

GEOTECHNICAL INVESTIGATIONS

Highway Construction
Km 1664.2 to 1674.2
Alaska Highway #1
Yukon 2001-2002
Volume 1 of 2



Community and Transportation Services
Transportation Engineering Branch

Geotechnical Services

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HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1664.2 to Km 1674.2
YUKON 2001-2002

ALASKA HIGHWAY #1

Highway Construction
Km 1664.2 to 1674.2
Alaska Highway #1
Yukon 2001-2002
Volume 1 of 2

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February, 2001

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

CONTENTS

Volume 1 of 2

INTRODUCTION

Investigation notes, classification methods and legends.

2000 CENTRELINE TESTING ALASKA HIGHWAY

Subsurface Exploration and Testing Report Sheets are provided.

The reports for the centreline holes are arranged according to project location, starting at Km 1664+350 and increasing to Km 1673+855.

Laboratory Testing Result Sheets are provided.

The reports for the centreline holes are arranged according to test hole number, starting at 568-1768 and increasing to 576-887.

2000	TEST HOLES 1768 to 1789	shown with prefix 568-
	TEST HOLES 1790 to 1813	shown with prefix 569-
	TEST HOLES 1814 to 1833	shown with prefix 570-
	TEST HOLES 1848 to 1858	shown with prefix 572-
	TEST HOLES 1859 to 1878	shown with prefix 573-
	TEST HOLES 884 to 887	shown with prefix 576-

NOTE: 2000 Centreline Test Hole locations on the Subsurface Exploration and Testing Report Sheets are approximate. Actual Test Hole locations, compiled by GPS survey, are indicated on project plans.

CONTENTS (continued)**Volume 2 of 2****1978 CENTRELINE TESTING ALASKA HIGHWAY**

A Test Hole Location Reference Table and Subsurface Exploration & Testing Report Sheets are provided.

The reports for the centreline holes are arranged according to project location, starting at Km 1664+248 and increasing to Km 1674+291.

1978	TEST HOLES 26 to 31, 328 to 340, and 100 to 173	shown with no prefix
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IMPORTANT NOTE: Due to alignment revisions subsequent to the 1978 centreline testing the test hole locations indicated on the 1978 Subsurface Exploration and Testing Report sheets are invalid. Utilize the Test Hole Location Reference Table provided in order to determine the test hole locations relevant to the current alignment.

GRANULAR SOURCE Km 1654.3 LHS ALASKA HIGHWAY (Bear Creek Summit)

Location Plans and Subsurface Exploration and Testing Report Sheets are provided.

Backhoe Testing

1998	TEST PITS 20 to 27	shown with prefix 496-
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Laboratory Crush Results

1998	TEST PITS 20 to 23 and 26	shown with prefix 496-
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Auger Testing

2000	TEST HOLES 1451 to 1455, 1471 to 1479	shown with prefix 571-
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QUARRY SOURCE Km 1674 RHS ALASKA HIGHWAY

Location Plans and Subsurface Exploration and Testing Report Sheets are provided.

Air Rotary Drill Testing

2000	TEST HOLES 865 to 883	shown with prefix 576-
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HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1664.2 to Km 1674.2
YUKON 2001-2002

ALASKA HIGHWAY #1

INTRODUCTION

GEOTECHNICAL INVESTIGATION DATA

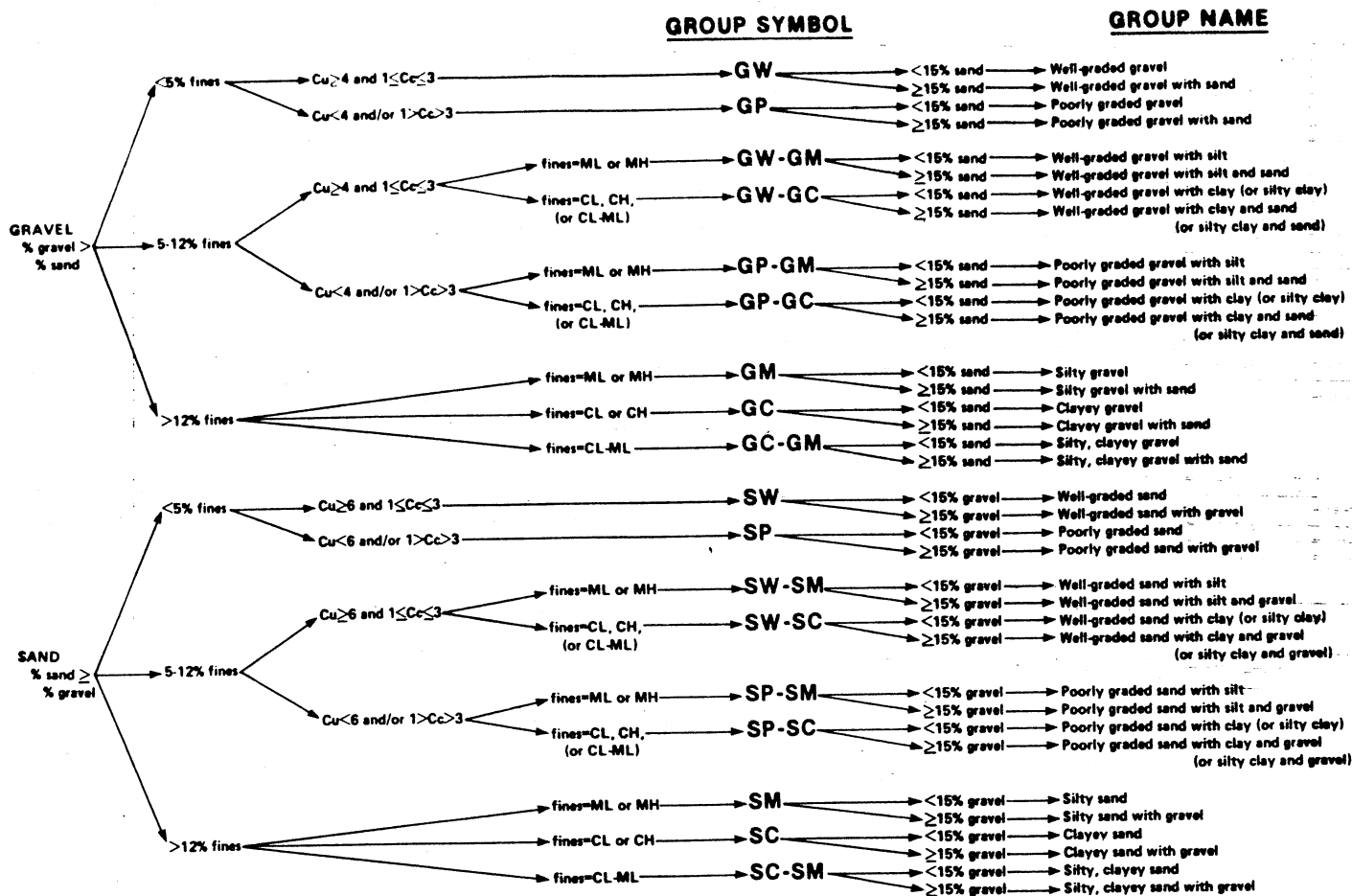
This geotechnical investigation data is provided to assist in the interpretation of soil conditions encountered within this project area. The data presented was prepared solely for Departmental designing and estimating purposes.

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

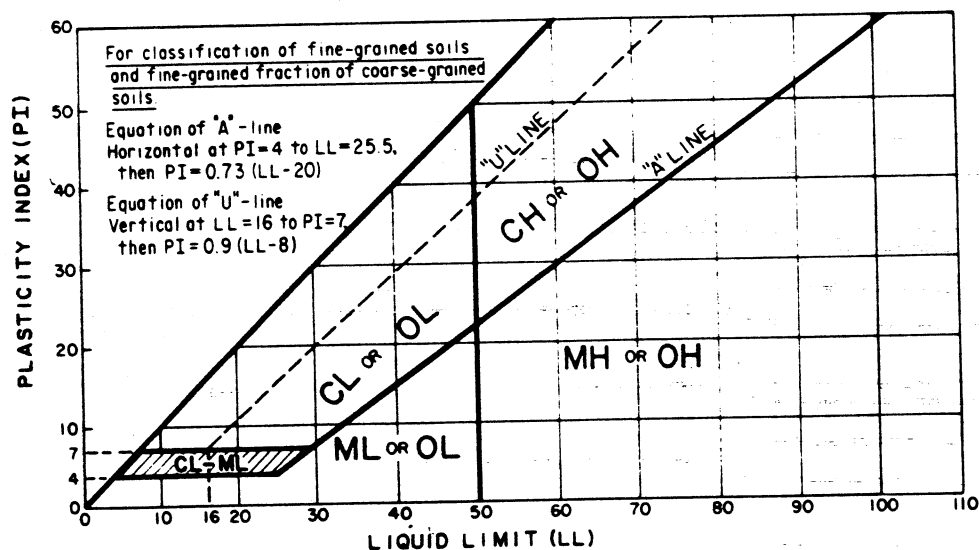
The sample identification and laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. ***These tests may be conducted on disturbed samples and may exhibit properties different from the native materials. The sample classification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

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

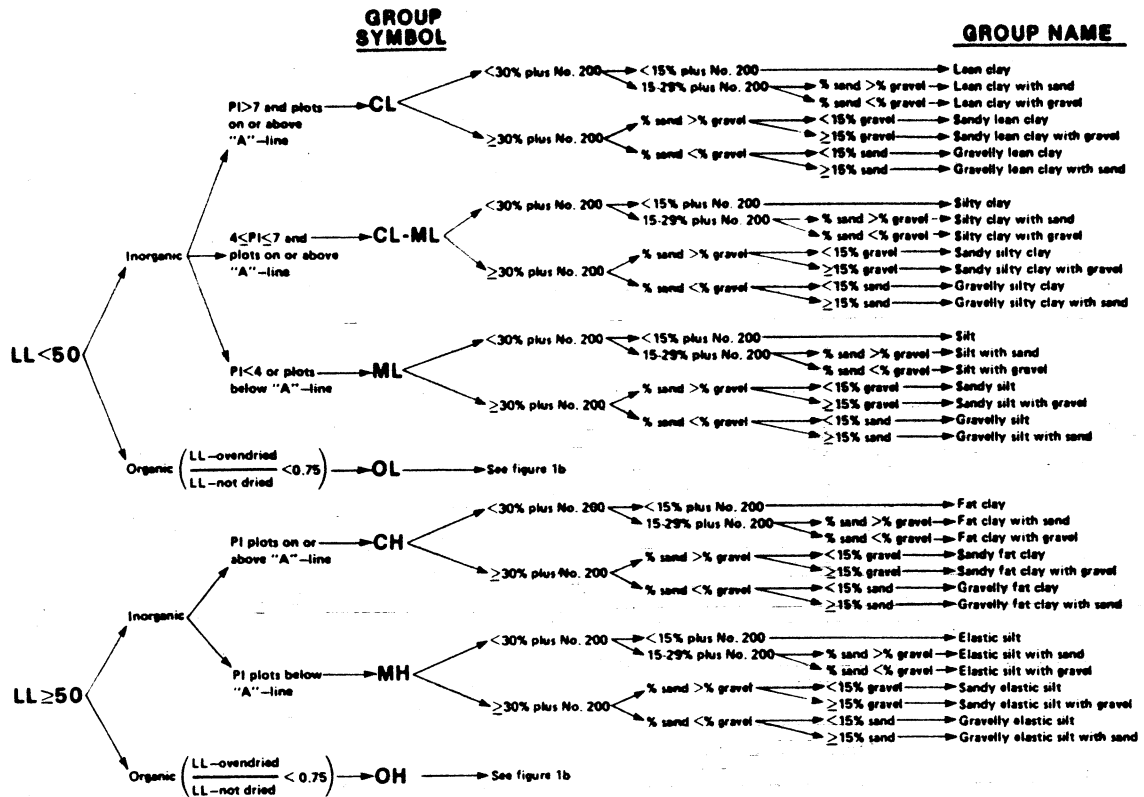
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions at the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



Flow chart for classifying coarse-grained soil.



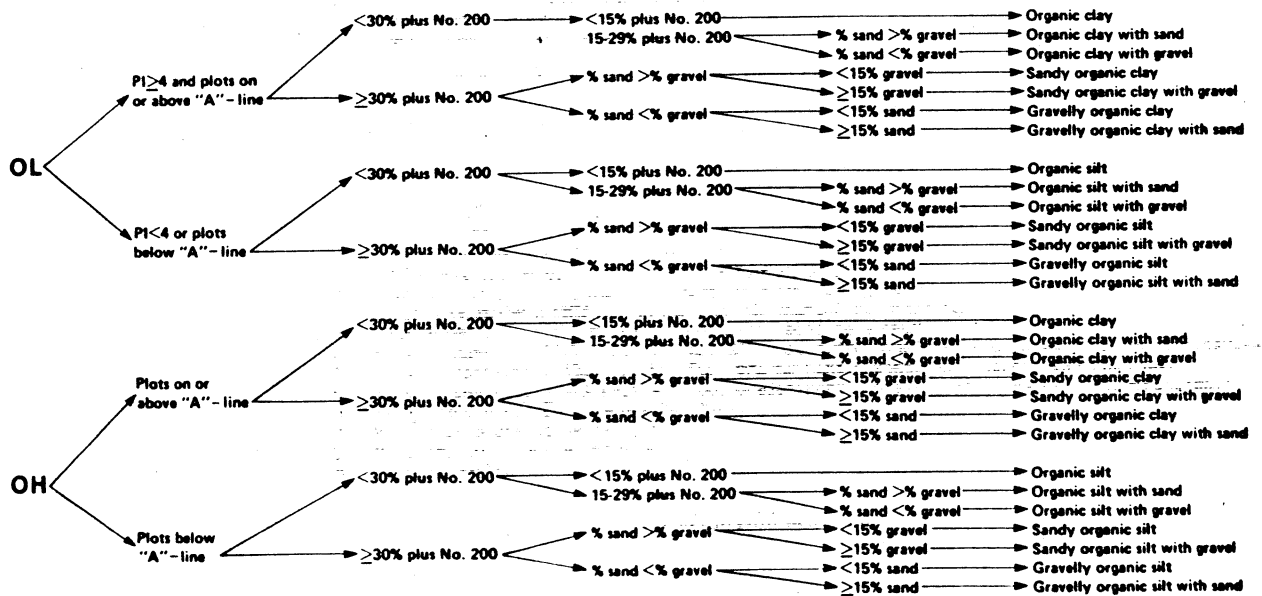
Plasticity chart.



Flow chart for classifying fine-grained soil.

GROUP SYMBOL

GROUP NAME



Flow chart for classifying organic soil.

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

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

Soil classification chart

UNIFIED SOIL CLASSIFICATION†

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES	CLASSIFICATION CRITERIA				
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve*	GRAVELS 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines	Classification on basis of percentage of fines GW, GP, SW, SP GM, GC, SM, SC Borderline classification requiring use of dual symbols	$C_u = D_{60}/D_{10}$ Greater than 4 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3			
			GP	Poorly-graded gravels and gravel-sand mixtures, little or no fines		Not meeting both criteria for GW			
		GRAVELS WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures		Atterberg limits plot below 'A' line or plasticity index less than 4	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols		
			GC	Clayey gravels, gravel-sand clay mixtures		Atterberg limits plot above 'A' line and plasticity index greater than 7			
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS	SW	Well-graded sands and gravelly sands, little or no fines		$C_u = D_{60}/D_{10}$ Greater than 6 $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between 1 and 3			
			SP	Poorly-graded sands and gravelly sands, little or no fines		Not meeting both criteria for SW			
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures		Atterberg limits plot below 'A' line or plasticity index less than 4	Atterberg limits plotting in hatched area are borderline classifications requiring use of dual symbols		
			SC	Clayey sands, sand-clay mixtures		Atterberg limits plot above 'A' line and plasticity index greater than 7			
			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	60 50 40 30 20 10 7 4 0 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: $PI = 0.73(LL - 20)$ 0102030405060708090100 LIQUID LIMIT
						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		MH & OH					
	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				

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:		COMPLETION DEPTH: 6.0 m		
				REVIEWED BY:		COMPLETE: / /		
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HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1664.2 to Km 1674.2
YUKON 2001-2002

ALASKA HIGHWAY #1

**2000 CENTRELINE TESTING
1664+350 to 1673+855
ALASKA HIGHWAY**

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1768	
ENGINEERING CAPITAL		KM 1664- 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1664+350 12M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				20	40	60			20	40	60	80	20	40	
0.0	ORGANIC													0.0	
0.0	SILTY SAND (SM) -some organic -brown -wet														
1.0		☒	1523	●	▲		SM	⋮	◆					1.0	
2.0	SANDY SILT TO SILTY SAND WITH GRAVEL (ML)-(SM) -brown -saturated -some grindy drilling														
2.0		☒	1524	●	▲		ML	⋮	■	◆				2.0	
3.0															
4.0															
4.5	END HOLE @ 4.5m	☒	1525	●	▲		SM	⋮	◆					4.5	
5.0															
6.0															

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		REVIEWED BY:	COMPLETE: 00/08/14
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1769	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1664+450 12M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60		
0.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (SM)-(GM)-(SM) -brown -moist -grindy drilling											0.0	
1.0												1.0	
2.0													2.0
3.0													3.0
4.0													4.0
5.0													5.0
6.0													6.0
	END HOLE @ 4.5m												

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1770	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1664+550 12M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40			60	80
0.0	SANDY SILT TO GRAVELLY SILT WITH SAND TO SANDY SILT (ML) -brown -damp -grindy drilling	☒	1529				ML					0.0		
1.0														
2.0														
3.0		☒	1530				ML					3.0		
4.0												4.0		
5.0		☒	1531				ML					5.0		
6.0												6.0		
END HOLE @ 4.5m														

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1771	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1664+600 25 RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL		DEPTH (m)	
				PLASTIC M.C. LIQUID					PERCENT SAND	PERCENT GRAVEL		
				20 40 60 80	20 40 60 80	20 40 60 80						
0.0	SILTY GRAVEL WITH SAND TO SANDY SILT (GM)-(ML) -brown -damp to moist -some grindy drilling	☒	1532	•	▲		GM		◆	■	0.0	
1.0											1.0	
2.0												2.0
3.0		☒	1533	•	▲		GM		◆	■	3.0	
4.0												4.0
5.0		☒	1534	•	▲		GM		◆	■	5.0	
6.0												6.0
7.0												7.0
8.0	END HOLE @ 7.6m	☒	1535	•	▲		ML		◆	■	8.0	
9.0												9.0
10.0												10.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1772	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1664+650 25 RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				20 40 60 80					20 40 60 80			
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	SANDY SILT (ML) -grey -moist -grindy drilling											0.0
1.0												1.0
2.0												2.0
3.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brown -damp -some +5mm material -smoother drilling -hard grindy drilling below 3.5m		1536				ML					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
	END HOLE @ 7.0m -refusal		1537				SM					
			1538				SM					
			1539				GM					

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		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1773	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1664+700 25 RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■			DEPTH (m)
				20	40	60			20	40	60	20	40	60	
0.0	ORGANIC													0.0	
1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL TO SANDY SILT (SM)-(GM)-(SM)-(ML) -grey -moist -grindy drilling	☒	1540	●	▲		SM		◆	■				1.0	
2.0														2.0	
3.0		☒	1541	●	▲		GM		◆	■				3.0	
4.0														4.0	
5.0	-difficult slow grindy drilling below 4.7m	☒	1542	●	▲		SM		◆	■				5.0	
6.0														6.0	
7.0	END HOLE @ 7.0m -refusal	☒	1543	●	▲		ML		◆	■				7.0	
8.0														8.0	
9.0														9.0	
10.0														10.0	

Government of Yukon Transportation Engineering		LOGGED BY: D.T.	COMPLETION DEPTH: 7.0 m
		REVIEWED BY:	COMPLETE: 00/08/14
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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1774									
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363									
MOBILE B40 L 6" AUGER		LOCATION: 1664+800 13M RT		ELEVATION: 0.00 (m)									
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20	40		
				PLASTIC	M.C.	LIQUID							
				20	40	60	80			20	40	60	80
0.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND TO SANDY SILT (SM)-(GM)-(ML) -grey -moist -grindy drilling												0.0
1.0													1.0
2.0			1544	●	▲		SM	▢	■	◆			2.0
3.0			1545	●	▲		GM	▢	■	◆			3.0
4.0			1546	●	▲		ML	▢	■	◆			4.0
5.0	END HOLE @ 4.5m												5.0
6.0													6.0
Government of Yukon Transportation Engineering				LOGGED BY: D.T. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 00/08/14 Page 1 of 1							

SUBSURFACE EXPLORATION & TEST REPORT			SHAKWAK SEG 9			TEST HOLE NO: 568-1775			
ENGINEERING CAPITAL			KM 1664-1692 A/H			Project No: 092-202101-0363			
MOBILE B40 L 6" AUGER			LOCATION: 1664+900 15M LT			ELEVATION: 0.00 (m)			
SAMPLE TYPE			☒ RETURN	☒ S.P.T.	☒ AUGER	☐ BULK	☐ TUBE	☐ CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80		USC	SOIL SYMBOL	PERCENT SAND ◆ 20 40 60 80 PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC								0.0
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -grey -saturated								
1.0									1.0
	-wet below 2.5m								
2.0									2.0
		X	1547	●	▲	SM	[Symbol]	■◆	
3.0									3.0
		X	1548	●	▲	SM	[Symbol]	■◆	
4.0									4.0
		X	1549	●	▲	GM	[Symbol]	■◆	
5.0	END HOLE @ 4.5m								5.0
6.0									6.0

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 Fig. No:

COMPLETION DEPTH: 4.5 m
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SUBSURFACE EXPLORATION & TEST REPORT			SHAKWAK SEG 9			TEST HOLE NO: 568-1776																	
ENGINEERING CAPITAL			KM 1664-1692 A/H			Project No: 092-202101-0363																	
MOBILE B40 L 6" AUGER			LOCATION: 1664+975 20M LT			ELEVATION: 0.00 (m)																	
SAMPLE TYPE			S.P.T.			AUGER			BULK			TUBE			CORE								
DEPTH (m)			SOIL DESCRIPTION			SAMPLE TYPE			SAMPLE NO			PERCENT FINES			USC			SOIL SYMBOL			DEPTH (m)		
												20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80						20 40 60 80 PERCENT SAND 20 40 60 80 PERCENT GRAVEL					
0.0			ORGANIC																		0.0		
			-smooth easy drilling																				
			SILT TO SILTY GRAVEL WITH SAND TO SILTY																				
			SAND WITH GRAVEL (ML)-(GM)-(SM)																				
			-grey																				
			-frozen (Nb)																				
1.0			-tight drilling below 0.6m (frozen)																				
						X			1550			● ▲			ML			◈ ■					
2.0			-some +5mm material below 2.0m																				
			-frozen (Vr) below 2.0m																				
						X			1551			● ▲			GM			◈ ■					
3.0																							
4.0			-frozen (Nf) below 3.8m																				
						X			1552			● ▲			SM			◈ ■					
5.0			END HOLE @ 4.5m																				
			Note: Test Hole @ culvert																				
6.0																							

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COMPLETION DEPTH: 4.5 m

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1777	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1665+075 15M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM)												
	-grey												
	-moist												
	-some grindy drilling below 0.7m												
1.0												1.0	
			1553	●	▲		SM		■	◆			
2.0	-saturated below 2.0m											2.0	
			1554	●	▲		GM		◆	■			
3.0												3.0	
	-brown below 3.5m												
	-saturated to free water below 3.5m												
4.0			1555	●	▲		GM		◆	■			
5.0	END HOLE @ 4.5m											5.0	
6.0												6.0	

Government of Yukon Transportation Engineering		LOGGED BY: D.T.	COMPLETION DEPTH: 4.5 m
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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1779	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1665+275 8M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				20	40	60			20	40	60	80	
0.0	SANDY SILT TO SILTY SAND WITH GRAVEL TO SANDY SILT WITH GRAVEL (ML)-(SM)-(ML) -olive -moist -grindy drilling											0.0	
1.0												1.0	
2.0												2.0	
3.0												3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	

END HOLE @ 4.5m		LOGGED BY: D.T.		COMPLETION DEPTH: 4.5 m	
		REVIEWED BY:		COMPLETE: 00/08/15	
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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1780	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1665+375 8M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC M.C. LIQUID					PERCENT SAND PERCENT GRAVEL			
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	SILTY SAND WITH GRAVEL TO SANDY SILT TO SANDY SILT WITH GRAVEL -brown -moist											0.0
1.0												1.0
2.0												2.0
3.0			1562				SM					3.0
4.0												4.0
5.0			1563				ML					5.0
6.0												6.0
7.0			1564				ML					7.0
8.0	END HOLE @ 4.5m											8.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1781	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1665+475 8M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)	
				PLASTIC	M.C.	LIQUID			20	80		
												20
0.0	SANDY SILT TO SILT WITH SAND TO SANDY SILT WITH GRAVEL (ML) -brown -moist										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	
END HOLE @ 4.5m												

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1782								
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363								
MOBILE B40 L 6" AUGER		LOCATION: 1665+575 9M LT		ELEVATION: 0.00 (m)								
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	GRAVELLY SILT -brown -grindy drilling											0.0
	SANDY MATERIAL -pink											
1.0	SILTY SAND WITH GRAVEL TO SANDY SILT WITH GRAVEL TO SILT WITH SAND (SM)-(ML) -brown -moist											1.0
		☒	1568	●	▲		SM		■	◆		
2.0												2.0
3.0		☒	1569	●	▲		ML		■	◆		3.0
4.0												4.0
5.0		☒	1570	●	▲		ML		■	◆		5.0
6.0	END HOLE @ 4.5m											6.0
Government of Yukon Transportation Engineering				LOGGED BY: D.T.		COMPLETION DEPTH: 4.5 m						
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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1783	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1665+675 15M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	SANDY SILT TO SILT WITH SAND (ML) -brown -moist						0.0	
1.0							1.0	
2.0							2.0	
3.0	-damp to moist below 2.5m	☒	1571	● ▲	ML	■ ◆	3.0	
4.0	-damp below 4.0m	☒	1572	● ▲	ML	■ ◆	4.0	
5.0	END HOLE @ 4.5m	☒	1573	● ▲	ML	■ ◆	5.0	
6.0							6.0	

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1784								
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363								
MOBILE B40 L 6" AUGER		LOCATION: 1665+775 13M LT		ELEVATION: 0.00 (m)								
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC SILTY SAND WITH GRAVEL TO SANDY SILT WITH GRAVEL (SM)-(ML) -brown -moist -grindy drilling											0.0
1.0												1.0
2.0												2.0
3.0			1574	●	▲		SM		■	◆		3.0
4.0												4.0
5.0			1575	●	▲		ML		■	◆		5.0
6.0												6.0
	END HOLE @ 4.5m		1576	●	▲		ML		■	◆		
Government of Yukon Transportation Engineering				LOGGED BY: D.T. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 00/08/15 Page 1 of 1						

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1785	
ENGINEERING CAPITAL		KM 1664-1692 A/HH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1665+875 20M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (SM)-(GM)-(SM) -brown -moist -grindy drilling	☒	1577	●	▲		SM		◆	■		0.0	
1.0													
2.0													
3.0		☒	1578	●	▲		GM		◆	■		3.0	
4.0													
5.0		☒	1579	●	▲		SM		◆	■		5.0	
6.0													
END HOLE @ 4.5m Note: Test hole @ culvert													

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1786	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1665+975 15M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
											20		40
0.0	SANDY SILT WITH GRAVEL TO SANDY SILT (ML) -brown -moist -grindy drilling											0.0	
1.0												1.0	
2.0													2.0
3.0													3.0
4.0												4.0	
5.0												5.0	
6.0												6.0	
END HOLE @ 4.5m													

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1787	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1666+075 12M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	SANDY SILT TO SILTY GRAVEL WITH SAND (ML)-(GM) -brown -moist											0.0
1.0												1.0
2.0												2.0
3.0		☒	1583	●	▲		ML		■	◆		
4.0												4.0
5.0												5.0
6.0												6.0
4.0	END HOLE @ 4.0M -broke off bit.	☒	1584	●	▲		GM		■	◆		
5.0												5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1788	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1666+175 15M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
											20	
0.0	SANDY SILT WITH GRAVEL TO SILT WITH SAND TO SANDY SILT (ML) -brown -moist											0.0
1.0												1.0
2.0												2.0
3.0			1585	●	▲		ML	▨	■	◆		3.0
4.0												4.0
5.0			1586	●	▲		ML	▨	■	◆		5.0
6.0												6.0
7.0			1587	●	▲		ML	▨	■	◆		7.0
8.0	END HOLE @ 4.5m											8.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 568-1789								
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363								
MOBILE B40 L 6" AUGER		LOCATION: 1666+275 15M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	SANDY SILT TO GRAVELLY SILT WITH SAND TO SANDY SILT WITH GRAVEL (ML) -brown -moist											0.0
1.0												1.0
2.0	-damp to moist below 2.0m											2.0
3.0			1588	●	▲		ML	▨	■	◆		3.0
4.0			1589	●	▲		ML	▨	■	◆		4.0
5.0	END HOLE @ 4.5m		1590	●	▲		ML	▨	■	◆		5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: D.T. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 00/08/15		Page 1 of 1				

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1790	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1666+375 15M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	SANDY SILT TO SANDY SILT WITH GRAVEL TO SANDY SILT (ML) -trace +5mm material -brown -moist							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
	END HOLE @ 4.5m							

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1791					
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363					
MOBILE B40 L 6" AUGER		LOCATION: 1666+475 17M RT		ELEVATION: 0.00 (m)					
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	SANDY SILT TO SANDY SILT WITH GRAVEL TO SANDY SILT (ML) -trace +5mm material -olive -wet -moist below 2.5m							0.0	
1.0								1.0	
2.0									2.0
3.0									3.0
4.0								4.0	
5.0	END HOLE @ 4.5m Note: Test hole @ culvert outlet							5.0	
6.0								6.0	

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1792						
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363						
MOBILE B40 L 6" AUGER		LOCATION: 1666+575 13M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES		USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.			PERCENT SAND	PERCENT GRAVEL	
0.0	SANDY SILT (ML) -brown -moist -some grindy drilling									0.0
1.0										1.0
2.0										2.0
3.0	SILTY GRAVEL WITH SAND (GM) -brown -damp -easy drilling									3.0
4.0	SANDY SILT (ML) -brown -moist -tighter drilling									4.0
5.0	END HOLE @ 4.5m									5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: J.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 00/08/16 Page 1 of 1				

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1793						
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363						
MOBILE B40 L 6" AUGER		LOCATION: 1666+675 12M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■	DEPTH (m)		
				20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80					20 40 60 80 20 40 60 80	
0.0	SANDY SILT WITH GRAVEL TO GRAVELLY SILT WITH SAND (ML) -brown -moist -grindy drilling	☒	1600	● ▲	ML		■ ◆	0.0		
1.0				2.0			3.0	4.0	5.0	6.0
1.0				2.0			3.0	4.0	5.0	6.0
1.0				2.0			3.0	4.0	5.0	6.0
2.0	END HOLE @ 4.5m	☒	1601	● ▲	ML		■ ◆	2.0		
3.0				4.0			5.0	6.0		
3.0				4.0			5.0	6.0		
3.0				4.0			5.0	6.0		
3.0	END HOLE @ 4.5m	☒	1602	● ▲	ML		■ ◆	3.0		
4.0				5.0			6.0			
4.0				5.0			6.0			
4.0				5.0			6.0			
4.0	END HOLE @ 4.5m	☒	1602	● ▲	ML		■ ◆	4.0		
5.0				6.0						
5.0				6.0						
5.0				6.0						
5.0	END HOLE @ 4.5m	☒	1602	● ▲	ML		■ ◆	5.0		
6.0				6.0						
6.0				6.0						
6.0				6.0						
Government of Yukon Transportation Engineering				LOGGED BY: J.B. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 00/08/16 Page 1 of 1				

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1794	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1666+775 12M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	SANDY SILT WITH GRAVEL TO SILTY SAND WITH GRAVEL TO SANDY SILT (ML)-(SM)-(ML) -brown -moist -grindy drilling										0.0		
1.0											1.0		
2.0												2.0	
3.0												3.0	
4.0											4.0		
5.0											5.0		
6.0											6.0		
END HOLE @ 4.5m													

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1795	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1666+875 12RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)			
				20	40	60			80	20			40	60	80
0.0	SANDY SILT (ML) -brown -moist -grindy drilling											0.0			
1.0												1.0			
2.0												2.0			
3.0												3.0			
4.0												4.0			
5.0												5.0			
6.0												6.0			

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1796	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1666+975 8M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40			60	80
0.0	GRAVELLY SILT WITH SAND TO SILT WITH SAND TO SANDY SILT (ML) -brown -moist											0.0		
1.0												1.0		
2.0												2.0		
3.0			1610	●		▲	ML	▨	◆	■		3.0		
4.0												4.0		
5.0			1611	●		▲	ML	▨	◆	■		5.0		
6.0												6.0		
END HOLE @ 4.5m														

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1797								
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363								
MOBILE B40 L 6" AUGER		LOCATION: 1667+075 8M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	SANDY SILT (ML) -brown -damp	X	1612	●	▲	ML	▨	■	◆	0.0		
1.0												
2.0												
3.0												
3.0		X	1613	●	▲	ML	▨	■	◆	3.0		
4.0												
5.0												
6.0												
4.5	END HOLE @ 4.5m	X	1614	●	▲	ML	▨	■	◆	4.5		
5.0												
5.5												
6.0												

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1798	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0383	
MOBILE B40 L 6" AUGER		LOCATION: 1667+175 8M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	SANDY SILT TO GRAVELLY SILT WITH SAND (ML) -brown -damp										0.0		
1.0											1.0		
2.0											2.0		
3.0			1615	●	▲		ML	■	◆		3.0		
4.0											4.0		
5.0			1616	●	▲		ML	■	◆		5.0		
6.0											6.0		
7.0			1617	●	▲		ML	■	◆		7.0		
8.0	END HOLE @ 4.5m										8.0		

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1799	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1667+275 12M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	SANDY SILT TO SILTY SAND WITH GRAVEL TO SILT SAND (ML)-(SM) -brown -moist											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
END HOLE @ 4.5m												

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1800	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1667+350 17M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC 20 40 60 80	M.C. 20 40 60 80	LIQUID 20 40 60 80			20 40 60 80	PERCENT GRAVEL ■ 20 40 60 80	
0.0	SANDY SILT TO SILTY GRAVEL WITH SAND (ML)-(GM) -brown -damp										0.0
1.0											1.0
2.0											2.0
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1801	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1667+450 8M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	SILT WITH SAND TO SANDY SILT (ML) -brown -damp												0.0
1.0													1.0
2.0													2.0
3.0			1624				ML						3.0
4.0													4.0
5.0			1625				ML						5.0
6.0													6.0
			1626				ML						
	END HOLE @ 4.5m												

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1802									
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363									
MOBILE B40 L 6" AUGER		LOCATION: 1667+550 12M RT		ELEVATION: 0.00 (m)									
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20	40		
				PLASTIC	M.C.	LIQUID							
0.0	SILTY SAND WITH GRAVEL TO SILT WITH SAND TO GRAVELLY SILT WITH SAND (SM)-(ML) -brown -moist to wet												0.0
1.0													1.0
2.0													2.0
3.0			1627	●	▲		SM	▨	◆	■			3.0
4.0													4.0
5.0			1628	●	▲		ML	▨	◆	■			5.0
6.0													6.0
7.0			1629	●	▲		ML	▨	◆	■			7.0
8.0	END HOLE @ 4.5m												8.0
9.0													9.0
10.0													10.0
11.0													11.0
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

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1803									
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363									
MOBILE B40 L 6" AUGER		LOCATION: 1667+650 12M RT		ELEVATION: 0.00 (m)									
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
0.0	SILTY SAND WITH GRAVEL TO SILT WITH SAND (SM)-(ML) -brown -moist	☒	1630	20	40	60	80	SM	20	40	60	80	0.0
1.0													
2.0													
3.0													
3.0	END HOLE @ 4.5m	☒	1631	20	40	60	80	ML	20	40	60	80	3.0
4.0													
5.0													
6.0													
4.5		☒	1632	20	40	60	80	ML	20	40	60	80	4.5
5.0													
5.5													
6.0													

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SUBSURFACE EXPLORATION & TEST REPORT			SHAKWAK SEG 09			TEST HOLE NO: 569-1804			
ENGINEERING CAPITAL			KM 1664 A/H NORTH			Project No: 092-202101-0363			
MOBILE B40 L 6" AUGER			LOCATION: 1667+730 15M RT			ELEVATION: 0.00 (m)			
SAMPLE TYPE			RETURN			S.P.T.			
AUGER			BULK			TUBE			
CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES	USC	SOIL SYMBOL	PERCENT SAND	PERCENT GRAVEL	DEPTH (m)
				20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			20 40 60 80 PERCENT SAND	20 40 60 80 PERCENT GRAVEL	
0.0	SANDY SILT (ML) -brown -moist								0.0
1.0									1.0
2.0									2.0
2.0	SILTY SAND (SM) -trace +5mm material -brown -damp								2.0
3.0									3.0
3.0	SANDY SILT (ML) -some +5mm material -brown -moist								3.0
4.0									4.0
4.0									4.0
5.0	END HOLE @ 4.5m Note: Test hole @ culvert outlet								5.0
6.0									6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1805	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1667+800 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)			
				20	40	60			80	20			40	60	80
0.0	ORGANIC SANDY SILT (ML) -brown -damp											0.0			
1.0												1.0			
2.0												2.0			
3.0			1636	●		▲		ML	▨	◆		3.0			
4.0												4.0			
5.0			1637	●		▲		ML	▨	◆		5.0			
6.0												6.0			
7.0			1638	●		▲		ML	▨	◆		7.0			
8.0	END HOLE @ 4.5m											8.0			

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1806	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1667+900 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			20	40	60		80
0.0	ORGANIC SANDY SILT (mL) -brown -damp											0.0	
1.0												1.0	
2.0												2.0	
3.0	-less +5mm material below 2.5m											3.0	
4.0	SILT WITH SAND (ML) -brown -damp											4.0	
5.0	END HOLE @ 4.5m											5.0	
6.0												6.0	

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1807	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+000 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)	
				PLASTIC	M.C.	LIQUID							PERCENT GRAVEL ■
				20	40	60	80		20	40	60	80	
0.0	SILTY SAND WITH GRAVEL (SM) -brown -moist												0.0
1.0													1.0
2.0													2.0
3.0	-lost sample #1642		1642	●									3.0
4.0													4.0
5.0													5.0
6.0													6.0
END HOLE @ 4.5m			1643	●	▲			SM	◆	■			3.0
			1644	●	▲			SM	◆	■			4.5

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1808	
ENGINEERING CAPITAL		KM. 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+100 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				20 40 60 80					20 40 60 80			
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC											0.0
	SILTY SAND WITH GRAVEL TO SANDY SILT TO SILTY SAND (SM)-(ML)-(SM)											
	-brown											
	-moist to wet											
1.0												1.0
2.0												2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0
	END HOLE @ 4.5m											

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ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+200 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC											0.0	
	SANDY SILT (ML) -brown -moist												
1.0												1.0	
2.0												2.0	
	SILTY SAND (SM) -trace +5mm material -brown -damp												
3.0												3.0	
4.0												4.0	
	SANDY SILT (ML) -brown -damp												
5.0												5.0	
6.0												6.0	
	END HOLE @ 4.5m												

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SUBSURFACE EXPLORATION & TEST REPORT			SHAKWAK SEG 09			TEST HOLE NO: 569-1810		
ENGINEERING CAPITAL			KM 1664 A/H NORTH			Project No: 092-202101-0363		
MOBILE B40 L 6" AUGER			LOCATION: 1668+300 40LT			ELEVATION: 0.00 (m)		
SAMPLE TYPE ☒ RETURN			☒ S.P.T.			☒ AUGER		
			☐ BULK			☐ TUBE		
			☐ CORE					
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)								DEPTH (m)
0.0	ORGANIC							0.0
	SANDY SILT TO SILT WITH SAND TO SANDY SILT (ML)							
	-olive							
	-wet							
1.0								1.0
		☒	1651			ML		
2.0								2.0
	-moist below 2.5m							
3.0		☒	1652			ML		3.0
4.0								4.0
		☒	1653			ML		
5.0	END HOLE @ 4.5m							5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1811	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+400 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
0.0	ORGANIC											0.0
	SANDY SILT TO SILT WITH SAND TO SANDY SILT WITH GRAVEL (ML)											
	-brown											
	-moist											
1.0												1.0
2.0												2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0
	END HOLE @ 4.5m											

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1812	
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+500 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC M.C. LIQUID					
				20 40 60 80	20 40 60 80	20 40 60 80			
0.0	ORGANIC								0.0
	SANDY SILT TO SILT WITH SAND TO SANDY SILT (ML)								
	-brown								
	-wet								
1.0									1.0
2.0									2.0
3.0									3.0
4.0									4.0
5.0									5.0
6.0									6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 569-1813			
ENGINEERING CAPITAL		KM 1664 A/H NORTH		Project No: 092-202101-0363			
MOBILE B40 L 6" AUGER		LOCATION: 1668+600 20LT		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	ORGANIC						0.0
	SANDY SILT TO SILTY GRAVEL WITH SAND TO SANDY SILT (ML)-(GM)-(ML) -brown -damp						
1.0							1.0
			1660		ML		
2.0							2.0
			1661		GM		
3.0							3.0
			1662		ML		
4.0							4.0
	END HOLE @ 4.5m Note: Test hole @ culvert inlet						
5.0							5.0
6.0							6.0
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				REVIEWED BY:		COMPLETE: 00/08/17	
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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1814	
ENGINEERING CAPITAL		KM 1664 -1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+700 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC M.C. LIQUID					PERCENT SAND PERCENT GRAVEL			
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	ORGANIC											0.0
	SANDY SILT TO SILT WITH SAND TO SANDY SILT (ML)											
	-moist to wet											
1.0												1.0
2.0												2.0
3.0												3.0
4.0	-damp below 4.0m											4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1815	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+800 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	ORGANIC, SAND & GRAVEL												0.0
	SILTY SAND WITH GRAVEL TO SANDY SILT WITH GRAVEL (SM)-(ML)												
	-brown												
	-moist												
1.0													1.0
2.0													2.0
	-more +5mm material below 2.5m												
	-damp below 2.5m												
3.0													3.0
4.0													4.0
5.0													5.0
6.0													6.0
	END HOLE @ 4.5m												
	Note: on Old Alaska Hwy Roadbed												

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1816	
ENGINEERING CAPITAL		KM 1664 - 1962 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1668+900 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC											0.0
	SANDY SILT TO SILT WITH SAND (ML)											
	-brown											
	-moist to wet											
1.0												1.0
2.0		☒	1669	●	▲		ML	▨	◆	■		2.0
3.0												3.0
4.0	-damp below 4.0m	☒	1670	●	▲		ML	▨	◆	■		4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1817	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202002-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+000 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	ORGANIC												0.0
	SANDY SILT WITH GRAVEL TO SANDY SILT TO SILT WITH SAND (ML)												
	-brown												
	-wet												
1.0													1.0
2.0													2.0
3.0													3.0
4.0													4.0
5.0													5.0
6.0													6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1818	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+100 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC											0.0
	SANDY SILT TO SILT WITH SAND (ML)											
	-brown											
	-wet											
1.0												1.0
		☒	1674	●		▲	ML		■	◆		
2.0												2.0
	-moist below 2.5m											
3.0		☒	1675	●		▲	ML		■	◆		3.0
4.0												4.0
	-light brown below 4.0m											
	-less +5mm material below 4.0m											
	END HOLE @ 4.5m	☒	1676	●		▲	ML		■	◆		
5.0												5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1819	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+175 20LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)		
				20	40	60			80	20	40		60	80
0.0	ORGANIC											0.0		
	SANDY SILT TO SILT (ML)													
	-brown													
	-wet													
1.0												1.0		
2.0												2.0		
	-moist to wet below 2.5m													
3.0												3.0		
4.0												4.0		
	-damp below 4.0m													
5.0												5.0		
	END HOLE @ 4.5m													
	Note: Culvert Outlet													
6.0												6.0		

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1820	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+300 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)	
				PLASTIC		M.C.			PERCENT SAND		PERCENT GRAVEL		
				20	40	60			80	20	40		60
0.0	ORGANIC											0.0	
	SANDY SILT TO SILT WITH SAND (ML)												
	-brown												
	-wet												
1.0												1.0	
2.0												2.0	
	-moist below 2.5m												
3.0												3.0	
4.0												4.0	
5.0												5.0	
6.0												6.0	
	END HOLE @ 4.5m												

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1821	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+435 20LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC SANDY SILT TO SANDY SILT WITH GRAVEL (ML) -brown -moist										0.0
1.0											1.0
2.0											2.0
3.0	-damp to moist below 2.5m										3.0
4.0											4.0
5.0	END HOLE @ 4.5m Note: Culvert outlet										5.0
6.0											6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1822	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+550 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC 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											0.0
	SANDY SILT (ML)											
	-brown											
	-saturated											
1.0												1.0
2.0												2.0
	-frozen (Vr) below 2.1m											
3.0												3.0
4.0												4.0
	-thawed & damp below 3.5m											
5.0												5.0
	END HOLE @ 4.5M											
6.0												6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1823	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+650 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☒ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC										0.0
	SANDY SILT TO SANDY SILT WITH GRAVEL (ML)										
	-brown										
1.0											1.0
	-frozen (Vr) below 1.1m										
2.0											2.0
	-thawed - damp to moist below 2.1m										
3.0											3.0
4.0											4.0
	-damp below 4.0m										
5.0											5.0
	END HOLE @ 4.5m										
6.0											6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1824	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+750 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	ORGANIC SANDY SILT WITH GRAVEL TO SANDY SILT (ML) -brown -saturated										0.0		
1.0											1.0		
2.0											2.0		
3.0	-damp to moist below 2.5m		1692	●	▲		ML	▨	■	◆	3.0		
4.0	-grindy drilling below 3.2m -easier drilling below 3.6m		1693	●	▲		ML	▨	■	◆	4.0		
5.0	-damp below 4.0m		1694	●	▲		ML	▨	■	◆	5.0		
6.0	END HOLE @ 6.0m		1695	●	▲		ML	▨	■	◆	6.0		

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1825	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+850 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☒ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC										0.0
	SANDY SILT TO GRAVELLY SILT WITH SAND (ML)										
	-brown										
	-smooth easy drilling										
1.0											1.0
	-frozen (Vr) below 1.1m										
2.0											2.0
	-thawed & moist below 2.1m										
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1826	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1669+950 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	ORGANIC										0.0		
	SANDY SILT TO SILTY GRAVEL WITH SAND TO SANDY SILT (ML)-(GM)-(ML) -brown												
1.0	-frozen (Vr) below 1.1m												
		☒	1699	●	▲		ML		■	◆			
2.0													
	-frozen (Nf) below 2.5m												
3.0		☒	1700	●	▲		GM		■	◆			
4.0													
		☒	1701	●	▲		ML		■	◆			
5.0	END HOLE @ 4.5m												
6.0													

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1827	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1670+050 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC M.C. LIQUID					PERCENT SAND PERCENT GRAVEL			
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	ORGANIC											0.0
	SANDY SILT (ML)											
	-brown											
1.0	-frozen (Vr) below 1.0m											1.0
		☒	1702	●		▲	ML		■	◆		
2.0												2.0
3.0	-frozen (Nf) below 2.5m											3.0
		☒	1703	●		▲	ML		■	◆		
4.0												4.0
		☒	1704	●		▲	ML		■	◆		
5.0	END HOLE @ 4.5m											5.0
6.0												6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1828	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1670+150 40LT		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	ORGANIC							0.0
	SILT (ML)							
	-brown							
1.0	-frozen (Vr) below 1.0m							1.0
		☒	1705	● ▲		ML	■ ◆	
2.0								2.0
3.0	END HOLE @ 2.8m							3.0
	-refusal							
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1829	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1670+250 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	ORGANIC										0.0		
	SILT TO SILT WITH SAND TO SANDY SILT WITH GRAVEL (ML)												
	-trace +5mm material												
	-olive												
	-wet												
1.0											1.0		
		☒	1706				ML		◆				
2.0											2.0		
	-moist below 2.5m												
3.0		☒	1707				ML		◆		3.0		
4.0											4.0		
	-moist to wet below 4.0m												
5.0		☒	1708				ML		◆		5.0		
	END HOLE @ 4.5m												
6.0											6.0		

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1830	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1670+350 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	80	
0.0	ORGANIC										0.0
	SILT TO SILT WITH SAND TO SANDY SILT WITH GRAVEL (ML)										
	-brown										
	-frozen (Nb)										
1.0											1.0
		☒	1709				ML				
2.0											2.0
	-moist below 2.5m										
3.0		☒	1710				ML				3.0
4.0											4.0
		☒	1711				ML				
5.0	END HOLE @ 4.5m										5.0
6.0											6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1831	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-202101-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1670+450 40LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■	PERCENT SAND ◆	
0.0	ORGANIC										0.0
	SILT TO SILT WITH SAND TO SANDY SILT WITH GRAVEL (ML)										
	-brown										
	-wet										
1.0											1.0
2.0											2.0
3.0	-more +5mm material below 2.5m -moist to wet below 2.5m	☒	1713	●		▲	ML	■	◆		3.0
4.0											4.0
5.0	END HOLE @ 4.5m	☒	1714	●		▲	ML		●		5.0
6.0											6.0

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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 570-1833	
ENGINEERING CAPITAL		KM 1664 - 1692 A/H		Project No: 092-20210-0363	
MOBILE B40 L 6" AUGER		LOCATION: 1670+550 20M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)			
				20	40	60			80	20		40	60	80
				20	40	60	80							
0.0	SILT (ML) -grey -moist										0.0			
1.0	-wet below 1.1m										1.0			
2.0	SAND -trace silt -grey -free water										2.0			
3.0	SANDY SILT TO SANDY SILT WITH GRAVEL (ML) -brown -saturated	☒	1715					ML						
4.0	-grey below 4.0m -wet below 4.0m										4.0			
5.0	END HOLE @ 4.5m Note: Culvert outlet										5.0			
6.0											6.0			

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1848	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1670+575 15M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	ORGANIC										0.0		
1.0	SILT (ML) -trace gravel -brown -frozen (Vx)										1.0		
		☒	1755		60	75	ML		40	60			
3.0	SILTY SAND (SM) -frozen (Nf) -trace of gravel -grindy drilling										3.0		
		☒	1756	20	30		SM		60	80			
4.0	SANDY SILT (ML) -grey -saturated -smooth drilling										4.0		
		☒	1757	10	50	70	ML		40	60			
5.0	END HOLE @ 4.7m Note: Test hole at culvert inlet										5.0		
6.0											6.0		

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1849	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1670+675 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☐ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	ORGANIC										0.0
	SILT (ML) -brown -frozen (Vx)										
1.0											1.0
		☒	1758				ML				
2.0											2.0
	SILTY SAND (SM) -brown -saturated										
3.0		☒	1759				SM				3.0
4.0											4.0
	SANDY SILT (ML) -brown -moist to wet										
5.0		☒	1760				ML				5.0
	END HOLE @ 4.8m										
6.0											6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1850	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1670+775 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)	
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL			
				20	40	60	80		20	40	60	80	
0.0	ORGANIC												0.0
	SILT (ML) -trace gravel -light grey -moist												
1.0													1.0
2.0	SANDY SILT TO SILT WITH SAND (ML) -brown -moist -grindy drilling												2.0
3.0			1761				ML						3.0
4.0													4.0
5.0			1762				ML						5.0
6.0													6.0
			1763				ML						
	END HOLE @ 4.7m												

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1851	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1670+875 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC							0.0
	SANDY SILT (ML)							
	-brown							
	-wet							
1.0								1.0
		☒	1764	● ▲	ML	■ ◆		
2.0	SILT WITH SAND (ML)							2.0
	-brown							
	-moist							
	-grindy drilling							
3.0		☒	1765	● ▲	ML	■ ◆		3.0
4.0								4.0
	-grindier drilling							
5.0	END HOLE @ 4.7m	☒	1766	● ▲	ML	■ ◆		5.0
6.0								6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1852	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1670+975 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)		
				PLASTIC	M.C.	LIQUID			20	40		60	80
0.0	ORGANIC										0.0		
	SANDY SILT WITH GRAVEL TO SILT WITH SAND TO SANDY SILT (ML)												
	-brown												
	-saturated												
1.0											1.0		
	-more gravel grindy drilling below 1.4m												
2.0											2.0		
	-damp below 2.5m												
3.0											3.0		
4.0											4.0		
5.0											5.0		
	END HOLE @ 4.7M												
6.0											6.0		

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1853	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1671+075 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC							0.0
	SANDY SILT TO SILT WITH SAND (ML)							
	-brown							
	-moist							
1.0								1.0
	-grindy drilling below 1.1m							
2.0								2.0
3.0								3.0
	-damp below 3.0m							
4.0								4.0
5.0								5.0
	END HOLE @ 4.7m							
6.0								6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1854				
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363				
MOBILE B 40L		LOCATION: 1671+175 40M RT		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲	USC	SOIL SYMBOL	◆ PERCENT SAND ◆	DEPTH (m)
				20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			20 40 60 80 ◆ PERCENT SAND ◆ ■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC							0.0
	SILT WITH SAND TO GRAVELLY SILT WITH SAND TO SILTY SAND WITH GRAVEL (ML)							
	-brown							
	-moist							
1.0	-grindy drilling below 1.0m							1.0
		X	1773	●	▲	ML	■ ◆	
2.0								2.0
		X	1774	●	▲	ML	◆	
3.0								3.0
4.0								4.0
5.0								5.0
6.0	END HOLE @ 6.0m	X	1775	●	▲	ML	■	6.0
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1855				
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363				
MOBILE B 40L		LOCATION: 1671+275 40M RT		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲	USC	SOIL SYMBOL	◆ PERCENT SAND ◆	DEPTH (m)
				20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC							0.0
	SILT WITH SAND (ML)							
	-brown							
	-moist							
	-grindy drilling							
1.0								1.0
		X	1776	● ▲	ML	▨ ◆		
2.0								2.0
		X	1777	● ▲	ML	▨ ◆		
3.0								3.0
4.0								4.0
5.0								5.0
6.0	END HOLE @ 6.0m	X	1778	● ▲	ML	▨ ◆		6.0
Government of Yukon Transportation Engineering				LOGGED BY: JB		COMPLETION DEPTH: 6.0 m		
				REVIEWED BY:		COMPLETE: 00/08/25		
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1856				
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363				
MOBILE B 40L		LOCATION: 1671+375 40M RT		ELEVATION: 0.00 (m)				
SAMPLE TYPE		☒ RETURN	☒ S.P.T.	☒ AUGER	☐ BULK	☐ TUBE	☐ CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	PERCENT SAND ◆ 20 40 60 80 PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC							0.0
	SILT (ML) -trace gravel -brown -wet							
1.0								1.0
	SILTY SAND TO SANDY SILT (SM)-(ML) -grey brown -moist -grindy drilling	X	1779	● ▲	ML	[Symbol]	◆ ■	
2.0								2.0
		X	1780	● ▲	SM	[Symbol]	◆ ■	
3.0								3.0
		X	1781	● ▲	ML	[Symbol]	◆ ■	
4.0								4.0
5.0	END HOLE @ 4.7m							5.0
6.0								6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1857	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1671+475 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			20	40	60		
0.0	ORGANIC												0.0
	SANDY SILT (ML) -trace gravel -grey brown -wet												
1.0													1.0
2.0													2.0
3.0	SILTY SAND (SM) -grey brown -moist		1783				SM						3.0
4.0	SILTY SAND WITH GRAVEL (ML) -grey brown -moist												4.0
5.0	END HOLE @ 4.7m												5.0
6.0													6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 572-1858	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1671+575 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL		DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC SILT TO SILTY SAND (ML)-(SM) -brown -wet										0.0
1.0											1.0
2.0			1785				ML				2.0
3.0			1786				SM				3.0
4.0	SANDY SILT (ML) -brown -damp										4.0
5.0			1787				ML				5.0
6.0											6.0
7.0	END HOLE @ 7.0m										7.0
8.0											8.0
9.0											9.0
10.0											10.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1859								
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363								
MOBILE B 40L		LOCATION: 1671+625 15M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	SILT (SM) -olive -moist -trace plastic -smooth easy drilling											0.0
1.0												1.0
2.0												2.0
3.0	SILTY SAND (SM) -brown -damp		1788				ML					3.0
4.0												4.0
5.0			1789				SM					5.0
6.0												6.0
			1790				SM					
	END HOLE @ 4.5m Note: Test hole @ culvert inlet											

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1860									
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363									
MOBILE B 40L		LOCATION: 1671+725 40M RT		ELEVATION: 0.00 (m)									
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20	40		
				PLASTIC	M.C.	LIQUID							
0.0	ORGANIC SILT (ML) -brown -moist -trace +5mm material												0.0
1.0													1.0
2.0													2.0
3.0													3.0
4.0	SILTY SAND (SM) -brown -damp												4.0
5.0	END HOLE @ 4.5m												5.0
6.0													6.0
Government of Yukon Transportation Engineering				LOGGED BY: DT				COMPLETION DEPTH: 4.5 m					
				REVIEWED BY:				COMPLETE: 00/08/28					
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1861	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1671+825 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC SILT WITH SAND (ML) -brown -moist to wet						0.0	
1.0							1.0	
2.0	SILT (ML) -brown -frozen (Nf) 2.0m to 2.4m -grindy drilling -frozen (Vx) below 2.4m						2.0	
3.0		☒	1794	● ▲	ML	■ ◆	3.0	
4.0							4.0	
5.0		☒	1795	● ▲	ML	■ ◆	5.0	
6.0							6.0	
	END HOLE @ 4.5m	☒	1796	● ▲	ML	■ ◆		

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1862						
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363						
MOBILE B 40L		LOCATION: 1671+925 40M RT		ELEVATION: 0.00 (m)						
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE										
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
0.0	ORGANIC SANDY SILT (ML) -damp -brown								0.0	
1.0									1.0	
2.0									2.0	
3.0	-moist below 2.5m -silt seams below 2.5m -odd rock (25mm) below 2.5m	☒	1797		ML				3.0	
4.0	-more gravel below 4.0m	☒	1798		ML				4.0	
5.0	END HOLE @ 4.5m	☒	1799		ML				5.0	
6.0									6.0	

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1863	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1672+025 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBÉ ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60		
0.0	ORGANIC												0.0
	SANDY SILT TO SILT WITH SAND (ML)												
	-brown												
	-damp												
1.0													1.0
2.0													2.0
3.0													3.0
4.0													4.0
	SANDY SILT (ML)												
	-brown												
	-moist												
	-grindy drilling												
5.0													5.0
	END HOLE @ 4.5m												
6.0													6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1865		
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363		
MOBILE B 40L		LOCATION: 1672+225 40M RT		ELEVATION: 0.00 (m)		
SAMPLE TYPE	☒ RETURN	☒ S.P.T.	☒ AUGER	☐ BULK	☐ TUBE	☐ CORE
DEPTH (m)				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 ■
SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO				DEPTH (m)
0.0	ORGANIC SILT WITH SAND TO SANDY SILT WITH GRAVEL TO SILT WITH SAND (ML) -brown -moist					0.0
1.0	-rocks @ 1.0m					1.0
2.0		X 1806			ML	
3.0	-some gravel below 3.0m -damp below 3.0m	X 1807			ML	
4.0		X 1808			ML	
END HOLE @ 4.5m						
5.0						5.0
6.0						6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1866									
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363									
MOBILE B 40L		LOCATION: 1672+325 35M RT		ELEVATION: 0.00 (m)									
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE													
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20	40		
				PLASTIC	M.C.	LIQUID							
				20	40	60	80			20	40	60	80
0.0	ORGANIC -surface Boulders SANDY SILT TO SILT WITH SAND (ML) -brown -wet -with pebbles												0.0
1.0													1.0
2.0													2.0
3.0	-moist below 2.5m												3.0
4.0													4.0
5.0	END HOLE @ 4.5m												5.0
6.0													6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1867								
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363								
MOBILE B 40L		LOCATION: 1672+425 40M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20		
				PLASTIC	M.C.	LIQUID						
0.0	ORGANIC											0.0
	SILT WITH SAND (ML)											
	-wet											
1.0												1.0
2.0												2.0
3.0	-grinding @ 2.75m		1812	●		▲	ML	▨	■	◆		3.0
4.0	-wet to moist below 4.0m		1813	●		▲	ML	▨	■	◆		4.0
5.0	END HOLE @ 4.5m		1814	●		▲	ML	▨	■	◆		5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: GC REVIEWED BY: Fig. No:				COMPLETION DEPTH: 4.5 m COMPLETE: 00/08/28 Page 1 of 1				

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1868	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1672+525 40M RT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC M.C. LIQUID					20 40 60 80			
				20	40	60			20	40	60	
0.0	ORGANIC -grinding @ surface SILTY SAND TO SILT WITH SAND TO GRAVELLY SILT WITH SAND (SM)-(ML) -brown -moist											0.0
1.0												1.0
2.0	-frozen (Nb) below 1.7m -easy drilling below 2.0m											2.0
3.0			1815				SM					3.0
4.0												4.0
5.0			1816				ML					5.0
6.0												6.0
7.0			1817				ML					7.0
8.0												8.0
9.0												9.0
10.0												10.0
11.0												11.0
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
25.0												25.0
26.0												26.0
27.0												27.0
28.0												28.0
29.0												29.0
30.0												30.0
31.0												31.0
32.0												32.0
33.0												33.0
34.0												34.0
35.0												35.0
36.0												36.0
37.0												37.0
38.0												38.0
39.0												39.0
40.0												40.0
41.0												41.0
42.0												42.0
43.0												43.0
44.0												44.0
45.0												45.0
46.0												46.0
47.0												47.0
48.0												48.0
49.0												49.0
50.0												50.0
51.0												51.0
52.0												52.0
53.0												53.0
54.0												54.0
55.0												55.0
56.0												56.0
57.0												57.0
58.0												58.0
59.0												59.0
60.0												60.0
61.0												61.0
62.0												62.0
63.0												63.0
64.0												64.0
65.0												65.0
66.0												66.0
67.0												67.0
68.0												68.0
69.0												69.0
70.0												70.0
71.0												71.0
72.0												72.0
73.0												73.0
74.0												74.0
75.0												75.0
76.0												76.0
77.0												77.0
78.0												78.0
79.0												79.0
80.0												80.0
81.0												81.0
82.0												82.0
83.0												83.0
84.0												84.0
85.0												85.0
86.0												86.0
87.0												87.0
88.0												88.0
89.0												89.0
90.0												90.0
91.0												91.0
92.0												92.0
93.0												93.0
94.0												94.0
95.0												95.0
96.0												96.0
97.0												97.0
98.0												98.0
99.0												99.0
100.0												100.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1869							
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363							
MOBILE B 40L		LOCATION: 1672+625 40M RT		ELEVATION: 0.00 (m)							
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE											
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲		USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				20	40			60	80		
0.0	ORGANIC										0.0
	SANDY SILT (ML)										
	-brown										
	-wet										
1.0											1.0
2.0	SANDY SILT WITH GRAVEL TO SILT WITH SAND (ML)										2.0
	-brown										
	-moist										
	-smooth drilling										
3.0											3.0
4.0											4.0
5.0	END HOLE @ 4.5m										5.0
6.0											6.0
Government of Yukon Transportation Engineering				LOGGED BY: GC		COMPLETION DEPTH: 4.5 m					
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1870				
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363				
MOBILE B 40L		LOCATION: 1672+725 40M RT		ELEVATION: 0.00 (m)				
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC							0.0
	SANDY SILT (ML)							
	-brown							
	-wet							
1.0								1.0
		☒	1821	● ▲	ML	■ ◆		
2.0								2.0
	-moist to wet below 2.4m							
	-lost sample # 1822							
3.0			1822	●				3.0
	-little grindy @ 3.0m							
	-some gravel 3.0m							
4.0								4.0
		☒	1823	● ▲	ML	■ ◆		
5.0	END HOLE @ 4.5m							5.0
6.0								6.0
Government of Yukon Transportation Engineering				LOGGED BY: GC		COMPLETION DEPTH: 4.5 m		
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1871								
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363								
MOBILE B 40L		LOCATION: 1672+825 40M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC											0.0
	SILT WITH SAND (ML)											
	-brown											
	-wet											
	-grindy drilling below organics											
1.0												1.0
	-layer of wet sand 1.4 to 1.6m											
2.0												2.0
	-some gravel below 2.5m											
3.0												3.0
	-moist below 3.2m											
4.0												4.0
	END HOLE @ 4.5m											
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: GC		COMPLETION DEPTH: 4.5 m						
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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1872							
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363							
MOBILE B 40L		LOCATION: 1672+900 30M LT		ELEVATION: 0.00 (m)							
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE											
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)
				20	40	60			80	20	
				PLASTIC M.C. LIQUID ----- ----- ----- 20 40 60 80					■ PERCENT GRAVEL ■ 20 40 60 80		
0.0	ORGANIC SANDY SILT TO SILT WITH SAND TO SANDY SILT (ML) -brown -saturated to 1.0m -some grindy drilling -1.0 -wet to saturated below 1.0m -3.0 -moist below 2.6m -some contamination from saturated material above -4.0 -damp to moist below 4.5m END HOLE @ 4.5m										
		☒	1807	●	▲		ML	▨	■ ◆		
		☒	1808	●	▲		ML	▨	■ ◆		
		☒	1809	●	▲		ML	▨	■ ◆		
5.0											
6.0											

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1873	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1673+000 25M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND / GRAVEL			DEPTH (m)
				PLASTIC M.C. LIQUID					PERCENT SAND			
				20 40 60 80	20 40 60 80	20 40 60 80			20 40 60 80	20 40 60 80		
0.0	ORGANIC SILTY SAND WITH GRAVEL TO SILT WITH SAND (SM)-(ML) -brown -saturated											0.0
1.0												1.0
2.0												2.0
3.0	-moist below 2.5m		1810				SM					3.0
4.0	-damp to moist below 4.0m		1811				ML					4.0
5.0	END HOLE @ 4.5m		1812				ML					5.0
6.0												6.0

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1874					
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363					
MOBILE B 40L		LOCATION: 1673+100 25M LT		ELEVATION: 0.00 (m)					
SAMPLE TYPE		☒ RETURN	☒ S.P.T.	☒ AUGER	☐ BULK	☐ TUBE	☐ CORE		
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	DEPTH (m)
0.0	ORGANIC SANDY SILT (ML) -some gravel -brown -wet -grindy below organics but not continous								0.0
1.0									1.0
2.0									2.0
3.0	SILTY GRAVEL (GM) -brown -moist -grinding occasionally	X	1813	●	▲	ML	[Symbol]	■ ◆	3.0
4.0									4.0
5.0	GRAVELLY SILT WITH SAND (ML) -brown -damp								5.0
6.0									6.0
	END HOLE @ 4.5m	X	1814	●	▲	GM	[Symbol]	◆ ■	3.0
		X	1815	●	▲	ML	[Symbol]	◆	4.5

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 Fig. No:

COMPLETION DEPTH: 4.5 m
 COMPLETE: 00/08/29

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1875	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1673+130 15M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)			
				20	40	60			80	20			40	60	80
0.0	ORGANIC SILTY SAND (SM) -brown -wet -smooth drilling											0.0			
1.0												1.0			
2.0												2.0			
2.0	GRAVELLY SILT WITH SAND (ML) -brown -moist to wet -grindy drilling @ 2.5m											2.0			
3.0												3.0			
3.0	SILTY SAND (SM) -brown -wet to saturated											3.0			
4.0												4.0			
4.0												4.0			
5.0	END HOLE @ 4.5m											5.0			
6.0												6.0			

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 00/08/29
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1876	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1673+275 25M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE		RETURN		S.P.T.	
AUGER		BULK		TUBE	
CORE					
SOIL DESCRIPTION		SAMPLE TYPE		SAMPLE NO	
DEPTH (m)		PERCENT FINES		USC	
		PLASTIC M.C. LIQUID		SOIL SYMBOL	
		20 40 60 80		PERCENT SAND PERCENT GRAVEL	
		20 40 60 80		20 40 60 80	
0.0	ORGANIC				
	SANDY SILT (ML)				
	-brown				
	-wet				
1.0					
	-rocks grinding @ 1.6m				
	-damp to moist below 1.8m				
2.0					
3.0					
	-moist below 3.2m				
	-grinding @ 3.2m				
4.0					
5.0					
	END HOLE @ 4.5m				
6.0					

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Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 00/08/29

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SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1877	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1673+375 25M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60		
0.0	ORGANIC												0.0
	SANDY SILT WITH GRAVEL TO SILTY SAND WITH GRAVEL (ML)-(SM)												
	-brown												
	-damp to moist												
	-grinding @ 0.5m												
1.0													1.0
2.0	-damp below 2.0m												2.0
	-some grinding below 2.0m												
3.0													3.0
4.0													4.0
5.0	END HOLE @ 4.5m												5.0
6.0													6.0

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Transportation Engineering		REVIEWED BY:	COMPLETE: 00/08/29
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION AND TEST REPORT		SHAKWAK SEG 9		TEST HOLE NO: 573-1878	
ENGINEERING CAPITAL		KM 1664-1692 A/H		Project No: 092-202101-0363	
MOBILE B 40L		LOCATION: 1673+468 25M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☒ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			PERCENT GRAVEL ■	DEPTH (m)		
				20	40	60			80	20	40			60	80
0.0	ORGANIC SILT (ML) -brown -moist												0.0		
1.0													1.0		
2.0													2.0		
3.0	SILTY SAND TO SANDY SILT WITH GRAVEL (SM)-(ML) -brown -damp -grinding @ 2.0m -hard grinding @ 3.3m		1825					ML					3.0		
4.0													4.0		
5.0													5.0		
6.0													6.0		
	END HOLE @ 4.4m Note: 0.4-0.5m shot rock on surface -Test hole @ existing culvert		1826					ML							

Government of Yukon Transportation Engineering		LOGGED BY: GC	COMPLETION DEPTH: 4.4 m
		REVIEWED BY:	COMPLETE: 00/08/29
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 576-887	
ENGINEERING CAPITAL				Project No: 092-202101-0363	
AIR ROTARY		LOCATION: 1673+593 19M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	ROCK @ .15m							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	END HOLE @ 6.7m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0
13.0								13.0
14.0								14.0
15.0								15.0
16.0								16.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 6.7 m
	REVIEWED BY:	COMPLETE: 00/09/04
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 576-886	
ENGINEERING CAPITAL				Project No: 092-202101-0363	
AIR ROTARY		LOCATION: 1673+765 17M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN		☒ S.P.T.		☒ AUGER	
		☐ BULK		☐ TUBE	
				☒ CORE	

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				20	40	60			80	20	40	
0.0	ORGANICS MIXED WITH SILTY SAND											0.0
1.0	LOOSE ROCK WITH SILT -possibly old stripping etc											1.0
2.0												2.0
3.0	ROCK @ 3.5m -slow drilling											3.0
4.0												4.0
5.0												5.0
6.0												6.0
7.0	END HOLE @ 6.7m											7.0
8.0												8.0
9.0												9.0
10.0												10.0
11.0												11.0
12.0												12.0
13.0												13.0
14.0												14.0
15.0												15.0
16.0												16.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 6.7 m
	REVIEWED BY:	COMPLETE: 00/09/04
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SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 576-885	
ENGINEERING CAPITAL				Project No: 092-202101-0363	
AIR ROTARY		LOCATION: 1673+835 15M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	SILT GRAVEL & ORGANIC (Mixture)							0.0
1.0	ROCK @ .90M -slow drilling							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	END HOLE @ 10.4m							11.0
12.0								12.0
13.0								13.0
14.0								14.0
15.0								15.0
16.0								16.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 10.4 m
	REVIEWED BY:	COMPLETE: 00/09/04
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TEST REPORT		SHAKWAK SEG 09		TEST HOLE NO: 576-884	
ENGINEERING CAPITAL				Project No: 092-202101-0363	
AIR ROTARY		LOCATION: 1673+855 15M LT		ELEVATION: 0.00 (m)	
SAMPLE TYPE ☐ RETURN ☒ S.P.T. ☒ AUGER ☐ BULK ☐ TUBE ☐ CORE					

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	ROCK CHIPS							0.0
1.0	-layer of organic (peat moss - wood)							1.0
2.0	ROCK @ 1.8m							2.0
3.0	-very slow drilling							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	END HOLE @ 10.4m							11.0
12.0								12.0
13.0								13.0
14.0								14.0
15.0								15.0
16.0								16.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 10.4 m
	REVIEWED BY:	COMPLETE: 00/09/04
	Fig. No:	Page 1 of 1

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

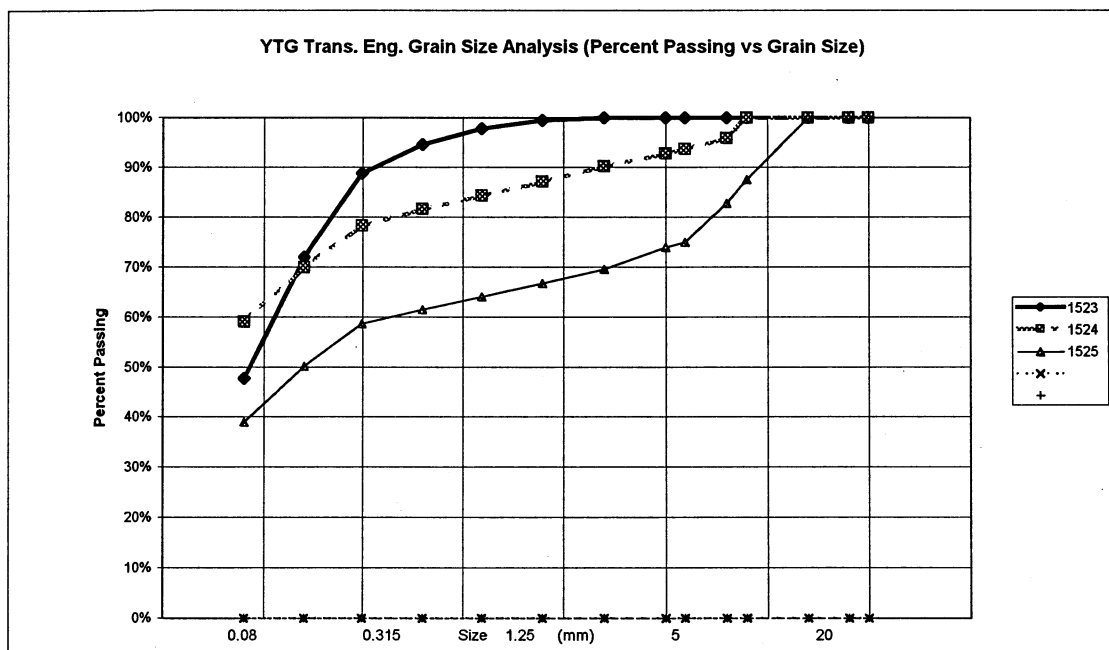
Km 1664.2 to Km 1674.2
YUKON 2001-2002

ALASKA HIGHWAY #1

2000 CENTRELINE TESTING (cont'd)
1664+350 to 1673+855
ALASKA HIGHWAY

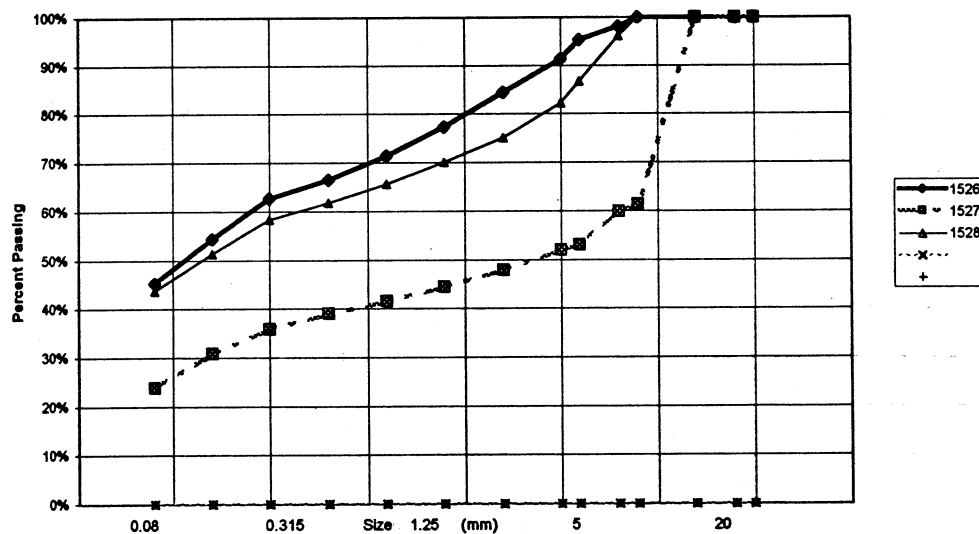
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1768
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B-40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1664+350 12M RT DATE COM 2000/08/14

FIELD No: 1523 LAB No: 1994 DEPTH: 0.8-1.0 TYPE: AUGER	FIELD No: 1524 LAB No: 1995 DEPTH: 1.8-2.0 A AUGER	FIELD No: 1525 LAB No: 1996 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	96%
12.5	100%	12.5	94%
10.0	100%	10.0	93%
5.0	100%	5.0	90%
2.5	100%	2.5	87%
1.25	98%	1.25	84%
0.630	95%	0.630	82%
0.315	89%	0.315	78%
0.160	72%	0.160	70%
0.080	48%	0.080	59%
M.C.(%): 19%	M.C.(%): 17%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 10	% GRAVEL 30	
% SAND: 52	% SAND: 31	% SAND: 30	
% FINES: 48	% FINES: 59	% FINES: 39	
CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	



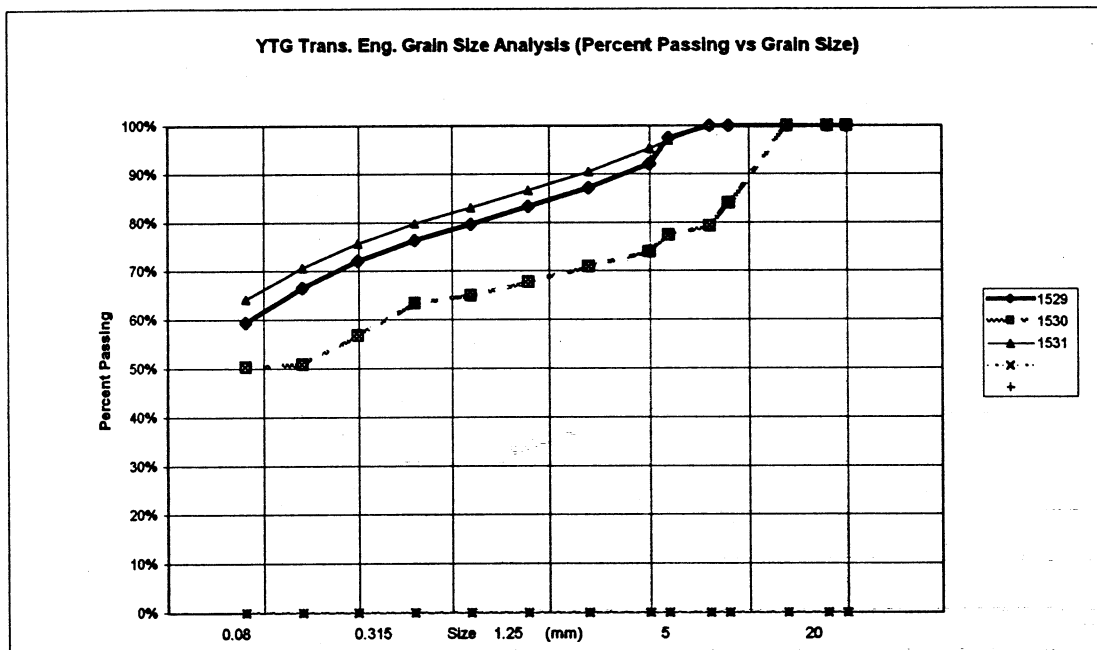
PROJECT NUMBER: 092-202101-0363-1			HOLE No.: 568-1769		
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: KM1664.5-1692.6 A/H					
DRILL UNIT: MOBILE B 40-L					
LOGGED BY: DOUG TRIM			DATE COM 2000/08/14		
HOLE LOCATION: 1664+450 12M RT					
FIELD No: 1526		FIELD No: 1527		FIELD No: 1528	
LAB No: 1997		LAB No: 1998		LAB No: 1999	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	61%	25.0	100%
20.0	98%	20.0	60%	20.0	96%
12.5	95%	12.5	53%	12.5	87%
10.0	91%	10.0	52%	10.0	82%
5.0	84%	5.0	48%	5.0	75%
2.5	77%	2.5	44%	2.5	70%
1.25	71%	1.25	42%	1.25	66%
0.630	67%	0.630	39%	0.630	62%
0.315	63%	0.315	36%	0.315	58%
0.160	54%	0.160	31%	0.160	51%
0.080	45%	0.080	24%	0.080	44%
M.C.(%): 9%		M.C.(%): 7%		M.C.(%): 9%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL: 16		% GRAVEL: 52		% GRAVEL: 25	
% SAND: 39		% SAND: 24		% SAND: 31	
% FINES: 45		% FINES: 24		% FINES: 44	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1770
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664 5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1664+550 12M RT DATE COM 2000/08/14

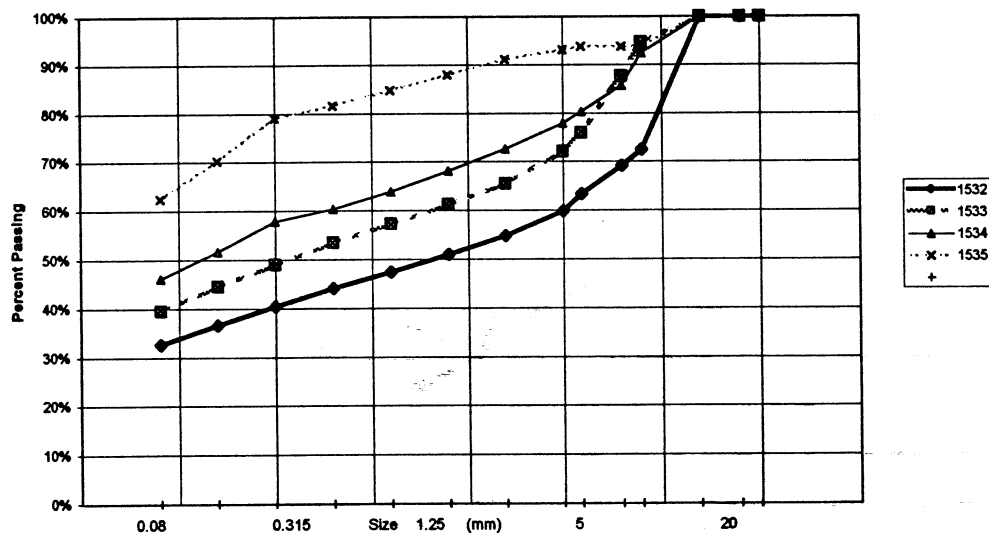
FIELD No: 1529 LAB No: 2000 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1530 LAB No: 2001 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1531 LAB No: 2002 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	97%	12.5	97%
10.0	92%	10.0	95%
5.0	87%	5.0	91%
2.5	83%	2.5	87%
1.25	80%	1.25	83%
0.630	76%	0.630	80%
0.315	72%	0.315	76%
0.160	67%	0.160	71%
0.080	60%	0.080	64%
M.C.(%): 9%	M.C.(%): 8%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL: 13	% GRAVEL: 29	% GRAVEL: 9	
% SAND: 28	% SAND: 21	% SAND: 26	
% FINES: 60	% FINES: 50	% FINES: 64	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT (ML)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1771
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1664+600 25M RT DATE COM 2000/08/14

FIELD No: 1532		FIELD No: 1533		FIELD No: 1534		FIELD No: 1535	
LAB No: 2003		LAB No: 2004		LAB No: 2005		LAB No: 2006	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5		DEPTH: 7.4-7.6	
TYPE: AUGER		TYPE: AUGER		TYPE: AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	73%	25.0	95%	25.0	92%	25.0	94%
20.0	69%	20.0	88%	20.0	86%	20.0	94%
12.5	63%	12.5	76%	12.5	80%	12.5	94%
10.0	60%	10.0	72%	10.0	78%	10.0	93%
5.0	55%	5.0	66%	5.0	73%	5.0	91%
2.5	51%	2.5	61%	2.5	68%	2.5	88%
1.25	48%	1.25	57%	1.25	64%	1.25	85%
0.630	44%	0.630	53%	0.630	60%	0.630	82%
0.315	40%	0.315	49%	0.315	58%	0.315	79%
0.160	37%	0.160	45%	0.160	52%	0.160	70%
0.080	33%	0.080	40%	0.080	46%	0.080	63%
M.C.(%): 10%		M.C.(%): 6%		M.C.(%): 7%		M.C.(%): 9%	
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL: 45		% GRAVEL: 34		% GRAVEL: 27		% GRAVEL: 9	
% SAND: 22		% SAND: 26		% SAND: 27		% SAND: 29	
% FINES: 33		% FINES: 40		% FINES: 46		% FINES: 63	
CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SANDY SILT (ML)	

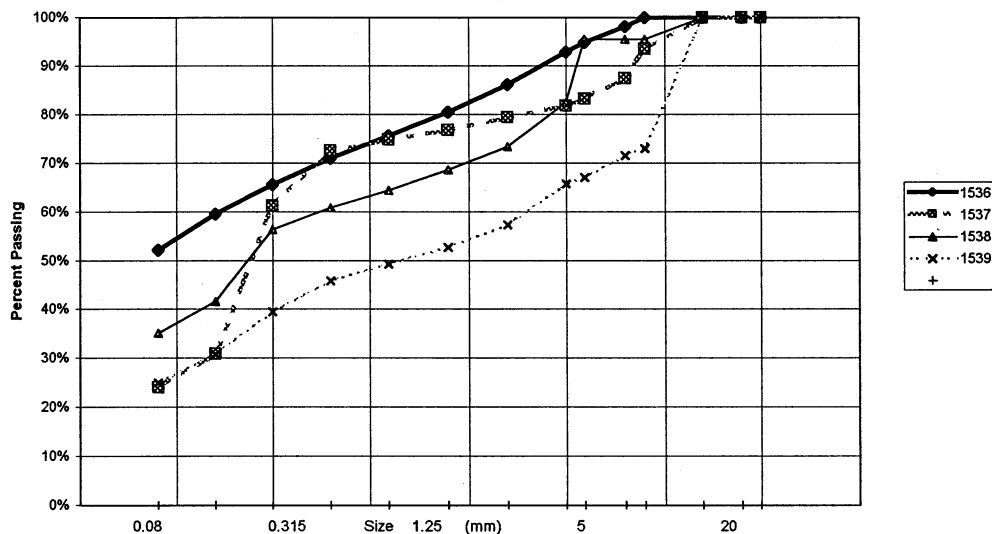
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1772
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1664+650 25M RT DATE COM 2000/08/14

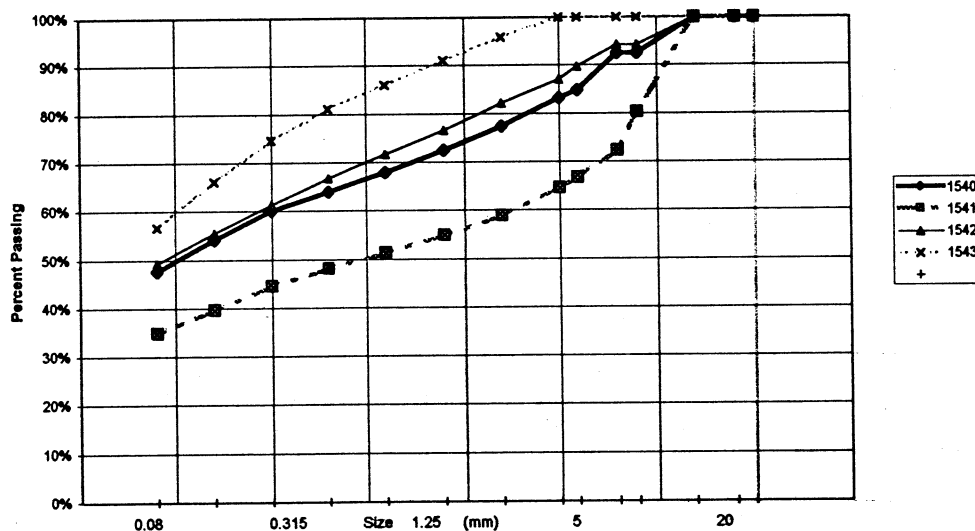
FIELD No: 1536 LAB No: 2007 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1537 LAB No: 2008 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1538 LAB No: 2009 DEPTH: 4.3-4.5 TYPE: AUGER	FIELD No: 1539 LAB No: 2010 DEPTH: 6.8-7.0 TYPE: AUGER				
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	94%	25.0	95%	25.0	73%
20.0	98%	20.0	88%	20.0	95%	20.0	71%
12.5	95%	12.5	83%	12.5	95%	12.5	67%
10.0	93%	10.0	82%	10.0	82%	10.0	66%
5.0	86%	5.0	79%	5.0	73%	5.0	57%
2.5	81%	2.5	77%	2.5	69%	2.5	53%
1.25	76%	1.25	75%	1.25	64%	1.25	49%
0.630	71%	0.630	73%	0.630	61%	0.630	46%
0.315	66%	0.315	61%	0.315	56%	0.315	40%
0.160	60%	0.160	31%	0.160	42%	0.160	31%
0.080	52%	0.080	24%	0.080	35%	0.080	25%
M.C.(%): 10%	M.C.(%): 5%	M.C.(%): 11%	M.C.(%): 4%				
LIMITS	LIMITS	LIMITS	LIMITS				
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0				
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0				
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0				
% GRAVEL 14	% GRAVEL 21	% GRAVEL 27	% GRAVEL 43				
% SAND: 34	% SAND: 55	% SAND: 38	% SAND: 32				
% FINES: 52	% FINES: 24	% FINES: 35	% FINES: 25				
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)				

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



PROJECT NUMBER: 092-202101-0363-1				HOLE No.: 568-1773			
CLIENT: ENGINEERING-CAPITAL							
PROJECT NAME: SHAKWAK SEG 9							
PROJECT LOCATION: KM1664.5-1692.6 A/H							
DRILL UNIT: MOBILE B 40-L							
LOGGED BY: DOUG TRIM							
HOLE LOCATION: 1664+700 25M RT				DATE COM 2000/08/14			
=====				=====			
FIELD NO: 1540		FIELD No. 1541		FIELD No: 1542		FIELD No: 1543	
LAB NO: 2011		LAB No. 2012		LAB No: 2013		LAB No: 2014	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0		DEPTH: 4.3-4.5		DEPTH: 6.8-7.0	
TYPE: AUGER		A AUGER		TYPE: AUGER		TYPE: AUGER	
=====				=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	93%	25.0	80%	25.0	94%	25.0	100%
20.0	93%	20.0	72%	20.0	94%	20.0	100%
12.5	85%	12.5	67%	12.5	90%	12.5	100%
10.0	83%	10.0	65%	10.0	87%	10.0	100%
5.0	77%	5.0	59%	5.0	82%	5.0	96%
2.5	72%	2.5	55%	2.5	77%	2.5	91%
1.25	68%	1.25	51%	1.25	72%	1.25	86%
0.630	64%	0.630	48%	0.630	67%	0.630	81%
0.315	60%	0.315	45%	0.315	61%	0.315	75%
0.160	54%	0.160	40%	0.160	56%	0.160	66%
0.080	48%	0.080	35%	0.080	49%	0.080	57%
M.C.(%): 9%		M.C.(%): 13%		M.C.(%): 8%		M.C.(%): 8%	
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL 23		% GRAVEL 41		% GRAVEL 18		% GRAVEL 4	
% SAND: 30		% SAND: 24		% SAND: 33		% SAND: 39	
% FINES: 48		% FINES: 35		% FINES: 49		% FINES: 57	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SANDY SILT (ML)	

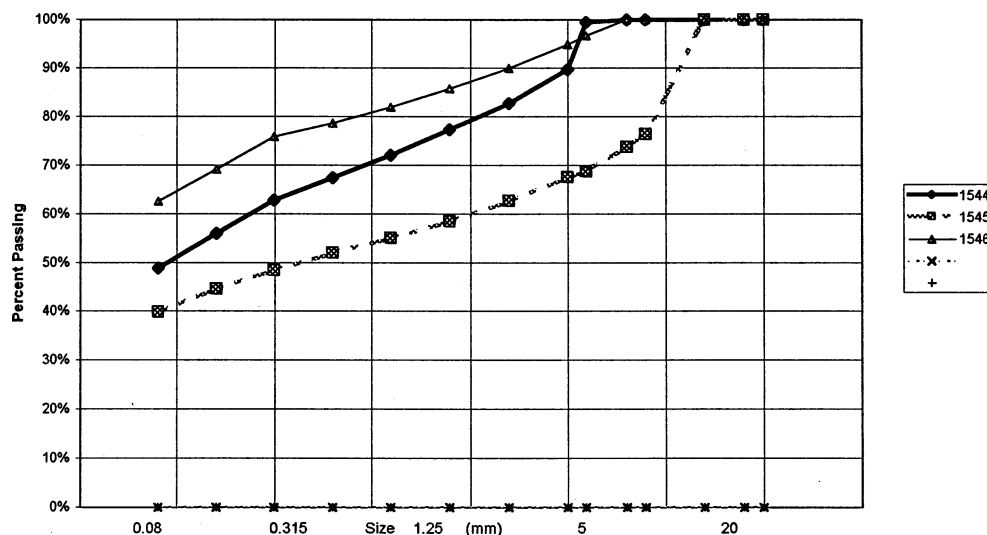
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



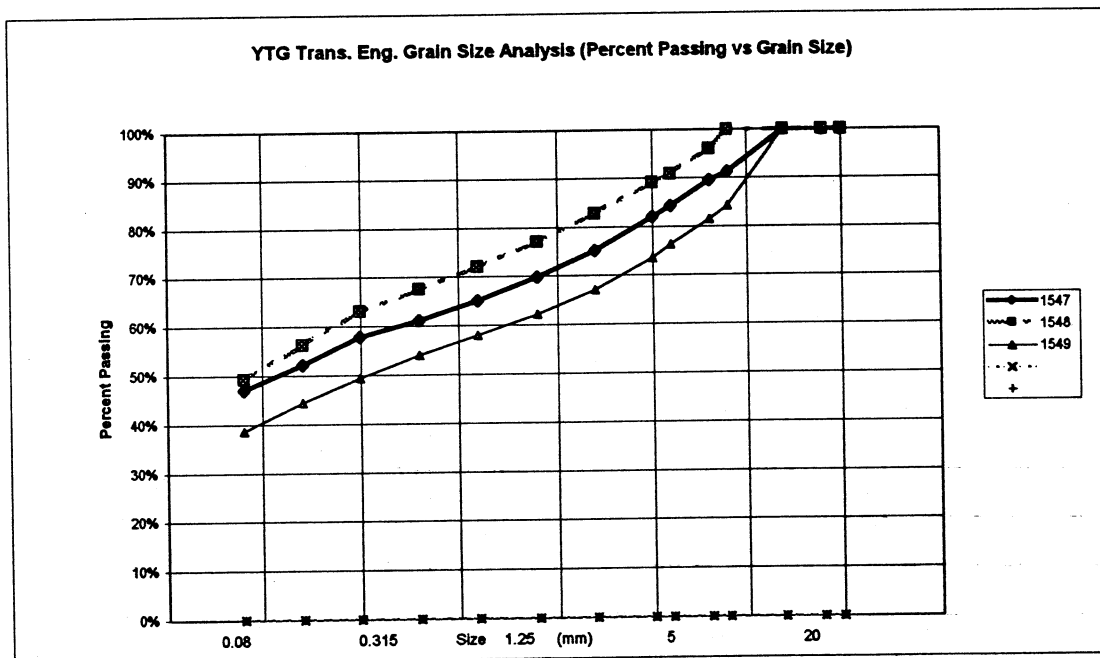
PROJECT NUMBER:	092-202101-0363-1	HOLE No.:	568-1774
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM1664.5-1692.6 A/H		
DRILL UNIT:	MOBILE B 40-L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1664+800 13M RT	DATE COM	2000/08/14

FIELD NO: 1544		FIELD No. 1545		FIELD No: 1546	
LAB NO: 2015		LAB No. 2016		LAB No: 2017	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	76%	25.0	100%
20.0	100%	20.0	74%	20.0	100%
12.5	100%	12.5	69%	12.5	97%
10.0	90%	10.0	68%	10.0	95%
5.0	83%	5.0	63%	5.0	90%
2.5	77%	2.5	58%	2.5	86%
1.25	72%	1.25	55%	1.25	82%
0.630	67%	0.630	52%	0.630	79%
0.315	63%	0.315	48%	0.315	76%
0.160	56%	0.160	45%	0.160	69%
0.080	49%	0.080	40%	0.080	63%
M.C.(%):	9%	M.C.(%):	8%	M.C.(%):	10%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	17	% GRAVEL	37	% GRAVEL	10
% SAND:	34	% SAND:	23	% SAND:	27
% FINES:	49	% FINES:	40	% FINES:	63
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL	(SM)	SILTY GRAVEL WITH SAND	(GM)	SANDY SILT (ML)	

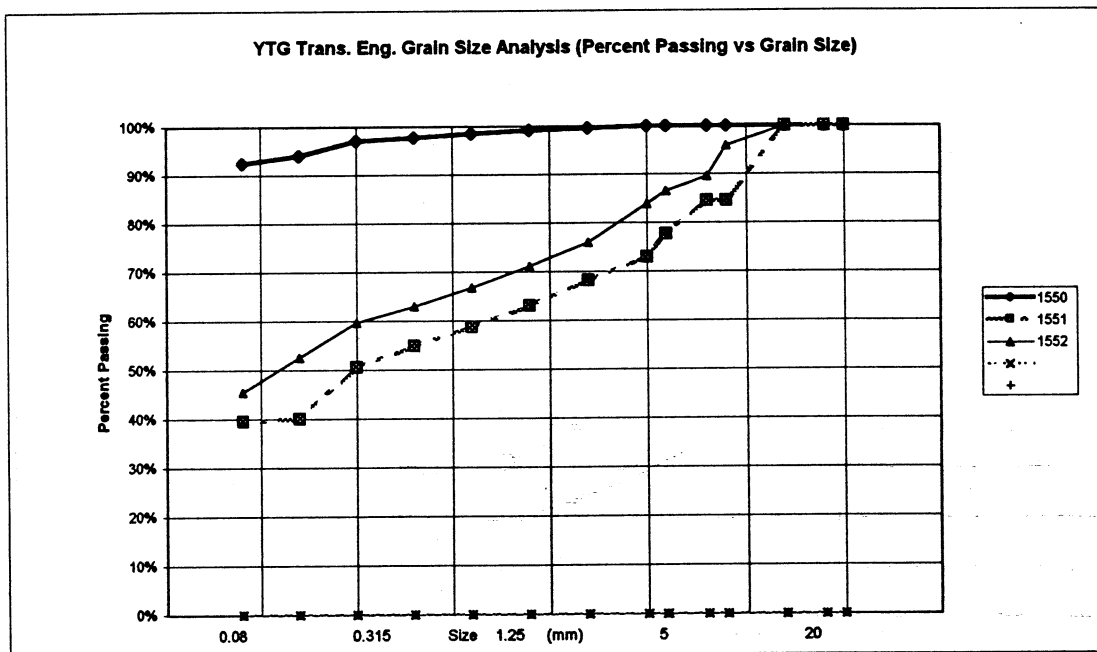
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 568-1775	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: KM1664.5-1692.6 A/H			
DRILL UNIT: MOBILE B 40-L			
LOGGED BY: DOUG TRIM		DATE COM 2000/08/14	
HOLE LOCATION: 1664+900 15m It			
=====		=====	
FIELD No: 1547	FIELD No: 1548	FIELD No: 1549	
LAB No: 2018	LAB No: 2019	LAB No: 2020	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	
=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	91%	25.0	84%
20.0	90%	20.0	82%
12.5	84%	12.5	76%
10.0	82%	10.0	74%
5.0	75%	5.0	67%
2.5	70%	2.5	62%
1.25	65%	1.25	58%
0.630	61%	0.630	54%
0.315	58%	0.315	49%
0.160	52%	0.160	44%
0.080	47%	0.080	39%
M.C.(%): 15%	M.C.(%): 12%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL: 25	% GRAVEL: 17	% GRAVEL: 33	
% SAND: 28	% SAND: 34	% SAND: 29	
% FINES: 47	% FINES: 49	% FINES: 39	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	



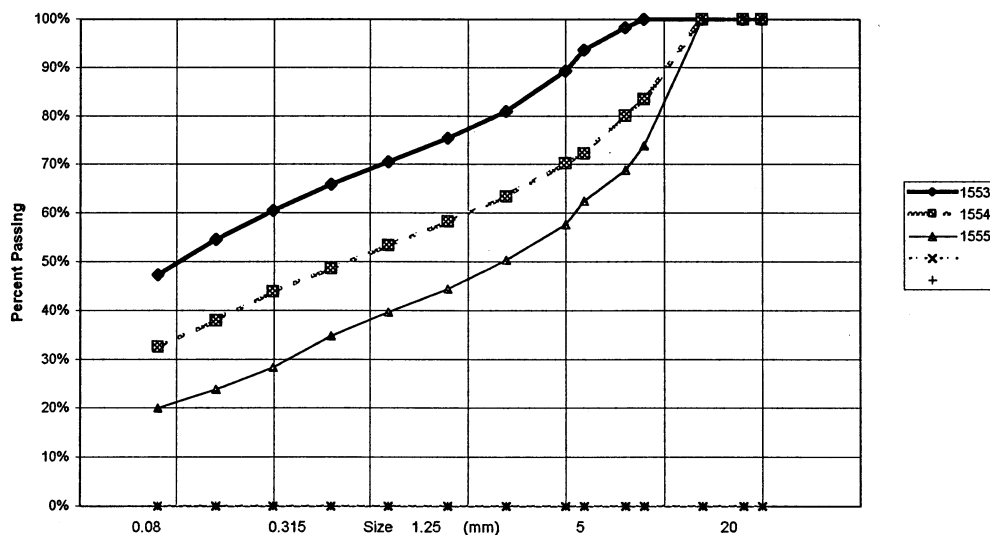
PROJECT NUMBER: 092-202101-0363-1			HOLE No.: 568-1776		
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: KM1664.5-1692.6 A/H					
DRILL UNIT: MOBILE B 40-L					
LOGGED BY: DOUG TRIM					
HOLE LOCATION: 1664+975 20M LT			DATE COM 2000/08/14		
=====					
FIELD No: 1550		FIELD No: 1551		FIELD No: 1552	
LAB NO: 2021		LAB No: 2022		LAB No: 2023	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		TYPE: AUGER	
=====					
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	85%	25.0	96%
20.0	100%	20.0	85%	20.0	90%
12.5	100%	12.5	78%	12.5	87%
10.0	100%	10.0	73%	10.0	84%
5.0	100%	5.0	68%	5.0	76%
2.5	99%	2.5	63%	2.5	71%
1.25	99%	1.25	59%	1.25	67%
0.630	98%	0.630	55%	0.630	63%
0.315	97%	0.315	51%	0.315	60%
0.160	94%	0.160	40%	0.160	53%
0.080	92%	0.080	40%	0.080	46%
=====					
M.C.(%):	31%	M.C.(%):	12%	M.C.(%):	12%
=====					
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
=====					
% GRAVEL	0	% GRAVEL	32	% GRAVEL	24
% SAND:	7	% SAND:	29	% SAND:	31
% FINES:	92	% FINES:	40	% FINES:	46
=====					
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT (ML)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	



PROJECT NUMBER:	092-202101-0363-1	HOLE No.:	568-1777
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM1664.5-1692.6 A/H		
DRILL UNIT:	MOBILE B 40-L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1665+075 15M LT	DATE COM	2000/08/14

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	83%	25.0	74%
20.0	98%	20.0	80%	20.0	69%
12.5	94%	12.5	72%	12.5	63%
10.0	89%	10.0	70%	10.0	58%
5.0	81%	5.0	64%	5.0	50%
2.5	76%	2.5	58%	2.5	44%
1.25	71%	1.25	53%	1.25	40%
0.630	66%	0.630	49%	0.630	35%
0.315	61%	0.315	44%	0.315	28%
0.160	55%	0.160	38%	0.160	24%
0.080	47%	0.080	33%	0.080	20%
M.C.(%):	11%	M.C.(%):	10%	M.C.(%):	9%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	19	% GRAVEL	36	% GRAVEL	50
% SAND:	34	% SAND:	31	% SAND:	30
% FINES:	47	% FINES:	33	% FINES:	20
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

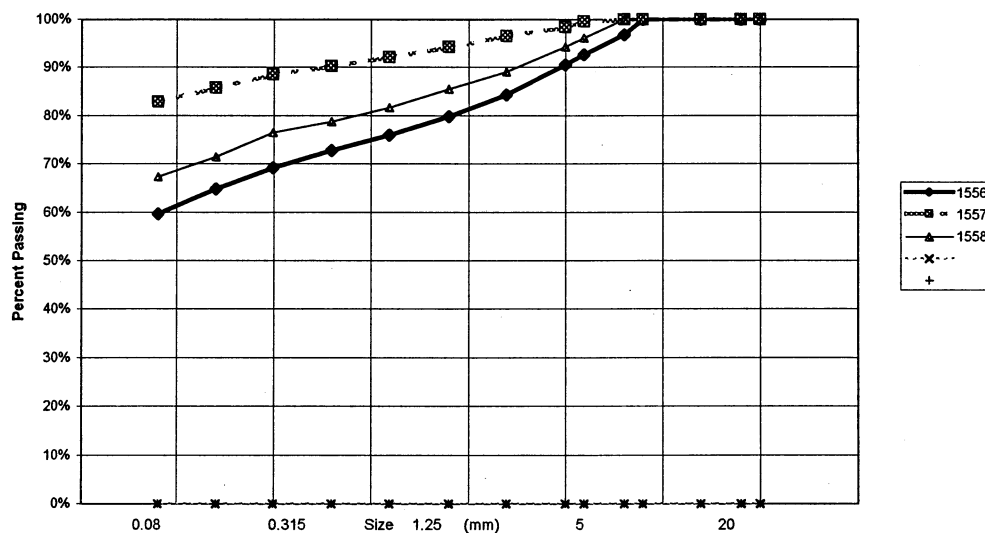
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1778
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1665+175 8M LT DATE COM 2000/08/14

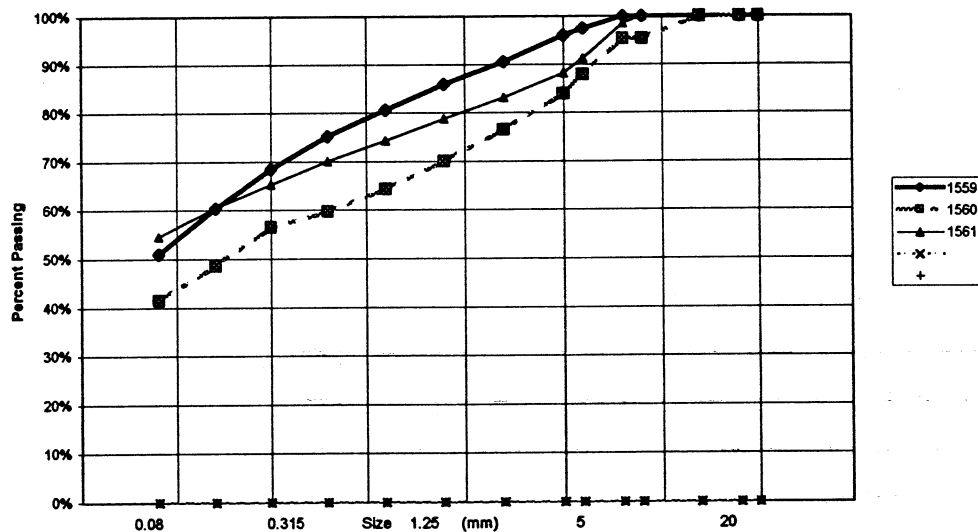
FIELD NO: 1556 LAB NO: 2027 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1557 LAB No. 2028 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1558 LAB No: 2029 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	100%
12.5	93%	12.5	100%
10.0	91%	10.0	98%
5.0	84%	5.0	97%
2.5	80%	2.5	94%
1.25	76%	1.25	92%
0.630	73%	0.630	90%
0.315	69%	0.315	89%
0.160	65%	0.160	86%
0.080	60%	0.080	83%
M.C.(%): 13%	M.C.(%): 13%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 16	% GRAVEL 3	% GRAVEL 11	
% SAND: 25	% SAND: 14	% SAND: 22	
% FINES: 60	% FINES: 83	% FINES: 67	
CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT (ML)	

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



PROJECT NUMBER: 092-202101-0363-1				HOLE No.: 568-1779	
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: KM1664.5-1692.6 A/H					
DRILL UNIT: MOBILE B 40-L					
LOGGED BY: DOUG TRIM					
HOLE LOCATION: 1665+275 8M LT				DATE COM 2000/08/14	
FIELD No: 1559		FIELD No: 1560		FIELD No: 1561	
LAB No: 2030		LAB No: 2031		LAB No: 2032	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		TYPE: AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	95%	25.0	100%
20.0	100%	20.0	95%	20.0	99%
12.5	98%	12.5	88%	12.5	91%
10.0	96%	10.0	84%	10.0	88%
5.0	91%	5.0	77%	5.0	83%
2.5	86%	2.5	70%	2.5	79%
1.25	81%	1.25	64%	1.25	74%
0.630	75%	0.630	60%	0.630	70%
0.315	69%	0.315	57%	0.315	65%
0.160	60%	0.160	49%	0.160	61%
0.080	51%	0.080	42%	0.080	55%
M.C.(%): 8%		M.C.(%): 7%		M.C.(%): 8%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL: 9		% GRAVEL: 23		% GRAVEL: 17	
% SAND: 40		% SAND: 35		% SAND: 29	
% FINES: 51		% FINES: 42		% FINES: 55	
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

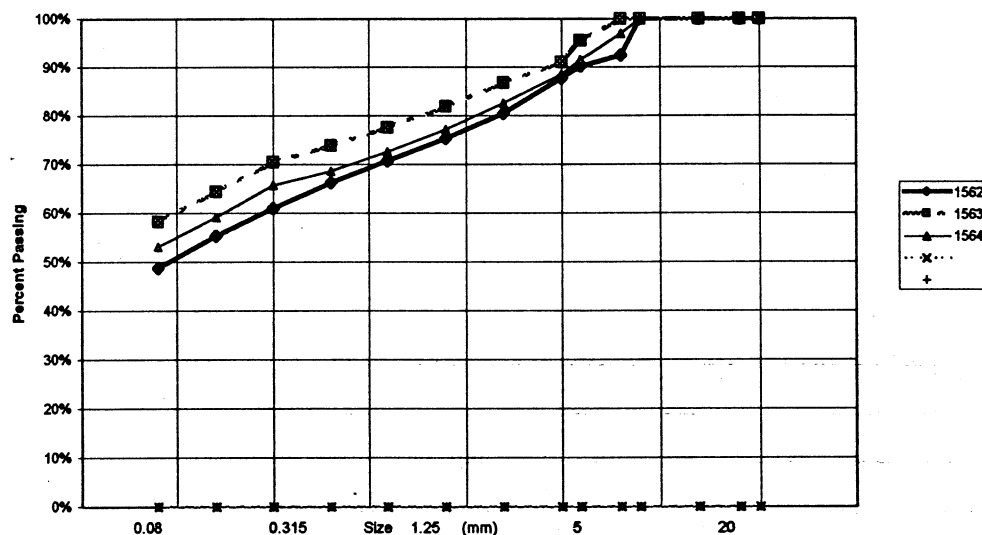
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 1568-1780
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1665+375 8M LT DATE COM 2000/08/14

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	92%	20.0	100%	20.0	97%
12.5	90%	12.5	95%	12.5	92%
10.0	88%	10.0	91%	10.0	89%
5.0	81%	5.0	87%	5.0	83%
2.5	75%	2.5	82%	2.5	77%
1.25	71%	1.25	78%	1.25	73%
0.630	66%	0.630	74%	0.630	69%
0.315	61%	0.315	71%	0.315	66%
0.160	55%	0.160	65%	0.160	59%
0.080	49%	0.080	58%	0.080	53%
M.C.(%):	9%	M.C.(%):	10%	M.C.(%):	9%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	19	% GRAVEL	13	% GRAVEL	17
% SAND:	32	% SAND:	29	% SAND:	29
% FINES:	49	% FINES:	58	% FINES:	53
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SANDY SILT (ML)		SANDY SILT WITH GRAVEL (ML)	

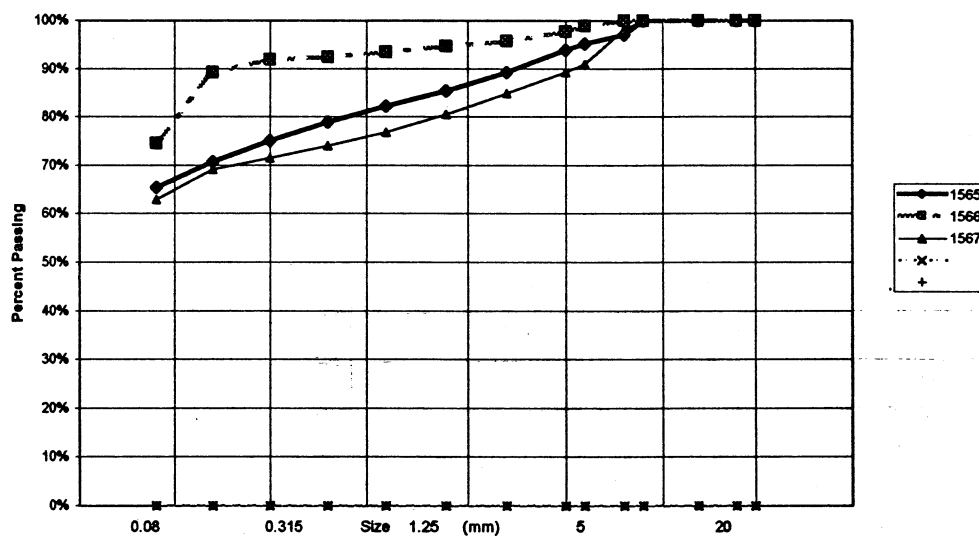
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



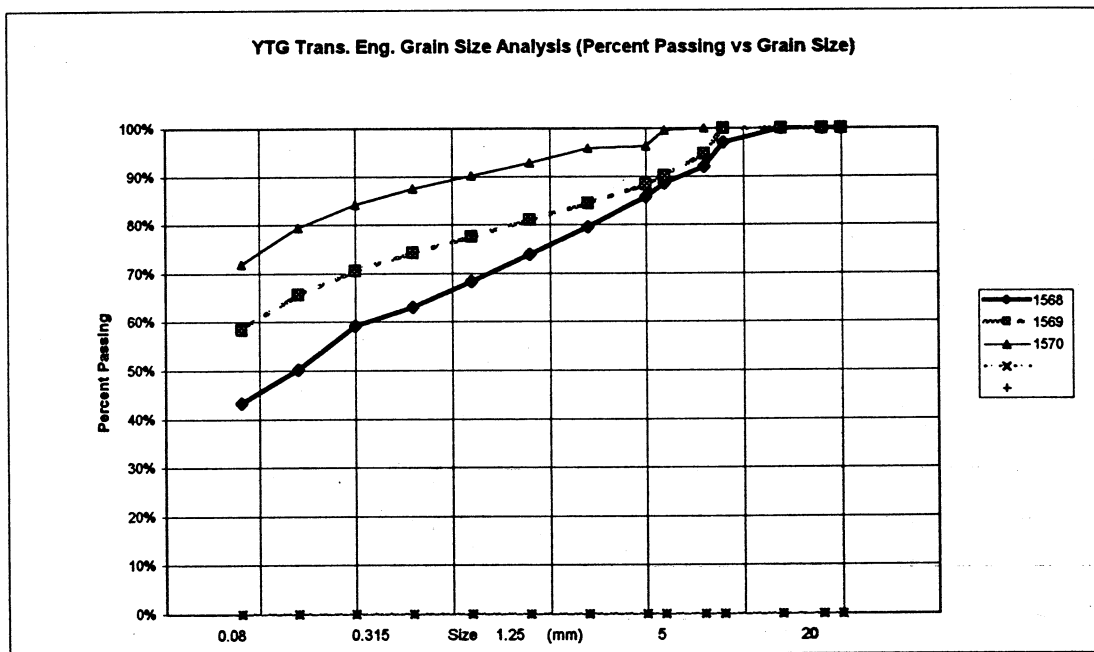
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1781
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1665+475 8M LT DATE COM 2000/08/14

FIELD No: 1565 LAB No: 2036 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1566 LAB No: 2037 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1567 LAB No: 2038 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	98%
12.5	95%	12.5	91%
10.0	94%	10.0	89%
5.0	89%	5.0	85%
2.5	85%	2.5	81%
1.25	82%	1.25	77%
0.630	79%	0.630	74%
0.315	75%	0.315	72%
0.160	71%	0.160	69%
0.080	65%	0.080	63%
M.C.(%): 11%	M.C.(%): 11%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 11	% GRAVEL 4	% GRAVEL 15	
% SAND: 24	% SAND: 21	% SAND: 22	
% FINES: 65	% FINES: 75	% FINES: 63	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

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



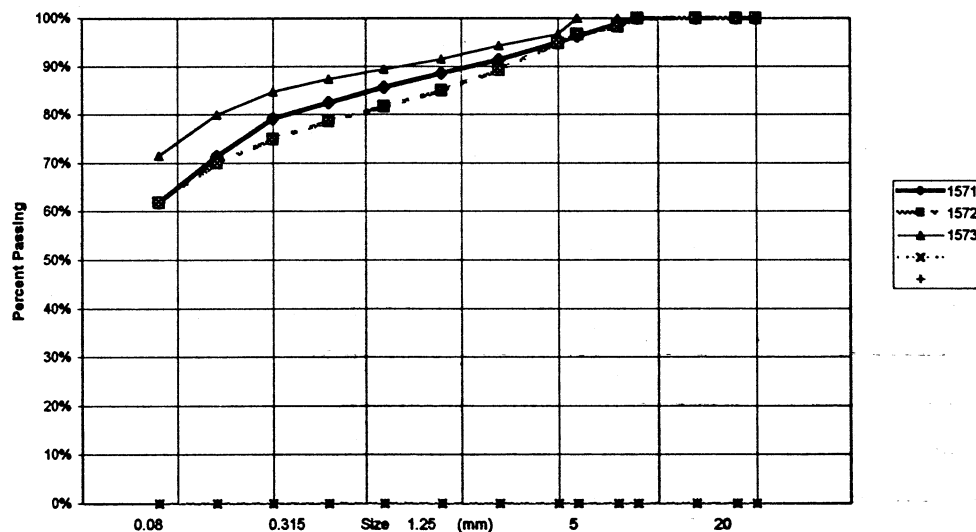
PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 568-1782	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: KM1664.5-1692.6 A/H			
DRILL UNIT: MOBILE B 40-L			
LOGGED BY: DOUG TRIM			
HOLE LOCATION: 1665+575 9M LT		DATE COM 2000/08/15	
=====		=====	
FIELD No: 1568	FIELD No. 1569	FIELD No: 1570	
LAB No: 2039	LAB No: 2040	LAB No: 2041	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	A AUGER	TYPE: AUGER	
=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	97%	25.0	100%
20.0	92%	20.0	100%
12.5	89%	12.5	100%
10.0	86%	10.0	96%
5.0	80%	5.0	96%
2.5	74%	2.5	93%
1.25	68%	1.25	90%
0.630	63%	0.630	88%
0.315	59%	0.315	84%
0.160	50%	0.160	79%
0.080	43%	0.080	72%
M.C.(%): 7%	M.C.(%): 10%	M.C.(%): 12%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 20	% GRAVEL 16	% GRAVEL 4	
% SAND: 36	% SAND: 26	% SAND: 24	
% FINES: 43	% FINES: 58	% FINES: 72	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SILT WITH SAND (ML)	



PROJECT NUMBER:	092-202101-0363-1	HOLE No.:	568-1783
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM1664.5-1662.6 A/H		
DRILL UNIT:	MOBILE B 40-L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1665+675 15M LT	DATE COM	2000/08/15

FIELD NO: 1571		FIELD No: 1572		FIELD No: 1573	
LAB NO: 2042		LAB No: 2043		LAB No: 2044	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	99%	20.0	98%	20.0	100%
12.5	96%	12.5	97%	12.5	100%
10.0	95%	10.0	95%	10.0	97%
5.0	91%	5.0	89%	5.0	94%
2.5	89%	2.5	85%	2.5	92%
1.25	86%	1.25	82%	1.25	89%
0.630	83%	0.630	79%	0.630	87%
0.315	79%	0.315	75%	0.315	85%
0.160	71%	0.160	70%	0.160	80%
0.080	62%	0.080	62%	0.080	72%
M.C.(%):	13%	M.C.(%):	11%	M.C.(%):	13%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	9	% GRAVEL	11	% GRAVEL	6
% SAND:	29	% SAND:	27	% SAND:	23
% FINES:	62	% FINES:	62	% FINES:	72
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SANDY SILT (ML)		SILT WITH SAND (ML)	

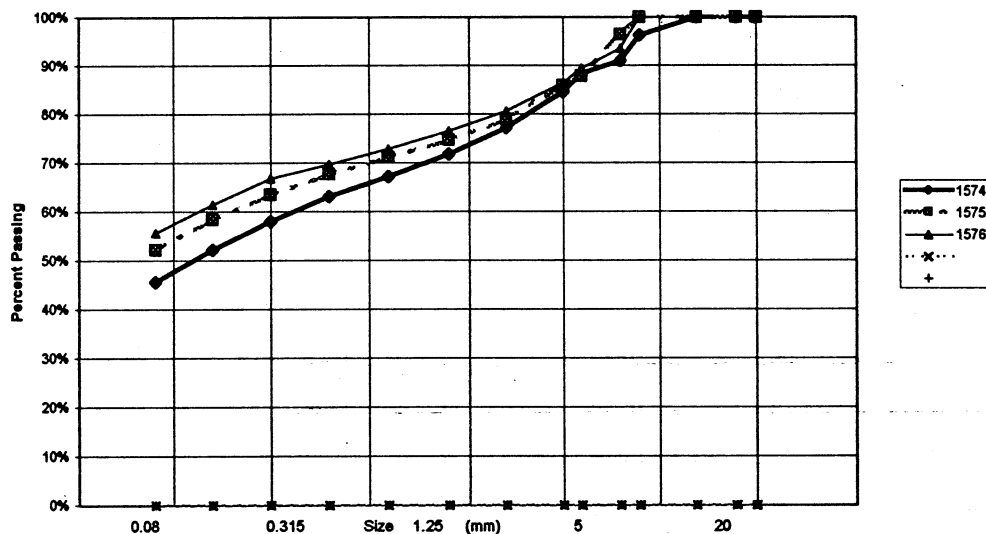
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1784
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1665+775 13M LT DATE COM 2000/08/15

FIELD No: 1574 LAB No: 2045 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1575 LAB No: 2046 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1576 LAB No: 2047 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	96%	25.0	100%
20.0	91%	20.0	96%
12.5	88%	12.5	88%
10.0	85%	10.0	86%
5.0	77%	5.0	79%
2.5	72%	2.5	75%
1.25	67%	1.25	71%
0.630	63%	0.630	68%
0.315	58%	0.315	64%
0.160	52%	0.160	58%
0.080	46%	0.080	52%
M.C.(%): 11%	M.C.(%): 12%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 23	% GRAVEL 21	% GRAVEL 19	
% SAND: 32	% SAND: 27	% SAND: 25	
% FINES: 46	% FINES: 52	% FINES: 56	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

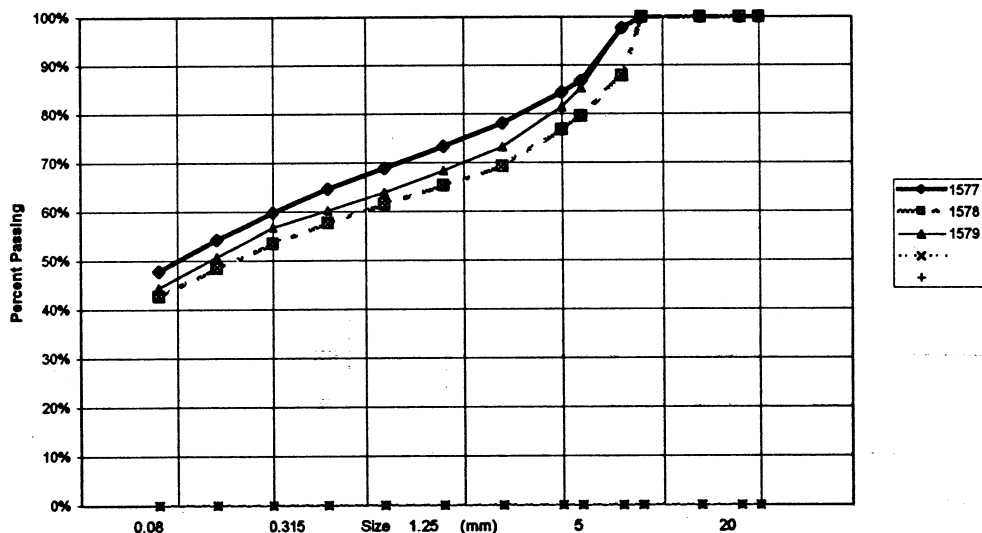
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1785
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1665+875 20M LT DATE COM 2000/08/15

FIELD No: 1577 LAB No: 2048 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1578 LAB No: 2049 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1579 LAB No: 2050 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	98%	20.0	98%
12.5	87%	12.5	85%
10.0	84%	10.0	81%
5.0	78%	5.0	73%
2.5	73%	2.5	68%
1.25	69%	1.25	64%
0.630	65%	0.630	60%
0.315	60%	0.315	57%
0.160	54%	0.160	51%
0.080	48%	0.080	45%
M.C.(%): 10%	M.C.(%): 9%	M.C.(%): 8%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 22	% GRAVEL 31	% GRAVEL 27	
% SAND: 30	% SAND: 27	% SAND: 29	
% FINES: 48	% FINES: 43	% FINES: 45	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

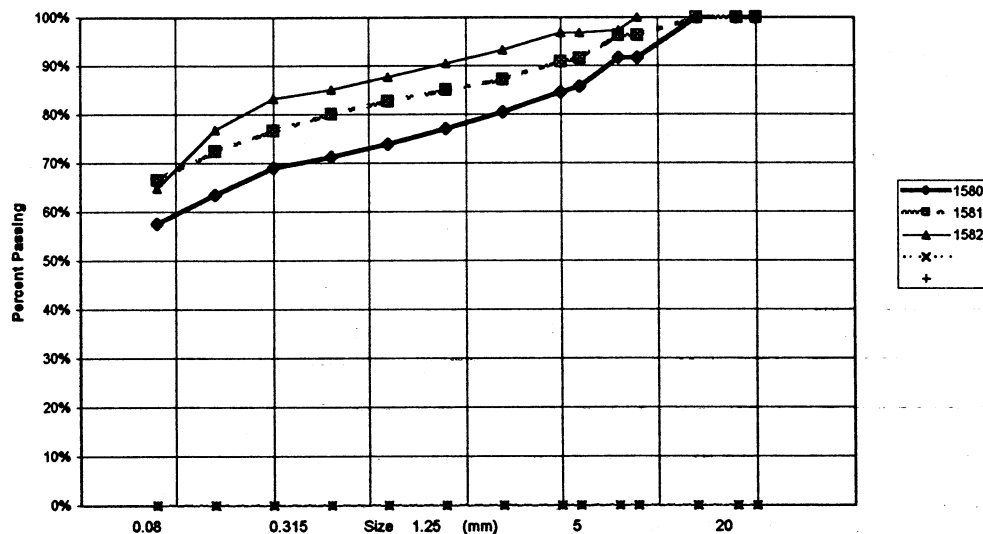
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1786
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1665+975 15M LT DATE COM 2000/08/15

FIELD No: 1580 LAB No: 2051 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1581 LAB No: 2052 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1582 LAB No: 2053 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	92%	25.0	96%
20.0	92%	20.0	96%
12.5	86%	12.5	92%
10.0	85%	10.0	91%
5.0	81%	5.0	87%
2.5	77%	2.5	85%
1.25	74%	1.25	83%
0.630	71%	0.630	80%
0.315	69%	0.315	77%
0.160	64%	0.160	73%
0.080	58%	0.080	67%
M.C.(%): 7%	M.C.(%): 11%	M.C.(%): 11%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 19	% GRAVEL 13	% GRAVEL 7	
% SAND: 23	% SAND: 21	% SAND: 28	
% FINES: 58	% FINES: 67	% FINES: 65	
CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	

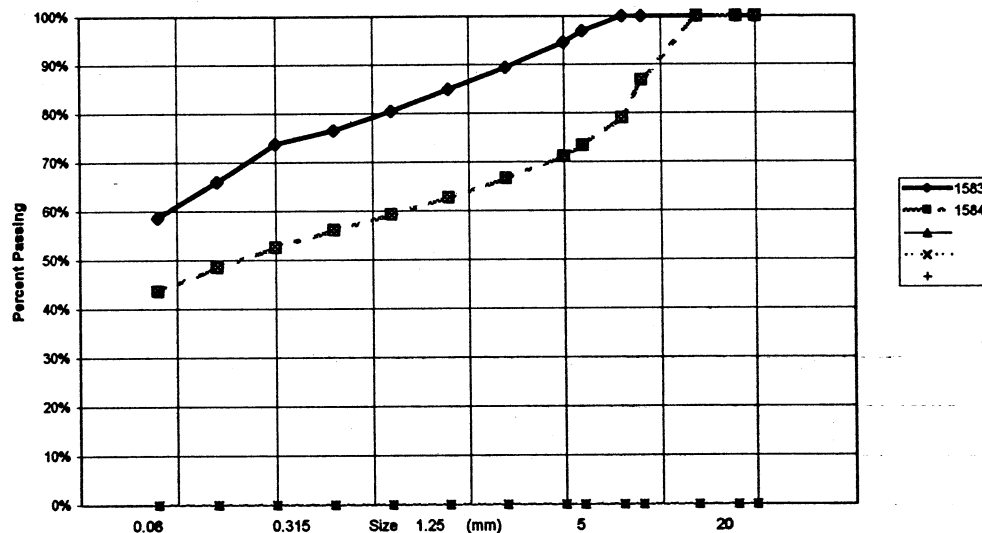
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1787
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+075 12M LT DATE COM 2000/08/15

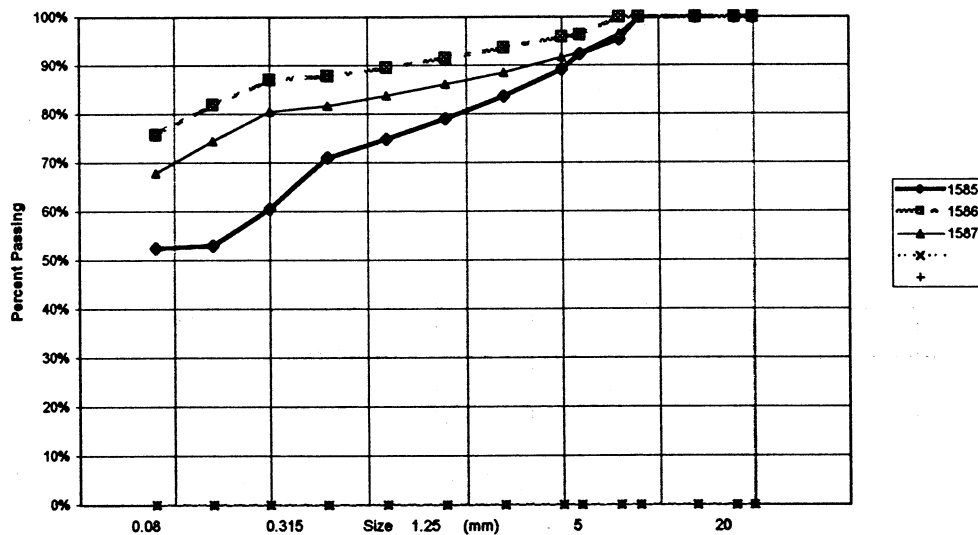
FIELD NO: 1583		FIELD No: 1584	
LAB NO: 2054		LAB No: 2055	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0	
TYPE: AUGER		AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	87%
20.0	100%	20.0	79%
12.5	97%	12.5	73%
10.0	95%	10.0	71%
5.0	89%	5.0	67%
2.5	85%	2.5	63%
1.25	81%	1.25	59%
0.630	77%	0.630	56%
0.315	74%	0.315	53%
0.160	66%	0.160	49%
0.080	59%	0.080	44%
M.C.(%):	11%	M.C.(%):	8%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL	11	% GRAVEL	33
% SAND:	31	% SAND:	23
% FINES:	59	% FINES:	44
CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 092-202101-0363-1			HOLE No.: 568-1788		
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: KM1664.5-1692.6 A/H					
DRILL UNIT: MOBILE B 40-L					
LOGGED BY: DOUG TRIM			DATE COM: 2000/08/15		
HOLE LOCATION: 1666+175 15M LT					
=====		=====		=====	
FIELD No: 1585		FIELD No: 1586		FIELD No: 1587	
LAB No: 2056		LAB No: 2057		LAB No: 2058	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		TYPE: AUGER		TYPE: AUGER	
=====		=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	95%	20.0	100%	20.0	97%
12.5	92%	12.5	96%	12.5	93%
10.0	89%	10.0	96%	10.0	92%
5.0	84%	5.0	94%	5.0	89%
2.5	79%	2.5	92%	2.5	86%
1.25	75%	1.25	90%	1.25	84%
0.630	71%	0.630	88%	0.630	82%
0.315	61%	0.315	87%	0.315	81%
0.160	53%	0.160	82%	0.160	75%
0.080	52%	0.080	76%	0.080	68%
=====		=====		=====	
M.C.(%):	11%	M.C.(%):	14%	M.C.(%):	12%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
=====		=====		=====	
% GRAVEL	16	% GRAVEL	6	% GRAVEL	11
% SAND:	31	% SAND:	18	% SAND:	21
% FINES:	52	% FINES:	76	% FINES:	68
=====		=====		=====	
CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)		CLASSIFICATION: SILT WITH SAND (ML)		CLASSIFICATION: SANDY SILT (ML)	

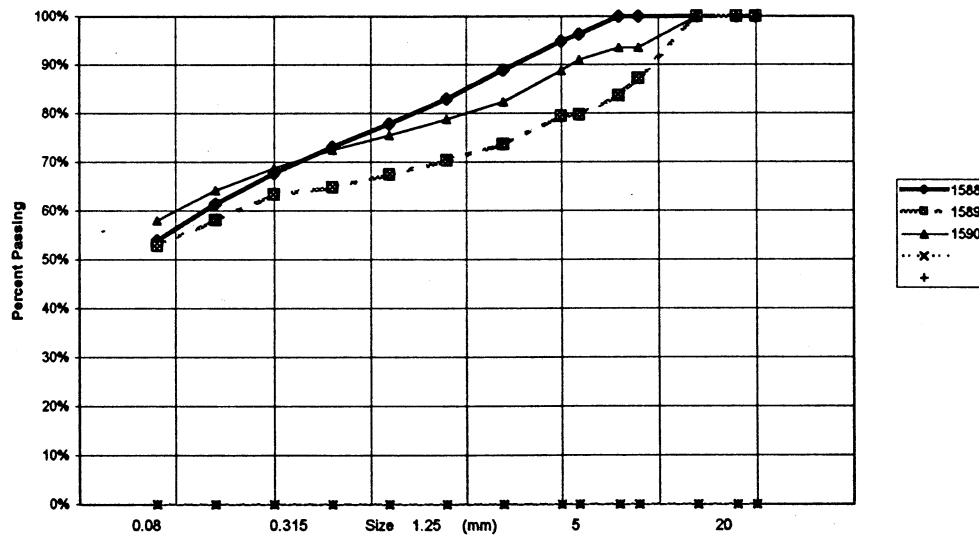
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 568-1789
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM1664.5-1692.6 A/H
 DRILL UNIT: MOBILE B 40-L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+275 15M LT DATE COM 2000/08/15

FIELD No: 1588 LAB No: 2059 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1589 LAB No: 2060 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1590 LAB No: 2061 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	87%
20.0	100%	20.0	84%
12.5	96%	12.5	80%
10.0	95%	10.0	79%
5.0	89%	5.0	74%
2.5	83%	2.5	70%
1.25	78%	1.25	67%
0.630	73%	0.630	65%
0.315	68%	0.315	63%
0.160	61%	0.160	58%
0.080	54%	0.080	53%
M.C.(%): 10%		M.C.(%): 11%	
M.C.(%): 10%		M.C.(%): 10%	
LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0	
% GRAVEL 11		% GRAVEL 26	
% SAND: 35		% SAND: 21	
% FINES: 54		% FINES: 53	
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	
		CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

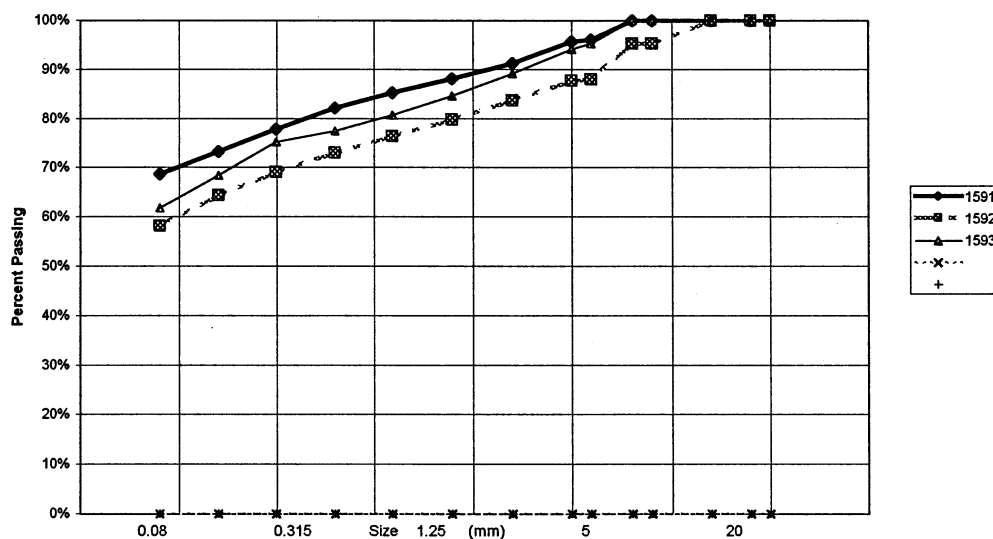
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0363-1	HOLE No.:	569-1790
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM 1664.5 - 1692.6 A/H		
DRILL UNIT:	MOBILE B 40 L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1666+375 15M RT	DATE COM	2000/08/16

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	95%	25.0	100%
20.0	100%	20.0	95%	20.0	100%
12.5	96%	12.5	88%	12.5	95%
10.0	96%	10.0	88%	10.0	94%
5.0	91%	5.0	84%	5.0	89%
2.5	88%	2.5	80%	2.5	85%
1.25	85%	1.25	76%	1.25	81%
0.630	82%	0.630	73%	0.630	77%
0.315	78%	0.315	69%	0.315	75%
0.160	73%	0.160	64%	0.160	68%
0.080	69%	0.080	58%	0.080	62%
M.C.(%):	21%	M.C.(%):	13%	M.C.(%):	13%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	9	% GRAVEL	16	% GRAVEL	11
% SAND:	23	% SAND:	26	% SAND:	27
% FINES:	69	% FINES:	58	% FINES:	62
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION:	SANDY SILT (ML)

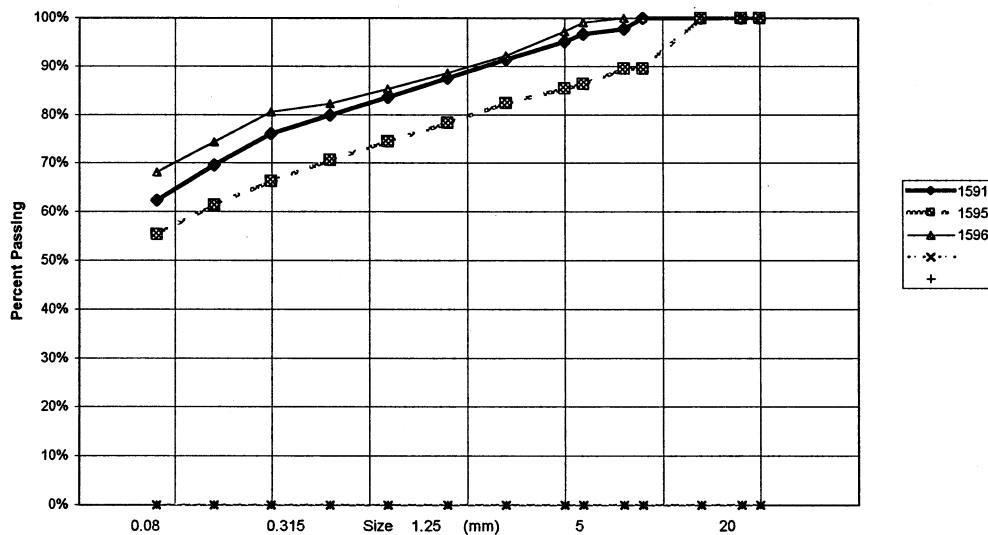
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1791
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+475 17M RT DATE COM 2000/08/16

FIELD NO: 1591 LAB NO: 2065 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1595 LAB No: 2066 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1596 LAB No: 2067 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	98%	20.0	100%
12.5	97%	12.5	99%
10.0	95%	10.0	97%
5.0	91%	5.0	92%
2.5	88%	2.5	89%
1.25	84%	1.25	85%
0.630	80%	0.630	82%
0.315	76%	0.315	81%
0.160	70%	0.160	74%
0.080	62%	0.080	68%
M.C.(%): 14%	M.C.(%): 12%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 9	% GRAVEL 18	% GRAVEL 8	
% SAND: 29	% SAND: 27	% SAND: 24	
% FINES: 62	% FINES: 55	% FINES: 68	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT (ML)	

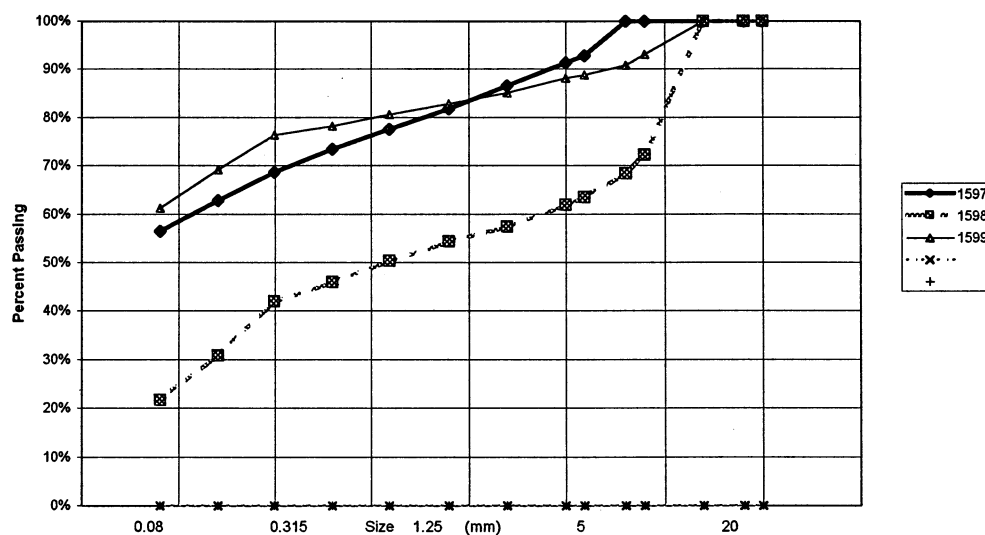
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1792
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+575 13M RT DATE COM 2000/08/16

FIELD No: 1597 LAB No: 2068 DEPTH: 1-3.1.5 TYPE: AUGER	FIELD No: 1598 LAB No: 2069 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1599 LAB No: 2070 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	72%
20.0	100%	20.0	68%
12.5	93%	12.5	64%
10.0	91%	10.0	62%
5.0	87%	5.0	57%
2.5	82%	2.5	54%
1.25	78%	1.25	50%
0.630	73%	0.630	46%
0.315	69%	0.315	42%
0.160	63%	0.160	31%
0.080	56%	0.080	22%
M.C.(%): 11%	M.C.(%): 5%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 13	% GRAVEL 43	% GRAVEL 15	
% SAND: 30	% SAND: 36	% SAND: 24	
% FINES: 56	% FINES: 22	% FINES: 61	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION: SANDY SILT (ML)	

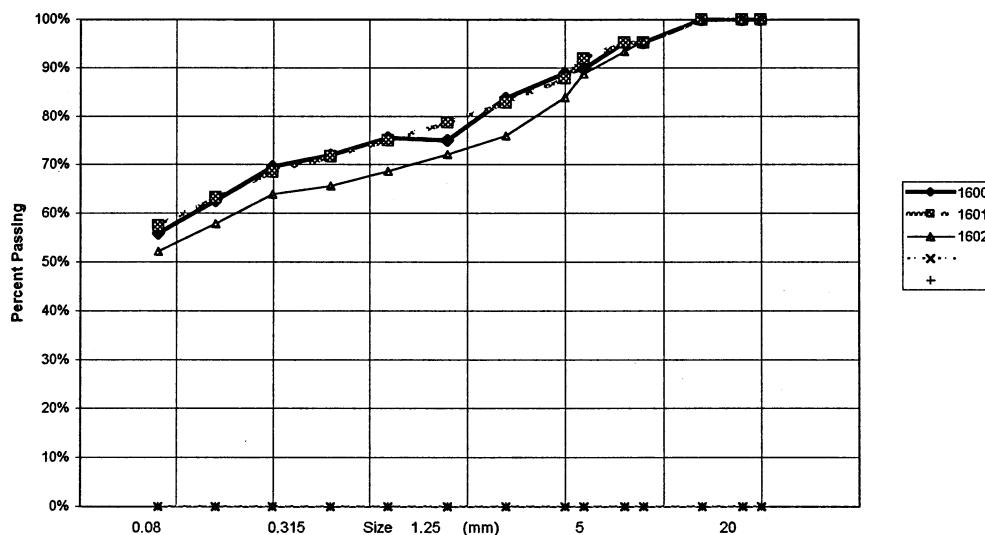
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1793
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+675 12M RT DATE COM 2000/08/16

FIELD No: 1600 LAB No: 2071 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1601 LAB No: 2072 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1602 LAB No: 2073 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	96%
20.0	95%	20.0	93%
12.5	90%	12.5	89%
10.0	89%	10.0	84%
5.0	84%	5.0	76%
2.5	75%	2.5	72%
1.25	76%	1.25	69%
0.630	72%	0.630	66%
0.315	70%	0.315	64%
0.160	63%	0.160	58%
0.080	56%	0.080	52%
M.C.(%): 11%	M.C.(%): 10%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 16	% GRAVEL 17	% GRAVEL 24	
% SAND: 28	% SAND: 25	% SAND: 24	
% FINES: 56	% FINES: 58	% FINES: 52	
CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	

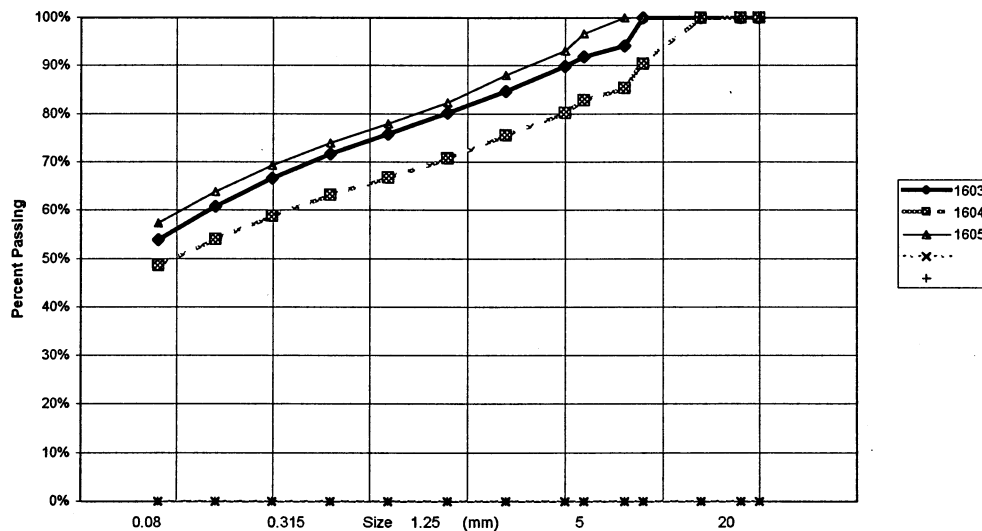
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1794
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+775 12M RT DATE COM 2000/08/16

FIELD NO: 1603 LAB NO: 2074 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1604 LAB No. 2075 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1605 LAB No: 2076 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	94%	20.0	100%
12.5	92%	12.5	97%
10.0	90%	10.0	93%
5.0	85%	5.0	88%
2.5	80%	2.5	82%
1.25	76%	1.25	78%
0.630	72%	0.630	74%
0.315	67%	0.315	69%
0.160	61%	0.160	64%
0.080	54%	0.080	57%
M.C.(%): 11%	M.C.(%): 10%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 15	% GRAVEL 24	% GRAVEL 12	
% SAND: 31	% SAND: 27	% SAND: 31	
% FINES: 54	% FINES: 49	% FINES: 57	
CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SANDY SILT (ML)	

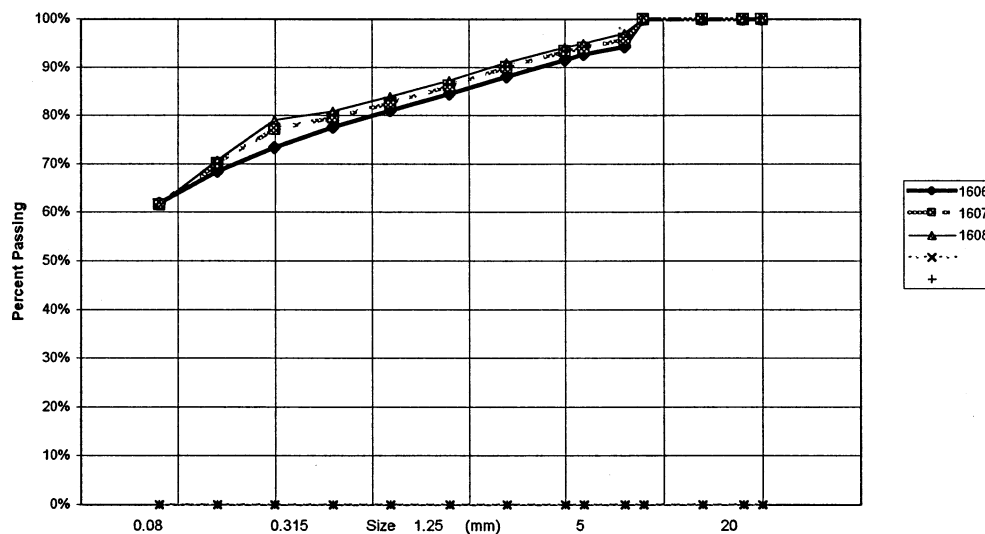
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1795
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+875 12M RT DATE COM 2000/08/16

FIELD No: 1606 LAB No: 2077 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1607 LAB No: 2078 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1608 LAB No: 2079 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	94%	20.0	97%
12.5	93%	12.5	95%
10.0	92%	10.0	94%
5.0	88%	5.0	91%
2.5	84%	2.5	87%
1.25	81%	1.25	84%
0.630	78%	0.630	81%
0.315	73%	0.315	79%
0.160	68%	0.160	71%
0.080	62%	0.080	62%
M.C.(%): 13%	M.C.(%): 11%	M.C.(%): 11%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 12	% GRAVEL 10	% GRAVEL 9	
% SAND: 26	% SAND: 29	% SAND: 29	
% FINES: 62	% FINES: 62	% FINES: 62	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	

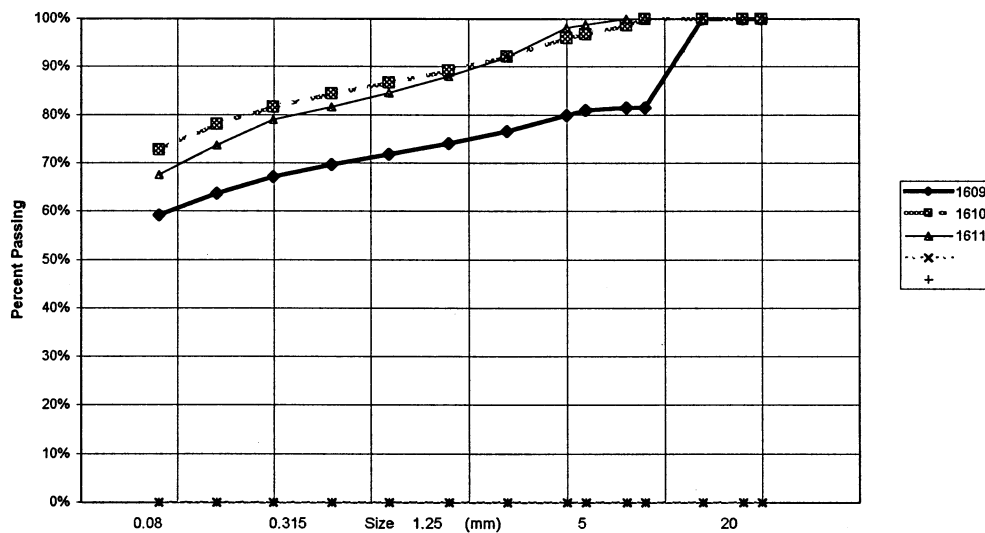
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1796
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1666+975.8M RT DATE COM 2000/08/16

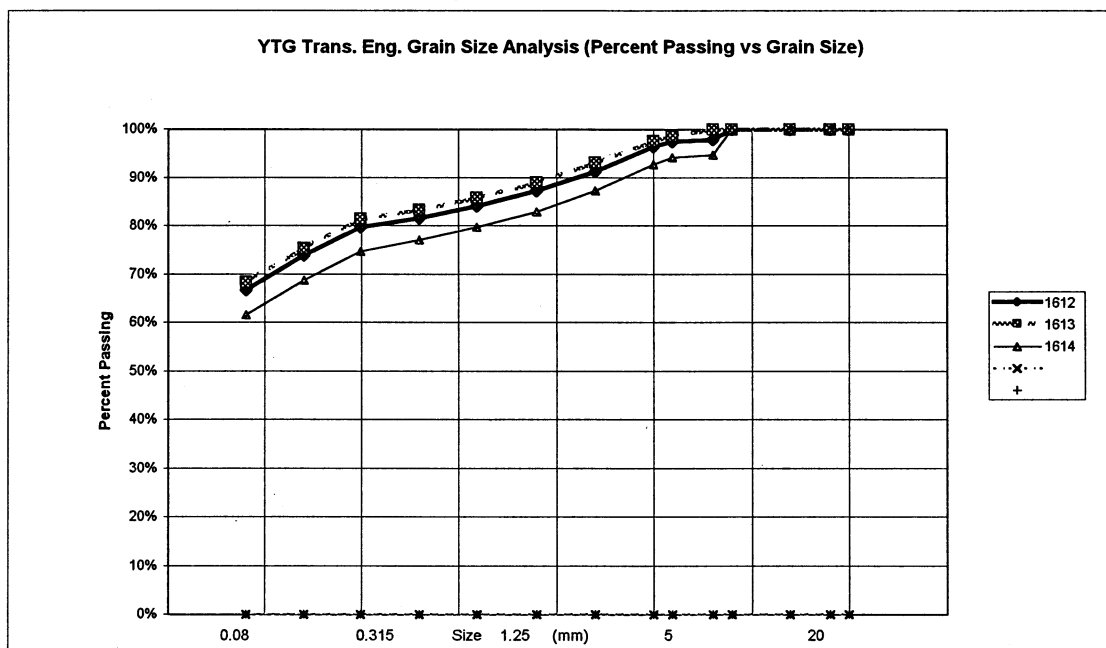
FIELD No: 1609 LAB No: 2080 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1610 LAB No: 2081 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1611 LAB No: 2082 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	82%	25.0	100%
20.0	82%	20.0	100%
12.5	81%	12.5	99%
10.0	80%	10.0	96%
5.0	77%	5.0	92%
2.5	74%	2.5	89%
1.25	72%	1.25	87%
0.630	70%	0.630	84%
0.315	67%	0.315	82%
0.160	64%	0.160	78%
0.080	59%	0.080	73%
M.C.(%): 11%	M.C.(%): 11%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 23	% GRAVEL 8	% GRAVEL 8	
% SAND: 17	% SAND: 19	% SAND: 24	
% FINES: 59	% FINES: 73	% FINES: 68	
CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT (ML)	

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



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1797
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+075 8M RT DATE COM 2000/08/16

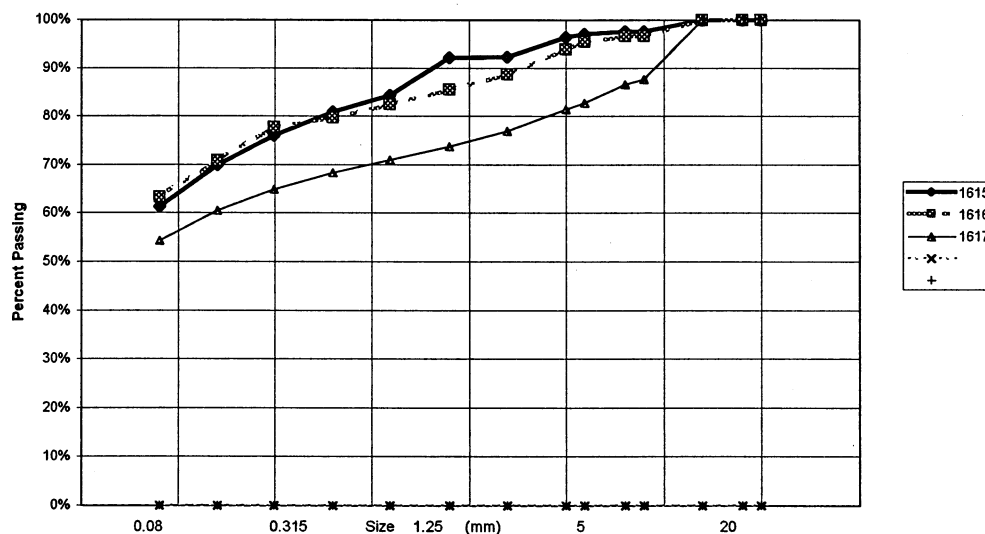
FIELD NO: 1612 LAB NO: 2083 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1613 LAB No. 2084 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1614 LAB No: 2085 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	98%	20.0	100%
12.5	97%	12.5	99%
10.0	96%	10.0	98%
5.0	91%	5.0	93%
2.5	87%	2.5	89%
1.25	84%	1.25	86%
0.630	82%	0.630	83%
0.315	80%	0.315	81%
0.160	74%	0.160	75%
0.080	67%	0.080	68%
M.C.(%): 10%		M.C.(%): 9%	
LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0	
% GRAVEL 9		% GRAVEL 7	
% SAND: 24		% SAND: 25	
% FINES: 67		% FINES: 68	
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: SANDY SILT (ML)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1798
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+175 8M LT DATE COM 2000/08/16

FIELD No: 1615 LAB No: 2086 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1616 LAB No: 2087 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1617 LAB No: 2088 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	98%	25.0	97%
20.0	98%	20.0	97%
12.5	97%	12.5	95%
10.0	96%	10.0	94%
5.0	92%	5.0	89%
2.5	92%	2.5	86%
1.25	84%	1.25	83%
0.630	81%	0.630	80%
0.315	76%	0.315	78%
0.160	70%	0.160	71%
0.080	61%	0.080	63%
M.C.(%): 11%	M.C.(%): 8%	M.C.(%): 9%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 8	% GRAVEL 11	% GRAVEL 23	
% SAND: 31	% SAND: 25	% SAND: 23	
% FINES: 61	% FINES: 63	% FINES: 54	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	

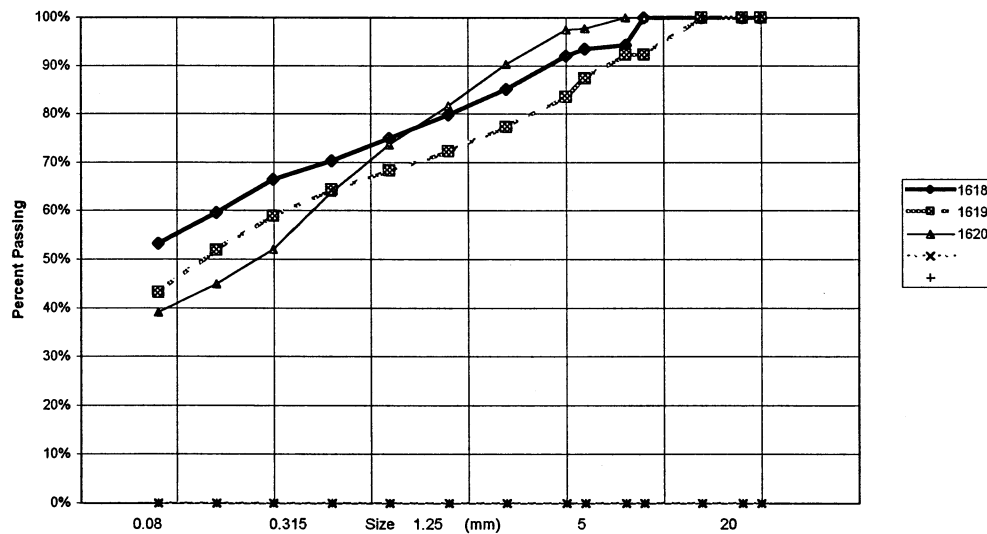
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1799
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+275 12M RT DATE COM 2000/08/16

FIELD No: 1618 LAB No: 2089 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1619 LAB No: 2090 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1620 LAB No: 2091 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	92%
20.0	94%	20.0	92%
12.5	94%	12.5	87%
10.0	92%	10.0	84%
5.0	85%	5.0	77%
2.5	80%	2.5	72%
1.25	75%	1.25	68%
0.630	70%	0.630	64%
0.315	67%	0.315	59%
0.160	60%	0.160	52%
0.080	53%	0.080	43%
M.C.(%): 11%	M.C.(%): 9%	M.C.(%): 7%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 15	% GRAVEL 23	% GRAVEL 10	
% SAND: 32	% SAND: 34	% SAND: 51	
% FINES: 53	% FINES: 43	% FINES: 39	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY SAND (SM)	

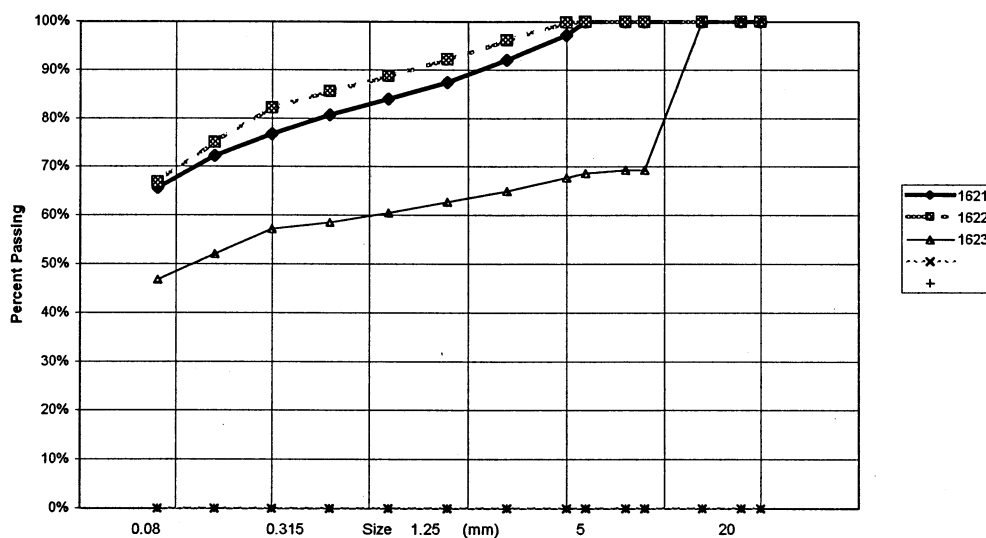
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1800
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+350 17M RT DATE COM 2000/08/16

FIELD NO: 1621 LAB NO: 2092 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1622 LAB No. 2093 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1623 LAB No: 2094 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	69%
20.0	100%	20.0	69%
12.5	100%	12.5	69%
10.0	97%	10.0	68%
5.0	92%	5.0	65%
2.5	88%	2.5	63%
1.25	84%	1.25	61%
0.630	81%	0.630	59%
0.315	77%	0.315	57%
0.160	72%	0.160	52%
0.080	66%	0.080	47%
M.C.(%): 12%	M.C.(%): 11%	M.C.(%): 8%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 8	% GRAVEL 4	% GRAVEL 35	
% SAND: 26	% SAND: 29	% SAND: 18	
% FINES: 66	% FINES: 67	% FINES: 47	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	

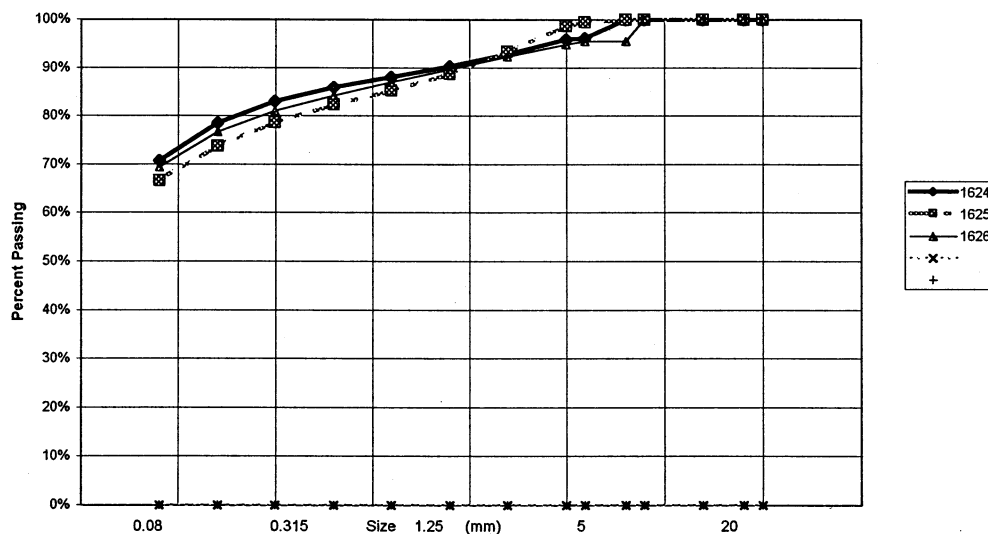
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1801
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+450 8M RT DATE COM 2000/08/16

FIELD No: 1624 LAB No: 2095 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1625 LAB No: 2096 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1626 LAB No: 2097 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	96%
12.5	96%	12.5	99%
10.0	96%	10.0	99%
5.0	93%	5.0	93%
2.5	90%	2.5	89%
1.25	88%	1.25	85%
0.630	86%	0.630	82%
0.315	83%	0.315	79%
0.160	79%	0.160	74%
0.080	71%	0.080	67%
M.C.(%): 11%	M.C.(%): 10%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 7	% GRAVEL 7	% GRAVEL 8	
% SAND: 22	% SAND: 27	% SAND: 23	
% FINES: 71	% FINES: 67	% FINES: 69	
CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	

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



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1802
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+550 12M RT DATE COM 2000/08/16

FIELD NO: 1627	FIELD No. 1628	FIELD No: 1629	
LAB NO: 2098	LAB No. 2099	LAB No: 2100	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	A AUGER	TYPE: AUGER	

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	94%	25.0	100%	25.0	90%
20.0	93%	20.0	100%	20.0	90%
12.5	84%	12.5	100%	12.5	85%
10.0	80%	10.0	100%	10.0	85%
5.0	75%	5.0	98%	5.0	82%
2.5	72%	2.5	97%	2.5	80%
1.25	68%	1.25	96%	1.25	78%
0.630	65%	0.630	96%	0.630	76%
0.315	61%	0.315	95%	0.315	74%
0.160	55%	0.160	88%	0.160	71%
0.080	48%	0.080	83%	0.080	66%

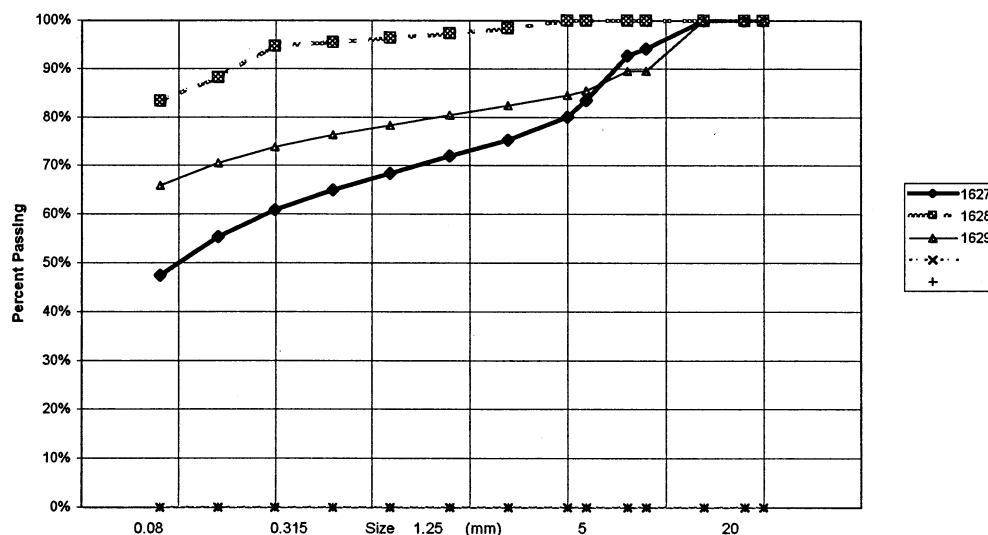
M.C.(%): 10%	M.C.(%): 15%	M.C.(%): 10%
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LIMITS	LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0

% GRAVEL: 25	% GRAVEL: 2	% GRAVEL: 18
% SAND: 28	% SAND: 15	% SAND: 16
% FINES: 48	% FINES: 83	% FINES: 66

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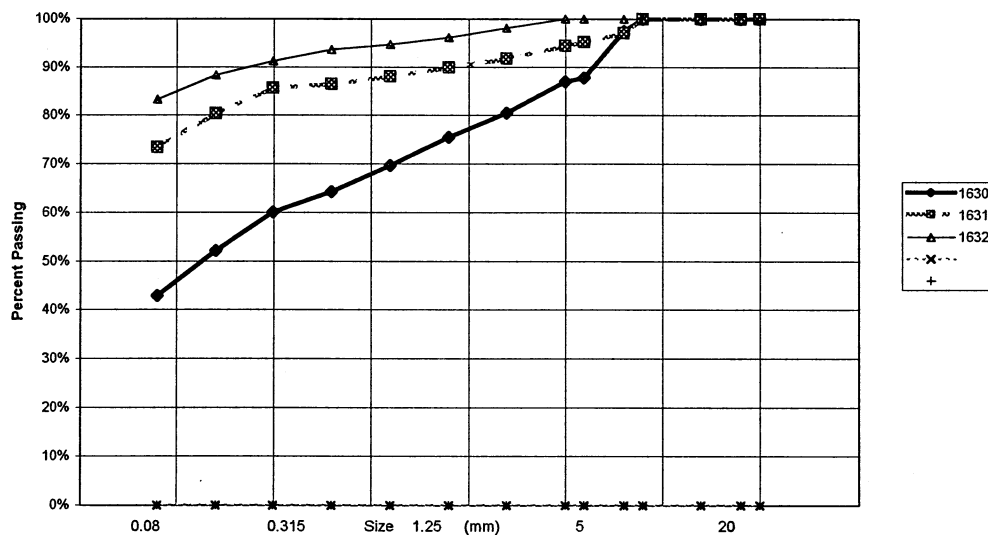
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1803
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667-650 12M RT DATE COM 2000/08/16

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	98%	20.0	97%	20.0	100%
12.5	88%	12.5	95%	12.5	100%
10.0	87%	10.0	94%	10.0	100%
5.0	81%	5.0	92%	5.0	98%
2.5	76%	2.5	90%	2.5	96%
1.25	70%	1.25	88%	1.25	95%
0.630	64%	0.630	87%	0.630	94%
0.315	60%	0.315	86%	0.315	91%
0.160	52%	0.160	80%	0.160	88%
0.080	43%	0.080	73%	0.080	83%
M.C.(%):	9%	M.C.(%):	12%	M.C.(%):	13%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	19	% GRAVEL	8	% GRAVEL	2
% SAND:	38	% SAND:	18	% SAND:	15
% FINES:	43	% FINES:	73	% FINES:	83
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILT WITH SAND (ML)		SILT WITH SAND (ML)	

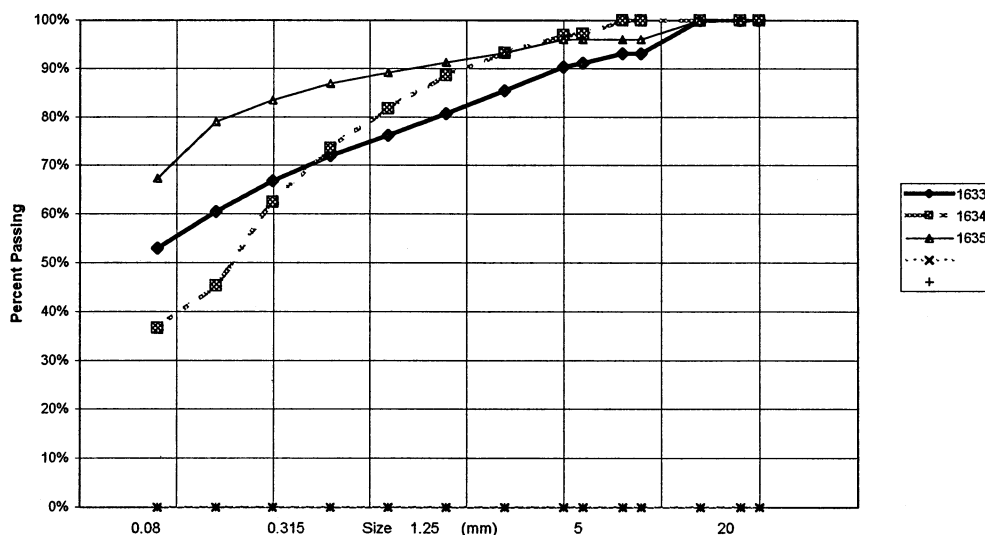
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0363-1	HOLE No.:	569-1804
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM 1664.5 - 1692.6 A/H		
DRILL UNIT:	MOBILE B 40 L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1667+730 15M RT	DATE COM	2000/08/16

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	93%	25.0	100%	25.0	96%
20.0	93%	20.0	100%	20.0	96%
12.5	91%	12.5	97%	12.5	96%
10.0	90%	10.0	97%	10.0	96%
5.0	86%	5.0	93%	5.0	93%
2.5	81%	2.5	89%	2.5	91%
1.25	76%	1.25	82%	1.25	89%
0.630	72%	0.630	74%	0.630	87%
0.315	67%	0.315	63%	0.315	83%
0.160	61%	0.160	45%	0.160	79%
0.080	53%	0.080	37%	0.080	67%
M.C.(%):	11%	M.C.(%):	8%	M.C.(%):	11%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	14	% GRAVEL	7	% GRAVEL	7
% SAND:	32	% SAND:	57	% SAND:	26
% FINES:	53	% FINES:	37	% FINES:	67
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY SAND (SM)	CLASSIFICATION:	SANDY SILT (ML)

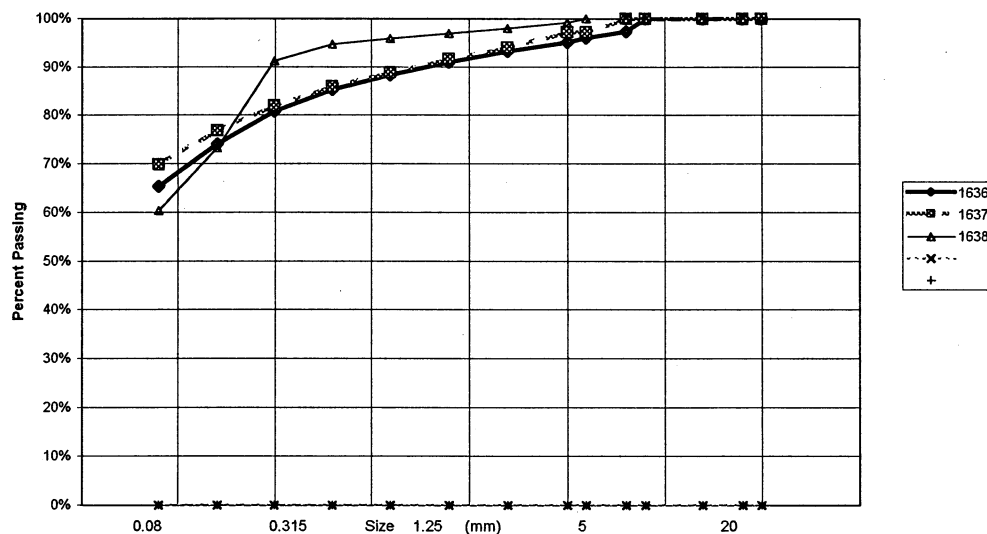
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1805
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+800 40M RT DATE COM 2000/08/17

FIELD No: 1636 LAB No: 2107 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1637 LAB No: 2108 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1638 LAB No: 21.9 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	100%
12.5	96%	12.5	100%
10.0	95%	10.0	97%
5.0	93%	5.0	94%
2.5	91%	2.5	92%
1.25	88%	1.25	89%
0.630	85%	0.630	86%
0.315	81%	0.315	82%
0.160	74%	0.160	77%
0.080	65%	0.080	70%
M.C.(%): 11%	M.C.(%): 10%	M.C.(%): 9%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 7	% GRAVEL 6	% GRAVEL 2	
% SAND: 28	% SAND: 24	% SAND: 38	
% FINES: 65	% FINES: 70	% FINES: 60	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	

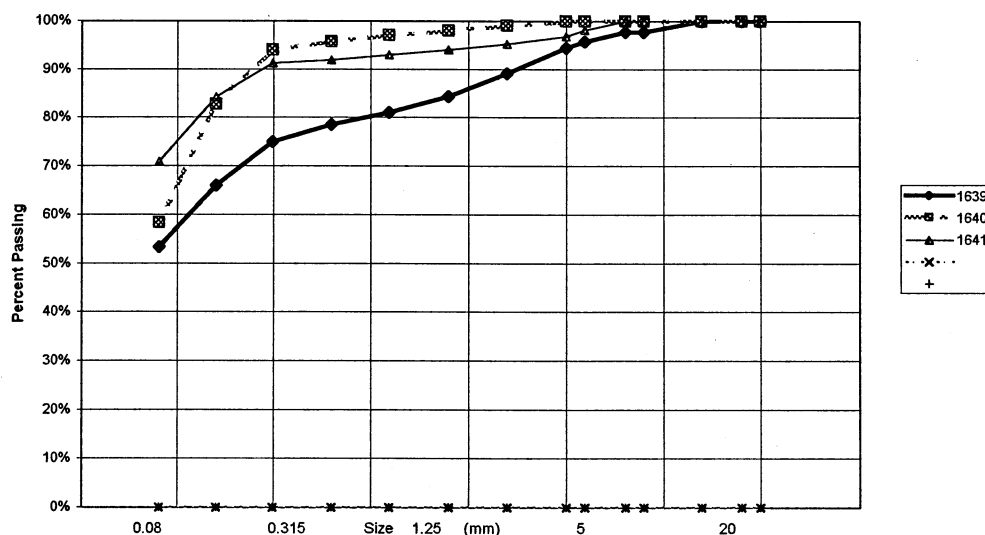
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1806
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1667+900 40M LT DATE COM 2000/08/17

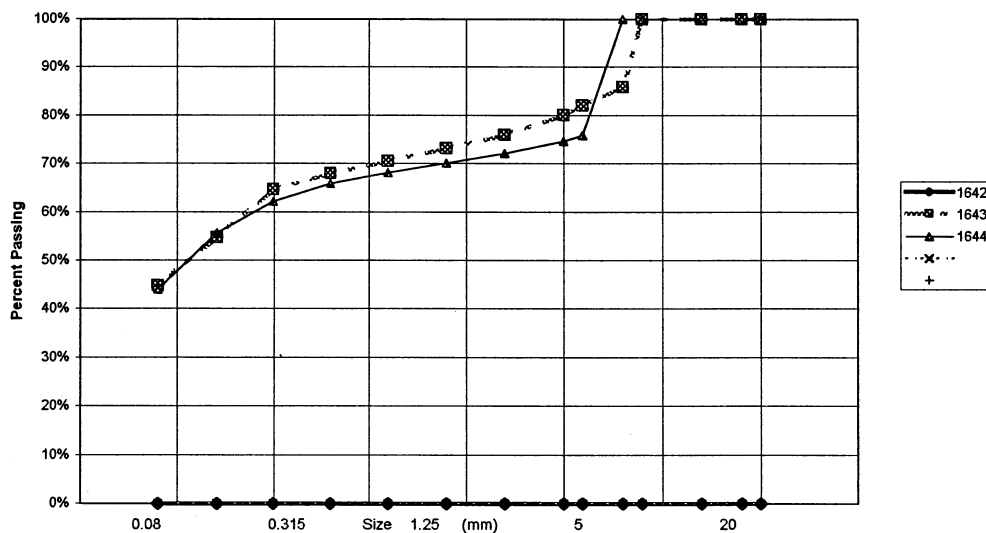
FIELD No: 1639 LAB No: 2110 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1640 LAB No: 2111 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1641 LAB No: 2112 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	98%	25.0	100%
20.0	98%	20.0	100%
12.5	96%	12.5	100%
10.0	94%	10.0	100%
5.0	89%	5.0	99%
2.5	84%	2.5	98%
1.25	81%	1.25	97%
0.630	79%	0.630	96%
0.315	75%	0.315	94%
0.160	66%	0.160	83%
0.080	53%	0.080	58%
M.C.(%): 11%	M.C.(%): 11%	M.C.(%): 12%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 11	% GRAVEL 1	% GRAVEL 5	
% SAND: 36	% SAND: 41	% SAND: 24	
% FINES: 53	% FINES: 58	% FINES: 71	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

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



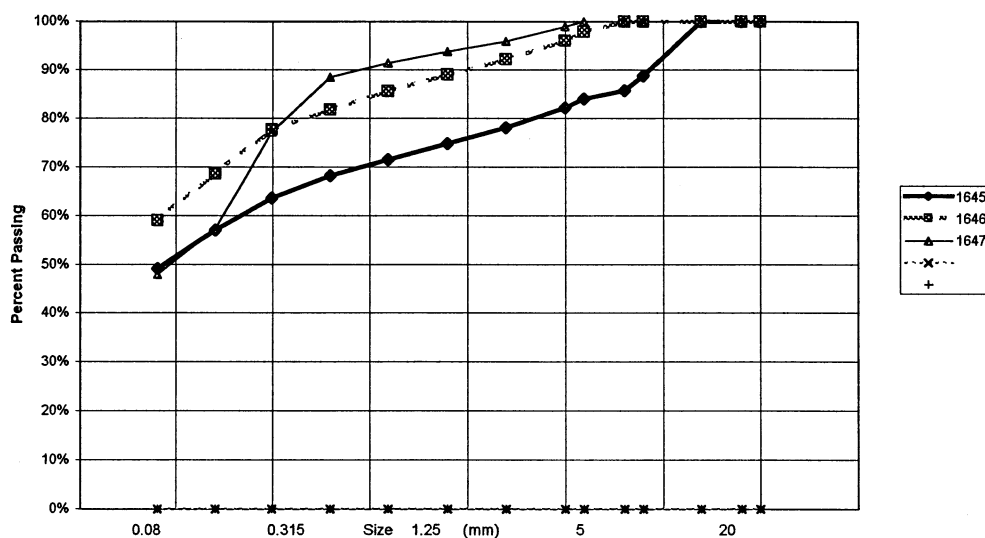
PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 569-1807	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: KM 1664.5 - 1692.6 A/H			
DRILL UNIT: MOBILE B 40 L			
LOGGED BY: DOUG TRIM		DATE COM 2000/08/17	
HOLE LOCATION: 1668+000 40M LT			
=====		=====	
FIELD No: 1642	FIELD No: 1643	FIELD No: 1644	
LAB No: LOST	LAB No: 2114	LAB No: 2115	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	A AUGER	TYPE: AUGER	
=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	0%	100.0	100%
80.0	0%	80.0	100%
50.0	0%	50.0	100%
25.0	0%	25.0	100%
20.0	0%	20.0	100%
12.5	0%	12.5	76%
10.0	0%	10.0	75%
5.0	0%	5.0	72%
2.5	0%	2.5	70%
1.25	0%	1.25	68%
0.630	0%	0.630	66%
0.315	0%	0.315	62%
0.160	0%	0.160	56%
0.080	0%	0.080	44%
M.C.(%): 11%		M.C.(%): 7%	
LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0	
% GRAVEL 100		% GRAVEL 24	
% SAND: 0		% SAND: 31	
% FINES: 0		% FINES: 44	
CLASSIFICATION: #DIV/0!		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	
		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 569-1808	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: KM 1664.5 - 1692.6 A/H			
DRILL UNIT: MOBILE B 40 L			
LOGGED BY: DOUG TRIM			
HOLE LOCATION: 1668+100 40M LT		DATE COM 2000/08/17	
=====		=====	
FIELD No: 1645	FIELD No: 1646	FIELD No: 1647	
LAB No: 2116	LAB No: 2117	LAB No: 2118	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	
=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	89%	25.0	100%
20.0	86%	20.0	100%
12.5	84%	12.5	100%
10.0	82%	10.0	99%
5.0	78%	5.0	96%
2.5	75%	2.5	94%
1.25	72%	1.25	91%
0.630	68%	0.630	89%
0.315	64%	0.315	77%
0.160	57%	0.160	57%
0.080	49%	0.080	48%
M.C.(%): 11%		M.C.(%): 9%	
LIMITS		LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 22		% GRAVEL 4	
% SAND: 29		% SAND: 48	
% FINES: 49		% FINES: 48	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SANDY SILT (ML)	
		CLASSIFICATION: SILTY SAND (SM)	

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



PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 569-1809	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: KM 1664.5 - 1692.6 A/H			
DRILL UNIT: MOBILE B 40 L			
LOGGED BY: DOUG TRIM			
HOLE LOCATION: 1668+200 40M LT		DATE COM 2000/08/17	

FIELD No: 1648	FIELD No: 1649	FIELD No: 1650	
LAB No: 2119	LAB No: 2120	LAB No: 2121	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	96%	25.0	100%	25.0	90%
20.0	93%	20.0	98%	20.0	90%
12.5	93%	12.5	97%	12.5	89%
10.0	91%	10.0	96%	10.0	88%
5.0	89%	5.0	94%	5.0	86%
2.5	86%	2.5	90%	2.5	84%
1.25	84%	1.25	86%	1.25	81%
0.630	80%	0.630	79%	0.630	79%
0.315	75%	0.315	69%	0.315	78%
0.160	68%	0.160	54%	0.160	72%
0.080	59%	0.080	39%	0.080	68%

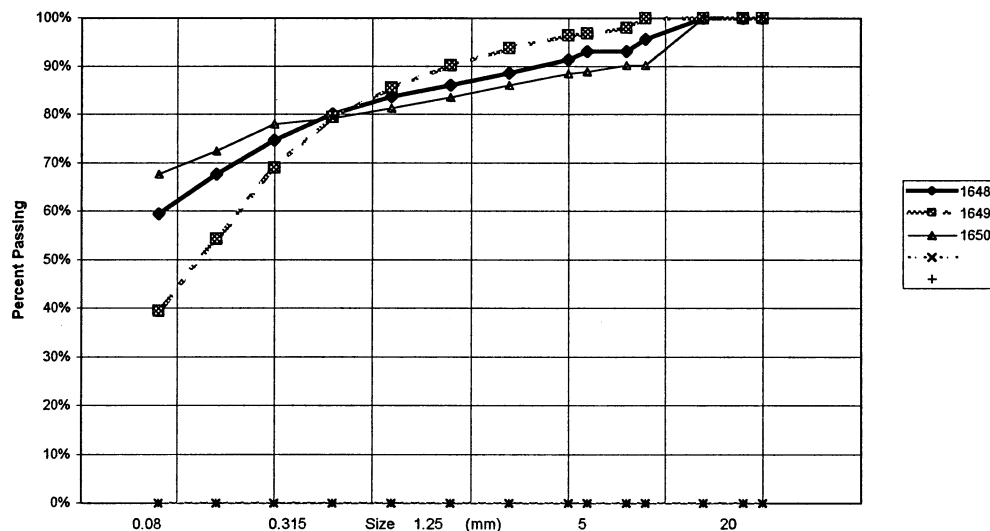
M.C.(%): 13%	M.C.(%): 7%	M.C.(%): 11%
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LIMITS	LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0

% GRAVEL 11	% GRAVEL 6	% GRAVEL 14
% SAND: 29	% SAND: 54	% SAND: 18
% FINES: 59	% FINES: 39	% FINES: 68

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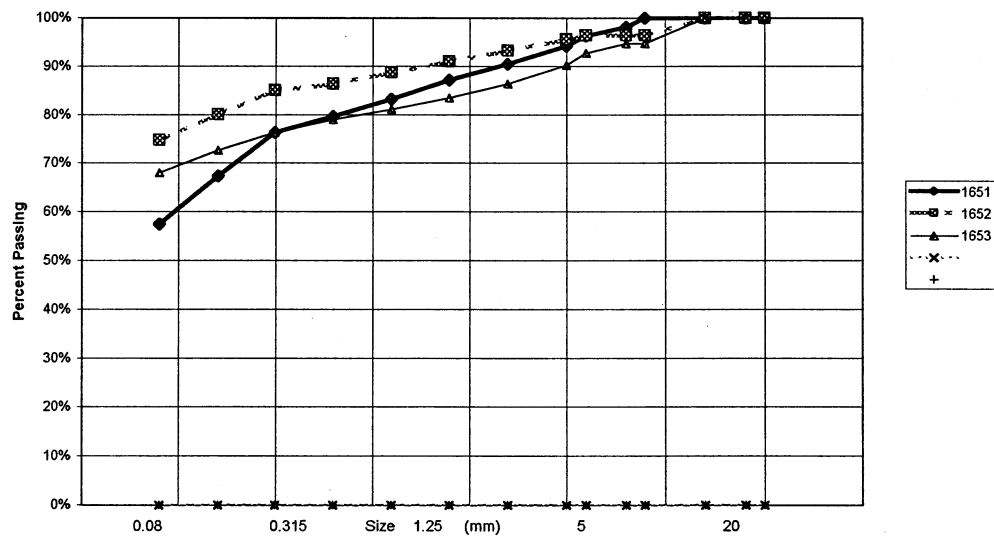
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0363-1	HOLE No.:	569-1810
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM 1664.5 - 1692.6 A/H		
DRILL UNIT:	MOBILE B 40 L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1668+300 40M LT	DATE COM	2000/08/17

FIELD No: 1651		FIELD No: 1652		FIELD No: 1653	
LAB NO: 2122		LAB No: 2321		LAB No: 2124	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	96%	25.0	95%
20.0	98%	20.0	96%	20.0	95%
12.5	96%	12.5	96%	12.5	93%
10.0	94%	10.0	96%	10.0	90%
5.0	90%	5.0	93%	5.0	86%
2.5	87%	2.5	91%	2.5	83%
1.25	83%	1.25	89%	1.25	81%
0.630	80%	0.630	86%	0.630	79%
0.315	76%	0.315	85%	0.315	76%
0.160	67%	0.160	80%	0.160	73%
0.080	58%	0.080	75%	0.080	68%
M.C.(%):	13%	M.C.(%):	13%	M.C.(%):	10%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	10	% GRAVEL	7	% GRAVEL	14
% SAND:	33	% SAND:	18	% SAND:	18
% FINES:	58	% FINES:	75	% FINES:	68
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILT WITH SAND (ML)		SANDY SILT (ML)	

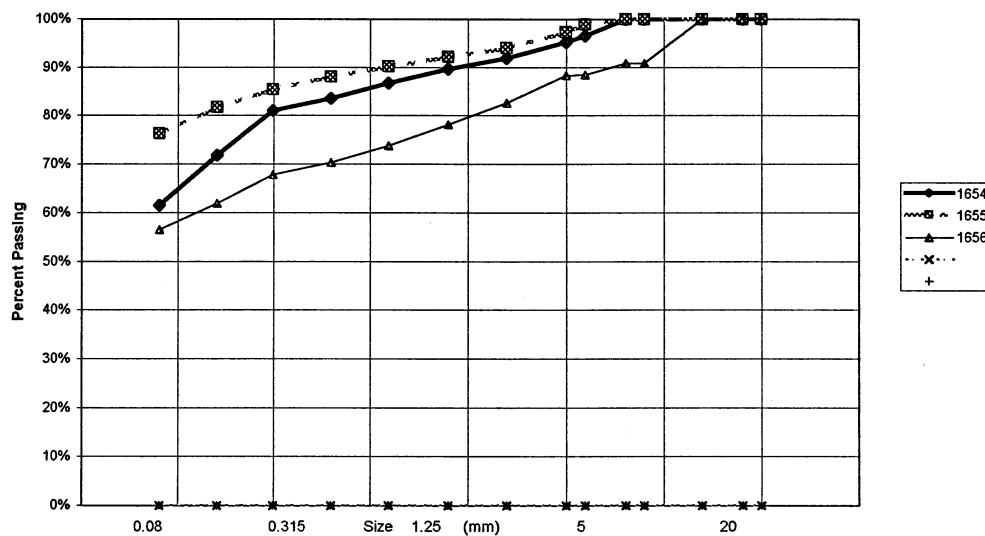
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0363-1	HOLE No.:	569-1811
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM 1664.5 - 1692.6 A/H		
DRILL UNIT:	MOBILE B 40 L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1668+400 40M LT	DATE COM	2000/08/17

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	91%
20.0	100%	20.0	100%	20.0	91%
12.5	97%	12.5	99%	12.5	89%
10.0	95%	10.0	97%	10.0	88%
5.0	92%	5.0	94%	5.0	83%
2.5	90%	2.5	92%	2.5	78%
1.25	87%	1.25	90%	1.25	74%
0.630	84%	0.630	88%	0.630	70%
0.315	81%	0.315	86%	0.315	68%
0.160	72%	0.160	82%	0.160	62%
0.080	62%	0.080	76%	0.080	57%
M.C.(%):	13%	M.C.(%):	13%	M.C.(%):	8%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	8	% GRAVEL	6	% GRAVEL	17
% SAND:	30	% SAND:	18	% SAND:	26
% FINES:	62	% FINES:	76	% FINES:	57
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILT WITH SAND (ML)	CLASSIFICATION:	SANDY SILT WITH GRAVEL (ML)

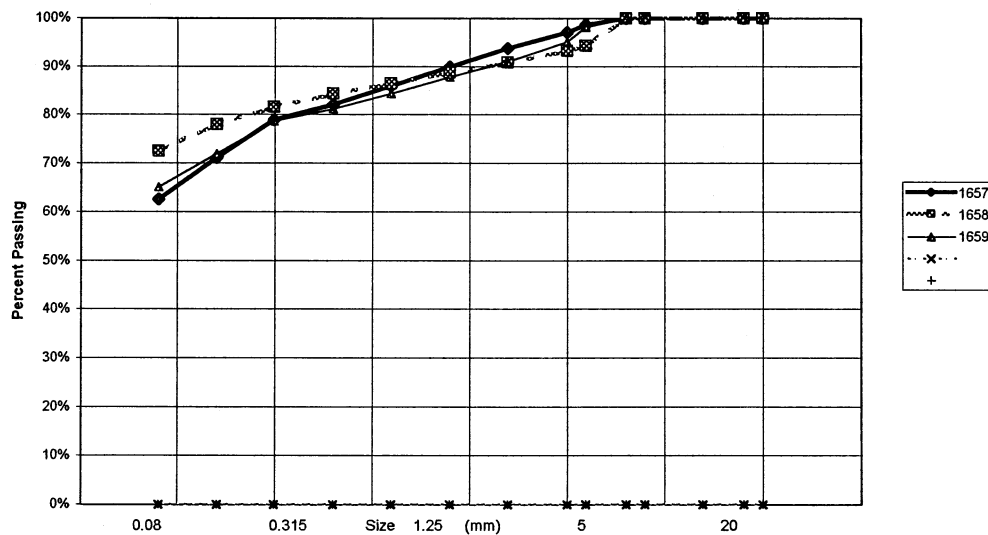
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1812
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1668+500 40M LT DATE COM 1905/10/28

FIELD No: 1657 LAB No: 2128 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1658 LAB No: 2129 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1659 LAB No: 2130 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	99%	12.5	94%
10.0	97%	10.0	93%
5.0	94%	5.0	91%
2.5	90%	2.5	89%
1.25	86%	1.25	87%
0.630	82%	0.630	84%
0.315	79%	0.315	82%
0.160	71%	0.160	78%
0.080	63%	0.080	72%
M.C.(%): 14%		M.C.(%): 13%	
LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0	
% GRAVEL: 6		% GRAVEL: 9	
% SAND: 31		% SAND: 18	
% FINES: 63		% FINES: 72	
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: SILT WITH SAND (ML)	

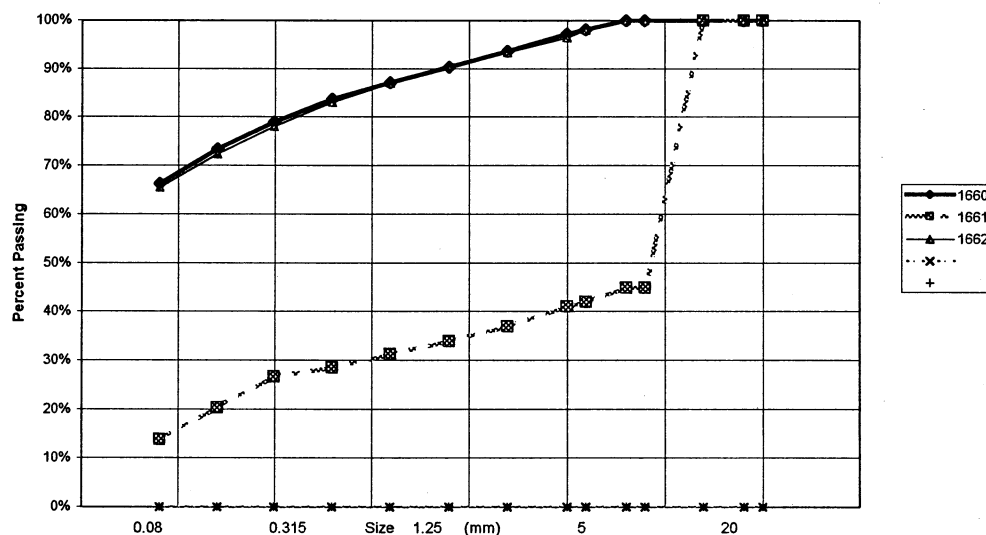
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 569-1813
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5 - 1692.6 A/H
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1668+600 20M LT DATE COM 2000/08/17

FIELD No: 1660 LAB No: 2131 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1661 LAB No: 2132 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1662 LAB No: 2133 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	98%	12.5	98%
10.0	97%	10.0	96%
5.0	94%	5.0	93%
2.5	90%	2.5	91%
1.25	87%	1.25	87%
0.630	84%	0.630	83%
0.315	79%	0.315	78%
0.160	73%	0.160	72%
0.080	66%	0.080	66%
M.C.(%): 12%	M.C.(%): 11%	M.C.(%): 11%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 6	% GRAVEL 63	% GRAVEL 7	
% SAND: 27	% SAND: 23	% SAND: 28	
% FINES: 66	% FINES: 14	% FINES: 66	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION: SANDY SILT (ML)	

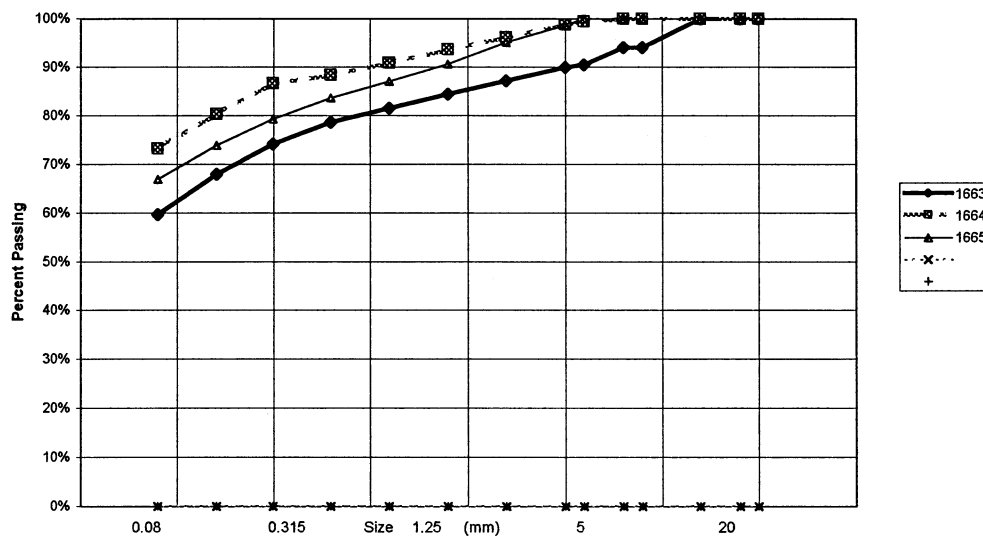
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1814
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1668+700 40M LT DATE COM 2000/08/17

FIELD No: 1663 LAB No: 2134 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1664 LAB No: 2135 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1665 LAB No: 2136 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	94%	25.0	100%
20.0	94%	20.0	100%
12.5	91%	12.5	99%
10.0	90%	10.0	99%
5.0	87%	5.0	96%
2.5	85%	2.5	94%
1.25	82%	1.25	91%
0.630	79%	0.630	88%
0.315	74%	0.315	87%
0.160	68%	0.160	80%
0.080	60%	0.080	73%
M.C.(%): 13%	M.C.(%): 13%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 13	% GRAVEL 4	% GRAVEL 5	
% SAND: 28	% SAND: 23	% SAND: 28	
% FINES: 60	% FINES: 73	% FINES: 67	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT (ML)	

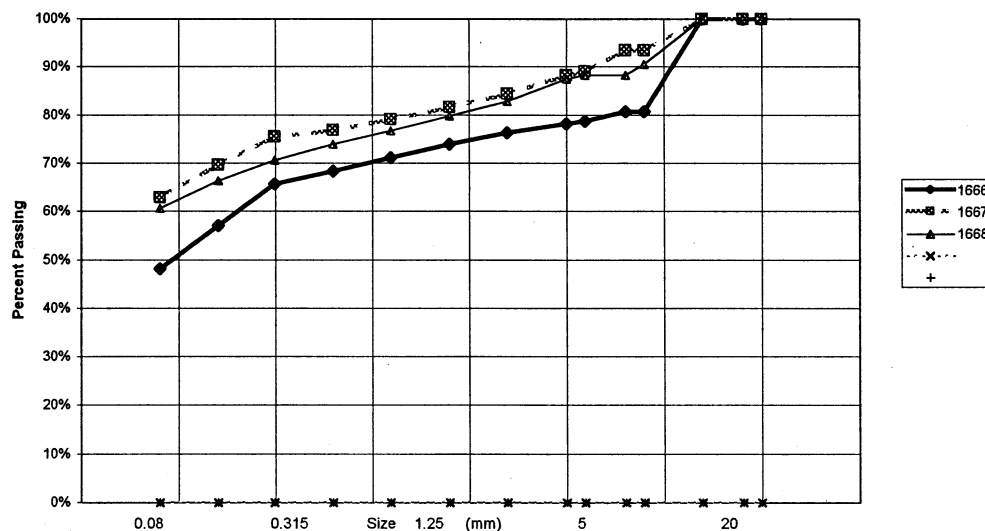
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1815
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 168+800 40M LT DATE COM 2000/08/17

FIELD No: 1666	FIELD No: 1667	FIELD No: 1668	
LAB No: 2137	LAB No: 2138	LAB No: 2139	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	81%	25.0	91%
20.0	81%	20.0	88%
12.5	79%	12.5	88%
10.0	78%	10.0	88%
5.0	76%	5.0	83%
2.5	74%	2.5	80%
1.25	71%	1.25	77%
0.630	68%	0.630	74%
0.315	66%	0.315	71%
0.160	57%	0.160	66%
0.080	48%	0.080	61%
M.C.(%): 11%	M.C.(%): 10%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 24	% GRAVEL 16	% GRAVEL 17	
% SAND: 28	% SAND: 22	% SAND: 22	
% FINES: 48	% FINES: 63	% FINES: 61	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

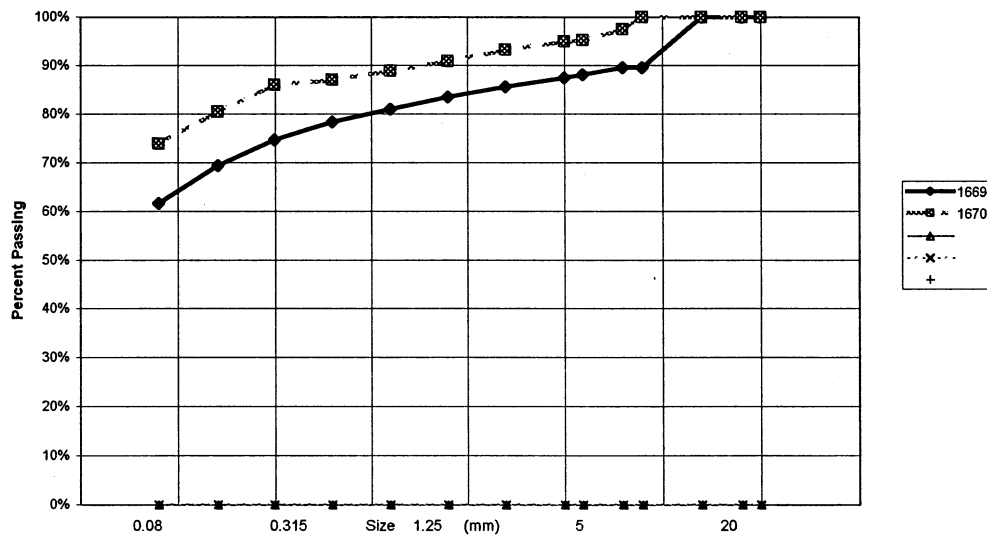
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202002-0104	HOLE No.:	570-1816
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM 1664.5-1692.6 ALASKA HWY		
DRILL UNIT:	MOBILE B40 L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1668+900 40M LT	DATE COM	2000/08/17

FIELD NO: 1669		FIELD No. 1670			
LAB NO: 2140		LAB No. 2141			
DEPTH: 2.0-2.2		DEPTH 4.3-4.5			
TYPE: AUGER		TYPE AUGER			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING		
100.0	100%	100.0	100%		
80.0	100%	80.0	100%		
50.0	100%	50.0	100%		
25.0	90%	25.0	100%		
20.0	90%	20.0	97%		
12.5	88%	12.5	95%		
10.0	87%	10.0	95%		
5.0	86%	5.0	93%		
2.5	83%	2.5	91%		
1.25	81%	1.25	89%		
0.630	78%	0.630	87%		
0.315	75%	0.315	86%		
0.160	69%	0.160	80%		
0.080	62%	0.080	74%		
M.C.(%):	12%	M.C.(%):	10%		
LIMITS		LIMITS			
LIQUID:	0.0	LIQUID:	0.0		
PLASTIC:	0.0	PLASTIC:	0.0		
P.I.:	0.0	P.I.:	0.0		
% GRAVEL	14	% GRAVEL	7		
% SAND:	24	% SAND:	19		
% FINES:	62	% FINES:	74		
CLASSIFICATION:		CLASSIFICATION:			
SANDY SILT (ML)		SILT WITH SAND (ML)			

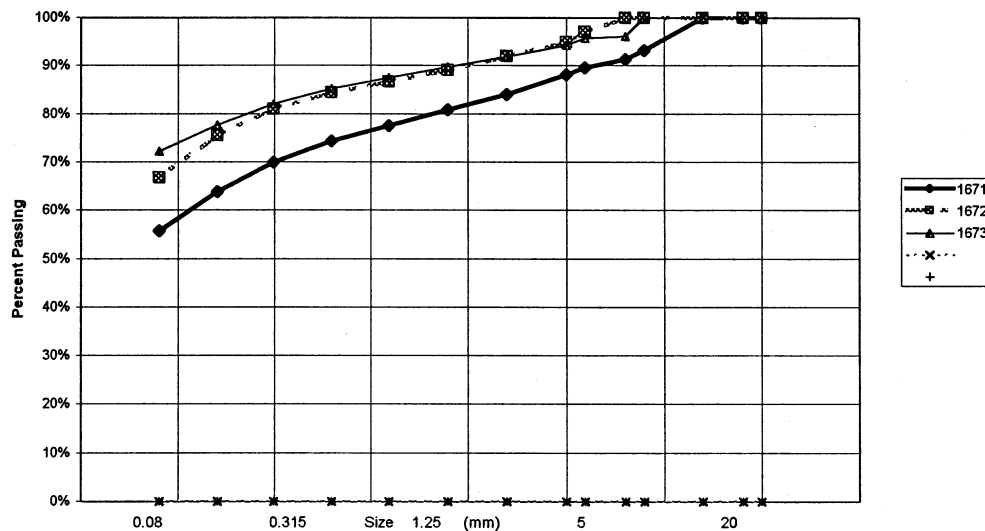
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1817
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+000 40M LT DATE COM 2000/08/17

FIELD NO: 1671 LAB NO: 2142 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1672 LAB No. 2143 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1673 LAB No: 21444 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	100%
20.0	91%	20.0	96%
12.5	90%	12.5	96%
10.0	88%	10.0	94%
5.0	84%	5.0	92%
2.5	81%	2.5	90%
1.25	78%	1.25	88%
0.630	74%	0.630	85%
0.315	70%	0.315	82%
0.160	64%	0.160	78%
0.080	56%	0.080	72%
M.C.(%): 11%	M.C.(%): 8%	M.C.(%): 12%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 16	% GRAVEL 8	% GRAVEL 8	
% SAND: 28	% SAND: 25	% SAND: 20	
% FINES: 56	% FINES: 67	% FINES: 72	
CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

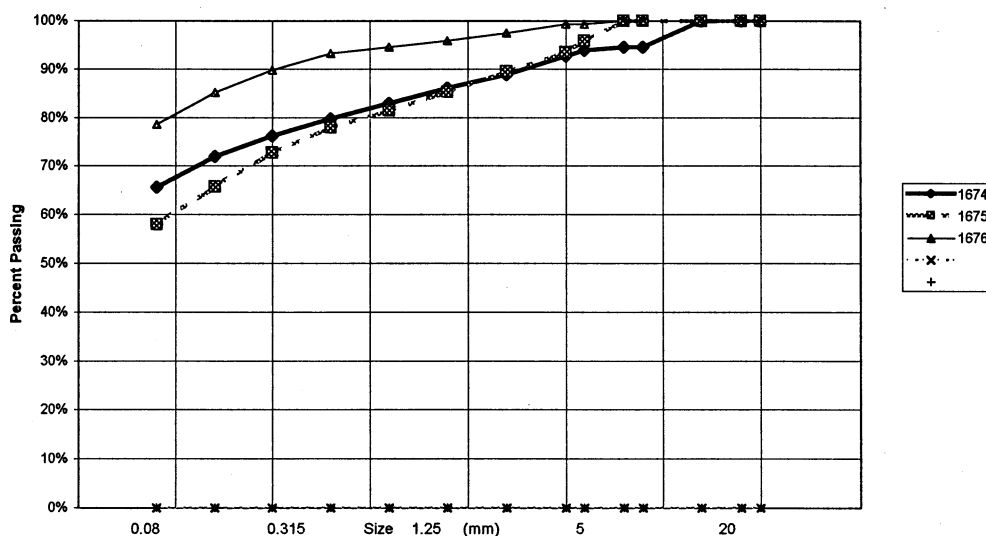
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1818
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+100 40M LT DATE COM 2000/08/17

FIELD No: 1674 LAB No: 2145 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1675 LAB No: 2146 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1676 LAB No: 2147 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	100%
20.0	95%	20.0	100%
12.5	94%	12.5	96%
10.0	93%	10.0	94%
5.0	89%	5.0	90%
2.5	86%	2.5	85%
1.25	83%	1.25	82%
0.630	80%	0.630	78%
0.315	76%	0.315	73%
0.160	72%	0.160	66%
0.080	66%	0.080	58%
M.C.(%): 12%	M.C.(%): 9%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 11	% GRAVEL 10	% GRAVEL 3	
% SAND: 23	% SAND: 32	% SAND: 19	
% FINES: 66	% FINES: 58	% FINES: 79	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

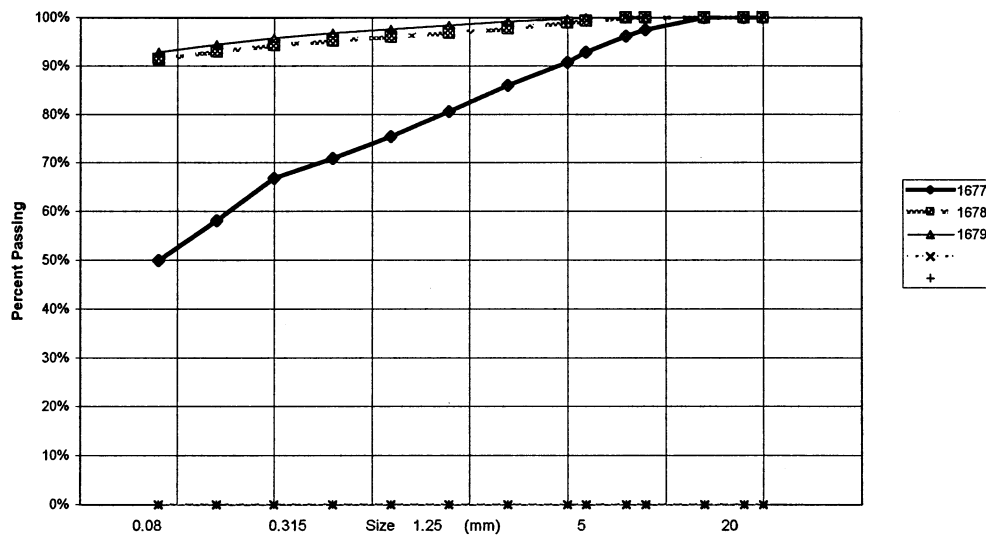
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1819
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+175 20M LT DATE COM 2000/08/17

FIELD No: 1677 LAB No: 2148 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1678 LAB No: 2149 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1679 LAB No: 2150 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	97%	25.0	100%
20.0	96%	20.0	100%
12.5	93%	12.5	99%
10.0	91%	10.0	99%
5.0	86%	5.0	98%
2.5	81%	2.5	97%
1.25	75%	1.25	96%
0.630	71%	0.630	95%
0.315	67%	0.315	94%
0.160	58%	0.160	93%
0.080	50%	0.080	91%
M.C.(%): 17%	M.C.(%): 17%	M.C.(%): 17%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 14	% GRAVEL 2	% GRAVEL 1	
% SAND: 36	% SAND: 6	% SAND: 6	
% FINES: 50	% FINES: 91	% FINES: 93	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILT (ML)	

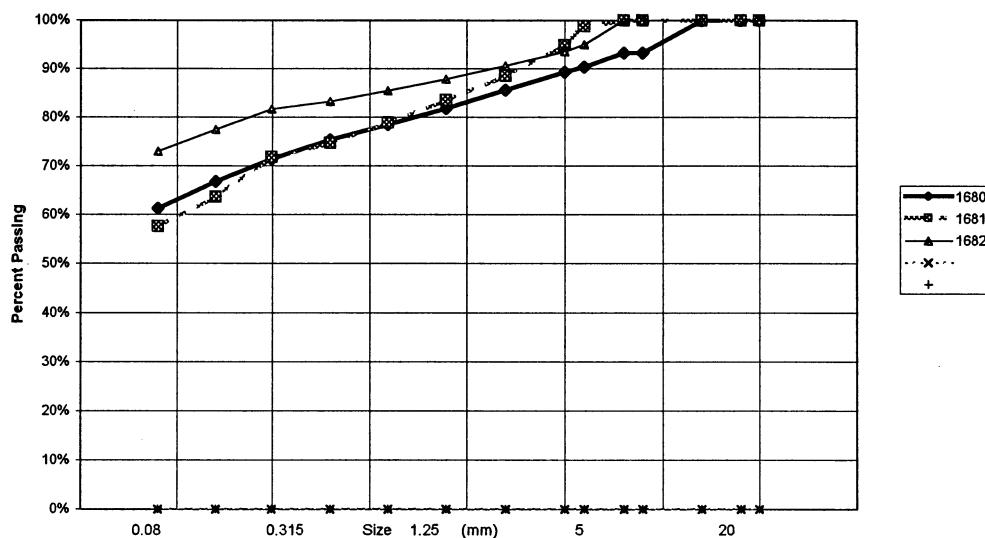
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1820
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+300 40M LT DATE COM 2000/08/17

FIELD No: 1680 LAB No: 2151 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1681 LAB No: 2152 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1682 LAB No: 2153 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	100%
20.0	93%	20.0	100%
12.5	90%	12.5	99%
10.0	89%	10.0	95%
5.0	86%	5.0	89%
2.5	82%	2.5	84%
1.25	79%	1.25	79%
0.630	75%	0.630	75%
0.315	71%	0.315	72%
0.160	67%	0.160	64%
0.080	61%	0.080	58%
M.C.(%): 17%	M.C.(%): 11%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 14	% GRAVEL 11	% GRAVEL 9	
% SAND: 24	% SAND: 31	% SAND: 18	
% FINES: 61	% FINES: 58	% FINES: 73	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

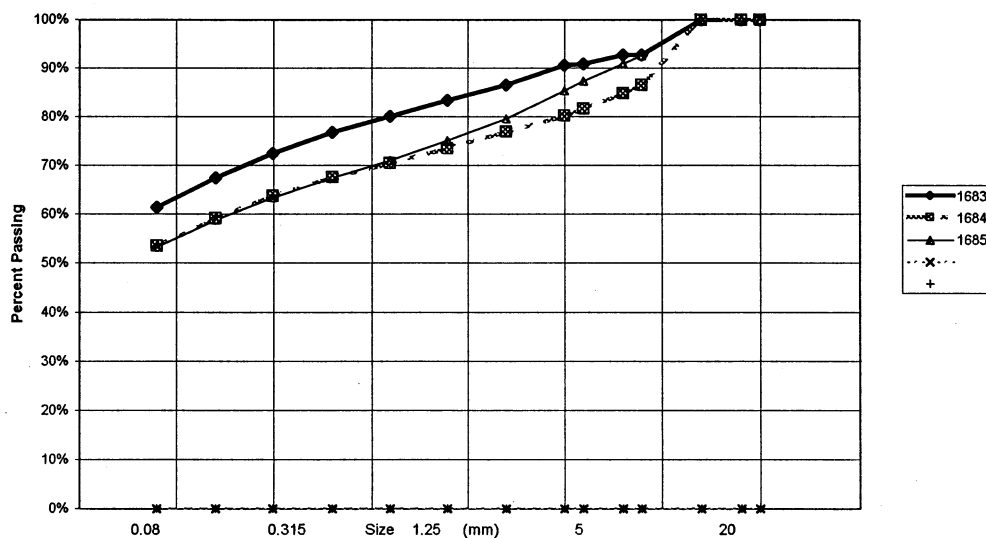
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1821
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+435 20M LT DATE COM 2000/08/18

FIELD No: 1683 LAB No: 2154 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1684 LAB No: 2155 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1685 LAB No: 2156 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	87%
20.0	93%	20.0	85%
12.5	91%	12.5	82%
10.0	91%	10.0	80%
5.0	87%	5.0	77%
2.5	83%	2.5	74%
1.25	80%	1.25	71%
0.630	77%	0.630	68%
0.315	73%	0.315	64%
0.160	68%	0.160	59%
0.080	62%	0.080	54%
M.C.(%): 11%	M.C.(%): 10%	M.C.(%): 10%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 13	% GRAVEL 23	% GRAVEL 20	
% SAND: 25	% SAND: 23	% SAND: 26	
% FINES: 62	% FINES: 54	% FINES: 53	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

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



PROJECT NUMBER: 092-202002-0104		HOLE No.: 570-1822	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY			
DRILL UNIT: MOBILE B40 L			
LOGGED BY: DOUG TRIM		DATE COM 2000/08/18	
HOLE LOCATION: 1669+550 40M LT			

FIELD NO: 1686	FIELD No. 1687	FIELD No: 1688	
LAB NO: 2157	LAB No. 2158	LAB No: 2159	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	

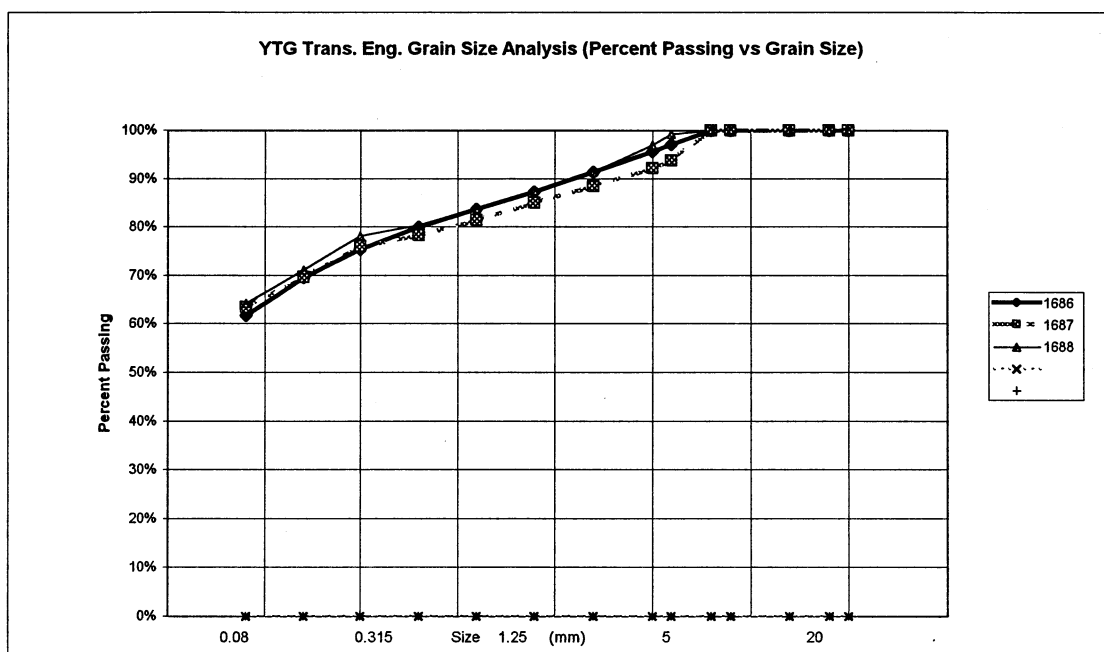
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	97%	12.5	94%	12.5	99%
10.0	96%	10.0	92%	10.0	97%
5.0	91%	5.0	88%	5.0	91%
2.5	87%	2.5	85%	2.5	88%
1.25	84%	1.25	82%	1.25	84%
0.630	80%	0.630	78%	0.630	80%
0.315	75%	0.315	76%	0.315	78%
0.160	70%	0.160	70%	0.160	71%
0.080	62%	0.080	63%	0.080	64%

M.C.(%): 15%	M.C.(%): 12%	M.C.(%): 11%
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LIMITS	LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0

% GRAVEL: 9	% GRAVEL: 12	% GRAVEL: 9
% SAND: 30	% SAND: 25	% SAND: 27
% FINES: 62	% FINES: 63	% FINES: 64

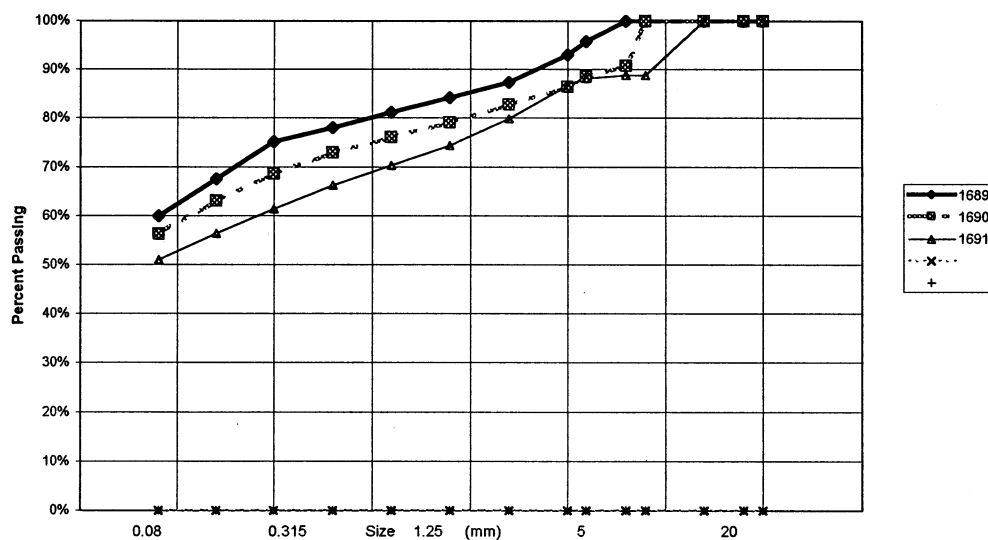
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)
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PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1823
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+650 40 LT DATE COM 2000/08/18

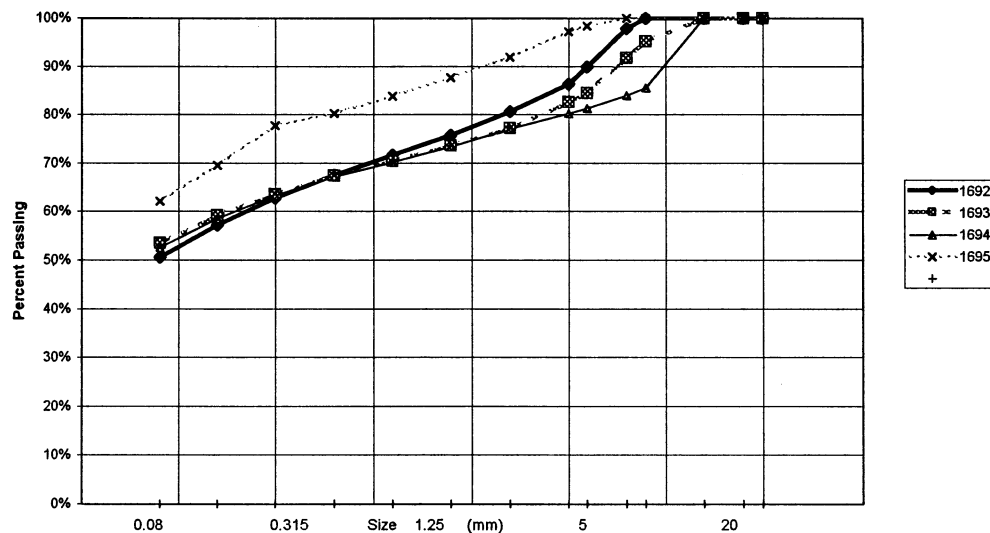
FIELD No: 1689 LAB No: 2160 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1690 LAB No: 2161 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1691 LAB No: 2162 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	91%
12.5	96%	12.5	89%
10.0	93%	10.0	86%
5.0	87%	5.0	83%
2.5	84%	2.5	79%
1.25	81%	1.25	76%
0.630	78%	0.630	73%
0.315	75%	0.315	69%
0.160	68%	0.160	63%
0.080	60%	0.080	56%
M.C.(%): 15%	M.C.(%): 11%	M.C.(%): 8%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 13	% GRAVEL 17	% GRAVEL 20	
% SAND: 28	% SAND: 26	% SAND: 29	
% FINES: 60	% FINES: 56	% FINES: 51	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

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



PROJECT NUMBER: 092-202002-0104				HOLE No.: 570-1824			
CLIENT: ENGINEERING-CAPITAL							
PROJECT NAME: SHAKWAK SEG 9							
PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY							
DRILL UNIT: MOBILE B40 L							
LOGGED BY: DOUG TRIM							
HOLE LOCATION: 1669+750 40M LT				DATE COM 2000/08/18			
=====							
FIELD NO: 1692		FIELD No. 1693		FIELD No: 1694		FIELD No: 1695	
LAB NO: 2163		LAB No. 2164		LAB No: 2165		LAB No: 2166	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0		DEPTH: 4.3-4.5		DEPTH: 5.8-6.0	
TYPE: AUGER		A AUGER		TYPE: AUGER		TYPE: AUGER	
=====							
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	95%	25.0	86%	25.0	100%
20.0	98%	20.0	92%	20.0	84%	20.0	100%
12.5	90%	12.5	84%	12.5	81%	12.5	98%
10.0	86%	10.0	83%	10.0	80%	10.0	97%
5.0	81%	5.0	77%	5.0	77%	5.0	92%
2.5	76%	2.5	74%	2.5	73%	2.5	88%
1.25	72%	1.25	71%	1.25	70%	1.25	84%
0.630	68%	0.630	67%	0.630	67%	0.630	80%
0.315	63%	0.315	64%	0.315	63%	0.315	78%
0.160	57%	0.160	59%	0.160	59%	0.160	70%
0.080	51%	0.080	54%	0.080	53%	0.080	62%
=====							
M.C.(%):	14%	M.C.(%):	9%	M.C.(%):	9%	M.C.(%):	10%
=====							
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
=====							
% GRAVEL	19	% GRAVEL	23	% GRAVEL	23	% GRAVEL	8
% SAND:	30	% SAND:	24	% SAND:	24	% SAND:	30
% FINES:	51	% FINES:	54	% FINES:	53	% FINES:	62
=====							
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT WITH GRAVEL (ML)		SANDY SILT WITH GRAVEL (ML)		SANDY SILT WITH GRAVEL (ML)		SANDY SILT (ML)	

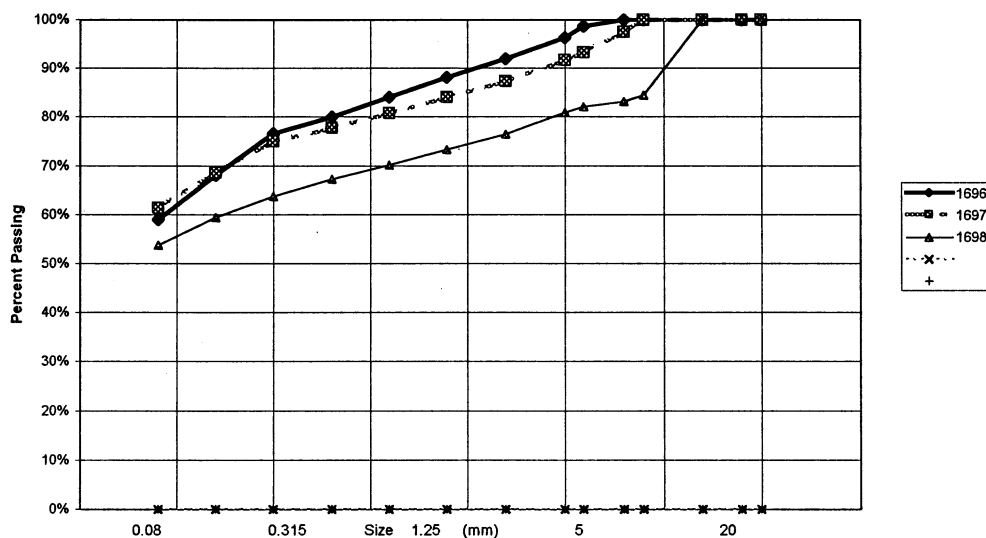
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1825
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+850 40M LT DATE COM 2000/08/18

FIELD No: 1696 LAB No: 2197 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1697 LAB No: 2168 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1698 LAB No: 2169 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	84%
12.5	99%	12.5	83%
10.0	96%	10.0	82%
5.0	92%	5.0	81%
2.5	88%	2.5	76%
1.25	84%	1.25	73%
0.630	80%	0.630	70%
0.315	77%	0.315	67%
0.160	68%	0.160	64%
0.080	59%	0.080	59%
M.C.(%): 15%	M.C.(%): 14%	M.C.(%): 11%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 8	% GRAVEL 13	% GRAVEL 24	
% SAND: 33	% SAND: 26	% SAND: 23	
% FINES: 59	% FINES: 61	% FINES: 54	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	

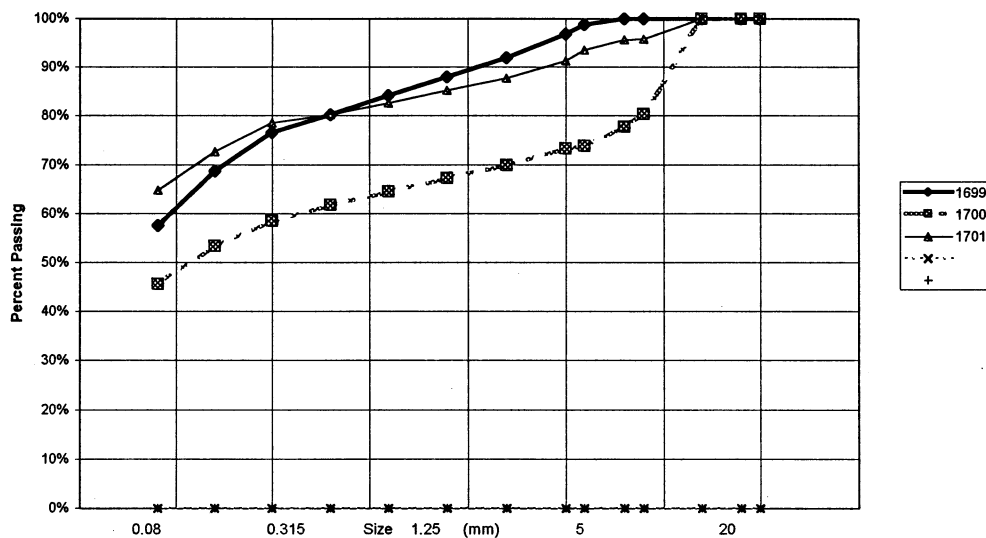
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 570-1826
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1669+950 40M LT DATE COM 2000/08/18

FIELD No: 1699	FIELD No: 1700	FIELD No: 1701	
LAB No: 2170	LAB No: 2171	LAB No: 2172	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	TYPE: AUGER	TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	96%
20.0	100%	20.0	96%
12.5	99%	12.5	94%
10.0	97%	10.0	91%
5.0	92%	5.0	88%
2.5	88%	2.5	85%
1.25	84%	1.25	83%
0.630	80%	0.630	80%
0.315	77%	0.315	79%
0.160	69%	0.160	73%
0.080	58%	0.080	65%
M.C.(%): 15%	M.C.(%): 13%	M.C.(%): 14%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 8	% GRAVEL 30	% GRAVEL 12	
% SAND: 34	% SAND: 24	% SAND: 23	
% FINES: 58	% FINES: 46	% FINES: 65	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION: SANDY SILT (ML)	

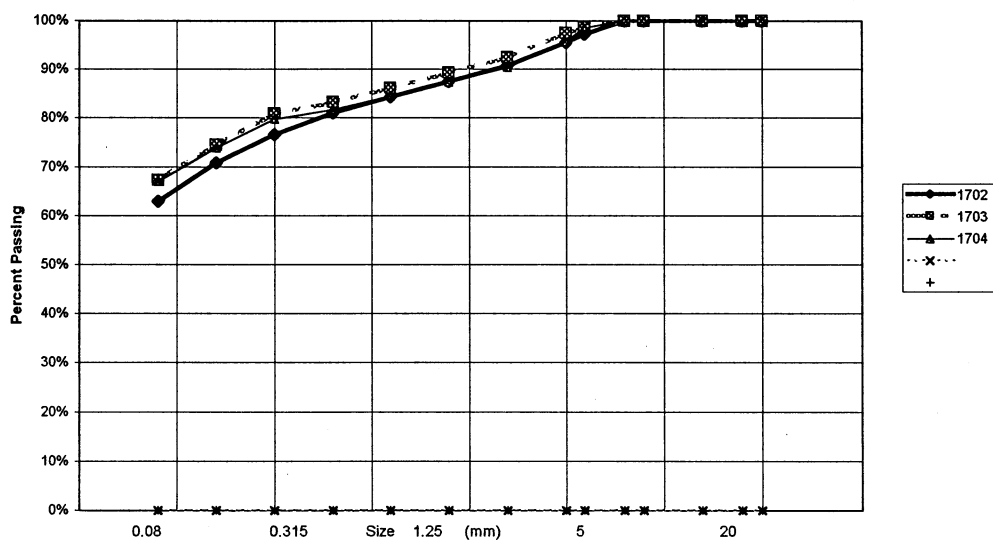
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1827
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+050 40M LT DATE COM 2000/08/18

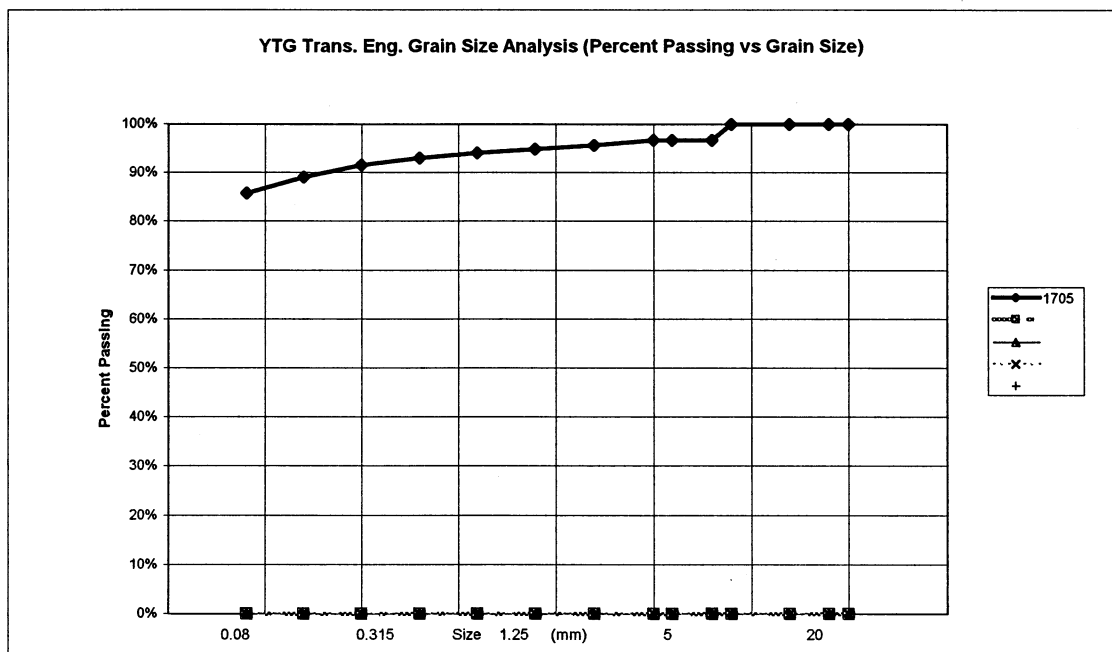
FIELD No: 1702 LAB No: 2173 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1703 LAB No: 2174 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1704 LAB No: 2175 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	97%	12.5	99%
10.0	96%	10.0	97%
5.0	91%	5.0	93%
2.5	87%	2.5	89%
1.25	84%	1.25	86%
0.630	81%	0.630	83%
0.315	77%	0.315	81%
0.160	71%	0.160	74%
0.080	63%	0.080	67%
M.C.(%): 17%	M.C.(%): 13%	M.C.(%): 12%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 9	% GRAVEL 7	% GRAVEL 10	
% SAND: 28	% SAND: 25	% SAND: 23	
% FINES: 63	% FINES: 67	% FINES: 67	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	

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



PROJECT NUMBER:	092-202002-0104	HOLE No.:	570-1828
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK SEG 9		
PROJECT LOCATION:	KM 1664.5-1692.6 ALASKA HWY		
DRILL UNIT:	MOBILE B40 L		
LOGGED BY:	DOUG TRIM		
HOLE LOCATION:	1670+150 40M LT	DATE COM	2000/08/18

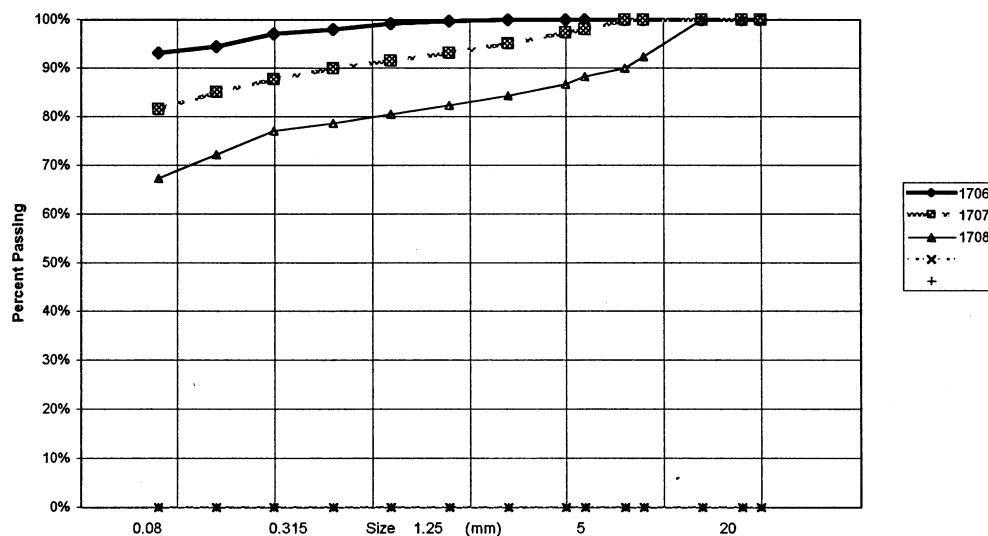
FIELD NO: 1705			
LAB NO: 2176			
DEPTH: 1.3-1.5			
TYPE: AUGER	TYPE		
SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	100%		
20.0	97%		
12.5	97%		
10.0	97%		
5.0	96%		
2.5	95%		
1.25	94%		
0.630	93%		
0.315	92%		
0.160	89%		
0.080	86%		
M.C.(%):	10%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL	4		
% SAND:	10		
% FINES:	86		
CLASSIFICATION:			
SILT (ML)			



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1829
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+250 40M LT DATE COM 2000/08/18

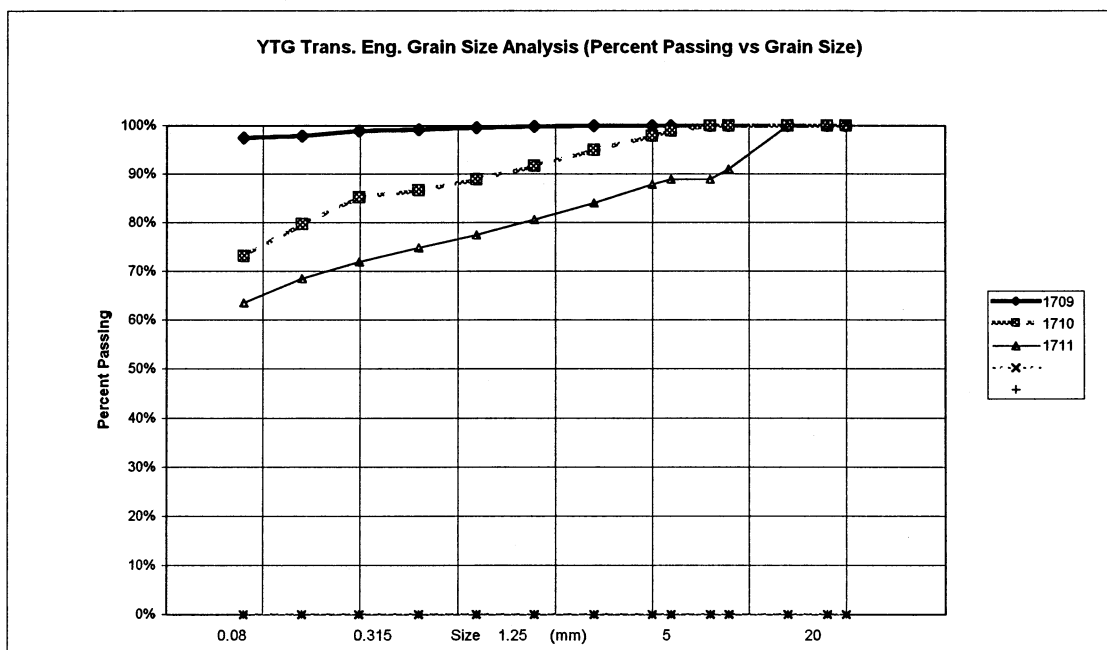
FIELD No: 1706 LAB No: 2177 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1707 LAB No: 2178 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1708 LAB No: 2179 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	98%
10.0	100%	10.0	97%
5.0	100%	5.0	95%
2.5	100%	2.5	93%
1.25	99%	1.25	92%
0.630	98%	0.630	90%
0.315	97%	0.315	88%
0.160	94%	0.160	85%
0.080	93%	0.080	82%
M.C.(%): 21%	M.C.(%): 17%	M.C.(%): 15%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 5	% GRAVEL 16	
% SAND: 7	% SAND: 14	% SAND: 17	
% FINES: 93	% FINES: 82	% FINES: 67	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

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



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1830
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+350 40M LT DATE COM 2000/08/18

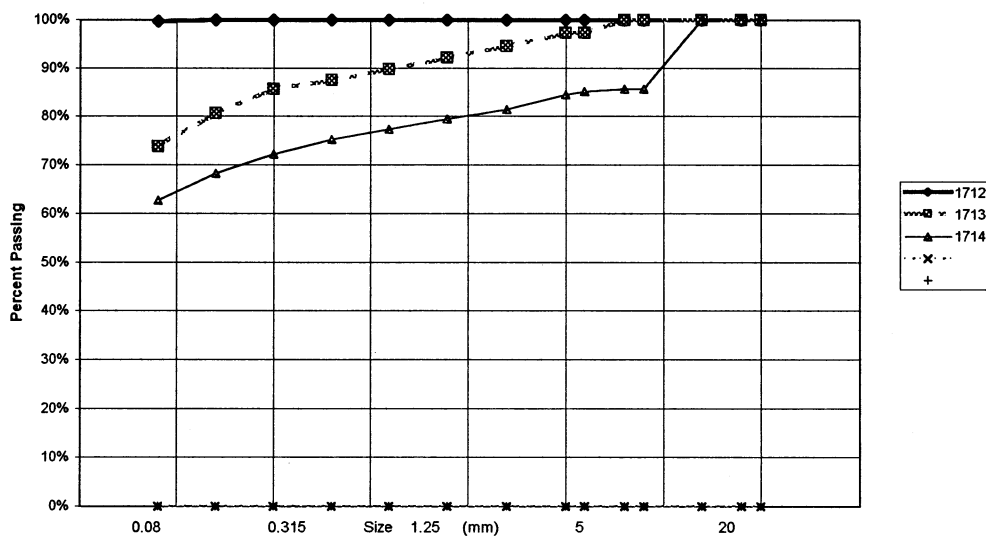
FIELD NO: 1709 LAB NO: 2180 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1710 LAB No. 2181 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1711 LAB No: 2182 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	99%
10.0	100%	10.0	98%
5.0	100%	5.0	95%
2.5	100%	2.5	92%
1.25	100%	1.25	89%
0.630	99%	0.630	87%
0.315	99%	0.315	85%
0.160	98%	0.160	80%
0.080	98%	0.080	73%
M.C.(%): 25%	M.C.(%): 13%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 5	% GRAVEL 16	
% SAND: 2	% SAND: 22	% SAND: 21	
% FINES: 98	% FINES: 73	% FINES: 64	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1831
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+450 40M LT DATE COM 2000/08/18

FIELD No: 1712 LAB No: 2183 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1713 LAB No: 2184 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1714 LAB No: 2185 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	97%
10.0	100%	10.0	97%
5.0	100%	5.0	95%
2.5	100%	2.5	92%
1.25	100%	1.25	90%
0.630	100%	0.630	88%
0.315	100%	0.315	86%
0.160	100%	0.160	81%
0.080	100%	0.080	74%
M.C.(%): 25%	M.C.(%): 15%	M.C.(%): 14%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 5	% GRAVEL 19	
% SAND: 0	% SAND: 21	% SAND: 19	
% FINES: 100	% FINES: 74	% FINES: 63	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

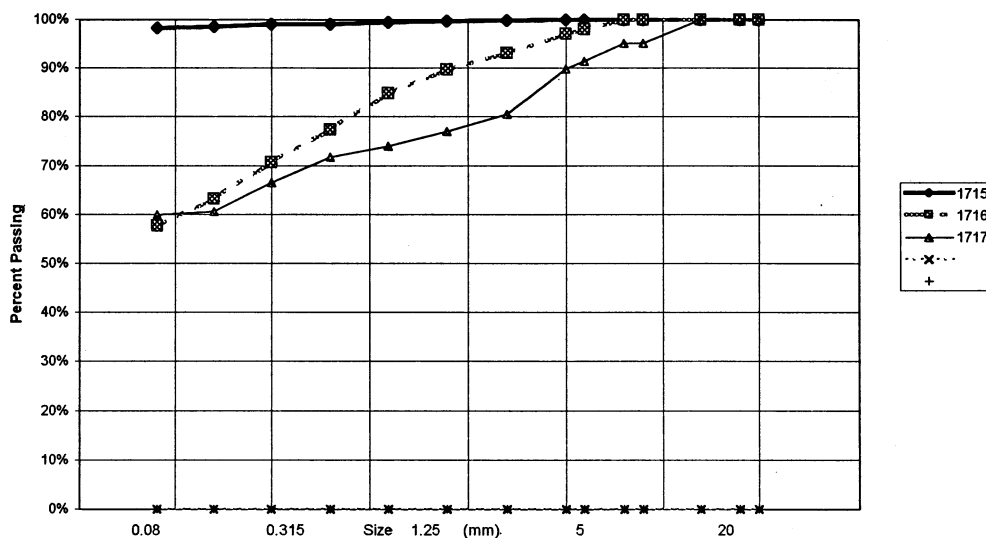
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202002-0104 HOLE No.: 570-1833
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: KM 1664.5-1692.6 ALASKA HWY
 DRILL UNIT: MOBILE B40 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+550 20M LT DATE COM 2000/08/18

FIELD No: 1715 LAB No: 2186 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1716 LAB No: 2187 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1717 LAB No: 2188 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	95%
20.0	100%	20.0	95%
12.5	100%	12.5	92%
10.0	100%	10.0	90%
5.0	100%	5.0	81%
2.5	100%	2.5	77%
1.25	100%	1.25	74%
0.630	99%	0.630	72%
0.315	99%	0.315	67%
0.160	99%	0.160	61%
0.080	98%	0.080	60%
M.C.(%): 21%	M.C.(%): 15%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 7	% GRAVEL 19	
% SAND: 2	% SAND: 35	% SAND: 21	
% FINES: 98	% FINES: 58	% FINES: 60	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

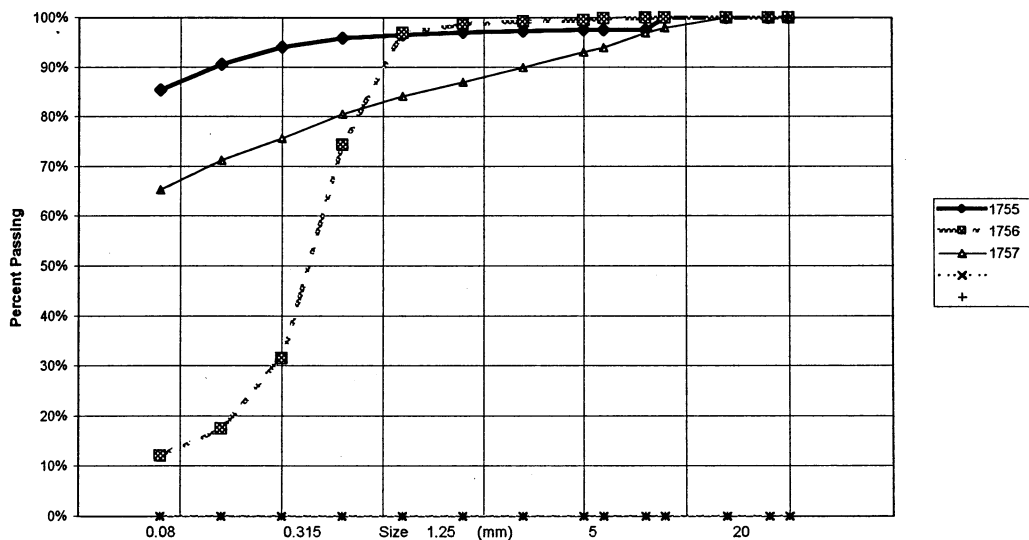
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1848
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+575 15M RT DATE COM 2000/08/25

FIELD NO: 1755 LAB NO: 2226 DEPTH: 1.3-1.4 TYPE: AUGER	FIELD No. 1756 LAB No. 2227 DEPTH: 2.5-2.7 A AUGER	FIELD No: 1757 LAB No: 2228 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	98%
20.0	98%	20.0	97%
12.5	98%	12.5	94%
10.0	98%	10.0	93%
5.0	97%	5.0	90%
2.5	97%	2.5	87%
1.25	97%	1.25	84%
0.630	96%	0.630	81%
0.315	94%	0.315	76%
0.160	91%	0.160	71%
0.080	85%	0.080	65%
M.C.(%): 57%	M.C.(%): 24%	M.C.(%): 14%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 3	% GRAVEL 1	% GRAVEL 10	
% SAND: 12	% SAND: 87	% SAND: 25	
% FINES: 85	% FINES: 12	% FINES: 65	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: SANDY SILT (ML)	

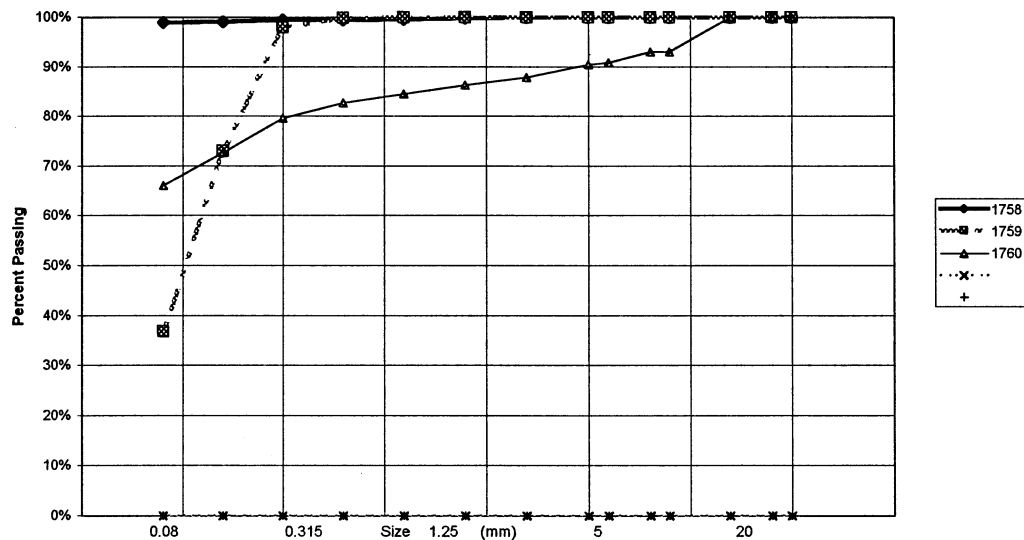
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1849
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+675 40M RT DATE COM 2000/08/25

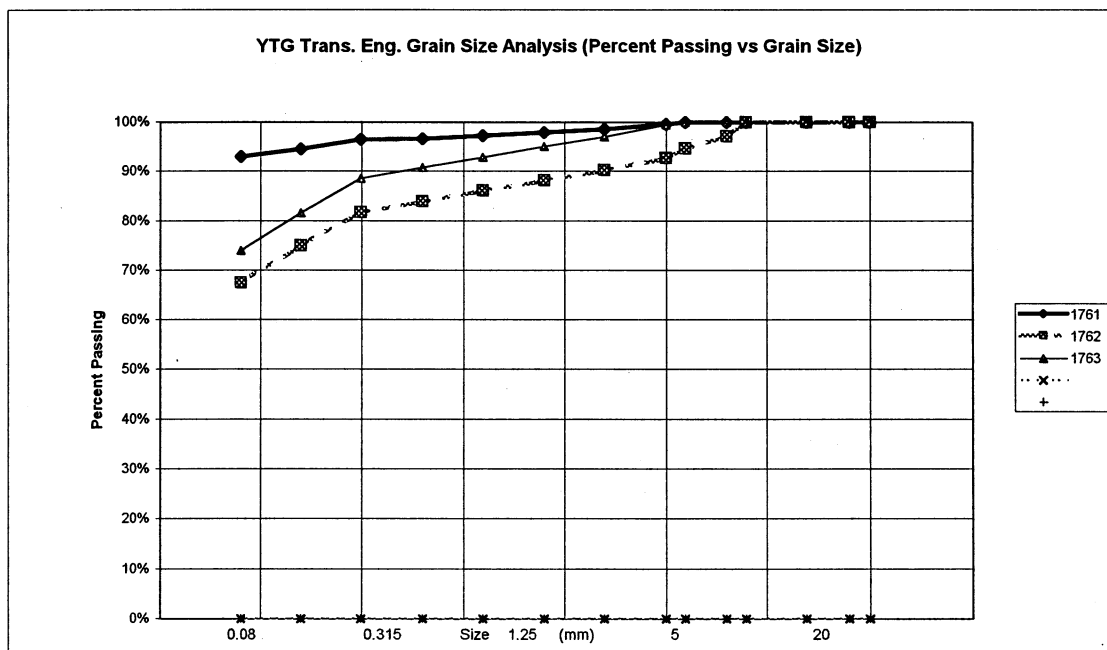
FIELD NO: 1758 LAB NO: 2229 DEPTH: 1.2-1.4 TYPE: AUGER	FIELD No: 1759 LAB No: 2230 DEPTH: 2.6-2.8 A AUGER	FIELD No: 1760 LAB No: 2231 DEPTH: 4.6-4.8 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	93%
12.5	100%	12.5	93%
10.0	100%	10.0	91%
5.0	100%	5.0	90%
2.5	100%	2.5	88%
1.25	100%	1.25	86%
0.630	100%	0.630	85%
0.315	99%	0.315	83%
0.160	99%	0.160	80%
0.080	99%	0.080	73%
M.C.(%): 29%	M.C.(%): 20%	M.C.(%): 16%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 0	% GRAVEL 12	
% SAND: 1	% SAND: 63	% SAND: 22	
% FINES: 99	% FINES: 37	% FINES: 66	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: SANDY SILT (ML)	

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



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1850
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+775 40M RT DATE COM 2000/08/25

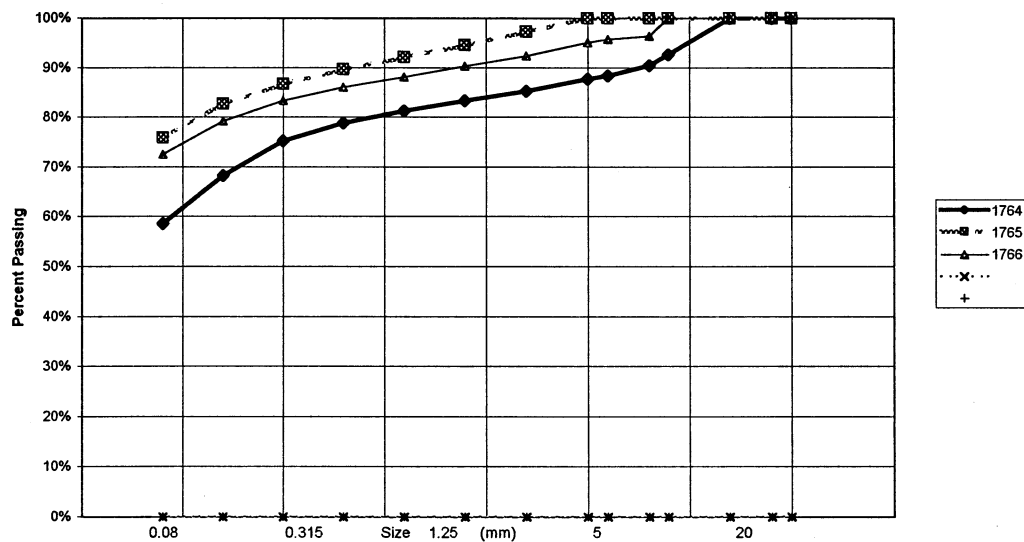
FIELD NO: 1761 LAB NO: 2232 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1762 LAB No. 2233 DEPTH: 2.9-3.1 A AUGER	FIELD No: 1763 LAB No: 2234 DEPTH: 4.4-4.6 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	97%
12.5	100%	12.5	95%
10.0	100%	10.0	93%
5.0	99%	5.0	90%
2.5	98%	2.5	88%
1.25	97%	1.25	86%
0.630	97%	0.630	84%
0.315	96%	0.315	82%
0.160	95%	0.160	75%
0.080	93%	0.080	68%
M.C.(%): 24%	M.C.(%): 13%	M.C.(%): 14%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 1	% GRAVEL 10	% GRAVEL 3	
% SAND: 6	% SAND: 23	% SAND: 23	
% FINES: 93	% FINES: 68	% FINES: 74	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1851
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+875 40M RT DATE COM 2000/08/25

FIELD NO: 1764 LAB NO: 2235 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1765 LAB No: 2236 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1766 LAB No: 2237 DEPTH: 4.4-4.6 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	100%
20.0	90%	20.0	100%
12.5	88%	12.5	100%
10.0	88%	10.0	100%
5.0	85%	5.0	97%
2.5	83%	2.5	95%
1.25	81%	1.25	92%
0.630	79%	0.630	90%
0.315	75%	0.315	87%
0.160	68%	0.160	83%
0.080	59%	0.080	76%
M.C.(%): 15%	M.C.(%): 14%	M.C.(%): 12%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 15	% GRAVEL 3	% GRAVEL 8	
% SAND: 27	% SAND: 21	% SAND: 20	
% FINES: 59	% FINES: 76	% FINES: 73	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

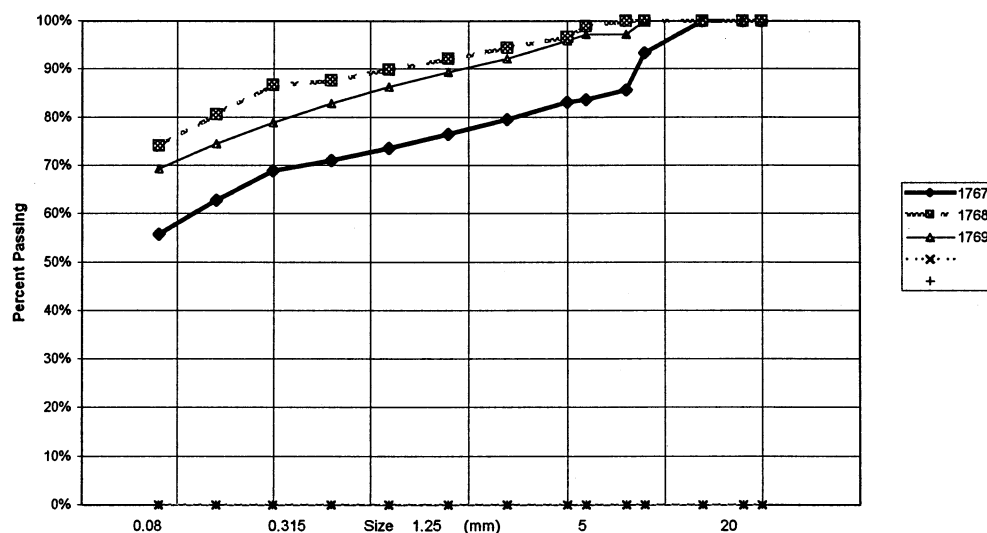
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1852
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1670+975 40M RT DATE COM 2000/08/25

FIELD NO: 1767 LAB NO: 2238 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1768 LAB No. 2239 DEPTH: 2.7-2.9 A AUGER	FIELD No: 1769 LAB No: 2240 DEPTH: 4.4-4.6 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	100%
20.0	86%	20.0	100%
12.5	84%	12.5	99%
10.0	83%	10.0	97%
5.0	80%	5.0	94%
2.5	76%	2.5	92%
1.25	74%	1.25	90%
0.630	71%	0.630	88%
0.315	69%	0.315	87%
0.160	63%	0.160	81%
0.080	56%	0.080	74%
M.C.(%): 15%	M.C.(%): 15%	M.C.(%): 11%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 20	% GRAVEL 6	% GRAVEL 8	
% SAND: 24	% SAND: 20	% SAND: 23	
% FINES: 56	% FINES: 74	% FINES: 69	
CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT (ML)	

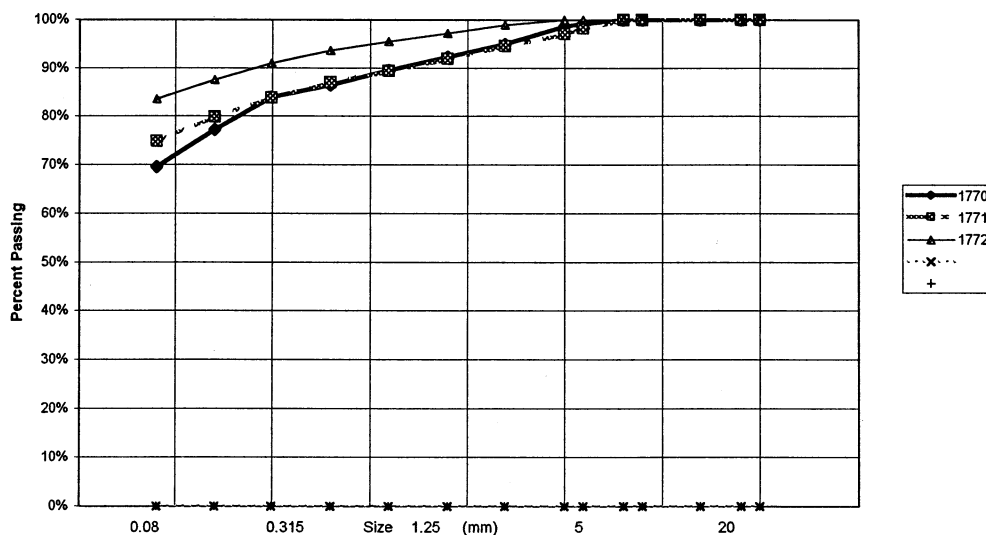
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1853
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1671+075 40M RT DATE COM 2000/08/25

FIELD No: 1770 LAB No: 2241 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1771 LAB No: 2242 DEPTH: 2.7-2.9 A AUGER	FIELD No: 1772 LAB No: 2243 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	99%	12.5	98%
10.0	99%	10.0	97%
5.0	95%	5.0	95%
2.5	92%	2.5	92%
1.25	90%	1.25	89%
0.630	87%	0.630	87%
0.315	84%	0.315	84%
0.160	77%	0.160	80%
0.080	70%	0.080	75%
M.C.(%): 15%	M.C.(%): 12%	M.C.(%): 15%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 5	% GRAVEL 5	% GRAVEL 1	
% SAND: 25	% SAND: 20	% SAND: 15	
% FINES: 70	% FINES: 75	% FINES: 84	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

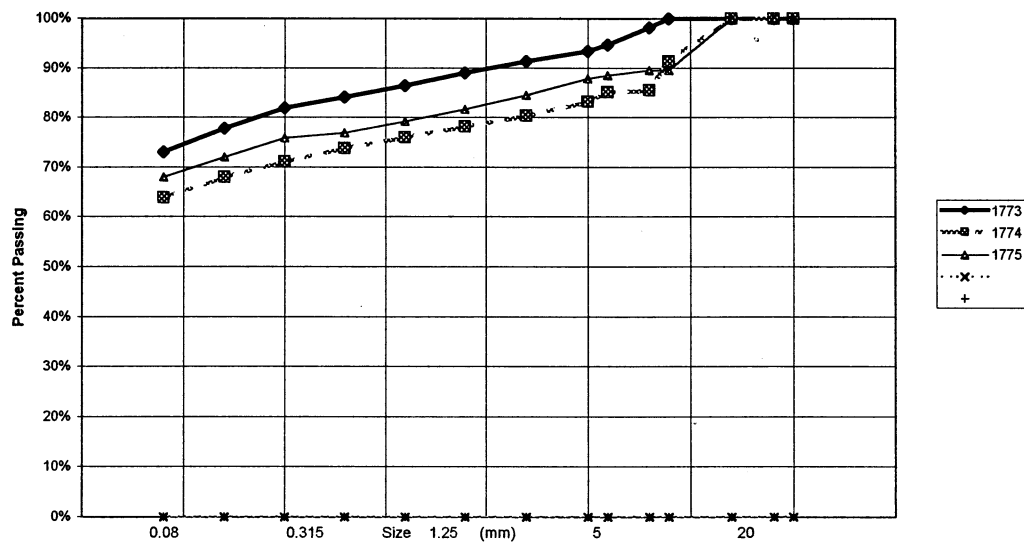
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



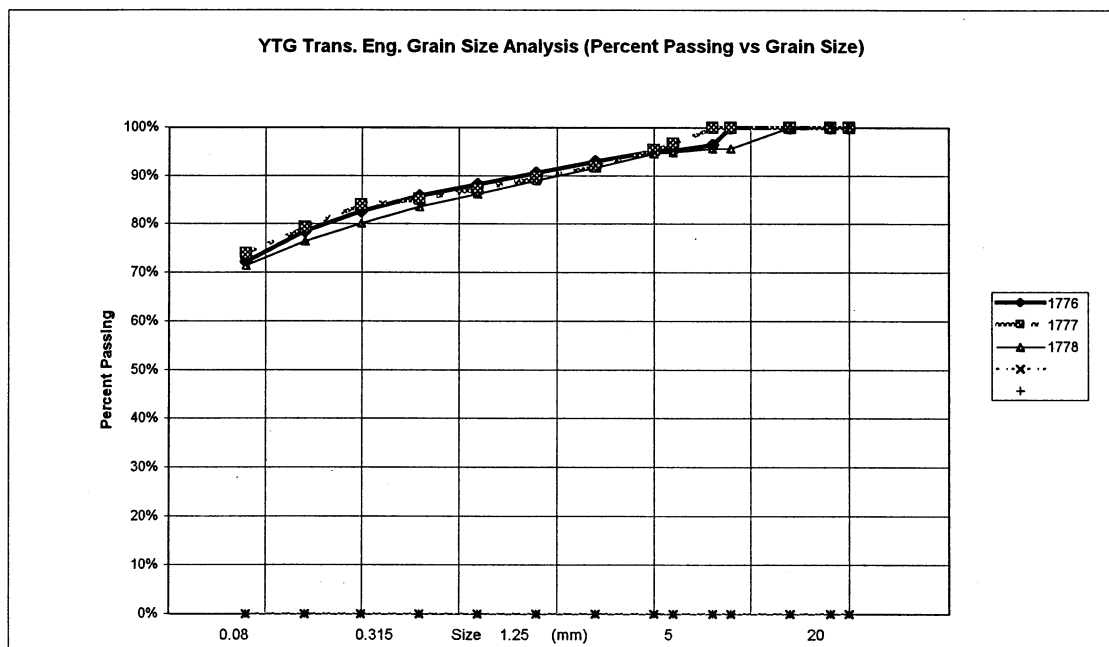
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1854
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1671+175 40M RT DATE COM 2000/08/25

FIELD No: 1773 LAB No: 2244 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1774 LAB No: 2245 DEPTH: 2.7-2.9 A AUGER	FIELD No: 1775 LAB No: 2246 DEPTH: 5.9-6.0 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	91%
20.0	98%	20.0	86%
12.5	95%	12.5	85%
10.0	93%	10.0	83%
5.0	91%	5.0	80%
2.5	89%	2.5	78%
1.25	86%	1.25	76%
0.630	84%	0.630	74%
0.315	82%	0.315	71%
0.160	78%	0.160	68%
0.080	73%	0.080	64%
M.C.(%): 15%	M.C.(%): 11%	M.C.(%): 11%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 9	% GRAVEL 20	% GRAVEL 16	
% SAND: 18	% SAND: 16	% SAND: 16	
% FINES: 73	% FINES: 64	% FINES: 68	
CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

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



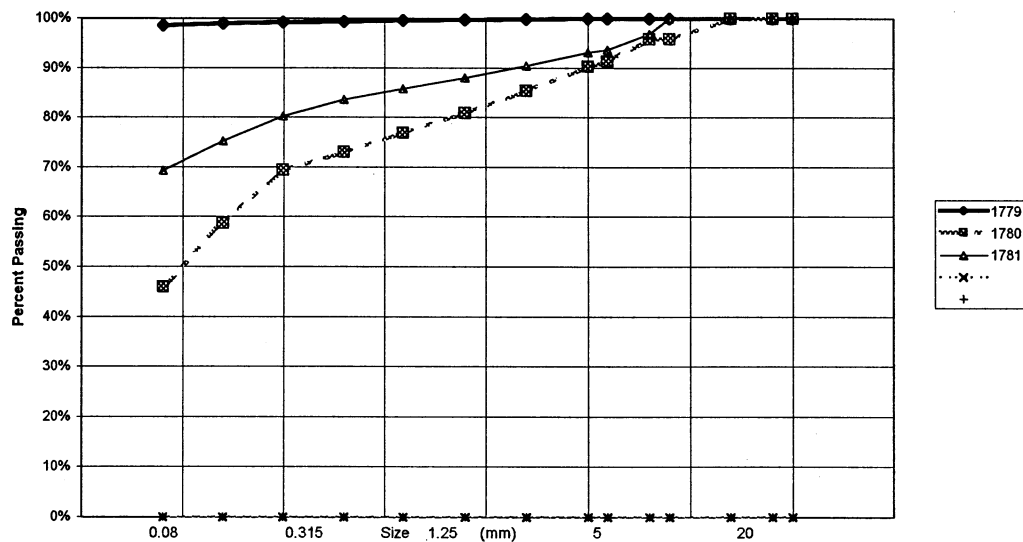
PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 572-1855			
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H					
DRILL UNIT: MOBILE B 30 L					
LOGGED BY: DOUG TRIM					
HOLE LOCATION: 1671+275 40M RT		DATE COM 2000/08/25			
=====		=====			
FIELD NO: 1776		FIELD No. 1777			
LAB NO: 2247		LAB No. 2248			
DEPTH: 1.3-1.5		DEPTH 2.7-2.9			
TYPE: AUGER		A AUGER			
=====		=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	96%
20.0	96%	20.0	100%	20.0	96%
12.5	95%	12.5	97%	12.5	95%
10.0	95%	10.0	95%	10.0	95%
5.0	93%	5.0	92%	5.0	92%
2.5	91%	2.5	90%	2.5	89%
1.25	88%	1.25	87%	1.25	86%
0.630	86%	0.630	85%	0.630	84%
0.315	83%	0.315	84%	0.315	80%
0.160	79%	0.160	79%	0.160	76%
0.080	72%	0.080	74%	0.080	71%
=====		=====		=====	
M.C.(%):	14%	M.C.(%):	12%	M.C.(%):	12%
=====		=====		=====	
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
=====		=====		=====	
% GRAVEL	7	% GRAVEL	8	% GRAVEL	8
% SAND:	21	% SAND:	18	% SAND:	20
% FINES:	72	% FINES:	74	% FINES:	71
=====		=====		=====	
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILT WITH SAND (ML)		SILT WITH SAND (ML)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1856
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1671+375 40M RT DATE COM 2000/08/25

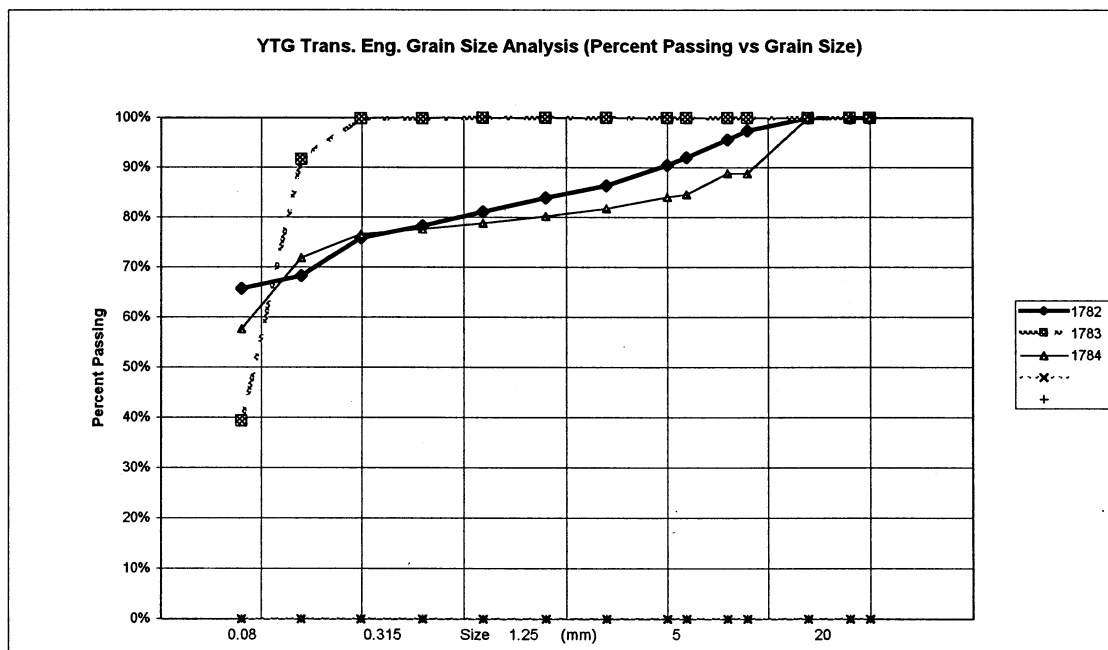
FIELD No: 1779 LAB No: 2250 DEPTH: 1.3-1.5 TYPE: AUGER		FIELD No: 1780 LAB No: 2251 DEPTH: 2.7-2.9 A AUGER		FIELD No: 1781 LAB No: 2252 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	96%	25.0	100%
20.0	100%	20.0	96%	20.0	97%
12.5	100%	12.5	91%	12.5	94%
10.0	100%	10.0	90%	10.0	93%
5.0	100%	5.0	85%	5.0	90%
2.5	100%	2.5	81%	2.5	88%
1.25	100%	1.25	77%	1.25	86%
0.630	99%	0.630	73%	0.630	84%
0.315	99%	0.315	69%	0.315	80%
0.160	99%	0.160	59%	0.160	75%
0.080	99%	0.080	46%	0.080	69%
M.C.(%): 29%		M.C.(%): 12%		M.C.(%): 13%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL 0		% GRAVEL 15		% GRAVEL 10	
% SAND: 1		% SAND: 39		% SAND: 21	
% FINES: 99		% FINES: 46		% FINES: 69	
CLASSIFICATION: SILT (ML)		CLASSIFICATION: SILTY SAND (SM)		CLASSIFICATION: SANDY SILT (ML)	

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



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1857
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1671+475 40M RT DATE COM 2000/08/25

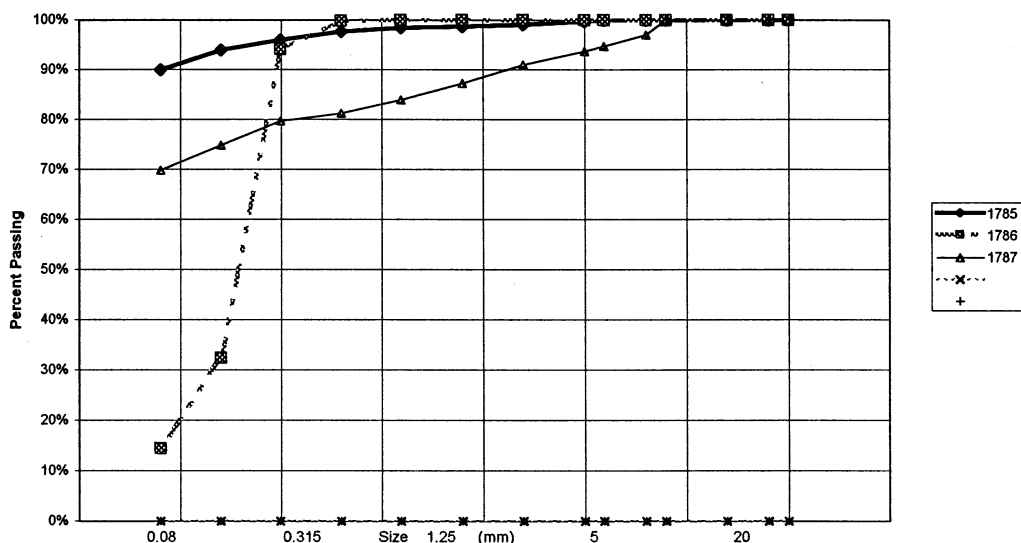
FIELD No: 1782 LAB No: 2253 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1783 LAB No: 2254 DEPTH: 2.7-2.9 A AUGER	FIELD No: 1784 LAB No: 2255 DEPTH: 4.4-4.6 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	97%	25.0	100%
20.0	96%	20.0	100%
12.5	92%	12.5	100%
10.0	91%	10.0	100%
5.0	86%	5.0	100%
2.5	84%	2.5	100%
1.25	81%	1.25	100%
0.630	78%	0.630	100%
0.315	76%	0.315	100%
0.160	68%	0.160	92%
0.080	66%	0.080	39%
M.C.(%): 17%	M.C.(%): 16%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 14	% GRAVEL 0	% GRAVEL 18	
% SAND: 21	% SAND: 61	% SAND: 24	
% FINES: 66	% FINES: 39	% FINES: 58	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	



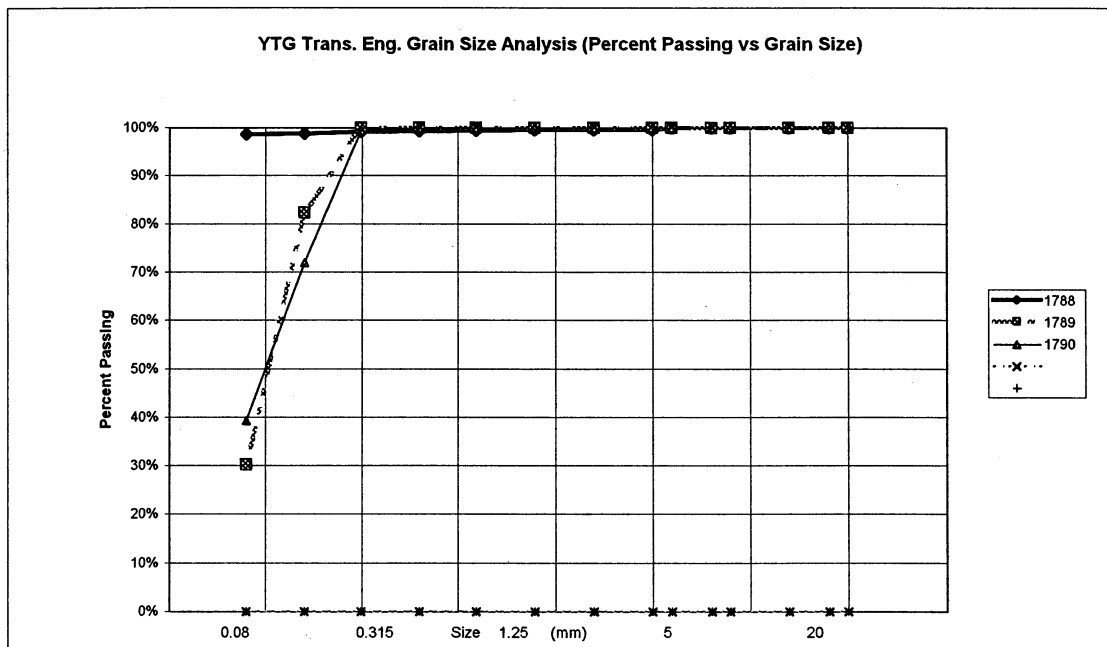
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 572-1858
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: BEAR CREEK SUMMIT KM 1655 A/H
 DRILL UNIT: MOBILE B 30 L
 LOGGED BY: DOUG TRIM
 HOLE LOCATION: 1671+575 RT DATE COM 2000/08/25

FIELD No: 1785 LAB No: 2256 DEPTH: 1.4-1.6 TYPE: AUGER	FIELD No: 1786 LAB No: 2257 DEPTH: 2.8-3.0 AUGER	FIELD No: 1787 LAB No: 2258 DEPTH: 4.4-4.6 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	97%
12.5	100%	12.5	95%
10.0	100%	10.0	94%
5.0	99%	5.0	91%
2.5	99%	2.5	87%
1.25	98%	1.25	84%
0.630	98%	0.630	81%
0.315	96%	0.315	80%
0.160	94%	0.160	75%
0.080	90%	0.080	70%
M.C.(%): 22%	M.C.(%): 16%	M.C.(%): 17%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 1	% GRAVEL 0	% GRAVEL 9	
% SAND: 9	% SAND: 85	% SAND: 21	
% FINES: 90	% FINES: 15	% FINES: 70	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: SANDY SILT (ML)	

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



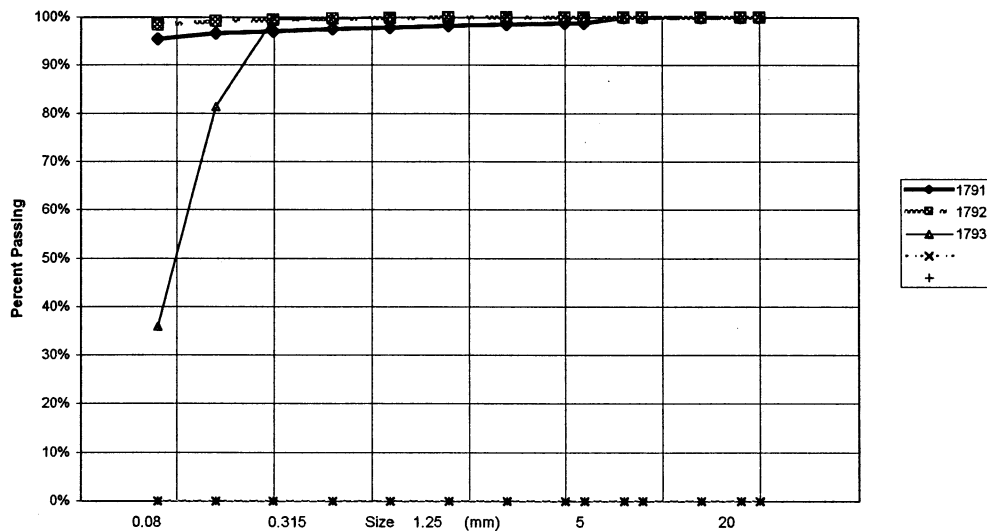
PROJECT NUMBER: 092-202101-0363-1			HOLE No.: 573-1859		
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: JARVIS CREEK NORTH					
DRILL UNIT: MOBILE B 40 L					
LOGGED BY: Doug Trim			DATE COM 2000/08/28		
HOLE LOCATION: 1671+625 15M RT					
=====		=====		=====	
FIELD NO: 1788		FIELD No. 1789		FIELD No: 1790	
LAB NO: 2292		LAB No. 2293		LAB No: 2294	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	100%
10.0	100%	10.0	100%	10.0	100%
5.0	100%	5.0	100%	5.0	100%
2.5	100%	2.5	100%	2.5	100%
1.25	100%	1.25	100%	1.25	100%
0.630	99%	0.630	100%	0.630	100%
0.315	99%	0.315	100%	0.315	99%
0.160	99%	0.160	82%	0.160	72%
0.080	99%	0.080	30%	0.080	39%
M.C.(%): 23%		M.C.(%): 7%		M.C.(%): 13%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL 0		% GRAVEL 0		% GRAVEL 0	
% SAND: 1		% SAND: 70		% SAND: 61	
% FINES: 99		% FINES: 30		% FINES: 39	
CLASSIFICATION: SILT (ML)		CLASSIFICATION: SILTY SAND (SM)		CLASSIFICATION: SILTY SAND (SM)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1860
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1671+725 40M RT DATE COM 2000/08/28

FIELD No: 1791 LAB No: 2295 DEPTH: 1.3-1.5 TYPE: AUGER		FIELD No: 1792 LAB No: 2296 DEPTH: 2.8-3.0 A AUGER		FIELD No: 1793 LAB No: 2297 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	99%	12.5	100%	12.5	100%
10.0	99%	10.0	100%	10.0	100%
5.0	99%	5.0	100%	5.0	100%
2.5	98%	2.5	100%	2.5	100%
1.25	98%	1.25	100%	1.25	100%
0.630	98%	0.630	100%	0.630	100%
0.315	97%	0.315	99%	0.315	100%
0.160	97%	0.160	99%	0.160	81%
0.080	95%	0.080	98%	0.080	36%
M.C.(%): 24%		M.C.(%): 25%		M.C.(%): 10%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL 1		% GRAVEL 0		% GRAVEL 0	
% SAND: 3		% SAND: 2		% SAND: 64	
% FINES: 95		% FINES: 98		% FINES: 36	
CLASSIFICATION: SILT (ML)		CLASSIFICATION: SILT (ML)		CLASSIFICATION: SILTY SAND (SM)	

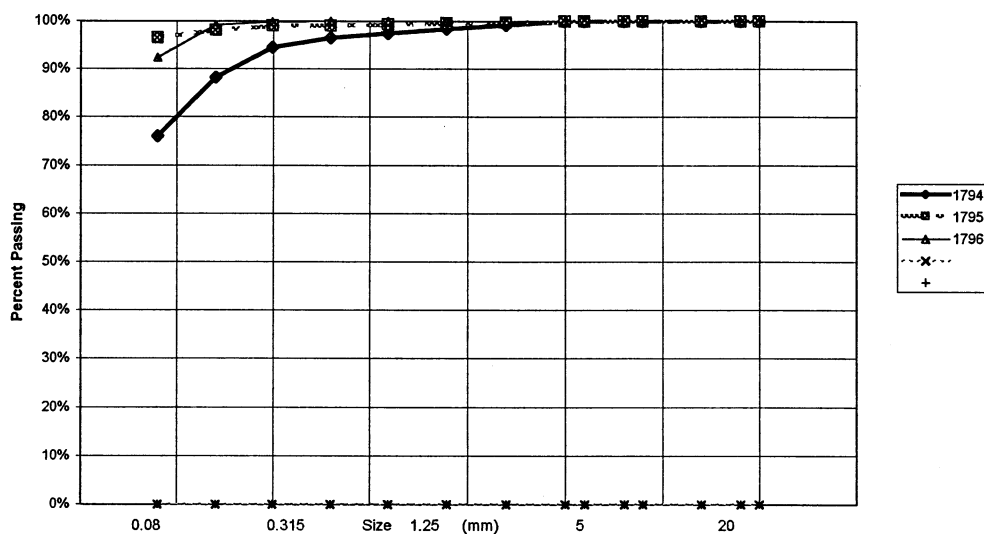
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1861
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1671+825 40M RT DATE COM 2000/08/28

FIELD No: 1794 LAB No: 2298 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1795 LAB No: 2299 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1796 LAB No: 2300 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	100%
10.0	100%	10.0	100%
5.0	99%	5.0	100%
2.5	98%	2.5	100%
1.25	98%	1.25	99%
0.630	97%	0.630	99%
0.315	95%	0.315	99%
0.160	88%	0.160	98%
0.080	76%	0.080	97%
M.C.(%): 19%	M.C.(%): 39%	M.C.(%): 25%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 1	% GRAVEL 0	% GRAVEL 0	
% SAND: 23	% SAND: 3	% SAND: 8	
% FINES: 76	% FINES: 97	% FINES: 92	
CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILT (ML)	

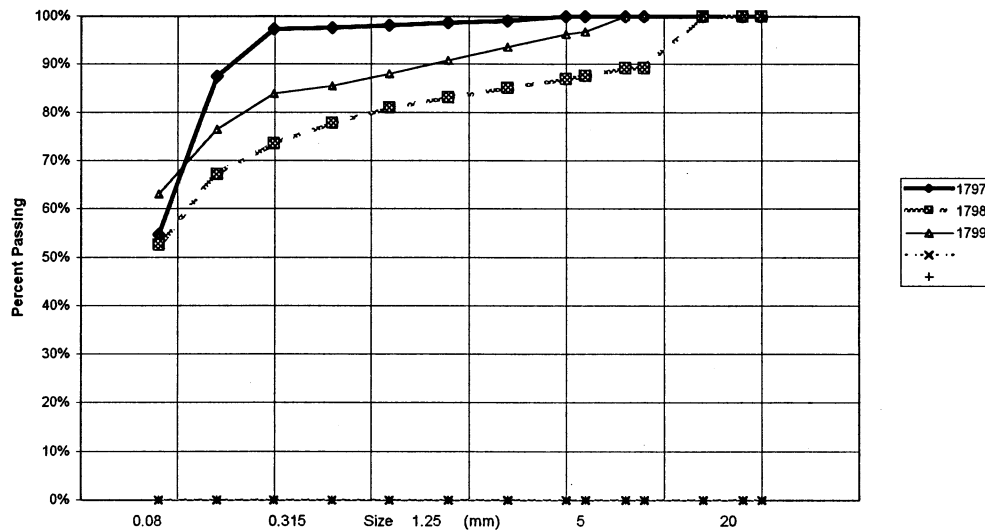
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1862
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1671+925 40M RT DATE COM 2000/08/28

FIELD NO: 1797 LAB NO: 2301 DEPTH: 1.3-1.5 TYPE: AUGER		FIELD No. 1798 LAB No. 2302 DEPTH: 2.8-3.0 A AUGER		FIELD No: 1799 LAB No: 2303 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	89%	25.0	100%
20.0	100%	20.0	89%	20.0	100%
12.5	100%	12.5	88%	12.5	97%
10.0	100%	10.0	87%	10.0	96%
5.0	99%	5.0	85%	5.0	94%
2.5	99%	2.5	83%	2.5	91%
1.25	98%	1.25	81%	1.25	88%
0.630	98%	0.630	78%	0.630	86%
0.315	97%	0.315	74%	0.315	84%
0.160	88%	0.160	67%	0.160	76%
0.080	55%	0.080	53%	0.080	63%
M.C.(%)	12%	M.C.(%)	13%	M.C.(%)	13%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	1	% GRAVEL	15	% GRAVEL	6
% SAND:	44	% SAND:	33	% SAND:	31
% FINES:	55	% FINES:	53	% FINES:	63
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SANDY SILT (ML)		SANDY SILT (ML)	

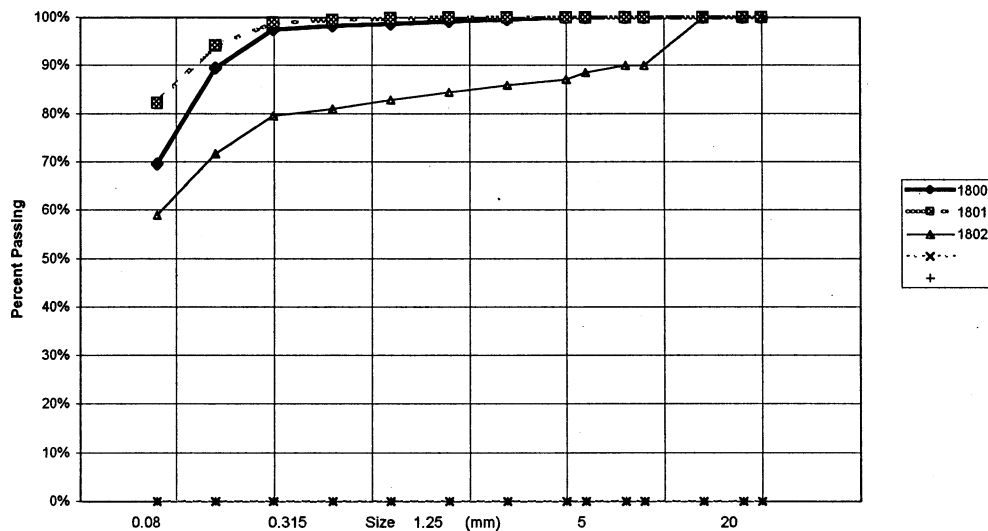
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



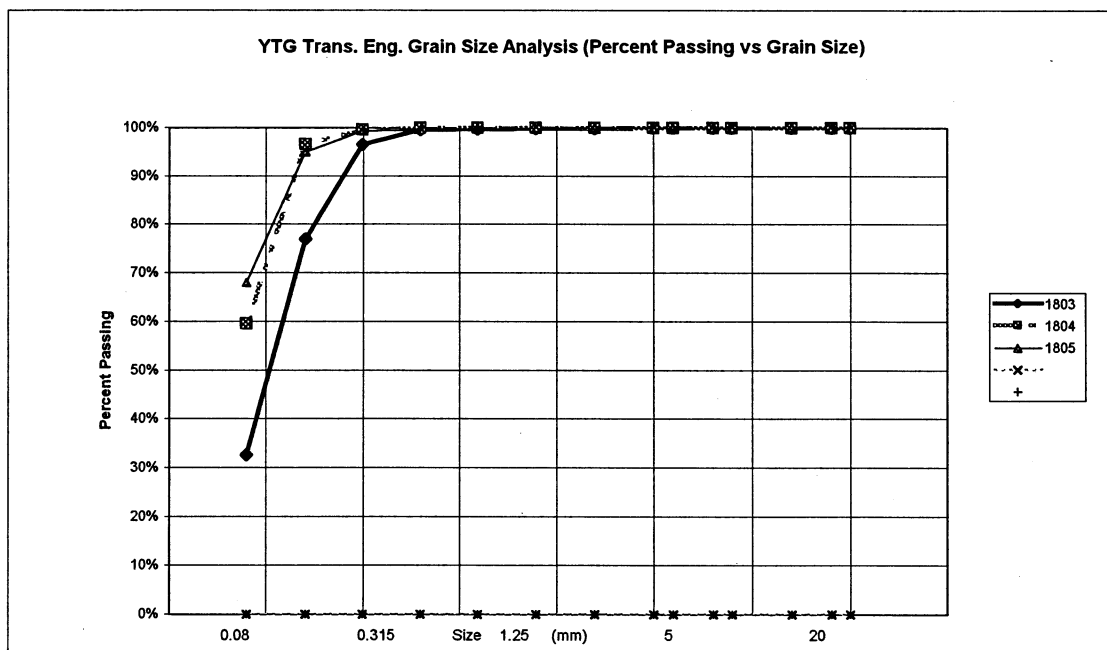
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1863
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1672+025 40M RT DATE COM 2000/08/28

FIELD No: 1800 LAB No: 2304 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1801 LAB No: 2305 DEPTH: 2.8-3.0 TYPE: AUGER	FIELD No: 1802 LAB No: 2306 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	100%
10.0	100%	10.0	100%
5.0	100%	5.0	100%
2.5	99%	2.5	100%
1.25	99%	1.25	100%
0.630	98%	0.630	99%
0.315	97%	0.315	99%
0.160	90%	0.160	94%
0.080	70%	0.080	82%
M.C.(%): 13%	M.C.(%): 14%	M.C.(%): 12%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 0	% GRAVEL 14	
% SAND: 30	% SAND: 18	% SAND: 27	
% FINES: 70	% FINES: 82	% FINES: 59	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT (ML)	

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



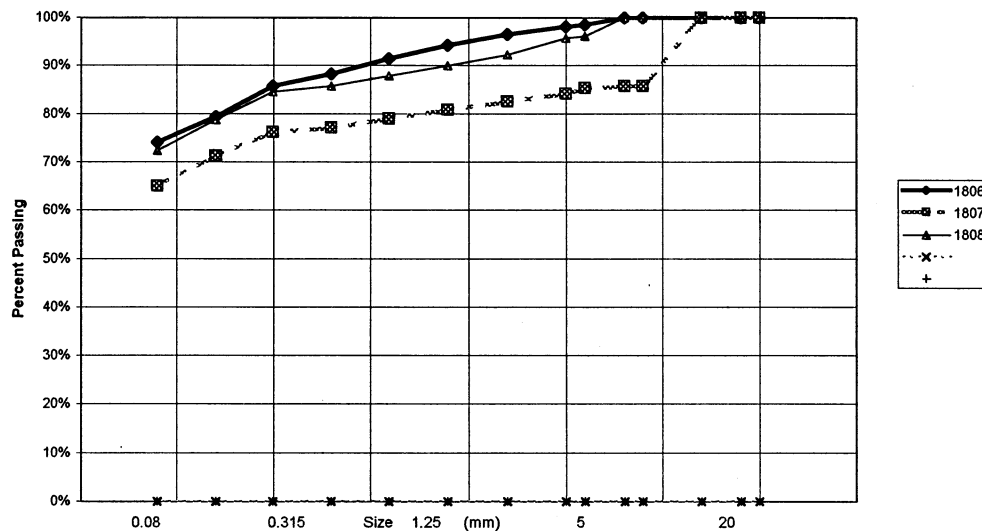
PROJECT NUMBER: 092-202101-0363-1			HOLE No.: 573-1864		
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: JARVIS CREEK NORTH					
DRILL UNIT: MOBILE B 40 L					
LOGGED BY: Doug Trim					
HOLE LOCATION: 1672+125 40M RT			DATE COM 2000/08/28		
=====		=====		=====	
FIELD No: 1803		FIELD No: 1804		FIELD No: 1805	
LAB No: 2307		LAB No: 2308		LAB No: 2309	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		AUGER		AUGER	
=====		=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	100%	12.5	100%
10.0	100%	10.0	100%	10.0	100%
5.0	100%	5.0	100%	5.0	100%
2.5	100%	2.5	100%	2.5	100%
1.25	100%	1.25	100%	1.25	100%
0.630	100%	0.630	100%	0.630	100%
0.315	97%	0.315	100%	0.315	99%
0.160	77%	0.160	97%	0.160	95%
0.080	33%	0.080	60%	0.080	68%
M.C.(%):	7%	M.C.(%):	7%	M.C.(%):	8%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	0	% GRAVEL	0	% GRAVEL	0
% SAND:	67	% SAND:	40	% SAND:	32
% FINES:	33	% FINES:	60	% FINES:	68
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		SANDY SILT (ML)		SANDY SILT (ML)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1865
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1672+225 40M RT DATE COM 2000/08/28

FIELD NO: 1806 LAB NO: 2310 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No. 1807 LAB No. 2311 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1808 LAB No: 2312 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	99%	12.5	85%
10.0	98%	10.0	84%
5.0	97%	5.0	83%
2.5	94%	2.5	81%
1.25	91%	1.25	79%
0.630	88%	0.630	77%
0.315	86%	0.315	76%
0.160	79%	0.160	71%
0.080	74%	0.080	65%
M.C.(%): 15%	M.C.(%): 12%	M.C.(%): 11%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 3	% GRAVEL 17	% GRAVEL 8	
% SAND: 23	% SAND: 18	% SAND: 20	
% FINES: 74	% FINES: 65	% FINES: 72	
CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

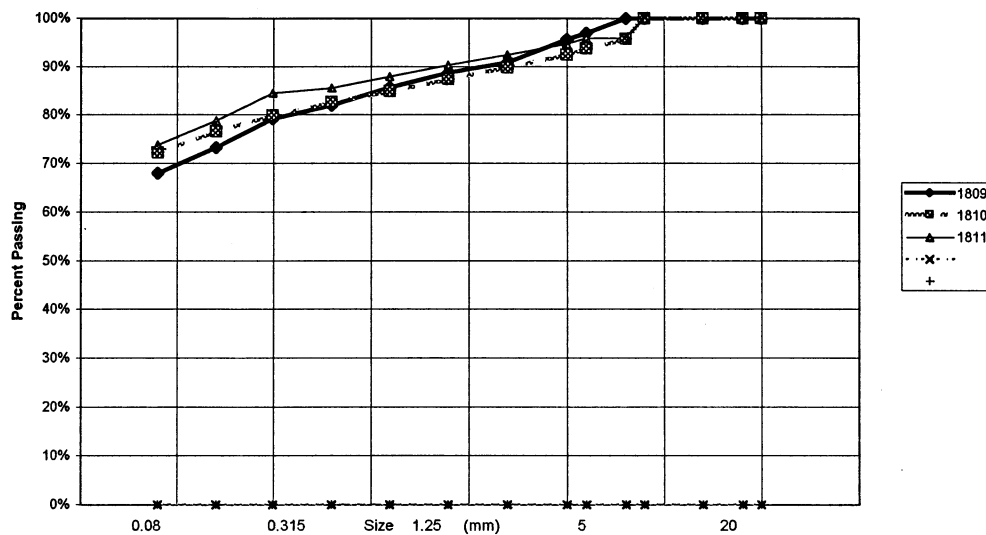
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1866
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1672+325 35M RT DATE COM 2000/08/28

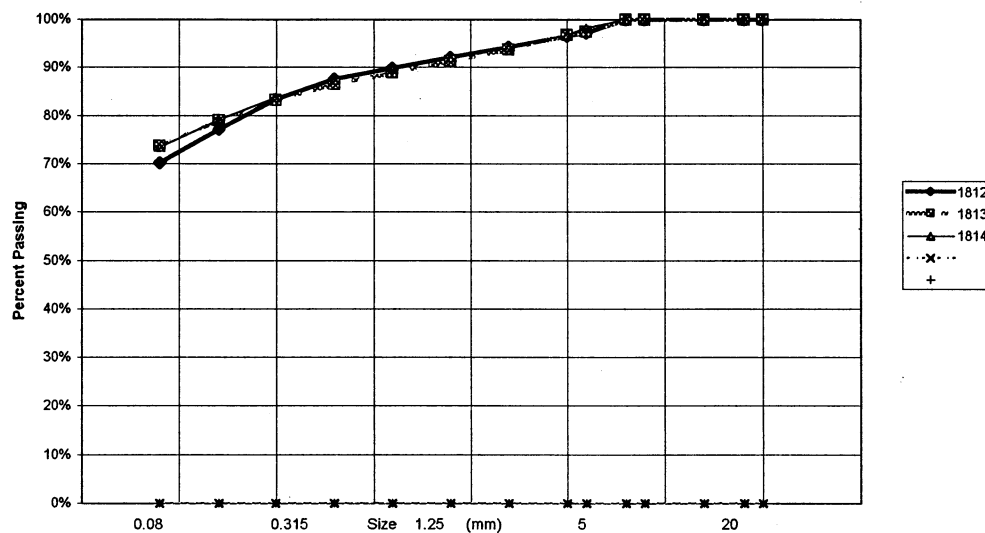
FIELD NO: 1809 LAB NO: 2313 DEPTH: 1.3-1.5 TYPE: AUGER		FIELD No. 1810 LAB No. 2314 DEPTH: 2.8-3.0 A AUGER		FIELD No: 1811 LAB No: 2315 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	96%	20.0	96%
12.5	97%	12.5	94%	12.5	96%
10.0	96%	10.0	92%	10.0	95%
5.0	91%	5.0	90%	5.0	93%
2.5	89%	2.5	87%	2.5	90%
1.25	86%	1.25	85%	1.25	88%
0.630	82%	0.630	83%	0.630	86%
0.315	79%	0.315	80%	0.315	85%
0.160	73%	0.160	77%	0.160	79%
0.080	68%	0.080	72%	0.080	74%
M.C.(%): 17%		M.C.(%): 15%		M.C.(%): 15%	
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	9	% GRAVEL	10	% GRAVEL	7
% SAND:	23	% SAND:	18	% SAND:	19
% FINES:	68	% FINES:	72	% FINES:	74
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: SILT WITH SAND (ML)		CLASSIFICATION: SILT WITH SAND (ML)	

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



PROJECT NUMBER: 092-202101-0363-1				HOLE No.: 573-1867	
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: JARVIS CREEK NORTH					
DRILL UNIT: MOBILE B 40 L					
LOGGED BY: Doug Trim					
HOLE LOCATION: 1672+425 40M RT				DATE COM 2000/08/28	
=====					
FIELD NO: 1812		FIELD No. 1813		FIELD No: 1814	
LAB NO: 2316		LAB No. 2317		LAB No: 2318	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		TYPE: AUGER	
=====					
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	97%	12.5	97%	12.5	98%
10.0	97%	10.0	97%	10.0	97%
5.0	94%	5.0	94%	5.0	94%
2.5	92%	2.5	91%	2.5	92%
1.25	90%	1.25	89%	1.25	90%
0.630	88%	0.630	87%	0.630	87%
0.315	83%	0.315	83%	0.315	84%
0.160	77%	0.160	79%	0.160	79%
0.080	70%	0.080	74%	0.080	73%
=====					
M.C.(%):	16%	M.C.(%):	15%	M.C.(%):	15%
=====					
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
=====					
% GRAVEL	6	% GRAVEL	6	% GRAVEL	6
% SAND:	24	% SAND:	20	% SAND:	21
% FINES:	70	% FINES:	74	% FINES:	73
=====					
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILT WITH SAND (ML)		SILT WITH SAND (ML)	

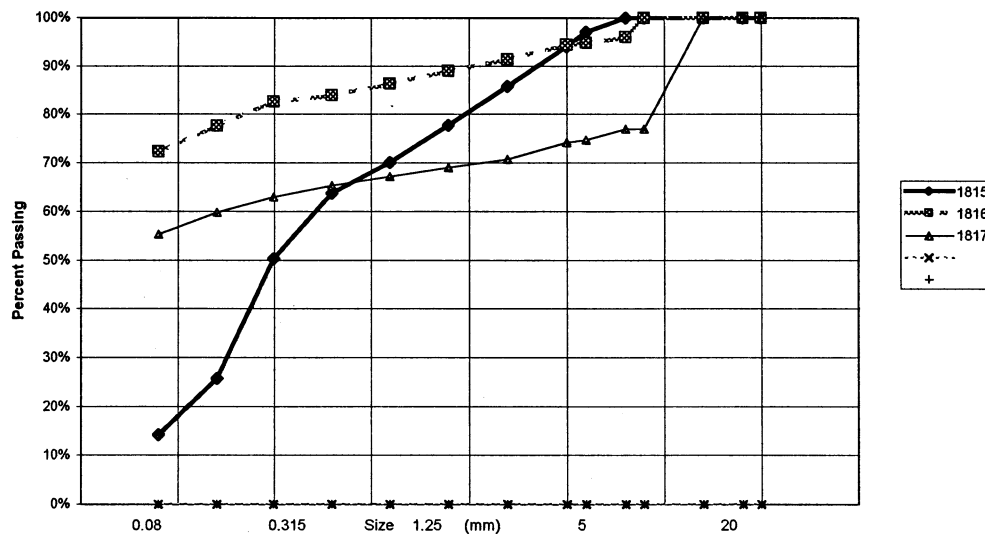
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



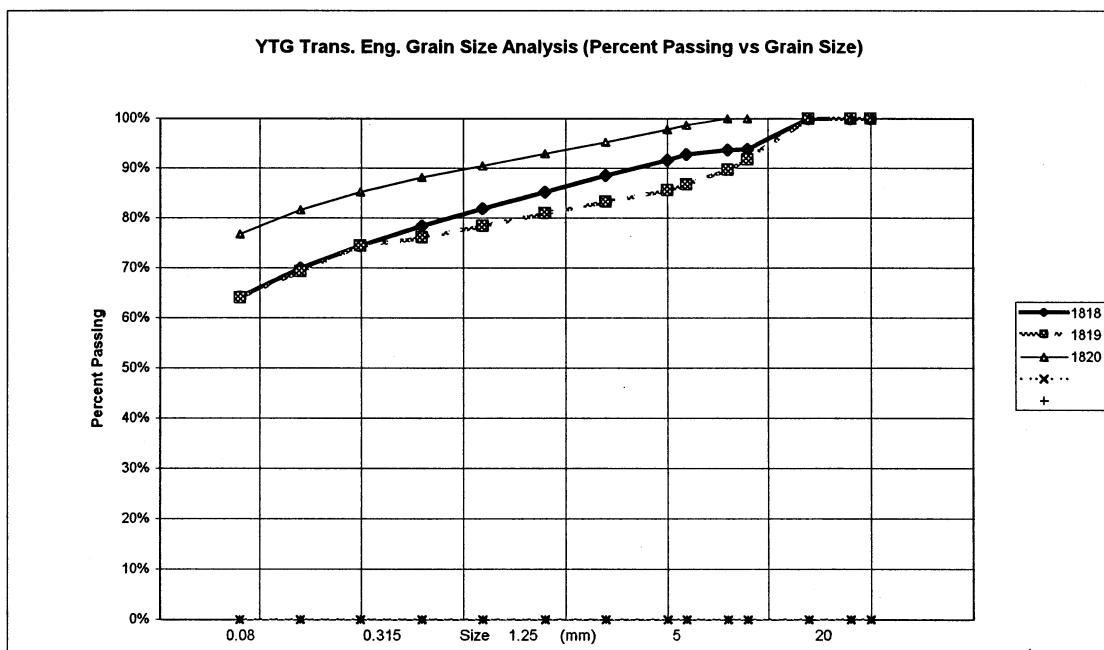
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1868
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1672+525 40M RT DATE COM 2000/08/28

FIELD NO: 1815		FIELD No: 1816		FIELD No: 1817	
LAB NO: 2319		LAB No: 2320		LAB No: 2321	
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	77%
20.0	100%	20.0	96%	20.0	77%
12.5	97%	12.5	95%	12.5	75%
10.0	94%	10.0	94%	10.0	74%
5.0	86%	5.0	91%	5.0	71%
2.5	78%	2.5	89%	2.5	69%
1.25	70%	1.25	86%	1.25	67%
0.630	64%	0.630	84%	0.630	65%
0.315	50%	0.315	83%	0.315	63%
0.160	26%	0.160	78%	0.160	60%
0.080	14%	0.080	72%	0.080	55%
M.C.(%): 14%		M.C.(%): 18%		M.C.(%): 12%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL 14		% GRAVEL 9		% GRAVEL 29	
% SAND: 72		% SAND: 19		% SAND: 16	
% FINES: 14		% FINES: 72		% FINES: 55	
CLASSIFICATION: SILTY SAND (SM)		CLASSIFICATION: SILT WITH SAND (ML)		CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	

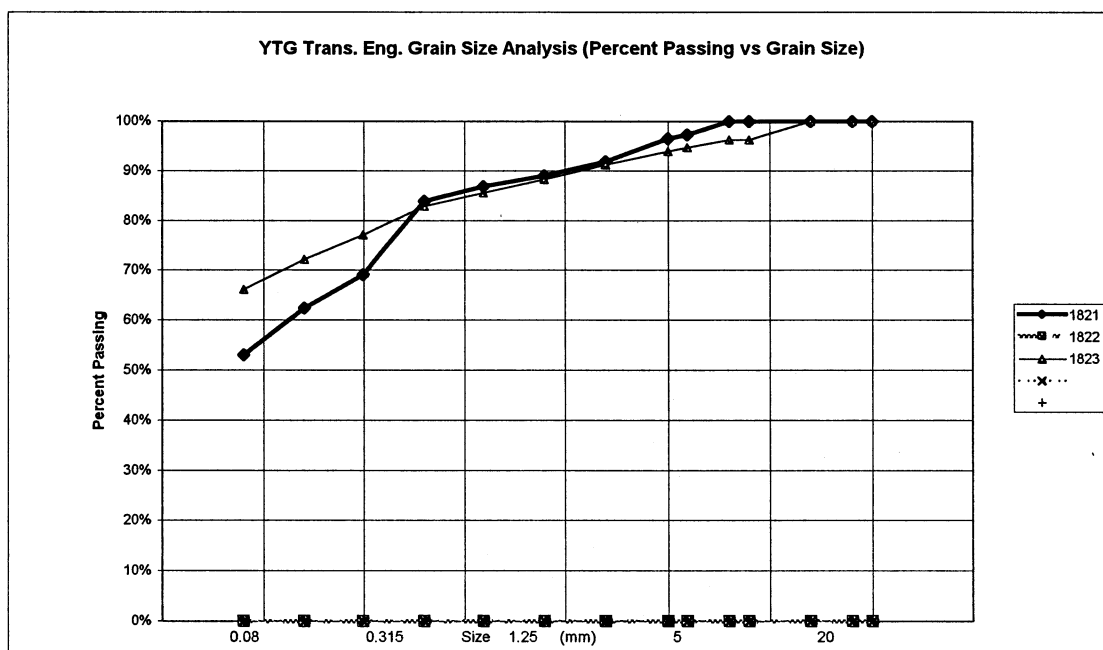
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 573-1869	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: JARVIS CREEK NORTH			
DRILL UNIT: MOBILE B 40 L			
LOGGED BY: Doug Trim		DATE COM 2000/08/28	
HOLE LOCATION: 1672+625 40M RT			
=====		=====	
FIELD NO: 1818	FIELD No. 1819	FIELD No: 1820	
LAB NO: 2322	LAB No. 2323	LAB No: 2324	
DEPTH: 1.3-1.5	DEPTH 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	A AUGER	TYPE: AUGER	
=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	94%	25.0	100%
20.0	94%	20.0	100%
12.5	93%	12.5	99%
10.0	92%	10.0	98%
5.0	89%	5.0	95%
2.5	85%	2.5	93%
1.25	82%	1.25	91%
0.630	78%	0.630	88%
0.315	74%	0.315	85%
0.160	70%	0.160	82%
0.080	64%	0.080	77%
=====		=====	
M.C.(%): 18%	M.C.(%): 15%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
=====		=====	
% GRAVEL 11	% GRAVEL 17	% GRAVEL 5	
% SAND: 24	% SAND: 19	% SAND: 18	
% FINES: 64	% FINES: 64	% FINES: 77	
=====		=====	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SILT WITH SAND (ML)	

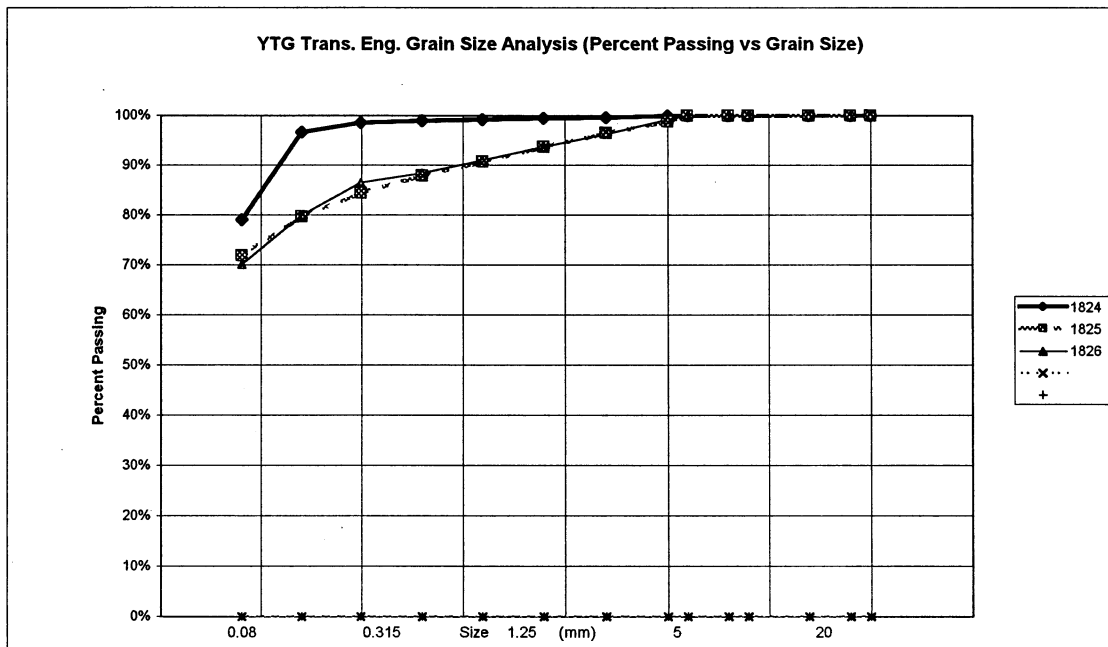


PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 573-1870	
CLIENT: ENGINEERING-CAPITAL			
PROJECT NAME: SHAKWAK SEG 9			
PROJECT LOCATION: JARVIS CREEK NORTH			
DRILL UNIT: MOBILE B 40 L			
LOGGED BY: Doug Trim		DATE COM 2000/08/28	
HOLE LOCATION: 1672+725 40M RT			
=====		=====	
FIELD NO: 1821	FIELD No: 1822	FIELD No: 1823	
LAB NO: 2325	LAB No: lost	LAB No: 2327	
DEPTH: 1.3-1.5	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	A AUGER	TYPE: AUGER	
=====		=====	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	96%
20.0	100%	20.0	96%
12.5	97%	12.5	95%
10.0	97%	10.0	94%
5.0	92%	5.0	91%
2.5	89%	2.5	88%
1.25	87%	1.25	86%
0.630	84%	0.630	83%
0.315	69%	0.315	77%
0.160	62%	0.160	72%
0.080	53%	0.080	66%
=====		=====	
M.C.(%): 15%	M.C.(%): 13%	M.C.(%): 15%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
=====		=====	
% GRAVEL 8	% GRAVEL #VALUE!	% GRAVEL 9	
% SAND: 39	% SAND: #VALUE!	% SAND: 25	
% FINES: 53	% FINES: #VALUE!	% FINES: 66	
=====		=====	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: #VALUE!	CLASSIFICATION: SANDY SILT (ML)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1871
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1672+825 40m rt DATE COM 2000/08/28

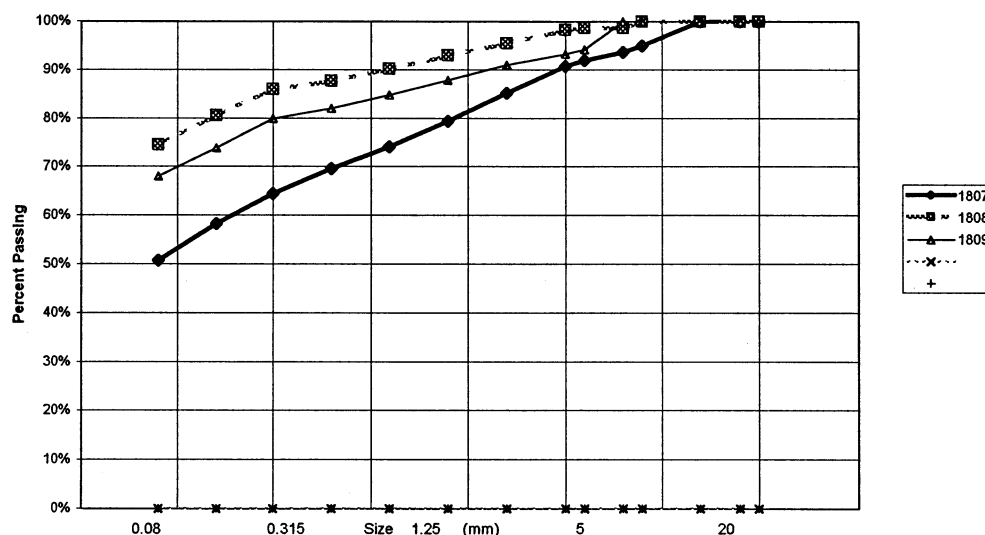
FIELD NO: 1824	FIELD No: 1825	FIELD No: 1826	
LAB NO: 2328	LAB No: 2329	LAB No: 2330	
DEPTH: 1.1-1.3	DEPTH: 2.8-3.0	DEPTH: 4.3-4.5	
TYPE: AUGER	A AUGER	TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	100%
10.0	100%	10.0	99%
5.0	100%	5.0	97%
2.5	99%	2.5	94%
1.25	99%	1.25	91%
0.630	99%	0.630	88%
0.315	99%	0.315	87%
0.160	97%	0.160	80%
0.080	79%	0.080	70%
M.C.(%): 18%	M.C.(%): 15%	M.C.(%): 15%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 3	% GRAVEL 4	
% SAND: 20	% SAND: 25	% SAND: 26	
% FINES: 79	% FINES: 72	% FINES: 70	
CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SILT WITH SAND (ML)	



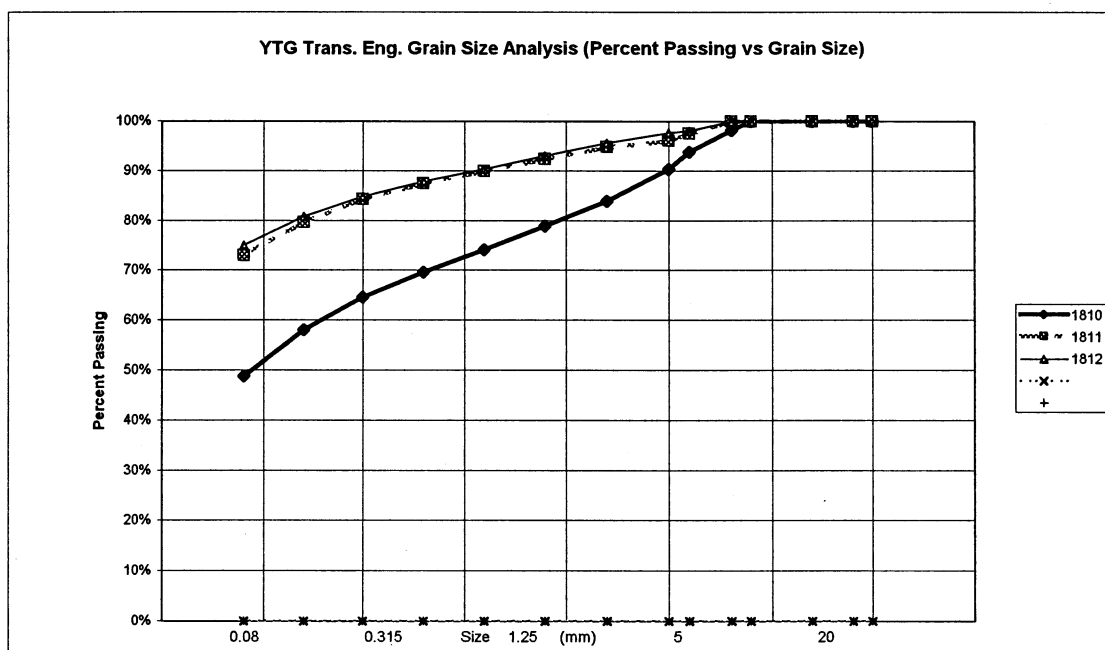
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1872
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1672+900 30M LT DATE COM 2000/08/29

FIELD No: 1807 LAB No: 2331 DEPTH: 1.3-1.5 TYPE: AUGER		FIELD No: 1808 LAB No: 2332 DEPTH: 2.8-3.0 A AUGER		FIELD No: 1809 LAB No: 2333 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	95%	25.0	100%	25.0	100%
20.0	94%	20.0	99%	20.0	100%
12.5	92%	12.5	99%	12.5	94%
10.0	91%	10.0	98%	10.0	93%
5.0	85%	5.0	96%	5.0	91%
2.5	79%	2.5	93%	2.5	88%
1.25	74%	1.25	90%	1.25	85%
0.630	70%	0.630	88%	0.630	82%
0.315	65%	0.315	86%	0.315	80%
0.160	58%	0.160	81%	0.160	74%
0.080	51%	0.080	75%	0.080	68%
M.C.(%): 13%		M.C.(%): 15%		M.C.(%): 15%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL 15		% GRAVEL 4		% GRAVEL 9	
% SAND: 34		% SAND: 21		% SAND: 23	
% FINES: 51		% FINES: 75		% FINES: 68	
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: SILT WITH SAND (ML)		CLASSIFICATION: SANDY SILT (ML)	

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



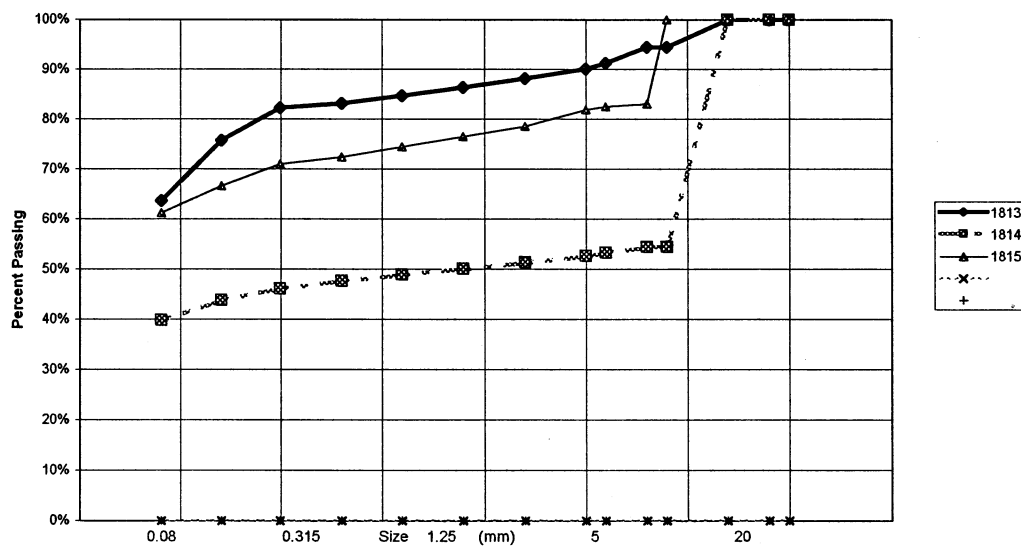
PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 573-1873			
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: JARVIS CREEK NORTH					
DRILL UNIT: MOBILE B 40 L					
LOGGED BY: Doug Trim		DATE COM 2000/08/29			
HOLE LOCATION: 1673+000 25m It					
FIELD NO: 1810		FIELD No: 1811			
LAB NO: 2334		LAB No: 2335			
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0			
TYPE: AUGER		TYPE: AUGER			
FIELD NO: 1812					
LAB NO: 2336					
DEPTH: 4.3-4.5					
TYPE: AUGER					
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	98%	20.0	100%	20.0	100%
12.5	94%	12.5	98%	12.5	98%
10.0	90%	10.0	96%	10.0	98%
5.0	84%	5.0	95%	5.0	96%
2.5	79%	2.5	92%	2.5	93%
1.25	74%	1.25	90%	1.25	90%
0.630	70%	0.630	88%	0.630	88%
0.315	65%	0.315	84%	0.315	85%
0.160	58%	0.160	80%	0.160	81%
0.080	49%	0.080	73%	0.080	75%
M.C.(%): 18%		M.C.(%): 16%		M.C.(%): 14%	
LIMITS		LIMITS		LIMITS	
LIQUID: 0.0		LIQUID: 0.0		LIQUID: 0.0	
PLASTIC: 0.0		PLASTIC: 0.0		PLASTIC: 0.0	
P.I.: 0.0		P.I.: 0.0		P.I.: 0.0	
% GRAVEL 16		% GRAVEL 5		% GRAVEL 4	
% SAND: 35		% SAND: 22		% SAND: 21	
% FINES: 49		% FINES: 73		% FINES: 75	
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILT WITH SAND (ML)		CLASSIFICATION: SILT WITH SAND (ML)	



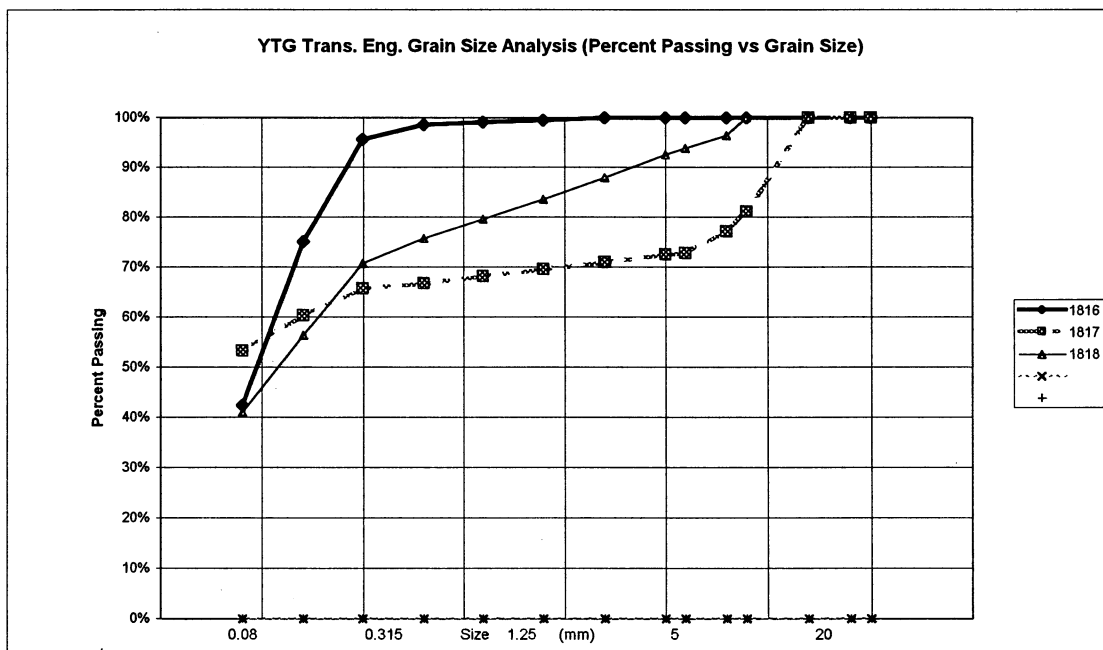
PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1874
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1673+10025M LT DATE COM 2000/08/29

FIELD NO: 1813 LAB NO: 2337 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1814 LAB No: 2338 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1815 LAB No: 2339 DEPTH: 4.3-4.5 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	100%
20.0	95%	20.0	83%
12.5	91%	12.5	83%
10.0	90%	10.0	82%
5.0	88%	5.0	79%
2.5	86%	2.5	77%
1.25	85%	1.25	74%
0.630	83%	0.630	72%
0.315	82%	0.315	71%
0.160	76%	0.160	67%
0.080	64%	0.080	61%
M.C.(%): 17%	M.C.(%): 11%	M.C.(%): 13%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 12	% GRAVEL 49	% GRAVEL 21	
% SAND: 25	% SAND: 12	% SAND: 17	
% FINES: 64	% FINES: 40	% FINES: 61	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SILTY GRAVEL (GM)	CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)	

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

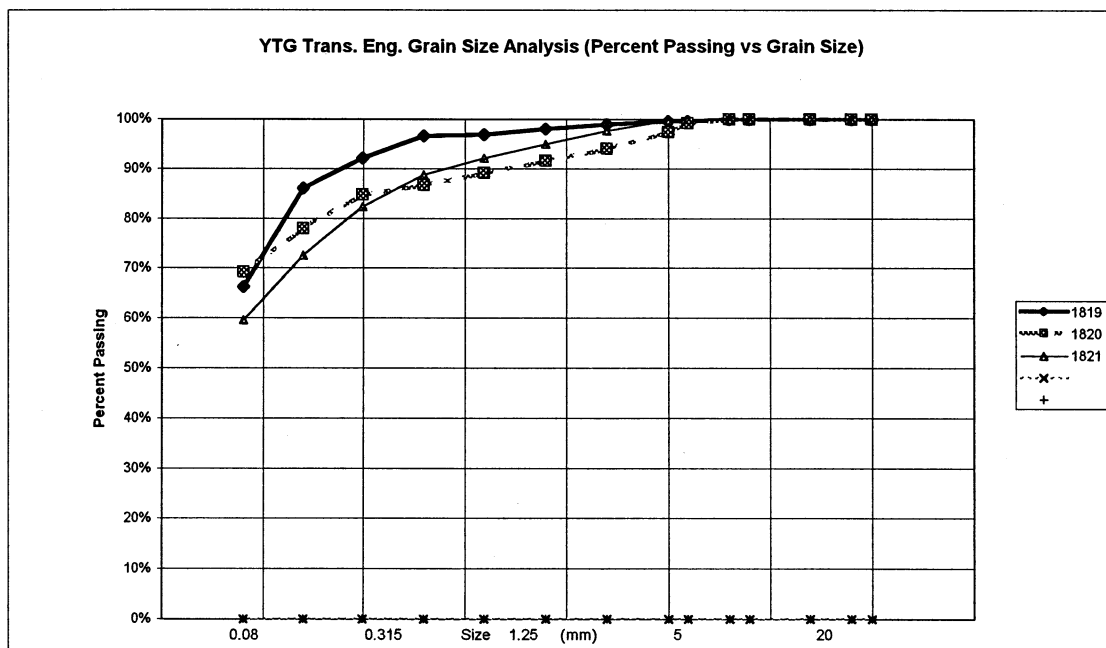


PROJECT NUMBER: 092-202101-0363-1		HOLE No.: 573-1875			
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: JARVIS CREEK NORTH					
DRILL UNIT: MOBILE B 40 L					
LOGGED BY: Doug Trim		DATE COM 2000/08/29			
HOLE LOCATION: 1673+130 15M LT					
FIELD NO: 1816		FIELD No: 1817			
LAB NO: 2340		LAB No: 2341			
DEPTH: 1.3-1.5		DEPTH: 2.8-3.0			
TYPE: AUGER		A AUGER			
FIELD No: 1818					
LAB No: 2342					
DEPTH: 4.3-4.5					
TYPE: AUGER					
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	81%	25.0	100%
20.0	100%	20.0	77%	20.0	96%
12.5	100%	12.5	73%	12.5	94%
10.0	100%	10.0	73%	10.0	93%
5.0	100%	5.0	71%	5.0	88%
2.5	99%	2.5	70%	2.5	84%
1.25	99%	1.25	68%	1.25	80%
0.630	99%	0.630	67%	0.630	76%
0.315	96%	0.315	66%	0.315	71%
0.160	75%	0.160	60%	0.160	56%
0.080	42%	0.080	53%	0.080	41%
M.C.(%):	18%	M.C.(%):	18%	M.C.(%):	16%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL	0	% GRAVEL	29	% GRAVEL	12
% SAND:	58	% SAND:	18	% SAND:	47
% FINES:	42	% FINES:	53	% FINES:	41
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND (SM)		GRAVELLY SILT WITH SAND (ML)		SILTY SAND (SM)	



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1876
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1673+275 25M LT DATE COM 2000/08/29

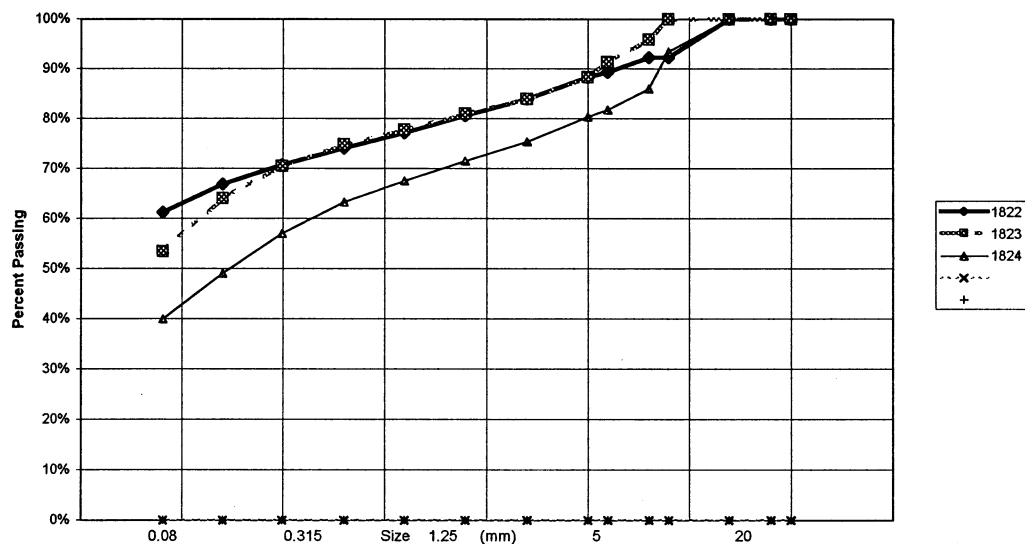
FIELD NO: 1819 LAB No: 2343 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1820 LAB No: 2344 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1821 LAB No: 2345 DEPTH: 4.3-4.5 AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	99%
10.0	100%	10.0	97%
5.0	99%	5.0	94%
2.5	98%	2.5	92%
1.25	97%	1.25	89%
0.630	97%	0.630	87%
0.315	92%	0.315	85%
0.160	86%	0.160	78%
0.080	66%	0.080	69%
M.C.(%): 20%	M.C.(%): 14%	M.C.(%): 18%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 1	% GRAVEL 6	% GRAVEL 2	
% SAND: 33	% SAND: 25	% SAND: 38	
% FINES: 66	% FINES: 69	% FINES: 60	
CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	CLASSIFICATION: SANDY SILT (ML)	



PROJECT NUMBER: 092-202101-0363-1				HOLE No.: 573-1877	
CLIENT: ENGINEERING-CAPITAL					
PROJECT NAME: SHAKWAK SEG 9					
PROJECT LOCATION: JARVIS CREEK NORTH					
DRILL UNIT: MOBILE B 40 L					
LOGGED BY: Doug Trim					
HOLE LOCATION: 1673+375 25M LT				DATE COM 2000/08/29	
=====					
FIELD NO: 1822		FIELD No. 1823		FIELD No: 1824	
LAB NO: 2346		LAB No. 2347		LAB No: 2348	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		A AUGER		TYPE: AUGER	
=====					
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING

100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	92%	25.0	100%	25.0	94%
20.0	92%	20.0	96%	20.0	86%
12.5	89%	12.5	91%	12.5	82%
10.0	88%	10.0	88%	10.0	80%
5.0	84%	5.0	84%	5.0	75%
2.5	81%	2.5	81%	2.5	72%
1.25	77%	1.25	78%	1.25	68%
0.630	74%	0.630	75%	0.630	63%
0.315	71%	0.315	71%	0.315	57%
0.160	67%	0.160	64%	0.160	49%
0.080	61%	0.080	53%	0.080	40%
=====					
M.C.(%):	13%	M.C.(%):	9%	M.C.(%):	9%
=====					
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
=====					
% GRAVEL	16	% GRAVEL	16	% GRAVEL	25
% SAND:	23	% SAND:	30	% SAND:	35
% FINES:	61	% FINES:	53	% FINES:	40
=====					
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT WITH GRAVEL		SANDY SILT WITH GRAVEL		SILTY SAND WITH GRAVEL	
(ML)		(ML)		(SM)	

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



PROJECT NUMBER: 092-202101-0363-1 HOLE No.: 573-1878
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK SEG 9
 PROJECT LOCATION: JARVIS CREEK NORTH
 DRILL UNIT: MOBILE B 40 L
 LOGGED BY: Doug Trim
 HOLE LOCATION: 1673+468 25M LT DATE COM 2000/08/29

FIELD NO: 1825 LAB NO: 2349 DEPTH: 1.3-1.5 TYPE: AUGER	FIELD No: 1826 LAB No: 2350 DEPTH: 2.8-3.0 A AUGER	FIELD No: 1827 LAB No: 2351 DEPTH: 4.2-4.4 TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	91%
12.5	100%	12.5	89%
10.0	100%	10.0	87%
5.0	100%	5.0	82%
2.5	100%	2.5	79%
1.25	100%	1.25	77%
0.630	100%	0.630	74%
0.315	100%	0.315	71%
0.160	98%	0.160	68%
0.080	88%	0.080	63%
M.C.(%): 19%	M.C.(%): 8%	M.C.(%): 8%	
LIMITS	LIMITS	LIMITS	
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	
% GRAVEL 0	% GRAVEL 12	% GRAVEL 18	
% SAND: 12	% SAND: 69	% SAND: 19	
% FINES: 88	% FINES: 19	% FINES: 63	
CLASSIFICATION: SILT (ML)	CLASSIFICATION: SILTY SAND (SM)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	

