

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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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-
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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.

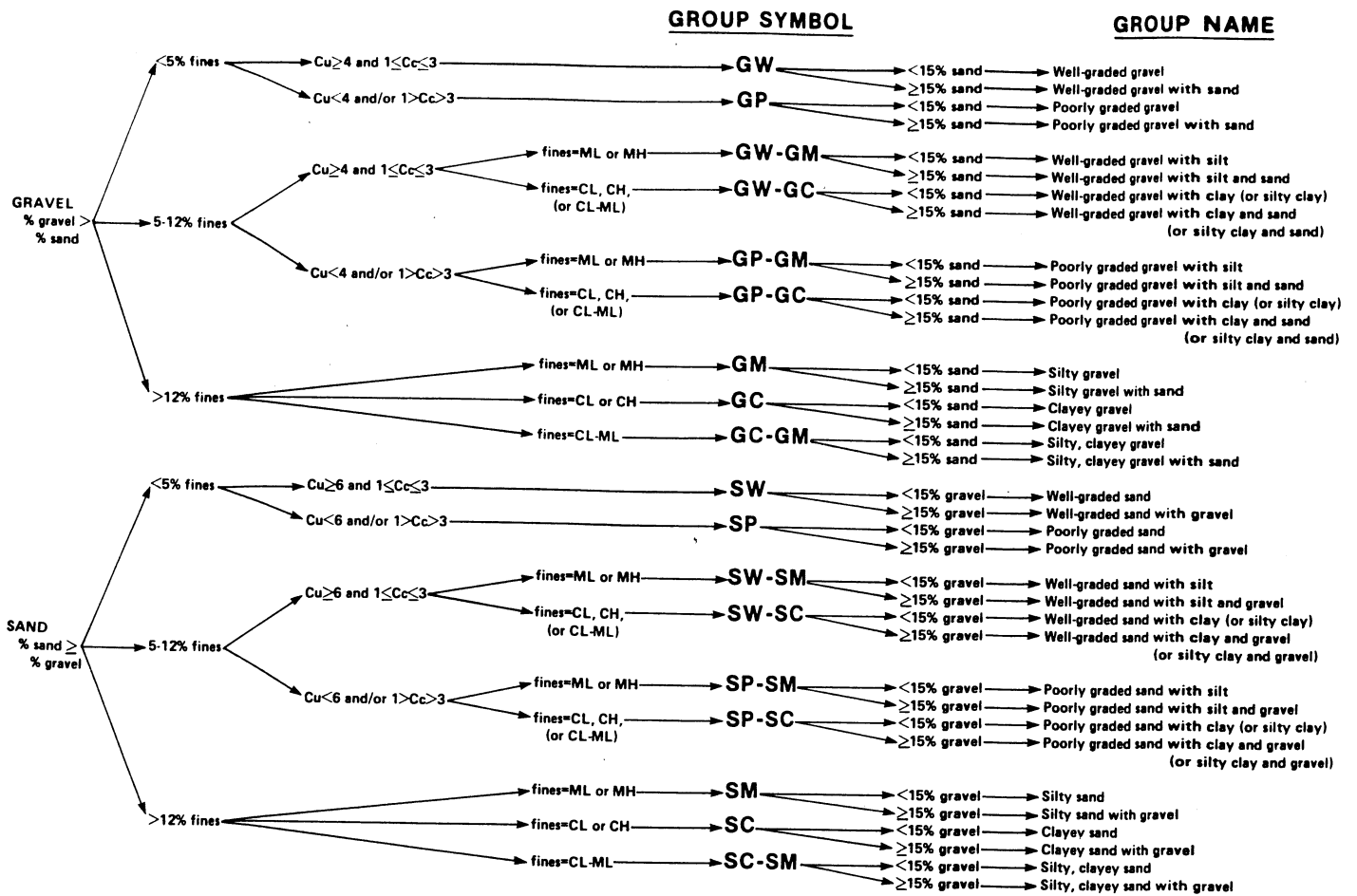
The sample laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. ***These tests may be conducted on disturbed samples and may exhibit properties different from the native materials. The sample classification may also vary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

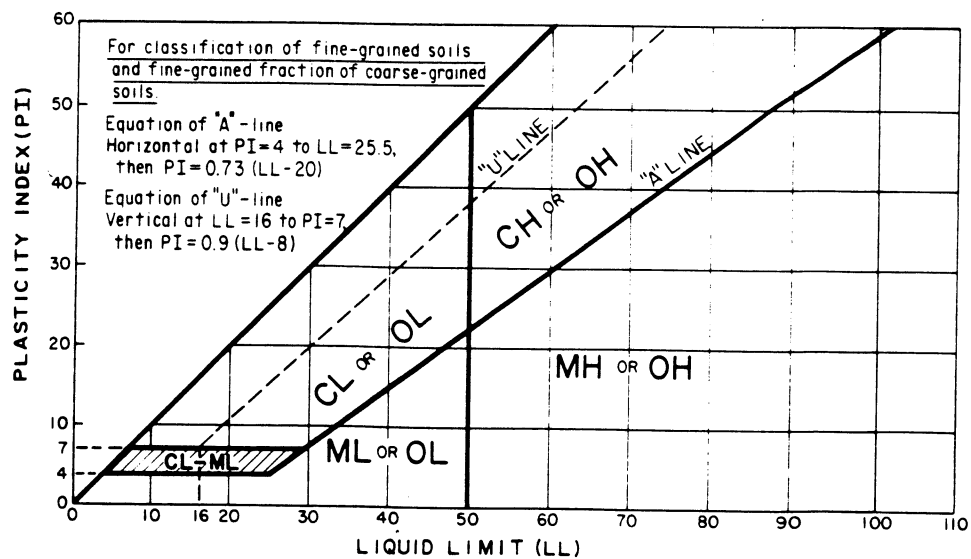
These descriptions and averages are not intended to be conclusive as to the nature of any material encountered, or to conditions between or around the test borings/pits.

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

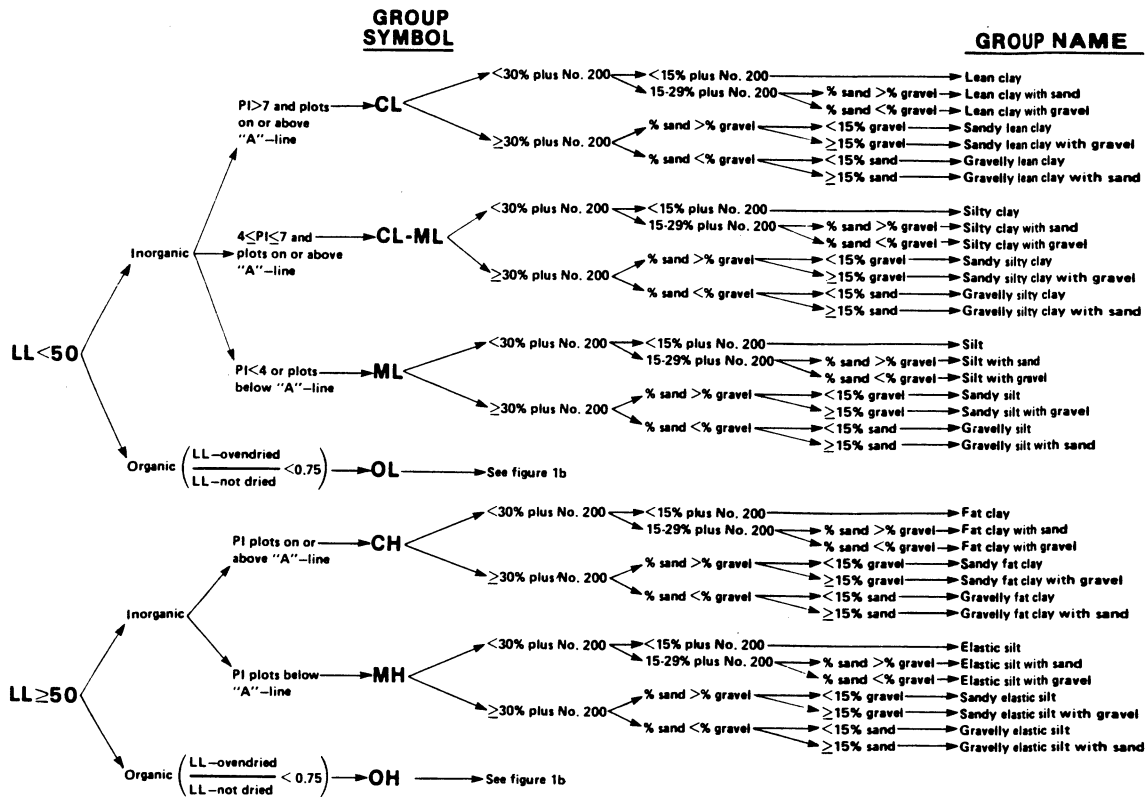
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions at the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



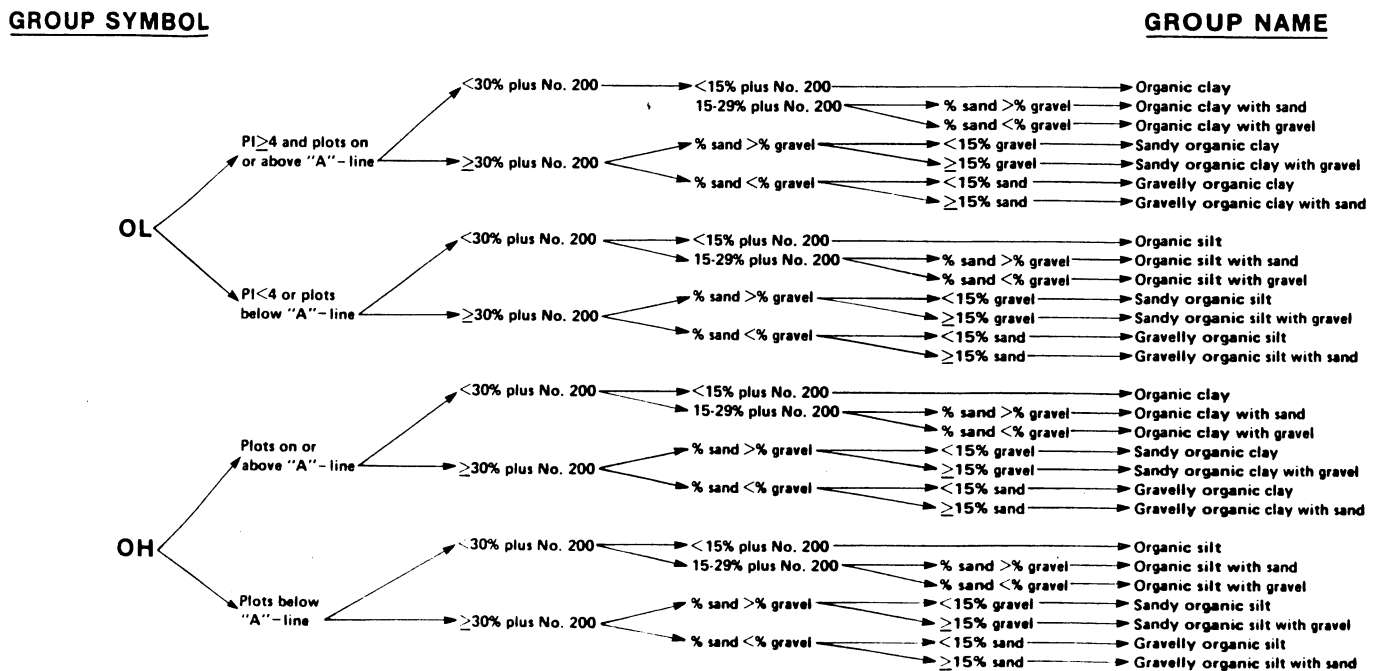
Flow chart for classifying coarse-grained soil.



Plasticity chart.



Flow chart for classifying fine-grained soil.



Flow chart for classifying organic soil.

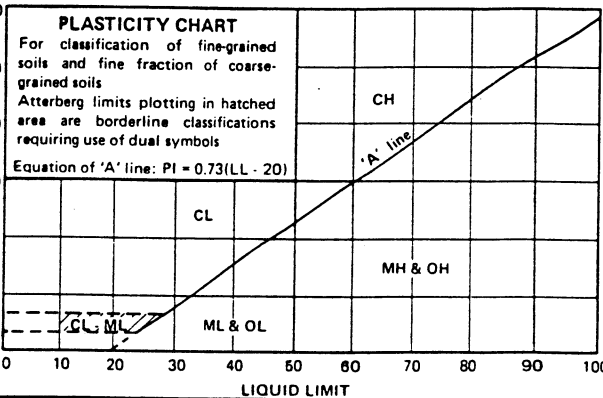
CRITERIA FOR ASSIGNING GROUP SYMBOLS AND GROUP NAMES USING LABORATORY TESTS ^a					SOIL CLASSIFICATION	
					GROUP SYMBOL	GROUP NAME ^b
COARSE-GRAINED SOILS more than 50% retained on No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS Less than 5% fines ^c	$C_u \geq 4$ 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	$\frac{\text{Liquid limit} - \text{oven dried}}{\text{Liquid limit} - \text{not dried}} < 0.75$	OL	Organic clay ^{k, l, m, n} Organic silt ^{k, l, m, o}	
	SILTS AND CLAYS Liquid limit 50% or more	inorganic	PI plots on or above "A" line	CH	Fat clay ^{k,l,m}	
			PI plots below "A" line	MH	Elastic silt ^{k,l,m}	
		organic	$\frac{\text{Liquid limit} - \text{oven dried}}{\text{Liquid limit} - \text{not dried}} < 0.75$	OH	Organic clay ^{k, l, m, p} Organic silt ^{k, l, m, q}	
Highly organic soils		Primarily organic matter, dark in color, and organic odor		PT	Peat	

- Based on the material passing the 3-in (75-mm) sieve.
- If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
- Gravels with 5 to 12% fines require dual symbols
 - 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 $\geq 15\%$ sand, add "with sand" to group name.
- If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
- If fines are organic, add "with organic fines" to group name.
- If soil contains $\geq 15\%$ 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 $\geq 30\%$ plus No. 200, predominantly sand, add "sandy" to group name.
- If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.
- PI > 4 and plots on or above "A" line.
- PI < 4 or plots below "A" line.
- PI plots on or above "A" line.
- PI plots below "A" line.

Soil classification chart

UNIFIED SOIL CLASSIFICATION†

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES	CLASSIFICATION CRITERIA		
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve*	GRAVELS 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	Classification on basis of percentage of fines GW, GP, SW, SP 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	
		GRAVELS WITH FINES	GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines		Not meeting both criteria for GW	
		SANDS More than 50% of coarse fraction passes No. 4 sieve	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	Classification on basis of percentage of fines Less than 5% pass No. 200 sieve More than 12% pass No. 200 sieve 5% to 12% pass No. 200 sieve	$C_u = D_{60}/D_{10}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3	
		SANDS WITH FINES	SP	Poorly-graded sands and gravelly sands, little or no fines		Not meeting both criteria for SW	
			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
		SANDS WITH FINES	SC	Clayey sands, sand-clay mixtures		Atterberg limits plot above 'A' line and plasticity index greater than 7	

FINE-GRAINED SOILS 50% or more passes No. 200 sieve*	SILTS AND CLAYS Liquid limit 50% or less	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands	PLASTICITY CHART For classification of fine-grained soils and fine fraction of coarse-grained soils Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols Equation of 'A' line: $PI = 0.73(LL - 20)$ 
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
		OL	Organic silts and organic silty clays of low plasticity	
	SILTS AND CLAYS Liquid limit greater than 50%	MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts	
		CH	Inorganic clay of high plasticity, fat clays	
		OH	Organic clays of medium to high plasticity	

HIGHLY ORGANIC SOILS	PT	Peat, muck and other highly organic soils	*Based on the material passing the 3 in. (75 mm) sieve †ASTM Designation D 2487, for identification procedure see D 2488
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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	

NOTE:

- Dual symbols are used to indicate borderline or mixed ice classifications
- Visual estimates of ice contents indicated on borehole logs $\pm 5\%$
- 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

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)	

		BOUNDARY LINES ON DRILL LOGS		TEST HOLE NO: 3				
ENGINEERING—CAPITAL				Project No:				
				ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	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: REVIEWED BY: Fig. No:		COMPLETION DEPTH: 6.0 m COMPLETE: / /		

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					

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	ORGANIC SILTS							0.0
0.2	SILTY SAND -damp, medium dense, brown	☒	319	● ▲	SM	[Symbol]	◆ ■	-0.2
0.4	GRAVELLY SILTY SAND -damp, medium dense, brown	☒	320	● ▲	SM	[Symbol]	◆ ■	-0.4
1.2	GRAVELLY SILTY SAND -dry, dense, brown/grey -some rock powder in sample #320	☒						-1.2
1.5	End Of Hole @ 1.5m - Refusal -refusal @ 1.5m - move south 2m -refusal @ 0.9m - EOH							-1.5
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	COMPLETION DEPTH: 1.5 m
		REVIEWED BY:	COMPLETE: 08/15/04
		Fig. No: 76	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30091	
Donjek Services Ltd.		UTM ZONE: - N6769701 E635044		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS							0.0
0.3	GRAVELLY SILTY SAND -damp, medium dense, brown	☒	318	● ▲	SM		■ ◆	-1.0
1.4	End Of Hole @ 1.4m - Refusal -refusal @ 1.4m - move south 2m -refusal @ 1.2m - EOH							-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								-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 1.4 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: 30091R	
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					

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 30091 -refusal @ 1.2m & 1.4m							0.0
1.0	ROCK -dry, grey							-1.0
2.0			R34		ROCK			-2.0
3.0			R35		ROCK			-3.0
4.0	End Of Hole @ 4.0m -no casing used							-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	COMPLETION DEPTH: 4 m
		REVIEWED BY:	COMPLETE: 09/24/04
		Fig. No: 106	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30092	
Donjek Services Ltd.		UTM ZONE: - N6769764 E635000		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS											0.0
0.4	GRAVELLY SILTY SAND -damp, medium dense, dark brown	☒	315	20	40	60	SM		20	40	60	-0.4
1.8	SANDY SILT, trace gravel -Frozen, no visible ice -brown	☒	316	20	40	60	ML		20	40	60	-1.8
3.7	SANDY SILT, some gravel -Frozen, no visible ice -brown	☒	317	20	40	60	ML		20	40	60	-3.7
5.0	End Of Hole @ 5.0m - Refusal -refusal @ 4.7m - move south 2m -refusal @ 5.0m - EOH											-5.0

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					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		ELEVATION(m)	
				20	40	60			80	20	40	60		80
0.0	GRAVELLY SILTY SAND -moist, medium dense, brown w/ black organic seams	X	310					SM					0.0	
1.0	-organic silt seams throughout to 75mm in thickness												-1.0	
2.0	GRAVELLY SILTY SAND 1.8m -Frozen, no visible ice -brown/grey -minimal gravels in sample #314 @ refusal								GM					-2.0
3.0														-3.0
4.0		X	312					SM					-4.0	
5.0												-5.0		
6.0		X	313					SM					-6.0	
7.0												-7.0		
7.0	End Of Hole @ 7.0m - Refusal -refusal @ 7.0m - move south 2m -refusal @ 2.1m - move south 2m -refusal @ 2.4m - EOH	X	314					SM					-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: 7 m
	REVIEWED BY:	COMPLETE: 08/15/04
	Fig. No: 73	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30093R	
Midnight Sun Drilling Ltd.		UTM ZONE: - N6769812 E634965		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 30093 -refusal @ 7.0m, 2.1m & 2.4m							0.0
1.0								-1.0
2.0								-2.0
3.0	SANDY SILT/SILTY SAND, some gravel -moist, brown		R38					-3.0
4.0								-4.0
5.0								-5.0
6.0								-6.0
7.0								-7.0
8.0	POSSIBLY ROCK 7.6m -some rock chips noted -some sand -minimal powder or dust		R39					-8.0
9.0	ROCK 8.5m -dry, grey		R40		ROCK			-9.0
10.0								-10.0
11.0			R41		ROCK			-11.0
12.0	End Of Hole @ 10.7m -no casing used							-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 10.7 m
		REVIEWED BY:	COMPLETE: 09/24/04
		Fig. No: 108	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30094	
Donjek Services Ltd.		UTM ZONE: - N6769845 E634943		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	DRILL PAD FILL										0.0
0.4	ORGANIC SILTS										
0.8	SANDY GRAVEL, some silt -damp, medium dense, brown	☒	306	●	▲		GM		◆	■	-1.0
1.8	SILTY SANDY GRAVEL -damp, medium dense, brown w/ black organic seams -some organic silts throughout (seams to 75mm)	☒	307	●	▲		GM		◆	■	-2.0
3.0	GRAVELLY SILTY SAND -damp to moist, dense, brown	☒	308	●	▲		SM		◆	■	-4.0
5.2	AS ABOVE -increase moisture/increase silt	☒	309	●	▲		SM		◆	■	-5.8
5.8	End Of Hole @ 5.8m										
6.0											
7.0											
8.0											
9.0											
10.0											
11.0											
12.0											

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 5.8 m
		REVIEWED BY:	COMPLETE: 08/15/04
		Fig. No: 72	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30095	
Donjek Services Ltd.		UTM ZONE: - N6769885 E634905		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS											0.0	
0.3m	GRAVELLY SANDY SILT -damp to moist, firm, brown	☒	302	20	40	60	ML		20	40	60	80	-1.0
1.2m	SILTY SANDY GRAVEL -damp, medium dense, brown	☒	303	20	40	60	GM		20	40	60	80	-2.0
3.0m	GRAVELLY SAND, some silt -moist to wet, dense, brown	☒	304	20	40	60	SM		20	40	60	80	-4.0
5.9m	End Of Hole @ 5.9m	☒	305	20	40	60	SW-SM		20	40	60	80	-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: 5.9 m
		REVIEWED BY:	COMPLETE: 08/15/04
		Fig. No: 71	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30096	
Donjek Services Ltd.		UTM ZONE: - N6769994 E634847		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS										0.0
0.6	SILTY GRAVELLY SAND										
1.0	-moist to wet, medium dense, brown										
1.0	AS ABOVE		295				SM				-1.0
1.8	-Frozen										
1.8	-brown										
1.8	SILTY GRAVELLY SAND		296				SM				-2.0
1.8	-Frozen										
1.8	-brown										
4.0			297				SM				-4.0
5.0			298				SM				-5.0
7.0			299				SM				-7.0
9.0			300				SM				-9.0
11.0			301				SM				-11.0
11.3	End Of Hole @ 11.3m - Refusal										-11.3

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 11.3 m
		REVIEWED BY:	COMPLETE: 08/14/04
		Fig. No: 70	Page 1 of 1

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 ▲ 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 30096 -refusal @ 11.3m & 8.7m							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	GRAVELLY SILTY SAND -moist to wet, brown		R42					-7.0
8.0								-8.0
9.0								-9.0
10.0								-10.0
10.1	GRAVELLY SAND, some silt -damp, brown		R43					-10.1
11.0								-11.0
11.3	Very dense slow drilling -no indication of rock							-11.3
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					

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	GRAVELLY SILTY SAND -damp to moist, brown		R44	●			-12.0	
13.0								
14.0	POSSIBLY ROCK or GRAVEL/COBBLE LAYER 13.7m -moist, brown -bit freezing/plugging up (not pounding) -some rounded stone -minimal powder from cone		R45	●			-14.0	
15.0	14.3m						-15.0	
16.0	End Of Hole 14.3m						-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: 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					

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	ORGANIC SILTS							0.0
0.2	SILTY SANDY GRAVEL -moist to wet, medium dense, brown							
1.0		X	293	● ▲	GM		◆ ■	-1.0
2.0	GRAVELLY SILTY SAND -Frozen, no visible ice -brown	X	294	● ▲	SM		◆ ■	-2.0
3.4	End Of Hole @ 3.4m - Refusal -refusal @ 3.4m - move south 2m -refusal @ 3.2m - EOH							
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	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					

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 30097 -refusal @ 3.4m & 3.2m											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	GRAVELLY SANDY SILT to GRAVELLY SILTY SAND -wet, brown -some rock chips		R46									-7.0
8.0												-8.0
9.0												-9.0
10.0	GRAVELLY SAND, some silt to silty 9.8m -damp to moist, brown		R47									-10.0
11.0												-11.0
12.0			R48									-12.0

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 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 ☒ 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)
12.0	SANDY GRAVEL, trace to some silt -damp, brown		R49				-12.0	
13.0							-13.0	
14.0							-14.0	
15.0			R50				-15.0	
15.2	End Of Hole @ 15.2m -bit was plugged from 0.0 to 6.7m depth -no indication of rock						-15.2	
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

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30098	
Donjek Services Ltd.		UTM ZONE: - N6770279 E634696		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	SANDY GRAVEL, trace silt -damp, medium dense, brown	X	290	● ▲		GP-GM	◆ ■	0.0
1.8	GRAVELLY SAND, trace silt -damp, medium dense, brown	X	291	● ▲		SW-SM	◆ ■	-1.8
3.0	GRAVELLY SAND, some silt -saturated, medium dense, brown	X	292	● ▲		SW-SM	◆ ■	-3.0
4.3	End Of Hole @ 4.3m							-4.3

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 4.3 m
		REVIEWED BY: .	COMPLETE: 08/14/04
		Fig. No: 68	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30099	
Donjek Services Ltd.		UTM ZONE: - N6770392 E634666		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	80
0.0	SILTY SANDY GRAVEL -damp, medium dense, brown -organics noted to 0.3m depth	X	286	20	40	60	GM	20	40	60	0.0		
1.0	AS ABOVE 0.9m -moist to wet	X									-1.0		
2.0	GRAVELLY SAND, trace silt 1.8m saturated, medium dense, brown	X	287	20	40	60	SW-SM	20	40	60	-2.0		
3.0	SANDY SILT, some gravel 3.0m -saturated, soft, black/brown -organic silts	X	288	20	40	60	ML	20	40	60	-3.0		
4.0	GRAVELLY SAND, some silt 3.7m -saturated, medium dense, brown	X	289	20	40	60	SM	20	40	60	-4.0		
4.4	End Of Hole @ 4.4m										-4.4		
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: 4.4 m
		REVIEWED BY:	COMPLETE: 08/14/04
		Fig. No: 67	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30100	
Donjek Services Ltd.		UTM ZONE: - N6770537 E634636		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SANDY GRAVEL, some silt -damp, dense, brown -boulders to 0.5m dia. noted on surface										0.0
1.0			279				GM				-1.0
2.0	SILTY SANDY GRAVEL 1.8m -damp to moist, dense, brown		280				GM				-2.0
3.0	ORGANIC SILTS 2.7m -damp, firm, dark brown										-3.0
4.0	SILTY SANDY GRAVEL 3.0m -damp, dense, brown		281				GM				-4.0
5.0	SILTY SANDY GRAVEL 4.9m -wet, dense, brown -sample #283 poor recovery		282				GM				-5.0
6.0											-6.0
7.0			283				SM				-7.0
8.0	GRAVELLY SILTY SAND 7.9m -moist to wet, dense, grey w/ blueish hue		284				SM				-8.0
9.0											-9.0
10.0	SILTY SAND, trace gravel 9.4m -moist, dense, purple		285				SM				-10.0
11.0	End of Hole @ 10.1m - Refusal										-11.0
12.0											-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 10.1 m
		REVIEWED BY: -	COMPLETE: 08/14/04
		Fig. No: 66	Page 1 of 1

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 ▲ 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 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	COMPLETION DEPTH: 16.2 m
		REVIEWED BY: -	COMPLETE: 09/25/04
		Fig. No: 111	Page 1 of 2

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 / GRAVEL			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
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					

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	SILTY SAND -damp, medium dense, brown -organics noted to 0.3m depth	X	277	● ▲	SM		■ ◆	0.0
1.0	GRAVELLY SILTY SAND -damp, medium dense, brown			● ▲			■ ◆	-1.0
2.0	GRAVELLY SILTY SAND -damp, dense, brown	X	278	● ▲	SM		■ ◆	-2.0
3.0								-3.0
4.0	End Of Hole @ 3.2m - Refusal -refusal @ 3.0m - move east 2m -refusal @ 3.2m - EOH							-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	COMPLETION DEPTH: 3.2 m
		REVIEWED BY: -	COMPLETE: 08/14/04
		Fig. No: 65	Page 1 of 1

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 ▲ 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 30101 -refusal @ 3.0m & 3.2m							0.0
1.0								-1.0
2.0								-2.0
2.4	ROCK -dry, grey							-2.4
3.0								-3.0
4.0								-4.0
4.6	End Of Hole @ 4.6m		R53		ROCK			-4.6
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: 4.6 m
		REVIEWED BY: -	COMPLETE: 09/25/04
		Fig. No: 112	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30102	
Donjek Services Ltd.		UTM ZONE: - N6770753 E634670		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	

SAMPLE TYPE		☒ RETURN	☒ S.P.T.	☒ AUGER	☐ BULK	☐ TUBE	☐ CORE
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DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			ELEVATION(m)
				PLASTIC	M.C.	LIQUID									
0.0	SANDY SILT/SILTY SAND -damp, medium dense, brown w/ orange hue -organics noted to 0.3m depth													0.0	
1.0	SANDY SILT, trace gravel -damp, medium dense, brown		275				ML							-1.0	
2.0	SILTY SAND -dry, dense, light grey -rock powder in sample #276													-2.0	
3.0	End Of Hole @ 3.0m - Refusal -refusal @ 1.0m - move north 2m -refusal @ 3.0m - EOH		276				SM							-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	COMPLETION DEPTH: 3 m
		REVIEWED BY:	COMPLETE: 08/14/04
		Fig. No: 64	Page 1 of 1

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			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	AS PER SOILS LOG 30102 -refusal @ 3.0m & 1.0m											0.0
1.0	ROCK -dry, grey											-1.0
2.0			R54				ROCK					-2.0
3.0												-3.0
4.0			R55				ROCK					-4.0
5.0	End Of Hole @ 4.3m											-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

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30103	
Donjek Services Ltd.		UTM ZONE: - N6770855 E634651		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SILTY SAND/SANDY SILT -damp, medium dense, brown -organics noted to 0.7m depth									0.0		
0.6m	GRAVELLY SILTY SAND -damp, medium dense, brown	X	272	●	▲		SM		■ ◆	-1.0		
2.0m	SILTY GRAVELLY SAND -dry to damp, dense, light brown	X	273	●	▲		SM		■ ◆	-2.0		
3.7m	SILTY SAND -dry, dense, light grey -rock powder in sample #274	X	274	●	▲		SM		■ ◆	-4.0		
4.3m	End Of Hole @ 4.3m - Refusal -refusal @ 4.3m - move south 2m -refusal @ 2.4m - EOH									-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										-12.0		

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 4.3 m
		REVIEWED BY:	COMPLETE: 08/14/04
		Fig. No: 63	Page 1 of 1

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 ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	AS PER SOILS LOG 30103 -refusal @ 4.3m & 2.4m							0.0
1.0								-1.0
2.0								-2.0
3.0								-3.0
3.4	ROCK -dry, grey							-3.4
4.0			R56		ROCK			-4.0
5.0								-5.0
6.0			R57		ROCK			-6.0
7.0								-7.0
7.3	End of Hole @ 7.3m							-7.3
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: 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					

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
0.0	SILTY SAND -damp, loose, brown		268	20	40	60	SM		20	40	60	0.0
1.0	GRAVELLY SANDY SILT -damp, medium dense, brown		269	20	40	60	ML		20	40	60	-1.0
3.0	GRAVELLY SILTY SAND -dry, dense, light grey -rock powder in sample #270 (attempt 1) -rock powder in sample #271 (attempt 2)		270	20	40	60	SM		20	40	60	-3.0
4.0			271	20	40	60	SM		20	40	60	-4.0
4.9	End Of Hole @ 4.9m - Refusal -refusal @ 3.7m - move south 2m -refusal @ 4.9m - EOH											-4.9

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW		COMPLETION DEPTH: 4.9 m	
		REVIEWED BY:		COMPLETE: 08/13/04	
		Fig. No: 62		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					

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	SILTY SAND/SANDY SILT -damp, medium dense, brown								0.0		
1.0	GRAVELLY SILTY SAND 0.9m -damp, medium dense, brown	☒	262	●	▲		SM		◆	-1.0	
2.0	SANDY SILT, trace gravel 1.8m -damp to moist, medium dense, brown	☒	263	●	▲		ML		◆	-2.0	
3.0	SILTY SANDY GRAVEL 3.0m -damp, dense, brown	☒	264	●	▲		GM		◆	-4.0	
4.6	End Of Hole @ 4.6m - Refusal								-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	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		

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			ELEVATION(m)
				20	40	60			80	20	40	60	80	20	
0.0	AS PER SOILS LOG 30105 -refusal @ 4.6m													0.0	
1.0														-1.0	
2.0														-2.0	
3.0														-3.0	
4.0														-4.0	
5.0	ROCK -dry, grey		R64				ROCK							-5.0	
6.0														-6.0	
7.0			R65				ROCK							-7.0	
8.0	End Of Hole @ 7.6m													-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: 116

COMPLETION DEPTH: 7.6 m

COMPLETE: 09/26/04

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Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30106	
Donjek Services Ltd.		UTM ZONE: - N6771078 E634574		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SILTY SANDY GRAVEL -dry to damp, loose, brown w/ orange hue -organics to 0.2m	☒	266	● ▲	GM	[Symbol]	◆ ■	0.0
0.6m	SILTY SAND -dry to damp, dense, light grey -rock powder in sample #267	☒	267	● ▲	SM	[Symbol]	◆ ■	-1.0
0.9m	End Of Hole @ 0.9m - Refusal -refusal @ 0.9m - move south 2m -refusal @ 0.9m - EOH							-1.0
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	COMPLETION DEPTH: 0.9 m
		REVIEWED BY:	COMPLETE: 08/13/04
		Fig. No: 60	Page 1 of 1

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					

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 30106 -refusal @ 0.9m both attempts							0.0
1.0	ROCK (possibly fractured) 1.2m -dry, grey							-1.0
2.0	ROCK 1.8m -dry, grey		R60		ROCK			-2.0
3.0								-3.0
4.0			R61		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: 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					

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	ORGANIC SILTS							0.0
0.3	SILTY SAND/SANDY SILT -damp, medium dense, brown							
0.9	GRAVELLY SAND, some silt -dry to damp, dense, light brown/grey -rock powder in sample #265	☒	265	▲	SM		◆ ◆	-1.0
1.5	End Of Hole @ 2.5m - Refusal -refusal @ 1.5m - move 2m south -refusal @ 1.5m - EOH							
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	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			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	AS PER SOILS LOG 30107 -refusal @ 1.5m both attempts											0.0
1.0	ROCK -dry, grey											-1.0
2.0			R62				ROCK					-2.0
3.0												-3.0
4.0			R63				ROCK					-4.0
5.0	End Of Hole @ 4.3m											-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: 132

COMPLETION DEPTH: 4.3 m

COMPLETE: 09/26/04

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Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30108	
Donjek Services Ltd.		UTM ZONE: - N6771278 E634528		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SANDY SILT, trace gravel -damp to moist, medium dense, brown							0.0
1.0		X	258	● ▲		ML	■ ◆	-1.0
1.5	GRAVELLY SILTY SAND -damp, medium dense, brown	X	259	● ▲		SM	■ ◆	-2.0
2.4	GRAVELLY SAND, some silt -dry, dense, light brown/grey -rock powder in samples #260 & #261	X	260	● ▲		SM	■ ◆	-3.0
5.5	End Of Hole @ 5.5m - Very slow drilling	X	261	● ▲		SM	■ ◆	-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: 5.5 m
		REVIEWED BY:	COMPLETE: 08/13/04
		Fig. No: 58	Page 1 of 1

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					

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	SANDY SILT -damp, medium dense, brown											0.0
1.0			256				ML					-1.0
2.0	GRAVELLY SILTY SAND 1.5m -damp, dense, brown		257				SM					-2.0
3.0	SILTY SAND, trace gravel 3.0m -dry to damp, dense, light brown/grey -rock powder in sample #257		258				SM					-3.0
4.0	End Of Sample @ 4.0m - Refusal -refusal @ 3.0m - move south 2m -refusal @ 4.0m - EOH											-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	COMPLETION DEPTH: 4 m
		REVIEWED BY:	COMPLETE: 08/13/04
		Fig. No: 57	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30110	
Donjek Services Ltd.		UTM ZONE: - N6771567 E634457		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS											0.0
0.3	SANDY SILT/SILTY SAND, some gravel		251				ML					-0.3
1.0	-Frozen -brown											-1.0
2.0			252				ML					-2.0
3.0												-3.0
4.0			253				SM					-4.0
4.6	SILTY SAND											-4.6
5.0	-dry to damp, dense, brown w/ orange hue -more rock powder w/ depth		254				SM					-5.0
5.6	End Of Hole @ 5.6m - Very slow drilling -refusal @ 2.1m - move west 2m -very slow drilling @ 5.6m - EOH											-5.6
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	COMPLETION DEPTH: 5.6 m
		REVIEWED BY:	COMPLETE: 08/13/04
		Fig. No: 56	Page 1 of 1

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 ☒ 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	GRAVELLY SILTY SAND -damp, medium dense, brown -light organics to 0.3m	☒	249	● ▲	SM		■ ◆	0.0
1.0	SILTY GRAVELLY SAND 1.0m -dry, dense, light brown/grey -rock powder in sample #250	☒	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	COMPLETION DEPTH: 1.8 m
		REVIEWED BY:	COMPLETE: 08/13/04
		Fig. No: 55	Page 1 of 1

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	

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 30111 -refusal @ 1.8m both attempts												0.0
1.0	ROCK -dry, grey												-1.0
2.0			R66				ROCK						-2.0
3.0													-3.0
4.0			R67				ROCK						-4.0
4.0	End Of Hole @ 4.0m												-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

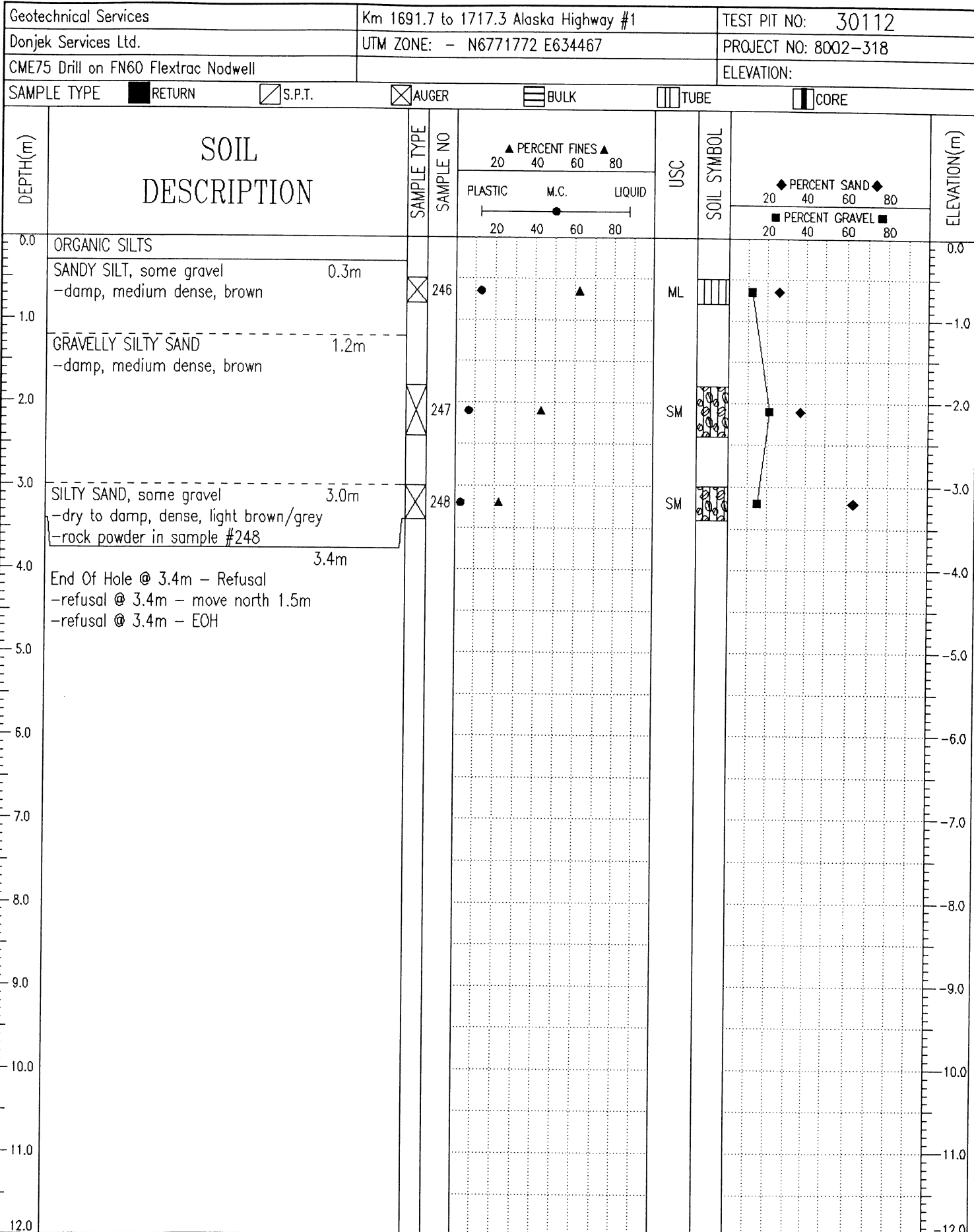
REVIEWED BY:

Fig. No: 118

COMPLETION DEPTH: 4 m

COMPLETE: 09/26/04

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

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

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

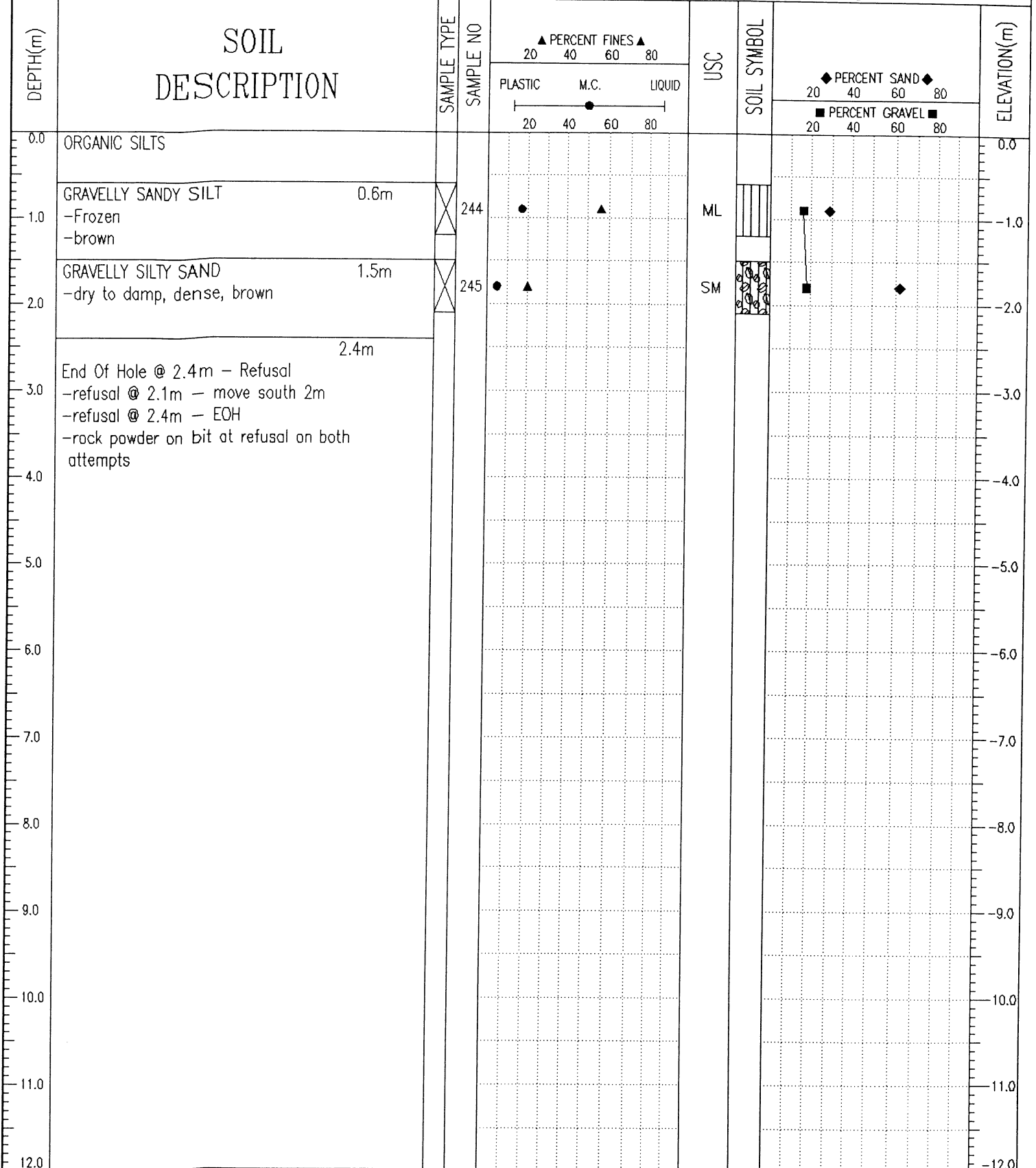
Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30112R	
Midnight Sun Drilling Ltd.		UTM ZONE: - N6771772 E634470		PROJECT NO: 8002-318	
Reverse Circulation Air Rotary Drill				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

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
1.0								-1.0
2.0								-2.0
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
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: 119	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30113
Donjek Services Ltd.	UTM ZONE: - N6771879 E634435	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: 53

COMPLETION DEPTH: 2.4 m
COMPLETE: 08/12/04

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 ▲ 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 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					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	ORGANIC SILTS							0.0
0.3	GRAVELLY SAND, trace to some silt -dry to damp, medium dense, brown		242	▲▲		SW-SM	■ ◆	-1.0
2.0			243	● ▲		SW-SM	■ ◆	-2.0
2.9	End Of Hole @ 2.9m -refusal @ 1.8m - move south 2m -refusal @ 2.9m - EOH							-3.0
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	COMPLETION DEPTH: 2.9 m
		REVIEWED BY:	COMPLETE: 08/12/04
		Fig. No: 52	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 & GRAVEL			ELEVATION(m)
				20	40	60			80	20	40	
0.0	AS PER SOILS LOG 30114 -refusal @ 1.8m & 2.9m											0.0
1.0												-1.0
2.0												-2.0
3.0	ROCK (possibly fractured) 3.0m -medium dense -some sand infill											-3.0
4.0	ROCK 4.0m -intact											-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: 09/27/04
	Fig. No: 121	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30115	
Donjek Services Ltd.		UTM ZONE: - N6772105 E634338		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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.			PERCENT SAND	PERCENT GRAVEL	
0.0	SANDY GRAVEL, trace silt -damp to moist, medium dense, light brown -increase moisture w/ depth	☒	238	20	40		GP-GM	20	40	0.0
1.0										-1.0
2.0	SILTY GRAVELLY SAND to SILTY SAND 1.8m -dry to damp, dense, light brown	☒	239	20	40		SM	20	40	-2.0
3.0										-3.0
4.0		☒	240	20	40		SM	20	40	-4.0
4.3	End Of Hole @ 4.3m - Refusal -refusal @ 3.7m - move south 2m -refusal @ 4.3m - EOH									-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: 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 ▲ 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 30115 -refusal @ 3.7m & 4.3m							0.0
2.0	ROCK or COBBLES/BOULDERS -light brown/grey							-2.0
3.4	ROCK -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. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 4.6 m
		REVIEWED BY:	COMPLETE: 09/27/04
		Fig. No: 122	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30116	
Donjek Services Ltd.		UTM ZONE: - N6672111 E634312		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS										0.0
0.0 - 0.3	SANDY GRAVEL, some silt -damp, medium dense, brown		234	20	40	80	GM		20 40 60 80	20 40 60 80	-1.0
0.3 - 1.8	GRAVELLY SAND, some silt -dry to damp, dense, light brown -some rock powder in samples		235	20	40	80	SW-SM		20 40 60 80	20 40 60 80	-2.0
1.8 - 4.0			236	20	40	80	SW-SM		20 40 60 80	20 40 60 80	-4.0
4.0 - 5.2	Pulverized rock sample @ refusal		237	20	40	80	SM		20 40 60 80	20 40 60 80	-5.0
5.2	End Of Hole @ 5.2m - Refusal										-5.2
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: 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
1.0								-1.0
2.0	ROCK (possibly fractured) 1.5m -dry, grey -medium dense -some sand in powder							-2.0
3.0	ROCK 3.0m -dry, grey							-3.0
4.0			R71		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	COMPLETION DEPTH: 4.6 m
		REVIEWED BY:	COMPLETE: 09/27/04
		Fig. No: 123	Page 1 of 1

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					

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	SANDY SILT, some gravel -damp to moist, medium dense, brown	X	232	● ▲	ML		■ ◆	0.0
0.6	ORGANIC SILTS -damp to moist, medium dense, brown							-1.0
1.5	SILTY SANDY GRAVEL -damp to moist, medium dense, brown	X	234	● ▲	GM		◆ ■	-2.0
3.7	AS ABOVE End Of Hole @ 3.0m - Refusal -refusal @ 3.7m - move south 2m -refusal @ 2.1m - EOH							-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								-12.0

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
1.0								-1.0
2.0								-2.0
3.0								-3.0
4.0	ROCK or GRAVEL STRATA 3.4m -dry, brown -not much powder -some round stone in sample							-4.0
5.0								-5.0
6.0								-6.0
6.7	End Of Hole @ 6.7m 6.7m		R72					-6.7
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: 6.7 m
		REVIEWED BY:	COMPLETE: 09/27/04
		Fig. No: 124	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30118	
Donjek Services Ltd.		UTM ZONE: - N6772272 E634185		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	ORGANIC SILTS							0.0
0.3	SILTY SAND/SANDY SILT -damp, medium dense, light brown							
0.6	SANDY SILT, trace gravel -damp, medium dense, brown		229	● ▲	ML	■ ◆		-1.0
1.2	SANDY SILTY GRAVEL -damp, dense, brown		230	● ▲	GM	■ ◆		-2.0
2.7	SILTY SAND, trace gravel -dry, very dense, light brown -rock powder in sample		231	● ▲	SM	■ ◆		-3.0
3.7	End Of Hole @ 3.7m - Refusal -refusal @ 3.7m - move south 1.5m -refusal @ 3.7m - EOH							-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								-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 3.7 m
		REVIEWED BY: -	COMPLETE: 08/12/04
		Fig. No: 48	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					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	SILTY SANDY GRAVEL -saturated, medium dense, brown	☒	226	● ▲	GM		◆ ■	0.0
0.6	ORGANIC SILTS -wet, soft to firm, black/dark brown							-1.0
0.9	GRAVELLY SAND, trace silt -damp, medium dense, light brown							-2.0
3.0	SAND, some silt, trace gravel -moist to wet, dense, light brown -increase moisture from seepage	☒	227	● ▲	SW-SM		◆ ■	-3.0
4.0		☒	228	● ▲	SM		◆ ■	-4.0
4.6	End Of Hole @ 4.6m - Refusal -refusal @ 3.7m - move north 2m -refusal @ 4.6m - EOH							-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: 08/12/04
		Fig. No: 47	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30120	
Donjek Services Ltd.		UTM ZONE: - N6772396 E634076		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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.			PERCENT SAND		PERCENT GRAVEL		
				20	40	60			80	20	40		60
0.0	ORGANIC SILTS											0.0	
0.3	GRAVELLY SILTY SAND -damp, medium dense, brown	☒	222	●	▲		SM		■	◆		-0.3	
2.1	SILTY SAND -damp, very dense, brown	☒	223	●	▲		SM			◆		-2.1	
3.0	AS ABOVE -light brown (lighter with depth)	☒	224	●	▲		SM			◆		-3.0	
5.3	some rock powder in sample #225	☒	225	●	▲		SM			◆		-5.3	
5.3	End Of Hole @ 5.3m - Very Slow Drilling -refusal @ 2.4m - move north 2m -very slow drilling at 5.3m - EOH											-5.3	
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: 5.3 m
		REVIEWED BY:	COMPLETE: 08/12/04
		Fig. No: 46	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30121	
Donjek Services Ltd.		UTM ZONE: - N6772578 E633974		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS										0.0
0.3	GRAVELLY SILTY SAND -damp, medium dense, brown	☒	219	20	40	60	SM		20	40	-1.0
1.5	SILTY SANDY GRAVEL -dense	☒	220	20	40	60	GM		20	40	-2.0
2.7	SILTY SAND -dry, very dense, light brown -rock powder in sample	☒	221	20	40	60	SM		20	40	-3.0
3.2	End Of Hole @ 3.2m - Refusal -refusal @ 3.0m - move east 2m -refusal @ 3.2m - EOH										-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											-13.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 3.2 m
		REVIEWED BY: -	COMPLETE: 08/12/04
		Fig. No: 45	Page 1 of 1

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 & 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 30121 -refusal @ 3.2m & 3.0m												0.0
1.0													-1.0
2.0													-2.0
3.0	ROCK 3.0m												-3.0
4.0	-dry, grey -some powder -medium dense rock												-4.0
5.0													-5.0
6.0													-6.0
7.0													-7.0
7.6	End Of Hole @ 7.6m												-7.6
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: 7.6 m
		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					

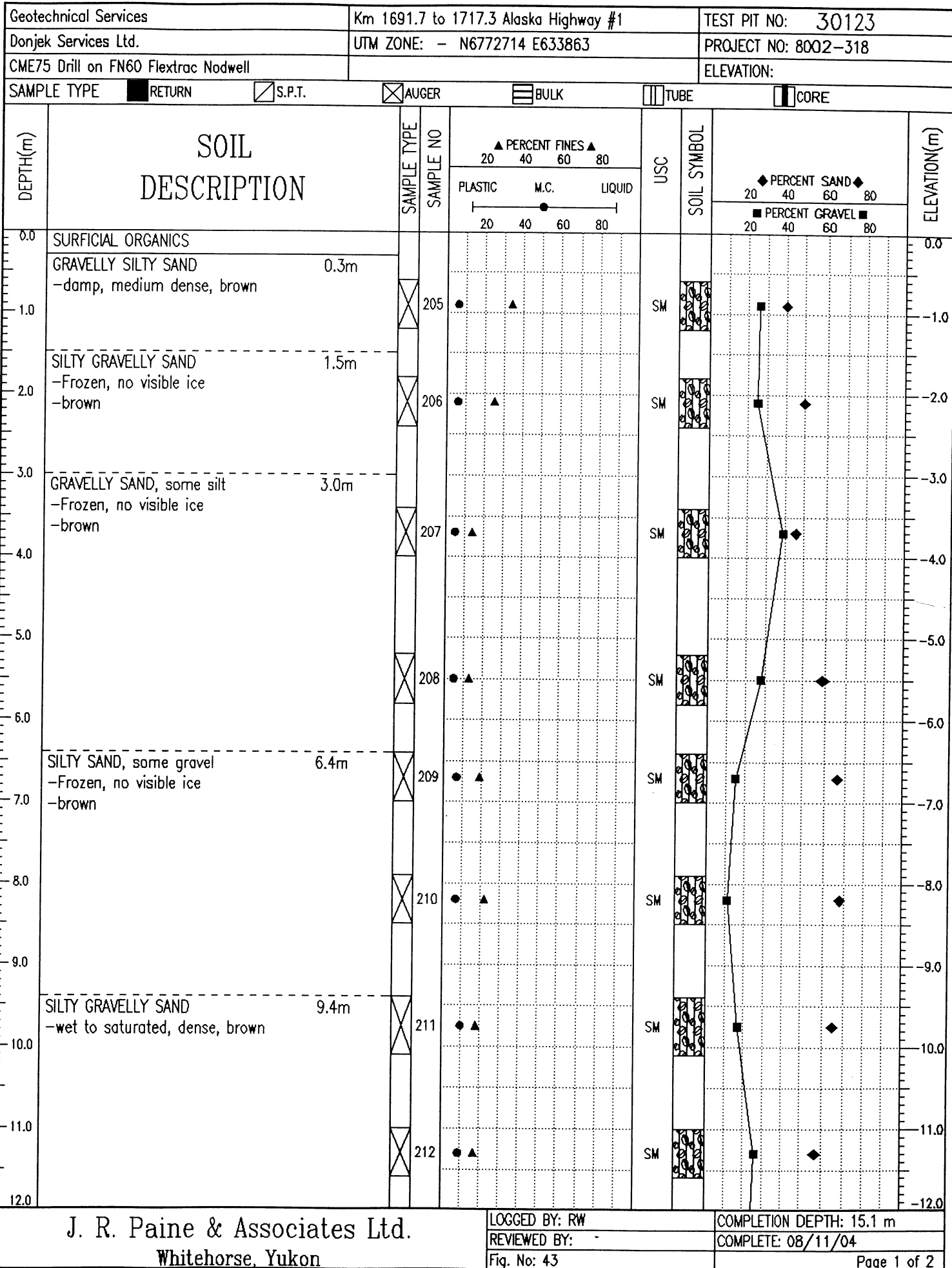
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80 20 40 60 80		ELEVATION(m)
0.0	ORGANIC SILTS								0.0		
0.6	SILTY SANDY GRAVEL -wet, medium dense, dark brown	X	215			GM			-1.0		
1.5	SANDY GRAVEL/GRAVELLY SAND, some silt -saturated, medium dense, dark brown	X	216			GM			-2.0		
4.0	Poor sample recovery on #217 due to H2O	X	217			GP-GM			-4.0		
5.2	End Of Hole @ 5.2m - Refusal	X	218			SM			-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: 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					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			ELEVATION(m)	
				▲ PERCENT FINES ▲ 20 40 60 80					◆ PERCENT SAND ◆ 20 40 60 80		■ PERCENT GRAVEL ■ 20 40 60 80		
				PLASTIC 20 40 60 80	M.C. 20 40 60 80	LIQUID 20 40 60 80							
0.0	AS PER SOILS LOG 30122 -refusal @ 5.2m											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	
7.6	7.6m End Of Hole @ 7.6m - No Rock Encountered		R77									-7.6	
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: 7.6 m
		REVIEWED BY: -	COMPLETE: 09/27/04
		Fig. No: 127	Page 1 of 1



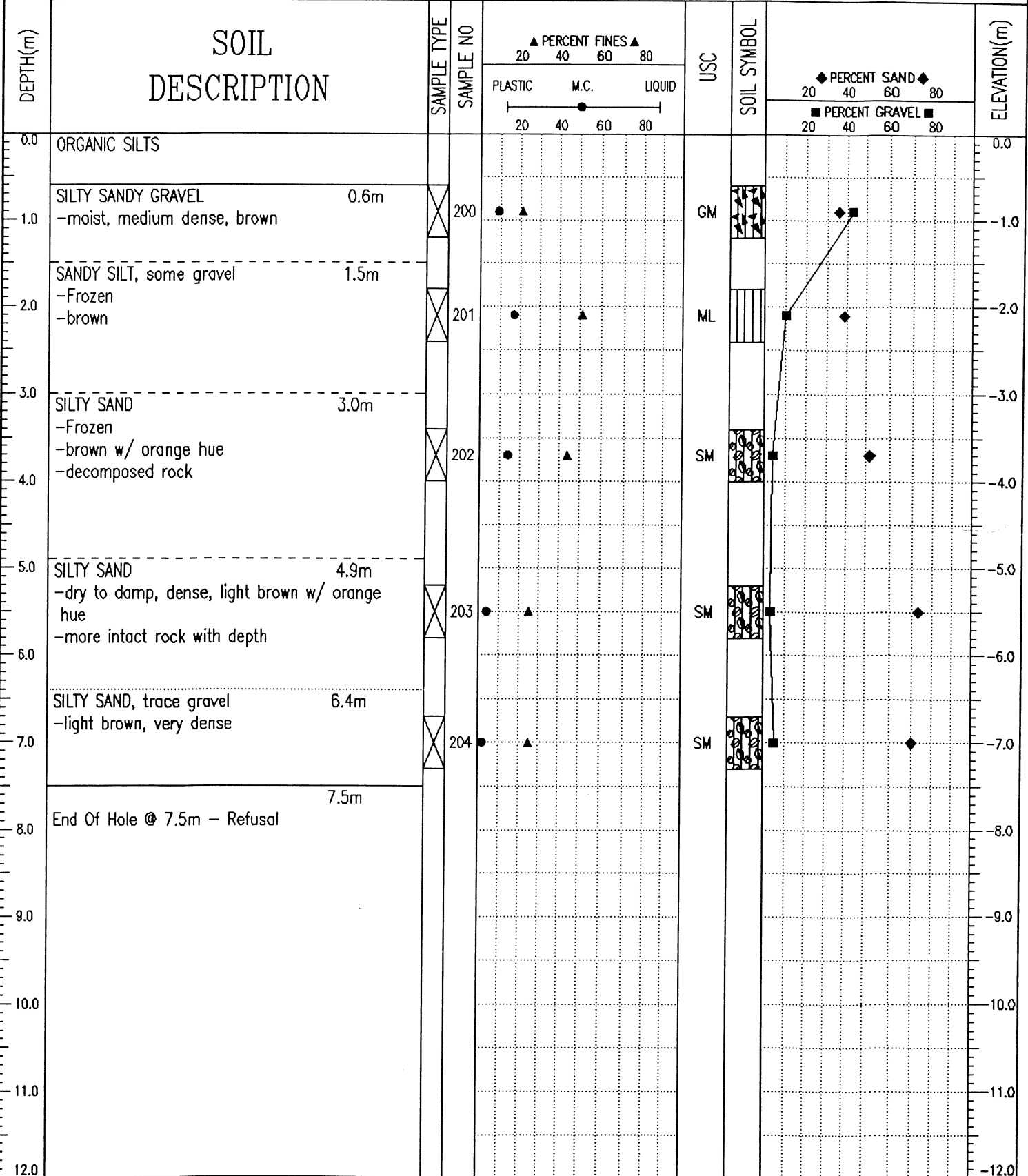
Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30123	
Donjek Services Ltd.		UTM ZONE: - N6772714 E633863		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

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	
12.0													-12.0
13.0													-13.0
14.0													-14.0
15.0													-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

15.1m End Of Hole @ 15.1m -refusal @ 4.9m - move north 1.5m	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>LOGGED BY: RW</td> <td>COMPLETION DEPTH: 15.1 m</td> </tr> <tr> <td>REVIEWED BY: -</td> <td>COMPLETE: 08/11/04</td> </tr> <tr> <td>Fig. No: 43</td> <td>Page 2 of 2</td> </tr> </table>	LOGGED BY: RW	COMPLETION DEPTH: 15.1 m	REVIEWED BY: -	COMPLETE: 08/11/04	Fig. No: 43	Page 2 of 2
LOGGED BY: RW	COMPLETION DEPTH: 15.1 m						
REVIEWED BY: -	COMPLETE: 08/11/04						
Fig. No: 43	Page 2 of 2						

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30124
Donjek Services Ltd.	UTM ZONE: - N6772909 E633827	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: 42

COMPLETION DEPTH: 7.5 m
COMPLETE: 08/11/04
Page 1 of 1

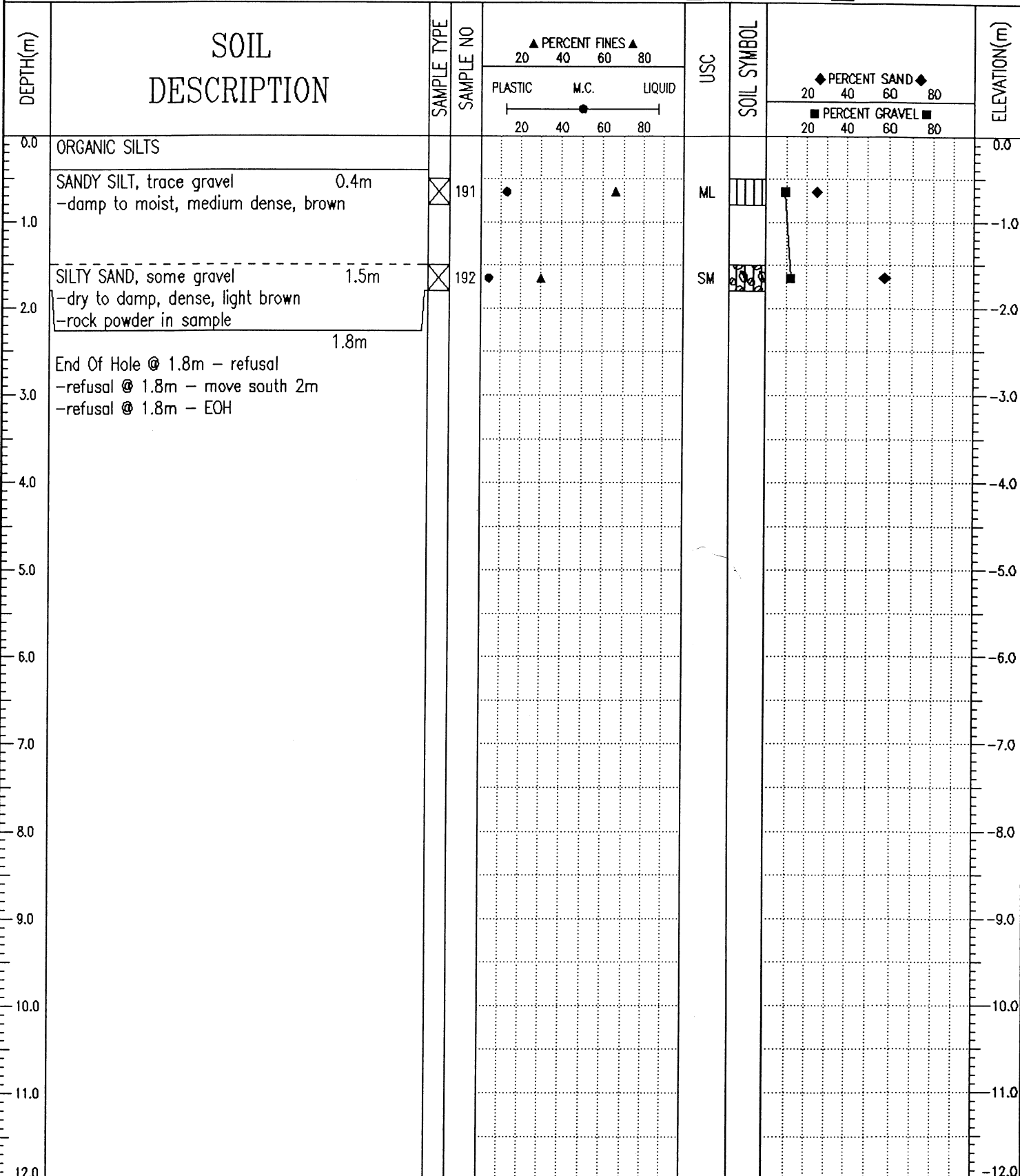
Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30125	
Donjek Services Ltd.		UTM ZONE: - N6773058 E633772		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

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	SURFICIAL ORGANICS										0.0
0.1	SANDY GRAVEL, trace silt -dry to damp, medium dense, light brown	X	193	▲			GW-GM		◆	■	-0.1
1.5	SILTY GRAVELLY SAND -damp, medium dense, brown	X	194	●	▲		SM		◆		-1.5
3.4	SILTY GRAVELLY SAND -moist, medium dense, brown	X	195	●	▲		SM		◆	■	-3.4
4.3	SILTY GRAVELLY SAND -moist to wet, medium dense, brown	X	196	●	▲		SM		◆	■	-4.3
6.1	GRAVELLY SILTY SAND -saturated, medium dense, brown	X	197	●	▲		SM		◆	■	-6.1
7.9	SILTY SAND, trace gravel -moist, medium dense, grey	X	198	●	▲		SM		◆	■	-7.9
10.7	End Of Hole @ 10.7m	X	199	●	▲		SM		◆	■	-10.7

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
REVIEWED BY:
Fig. No: 40

COMPLETION DEPTH: 1.8 m
COMPLETE: 08/10/04

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30127	
Donjek Services Ltd.		UTM ZONE: - N6773331 E633619		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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 20 40 60 80	M.C. 20 40 60 80	LIQUID 20 40 60 80			PERCENT SAND 20 40 60 80	PERCENT GRAVEL 20 40 60 80	
0.0	ORGANIC SILTS										0.0
0.3	GRAVELLY SILTY SAND -Frozen, no visible ice -brown		188	▲			SM		■	◆	-1.0
2.0			189	●	▲		SM		■	◆	-2.0
4.0	SILTY SAND -dry to damp, dense, light brown -powder in sample		190	●	▲		SM		■	◆	-4.0
4.6	End Of Hole @ 4.6m - Refusal -refusal @ 4.6m - move east 2m -refusal @ 4.4m - EOH -rock powder on bit at refusal on both attempts										-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: 08/10/04
		Fig. No: 39	Page 1 of 1

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					

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 30127 -refusal @ 4.6m & 4.4m												0.0
4.0	SILTY SAND 3.7m -dry to damp, brown/grey -minimal chips in sample -minimal powder, more fine sands -drill advanced steadily -not hard drilling												4.0
5.0			R80				SM						5.0
7.0			R81				SM						7.0
8.0	7.6m End Of Hole @ 7.6m - Cannot Determine Rock												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: 7.6 m
		REVIEWED BY: -	COMPLETE: 09/28/04
		Fig. No: 129	Page 1 of 1

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					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		ELEVATION(m)
				PLASTIC 20 40 60 80	M.C. 20 40 60 80	LIQUID 20 40 60 80			PERCENT SAND 20 40 60 80	PERCENT GRAVEL 20 40 60 80	
0.0	ORGANIC SILTS										0.0
0.3	GRAVELLY SAND, some silt -dry to damp, medium dense, light brown	☒	184	▲			SW-SM		◆		-0.3
1.5	SILTY SAND -moist, dense, light brown with odd yellow/green hue -water seepage at approx. 1.5m	☒	185	▲			SM		◆		-1.5
4.6	SILTY SAND -moist, dense, light brown with odd yellow/green hue	☒	186	▲			SM		◆		-4.6
5.9	End Of Hole @ 5.9m -standing water in testhole approx. 100mm below surface during drilling of 4.4 to 4.7m	☒	187	▲			SM		◆		-5.9

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW		COMPLETION DEPTH: 5.9 m	
		REVIEWED BY:		COMPLETE: 08/10/04	
		Fig. No: 38		Page 1 of 1	

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30129	
Donjek Services Ltd.		UTM ZONE: - N6773473 E633531		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS							0.0
1.0	SANDY SILT 0.6m -moist, soft to firm, brown with some black organic silts	X	181	● ● ▲	ML	■ ◆		-1.0
2.0	SILTY GRAVELLY SAND 1.5m -moist to wet, medium dense, brown	X	182	● ▲	SM	■ ◆		-2.0
3.0	SILTY SAND, some gravel 3.0m -damp, dense, brown	X	183	● ▲	SM	■ ◆		-3.0
4.0	End Of Hole @ 4.0m - Refusal -refusal @ 3.7m - move south 1.5m -refusal @ 4.0m - EOH							-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	COMPLETION DEPTH: 4 m
		REVIEWED BY: -	COMPLETE: 08/10/04
		Fig. No: 37	Page 1 of 1

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					

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 30129 -refusal @ 3.7m & 4.0m											0.0
				4.0	SANDY GRAVEL (Cannot Determine Rock) 3.7m -dry, brown/grey -some rock chips -minimal powder -steady drilling											-4.0
5.0			R82						-5.0							
7.0	ROCK 7.0m -dry, grey -significant powder		R83			ROCK			-7.0							
8.0	End Of Hole @ 7.6m								-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: 7.6 m
		REVIEWED BY: -	COMPLETE: 09/29/04
		Fig. No: 130	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30130	
Donjek Services Ltd.		UTM ZONE: - N6773537 E633472		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS											0.0
0.6m	GRAVELLY SILTY SAND		176				SM					-1.0
1.0	-Frozen -brown -possible water seepage 2.7m to 3.7m											
2.0			177				SM					-2.0
3.7m	GRAVELLY SILTY SAND											
4.0	-damp to moist, dense, brown											
4.9m	SILTY SAND, trace gravel		178				SM					-5.0
5.0	-damp, dense, brown											
5.8m	SILTY SAND											
6.0	-dry to damp, dense, light brown -powder like sample -very slow drilling											
7.0			179				SM					-7.0
8.2m	End Of Hole @ 8.2m - Refusal -refusal @ 4.9m - move north 2m -refusal @ 8.2m - EOH -Visible water in hole upon auger withdrawal of attempt #1.											-8.2
8.2m												
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: 8.2 m
		REVIEWED BY: -	COMPLETE: 08/10/04
		Fig. No: 36	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30131	
Donjek Services Ltd.		UTM ZONE: - N6773651 E633423		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS										0.0
0.3	SANDY SILT, trace gravel -Frozen -brown	X	173				ML				-0.3
1.5	SILTY SAND, some gravel -Frozen -brown	X	174				SM				-1.5
3.4	SILTY SAND -dry to damp, dense, light brown -rock powder in sample	X	175				SM				-3.4
4.0	End Of Hole @ 4.0m - Refusal -refusal @ 4.0m - move north 2.5m -refusal @ 4.0m - EOH -rock powder on bit at refusal on both attempts -visible rock outcropping approx. 10m west of testhole										-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	COMPLETION DEPTH: 4 m
		REVIEWED BY: -	COMPLETE: 08/10/04
		Fig. No: 35	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30131R	
Midnight Sun Drilling Ltd.		UTM ZONE: - N6773655 E633418		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 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		R85				ROCK						-4.9
6.1	End Of Hole @ 6.1m												-6.1
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: 6.1 m
		REVIEWED BY:	COMPLETE: 09/29/04
		Fig. No: 131	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30132	
Donjek Services Ltd.		UTM ZONE: - N6773786 E633337		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS										0.0
1.0	SILTY SAND, trace to some gravel 0.9m -Frozen -brown	☒	170	●	▲		SM		■	◆	-1.0
2.0		☒	171	●	▲		SM		■	◆	-2.0
3.0	AS ABOVE 3.2m -Unfrozen	☒	172	●	▲		SM		■	◆	-3.0
4.0	-damp, medium dense, brown 4.0m	☒									-4.0
5.0	End Of Hole @ 4.0m - Refusal -refusal @ 0.9m - move south 5m -refusal @ 4.0m - EOH -rock powder on bit at refusal on both attempts										-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 m
		REVIEWED BY: -	COMPLETE: 08/09/04
		Fig. No: 34	Page 1 of 1

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 ▲ 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 30132 -refusal @ 0.9m & 4.0m									0.0
1.0										-1.0
2.0										-2.0
3.0										-3.0
4.0	ROCK (possibly fractured) 3.4m -dry, grey w/ odd brown seam									-4.0
5.0	ROCK 4.6m -dry, grey -significant powder -rock chips		R86			ROCK				-5.0
6.0			R87			ROCK				-6.0
7.0	End Of Hole @ 6.4m 6.4m									-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: 133		COMPLETION DEPTH: 6.4 m COMPLETE: 09/28/04 Page 1 of 1				

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					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			ELEVATION(m)		
				▲ PERCENT FINES ▲		PLASTIC M.C. LIQUID			◆ PERCENT SAND ◆		■ PERCENT GRAVEL ■			
				20	40	20			40	20	40		60	80
0.0	ORGANIC SILTS											0.0		
0.6	SILTY GRAVELLY SAND													
1.0	-Frozen -brown	☒	168	●	▲		SM		◆			-1.0		
1.8	SILTY SAND													
2.0	-damp, dense, brown	☒	169	●	▲		SM		◆			-2.0		
2.7	End Of Hole @ 2.7m - Refusal													
	-refusal @ 2.7m - move south 3m													
	-refusal @ 2.6m - EOH													
	-rock powder on bit at refusal on both attempts													
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	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 & 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 30133 -refusal @ 2.7m & 2.6m												0.0
1.0													-1.0
2.0													-2.0
3.0	ROCK 2.4m -dry, grey -significant powder -rock chips -more intact w/ depth												-3.0
4.0													-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: 09/28/04
		Fig. No: 134	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30134	
Donjek Services Ltd.		UTM ZONE: - N6674008 E633158		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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 ◆ ■ PERCENT GRAVEL ■ 20 40 60 80 20 40 60 80		ELEVATION(m)
0.0	SURFICIAL ORGANICS								0.0		
1.0	SILTY GRAVELLY SAND 0.9m -damp, medium dense, brown	☒	166	● ▲	SM		◆ ◆		-1.0		
2.0	SILTY SAND, trace gravel 1.8m -dry to damp, dense, light brown	☒	167	● ▲	SM		◆ ◆		-2.0		
3.0	End Of Hole @ 2.7m - Refusal -refusal @ 2.7m - move west 2m -refusal @ 1.5m - EOH -rock powder on bit at refusal on both attempts								-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	COMPLETION DEPTH: 2.7 m
		REVIEWED BY: -	COMPLETE: 08/09/04
		Fig. No: 32	Page 1 of 1

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 -dry, grey -significant powder -rock chips 1.2m							-2.0
			R89		ROCK			
3.0								-3.0
4.0	End Of Hole @ 4.0m 4.0m							-4.0
			R90		ROCK			
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					

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	
0.0	SURFICAL ORGANICS -Frozen											0.0
1.0	SILTY SAND, some gravel 0.9m -Frozen -brown	X	164	•	▲		SM		■	◆		-1.0
2.0	SILTY SAND 1.8m -damp -light brown	X	165	•	▲		SM		■	◆		-2.0
3.0	End Of Hole @ 3.0m - Refusal -Some rock powder on bit at depth -refusal @ 1.5m - move south 2m -refusal @ 3.0m - EOH											-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	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 & 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 30135 -refusal @ 1.5m & 3.0m												0.0
1.0													-1.0
2.0													-2.0
2.4	ROCK												-2.4
3.0	-possibly fractured -some brown sand infill -some powder												-3.0
3.7	ROCK												-3.7
4.0	-dry, grey -significant powder -rock chips -intact		R91					ROCK					-4.0
4.6	End Of Hole @ 4.6m												-4.6
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: 4.6 m
		REVIEWED BY: -	COMPLETE: 09/28/04
		Fig. No: 136	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30136	
Donjek Services Ltd.		UTM ZONE: - N6674206 E633003		PROJECT NO: 9002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SURFICIAL ORGANICS								0.0		
0.6	SILTY SAND, some gravel										
1.0	-Frozen -brown		162			SM			-1.0		
1.5	SILTY SAND										
2.0	-Frozen -brown		163			SM			-2.0		
2.1	End Of Hole @ 2.1m - Refusal -refusal @ 2.1m - move 2m south -refusal @ 2.1m - EOH										
3.0									-3.0		
4.0									-4.0		
5.0									-5.0		
6.0									-6.0		

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

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30136R	
Midnight Sun Drilling Ltd.		UTM ZONE: - N6774199 E633004		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
0.0	AS PER SOILS LOG 30136 -refusal @ 2.1m both attempts				
1.0					
2.0					
3.0	ROCK 2.4m -dry, grey -significant powder -rock chips -more intact w/ depth		R92		ROCK
4.0					
5.0	End Of Hole @ 4.6m 4.6m		R93		ROCK
6.0					
7.0					
8.0					
9.0					
10.0					
11.0					
12.0					
J. R. Paine & Associates Ltd.		LOGGED BY: RW		COMPLETION DEPTH: 4.6 m	
Whitehorse, Yukon		REVIEWED BY: -		COMPLETE: 09/28/04	
		Fig. No: 137		Page 1 of 1	

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30148	
Donjek Services Ltd.		UTM ZONE: - N6775613 E632037		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

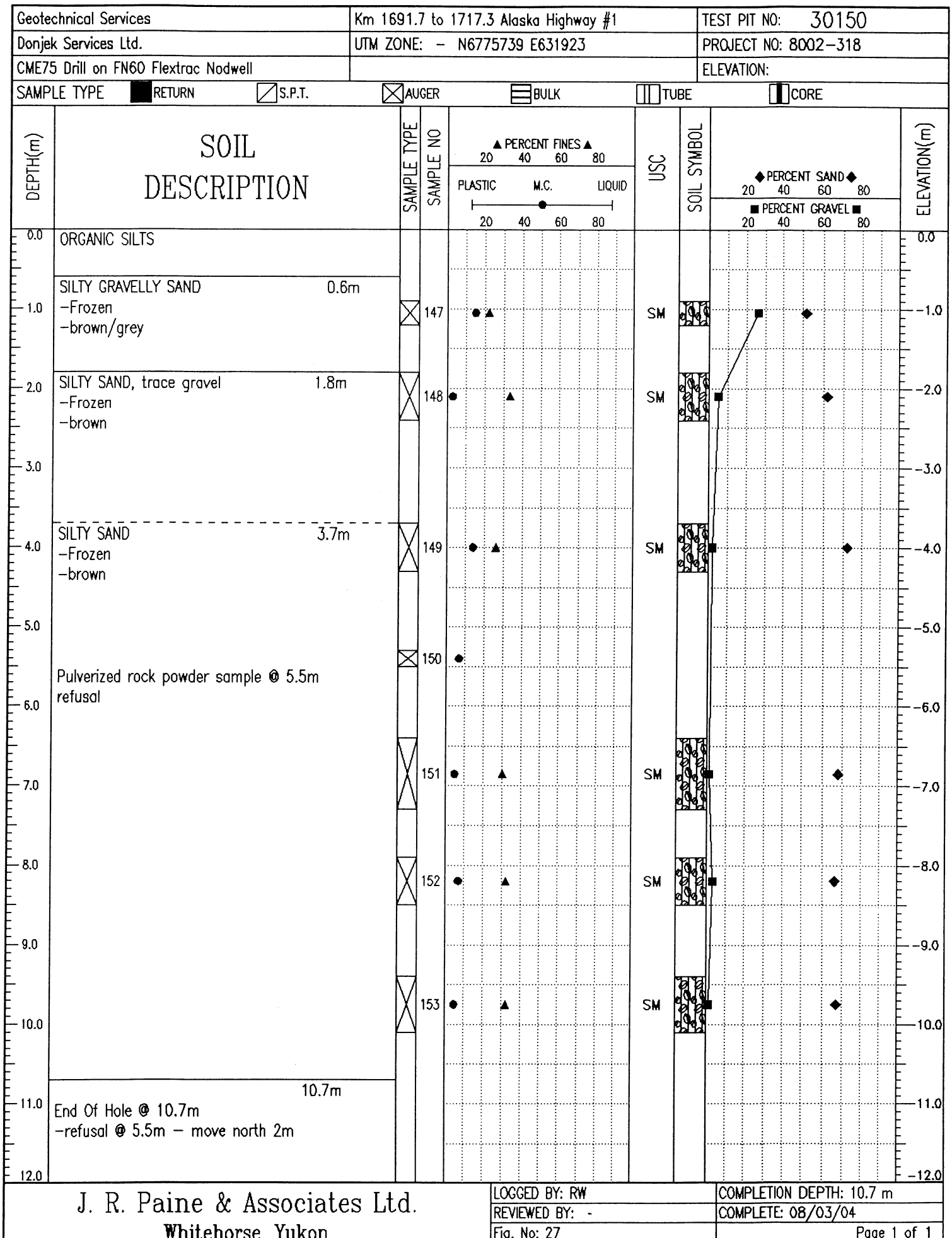
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	ORGANIC SILTS							0.0
1.0	SILTY SAND, some gravel 0.9m -Frozen -dark brown -some organic silts	☒	158	● ▲	SM	■ ◆		-1.0
2.0	SILTY SAND, some gravel to GRAVELLY 1.8m -Frozen -brown	☒	159	● ▲	SM	■ ◆		-2.0
4.0		☒	160	● ▲	SM	■ ◆		-4.0
5.0	Pulverized rock sample @ refusal	☒	161	●				-5.0
5.2	End Of Hole @ 5.2m - Refusal							-5.2
6.0	-refusal @ 5.2m - move north 2m -refusal @ 5.2m - EOH							-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: 5.2 m
		REVIEWED BY: -	COMPLETE: 08/03/04
		Fig. No: 29	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30149	
Donjek Services Ltd.		UTM ZONE: - N6775666 E631983		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS										0.0
1.0	SILTY GRAVELLY SAND 0.9m -Frozen -brown	X	154	●	▲		SM		■	◆	-1.0
2.0	GRAVELLY SILTY SAND -Frozen -brown	X	155	●	▲		SM		■	◆	-2.0
4.0	SILTY SAND, trace gravel 3.7m -Frozen -brown	X	156	●	▲		SM		■	◆	-4.0
5.0	Pulverized rock powder sample @ refusal	X	157	●							-5.0
6.0	End Of Hole @ 5.5m - Refusal -refusal @ 4.7m - move north 2m -refusal @ 5.5m - EOH										-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: 5.5 m
		REVIEWED BY: -	COMPLETE: 08/03/04
		Fig. No: 28	Page 1 of 1



Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30151	
Donjek Services Ltd.		UTM ZONE: - N6775813 E631868		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	ORGANIC SILTS -Frozen											0.0
-1.0	SILTY SAND, trace gravel 0.9m -Frozen -brown	☒	144	20	40	60	SM		20	40	60	-1.0
-2.0		☒	145	20	40	60	SM		20	40	60	-2.0
-3.0	Pulverized rock sample @ refusal -damp, light brown	☒	146	20	40	60			20	40	60	-3.0
-4.0	End Of Hole @ 4.0m - Refusal 4.0m -refusal @ 3.2m - move south 2m -refusal @ 4.0m - EOH											-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	COMPLETION DEPTH: 4 m
		REVIEWED BY: -	COMPLETE: 08/03/04
		Fig. No: 26	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30152	
Donjek Services Ltd.		UTM ZONE: - N6775939 E631805		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	GRAVELLY SAND, some silt -damp, medium dense, brown/grey	☒	140	20	40	60	80	SW-SM	20	40	60	80	0.0
2.1	SILTY SAND -damp, medium dense, brown w/ some dark organic silts	☒	141	20	40	60	80	SM	20	40	60	80	-2.1
3.0	SANDY SILT -damp, medium dense, brown	☒	142	20	40	60	80	ML	20	40	60	80	-3.0
5.2	Pulveized rock sample @ refusal -dry to damp, light grey	☒	143	20	40	60	80	SM	20	40	60	80	-5.2
5.2	End Of Hole @ 5.2m - Refusal Testhole located in existing ditch												-5.2

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 5.2 m
		REVIEWED BY: -	COMPLETE: 08/03/04
		Fig. No: 25	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30153	
Donjek Services Ltd.		UTM ZONE: - N6776010 E631728		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	80
0.0	SURFICAL ORGANICS										0.0		
0.15m	SILTY SAND, some gravel -moist, loose, brown -organics noted to 0.6m depth	X	135	●	▲		SM	■	◆		-1.0		
1.2m	SILTY SAND, trace gravel -Frozen -brown	X	136	●	▲		SM	■	◆		-2.0		
3.0m	SILTY SAND, some gravel -damp, dense, brown	X	137	●							-3.0		
5.2m	SANDY SILT -damp, medium dense, brown/dark grey -easier drilling @ 5.2m	X	138	●	▲		ML	■	◆		-5.0		
7.6m	Pulverized rock sample @ refusal -dry, damp, light grey	X	139	●							-7.0		
7.6m	End Of Hole @ 7.6m - Refusal -refusal @ 7.6m - move east 1m -refusal @ 3.7m - EOH										-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: 7.6 m
		REVIEWED BY: -	COMPLETE: 08/03/04
		Fig. No: 24	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30154	
Donjek Services Ltd.		UTM ZONE: - N6776060 E631698		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

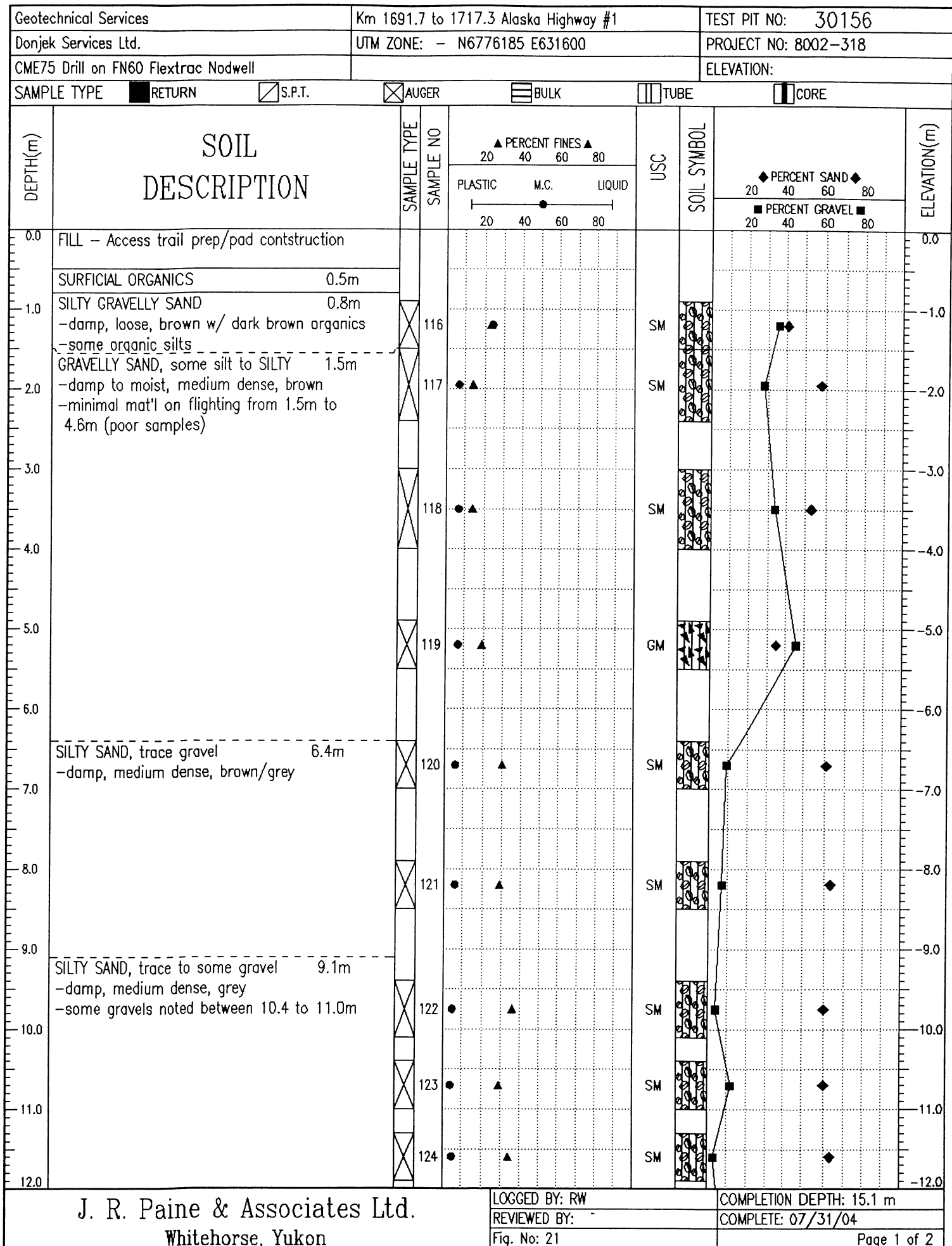
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			ELEVATION(m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	SURFICIAL ORGANICS											0.0
0.0 - 0.3	GRAVELLY SILTY SAND -Frozen -brown/grey	X	132				SM					-0.15
0.3 - 1.5	SILTY SAND -Frozen -brown	X	133				SM					-1.4
1.5 - 3.0	GRAVELLY SILTY SAND -Frozen -brown	X	134				SM					-2.25
3.0 - 5.3	GRAVELLY SILTY SAND -Frozen -brown	X	134				SM					-3.65
5.3 - 5.3	End Of Hole @ 5.3m - Refusal -refusal @ 5.3m - move east 1m -refusal @ 2.4m - EOH											-5.3
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: 5.3 m
		REVIEWED BY:	COMPLETE: 07/31/04
		Fig. No: 23	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30155	
Donjek Services Ltd.		UTM ZONE: - N6776117 E631643		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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					PERCENT GRAVEL ■			
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	SURFICAL ORGANICS ORGANIC SILTS -damp, firm, dark brown										0.0	
0.1m												
1.0	SILTY GRAVELLY SAND -damp to moist, medium dense, brown	X	127	●	▲		SM		◆		-1.0	
1.5m	GRAVELLY SAND, some silt to SILTY -Frozen -brown	X	128	●	▲		SM		◆		-2.0	
2.0		X	129	●	▲		SM		◆		-3.0	
3.0		X	130	●	▲		SM		◆		-4.0	
4.0		X	131	●	▲		SM		◆		-5.0	
4.6m	SILTY GRAVELLY SAND -Frozen -brown	X									-6.0	
5.0											-7.0	
7.0	End Of Hole @ 7.0m - Refusal -refusal 3.0m - move east 1m -refusal 7.0m - move east 2m -refusal 4.0m - EOH										-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	COMPLETION DEPTH: 7 m
		REVIEWED BY: -	COMPLETE: 07/31/04
		Fig. No: 22	Page 1 of 1



Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30156	
Donjek Services Ltd.		UTM ZONE: - N6776185 E631600		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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.			PERCENT SAND		PERCENT GRAVEL	
				20	40	60			80	20	40	
12.0												-12.0
13.0			125	●	▲		SM		■	◆		-13.0
14.0			126	●	▲		SM		■	◆		-14.0
15.0	End Of Hole @ 15.1m											-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: 15.1 m
		REVIEWED BY: -	COMPLETE: 07/31/04
		Fig. No: 21	Page 2 of 2

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30157	
Donjek Services Ltd.		UTM ZONE: - N6776190 E631655		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

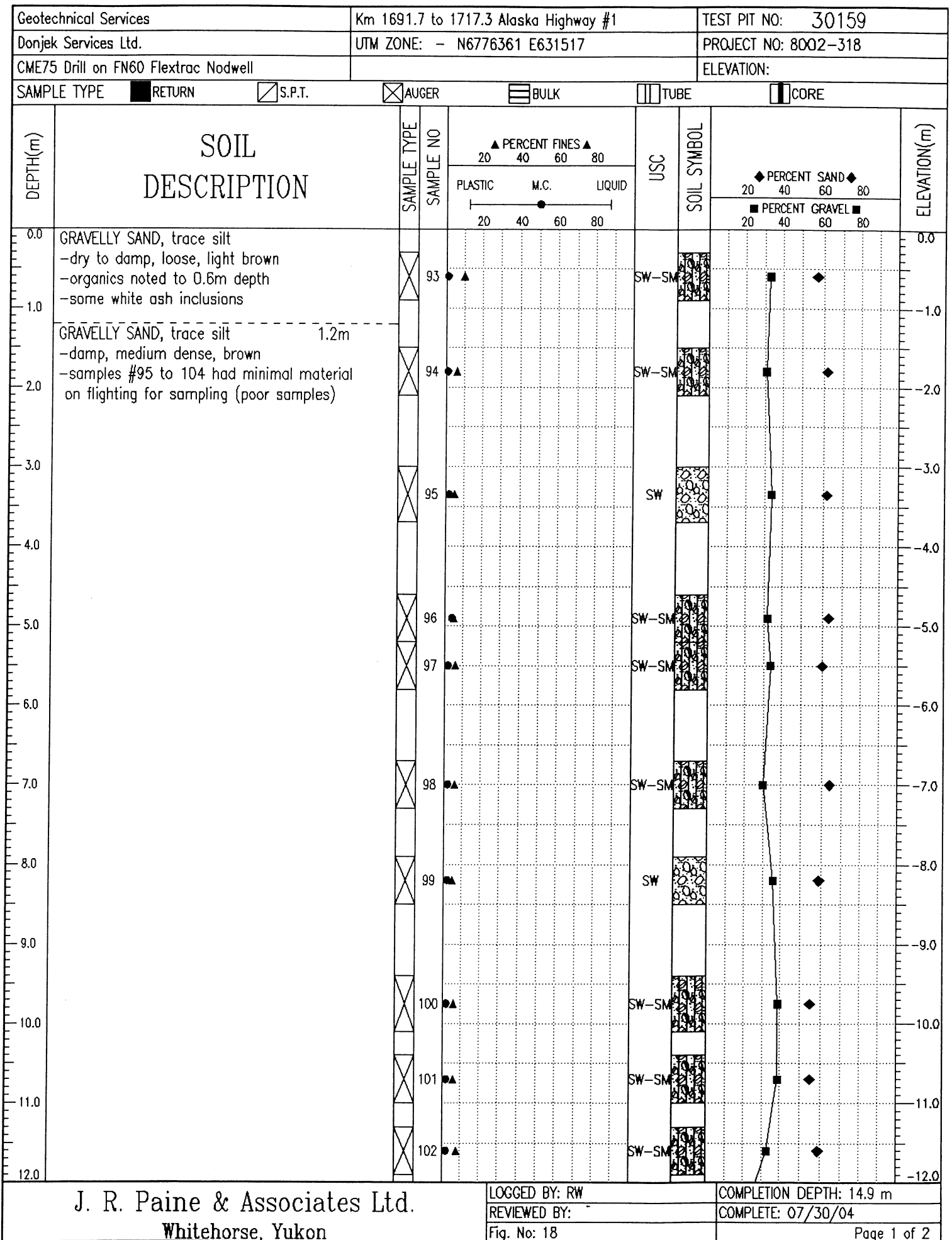
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	SURFICIAL ORGANICS							0.0
0.0 - 0.1	SANDY GRAVEL, trace to some silt -damp, medium dense, brown		111	▲	GW-GM		◆	-0.1
0.1 - 1.0	-samples #114 & 115 had minimal material on flighting for sampling (poor samples)							
1.0 - 2.0			112	● ▲	GM		◆	-2.0
2.0 - 3.0			113	● ▲	SM		◆	-3.0
3.0 - 4.0			114	● ▲	SM		◆	-4.0
4.0 - 5.0			115	● ▲	SM		◆	-5.0
5.0 - 5.8								-5.8
5.8	End Of Hole @ 5.8m							-5.8
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: 5.8 m
		REVIEWED BY:	COMPLETE: 07/30/04
		Fig. No: 20	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30158	
Donjek Services Ltd.		UTM ZONE: - N6776272 E631563		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	FILL - Access trail prep/pad construction										0.0
1.0	ORGANIC SILTS 0.8m -Frozen -no visible ice -black/dark brown	☒	106				ML				-1.0
2.0	SILTY GRAVELLY SAND 1.5m -Frozen -brown	☒	107				SM				-2.0
3.0	GRAVELLY SAND, some silt to SILTY 3.0m -Frozen -brown	☒	108				SM				-3.0
4.0		☒	109				SM				-4.0
5.0		☒	110				SM				-5.0
6.0											-6.0
7.0	End Of Hole @ 6.2m - Refusal -refusal @ 6.2m - move north 2m -resusal @ 1.8m - move north 1m -refusal @ 1.5m - move south 1.5m -refusal @ 4.0m - EOH										-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: 6.2 m
		REVIEWED BY: -	COMPLETE: 07/30/04
		Fig. No: 19	Page 1 of 1



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					

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				
12.0				20	40	60	80			20	40	60	80	-12.0
13.0	SILTY SAND, some gravel -moist, medium dense, brown	X	103					SM						-13.0
14.0	GRAVELLY SAND, some silt -damp, medium dense, brown	X	104					SW-SM						-14.0
15.0		X	105					SW-SM						-15.0
14.9	End Of Hole @ 14.9m													-14.9
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: 14.9 m
		REVIEWED BY:	COMPLETE: 07/30/04
		Fig. No: 18	Page 2 of 2

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30160	
Donjek Services Ltd.		UTM ZONE: - N6776506 E631499		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

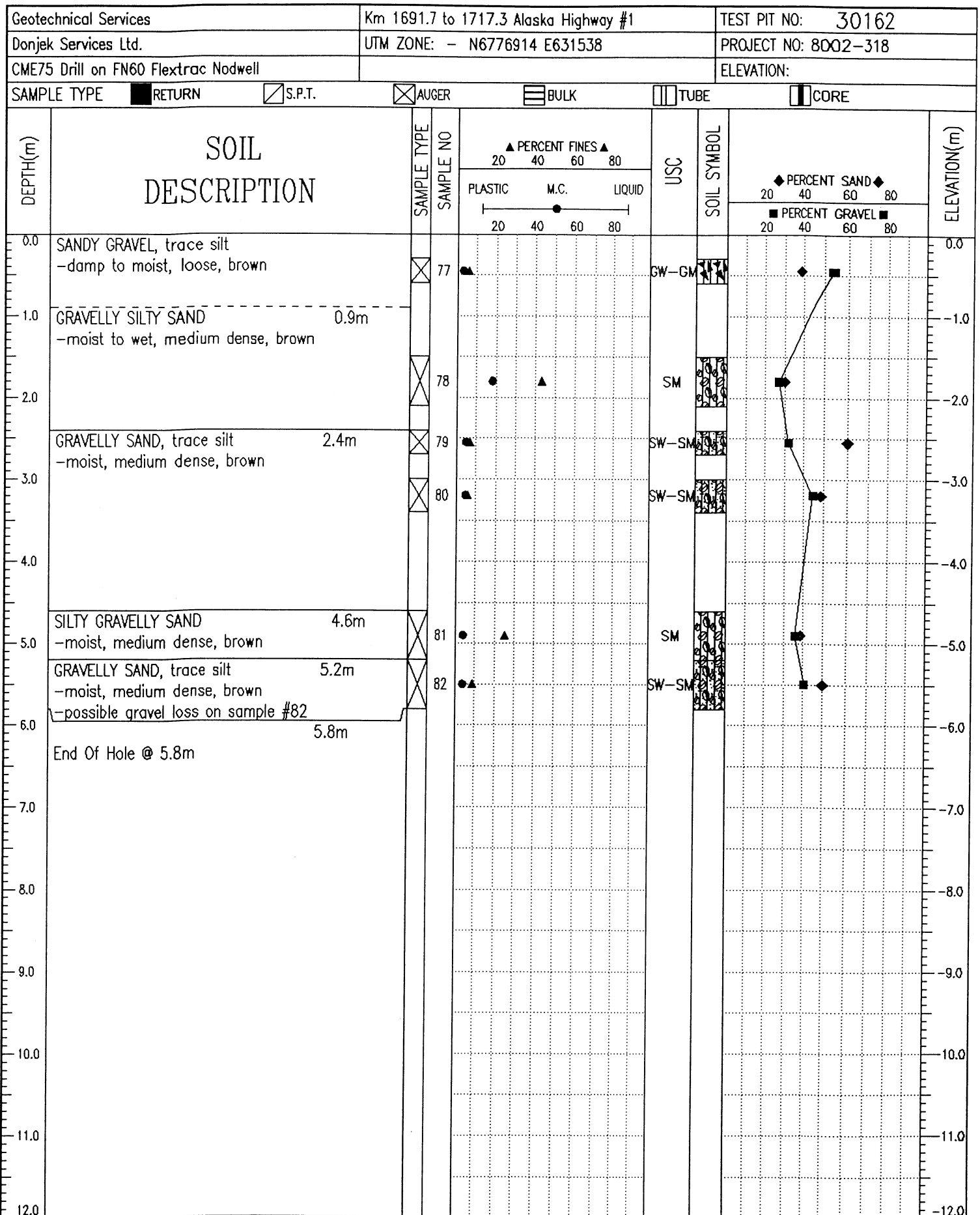
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			ELEVATION(m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	GRAVELLY SAND -damp, loose, brown/grey	X	88					SW					0.0
1.0		X											-1.0
2.0	SAND, some silt, some gravel 1.7m -wet, medium dense, brown/grey	X	89					SM					-2.0
3.0	ORGANIC SILTS 2.4m -moist, soft to firm, dark brown w/ black inclusions -increase moisture to wet/saturated @ 3.0m	X	90					ML					-3.0
4.0	GRAVELLY SAND, trace silt 3.4m -saturated, medium dense, brown/grey	X	91					SW-SM					-4.0
5.0		X											-5.0
6.0		X	92					SW-SM					-6.0
7.0	End Of Hole @ 6.1m 6.1m												-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: 6.1 m
		REVIEWED BY: -	COMPLETE: 07/29/04
		Fig. No: 17	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30161	
Donjek Services Ltd.		UTM ZONE: - N6776711 E631513		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		ELEVATION(m)
			PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	SURFICAL ORGANCIS									0.0
0.2	SANDY GRAVEL, trace silt -damp to moist, loose, brown	83	▲			GP-GM		◆	■	-0.2
1.0	SANDY GRAVEL/GRAVELLY SAND, trace silt									-1.0
1.0	-moist, medium dense, brown	84	▲			GP-GM		◆	■	-1.0
2.0										-2.0
2.0		85	●			SW-SM		◆	■	-2.0
3.0										-3.0
3.0		86	●	▲		GM		◆	■	-3.0
4.0	SILTY SANDY GRAVEL -moist, medium dense, brown									-4.0
4.0	GRAVELLY SAND, some silt									-4.0
4.4	-moist, medium dense, brown	87	●	▲		SM		◆	■	-4.4
5.0										-5.0
5.0										-5.0
5.8	End Of Hole @ 5.8m									-5.8
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: 5.8 m
		REVIEWED BY:	COMPLETE: 07/29/04
		Fig. No: 16	Page 1 of 1



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

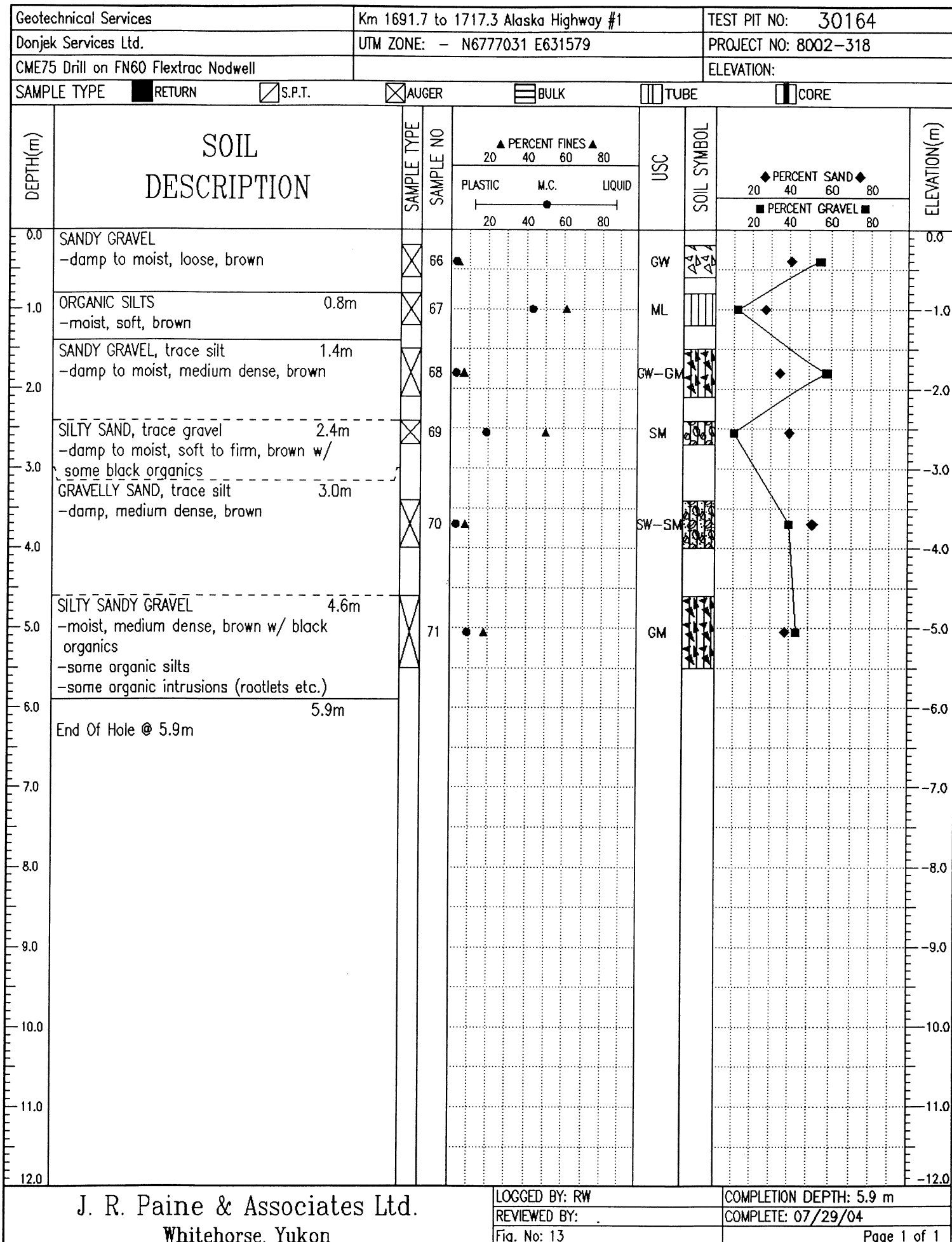
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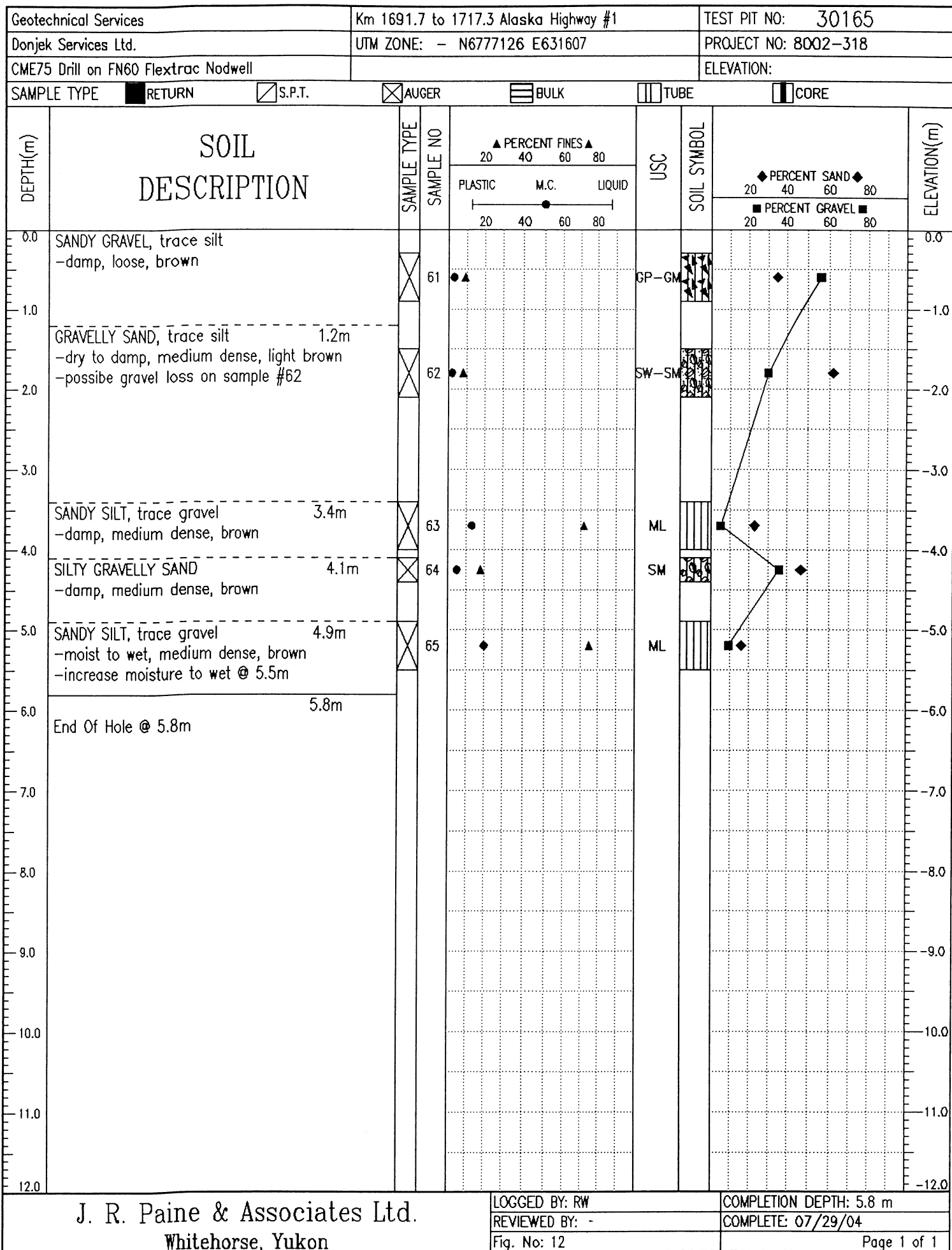
COMPLETION DEPTH: 5.8 m
COMPLETE: 07/29/04

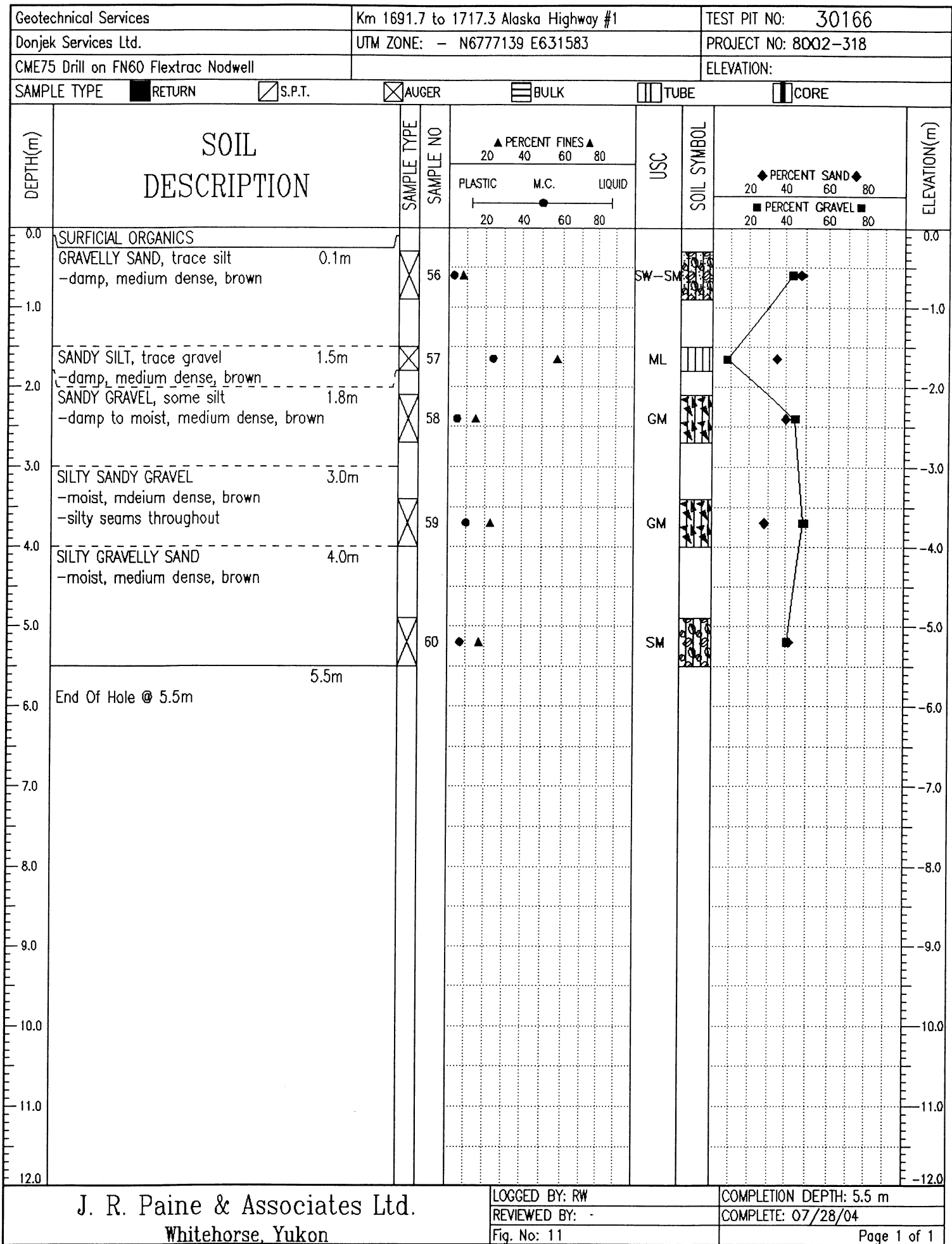
Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30163	
Donjek Services Ltd.		UTM ZONE: - N6776900 E631563		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	SANDY GRAVEL, some silt -damp to moist, loose, brown -silt seam noted between 0.6 & 0.8m	X	72	● ▲	SM		◆ ●	0.0
1.5	GRAVELLY SILTY SAND -moist, soft, brown -some organics noted (rootlets)	X	73	● ▲	SM		◆ ●	-1.0
2.0	SANDY GRAVEL/GRAVELLY SAND, trace silt 2.0m -moist, medium dense, brown -some oxidation on gravels	X	74	● ▲	SM		◆ ●	-2.0
4.0		X	75	● ▲	GW-GM		◆ ●	-4.0
5.2	GRAVELLY SAND, trace silt -saturated, medium dense, brown	X	76	● ▲	SW-SM		◆ ●	-5.2
5.8	End Of Hole @ 5.8m							-5.8
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: 5.8 m
		REVIEWED BY: .	COMPLETE: 07/29/04
		Fig. No: 14	Page 1 of 1







Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30167	
Donjek Services Ltd.		UTM ZONE: - N677298 E631589		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SURFICAL ORGANICS										0.0
0.05m	SILTY SAND, some gravel -damp, loose, brown		51				GW-GM				-1.0
0.5m	SANDY GRAVEL, trace silt -damp, medium dense, brown		52				GM				-2.0
1.5m	SANDY SILTY GRAVEL -moist, medium dense, brown		53				GP-GM				-3.0
2.3m	SANDY GRAVEL, trace silt -damp, medium dense, brown		54				SM				-4.0
3.4m	SANDY GRAVEL/GRAVELLY SAND, some silt -damp to moist, medium dense, brown -some oxidation noted		55				GM				-5.0
5.8m	End Of Hole @ 5.8m										-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											-12.0

J. R. Paine & Associates Ltd. Whitehorse, Yukon		LOGGED BY: RW	COMPLETION DEPTH: 5.8 m
		REVIEWED BY: -	COMPLETE: 07/28/04
		Fig. No: 10	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30168	
Donjek Services Ltd.		UTM ZONE: - N6777587 E631509		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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)		
				20	40	60			80	20	40		60	80
0.0	SURFICIAL ORGANICS											0.0		
0.2	SILTY GRAVELLY SAND -damp, loose, brown	X	45	●	▲		SM		◆			-0.2		
0.6	SANDY GRAVEL, trace silt -damp, medium dense, brown	X	46	▲			GP-GM		◆	■		-0.6		
1.8	SILTY SANDY GRAVEL -moist, medium dense, brown	X	47	●	▲		GM		◆			-1.8		
2.7	GRAVELLY SAND, trace to some silt -damp, medium dense, brown											-2.7		
4.0		X	48	●	▲		SM		■	◆		-4.0		
4.9		X	49	●	▲		SW-SM		■	◆		-4.9		
5.5	SANDY GRAVELLY SILT -moist, firm, light brown w/ some black organics -some gravel in sample #50 is from top of hole	X	50	●	▲		ML		◆	■		-5.5		
5.8	End Of Hole @ 5.8m											-5.8		
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: 5.8 m
		REVIEWED BY: -	COMPLETE: 07/28/04
		Fig. No: 9	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30169	
Donjek Services Ltd.		UTM ZONE: - N6777708 E631458		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				ELEVATION:	

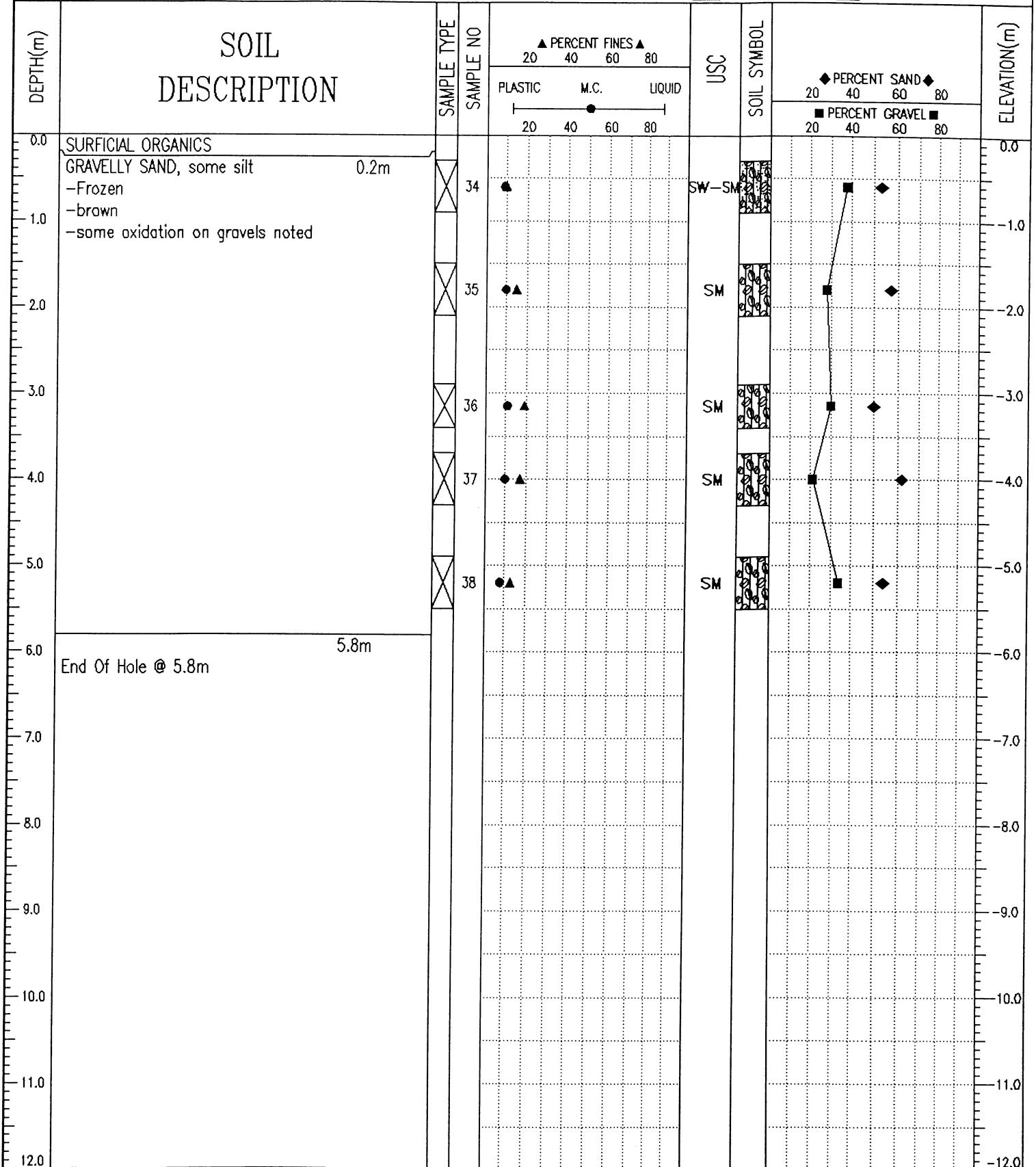
SAMPLE TYPE		☒ RETURN	☒ S.P.T.	☒ AUGER	☐ BULK	☐ TUBE	☐ CORE
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DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		ELEVATION(m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	SURFICIAL ORGANICS										0.0
0.0 - 0.2	GRAVELLY SAND, trace to some silt -Frozen -brown	X	39	●	▲		SM		■	◆	-0.1
0.2 - 2.0		X	40	●	▲		SW-SM		■	◆	-1.9
2.0 - 4.0		X	41	●	▲		SM		■	◆	-2.9
4.0 - 4.9	SANDY SILT, some gravel -Frozen -brown/light brown, some black organics	X	42	●			SW-SM		■	◆	-3.9
4.9 - 5.8	GRAVELLY SILTY SAND -Frozen -brown	X	43	●	▲		ML		■	◆	-4.9
5.8 - 5.8	End Of Hole @ 5.8m	X	44	●	▲		SM		■	◆	-5.8
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: 5.8 m
		REVIEWED BY: -	COMPLETE: 07/28/04
		Fig. No: 8	Page 1 of 1

Geotechnical Services	Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO: 30170
Donjek Services Ltd.	UTM ZONE: - N6777845 E631414	PROJECT NO: 8002-318
CME75 Drill on FN60 Flextrac Nodwell		ELEVATION:

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

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30171	
Donjek Services Ltd.		UTM ZONE: - N6777998 E631414		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SURFICIAL ORGANICS										0.0
0.2	SILTY SAND, some gravel		29				SM				-0.2
1.0	-Frozen -medium dense, brown		30				SM				-1.0
1.5	SILTY SAND										
2.0	-Frozen -medium dense, brown -some organic silts noted		31				SM				-2.0
2.7	SANDY SILT, trace gravel										
3.0	-Frozen -visible ice crystals to 10mm in clusters		32				ML				-3.0
4.3	SANDY SILT										
5.0	-Frozen -no visible ice -brown & grey -some wood pieces noted		33				ML				-5.0
5.8	End Of Hole @ 5.8m										-5.8
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: 5.8 m
		REVIEWED BY: -	COMPLETE: 07/28/04
		Fig. No: 6	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30172	
Donjek Services Ltd.		UTM ZONE: - N6778136 E631432		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SURFICIAL ORGANICS								0.0		
0.2	GRAVELLY SILTY SAND -moist to wet, loose, brown -organics noted throughout	X	23	● ▲			SM	■ ◆	-1.0		
1.5	SANDY SILT, trace gravel -saturated, firm, brown	X	24	● ▲			ML	■ ◆	-2.0		
2.5		X	25	● ▲			ML	■ ◆	-3.0		
3.0	SILTY SAND, trace gravel -saturated, medium dense, brown	X	26	● ▲			SM	■ ◆	-4.0		
4.9	GRAVELLY SILTY SAND -saturated, dense, grey w/ blue hue	X	27	● ▲			SM	■ ◆	-5.0		
5.5	SILT, some sand -moist, firm to stiff, grey w/ blue hue	X	28	● ▲			ML	■ ◆	-6.0		
5.9	End Of Hole @ 5.9m								-12.0		

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					

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	SURFICIAL ORGANICS										0.0
0.2	SILT -saturated, soft, grey/brown	X	18				ML				
0.8	moderate organics										
1.0	SILT, some sand -Frozen, visible ice crystals to 3mm in clusters	X	19				ML				-1.0
1.8	grey/brown with black organic silts										
2.0	SANDY SILT -Frozen -medium dense, grey/brown	X	20				ML				-2.0
3.0	SANDY SILT -Frozen -medium dense, light brown										
4.0	AS ABOVE	X	21				ML				-4.0
4.6	grey/brown										
5.0		X	22				ML				-5.0
5.9	End Of Hole @ 5.9m										-6.0
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: 5.9 m
		REVIEWED BY: -	COMPLETE: 07/28/04
		Fig. No: 4	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1	TEST PIT NO:	30174				
Donjek Services Ltd.		UTM ZONE: - N677837D E631499	PROJECT NO:	8002-318				
CME75 Drill on FN60 Flextrac Nodwell			ELEVATION:					
SAMPLE TYPE	☒ RETURN	☒ S.P.T.	☒ AUGER	☐ BULK	☐ TUBE	☐ CORE		
DEPTH(m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	PERCENT SAND ◆ PERCENT SAND ◆ 20 40 60 80 PERCENT GRAVEL ■ PERCENT GRAVEL ■ 20 40 60 80	ELEVATION(m)
0.0	SILT, trace sand -damp, firm, non plastic, grey -some oxidation -some organics throughout	X	12	●	ML	[Symbol]	◆	0.0
1.0	ORGANIC SILTS 0.6m -saturated, soft, black/dark brown	X	13	●	ML	[Symbol]	◆	-1.0
2.0	SILTY GRAVELLY SAND 1.5m -saturated, medium dense, brown -some silt in sample #14 could be contamination from top of hole	X	14	●	SM	[Symbol]	◆	-2.0
4.0	SILTY SAND 3.7m -saturated, medium dense, grey	X	15	●	SM	[Symbol]	◆	-4.0
5.0	SANDY SILT 4.0m -wet, firm, dark brown	X	16	●	ML	[Symbol]	◆	-5.0
6.0	SANDY SILT 4.6m -wet, firm, grey -odd interbedded gravels to 20mm dia. -some organics noted	X	17	●	ML	[Symbol]	◆	-6.0
5.9	End Of Hole @ 5.9m -testhole 12m from interceptor ditch with standing water.							-5.9

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

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30175	
Donjek Services Ltd.		UTM ZONE: - N6778568 E631598		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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	SANDY GRAVEL, trace silt -damp, loose, brown		7				GP-GM				0.0
2.0	GRAVELLY SAND, trace silt -saturated, medium dense, brown		8				SW-SM				-2.0
3.0	SILTY GRAVELLY SAND -Frozen		9				SM				-3.0
4.0	-some decomposed organics noted between 3.0 & 4.6m (wood pieces)		10				SM				-4.0
5.0			11				SM				-5.0
5.9	End of Hole @ 5.9m										-5.9
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: 5.9 m
		REVIEWED BY:	COMPLETE: 07/28/04
		Fig. No: 2	Page 1 of 1

Geotechnical Services		Km 1691.7 to 1717.3 Alaska Highway #1		TEST PIT NO: 30176	
Donjek Services Ltd.		UTM ZONE: - N6778670 E631642		PROJECT NO: 8002-318	
CME75 Drill on FN60 Flextrac Nodwell				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			PERCENT GRAVEL ■			
										20	40	
0.0	SILTY SANDY GRAVEL -damp to moist, loose, brown	☒	1	20	40	60	GM		20	40	60	0.0
0.6	ORGANIC SILTS/SANDS -damp, soft, dark brown	☒	2	20	40	60	SM		20	40	60	-1.0
1.5	GRAVELLY SAND, trace silt -moist to wet, medium dense, brown	☒	3	20	40	60	SW-SM		20	40	60	-2.0
2.4	GRAVELLY SILTY SAND -wet, medium dense, brown -some sample contamination from above	☒	4	20	40	60	SM		20	40	60	-3.0
3.4	GRAVELLY SILTY SAND -Frozen -medium dense, brown	☒	5	20	40	60	SM		20	40	60	-4.0
5.8	End Of Hole @ 5.8m -testhole within existing road shoulder	☒	6	20	40	60	SM		20	40	60	-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: 5.8 m
	REVIEWED BY: -	COMPLETE: 07/28/04
	Fig. No: 1	Page 1 of 1



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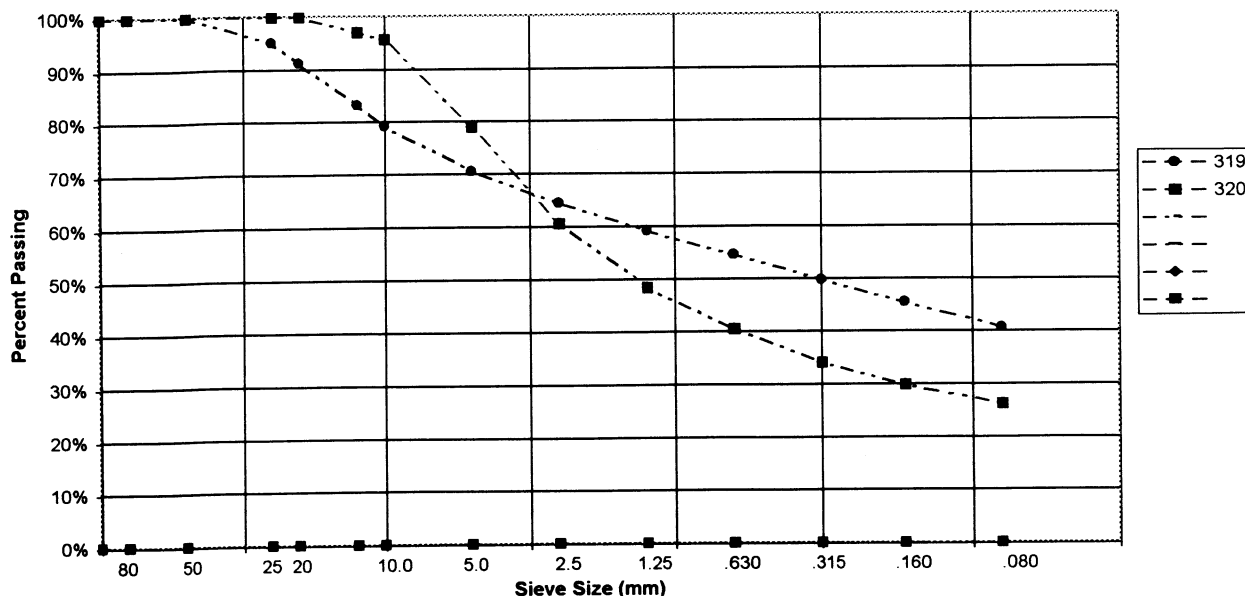
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CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 635061-6769660
LOGGED BY: RW

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)





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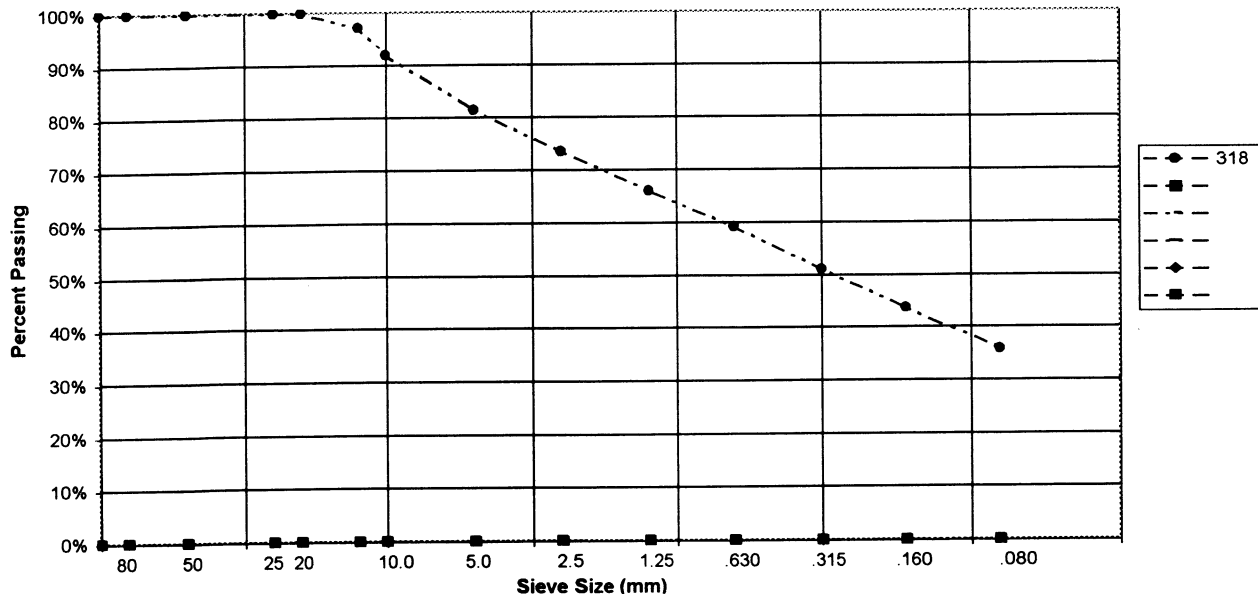
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 635044-6769701
LOGGED BY: RW

HOLE No.: 30091

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)				

Grain Size Analysis (Percent Passing vs Grain Size)





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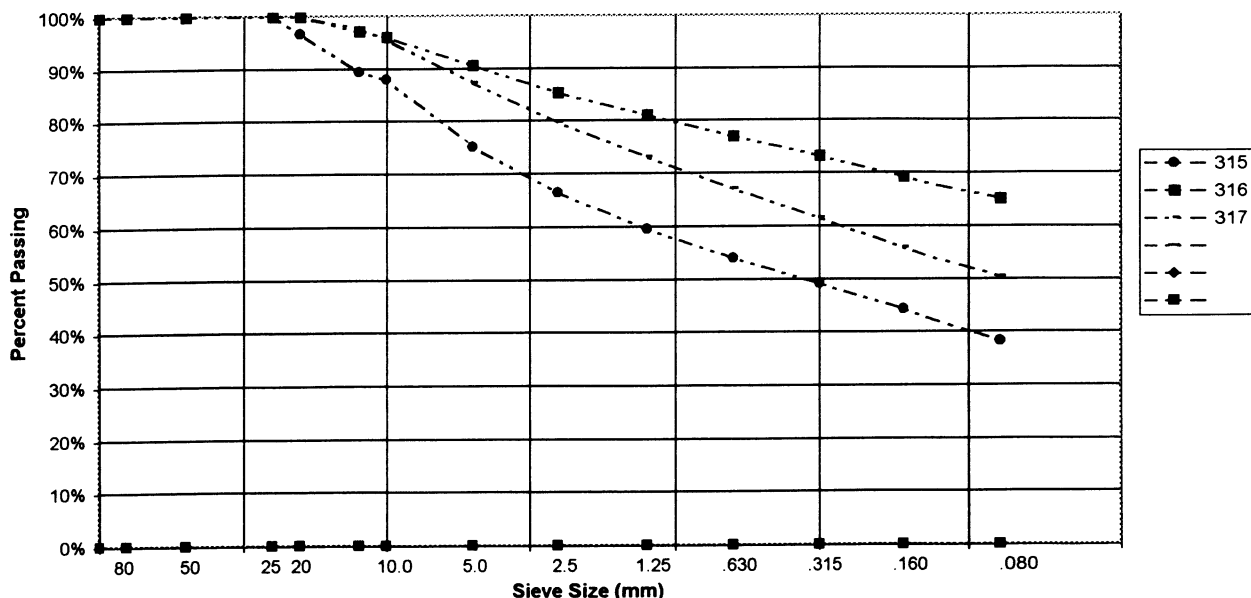
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 635000-6769764
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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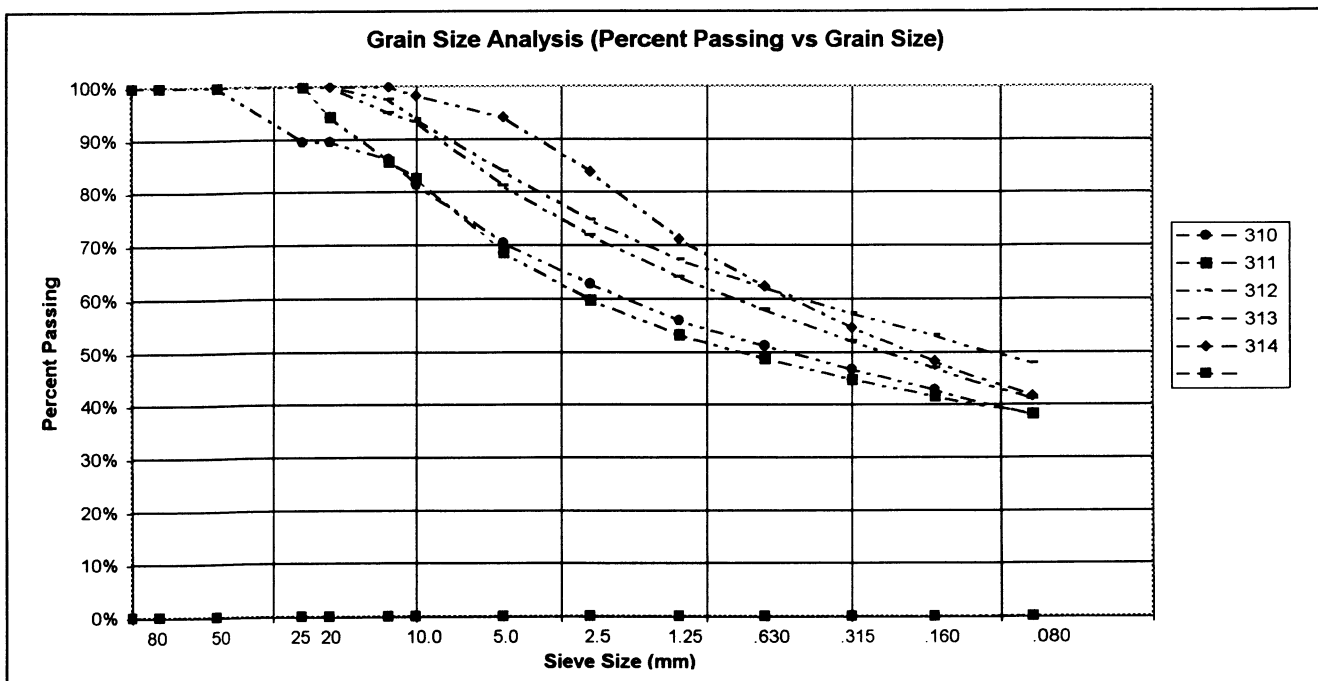


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634966-6769809
LOGGED BY: RW

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)	





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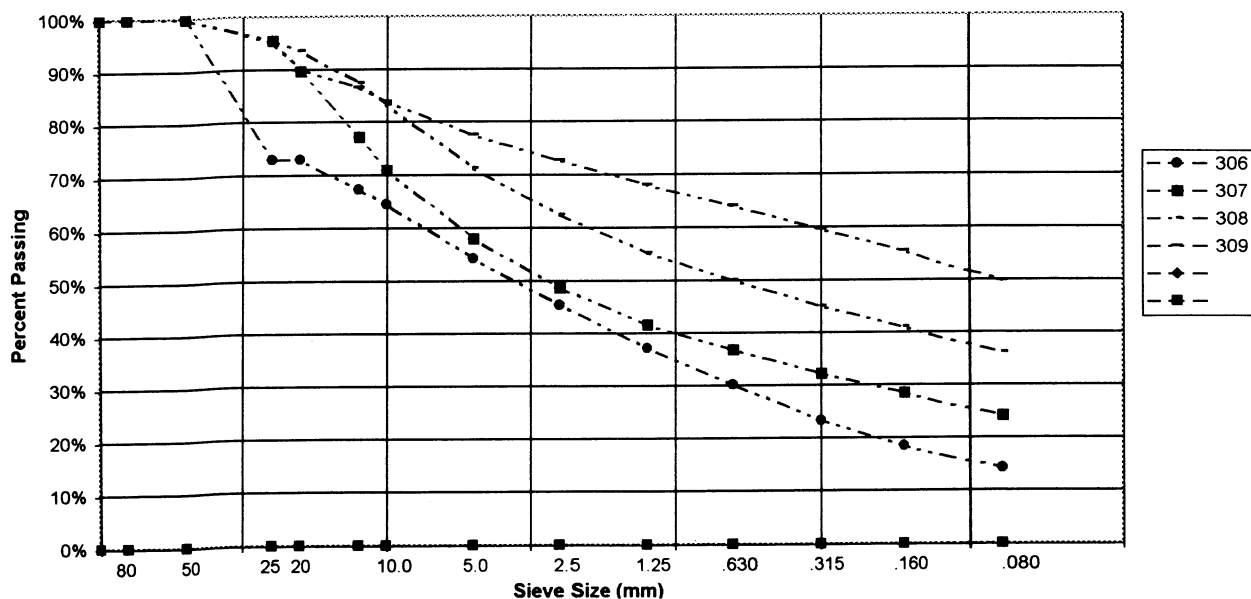
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634943-6769845
LOGGED BY: RW

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)		

Grain Size Analysis (Percent Passing vs Grain Size)





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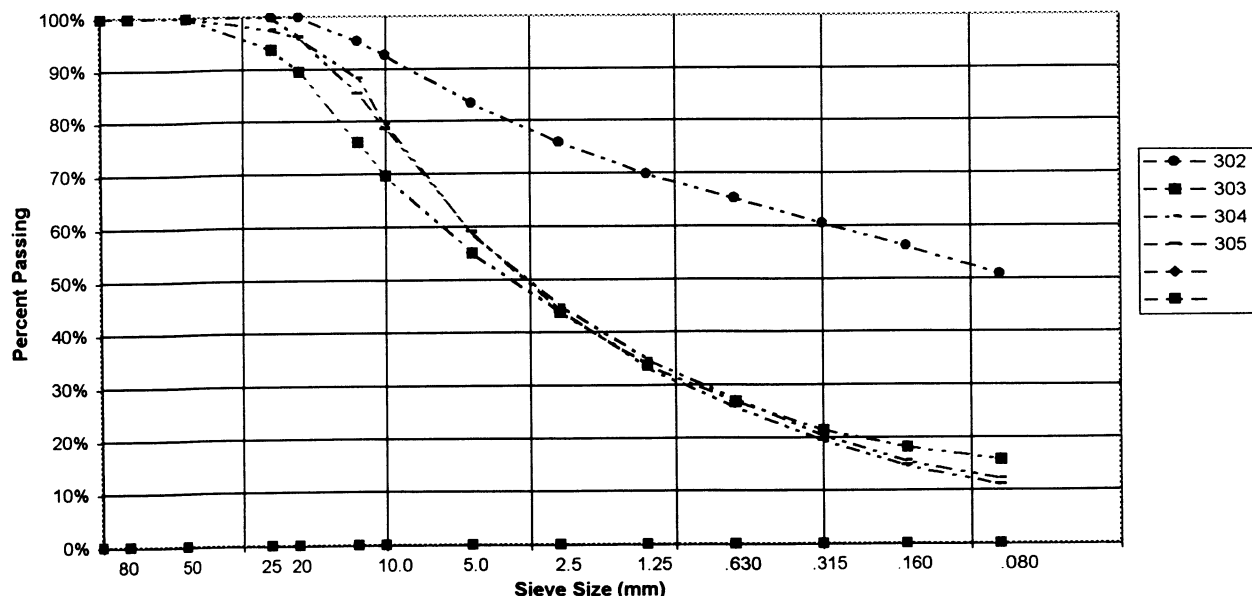
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634905-6769885
LOGGED BY: RW

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)		

Grain Size Analysis (Percent Passing vs Grain Size)





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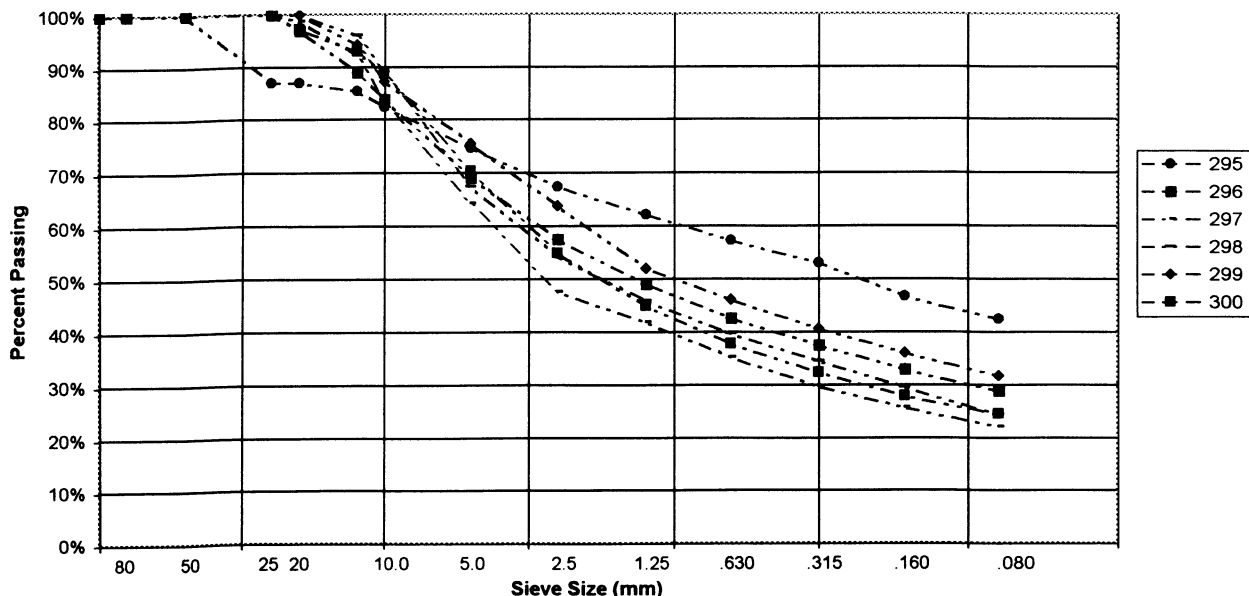
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634847-6769994
LOGGED BY: RW

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)





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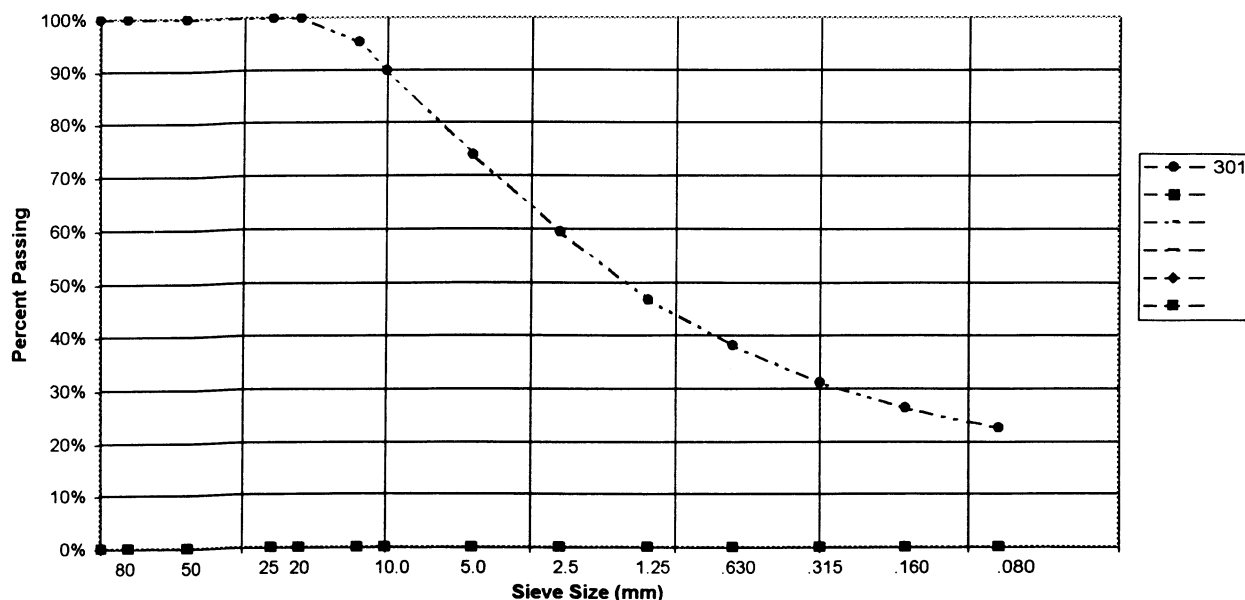
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634847-6769994
LOGGED BY: RW

HOLE No.: 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)





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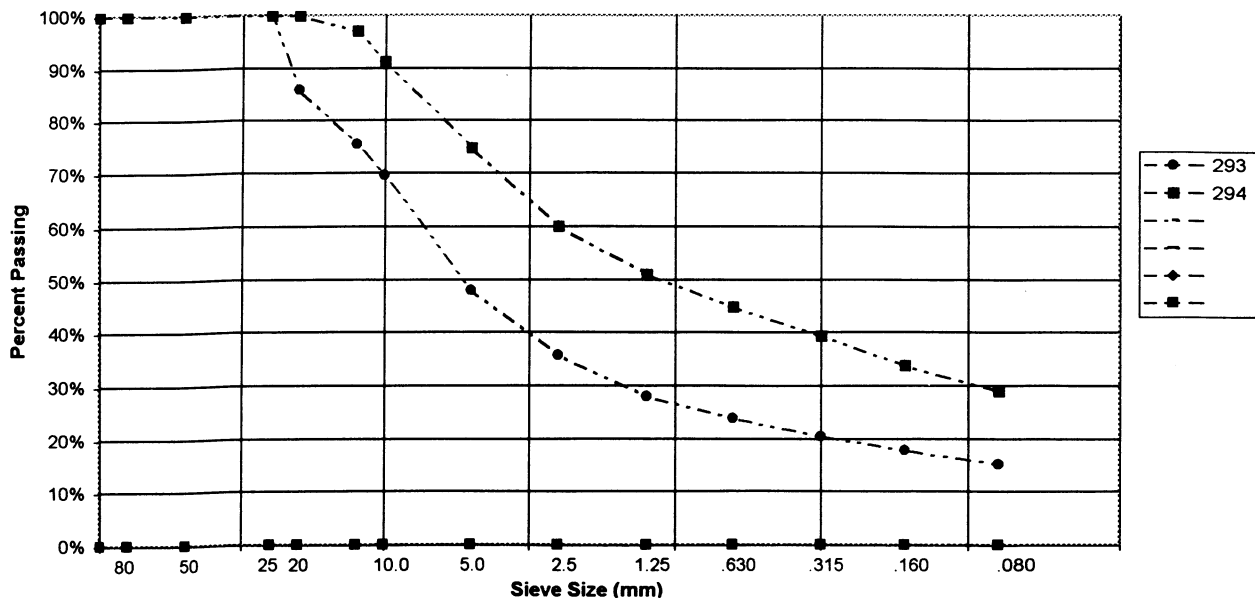
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634800-6770135
LOGGED BY: RW

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)				

Grain Size Analysis (Percent Passing vs Grain Size)





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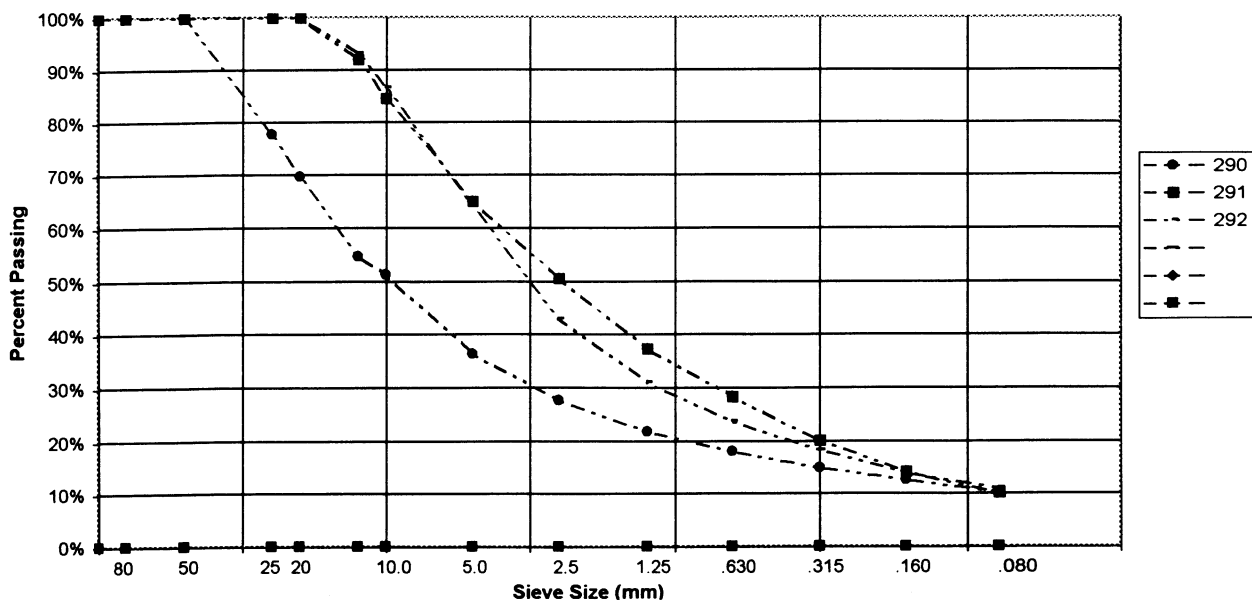
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634696-6770279
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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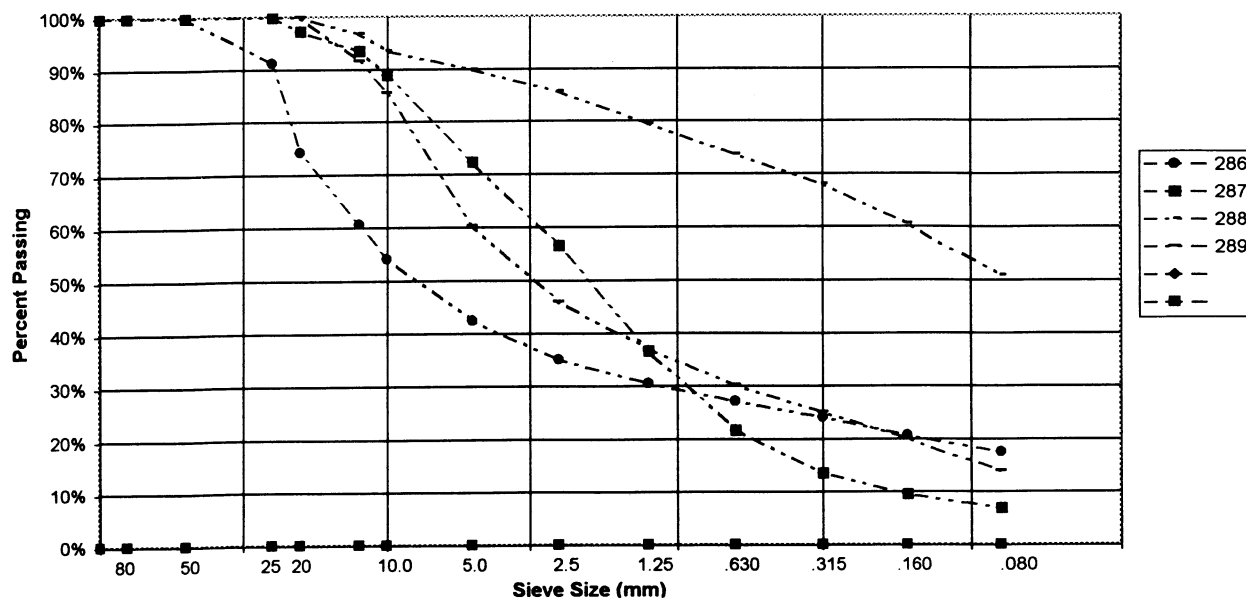
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CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634666-6770392
LOGGED BY: RW

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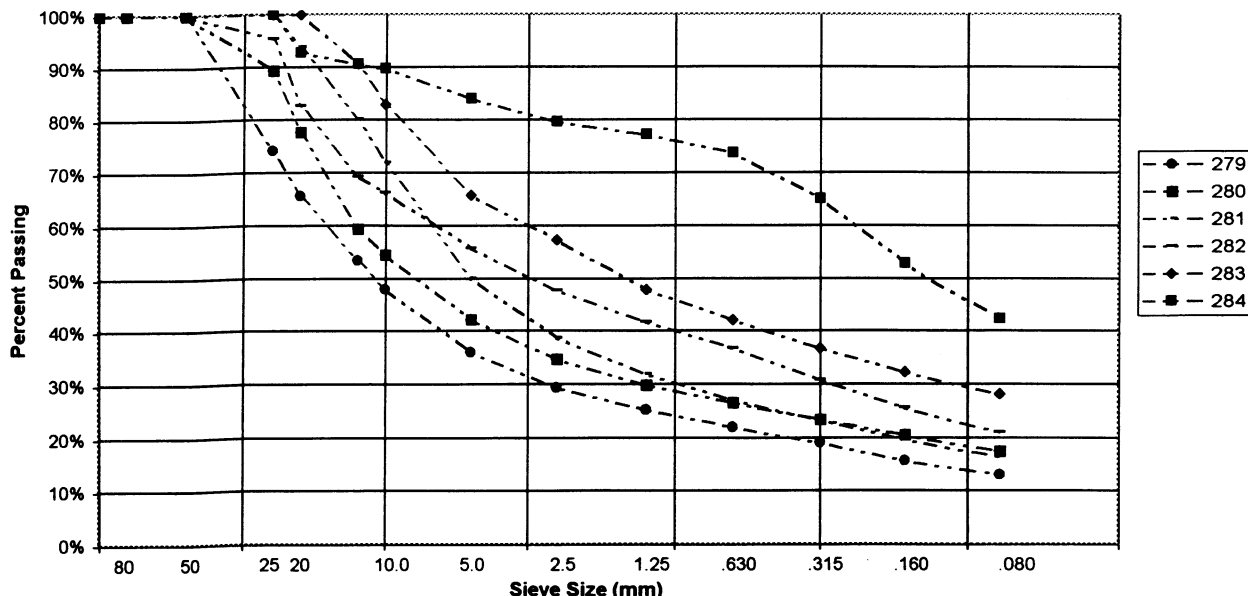
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634636-6770537
LOGGED BY: RW

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)

Grain Size Analysis (Percent Passing vs Grain Size)





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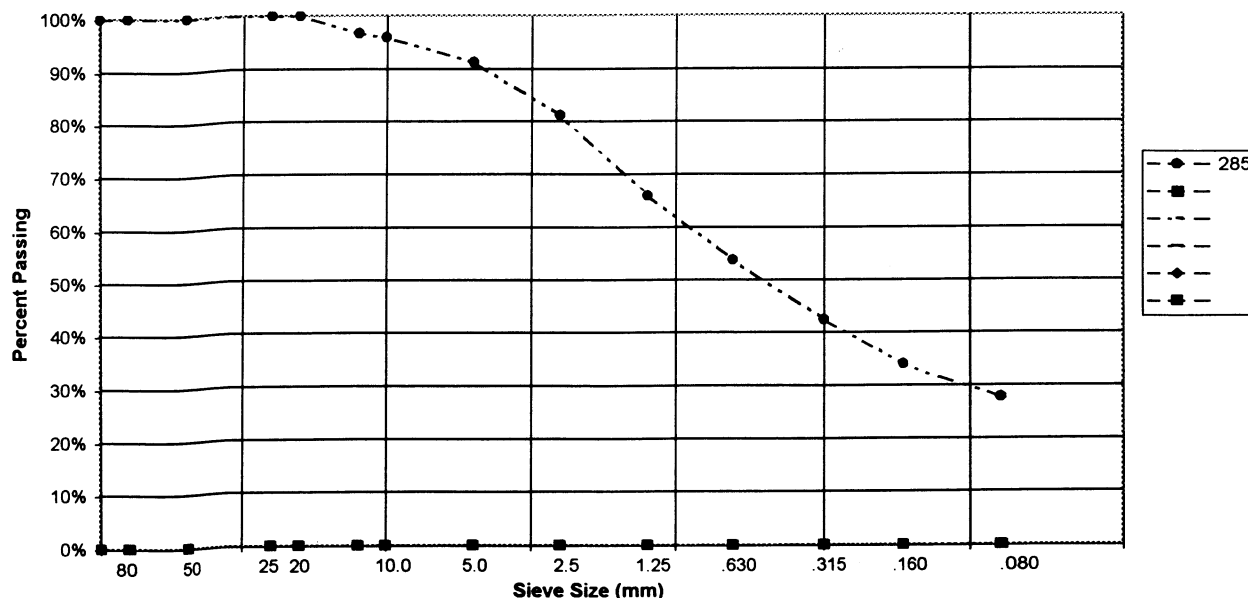
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634636-6770537
LOGGED BY: RVW

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)				

Grain Size Analysis (Percent Passing vs Grain Size)





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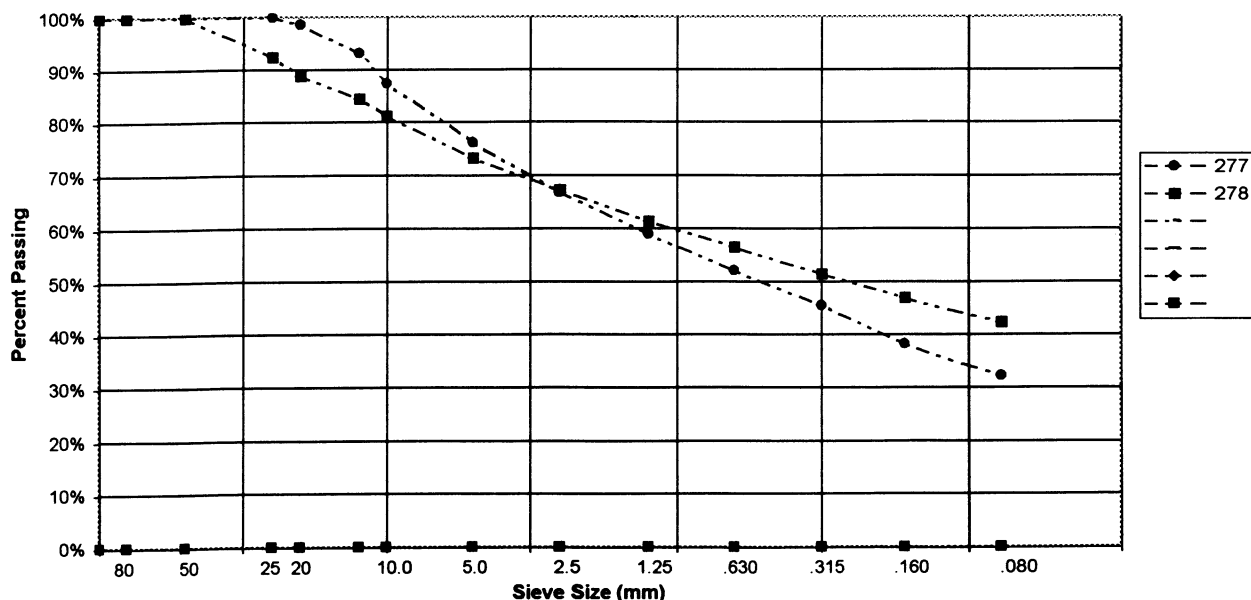
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634650-6770650
LOGGED BY: RW

HOLE No.: 30101

DATE COMP: 08/14/2004

FIELD NO:	277	278				
LAB NO:	277	278				
DEPTH:	0.4-1.0	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%	93%				
20.0	99%	89%				
12.5	93%	85%				
10.0	87%	81%				
5.0	76%	73%				
2.5	67%	67%				
1.25	59%	61%				
0.630	52%	57%				
0.315	46%	51%				
0.160	38%	47%				
0.080	32%	42%				
M.C.(%)	4%	6%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	24	27				
% SAND:	44	31				
% FINES:	32	42				
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)				

Grain Size Analysis (Percent Passing vs Grain Size)





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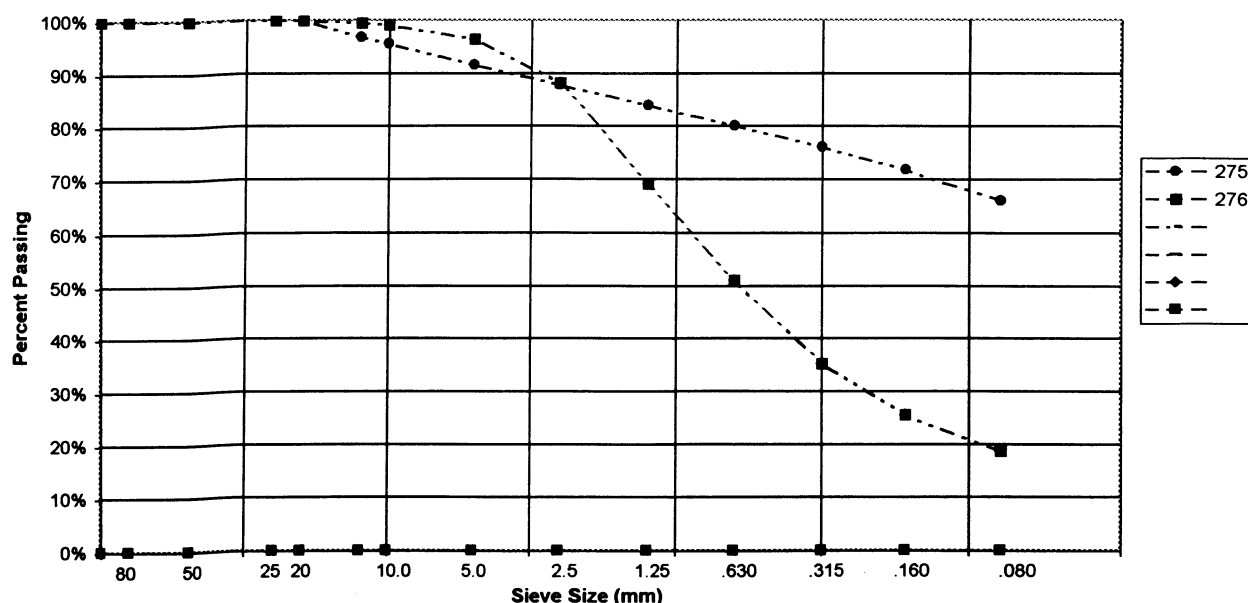
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CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634670-6770753
LOGGED BY: RW

HOLE No.: 30102

DATE COMP: 08/14/2004

FIELD NO:	275	276				
LAB NO:	275	276				
DEPTH:	0.6-1.2	2.4-3.0				
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	97%	100%				
10.0	96%	99%				
5.0	92%	97%				
2.5	88%	88%				
1.25	84%	69%				
0.630	80%	51%				
0.315	76%	35%				
0.160	72%	26%				
0.080	66%	19%				
M.C.(%)	12%	1%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX:	0.0	0.0				
% GRAVEL:	8	3				
% SAND:	26	78				
% FINES:	66	19				
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND (SM)				

Grain Size Analysis (Percent Passing vs Grain Size)





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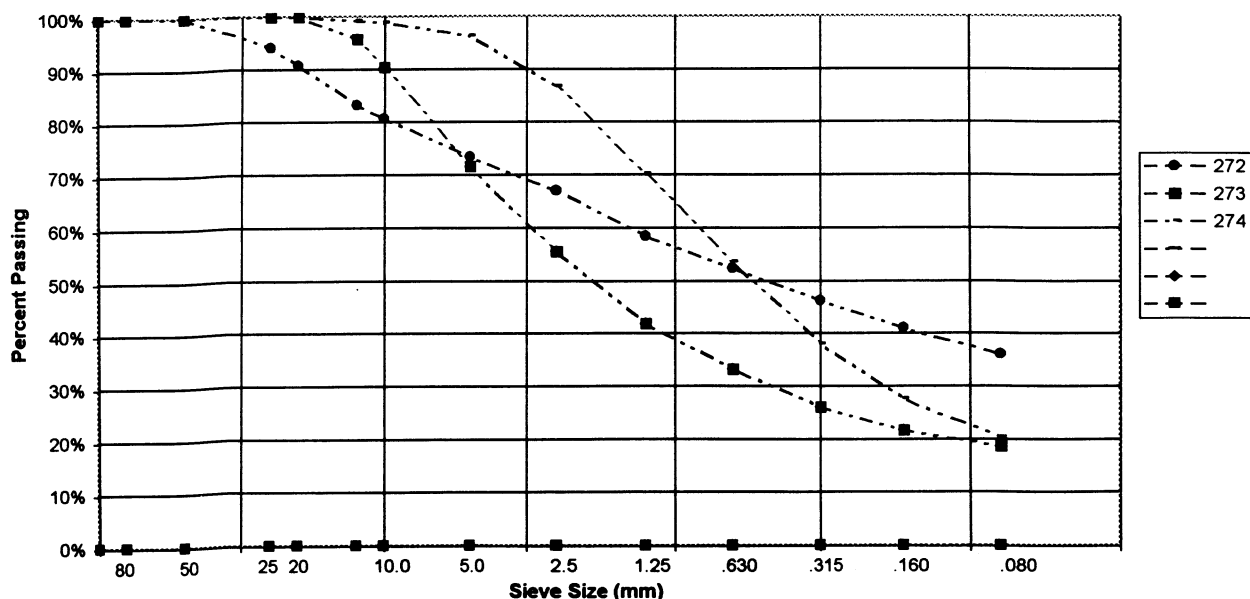
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634651-6770855
LOGGED BY: RV

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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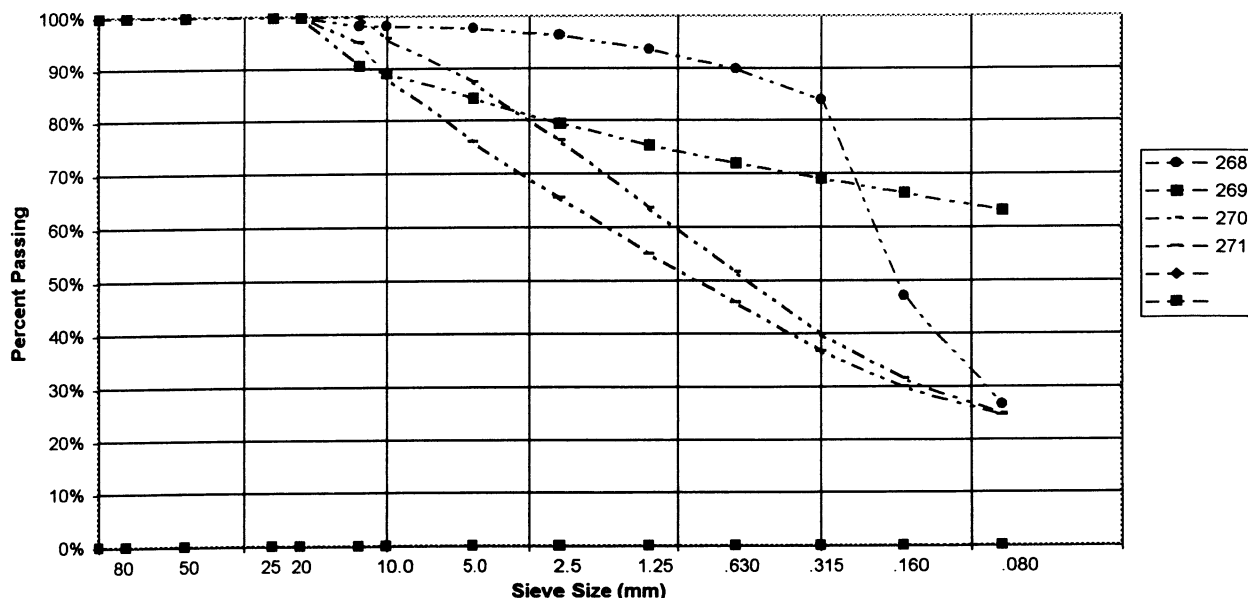
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634614-6770965
LOGGED BY: RW

HOLE No.: 30104

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)		

Grain Size Analysis (Percent Passing vs Grain Size)





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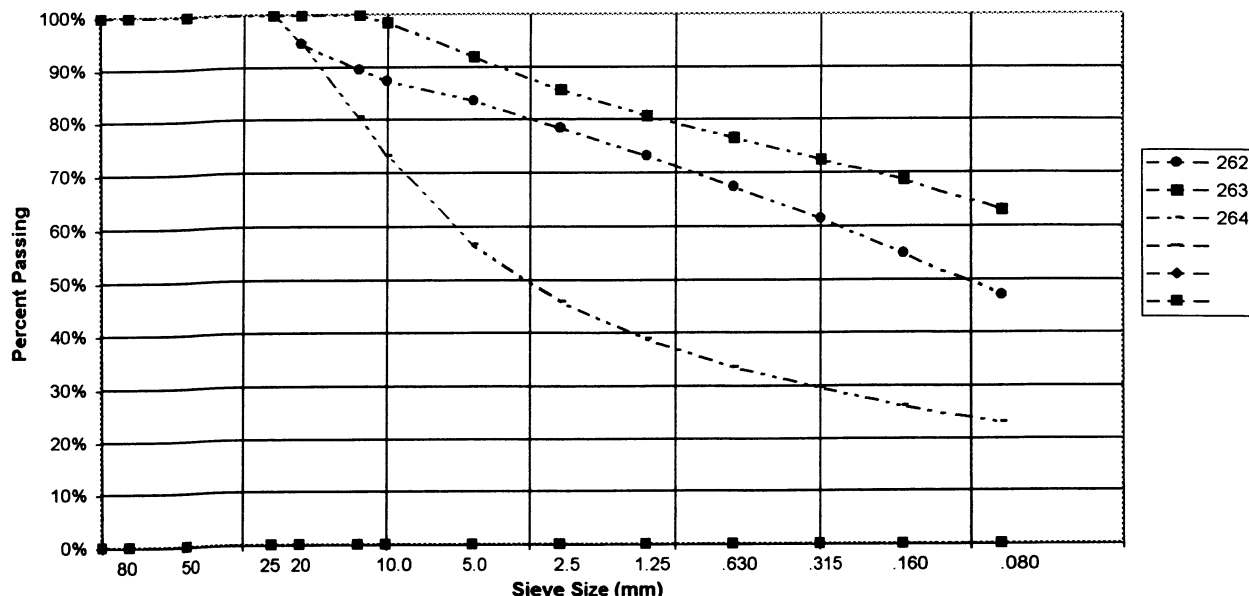
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634672-6771005
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





HOGGAN ENGINEERING & TESTING (1980) LTD.

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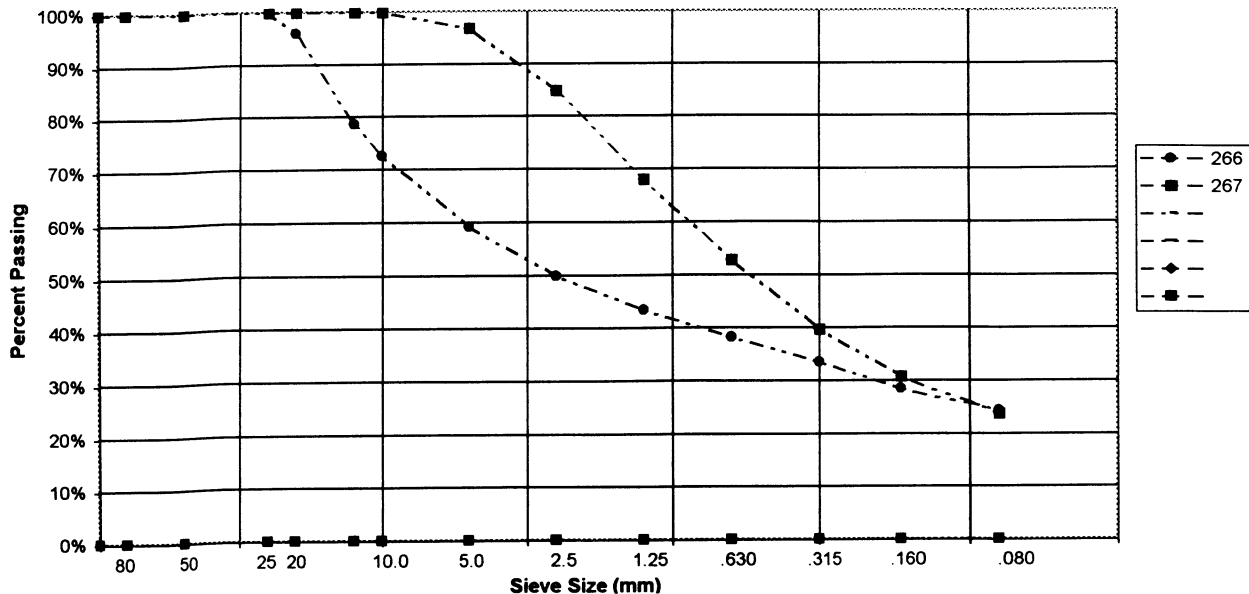
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634574-6771078
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





HOGGAN ENGINEERING & TESTING (1980) LTD.

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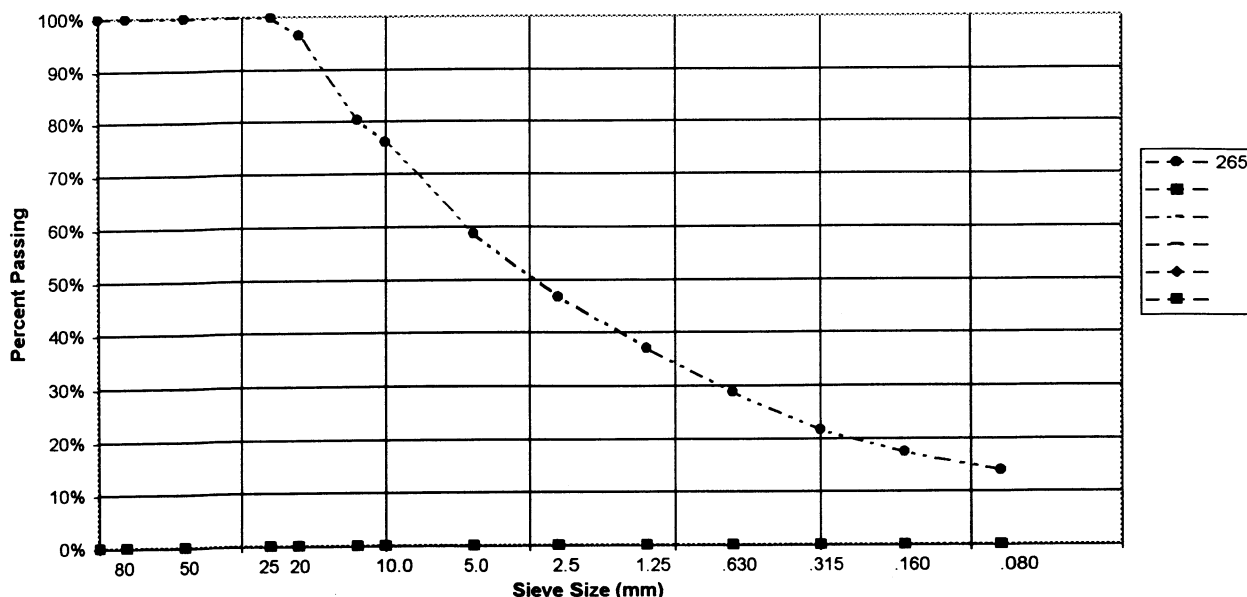
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634529-6771149
LOGGED BY: RW

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)				

Grain Size Analysis (Percent Passing vs Grain Size)





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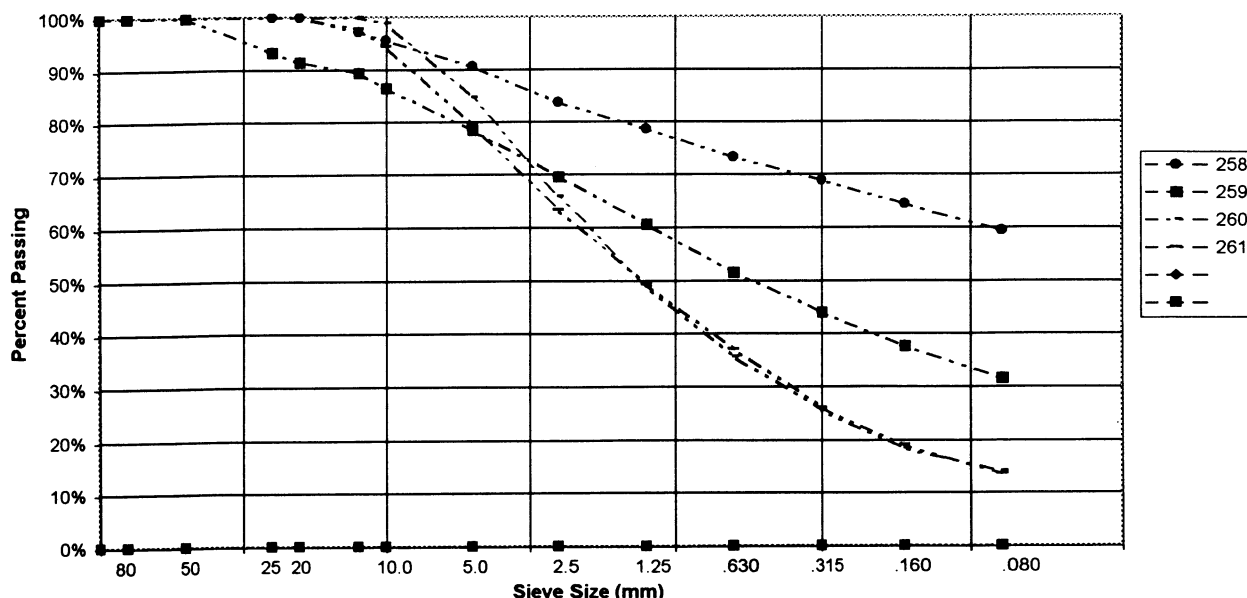
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634528-6771278
LOGGED BY: RW

HOLE No.: 30108

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)		

Grain Size Analysis (Percent Passing vs Grain Size)





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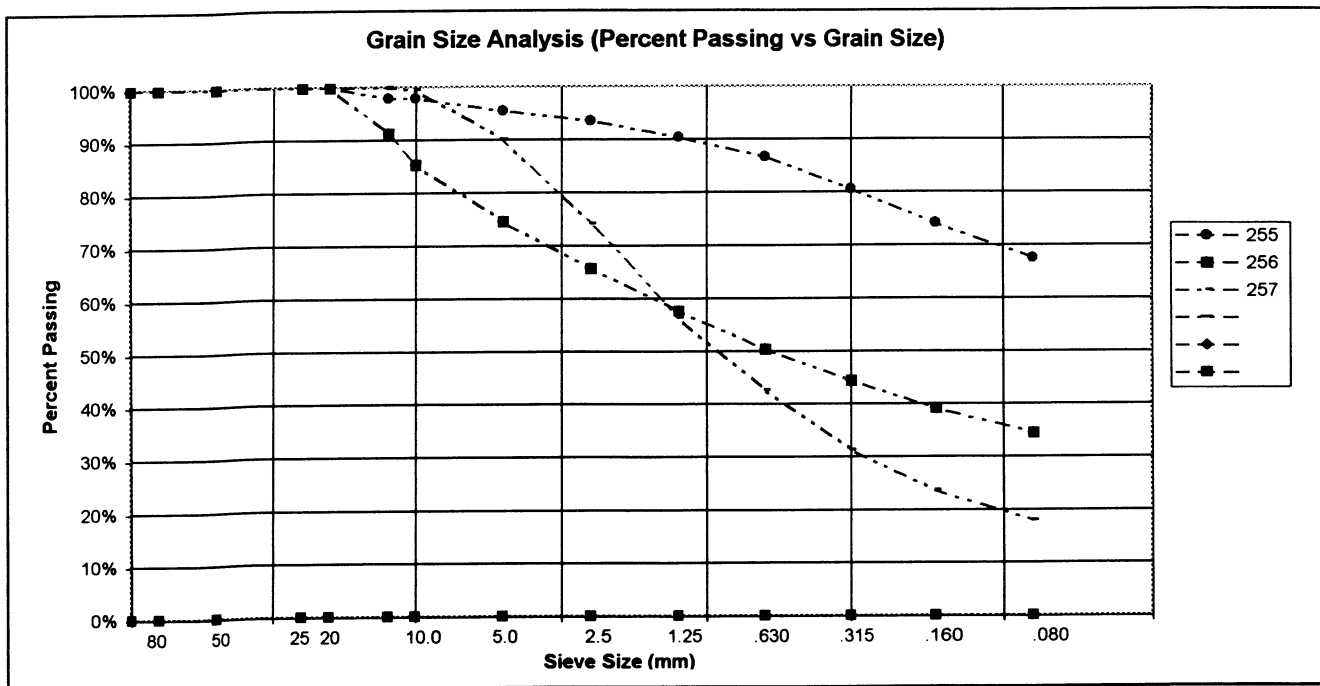


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634466-6771427
LOGGED BY: RW

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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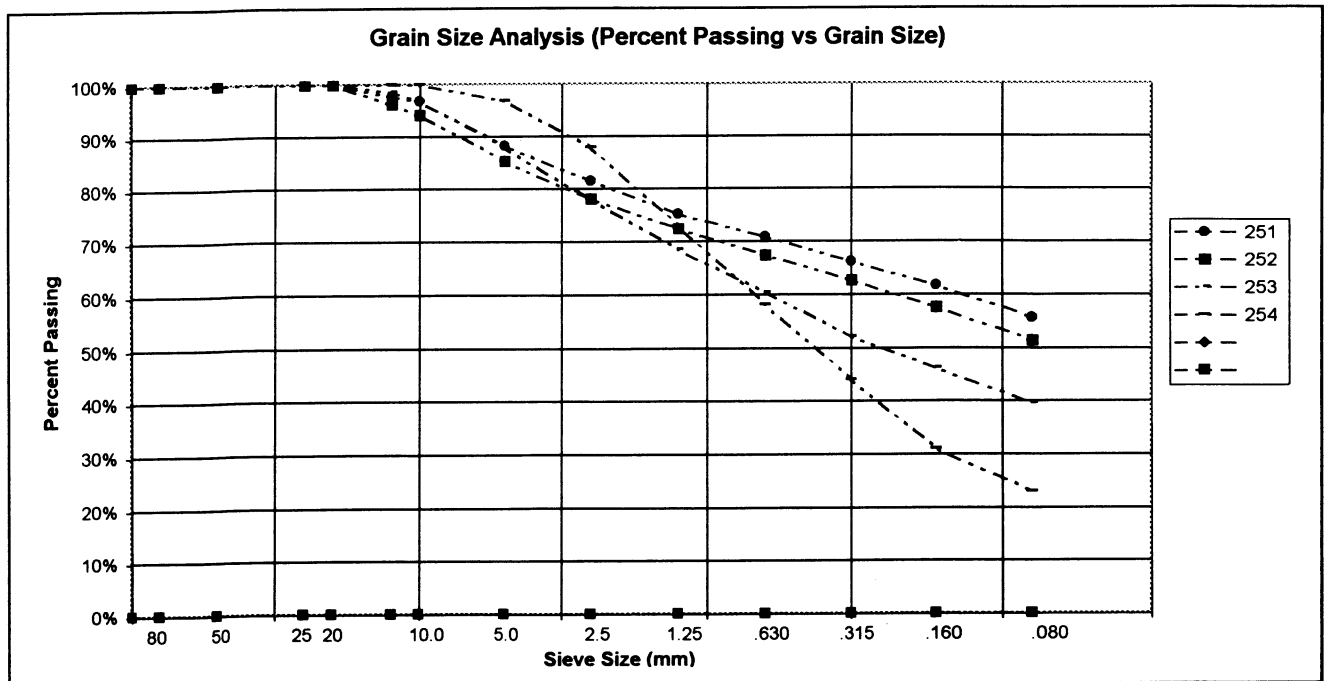


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634457-6771567
LOGGED BY: RW

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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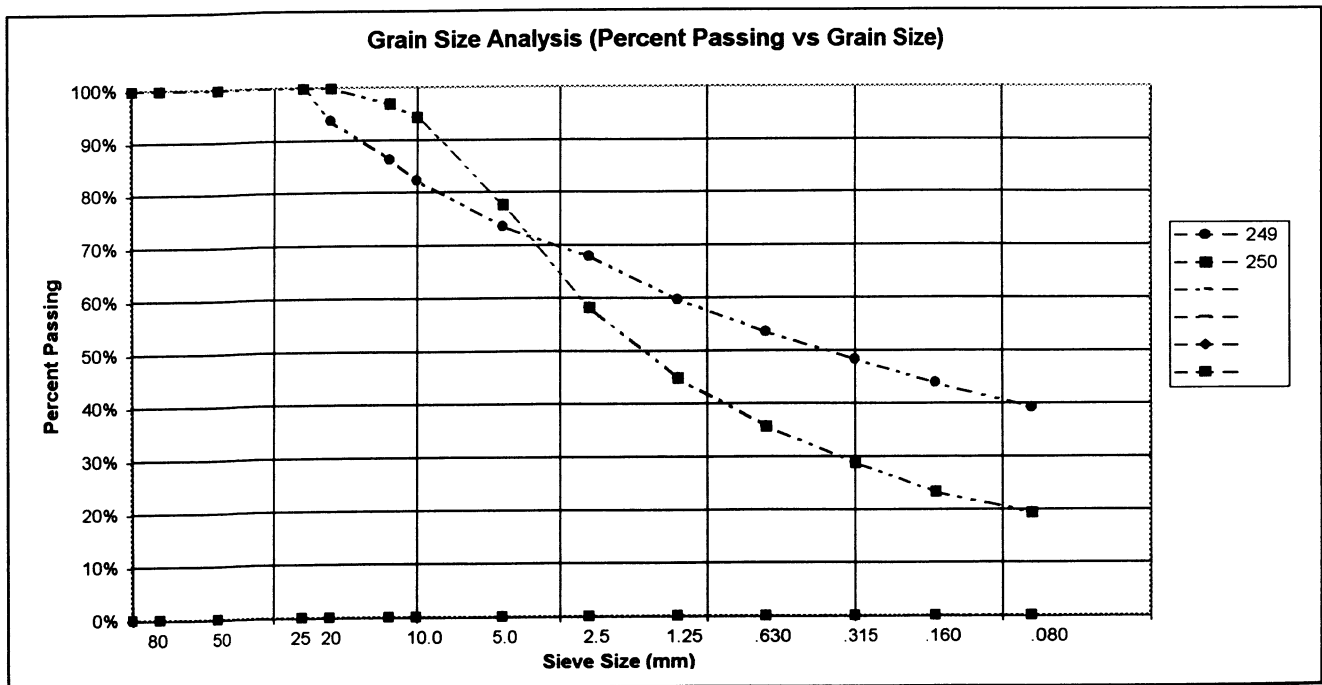


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634475-6771627
LOGGED BY: RW

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)			





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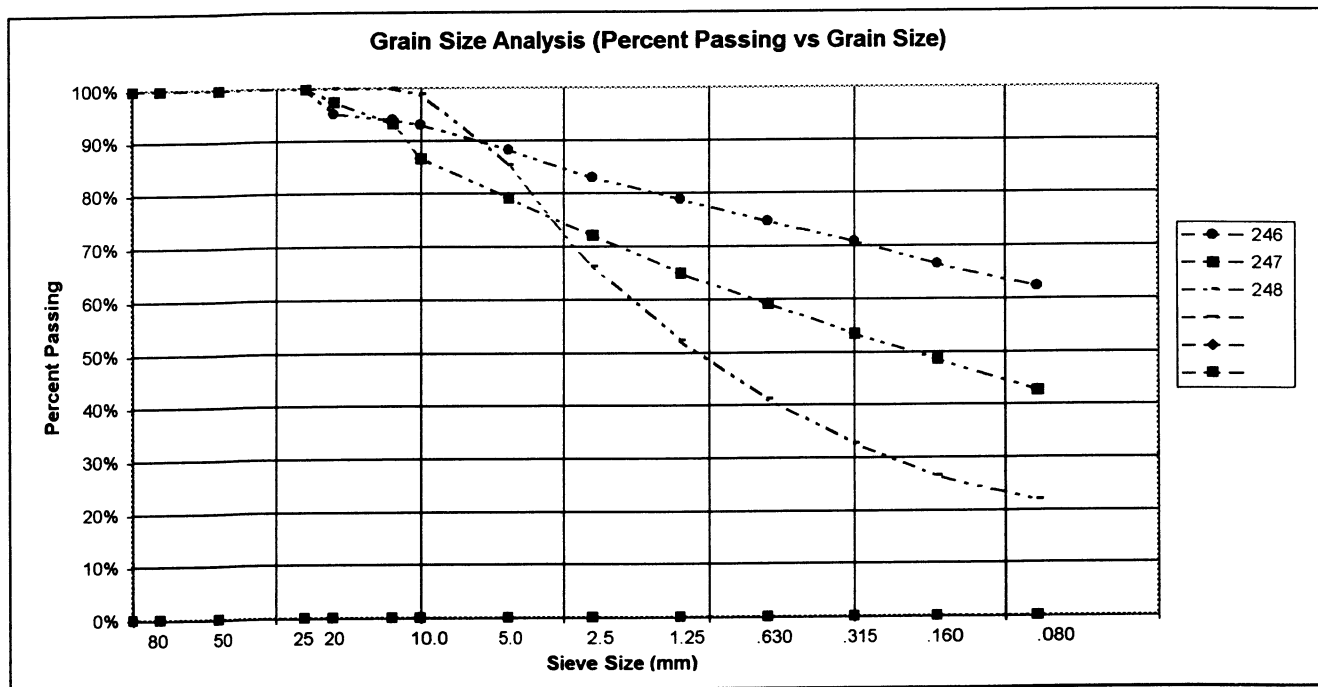


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634468-6771772
LOGGED BY: RW

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)			





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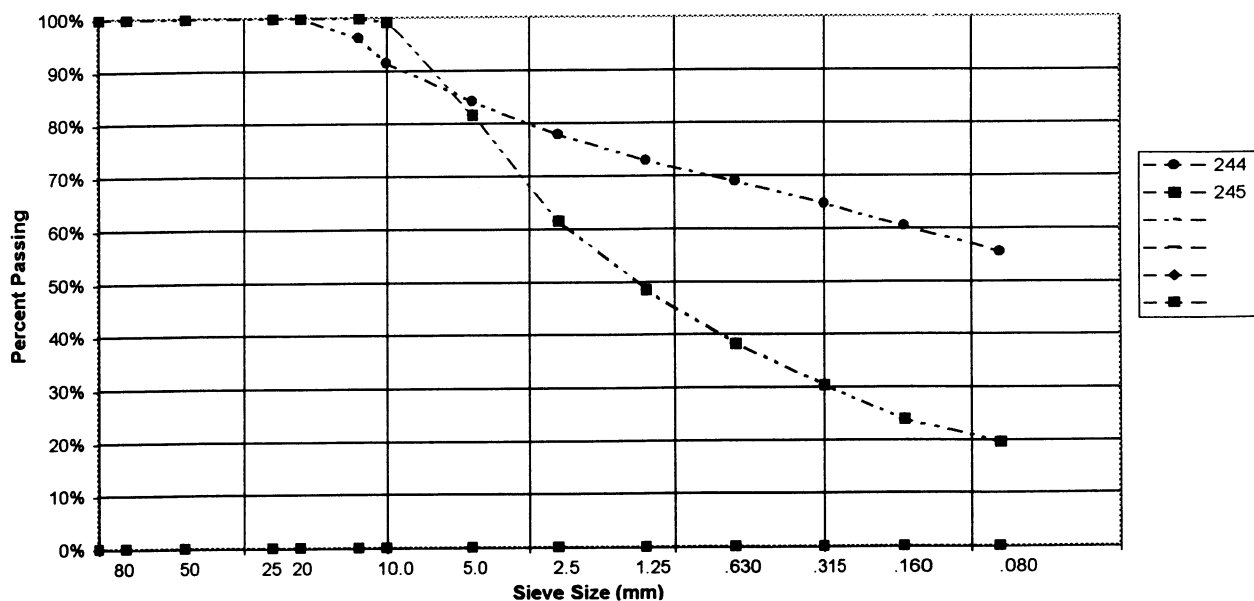
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634435-6771879
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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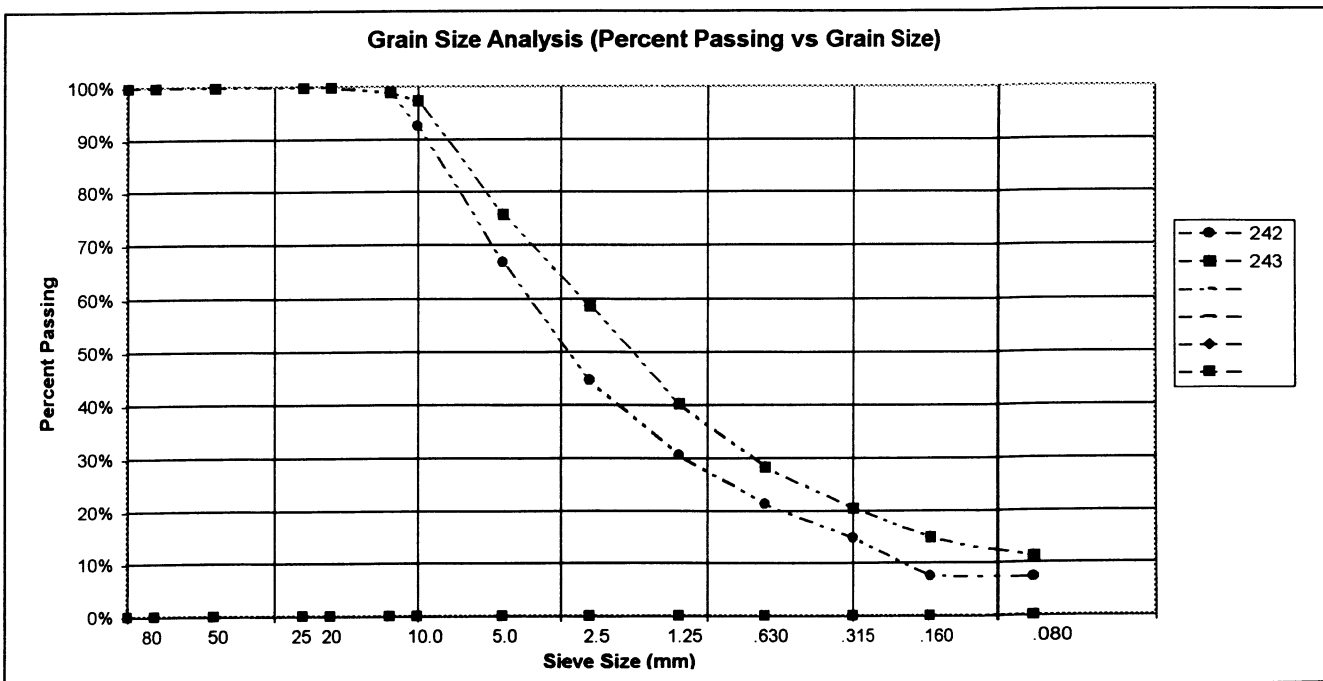


PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 634386-6772019
 LOGGED BY: RW

HOLE No.: 30114

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)			





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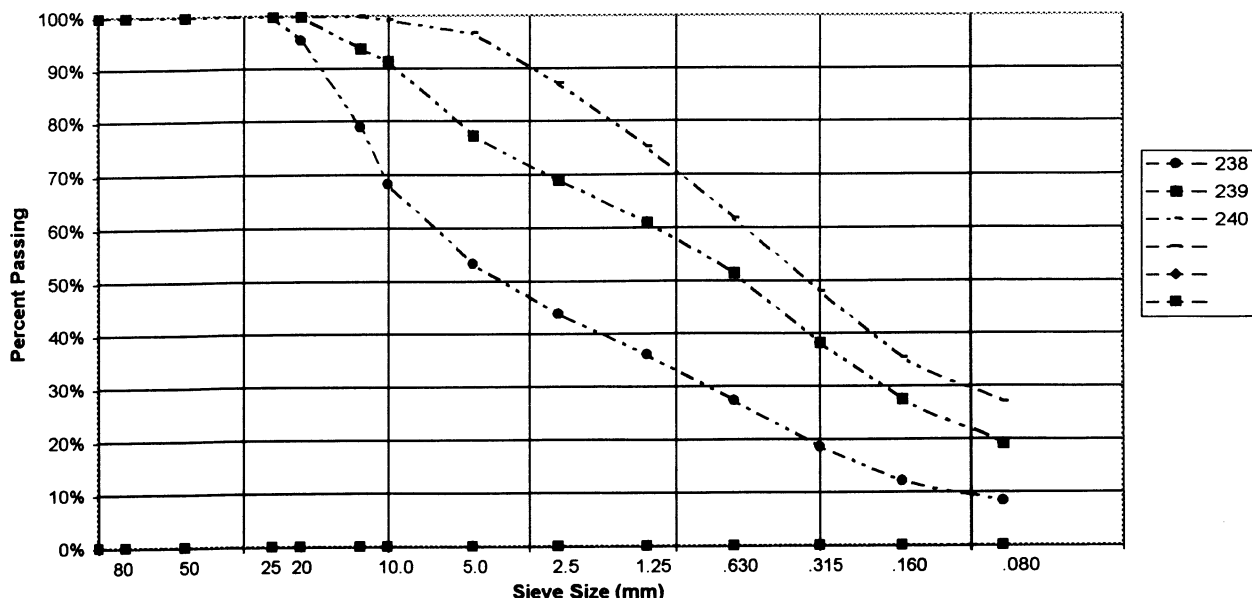
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634339-6772105
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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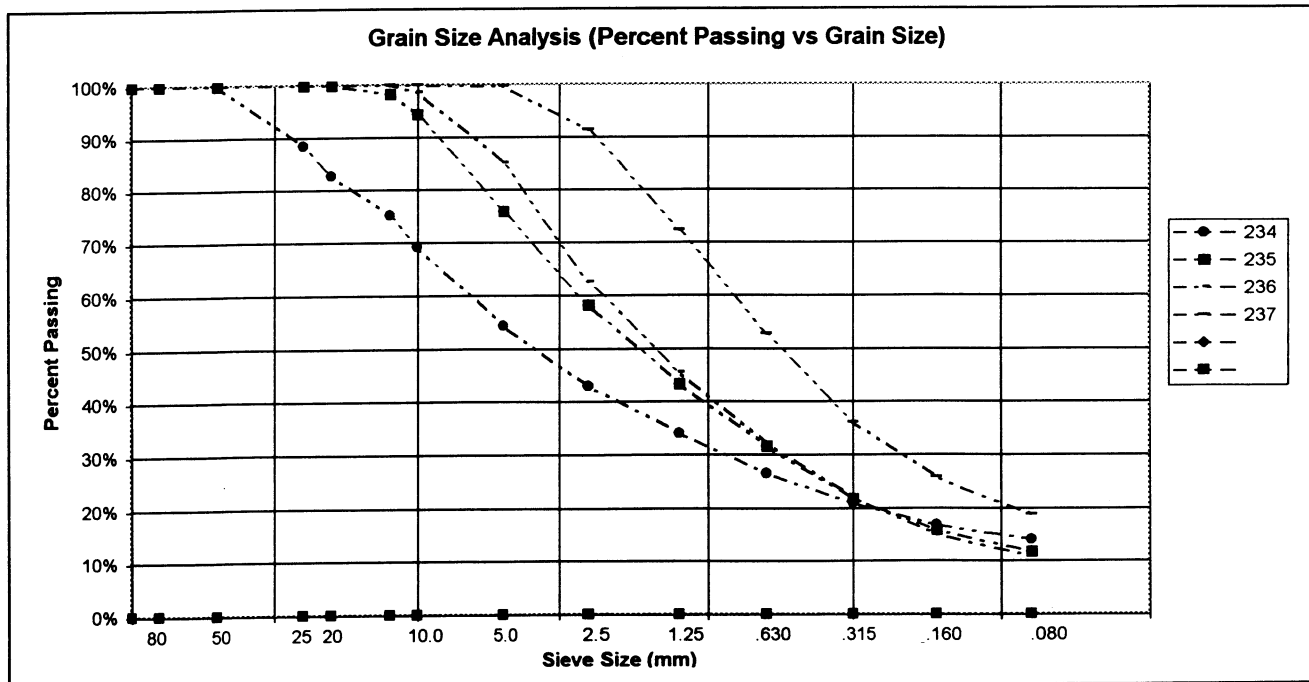


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634312-6772111
LOGGED BY: RW

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)		





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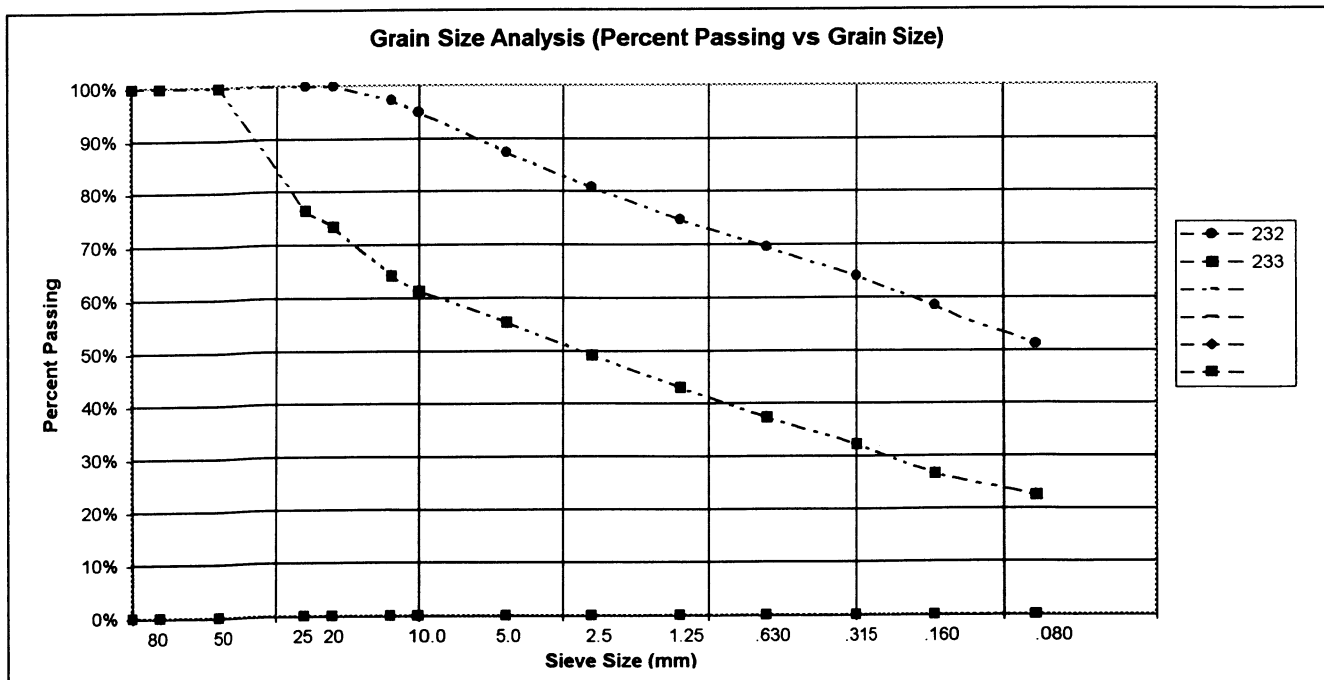


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634222-6772256
LOGGED BY: RW

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)			





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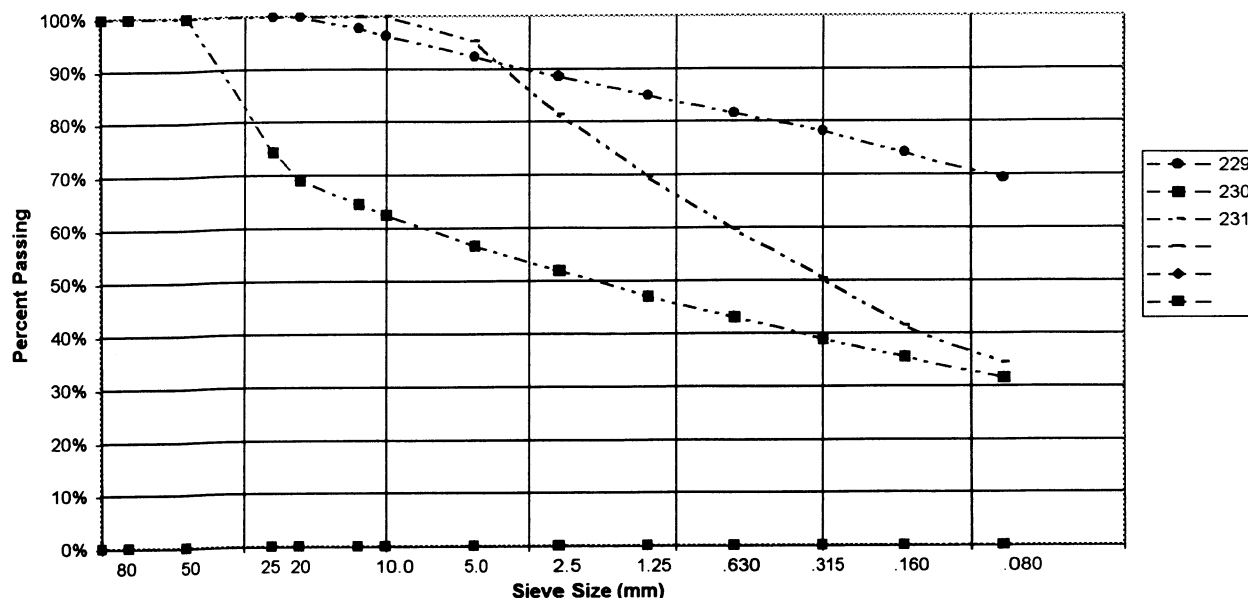
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634185-6772272
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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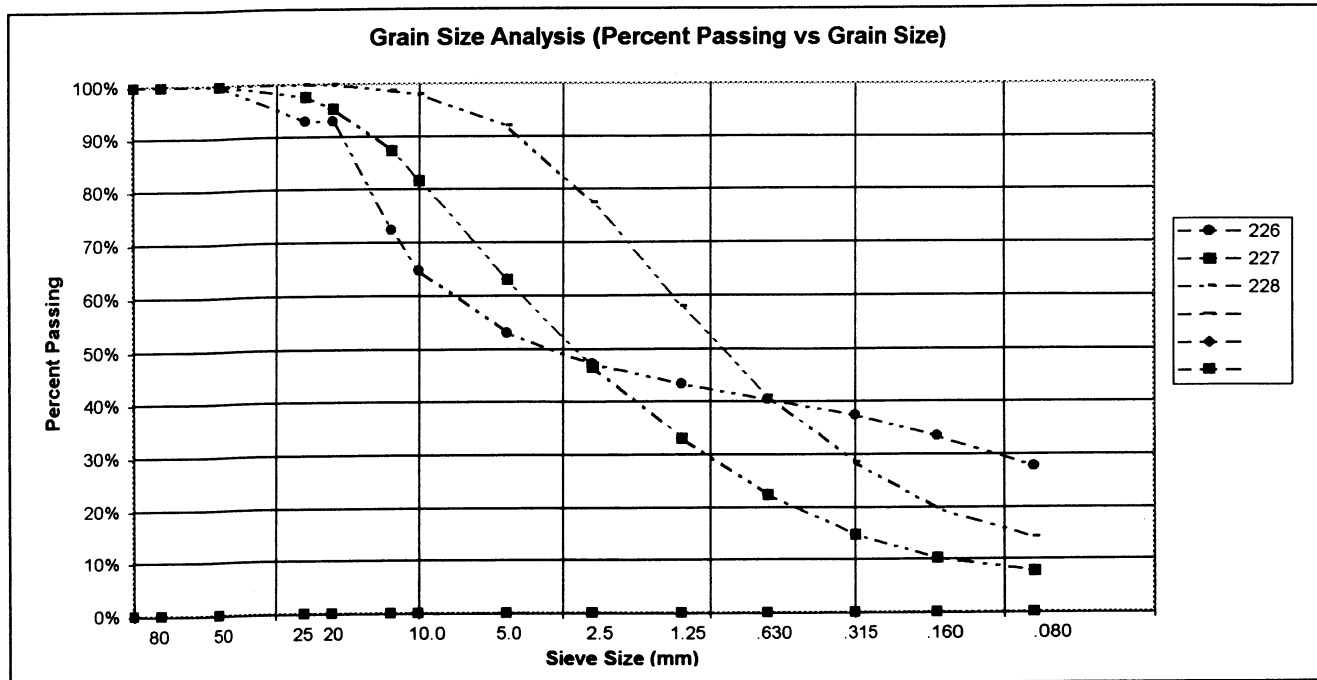


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634109-6772380
LOGGED BY: RW

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)			





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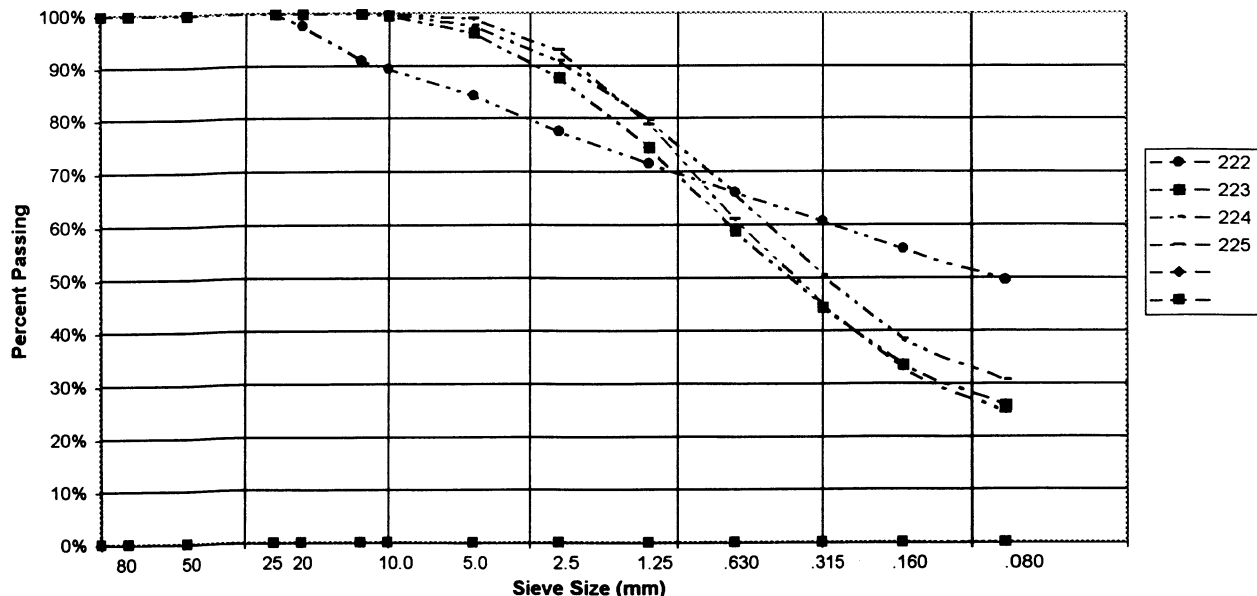
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 634076-6772396
LOGGED BY: RW

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)		

Grain Size Analysis (Percent Passing vs Grain Size)





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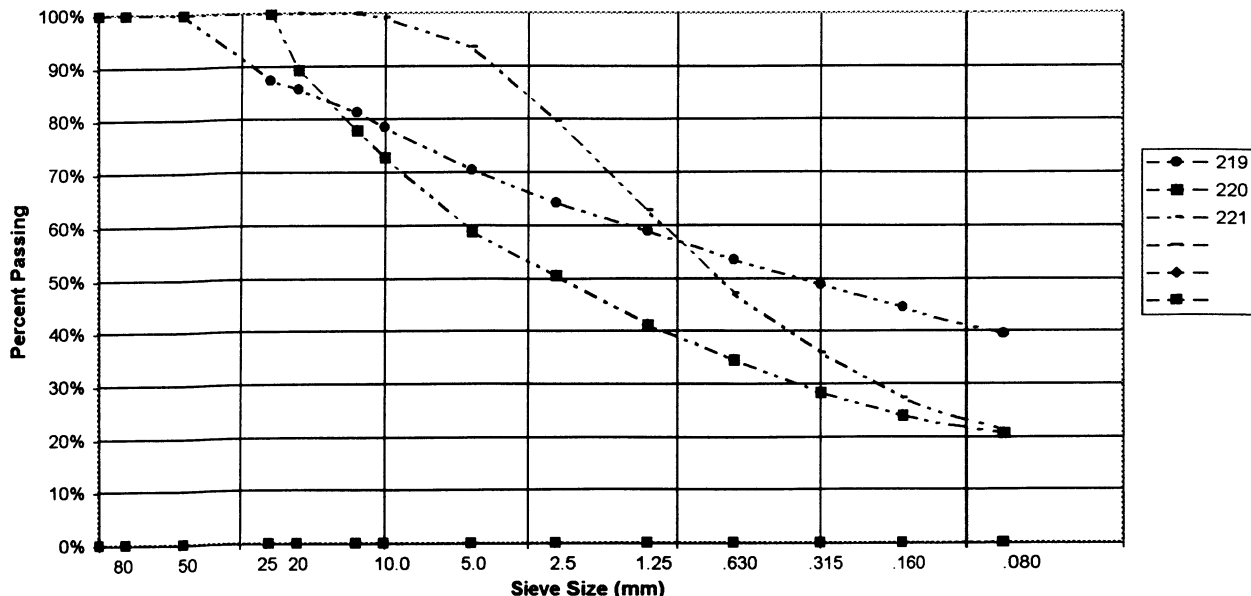
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633974-6772578
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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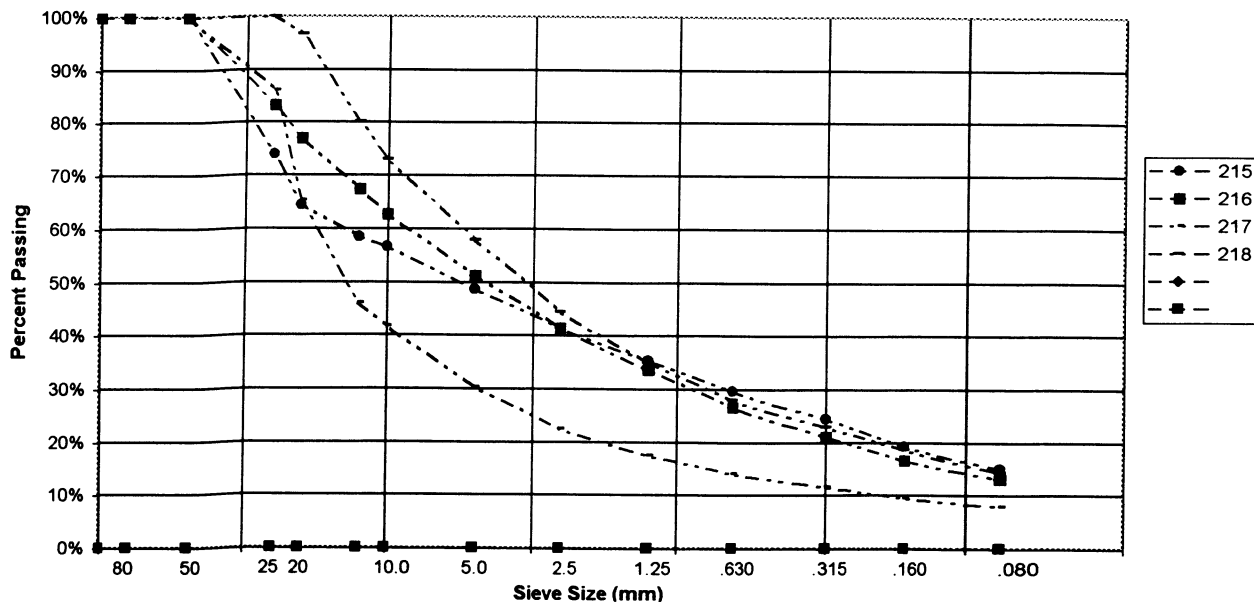
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633916-6772688
LOGGED BY: RW

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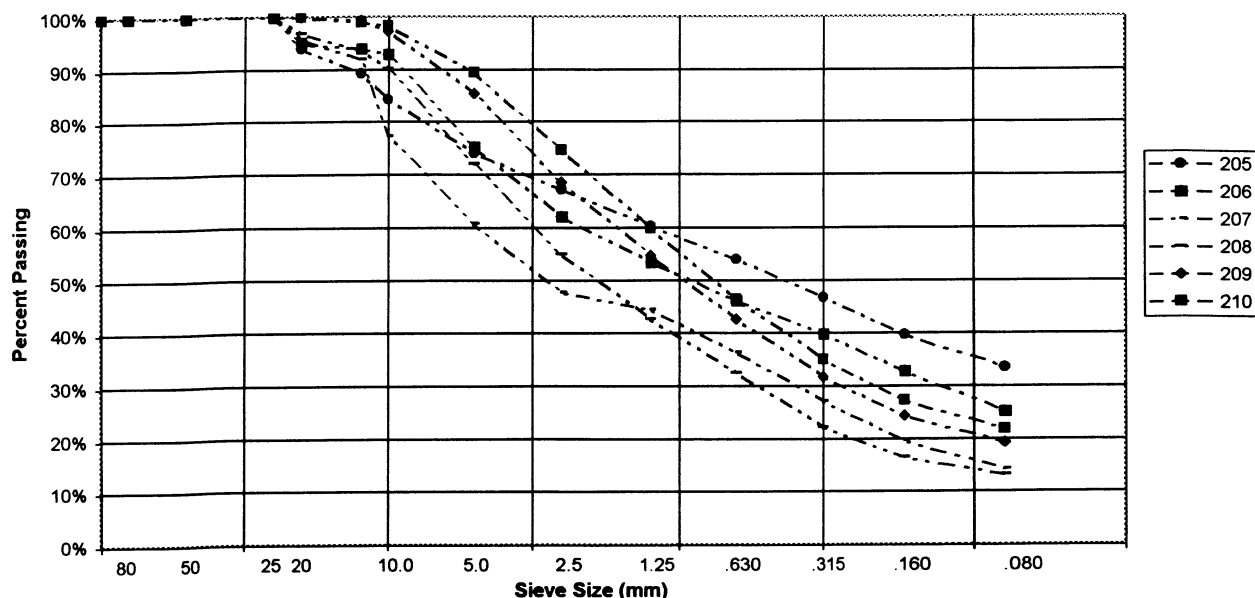
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633863-6772714
LOGGED BY: RW

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)

Grain Size Analysis (Percent Passing vs Grain Size)





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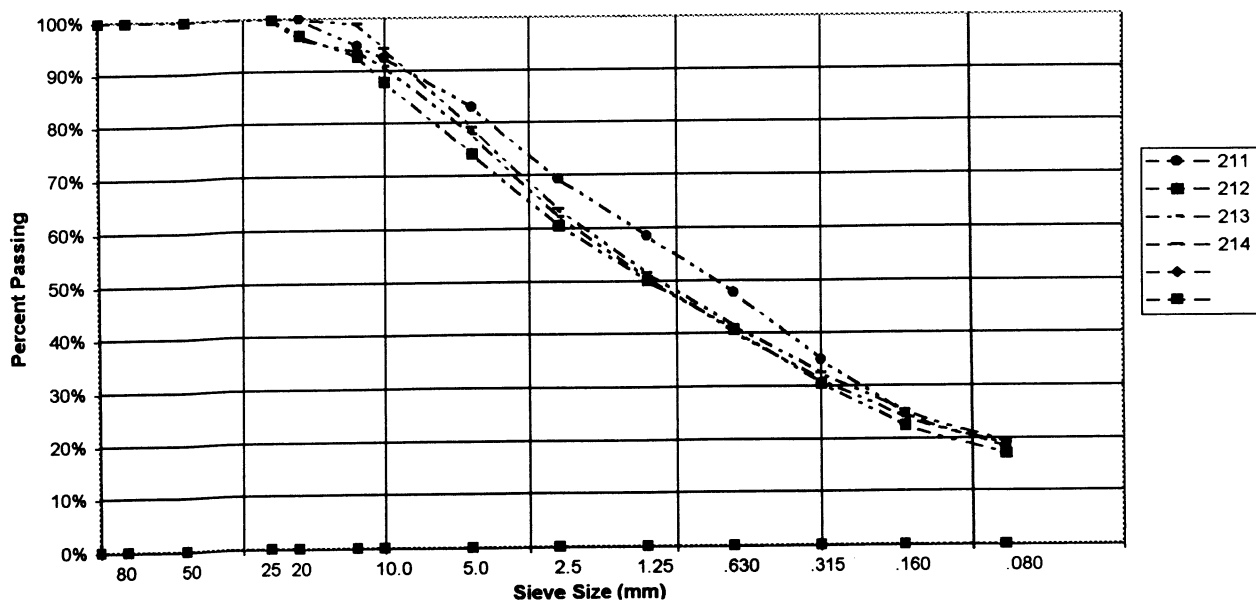
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633863-6772714
LOGGED BY: RW

HOLE No.: 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)		

Grain Size Analysis (Percent Passing vs Grain Size)





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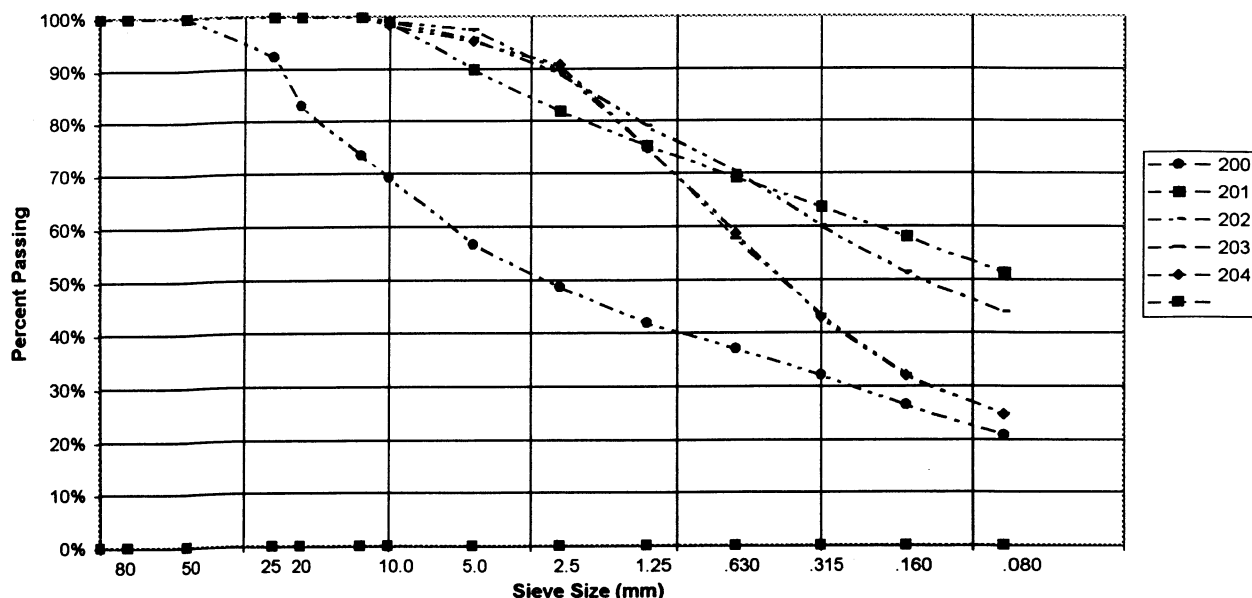
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633827-6772909
LOGGED BY: RW

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





HOGGAN ENGINEERING & TESTING (1980) LTD.

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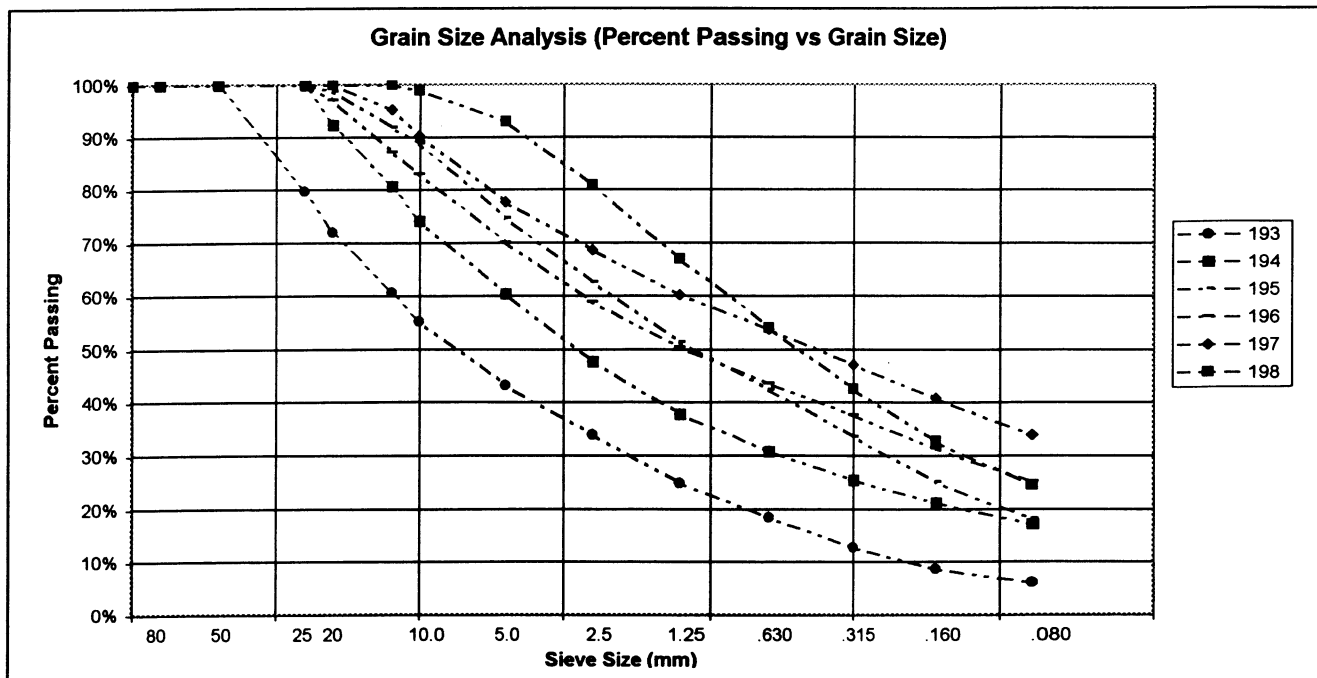


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633773-6773058
LOGGED BY: RW

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)



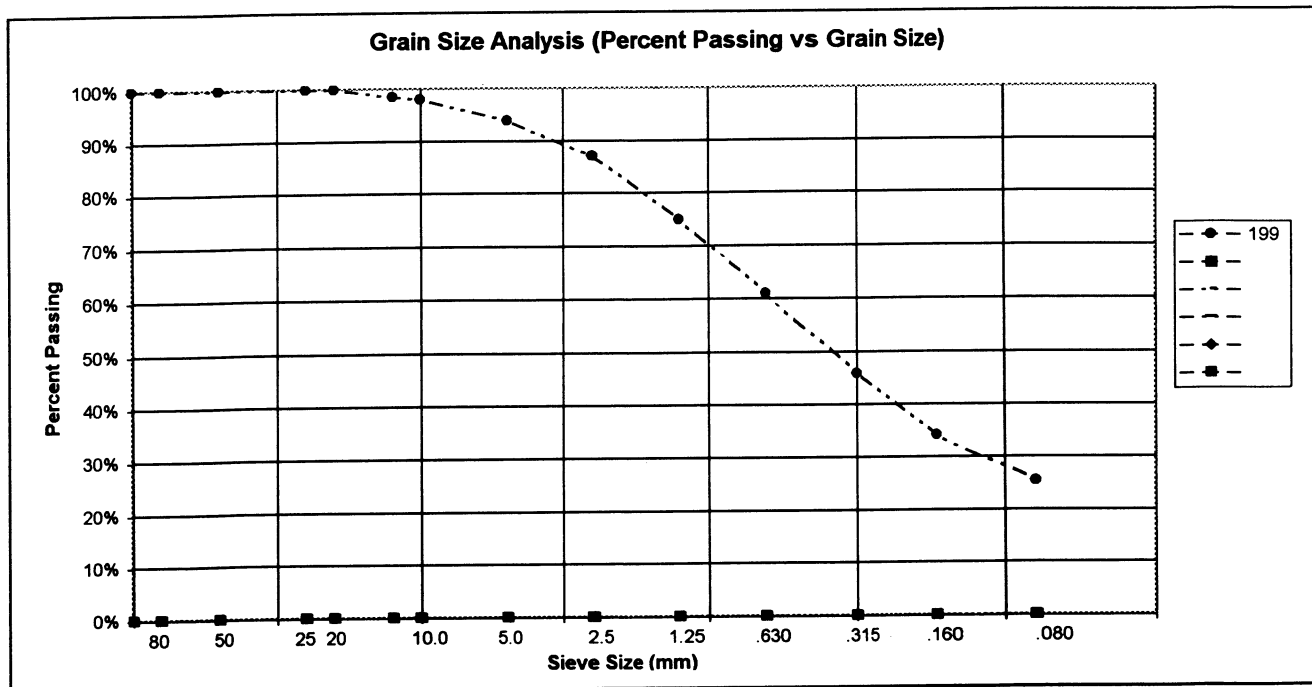


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633773-6773058
LOGGED BY: RW

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)				





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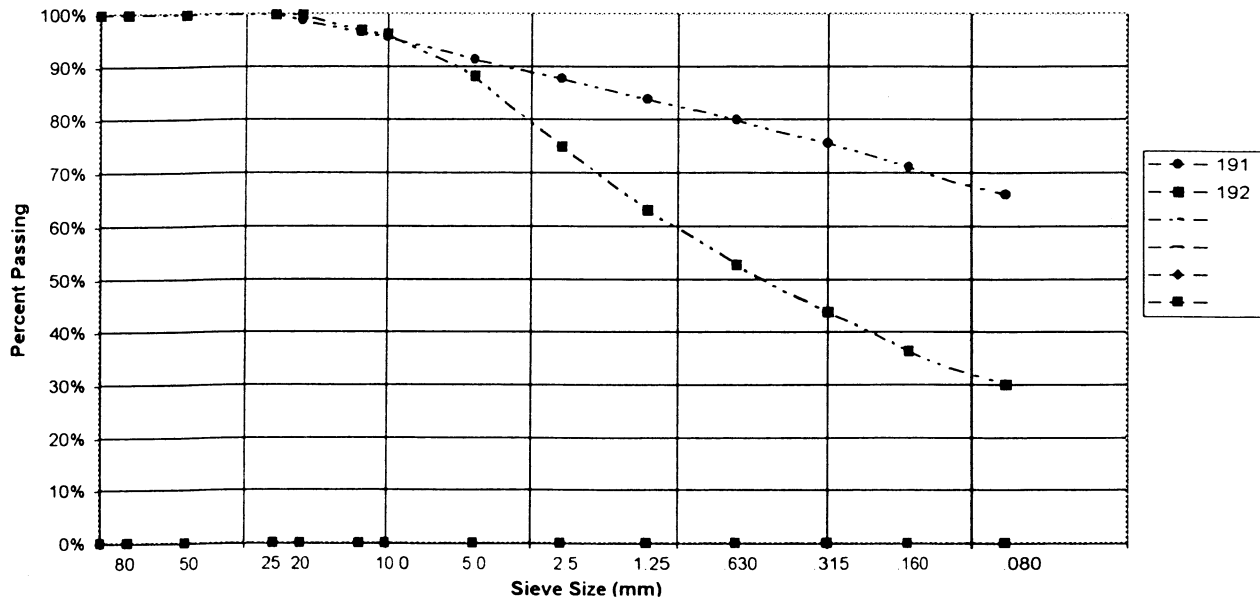
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633699-6773199
LOGGED BY: RW

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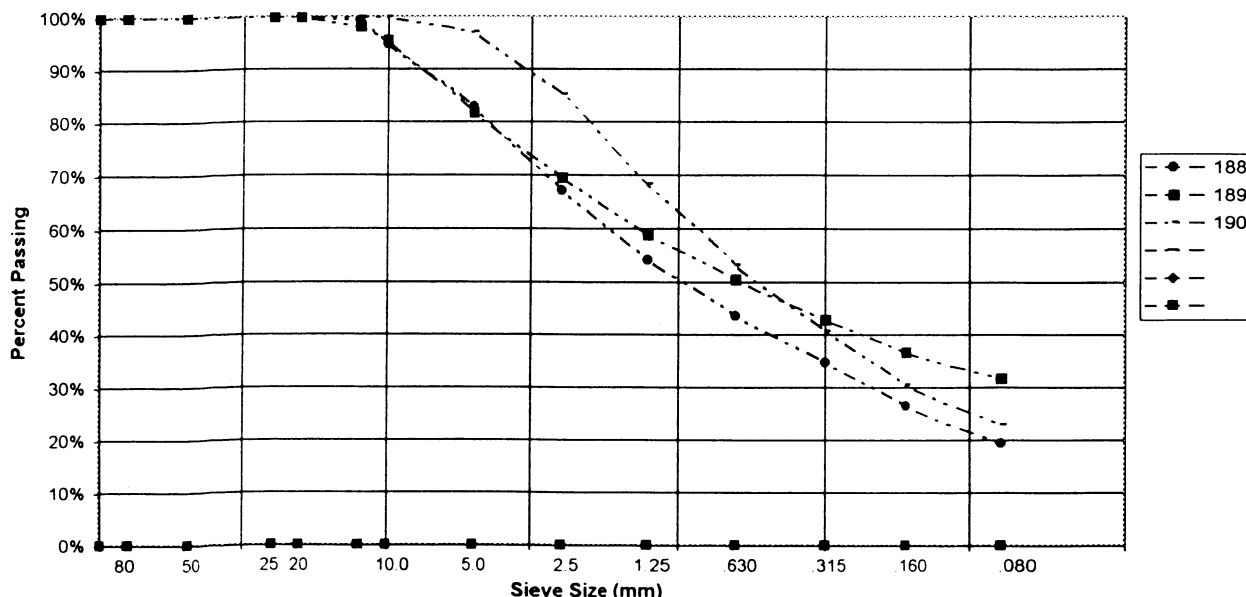
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633619-6773331
LOGGED BY: RW

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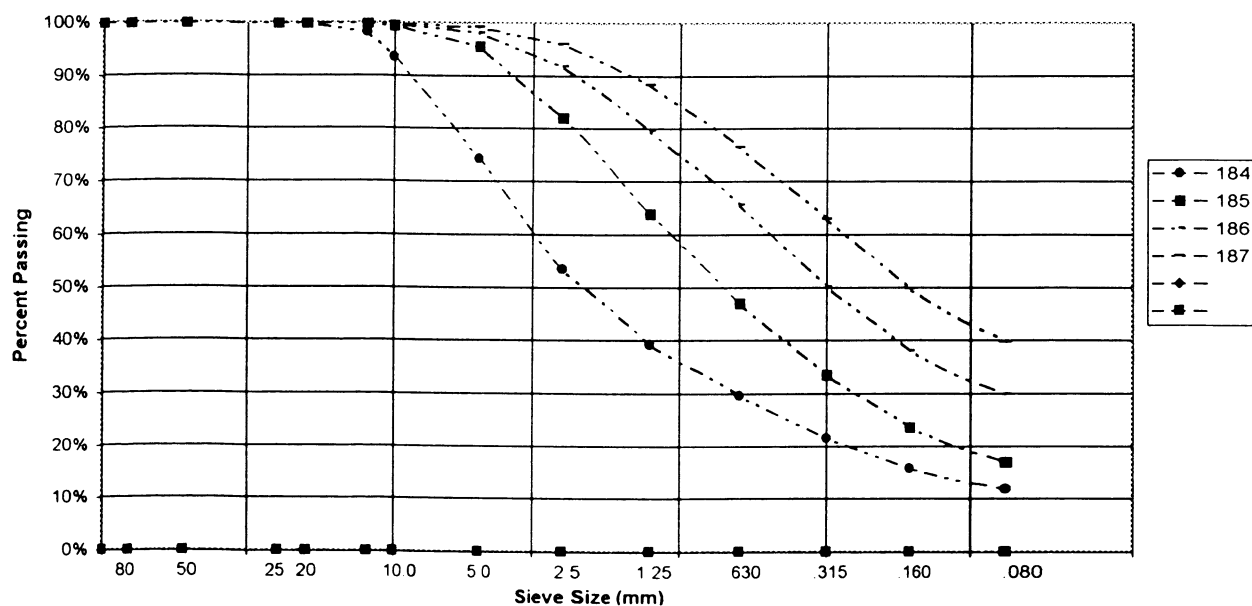
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633550-6773445
LOGGED BY: RW

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)		

Grain Size Analysis (Percent Passing vs Grain Size)





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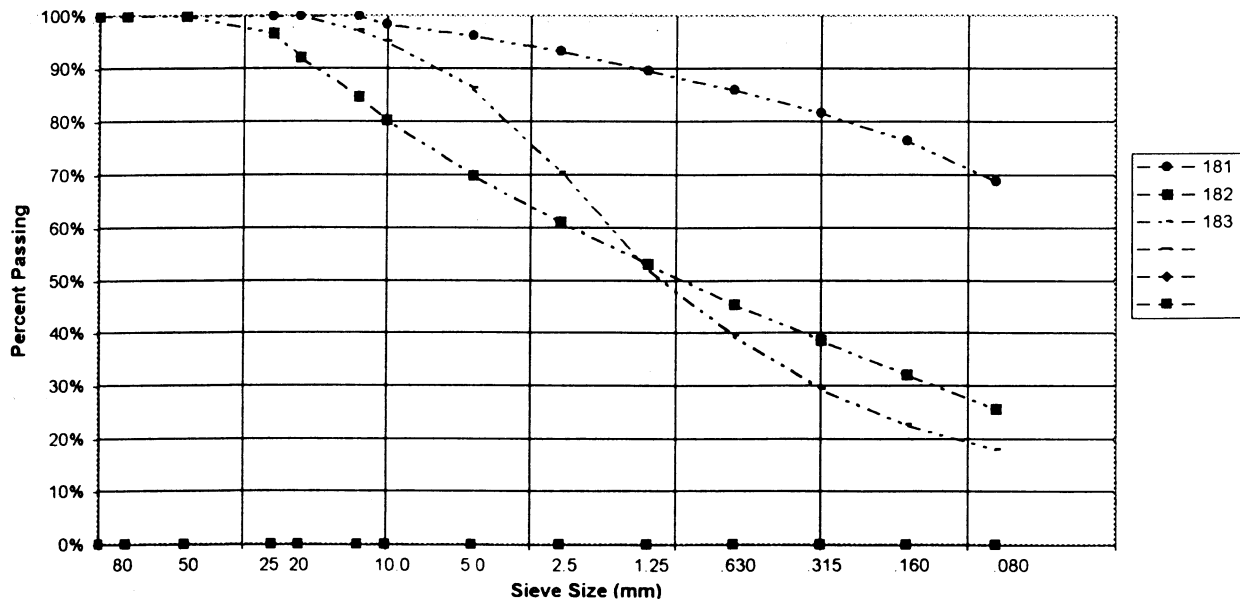
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633531-6773473
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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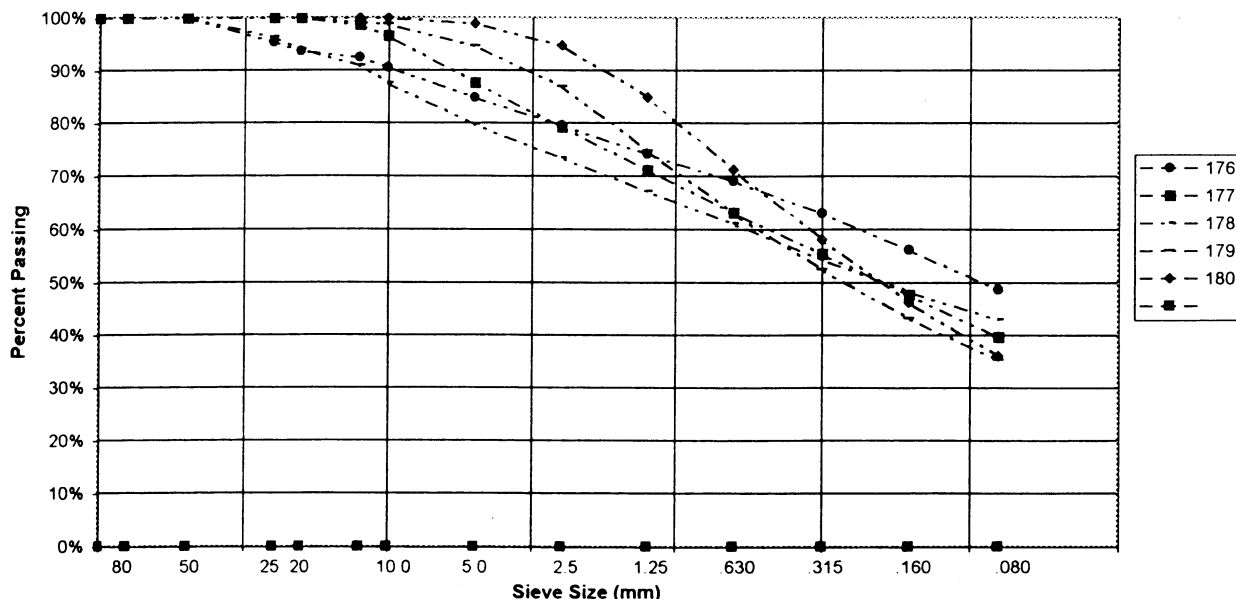
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633472-6773537
LOGGED BY: RW

HOLE No.: 30130

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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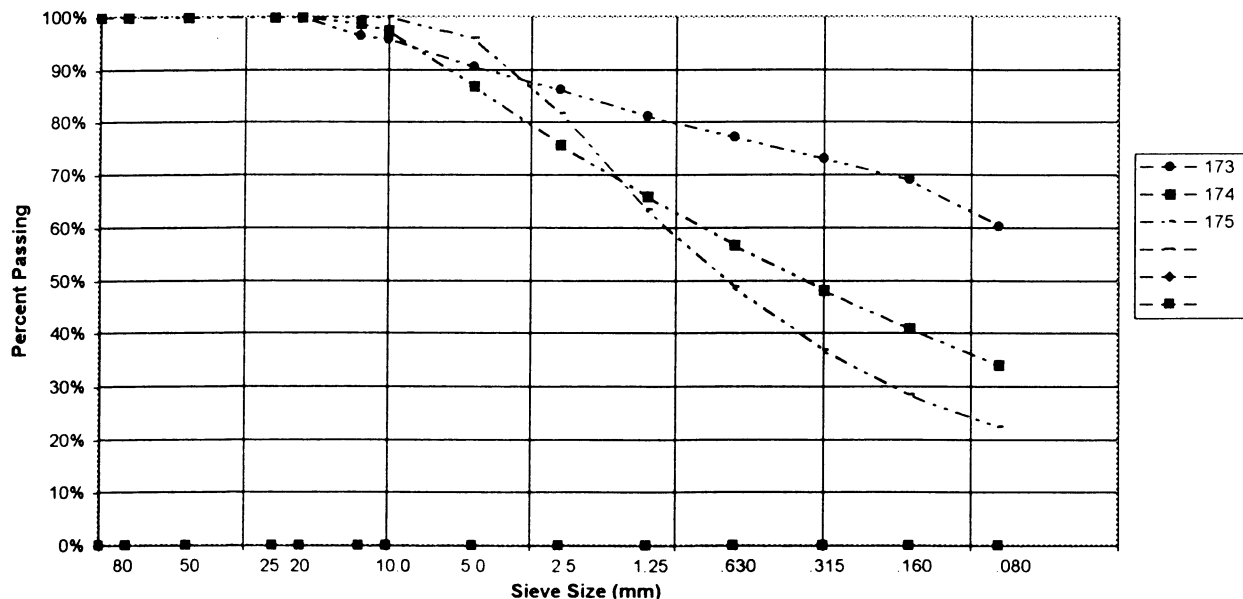
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633423-6773651
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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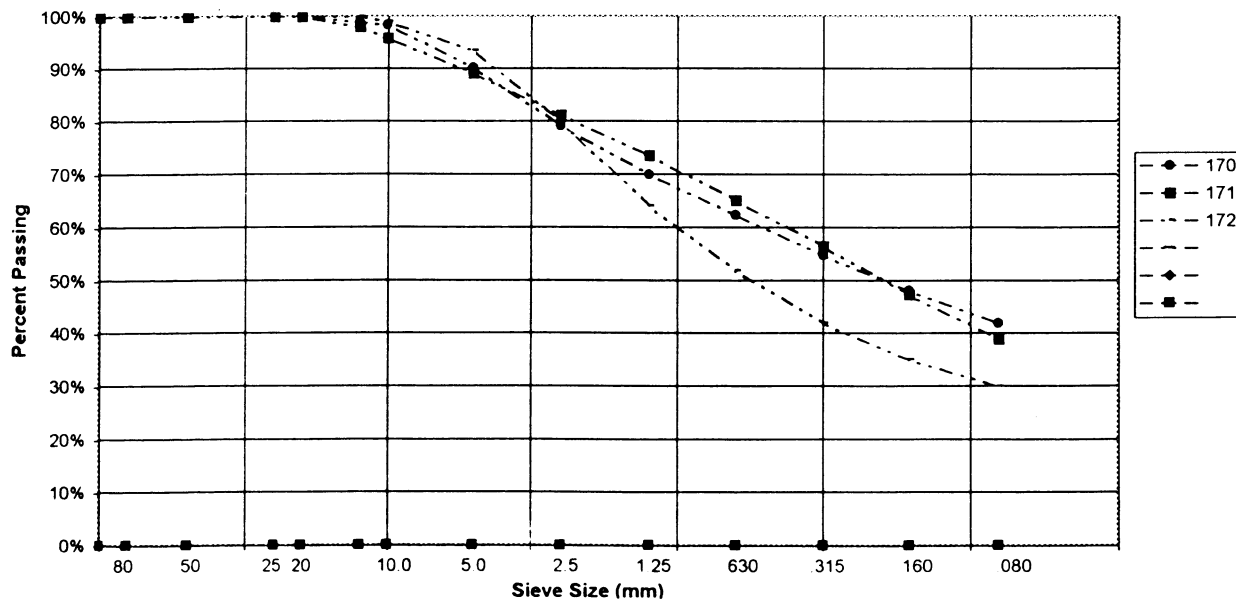
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633337-6773786
LOGGED BY: RVW

HOLE No.: 30132

DATE COMP: 08/09/2004

FIELD NO:	170	171	172			
LAB NO:	170	171	172			
DEPTH:	0.9-1.2	2.1-2.7	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	99%	98%	100%			
10.0	98%	96%	99%			
5.0	90%	89%	93%			
2.5	79%	81%	80%			
1.25	70%	74%	64%			
0.630	62%	65%	52%			
0.315	55%	56%	42%			
0.160	48%	47%	35%			
0.080	42%	39%	30%			
M.C.(%)	10%	9%	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:	10	11	7			
% SAND:	48	50	63			
% FINES:	42	39	30			
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)			

Grain Size Analysis (Percent Passing vs Grain Size)





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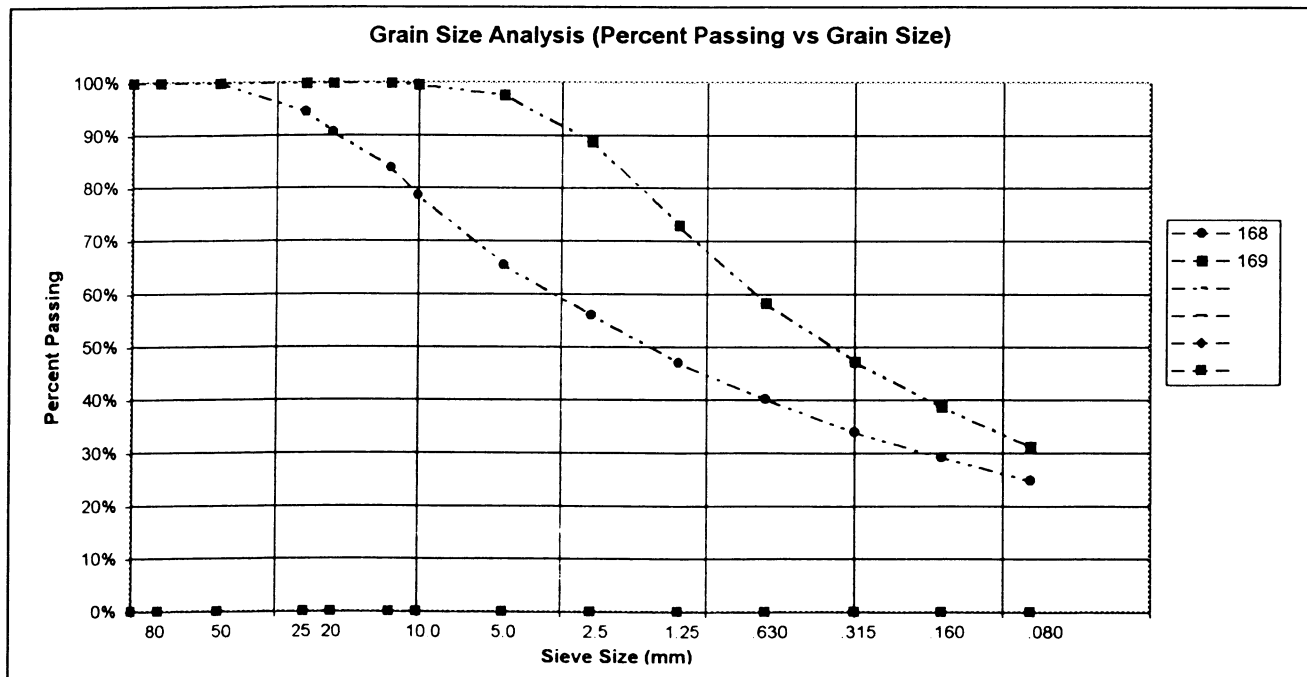


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633261-6773901
LOGGED BY: RW

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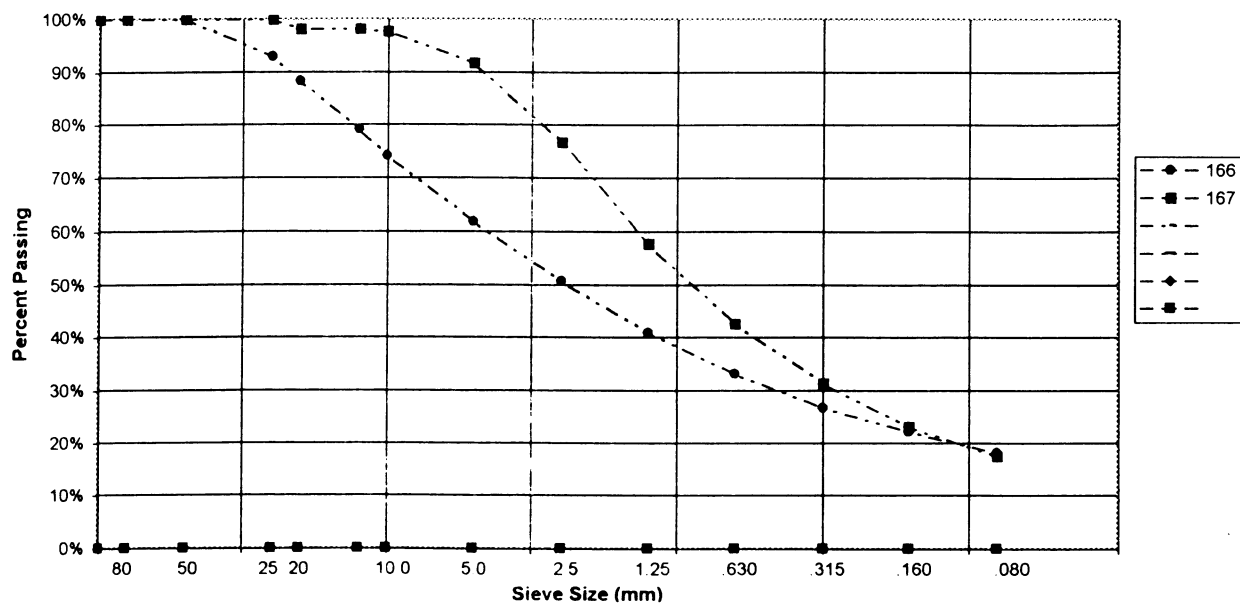
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633158-6774008
LOGGED BY: RW

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)				

Grain Size Analysis (Percent Passing vs Grain Size)





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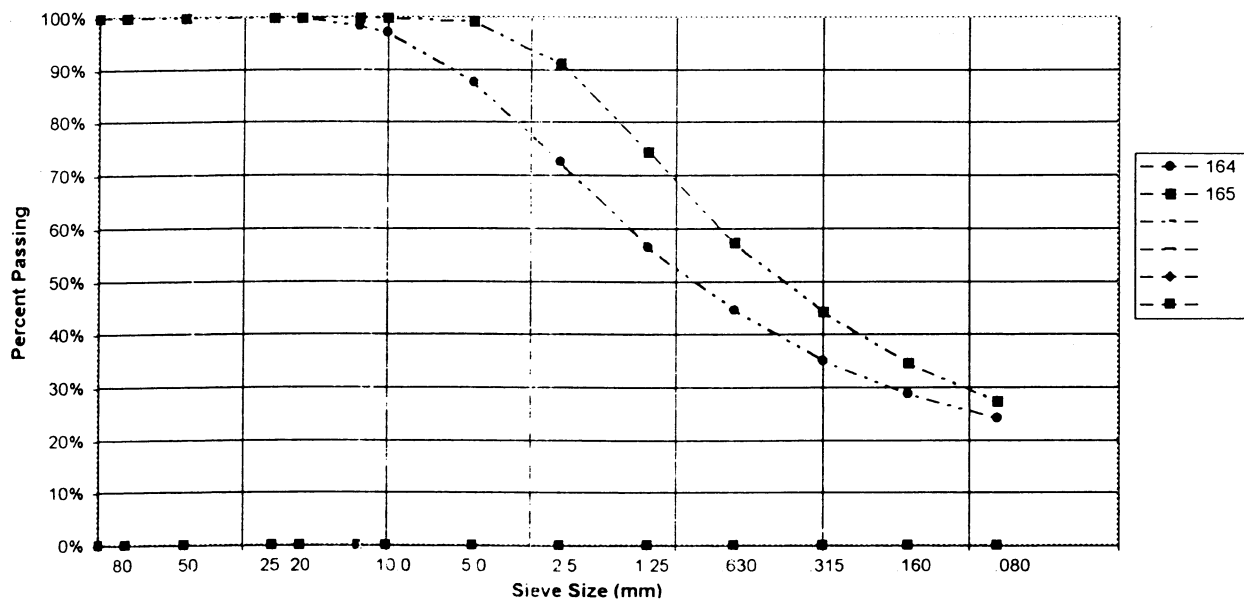
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633067-6774137
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





HOGGAN ENGINEERING & TESTING (1980) LTD.

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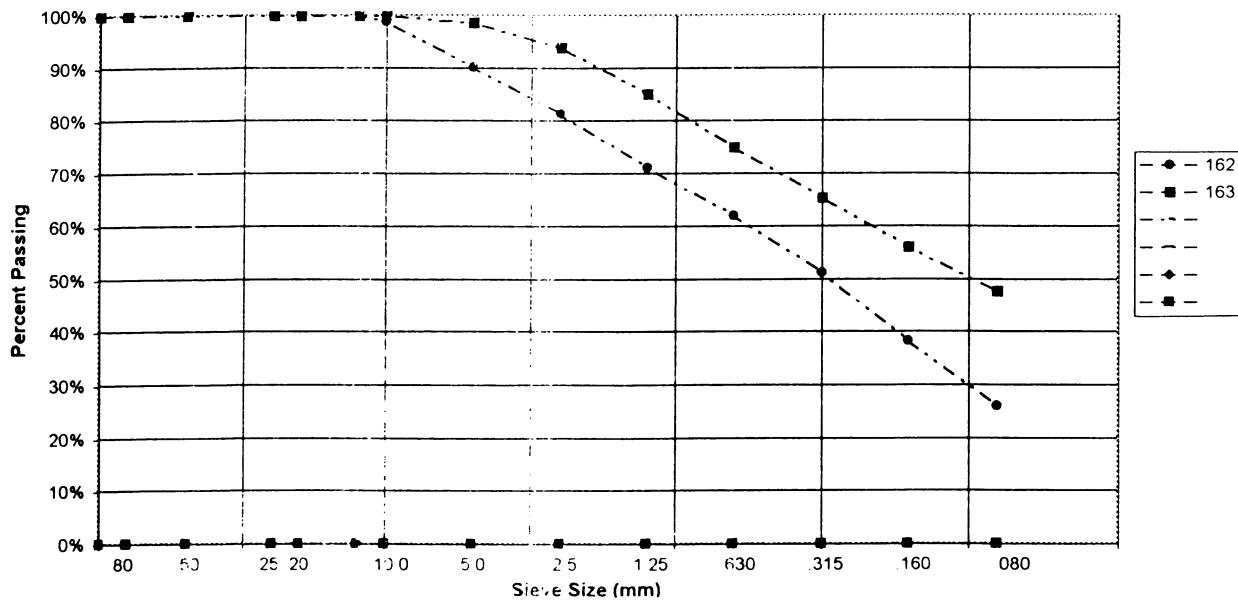
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 633003-6774206
LOGGED BY: RW

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 _M)	SILTY SAND (SM)			

Grain Size Analysis (Percent Passing vs Grain Size)





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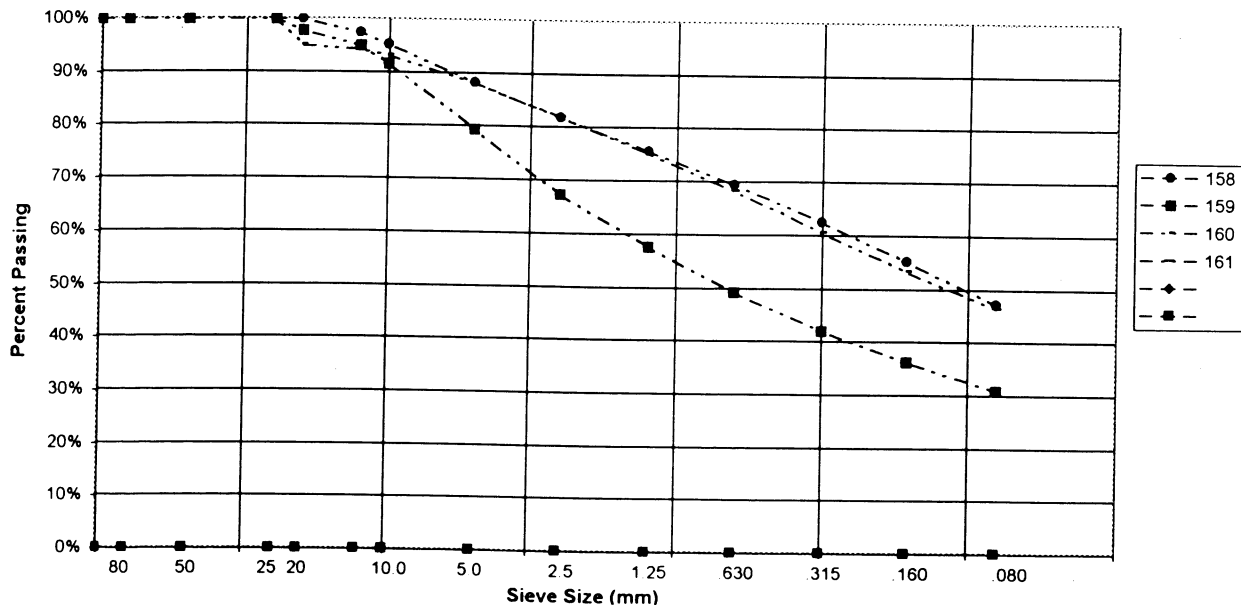
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 632037-6775613
LOGGED BY: RW

HOLE No.: 30148

DATE COMP: 08/03/2004

FIELD NO:	158	159	160	161		
LAB NO:	158	159	160	161		
DEPTH:	0.9-1.5	2.1-2.7	3.7-4.3	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	100%	100%	100%	100%		
20.0	100%	98%	95%	95%		
12.5	98%	95%	94%	94%		
10.0	95%	92%	93%	93%		
5.0	88%	79%	88%	88%		
2.5	82%	67%	82%	82%		
1.25	76%	58%	75%	75%		
0.630	70%	49%	68%	68%		
0.315	63%	42%	61%	61%		
0.160	55%	36%	53%	53%		
0.080	47%	31%	46%	46%		
M.C.(%)	25%	11%	16%	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	21	12	#VALUE!		
% SAND:	41	49	42	#VALUE!		
% FINES:	47	31	46	#VALUE!		
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	#VALUE!		

Grain Size Analysis (Percent Passing vs Grain Size)





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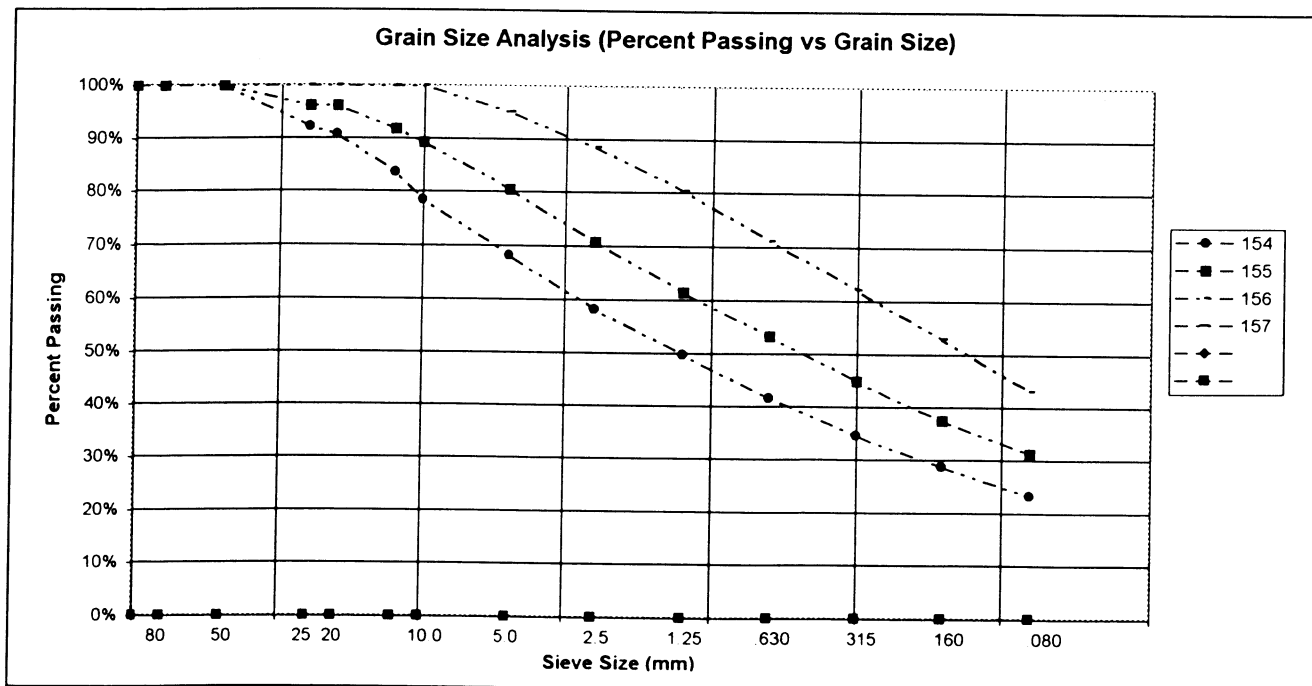


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631983-6775666
LOGGED BY: RW

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%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	92%	96%	100%			
20.0	91%	96%	100%			
12.5	84%	92%	100%			
10.0	79%	89%	100%			
5.0	68%	81%	95%			
2.5	58%	71%	88%			
1.25	50%	62%	80%			
0.630	42%	53%	71%			
0.315	35%	45%	62%			
0.160	29%	38%	53%			
0.080	23%	31%	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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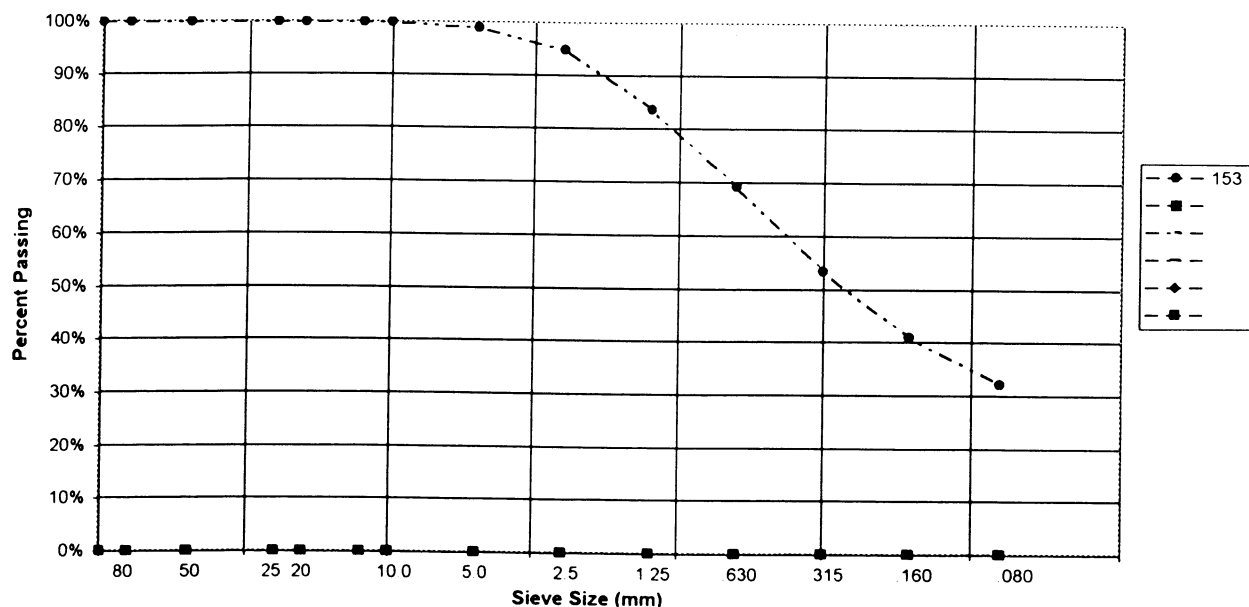
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631923-6775739
LOGGED BY: RW

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)





HOGGAN ENGINEERING & TESTING (1980) LTD.

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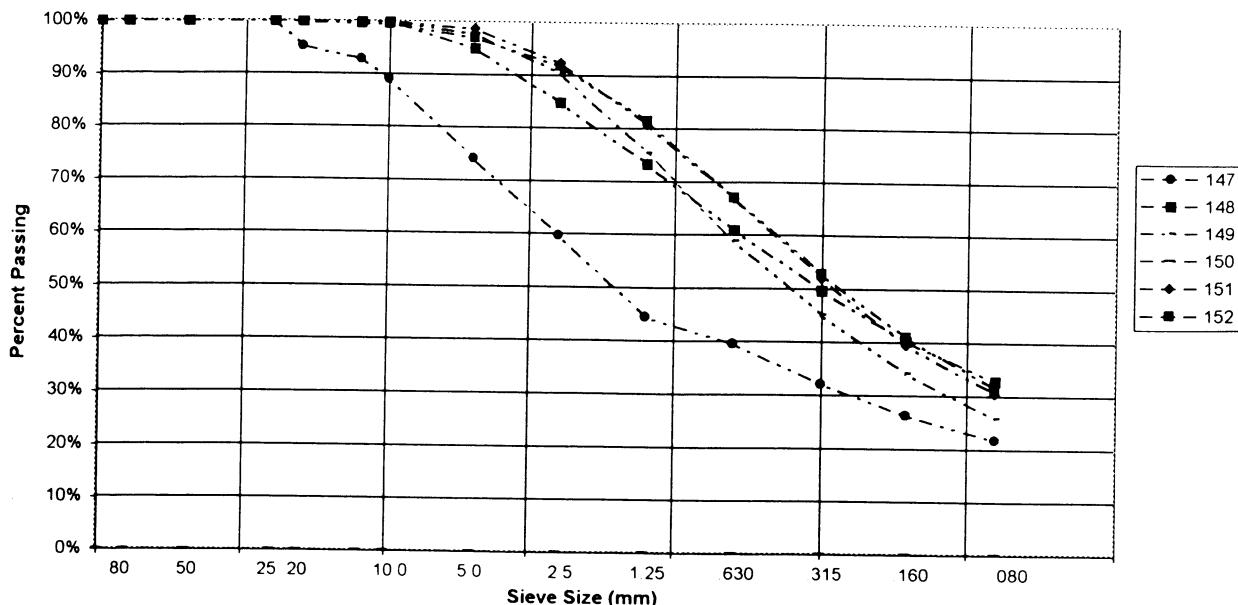
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631923-6775739
LOGGED BY: RW

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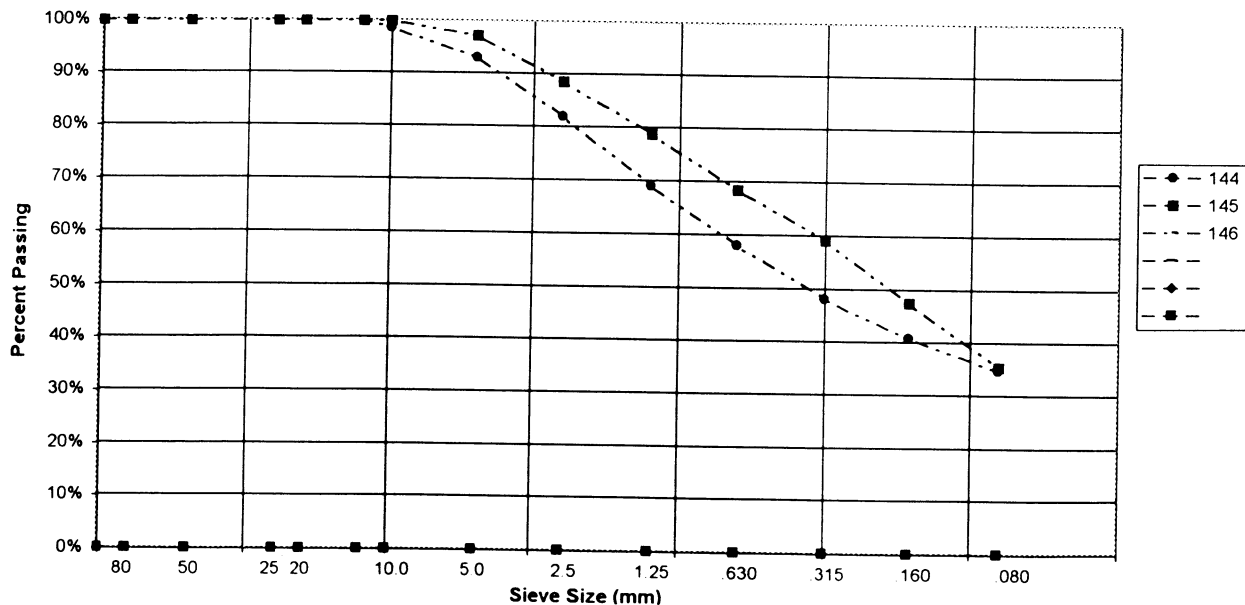
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631868-6775813
LOGGED BY: RVW

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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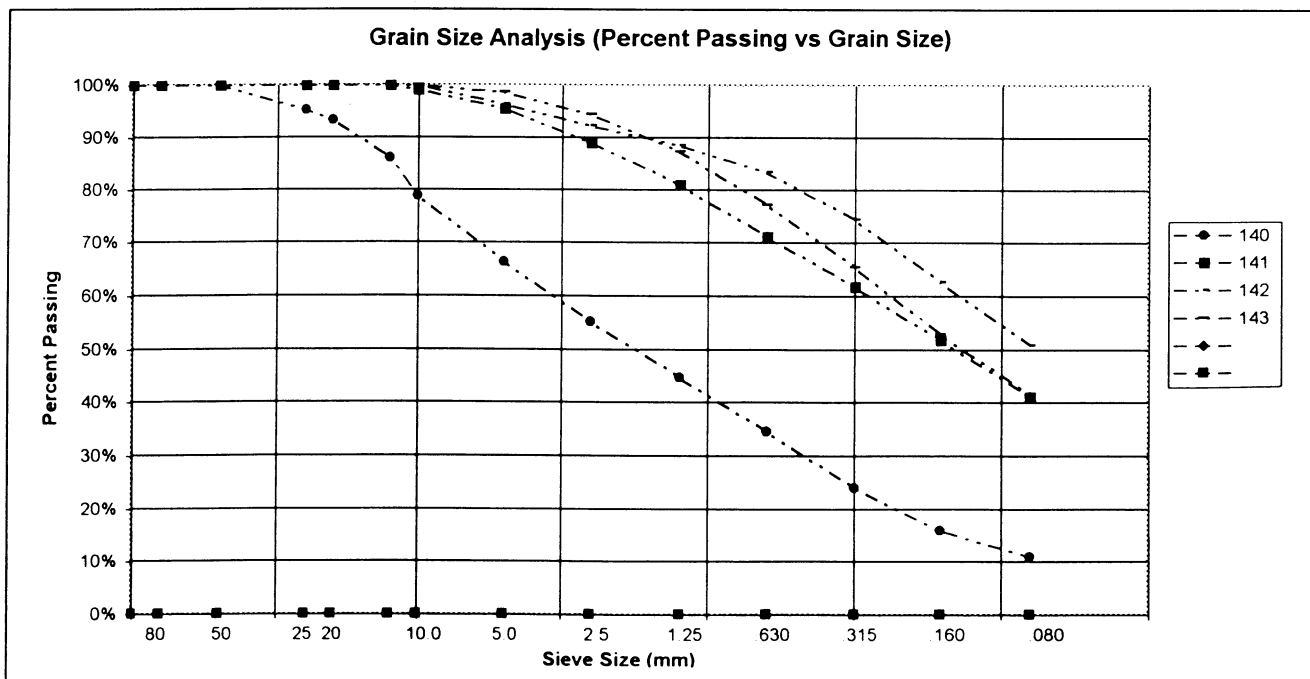


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631805-6775939
LOGGED BY: RW

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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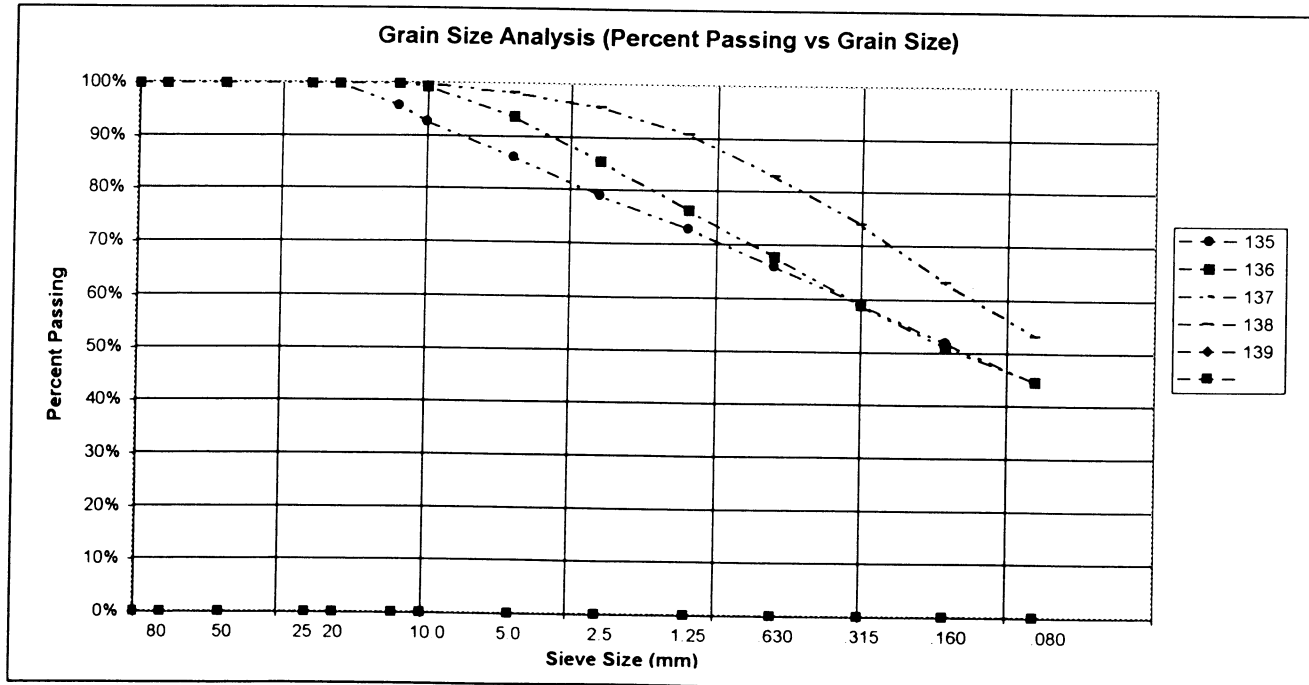


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631728-6776010
LOGGED BY: RW

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%		100%		
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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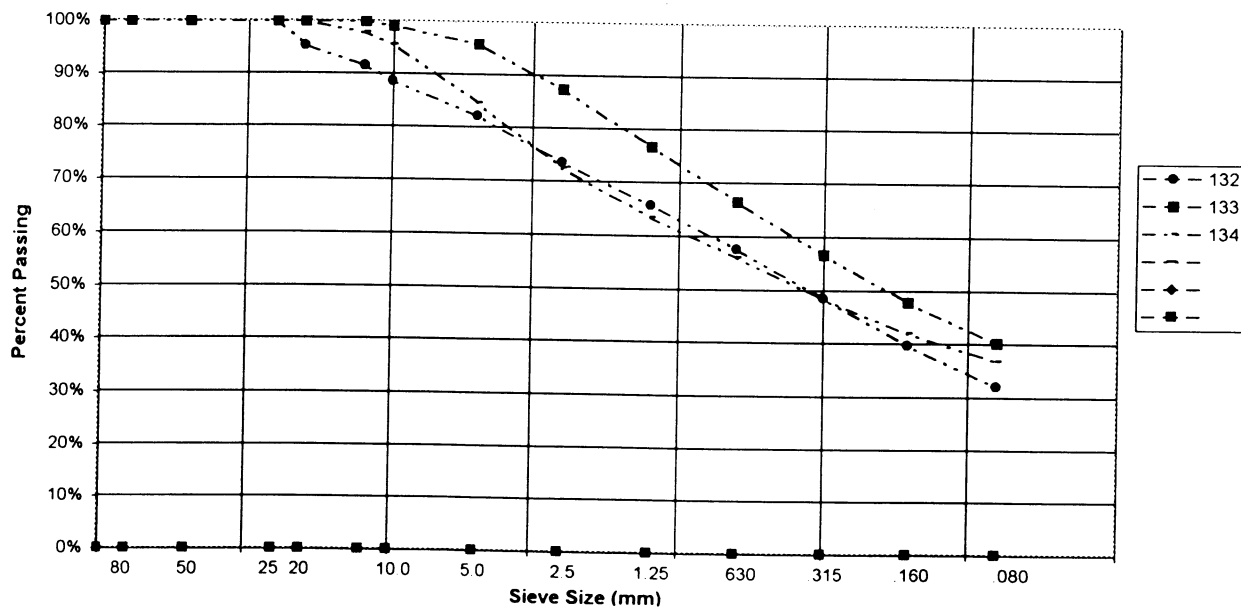
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631698-6776060
LOGGED BY: RW

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)			

Grain Size Analysis (Percent Passing vs Grain Size)





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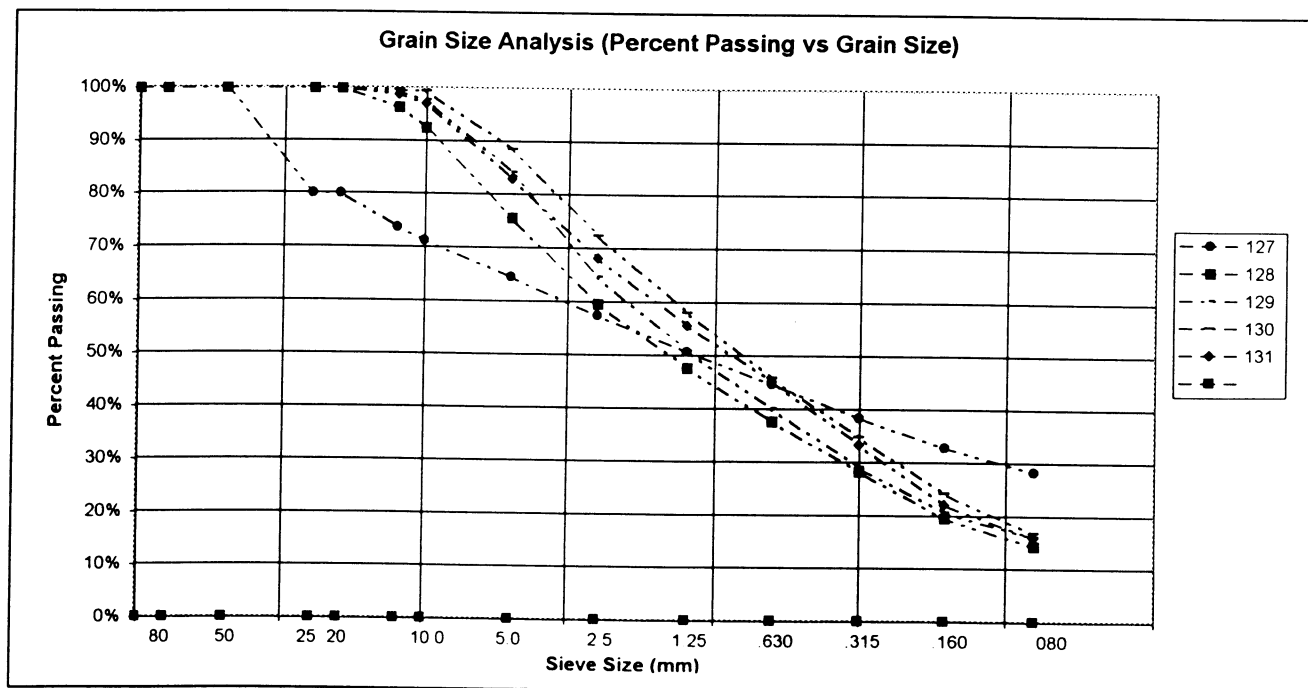


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631643-6776117
LOGGED BY: RW

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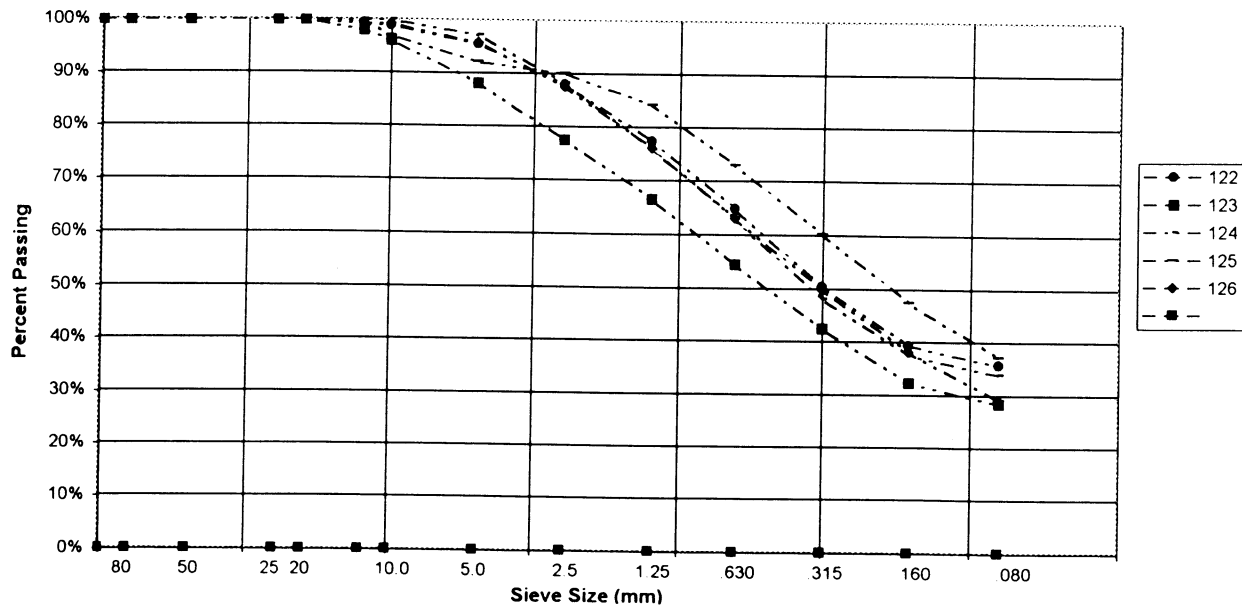
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631600-6776185
LOGGED BY: RW

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%	100%	
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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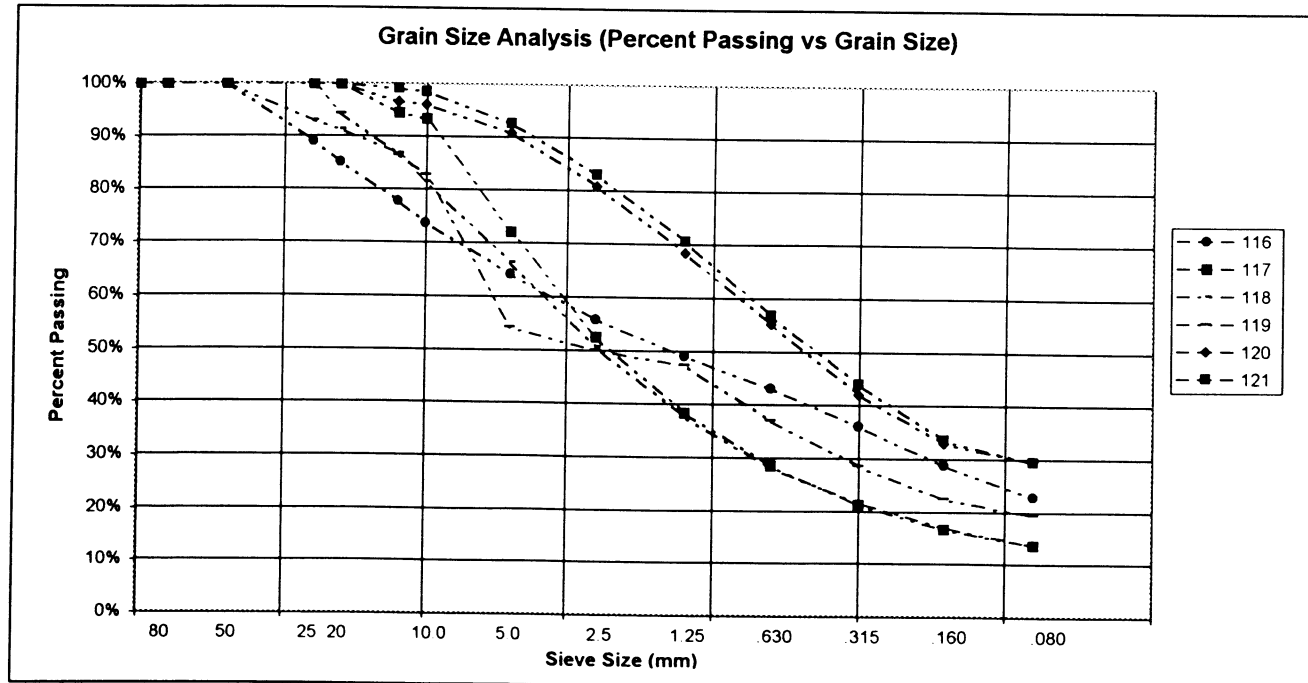


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631600-6776185
LOGGED BY: RW

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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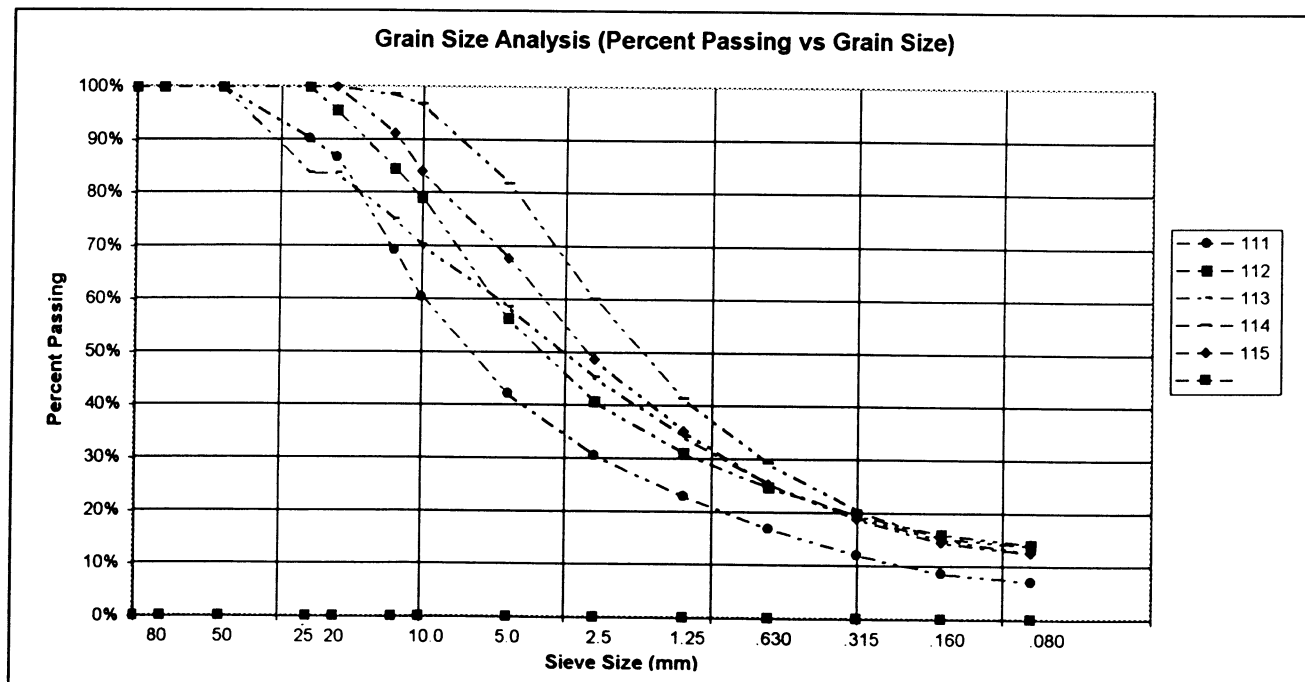


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631655-6776190
LOGGED BY: RW

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)	





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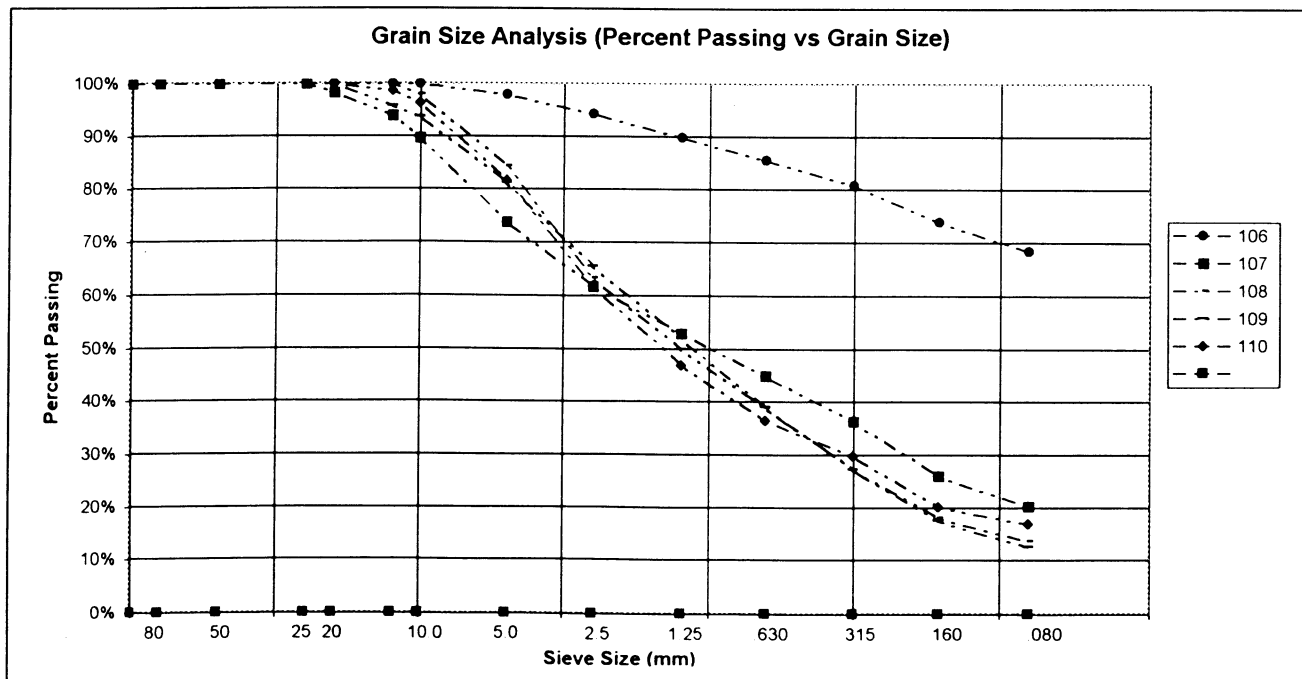


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631563-6776272
LOGGED BY: RW

HOLE No.: 30158

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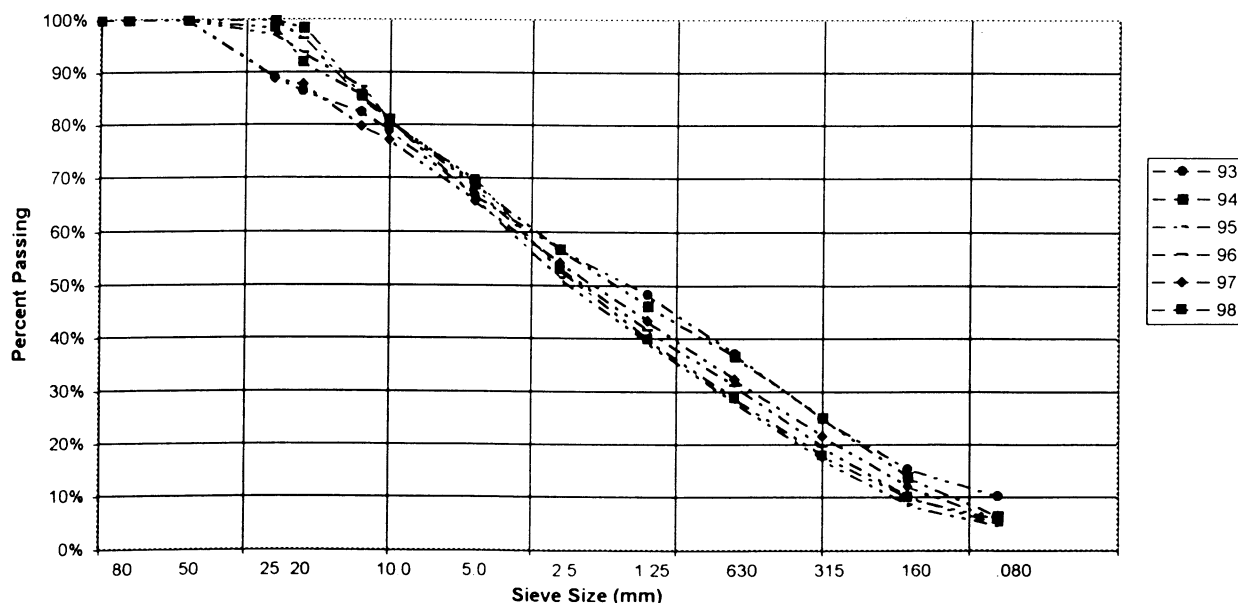
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631517-6776361
LOGGED BY: RW

HOLE No.: 30159

DATE COMP: 07/30/2004

FIELD NO:	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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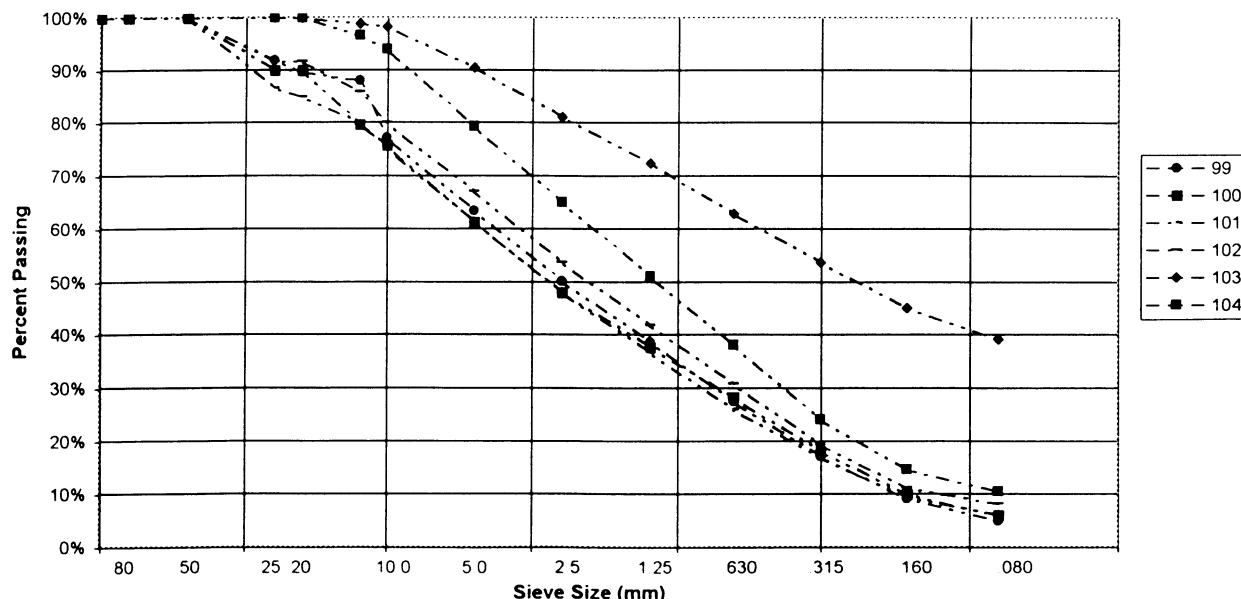
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631517-6776361
LOGGED BY: RW

HOLE No.: 30159

DATE COMP: 07/30/2004

FIELD NO:	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)

Grain Size Analysis (Percent Passing vs Grain Size)





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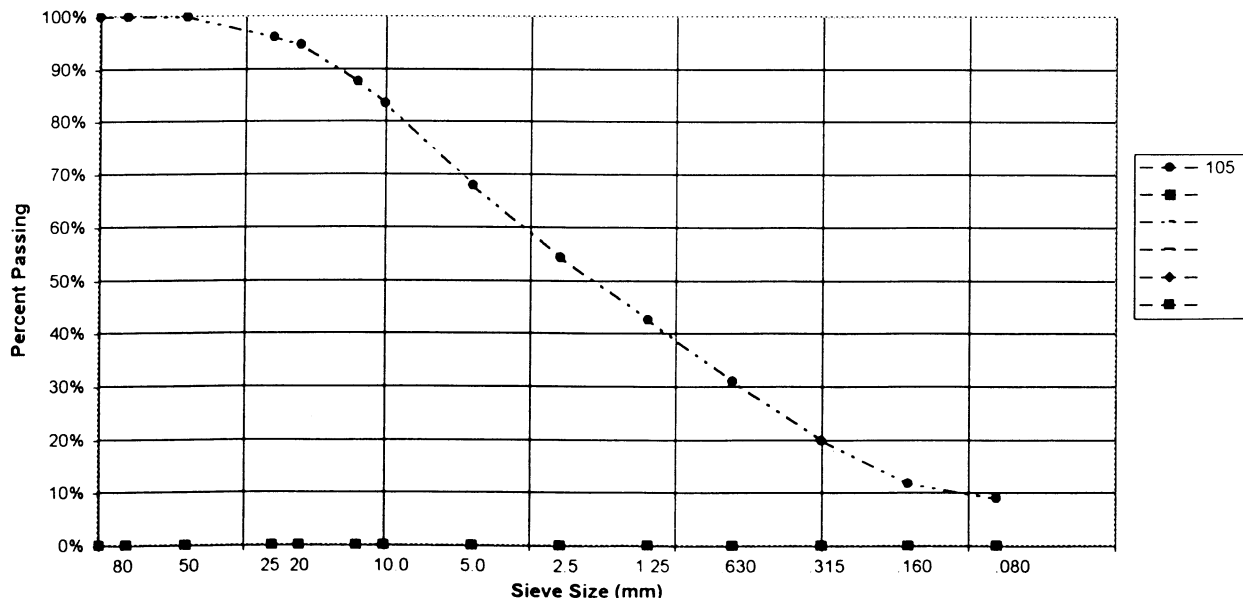
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631517-6776361
LOGGED BY: RW

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)





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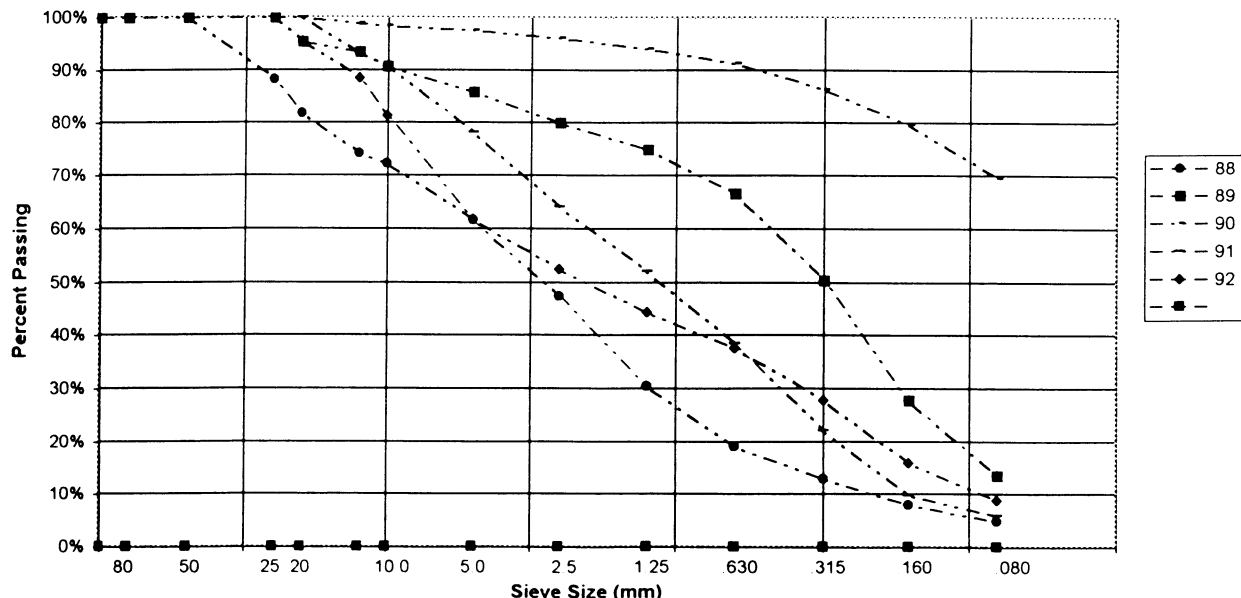
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631499-6776506
LOGGED BY: RW

HOLE No.: 30160

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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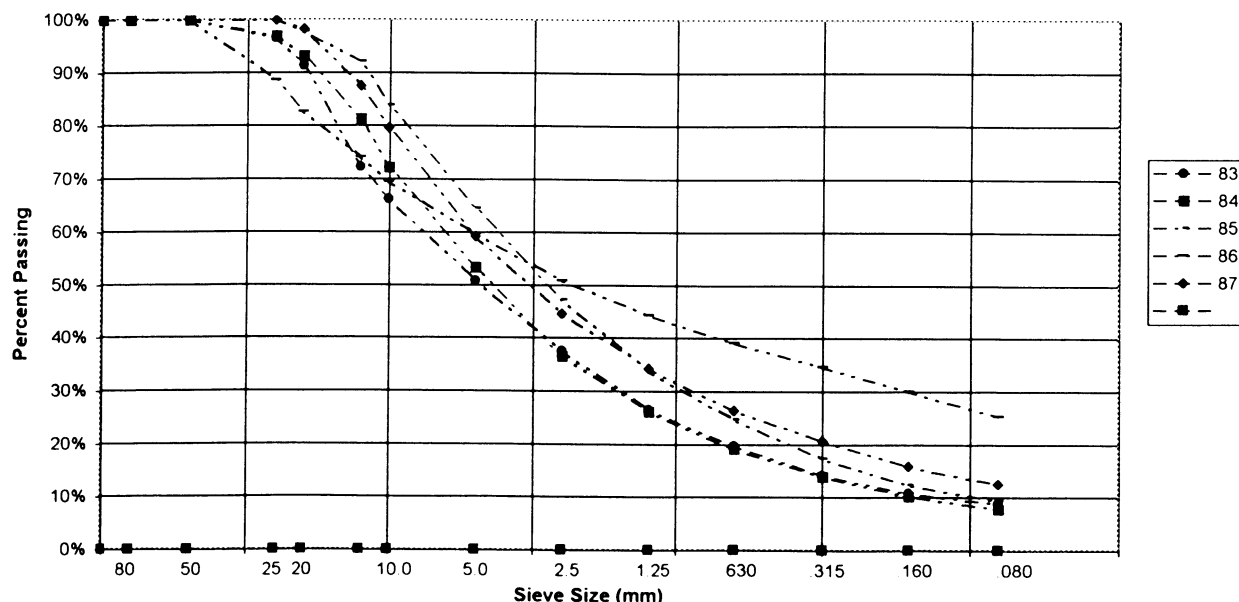
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CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631513-6776711
LOGGED BY: RW

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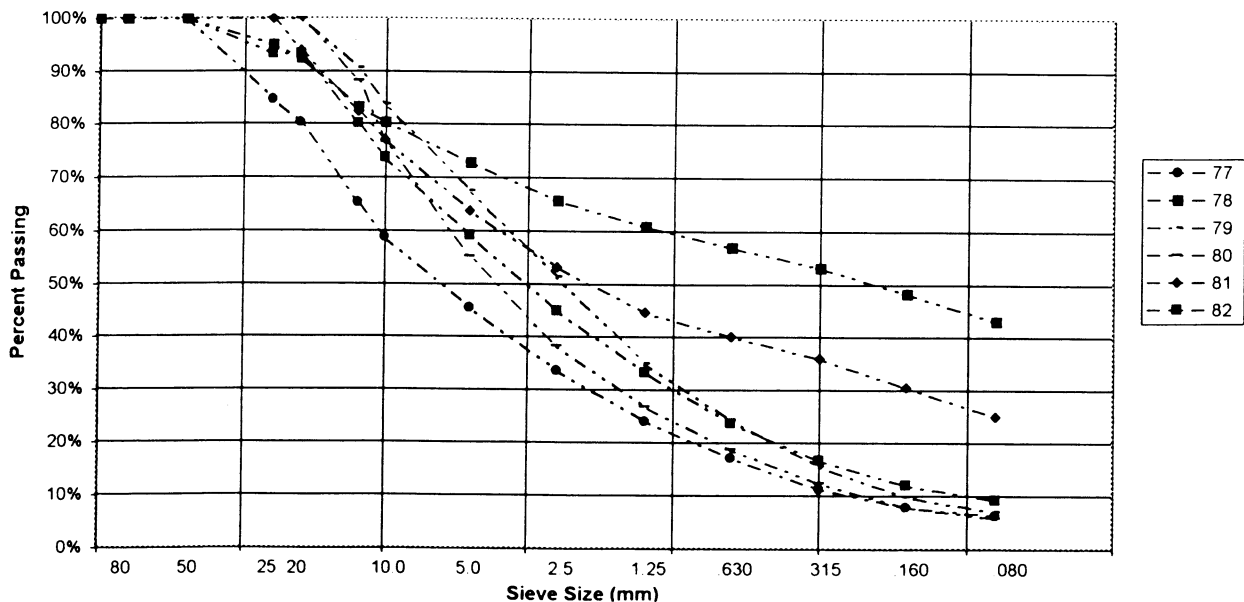
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631538-6776914
LOGGED BY: RW

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)

Grain Size Analysis (Percent Passing vs Grain Size)





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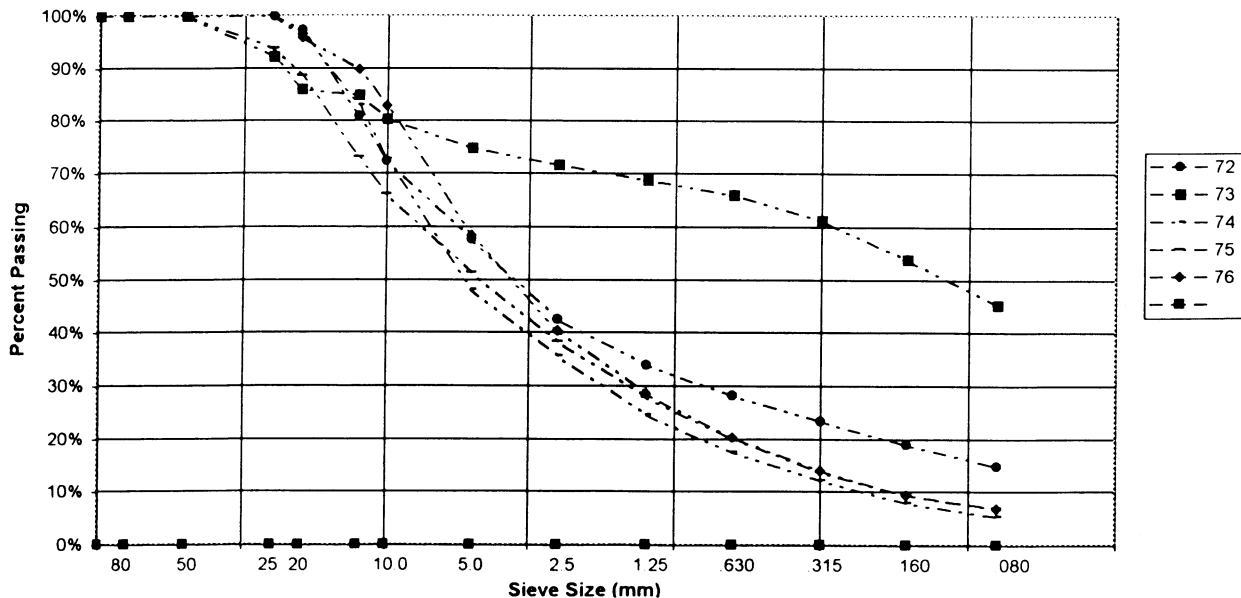
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631563-6776900
LOGGED BY: RW

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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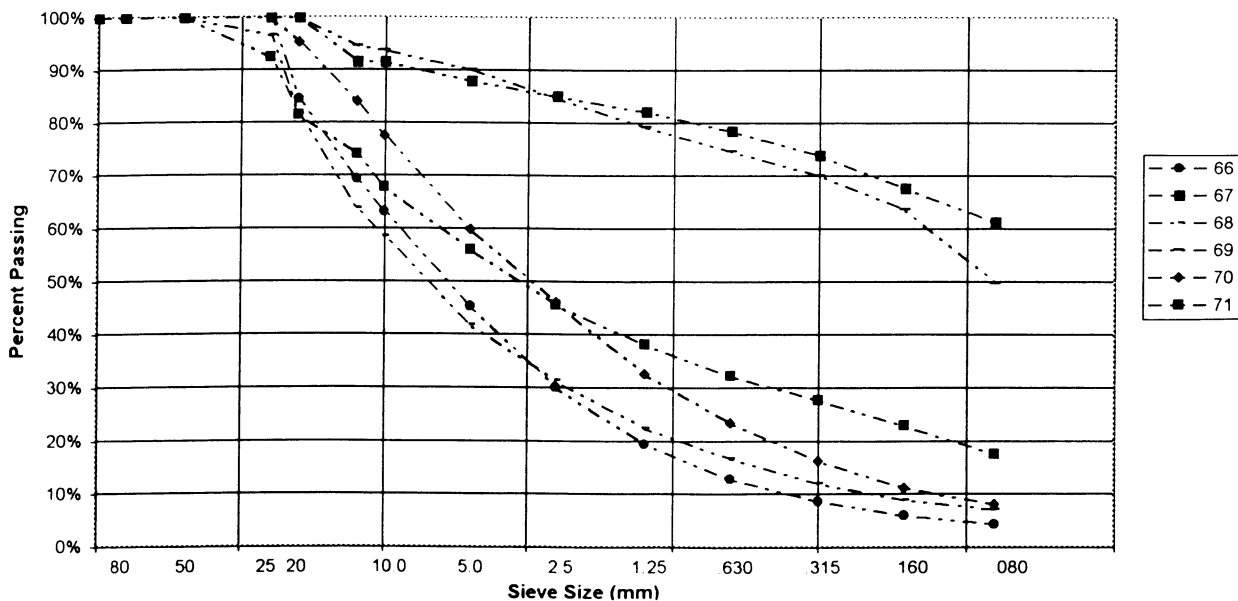
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631580-6777031
LOGGED BY: RW

HOLE No.: 30164

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)

Grain Size Analysis (Percent Passing vs Grain Size)





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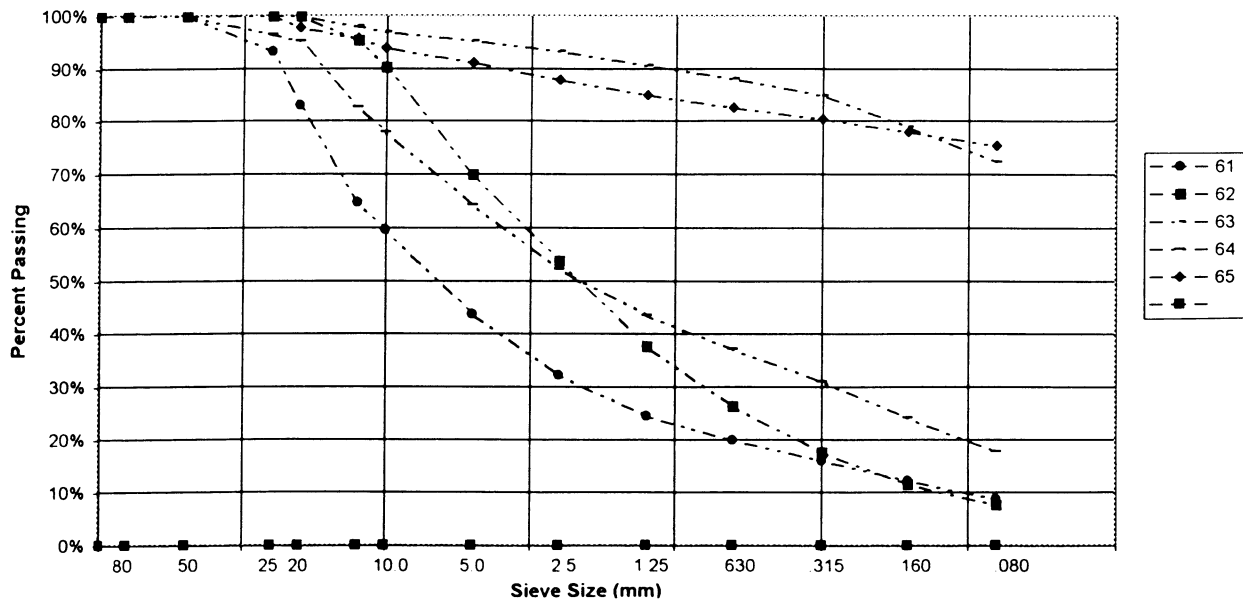
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631607-6777126
LOGGED BY: RW

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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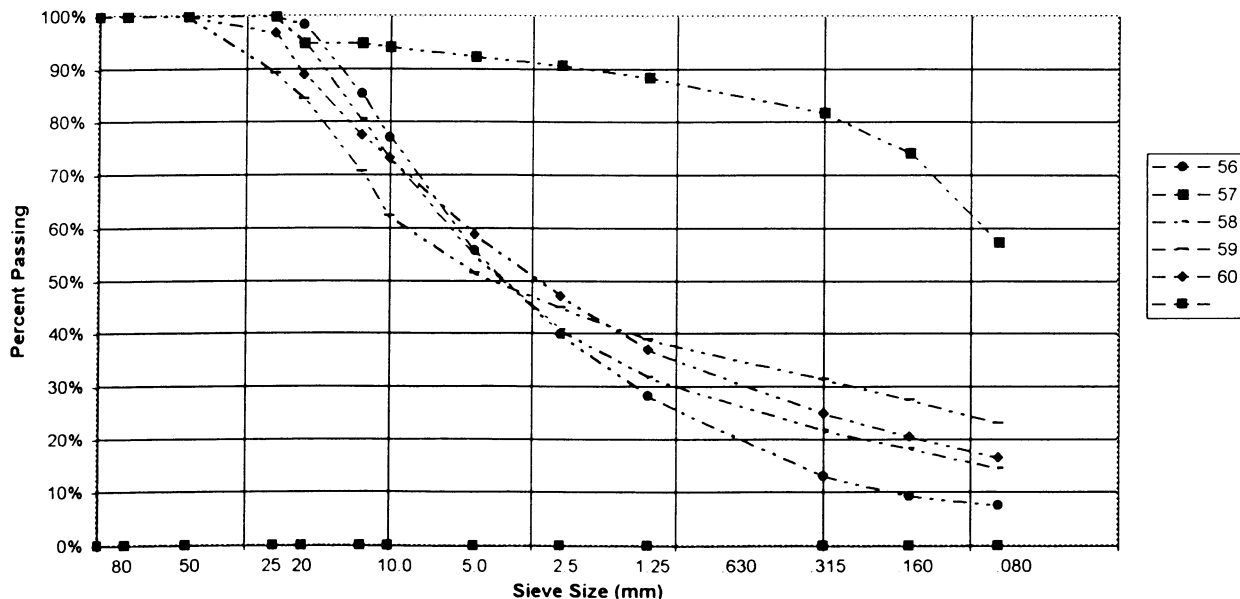
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631583-6777139
LOGGED BY: RW

HOLE No.: 30166

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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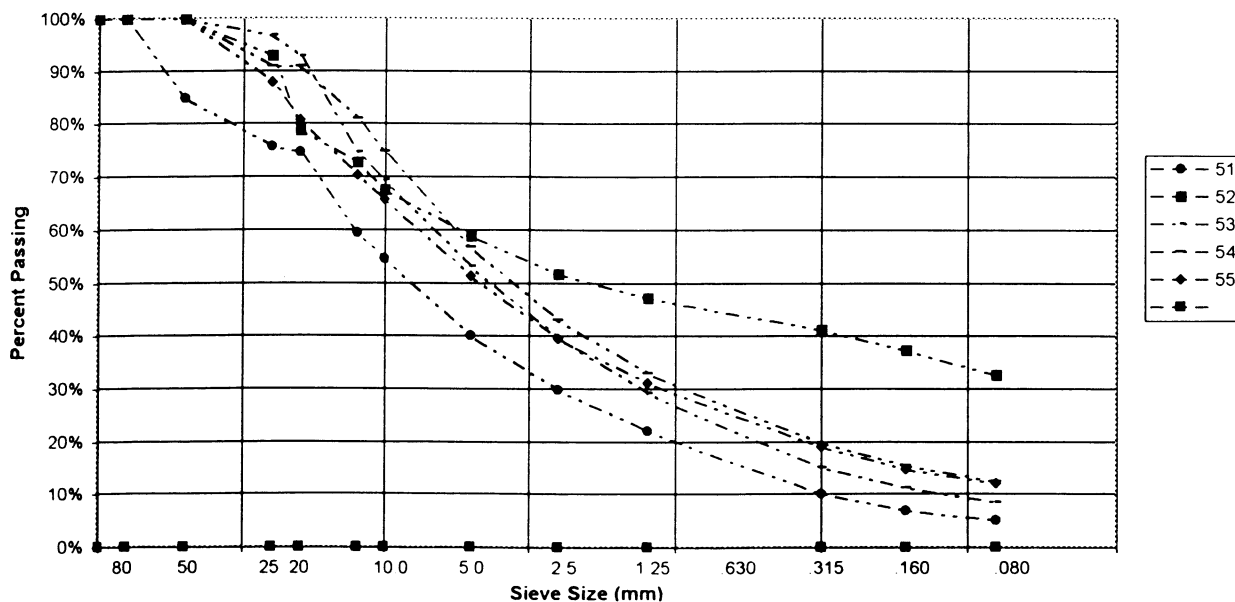
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631589-6777298
LOGGED BY: RW

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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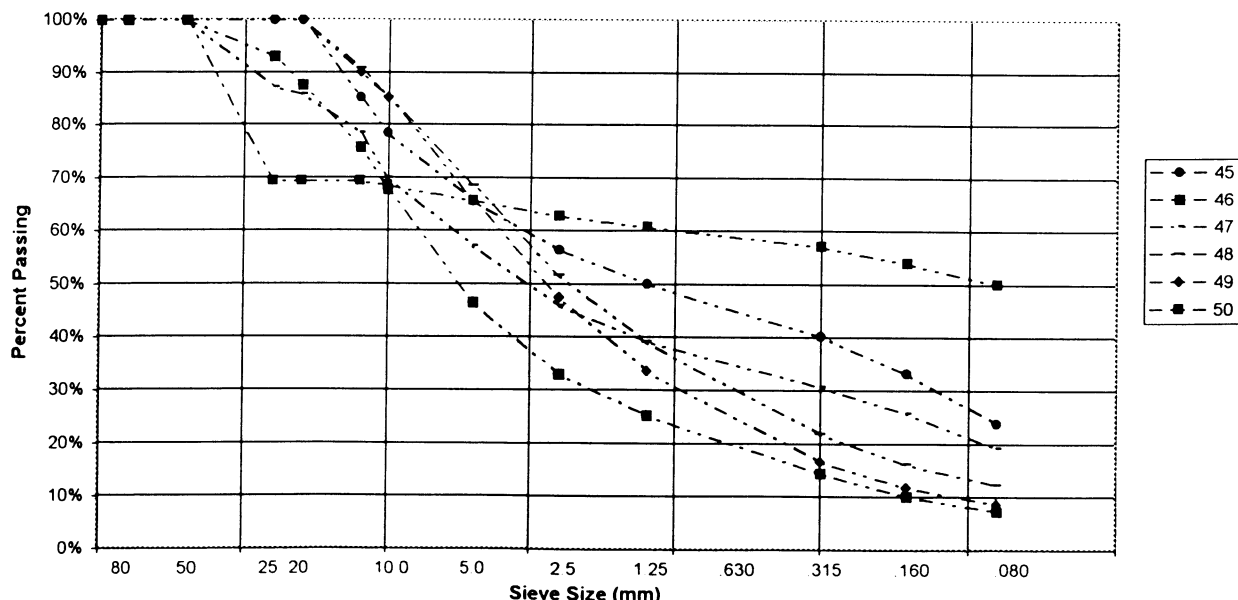
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CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631509-6777587
LOGGED BY: RW

HOLE No.: 30168

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)

Grain Size Analysis (Percent Passing vs Grain Size)





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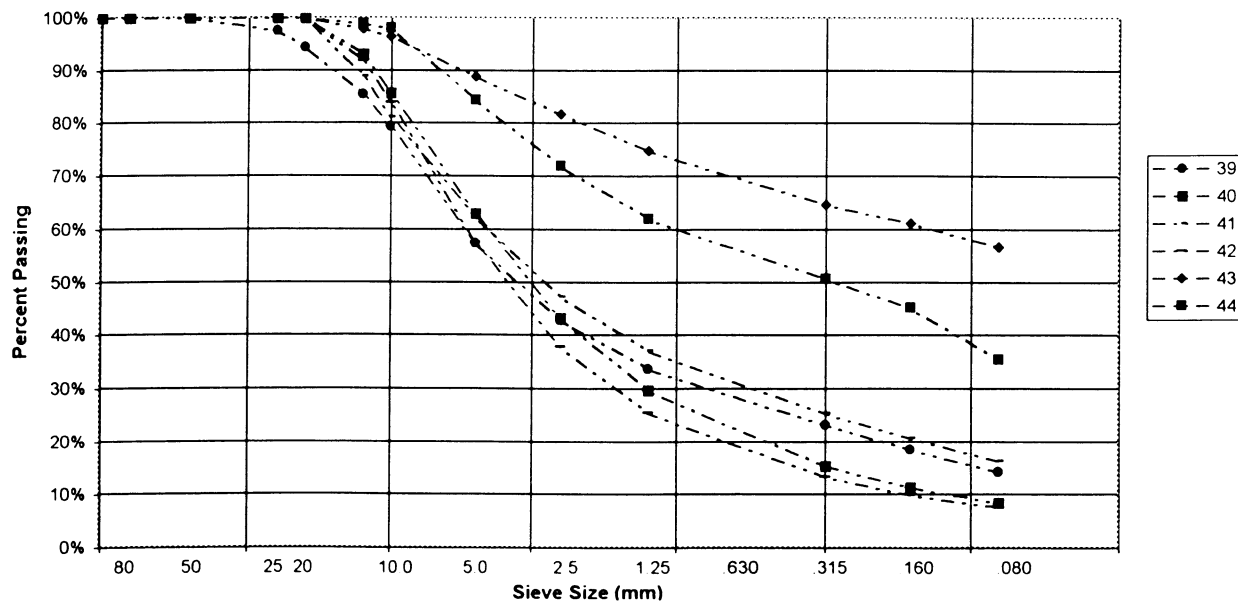
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631458-6777708
LOGGED BY: RW

HOLE No.: 30169

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)





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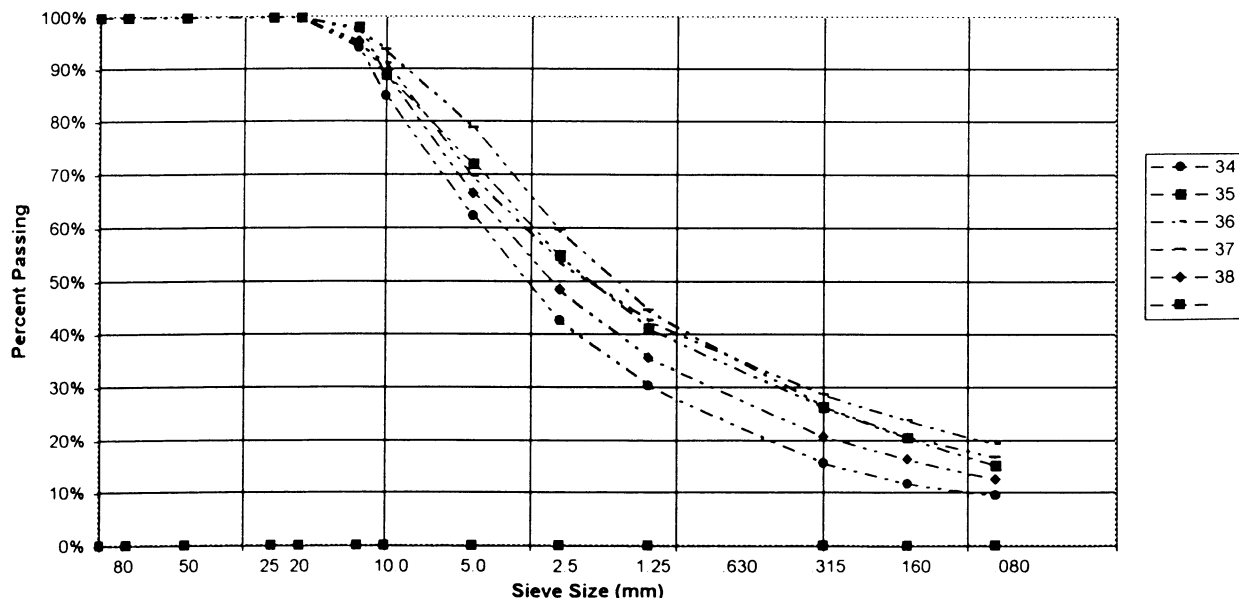
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631414-6777845
LOGGED BY: RW

HOLE No.: 30170

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





HOGGAN ENGINEERING & TESTING (1980) LTD.

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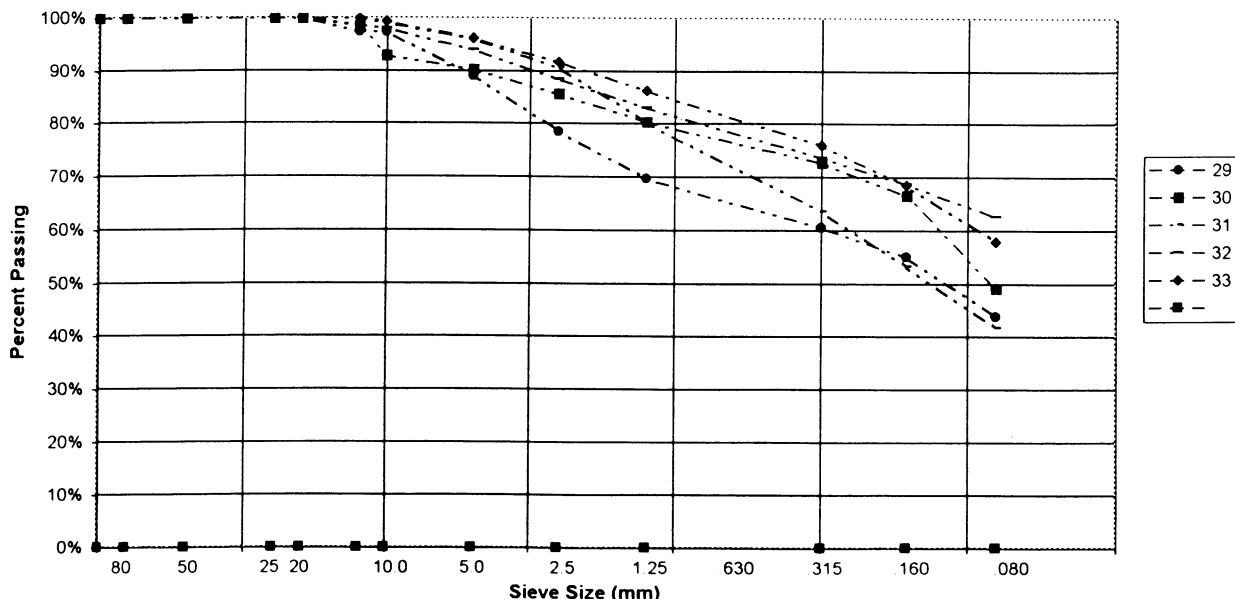
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631414-6777998
LOGGED BY: RW

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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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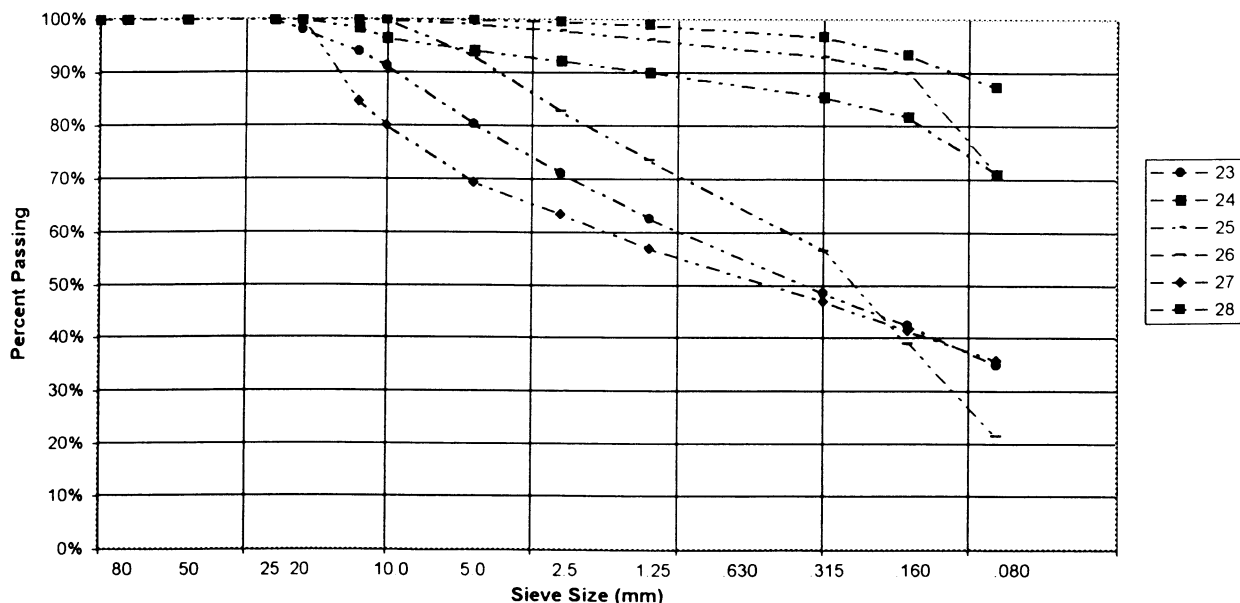
PROJECT NUMBER: 8002-318
 CLIENT: YTG, Transportation & Engineering
 PROJECT NAME: Geotechnical Services
 PROJECT LOCATION: Km 1691.7-1717.3
 DRILL UNIT: CME75
 HOLE LOCATION: 631432-6778136
 LOGGED BY: RW

HOLE No.: 30172

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)

Grain Size Analysis (Percent Passing vs Grain Size)





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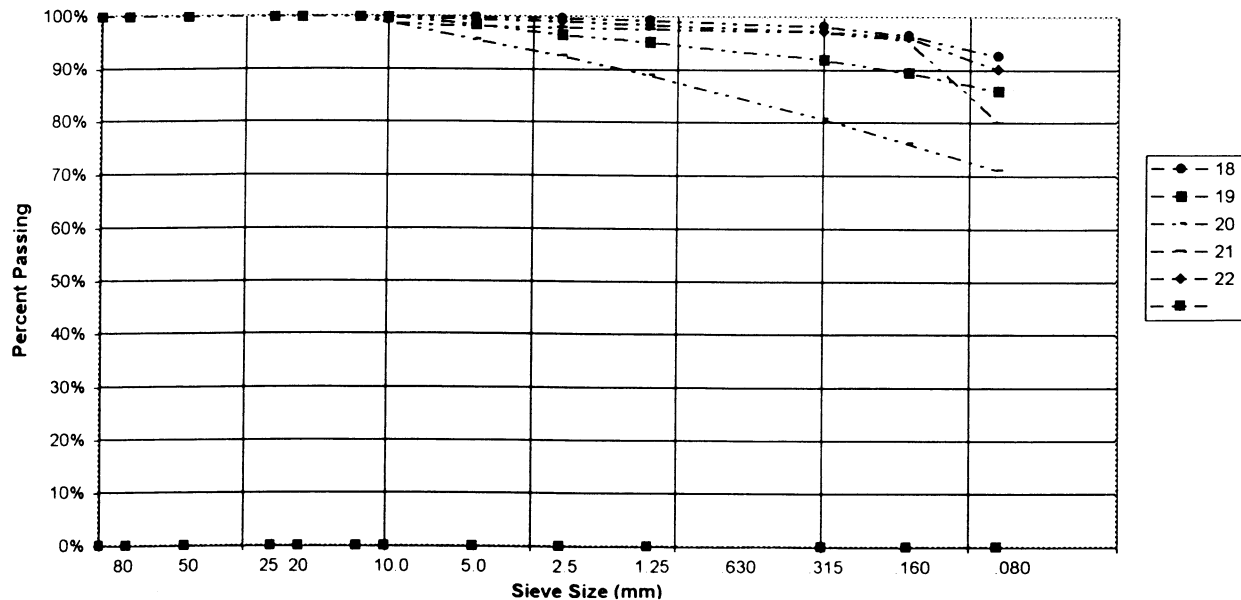
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631425-6778189
LOGGED BY: RW

HOLE No.: 30173

DATE COMP: 07/28/2004

FIELD NO:	18	19	20	21	22	
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)	

Grain Size Analysis (Percent Passing vs Grain Size)





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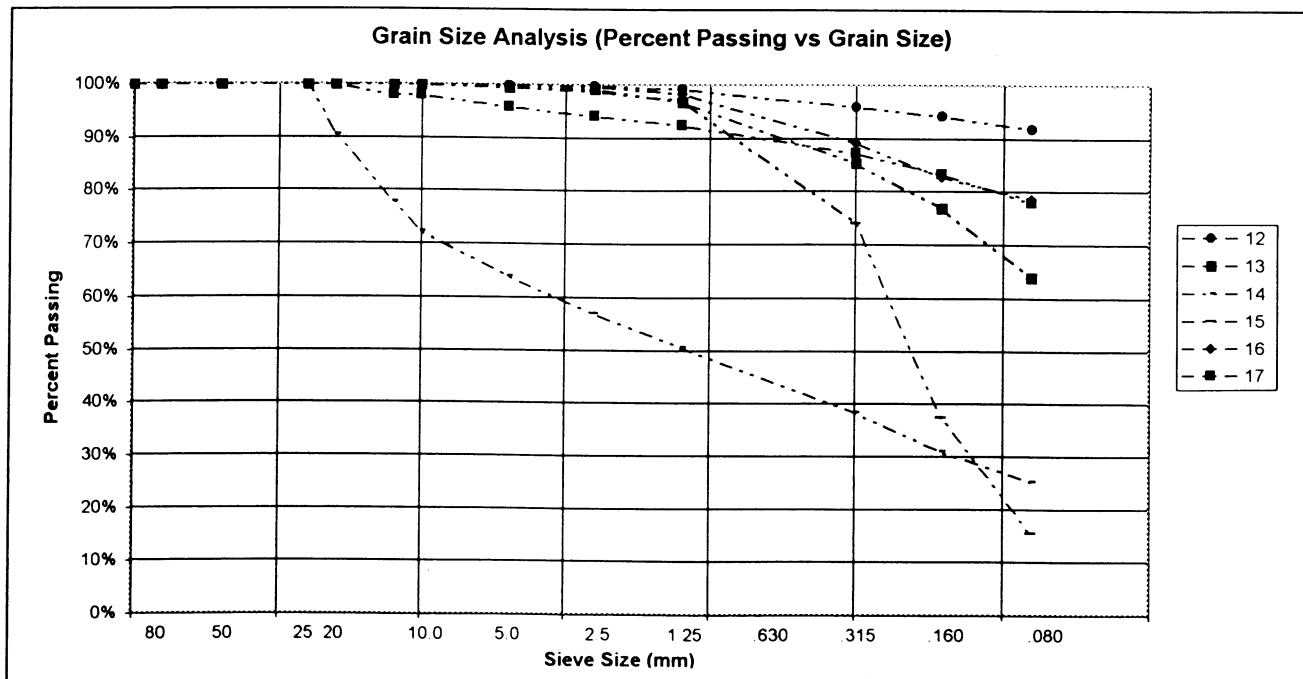


PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631499-6778370
LOGGED BY: RW

HOLE No.: 30174

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)





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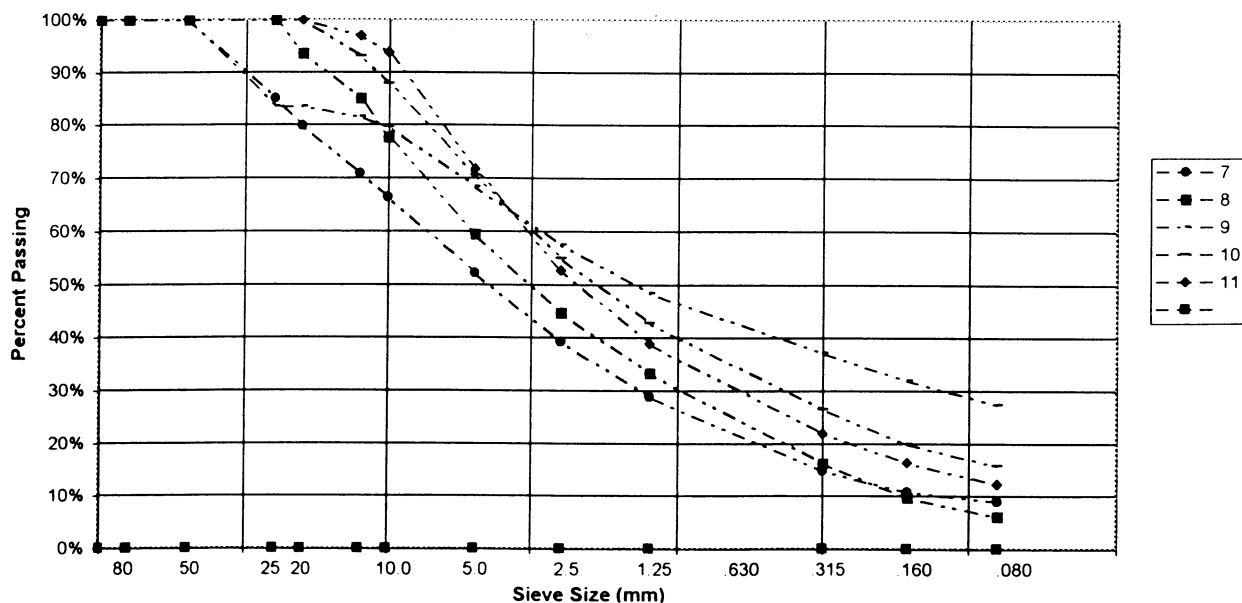
PROJECT NUMBER: 8002-318
CLIENT: YTG, Transportation & Engineering
PROJECT NAME: Geotechnical Services
PROJECT LOCATION: Km 1691.7-1717.3
DRILL UNIT: CME75
HOLE LOCATION: 631598-6778568
LOGGED BY: RW

HOLE No.: 30175

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)	

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: 631642-6778670
LOGGED BY: RW

HOLE No.: 30176

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)

Grain Size Analysis (Percent Passing vs Grain Size)

