

GEOTECHNICAL INVESTIGATIONS

**Highway Construction
km 1707.0 to 1717.4
Alaska Highway #1
Yukon, 2005-2006
Volume 1 of 2**



**Highways and Public Works
Transportation Engineering Branch**

Geotechnical Services

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ORIGINAL - Do Not Remove From File

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION
km 1707.0 to 1717.4
YUKON, 2005-2006

ALASKA HIGHWAY #1

Highway Construction
km 1707.0 to 1717.4
Alaska Highway #1
Yukon, 2005-2006
Volume 1 of 2

This Data Package prepared for project viewing:

February, 2005

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

CONTENTS

Volume 1 of 2

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING km 1707.0 to 1717.4 Alaska Highway

Subsurface Exploration and Test Report Sheets are provided.

The reports for the Centreline testing holes are arranged according to project location, starting at km 1707+000 and increasing to km 1717+400.

Laboratory Testing Result Sheets are provided.

The reports for the centreline holes are arranged according to test hole number, starting at 30090 and increasing to 30176.

2004 TEST HOLES 30090 to 30136
 TEST HOLES 30148 to 30176

*Note: For Centreline subsurface geotechnical information between station 1712+400 and 1713+900 refer to the km 1713.0 LHS Granular Source Section.

CONTENTS (continued)**Volume 2 of 2****GRANULAR SOURCE km 1713.0 LHS ALASKA HIGHWAY Pit ID 115 G-12**

Location plans, photographs, and subsurface exploration and testing report sheets are provided.

Auger Testing

2003 TEST HOLES 2693 to 2716 shown with prefix 651-

Test Pit Testing

2002 TEST PITS 2569 to 2576 shown with prefix 640-
2003 TEST PITS 2732 to 2744 shown with prefix 654-
2003 TEST PITS 2754 to 2764 shown with prefix 654-
2003 TEST PITS 2853 to 2858 shown with prefix 663-
2004 TEST PITS 30137 to 30147 shown with no prefix

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION
km 1707.0 to 1717.4
YUKON, 2005-2006

ALASKA HIGHWAY #1

INTRODUCTION

GEOTECHNICAL INVESTIGATION DATA

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

The description of material / soil description shown on the Subsurface Exploration & 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.

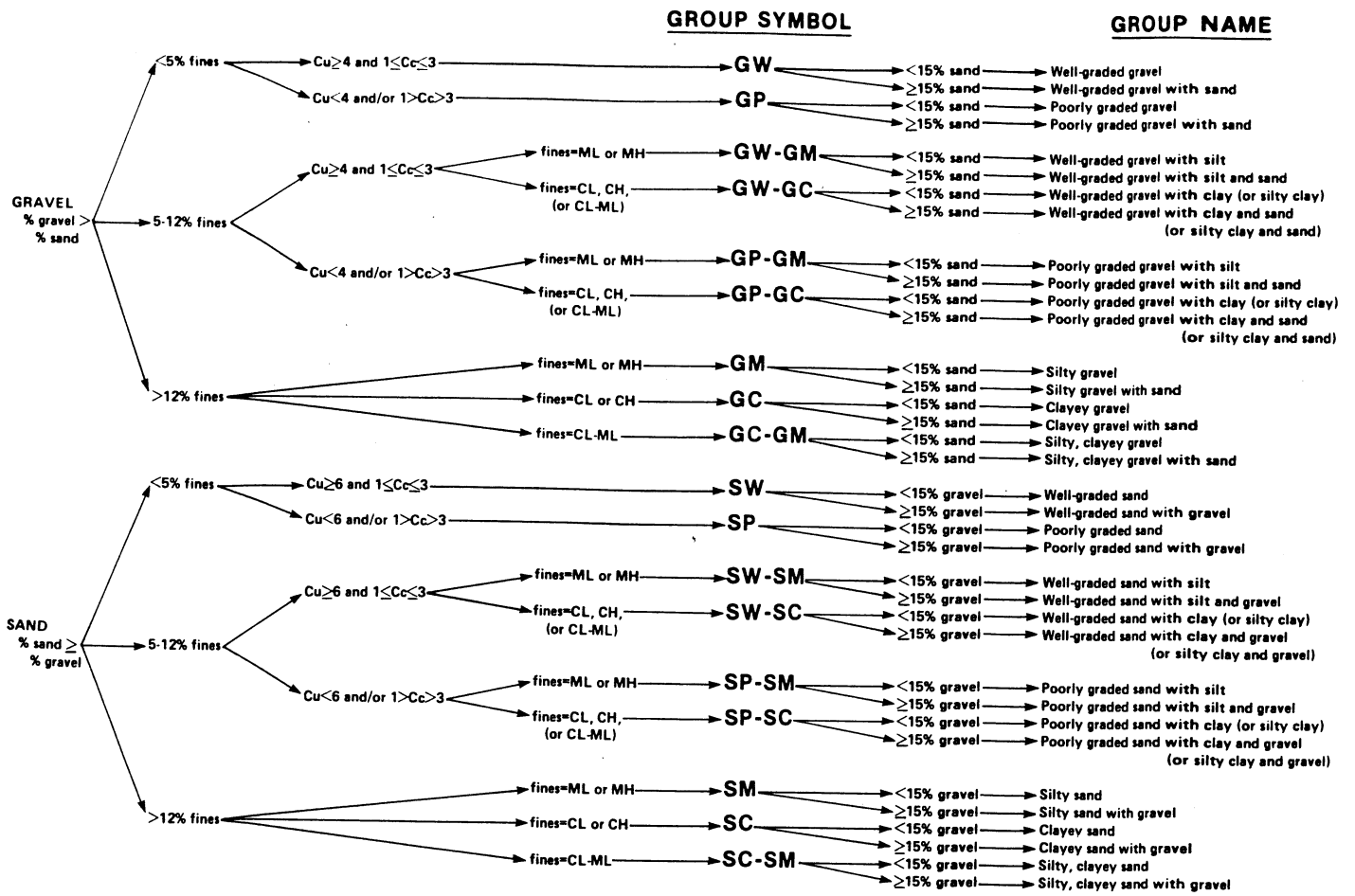
The sample laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. ***These tests may be conducted on disturbed samples and may exhibit properties different from the native materials. The sample classification may also vary 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.***

History of Aggregate Production Averages shown provide an unweighted average of the total individual quality control tests performed during the production of the indicated stockpiles. Individual test results may fall outside of the material type specification limit. Fracture tests may not have been performed on all samples collected.

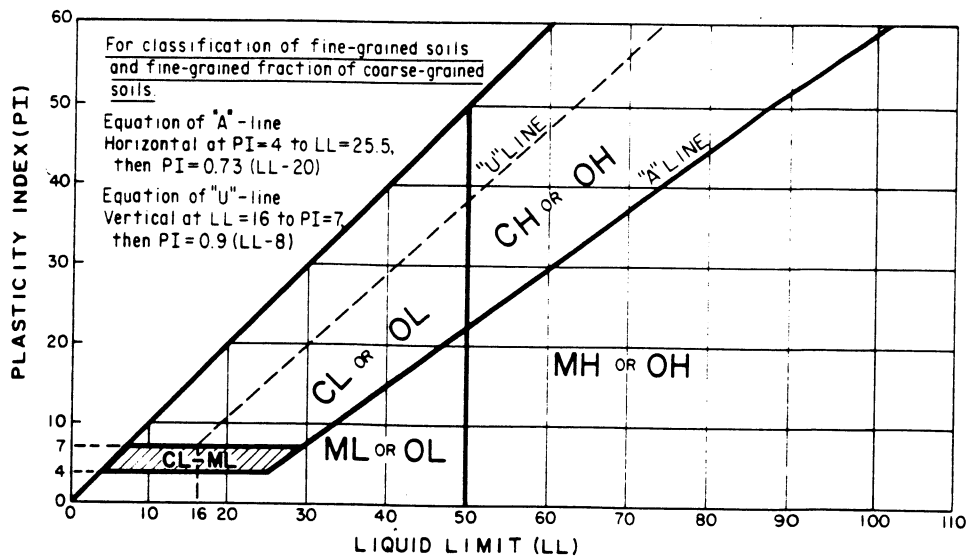
These descriptions and averages are not intended to be conclusive as to the nature of any material encountered, or to conditions between or around the test borings/pits.

Note: Development work may have taken place since the time of geotechnical investigation.

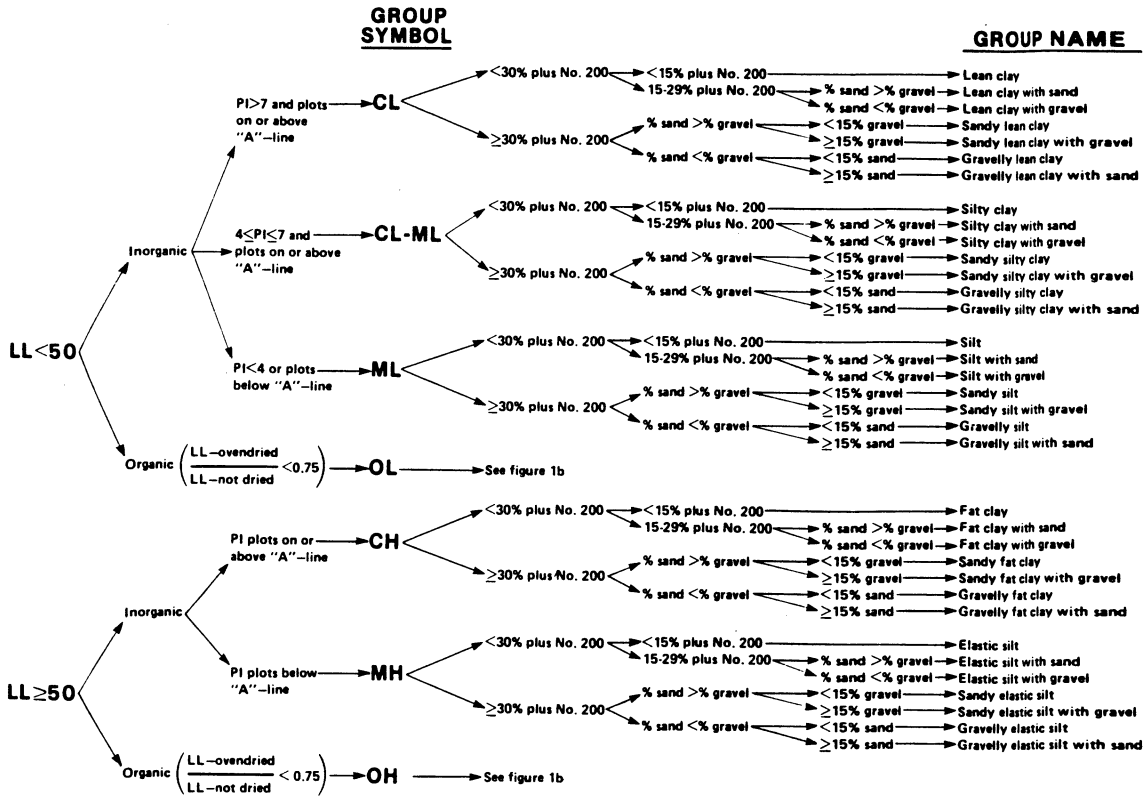
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions at the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



Flow chart for classifying coarse-grained soil.



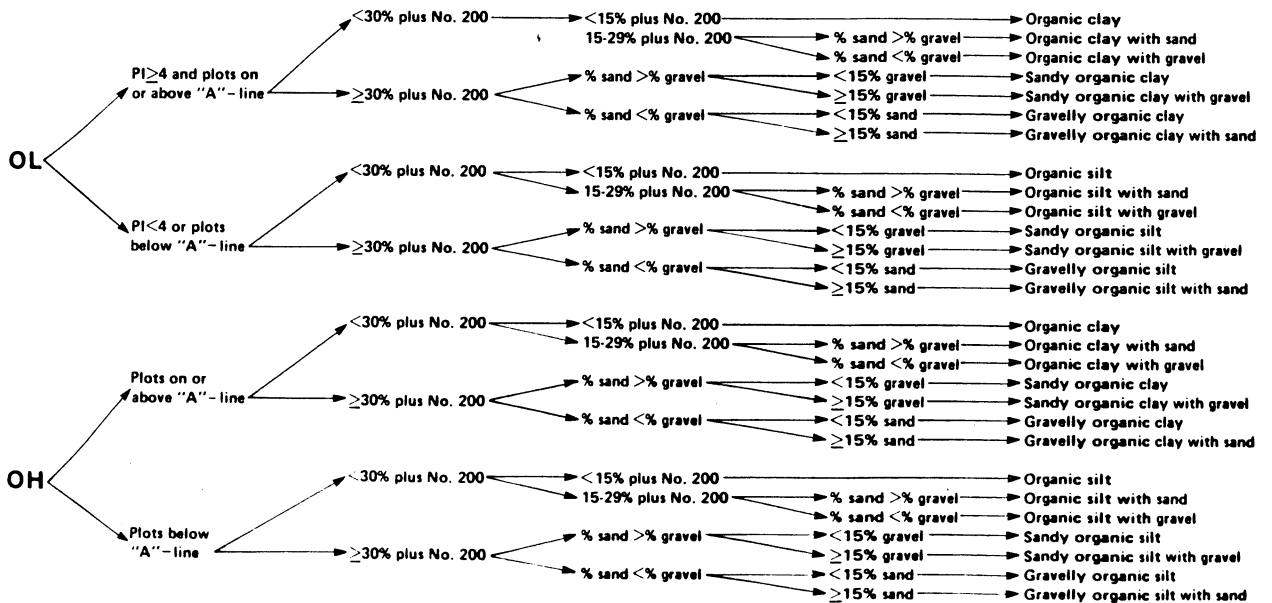
Plasticity chart.



Flow chart for classifying fine-grained soil.

GROUP SYMBOL

GROUP NAME



Flow chart for classifying organic soil.

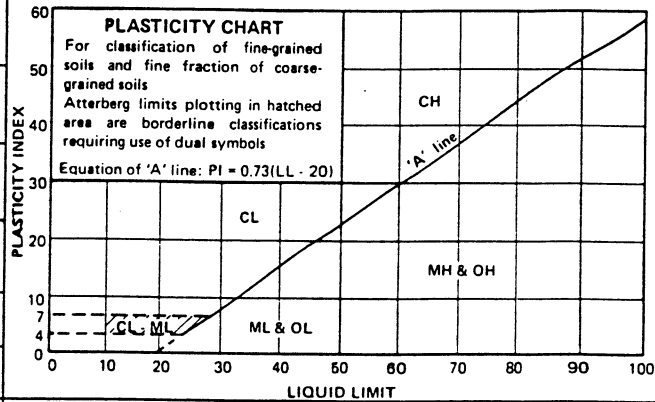
CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS ^a				SOIL CLASSIFICATION	
				GROUP SYMBOL	GROUP NAME ^b
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS Less than 5% fines ^c	$C_u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

- Based on the material passing the 3-in (75-mm) sieve.
- If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- Gravels with 5 to 12% fines require dual symbols
 - GM-GM well graded gravel with silt
 - GM-GC well graded gravel with clay
 - GP-GM poorly graded gravel with silt
 - GP-GC poorly graded gravel with clay
- Sands with 5 to 12% fines require dual symbols
 - 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 \leq 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	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	$C_u = D_{60}/D_{10}$ Greater than 4 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3		
		GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines		Not meeting both criteria for GW		
		GRAVELS WITH FINES	GM		Silty gravels, gravel-sand-silt mixtures	Atterberg limits plot below 'A' line or plasticity index less than 4	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
			GC		Clayey gravels, gravel-sand clay mixtures	Atterberg limits plot above 'A' line and plasticity index greater than 7	
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW		Well-graded sands and gravelly sands, little or no fines	$C_u = D_{60}/D_{10}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3	
			SP		Poorly-graded sands and gravelly sands, little or no fines	Not meeting both criteria for SW	
		SANDS WITH FINES	SM		Silty sands, sand-silt mixtures	Atterberg limits plot below 'A' line or plasticity index less than 4	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols
			SC		Clayey sands, sand-clay mixtures	Atterberg limits plot above 'A' line and plasticity index greater than 7	



GROUND ICE DESCRIPTION

ICE NOT VISIBLE

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

VISIBLE ICE LESS THAN 50% BY VOLUME

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

VISIBLE ICE GREATER THAN 50% BY VOLUME

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

NOTE:

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

LEGEND

Soil Ice

		BOUNDARY LINES ON DRILL LOGS			TEST HOLE NO: 3			
ENGINEERING-CAPITAL					Project No:			
					ELEVATION: 0.00 (m)			
SAMPLE TYPE		<input 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	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:				

HIGHWAY CONSTRUCTION

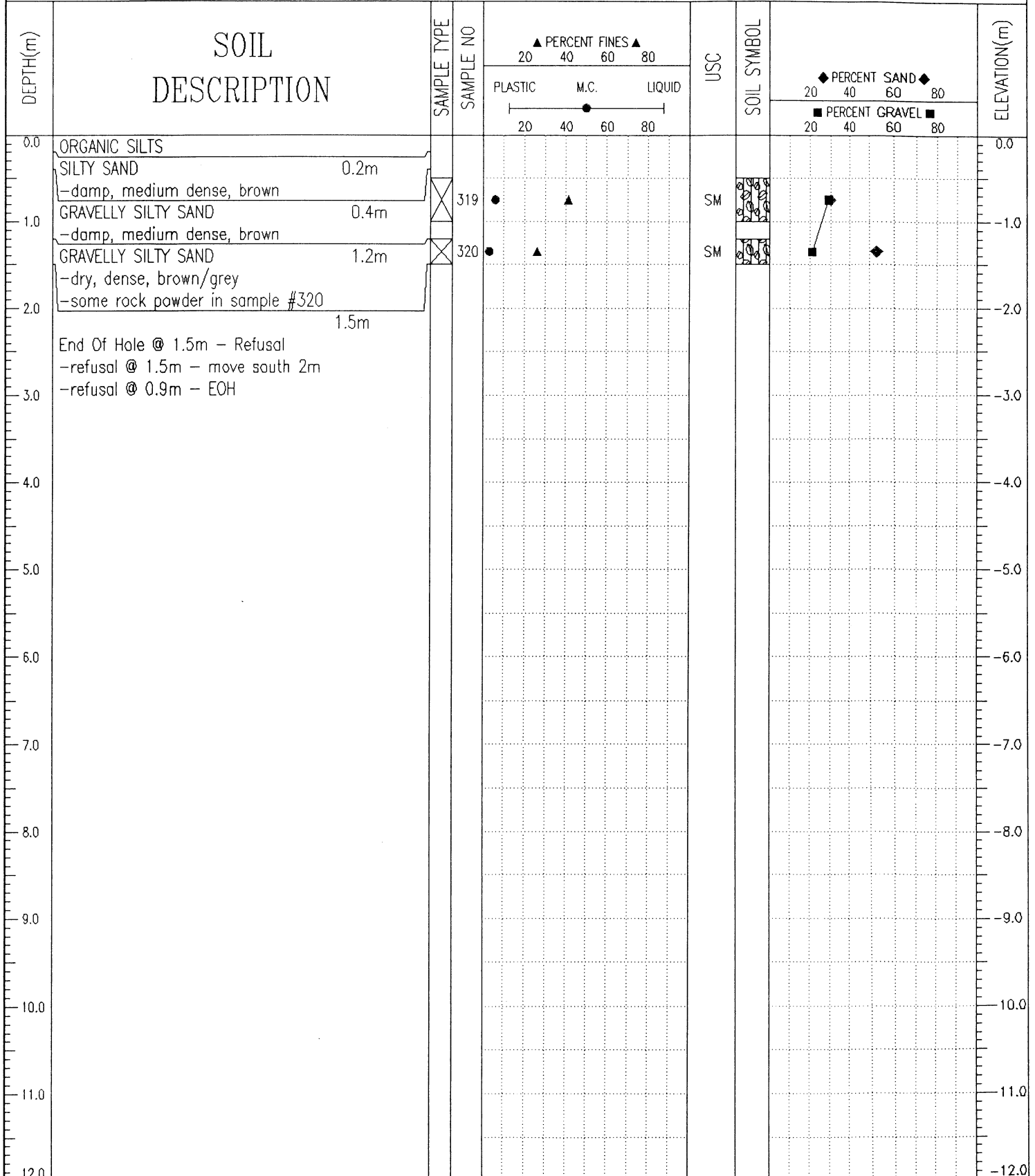
GEOTECHNICAL INVESTIGATION
km 1707.0 to 1717.4
YUKON, 2005-2006

ALASKA HIGHWAY #1

**CENTRELINE TESTING
1707.0 to 1717.4
ALASKA HIGHWAY**

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30090
Donjek Services Ltd.	UTM ZONE: - N6769660 E635061	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 1.5 m
	REVIEWED BY:	COMPLETE: 08/15/04
	Fig. No: 75	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30090R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6769661 E635065	PROJECT NO: 8002-318
Reverse Circulation Air Rotaty Drill		ELEVATION:

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

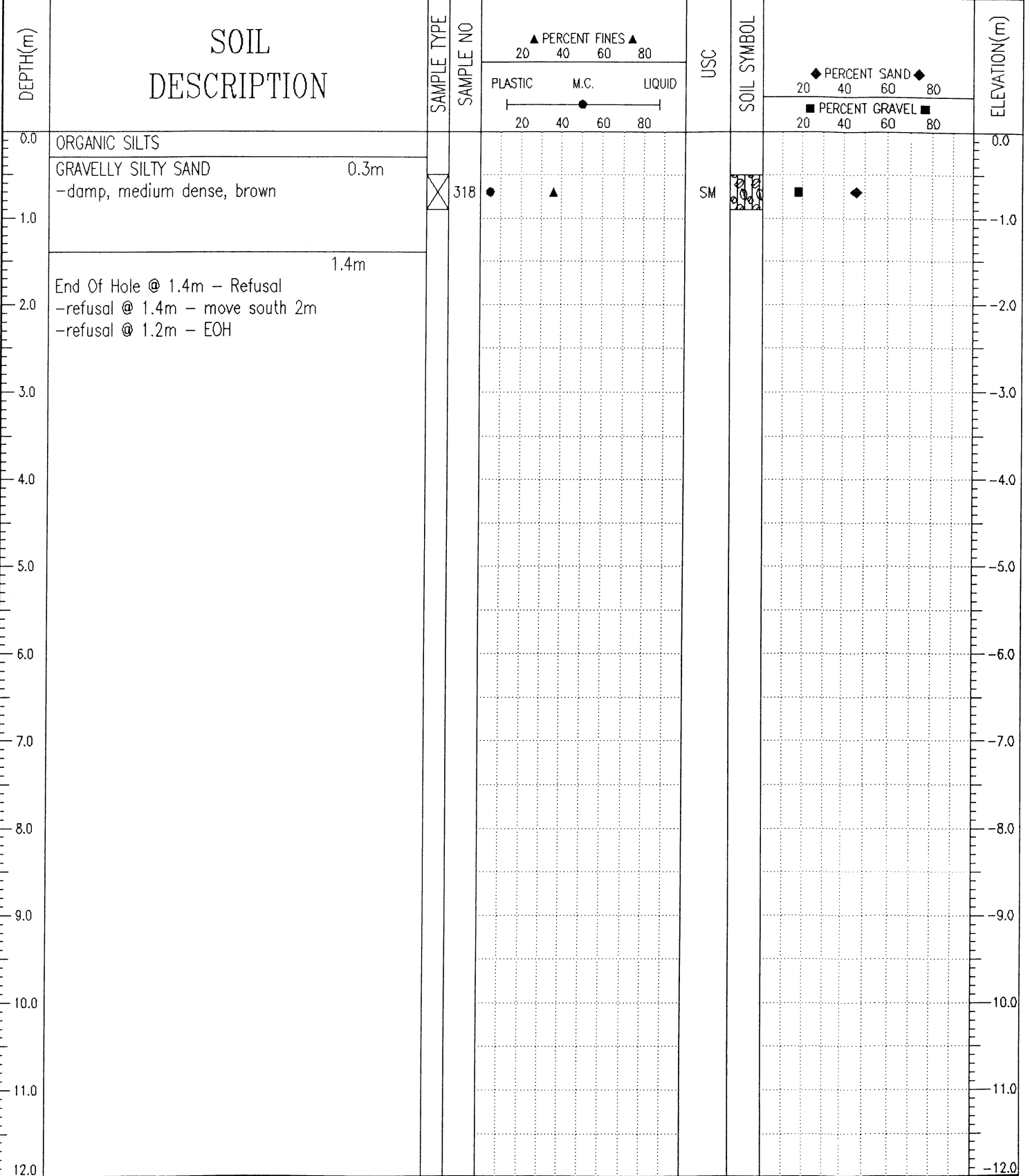
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	AS PER SOILS LOG 30090 -refusal @ 1.5m & 0.9m										0.0	
1.5	ROCK -dry, grey										-1.0	
2.0			R32				ROCK				-2.0	
4.0			R33				ROCK				-4.0	
4.3	End Of Hole @ 4.3m -no casing used										-5.0	
5.0											-6.0	
6.0											-7.0	
7.0											-8.0	
8.0											-9.0	
9.0											-10.0	
10.0											-11.0	
11.0											-12.0	

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 105

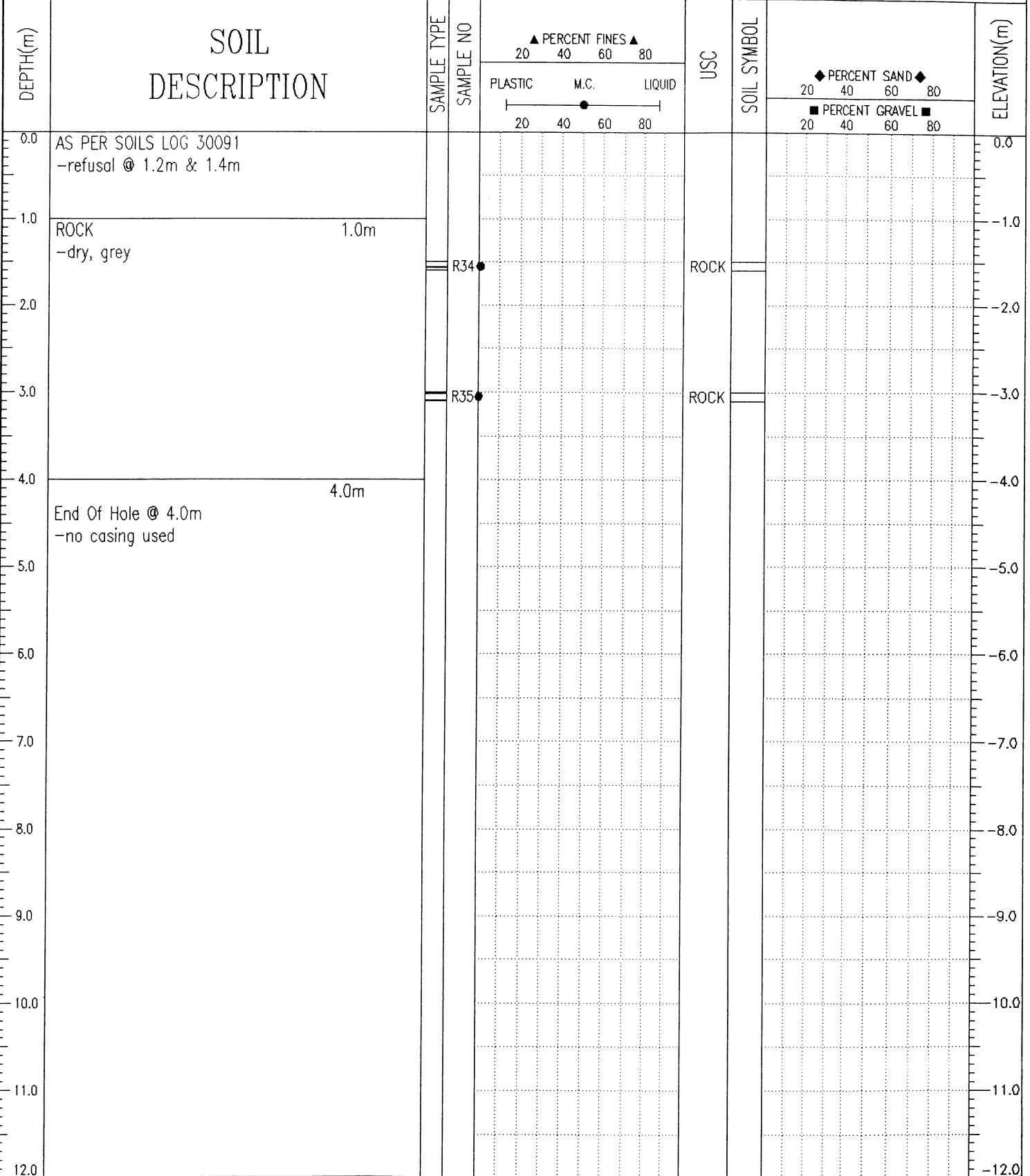
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COMPLETE: 09/24/04

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



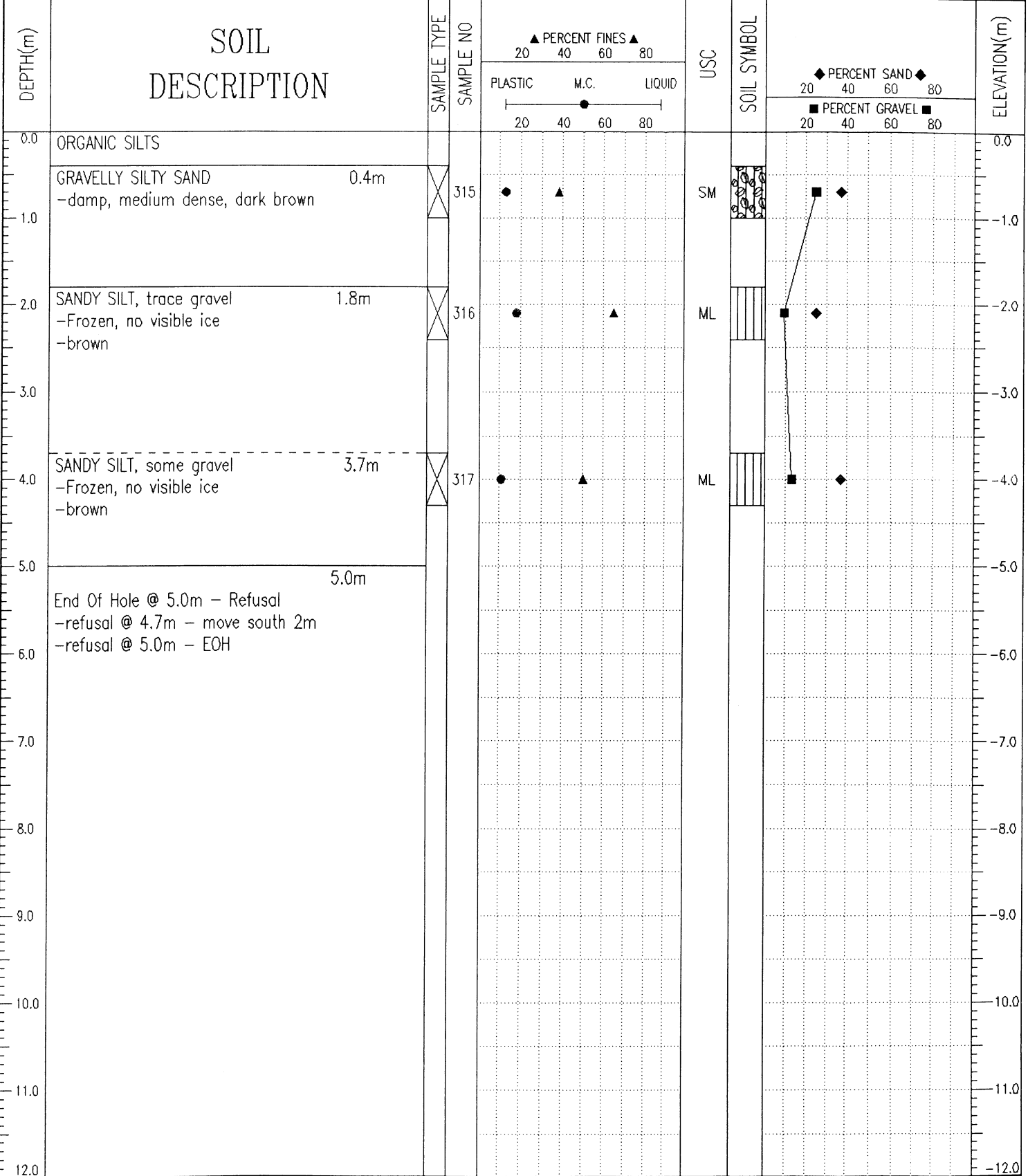
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Midnight Sun Drilling Ltd.	UTM ZONE: - N6769700 E635045	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 4 m
	REVIEWED BY:	COMPLETE: 09/24/04
	Fig. No: 106	Page 1 of 1

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

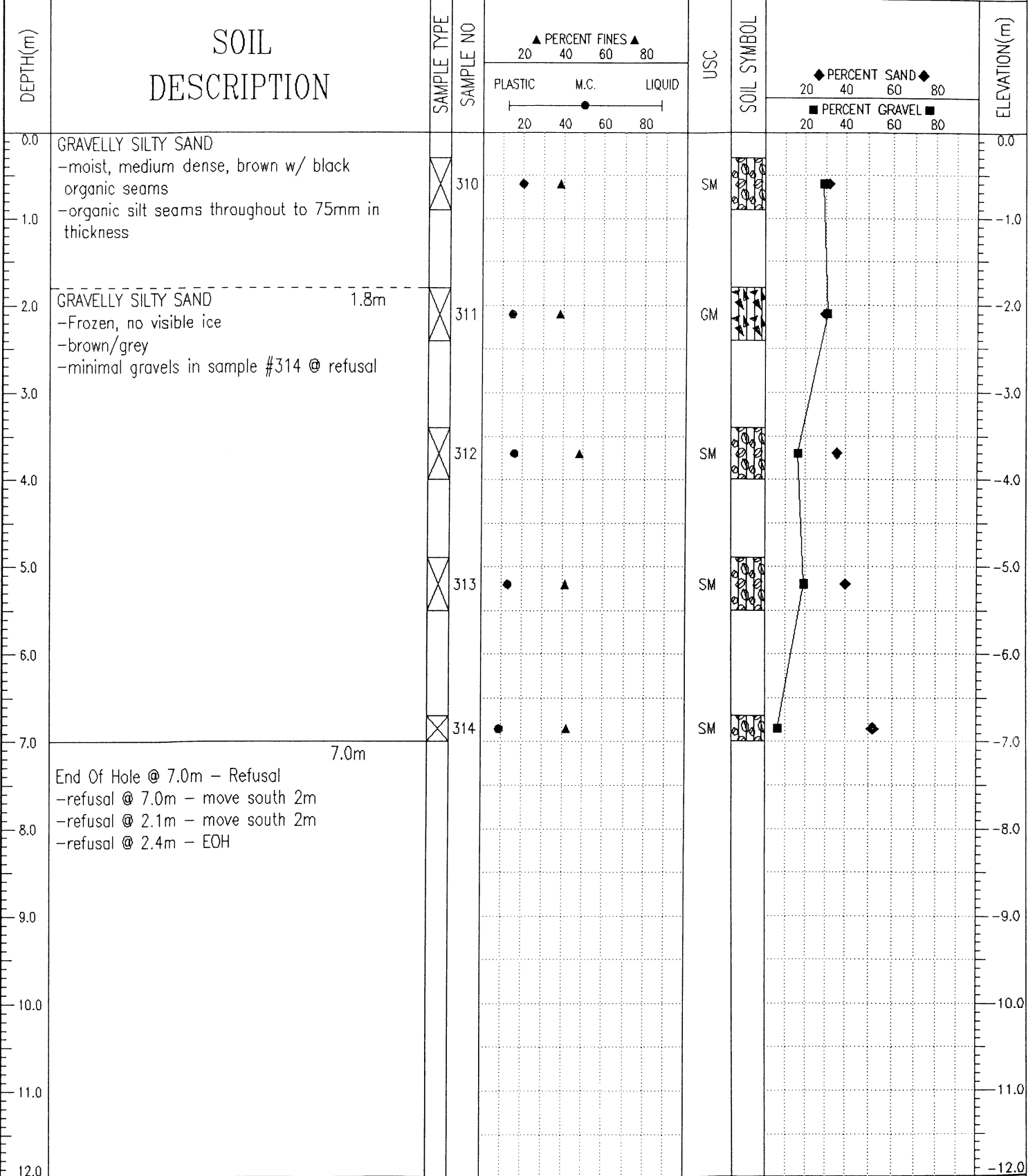


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5 m
REVIEWED BY:	COMPLETE: 08/15/04
Fig. No: 74	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30093
Donjek Services Ltd.	UTM ZONE: - N6769809 E634966	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

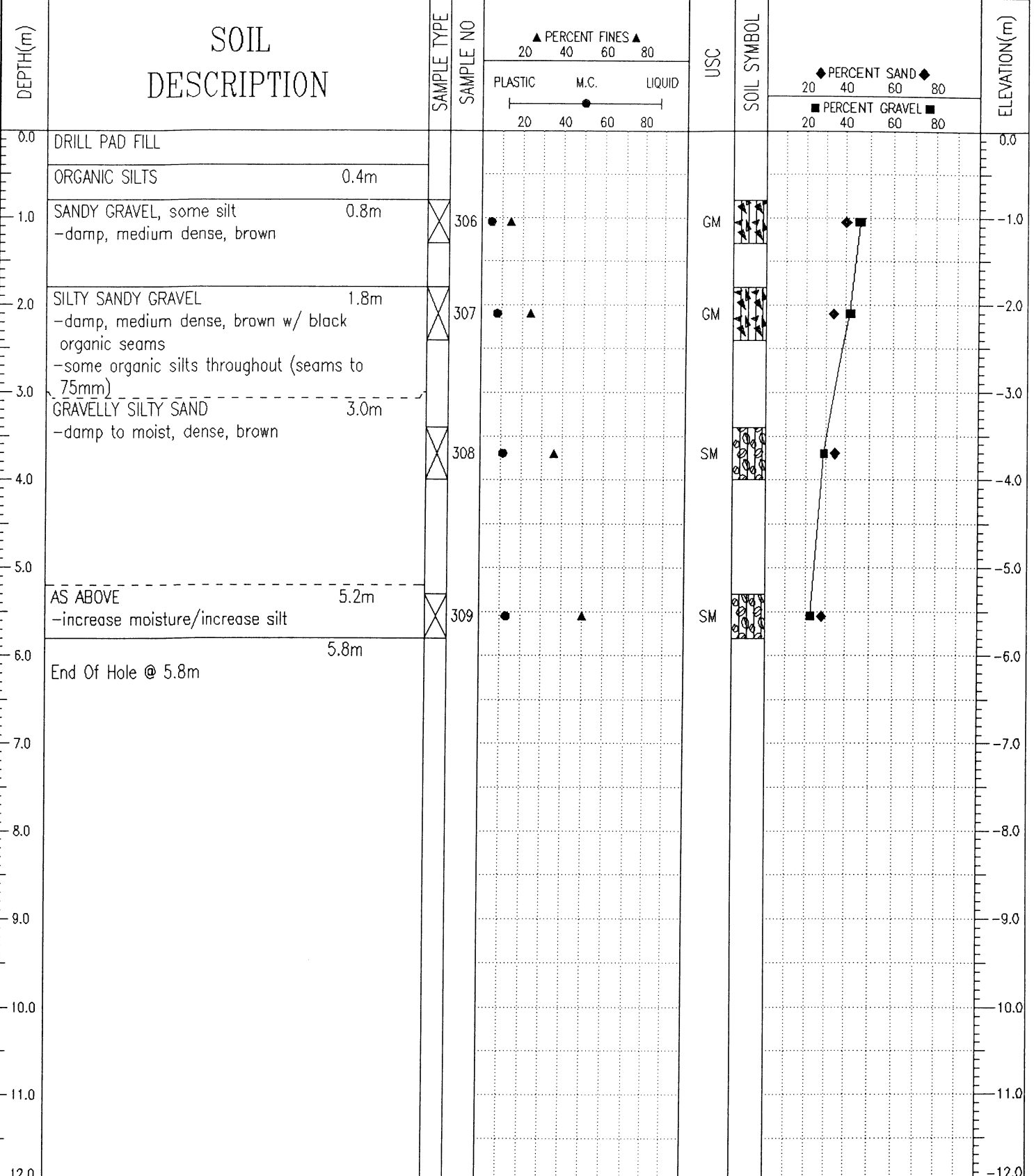
LOGGED BY: RW	COMPLETION DEPTH: 7 m
REVIEWED BY:	COMPLETE: 08/15/04
Fig. No: 73	Page 1 of 1

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

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 ▲ PLASTIC M.C. LIQUID -----●----- 20 40 60 80	USC	SOIL SYMBOL	PERCENT SAND ◆ 20 40 60 80 ◆ PERCENT GRAVEL ■ 20 40 60 80 ■	ELEVATION(m)
0.0	AS PER SOILS LOG 30093 -refusal @ 7.0m, 2.1m & 2.4m							0.0
2.8	SANDY SILT/SILTY SAND, some gravel -moist, brown		R38					-2.8
7.6	POSSIBLY ROCK -some rock chips noted -some sand -minimal powder or dust		R39					-7.6
8.5	ROCK -dry, grey		R40		ROCK			-8.5
10.7	End Of Hole @ 10.7m -no casing used		R41		ROCK			-10.7
12.0								-12.0

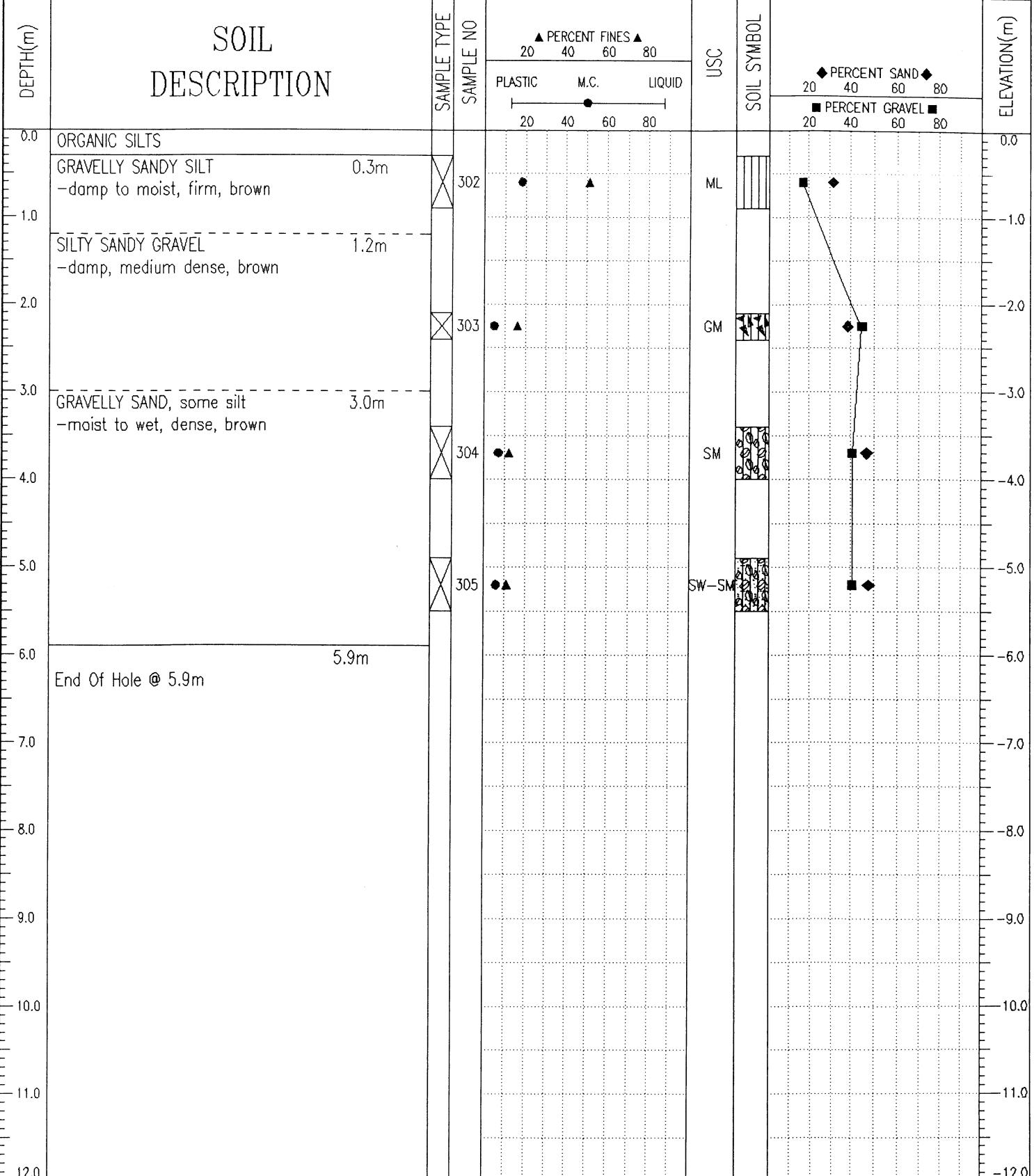
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SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

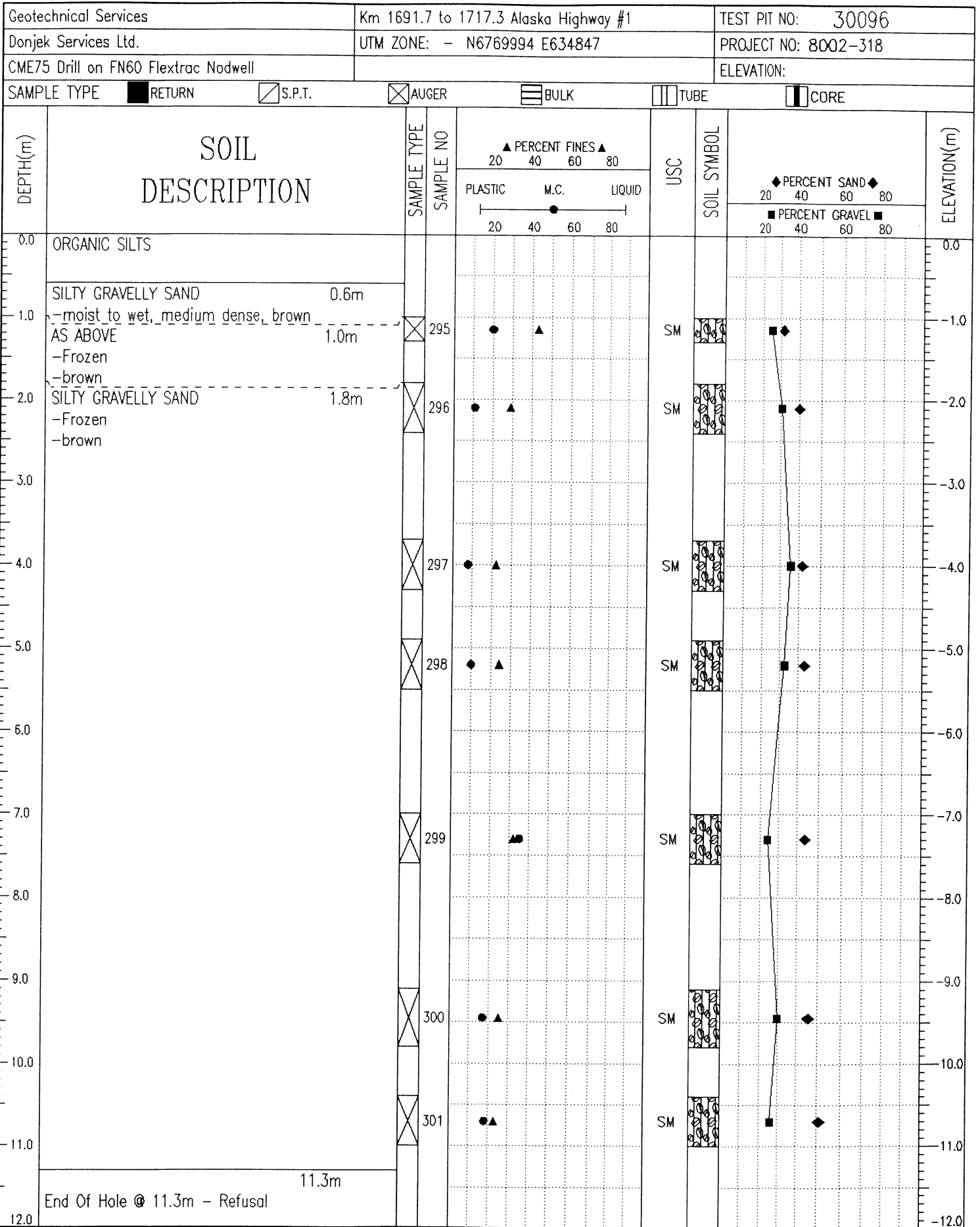


05/02/10 07:29AM (YIG_HHWS)

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



05/02/10 07:29AM (YTG_HWTS)



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 70

COMPLETION DEPTH: 11.3 m
COMPLETE: 08/14/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30096R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6769986 E634847	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

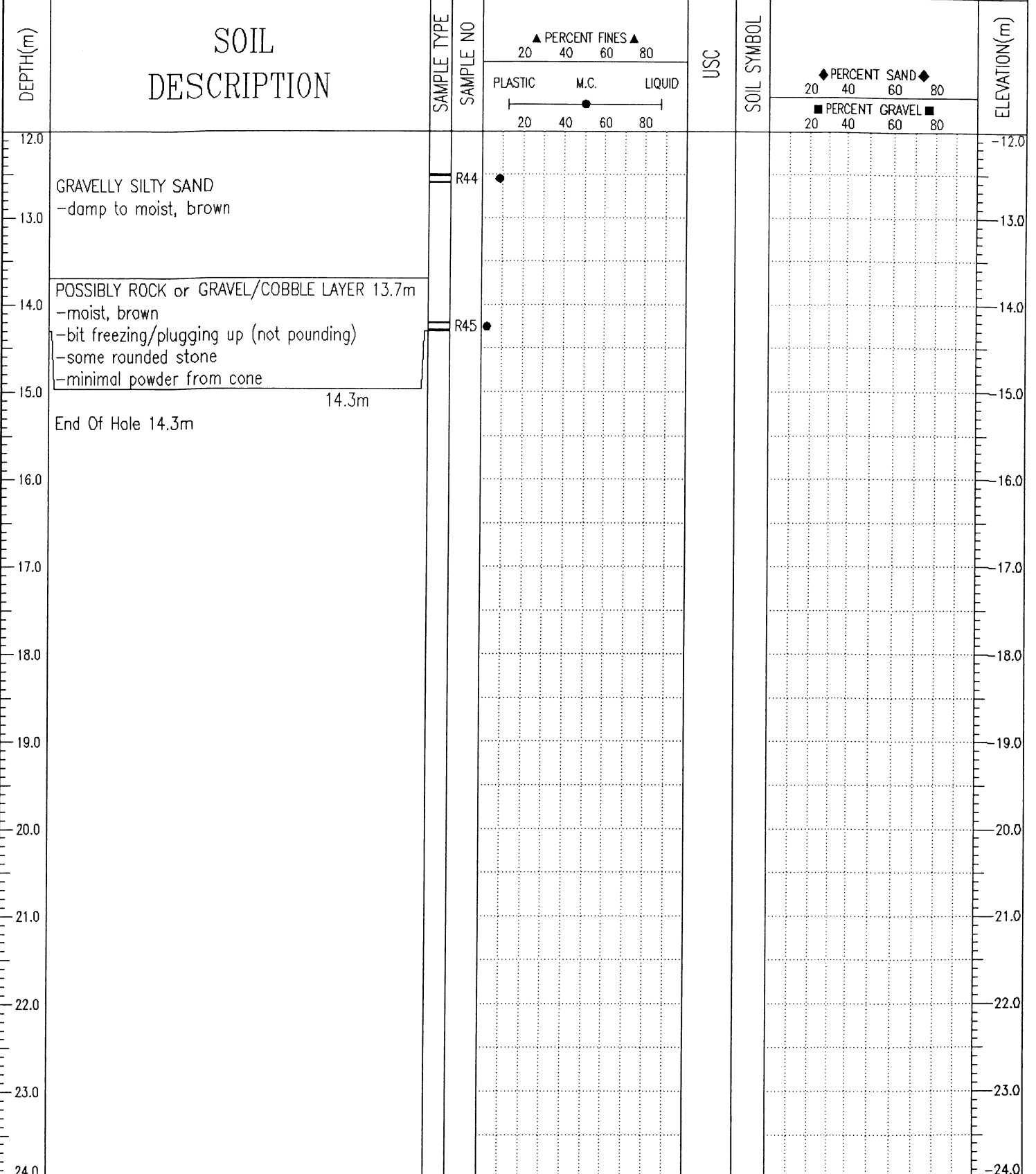
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	AS PER SOILS LOG 30096 -refusal @ 11.3m & 8.7m													0.0	
7.0	GRAVELLY SILTY SAND -moist to wet, brown		R42											-7.0	
10.1	GRAVELLY SAND, some silt -damp, brown		R43											-10.1	
11.0	Very dense slow drilling -no indication of rock													-11.0	
12.0														-12.0	

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 14.3 m
REVIEWED BY:	COMPLETE: 09/24/04
Fig. No: 109	Page 1 of 2

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30096R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6769986 E634847	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

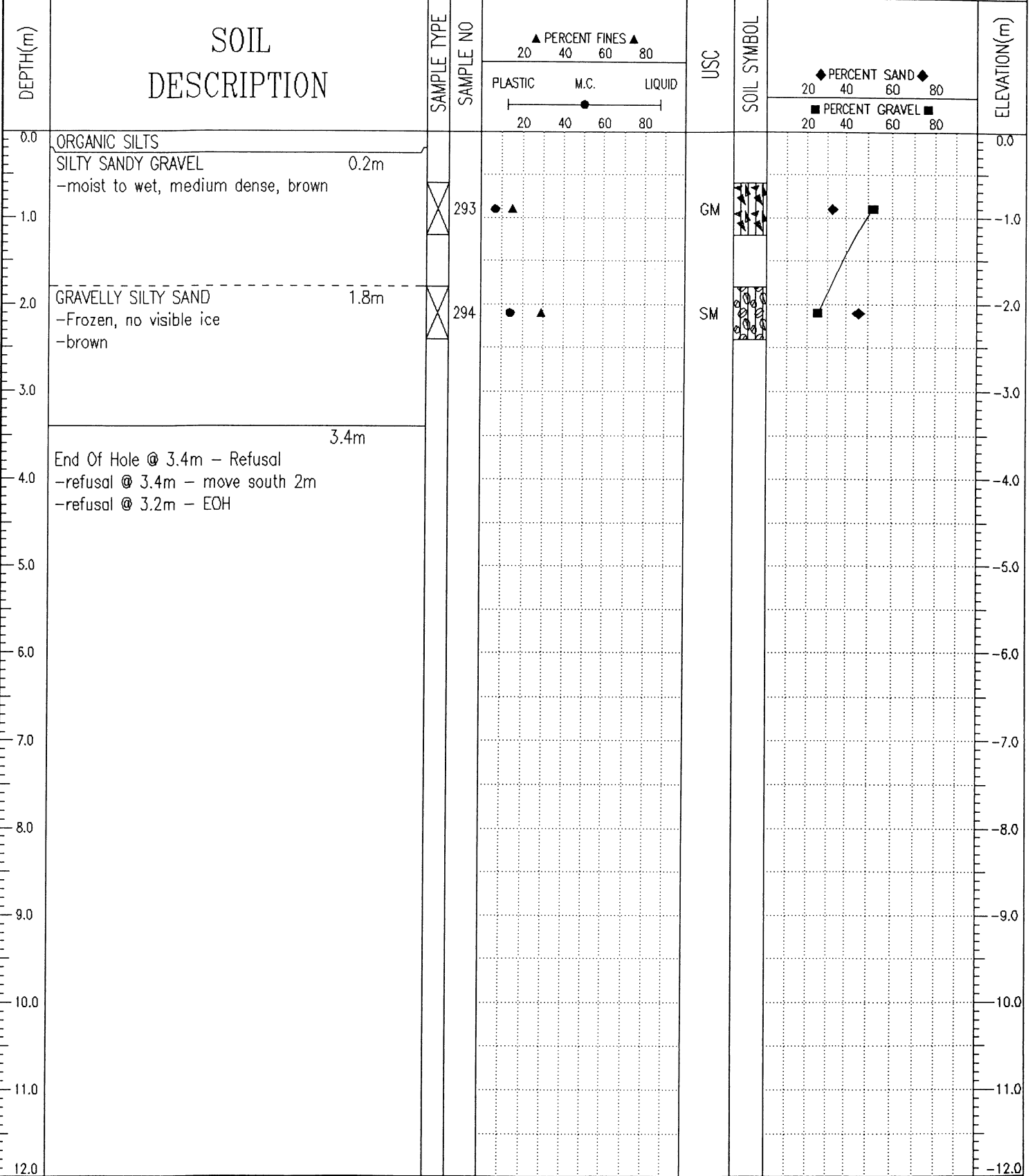
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 14.3 m
	REVIEWED BY:	COMPLETE: 09/24/04
	Fig. No: 109	Page 2 of 2

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30097
Donjek Services Ltd.	UTM ZONE: - N6770135 E634800	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

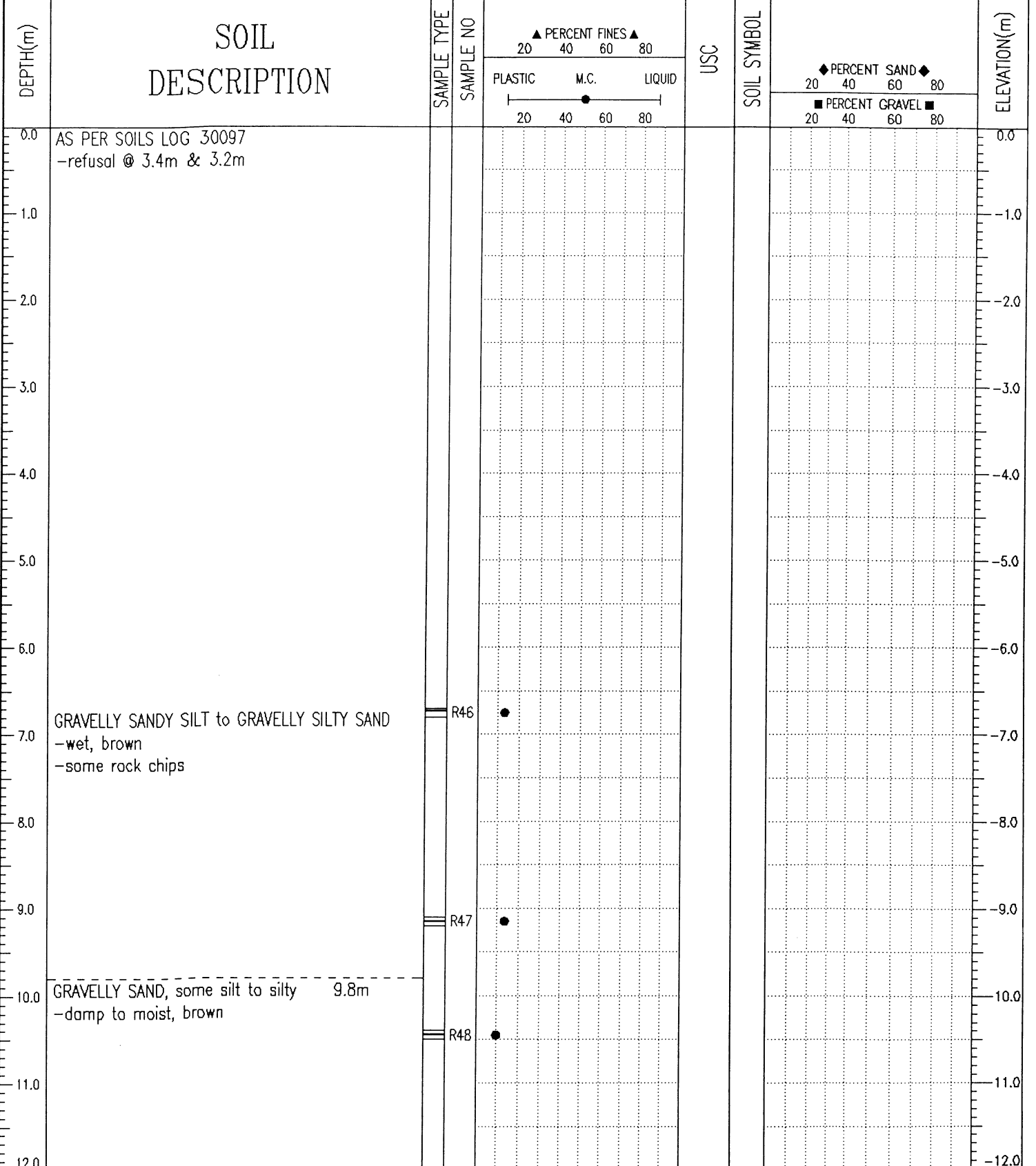
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 3.4 m
	REVIEWED BY:	COMPLETE: 08/14/04
	Fig. No: 69	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30097R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6770133 E634803	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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



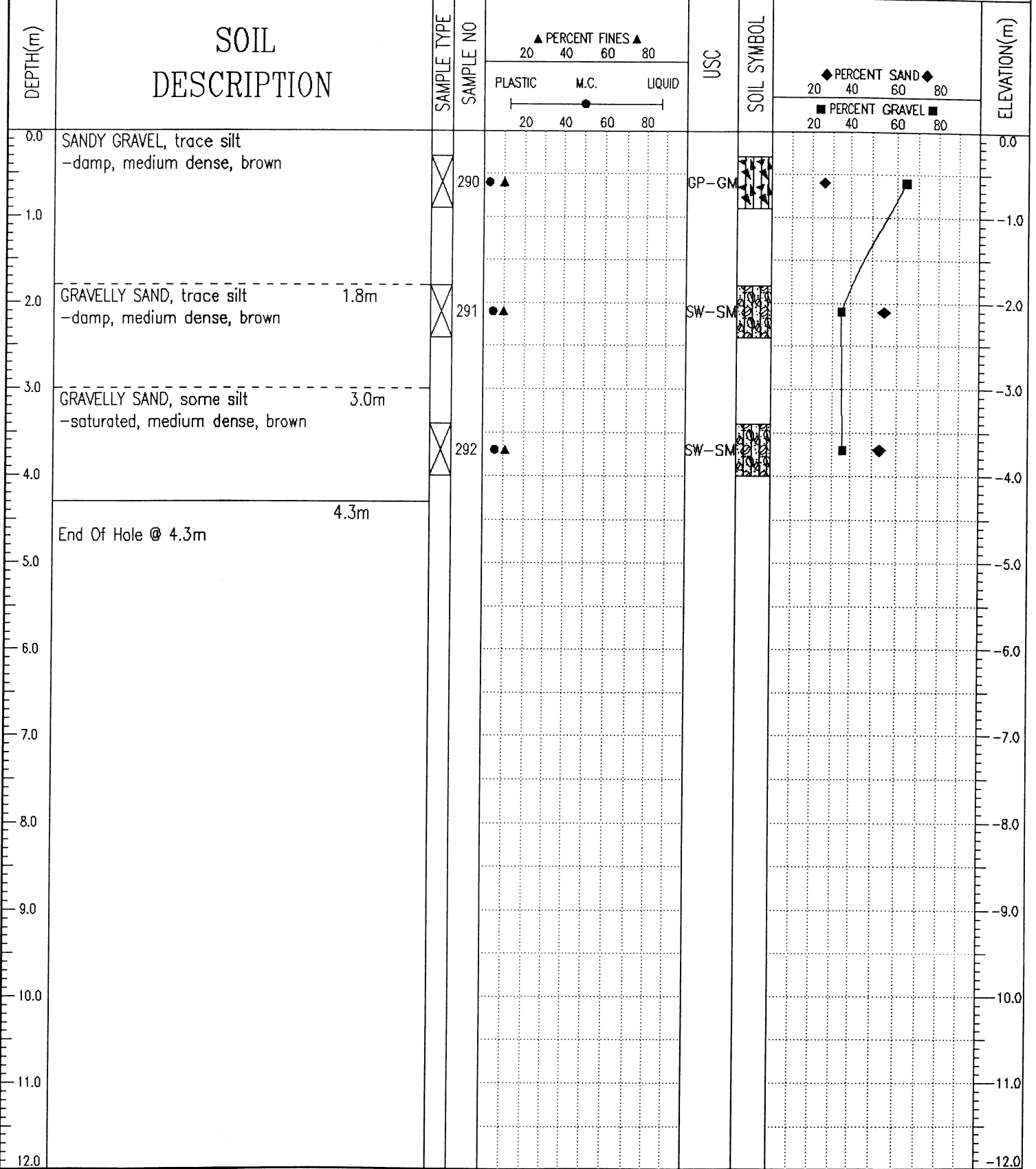
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	REVIEWED BY:	COMPLETE: 09/24/04
	Fig. No: 110	Page 1 of 2

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30097R	
Midnight Sun Drilling Ltd.		UTM ZONE: - N6770133 E634803		PROJECT NO: 8002-318	
Reverse Circulation Air Rotary Drill				ELEVATION:	
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	ELEVATION(m)
12.0	SANDY GRAVEL, trace to some silt 12.5m -damp, brown		R49					-12.0
13.0								-13.0
14.0								-14.0
15.0	End Of Hole @ 15.2m -bit was plugged from 0.0 to 6.7m depth -no indication of rock		R50					-15.0
16.0								-16.0
17.0								-17.0
18.0								-18.0
19.0								-19.0
20.0								-20.0
21.0								-21.0
22.0								-22.0
23.0								-23.0
24.0								-24.0

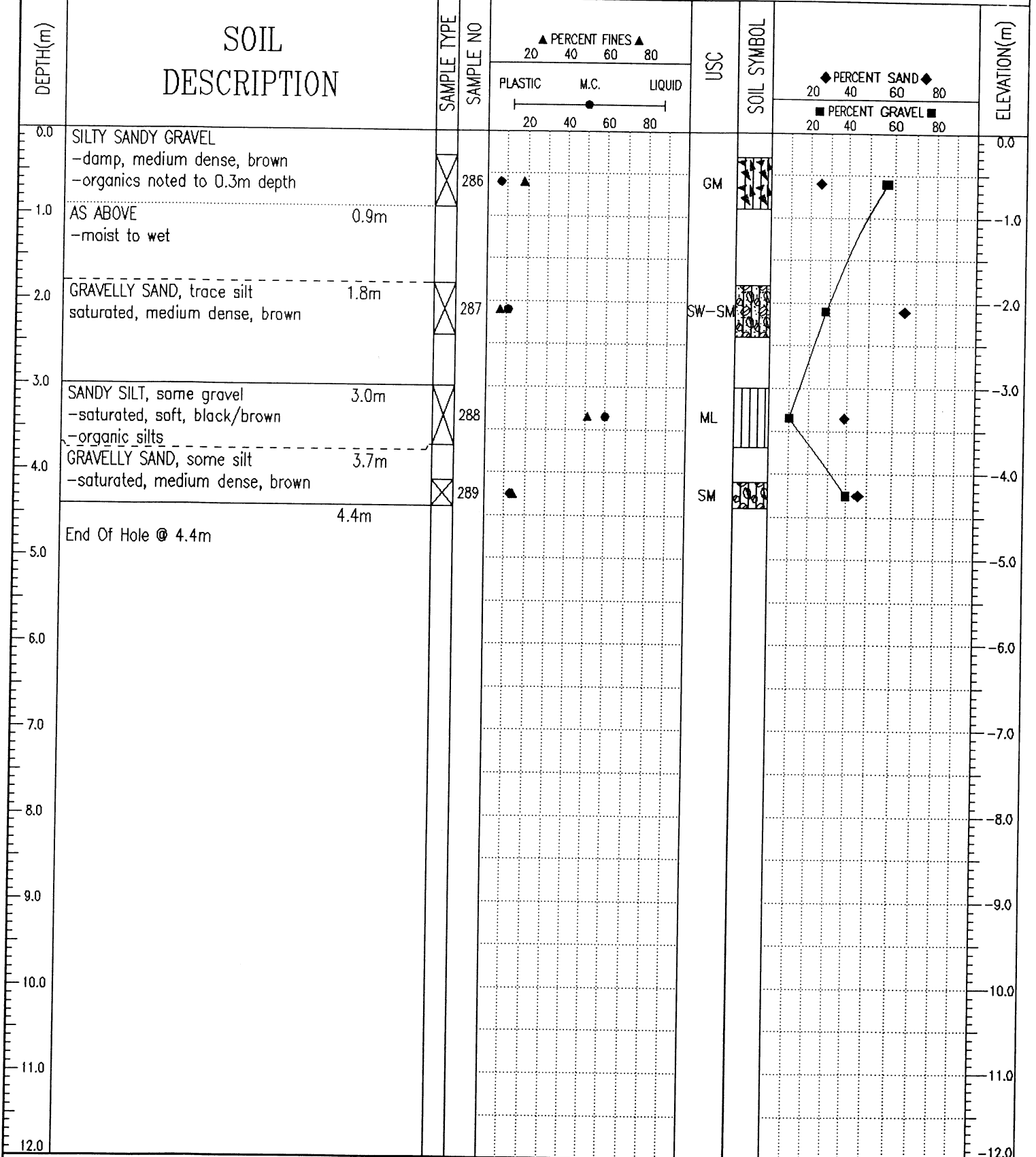
J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 15.2 m
		REVIEWED BY:	COMPLETE: 09/24/04
		Fig. No: 110	Page 2 of 2

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



05/02/10 07:31AM (YIG_HWYS)

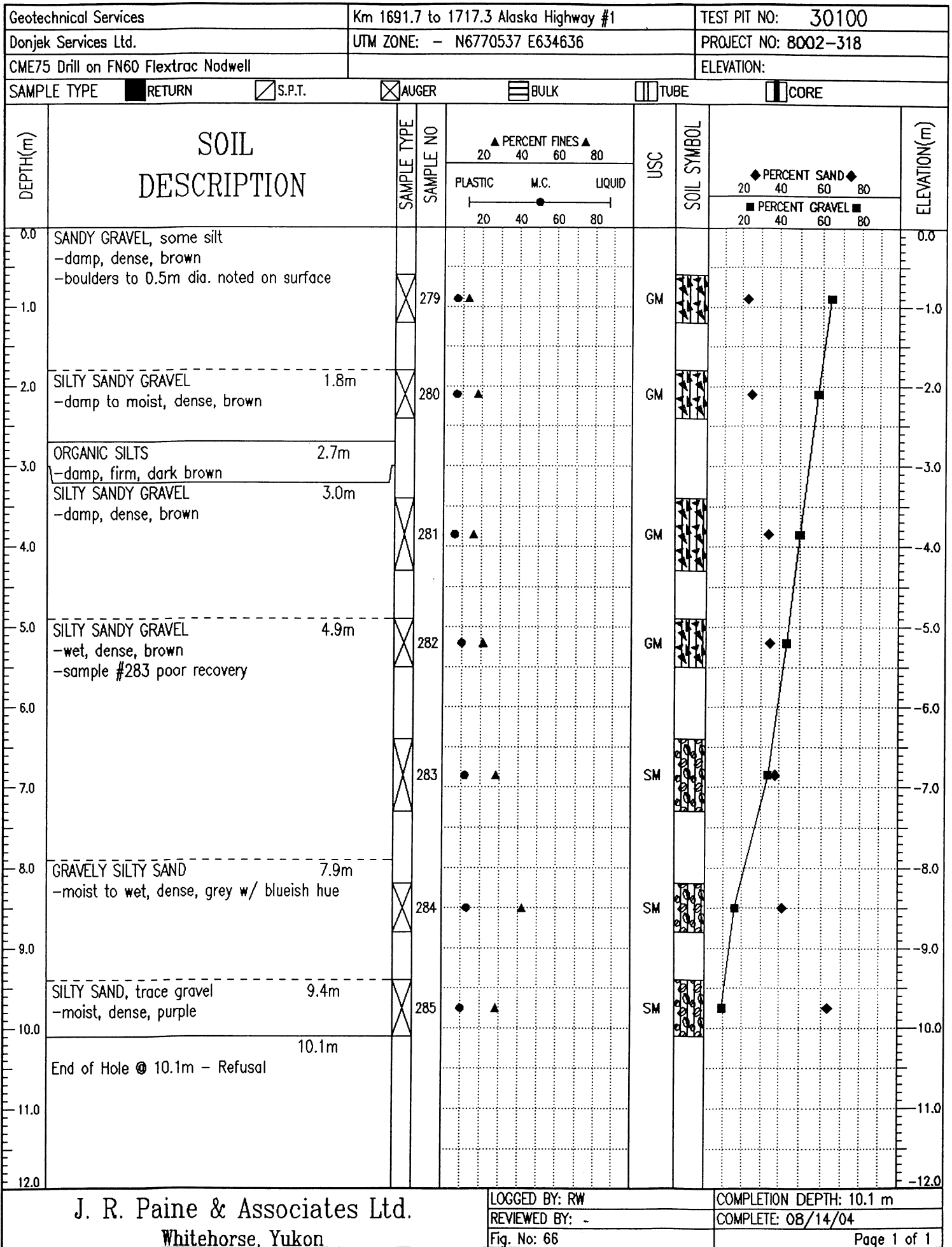
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 67

COMPLETION DEPTH: 4.4 m
COMPLETE: 08/14/04



Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30100R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6770540 E634627	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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		ELEVATION (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	AS PER SOILS LOG 30100 -refusal @ 10.1m											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	
7.0												-7.0	
8.0												-8.0	
9.0												-9.0	
10.0												-10.0	
11.0												-11.0	
12.0												-12.0	

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 111

COMPLETION DEPTH: 16.2 m
COMPLETE: 09/25/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30100R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6770540 E634627	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

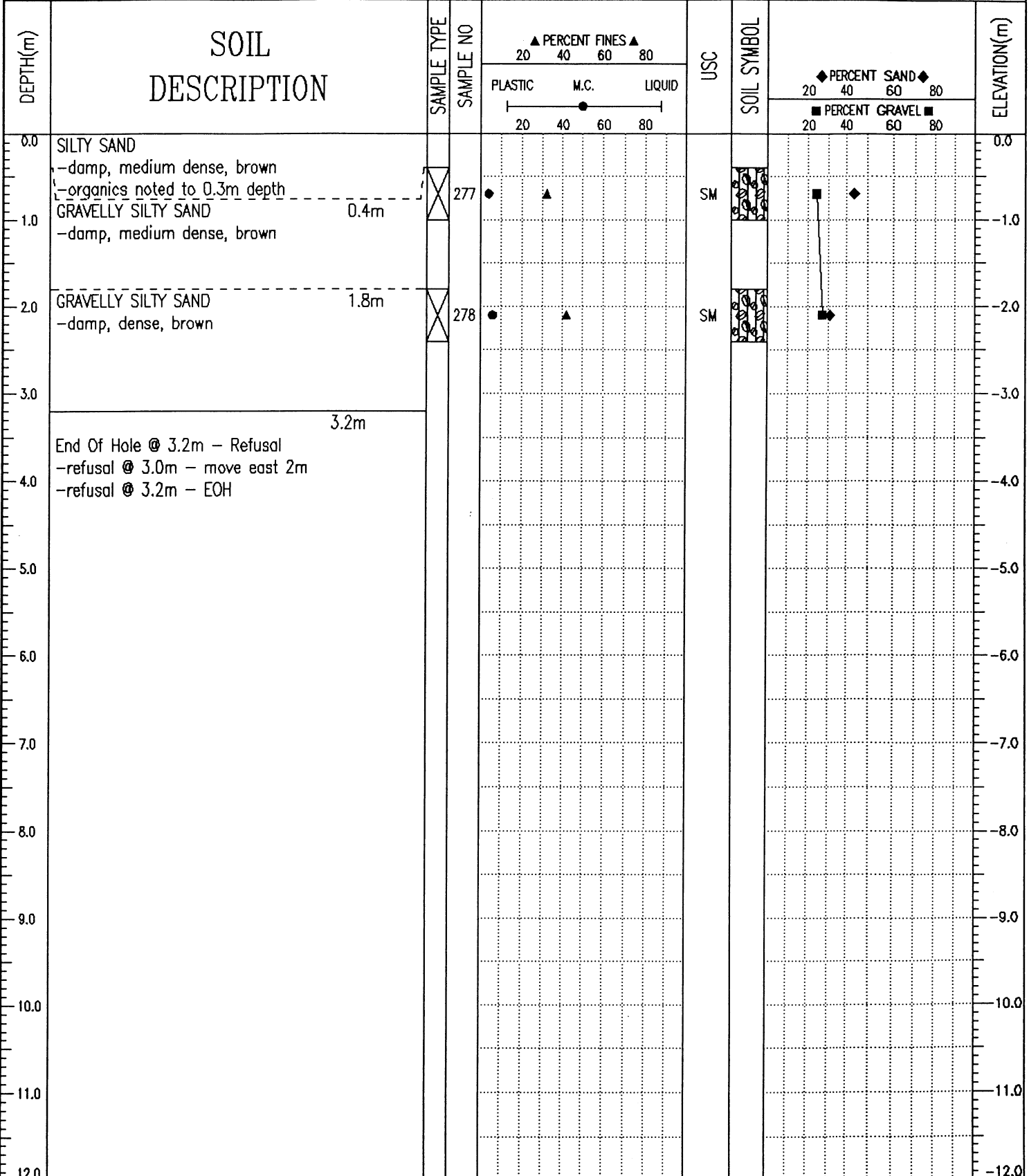
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60	
12.0	ROCK -soft, damp, brown w/ purple hue											-12.0
13.0												-13.0
14.0			R51				ROCK					-14.0
15.0	ROCK -dry, grey w/ purple hue											-15.0
16.0			R52				ROCK					-16.0
16.2	End Of Hole @ 16.2m											-16.2
17.0												-17.0
18.0												-18.0
19.0												-19.0
20.0												-20.0
21.0												-21.0
22.0												-22.0
23.0												-23.0
24.0												-24.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 16.2 m
REVIEWED BY: -	COMPLETE: 09/25/04
Fig. No: 111	Page 2 of 2

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30101
Donjek Services Ltd.	UTM ZONE: - N6770650 E634650	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 65

COMPLETION DEPTH: 3.2 m
COMPLETE: 08/14/04

05/02/10 07:30AM (VIC_HHS)

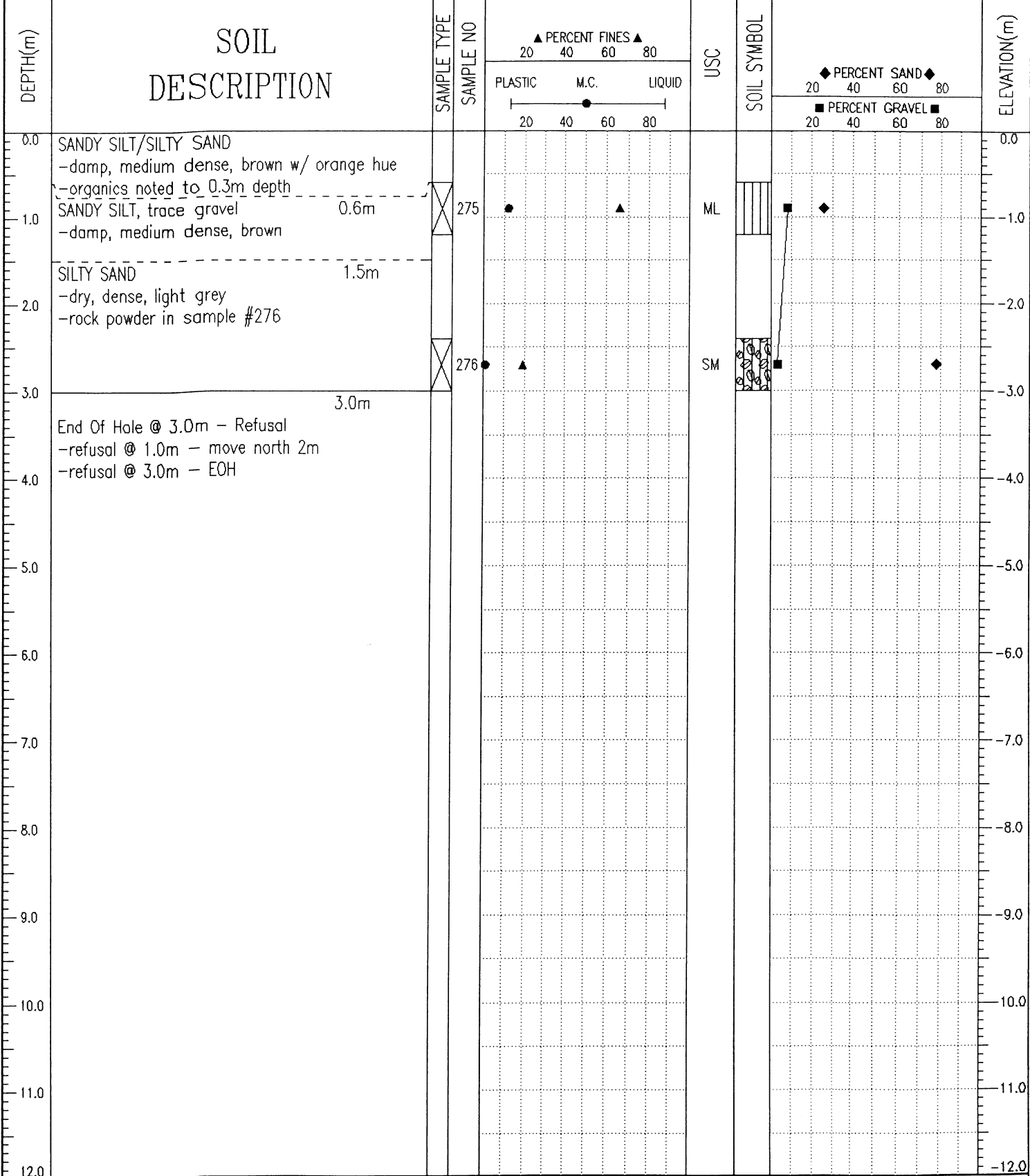
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30101R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6770659 E634653	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		ELEVATION(m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	AS PER SOILS LOG 30101 -refusal @ 3.0m & 3.2m										0.0
2.4	ROCK -dry, grey										
4.0			R53				ROCK				
4.6	End Of Hole @ 4.6m										
12.0											

J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW REVIEWED BY: - Fig. No: 112	COMPLETION DEPTH: 4.6 m COMPLETE: 09/25/04
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SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



05/02/10 07:32AM (FIG_HHTS)

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30102R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6770744 E634667	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

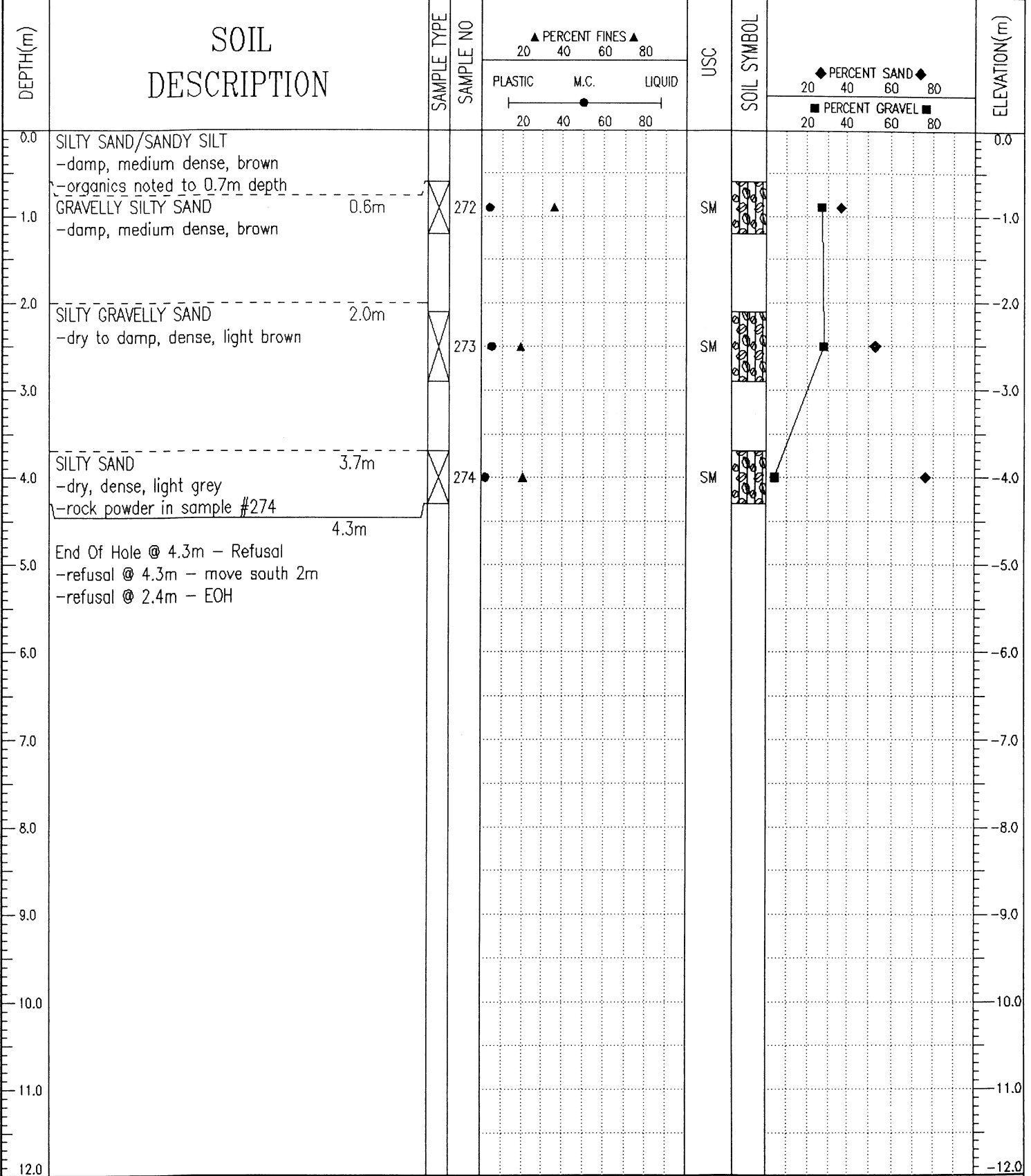
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30102 -refusal @ 3.0m & 1.0m						0.0
1.0	ROCK -dry, grey 1.0m						-1.0
2.0			R54		ROCK		-2.0
3.0							-3.0
4.0			R55		ROCK		-4.0
4.3	End Of Hole @ 4.3m 4.3m						-4.3
5.0							-5.0
6.0							-6.0
7.0							-7.0
8.0							-8.0
9.0							-9.0
10.0							-10.0
11.0							-11.0
12.0							-12.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4.3 m
REVIEWED BY:	COMPLETE: 09/25/04
Fig. No: 113	Page 1 of 1

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



05/02/10 07:53AM (YIG_HMS)

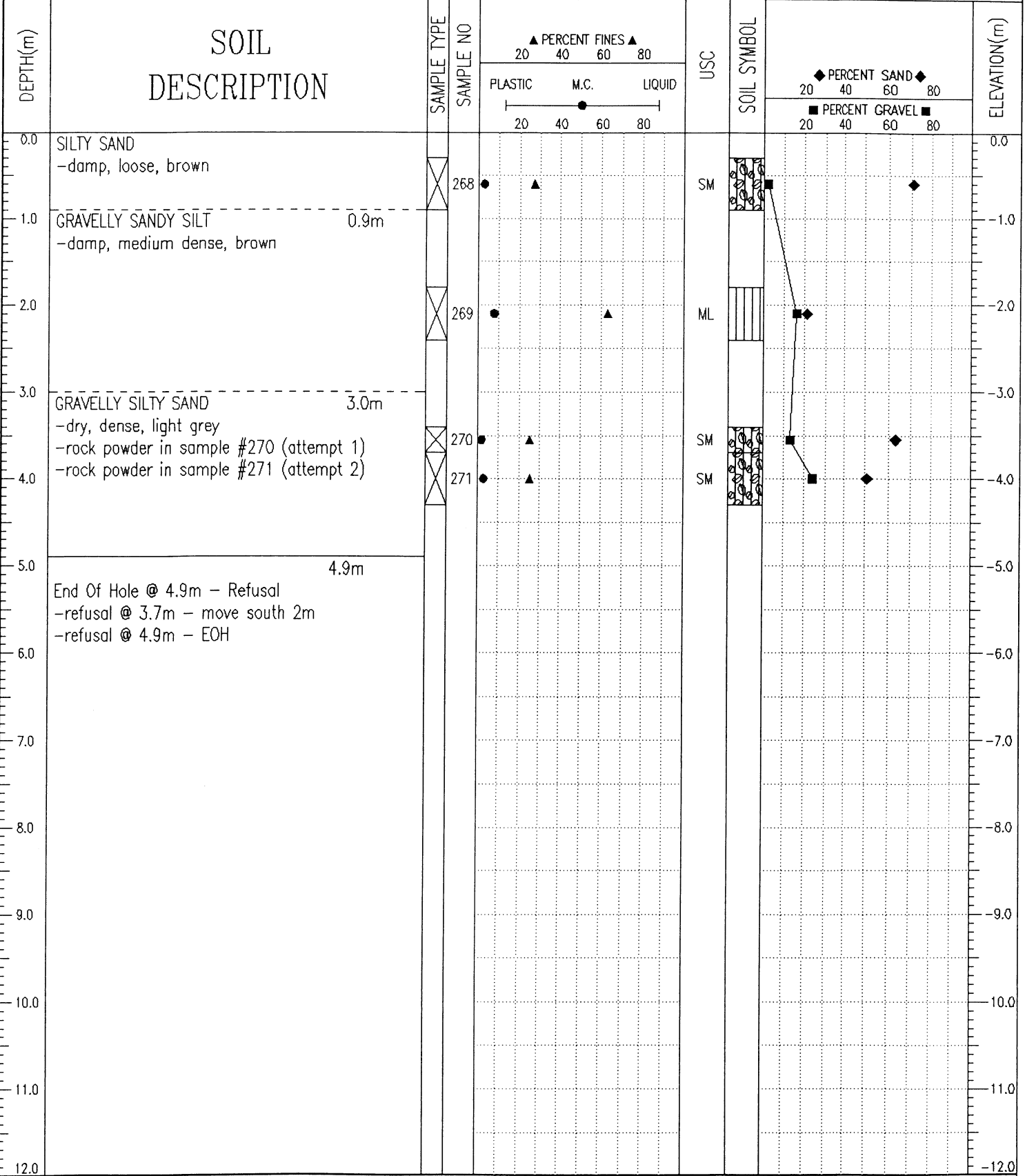
Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30103R	
Midnight Sun Drilling Ltd.		UTM ZONE: - N6770854 E634648		PROJECT NO: 8002-318	
Reverse Circulation Air Rotary Drill				ELEVATION:	
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input checked="" type="checkbox"/> 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	ELEVATION(m)
				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	AS PER SOILS LOG 30103 -refusal @ 4.3m & 2.4m						0.0
3.4	ROCK -dry, grey						
4.0			R56		ROCK		-4.0
5.5			R57		ROCK		-5.5
7.3	End of Hole @ 7.3m						-7.3
12.0							-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 7.3 m
		REVIEWED BY:	COMPLETE: 09/25/04
		Fig. No: 114	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30104
Donjek Services Ltd.	UTM ZONE: - N6770965 E634614	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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

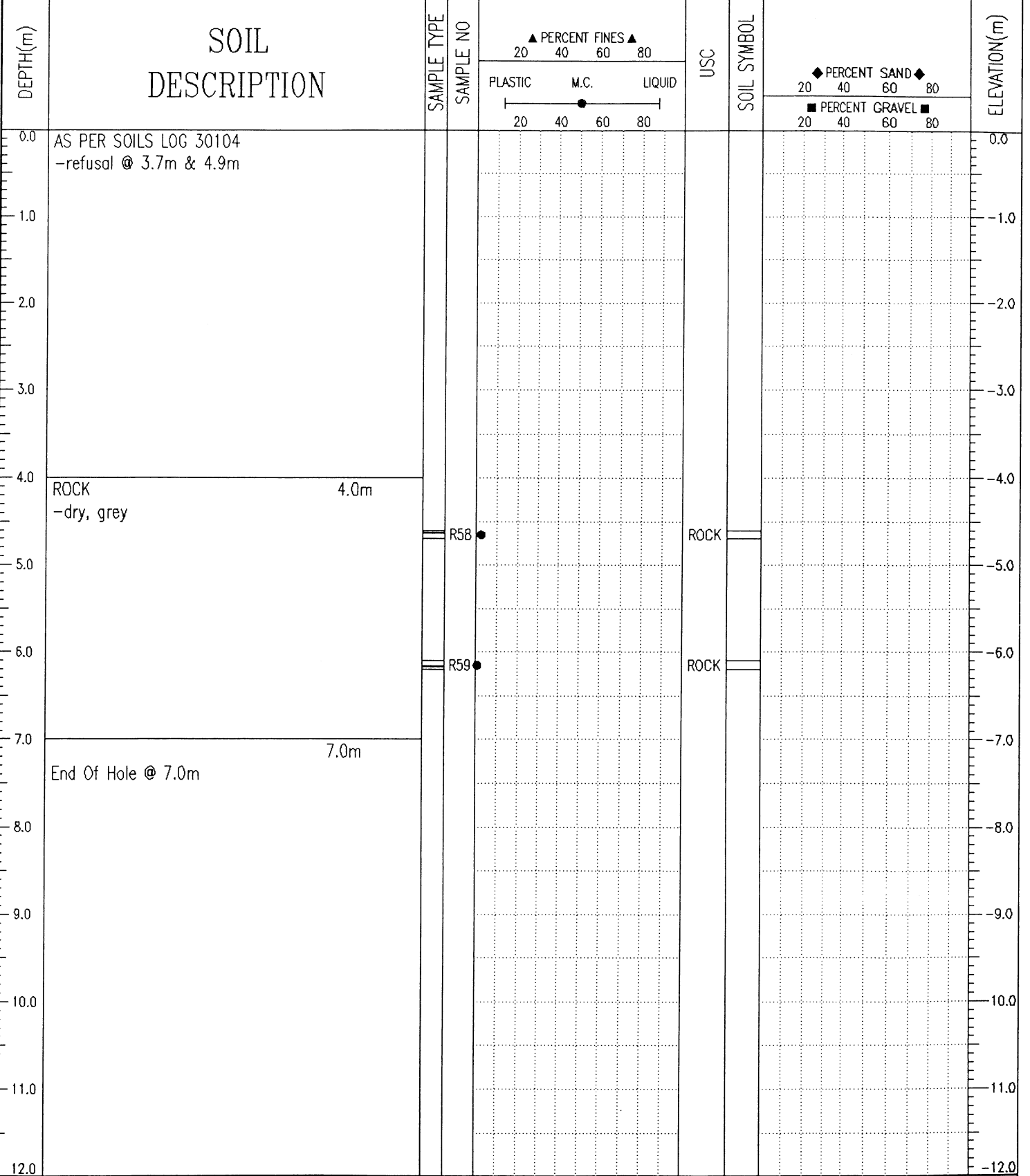


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 62
COMPLETION DEPTH: 4.9 m
COMPLETE: 08/13/04
Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30104R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6770967 E634604	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

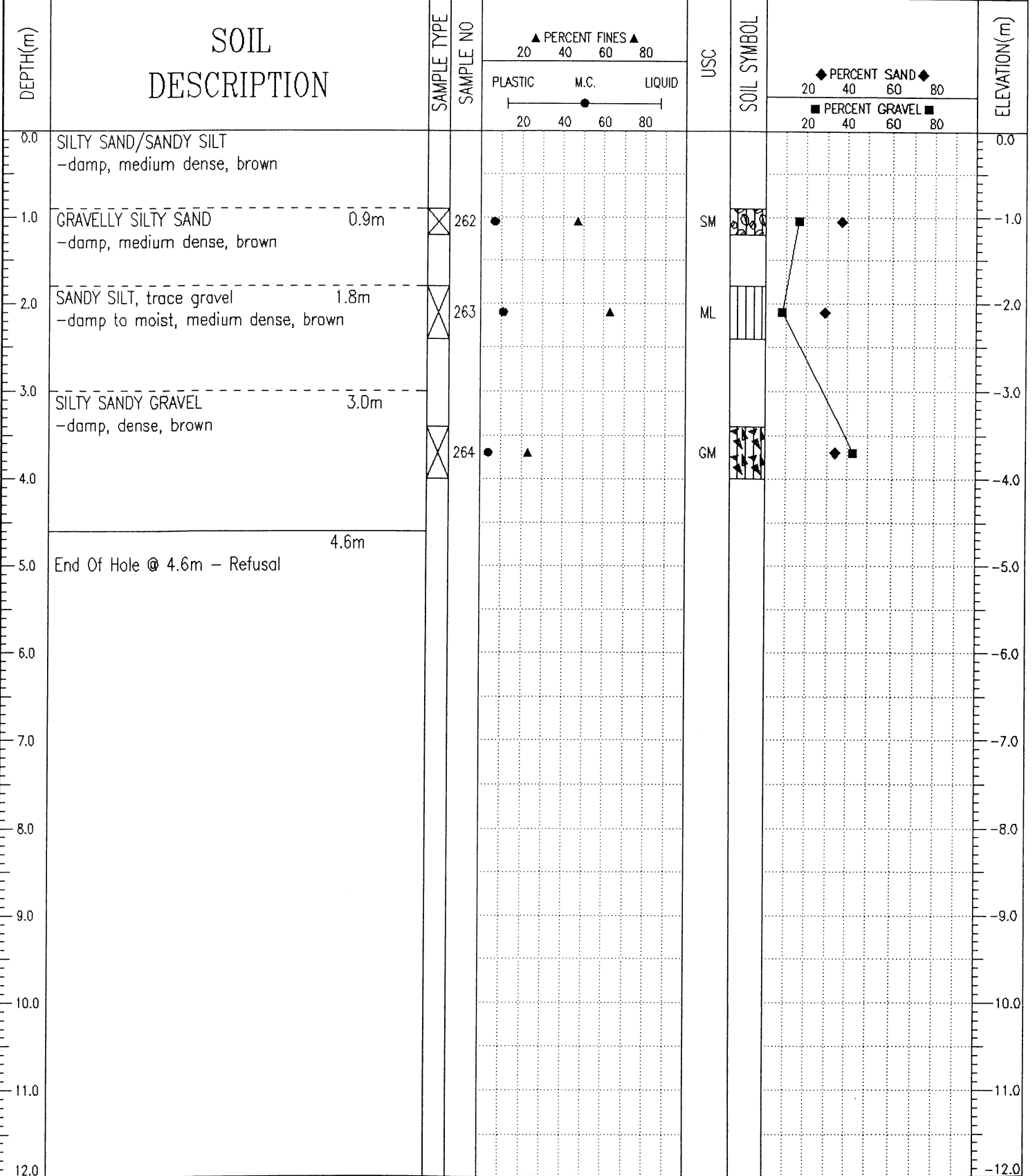


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 7 m
REVIEWED BY:	COMPLETE: 09/25/04
Fig. No: 115	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30105
Donjek Services Ltd.	UTM ZONE: - N6771005 E604672	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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

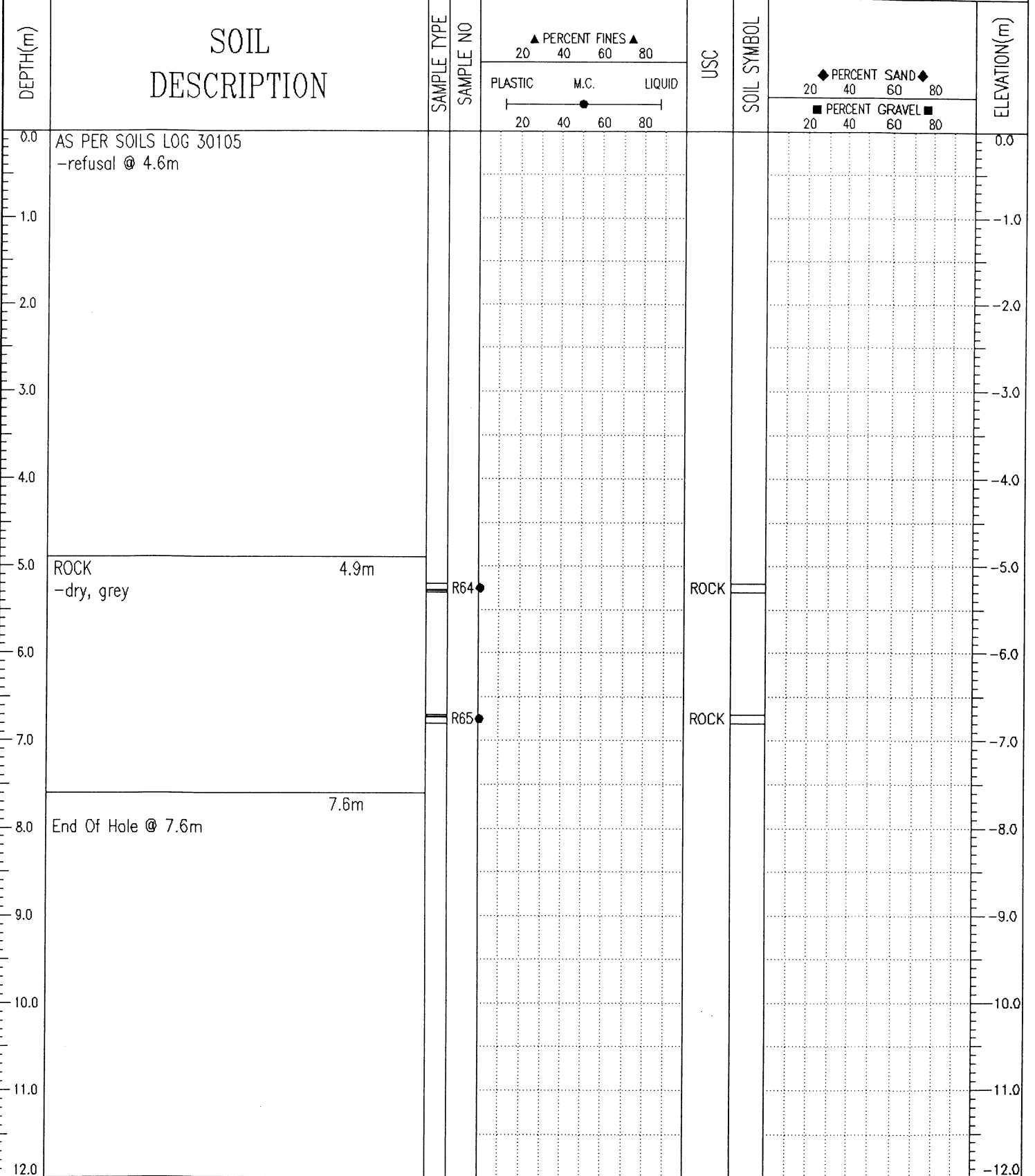


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
REVIEWED BY:	COMPLETE: 08/13/04
Fig. No: 61	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30105R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6771014 E634672	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

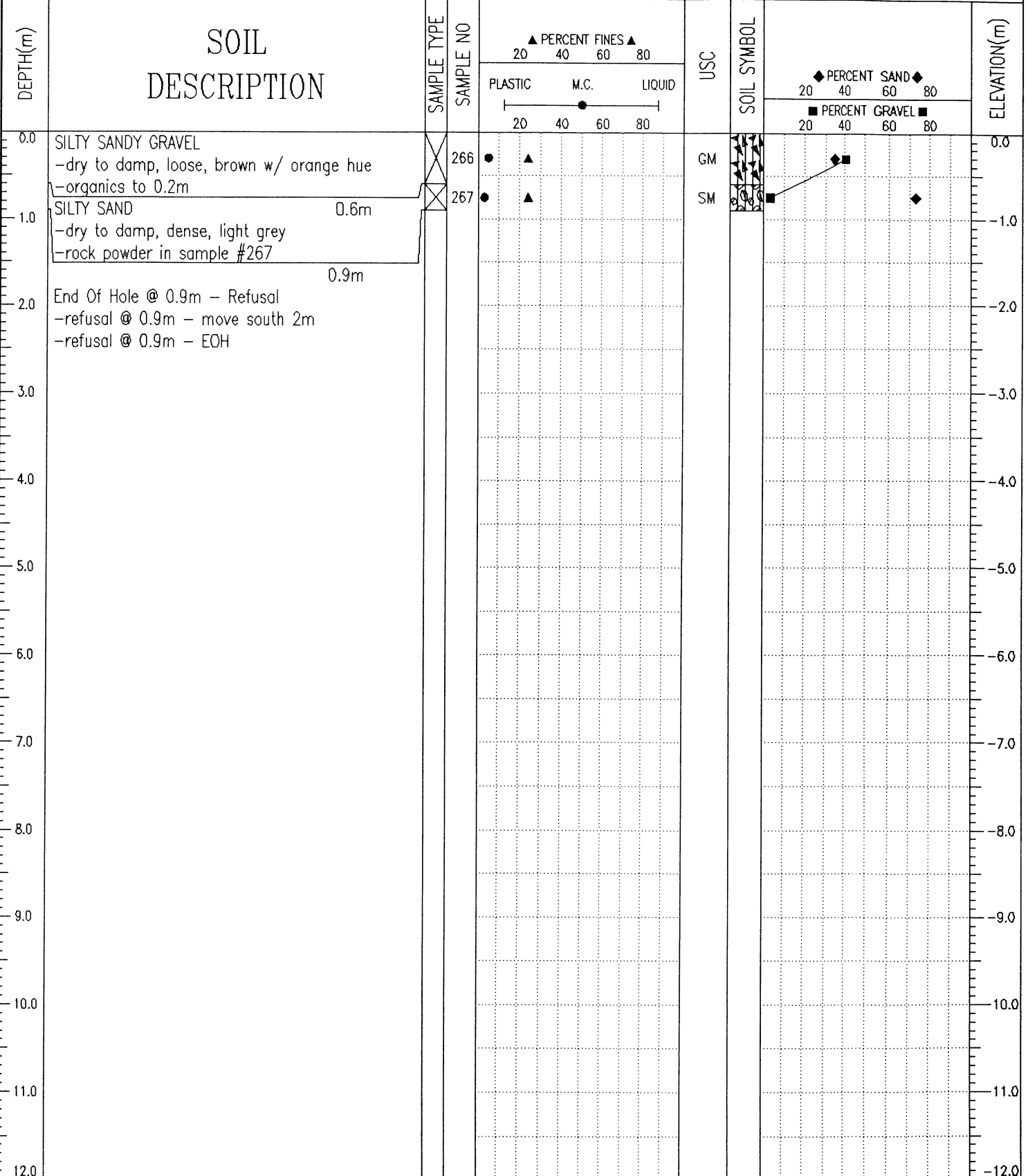


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 116

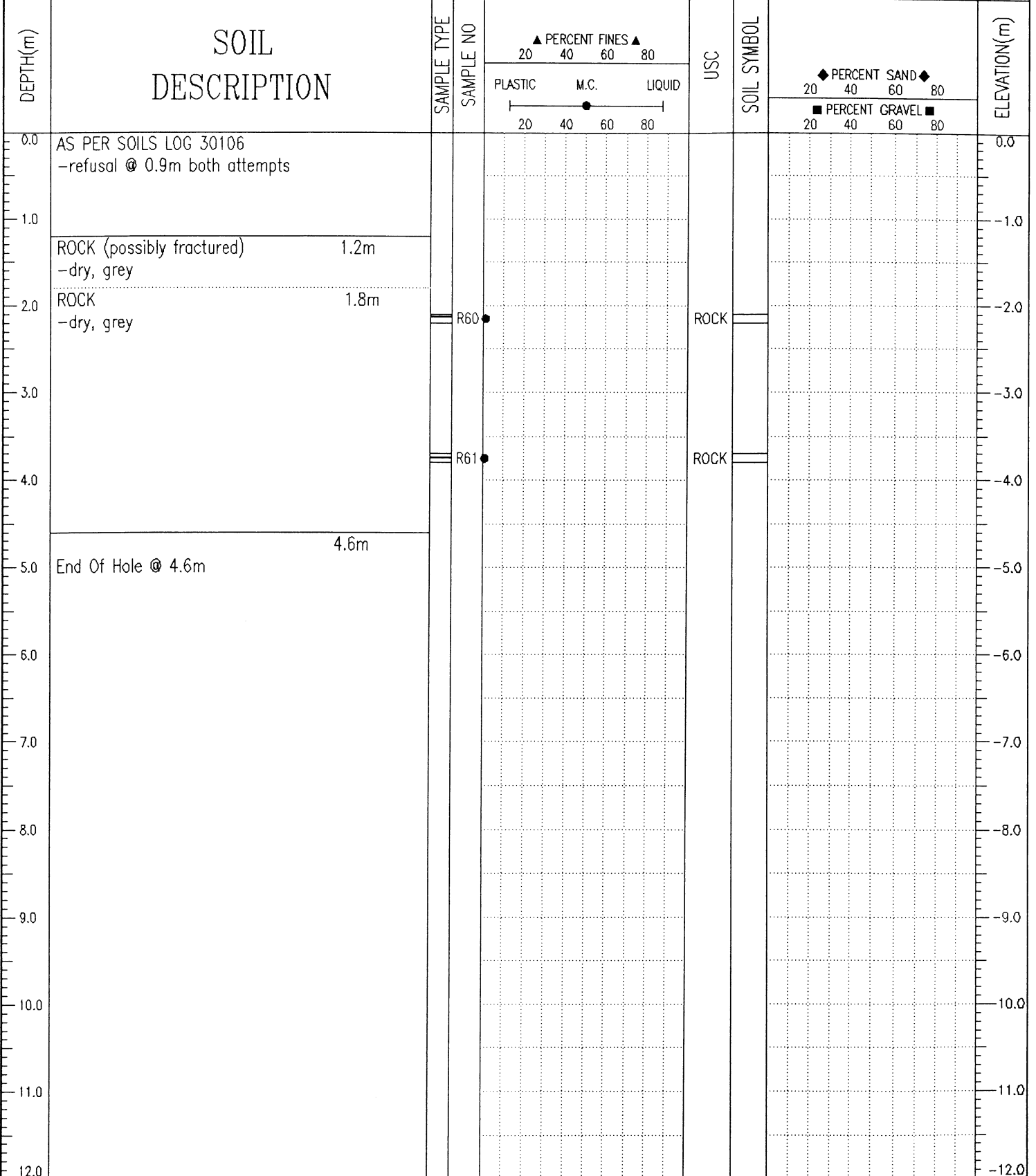
COMPLETION DEPTH: 7.6 m
COMPLETE: 09/26/04

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



Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30106R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6771070 E634575	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

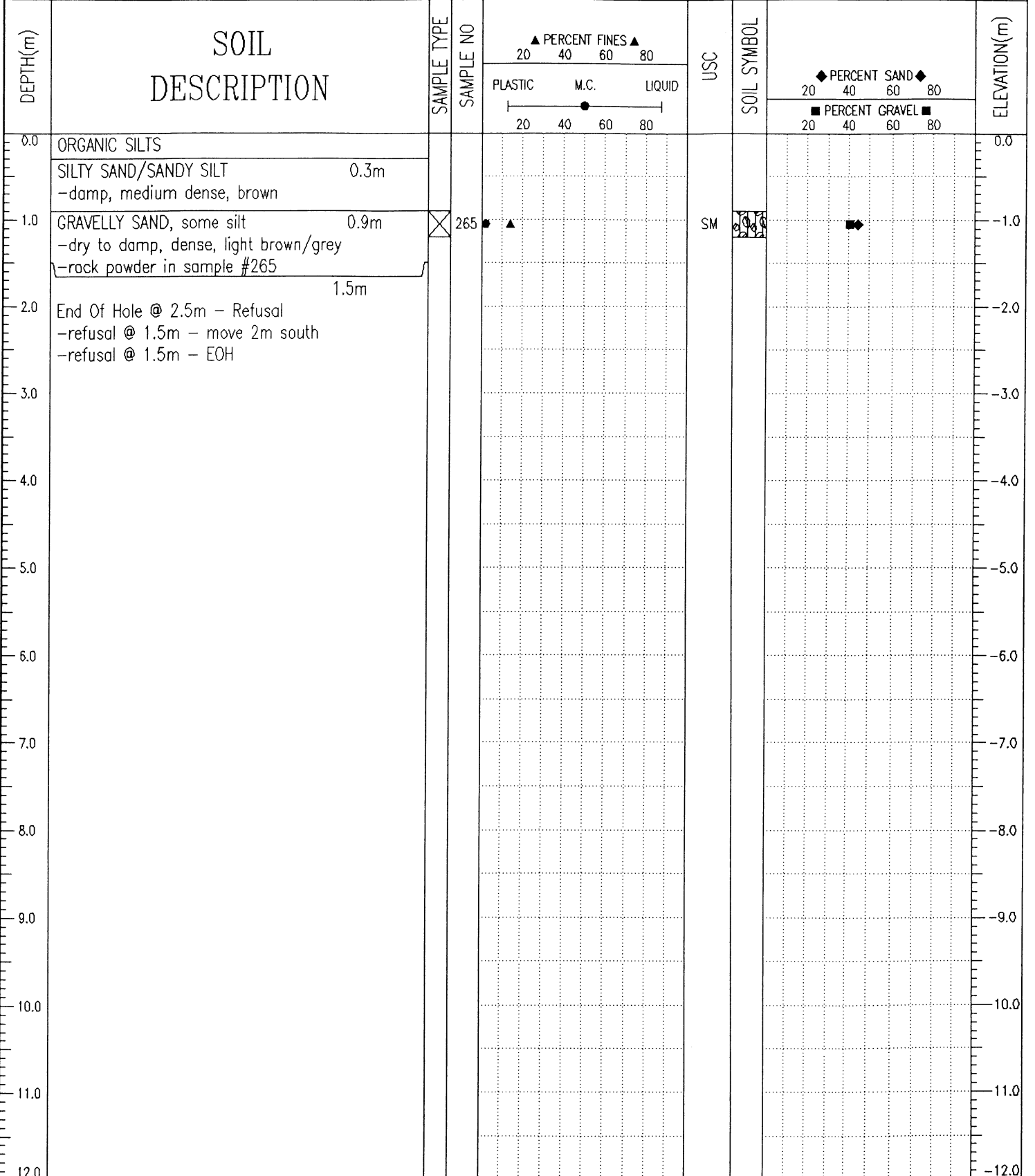
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
	REVIEWED BY:	COMPLETE: 09/26/04
	Fig. No: 117	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30107
Donjek Services Ltd.	UTM ZONE: - N6771149 E634529	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 1.5 m
REVIEWED BY:	COMPLETE: 08/13/04
Fig. No: 59	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30107R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6771151 E634529	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

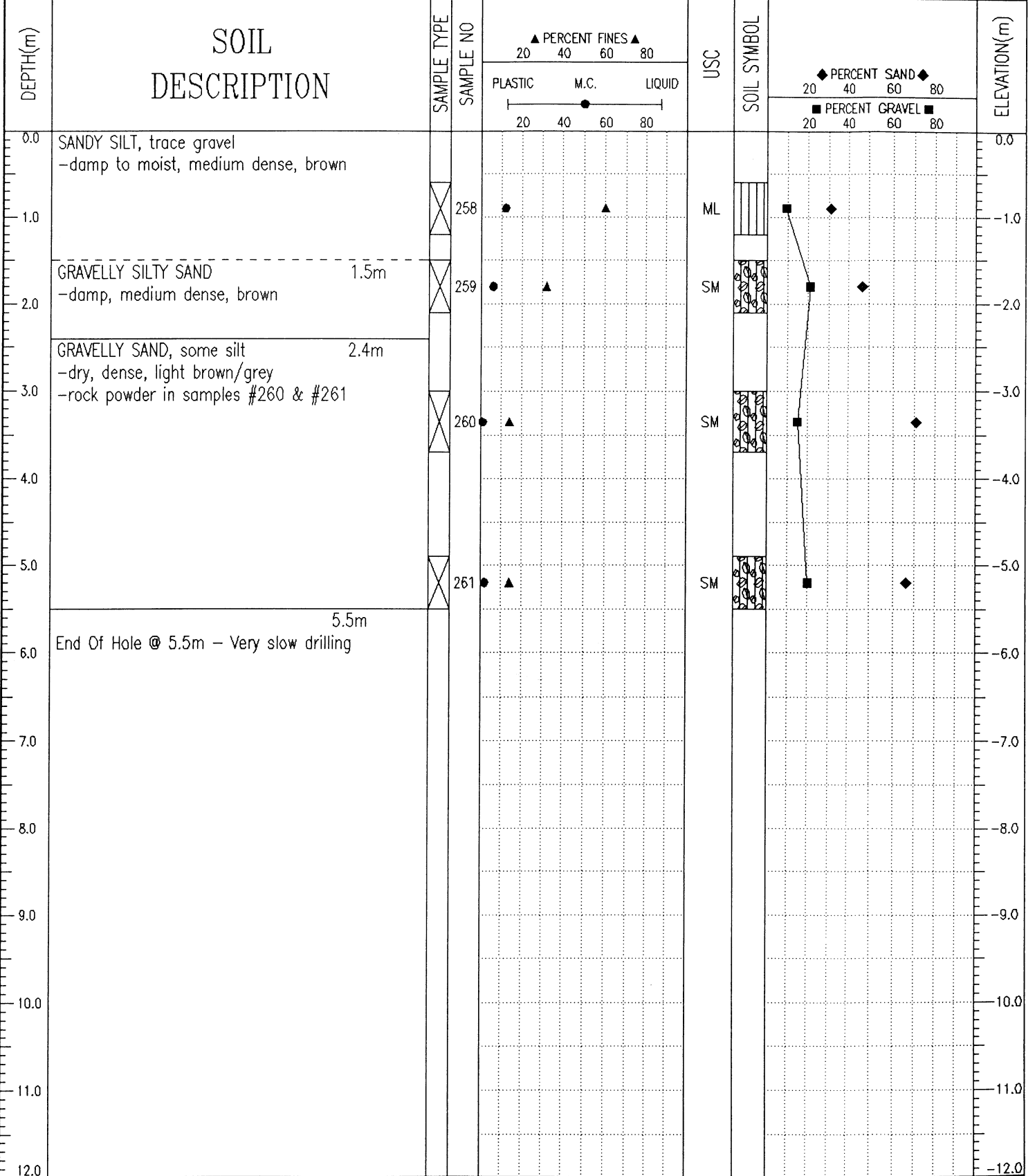
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL ◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30107 -refusal @ 1.5m both attempts						0.0
1.0	ROCK -dry, grey 1.2m						-1.0
2.0			R62		ROCK		-2.0
3.0							-3.0
4.0			R63		ROCK		-4.0
4.3	End Of Hole @ 4.3m 4.3m						-4.3
5.0							-5.0
6.0							-6.0
7.0							-7.0
8.0							-8.0
9.0							-9.0
10.0							-10.0
11.0							-11.0
12.0							-12.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4.3 m
REVIEWED BY:	COMPLETE: 09/26/04
Fig. No: 132	Page 1 of 1

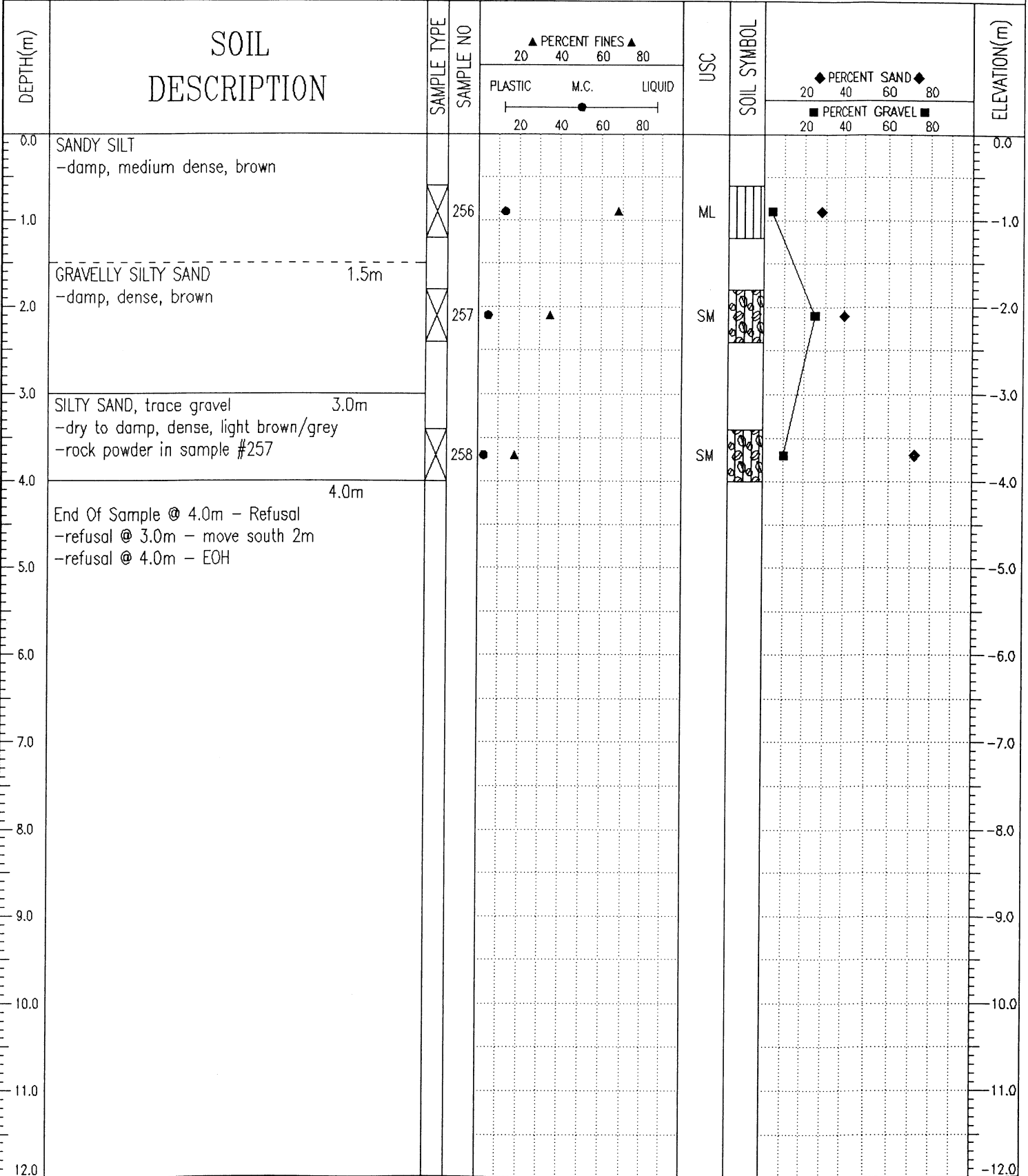
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



05/02/10 07:35AM (YIG_HHRS)

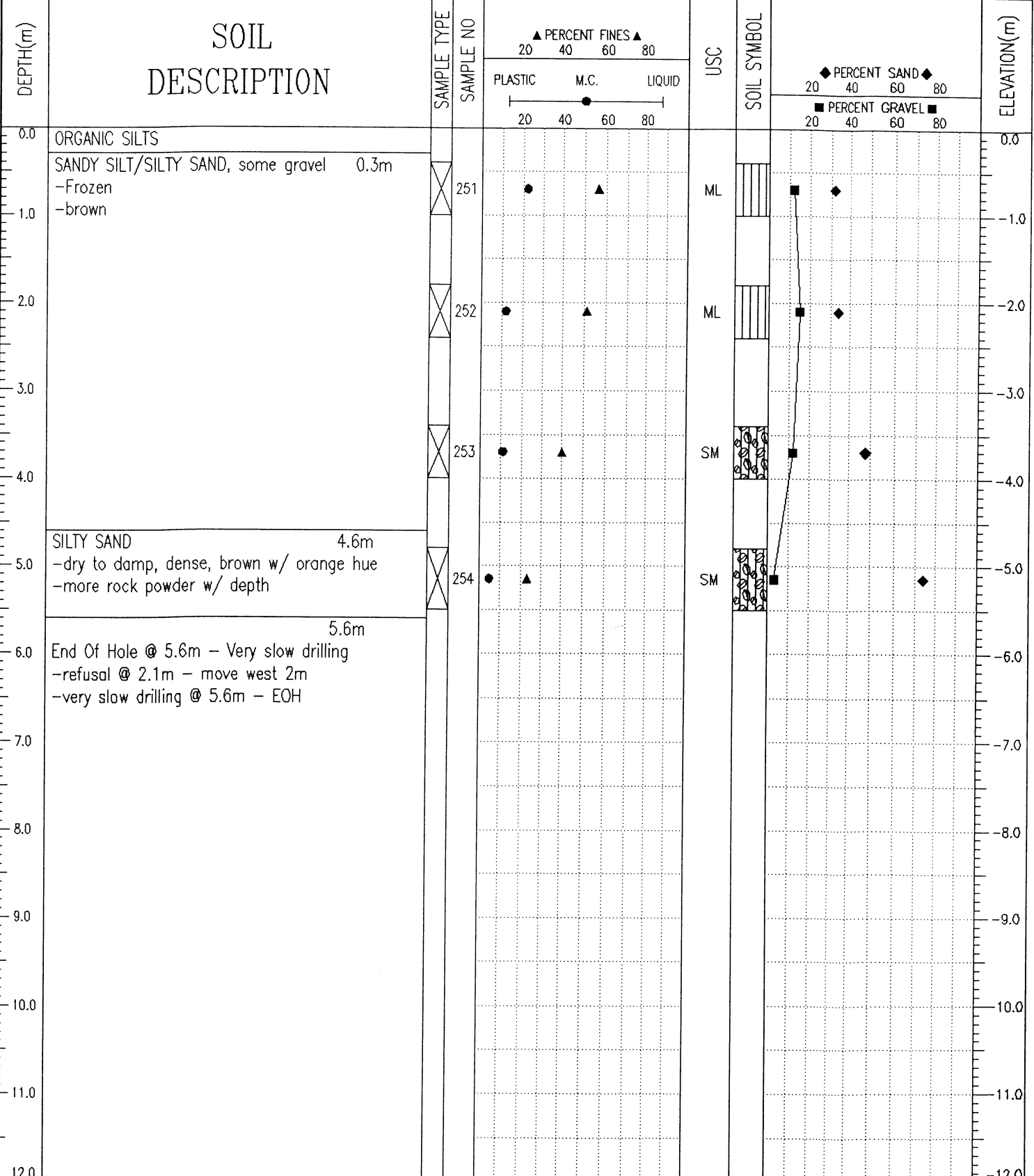
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30109
Donjek Services Ltd.	UTM ZONE: - N6771427 E634466	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 4 m
	REVIEWED BY:	COMPLETE: 08/13/04
	Fig. No: 57	Page 1 of 1

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 56

COMPLETION DEPTH: 5.6 m
COMPLETE: 08/13/04

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30111						
Donjek Services Ltd.		UTM ZONE: - N6776127 E634475		PROJECT NO: 8002-318						
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:						
SAMPLE TYPE <input type="checkbox"/> RETURN <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 ◆		ELEVATION (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■	
0.0	GRAVELLY SILTY SAND -damp, medium dense, brown -light organics to 0.3m	<input checked="" type="checkbox"/>	249	●	▲		SM	■	◆	0.0
1.0	SILTY GRAVELLY SAND 1.0m -dry, dense, light brown/grey -rock powder in sample #250	<input checked="" type="checkbox"/>	250	●	▲		SM	■	◆	-1.0
2.0	1.8m End Of Hole @ 1.8m - Refusal -refusal @ 1.8m - move east 1.5m -refusal @ 1.8m - EOH									-2.0
3.0										-3.0
4.0										-4.0
5.0										-5.0
6.0										-6.0
7.0										-7.0
8.0										-8.0
9.0										-9.0
10.0										-10.0
11.0										-11.0
12.0										-12.0

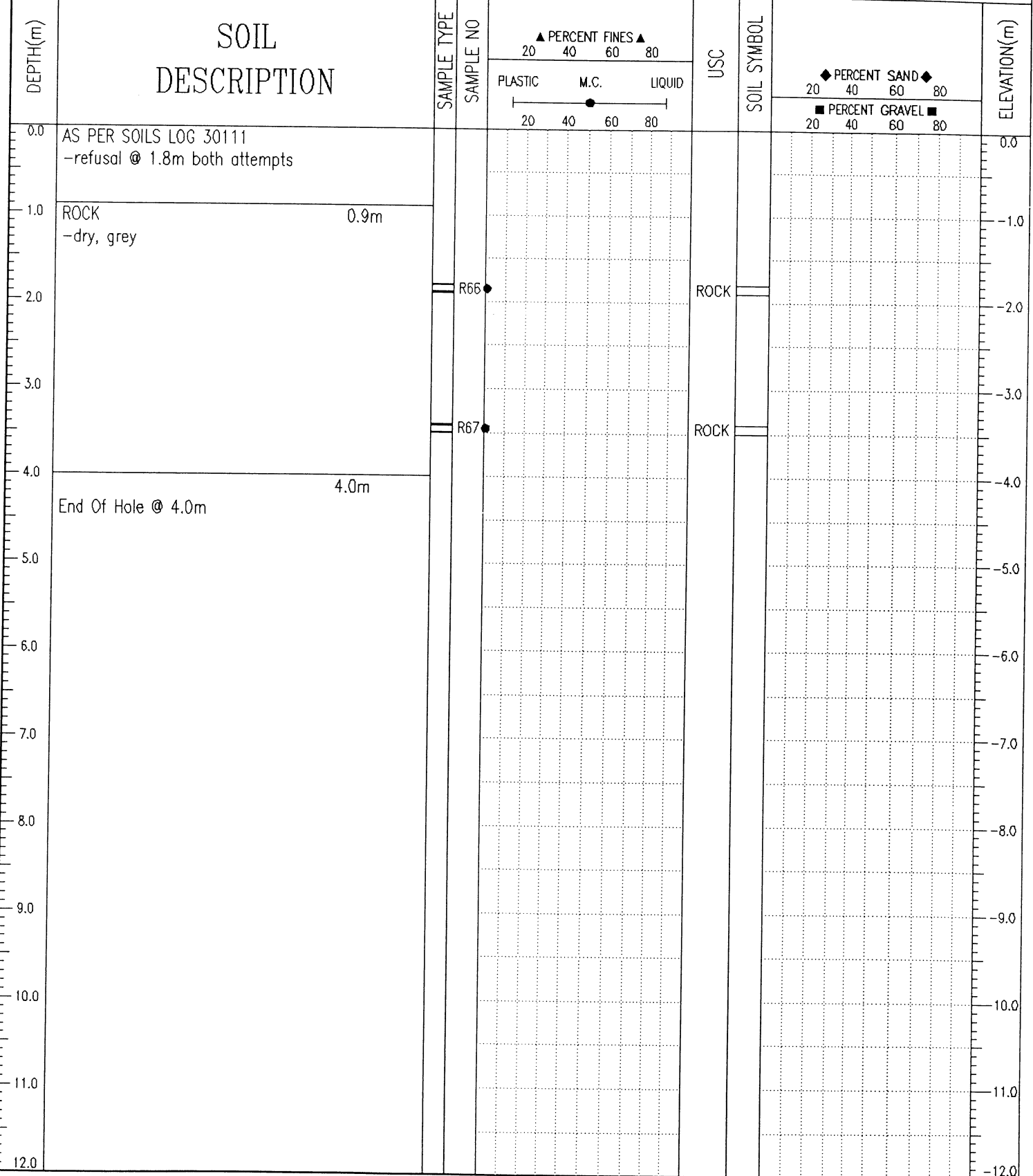
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 55

COMPLETION DEPTH: 1.8 m
COMPLETE: 08/13/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30111R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6771629 E634480	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

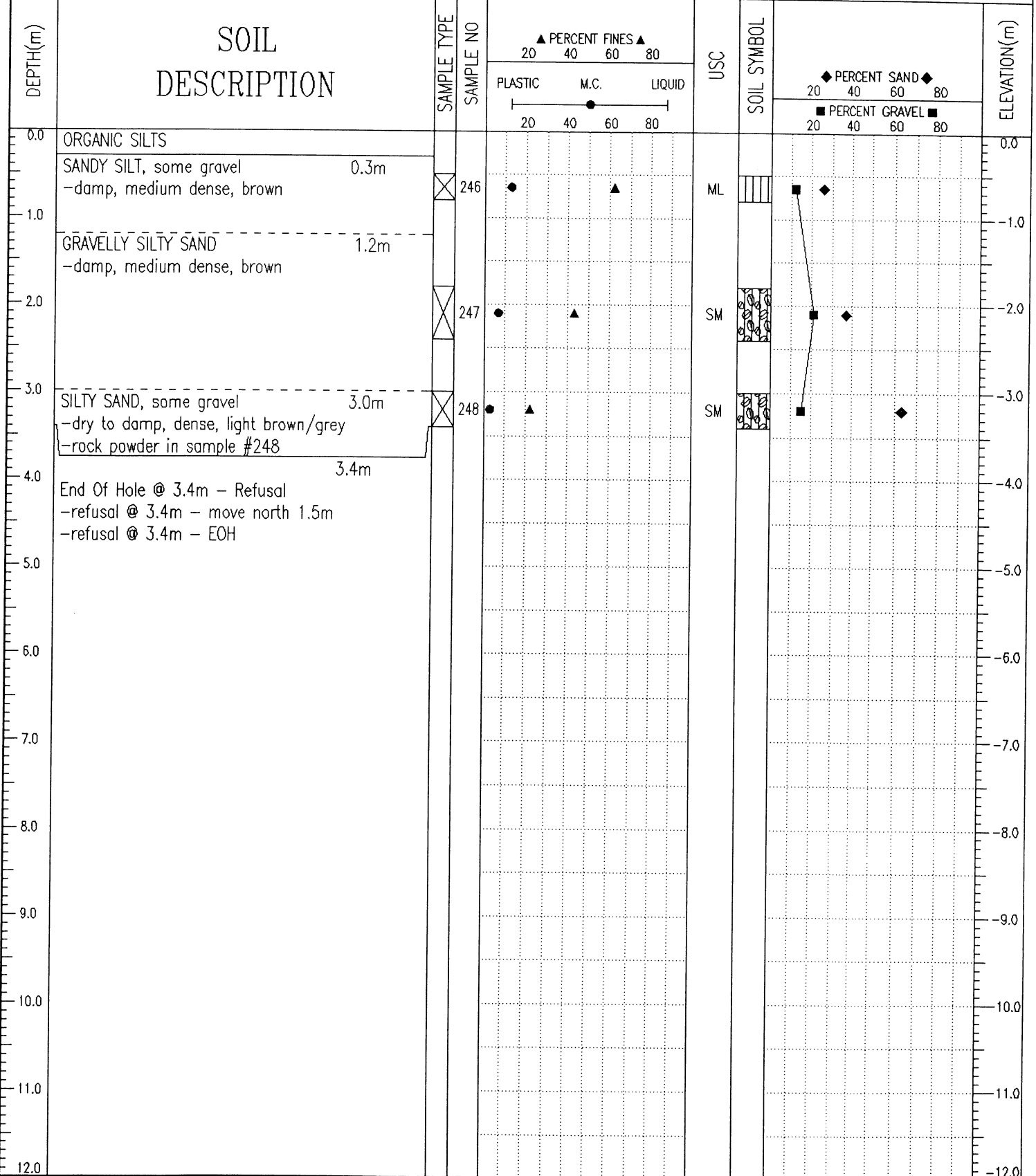
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4 m
REVIEWED BY:	COMPLETE: 09/26/04
Fig. No: 118	Page 1 of 1

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 54

COMPLETION DEPTH: 3.4 m
COMPLETE: 08/13/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30112R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6771772 E634470	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

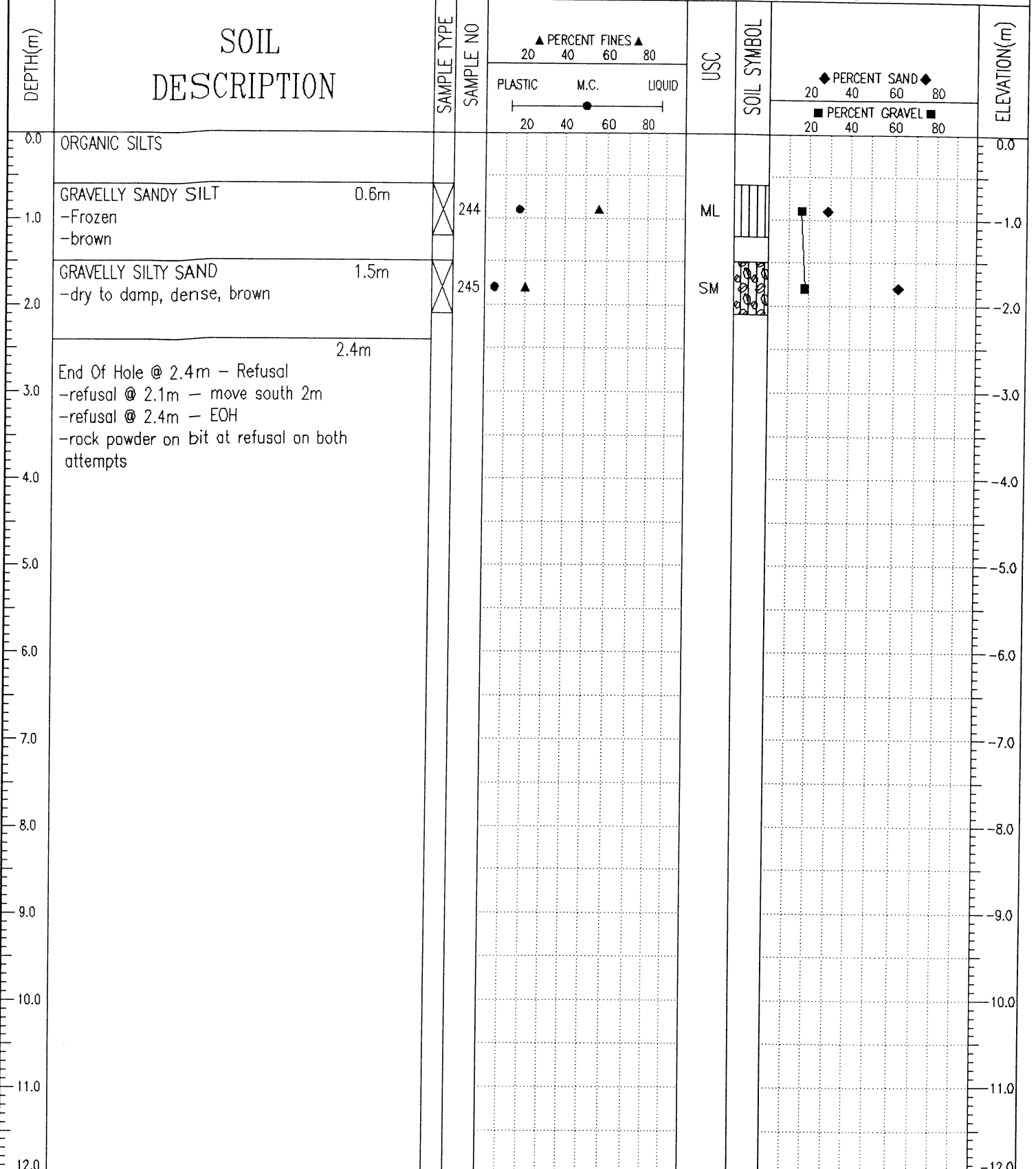
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 ▲ PLASTIC M.C. LIQUID ----- 20 40 60 80	USC	SOIL SYMBOL ◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30112 -refusal @ 3.4m both attempts						0.0
3.0	ROCK (possibly fractured) 3.0m -dry, grey -some sand infill						-3.0
4.0	ROCK 4.0m -dry, grey		R68		ROCK		-4.0
4.6	End Of Hole @ 4.6m						-4.6
12.0							-12.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
REVIEWED BY:	COMPLETE: 09/26/04
Fig. No: 119	Page 1 of 1

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



05/02/10 07:35AM (YIG_HHMS)

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30113R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6771880 E634441	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

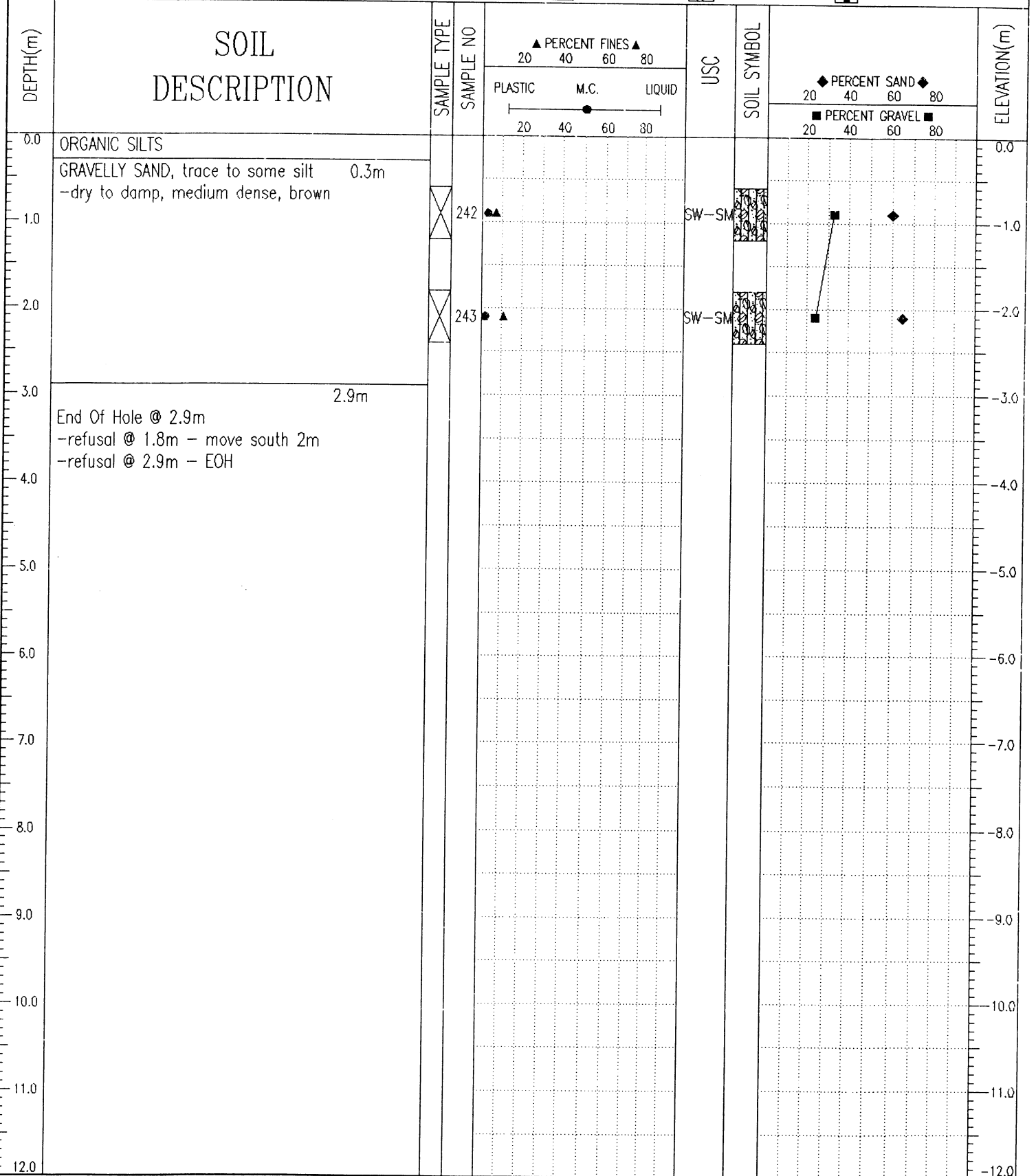
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL	ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60		
0.0	AS PER SOILS LOG 30113 --refusal @ 2.4m & 2.1m												0.0
2.0	ROCK (possibly fractured) 1.8m												-2.0
3.0	ROCK -intact 2.4m												-3.0
4.0			R69				ROCK						-4.0
5.0	End Of Hole @ 4.6m 4.6m												-5.0
6.0													-6.0
7.0													-7.0
8.0													-8.0
9.0													-9.0
10.0													-10.0
11.0													-11.0
12.0													-12.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
REVIEWED BY:	COMPLETE: 09/26/04
Fig. No: 120	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30114
Donjek Services Ltd.	UTM ZONE: - N6772019 E634386	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 52

COMPLETION DEPTH: 2.9 m
COMPLETE: 08/12/04
Page 1 of 1

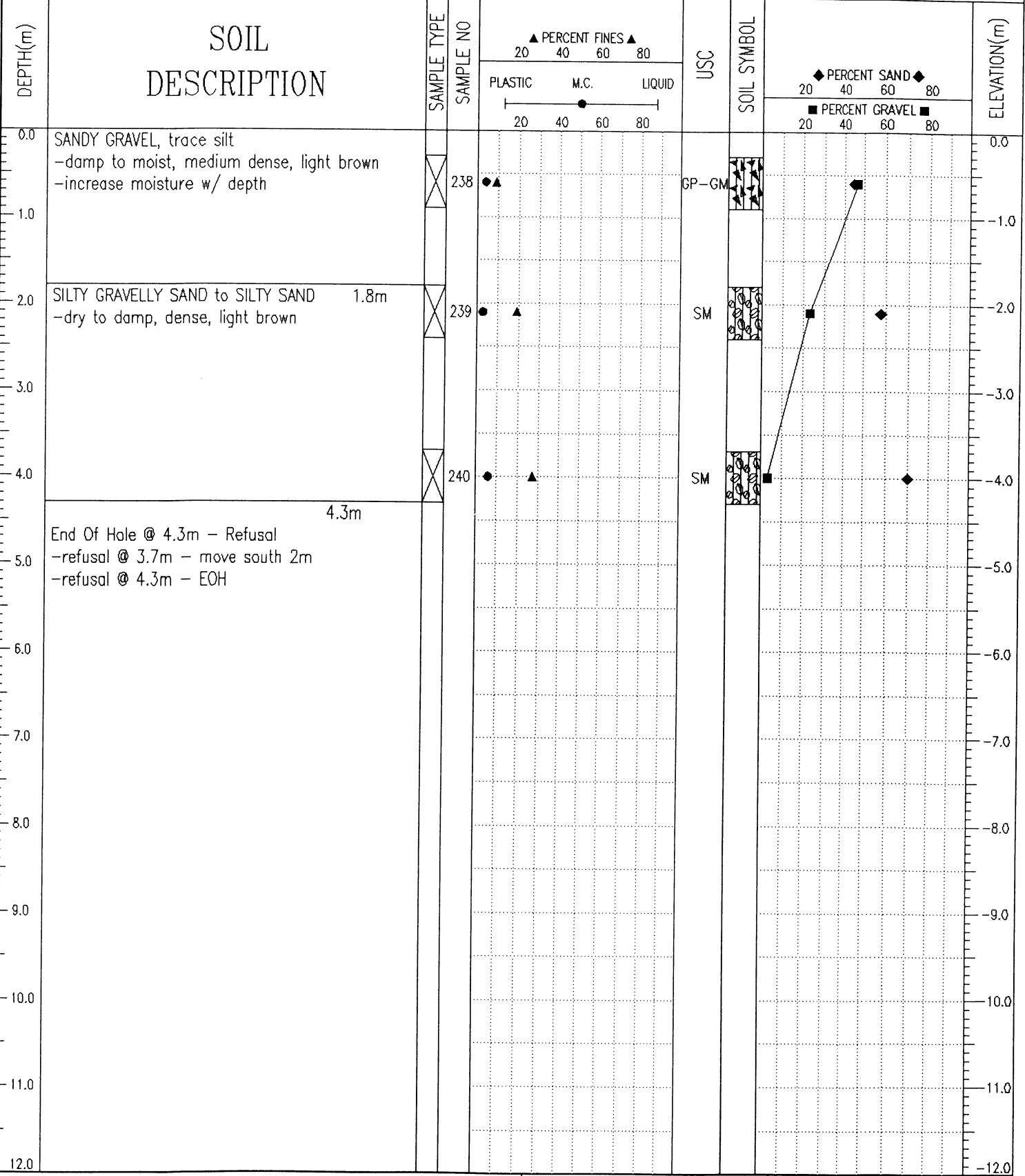
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30114R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6772023 E634386	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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 ◆			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	AS PER SOILS LOG 30114 -refusal @ 1.8m & 2.9m											0.0
3.0	ROCK (possibly fractured) 3.0m -medium dense -some sand infill											-3.0
4.0	ROCK 4.0m -intact		R70 ●				ROCK					-4.0
4.6	End Of Hole @ 4.6m											-4.6
12.0												-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
	REVIEWED BY:	COMPLETE: 09/27/04
	Fig. No: 121	Page 1 of 1

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4.3 m
REVIEWED BY:	COMPLETE: 08/12/04
Fig. No: 51	Page 1 of 1

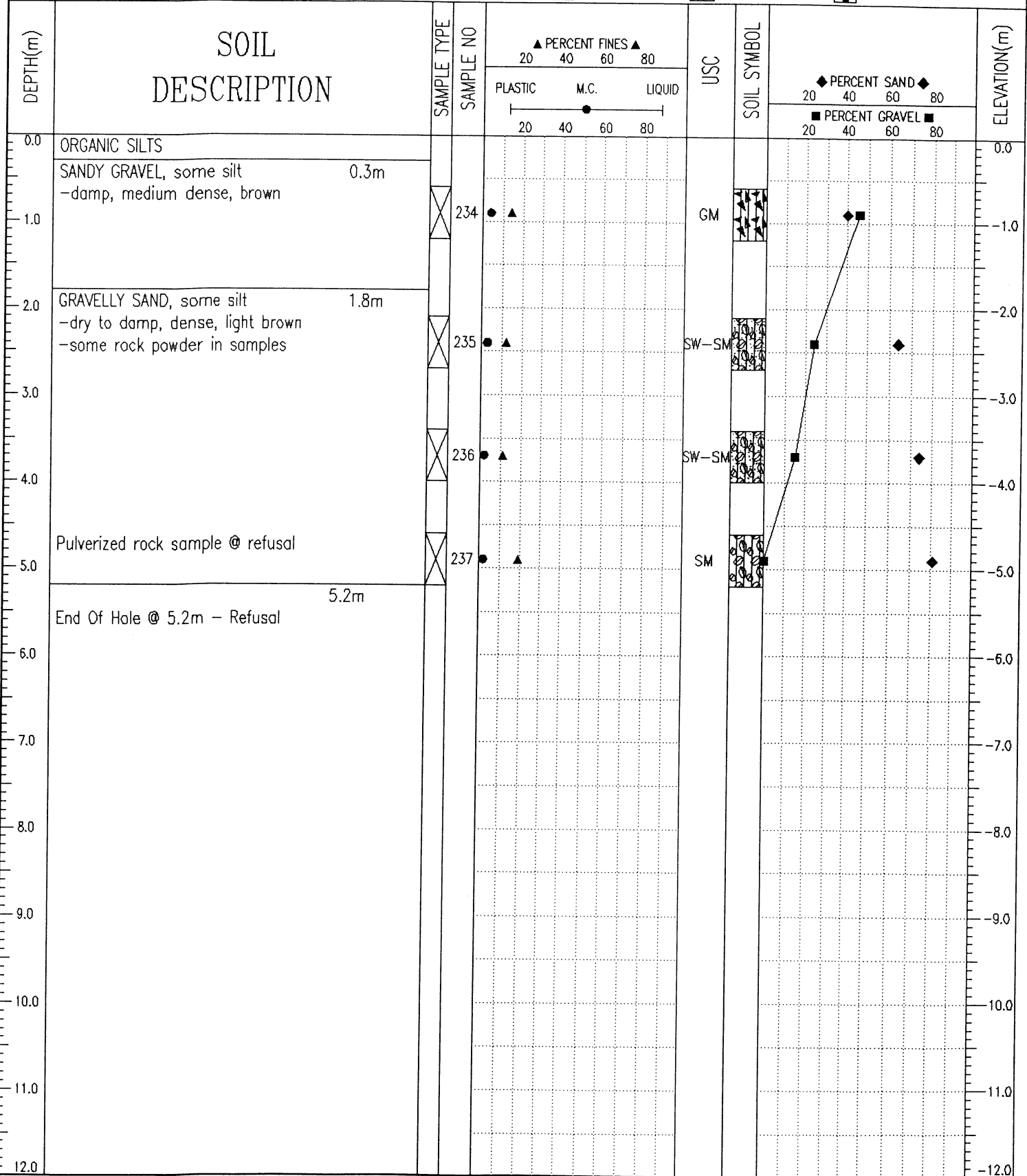
Geotechnical Services Km 1691.7 to 1717.3 Alaska Highway #1 TEST PIT NO: 30115R
 Midnight Sun Drilling Ltd. UTM ZONE: - N6772108 E634337 PROJECT NO: 8002-318
 Reverse Circulation Air Rotary Drill ELEVATION:

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 ◆			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	AS PER SOILS LOG 30115 -refusal @ 3.7m & 4.3m											0.0
2.0	ROCK or COBBLES/BOULDERS 1.8m -light brown/grey											-2.0
3.4	ROCK 3.4m -some powder (not fine) -some sand in sample -water on stem after withdrawal -medium dense		R73				ROCK					-4.0
4.6	End Of Hole @ 4.6m											-5.0
6.0												-6.0
7.0												-7.0
8.0												-8.0
9.0												-9.0
10.0												-10.0
11.0												-11.0
12.0												-12.0

J. R. Paine & Associates Ltd. LOGGED BY: RW COMPLETION DEPTH: 4.6 m
 Whitehorse, Yukon REVIEWED BY: COMPLETE: 09/27/04
 Fig. No: 122 Page 1 of 1

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.2 m
REVIEWED BY:	COMPLETE: 08/12/04
Fig. No: 50	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30116R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6772107 E634309	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

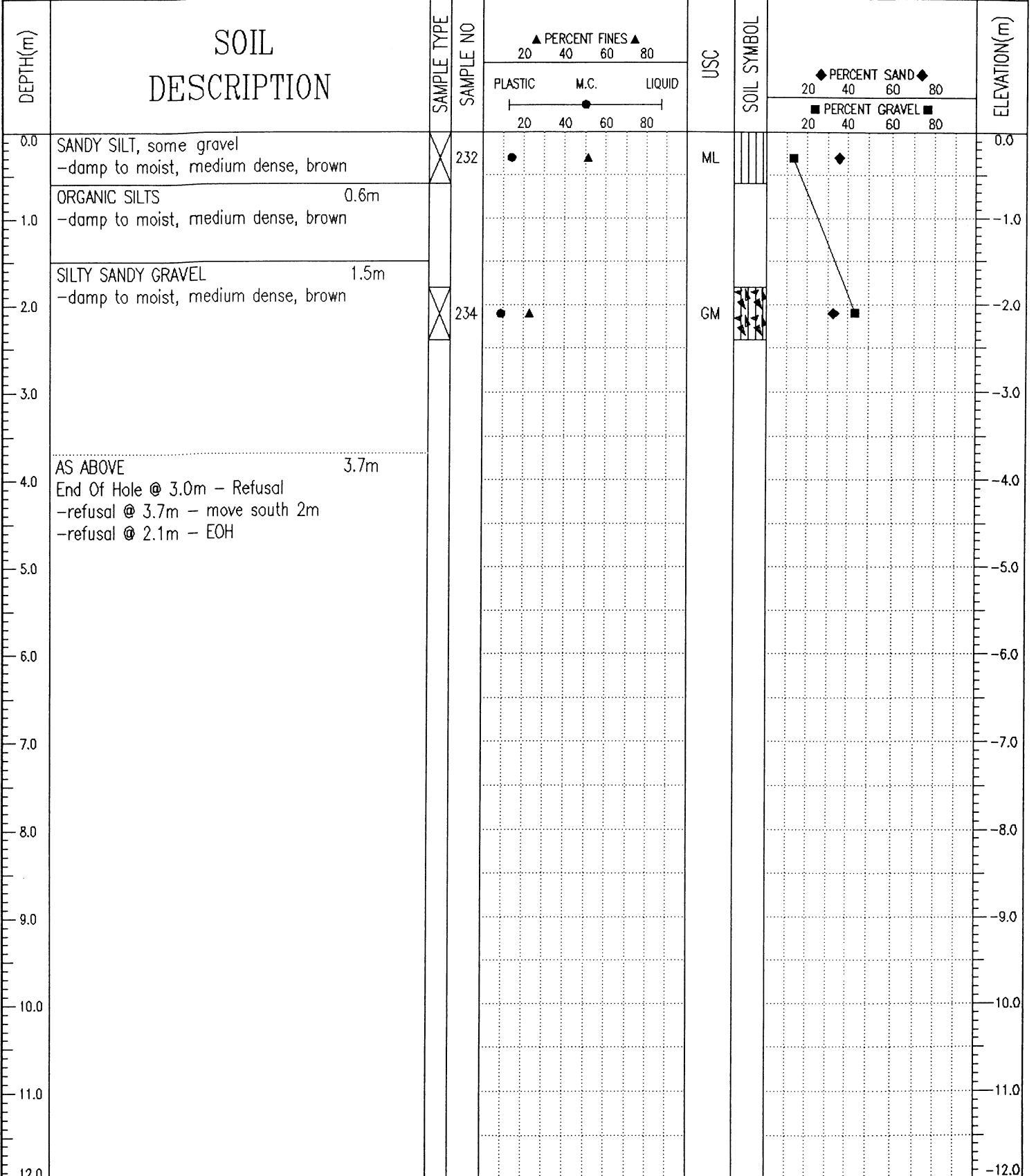
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30116 -refusal @ 5.2m							0.0
1.5	ROCK (possibly fractured) -dry, grey -medium dense -some sand in powder							-1.5
3.0	ROCK -dry, grey							-3.0
4.0			R71		ROCK			-4.0
4.6	End Of Hole @ 4.6m							-4.6
6.0								-6.0
7.0								-7.0
8.0								-8.0
9.0								-9.0
10.0								-10.0
11.0								-11.0
12.0								-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW REVIEWED BY: Fig. No: 123	COMPLETION DEPTH: 4.6 m COMPLETE: 09/27/04
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Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30117
Donjek Services Ltd.	UTM ZONE: - N6772256 E634222	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 3.7 m
	REVIEWED BY:	COMPLETE: 08/12/04
	Fig. No: 49	Page 1 of 1

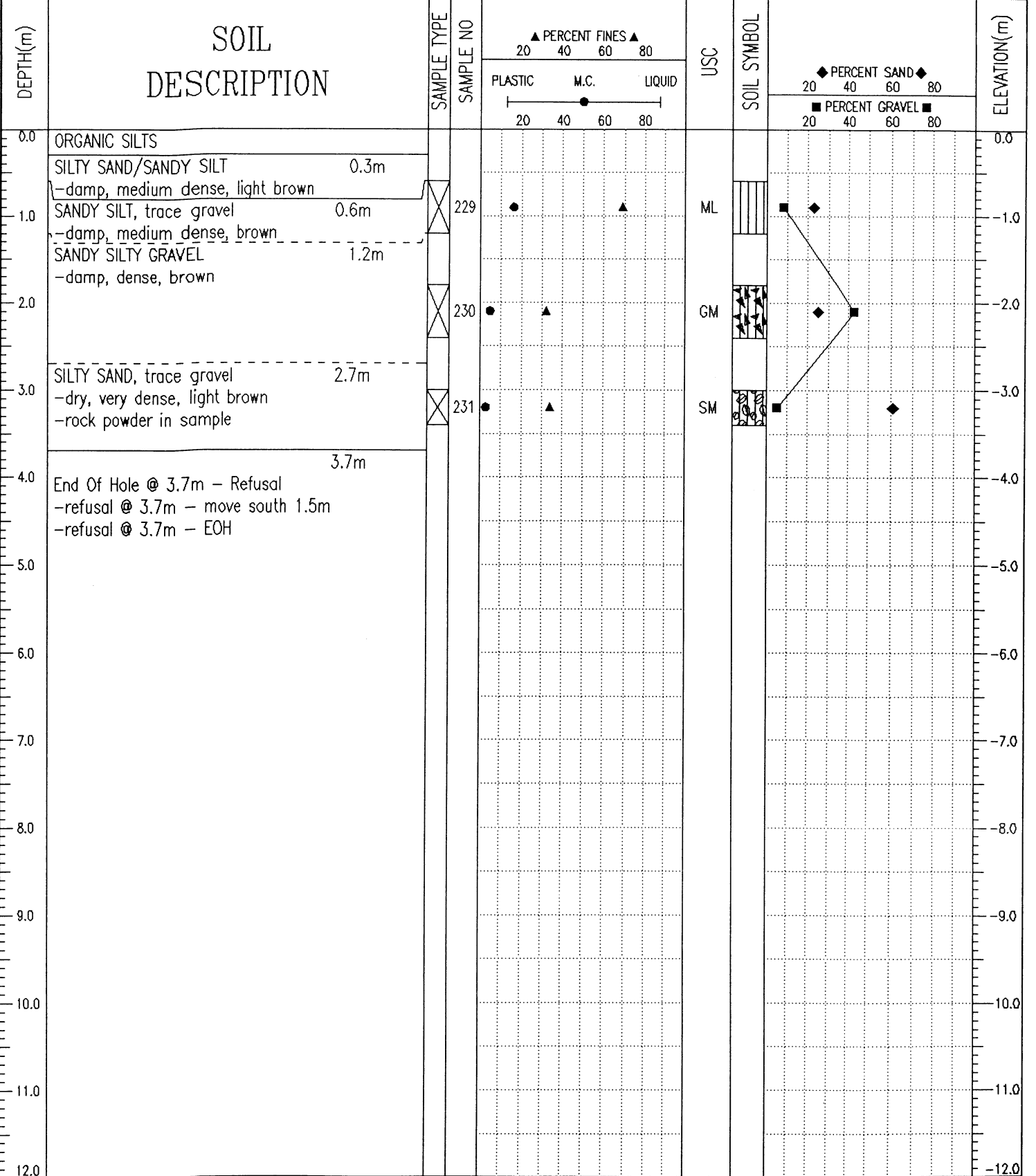
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30117R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6772253 E634224	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID ────┬───┬───┬─── 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30117 -refusal 2.1m @ 3.7m							0.0
3.4	ROCK or GRAVEL STRATA -dry, brown -not much powder -some round stone in sample							-3.4
6.7	End Of Hole @ 6.7m		R72					-6.7

J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 6.7 m
	REVIEWED BY:	COMPLETE: 09/27/04
	Fig. No: 124	Page 1 of 1

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



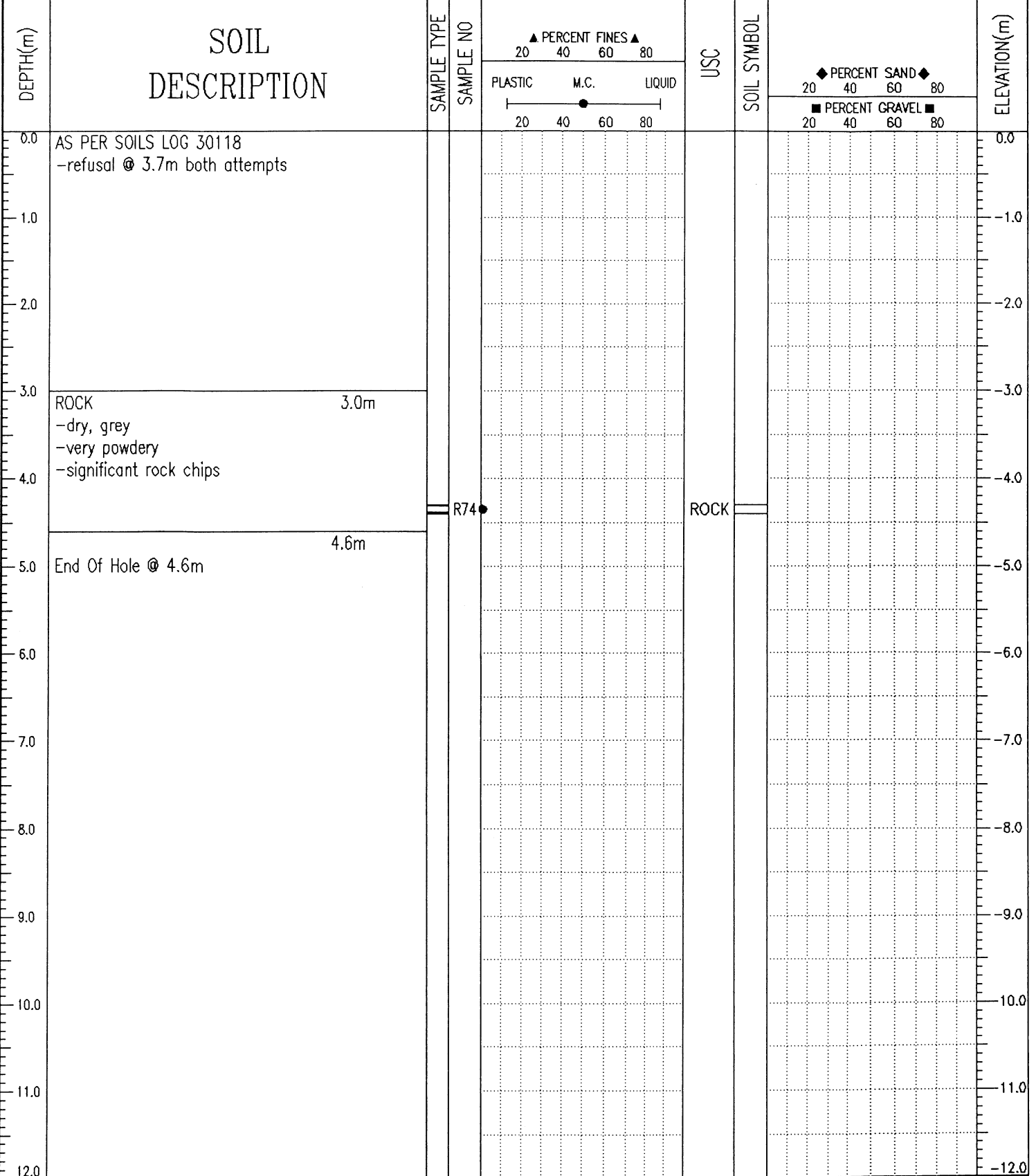
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 48

COMPLETION DEPTH: 3.7 m
COMPLETE: 08/12/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30118R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6772274 E634188	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

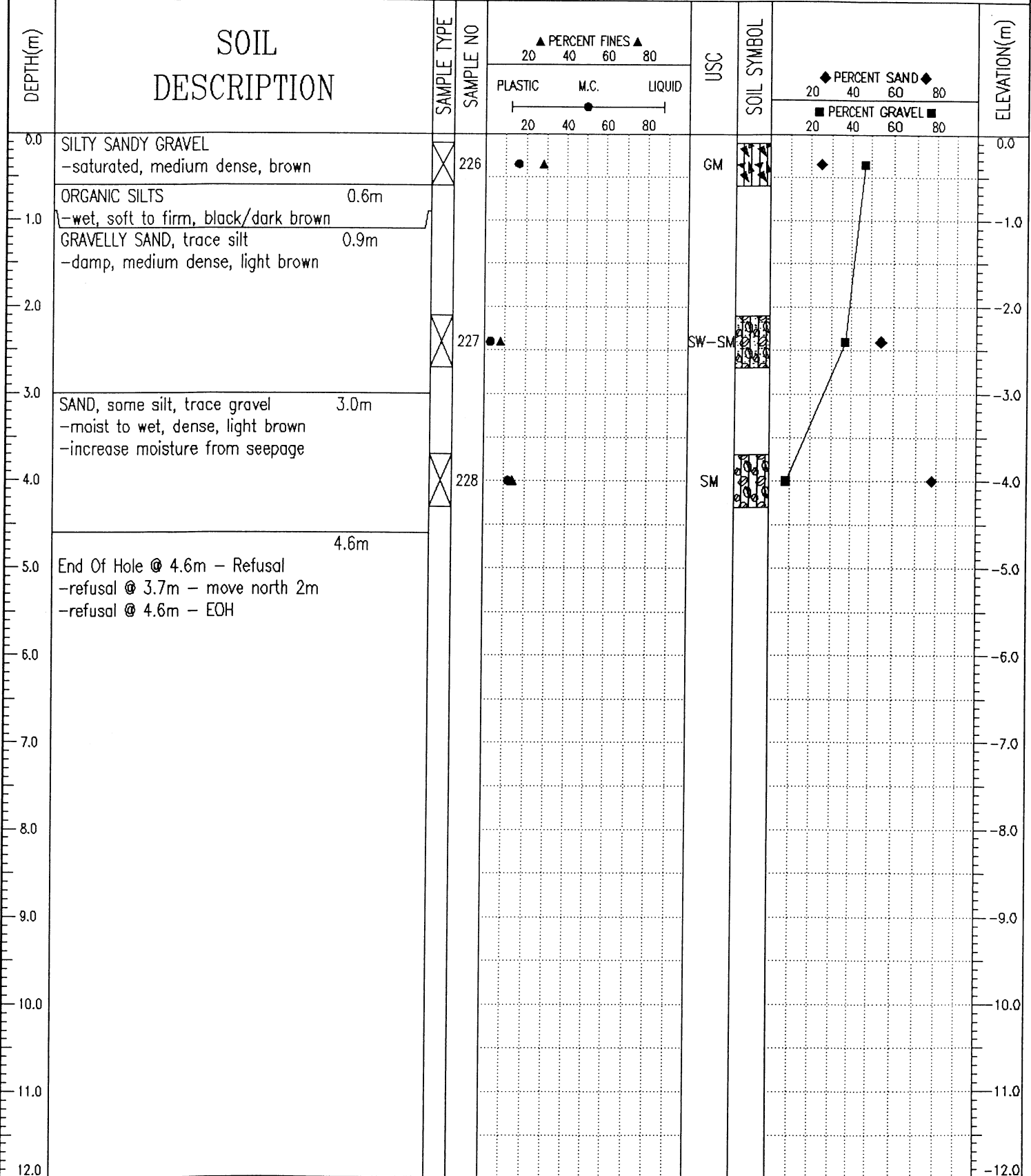
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
	REVIEWED BY:	COMPLETE: 09/27/04
	Fig. No: 125	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30119
Donjek Services Ltd.	UTM ZONE: - N6772380 E634109	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

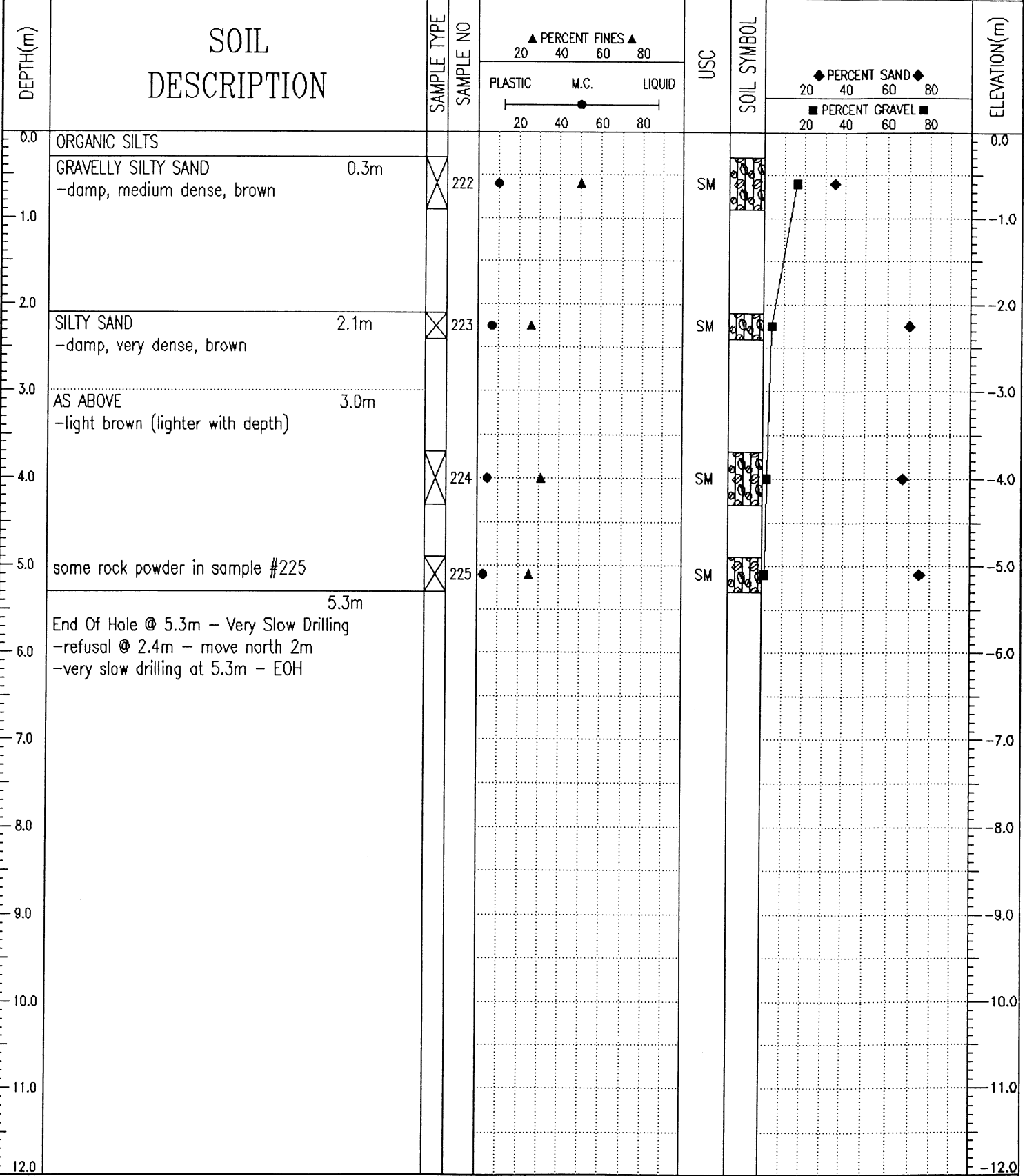
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

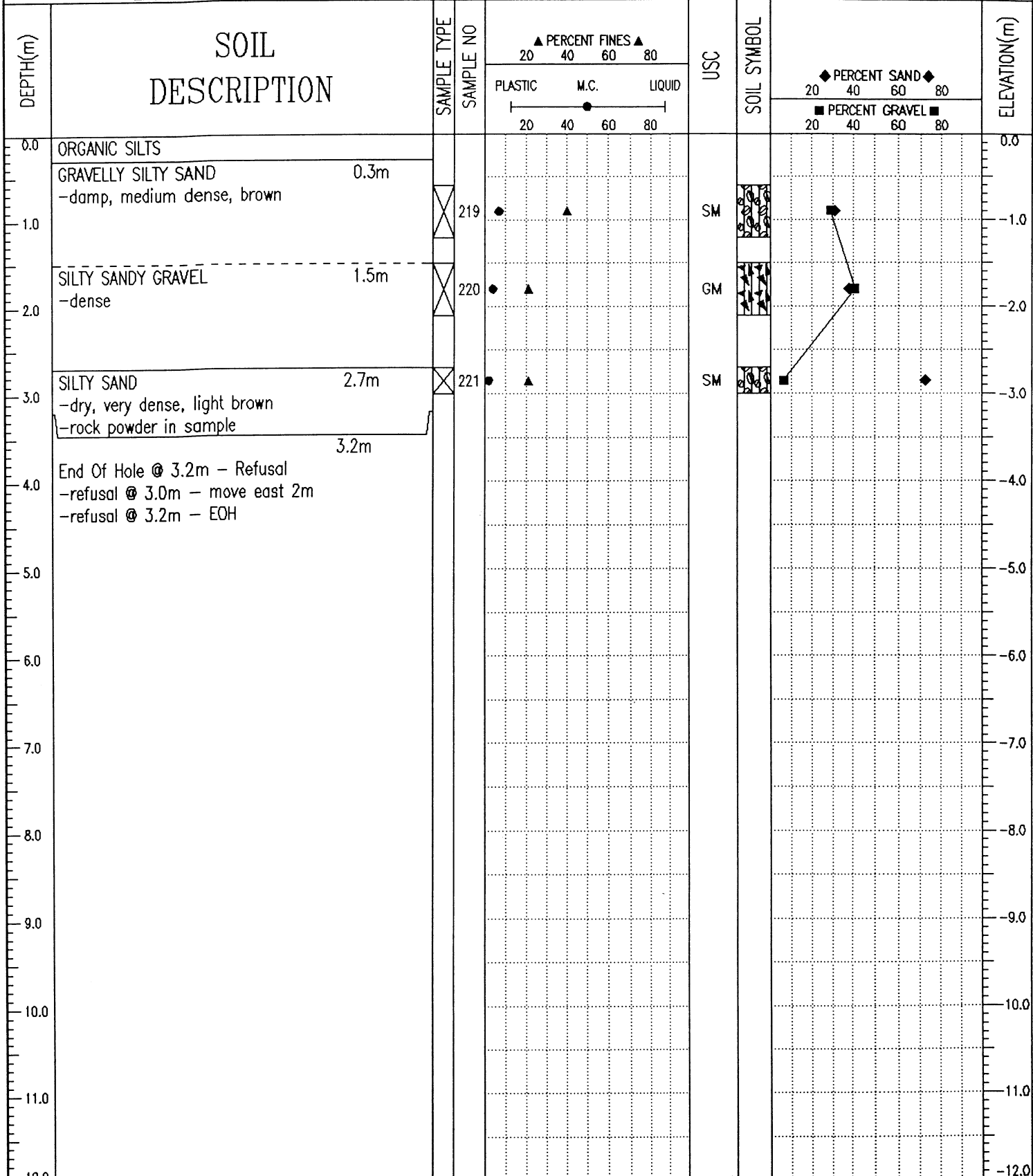
LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
REVIEWED BY:	COMPLETE: 08/12/04
Fig. No: 47	Page 1 of 1

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



65/02/10 07:38AM (YIG_HHTS)

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



85/02/10 07:38AM (YIG_HWS)

Geotechnical Services Km 1691.7 to 1717.3 Alaska Highway #1 TEST PIT NO: 30121R
 Midnight Sun Drilling Ltd. UTM ZONE: - N6772578 E633974 PROJECT NO: 8002-318
 Reverse Circulation Air Rotary Drill ELEVATION:

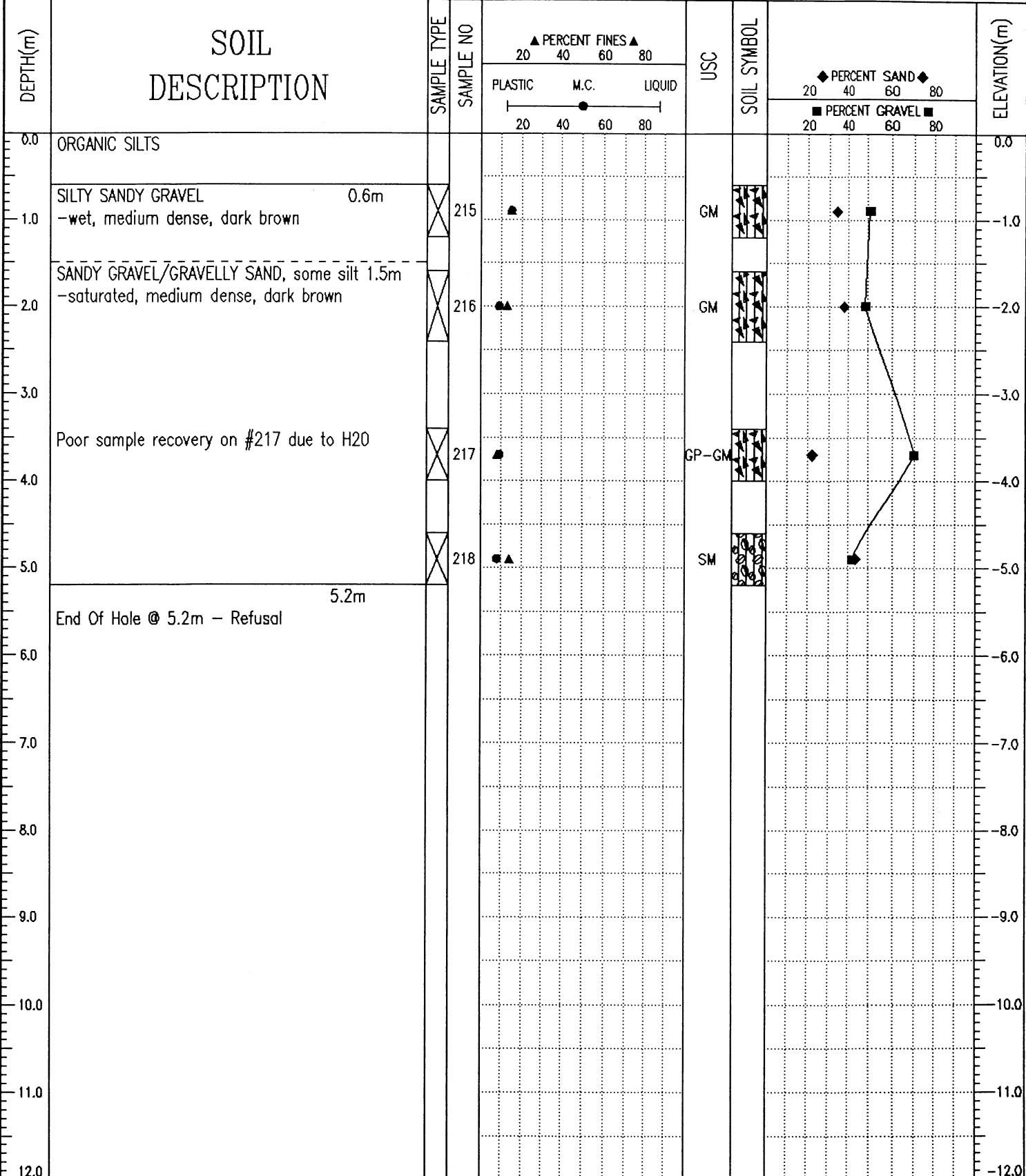
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	AS PER SOILS LOG 30121 -refusal @ 3.2m & 3.0m											0.0	
3.0	ROCK 3.0m -dry, grey -some powder -medium dense rock											-3.0	
4.8			R75				ROCK					-4.8	
7.0			R76				ROCK					-7.0	
7.6	End Of Hole @ 7.6m 7.6m											-7.6	
12.0												-12.0	

J. R. Paine & Associates Ltd. LOGGED BY: RW COMPLETION DEPTH: 7.6 m
 Whitehorse, Yukon REVIEWED BY: - COMPLETE: 09/27/04
 Fig. No: 126 Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30122
Donjek Services Ltd.	UTM ZONE: - N6772688 E633916	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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

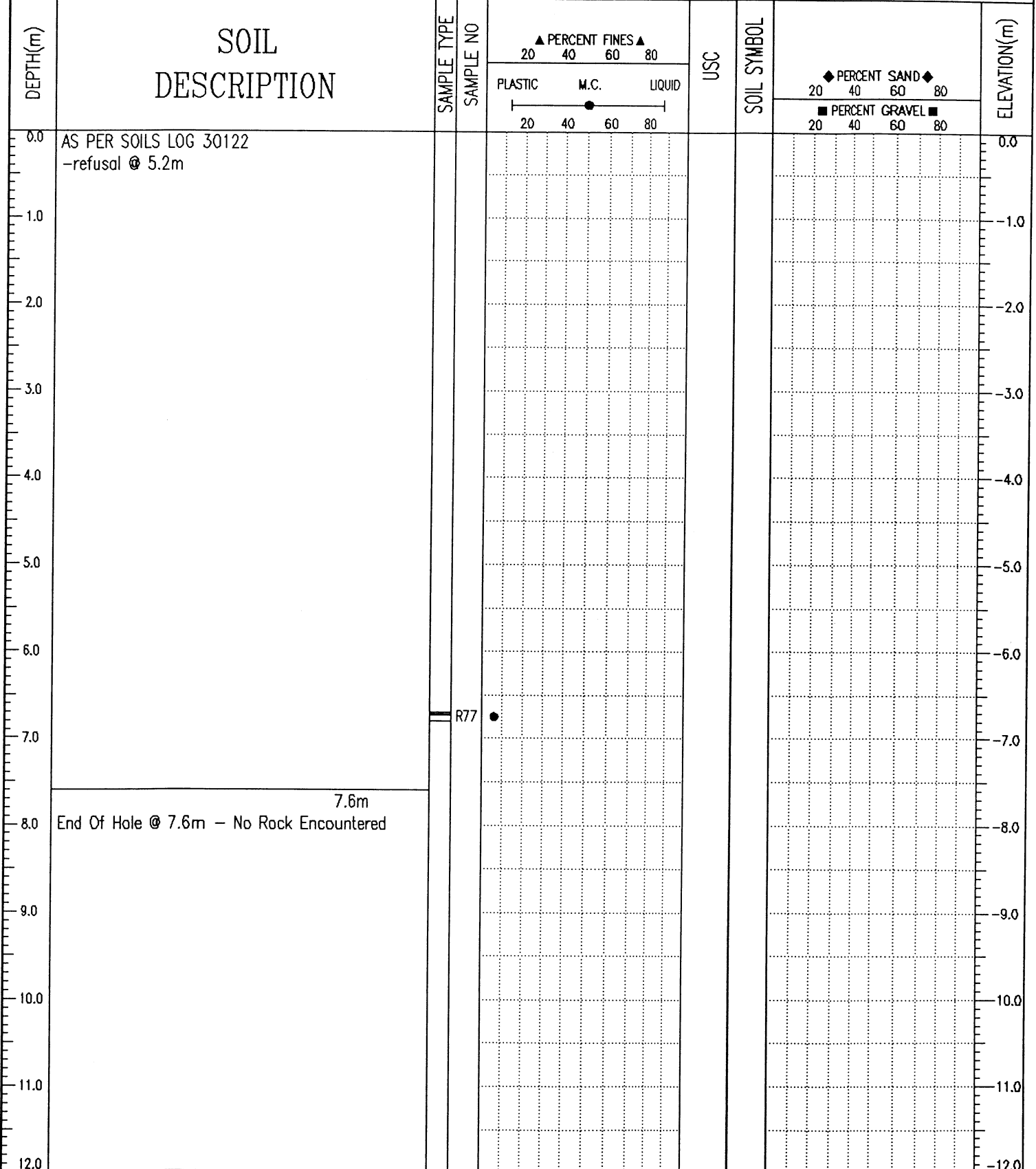


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.2 m
REVIEWED BY:	COMPLETE: 08/12/04
Fig. No: 44	Page 1 of 1

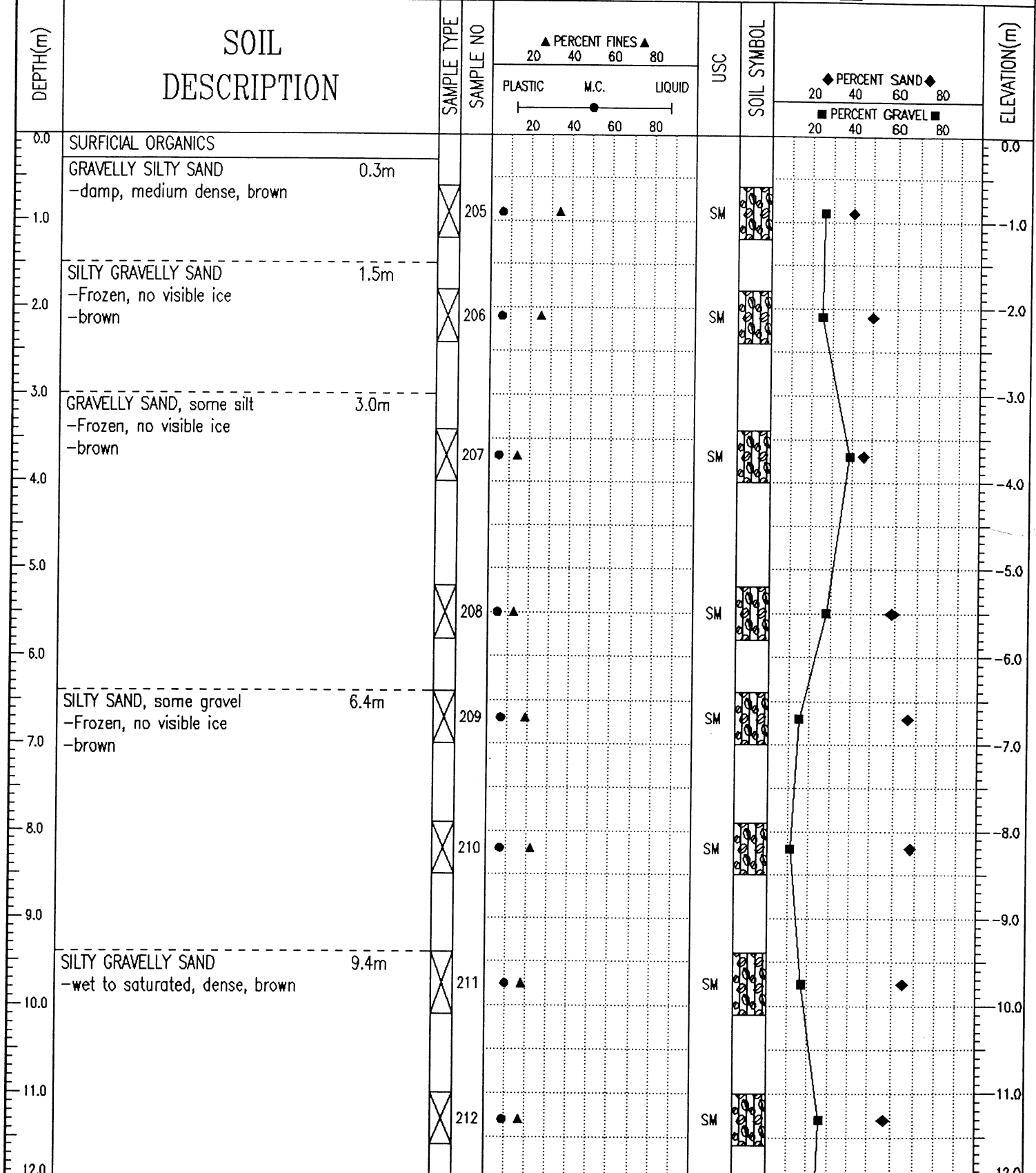
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30122R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6772688 E633923	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 7.6 m
	REVIEWED BY: -	COMPLETE: 09/27/04
	Fig. No: 127	Page 1 of 1

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



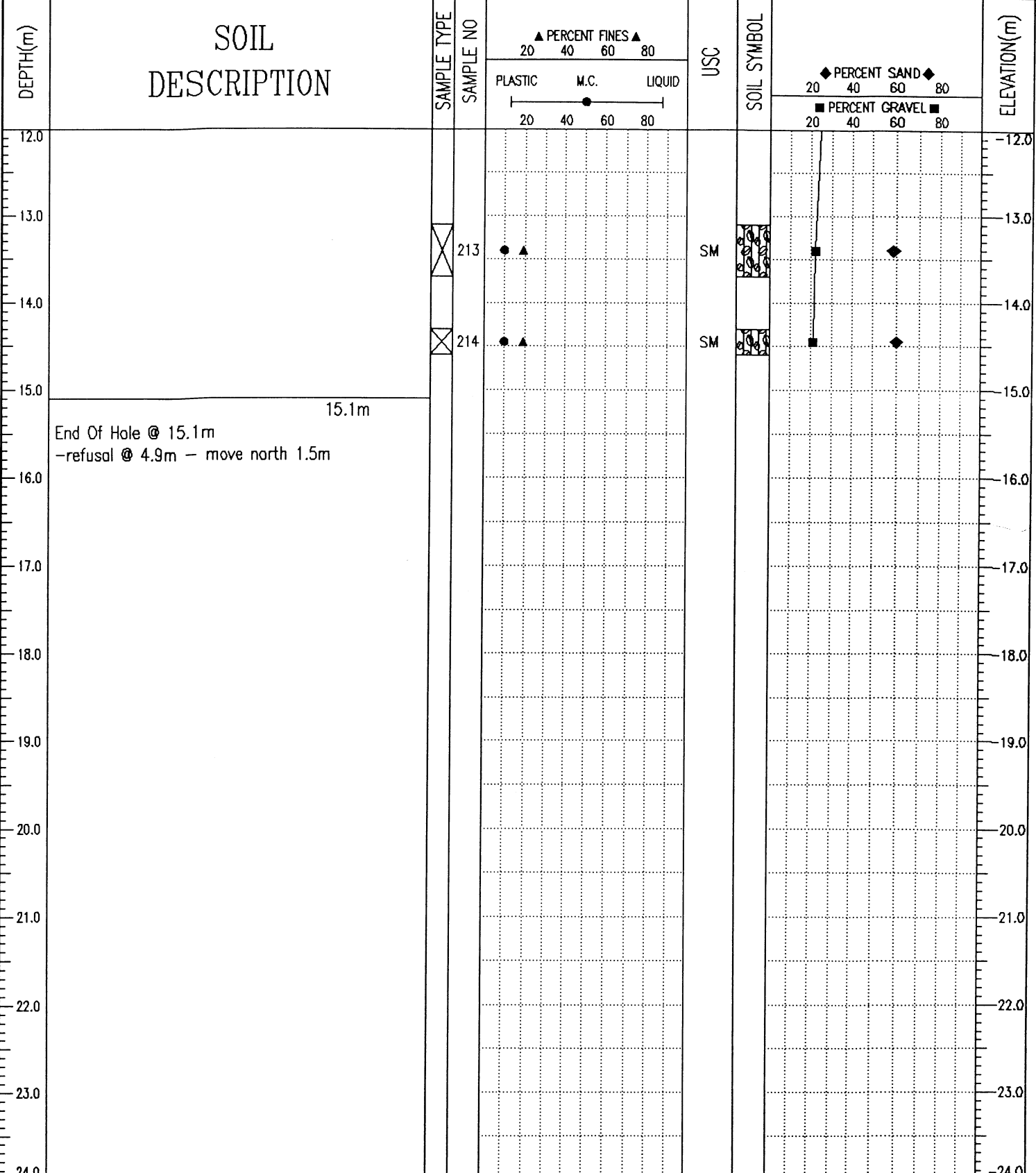
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 43

COMPLETION DEPTH: 15.1 m
COMPLETE: 08/11/04

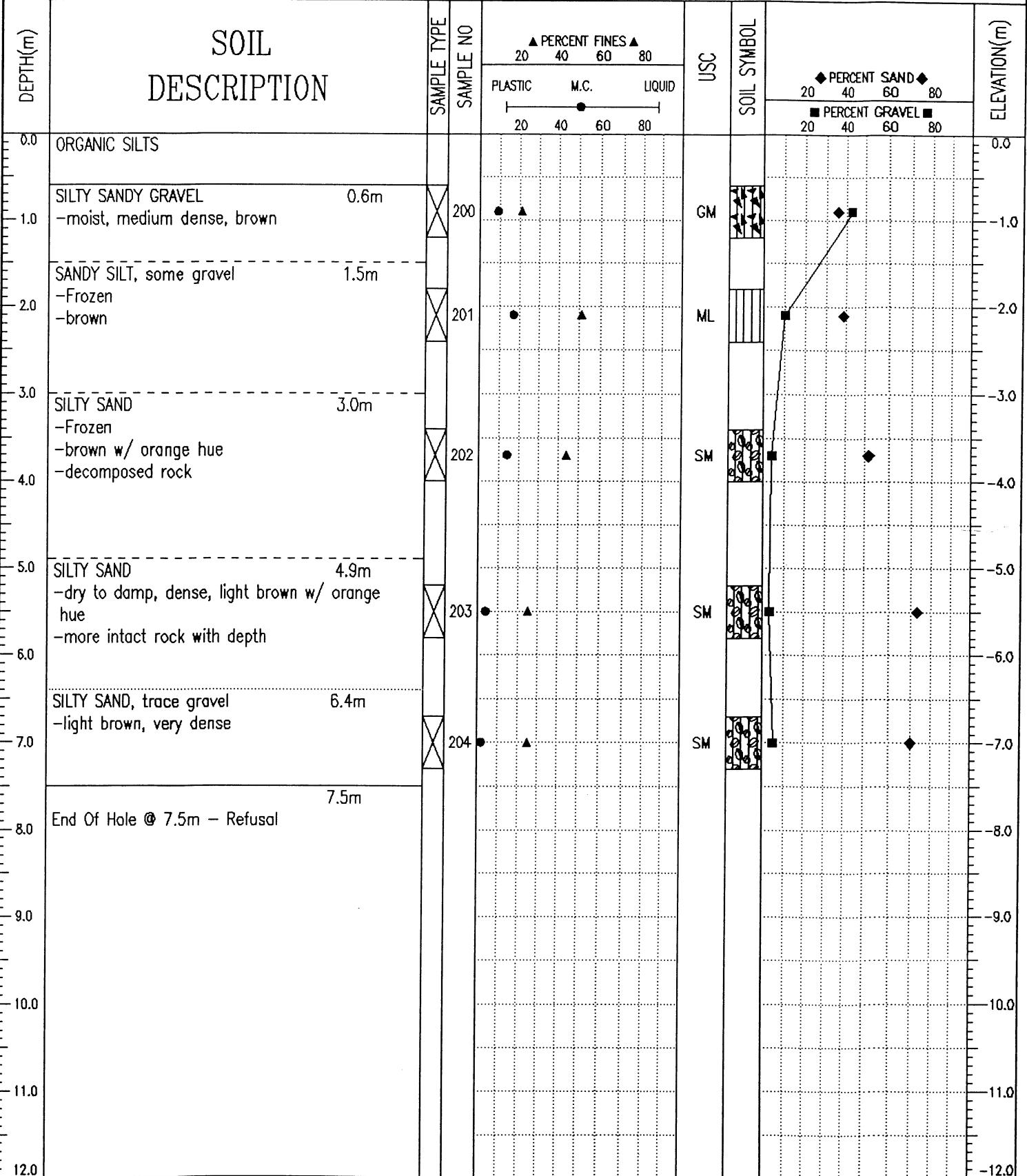
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30123
Donjek Services Ltd.	UTM ZONE: - N6772714 E633863	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



<p>J. R. Paine & Associates Ltd. Whitehorse, Yukon</p>	<p>LOGGED BY: RW REVIEWED BY: Fig. No: 43</p>	<p>COMPLETION DEPTH: 15.1 m COMPLETE: 08/11/04</p>
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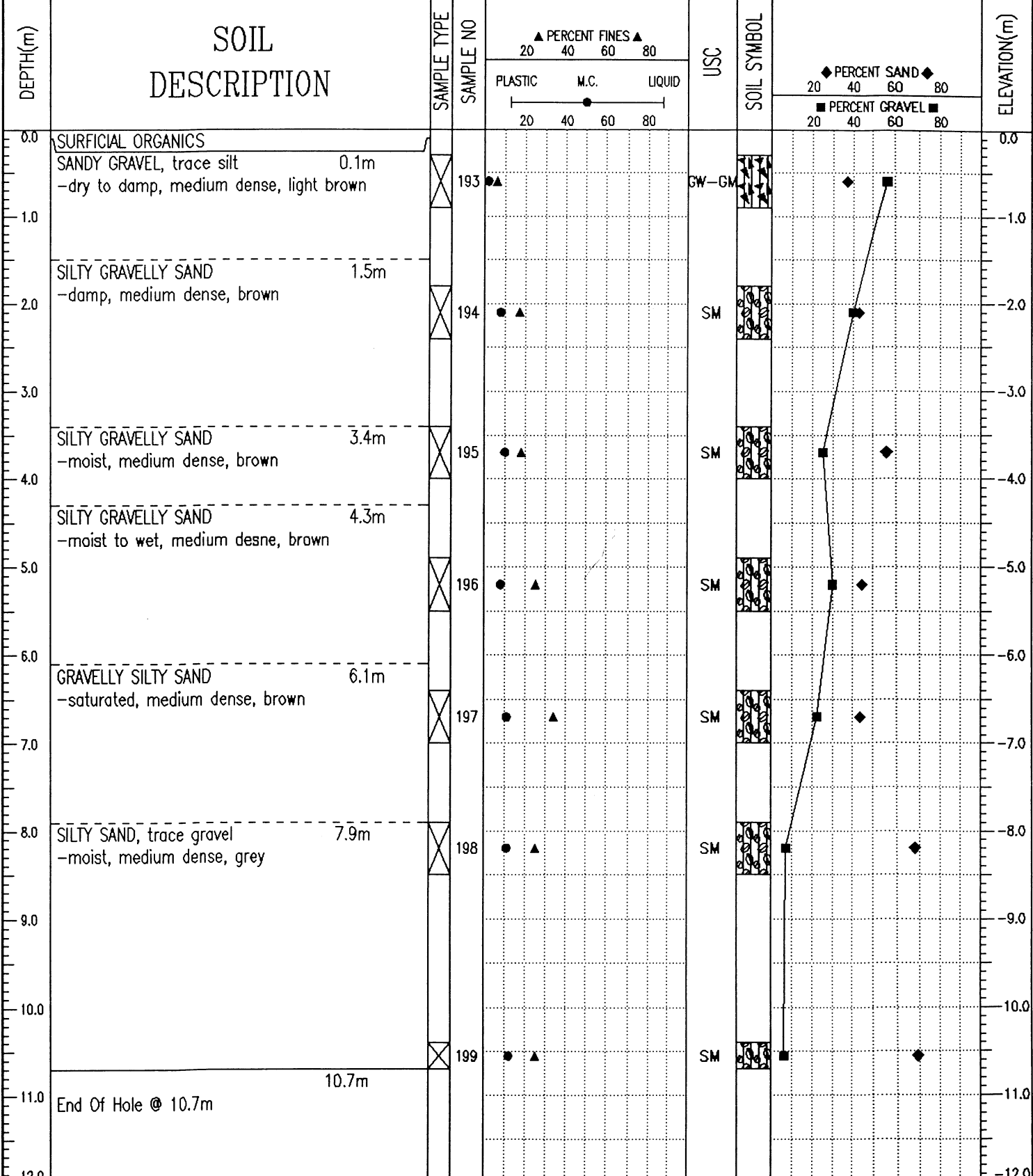
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 7.5 m
REVIEWED BY: -	COMPLETE: 08/11/04
Fig. No: 42	Page 1 of 1

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

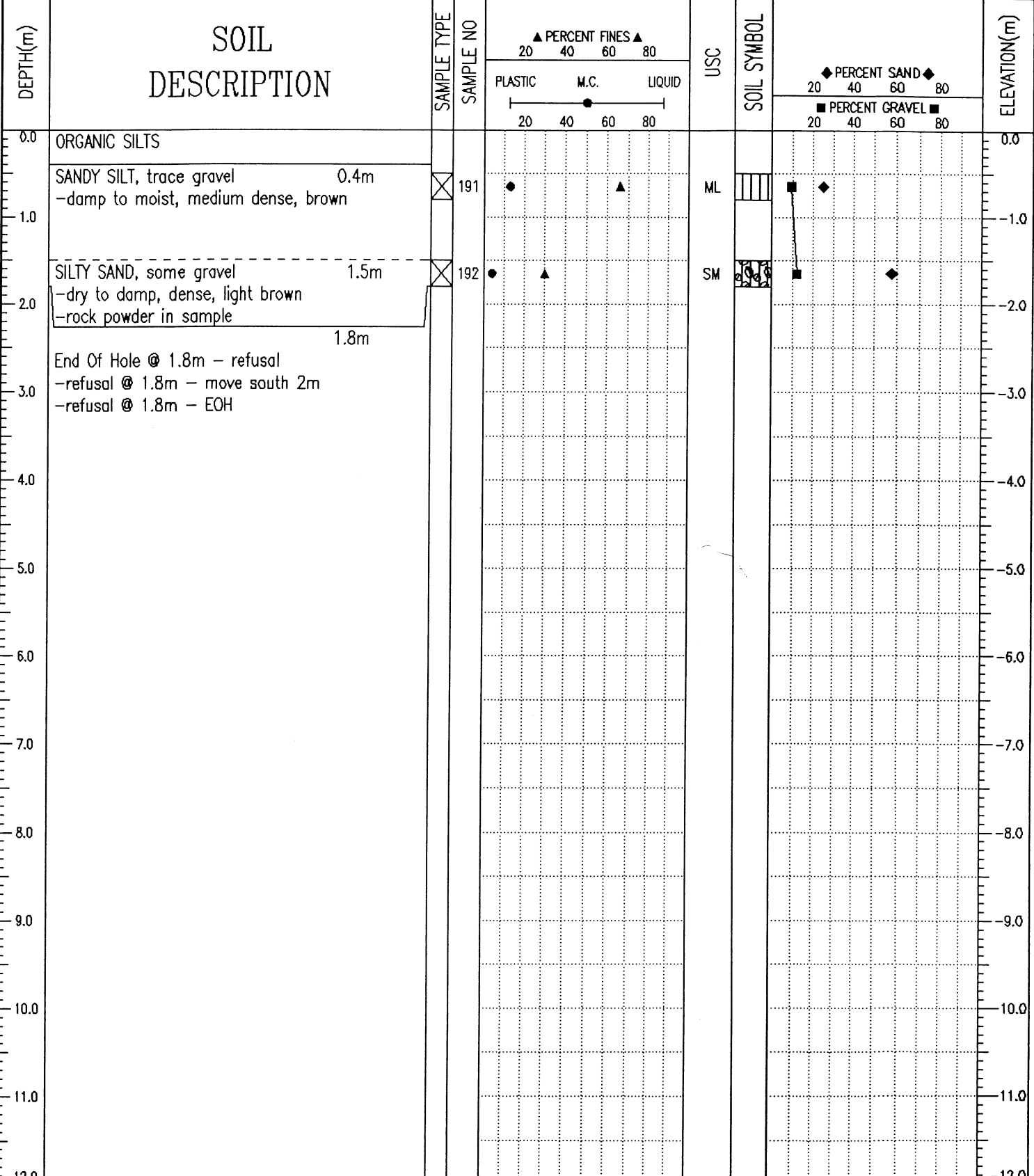


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 10.7 m
REVIEWED BY:	COMPLETE: 08/11/04
Fig. No: 41	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30126
Donjek Services Ltd.	UTM ZONE: - N6773199 E633699	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 1.8 m
REVIEWED BY:	COMPLETE: 08/10/04
Fig. No: 40	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30126R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6773197 E633699	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

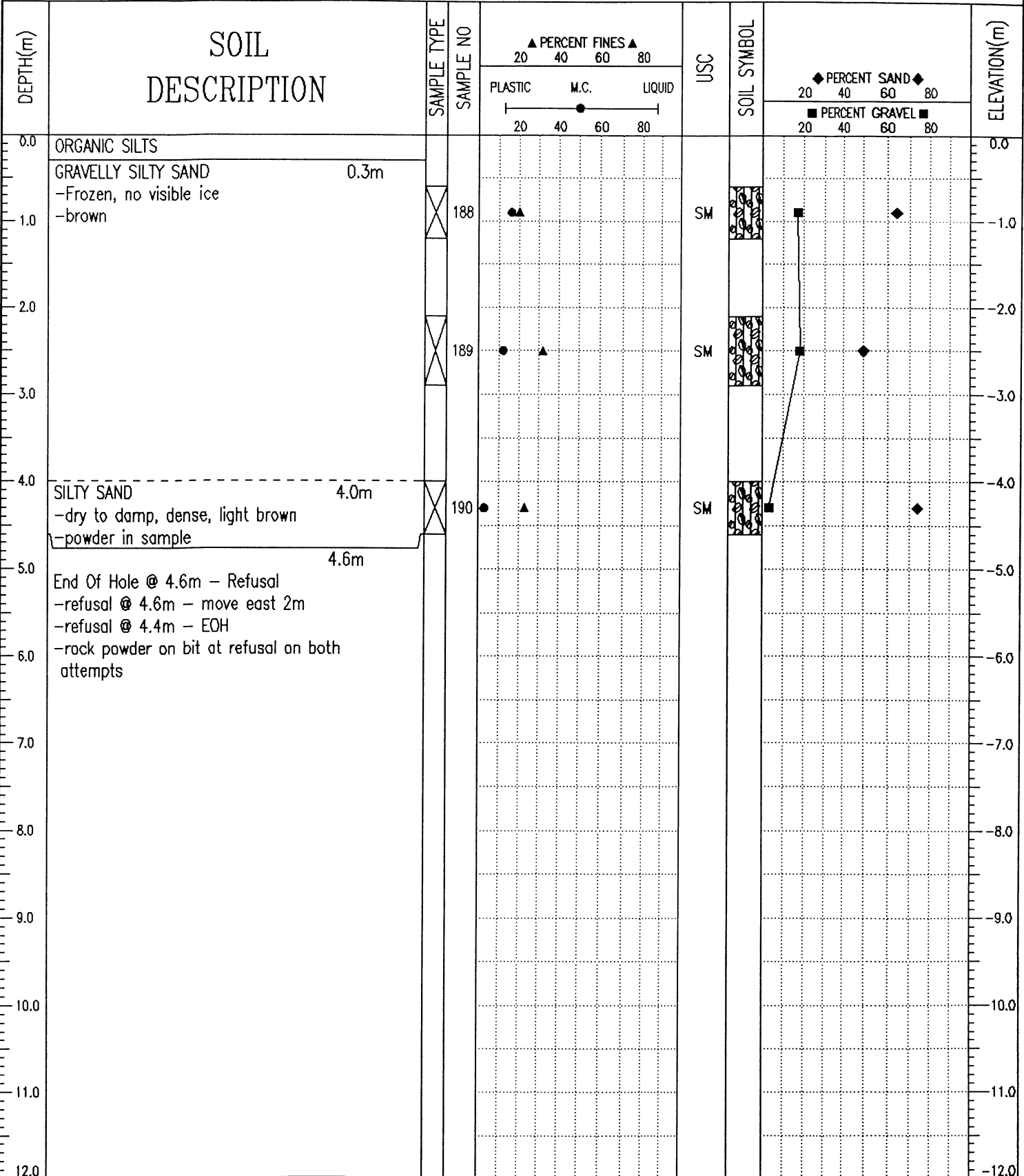
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆		ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	AS PER SOILS LOG 30126 -refusal @ 1.8m both attempts										0.0
1.0											-1.0
2.0	ROCK 1.8m -dry, grey -medium dense to dense rock										-2.0
3.0			R78				ROCK				-3.0
4.0			R79				ROCK				-4.0
5.0	End Of Hole @ 4.6m										-5.0
6.0											-6.0
7.0											-7.0
8.0											-8.0
9.0											-9.0
10.0											-10.0
11.0											-11.0
12.0											-12.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 128

COMPLETION DEPTH: 4.6 m
COMPLETE: 09/28/04

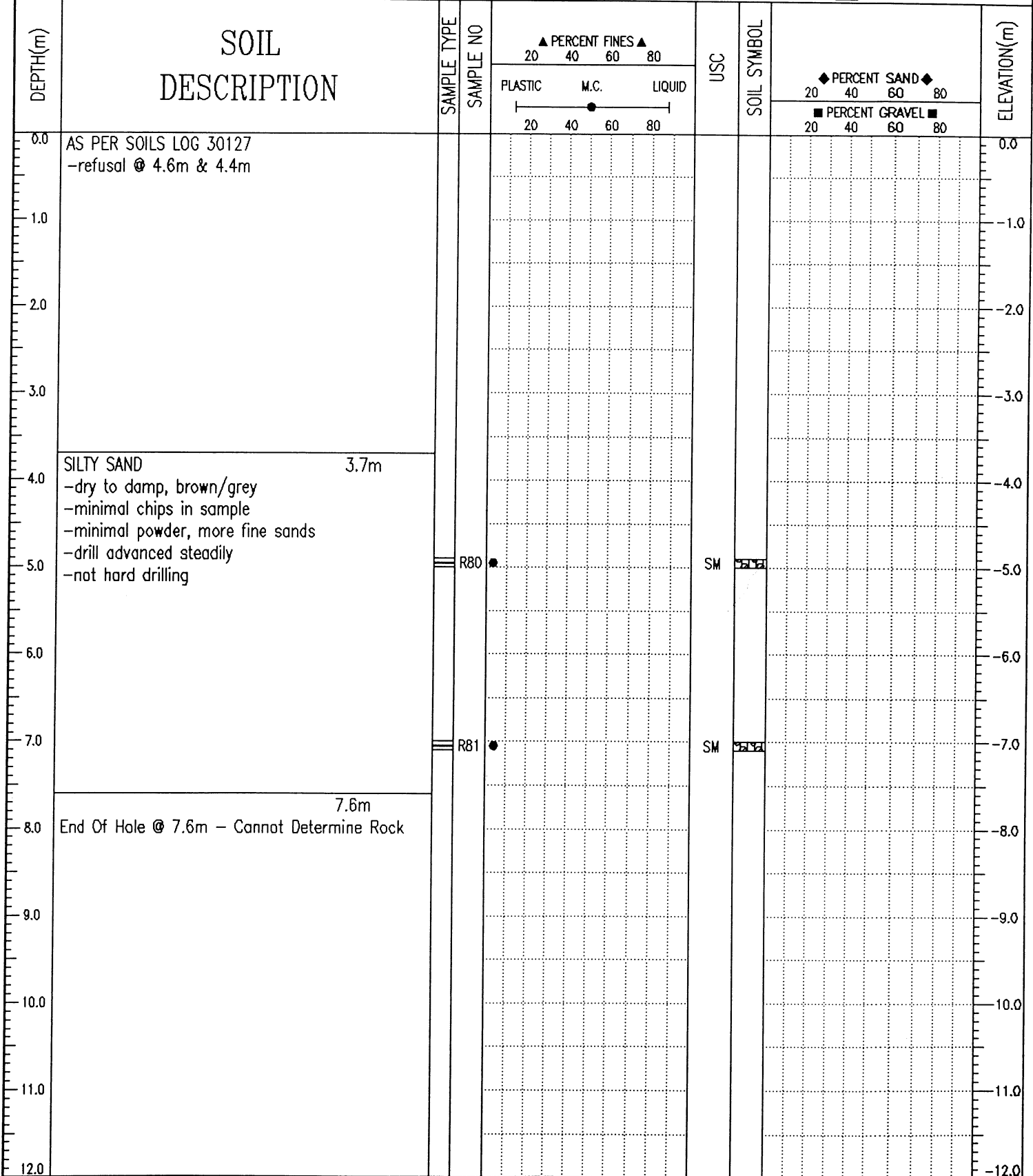
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



05/02/10 07:40AM (YIG_HHWS)

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30127R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6773336 E633614	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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



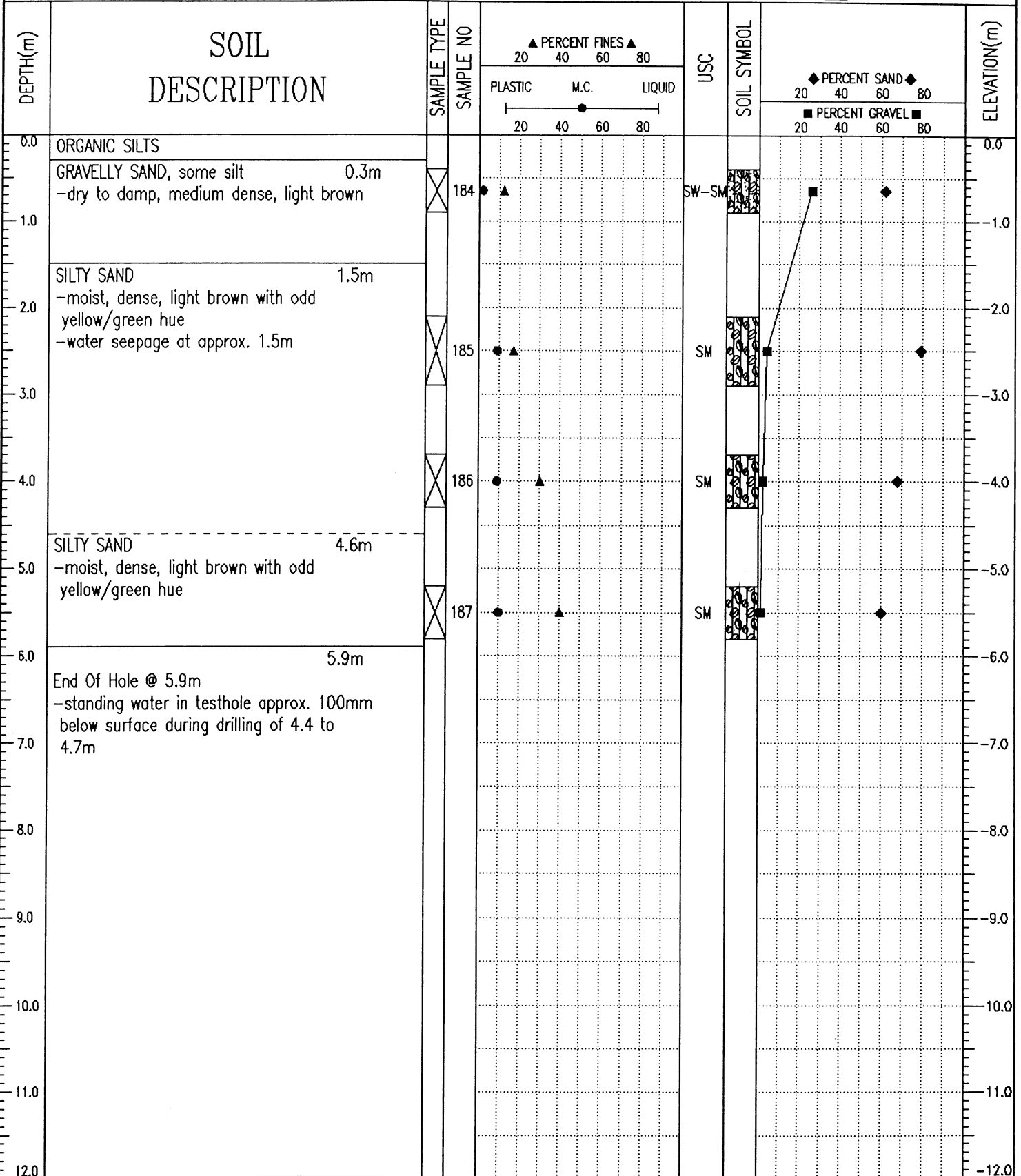
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 129

COMPLETION DEPTH: 7.6 m
COMPLETE: 09/28/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30128
Donjek Services Ltd.	UTM ZONE: - N6773445 E633550	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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

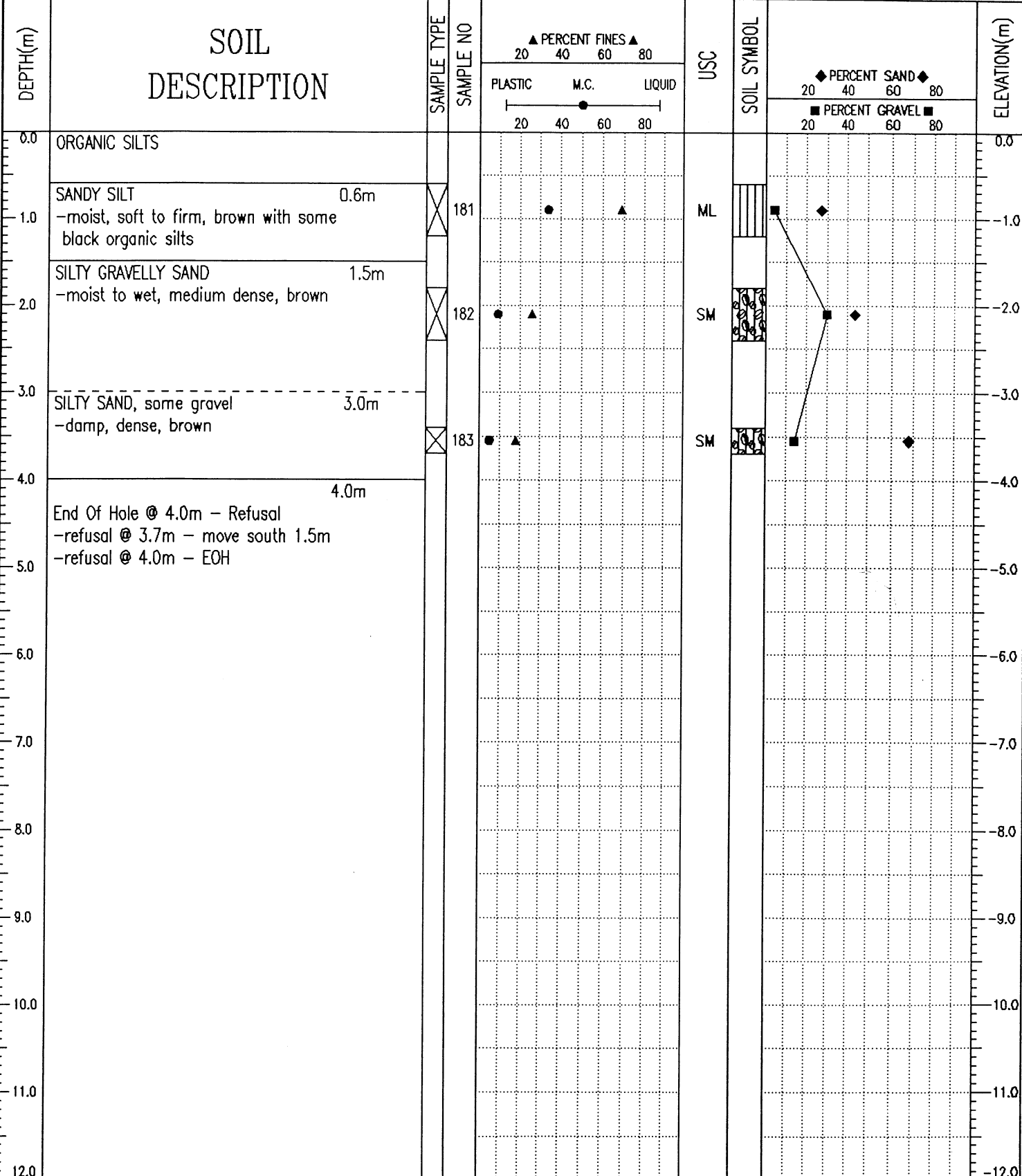


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 38

COMPLETION DEPTH: 5.9 m
COMPLETE: 08/10/04

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



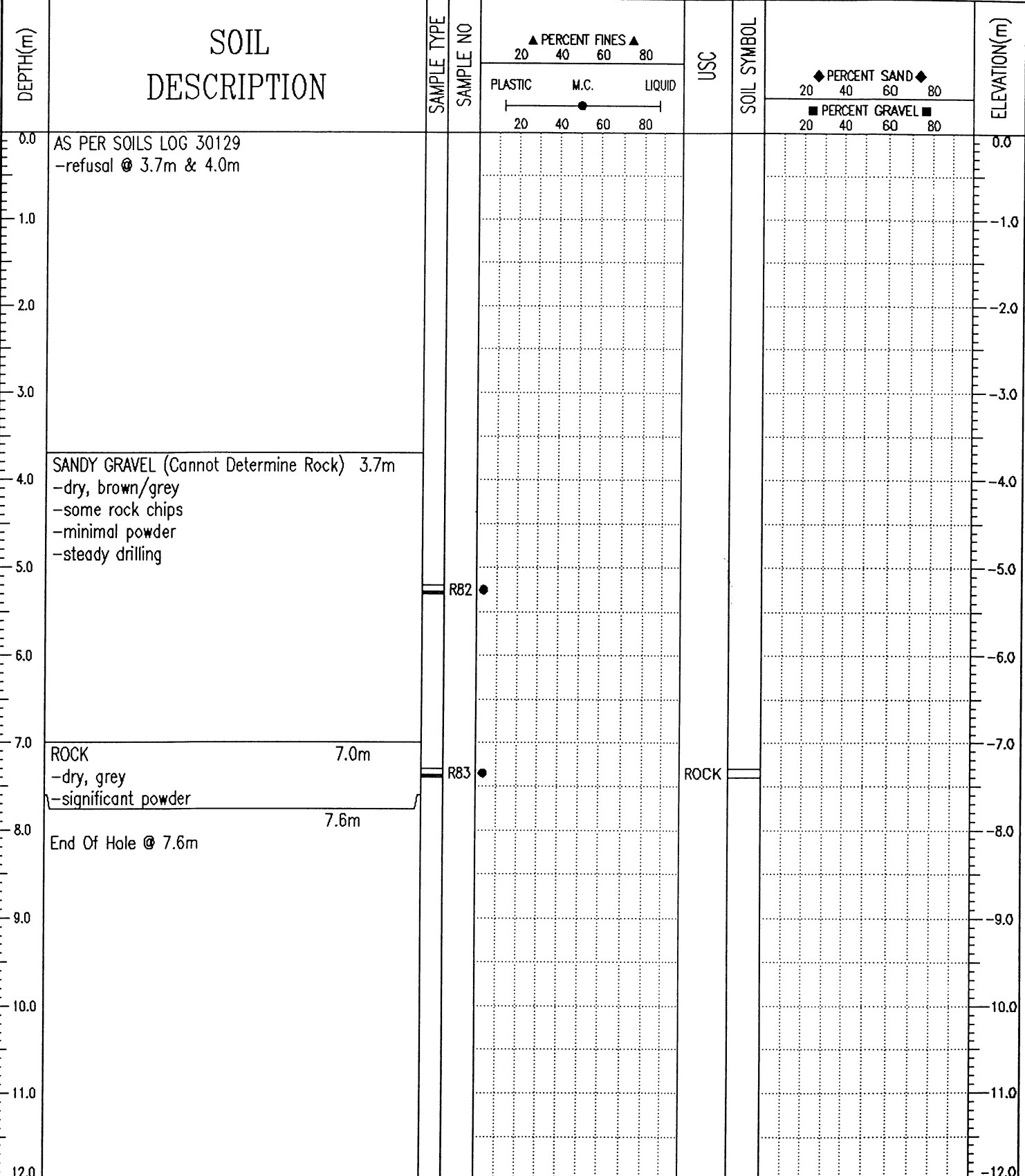
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 37

COMPLETION DEPTH: 4 m
COMPLETE: 08/10/04

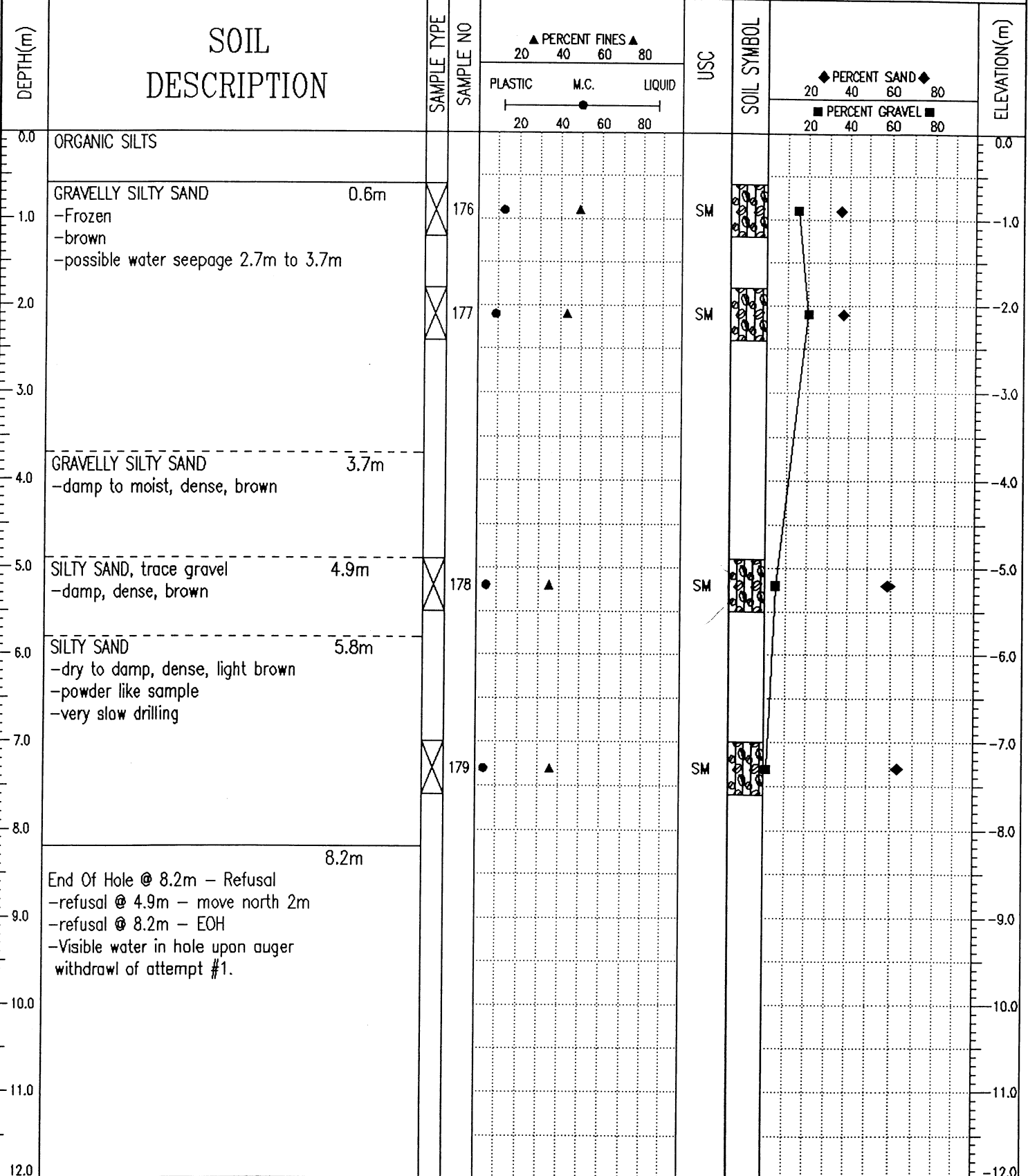
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30129R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6773477 E633527	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW REVIEWED BY: - Fig. No: 130	COMPLETION DEPTH: 7.6 m COMPLETE: 09/29/04
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SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

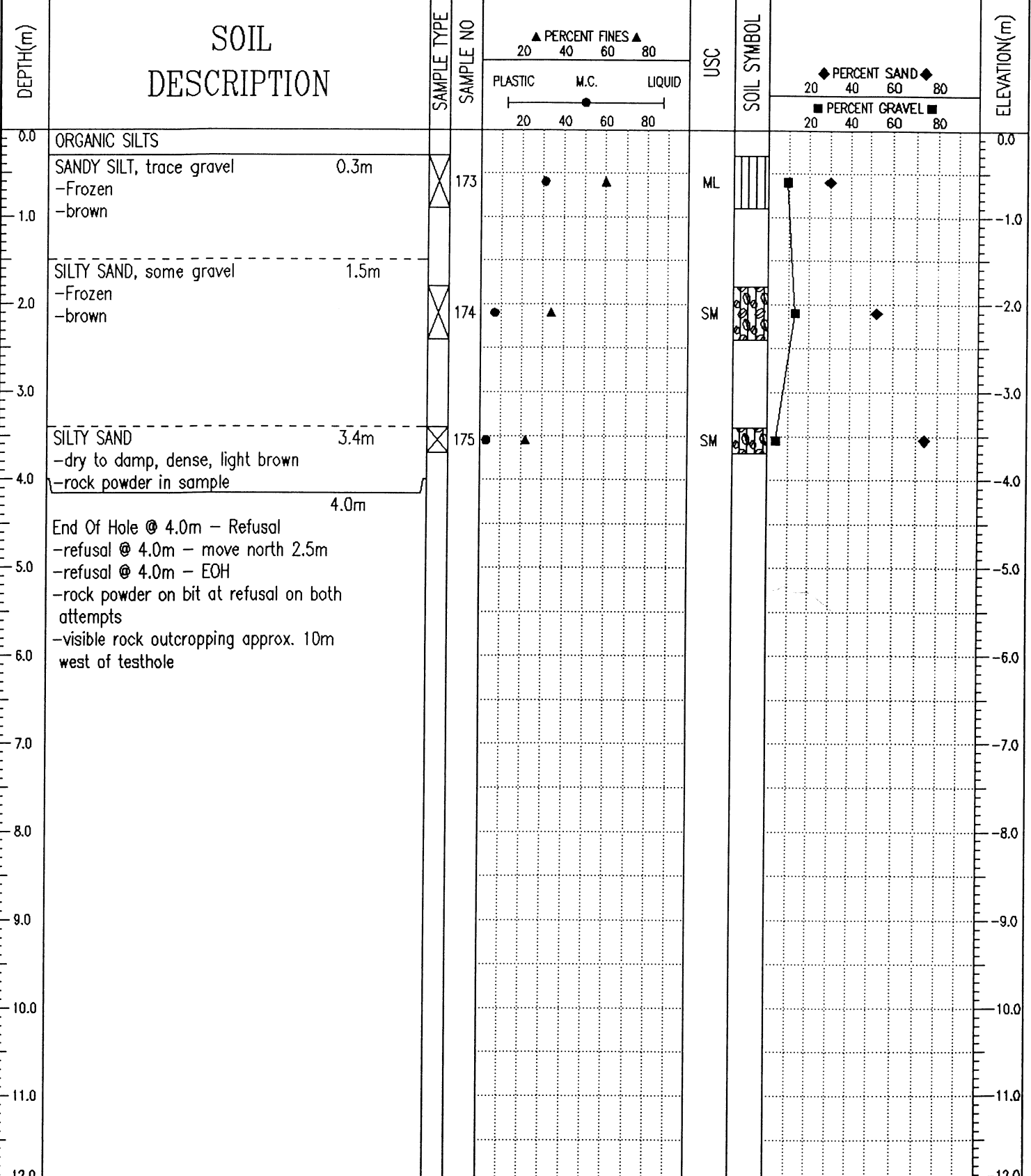


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 36

COMPLETION DEPTH: 8.2 m
COMPLETE: 08/10/04

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



08/02/10 07:42AM (YIG_HHS)

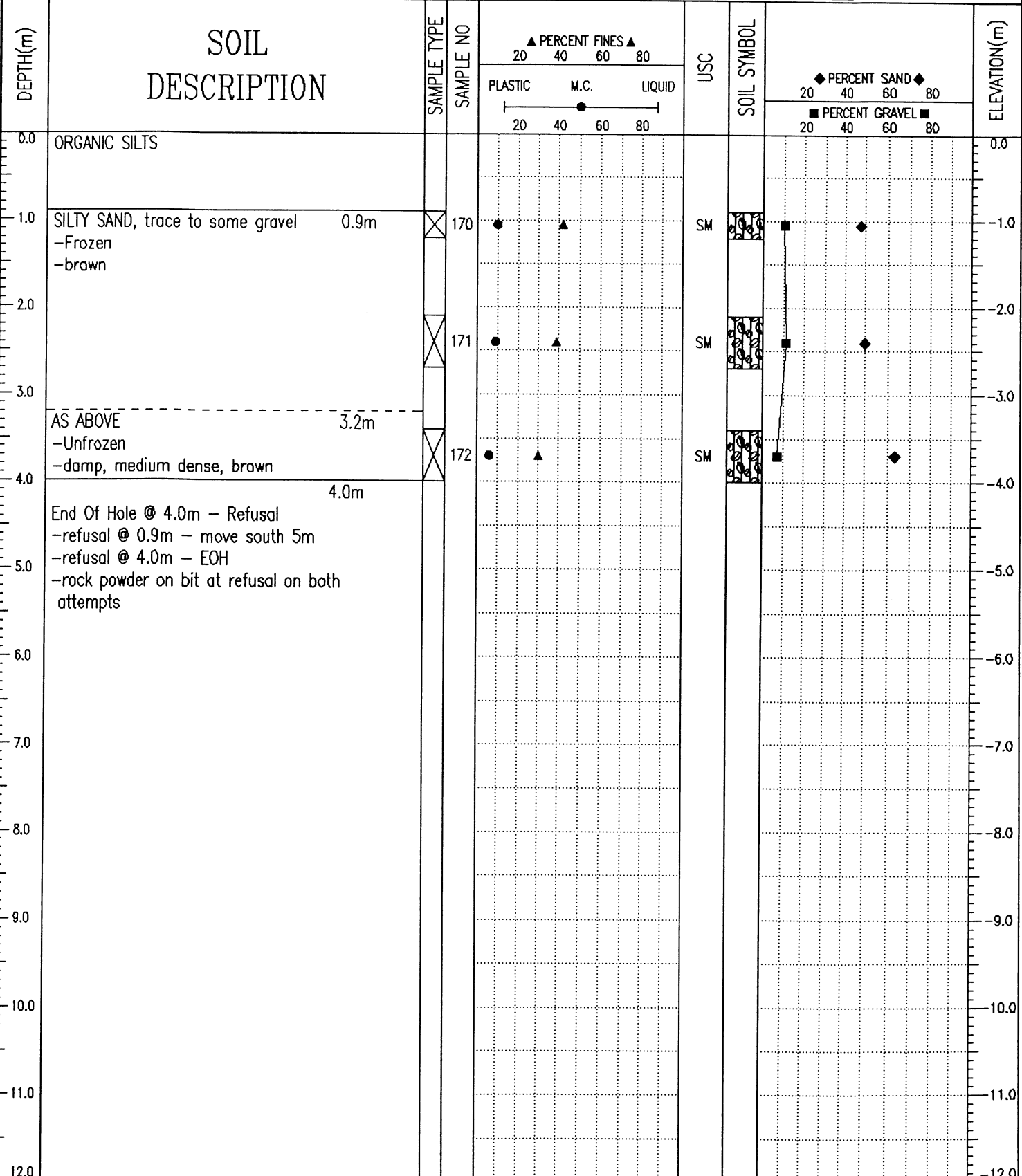
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	AS PER SOILS LOGS 30131 -refusal @ 4.0m both attempts											0.0
3.4	ROCK -dry, grey -significant powder -minimal rock chips		R84				ROCK					-3.4
4.9	AS ABOVE -increase rock chips											-4.9
6.1	End Of Hole @ 6.1m		R85				ROCK					-6.1

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 6.1 m
REVIEWED BY:	COMPLETE: 09/29/04
Fig. No: 131	Page 1 of 1

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 34

COMPLETION DEPTH: 4 m
COMPLETE: 08/09/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30132R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6773786 E633333	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

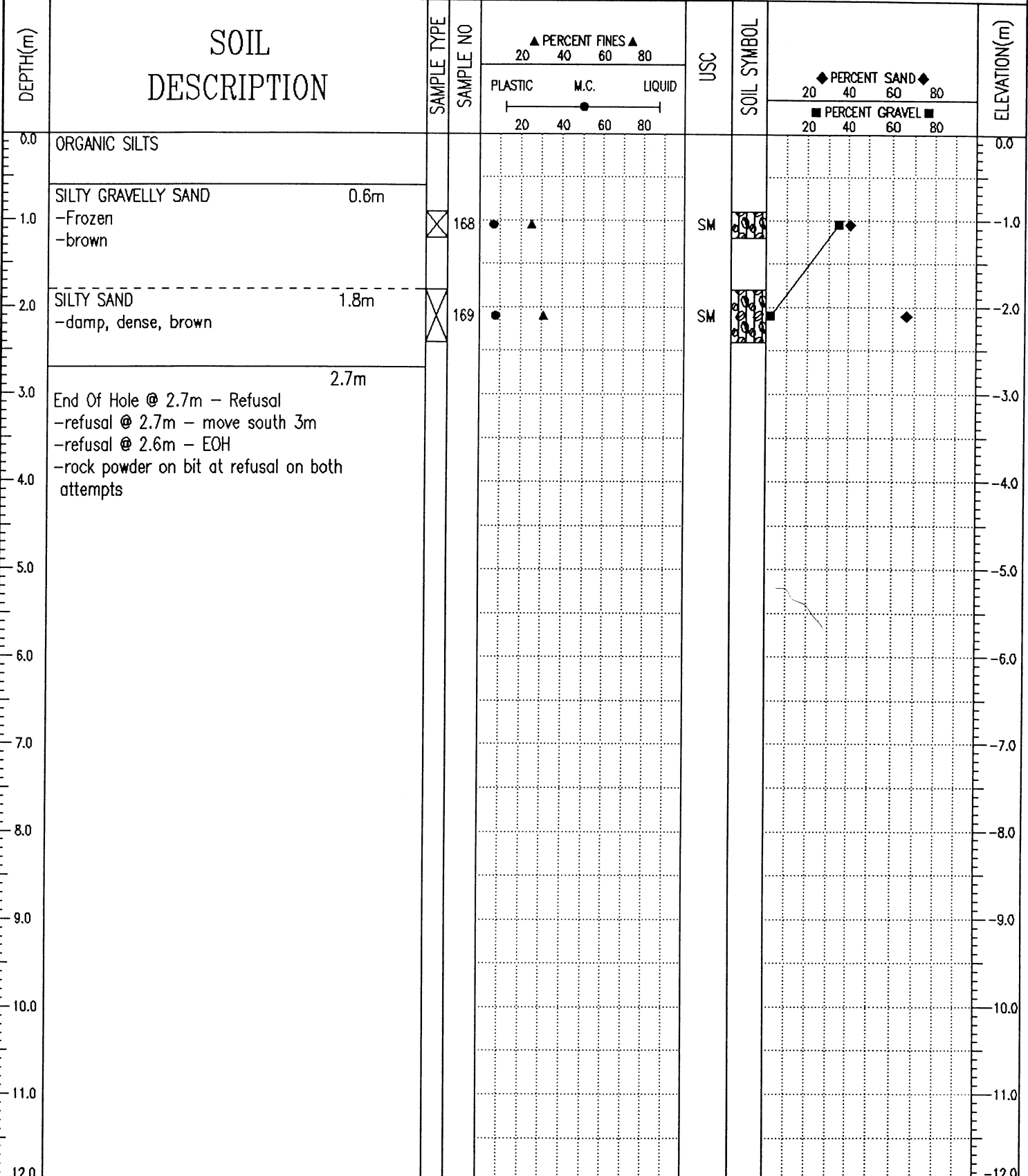
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			ELEVATION(m)		
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL				
				20	40	60	80			20	40	60	80	
0.0	AS PER SOILS LOG 30132 -refusal @ 0.9m & 4.0m													0.0
3.4	ROCK (possibly fractured) -dry, grey w/ odd brown seam													-3.4
4.6	ROCK -dry, grey -significant powder -rock chips		R86				ROCK							-4.6
6.4	End Of Hole @ 6.4m		R87				ROCK							-6.4

J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW REVIEWED BY: - Fig. No: 133	COMPLETION DEPTH: 6.4 m COMPLETE: 09/28/04
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Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30133
Donjek Services Ltd.	UTM ZONE: - N6673901 E633261	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 2.7 m
	REVIEWED BY: -	COMPLETE: 08/09/04
	Fig. No: 33	Page 1 of 1

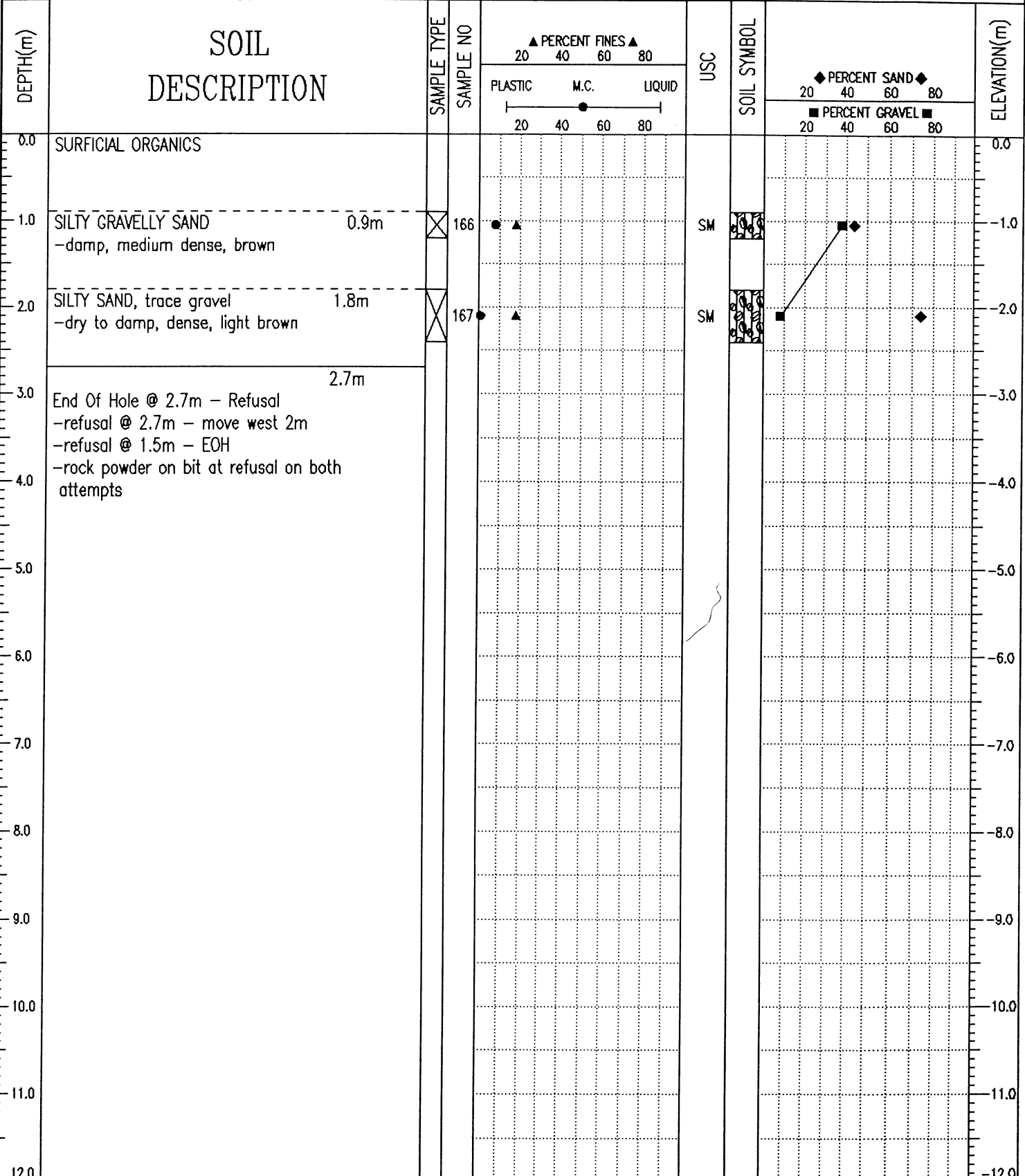
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30133R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6773908 E633264	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	AS PER SOILS LOG 30133 -refusal @ 2.7m & 2.6m													0.0	
2.4	ROCK -dry, grey -significant powder -rock chips -more intact w/ depth														
4.0			R88				ROCK								
4.6	End Of Hole @ 4.6m														

J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW REVIEWED BY: - Fig. No: 134	COMPLETION DEPTH: 4.6 m COMPLETE: 09/28/04
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SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



05/02/10 07:48AM (716_HHTS)

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30134R
Midnight Sun Drilling Ltd.	UTM ZONE: - N6774009 E633155	PROJECT NO: 8002-318
Reverse Circulation Air Rotary Drill		ELEVATION:

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

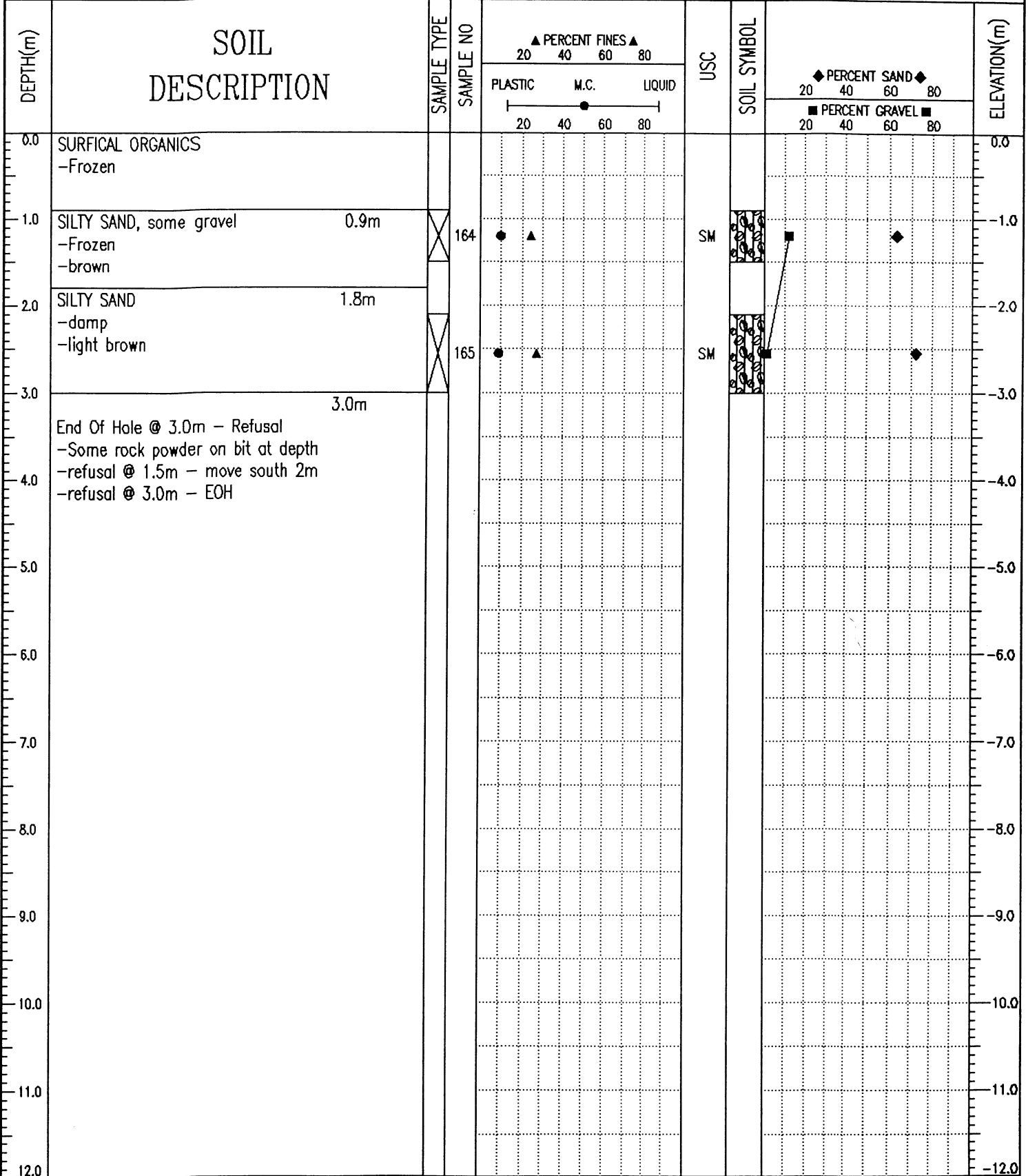
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL ◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30134 -refusal @ 2.7m & 1.5m						0.0
1.0							-1.0
2.0	ROCK 1.2m -dry, grey -significant powder -rock chips		R89		ROCK		-2.0
3.0							-3.0
4.0	End Of Hole @ 4.0m 4.0m		R90		ROCK		-4.0
5.0							-5.0
6.0							-6.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4 m
REVIEWED BY: -	COMPLETE: 09/28/04
Fig. No: 135	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30135
Donjek Services Ltd.	UTM ZONE: - N6674137 E633067	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



J. R. Paine & Associates Ltd. Whitehorse, Yukon	LOGGED BY: RW	COMPLETION DEPTH: 3 m
	REVIEWED BY: -	COMPLETE: 08/09/04
	Fig. No: 31	Page 1 of 1

Geotechnical Services Km 1691.7 to 1717.3 Alaska Highway #1 TEST PIT NO: 30135R
 Midnight Sun Drilling Ltd. UTM ZONE: - N6674140 E633064 PROJECT NO: 8002-318
 Reverse Circulation Air Rotary Drill ELEVATION:

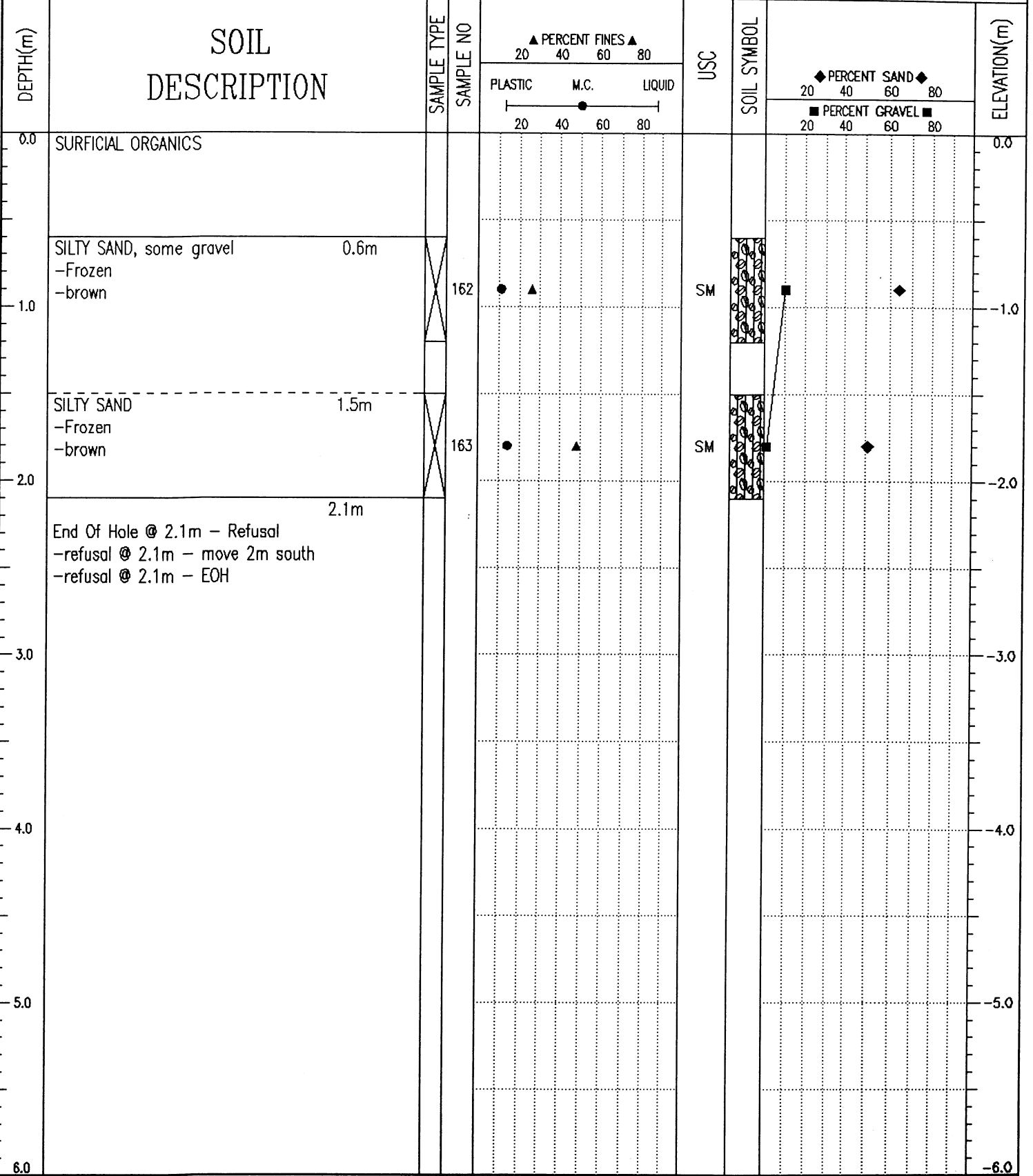
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		ELEVATION(m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	AS PER SOILS LOG 30135 -refusal @ 1.5m & 3.0m												0.0
2.4	ROCK -possibly fractured -some brown sand infill -some powder												
3.7	ROCK -dry, grey -significant powder -rock chips -intact		R91				ROCK						
4.6	End Of Hole @ 4.6m												

J. R. Paine & Associates Ltd.
 Whitehorse, Yukon

LOGGED BY: RW COMPLETION DEPTH: 4.6 m
 REVIEWED BY: COMPLETE: 09/28/04
 Fig. No: 136 Page 1 of 1

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 2.1 m
REVIEWED BY: -	COMPLETE: 08/09/04
Fig. No: 30	Page 1 of 1

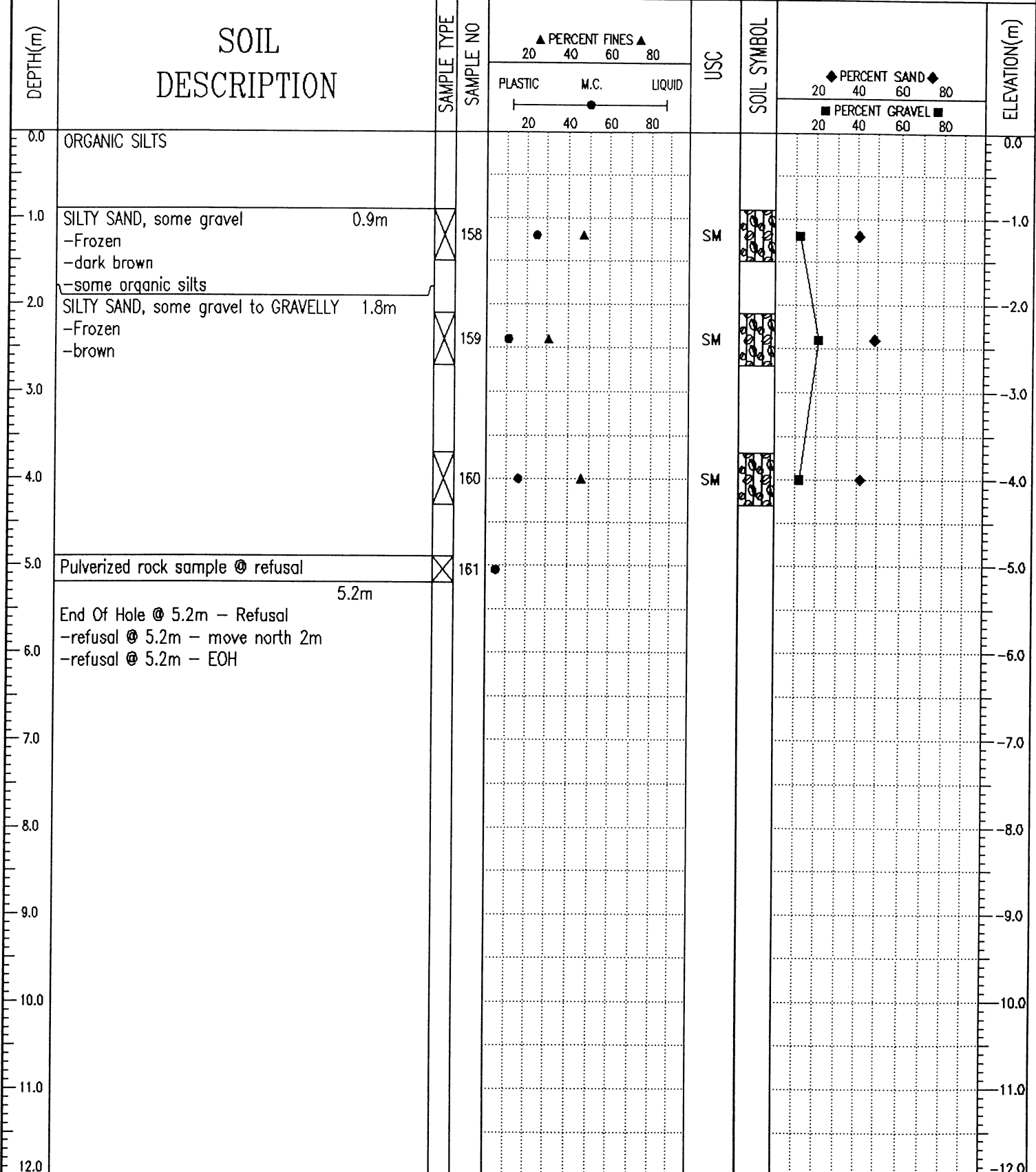
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30136 -refusal @ 2.1m both attempts							0.0
2.4	ROCK -dry, grey -significant powder -rock chips -more intact w/ depth		R92		ROCK			-3.0
4.6	End Of Hole @ 4.6m		R93		ROCK			-4.6
12.0								-12.0

J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
REVIEWED BY: -	COMPLETE: 09/28/04
Fig. No: 137	Page 1 of 1

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

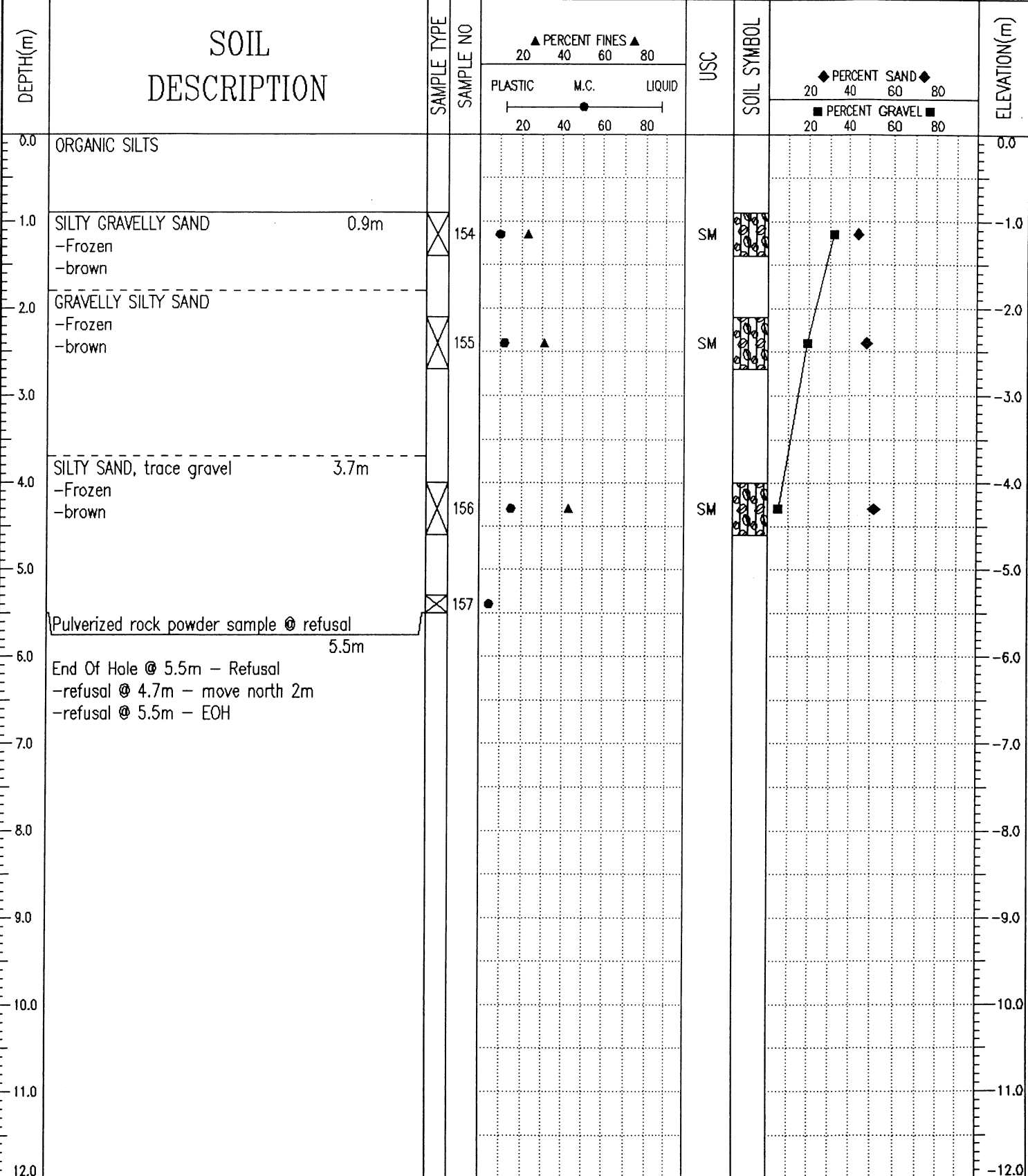


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 29

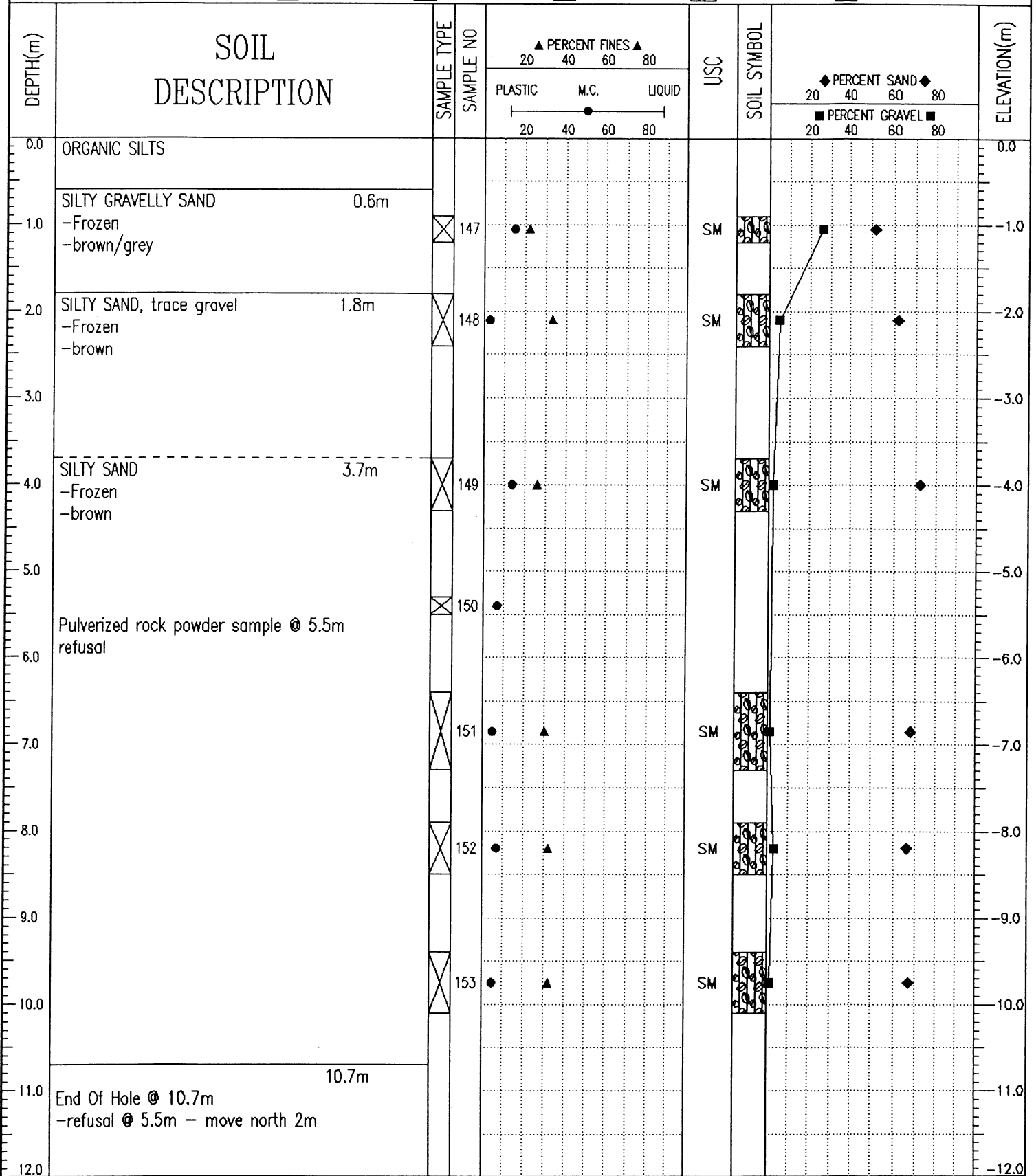
COMPLETION DEPTH: 5.2 m
COMPLETE: 08/03/04

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



05/02/09 11:52AM (YIG_HHS)

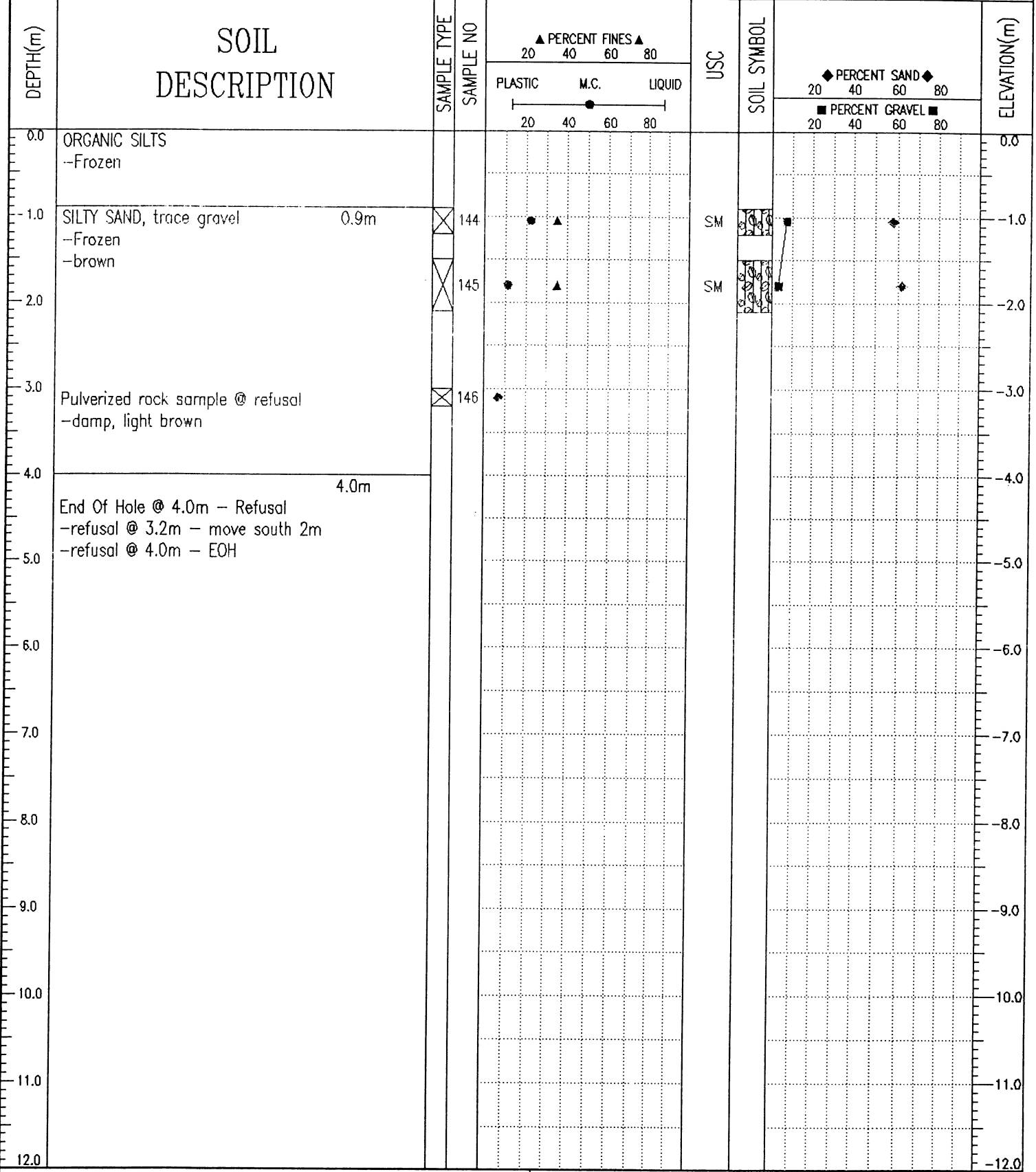
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 10.7 m
REVIEWED BY: -	COMPLETE: 08/03/04
Fig. No: 27	Page 1 of 1

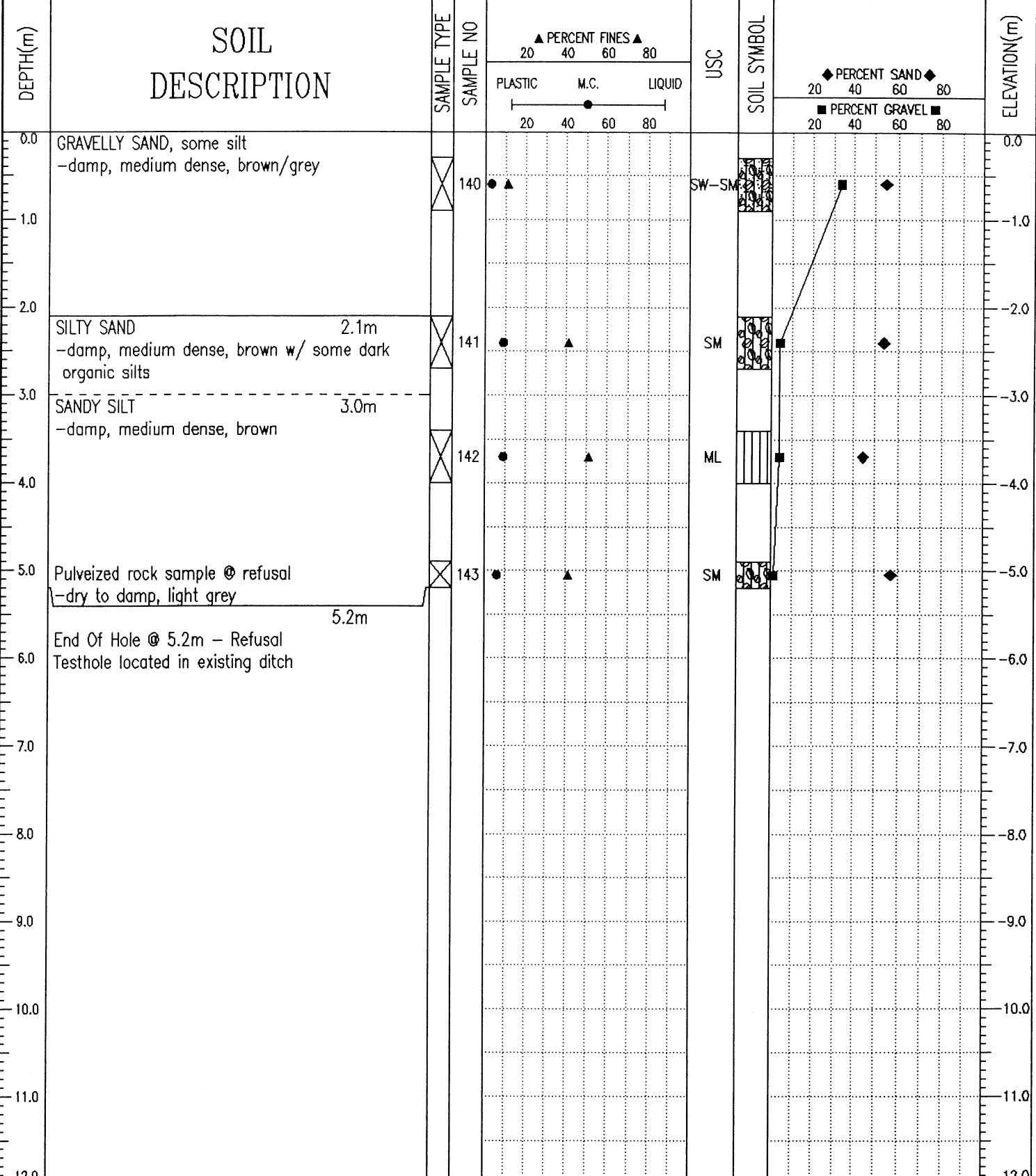
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

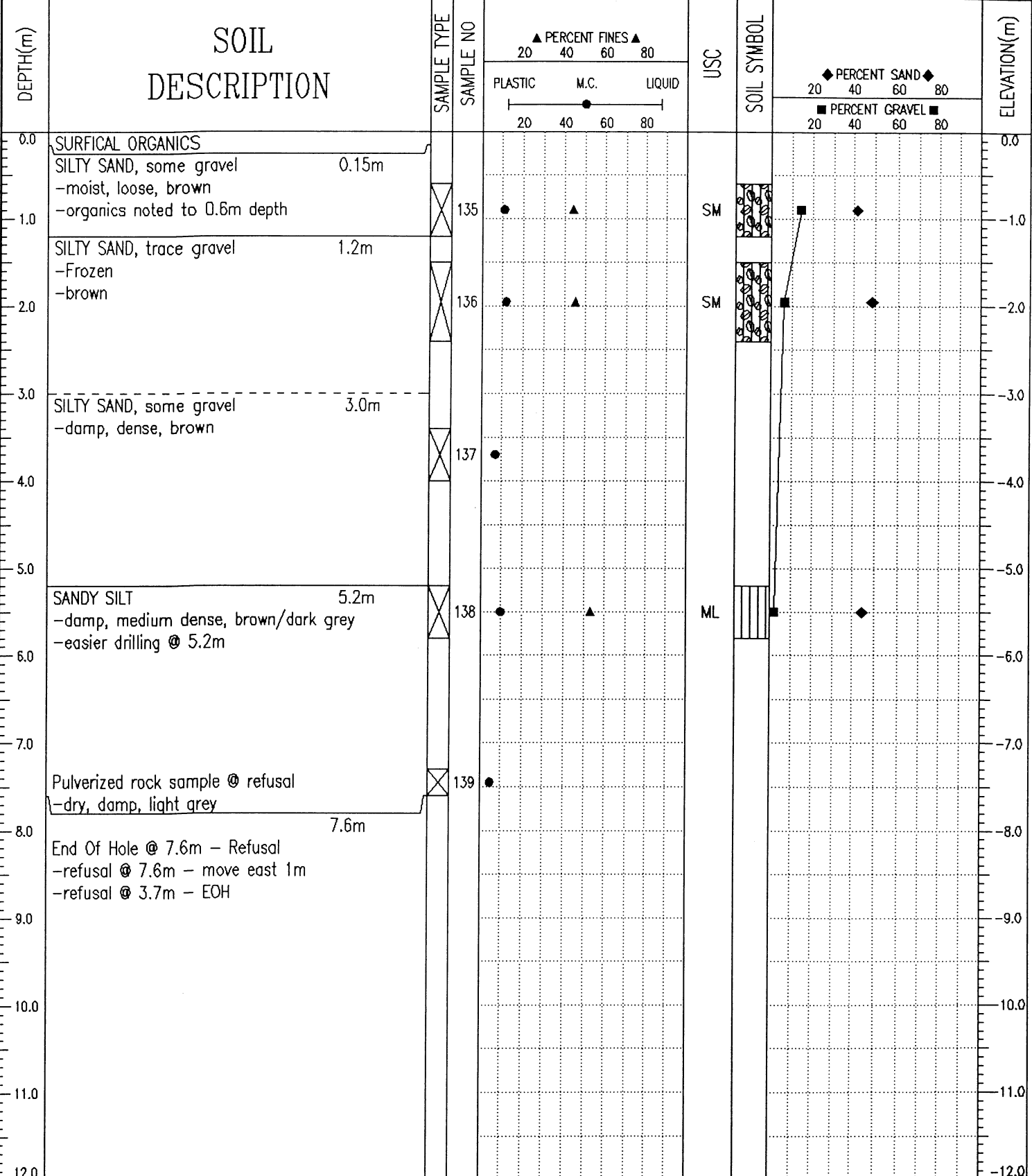
LOGGED BY: RW	COMPLETION DEPTH: 4 m
REVIEWED BY: -	COMPLETE: 08/03/04
Fig. No: 26	Page 1 of 1

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



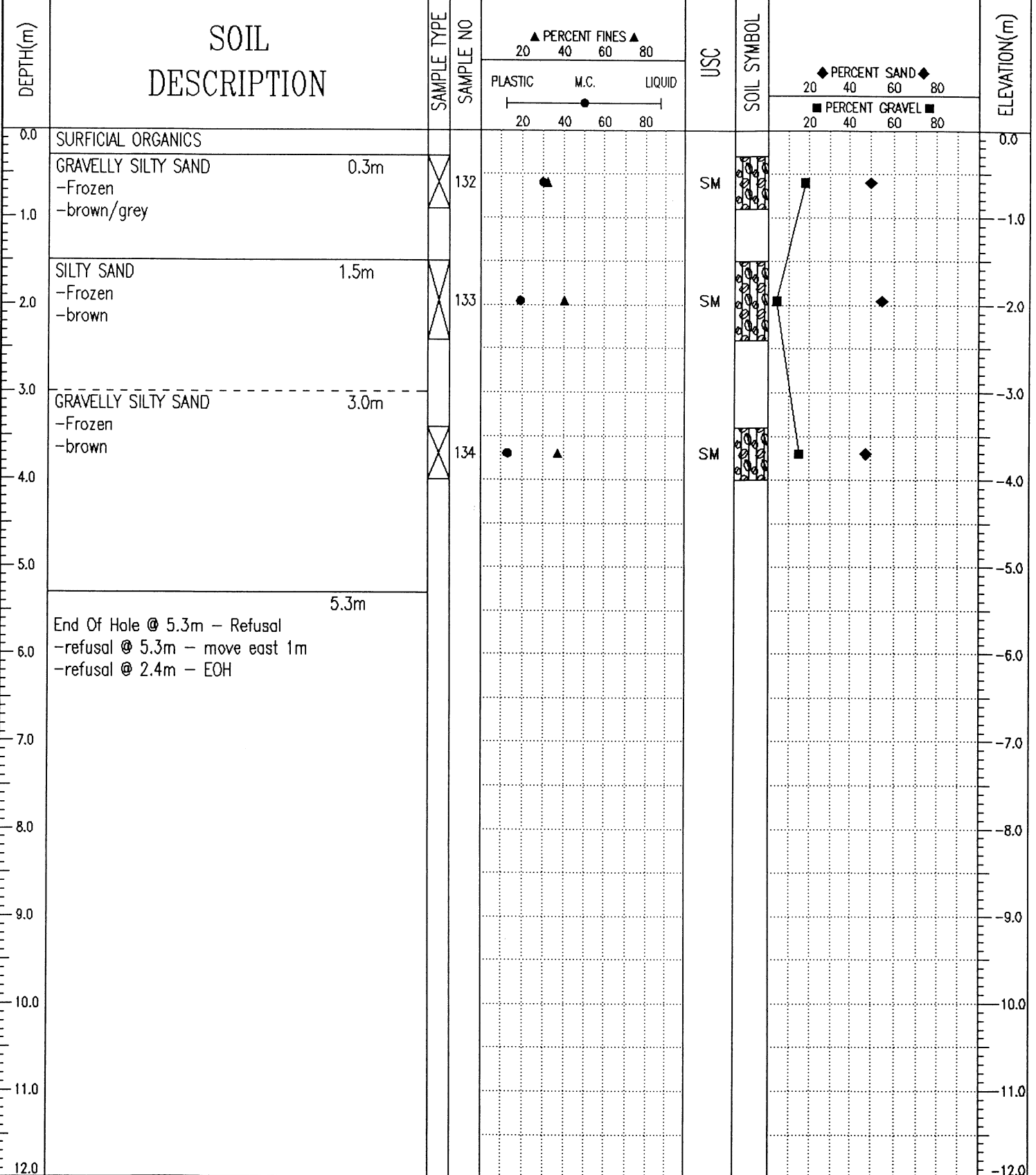
05/02/09 11:53AM (116_HWS)

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



08/02/09 11:53AM (YIG_HMS)

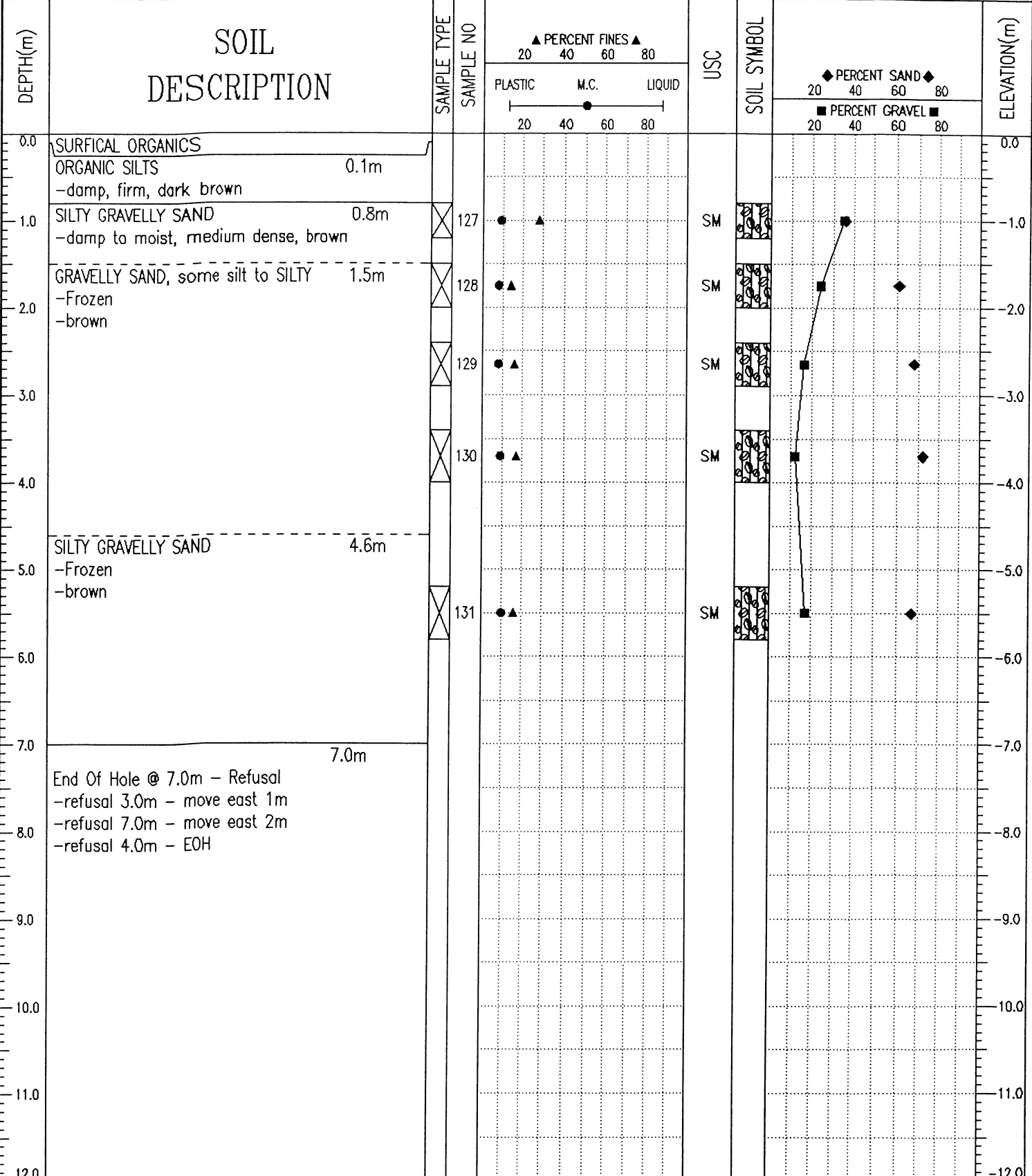
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



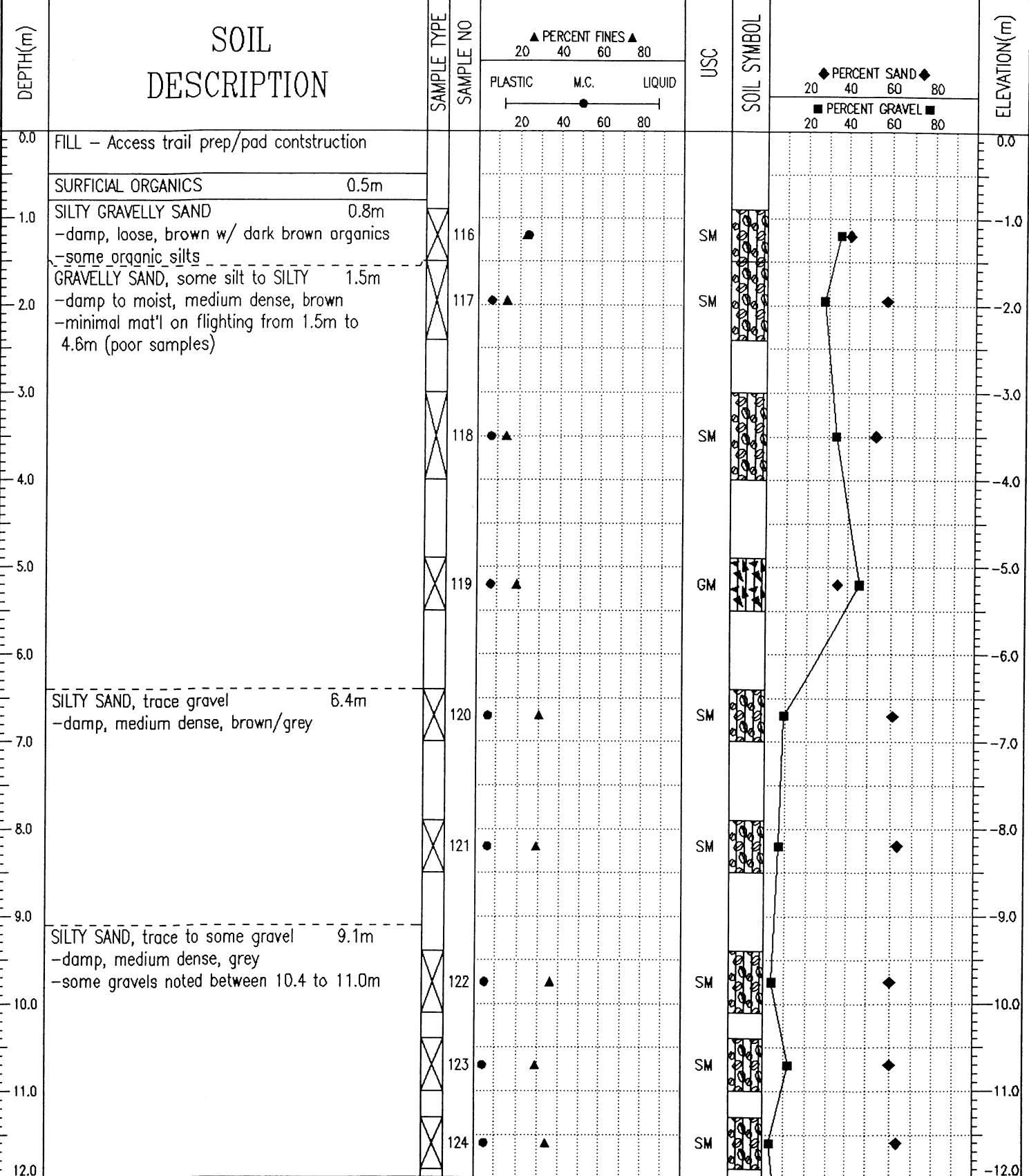
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.3 m
REVIEWED BY:	COMPLETE: 07/31/04
Fig. No: 23	Page 1 of 1

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

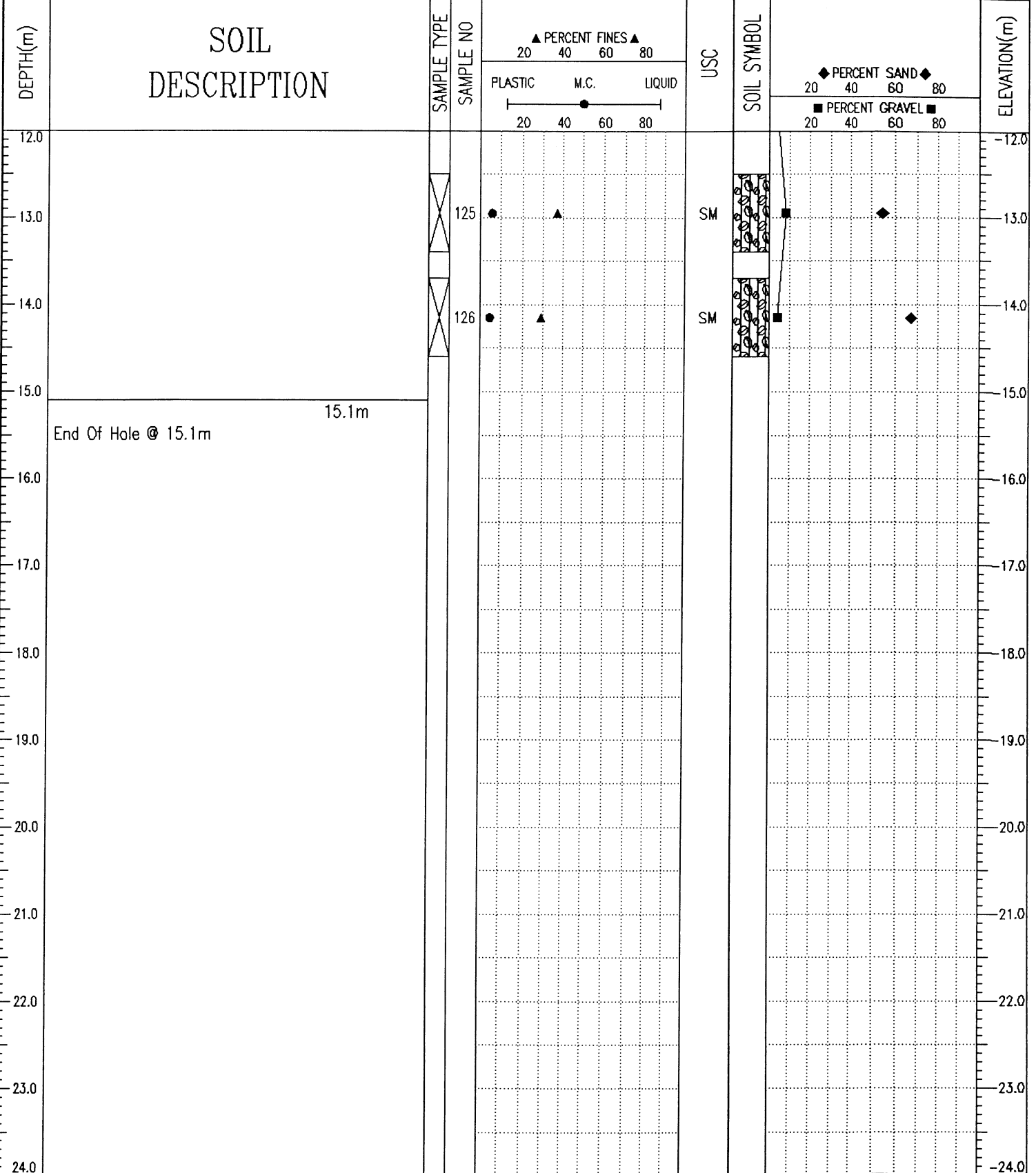


SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



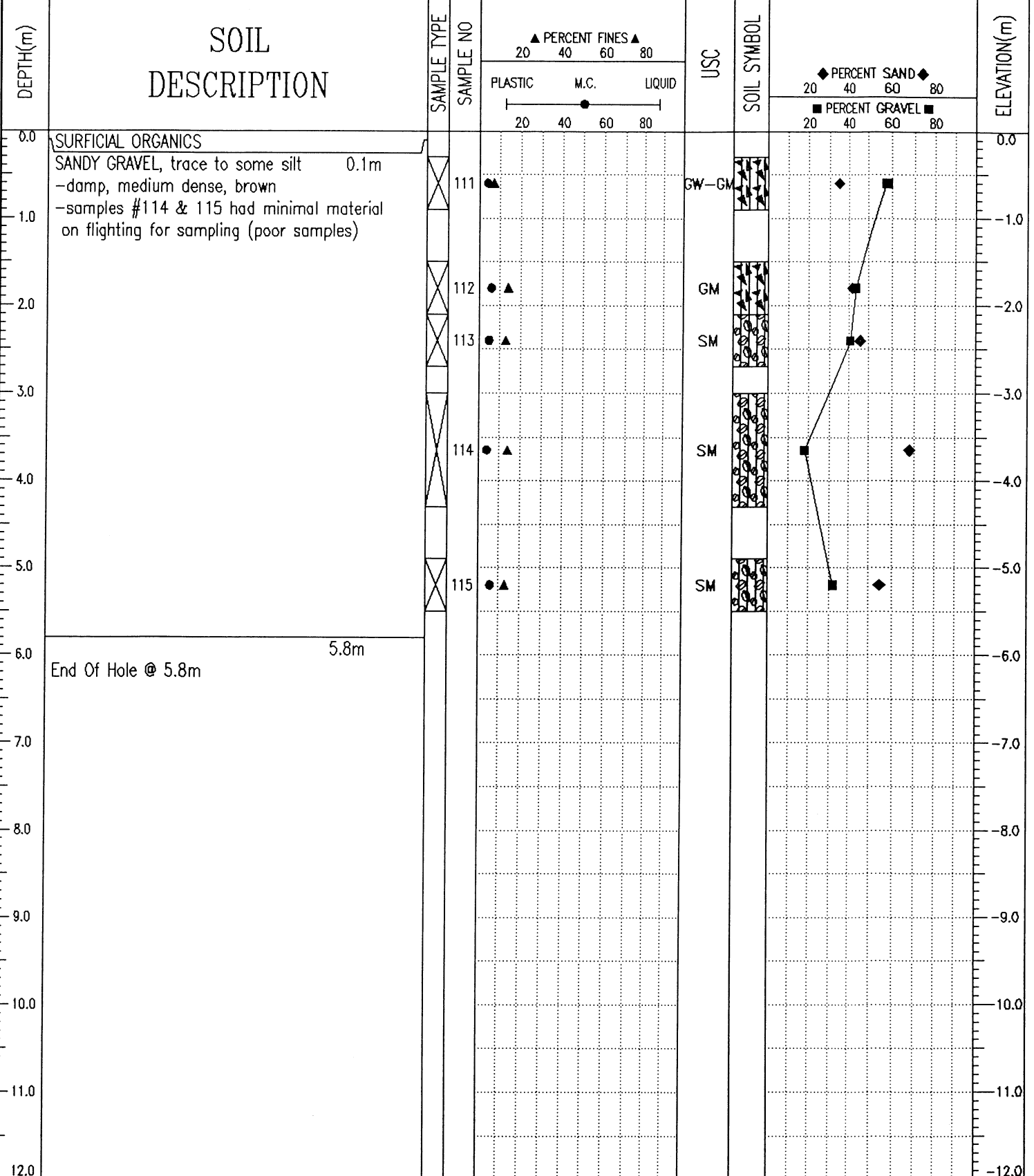
05/02/09 11:53AM (MIG_HHWS)

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



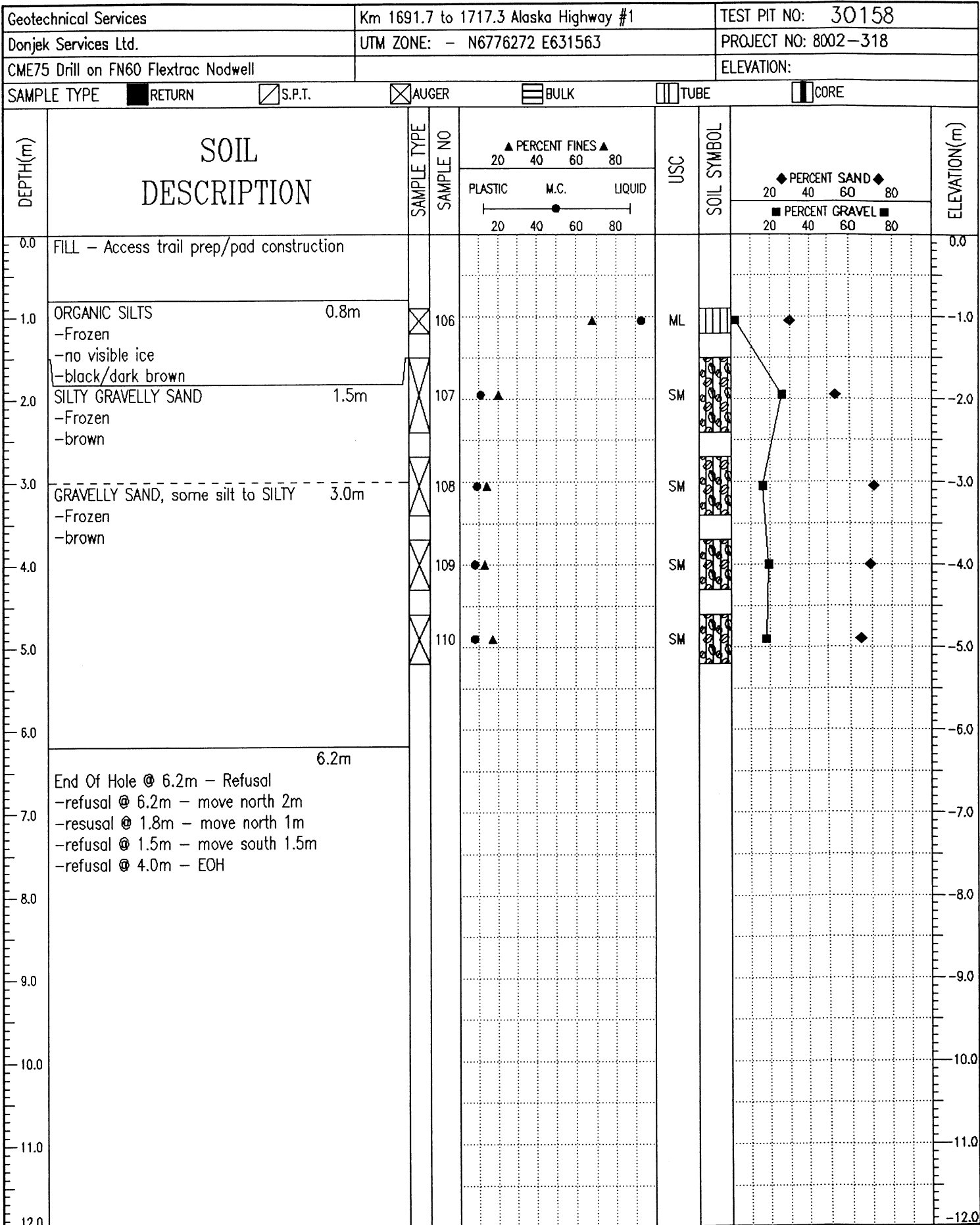
05/02/09 11:54AM (YIG_HWS)

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.8 m
REVIEWED BY:	COMPLETE: 07/30/04
Fig. No: 20	Page 1 of 1

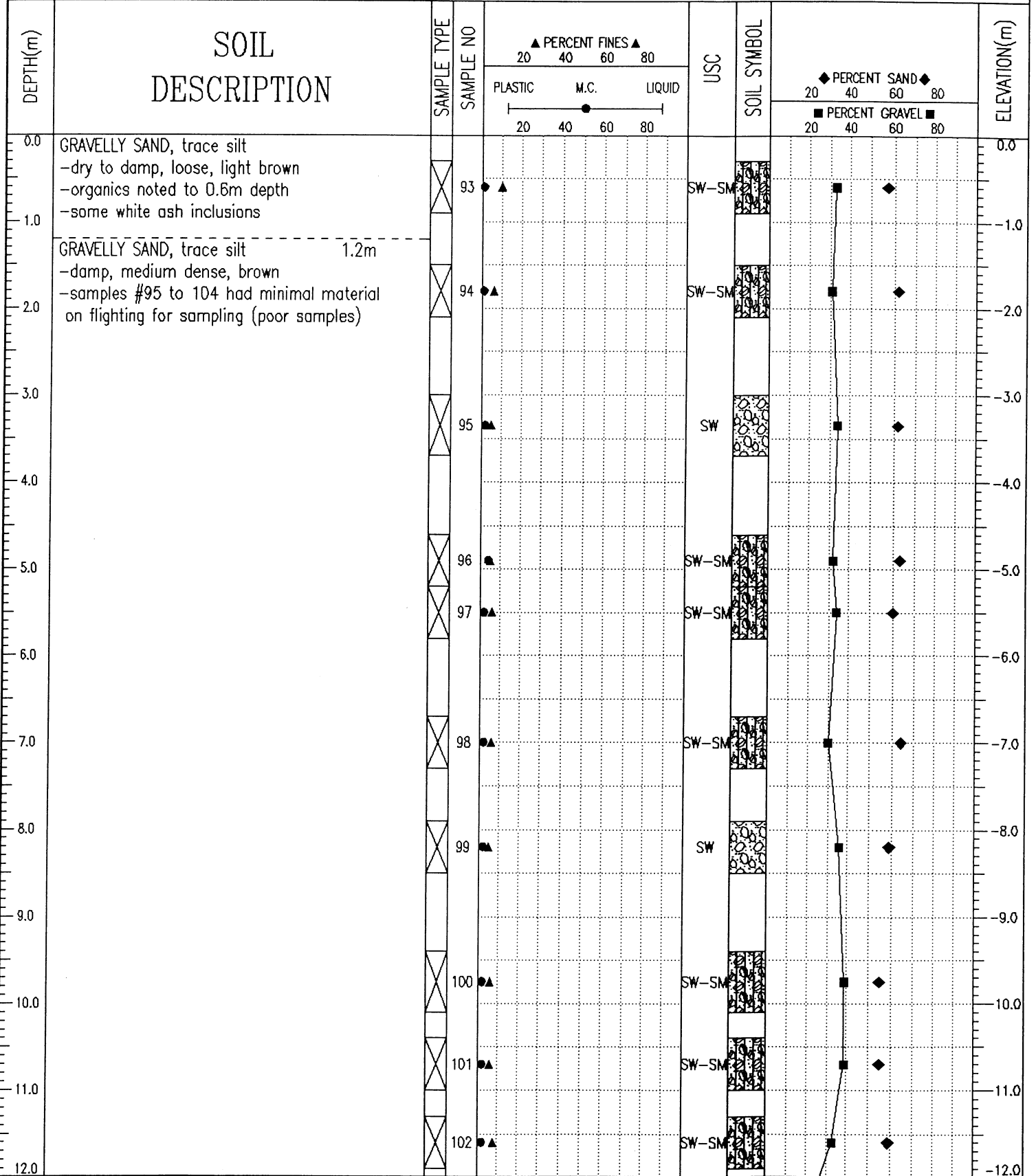


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 19

COMPLETION DEPTH: 6.2 m
COMPLETE: 07/30/04

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



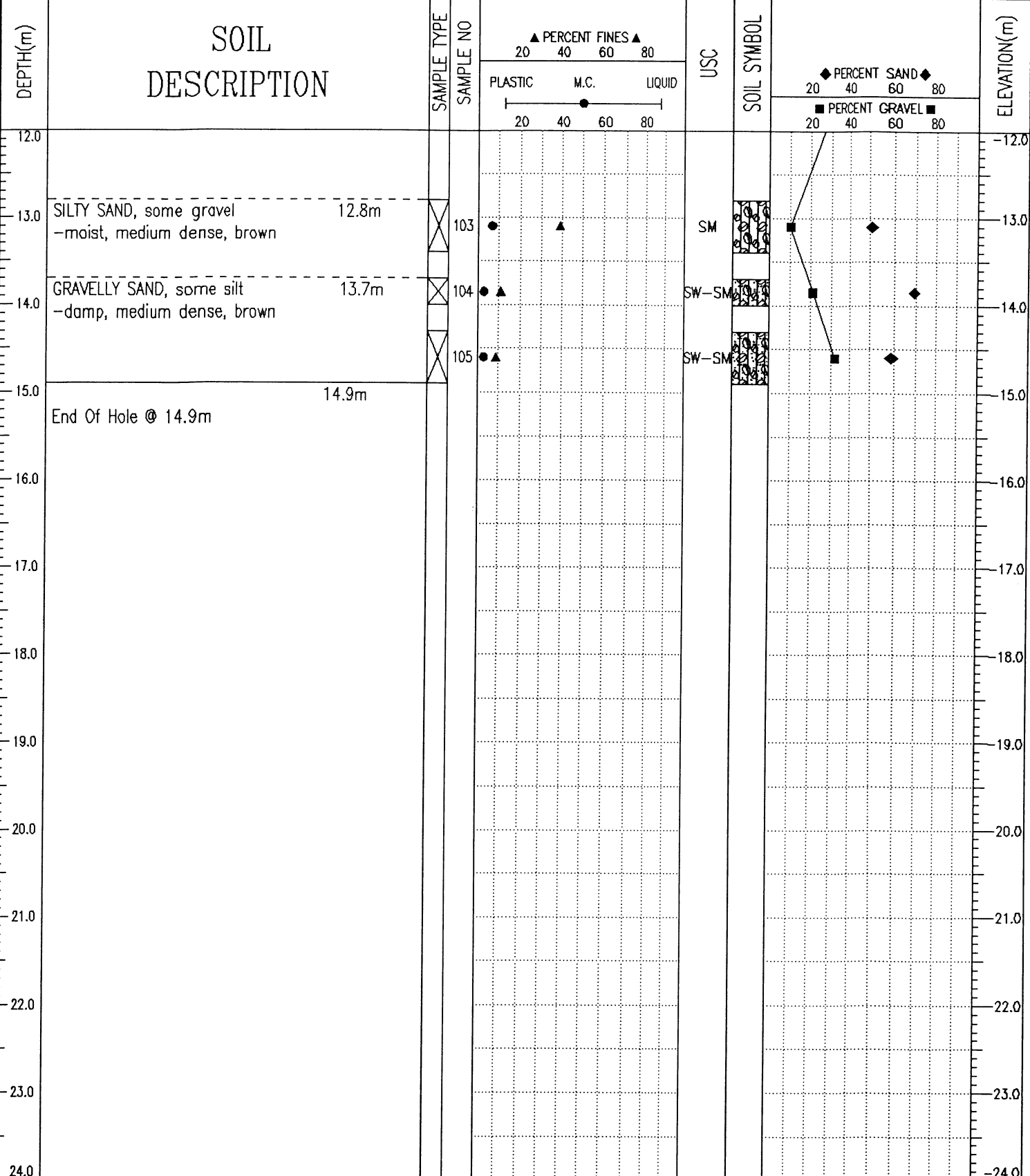
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 18

COMPLETION DEPTH: 14.9 m
COMPLETE: 07/30/04

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30159
Donjek Services Ltd.	UTM ZONE: - N6776361 E631517	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

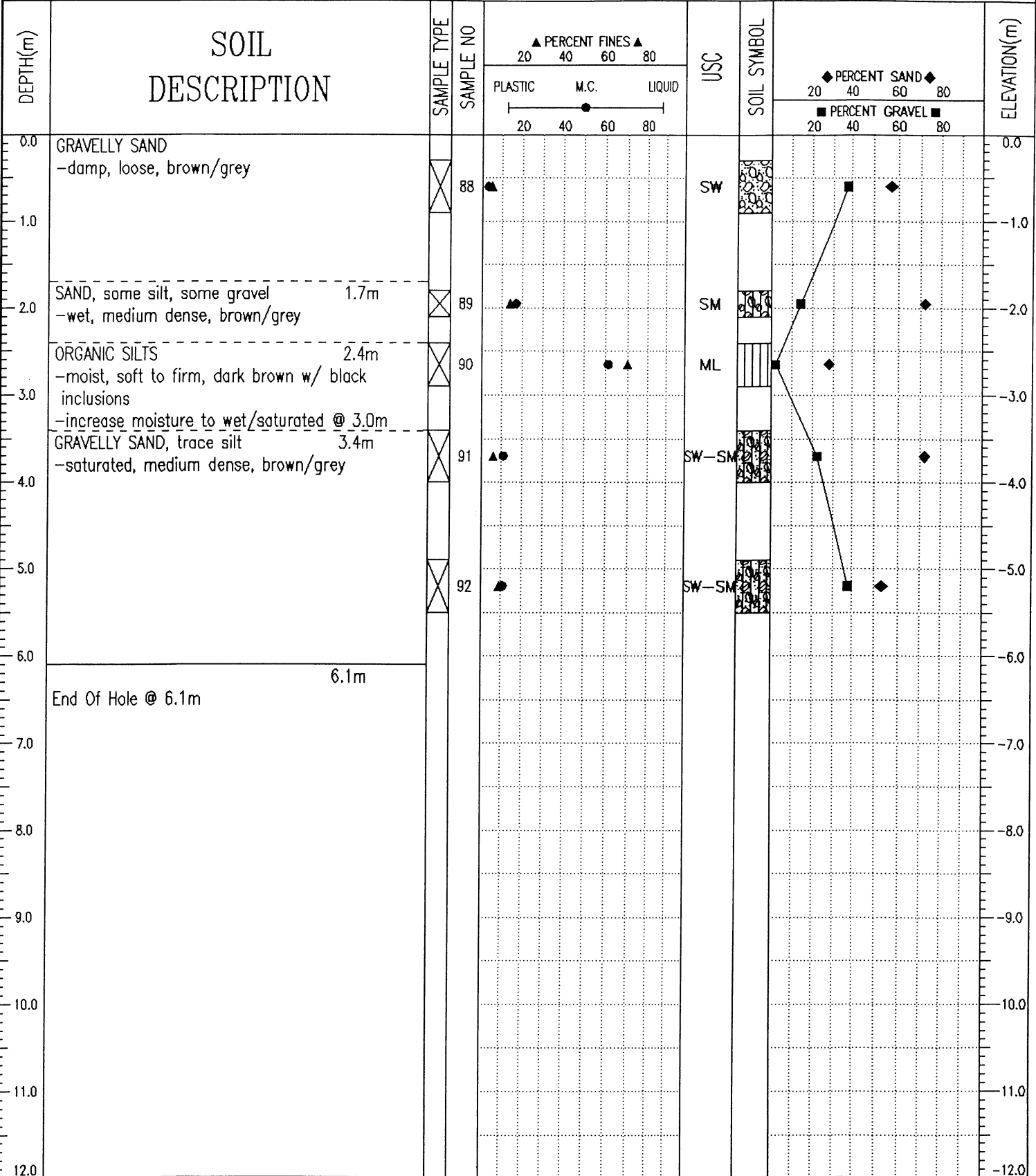
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



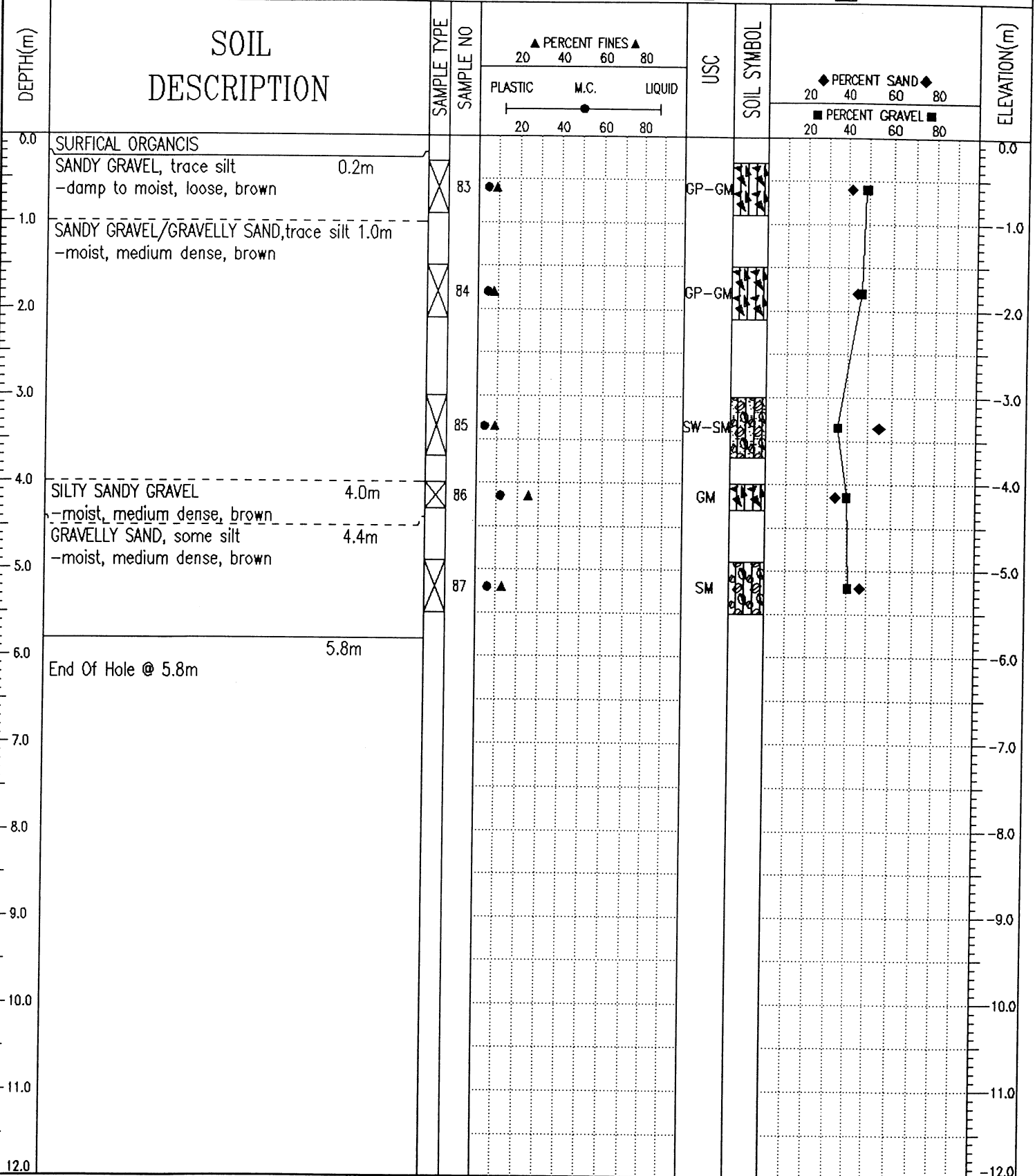
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 14.9 m
REVIEWED BY:	COMPLETE: 07/30/04
Fig. No: 18	Page 2 of 2

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



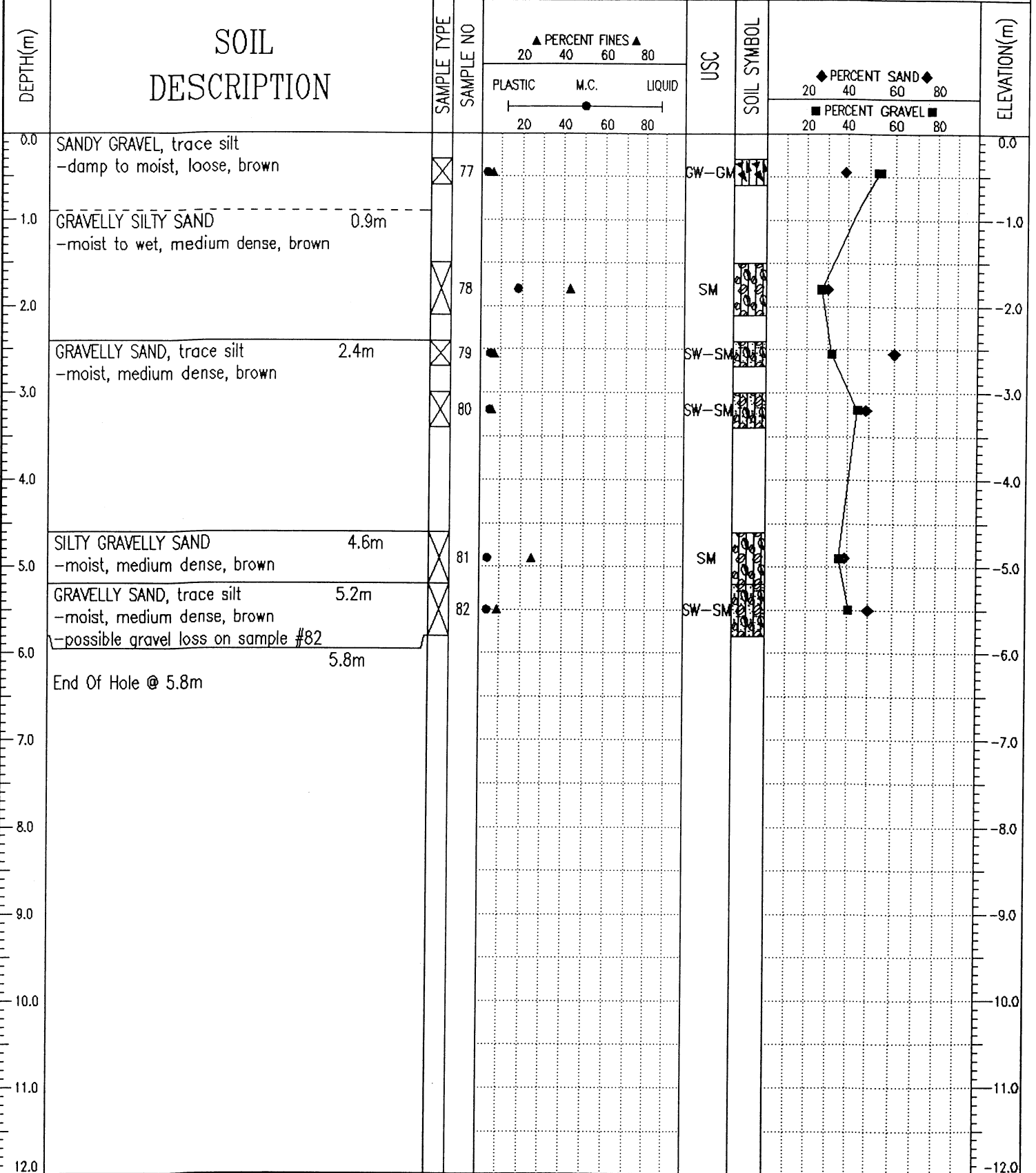
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

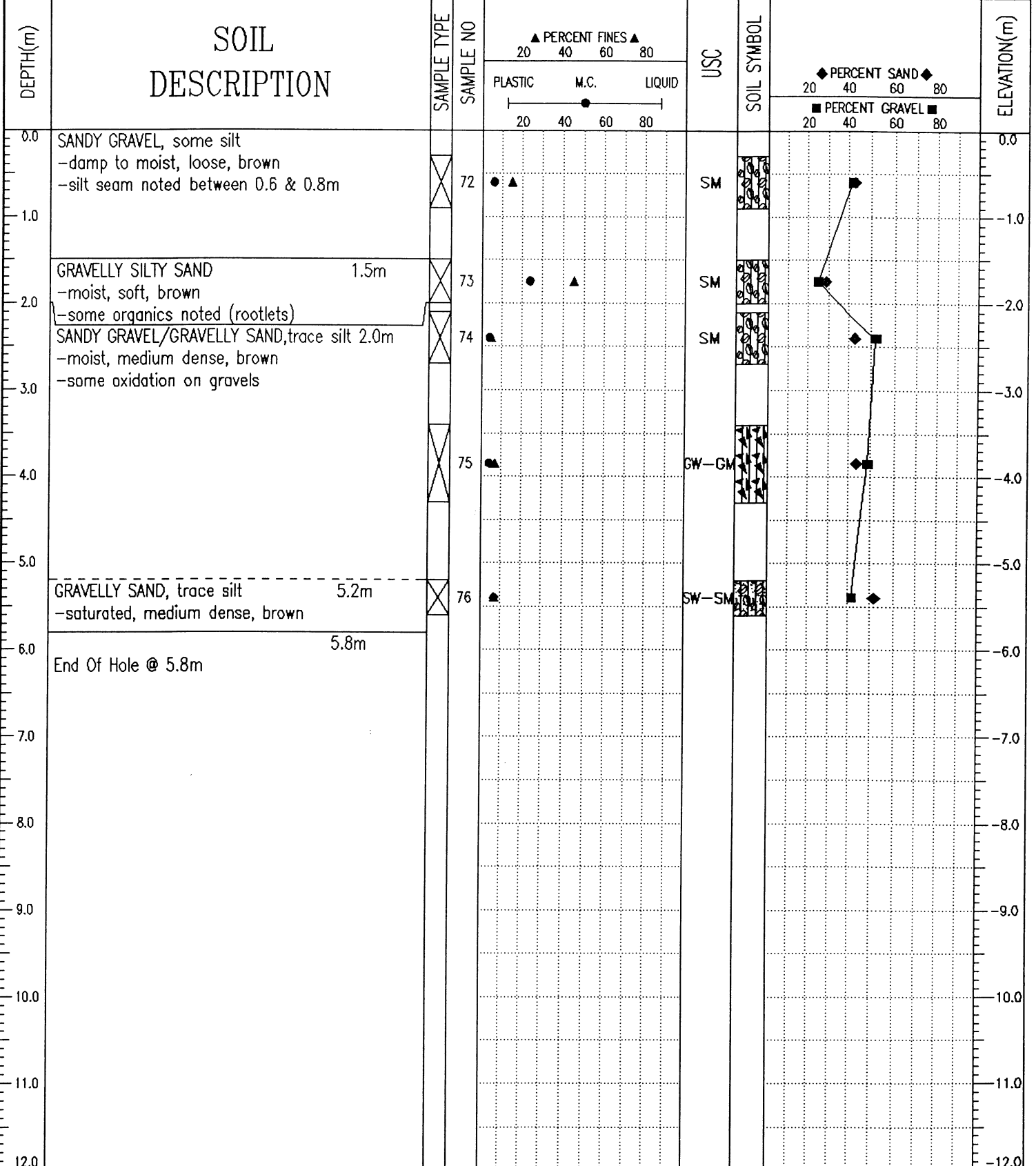
LOGGED BY: RW	COMPLETION DEPTH: 5.8 m
REVIEWED BY:	COMPLETE: 07/29/04
Fig. No: 16	Page 1 of 1

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



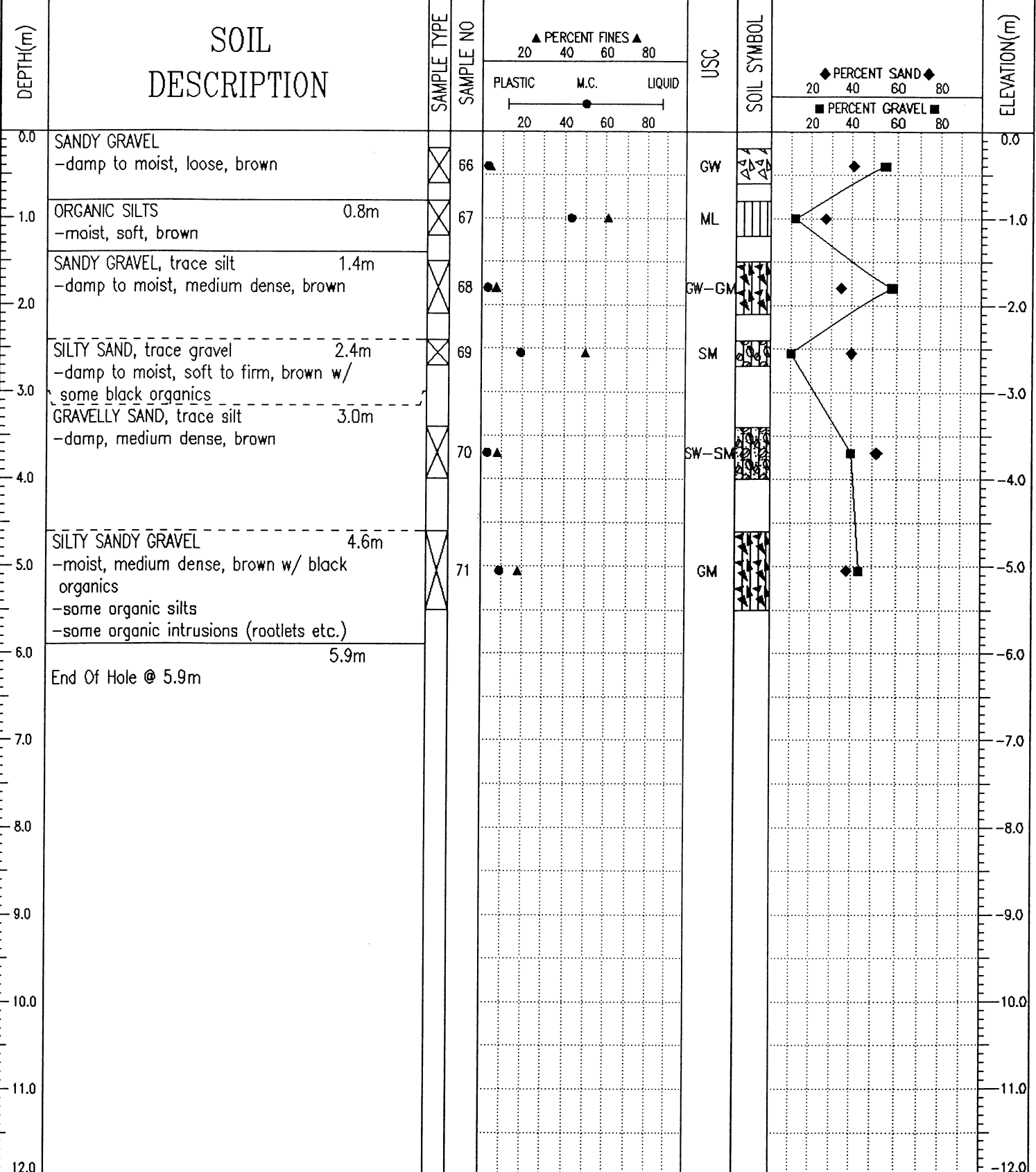
05/02/09 11:55AM (116_HWS)

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



05/02/04 02:20PM (Y16_HHW)

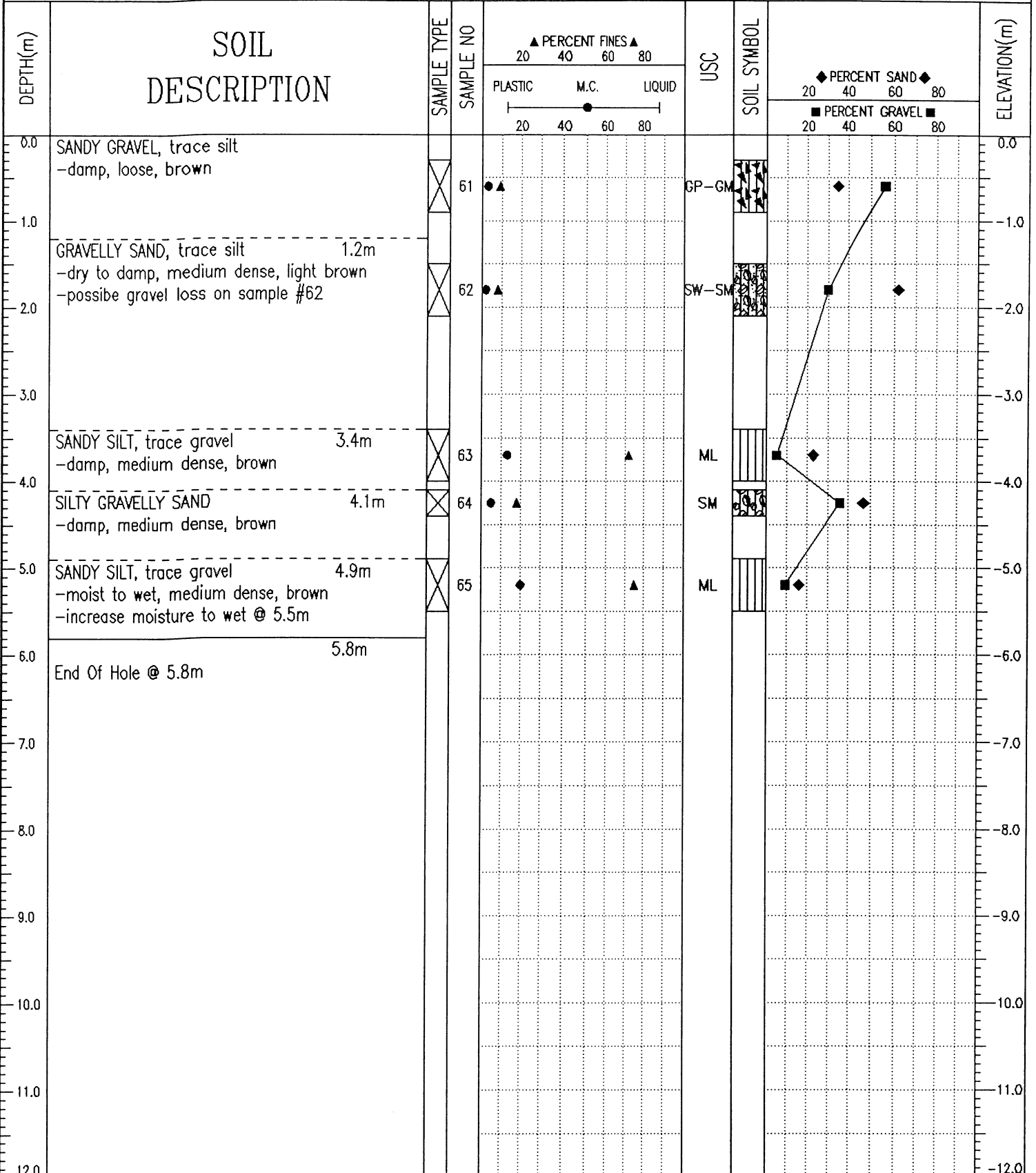
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

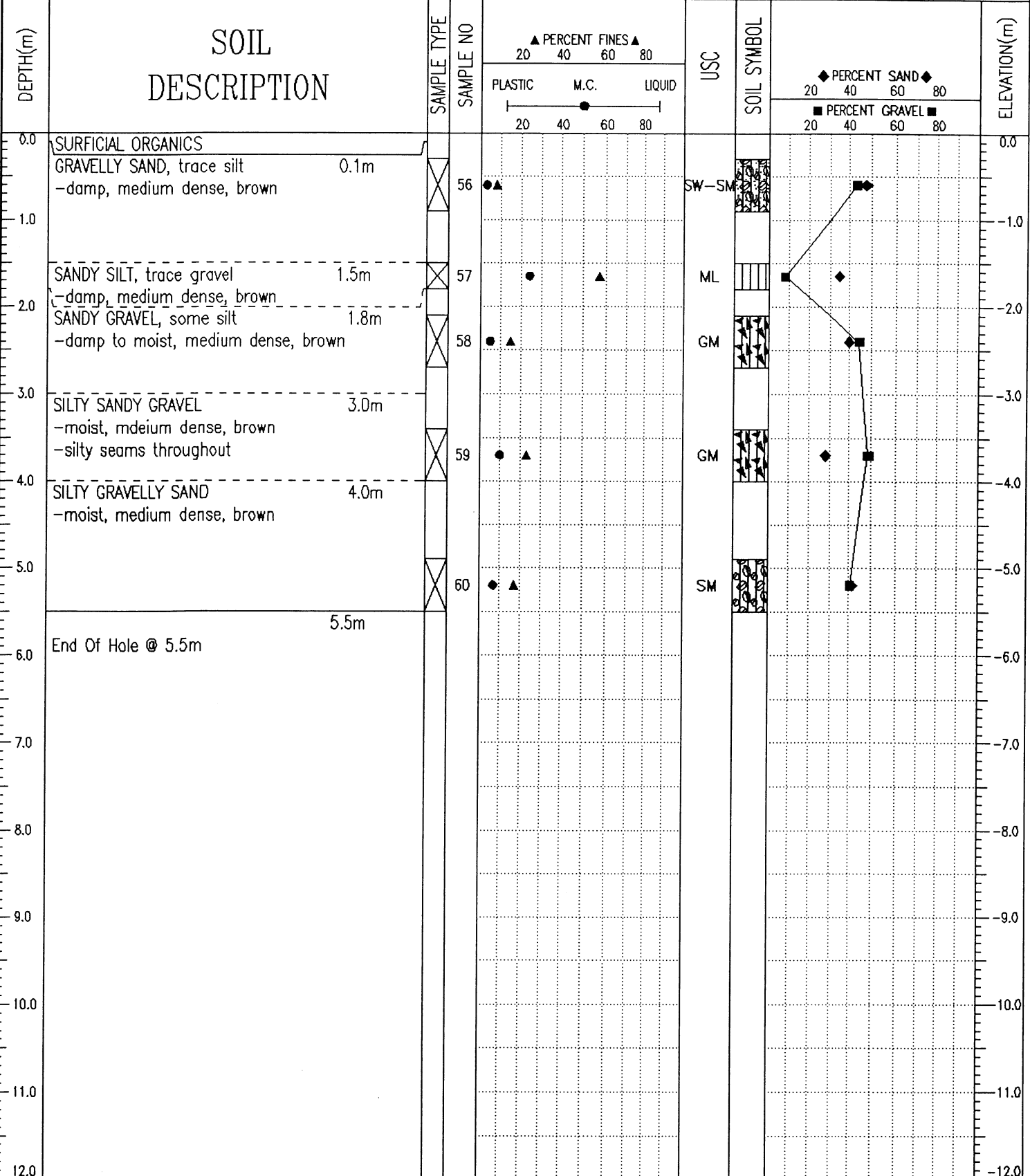
LOGGED BY: RW	COMPLETION DEPTH: 5.9 m
REVIEWED BY:	COMPLETE: 07/29/04
Fig. No: 13	Page 1 of 1

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



05/02/09 11:55AM (YIG_HMTS)

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW

REVIEWED BY: -

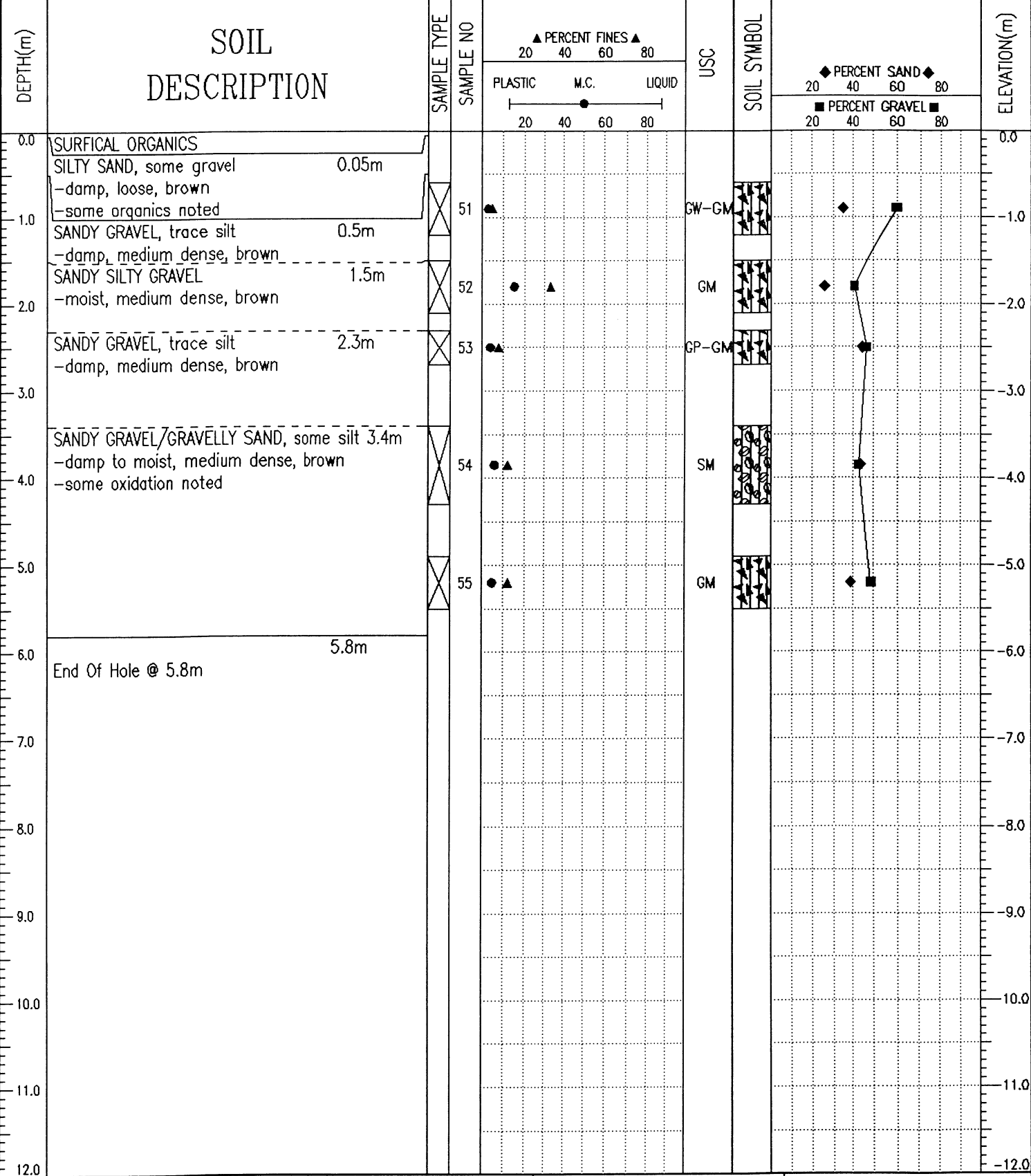
Fig. No: 11

COMPLETION DEPTH: 5.5 m

COMPLETE: 07/28/04

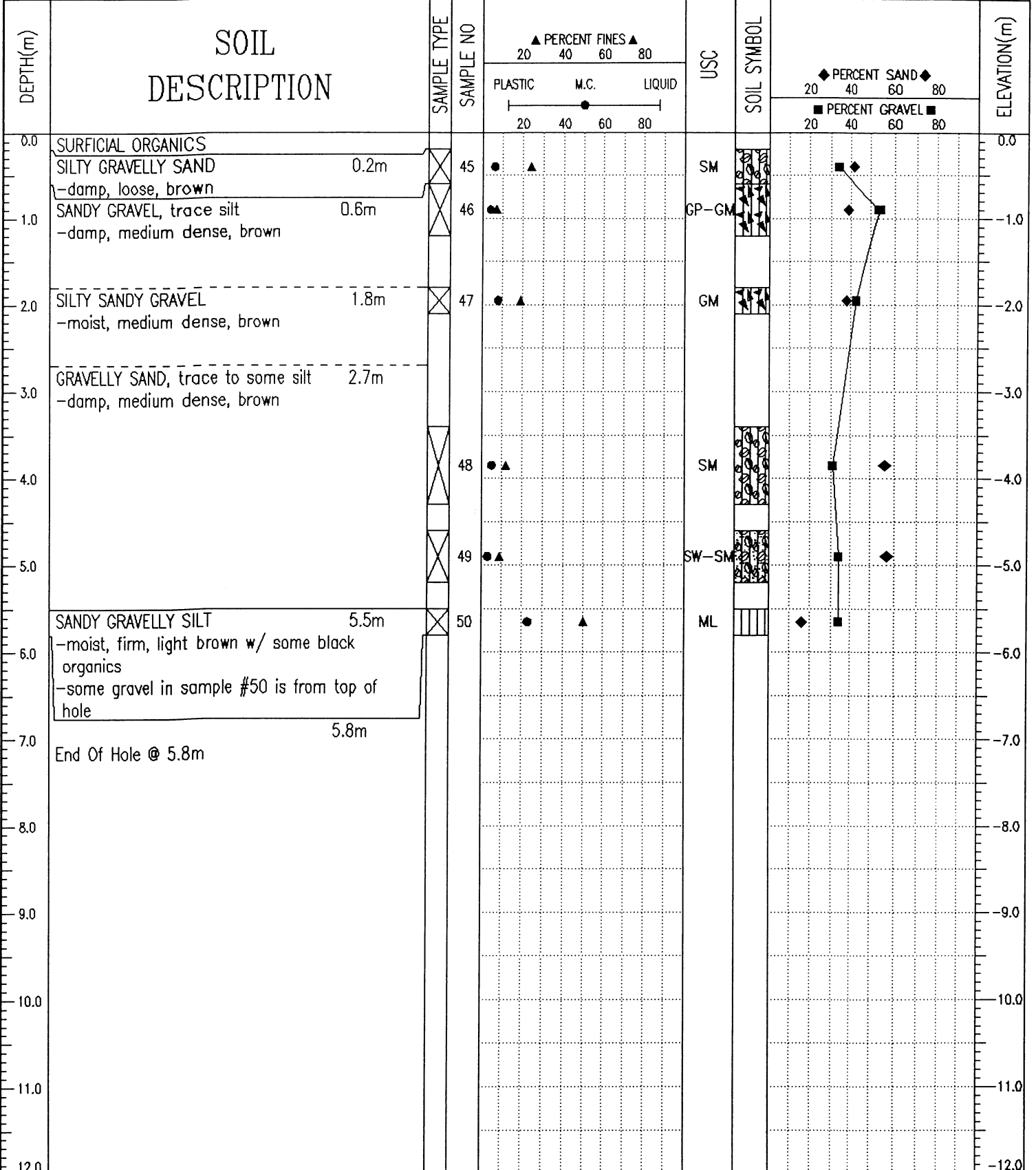
Page 1 of 1

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



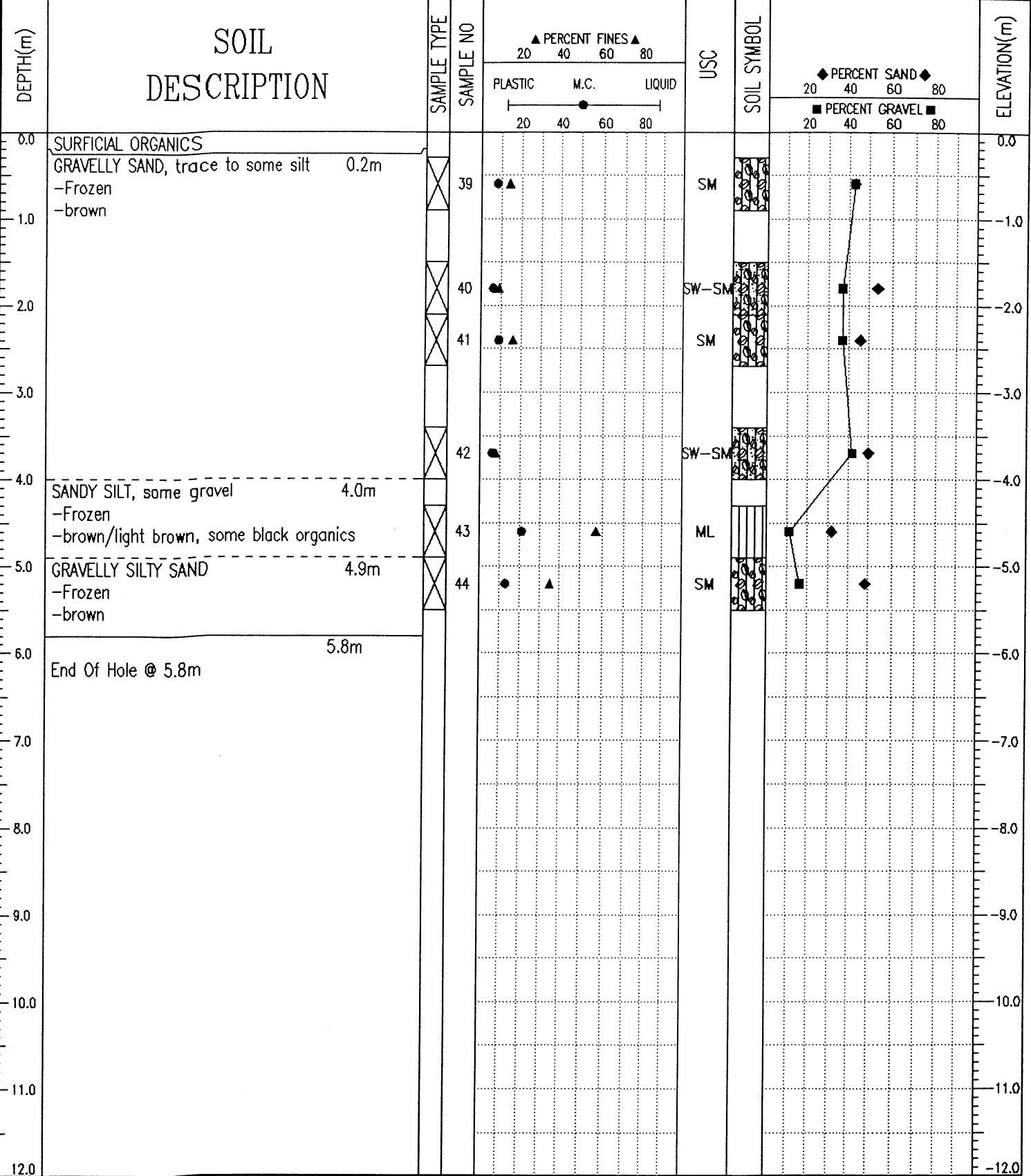
05/02/09 02:20PM (YIG_LHHS)

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



05/02/09 11:56AM (YIG_HHTS)

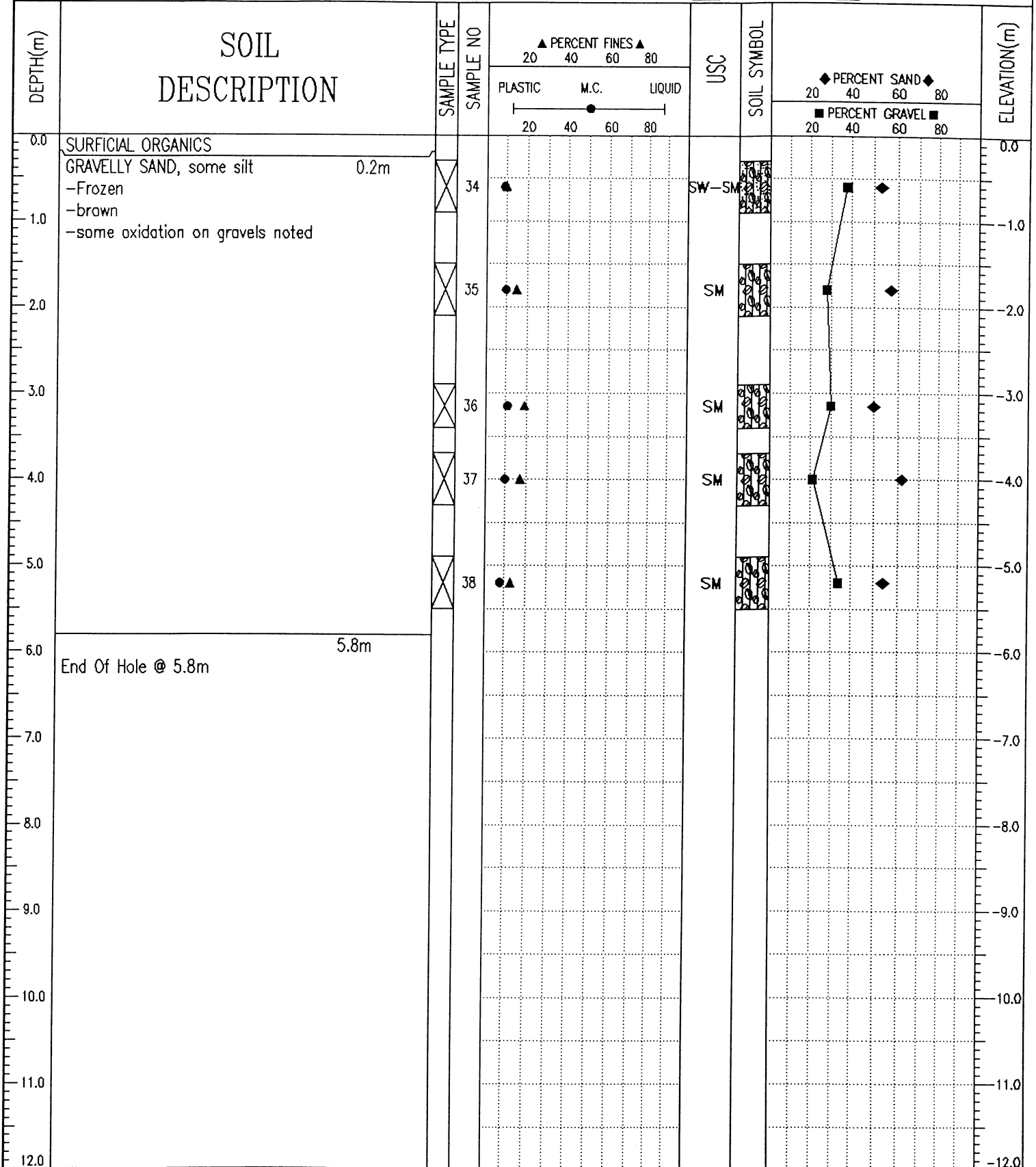
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.8 m
REVIEWED BY: -	COMPLETE: 07/28/04
Fig. No: 8	Page 1 of 1

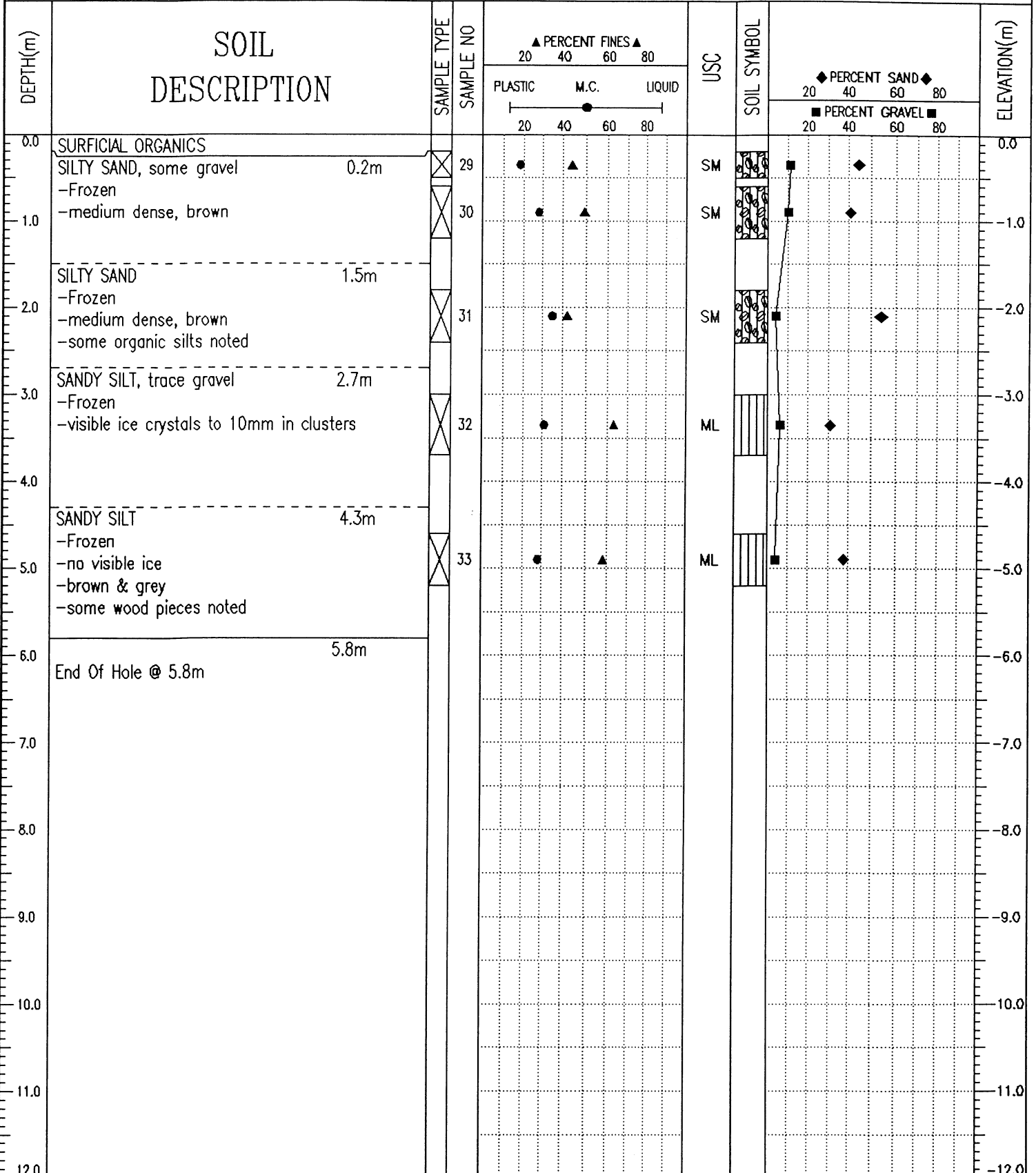
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

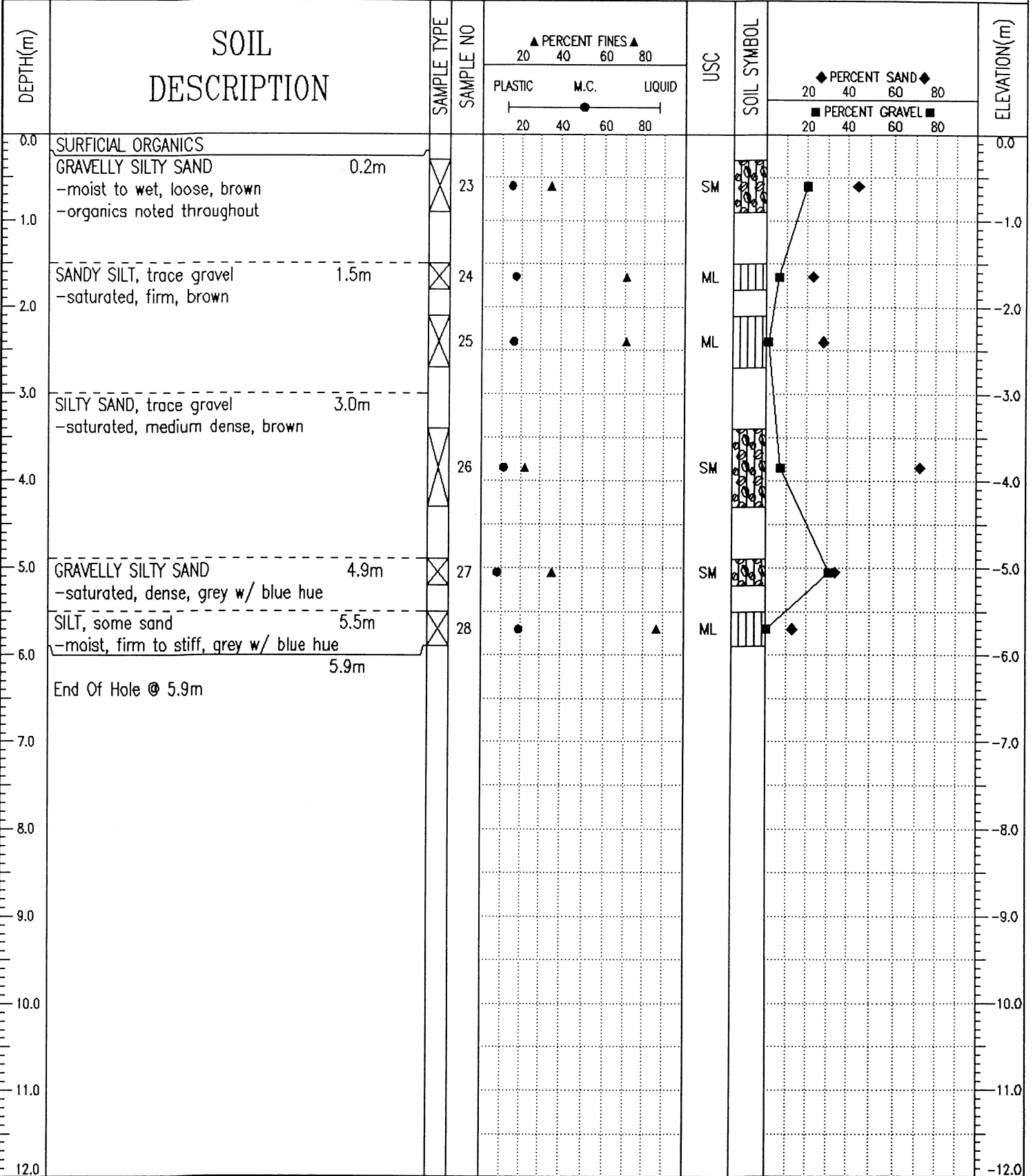
LOGGED BY: RW	COMPLETION DEPTH: 5.8 m
REVIEWED BY: -	COMPLETE: 07/28/04
Fig. No: 7	Page 1 of 1

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



05/02/09 11:57AM (YIG_HHS)

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

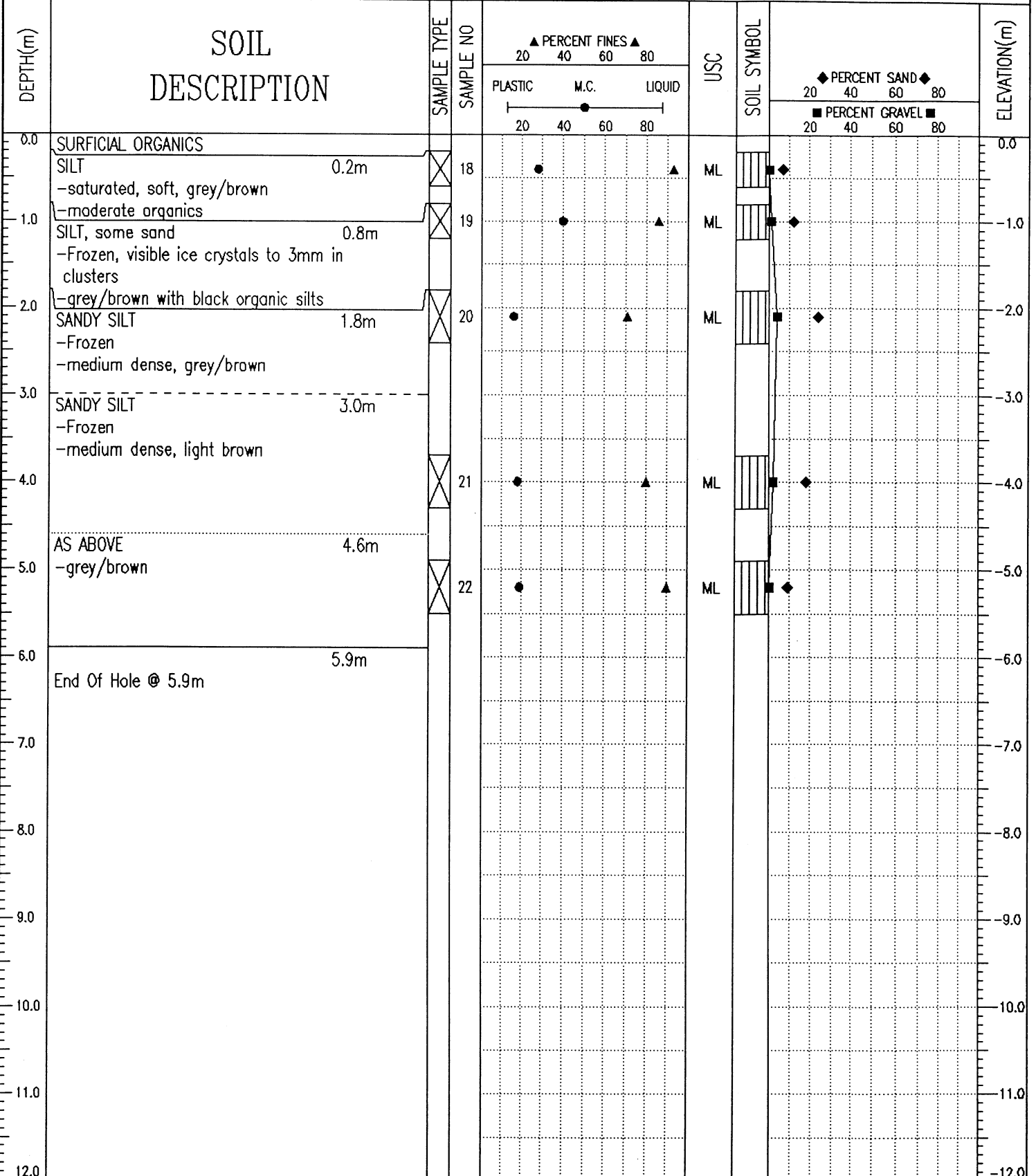


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.9 m
REVIEWED BY: -	COMPLETE: 07/28/04
Fig. No: 5	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30173
Donjek Services Ltd.	UTM ZONE: - N6778189 E631425	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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



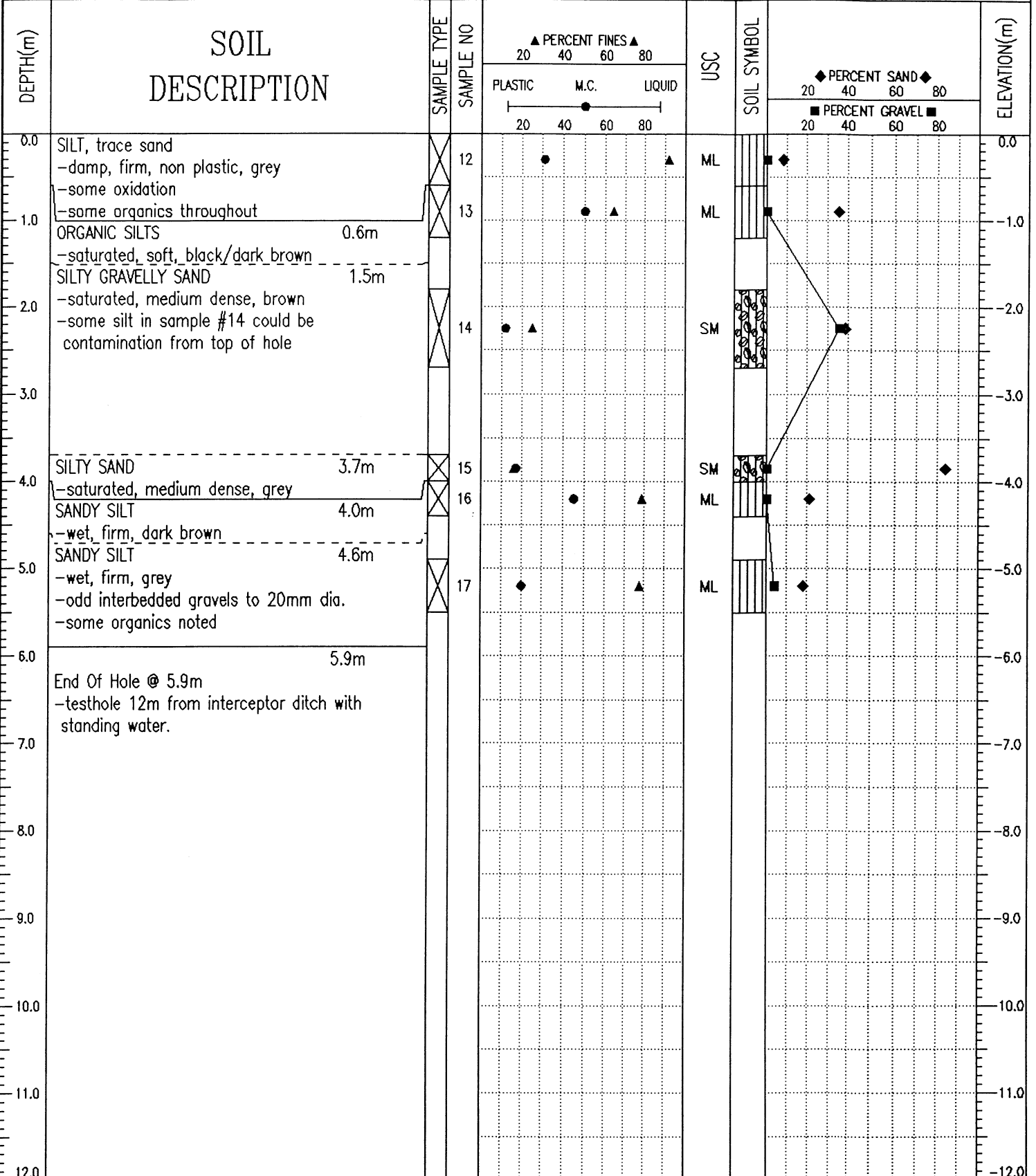
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 4

COMPLETION DEPTH: 5.9 m
COMPLETE: 07/28/04

Page 1 of 1

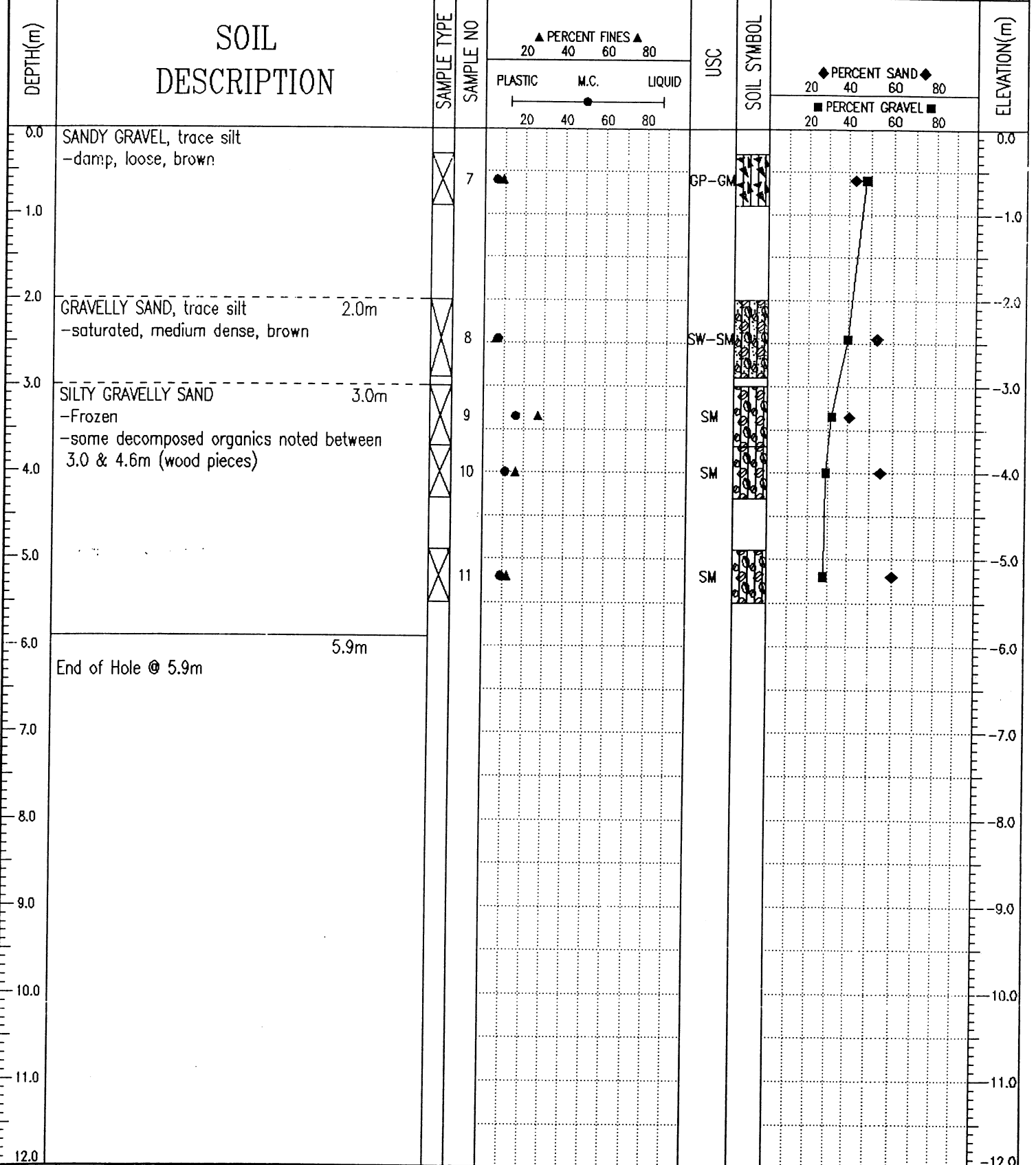
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.9 m
REVIEWED BY: -	COMPLETE: 07/28/04
Fig. No: 3	Page 1 of 1

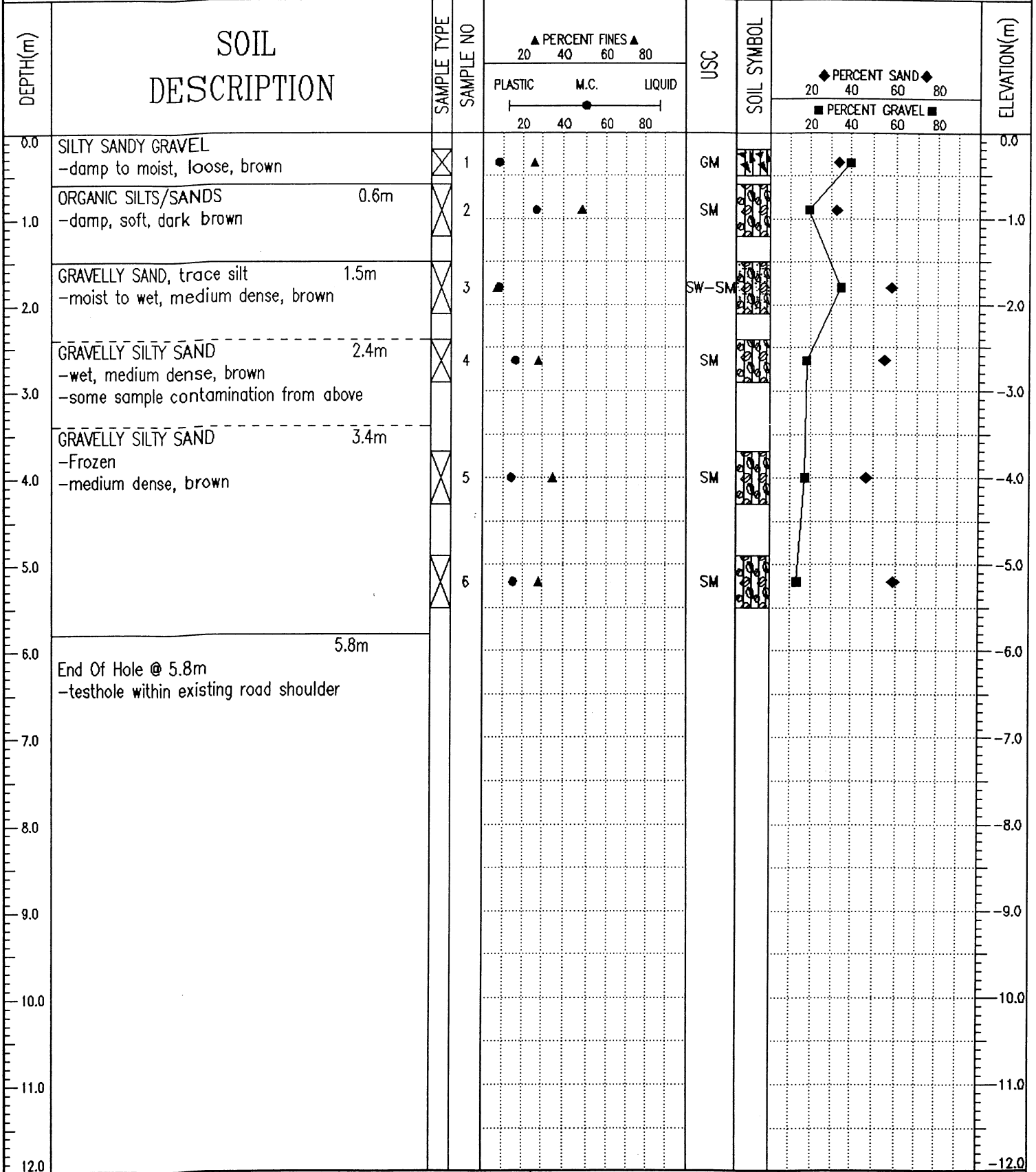
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.9 m
REVIEWED BY:	COMPLETE: 07/28/04
Fig. No: 2	Page 1 of 1

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



05/02/09 11:57AM (YIC_JHWS)



HOGGAN ENGINEERING & TESTING (1980) LTD.

An Affiliate of J. P. Payne & Associates Ltd.



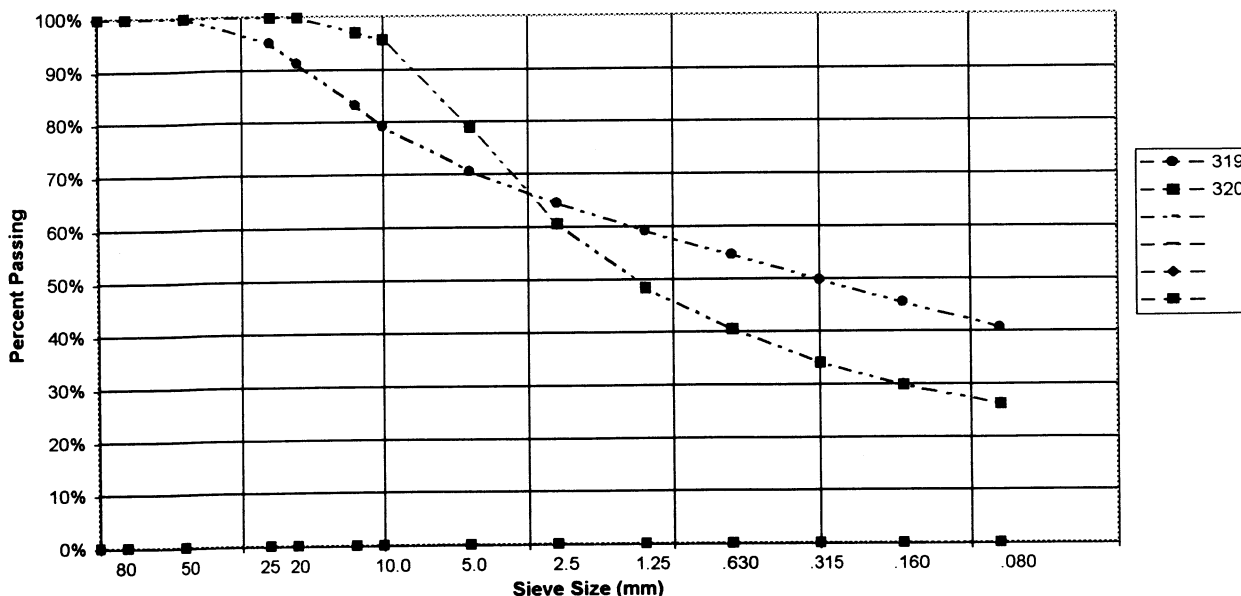
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 635061-6769660
 LOGGED BY: RW

HOLE No.: 30090

DATE COMP: 08/15/2004

FIELD NO:	319	320			
LAB NO:	319	320			
DEPTH:	0.5-1.0	1.2-1.5			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	95%	100%			
20.0	91%	100%			
12.5	83%	97%			
10.0	79%	96%			
5.0	71%	79%			
2.5	65%	61%			
1.25	59%	48%			
0.630	55%	41%			
0.315	50%	34%			
0.160	46%	30%			
0.080	41%	26%			
M.C.(%)	6%	3%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	29	21			
% SAND:	30	53			
% FINES:	41	26			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)			

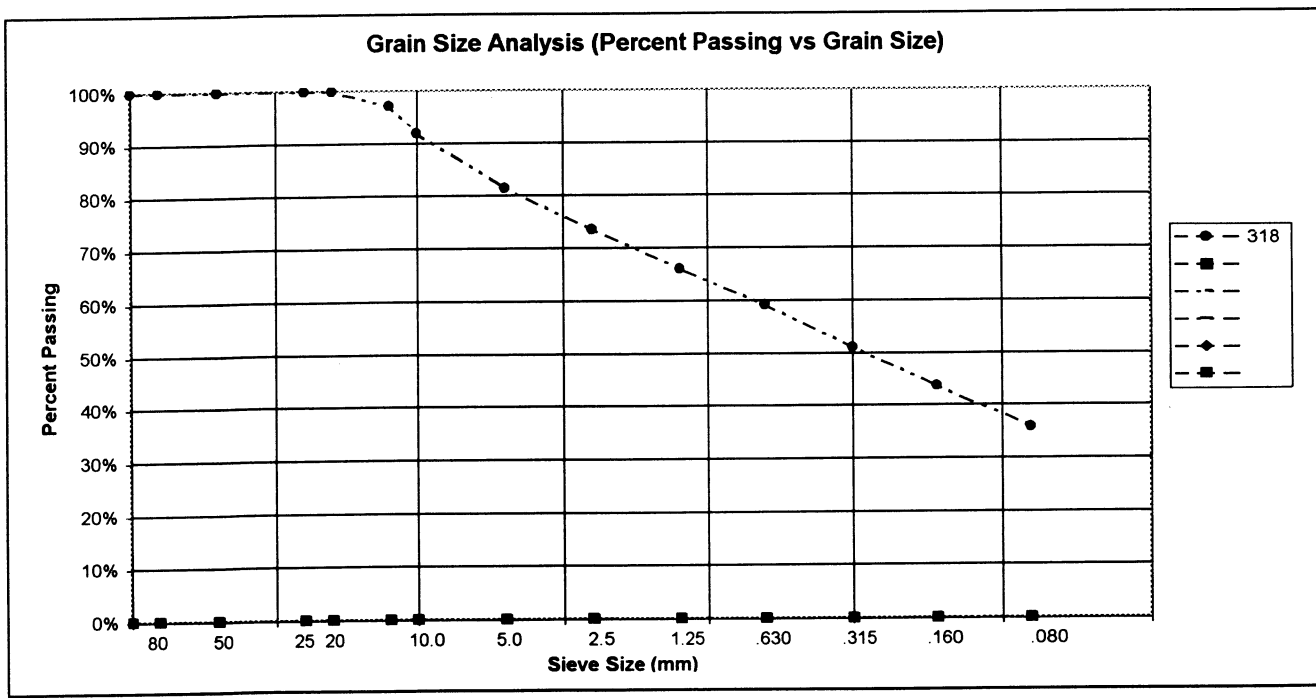
Grain Size Analysis (Percent Passing vs Grain Size)





PROJECT NUMBER: 8002-318 HOLE No.: 30091
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 635044-6769701
 LOGGED BY: RW DATE COMP: 08/15/2004

FIELD NO:	318				
LAB NO:	318				
DEPTH:	0.5-0.9				
TYPE:	AUGER				
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	100%				
20.0	100%				
12.5	97%				
10.0	92%				
5.0	82%				
2.5	74%				
1.25	66%				
0.630	59%				
0.315	51%				
0.160	44%				
0.080	36%				
M.C.(%)	5%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX:	0.0				
% GRAVEL:	18				
% SAND:	46				
% FINES:	36				
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)				





HOGGAN ENGINEERING & TESTING (1980) LTD.

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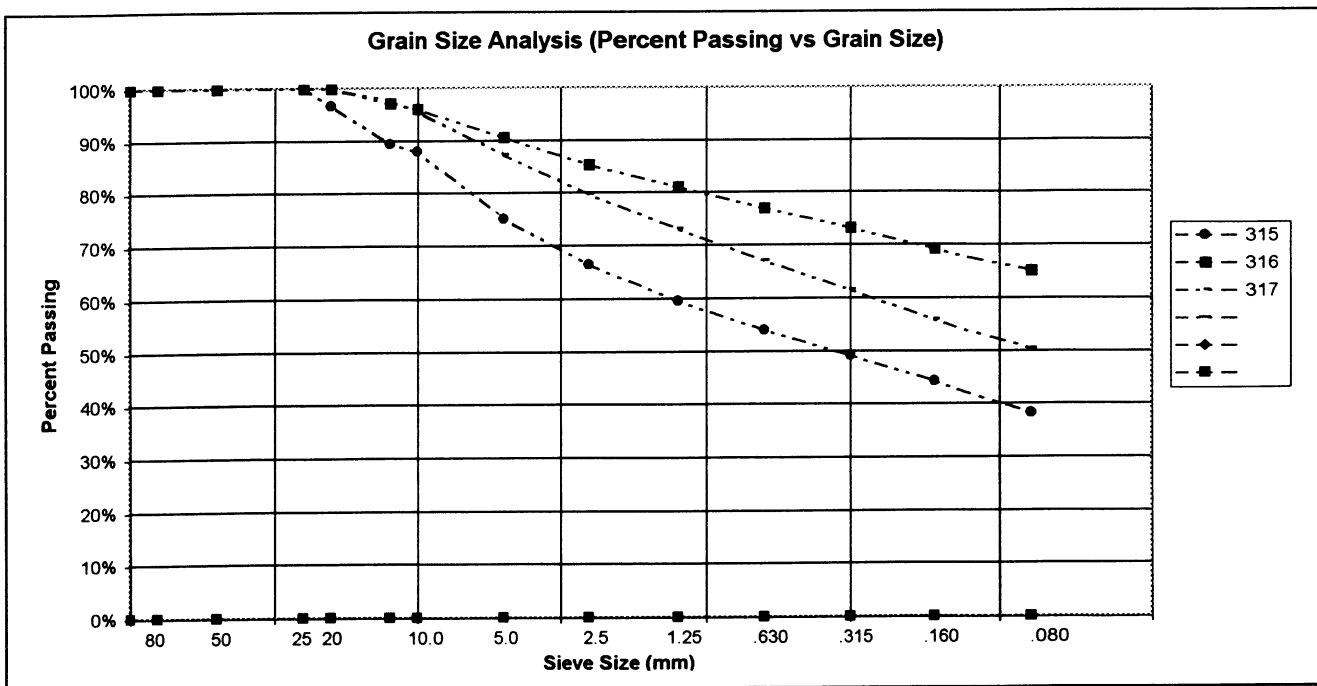


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 635000-6769764
 LOGGED BY: RW

HOLE No.: 30092

DATE COMP: 08/15/2004

FIELD NO:	315	316	317		
LAB NO:	315	316	317		
DEPTH:	0.4-1.0	1.8-2.4	3.7-4.3		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	97%	100%	100%		
12.5	89%	97%	98%		
10.0	88%	96%	96%		
5.0	75%	91%	87%		
2.5	67%	85%	80%		
1.25	60%	81%	73%		
0.630	54%	77%	67%		
0.315	49%	73%	62%		
0.160	44%	69%	56%		
0.080	38%	65%	50%		
M.C.(%)	13%	18%	11%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	25	9	13		
% SAND:	37	25	37		
% FINES:	38	65	50		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SANDY SILT (ML)	SANDY SILT (ML)		





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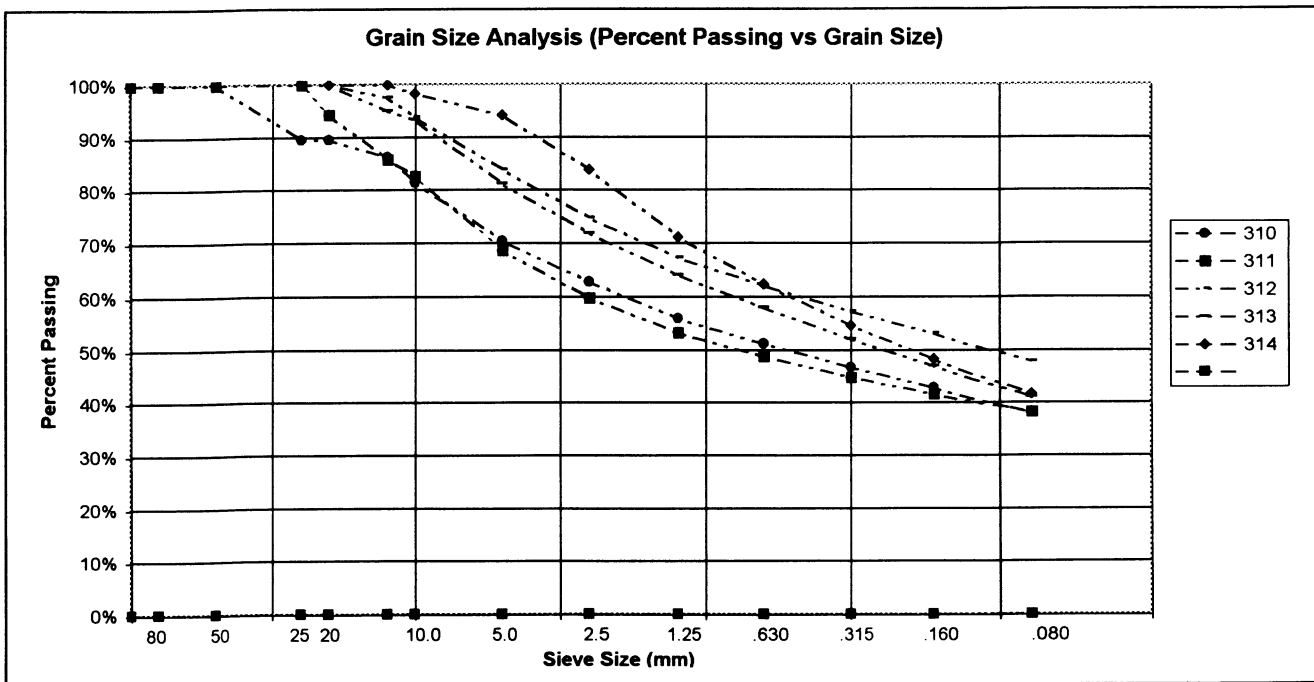


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634966-6769809
 LOGGED BY: RW

HOLE No.: 30093

DATE COMP: 08/15/2004

FIELD NO:	310	311	312	313	314	
LAB NO:	310	311	312	313	314	
DEPTH:	0.3-0.9	1.8-2.4	3.4-4.0	4.9-5.5	6.7-7.0	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	90%	100%	100%	100%	100%	
20.0	90%	94%	100%	100%	100%	
12.5	86%	86%	98%	95%	100%	
10.0	81%	83%	94%	93%	98%	
5.0	71%	69%	84%	81%	94%	
2.5	63%	60%	75%	72%	84%	
1.25	56%	53%	67%	64%	71%	
0.630	51%	49%	62%	58%	62%	
0.315	47%	45%	57%	52%	55%	
0.160	43%	42%	53%	47%	48%	
0.080	38%	38%	48%	41%	42%	
M.C.(%)	20%	15%	16%	13%	9%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	29	31	16	19	6	
% SAND:	32	30	36	40	52	
% FINES:	38	38	48	41	42	
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	



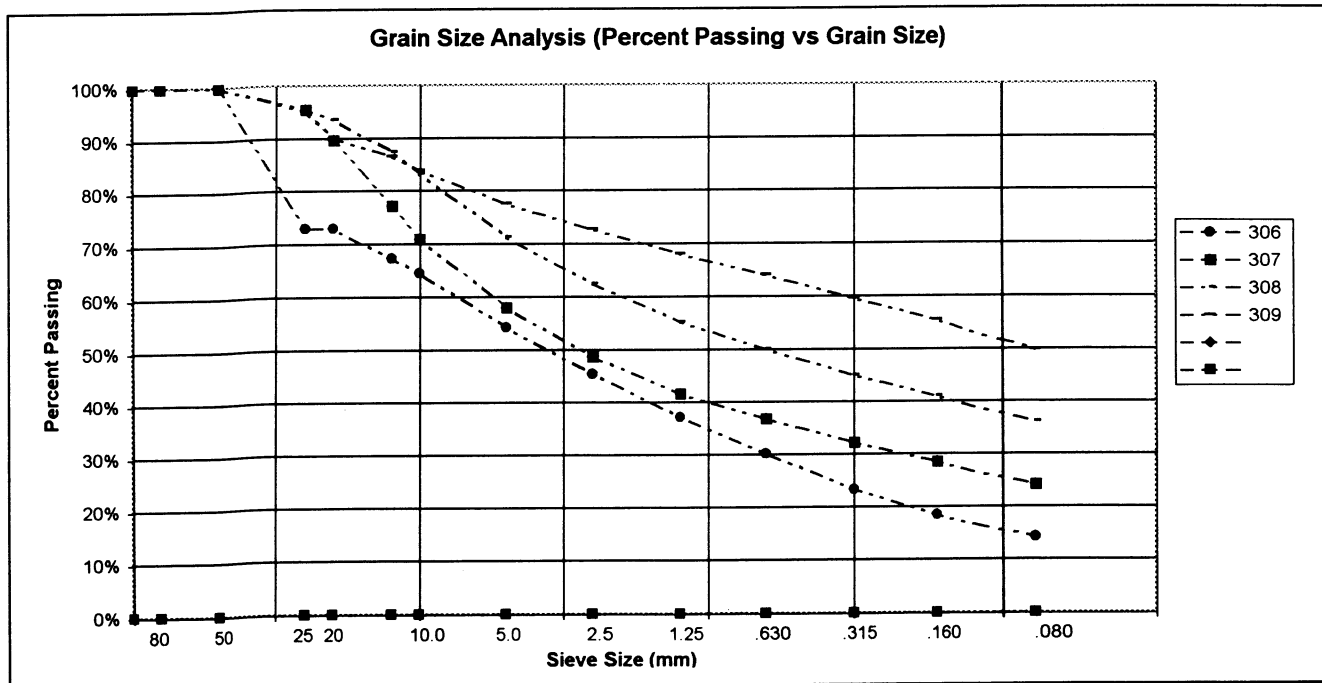


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634943-6769845
 LOGGED BY: RW

HOLE No.: 30094

DATE COMP: 08/15/2004

FIELD NO:	306	307	308	309	
LAB NO:	306	307	308	309	
DEPTH:	0.8-1.3	1.8-2.4	3.4-4.0	5.3-5.8	
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	
25.0	73%	95%	96%	95%	
20.0	73%	90%	94%	90%	
12.5	67%	77%	87%	87%	
10.0	65%	71%	83%	84%	
5.0	54%	58%	71%	78%	
2.5	45%	49%	63%	73%	
1.25	37%	42%	55%	68%	
0.630	30%	37%	50%	64%	
0.315	23%	32%	45%	60%	
0.160	19%	29%	41%	56%	
0.080	14%	24%	36%	50%	
M.C.(%):	5%	8%	11%	13%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	
% GRAVEL:	46	42	29	22	
% SAND:	40	34	35	28	
% FINES:	14	24	36	50	
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	





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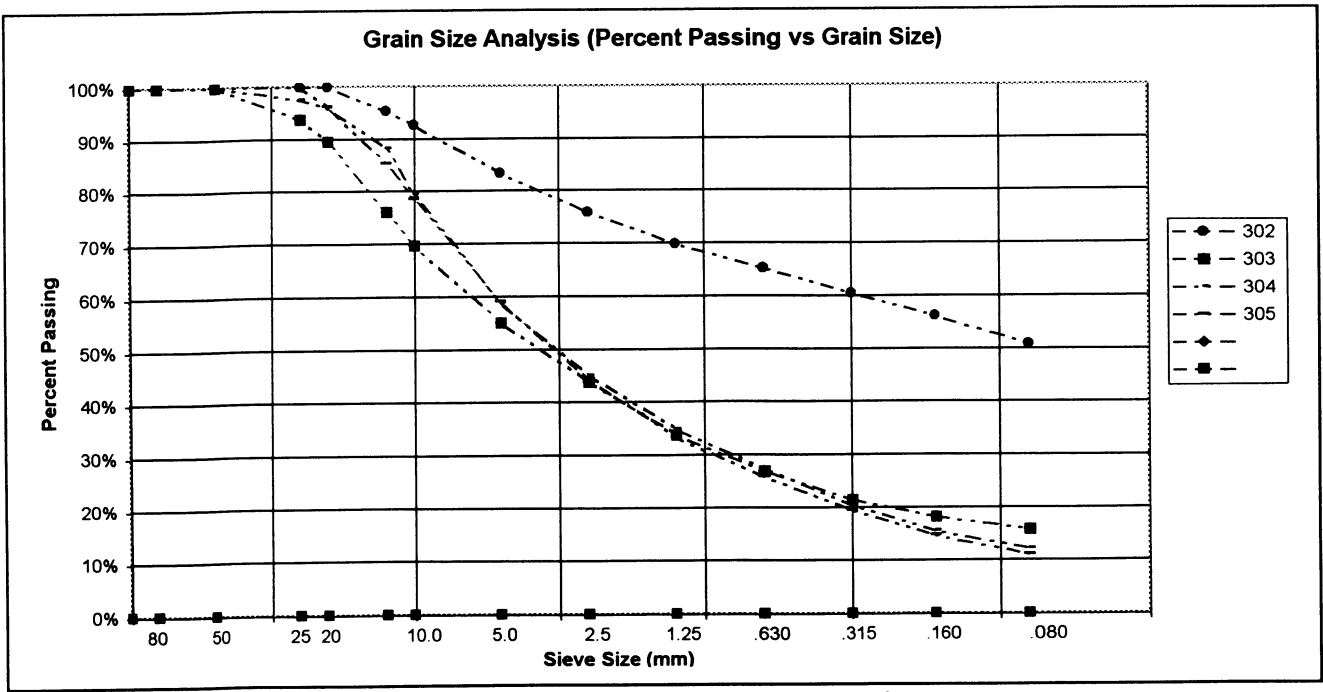


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634905-6769885
 LOGGED BY: RW

HOLE No.: 30095

DATE COMP: 08/15/2004

FIELD NO:	302	303	304	305
LAB NO:	302	303	304	305
DEPTH:	0.3-0.9	2.1-2.4	3.4-4.0	4.9-5.5
TYPE:	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%
80.0	100%	100%	100%	100%
50.0	100%	100%	100%	100%
25.0	100%	94%	98%	100%
20.0	100%	90%	96%	96%
12.5	95%	76%	88%	85%
10.0	93%	70%	80%	79%
5.0	83%	55%	59%	59%
2.5	76%	44%	45%	44%
1.25	70%	34%	35%	33%
0.630	65%	27%	27%	26%
0.315	61%	22%	20%	19%
0.160	56%	18%	16%	15%
0.080	51%	16%	12%	11%
M.C.(%)	18%	5%	7%	6%
LIQUID LIMIT:	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0
% GRAVEL:	17	45	41	41
% SAND:	32	39	47	48
% FINES:	51	16	12	11
CLASSIFICATION	SANDY SILT WITH GRAVEL (ML)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)





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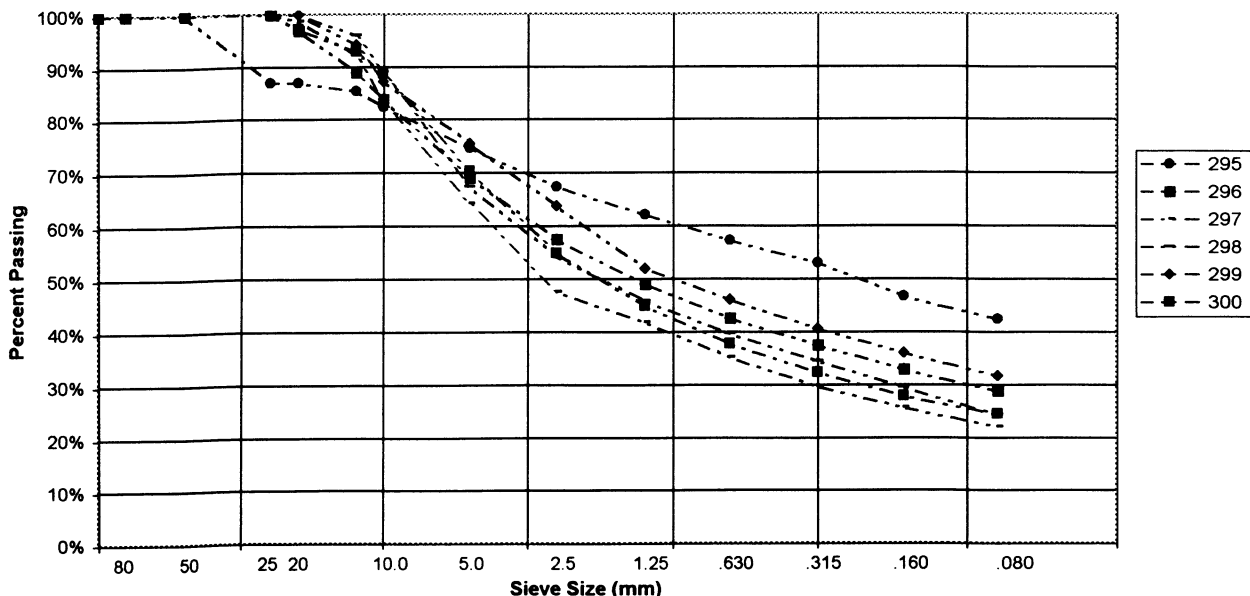
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634847-6769994
 LOGGED BY: RW

HOLE No.: 30096

DATE COMP: 08/14/2004

FIELD NO:	295	296	297	298	299	300
LAB NO:	295	296	297	298	299	300
DEPTH:	1.0-1.3	1.8-2.4	3.7-4.3	4.9-5.5	7.0-7.6	9.1-9.8
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	87%	100%	100%	100%	100%	100%
20.0	87%	97%	99%	100%	100%	97%
12.5	85%	89%	92%	96%	94%	93%
10.0	83%	84%	83%	89%	87%	89%
5.0	75%	69%	64%	67%	76%	70%
2.5	67%	58%	48%	54%	64%	55%
1.25	62%	49%	42%	46%	52%	45%
0.630	57%	43%	35%	40%	46%	38%
0.315	53%	38%	30%	35%	41%	32%
0.160	47%	33%	26%	30%	36%	28%
0.080	43%	29%	22%	24%	32%	25%
M.C.(%):	20%	11%	8%	10%	35%	17%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	25	31	36	33	24	30
% SAND:	32	40	42	43	44	46
% FINES:	43	29	22	24	32	25
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)

Grain Size Analysis (Percent Passing vs Grain Size)





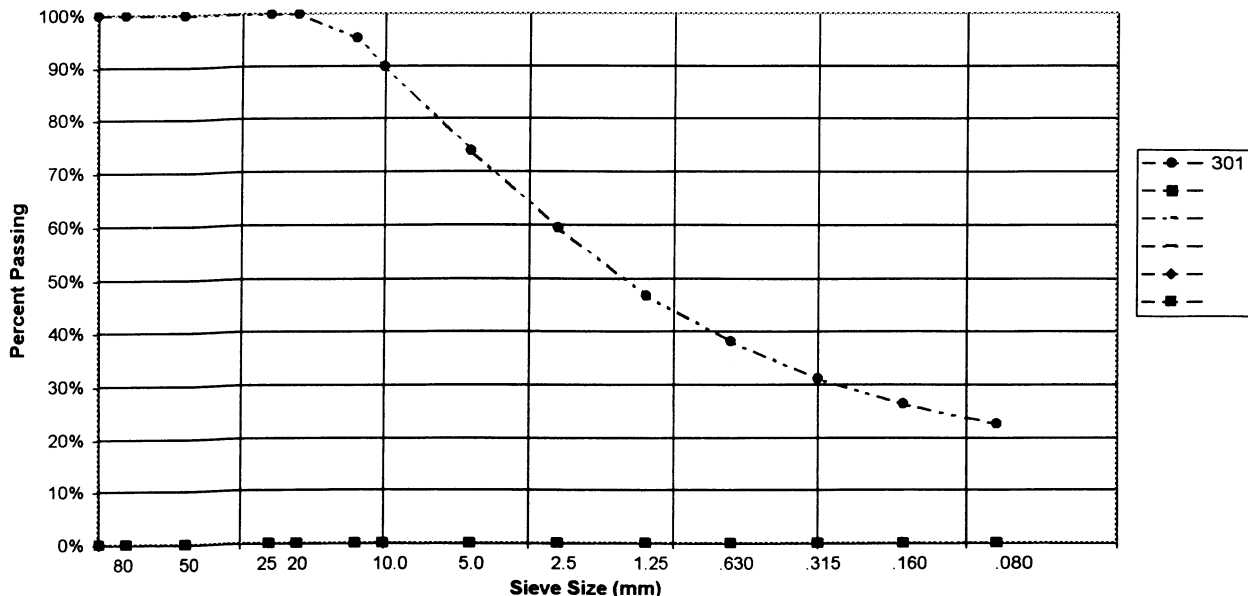
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634847-6769994
 LOGGED BY: RW

HOLE No.: 30096B

DATE COMP: 08/14/2004

FIELD NO:	301				
LAB NO:	301				
DEPTH:	10.4-11.0				
TYPE:	AUGER				
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	100%				
20.0	100%				
12.5	95%				
10.0	90%				
5.0	74%				
2.5	59%				
1.25	47%				
0.630	38%				
0.315	31%				
0.160	26%				
0.080	23%				
M.C.(%):	18%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX.:	0.0				
% GRAVEL:	26				
% SAND:	51				
% FINES:	23				
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)				

Grain Size Analysis (Percent Passing vs Grain Size)



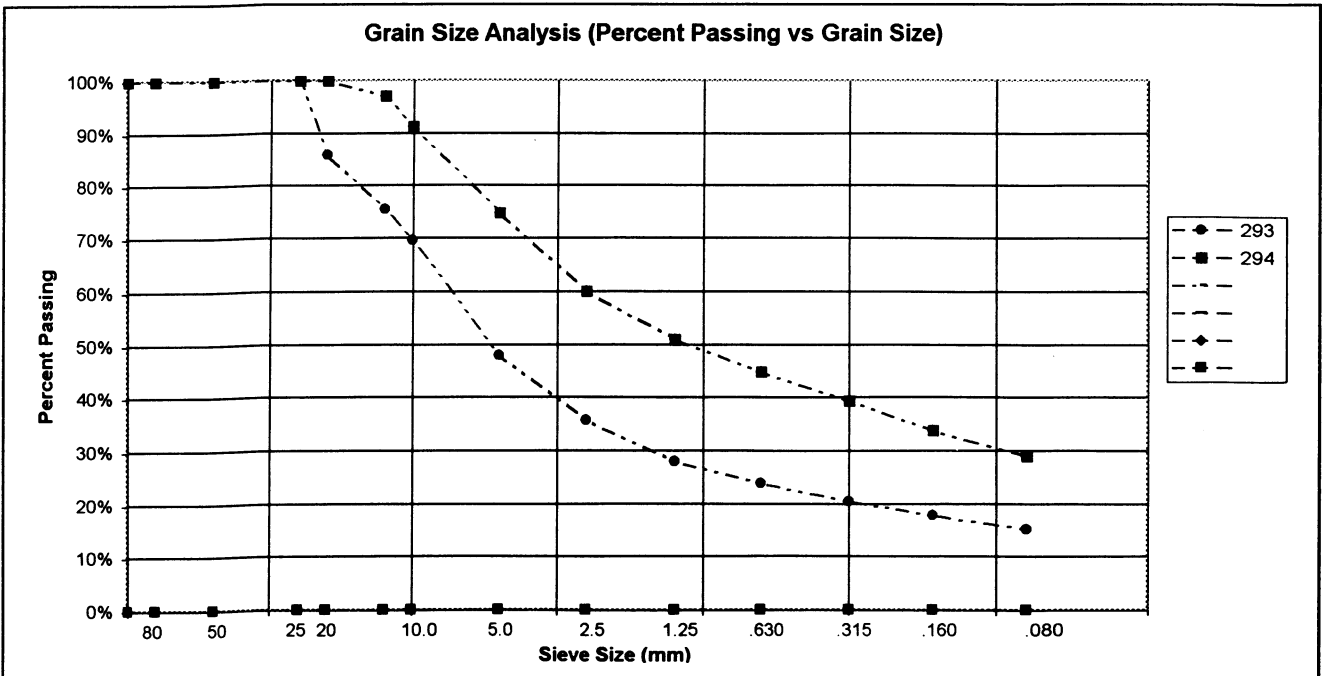


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634800-6770135
 LOGGED BY: RW

HOLE No.: 30097

DATE COMP: 08/14/2004

FIELD NO:	293	294			
LAB NO:	293	294			
DEPTH:	0.6-1.2	1.8-2.4			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	86%	100%			
12.5	76%	97%			
10.0	70%	91%			
5.0	48%	75%			
2.5	36%	60%			
1.25	28%	51%			
0.630	24%	45%			
0.315	21%	39%			
0.160	18%	34%			
0.080	15%	29%			
M.C.(%):	7%	14%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	52	25			
% SAND:	33	46			
% FINES:	15	29			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)			



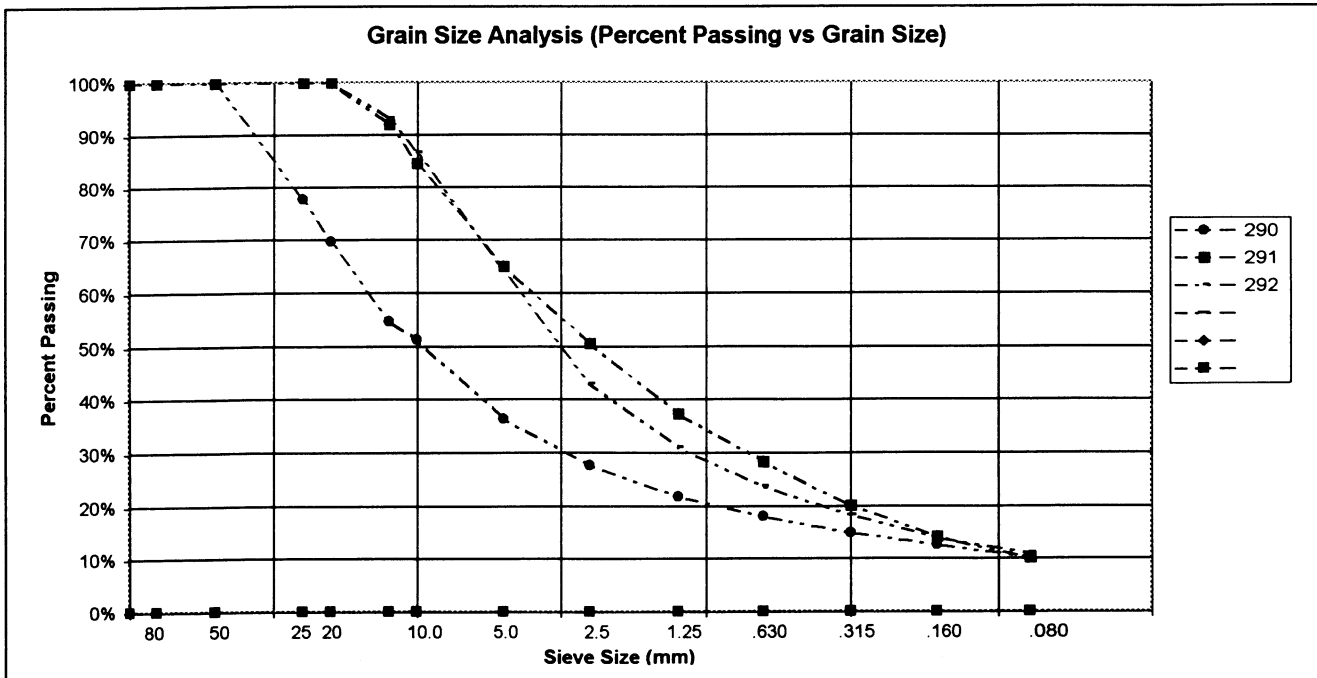


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634696-6770279
 LOGGED BY: RW

HOLE No.: 30098

DATE COMP: 08/14/2004

FIELD NO:	290	291	292		
LAB NO:	290	291	292		
DEPTH:	0.3-0.9	1.8-2.4	3.4-4.0		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	78%	100%	100%		
20.0	70%	100%	100%		
12.5	55%	92%	93%		
10.0	51%	85%	87%		
5.0	36%	65%	64%		
2.5	28%	51%	43%		
1.25	22%	37%	31%		
0.630	18%	28%	24%		
0.315	15%	20%	18%		
0.160	13%	14%	14%		
0.080	10%	10%	11%		
M.C.(%):	3%	5%	6%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	64	35	36		
% SAND:	26	55	53		
% FINES:	10	10	11		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		





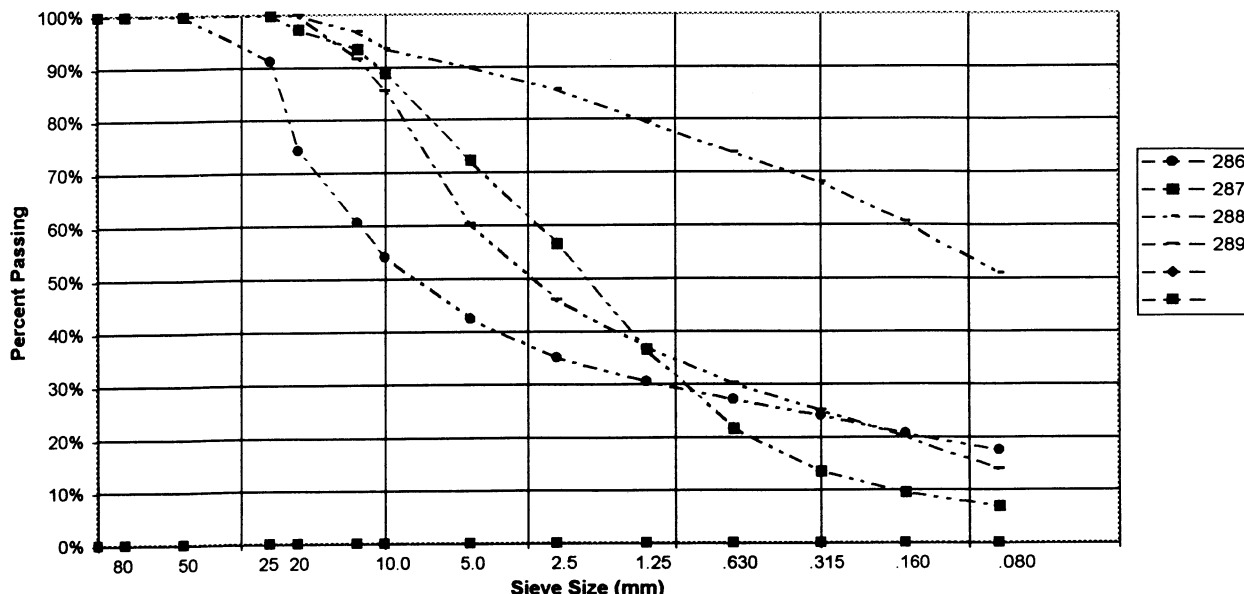
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634666-6770392
 LOGGED BY: RW

HOLE No.: 30099

DATE COMP: 08/14/2004

FIELD NO:	286	287	288	289		
LAB NO:	286	287	288	289		
DEPTH:	0.3-0.9	1.8-2.4	3.0-3.7	4.1-4.4		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	91%	100%	100%	100%		
20.0	74%	97%	100%	100%		
12.5	61%	94%	97%	92%		
10.0	54%	89%	94%	86%		
5.0	43%	72%	90%	60%		
2.5	35%	57%	86%	46%		
1.25	31%	37%	80%	37%		
0.630	27%	22%	74%	30%		
0.315	24%	14%	68%	25%		
0.160	21%	10%	61%	20%		
0.080	18%	7%	51%	14%		
M.C.(%):	7%	11%	60%	13%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	28	10	40		
% SAND:	25	65	39	46		
% FINES:	18	7	51	14		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)		

Grain Size Analysis (Percent Passing vs Grain Size)





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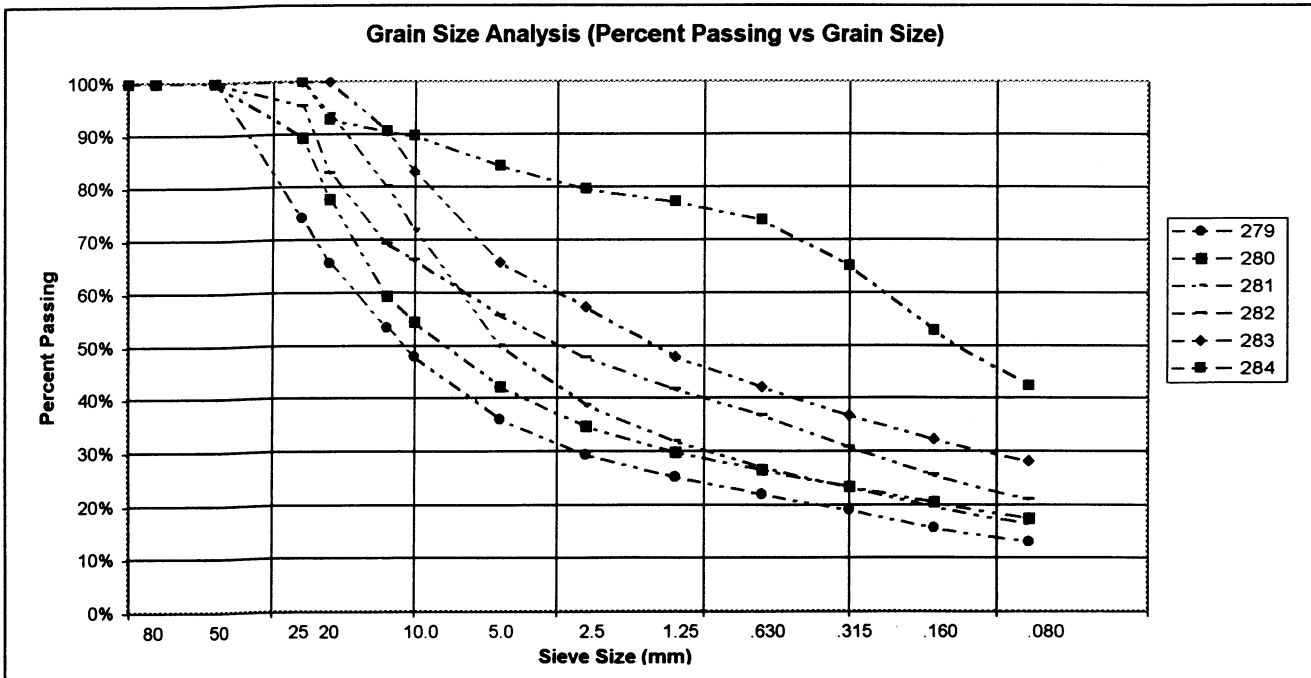


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634636-6770537
 LOGGED BY: RW

HOLE No.: 30100

DATE COMP: 08/14/2004

FIELD NO:	279	280	281	282	283	284
LAB NO:	279	280	281	282	283	284
DEPTH:	0.6-1.2	1.8-2.4	3.4-4.3	4.9-5.5	6.4-7.3	8.2-8.8
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	74%	89%	100%	95%	100%	100%
20.0	66%	78%	94%	83%	100%	93%
12.5	53%	59%	80%	69%	91%	91%
10.0	48%	55%	72%	66%	83%	90%
5.0	36%	42%	50%	56%	66%	84%
2.5	29%	35%	39%	48%	57%	80%
1.25	25%	30%	32%	42%	48%	77%
0.630	22%	27%	27%	37%	42%	74%
0.315	19%	23%	23%	31%	37%	65%
0.160	16%	21%	20%	26%	32%	53%
0.080	13%	18%	16%	21%	28%	42%
M.C.(%)	7%	7%	6%	10%	12%	13%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	64	58	50	44	34	16
% SAND:	23	25	34	35	38	42
% FINES:	13	18	16	21	28	42
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)



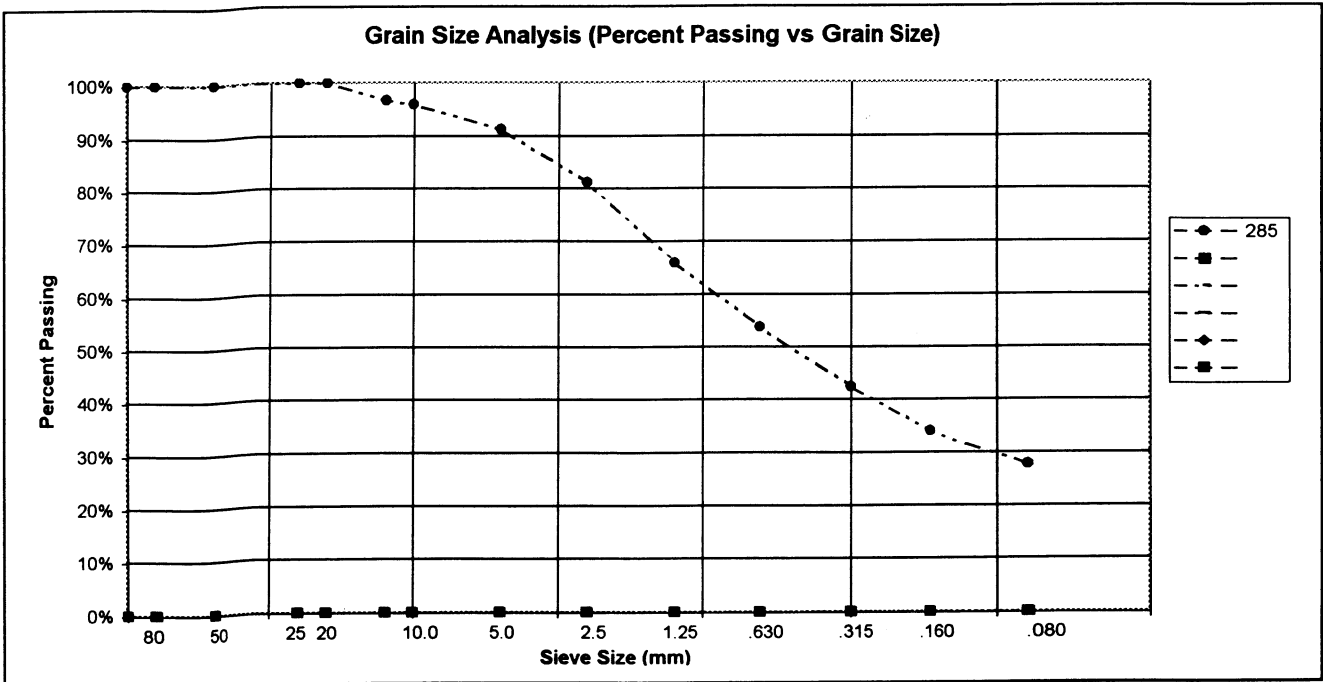


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634636-6770537
 LOGGED BY: RW

HOLE No.: 30100B

DATE COMP: 08/14/2004

FIELD NO:	285				
LAB NO:	285				
DEPTH:	9.4-10.1				
TYPE:	AUGER				
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	100%				
20.0	100%				
12.5	97%				
10.0	96%				
5.0	91%				
2.5	81%				
1.25	66%				
0.630	54%				
0.315	42%				
0.160	34%				
0.080	28%				
M.C.(%):	10%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX.:	0.0				
% GRAVEL:	9				
% SAND:	63				
% FINES:	28				
CLASSIFICATION	SILTY SAND (SM)				



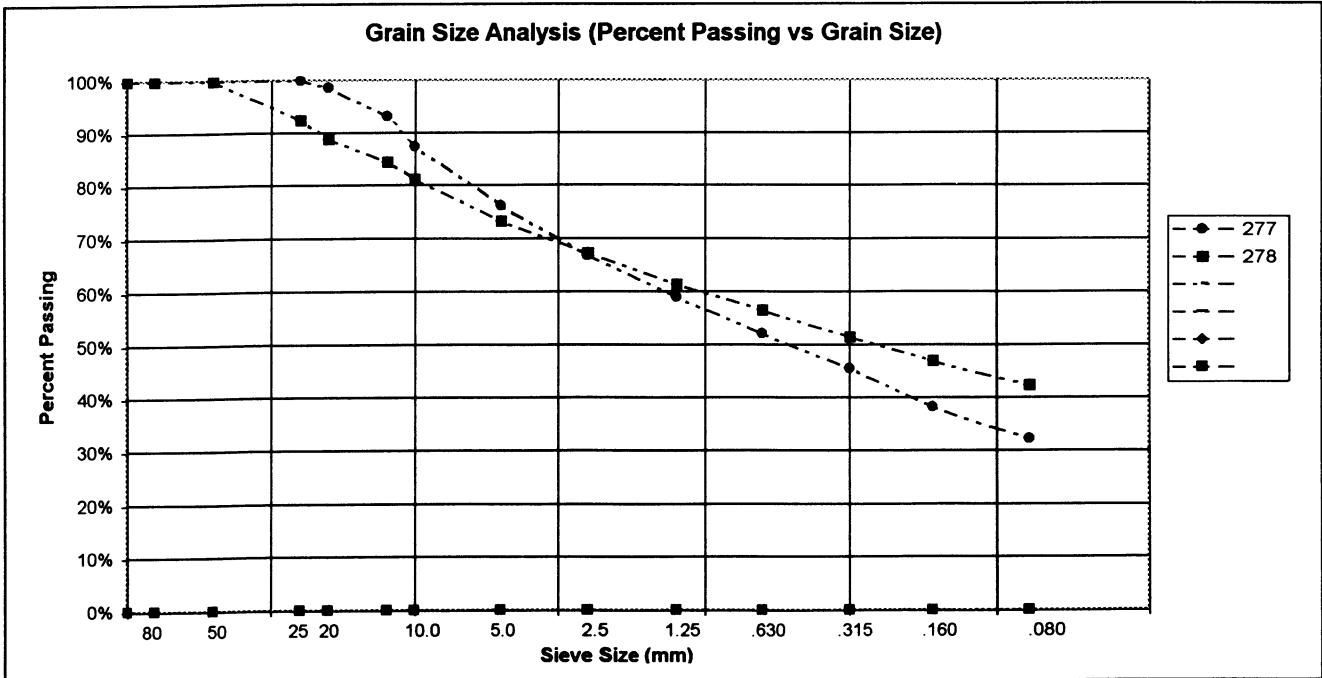


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634650-6770650
LOGGED BY: RW

HOLE No.: 30101

DATE COMP: 08/14/2004

Table with columns for Field No., Lab No., Depth, Type, Sieve Size, Percent Passing, and Classification. It compares two samples, 277 and 278, across various sieve sizes and soil properties like M.C., Liquid Limit, Plastic Limit, and % Gravel/Sand/Fines.



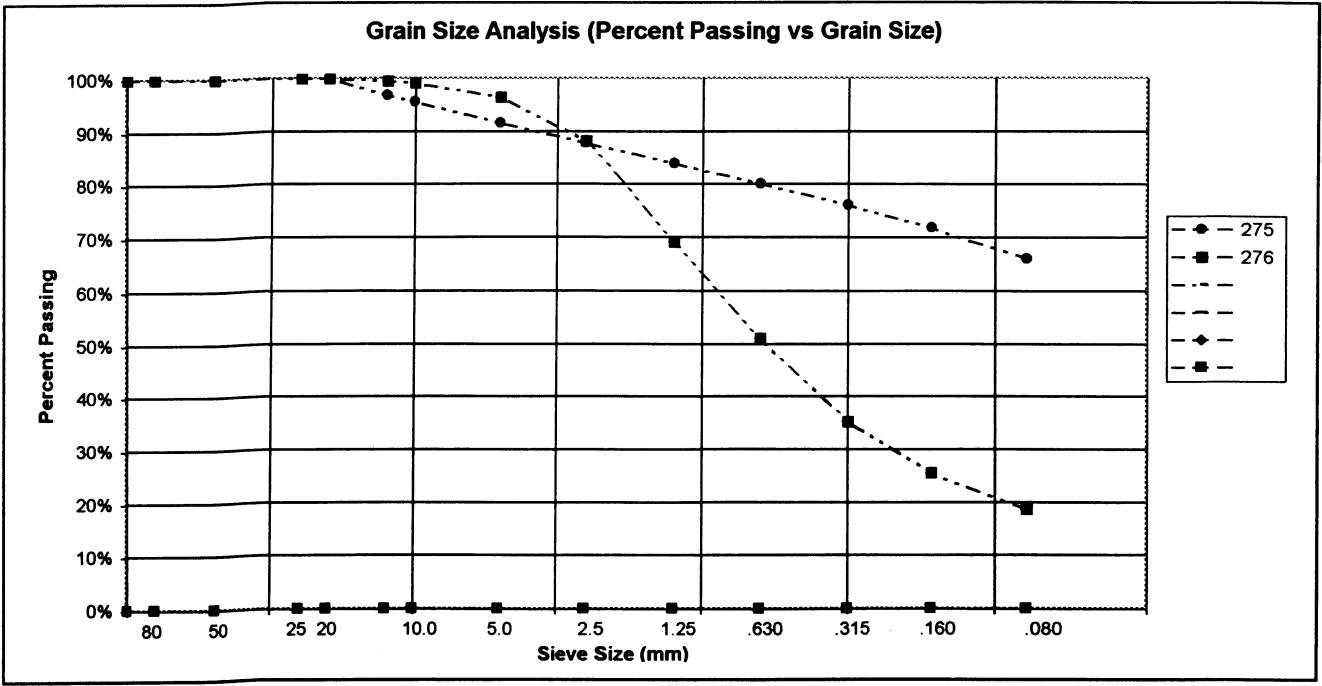


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634670-6770753
LOGGED BY: RW

HOLE No.: 30102

DATE COMP: 08/14/2004

Table with columns for Field No., Lab No., Depth, Type, Sieve Size, Percent Passing, M.C. (%), Liquid Limit, Plastic Limit, Plastic Index, % Gravel, % Sand, % Fines, and Classification. It compares data for two samples, 275 and 276.



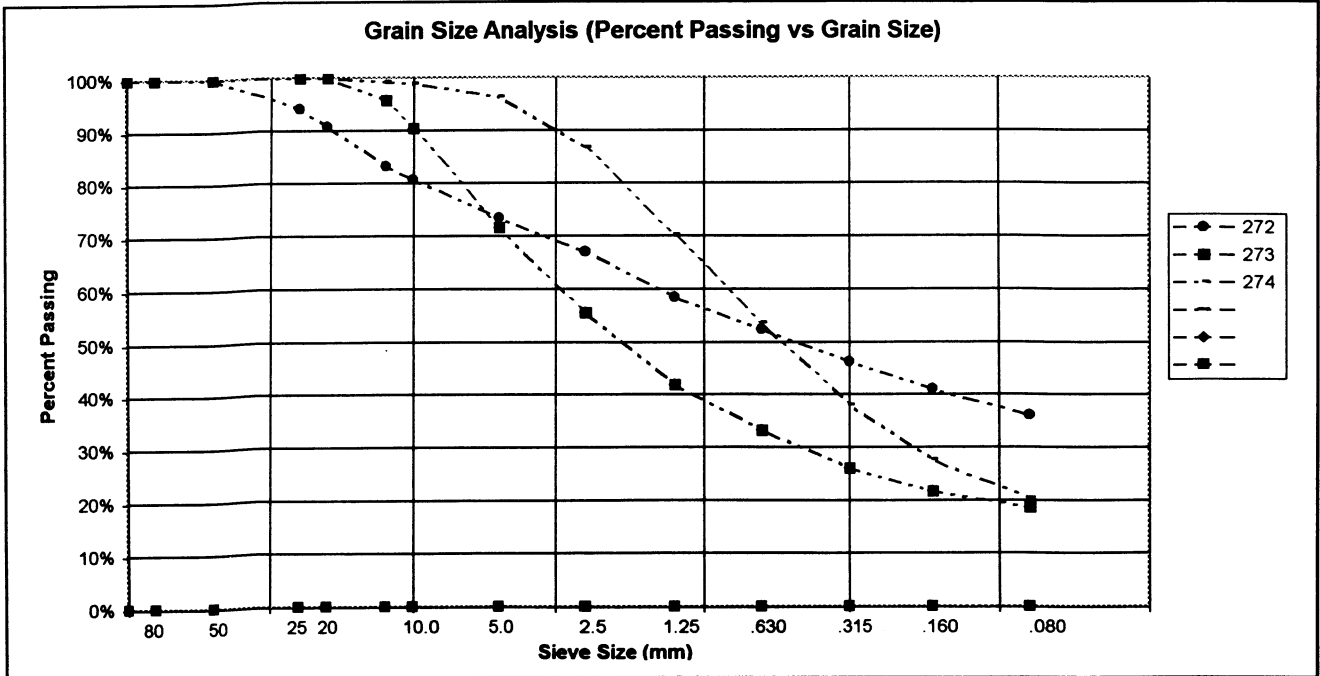


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634651-6770855
 LOGGED BY: RV

HOLE No.: 30103

DATE COMP: 08/14/2004

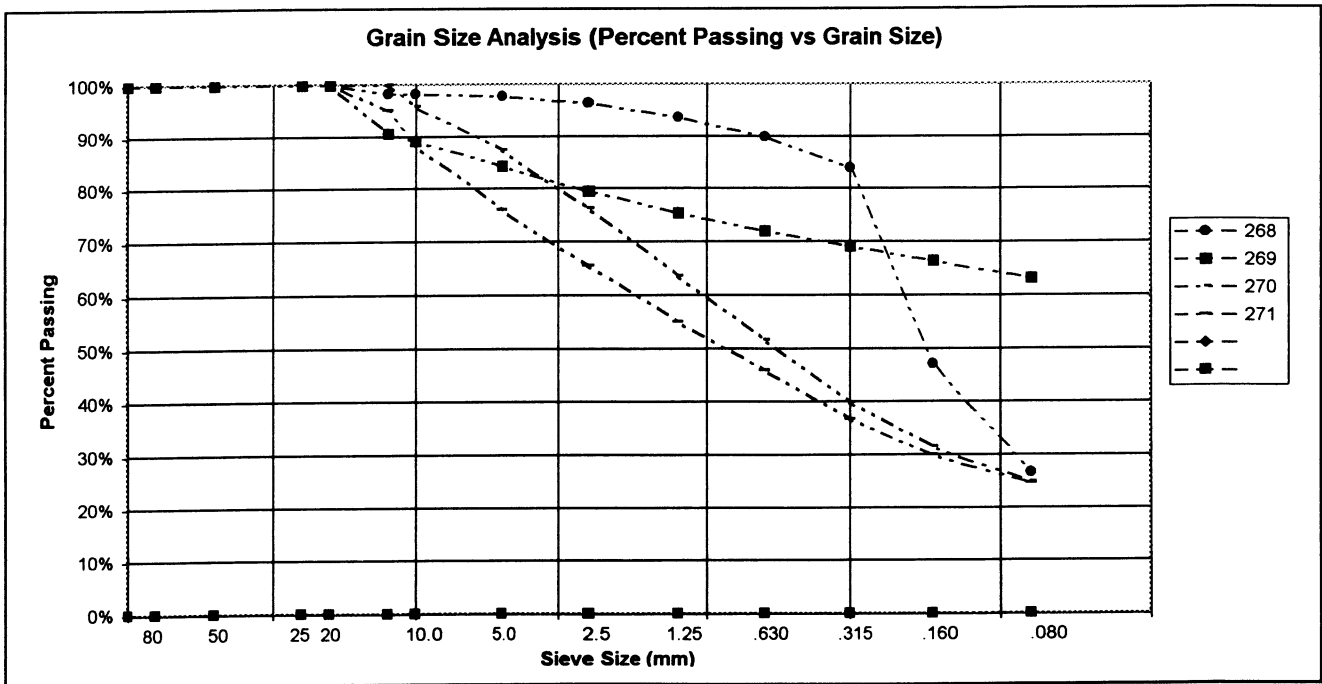
FIELD NO:	272	273	274		
LAB NO:	272	273	274		
DEPTH:	0.6-1.2	2.1-2.9	3.7-4.3		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	94%	100%	100%		
20.0	91%	100%	100%		
12.5	83%	96%	99%		
10.0	81%	90%	99%		
5.0	73%	72%	96%		
2.5	67%	56%	87%		
1.25	59%	42%	70%		
0.630	52%	33%	54%		
0.315	46%	26%	38%		
0.160	41%	22%	28%		
0.080	36%	19%	20%		
M.C.(%)	4%	5%	2%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	27	28	4		
% SAND:	37	53	76		
% FINES:	36	19	20		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)		





PROJECT NUMBER: 8002-318 HOLE No.: 30104
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634614-6770965
 LOGGED BY: RW DATE COMP: 08/13/2004

FIELD NO:	268	269	270	271		
LAB NO:	268	269	270	271		
DEPTH:	0.3-0.9	1.8-2.4	3.4-3.7	3.7-4.3		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	98%	91%	100%	95%		
10.0	98%	89%	96%	88%		
5.0	98%	84%	87%	76%		
2.5	96%	80%	76%	66%		
1.25	94%	75%	64%	55%		
0.630	90%	72%	52%	46%		
0.315	84%	69%	40%	37%		
0.160	47%	66%	32%	30%		
0.080	27%	63%	25%	25%		
M.C.(%)	3%	8%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	2	16	13	24		
% SAND:	71	21	63	51		
% FINES:	27	63	25	25		
CLASSIFICATION	SILTY SAND (SM)	SANDY SILT WITH GRAVEL (ML)	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)		



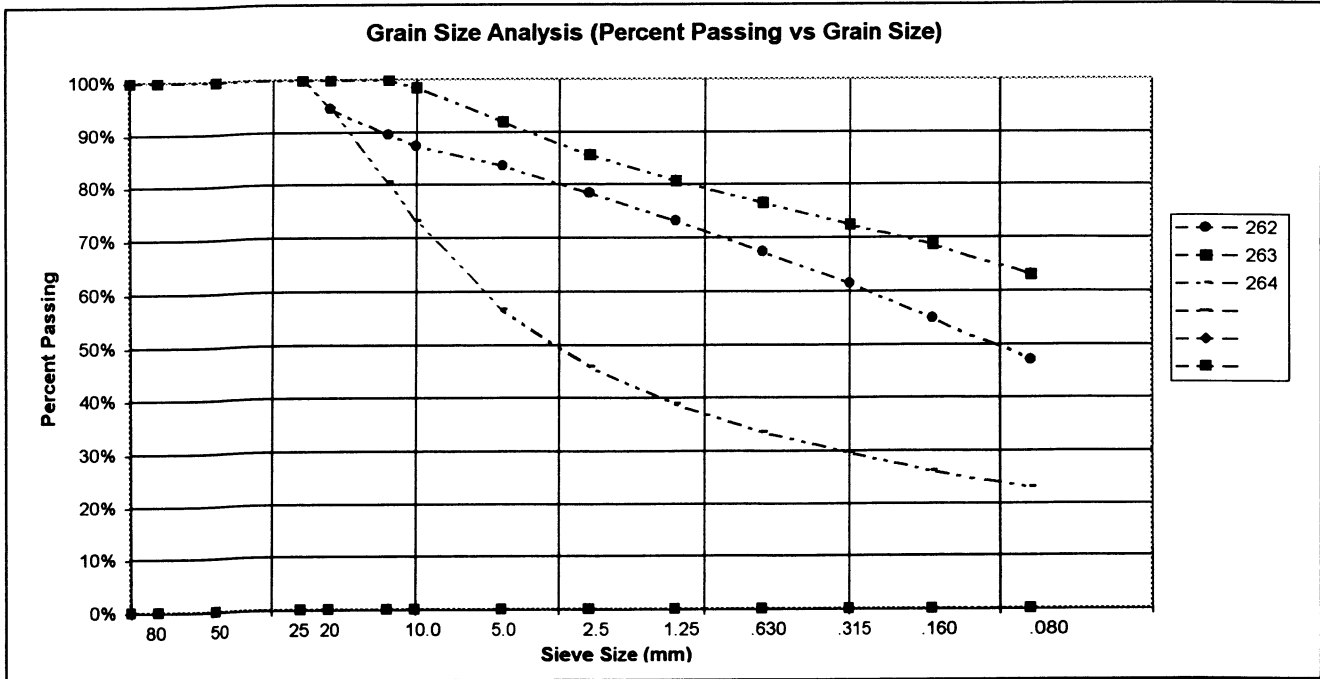


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634672-6771005
 LOGGED BY: RW

HOLE No.: 30105

DATE COMP: 08/13/2004

FIELD NO:	262	263	264		
LAB NO:	262	263	264		
DEPTH:	0.9-1.2	1.8-2.4	3.4-4.0		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	95%	100%	95%		
12.5	90%	100%	80%		
10.0	87%	99%	73%		
5.0	84%	92%	57%		
2.5	78%	86%	46%		
1.25	73%	81%	39%		
0.630	67%	77%	34%		
0.315	62%	73%	30%		
0.160	55%	69%	26%		
0.080	47%	63%	23%		
M.C.(%)	7%	11%	4%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	16	8	43		
% SAND:	37	29	34		
% FINES:	47	63	23		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SANDY SILT (ML)	SILTY GRAVEL WITH SAND (GM)		



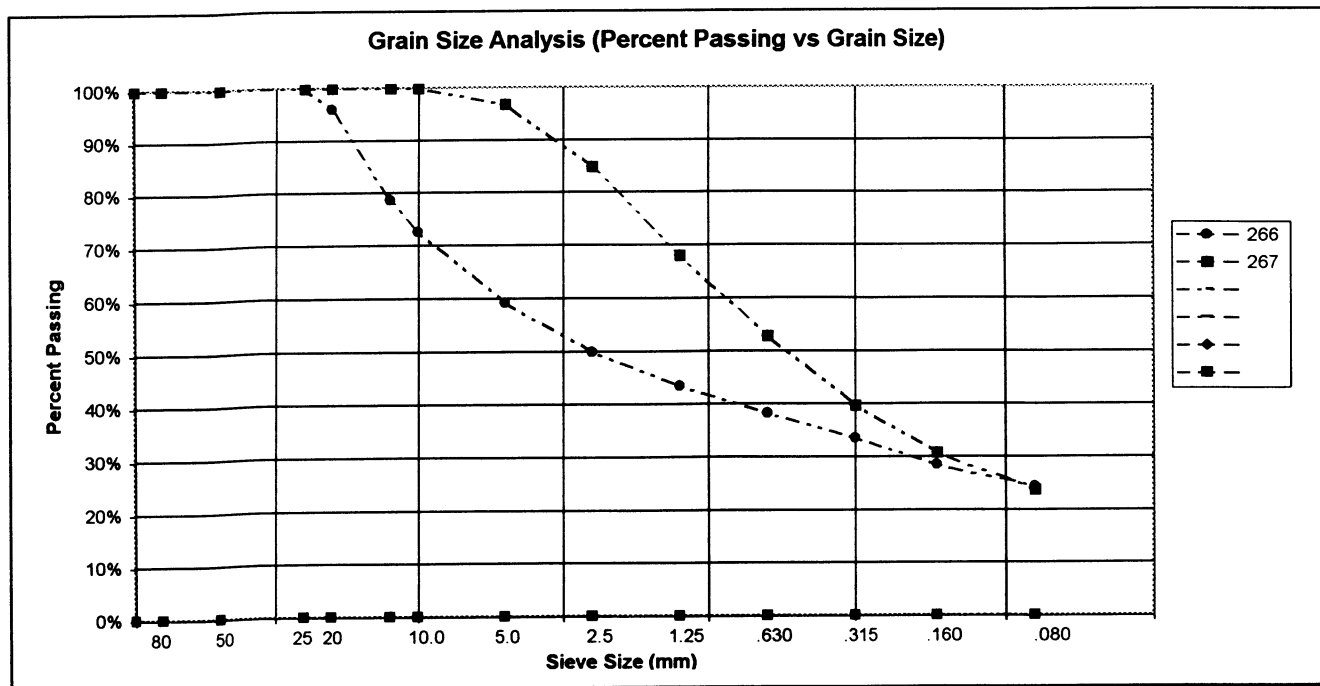


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634574-6771078
 LOGGED BY: RW

HOLE No.: 30106

DATE COMP: 08/13/2004

FIELD NO:	266	267			
LAB NO:	266	267			
DEPTH:	0.0-0.6	0.9-1.2			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	96%	100%			
12.5	79%	100%			
10.0	73%	100%			
5.0	59%	97%			
2.5	50%	85%			
1.25	44%	68%			
0.630	38%	53%			
0.315	34%	40%			
0.160	29%	31%			
0.080	24%	24%			
M.C.(%)	5%	3%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	41	3			
% SAND:	35	73			
% FINES:	24	24			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY SAND (SM)			





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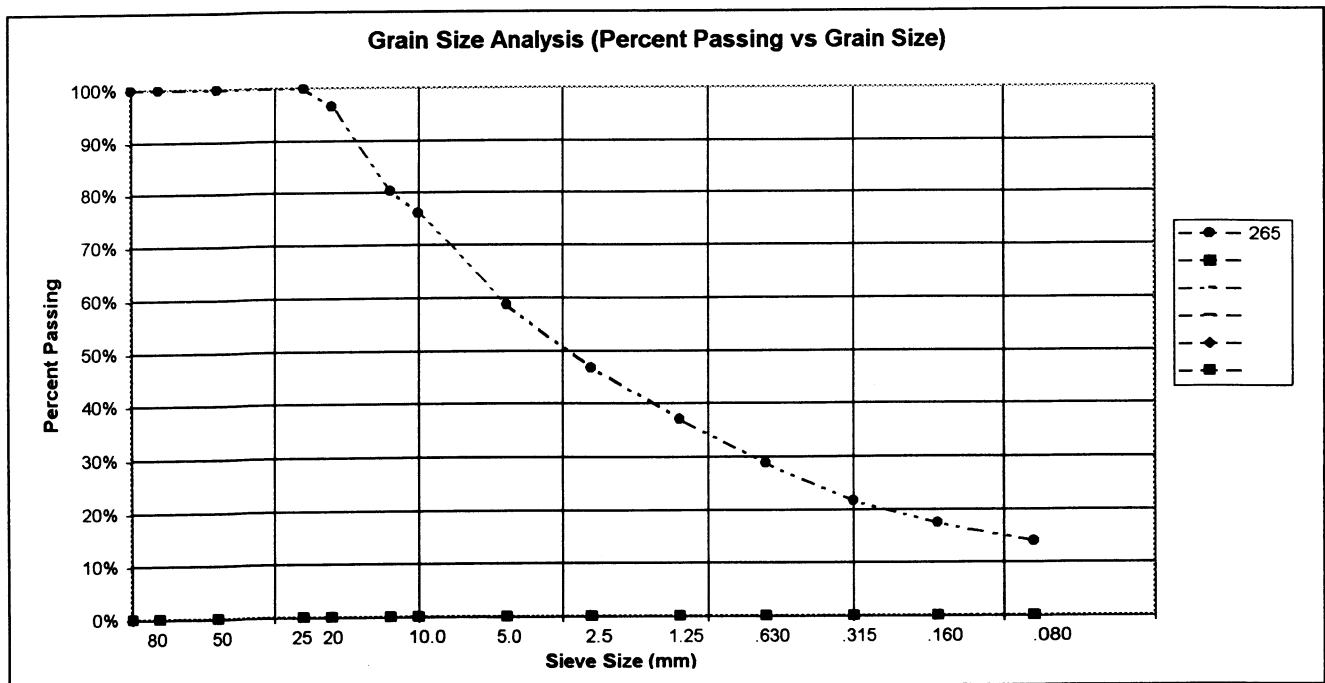


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634529-6771149
 LOGGED BY: RW

HOLE No.: 30107

DATE COMP: 08/13/2004

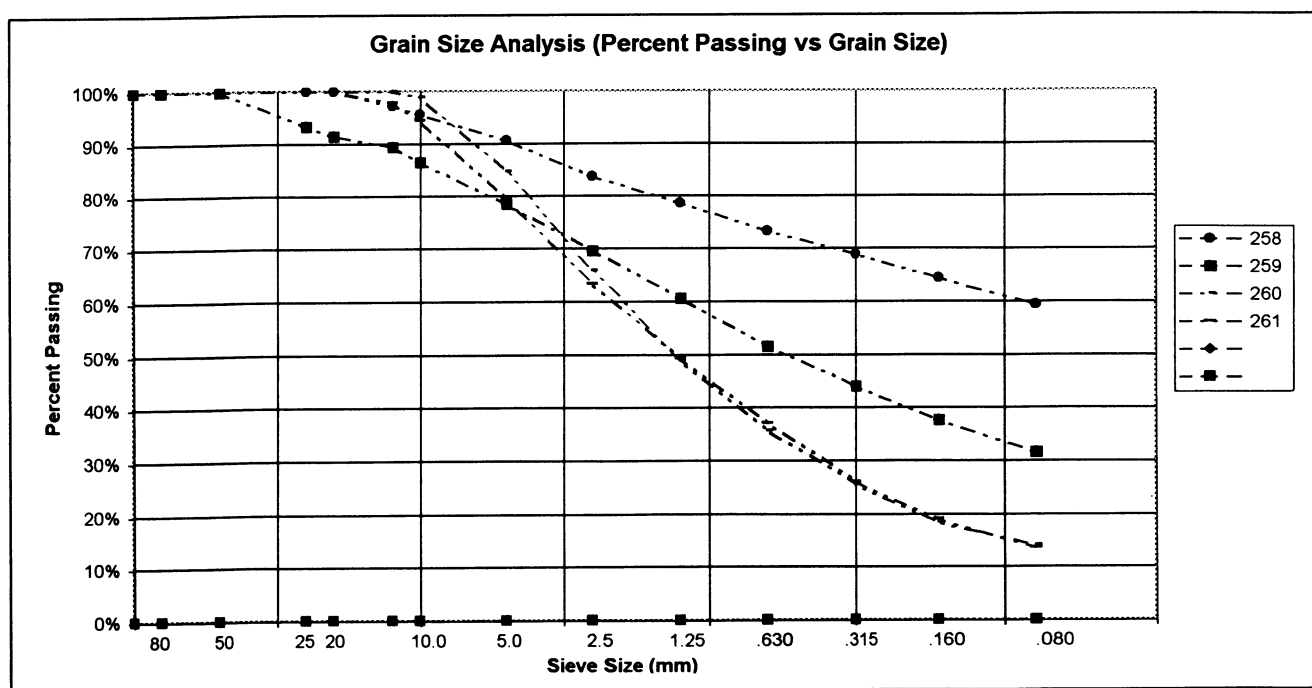
FIELD NO:	265				
LAB NO:	265				
DEPTH:	0.9-1.2				
TYPE:	AUGER				
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	100%				
20.0	97%				
12.5	80%				
10.0	76%				
5.0	59%				
2.5	47%				
1.25	37%				
0.630	29%				
0.315	22%				
0.160	17%				
0.080	14%				
M.C.(%):	2%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX.:	0.0				
% GRAVEL:	41				
% SAND:	45				
% FINES:	14				
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)				





PROJECT NUMBER: 8002-318 HOLE No.: 30108
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634528-6771278
 LOGGED BY: RW DATE COMP: 08/13/2004

FIELD NO:	258	259	260	261		
LAB NO:	258	259	260	261		
DEPTH:	0.6-1.2	1.5-2.1	3.0-3.7	4.9-5.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	93%	100%	100%		
20.0	100%	92%	100%	100%		
12.5	97%	89%	100%	98%		
10.0	96%	87%	99%	94%		
5.0	91%	79%	85%	80%		
2.5	84%	70%	66%	63%		
1.25	79%	61%	49%	49%		
0.630	73%	52%	36%	37%		
0.315	69%	44%	26%	26%		
0.160	64%	38%	19%	19%		
0.080	60%	32%	14%	14%		
M.C.(%)	12%	6%	1%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	9	21	15	20		
% SAND:	31	47	71	66		
% FINES:	60	32	14	14		
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)		





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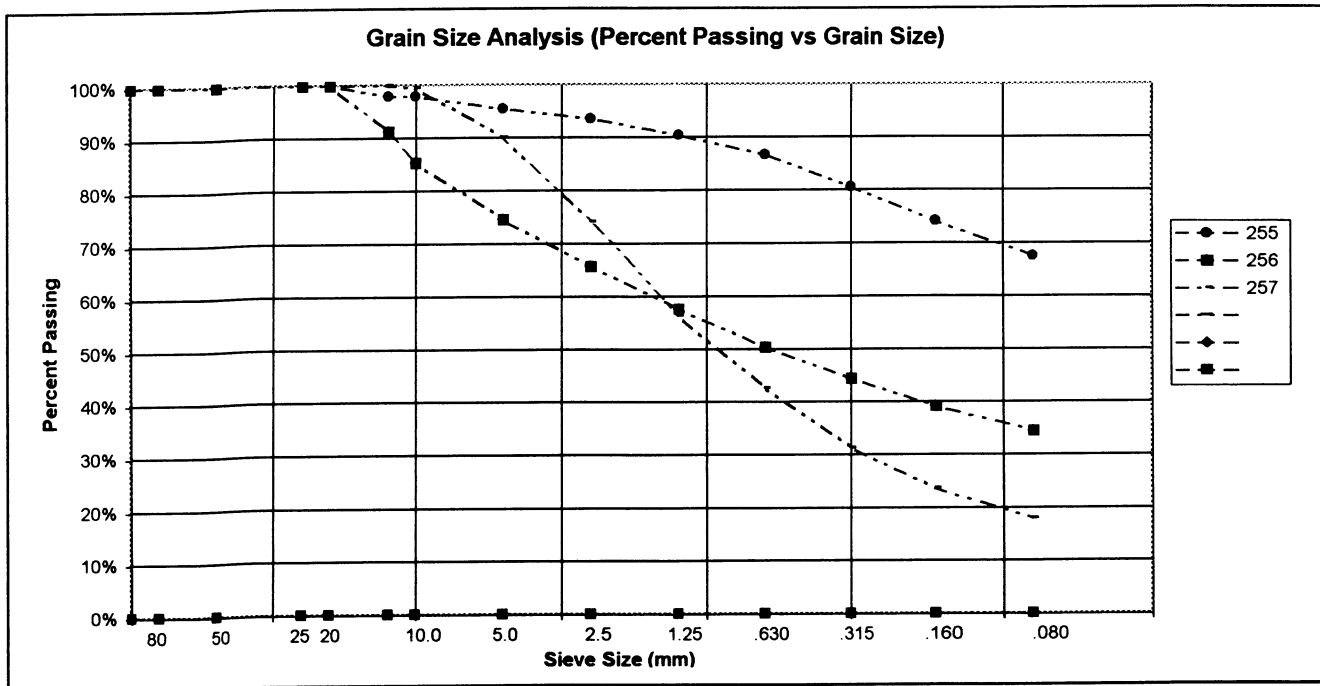


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634466-6771427
 LOGGED BY: RW

HOLE No.: 30109

DATE COMP: 08/13/2004

FIELD NO:	255	256	257		
LAB NO:	255	256	257		
DEPTH:	0.6-1.2	1.8-2.4	3.4-4.0		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	100%	100%	100%		
12.5	98%	91%	100%		
10.0	98%	85%	100%		
5.0	96%	75%	90%		
2.5	94%	66%	74%		
1.25	90%	58%	56%		
0.630	87%	50%	43%		
0.315	81%	44%	31%		
0.160	74%	39%	24%		
0.080	68%	35%	18%		
M.C.(%)	13%	5%	3%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	4	25	10		
% SAND:	28	40	72		
% FINES:	68	35	18		
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)		





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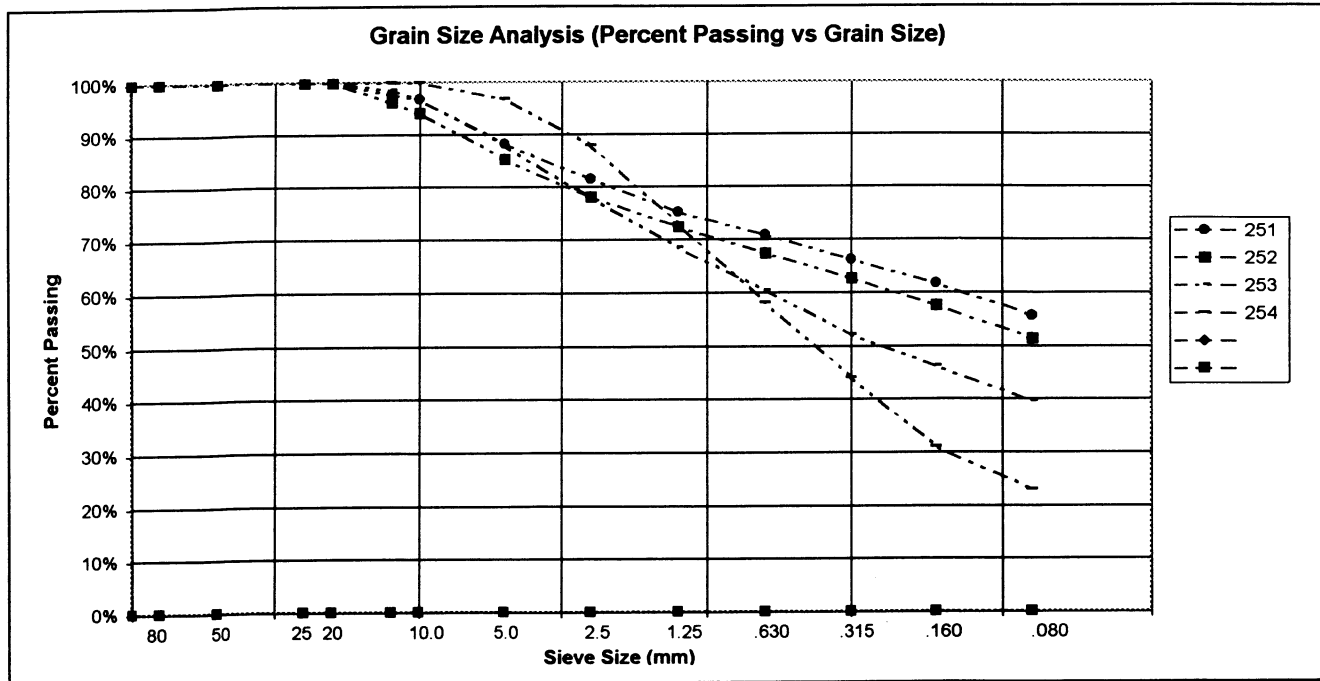


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634457-6771567
 LOGGED BY: RW

HOLE No.: 30110

DATE COMP: 08/13/2004

FIELD NO:	251	252	253	254
LAB NO:	251	252	253	254
DEPTH:	0.4-1.0	1.8-2.4	3.4-4.0	4.8-5.5
TYPE:	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%
80.0	100%	100%	100%	100%
50.0	100%	100%	100%	100%
25.0	100%	100%	100%	100%
20.0	100%	100%	100%	100%
12.5	98%	96%	99%	100%
10.0	97%	94%	97%	100%
5.0	88%	85%	88%	97%
2.5	82%	78%	78%	88%
1.25	75%	73%	69%	73%
0.630	71%	67%	60%	58%
0.315	66%	63%	52%	44%
0.160	62%	58%	46%	31%
0.080	56%	51%	40%	23%
M.C.(%)	22%	12%	11%	5%
LIQUID LIMIT:	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0
% GRAVEL:	12	15	12	3
% SAND:	32	34	48	74
% FINES:	56	51	40	23
CLASSIFICATION	SANDY SILT (ML)	SANDY SILT (ML)	SILTY SAND (SM)	SILTY SAND (SM)





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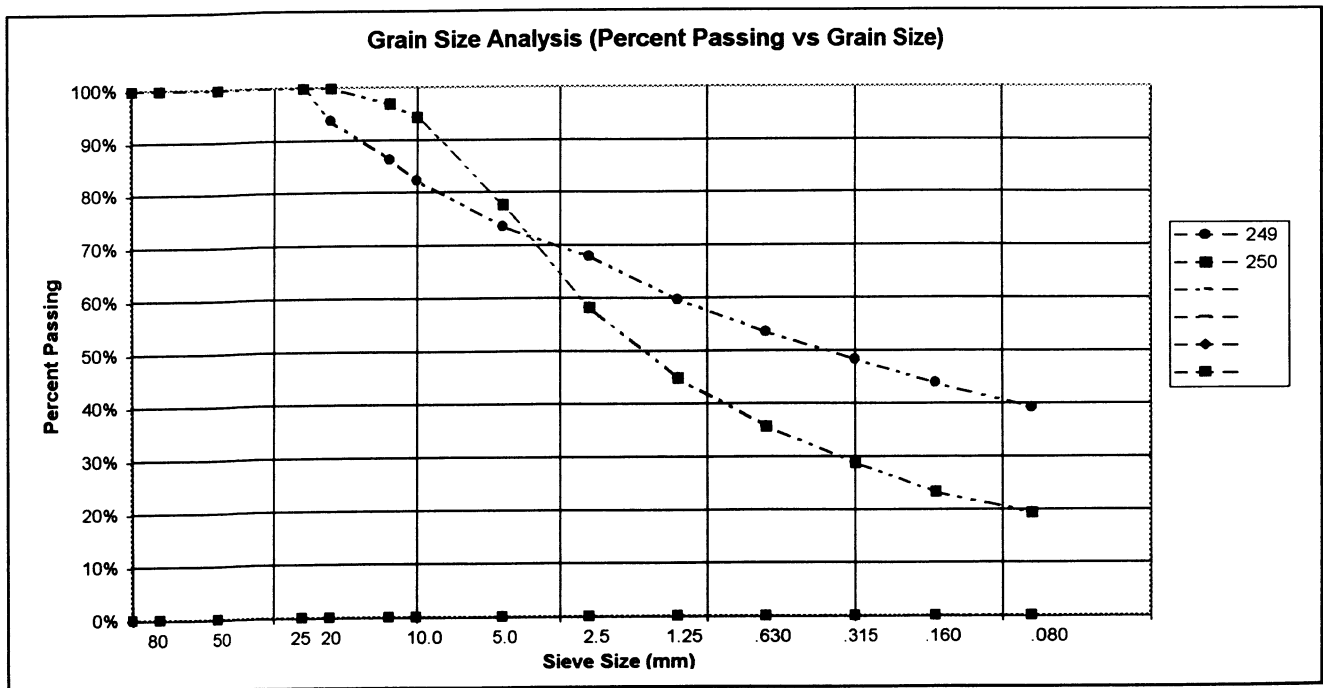


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634475-6771627
 LOGGED BY: RW

HOLE No.: 30111

DATE COMP: 08/13/2004

FIELD NO:	249	250			
LAB NO:	249	250			
DEPTH:	0.2-0.6	1.5-1.8			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	94%	100%			
12.5	86%	97%			
10.0	82%	94%			
5.0	74%	78%			
2.5	68%	58%			
1.25	60%	45%			
0.630	54%	36%			
0.315	48%	29%			
0.160	44%	23%			
0.080	39%	19%			
M.C.(%)	5%	2%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	26	22			
% SAND:	34	58			
% FINES:	39	19			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)			



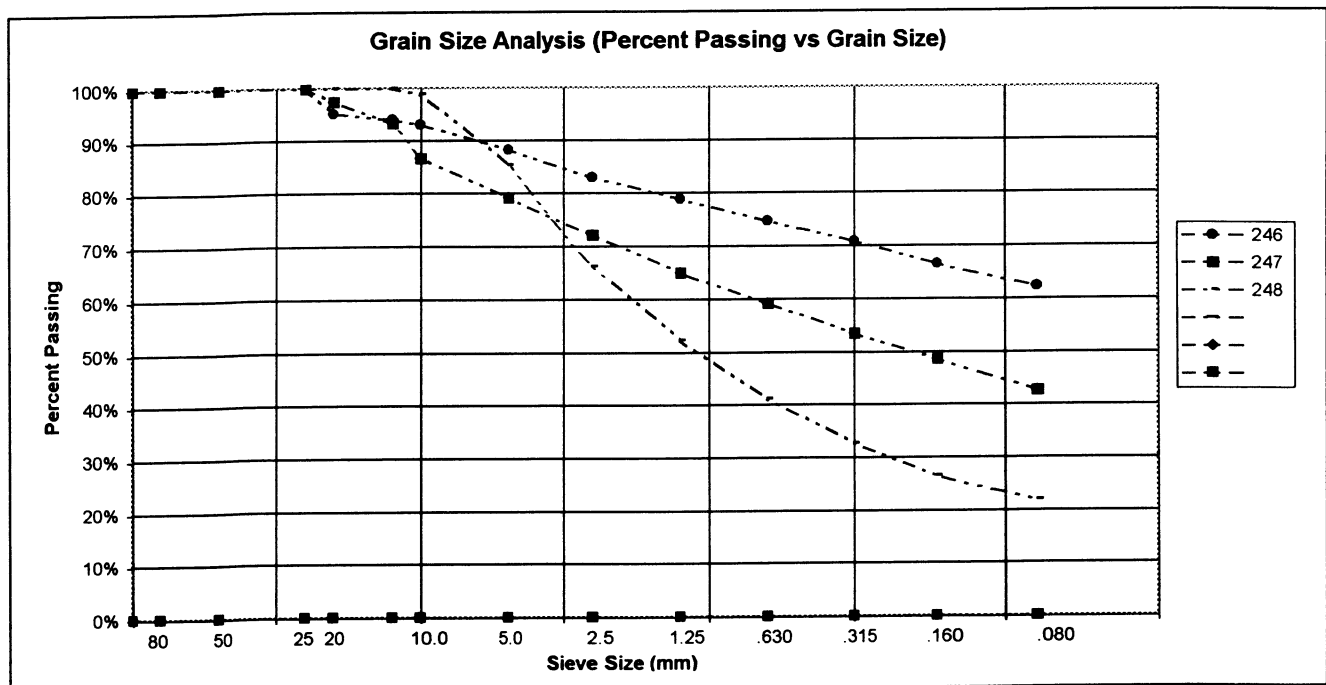


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634468-6771772
 LOGGED BY: RW

HOLE No.: 30112

DATE COMP: 08/13/2004

FIELD NO:	246	247	248		
LAB NO:	246	247	248		
DEPTH:	0.5-0.8	1.8-2.4	3.0-3.4		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	95%	97%	100%		
12.5	94%	93%	100%		
10.0	93%	87%	99%		
5.0	88%	79%	85%		
2.5	83%	72%	66%		
1.25	79%	65%	52%		
0.630	75%	59%	41%		
0.315	71%	54%	33%		
0.160	67%	49%	27%		
0.080	62%	43%	22%		
M.C.(%)	13%	7%	3%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	12	21	15		
% SAND:	26	37	63		
% FINES:	62	43	22		
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)		



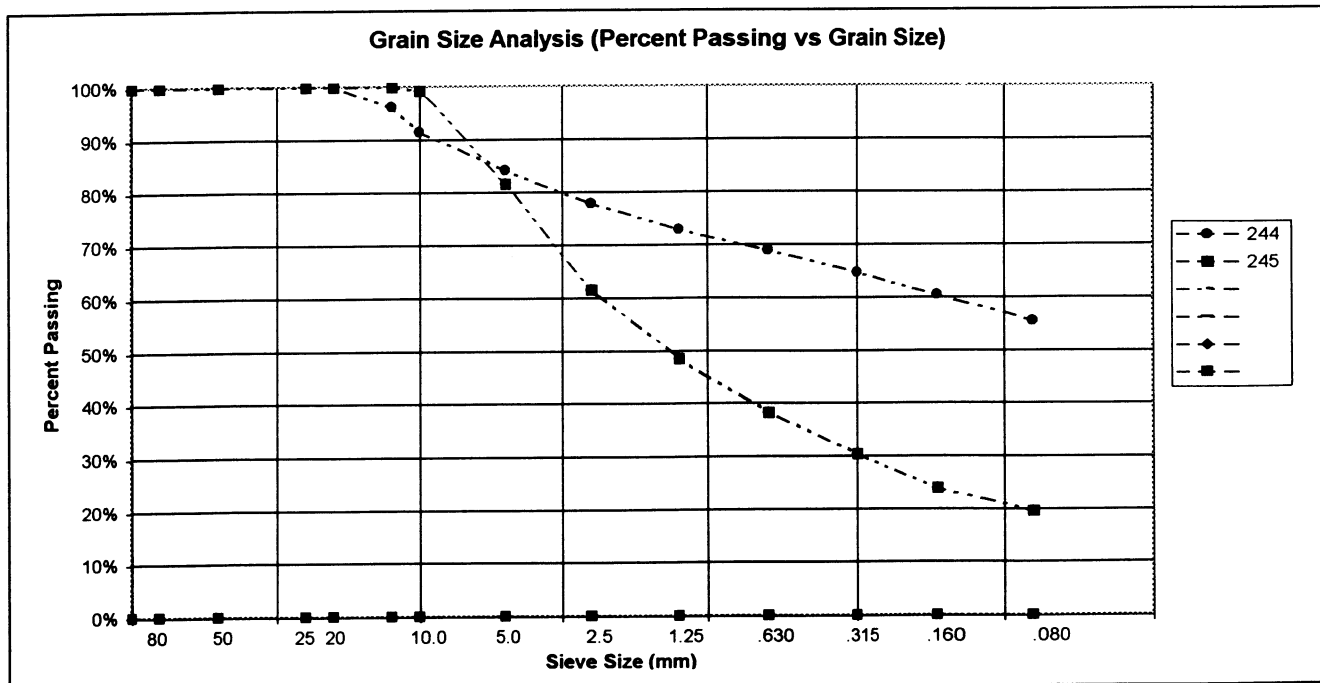


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634435-6771879
LOGGED BY: RW

HOLE No.: 30113

DATE COMP: 12/8/2004

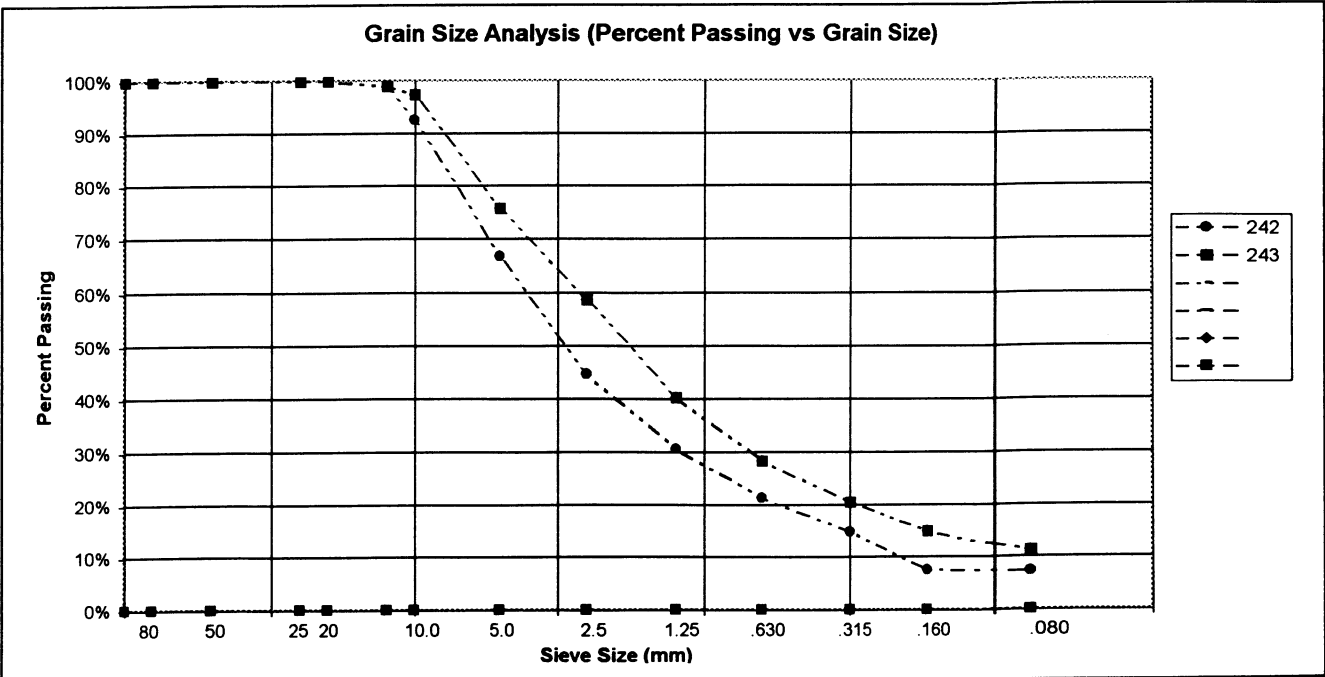
FIELD NO:	244	245			
LAB NO:	244	245			
DEPTH:	0.6-1.2	1.5-2.1			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	100%	100%			
12.5	96%	100%			
10.0	92%	99%			
5.0	84%	82%			
2.5	78%	62%			
1.25	73%	49%			
0.630	69%	38%			
0.315	65%	30%			
0.160	61%	24%			
0.080	56%	20%			
M.C.(%):	17%	5%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	16	18			
% SAND:	29	62			
% FINES:	56	20			
CLASSIFICATION	SANDY SILT WITH GRAVEL (ML)	SILTY SAND WITH GRAVEL (SM)			





PROJECT NUMBER: 8002-318	HOLE No.: 30114
CLIENT: YTG, Transportation & Engineering	
PROJECT NAME: Geotechnical Services	
PROJECT LOCATION: Km 1691.7-1717.3	
DRILL UNIT: CME75	
HOLE LOCATION: 634386-6772019	
LOGGED BY: RW	DATE COMP: 12/8/2004

FIELD NO:	242	243			
LAB NO:	242	243			
DEPTH:	0.6-1.2	1.8-2.4			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	100%	100%			
12.5	99%	99%			
10.0	93%	97%			
5.0	67%	76%			
2.5	45%	59%			
1.25	31%	40%			
0.630	21%	28%			
0.315	15%	21%			
0.160	8%	15%			
0.080	7%	11%			
M.C.(%):	3%	2%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	33	24			
% SAND:	60	65			
% FINES:	7	11			
CLASSIFICATION					
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



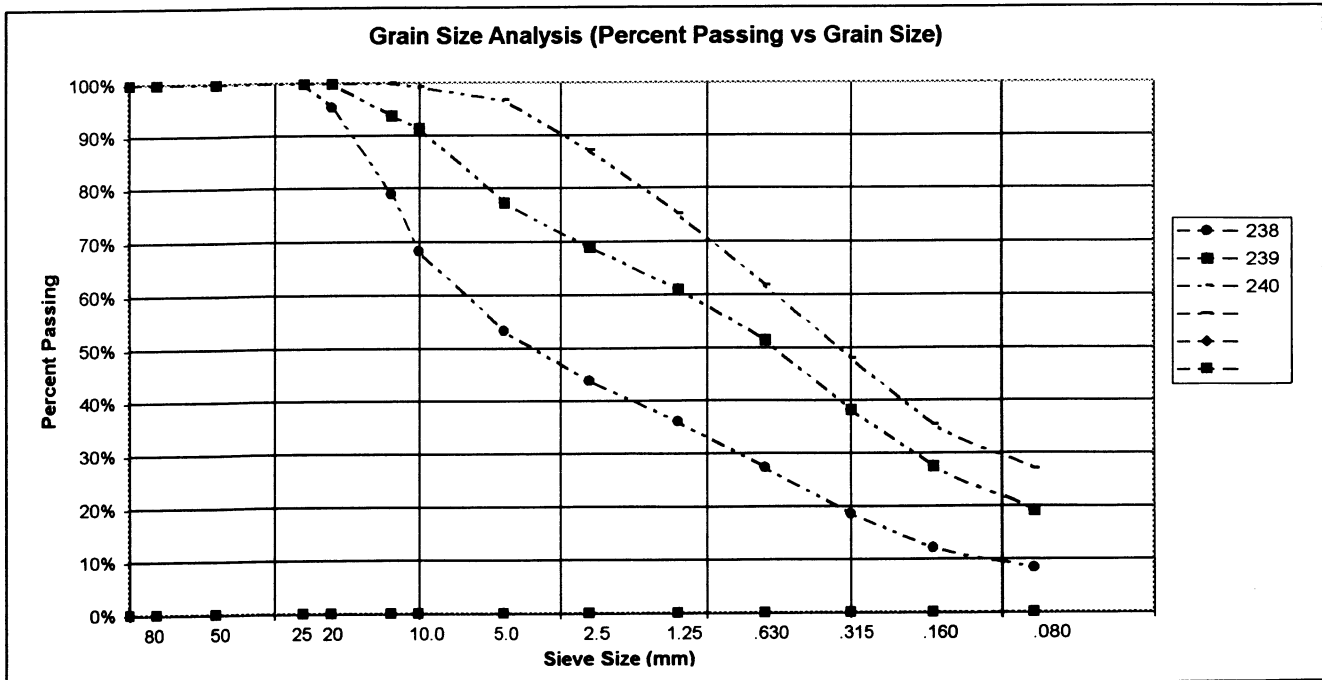


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634339-6772105
 LOGGED BY: RW

HOLE No.: 30115

DATE COMP: 12/8/2004

FIELD NO:	238	239	240		
LAB NO:	238	239	240		
DEPTH:	0.3-0.9	1.8-2.4	3.7-4.3		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	95%	100%	100%		
12.5	79%	94%	100%		
10.0	68%	91%	99%		
5.0	53%	77%	97%		
2.5	44%	69%	87%		
1.25	36%	61%	75%		
0.630	27%	51%	62%		
0.315	19%	38%	48%		
0.160	12%	28%	35%		
0.080	9%	19%	27%		
M.C.(%):	4%	3%	6%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	47	23	3		
% SAND:	45	58	70		
% FINES:	9	19	27		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)		



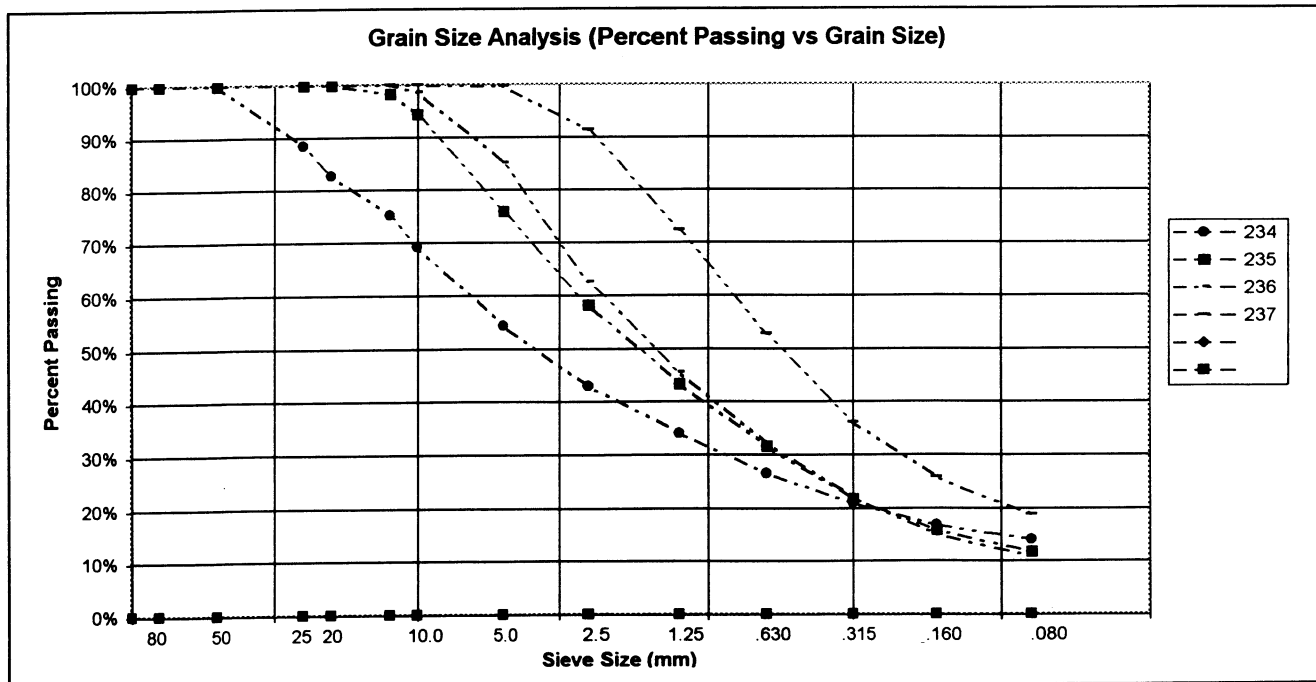


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634312-6772111
 LOGGED BY: RW

HOLE No.: 30116

DATE COMP: 12/8/2004

FIELD NO:	234	235	236	237		
LAB NO:	234	235	236	237		
DEPTH:	0.6-1.2	2.1-2.7	3.4-4.0	4.6-5.2		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	89%	100%	100%	100%		
20.0	83%	100%	100%	100%		
12.5	75%	98%	100%	100%		
10.0	69%	94%	99%	100%		
5.0	54%	76%	85%	100%		
2.5	43%	58%	63%	91%		
1.25	34%	43%	46%	72%		
0.630	27%	32%	32%	53%		
0.315	21%	22%	22%	36%		
0.160	17%	16%	15%	26%		
0.080	14%	12%	11%	19%		
M.C.(%)	4%	3%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	46	24	15	0		
% SAND:	40	64	74	81		
% FINES:	14	12	11	19		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT (SW-SM)	SILTY SAND (SM)		



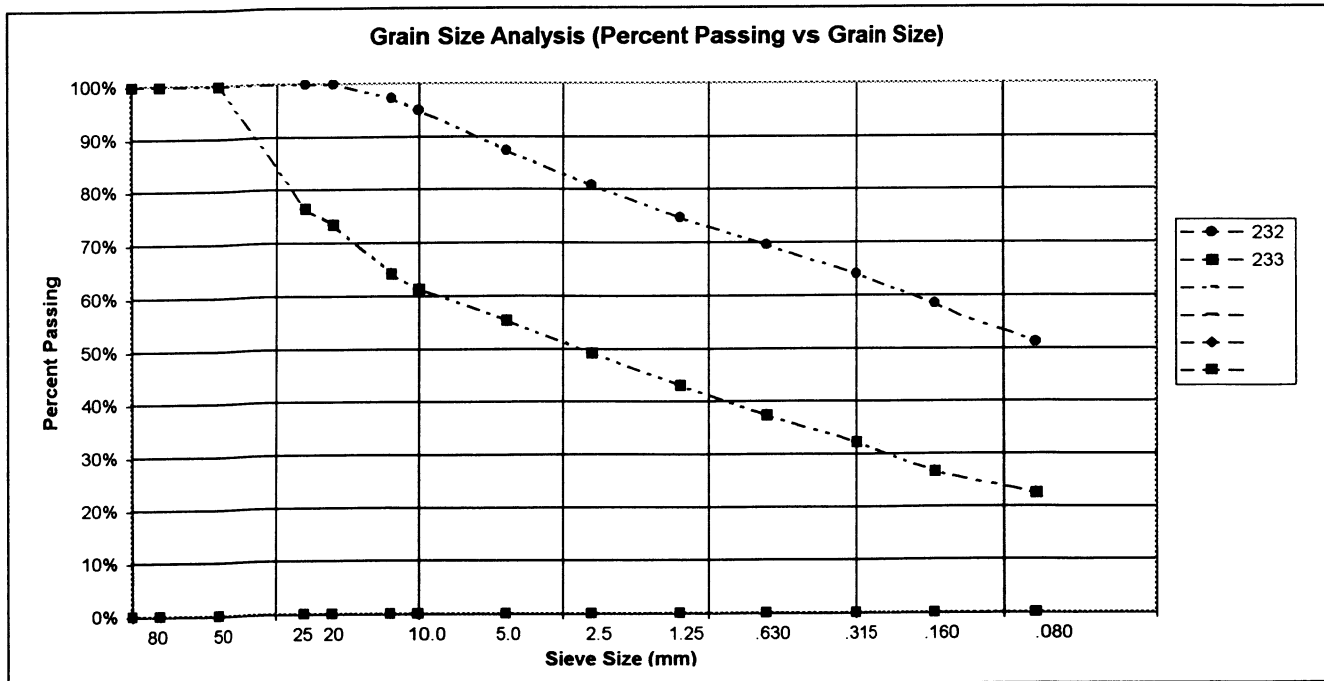


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634222-6772256
 LOGGED BY: RW

HOLE No.: 30117

DATE COMP: 12/8/2004

FIELD NO:	232	233			
LAB NO:	232	233			
DEPTH:	0.0-0.6	1.8-2.4			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	77%			
20.0	100%	73%			
12.5	97%	64%			
10.0	95%	61%			
5.0	87%	56%			
2.5	81%	49%			
1.25	75%	43%			
0.630	70%	38%			
0.315	64%	32%			
0.160	59%	27%			
0.080	51%	23%			
M.C.(%)	14%	9%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	13	44			
% SAND:	36	33			
% FINES:	51	23			
CLASSIFICATION	SANDY SILT (ML)	SILTY GRAVEL WITH SAND (GM)			



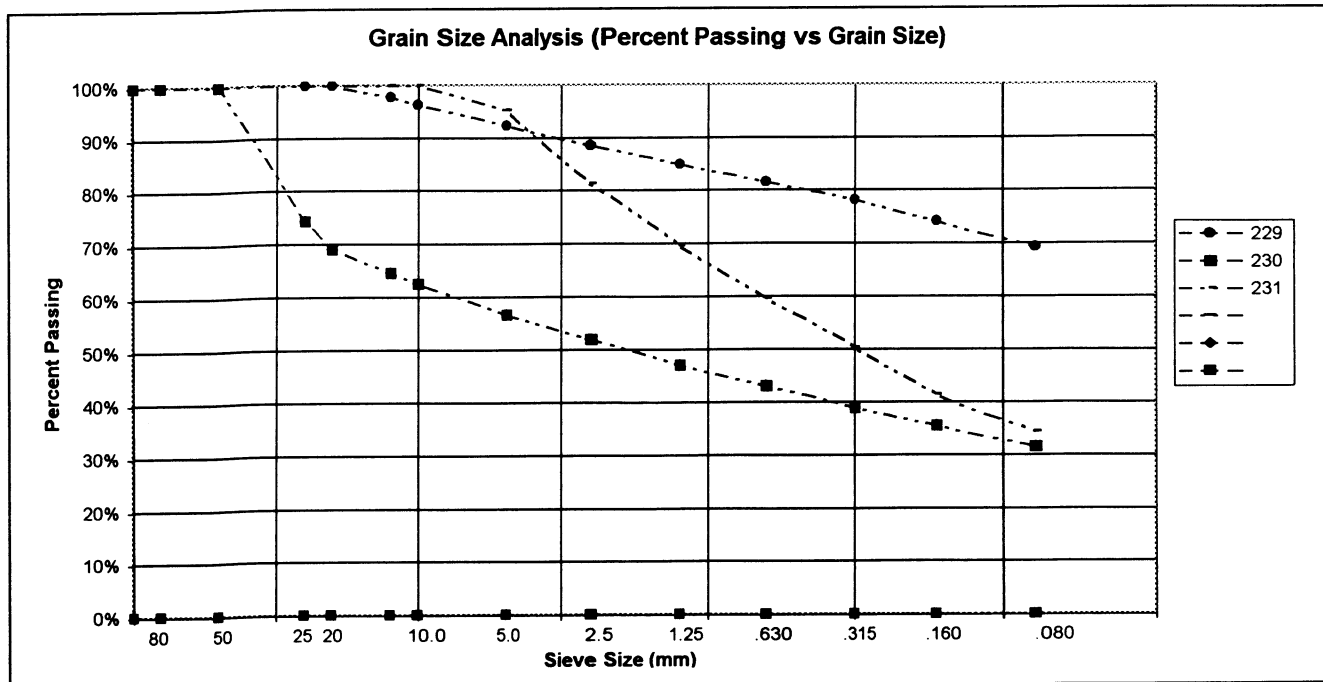


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634185-6772272
 LOGGED BY: RW

HOLE No.: 30118

DATE COMP: 12/8/2004

FIELD NO:	229	230	231			
LAB NO:	229	230	231			
DEPTH:	0.6-1.2	1.8-2.4	3.0-3.4			
TYPE:	AUGER	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	74%	100%			
20.0	100%	69%	100%			
12.5	98%	65%	100%			
10.0	96%	63%	100%			
5.0	92%	57%	95%			
2.5	89%	52%	81%			
1.25	85%	47%	70%			
0.630	82%	43%	60%			
0.315	78%	39%	50%			
0.160	74%	36%	42%			
0.080	69%	32%	34%			
M.C.(%):	16%	5%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	8	43	5			
% SAND:	23	25	61			
% FINES:	69	32	34			
CLASSIFICATION	SANDY SILT (ML)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND (SM)			



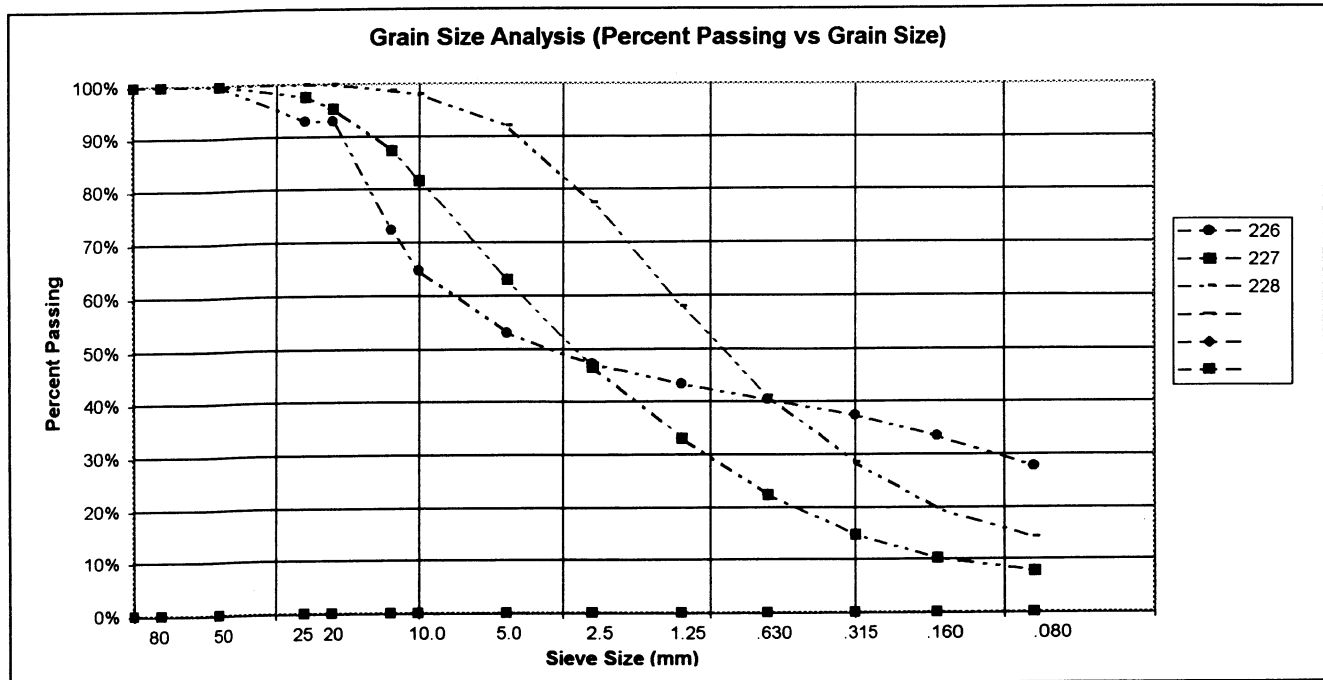


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634109-6772380
 LOGGED BY: RW

HOLE No.: 30119

DATE COMP: 12/8/2004

FIELD NO:	226	227	228		
LAB NO:	226	227	228		
DEPTH:	0.1-0.6	2.1-2.7	3.7-4.3		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	93%	98%	100%		
20.0	93%	95%	100%		
12.5	72%	87%	99%		
10.0	65%	82%	98%		
5.0	53%	63%	92%		
2.5	47%	47%	78%		
1.25	43%	33%	58%		
0.630	41%	23%	41%		
0.315	38%	15%	29%		
0.160	33%	10%	20%		
0.080	28%	8%	14%		
M.C.(%)	16%	3%	12%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	47	37	8		
% SAND:	25	55	78		
% FINES:	28	8	14		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND (SM)		



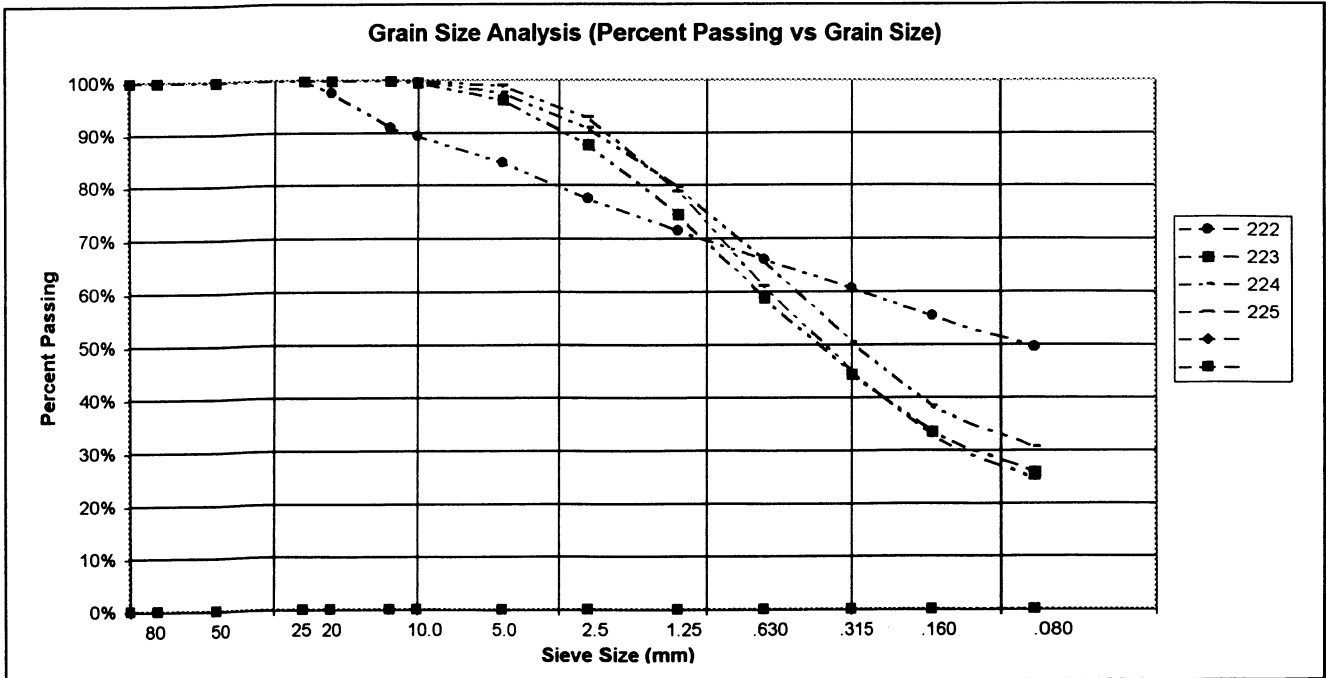


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634076-6772396
 LOGGED BY: RW

HOLE No.: 30120

DATE COMP: 12/8/2004

FIELD NO:	222	223	224	225		
LAB NO:	222	223	224	225		
DEPTH:	0.3-0.9	2.1-2.4	3.7-4.3	4.9-5.3		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	98%	100%	100%	100%		
12.5	91%	100%	100%	100%		
10.0	90%	100%	100%	100%		
5.0	84%	96%	98%	99%		
2.5	78%	88%	91%	93%		
1.25	72%	75%	80%	79%		
0.630	66%	59%	66%	61%		
0.315	61%	44%	50%	45%		
0.160	56%	34%	38%	33%		
0.080	50%	26%	31%	25%		
M.C.(%):	10%	7%	5%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	16	4	2	1		
% SAND:	35	70	67	75		
% FINES:	50	26	31	25		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)		



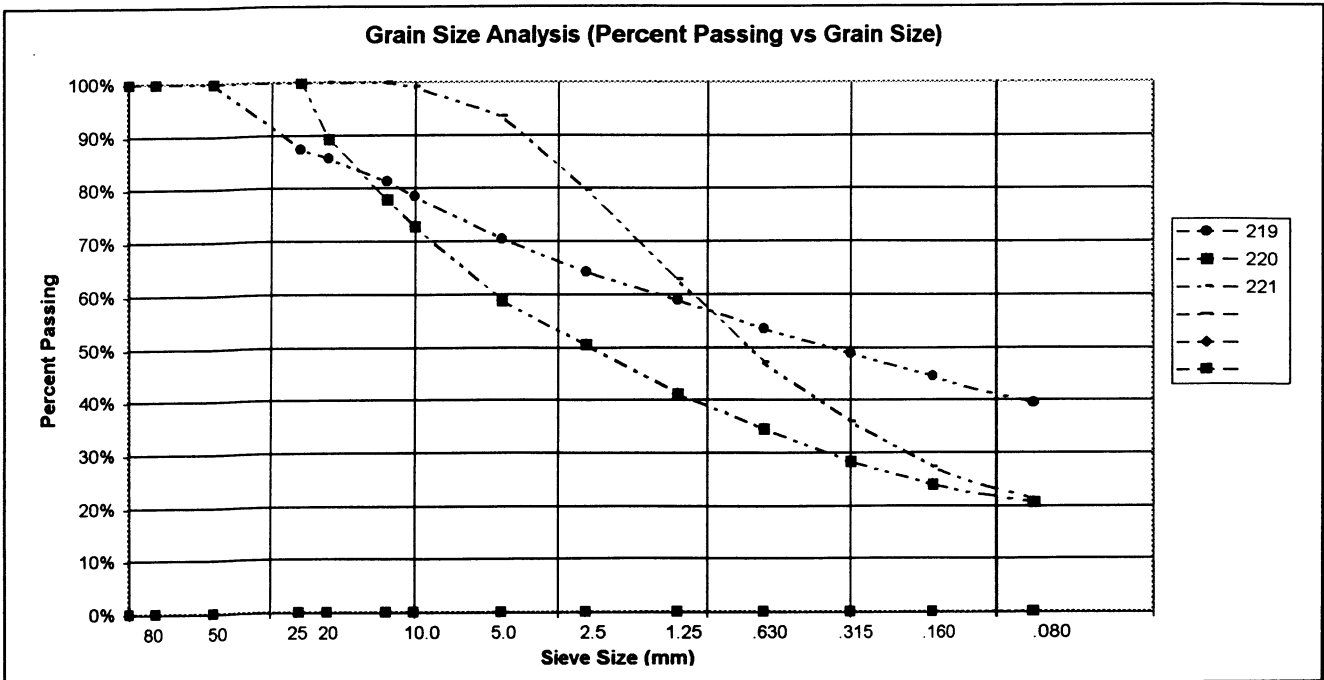


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633974-6772578
 LOGGED BY: RW

HOLE No.: 30121

DATE COMP: 12/8/2004

FIELD NO:	219	220	221		
LAB NO:	219	220	221		
DEPTH:	0.6-1.2	1.5-2.1	2.7-3.0		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	87%	100%	100%		
20.0	86%	89%	100%		
12.5	81%	78%	100%		
10.0	79%	73%	99%		
5.0	71%	59%	94%		
2.5	64%	51%	80%		
1.25	59%	41%	63%		
0.630	54%	35%	47%		
0.315	49%	28%	36%		
0.160	45%	24%	27%		
0.080	40%	21%	21%		
M.C.(%)	7%	4%	2%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	29	41	6		
% SAND:	31	38	72		
% FINES:	40	21	21		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND (SM)		





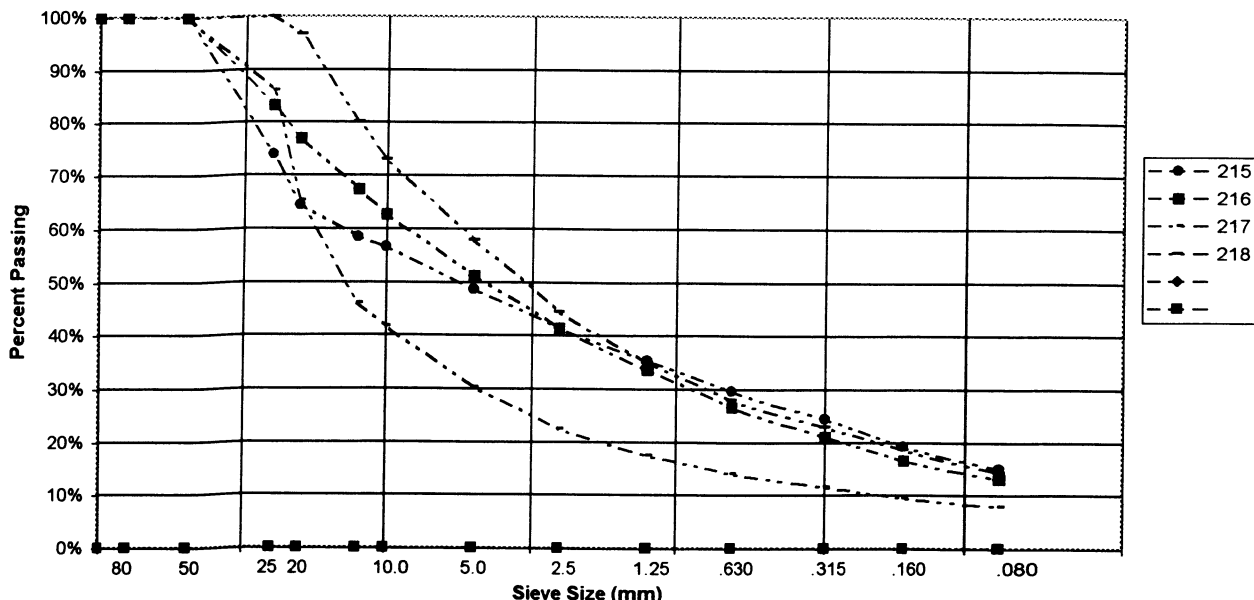
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633916-6772688
 LOGGED BY: RW

HOLE No.: 30122

DATE COMP: 12/8/2004

FIELD NO:	215	216	217	218		
LAB NO:	215	216	217	218		
DEPTH:	0.6-1.2	1.6-2.4	3.4-4.0	4.6-5.2		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	74%	83%	86%	100%		
20.0	64%	77%	65%	97%		
12.5	59%	68%	46%	80%		
10.0	57%	63%	42%	73%		
5.0	49%	51%	30%	58%		
2.5	41%	41%	23%	44%		
1.25	35%	34%	18%	35%		
0.630	30%	27%	14%	28%		
0.315	25%	21%	12%	23%		
0.160	19%	17%	10%	19%		
0.080	15%	13%	8%	14%		
M.C.(%)	15%	9%	9%	8%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	51	49	70	42		
% SAND:	34	38	22	44		
% FINES:	15	13	8	14		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)		

Grain Size Analysis (Percent Passing vs Grain Size)





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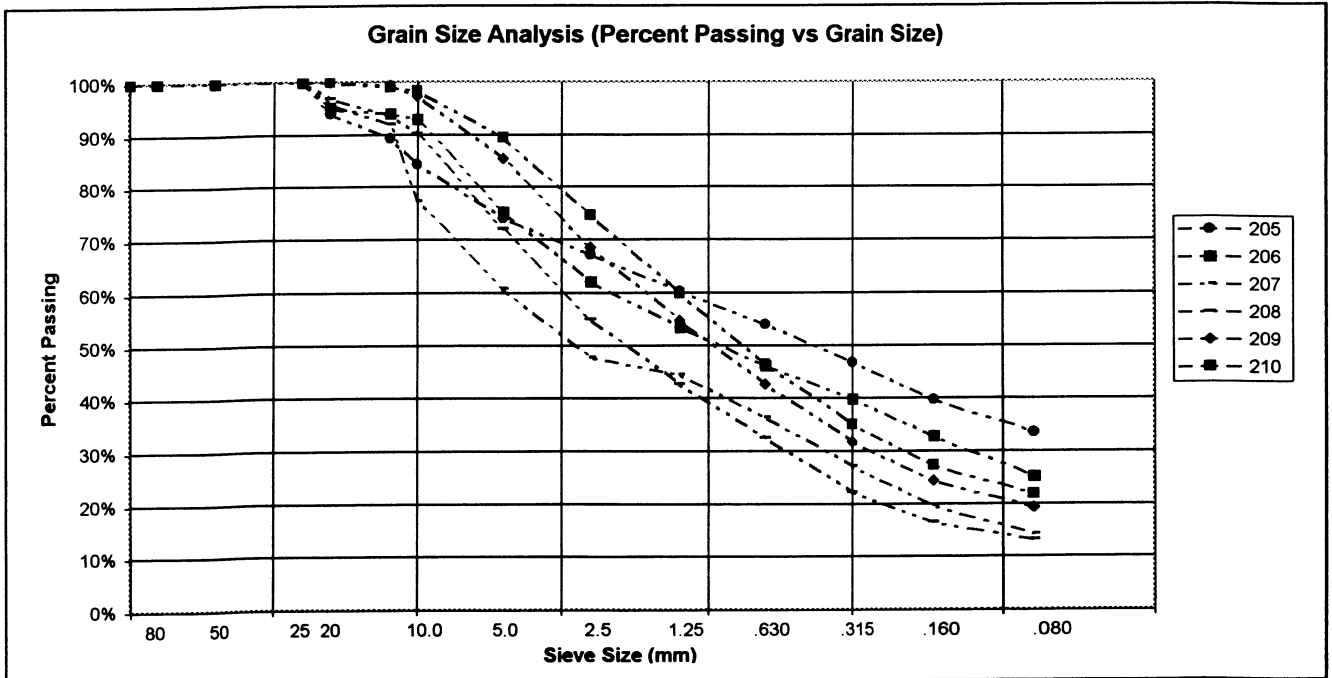


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633863-6772714
 LOGGED BY: RW

HOLE No.: 30123

DATE COMP: 11/8/2004

FIELD NO:	205	206	207	208	209	210
LAB NO:	205	206	207	208	209	210
DEPTH:	0.6-1.2	1.8-2.4	3.4-4.0	5.2-5.8	6.4-7.0	7.9-8.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	94%	95%	96%	97%	100%	100%
12.5	89%	94%	92%	94%	99%	99%
10.0	84%	93%	77%	90%	97%	98%
5.0	74%	75%	61%	72%	85%	89%
2.5	67%	62%	48%	55%	69%	75%
1.25	60%	53%	44%	43%	55%	60%
0.630	54%	46%	36%	32%	43%	46%
0.315	47%	40%	27%	22%	32%	35%
0.160	40%	33%	20%	17%	24%	27%
0.080	34%	25%	14%	13%	19%	22%
M.C.(%)	6%	6%	5%	5%	7%	7%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	26	25	39	28	15	11
% SAND:	40	50	46	59	66	68
% FINES:	34	25	14	13	19	22
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY SAND (SM)





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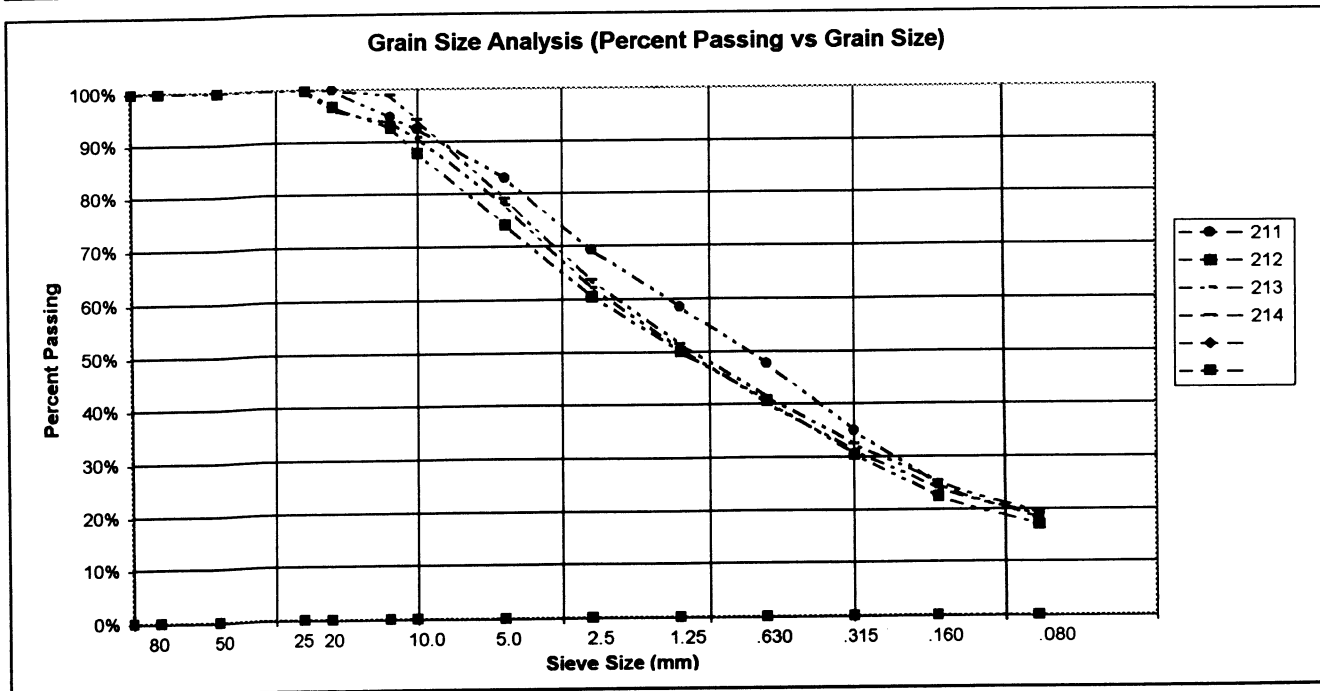


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633863-6772714
 LOGGED BY: RW

HOLE No.: 30123B

DATE COMP: 11/8/2004

FIELD NO:	211	212	213	214		
LAB NO:	211	212	213	214		
DEPTH:	9.4-10.1	11.0-11.6	13.1-13.7	14.3-14.6		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	97%	96%	100%		
12.5	95%	93%	94%	99%		
10.0	93%	88%	91%	94%		
5.0	83%	74%	78%	79%		
2.5	69%	61%	62%	64%		
1.25	59%	50%	51%	52%		
0.630	48%	41%	40%	42%		
0.315	35%	31%	31%	33%		
0.160	25%	23%	24%	25%		
0.080	18%	17%	19%	19%		
M.C.(%):	10%	9%	10%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	17	26	22	21		
% SAND:	65	57	59	60		
% FINES:	18	17	19	19		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)		





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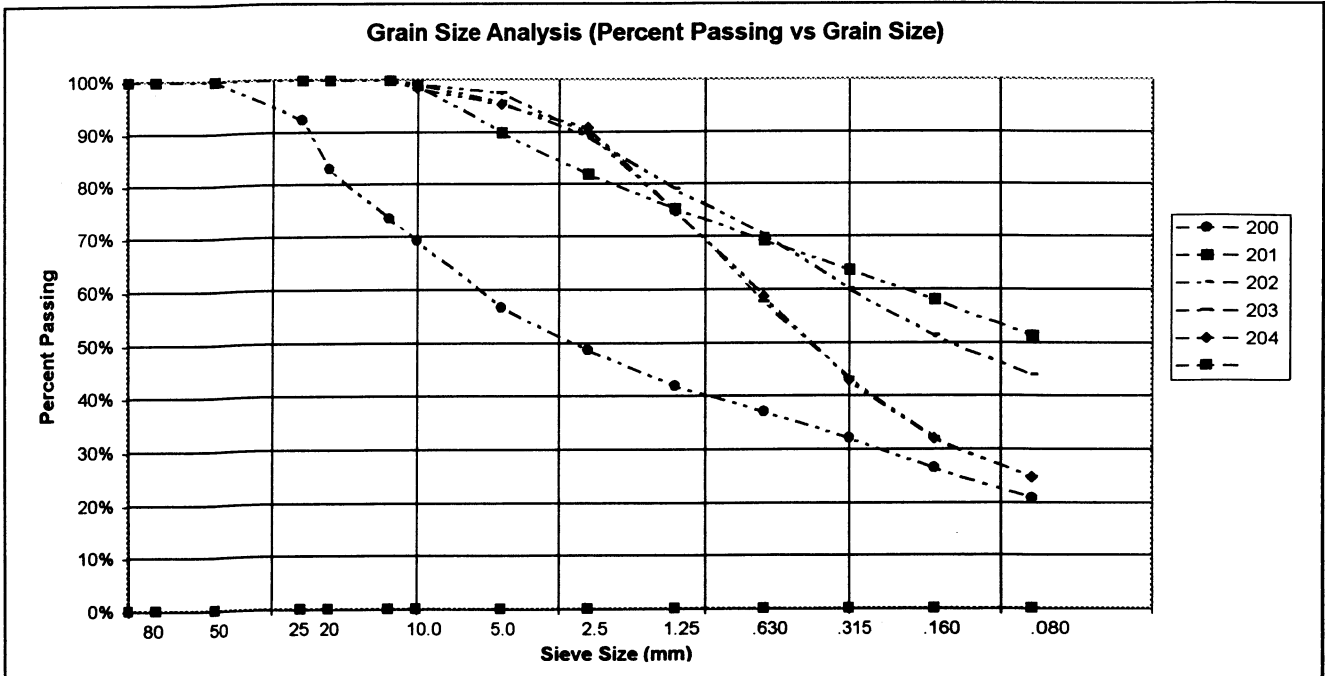


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633827-6772909
 LOGGED BY: RW

HOLE No.: 30124

DATE COMP: 11/8/2004

FIELD NO:	200	201	202	203	204	
LAB NO:	200	201	202	203	204	
DEPTH:	0.6-1.2	1.8-2.4	3.4-4.0	5.2-5.8	6.7-7.3	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	92%	100%	100%	100%	100%	
20.0	83%	100%	100%	100%	100%	
12.5	74%	100%	100%	100%	100%	
10.0	69%	99%	99%	99%	98%	
5.0	57%	90%	96%	97%	95%	
2.5	49%	82%	89%	90%	91%	
1.25	42%	75%	79%	75%	75%	
0.630	37%	69%	70%	58%	59%	
0.315	32%	64%	60%	43%	43%	
0.160	27%	58%	51%	32%	32%	
0.080	21%	51%	44%	25%	25%	
M.C.(%)	9%	17%	14%	4%	2%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	43	10	4	3	5	
% SAND:	36	39	52	73	70	
% FINES:	21	51	44	25	25	
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SANDY SILT (ML)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	





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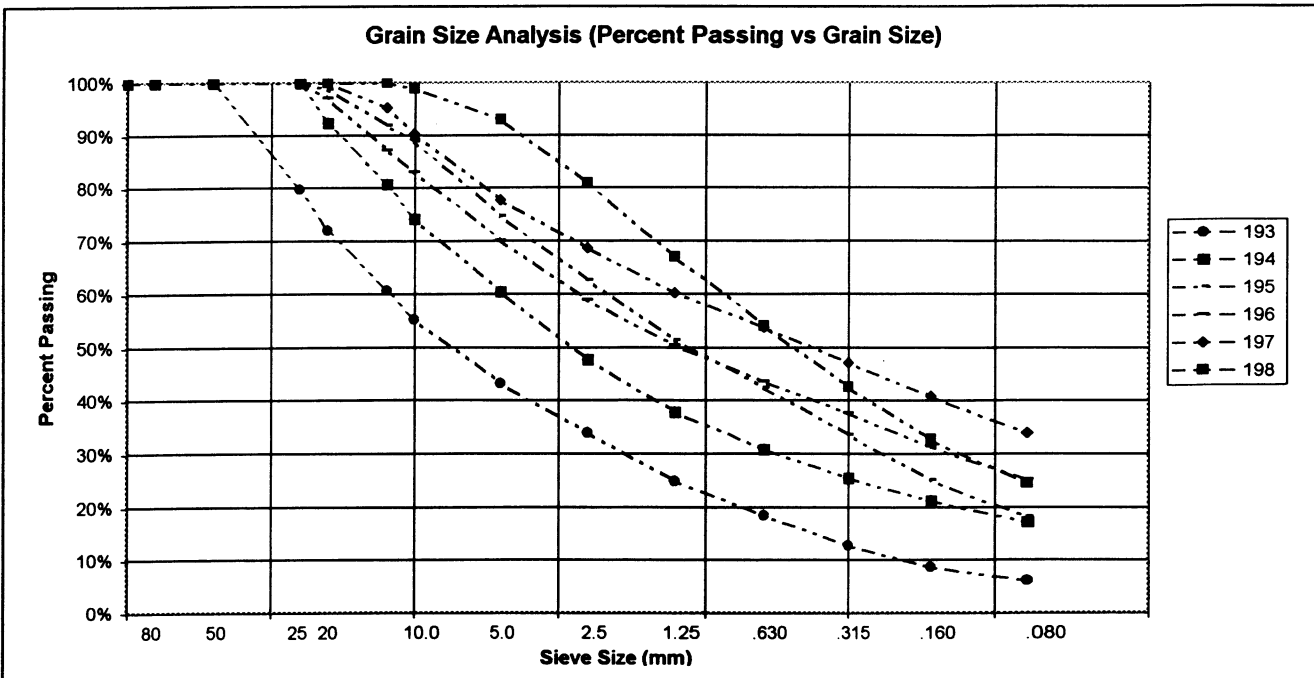


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633773-6773058
 LOGGED BY: RW

HOLE No.: 30125

DATE COMP: 11/8/2004

FIELD NO:	193	194	195	196	197	198
LAB NO:	193	194	195	196	197	198
DEPTH:	0.3-0.9	1.8-2.4	3.4-4.0	4.9-5.5	6.4-7.0	7.9-8.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	80%	100%	100%	100%	100%	100%
20.0	72%	92%	99%	97%	100%	100%
12.5	61%	81%	92%	87%	95%	100%
10.0	55%	74%	89%	83%	90%	99%
5.0	43%	60%	75%	70%	78%	93%
2.5	34%	48%	63%	59%	69%	81%
1.25	25%	38%	51%	50%	60%	67%
0.630	19%	31%	42%	44%	54%	54%
0.315	13%	26%	34%	38%	47%	43%
0.160	9%	21%	25%	31%	41%	33%
0.080	6%	17%	18%	25%	34%	25%
M.C.(%)	2%	8%	10%	8%	11%	11%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	57	40	25	30	22	7
% SAND:	37	43	56	45	44	68
% FINES:	6	17	18	25	34	25
CLASSIFICATION	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)





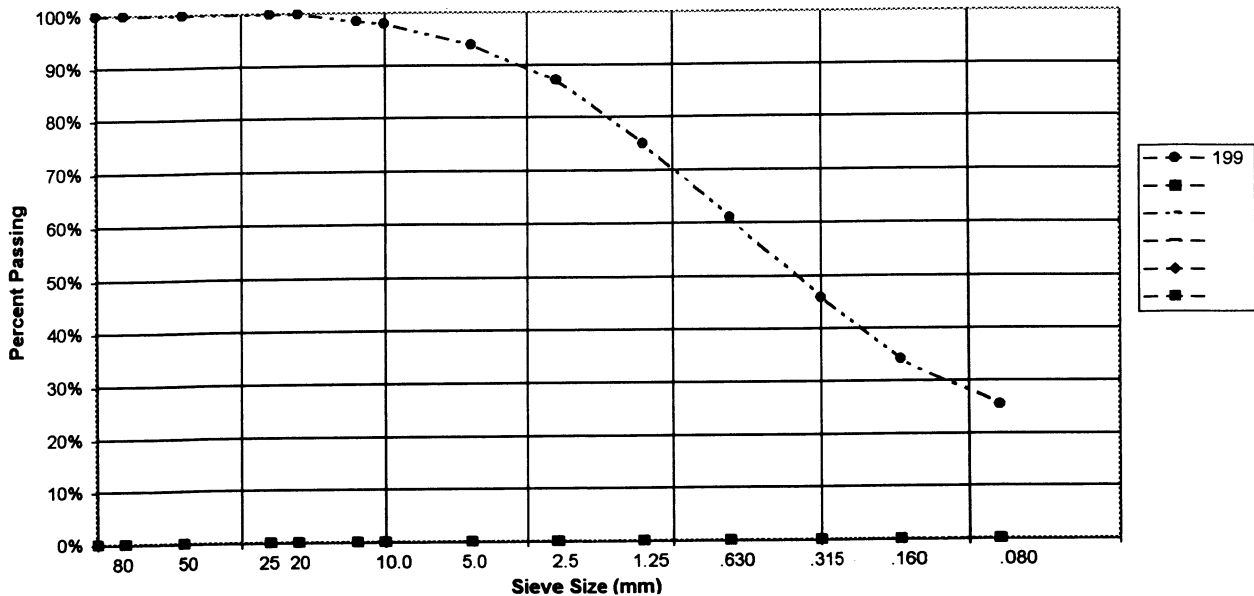
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633773-6773058
LOGGED BY: RW

HOLE No.: 30125B

DATE COMP: 11/8/2004

FIELD NO:	199				
LAB NO:	199				
DEPTH:	10.4-10.7				
TYPE:	AUGER				
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	100%				
20.0	100%				
12.5	99%				
10.0	98%				
5.0	94%				
2.5	87%				
1.25	75%				
0.630	61%				
0.315	46%				
0.160	34%				
0.080	25%				
M.C.(%):	12%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX:	0.0				
% GRAVEL:	6				
% SAND:	69				
% FINES:	25				
CLASSIFICATION	SILTY SAND (SM)				

Grain Size Analysis (Percent Passing vs Grain Size)





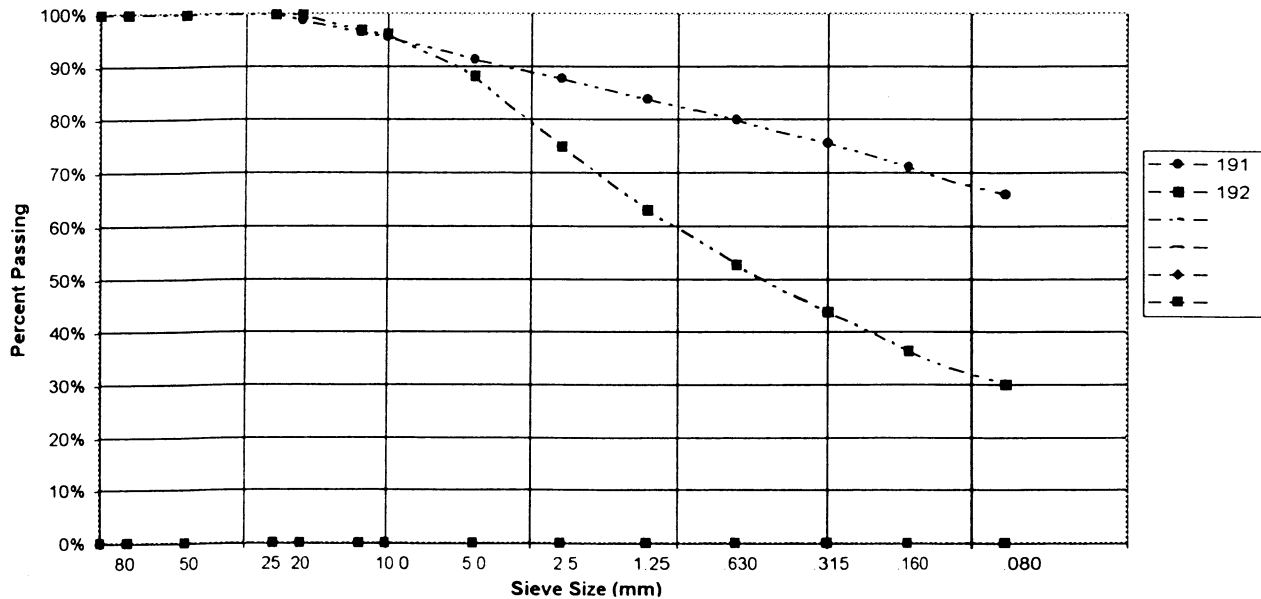
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633699-6773199
 LOGGED BY: RW

HOLE No.: 30126

DATE COMP: 08/10/2004

FIELD NO:	191	192			
LAB NO:	191	192			
DEPTH:	0.5-0.8	1.5-1.8			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	99%	100%			
12.5	97%	97%			
10.0	96%	96%			
5.0	91%	88%			
2.5	88%	75%			
1.25	84%	63%			
0.630	80%	53%			
0.315	76%	44%			
0.160	71%	37%			
0.080	66%	30%			
M.C.(%)	13%	4%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	9	12			
% SAND:	25	58			
% FINES:	66	30			
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND (SM)			

Grain Size Analysis (Percent Passing vs Grain Size)





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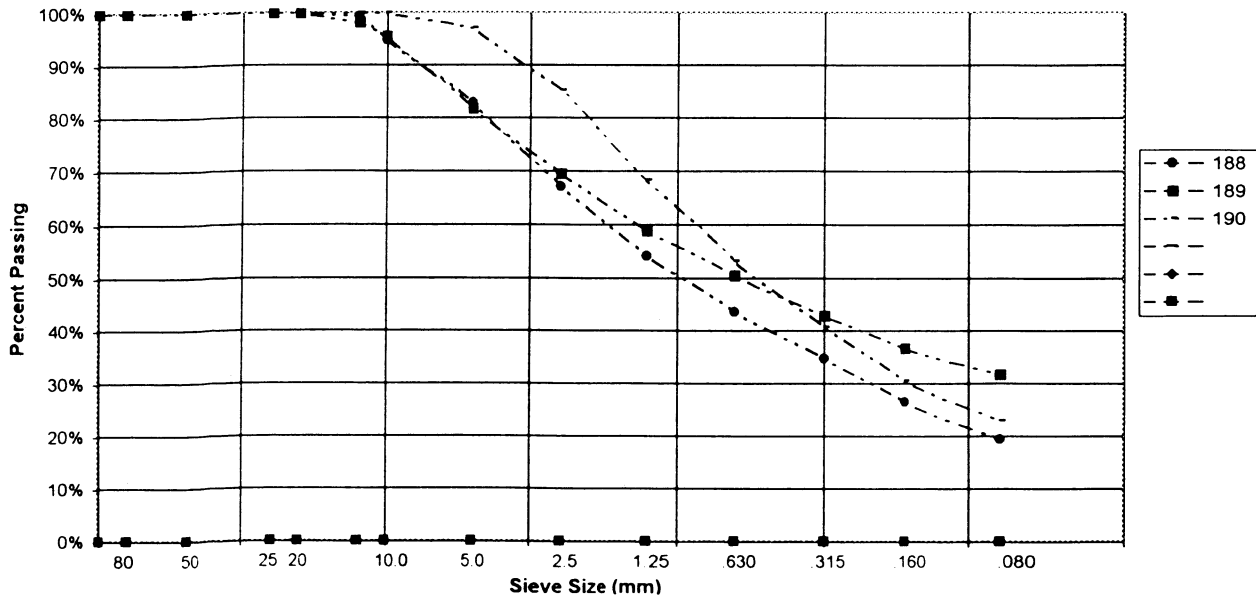
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633619-6773331
 LOGGED BY: RW

HOLE No.: 30127

DATE COMP: 08/10/2004

FIELD NO:	188	189	190		
LAB NO:	188	189	190		
DEPTH:	0.6-1.2	2.1-2.9	4.0-4.6		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	100%	100%	100%		
12.5	99%	98%	100%		
10.0	95%	95%	100%		
5.0	83%	82%	97%		
2.5	67%	70%	85%		
1.25	54%	59%	68%		
0.630	44%	51%	53%		
0.315	35%	43%	41%		
0.160	27%	37%	31%		
0.080	20%	32%	23%		
M.C.(%)	16%	12%	3%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	17	18	3		
% SAND:	64	50	74		
% FINES:	20	32	23		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)		

Grain Size Analysis (Percent Passing vs Grain Size)





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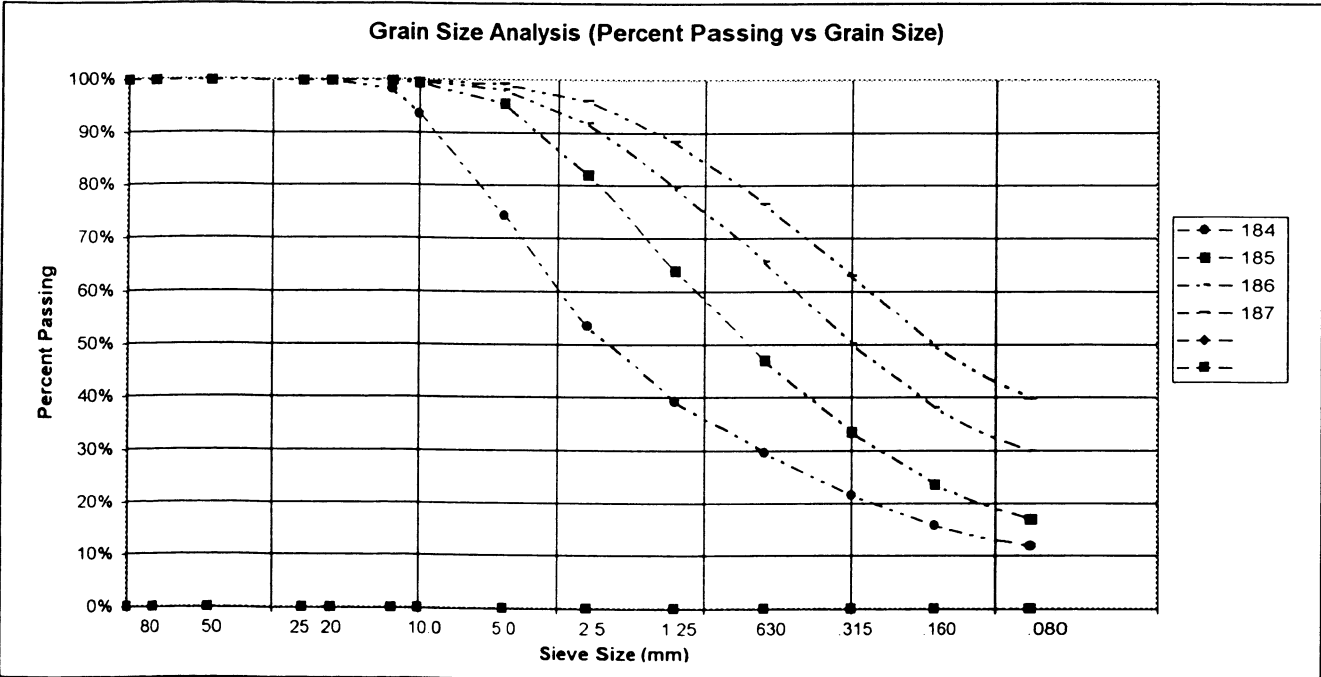


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633550-6773445
 LOGGED BY: RW

HOLE No.: 30128

DATE COMP: 08/10/2004

FIELD NO:	184	185	186	187		
LAB NO:	184	185	186	187		
DEPTH:	0.4-0.9	2.1-2.9	3.7-4.3	5.2-5.8		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	98%	100%	100%	100%		
10.0	94%	100%	100%	100%		
5.0	74%	96%	98%	99%		
2.5	54%	82%	92%	96%		
1.25	39%	64%	80%	88%		
0.630	30%	47%	66%	77%		
0.315	22%	34%	50%	63%		
0.160	16%	24%	38%	50%		
0.080	12%	17%	30%	40%		
M.C.(%)	2%	9%	9%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	26	4	2	1		
% SAND:	62	79	68	60		
% FINES:	12	17	30	40		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)		





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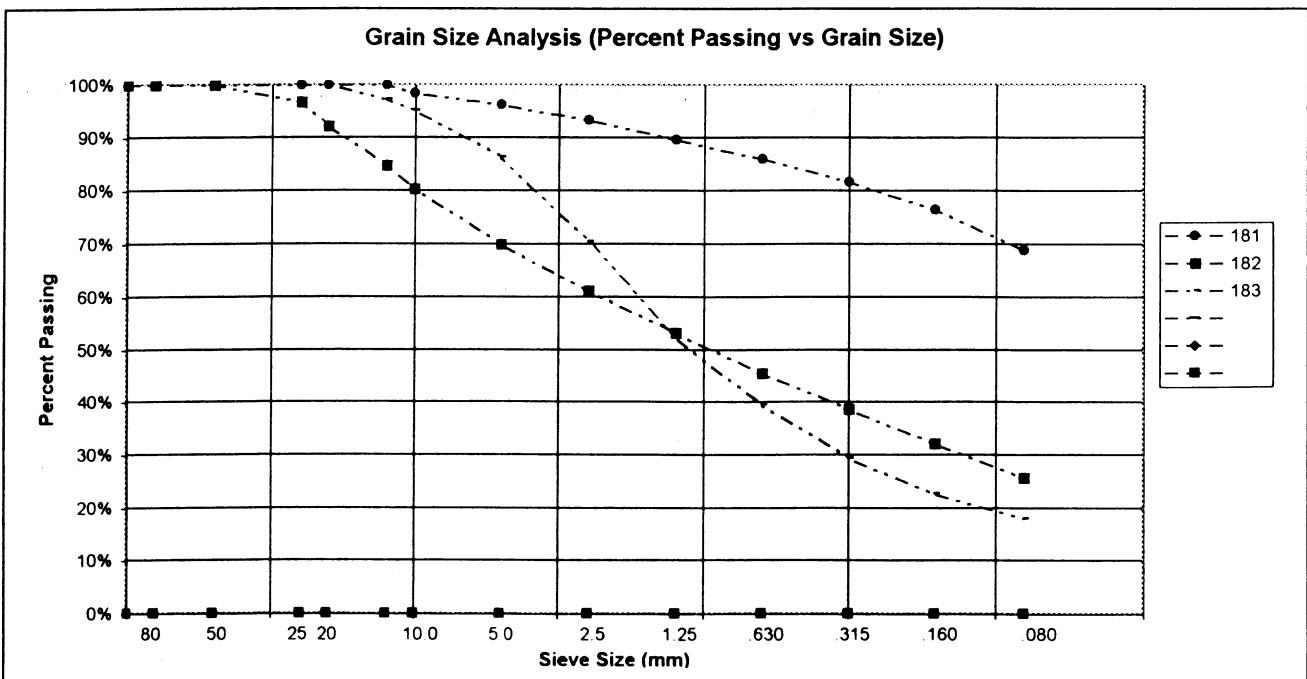


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633531-6773473
 LOGGED BY: RW

HOLE No.: 30129

DATE COMP: 08/10/2004

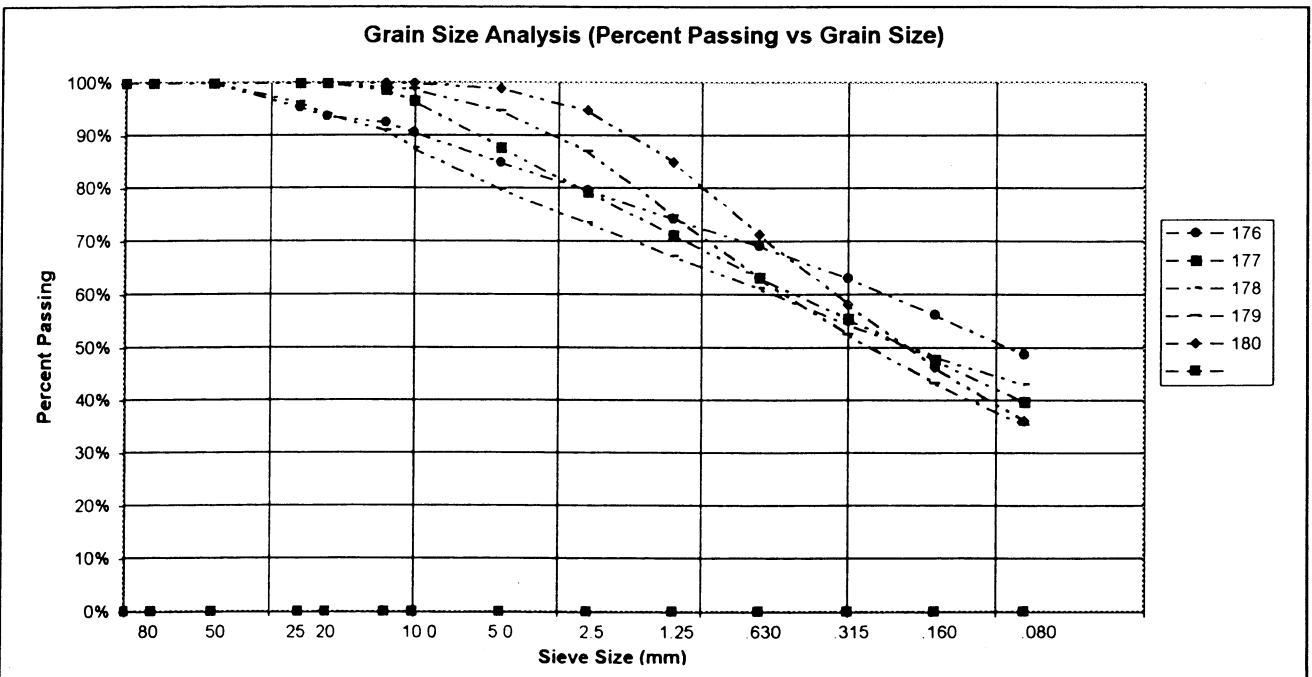
FIELD NO:	181	182	183		
LAB NO:	181	182	183		
DEPTH:	0.6-1.2	1.8-2.4	3.4-3.7		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	97%	100%		
20.0	100%	92%	100%		
12.5	100%	85%	97%		
10.0	98%	80%	95%		
5.0	96%	70%	86%		
2.5	93%	61%	70%		
1.25	90%	53%	52%		
0.630	86%	46%	39%		
0.315	82%	39%	29%		
0.160	76%	32%	23%		
0.080	69%	26%	18%		
M.C.(%):	34%	9%	5%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	4	30	14		
% SAND:	27	44	68		
% FINES:	69	26	18		
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)		





PROJECT NUMBER: 8002-318 HOLE No.: 30130
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633472-6773537
 LOGGED BY: RW DATE COMP: 08/10/2004

FIELD NO:	176	177	178	179	180	
LAB NO:	176	177	178	179	180	
DEPTH:	0.6-1.2	1.8-2.4	3.7-4.3	4.9-5.5	7.0-7.6	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	95%	100%	96%	100%	100%	
20.0	94%	100%	94%	100%	100%	
12.5	93%	99%	91%	99%	100%	
10.0	91%	97%	87%	99%	100%	
5.0	85%	88%	80%	95%	99%	
2.5	80%	79%	74%	87%	95%	
1.25	74%	71%	67%	75%	85%	
0.630	69%	63%	61%	63%	71%	
0.315	63%	55%	54%	53%	58%	
0.160	56%	48%	48%	43%	46%	
0.080	49%	40%	43%	35%	36%	
M.C.(%)	13%	10%	9%	5%	4%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	15	12	20	5	1	
% SAND:	36	48	37	59	63	
% FINES:	49	40	43	35	36	
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY SAND (SM)	





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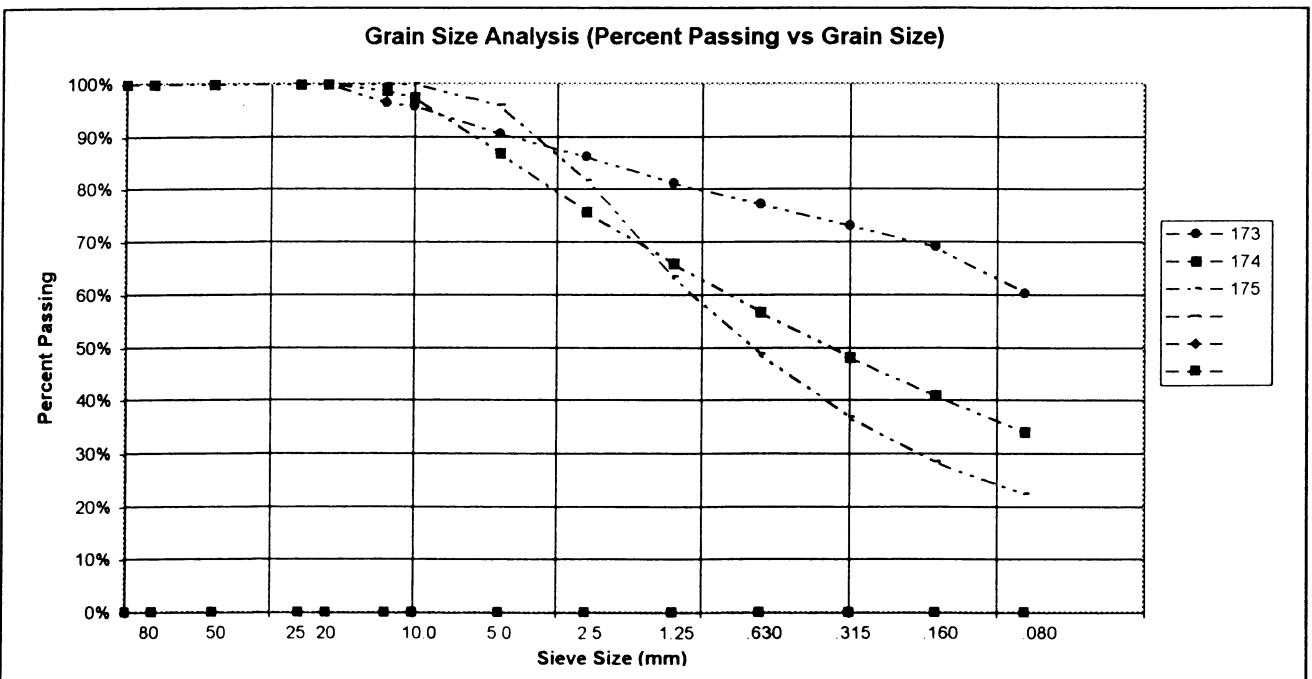


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633423-6773651
 LOGGED BY: RW

HOLE No.: 30131

DATE COMP: 08/10/2004

FIELD NO:	173	174	175		
LAB NO:	173	174	175		
DEPTH:	0.3-0.9	1.8-2.4	3.4-3.7		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	100%	100%	100%		
12.5	96%	99%	100%		
10.0	96%	98%	100%		
5.0	91%	87%	96%		
2.5	86%	76%	82%		
1.25	81%	66%	63%		
0.630	77%	57%	49%		
0.315	73%	48%	37%		
0.160	69%	41%	29%		
0.080	60%	34%	22%		
M.C.(%)	31%	7%	3%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	9	13	4		
% SAND:	30	53	74		
% FINES:	60	34	22		
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND (SM)	SILTY SAND (SM)		



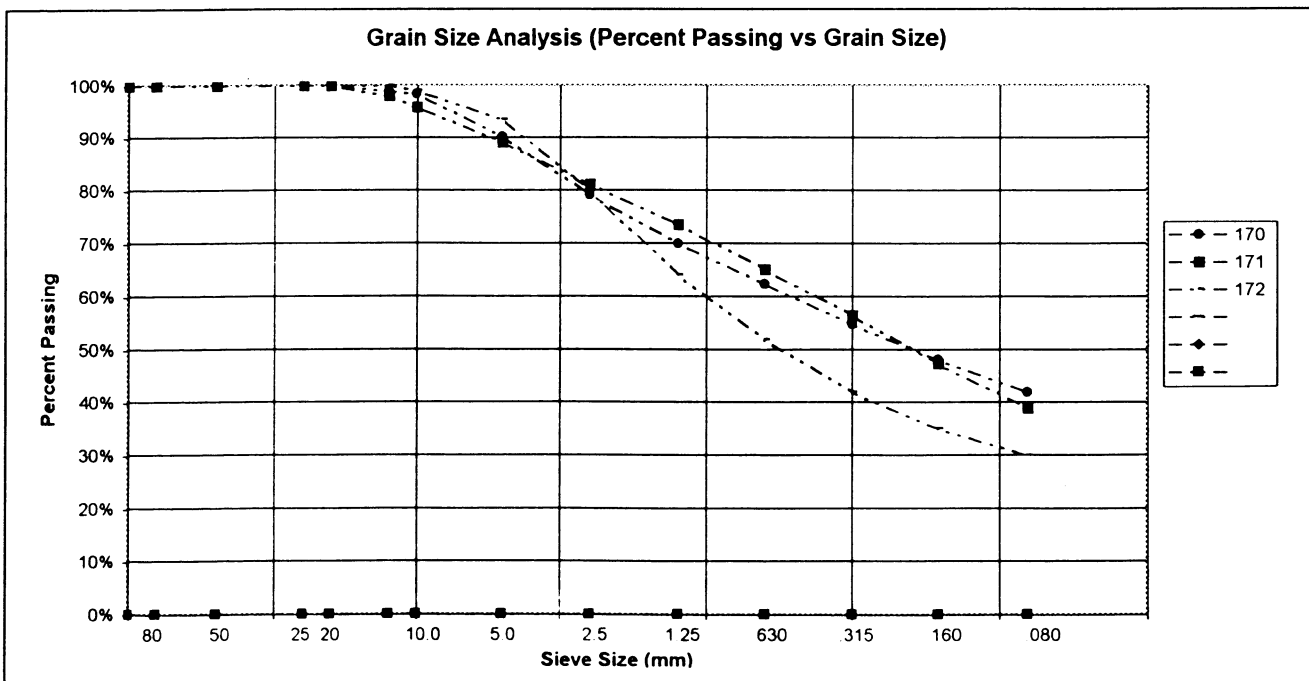


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633337-6773786
LOGGED BY: RW

HOLE No.: 30132

DATE COMP: 08/09/2004

Table with columns for Field No., Lab No., Depth, Type, Sieve Size, Percent Passing, and Classification. It contains data for three samples (170, 171, 172) across various sieve sizes and soil properties like M.C., Liquid Limit, Plastic Limit, and % Gravel/Sand/Fines.





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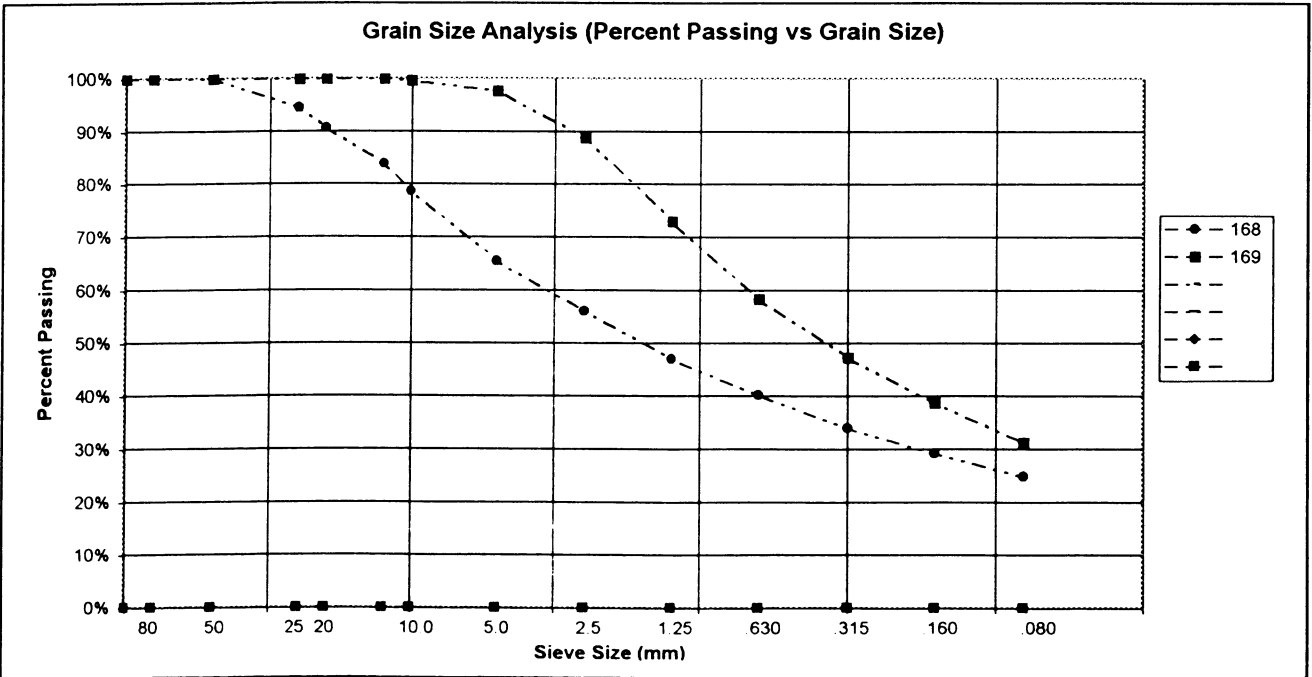


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633261-6773901
 LOGGED BY: RW

HOLE No.: 30133

DATE COMP: 08/09/2004

FIELD NO:	168	169			
LAB NO:	168	169			
DEPTH:	0.9-1.2	1.8-2.4			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	95%	100%			
20.0	91%	100%			
12.5	84%	100%			
10.0	79%	100%			
5.0	65%	98%			
2.5	56%	89%			
1.25	47%	73%			
0.630	40%	58%			
0.315	34%	47%			
0.160	29%	39%			
0.080	25%	31%			
M.C.(%):	7%	8%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	35	2			
% SAND:	41	66			
% FINES:	25	31			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)			





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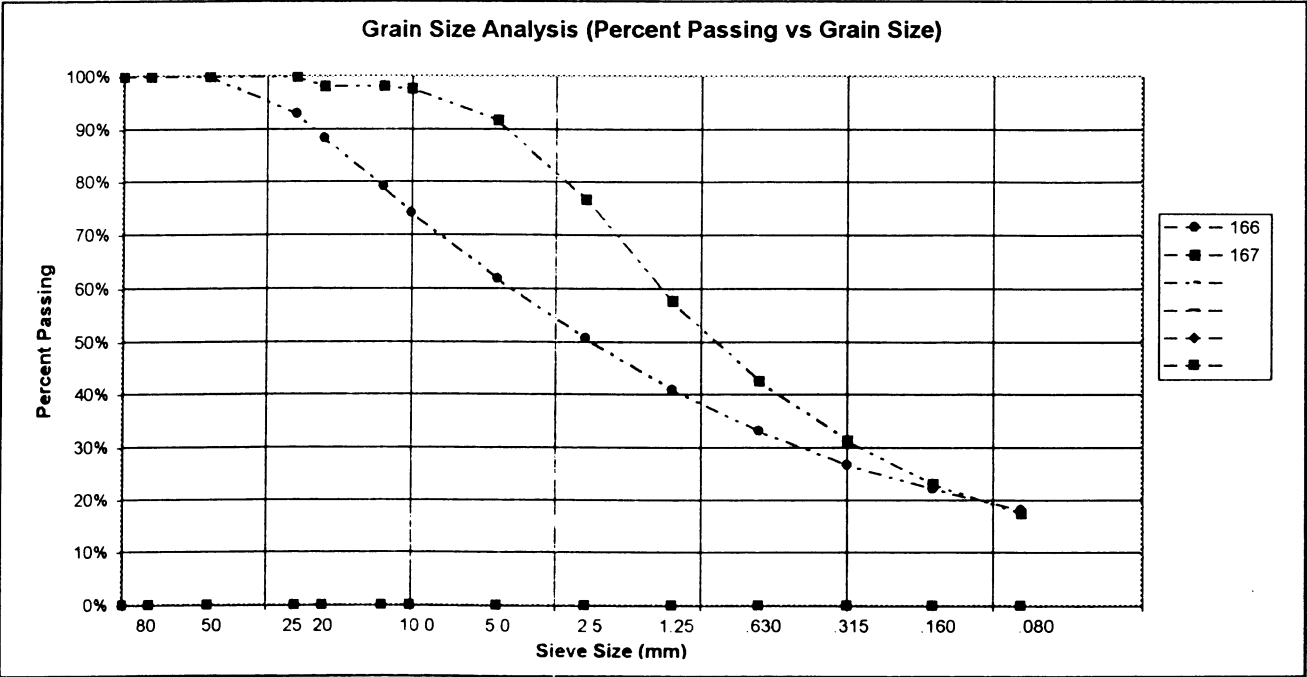


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633158-6774008
 LOGGED BY: RW

HOLE No.: 30134

DATE COMP: 08/09/2004

FIELD NO:	166	167			
LAB NO:	166	167			
DEPTH:	0.9-1.2	1.8-2.4			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	93%	100%			
20.0	88%	98%			
12.5	79%	98%			
10.0	74%	98%			
5.0	62%	92%			
2.5	51%	77%			
1.25	41%	58%			
0.630	33%	43%			
0.315	27%	31%			
0.160	22%	23%			
0.080	18%	18%			
M.C.(%)	8%	1%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	38	8			
% SAND:	44	74			
% FINES:	18	18			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)			





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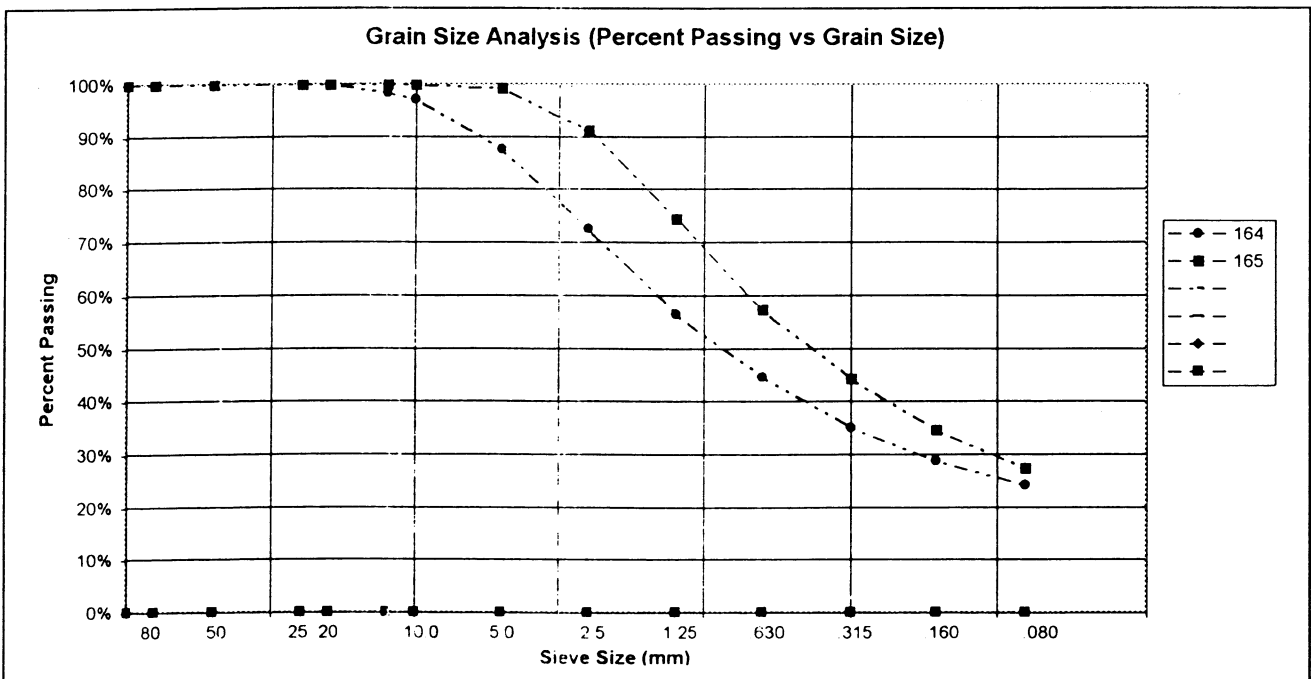


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633067-6774137
 LOGGED BY: RW

HOLE No.: 30135

DATE COMP: 08/09/2004

FIELD NO:	164	165			
LAB NO:	164	165			
DEPTH:	0.9-1.5	2.1-3.0			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	100%	100%			
12.5	98%	100%			
10.0	97%	100%			
5.0	88%	99%			
2.5	73%	91%			
1.25	57%	74%			
0.630	45%	57%			
0.315	35%	44%			
0.160	29%	35%			
0.080	24%	27%			
M.C.(%)	10%	9%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	12	1			
% SAND:	63	72			
% FINES:	24	27			
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)			





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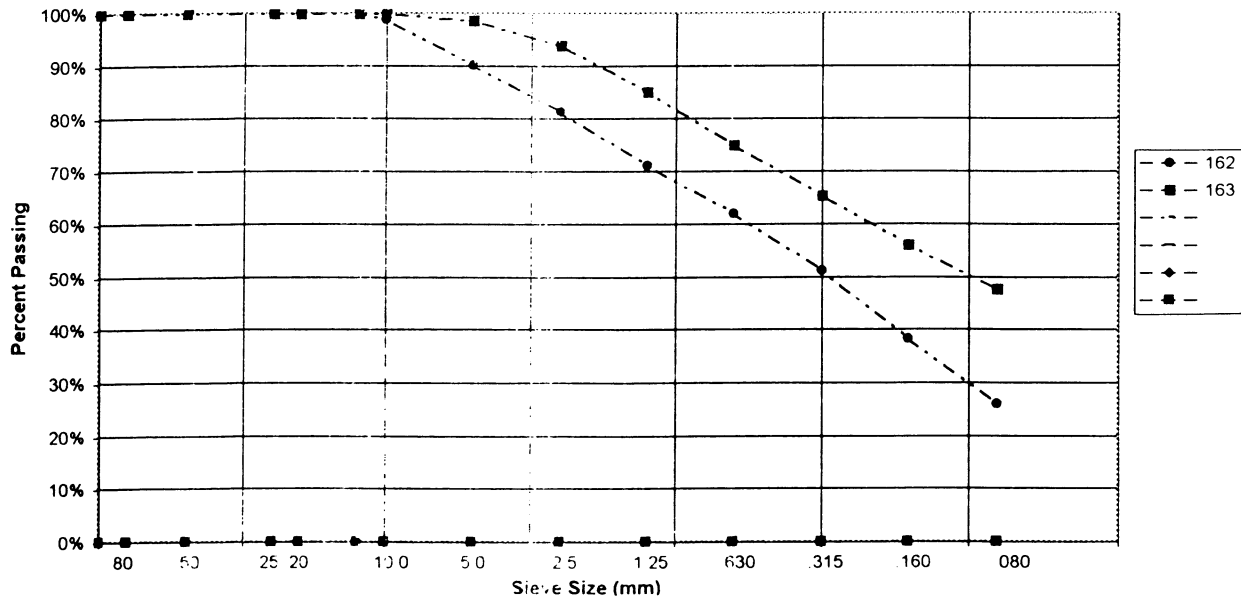
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 633003-6774206
 LOGGED BY: RW

HOLE No.: 30136

DATE COMP: 08/09/2004

FIELD NO:	162	163			
LAB NO:	162	163			
DEPTH:	0.6-1.2	1.5-2.1			
TYPE:	AUGER	AUGER			
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	100%	100%			
12.5	100%	100%			
10.0	99%	100%			
5.0	90%	99%			
2.5	81%	94%			
1.25	71%	85%			
0.630	62%	75%			
0.315	51%	65%			
0.160	38%	56%			
0.080	26%	48%			
M.C.(%)	11%	14%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	10	1			
% SAND:	64	51			
% FINES:	26	48			
CLASSIFICATION	SILTY SAND (S _A)	SILTY SAND (S _M)			

Grain Size Analysis (Percent Passing vs Grain Size)





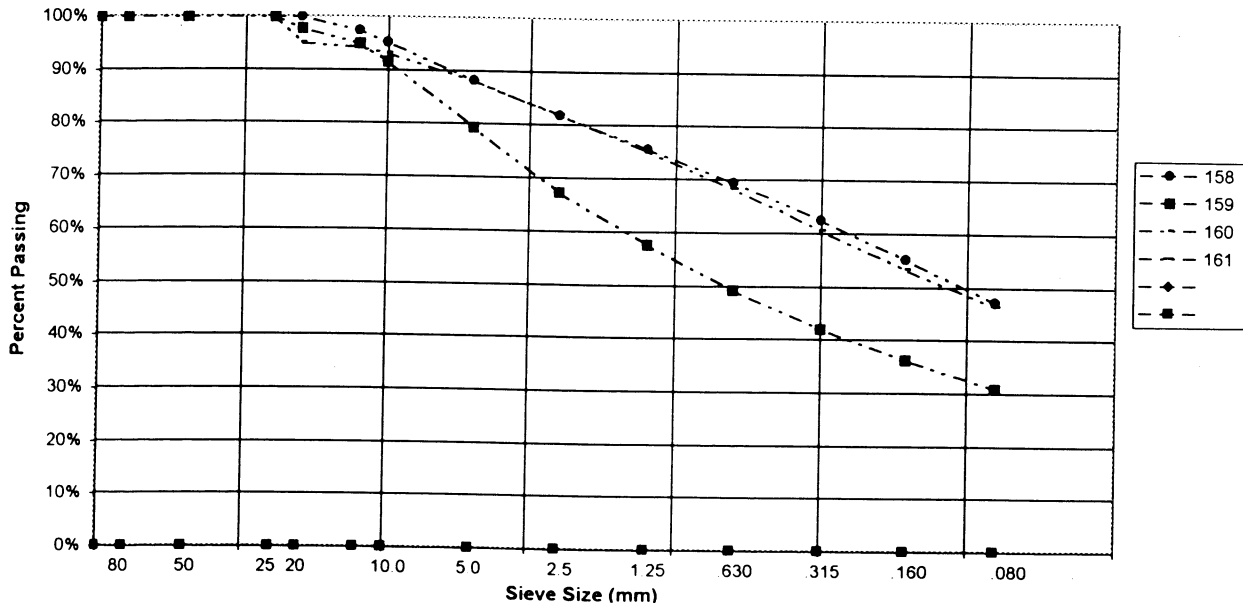
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 632037-6775613
LOGGED BY: RW

HOLE No.: 30148

DATE COMP: 08/03/2004

Table with columns for Field No., Lab No., Depth, Type, Sieve Size, Percent Passing, M.C. (%), Liquid Limit, Plastic Limit, Plastic Index, % Gravel, % Sand, % Fines, and Classification. Rows include sieve sizes from 100.0 to 0.080 mm and classification results like 'SILTY SAND (SM)'.

Grain Size Analysis (Percent Passing vs Grain Size)



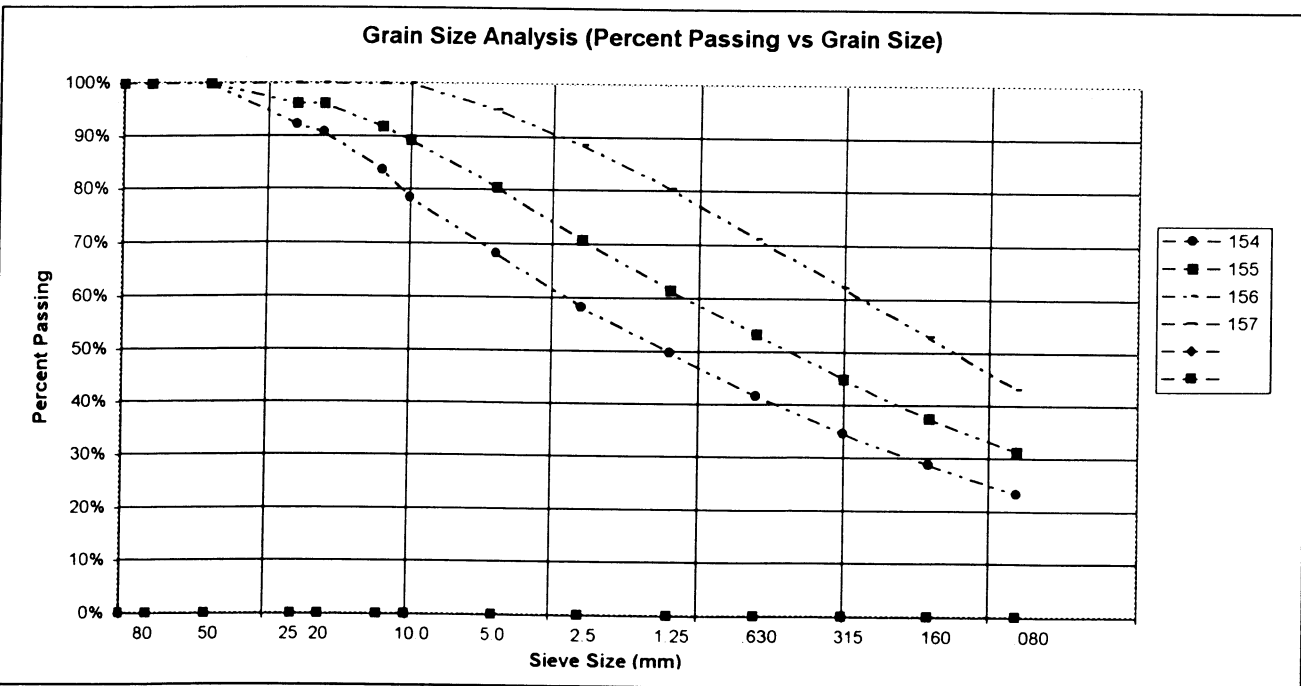


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631983-6775666
 LOGGED BY: RW

HOLE No.: 30149

DATE COMP: 08/03/2004

FIELD NO:	154	155	156	157		
LAB NO:	154	155	156	157		
DEPTH:	0.9-1.4	2.1-2.7	4.0-4.6	5.3-5.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	92%	96%	100%	100%		
20.0	91%	96%	100%	100%		
12.5	84%	92%	100%	100%		
10.0	79%	89%	100%	100%		
5.0	68%	81%	95%	95%		
2.5	58%	71%	88%	88%		
1.25	50%	62%	80%	80%		
0.630	42%	53%	71%	71%		
0.315	35%	45%	62%	62%		
0.160	29%	38%	53%	53%		
0.080	23%	31%	43%	43%		
M.C.(%):	10%	12%	15%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	32	19	5	#VALUE!		
% SAND:	45	49	52	#VALUE!		
% FINES:	23	31	43	#VALUE!		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	#VALUE!		





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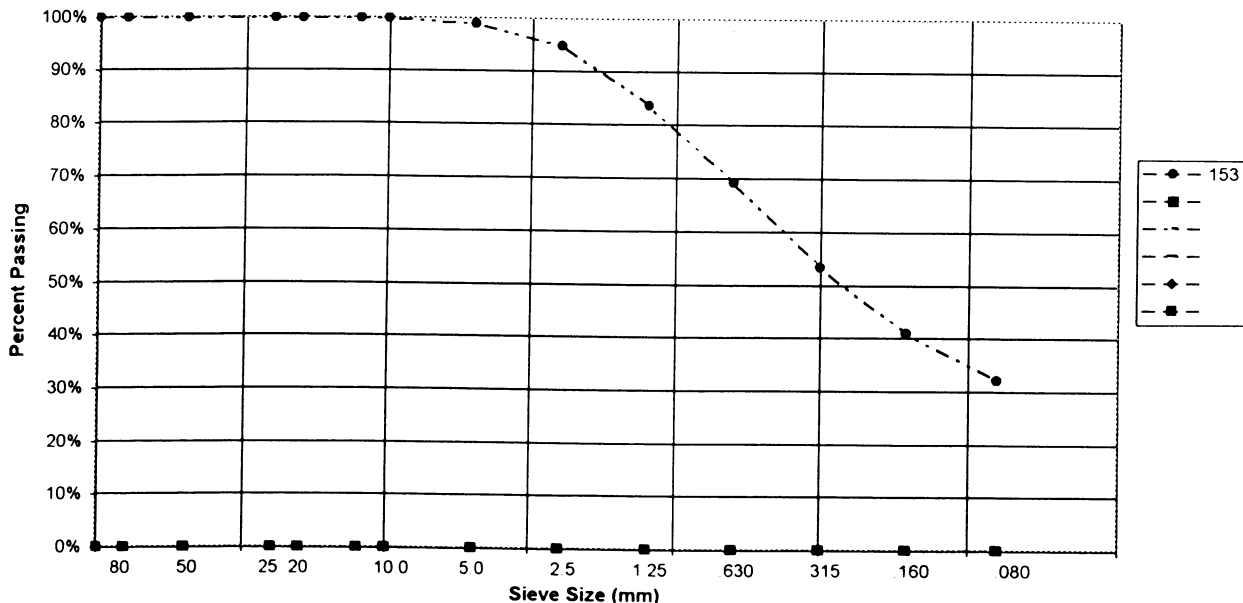
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631923-6775739
 LOGGED BY: RW

HOLE No.: 30150

DATE COMP: 08/03/2004

FIELD NO:	153				
LAB NO:	153				
DEPTH:	9.4-10.1				
TYPE:	AUGER				
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	100%				
20.0	100%				
12.5	100%				
10.0	100%				
5.0	99%				
2.5	95%				
1.25	84%				
0.630	69%				
0.315	53%				
0.160	41%				
0.080	32%				
M.C.(%):	5%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX.:	0.0				
% GRAVEL:	1				
% SAND:	67				
% FINES:	32				
CLASSIFICATION	SILTY SAND (SM)				

Grain Size Analysis (Percent Passing vs Grain Size)





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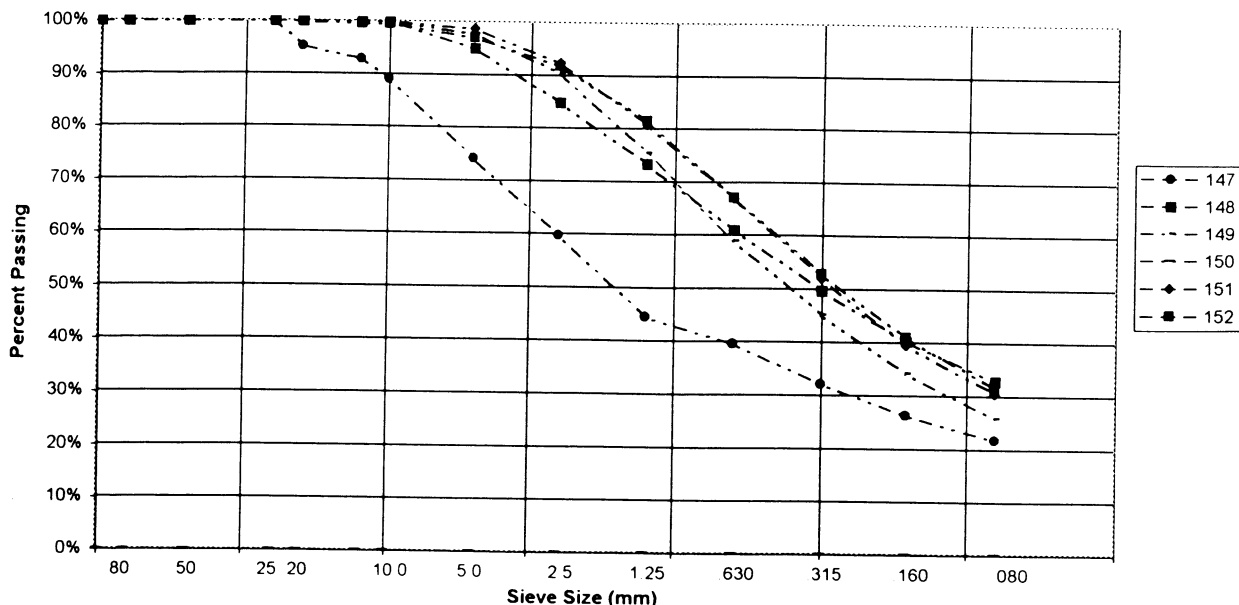


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631923-6775739
 LOGGED BY: RW

HOLE No.: 30150
 DATE COMP: 08/03/2004

FIELD NO:	147	148	149	150	151	152
LAB NO:	147	148	149	150	151	152
DEPTH:	0.9-1.2	1.8-2.4	3.7-4.3	5.3-5.5	6.4-7.3	7.9-8.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%		100%	100%
80.0	100%	100%	100%		100%	100%
50.0	100%	100%	100%		100%	100%
25.0	100%	100%	100%		100%	100%
20.0	95%	100%	100%		100%	100%
12.5	93%	100%	100%		100%	100%
10.0	89%	100%	100%		100%	100%
5.0	74%	95%	98%		99%	97%
2.5	60%	85%	90%		92%	92%
1.25	45%	73%	75%		81%	81%
0.630	40%	61%	59%		67%	67%
0.315	32%	50%	45%		52%	53%
0.160	26%	40%	34%		40%	41%
0.080	22%	33%	26%		30%	32%
M.C.(%)	15%	3%	14%	7%	5%	7%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	26	5	2	#VALUE!	1	3
% SAND:	52	62	72	#VALUE!	68	66
% FINES:	22	33	26	#VALUE!	30	32
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY SAND (SM)	#VALUE!	SILTY SAND (SM)	SILTY SAND (SM)

Grain Size Analysis (Percent Passing vs Grain Size)





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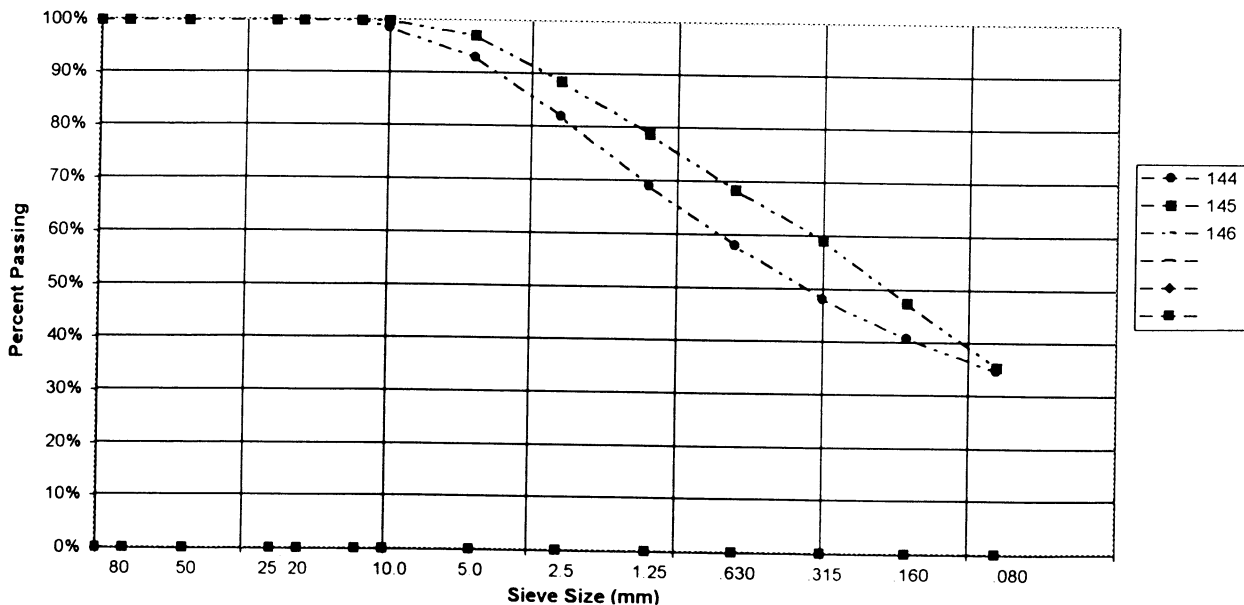
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631868-6775813
 LOGGED BY: RW

HOLE No.: 30151

DATE COMP: 08/03/2004

FIELD NO:	144	145	146		
LAB NO:	144	145	146		
DEPTH:	0.9-1.2	1.5-2.1	3.0-3.2		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	100%			
20.0	100%	100%			
12.5	100%	100%			
10.0	99%	100%			
5.0	93%	97%			
2.5	82%	89%			
1.25	69%	79%			
0.630	58%	68%			
0.315	48%	59%			
0.160	41%	48%			
0.080	35%	35%			
M.C.(%):	22%	11%	7%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	7	3	#VALUE!		
% SAND:	58	62	#VALUE!		
% FINES:	35	35	#VALUE!		
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	#VALUE!		

Grain Size Analysis (Percent Passing vs Grain Size)





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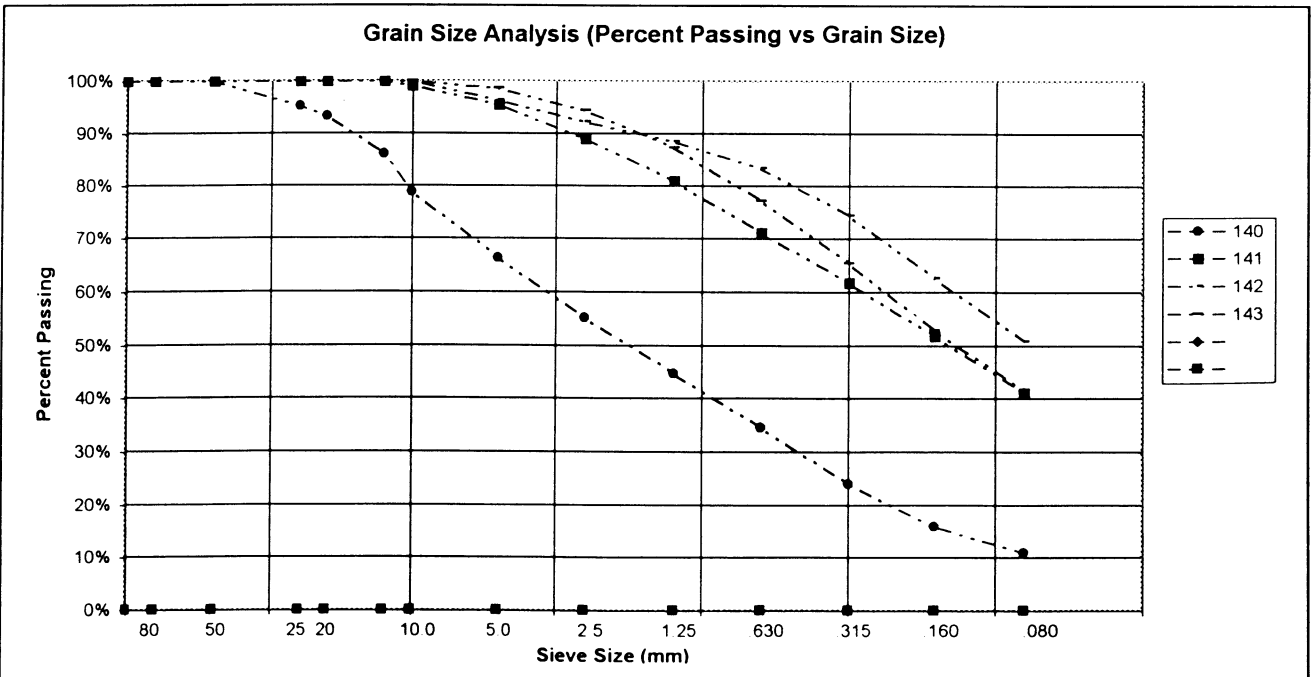


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631805-6775939
 LOGGED BY: RW

HOLE No.: 30152

DATE COMP: 08/03/2004

FIELD NO:	140	141	142	143		
LAB NO:	140	141	142	143		
DEPTH:	0.3-0.9	2.1-2.7	3.4-4.0	4.9-5.2		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	95%	100%	100%	100%		
20.0	93%	100%	100%	100%		
12.5	86%	100%	100%	100%		
10.0	79%	99%	100%	100%		
5.0	66%	96%	96%	99%		
2.5	55%	89%	92%	94%		
1.25	45%	81%	88%	87%		
0.630	35%	71%	83%	77%		
0.315	24%	62%	74%	65%		
0.160	16%	52%	63%	53%		
0.080	11%	41%	51%	41%		
M.C.(%)	3%	9%	9%	6%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	34	4	4	1		
% SAND:	55	54	45	57		
% FINES:	11	41	51	41		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND (SM)	SANDY SILT (ML)	SILTY SAND (SM)		





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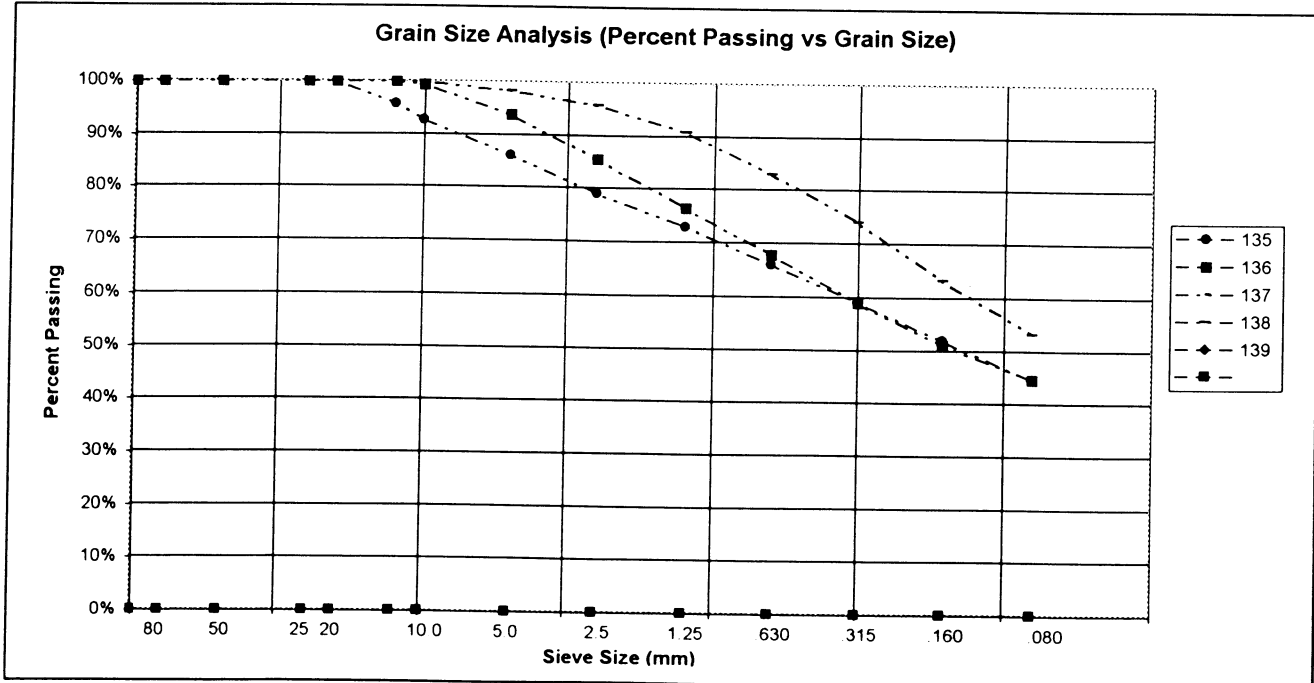


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631728-6776010
 LOGGED BY: RW

HOLE No.: 30153

DATE COMP: 08/03/2004

FIELD NO:	135	136	137	138	139	
LAB NO:	135	136	137	138	139	
DEPTH:	0.6-1.2	1.5-2.4	3.4-4.0	5.2-5.8	7.3-7.6	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%		100%		
80.0	100%	100%		100%		
50.0	100%	100%		100%		
25.0	100%	100%		100%		
20.0	100%	100%		100%		
12.5	96%	100%		100%		
10.0	93%	99%		100%		
5.0	86%	94%		98%		
2.5	79%	86%		96%		
1.25	73%	76%		91%		
0.630	66%	68%		83%		
0.315	59%	59%		74%		
0.160	52%	51%		63%		
0.080	44%	45%		53%		
M.C.(%):	11%	12%	7%	10%	5%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	14	6	#VALUE!	2	#VALUE!	
% SAND:	42	49	#VALUE!	45	#VALUE!	
% FINES:	44	45	#VALUE!	53	#VALUE!	
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	#VALUE!	SANDY SILT (ML)	#VALUE!	





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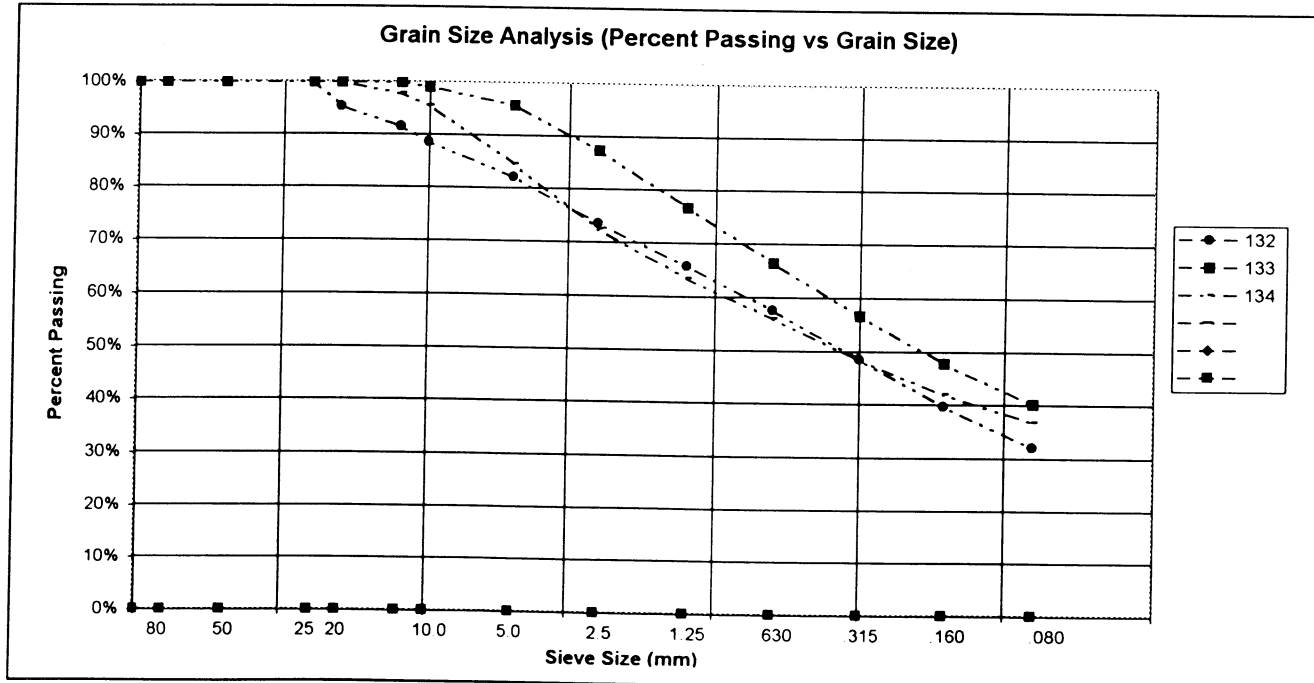


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631698-6776060
 LOGGED BY: RW

HOLE No.: 30154

DATE COMP: 07/31/2004

FIELD NO:	132	133	134		
LAB NO:	132	133	134		
DEPTH:	0.3-0.9	1.5-2.4	3.4-4.0		
TYPE:	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	100%	100%	100%		
20.0	95%	100%	100%		
12.5	92%	100%	98%		
10.0	89%	99%	96%		
5.0	82%	96%	85%		
2.5	74%	87%	73%		
1.25	66%	77%	64%		
0.630	58%	67%	56%		
0.315	49%	57%	48%		
0.160	40%	48%	42%		
0.080	32%	40%	37%		
M.C.(%):	30%	19%	13%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	18	4	15		
% SAND:	50	55	48		
% FINES:	32	40	37		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)		





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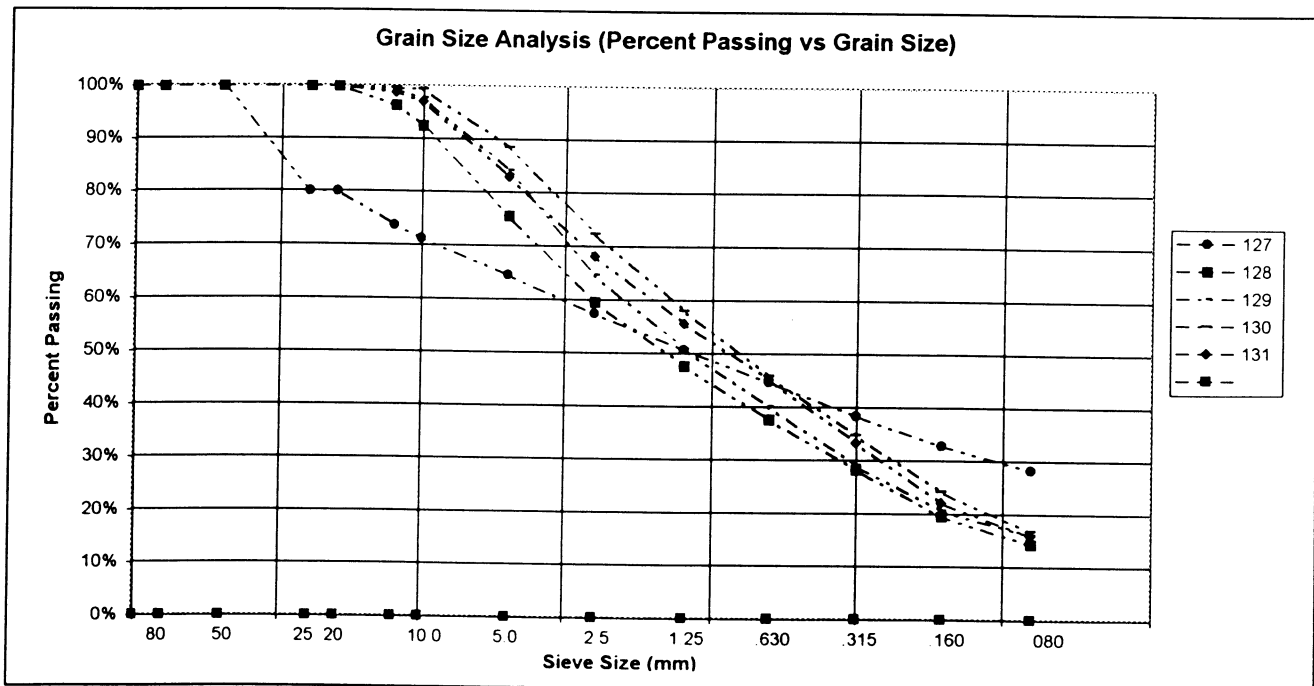


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631643-6776117
 LOGGED BY: RW

HOLE No.: 30155

DATE COMP: 07/31/2004

FIELD NO:	127	128	129	130	131	
LAB NO:	127	128	129	130	131	
DEPTH:	0.8-1.2	1.5-2.0	2.4-2.9	3.4-4.0	5.2-5.8	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	80%	100%	100%	100%	100%	
20.0	80%	100%	100%	100%	100%	
12.5	74%	96%	99%	100%	99%	
10.0	71%	93%	98%	99%	97%	
5.0	65%	76%	84%	88%	83%	
2.5	57%	60%	65%	72%	68%	
1.25	51%	48%	51%	58%	56%	
0.630	45%	38%	40%	46%	45%	
0.315	38%	28%	29%	35%	33%	
0.160	33%	20%	21%	24%	22%	
0.080	28%	14%	16%	17%	16%	
M.C.(%):	9%	8%	8%	9%	10%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	35	24	16	12	17	
% SAND:	36	61	68	72	67	
% FINES:	28	14	16	17	16	
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)	





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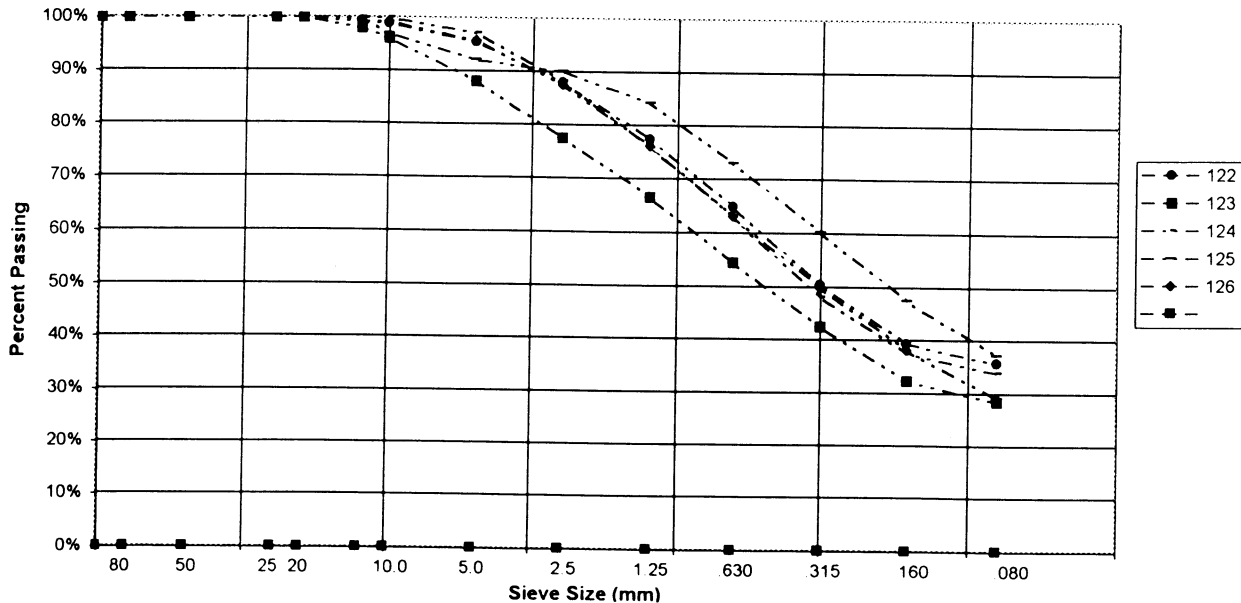
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631600-6776185
 LOGGED BY: RW

HOLE No.: 30156

DATE COMP: 07/31/2004

FIELD NO:	122	123	124	125	126	
LAB NO:	122	123	124	125	126	
DEPTH:	9.4-10.1	10.4-11.0	11.3-11.9	12.5-13.4	13.7-14.6	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	100%	100%	
20.0	100%	100%	100%	100%	100%	
12.5	99%	98%	100%	100%	99%	
10.0	99%	96%	100%	97%	99%	
5.0	96%	88%	97%	92%	96%	
2.5	88%	78%	88%	90%	88%	
1.25	77%	67%	76%	84%	76%	
0.630	65%	55%	63%	73%	63%	
0.315	50%	43%	48%	60%	50%	
0.160	39%	32%	38%	48%	38%	
0.080	36%	29%	34%	37%	29%	
M.C.(%):	5%	4%	5%	6%	5%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	4	12	3	8	4	
% SAND:	60	60	63	55	67	
% FINES:	36	29	34	37	29	
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	

Grain Size Analysis (Percent Passing vs Grain Size)





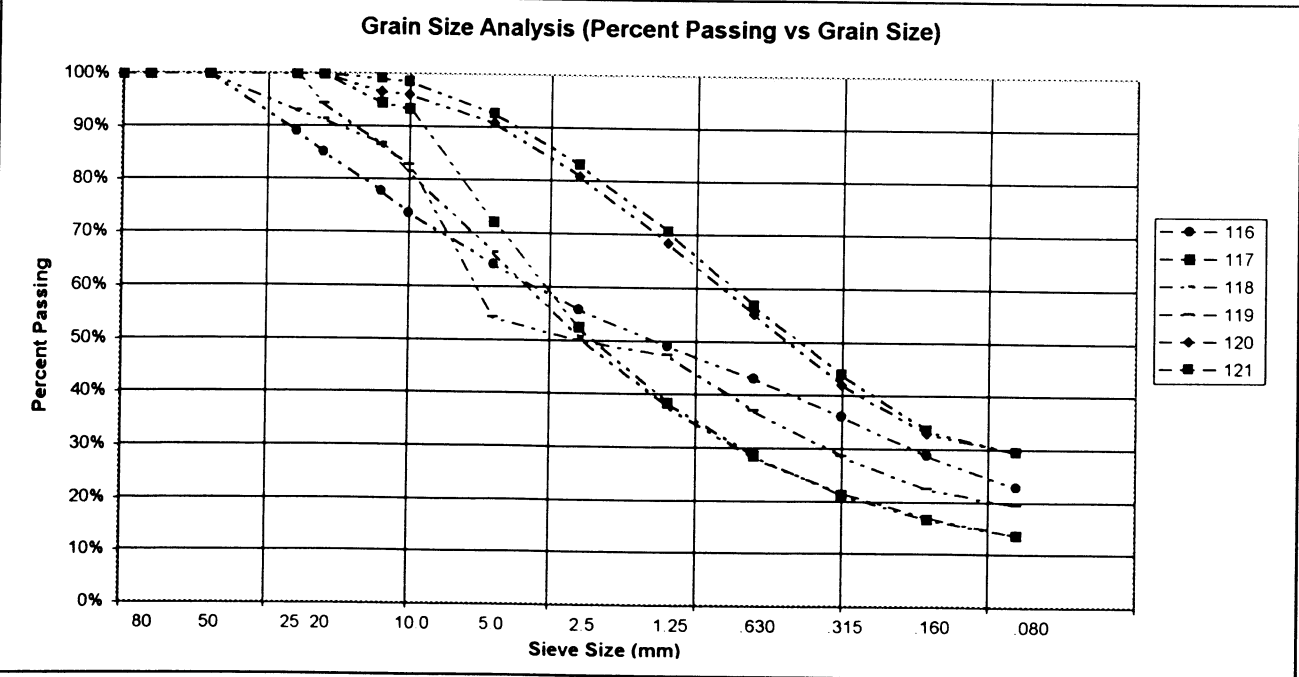
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PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631600-6776185
 LOGGED BY: RW
 HOLE No.: 30156
 DATE COMP: 07/31/2004

FIELD NO:	116	117	118	119	120	121
LAB NO:	116	117	118	119	120	121
DEPTH:	0.9-1.5	1.5-2.4	3.0-4.0	4.9-5.5	6.4-7.0	7.9-8.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	89%	100%	93%	100%	100%	100%
20.0	85%	100%	91%	94%	100%	100%
12.5	78%	95%	87%	87%	97%	99%
10.0	74%	93%	82%	83%	96%	99%
5.0	64%	72%	66%	54%	91%	93%
2.5	56%	53%	51%	50%	81%	83%
1.25	49%	38%	38%	47%	68%	71%
0.630	43%	29%	28%	37%	55%	57%
0.315	36%	21%	22%	29%	42%	44%
0.160	29%	17%	17%	23%	33%	34%
0.080	23%	14%	14%	19%	30%	29%
M.C.(%):	24%	7%	7%	7%	6%	6%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	36	28	34	46	9	7
% SAND:	41	58	53	35	61	63
% FINES:	23	14	14	19	30	29
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND (SM)	SILTY SAND (SM)





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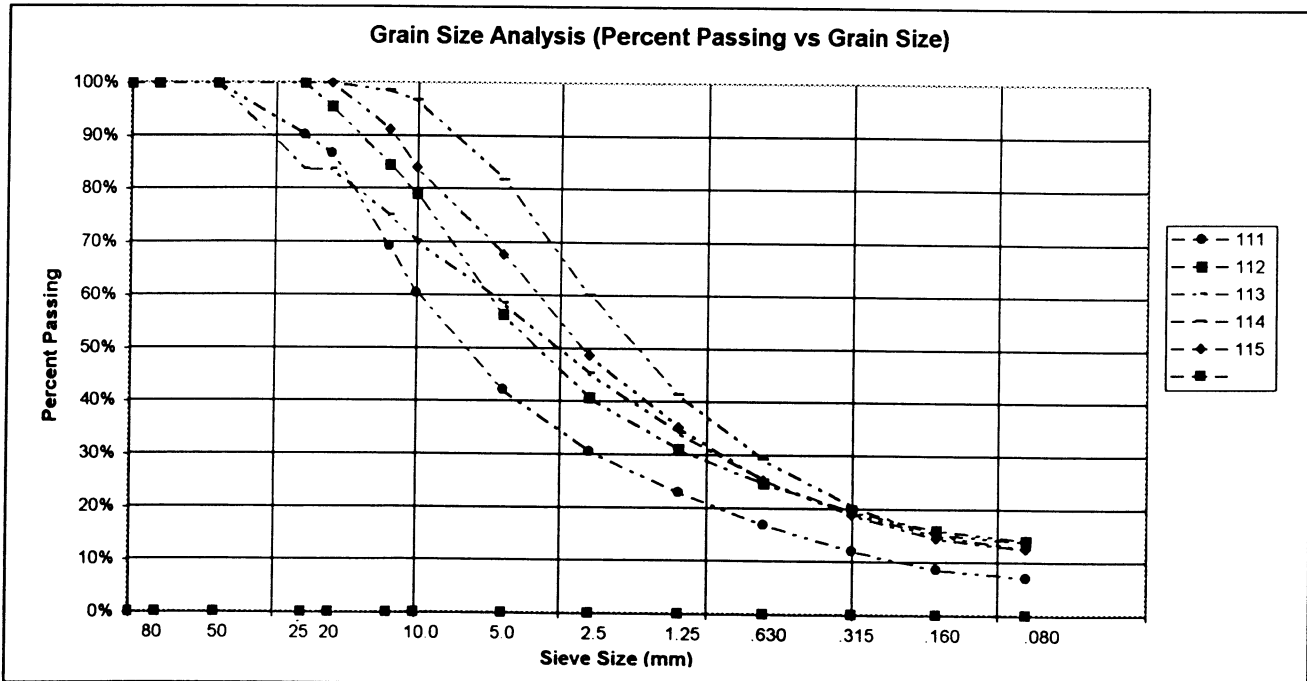


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631655-6776190
 LOGGED BY: RW

HOLE No.: 30157

DATE COMP: 07/31/2004

FIELD NO:	111	112	113	114	115	
LAB NO:	111	112	113	114	115	
DEPTH:	0.3-0.9	1.5-2.1	2.1-2.7	3.0-4.3	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	90%	100%	84%	100%	100%	
20.0	87%	96%	84%	100%	100%	
12.5	69%	85%	75%	99%	91%	
10.0	60%	79%	70%	97%	84%	
5.0	42%	56%	59%	82%	68%	
2.5	31%	41%	45%	60%	49%	
1.25	23%	31%	34%	41%	35%	
0.630	17%	25%	25%	29%	25%	
0.315	12%	20%	19%	20%	19%	
0.160	9%	16%	15%	15%	14%	
0.080	7%	14%	13%	14%	13%	
M.C.(%):	4%	6%	5%	4%	6%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	58	44	41	18	32	
% SAND:	35	42	46	68	55	
% FINES:	7	14	13	14	13	
CLASSIFICATION	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	





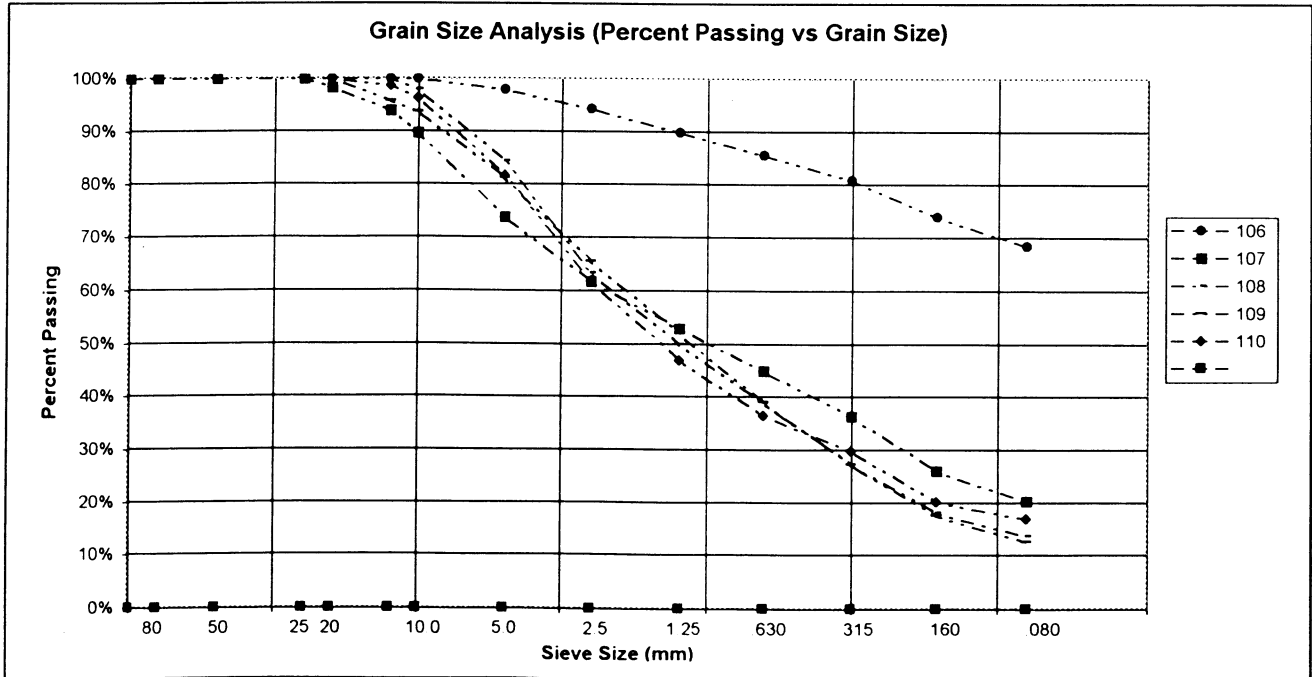
HOGGAN ENGINEERING & TESTING (1980) LTD.

An Affiliate of J. R. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30158
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631563-6776272
 LOGGED BY: RW DATE COMP: 07/30/2004

FIELD NO:	106	107	108	109	110	
LAB NO:	106	107	108	109	110	
DEPTH:	0.9-1.2	1.5-2.4	2.7-3.4	3.7-4.3	4.6-5.2	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	100%	100%	
20.0	100%	98%	100%	100%	100%	
12.5	100%	94%	100%	96%	99%	
10.0	100%	90%	98%	94%	96%	
5.0	98%	74%	84%	81%	82%	
2.5	94%	62%	63%	66%	62%	
1.25	90%	53%	50%	52%	47%	
0.630	86%	45%	39%	39%	37%	
0.315	81%	36%	27%	27%	30%	
0.160	74%	26%	18%	18%	20%	
0.080	68%	20%	14%	13%	17%	
M.C.(%)	93%	11%	9%	8%	8%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	2	26	16	19	18	
% SAND:	30	54	71	69	65	
% FINES:	68	20	14	13	17	
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	





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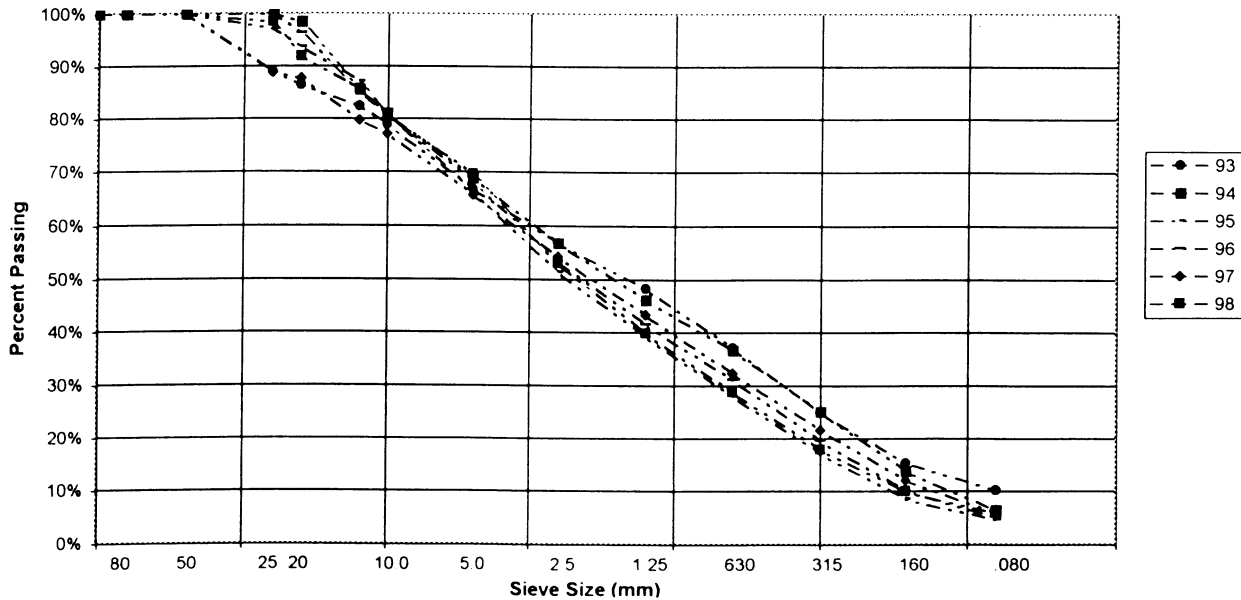
An Affiliate of J. R. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30159
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631517-6776361
 LOGGED BY: RW DATE COMP: 07/30/2004

FIELD NO:	93	94	95	96	97	98
LAB NO:	93	94	95	96	97	98
DEPTH:	0.3-0.9	1.5-2.1	3.0-3.7	4.6-5.2	5.2-5.8	6.7-7.3
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	89%	100%	97%	100%	89%	99%
20.0	87%	99%	94%	96%	88%	92%
12.5	83%	86%	87%	85%	80%	86%
10.0	79%	81%	81%	81%	77%	81%
5.0	67%	69%	66%	68%	66%	70%
2.5	57%	57%	51%	53%	54%	53%
1.25	48%	46%	39%	42%	43%	40%
0.630	37%	37%	28%	31%	32%	29%
0.315	25%	25%	17%	20%	22%	18%
0.160	15%	14%	9%	10%	12%	10%
0.080	10%	6%	5%	5%	6%	6%
M.C.(%)	1%	1%	2%	4%	2%	2%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	33	31	34	32	34	30
% SAND:	57	62	62	63	60	64
% FINES:	10	6	5	5	6	6
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH GRAVEL (SW)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)

Grain Size Analysis (Percent Passing vs Grain Size)





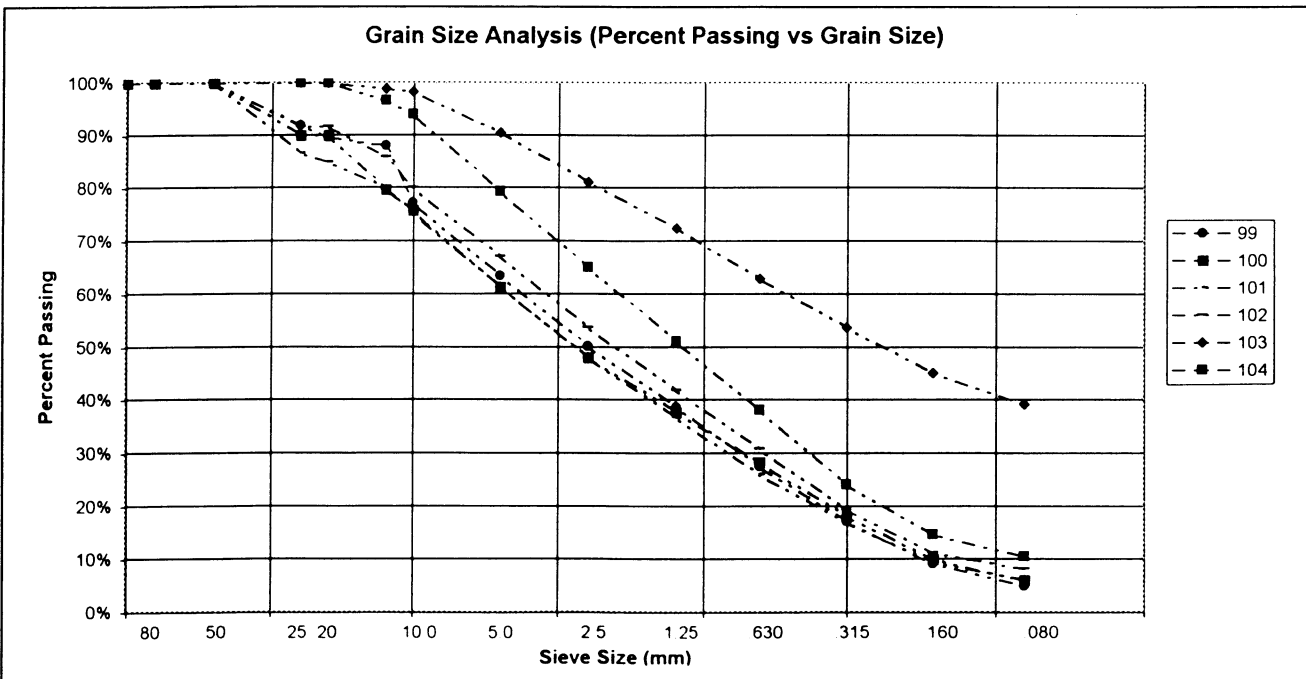
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An Associate of J. R. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30159
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631517-6776361
 LOGGED BY: RW DATE COMP: 07/30/2004

FIELD NO:	99	100	101	102	103	104
LAB NO:	99	100	101	102	103	104
DEPTH:	7.9-8.5	9.4-10.1	10.4-11.0	11.3-11.9	12.8-13.4	13.7-14.0
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	92%	90%	87%	92%	100%	100%
20.0	90%	90%	85%	92%	100%	100%
12.5	88%	80%	80%	86%	99%	97%
10.0	77%	76%	75%	80%	98%	94%
5.0	64%	61%	61%	67%	90%	79%
2.5	50%	48%	48%	54%	81%	65%
1.25	39%	38%	37%	42%	72%	51%
0.630	28%	28%	26%	31%	63%	38%
0.315	17%	18%	17%	19%	54%	24%
0.160	9%	10%	10%	11%	45%	15%
0.080	5%	6%	6%	8%	39%	11%
M.C.(%)	2%	2%	2%	2%	7%	3%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	36	39	39	33	10	21
% SAND:	59	55	55	59	51	69
% FINES:	5	6	6	8	39	11
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)





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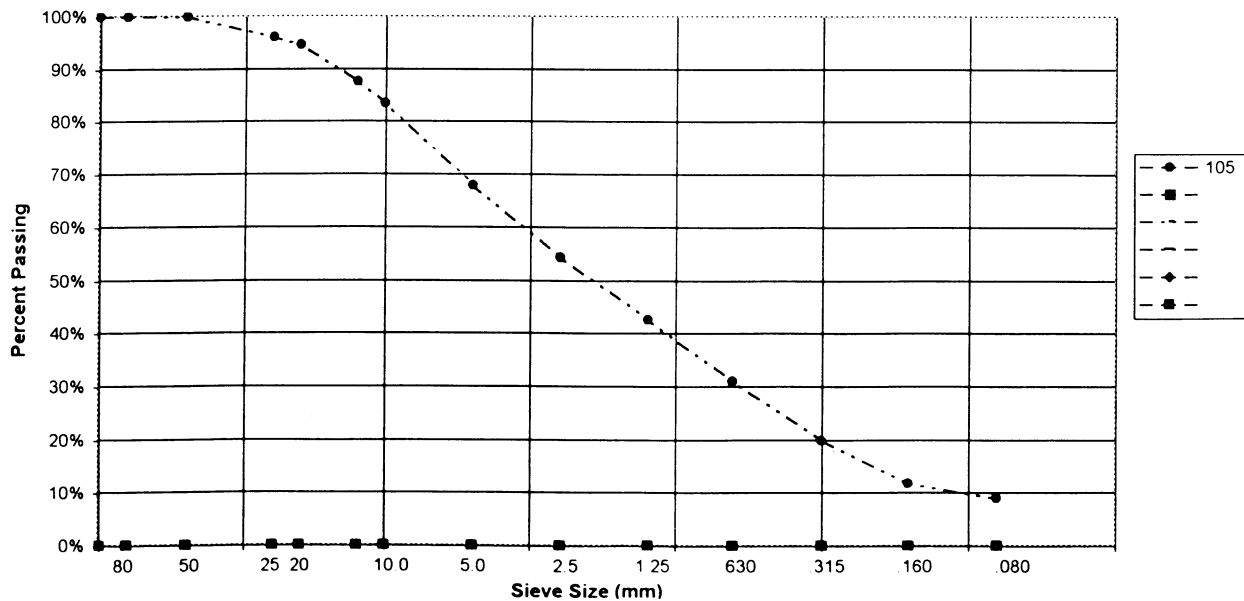
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631517-6776361
LOGGED BY: RW

HOLE No.: 30159

DATE COMP: 07/30/2004

FIELD NO:	105				
LAB NO:	105				
DEPTH:	14.3-14.9				
TYPE:	AUGER				
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	96%				
20.0	95%				
12.5	88%				
10.0	83%				
5.0	68%				
2.5	54%				
1.25	43%				
0.630	31%				
0.315	20%				
0.160	12%				
0.080	9%				
M.C.(%):	3%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX.:	0.0				
% GRAVEL:	32				
% SAND:	59				
% FINES:	9				
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)				

Grain Size Analysis (Percent Passing vs Grain Size)





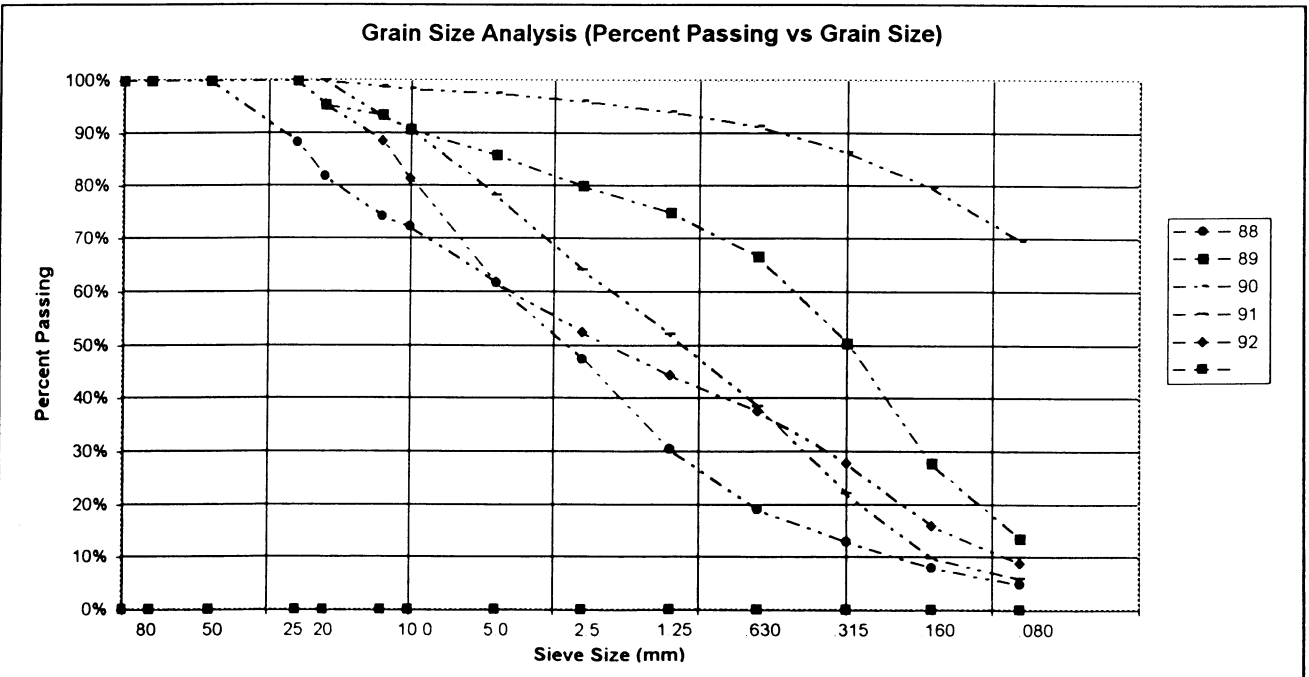
HOGGAN ENGINEERING & TESTING (1980) LTD.

An Affiliate of J. R. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30160
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631499-6776506
 LOGGED BY: RW DATE COMP: 07/29/2004

FIELD NO:	88	89	90	91	92	
LAB NO:	88	89	90	91	92	
DEPTH:	0.3-0.9	1.8-2.1	2.4-2.9	3.4-4.0	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	88%	100%	100%	100%	100%	
20.0	82%	95%	100%	100%	96%	
12.5	74%	94%	99%	93%	88%	
10.0	72%	91%	98%	91%	81%	
5.0	62%	86%	98%	78%	62%	
2.5	47%	80%	96%	64%	53%	
1.25	30%	75%	94%	52%	44%	
0.630	19%	67%	91%	38%	38%	
0.315	13%	50%	86%	22%	28%	
0.160	8%	28%	80%	10%	16%	
0.080	5%	14%	70%	6%	9%	
M.C.(%)	3%	17%	61%	11%	11%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	38	14	2	22	38	
% SAND:	57	72	28	72	53	
% FINES:	5	14	70	6	9	
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	SILTY SAND (SM)	SANDY SILT (ML)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	





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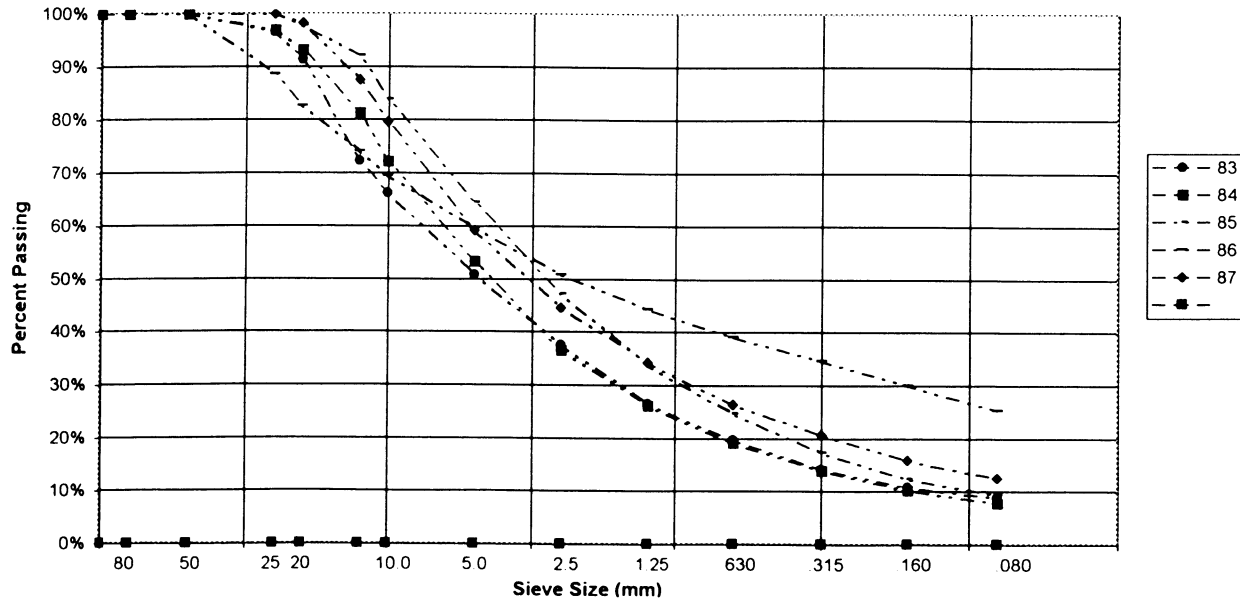
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631513-6776711
 LOGGED BY: RW

HOLE No.: 30161

DATE COMP: 07/29/2004

FIELD NO:	83	84	85	86	87	
LAB NO:	83	84	85	86	87	
DEPTH:	0.3-0.9	1.5-2.1	3.0-3.7	4.0-4.3	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	97%	97%	100%	89%	100%	
20.0	91%	93%	98%	83%	98%	
12.5	72%	81%	92%	74%	88%	
10.0	66%	72%	84%	70%	80%	
5.0	51%	53%	65%	60%	59%	
2.5	38%	37%	47%	51%	45%	
1.25	27%	26%	34%	44%	34%	
0.630	20%	19%	25%	39%	26%	
0.315	14%	14%	17%	35%	21%	
0.160	11%	10%	12%	30%	16%	
0.080	9%	8%	9%	25%	13%	
M.C.(%)	5%	5%	4%	12%	6%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	49	47	35	40	41	
% SAND:	42	45	55	34	47	
% FINES:	9	8	9	25	13	
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	

Grain Size Analysis (Percent Passing vs Grain Size)





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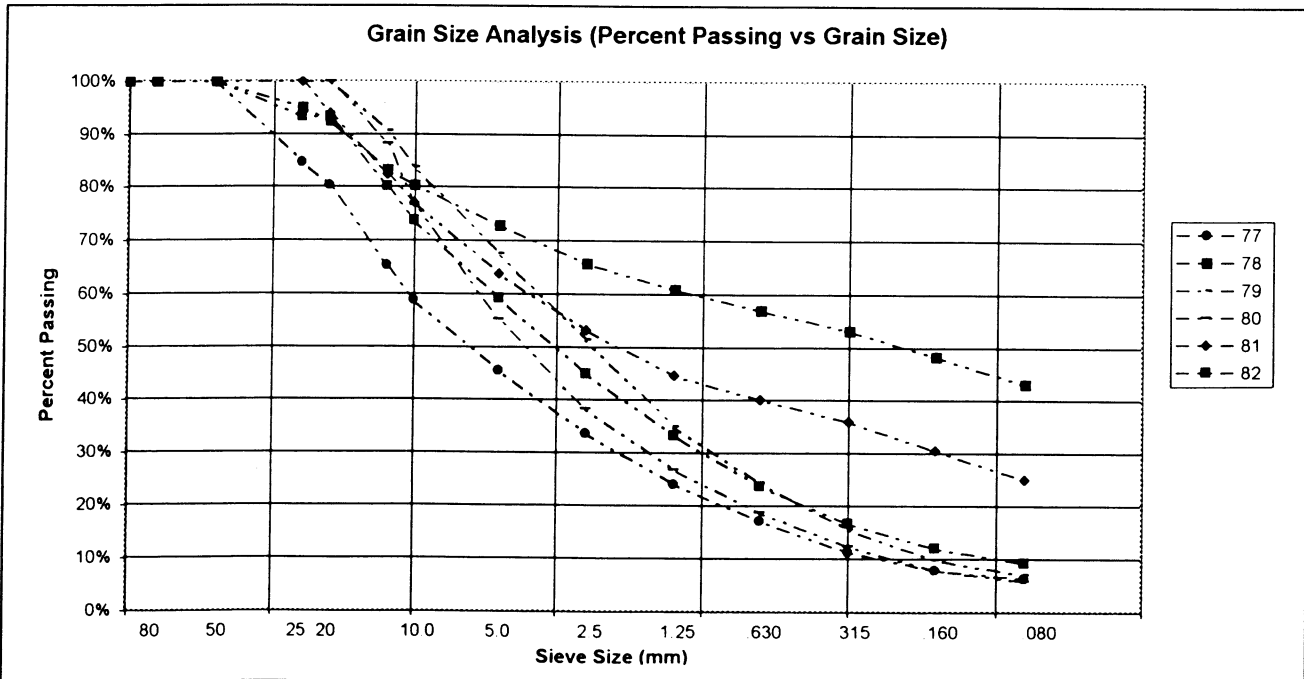


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631538-6776914
 LOGGED BY: RW

HOLE No.: 30162

DATE COMP: 07/29/2004

FIELD NO:	77	78	79	80	81	82
LAB NO:	77	78	79	80	81	82
DEPTH:	0.3-0.6	1.5-2.1	2.4-2.7	3.0-4.0	4.6-5.2	5.2-5.8
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	85%	95%	100%	100%	100%	93%
20.0	80%	93%	100%	100%	94%	93%
12.5	65%	83%	91%	88%	82%	80%
10.0	59%	80%	84%	77%	77%	74%
5.0	46%	73%	68%	55%	64%	59%
2.5	34%	66%	51%	38%	53%	45%
1.25	24%	61%	35%	27%	45%	33%
0.630	17%	57%	24%	19%	40%	24%
0.315	11%	53%	16%	12%	36%	17%
0.160	8%	48%	10%	8%	31%	12%
0.080	6%	43%	7%	6%	25%	9%
M.C.(%)	3%	18%	5%	4%	10%	4%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	54	27	32	45	36	41
% SAND:	39	30	60	49	39	50
% FINES:	6	43	7	6	25	9
CLASSIFICATION	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)





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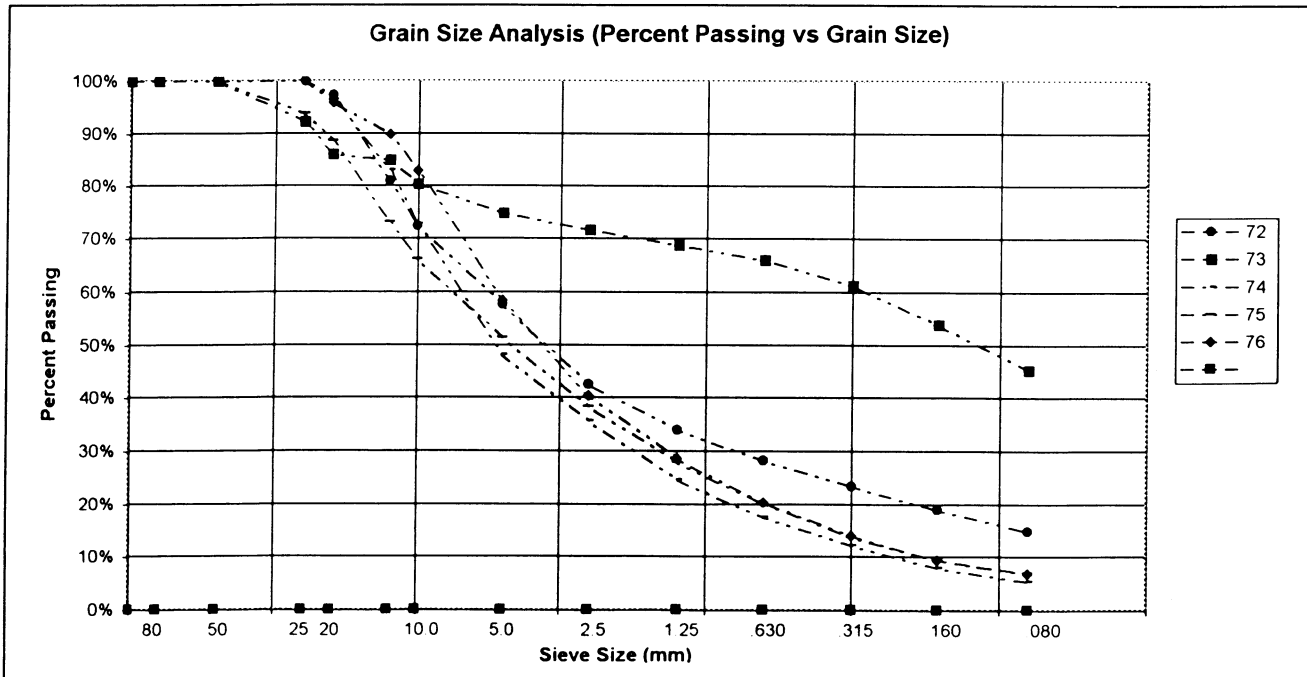


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631563-6776900
 LOGGED BY: RW

HOLE No.: 30163

DATE COMP: 07/29/2004

FIELD NO:	72	73	74	75	76	
LAB NO:	72	73	74	75	76	
DEPTH:	0.3-0.9	1.5-2.1	2.1-2.7	3.4-4.3	5.2-5.6	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	92%	100%	94%	100%	
20.0	97%	86%	97%	89%	96%	
12.5	81%	85%	83%	73%	90%	
10.0	72%	80%	73%	66%	83%	
5.0	58%	75%	48%	51%	58%	
2.5	43%	72%	36%	38%	40%	
1.25	34%	69%	25%	28%	29%	
0.630	28%	66%	17%	20%	20%	
0.315	24%	61%	12%	14%	14%	
0.160	19%	54%	8%	9%	9%	
0.080	15%	45%	5%	7%	7%	
M.C.(%):	6%	24%	4%	4%	7%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	42	25	52	49	42	
% SAND:	43	29	43	44	52	
% FINES:	15	45	5	7	7	
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	





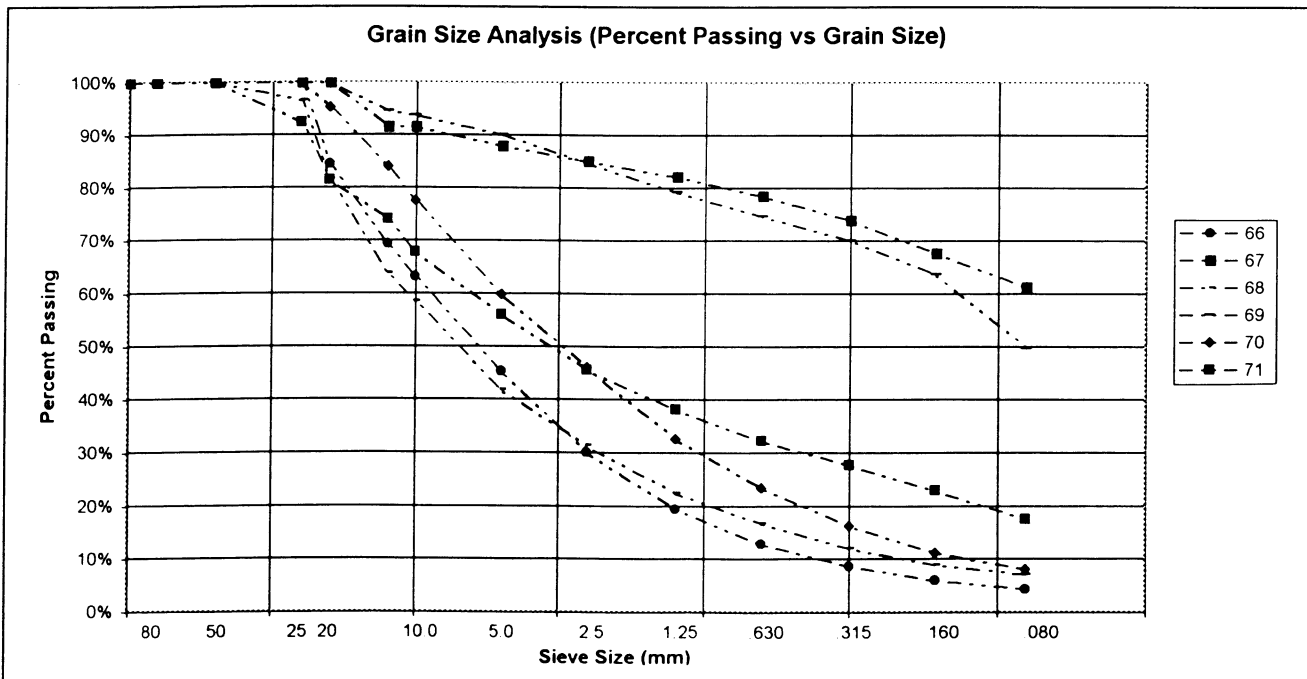
HOGGAN ENGINEERING & TESTING (1980) LTD.

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PROJECT NUMBER: 8002-318 HOLE No.: 30164
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631580-6777031
 LOGGED BY: RW DATE COMP: 07/29/2004

FIELD NO:	66	67	68	69	70	71
LAB NO:	66	67	68	69	70	71
DEPTH:	0.2-0.6	0.8-1.2	1.5-2.1	2.4-2.7	3.4-4.0	4.6-5.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	97%	100%	100%	92%
20.0	85%	100%	82%	100%	95%	81%
12.5	69%	91%	64%	95%	84%	74%
10.0	63%	91%	59%	94%	78%	68%
5.0	45%	88%	42%	90%	60%	56%
2.5	30%	85%	31%	85%	46%	46%
1.25	19%	82%	22%	79%	33%	38%
0.630	13%	79%	17%	75%	24%	32%
0.315	9%	74%	12%	70%	16%	28%
0.160	6%	68%	9%	64%	11%	23%
0.080	4%	61%	7%	50%	8%	18%
M.C.(%)	3%	43%	3%	19%	3%	9%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	55	12	58	10	40	44
% SAND:	41	27	35	40	52	38
% FINES:	4	61	7	50	8	18
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	SANDY SILT (ML)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	SILTY SAND (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY GRAVEL WITH SAND (GM)





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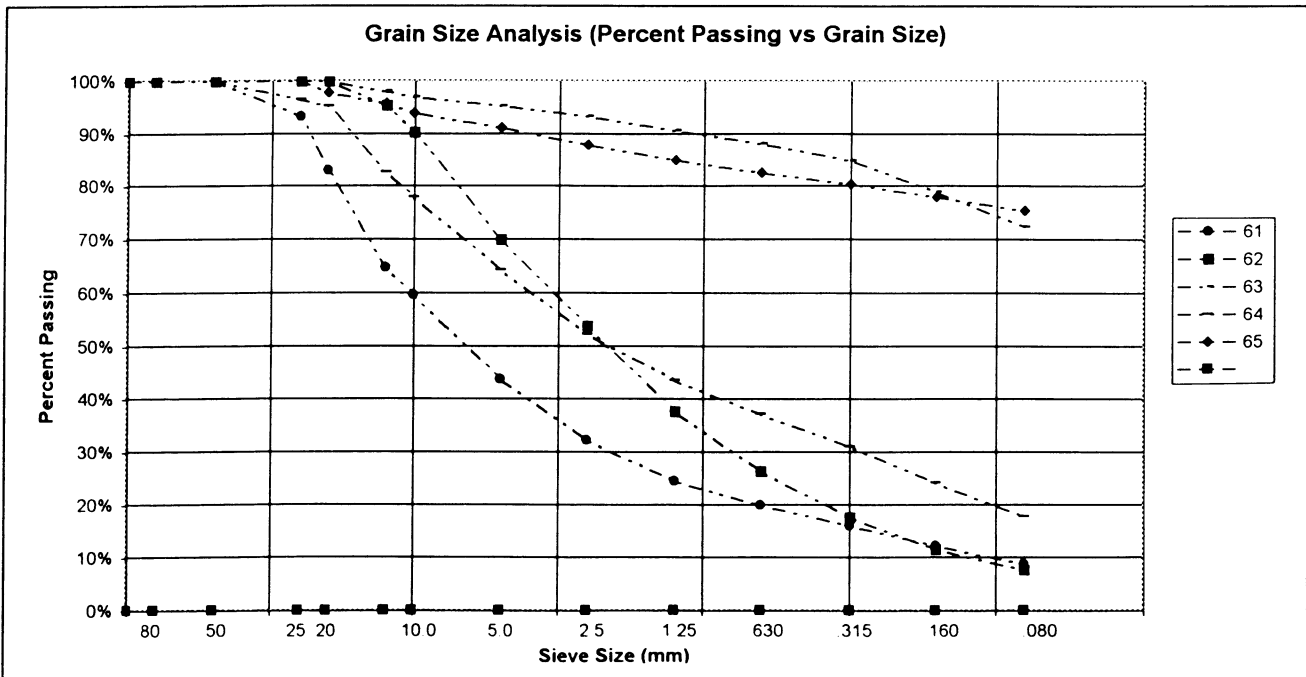


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631607-6777126
 LOGGED BY: RW

HOLE No.: 30165

DATE COMP: 07/29/2004

FIELD NO.:	61	62	63	64	65	
LAB NO.:	61	62	63	64	65	
DEPTH:	0.3-0.9	1.5-2.1	3.4-4.0	4.1-4.4	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE:	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	93%	100%	100%	97%	100%	
20.0	83%	100%	100%	95%	98%	
12.5	65%	95%	98%	83%	96%	
10.0	60%	90%	97%	78%	94%	
5.0	44%	70%	95%	64%	91%	
2.5	32%	54%	93%	52%	88%	
1.25	25%	38%	91%	43%	85%	
0.630	20%	26%	88%	37%	83%	
0.315	16%	18%	85%	31%	80%	
0.160	12%	12%	79%	24%	78%	
0.080	9%	8%	72%	18%	75%	
M.C.(%):	3%	2%	13%	5%	20%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	56	30	5	36	9	
% SAND:	35	62	23	47	16	
% FINES:	9	8	72	18	75	
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILT WITH SAND (ML)	SILTY SAND WITH GRAVEL (SM)	SILT WITH SAND (ML)	





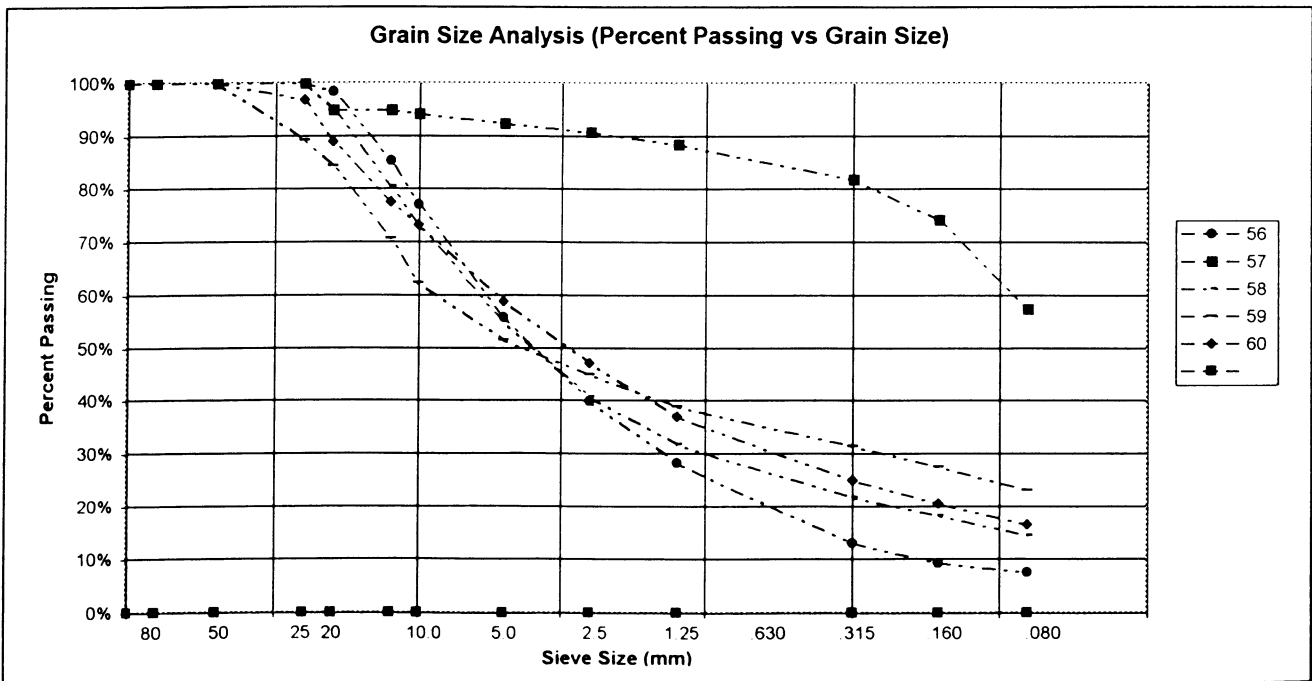
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An Affiliate of J. R. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30166
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631583-6777139
 LOGGED BY: RW DATE COMP: 07/28/2004

FIELD NO:	56	57	58	59	60	
LAB NO:	56	57	58	59	60	
DEPTH:	0.3-0.9	1.5-1.8	2.1-2.7	3.4-4.0	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	89%	97%	
20.0	98%	95%	95%	84%	89%	
12.5	85%	95%	81%	71%	78%	
10.0	77%	94%	73%	62%	73%	
5.0	56%	92%	55%	51%	59%	
2.5	40%	91%	41%	45%	47%	
1.25	28%	89%	32%	39%	37%	
0.630				35%	30%	
0.315	13%	82%	22%	31%	25%	
0.160	9%	74%	18%	28%	21%	
0.080	8%	57%	15%	23%	17%	
M.C.(%)	3%	24%	5%	10%	7%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	44	8	45	49	41	
% SAND:	48	35	40	28	42	
% FINES:	8	57	15	23	17	
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SANDY SILT (ML)	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	





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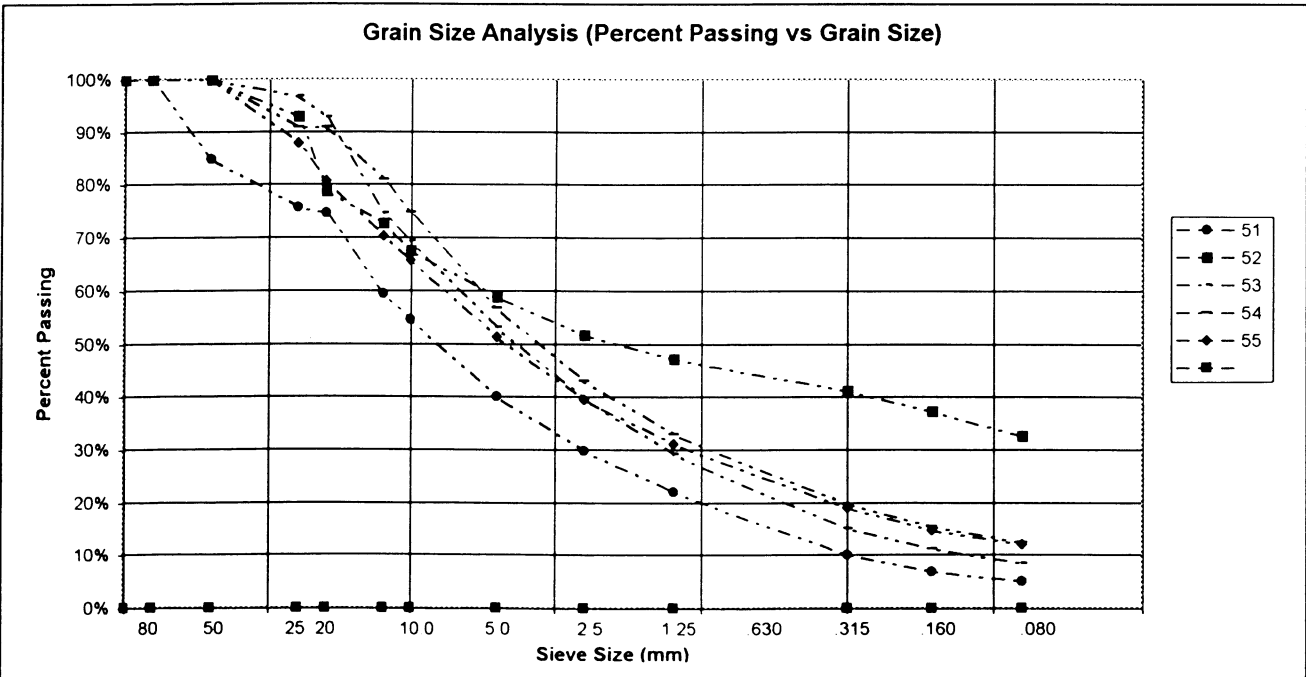


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631589-6777298
 LOGGED BY: RW

HOLE No.: 30167

DATE COMP: 07/28/2004

FIELD NO:	51	52	53	54	55	
LAB NO:	51	52	53	54	55	
DEPTH:	0.6-1.2	1.5-2.1	2.3-2.7	3.4-4.3	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	85%	100%	100%	100%	100%	
25.0	76%	93%	97%	91%	88%	
20.0	75%	79%	93%	91%	81%	
12.5	60%	73%	75%	81%	70%	
10.0	55%	68%	69%	75%	66%	
5.0	40%	59%	53%	57%	51%	
2.5	30%	52%	40%	43%	40%	
1.25	22%	47%	29%	33%	31%	
0.630						
0.315	10%	41%	15%	20%	19%	
0.160	7%	37%	11%	15%	15%	
0.080	5%	33%	8%	12%	12%	
M.C.(%)	3%	15%	4%	6%	5%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	60	41	47	43	49	
% SAND:	35	26	45	44	39	
% FINES:	5	33	8	12	12	
CLASSIFICATION	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	





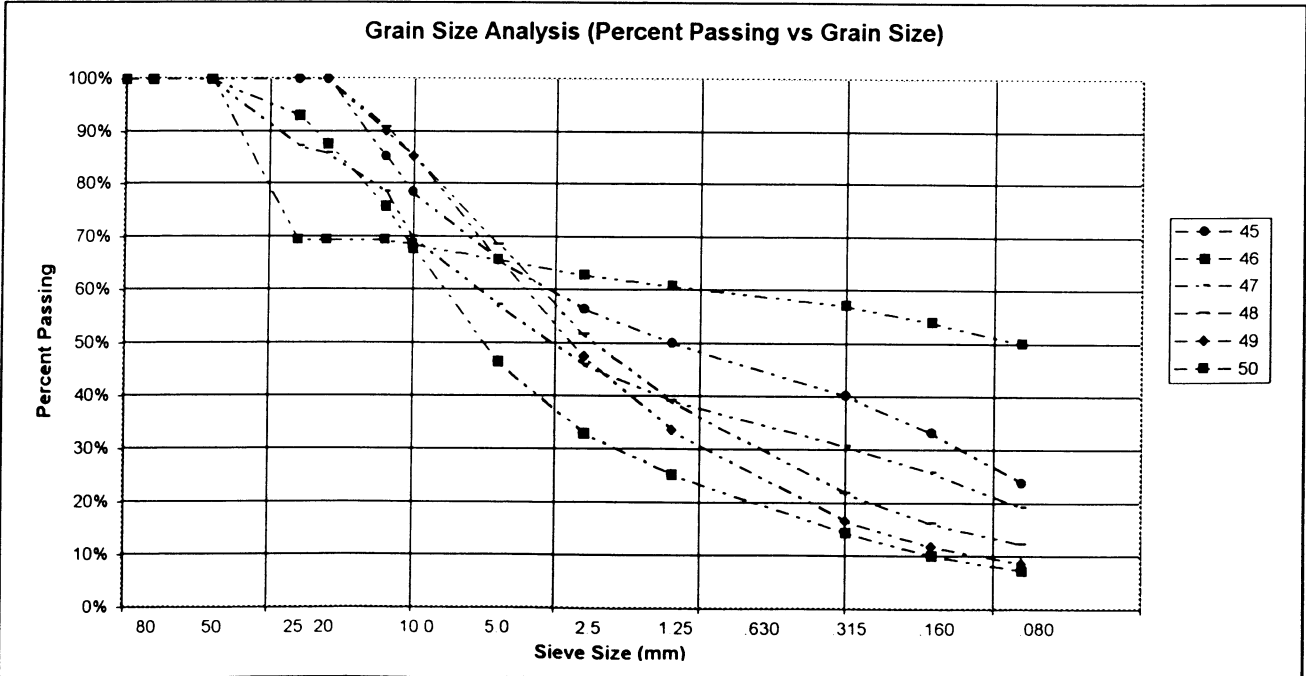
HOGGAN ENGINEERING & TESTING (1980) LTD.

An Affiliate of J. R. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30168
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631509-6777587
 LOGGED BY: RW DATE COMP: 07/28/2004

FIELD NO:	45	46	47	48	49	50
LAB NO:	45	46	47	48	49	50
DEPTH:	0.2-0.6	0.6-1.2	1.8-2.1	3.4-4.3	4.6-5.2	5.5-5.8
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	93%	87%	100%	100%	69%
20.0	100%	88%	86%	100%	100%	69%
12.5	85%	76%	79%	91%	90%	69%
10.0	79%	68%	70%	85%	85%	69%
5.0	66%	46%	57%	69%	66%	66%
2.5	56%	33%	46%	52%	48%	63%
1.25	50%	25%	39%	39%	34%	61%
0.630						
0.315	40%	14%	31%	22%	17%	57%
0.160	33%	10%	26%	16%	12%	54%
0.080	24%	7%	19%	12%	9%	50%
M.C. (%):	6%	4%	8%	5%	3%	23%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	34	54	43	31	34	34
% SAND:	42	39	38	56	57	16
% FINES:	24	7	19	12	9	50
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	GRAVELLY SILT WITH SAND (ML)





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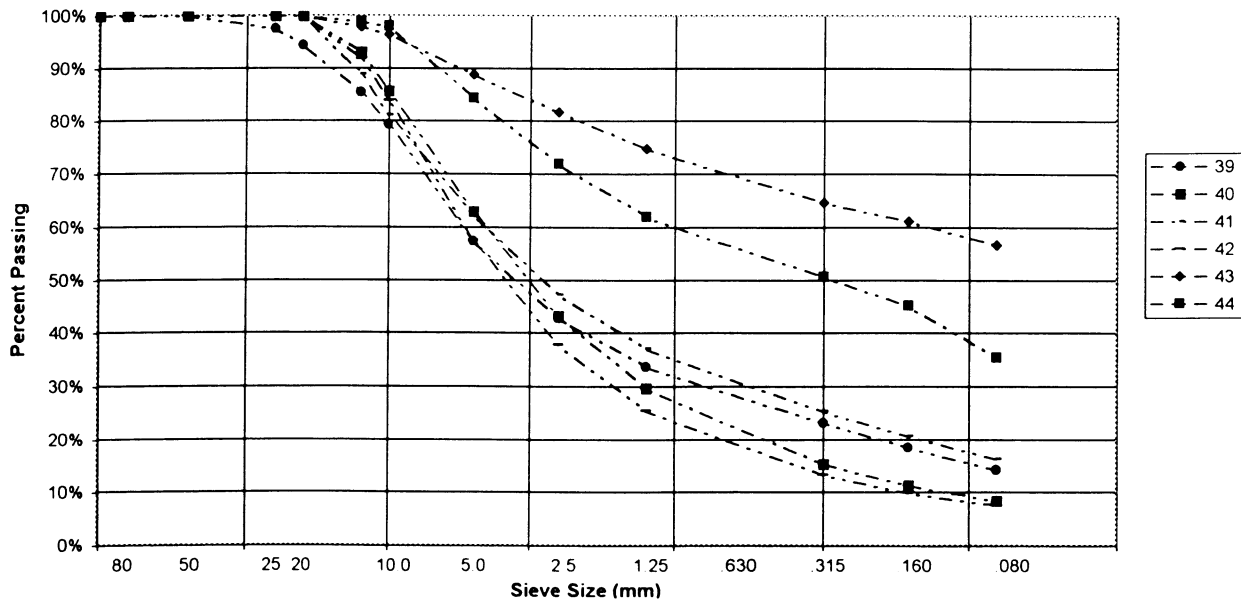
An Affiliate of J. B. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30169
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631458-6777708
 LOGGED BY: RW DATE COMP: 07/28/2004

FIELD NO:	39	40	41	42	43	44
LAB NO:	39	40	41	42	43	44
DEPTH:	0.3-0.9	1.5-2.1	2.1-2.7	3.4-4.0	4.3-4.9	4.9-5.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	98%	100%	100%	100%	100%	100%
20.0	94%	100%	100%	100%	100%	100%
12.5	85%	93%	89%	92%	98%	99%
10.0	79%	86%	81%	84%	96%	98%
5.0	57%	63%	63%	58%	89%	84%
2.5	43%	43%	47%	38%	82%	72%
1.25	34%	30%	37%	26%	75%	62%
0.630						
0.315	23%	15%	25%	13%	65%	51%
0.160	19%	11%	21%	10%	61%	45%
0.080	14%	9%	16%	8%	57%	35%
M.C.(%)	8%	6%	9%	6%	21%	13%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	43	37	37	42	11	16
% SAND:	43	54	46	50	32	49
% FINES:	14	9	16	8	57	35
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)

Grain Size Analysis (Percent Passing vs Grain Size)





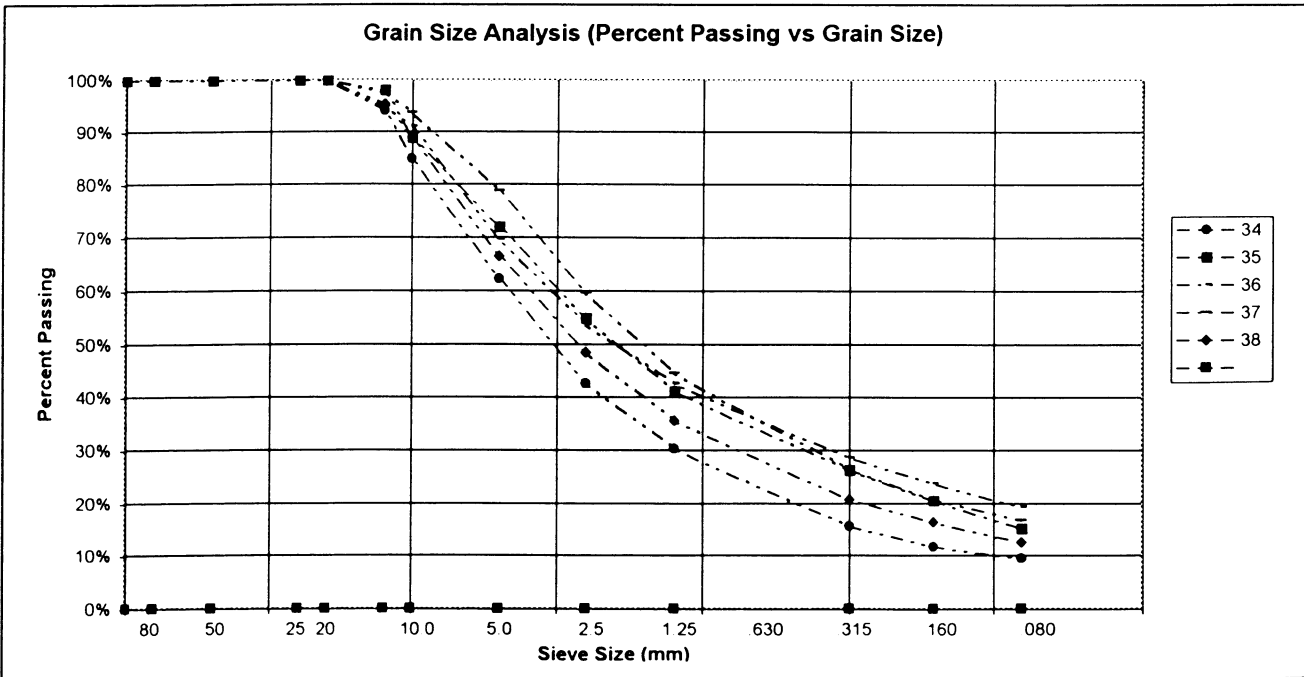
HOGGAN ENGINEERING & TESTING (1980) LTD.

An Affiliate of J. B. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318	HOLE No.: 30170
CLIENT: YTG, Transportation & Engineering	
PROJECT NAME: Geotechnical Services	
PROJECT LOCATION: Km 1691.7-1717.3	
DRILL UNIT: CME75	
HOLE LOCATION: 631414-6777845	
LOGGED BY: RW	DATE COMP: 07/28/2004

FIELD NO:	34	35	36	37	38	
LAB NO:	34	35	36	37	38	
DEPTH:	0.3-0.9	1.5-2.1	2.9-3.4	3.7-4.3	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	100%	100%	
20.0	100%	100%	100%	100%	100%	
12.5	94%	98%	95%	98%	95%	
10.0	85%	89%	91%	94%	89%	
5.0	62%	72%	70%	79%	66%	
2.5	43%	55%	54%	60%	48%	
1.25	30%	41%	43%	45%	36%	
0.630						
0.315	16%	26%	29%	26%	21%	
0.160	12%	21%	24%	21%	16%	
0.080	10%	15%	19%	17%	13%	
M.C.(%)	9%	10%	11%	10%	8%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	38	28	30	21	34	
% SAND:	53	57	50	62	54	
% FINES:	10	15	19	17	13	
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	





HOGGAN ENGINEERING & TESTING (1980) LTD.

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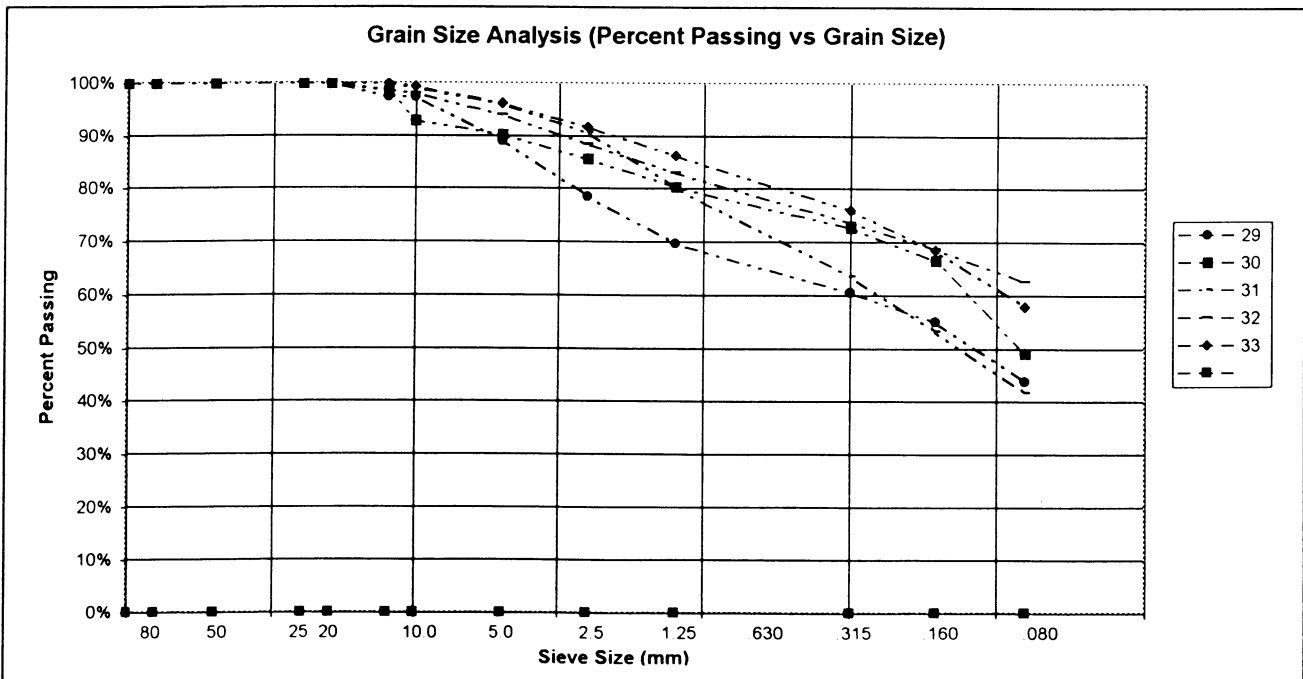


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631414-6777998
 LOGGED BY: RW

HOLE No.: 30171

DATE COMP: 07/28/2004

FIELD NO:	29	30	31	32	33	
LAB NO:	29	30	31	32	33	
DEPTH:	0.2-0.5	0.6-1.2	1.8-2.4	3.0-3.7	4.6	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	100%	100%	
20.0	100%	100%	100%	100%	100%	
12.5	97%	99%	100%	99%	100%	
10.0	97%	93%	99%	98%	99%	
5.0	89%	90%	96%	94%	96%	
2.5	79%	86%	91%	88%	92%	
1.25	70%	80%	80%	83%	86%	
0.630						
0.315	61%	73%	64%	74%	76%	
0.160	55%	67%	53%	69%	69%	
0.080	44%	49%	42%	63%	58%	
M.C.(%)	18%	28%	35%	31%	28%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	11	10	4	6	4	
% SAND:	45	41	54	31	38	
% FINES:	44	49	42	63	58	
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SANDY SILT (ML)	SANDY SILT (ML)	





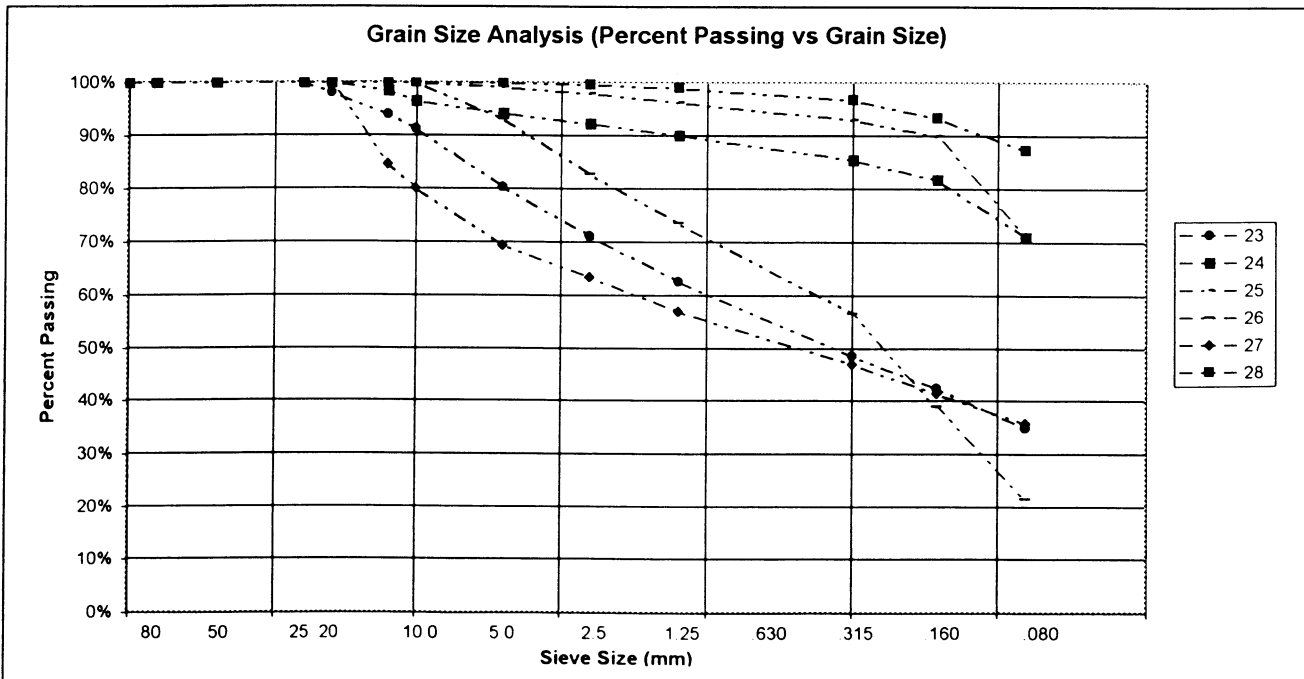
HOGGAN ENGINEERING & TESTING (1980) LTD.

An Affiliate of J. B. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30172
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631432-6778136
 LOGGED BY: RW DATE COMP: 07/28/2004

FIELD NO:	23	24	25	26	27	28
LAB NO:	23	24	25	26	27	28
DEPTH:	0.3-0.9	1.5-1.8	2.1-2.7	3.4-4.3	4.9-5.2	5.5-5.9
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	98%	100%	100%	100%	100%	100%
12.5	94%	98%	100%	100%	85%	100%
10.0	91%	96%	100%	100%	80%	100%
5.0	80%	94%	99%	93%	69%	100%
2.5	71%	92%	98%	83%	63%	100%
1.25	63%	90%	96%	74%	57%	99%
0.630						
0.315	49%	85%	93%	57%	47%	97%
0.160	42%	82%	90%	39%	41%	93%
0.080	35%	71%	71%	22%	36%	87%
M.C.(%)	15%	17%	16%	11%	8%	19%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	20	6	1	7	31	0
% SAND:	45	23	28	72	34	13
% FINES:	35	71	71	22	36	87
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILT WITH SAND (ML)	SILT WITH SAND (ML)	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)	SILT (ML)





HOGGAN ENGINEERING & TESTING (1980) LTD.

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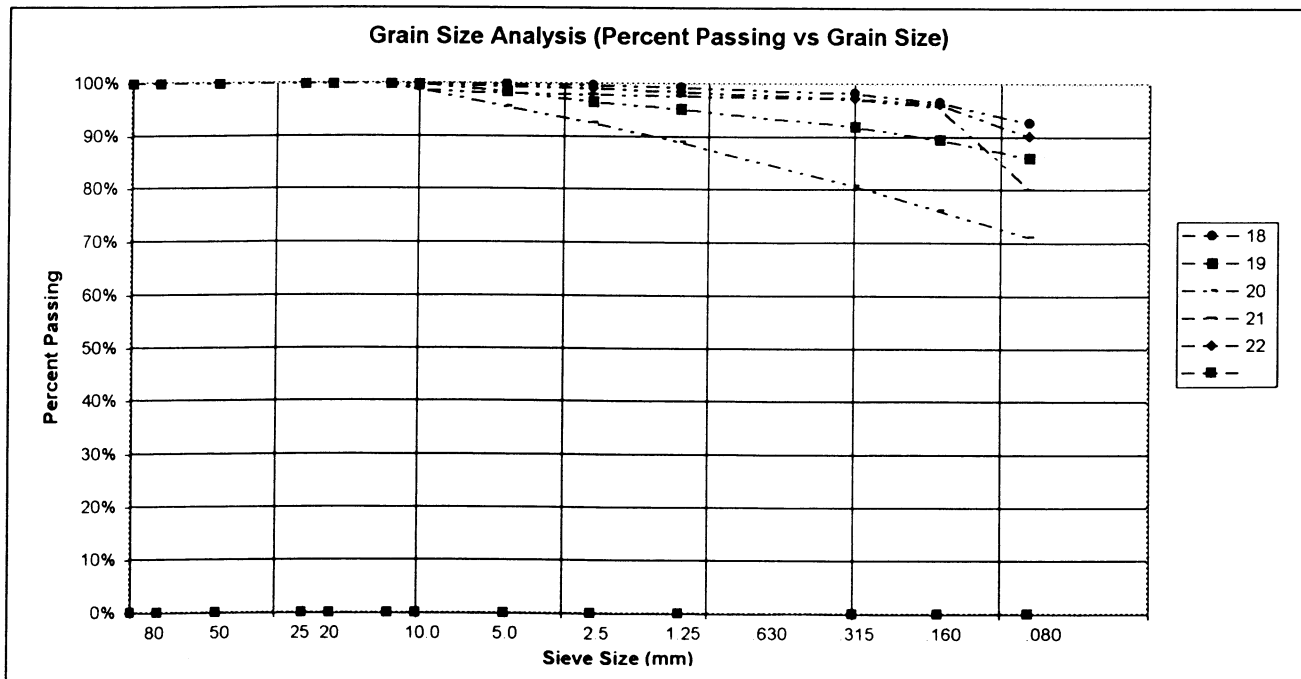


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631425-6778189
 LOGGED BY: RW

HOLE No.: 30173

DATE COMP: 07/28/2004

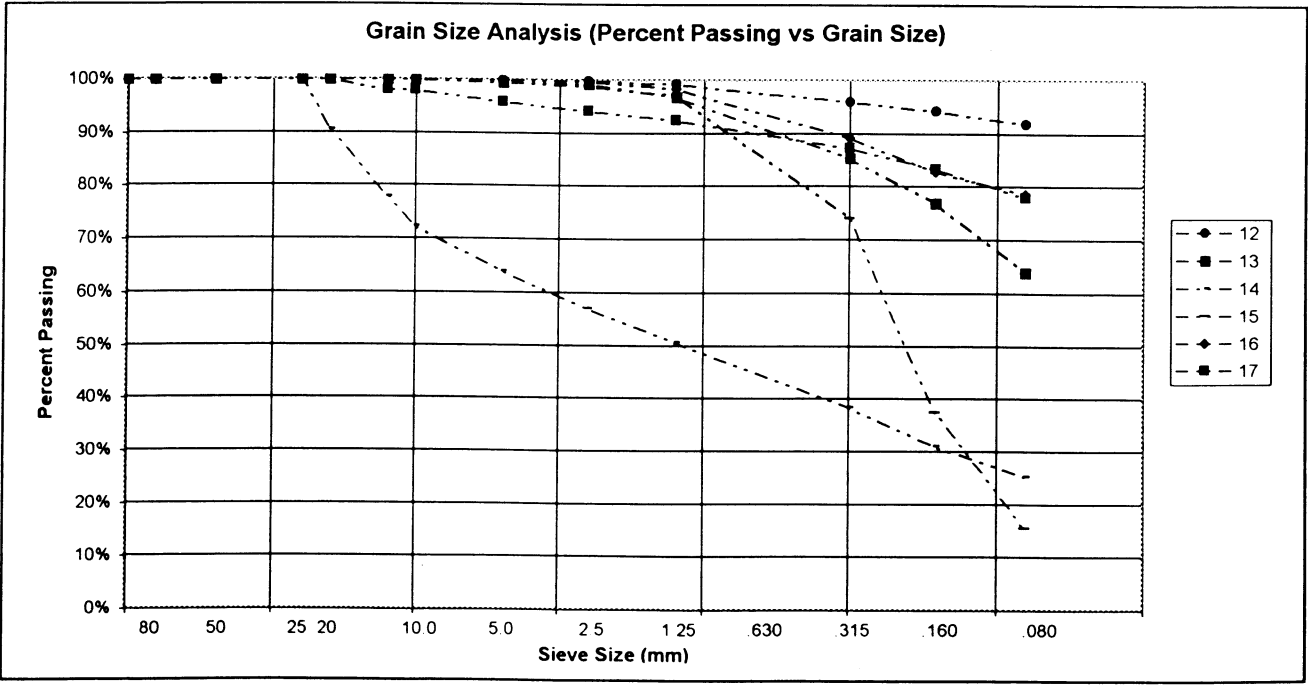
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LAB NO:	18	19	20	21	22	
DEPTH:	0.2-0.6	0.8-1.2	1.8-2.4	3.7-4.3	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	100%	100%	
20.0	100%	100%	100%	100%	100%	
12.5	100%	100%	100%	100%	100%	
10.0	100%	100%	99%	99%	100%	
5.0	100%	99%	96%	98%	100%	
2.5	100%	97%	93%	98%	99%	
1.25	99%	95%	89%	98%	99%	
0.630						
0.315	98%	92%	81%	97%	97%	
0.160	97%	90%	76%	96%	96%	
0.080	93%	86%	71%	80%	90%	
M.C. (%):	28%	40%	16%	18%	19%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	0	1	4	2	0	
% SAND:	7	12	24	18	9	
% FINES:	93	86	71	80	90	
CLASSIFICATION	SILT (ML)	SILT (ML)	SILT WITH SAND (ML)	SILT WITH SAND (ML)	SILT (ML)	





PROJECT NUMBER: 8002-318 HOLE No.: 30174
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631499-6778370
 LOGGED BY: RW DATE COMP: 07/28/2004

FIELD NO:	12	13	14	15	16	17
LAB NO:	12	13	14	15	16	17
DEPTH:	0.0-0.6	0.6-1.2	1.8-2.7	3.7-4.0	4.0-4.4	4.9-5.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	100%	100%	91%	100%	100%	100%
12.5	100%	100%	78%	100%	100%	98%
10.0	100%	100%	72%	100%	100%	98%
5.0	100%	100%	64%	100%	100%	96%
2.5	100%	99%	57%	99%	100%	94%
1.25	99%	97%	51%	97%	98%	93%
0.630						
0.315	96%	85%	38%	74%	89%	87%
0.160	94%	77%	31%	37%	83%	83%
0.080	92%	64%	25%	16%	79%	78%
M.C.(%)	31%	50%	12%	17%	45%	20%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	0	0	36	0	0	4
% SAND:	8	36	39	84	21	18
% FINES:	92	64	25	16	79	78
CLASSIFICATION	SILT (ML)	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILT WITH SAND (ML)	SILT WITH SAND (ML)





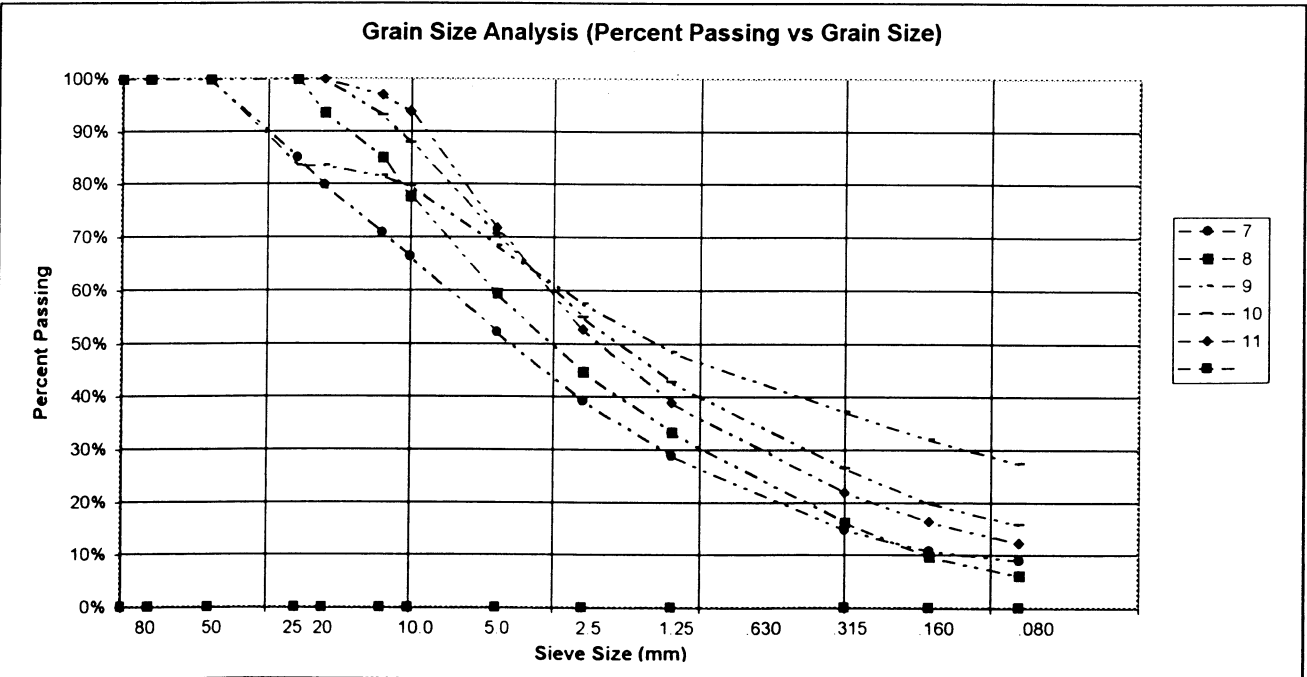
HOGGAN ENGINEERING & TESTING (1980) LTD.

An Affiliate of J. R. Payne & Associates Ltd.



PROJECT NUMBER: 8002-318 HOLE No.: 30175
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631598-6778568
 LOGGED BY: RW DATE COMP: 07/28/2004

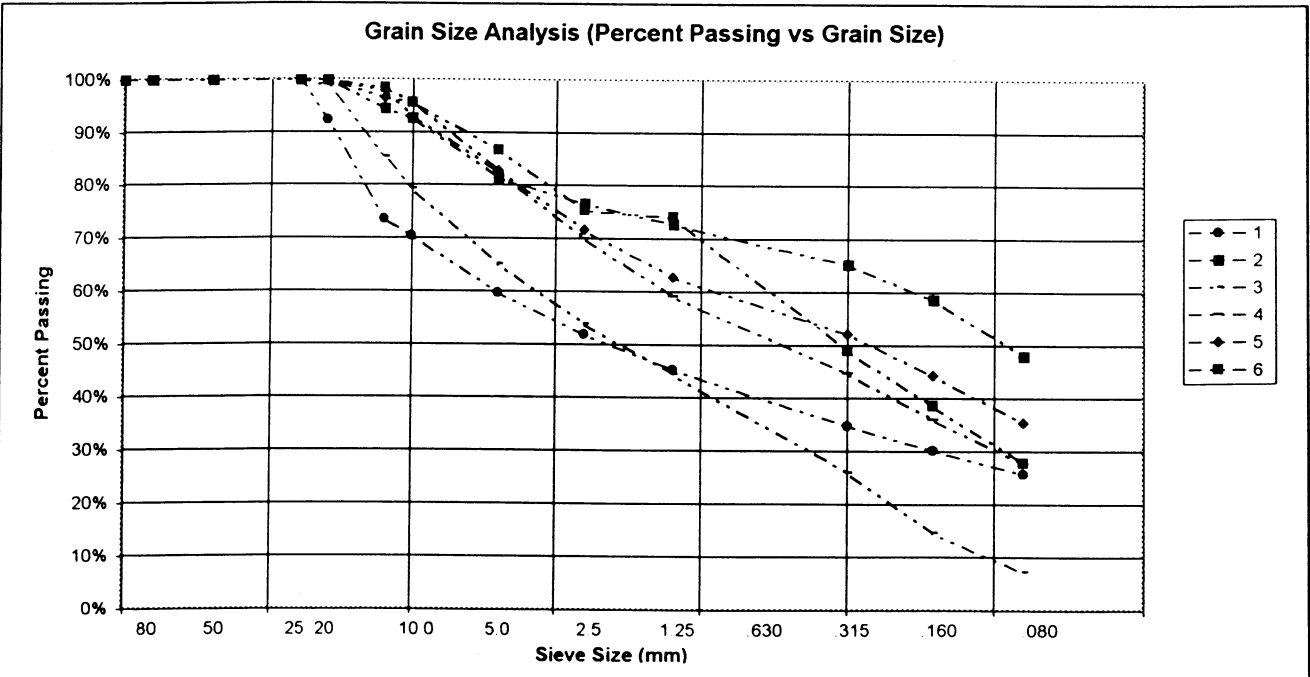
FIELD NO:	7	8	9	10	11	
LAB NO:	7	8	9	10	11	
DEPTH:	0.3-0.9	2.0-2.9	3.0-3.7	3.7-4.3	4.9-5.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	#N/A
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	85%	100%	84%	100%	100%	
20.0	80%	94%	84%	100%	100%	
12.5	71%	85%	82%	93%	97%	
10.0	66%	78%	80%	88%	94%	
5.0	52%	60%	68%	71%	72%	
2.5	39%	45%	58%	55%	53%	
1.25	29%	33%	49%	43%	39%	
0.630						
0.315	15%	16%	37%	27%	22%	
0.160	11%	10%	32%	20%	16%	
0.080	9%	6%	27%	16%	12%	
M.C.(%):	6%	7%	16%	11%	9%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	48	40	32	29	28	
% SAND:	43	53	41	55	60	
% FINES:	9	6	27	16	12	
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	





PROJECT NUMBER: 8002-318 HOLE No.: 30176
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631642-6778670
 LOGGED BY: RW DATE COMP: 07/28/2004

FIELD NO:	1	2	3	4	5	6
LAB NO:	1	2	3	4	5	6
DEPTH:	0.2-0.5	0.6-1.2	1.5-2.1	2.4-2.9	3.7-4.3	4.9-5.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	92%	100%	99%	100%	100%	100%
12.5	74%	95%	85%	98%	97%	98%
10.0	71%	93%	79%	93%	96%	96%
5.0	60%	81%	65%	82%	83%	87%
2.5	52%	77%	54%	70%	72%	75%
1.25	45%	73%	45%	59%	63%	74%
0.630						
0.315	35%	65%	26%	45%	52%	49%
0.160	30%	59%	15%	36%	44%	39%
0.080	26%	48%	7%	28%	35%	28%
M.C.(%)	8%	27%	8%	16%	14%	15%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	40	19	35	18	17	13
% SAND:	34	33	58	55	47	59
% FINES:	26	48	7	28	35	28
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)



GEOTECHNICAL INVESTIGATIONS

**Highway Construction
km 1707.0 to 1717.4
Alaska Highway #1
Yukon, 2005-2006
Volume 2 of 2**



**Highways and Public Works
Transportation Engineering Branch**

Geotechnical Services

**BOX 2703, WHITEHORSE, YUKON
PHONE 867-667-8820 FAX 867-393-6447**

ORIGINAL - Do Not Remove From File

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION
km 1707.0 to 1717.4
YUKON, 2005-2006

ALASKA HIGHWAY #1

Highway Construction
km 1707.0 to 1717.4
Alaska Highway #1
Yukon, 2005-2006
Volume 2 of 2

This Data Package prepared for project viewing:

February, 2005

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

CONTENTS

Volume 1 of 2

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING km 1707.0 to 1717.4 Alaska Highway

Subsurface Exploration and Test Report Sheets are provided.

The reports for the Centreline testing holes are arranged according to project location, starting at km 1707+000 and increasing to km 1717+400.

Laboratory Testing Result Sheets are provided.

The reports for the centreline holes are arranged according to test hole number, starting at 30090 and increasing to 30176.

2004 TEST HOLES 30090 to 30136
 TEST HOLES 30148 to 30176

*Note: For Centreline subsurface geotechnical information between station 1712+400 and 1713+900 refer to the km 1713.0 LHS Granular Source Section.

CONTENTS (continued)**Volume 2 of 2****GRANULAR SOURCE km 1713.0 LHS ALASKA HIGHWAY Pit ID 115 G-12**

Location plans, photographs, and subsurface exploration and testing report sheets are provided.

Auger Testing

2003 TEST HOLES 2693 to 2716 shown with prefix 651-

Test Pit Testing

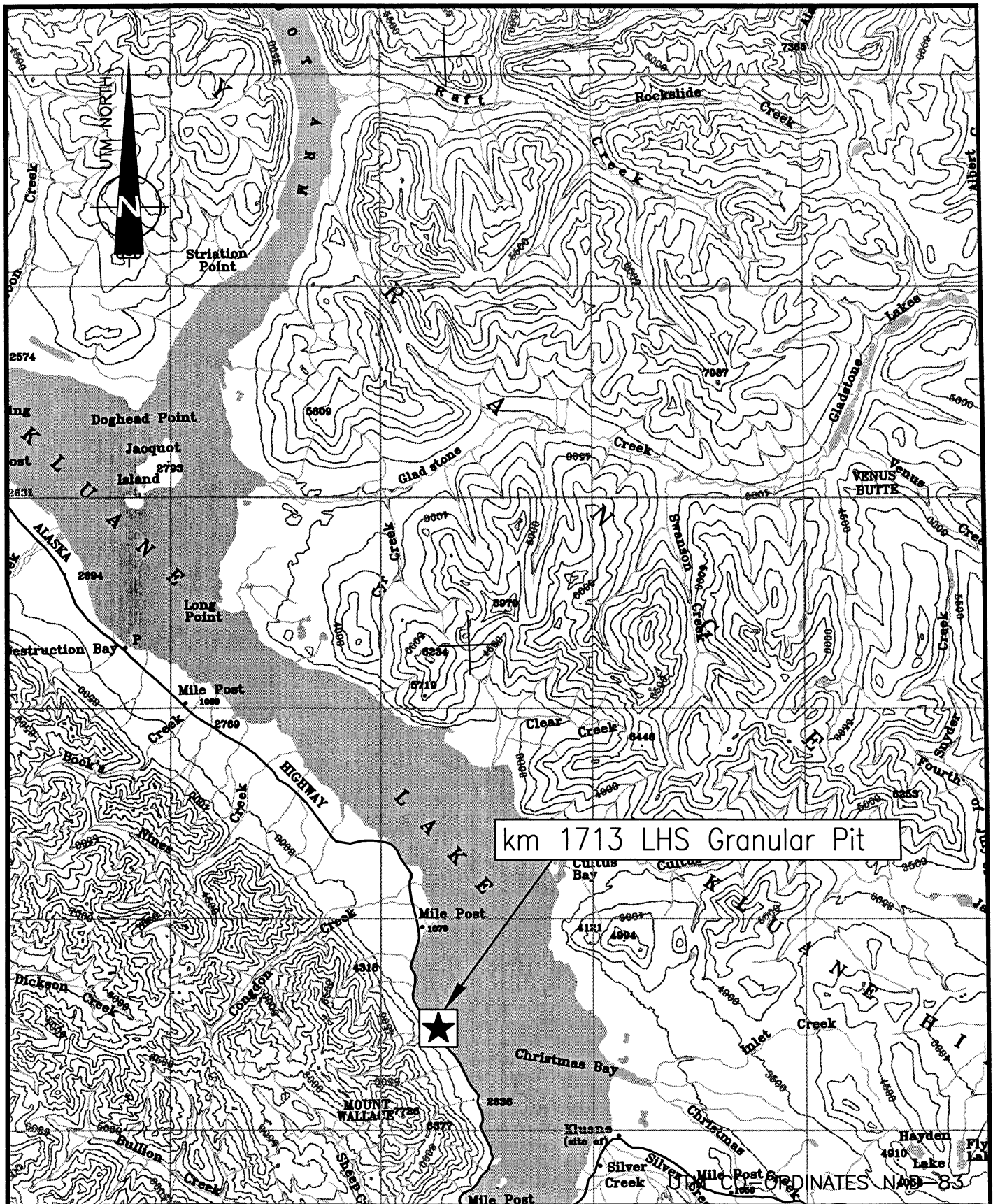
2002 TEST PITS 2569 to 2576 shown with prefix 640-
2003 TEST PITS 2732 to 2744 shown with prefix 654-
2003 TEST PITS 2754 to 2764 shown with prefix 654-
2003 TEST PITS 2853 to 2858 shown with prefix 663-
2004 TEST PITS 30137 to 30147 shown with no prefix

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION
km 1707.0 to 1717.4
YUKON, 2005-2006

ALASKA HIGHWAY #1

GRANULAR SOURCE TESTING
km 1713.0 LHS
ALASKA HIGHWAY



km 1713 LHS Granular Pit

pit file:	115 G-12
	115G/02 ???
drawn:	JJM
date:	2005-02-09
scale:	1: 250,000
drwg:	115g-12Ltk



Highways and Public Works

Transportation Engineering Branch

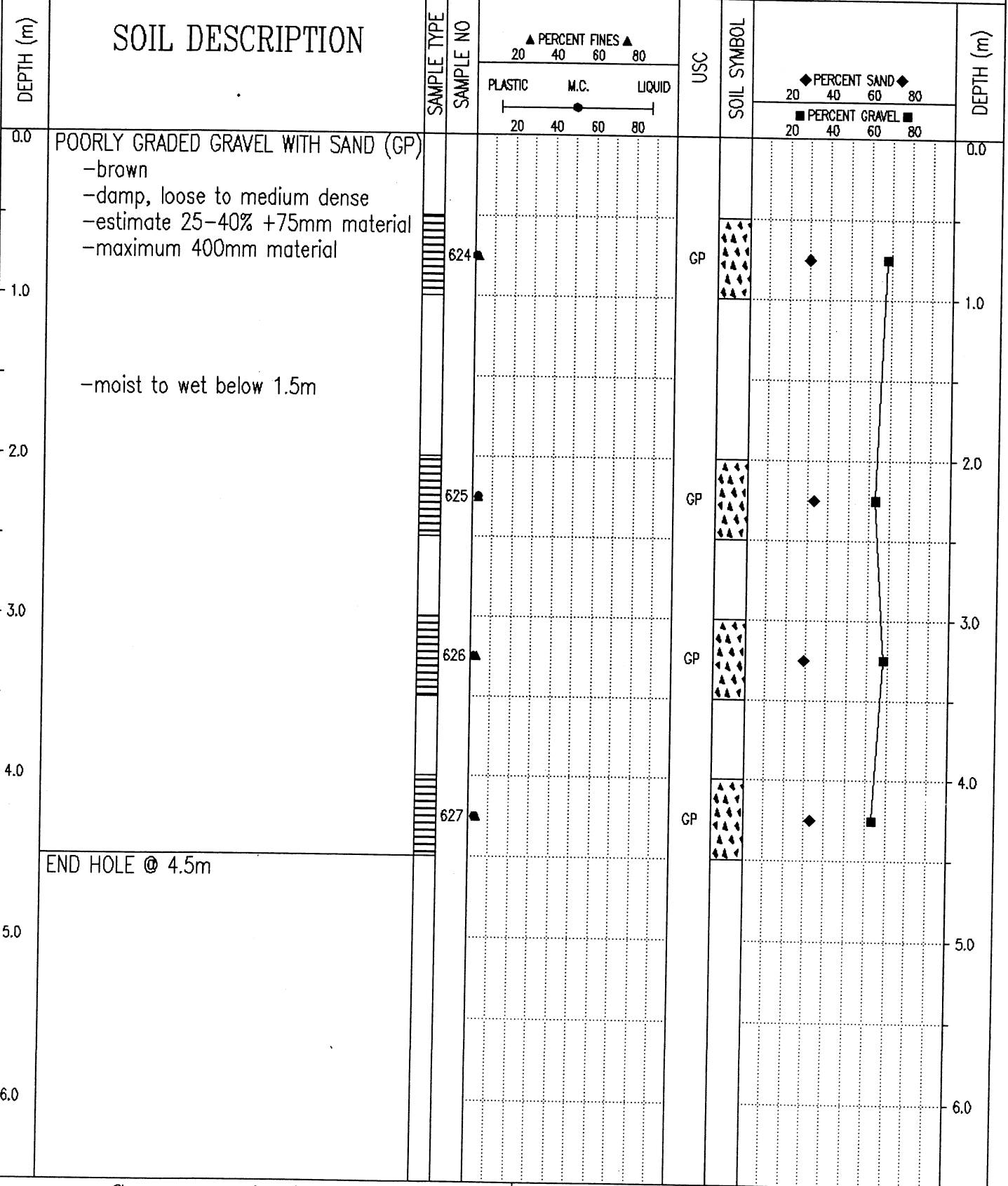
KEY PLAN
 GRANULAR PIT
 km 1713.0 LHS
 (Williscroft Creek)
 ALASKA HWY. YUKON

Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

September 2002
Book # 640

Test Pit Logs

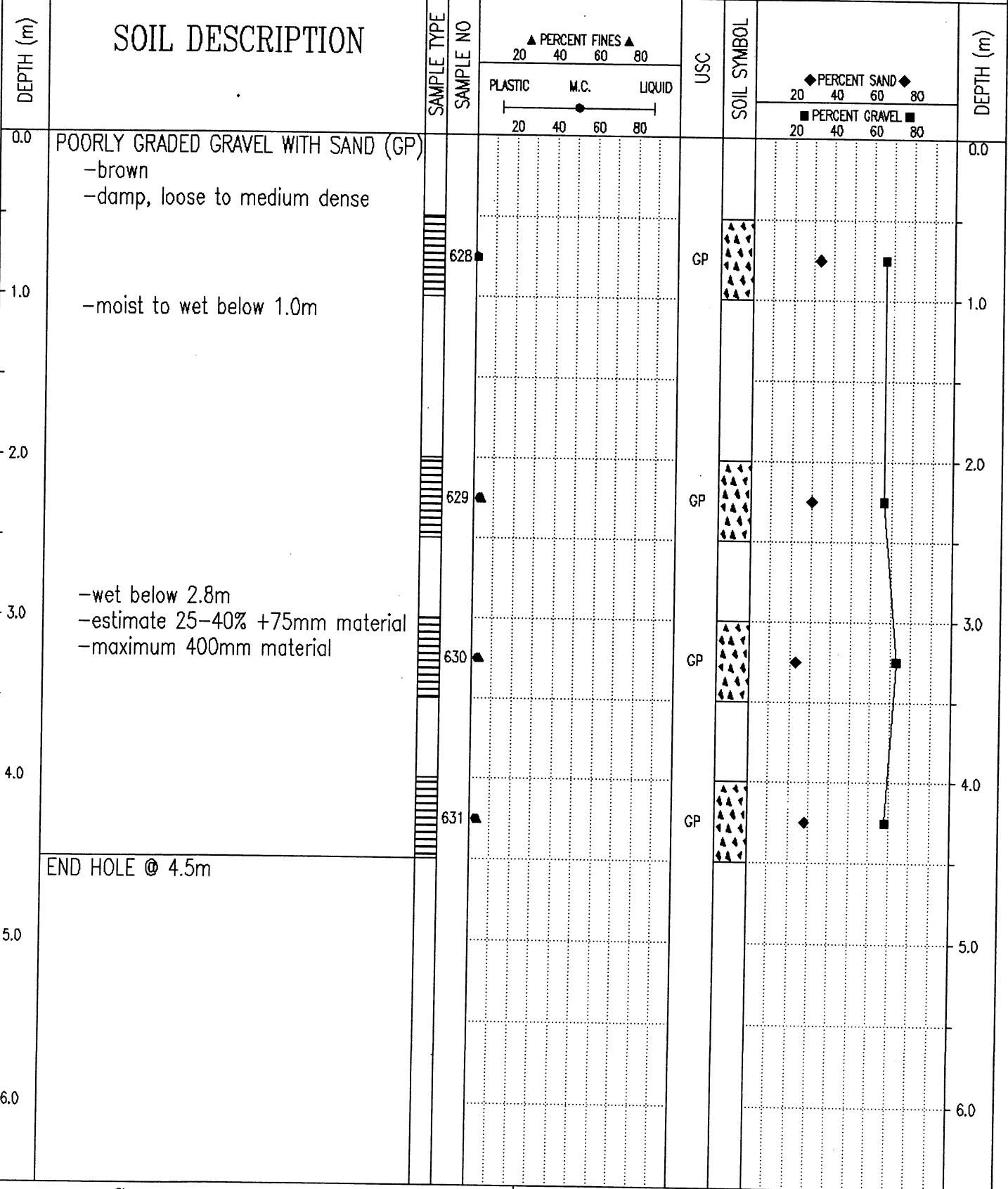
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 640-2569
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/30
Fig. No:	Page 1 of 1

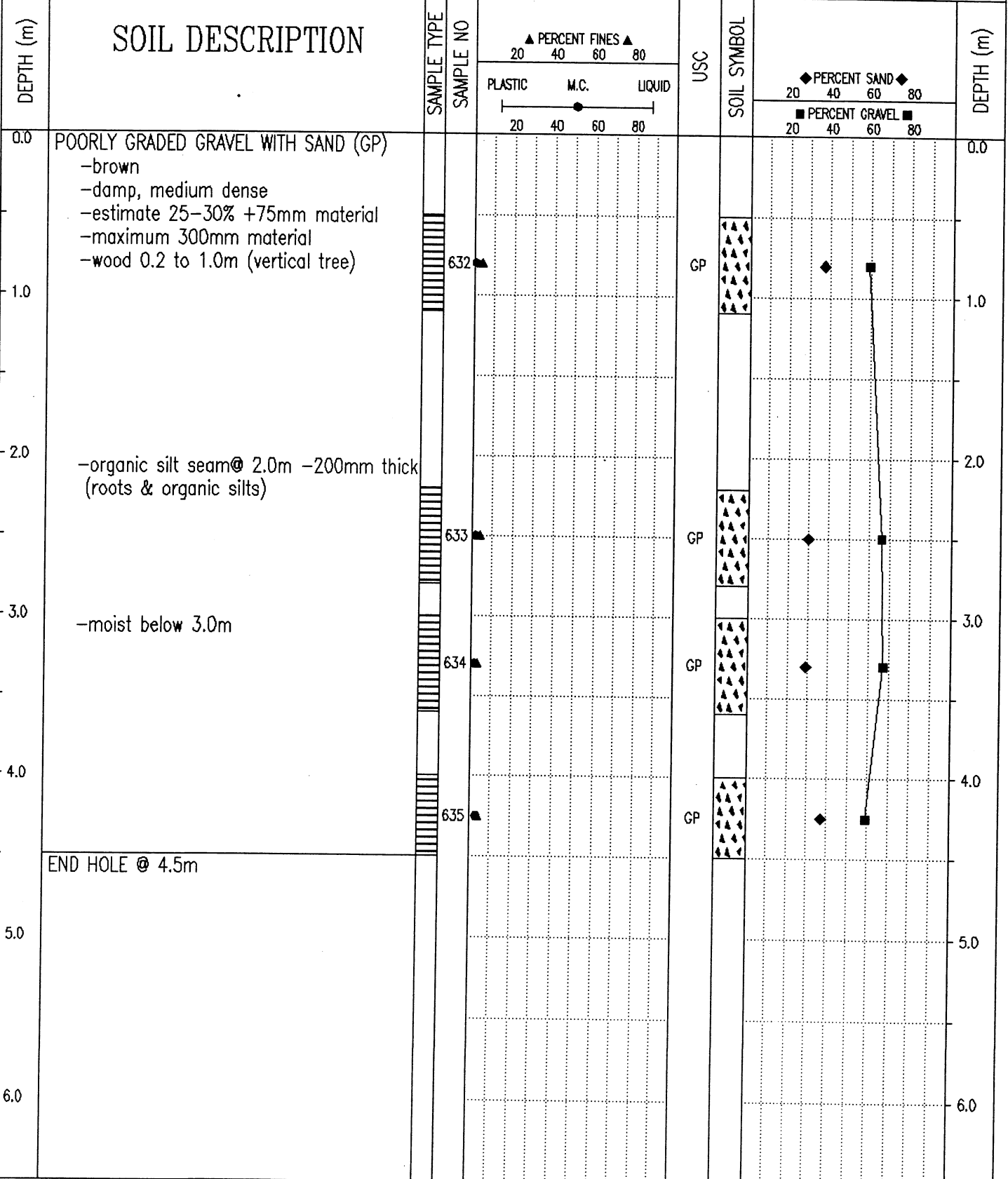
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/30
Fig. No:	

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

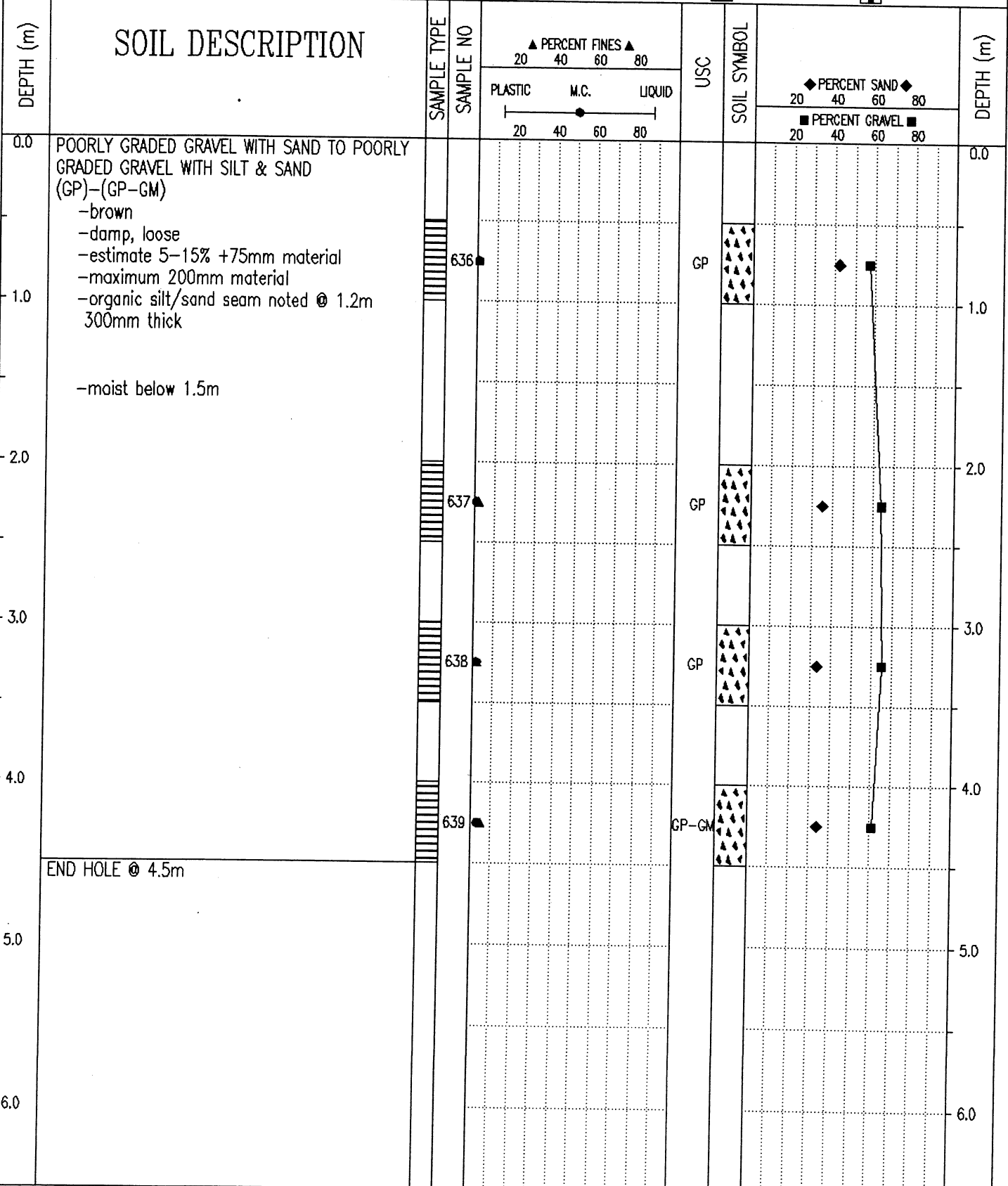


Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/30
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 640-2572
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

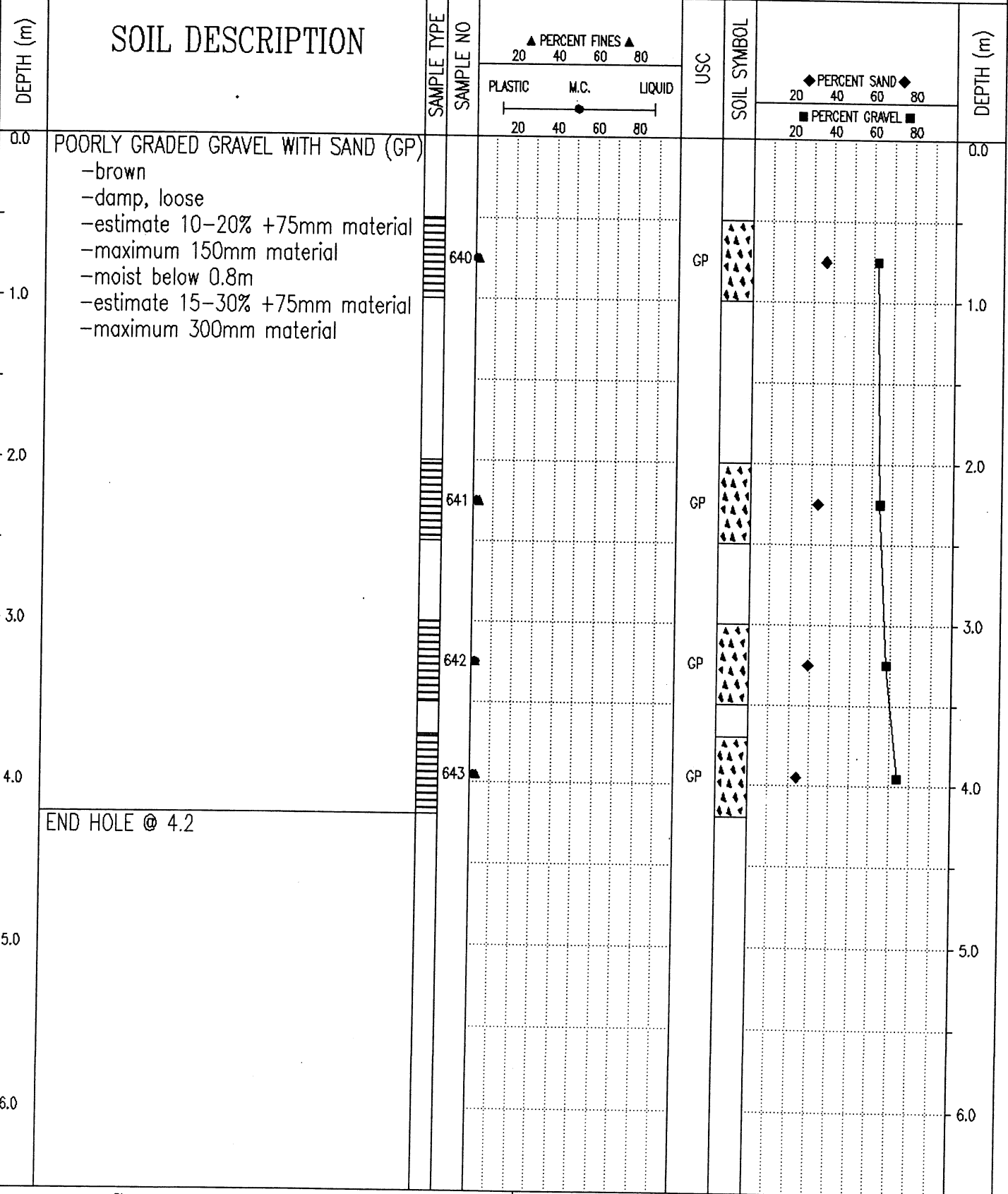


Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 02/09/30

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



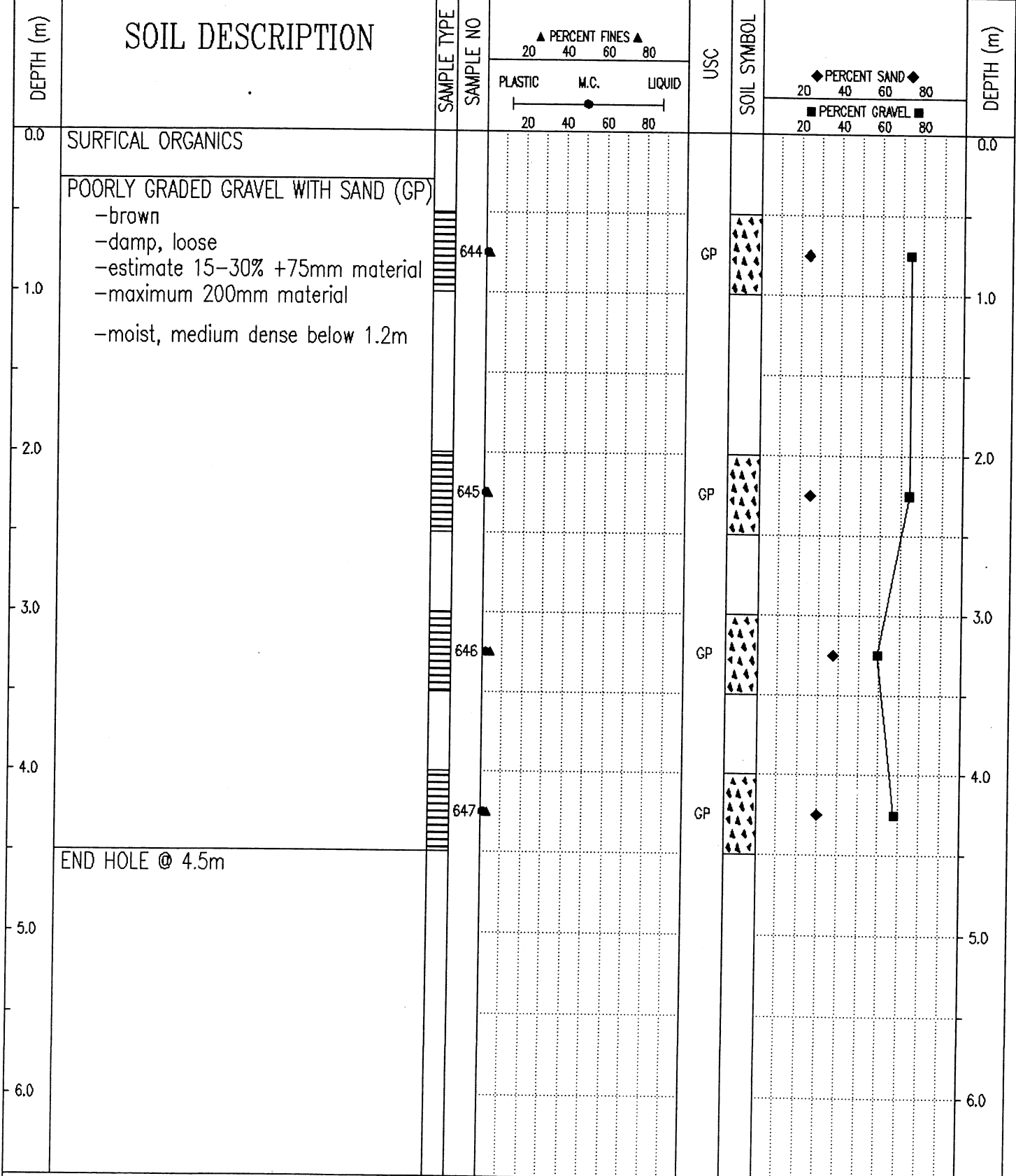
Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.2 m
COMPLETE: 02/09/30

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 640-2574
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon
Transportation Engineering

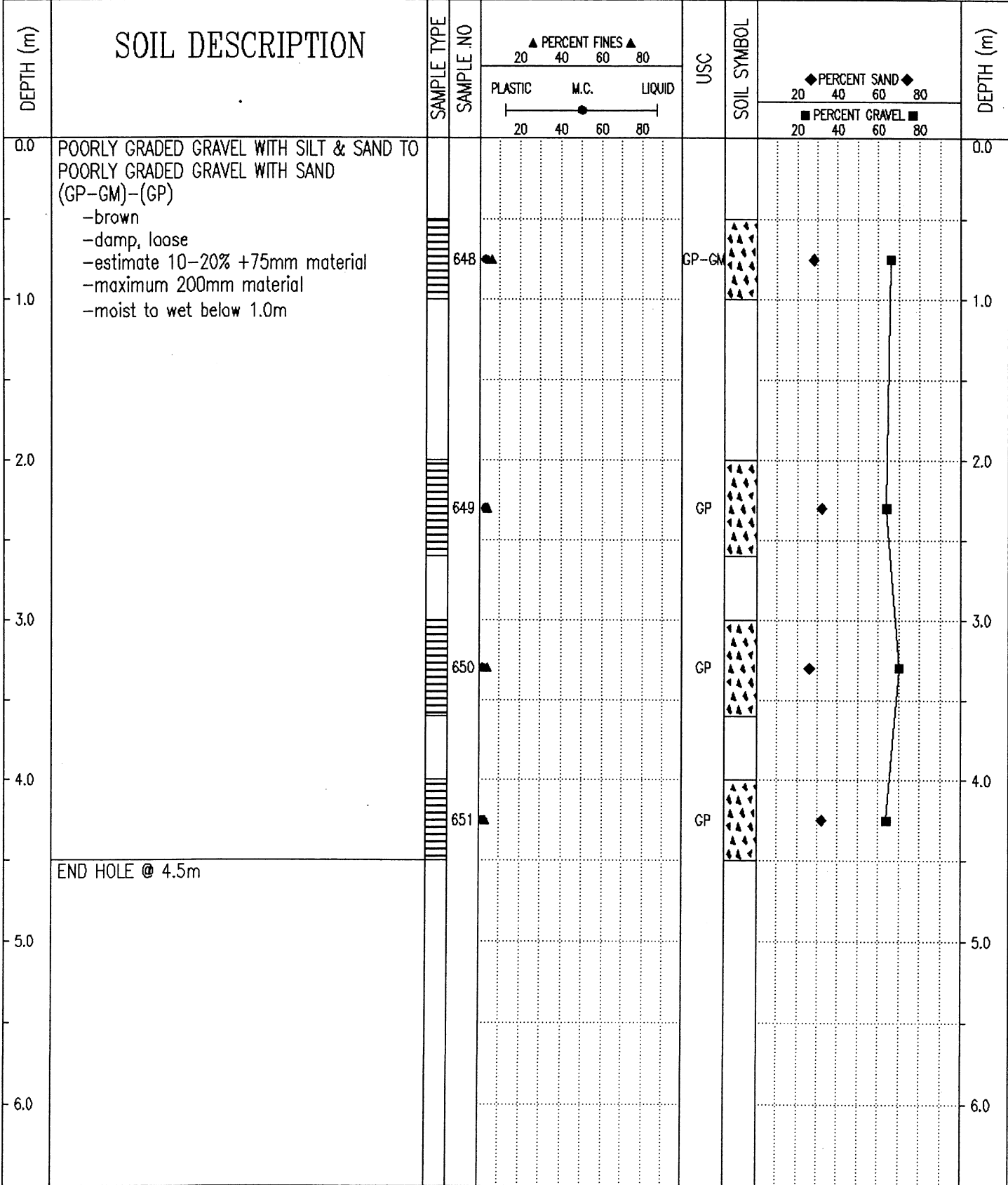
LOGGED BY: JRP
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 02/09/30

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 640-2575
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



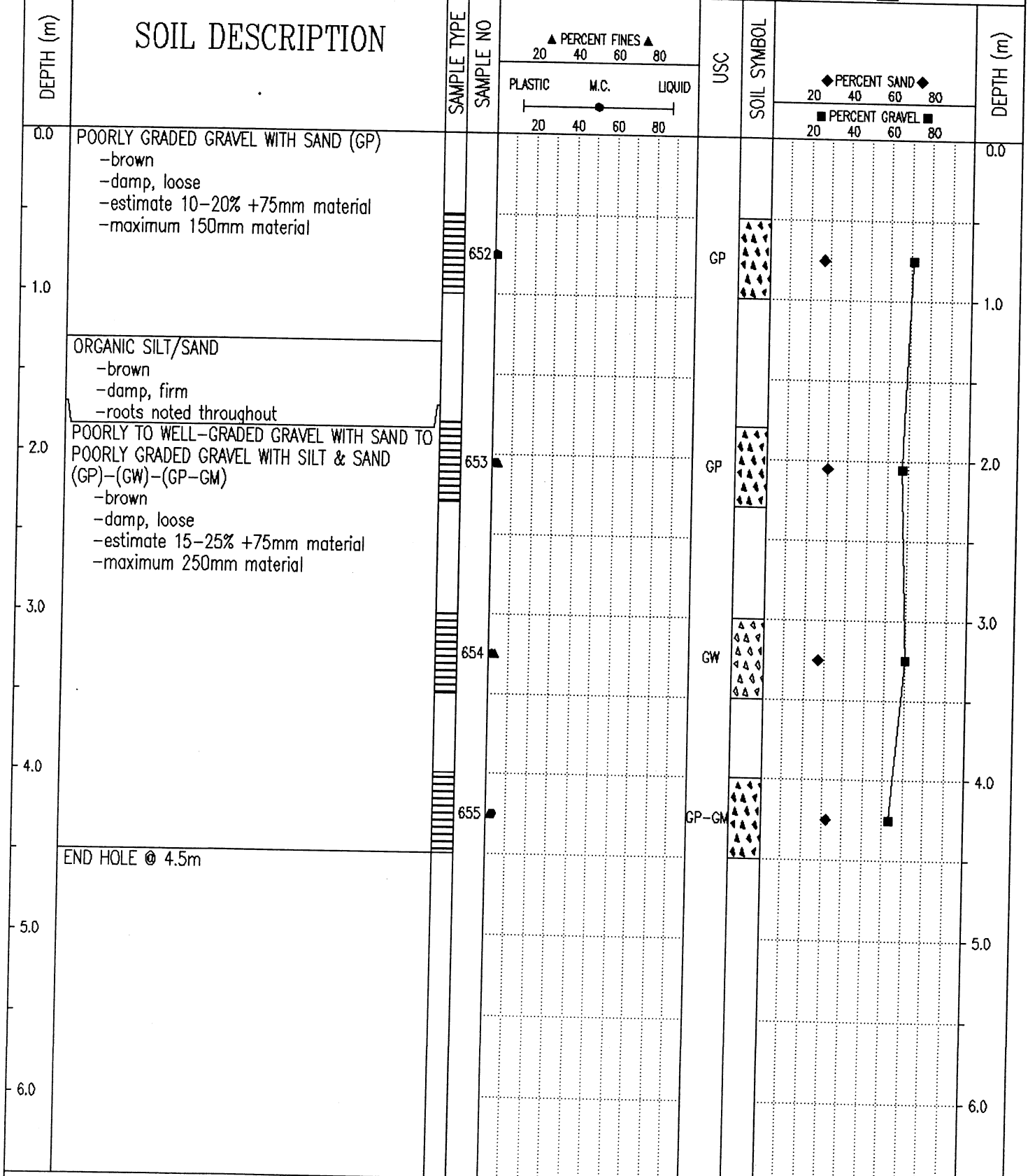
Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 02/09/30

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 640-2576
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/30
Fig. No:	

Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

September 2002
Book # 640

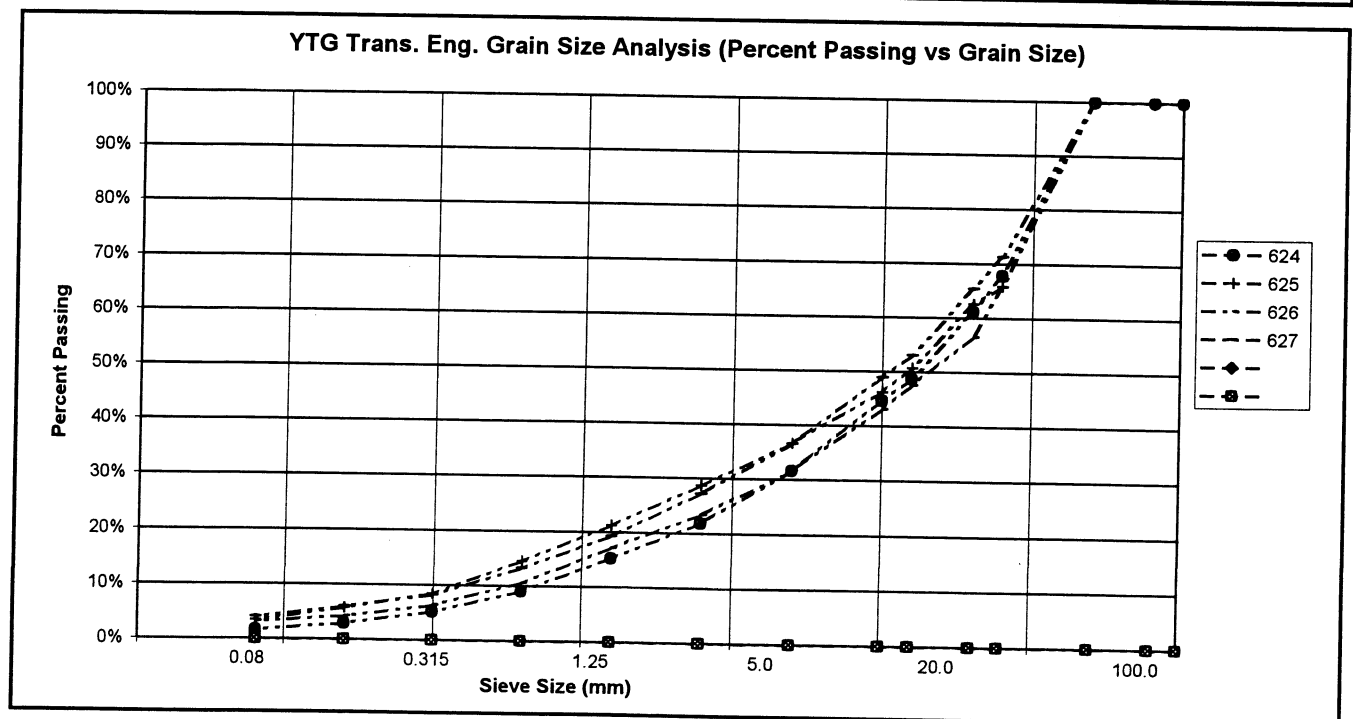
Pit Run Sample Results

PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Willisroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2569

DATE COMP: Sept 30 /02

FIELD NO:	624	625	626	627		
LAB NO:	883	884	885	886		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	AUGER	BULK	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	68%	66%	66%	71%		
20.0	61%	63%	56%	65%		
12.5	49%	51%	48%	53%		
10.0	45%	46%	43%	49%		
5.0	32%	37%	32%	37%		
2.5	22%	29%	23%	27%		
1.25	15%	21%	17%	19%		
0.630	9%	15%	11%	13%		
0.315	5%	8%	6%	8%		
0.160	3%	6%	4%	6%		
0.080	2%	3%	3%	4%		
M.C.(%)	1%	3%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	63	68	63		
% SAND:	30	33	29	33		
% FINES:	2	3	3	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

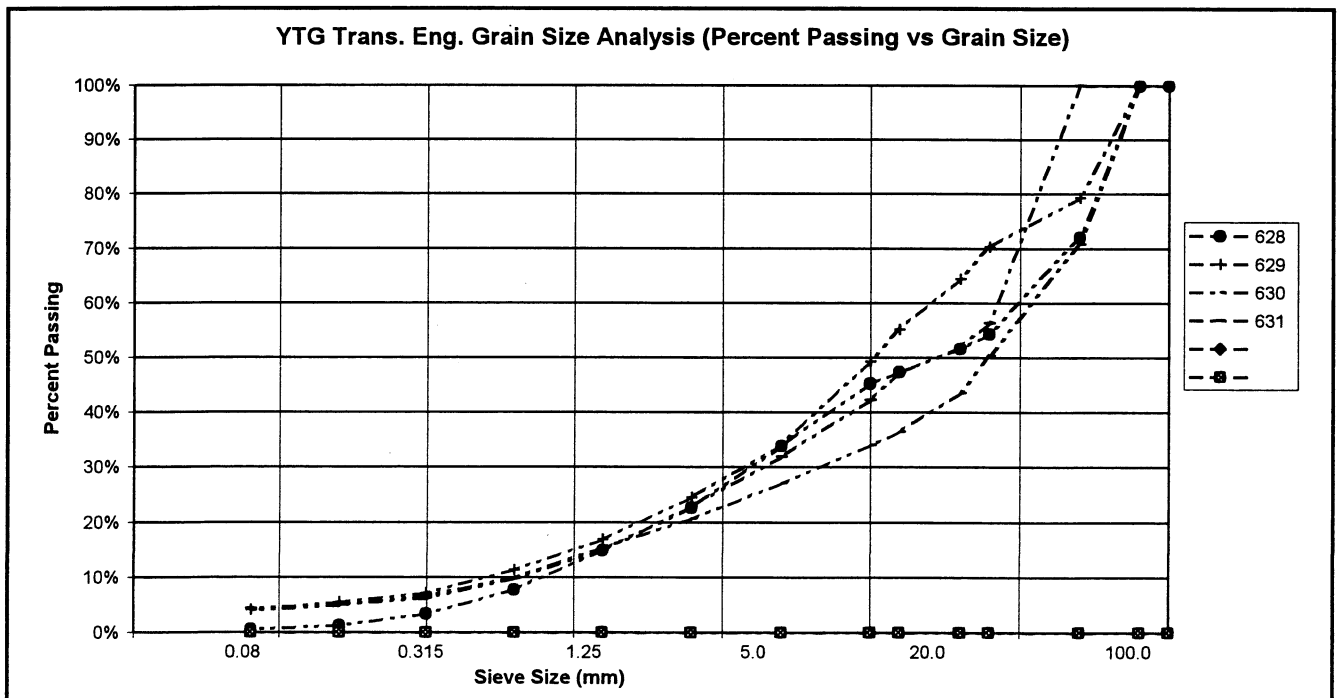


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Williscroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2570

DATE COMP: Sept 30 /02

FIELD NO:	628	629	630	631		
LAB NO:	887	888	889	890		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	AUGER	BULK	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	72%	79%	71%	100%		
25.0	54%	70%	50%	56%		
20.0	52%	64%	44%	52%		
12.5	47%	55%	37%	47%		
10.0	45%	49%	34%	42%		
5.0	34%	34%	27%	32%		
2.5	23%	25%	21%	23%		
1.25	15%	17%	16%	15%		
0.630	8%	11%	10%	10%		
0.315	3%	7%	7%	6%		
0.160	1%	6%	5%	5%		
0.080	1%	4%	4%	4%		
M.C.(%):	1%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	66	73	68		
% SAND:	33	30	23	28		
% FINES:	1	4	4	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

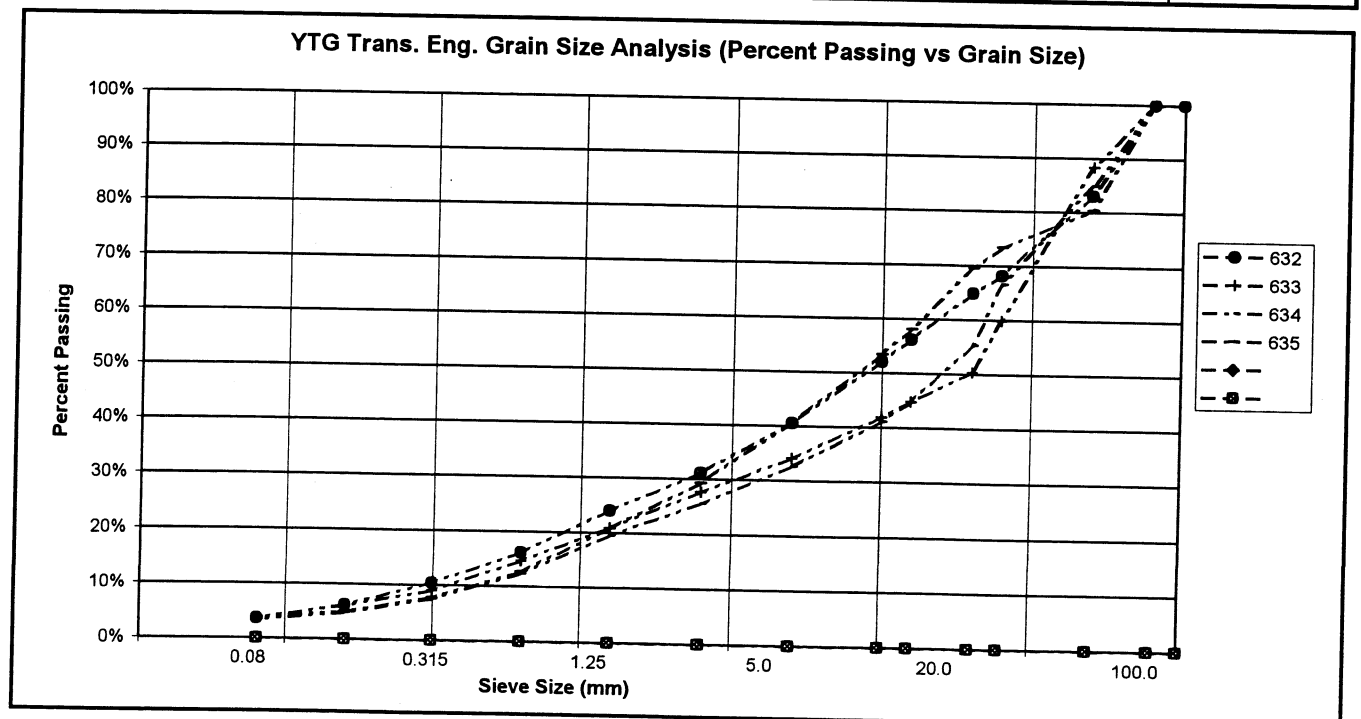


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Willisroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2571

DATE COMP: Sept 30 /02

FIELD NO:	632	633	634	635		
LAB NO:	897	892	893	894		
DEPTH:	0.5-1.1	2.2-2.8	3.0-3.6	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	83%	88%	85%	80%		
25.0	68%	60%	67%	73%		
20.0	65%	50%	55%	70%		
12.5	56%	45%	45%	58%		
10.0	52%	42%	41%	53%		
5.0	41%	34%	33%	41%		
2.5	31%	28%	26%	29%		
1.25	24%	21%	20%	21%		
0.630	16%	15%	12%	13%		
0.315	10%	9%	7%	8%		
0.160	6%	6%	5%	5%		
0.080	4%	4%	3%	4%		
M.C.(%):	1%	2%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	59	66	67	59		
% SAND:	37	30	29	37		
% FINES:	4	4	3	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

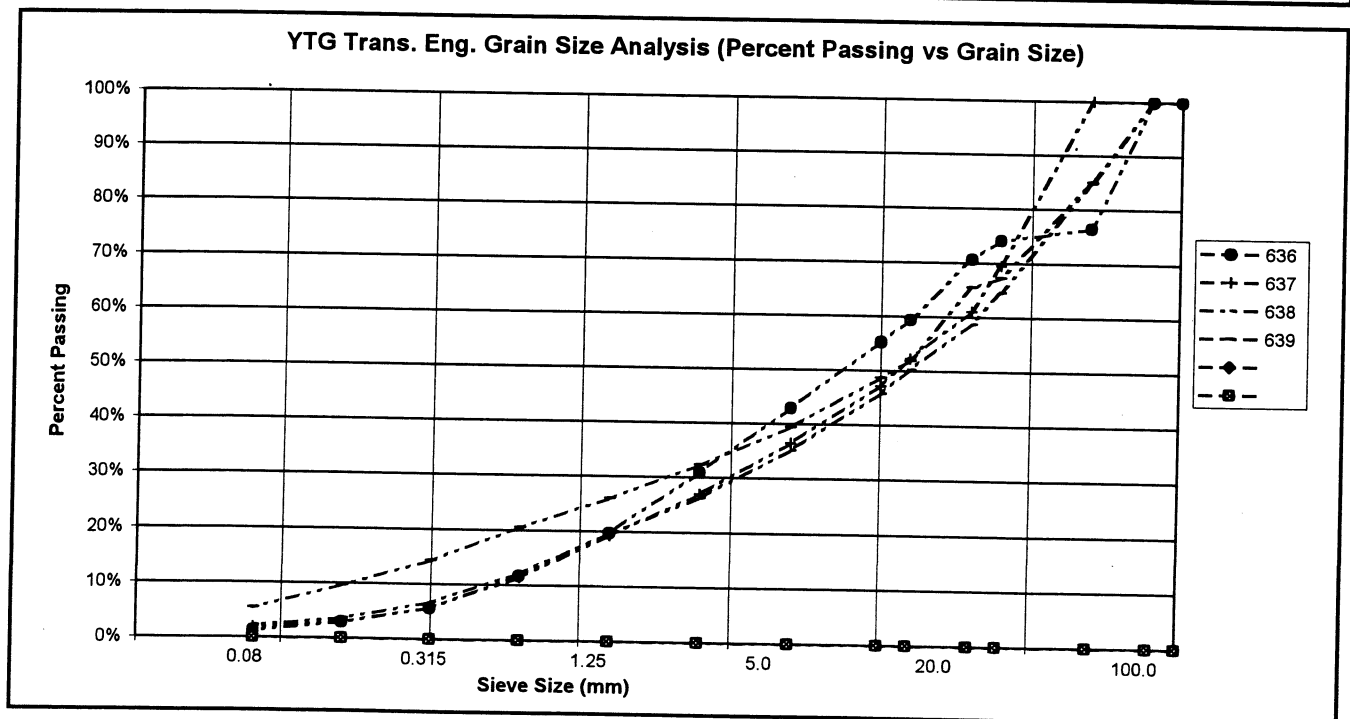


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Willisroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2572

DATE COMP: Sept 30 /02

FIELD NO:	636	637	638	639		
LAB NO:	895	896	897	898		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	77%	100%	85%	85%		
25.0	74%	69%	65%	67%		
20.0	71%	61%	59%	65%		
12.5	59%	52%	50%	52%		
10.0	55%	47%	46%	49%		
5.0	43%	36%	35%	39%		
2.5	31%	27%	26%	32%		
1.25	20%	19%	20%	26%		
0.630	12%	11%	12%	21%		
0.315	6%	6%	7%	14%		
0.160	3%	3%	4%	10%		
0.080	1%	2%	2%	5%		
M.C.(%)	1%	1%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	64	65	61		
% SAND:	42	35	33	34		
% FINES:	1	2	2	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

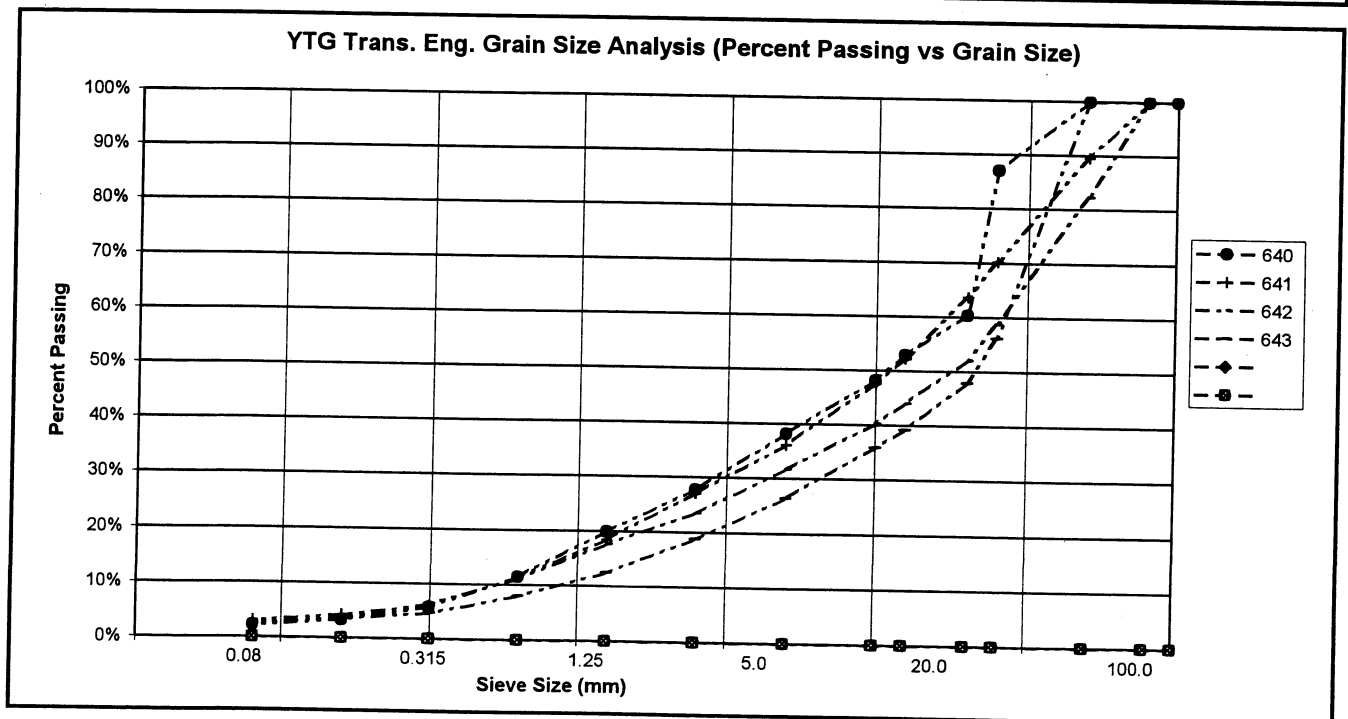


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Williscroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2573

DATE COMP: Sept 30 /02

FIELD NO:	640	641	642	643		
LAB NO:	899	900	901	902		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	3.7-4.2		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	90%	82%	100%		
25.0	87%	70%	59%	56%		
20.0	60%	64%	52%	48%		
12.5	53%	52%	44%	39%		
10.0	48%	48%	40%	36%		
5.0	38%	36%	32%	26%		
2.5	28%	27%	24%	19%		
1.25	20%	18%	18%	12%		
0.630	12%	11%	11%	8%		
0.315	6%	6%	6%	5%		
0.160	3%	4%	4%	4%		
0.080	2%	3%	2%	3%		
M.C.(%)	1%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	64	68	74		
% SAND:	36	33	29	24		
% FINES:	2	3	2	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

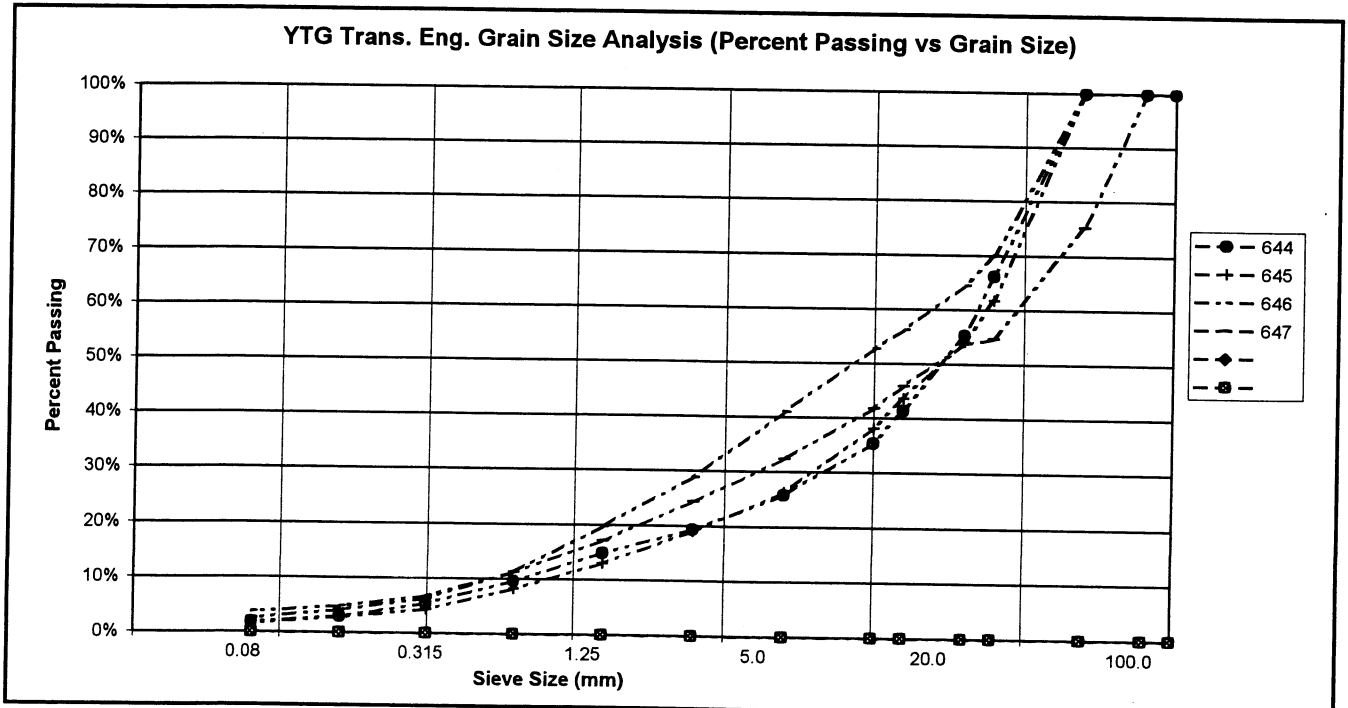


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Williscroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2574

DATE COMP: Sept 30 /02

FIELD NO:	644	645	646	647		
LAB NO:	903	904	905	906		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	75%		
25.0	66%	62%	70%	55%		
20.0	55%	54%	64%	54%		
12.5	41%	44%	56%	46%		
10.0	35%	38%	53%	42%		
5.0	26%	26%	41%	32%		
2.5	19%	19%	29%	24%		
1.25	15%	13%	20%	17%		
0.630	10%	8%	11%	11%		
0.315	5%	4%	7%	6%		
0.160	3%	3%	5%	4%		
0.080	2%	2%	4%	3%		
M.C.(%):	1%	1%	2%	1%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	74	74	59	68		
% SAND:	24	25	37	30		
% FINES:	2	2	4	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

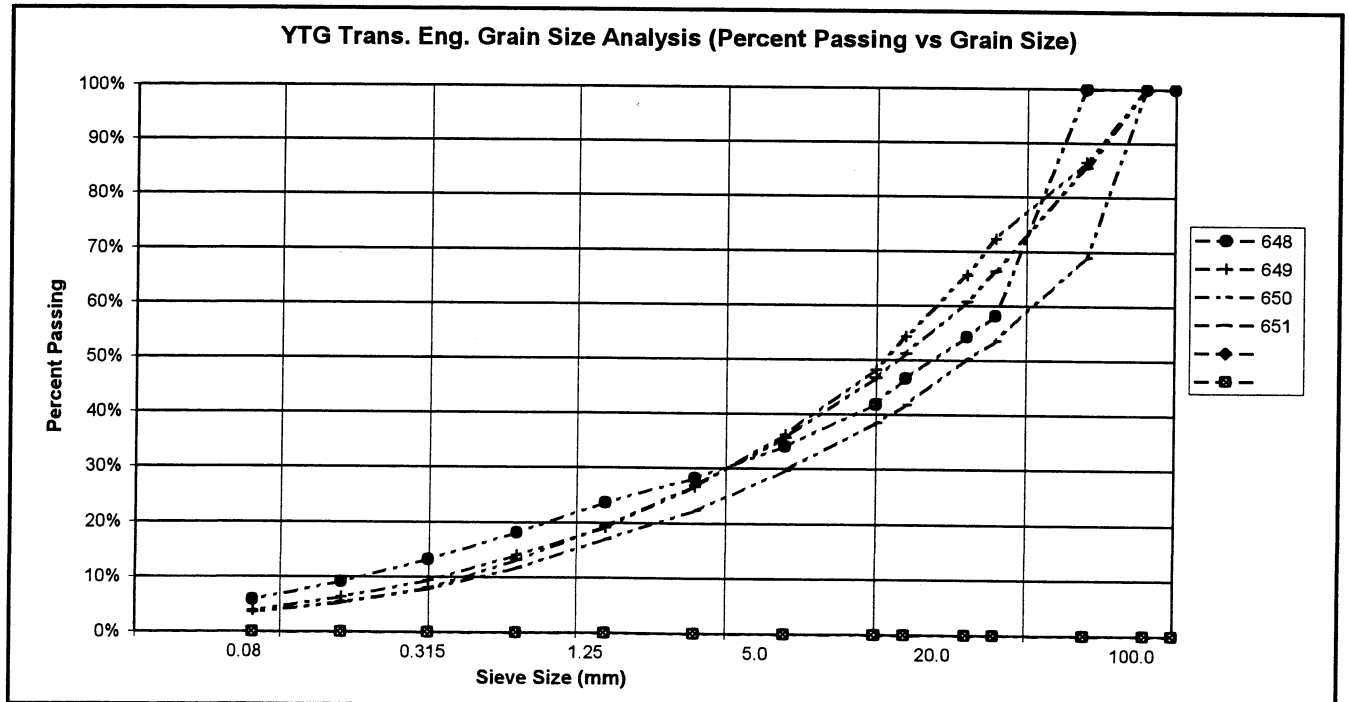


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Williscroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2575

DATE COMP: Sept 30 /02

FIELD NO:	648	649	650	651		
LAB NO:	907	908	909	910		
DEPTH:	0.5-1.1	2.0-2.6	3.0-3.6	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	87%	69%	85%		
25.0	58%	72%	54%	66%		
20.0	54%	66%	50%	61%		
12.5	47%	54%	42%	51%		
10.0	42%	48%	38%	47%		
5.0	34%	36%	30%	36%		
2.5	28%	27%	22%	27%		
1.25	24%	19%	17%	19%		
0.630	18%	14%	12%	13%		
0.315	13%	9%	8%	8%		
0.160	9%	6%	5%	5%		
0.080	6%	4%	4%	3%		
M.C.(%):	3%	3%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	64	70	64		
% SAND:	28	32	26	32		
% FINES:	6	4	4	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

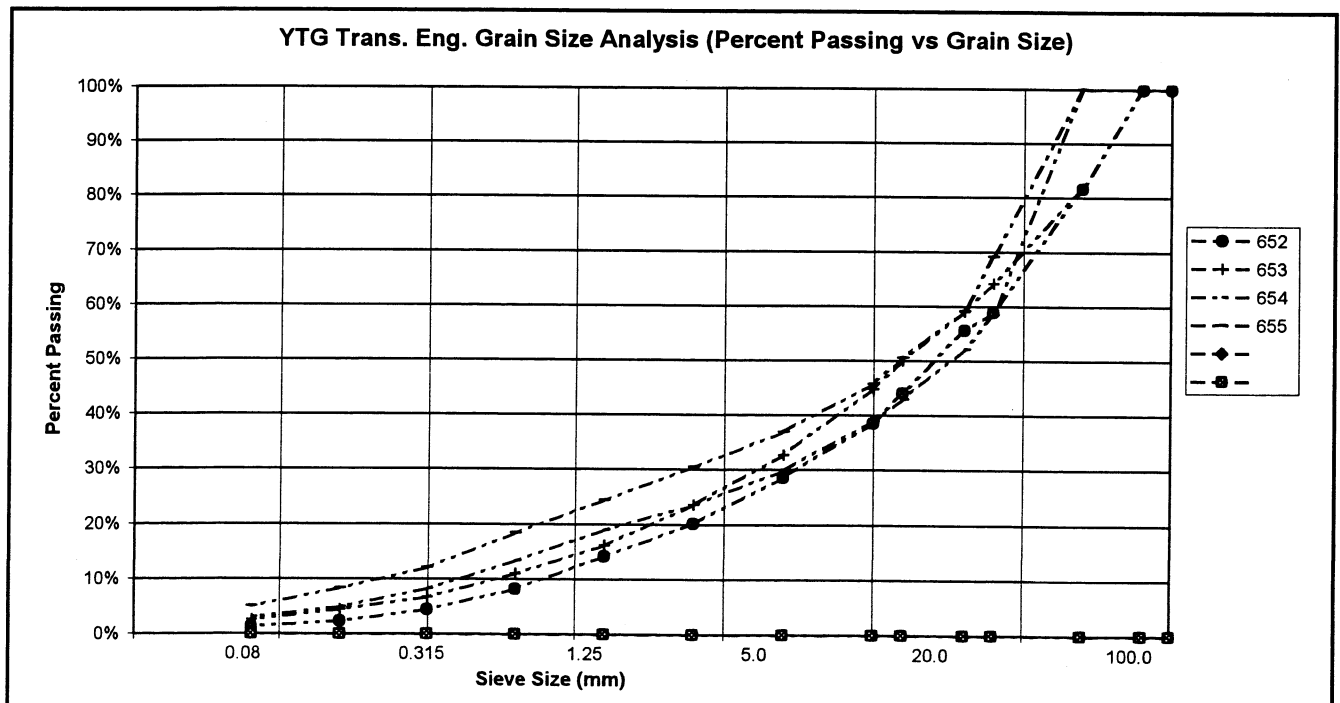


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Willisroft Creek Km 1715.8 A/H
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 640-2576

DATE COMP: Sept 30 /02

FIELD NO:	652	653	654	655		
LAB NO:	911	912	913	914		
DEPTH:	0.5-1.0	1.8-2.3	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	82%	82%	100%	100%		
25.0	59%	64%	58%	69%		
20.0	56%	59%	52%	59%		
12.5	44%	50%	43%	51%		
10.0	39%	45%	39%	46%		
5.0	29%	33%	30%	37%		
2.5	20%	24%	24%	30%		
1.25	14%	16%	19%	24%		
0.630	8%	11%	13%	18%		
0.315	4%	7%	8%	12%		
0.160	2%	4%	5%	8%		
0.080	1%	3%	3%	5%		
M.C.(%):	1%	2%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	71	67	70	63		
% SAND:	27	30	27	32		
% FINES:	1	3	3	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

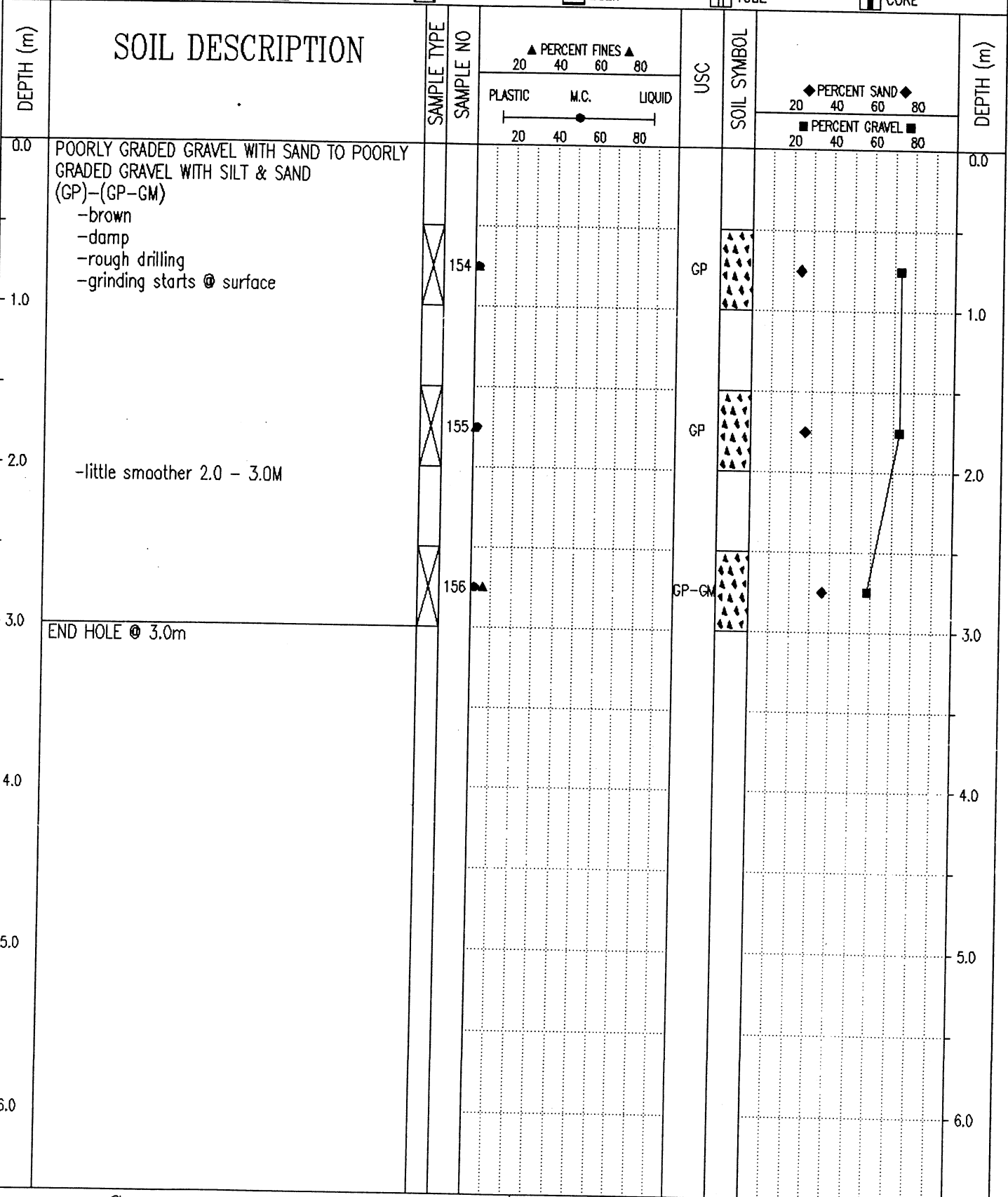


Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

September 2003
Book # 651

Auger Hole Logs

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2693
ENGINEERING CAPITAL		WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

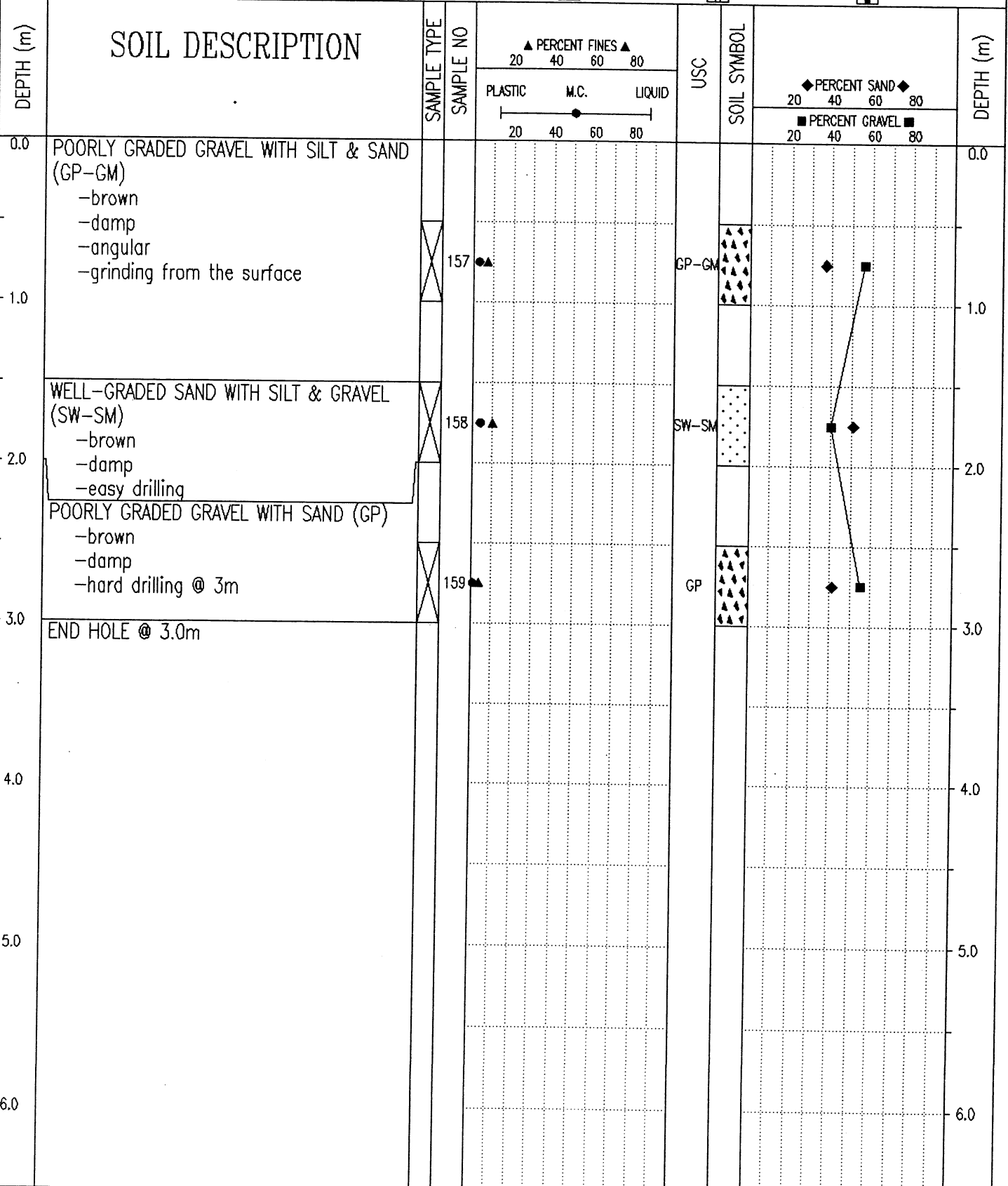


Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 03/09/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2694
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

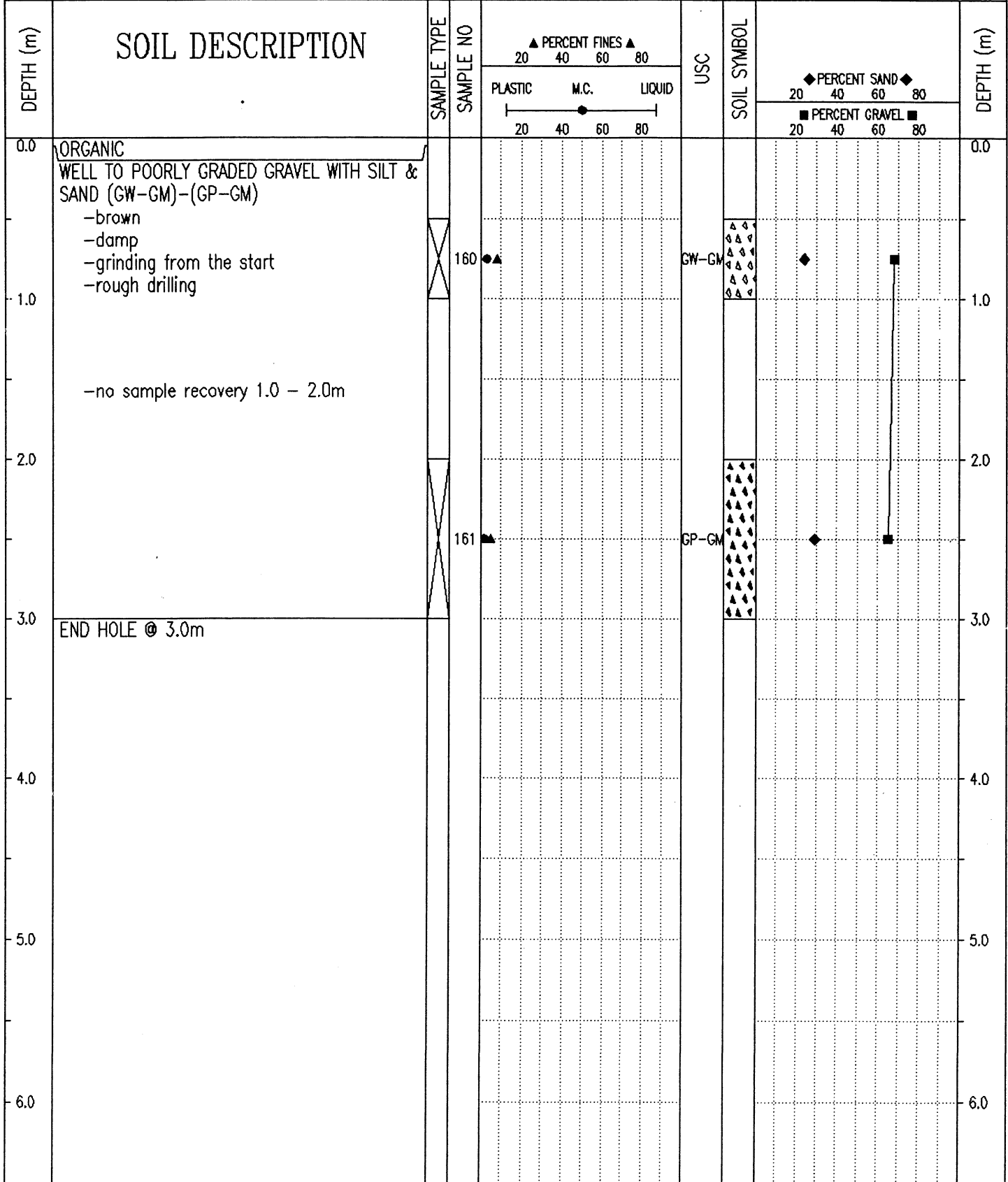


Government of Yukon
 Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/25
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2695
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



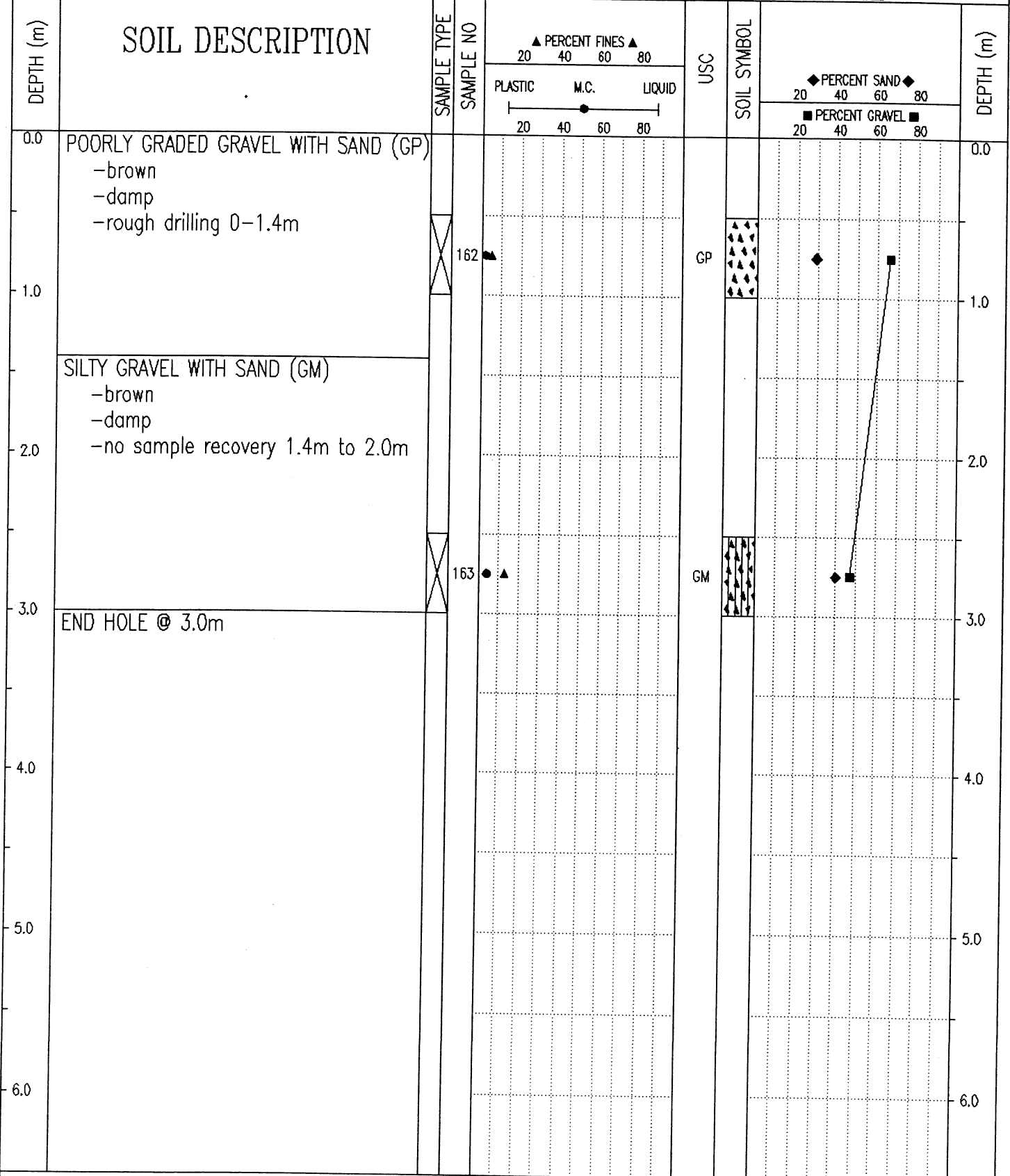
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LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 03/09/25

Page 1 of 1

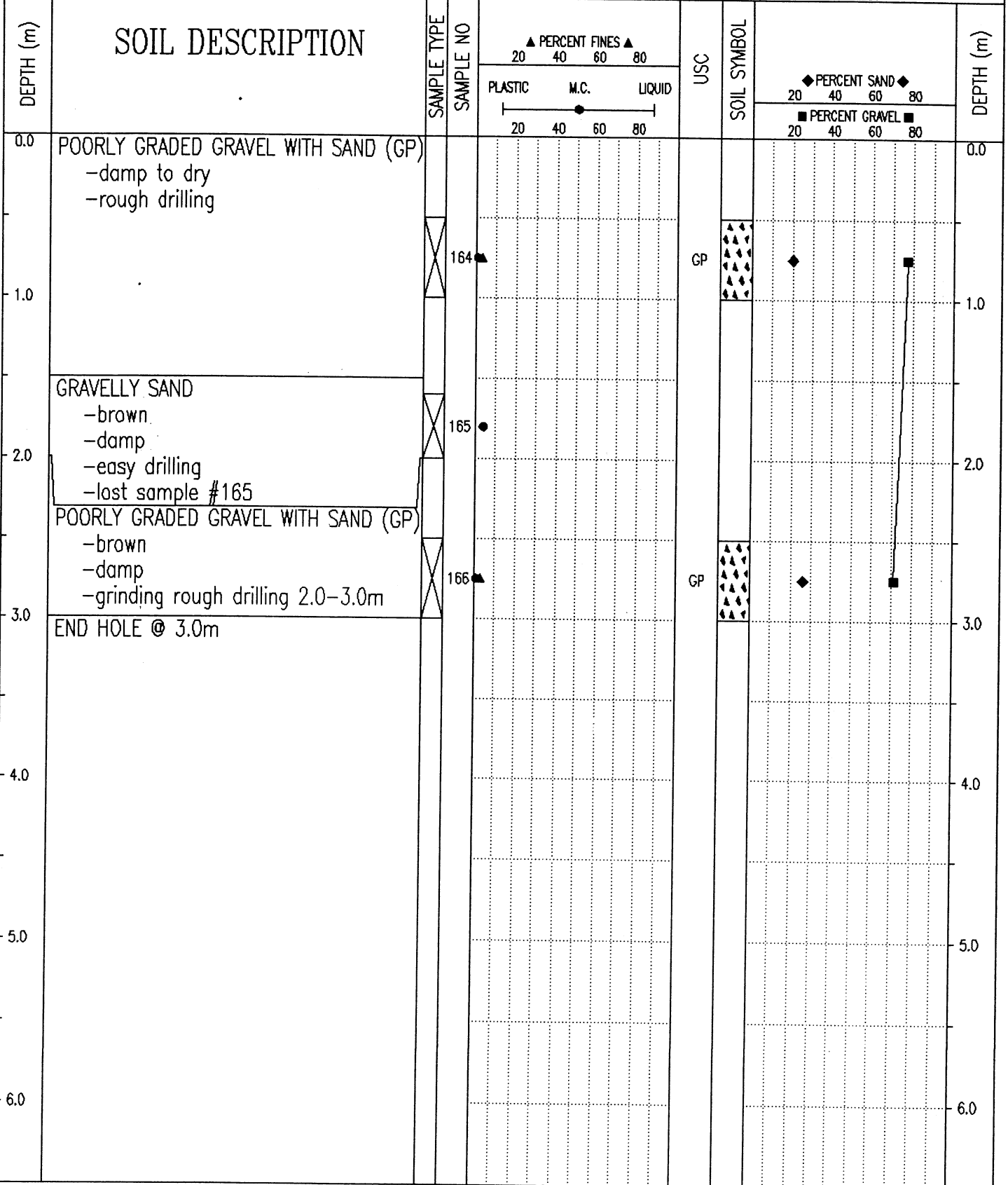
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2696	
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362	
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		ELEVATION: 0.00 (m)	
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input 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
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LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/25
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2697
ENGINEERING CAPITAL		WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



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LOGGED BY: GC

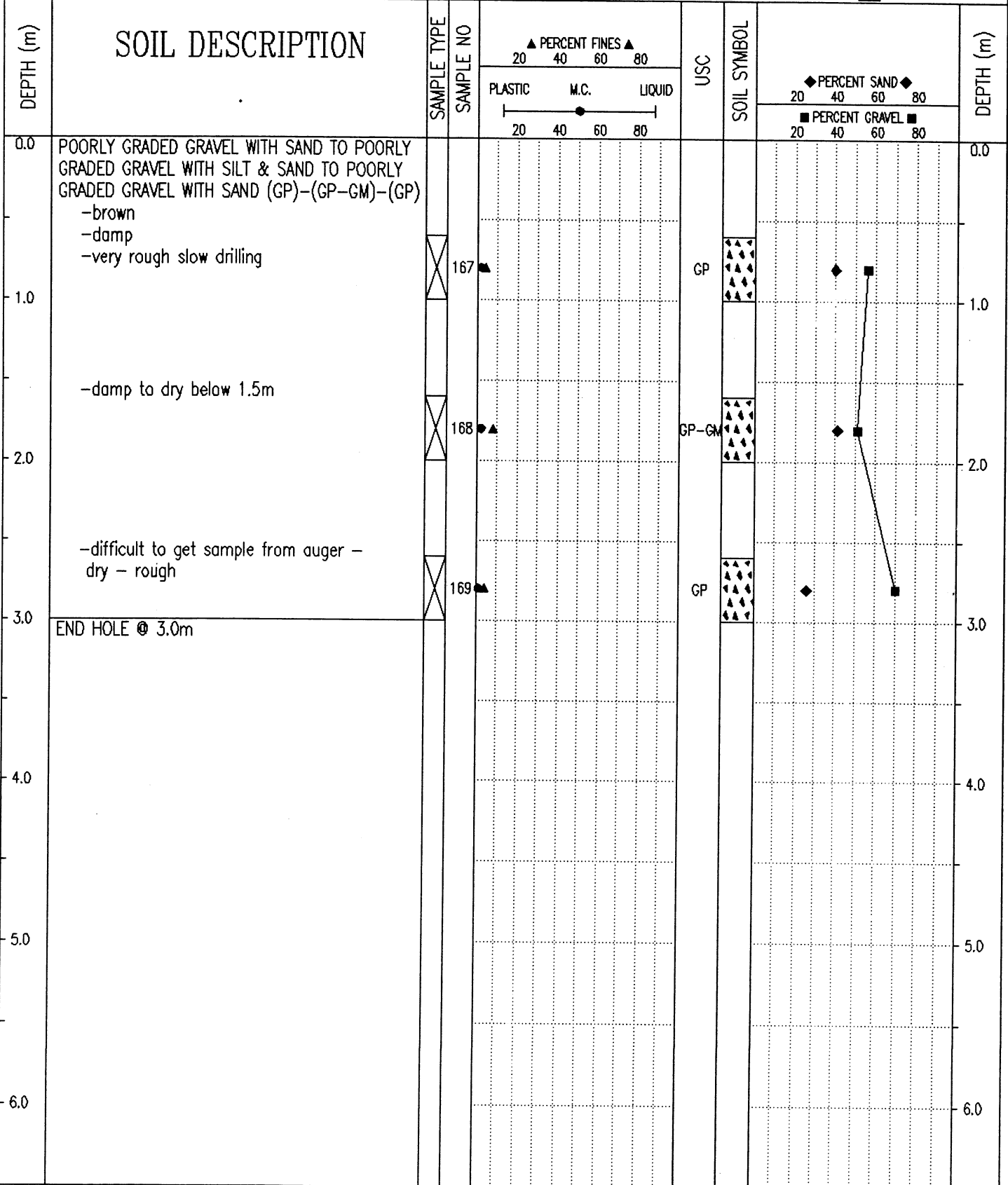
REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 3.0 m

COMPLETE: 03/09/25

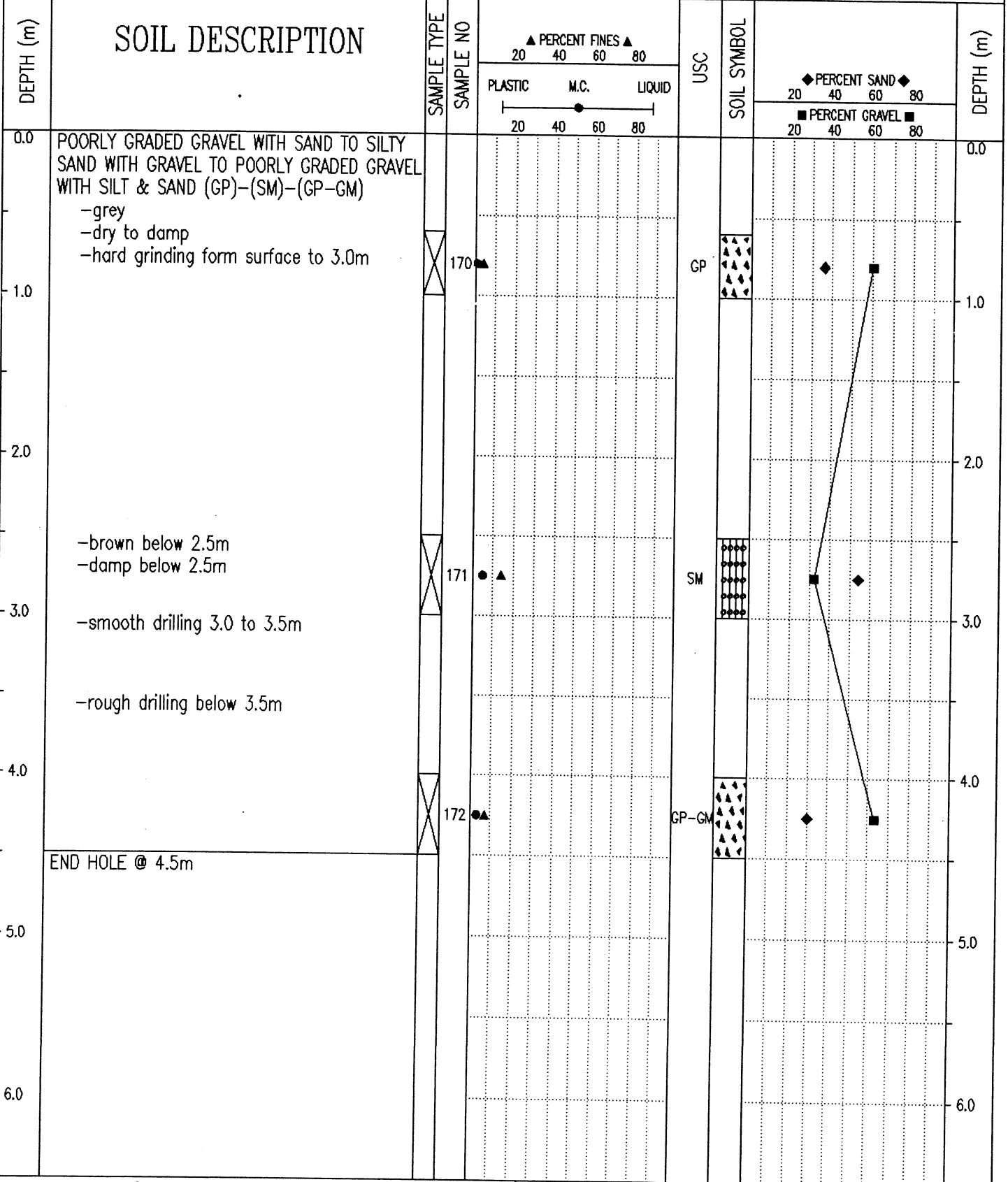
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ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon
 Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/25
Fig. No:	Page 1 of 1

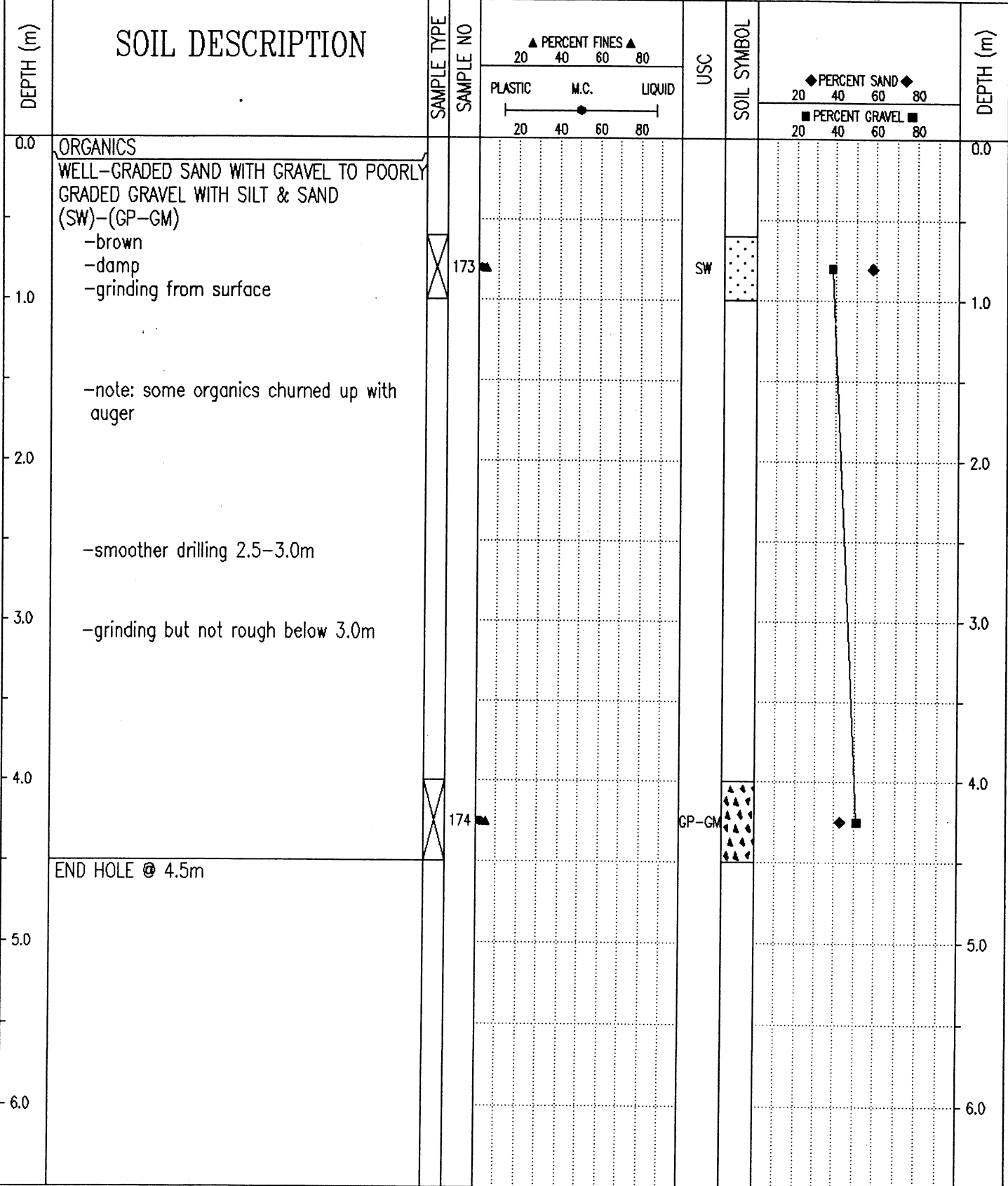
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2699	
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362	
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		ELEVATION: 0.00 (m)	
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER	
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE	
				<input type="checkbox"/> CORE	



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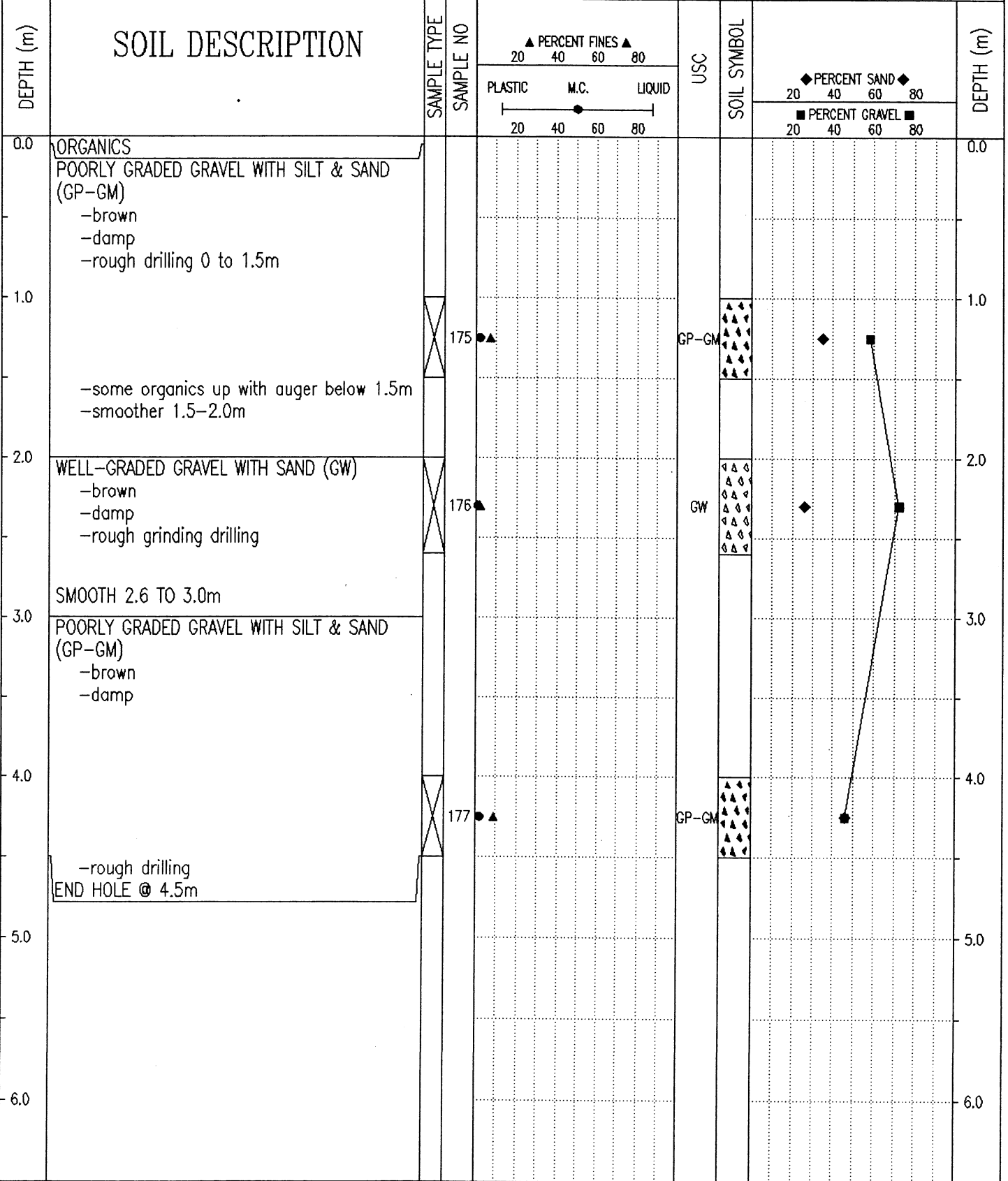
LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/29
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2700
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 03/09/29
	Fig. No:	Page 1 of 1

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



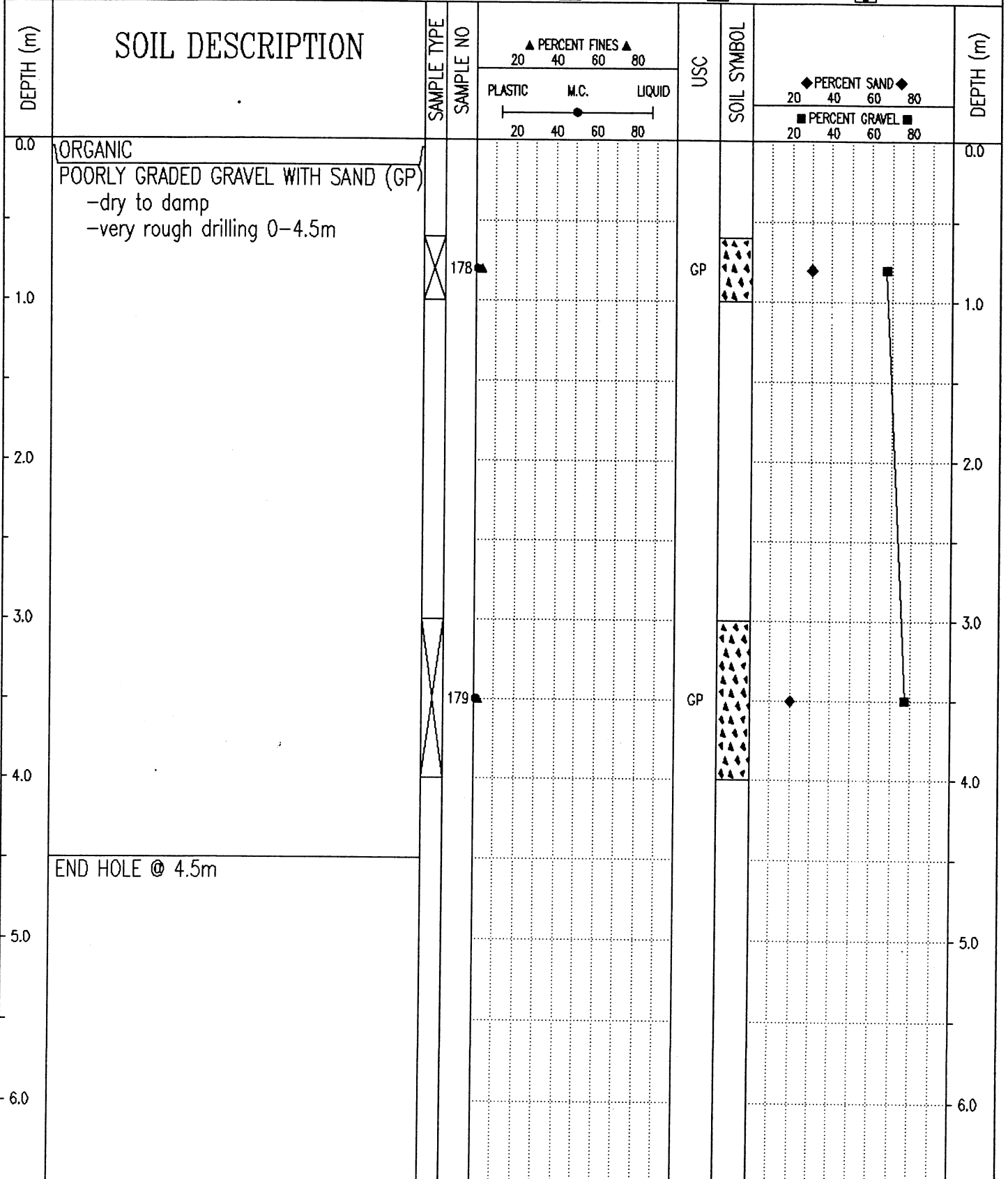
Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 03/09/29

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2702
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



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LOGGED BY: GC

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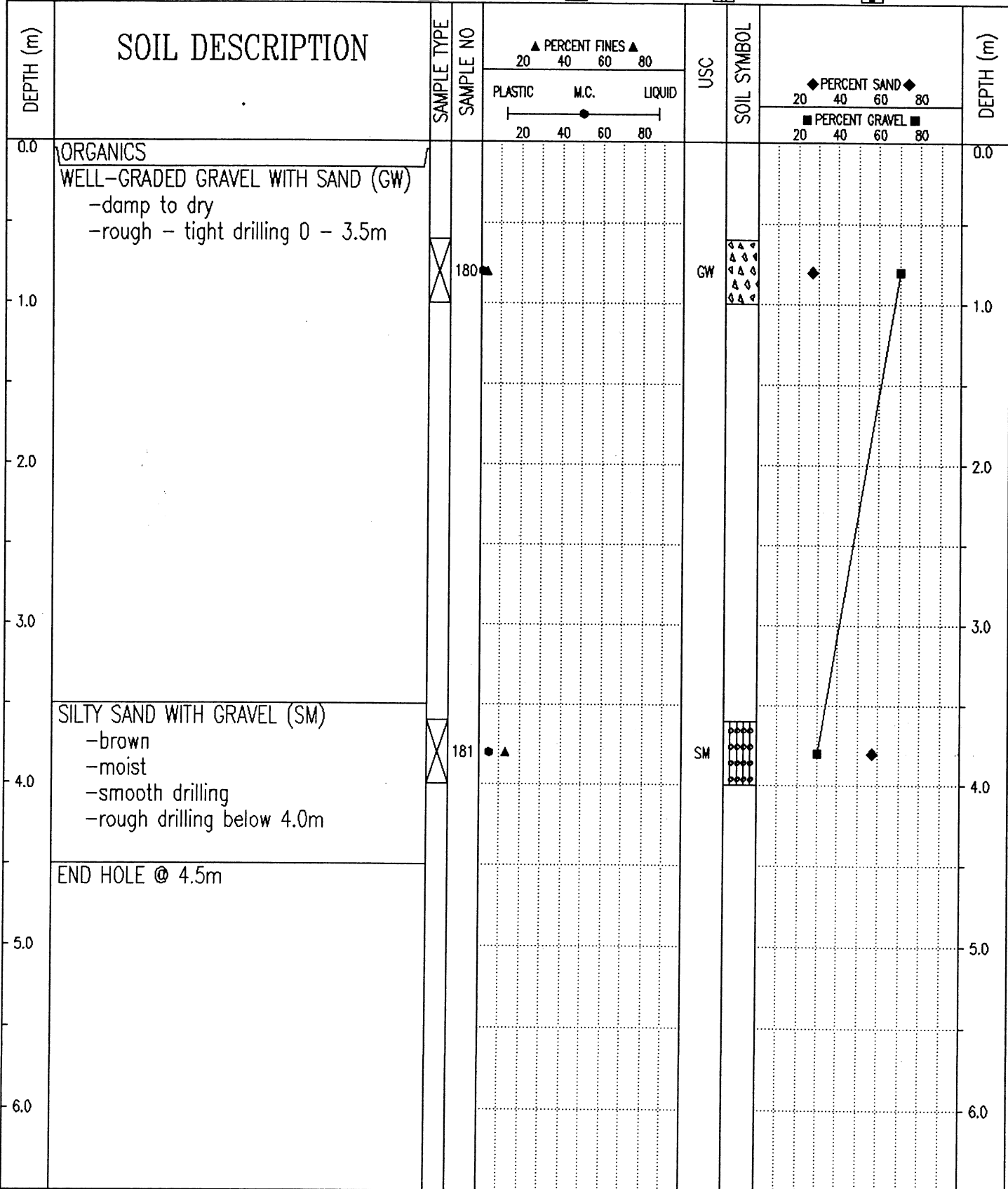
Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 03/09/29

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2703
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

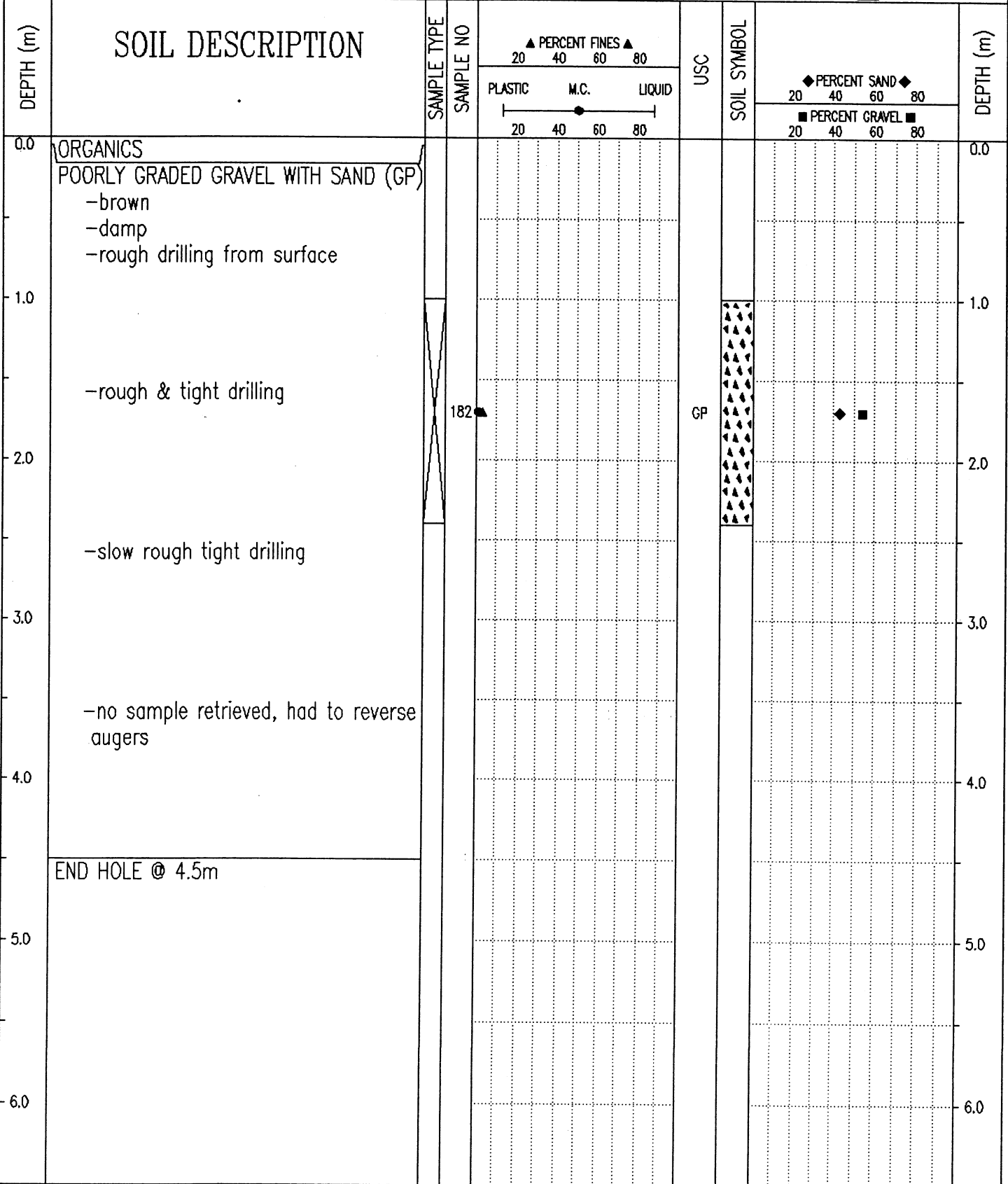
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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LOGGED BY: GC	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 03/09/29
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2704
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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LOGGED BY: GC

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 03/09/29

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2705
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	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	WELL-GRADED GRAVEL WITH SAND (GW) -extremely rough / big rocks													0.0	
1.0														1.0	
2.0	END HOLE @ 2.0m -refusal		183				GW	▲▲▲▲	◆	■				2.0	
3.0														3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 2.0 m
	REVIEWED BY:	COMPLETE: 03/09/29
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2706
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <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	ROCKS WITH SAND -extremely rough & tight drilling -no samples											0.0
1.0												1.0
2.0												2.0
3.0	END HOLE @ 2.4m											3.0
4.0												4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 2.4 m
	REVIEWED BY:	COMPLETE: 03/09/29
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2707
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				20	40	60			80	20	40	
0.0	GRAVEL -rough & tight drilling -no samples											0.0
1.0												1.0
2.0	END HOLE @ 1.8m -refusal											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 1.8 m
REVIEWED BY:	COMPLETE: 03/09/29
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2708
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <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	POORLY GRADED GRAVEL WITH SAND (GP) -brown -dry -grinding starts @ surface										0.0	
1.0	-refusal @ 1.2m / moved 2m		184				GP				1.0	
2.0	END HOLE @ 1.5m -refusal -3rd refusal @ 1.5m										2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 1.5 m
	REVIEWED BY:	COMPLETE: 03/09/30
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2709								
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362								
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN		<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 SILT -brown -dry -grinding starts @ 0.5m											0.0
1.0	SANDY GRAVEL -brown -damp -rough, slow drilling											1.0
2.0												2.0
3.0	-refusal @ 2.2m / moved 3m / rock dust on bit -extreme rough & tight drilling											3.0
4.0												4.0
5.0	END HOLE @ 5.0m -refusal -Note: Last auger was moist											5.0
6.0												6.0

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Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 5.0 m

COMPLETE: 03/09/30

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2710								
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362								
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		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 SANDY GRAVEL</p> <ul style="list-style-type: none"> -brown -damp -grinding from .05m -rough & tight drilling 											0.0
1.0												1.0
2.0												2.0
3.0	-still grinding but not as rough 3.0-4.0											3.0
4.0												4.0
5.0	<p>END HOLE @ 4.5m</p> <p>Note: Some wet silty sand came up with auger bottom</p>											5.0
6.0												6.0

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Transportation Engineering

LOGGED BY: GC

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Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 03/09/30

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2711									
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362									
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		ELEVATION: 0.00 (m)									
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER									
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE									
				<input type="checkbox"/> CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				20	40	60			80	20	40		60
				PLASTIC	M.C.	LIQUID			20	40	60	80	
				20	40	60	80		20	40	60	80	
0.0	ORGANICS & SILT												0.0
1.0	SANDY GRAVEL -saturated -grinding												1.0
2.0	-easy drilling but grinding / rough @ 2.0m												2.0
3.0													3.0
4.0	END HOLE @ 3.5m												4.0
5.0													5.0
6.0													6.0
Government of Yukon Transportation Engineering				LOGGED BY: GC				COMPLETION DEPTH: 3.5 m					
				REVIEWED BY:				COMPLETE: 03/09/30					
				Fig. No:				Page 1 of 1					

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2712									
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362									
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		ELEVATION: 0.00 (m)									
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER									
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE									
				<input type="checkbox"/> CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				20	40	60			80	20	40		60
				PLASTIC	M.C.	LIQUID			20	40	60	80	
				20	40	60	80		20	40	60	80	
0.0	ORGANICS GRAVEL -rough drilling starts @ 0.1m -rough & tight -no samples												0.0
1.0													1.0
2.0													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: GC				COMPLETION DEPTH: 3.0 m					
				REVIEWED BY:				COMPLETE: 03/09/30					
				Fig. No:				Page 1 of 1					

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2713	
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362	
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		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	ORGANICS & SILT						0.0
	SANDY & GRAVEL -rough & tight drilling						
1.0							1.0
2.0							2.0
3.0	END HOLE @ 2.6m -refusal						3.0
4.0							4.0
5.0							5.0
6.0							6.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 2.6 m
	REVIEWED BY:	COMPLETE: 03/09/30
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT GRANULAR INVESTIGATION		TEST PIT NO: 651-2714					
ENGINEERING CAPITAL		WILLISCROFT CR FAN		Project No: 552-202101-0362					
D-4 CAT - 6" AUGER		LOCATION: SEE PLAN & GPS		ELEVATION: 0.00 (m)					
SAMPLE TYPE <input type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER					
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE					
				<input type="checkbox"/> CORE					
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			
0.0	SILT & ORGANICS								0.0
	SANDY GRAVEL								
	-brown								
	-damp								
	-grinding starts @ 0.2m								
1.0									1.0
	-very rough & tight								
2.0									2.0
3.0	END HOLE @ 2.8m								3.0
4.0									4.0
5.0									5.0
6.0									6.0

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Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 2.8 m
COMPLETE: 03/09/30

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2715
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				20	40	60			80	20	40	
0.0	ORGANICS											0.0
	SANDY GRAVEL -brown -damp -ginding											
1.0												1.0
	ORGANIC & SILT -smooth											
	SANDY GRAVEL -rough tight drilling											
2.0												2.0
	END HOLE @ 2.5m -refusal											
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 2.5 m
	REVIEWED BY:	COMPLETE: 03/09/30
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST PIT NO: 651-2716
ENGINEERING CAPITAL	WILLISCROFT CR FAN	Project No: 552-202101-0362
D-4 CAT - 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				20	40	60			80	20	40	
0.0	ORGANICS SANDY GRAVEL -brown -damp -rough drilling 0.2-7.5m -tight drilling											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
7.0												7.0
8.0	END HOLE @ 7.5m -refusal											8.0
9.0												9.0
10.0												10.0
11.0												11.0
12.0												12.0

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LOGGED BY: GC	COMPLETION DEPTH: 7.5 m
REVIEWED BY:	COMPLETE: 03/09/30
Fig. No:	Page 1 of 1

Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

September 2003
Book # 651

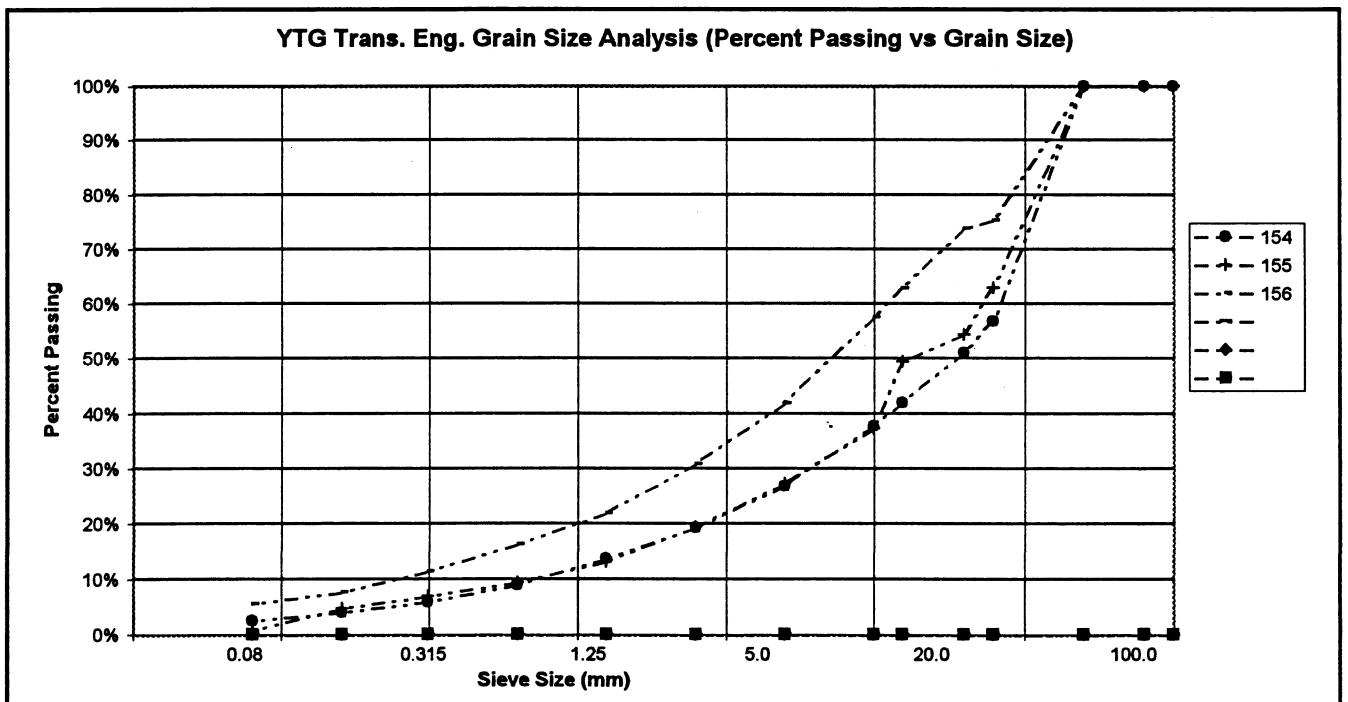
Auger Sample Results

PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 AVH 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2693

DATE COMP: 03/09/25

FIELD NO:	154	155	156		
LAB NO:	316	317	318		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0		
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	57%	63%	75%		
20.0	51%	54%	74%		
12.5	42%	49%	63%		
10.0	38%	37%	58%		
5.0	27%	27%	42%		
2.5	19%	19%	31%		
1.25	14%	13%	22%		
0.630	9%	9%	16%		
0.315	6%	7%	11%		
0.160	4%	5%	8%		
0.080	2%	1%	6%		
M.C.(%):	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	73	73	58		
% SAND:	24	27	36		
% FINES:	2	1	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

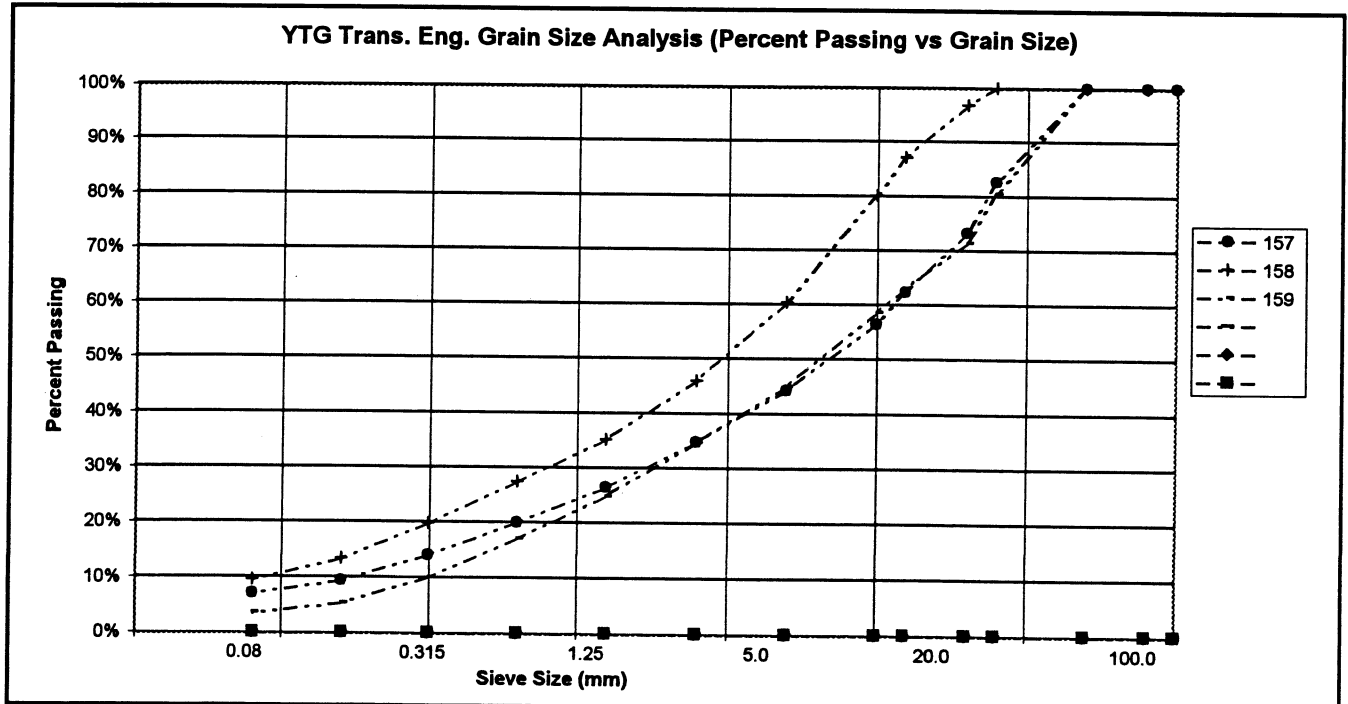


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2694

DATE COMP: 03/09/25

FIELD NO:	157	158	159		
LAB NO:	319	320	321		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0		
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	83%	100%	81%		
20.0	73%	97%	71%		
12.5	62%	87%	63%		
10.0	56%	80%	59%		
5.0	44%	60%	45%		
2.5	35%	46%	35%		
1.25	27%	35%	25%		
0.630	20%	27%	17%		
0.315	14%	20%	10%		
0.160	9%	13%	5%		
0.080	7%	10%	4%		
M.C.(%):	3%	4%	1%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	56	40	55		
% SAND:	37	51	41		
% FINES:	7	10	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)		

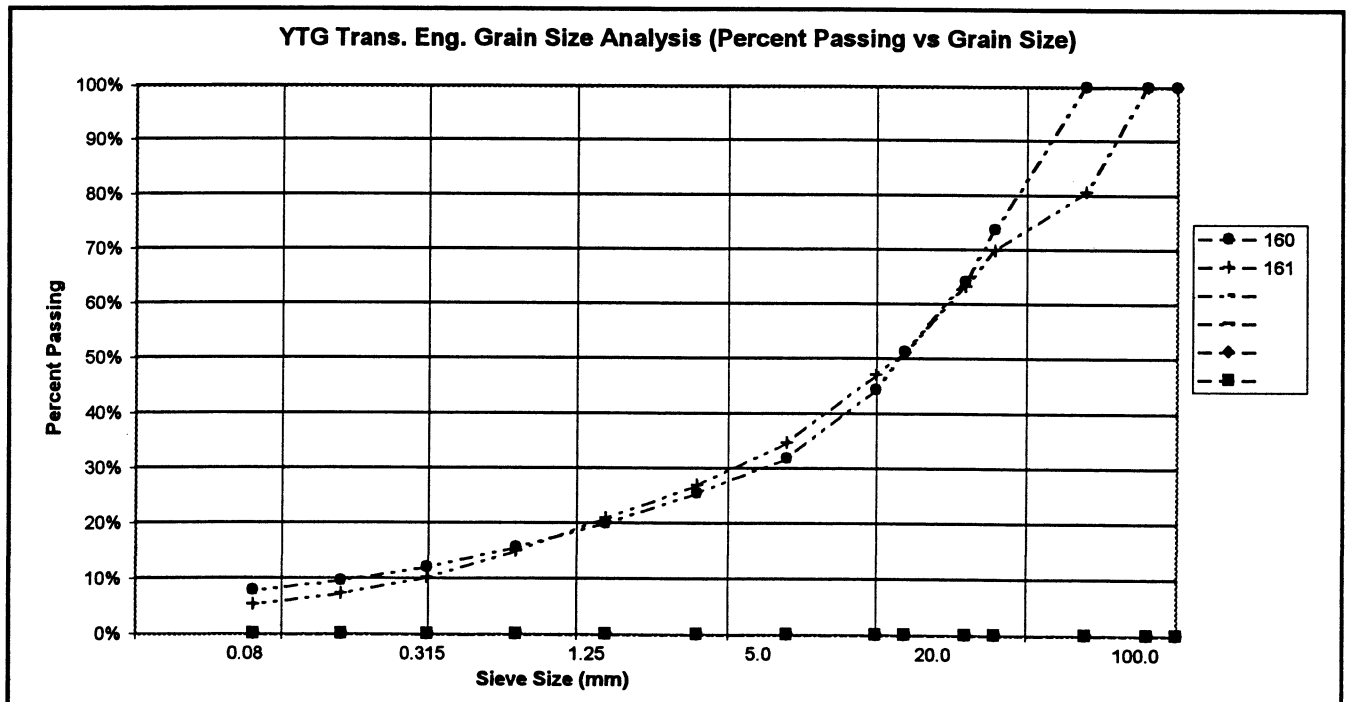


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1718.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2695

DATE COMP: 03/09/25

FIELD NO:	160	161			
LAB NO:	322	323			
DEPTH:	0.5-1.0	2.0-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	81%			
25.0	74%	70%			
20.0	64%	63%			
12.5	51%	51%			
10.0	44%	47%			
5.0	32%	35%			
2.5	26%	27%			
1.25	20%	21%			
0.830	16%	15%			
0.315	12%	10%			
0.160	10%	7%			
0.080	8%	5%			
M.C.(%):	3%	2%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	68	65			
% SAND:	24	29			
% FINES:	8	5			
CLASSIFICATION	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			

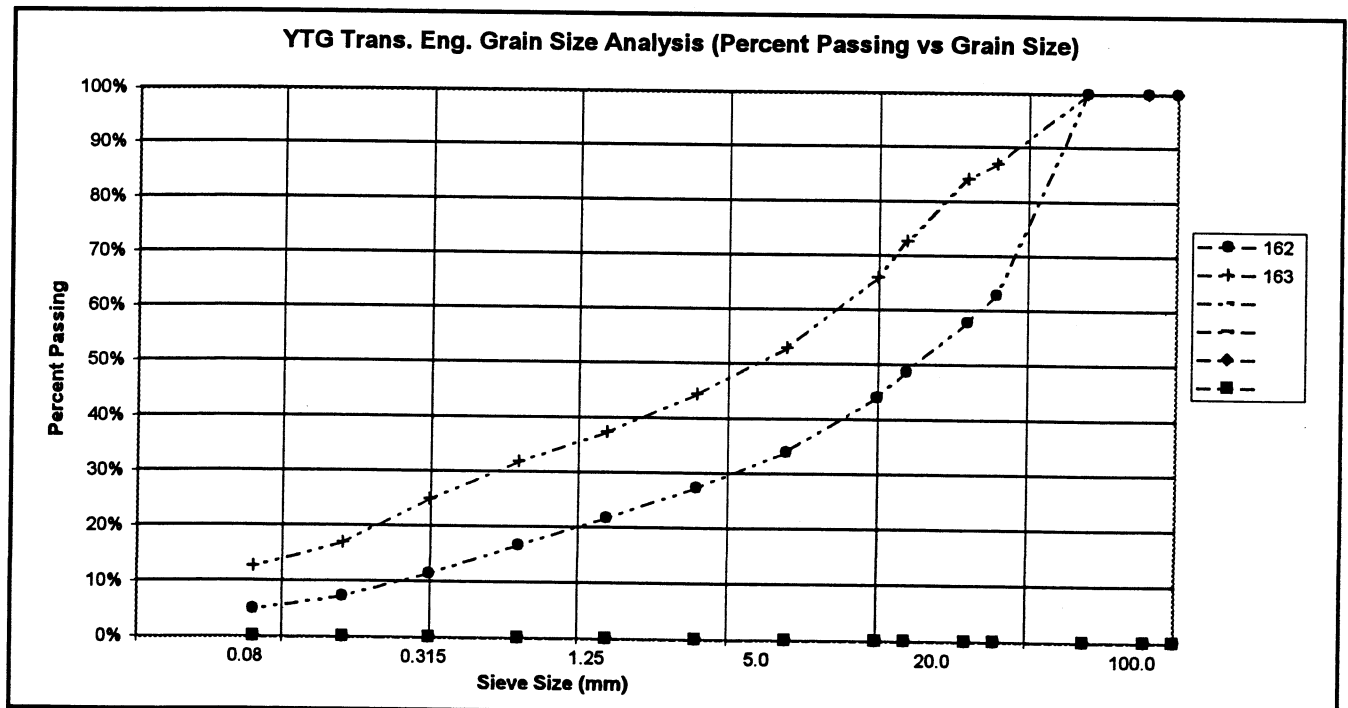


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2696

DATE COMP: 03/09/25

FIELD NO:	162	163			
LAB NO:	324	325			
DEPTH:	0.5-1.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	63%	87%			
20.0	58%	84%			
12.5	49%	73%			
10.0	44%	66%			
5.0	34%	53%			
2.5	27%	44%			
1.25	22%	37%			
0.630	17%	32%			
0.315	11%	25%			
0.160	7%	17%			
0.080	5%	13%			
M.C.(%):	2%	4%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	66	47			
% SAND:	29	40			
% FINES:	5	13			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)			

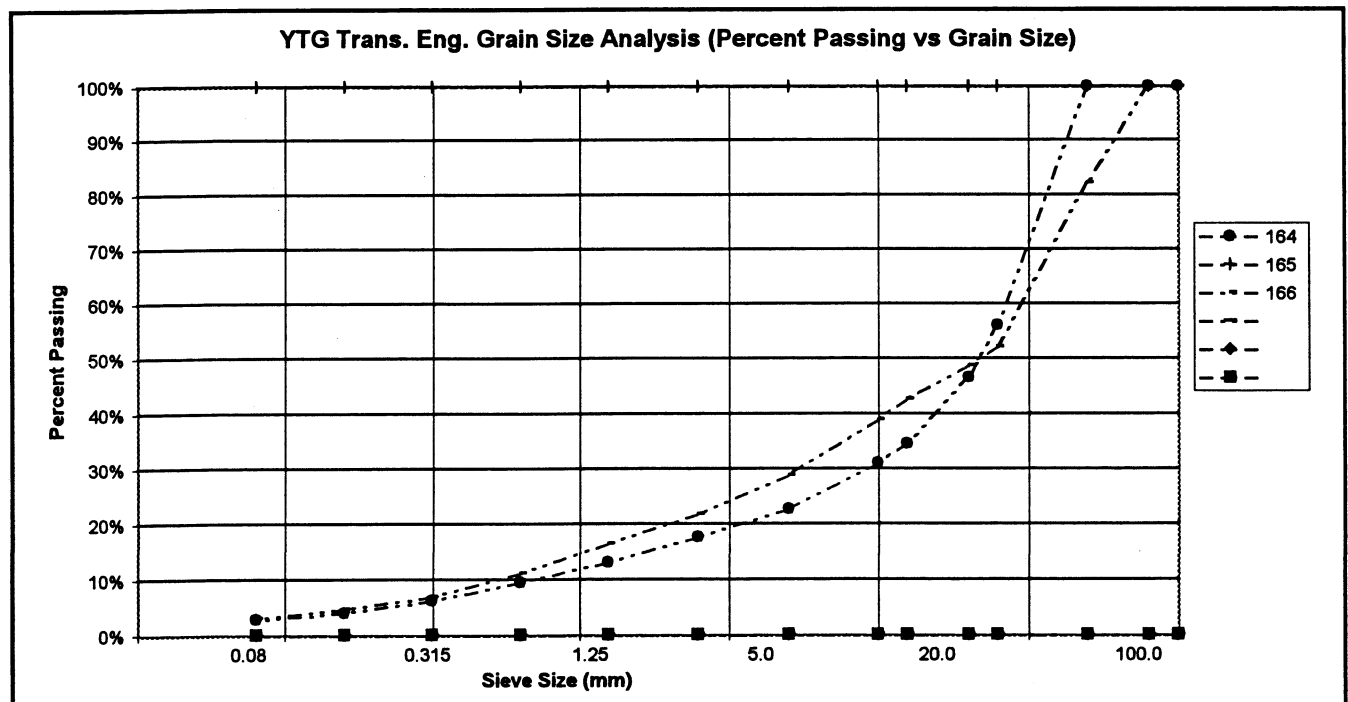


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2697

DATE COMP: 03/09/25

FIELD NO:	164	165	166		
LAB NO:	326	Sample lost	328		
DEPTH:	0.5-1.0	1.6-2.0	2.5-3.0		
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	82%		
25.0	56%	100%	52%		
20.0	47%	100%	49%		
12.5	35%	100%	43%		
10.0	31%	100%	39%		
5.0	23%	100%	29%		
2.5	18%	100%	22%		
1.25	13%	100%	16%		
0.630	10%	100%	11%		
0.315	6%	100%	7%		
0.160	4%	100%	5%		
0.080	3%	100%	3%		
M.C.(%)	1%	4%	1%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	77	0	71		
% SAND:	20	0	26		
% FINES:	3	100	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	<SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)		

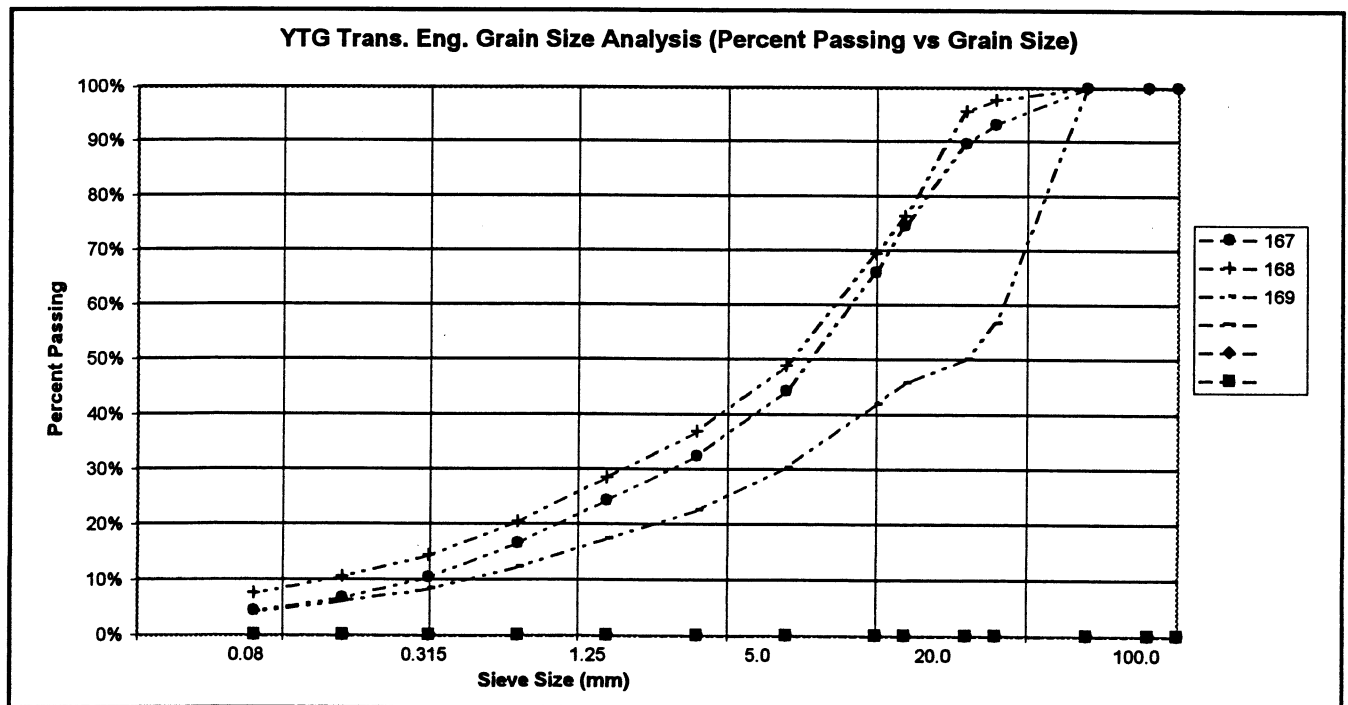


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2698

DATE COMP: 03/09/25

FIELD NO:	167	168	169		
LAB NO:	462	463	329		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0		
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	93%	98%	57%		
20.0	90%	96%	50%		
12.5	75%	76%	46%		
10.0	66%	69%	42%		
5.0	44%	49%	30%		
2.5	32%	37%	23%		
1.25	24%	28%	17%		
0.630	17%	21%	12%		
0.315	10%	14%	8%		
0.160	7%	11%	6%		
0.080	4%	8%	4%		
M.C.(%):	2%	2%	1%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	56	51	70		
% SAND:	40	41	26		
% FINES:	4	8	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

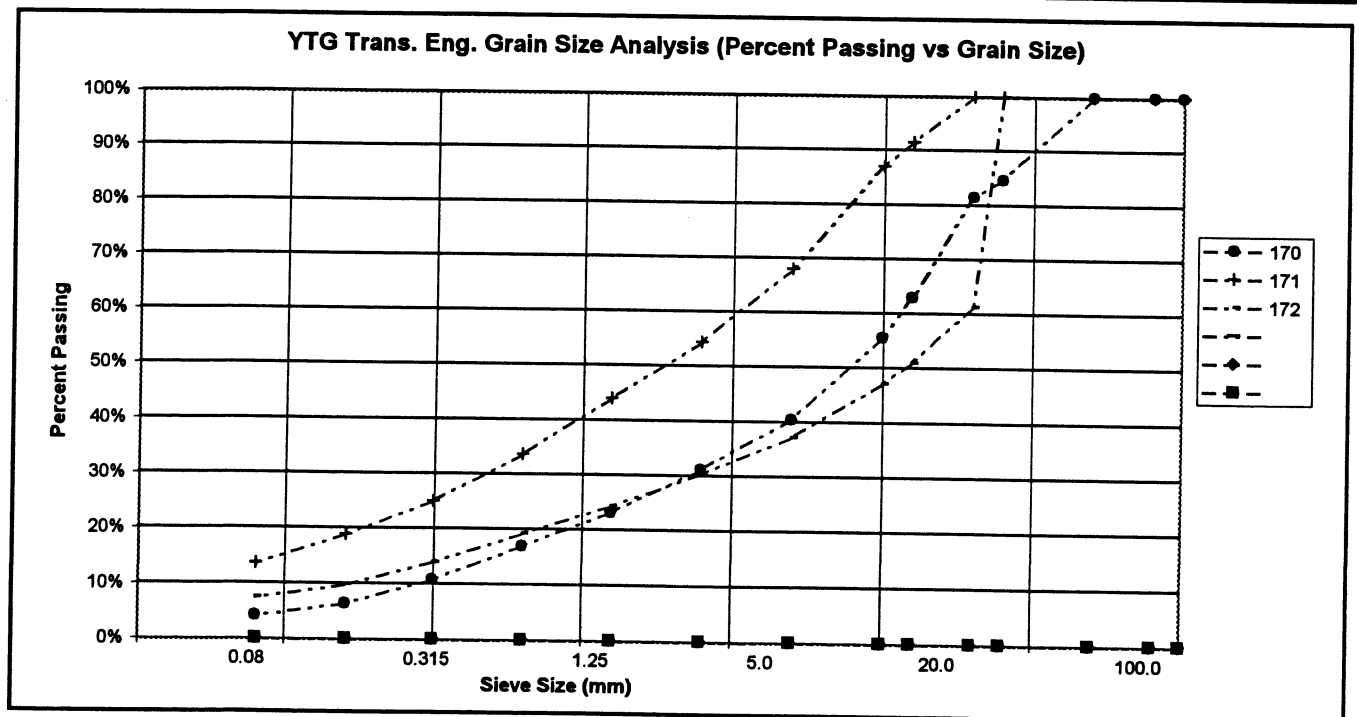


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2699

DATE COMP: 03/09/29

FIELD NO:	170	171	172		
LAB NO:	330	331	332		
DEPTH:	0.6-1.0	2.5-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	85%	100%	100%		
20.0	81%	100%	61%		
12.5	63%	92%	51%		
10.0	56%	87%	47%		
5.0	40%	68%	37%		
2.5	31%	54%	30%		
1.25	23%	44%	24%		
0.630	17%	34%	19%		
0.315	11%	25%	14%		
0.160	6%	19%	10%		
0.080	4%	14%	7%		
M.C.(%):	1%	5%	3%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	60	32	63		
% SAND:	36	54	30		
% FINES:	4	14	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

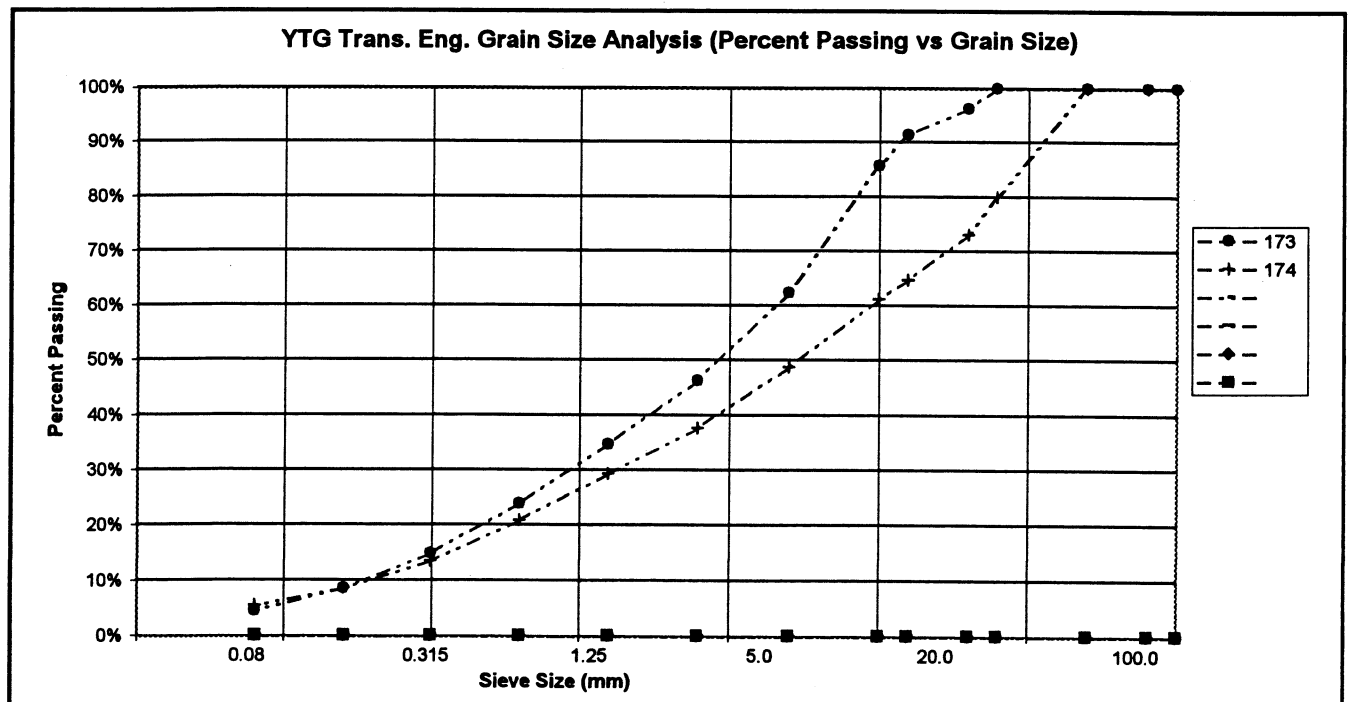


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2700

DATE COMP: 03/09/29

FIELD NO:	173	174			
LAB NO:	333	334			
DEPTH:	0.6-1.0	4.0-4.5			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	100%	80%			
20.0	96%	73%			
12.5	91%	65%			
10.0	86%	61%			
5.0	62%	49%			
2.5	46%	38%			
1.25	35%	29%			
0.630	24%	21%			
0.315	15%	14%			
0.160	9%	9%			
0.080	4%	5%			
M.C.(%):	2%	2%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	38	51			
% SAND:	58	43			
% FINES:	4	5			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			

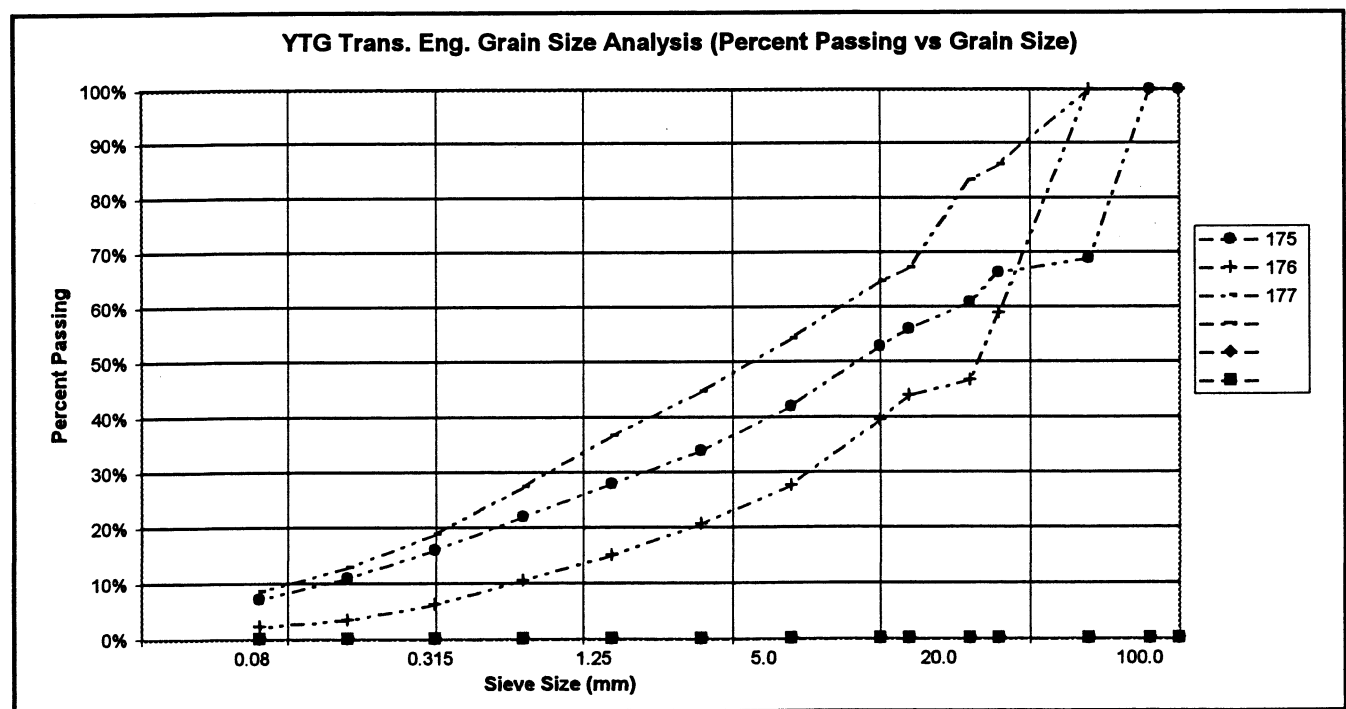


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2701

DATE COMP: 03/09/29

FIELD NO:	175	176	177		
LAB NO:	335	336	337		
DEPTH:	1.0-1.5	2.0-2.6	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	69%	100%	100%		
25.0	66%	59%	86%		
20.0	61%	47%	83%		
12.5	56%	44%	67%		
10.0	53%	39%	65%		
5.0	42%	28%	54%		
2.5	34%	21%	45%		
1.25	28%	15%	37%		
0.630	22%	11%	27%		
0.315	16%	6%	19%		
0.160	11%	3%	13%		
0.080	7%	2%	9%		
M.C.(%):	2%	1%	2%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	58	72	46		
% SAND:	35	26	46		
% FINES:	7	2	9		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

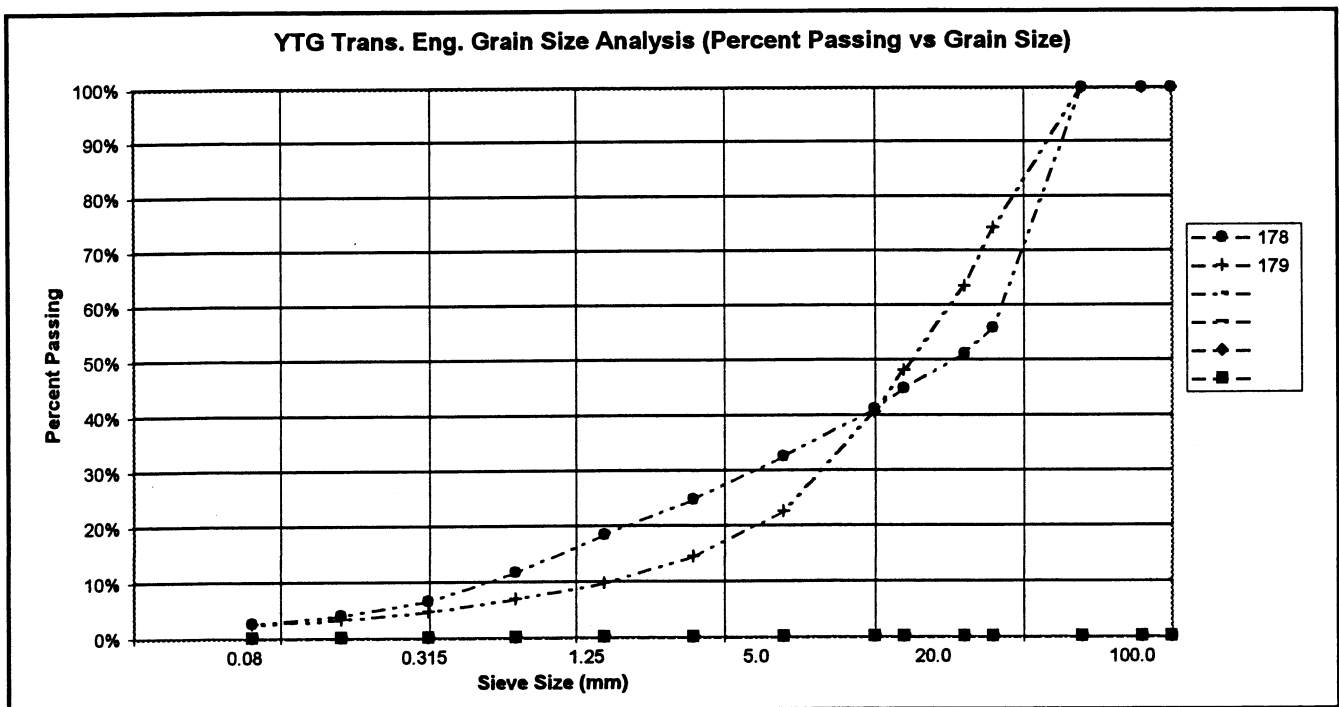


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2702

DATE COMP: 03/09/29

FIELD NO:	178	179			
LAB NO:	338	339			
DEPTH:	0.6-1.0	3.0-4.0			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	56%	74%			
20.0	51%	64%			
12.5	45%	48%			
10.0	41%	41%			
5.0	33%	23%			
2.5	25%	15%			
1.25	18%	10%			
0.630	12%	7%			
0.315	7%	5%			
0.160	4%	3%			
0.080	3%	2%			
M.C.(%):	1%	1%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	67	77			
% SAND:	30	20			
% FINES:	3	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

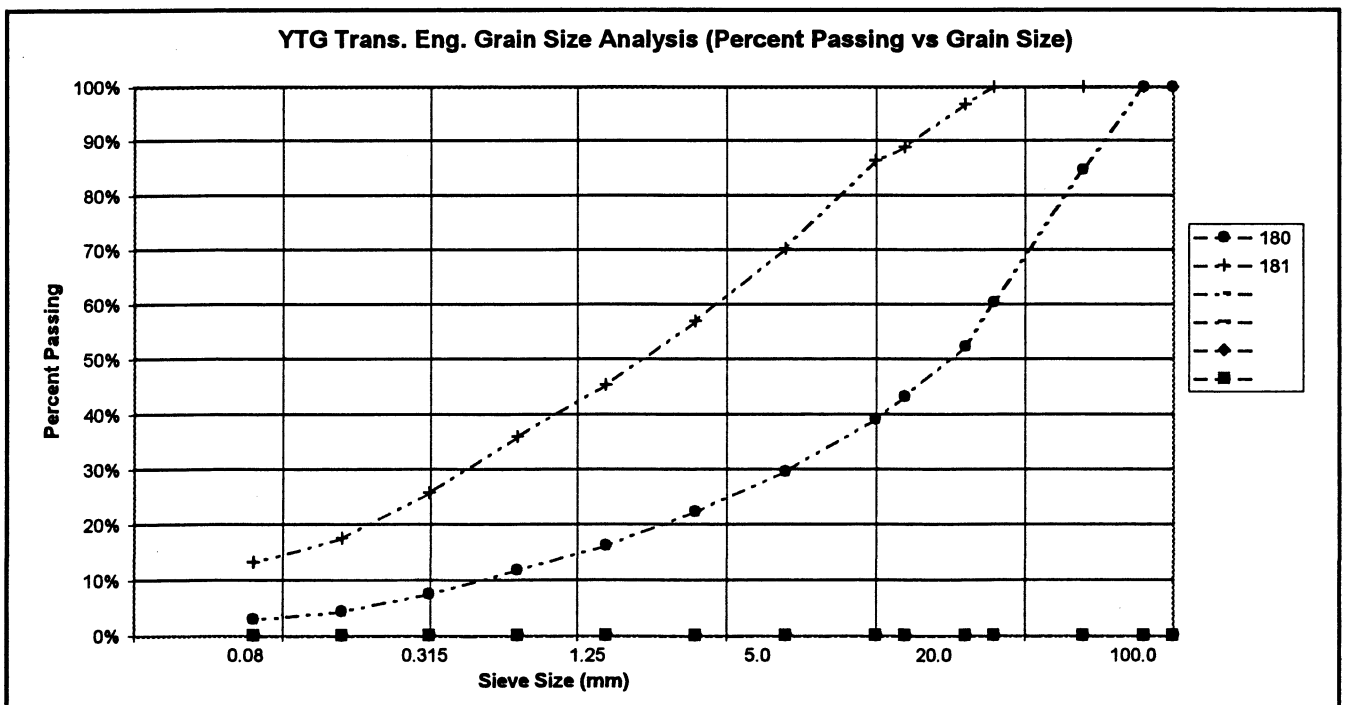


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2703

DATE COMP: 03/09/29

FIELD NO:	180	181			
LAB NO:	340	341			
DEPTH:	0.6-1.0	3.6-4.0			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	85%	100%			
25.0	61%	100%			
20.0	52%	97%			
12.5	43%	89%			
10.0	39%	86%			
5.0	30%	70%			
2.5	22%	57%			
1.25	16%	45%			
0.630	12%	36%			
0.315	8%	26%			
0.160	4%	18%			
0.080	3%	13%			
M.C.(%):	1%	5%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	70	30			
% SAND:	27	57			
% FINES:	3	13			
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	SILTY SAND WITH GRAVEL (SM)			

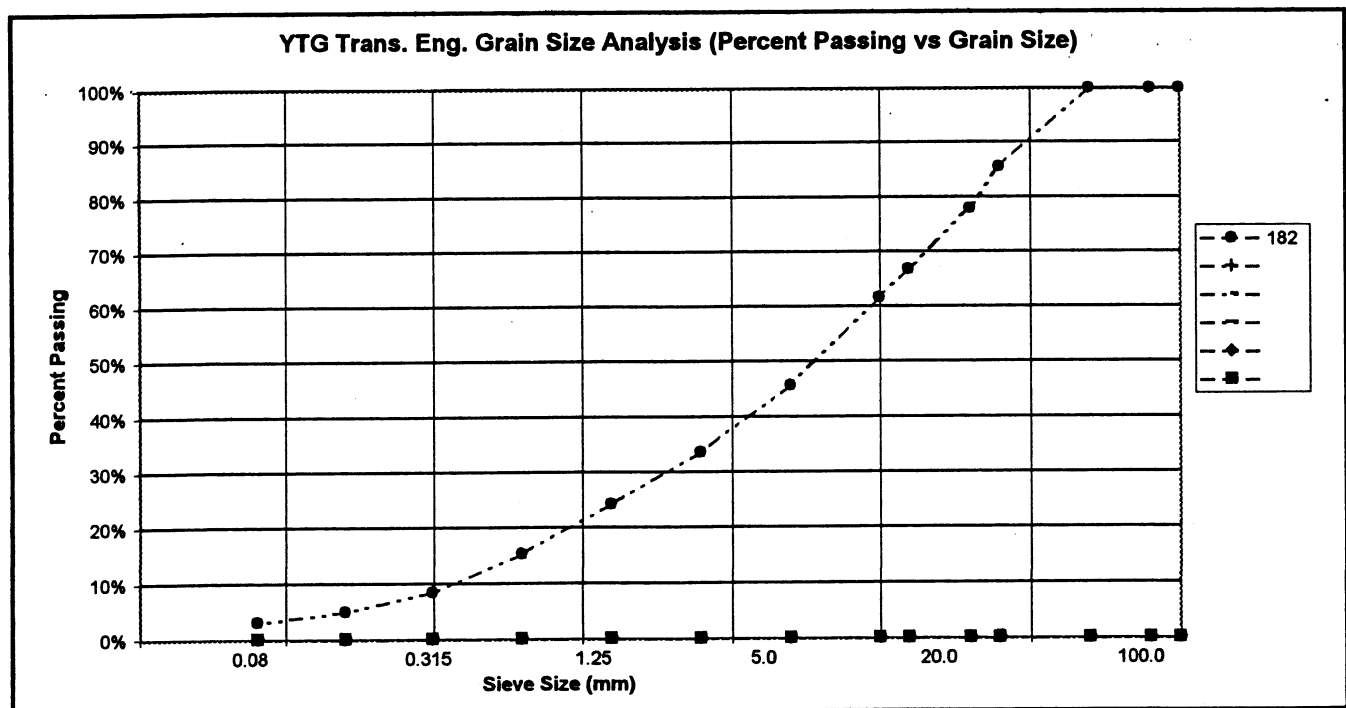


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2704

DATE COMP: 03/09/29

FIELD NO:	182				
LAB NO:	342				
DEPTH:	1.0-2.4				
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	86%				
20.0	78%				
12.5	67%				
10.0	62%				
5.0	46%				
2.5	34%				
1.25	24%				
0.630	15%				
0.315	8%				
0.160	5%				
0.080	3%				
M.C.(%)	1%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX:	0.0				
% GRAVEL:	54				
% SAND:	43				
% FINES:	3				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)				

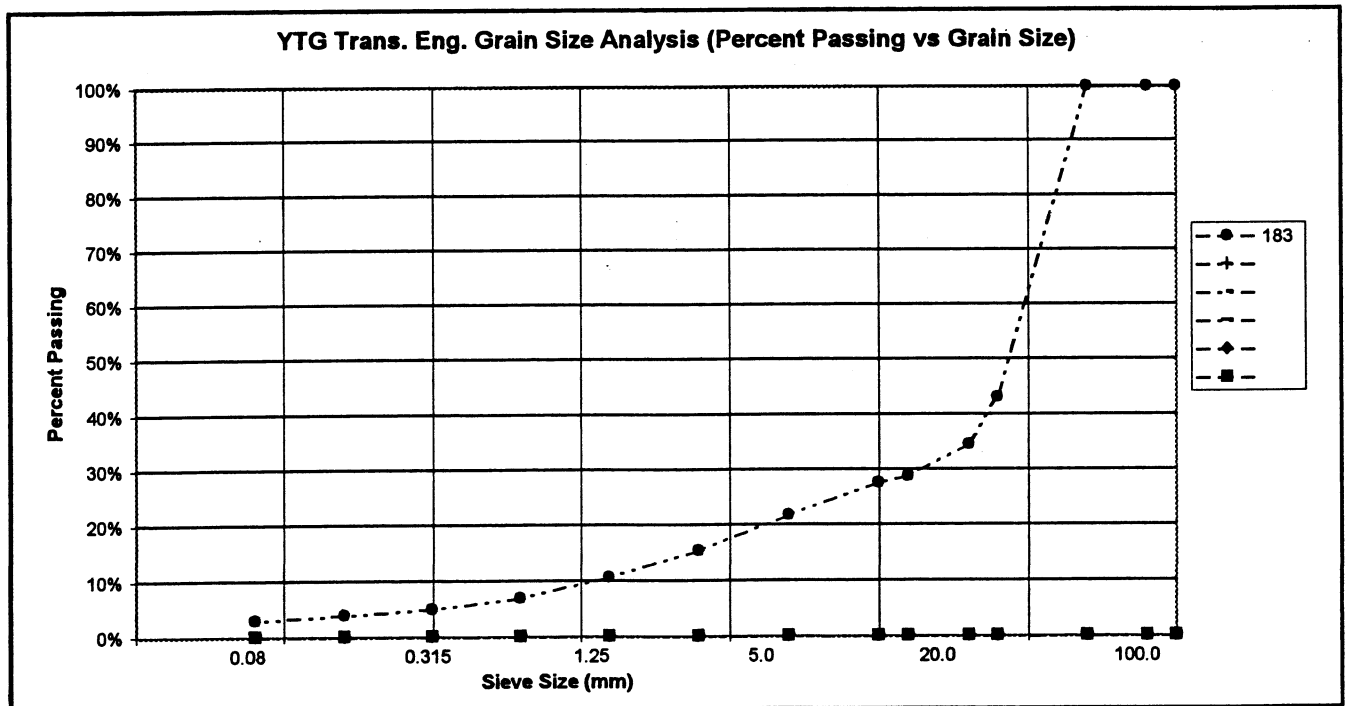


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2705

DATE COMP: 03/09/29

FIELD NO:	183				
LAB NO:	343				
DEPTH:	1.5-2.0				
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	43%				
20.0	35%				
12.5	29%				
10.0	28%				
5.0	22%				
2.5	15%				
1.25	11%				
0.630	7%				
0.315	5%				
0.160	4%				
0.080	3%				
M.C.(%):	1%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX.:	0.0				
% GRAVEL:	78				
% SAND:	19				
% FINES:	3				
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)				

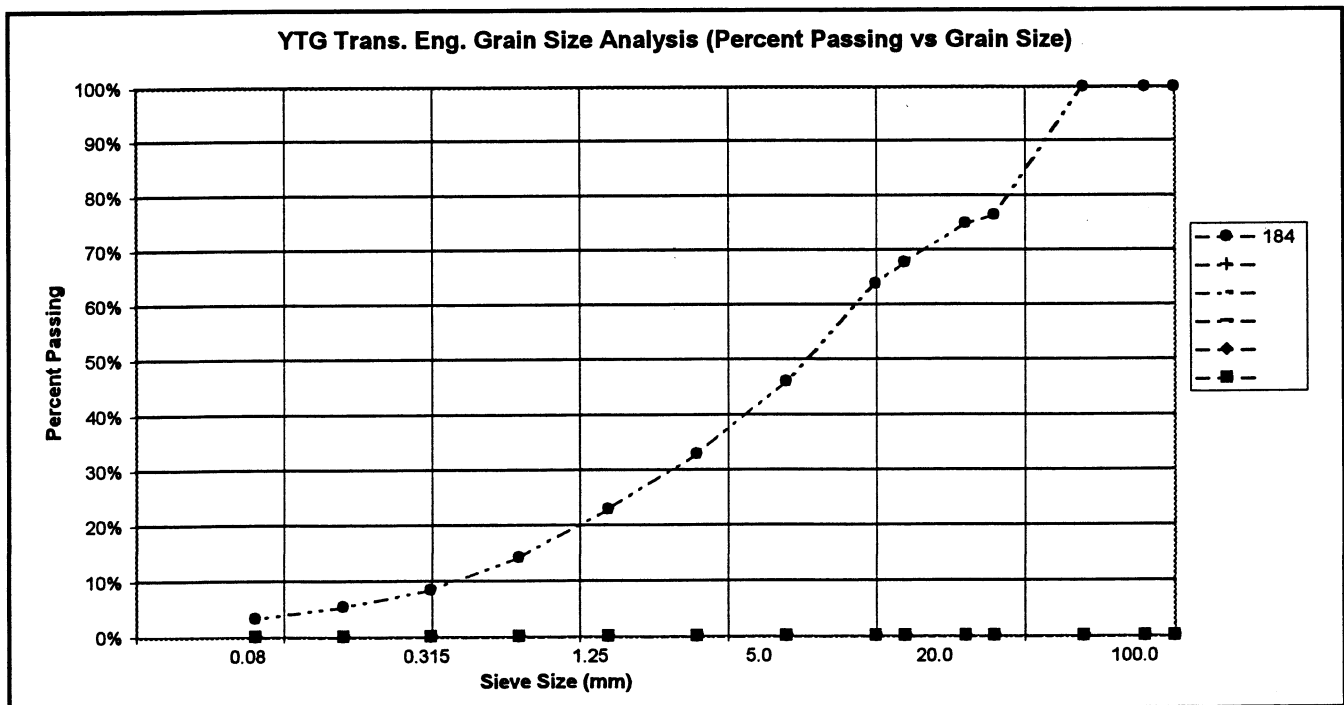


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Fan
 PROJECT LOCATION: Km 1716.0 A/H 115-G-12
 DRILL UNIT: D-4 CAT 6" Auger
 HOLE LOCATION: See Plan
 LOGGED BY: G.C.

HOLE No.: 651-2708

DATE COMP: 03/09/29

FIELD NO:	184				
LAB NO:	344				
DEPTH:	0.6-1.0				
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	76%				
20.0	75%				
12.5	68%				
10.0	64%				
5.0	46%				
2.5	33%				
1.25	23%				
0.630	14%				
0.315	8%				
0.160	5%				
0.080	3%				
M.C.(%):	1%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX:	0.0				
% GRAVEL:	54				
% SAND:	43				
% FINES:	3				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)				

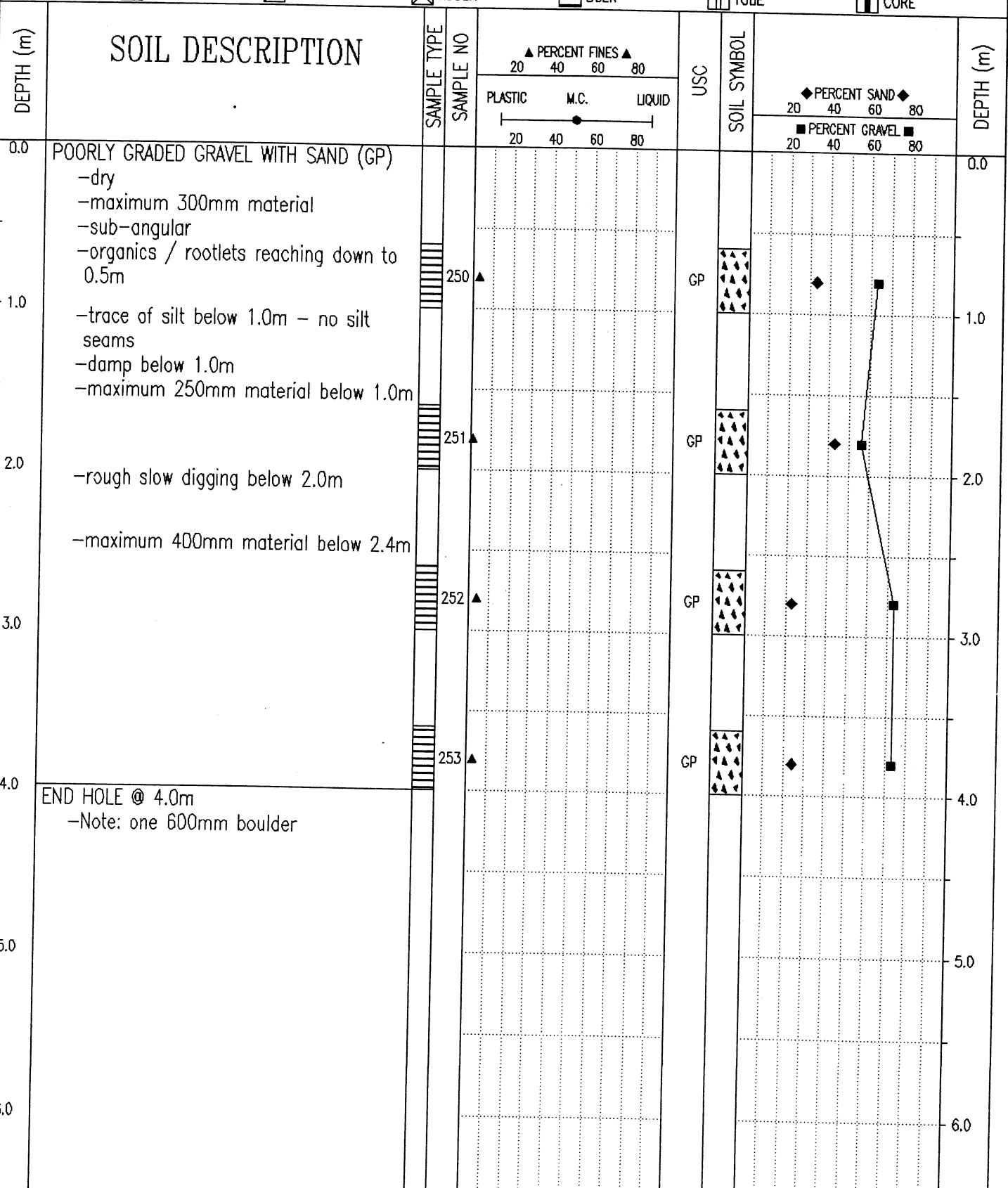


Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

October 2003
Book # 654

Test Pit Logs

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2732
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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LOGGED BY: GC

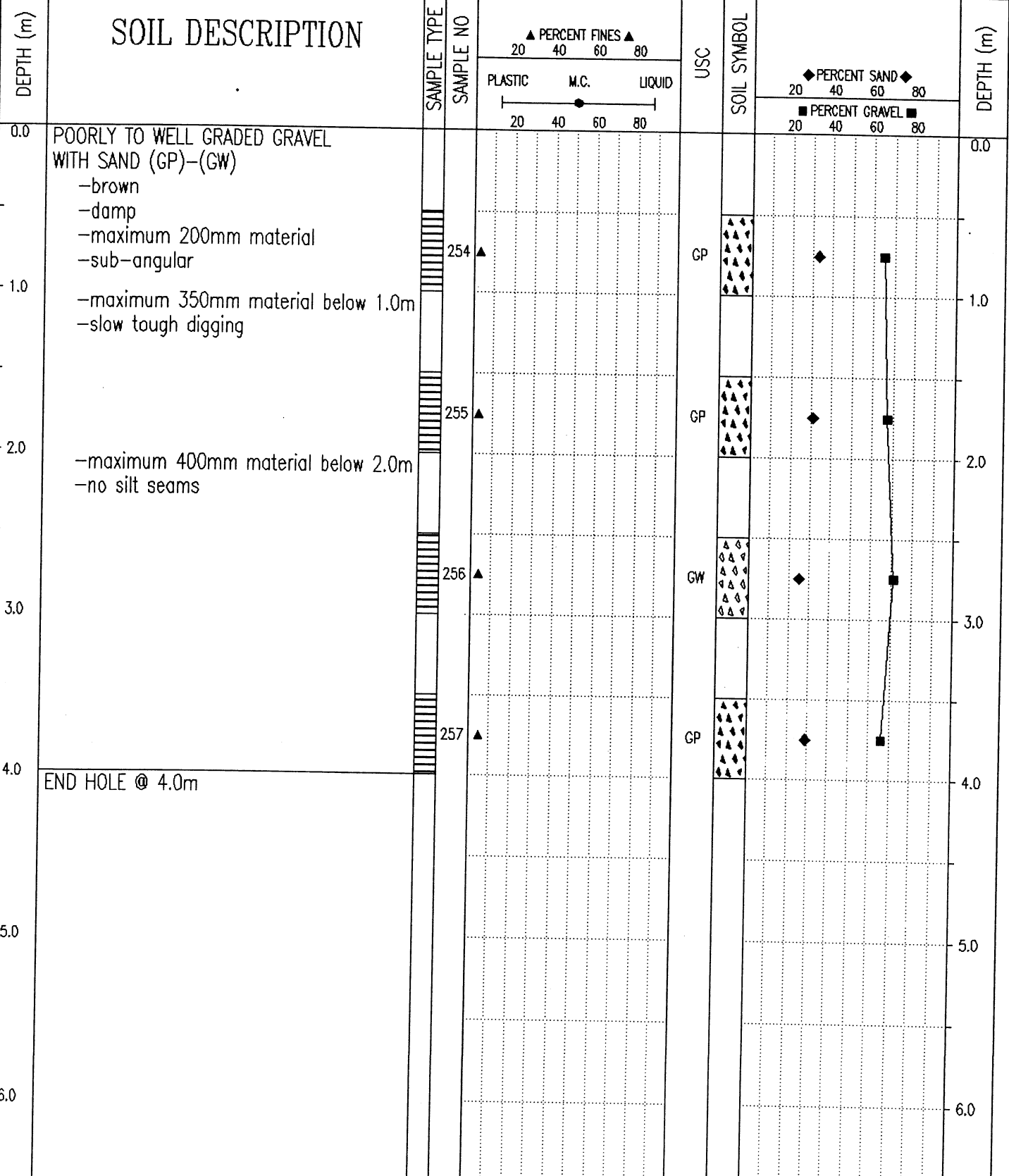
REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 03/10/09

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

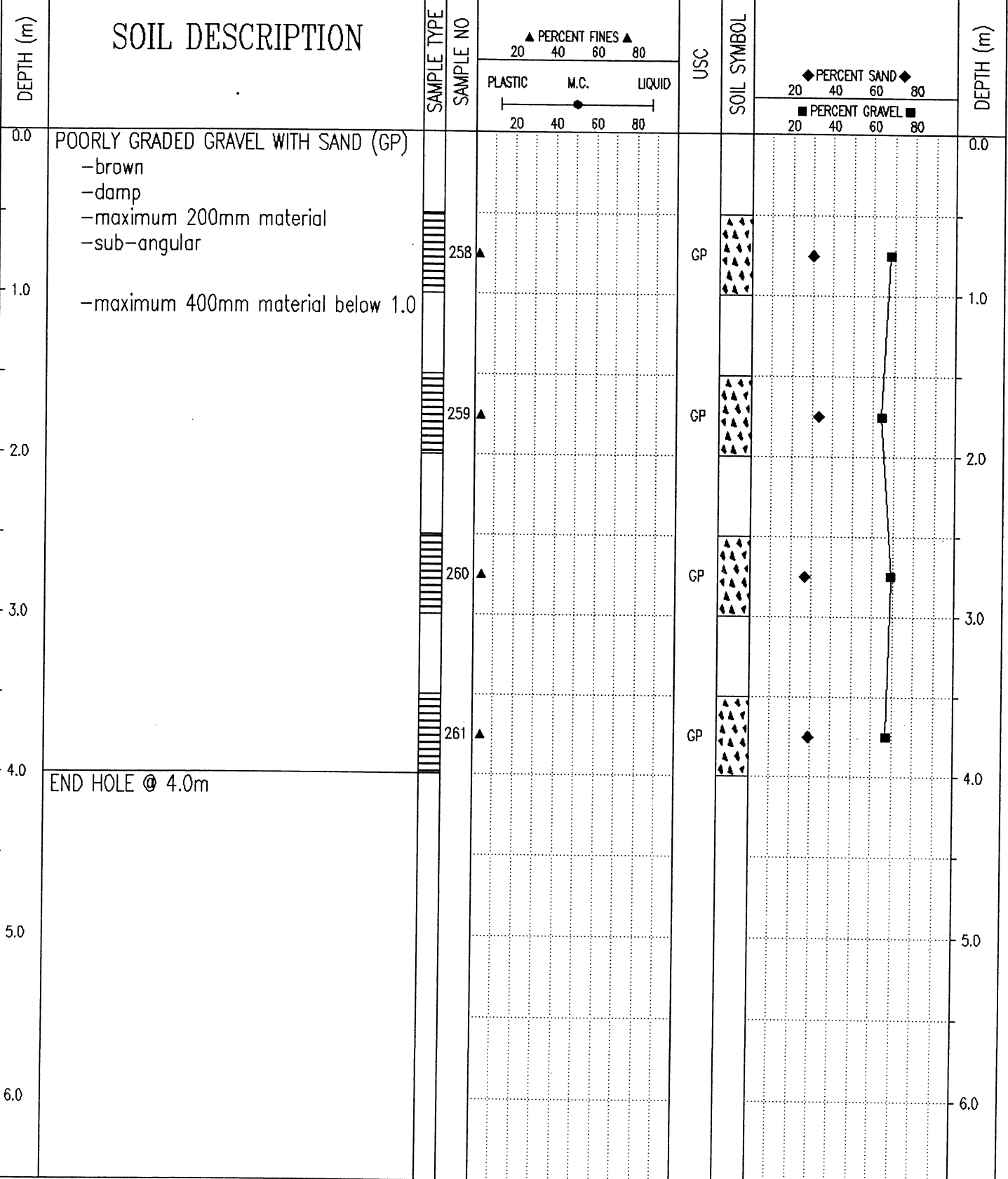


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Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/10/09
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2734
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

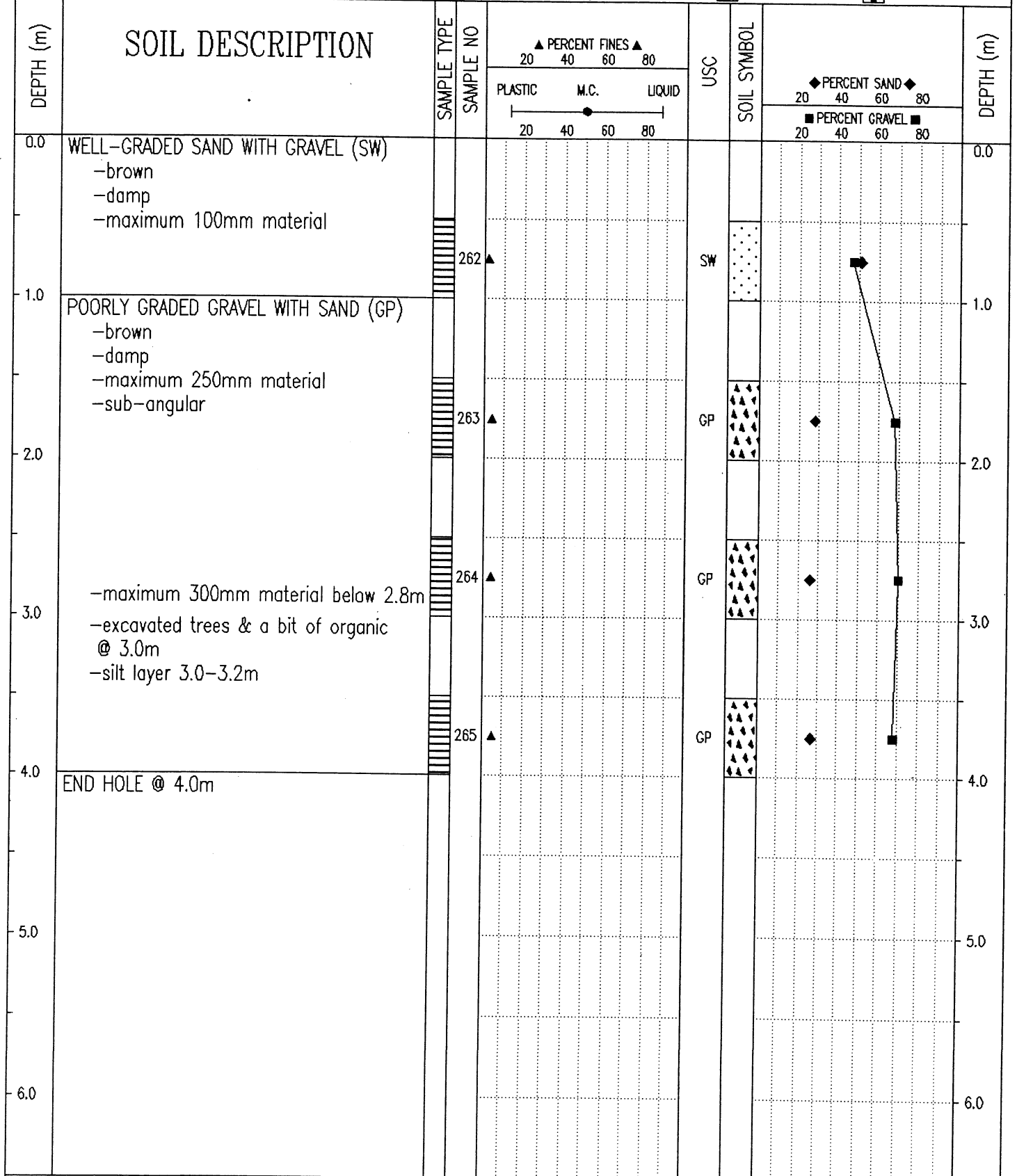
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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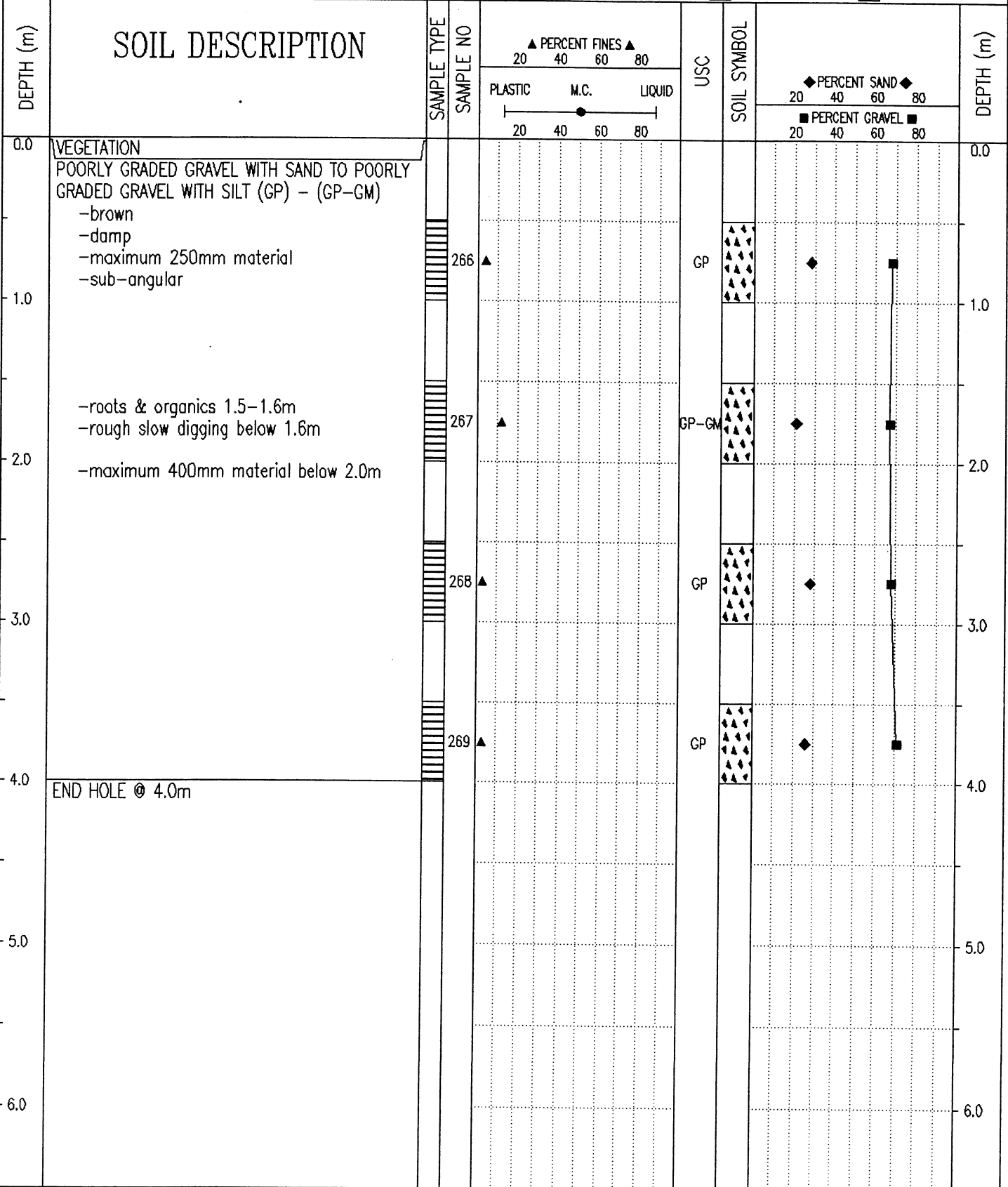
LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/10/09
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 654-2735
ENGINEERING CAPITAL		WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 03/10/09
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2736
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

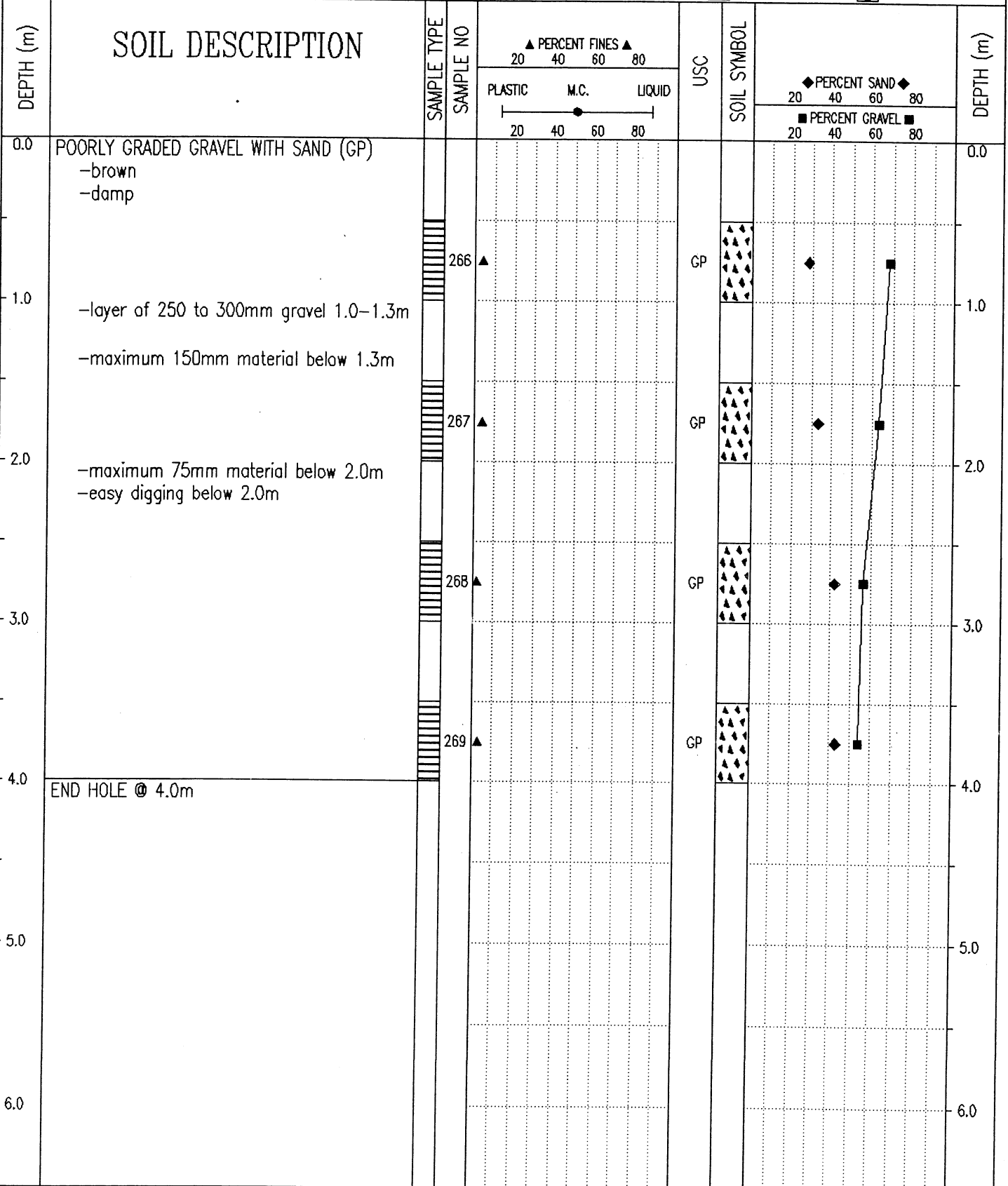


Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 03/10/09

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2737
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



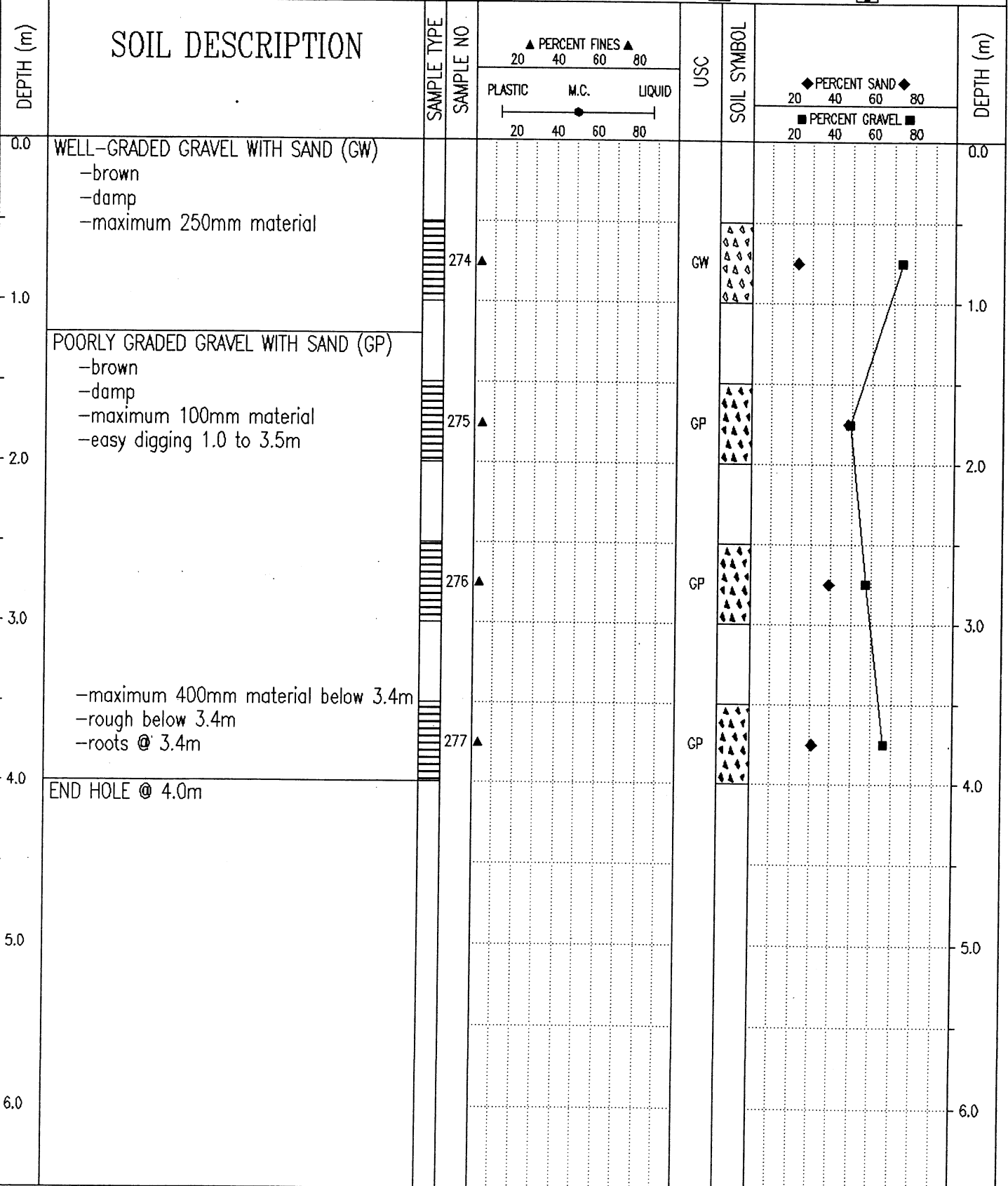
Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 03/10/09

Page 1 of 1

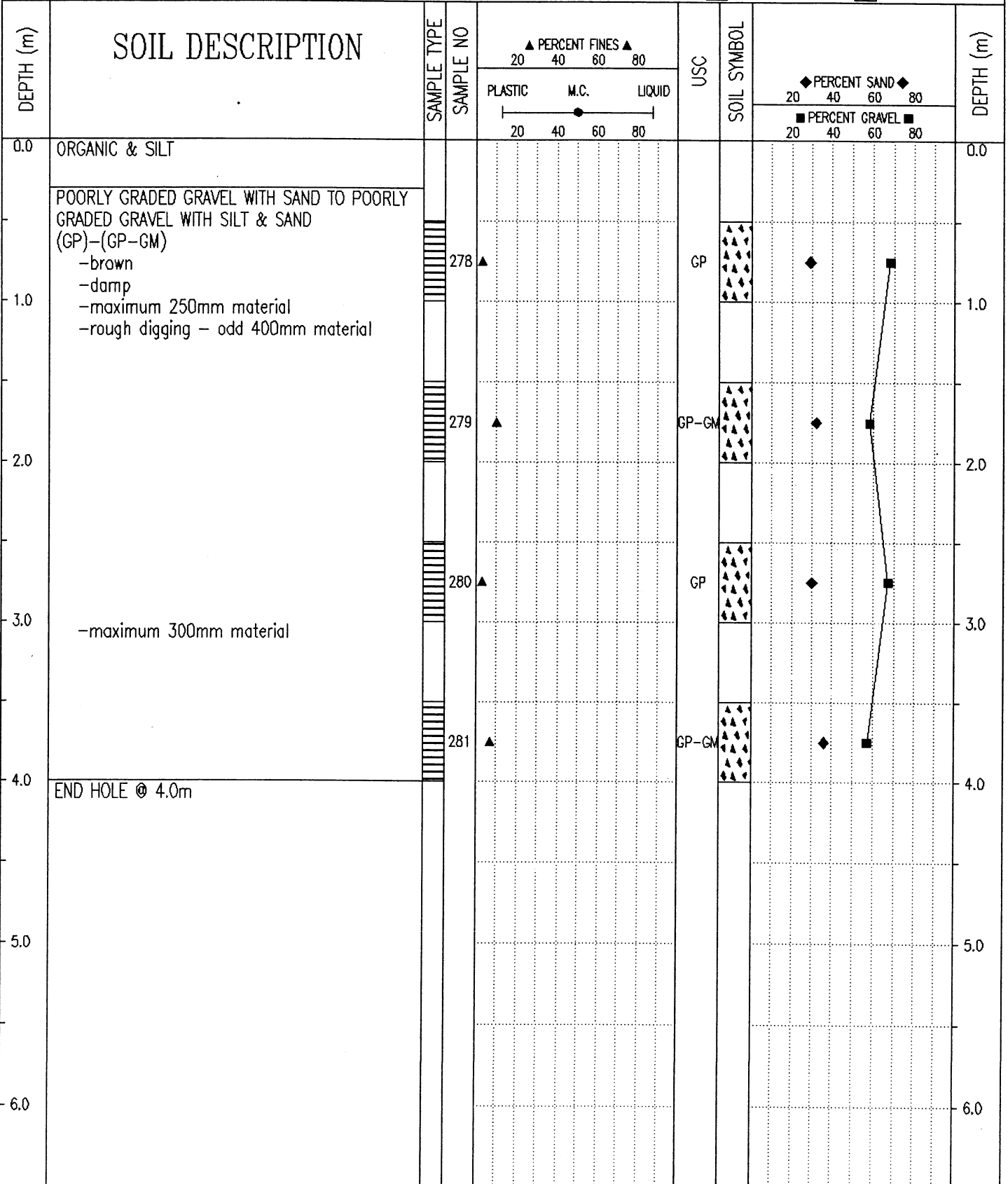
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 654-2738
ENGINEERING CAPITAL		WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE			



Government of Yukon
 Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/10/09
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2739
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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LOGGED BY: GC

REVIEWED BY:

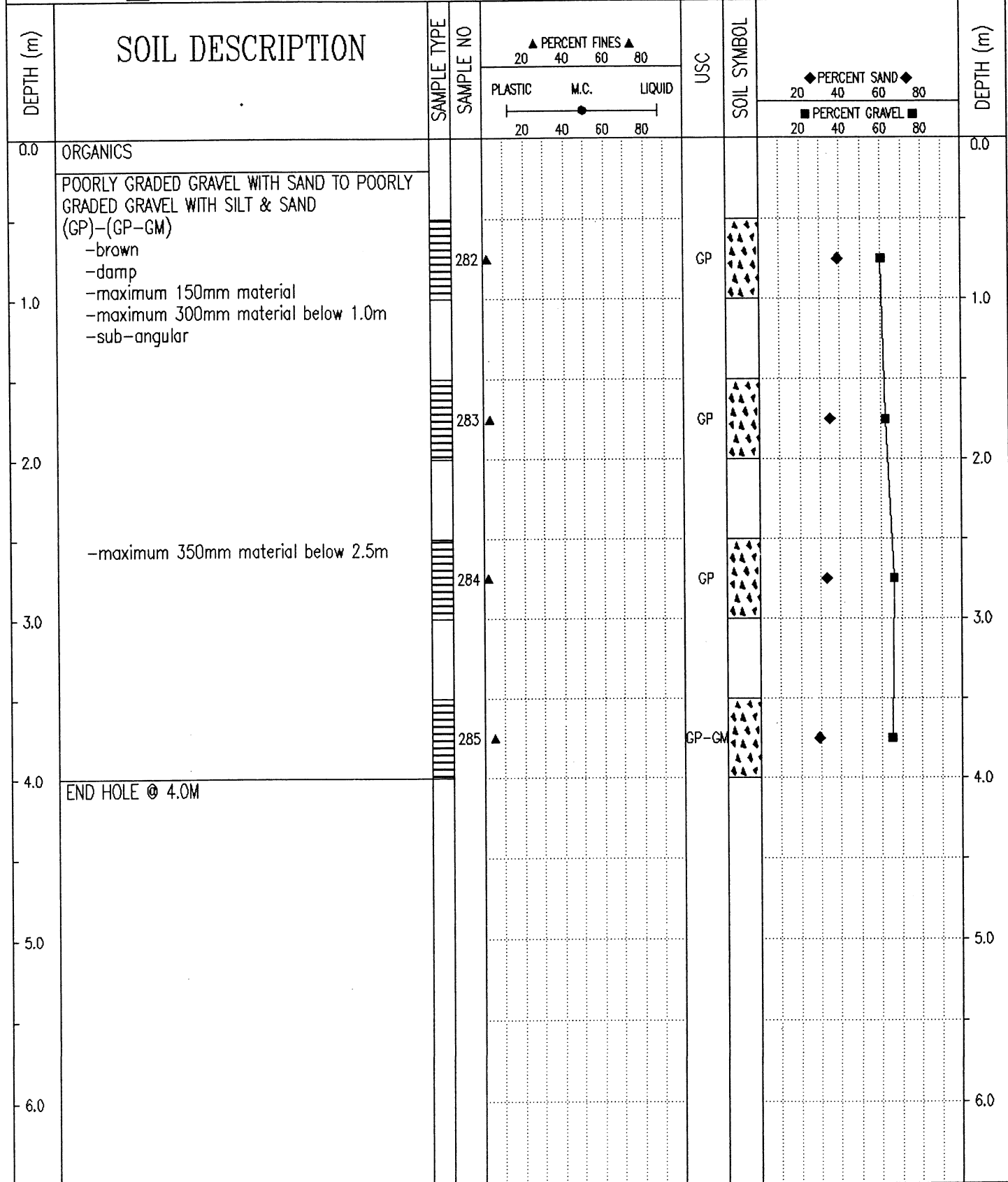
Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 03/10/09

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SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 654-2740
ENGINEERING CAPITAL		WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

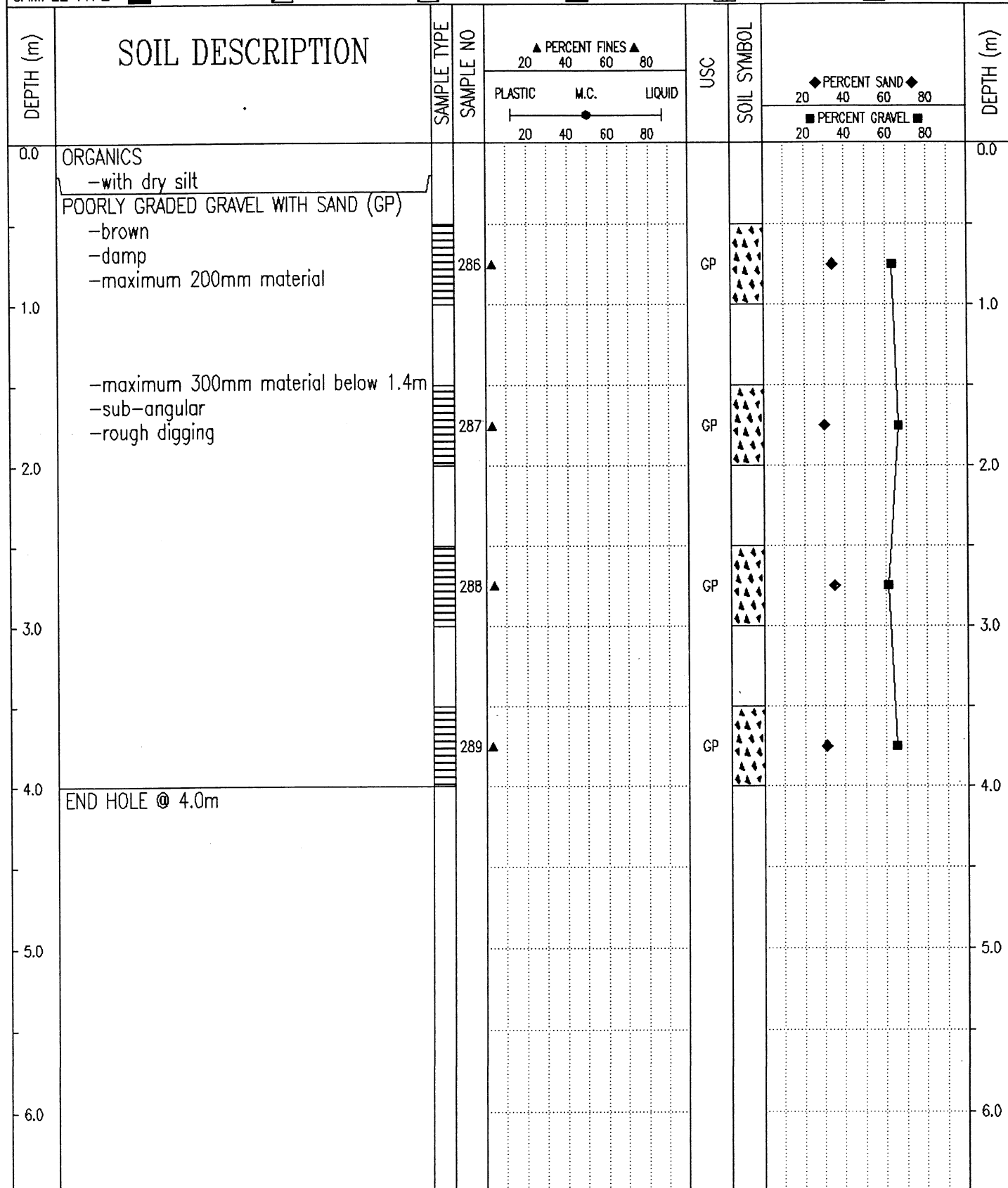


Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 03/10/10

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2741
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

Fig. No:

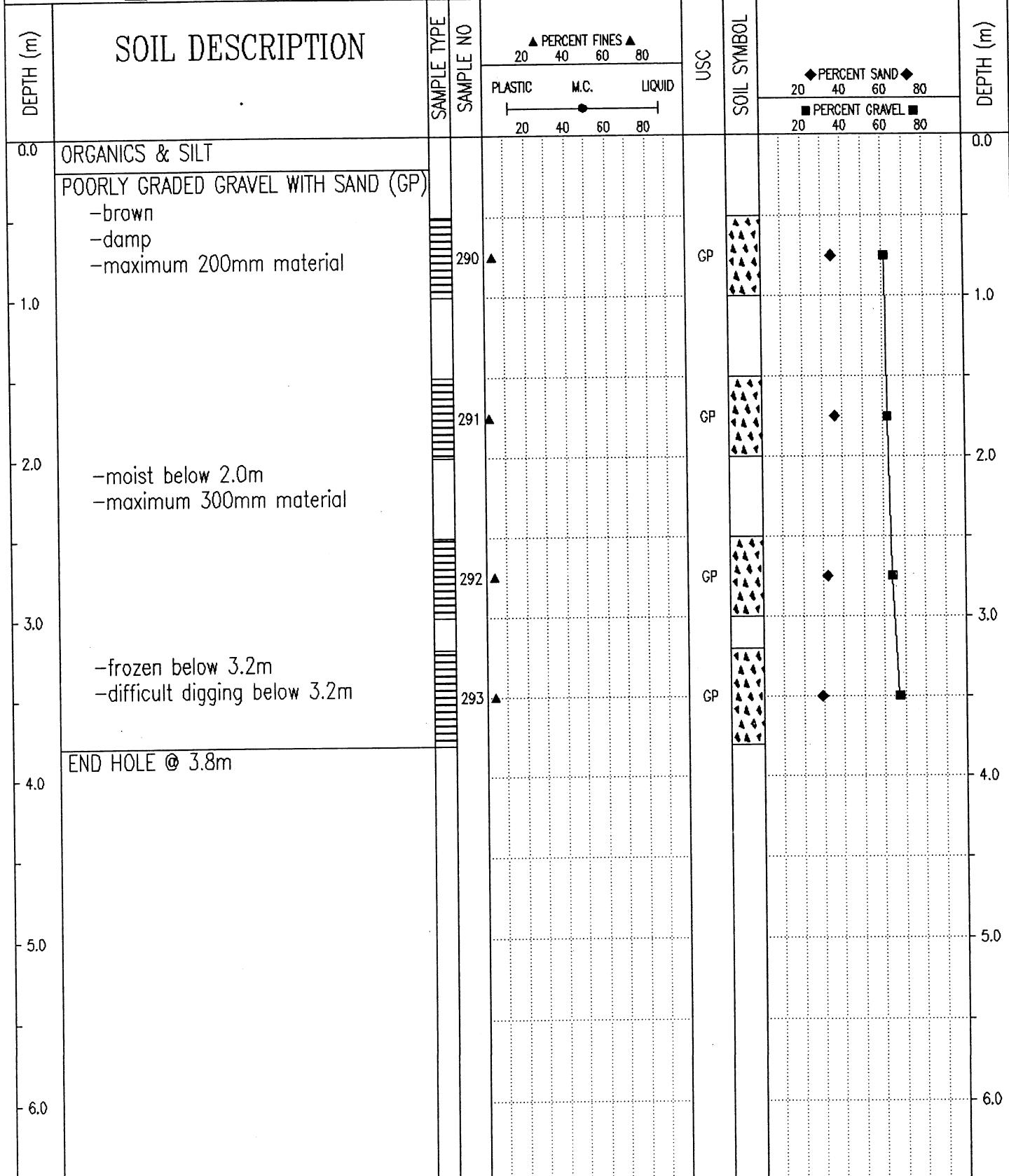
COMPLETION DEPTH: 4.0 m

COMPLETE: 03/10/10

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2742
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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

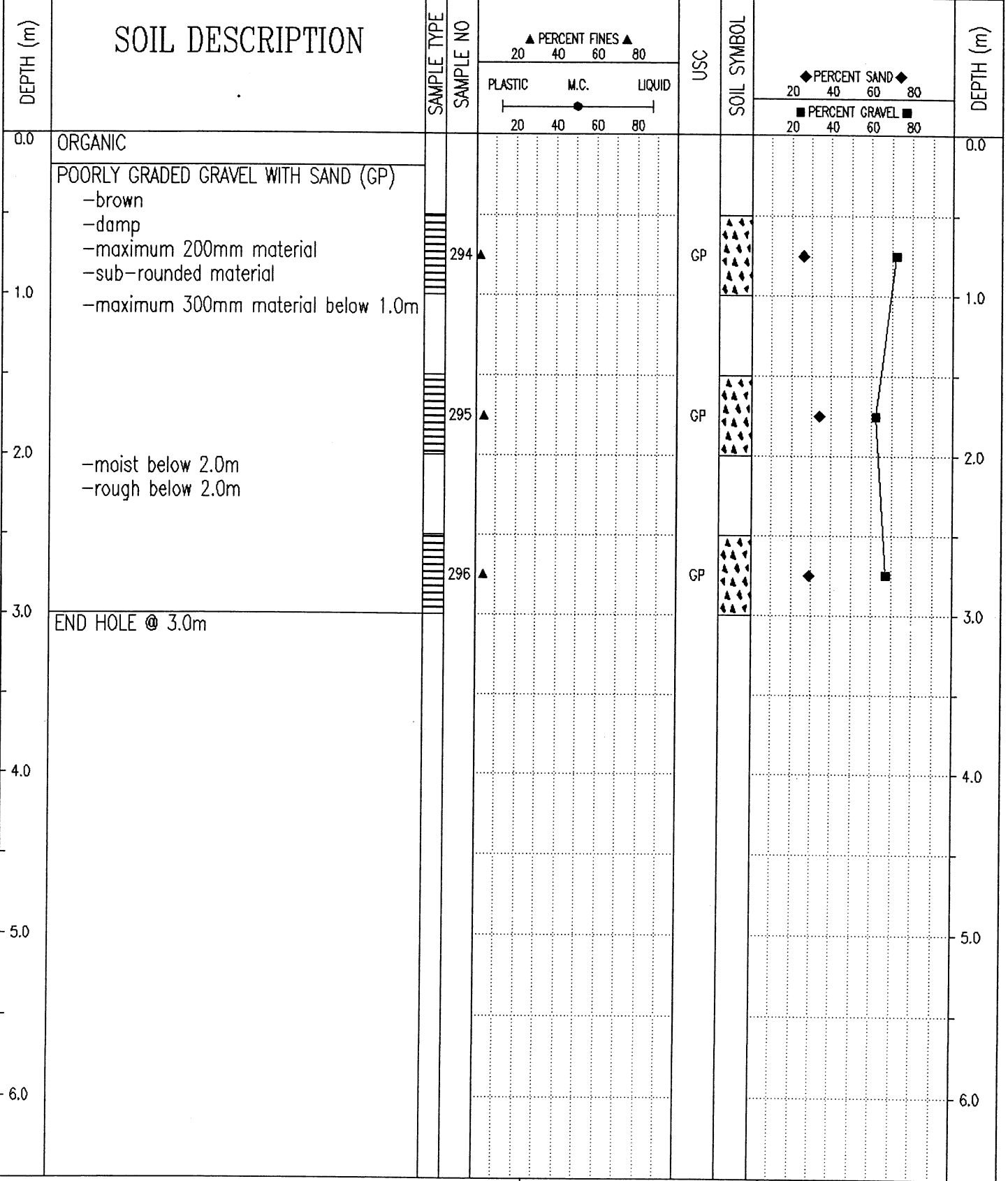


Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 3.8 m
REVIEWED BY:	COMPLETE: 03/10/10
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2743
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

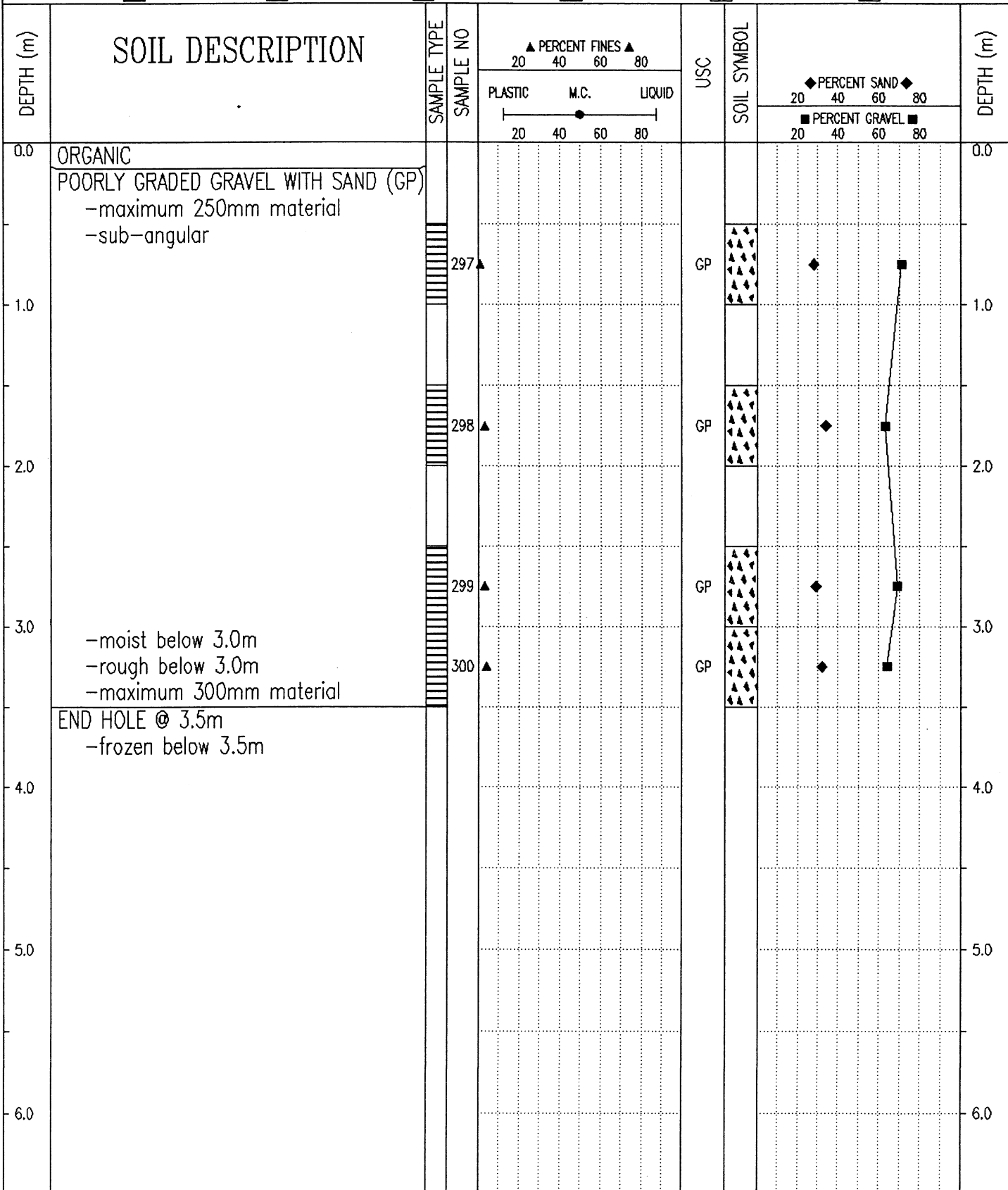
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/10/10
Fig. No:	Page 1 of 1

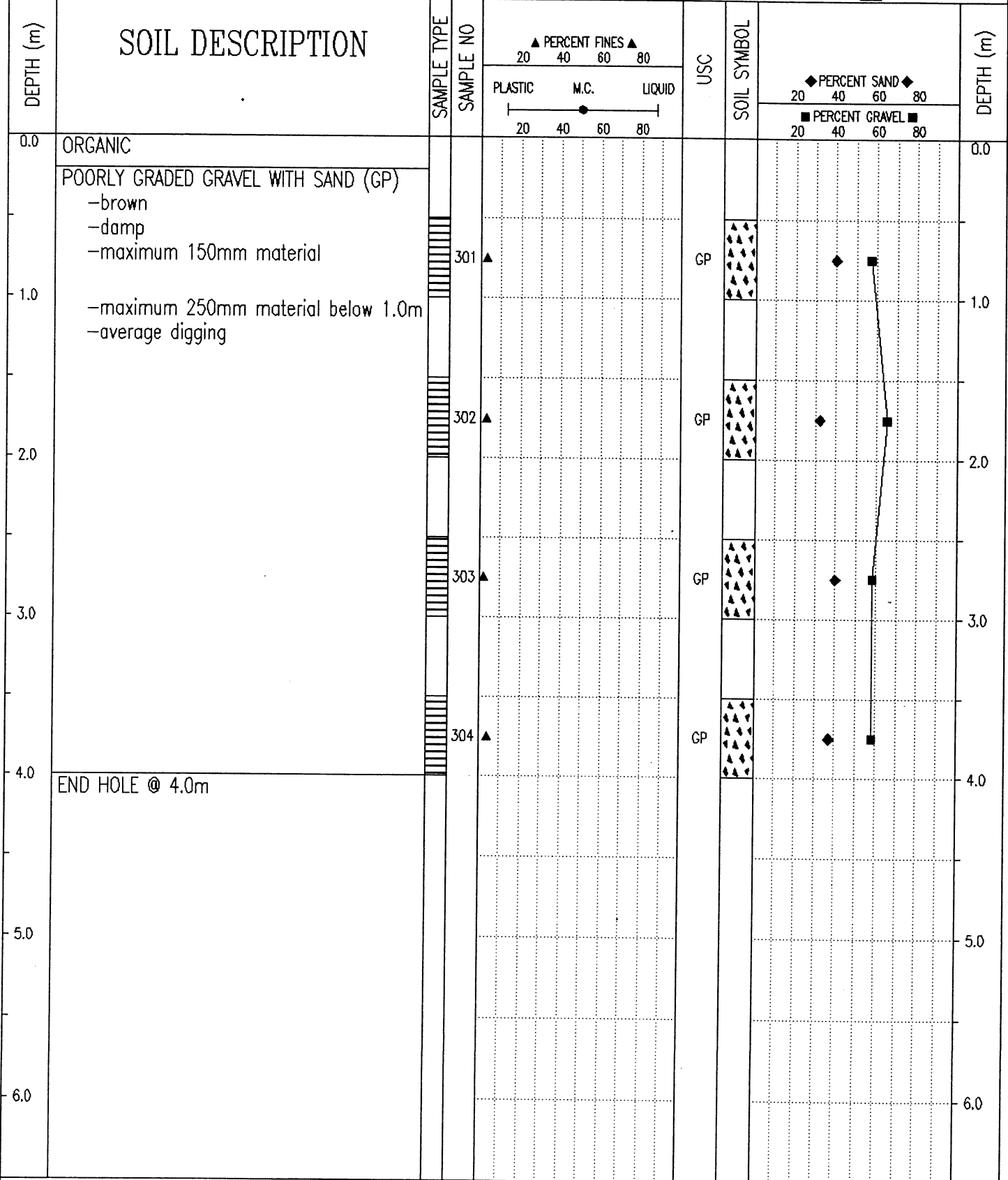
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2744
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC-220-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.5 m
	REVIEWED BY:	COMPLETE: 03/10/10
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2754
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

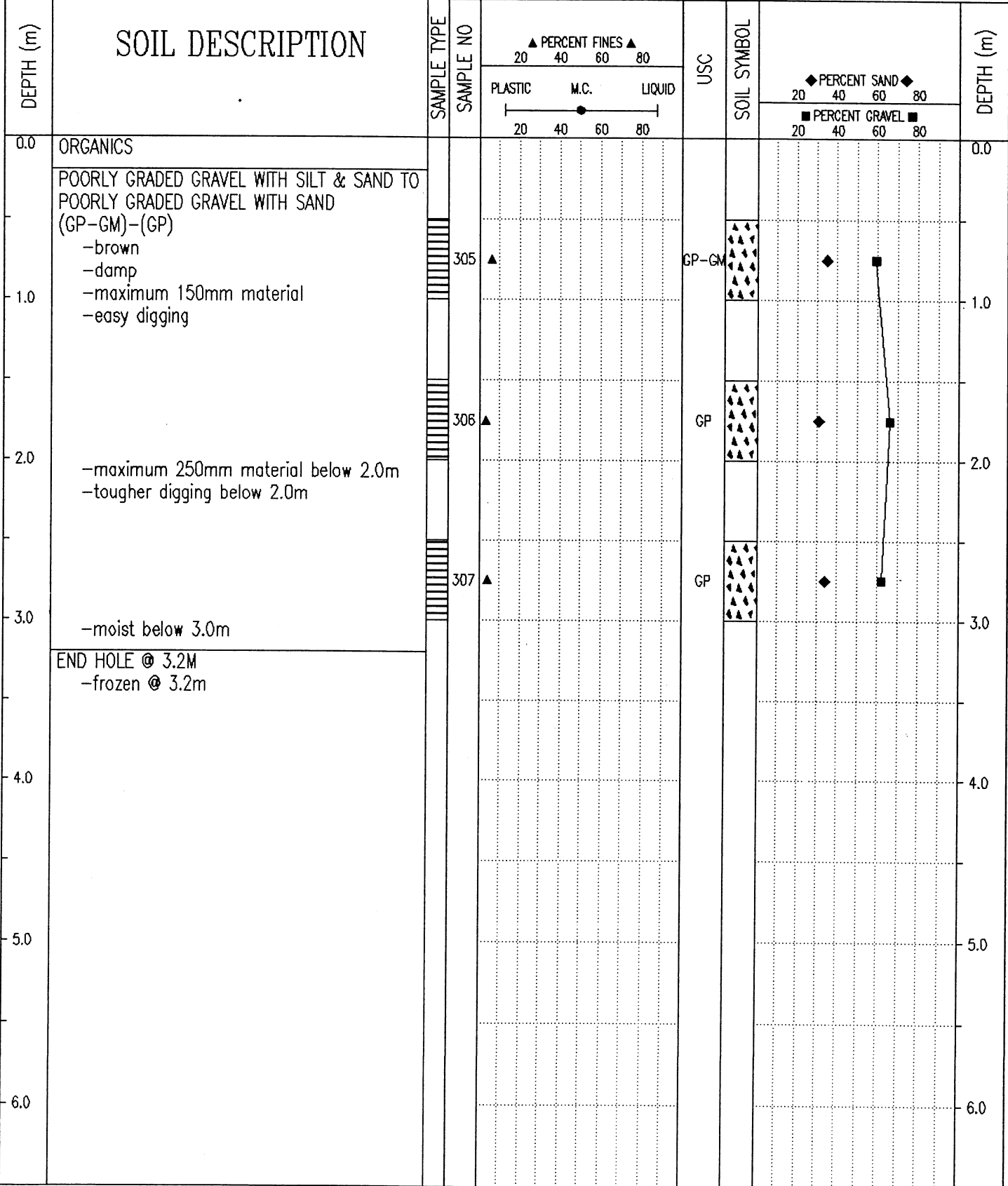
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 03/10/10
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2755
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



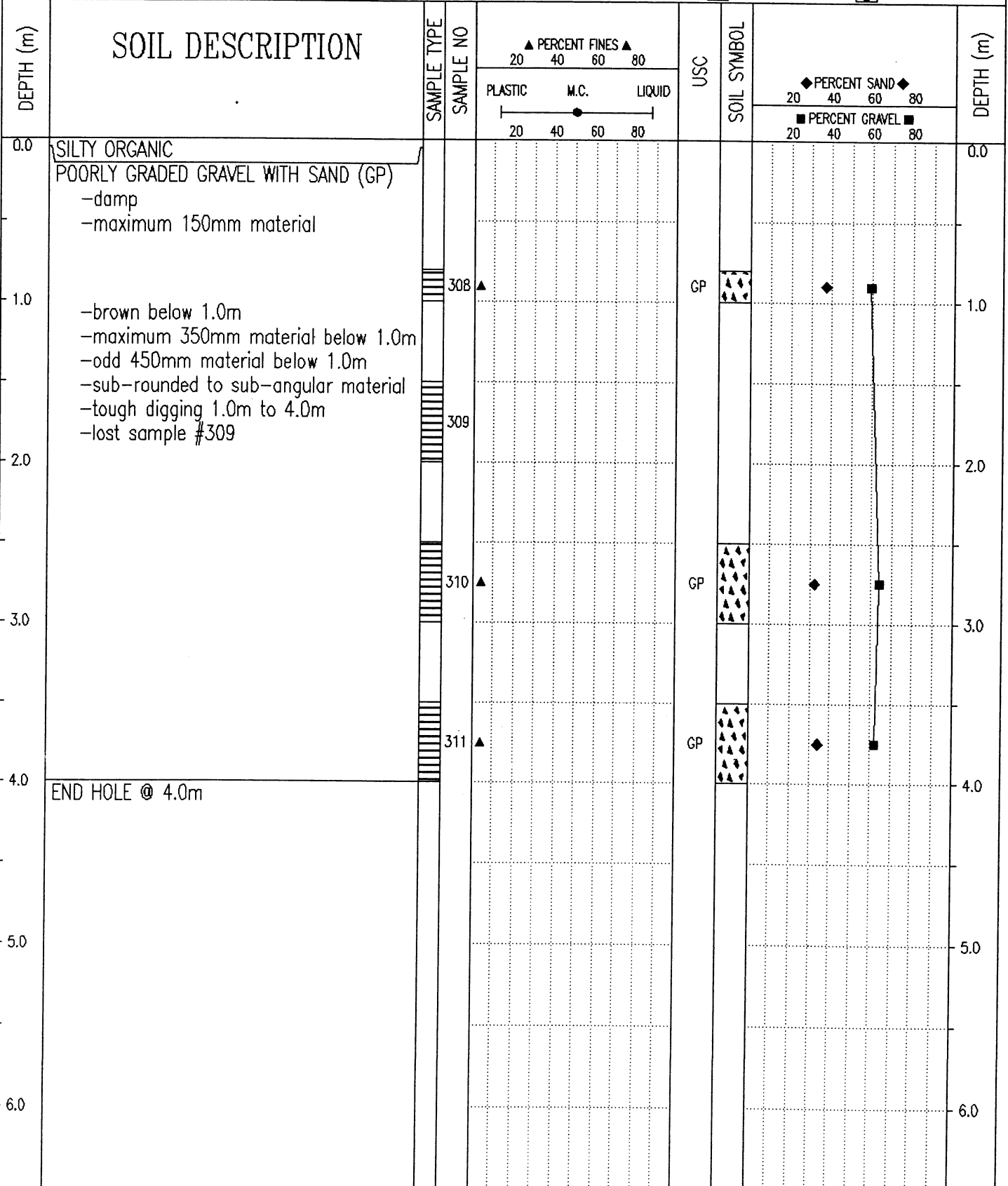
Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.2 m
COMPLETE: 03/10/10

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2756
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	

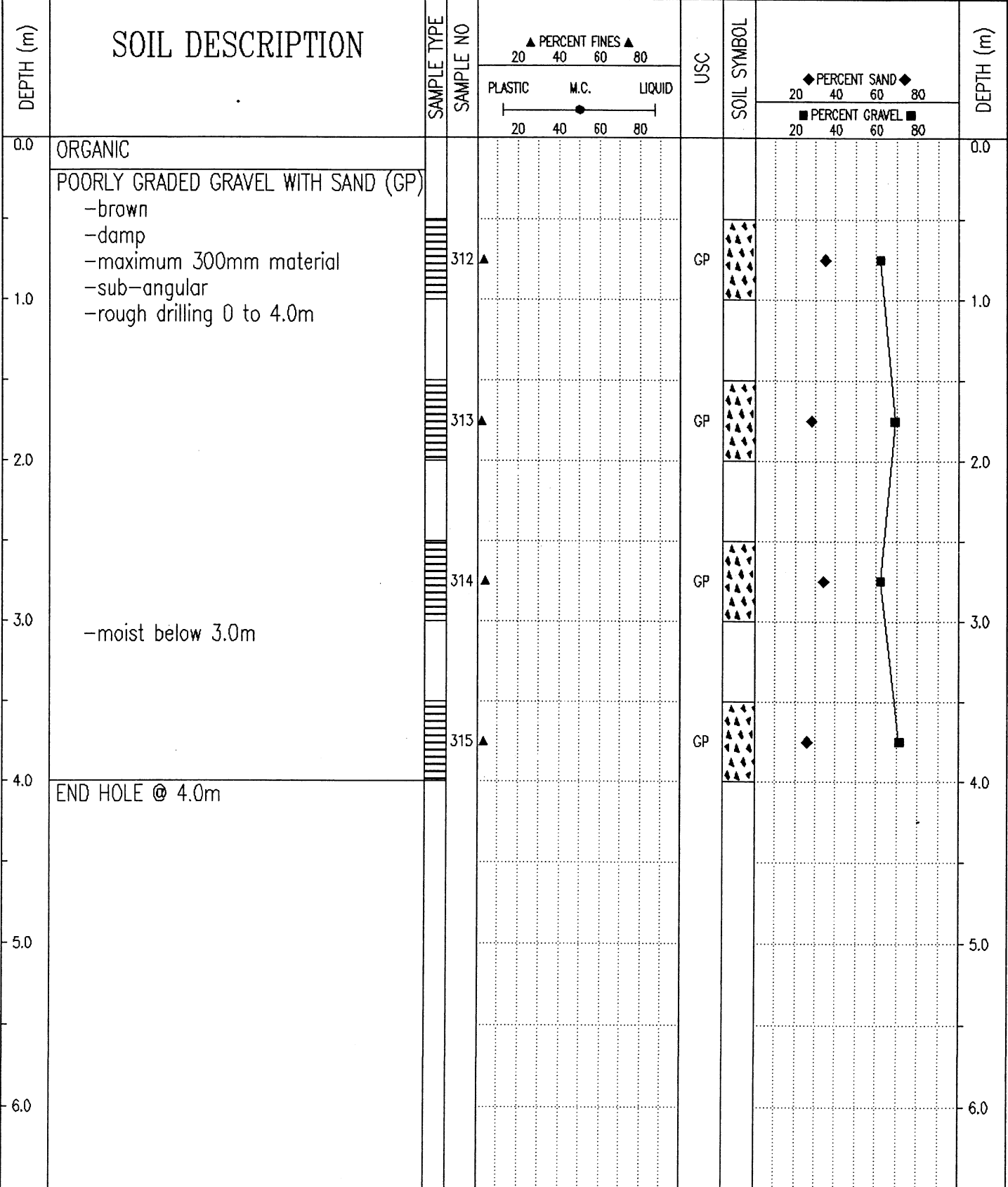


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Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/10/10
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2757
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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

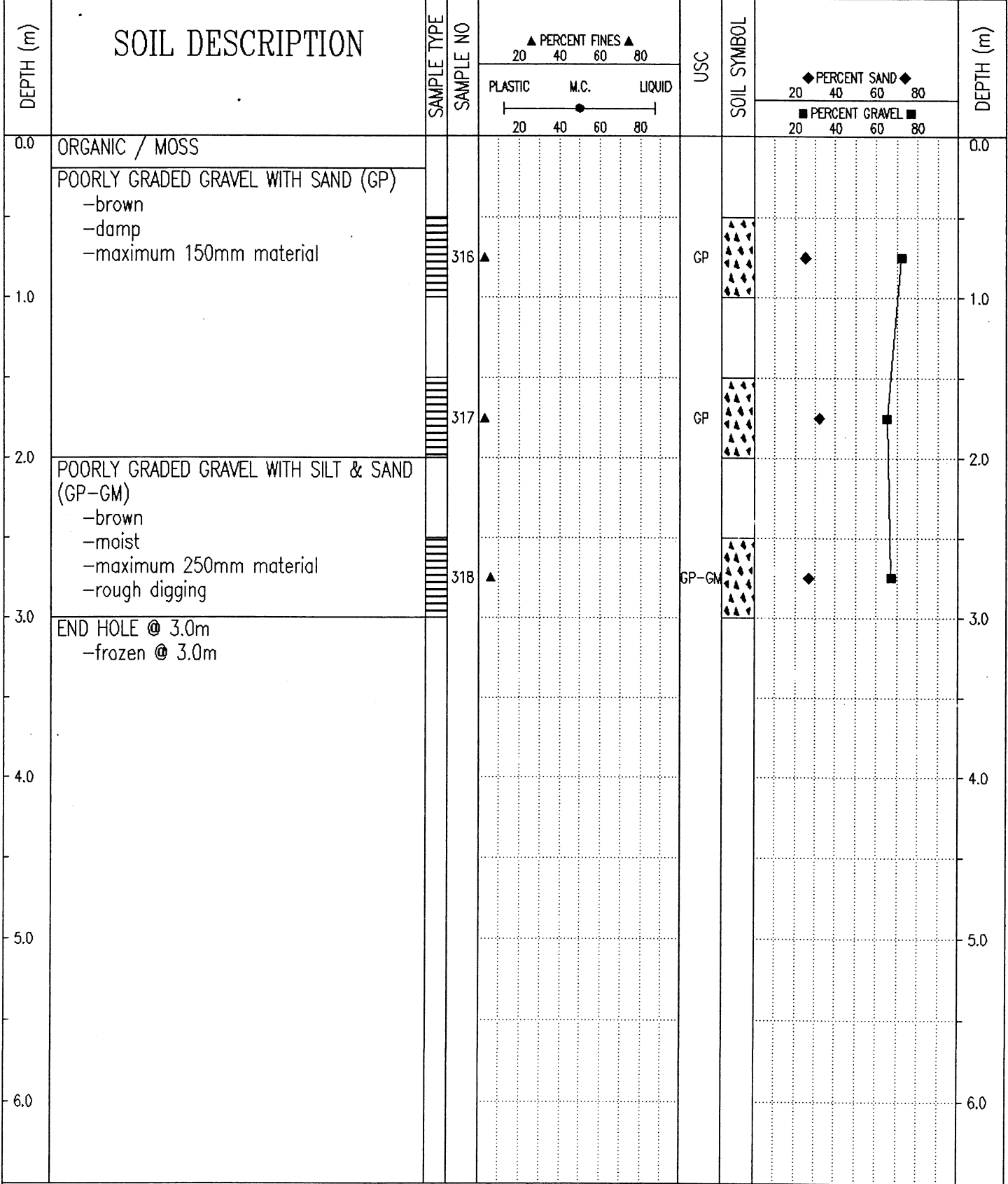


Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 03/10/10

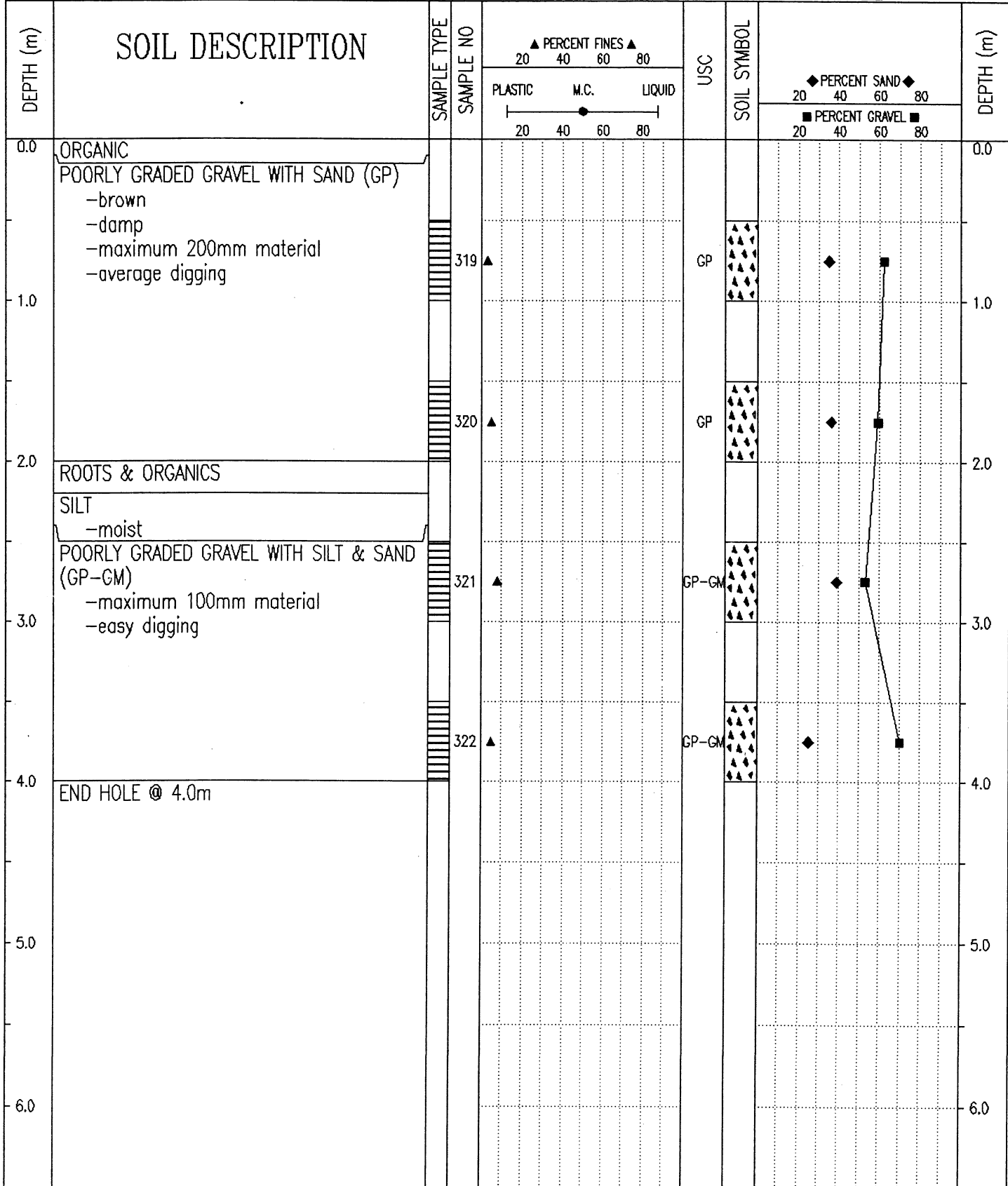
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 654-2758
ENGINEERING CAPITAL		WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 03/10/10
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2759
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



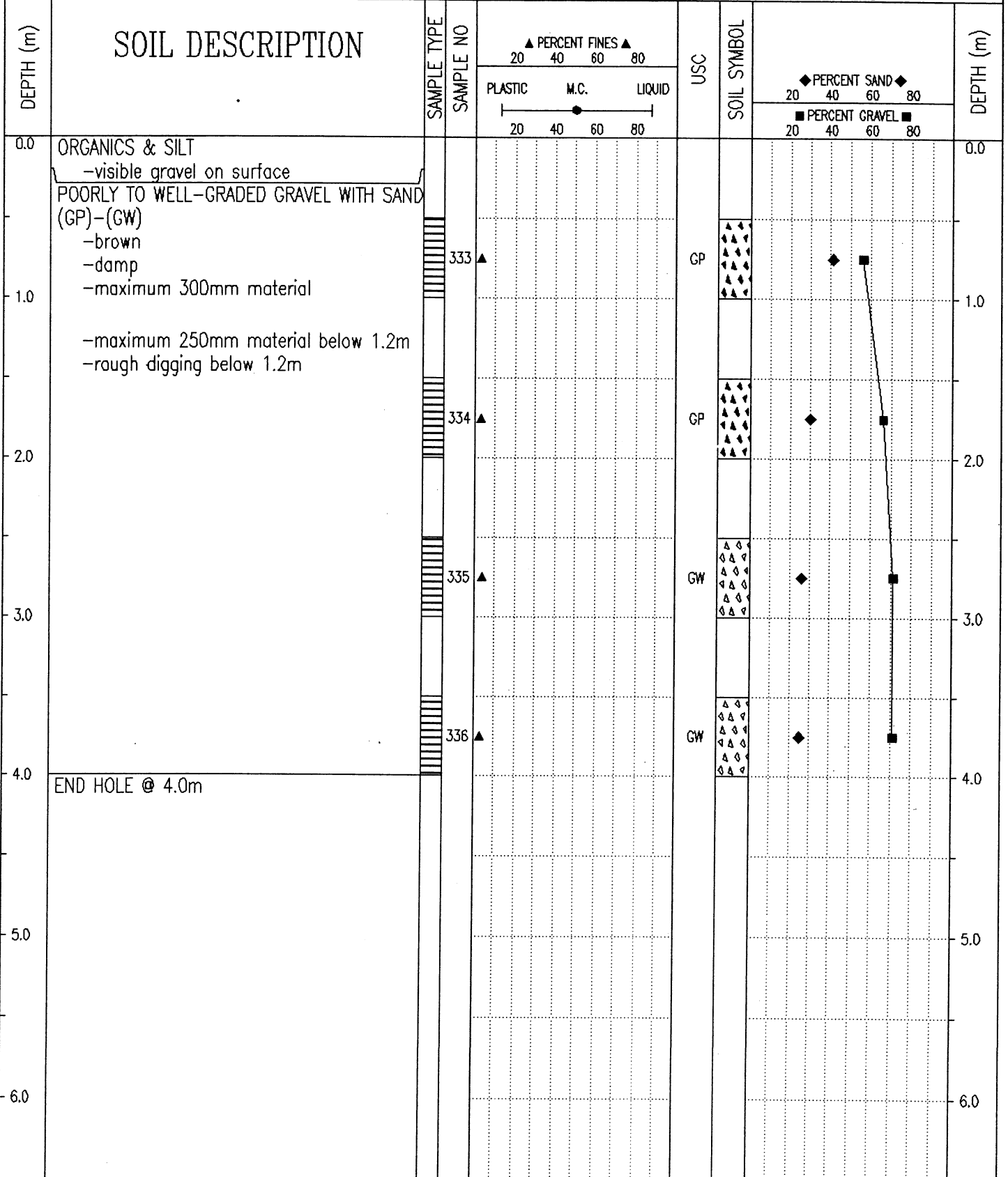
Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 03/10/10

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2760
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



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Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

Fig. No:

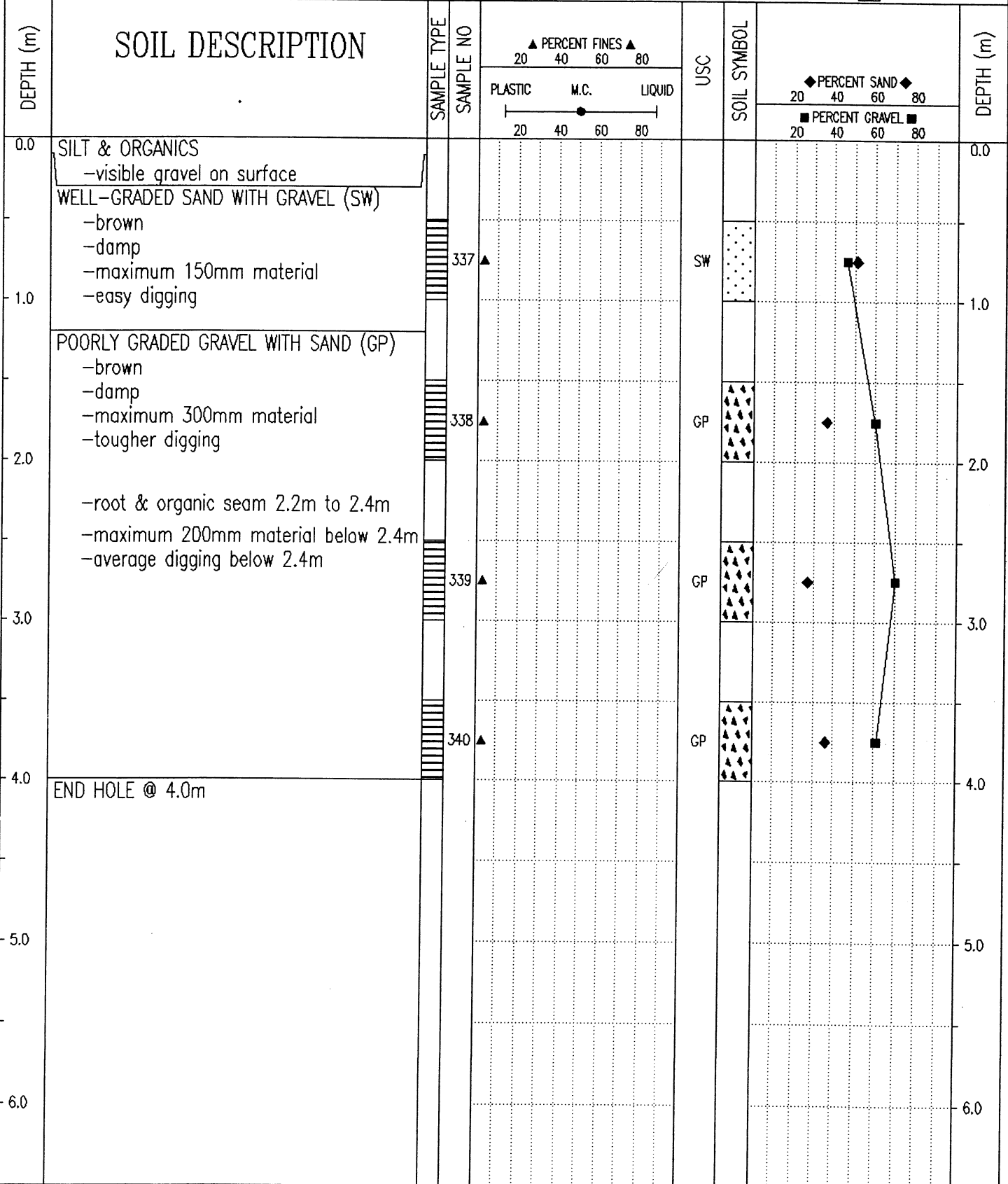
COMPLETION DEPTH: 4.0 m

COMPLETE: 03/10/10

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2761
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

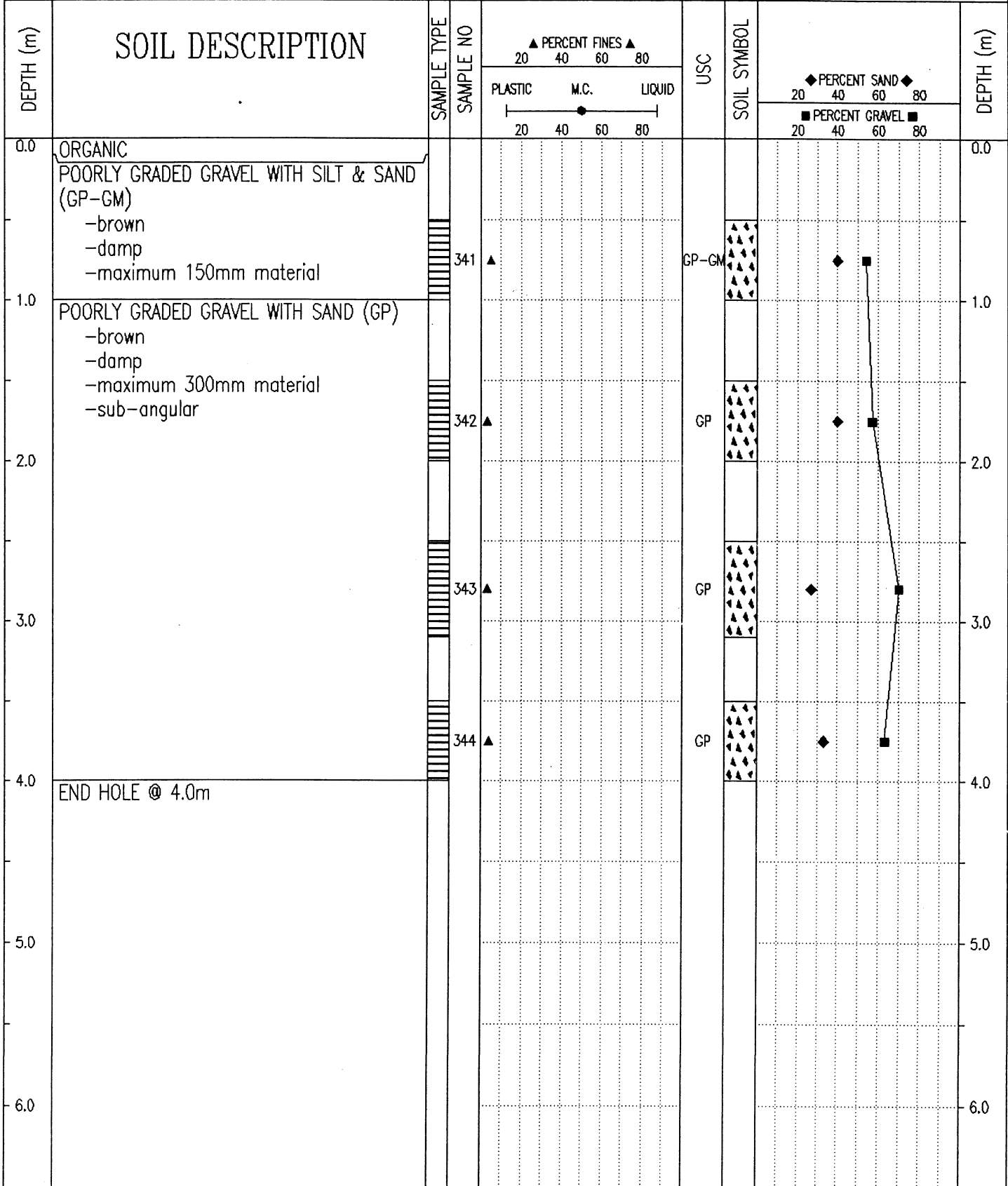
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 03/10/11
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 654-2762
ENGINEERING CAPITAL	WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC-220-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



Government of Yukon
Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

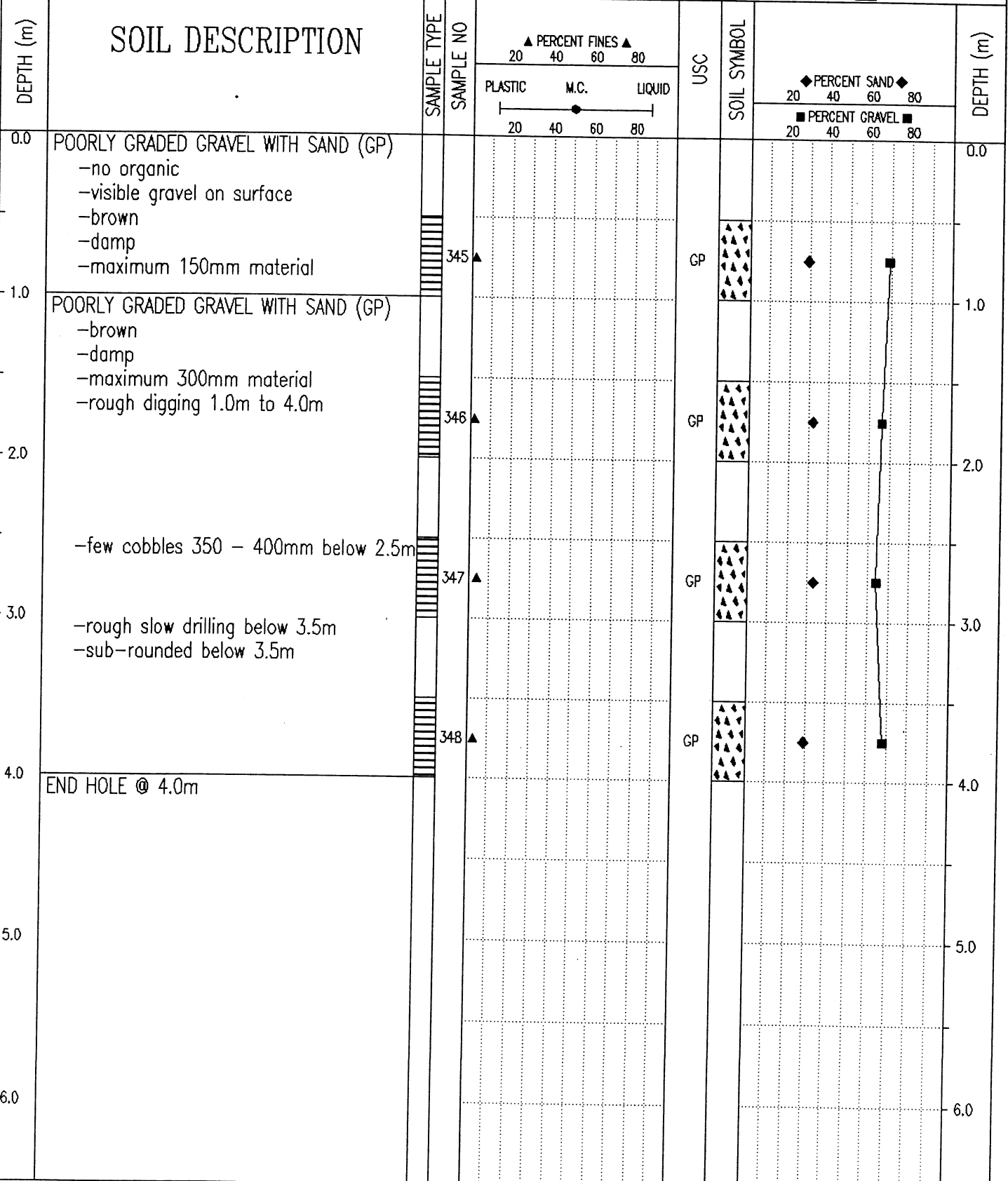
Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 03/10/11

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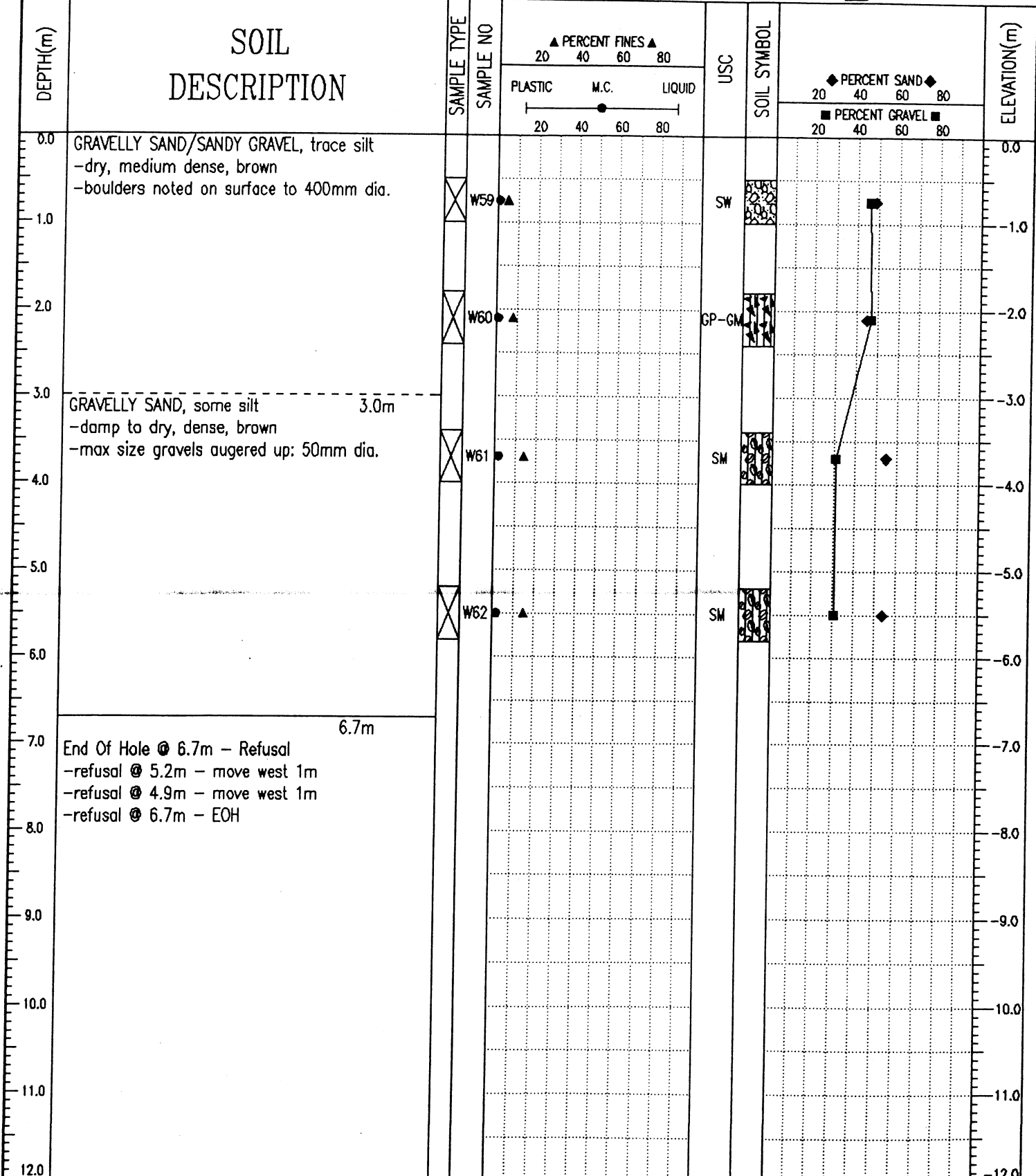
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/10/11
Fig. No:	Page 1 of 1

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



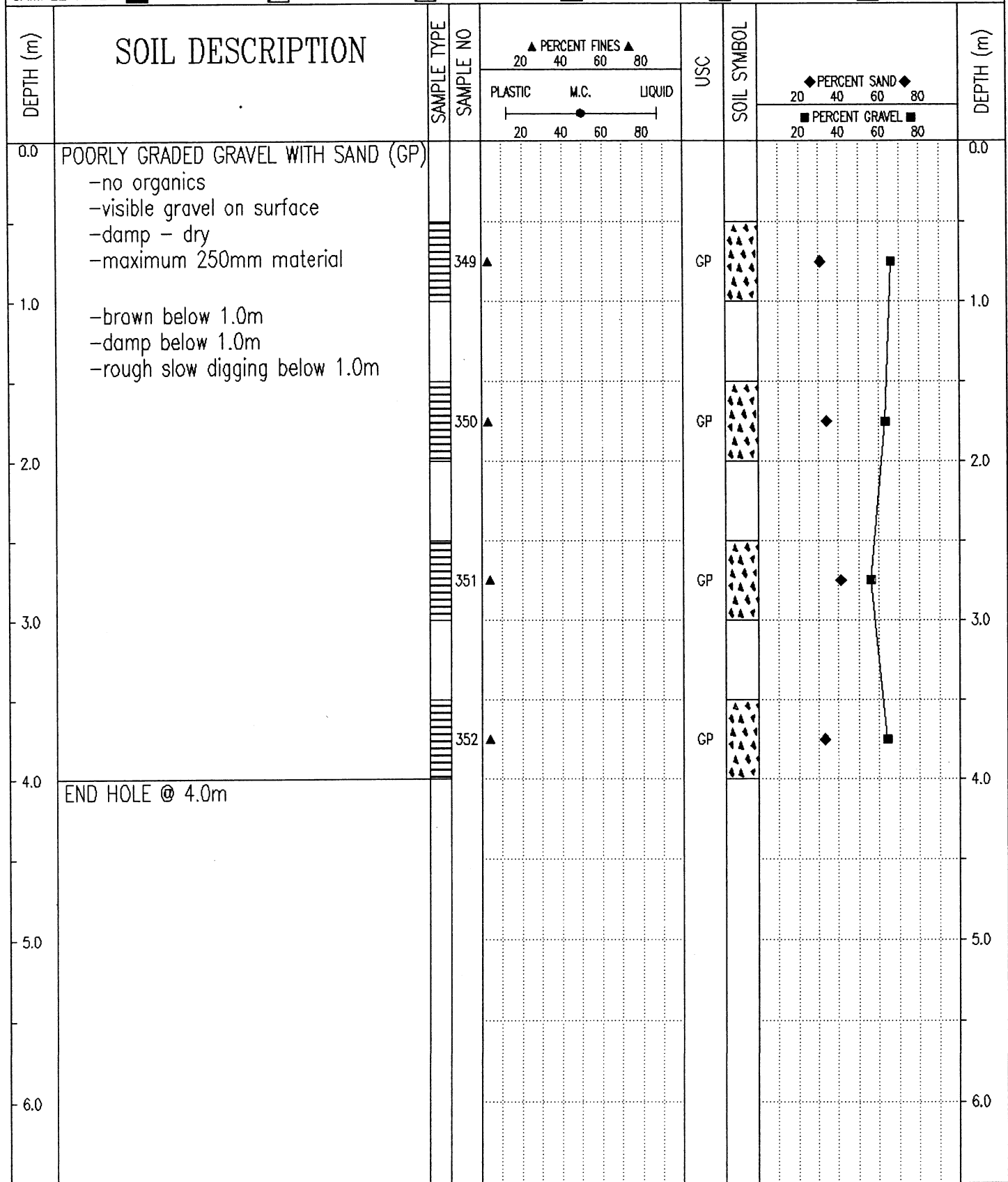
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 98

COMPLETION DEPTH: 6.7 m
COMPLETE: 11/01/04

05/02/10 08:11AM (YIC_HHRS)

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 654-2764
ENGINEERING CAPITAL		WILLISCROFT CREEK	Project No: 552-202101-0361
KOMATSU PC- 220 -LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE			



Government of Yukon
Transportation Engineering

LOGGED BY: GC
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 03/10/11

Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

October 2003
Book # 654

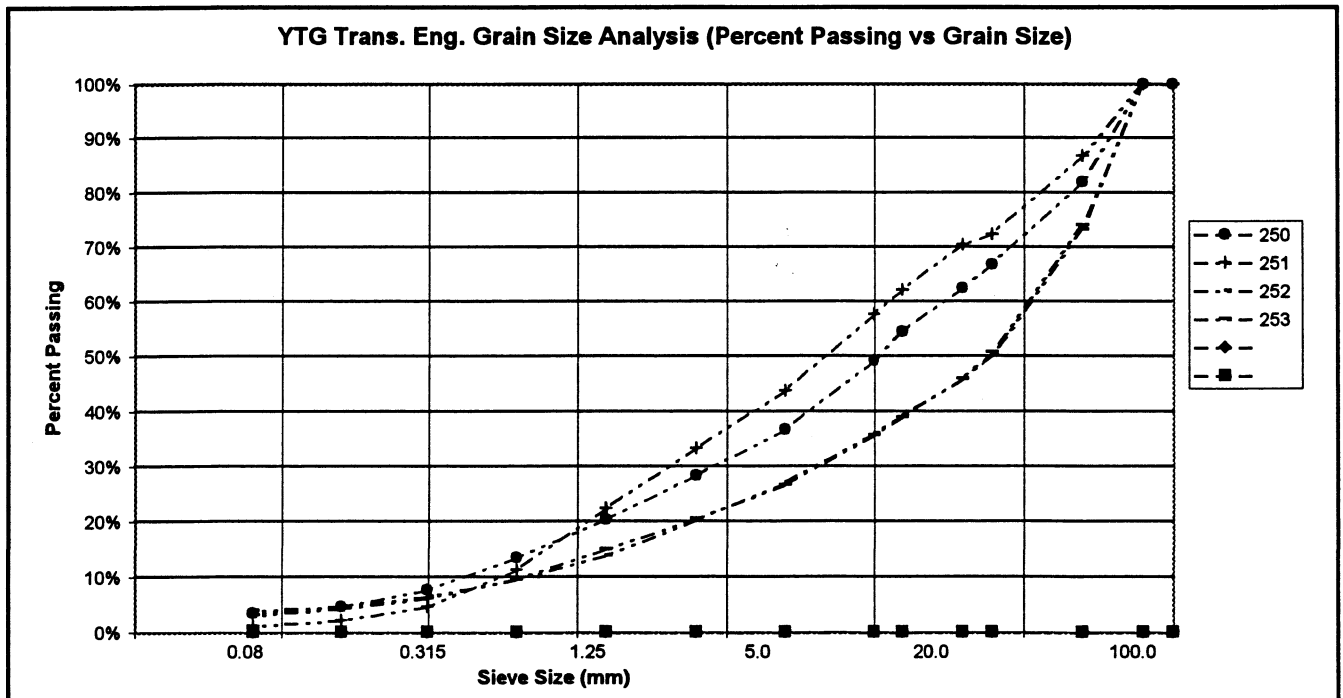
Pit Run Sample Results

PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC-460-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2732

DATE COMP: 2003/10/09

FIELD NO:	250	251	252	253		
LAB NO:	464	465	466	467		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.6-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	82%	87%	73%	74%		
25.0	67%	72%	50%	51%		
20.0	62%	70%	46%	46%		
12.5	55%	62%	39%	39%		
10.0	49%	58%	36%	36%		
5.0	37%	44%	27%	27%		
2.5	28%	33%	20%	21%		
1.25	20%	22%	14%	15%		
0.630	14%	11%	10%	10%		
0.315	8%	5%	6%	6%		
0.160	5%	2%	5%	4%		
0.080	3%	1%	4%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	56	73	73		
% SAND:	33	43	23	24		
% FINES:	3	1	4	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

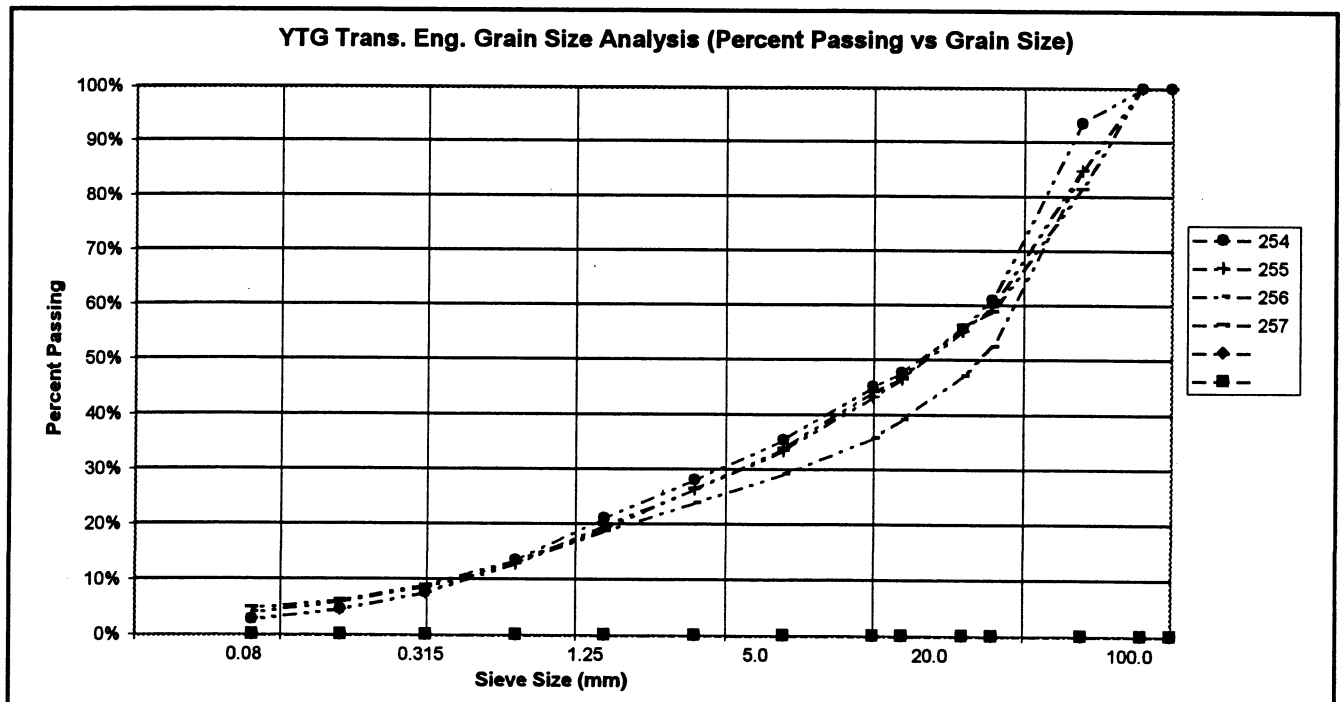


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H 22
 DRILL UNIT: Komatsu PC-400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2733

DATE COMP: 2003/10/09

FIELD NO:	254	255	256	257		
LAB NO:	468	469	470	471		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	94%	85%	85%	81%		
25.0	61%	60%	53%	59%		
20.0	56%	55%	47%	56%		
12.5	48%	47%	39%	47%		
10.0	45%	43%	36%	44%		
5.0	35%	33%	29%	34%		
2.5	28%	26%	24%	27%		
1.25	21%	20%	19%	19%		
0.630	13%	13%	13%	13%		
0.315	8%	7%	9%	9%		
0.160	5%	4%	6%	6%		
0.080	3%	3%	4%	5%		
M.C.(%)						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	65	67	71	66		
% SAND:	33	31	25	29		
% FINES:	3	3	4	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		



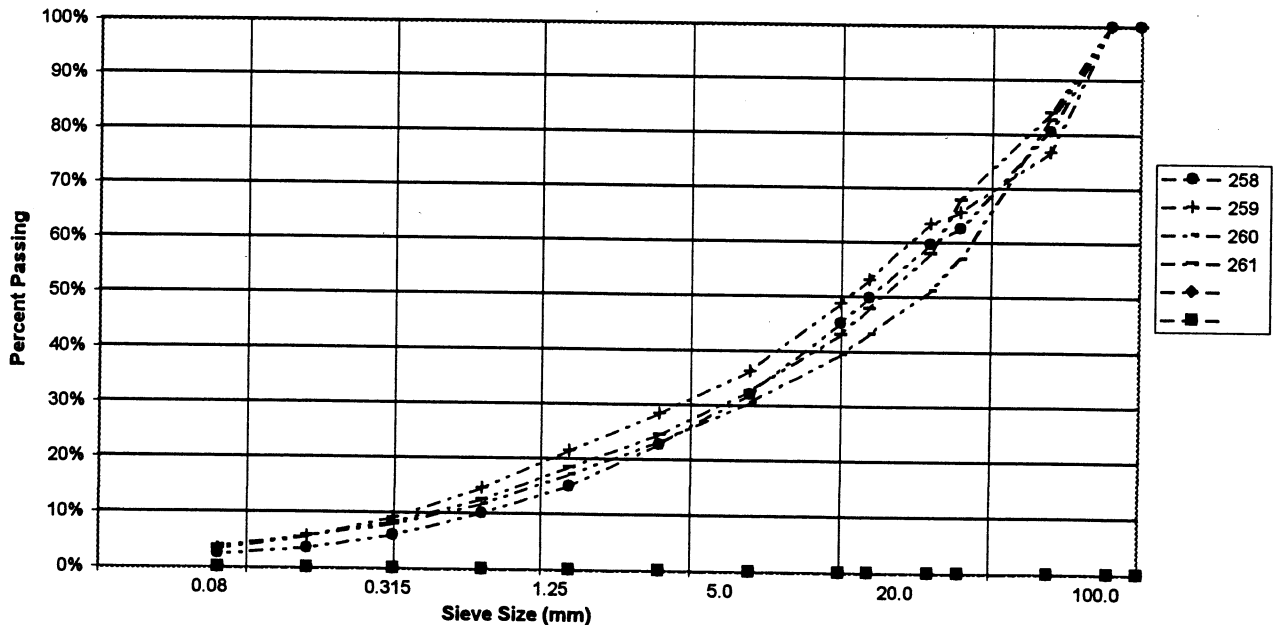
PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Willisroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2734

DATE COMP: 2003/10/09

FIELD NO:	258	259	260	261		
LAB NO:	472	473	474	475		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	81%	77%	83%	84%		
25.0	63%	66%	57%	68%		
20.0	60%	64%	51%	58%		
12.5	50%	53%	43%	48%		
10.0	45%	49%	40%	43%		
5.0	32%	36%	31%	33%		
2.5	23%	29%	23%	25%		
1.25	15%	22%	17%	19%		
0.630	10%	15%	12%	13%		
0.315	6%	9%	8%	8%		
0.160	4%	6%	6%	6%		
0.080	2%	3%	4%	4%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	64	69	67		
% SAND:	30	33	27	29		
% FINES:	2	3	4	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

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

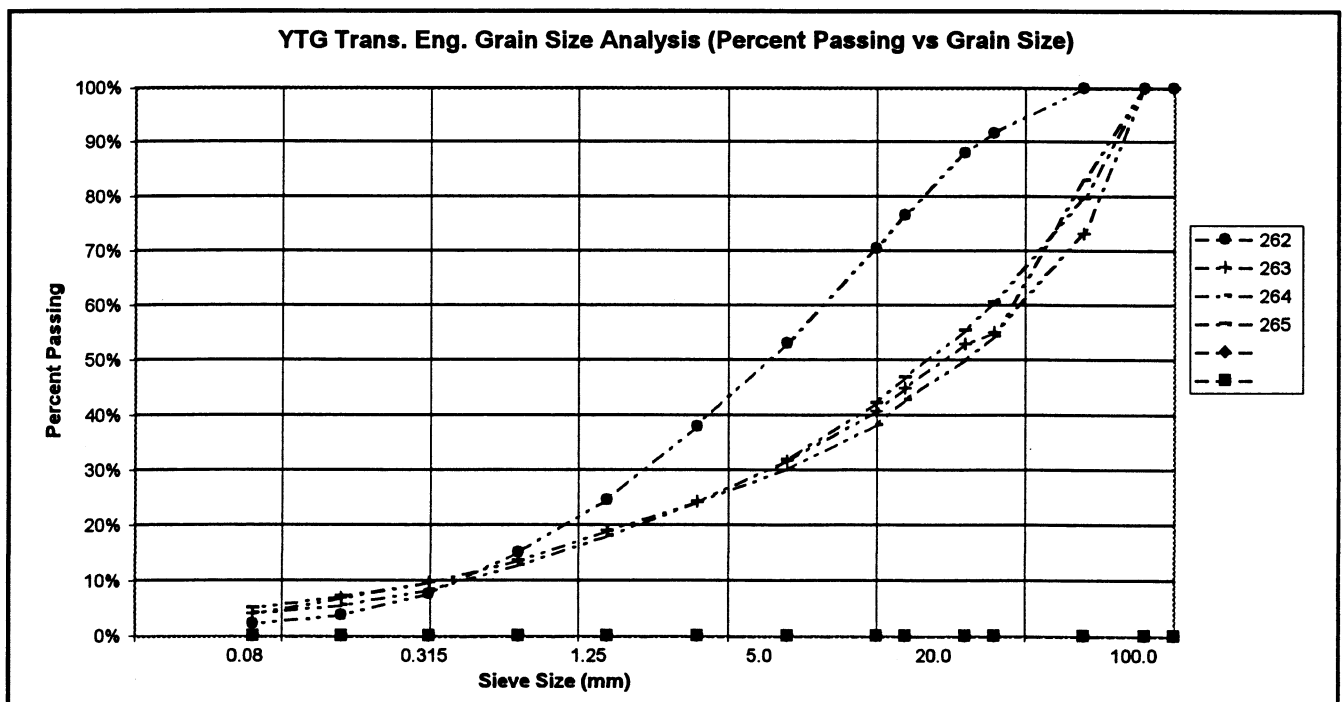


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2735

DATE COMP: 2003/10/09

FIELD NO:	262	263	264	265		
LAB NO:	476	477	478	479		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	73%	83%	80%		
25.0	92%	55%	54%	61%		
20.0	88%	53%	50%	55%		
12.5	77%	45%	43%	47%		
10.0	70%	41%	38%	42%		
5.0	53%	32%	30%	32%		
2.5	38%	24%	24%	24%		
1.25	25%	19%	18%	19%		
0.630	15%	14%	13%	14%		
0.315	8%	10%	8%	10%		
0.160	4%	7%	6%	7%		
0.080	2%	4%	4%	5%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	47	68	70	68		
% SAND:	51	28	26	27		
% FINES:	2	4	4	5		
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

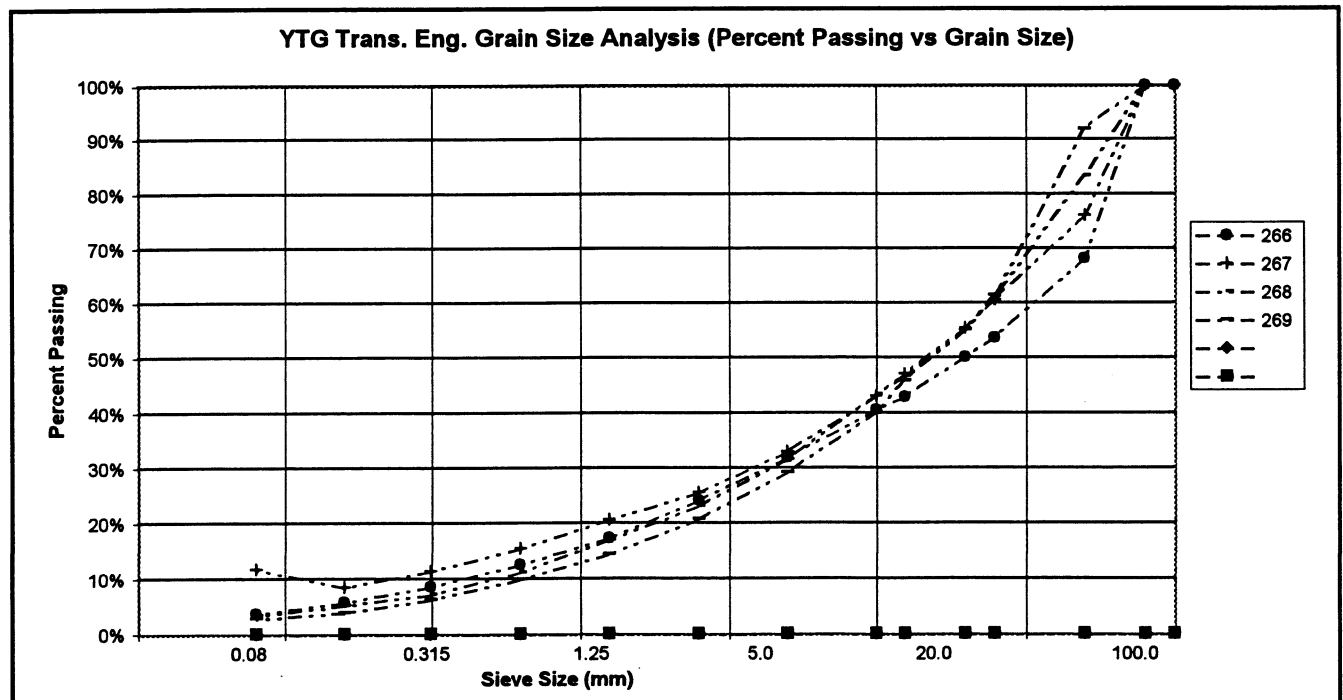


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Willisroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2736

DATE COMP: 2003/10/09

FIELD NO:	266	267	268	269		
LAB NO:	480	481	482	183		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	68%	76%	83%	92%		
25.0	54%	61%	61%	61%		
20.0	50%	55%	55%	55%		
12.5	43%	47%	47%	46%		
10.0	41%	43%	43%	40%		
5.0	32%	33%	32%	29%		
2.5	24%	26%	23%	21%		
1.25	17%	21%	17%	14%		
0.630	12%	16%	11%	10%		
0.315	9%	11%	7%	6%		
0.160	6%	8%	5%	4%		
0.080	4%	12%	3%	3%		
M.C.(%)						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	67	68	71		
% SAND:	28	21	28	26		
% FINES:	4	12	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

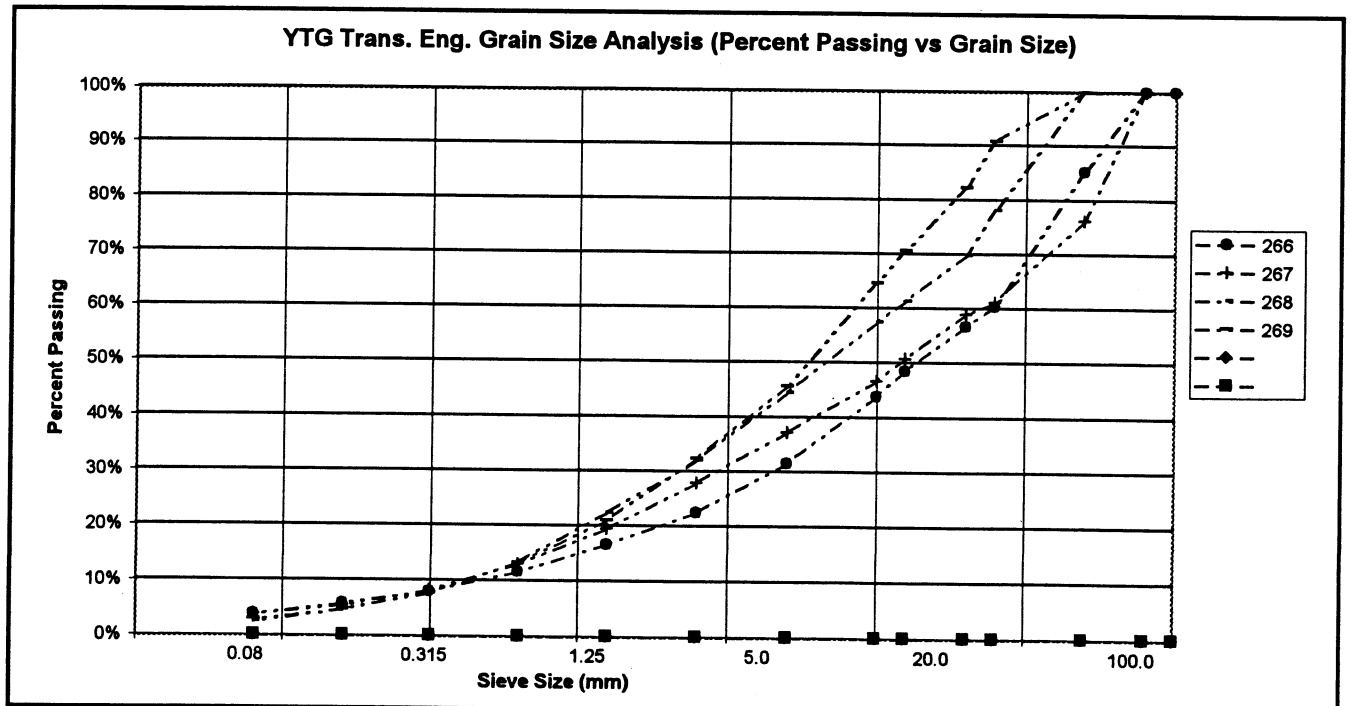


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2737

DATE COMP: 2003/10/09

FIELD NO:	266	267	268	269		
LAB NO:	484	485	486	487		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	85%	76%	100%	100%		
25.0	60%	61%	78%	91%		
20.0	57%	59%	70%	82%		
12.5	49%	51%	61%	71%		
10.0	44%	47%	57%	65%		
5.0	32%	37%	44%	46%		
2.5	23%	28%	32%	32%		
1.25	17%	19%	22%	21%		
0.630	12%	13%	13%	13%		
0.315	8%	8%	8%	8%		
0.160	6%	5%	5%	5%		
0.080	4%	4%	2%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	63	58	54		
% SAND:	28	33	42	43		
% FINES:	4	4	2	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

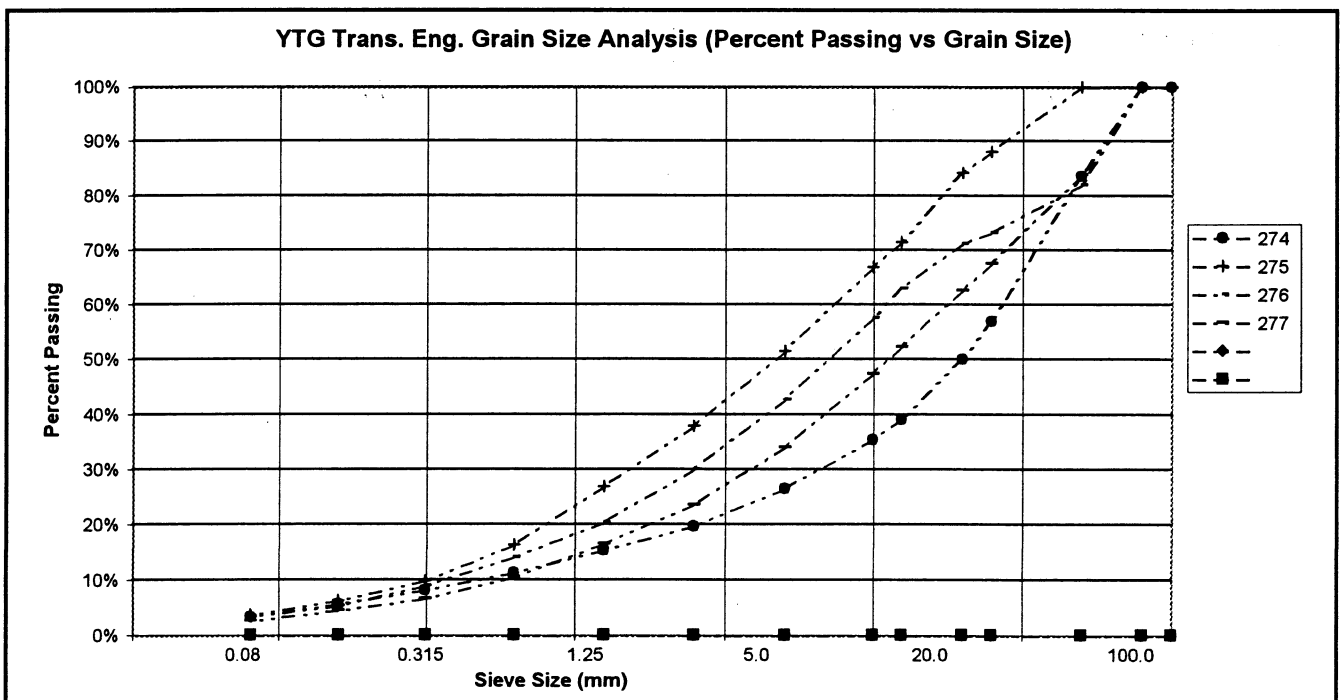


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2738

DATE COMP: 2003/10/09

FIELD NO:	274	275	276	277		
LAB NO:	488	489	490	491		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	84%	100%	82%	84%		
25.0	57%	88%	73%	67%		
20.0	50%	84%	71%	63%		
12.5	39%	71%	63%	52%		
10.0	35%	67%	58%	47%		
5.0	26%	51%	43%	34%		
2.5	20%	38%	30%	24%		
1.25	15%	27%	20%	17%		
0.630	11%	16%	14%	10%		
0.315	8%	10%	9%	7%		
0.160	6%	6%	5%	4%		
0.080	3%	4%	3%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	74	49	57	66		
% SAND:	23	48	39	31		
% FINES:	3	4	3	3		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

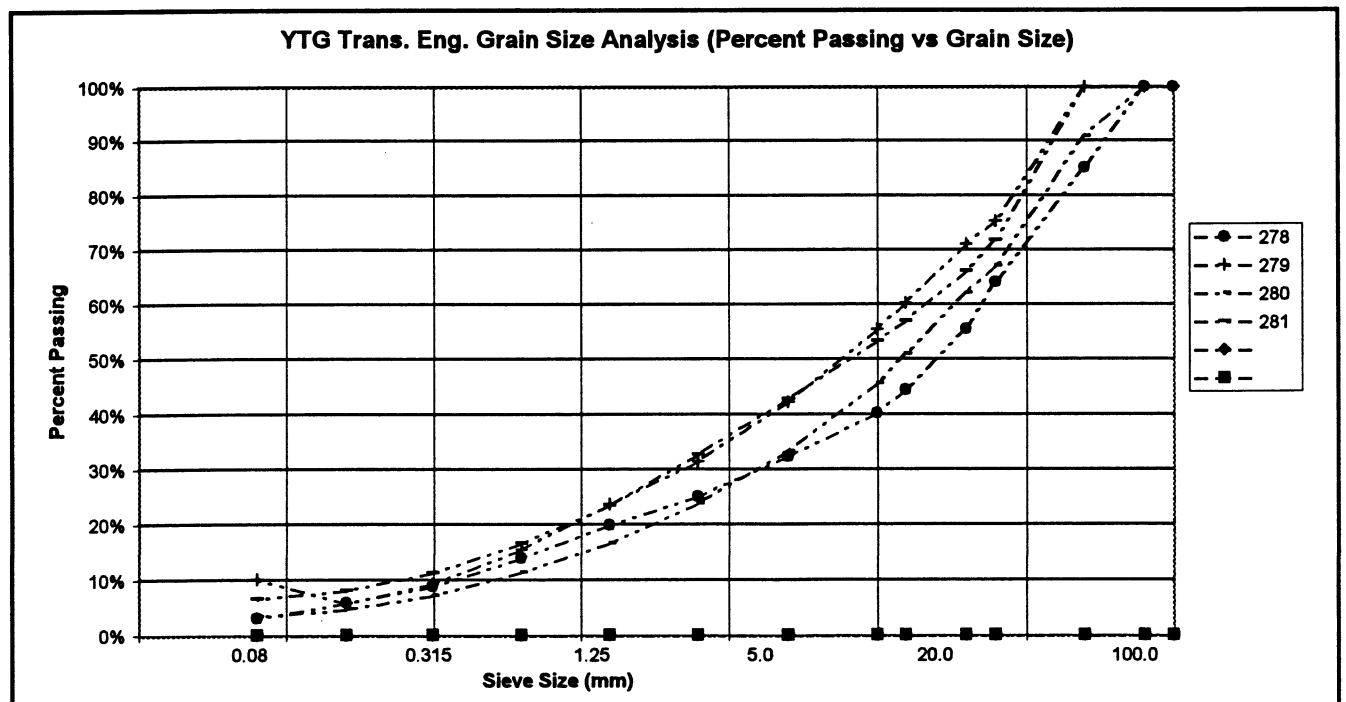


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Willisroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2739

DATE COMP: 2003/10/09

FIELD NO:	278	279	280	281		
LAB NO:	492	493	494	495		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	85%	100%	91%	100%		
25.0	64%	75%	67%	72%		
20.0	56%	71%	62%	66%		
12.5	44%	60%	51%	57%		
10.0	40%	55%	46%	53%		
5.0	32%	42%	33%	43%		
2.5	25%	31%	24%	33%		
1.25	20%	24%	17%	23%		
0.630	14%	16%	11%	17%		
0.315	9%	9%	7%	11%		
0.160	6%	6%	5%	8%		
0.080	3%	10%	3%	7%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	58	67	57		
% SAND:	29	32	30	36		
% FINES:	3	10	3	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

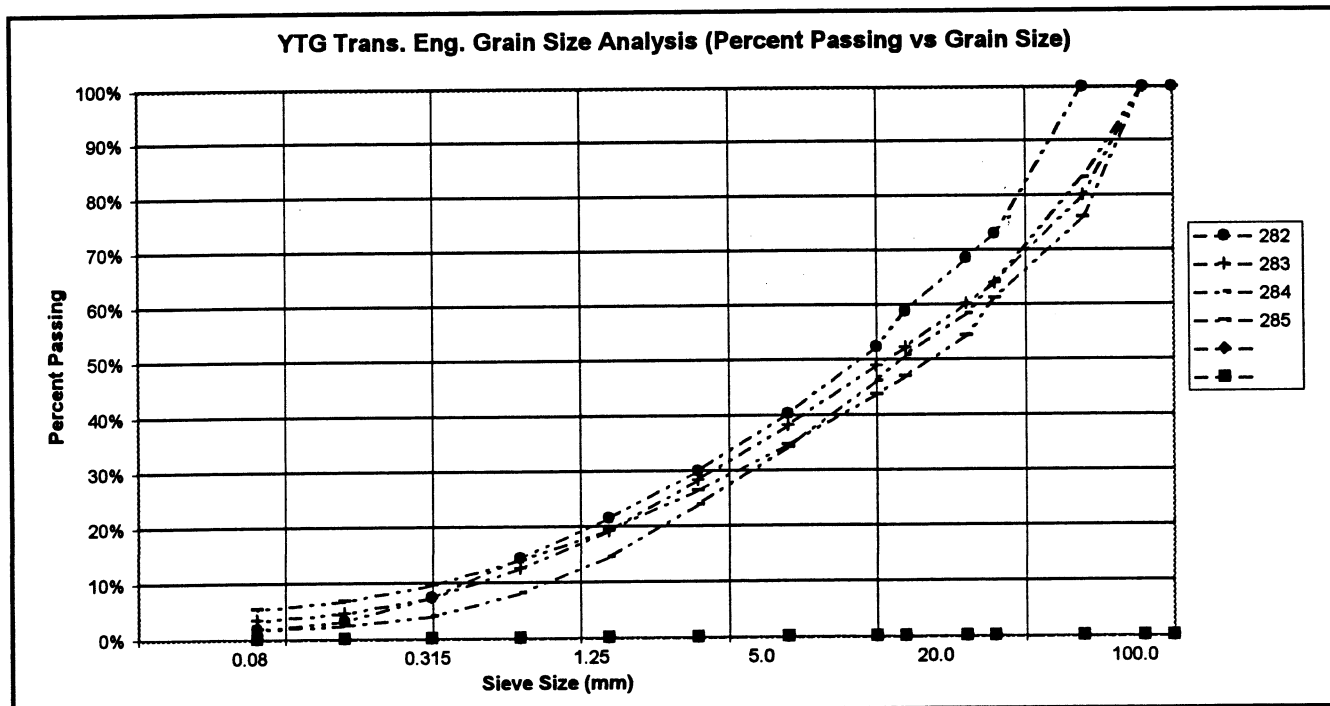


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2740

DATE COMP: 2003/10/09

FIELD NO:	282	283	284	285		
LAB NO:	496	497	498	499		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	80%	83%	76%		
25.0	73%	64%	64%	61%		
20.0	69%	60%	58%	54%		
12.5	59%	52%	51%	47%		
10.0	52%	49%	46%	44%		
5.0	40%	38%	34%	35%		
2.5	30%	28%	24%	27%		
1.25	22%	19%	15%	19%		
0.630	14%	13%	8%	14%		
0.315	7%	7%	4%	10%		
0.160	3%	5%	2%	7%		
0.080	2%	3%	2%	5%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	60	62	66	65		
% SAND:	39	35	33	29		
% FINES:	2	3	2	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

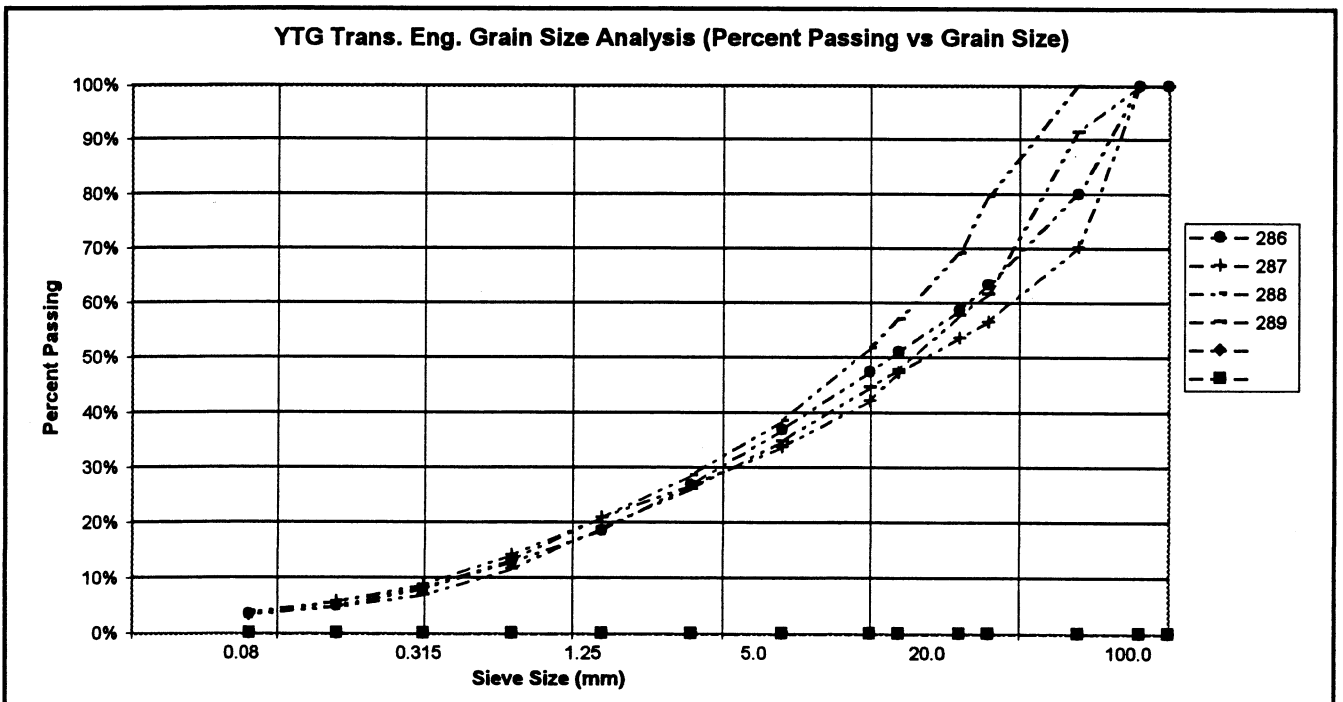


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Willisroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2741

DATE COMP: 2003/10/09

FIELD NO:	286	287	288	289		
LAB NO:	500	501	502	503		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	80%	70%	100%	92%		
25.0	63%	57%	80%	62%		
20.0	59%	54%	69%	58%		
12.5	51%	47%	57%	48%		
10.0	47%	42%	52%	45%		
5.0	37%	34%	39%	35%		
2.5	27%	27%	29%	26%		
1.25	19%	21%	21%	19%		
0.630	13%	14%	13%	12%		
0.315	8%	9%	8%	7%		
0.160	5%	6%	6%	5%		
0.080	3%	3%	4%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	66	61	65		
% SAND:	34	30	35	31		
% FINES:	3	3	4	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

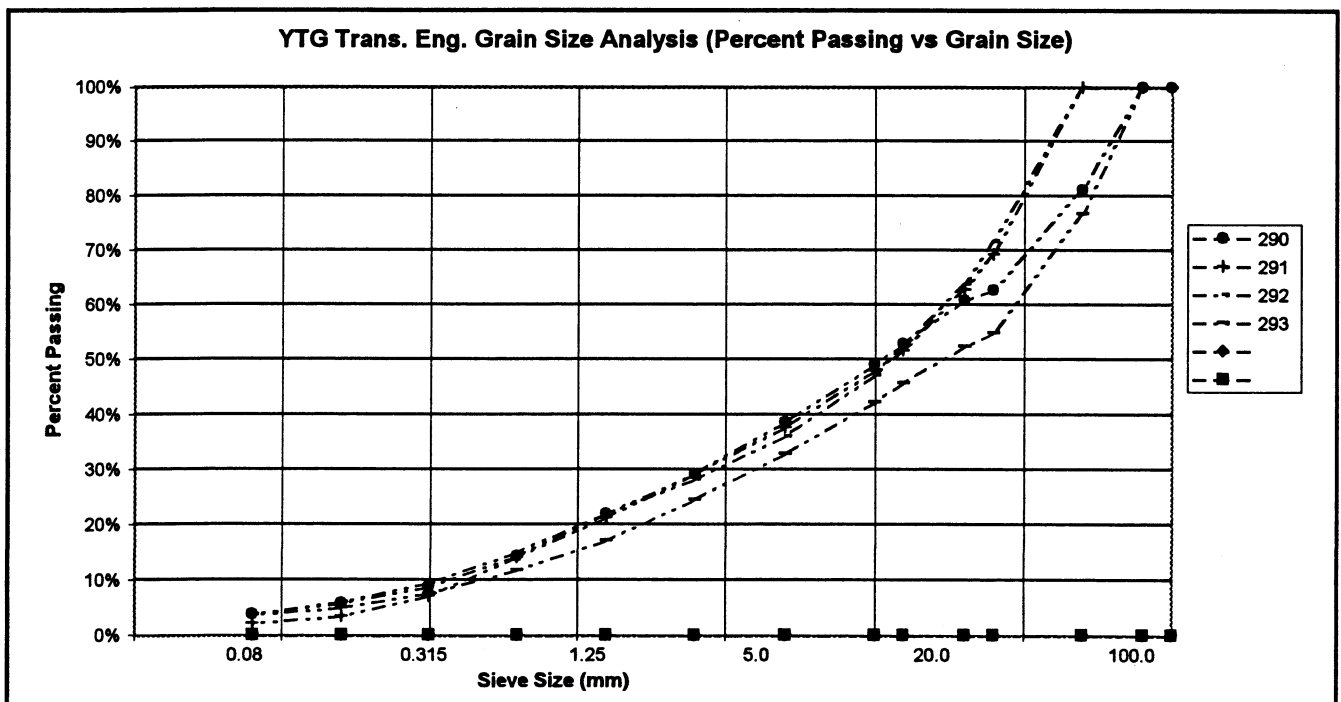


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2742

DATE COMP: 2003/10/10

FIELD NO:	290	291	292	293		
LAB NO:	504	505	506	507		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.2-3.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	81%	100%	100%	77%		
25.0	63%	69%	72%	55%		
20.0	61%	63%	64%	52%		
12.5	53%	52%	52%	46%		
10.0	49%	48%	47%	42%		
5.0	39%	38%	36%	33%		
2.5	29%	29%	28%	24%		
1.25	22%	21%	22%	17%		
0.630	14%	14%	15%	12%		
0.315	9%	7%	9%	7%		
0.160	6%	3%	6%	5%		
0.080	4%	2%	4%	4%		
M.C.(%)						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	62	64	67		
% SAND:	35	36	32	29		
% FINES:	4	2	4	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

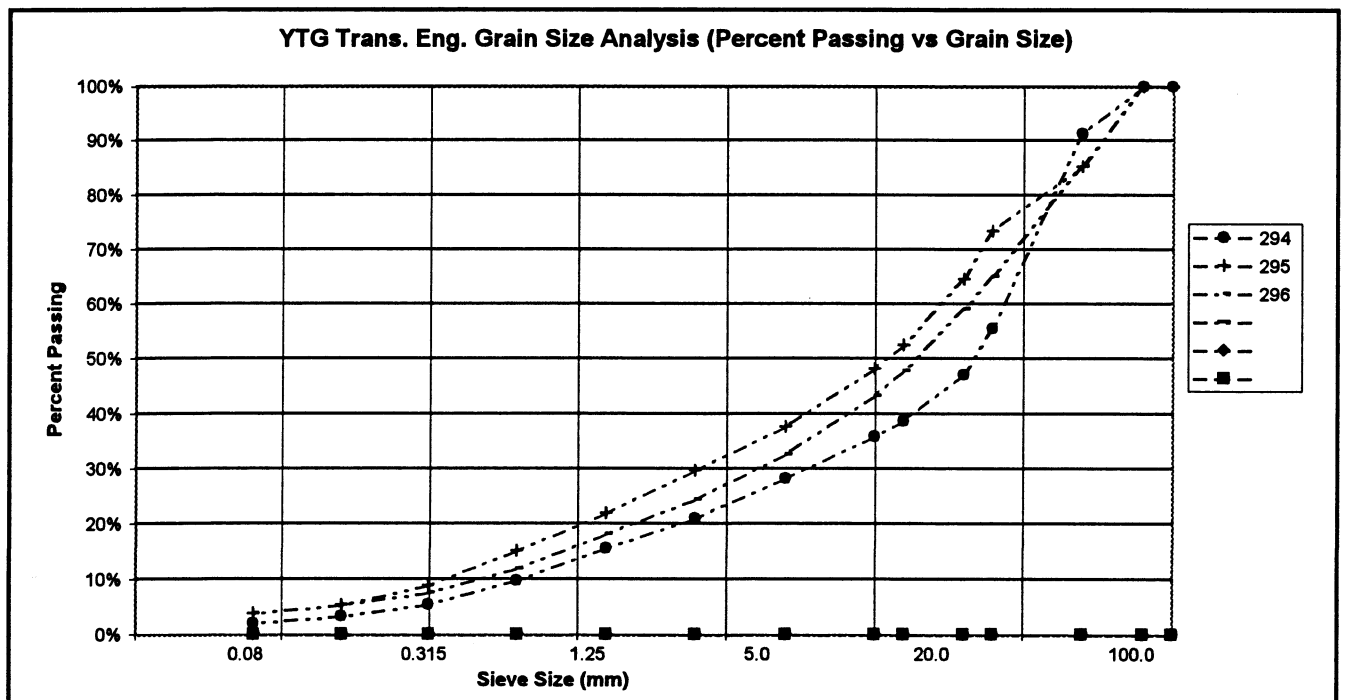


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2743

DATE COMP: 2003/10/10

FIELD NO:	294	295	296		
LAB NO:	508	509	510		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	91%	85%	85%		
25.0	56%	73%	65%		
20.0	47%	65%	59%		
12.5	39%	53%	48%		
10.0	36%	48%	43%		
5.0	28%	38%	33%		
2.5	21%	30%	24%		
1.25	16%	22%	18%		
0.630	10%	15%	12%		
0.315	5%	9%	7%		
0.160	3%	5%	5%		
0.080	2%	4%	4%		
M.C.(%)					
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	72	62	67		
% SAND:	26	34	29		
% FINES:	2	4	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

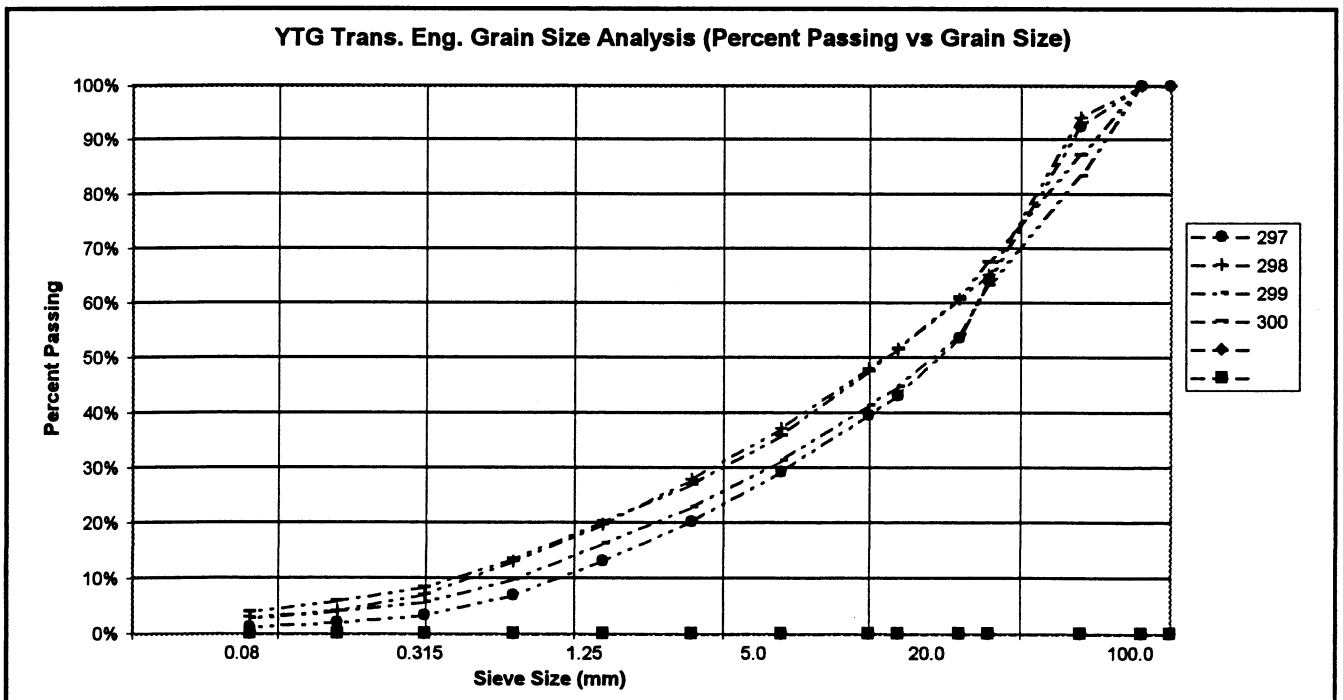


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2744

DATE COMP: 2003/10/10

FIELD NO:	297	298	299	300		
LAB NO:	511	512	513	514		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.0-3.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	92%	94%	83%	87%		
25.0	64%	65%	63%	68%		
20.0	54%	61%	54%	61%		
12.5	43%	52%	45%	52%		
10.0	40%	48%	41%	48%		
5.0	29%	37%	31%	36%		
2.5	20%	28%	23%	27%		
1.25	13%	20%	16%	20%		
0.630	7%	13%	10%	13%		
0.315	3%	7%	6%	8%		
0.160	2%	4%	4%	6%		
0.080	1%	3%	3%	4%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	71	63	69	64		
% SAND:	28	34	29	32		
% FINES:	1	3	3	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

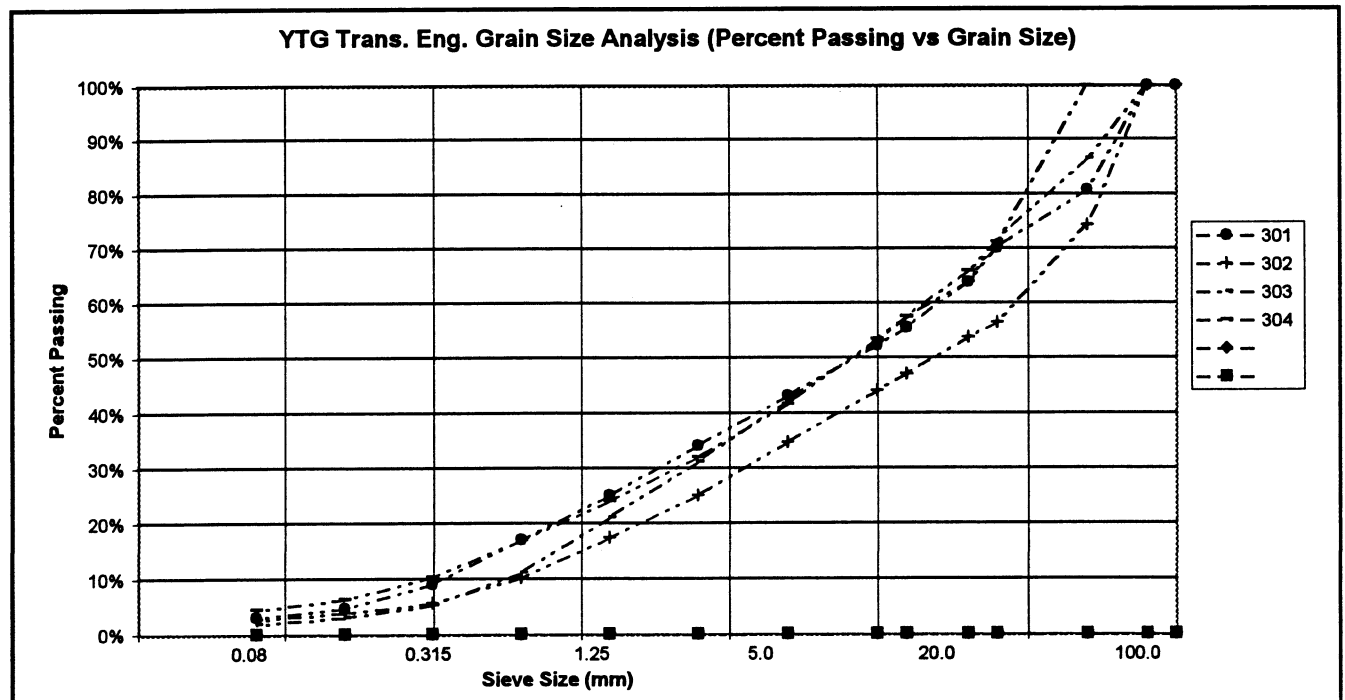


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Willisicroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2754

DATE COMP: 2003/10/10

FIELD NO:	301	302	303	304		
LAB NO:	515	516	517	518		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	81%	74%	86%	100%		
25.0	70%	56%	71%	71%		
20.0	64%	54%	64%	66%		
12.5	56%	47%	57%	58%		
10.0	52%	44%	53%	53%		
5.0	43%	35%	42%	42%		
2.5	34%	25%	31%	32%		
1.25	25%	17%	21%	24%		
0.630	17%	10%	11%	17%		
0.315	9%	6%	5%	10%		
0.160	5%	4%	3%	6%		
0.080	3%	3%	2%	4%		
M.C.(%)						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	65	58	58		
% SAND:	40	32	40	37		
% FINES:	3	3	2	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

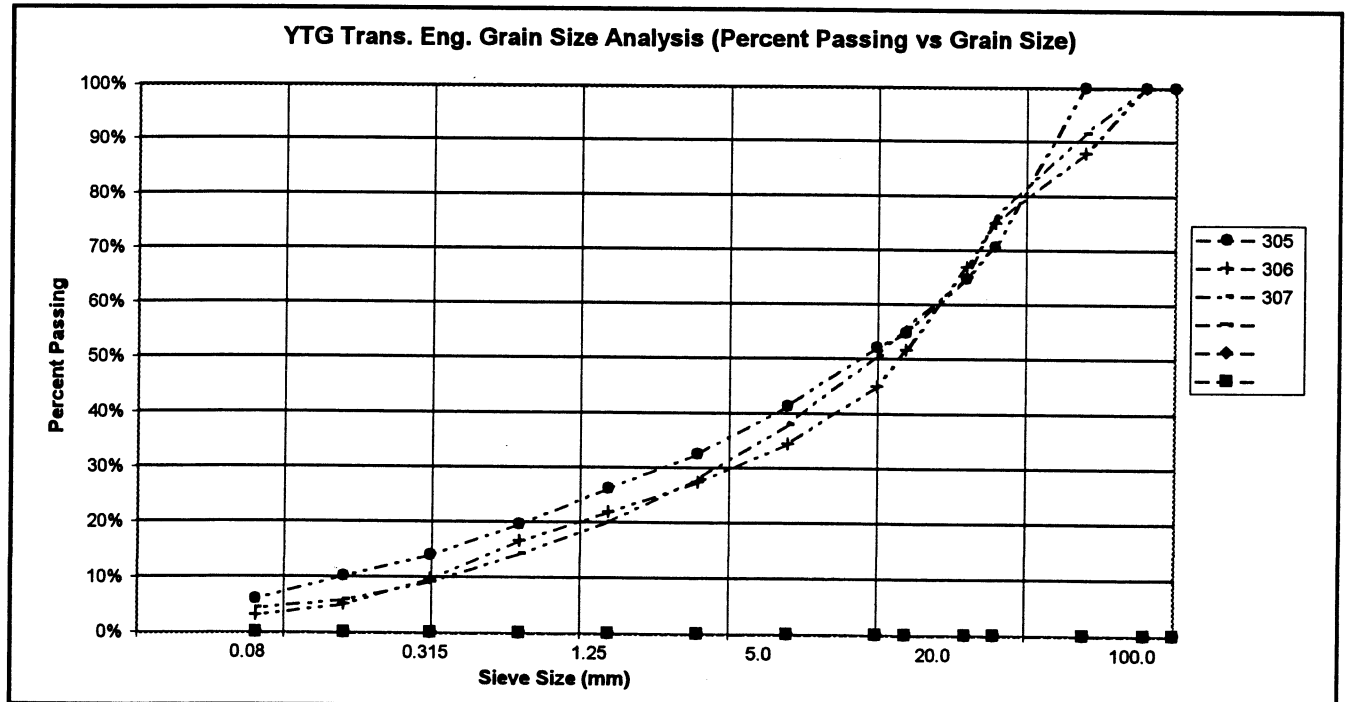


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2755

DATE COMP: 2003/10/10

FIELD NO:	305	306	307		
LAB NO:	519	520	521		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	88%	92%		
25.0	71%	75%	76%		
20.0	65%	67%	65%		
12.5	55%	52%	56%		
10.0	52%	45%	51%		
5.0	41%	34%	38%		
2.5	33%	27%	28%		
1.25	26%	22%	20%		
0.630	20%	17%	14%		
0.315	14%	10%	9%		
0.160	10%	5%	6%		
0.080	6%	3%	4%		
M.C.(%):					
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	59	66	62		
% SAND:	35	31	34		
% FINES:	6	3	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

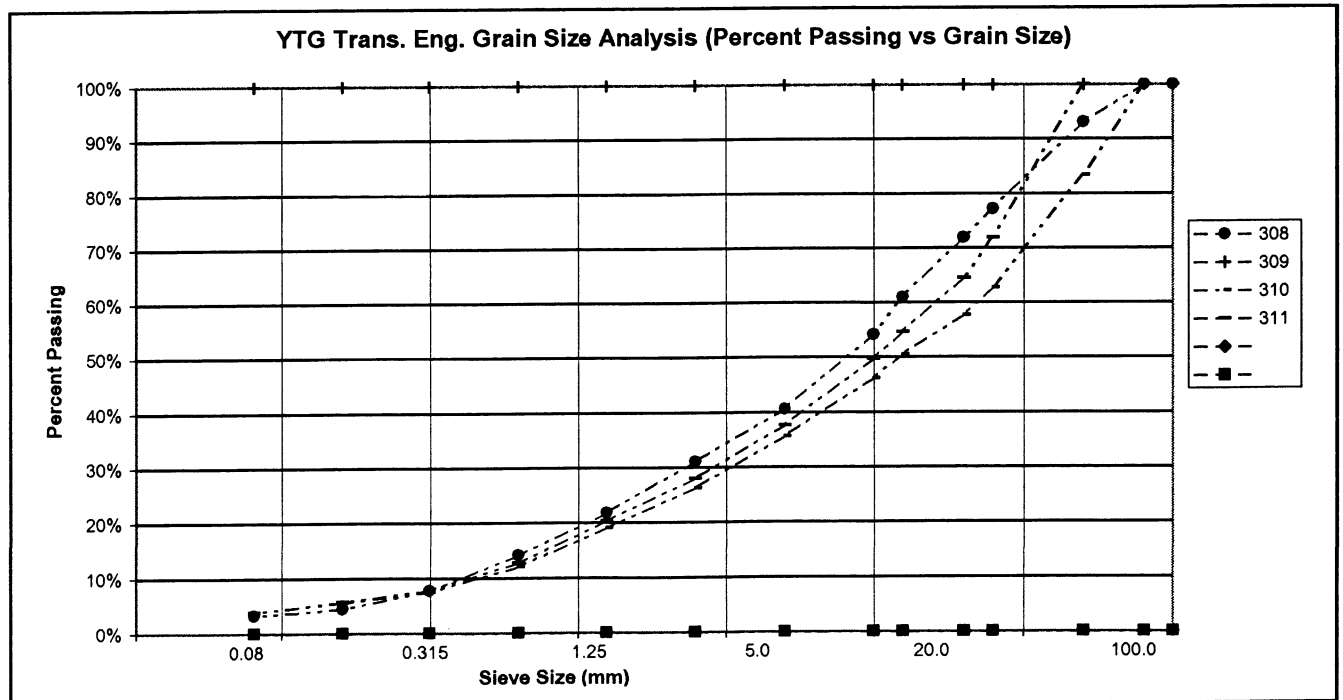


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2756

DATE COMP: 2003/10/10

FIELD NO:	308	309	310	311		
LAB NO:	522	Lost	524	525		
DEPTH:	0.8-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	93%	100%	83%	100%		
25.0	77%	100%	63%	72%		
20.0	72%	100%	58%	64%		
12.5	61%	100%	50%	55%		
10.0	54%	100%	46%	50%		
5.0	41%	100%	36%	38%		
2.5	31%	100%	26%	28%		
1.25	22%	100%	19%	20%		
0.630	14%	100%	12%	13%		
0.315	8%	100%	7%	8%		
0.160	4%	100%	6%	6%		
0.080	3%	100%	4%	4%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	59	0	64	62		
% SAND:	37	0	32	34		
% FINES:	3	100	4	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILT	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

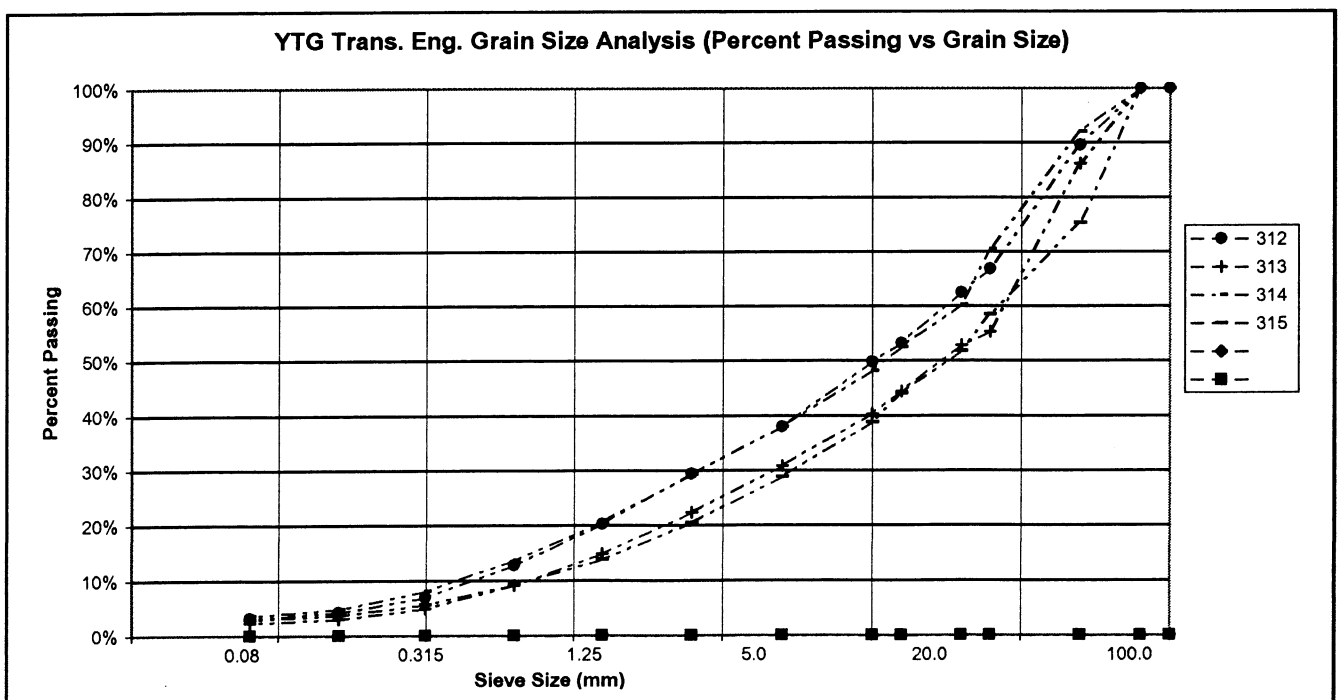


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2757

DATE COMP: 2003/10/10

FIELD NO:	312	313	314	315		
LAB NO:	526	527	528	529		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	90%	86%	92%	75%		
25.0	67%	55%	70%	58%		
20.0	62%	53%	60%	52%		
12.5	53%	44%	53%	44%		
10.0	50%	40%	48%	39%		
5.0	38%	31%	38%	29%		
2.5	29%	22%	29%	21%		
1.25	20%	15%	21%	14%		
0.630	13%	9%	14%	9%		
0.315	7%	5%	8%	6%		
0.160	4%	3%	5%	4%		
0.080	3%	2%	4%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	69	62	71		
% SAND:	35	28	34	26		
% FINES:	3	2	4	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

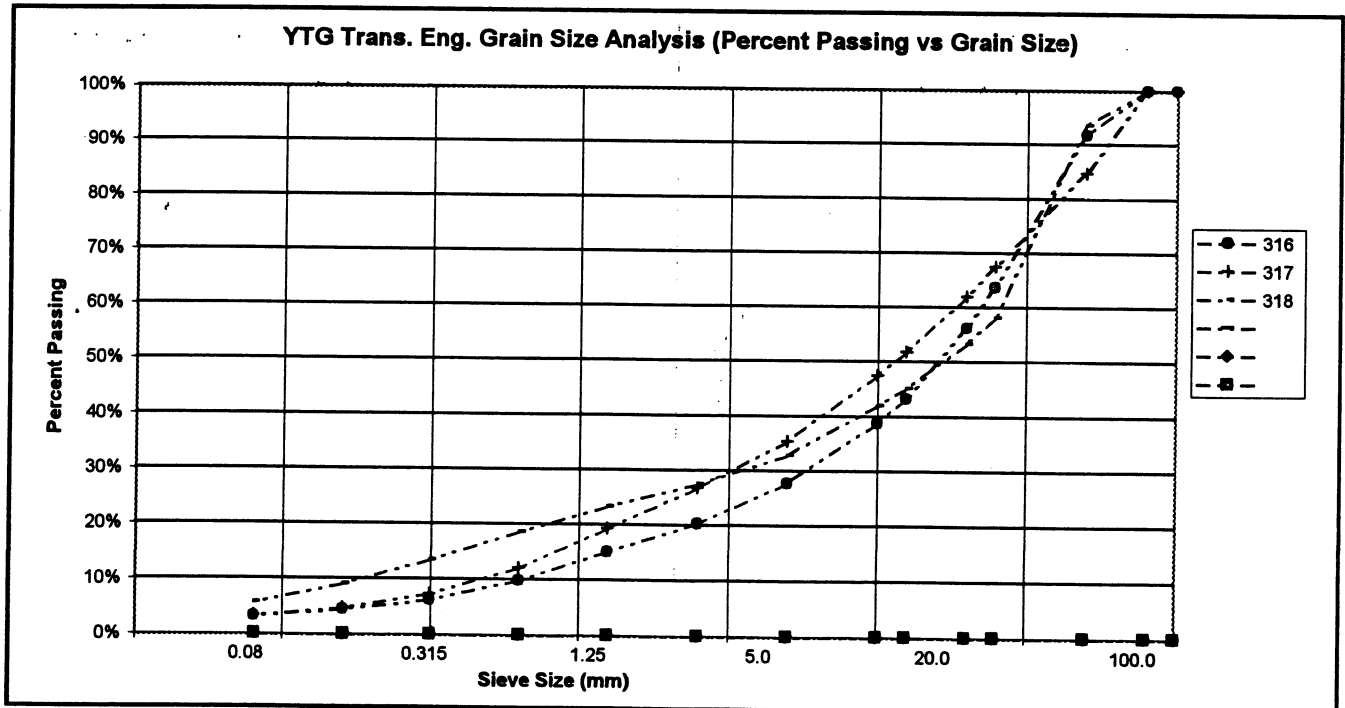


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2758

DATE COMP: 2003/10/10

FIELD NO:	316	317	318		
LAB NO:	530	531	532		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	92%	85%	94%		
25.0	64%	68%	58%		
20.0	56%	62%	53%		
12.5	43%	52%	45%		
10.0	39%	48%	42%		
5.0	28%	35%	33%		
2.5	20%	27%	28%		
1.25	15%	19%	23%		
0.630	10%	12%	19%		
0.315	6%	7%	14%		
0.160	4%	5%	9%		
0.080	3%	3%	6%		
M.C.(%):					
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	72	65	67		
% SAND:	25	32	27		
% FINES:	3	3	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

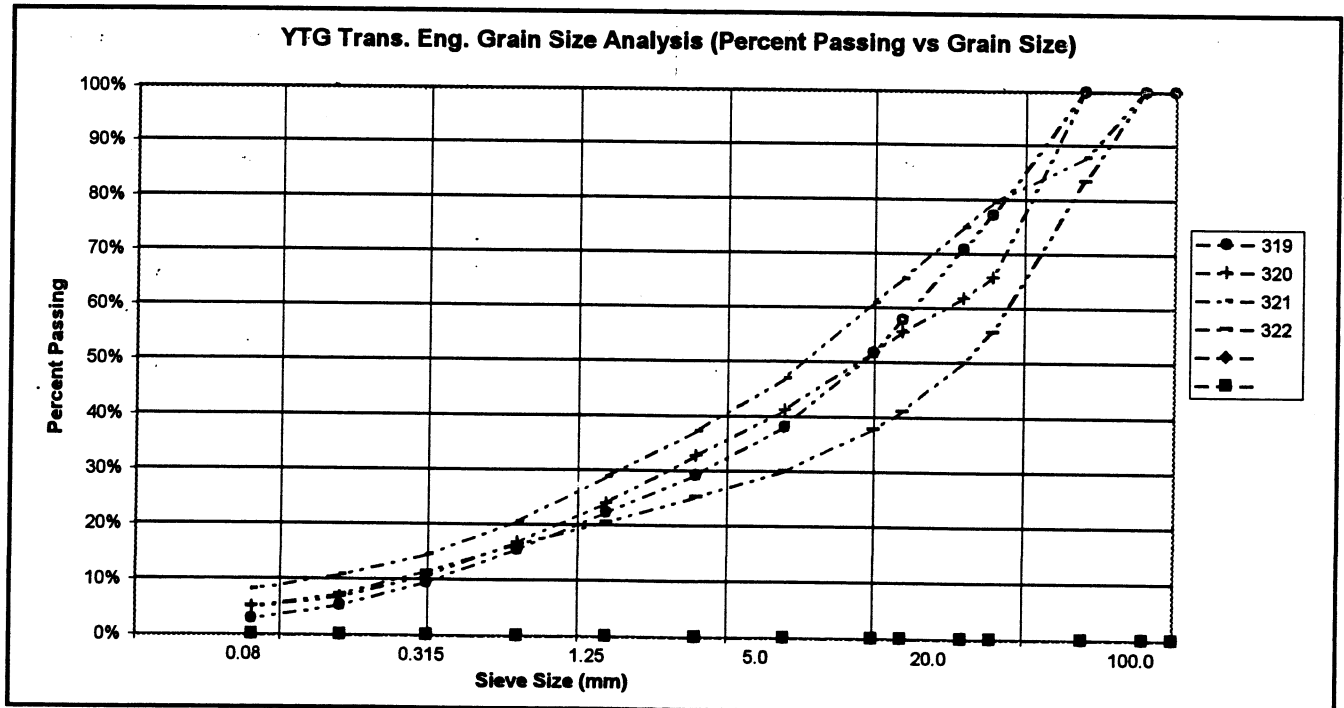


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2759

DATE COMP: 2003/10/10

FIELD NO:	319	320	321	322		
LAB NO:	533	534	535	536		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	88%	83%		
25.0	77%	66%	80%	56%		
20.0	71%	62%	75%	50%		
12.5	58%	56%	65%	41%		
10.0	52%	52%	61%	38%		
5.0	38%	41%	47%	30%		
2.5	29%	33%	37%	25%		
1.25	22%	24%	29%	21%		
0.630	16%	17%	21%	16%		
0.315	10%	11%	15%	12%		
0.160	5%	7%	11%	7%		
0.080	3%	5%	8%	5%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	59	53	70		
% SAND:	35	36	39	25		
% FINES:	3	5	8	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

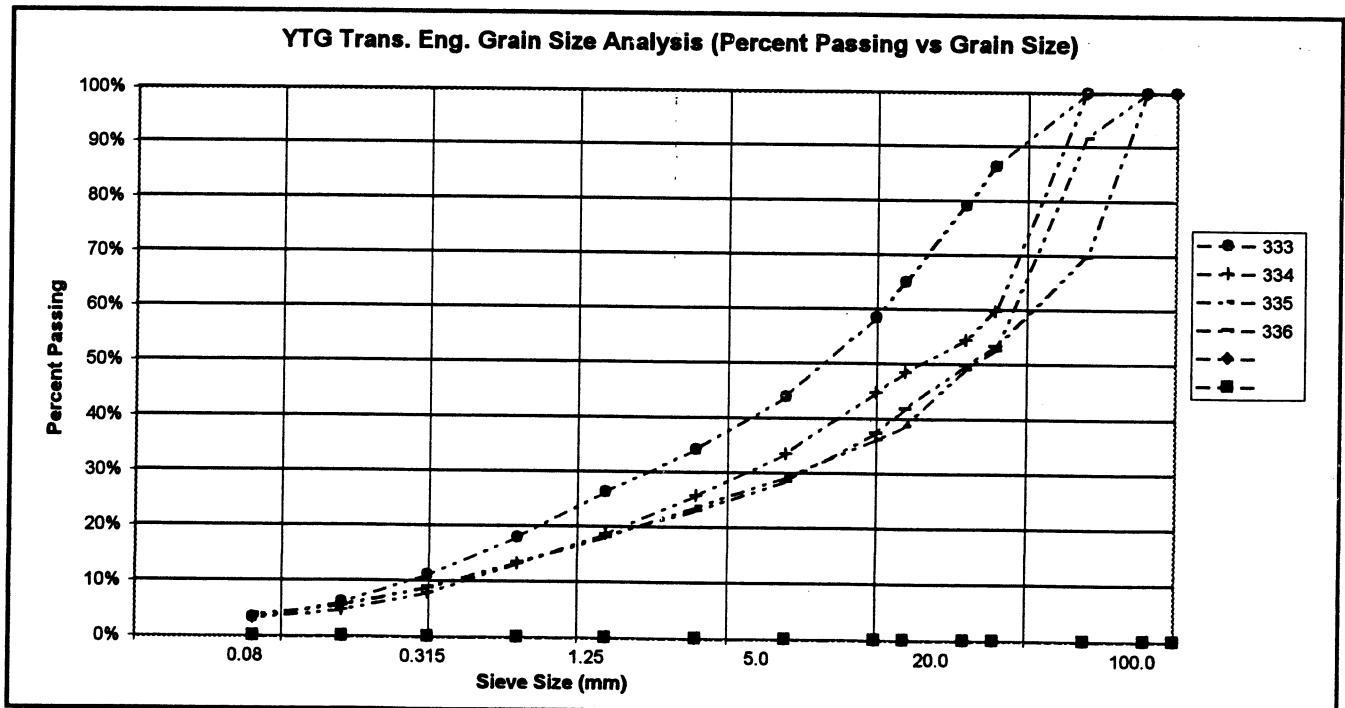


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2760

DATE COMP: 2003/10/11

FIELD NO:	333	334	335	336		
LAB NO:	537	538	539	540		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	92%	70%		
25.0	86%	60%	53%	53%		
20.0	79%	55%	49%	50%		
12.5	65%	49%	39%	42%		
10.0	58%	45%	36%	37%		
5.0	44%	34%	29%	29%		
2.5	34%	26%	24%	23%		
1.25	26%	19%	18%	18%		
0.630	18%	13%	13%	14%		
0.315	11%	8%	9%	9%		
0.160	6%	5%	6%	6%		
0.080	3%	3%	4%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	66	71	71		
% SAND:	41	30	26	25		
% FINES:	3	3	4	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)		

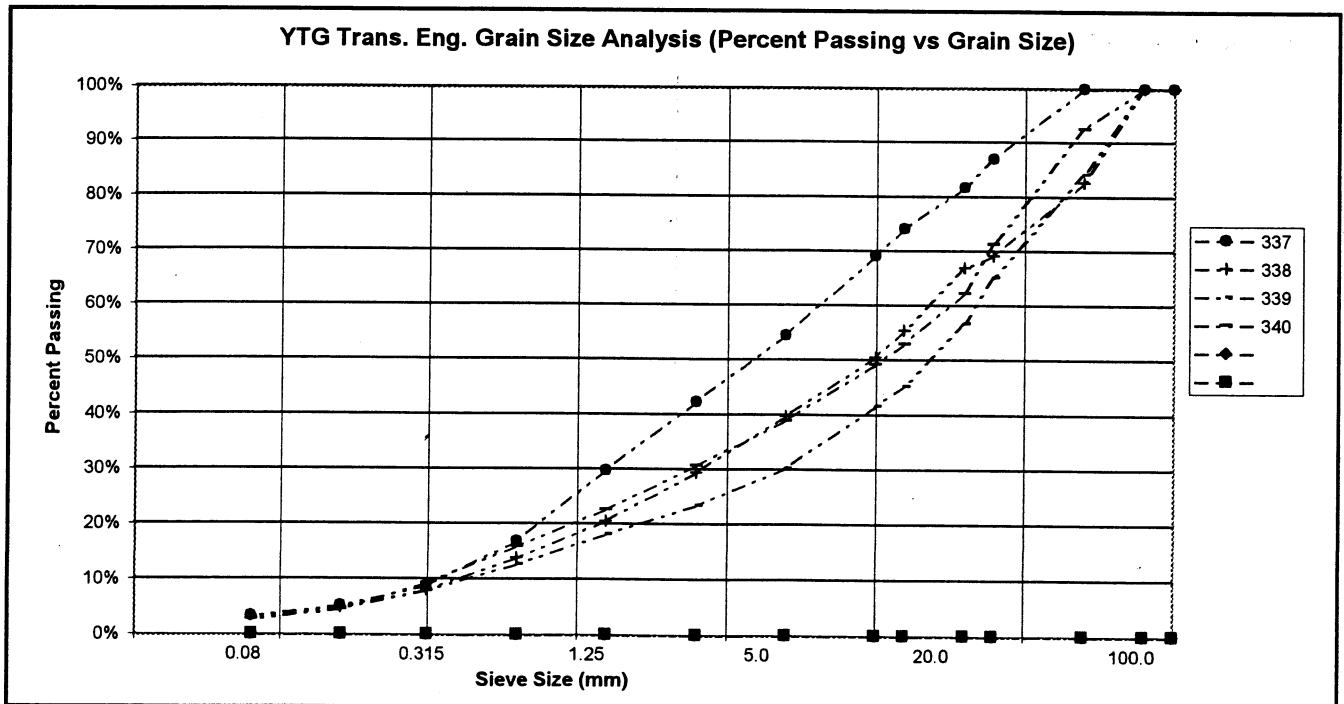


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 2654-2761

DATE COMP: 2003/10/11

FIELD NO:	337	338	339	340		
LAB NO:	541	542	543	544		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	83%	84%	93%		
25.0	87%	69%	65%	71%		
20.0	82%	67%	57%	62%		
12.5	74%	55%	45%	53%		
10.0	69%	50%	42%	49%		
5.0	54%	40%	30%	39%		
2.5	42%	29%	23%	31%		
1.25	30%	21%	18%	23%		
0.630	17%	14%	13%	16%		
0.315	9%	8%	8%	9%		
0.160	5%	5%	5%	4%		
0.080	3%	3%	3%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	46	60	70	61		
% SAND:	51	36	27	36		
% FINES:	3	3	3	3		
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

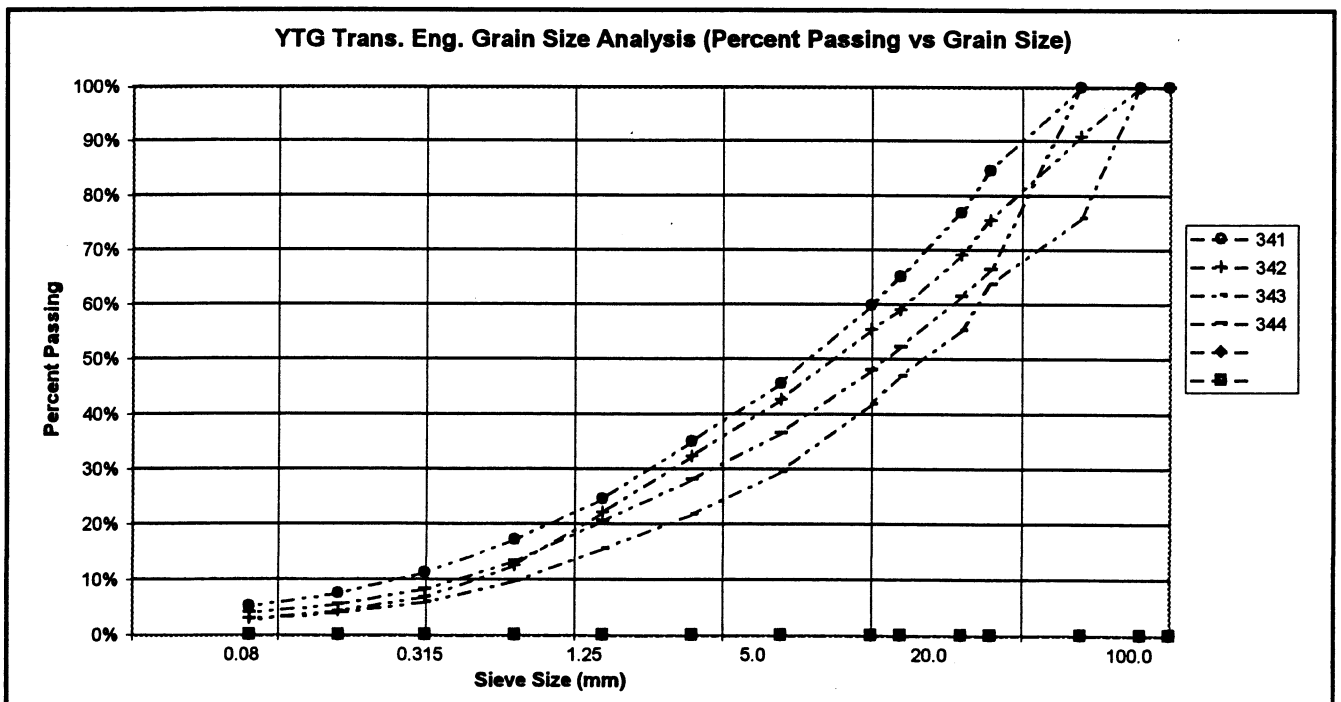


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2762

DATE COMP: 2003/10/11

FIELD NO:	341	342	343	344		
LAB NO:	545	546	547	548		
DEPTH:	0.5-1.1	1.5-2.1	2.5-3.1	3.5-4.1		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	91%	76%	100%		
25.0	85%	76%	64%	66%		
20.0	77%	69%	55%	62%		
12.5	65%	59%	47%	52%		
10.0	60%	55%	42%	48%		
5.0	46%	43%	30%	37%		
2.5	35%	32%	22%	28%		
1.25	25%	22%	16%	21%		
0.830	17%	13%	10%	13%		
0.315	11%	7%	6%	8%		
0.160	8%	4%	4%	5%		
0.080	5%	3%	3%	4%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	54	57	70	63		
% SAND:	40	40	27	33		
% FINES:	5	3	3	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

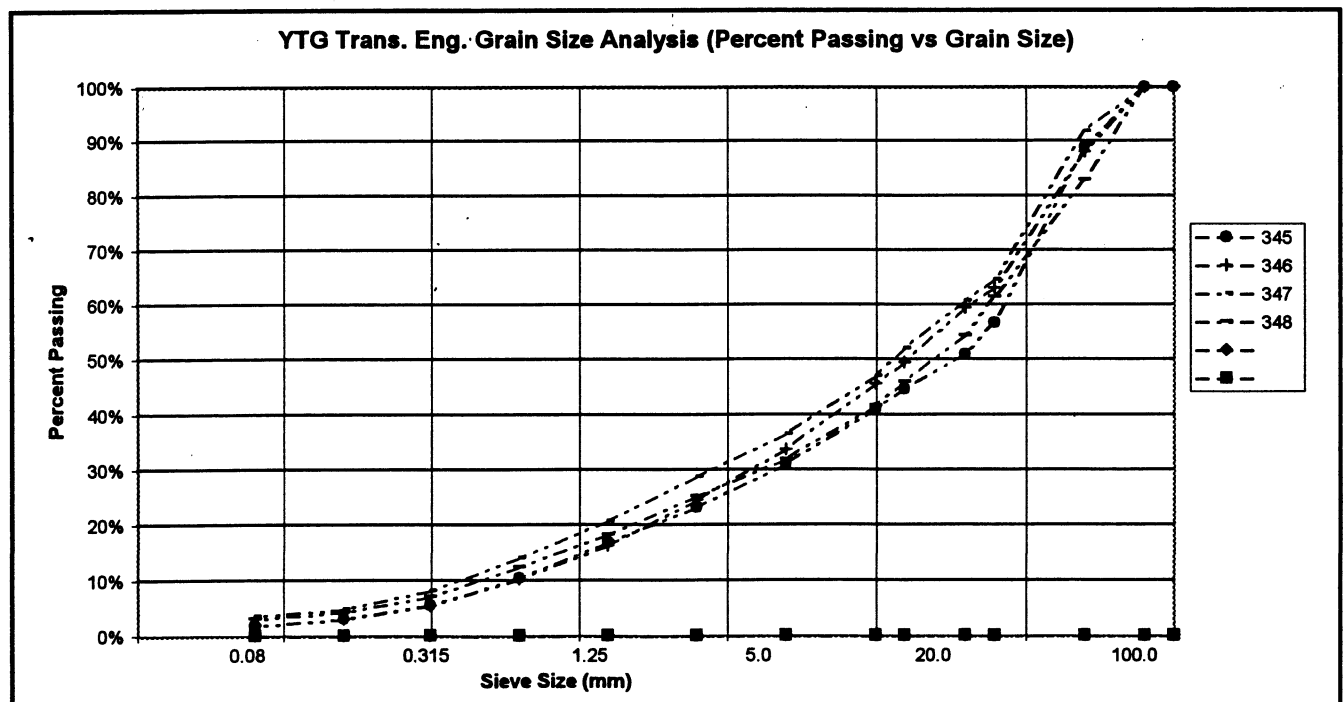


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2763

DATE COMP: 2003/10/11

FIELD NO:	345	346	347	348		
LAB NO:	549	550	551	552		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	89%	88%	92%	83%		
25.0	57%	63%	65%	61%		
20.0	51%	59%	61%	54%		
12.5	45%	49%	52%	46%		
10.0	41%	46%	47%	42%		
5.0	31%	34%	36%	32%		
2.5	23%	25%	29%	25%		
1.25	17%	16%	21%	18%		
0.630	10%	10%	14%	12%		
0.315	5%	5%	8%	7%		
0.160	3%	3%	5%	4%		
0.080	2%	2%	4%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	69	68	64	68		
% SAND:	29	32	33	29		
% FINES:	2	2	4	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		





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An Associate of J. R. Faine & Associates Ltd.

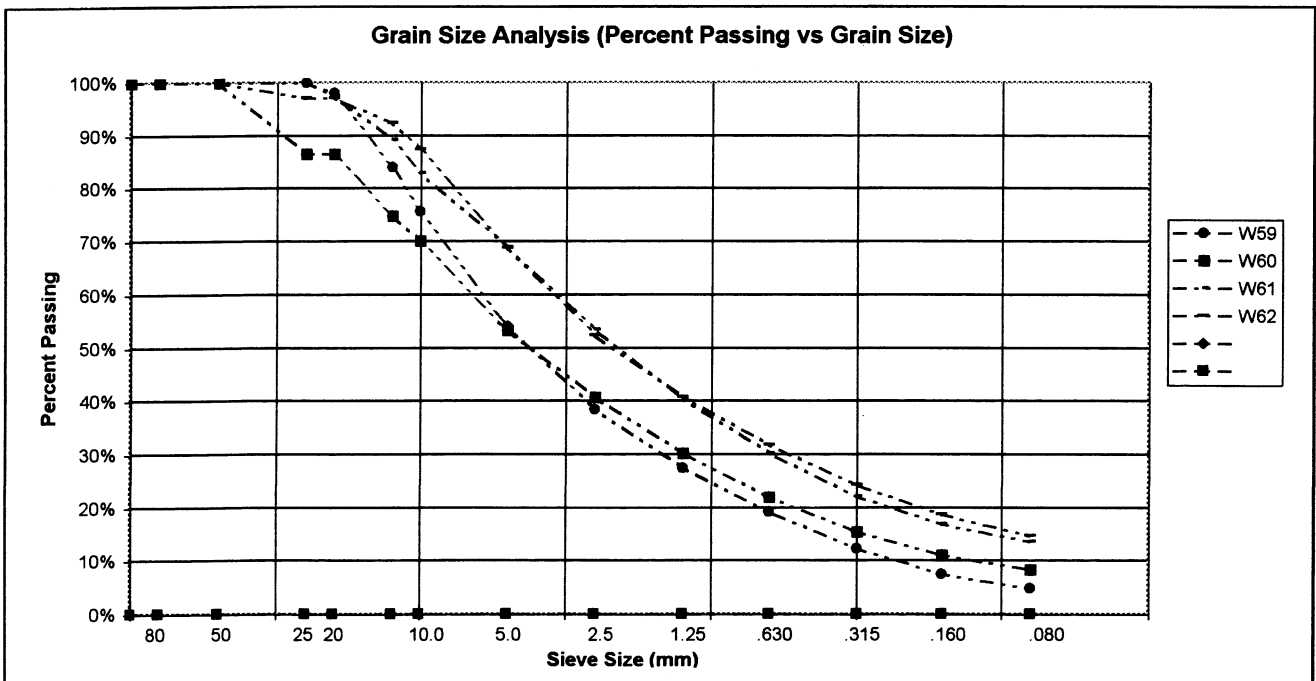


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 632672-6774951
 LOGGED BY: RW

HOLE No.: 654-2763Drill

DATE COMP: 11/01/2004

FIELD NO:	W59	W60	W61	W62		
LAB NO:	W59	W60	W61	W62		
DEPTH:	0.5-1.0	1.8-2.4	3.4-4.0	5.2-5.8		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
60.0	100%	100%	100%	100%		
25.0	100%	87%	100%	97%		
20.0	98%	87%	97%	97%		
12.5	84%	75%	89%	92%		
10.0	76%	70%	83%	87%		
5.0	54%	53%	69%	69%		
2.5	38%	41%	53%	52%		
1.25	27%	30%	40%	41%		
0.630	19%	22%	30%	32%		
0.315	12%	15%	22%	24%		
0.160	7%	11%	17%	19%		
0.080	5%	8%	14%	15%		
M.C.(%)	1%	1%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	46	47	31	31		
% SAND:	49	45	55	54		
% FINES:	5	8	14	15		
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)		

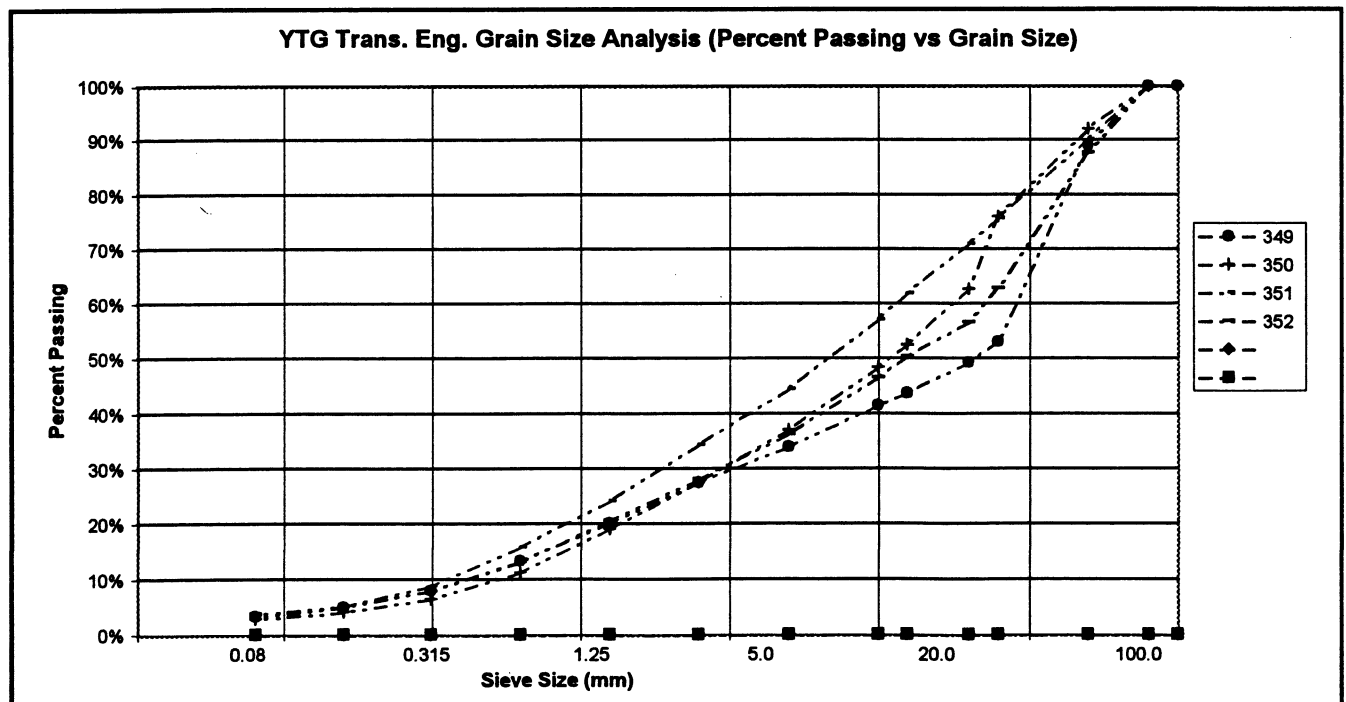


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek Granular Investigation
 PROJECT LOCATION: Km 1712 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 654-2764

DATE COMP: 2003/10/11

FIELD NO:	349	350	351	352		
LAB NO:	553	554	555	556		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	89%	92%	90%	88%		
25.0	53%	76%	76%	63%		
20.0	49%	63%	71%	57%		
12.5	44%	53%	62%	50%		
10.0	42%	48%	57%	47%		
5.0	34%	37%	44%	36%		
2.5	28%	28%	34%	28%		
1.25	20%	19%	24%	21%		
0.830	13%	11%	16%	13%		
0.315	8%	6%	9%	8%		
0.160	5%	4%	5%	5%		
0.080	3%	3%	4%	4%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	63	56	64		
% SAND:	31	34	41	33		
% FINES:	3	3	4	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

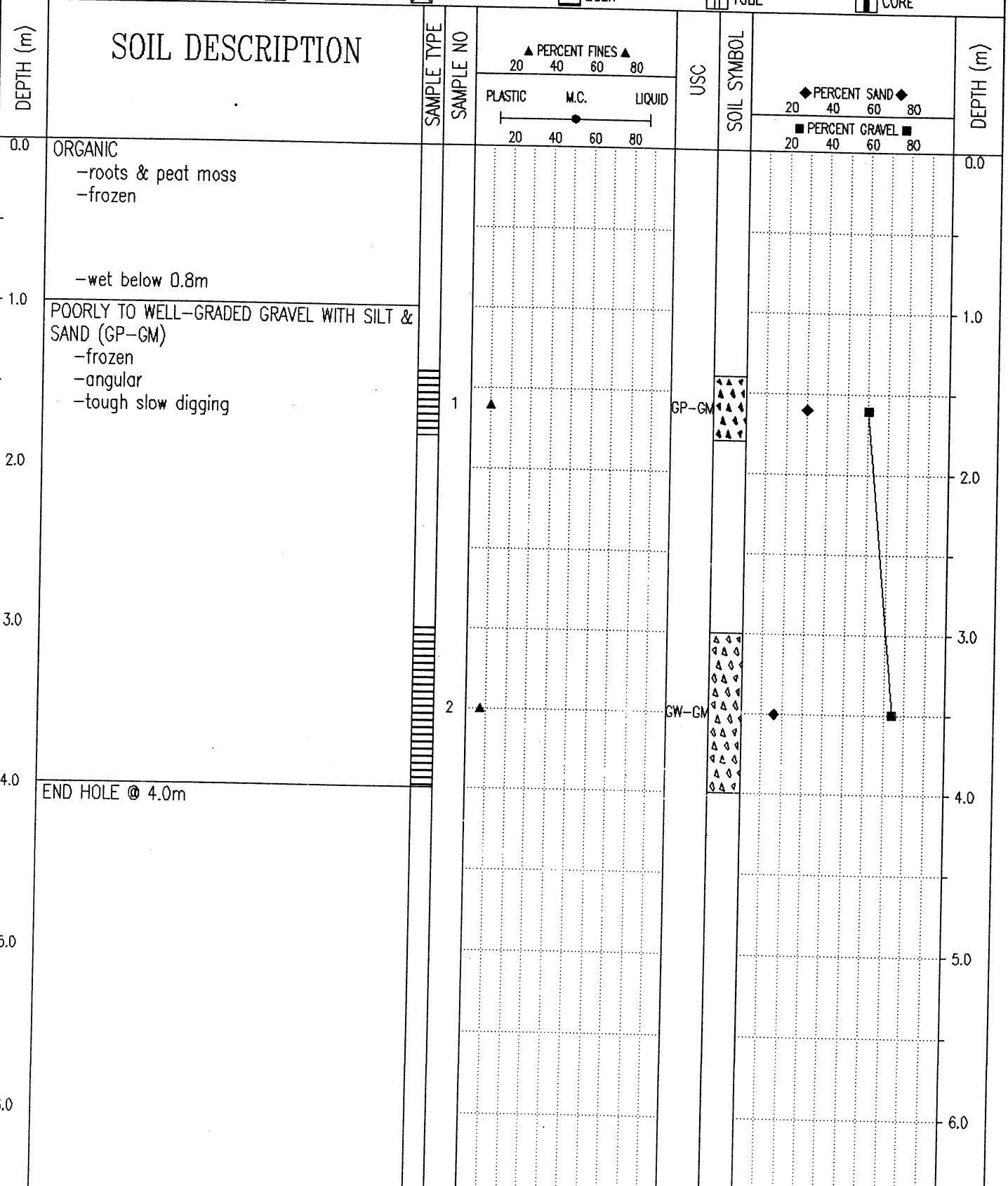


Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

December 2003
Book # 663

Test Pit Logs

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 663-2853
ENGINEERING CAPITAL		KM 1712 A/H LHS	Project No: 552-202101-0362
KOMATSU PC-400 LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

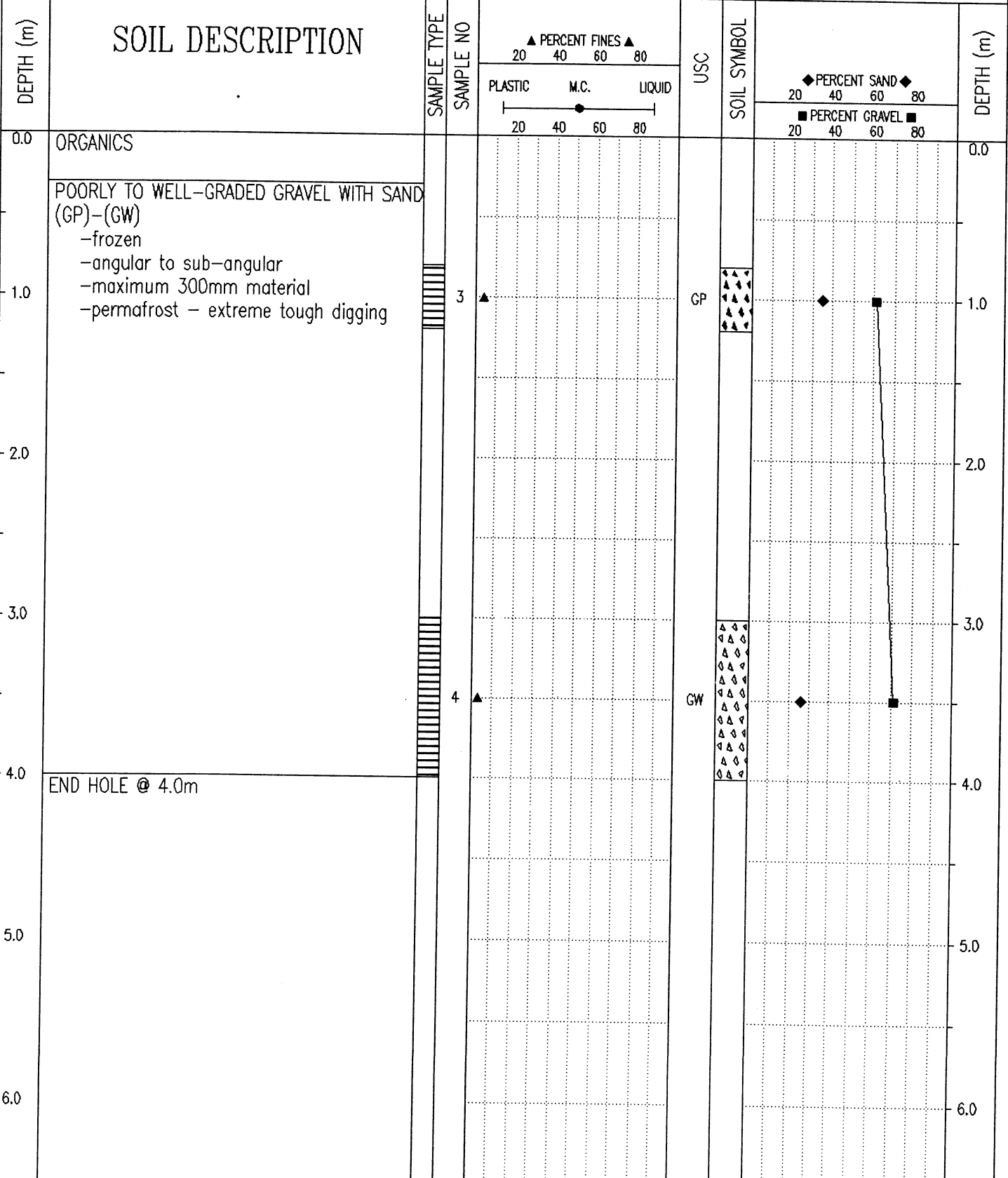


Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/12/16
Fig. No:	

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 663-2854
ENGINEERING CAPITAL	KM 1712 A/H LHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

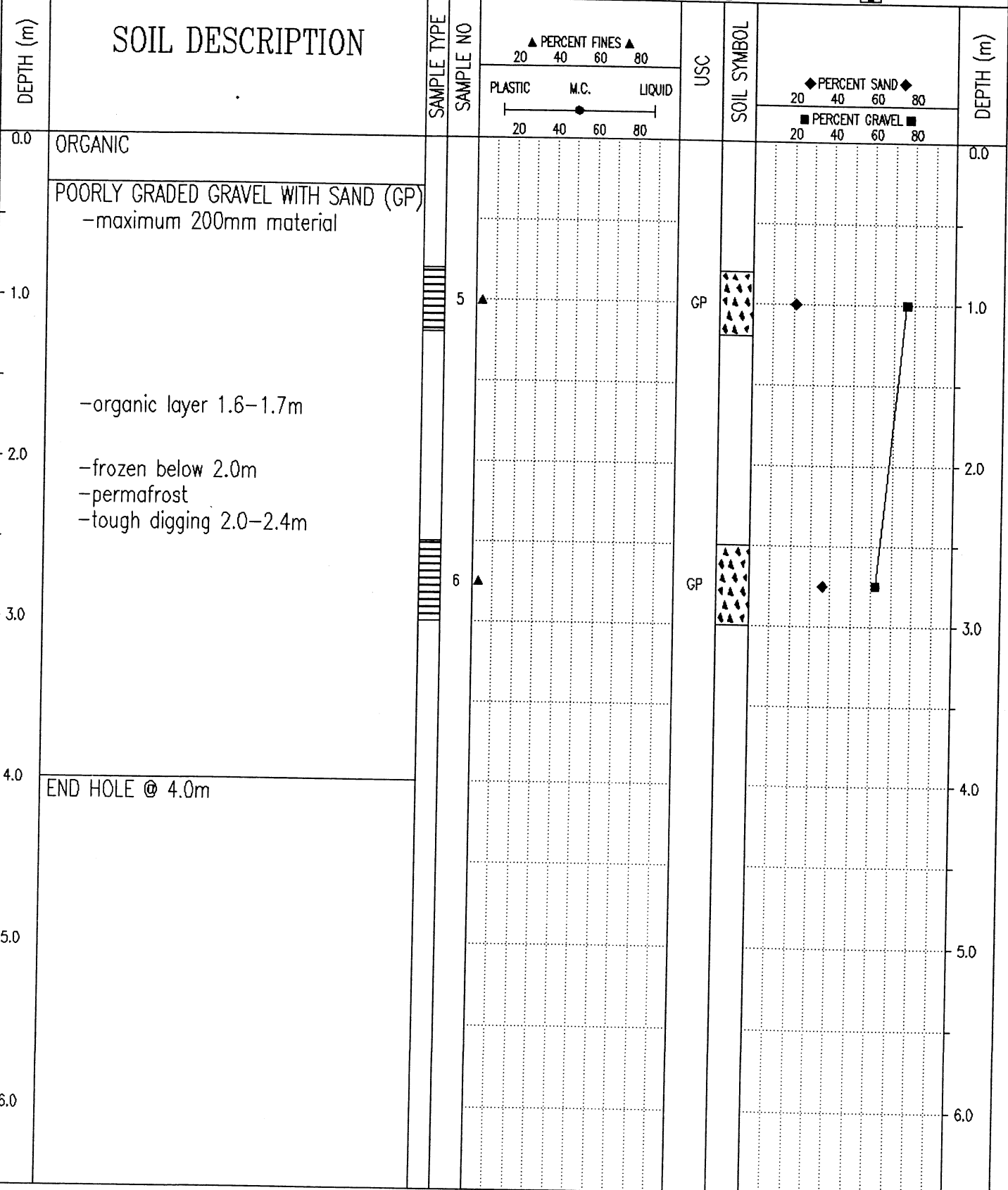
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 03/12/16
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 663-2855
ENGINEERING CAPITAL		KM 1712 A/H LHS	Project No: 552-202101-0362
KOMATSU PC-400 LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

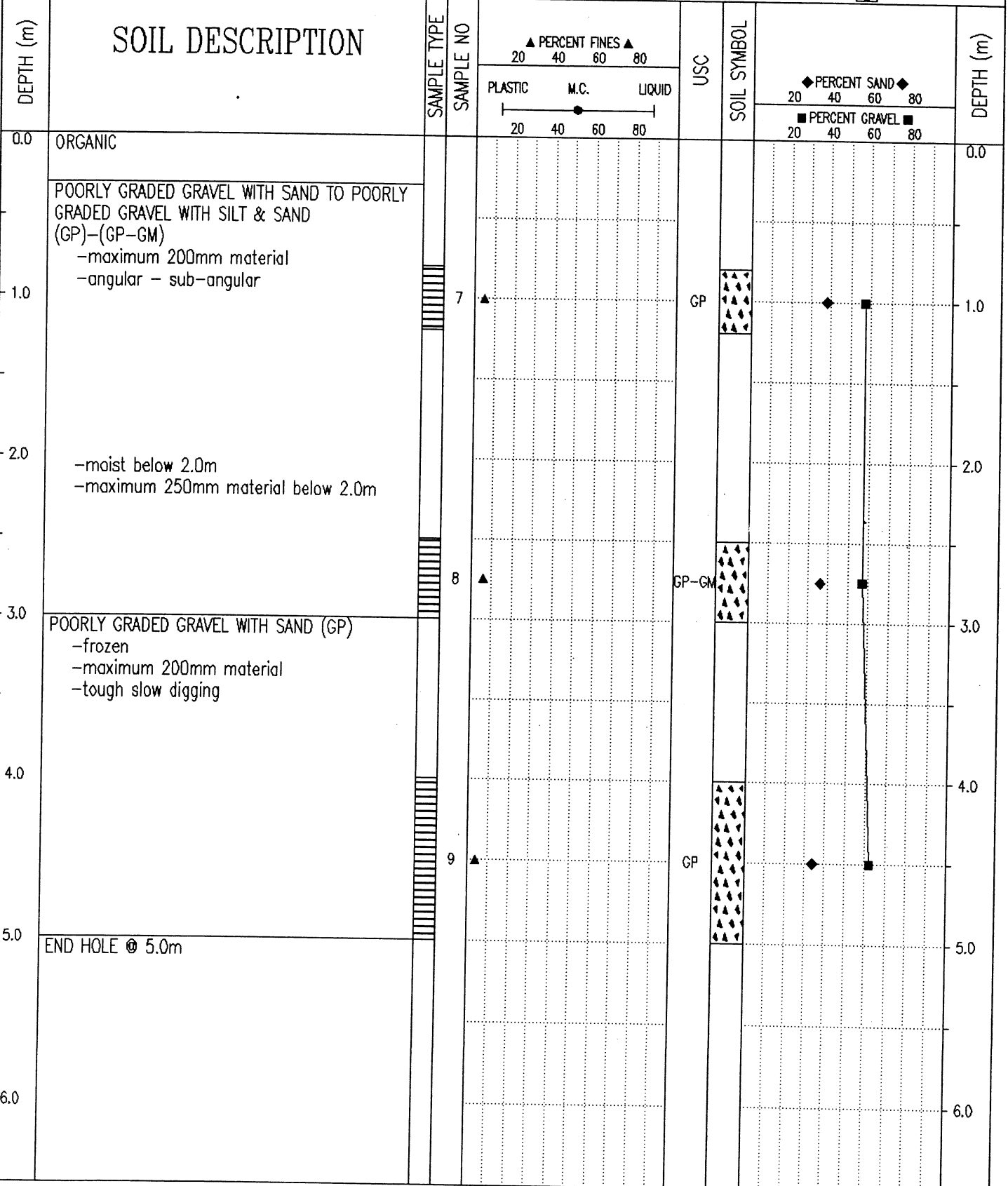
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/12/18
Fig. No:	Page 1 of 1

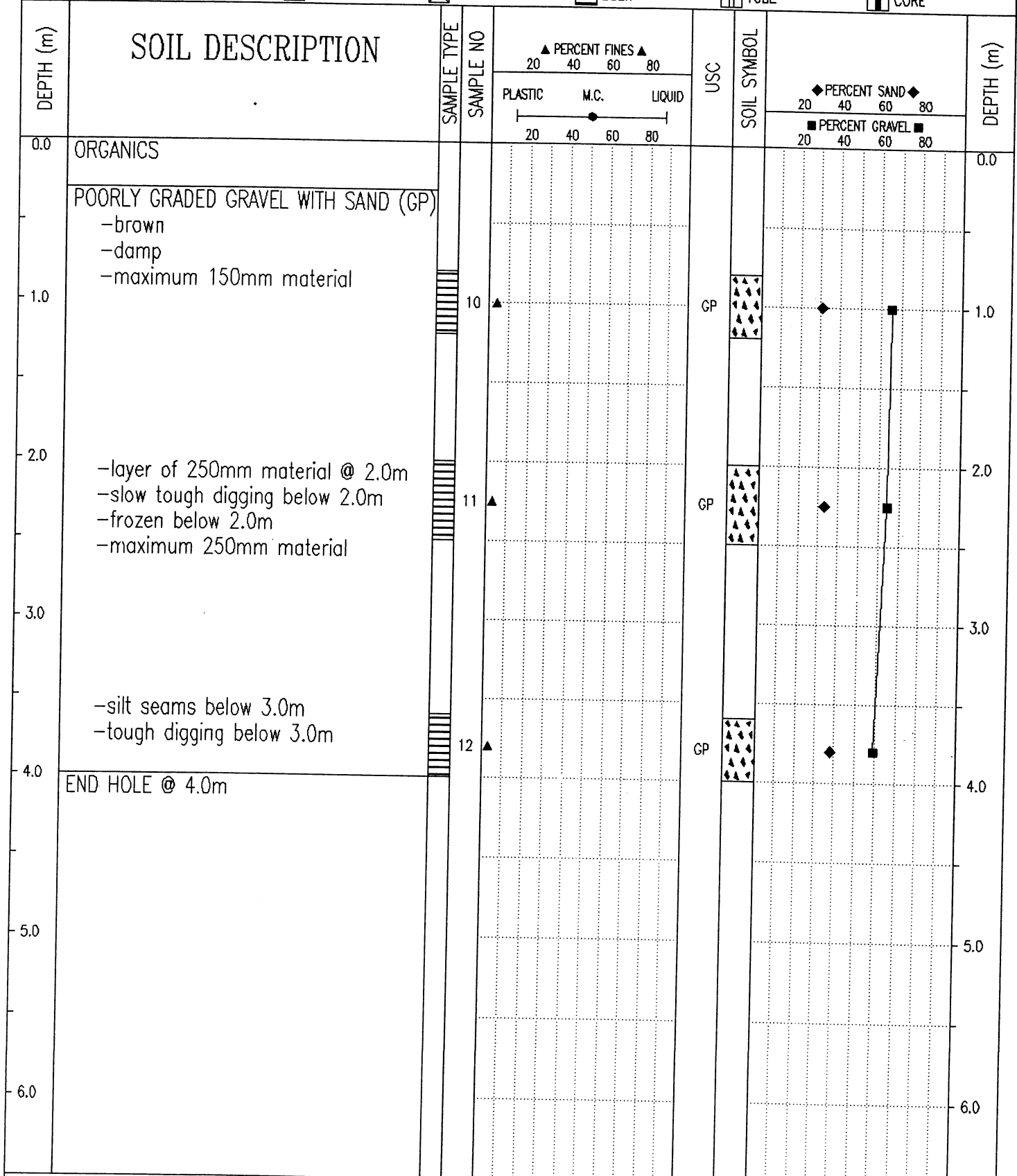
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 663-2856
ENGINEERING CAPITAL		KM 1712 A/H LHS	Project No: 552-202101-0362
KOMATSU PC-400 LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/12/18
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT	TEST PIT NO: 663-2857
ENGINEERING CAPITAL		KM 1712 A/H LHS	Project No: 552-202101-0362
KOMATSU PC-400 LC		LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



Government of Yukon
Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

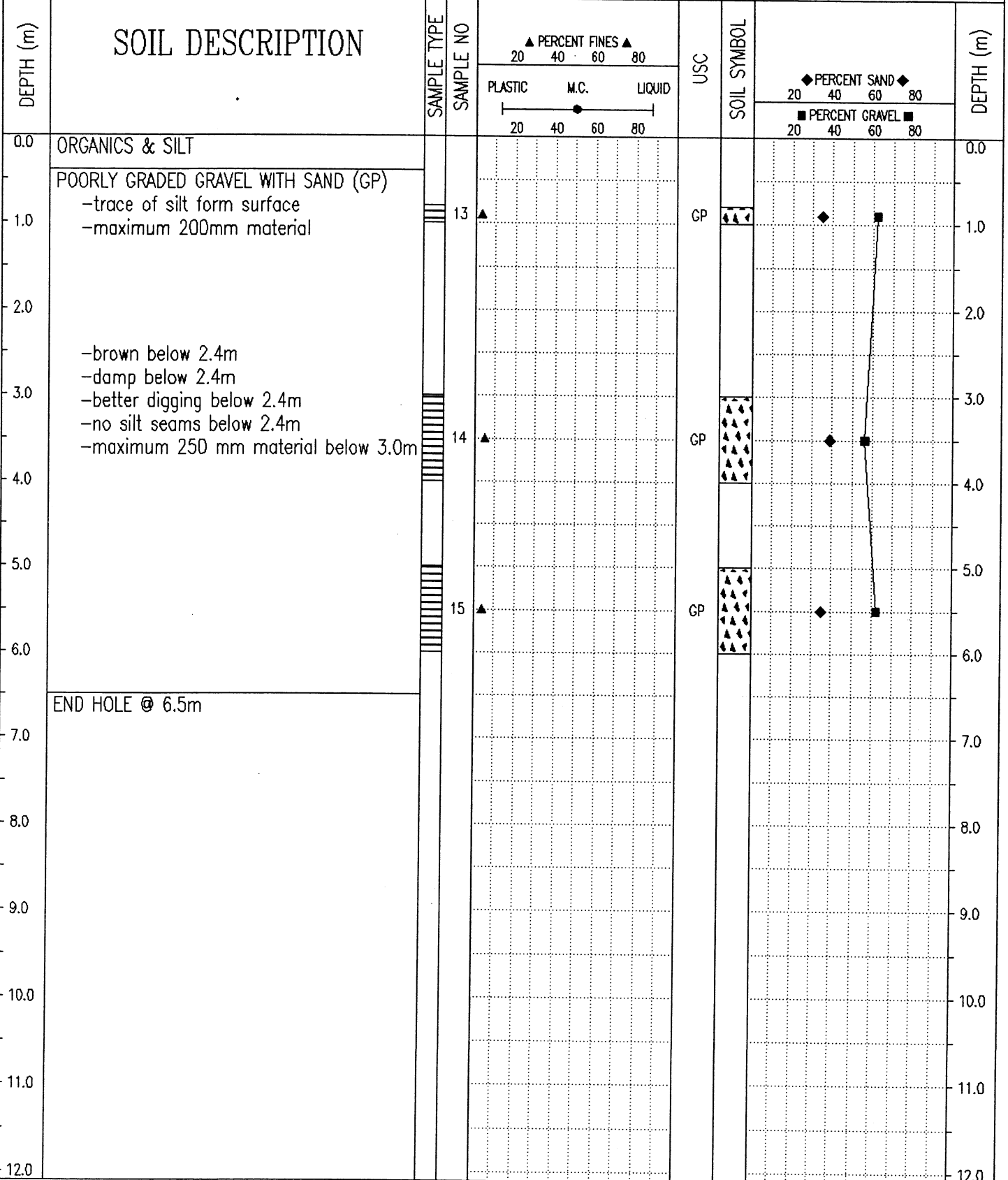
Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 03/12/18

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 663-2858
ENGINEERING CAPITAL	KM 1712 A/H LHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



Government of Yukon
Transportation Engineering

LOGGED BY: GC

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 6.5 m

COMPLETE: 03/12/18

Page 1 of 1

Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

December 2003
Book # 663

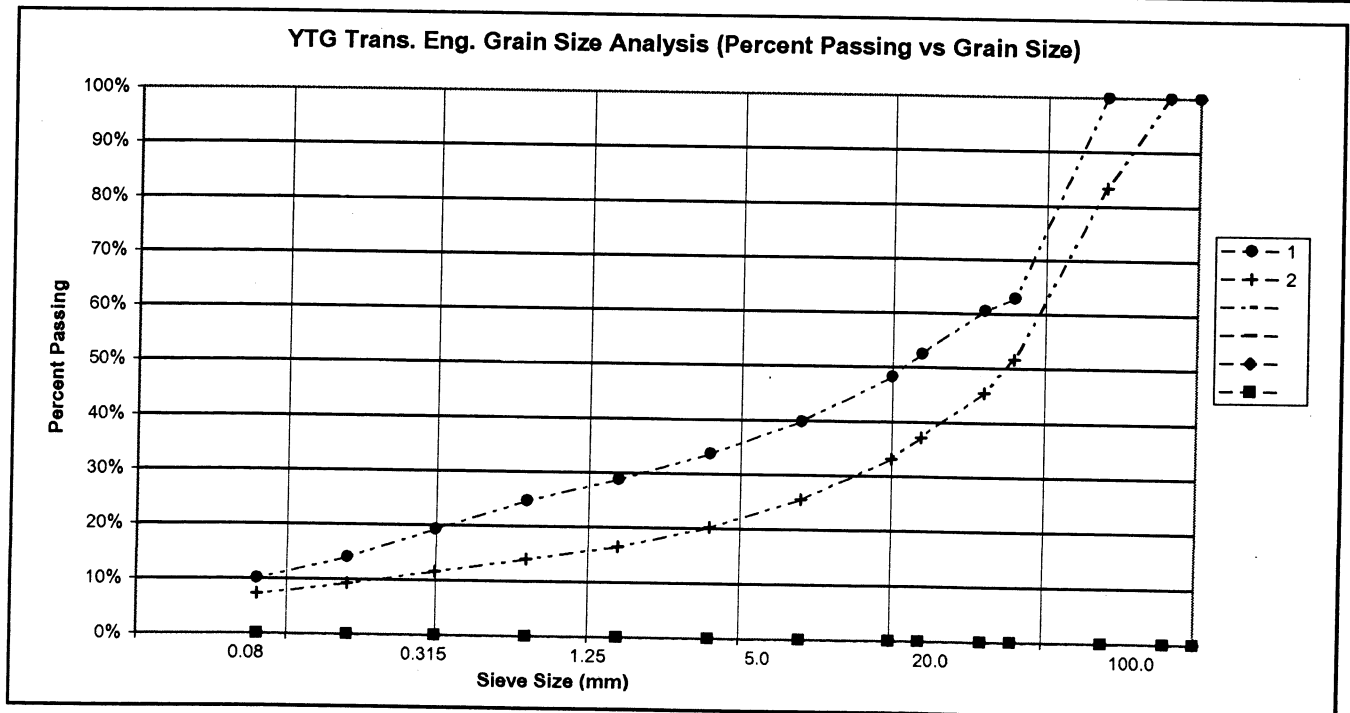
Pit Run Sample Results

PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek
 PROJECT LOCATION: Km 1712.5 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 663-2853

DATE COMP: 03/02/16

FIELD NO:	1	2			
LAB NO:	766	767			
DEPTH:	1.4-1.8	3.0-4.0			
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	83%			
25.0	63%	52%			
20.0	61%	46%			
12.5	52%	37%			
10.0	48%	33%			
5.0	40%	26%			
2.5	34%	20%			
1.25	29%	17%			
0.630	25%	14%			
0.315	19%	12%			
0.160	14%	9%			
0.080	10%	7%			
M.C.(%):					
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	60	74			
% SAND:	30	18			
% FINES:	10	7			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)			

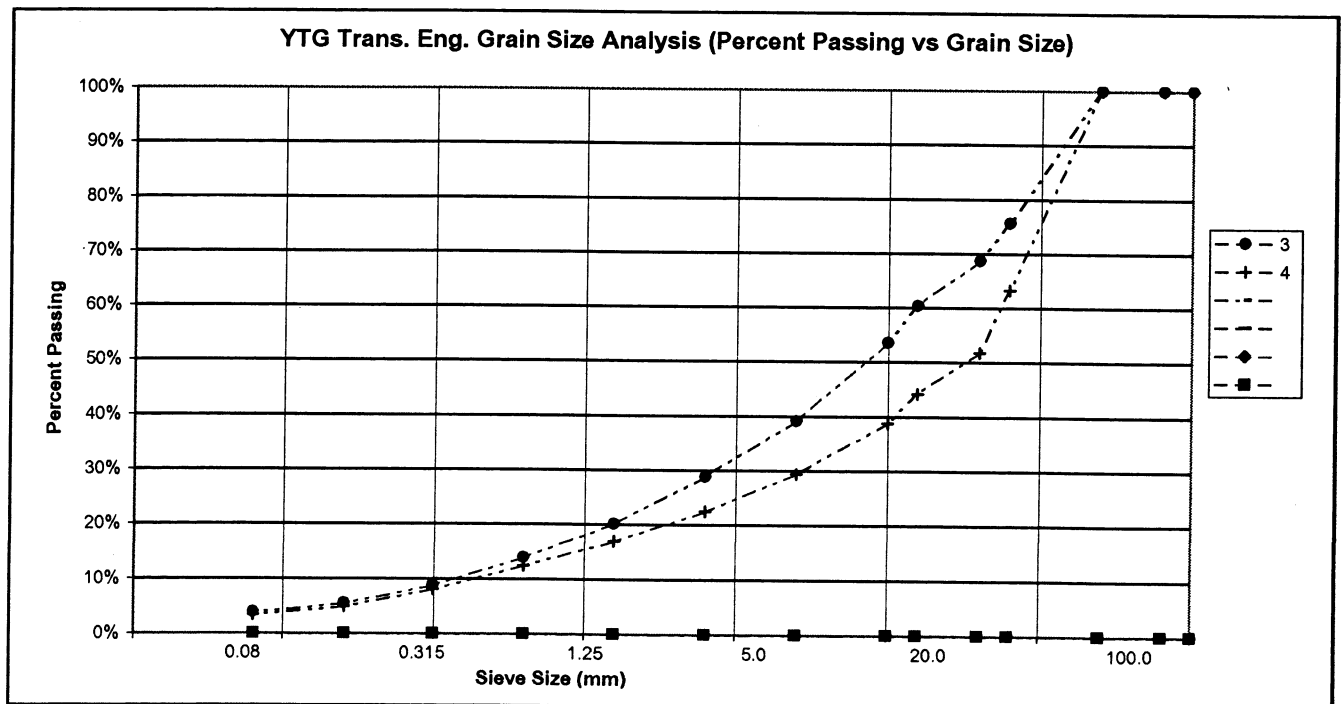


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek
 PROJECT LOCATION: Km 1712.5 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 663-2854

DATE COMP: 03/02/18

FIELD NO.:	3	4			
LAB NO.:	768	769			
DEPTH:	0.8-1.2	3.0-4.0			
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	76%	63%			
20.0	69%	52%			
12.5	60%	44%			
10.0	54%	39%			
5.0	39%	29%			
2.5	29%	23%			
1.25	20%	17%			
0.630	14%	12%			
0.315	9%	8%			
0.160	6%	5%			
0.080	4%	3%			
M.C.(%):					
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	61	71			
% SAND:	35	26			
% FINES:	4	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)			

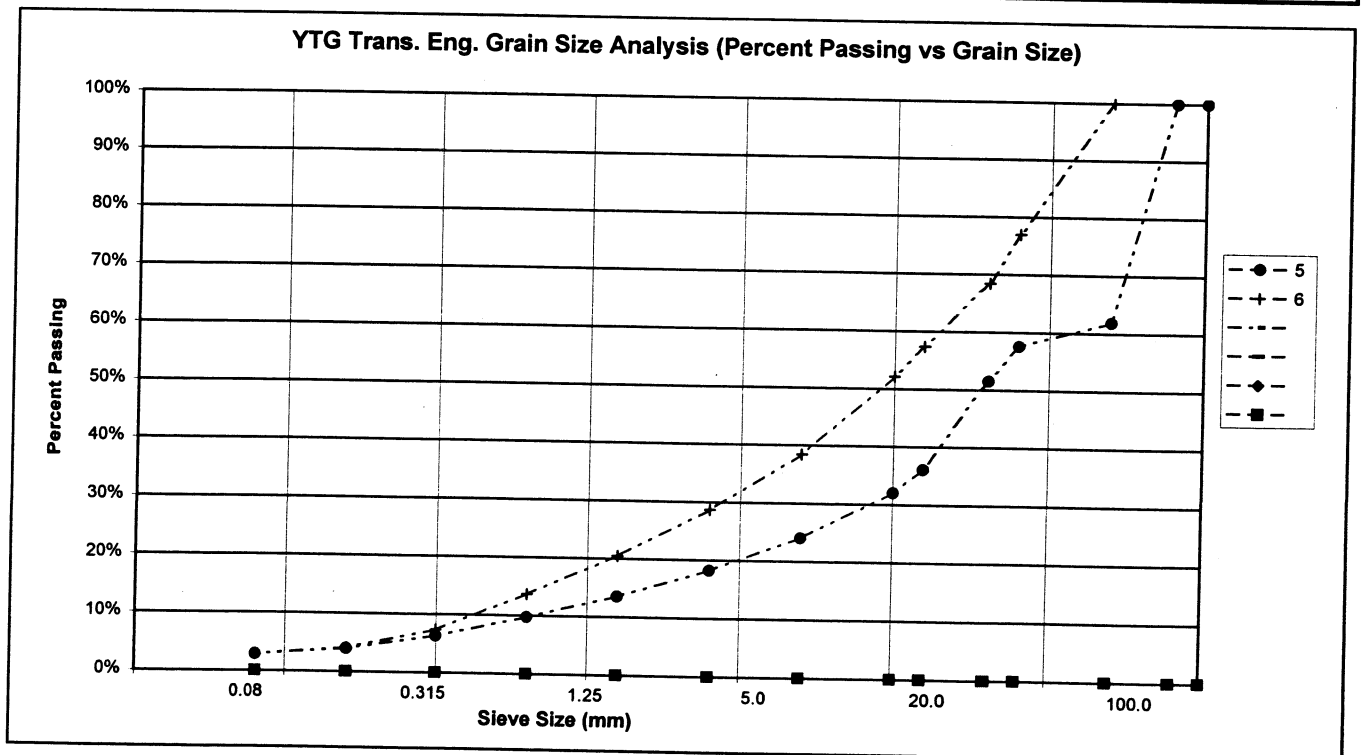


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek
 PROJECT LOCATION: Km 1712.5 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 663-2855

DATE COMP: 03/02/18

FIELD NO:	5	6			
LAB NO:	770	771			
DEPTH:	0.8-1.2	2.5-3.0			
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	62%	100%			
25.0	58%	77%			
20.0	52%	68%			
12.5	36%	57%			
10.0	32%	52%			
5.0	24%	38%			
2.5	18%	29%			
1.25	14%	21%			
0.630	10%	14%			
0.315	6%	7%			
0.160	4%	4%			
0.080	3%	3%			
M.C.(%):					
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	76	62			
% SAND:	21	36			
% FINES:	3	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

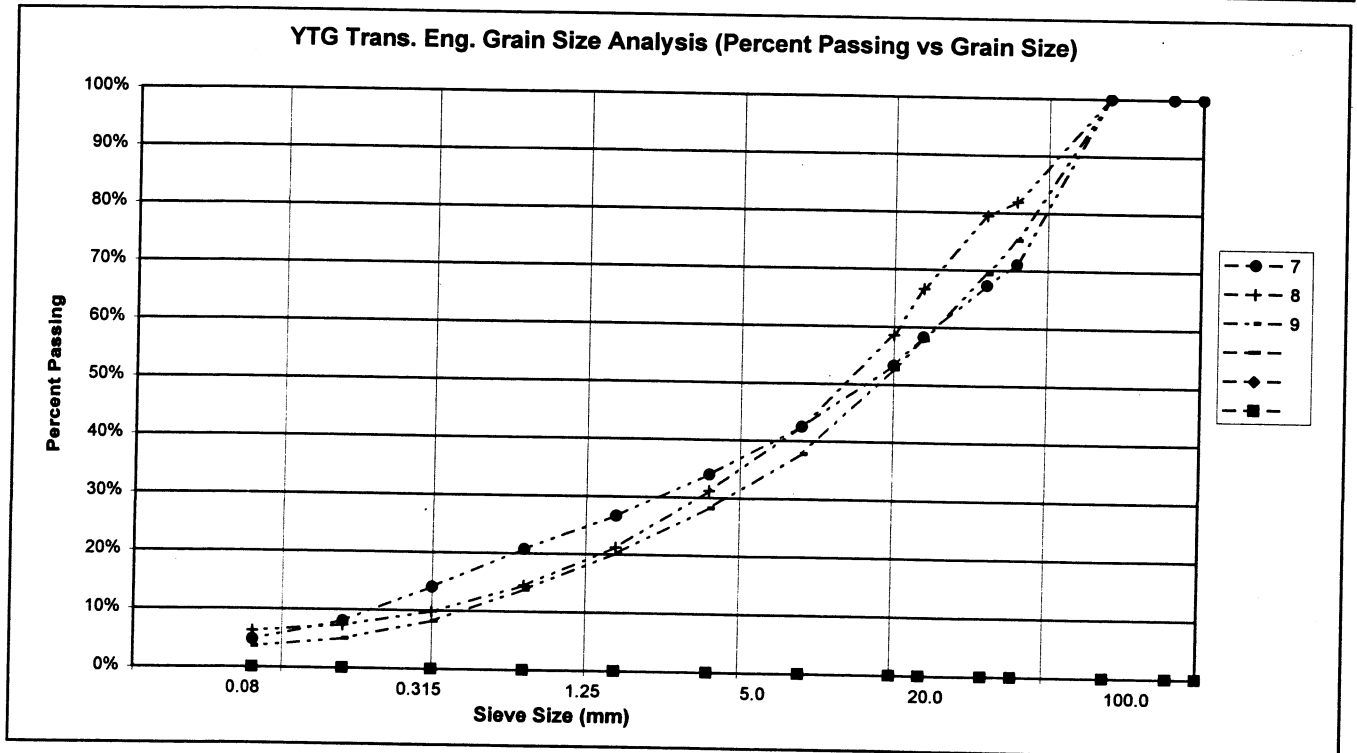


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Willisroft Creek
 PROJECT LOCATION: Km 1712.5 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 663-2856

DATE COMP: 03/02/18

FIELD NO:	7	8	9		
LAB NO:	772	773	774		
DEPTH:	0.8-1.2	2.5-3.0	4.0-5.0		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	71%	82%	75%		
20.0	67%	80%	69%		
12.5	58%	67%	58%		
10.0	53%	59%	53%		
5.0	43%	43%	38%		
2.5	34%	31%	28%		
1.25	27%	21%	20%		
0.630	21%	15%	14%		
0.315	14%	10%	8%		
0.160	8%	7%	5%		
0.080	5%	6%	4%		
M.C.(%):					
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	57	57	62		
% SAND:	38	36	34		
% FINES:	5	6	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

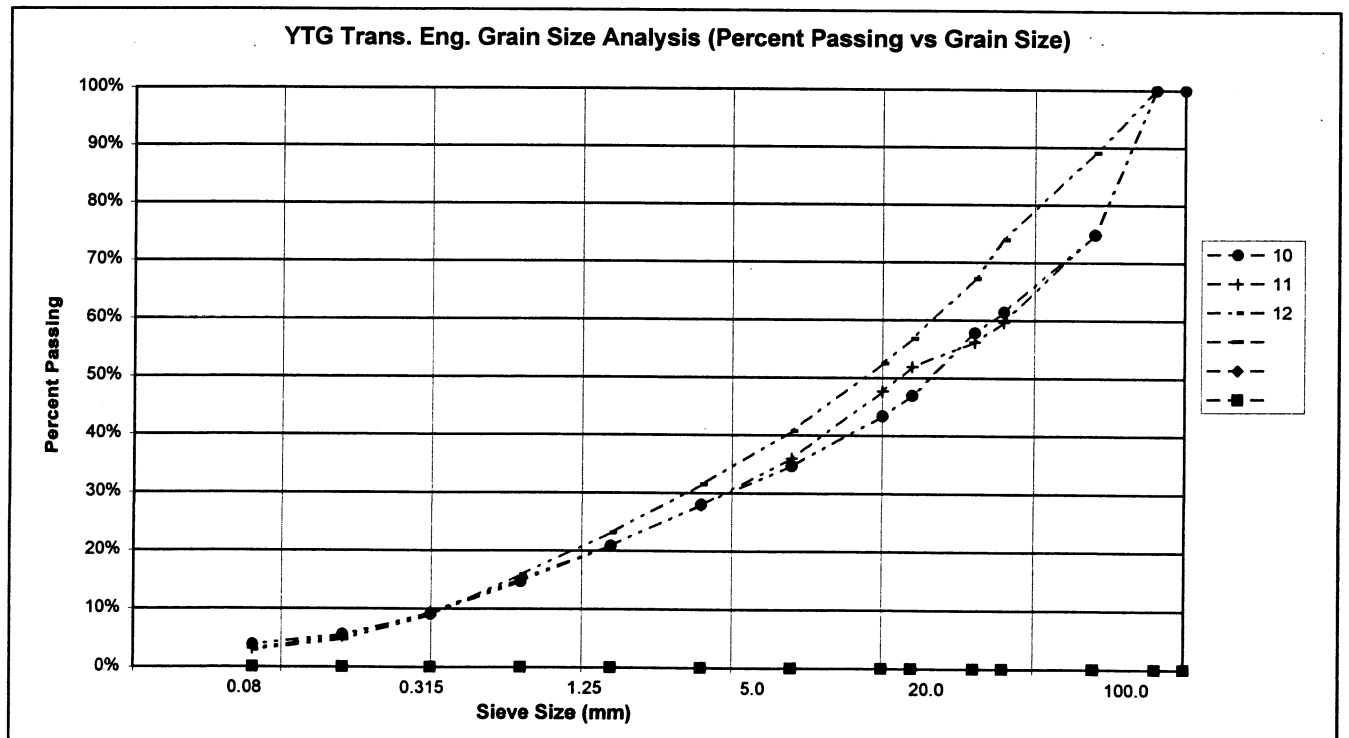


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek
 PROJECT LOCATION: Km 1712.5 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 663-2857

DATE COMP: 03/02/18

FIELD NO:	10	11	12		
LAB NO:	775	776	777		
DEPTH:	0.8-1.2	2.0-2.5	3.6-4.0		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	75%	75%	89%		
25.0	61%	60%	74%		
20.0	58%	56%	67%		
12.5	47%	52%	57%		
10.0	43%	48%	52%		
5.0	35%	36%	41%		
2.5	28%	28%	31%		
1.25	21%	21%	23%		
0.630	15%	15%	16%		
0.315	9%	9%	9%		
0.160	6%	5%	5%		
0.080	4%	3%	3%		
M.C.(%):					
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	65	64	59		
% SAND:	31	33	38		
% FINES:	4	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

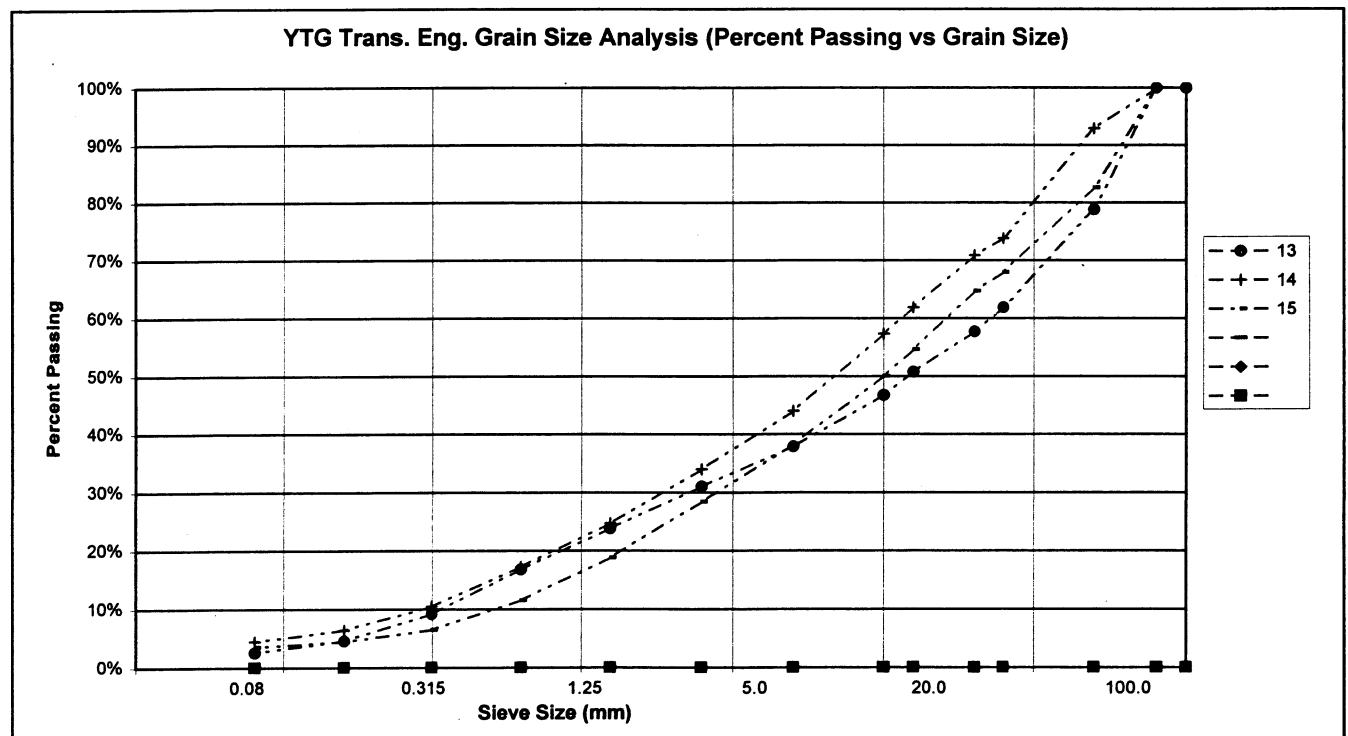


PROJECT NUMBER: 552-202101-0362-1
 CLIENT: Shakwak
 PROJECT NAME: Williscroft Creek
 PROJECT LOCATION: Km 1712.5 A/H
 DRILL UNIT: Komatsu PC- 400-LC
 HOLE LOCATION: See Plan / GPS
 LOGGED BY: G.C.

HOLE No.: 663-2858

DATE COMP: 03/02/18

FIELD NO:	13	14	15		
LAB NO:	778	779	780		
DEPTH:	0.8-1.0	3.0-4.0	5.0-6.0		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	79%	93%	83%		
25.0	62%	74%	68%		
20.0	58%	71%	65%		
12.5	51%	62%	55%		
10.0	47%	57%	50%		
5.0	38%	44%	38%		
2.5	31%	34%	28%		
1.25	24%	25%	19%		
0.630	17%	17%	12%		
0.315	9%	11%	7%		
0.160	5%	6%	4%		
0.080	3%	5%	4%		
M.C.(%):					
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	62	56	62		
% SAND:	35	39	35		
% FINES:	3	5	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



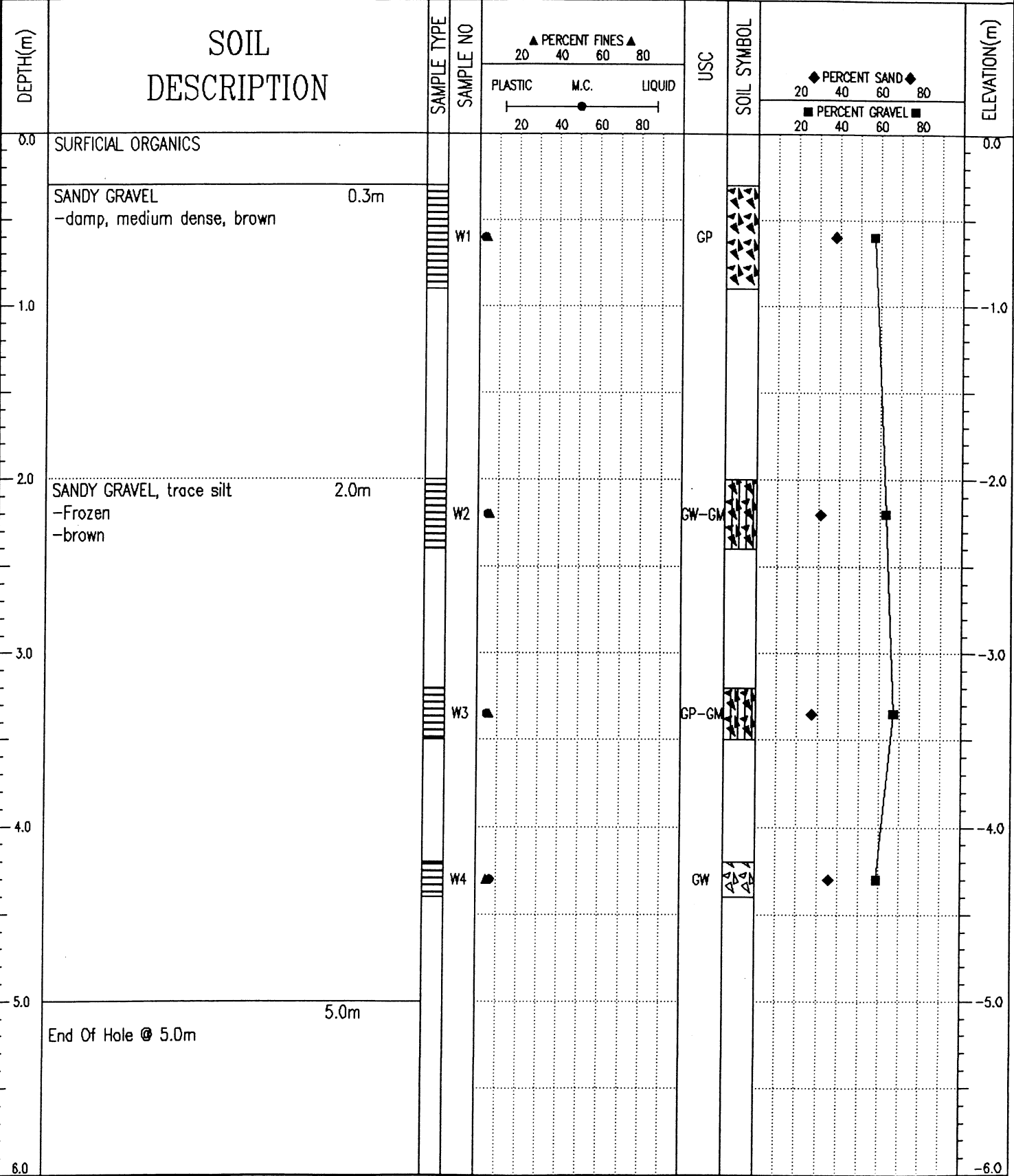
Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

July 2004
Book # N/A

Test Pit Logs for 30137 to 30147

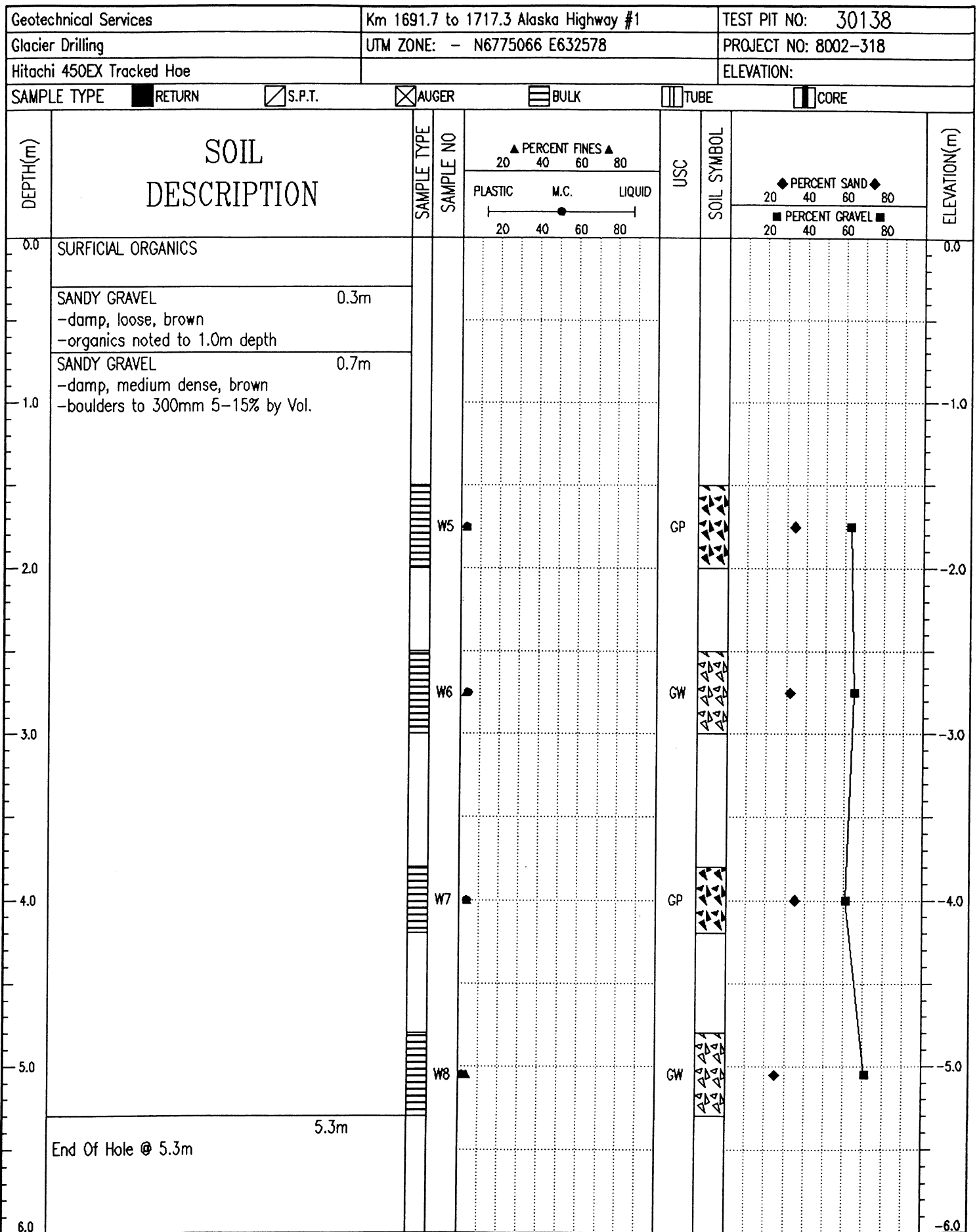
Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30137
Glacier Drilling	UTM ZONE: - N6775028 E632523	PROJECT NO: 8002-318
Hitachi EX450 Tracked Hoe		ELEVATION:

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



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Whitehorse, Yukon

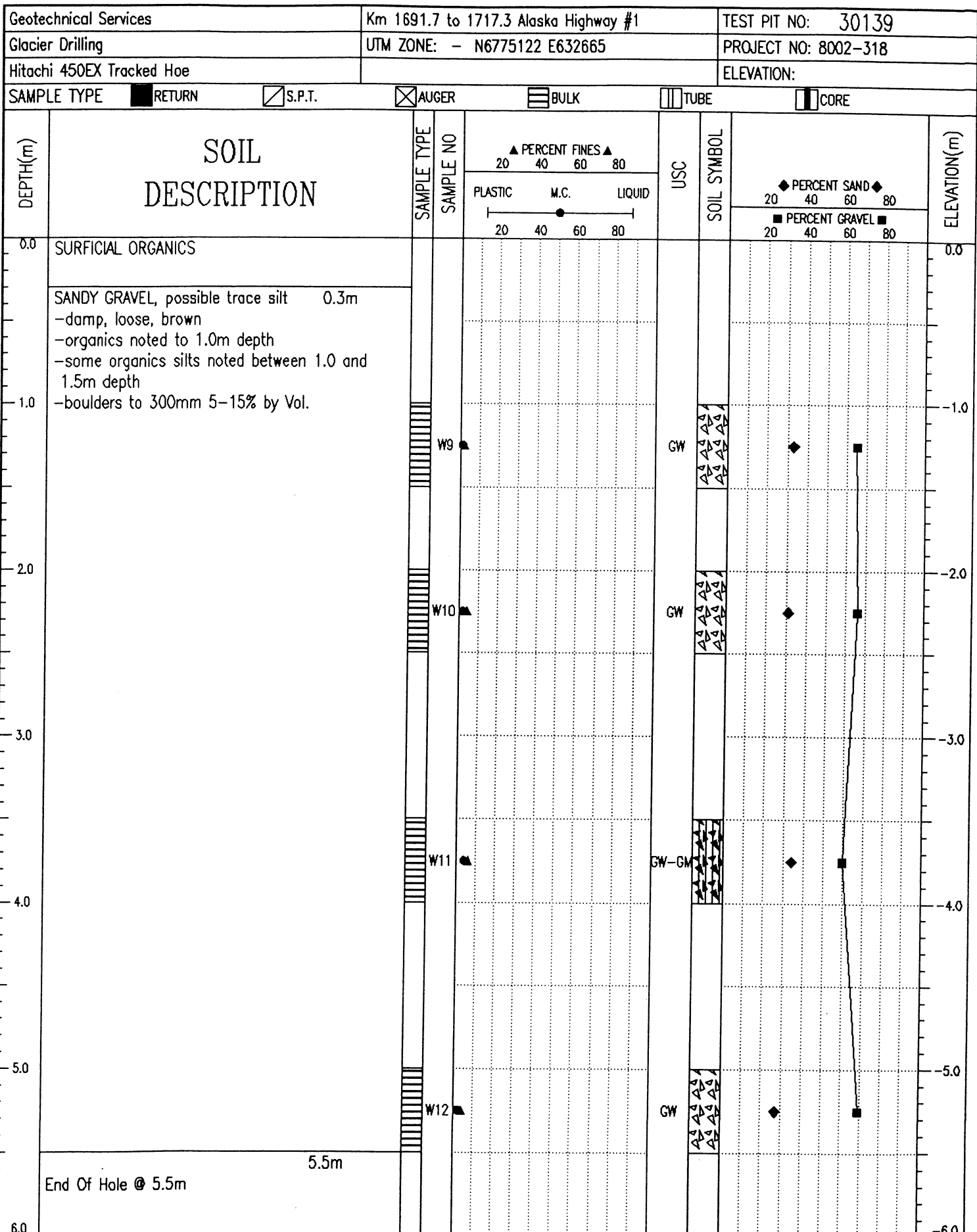
LOGGED BY: RW	COMPLETION DEPTH: 5 m
REVIEWED BY: -	COMPLETE: 07/31/04
Fig. No: 95	Page 1 of 1



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

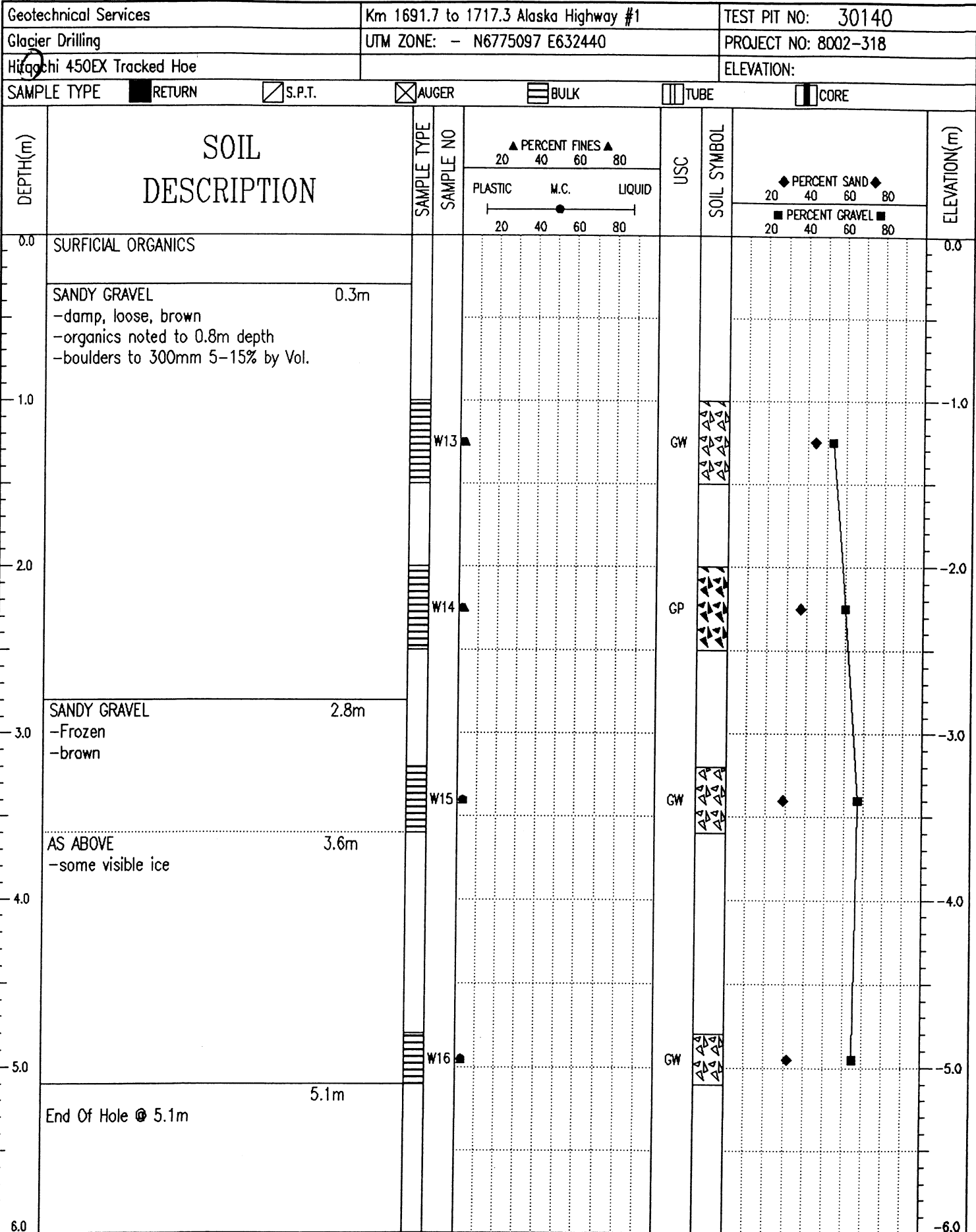
LOGGED BY: RW
REVIEWED BY: -
Fig. No: 94

COMPLETION DEPTH: 5.3 m
COMPLETE: 08/01/04



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5.5 m
REVIEWED BY:	COMPLETE: 08/01/04
Fig. No: 93	Page 1 of 1

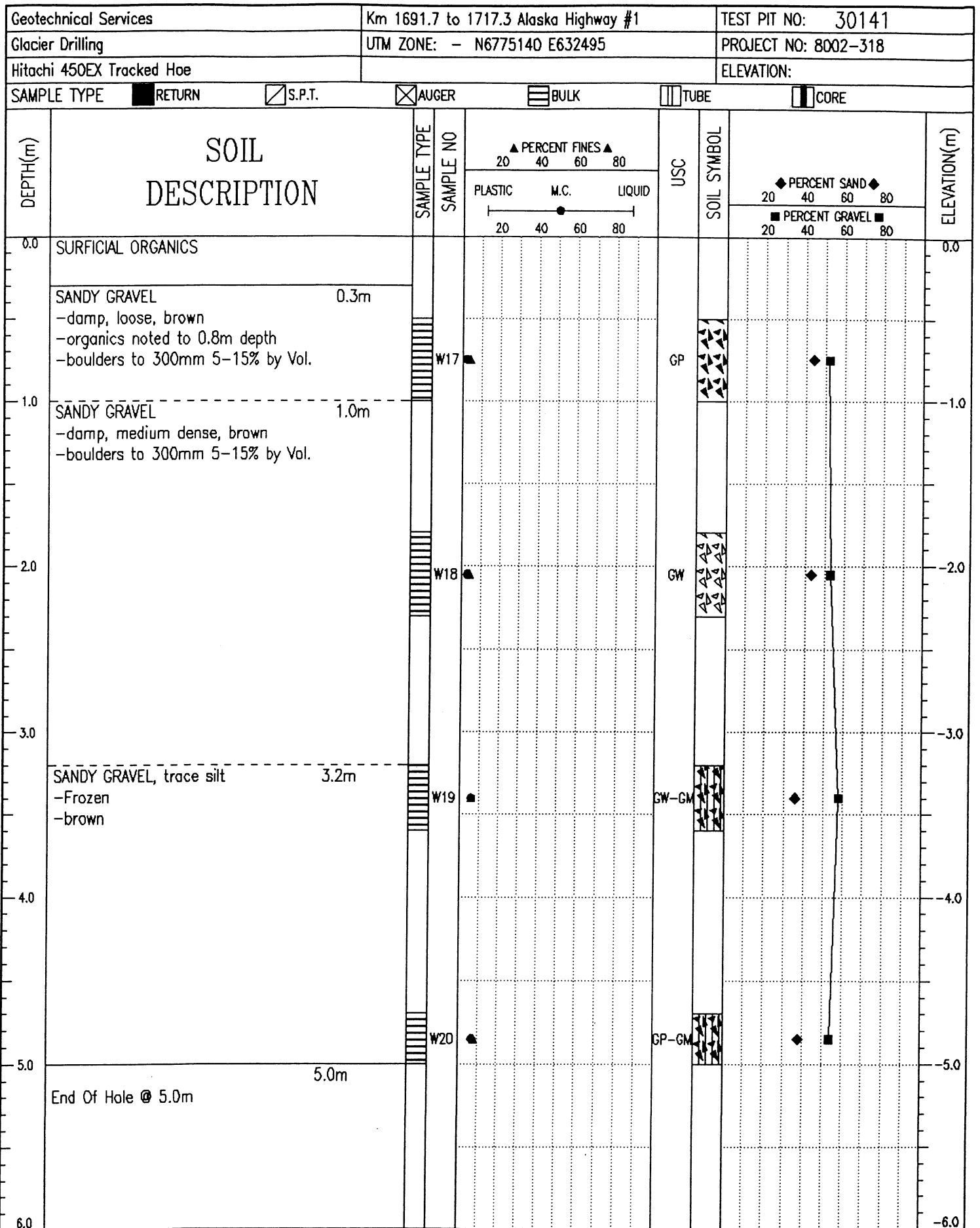


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 92

COMPLETION DEPTH: 5.1 m
COMPLETE: 08/01/04

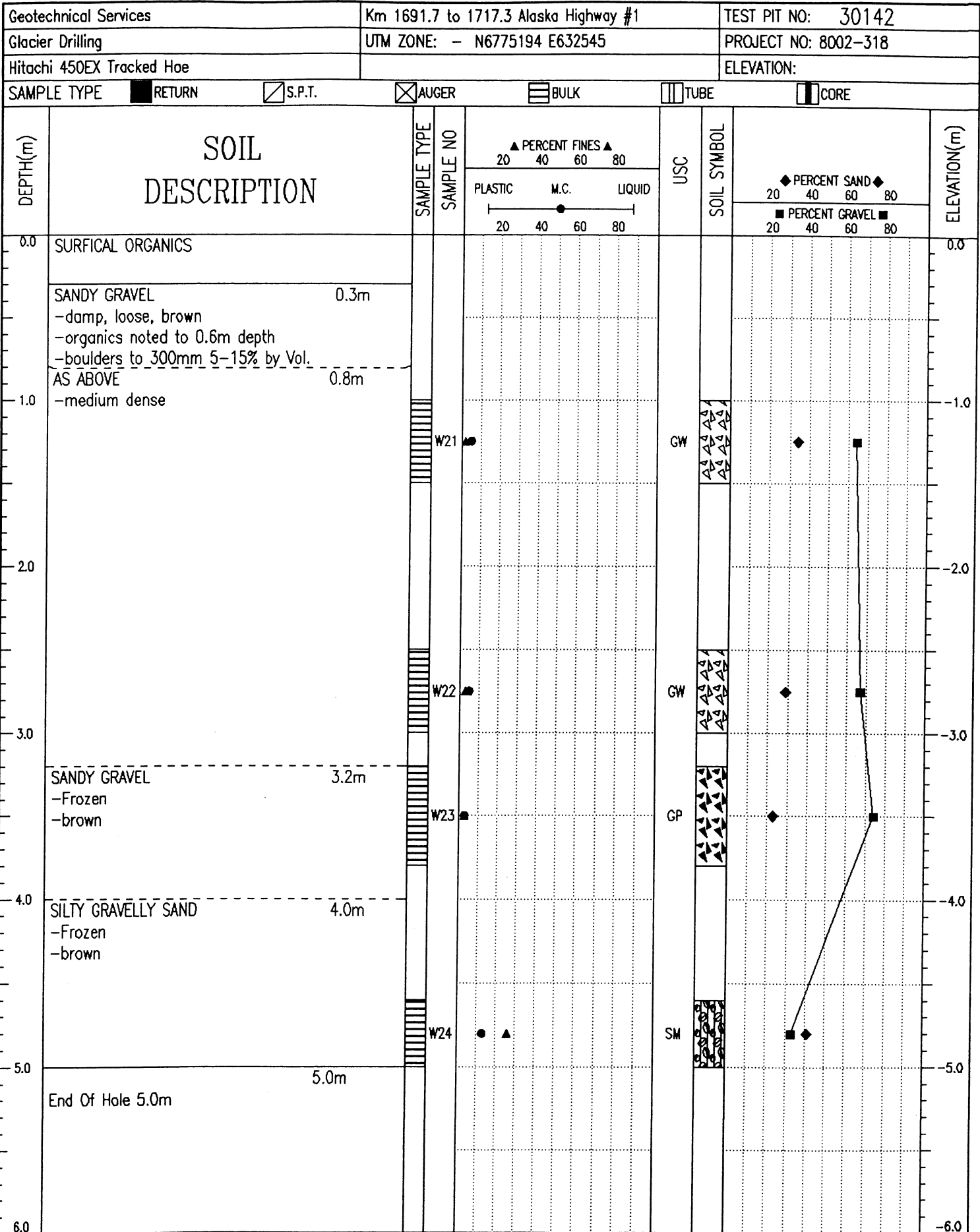
05/02/10 07:50AM (VIC.J.HHS)



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY:
Fig. No: 91

COMPLETION DEPTH: 5 m
COMPLETE: 08/01/04
Page 1 of 1

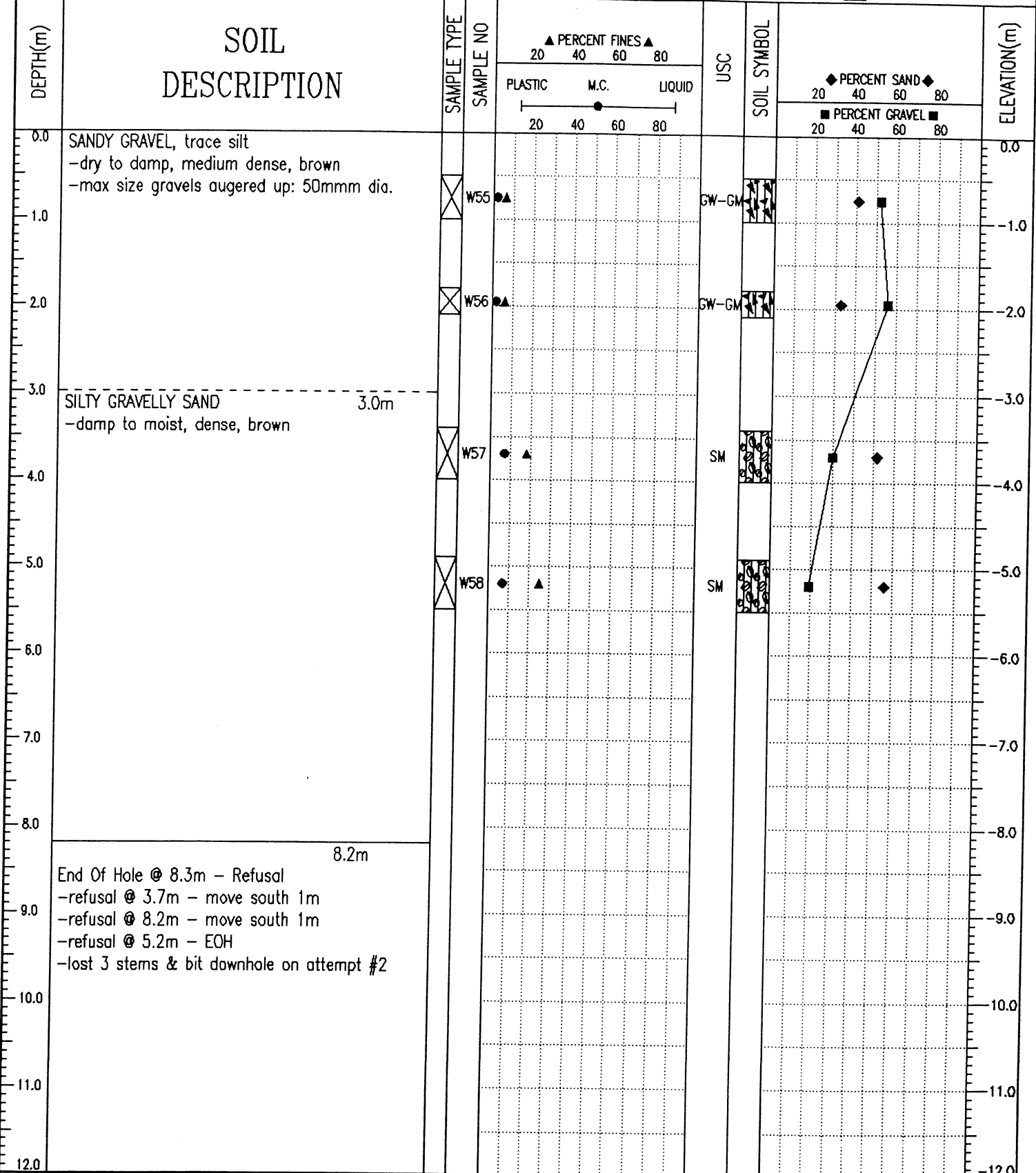


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 90

COMPLETION DEPTH: 5 m
COMPLETE: 08/01/04

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

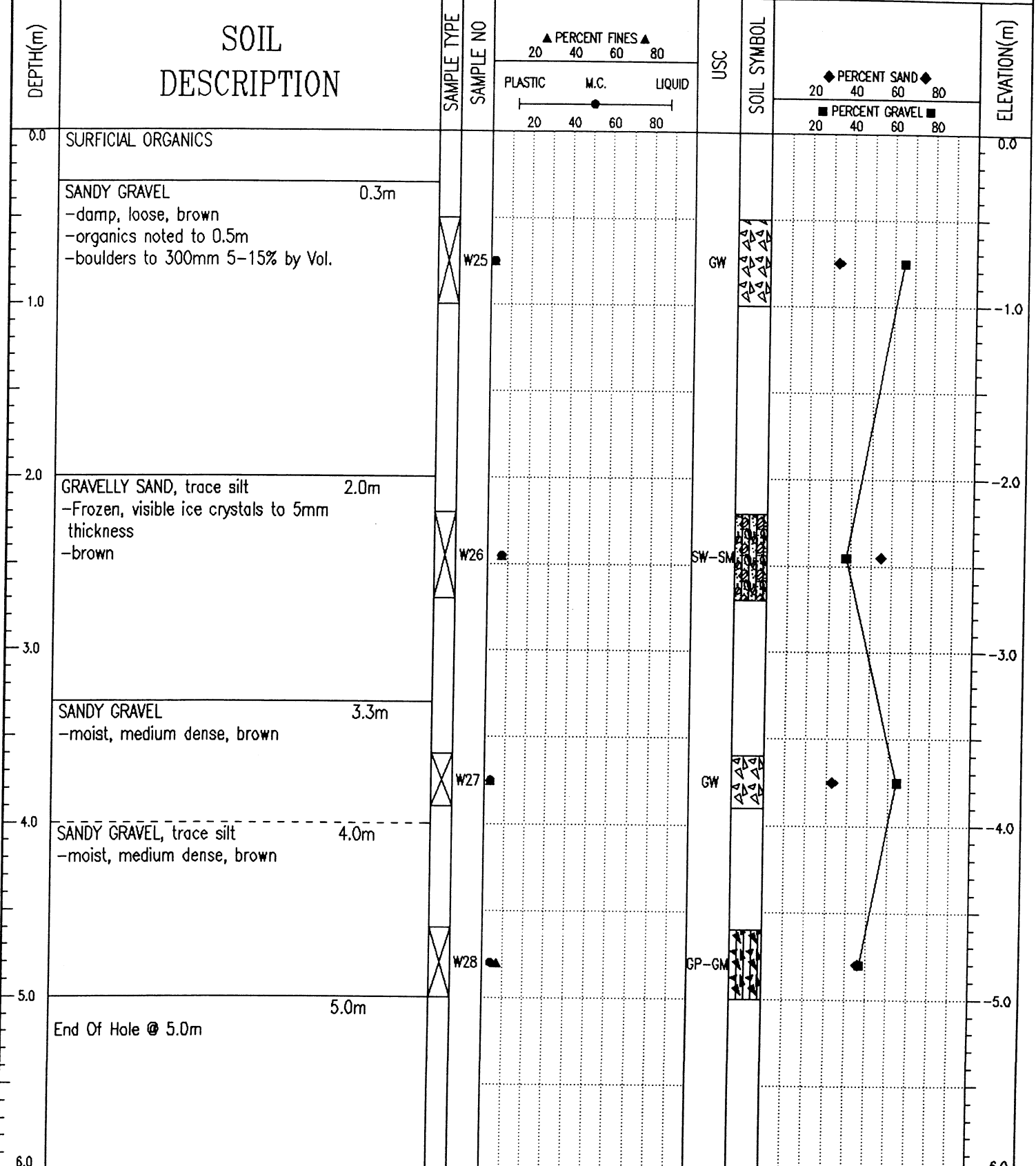


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 97

COMPLETION DEPTH: 8.2 m
COMPLETE: 11/01/04

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

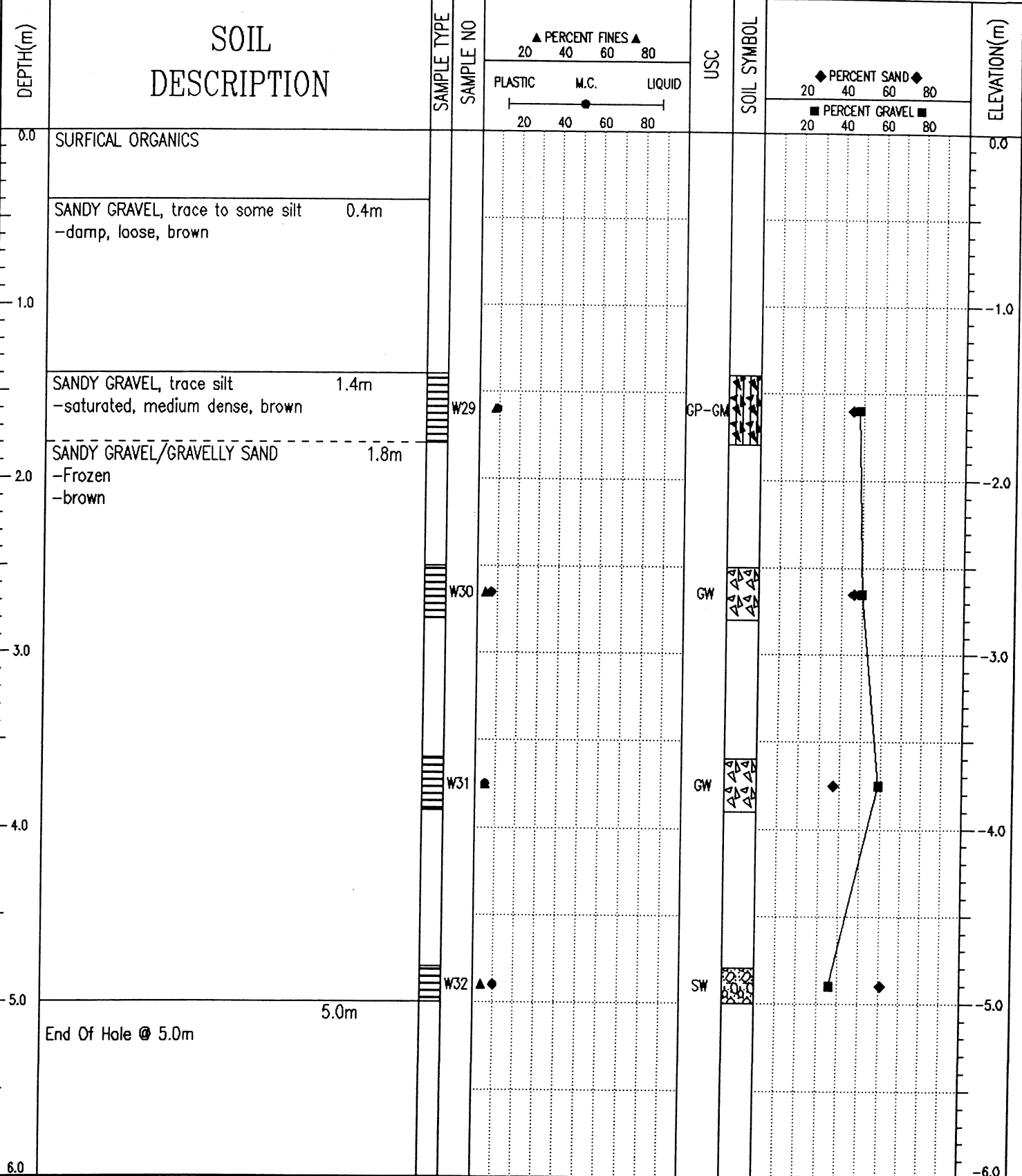


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 89

COMPLETION DEPTH: 5 m
COMPLETE: 08/02/04

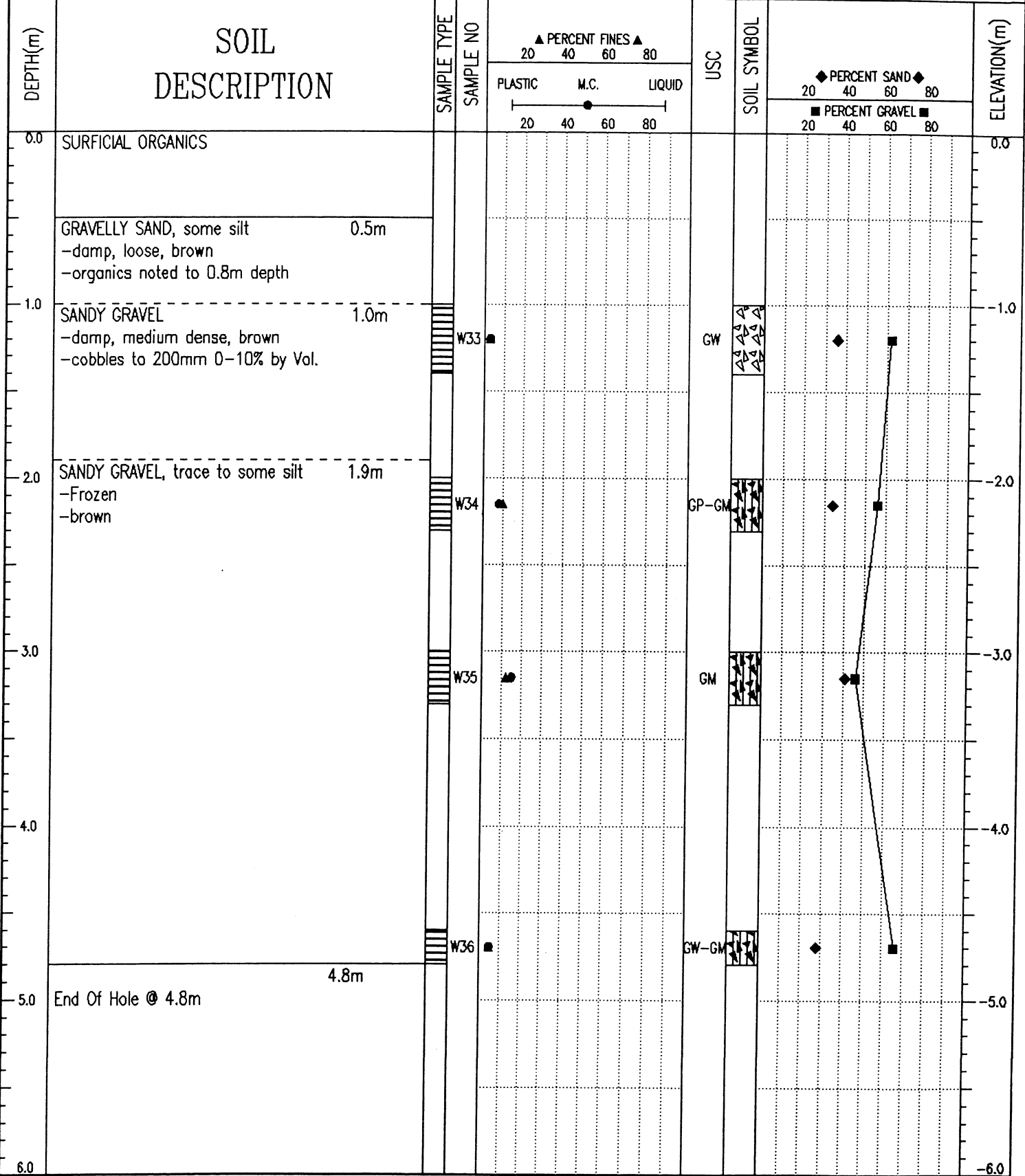
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 5 m
REVIEWED BY: -	COMPLETE: 08/02/04
Fig. No: 88	Page 1 of 1

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



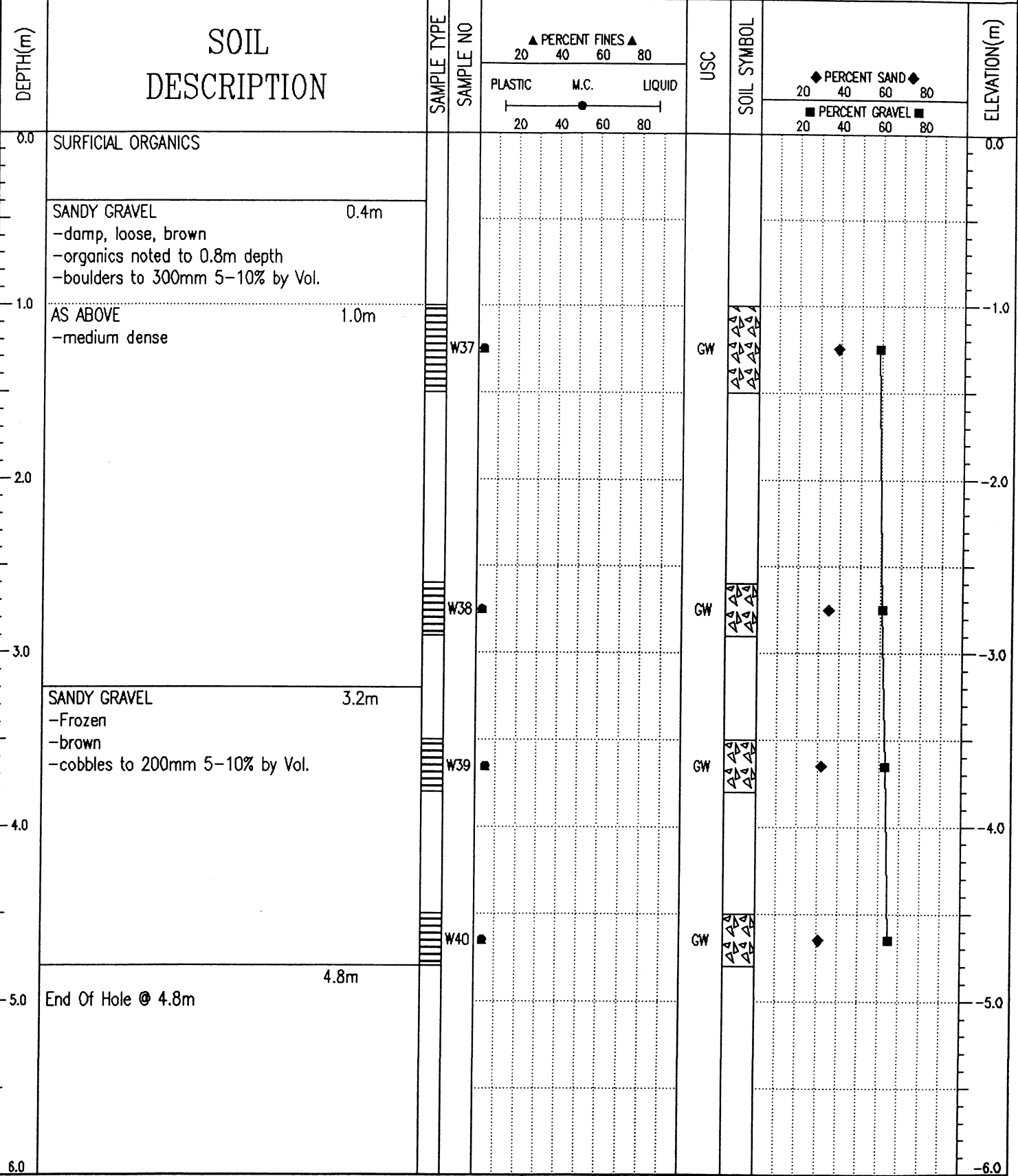
J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 87

COMPLETION DEPTH: 4.8 m
COMPLETE: 08/02/04

Geotechnical Services Km 1691.7 to 1717.3 Alaska Highway #1 TEST PIT NO: 30146
 Glacier Drilling UTM ZONE: - N6775326 E632400 PROJECT NO: 8002-318
 Hitachi 450EX Tracked Hoe ELEVATION:

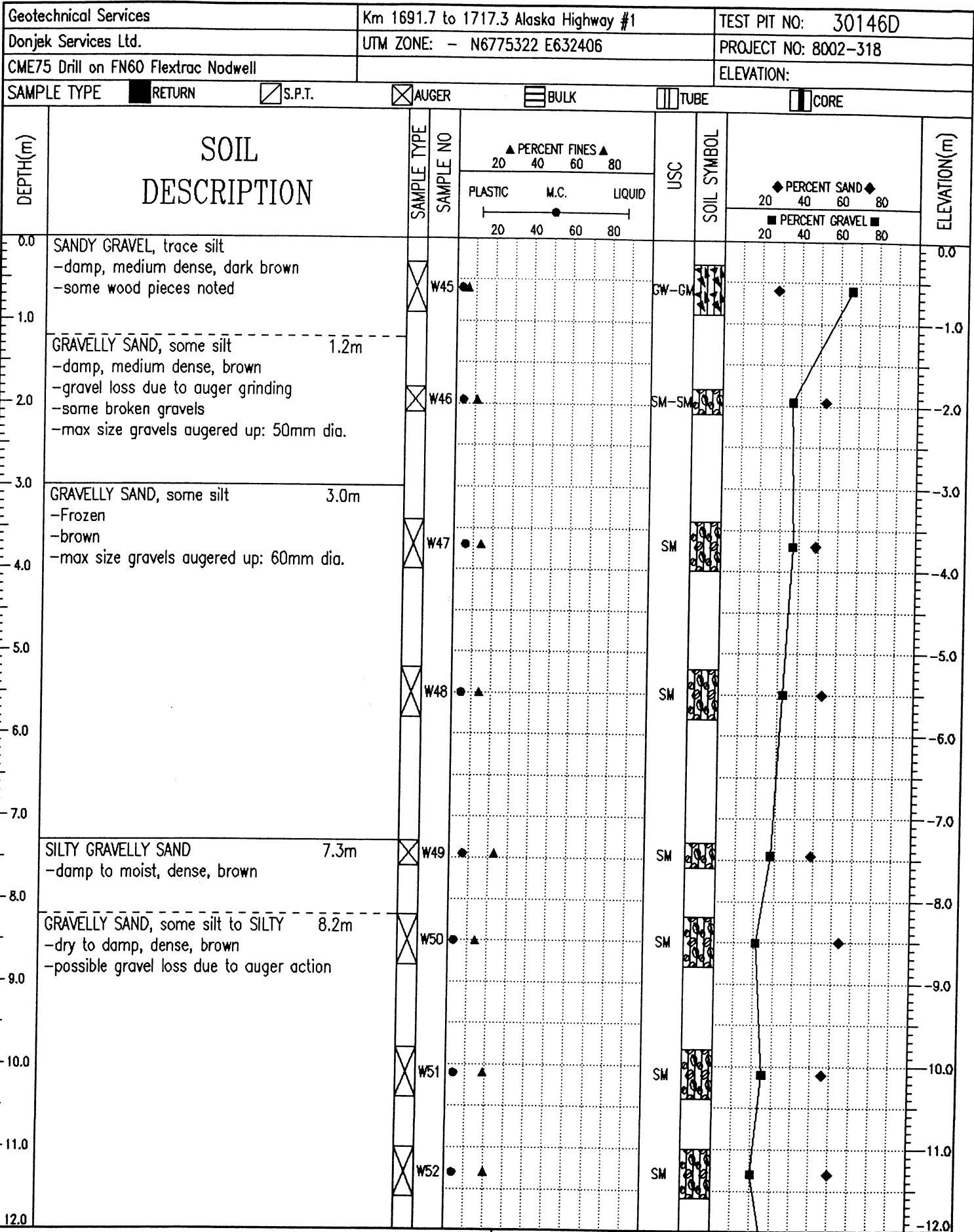
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



J. R. Paine & Associates Ltd.
 Whitehorse, Yukon

LOGGED BY: RW
 REVIEWED BY: -
 Fig. No: 86

COMPLETION DEPTH: 4.8 m
 COMPLETE: 08/02/04
 Page 1 of 1

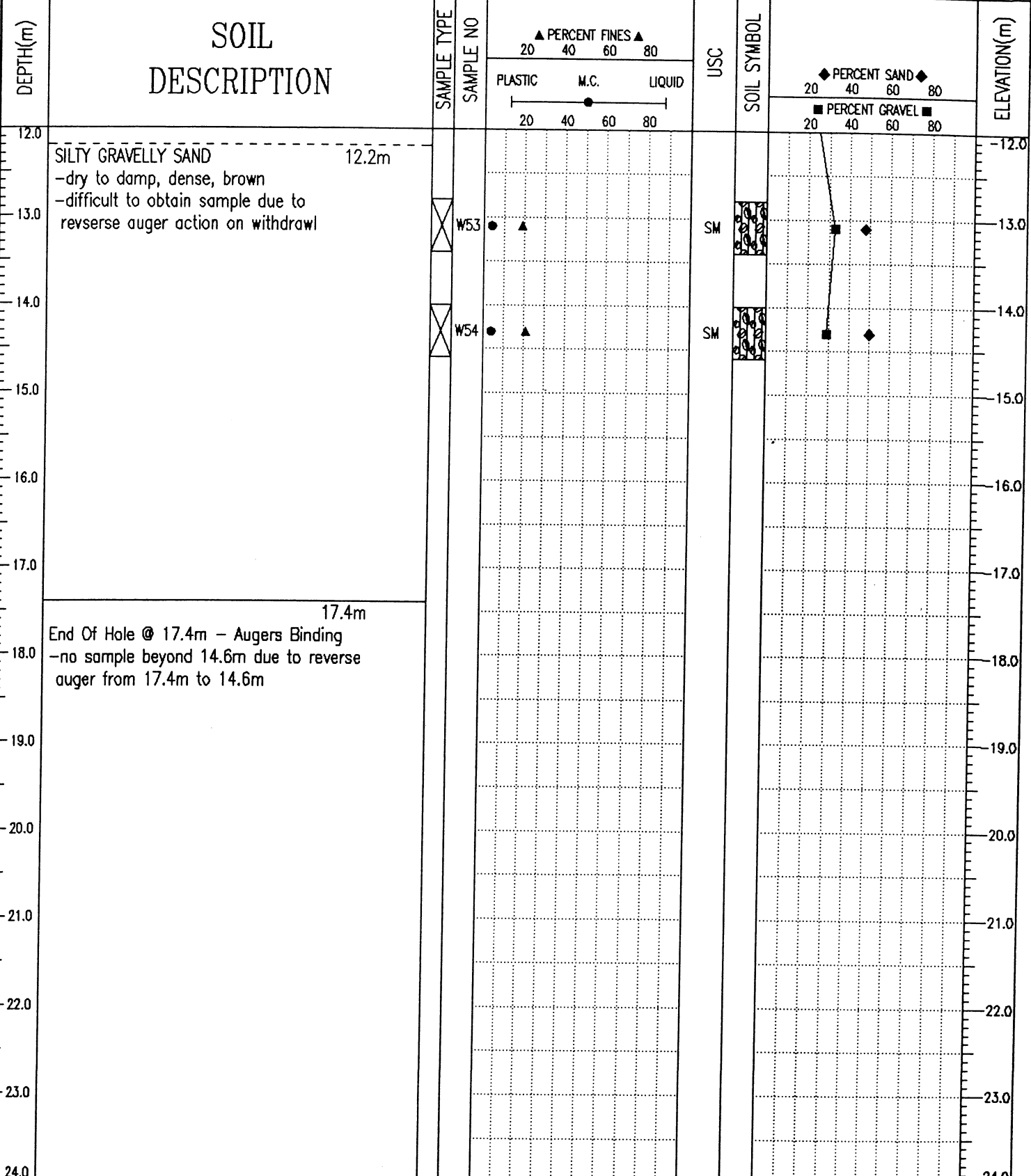


J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 95

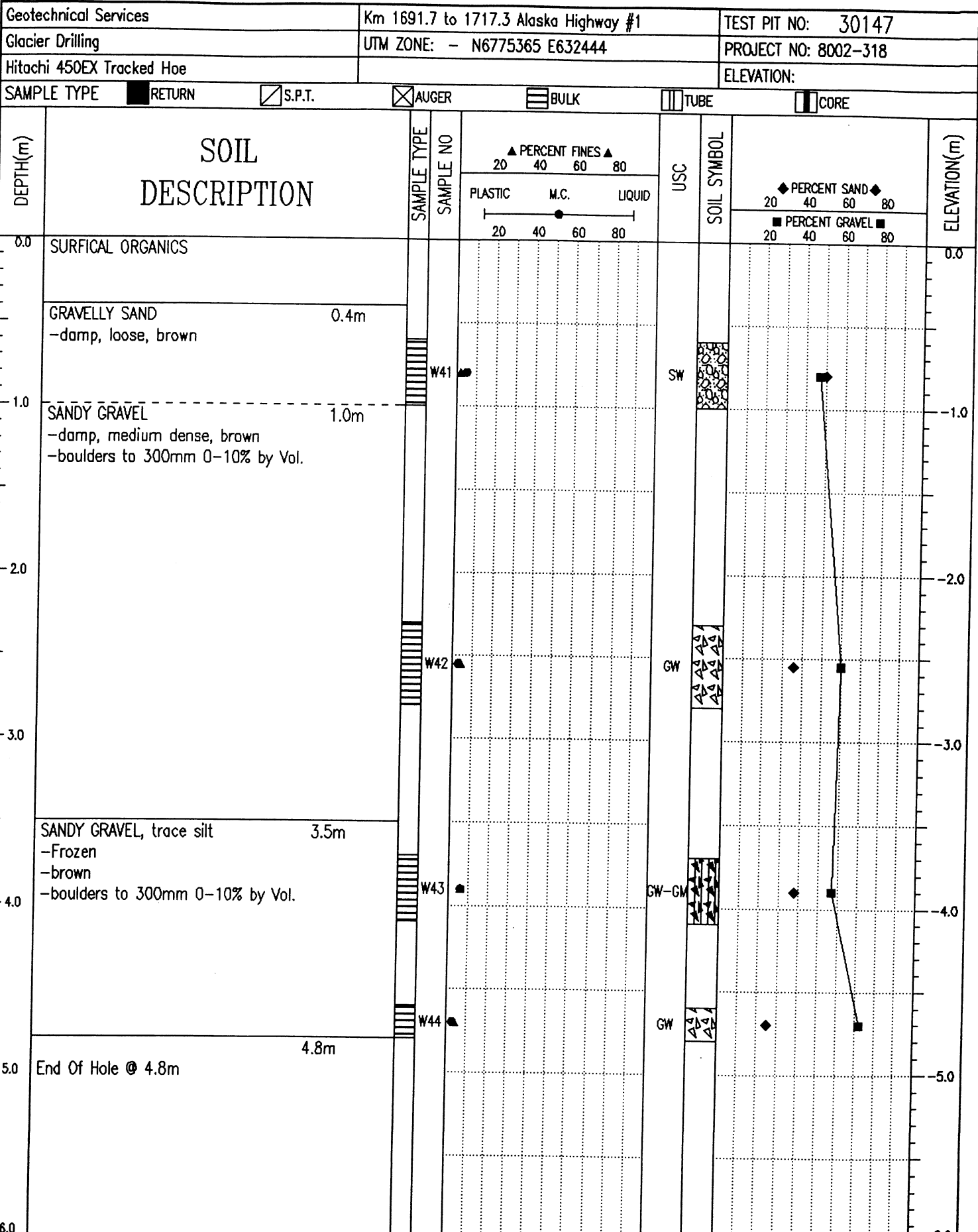
COMPLETION DEPTH: 17.4 m
COMPLETE: 11/01/04

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



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW	COMPLETION DEPTH: 17.4 m
REVIEWED BY: -	COMPLETE: 11/01/04
Fig. No: 96	Page 2 of 2



J. R. Paine & Associates Ltd.
Whitehorse, Yukon

LOGGED BY: RW
REVIEWED BY: -
Fig. No: 85

COMPLETION DEPTH: 4.8 m
COMPLETE: 08/02/04

Km 1713.0 LHS Alaska Highway #1
Pit Ident. 115 G-12
(Williscroft Creek)

July 2004
Book # N/A

Pit Run Sample Results for 30137 to 30147



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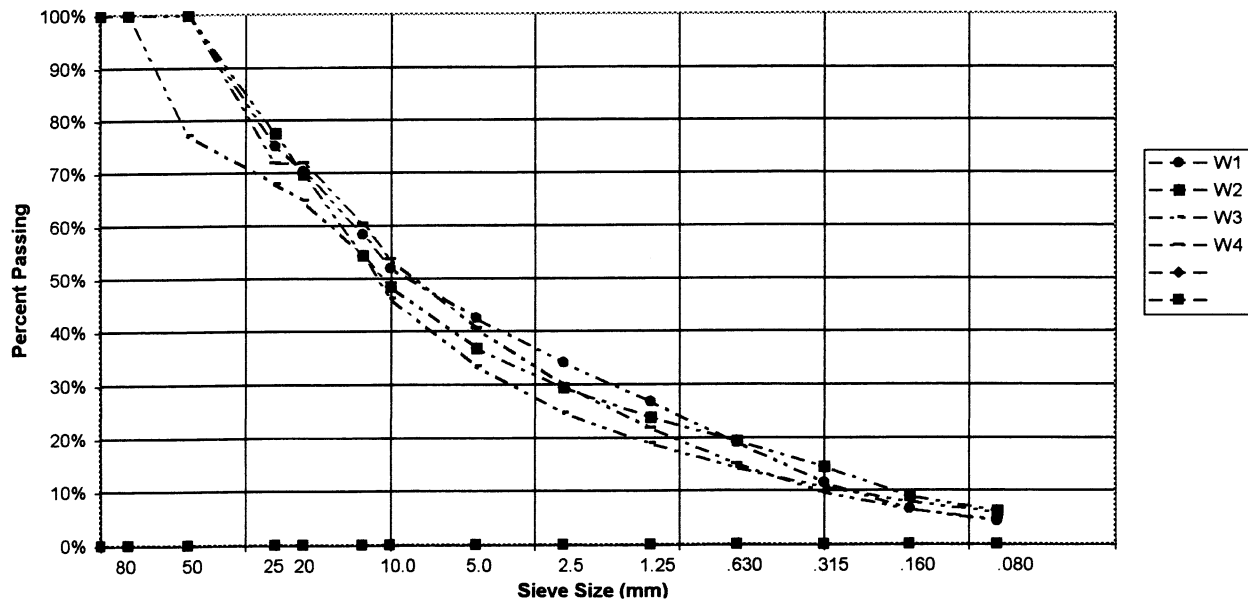
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632523-6775028
 LOGGED BY: RW

HOLE No.: 30137

DATE COMP: 07/31/2004

FIELD NO:	W1	W2	W3	W4		
LAB NO:	W1	W2	W3	W4		
DEPTH:	0.3-0.9	2.0-2.4	3.2-3.5	4.2-4.4		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	77%	100%		
25.0	75%	78%	68%	72%		
20.0	70%	70%	65%	72%		
12.5	58%	54%	54%	60%		
10.0	52%	48%	46%	54%		
5.0	43%	37%	33%	41%		
2.5	34%	30%	25%	30%		
1.25	27%	24%	19%	22%		
0.630	19%	19%	14%	15%		
0.315	12%	15%	11%	10%		
0.160	7%	9%	8%	7%		
0.080	4%	6%	6%	5%		
M.C.(%)	3%	5%	5%	7%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	63	67	59		
% SAND:	38	31	27	36		
% FINES:	4	6	6	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)		

Grain Size Analysis (Percent Passing vs Grain Size)





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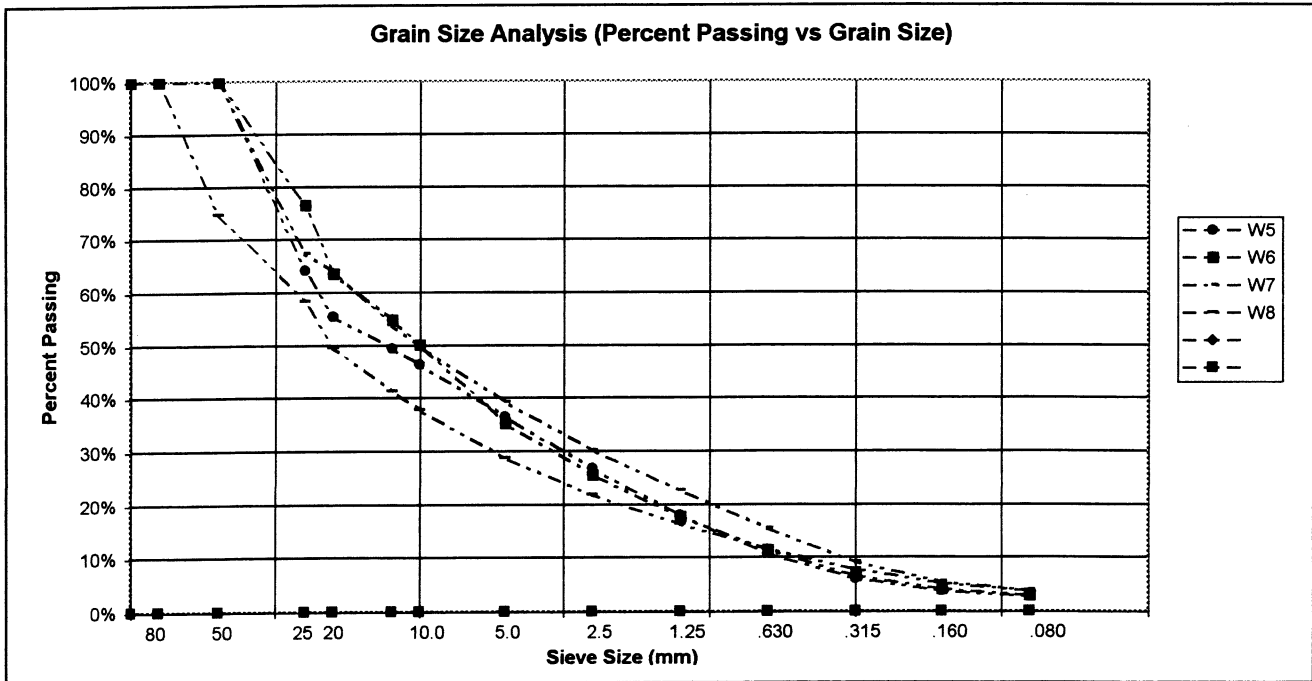


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632578-6775066
 LOGGED BY: RW

HOLE No.: 30138

DATE COMP: 08/01/2004

FIELD NO:	W5	W6	W7	W8
LAB NO:	W5	W6	W7	W8
DEPTH:	1.5-2.0	2.5-3.0	3.8-4.2	4.8-5.3
TYPE:	BULK	BULK	BULK	BULK
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%
80.0	100%	100%	100%	100%
50.0	100%	100%	100%	75%
25.0	64%	77%	67%	58%
20.0	56%	64%	64%	50%
12.5	49%	55%	54%	41%
10.0	46%	50%	50%	38%
5.0	37%	35%	39%	29%
2.5	27%	26%	30%	22%
1.25	18%	18%	23%	16%
0.630	11%	12%	15%	12%
0.315	6%	7%	9%	8%
0.160	4%	4%	6%	5%
0.080	3%	3%	4%	4%
M.C.(%)	3%	4%	4%	2%
LIQUID LIMIT:	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0
% GRAVEL:	63	65	61	71
% SAND:	34	32	35	25
% FINES:	3	3	4	4
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)





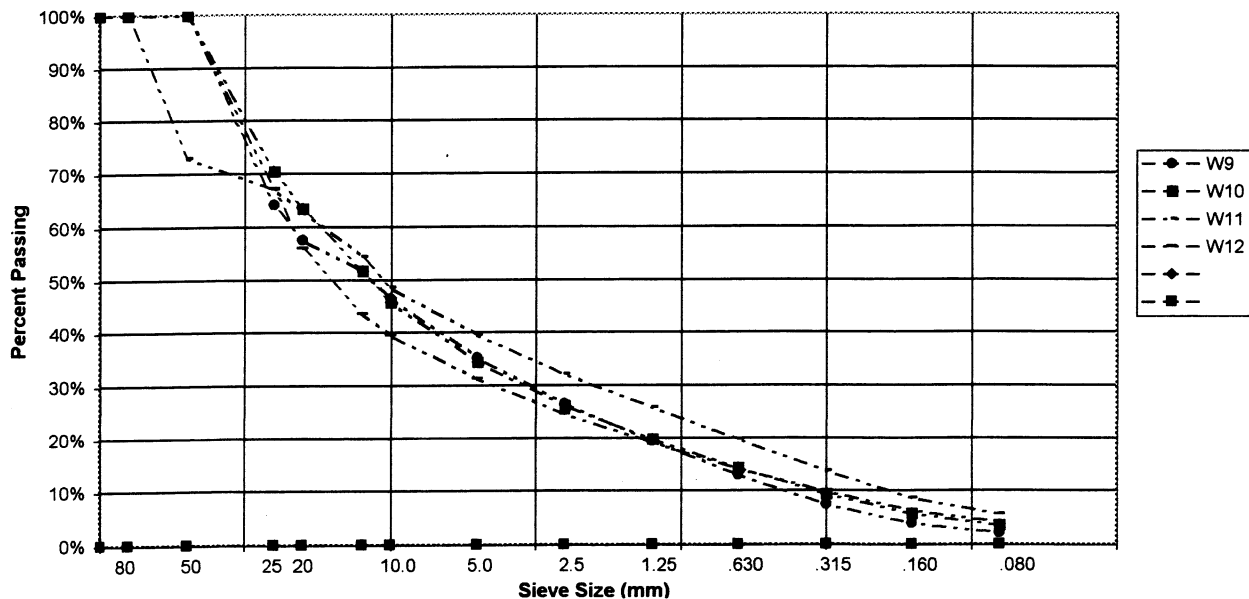
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: Hitachi 450EX
HOLE LOCATION: 632665-6775122
LOGGED BY: RW

HOLE No.: 30139

DATE COMP: 08/01/2004

Table with columns for Field No., Lab No., Depth, Type, Sieve Size, Percent Passing, and Classification. Rows include sieve sizes from 100.0 to 0.080 mm, M.C. (%), Liquid Limit, Plastic Limit, Plastic Index, and % Gravel, Sand, and Fines.

Grain Size Analysis (Percent Passing vs Grain Size)





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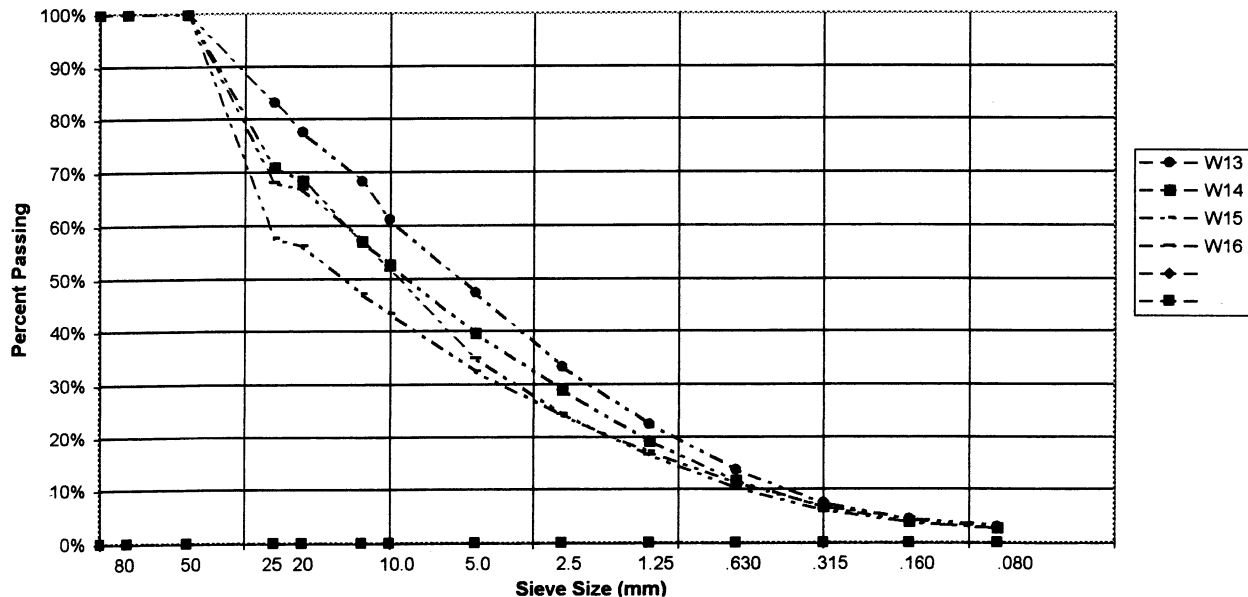
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632440-6775097
 LOGGED BY: RW

HOLE No.: 30140

DATE COMP: 08/01/2004

FIELD NO:	W13	W14	W15	W16		
LAB NO:	W13	W14	W15	W16		
DEPTH:	1.0-1.5	2.0-2.5	3.2-3.6	4.8-5.1		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	83%	71%	58%	68%		
20.0	78%	68%	56%	67%		
12.5	68%	57%	47%	57%		
10.0	61%	53%	43%	52%		
5.0	47%	40%	33%	35%		
2.5	33%	29%	24%	24%		
1.25	23%	19%	17%	17%		
0.630	14%	12%	11%	10%		
0.315	7%	7%	7%	6%		
0.160	4%	4%	5%	4%		
0.080	3%	3%	3%	3%		
M.C.(%)	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	53	60	67	65		
% SAND:	44	37	29	32		
% FINES:	3	3	3	3		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)		

Grain Size Analysis (Percent Passing vs Grain Size)





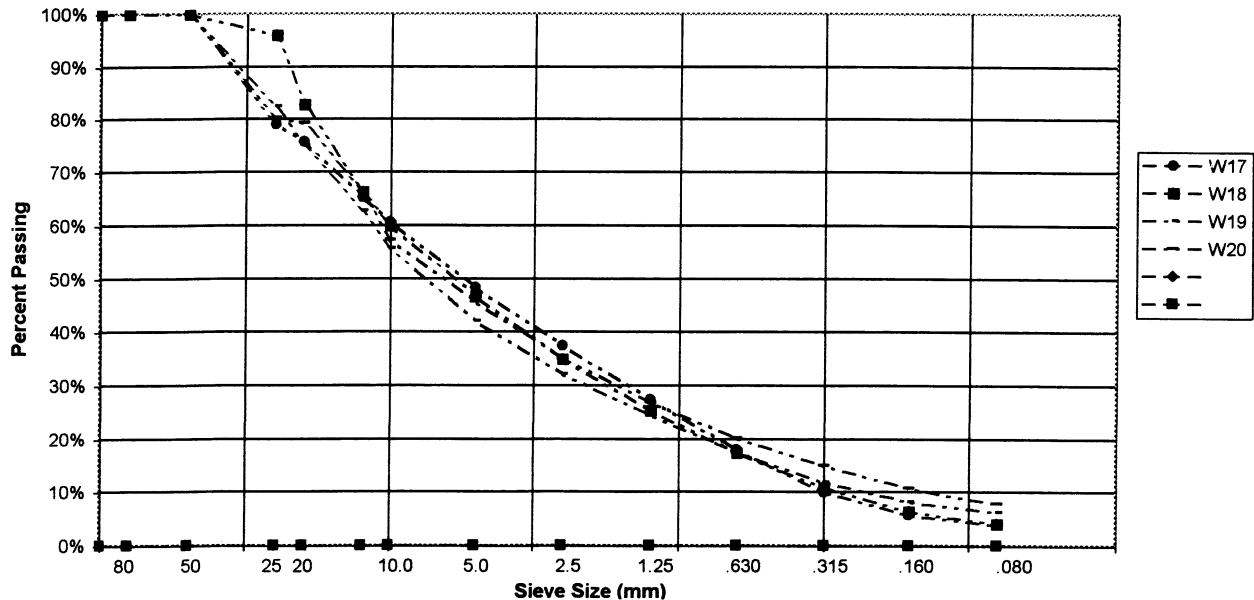
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632495-6775140
 LOGGED BY: RW

HOLE No.: 30141

DATE COMP: 08/01/2004

FIELD NO:	W17	W18	W19	W20		
LAB NO:	W17	W18	W19	W20		
DEPTH:	0.5-1.0	1.8-2.3	3.2-3.6	4.7-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	79%	96%	82%	80%		
20.0	76%	83%	75%	79%		
12.5	65%	66%	63%	66%		
10.0	61%	60%	56%	57%		
5.0	48%	47%	42%	46%		
2.5	38%	35%	32%	35%		
1.25	27%	25%	25%	27%		
0.630	18%	17%	18%	20%		
0.315	10%	11%	12%	15%		
0.160	6%	6%	8%	11%		
0.080	4%	4%	6%	8%		
M.C.(%)	2%	3%	6%	7%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	52	53	58	54		
% SAND:	44	43	36	38		
% FINES:	4	4	6	8		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

Grain Size Analysis (Percent Passing vs Grain Size)





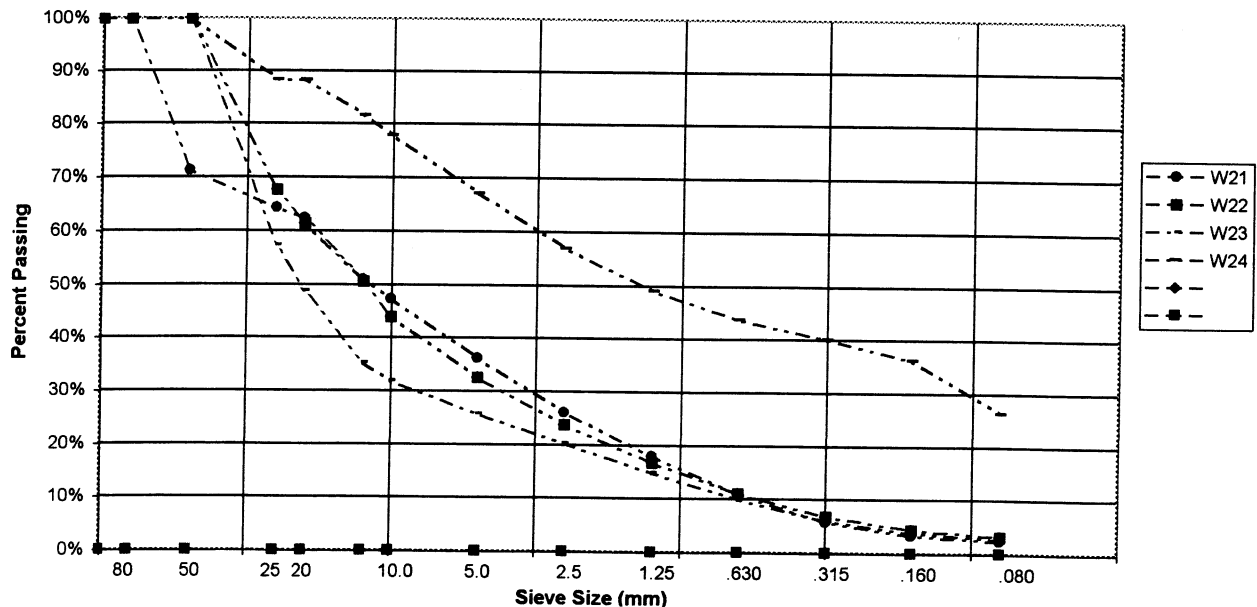
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632545-6775194
 LOGGED BY: RW

HOLE No.: 30142

DATE COMP: 08/01/2004

FIELD NO:	W21	W22	W23	W24		
LAB NO:	W21	W22	W23	W24		
DEPTH:	1.0-1.5	2.5-3.0	3.2-3.8	4.6-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	71%	100%	100%	100%		
25.0	64%	68%	57%	88%		
20.0	62%	61%	49%	88%		
12.5	51%	51%	35%	82%		
10.0	47%	44%	32%	78%		
5.0	36%	33%	26%	67%		
2.5	26%	24%	20%	57%		
1.25	18%	17%	15%	49%		
0.630	11%	11%	10%	44%		
0.315	6%	7%	6%	40%		
0.160	3%	4%	4%	36%		
0.080	2%	3%	3%	26%		
M.C.(%):	5%	5%	3%	13%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	64	67	74	33		
% SAND:	34	29	23	41		
% FINES:	2	3	3	26		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)		

Grain Size Analysis (Percent Passing vs Grain Size)





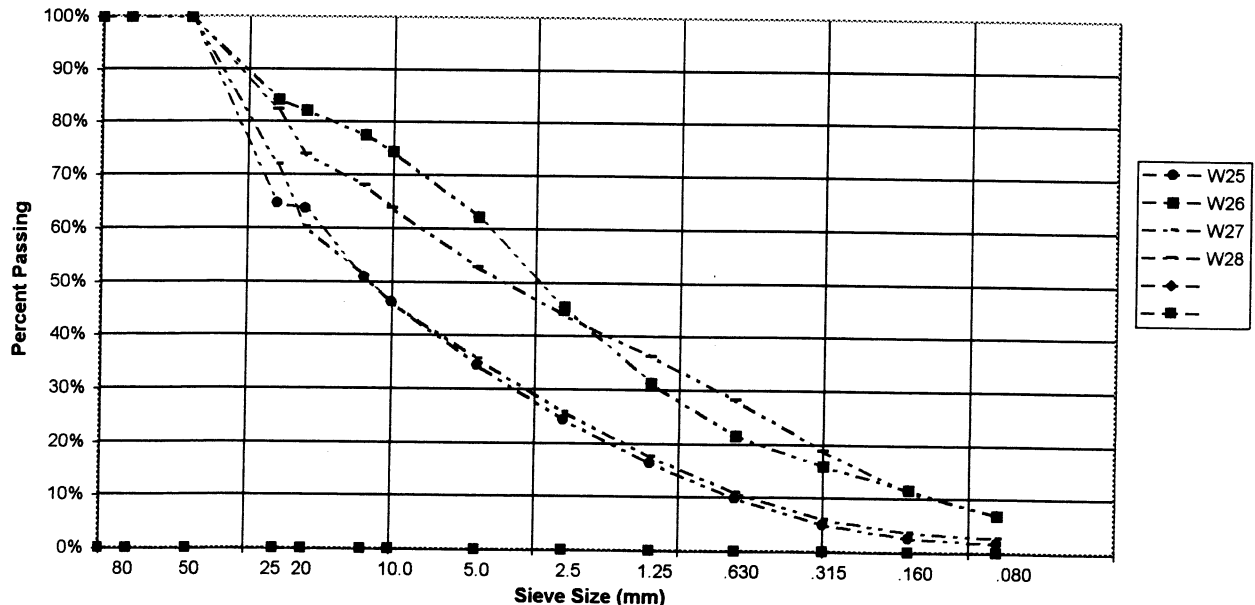
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632619-6775245
 LOGGED BY: RW

HOLE No.: 30143

DATE COMP: 08/01/2004

FIELD NO:	W25	W26	W27	W28		
LAB NO:	W25	W26	W27	W28		
DEPTH:	0.5-1.0	2.2-2.7	3.6-3.9	4.6-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	65%	84%	72%	82%		
20.0	64%	82%	60%	74%		
12.5	51%	78%	51%	68%		
10.0	46%	74%	46%	64%		
5.0	35%	62%	36%	53%		
2.5	24%	46%	26%	44%		
1.25	16%	31%	18%	36%		
0.630	10%	22%	11%	28%		
0.315	5%	16%	6%	19%		
0.160	3%	12%	4%	11%		
0.080	2%	7%	3%	7%		
M.C.(%)	2%	7%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	65	38	64	47		
% SAND:	33	55	33	46		
% FINES:	2	7	3	7		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

Grain Size Analysis (Percent Passing vs Grain Size)





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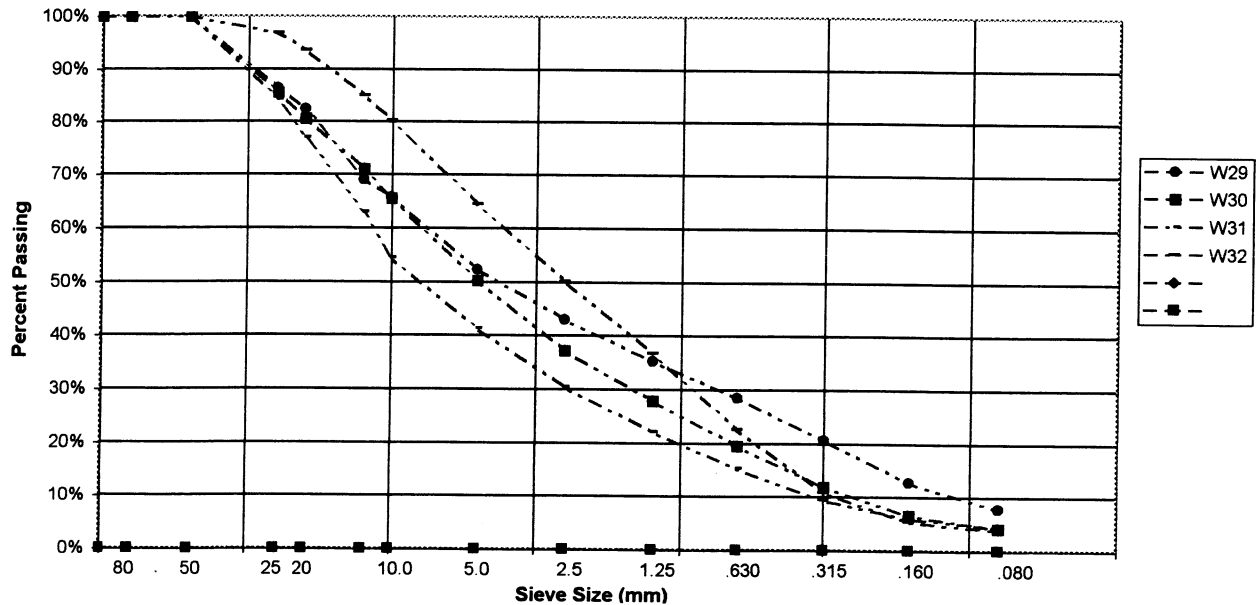
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632303-6775254
 LOGGED BY: RW

HOLE No.: 30144

DATE COMP: 08/02/2004

FIELD NO:	W29	W30	W31	W32		
LAB NO:	W29	W30	W31	W32		
DEPTH:	1.4-1.8	2.5-2.8	3.6-3.9	4.8-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	86%	86%	84%	97%		
20.0	82%	81%	77%	94%		
12.5	69%	71%	63%	85%		
10.0	66%	66%	55%	80%		
5.0	52%	50%	41%	64%		
2.5	43%	37%	30%	50%		
1.25	35%	28%	22%	37%		
0.630	29%	20%	15%	23%		
0.315	21%	12%	9%	11%		
0.160	13%	7%	6%	5%		
0.080	8%	4%	5%	4%		
M.C.(%)	9%	7%	5%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	48	50	59	36		
% SAND:	45	46	37	61		
% FINES:	8	4	5	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED SAND WITH GRAVEL (SW)		

Grain Size Analysis (Percent Passing vs Grain Size)





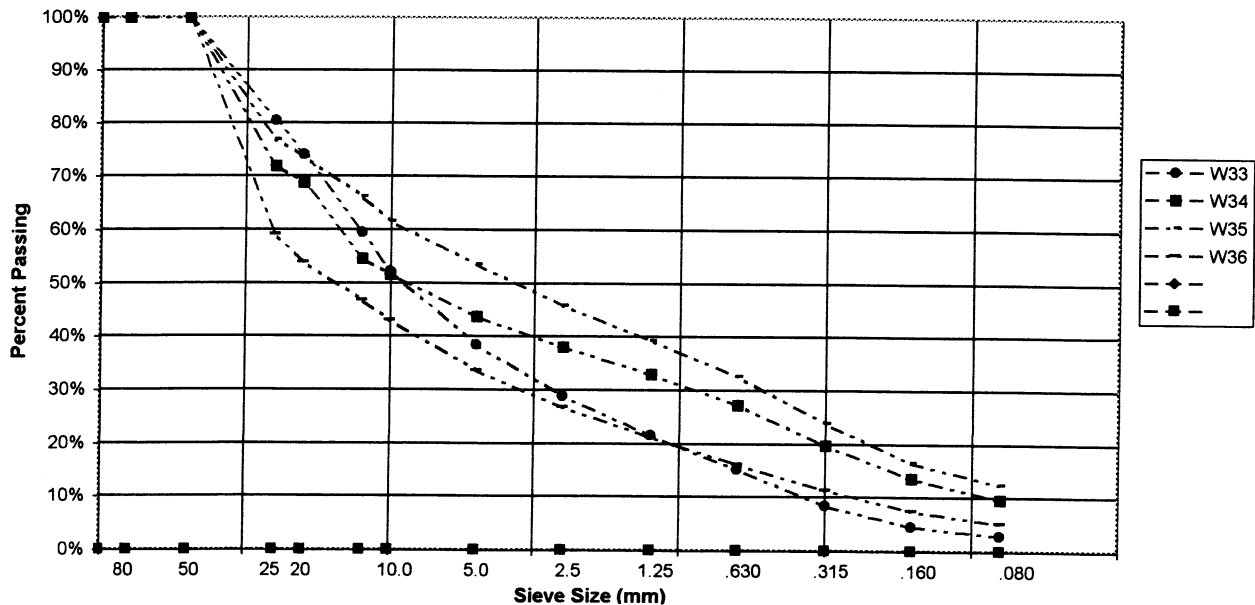
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632345-6775287
 LOGGED BY: RW

HOLE No.: 30145

DATE COMP: 08/02/2004

FIELD NO:	W33	W34	W35	W36		
LAB NO:	W33	W34	W35	W36		
DEPTH:	1.0-1.4	2.0-2.3	3.0-3.3	4.6-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	81%	72%	77%	59%		
20.0	74%	69%	74%	54%		
12.5	59%	55%	66%	47%		
10.0	52%	52%	62%	43%		
5.0	38%	44%	54%	34%		
2.5	29%	38%	46%	27%		
1.25	22%	33%	39%	21%		
0.630	15%	27%	33%	16%		
0.315	8%	20%	24%	11%		
0.160	5%	14%	17%	8%		
0.080	3%	10%	12%	5%		
M.C.(%):	3%	8%	15%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	56	46	66		
% SAND:	36	34	41	28		
% FINES:	3	10	12	5		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)		

Grain Size Analysis (Percent Passing vs Grain Size)





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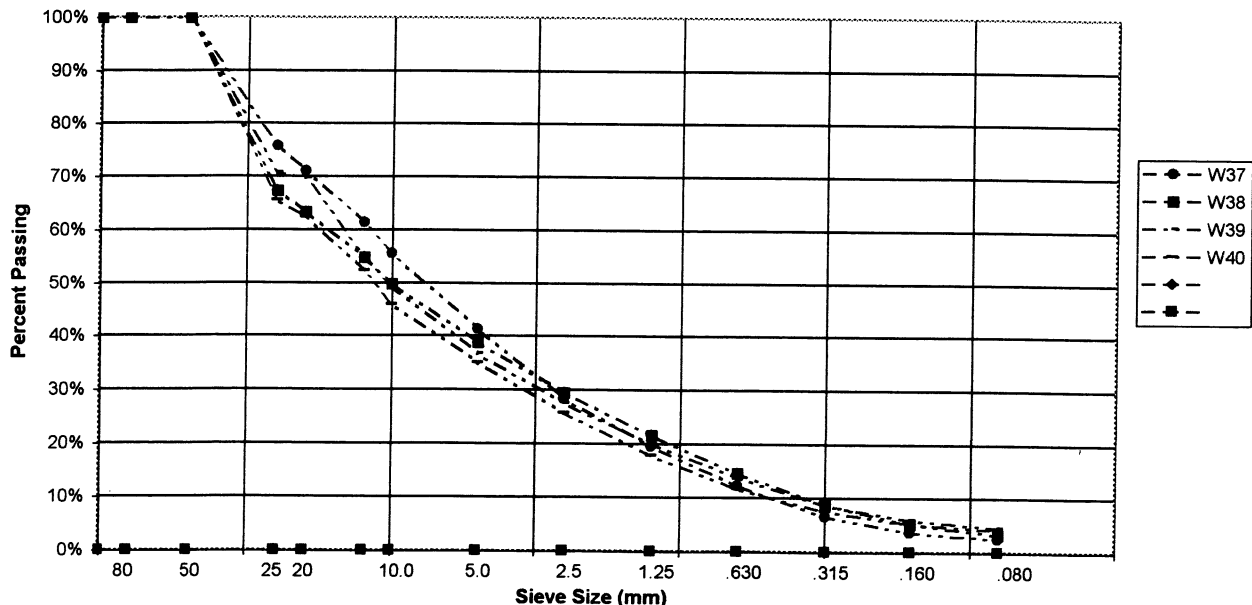
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632400-6775326
 LOGGED BY: RW

HOLE No.: 30146

DATE COMP: 08/02/2004

FIELD NO:	W37	W38	W39	W40	
LAB NO:	W37	W38	W39	W40	
DEPTH:	1.0-1.5	2.6-2.9	3.5-3.8	4.5-4.8	
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	
25.0	76%	67%	71%	66%	
20.0	71%	63%	70%	63%	
12.5	61%	55%	55%	52%	
10.0	56%	50%	49%	46%	
5.0	41%	39%	37%	35%	
2.5	28%	30%	28%	26%	
1.25	20%	22%	20%	18%	
0.630	12%	15%	14%	12%	
0.315	7%	9%	9%	8%	
0.160	4%	5%	6%	5%	
0.080	3%	3%	5%	4%	
M.C.(%):	3%	3%	5%	4%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	
PLASTIC INDEX:	0.0	0.0	0.0	0.0	
% GRAVEL:	59	61	63	65	
% SAND:	39	35	32	31	
% FINES:	3	3	5	4	
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)	

Grain Size Analysis (Percent Passing vs Grain Size)





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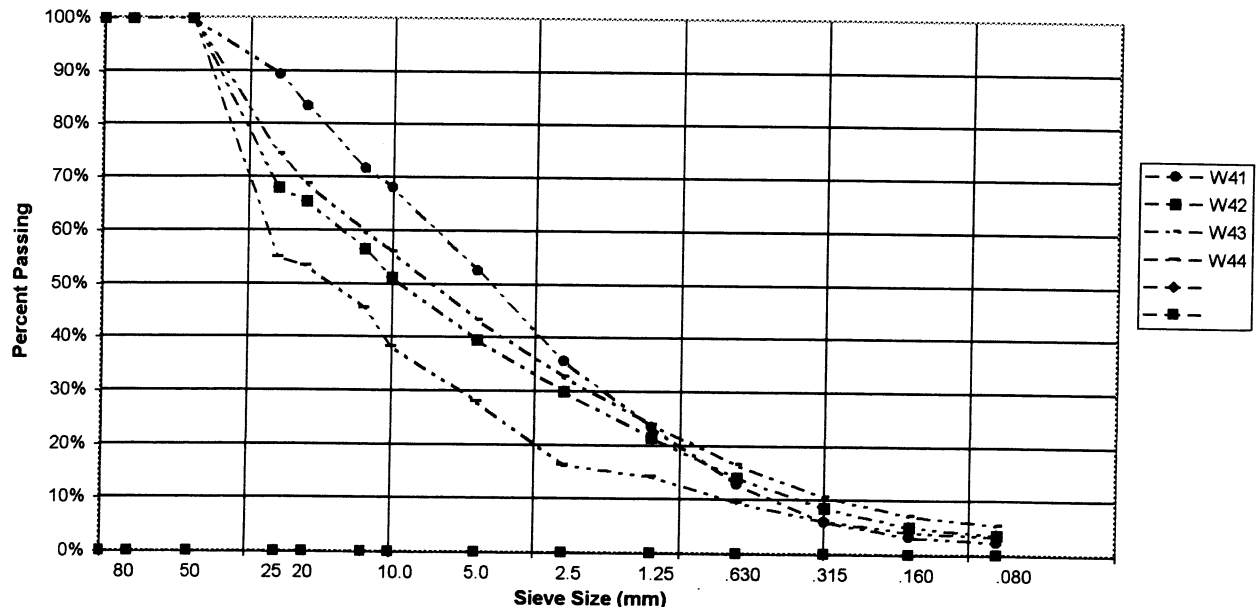
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: Hitachi 450EX
 HOLE LOCATION: 632444-6775365
 LOGGED BY: RW

HOLE No.: 30147

DATE COMP: 08/02/2004

FIELD NO:	W41	W42	W43	W44		
LAB NO:	W41	W42	W43	W44		
DEPTH:	0.6-1.1	2.3-2.8	3.7-4.1	4.6-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
60.0	100%	100%	100%	100%		
25.0	89%	68%	74%	55%		
20.0	83%	65%	69%	53%		
12.5	72%	57%	60%	45%		
10.0	68%	51%	56%	38%		
5.0	53%	40%	43%	28%		
2.5	36%	30%	33%	16%		
1.25	23%	22%	24%	14%		
0.630	13%	14%	17%	10%		
0.315	6%	9%	11%	6%		
0.160	3%	5%	7%	4%		
0.080	2%	4%	6%	4%		
M.C.(%):	5%	3%	6%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	47	60	57	72		
% SAND:	50	36	38	25		
% FINES:	2	4	6	4		
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	WELL-GRADED GRAVEL WITH SAND (GW)		

Grain Size Analysis (Percent Passing vs Grain Size)





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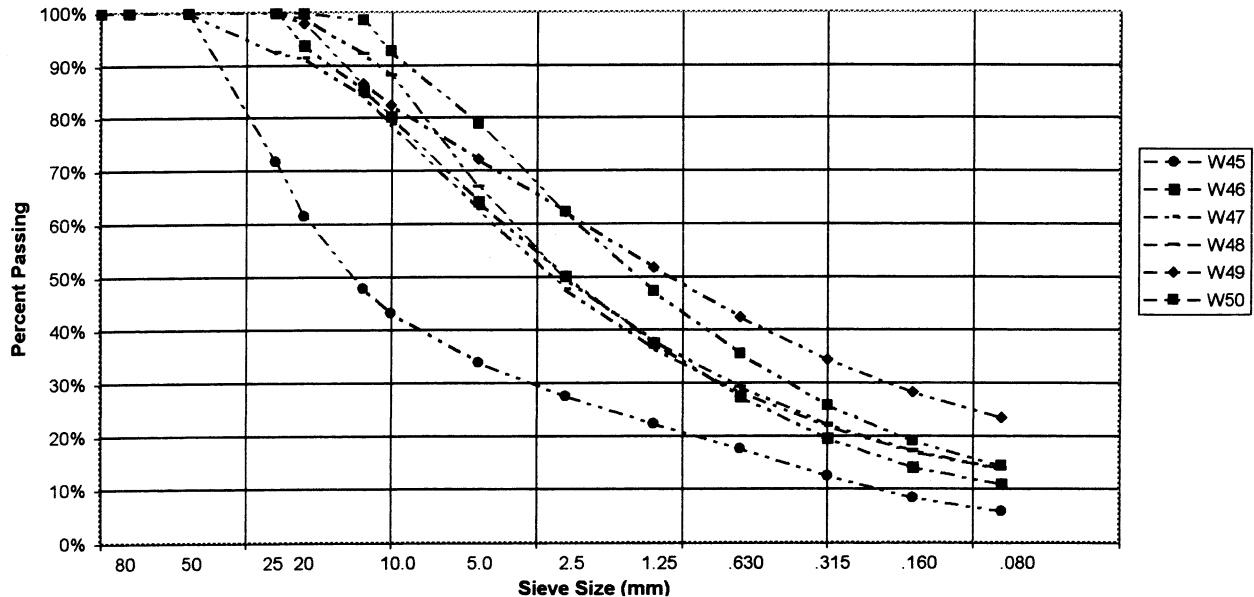
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 632406-6775322
 LOGGED BY: RW

HOLE No.: 30146Drill

DATE COMP: 11/01/2004

FIELD NO:	W45	W46	W47	W48	W49	W50
LAB NO:	W45	W46	W47	W48	W49	W50
DEPTH:	0.3-0.9	1.8-2.1	3.4-4.0	5.2-5.8	7.3-7.6	8.2-8.8
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	72%	100%	92%	100%	100%	100%
20.0	62%	94%	91%	99%	98%	100%
12.5	48%	85%	84%	92%	87%	99%
10.0	43%	80%	79%	88%	82%	93%
5.0	34%	64%	63%	67%	72%	79%
2.5	28%	50%	48%	50%	62%	62%
1.25	22%	38%	37%	38%	52%	47%
0.630	18%	27%	28%	29%	42%	36%
0.315	13%	20%	22%	22%	34%	26%
0.160	8%	14%	17%	17%	28%	19%
0.080	6%	11%	14%	14%	23%	14%
M.C.(%)	3%	4%	6%	5%	7%	3%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	66	36	37	33	28	21
% SAND:	28	53	49	53	49	64
% FINES:	6	11	14	14	23	14
CLASSIFICATION	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)

Grain Size Analysis (Percent Passing vs Grain Size)





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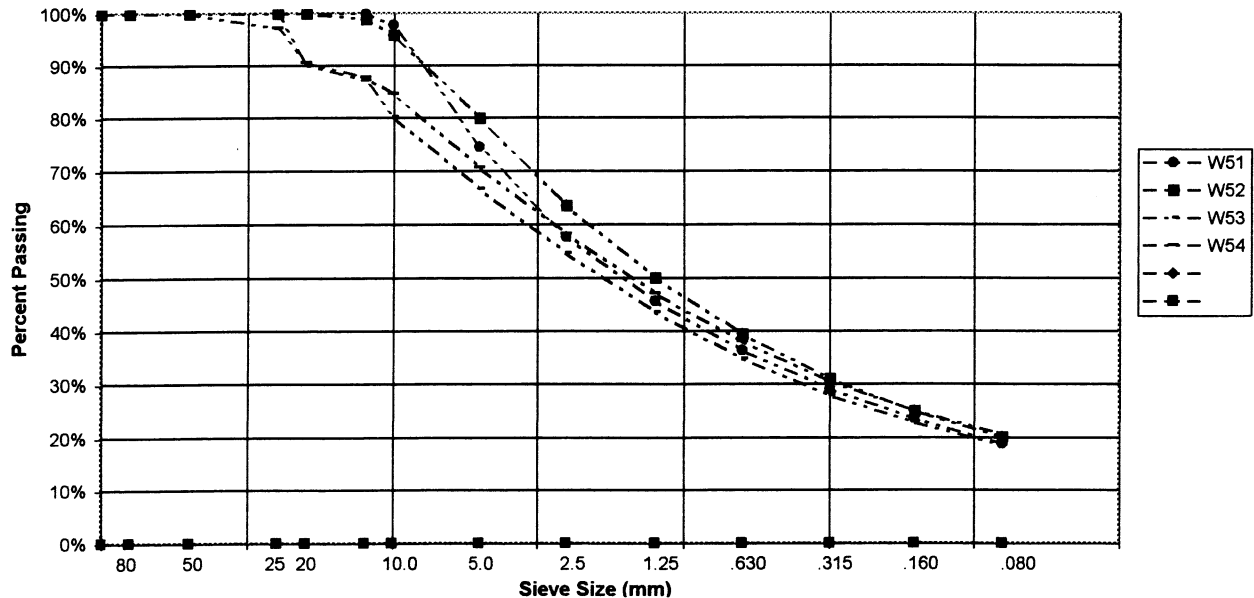
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 632406-6775322
 LOGGED BY: RW

HOLE No.: 30146Drill B

DATE COMP: 11/01/2004

FIELD NO:	W51	W52	W53	W54		
LAB NO:	W51	W52	W53	W54		
DEPTH:	9.8-10.4	11.0-11.6	12.8-13.4	14.0-14.6		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	97%		
20.0	100%	100%	90%	91%		
12.5	100%	99%	87%	88%		
10.0	98%	96%	80%	85%		
5.0	75%	80%	67%	71%		
2.5	58%	64%	55%	58%		
1.25	46%	50%	44%	47%		
0.630	36%	40%	35%	38%		
0.315	29%	31%	28%	31%		
0.160	24%	25%	23%	25%		
0.080	19%	20%	19%	21%		
M.C.(%):	4%	4%	4%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	25	20	33	29		
% SAND:	56	60	48	50		
% FINES:	19	20	19	21		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)		

Grain Size Analysis (Percent Passing vs Grain Size)





PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 632558-6775193
 LOGGED BY: RW

HOLE No.: 30142Drill

DATE COMP: 11/01/2004

FIELD NO:	W55	W56	W57	W58		
LAB NO:	W55	W56	W57	W58		
DEPTH:	0.5-1.0	1.8-2.1	3.4-4.0	4.9-5.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	91%	85%	100%	100%		
20.0	83%	72%	98%	100%		
12.5	73%	65%	93%	98%		
10.0	65%	58%	87%	94%		
5.0	48%	44%	70%	81%		
2.5	35%	33%	55%	67%		
1.25	26%	24%	43%	55%		
0.630	18%	17%	34%	45%		
0.315	12%	12%	27%	37%		
0.160	8%	9%	22%	30%		
0.080	6%	6%	18%	25%		
M.C.(%)	2%	2%	7%	7%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	52	56	30	19		
% SAND:	41	38	52	56		
% FINES:	6	6	18	25		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)		

Grain Size Analysis (Percent Passing vs Grain Size)

