GEOTECHNICAL INVESTIGATIONS

Highway Construction
km 1716.6 to 1723.6
Yukon, 2003-2004
Volume 1 of 3

Yukon
Highways and Public Works
Transportation Engineering Branch

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Highway Construction
Km 1716.6 to 1723.6
Alaska Highway #1
Yukon, 2004-2005
Volume 1 of 3

This Data Package prepared for project viewing:

February, 2004

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

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Investigation notes, classification methods and legends.

CENTRELINE TESTING km 1716.6 to 1723.6, Alaska Highway

Subsurface Exploration and Test Report Sheets are provided.
The reports for the Centreline testing holes are arranged according to project location, starting at km 1716+900 and increasing to km 1723+725.

Laboratory Testing Result Sheets are provided.
The reports for the centreline holes are arranged according to test hole number, starting at 619-495 and increasing to 649-259.

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A production history and location plans are provided.

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A production history, location plan, photographs, and subsurface exploration and testing report sheets are provided.

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INTRODUCTION

GEOTECHNICAL INVESTIGATION DATA

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

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

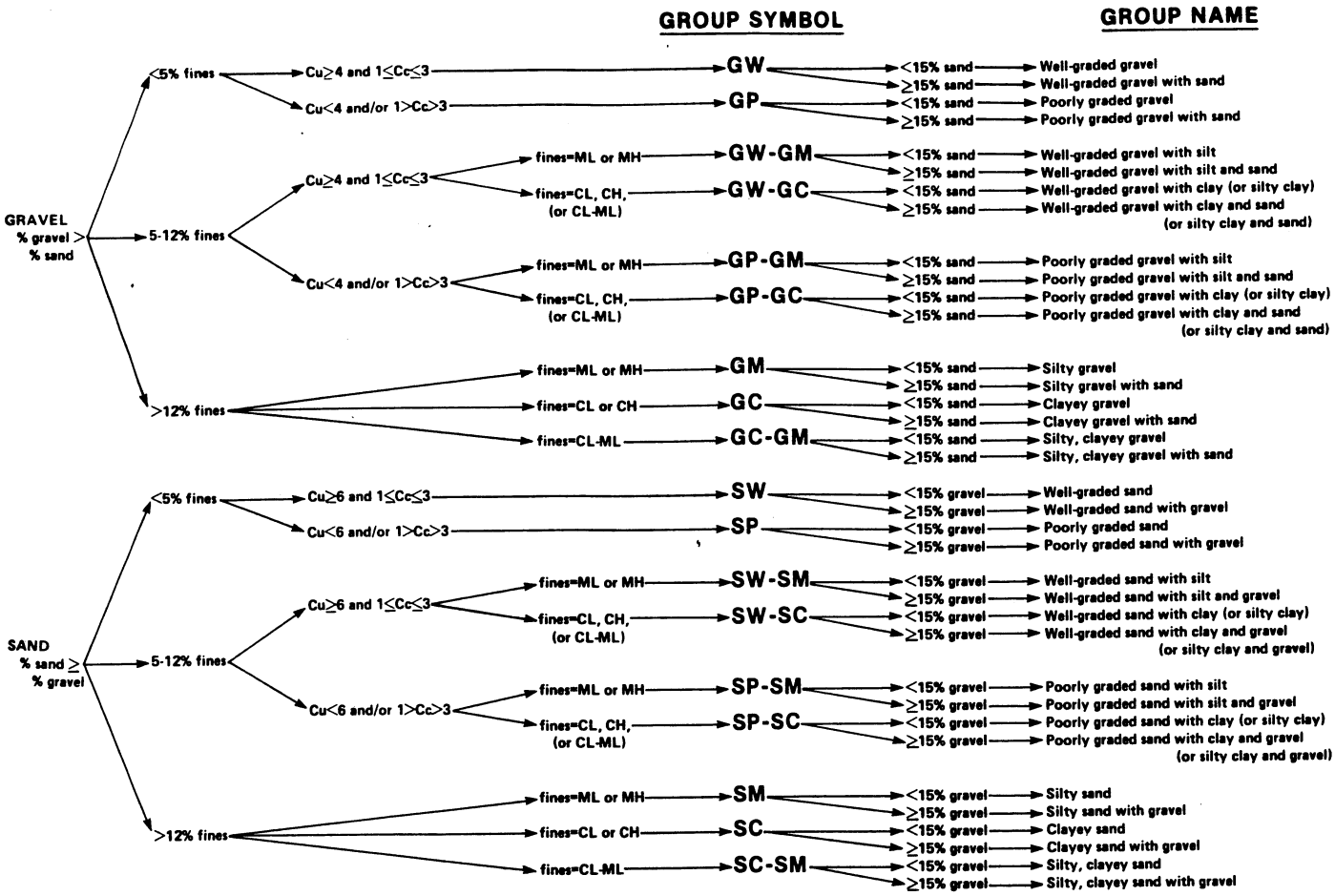
The sample laboratory testing data is provided to give detailed physical properties of selected retrieved samples within the subsurface profile. ***These tests may be conducted on disturbed samples and may exhibit properties different from the native materials. The sample classification may also vary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

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

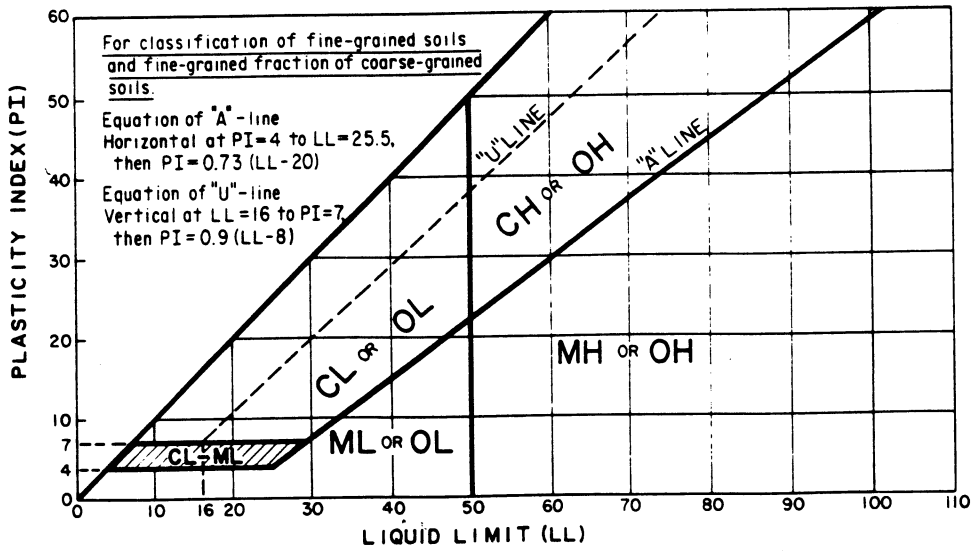
These descriptions and averages are not intended to be conclusive as to the nature of any material encountered, or to conditions between or around the test borings/pits.

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

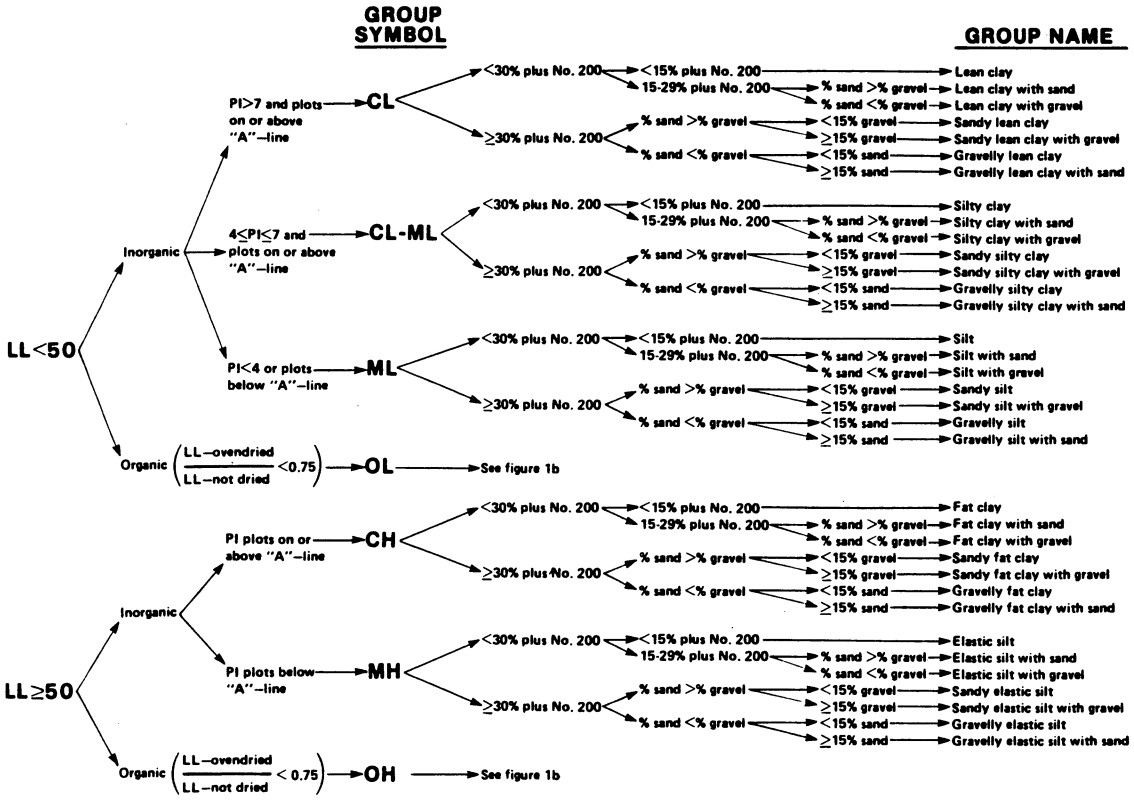
It is recommended that a site inspection, combined with consideration of the regional geology and climatic conditions be conducted. An evaluation of the investigation methods and development work done since the time of investigation should be done prior to interpreting the subsurface conditions at the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



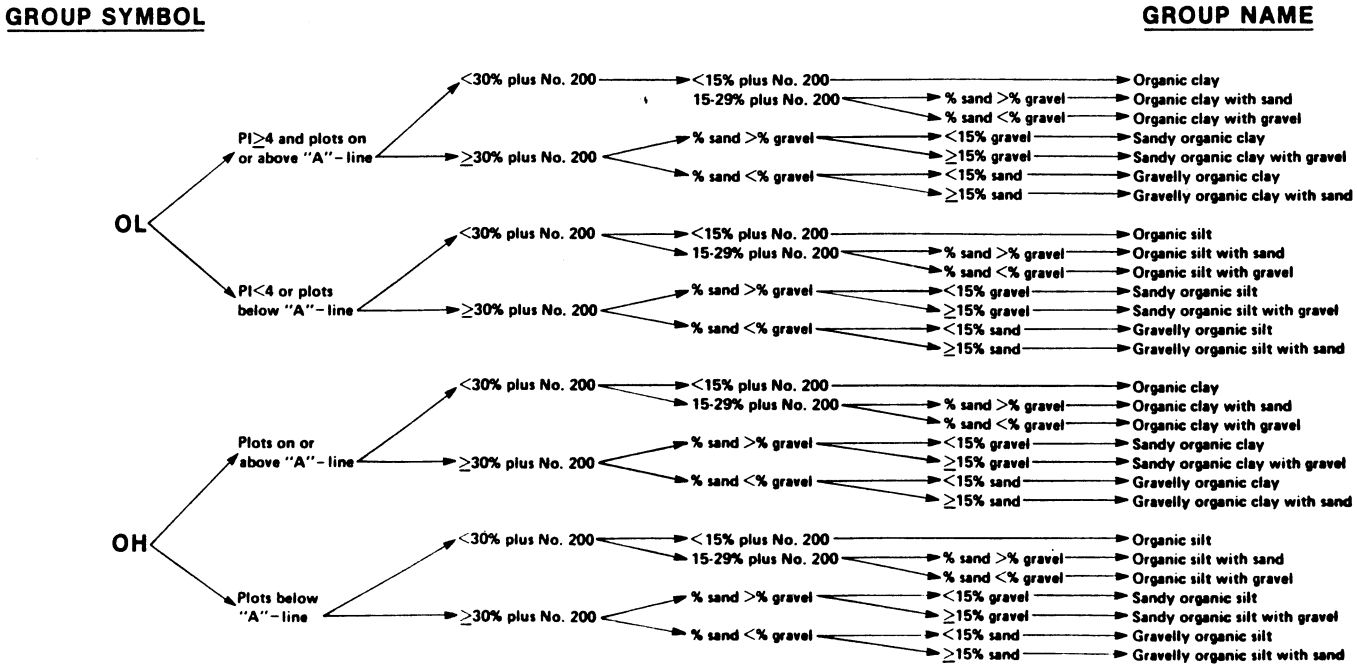
Flow chart for classifying coarse-grained soil.



Plasticity chart.



Flow chart for classifying fine-grained soil.



Flow chart for classifying organic soil.

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

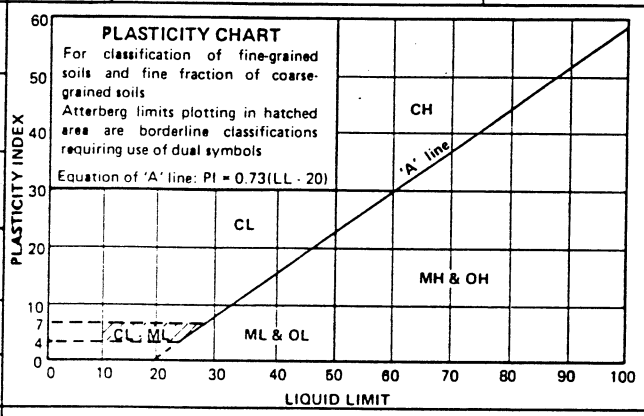
a. Based on the material passing the 3-in (75-mm) sieve.
b. If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name.
c. Gravels with 5 to 12% fines require dual symbols
   GW-GM well graded gravel with silt
   GW-GC well graded gravel with clay
   GP-GM poorly graded gravel with silt
   GP-GC poorly graded gravel with clay
d. 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
e. $C_u = D_{60}/D_{10}$ $\quad C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
f. If soil contains $\geq$ 15% sand, add "with sand" to group name.
g. If fines classify as CL-ML, use dual symbol GC-GM, SC-SM.
h. If fines are organic, add "with organic fines" to group name.
i. If soil contains $\geq$ 15% gravel, add "with gravel" to group name.
j. If Atterberg limits plot in hatched area, soil is a CL-ML, silty clay.
k. If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant.
l. If soil contains $\geq$ 30% plus No. 200, predominantly sand, add "sandy" to group name.
m. If soil contains $\geq$ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
n. PI $\geq$ 4 and plots on or above "A" line.
o. PI $<$ 4 or plots below "A" line.
p. PI plots on or above "A" line.
q. 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	$C_u = D_{60}/D_{10}$ 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		
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
			OL	Organic silts and organic silty clays of low plasticity		
	SILTS AND CLAYS Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts		
			CH	Inorganic clay of high plasticity, fat clays		
			OH	Organic clays of medium to high plasticity		
HIGHLY ORGANIC SOILS			PT	Peat, muck and other highly organic soils		

Classification on basis of percentage of fines
Less than 5% pass No. 200 sieve: GW, GP, SW, SP
More than 12% pass No. 200 sieve: GM, GC, SM, SC
5% to 12% pass No. 200 sieve: Borderline classification requiring use of dual symbols



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

LEGEND
Soil Ice

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	A triangle over two lines indicates water level detected at the time of drilling, unless otherwise noted							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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CENTRELINE TESTING
1716+900 to 1723+725
ALASKA HIGHWAY

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-259
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION:1716+900 2M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	PREVIOUSLY STRIPPED POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -grinding @ 0.5m	⊠	140 ▲		GP		◆ ■	0.0
1.0								1.0
		⊠	141 ● ▲		GP-GM		◆ ■	
2.0								2.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -wet -very rough @ 2.5	⊠	142 ●		GP		◆ ■	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-258
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	IOCATION:1716+975 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 (ML) -brown -saturated	⊠	137	● ▲	ML		◆	0.0
1.0								1.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) -saturated -grinding @ 1.5 to 1.6m -smooth easy drilling below 1.6m -sample # 139 has silt contamination from above	⊠	138	●	GP-GM		◆ ■	
2.0								2.0
		⊠	139	▲ ●	GP		◆ ■	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-257
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	IOCATION:1717+048 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	OPEN WILLOW AREA (WATER ON SURFACE) SILTY SAND (SM) -brown -wet to saturated	⊠	134	● ▲	SM	▨	◆	0.0
1.0	-visible water @ 1.0m							1.0
	-frozen 1.5 to 2.4m	⊠	135	●	SM	▨	◆	
2.0								2.0
	SILT (ML) -brown -saturated	⊠	136	● ▲	ML	▤	◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-256
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION:1717+158 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 / MOSS							0.0
	SILT WITH SAND TO SILTY SAND (ML)-(SM) -brown -frozen -slow tight penetration							
1.0		⊠	131	▲ ●	ML		◆	1.0
		⊠	132	● ▲	SM		■ ◆	
2.0	SANDY SILT (ML) -brown -frozen							2.0
3.0		⊠	133	● ▲	ML		◆	3.0
	END HOLE @ 3.0m							
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-255
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	IOCATION:1717+253 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆PERCENT SAND◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SILTY SAND WITH GRAVEL (SM) -brown -damp	⊠	128	● ▲	SM		■ ◆	
1.0	SILTY SAND WITH GRAVEL TO WELL-GRADED SAND WITH SILT & GRAVEL (SM)-(SW-SM) -brown -frozen -grinding @ 0.8m -tough drilling -sounds rougher than sample appearance	⊠	129	● ▲	SM		■ ◆	1.0
2.0		⊠	130	▲	SW-SM		■	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-254
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	IOCATION:1717+315 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 WITH SAND (ML) -brown -moist	⊠	125	● ▲	ML	▥	◆	0.0
1.0	SILTY GRAVEL WITH SAND (GM) -brown -damp -grinding starts @ 1.0m -hard grinding @ 1.5m	⊠	126	● ▲	GM	▨	◆ ■	1.0
2.0								2.0
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -moist -easier drilling @ 2.4m END HOLE @ 3.0m	⊠	127	●	GP-GM	▨	◆ ■	3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-253
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	IOCATION:1717+390 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -grinding hard	⊠	122	▲	GP		◆ ■	
1.0								1.0
	SILTY GRAVEL WITH SAND (GM) -brown -damp -smooth @ 1.2m	⊠	123	● ▲	GM		◆ ■	
2.0	SANDY SILT (ML) -brown -damp -smooth							2.0
		⊠	124	● ▲	ML		◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/15
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-252
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	IOCATION:1717+490 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SANDY SILT (ML) -frozen, appears to have high moisture	⊠	119	● ▲	ML		◆	
1.0								1.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -grey -moist -light grinding	⊠	120	●	SW-SM		■ ◆	
2.0								2.0
		⊠	121	● ▲	SW-SM		◆ ■	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/15
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-251
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION:1717+569 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	MOSS				
	SANDY SILT (ML) -frozen	⊠	116	ML	
1.0					
	-grinding @ 1.5m frozen - slower	⊠	117	ML	
2.0					
	SILTY SAND WITH GRAVEL (SM) -frozen	⊠	118	SM	
3.0	END HOLE @ 3.0m				
4.0					
5.0					
6.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC — M.C. — LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m)

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-250
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION:1717+654 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	MOSS / ORGANIC							0.0
	SANDY SILT (ML) -grey / brown -moist -easy drilling	⊠	113	● ▲	ML		◆	
1.0								1.0
	SILTY GRAVEL WITH SAND (GM) -brown -moist -little grind	⊠	114	● ▲	GM		■ ◆	
2.0								2.0
	SANDY SILT (ML) -brown -moist -smooth drilling	⊠	115	● ▲	ML		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-249
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1717+753 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 WITH SAND (ML) -brown -frozen (wet)	⊠	110	● ▲	ML		◆	
1.0								1.0
	SILTY GRAVEL WITH SAND (GM) -easy drilling - grinding seam @ 1.8m -moist below 2.0m	⊠	111	● ▲	GM		◆ ■	
2.0								2.0
	SILTY SAND WITH GRAVEL (SM) -grey -moist	⊠	112	● ▲	SM		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-248
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1717+850 5M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ☰ BULK ||| TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	MOSS / ORGANICS							0.0
	SILTY SAND (SM) -brown -damp -smooth easy drilling	⊠	107	● ▲	SM		◆	
1.0								1.0
	SILTY GRAVEL WITH SAND (GM) -(silt/gravel mixture) -brown -moist	⊠	108	● ▲	GM		◆ ■	
2.0								2.0
	SILTY GRAVEL WITH SAND (GM) -grey -damp -sample # 109 contaminated from above -grinding starts @ 2.2m	⊠	109	● ▲	GM		◆ ■	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-247
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1717+945 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯▯ TUBE ▮▯ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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, MOSS							0.0
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -grey -damp -grinding 0.1 - 2.0m -easy drilling	☒	104	● ▲	GM		◆ ■	
1.0								1.0
		☒	105	● ▲	SM		■ ◆	
2.0	SILTY SAND (SM) -brown -damp							2.0
		☒	106	● ▲	SM		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 649-246
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+045 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp -grinding 0.1 - 1.5m	⊠	101 ▲		GP		◆ ■	
1.0								1.0
	-easy drilling @ 1.5m to 3.0m	⊠	102 ▲		GP		◆ ■	
2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -grey -damp	⊠	103 ● ▲		SW-SM		■ ◆	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-245
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+160 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆PERCENT SAND◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND TO SILTY GRAVEL WITH SAND (GP)-(GM) -grey -damp -grinding @ 0.5m	☒	98	■	GP		◆ ■	
1.0	-easy drilling @ 1.0m							1.0
	-heavy grinding @ 1.7m	☒	99	▲ ■	GM		◆ ■	
2.0								2.0
	WELL-GRADED SAND WITH GRAVEL (SW) -grey -damp -easy drilling	☒	100	▲	SW		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-244
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+245 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp -grinding from surface -rough drilling	⊠	95	▲	GP		◆ ■	
1.0								1.0
	WELL-GRADED GRAVEL WITH SAND (GW) -brown -damp -smooth drilling @ 1.5m	⊠	96	▲	GW		◆ ■	
2.0								2.0
	SILTY SAND WITH GRAVEL (SM) -brown -damp	⊠	97	● ▲	SM		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-243
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+345 CENTRELINE	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 / MOSS							0.0
	SILTY SAND WITH GRAVEL (SM) -olive -damp		92		SM			
1.0								1.0
	SILTY GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GM)-(GP-GM) -olive -damp -grinding hard @ 1.5m -easier drilling below 2.0m		93		GM			
2.0								2.0
			94		GP-GM			
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-242
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+455 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 / MOSS							0.0
	WELL-GRADED SAND WITH GRAVEL TO POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP) -damp -grey -easy drilling	⊠	89	◆	SW		◆ ■	
1.0								1.0
	-grinding harder below 1.5m	⊠	90	◆	GP-GM		◆ ■	
2.0								2.0
		⊠	91	◆	GP		◆ ■	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-241
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+555 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC / MOSS				
	SILT WITH SAND (ML) -brown -damp	⊠	86	ML	
1.0	SILTY SAND WITH GRAVEL (SM) -brown/olive -damp	⊠	87	SM	
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -olive -damp -grinding drilling @ 1.5m -easy drilling below 2.0m	⊠	88	GP-GM	
3.0	END HOLE @ 3.0m				
4.0					
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-240
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+660 CENTRELINE	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC / MOSS				
	SILTY SAND WITH GRAVEL (SM) -brown -damp -smooth easy drilling	AUGER	83	SM	
1.0					
	SILT WITH SAND (ML) -brown -damp	AUGER	84	ML	
2.0					
	SILTY GRAVEL WITH SAND (GM) -brown -damp -grinding	AUGER	85	GM	
3.0	END HOLE @ 3.0m				
4.0					
5.0					
6.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC — M.C. — LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m)

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-239
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+755 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	MOSS / ORGANICS							0.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -smooth easy drilling	⊠	80	● ▲	SW-SM		■ ◆	
1.0								1.0
	SANDY GRAVEL -damp to moist -lost sample # 81	⊠	81	●				
2.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -grinding @ 2.4m	⊠	82	▲	GP		◆ ■	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-238
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+835 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	MOSS / ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp		77		GP			
1.0	SILTY SAND WITH GRAVEL (SM) -brown -damp -easy smooth drilling		78		SM			1.0
2.0								2.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -grinding		79		SW-SM			
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-237
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1718+960 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SILTY GRAVEL WITH SAND (GM) -damp -brown	⊠	73	● ▲	GM		◆ ■	
1.0	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) -grey -damp -grinding @ 0.7m -harder grinding 1.5-2.5	⊠	74	● ▲	GP-GM		◆ ■	1.0
2.0		⊠	75	▲	GP		◆ ■	2.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -smoother	⊠	76	▲	SW-SM		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-236
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+052 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SILTY SAND WITH GRAVEL (SM) -brown -damp	⊠	70	● ▲	SM		■ ◆	
1.0	SILTY GRAVEL WITH SAND (GM) -brown -damp -light grinding @ 1.0m	⊠	71	● ▲	GM		◆ ■	1.0
2.0	-heavy grinding 1.9 to 2.8m							2.0
3.0	SILTY SAND (SM) -damp -smooth drilling	⊠	72	● ▲	SM		■ ◆	3.0
	END HOLE @ 3.0m							
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-235
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+148 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆PERCENT SAND◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SANDY GRAVEL							
	ORGANICS							
	SILTY SAND (SM) -brown -damp	⊠	67	● ▲	SM		◆	
1.0								1.0
	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP)-(GW) -grey -damp to dry -grinding @ 1.5,	⊠	68	▲	GP		◆ ■	
2.0								2.0
	-heavier grinding @ 2.8m	⊠	69	▲	GW		◆ ■	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-234
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+250 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp	⊠	64	▲▲	SW-SM		■◆	
1.0	SILTY SAND WITH GRAVEL (SM) -brown -damp -grinding starts @ 0.9m	⊠	65	● ▲	SM		■ ◆	1.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -smooth easy drilling							
2.0	-grinding @ 2.5m	⊠	66	●	GP-GM		◆■	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-233
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+355 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	SILTY GRAVEL WITH SAND (GM) -grey -moist	⊠	61	● ▲	GM		◆ ■	0.0
1.0	WELL-GRADED GRAVEL (GW) -grey -damp -angular to sub-angular -grinding 0.5m to 1.5m	⊠	62	● ▲	GW		◆ ■	1.0
2.0	SANDY SILT (ML) -brown -wet -smooth easy drilling	⊠	63	◆ ▲	ML		◆	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-232
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+455 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp -grinding from surface	⊠	58	●	GP		◆ ■	
1.0								1.0
		⊠	59	●	GP		◆ ■	
2.0								2.0
	WELL-GRADED SAND WITH GRAVEL (SW) -grey -moist -smooth easy drilling 2.2m to 3.0m	⊠	60	●	SW		■ ◆	
3.0	ORGANICS							3.0
	END HOLE @ 3.0m							
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-231
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+550 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp to dry -no organics on surface, visible gravel	⊠	55	▲	GP		◆ ■	0.0
1.0	-damp below 1.2m -harder grinding @ 1.2m	⊠	56	▲	GP		◆ ■	1.0
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -grey -moist -easy smooth drilling 2.0m to 3.0m	⊠	57	▲	GP-GM		◆ ■	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-230
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+648 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 GRAVEL WITH SAND (GM) -brown -damp	⊠	51	● ▲	GM		●	
1.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -grinding drilling -smooth @ 1.6m	⊠	52	● ▲	GP-GM		◆ ■	1.0
		⊠	53	● ▲	GP-GM		◆ ■	
2.0	WELL-GRADED GRAVEL WITH SAND (GW) -brown -damp -heavy grinding @ 2.0m	⊠	54	●	GW		◆ ■	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-229
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+750 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -grey -damp -grinding from 0.1m	⊠	48	●▲	GP-GM	▲▲▲	◆ ■	
1.0								1.0
	SAND -lost sample #49 -brown -damp	⊠	49	●				
2.0								2.0
	SILT WITH SAND (ML) -brown -damp	⊠	50	● ▲	ML	▥	◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-228
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+852 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SILTY SAND WITH GRAVEL (SM) -olive -damp	⊠	45	● ▲	SM		■ ◆	
1.0	-easy drilling							1.0
	ORGANICS -brown							
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -brown -damp -sample # 46 contaminated from above	⊠	46	● ▲	GM		◆	
2.0	-grinding @ 2.5m							2.0
	-rougher @ 2.8m	⊠	47	● ▲	SM		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-227
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1719+950 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	SILTY SAND -damp							0.0
	ORGANIC ASH							
	SILT WITH SAND (ML) -brown -damp	⊠	42	● ▲	ML		◆	
1.0								1.0
		⊠	43	● ▲	ML		◆	
2.0								2.0
	SANDY SILT (ML) -olive -damp -tighter drilling @ 2.5m -no grinding below 2.5m	⊠	44	● ▲	ML		◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-226
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1720+050 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 WITH SAND (ML) -brown -damp -smooth drilling - not frozen	⊠	39	● ▲	ML		◆	0.0
1.0	SANDY SILT (ML) -with organics -brown -damp	⊠	40	● ▲	ML		◆	1.0
2.0	SILTY SAND (SM) -brown -damp	⊠	41	● ▲	SM		◆	2.0
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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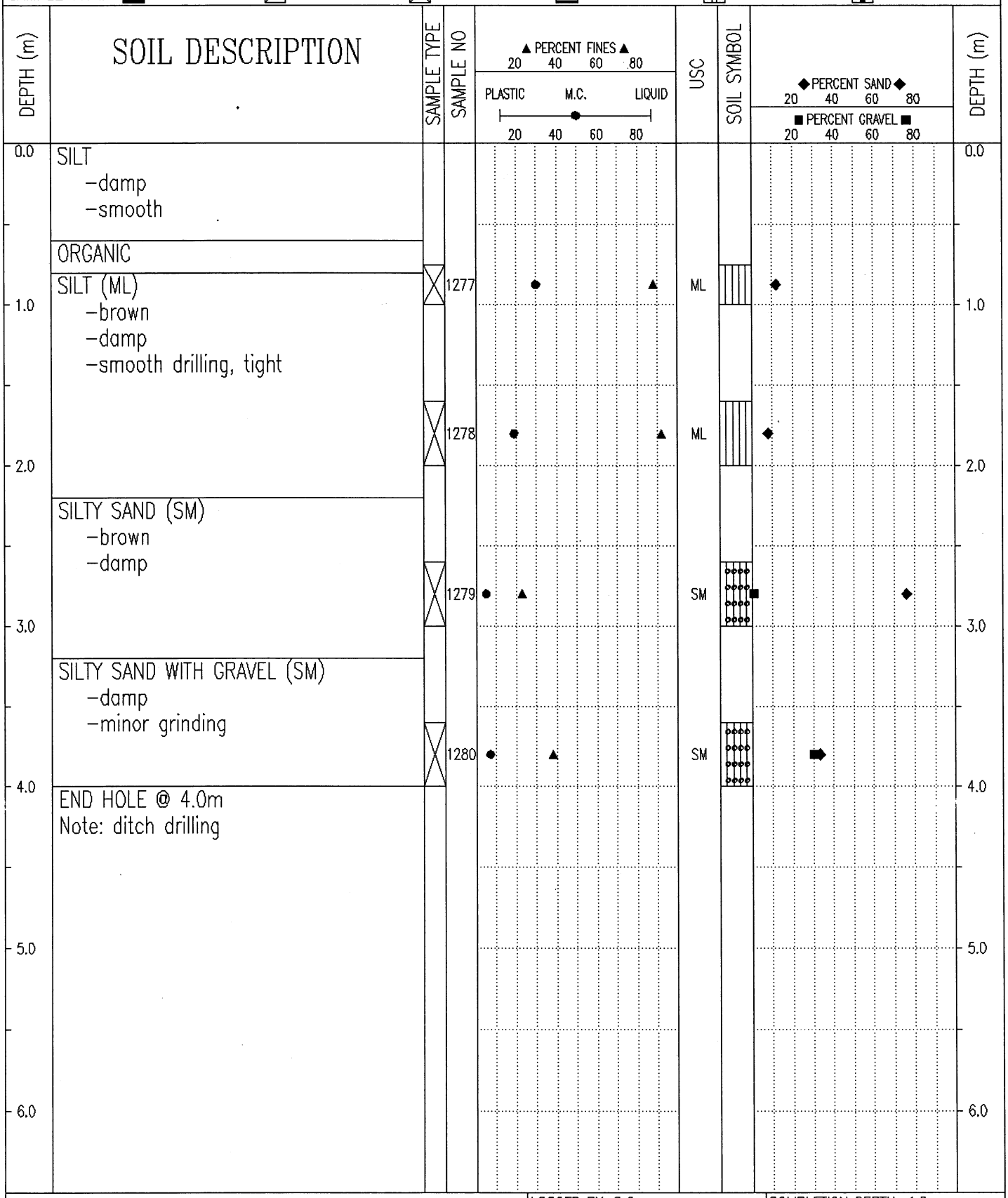
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-531
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+100 2M LHS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE



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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-225
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1720+155 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SILTY SAND TO SANDY SILT (ML) -brown -damp -no grinding	⊠	36	● ▲	SM		■ ◆	
1.0								1.0
		⊠	37	● ▲	ML		◆	
2.0	-with organics below 2.0m							2.0
		⊠	38	● ▲	ML		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-530
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+225 50M LHS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 & DRY GRAVEL –fill							0.0
	ORGANIC –original							
1.0	SILT WITH SAND (ML) –brown –damp to moist –smooth penetration							1.0
		⊠	1274	● ▲	ML	▥	■ ◆	
2.0								2.0
	SANDY SILT (ML) –damp –grinding (one rock) –smooth drilling below 3.2m	⊠	1275	● ▲	ML	▥	■ ◆	
3.0								3.0
		⊠	1276	● ▲	ML	▥	■ ◆	
4.0	END HOLE @ 3.2m Note: ditch drilling, no access to new centreline							4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-224
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1720+250 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	MOSS							0.0
	WELL TO POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GW)-(GP)-(GP-GM) -brown -damp -easy drilling - not frozen	⊠	33	▲	GW		◆ ■	
1.0								1.0
		⊠	34	▲	GP		◆ ■	
2.0								2.0
		⊠	35	● ▲	GP-GM		◆ ■	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-529
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+325 50M LHS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT AND SAND (GP)-(GP-GM) -brown -damp -grinding from surface -rough drilling	⊠	1270 ▲		GP		◆ ■	0.0
1.0								1.0
2.0		⊠	1271 ▲		GP		◆ ■	2.0
3.0		⊠	1272 ● ▲		GP-GM		◆ ■	3.0
	SILTY SAND (SM) -brown -moist -some sand & gravel contamination from above -smooth drilling							
4.0		⊠	1273 ● ▲		SM		■ ◆	4.0
	END HOLE @ 4.5m Note: No access to new centreline Ditch drilling 10m Rt of existing highway Previously stripped.							
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/13
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02/10/02 02:02PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-223
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1720+348 CENTRELINE	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SANDY SILT WITH GRAVEL (ML) -organics (ground up tree) -grinding 0.1-1.2m	AUGER	30	ML	
1.0	POORLY GRADED GRAVEL WITH SILT (GP-GM) -brown -damp -smooth drilling	AUGER	31	GP-GM	
2.0	SILTY GRAVEL (GM) -damp -grinding 2.0 - 3.0m	AUGER	32	GM	
3.0	END HOLE @ 3.0m				
4.0					
5.0					
6.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC — M.C. — LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m)

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/09
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03/12/03 11:04AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-528
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+425 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES / PLASTIC / M.C. / LIQUID	USC	SOIL SYMBOL	PERCENT SAND / PERCENT GRAVEL	DEPTH (m)
0.0	ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -rough grinding drilling 0.1m TO 4.5m	⊠	1266	▲	GP-GM		◆ ■	
1.0								1.0
	POORLY GRADED GRAVEL WITH SAND (GP)	⊠	1267	●	GP		◆ ■	
2.0								2.0
	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	⊠	1268	●▲	GW-GM		◆ ■	
3.0								3.0
4.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	⊠	1269	●▲	GP-GM		◆ ■	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/13
Fig. No:	Page 1 of 1

02/09/13 10:36AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-222
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1720+450 4M 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	ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (GP-GM)-(GP)-(SW-SM)							
	-brown	⊠	27 ●▲		GP-GM		◆ ■	
1.0	-damp							1.0
	-easy drilling - not froxen							
	-grinding @ 0.1m	⊠	28 ●▲		GP		◆ ■	
2.0								2.0
		⊠	29 ●▲		SW-SM		■ ◆	
3.0	END HOLE @ 3.0m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
	REVIEWED BY:	COMPLETE: 03/09/09
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03/11/27 01:14PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-527
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+500 50M 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 -damp							
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -grinding starts 0.5 to 1.8m	⊠	1262	▲	GP		◆ ■	
1.0								1.0
		⊠	1263	▲	GP-GM		◆ ■	
	ORGANIC -possibly original ground							
2.0	SILT WITH SAND (ML) -olive -damp -smooth, tight	⊠	1264	● ▲	ML		■ ◆	2.0
	SILTY SAND WITH GRAVEL (SM) -brown -damp -smooth							
3.0								3.0
4.0		⊠	1265	● ▲	SM		■ ◆	4.0
	END HOLE @ 4.5m Note: Test hole @ edge of treeline 25m Rt of existing Hwy (8 inch spruce)							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/13
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02/10/02 02:00PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT GRANULAR INVESTIGATION	TEST HOLE NO: 648-221
ENGINEERING CAPITAL	CONGDON-NO NAME CR	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: 1720+550 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	MOSS / ORGANIC							0.0
	SANDY SILT (ML) -brown -damp	⊠	24	● ▲	ML		◆	
1.0	SILTY GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GM)-(GP-GM) -brown -damp -grinding starts @ 1.0m -easy drilling - not frozen	⊠	25	● ▲	GM		◆ ■	1.0
2.0								2.0
3.0	END HOLE @ 3.0m	⊠	26	● ▲	GP-GM		◆ ■	3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G C	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 03/09/09
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03/11/27 11:33AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-526
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+585 CENTRELINE	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	SANDY GRAVEL -damp -grinding 0.2m to 0.5m							
	SILT WITH SAND (ML) -wet	⊠	1258	● ▲	ML		◆	
1.0								1.0
	POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -grinding @ 1.2m	⊠	1259	▲	GP		◆ ■	
2.0		⊠	1260	◆ ▲	SW-SM		■ ◆	2.0
	SILTY SAND WITH GRAVEL (SM) -moist -smoother drilling							
3.0								3.0
4.0		⊠	1261	● ▲	SM		■ ◆	4.0
	END HOLE @ 4.5m Note: No access through forest beyond this point, Willow & Spruce.							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/13
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-525
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+675 3M 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	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp –no organic on surface –grinding from surface	⊠	1254 ▲		GP		◆ ■	0.0
1.0								1.0
		⊠	1255 ▲		GP		◆ ■	
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) –damp to moist							2.0
		⊠	1256 ● ▲		GP-GM		◆ ■	
3.0	SILT (ML) –brown –moist –smoother drilling below 2.8m							3.0
4.0		⊠	1257 ● ▲		ML		◆	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/13
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-524
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+775 5M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 TO SANDY SILT (ML) -brown -moist -smooth drilling	⊠	1251	● ▲	ML		◆	
1.0								1.0
		⊠	1252	● ▲	ML		◆	
2.0								2.0
		⊠	1253	● ▲	ML		■ ◆	
3.0	END HOLE @ 3.0m -refusal							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 01/09/12
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02/09/13 10:35AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 621-523
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+875 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	CRUSH							0.0
	SILT TO SILT WITH SAND TO SANDY SILT (ML) –brown –moist –smooth drilling	⊠	1247	● ▲	ML		◆	
1.0								1.0
		⊠	1248	● ▲	ML		■ ◆	
2.0								2.0
		⊠	1249	● ▲	ML		■ ◆	
	SANDY SILT WITH GRAVEL (ML) –brown–grey –damp –grinding starts @ 2.8m							
3.0								3.0
		⊠	1250	● ▲	ML		■ ◆	
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 01/09/12
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02/10/02 01:50PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST HOLE NO: 621-522
ENGINEERING CAPITAL	CONDON CREEK CHANNEL	Project No: 092-202101-0362
NODWELL B40L 6" AUGER	LOCATION: 1720+975 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	ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp to moist -grinding starts @ surface	⊠	1243	▲	GP		◆ ■	
1.0								1.0
		⊠	1244	▲	GP		◆ ■	
2.0								2.0
		⊠	1245	▲	GP		◆ ■	
3.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -grey -damp -little smoother below 3.0m	⊠	1246	● ▲	SW-SM		■ ◆	3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 01/09/12
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02/08/13 10:35AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-521
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+250 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
	SILT (ML) -wet to saturated	☒	1239	● ▲	ML		◆	
1.0	-brown below 0.8m -frozen below 0.8m -no visible ice below 0.8m -slow tight penetration below 0.8m							1.0
		☒	1240	● ▲	ML		■	
2.0	-olive (light colour) below 2.4m							2.0
		☒	1241	● ▲	ML		◆	
3.0								3.0
	GRAVELLY SILT WITH SAND (ML) -brown -frozen							
4.0	-some grinding	☒	1242	● ▲	ML		●	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/12
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-520
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+325 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
	SILT WITH SAND (ML) -wet-saturated -smooth	⊠	1235	● ▲	ML		◆	
1.0	-brown below 1.0m -frozen below 1.0m -slow penetration below 1.0m							1.0
		⊠	1236	● ▲	ML		◆	
2.0								2.0
	SILT (ML) -brown -frozen (Vx) -very slow drilling	⊠	1237	● ▲	ML		◆	
3.0								3.0
4.0	GRAVELLY SILT WITH SAND (ML) -brown -frozen (Vx) -more ice than previous 2m -some grinding @ 4.0m	⊠	1238	● ▲	ML		◆	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/12
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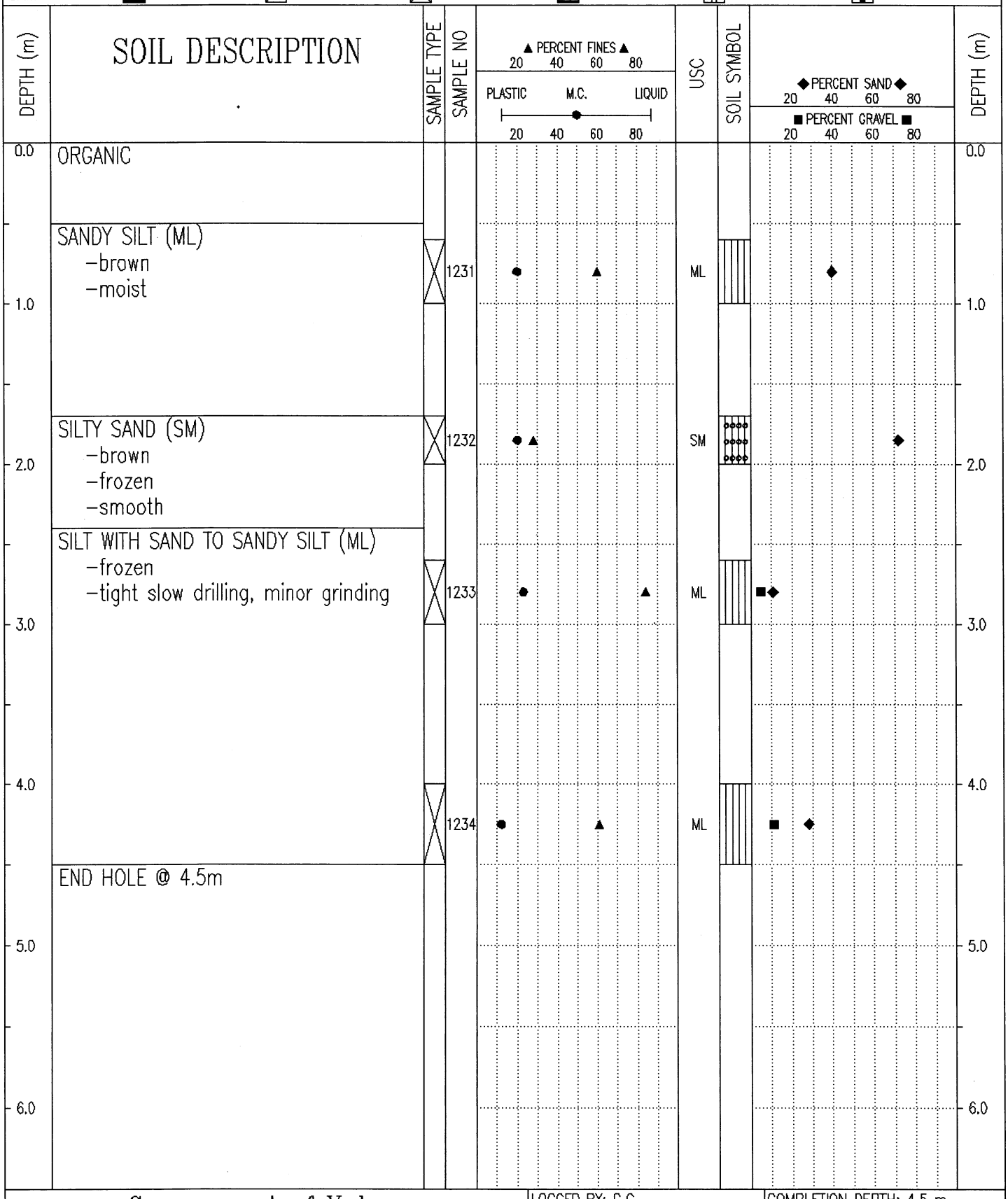
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-519
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+375 12M LT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/12
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-518
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+425 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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 WITH SAND (ML) -with organics -brown -damp -smooth from surface	⊠	1227	● ▲	ML		■ ◆	
1.0								1.0
	POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (GP)-(SW-SM) -brown -damp -grinding starts @ 1.5m	⊠	1228	▲	GP		◆ ■	
2.0								2.0
		⊠	1229	▲	GP		◆ ■	
3.0								3.0
		⊠	1230	● ▲	SW-SM		■	
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 01/09/12
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-517
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+525 C.L.	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	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)-(GP)-(GP-GM) -brown -damp -grinding from surface. -previously stripped	☒	1223	● ▲	GP-GM	▨	◆ ■	0.0
1.0								1.0
		☒	1224	● ▲	GP	▨	◆ ■	
2.0								2.0
		☒	1225	● ▲	GP-GM	▨	◆ ■	
3.0								3.0
		☒	1226	● ▲	GP-GM	▨	◆ ■	
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 01/09/12
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-516
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+625 3M LT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC				
	SILTY GRAVEL WITH SAND TO WELL-GRADED SAND WITH GRAVEL (GM)-(SW) -brown -damp -grinding from surface	⊠	1219	GM	
1.0					
		⊠	1220	SW	
2.0					
	SILTY SAND (SM) -brown -moist -smoother less grinding	⊠	1221	SM	
3.0					
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -little increase in grinding drilling	⊠	1222	GP-GM	
4.0	END HOLE @ 4.0m				
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m)

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-515
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+725 5M 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 -brown -moist							
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -grinding starts @ 0.5m		1215		GP			
1.0								1.0
			1216		GP			
2.0								2.0
			1217		GP			
3.0								3.0
			1218		GP-GM			
4.0								4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/12
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-514
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+825 2M LT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -moist -grinding starts @ 0.5m	⊠	1211	● ▲	SW-SM		◆	
1.0								1.0
	SILTY GRAVEL WITH SAND TO POORLY TO WELL-GRADED GRAVEL WITH SILT & SAND (GM)-(GP-GM)-(GW-GM) -brown -damp -smoother but still grinding	⊠	1212	● ▲	GM		◆ ■	
2.0								2.0
		⊠	1213	● ▲	GP-GM		◆ ■	
3.0								3.0
4.0		⊠	1214	● ▲	GW-GM		◆ ■	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-513
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1721+925 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯▯ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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
	ORGANIC & GRAVEL MIX -grinding @ 0.2m							
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp	⊠	1207	▲	GP		◆ ■	
1.0								1.0
		⊠	1208	▲	GP		◆ ■	
2.0								2.0
		⊠	1209	▲	GP-GM		◆ ■	
3.0								3.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -smoother penetration	⊠	1210	● ▲	SW-SM		■ ◆	
4.0								4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-512
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+025 3M 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 (SM) –brown –moist	⊠	1203	● ▲	SM		◆	
1.0								1.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) –brown –damp –grinding @ 1.25m	⊠	1204	▲	GP-GM		■ ◆	
2.0								2.0
		⊠	1205	▲	GP		◆ ■	
3.0								3.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) –brown –damp –easier penetration							
4.0		⊠	1206	● ▲	SW-SM		■ ◆	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-511
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+175 10M 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	SILTY SAND (SM) -brown -moist -smooth easy penetration	⊠	1199	● ▲	SM		◆	0.0
1.0								1.0
		⊠	1200	●	SM		◆	
2.0								2.0
	-frozen below 2.6	⊠	1201	● ▲	SM		◆	
3.0								3.0
	WELL-GRADED SAND WITH SILT (SW-SM) -frozen -slow & tight drilling	⊠	1202	●	SW-SM		◆	
4.0								4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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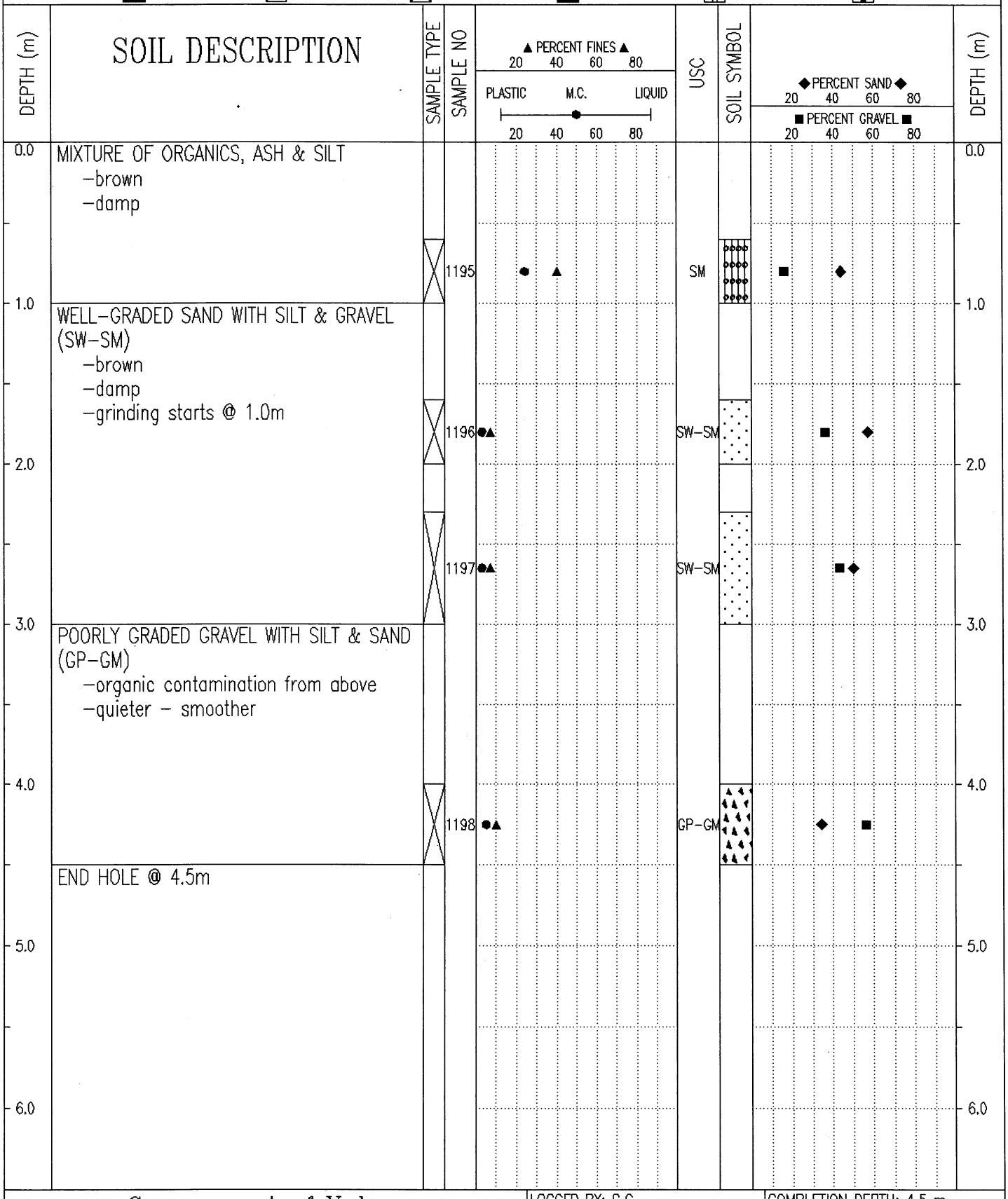
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-510
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+300 3M LT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE



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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-509
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+425 C.L.	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 -wet	⊠	1191	● ▲	ML	▥	◆	0.0
1.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -grinding starts @ 1.2m	⊠	1192	● ▲	GP	▨	◆ ■	1.0
2.0	SILTY GRAVEL WITH SAND (GM) -brown -moist -smoother drilling	⊠	1193	● ▲	GM	▨	◆ ■	2.0
3.0								3.0
4.0	END HOLE @ 4.0m	⊠	1194	● ▲	GM	▨	◆ ■	4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-508
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+525 3M 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	ORGANICS –grinding starts @ surface							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –with organics –brown –damp	⊠	1187	▲	GP		◆ ■	
1.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP–GM) –brown –damp	⊠	1188	▲	GP–GM		◆	1.0
2.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)–(SM) –damp to moist –not as grinding –difficult to recover sample due to auger collar	⊠	1189	● ▲	GM		◆ ■	2.0
3.0								3.0
4.0	–Believe sample #1190 is more representive of material below 2.0m	⊠	1190	● ▲	SM		■ ◆	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-507
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+625 C.L.	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	SILTY SAND WITH ORGANICS (SM) –brown –damp	⊠	1183	● ▲	SM		◆	0.0
1.0	POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (GP)–(SW-SM) –brown –dry –grinding starts @ 1.2m –damp below 2.0m	⊠	1184	● ▲	GP		◆ ■	1.0
2.0								2.0
3.0		⊠	1185	● ▲	SW-SM		■ ◆	3.0
4.0	SILTY SAND WITH GRAVEL (SM) –little smoother	⊠	1186	● ▲	SM		■ ◆	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 620-506
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+700 C.L.	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	SILTY SAND (SM) –brown –damp –smooth easy drilling							0.0
1.0		⊠	1177	● ▲	SM		◆	1.0
2.0		⊠	1178	● ▲	SM		◆	2.0
3.0		⊠	1179	● ▲	SM		◆	3.0
4.0		⊠	1180	● ▲	SM		◆	4.0
5.0								5.0
6.0								6.0
7.0	–either frozen or tightly packed below 7.3m (cold)	⊠	1181	● ▲	SM		◆	7.0
8.0								8.0
9.0		⊠	1182	● ▲	SM		◆	9.0
	END HOLE @ 9.5m							
10.0								10.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 9.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-505
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+750 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 ▲ 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							
	-brown							
	-damp	⊠	1171	● ▲	SM		◆	
1.0	SILTY SAND (SM)							1.0
	-brown							
	-damp							
	-easy smooth drilling 0 to 1.7m	⊠	1172	●	SM		◆	
2.0	-frozen below 1.7m							2.0
	-slow tight drilling below 1.7m	⊠	1173	● ▲	SM		◆	
3.0								3.0
4.0								4.0
		⊠	1174	● ▲	SM		◆	
5.0								5.0
6.0								6.0
		⊠	1175	● ▲	SM		◆	
7.0								7.0
8.0								8.0
9.0		⊠	1176	● ▲	SM		◆	9.0
	END HOLE @ 9.5							
10.0								10.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-504
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+825 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 ▲ 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 -moist to wet							
1.0	SANDY SILT TO SILT WITH SAND (ML) -frozen -slow tight penetration	⊠	1167	● ▲	ML		◆	1.0
2.0		⊠	1168	● ▲	ML		◆	2.0
3.0		⊠	1169	● ▲	ML		◆	3.0
4.0								4.0
5.0		⊠	1170	● ▲	ML		◆	5.0
	END HOLE @ 5.0m							
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 5.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-503
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+875 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 ▲ 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 –wet							
1.0	SILT WITH SAND (ML) –brown –frozen –slow penetration	⊠	1163	● ▲	ML		◆	1.0
2.0	SILTY SAND TO SANDY SILT (SM)–(ML) –brown –frozen –tight drilling, no grinding	⊠	1164	● ▲	SM		◆	2.0
3.0	–tough drilling below 2.6m	⊠	1165	● ▲	SM		◆	3.0
4.0								4.0
5.0		⊠	1166	● ▲	ML		◆	5.0
	END HOLE @ 5.0m							
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 5.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-502
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1722+950 6M 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 & ASH							0.0
	SILT -brown -wet							
1.0	SILT (ML) -brown -frozen -slow penetration	⊠	1159	● ▲	ML		◆	1.0
	SANDY SILT (ML) -frozen	⊠	1160	● ▲	ML		◆	
2.0								2.0
	SILTY SAND TO SANDY SILT (SM)-(ML) -brown -frozen	⊠	1161	● ▲	SM		◆	
3.0								3.0
4.0		⊠	1162	● ▲	ML		◆	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

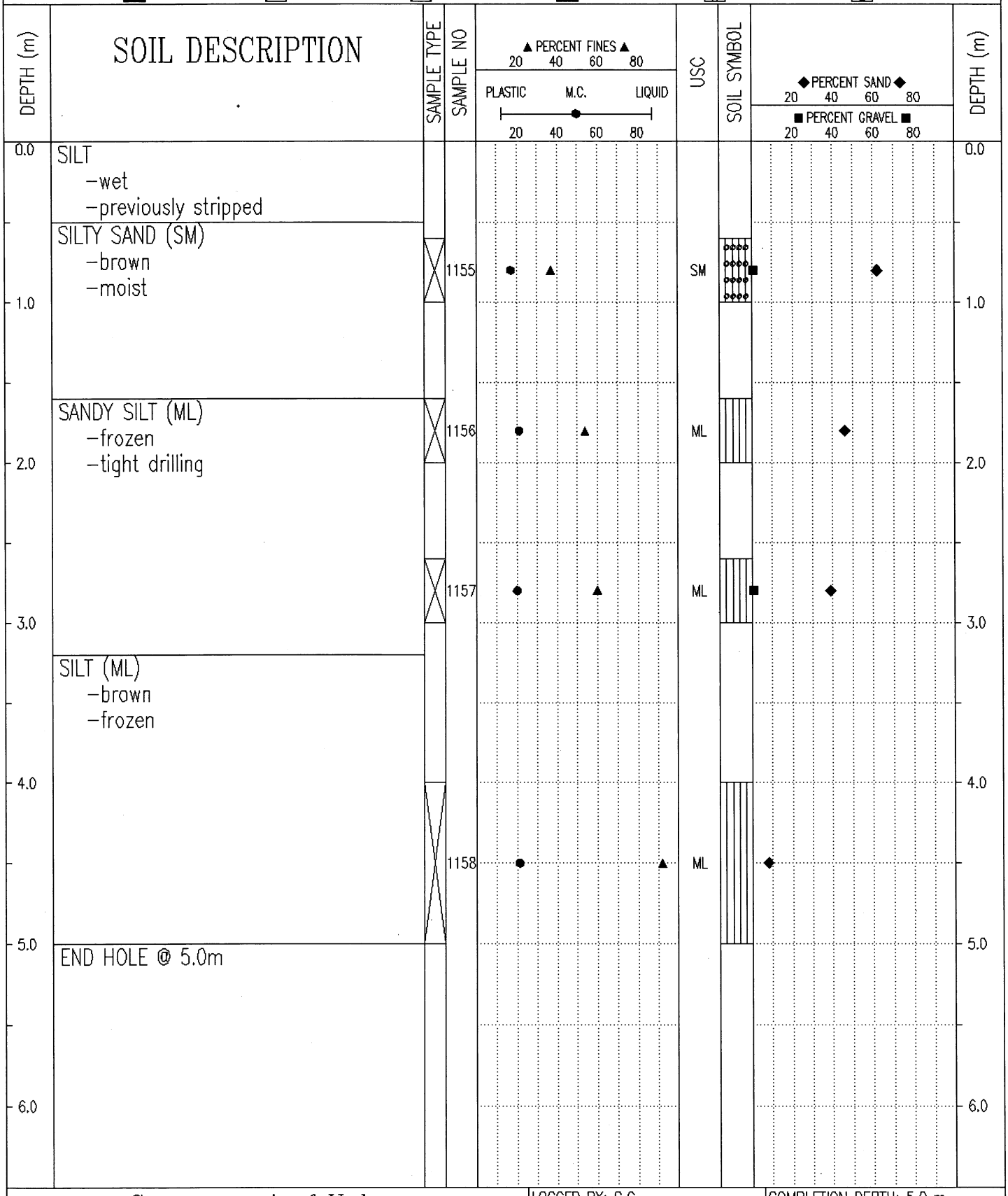
Government of Yukon
Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/10
Fig. No:	Page 1 of 1

02/10/02 09:24AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-501
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1723+050 4M LT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ☒ AUGER ▤ BULK ▥ TUBE ◧ CORE



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 01/09/10
	Fig. No:	Page 1 of 1

02/08/02 02:07PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-500
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1723+140 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	ASH & ORGANIC							0.0
	SILTY SAND TO SILT WITH SAND (SM)-(ML) -brown -damp -smooth drilling -frozen below 1.4m -slow penetration below 1.6m	⊠	1148	● ▲ ◆	SM	▨	◆	
1.0								1.0
		⊠	1149	● ▲ ◆	SM	▨	◆	
2.0								2.0
		⊠	1150	● ▲	ML	▨	■ ◆	
3.0								3.0
	-frozen (Vx) below 3.5m							
4.0		⊠	1151	● ▲	ML	▨	■ ◆	4.0
5.0	SILTY SAND WITH GRAVEL TO SANDY SILT (SM)-(ML) -frozen -grinding between 5.0 - 7.5m -tight drilling	⊠	1152	● ▲	SM	▨	■ ◆	5.0
6.0								6.0
		⊠	1153	● ▲	ML	▨	■ ◆	
7.0								7.0
8.0								8.0
		⊠	1154	● ▲	ML	▨	■ ◆	
9.0	END HOLE @ 9.0m							9.0
10.0								10.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 9.0 m
	REVIEWED BY:	COMPLETE: 01/09/10
	Fig. No:	Page 1 of 1

03/01/02 10:54AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-499
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1723+275 C.L.	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	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -easy drilling	☒	1144	▲	SW-SM		■ ◆	0.0
1.0								1.0
	POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED GRAVEL WITH SILT & SAND (GP)-(GW-GM) -brown -damp -little more grinding	☒	1145	▲	GP		◆ ■	
2.0								2.0
		☒	1146	▲	GW-GM		◆ ■	
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -moist to wet -smoother drilling below 3.0m							3.0
4.0		☒	1147	▲	GP-GM		◆ ■	4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/10
Fig. No:	Page 1 of 1

03/01/02 10:56AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-498
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1723+350 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -moist -rough drilling -grinding starts @ surface (previously stripped)	⊠	1140		GP-GM			0.0
1.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp	⊠	1141		GP			1.0
2.0								2.0
3.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -easier penetration @ 3.0m	⊠	1142		SW-SM			3.0
4.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) END HOLE @ 4.0m	⊠	1143		GP-GM			4.0
5.0								5.0
6.0								6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 01/09/10
Fig. No:	Page 1 of 1

03/12/11 09:06AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-497
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1723+540 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SILT WITH ORGANICS -orange-brown -0.5m diameter boulders on slope				
1.0	SANDY SILT TO SILTY SAND (ML)-(SM) -creamy brown -dry -smooth easy drilling	X	1136	ML	
2.0		X	1137	SM	
3.0	SILTY SAND WITH GRAVEL TO POORLY GRADED SAND WITH SILT (SM)-(SP-SM) -dry -minor grinding @ 2.6m	X	1138	SM	
4.0		X	1139	SP-SM	
5.0	SILT WITH GRAVEL -damp -grinding between 5 & 6m -no sample recovered between 5 & 6m				
6.0	END HOLE @ 6.0m -one refusal @ 6m -second refusal @ 5.5m				

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 6.0 m
	REVIEWED BY:	COMPLETE: 01/09/10
	Fig. No:	Page 1 of 1

03/12/11 09:06AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-496
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1723+625 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ☒ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC				
	SILTY SAND (SM) -brown -moist -smooth drilling	☒	1130	SM	
2.0	POORLY GRADED SAND WITH SILT TO SILTY SAND (SP-SM)-(SM) -brown -damp -minor grinding drilling	☒	1131	SP-SM	
		☒	1132	SP-SM	
4.0		☒	1133	SM	
5.0	-tight drilling, some grinding drilling below 5.0m				
6.0	-smooth slow drilling below 6.0m	☒	1134	SM	
8.0		☒	1135	SM	
9.0	END HOLE @ 9.0m				
10.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m)

Government of Yukon
Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 9.0 m
REVIEWED BY:	COMPLETE: 01/09/10
Fig. No:	Page 1 of 1

03/12/11 09:07AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 10	TEST HOLE NO: 619-495
ENGINEERING CAPITAL	R.O.W. TESTING	Project No: 092-202101-0362
NODWELL B40 L 6" AUGER	LOCATION: 1723+725 3M RT	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC				
	SANDY SILT (ML) –brown –damp –smooth	⊠	1125	ML	
1.0					
	POORLY GRADED SAND WITH GRAVEL (SM) –brown –damp –smooth	⊠	1126	SP	
2.0					
	SILTY SAND WITH GRAVEL (SM) –brown –damp –minor grinding start @ 2.0m –tight drilling	⊠	1127	SM	
3.0					
		⊠	1128	SM	
4.0					
5.0	SILT WITH SAND –brown –damp –sample # 1129 possible contaminated with material from above. Test results Silty Sand with Gravel (SM) Field description Silt with Sand				
6.0					
7.0		⊠	1129	SM	
	END HOLE @ 7.5m				
8.0					
9.0					
10.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC M.C. LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m)

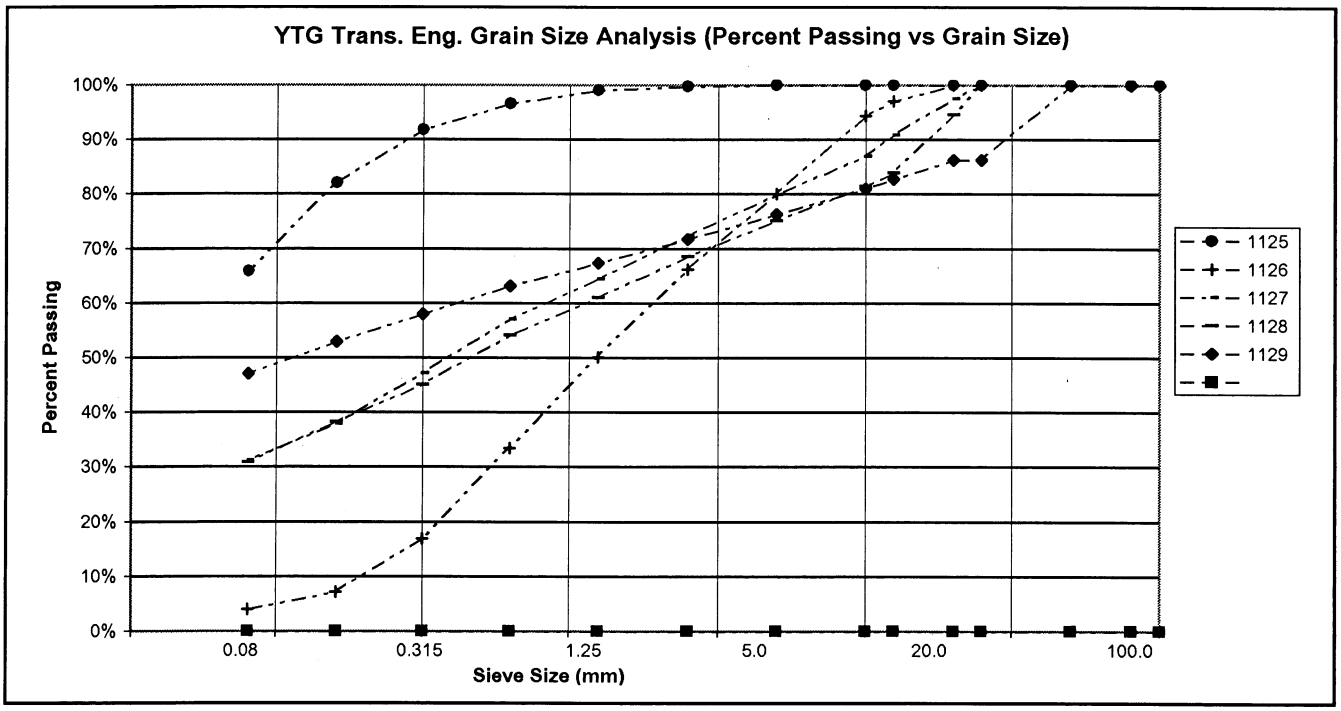
Government of Yukon
Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 7.5 m
REVIEWED BY:	COMPLETE: 01/09/10
Fig. No:	Page 1 of 1

03/12/11 09:07AM

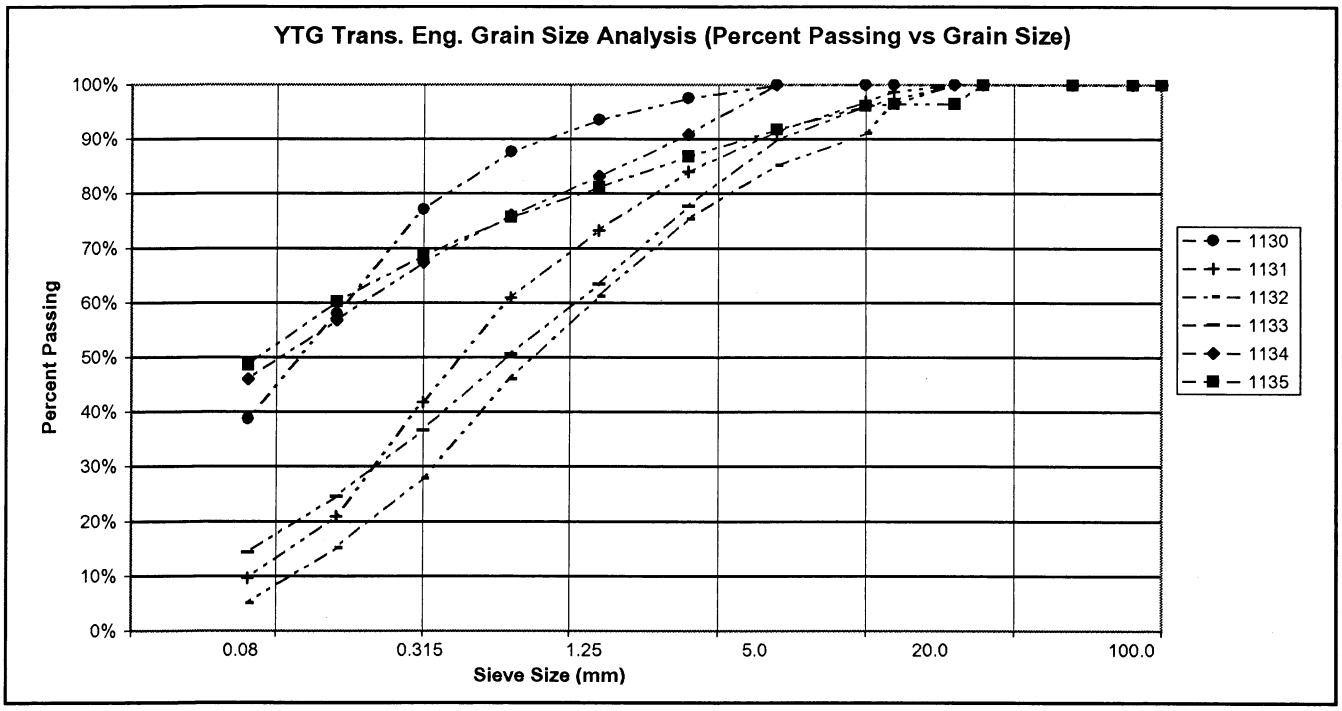
PROJECT NUMBER:	092-202101-0362-1	HOLE No.: 619-495
CLIENT:	ENGINEERING CAPITAL	
PROJECT NAME:	SHAKWAK SEG 10	
PROJECT LOCATION:	Km 1692.6-1729.6 A/H	
DRILL UNIT:	MOBILE B40 L	
HOLE LOCATION:	See Testhole Log Sheet	
LOGGED BY:	G.C.	DATE COMP: 2001/09/06

FIELD NO:	1125	1126	1127	1128	1129	
LAB NO:	1902	1903	1904	1905	1906	
DEPTH:	0.4-0.8	1.6-2.0	2.6-3.0	3.6-4.0	6.5-7.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	100%	86%	
20.0	100%	100%	98%	95%	86%	
12.5	100%	97%	91%	84%	83%	
10.0	100%	94%	87%	82%	81%	
5.0	100%	80%	80%	75%	76%	
2.5	100%	66%	72%	69%	72%	
1.25	99%	50%	64%	61%	67%	
0.630	97%	34%	57%	54%	63%	
0.315	92%	17%	47%	45%	58%	
0.160	82%	7%	38%	38%	53%	
0.080	66%	4%	31%	31%	47%	
M.C.(%):	15%	1%	5%	5%	7%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	0	20	20	25	24	
% SAND:	34	76	49	44	29	
% FINES:	66	4	31	31	47	
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED SAND WITH GRAVEL (SP)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	



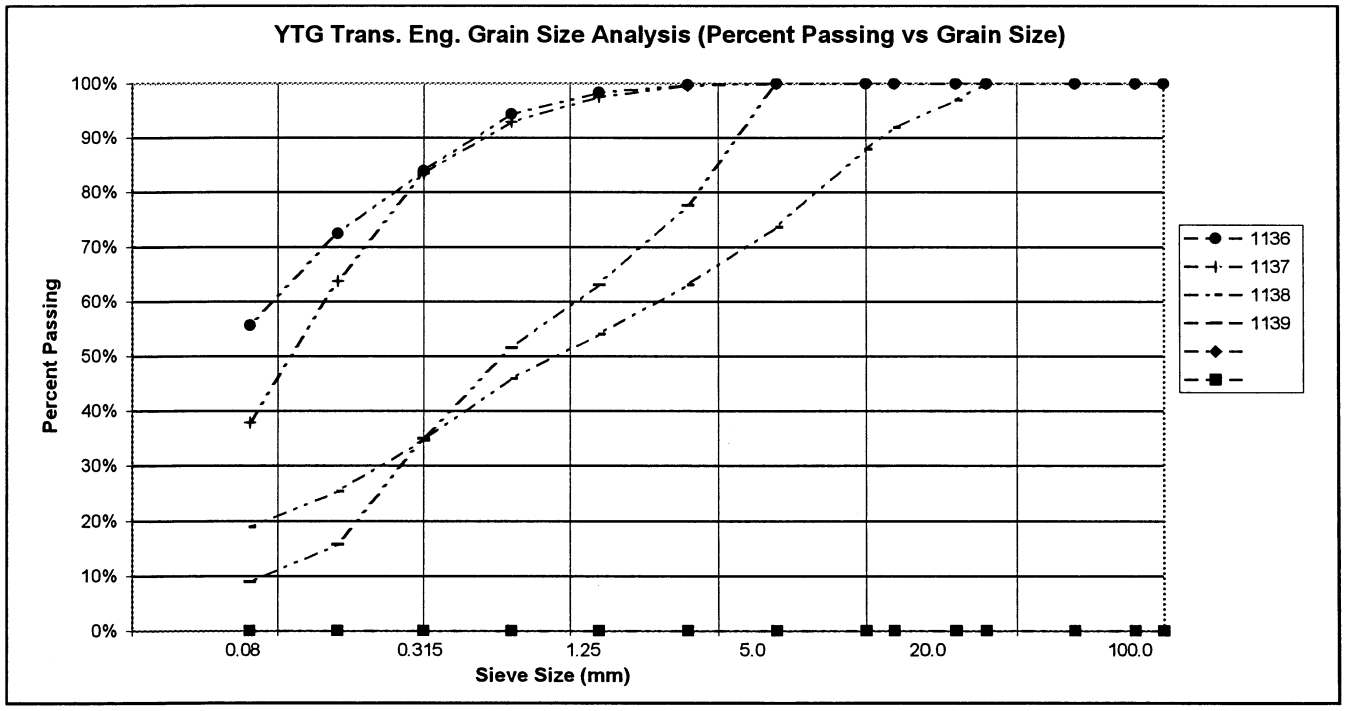
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-496
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/06

FIELD NO:	1130	1131	1132	1133	1134	1135
LAB NO:	1907	1908	1909	1910	1911	1912
DEPTH:	0.5-1.0	1.8-2.0	2.6-3.0	4.0-4.5	6.0-6.5	8.0-9.0
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	100%	100%	100%	100%	100%	96%
12.5	100%	99%	97%	97%	100%	96%
10.0	100%	97%	91%	96%	100%	96%
5.0	100%	91%	85%	90%	100%	92%
2.5	98%	84%	75%	78%	91%	87%
1.25	94%	73%	61%	63%	83%	81%
0.630	88%	61%	46%	51%	76%	76%
0.315	77%	42%	28%	37%	67%	69%
0.160	58%	21%	15%	25%	57%	60%
0.080	39%	10%	5%	14%	46%	49%
M.C.(%):	11%	2%	2%	3%	7%	6%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	0	9	15	10	0	8
% SAND:	61	82	80	76	54	43
% FINES:	39	10	5	14	46	49
CLASSIFICATION	SILTY SAND (SM)	POORLY GRADED SAND WITH SILT (SP-SM)	POORLY GRADED SAND WITH SILT (SP-SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)



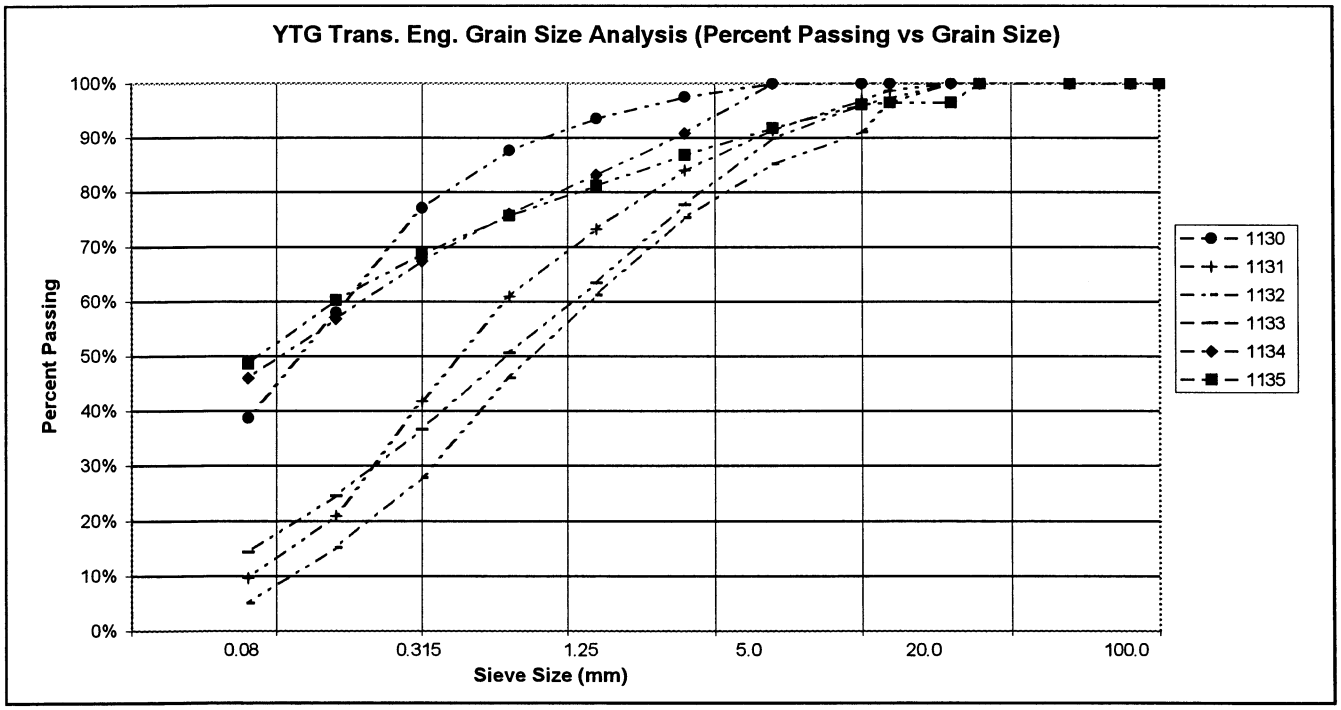
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-497
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 9/6/2001

FIELD NO:	1136	1137	1138	1139		
LAB NO:	1913	1914	1915	1916		
DEPTH:	0.5-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	97%	100%		
12.5	100%	100%	92%	100%		
10.0	100%	100%	88%	100%		
5.0	100%	100%	74%	100%		
2.5	100%	100%	63%	78%		
1.25	98%	98%	54%	63%		
0.630	94%	93%	46%	52%		
0.315	84%	83%	35%	35%		
0.160	72%	64%	25%	16%		
0.080	56%	38%	19%	9%		
M.C.(%):	5%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	26	0		
% SAND:	44	62	55	91		
% FINES:	56	38	19	9		
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED SAND WITH SILT (SP-SM)		



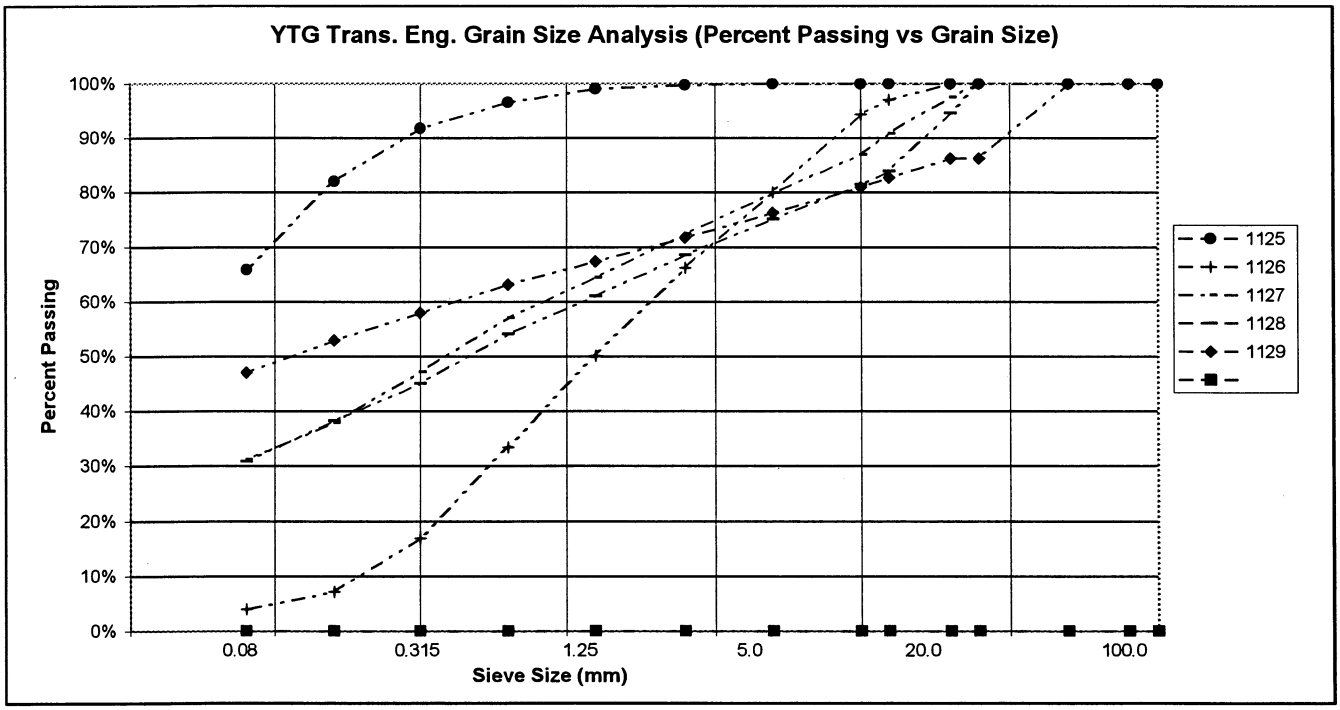
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-496
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 9/6/2001

FIELD NO:	1130	1131	1132	1133	1134	1135
LAB NO:	1907	1908	1909	1910	1911	1912
DEPTH:	0.5-1.0	1.8-2.0	2.6-3.0	4.0-4.5	6.0-6.5	8.0-9.0
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	100%	100%	100%	100%	100%	96%
12.5	100%	99%	97%	97%	100%	96%
10.0	100%	97%	91%	96%	100%	96%
5.0	100%	91%	85%	90%	100%	92%
2.5	98%	84%	75%	78%	91%	87%
1.25	94%	73%	61%	63%	83%	81%
0.630	88%	61%	46%	51%	76%	76%
0.315	77%	42%	28%	37%	67%	69%
0.160	58%	21%	15%	25%	57%	60%
0.080	39%	10%	5%	14%	46%	49%
M.C.(%):	11%	2%	2%	3%	7%	6%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	0	9	15	10	0	8
% SAND:	61	82	80	76	54	43
% FINES:	39	10	5	14	46	49
CLASSIFICATION	SILTY SAND (SM)	POORLY GRADED SAND WITH SILT (SP-SM)	POORLY GRADED SAND WITH SILT (SP-SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)



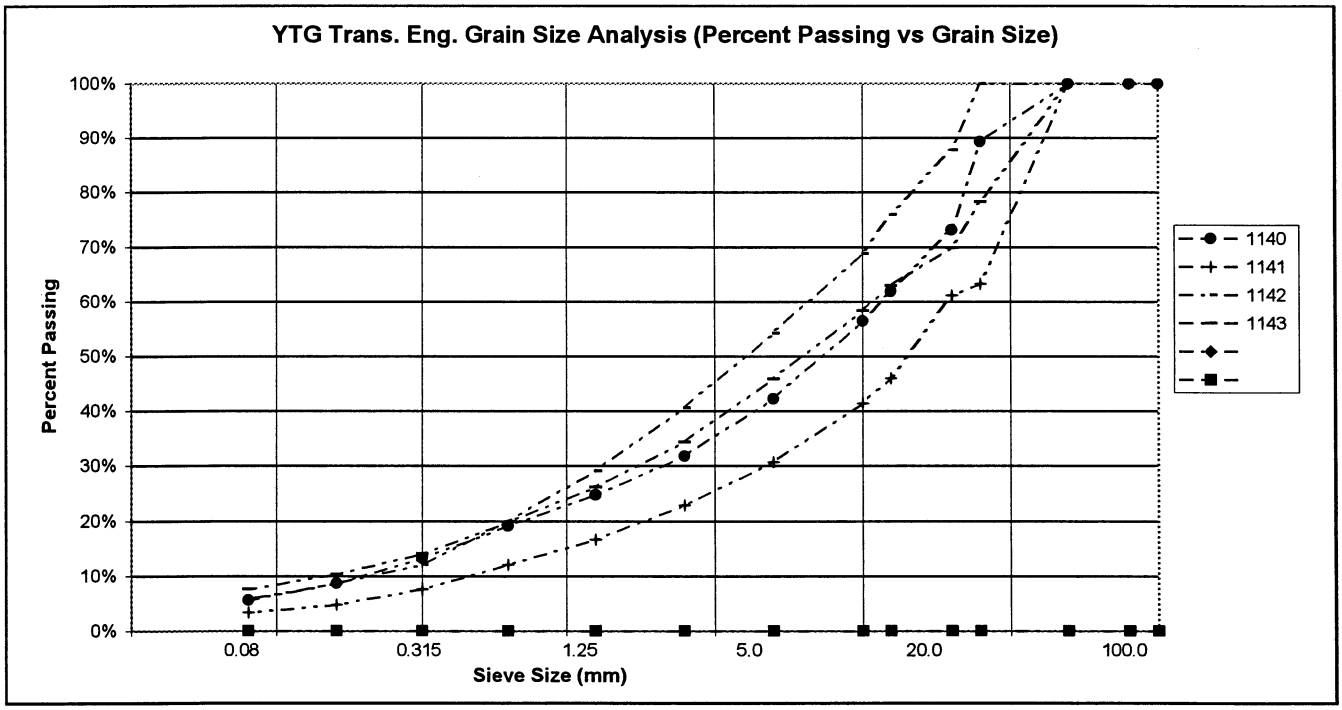
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-495
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 9/6/2001

FIELD NO:	1125	1126	1127	1128	1129	
LAB NO:	1902	1903	1904	1905	1906	
DEPTH:	0.4-0.8	1.6-2.0	2.6-3.0	3.6-4.0	6.5-7.5	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	100%	100%	100%	86%	
20.0	100%	100%	98%	95%	86%	
12.5	100%	97%	91%	84%	83%	
10.0	100%	94%	87%	82%	81%	
5.0	100%	80%	80%	75%	76%	
2.5	100%	66%	72%	69%	72%	
1.25	99%	50%	64%	61%	67%	
0.630	97%	34%	57%	54%	63%	
0.315	92%	17%	47%	45%	58%	
0.160	82%	7%	38%	38%	53%	
0.080	66%	4%	31%	31%	47%	
M.C.(%):	15%	1%	5%	5%	7%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	0	20	20	25	24	
% SAND:	34	76	49	44	29	
% FINES:	66	4	31	31	47	
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED SAND WITH GRAVEL (SP)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	



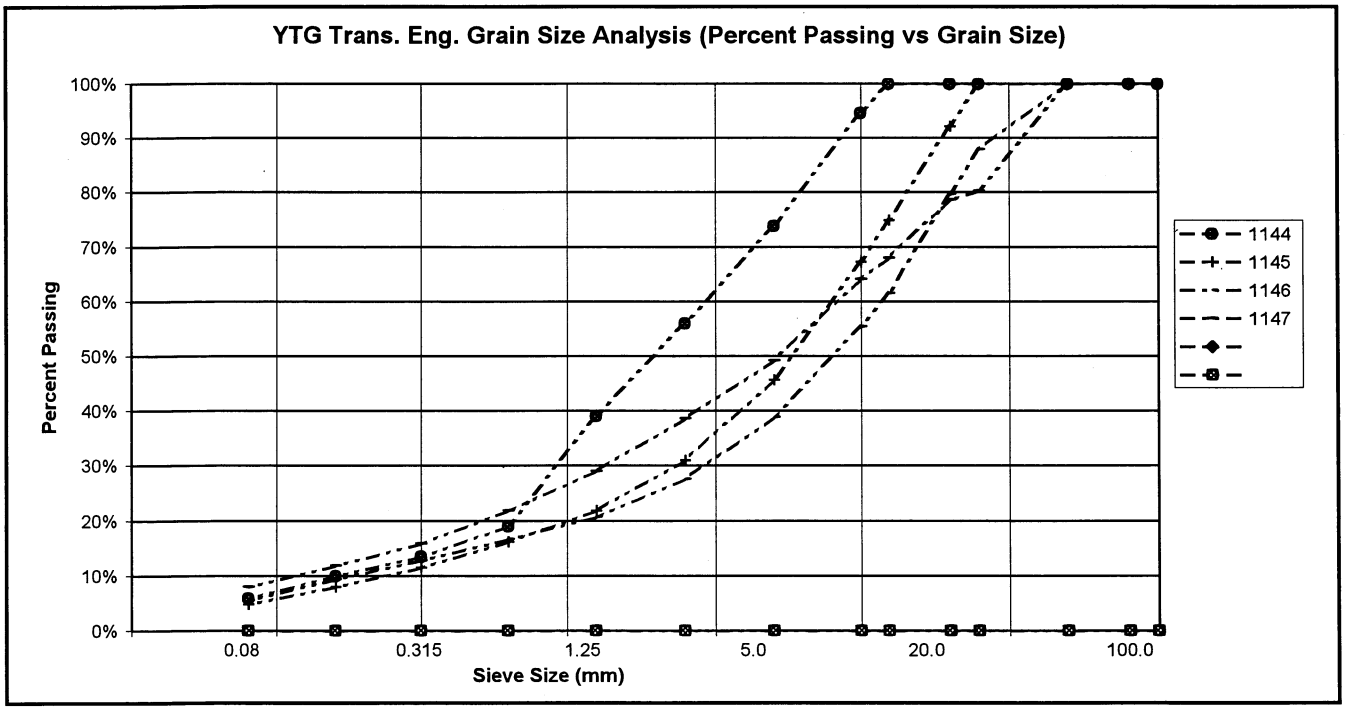
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-498
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 9/7/2001

FIELD NO:	1140	1141	1142	1143		
LAB NO:	1917	1918	1919	1920		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.5-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	89%	63%	100%	78%		
20.0	73%	61%	88%	70%		
12.5	62%	46%	76%	63%		
10.0	56%	41%	69%	58%		
5.0	42%	31%	54%	46%		
2.5	32%	23%	41%	34%		
1.25	25%	17%	29%	26%		
0.630	19%	12%	20%	20%		
0.315	13%	8%	12%	14%		
0.160	9%	5%	9%	10%		
0.080	6%	3%	6%	8%		
M.C.(%):	3%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	58	69	46	54		
% SAND:	37	27	48	38		
% FINES:	6	3	6	8		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



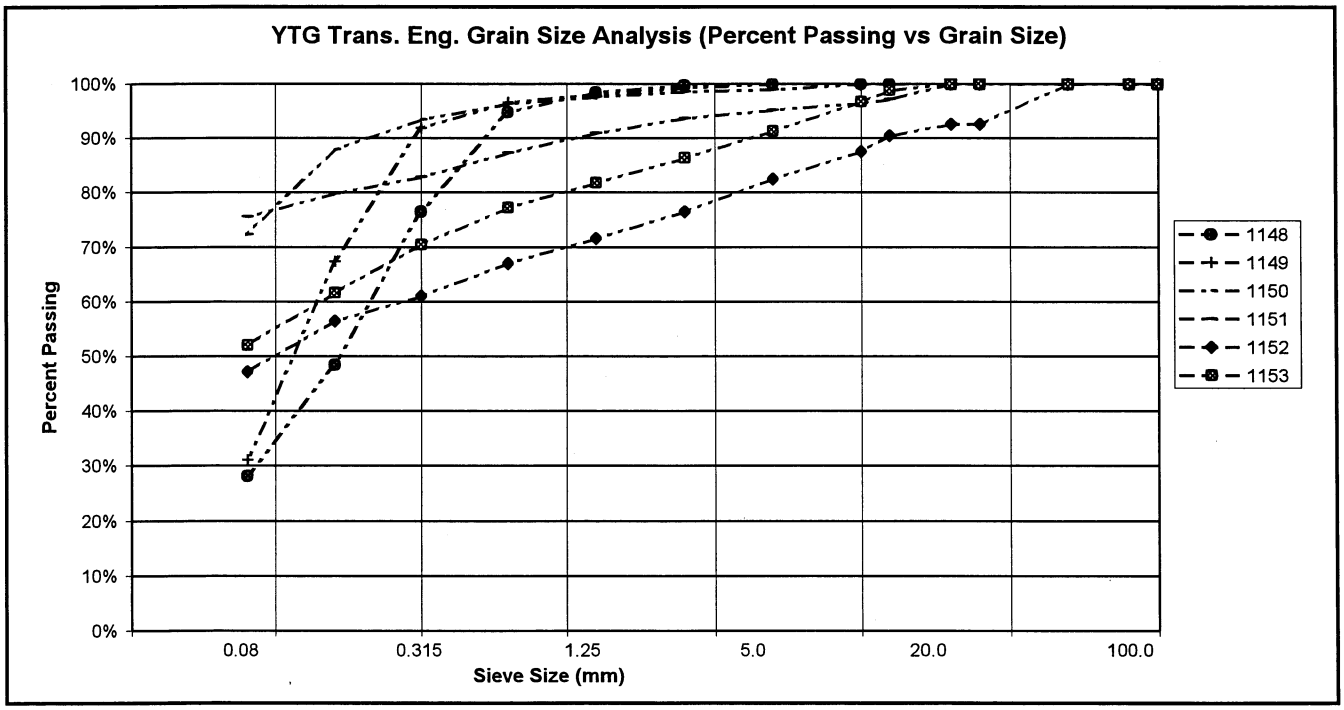
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-499
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/07

FIELD NO:	1144	1145	1146	1147		
LAB NO:	1921	1922	1923	1924		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	88%	80%		
20.0	100%	92%	80%	79%		
12.5	100%	75%	61%	68%		
10.0	95%	67%	55%	64%		
5.0	74%	46%	39%	49%		
2.5	56%	31%	28%	39%		
1.25	39%	22%	21%	29%		
0.630	19%	16%	17%	22%		
0.315	13%	11%	13%	16%		
0.160	10%	8%	9%	12%		
0.080	6%	5%	6%	8%		
M.C.(%):	4%	2%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	26	54	61	51		
% SAND:	68	41	33	41		
% FINES:	6	5	6	8		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



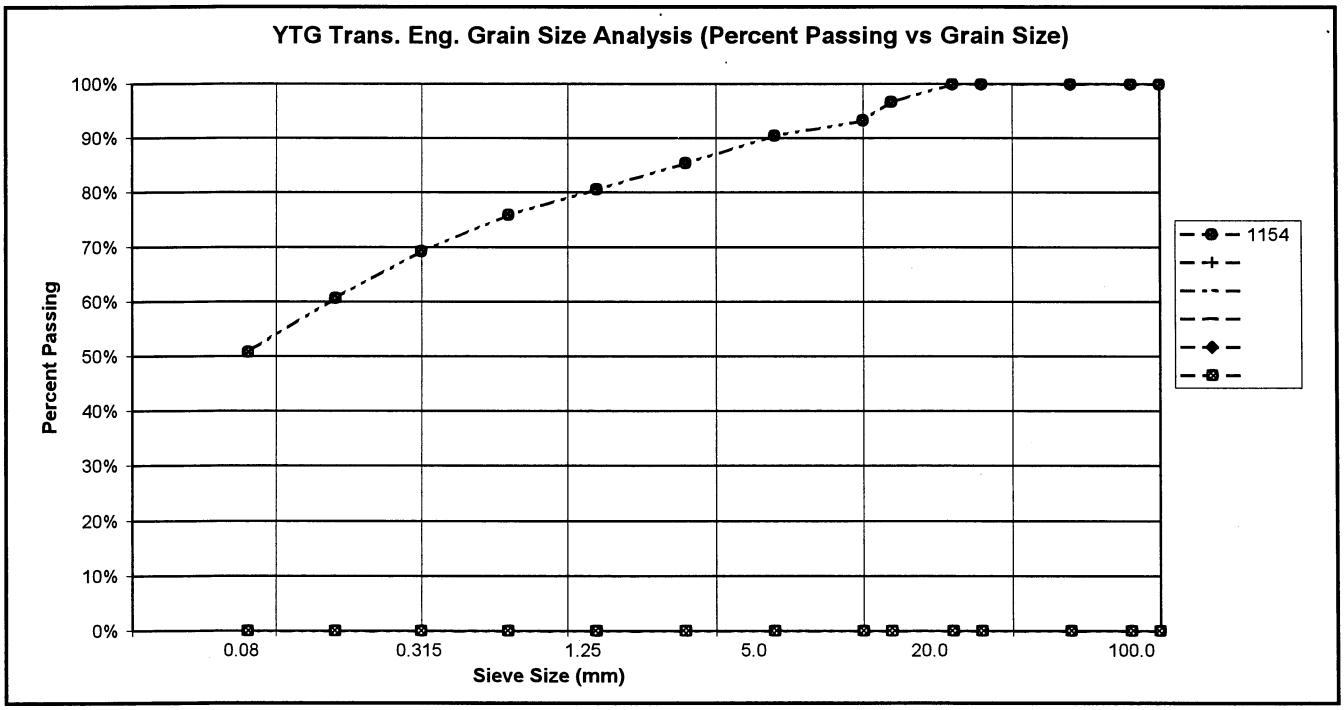
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-500
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/07

FIELD NO:	1148	1149	1150	1151	1152	1153
LAB NO:	1925	1926	1927	1928	1929	1930
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5	5.0-6.0	7.0-7.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	93%	100%
20.0	100%	100%	100%	100%	93%	100%
12.5	100%	100%	100%	97%	90%	99%
10.0	100%	100%	100%	96%	88%	97%
5.0	100%	100%	99%	95%	83%	91%
2.5	100%	99%	99%	94%	76%	86%
1.25	99%	98%	98%	91%	72%	82%
0.630	95%	97%	96%	87%	67%	77%
0.315	76%	92%	93%	83%	61%	70%
0.160	49%	67%	88%	80%	56%	62%
0.080	28%	31%	72%	76%	47%	52%
M.C.(%):	7%	11%	19%	39%	10%	11%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	0	0	1	5	17	9
% SAND:	72	69	27	20	35	39
% FINES:	28	31	72	76	47	52
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILT WITH SAND (ML)	SILT WITH SAND (ML)	SILTY SAND WITH GRAVEL (SM)	SANDY SILT (ML)



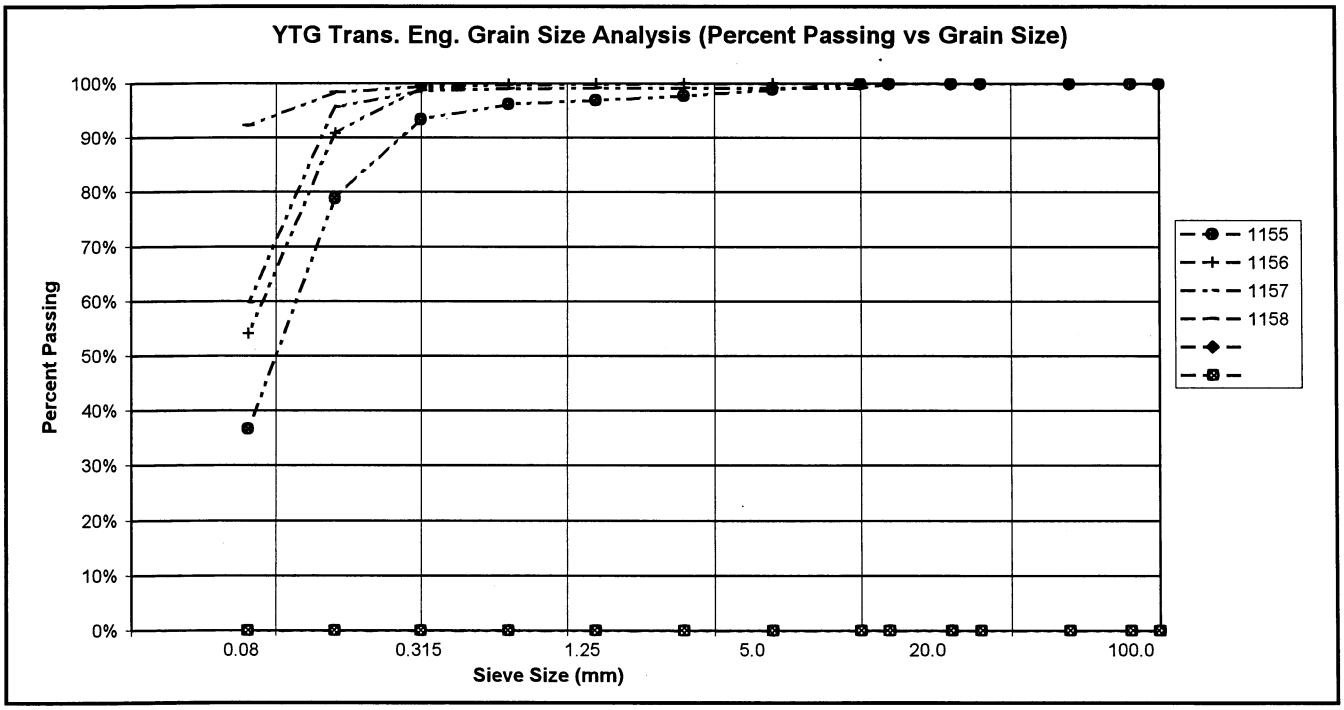
PROJECT NUMBER:	092-202101-0362-1				HOLE No.: 619-500A	
CLIENT:	ENGINEERING CAPITAL					
PROJECT NAME:	SHAKWAK SEG 10					
PROJECT LOCATION:	Km 1692.6-1729.6 A/H					
DRILL UNIT:	MOBILE B40 L					
HOLE LOCATION:	See Testhole Log Sheet					
LOGGED BY:	G.C.				DATE COMP: 2001/09/07	

FIELD NO:	1154					
LAB NO:	1931					
DEPTH:	8.5-9.0					
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	100%					
20.0	100%					
12.5	97%					
10.0	93%					
5.0	91%					
2.5	85%					
1.25	81%					
0.630	76%					
0.315	69%					
0.160	61%					
0.080	51%					
M.C.(%):	10%					
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	9					
% SAND:	40					
% FINES:	51					
CLASSIFICATION	SANDY SILT (ML)					



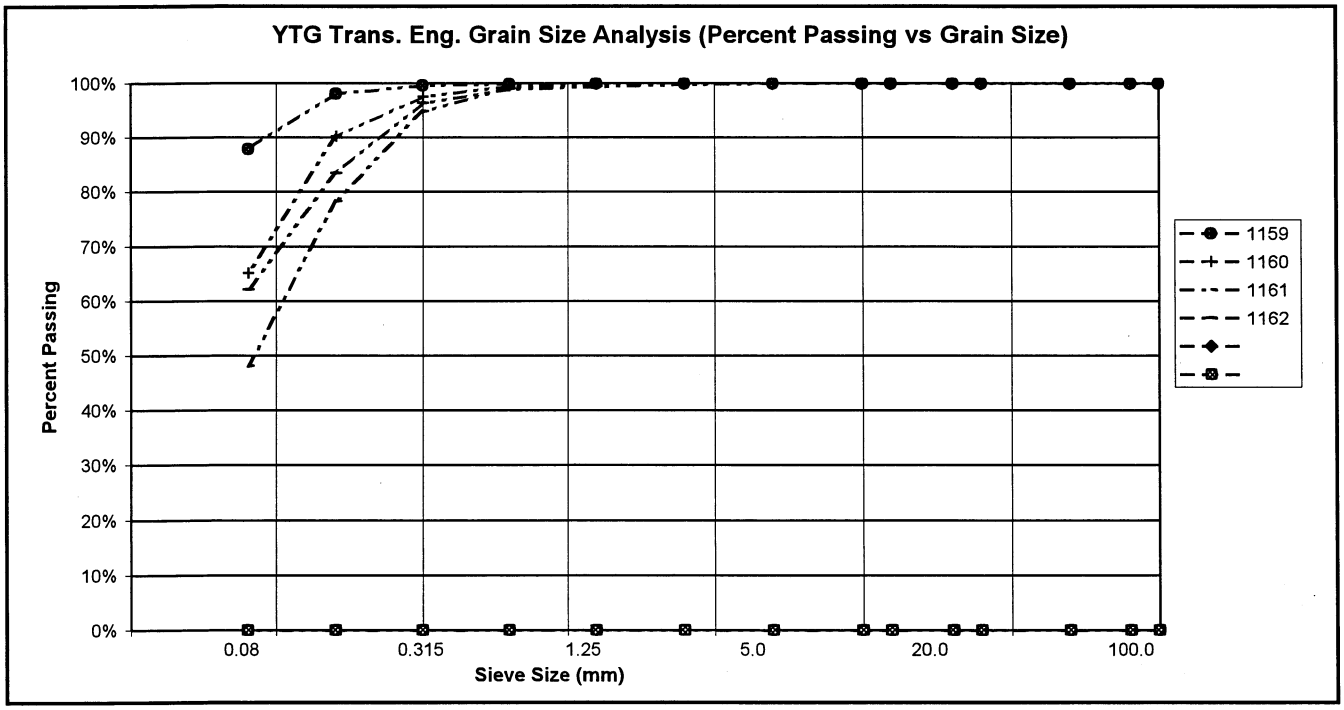
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-501
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/07

FIELD NO:	1155	1156	1157	1158		
LAB NO:	1932	1933	1934	1935		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	100%	100%	100%	100%		
10.0	100%	100%	99%	100%		
5.0	99%	100%	99%	100%		
2.5	98%	100%	99%	100%		
1.25	97%	100%	99%	100%		
0.630	96%	100%	99%	100%		
0.315	93%	99%	99%	99%		
0.160	79%	91%	96%	98%		
0.080	37%	54%	60%	92%		
M.C.(%):	17%	21%	20%	21%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	1	0	1	0		
% SAND:	62	46	39	8		
% FINES:	37	54	60	92		
CLASSIFICATION	SILTY SAND (SM)	SANDY SILT (ML)	SANDY SILT (ML)	SILT (ML)		



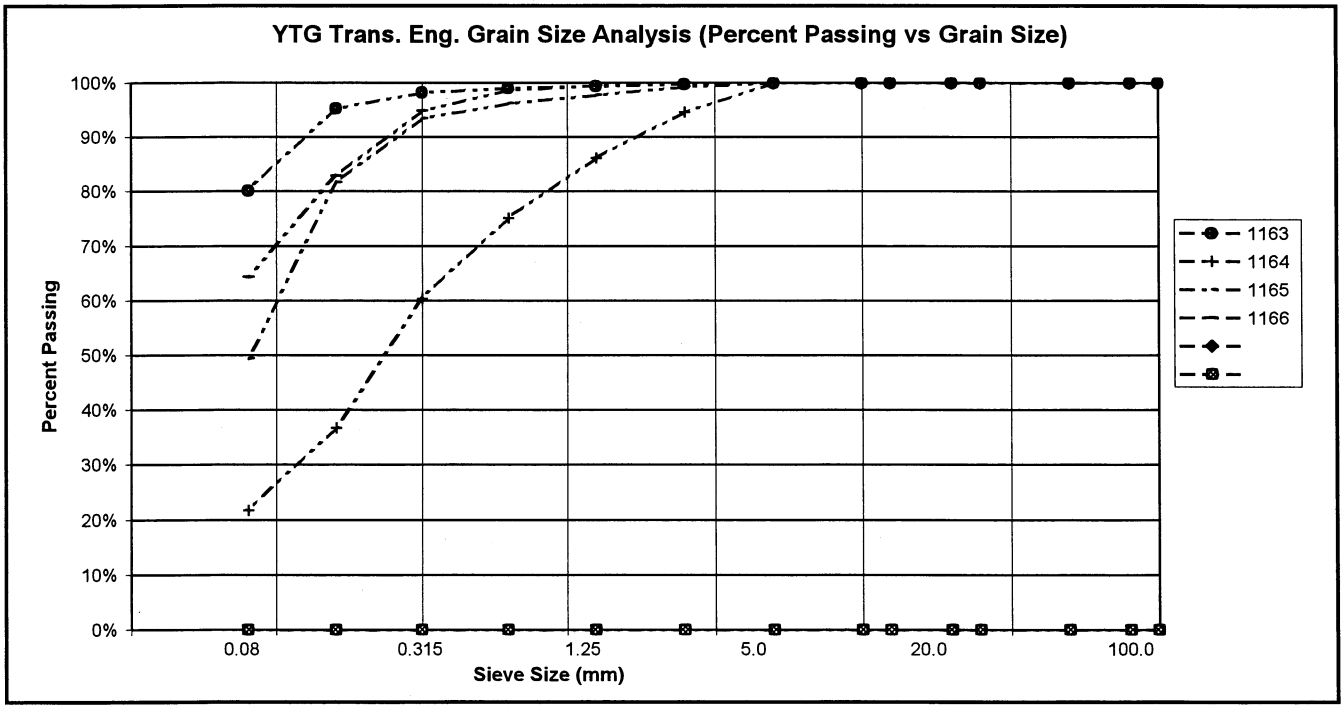
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-502
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/07

FIELD NO:	1159	1160	1161	1162		
LAB NO:	1936	1937	1938	1939		
DEPTH:	0.8-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	100%	100%	100%	100%		
10.0	100%	100%	100%	100%		
5.0	100%	100%	100%	100%		
2.5	100%	100%	100%	100%		
1.25	100%	100%	100%	99%		
0.630	100%	100%	99%	99%		
0.315	100%	97%	95%	96%		
0.160	98%	90%	78%	83%		
0.080	88%	65%	48%	62%		
M.C.(%):	70%	24%	21%	21%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	0	0		
% SAND:	12	35	52	38		
% FINES:	88	65	48	62		
CLASSIFICATION	SILT (ML)	SANDY SILT (ML)	SILTY SAND (SM)	SANDY SILT (ML)		



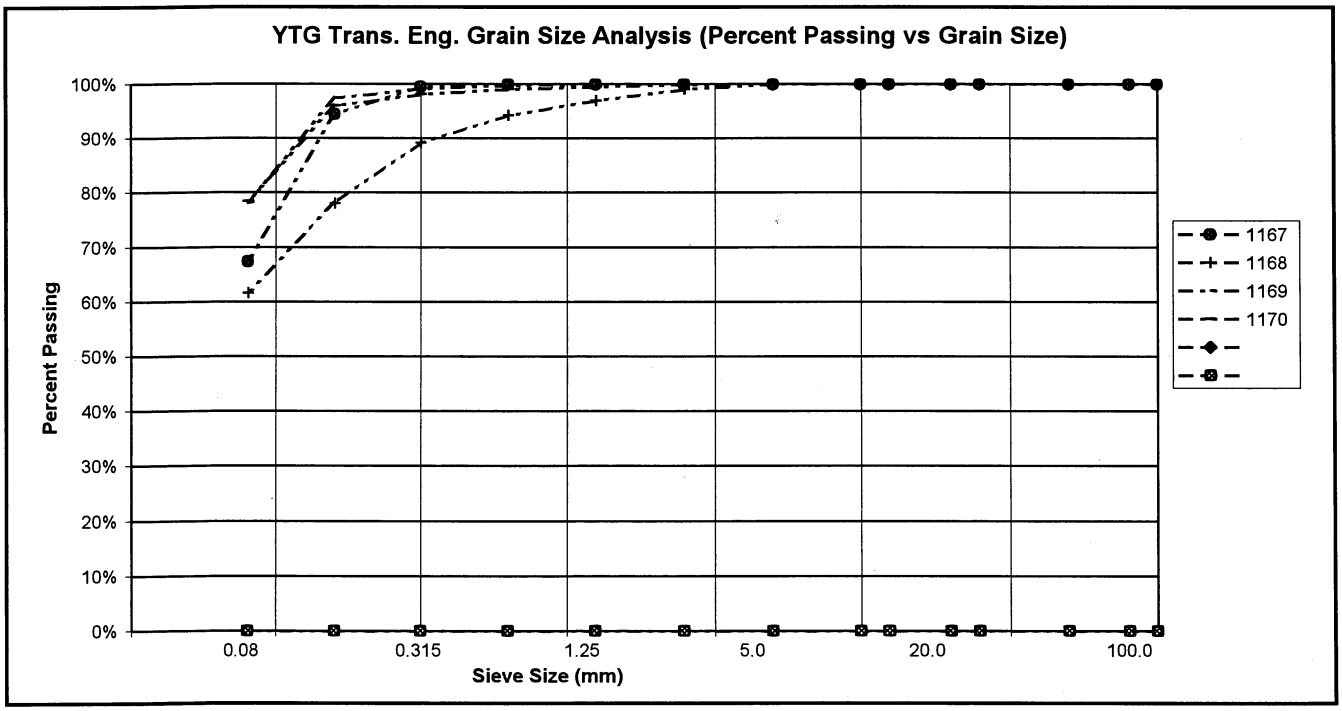
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-503
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/07

FIELD NO:	1163	1164	1165	1166		
LAB NO:	1940	1941	1942	1943		
DEPTH:	0.75-1.0	1.6-2.0	2.6-3.0	4.5-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	100%	100%	100%	100%		
10.0	100%	100%	100%	100%		
5.0	100%	100%	100%	100%		
2.5	100%	95%	99%	100%		
1.25	99%	86%	98%	100%		
0.630	99%	75%	96%	99%		
0.315	98%	60%	93%	95%		
0.160	95%	37%	82%	83%		
0.080	80%	22%	49%	64%		
M.C.(%):	35%	12%	21%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	0	0		
% SAND:	20	78	51	36		
% FINES:	80	22	49	64		
CLASSIFICATION	SILT WITH SAND (ML)	SILTY SAND (SM)	SILTY SAND (SM)	SANDY SILT (ML)		



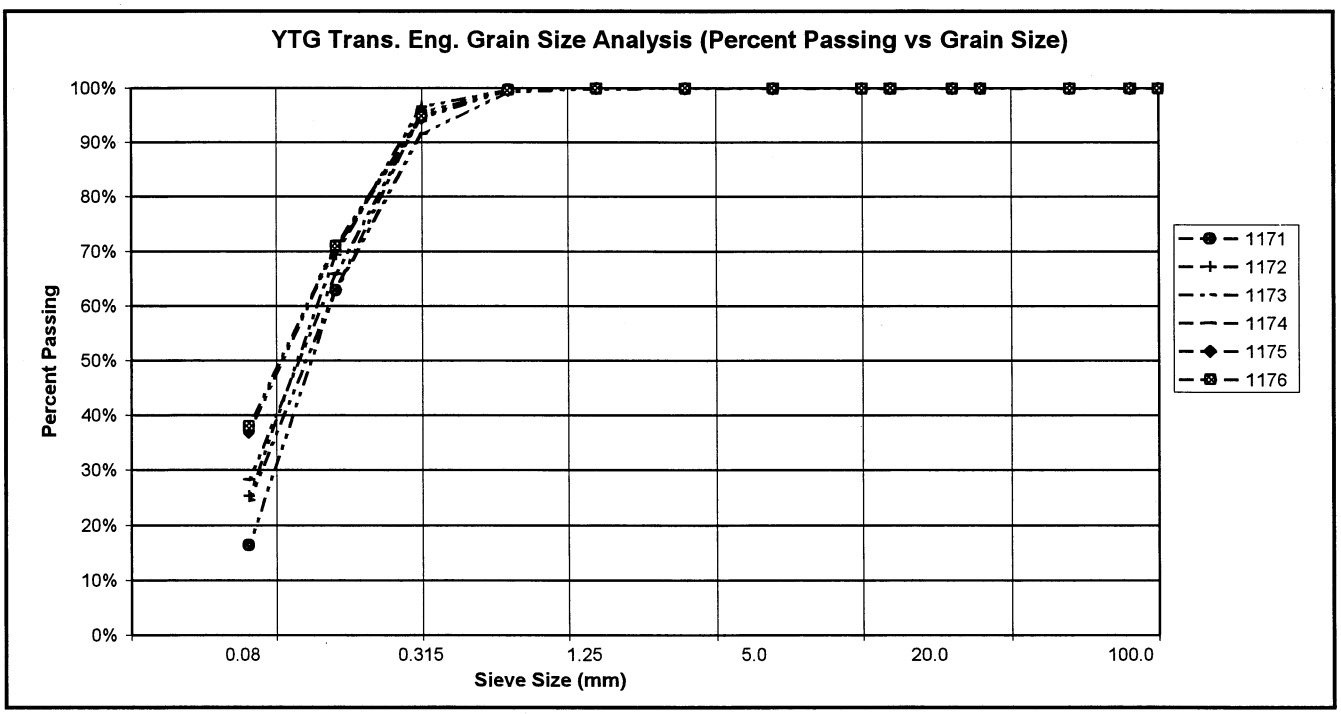
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-504
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/07

FIELD NO:	1167	1168	1169	1170		
LAB NO:	1944	1945	1946	1947		
DEPTH:	0.75-1.0	1.6-2.0	2.6-3.0	4.5-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	100%	100%	100%	100%		
10.0	100%	100%	100%	100%		
5.0	100%	100%	100%	100%		
2.5	100%	99%	100%	100%		
1.25	100%	97%	100%	100%		
0.630	100%	94%	100%	99%		
0.315	100%	89%	99%	98%		
0.160	95%	78%	97%	96%		
0.080	67%	62%	78%	78%		
M.C.(%):	4%	29%	26%	26%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	0	0		
% SAND:	33	38	22	22		
% FINES:	67	62	78	78		
CLASSIFICATION	SANDY SILT (ML)	SANDY SILT (ML)	SILT WITH SAND (ML)	SILT WITH SAND (ML)		



PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 619-505
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/07

FIELD NO:	1171	1172	1173	1174	1175	1176
LAB NO:	1948	1949	1950	1951	1952	1953
DEPTH:	0.6-1.0	1.75-2.0	2.6-3.0	4.5-5.0	6.5-7.0	9.0-9.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	100%	100%	100%	100%	100%	100%
12.5	100%	100%	100%	100%	100%	100%
10.0	100%	100%	100%	100%	100%	100%
5.0	100%	100%	100%	100%	100%	100%
2.5	100%	100%	100%	100%	100%	100%
1.25	100%	100%	100%	100%	100%	100%
0.630	100%	100%	99%	100%	100%	100%
0.315	96%	97%	92%	95%	94%	95%
0.160	63%	69%	63%	66%	71%	71%
0.080	16%	25%	24%	28%	37%	38%
M.C.(%):	5%	26%	20%	22%	23%	20%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	0	0	0	0	0	0
% SAND:	84	75	75	72	63	62
% FINES:	16	25	24	28	37	38
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)

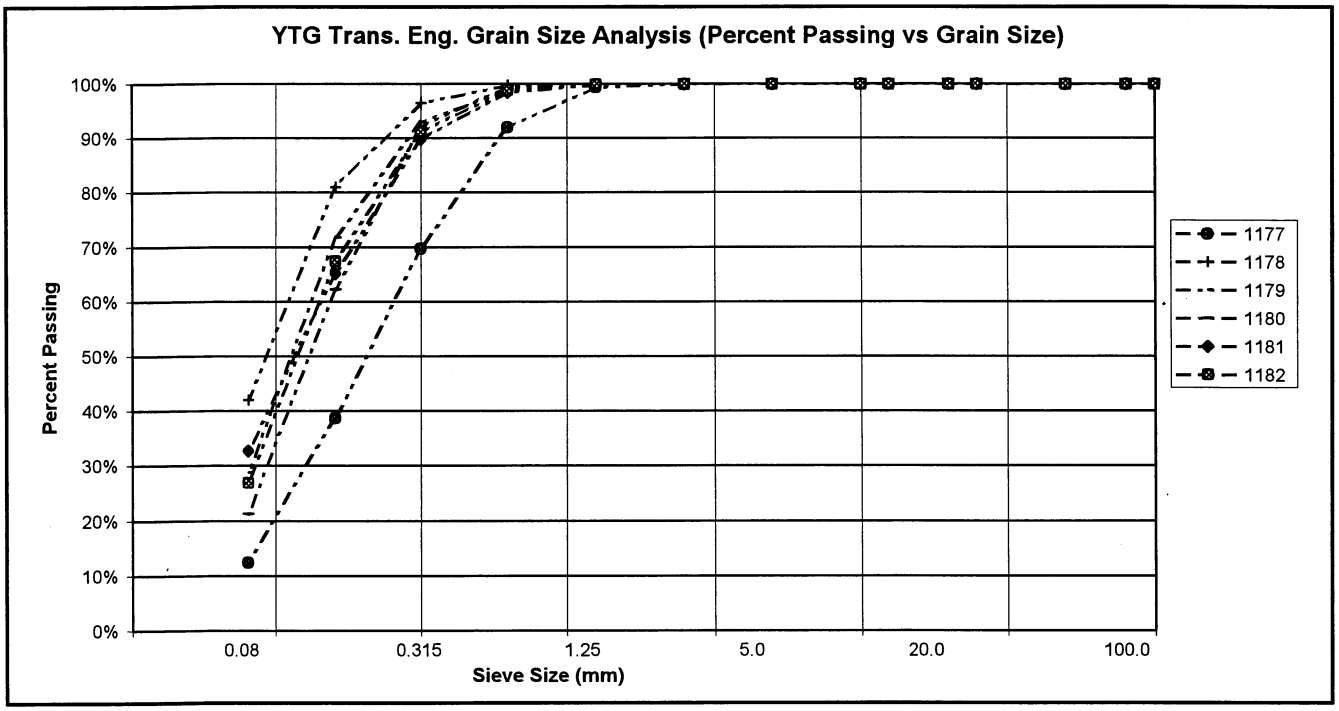


PROJECT NUMBER: 092-202101-0362-1
CLIENT: ENGINEERING CAPITAL
PROJECT NAME: SHAKWAK SEG 10
PROJECT LOCATION: Km 1692.6-1729.6 A/H
DRILL UNIT: MOBILE B40 L
HOLE LOCATION: See Testhole Log Sheet
LOGGED BY: G.C.

HOLE No.: 620-506

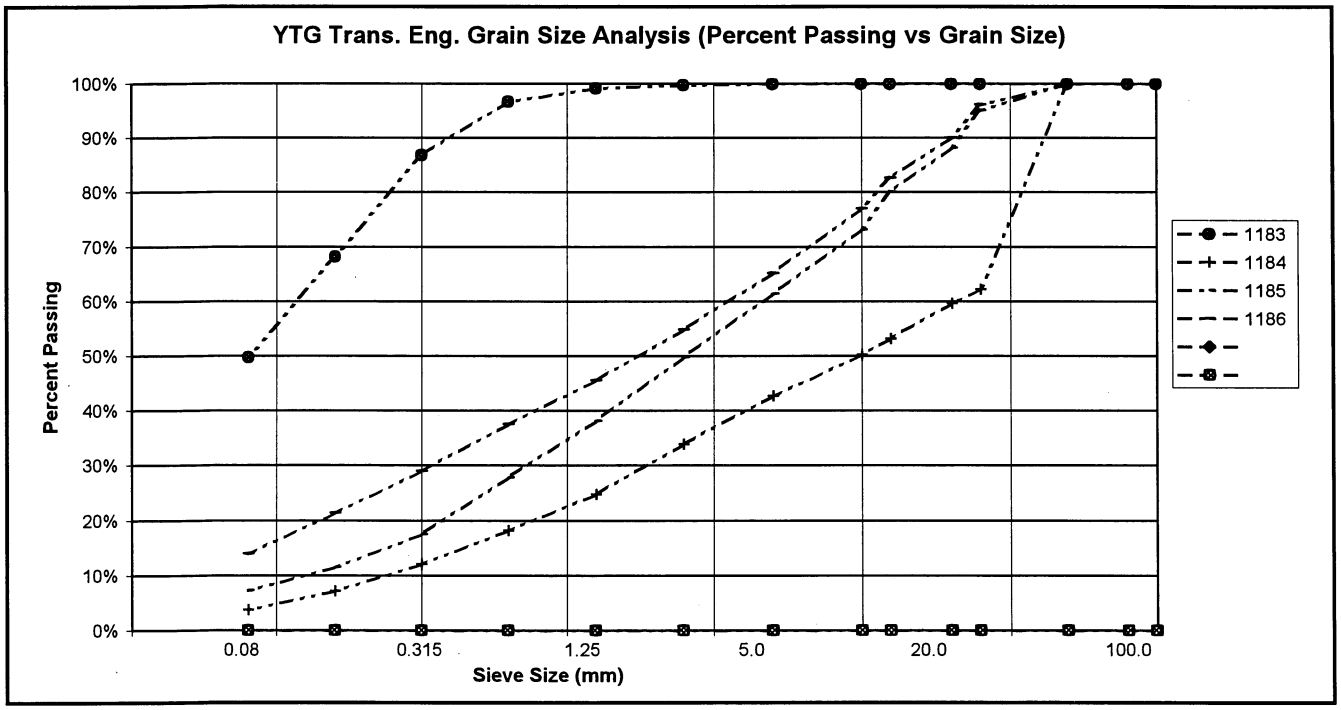
DATE COMP: 2001/09/11

FIELD NO:	1177	1178	1179	1180	1181	1182
LAB NO:	1954	1955	1956	1957	1958	1959
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5	6.5-7.0	9.0-9.5
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%	100%	100%
80.0	100%	100%	100%	100%	100%	100%
50.0	100%	100%	100%	100%	100%	100%
25.0	100%	100%	100%	100%	100%	100%
20.0	100%	100%	100%	100%	100%	100%
12.5	100%	100%	100%	100%	100%	100%
10.0	100%	100%	100%	100%	100%	100%
5.0	100%	100%	100%	100%	100%	100%
2.5	100%	100%	100%	100%	100%	100%
1.25	99%	100%	100%	100%	100%	100%
0.630	92%	100%	99%	100%	98%	99%
0.315	70%	96%	93%	92%	90%	91%
0.160	39%	81%	72%	62%	65%	67%
0.080	12%	42%	29%	21%	33%	27%
M.C.(%):	4%	10%	4%	4%	3%	3%
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	0.0
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	0.0
% GRAVEL:	0	0	0	0	0	0
% SAND:	88	58	71	79	67	73
% FINES:	12	42	29	21	33	27
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)



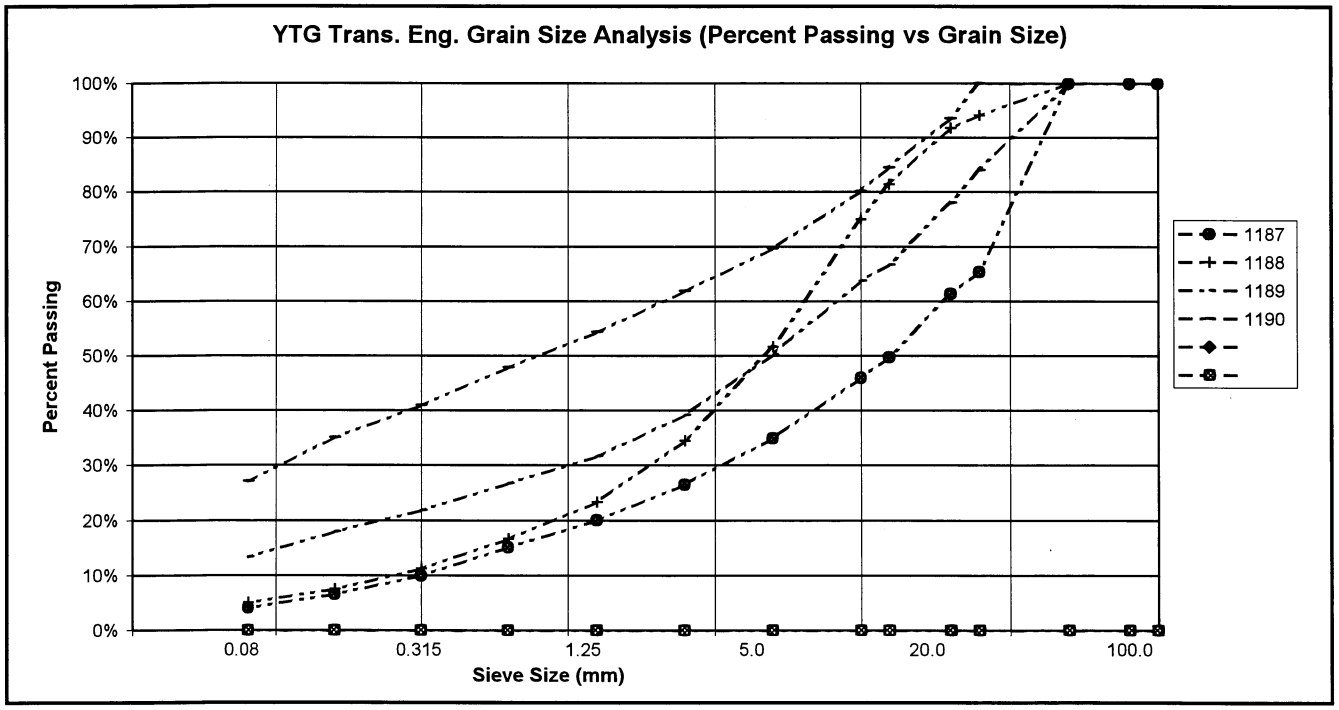
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-507
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1183	1184	1185	1186		
LAB NO:	1960	1961	1962	1963		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	62%	95%	96%		
20.0	100%	60%	88%	90%		
12.5	100%	53%	80%	83%		
10.0	100%	50%	73%	77%		
5.0	100%	43%	61%	65%		
2.5	100%	34%	50%	55%		
1.25	99%	25%	38%	45%		
0.630	97%	18%	28%	38%		
0.315	87%	12%	18%	29%		
0.160	68%	7%	12%	21%		
0.080	50%	4%	7%	14%		
M.C.(%):	19%	1%	2%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	57	39	35		
% SAND:	50	39	54	51		
% FINES:	50	4	7	14		
CLASSIFICATION	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)		



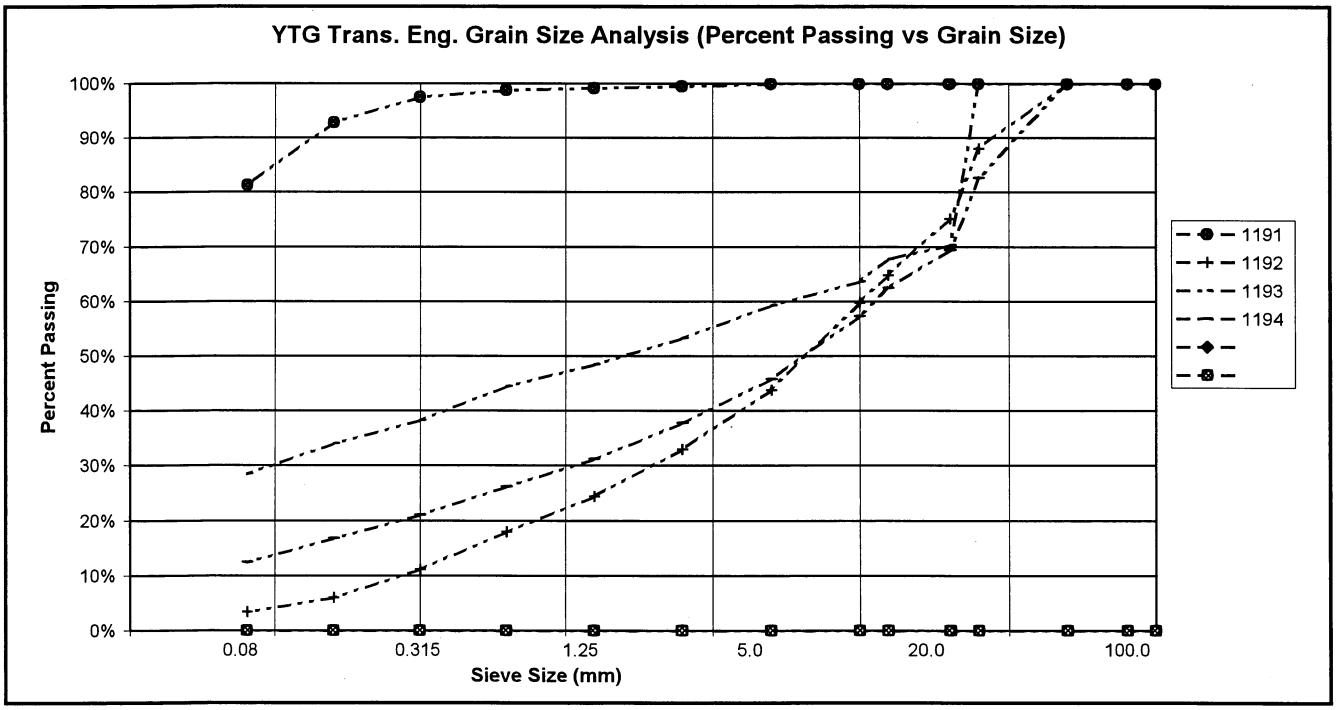
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-508
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1187	1188	1189	1190		
LAB NO:	1964	1965	1966	1967		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.8-4.3		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	65%	94%	84%	100%		
20.0	61%	92%	78%	94%		
12.5	50%	81%	67%	85%		
10.0	46%	75%	64%	80%		
5.0	35%	52%	50%	70%		
2.5	27%	35%	39%	62%		
1.25	20%	23%	32%	54%		
0.630	15%	17%	27%	48%		
0.315	10%	11%	22%	41%		
0.160	7%	8%	18%	35%		
0.080	4%	5%	13%	27%		
M.C.(%):	3%	2%	6%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	65	48	50	30		
% SAND:	31	47	37	43		
% FINES:	4	5	13	27		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)		



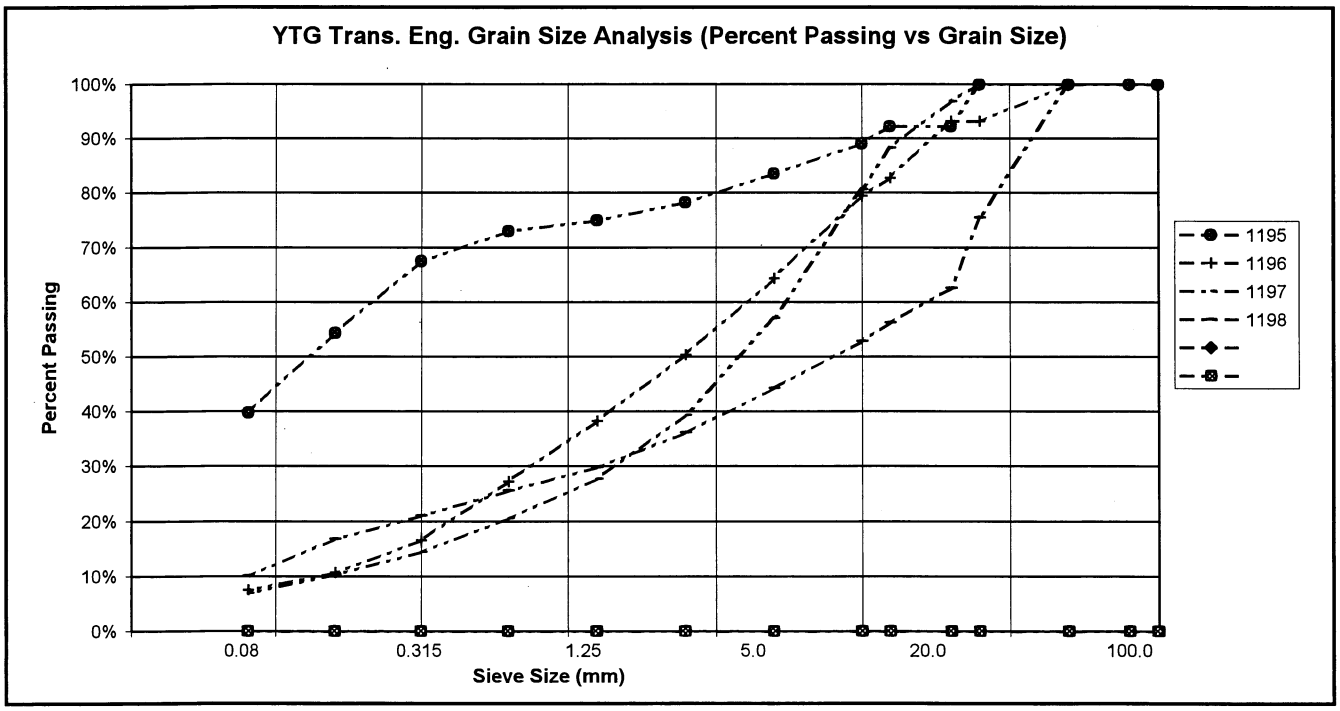
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-509
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1191	1192	1193	1194		
LAB NO:	1968	1969	1970	1971		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.6-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	88%	100%	83%		
20.0	100%	75%	70%	69%		
12.5	100%	65%	68%	62%		
10.0	100%	60%	64%	57%		
5.0	100%	44%	59%	46%		
2.5	100%	33%	53%	38%		
1.25	99%	24%	48%	31%		
0.630	99%	18%	45%	26%		
0.315	98%	11%	38%	21%		
0.160	93%	6%	34%	17%		
0.080	81%	3%	29%	12%		
M.C.(%):	30%	2%	15%	6%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	56	41	54		
% SAND:	19	40	31	33		
% FINES:	81	3	29	12		
CLASSIFICATION	SILT WITH SAND (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)		



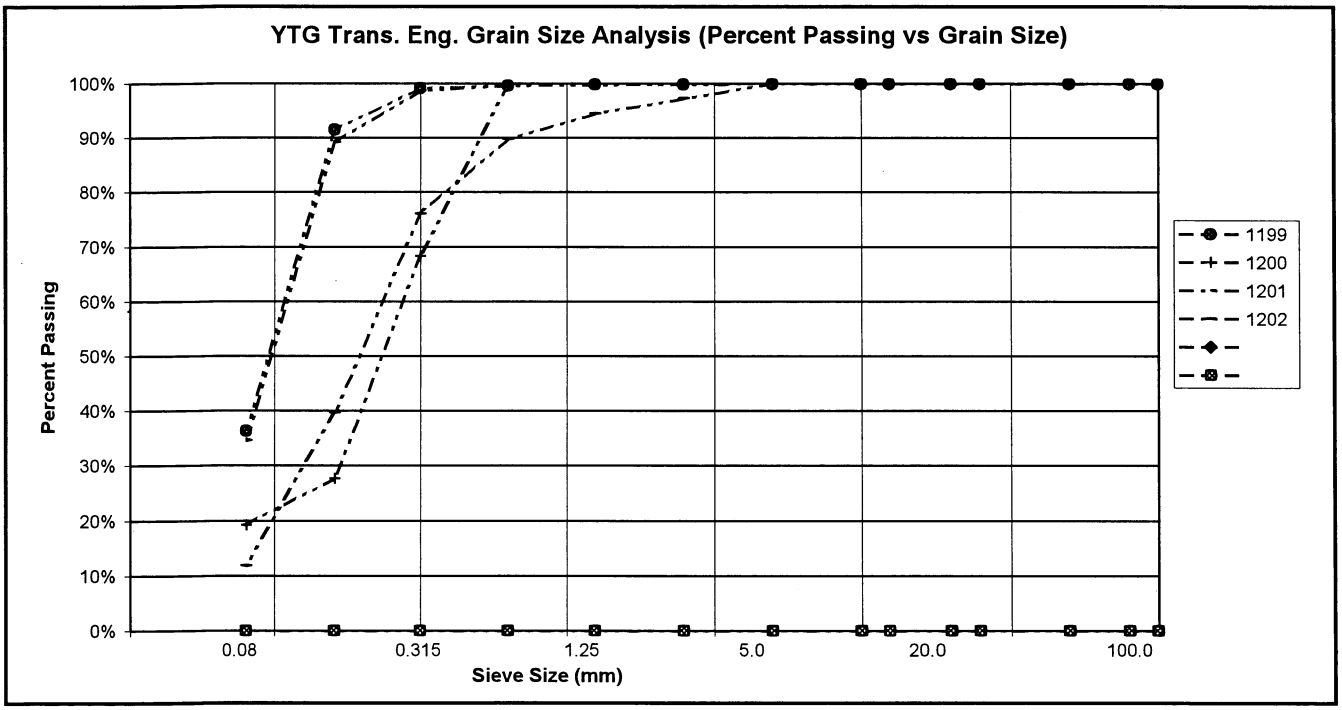
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-510
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1195	1196	1197	1198		
LAB NO:	1972	1973	1974	1975		
DEPTH:	0.6-1.0	1.6-2.0	2.3-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	93%	100%	75%		
20.0	92%	93%	97%	63%		
12.5	92%	83%	88%	56%		
10.0	89%	79%	81%	53%		
5.0	84%	64%	57%	44%		
2.5	78%	50%	39%	36%		
1.25	75%	38%	28%	30%		
0.630	73%	27%	21%	26%		
0.315	68%	17%	14%	21%		
0.160	54%	11%	10%	17%		
0.080	40%	7%	7%	10%		
M.C.(%):	24%	3%	3%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	16	36	43	56		
% SAND:	44	57	50	34		
% FINES:	40	7	7	10		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



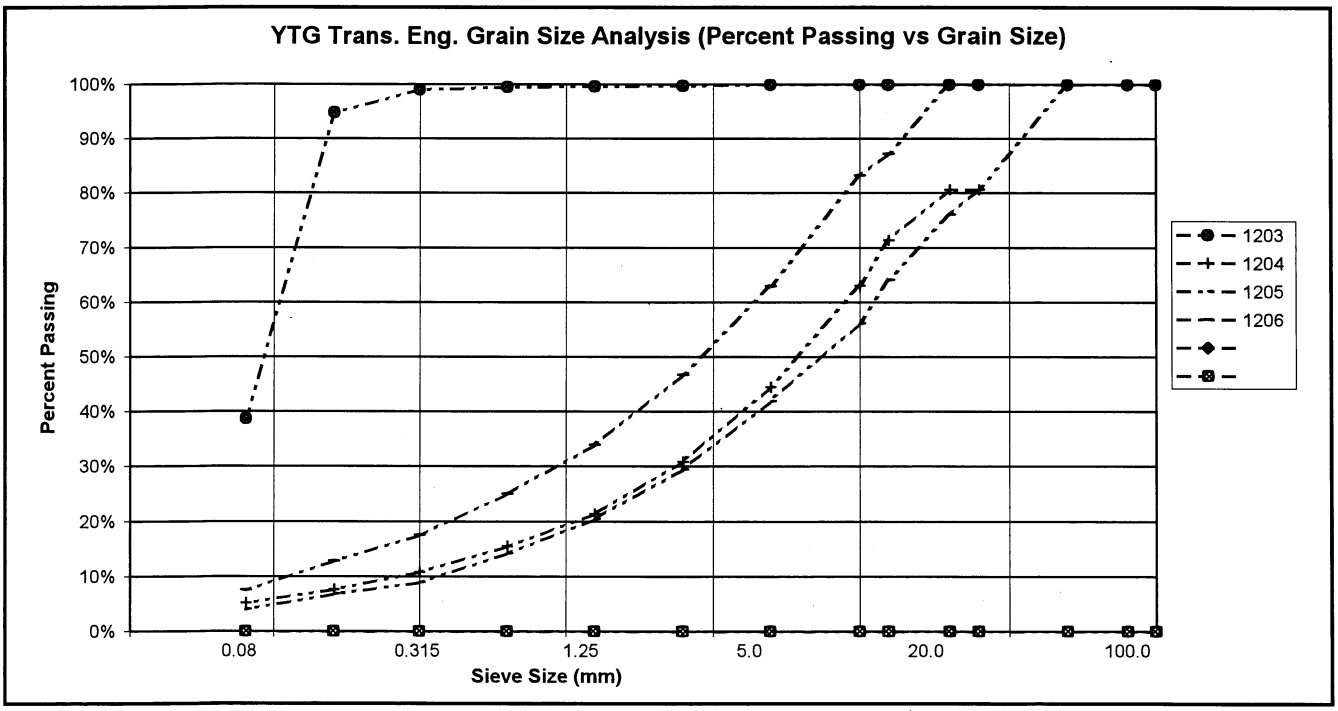
PROJECT NUMBER:	092-202101-0362-1	HOLE No.: 620-511
CLIENT:	ENGINEERING CAPITAL	
PROJECT NAME:	SHAKWAK SEG 10	
PROJECT LOCATION:	Km 1692.6-1729.6 A/H	
DRILL UNIT:	MOBILE B40 L	
HOLE LOCATION:	See Testhole Log Sheet	
LOGGED BY:	G.C.	DATE COMP: 2001/09/11

FIELD NO:	1199	1200	1201	1202		
LAB NO:	1976	1977	1978	1979		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	100%	100%	100%	100%		
10.0	100%	100%	100%	100%		
5.0	100%	100%	100%	100%		
2.5	100%	100%	100%	97%		
1.25	100%	100%	100%	94%		
0.630	100%	100%	100%	90%		
0.315	99%	68%	99%	76%		
0.160	92%	28%	89%	40%		
0.080	36%	19%	35%	12%		
M.C.(%):	10%	19%	24%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	0	0		
% SAND:	64	81	65	88		
% FINES:	36	19	35	12		
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILTY SAND (SM)	WELL-GRADED SAND WITH SILT (SW-SM)		



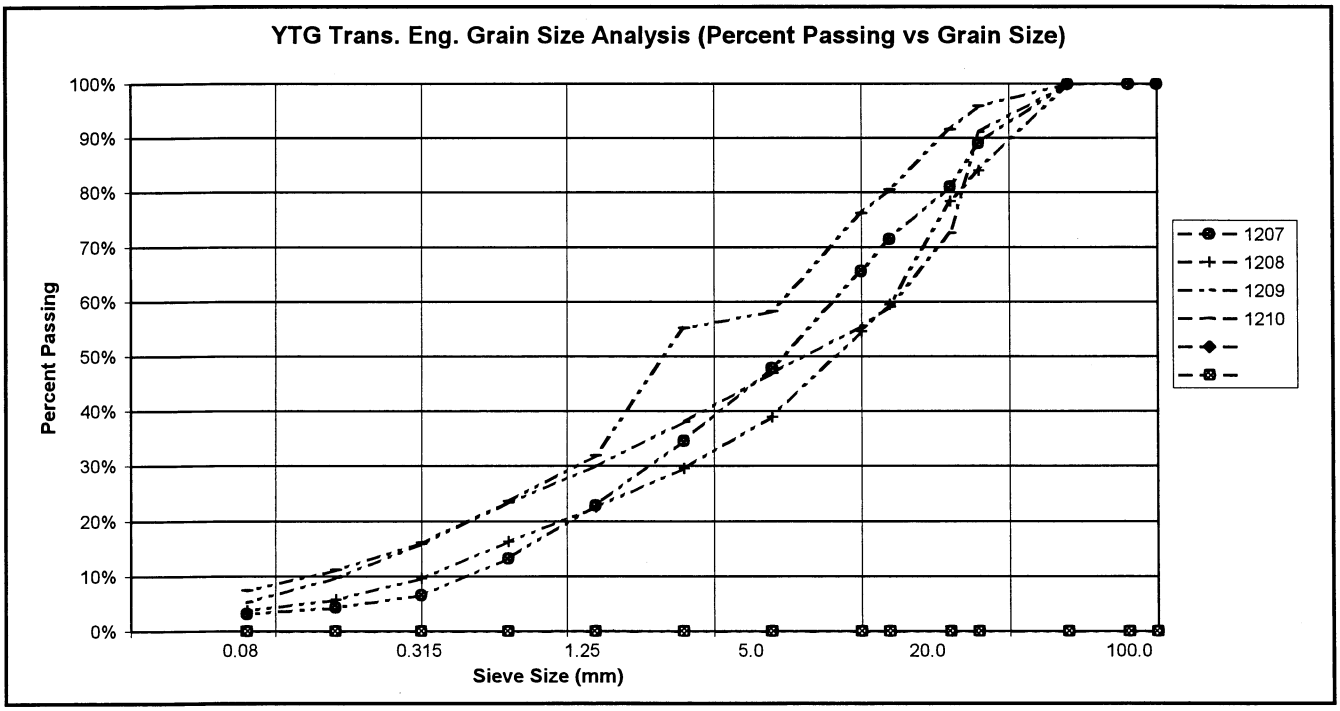
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-512
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1203	1204	1205	1206		
LAB NO:	1980	1981	1982	1983		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0.-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	81%	81%	100%		
20.0	100%	81%	76%	100%		
12.5	100%	71%	64%	87%		
10.0	100%	63%	56%	83%		
5.0	100%	44%	42%	63%		
2.5	100%	31%	30%	47%		
1.25	100%	21%	20%	34%		
0.630	100%	15%	14%	25%		
0.315	99%	11%	9%	17%		
0.160	95%	8%	7%	13%		
0.080	39%	5%	4%	7%		
M.C.(%):	15%	2%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	56	58	37		
% SAND:	61	39	38	55		
% FINES:	39	5	4	7		
CLASSIFICATION	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		



PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-513
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1207	1208	1209	1210		
LAB NO:	1984	1985	1986	1987		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	89%	84%	91%	96%		
20.0	81%	78%	73%	92%		
12.5	71%	59%	59%	80%		
10.0	66%	55%	56%	76%		
5.0	48%	39%	47%	58%		
2.5	35%	30%	38%	55%		
1.25	23%	23%	30%	32%		
0.630	13%	16%	23%	24%		
0.315	7%	10%	16%	16%		
0.160	4%	6%	10%	11%		
0.080	3%	4%	5%	7%		
M.C.(%):	2%	2%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	52	61	53	42		
% SAND:	45	35	42	51		
% FINES:	3	4	5	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		

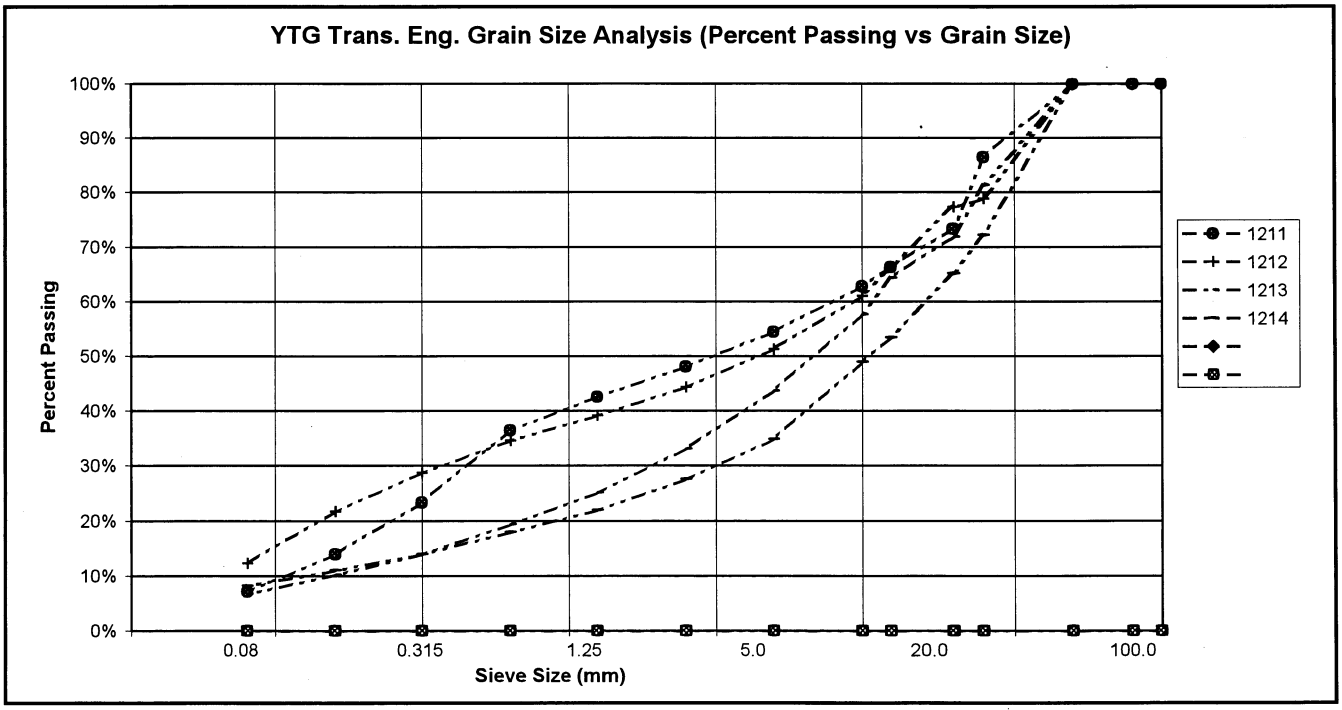


PROJECT NUMBER: 092-202101-0362-1
CLIENT: ENGINEERING CAPITAL
PROJECT NAME: SHAKWAK SEG 10
PROJECT LOCATION: Km 1692.6-1729.6 A/H
DRILL UNIT: MOBILE B40 L
HOLE LOCATION: See Testhole Log Sheet
LOGGED BY: G.C.

HOLE No.: 620-514

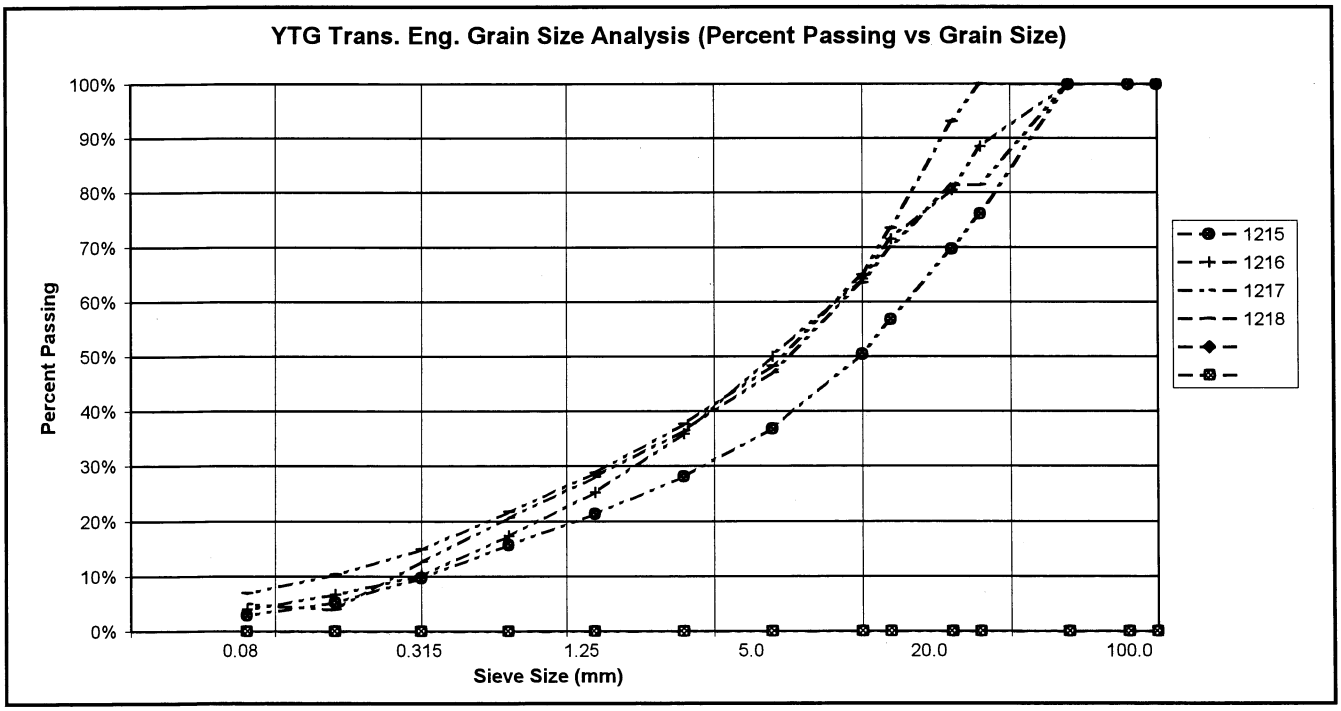
DATE COMP: 2001/09/11

FIELD NO:	1211	1212	1213	1214		
LAB NO:	1988	1989	1990	1991		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	87%	79%	81%	72%		
20.0	73%	77%	72%	65%		
12.5	66%	66%	64%	53%		
10.0	63%	61%	58%	49%		
5.0	54%	51%	44%	35%		
2.5	48%	44%	33%	28%		
1.25	43%	39%	25%	22%		
0.630	36%	35%	19%	18%		
0.315	23%	29%	14%	14%		
0.160	14%	22%	10%	11%		
0.080	7%	12%	7%	8%		
M.C.(%):	4%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	46	49	56	65		
% SAND:	47	39	37	27		
% FINES:	7	12	7	8		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)		



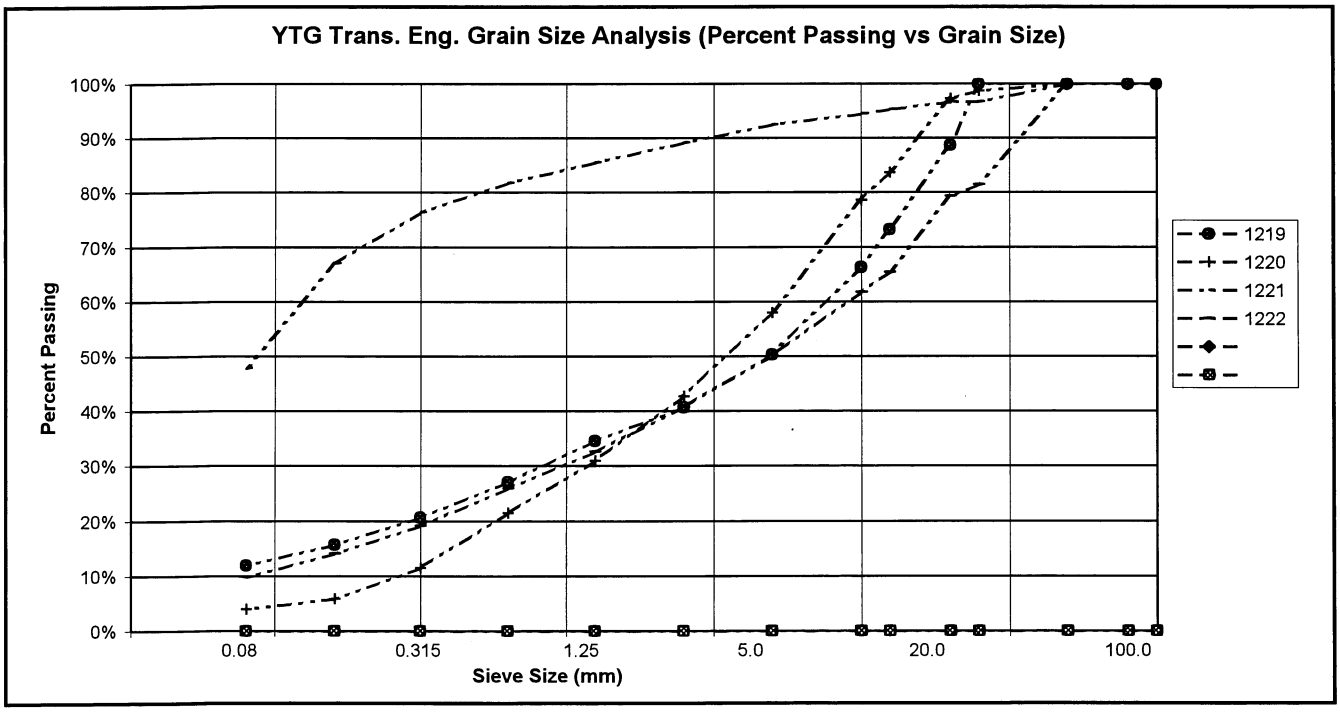
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-515
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1215	1216	1217	1218		
LAB NO:	1992	1993	1994	1995		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	76%	88%	81%	100%		
20.0	70%	81%	81%	93%		
12.5	57%	71%	70%	74%		
10.0	50%	64%	64%	65%		
5.0	37%	50%	47%	48%		
2.5	28%	36%	36%	38%		
1.25	21%	25%	28%	29%		
0.630	16%	17%	21%	22%		
0.315	10%	10%	13%	15%		
0.160	5%	7%	4%	10%		
0.080	3%	4%	5%	7%		
M.C.(%):	1%	1%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	50	53	52		
% SAND:	34	46	42	41		
% FINES:	3	4	5	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



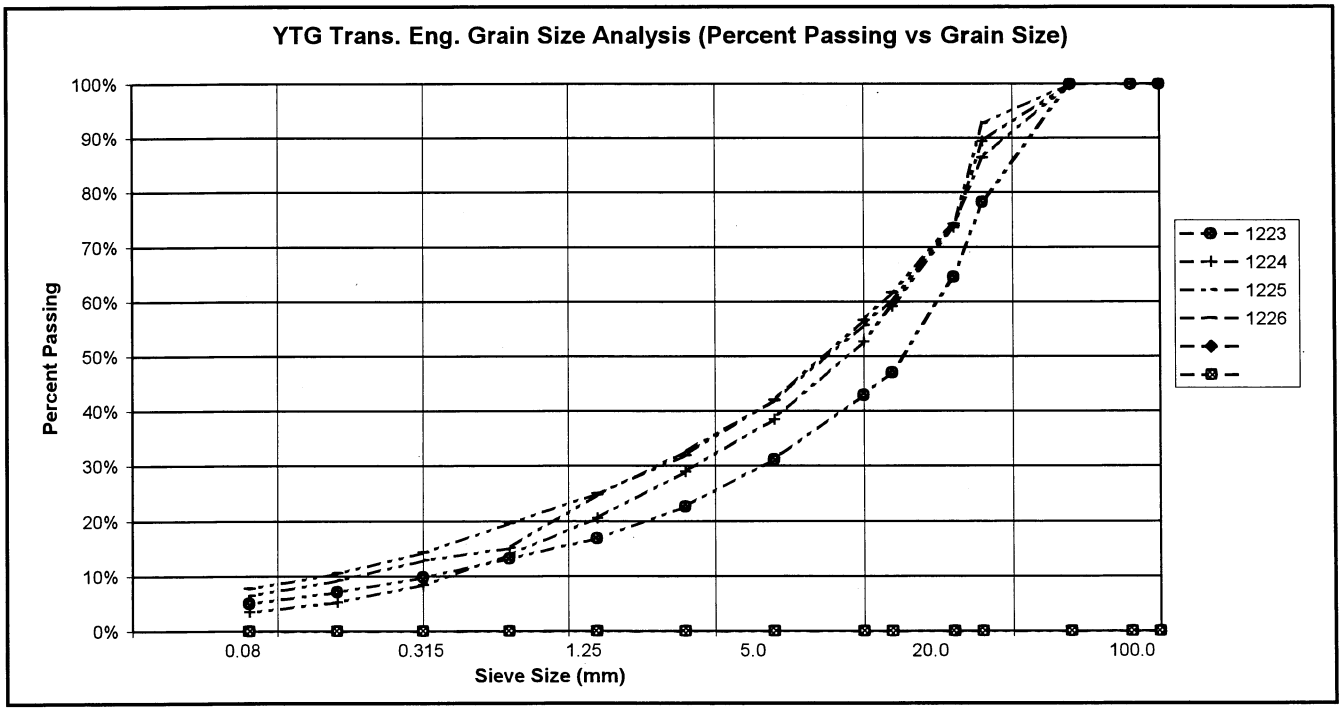
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-516
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1219	1220	1221	1222		
LAB NO:	1996	1997	1998	1999		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.5-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	99%	97%	81%		
20.0	89%	97%	97%	79%		
12.5	73%	84%	95%	65%		
10.0	66%	79%	94%	62%		
5.0	50%	58%	92%	50%		
2.5	41%	43%	89%	41%		
1.25	35%	31%	86%	33%		
0.630	27%	21%	82%	26%		
0.315	21%	11%	76%	19%		
0.160	16%	6%	67%	14%		
0.080	12%	4%	48%	10%		
M.C.(%):	5%	3%	18%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	50	42	8	50		
% SAND:	38	54	45	40		
% FINES:	12	4	48	10		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED SAND WITH GRAVEL (SW)	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



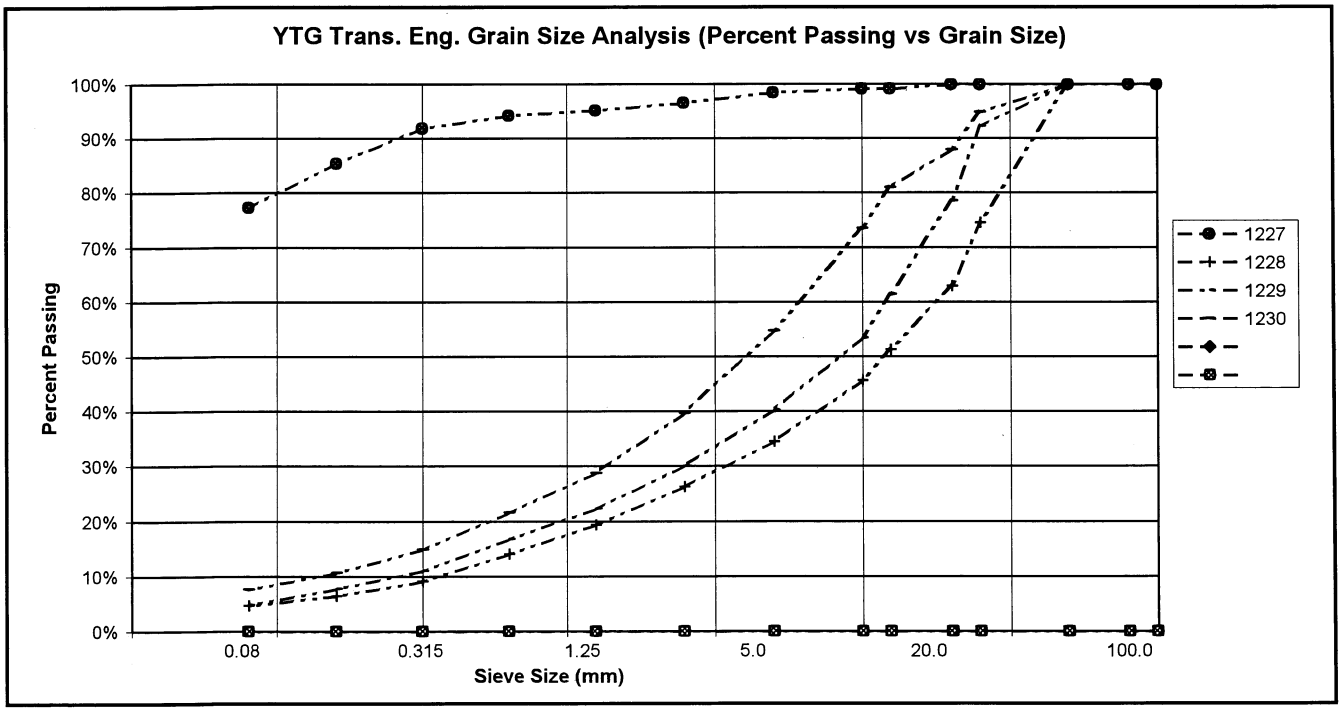
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-517
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/11

FIELD NO:	1223	1224	1225	1226		
LAB NO:	2000	2001	2002	2003		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.6-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	78%	89%	93%	86%		
20.0	65%	74%	74%	74%		
12.5	47%	59%	60%	62%		
10.0	43%	53%	56%	57%		
5.0	31%	39%	42%	42%		
2.5	23%	29%	33%	32%		
1.25	17%	21%	25%	25%		
0.630	13%	14%	15%	20%		
0.315	10%	8%	13%	14%		
0.160	7%	5%	9%	11%		
0.080	5%	3%	6%	8%		
M.C.(%):	3%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	69	61	58	58		
% SAND:	26	35	35	34		
% FINES:	5	3	6	8		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



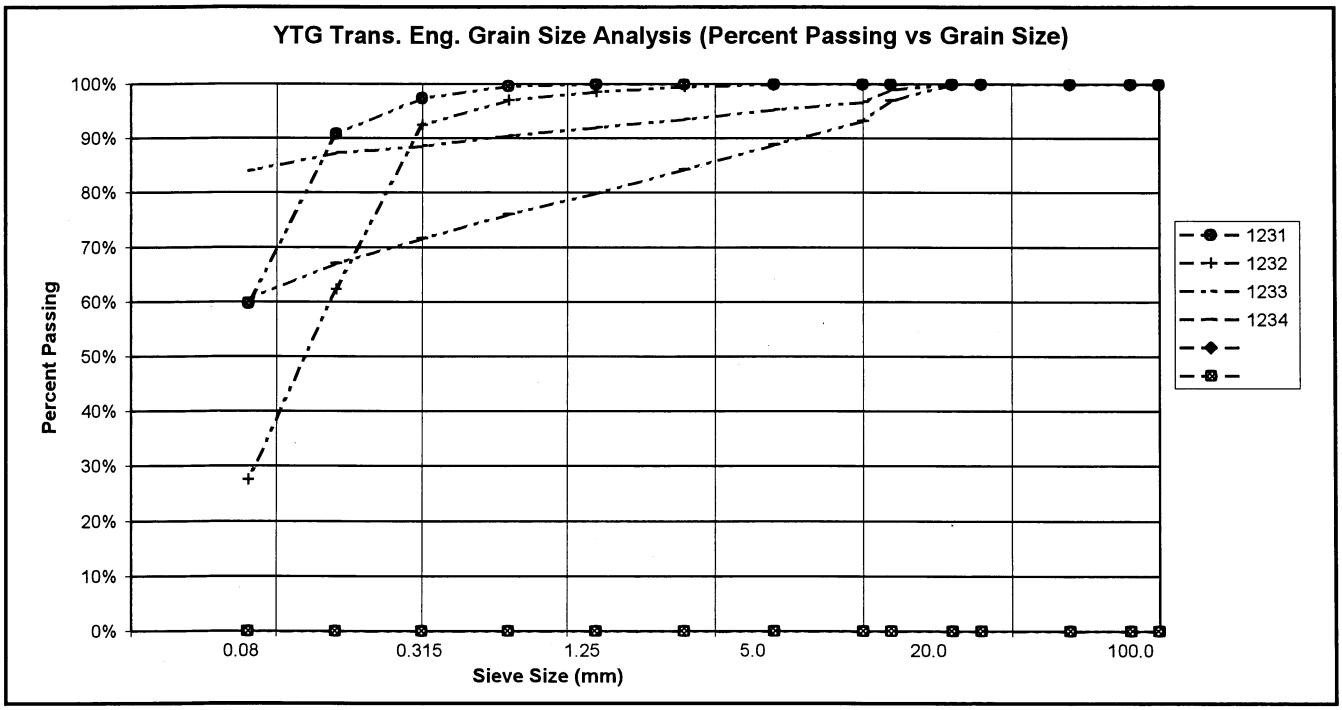
PROJECT NUMBER:	092-202101-0362-1	HOLE No.: 620-518
CLIENT:	ENGINEERING CAPITAL	
PROJECT NAME:	SHAKWAK SEG 10	
PROJECT LOCATION:	Km 1692.6-1729.6 A/H	
DRILL UNIT:	MOBILE B40 L	
HOLE LOCATION:	See Testhole Log Sheet	
LOGGED BY:	G.C.	DATE COMP: 2001/09/11

FIELD NO:	1227	1228	1229	1230		
LAB NO:	2004	2005	2006	2007		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.5-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	75%	92%	95%		
20.0	100%	63%	78%	88%		
12.5	99%	51%	61%	81%		
10.0	99%	46%	53%	74%		
5.0	98%	35%	40%	55%		
2.5	97%	26%	30%	40%		
1.25	95%	19%	22%	29%		
0.630	94%	14%	17%	22%		
0.315	92%	9%	11%	15%		
0.160	85%	6%	8%	11%		
0.080	77%	5%	5%	8%		
M.C.(%):	25%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	2	65	60	45		
% SAND:	21	30	35	47		
% FINES:	77	5	5	8		
CLASSIFICATION	SILT WITH SAND (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		



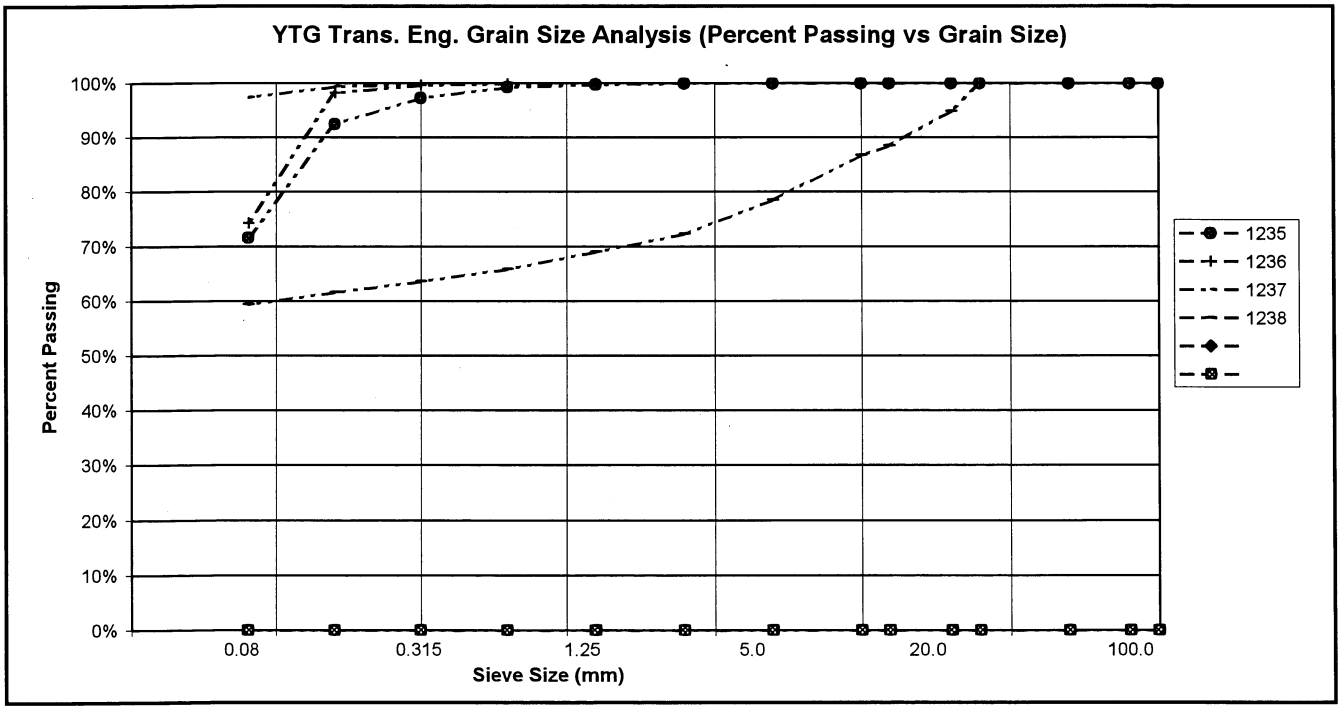
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-519
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/12

FIELD NO:	1231	1232	1233	1234		
LAB NO:	2008	2009	2010	2011		
DEPTH:	0.6-1.0	1.7-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	100%		
12.5	100%	100%	99%	97%		
10.0	100%	100%	97%	93%		
5.0	100%	100%	95%	89%		
2.5	100%	99%	94%	84%		
1.25	100%	99%	92%	80%		
0.630	100%	97%	90%	76%		
0.315	97%	92%	89%	72%		
0.160	91%	62%	87%	67%		
0.080	60%	28%	84%	61%		
M.C.(%):	20%	20%	23%	12%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	5	11		
% SAND:	40	72	11	28		
% FINES:	60	28	84	61		
CLASSIFICATION	SANDY SILT (ML)	SILTY SAND (SM)	SILT WITH SAND (ML)	SANDY SILT (ML)		



PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 620-520
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/12

FIELD NO:	1235	1236	1237	1238		
LAB NO:	2012	2013	2014	2015		
DEPTH:	0.4-0.8	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	100%		
20.0	100%	100%	100%	95%		
12.5	100%	100%	100%	88%		
10.0	100%	100%	100%	87%		
5.0	100%	100%	100%	79%		
2.5	100%	100%	100%	72%		
1.25	100%	100%	100%	69%		
0.630	99%	100%	100%	66%		
0.315	97%	100%	100%	64%		
0.160	92%	98%	99%	62%		
0.080	72%	74%	97%	59%		
M.C.(%):	44%	18%	24%	20%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	0	21		
% SAND:	28	26	3	19		
% FINES:	72	74	97	59		
CLASSIFICATION	SILT WITH SAND (ML)	SILT WITH SAND (ML)	SILT (ML)	GRAVELLY SILT WITH SAND (ML)		

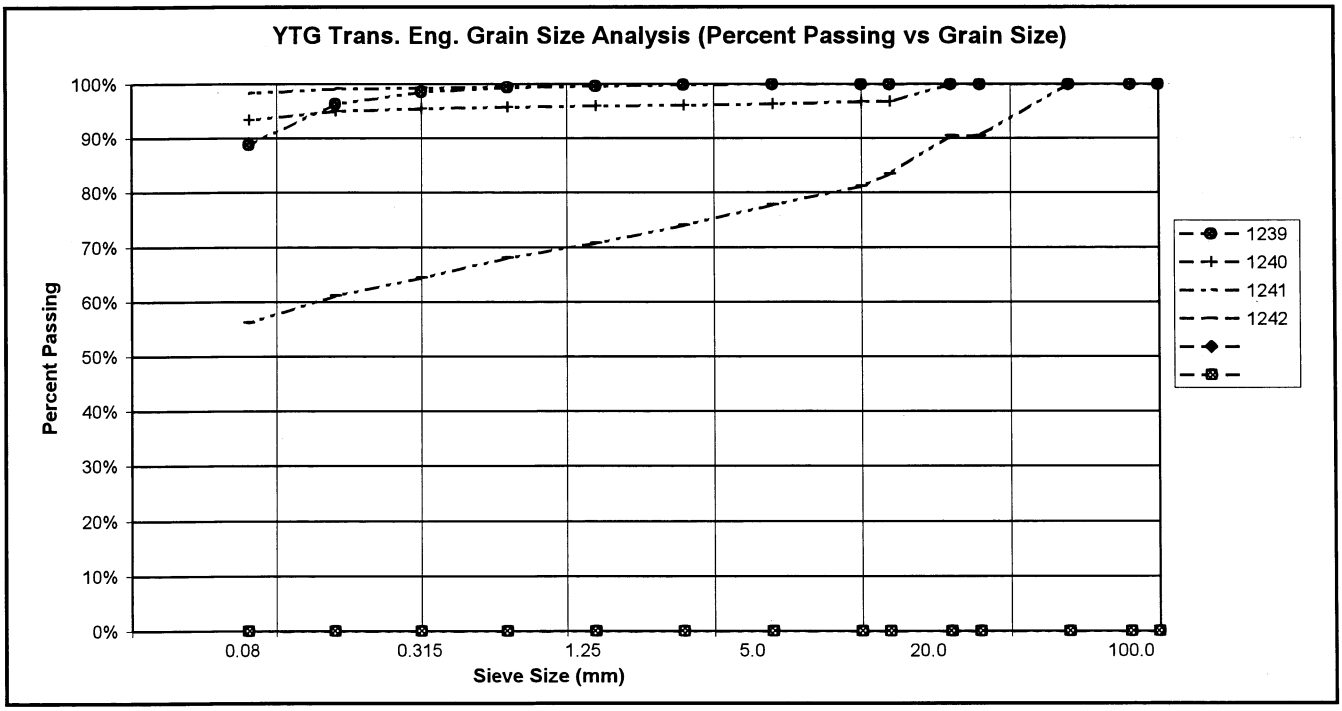


PROJECT NUMBER: 092-202101-0362-1
CLIENT: ENGINEERING CAPITAL
PROJECT NAME: SHAKWAK SEG 10
PROJECT LOCATION: Km 1692.6-1729.6 A/H
DRILL UNIT: MOBILE B40 L
HOLE LOCATION: See Testhole Log Sheet
LOGGED BY: G.C.

HOLE No.: 620-521

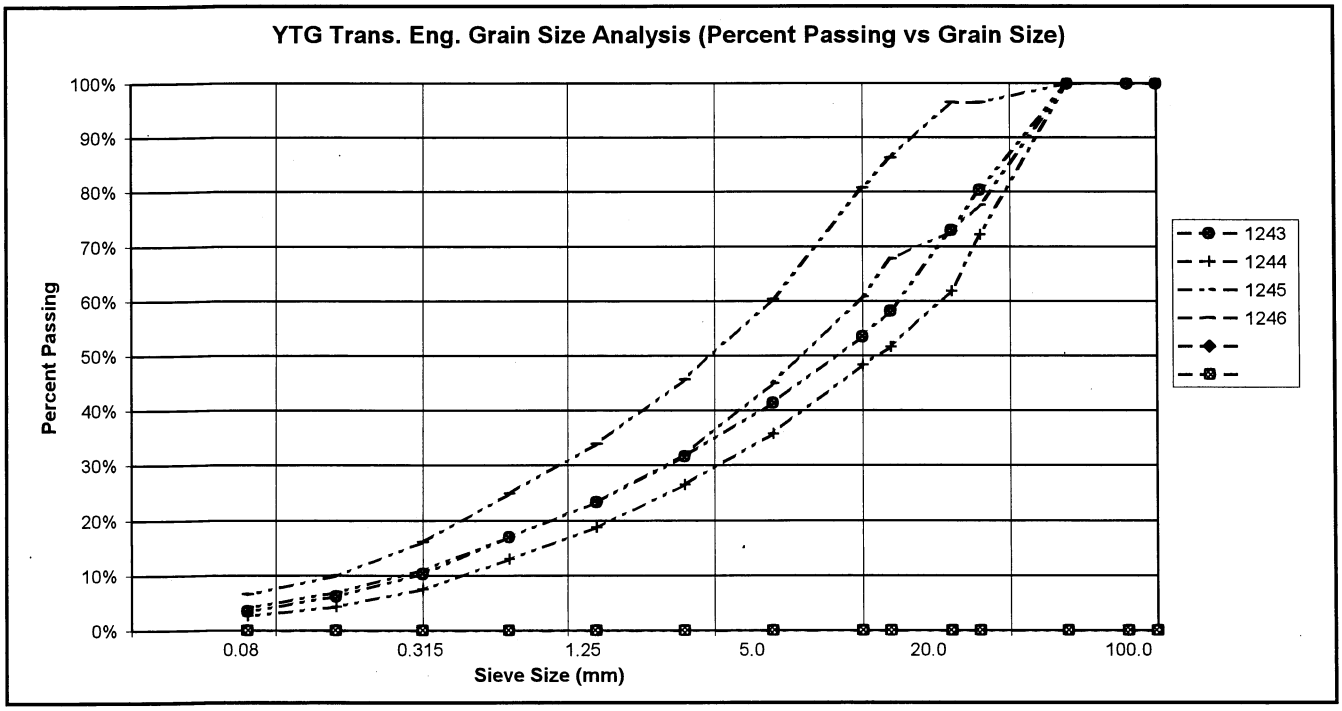
DATE COMP: 2001/09/12

FIELD NO:	1239	1240	1241	1242		
LAB NO:	2016	2017	2018	2019		
DEPTH:	0.4-0.8	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	91%		
20.0	100%	100%	100%	91%		
12.5	100%	97%	100%	83%		
10.0	100%	97%	100%	81%		
5.0	100%	96%	100%	78%		
2.5	100%	96%	100%	74%		
1.25	100%	96%	100%	71%		
0.630	99%	96%	100%	68%		
0.315	99%	96%	99%	64%		
0.160	96%	95%	99%	61%		
0.080	89%	93%	98%	56%		
M.C.(%):	46%	24%	14%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	4	0	22		
% SAND:	11	3	2	22		
% FINES:	89	93	98	56		
CLASSIFICATION	SILT (ML)	SILT (ML)	SILT (ML)	GRAVELLY SILT WITH SAND (ML)		



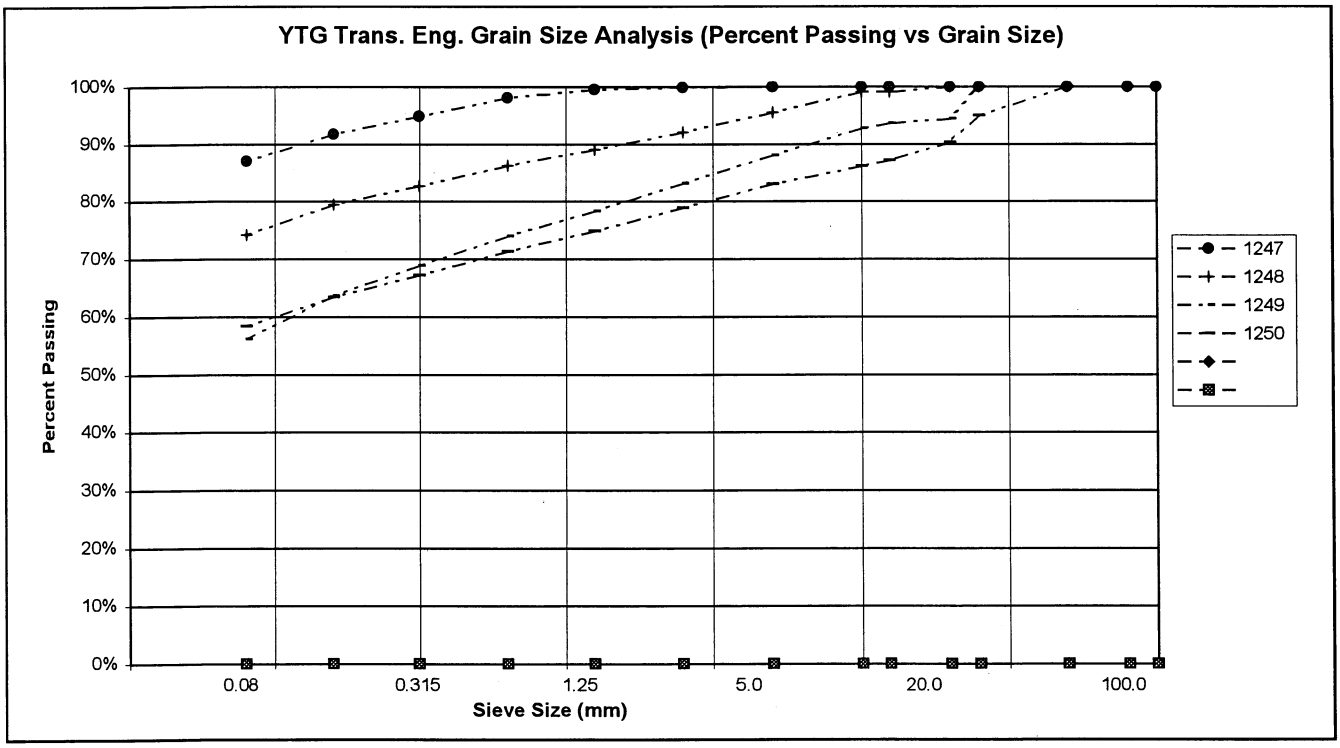
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-522
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/12

FIELD NO:	1243	1244	1245	1246		
LAB NO:	2020	2021	2022	2023		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	3.6-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	80%	72%	78%	97%		
20.0	73%	62%	73%	97%		
12.5	58%	52%	68%	86%		
10.0	53%	48%	61%	81%		
5.0	41%	36%	45%	60%		
2.5	32%	27%	32%	46%		
1.25	23%	19%	23%	34%		
0.630	17%	13%	17%	25%		
0.315	10%	7%	11%	16%		
0.160	6%	4%	7%	10%		
0.080	3%	3%	4%	7%		
M.C.(%):	2%	2%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	59	64	55	40		
% SAND:	38	33	41	54		
% FINES:	3	3	4	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		



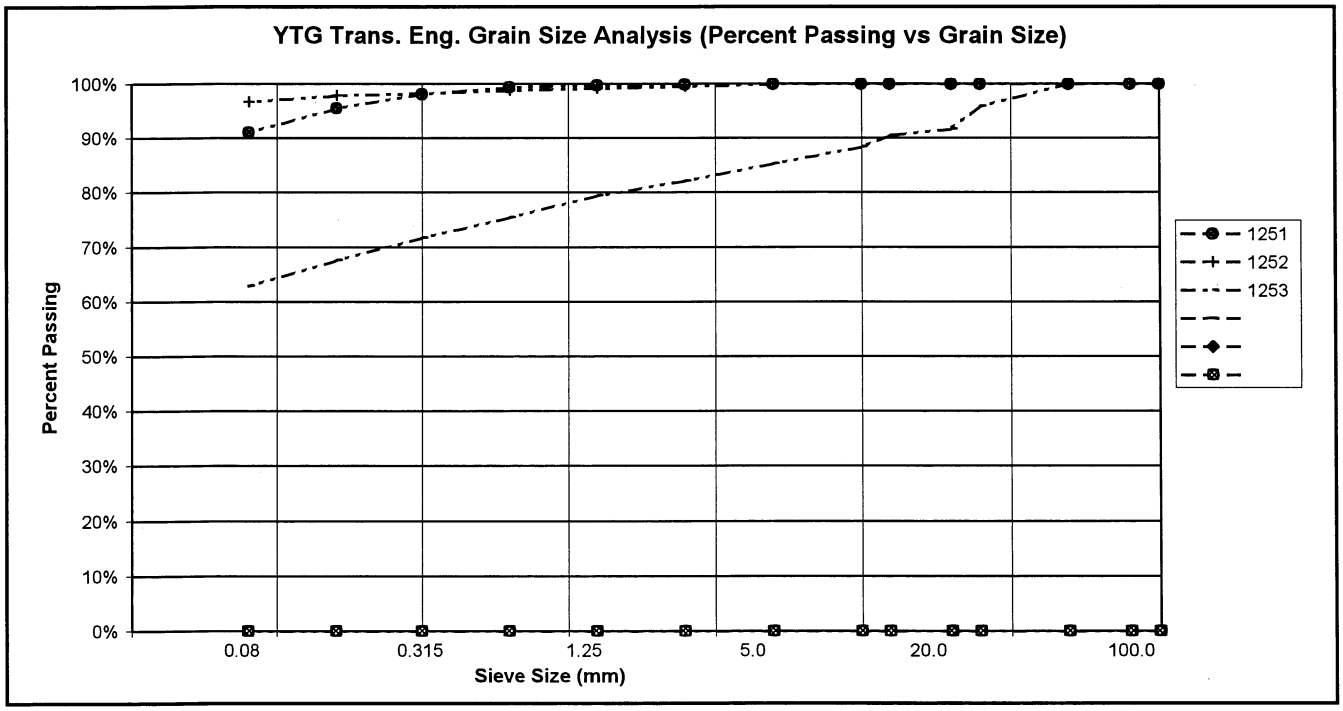
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-523
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/12

FIELD NO:	1247	1248	1249	1250		
LAB NO:	2024	2025	2026	2027		
DEPTH:	0.6-1.0	1.6-1.8	2.6-2.8	3.6-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	100%	95%		
20.0	100%	100%	94%	90%		
12.5	100%	99%	94%	87%		
10.0	100%	99%	93%	86%		
5.0	100%	95%	88%	83%		
2.5	100%	92%	83%	79%		
1.25	100%	89%	78%	75%		
0.630	98%	86%	74%	71%		
0.315	95%	83%	69%	67%		
0.160	92%	79%	64%	63%		
0.080	87%	74%	56%	58%		
M.C.(%):	28%	13%	10%	13%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	5	12	17		
% SAND:	13	21	32	25		
% FINES:	87	74	56	58		
CLASSIFICATION	SILT (ML)	SILT WITH SAND (ML)	SANDY SILT (ML)	SANDY SILT WITH GRAVEL (ML)		



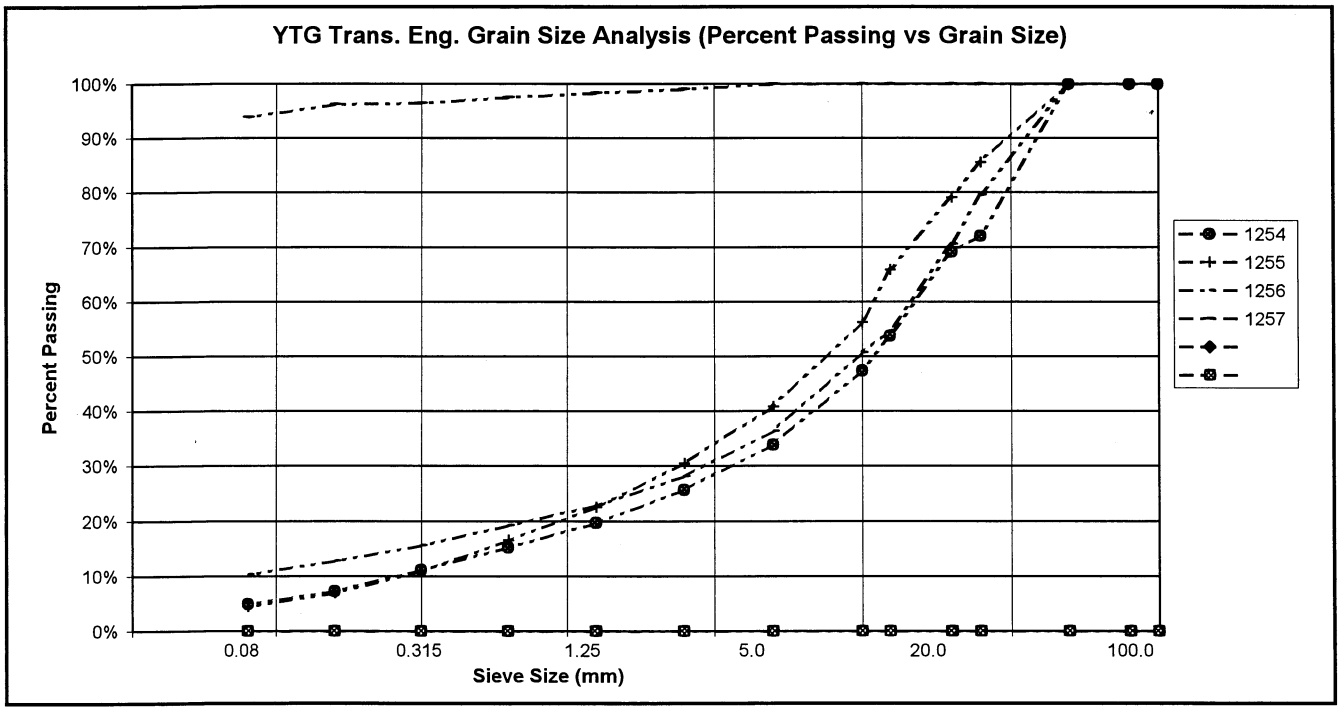
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-524
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/12

FIELD NO:	1251	1252	1253			
LAB NO:	2028	2029	2030			
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	96%			
20.0	100%	100%	92%			
12.5	100%	100%	91%			
10.0	100%	100%	88%			
5.0	100%	100%	85%			
2.5	100%	100%	82%			
1.25	100%	99%	80%			
0.630	99%	99%	76%			
0.315	98%	98%	72%			
0.160	96%	98%	68%			
0.080	91%	97%	63%			
M.C.(%):	23%	28%	13%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	0	15			
% SAND:	9	3	22			
% FINES:	91	97	63			
CLASSIFICATION	SILT (ML)	SILT (ML)	SANDY SILT (ML)			



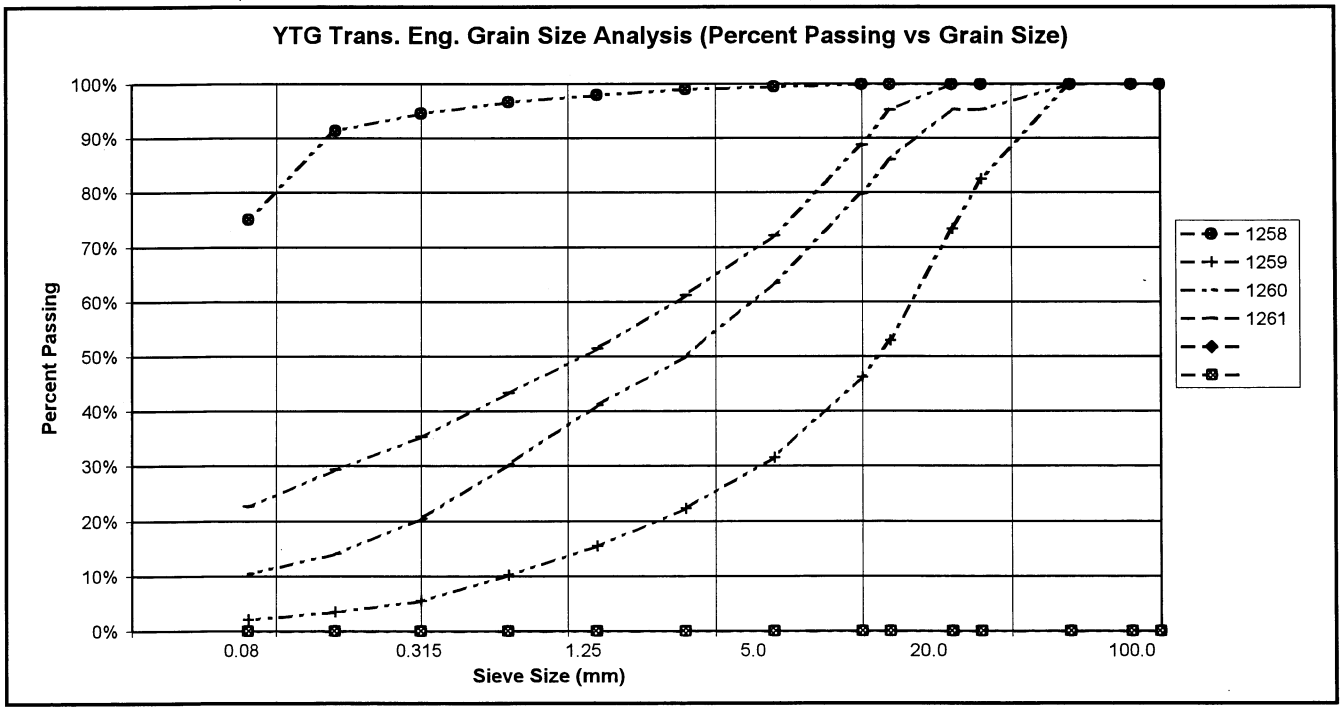
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-525
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/12

FIELD NO:	1254	1255	1256	1257		
LAB NO:	2031	2032	2033	2034		
DEPTH:	0.6-1.0	1.6-2.0	2.4-2.8	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	72%	86%	80%	100%		
20.0	69%	79%	71%	100%		
12.5	54%	66%	55%	100%		
10.0	47%	56%	51%	100%		
5.0	34%	41%	36%	100%		
2.5	26%	31%	28%	99%		
1.25	20%	23%	23%	98%		
0.630	15%	17%	19%	98%		
0.315	11%	11%	16%	96%		
0.160	7%	7%	13%	96%		
0.080	5%	5%	10%	94%		
M.C.(%):	2%	2%	4%	24%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	59	64	0		
% SAND:	29	36	26	6		
% FINES:	5	5	10	94		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILT (ML)		



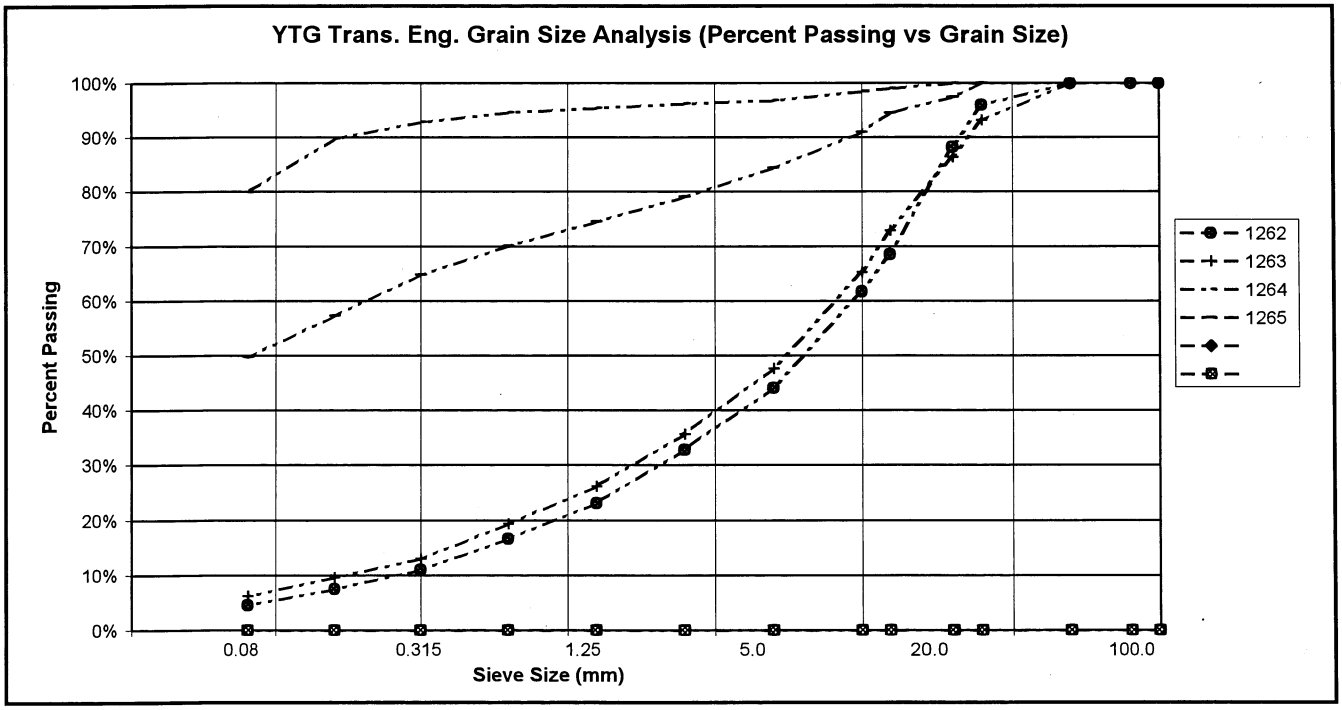
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-526
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/13

FIELD NO:	1258	1259	1260	1261		
LAB NO:	2035	2036	2037	2038		
DEPTH:	0.6-1.0	1.6-2.0	2.2-2.6	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	83%	95%	100%		
20.0	100%	73%	95%	100%		
12.5	100%	53%	86%	95%		
10.0	100%	46%	80%	89%		
5.0	100%	32%	63%	72%		
2.5	99%	22%	50%	61%		
1.25	98%	16%	41%	51%		
0.630	97%	10%	30%	43%		
0.315	95%	6%	20%	35%		
0.160	91%	4%	14%	29%		
0.080	75%	2%	10%	23%		
M.C.(%):	27%	1%	4%	6%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	68	37	28		
% SAND:	24	29	53	49		
% FINES:	75	2	10	23		
CLASSIFICATION	SILT WITH SAND (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)		



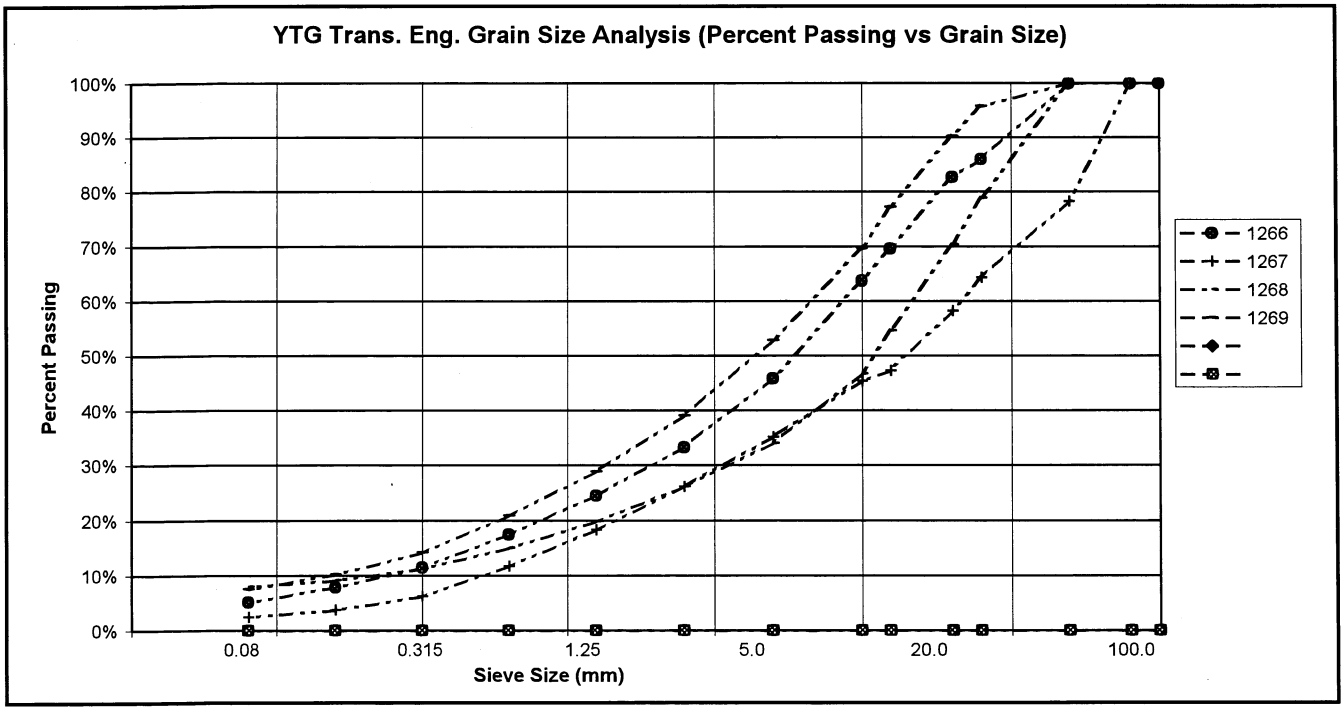
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-527
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/13

FIELD NO:	1262	1263	1264	1265		
LAB NO:	2039	2040	2041	2042		
DEPTH:	0.6-1.0	1.4-1.8	2.2-2.4	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	96%	93%	100%	100%		
20.0	88%	86%	100%	97%		
12.5	69%	73%	99%	95%		
10.0	62%	65%	98%	91%		
5.0	44%	48%	97%	84%		
2.5	33%	36%	96%	79%		
1.25	23%	26%	95%	75%		
0.630	17%	19%	95%	70%		
0.315	11%	13%	93%	65%		
0.160	7%	10%	90%	57%		
0.080	5%	6%	80%	50%		
M.C.(%):	2%	3%	13%	9%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	52	3	16		
% SAND:	40	41	17	35		
% FINES:	5	6	80	50		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILT WITH SAND (ML)	SILTY SAND WITH GRAVEL (SM)		



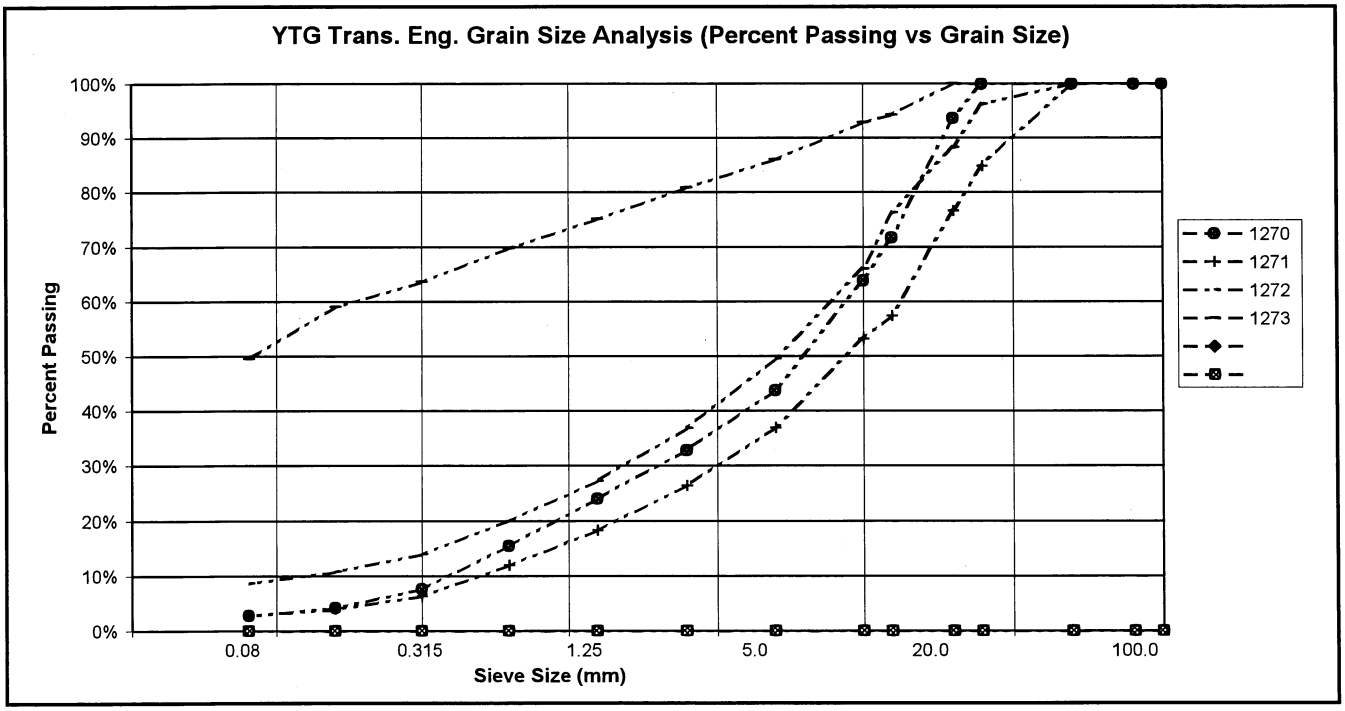
PROJECT NUMBER:	092-202101-0362-1	HOLE No.:	621-528
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.	DATE COMP:	2002/09/13

FIELD NO:	1266	1267	1268	1269		
LAB NO:	2043	2044	2045	2046		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	78%	100%	100%		
25.0	86%	64%	79%	96%		
20.0	83%	58%	70%	90%		
12.5	70%	47%	55%	77%		
10.0	64%	45%	47%	70%		
5.0	46%	35%	34%	53%		
2.5	33%	26%	26%	39%		
1.25	24%	18%	20%	29%		
0.630	18%	12%	15%	21%		
0.315	11%	6%	11%	14%		
0.160	8%	4%	9%	10%		
0.080	5%	2%	8%	7%		
M.C.(%):	2%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	54	65	66	47		
% SAND:	41	33	26	45		
% FINES:	5	2	8	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



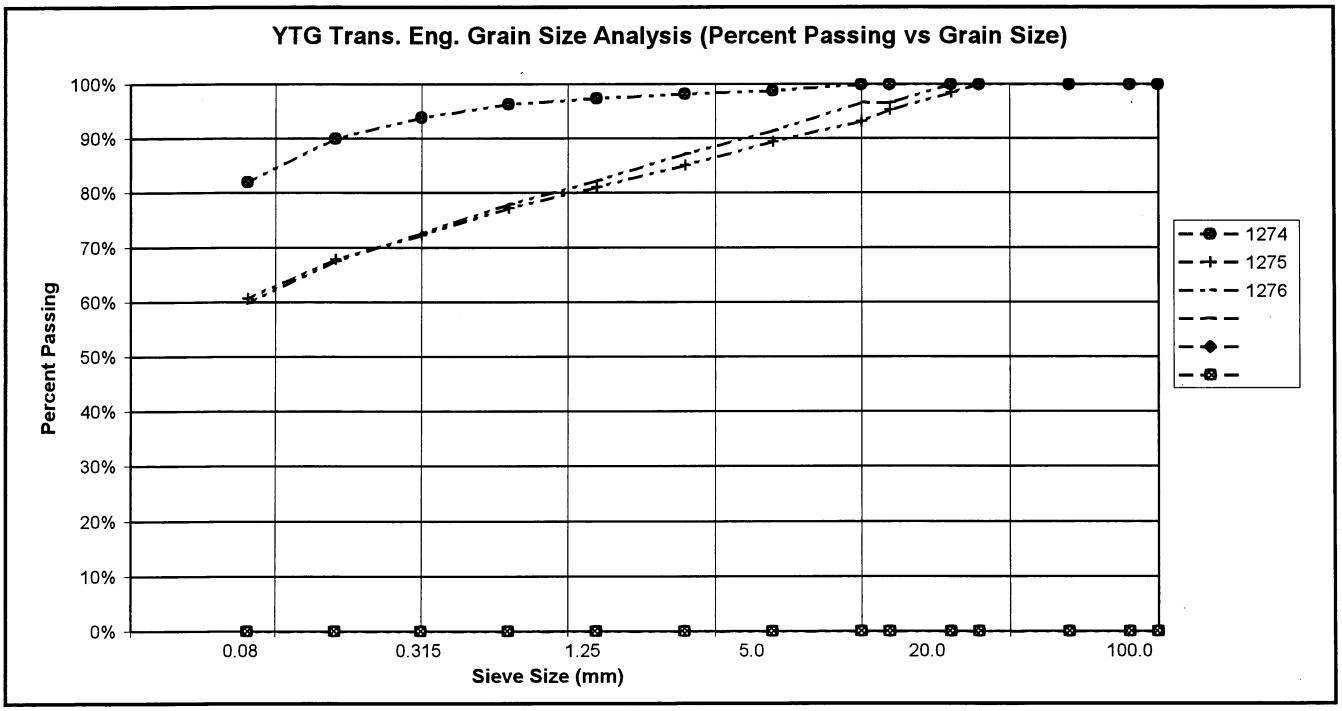
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-529
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/13

FIELD NO:	1270	1271	1272	1273		
LAB NO:	2047	2048	2049	2050		
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0	4.0-4.5		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	85%	96%	100%		
20.0	94%	77%	88%	100%		
12.5	72%	57%	76%	94%		
10.0	64%	53%	66%	93%		
5.0	44%	37%	50%	86%		
2.5	33%	26%	37%	81%		
1.25	24%	18%	27%	75%		
0.630	16%	12%	20%	70%		
0.315	8%	6%	14%	64%		
0.160	4%	4%	11%	59%		
0.080	3%	3%	9%	50%		
M.C.(%):	2%	2%	3%	9%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	63	50	14		
% SAND:	41	34	41	37		
% FINES:	3	3	9	50		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND (SM)		



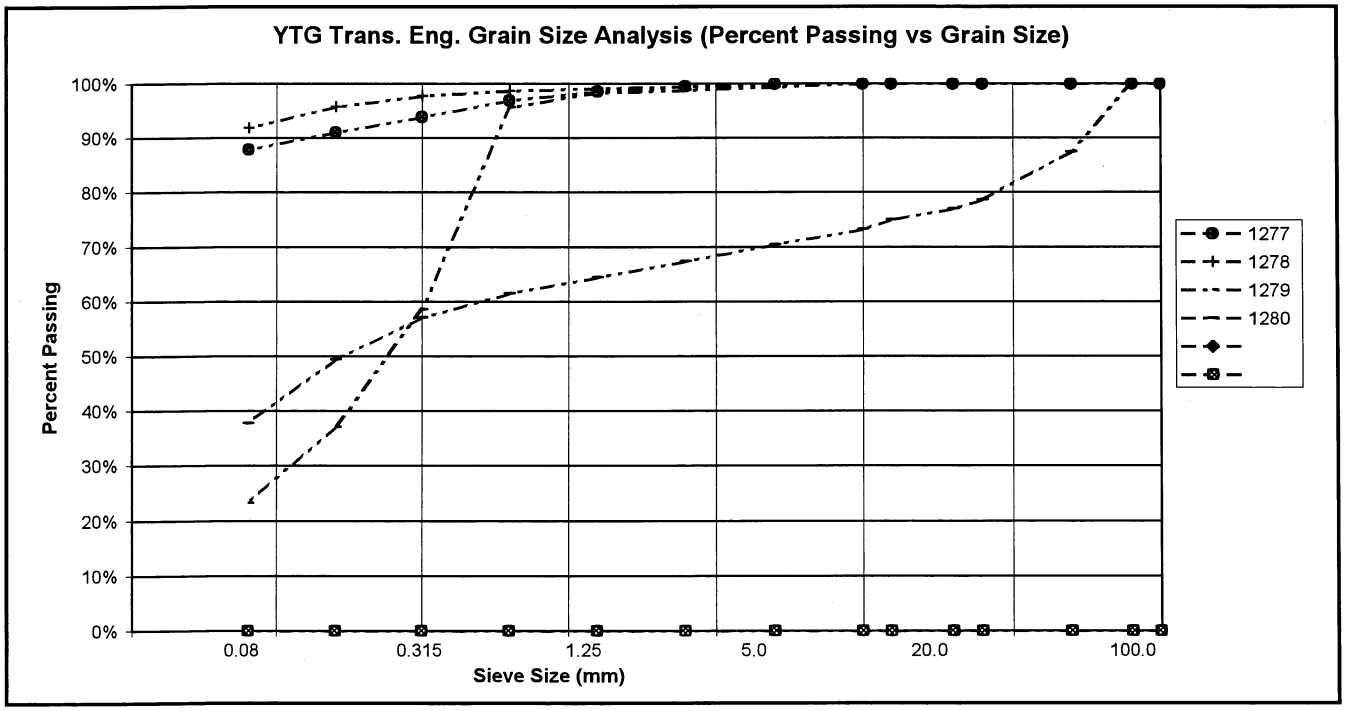
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-530
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/13

FIELD NO:	1274	1275	1276			
LAB NO:	2051	2052	2053			
DEPTH:	1.6-2.0	2.75-3.0	3.6-4.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	100%			
20.0	100%	98%	100%			
12.5	100%	95%	97%			
10.0	100%	93%	97%			
5.0	99%	89%	91%			
2.5	98%	85%	87%			
1.25	97%	81%	82%			
0.630	96%	77%	78%			
0.315	94%	72%	73%			
0.160	90%	68%	67%			
0.080	82%	61%	60%			
M.C.(%):	15%	11%	11%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	1	11	9			
% SAND:	17	29	32			
% FINES:	82	61	60			
CLASSIFICATION	SILT WITH SAND (ML)	SANDY SILT (ML)	SANDY SILT (ML)			



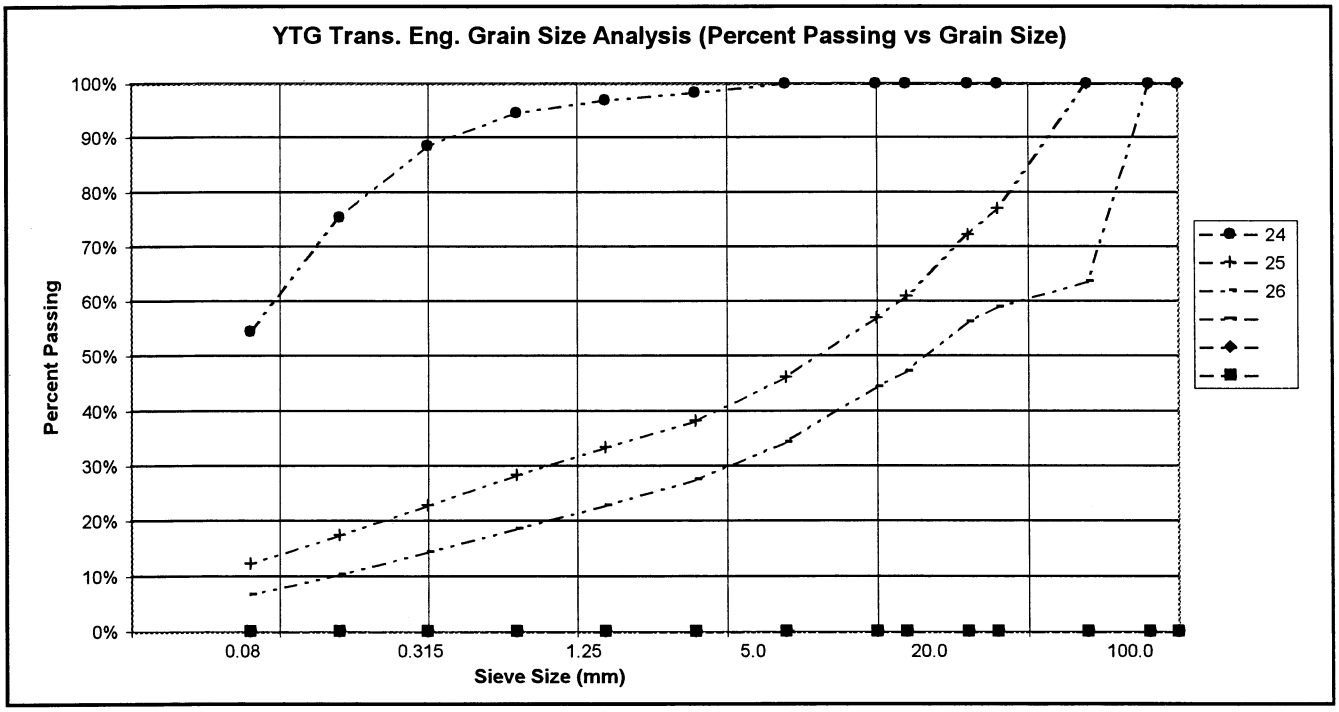
PROJECT NUMBER:	092-202101-0362-1		HOLE No.: 621-531
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 10		
PROJECT LOCATION:	Km 1692.6-1729.6 A/H		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Testhole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2002/09/13

FIELD NO:	1277	1278	1279	1280		
LAB NO:	2054	2055	2056	2057		
DEPTH:	0.75-1.0	1.6-2.0	2.6-3.0	3.6-4.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	87%		
25.0	100%	100%	100%	79%		
20.0	100%	100%	100%	77%		
12.5	100%	100%	100%	75%		
10.0	100%	100%	100%	73%		
5.0	100%	100%	99%	70%		
2.5	100%	99%	99%	67%		
1.25	99%	99%	98%	64%		
0.630	97%	99%	96%	62%		
0.315	94%	98%	59%	57%		
0.160	91%	96%	37%	49%		
0.080	88%	92%	23%	38%		
M.C.(%):	30%	19%	5%	7%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	0	1	30		
% SAND:	12	8	76	33		
% FINES:	88	92	23	38		
CLASSIFICATION	SILT (ML)	SILT (ML)	SILTY SAND (SM)	SILTY SAND WITH GRAVEL (SM)		



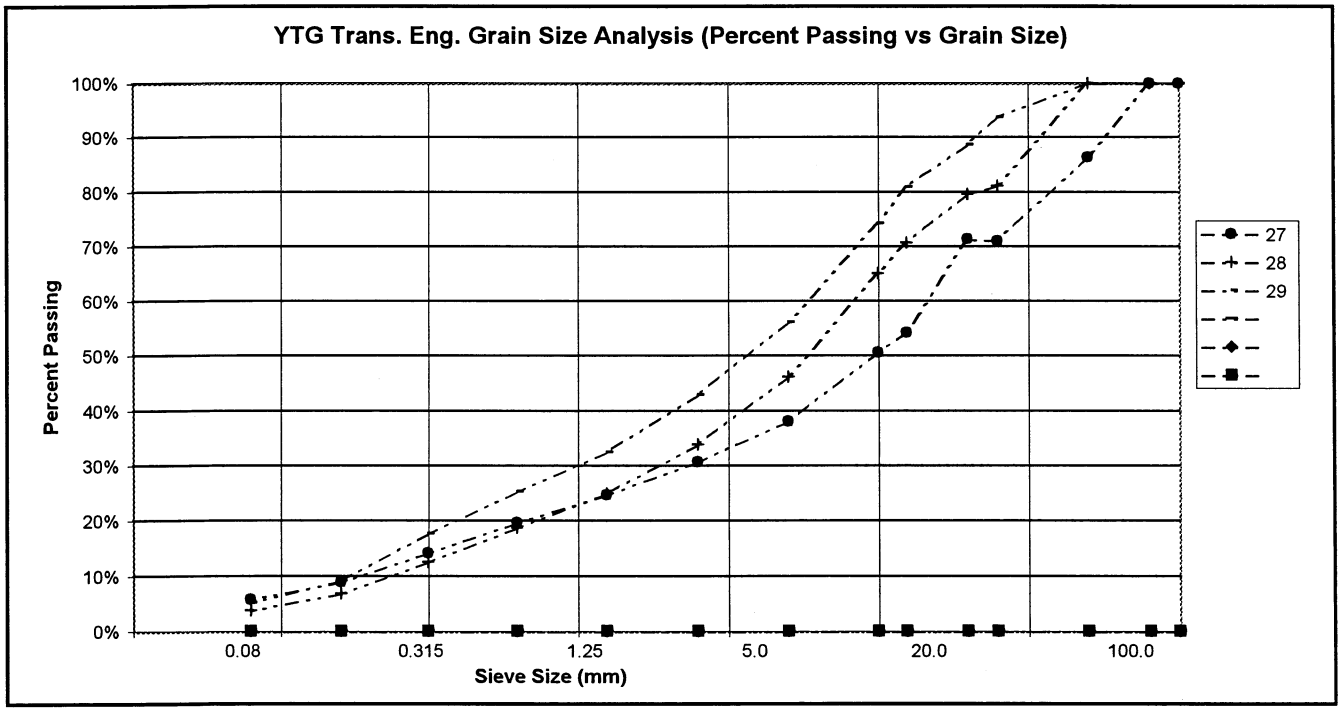
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 648-221
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek - No Name Creek	
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H	
DRILL UNIT:	D-4 Cat 6" Auger	
HOLE LOCATION:	1720+550 Centreline	
LOGGED BY:	G.C.	DATE COMP: 03/09/09

FIELD NO:	24	25	26			
LAB NO:	186	187	188			
DEPTH:	0.4-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	64%			
25.0	100%	77%	59%			
20.0	100%	72%	56%			
12.5	100%	61%	47%			
10.0	100%	57%	44%			
5.0	100%	46%	34%			
2.5	98%	38%	28%			
1.25	97%	33%	23%			
0.630	95%	28%	19%			
0.315	89%	23%	14%			
0.160	75%	17%	10%			
0.080	55%	12%	7%			
M.C.(%):	20%	5%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	54	66			
% SAND:	45	34	28			
% FINES:	55	12	7			
CLASSIFICATION	SANDY SILT (ML)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



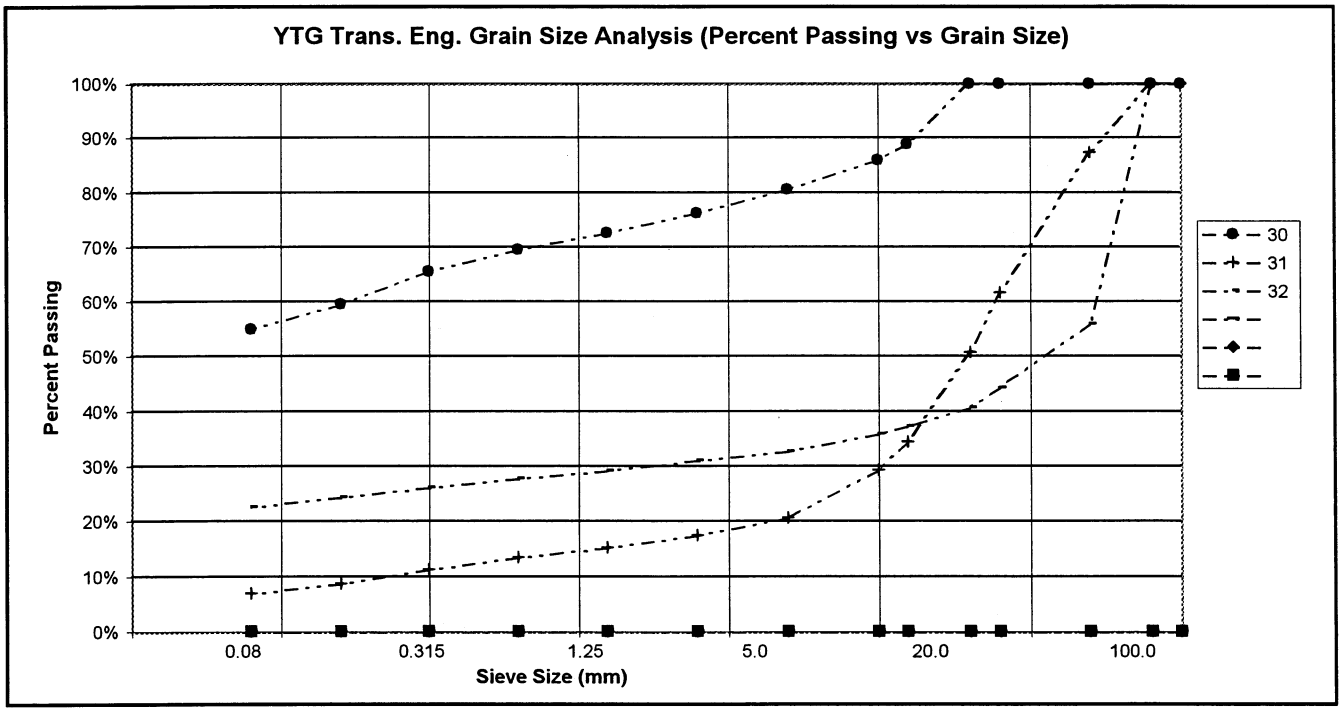
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-222
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1720+450 4m RT		
LOGGED BY:	G.C.		DATE COMP: 03/09/09

FIELD NO:	27	28	29			
LAB NO:	189	190	191			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	86%	100%	100%			
25.0	71%	81%	94%			
20.0	71%	80%	89%			
12.5	54%	71%	81%			
10.0	51%	65%	74%			
5.0	38%	46%	56%			
2.5	31%	34%	43%			
1.25	25%	25%	32%			
0.630	20%	19%	25%			
0.315	14%	13%	18%			
0.160	9%	7%	9%			
0.080	6%	4%	5%			
M.C.(%):	1%	1%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	62	54	44			
% SAND:	32	42	51			
% FINES:	6	4	5			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



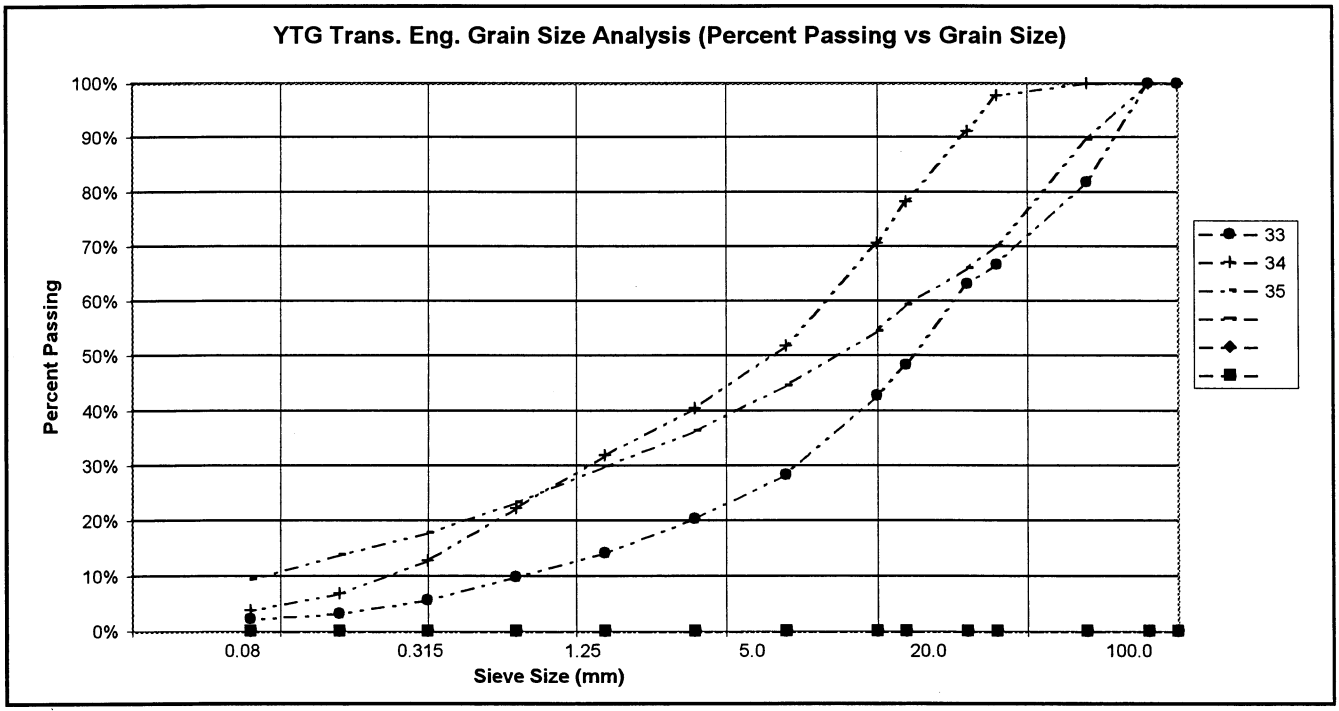
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-223
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1720+348 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/09

FIELD NO:	30	31	32			
LAB NO:	192	193	194			
DEPTH:	0.6-1.0	1.5-2.0	2.4-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	87%	56%			
25.0	100%	62%	44%			
20.0	100%	51%	41%			
12.5	89%	35%	37%			
10.0	86%	29%	36%			
5.0	80%	21%	33%			
2.5	76%	17%	31%			
1.25	73%	15%	29%			
0.630	69%	13%	28%			
0.315	65%	11%	26%			
0.160	60%	9%	24%			
0.080	55%	7%	23%			
M.C.(%):	17%	5%	7%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	20	79	67			
% SAND:	25	14	10			
% FINES:	55	7	23			
CLASSIFICATION	SANDY SILT WITH GRAVEL (ML)	POORLY GRADED GRAVEL WITH SILT (GP-GM)	SILTY GRAVEL (GM)			



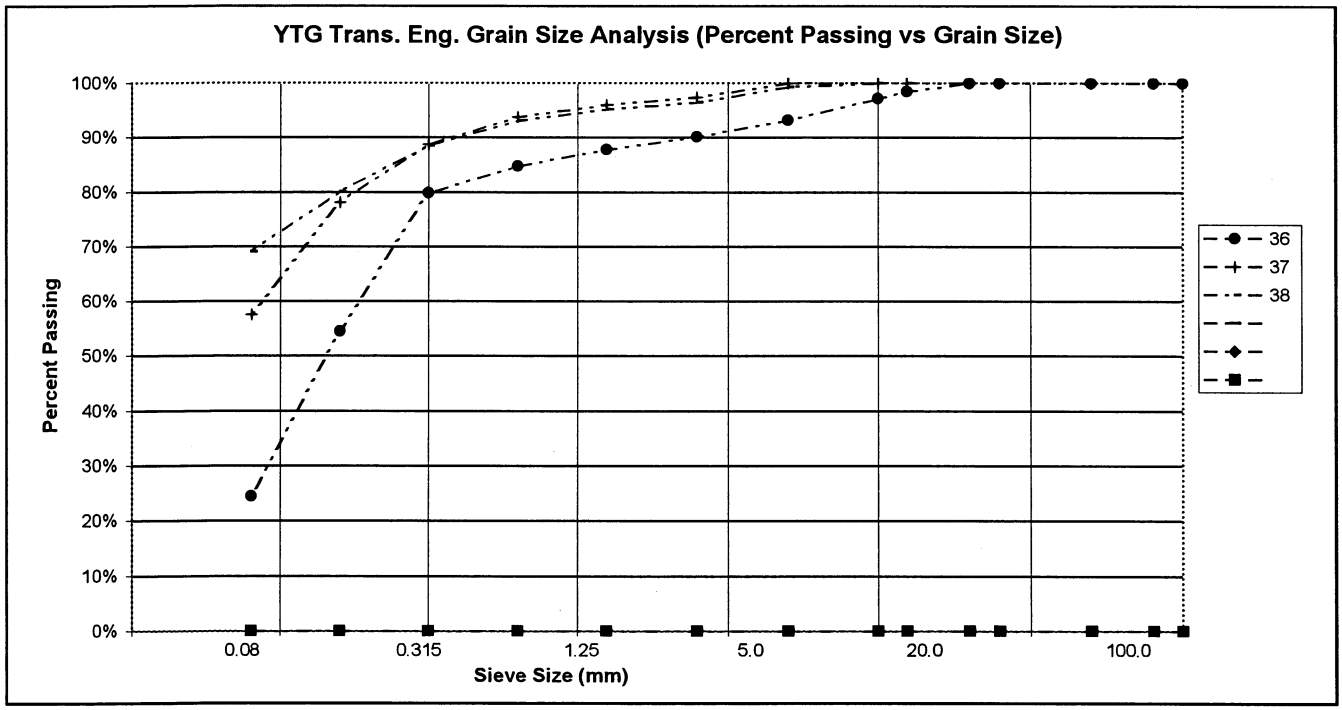
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-224
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1720+250 CENTRELINE		
LOGGED BY:	G.C.		DATE COMP: 03/09/09

FIELD NO:	33	34	35			
LAB NO:	195	196	197			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	82%	100%	90%			
25.0	67%	98%	70%			
20.0	63%	91%	66%			
12.5	48%	78%	59%			
10.0	43%	71%	55%			
5.0	28%	52%	44%			
2.5	20%	40%	36%			
1.25	14%	32%	30%			
0.630	10%	22%	23%			
0.315	6%	13%	18%			
0.160	3%	7%	14%			
0.080	2%	4%	9%			
M.C.(%):	1%	2%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	72	48	56			
% SAND:	26	48	35			
% FINES:	2	4	9			
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



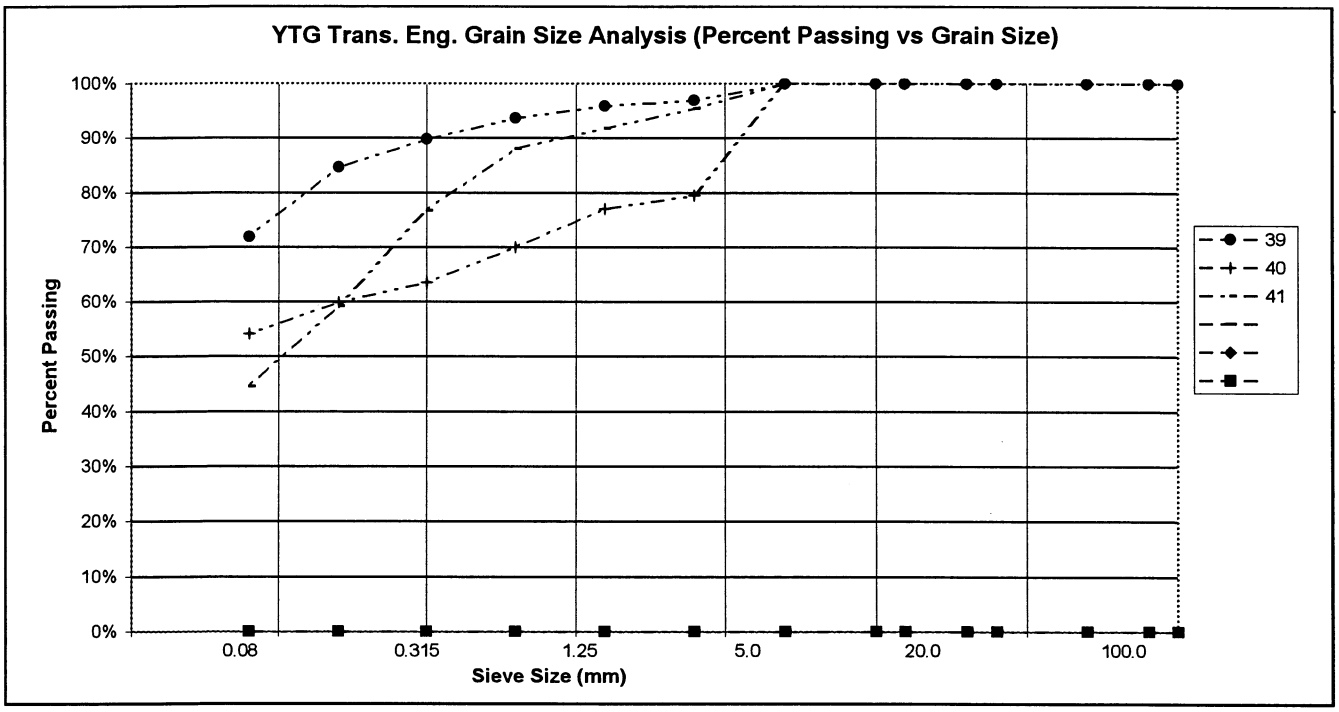
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 648-225
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek - No Name Creek	
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H	
DRILL UNIT:	D-4 Cat 6" Auger	
HOLE LOCATION:	1720+155 Centreline	
LOGGED BY:	G.C.	DATE COMP: 03/09/09

FIELD NO:	36	37	38			
LAB NO:	198	199	200			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	100%			
20.0	100%	100%	100%			
12.5	98%	100%	100%			
10.0	97%	100%	100%			
5.0	93%	100%	99%			
2.5	90%	97%	96%			
1.25	88%	96%	95%			
0.630	85%	94%	93%			
0.315	80%	89%	89%			
0.160	54%	78%	80%			
0.080	25%	58%	69%			
M.C.(%):	3%	7%	20%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	7	0	1			
% SAND:	69	42	30			
% FINES:	25	58	69			
CLASSIFICATION	SILTY SAND (SM)	SANDY SILT (ML)	SANDY SILT (ML)			



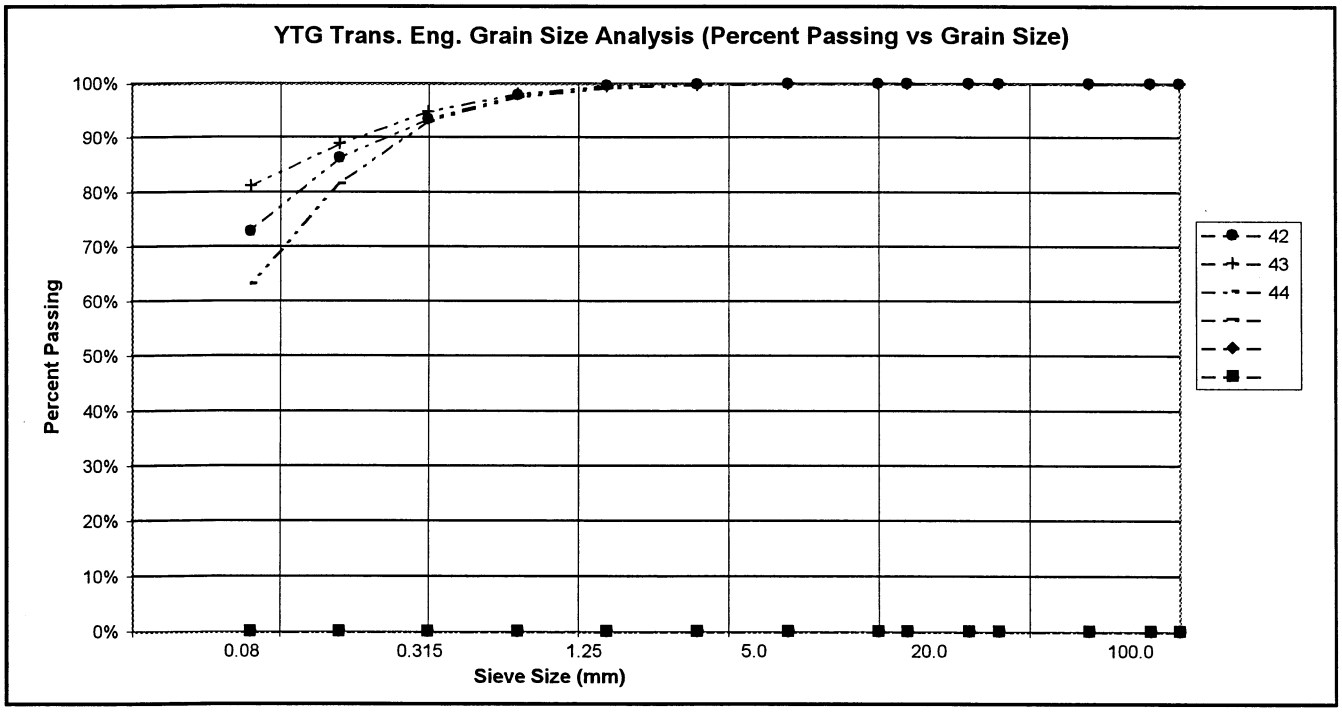
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-226
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1720+050 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/09

FIELD NO:	39	40	41			
LAB NO:	201	202	203			
DEPTH:	0.4-1.0	1.2-1.5	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	100%			
20.0	100%	100%	100%			
12.5	100%	100%	100%			
10.0	100%	100%	100%			
5.0	100%	100%	100%			
2.5	97%	80%	95%			
1.25	96%	77%	92%			
0.630	94%	70%	88%			
0.315	90%	64%	77%			
0.160	85%	60%	59%			
0.080	72%	54%	45%			
M.C.(%):	22%	24%	11%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	0	0			
% SAND:	28	46	55			
% FINES:	72	54	45			
CLASSIFICATION	SILT WITH SAND (ML)	SANDY SILT (ML)	SILTY SAND (SM)			



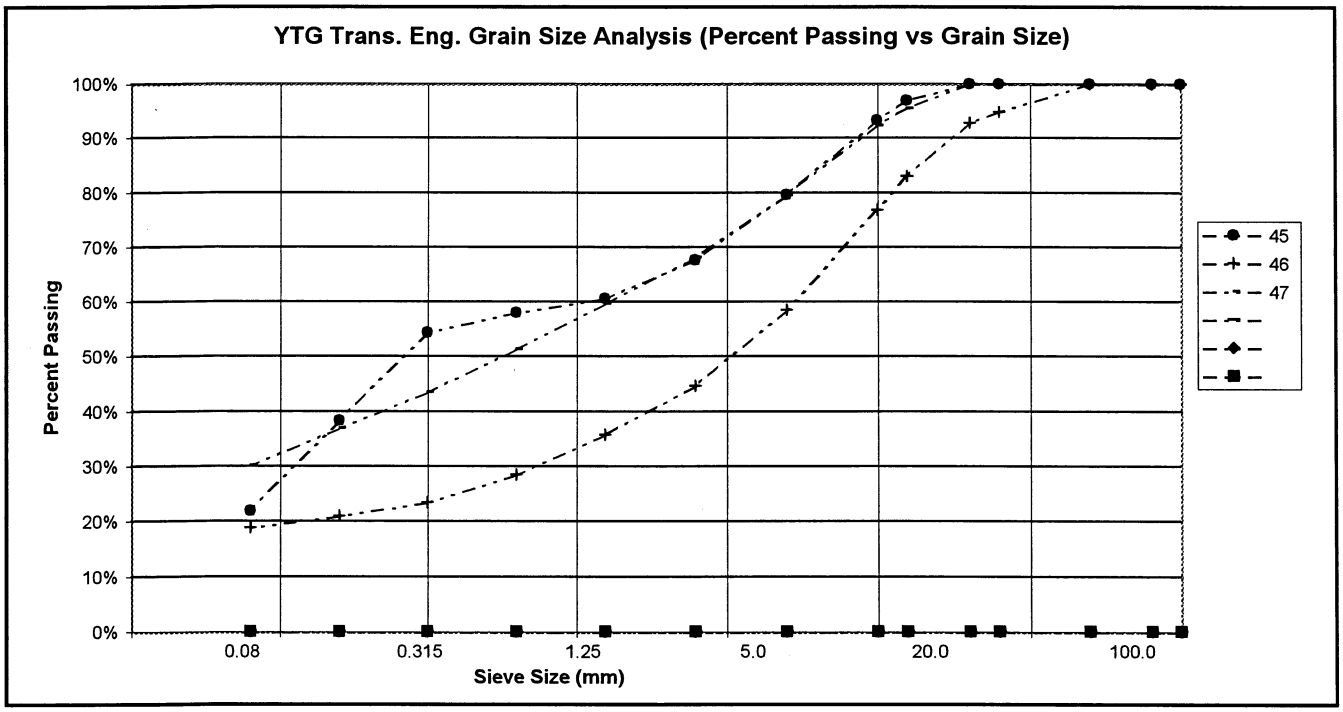
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 648-227
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek - No Name Creek	
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H	
DRILL UNIT:	D-4 Cat 6" Auger	
HOLE LOCATION:	1719+950 Centreline	
LOGGED BY:	G.C.	DATE COMP: 03/09/09

FIELD NO:	42	43	44			
LAB NO:	204	205	206			
DEPTH:	0.6-1.0	1.5-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	100%			
20.0	100%	100%	100%			
12.5	100%	100%	100%			
10.0	100%	100%	100%			
5.0	100%	100%	100%			
2.5	100%	100%	100%			
1.25	100%	100%	99%			
0.630	98%	98%	98%			
0.315	93%	95%	93%			
0.160	86%	89%	81%			
0.080	73%	81%	63%			
M.C.(%):	6%	13%	7%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	0	0			
% SAND:	27	19	37			
% FINES:	73	81	63			
CLASSIFICATION	SILT WITH SAND (ML)	SILT WITH SAND (ML)	SANDY SILT (ML)			



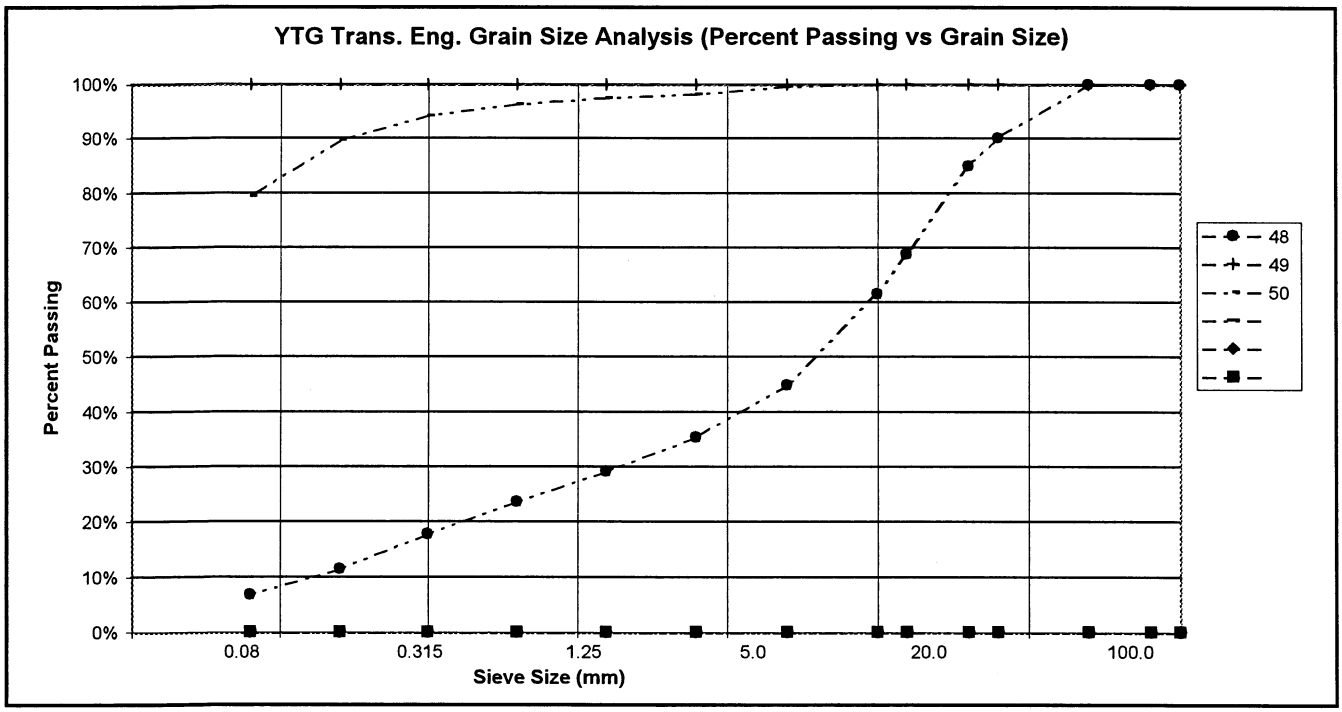
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-228
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+852 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/09

FIELD NO:	45	46	47			
LAB NO:	207	208	209			
DEPTH:	0.4-0.8	1.6-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	95%	100%			
20.0	100%	93%	100%			
12.5	97%	83%	96%			
10.0	93%	77%	92%			
5.0	80%	59%	80%			
2.5	68%	45%	68%			
1.25	61%	36%	60%			
0.630	58%	28%	51%			
0.315	54%	23%	43%			
0.160	38%	21%	37%			
0.080	22%	19%	30%			
M.C.(%):	3%	5%	6%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	20	41	20			
% SAND:	58	40	49			
% FINES:	22	19	30			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)			



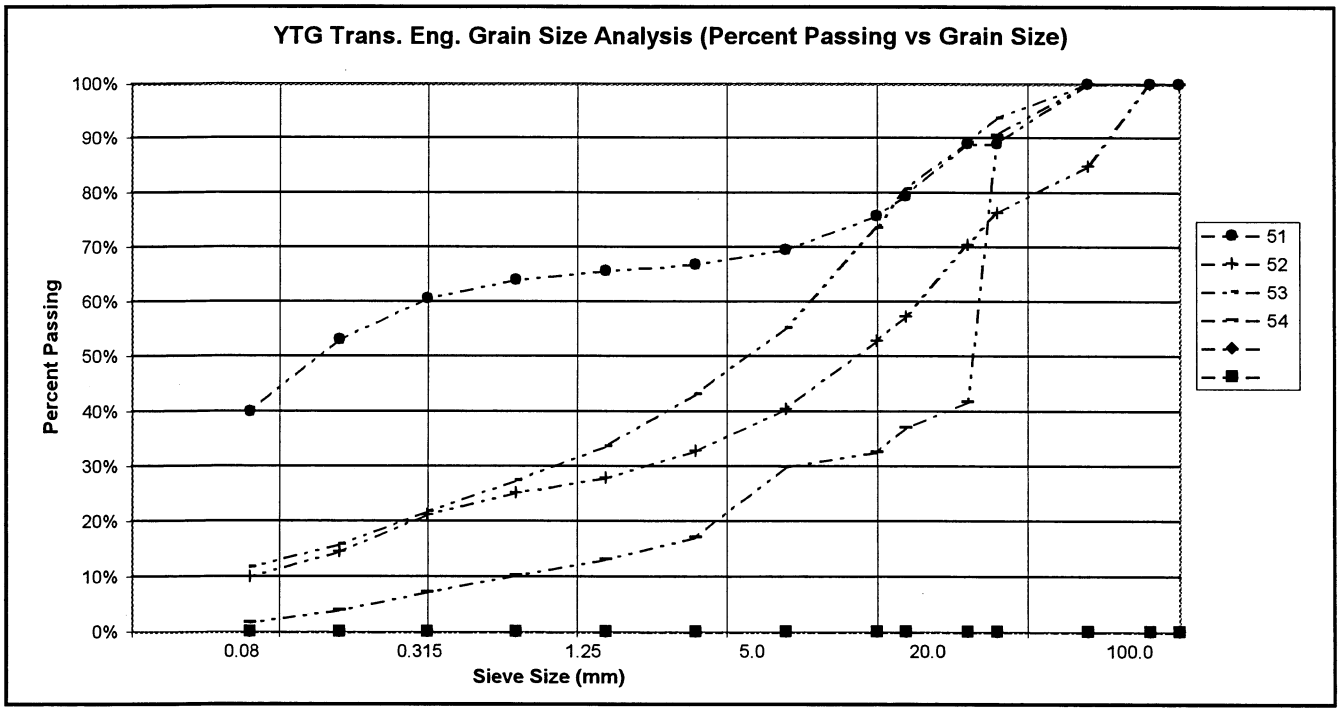
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-229
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+750 3m RT		
LOGGED BY:	G.C.		DATE COMP: 03/09/09

FIELD NO:	48	49	50			
LAB NO:	210	LOST	212			
DEPTH:	0.5-1.0	1.8-2.2	2.8-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	90%	100%	100%			
20.0	85%	100%	100%			
12.5	69%	100%	100%			
10.0	62%	100%	100%			
5.0	45%	100%	100%			
2.5	35%	100%	98%			
1.25	29%	100%	97%			
0.630	24%	100%	96%			
0.315	18%	100%	94%			
0.160	12%	100%	90%			
0.080	7%	100%	79%			
M.C.(%):	3%	9%	24%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	55	0	0			
% SAND:	38	0	20			
% FINES:	7	100	79			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	[illegible]	SILT WITH SAND (ML)			



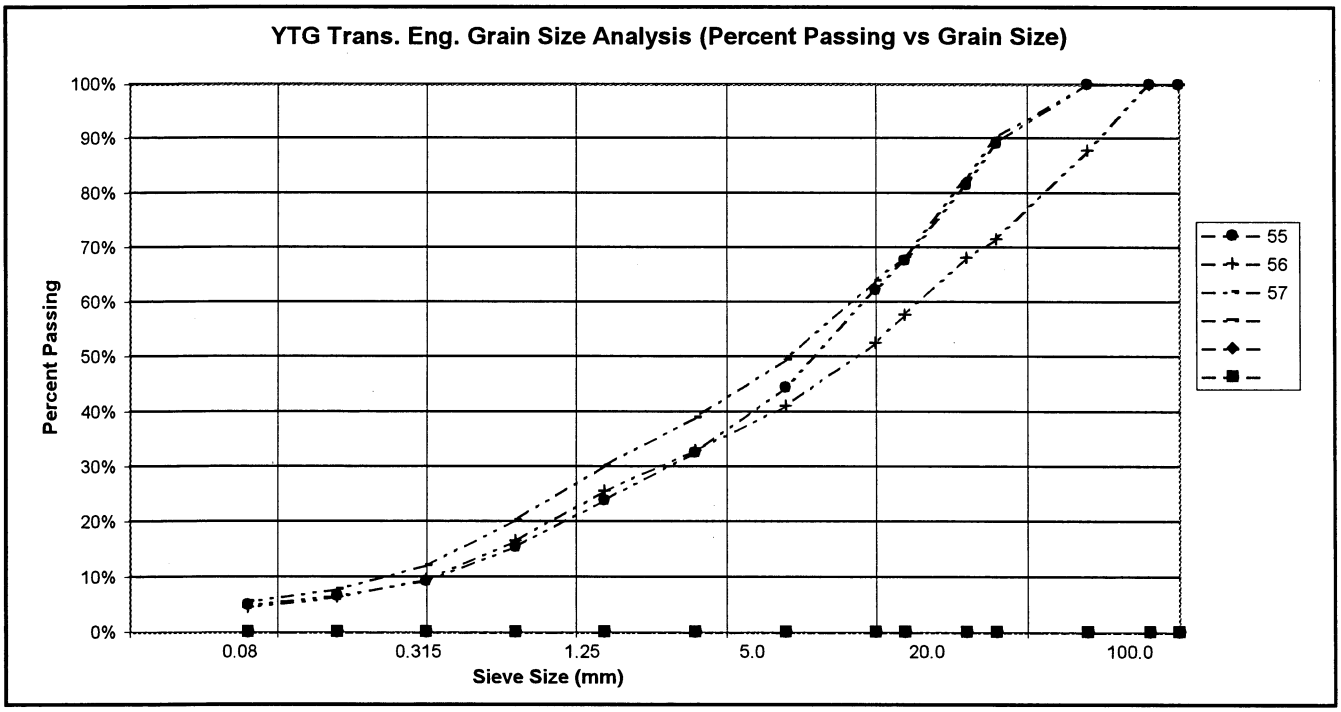
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-230
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+648 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	51	52	53	54		
LAB NO:	213	214	215	216		
DEPTH:	0.4-0.9	1.2-1.6	1.6-2.0	2.4-3.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	85%	100%	100%		
25.0	89%	76%	94%	91%		
20.0	89%	70%	89%	42%		
12.5	79%	57%	81%	37%		
10.0	76%	53%	74%	33%		
5.0	70%	41%	55%	30%		
2.5	67%	33%	43%	17%		
1.25	66%	28%	34%	13%		
0.630	64%	25%	27%	10%		
0.315	61%	21%	22%	7%		
0.160	53%	15%	16%	4%		
0.080	40%	10%	12%	2%		
M.C.(%):	12%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	30	59	45	70		
% SAND:	30	31	44	28		
% FINES:	40	10	12	2		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)		



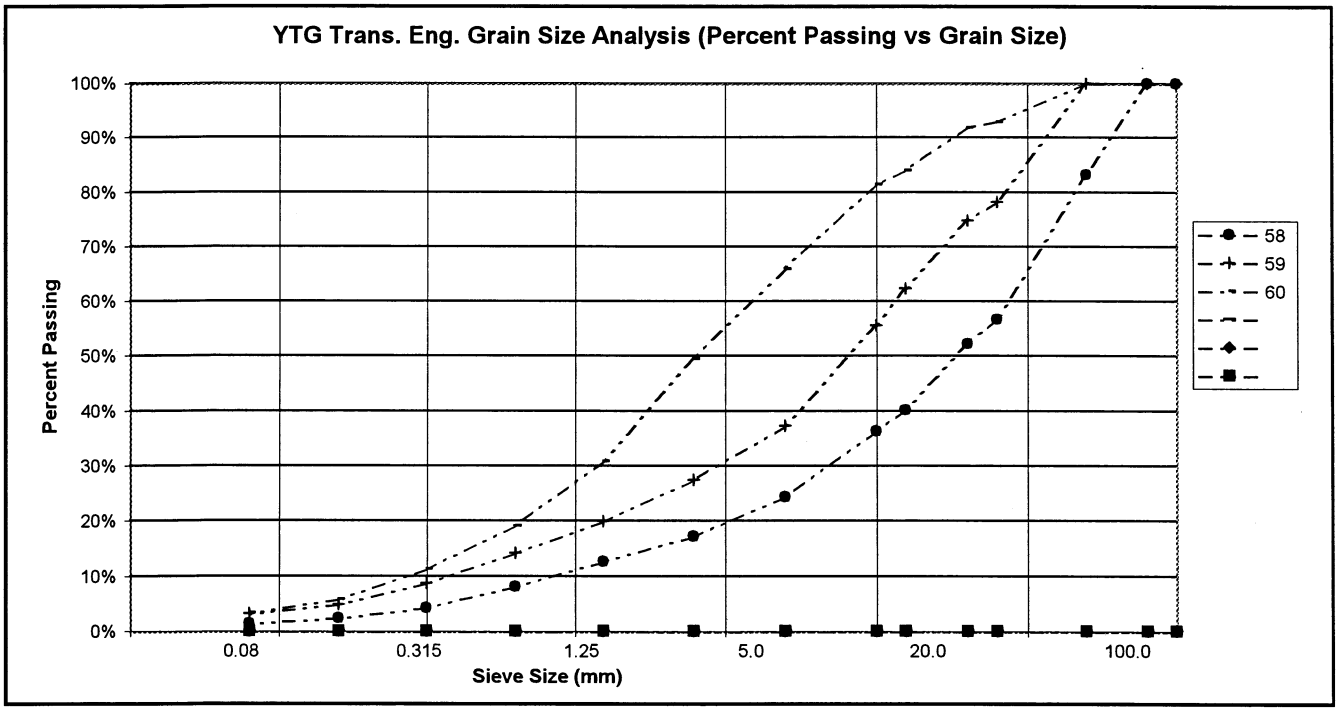
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-231
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+550 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	55	56	57			
LAB NO:	217	218	219			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	88%	100%			
25.0	89%	72%	90%			
20.0	81%	68%	83%			
12.5	68%	58%	68%			
10.0	62%	52%	64%			
5.0	44%	41%	49%			
2.5	33%	33%	39%			
1.25	24%	26%	30%			
0.630	15%	17%	20%			
0.315	9%	10%	12%			
0.160	7%	6%	8%			
0.080	5%	4%	5%			
M.C.(%):	2%	2%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	56	59	51			
% SAND:	40	37	44			
% FINES:	5	4	5			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



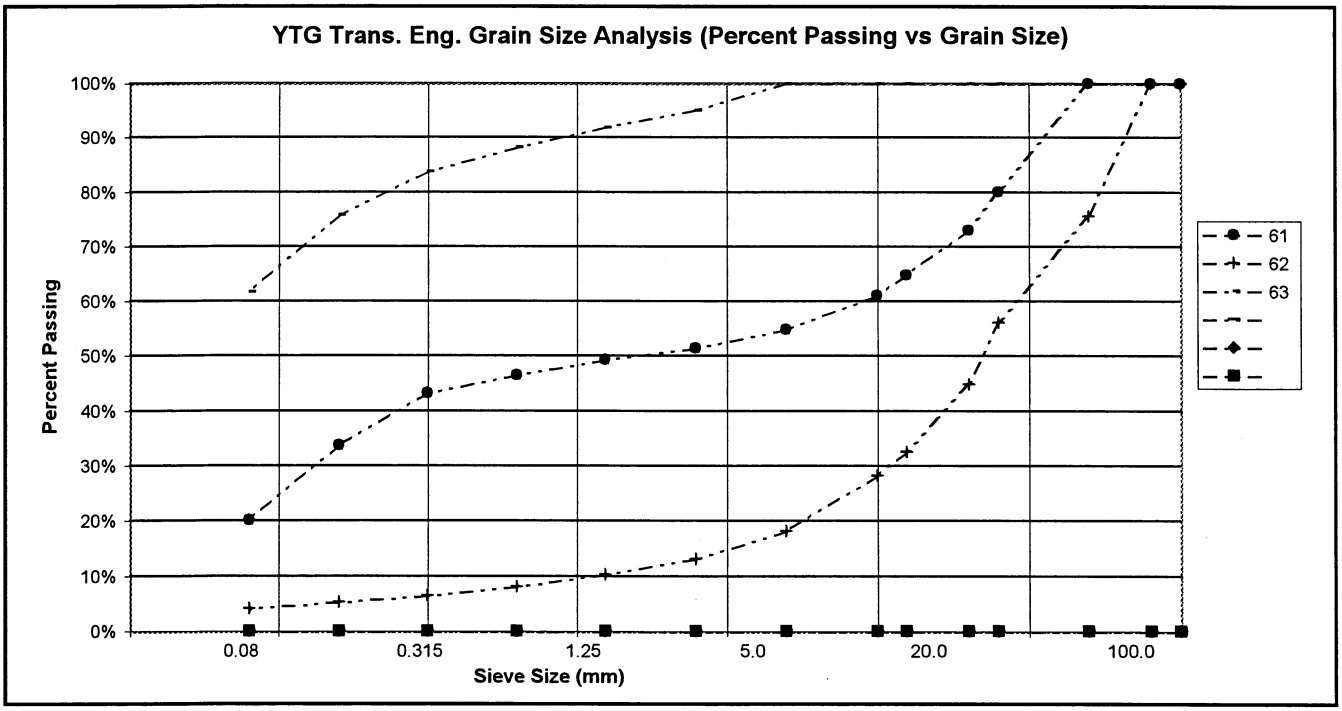
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-232
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+455 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	58	59	60			
LAB NO:	220	221	222			
DEPTH:	0.5-1.0	1.5-2.0	2.4-2.8			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	83%	100%	100%			
25.0	57%	78%	93%			
20.0	52%	75%	92%			
12.5	40%	62%	84%			
10.0	36%	56%	81%			
5.0	24%	37%	66%			
2.5	17%	27%	49%			
1.25	13%	20%	31%			
0.630	8%	14%	19%			
0.315	4%	9%	11%			
0.160	2%	5%	6%			
0.080	1%	3%	3%			
M.C.(%):	1%	2%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	76	63	34			
% SAND:	23	34	63			
% FINES:	1	3	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH GRAVEL (SW)			



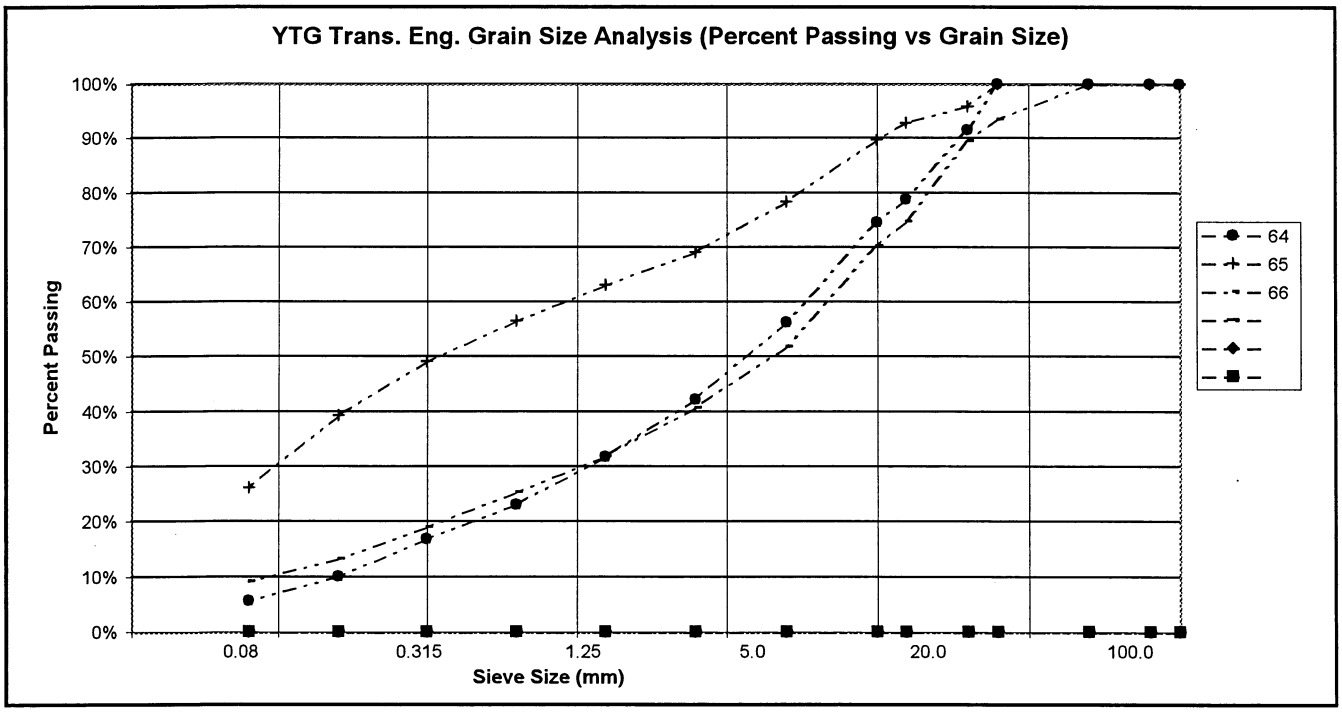
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-233
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+355 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	61	62	63			
LAB NO:	223	234	235			
DEPTH:	0.2-0.4	0.8-1.2	2.2-2.6			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	76%	100%			
25.0	80%	56%	100%			
20.0	73%	45%	100%			
12.5	65%	33%	100%			
10.0	61%	28%	100%			
5.0	55%	18%	100%			
2.5	51%	13%	95%			
1.25	49%	10%	92%			
0.630	47%	8%	88%			
0.315	43%	6%	84%			
0.160	34%	5%	76%			
0.080	20%	4%	62%			
M.C.(%):	11%	2%	22%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	45	82	0			
% SAND:	35	14	38			
% FINES:	20	4	62			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED GRAVEL (GW)	SANDY SILT (ML)			



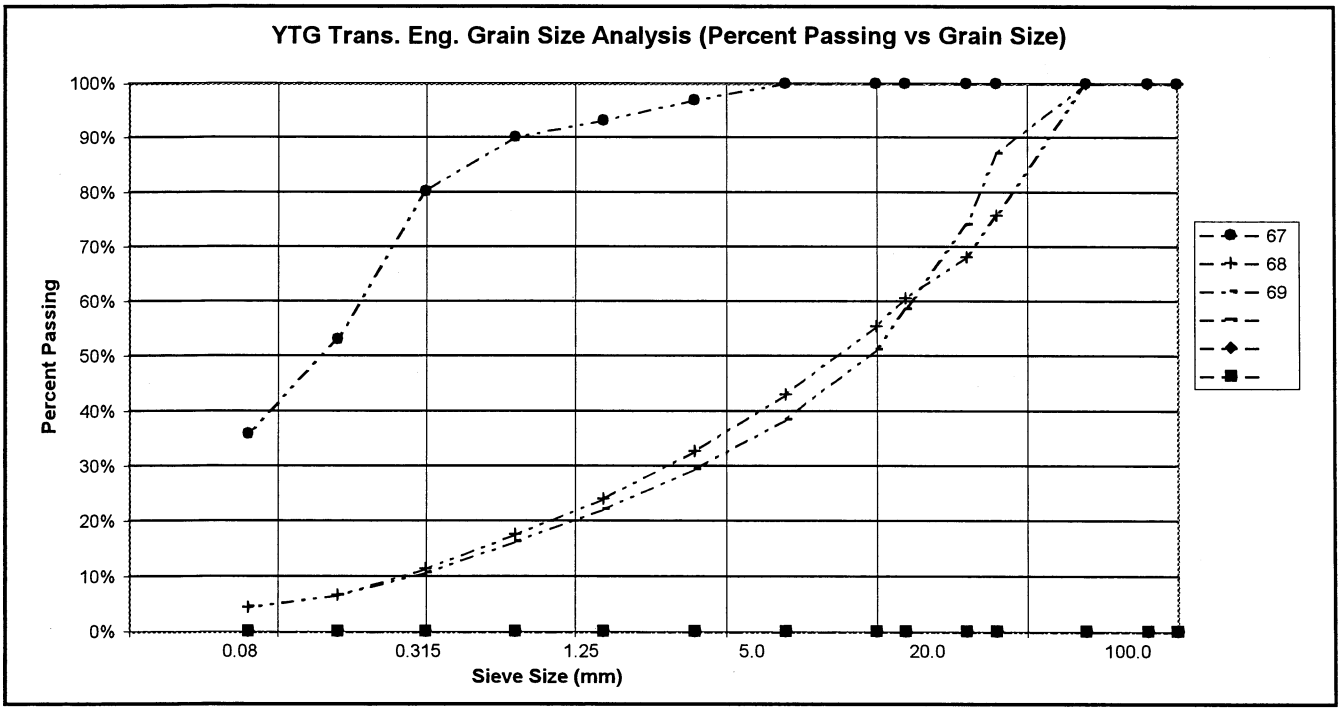
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-234
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+250 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	64	65	66			
LAB NO:	226	227	228			
DEPTH:	0.2-0.6	1.0-1.4	2.4-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	94%			
20.0	92%	96%	89%			
12.5	79%	93%	75%			
10.0	75%	90%	70%			
5.0	56%	78%	52%			
2.5	42%	69%	41%			
1.25	32%	63%	32%			
0.630	23%	57%	25%			
0.315	17%	49%	19%			
0.160	10%	39%	13%			
0.080	6%	26%	9%			
M.C.(%):	2%	6%	11%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	44	22	48			
% SAND:	51	52	43			
% FINES:	6	26	9			
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



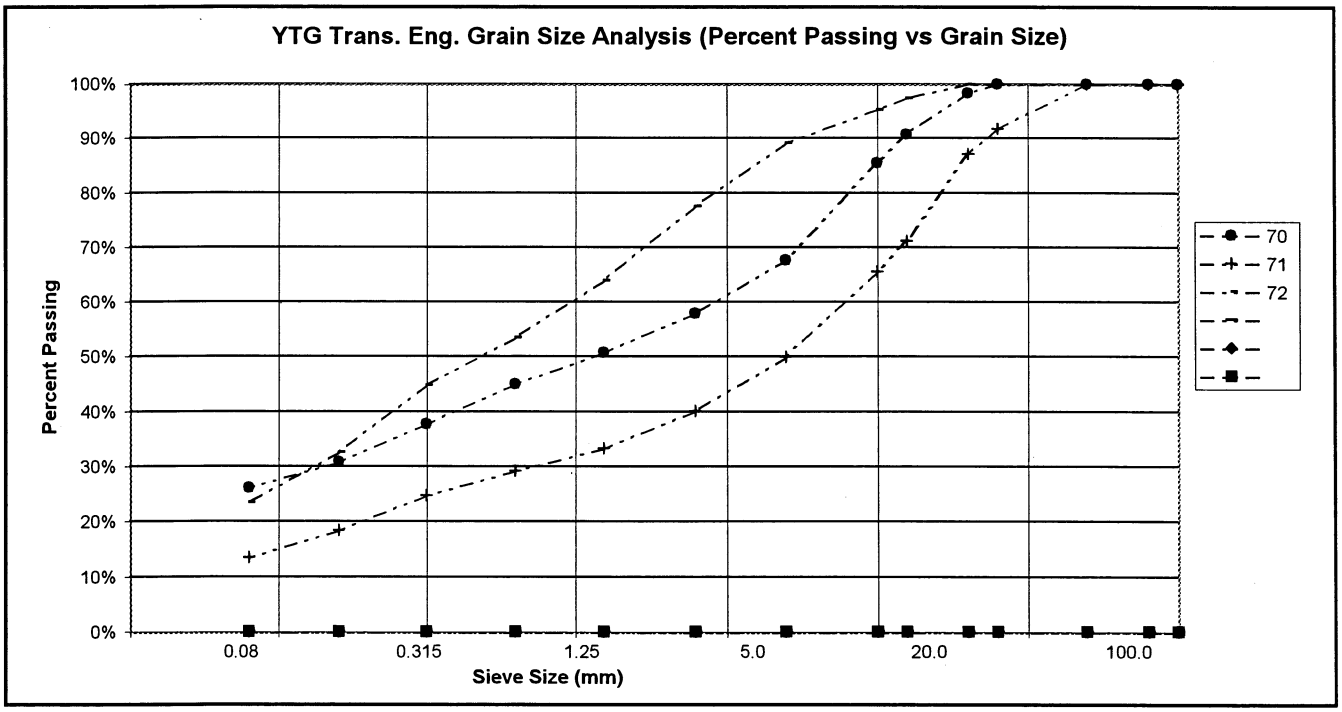
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-235
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+145 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	67	68	69			
LAB NO:	229	230	231			
DEPTH:	0.6-1.0	1.6-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	76%	87%			
20.0	100%	68%	74%			
12.5	100%	61%	59%			
10.0	100%	55%	51%			
5.0	100%	43%	38%			
2.5	97%	33%	29%			
1.25	93%	24%	22%			
0.630	90%	18%	16%			
0.315	80%	11%	11%			
0.160	53%	7%	7%			
0.080	36%	4%	4%			
M.C.(%):	11%	1%	1%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	57	62			
% SAND:	64	39	34			
% FINES:	36	4	4			
CLASSIFICATION	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)			



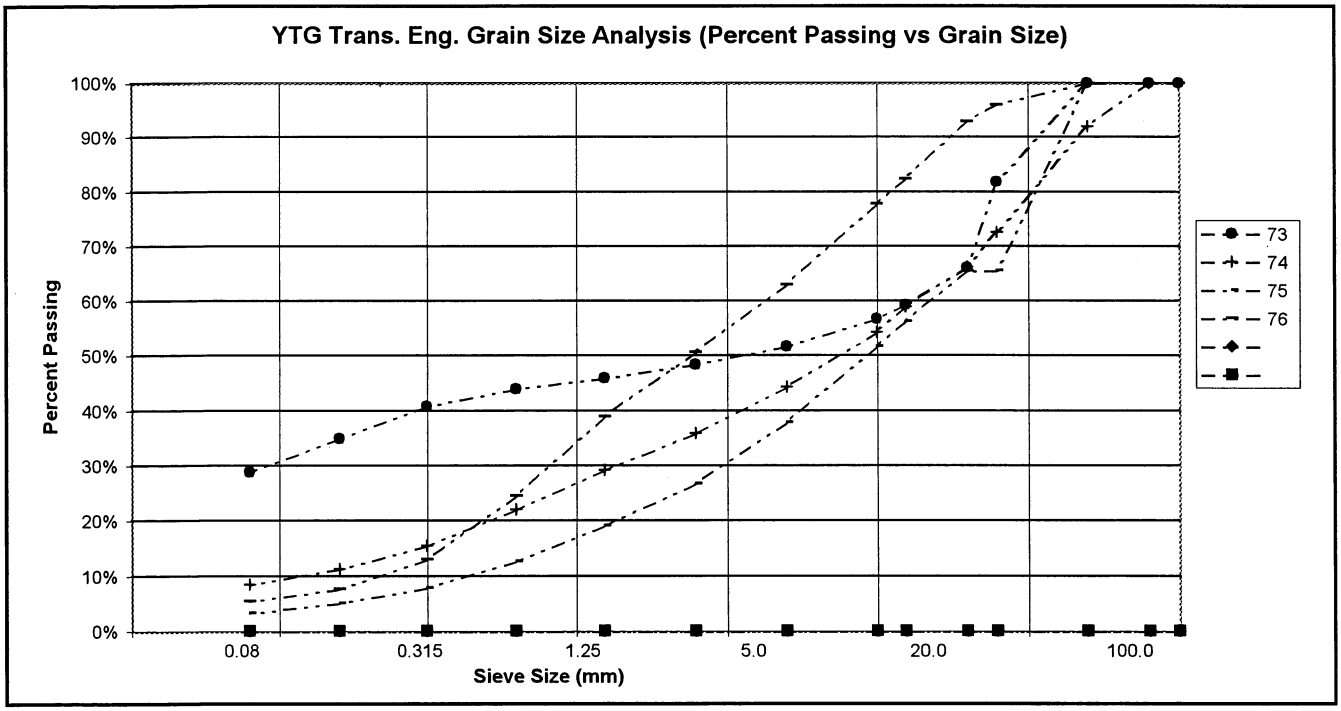
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-236
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1719+052 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	70	71	72			
LAB NO:	232	233	234			
DEPTH:	0.6-1.0	1.6-2.0	2.8-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	92%	100%			
20.0	98%	87%	100%			
12.5	91%	71%	97%			
10.0	85%	66%	95%			
5.0	68%	50%	89%			
2.5	58%	40%	78%			
1.25	51%	33%	64%			
0.630	45%	29%	53%			
0.315	38%	25%	45%			
0.160	31%	18%	33%			
0.080	26%	14%	23%			
M.C.(%):	8%	3%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	32	50	11			
% SAND:	41	36	66			
% FINES:	26	14	23			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND (SM)			



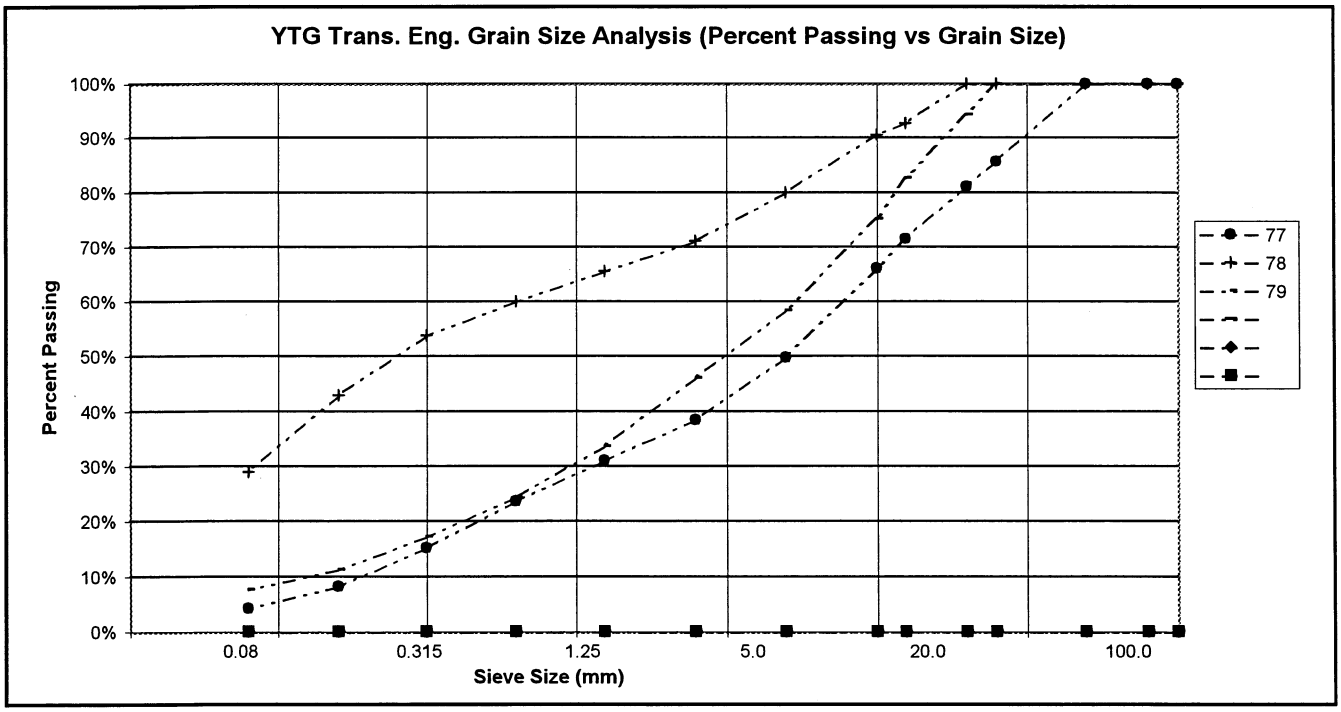
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-237
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+960 Centrerline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	73	74	75	76		
LAB NO:	235	236	237	238		
DEPTH:	0.2-0.4	1.0-1.4	2.0-2.5	2.5-3.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	92%	100%	100%		
25.0	82%	73%	65%	96%		
20.0	66%	66%	65%	93%		
12.5	59%	59%	56%	82%		
10.0	57%	54%	52%	78%		
5.0	52%	44%	38%	63%		
2.5	48%	36%	27%	51%		
1.25	46%	29%	19%	39%		
0.630	44%	22%	13%	25%		
0.315	41%	15%	8%	13%		
0.160	35%	11%	5%	8%		
0.080	29%	8%	3%	5%		
M.C.(%):	8%	3%	1%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	48	56	62	37		
% SAND:	23	36	35	58		
% FINES:	29	8	3	5		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		



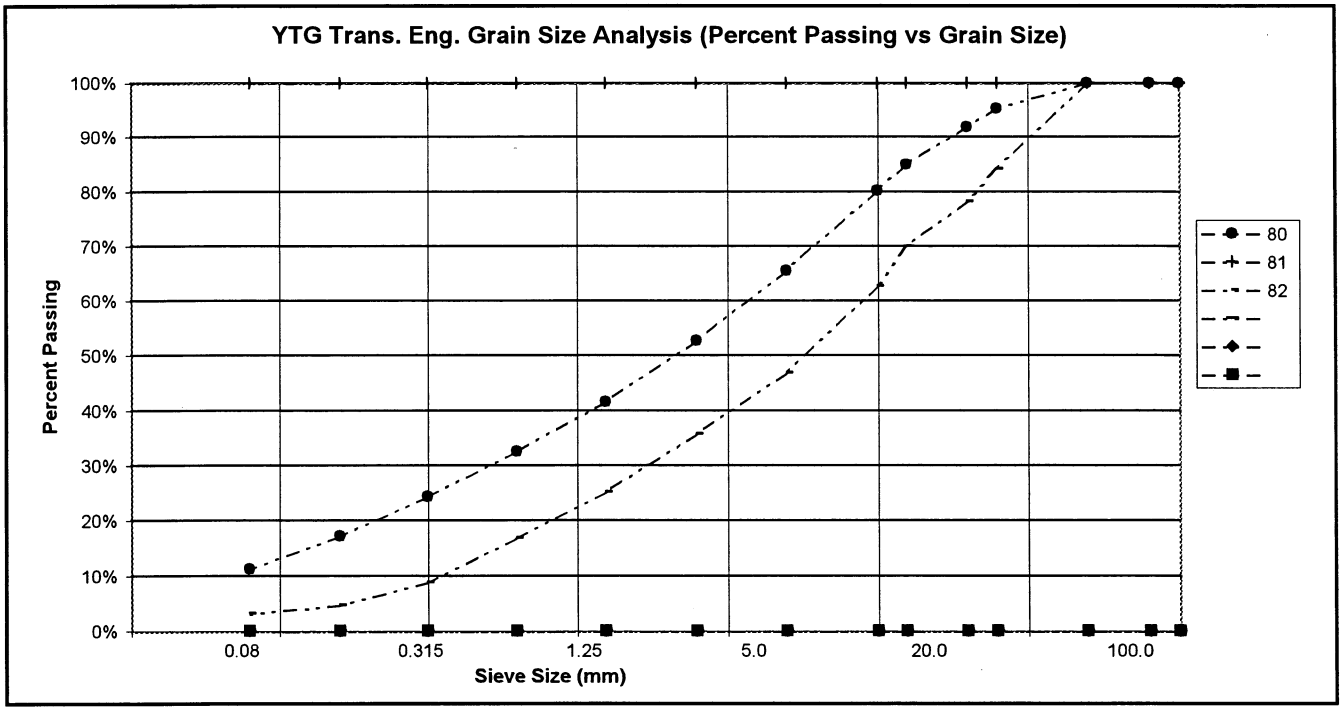
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-238
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+835 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	77	78	79			
LAB NO:	239	240	241			
DEPTH:	0.5-1.0	1.6-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	86%	100%	100%			
20.0	81%	100%	94%			
12.5	71%	93%	83%			
10.0	66%	91%	75%			
5.0	50%	80%	58%			
2.5	39%	71%	46%			
1.25	31%	66%	34%			
0.630	24%	60%	24%			
0.315	15%	54%	17%			
0.160	8%	43%	11%			
0.080	4%	29%	8%			
M.C.(%):	1%	6%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	50	20	42			
% SAND:	46	51	51			
% FINES:	4	29	8			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



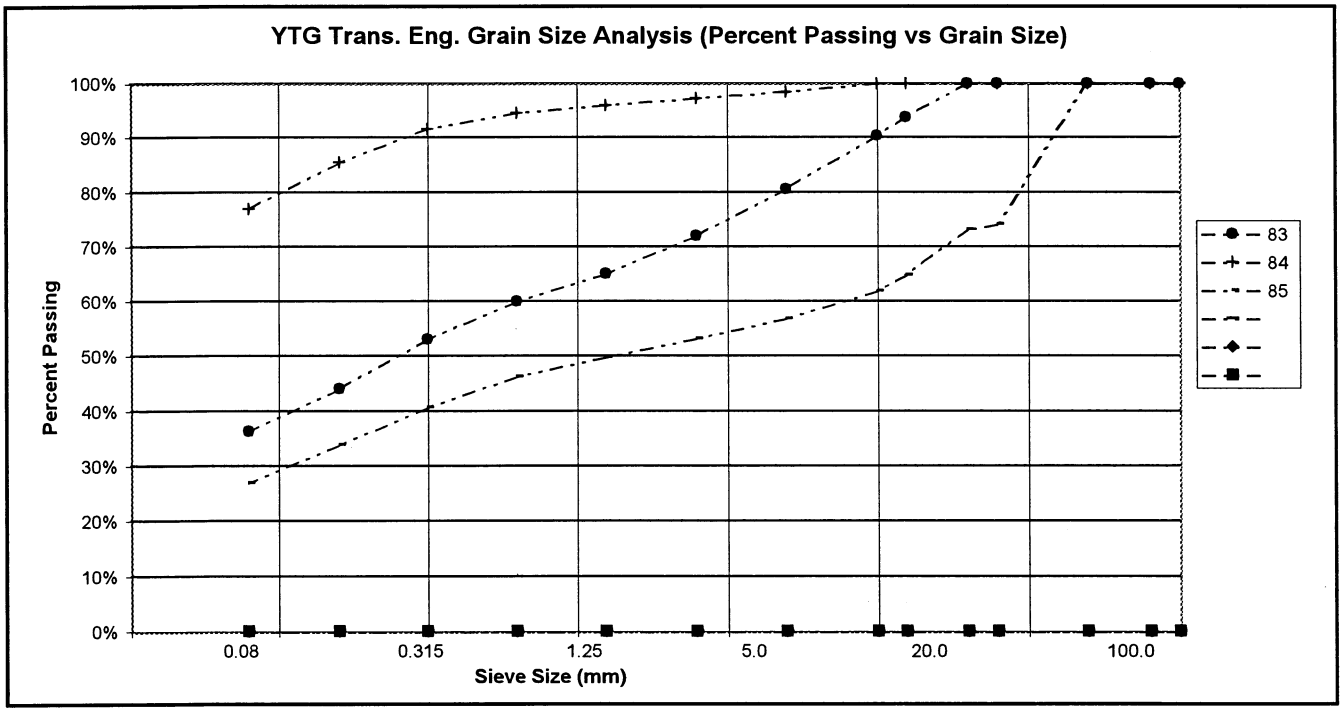
PROJECT NUMBER: 552-202101-0361-1 HOLE No.: 648-239
CLIENT: Shakwak
PROJECT NAME: Congdon Creek - No Name Creek
PROJECT LOCATION: Km 1692.6 - 1729.6 A/H
DRILL UNIT: D-4 Cat 6" Auger
HOLE LOCATION: 1718+755 Centreline
LOGGED BY: G.C. DATE COMP: 03/09/10

FIELD NO:	80	81	82			
LAB NO:	242	Lost	244			
DEPTH:	0.5-1.0	1.6-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	95%	100%	84%			
20.0	92%	100%	78%			
12.5	85%	100%	70%			
10.0	80%	100%	63%			
5.0	66%	100%	47%			
2.5	53%	100%	36%			
1.25	42%	100%	25%			
0.630	33%	100%	17%			
0.315	24%	100%	9%			
0.160	17%	100%	5%			
0.080	11%	100%	3%			
M.C.(%):	4%	7%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	34	0	53			
% SAND:	54	0	44			
% FINES:	11	100	3			
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	~~SILT (ML)~~	POORLY GRADED GRAVEL WITH SAND (GP)			



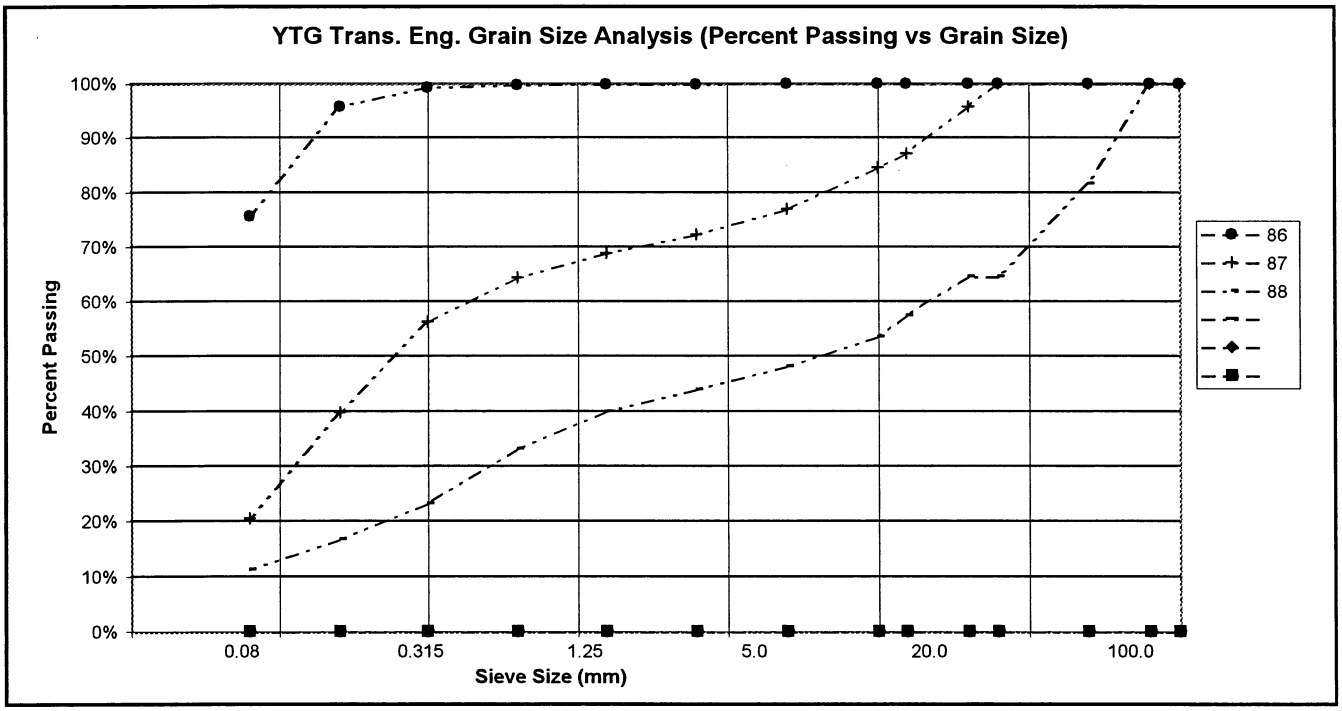
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-240
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+660 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	83	84	85			
LAB NO:	245	246	247			
DEPTH:	0.5-1.0	1.5-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	74%			
20.0	100%	100%	73%			
12.5	94%	100%	65%			
10.0	90%	100%	62%			
5.0	81%	98%	57%			
2.5	72%	97%	53%			
1.25	65%	96%	50%			
0.630	60%	95%	46%			
0.315	53%	92%	41%			
0.160	44%	85%	34%			
0.080	36%	77%	27%			
M.C.(%):	9%	22%	6%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	19	2	43			
% SAND:	44	22	30			
% FINES:	36	77	27			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILT WITH SAND (ML)	SILTY GRAVEL WITH SAND (GM)			



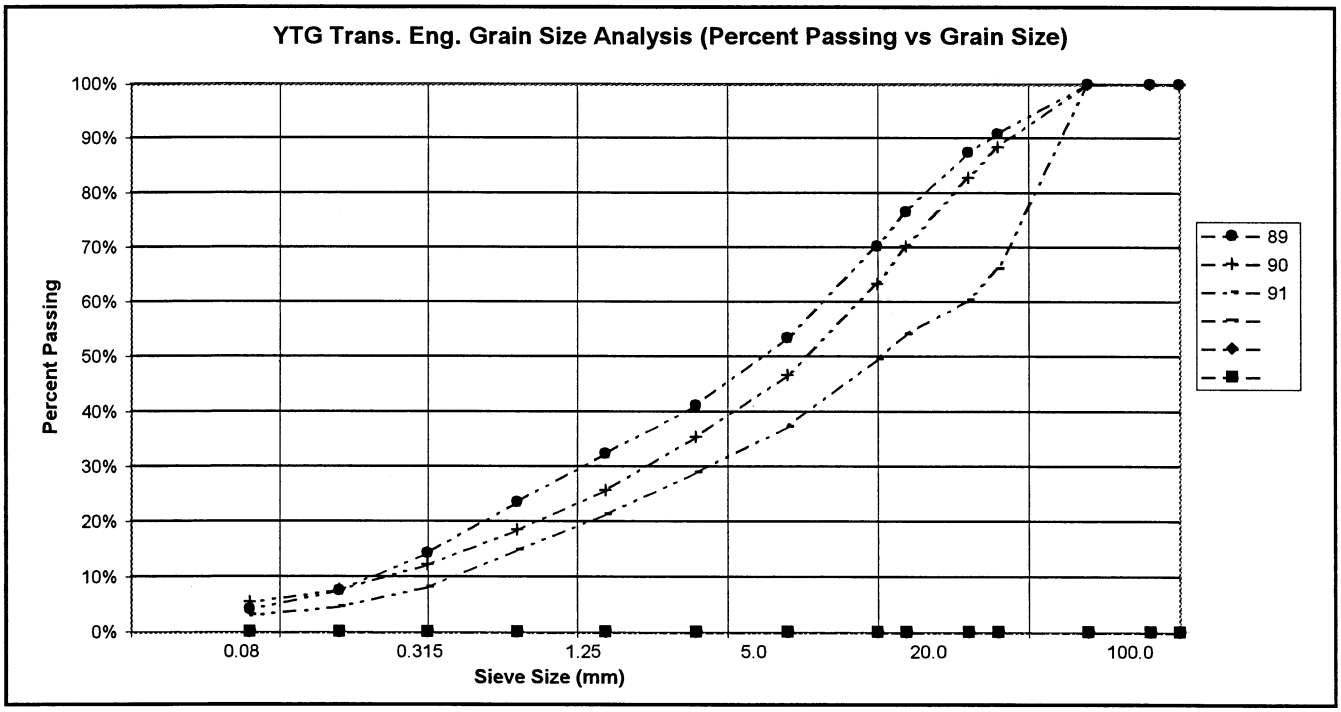
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-241
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+555 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	86	87	88			
LAB NO:	248	249	250			
DEPTH:	0.5-1.0	1.2-1.5	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	82%			
25.0	100%	100%	65%			
20.0	100%	96%	65%			
12.5	100%	87%	57%			
10.0	100%	85%	54%			
5.0	100%	77%	48%			
2.5	100%	72%	44%			
1.25	100%	69%	40%			
0.630	100%	64%	33%			
0.315	99%	56%	23%			
0.160	96%	40%	17%			
0.080	76%	20%	11%			
M.C.(%):	13%	3%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	23	52			
% SAND:	24	56	37			
% FINES:	76	20	11			
CLASSIFICATION	SILT WITH SAND (ML)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



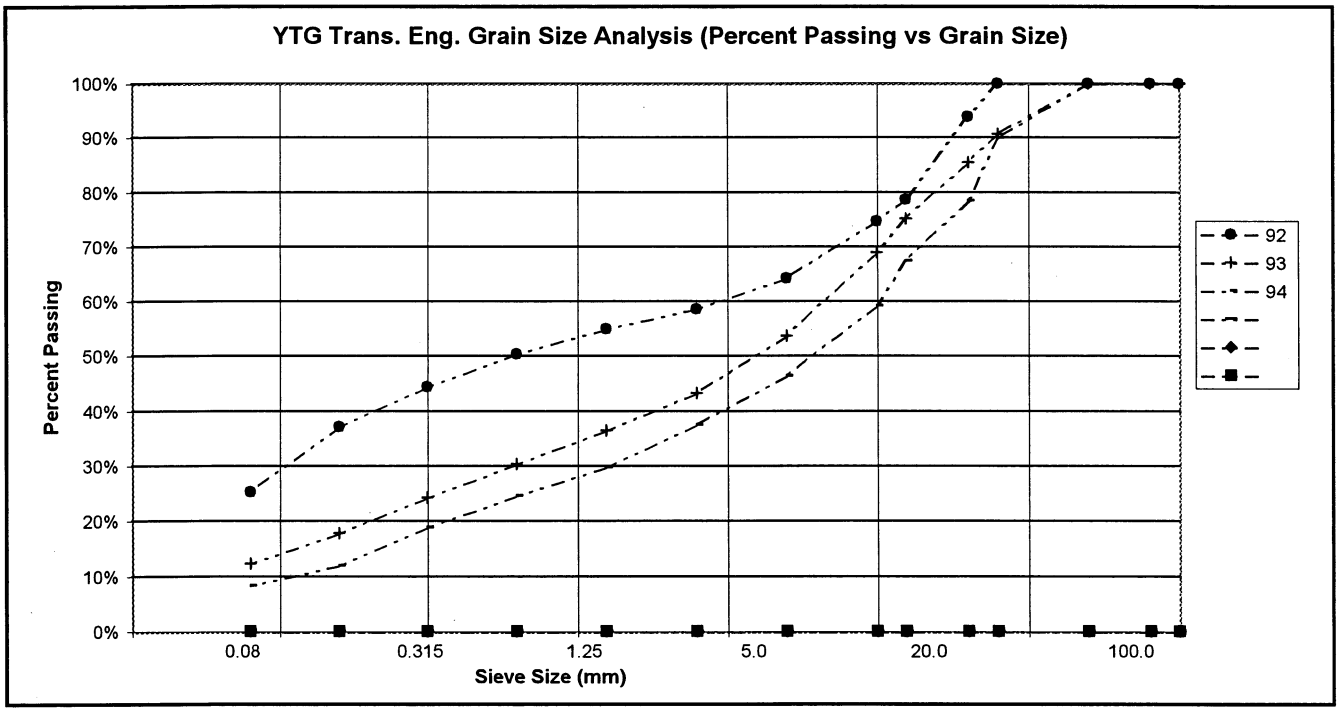
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-242
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+455 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	89	90	91			
LAB NO:	251	252	253			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	91%	88%	66%			
20.0	87%	83%	60%			
12.5	77%	70%	54%			
10.0	70%	63%	50%			
5.0	53%	47%	37%			
2.5	41%	35%	29%			
1.25	32%	26%	21%			
0.630	24%	19%	15%			
0.315	14%	12%	8%			
0.160	7%	8%	5%			
0.080	4%	5%	3%			
M.C.(%):	2%	3%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	47	53	63			
% SAND:	49	41	34			
% FINES:	4	5	3			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)			



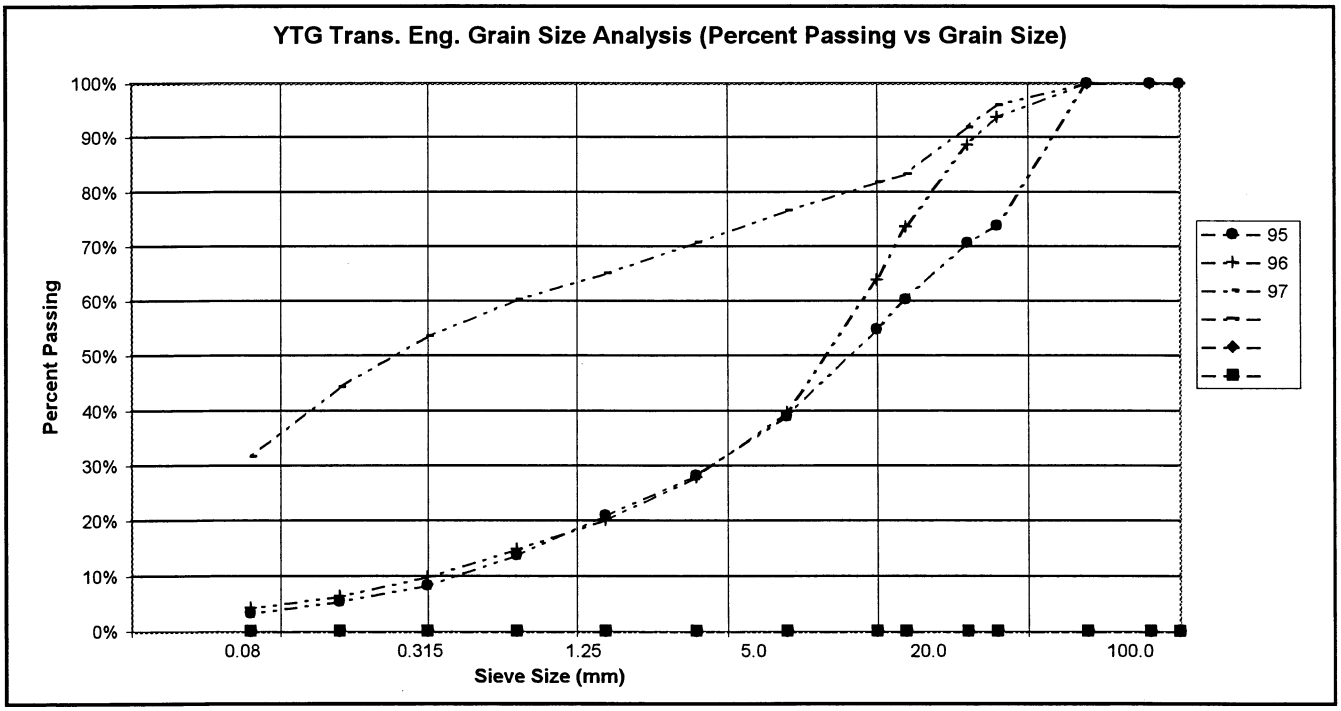
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-243
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+345 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	92	93	94			
LAB NO:	254	255	256			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.5			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	91%	90%			
20.0	94%	85%	78%			
12.5	79%	75%	67%			
10.0	75%	69%	59%			
5.0	64%	54%	46%			
2.5	59%	43%	37%			
1.25	55%	36%	30%			
0.630	50%	30%	25%			
0.315	44%	24%	19%			
0.160	37%	18%	12%			
0.080	25%	12%	8%			
M.C.(%):	6%	4%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	36	46	54			
% SAND:	39	41	38			
% FINES:	25	12	8			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



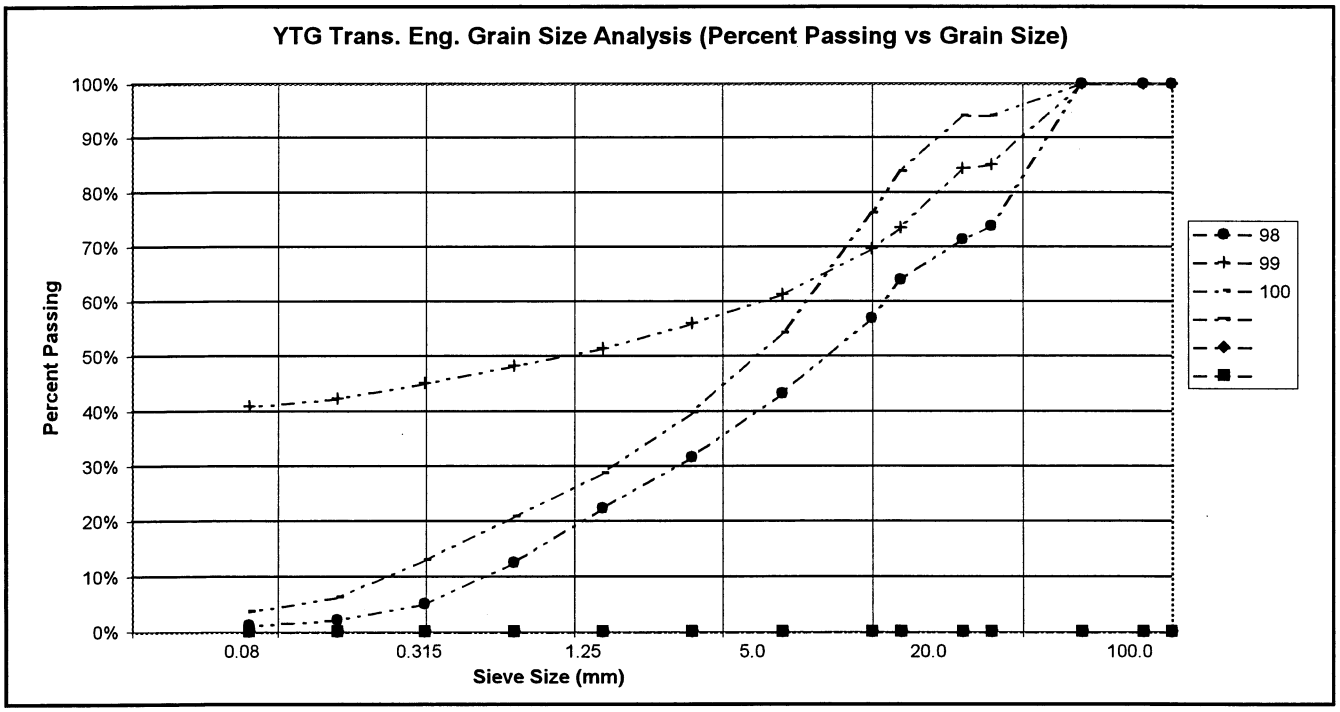
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-244
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+250 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/10

FIELD NO:	95	96	97			
LAB NO:	257	258	259			
DEPTH:	0.4-0.8	1.6-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	74%	94%	96%			
20.0	71%	89%	92%			
12.5	60%	74%	83%			
10.0	55%	64%	82%			
5.0	39%	40%	77%			
2.5	28%	28%	71%			
1.25	21%	20%	65%			
0.630	14%	15%	60%			
0.315	8%	10%	54%			
0.160	5%	6%	44%			
0.080	3%	4%	32%			
M.C.(%):	2%	2%	9%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	61	60	23			
% SAND:	36	36	45			
% FINES:	3	4	32			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	SILTY SAND WITH GRAVEL (SM)			



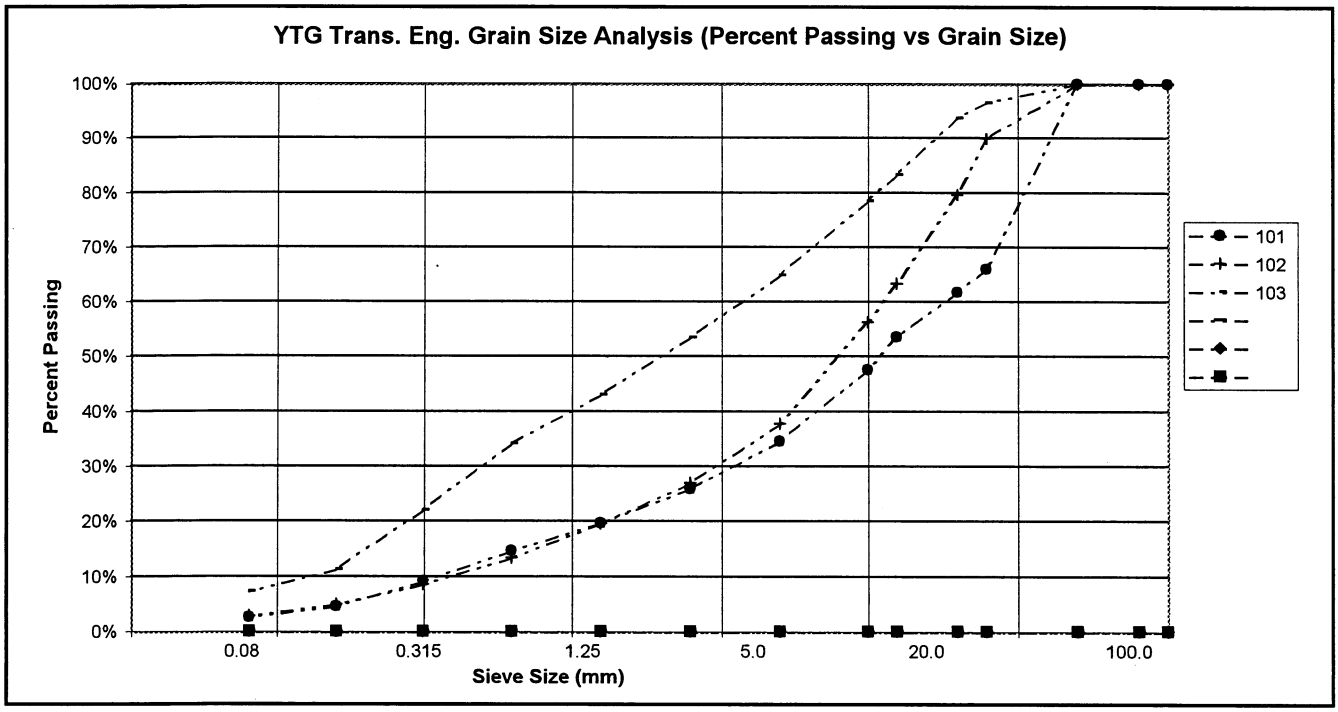
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 648-245
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek - No Name Creek		
PROJECT LOCATION:	Km 1692.6 - 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+160 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	98	99	100			
LAB NO:	260	261	262			
DEPTH:	0.6-1.0	1.8-2.2	2.7-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	74%	85%	94%			
20.0	71%	84%	94%			
12.5	64%	74%	84%			
10.0	57%	70%	76%			
5.0	43%	61%	54%			
2.5	32%	56%	40%			
1.25	22%	52%	29%			
0.630	12%	48%	21%			
0.315	5%	45%	13%			
0.160	2%	42%	6%			
0.080	1%	41%	4%			
M.C.(%):	1%	2%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	57	39	46			
% SAND:	42	20	51			
% FINES:	1	41	4			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED SAND WITH GRAVEL (SW)			



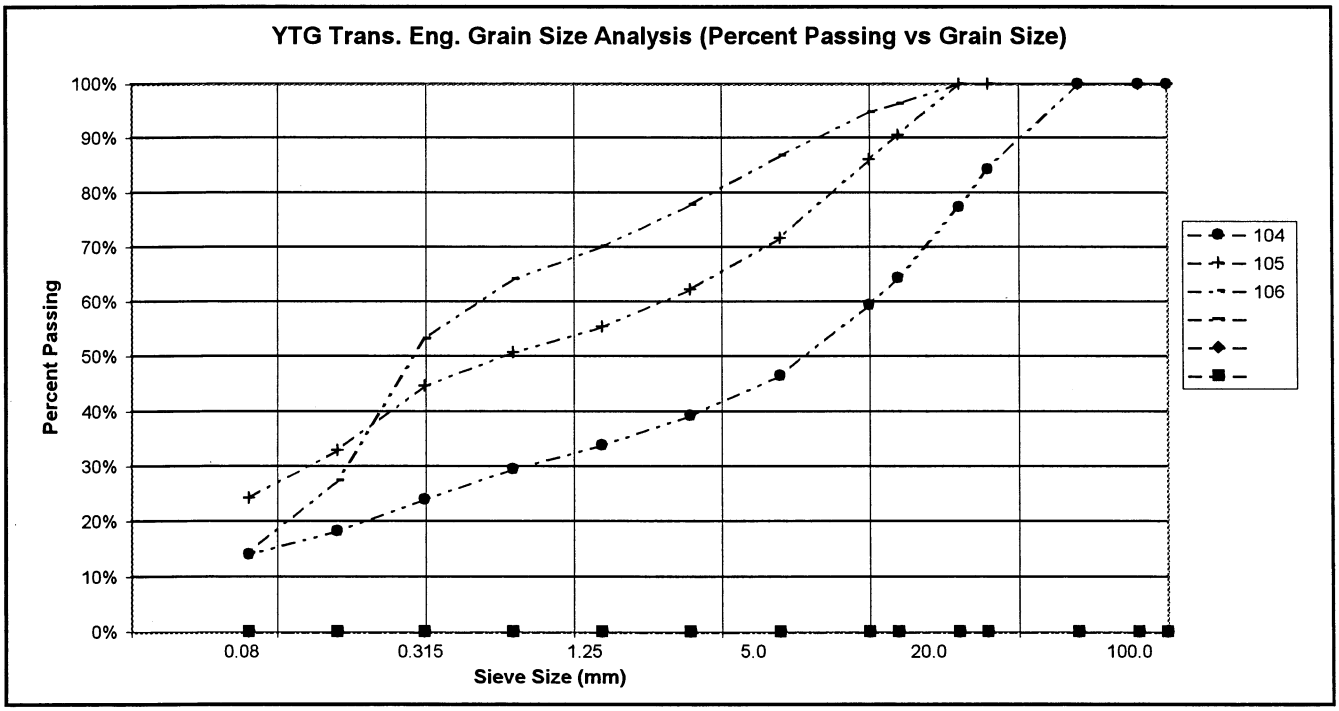
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-246
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1718+045 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	101	102	103			
LAB NO:	263	264	265			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	66%	90%	97%			
20.0	62%	80%	94%			
12.5	54%	63%	83%			
10.0	48%	56%	78%			
5.0	35%	38%	65%			
2.5	26%	27%	54%			
1.25	20%	20%	43%			
0.630	15%	13%	34%			
0.315	9%	9%	22%			
0.160	5%	5%	11%			
0.080	3%	3%	7%			
M.C.(%):	1%	1%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	65	62	35			
% SAND:	32	35	58			
% FINES:	3	3	7			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



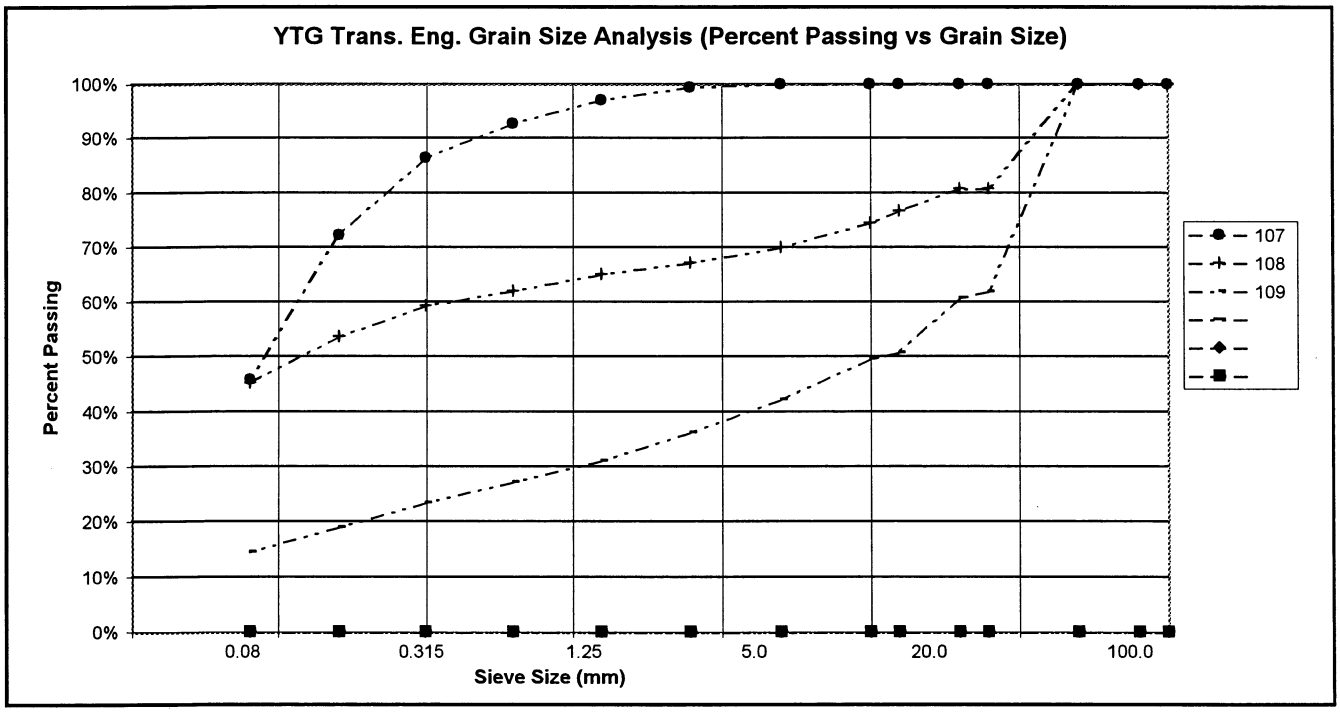
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-247
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+945 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	104	105	106			
LAB NO:	266	267	268			
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	84%	100%	100%			
20.0	77%	100%	100%			
12.5	64%	91%	96%			
10.0	59%	86%	95%			
5.0	47%	72%	87%			
2.5	39%	62%	78%			
1.25	34%	55%	70%			
0.630	30%	51%	64%			
0.315	24%	45%	53%			
0.160	18%	33%	27%			
0.080	14%	24%	14%			
M.C.(%):	5%	8%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	53	28	13			
% SAND:	32	47	72			
% FINES:	14	24	14			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)			



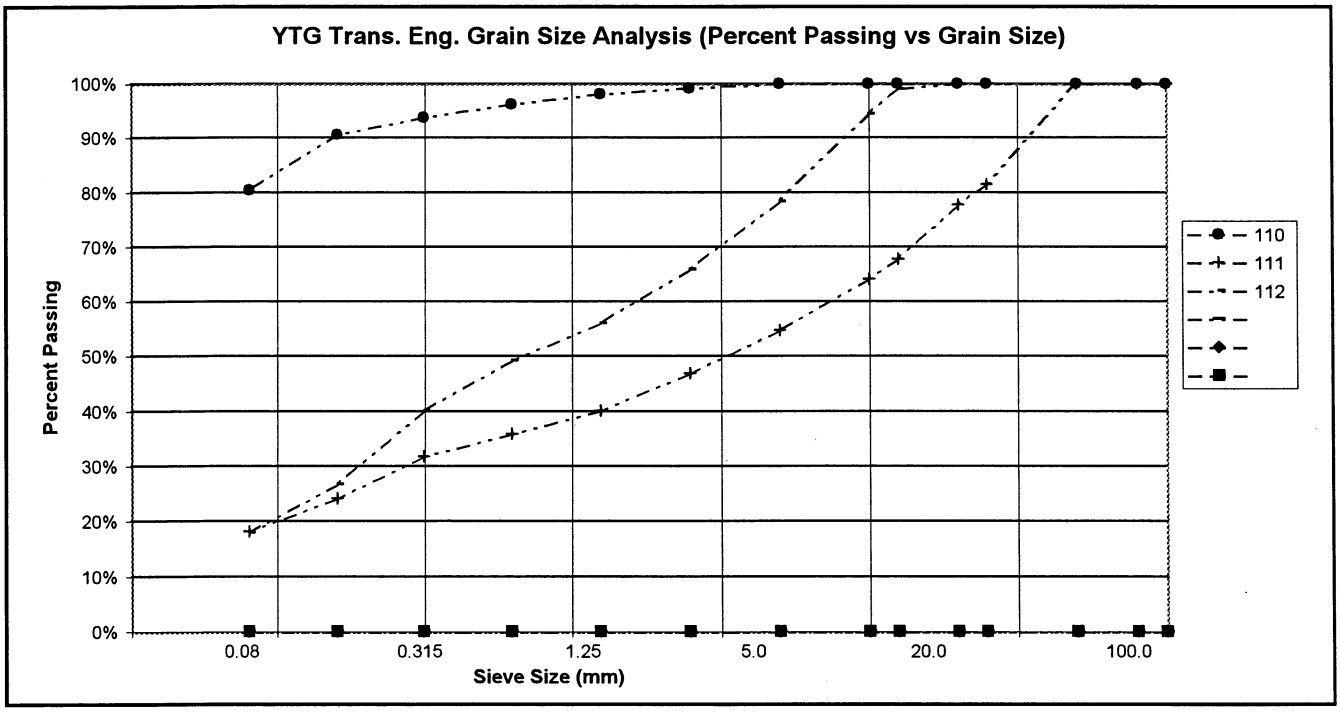
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-248
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+850 5m Rt		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	107	108	109			
LAB NO:	269	270	271			
DEPTH:	0.5-1.0	1.6-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	81%	62%			
20.0	100%	81%	61%			
12.5	100%	77%	51%			
10.0	100%	74%	50%			
5.0	100%	70%	42%			
2.5	99%	67%	36%			
1.25	97%	65%	31%			
0.630	93%	62%	27%			
0.315	86%	59%	23%			
0.160	72%	54%	19%			
0.080	46%	45%	14%			
M.C.(%):	14%	16%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	30	58			
% SAND:	54	25	28			
% FINES:	46	45	14			
CLASSIFICATION	SILTY SAND (SM)	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)			



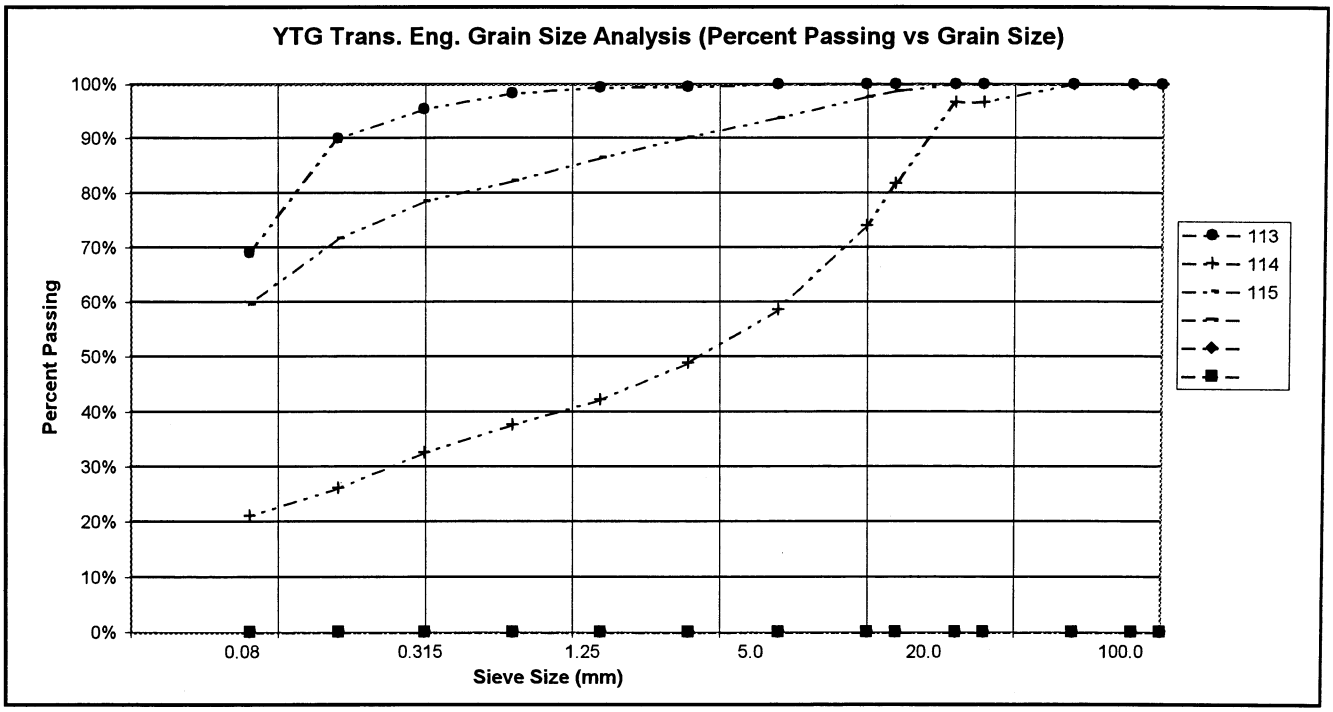
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-249
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+753 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	110	111	112			
LAB NO:	272	273	274			
DEPTH:	0.8-1.2	1.8-2.2	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	82%	100%			
20.0	100%	78%	100%			
12.5	100%	68%	99%			
10.0	100%	64%	94%			
5.0	100%	55%	78%			
2.5	99%	47%	66%			
1.25	98%	40%	56%			
0.630	96%	36%	49%			
0.315	94%	32%	40%			
0.160	91%	24%	27%			
0.080	80%	18%	18%			
M.C.(%):	32%	8%	8%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	45	22			
% SAND:	20	37	60			
% FINES:	80	18	18			
CLASSIFICATION	SILT WITH SAND (ML)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)			



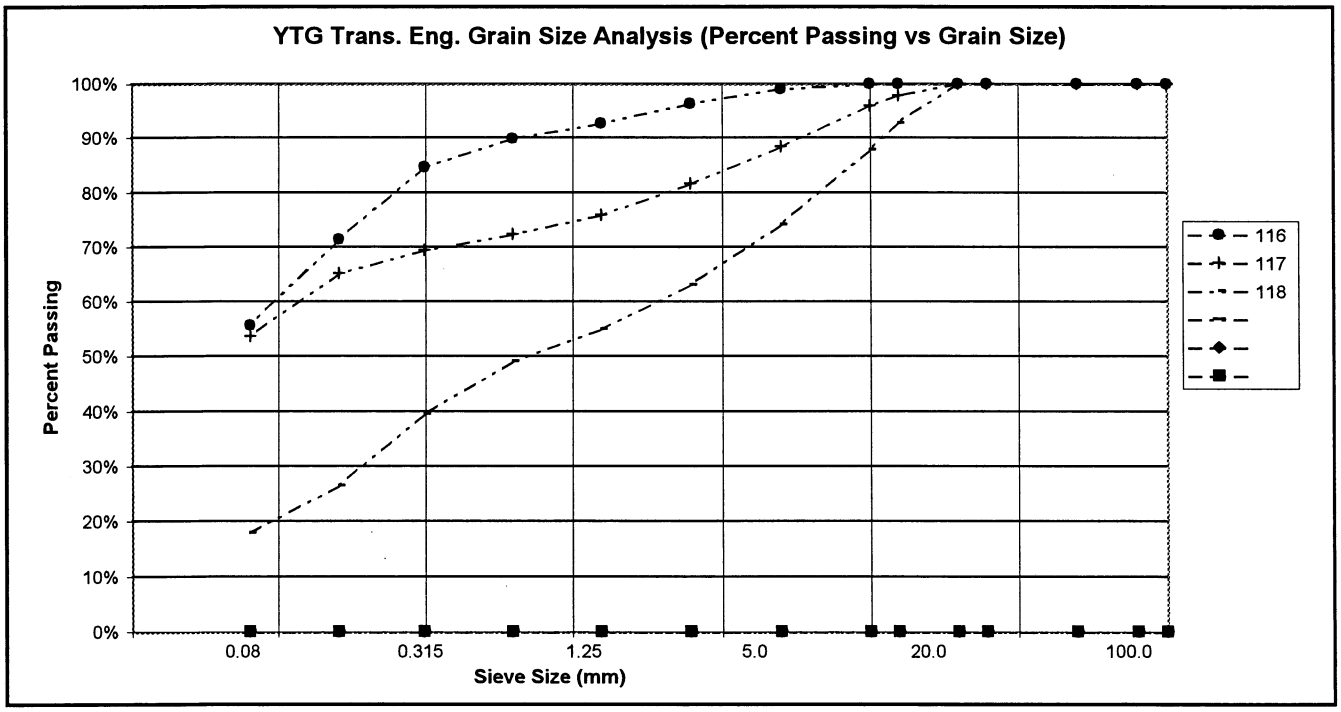
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-250
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+654 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	113	114	115			
LAB NO:	275	276	277			
DEPTH:	0.5-1.0	1.8-2.2	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	97%	100%			
20.0	100%	97%	100%			
12.5	100%	82%	99%			
10.0	100%	74%	98%			
5.0	100%	59%	94%			
2.5	100%	49%	90%			
1.25	99%	42%	86%			
0.630	98%	38%	82%			
0.315	95%	33%	78%			
0.160	90%	26%	72%			
0.080	69%	21%	60%			
M.C.(%):	25%	9%	23%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	41	6			
% SAND:	31	38	34			
% FINES:	69	21	60			
CLASSIFICATION	SANDY SILT (ML)	SILTY GRAVEL WITH SAND (GM)	SANDY SILT (ML)			



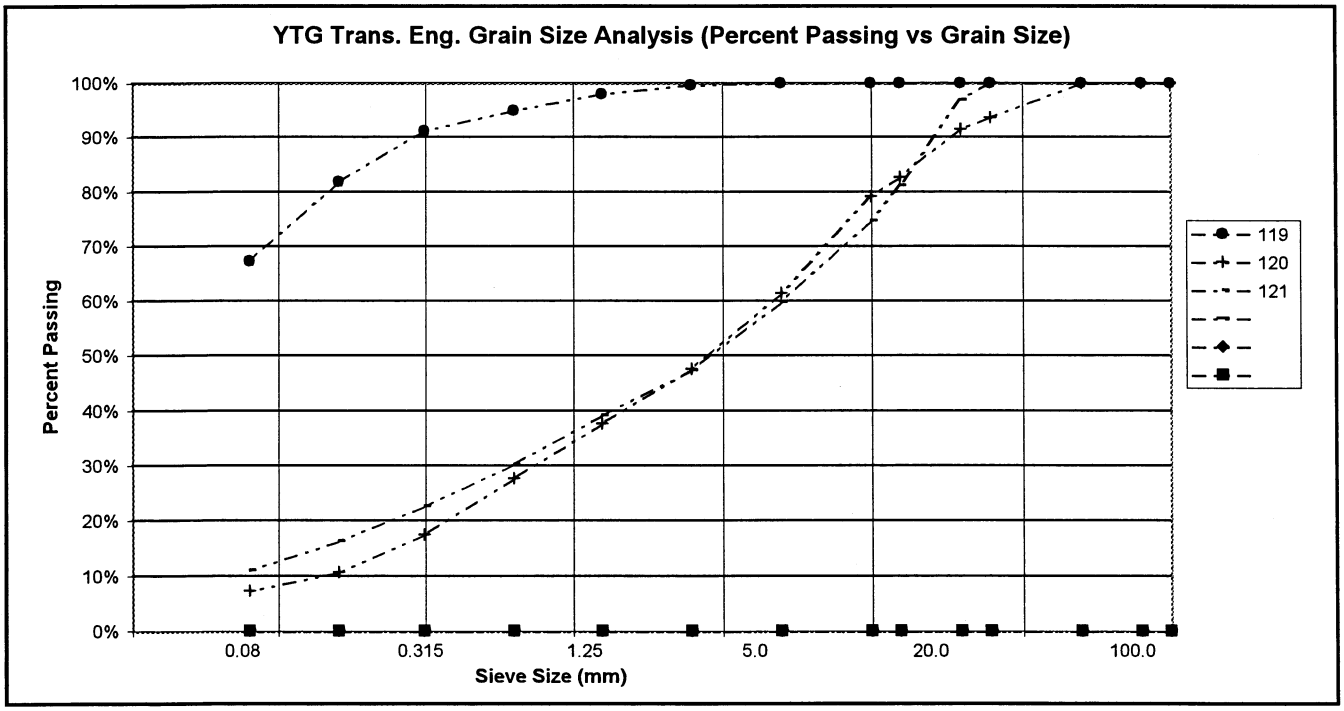
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-251
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+569 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	116	117	118			
LAB NO:	278	279	280			
DEPTH:	0.6-1.0	1.6-2.0	2.4-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	100%			
20.0	100%	100%	100%			
12.5	100%	98%	93%			
10.0	100%	96%	88%			
5.0	99%	88%	74%			
2.5	96%	82%	63%			
1.25	93%	76%	55%			
0.630	90%	72%	49%			
0.315	85%	69%	40%			
0.160	71%	65%	26%			
0.080	56%	54%	18%			
M.C.(%):	24%	20%	14%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	1	12	26			
% SAND:	43	35	56			
% FINES:	56	54	18			
CLASSIFICATION	SANDY SILT (ML)	SANDY SILT (ML)	SILTY SAND WITH GRAVEL (SM)			



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-252
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+490 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/11

FIELD NO:	119	120	121			
LAB NO:	281	282	283			
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	94%	100%			
20.0	100%	92%	97%			
12.5	100%	83%	81%			
10.0	100%	79%	75%			
5.0	100%	61%	60%			
2.5	100%	48%	47%			
1.25	98%	38%	39%			
0.630	95%	28%	30%			
0.315	91%	17%	23%			
0.160	82%	11%	16%			
0.080	67%	7%	11%			
M.C.(%):	37%	8%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	39	40			
% SAND:	33	54	49			
% FINES:	67	7	11			
CLASSIFICATION	SANDY SILT (ML)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			

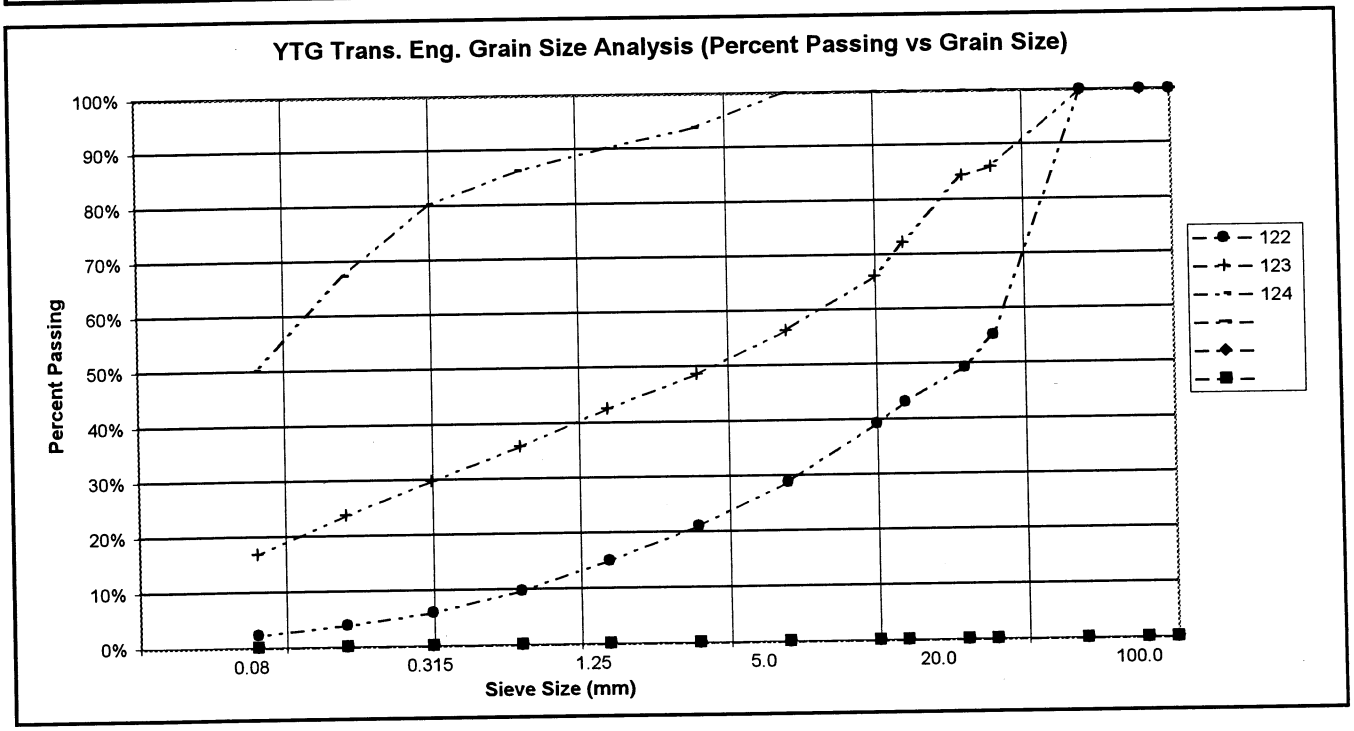


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek & No-Name Creek
PROJECT LOCATION: Km 1692.6- 1729.6 A/H
DRILL UNIT: D-4 Cat 6" Auger
HOLE LOCATION: 1717+390 Centreline
LOGGED BY: G.C.

HOLE No.: 649-253

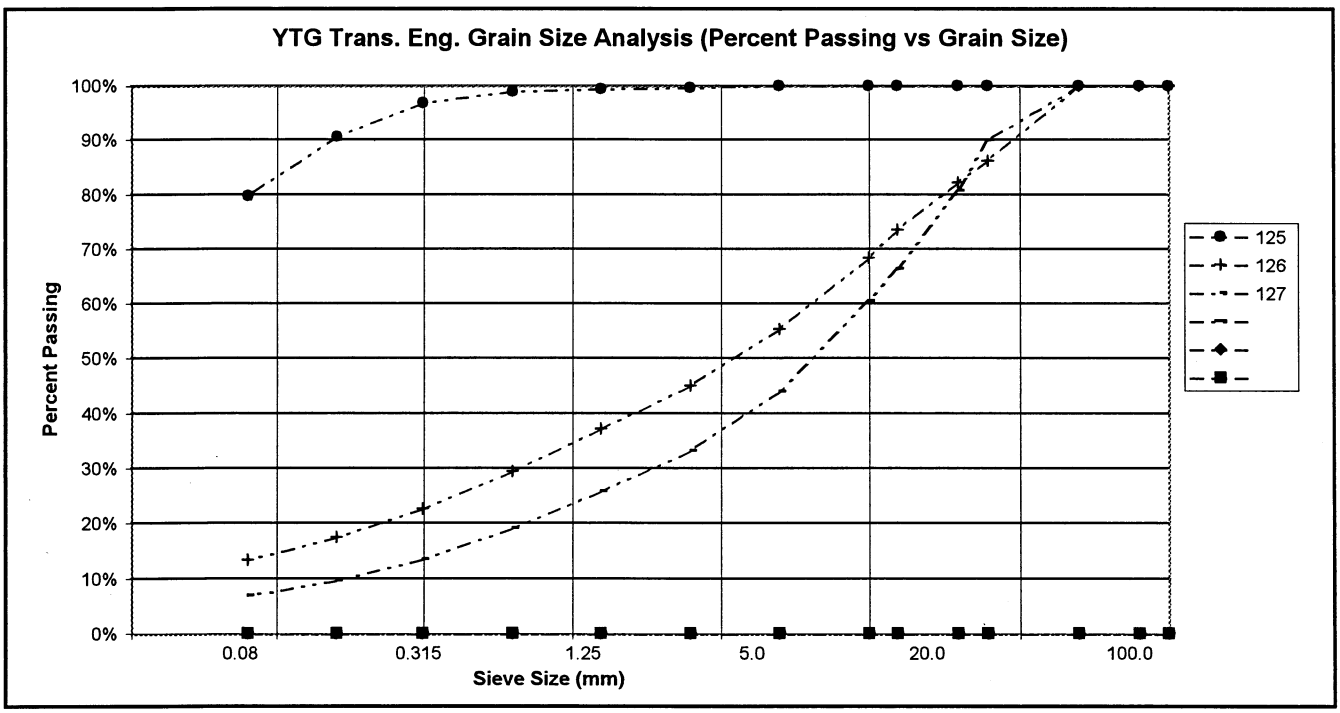
DATE COMP: 03/09/15

FIELD NO:	122	123	124			
LAB NO:	284	285	286			
DEPTH:	0.5-1.0	1.4-1.7	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	55%	86%	100%			
20.0	49%	84%	100%			
12.5	43%	72%	100%			
10.0	39%	66%	100%			
5.0	29%	56%	100%			
2.5	21%	49%	94%			
1.25	15%	43%	90%			
0.630	10%	36%	86%			
0.315	6%	30%	80%			
0.160	4%	24%	67%			
0.080	2%	17%	50%			
M.C.(%):	1%	6%	15%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	71	44	0			
% SAND:	27	40	50			
% FINES:	2	17	50			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)	SANDY SILT (ML)			



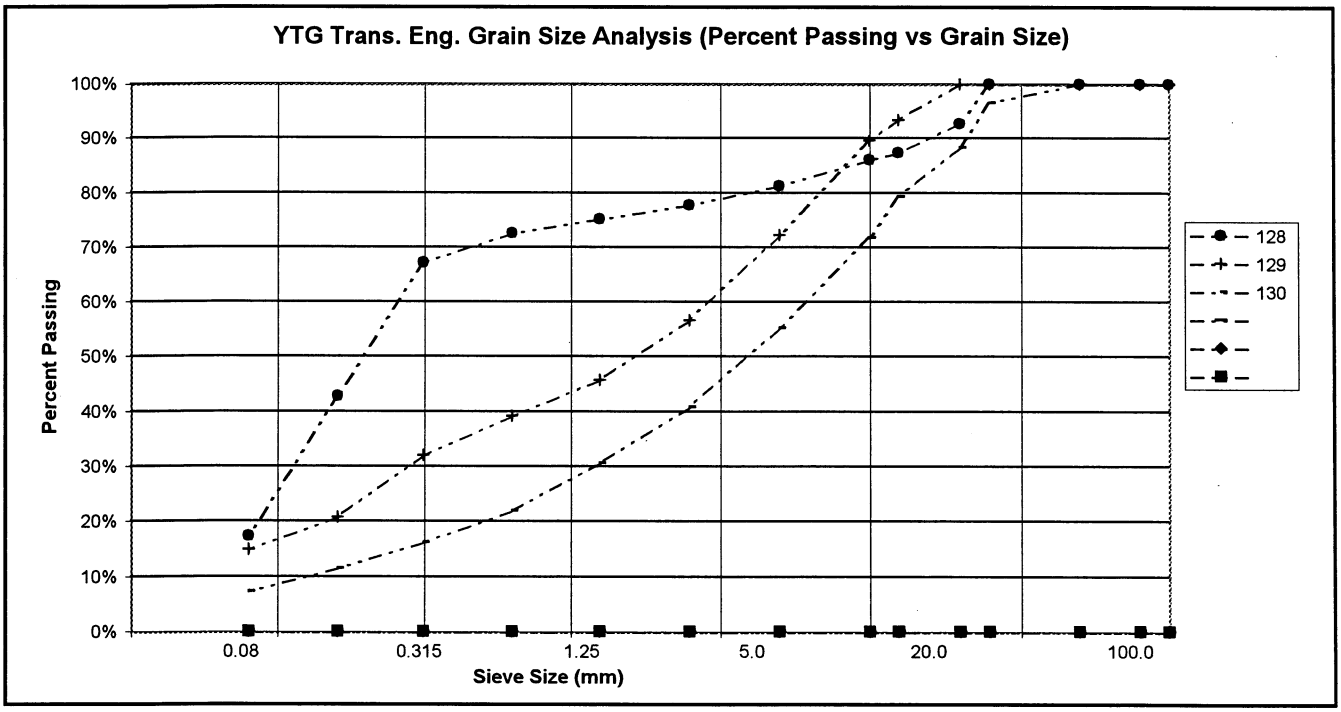
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-254
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+315 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/15

FIELD NO:	125	126	127			
LAB NO:	287	288	289			
DEPTH:	0.4-0.8	1.5-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	86%	90%			
20.0	100%	82%	81%			
12.5	100%	73%	66%			
10.0	100%	68%	60%			
5.0	100%	55%	44%			
2.5	100%	45%	33%			
1.25	99%	37%	26%			
0.630	99%	29%	19%			
0.315	97%	23%	13%			
0.160	91%	18%	10%			
0.080	80%	13%	7%			
M.C.(%):	29%	9%	6%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	45	56			
% SAND:	20	42	37			
% FINES:	80	13	7			
CLASSIFICATION	SILT WITH SAND (ML)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



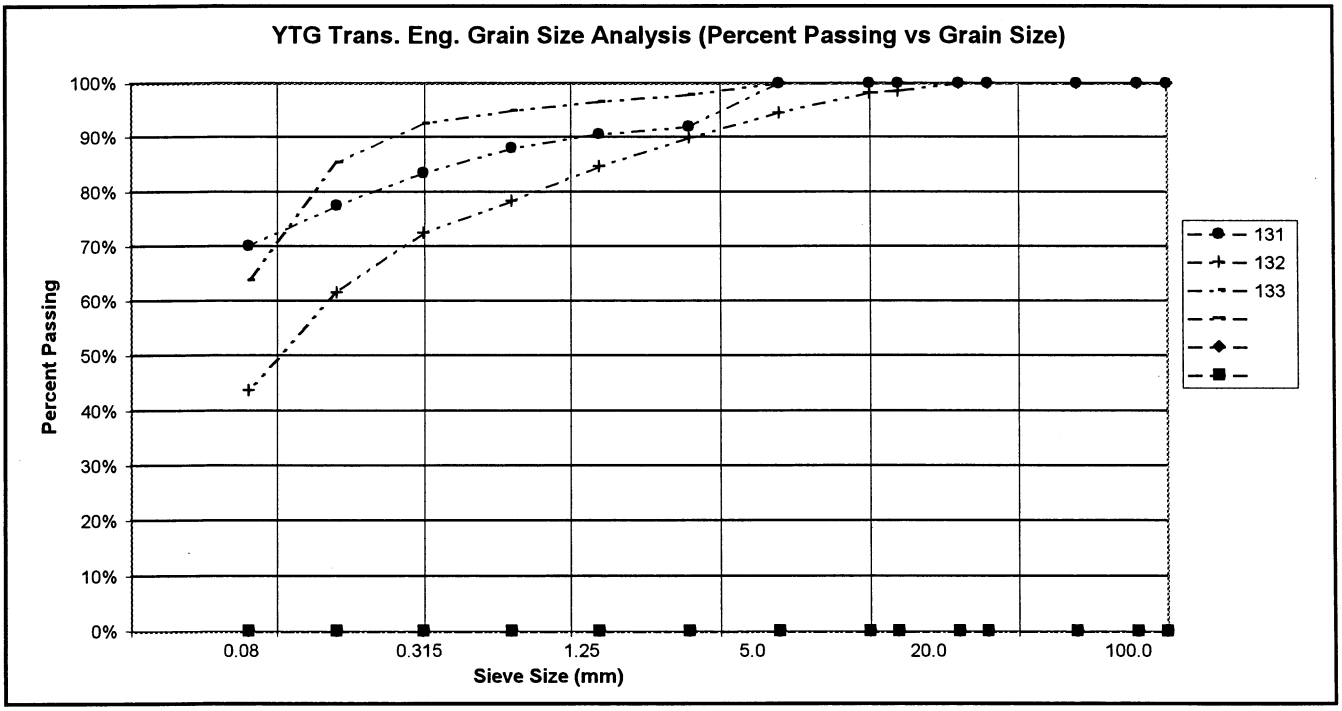
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-255
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+253 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/15

FIELD NO:	128	129	130			
LAB NO:	290	291	292			
DEPTH:	0.4-0.6	1.4-1.8	2.4-2.8			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	97%			
20.0	93%	100%	88%			
12.5	87%	93%	79%			
10.0	86%	90%	72%			
5.0	81%	72%	55%			
2.5	78%	57%	41%			
1.25	75%	46%	31%			
0.630	73%	39%	22%			
0.315	67%	32%	16%			
0.160	43%	21%	11%			
0.080	17%	15%	7%			
M.C.(%):	6%	11%	8%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	19	28	45			
% SAND:	64	57	48			
% FINES:	17	15	7			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-256
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1717+158 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/15

FIELD NO:	131	132	133			
LAB NO:	293	294	295			
DEPTH:	0.8-1.2	1.6-2.0	2.8-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	100%			
20.0	100%	100%	100%			
12.5	100%	99%	100%			
10.0	100%	98%	100%			
5.0	100%	95%	100%			
2.5	92%	90%	98%			
1.25	91%	85%	97%			
0.630	88%	78%	95%			
0.315	83%	72%	93%			
0.160	77%	62%	85%			
0.080	70%	44%	64%			
M.C.(%):	78%	34%	26%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	5	0			
% SAND:	30	51	36			
% FINES:	70	44	64			
CLASSIFICATION	SILT WITH SAND (ML)	SILTY SAND (SM)	SANDY SILT (ML)			

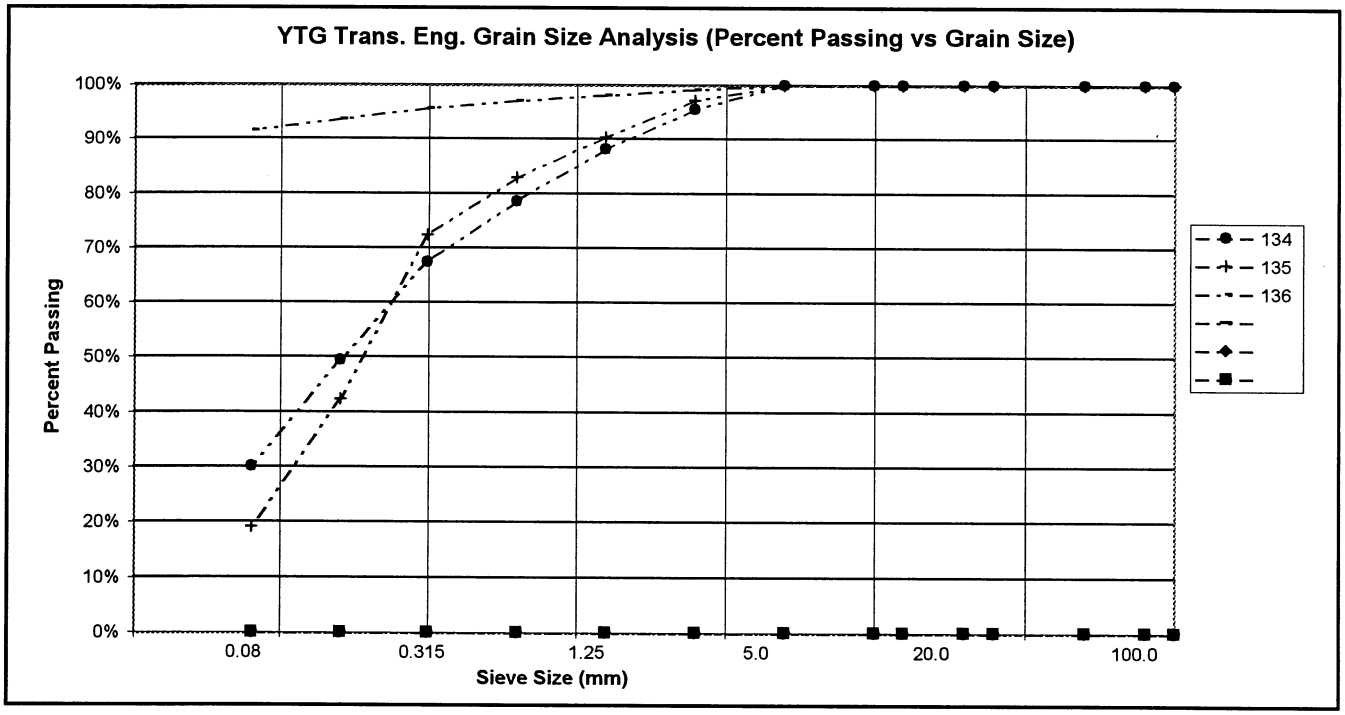


PROJECT NUMBER:	552-202101-0362-1
CLIENT:	Shakwak
PROJECT NAME:	Congdon Creek & No-Name Creek
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H
DRILL UNIT:	D-4 Cat 6" Auger
HOLE LOCATION:	1717+048 Centreline
LOGGED BY:	G.C.

HOLE No.: 649-257

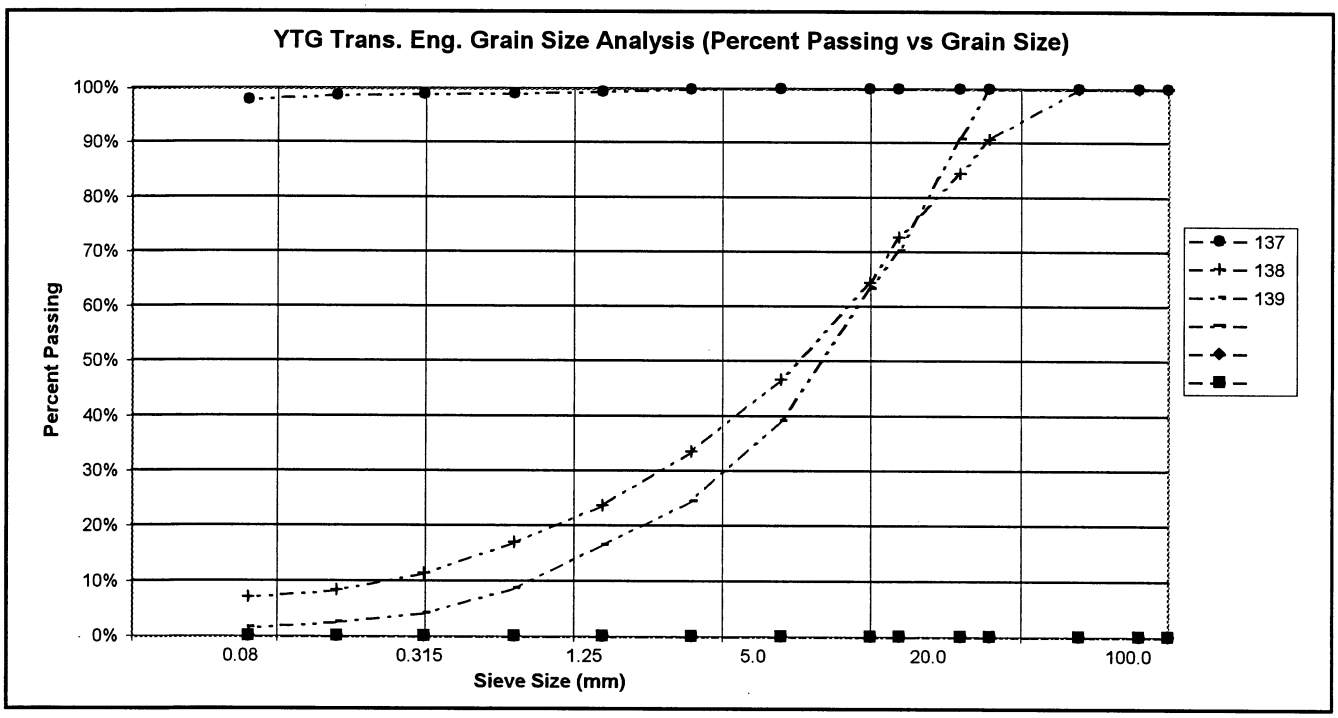
DATE COMP: 03/09/15

FIELD NO:	134	135	136			
LAB NO:	296	297	298			
DEPTH:	0.6-1.0	1.4-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	100%	100%			
20.0	100%	100%	100%			
12.5	100%	100%	100%			
10.0	100%	100%	100%			
5.0	100%	100%	100%			
2.5	96%	97%	99%			
1.25	88%	90%	98%			
0.630	79%	83%	97%			
0.315	67%	72%	96%			
0.160	49%	42%	94%			
0.080	30%	19%	92%			
M.C.(%):	18%	18%	39%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	0	0			
% SAND:	70	81	8			
% FINES:	30	19	92			
CLASSIFICATION	SILTY SAND (SM)	SILTY SAND (SM)	SILT (ML)			



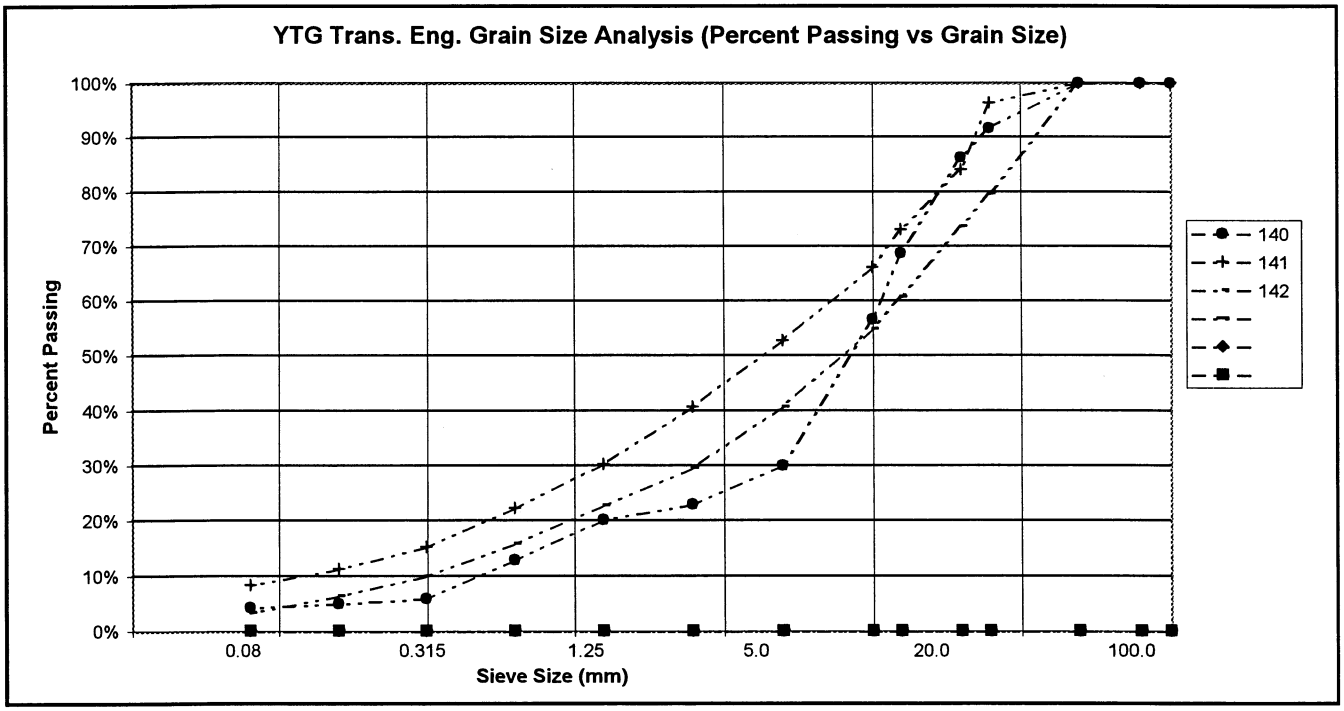
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-258
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1716+975 Centreline		
LOGGED BY:	G.C.		DATE COMP: 03/09/15

FIELD NO:	137	138	139			
LAB NO:	299	300	301			
DEPTH:	0.6-1.0	1.6-2.0	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	100%	91%	100%			
20.0	100%	84%	91%			
12.5	100%	73%	70%			
10.0	100%	64%	63%			
5.0	100%	47%	39%			
2.5	100%	33%	24%			
1.25	99%	24%	17%			
0.630	99%	17%	9%			
0.315	99%	11%	4%			
0.160	99%	8%	2%			
0.080	98%	7%	2%			
M.C.(%):	36%	6%	7%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	0	53	61			
% SAND:	2	40	38			
% FINES:	98	7	2			
CLASSIFICATION	SILT (ML)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)			



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 649-259
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek & No-Name Creek		
PROJECT LOCATION:	Km 1692.6- 1729.6 A/H		
DRILL UNIT:	D-4 Cat 6" Auger		
HOLE LOCATION:	1716+900 2m Rt		
LOGGED BY:	G.C.		DATE COMP: 03/09/15

FIELD NO:	140	141	142			
LAB NO:	302	303	304			
DEPTH:	0.6-1.0	1.6-2.0	2.6-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	92%	96%	80%			
20.0	86%	84%	74%			
12.5	69%	73%	61%			
10.0	57%	66%	55%			
5.0	30%	53%	41%			
2.5	23%	41%	30%			
1.25	20%	30%	23%			
0.630	13%	22%	16%			
0.315	6%	15%	10%			
0.160	5%	11%	6%			
0.080	4%	8%	3%			
M.C.(%):	1%	3%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	70	47	59			
% SAND:	26	44	37			
% FINES:	4	8	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)			



GEOTECHNICAL INVESTIGATIONS

Highway Construction
km 1716.6 to 1723.6
Yukon, 2003-2004
Volume 2 of 3

Yukon
Highways and Public Works
Transportation Engineering Branch

Geotechnical Services

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

ORIGINAL - Do Not Remove From File

Highway Construction
Km 1716.6 to 1723.6
Alaska Highway #1
Yukon, 2004-2005
Volume 2 of 3

This Data Package prepared for project viewing:

February, 2004

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

CONTENTS

Volume 1 of 3

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING km 1716.6 to 1723.6, Alaska Highway

Subsurface Exploration and Test Report Sheets are provided.
The reports for the Centreline testing holes are arranged according to project location, starting at km 1716+900 and increasing to km 1723+725.

Laboratory Testing Result Sheets are provided.
The reports for the centreline holes are arranged according to test hole number, starting at 619-495 and increasing to 649-259.

2001	TEST HOLES 495 to 505	shown with prefix 619-
	TEST HOLES 506 to 521	shown with prefix 620-
	TEST HOLES 522 to 531	shown with prefix 621-
2003	TEST HOLES 221 to 245	shown with prefix 648-
	TEST HOLES 246 to 259	shown with prefix 649-

CONTENTS (continued)

Volume 2 of 3

GRANULAR SOURCE km 1719.5 RHS ALASKA HIGHWAY

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

Auger Testing

2003	TEST HOLES 2766-2773	shown with prefix 656-

Test Pit Testing

2003	TEST PITS 2774 to 2784 & 2795 to 2797	shown with prefix 658-
	TEST PITS 2798 to 2815	shown with prefix 659-
	TEST PITS 2817 to 2830	shown with prefix 660-
	TEST PITS 2831 to 2845	shown with prefix 661-
	TEST PITS 2846 to 2851	shown with prefix 662-

CONTENTS (continued)

Volume 3 of 3

GRANULAR SOURCE km 1721.0 RHS ALASKA HIGHWAY

A production history and location plans are provided.

GRANULAR SOURCE km 1730.2 LHS ALASKA HIGHWAY

A production history, location plan, photographs, and subsurface exploration and testing report sheets are provided.

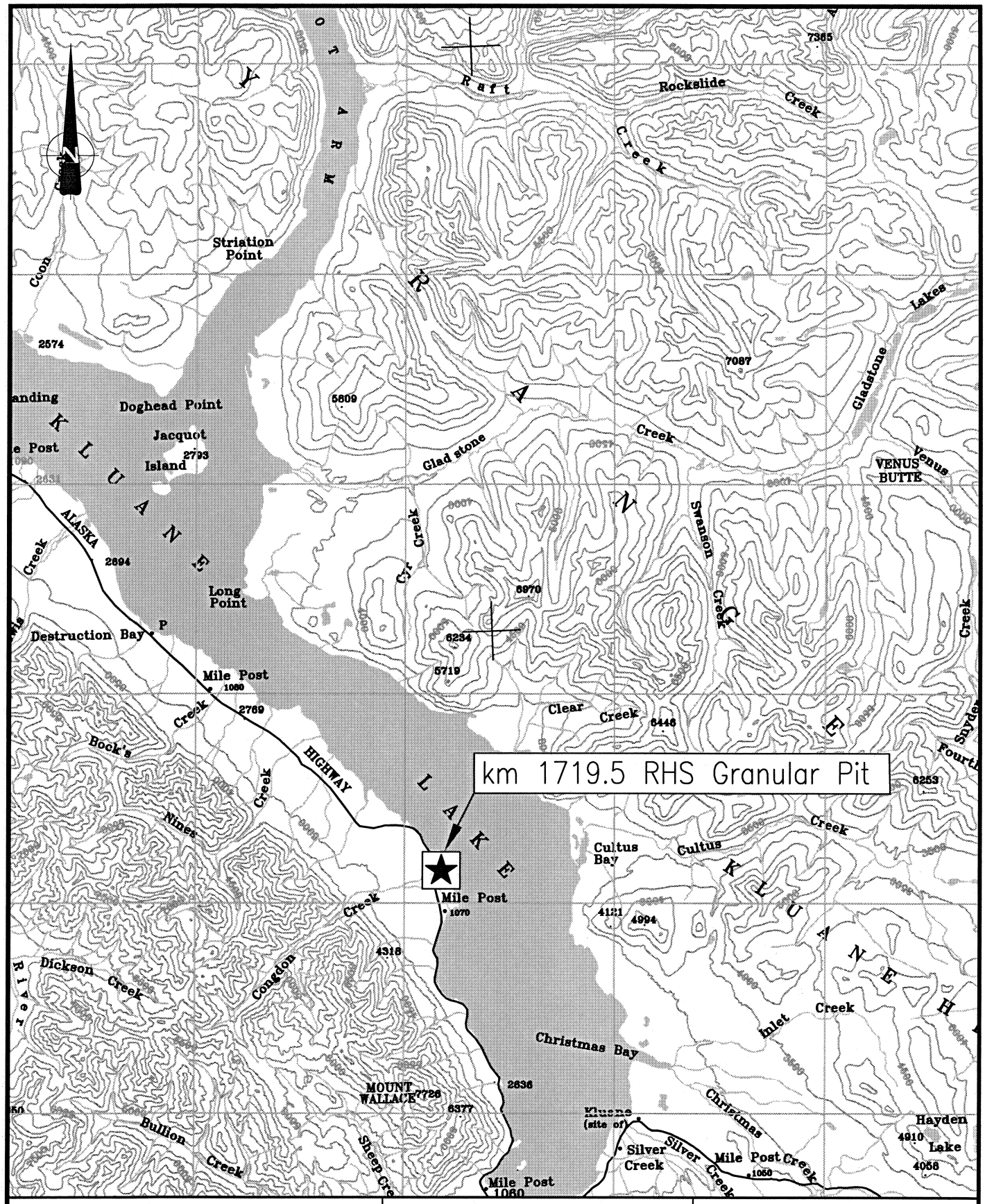
Auger Testing

2001	TEST HOLES 1926 to 1928	shown with prefix 623-
	TEST HOLES 1938 to 1941	shown with prefix 624-

Test Pit Testing

2002	TEST PITS 2460 to 2520	shown with prefix 638-

GRANULAR SOURCE TESTING
km 1719.5 RHS
ALASKA HIGHWAY

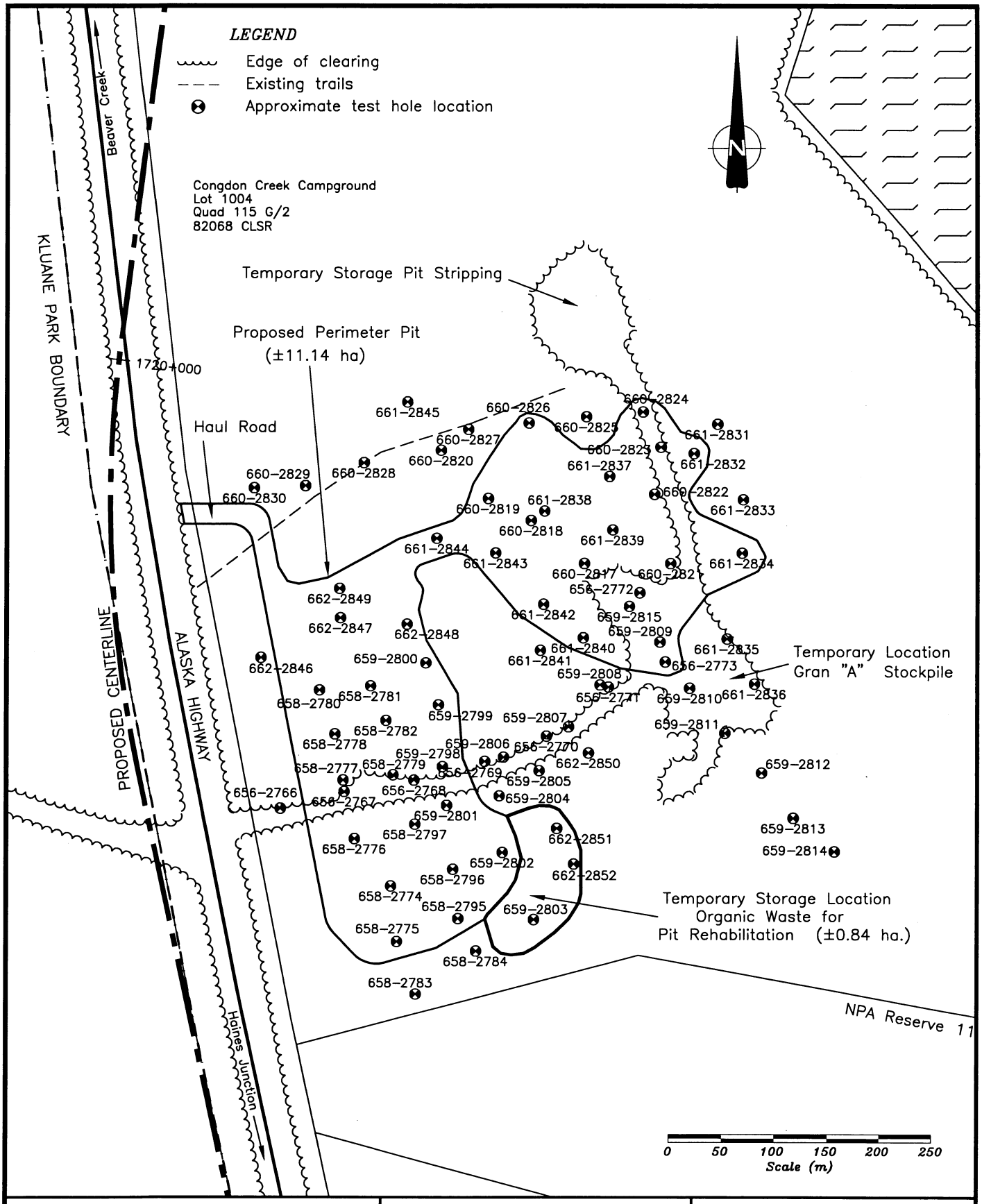


Yukon
Highways and Public Works

Transportation Engineering Branch

KEY PLAN
GRANULAR PIT
RESERVE
km 1719.5 R.H.S.
(Congdon Creek)
ALASKA HWY. YUKON

pit file:	115-G-23
quad:	115 G
drawn:	S. Fraser
date:	2004-01-20
scale:	1: 250,000
drwg:	115g-23K

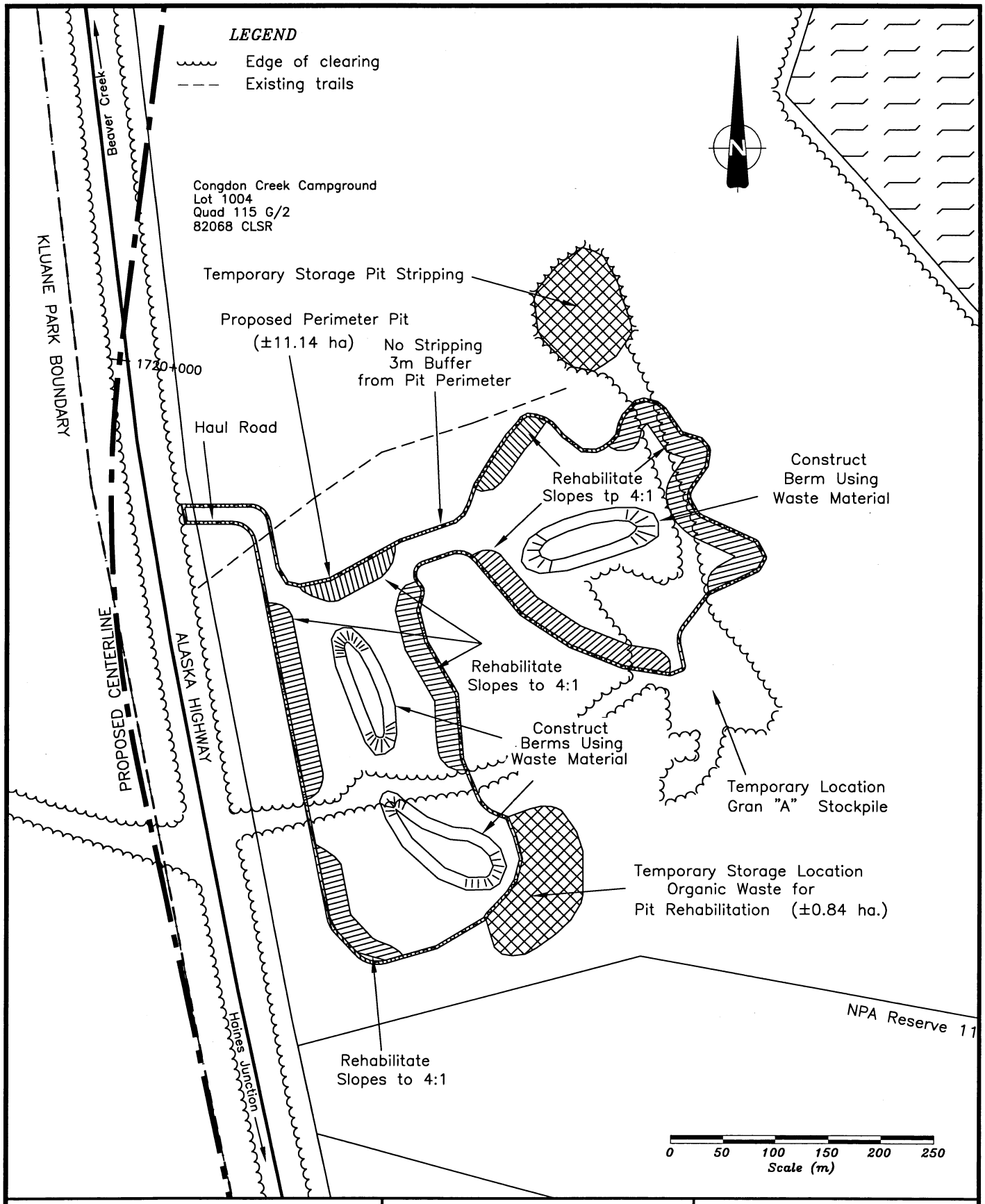


Yukon
Highways and Public Works

Transportation Engineering Branch

SITE PLAN
PROPOSED GRANULAR PIT
km 1719.5 RHS
ALASKA HWY. YUKON

pit file:	115 G–23
revision:	2004–Proposed
drawn:	JJM
date:	2004–02–04
scale:	1: 5000
drwg:	115g–22S



Yukon
Highways and Public Works

Transportation Engineering Branch

SITE PLAN
PROPOSED GRANULAR PIT
km 1719.5 RHS
ALASKA HWY. YUKON

pit file:	115 G–23
revision:	2004–Proposed
drawn:	JJM
date:	2004–02–04
scale:	1: 5000
drwg:	115g–22S

Km 1719.5 RHS Alaska Highway #1
Pit Ident. 115 G-23 (Congdon Campground)

October 2003

Auger Hole Logs

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2766
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -rough drilling 0-2.5m		400		GP			0.0
1.0								1.0
			401		GP			
2.0								2.0
	-easy drilling @ 2.5m - still grinding		402		GP			
3.0								3.0
4.0			403		GP			4.0
5.0	END HOLE @ 5.0m -had to reverse auger to remove							5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 03/10/17
	Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2767
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -rough drilling		404		GP			0.0
1.0								1.0
			405		GP-GM			
2.0								2.0
	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM) -easy drilling 2.2-3.0							
			406		GW-GM			
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -rough drilling							3.0
4.0								4.0
			407		GP-GM			
5.0	END HOLE @ 5.0m							5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/10/17
Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2768
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ☒ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp -rough drilling		408	SW	
1.0					
	SILTY SAND WITH GRAVEL (SM) -brown -moist -easy drilling		409	SM	
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -grinding drilling		410	GP-GM	
3.0					
4.0			411	GP-GM	
5.0	END HOLE @ 5.0m				
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/10/17
Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2769
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ☒ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -rough drilling		412 ▲		GP		◆ ■	0.0
1.0	SILTY SAND WITH GRAVEL (SM) -brown -smooth drilling 1.2-1.6m -damp -field description silty sand 1.2-1.6m -grindy drilling below 1.6m		413 ● ▲		SM		■ ◆	1.0
2.0								2.0
3.0	-smooth drilling 3.2-3.8m		414 ● ▲		SM		■ ◆	3.0
4.0	-grinding below 3.8m -no sample recovery below 3.8m							4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/10/17
Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2770
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	GRAVEL -brown -damp SILT WITH SAND (ML) -smooth drilling		415	● ▲	ML		■ ◆	0.0
1.0								1.0
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL -brown -damp -grinding (minor) 1.3-2.8 WITH SAND (GM)		416	● ▲	SM		■ ◆	
2.0								2.0
			417	● ▲	GM		■	
	-on / off rough drilling							
3.0								3.0
4.0	-poor sample recovery -sample # 418 questionable		418	● ▲	GM		◆ ■	4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/10/17
Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2771
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▦ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp -minor grinding		419	▲	SW		■ ◆	0.0
1.0								1.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -smooth, light grinding		420	● ▲	SW-SM		■ ◆	
2.0								2.0
	-easy smooth drilling @ 2.5m to EOH		421	▲	SW-SM		■ ◆	
3.0	SANDY SILT (ML) -organic -moist to wet		422	● ▲	ML		■ ◆	3.0
	SILT WITH SAND (ML) -brown -moist to wet							
4.0			423	● ▲	ML		■ ◆	4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/10/17
Fig. No:	Page 1 of 1

04/01/19 08:18AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2772
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL (GP)-(SW-SM) -brown -damp -grinding 0-5.0m -no moisture result for sample #424		424	▲	GP		◆ ■	0.0
1.0								1.0
			425	▲	GP		◆ ■	
2.0								2.0
			426	▲	GP		◆ ■	
3.0								3.0
4.0								4.0
			427	● ▲	SW-SM		■	
5.0	END HOLE @ 5.0m Note: Test hole is upchain of end of old pit. -estimate 2.0m previously excavated							5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 03/10/17
	Fig. No:	Page 1 of 1

04/01/19 08:18AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST HOLE NO: 656-2773
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
D-4 CAT 6" AUGER	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -grinding 0-5.0m							0.0
1.0			427		GP			1.0
2.0			429		GP			2.0
3.0			429		GP			3.0
4.0								4.0
5.0			430		GP			5.0
6.0	END HOLE @ 5.0m							6.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/10/17
Fig. No:	Page 1 of 1

04/01/19 08:18AM

Km 1719.5 RHS Alaska Highway #1
Pit Ident. 115 G-23 (Congdon Campground)

October 2003

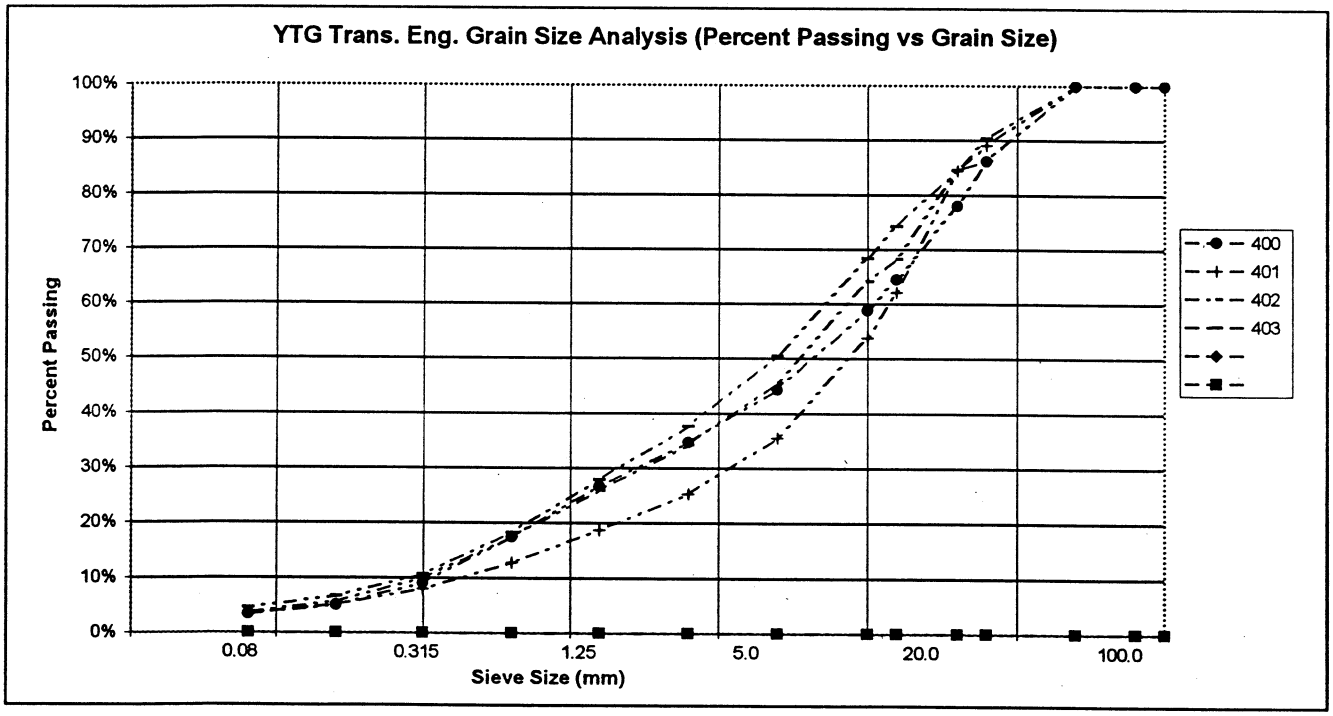
Auger Sample Results

PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Project Granular Investigation
PROJECT LOCATION: KM 1719.5 A/H RHS
DRILL UNIT: D-4 Cat 6" Auger
HOLE LOCATION: See Plan
LOGGED BY: GC

HOLE No.: 656-2766

DATE COMP: Oct 17/03

FIELD NO:	400	401	402	403		
LAB NO:	430	431	432	433		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	4.0-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	86%	89%	86%	90%		
20.0	78%	84%	85%	85%		
12.5	65%	62%	68%	74%		
10.0	59%	54%	64%	68%		
5.0	44%	36%	46%	51%		
2.5	35%	25%	34%	38%		
1.25	27%	19%	26%	28%		
0.630	17%	13%	17%	18%		
0.315	9%	8%	10%	11%		
0.160	5%	5%	6%	7%		
0.080	3%	3%	4%	5%		
M.C.(%):	2%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	64	54	49		
% SAND:	41	32	42	46		
% FINES:	3	3	4	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

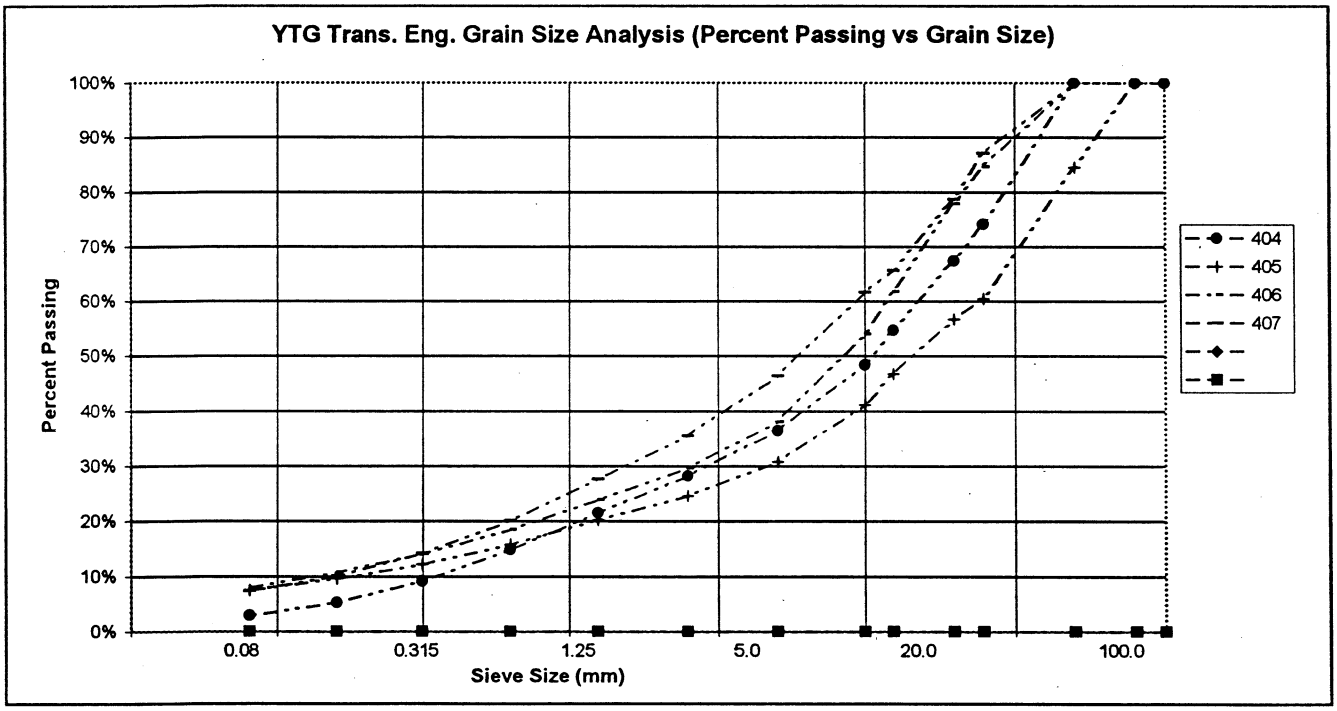


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Project Granular Investigation
PROJECT LOCATION: KM 1719.5 A/H RHS
DRILL UNIT: D-4 Cat 6" Auger
HOLE LOCATION: See Plan
LOGGED BY: GC

HOLE No.: 656-2767

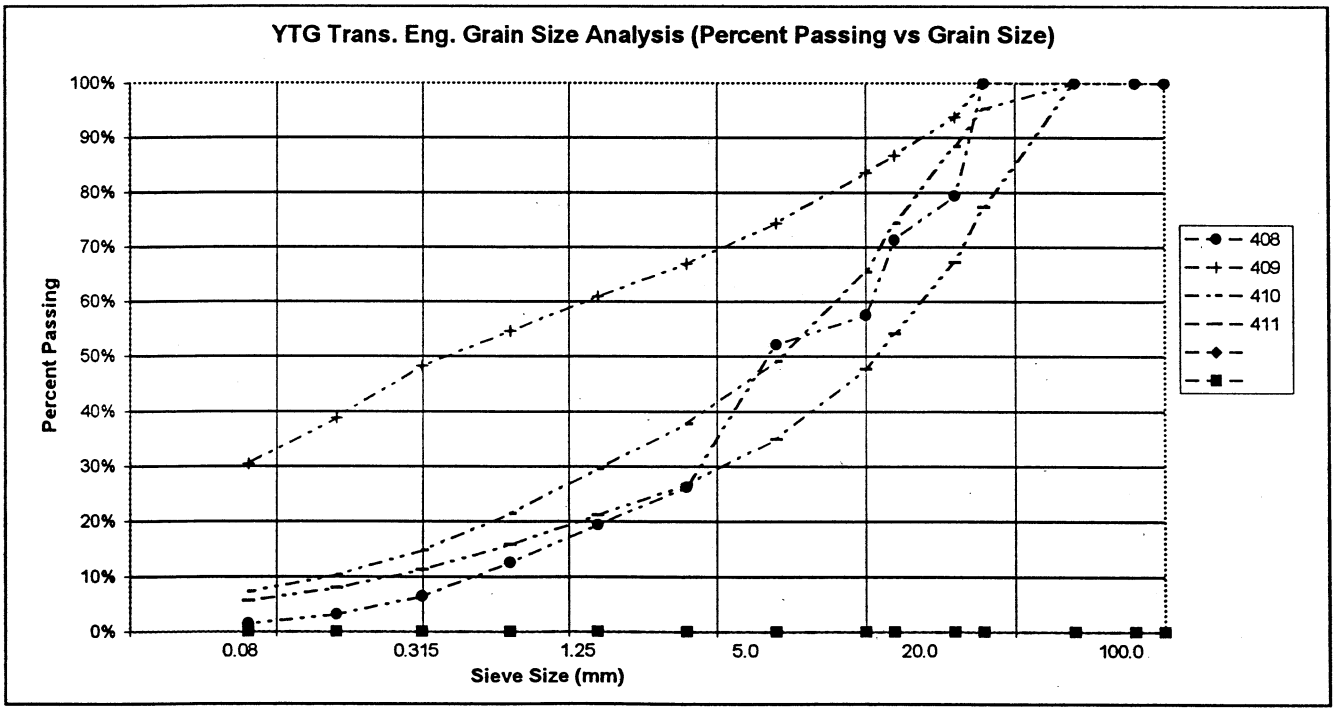
DATE COMP: Oct 17/03

FIELD NO:	404	405	406	407		
LAB NO:	434	435	436	437		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	4.0-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	85%	100%	100%		
25.0	74%	60%	85%	87%		
20.0	67%	57%	78%	79%		
12.5	55%	47%	62%	66%		
10.0	48%	41%	54%	62%		
5.0	37%	31%	38%	46%		
2.5	28%	25%	30%	36%		
1.25	22%	20%	24%	28%		
0.630	15%	16%	19%	20%		
0.315	9%	12%	14%	14%		
0.160	5%	10%	11%	10%		
0.080	3%	7%	8%	7%		
M.C.(%):	2%	4%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	69	62	54		
% SAND:	34	23	30	39		
% FINES:	3	7	8	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 656-2768
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Project Granular Investigation	
PROJECT LOCATION:	KM 1719.5 A/H RHS	
DRILL UNIT:	D-4 Cat 6" Auger	
HOLE LOCATION:	See Plan	
LOGGED BY:	GC	DATE COMP: Oct 17/03

FIELD NO:	408	409	410	411		
LAB NO:	438	439	440	441		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	4.0-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	95%	77%		
20.0	79%	94%	88%	67%		
12.5	71%	87%	74%	54%		
10.0	58%	84%	65%	48%		
5.0	52%	74%	49%	35%		
2.5	26%	67%	38%	27%		
1.25	19%	61%	29%	21%		
0.630	13%	55%	21%	16%		
0.315	6%	48%	15%	11%		
0.160	3%	39%	10%	8%		
0.080	2%	30%	7%	6%		
M.C.(%):	2%	17%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	48	26	51	65		
% SAND:	51	44	42	29		
% FINES:	2	30	7	6		
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

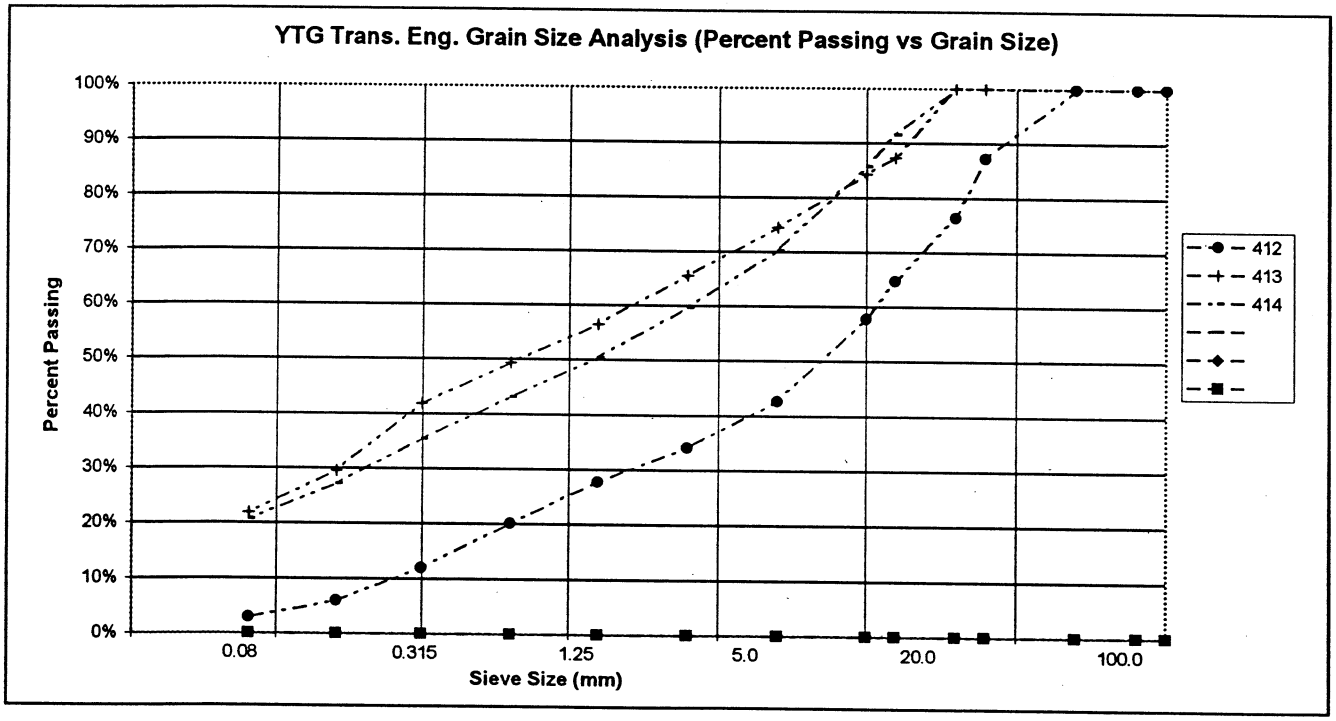


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Project Granular Investigation
PROJECT LOCATION:	KM 1719.5 A/H RHS
DRILL UNIT:	D-4 Cat 6" Auger
HOLE LOCATION:	See Plan
LOGGED BY:	GC

HOLE No.: 656-2769

DATE COMP: Oct 17/03

FIELD NO:	412	413	414			
LAB NO:	442	443	444			
DEPTH:	0.5-1.0	1.2-1.6	2.5-3.0			
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	87%	100%	100%			
20.0	76%	100%	100%			
12.5	65%	87%	92%			
10.0	58%	84%	86%			
5.0	43%	74%	70%			
2.5	34%	65%	60%			
1.25	28%	57%	50%			
0.630	20%	49%	43%			
0.315	12%	42%	35%			
0.160	6%	30%	27%			
0.080	3%	22%	21%			
M.C.(%):	2%	10%	4%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	57	26	30			
% SAND:	40	52	49			
% FINES:	3	22	21			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)			

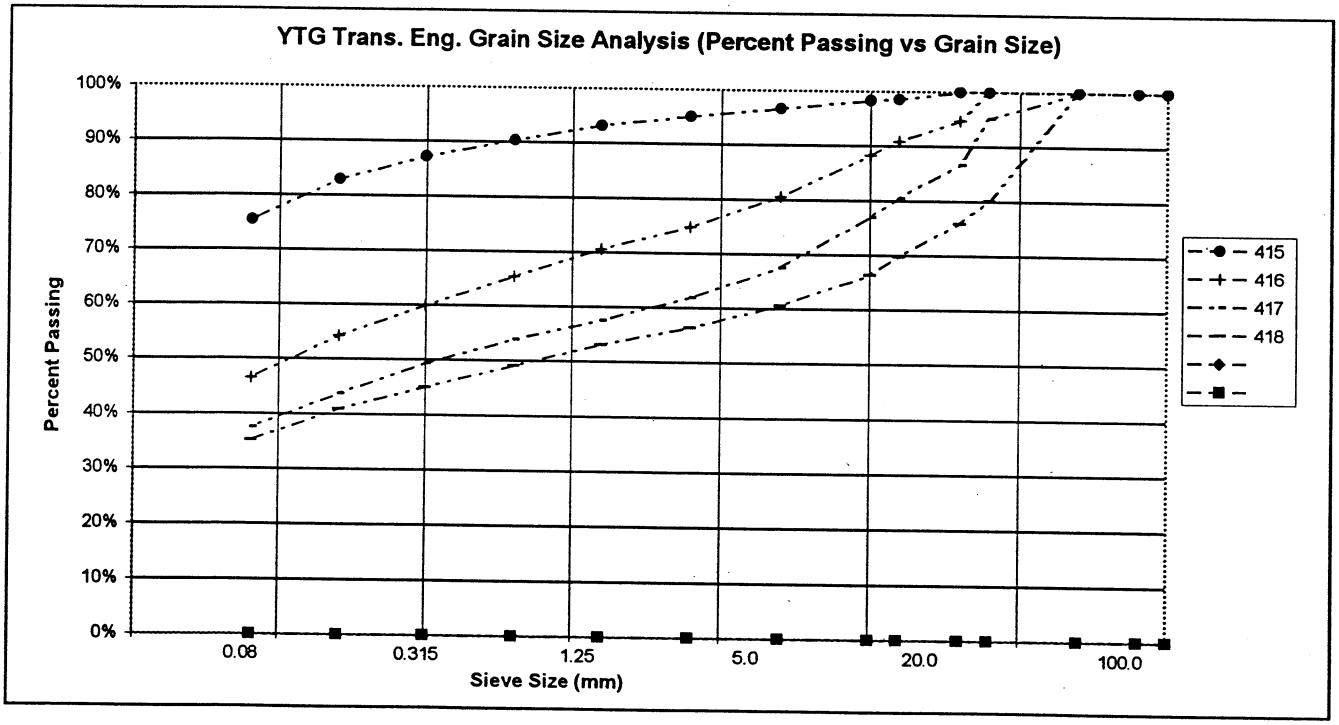


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Project Granular Investigation
PROJECT LOCATION: KM 1719.5 A/H RHS
DRILL UNIT: D-4 Cat 6" Auger
HOLE LOCATION: See Plan
LOGGED BY: GC

HOLE No.: 656-2770

DATE COMP: Oct 17/03

FIELD NO:	415	416	417	418		
LAB NO:	445	446	447	448		
DEPTH:	0.5-1.0	1.5-2.0	2.4-2.8	4.0-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	100%	95%	80%		
20.0	100%	95%	87%	76%		
12.5	99%	91%	80%	70%		
10.0	98%	88%	77%	66%		
5.0	97%	80%	68%	61%		
2.5	95%	75%	62%	56%		
1.25	93%	71%	58%	53%		
0.630	90%	65%	54%	49%		
0.315	87%	60%	49%	45%		
0.160	83%	54%	44%	41%		
0.080	75%	46%	37%	35%		
M.C.(%):	14%	6%	5%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	3	20	32	39		
% SAND:	21	34	30	25		
% FINES:	75	46	37	35		
CLASSIFICATION	SILT WITH SAND (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)		

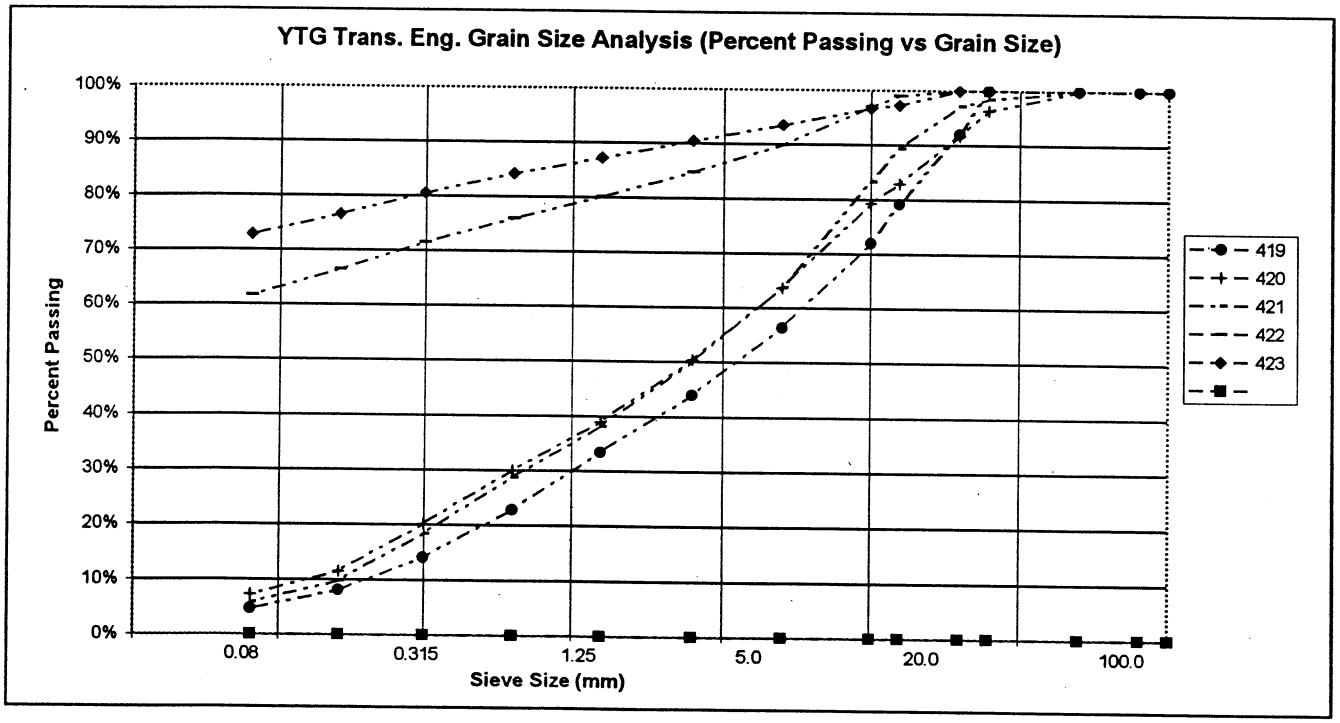


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Project Granular Investigation
PROJECT LOCATION: KM 1719.5 A/H RHS
DRILL UNIT: D-4 Cat 6" Auger
HOLE LOCATION: See Plan
LOGGED BY: GC

HOLE No.: 656-2771

DATE COMP: Oct 17/03

FIELD NO:	419	420	421	422	423	
LAB NO:	449	450	451	452	453	
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	3.0-3.2	4.0-5.0	
TYPE:	AUGER	AUGER	AUGER	AUGER	AUGER	AUGER
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	
100.0	100%	100%	100%	100%	100%	
80.0	100%	100%	100%	100%	100%	
50.0	100%	100%	100%	100%	100%	
25.0	100%	96%	99%	100%	100%	
20.0	92%	92%	97%	100%	100%	
12.5	79%	83%	89%	99%	97%	
10.0	72%	79%	83%	97%	97%	
5.0	56%	64%	64%	90%	94%	
2.5	44%	50%	50%	85%	91%	
1.25	33%	39%	38%	80%	87%	
0.630	23%	30%	29%	76%	84%	
0.315	14%	20%	18%	72%	81%	
0.160	8%	11%	10%	66%	77%	
0.080	5%	7%	6%	62%	73%	
M.C.(%):	2%	3%	3%	19%	19%	
LIQUID LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC LIMIT:	0.0	0.0	0.0	0.0	0.0	
PLASTIC INDEX.:	0.0	0.0	0.0	0.0	0.0	
% GRAVEL:	44	36	36	10	6	
% SAND:	52	56	58	28	21	
% FINES:	5	7	6	62	73	
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SANDY SILT (ML)	SILT WITH SAND (ML)	

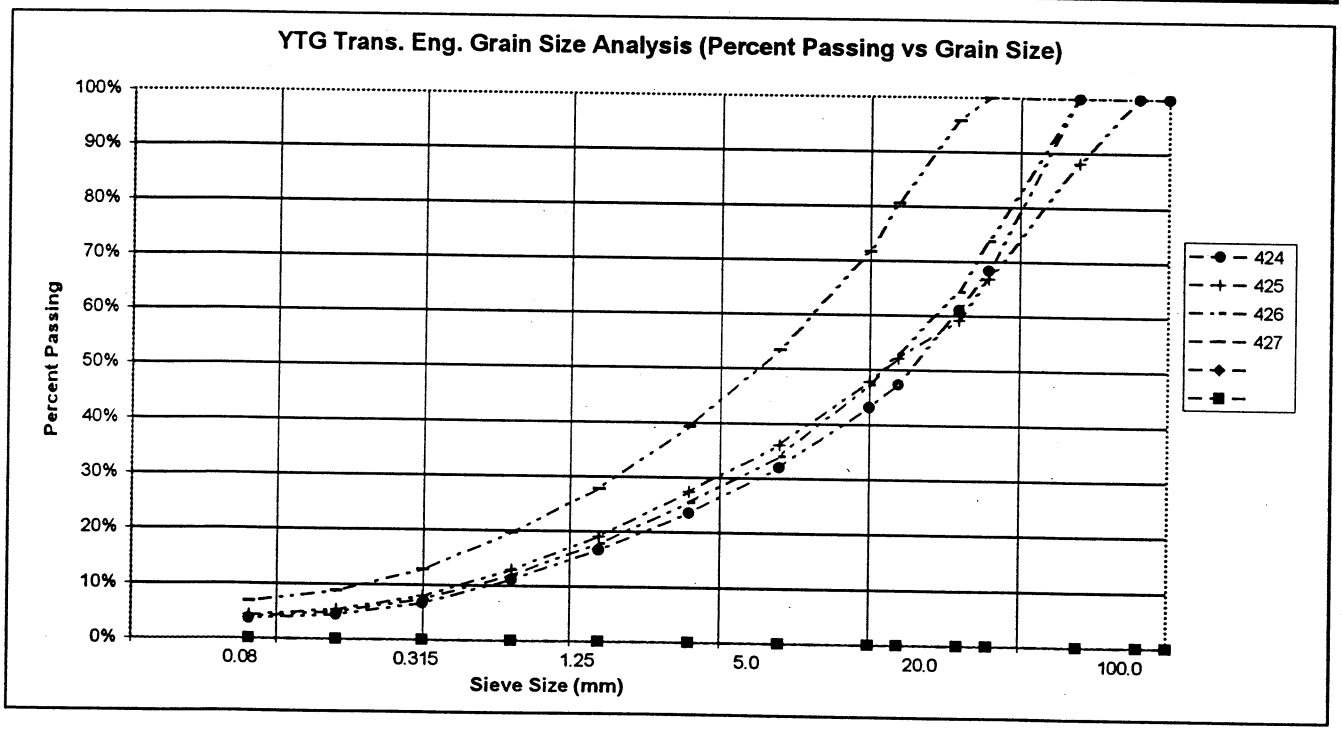


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Project Granular Investigation
PROJECT LOCATION:	KM 1719.5 A/H RHS
DRILL UNIT:	D-4 Cat 6" Auger
HOLE LOCATION:	See Plan
LOGGED BY:	GC

HOLE No.: 656-2772

DATE COMP: Oct 17/03

FIELD NO:	424	425	426	427		
LAB NO:	454	455	456	457		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	4.0-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	88%	100%	100%		
25.0	68%	67%	74%	100%		
20.0	61%	59%	64%	96%		
12.5	47%	52%	53%	80%		
10.0	43%	48%	47%	72%		
5.0	32%	36%	34%	54%		
2.5	24%	27%	25%	39%		
1.25	17%	19%	18%	28%		
0.630	11%	13%	12%	20%		
0.315	7%	8%	7%	13%		
0.160	4%	5%	5%	9%		
0.080	4%	4%	4%	7%		
M.C.(%):	0%	2%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	64	66	46		
% SAND:	28	32	30	47		
% FINES:	4	4	4	7		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)		

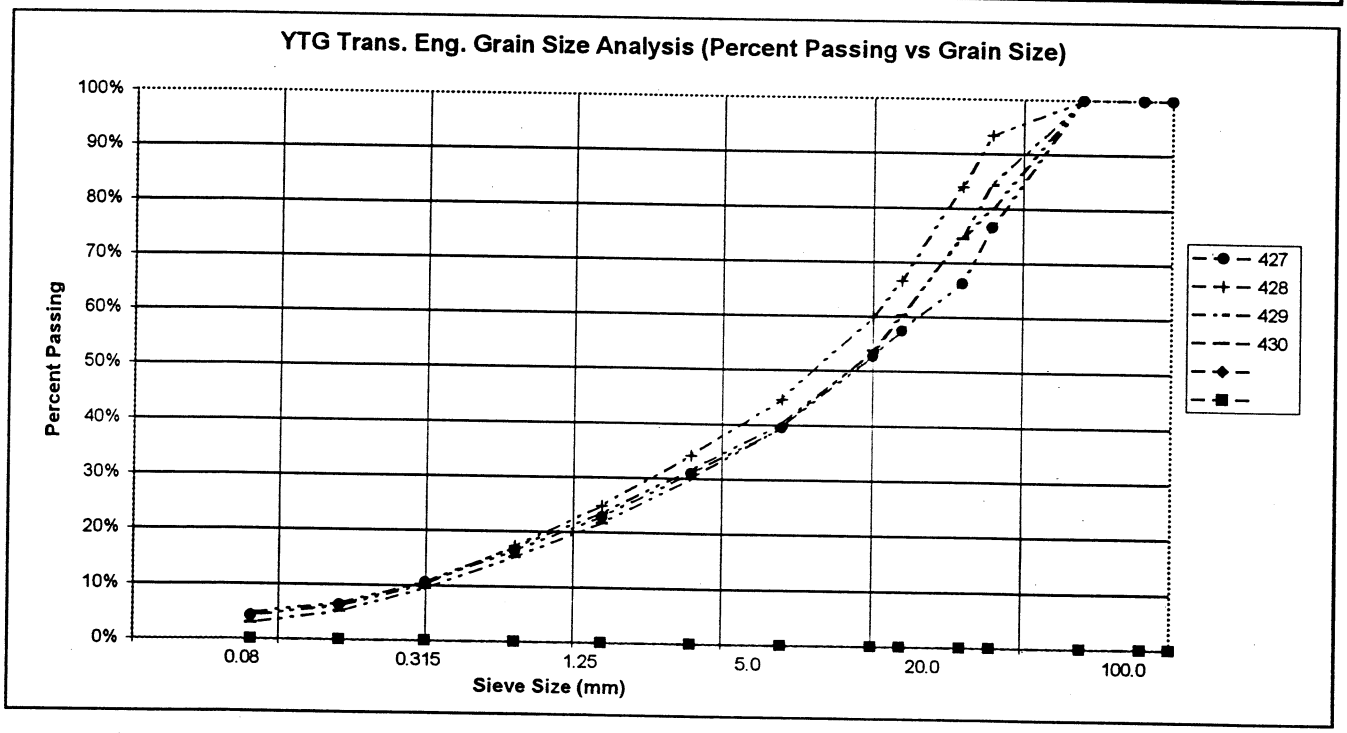


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Project Granular Investigation
PROJECT LOCATION: KM 1719.5 A/H RHS
DRILL UNIT: D-4 Cat 6" Auger
HOLE LOCATION: See Plan
LOGGED BY: GC

HOLE No.: 656-2773

DATE COMP: Oct 17/03

FIELD NO:	427	428	429	430		
LAB NO:	458	459	460	461		
DEPTH:	0.5-1.0	1.5-2.0	2.5-3.0	4.0-5.0		
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	77%	93%	84%	80%		
20.0	66%	84%	75%	74%		
12.5	57%	67%	60%	60%		
10.0	53%	60%	53%	54%		
5.0	40%	45%	40%	40%		
2.5	31%	34%	32%	30%		
1.25	23%	25%	24%	22%		
0.630	17%	17%	17%	15%		
0.315	11%	10%	11%	9%		
0.160	6%	6%	7%	5%		
0.080	4%	4%	5%	3%		
M.C.(%):	3%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	60	55	60	60		
% SAND:	35	40	35	37		
% FINES:	4	4	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



Km 1719.5 RHS Alaska Highway #1
Pit Ident. 115 G-23 (Congdon Campground)

December 2003

Test Pit Logs

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2774
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC SILT				
1.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -damp -easy digging		1	SW-SM	
2.0			2	SW-SM	
2.5	ORGANIC				
3.0	POORLY GRADED GRAVEL WITH SAND (GP) -damp to moist				
4.0			3	GP	
5.0					
5.7	SANDY SILT (ML) -moist -easy digging		4	ML	
6.5	END HOLE @ 6.5m				
7.0					
8.0					
9.0					
10.0					
11.0					
12.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC M.C. LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m) (0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0)

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/04
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04/01/06 02:11PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2775
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	POORLY GRADED GRAVEL WITH SAND (GP) –grey –damp –maximum 100mm material –easy digging		5 ▲		GP		◆ ■	0.0
1.0								1.0
2.0	SILTY GRAVEL WITH SAND (GM) –brown –damp		6 ▲		GM		◆ ■	2.0
3.0	VOLCANIC ASH							3.0
4.0	GRAVEL –maximum 50mm material –brown –damp							4.0
5.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) –brown –damp		7 ▲		SW-SM		◆ ■	5.0
6.0	END HOLE @ 6.0m							6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.0 m
REVIEWED BY:	COMPLETE: 03/12/04
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2776
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –grey –damp –maximum 100mm material		8 ▲		GP		◆ ■	
1.0								1.0
2.0	SANDY SILT WITH ASH –moist							2.0
	WELL-GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GW-GM)-(GP) –brown –moist –maximum 50mm material		9 ▲		GW-GM		◆ ■	
3.0								3.0
4.0			10 ▲		GP		◆ ■	4.0
5.0								5.0
6.0			11 ▲		GP		◆ ■	6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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	REVIEWED BY:	COMPLETE: 03/12/04
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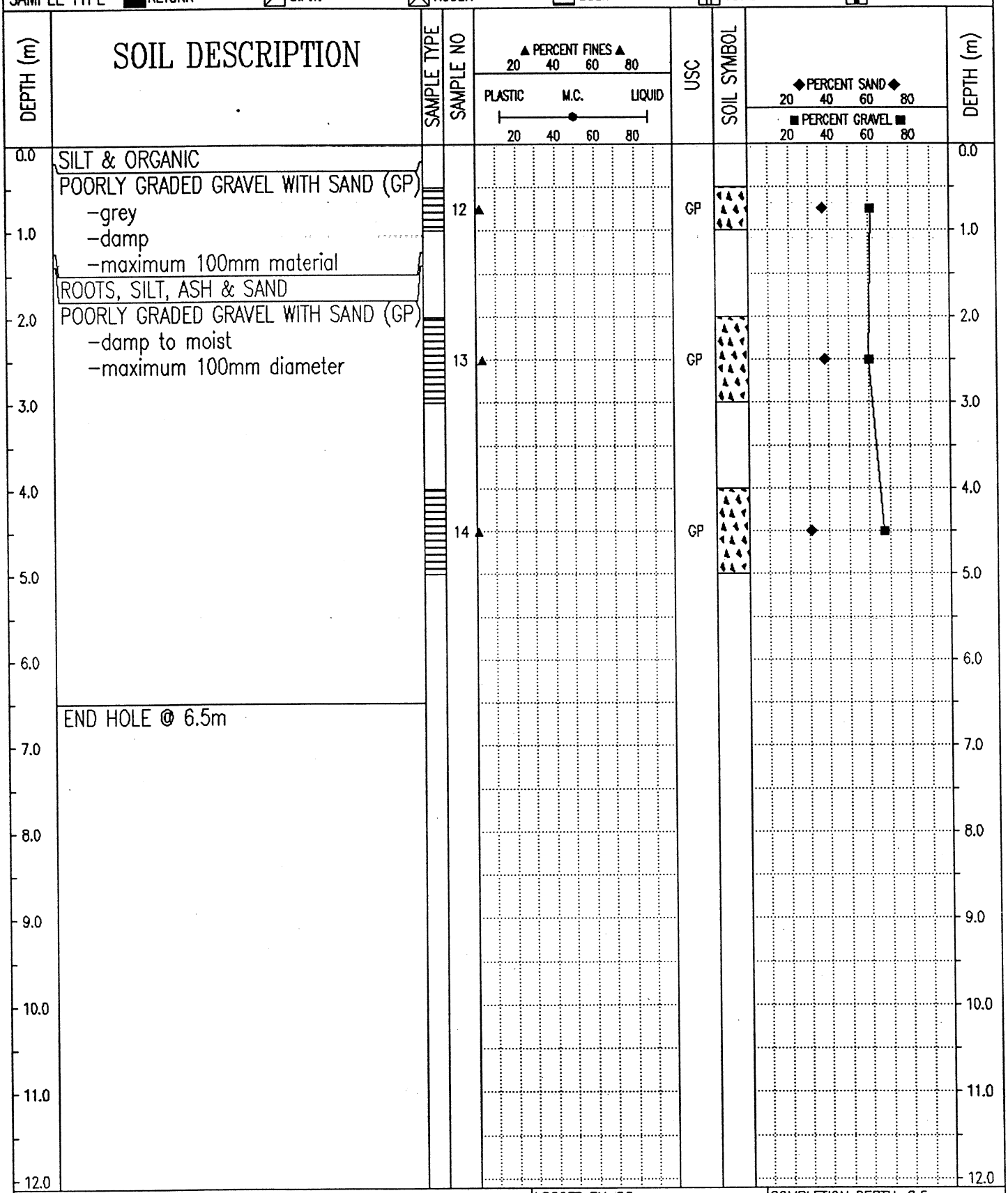
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2777
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 03/12/04
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2778
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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	ROOTS, SILT, SAND LAYERS							0.0
1.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -maximum 150mm material -no silt seams		14a ▲		GP			1.0
2.0								2.0
3.0								3.0
4.0			15 ▲		GP			4.0
5.0	-maximum 100mm material below 5.0m							5.0
6.0			16 ▲		GP			6.0
7.0	END HOLE @ 6.5m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/04
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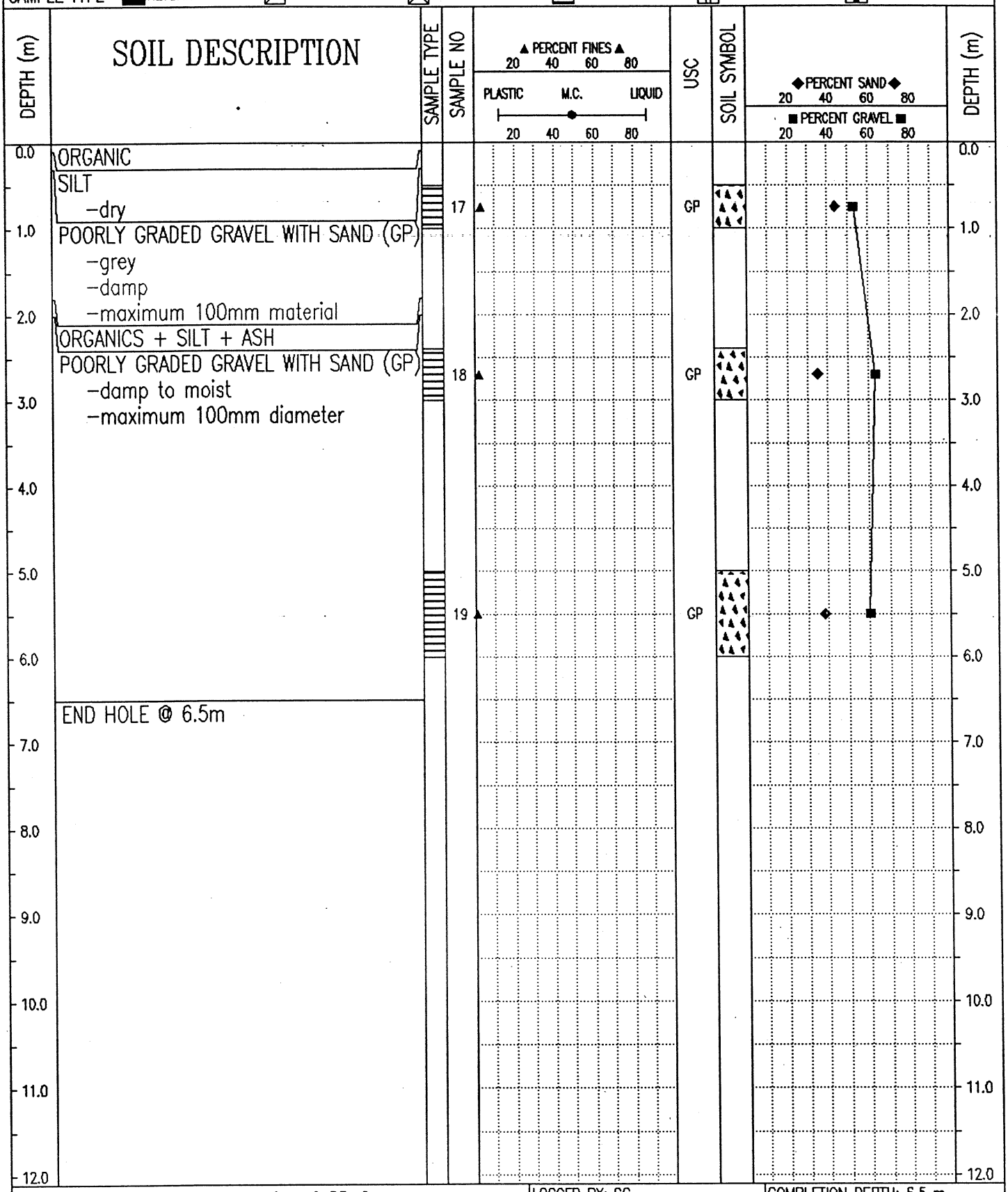
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2779
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 03/12/04
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2780
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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							
	-dry							
1.0	WELL-GRADED GRAVEL WITH SAND (GW)		20 ▲		GW			1.0
	-brown							
	-damp							
2.0	-no silt seam							2.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
	-brown							
	-damp							
3.0	-maximum 150mm material							3.0
			21 ▲		GP			
4.0								4.0
5.0								5.0
			22 ▲		GP			
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 03/12/05
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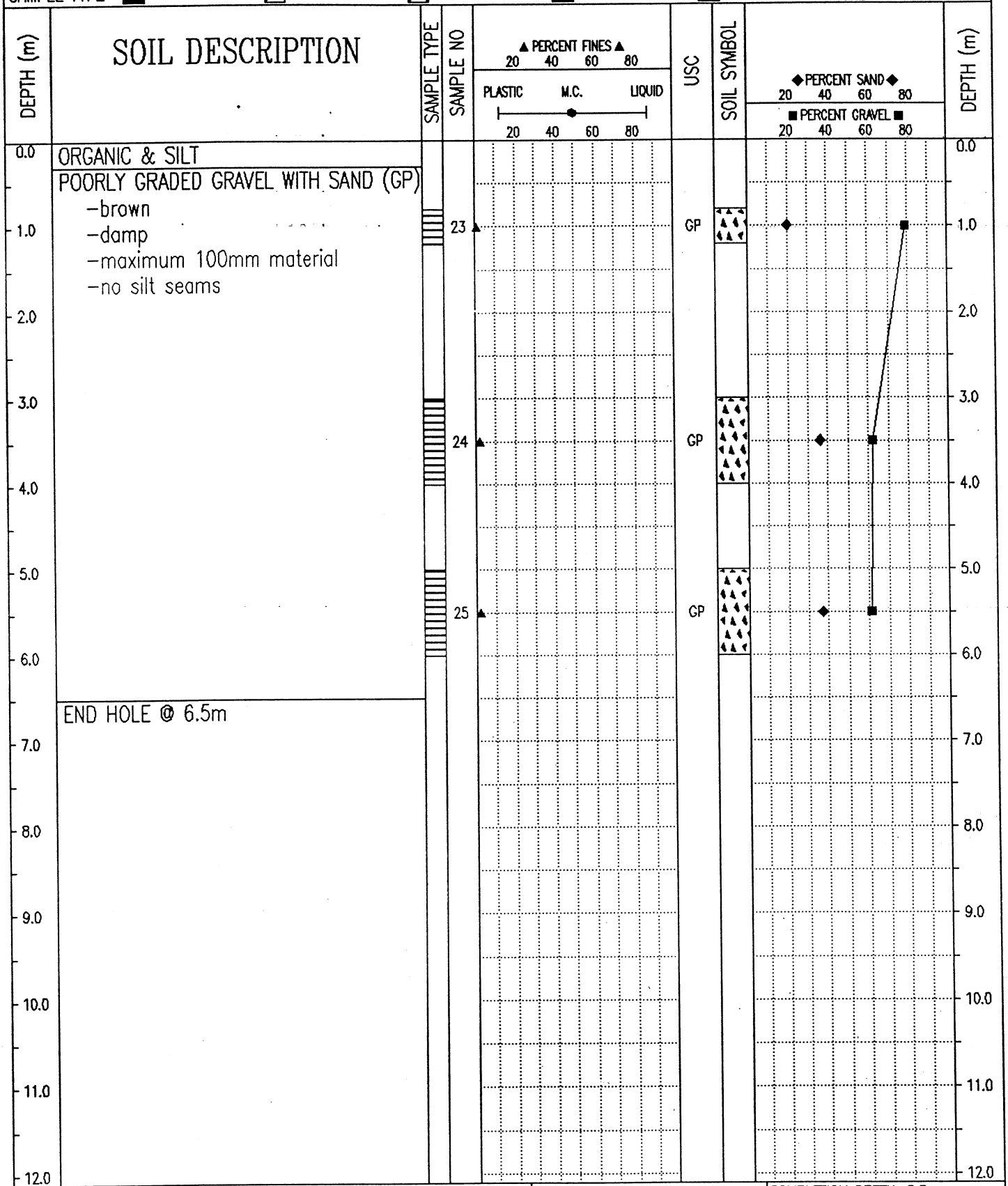
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2781
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 03/12/05
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2782
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ▮▯ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp –maximum 150mm material		26		GP			1.0
2.0	–maximum 100mm material below 2.0m							2.0
3.0			27		GP			3.0
4.0								4.0
5.0	–damp to moist below 5.0m							5.0
			28		GP			
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/05
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2783
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ⊠ AUGER ▭ BULK ▯ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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							0.0
	SILTY SAND WITH GRAVEL (SM)							
	-grey		29	▲	SM		■ ◆	
1.0	-damp							1.0
	-maximum 50mm material							
	SILTY SAND							
2.0	ASH & ORGANIC							2.0
	SANDY SILT TO SILTY SAND (ML)-(SM)							
	-brown							
3.0	-damp to moist							3.0
			30	▲	ML		■ ◆	
4.0								4.0
5.0								5.0
			31	▲	SM		■ ◆	
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/05
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2784
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC & SILT				
	WELL-GRADED SAND WITH GRAVEL (SW) -grey -damp -maximum 50mm material		32	SW	
1.0	SAND				
2.0	SANDY GRAVEL -maximum 50mm material				
	SAND -brown -damp				
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -maximum 50mm material		33	GP-GM	
4.0	SAND -small thin (0.05m) ash @ 4.0m				
5.0	GRAVEL -maximum 50mm material				
	SILTY SAND WITH GRAVEL (SM)		34	SM	
6.0	GRAVEL -maximum 50mm material				
	END HOLE @ 6.5m -from 1.5 to 6.5m alternate layers of sand then gravel app. 0.5m thick				
7.0					
8.0					
9.0					
10.0					
11.0					
12.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID

20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0

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REVIEWED BY:	COMPLETE: 03/12/05
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2795
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ▯ CORE

SOIL DESCRIPTION

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -grey -damp -maximum 75mm material		35	▲	GP-GM		◆ ■	
1.0								1.0
2.0	SAND / SILT							2.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -alternate layers of sand then gravel -maximum 50mm material -sample 36 is a mixture of layers		36	▲	SW-SM		◆ ■	
3.0								3.0
4.0	SANDY GRAVEL (layer) -maximum 50mm material							4.0
5.0	SILTY SAND (SM) -brown -damp to moist -alternate layers of gravel and sand -sample 37 is a mixture of layers		37	▲	SM		◆ ■	5.0
6.0								6.0
	SILTY SAND -brown -damp to moist							
7.0	END HOLE @ 6.5m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2796
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -grey -damp -maximum 100mm material		38	GP-GM	
2.0			39	GP-GM	
3.0	SILTY SAND WITH GRAVEL (SM) -alternate layers (0.3-0.5m thick) of gravel and silty sand -maximum 50mm material -sample 40 is a mixture of layers		40	SM	
5.0	SANDY SILT -moist, cold				
6.0	END HOLE @ 6.5m				
7.0					
8.0					
9.0					
10.0					
11.0					
12.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m)

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/05
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 658-2797
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0361
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
	-grey							
1.0	-damp		41 ▲		GP		◆ ■	1.0
	-maximum 150mm material							
	-easy digging							
2.0								2.0
	ASH							
	POORLY GRADED GRAVEL WITH SAND (GP)							
3.0	-damp to moist							3.0
	-maximum 100mm material		42 ▲		GP		◆ ■	
4.0								4.0
5.0	WELL-GRADED SAND WITH SILT & GRAVEL							5.0
	(SW-SM)							
	-brown							
6.0	-moist		43 ▲		SW-SM		◆ ■	6.0
	-maximum 50mm material							
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659–2798
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552–202101–0362
KOMATSU PC–400–LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –grey –damp –maximum 100mm material		44	▲	GP		◆ ■	
1.0								1.0
2.0	VOLCANIC ASH & ROOTS							2.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP–GM) –brown –damp –maximum 100mm material		45	▲	GP–GM		◆ ■	
3.0								3.0
4.0								4.0
5.0								5.0
	SILTY SAND (SM) –brown		46	▲	SM		◆	
6.0	END HOLE @ 6.5m							6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/06
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2799
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC & ASH							0.0
	WELL-GRADED SAND WITH GRAVEL (SW)							
	-grey							
1.0	-damp		47 ▲		SW		◆	1.0
	-maximum 100mm material							
	ASH							
2.0	POORLY GRADED GRAVEL WITH SAND (GP)							2.0
	-brown							
	-damp							
3.0	-maximum 75mm material							3.0
			48 ▲		GP		◆ ■	
4.0								4.0
5.0								5.0
	SILTY SAND WITH GRAVEL (SM)							
	-brown							
6.0	-damp		49 ▲		SM		◆ ■	6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/06
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2800
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▯ CORE

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 -dry							
1.0	WELL-GRADED SAND WITH GRAVEL TO SILTY SAND WITH GRAVEL (SW)-(SM) -brown -damp -maximum 50mm material							1.0
2.0			50 ▲		SW		◆ ■	2.0
3.0								3.0
4.0			51 ▲		SM		◆ ■	4.0
5.0	SILT (ML) -damp to moist -layer of organics							5.0
6.0			52 ▲		ML		◆	6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/06
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2801
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ▮ CORE

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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
1.0	-brown		53 ▲		GP		◆ ■	1.0
	-damp							
	-maximum 100mm material							
2.0	ASH SEAM							2.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
3.0	-brown		54 ▲		GP		◆ ■	3.0
	-damp							
	-maximum 100mm material							
4.0								4.0
5.0								5.0
			55 ▲		GP		◆ ■	
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2802
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –grey –damp –maximum 75mm material		56	▲	GP		◆ ■	
1.0								1.0
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) –brown –damp –layered –maximum 50mm material							2.0
3.0			57	▲	GP-GM		◆ ■	3.0
4.0								4.0
5.0								5.0
	SANDY SILT (ML) –brown –moist		58	▲	ML		◆	
6.0	END HOLE @ 6.5m							6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 03/12/06
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2803
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▥ TUBE ▯ CORE

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							0.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)							
1.0	-grey -damp -maximum 50mm material		59	▲	SW-SM		■ ◆	1.0
2.0	ROOTS							2.0
	SILTY SAND (SM) -alternate layers of sandy silt and silty sand -sample 60 mixture of layers		60	▲	SM		◆	
3.0								3.0
4.0								4.0
5.0	SANDY SILT (ML) -brown -moist		61	▲	ML		■ ◆	5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 03/12/06
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2804
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▦ CORE

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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp -maximum 50mm material		62	▲	GP		◆ ■	
1.0								1.0
2.0								2.0
	SILTY SAND WITH GRAVEL (SM) -with organics -brown -moist		63	▲	SM		◆	
3.0								3.0
	SANDY SILT (ML) -brown -moist		64	▲	ML		◆	
4.0								4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2805
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	SILTY SAND (SM)							
	-maximum 50mm material		65	▲	SM		■ ◆	
1.0	ROOTS & SILT							1.0
	-damp to dry							
	Seam of 50mm material							
2.0	SILT							2.0
	-brown							
	-damp							
3.0								3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2806
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
	-grey							
1.0	-damp		66 ▲		GP		■ ◆	1.0
	-maximum 50mm material							
	SILTY SAND (SM)							
2.0	-brown		67 ▲		SM		■ ◆	2.0
	-moist							
3.0								3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2807
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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 WITH GRAVEL (ML)							
	-olive							
1.0	-damp							1.0
			68	▲	ML		■ ◆	
2.0								2.0
3.0								3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/12/06
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2808
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp -maximum 50mm material		69	▲	GP		◆ ■	
1.0								1.0
2.0	SANDY SILT (ML) -with organic -moist		70	▲	ML		■ ◆	2.0
3.0	SILT -moist							3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2809
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	POORLY GRADED GRAVEL WITH SAND (GP) -grey -moist -maximum 75mm material -maximum 150mm material below 1.5m		71	▲	GP		◆ ■	0.0
1.0								1.0
2.0			72	▲	GP		◆ ■	2.0
3.0								3.0
4.0			73	▲	GP		◆ ■	4.0
5.0								5.0
6.0								6.0
6.5	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2810
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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	POORLY GRADED GRAVEL WITH SAND (GP) -maximum 100mm material							0.0
1.0			659 ▲		GP		◆ ■	1.0
2.0	SANDY SILT (ML) -brown -moist							2.0
3.0			75 ▲		ML		◆	3.0
4.0	END HOLE @4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2811
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC				
	SILTY SAND WITH GRAVEL (SM) -dry -maximum 50mm material		76	SM	
1.0					
	SILTY SAND (SM) -brown -moist				
2.0					
			77	SM	
3.0					
4.0					
5.0					
6.0					
	END HOLE @ 6.5m				
7.0					
8.0					
9.0					
10.0					
11.0					
12.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2812
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -maximum 75mm material		78 ▲		GP		◆ ■	
1.0								1.0
2.0								2.0
3.0								3.0
			79 ▲		GP-GM		◆ ■	
4.0	SILT -brown -moist							4.0
5.0								5.0
6.0	END HOLE @ 6.0m							6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2813
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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 & ORGANIC							0.0
	WELL-GRADED SAND WITH GRAVEL TO POORLY GRADED GRAVEL WITH SAND (SW)-(GP) -brown -damp -maximum 75mm material		80 ▲		SW		◆ ■	
1.0								1.0
2.0								2.0
3.0			81 ▲		GP		◆ ■	3.0
4.0	SILT -brown -moist							4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2814
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SILT & ORGANIC				
	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp -maximum 50mm material		82	SW	
1.0					
	SANDY SILT -moist				
2.0					
	SILT WITH SAND (ML) -black -moist to wet		83	ML	
3.0					
4.0	END HOLE @ 3.8m				
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m)

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Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 3.8 m
REVIEWED BY:	COMPLETE: 03/12/07
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 659-2815
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -maximum 150mm material							0.0
1.0			84 ▲		GP		◆ ■	1.0
2.0								2.0
3.0			85 ▲		GP		◆ ■	3.0
4.0								4.0
5.0								5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/07
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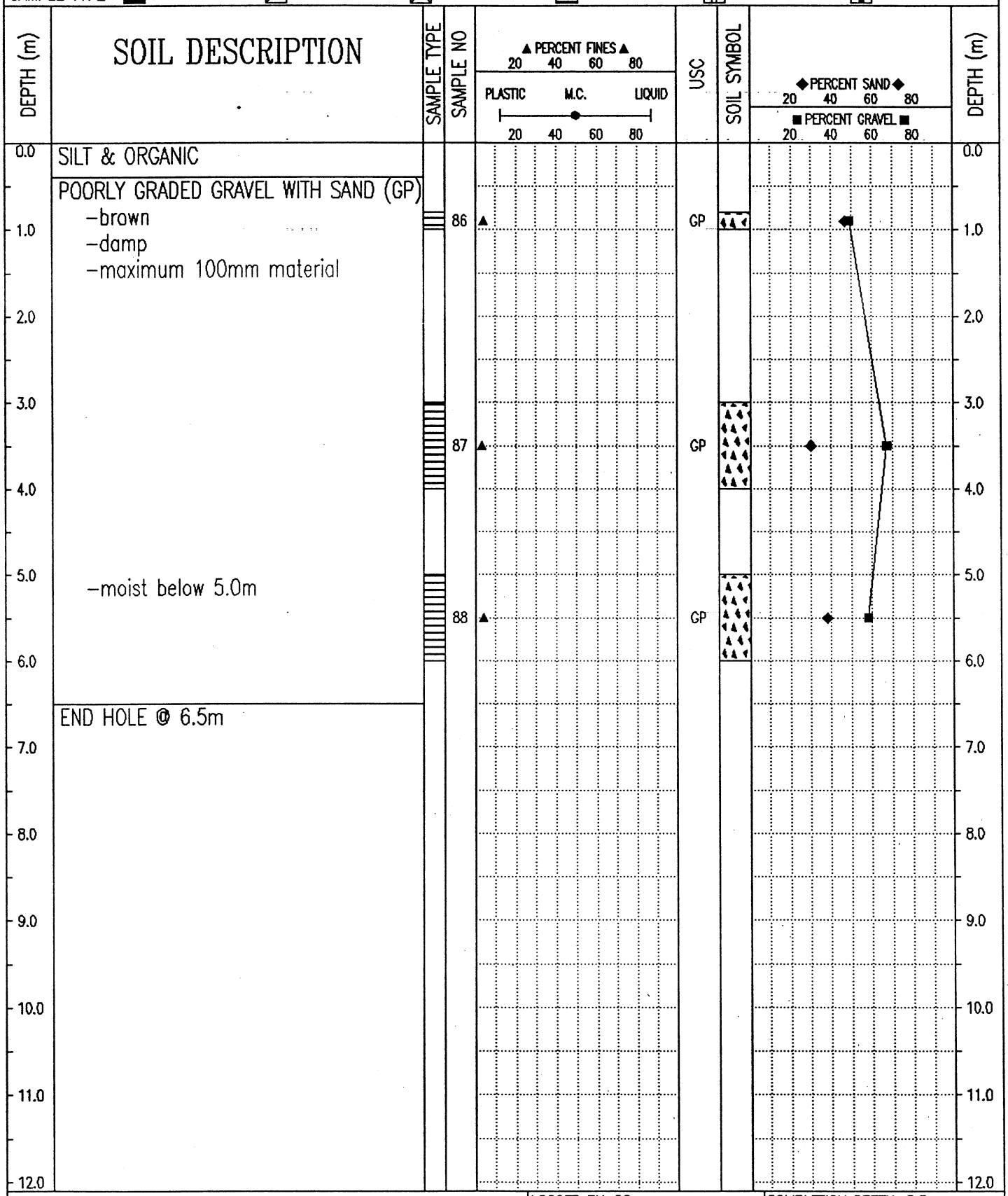
04/01/08 09:28AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2817
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
	REVIEWED BY:	COMPLETE: 03/12/08
	Fig. No:	Page 1 of 1

04/01/12 10:54AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2818
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP)							
	-brown							
1.0	-damp		89 ▲		GP		◆ ■	1.0
	-maximum 75mm material							
2.0								2.0
3.0								3.0
			90 ▲		GP		◆ ■	
4.0								4.0
5.0	-moist below 5.0m							5.0
			91 ▲		GP		◆ ■	
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/08
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2819
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp -maximum 100mm material		92 ▲		SW		◆ ■	1.0
2.0								2.0
3.0	ROOTS, SILT, ASH & TREE							3.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp to moist -maximum 150mm material		93 ▲		GP		◆ ■	4.0
5.0								5.0
6.0								6.0
	END HOLE @ 6.5m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/08
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2820
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -maximum 100mm material		94	▲	GP-GM		◆	
1.0								1.0
	ROOTS, ASH, & SILT -moist							
	SILTY SAND WITH GRAVEL (SM) -maximum 100mm material							
2.0			95	▲	SM		◆	2.0
3.0	SILT & GRAVEL -alternate layers of silt and gravel							3.0
4.0								4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0

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REVIEWED BY:	COMPLETE: 03/12/08
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2821
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯▯ TUBE ▮ CORE

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
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp -maximum 50mm material		96 ▲		GP		◆ ■	
1.0	ROOTS, SILT & ASH							1.0
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -maximum 200mm material							2.0
3.0	-silt contamination in sample 97 from 1.5-2.0m		97 ▲		GP-GM		◆ ■	3.0
4.0								4.0
5.0	-maximum 150mm material below 5.0m		98 ▲		GP-GM		◆ ■	5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2822
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

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							0.0
	SILTY GRAVEL WITH SAND (GM) -brown -damp -maximum 75mm material -thin silt seams, not wet.		99	▲	GM		◆ ■	
1.0								1.0
2.0	SANDY SILT -dry							2.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -maximum 75mm material		100	▲	SW-SM		◆ ■	
3.0								3.0
4.0								4.0
5.0								5.0
	SILT WITH SAND (ML) -orange -moist to wet		101	▲	ML		◆ ■	
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
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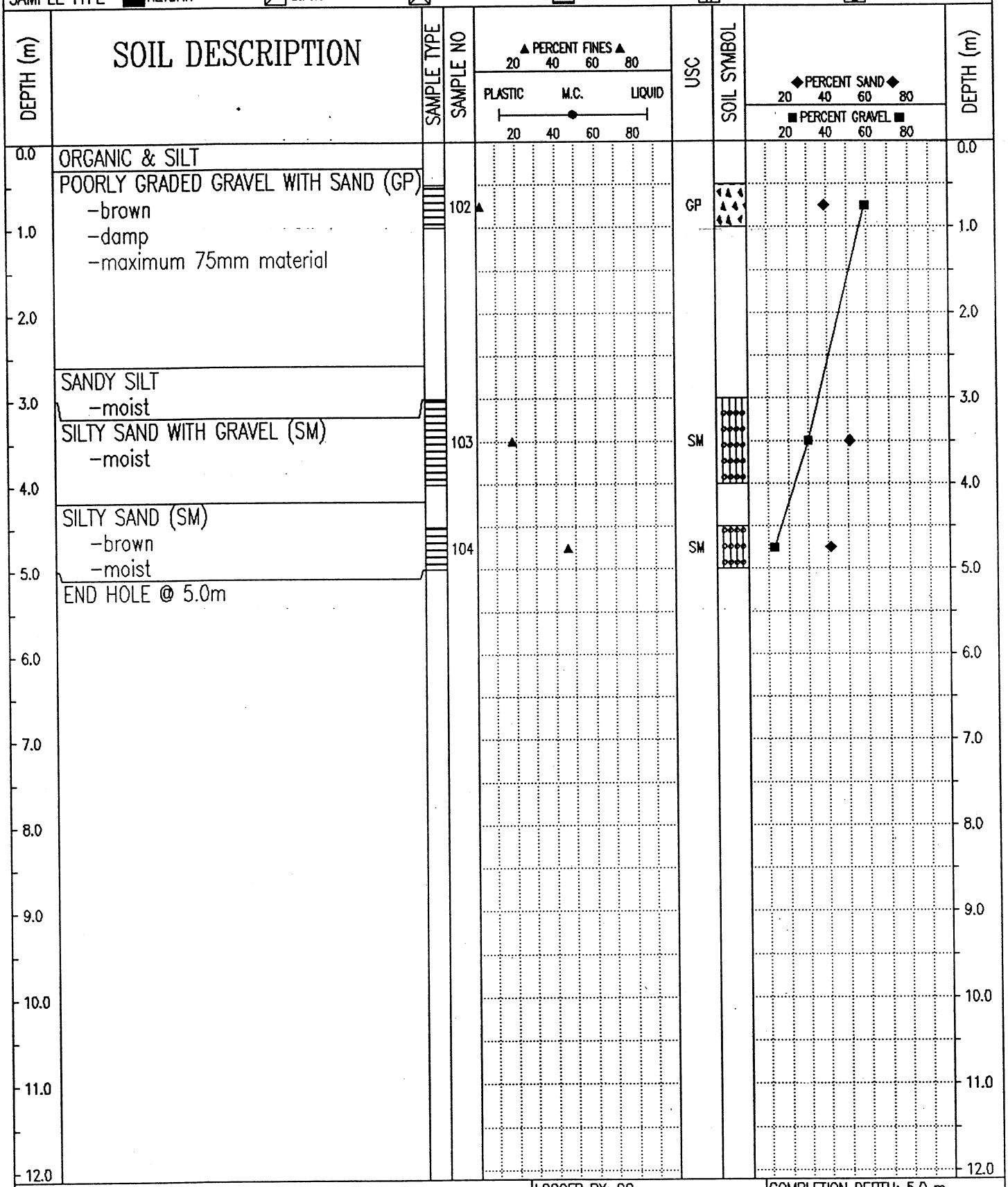
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2823
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE



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	REVIEWED BY:	COMPLETE: 03/12/08
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2824
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 & ORGANIC							0.0
	POORLY GRAVEL WITH SAND (GP) -brown -damp -maximum 50mm material		105 ▲		GP		◆ ■	1.0
2.0	-maximum 100mm material below 2.0m							2.0
3.0			106 ▲		GP		◆ ■	3.0
4.0								4.0
5.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -damp to moist -maximum 100mm maximum		107 ▲		GP-GM		◆ ■	5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/08
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2825
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⧄ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC				
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -maximum 50mm material		108	GP-GM	
1.0	ROOTS & SILT				
	SILTY SAND WITH GRAVEL (SM) -alternate layers of 50mm gravel and sand/silt averaging app. 0.3m in thickness -sample # 109 is combination of layers		109	SM	
2.0					
3.0					
4.0	SILT (ML) -brown -damp -silt & organic		110	ML	
5.0	END HOLE @ 5.0m				
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2826
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp –maximum 75mm material		111 ▲		GP		◆ ■	
1.0	ROOTS & SANDY SILT							1.0
2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) –maximum 50mm material –with odd 0.1m layers of silt from 1.6 to 6.5m		112 ▲		GP-GM		◆ ■	2.0
3.0								3.0
4.0								4.0
5.0	WELL-GRADED SAND WITH GRAVEL (SW) –damp –maximum 25mm material		113 ▲		SW		◆ ■	5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2827
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -maximum 100mm material		114 ▲		GP			1.0
	ROOTS & SANDY SILT -damp							2.0
	SILTY GRAVEL WITH SAND (GM) -alternate layers of sandy silt and gravel -sample # 115 is a mixture of layers		115 ▲		GM			3.0
4.0	POORLY GRADED GRAVEL WITH SAND (GP) -clean -damp -maximum 75mm material		116 ▲		GP			4.0
5.0								5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2828
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ▩ AUGER ▤ BULK ▥ TUBE ▦ CORE

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
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		117	▲	GP-GM		◆ ■	
1.0	-seams average 0.2m -maximum 50mm material							1.0
	ROOTS							
	SILTY SAND WITH GRAVEL (SM)							
2.0	-with silt seams -damp to moist		118	▲	SM		◆ ■	2.0
3.0	-maximum 75mm material -sample #118 is a blend of 2 to 3m							3.0
4.0	SILTY SAND WITH GRAVEL (SM)							4.0
	-grey -moist to wet		119	▲	SM		◆ ■	
5.0	END HOLE @ 5.0m							5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/12/09
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2829
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

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

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 & ORGANIC							0.0
1.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -maximum 150mm material		120	▲	GP-GM		◆ ■	1.0
2.0	ROOTS & SILT -damp							2.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -maximum 75mm material		121	▲	GP		◆ ■	3.0
4.0								4.0
5.0	SILTY SAND (SM) -orange -moist -moist to wet below 5.0m		122	▲	SM		■ ◆	5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/09
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK GRANULAR INVESTIGATION	TEST PIT NO: 660-2830
ENGINEERING CAPITAL	KM 1719+500 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400-LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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
	POORLY GRADED GRAVEL WITH SAND (GP)							
	-brown							
1.0	-damp		123 ▲		GP			1.0
	-maximum 75mm material							
2.0	-maximum 150mm material below 2.0m							2.0
			124 ▲		GP			
3.0								3.0
4.0	ORGANIC							4.0
	-brown							
	-moist							
5.0	POORLY GRADED GRAVEL WITH SAND (GP)							5.0
	-brown							
	-damp		125 ▲		GP			
6.0	-maximum 100mm material							6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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REVIEWED BY:	COMPLETE: 03/12/09
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2831
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 & ORANGE SILT							0.0
	SILT WITH SAND (ML) -grey -moist -marginal moisture, moist to wet 1.5-4.0 -one large 0.5m cobble @ 2.5m		126	▲	ML		■ ◆	
1.0								1.0
2.0								2.0
3.0								3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/12/11
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2832
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯▯ TUBE ▮▮ CORE

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 & ORGANIC							0.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -maximum 75mm material		127 ▲		SW-SM		◆ ■	
1.0								1.0
2.0	POORLY GRADED GRAVEL WITH SAND (GP) -moist -maximum 100mm material							2.0
3.0	-odd maximum 200mm material below 3.0m							3.0
			128 ▲		GP		◆ ■	
4.0								4.0
	SILT -orange -moist							
5.0	SANDY GRAVEL -brown -moist -maximum 75mm material		129					5.0
6.0	-lost sample # 129							6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2833
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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) -silt with organic & sand seams -grey – orange– brown -damp to moist -no gravel		130	▲	ML		■ ◆	
1.0								1.0
2.0								2.0
3.0								3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2834
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -maximum 75mm material		131 ▲		GP		◆ ■	
1.0								1.0
2.0								2.0
	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp -maximum 50mm material		132 ▲		SW		◆ ■	
3.0								3.0
4.0								4.0
	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp -maximum 50mm material		133 ▲		SW-SM		◆ ■	
5.0								5.0
6.0	SILT -brown -moist to wet							6.0
7.0	END HOLE @ 6.5m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2835
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▯ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 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			PLASTIC M.C. LIQUID 20 40 60 80				0.0
	WELL-GRADED SAND WITH GRAVEL (SW) -with roots and silt -damp -maximum 50mm material		134 ▲		SW		◆ ■	
1.0								1.0
2.0								2.0
	SILTY SAND WITH GRAVEL (SM) -brown -damp		135 ▲		SM		◆ ■	
3.0								3.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp		136 ▲		GP		◆ ■	
4.0								4.0
5.0								5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2836
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP)-(GP-GM)-(GP) -brown -damp -maximum 50mm material		137	▲	GP		◆ ■	
1.0								1.0
2.0								2.0
3.0			138	▲	GP-GM		◆ ■	3.0
4.0								4.0
5.0			139	▲	GP		◆ ■	5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2837
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	SILTY SAND WITH GRAVEL (SM) -brown -damp -maximum 75mm material		140 ▲		SM			
1.0								1.0
	SILT -brown -damp to moist							
2.0								2.0
	POORLY GRADED GRAVEL WITH SAND (GP) -maximum 75mm material							
3.0								3.0
			141 ▲		GP			
4.0								4.0
5.0	-damp to moist below 5.0m -maximum 50mm material below 5.0m		142 ▲		GP			5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2838
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp –maximum 75mm material		140 ▲		GP		◆ ■	
1.0								1.0
2.0	SILT & ROOTS –moist							2.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) –brown –damp –maximum 150mm material		141 ▲		GP-GM		◆ ■	
3.0								3.0
4.0								4.0
5.0								5.0
			142 ▲		GP		◆ ■	
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2839
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▥ TUBE ▥ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -maximum 50mm material		146 ▲		GP			
1.0								1.0
2.0								2.0
	ROOTS & SILT							
3.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp -maximum 150mm material -sample # 147 could be contaminated with silt from 2.4 to 2.9 -maximum 100mm material below 4.0m		147 ▲		GP			3.0
4.0								4.0
5.0								5.0
			148 ▲		GP			
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2840
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 & ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –maximum 100mm material		149 ▲		GP			
1.0								1.0
2.0	ROOTS							2.0
	POORLY GRADED GRAVEL WITH SAND (GP) –moist –maximum 50mm material –50mm seams of damp silt mixed with sandy gravel seams below 2.1m							
3.0			150 ▲		GP			3.0
4.0	–damp to moist below 4.0m –maximum 150mm material below 4.0m							4.0
5.0			151 ▲		GP			5.0
6.0	END HOLE @ 6.0m							6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2841
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -maximum 125mm material		152	▲	GP		◆	
1.0								1.0
	ROOTS & ORANGE SILT -moist		153	▲	ML		◆	
2.0	SILT WITH SAND (ML) -olive -moist to wet -grey below 2.4m							2.0
3.0			154	▲	ML		■ ◆	3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2842
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES / PLASTIC M.C. LIQUID	USC	SOIL SYMBOL	PERCENT SAND / PERCENT GRAVEL	DEPTH (m)
0.0	ORGANIC & SILT							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -grey -damp -maximum 100mm material		155		GP			
1.0								1.0
2.0								2.0
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp to moist -maximum 125mm material -seams of silty sand mixed with gravel		156		GP-GM			3.0
4.0								4.0
5.0								5.0
			157		GP-GM			
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

PERCENT FINES ▲ 20 40 60 80 — PLASTIC M.C. LIQUID — 20 40 60 80

PERCENT SAND ◆ 20 40 60 80 — PERCENT GRAVEL ■ 20 40 60 80

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2843
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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							0.0
	SILTY GRAVEL WITH SAND (GP) -maximum 100mm material		158 ▲		GP			1.0
2.0	SILT & ROOTS -moist							2.0
3.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -moist -maximum 150mm material		159 ▲		GP		◆	3.0
4.0								4.0
5.0			160 ▲		GP-GM		◆	5.0
6.0	ORGANIC & SILT -orange / brown -moist							6.0
7.0	END HOLE @ 6.5m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2844
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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
	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp -maximum 150mm material		161 ▲		SW		◆ ■	
1.0								1.0
2.0								2.0
3.0	POORLY GRADED GRAVEL WITH SAND (GP) -damp -maximum 75mm material -some 0.4m cobbles		162 ▲		GP		◆ ■	3.0
4.0	SANDY SILT (SM) -moist		163 ▲		SM		◆ ■	4.0
5.0								5.0
6.0								6.0
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 661-2845
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯▯ TUBE ▮▯ CORE

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
	POORLY GRADED GRAVEL WITH SAND (GP)		164 ▲		GP		◆ ■	
1.0	–brown –damp –maximum 150mm material							1.0
	SILT & ROOTS							
2.0	GRAVEL –maximum 50mm material							2.0
	WOOD / ORGANICS –orange							
3.0	SANDY SILT (ML) –moist		165	▲	ML		■ ◆	3.0
4.0								4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 03/12/12
Fig. No:	Page 1 of 1

04/01/14 08:39AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 662-2846
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	ORGANIC				
	SILT –brown –dry				
1.0	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) –brown –damp –maximum 150mm material –sample 166 contaminated by silt above		166	GP-GM	
2.0					
3.0			167	GP	
4.0					
5.0			168	GP	
6.0					
7.0	END HOLE @ 6.5m Note: Still in gravel @ 6.5m				
8.0					
9.0					
10.0					
11.0					
12.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/13
Fig. No:	Page 1 of 1

04/01/15 02:16PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 662-2847
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 -brown -damp							0.0
1.0	SILTY GRAVEL WITH SAND (GM) -brown -damp -maximum 100mm material		169 ▲		GM		◆ ■	1.0
2.0	SILT SEAM							2.0
3.0	POORLY GRADED GRAVEL WITH SILT & SAND TO WELL-GRADED SAND WITH GRAVEL (GP-GM)-(SW) -brown -damp -maximum 10mm material		170 ▲		GP-GM		◆ ■	3.0
4.0								4.0
5.0								5.0
6.0			171 ▲		SW		◆ ■	6.0
7.0	END HOLE @ 6.5m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/13
Fig. No:	Page 1 of 1

04/01/14 10:44AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 662-2848
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 & SANDY SILT –brown –damp							0.0
1.0	WELL-GRADED SAND WITH SILT AND GRAVEL (SW-SM) –brown –damp		172	▲	SW-SM		◆ ■	1.0
2.0								2.0
3.0	–mostly sand with 25mm gravel seams below 3.0m		173	▲	SW-SM		◆ ■	3.0
4.0								4.0
5.0								5.0
6.0	SILT (ML) –moist to wet		174	▲	ML		◆	6.0
7.0	END HOLE @ 6.5m							7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/13
Fig. No:	Page 1 of 1

04/01/15 02:21PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 662-2849
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 / PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 / ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP)							
1.0	-brown							1.0
	-damp							
	-maximum 100mm material below 1.5m							
2.0			175 ▲		GP-GM		◆ ■	2.0
3.0	-maximum 150mm material below 3.0m							3.0
4.0								4.0
			176 ▲		GP-GM		◆ ■	
5.0								5.0
6.0								6.0
			177 ▲		GP		◆ ■	
	END HOLE @ 6.5m							
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 6.5 m
REVIEWED BY:	COMPLETE: 03/12/13
Fig. No:	Page 1 of 1

04/01/14 10:49AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 662-2850
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 -olive -damp -orange 0.4m -0.6m							
1.0	SANDY SILT (ML) -grey / brown -damp							1.0
2.0								2.0
			178	▲	ML		■ ◆	
3.0								3.0
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
	REVIEWED BY:	COMPLETE: 03/12/14
	Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 662-2851
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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)							
1.0	-brown							1.0
	-damp							
2.0								2.0
			179	▲	ML		◆	
3.0								3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/12/14
Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT	TEST PIT NO: 662-2852
ENGINEERING CAPITAL	KM 1719 A/H RHS	Project No: 552-202101-0362
KOMATSU PC-400 LC	LOCATION: SEE PLAN & GPS	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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 WITH SAND (ML) -grey / brown -moist		180	▲	ML		■ ◆	
1.0								1.0
2.0								2.0
3.0								3.0
4.0	END HOLE @ 4.0m							4.0
5.0								5.0
6.0								6.0
7.0								7.0
8.0								8.0
9.0								9.0
10.0								10.0
11.0								11.0
12.0								12.0

Government of Yukon
Transportation Engineering

LOGGED BY: GC	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 03/12/14
Fig. No:	Page 1 of 1

04/01/14 10:44AM

Km 1719.5 RHS Alaska Highway #1
Pit Ident. 115 G-23 (Congdon Campground)

December 2003

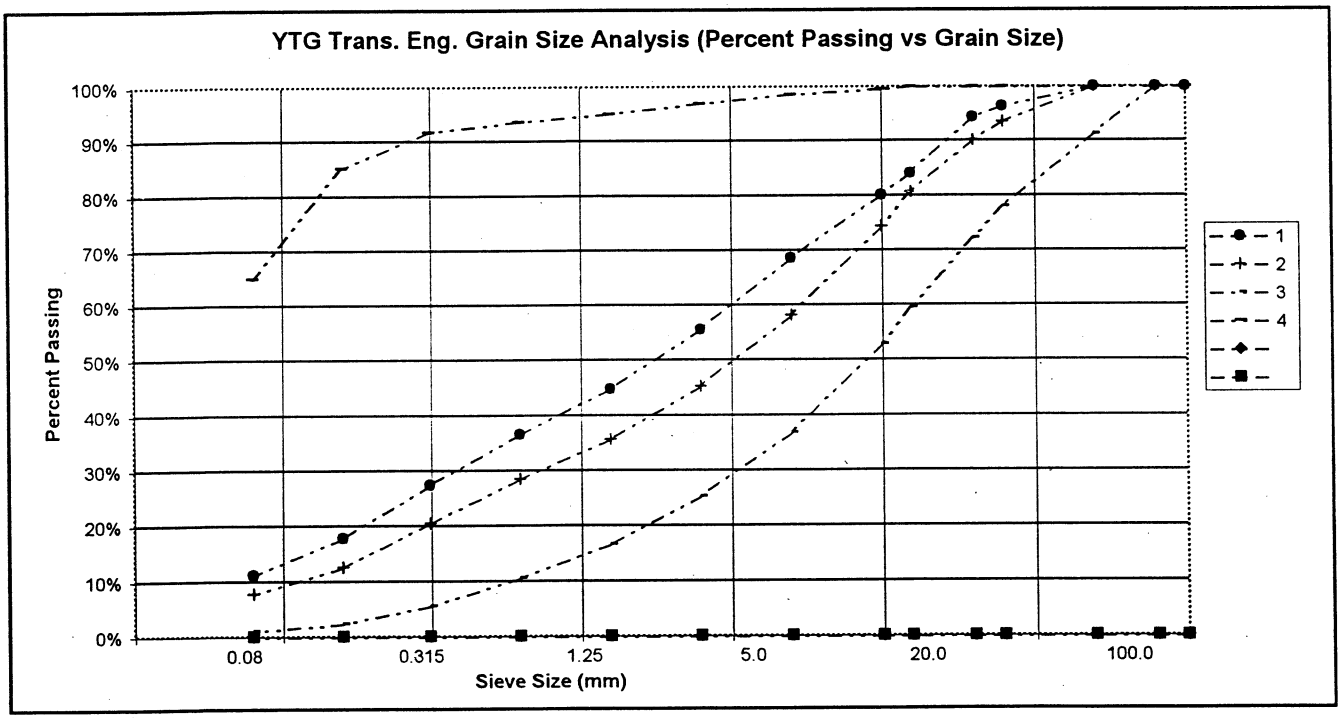
Pit Run Sample Results

PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 658-2774

DATE COMP: 03/12/04

FIELD NO:	1	2	3	4		
LAB NO:	585	586	587	588		
DEPTH:	0.5-1.0	1.6-2.0	4.0-5.0	5.8-6.2		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	91%	100%		
25.0	96%	93%	78%	100%		
20.0	94%	90%	72%	100%		
12.5	84%	81%	60%	100%		
10.0	80%	74%	53%	100%		
5.0	69%	58%	37%	99%		
2.5	56%	45%	25%	97%		
1.25	45%	36%	17%	95%		
0.630	37%	28%	11%	94%		
0.315	27%	21%	5%	92%		
0.160	18%	12%	2%	85%		
0.080	11%	8%	1%	65%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	31	42	63	1		
% SAND:	57	50	36	34		
% FINES:	11	8	1	65		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)		

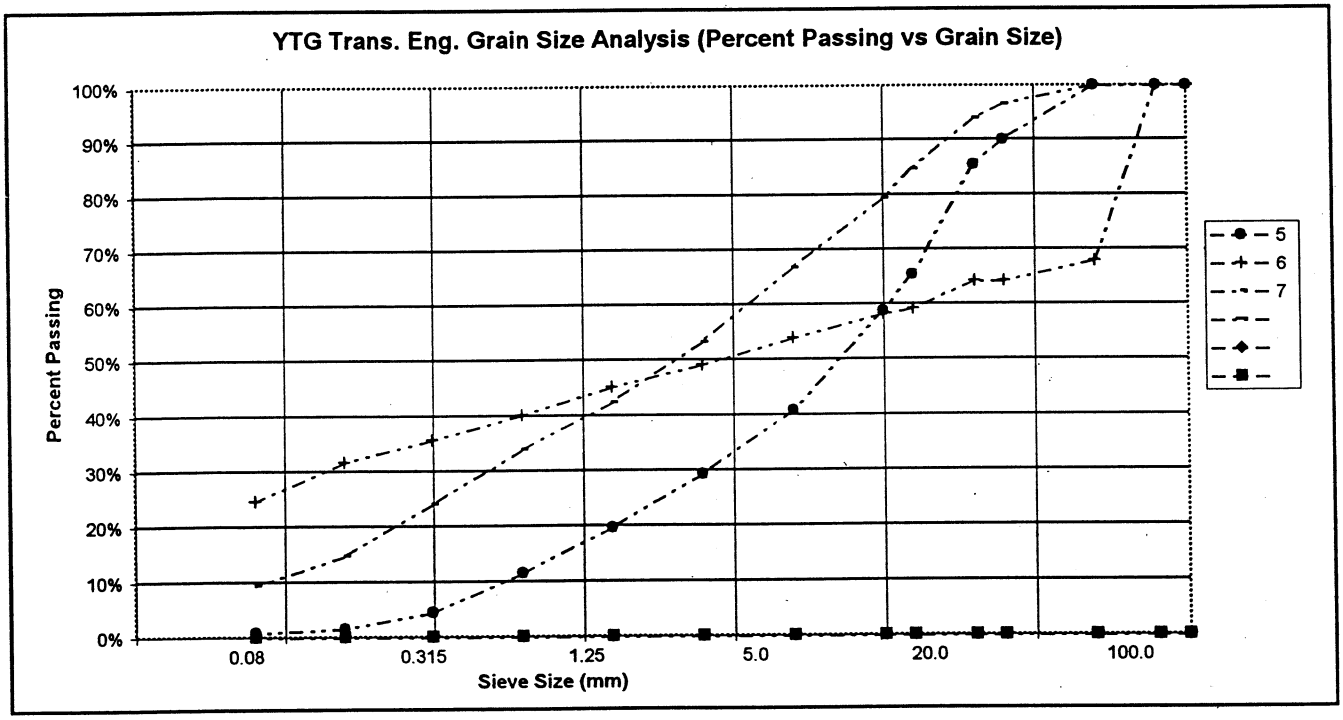


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 658-2775

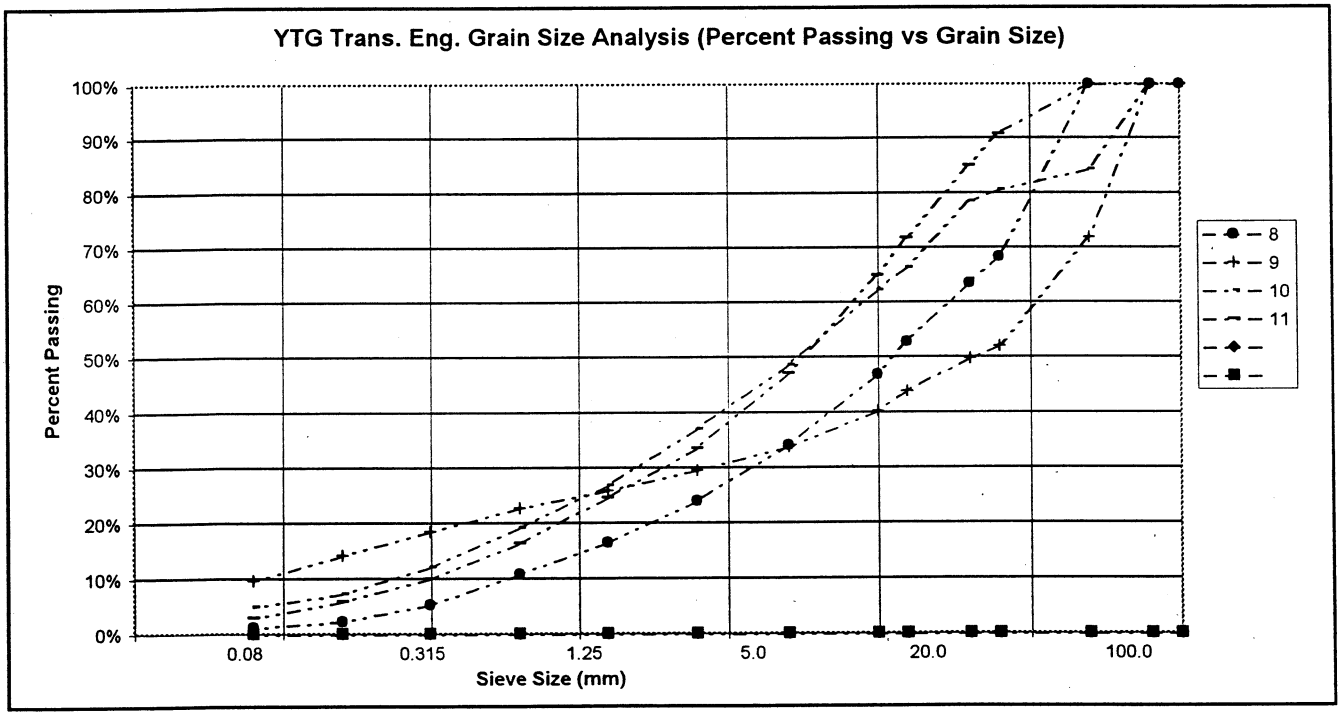
DATE COMP: 03/12/04

FIELD NO:	5	6	7			
LAB NO:	589	590	591			
DEPTH:	1.0-1.6	2.4-2.9	4.4-5.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	68%	100%			
25.0	90%	64%	97%			
20.0	86%	64%	94%			
12.5	65%	59%	85%			
10.0	59%	58%	79%			
5.0	41%	54%	67%			
2.5	29%	49%	53%			
1.25	20%	45%	42%			
0.630	12%	40%	34%			
0.315	4%	36%	24%			
0.160	2%	32%	15%			
0.080	1%	25%	9%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	59	46	33			
% SAND:	40	29	57			
% FINES:	1	25	9			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 658-2776
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/04

FIELD NO:	8	9	10	11		
LAB NO:	592	593	594	595		
DEPTH:	0.5-1.0	2.6-3.2	4.0-4.6	5.6-6.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	72%	84%	100%		
25.0	68%	52%	81%	91%		
20.0	63%	50%	78%	85%		
12.5	53%	44%	66%	72%		
10.0	47%	40%	62%	65%		
5.0	34%	34%	49%	47%		
2.5	24%	30%	37%	34%		
1.25	17%	26%	27%	25%		
0.630	11%	23%	19%	16%		
0.315	5%	19%	12%	10%		
0.160	2%	14%	7%	6%		
0.080	1%	10%	5%	3%		
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	66	51	53		
% SAND:	33	24	44	44		
% FINES:	1	10	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

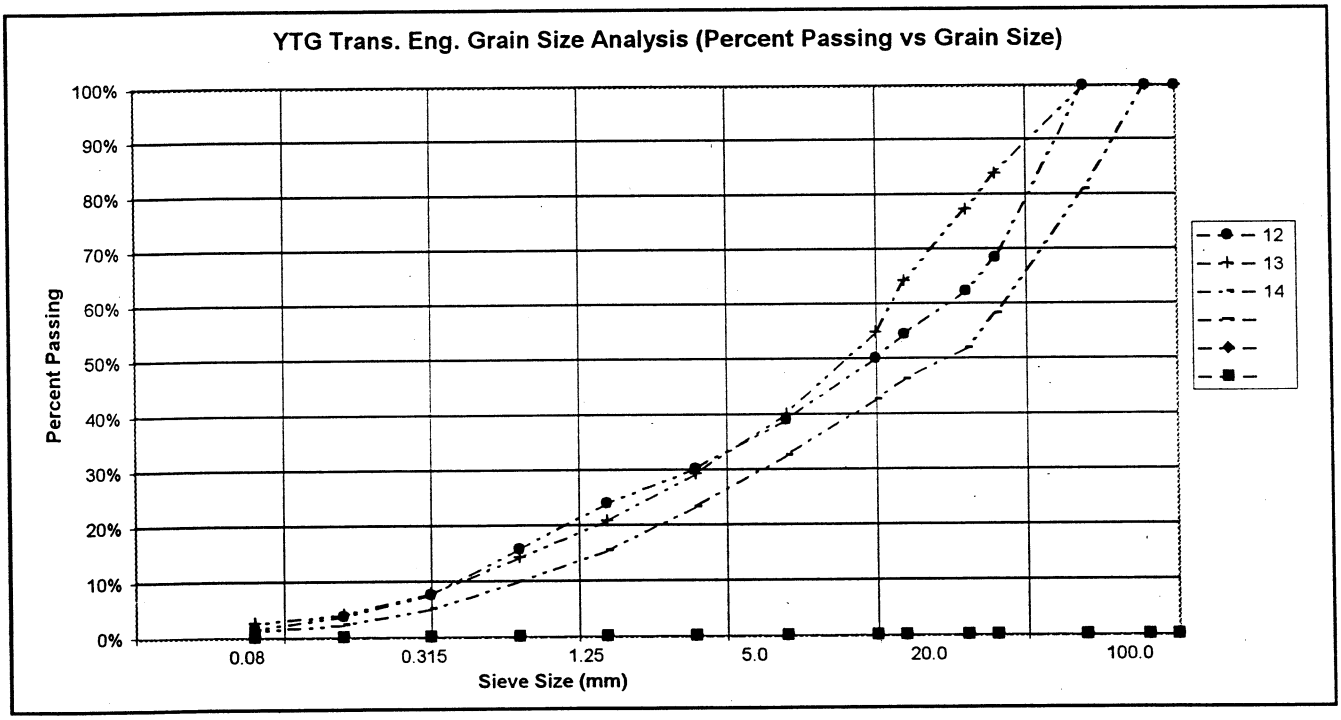


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 658-2777

DATE COMP: 03/12/04

FIELD NO:	12	13	14			
LAB NO:	596	597	598			
DEPTH:	0.5-1.0	2.0-3.0	4.0-5.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	81%			
25.0	68%	84%	58%			
20.0	62%	77%	52%			
12.5	55%	64%	46%			
10.0	50%	55%	43%			
5.0	39%	40%	33%			
2.5	30%	29%	23%			
1.25	24%	21%	15%			
0.630	16%	14%	10%			
0.315	8%	8%	5%			
0.160	4%	4%	2%			
0.080	2%	3%	1%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	61	60	67			
% SAND:	37	38	31			
% FINES:	2	3	1			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

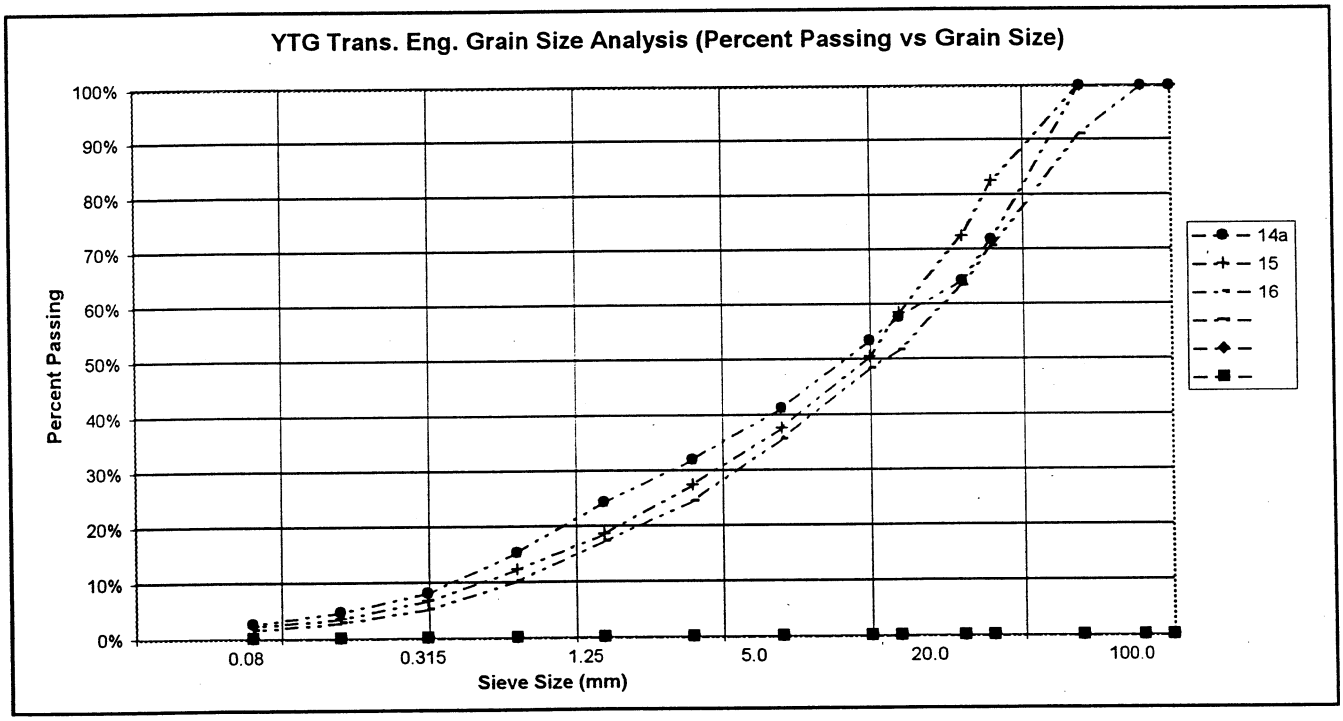


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 658-2778

DATE COMP: 03/12/04

FIELD NO:	14a	15	16			
LAB NO:	599	600	601			
DEPTH:	1.2-1.6	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	91%			
25.0	72%	83%	71%			
20.0	64%	72%	63%			
12.5	58%	58%	52%			
10.0	53%	51%	48%			
5.0	41%	38%	36%			
2.5	32%	27%	25%			
1.25	24%	19%	17%			
0.630	15%	12%	10%			
0.315	8%	7%	5%			
0.160	5%	4%	3%			
0.080	3%	2%	2%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	59	62	64			
% SAND:	39	35	34			
% FINES:	3	2	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

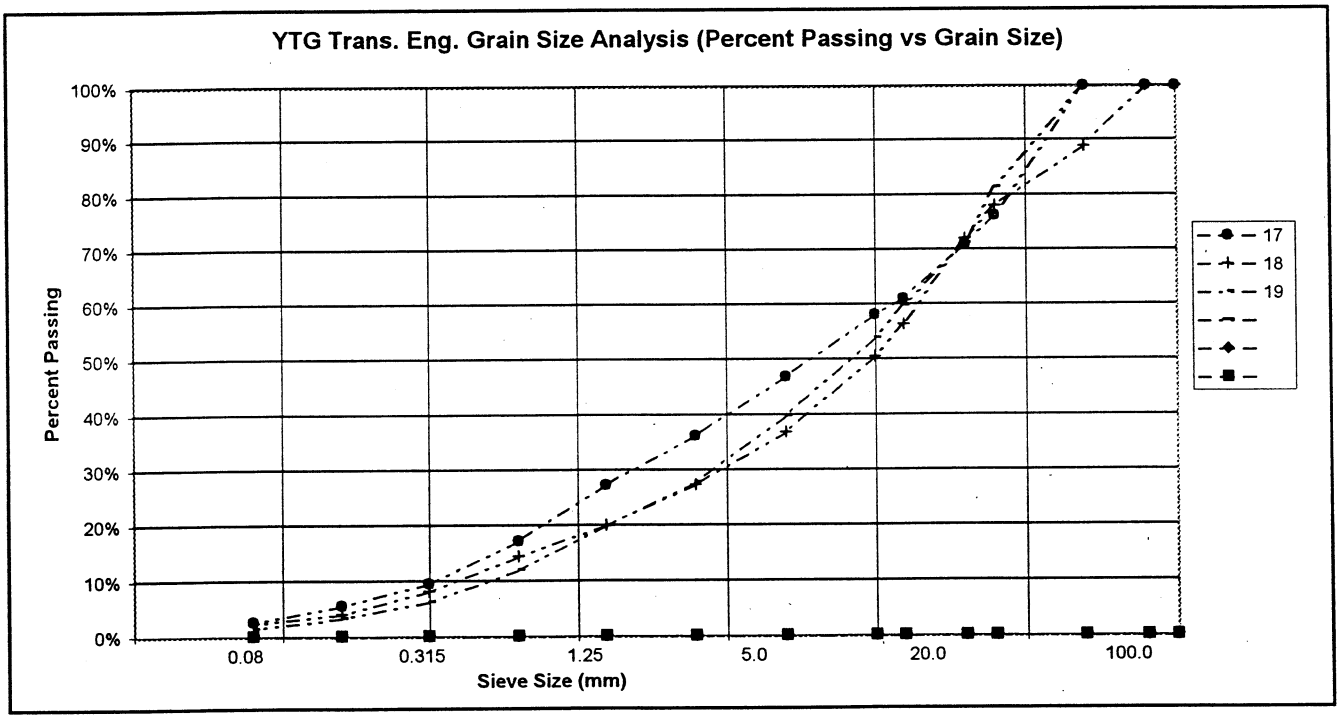


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 658-2779

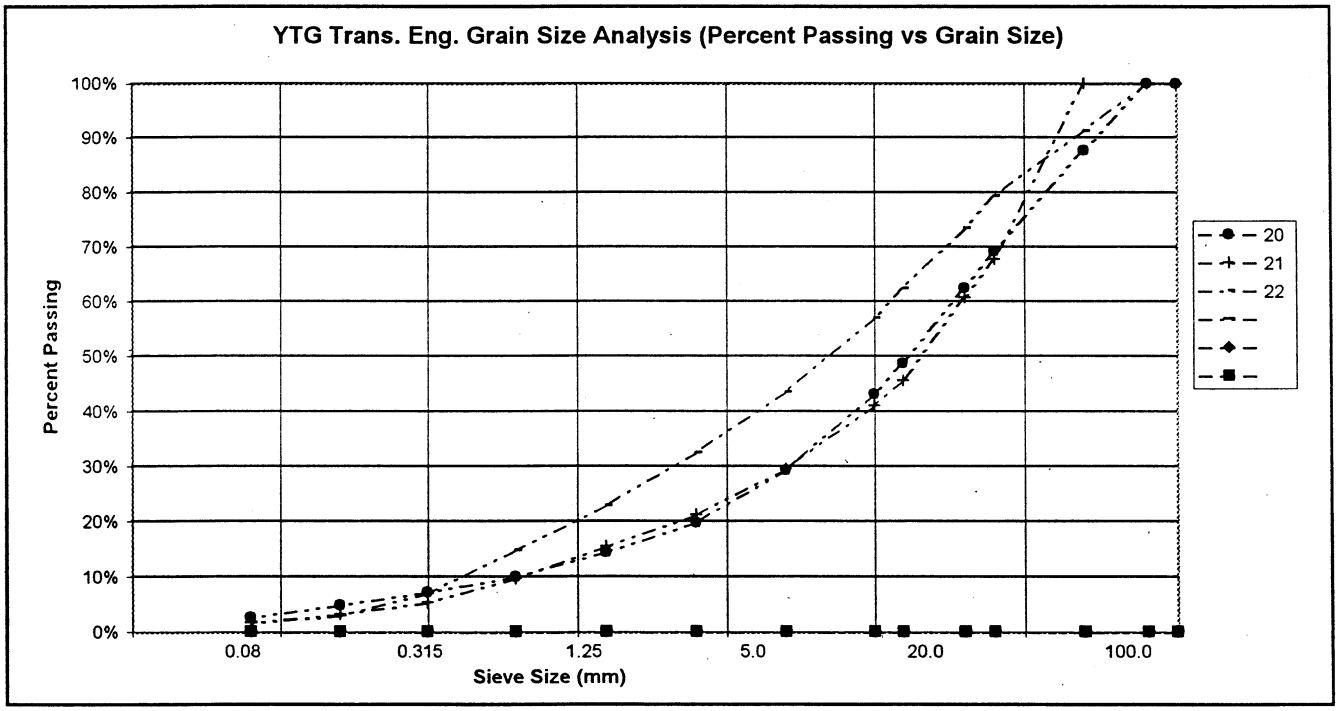
DATE COMP: 03/12/04

FIELD NO:	17	18	19			
LAB NO:	602	603	604			
DEPTH:	0.5-1.0	2.4-3.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	89%	100%			
25.0	76%	78%	81%			
20.0	71%	72%	71%			
12.5	61%	56%	60%			
10.0	58%	51%	54%			
5.0	47%	37%	40%			
2.5	36%	27%	28%			
1.25	27%	20%	20%			
0.630	17%	14%	12%			
0.315	10%	8%	6%			
0.160	5%	4%	3%			
0.080	3%	2%	1%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	53	63	60			
% SAND:	44	35	38			
% FINES:	3	2	1			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



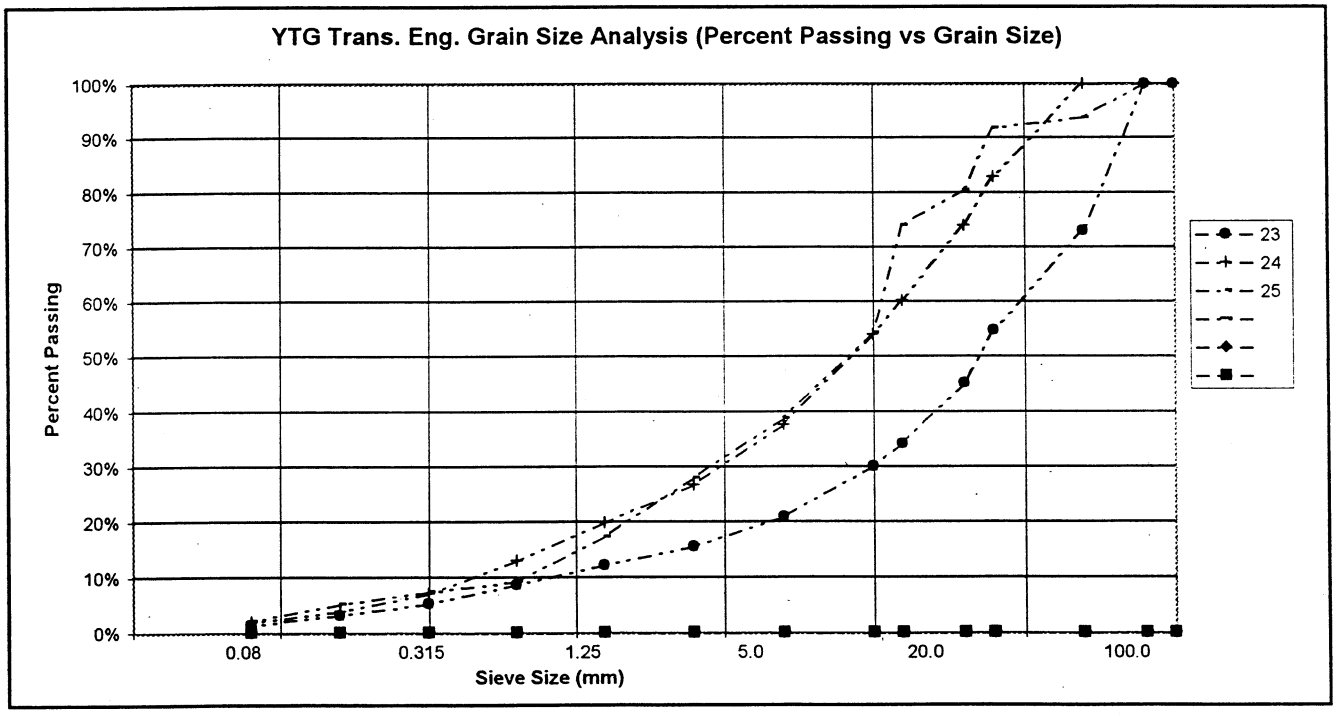
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 658-2780
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/04

FIELD NO:	20	21	22			
LAB NO:	605	606	607			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	88%	100%	91%			
25.0	69%	68%	79%			
20.0	62%	61%	73%			
12.5	49%	46%	62%			
10.0	43%	41%	57%			
5.0	29%	30%	44%			
2.5	20%	21%	33%			
1.25	14%	16%	23%			
0.630	10%	10%	15%			
0.315	7%	5%	7%			
0.160	5%	3%	3%			
0.080	3%	2%	2%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	71	70	56			
% SAND:	27	28	42			
% FINES:	3	2	2			
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



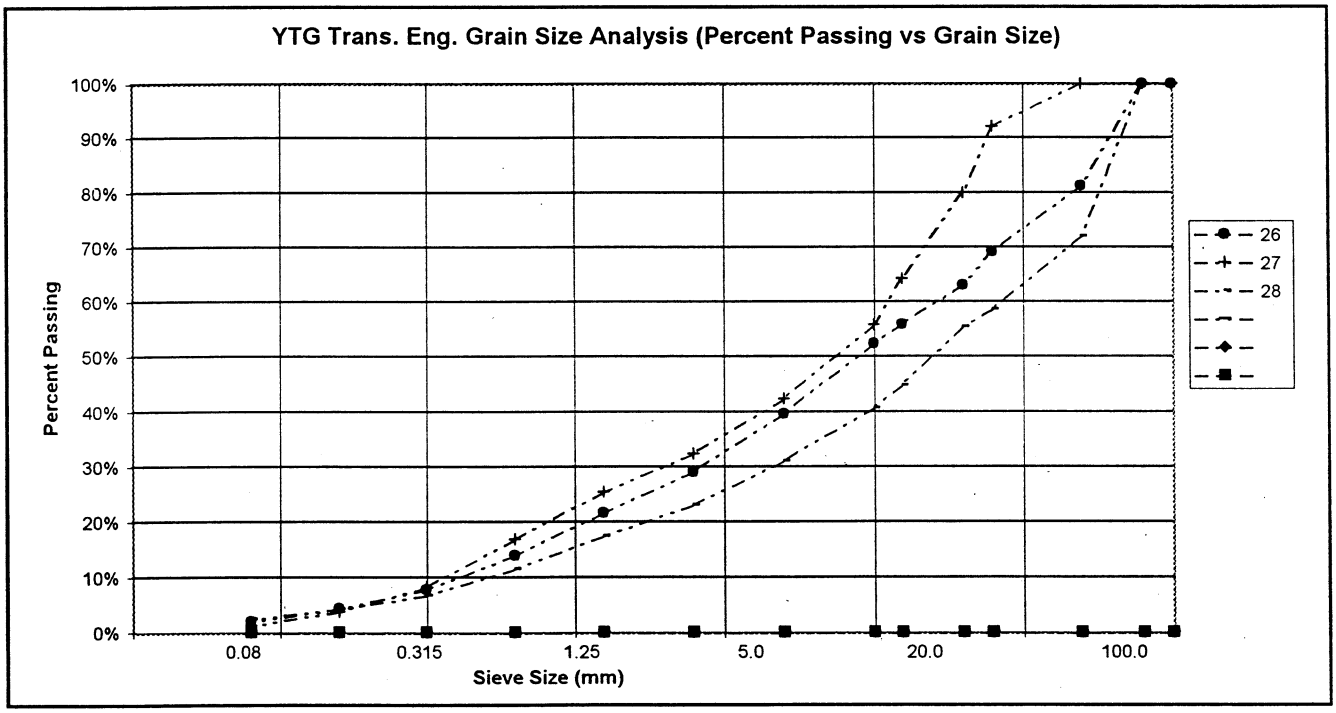
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 658-2781
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/04

FIELD NO:	23	24	25			
LAB NO:	608	609	610			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	73%	100%	94%			
25.0	55%	83%	92%			
20.0	45%	74%	80%			
12.5	34%	60%	74%			
10.0	30%	54%	54%			
5.0	21%	38%	39%			
2.5	16%	27%	28%			
1.25	12%	20%	17%			
0.630	9%	13%	9%			
0.315	5%	7%	7%			
0.160	3%	4%	5%			
0.080	1%	2%	2%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	79	62	61			
% SAND:	20	36	37			
% FINES:	1	2	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



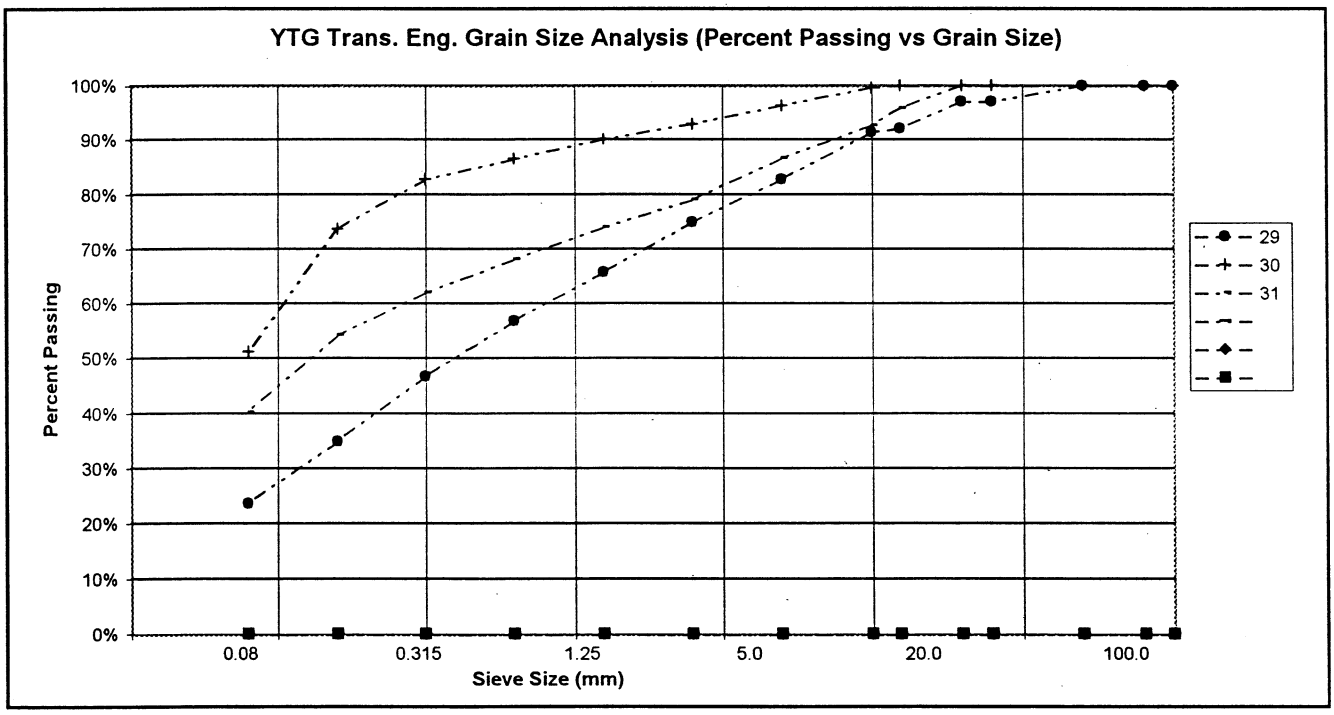
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 658-2782
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/04

FIELD NO:	26	27	28			
LAB NO:	611	612	613			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	81%	100%	72%			
25.0	69%	92%	59%			
20.0	63%	80%	55%			
12.5	56%	64%	45%			
10.0	52%	56%	41%			
5.0	40%	42%	31%			
2.5	29%	32%	23%			
1.25	22%	25%	17%			
0.630	14%	17%	11%			
0.315	8%	8%	7%			
0.160	4%	4%	4%			
0.080	2%	1%	2%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	60	58	69			
% SAND:	38	41	29			
% FINES:	2	1	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



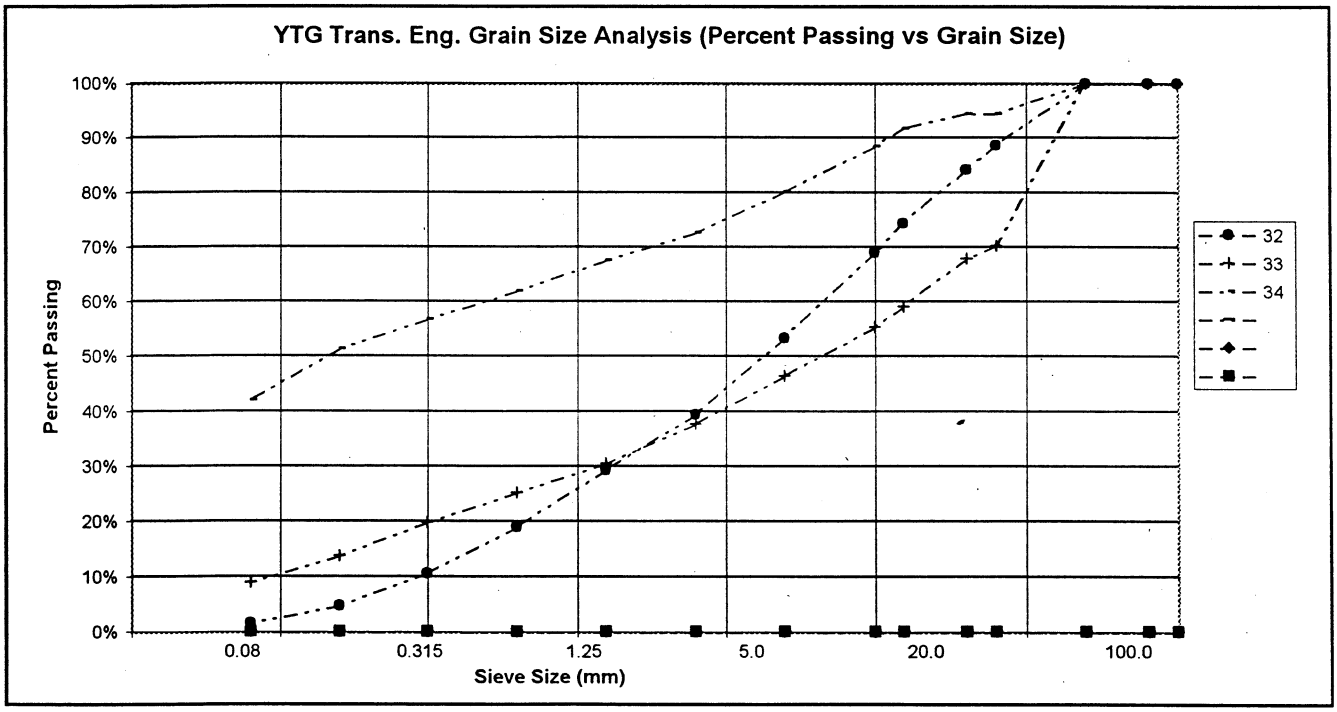
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 658-2783
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/04

FIELD NO:	29	30	31			
LAB NO:	614	615	616			
DEPTH:	0.6-1.0	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	97%	100%	100%			
20.0	97%	100%	100%			
12.5	92%	100%	96%			
10.0	91%	100%	93%			
5.0	83%	96%	87%			
2.5	75%	93%	79%			
1.25	66%	90%	74%			
0.630	57%	87%	68%			
0.315	47%	83%	62%			
0.160	35%	74%	54%			
0.080	24%	51%	40%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	17	4	13			
% SAND:	59	45	46			
% FINES:	24	51	40			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SANDY SILT (ML)	SILTY SAND (SM)			



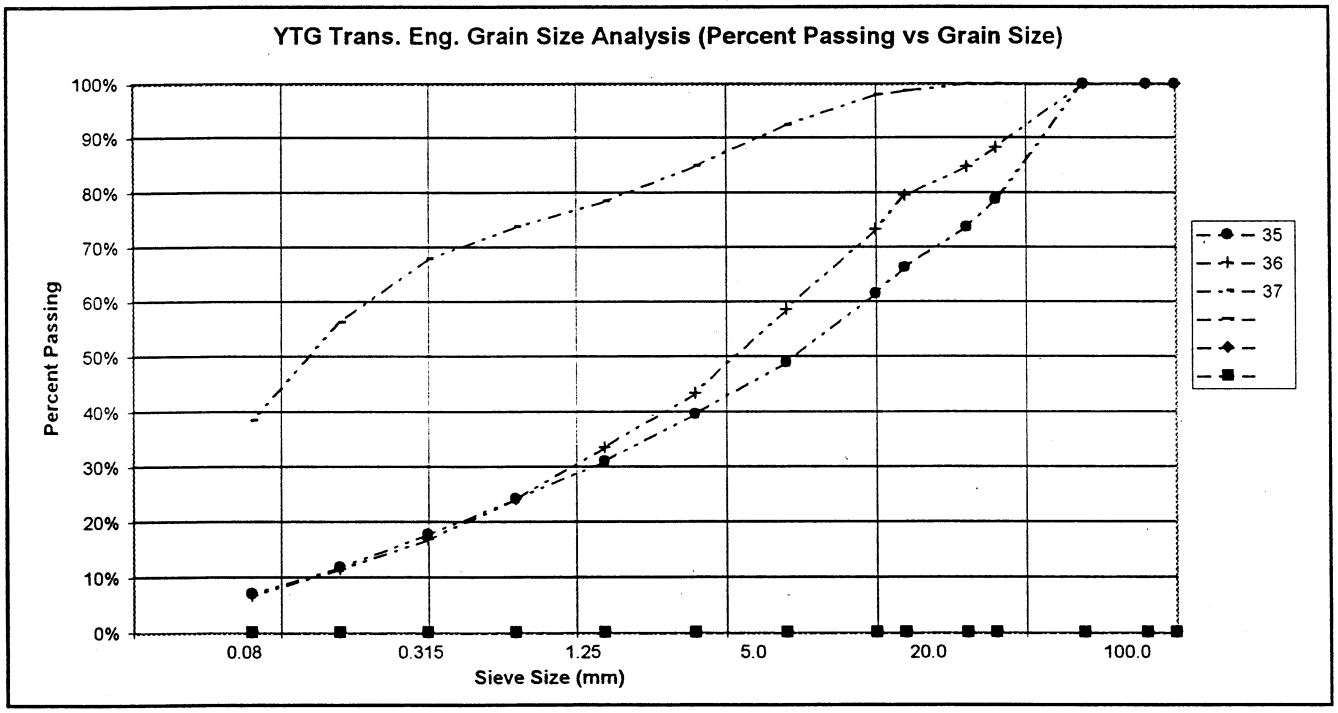
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 658-2784
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/04

FIELD NO:	32	33	34			
LAB NO:	617	618	619			
DEPTH:	0.5-1.0	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	89%	70%	95%			
20.0	84%	68%	95%			
12.5	74%	59%	92%			
10.0	69%	55%	88%			
5.0	53%	46%	80%			
2.5	39%	38%	73%			
1.25	29%	30%	68%			
0.630	19%	25%	62%			
0.315	11%	20%	57%			
0.160	5%	14%	51%			
0.080	2%	9%	42%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	47	54	20			
% SAND:	52	38	38			
% FINES:	2	9	42			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)			



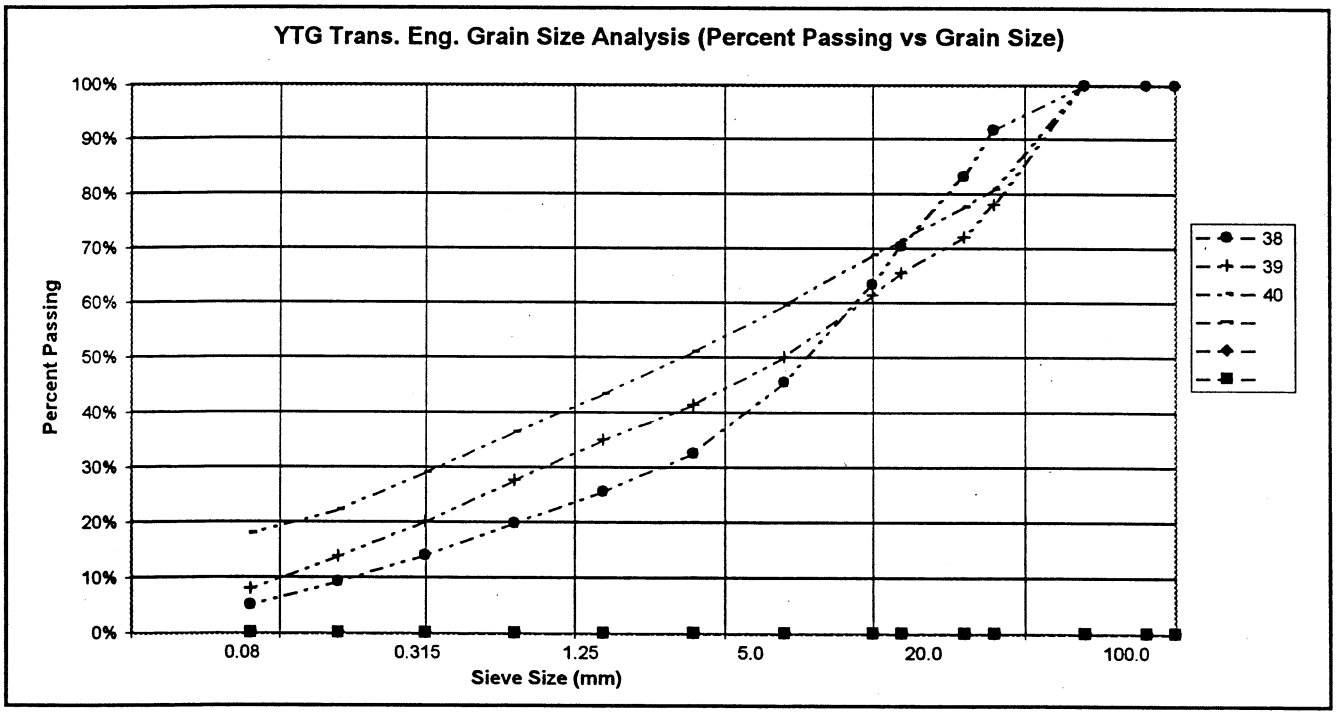
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 658-2795
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/04

FIELD NO:	35	36	37			
LAB NO:	620	621	622			
DEPTH:	0.8-1.2	2.6-3.2	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	79%	88%	100%			
20.0	74%	85%	100%			
12.5	66%	79%	99%			
10.0	62%	73%	98%			
5.0	49%	59%	92%			
2.5	40%	43%	85%			
1.25	31%	34%	78%			
0.630	24%	24%	74%			
0.315	18%	17%	68%			
0.160	12%	11%	56%			
0.080	7%	7%	38%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	51	41	8			
% SAND:	42	52	54			
% FINES:	7	7	38			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND (SM)			



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 658-2796
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/04

FIELD NO:	38	39	40			
LAB NO:	623	624	625			
DEPTH:	0.8-1.2	2.2-2.8	3.2-4.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	92%	78%	81%			
20.0	83%	72%	78%			
12.5	70%	66%	71%			
10.0	63%	61%	69%			
5.0	46%	50%	60%			
2.5	33%	41%	51%			
1.25	26%	35%	43%			
0.630	20%	28%	37%			
0.315	14%	20%	29%			
0.160	9%	14%	22%			
0.080	5%	8%	18%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	54	50	40			
% SAND:	41	42	42			
% FINES:	5	8	18			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)			

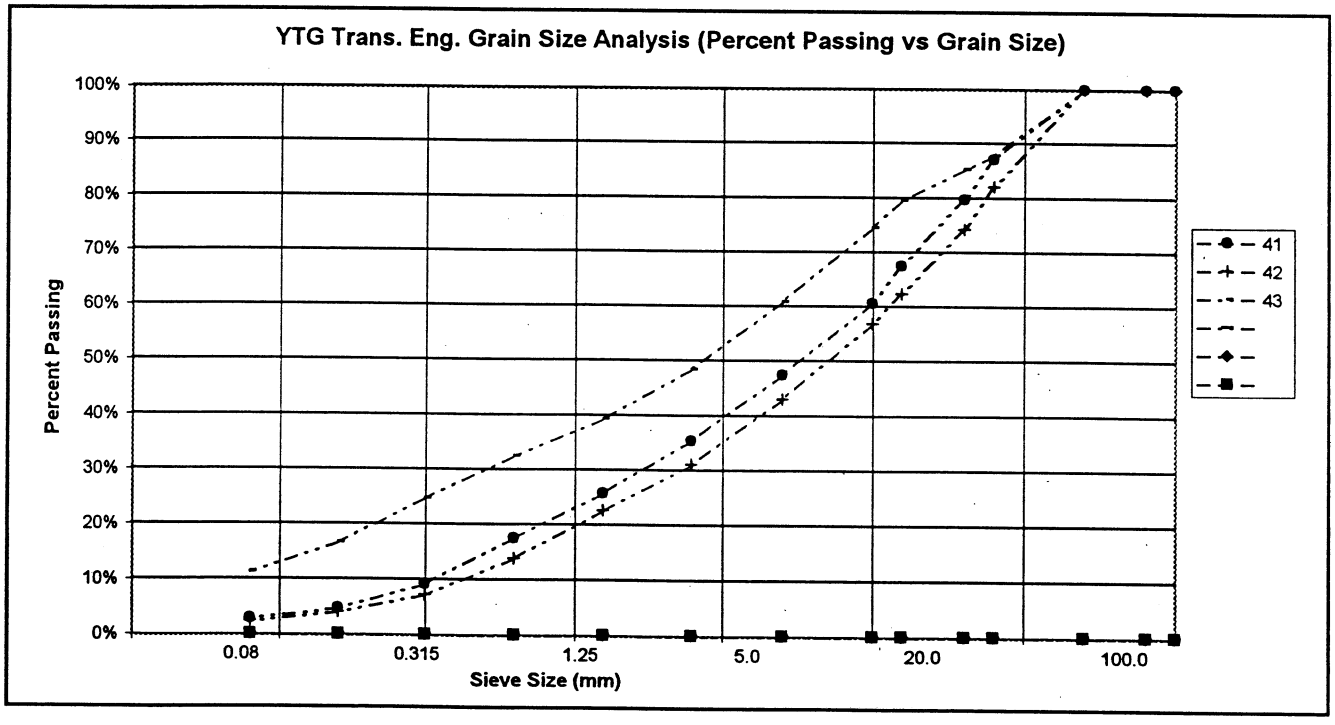


PROJECT NUMBER:	552-202101-0362-1
CLIENT:	Shakwak
PROJECT NAME:	Congdon Creek Granular Investigation
PROJECT LOCATION:	Km 1719.5 A/H
DRILL UNIT:	Komatsu PC- 400-LC
HOLE LOCATION:	See Plan / GPS
LOGGED BY:	G.C.

HOLE No.: 658-2797

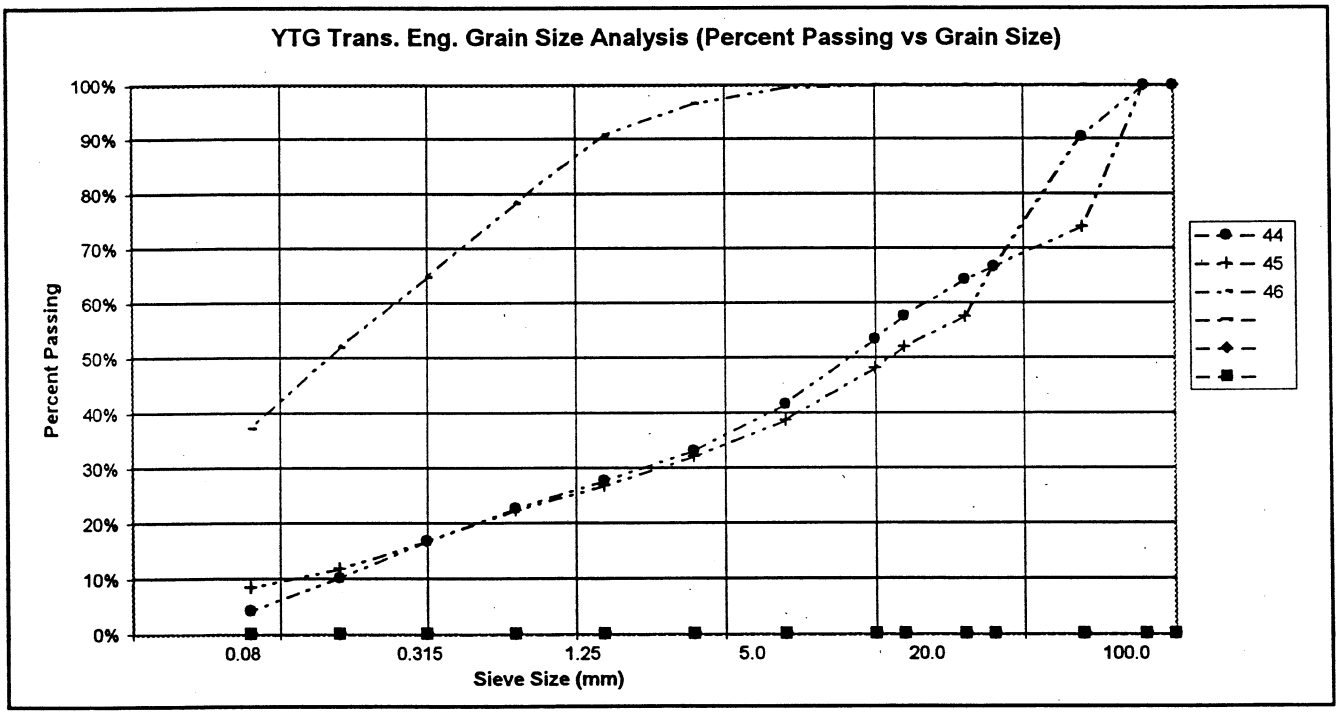
DATE COMP: 03/12/04

FIELD NO:	41	42	43			
LAB NO:	626	627	628			
DEPTH:	0.6-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	87%	82%	88%			
20.0	80%	74%	85%			
12.5	68%	62%	79%			
10.0	61%	57%	74%			
5.0	47%	43%	61%			
2.5	35%	31%	48%			
1.25	26%	23%	39%			
0.630	18%	14%	32%			
0.315	9%	7%	25%			
0.160	5%	4%	17%			
0.080	3%	2%	11%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	53	57	39			
% SAND:	45	41	50			
% FINES:	3	2	11			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2798
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	44	45	46			
LAB NO:	629	630	631			
DEPTH:	0.8-1.2	2.4-3.0	5.8-6.2			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	91%	74%	100%			
25.0	67%	67%	100%			
20.0	64%	58%	100%			
12.5	58%	52%	100%			
10.0	53%	48%	100%			
5.0	42%	39%	100%			
2.5	33%	32%	97%			
1.25	28%	27%	91%			
0.630	23%	22%	78%			
0.315	17%	17%	65%			
0.160	10%	12%	52%			
0.080	4%	8%	37%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	58	61	0			
% SAND:	37	30	62			
% FINES:	4	8	37			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND (SM)			

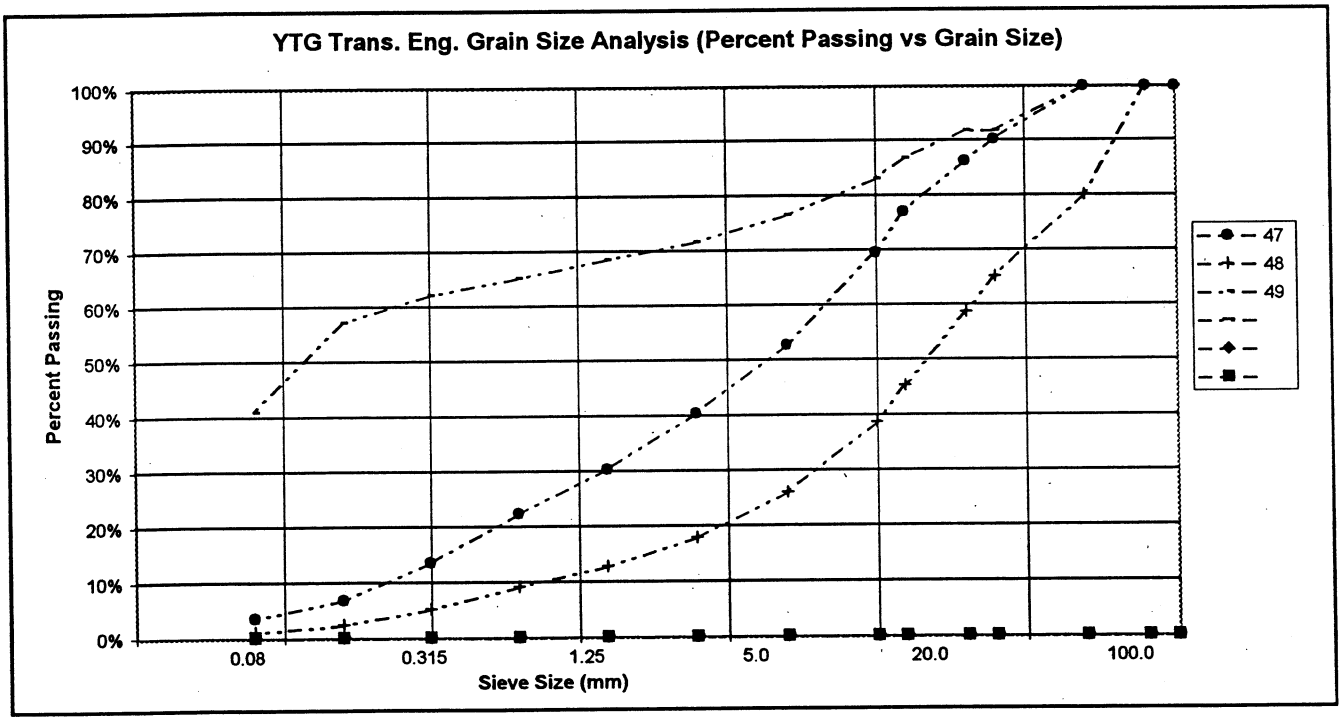


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 659-2799

DATE COMP: 03/12/06

FIELD NO:	47	48	49			
LAB NO:	632	633	634			
DEPTH:	0.8-1.2	3.0-4.0	5.8-6.2			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	80%	100%			
25.0	90%	65%	92%			
20.0	86%	59%	92%			
12.5	77%	45%	87%			
10.0	69%	39%	83%			
5.0	53%	26%	76%			
2.5	40%	18%	72%			
1.25	30%	13%	68%			
0.630	22%	9%	65%			
0.315	14%	5%	62%			
0.160	7%	2%	57%			
0.080	4%	1%	41%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	47	74	24			
% SAND:	49	25	36			
% FINES:	4	1	41			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)			

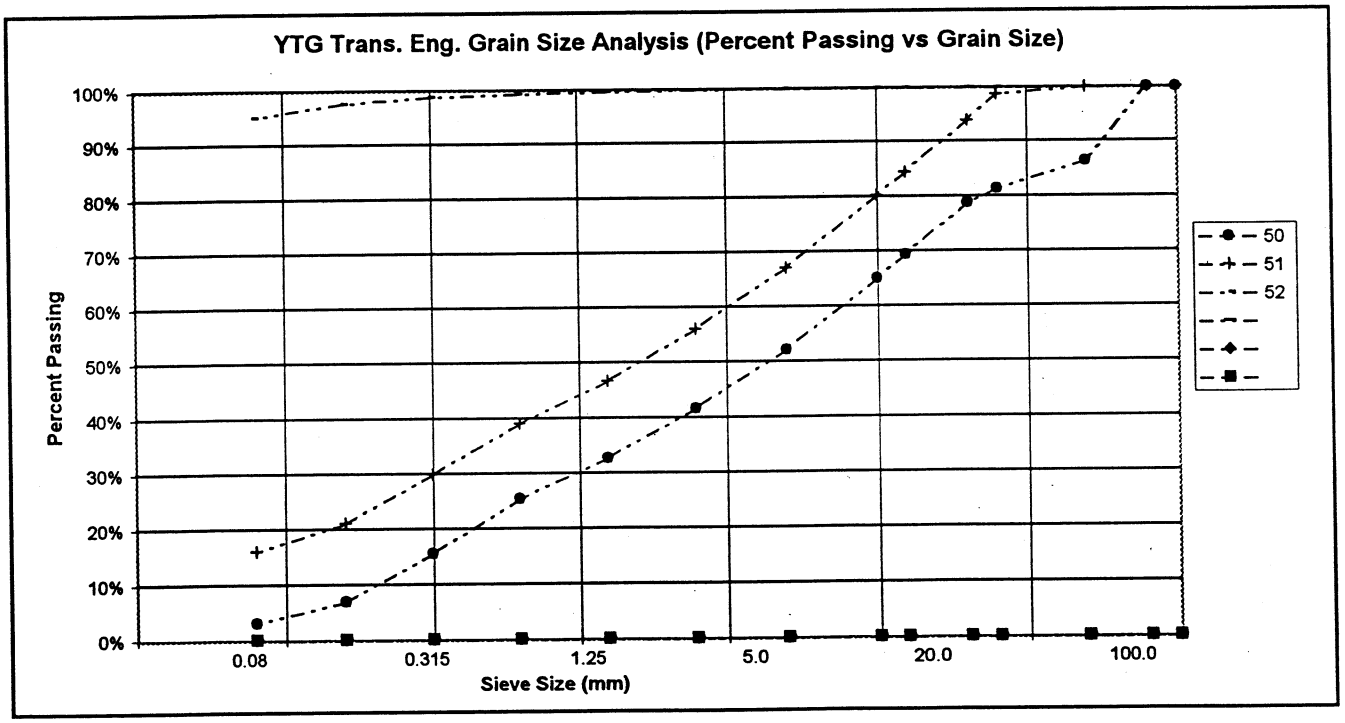


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 659-2800

DATE COMP: 03/12/06

FIELD NO:	50	51	52			
LAB NO:	635	636	637			
DEPTH:	1.7-2.0	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	86%	100%	100%			
25.0	81%	99%	100%			
20.0	79%	94%	100%			
12.5	69%	84%	100%			
10.0	65%	80%	100%			
5.0	52%	67%	100%			
2.5	42%	56%	100%			
1.25	33%	47%	100%			
0.630	25%	39%	99%			
0.315	16%	30%	99%			
0.160	7%	21%	98%			
0.080	3%	16%	95%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	48	33	0			
% SAND:	49	51	5			
% FINES:	3	16	95			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	SILTY SAND WITH GRAVEL (SM)	SILT (ML)			

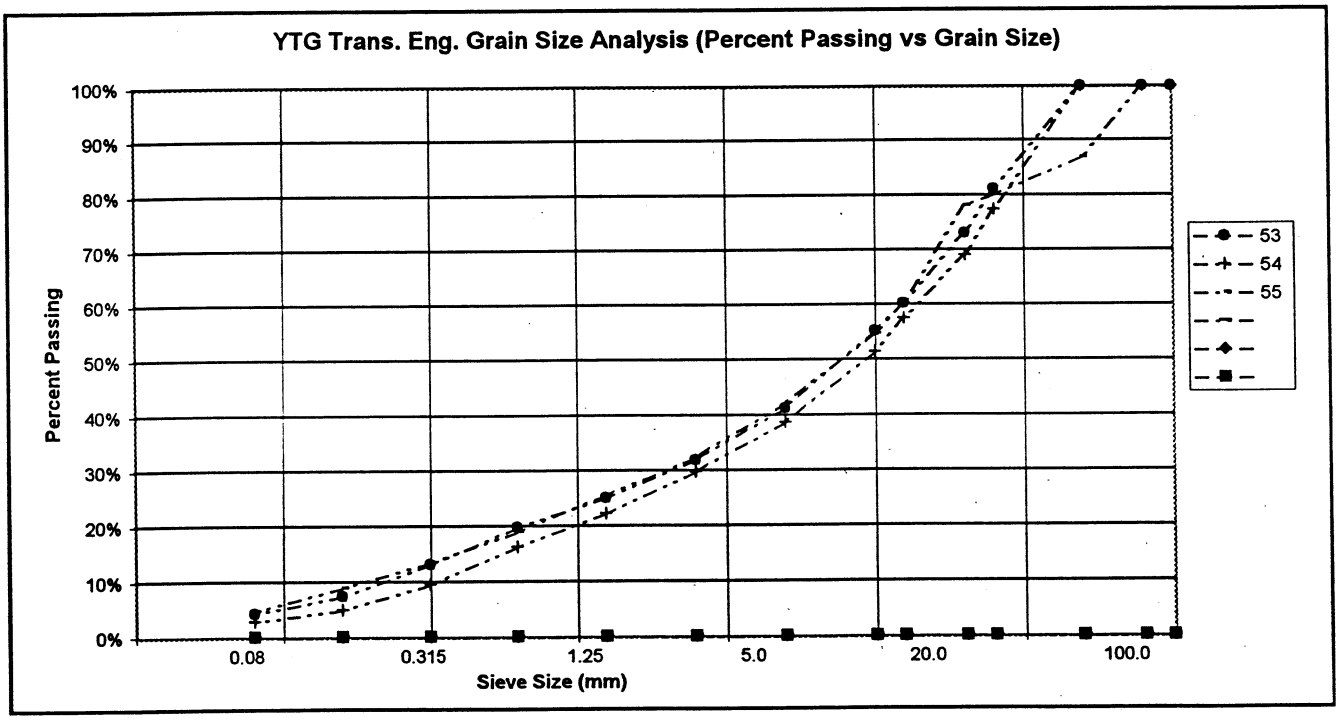


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 659-2801

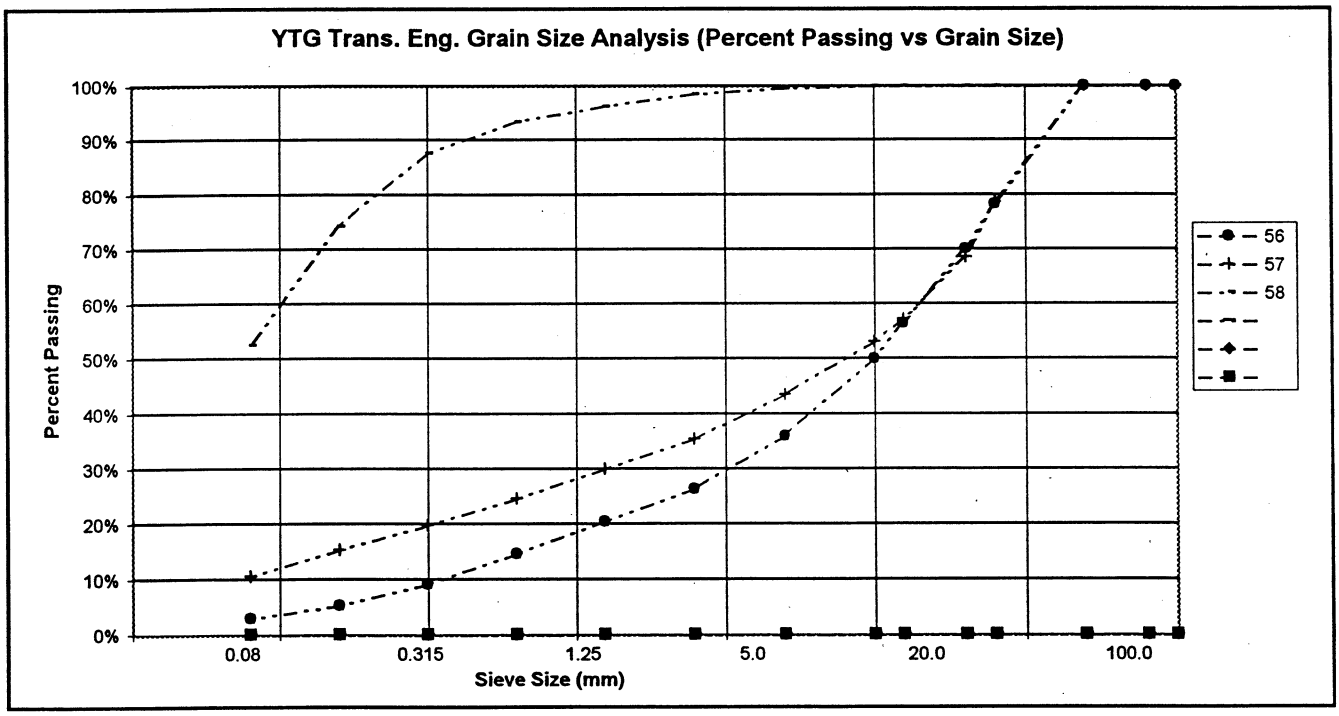
DATE COMP: 03/12/06

FIELD NO:	53	54	55			
LAB NO:	638	639	640			
DEPTH:	0.5-1.0	2.4-3.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	87%			
25.0	81%	77%	80%			
20.0	73%	69%	78%			
12.5	60%	58%	60%			
10.0	55%	51%	55%			
5.0	41%	39%	42%			
2.5	32%	30%	32%			
1.25	25%	22%	26%			
0.630	20%	16%	19%			
0.315	13%	10%	13%			
0.160	7%	5%	9%			
0.080	4%	3%	5%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	59	61	58			
% SAND:	37	36	38			
% FINES:	4	3	5			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



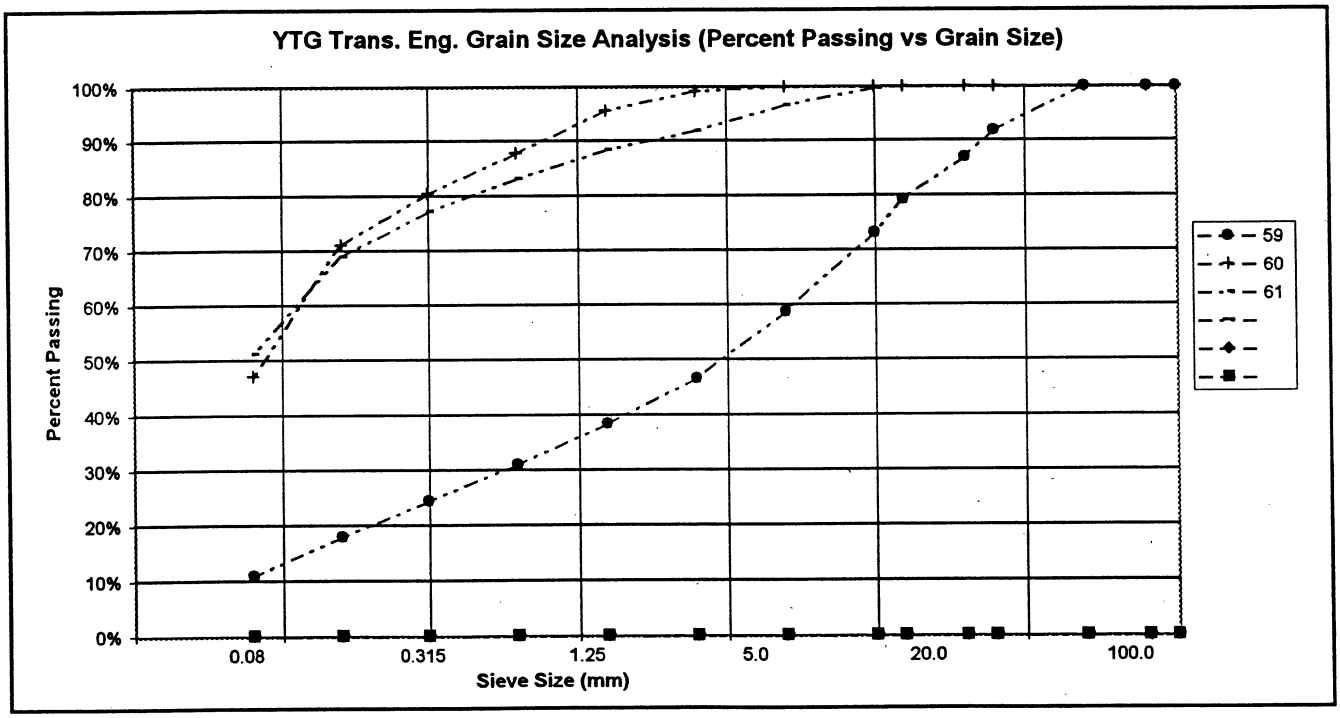
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2802
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	56	57	58			
LAB NO:	641	642	643			
DEPTH:	0.6-1.2	3.0-4.0	5.8-6.2			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	78%	79%	100%			
20.0	70%	69%	100%			
12.5	56%	57%	100%			
10.0	50%	53%	100%			
5.0	36%	43%	100%			
2.5	26%	35%	98%			
1.25	20%	30%	96%			
0.630	15%	25%	93%			
0.315	9%	20%	88%			
0.160	5%	15%	74%			
0.080	3%	11%	53%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	64	57	0			
% SAND:	33	33	47			
% FINES:	3	11	53			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SANDY SILT (ML)			



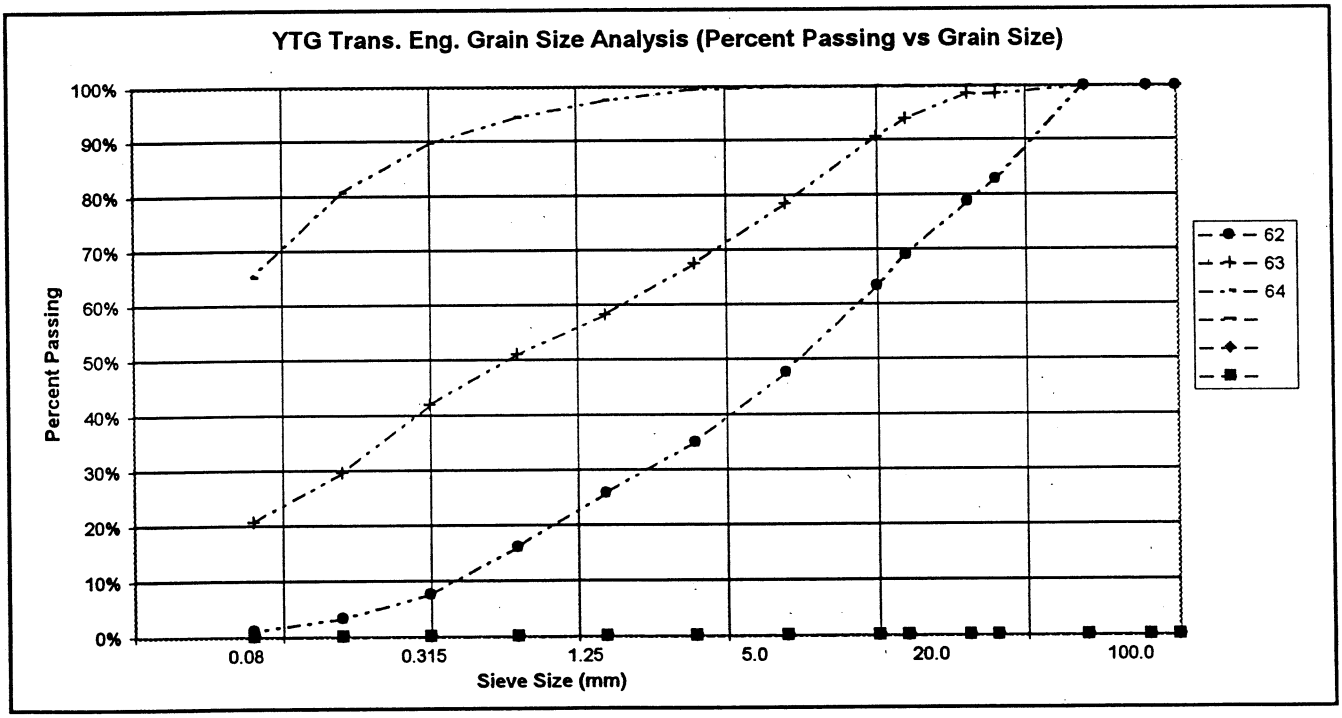
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2803
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	59	60	61			
LAB NO:	644	645	646			
DEPTH:	0.8-1.4	2.4-3.4	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	92%	100%	100%			
20.0	87%	100%	100%			
12.5	79%	100%	100%			
10.0	73%	100%	100%			
5.0	59%	100%	97%			
2.5	47%	99%	92%			
1.25	38%	96%	88%			
0.630	31%	88%	83%			
0.315	24%	80%	77%			
0.160	18%	71%	69%			
0.080	11%	47%	51%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	41	0	3			
% SAND:	48	53	45			
% FINES:	11	47	51			
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILTY SAND (SM)	SANDY SILT (ML)			



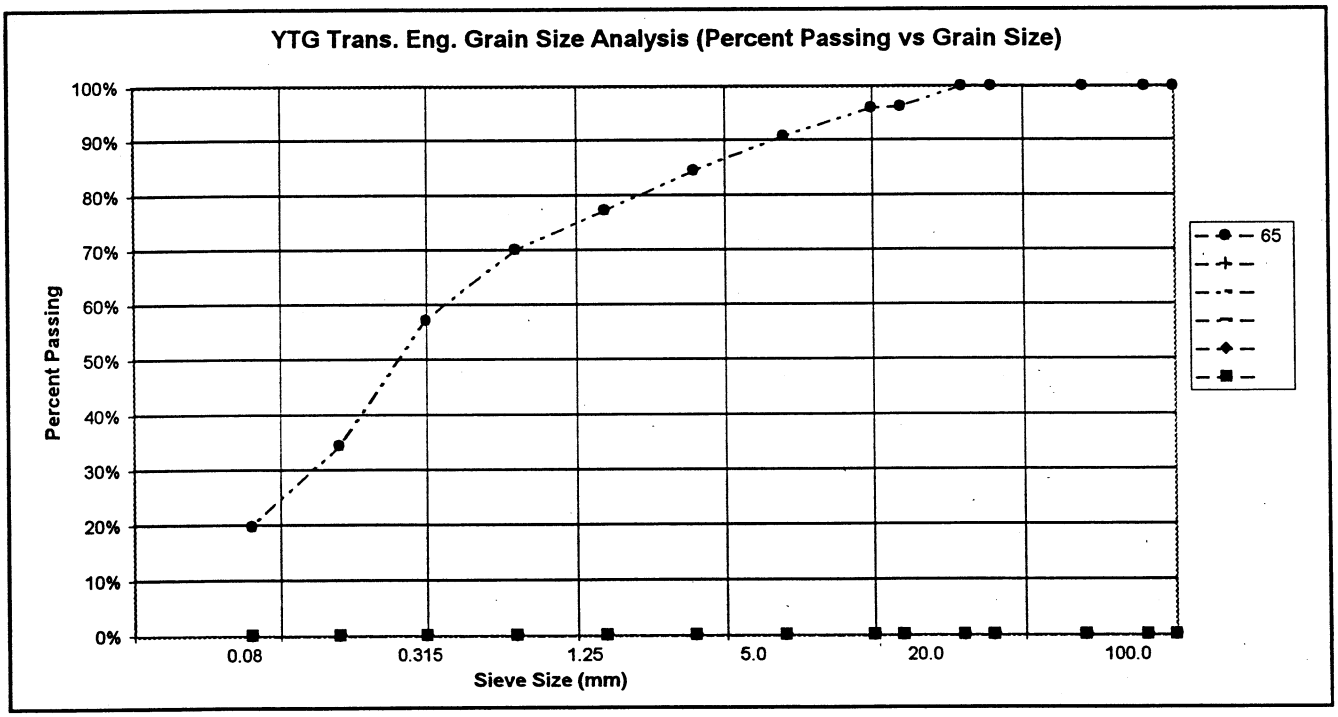
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2804
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	62	63	64			
LAB NO:	647	648	649			
DEPTH:	0.8-1.2	2.4-2.6	3.5-4.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	83%	99%	100%			
20.0	79%	99%	100%			
12.5	69%	94%	100%			
10.0	63%	91%	100%			
5.0	48%	78%	100%			
2.5	35%	68%	100%			
1.25	26%	58%	98%			
0.630	16%	51%	95%			
0.315	8%	42%	90%			
0.160	3%	30%	81%			
0.080	1%	21%	65%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	52	22	0			
% SAND:	47	58	35			
% FINES:	1	21	65			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	SANDY SILT (ML)			



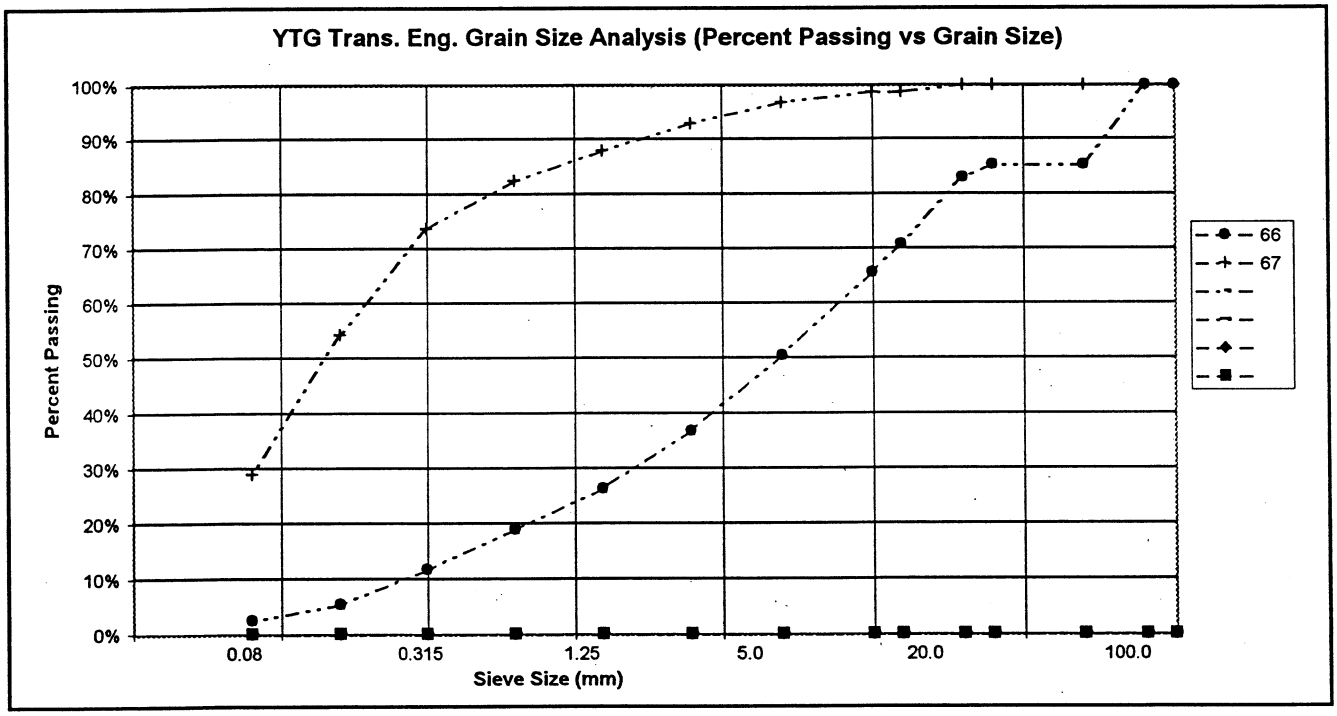
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2805
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	65					
LAB NO:	650					
DEPTH:	0.4-0.8					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	100%					
20.0	100%					
12.5	96%					
10.0	96%					
5.0	91%					
2.5	85%					
1.25	77%					
0.630	70%					
0.315	57%					
0.160	34%					
0.080	20%					
M.C.(%):						
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	9					
% SAND:	71					
% FINES:	20					
CLASSIFICATION	SILTY SAND (SM)					



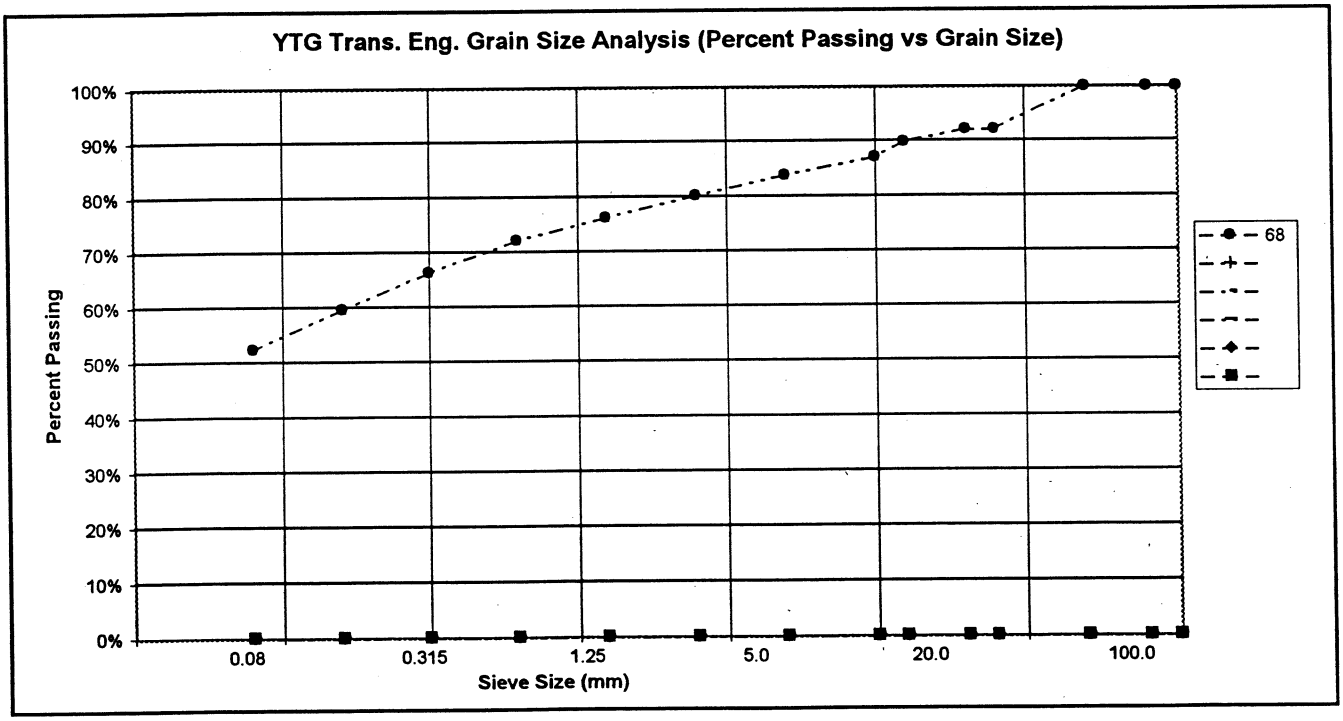
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2806
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	66	67				
LAB NO:	651	652				
DEPTH:	0.8-1.0	1.6-2.4				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	85%	100%				
25.0	85%	100%				
20.0	83%	100%				
12.5	71%	99%				
10.0	66%	99%				
5.0	50%	97%				
2.5	37%	93%				
1.25	26%	88%				
0.630	19%	82%				
0.315	12%	74%				
0.160	5%	54%				
0.080	2%	29%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	50	3				
% SAND:	48	68				
% FINES:	2	29				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)				



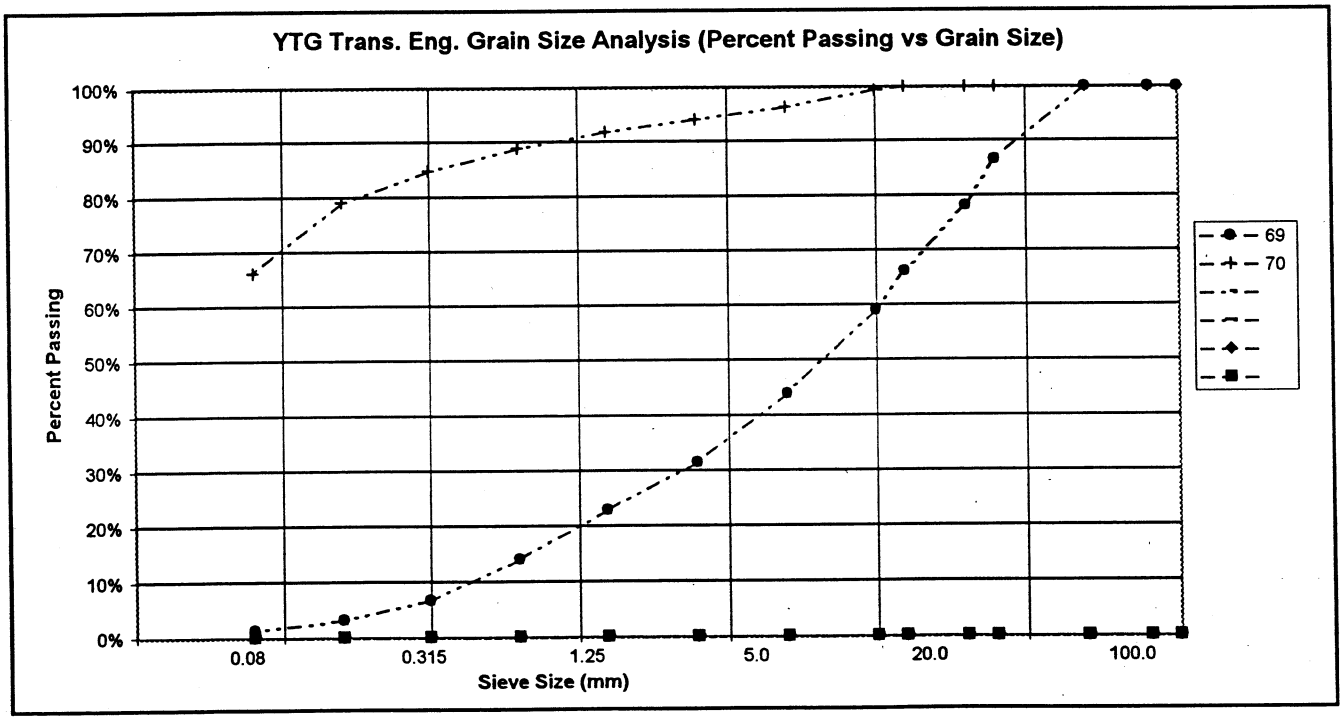
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2807
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	68					
LAB NO:	653					
DEPTH:	1.0-2.0					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	92%					
20.0	92%					
12.5	90%					
10.0	87%					
5.0	84%					
2.5	80%					
1.25	76%					
0.630	72%					
0.315	66%					
0.160	60%					
0.080	52%					
M.C.(%):						
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	16					
% SAND:	31					
% FINES:	52					
CLASSIFICATION	SANDY SILT WITH GRAVEL (ML)					



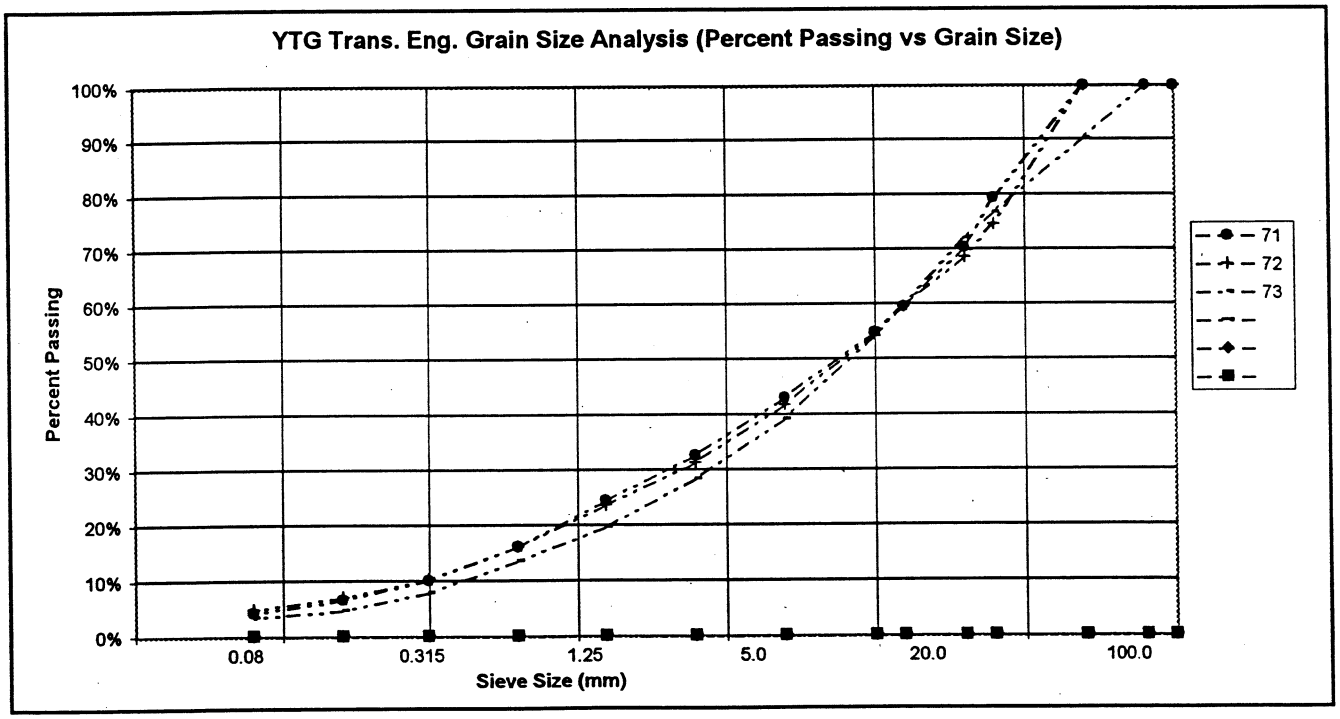
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2808
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	69	70				
LAB NO:	654	655				
DEPTH:	0.8-1.2	2.4-2.8				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	87%	100%				
20.0	78%	100%				
12.5	66%	100%				
10.0	59%	99%				
5.0	44%	96%				
2.5	31%	94%				
1.25	23%	92%				
0.630	14%	89%				
0.315	7%	85%				
0.160	3%	79%				
0.080	1%	66%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	56	4				
% SAND:	43	30				
% FINES:	1	66				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)				



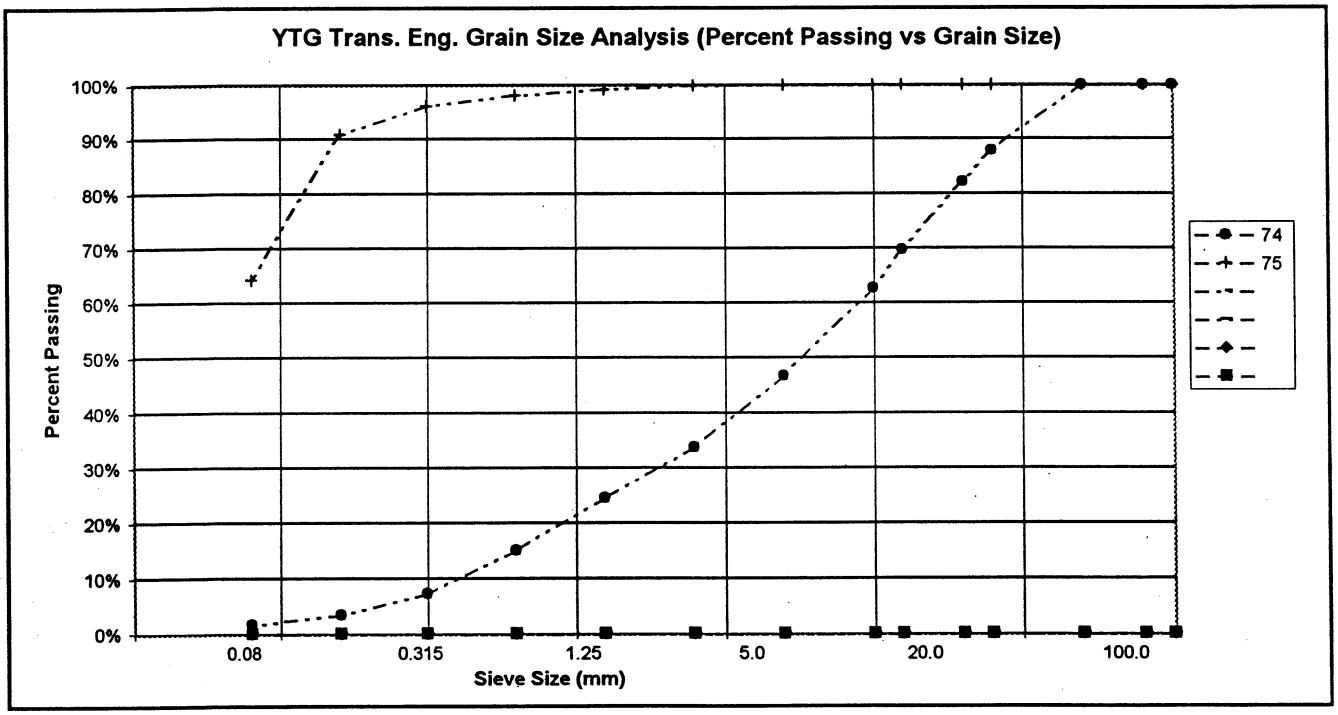
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 659-2809
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/06

FIELD NO:	71	72	73			
LAB NO:	656	657	658			
DEPTH:	0.8-1.2	1.8-2.2	4.0-5.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	90%			
25.0	79%	75%	77%			
20.0	70%	69%	72%			
12.5	60%	60%	60%			
10.0	55%	54%	54%			
5.0	43%	42%	39%			
2.5	33%	31%	28%			
1.25	24%	24%	20%			
0.630	16%	16%	14%			
0.315	10%	10%	8%			
0.160	7%	7%	5%			
0.080	4%	5%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	57	58	61			
% SAND:	39	37	36			
% FINES:	4	5	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



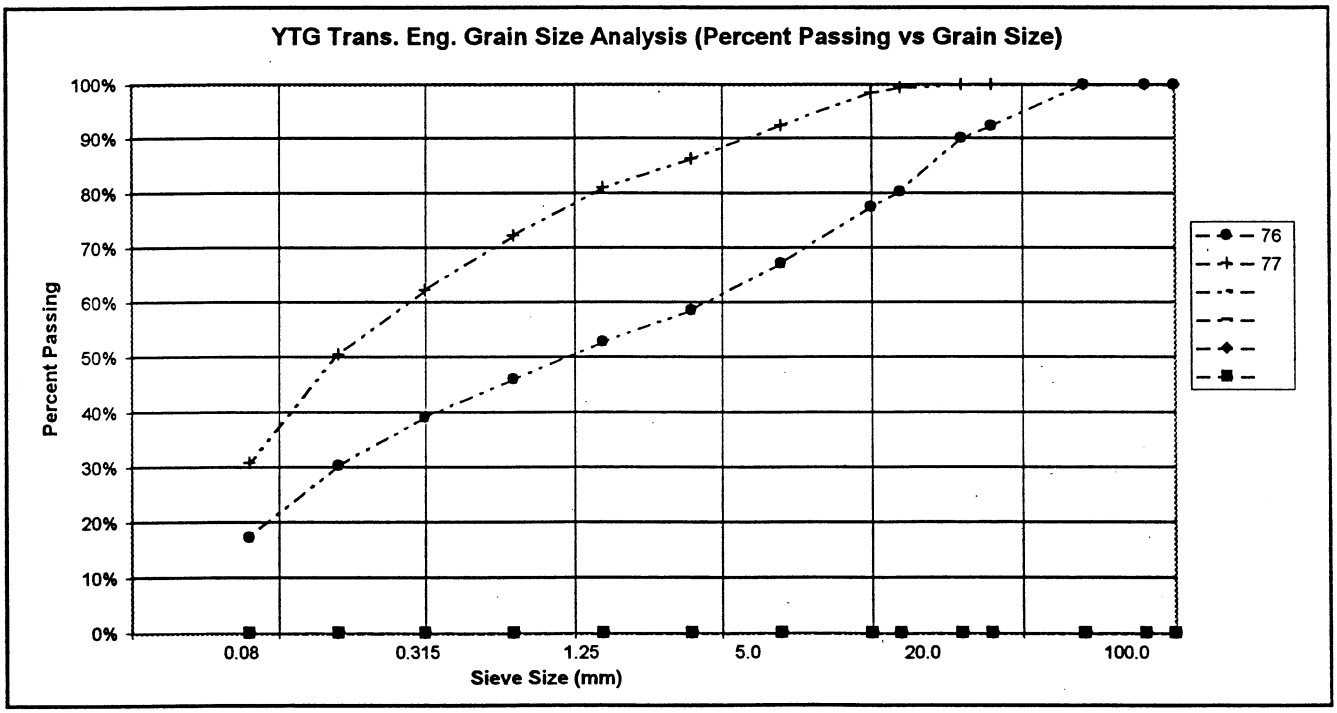
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2810
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	74	75				
LAB NO:	659	660				
DEPTH:	0.8-1.2	3.0-4.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	88%	100%				
20.0	82%	100%				
12.5	70%	100%				
10.0	63%	100%				
5.0	47%	100%				
2.5	34%	100%				
1.25	25%	99%				
0.630	15%	98%				
0.315	7%	96%				
0.160	3%	91%				
0.080	2%	64%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	53	0				
% SAND:	45	36				
% FINES:	2	64				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)				



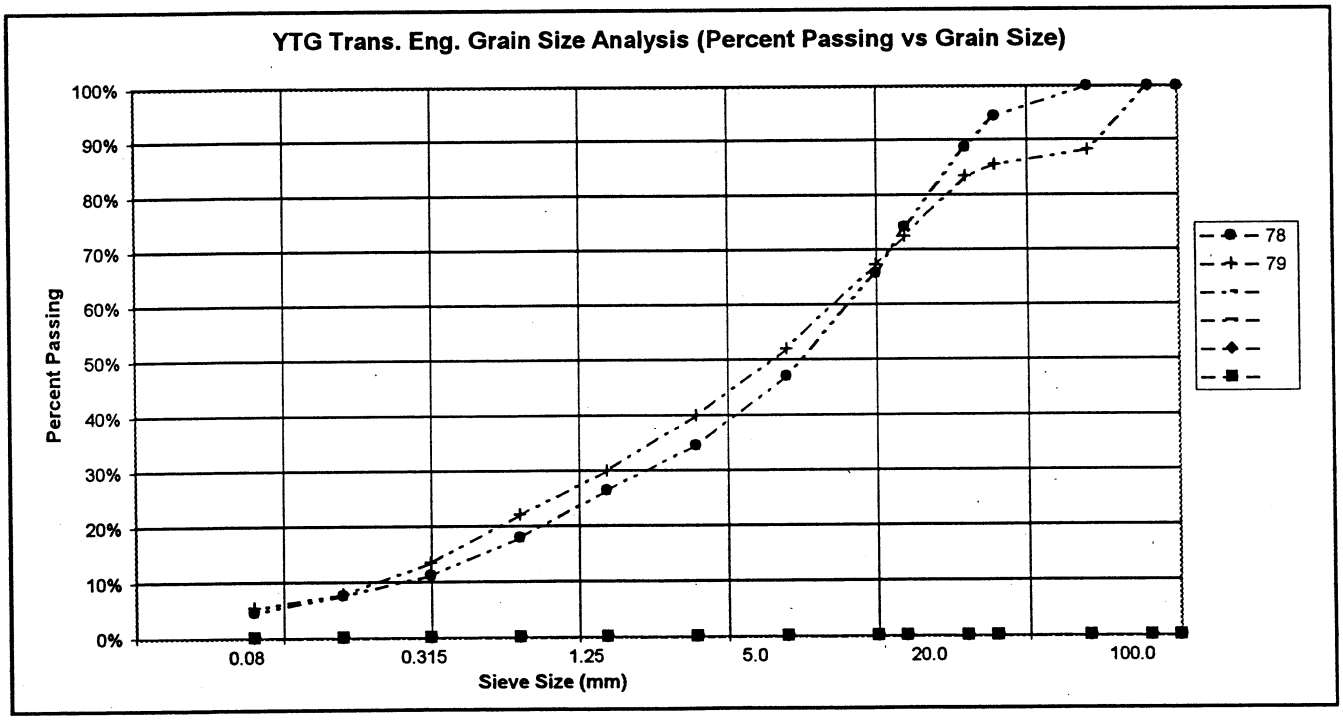
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2811
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/06

FIELD NO:	76	77				
LAB NO:	661	662				
DEPTH:	0.4-1.0	2.5-3.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	92%	100%				
20.0	90%	100%				
12.5	80%	99%				
10.0	78%	98%				
5.0	67%	93%				
2.5	59%	86%				
1.25	53%	81%				
0.630	46%	72%				
0.315	39%	62%				
0.160	30%	51%				
0.080	17%	31%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	33	7				
% SAND:	50	62				
% FINES:	17	31				
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)				



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2812
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/07

FIELD NO:	78	79				
LAB NO:	663	664				
DEPTH:	0.6-1.2	3.0-4.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	88%				
25.0	94%	86%				
20.0	89%	83%				
12.5	74%	72%				
10.0	66%	67%				
5.0	47%	52%				
2.5	35%	40%				
1.25	26%	30%				
0.630	18%	22%				
0.315	11%	13%				
0.160	8%	8%				
0.080	5%	5%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	53	48				
% SAND:	43	47				
% FINES:	5	5				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

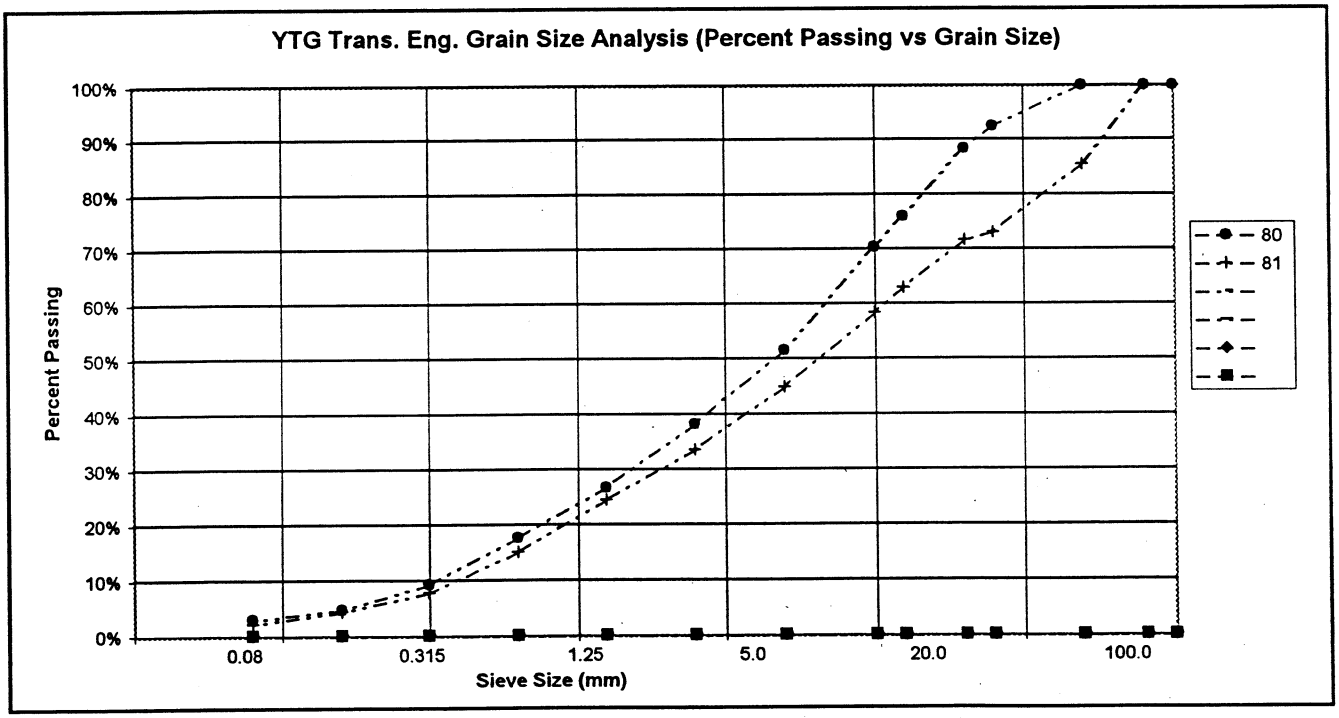


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 659-2813

DATE COMP: 03/12/07

FIELD NO:	80	81				
LAB NO:	665	666				
DEPTH:	0.8-1.4	3.0-4.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	85%				
25.0	92%	73%				
20.0	88%	72%				
12.5	76%	63%				
10.0	70%	58%				
5.0	52%	45%				
2.5	38%	34%				
1.25	27%	24%				
0.630	18%	15%				
0.315	9%	8%				
0.160	5%	4%				
0.080	3%	2%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	48	55				
% SAND:	49	43				
% FINES:	3	2				
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SAND (GP)				

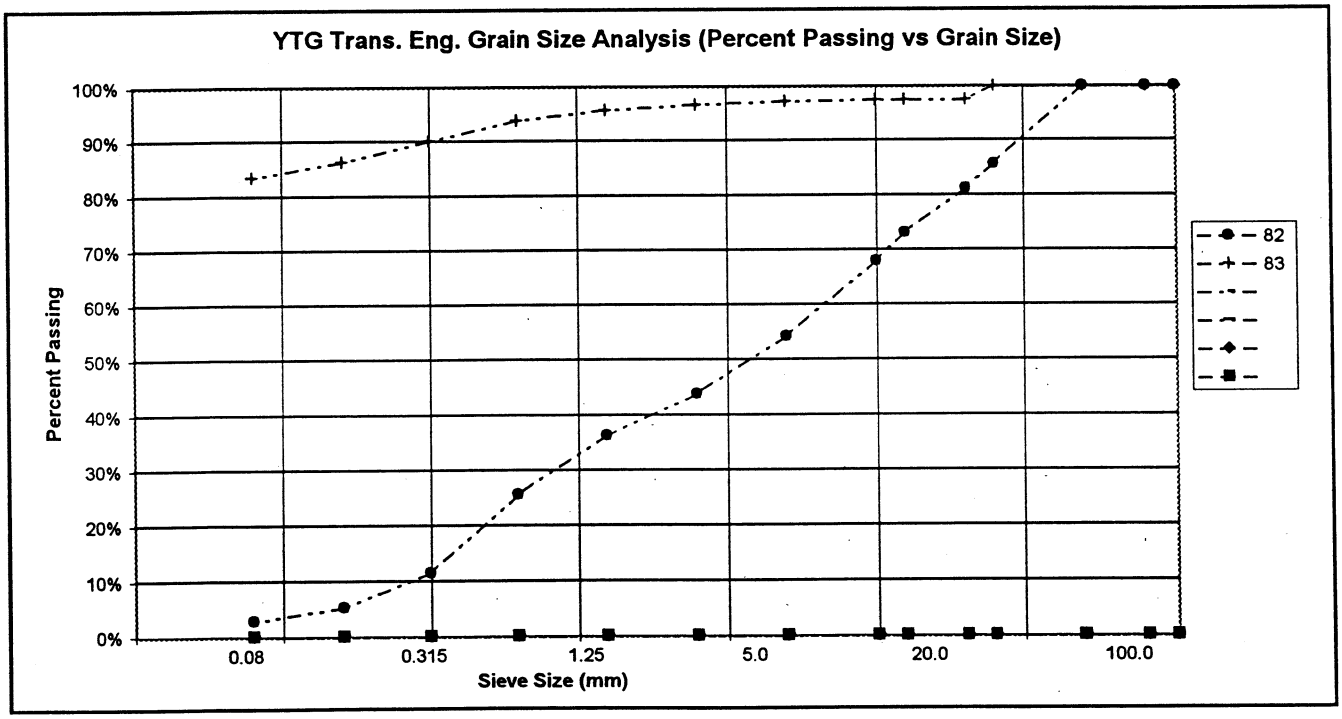


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 659-2814

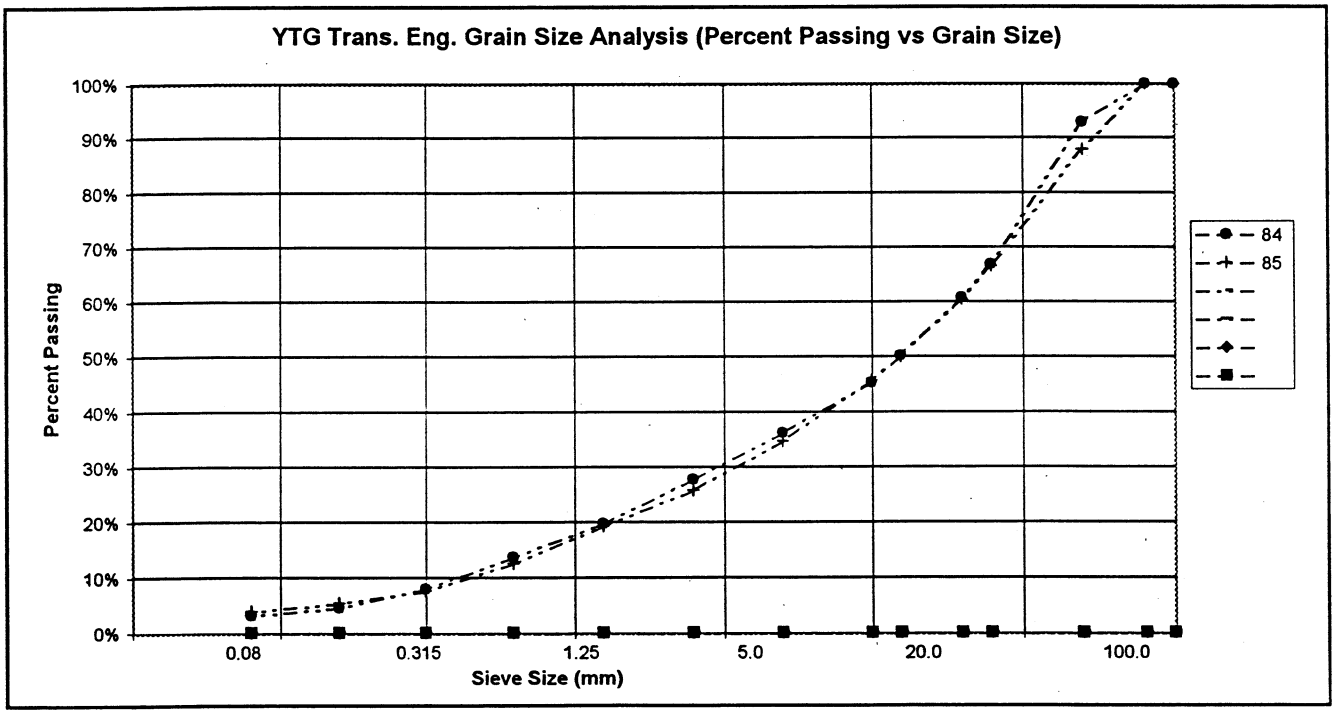
DATE COMP: 03/12/07

FIELD NO:	82	83				
LAB NO:	667	668				
DEPTH:	0.6-1.0	2.4-3.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	86%	100%				
20.0	81%	98%				
12.5	73%	98%				
10.0	68%	98%				
5.0	54%	97%				
2.5	44%	97%				
1.25	36%	96%				
0.630	26%	94%				
0.315	12%	90%				
0.160	5%	86%				
0.080	3%	83%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	46	3				
% SAND:	51	14				
% FINES:	3	83				
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	SILT WITH SAND (ML)				



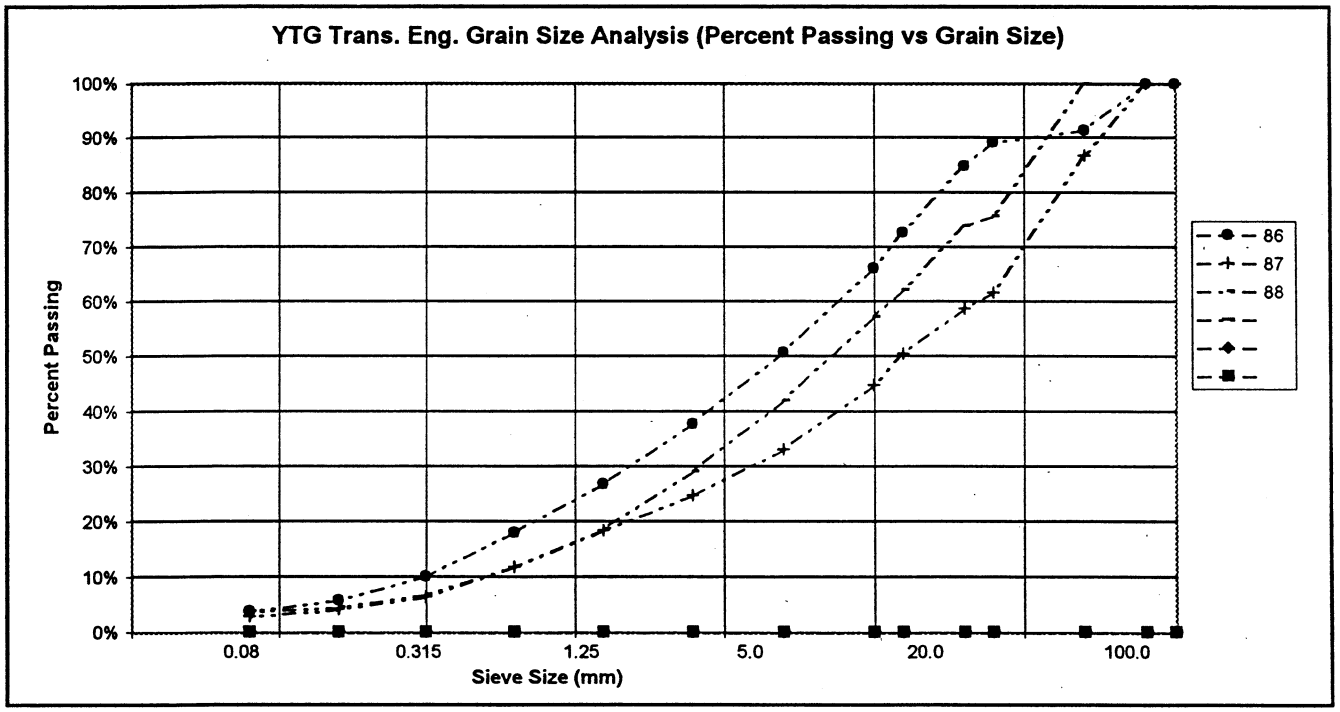
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 659-2815
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/07

FIELD NO:	84	85				
LAB NO:	669	670				
DEPTH:	0.8-1.2	3.0-4.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	93%	88%				
25.0	67%	67%				
20.0	61%	61%				
12.5	50%	50%				
10.0	45%	46%				
5.0	36%	35%				
2.5	28%	26%				
1.25	20%	19%				
0.630	14%	13%				
0.315	8%	8%				
0.160	5%	5%				
0.080	3%	4%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	64	65				
% SAND:	33	31				
% FINES:	3	4				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)				



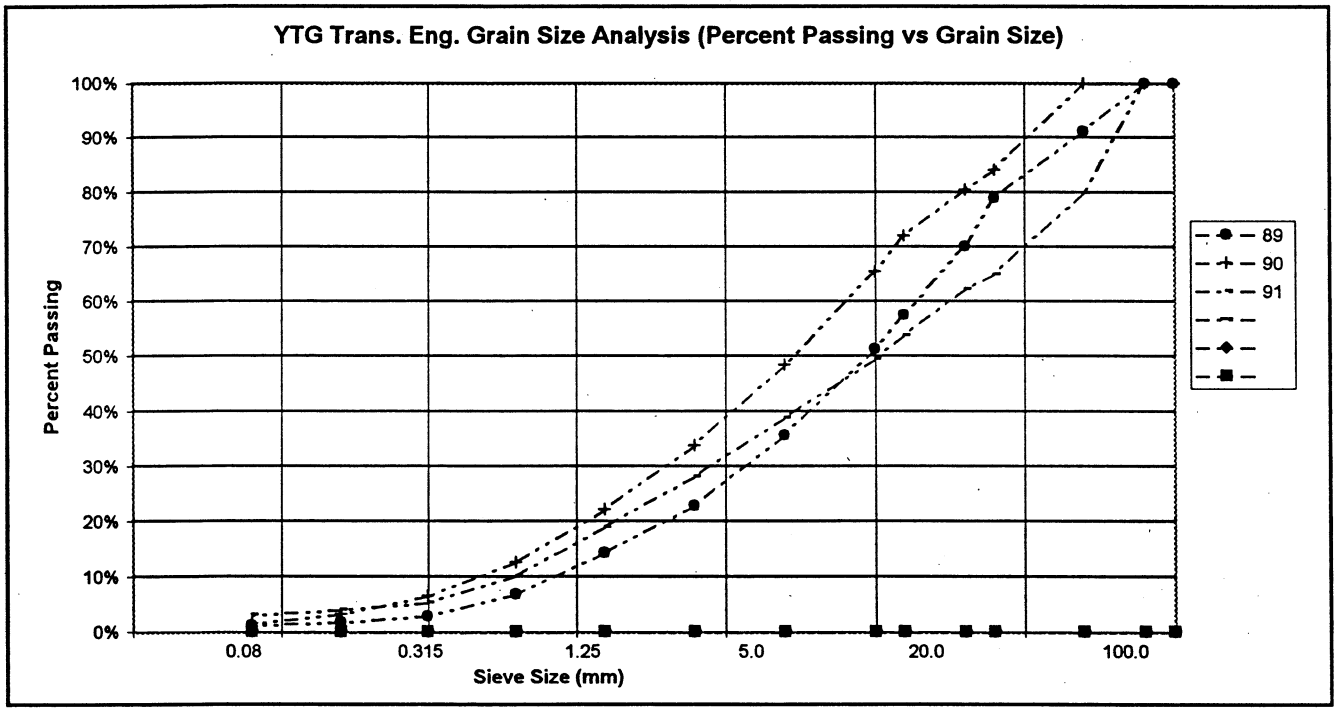
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 660-2817
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/08

FIELD NO:	86	87	88			
LAB NO:	671	672	673			
DEPTH:	0.8-1.0	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	91%	87%	100%			
25.0	89%	62%	76%			
20.0	85%	59%	74%			
12.5	73%	50%	62%			
10.0	66%	45%	57%			
5.0	51%	33%	42%			
2.5	38%	25%	29%			
1.25	27%	18%	19%			
0.630	18%	12%	12%			
0.315	10%	6%	7%			
0.160	6%	4%	4%			
0.080	4%	3%	4%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	49	67	58			
% SAND:	47	30	38			
% FINES:	4	3	4			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 660-2818
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/08

FIELD NO:	89	90	91			
LAB NO:	674	675	676			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	91%	100%	80%			
25.0	79%	84%	65%			
20.0	70%	80%	62%			
12.5	58%	72%	54%			
10.0	51%	65%	50%			
5.0	36%	48%	39%			
2.5	23%	34%	28%			
1.25	14%	22%	19%			
0.630	7%	13%	10%			
0.315	3%	6%	5%			
0.160	2%	3%	4%			
0.080	1%	1%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	64	52	61			
% SAND:	34	47	36			
% FINES:	1	1	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

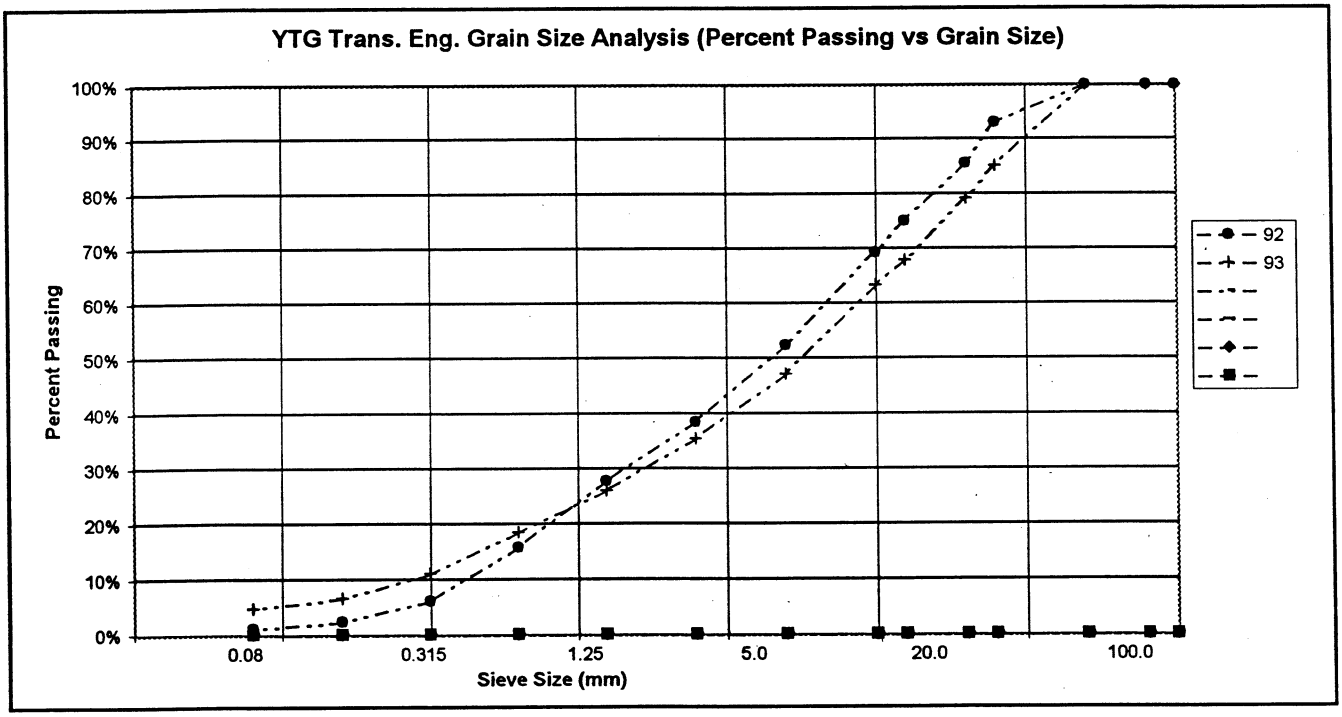


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 660-2819

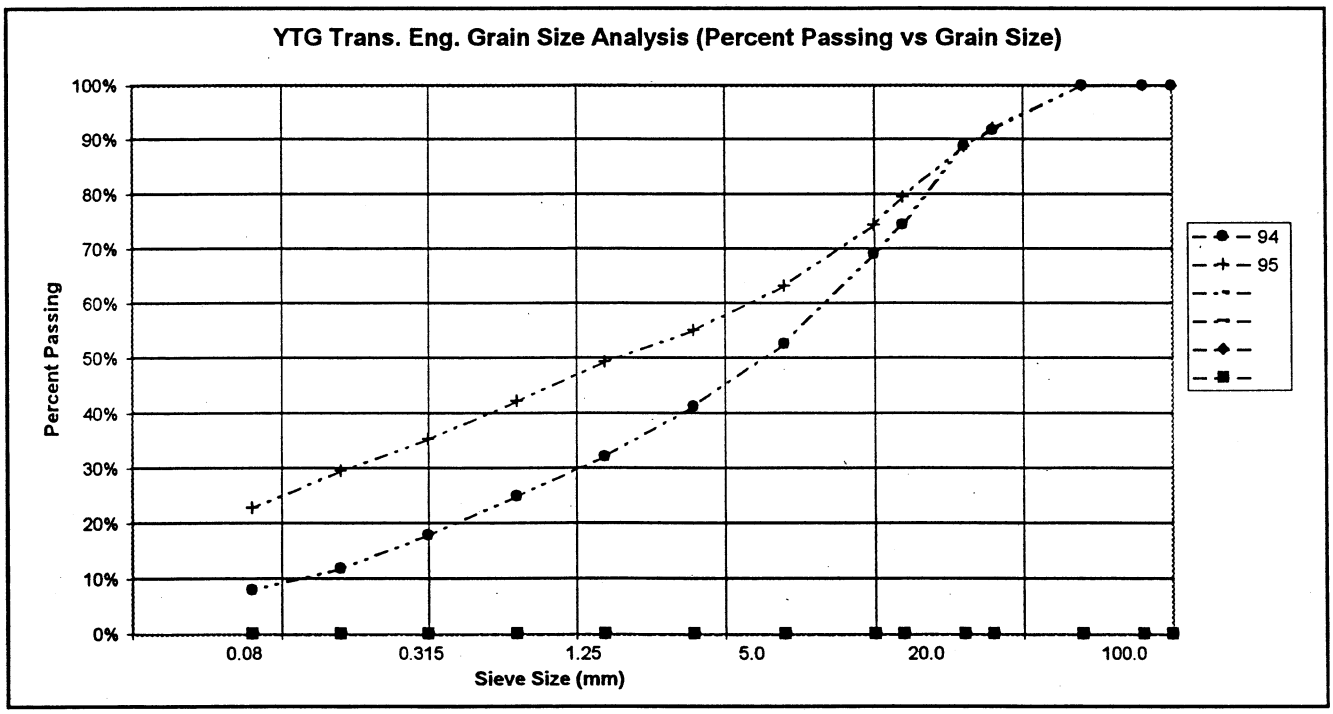
DATE COMP: 03/12/08

FIELD NO:	92	93				
LAB NO:	677	678				
DEPTH:	0.8-1.2	3.5-4.5				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	93%	85%				
20.0	86%	79%				
12.5	75%	68%				
10.0	69%	63%				
5.0	52%	47%				
2.5	38%	35%				
1.25	28%	26%				
0.630	16%	19%				
0.315	6%	11%				
0.160	2%	7%				
0.080	1%	5%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	48	53				
% SAND:	51	42				
% FINES:	1	5				
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SAND (GP)				



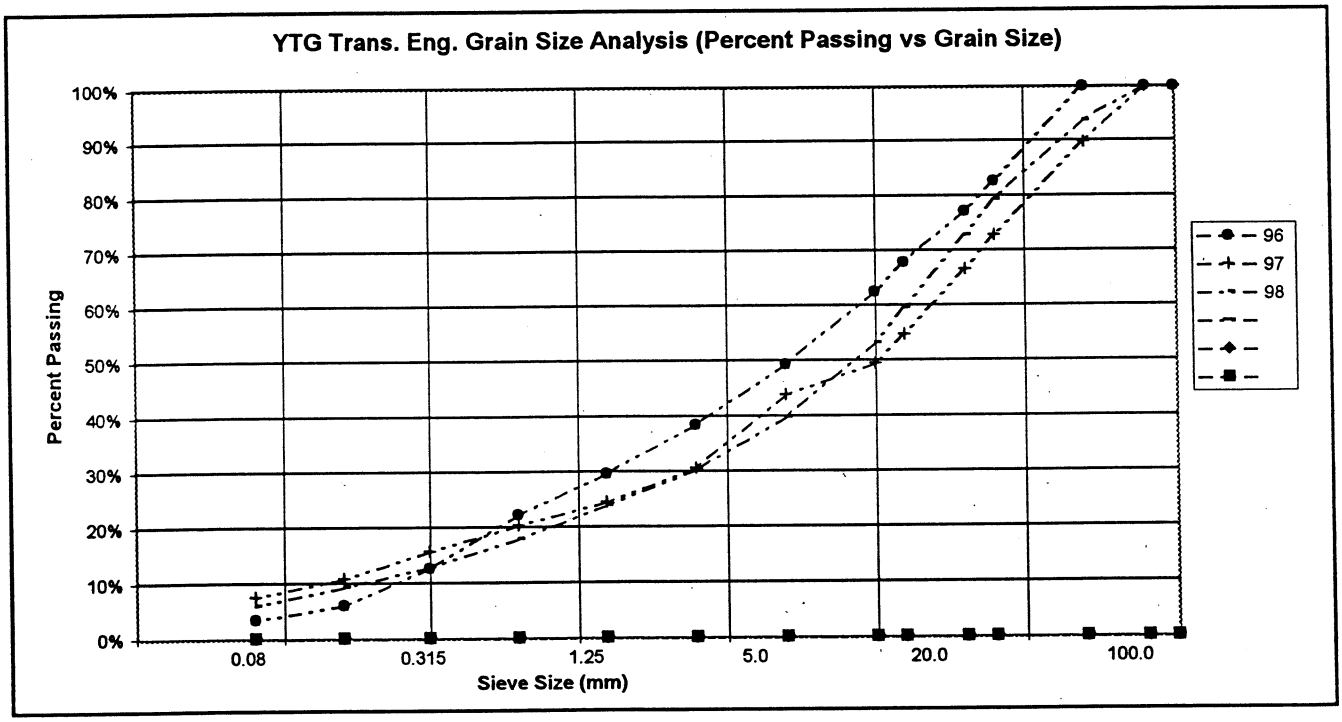
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 660-2820
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/08

FIELD NO:	94	95				
LAB NO:	679	680				
DEPTH:	0.4-0.8	2.0-3.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	92%	92%				
20.0	89%	89%				
12.5	74%	80%				
10.0	69%	74%				
5.0	53%	63%				
2.5	41%	55%				
1.25	32%	49%				
0.630	25%	42%				
0.315	18%	35%				
0.160	12%	30%				
0.080	8%	23%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	47	37				
% SAND:	45	40				
% FINES:	8	23				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)				



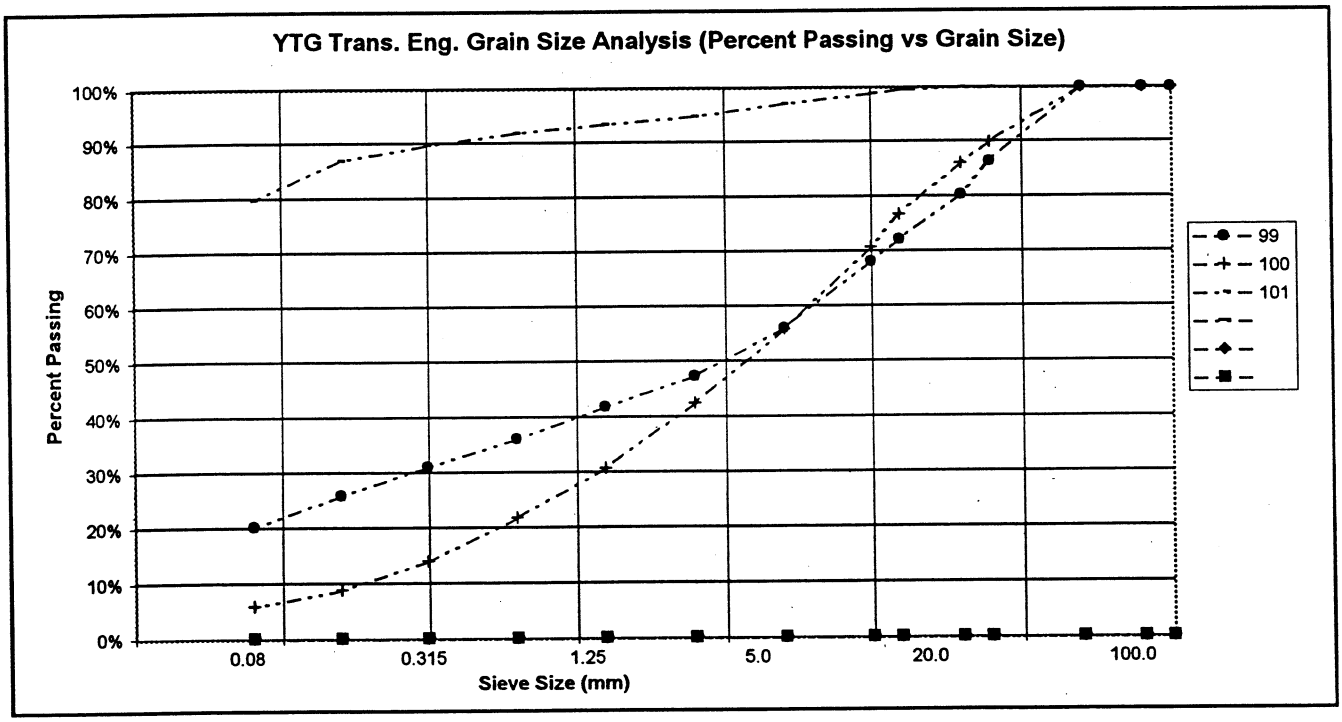
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 660-2821
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/08

FIELD NO:	96	97	98			
LAB NO:	681	682	683			
DEPTH:	0.5-1.0	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	90%	94%			
25.0	83%	73%	79%			
20.0	77%	67%	73%			
12.5	68%	55%	60%			
10.0	62%	49%	53%			
5.0	49%	44%	40%			
2.5	38%	31%	30%			
1.25	30%	25%	24%			
0.630	22%	20%	18%			
0.315	13%	16%	13%			
0.160	6%	11%	9%			
0.080	3%	7%	6%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	51	56	60			
% SAND:	46	36	34			
% FINES:	3	7	6			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 660-2822
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/08

FIELD NO:	99	100	101			
LAB NO:	684	685	686			
DEPTH:	0.5-1.0	2.6-3.0	5.6-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	86%	90%	100%			
20.0	80%	86%	100%			
12.5	72%	77%	100%			
10.0	68%	71%	99%			
5.0	56%	56%	97%			
2.5	47%	42%	95%			
1.25	42%	31%	93%			
0.630	36%	22%	92%			
0.315	31%	14%	90%			
0.160	26%	9%	87%			
0.080	20%	6%	80%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	44	44	3			
% SAND:	36	50	17			
% FINES:	20	6	80			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILT WITH SAND (ML)			

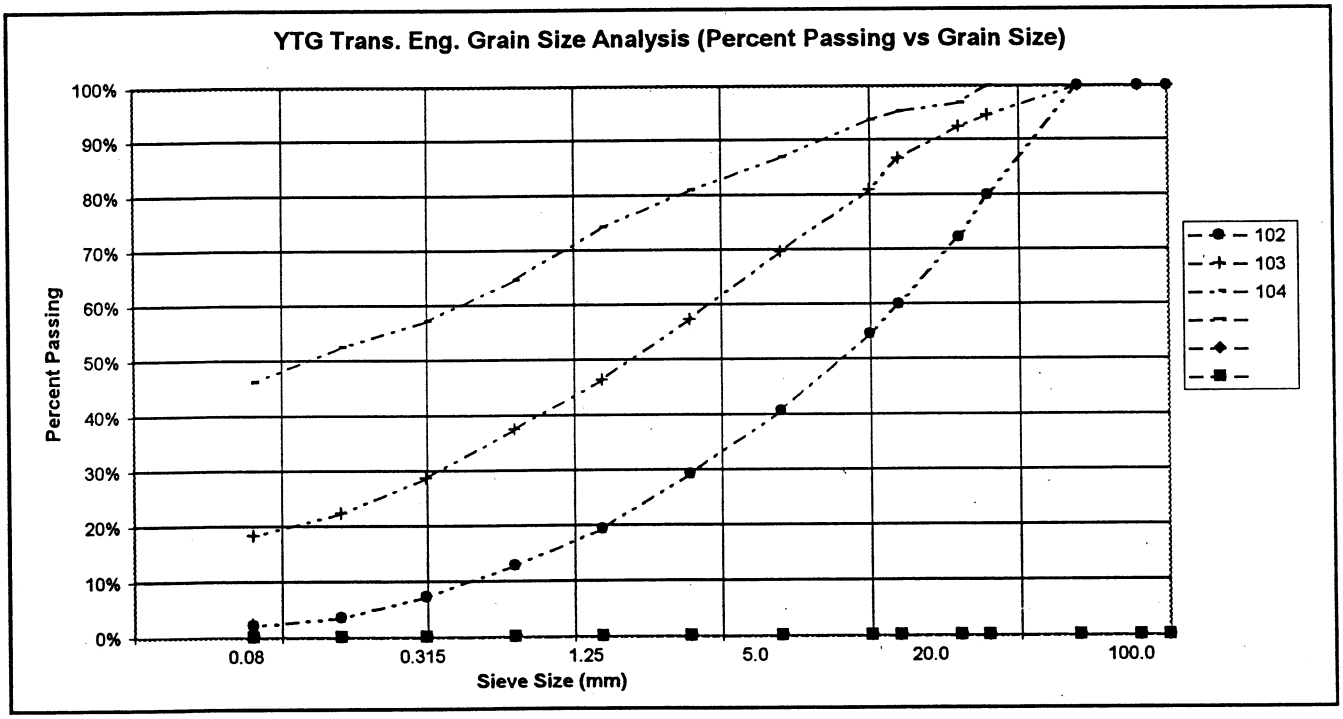


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 660-2823

DATE COMP: 03/12/08

FIELD NO:	102	103	104			
LAB NO:	687	688	689			
DEPTH:	0.5-1.0	3.0-4.0	4.5-5.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	80%	95%	100%			
20.0	72%	92%	97%			
12.5	60%	87%	95%			
10.0	55%	81%	94%			
5.0	41%	70%	87%			
2.5	29%	57%	81%			
1.25	19%	46%	74%			
0.630	13%	38%	65%			
0.315	7%	29%	57%			
0.160	3%	22%	53%			
0.080	2%	18%	46%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	59	30	13			
% SAND:	39	51	41			
% FINES:	2	18	46			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)			

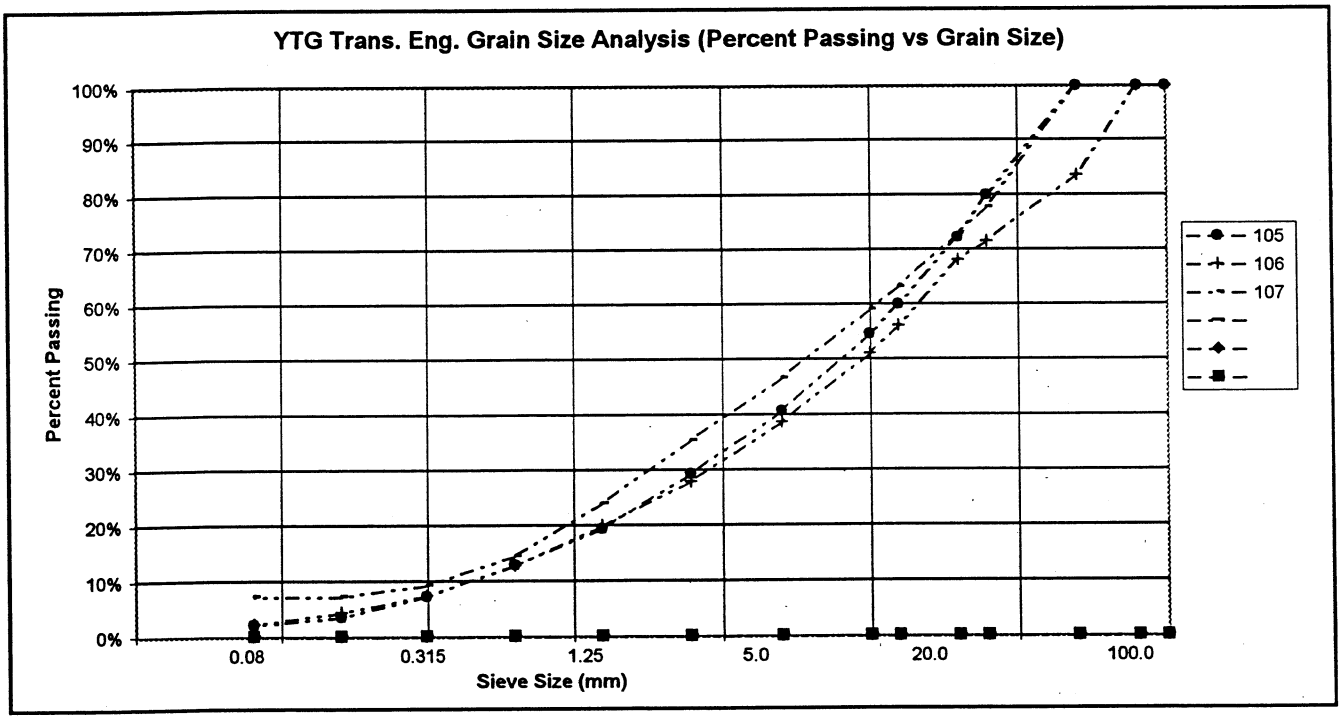


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 660-2824

DATE COMP: 03/12/08

FIELD NO:	105	106	107			
LAB NO:	690	691	692			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	84%	100%			
25.0	80%	72%	78%			
20.0	72%	68%	73%			
12.5	60%	56%	63%			
10.0	55%	51%	59%			
5.0	41%	39%	47%			
2.5	29%	28%	35%			
1.25	19%	20%	24%			
0.630	13%	13%	15%			
0.315	7%	7%	9%			
0.160	3%	4%	7%			
0.080	2%	2%	7%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	59	61	53			
% SAND:	39	36	39			
% FINES:	2	2	7			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			

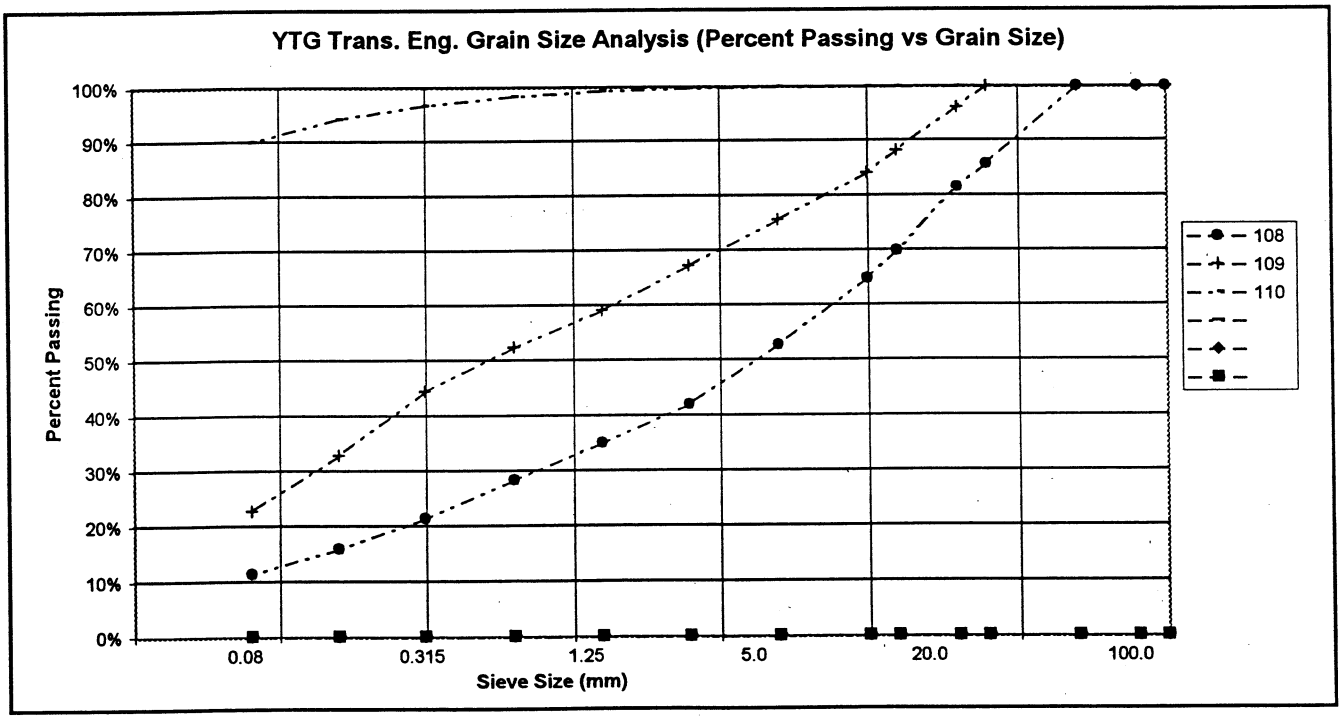


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 660-2825

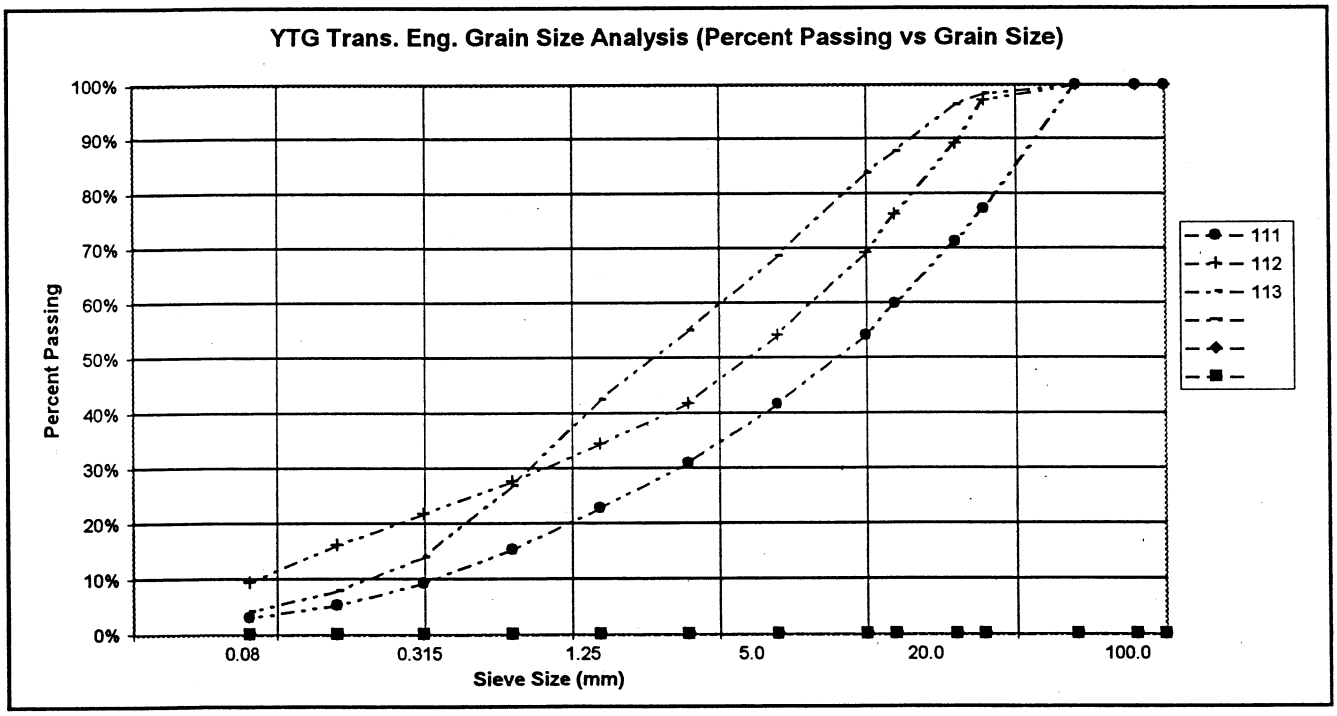
DATE COMP: 03/12/09

FIELD NO:	108	109	110			
LAB NO:	693	694	695			
DEPTH:	0.5-1.0	2.0-3.0	4.0-5.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	86%	100%	100%			
20.0	81%	96%	100%			
12.5	70%	88%	100%			
10.0	65%	84%	100%			
5.0	53%	75%	100%			
2.5	42%	67%	100%			
1.25	35%	59%	99%			
0.630	28%	52%	98%			
0.315	21%	44%	97%			
0.160	16%	33%	94%			
0.080	11%	23%	90%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	47	25	0			
% SAND:	41	53	10			
% FINES:	11	23	90			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)	SILT (ML)			



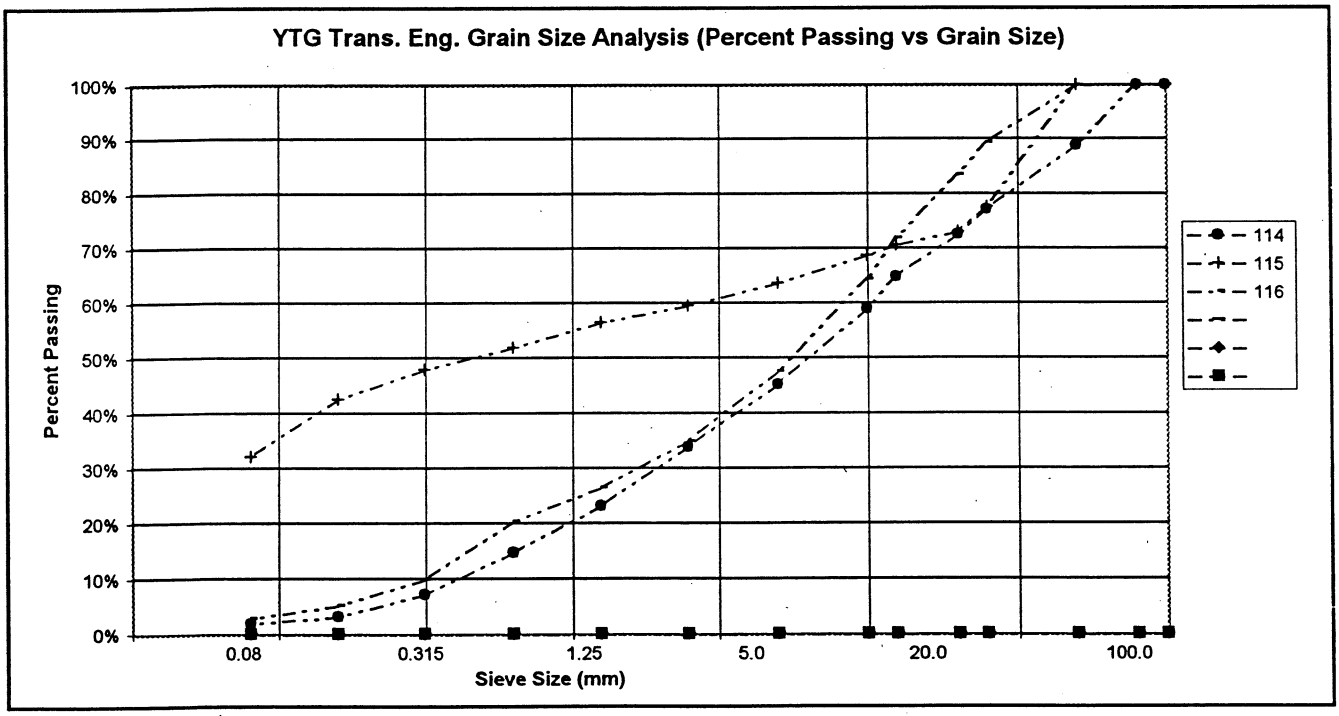
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 660-2826
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/09

FIELD NO:	111	112	113			
LAB NO:	696	697	698			
DEPTH:	0.5-1.0	2.0-3.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	77%	97%	98%			
20.0	71%	89%	96%			
12.5	60%	76%	88%			
10.0	54%	69%	84%			
5.0	42%	54%	69%			
2.5	31%	42%	55%			
1.25	23%	34%	42%			
0.630	15%	28%	27%			
0.315	9%	22%	14%			
0.160	5%	16%	8%			
0.080	3%	9%	4%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	58	46	31			
% SAND:	39	45	65			
% FINES:	3	9	4			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH GRAVEL (SW)			



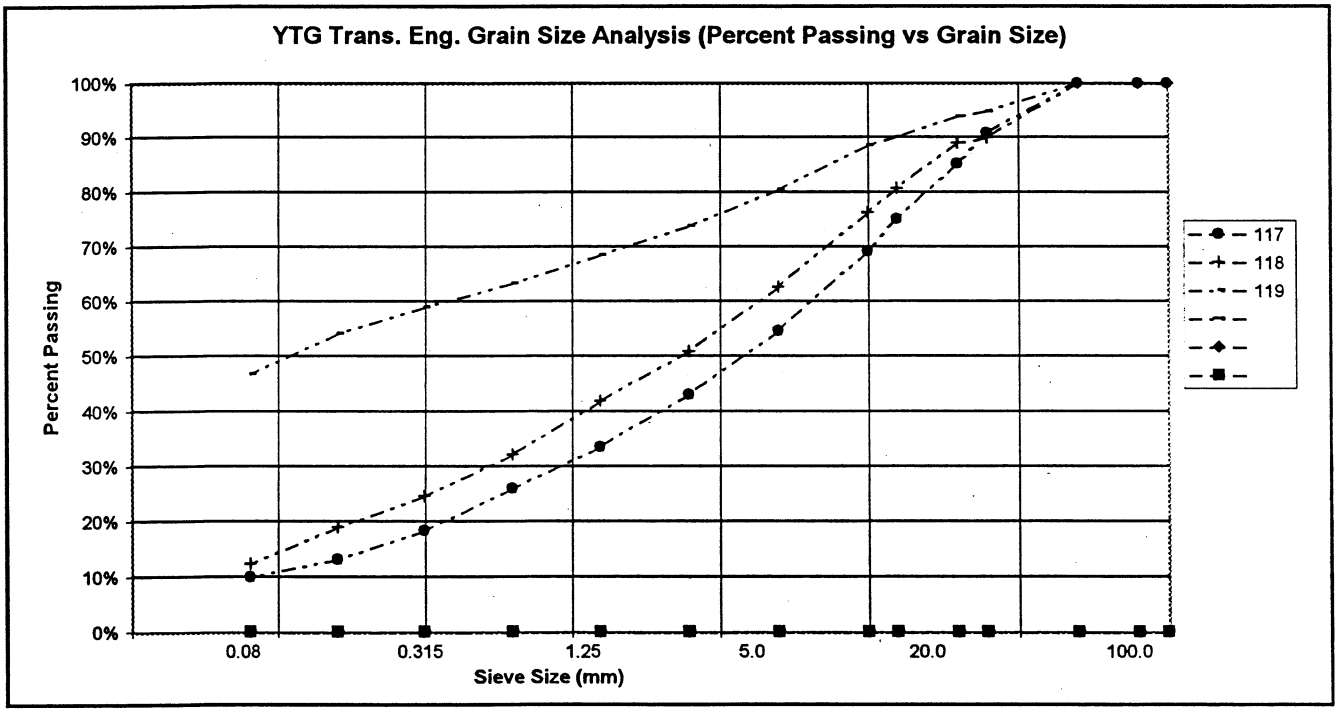
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 660-2827
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/09

FIELD NO:	114	115	116			
LAB NO:	699	700	701			
DEPTH:	0.5-1.0	2.0-3.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	89%	100%	100%			
25.0	77%	78%	89%			
20.0	73%	73%	83%			
12.5	65%	71%	72%			
10.0	59%	69%	64%			
5.0	45%	64%	48%			
2.5	34%	60%	35%			
1.25	23%	56%	27%			
0.630	15%	52%	20%			
0.315	7%	48%	10%			
0.160	3%	43%	5%			
0.080	2%	32%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	55	36	52			
% SAND:	43	32	45			
% FINES:	2	32	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SAND (GP)			



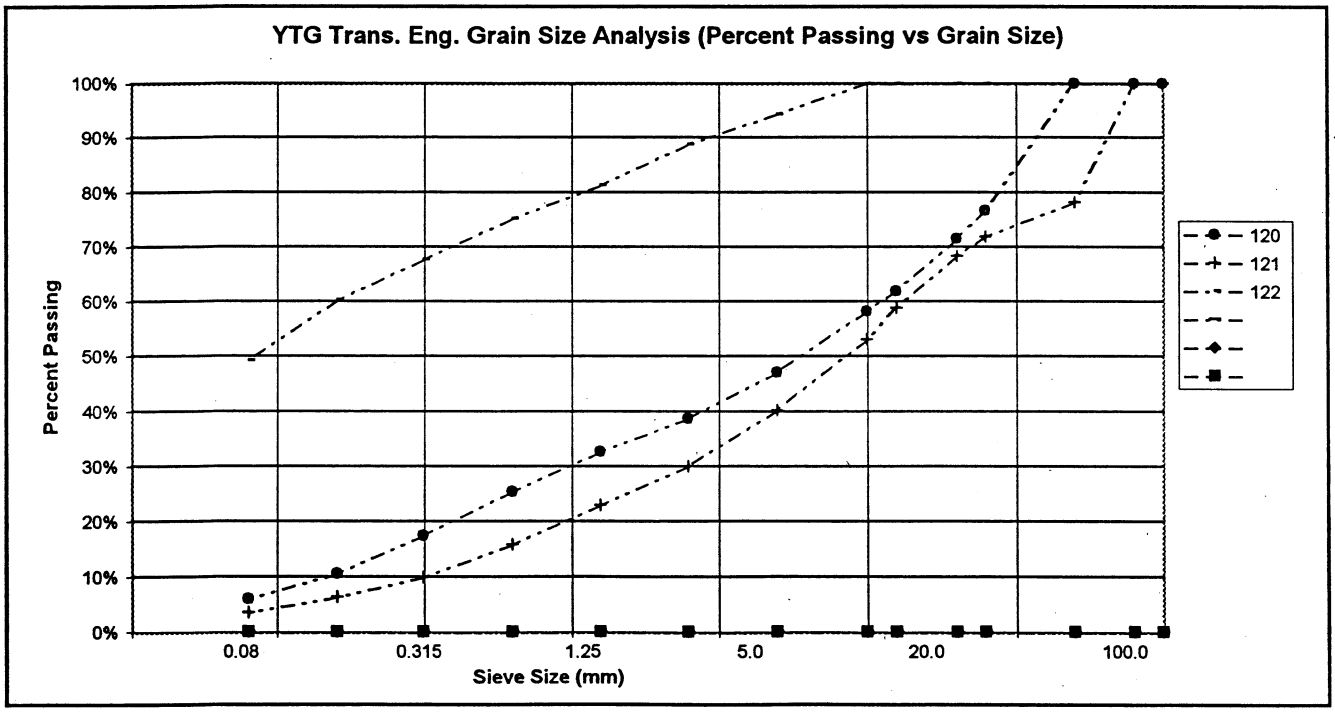
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 660-2828
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/09

FIELD NO:	117	118	119			
LAB NO:	702	703	704			
DEPTH:	0.5-1.0	2.0-3.0	4.4-5.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	91%	90%	95%			
20.0	85%	89%	94%			
12.5	75%	81%	90%			
10.0	69%	76%	88%			
5.0	55%	63%	80%			
2.5	43%	51%	74%			
1.25	34%	42%	68%			
0.630	26%	32%	63%			
0.315	18%	25%	59%			
0.160	13%	19%	54%			
0.080	10%	12%	47%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	45	37	20			
% SAND:	45	50	34			
% FINES:	10	12	47			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)			



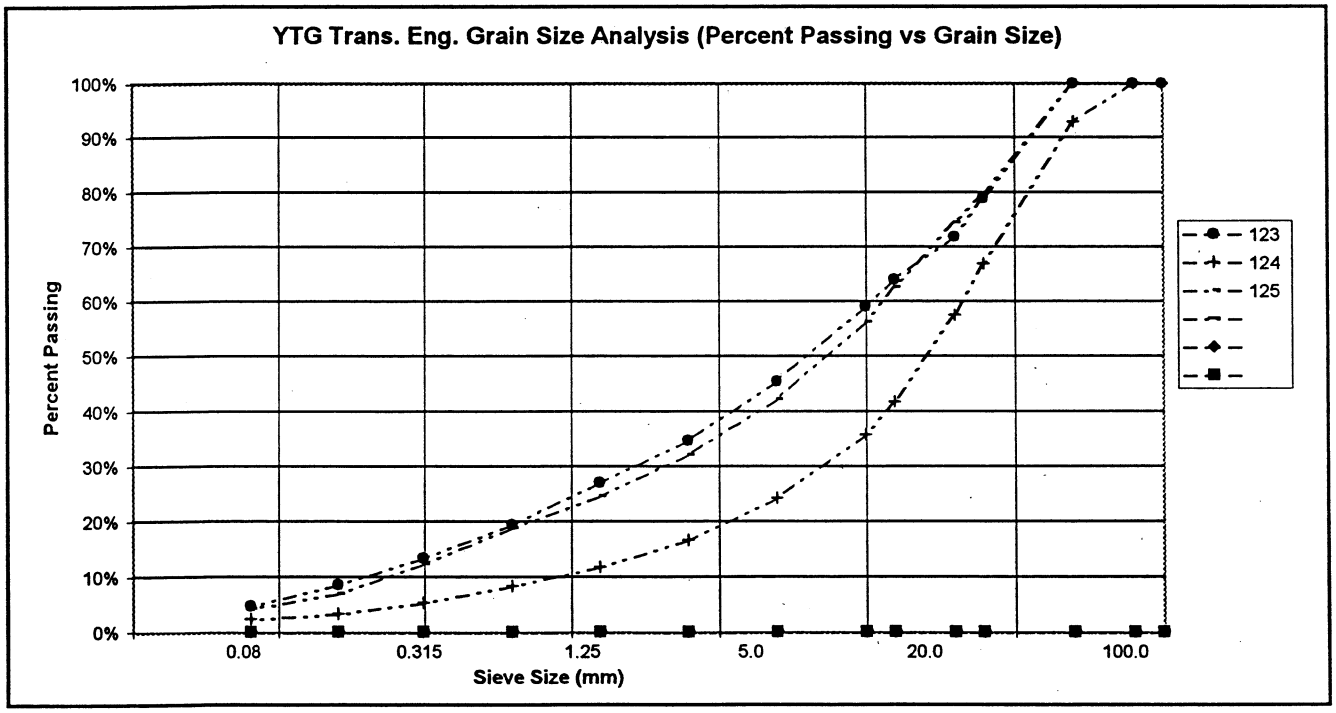
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 660-2829
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/09

FIELD NO:	120	121	122			
LAB NO:	705	706	707			
DEPTH:	0.8-1.2	2.5-3.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	78%	100%			
25.0	77%	72%	100%			
20.0	72%	68%	100%			
12.5	62%	59%	100%			
10.0	58%	53%	100%			
5.0	47%	40%	94%			
2.5	39%	30%	89%			
1.25	33%	23%	81%			
0.630	25%	16%	75%			
0.315	17%	10%	68%			
0.160	11%	6%	60%			
0.080	6%	3%	49%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	53	60	6			
% SAND:	41	37	45			
% FINES:	6	3	49			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)			



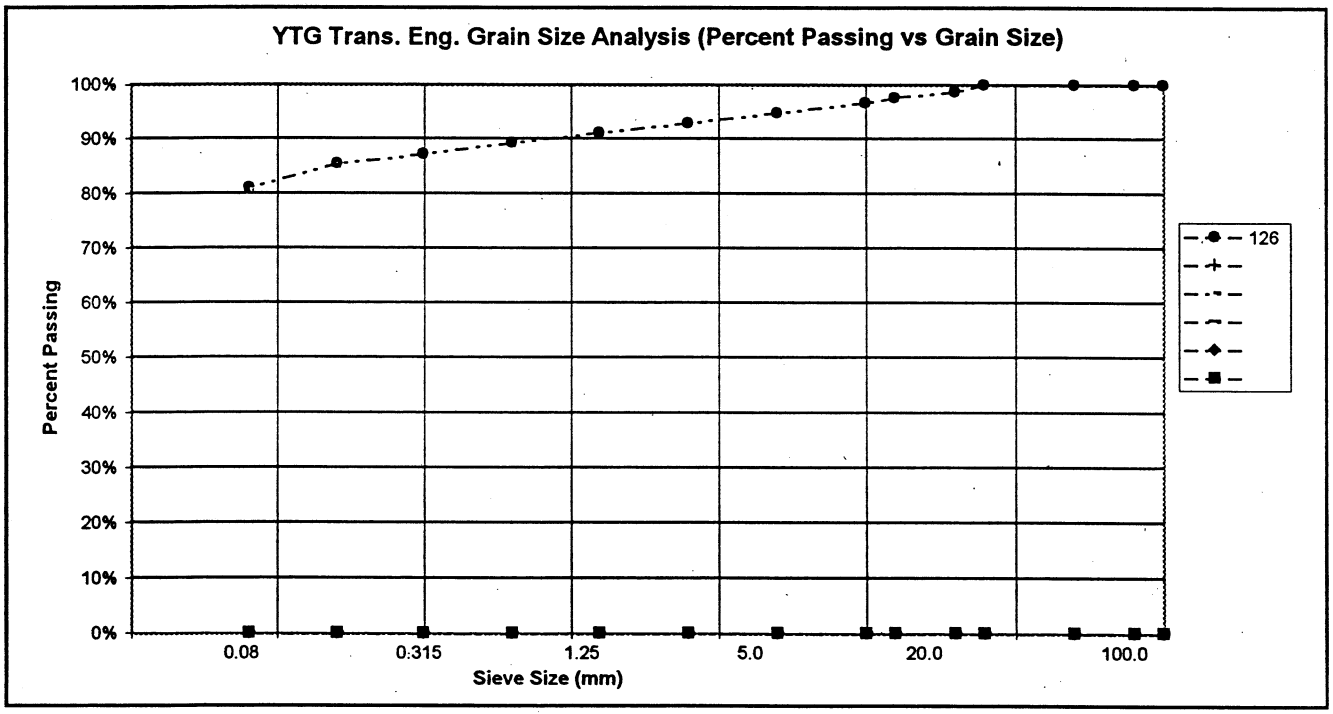
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 660-2830
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/09

FIELD NO:	123	124	125			
LAB NO:	708	709	710			
DEPTH:	0.5-1.0	2.0-3.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	93%	100%			
25.0	79%	67%	80%			
20.0	72%	58%	74%			
12.5	64%	42%	63%			
10.0	59%	36%	56%			
5.0	46%	24%	42%			
2.5	35%	17%	32%			
1.25	27%	12%	25%			
0.630	20%	8%	19%			
0.315	13%	5%	12%			
0.160	9%	3%	7%			
0.080	5%	2%	4%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	54	76	58			
% SAND:	41	22	38			
% FINES:	5	2	4			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



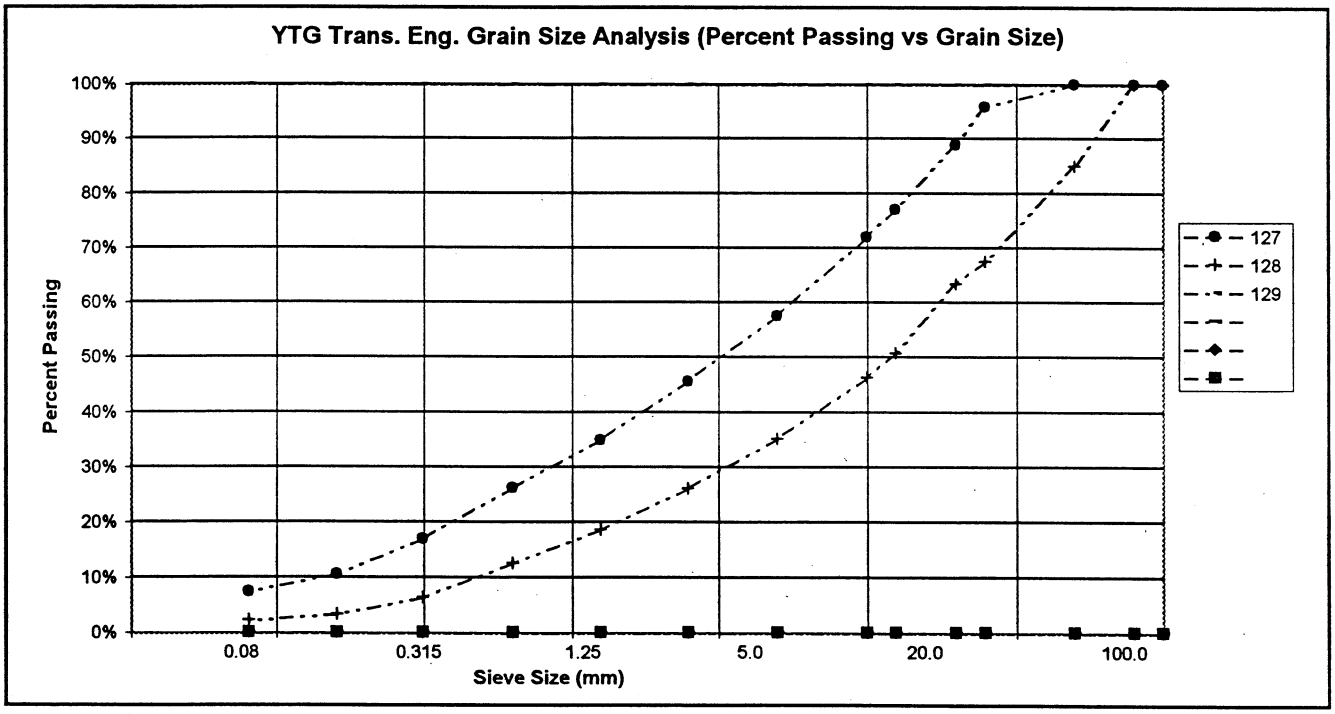
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 661-2831
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/11

FIELD NO:	126					
LAB NO:	711					
DEPTH:	1.0-2.0					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	100%					
20.0	99%					
12.5	98%					
10.0	97%					
5.0	95%					
2.5	93%					
1.25	91%					
0.630	89%					
0.315	87%					
0.160	85%					
0.080	81%					
M.C.(%):						
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	5					
% SAND:	14					
% FINES:	81					
CLASSIFICATION	SILT WITH SAND (ML)					

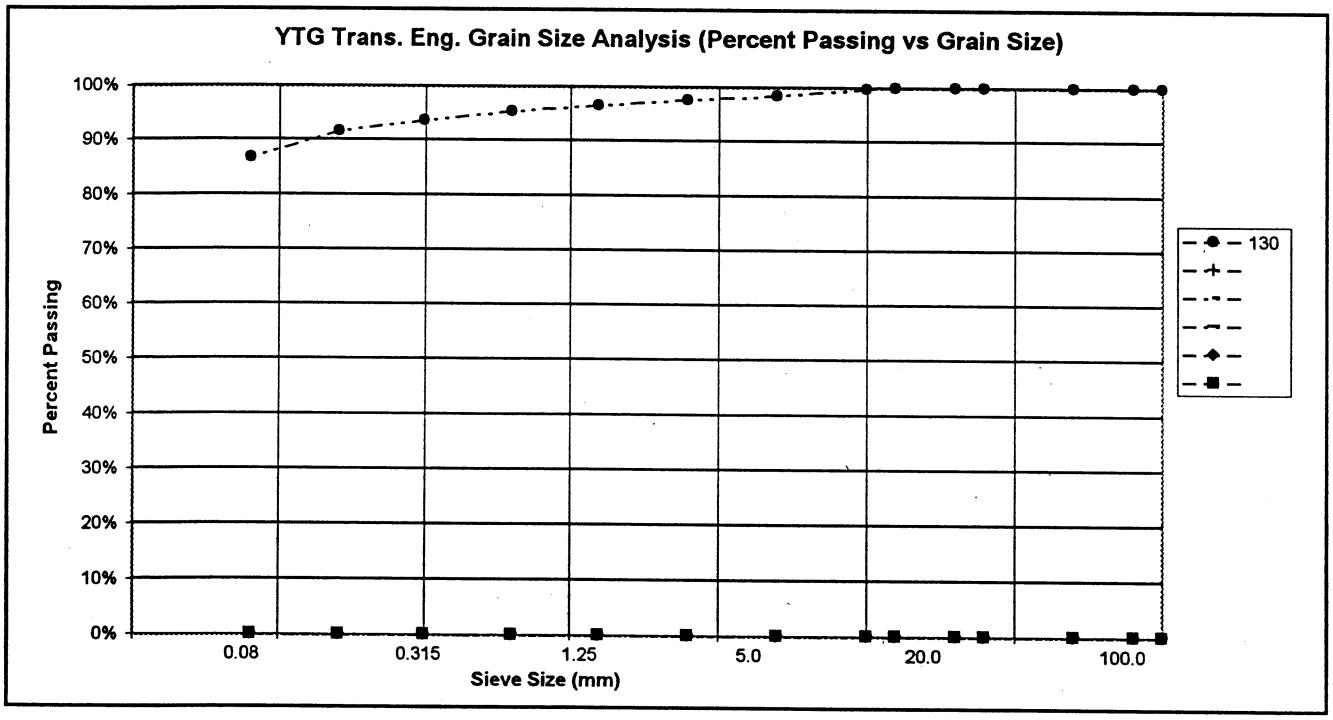


PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 661-2832
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/11

FIELD NO:	127	128	129			
LAB NO:	712	713	lost sample			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	85%	100%			
25.0	96%	67%	100%			
20.0	89%	63%	100%			
12.5	77%	51%	100%			
10.0	72%	46%	100%			
5.0	58%	35%	100%			
2.5	46%	26%	100%			
1.25	35%	19%	100%			
0.630	26%	13%	100%			
0.315	17%	6%	100%			
0.160	11%	3%	100%			
0.080	7%	2%	100%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	42	65	0			
% SAND:	50	33	0			
% FINES:	7	2	100			
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	SILT (ML)			

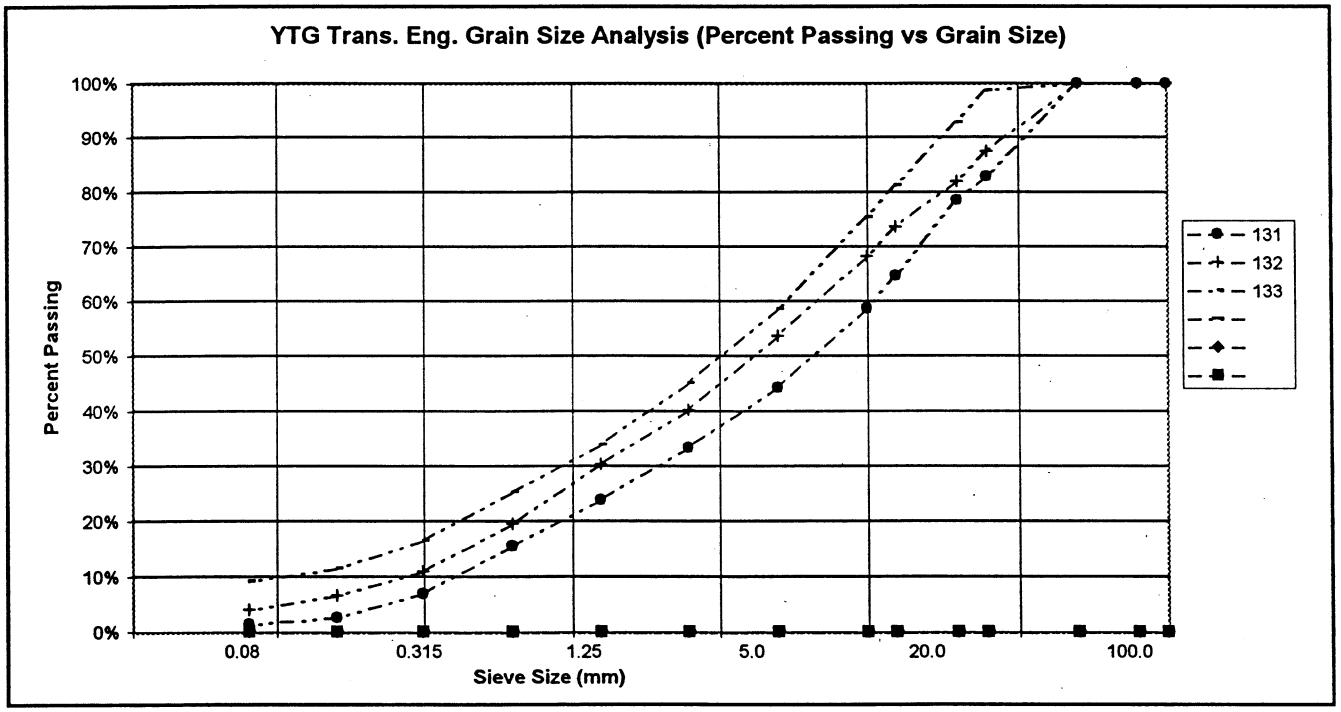


PROJECT NUMBER:	552-202101-0362-1				HOLE No.: 661-2833	
CLIENT:	Shakwak					
PROJECT NAME:	Congdon Creek Granular Investigation					
PROJECT LOCATION:	Km 1719.5 A/H					
DRILL UNIT:	Komatsu PC- 400-LC					
HOLE LOCATION:	See Plan / GPS					
LOGGED BY:	G.C.				DATE COMP: 03/12/11	
FIELD NO:	130					
LAB NO:	715					
DEPTH:	1.0-2.0					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	100%					
20.0	100%					
12.5	100%					
10.0	100%					
5.0	98%					
2.5	98%					
1.25	97%					
0.630	95%					
0.315	94%					
0.160	92%					
0.080	87%					
M.C.(%):						
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	2					
% SAND:	12					
% FINES:	87					
CLASSIFICATION	SILT (ML)					



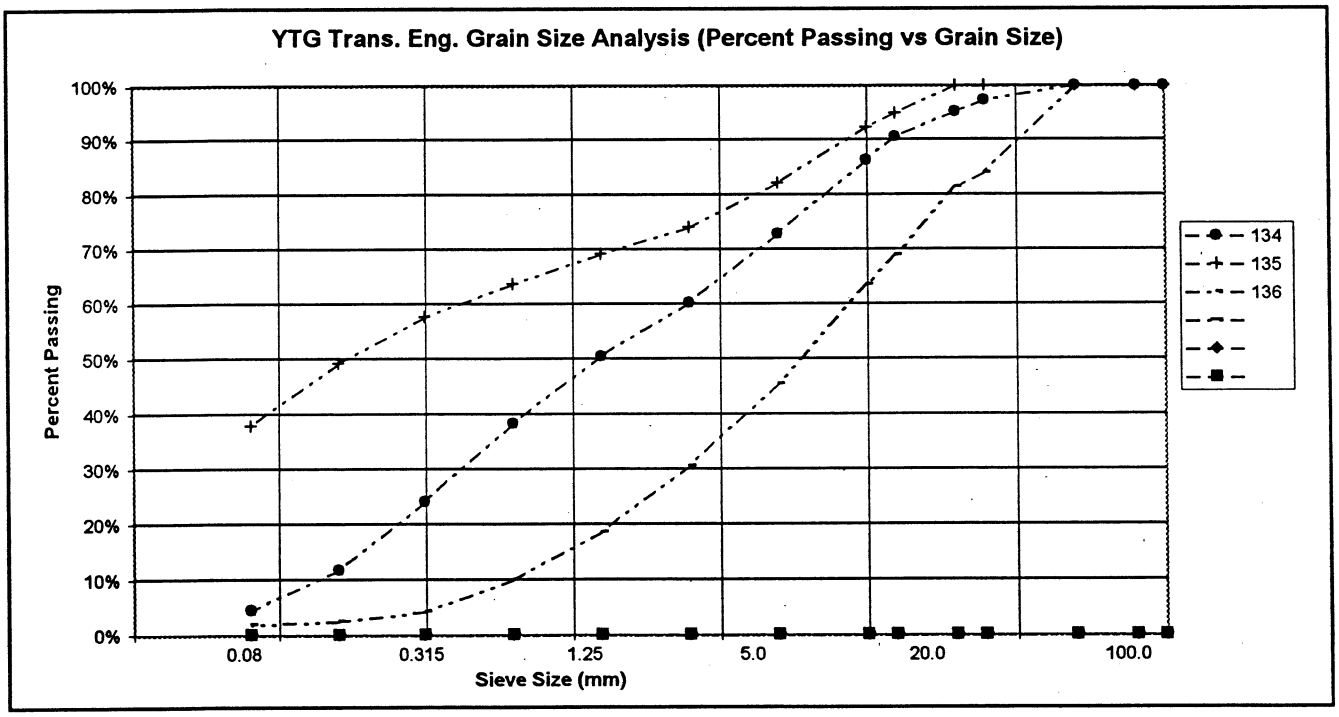
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 661-2834
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/11

FIELD NO:	131	132	133			
LAB NO:	716	717	718			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	83%	87%	99%			
20.0	79%	82%	93%			
12.5	65%	74%	81%			
10.0	59%	68%	75%			
5.0	44%	54%	59%			
2.5	33%	40%	45%			
1.25	24%	30%	34%			
0.630	16%	20%	25%			
0.315	7%	11%	17%			
0.160	3%	7%	11%			
0.080	1%	4%	9%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	56	46	41			
% SAND:	43	50	49			
% FINES:	1	4	9			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH GRAVEL (SW)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)			



PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 661-2835
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/11

FIELD NO:	134	135	136			
LAB NO:	719	720	721			
DEPTH:	0.8-1.2	2.6-3.0	4.0-5.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	97%	100%	84%			
20.0	95%	100%	81%			
12.5	91%	95%	69%			
10.0	86%	92%	64%			
5.0	73%	82%	46%			
2.5	60%	74%	31%			
1.25	51%	69%	19%			
0.630	38%	64%	10%			
0.315	24%	58%	4%			
0.160	12%	49%	2%			
0.080	4%	38%	2%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	27	18	54			
% SAND:	68	44	44			
% FINES:	4	38	2			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SAND (GP)			

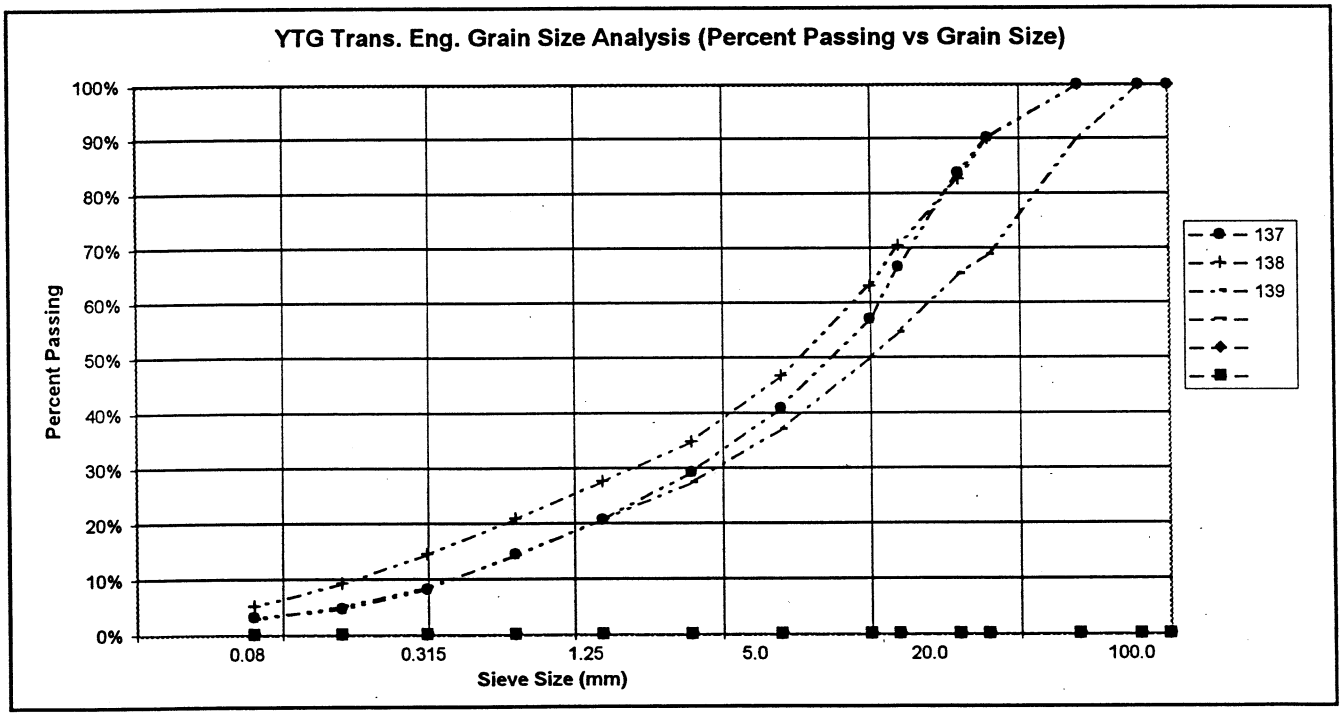


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 661-2836

DATE COMP: 03/12/11

FIELD NO:	137	138	139			
LAB NO:	722	723	724			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	90%			
25.0	90%	90%	69%			
20.0	84%	83%	65%			
12.5	67%	70%	55%			
10.0	57%	63%	50%			
5.0	41%	47%	37%			
2.5	29%	35%	27%			
1.25	21%	28%	21%			
0.630	15%	21%	14%			
0.315	8%	15%	9%			
0.160	5%	9%	5%			
0.080	3%	5%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	59	53	63			
% SAND:	38	42	34			
% FINES:	3	5	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)			

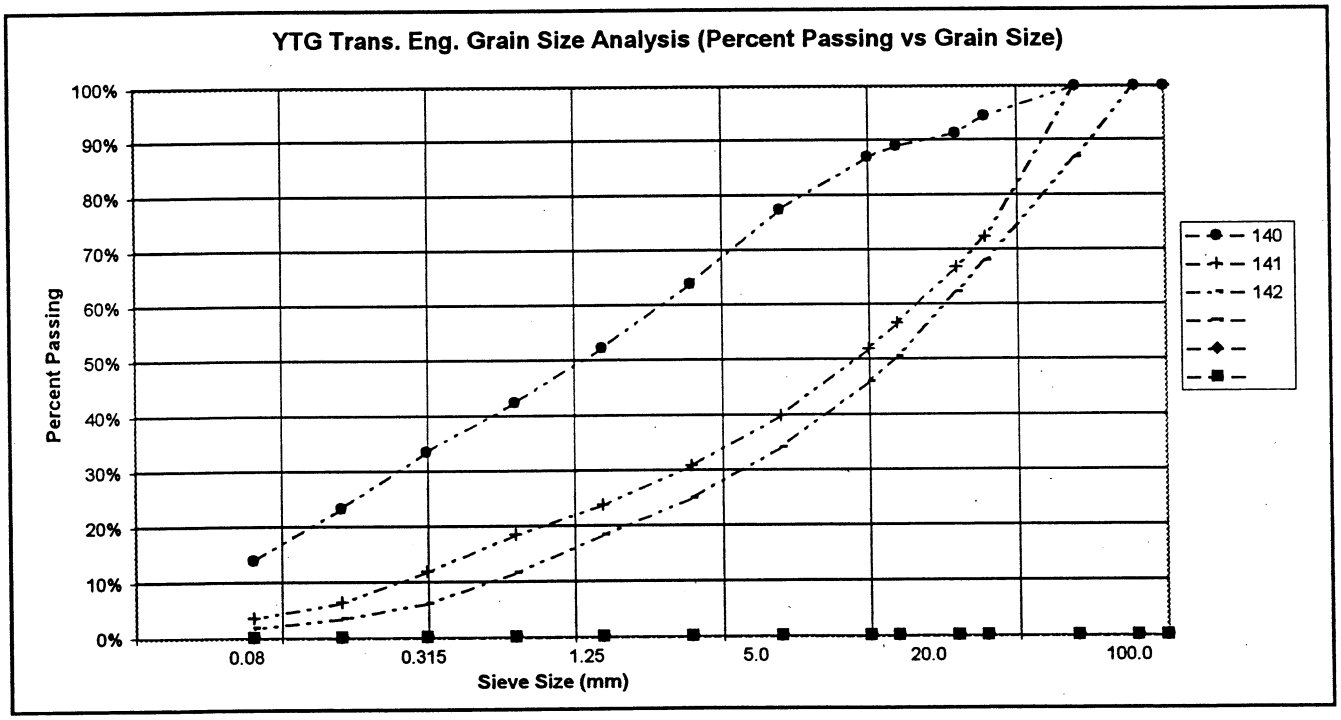


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 661-2837

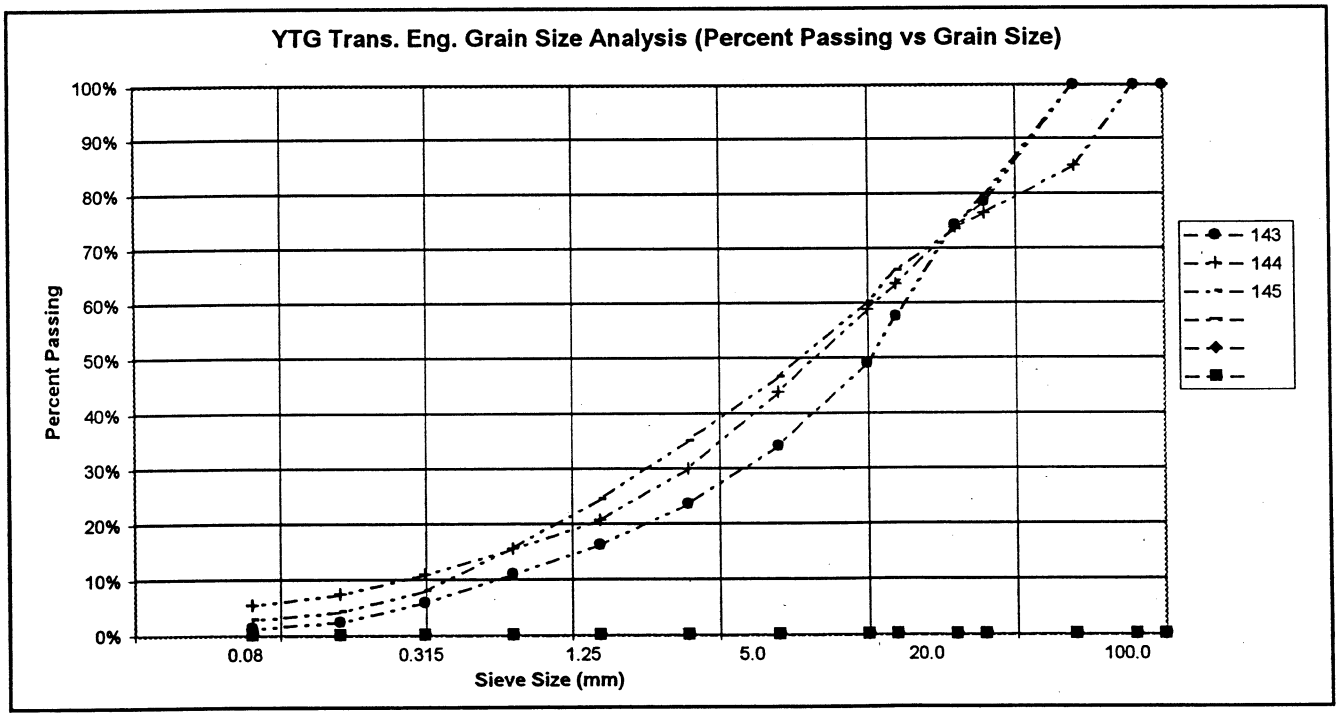
DATE COMP: 03/12/12

FIELD NO:	140	141	142			
LAB NO:	725	726	727			
DEPTH:	0.5-1.0	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	87%			
25.0	94%	72%	68%			
20.0	91%	67%	62%			
12.5	89%	57%	50%			
10.0	87%	52%	46%			
5.0	77%	40%	34%			
2.5	64%	31%	25%			
1.25	52%	24%	18%			
0.630	42%	18%	12%			
0.315	34%	12%	6%			
0.160	23%	6%	3%			
0.080	14%	3%	2%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	23	60	66			
% SAND:	63	36	32			
% FINES:	14	3	2			
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



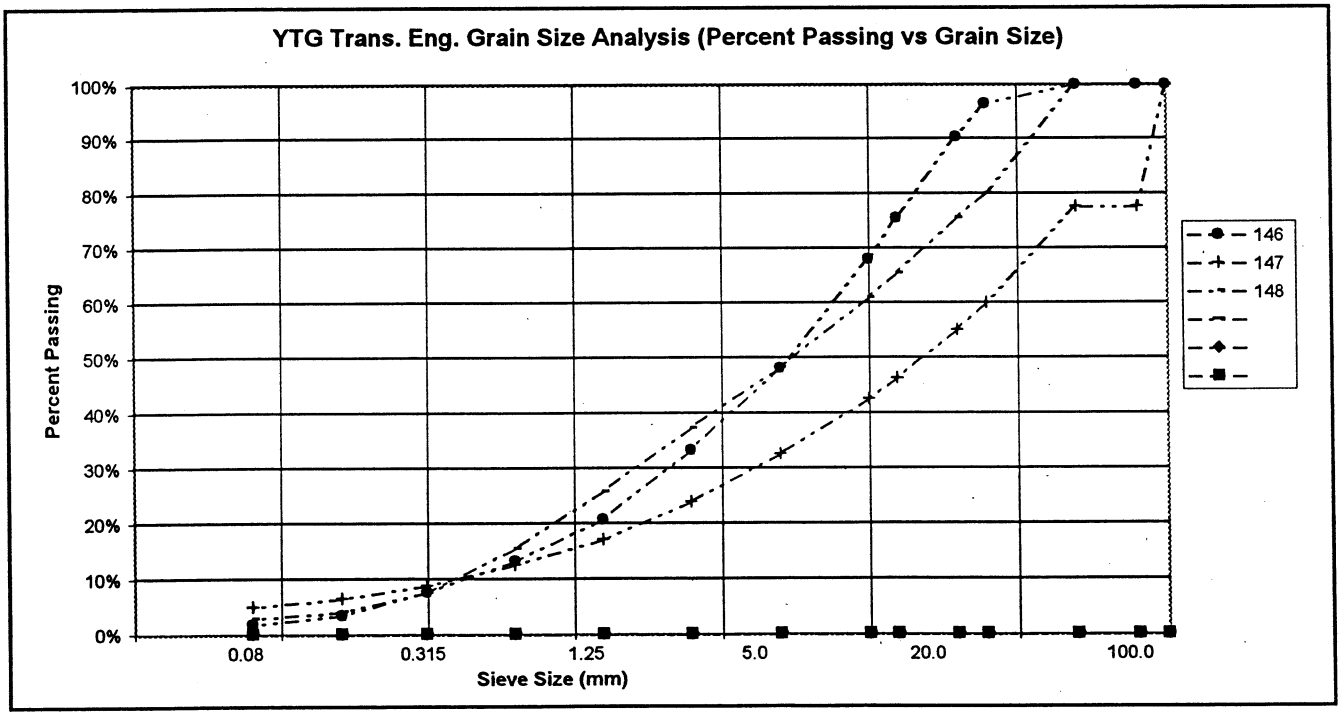
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 661-2838
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/12

FIELD NO:	143	144	145			
LAB NO:	728	729	730			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	85%	100%			
25.0	79%	76%	80%			
20.0	74%	74%	73%			
12.5	58%	64%	66%			
10.0	49%	59%	60%			
5.0	34%	44%	47%			
2.5	24%	30%	35%			
1.25	16%	21%	24%			
0.630	11%	16%	16%			
0.315	6%	11%	8%			
0.160	2%	7%	4%			
0.080	1%	5%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	66	56	53			
% SAND:	33	38	44			
% FINES:	1	5	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)			



PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 661-2839
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/12

FIELD NO:	146	147	148			
LAB NO:	731	732	733			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	78%	100%			
50.0	100%	78%	100%			
25.0	96%	60%	80%			
20.0	90%	55%	76%			
12.5	76%	46%	65%			
10.0	68%	43%	61%			
5.0	48%	33%	48%			
2.5	33%	24%	37%			
1.25	21%	17%	26%			
0.630	13%	13%	15%			
0.315	8%	9%	8%			
0.160	3%	6%	4%			
0.080	2%	5%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	52	67	52			
% SAND:	46	28	45			
% FINES:	2	5	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

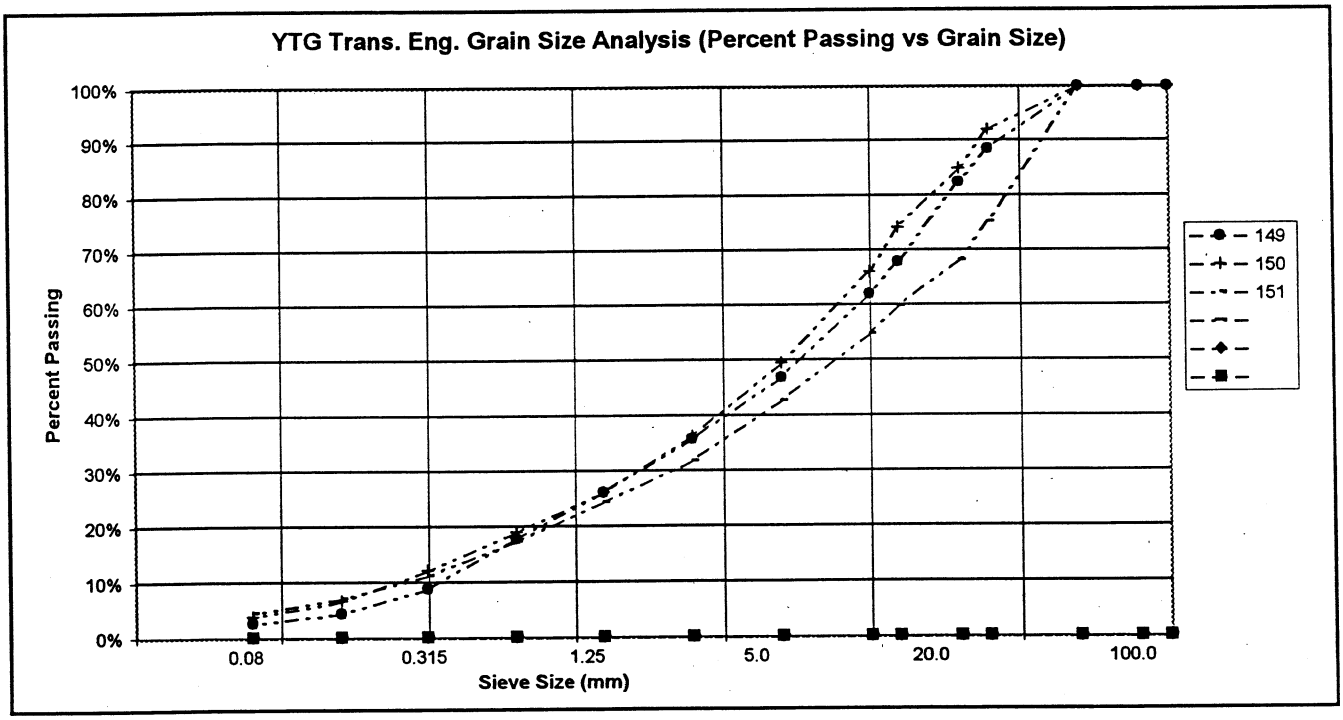


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 661-2840

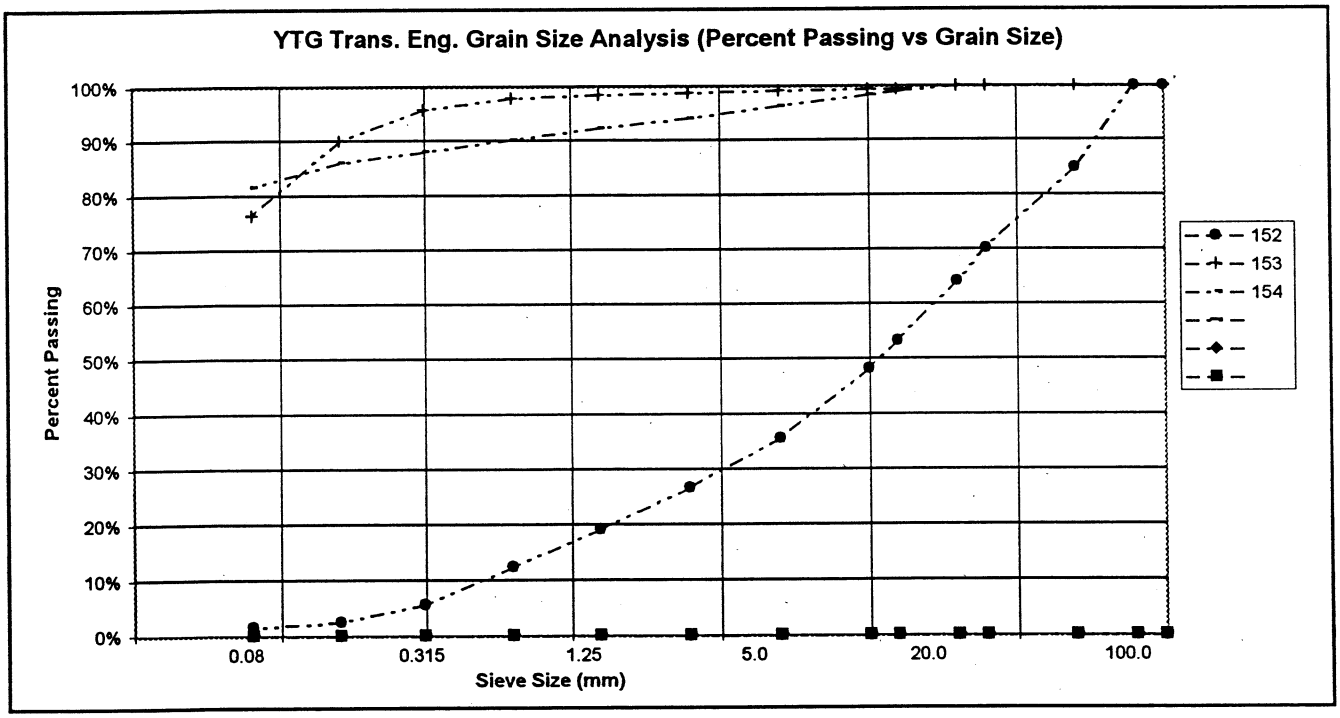
DATE COMP: 03/12/12

FIELD NO:	149	150	151			
LAB NO:	734	735	736			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	89%	92%	75%			
20.0	82%	85%	68%			
12.5	68%	74%	60%			
10.0	62%	66%	55%			
5.0	47%	50%	43%			
2.5	36%	36%	32%			
1.25	26%	26%	24%			
0.630	18%	19%	17%			
0.315	9%	12%	11%			
0.160	4%	7%	7%			
0.080	3%	4%	5%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	53	50	57			
% SAND:	44	46	38			
% FINES:	3	4	5			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



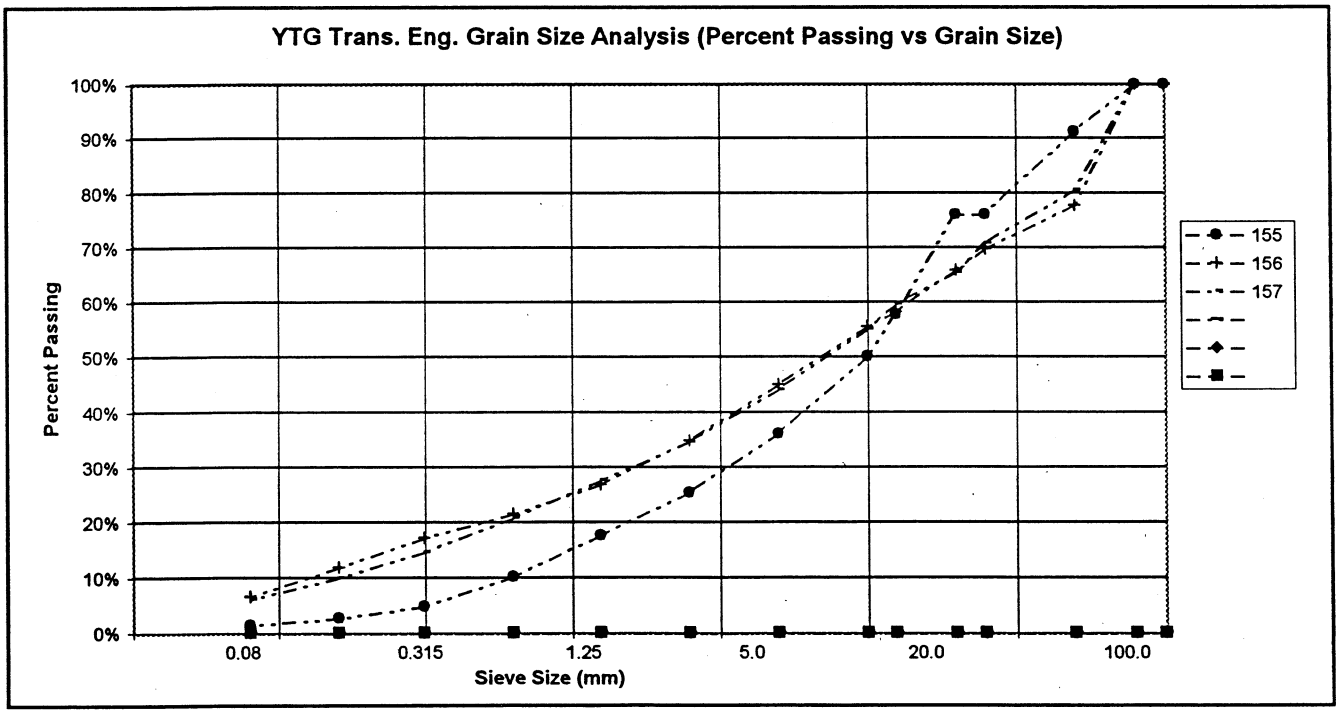
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 661-2841
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/12

FIELD NO:	152	153	154			
LAB NO:	737	738	739			
DEPTH:	0.8-1.2	1.8-2.0	3.2-3.6			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	85%	100%	100%			
25.0	70%	100%	100%			
20.0	64%	100%	100%			
12.5	53%	99%	99%			
10.0	48%	99%	98%			
5.0	36%	99%	96%			
2.5	27%	99%	94%			
1.25	19%	98%	92%			
0.630	12%	98%	90%			
0.315	6%	96%	88%			
0.160	2%	90%	86%			
0.080	1%	76%	82%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	64	1	4			
% SAND:	34	23	15			
% FINES:	1	76	82			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILT WITH SAND (ML)	SILT WITH SAND (ML)			



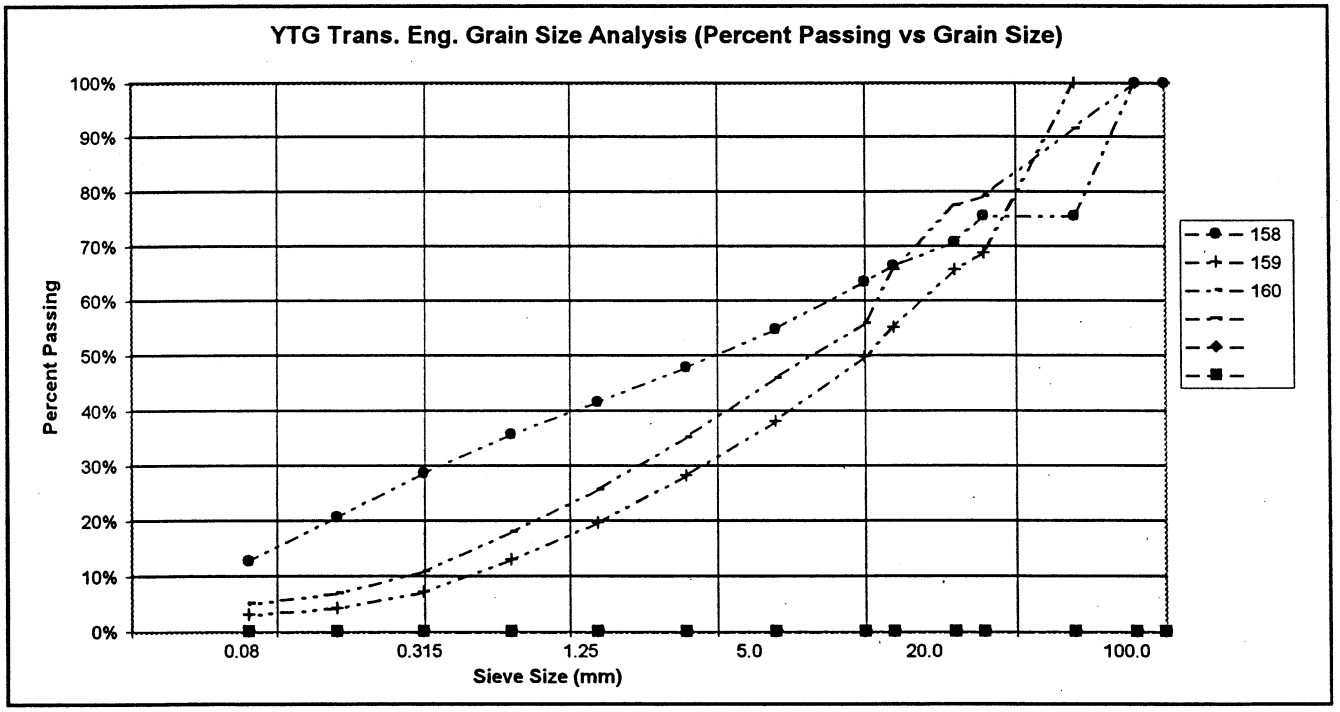
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 661-2842
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/12

FIELD NO:	155	156	157			
LAB NO:	740	741	742			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	91%	78%	81%			
25.0	76%	70%	71%			
20.0	76%	66%	65%			
12.5	58%	58%	60%			
10.0	50%	56%	55%			
5.0	36%	45%	44%			
2.5	25%	35%	35%			
1.25	18%	27%	28%			
0.630	10%	22%	21%			
0.315	5%	17%	15%			
0.160	3%	12%	10%			
0.080	1%	7%	6%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	64	55	56			
% SAND:	35	38	38			
% FINES:	1	7	6			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



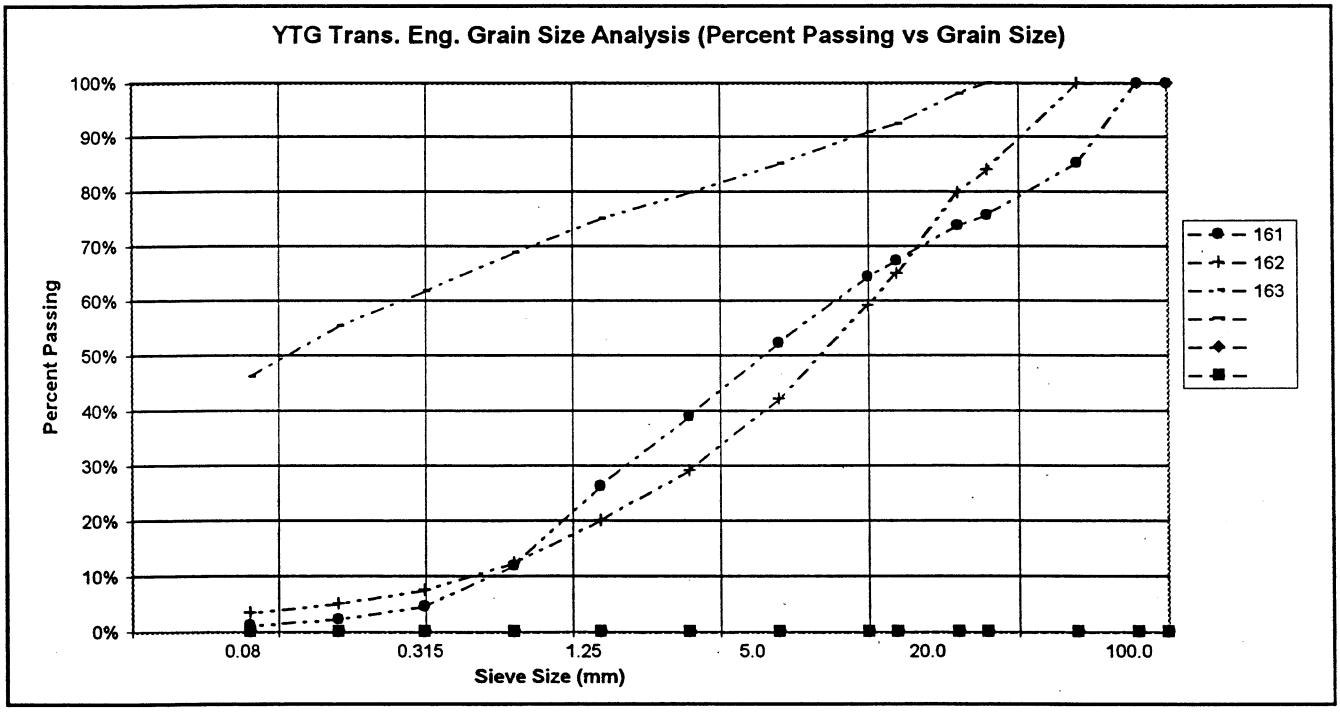
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 661-2843
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/12

FIELD NO:	158	159	160			
LAB NO:	743	744	745			
DEPTH:	0.8-1.2	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	76%	100%	92%			
25.0	76%	69%	79%			
20.0	71%	66%	77%			
12.5	66%	55%	66%			
10.0	64%	50%	56%			
5.0	55%	38%	46%			
2.5	48%	28%	35%			
1.25	42%	20%	26%			
0.630	36%	13%	18%			
0.315	29%	7%	11%			
0.160	21%	4%	7%			
0.080	13%	3%	5%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	45	62	54			
% SAND:	42	35	41			
% FINES:	13	3	5			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



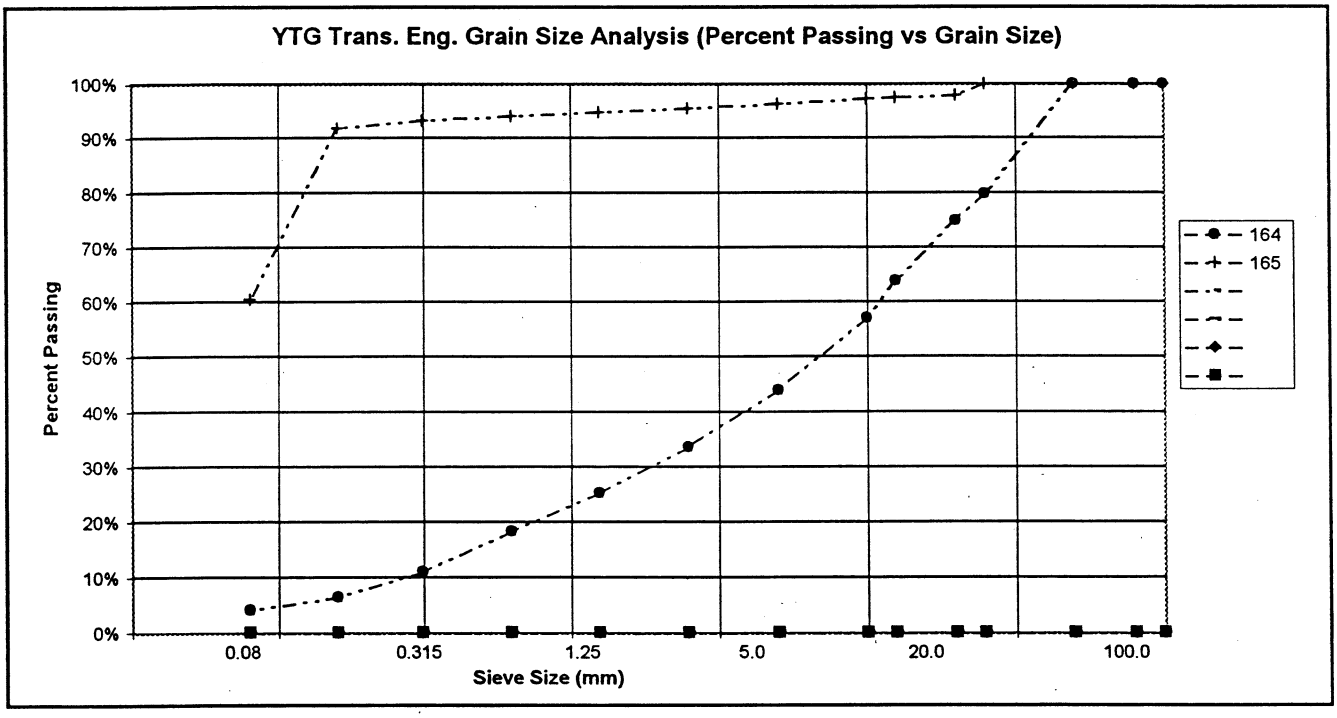
PROJECT NUMBER: 552-202101-0362-1 HOLE No.: 661-2844
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C. DATE COMP: 03/12/12

FIELD NO:	161	162	163			
LAB NO:	746	747	748			
DEPTH:	0.8-1.2	3.0-4.0	4.2-4.6			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	85%	100%	100%			
25.0	76%	84%	100%			
20.0	74%	80%	98%			
12.5	67%	65%	92%			
10.0	65%	59%	91%			
5.0	52%	42%	85%			
2.5	39%	29%	80%			
1.25	26%	20%	75%			
0.630	12%	12%	69%			
0.315	5%	7%	62%			
0.160	2%	5%	56%			
0.080	1%	3%	46%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	48	58	15			
% SAND:	51	39	39			
% FINES:	1	3	46			
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)			



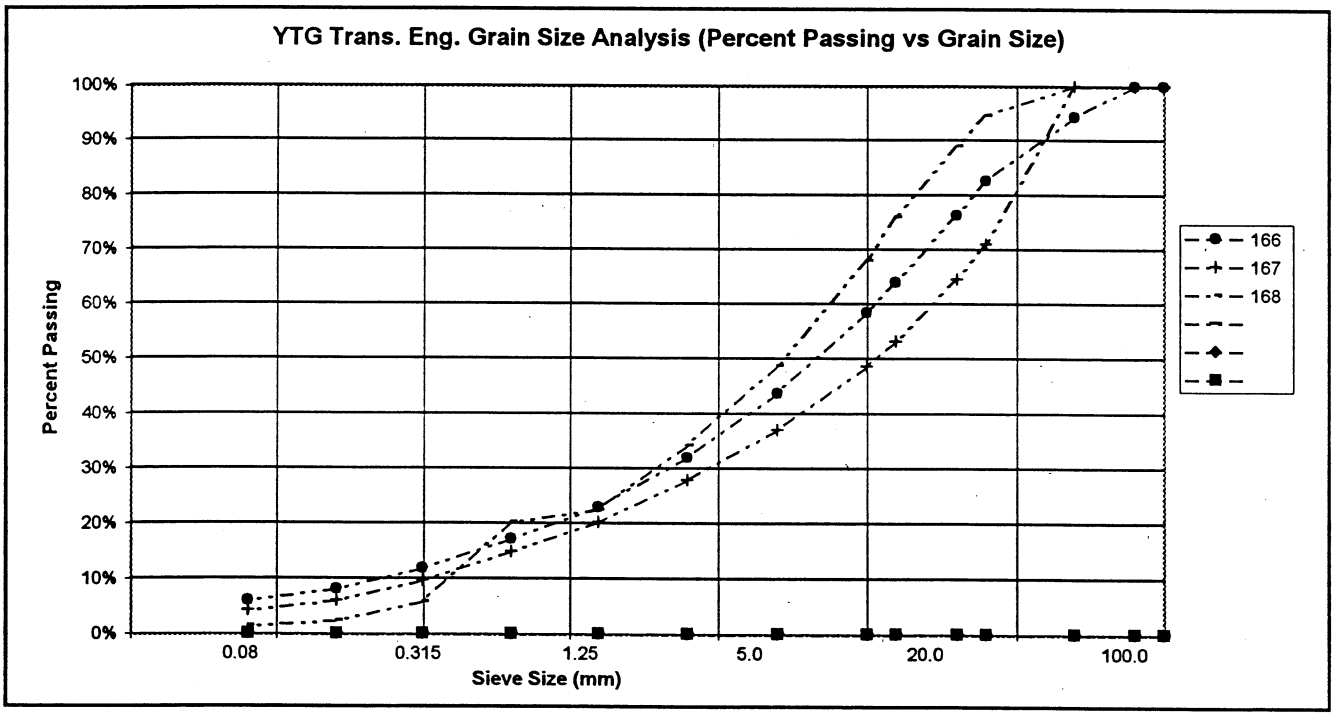
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 661-2845
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/12

FIELD NO:	164	165				
LAB NO:	749	750				
DEPTH:	0.4-0.8	3.0-4.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	80%	100%				
20.0	75%	98%				
12.5	64%	98%				
10.0	57%	97%				
5.0	44%	96%				
2.5	34%	96%				
1.25	25%	95%				
0.630	18%	94%				
0.315	11%	93%				
0.160	6%	92%				
0.080	4%	60%				
M.C.(%):						
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	56	4				
% SAND:	40	36				
% FINES:	4	60				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)				



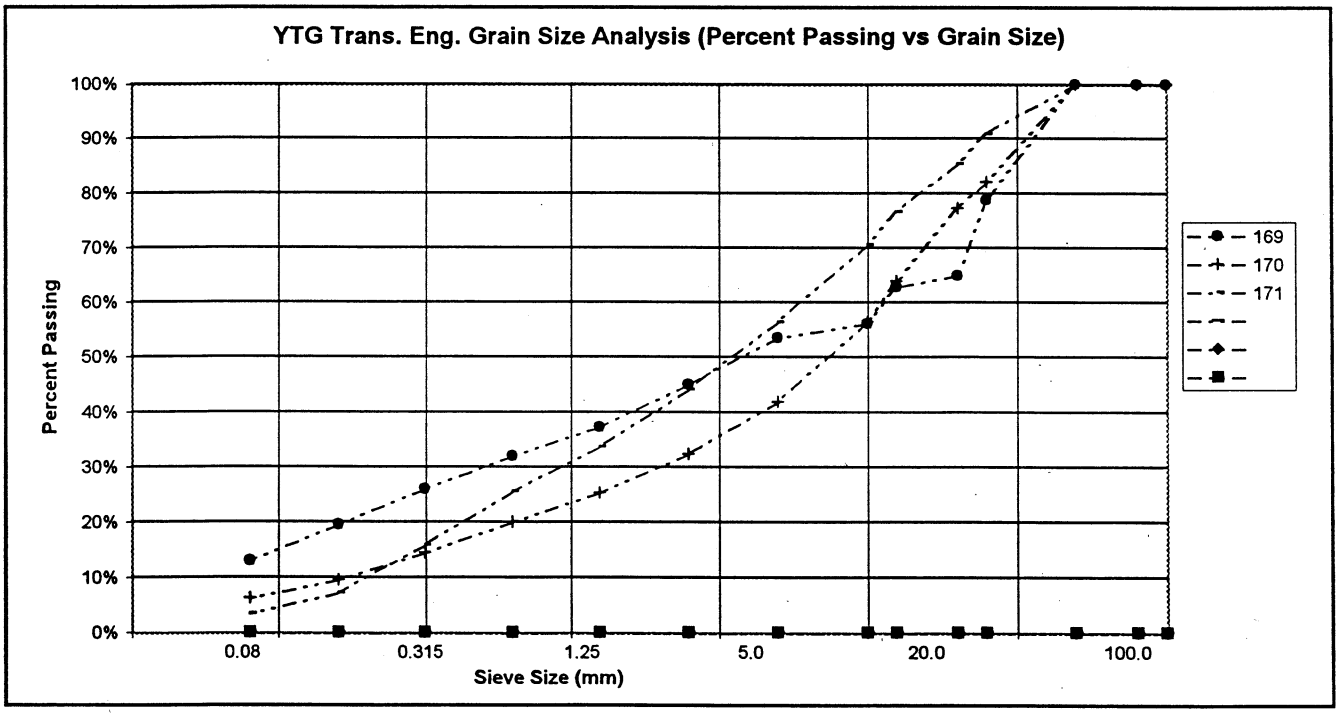
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 662-2846
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/13

FIELD NO:	166	167	168			
LAB NO:	751	752	753			
DEPTH:	1.4-2.0	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	94%	100%	100%			
25.0	83%	71%	95%			
20.0	76%	65%	89%			
12.5	64%	53%	76%			
10.0	59%	49%	68%			
5.0	44%	37%	49%			
2.5	32%	28%	34%			
1.25	23%	20%	23%			
0.630	17%	15%	20%			
0.315	12%	10%	6%			
0.160	8%	6%	2%			
0.080	6%	4%	1%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	56	63	51			
% SAND:	38	33	47			
% FINES:	6	4	1			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



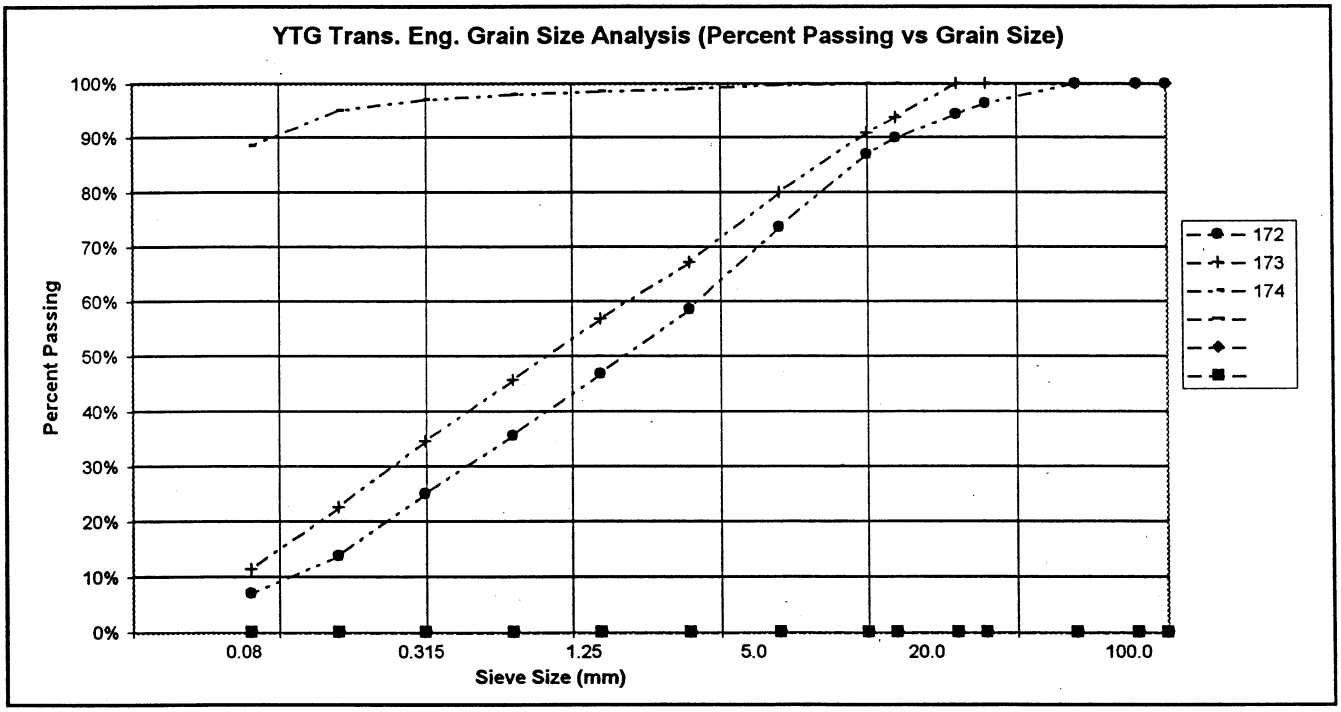
PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 662-2847
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/13

FIELD NO:	169	170	171			
LAB NO:	754	755	756			
DEPTH:	1.2-1.6	3.0-4.0	5.0-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	79%	82%	91%			
20.0	65%	77%	85%			
12.5	63%	64%	77%			
10.0	56%	56%	71%			
5.0	54%	42%	56%			
2.5	45%	32%	44%			
1.25	37%	25%	34%			
0.630	32%	20%	26%			
0.315	26%	14%	16%			
0.160	20%	10%	7%			
0.080	13%	6%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	46	58	44			
% SAND:	41	36	53			
% FINES:	13	6	3			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED SAND WITH GRAVEL (SW)			



PROJECT NUMBER:	552-202101-0362-1	HOLE No.: 662-2848
CLIENT:	Shakwak	
PROJECT NAME:	Congdon Creek Granular Investigation	
PROJECT LOCATION:	Km 1719.5 A/H	
DRILL UNIT:	Komatsu PC- 400-LC	
HOLE LOCATION:	See Plan / GPS	
LOGGED BY:	G.C.	DATE COMP: 03/12/13

FIELD NO:	172	173	174			
LAB NO:	757	758	759			
DEPTH:	1.0-2.0	3.0-4.0	5.6-6.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	96%	100%	100%			
20.0	94%	100%	100%			
12.5	90%	94%	100%			
10.0	87%	91%	100%			
5.0	74%	80%	100%			
2.5	59%	67%	99%			
1.25	47%	57%	99%			
0.630	36%	46%	98%			
0.315	25%	35%	97%			
0.160	14%	23%	95%			
0.080	7%	11%	88%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	26	20	0			
% SAND:	67	69	11			
% FINES:	7	11	88			
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	SILT (ML)			

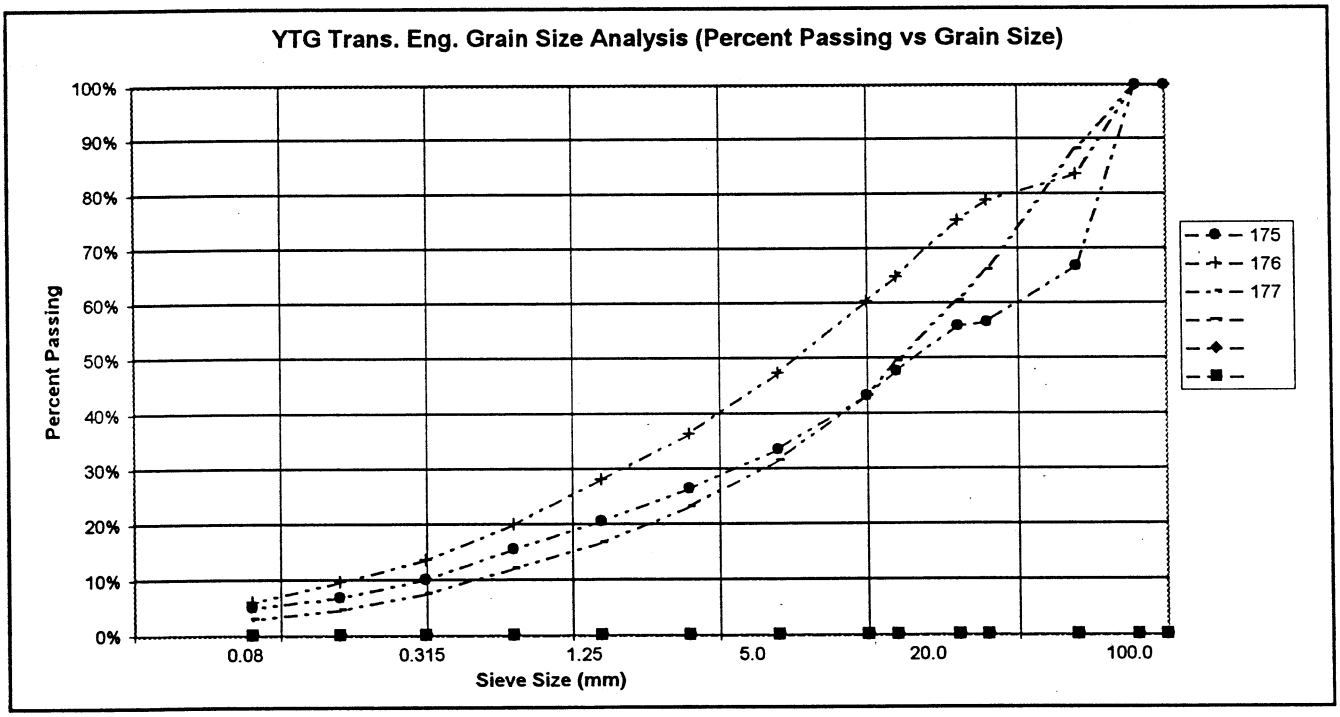


PROJECT NUMBER: 552-202101-0362-1
CLIENT: Shakwak
PROJECT NAME: Congdon Creek Granular Investigation
PROJECT LOCATION: Km 1719.5 A/H
DRILL UNIT: Komatsu PC- 400-LC
HOLE LOCATION: See Plan / GPS
LOGGED BY: G.C.

HOLE No.: 662-2849

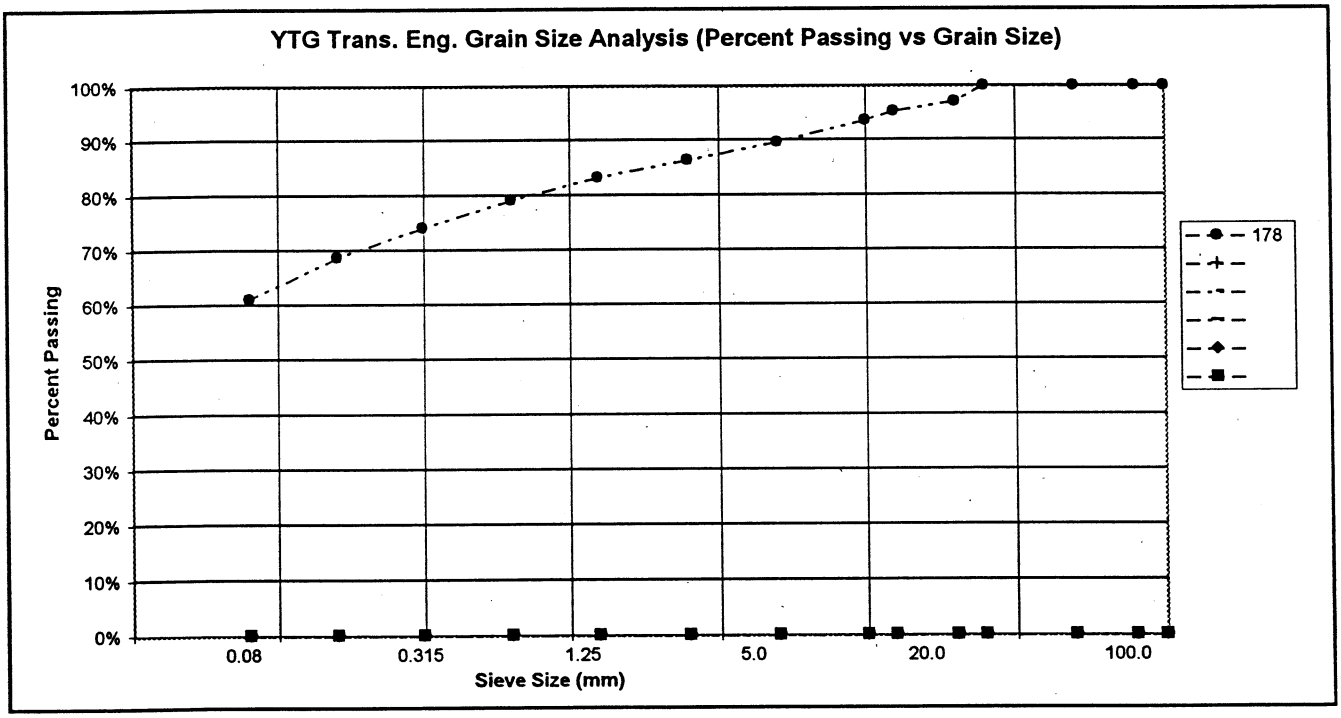
DATE COMP: 03/12/13

FIELD NO:	175	176	177			
LAB NO:	760	761	762			
DEPTH:	2.0-2.5	4.0-5.0	6.0-6.5			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	67%	84%	88%			
25.0	57%	79%	66%			
20.0	56%	75%	60%			
12.5	48%	65%	49%			
10.0	43%	60%	43%			
5.0	34%	47%	31%			
2.5	27%	36%	23%			
1.25	21%	28%	17%			
0.630	16%	20%	12%			
0.315	10%	14%	8%			
0.160	7%	10%	5%			
0.080	5%	6%	3%			
M.C.(%):						
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	66	53	69			
% SAND:	29	41	29			
% FINES:	5	6	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)			



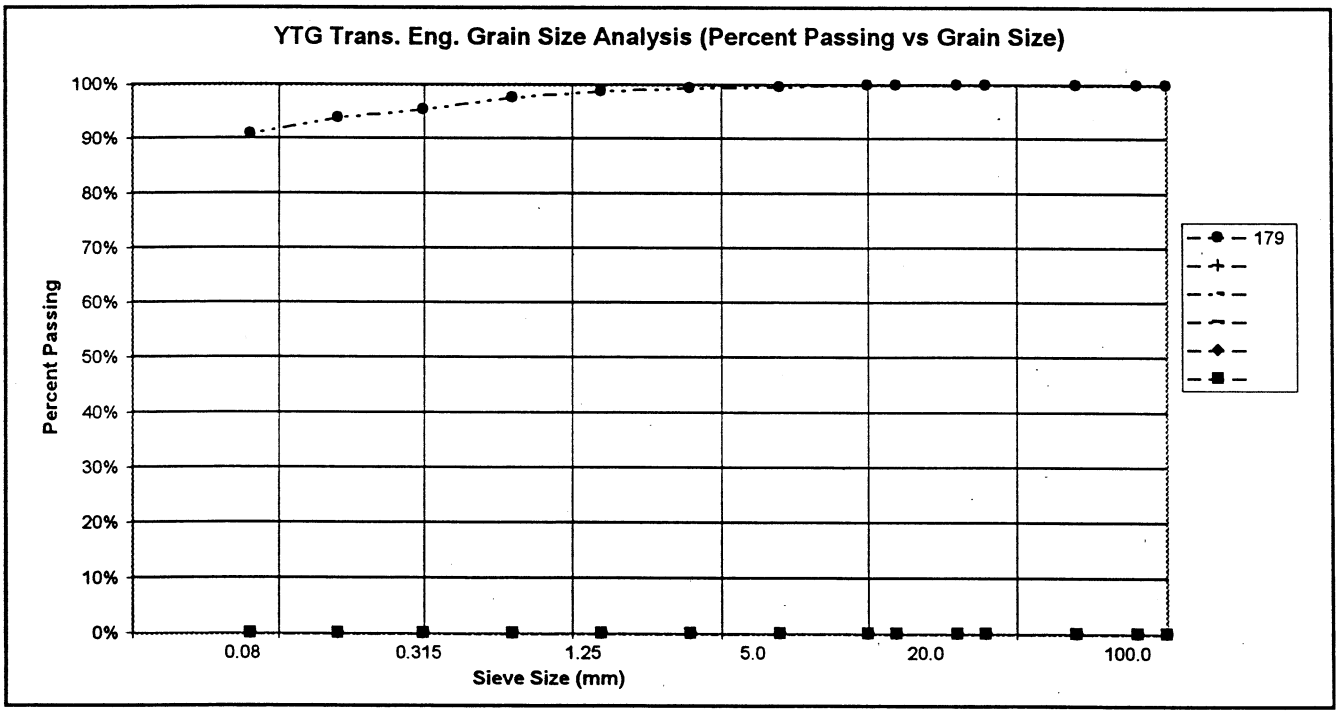
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 662-2850
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/13

FIELD NO:	178					
LAB NO:	763					
DEPTH:	2.0-3.0					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	100%					
20.0	97%					
12.5	95%					
10.0	94%					
5.0	90%					
2.5	86%					
1.25	83%					
0.630	79%					
0.315	74%					
0.160	69%					
0.080	61%					
M.C.(%):						
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	10					
% SAND:	29					
% FINES:	61					
CLASSIFICATION	SANDY SILT (ML)					



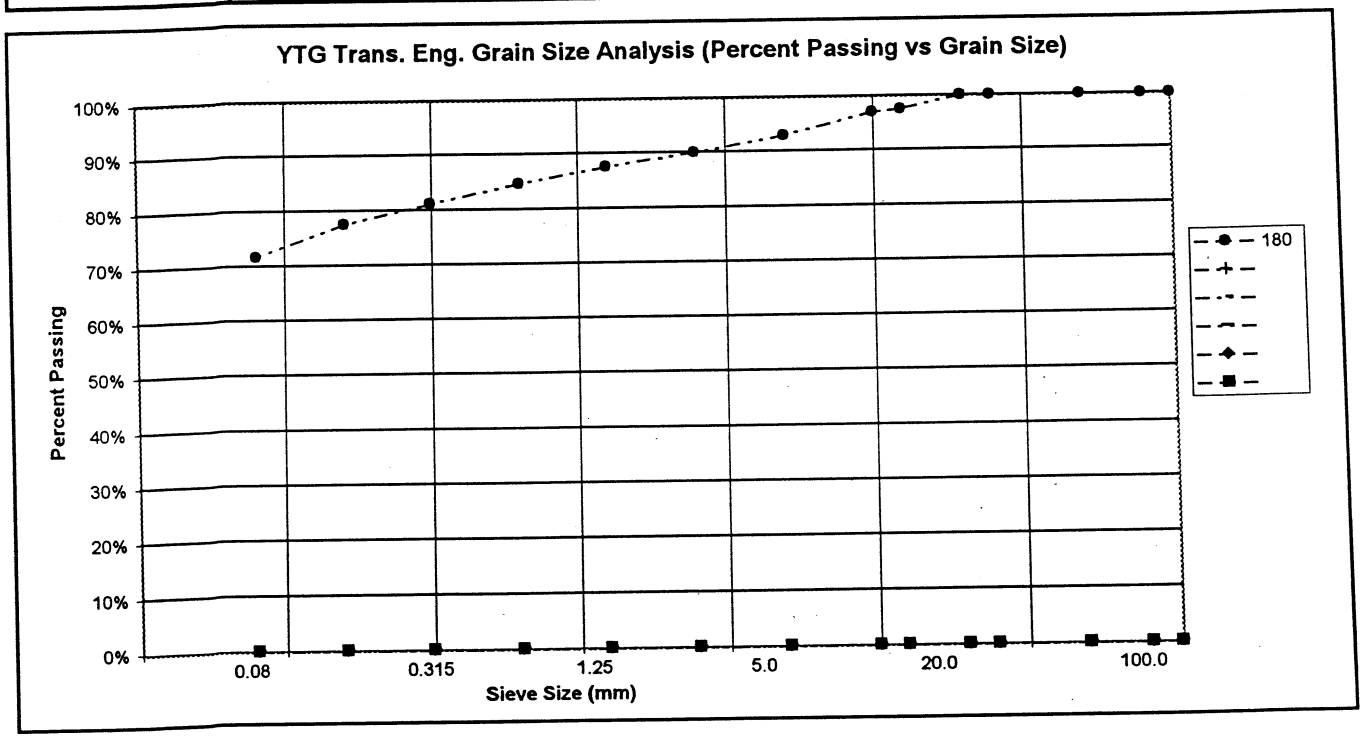
PROJECT NUMBER:	552-202101-0362-1		HOLE No.: 662-2851
CLIENT:	Shakwak		
PROJECT NAME:	Congdon Creek Granular Investigation		
PROJECT LOCATION:	Km 1719.5 A/H		
DRILL UNIT:	Komatsu PC- 400-LC		
HOLE LOCATION:	See Plan / GPS		
LOGGED BY:	G.C.		DATE COMP: 03/12/13

FIELD NO:	179					
LAB NO:	764					
DEPTH:	2.0-3.0					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	100%					
20.0	100%					
12.5	100%					
10.0	100%					
5.0	100%					
2.5	99%					
1.25	99%					
0.630	98%					
0.315	95%					
0.160	94%					
0.080	91%					
M.C.(%):						
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	0					
% SAND:	9					
% FINES:	91					
CLASSIFICATION	SILT (ML)					



PROJECT NUMBER:	552-202101-0362-1				HOLE No.: 662-2852	
CLIENT:	Shakwak					
PROJECT NAME:	Congdon Creek Granular Investigation					
PROJECT LOCATION:	Km 1719.5 A/H					
DRILL UNIT:	Komatsu PC- 400-LC					
HOLE LOCATION:	See Plan / GPS					
LOGGED BY:	G.C.				DATE COMP: 03/12/13	

FIELD NO:	180					
LAB NO:	765					
DEPTH:	1.0-2.0					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	100%					
20.0	100%					
12.5	98%					
10.0	97%					
5.0	93%					
2.5	90%					
1.25	88%					
0.630	85%					
0.315	81%					
0.160	77%					
0.080	72%					
M.C.(%):						
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	7					
% SAND:	21					
% FINES:	72					
CLASSIFICATION	SILT WITH SAND (ML)					



GEOTECHNICAL INVESTIGATIONS

Highway Construction
km 1716.6 to 1723.6
Yukon, 2003-2004
Volume 3 of 3

Yukon
Highways and Public Works
Transportation Engineering Branch

Geotechnical Services

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

ORIGINAL - Do Not Remove From File

Highway Construction
Km 1716.6 to 1723.6
Alaska Highway #1
Yukon, 2004-2005
Volume 3 of 3

This Data Package prepared for project viewing:

February, 2004

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

CONTENTS

Volume 1 of 3

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING km 1716.6 to 1723.6, Alaska Highway

Subsurface Exploration and Test Report Sheets are provided.
The reports for the Centreline testing holes are arranged according to project location, starting at km 1716+900 and increasing to km 1723+725.

Laboratory Testing Result Sheets are provided.
The reports for the centreline holes are arranged according to test hole number, starting at 619-495 and increasing to 649-259.

2001	TEST HOLES 495 to 505	shown with prefix 619-
	TEST HOLES 506 to 521	shown with prefix 620-
	TEST HOLES 522 to 531	shown with prefix 621-
2003	TEST HOLES 221 to 245	shown with prefix 648-
	TEST HOLES 246 to 259	shown with prefix 649-

CONTENTS (continued)

Volume 2 of 3

GRANULAR SOURCE km 1719.5 RHS ALASKA HIGHWAY

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

Auger Testing

2003	TEST HOLES 2766-2773	shown with prefix 656-

Test Pit Testing

2003	TEST PITS 2774 to 2784 & 2795 to 2797	shown with prefix 658-
	TEST PITS 2798 to 2815	shown with prefix 659-
	TEST PITS 2817 to 2830	shown with prefix 660-
	TEST PITS 2831 to 2845	shown with prefix 661-
	TEST PITS 2846 to 2851	shown with prefix 662-

CONTENTS (continued)

Volume 3 of 3

GRANULAR SOURCE km 1721.0 RHS ALASKA HIGHWAY

A production history and location plans are provided.

GRANULAR SOURCE km 1730.2 LHS ALASKA HIGHWAY

A production history, location plan, photographs, and subsurface exploration and testing report sheets are provided.

Auger Testing

2001	TEST HOLES 1926 to 1928	shown with prefix 623-
	TEST HOLES 1938 to 1941	shown with prefix 624-

Test Pit Testing

2002	TEST PITS 2460 to 2520	shown with prefix 638-

GRANULAR SOURCE TESTING
km 1721.0 RHS
ALASKA HIGHWAY

HISTORY OF AGGREGATE PRODUCTION

Alaska Highway Km 1721.0 RHS
Pit ID 115 G-08 (Congdon Creek)

Average Crusher Run Characteristics of Material Produced

File Number --- 2142-5-60 Contractor --- Loucheux Enterprises
Stockpile ID --- 1990-06 Commenced --- 90-06-15 Completed --- 90-06-18
Type of aggregate --- 20 mm B.S.T. Aggregate
Amount Produced --- 4,000 m³ No. of tests --- 25

Sieve Size mm	- 20.0	12.5	10.0	5.00	2.50	1.25	0.315	0.080
Percent Passing	- 100	82.8	--	51.5	37.9	27.8	13.6	4.7

Moisture Content - 2.6 % Standard Proctor
Fracture - 61.2 % Kg/m³ @ % moisture

==========

File Number --- 2142-5-60 Contractor --- Loucheux Enterprises
Stockpile ID --- n/a Commenced --- 90-06-18 Completed --- 90-06-20
Type of aggregate --- Granular "A" Base Course
Amount Produced --- ± 4,800 m³ No. of tests --- 10

Sieve Size mm	- 20.0	12.5	10.0	5.00	2.50	1.25	0.315	0.080
Percent Passing	- 99.9	86.1	--	55.8	--	30.2	14.7	5.0

Moisture Content - 3.0 % Standard Proctor
Fracture - 61.1 % Kg/m³ @ % moisture

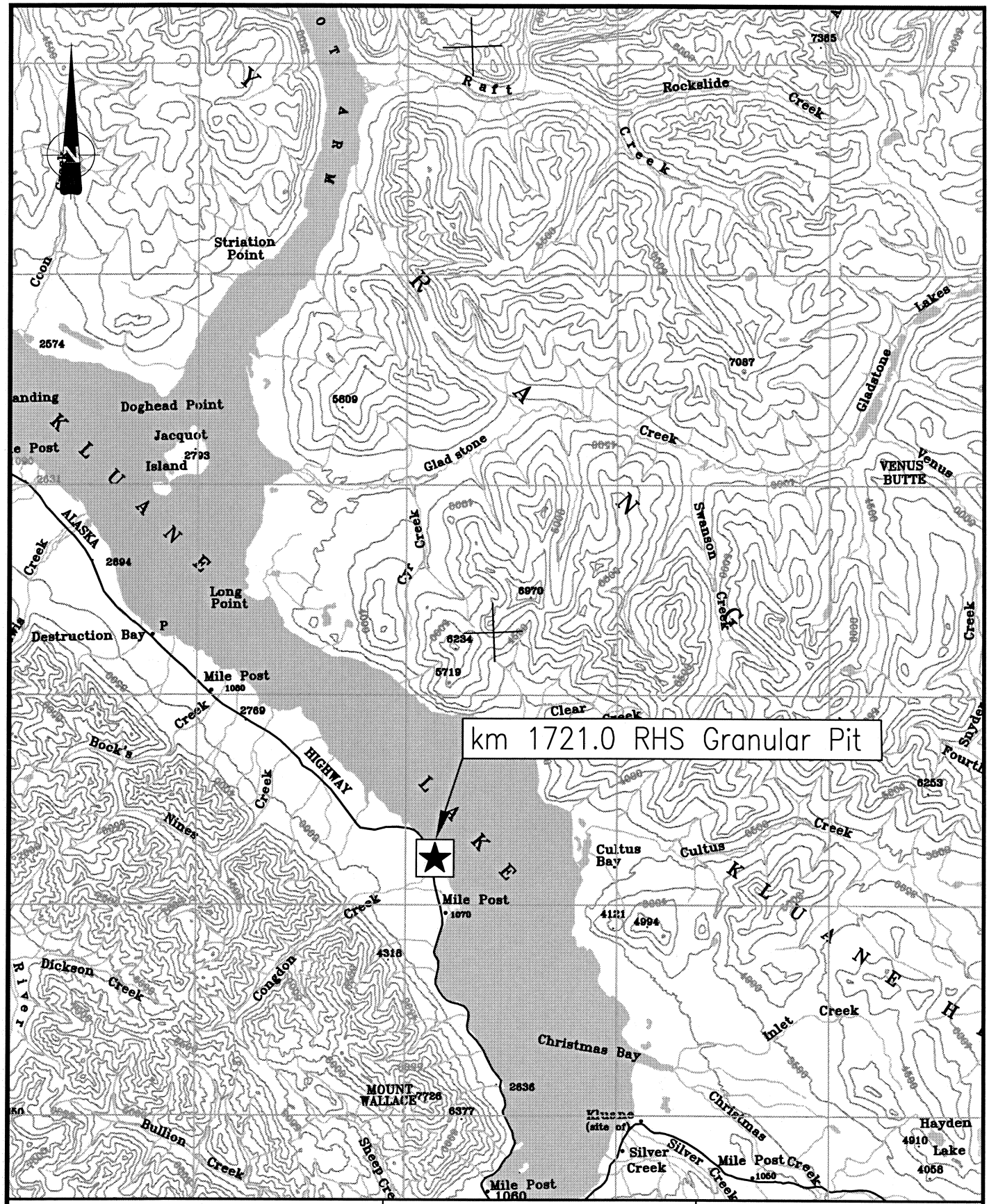
==========

File Number --- 2145-21 Contractor --- Nuway Crushing Ltd.
Stockpile ID --- 1996-11 Commenced --- 96-10-22 Completed --- 96-10-26
Type of aggregate --- 20 mm B.S.T. Aggregate
Amount Produced --- 9,998 m³ No. of tests --- 47

Sieve Size mm	- 20.0	12.5	10.0	5.00	2.50	1.25	0.315	0.080
Percent Passing	- 99.6	84.3	--	54.7	41.1	30.7	15.0	5.3

Moisture Content - 3.0 % Standard Proctor
Fracture - 56.9 % Kg/m³ @ % moisture

==========

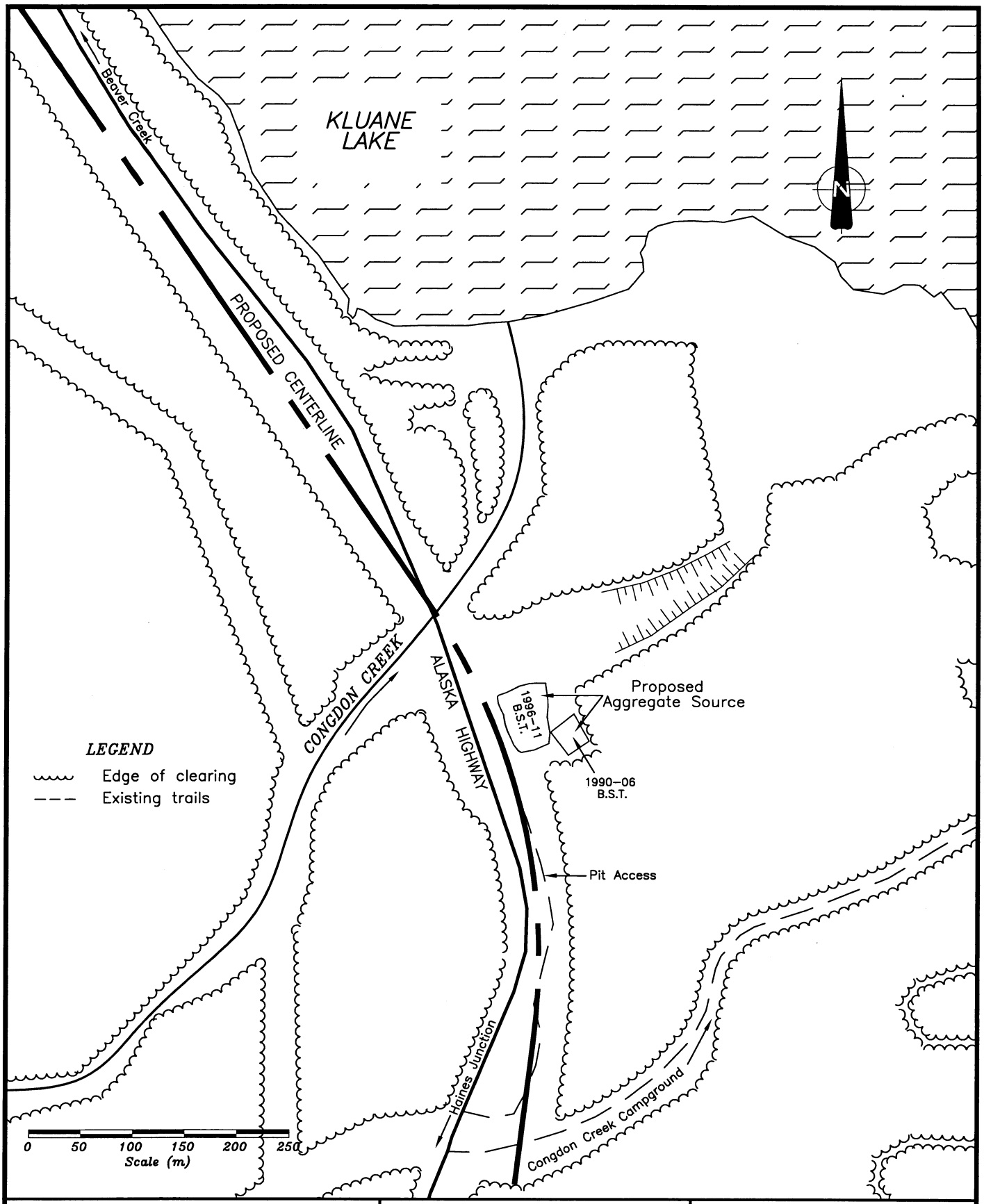


Yukon
Highways and Public Works

Transportation Engineering Branch

KEY PLAN
GRANULAR PIT
RESERVE
km 1721.0 R.H.S.
(Congdon Creek)
ALASKA HWY. YUKON

pit file:	115–G–08
quad:	115 G/02
drawn:	JJM
date:	2004–02–06
scale:	1: 250,000
drwg:	115g–08K



Yukon
Highways and Public Works

Transportation Engineering Branch

SITE PLAN
GRANULAR PIT
km 1721.0 RHS
(Congdon Creek)
ALASKA HWY. YUKON

pit file:	115 G-08
revision:	2004-Proposed
drawn:	JJM
date:	2004-02-06
scale:	1: 5000
drwg:	115g-08S

GRANULAR SOURCE TESTING
km 1730.2 LHS
ALASKA HIGHWAY

HISTORY OF AGGREGATE PRODUCTION

Name Highway Km 1730.2 LHS
Pit ID 115 G-21 (Nines Creek)

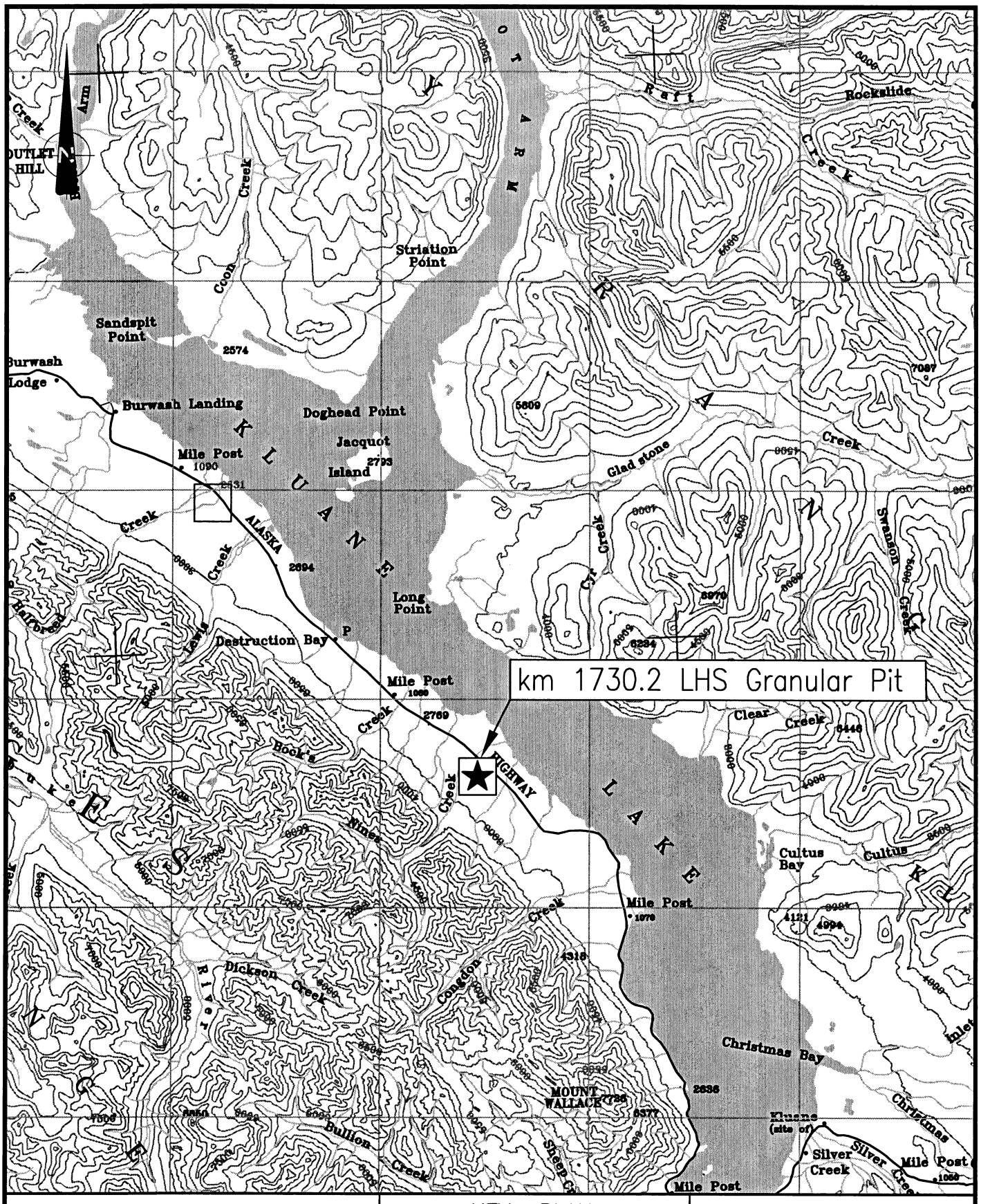
Average Crusher Run Characteristics of Material Produced

File Number --- 2550-22/01-35 Contractor --- GHV (Summit Aggregates)
Stockpile ID --- 2003-22 Commenced --- 03-06-01 Completed --- 03-06-16
Type of aggregate --- Granular "A" Base Course / B.S.T. Aggregate
Amount Produced --- ± 57,500 m^3 No. of tests --- 151

Sieve Size mm	- 20.0	12.5	10.0	5.00	2.50	1.25	0.315	0.080
Percent Passing	- 100	82.3	--	48.2	34.9	23.9	10.4	4.8

Moisture Content - 2.9 % Standard Proctor
Fracture - 71.0 % 2200 Kg/m^3 @ 8.1 % moisture
** Granular "A" and B.S.T. combined in one stockpile as material meet both specifications.

==========

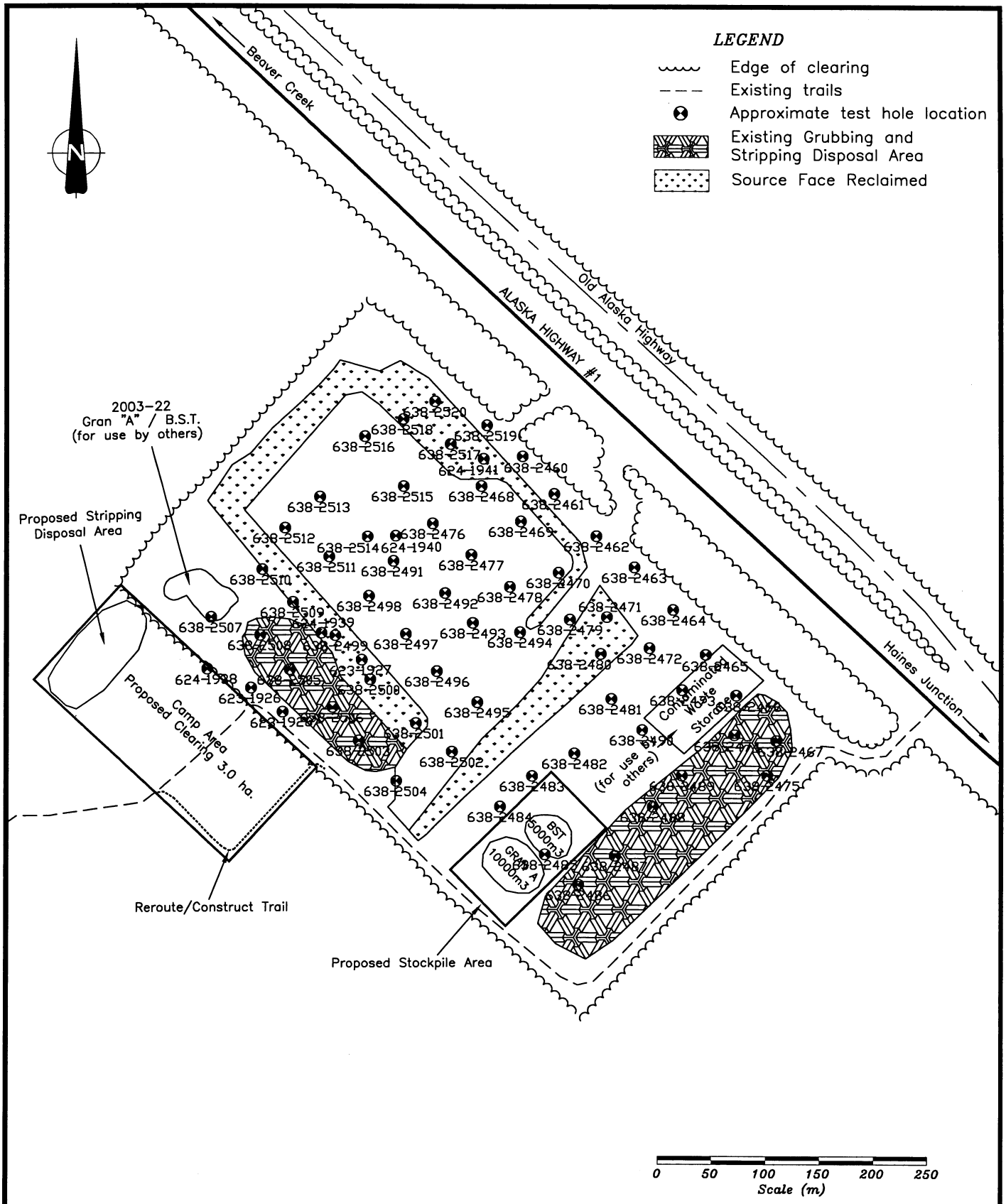


Yukon
Highways and Public Works

Transportation Engineering Branch

KEY PLAN
GRANULAR PIT
RESERVE
km 1730.2 L.H.S.
(Nines Creek)
ALASKA HWY. YUKON

pit file:	115-G-21
quad:	115G/02
drawn:	JJM
date:	2004-02-05
scale:	1: 250,000
drwg:	115g-21K



Yukon Highways and Public Works Transportation Engineering Branch	SITE PLAN GRANULAR PIT km 1730.2 LHS (Nines Creek) AILASKA HWY. YUKON	pit file: 115 G-21 revision: 2004-Proposed drawn: JJM date: 2004-02-05 scale: 1: 5000 drwg: 115g-21S

Km 1730.2 LHS Alaska Highway #1
Pit Ident. 115 G-21 (Nines Creek)

Book # 623 & 624

Auger Hole Logs

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 623-1926
ENGINEERING CAPITAL	NINES CREEK FAN LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	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	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -rough drilling from surface to 4.5m							0.0
1.0			1384		GP			1.0
2.0								2.0
3.0								3.0
4.0			1385		GP-GM			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/20
Fig. No:	Page 1 of 1

02/02/25 01:07PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 623-1927
ENGINEERING CAPITAL	NINES CREEK FAN LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -rough drilling from surface to 4.5m				
1.0					
			1386	GP	
2.0					
3.0					
4.0			1387	GP-GM	
	END HOLE @ 4.5m				
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Government of Yukon
Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/20
Fig. No:	Page 1 of 1

02/02/04 11:04AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 623-1928
ENGINEERING CAPITAL	NINES CREEK FAN LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	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	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp -rough drilling from surface to 4.5m							0.0
1.0			1388		GP			1.0
2.0								2.0
3.0								3.0
4.0			1389		GP-GM			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/20
Fig. No:	Page 1 of 1

02/02/04 11:04AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 624-1938
ENGINEERING CAPITAL	NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	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	POORLY TO WELL GRADED GRAVEL WITH SILT & SAMD (GP-GM)-(GW-GM) -brown -moist -rough drilling from surface.							0.0
1.0			1408		GP-GM			1.0
2.0	-extremely rough & tight drilling @ 2.5							2.0
3.0			1409		GW-GM			3.0
4.0	END HOLE @ 4.0m -refusal Note: No organics at surface							4.0
5.0								5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 01/09/21
Fig. No:	Page 1 of 1

02/02/06 11:21AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 624-1939
ENGINEERING CAPITAL	NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	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	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -brown -damp -rough drilling from surface to 4.5m							0.0
1.0		⊠	1410		GP-GM			1.0
2.0								2.0
3.0								3.0
4.0		⊠	1411		GP-GM			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

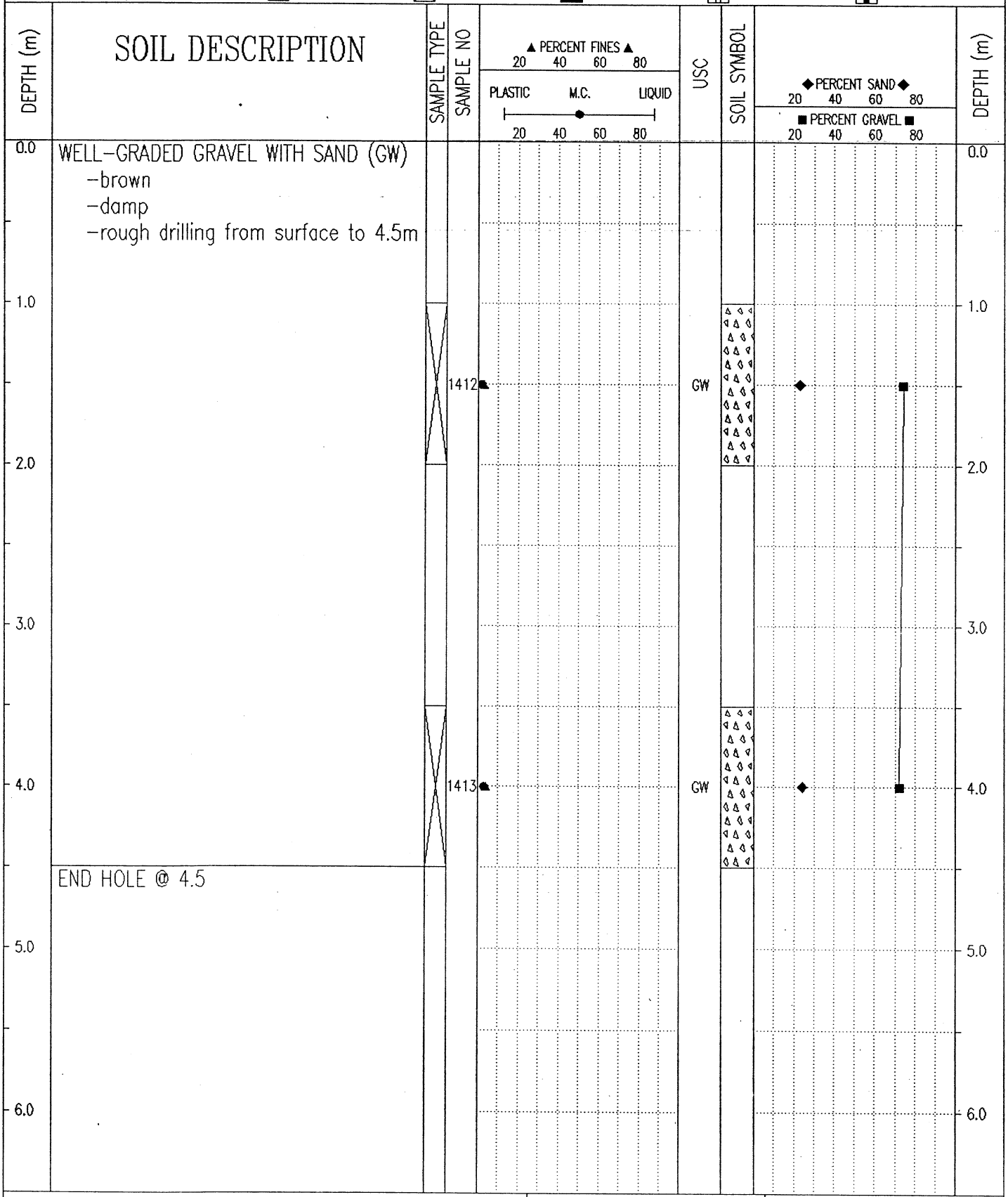
Government of Yukon
Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/21
Fig. No:	Page 1 of 1

02/02/06 11:24AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 624-1940
ENGINEERING CAPITAL	NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

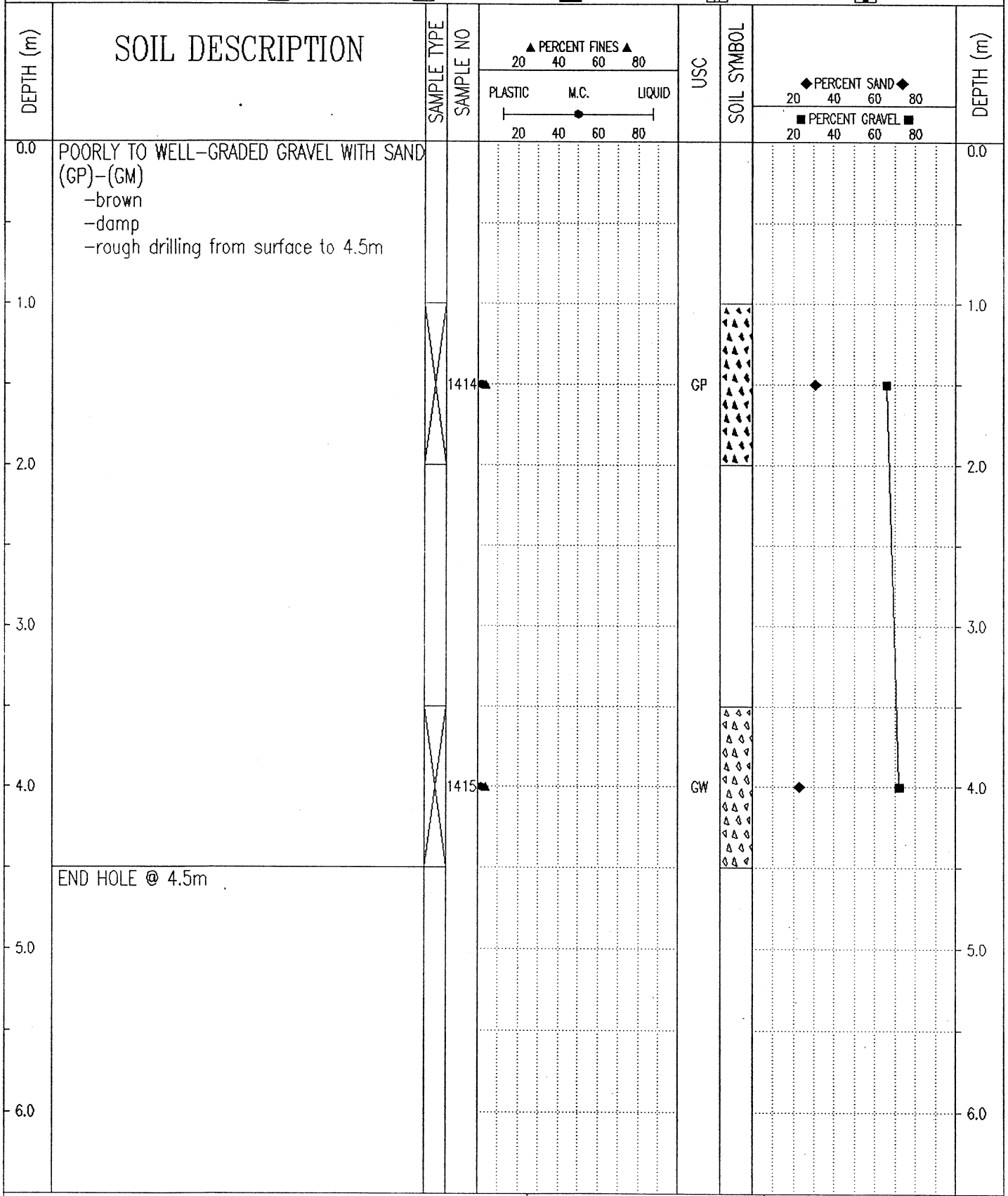


Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/21
	Fig. No:	Page 1 of 1

02/02/06 11:02AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 624-1941
ENGINEERING CAPITAL	NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/21
	Fig. No:	Page 1 of 1

02/02/25 01:49PM

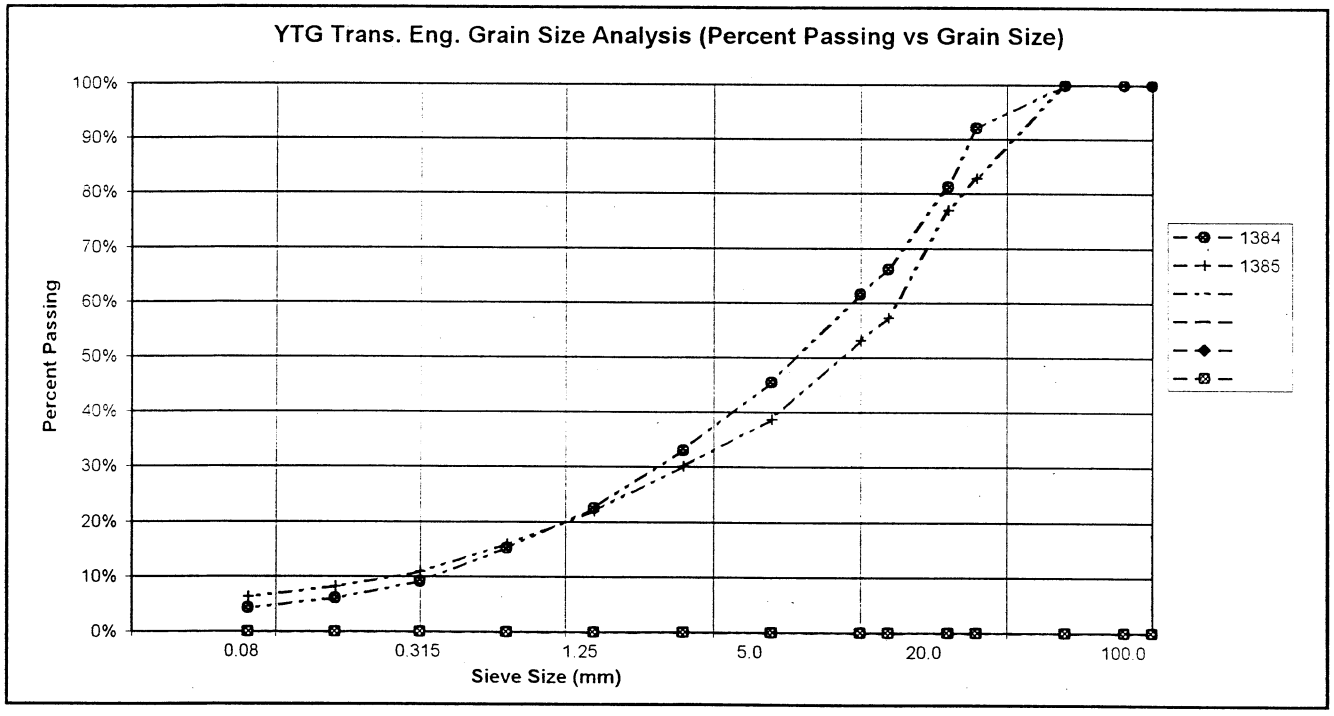
Km 1730.2 LHS Alaska Highway #1
Pit Ident. 115 G-21 (Nines Creek)

Book # 623 & 624

Auger Sample Results

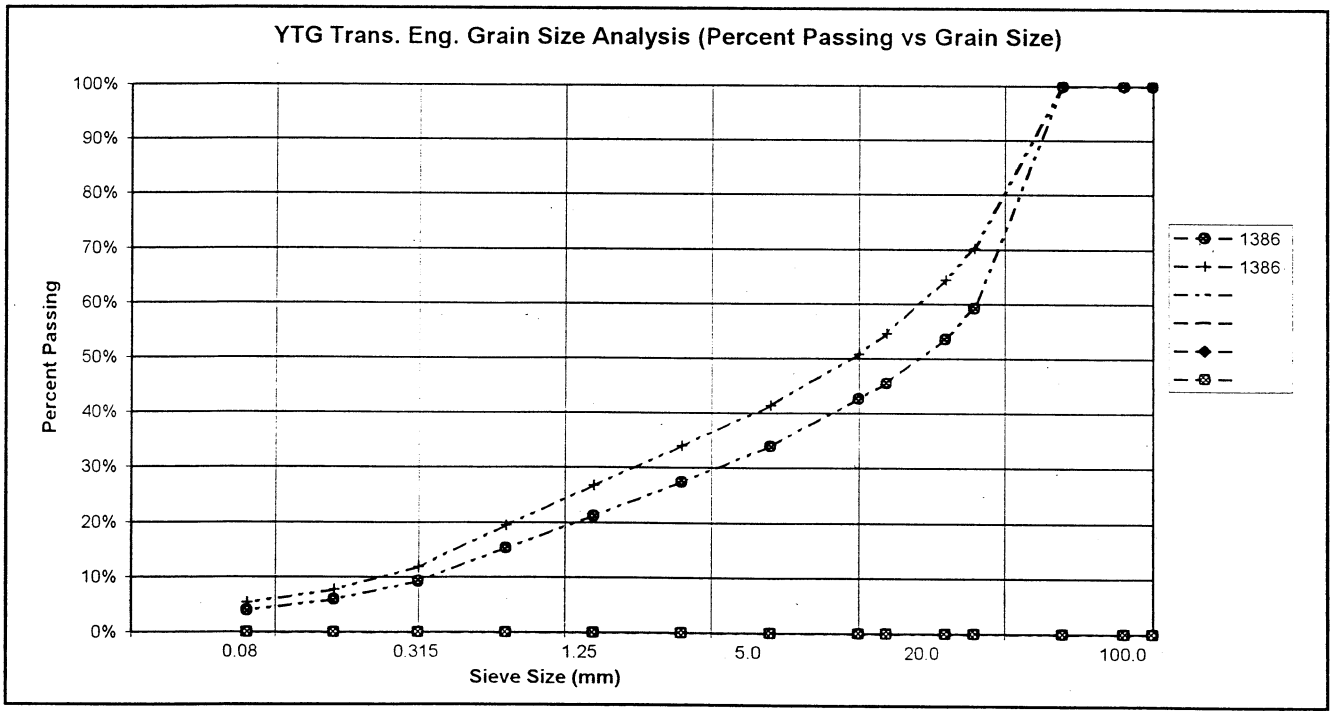
PROJECT NUMBER:	092-202101-0361-1		HOLE No.: 623-1926
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 11		
PROJECT LOCATION:	NINES CREEK CHANNEL		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Test Hole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/20

FIELD NO:	1384	1385				
LAB NO:	2161	2162				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	92%	83%				
20.0	81%	77%				
12.5	66%	57%				
10.0	62%	53%				
5.0	46%	39%				
2.5	33%	30%				
1.25	23%	22%				
0.630	15%	16%				
0.315	9%	11%				
0.160	6%	8%				
0.080	4%	6%				
M.C.(%):	3%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	54	61				
% SAND:	41	32				
% FINES:	4	6				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				



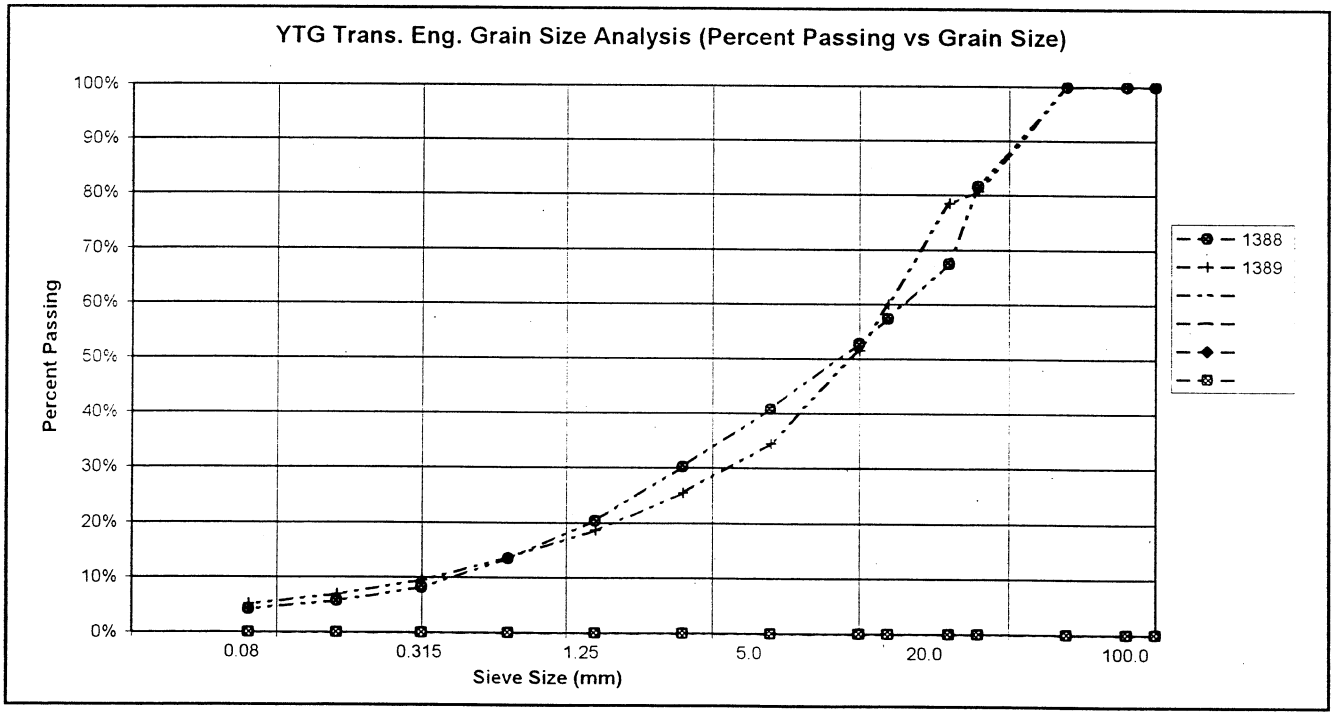
PROJECT NUMBER:	092-202101-0361-1		HOLE No.: 623-1927
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 11		
PROJECT LOCATION:	NINES CREEK CHANNEL		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Test Hole Log Sheet		
LOGGED BY:	G.C.		DATE COMP: 2001/09/20

FIELD NO:	1386	1386				
LAB NO:	2163	2164				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	59%	70%				
20.0	54%	64%				
12.5	46%	55%				
10.0	43%	51%				
5.0	34%	41%				
2.5	28%	34%				
1.25	21%	27%				
0.630	15%	19%				
0.315	9%	12%				
0.160	6%	8%				
0.080	4%	5%				
M.C.(%):	4%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	66	59				
% SAND:	30	36				
% FINES:	4	5				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				



PROJECT NUMBER:	092-202101-0361-1	HOLE No.:	623-1928
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 11		
PROJECT LOCATION:	NINES CREEK CHANNEL		
DRILL UNIT:	MOBILE B40 L		
HOLE LOCATION:	See Test Hole Log Sheet		
LOGGED BY:	G.C.	DATE COMP:	2001/09/20

FIELD NO:	1388	1389				
LAB NO:	2165	2166				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	82%	81%				
20.0	67%	78%				
12.5	57%	60%				
10.0	53%	51%				
5.0	41%	35%				
2.5	30%	25%				
1.25	20%	19%				
0.630	14%	14%				
0.315	8%	9%				
0.160	6%	7%				
0.080	4%	5%				
M.C.(%):	4%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	59	65				
% SAND:	37	29				
% FINES:	4	5				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

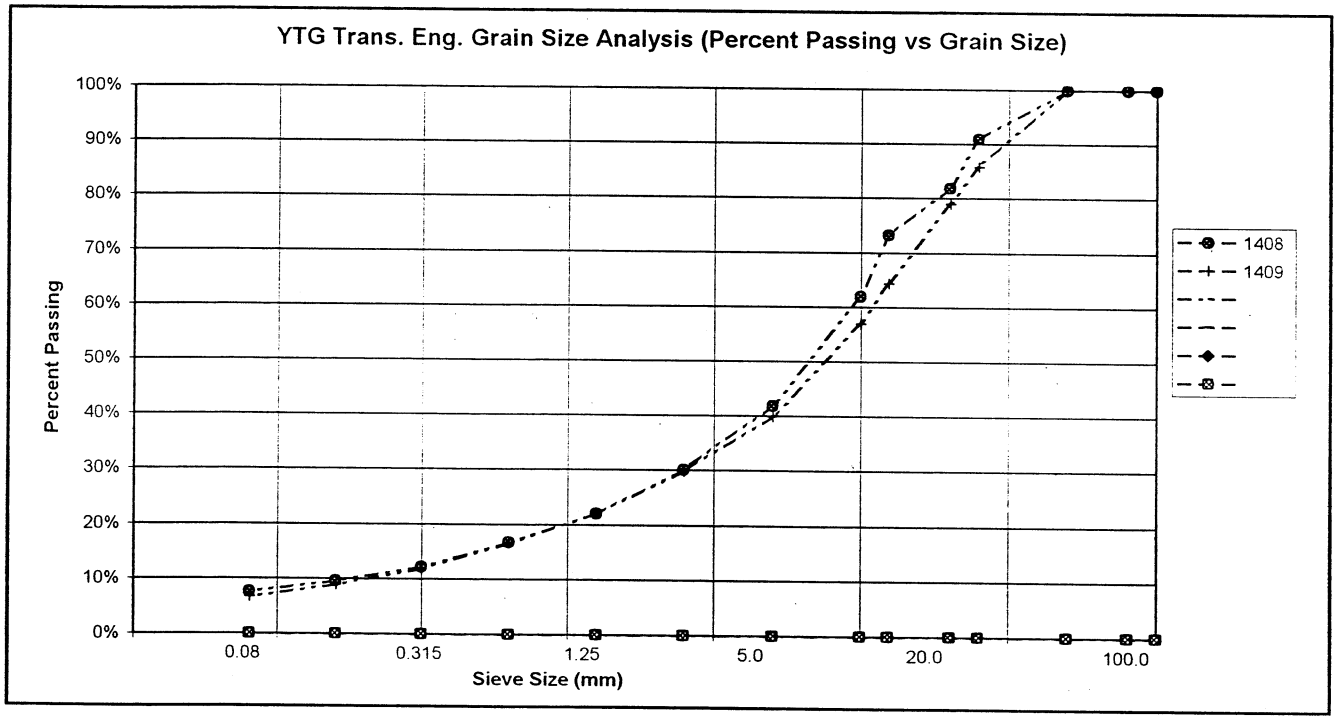


PROJECT NUMBER:	092-202101-0361-1
CLIENT:	ENGINEERING CAPITAL
PROJECT NAME:	SHAKWAK SEG 11
PROJECT LOCATION:	Km 1729.6-1787 A/H
DRILL UNIT:	MOBILE B40 L
HOLE LOCATION:	See Testhole Log Sheet
LOGGED BY:	G.C.

HOLE No.: 624-1938

DATE COMP: 2001/09/20

FIELD NO:	1408	1409				
LAB NO:	2185	2189				
DEPTH:	1.0-2.0	3.0-4.0				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	91%	86%				
20.0	82%	79%				
12.5	73%	64%				
10.0	62%	57%				
5.0	42%	40%				
2.5	30%	30%				
1.25	22%	22%				
0.630	17%	17%				
0.315	12%	12%				
0.160	10%	9%				
0.080	8%	7%				
M.C.(%):	4%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	58	60				
% SAND:	34	33				
% FINES:	8	7				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)				

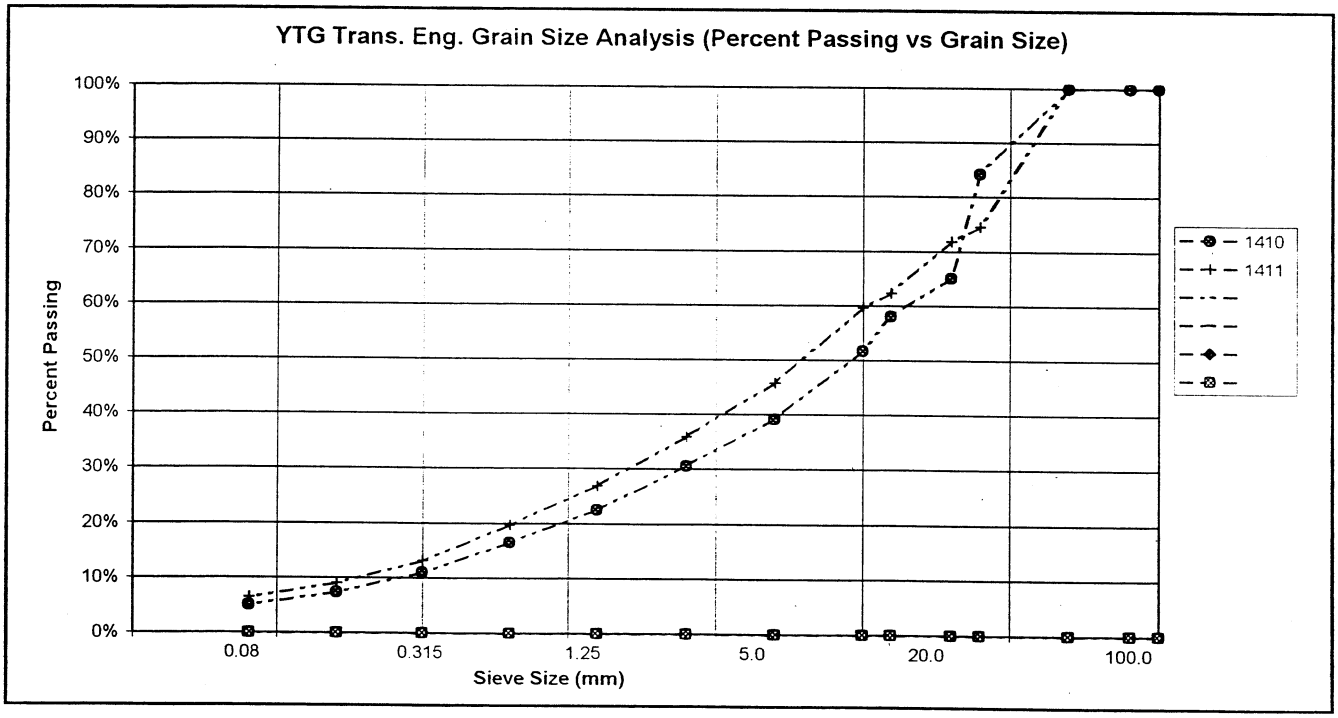


PROJECT NUMBER:	092-202101-0361-1
CLIENT:	ENGINEERING CAPITAL
PROJECT NAME:	SHAKWAK SEG 11
PROJECT LOCATION:	Km 1729.6-1787 A/H
DRILL UNIT:	MOBILE B40 L
HOLE LOCATION:	See Testhole Log Sheet
LOGGED BY:	G.C.

HOLE No.: 624-1939

DATE COMP: 2001/09/20

FIELD NO:	1410	1411				
LAB NO:	2190	2191				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	84%	74%				
20.0	65%	72%				
12.5	58%	62%				
10.0	52%	60%				
5.0	39%	46%				
2.5	31%	36%				
1.25	23%	27%				
0.630	17%	20%				
0.315	11%	13%				
0.160	7%	9%				
0.080	5%	6%				
M.C.(%):	3%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	61	54				
% SAND:	34	39				
% FINES:	5	6				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

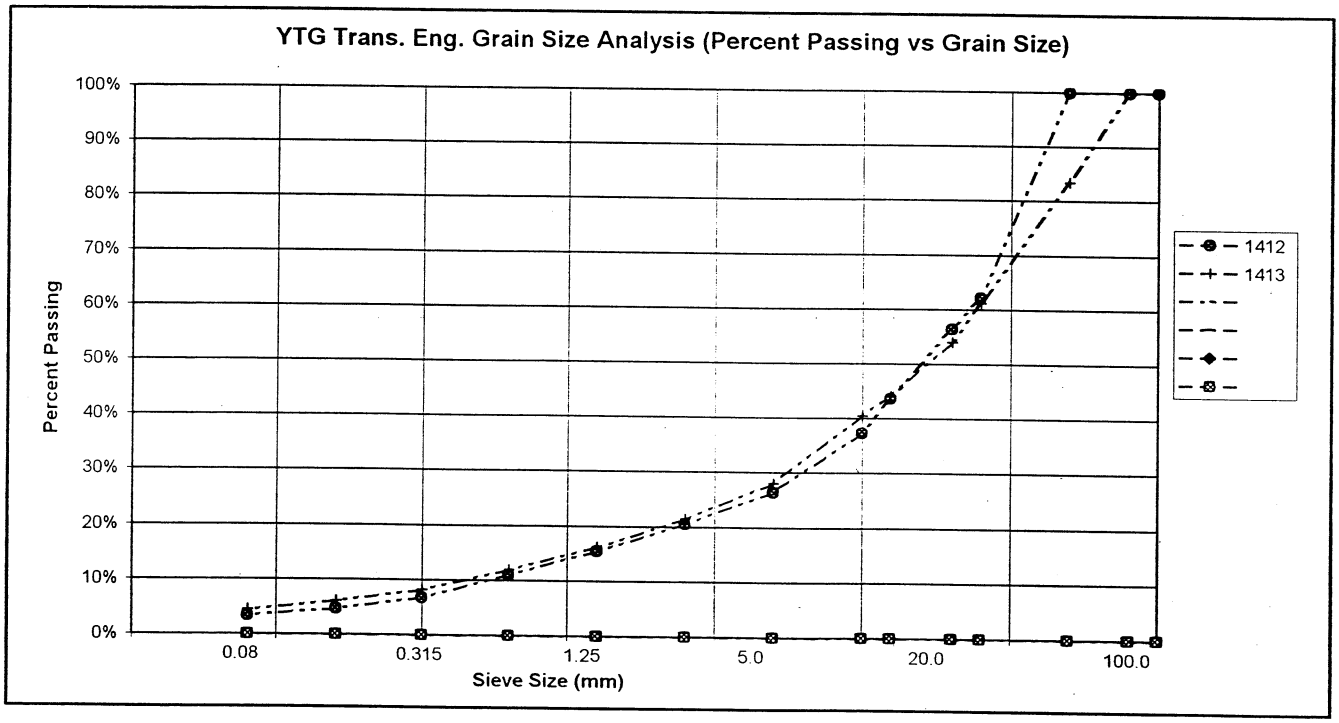


PROJECT NUMBER:	092-202101-0361-1
CLIENT:	ENGINEERING CAPITAL
PROJECT NAME:	SHAKWAK SEG 11
PROJECT LOCATION:	Km 1729.6-1787 A/H
DRILL UNIT:	MOBILE B40 L
HOLE LOCATION:	See Testhole Log Sheet
LOGGED BY:	G.C.

HOLE No.: 624-1940

DATE COMP: 2001/09/20

FIELD NO:	1412	1413				
LAB NO:	2192	2193				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	83%				
25.0	62%	61%				
20.0	56%	54%				
12.5	44%	44%				
10.0	37%	40%				
5.0	26%	28%				
2.5	21%	21%				
1.25	15%	16%				
0.630	11%	12%				
0.315	7%	8%				
0.160	5%	6%				
0.080	3%	4%				
M.C.(%):	2%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	74	72				
% SAND:	23	24				
% FINES:	3	4				
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)				

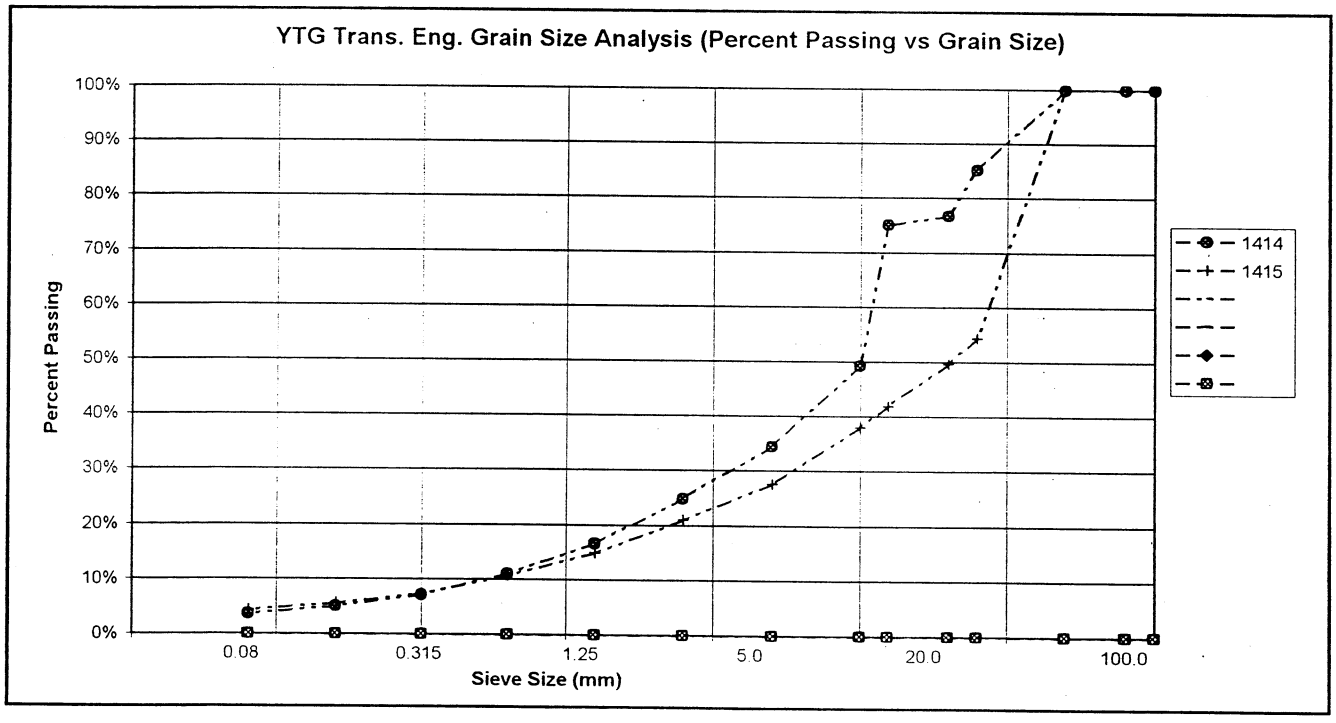


PROJECT NUMBER:	092-202101-0361-1
CLIENT:	ENGINEERING CAPITAL
PROJECT NAME:	SHAKWAK SEG 11
PROJECT LOCATION:	Km 1729.6-1787 A/H
DRILL UNIT:	MOBILE B40 L
HOLE LOCATION:	See Testhole Log Sheet
LOGGED BY:	G.C.

HOLE No.: 624-1941

DATE COMP: 2001/09/20

FIELD NO:	1414	1415				
LAB NO:	2194	2195				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	85%	54%				
20.0	77%	50%				
12.5	75%	42%				
10.0	49%	38%				
5.0	34%	28%				
2.5	25%	21%				
1.25	17%	15%				
0.630	11%	11%				
0.315	7%	7%				
0.160	5%	6%				
0.080	4%	4%				
M.C.(%):	2%	2%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	66	72				
% SAND:	31	23				
% FINES:	4	4				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)				



Km 1730.2 LHS Alaska Highway #1
Pit Ident. 115 G-21 (Nines Creek)

Book # 638

Test Pit Logs

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2460
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP)-(GP-GM)-(GP) -dry to damp -loose -estimate 5-15% +75mm material -maximum 300mm diameter		222		GP			
1.0								1.0
2.0	-odd silt seam between 2.0-2.8m -moist below 2.0m		223		GP-GM			2.0
3.0			224		GP			3.0
4.0			225		GP			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
Fig. No:	Page 1 of 1

02/11/23 10:29AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2461
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameter		226		GP			
1.0								1.0
	-estimate 0-10% +75mm material below 1.5m -maximum 200mm diameter below 1.5m		227		GP			
2.0								2.0
3.0			228		GP			3.0
4.0	SANDY SILT (ML) -brown -damp, firm -organic silts		229		ML			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
Fig. No:	Page 1 of 1

02/12/31 12:58PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2462
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY TO WELL TO POORLY GRADED GRAVEL WITH SAND (GP)-(GW)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameter -moist below 1.0m		230		GP			
1.0								1.0
2.0			231		GP			2.0
3.0	-silty sand seam noted @ 3.2m (+/- 200mm thick) -some organic noted (trees)		232		GW			3.0
4.0			233		GP			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
Fig. No:	Page 1 of 1

02/12/31 01:00PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2463
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANIC / SILTS							0.0
	POORLY TO WELL TO POORLY GRADED GRAVEL WITH SAND (GP)-(GW)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter		234		GP			
1.0								1.0
2.0	-moist below 2.0 -organic silt seam noted @ 3.2m (200mm thick)		235		GW			2.0
3.0			236		GP			3.0
4.0			237		GP			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

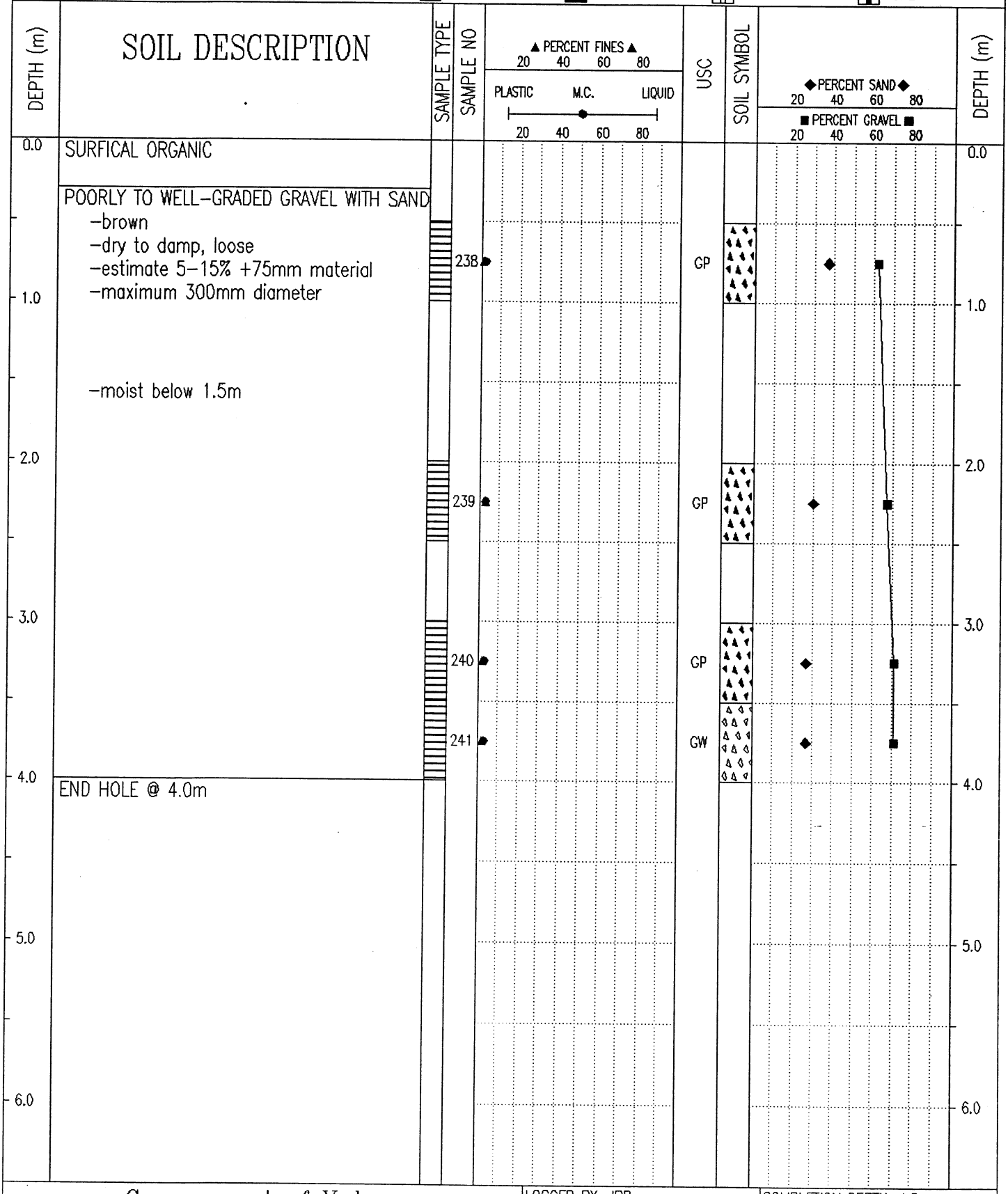
Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
Fig. No:	Page 1 of 1

02/11/28 10:29AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2464
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ▤ BULK ▥ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.0 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

02/11/28 10:29AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2465
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION
0.0	SURFICAL ORGANICS
	SILTY SAND WITH GRAVEL (SM) –brown –damp, loose –estimate 5–15% +75mm material –maximum 300mm diameter –organics noted to 1.0m (rootlets) –silt seam +/– 200mm thick @ 1.4m
1.0	
2.0	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP–GM)–(GP) –brown –damp, loose –maximum 300mm diameter –estimate 5–15% +75mm material
3.0	
4.0	
	END HOLE @ 4.5m
5.0	
6.0	

SAMPLE TYPE / SAMPLE NO: 242, 246, 244, 245

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC M.C. LIQUID (20 40 60 80)

USC / SOIL SYMBOL: SM, GP–GM, GP, GP

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m): 0.0, 1.0, 2.0, 3.0, 4.0, 5.0, 6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
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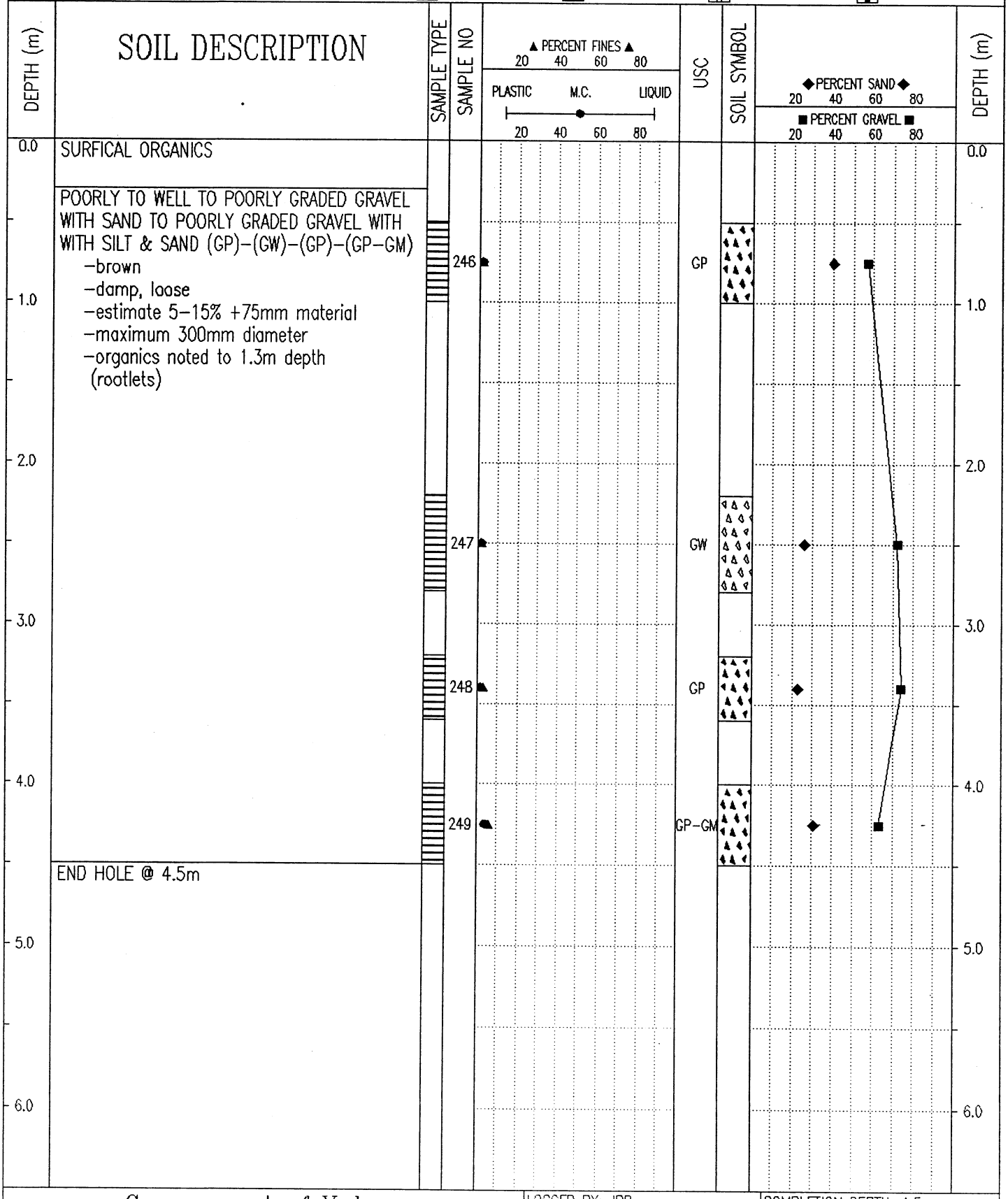
02/12/31 01:01PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2466
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

02/12/31 01:03PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2467
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	SANDY GRAVEL (some silt) -brown -damp, loose				
	SANDY SILT (ML) -brown -damp, loose -organics noted throughout		250	ML	
1.0					
2.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter -organic noted (trees, odd organic silt seam)		251	GP	
3.0			252	GP-GM	
4.0			253	GP-GM	
	END HOLE @ 4.5m				
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2468
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -dry to damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter -moist below 0.8m		254		GP			
1.0								1.0
2.0			255		GP			2.0
	-moist to wet below 2.8m							
3.0			256		GP			3.0
4.0			257		GP			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2469
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	SANDY GRAVEL –trace silt –brown –damp, loose –estimate 5–15% +75mm material –maximum 200mm diameter							
1.0								1.0
	WELL–GRADED SAND WITH SILT & GRAVEL (SW–SM) –brown –damp, loose		258	● ▲	SW–SM		◆	
2.0								2.0
	POORLY GRADED GRAVEL WITH SAND TO SILTY GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SAND (GP)–(GM)–(GP) –brown –damp, loose –estimate 5–15% +75mm material –maximum 200mm diameter		259	●	GP		◆	
3.0								3.0
	–organic silt seam @ 3.6m 300mm thick –tree encountered		260	●	GM		◆	
4.0								4.0
			261	●	GP		◆	
5.0	END HOLE @ 5.0m							5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 02/09/23
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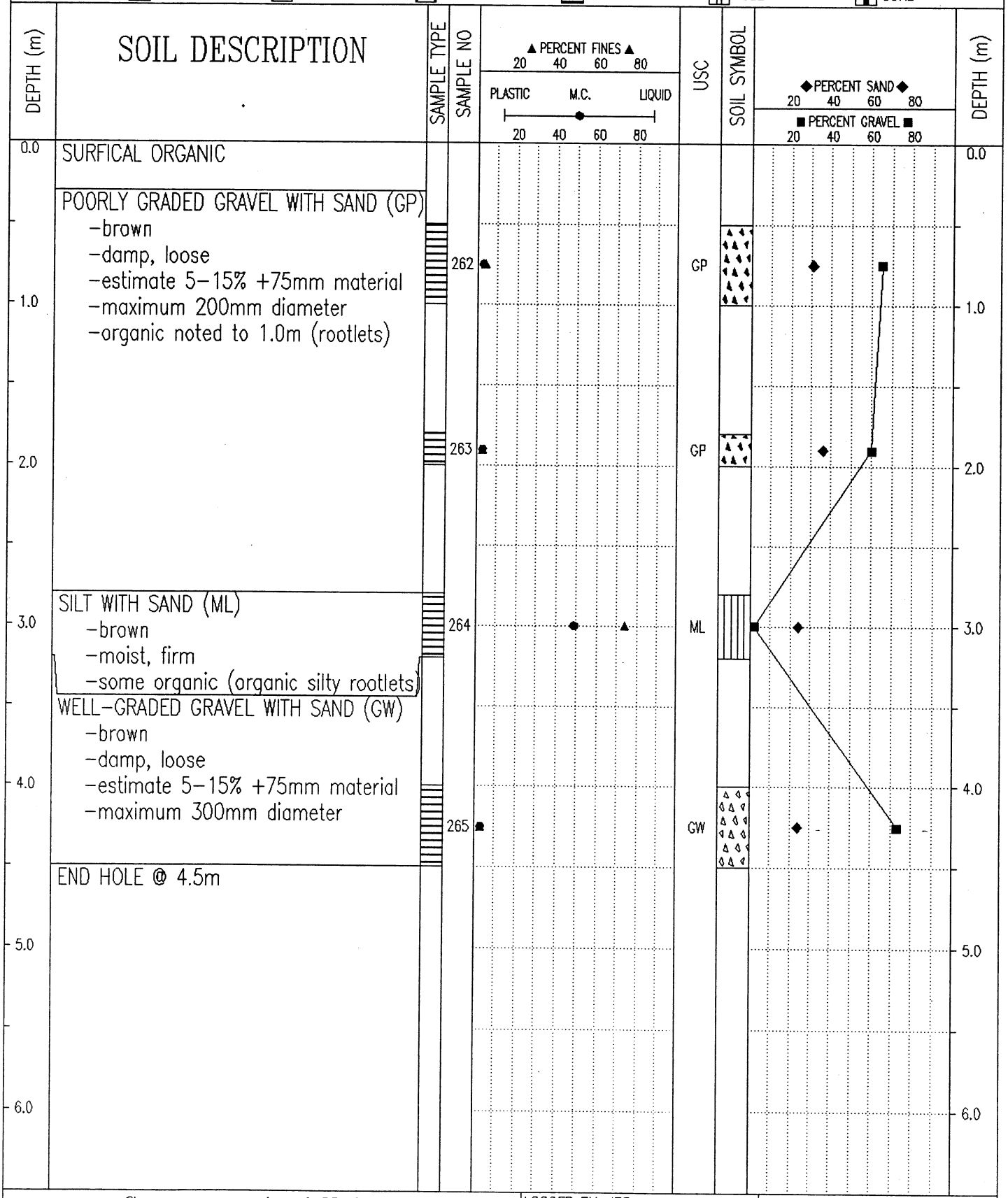
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2470
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2471
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estiamte 5-15% +75mm material -maximum 200mm diameter		266		GP			
1.0								1.0
2.0	SILTY SAND TO SAND WITH SILT -brown -damp, loose							2.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO WELL-GRADED GRAVEL WITH SAND (GP-GM)-(GW) -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameter		267		GP-GM			
3.0								3.0
			268		GW			
4.0								4.0
	END HOLE @ 4.5m -No sample taken @ depth due to excessive sloughage.							
5.0								5.0
6.0								6.0

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2472
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	POORLY TO WELL TO POORLY GRADED GRAVEL WITH SAND (GP)-(GW)-(GP) -brown -dry to damp, loose -estimate 5-15% +75mm material -maximum 200mm diameter		269	GP	
1.0	-moist below 1.4m				
2.0			270	GW	
3.0			271	GP	
4.0			272	GP	
	END HOLE @ 4.5m				
5.0					
6.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC M.C. LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2473
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter -moist below 1.0m		273		GP			1.0
1.0								1.0
2.0			274		GP			2.0
3.0			275		GP			3.0
4.0			276		GP			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2474
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANIC							0.0
	WELL TO POORLY GRADED GRAVEL WITH SAND (GW)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter -organics noted to 1.4m depth (rootlets)		277		GW			
1.0								1.0
2.0			278		GP			2.0
3.0	-boulder (400mm) noted @ 3.3m		279		GP			3.0
4.0			280		GP			4.0
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2475
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▯ TUBE ▮ CORE

SOIL DESCRIPTION

DEPTH (m)	SOIL DESCRIPTION	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANIC			
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -dry to damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter	281	GP	
1.0	SILTY SAND -brown -damp, loose			
2.0	POORLY GRADED GRAVEL WITH SILT & SAND TO WELL-GRADED GRAVEL WITH SAND (GP-GM)-(GW) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter	282	GP-GM	
3.0	-moist below 3.0m	283	GP-GM	
4.0		284	GW	
	END HOLE @ 4.5m			
5.0				
6.0				

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2476
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANIC				
	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP)-(GW) -brown -dry to damp, loose -estimate 5-15% +75mm material -maximum 300mm +75mm material -organics noted to 1.0m (rootlets) -moist below 1.0m		285	GP	
1.0					
2.0			286	GP	
3.0			287	GP	
4.0	-wet below 4.0m		288	GW	
	END HOLE @ 4.8m				
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2477
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊠ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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	SURFICAL ORGANIC							0.0
	WELL-GRADED SAND WITH SILT & GRAVEL TO POORLY TO WELL-GRADED GRAVEL WITH SAND (SW-SM)-(GP)-(GW) -brown -dry to damp, loose -estimate 5-15% +75mm material -maximum 300mm cobbles -silty sand seam @ 1.0m (300mm thick) -organics noted to 1.2m -damp to moist below 1.2m		289	▲ ◆	SW-SM		◆ ■	1.0
2.0			290	◆	GP		◆ ■	2.0
3.0								3.0
	-organic silt seam @ 4.0m (200mm thick)		291	◆	GP		◆ ■	4.0
			292	◆	GW		◆ ■	
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2478
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND TO POORLY -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameters -organics noted to 0.8m (rootlets) GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM)		293		GP			
1.0								1.0
2.0			294		GP			2.0
3.0			295		GP			3.0
4.0			296		GP-GM			4.0
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2479
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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	SURFICAL ORGANIC							0.0
	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameters		297		SW			
1.0								1.0
	SILTY SAND / SILTY SAND -brown -dry to damp, loose							
2.0								2.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -some organic throughout (trees)		298		GP-GM			
3.0								3.0
			299		GP			
4.0								4.0
			300		GP			
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2480
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -maximum 300mm diameters -silty sand seam @ 1.2m +/- 300mm thick		301		GP			
1.0								1.0
	SILTY SAND (SM) -frozen (permafrost) -moved 2m north		302		SM			
2.0								2.0
	WELL-GRADED GRAVEL WITH SAND (GW) -frozen		303		GW			
	END HOLE @ 2.4m -permafrost Note: moved 20m north, material was sandy gravel with trace silt 0.5m to 2.4m							
3.0								3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 2.4 m
REVIEWED BY:	COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2481
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANIC				
	WELL TO POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL (GW)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter -organics noted to 1.0m		304	GW	
1.0					
2.0	-moist below 2.0m		305	GP	
3.0	-frozen (permafrost) below 3.2		306	GP	
			307	GP	
	END HOLE @ 3.6 -refusal				
4.0					
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 3.6 m
REVIEWED BY:	COMPLETE: 02/09/24
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02/11/28 10:37AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2482
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

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	SURFICAL ORGANIC							0.0
	POORLY TO WELL GRADED GRAVEL WITH SAND (GP)-(GW) -brown -damp, loose -maximum 300mm diameter		308		GP			
1.0	-moist below 1.5m							1.0
2.0			309		GP			2.0
	-frozen below 2.7m (permafrost)		310		GW			
3.0	END HOLE @ 2.9m							3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 2.9 m
REVIEWED BY:	COMPLETE: 02/09/24
Fig. No:	Page 1 of 1

02/12/31 31:16PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2483
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp, loose –estimate 5–15% +75mm material –maximum 300mm diameter		311		GP			
1.0								1.0
2.0	–frozen below 2.1m		312		GP			2.0
	END HOLE @ 2.3m							
3.0								3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 2.3 m
REVIEWED BY:	COMPLETE: 02/09/24
Fig. No:	Page 1 of 1

02/12/02 11:00AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2484
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ◧ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –frozen (permafrost)		313	▲ ●	GP		◆ ■	1.0
	END HOLE @ 1.6m –refusal							2.0
3.0								3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 1.6 m
REVIEWED BY:	COMPLETE: 02/09/24
Fig. No:	Page 1 of 1

02/11/28 10:38AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2485
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter		314		GP			
1.0								1.0
2.0			315		GP			2.0
	POORLY GRADED SAND WITH GRAVEL (SP) -frozen (permafrost)							
3.0			316		SP			3.0
	END HOLE @ 3.1m -refusal							
4.0								4.0
5.0								5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 3.1 m
REVIEWED BY:	COMPLETE: 02/09/24
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2486
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANIC				
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 10-20% +75mm material -maximum 300mm diameter		317	GP	
2.0	-frozen below 2.4m (permafrost)		318	GP	
3.0	END HOLE @ 3.0M -refusal		319	GP	
4.0					
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 02/09/24
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2487
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter -moist below 1.2m		320		GP			1.0
2.0			321		GP			2.0
3.0	WELL-GRADED GRAVEL (GW) -frozen (permafrost)		322		GW			3.0
	END HOLE @ 3.4m							
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 3.4 m
REVIEWED BY:	COMPLETE: 02/09/24
Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2488
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS / SILTS							0.0
1.0	POORLY GRADED GRAVEL WITH SAND (GP) -frozen (permafrost)		323		GP			1.0
	END HOLE @ 1.6m -refusal							
2.0								2.0
3.0								3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 1.6 m
REVIEWED BY:	COMPLETE: 02/09/24
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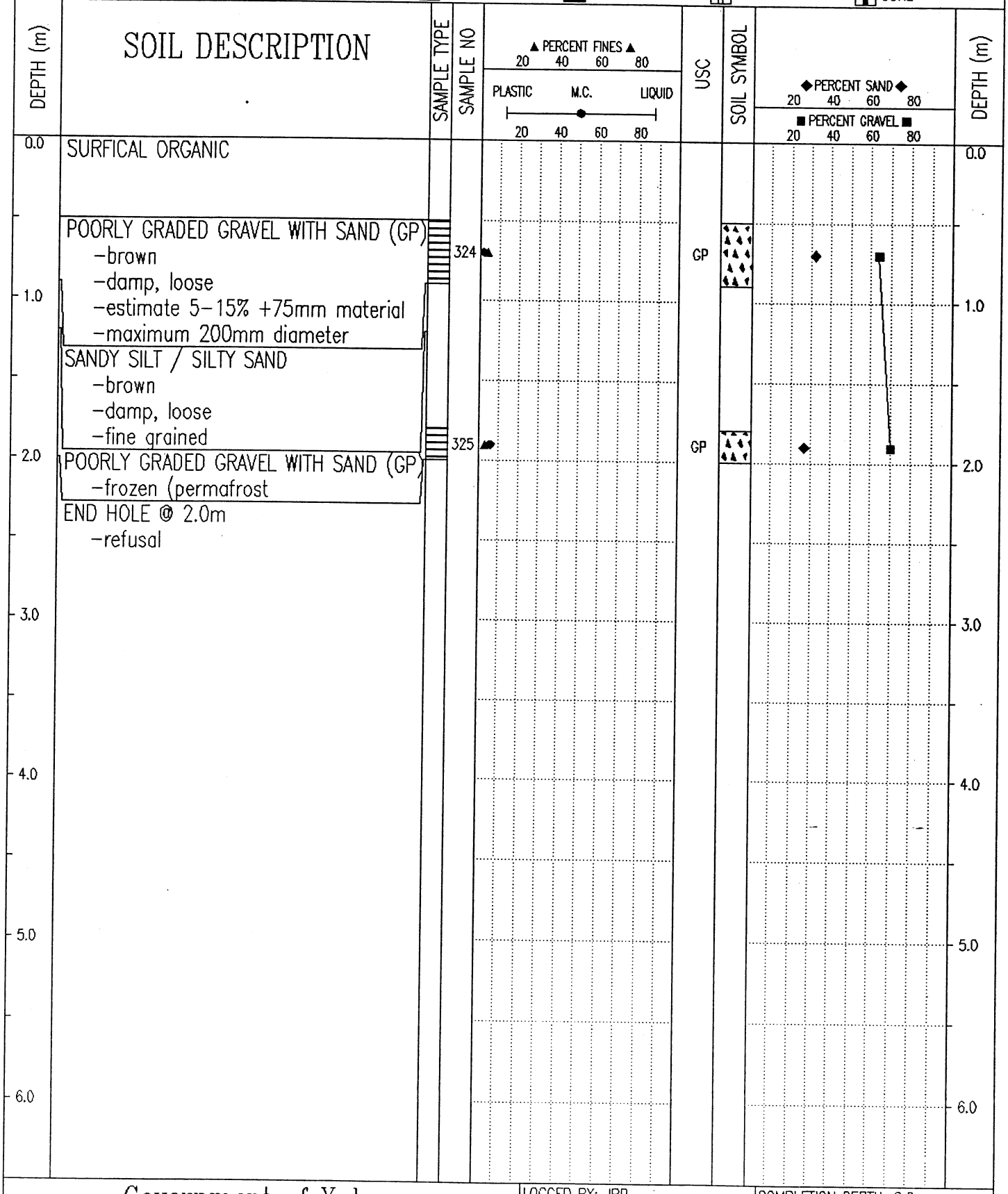
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2489
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ◧ CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 2.0 m
	REVIEWED BY:	COMPLETE: 02/09/24
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2490
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp, loose –estimate 10–20% +75mm material –maximum 300mm diameter –frozen below 1.4m		326		GP			
1.0								1.0
2.0			327		GP			2.0
	END HOLE @ 2.1m –refusal							
3.0								3.0
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 2.1 m
REVIEWED BY:	COMPLETE: 02/09/24
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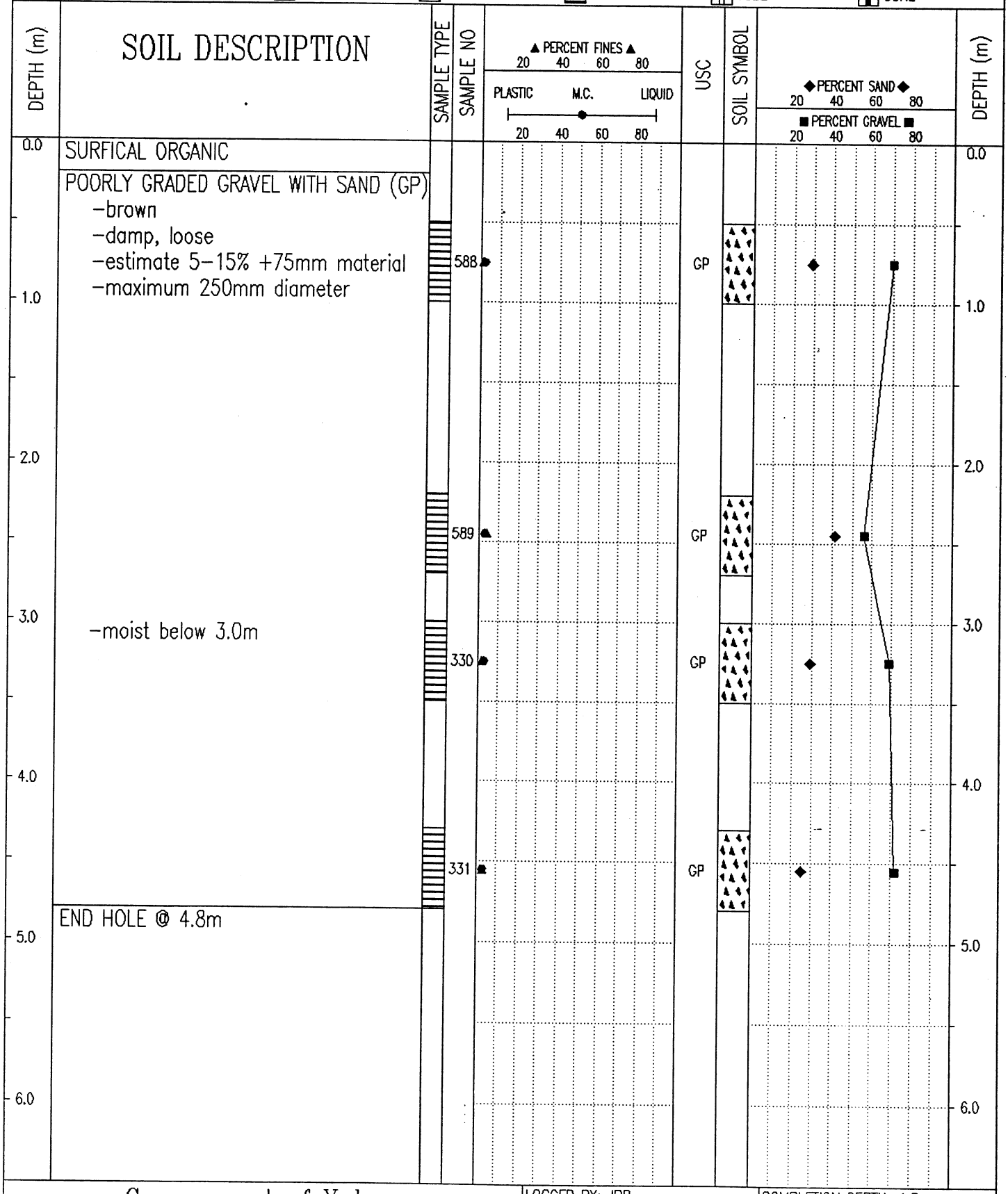
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2491
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/24
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2492
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND TO WELL-GRADED GRAVEL WITH SAND (GP)-(GP-GM)-(GW) -brown -damp, loose -estimate 10-20% +75mm material -maximum 250mm diameter -organics noted to 1.0m (rootlets) -moist below 1.2m		332		GP			1.0
2.0			333		GP-GM			2.0
3.0	-lost sample #334		334					3.0
4.0	-organic silt seam @ 3.8m (200mm thick)		335		GW			4.0
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/24
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2493
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -dry to damp, loose -estimate 5-15% +75mm material -maximum 250mm material		336	GP	
1.0					
2.0	SILTY SAND (SM) -brown -damp, firm -organic silts / wood		337	SM	
3.0					
	POORLY GRADED GRAVEL WITH SAND (GP)		338	GP	
4.0					
			339	GP	
5.0	END HOLE @ 5.0m				
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 02/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2494
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ◧ CORE

SOIL DESCRIPTION

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	SANDY SILT (ML) -brown -dry, loose -organic (rootlet/organic silts) throughout		340	ML	
1.0					
2.0	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP)-(GP-GM) -brown -dry to damp, loose -estimate 10-20% +75mm material -maximum 300mm diameter		341	GP	
3.0					
			342	GP	
4.0					
			343	GP-GM	
5.0	END HOLE @ 4.8m				
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/25
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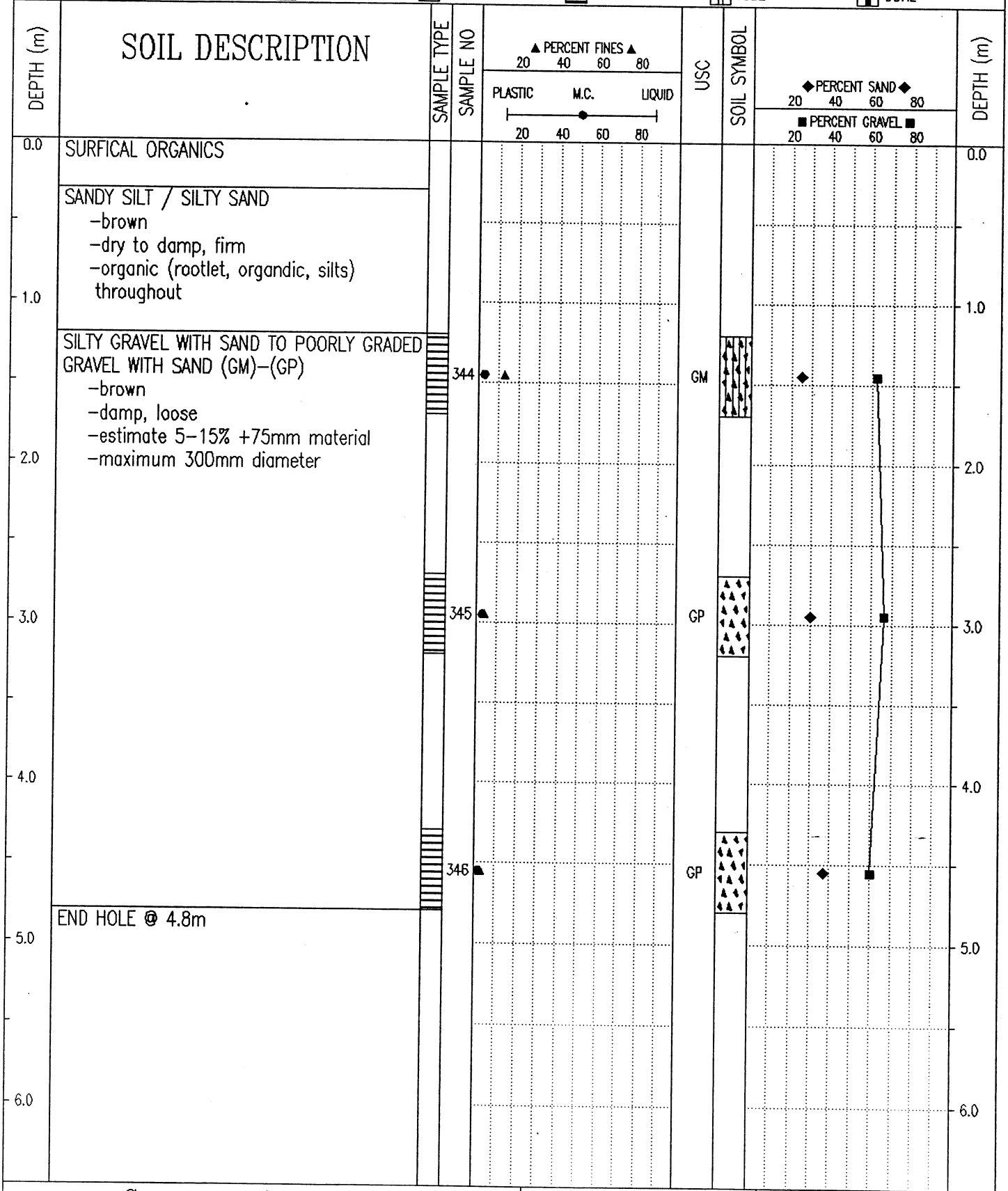
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2495
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▯ TUBE ◧ CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2496
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ☒ S.P.T. ☒ AUGER ☰ BULK ▯ TUBE ▮ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 250mm diameter -organics (rootlets) noted to 1.7m -wood noted @ 1.5m		347	▲	GP-GM		◆ ■	
1.0								1.0
2.0	-organic silt seam @ 2.4 (300mm thick)		348	▲	GP-GM		◆ ■	2.0
3.0	-moist below 3.0m							3.0
4.0			349		GP		◆ ■	4.0
			350		GP		◆ ■	
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2497
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP)-(GP-GM)-(GP) -brown -dry to damp, loose -estimate 10-20% +75mm material -estimate 300mm diameter -organic (rootlets) noted to 1.0m		351	GP	
1.0	-moist below 1.5m				
2.0	-organic silt seam noted @ 2.1m 200mm thick		352	GP-GM	
3.0			353	GP	
4.0			354	GP	
	END HOLE @ 4.8m				
5.0					
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2498
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 10-20% +75mm material -maximum 300mm diameter -organic (rootlets) noted to 1.0m		355		GP			
1.0								1.0
	-moist below 1.5m -boulder to 400mm noted							
2.0			356		GP			2.0
3.0	-wet below 3.0m		357		GP			3.0
4.0								4.0
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/25
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02/12/17 01:35PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2499
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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	SURFICAL ORGANIC							0.0
	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP)-(GW) -brown -damp, loose -estimate 5-15% +75mm material -maximum 250mm diameter -organics (rootlets) to 0.8m		359		GP			
1.0								1.0
	-moist below 1.5m -silty sand seam noted @ 2.6m (300mm thick)		360		GP			
2.0								2.0
3.0								3.0
			361		GP			
4.0								4.0
			362		GW			
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/25
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02/12/18 01:55PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2500
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

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	SURFICAL ORGANIC							0.0
	WELL TO POORLY GRADED GRAVEL WITH SAND (GW)-(GP) -brown -damp, loose -estimate 10-20% +75mm material -maximum 300mm diameter -organics (rootlets) noted to 1.5m -moist below 1.2m		363		GW			
1.0								1.0
2.0			364		GP			2.0
	-wood (tree) @ 2.8m							
3.0			365		GP			3.0
4.0			366		GP			4.0
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/25
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02/12/17 01:36PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2501
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANIC							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameter		367		GP			
1.0								1.0
	SILTY SAND / SANDY SILT -brown -damp, loose -organics (roots, organic silts) throughout							
2.0								2.0
	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) -brown -damp, loose -estimate 10-20% +75mm material -maximum 250mm diameter		368		GP-GM			
3.0								3.0
	-medium dense below 3.5m		369		GP-GM			
4.0								4.0
5.0			370		GP			5.0
	END HOLE @ 5.3m							
6.0								6.0

Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 5.3 m
	REVIEWED BY:	COMPLETE: 02/09/25
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02/12/31 09:25AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2502
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp, loose –estimate 10–20% +75mm material –maximum 300mm material –frozen below 1.0m		371		GP			
1.0								1.0
2.0	SILTY SAND / SANDY SILT –frozen							2.0
	WELL-GRADED SAND WITH SILT & GRAVEL TO POORLY GRADED GRAVEL WITH SILT & SAND (SW-SM)–(GP-GM) –frozen		372		SW-SM			
3.0			373		GP-GM			3.0
	END HOLE @ 3.3m –refusal							
4.0								4.0
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 3.3 m
REVIEWED BY:	COMPLETE: 02/09/25
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02/12/31 01:21PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2503
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION
0.0	SURFICAL ORGANIC
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –dry to damp, loose –estimate 5–15% +75mm material –maximum 300mm diameter
1.0	SILTY SAND, –some gravel –brown –damp, loose –gravel is in seams –organic throughout (rootlets, organic silts, wood)
2.0	POORLY TO WELL TO POORLY GRADED GRAVEL WITH SAND (GP)–(GW)–(GP) –brown –damp, medium dense –estimate 10–20% +75mm material –maximum 300mm diameter
3.0	
4.0	
5.0	
	END HOLE @ 5.3m
6.0	

SAMPLE TYPE / SAMPLE NO: 374, 375, 376, 377

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC M.C. LIQUID (20 40 60 80)

USC / SOIL SYMBOL: GP, GP, GW, GP

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m): 0.0, 1.0, 2.0, 3.0, 4.0, 5.0, 6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 5.3 m
REVIEWED BY:	COMPLETE: 02/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2504
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	SANDY SILT (ML) -brown -damp, loose -organics (rootlets, organic silts) noted throughout		378		ML			
1.0	POORLY TO WELL TO POORLY GRADED GRAVEL WITH SAND (GP)-(GW)-(GP) -brown -moist, medium dense		379		GP			1.0
2.0								2.0
3.0			380		GW			3.0
4.0			381		GP			4.0
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/25
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2505
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -dry to damp, loose -brown -estimate 10-20% +75mm material -maximum 300mm diameter -organics (rootlets) noted to 0.8m -moist below 0.8m		382		GP			
1.0								1.0
2.0			383		GP			2.0
3.0			383		GP			3.0
4.0			384		GP			4.0
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/26
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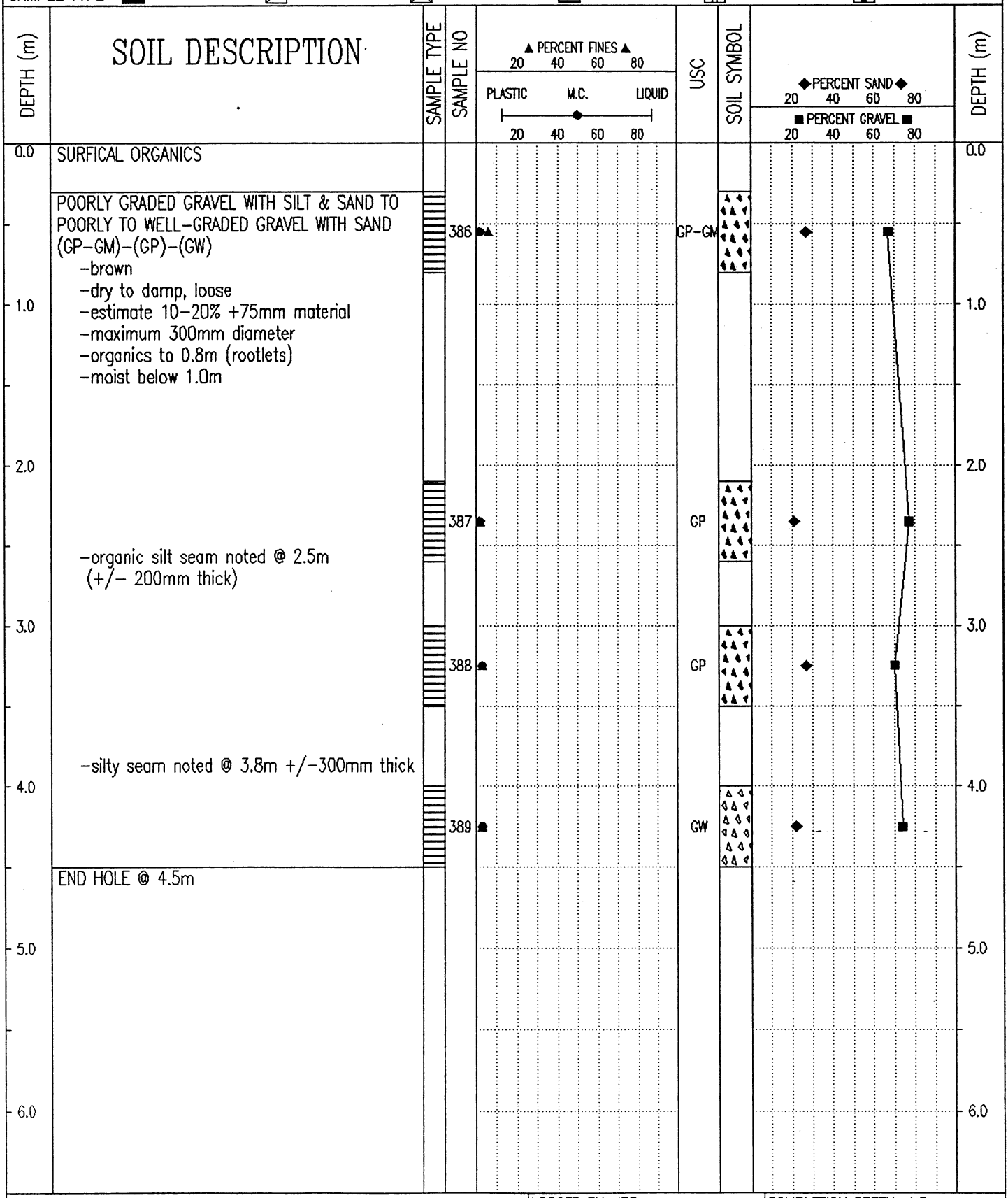
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2506
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ▮ CORE



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	REVIEWED BY:	COMPLETE: 02/09/26
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2507
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp, loose –estimate 10–20% +75mm material –maximum 300mm diameter		390		GP			
1.0								1.0
	–medimum dense below 1.5m –estimate 15–25% +75mm material							
2.0			391		GP			2.0
3.0	–moist below 3.0m							3.0
			392		GP			
4.0								4.0
			393		GP			
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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REVIEWED BY:	COMPLETE: 02/09/26
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2508
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -dry to damp, loose -estimate 5-10% +75mm material -maximum 200mm diameter		394		GP			
1.0	SILTY SAND / SANDY SILT -brown -damp, loose -organic noted throughout (rootlets, organic silts)							1.0
2.0	WELL TO POORLY GRADED GRAVEL WITH SAND (GW)-(GP) -brown -damp, loose -estimate 15-25% +75mm material -maximum 300mm diameter		395		GW			2.0
3.0			396		GP			3.0
4.0	-one 0.4m boulder noted at 4.2m		397		GP			4.0
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/26
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2509
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	POORLY GRADED GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP)-(GP-GM)-(GP) -brown -damp, loose -estimate 10-20% +75mm material -maximum 200mm diameter -organics (rootlets) noted to 0.8m -moist below 1.2m -maximum 300mm diameter below 1.20		398	GP	
1.0					
2.0			399	GP	
3.0	-estimate 15-25% +75mm material below 3.0m -maximum 300mm diameter below 3.0m		400	GP-GM	
4.0	-one 0.4m boulder noted at 4.0m		401	GP	
	END HOLE @ 4.8m				
5.0					
6.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC M.C. LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m)

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2510
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND TO WELL-GRADED SAND WITH SILT & GRAVEL TO POORLY GRADED GRAVEL WITH SAND (GP)-(SW-SM)-(GP) -dry to damp, loose -brown -estimate 5-10% +75mm material -maximum 200mm diameter -silty sand seam noted @ 0.8m (+/- 200mm thick) -organic noted to 1.2m (rootlets) -moist below 1.2m -estimate 20-30% +75mm material (very boney) -maximum 300mm diameter below 1.2m		402		GP			1.0
1.0								
2.0			403		SW-SM			2.0
3.0			404		GP			3.0
4.0			405		GP			4.0
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2511
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ☒ AUGER ▤ BULK ▥ TUBE ◧ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP)-(GW) -brown -dry to damp, loose -estimate 10-20% +75mm material -maximum 300mm diameter -organic noted to 1.0m (rootlets) -moist, medium dense below 1.2m -estimate 15-25% +75mm material below 1.2m -maximum 300mm diameter below 1.2m		406	GP	
1.0					
2.0			407	GP	
3.0			408	GP	
4.0			409	GW	
	END HOLE @ 4.8m				
5.0					
6.0					

▲ PERCENT FINES ▲ (20 40 60 80)
PLASTIC M.C. LIQUID (20 40 60 80)
◆ PERCENT SAND ◆ (20 40 60 80)
■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/26
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2512
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ◧ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 10-20% +75mm material -maximum 300mm diameter -silty sand seam @ 0.5m (300mm thick) -organic to 1.0m (rootlets) -moist, medium dense below 1.2m -estimate 15-25% +75mm material below 1.2m -maximum 300mm diameter below 1.2m		410		GP			
1.0								1.0
2.0								2.0
			411		GP			
3.0								3.0
			412		GP			
4.0								4.0
	SILTY SAND WITH GRAVEL (SM) -brown -damp, loose		413		SM			
	END HOLE @ 4.5m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 02/09/26
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2513
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ☰ BULK ▯ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 15-25% +75mm material -maximum 200mm diameter -silty sand seam @ 1.0m (300mm thick) -organic to 1.2m (roots) -moist, medium dense below 1.2m -estimate 20-30% +75mm material below 1.2m -maximum 300mm diameter below 1.2m		414		GP			
1.0								1.0
2.0			415		GP			2.0
3.0	-sandy silt seam @ 3.4m (300mm thick) (organic silts / roots)		416		GP			3.0
4.0			417		GP			4.0
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/26
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2514
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY TO WELL TO POORLY GRADED GRAVEL WITH SAND (GP)-(GW)-(GP) -brown -damp, loose -estimate 20-30% +75mm material -maximum 300mm diameter -organics to 1.0m (rootlets) -moist, medium dense below 1.0m		418		GP			
1.0								1.0
2.0			419		GP			2.0
3.0	-moist to wet below 3.0m		420		GW			3.0
4.0			421		GP			4.0
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

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LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/26
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2515
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

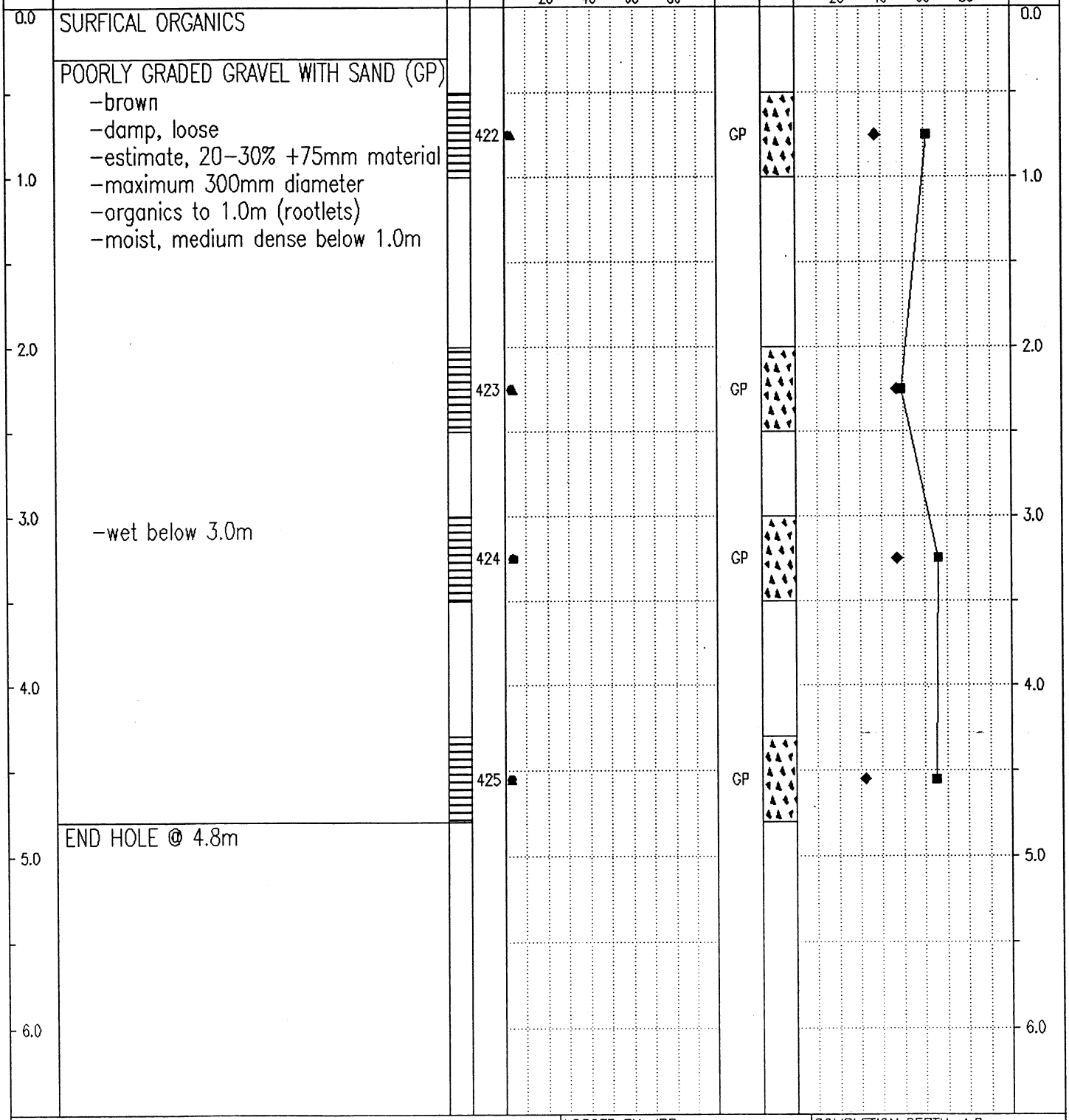
SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

SOIL DESCRIPTION

SURFICAL ORGANICS

POORLY GRADED GRAVEL WITH SAND (GP)
- -brown
- -damp, loose
- -estimate, 20-30% +75mm material
- -maximum 300mm diameter
- -organics to 1.0m (rootlets)
- -moist, medium dense below 1.0m
- -wet below 3.0m

END HOLE @ 4.8m



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	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2516
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP)-(GW) -brown -damp, loose -estimate 20-30% +75mm material -maximum 300mm diameter -organics to 1.2m (rootlets) -moist below 1.2m		426		GP			
1.0								1.0
2.0			427		GP			2.0
3.0	-moist to wet below 1.2m		428		GP			3.0
4.0			429		GW			4.0
5.0	END HOLE @ 4.8m							5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/26
Fig. No:	Page 1 of 1

02/12/17 02:42PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2517
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	WELL TO POORLY GRADED GRAVEL WITH SAND (GW)-(GP) -brown -damp, loose -estimate 15-25% +75mm material -maximum 200mm diameter -organic to 0.8m (rootlets) -moist, medium dense below 1.0m -estimate 20-30% +75mm material below 1.0m -maximum 300mm diameter below 1.0m		430	GP	
1.0					
2.0			431	GP	
3.0			432	GP	
4.0			433	GP	
5.0	END HOLE @ 5.0				
6.0					

▲ PERCENT FINES ▲ 20 40 60 80

PLASTIC M.C. LIQUID 20 40 60 80

◆ PERCENT SAND ◆ 20 40 60 80

■ PERCENT GRAVEL ■ 20 40 60 80

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 02/09/26
Fig. No:	Page 1 of 1

02/12/18 02:43PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2518
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▮ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 15-25% +75mm material -maximum 250mm material -organics to 1.5m (rootlets)		434		GP			
1.0	-moist, medium dense below 1.2m -estimate 20-30% +75mm material below 1.2m -maximum 300mm diameter below 1.2m							1.0
2.0			435		GP			2.0
3.0			436		GP			3.0
4.0			437		GP			4.0
5.0	END HOLE @ 5.0m							5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 02/09/26
Fig. No:	Page 1 of 1

02/12/31 01:42PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2519
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ⊘ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ◧ CORE

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	SURFICAL ORGANICS							0.0
	POORLY GRADED GRAVEL WITH SAND TO SILTY GRAVEL WITH SAND (GP)-(GM) -brown -damp, loose -estimate 20-30% +75mm material -maximum 300mm diameter -organics to 1.2m (rootlets) -moist below 1.2m		438		GP			
1.0								1.0
2.0			439		GP			2.0
3.0			440		GP			3.0
4.0			441		GM			4.0
	END HOLE @ 4.8m							
5.0								5.0
6.0								6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
REVIEWED BY:	COMPLETE: 02/09/26
Fig. No:	Page 1 of 1

02/12/31 01:43PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2520
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

SAMPLE TYPE ■ RETURN ▨ S.P.T. ⊠ AUGER ▤ BULK ▥ TUBE ▥ CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	USC	SOIL SYMBOL
0.0	SURFICAL ORGANICS				
	SILTY SAND WITH GRAVEL (SM) –brown –dry, loose –organics throughout (roots)		442	SM	
1.0					
	POORLY GRADED GRAVEL WITH SAND (GP) –brown –damp, loose –estimate 15–25% +75mm material –maximum 250mm diameter				
2.0			443	GP	
3.0	–medium dense below 3.0m		444	GP	
4.0					
			445	GP	
5.0	END HOLE @ 5.0m				
6.0					

▲ PERCENT FINES ▲ (20 40 60 80)

PLASTIC M.C. LIQUID (20 40 60 80)

◆ PERCENT SAND ◆ (20 40 60 80)

■ PERCENT GRAVEL ■ (20 40 60 80)

DEPTH (m) 0.0 1.0 2.0 3.0 4.0 5.0 6.0

Government of Yukon
Transportation Engineering

LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 02/09/26
Fig. No:	Page 1 of 1

02/12/17 02:42PM

Km 1730.2 LHS Alaska Highway #1
Pit Ident. 115 G-21 (Nines Creek)

Book # 638

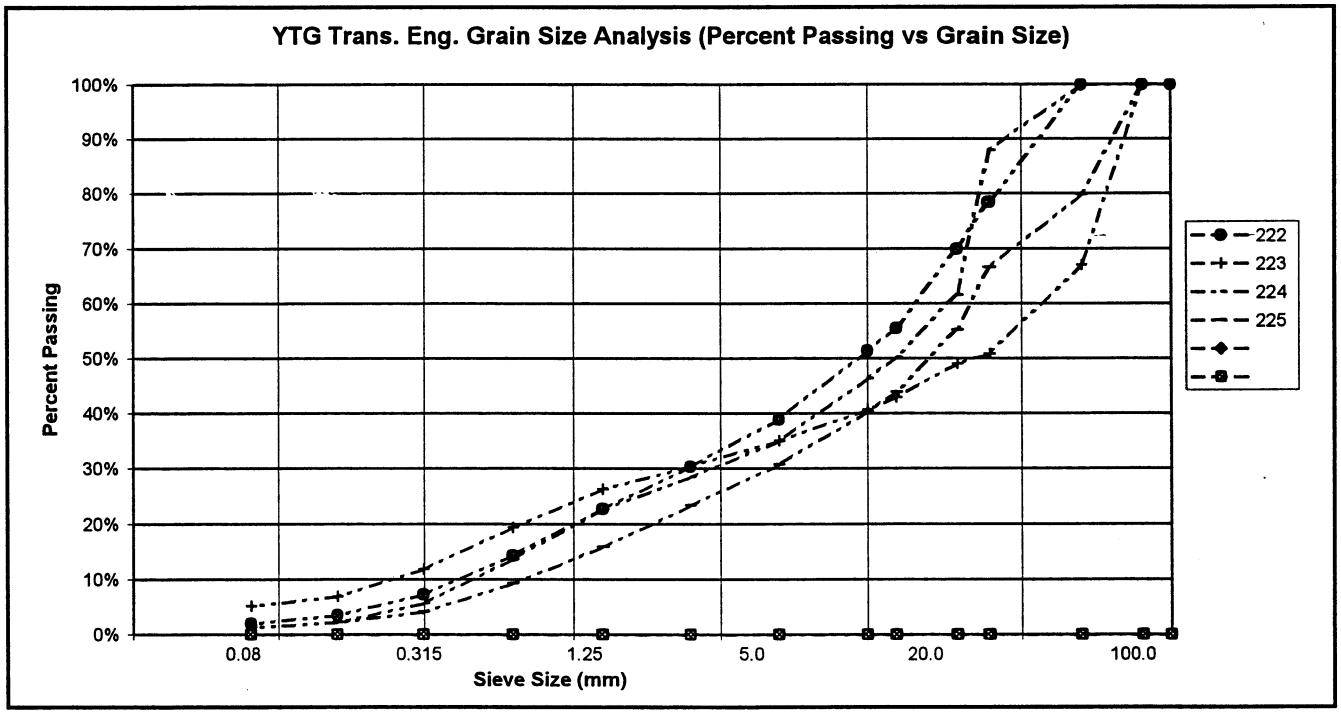
Pit Run Sample Results

PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2460

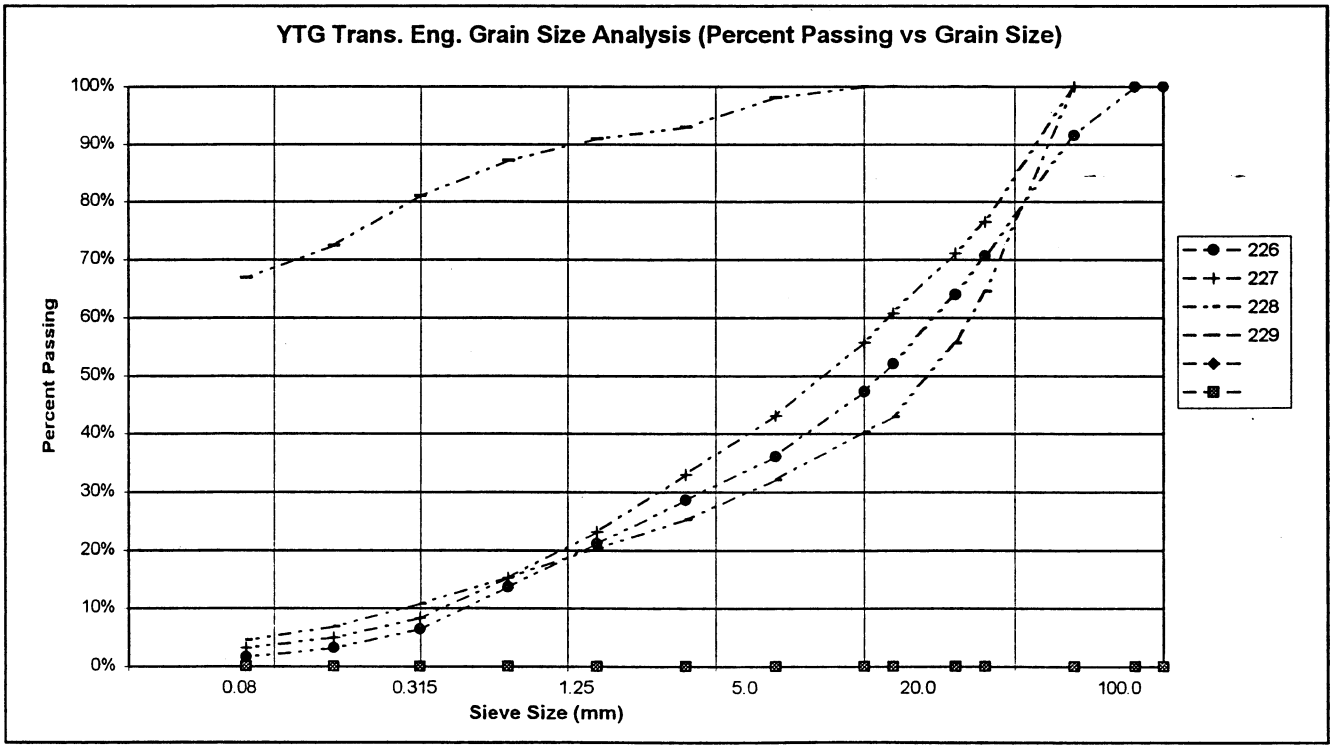
DATE COMP: SEPT 23/02

FIELD NO:	222	223	224	225		
LAB NO:	482	483	484	485		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	67%	100%	80%		
25.0	79%	51%	88%	67%		
20.0	70%	49%	62%	55%		
12.5	56%	43%	50%	44%		
10.0	51%	41%	46%	40%		
5.0	39%	35%	35%	31%		
2.5	30%	31%	29%	23%		
1.25	23%	26%	23%	16%		
0.630	14%	19%	14%	9%		
0.315	7%	12%	6%	4%		
0.160	4%	7%	2%	2%		
0.080	2%	5%	1%	1%		
M.C.(%):	2%	4%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	65	65	69		
% SAND:	37	30	34	29		
% FINES:	2	5	1	1		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



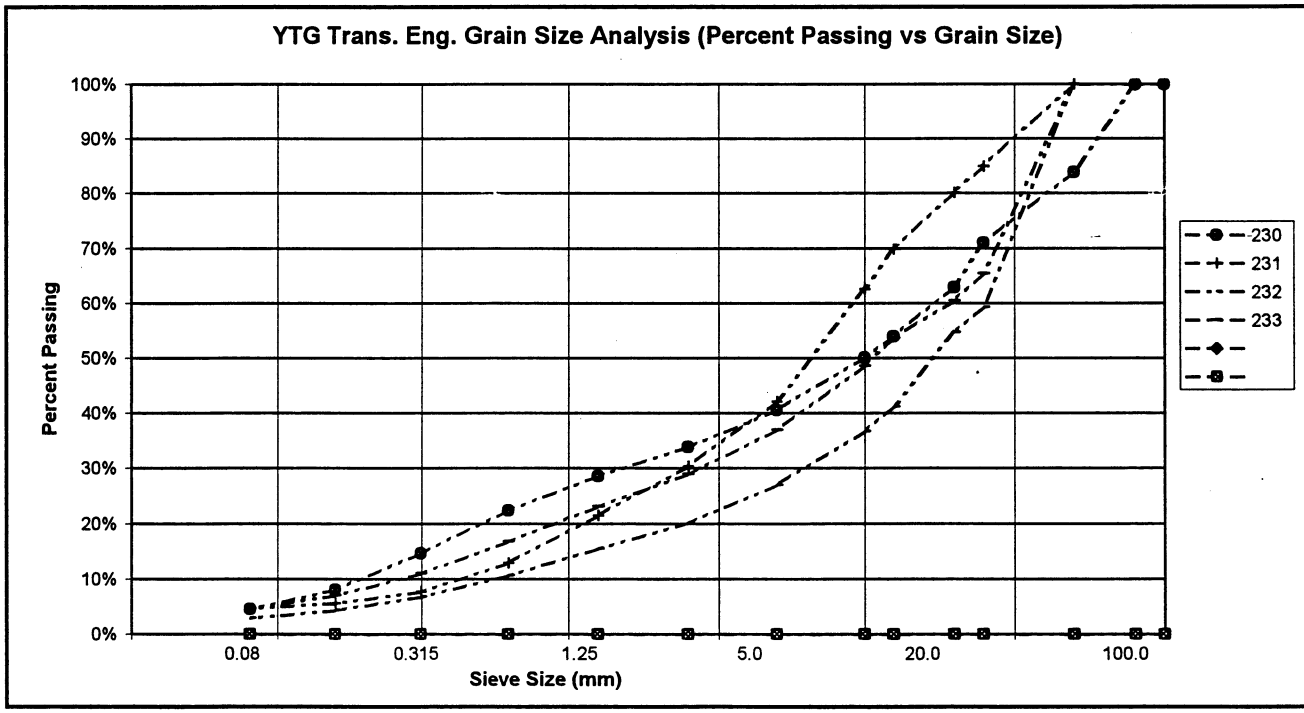
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2461
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 23/02

FIELD NO:	226	227	228	229		
LAB NO:	486	487	488	489		
DEPTH:	0.5-1.0	2.0-2.5	3.2-3.8	4.2-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	92%	100%	100%	100%		
25.0	71%	77%	65%	100%		
20.0	64%	71%	56%	100%		
12.5	52%	61%	43%	100%		
10.0	47%	56%	40%	100%		
5.0	36%	43%	32%	98%		
2.5	29%	33%	25%	93%		
1.25	21%	23%	20%	91%		
0.630	14%	15%	15%	87%		
0.315	7%	8%	11%	81%		
0.160	3%	5%	7%	72%		
0.080	2%	3%	5%	67%		
M.C.(%):	2%	3%	4%	50%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	64	57	68	2		
% SAND:	34	40	28	31		
% FINES:	2	3	5	67		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)		



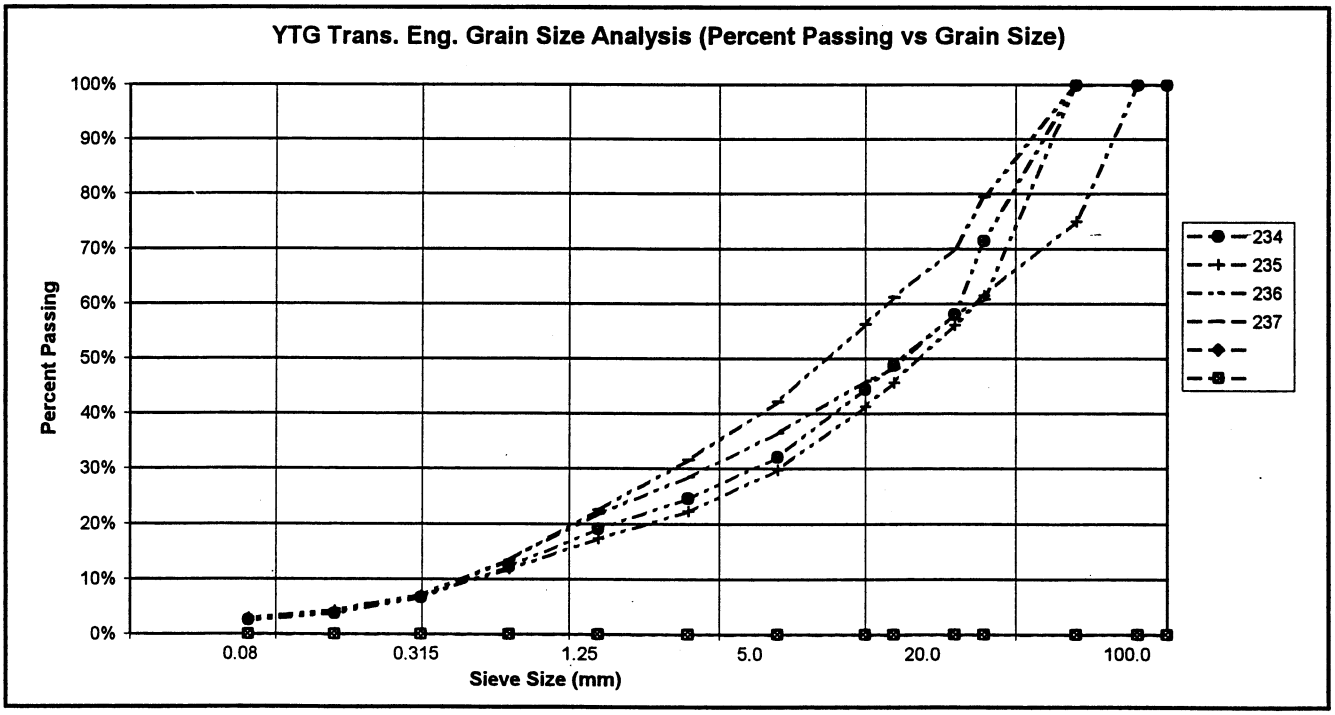
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2462
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 23/02

FIELD NO:	230	231	232	233		
LAB NO:	490	491	492	493		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	84%	100%	100%	100%		
25.0	71%	85%	59%	65%		
20.0	63%	80%	55%	60%		
12.5	54%	70%	41%	54%		
10.0	50%	63%	37%	49%		
5.0	41%	42%	27%	37%		
2.5	34%	30%	20%	29%		
1.25	29%	22%	15%	23%		
0.630	22%	13%	11%	17%		
0.315	15%	8%	7%	11%		
0.160	8%	6%	4%	7%		
0.080	5%	5%	3%	5%		
M.C.(%):	2%	4%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	59	58	73	63		
% SAND:	36	37	24	32		
% FINES:	5	5	3	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		



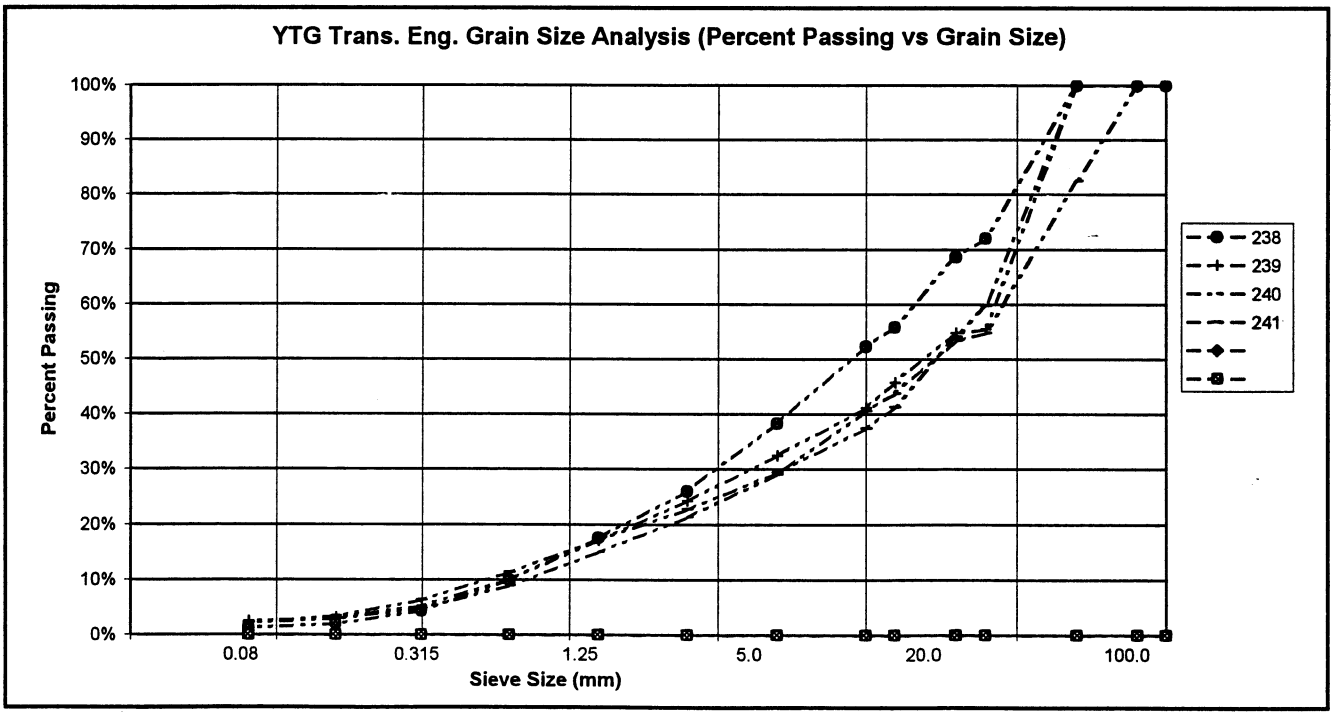
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2463
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 23/02

FIELD NO:	234	235	236	237		
LAB NO:	494	495	496	497		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	75%	100%	100%		
25.0	72%	61%	61%	79%		
20.0	58%	56%	58%	70%		
12.5	49%	46%	48%	61%		
10.0	44%	41%	46%	56%		
5.0	32%	30%	37%	42%		
2.5	25%	22%	28%	32%		
1.25	19%	17%	22%	23%		
0.630	12%	12%	14%	13%		
0.315	7%	7%	7%	7%		
0.160	4%	4%	4%	4%		
0.080	3%	3%	3%	3%		
M.C.(%):	2%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	70	63	58		
% SAND:	30	27	34	40		
% FINES:	3	3	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2464
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 23/02

FIELD NO:	238	239	240	241		
LAB NO:	498	499	500	501		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	82%	100%		
25.0	72%	56%	55%	60%		
20.0	69%	55%	53%	54%		
12.5	56%	46%	44%	41%		
10.0	52%	41%	41%	37%		
5.0	38%	33%	29%	29%		
2.5	26%	24%	21%	23%		
1.25	18%	17%	15%	17%		
0.630	10%	10%	9%	11%		
0.315	4%	5%	5%	6%		
0.160	2%	3%	3%	3%		
0.080	1%	3%	2%	2%		
M.C.(%):	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	67	71	71		
% SAND:	37	30	27	27		
% FINES:	1	3	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

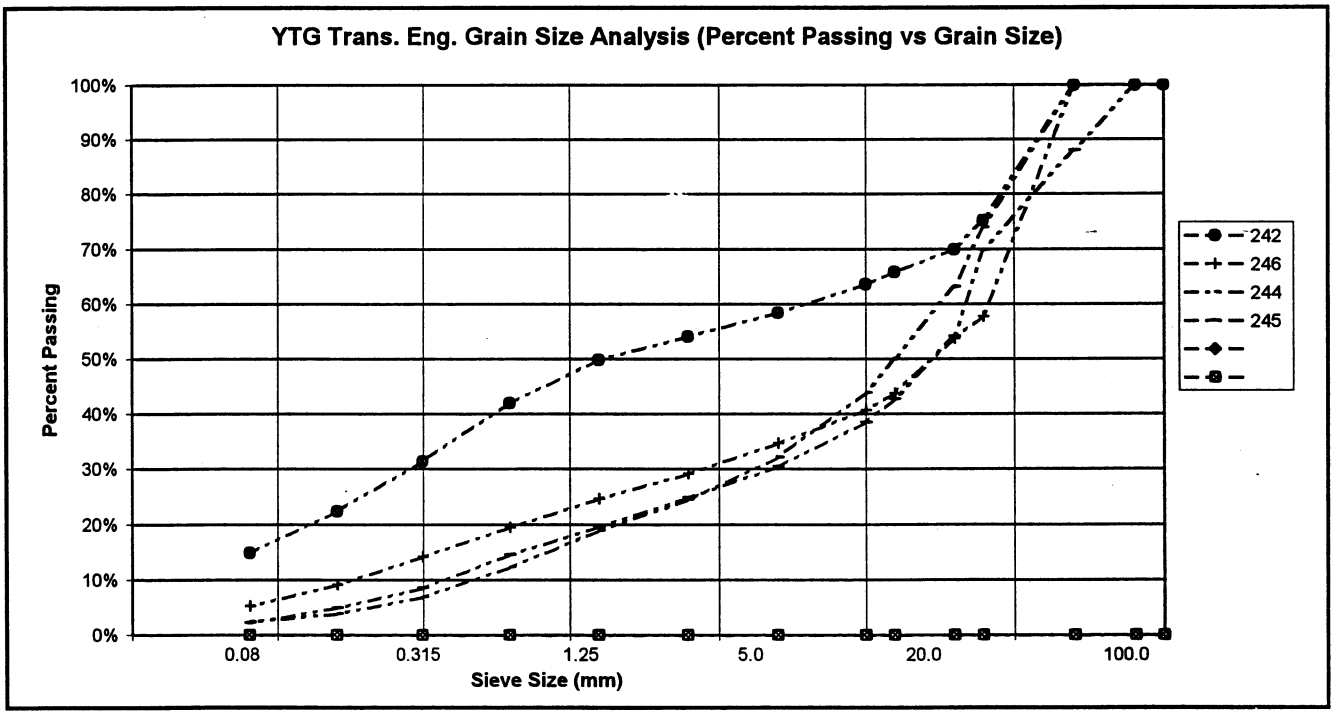


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2465

DATE COMP: SEPT 23/02

FIELD NO:	242	246	244	245		
LAB NO:	502	503	504	505		
DEPTH:	0.5-1.0	2.2-2.8	3.2-3.8	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	88%		
25.0	75%	58%	74%	70%		
20.0	70%	54%	63%	54%		
12.5	66%	44%	50%	43%		
10.0	64%	41%	44%	39%		
5.0	58%	35%	32%	30%		
2.5	54%	29%	25%	25%		
1.25	50%	25%	19%	20%		
0.630	42%	19%	12%	15%		
0.315	31%	14%	7%	9%		
0.160	22%	9%	4%	5%		
0.080	15%	5%	2%	2%		
M.C.(%):	5%	4%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	42	65	68	70		
% SAND:	44	29	30	28		
% FINES:	15	5	2	2		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

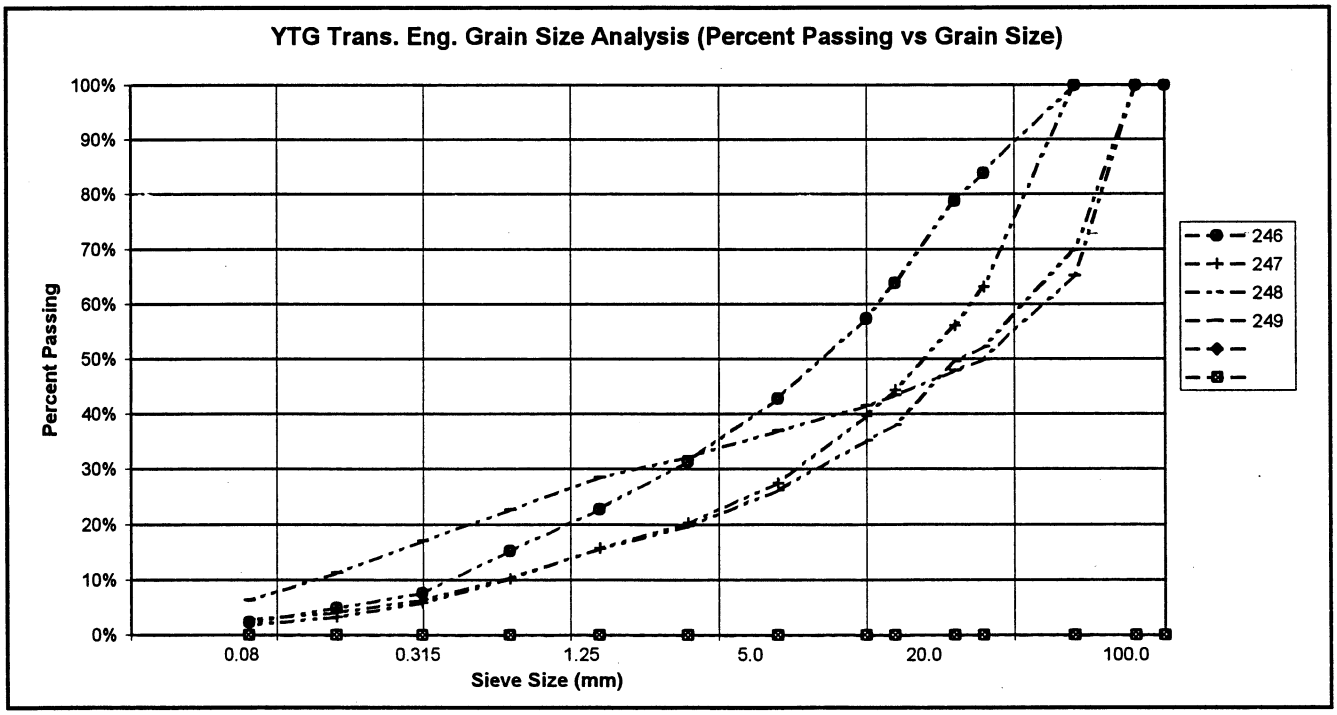


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2466

DATE COMP: SEPT 23/02

FIELD NO:	246	247	248	249		
LAB NO:	506	507	508	509		
DEPTH:	0.5-1.0	2.2-2.8	3.2-3.6	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	70%	65%		
25.0	84%	63%	52%	50%		
20.0	79%	56%	49%	48%		
12.5	64%	44%	38%	43%		
10.0	57%	40%	35%	42%		
5.0	43%	28%	26%	37%		
2.5	31%	20%	20%	32%		
1.25	23%	16%	16%	29%		
0.630	15%	10%	10%	23%		
0.315	8%	6%	6%	17%		
0.160	5%	3%	4%	11%		
0.080	2%	2%	3%	6%		
M.C.(%):	2%	2%	2%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	72	74	63		
% SAND:	40	26	23	31		
% FINES:	2	2	3	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

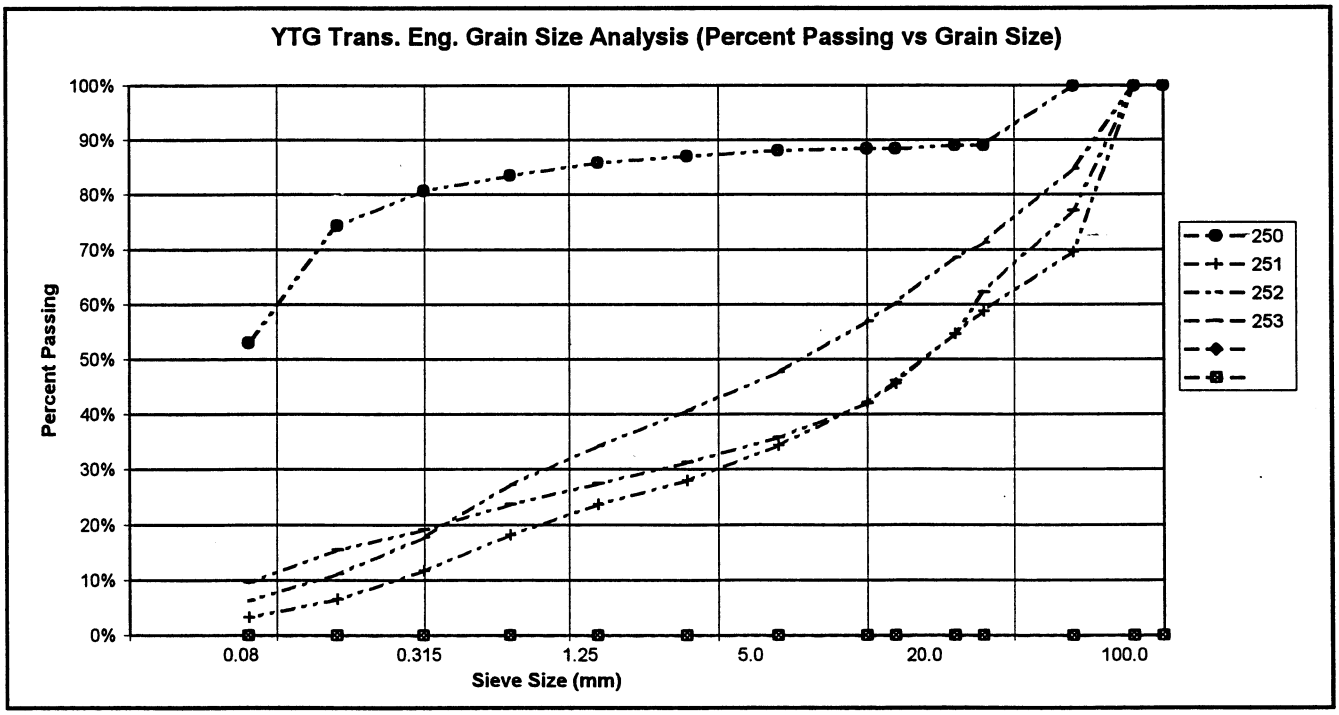


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2467

DATE COMP: SEPT 23/02

FIELD NO:	250	251	252	253		
LAB NO:	510	511	512	513		
DEPTH:	0.6-1.0	2.0-2.5	3.2-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	70%	85%	77%		
25.0	89%	59%	71%	62%		
20.0	89%	55%	69%	55%		
12.5	89%	46%	60%	46%		
10.0	89%	42%	57%	42%		
5.0	88%	34%	48%	36%		
2.5	87%	28%	41%	31%		
1.25	86%	24%	34%	27%		
0.630	84%	18%	27%	24%		
0.315	81%	12%	18%	19%		
0.160	74%	7%	11%	16%		
0.080	53%	3%	6%	10%		
M.C.(%):	9%	2%	3%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	12	66	52	64		
% SAND:	35	31	41	26		
% FINES:	53	3	6	10		
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

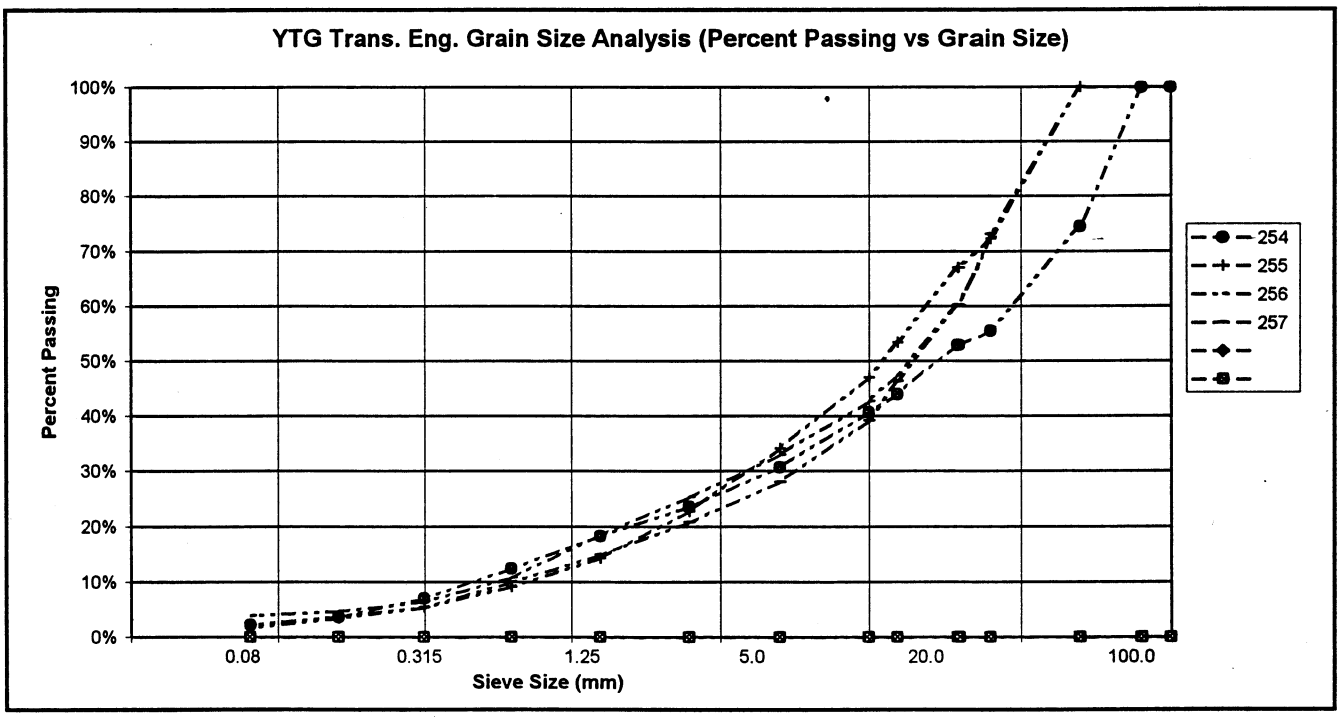


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2468

DATE COMP: SEPT 23/02

FIELD NO:	254	255	256	257		
LAB NO:	514	515	516	517		
DEPTH:	0.5-1.0	1.8-2.4	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	75%	100%	100%	100%		
25.0	56%	72%	72%	73%		
20.0	53%	67%	60%	60%		
12.5	44%	53%	47%	46%		
10.0	41%	47%	43%	39%		
5.0	31%	34%	33%	28%		
2.5	24%	23%	25%	21%		
1.25	18%	14%	19%	15%		
0.630	12%	9%	11%	10%		
0.315	7%	5%	6%	5%		
0.160	4%	3%	5%	4%		
0.080	2%	2%	4%	2%		
M.C.(%):	2%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	69	66	67	72		
% SAND:	29	32	29	26		
% FINES:	2	2	4	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

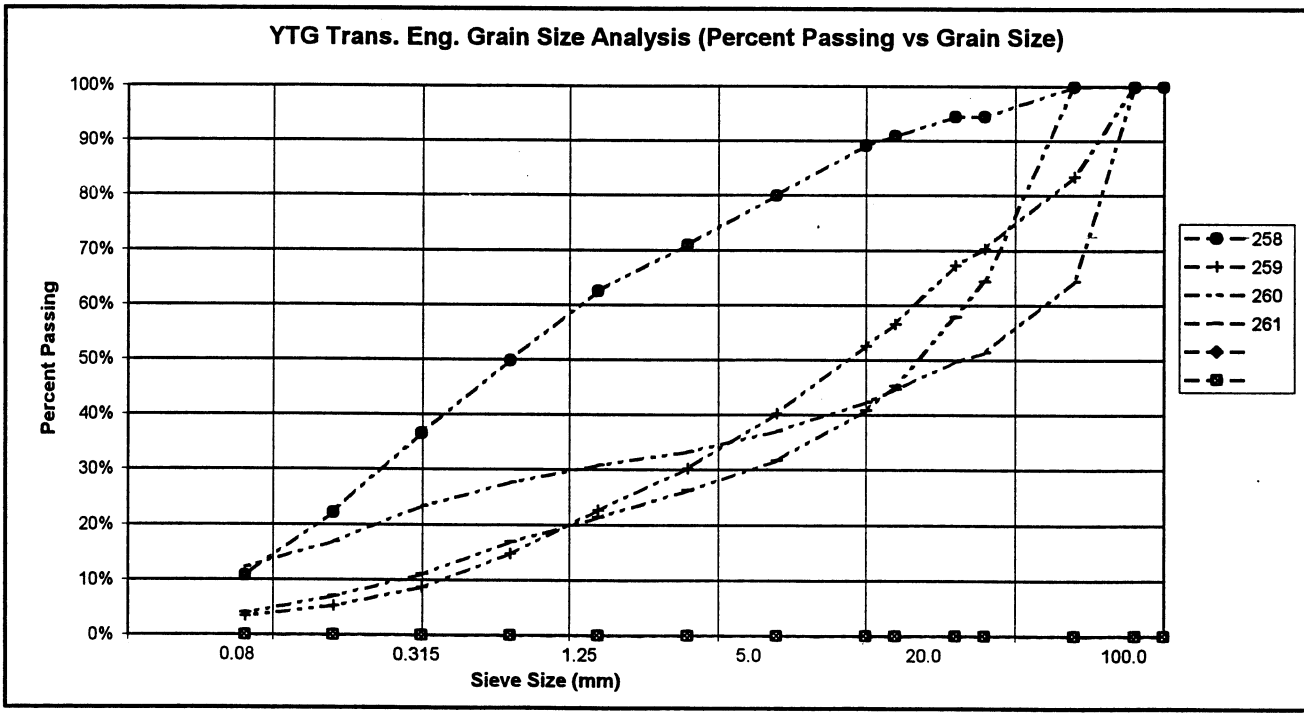


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2469

DATE COMP: SEPT 23/02

FIELD NO:	258	259	260	261		
LAB NO:	518	519	520	521		
DEPTH:	1.6-2.0	2.2-2.8	3.6-4.2	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	83%	64%	100%		
25.0	94%	70%	51%	64%		
20.0	94%	67%	50%	58%		
12.5	91%	57%	45%	45%		
10.0	89%	53%	42%	41%		
5.0	80%	40%	37%	32%		
2.5	71%	30%	33%	26%		
1.25	63%	23%	31%	21%		
0.630	50%	15%	28%	17%		
0.315	37%	9%	23%	11%		
0.160	22%	5%	17%	7%		
0.080	11%	3%	12%	4%		
M.C.(%):	4%	3%	12%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	20	60	63	68		
% SAND:	69	37	25	28		
% FINES:	11	3	12	4		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

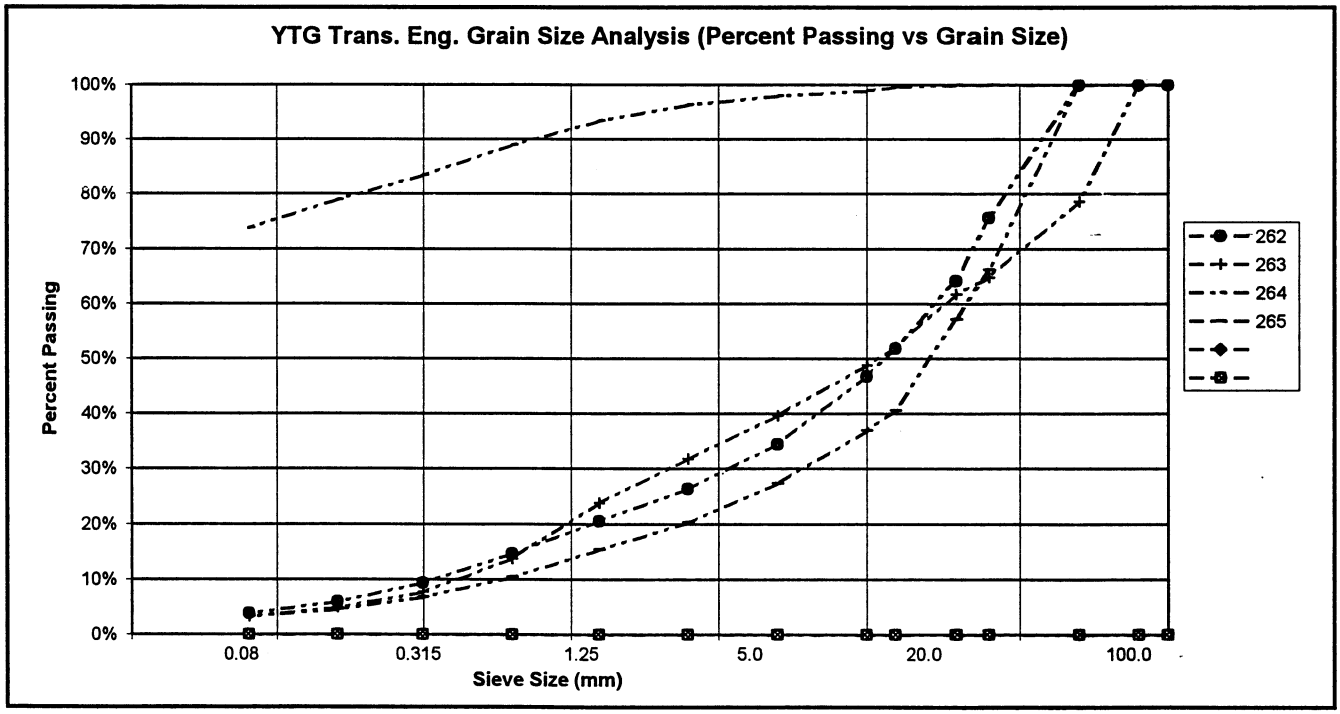


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2470

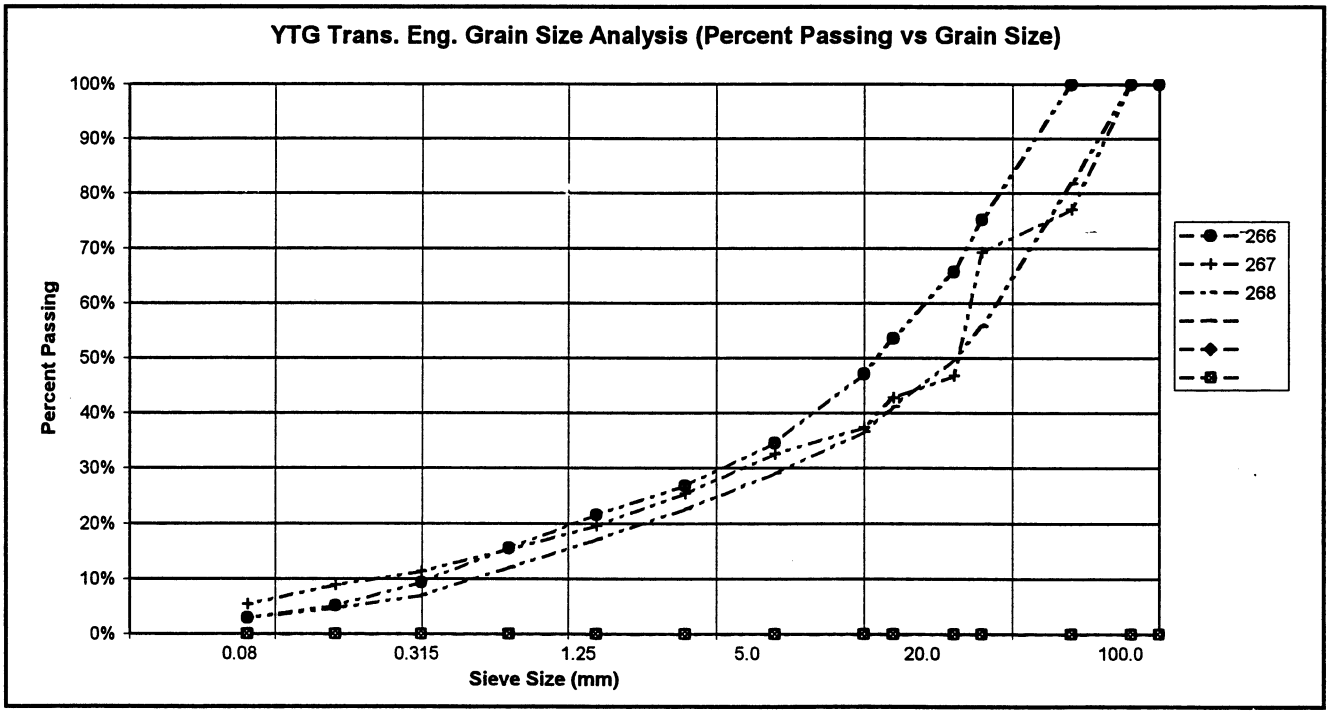
DATE COMP: SEPT 23/02

FIELD NO:	262	263	264	265		
LAB NO:	522	523	524	525		
DEPTH:	0.5-1.0	1.8-2.3	2.8-3.2	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	79%	100%	100%		
25.0	76%	65%	100%	66%		
20.0	64%	62%	100%	57%		
12.5	52%	52%	100%	41%		
10.0	47%	49%	99%	37%		
5.0	35%	40%	98%	27%		
2.5	26%	32%	96%	20%		
1.25	21%	24%	93%	15%		
0.630	15%	14%	89%	10%		
0.315	9%	8%	83%	7%		
0.160	6%	5%	79%	5%		
0.080	4%	3%	74%	3%		
M.C.(%):	3%	3%	49%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	65	60	2	73		
% SAND:	31	36	24	24		
% FINES:	4	3	74	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILT WITH SAND (ML)	WELL-GRADED GRAVEL WITH SAND (GW)		



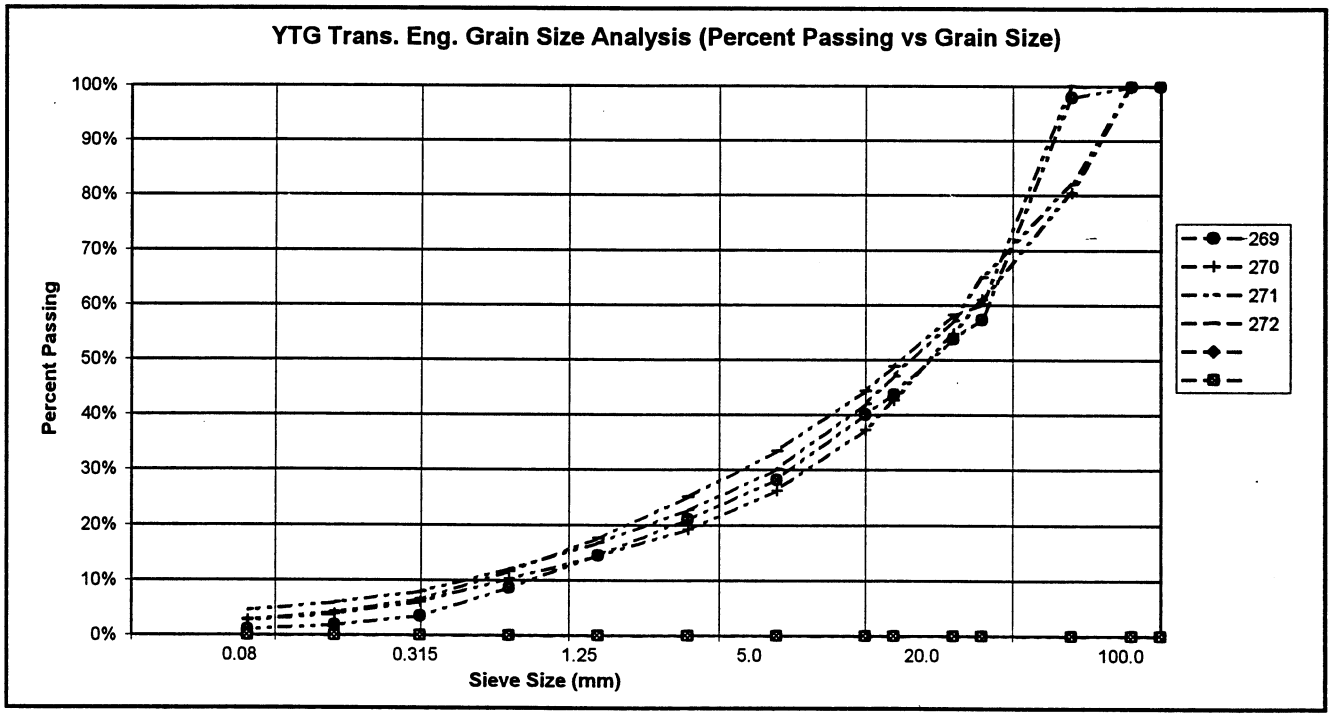
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2471
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 23/02

FIELD NO:	266	267	268			
LAB NO:	526	527	528			
DEPTH:	0.5-1.0	2.3-2.8	3.2-3.7			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	77%	82%			
25.0	75%	69%	56%			
20.0	66%	47%	50%			
12.5	54%	43%	41%			
10.0	47%	37%	37%			
5.0	35%	33%	29%			
2.5	27%	26%	23%			
1.25	22%	20%	17%			
0.630	16%	15%	12%			
0.315	9%	11%	7%			
0.160	5%	9%	5%			
0.080	3%	5%	3%			
M.C.(%):	2%	4%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	65	67	71			
% SAND:	32	27	26			
% FINES:	3	5	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)			



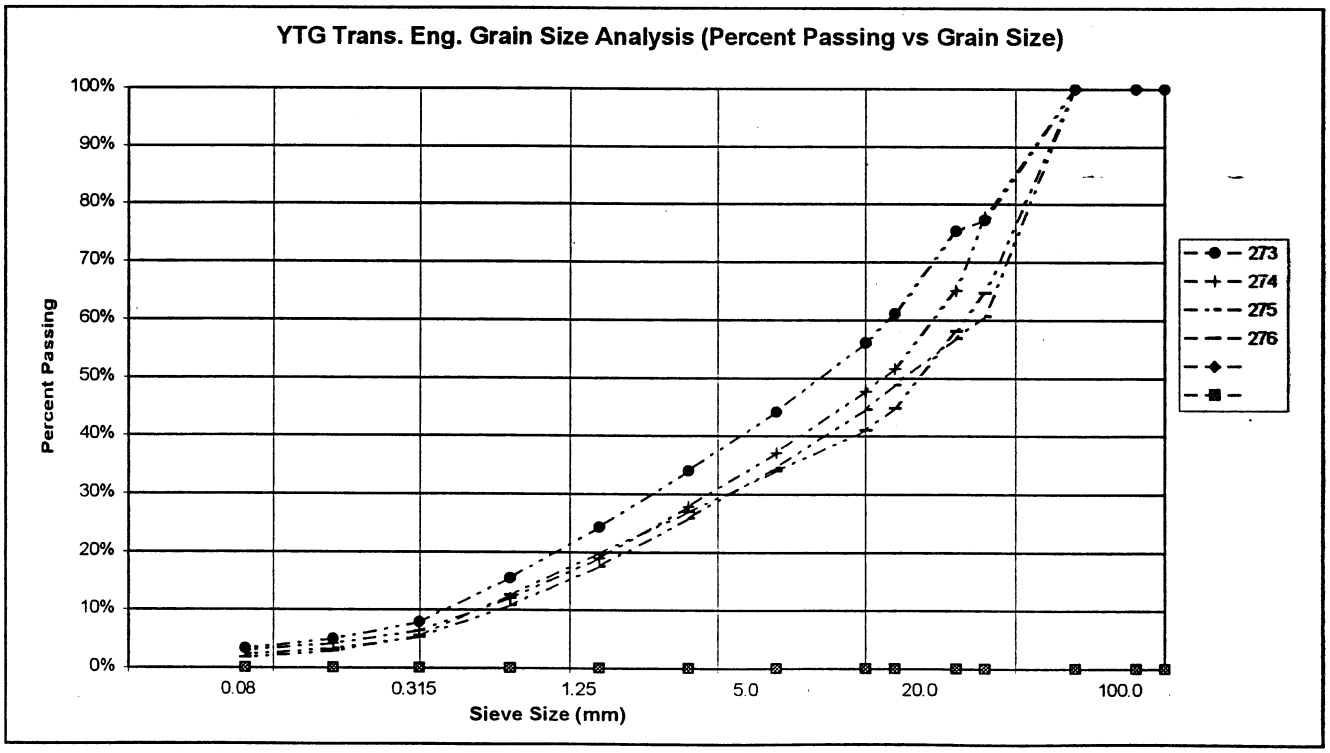
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2472
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 23/02

FIELD NO:	269	270	271	272		
LAB NO:	529	230	231	532		
DEPTH:	0.8-1.3	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	98%	81%	82%	100%		
25.0	57%	61%	65%	60%		
20.0	54%	55%	57%	58%		
12.5	44%	43%	47%	49%		
10.0	40%	37%	42%	44%		
5.0	28%	26%	30%	33%		
2.5	21%	19%	23%	25%		
1.25	15%	14%	17%	18%		
0.630	9%	10%	12%	12%		
0.315	4%	6%	8%	7%		
0.160	2%	4%	6%	4%		
0.080	1%	3%	5%	3%		
M.C.(%):	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	72	74	70	67		
% SAND:	27	24	26	31		
% FINES:	1	3	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



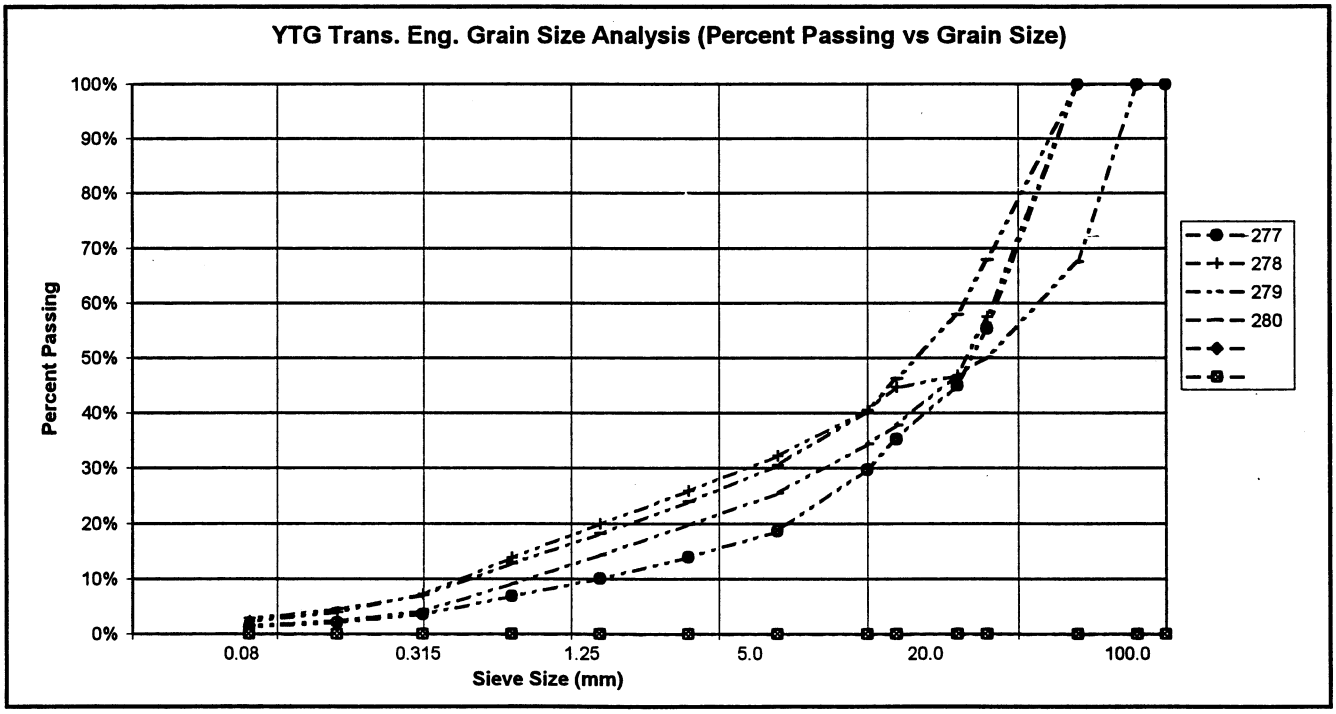
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2473
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 23/02

FIELD NO:	273	274	275	276		
LAB NO:	533	534	535	536		
DEPTH:	0.8-1.3	1.8-2.3	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	77%	78%	61%	65%		
20.0	75%	65%	57%	58%		
12.5	61%	52%	49%	45%		
10.0	56%	48%	45%	41%		
5.0	44%	37%	35%	34%		
2.5	34%	28%	26%	27%		
1.25	24%	19%	18%	20%		
0.630	15%	12%	11%	13%		
0.315	8%	6%	5%	6%		
0.160	5%	4%	3%	3%		
0.080	3%	3%	2%	2%		
M.C.(%):	3%	3%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	63	65	66		
% SAND:	41	34	32	32		
% FINES:	3	3	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2474
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 23/02

FIELD NO:	277	278	279	280		
LAB NO:	537	538	539	540		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	67%	100%		
25.0	55%	58%	50%	68%		
20.0	45%	47%	47%	58%		
12.5	35%	45%	38%	46%		
10.0	30%	41%	34%	40%		
5.0	19%	32%	26%	31%		
2.5	14%	26%	20%	24%		
1.25	10%	20%	14%	18%		
0.630	7%	14%	9%	13%		
0.315	4%	7%	4%	7%		
0.160	2%	4%	2%	5%		
0.080	1%	2%	2%	3%		
M.C.(%):	2%	2%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	81	68	74	69		
% SAND:	17	30	24	28		
% FINES:	1	2	2	3		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

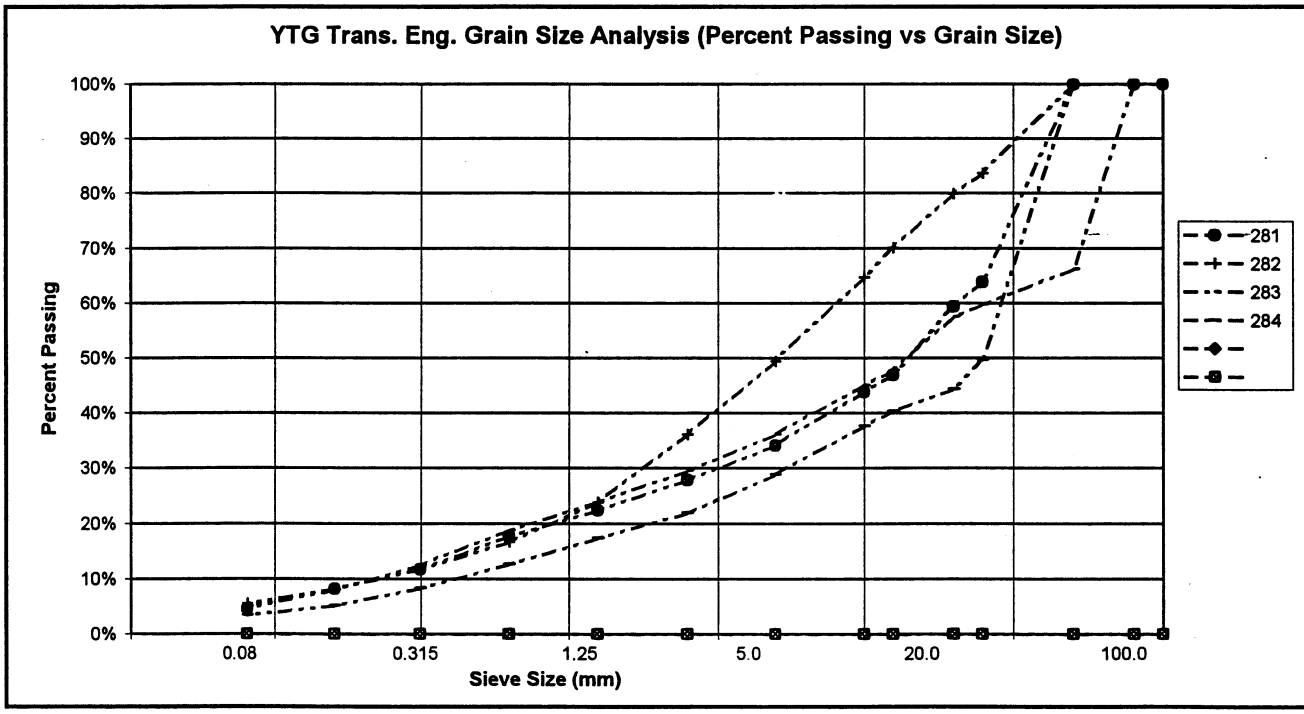


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2475

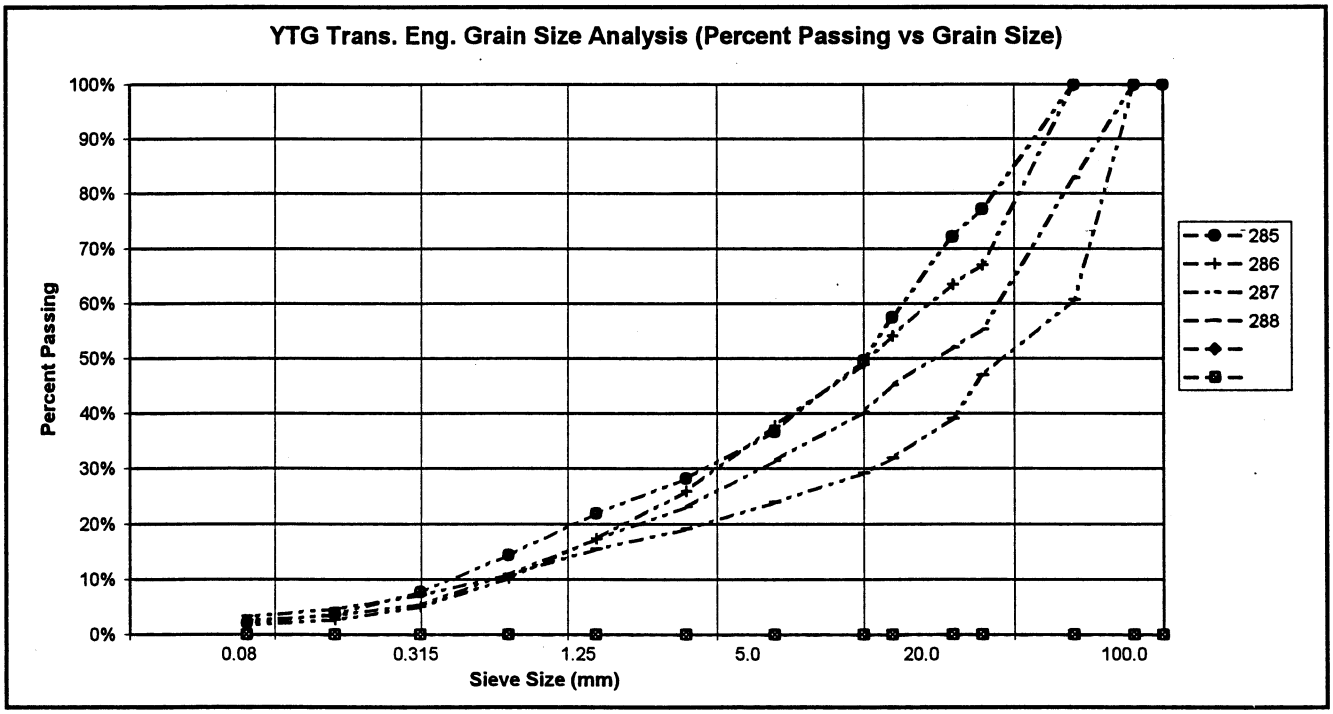
DATE COMP: SEPT 23/02

FIELD NO:	281	282	283	284		
LAB NO:	541	542	543	544		
DEPTH:	0.8-1.3	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	66%	100%		
25.0	64%	84%	60%	50%		
20.0	59%	80%	58%	44%		
12.5	47%	70%	48%	40%		
10.0	44%	65%	45%	38%		
5.0	34%	49%	36%	29%		
2.5	28%	36%	30%	22%		
1.25	22%	24%	24%	17%		
0.630	18%	17%	19%	13%		
0.315	12%	12%	13%	8%		
0.160	8%	8%	8%	5%		
0.080	5%	5%	5%	3%		
M.C.(%):	3%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	51	64	71		
% SAND:	30	44	31	25		
% FINES:	5	5	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)		



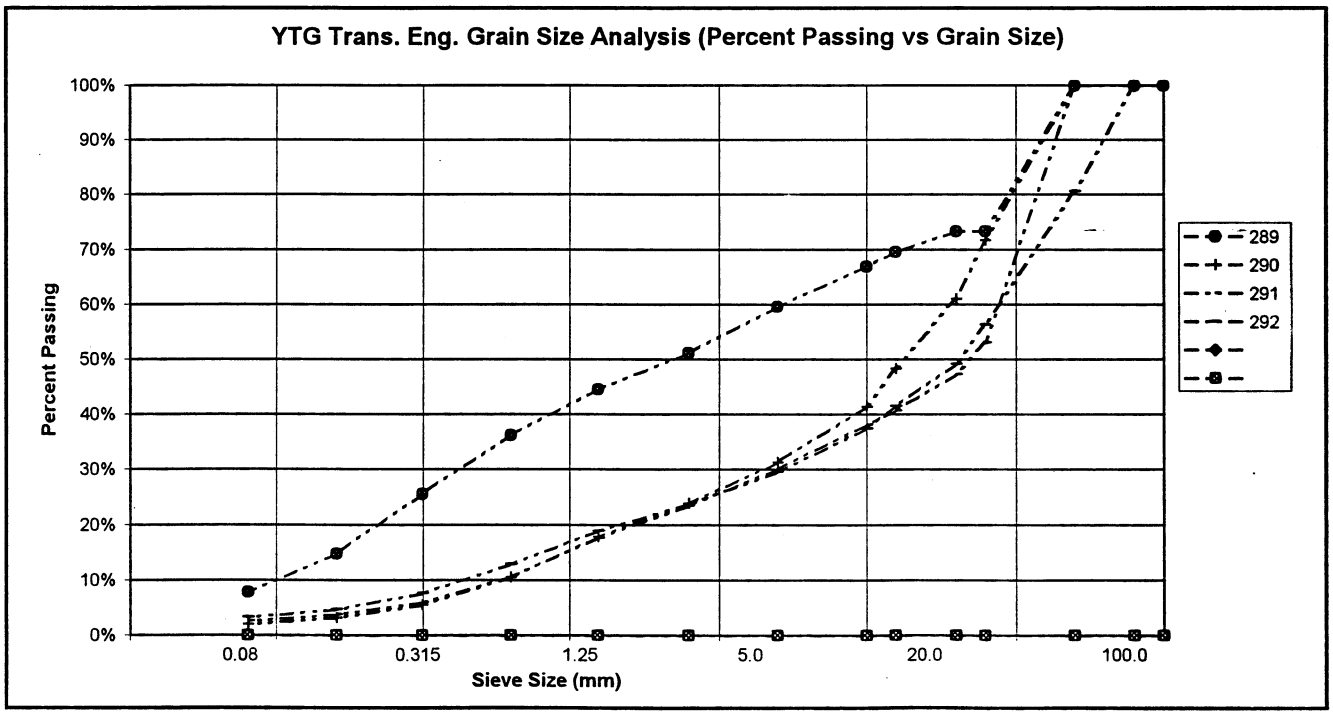
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2476
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 24/02

FIELD NO:	285	286	287	288		
LAB NO:	545	546	547	548		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	83%	61%		
25.0	77%	67%	55%	47%		
20.0	72%	63%	52%	39%		
12.5	57%	54%	45%	32%		
10.0	50%	49%	40%	29%		
5.0	37%	38%	31%	24%		
2.5	28%	26%	23%	19%		
1.25	22%	17%	17%	15%		
0.630	14%	10%	11%	11%		
0.315	8%	5%	6%	7%		
0.160	4%	3%	4%	5%		
0.080	2%	2%	3%	3%		
M.C.(%):	2%	2%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	62	69	76		
% SAND:	35	36	29	21		
% FINES:	2	2	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		



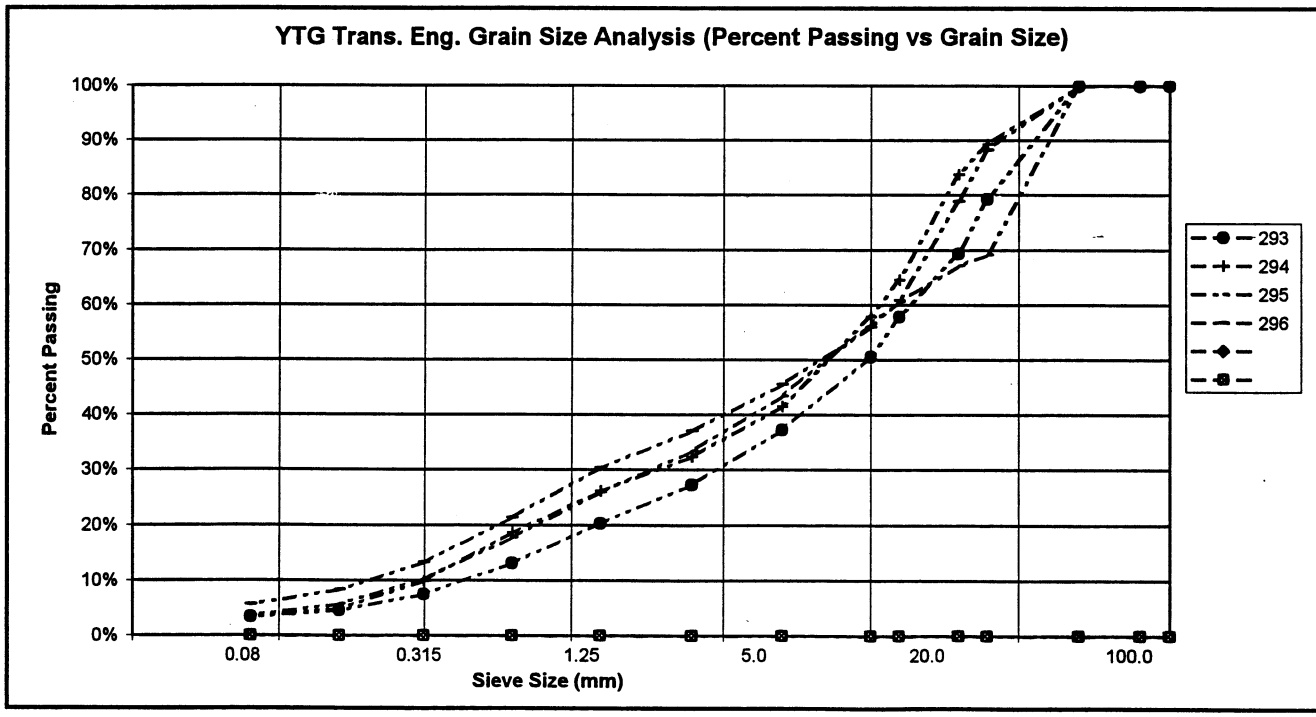
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2477
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 24/02

FIELD NO:	289	290	291	292		
LAB NO:	549	550	551	552		
DEPTH:	0.7-1.2	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	81%		
25.0	73%	72%	53%	56%		
20.0	73%	61%	47%	49%		
12.5	70%	48%	41%	42%		
10.0	67%	41%	38%	37%		
5.0	60%	31%	30%	30%		
2.5	51%	24%	23%	24%		
1.25	45%	18%	18%	19%		
0.630	36%	11%	11%	13%		
0.315	26%	5%	6%	8%		
0.160	15%	3%	4%	5%		
0.080	8%	2%	3%	3%		
M.C.(%):	3%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	40	69	70	70		
% SAND:	52	29	28	26		
% FINES:	8	2	3	3		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		



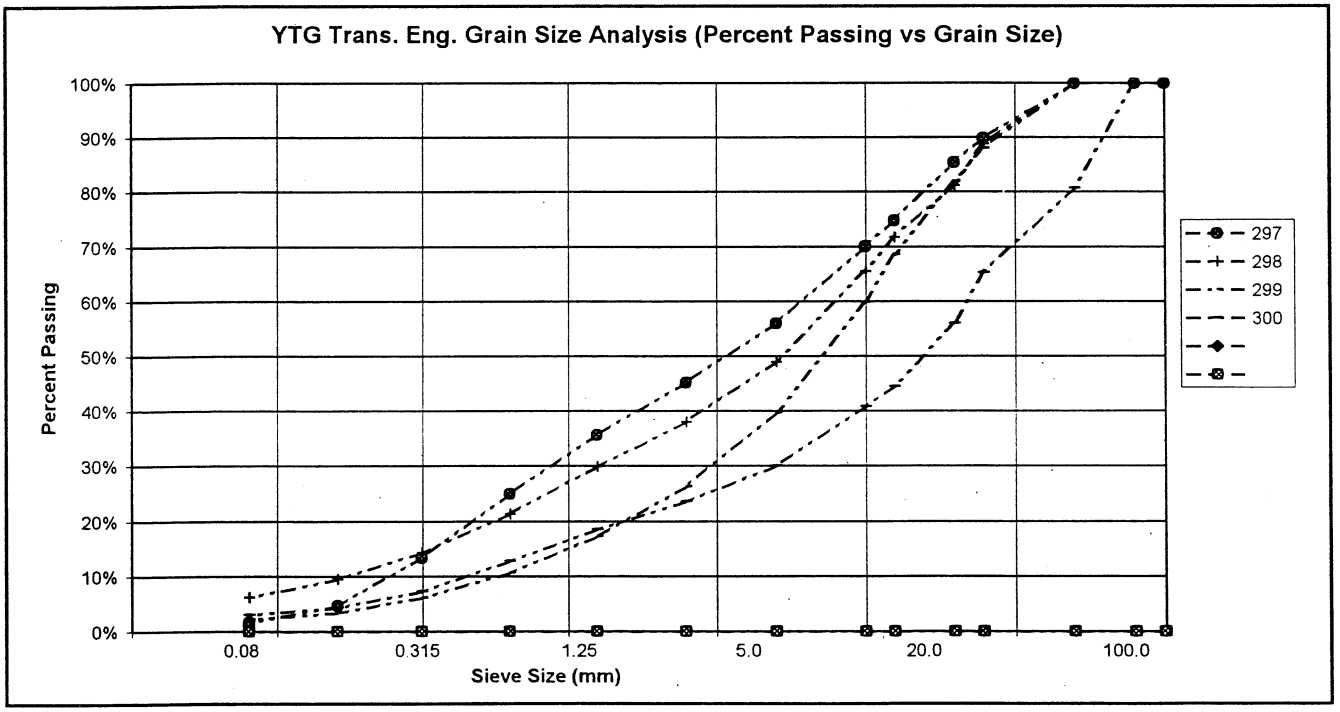
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2478
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 24/02

FIELD NO:	293	294	295	296		
LAB NO:	553	554	555	556		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	79%	89%	69%	88%		
20.0	69%	84%	67%	79%		
12.5	58%	65%	61%	61%		
10.0	51%	58%	57%	56%		
5.0	37%	42%	43%	46%		
2.5	27%	32%	33%	37%		
1.25	20%	26%	26%	30%		
0.630	13%	19%	18%	21%		
0.315	7%	10%	10%	13%		
0.160	5%	5%	6%	8%		
0.080	3%	3%	4%	6%		
M.C.(%):	3%	3%	3%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	58	57	54		
% SAND:	34	38	40	40		
% FINES:	3	3	4	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2479
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 24/02

FIELD NO:	297	298	299	300		
LAB NO:	557	558	559	560		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	81%		
25.0	90%	89%	88%	65%		
20.0	85%	81%	82%	56%		
12.5	75%	72%	68%	45%		
10.0	70%	66%	60%	41%		
5.0	56%	49%	40%	30%		
2.5	45%	38%	26%	24%		
1.25	36%	30%	17%	19%		
0.630	25%	21%	11%	13%		
0.315	13%	14%	6%	7%		
0.160	5%	10%	3%	4%		
0.080	2%	6%	2%	3%		
M.C.(%):	2%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	44	51	60	70		
% SAND:	54	43	37	27		
% FINES:	2	6	2	3		
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

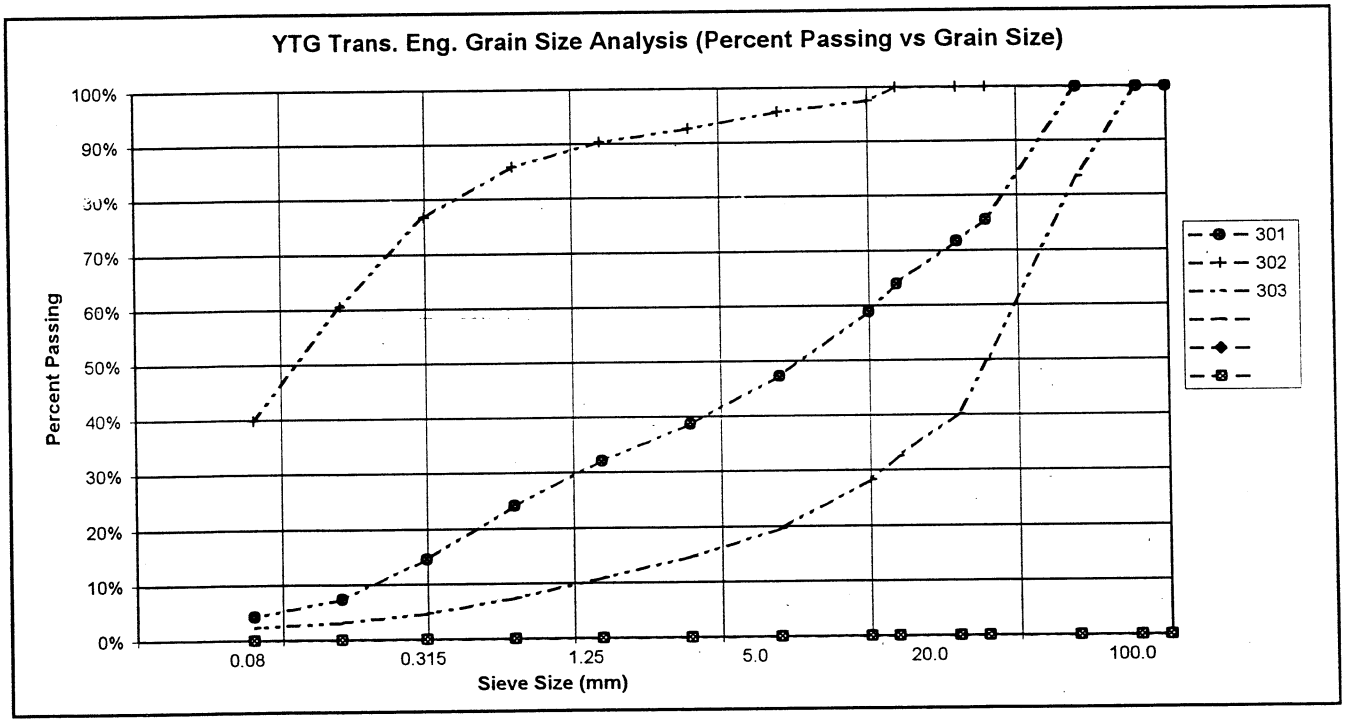


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2480

DATE COMP: SEPT 24/02

FIELD NO:	301	302	303			
LAB NO:	561	562	563			
DEPTH:	0.5-1.0	1.5-1.7	2.2-2.4			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	83%			
25.0	76%	100%	50%			
20.0	72%	100%	40%			
12.5	64%	100%	33%			
10.0	59%	98%	28%			
5.0	47%	96%	20%			
2.5	39%	93%	15%			
1.25	32%	90%	11%			
0.630	24%	86%	7%			
0.315	15%	77%	5%			
0.160	7%	61%	3%			
0.080	4%	40%	2%			
M.C.(%):	4%	43%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	53	4	80			
% SAND:	43	56	17			
% FINES:	4	40	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)	WELL-GRADED GRAVEL WITH SAND (GW)			

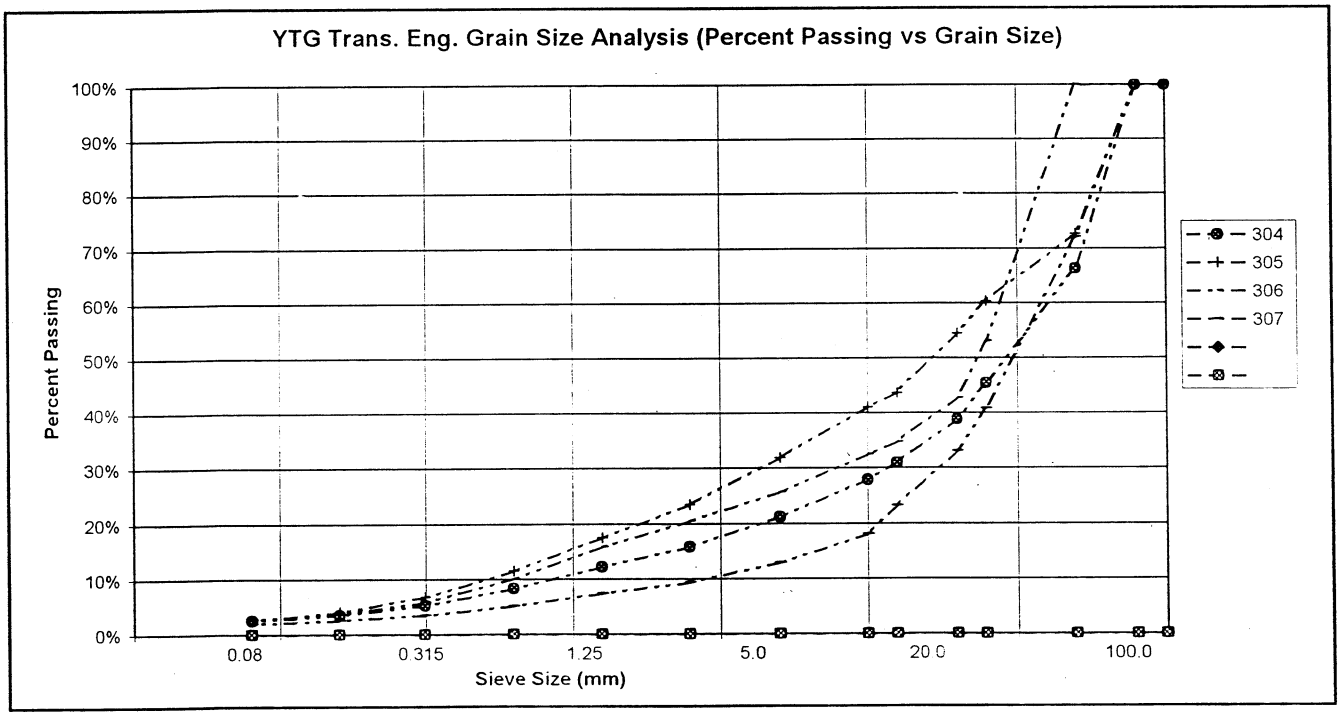


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2481

DATE COMP: SEPT 24/02

FIELD NO:	304	305	306	307		
LAB NO:	564	565	566	567		
DEPTH:	0.5-1.0	2.0-2.5	2.7-3.2	3.2-3.6		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	66%	73%	100%	72%		
25.0	45%	60%	53%	41%		
20.0	39%	54%	43%	33%		
12.5	31%	44%	35%	23%		
10.0	28%	41%	33%	18%		
5.0	21%	32%	26%	13%		
2.5	16%	23%	20%	9%		
1.25	12%	17%	16%	7%		
0.630	8%	12%	10%	5%		
0.315	5%	7%	6%	4%		
0.160	4%	4%	4%	3%		
0.080	3%	3%	3%	2%		
M.C.(%):	4%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	79	68	74	87		
% SAND:	19	29	23	11		
% FINES:	3	3	3	2		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL (GP)		

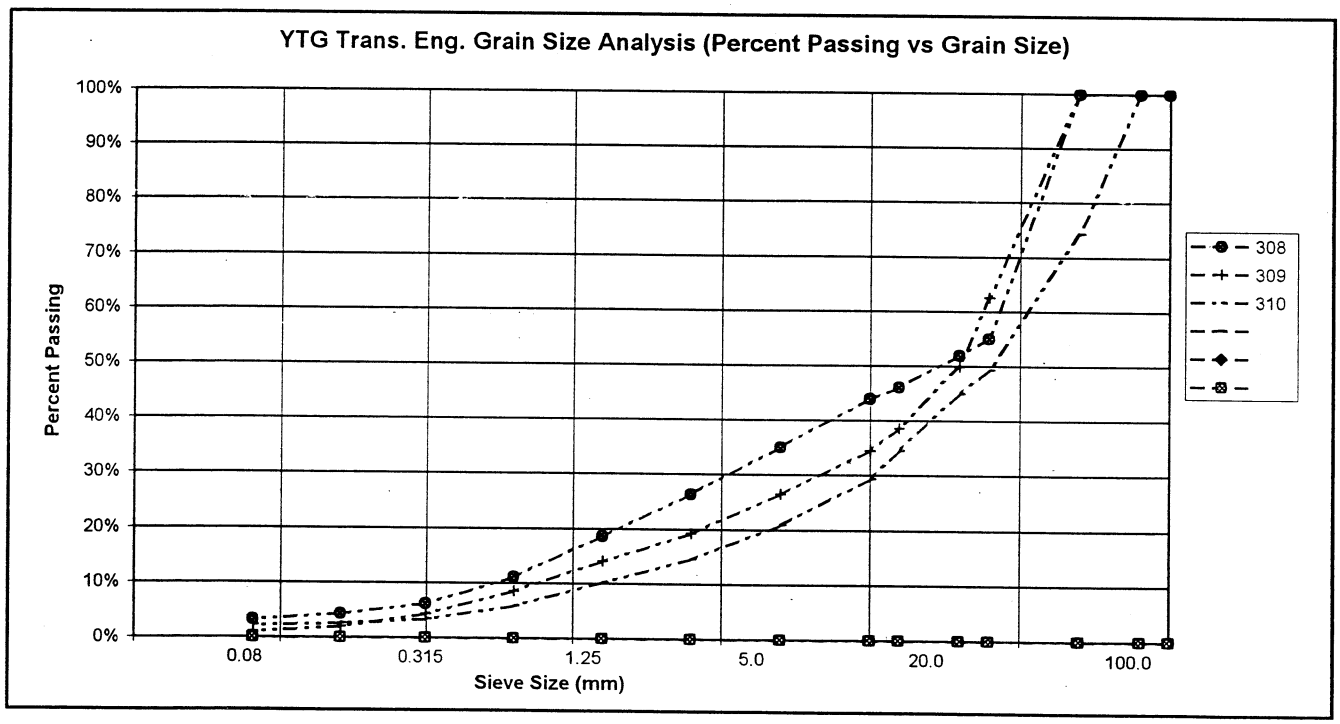


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2482

DATE COMP: SEPT 24/02

FIELD NO:	308	309	310			
LAB NO:	568	569	570			
DEPTH:	0.5-1.0	2.0-2.5	2.7-2.9			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	74%			
25.0	55%	63%	49%			
20.0	52%	50%	45%			
12.5	46%	39%	35%			
10.0	44%	34%	29%			
5.0	35%	27%	21%			
2.5	26%	19%	15%			
1.25	19%	14%	10%			
0.630	11%	9%	6%			
0.315	6%	4%	3%			
0.160	4%	2%	3%			
0.080	3%	1%	2%			
M.C.(%):	3%	3%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	65	73	79			
% SAND:	32	26	19			
% FINES:	3	1	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)			

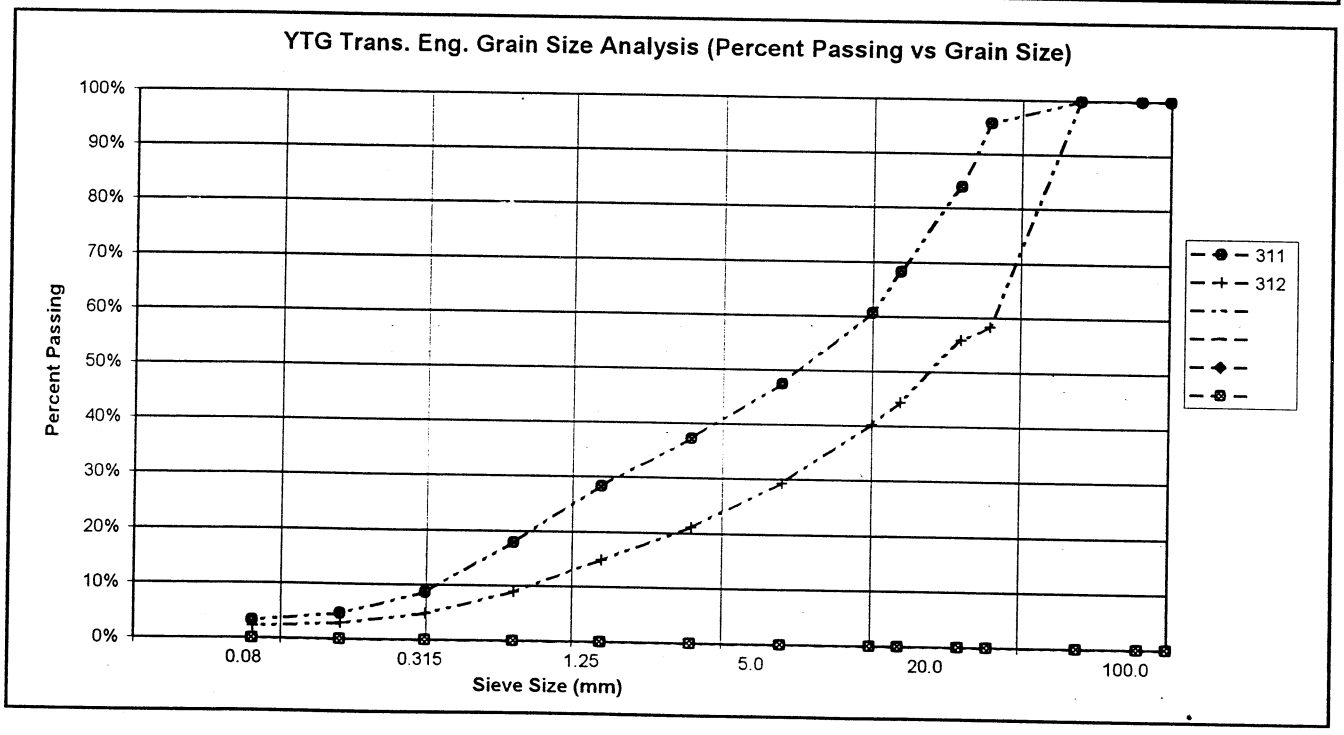


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2483

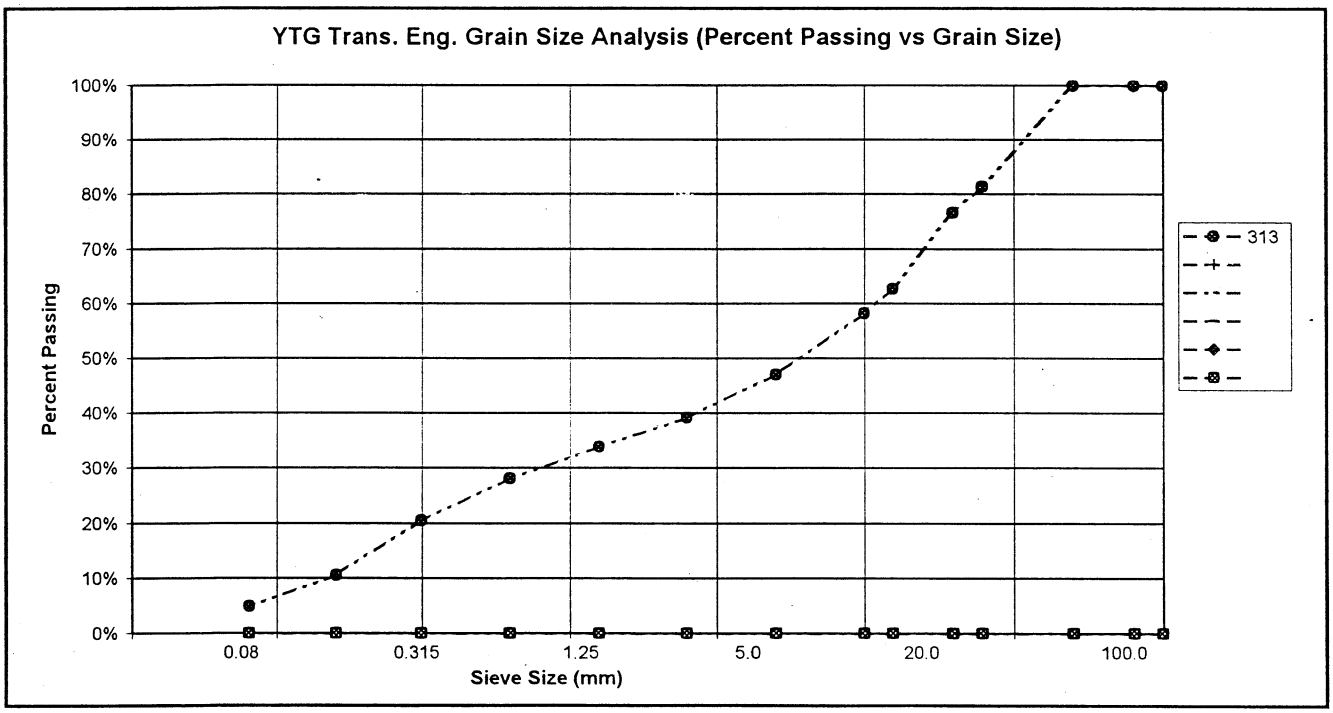
DATE COMP: SEPT 24/02

FIELD NO:	311	312				
LAB NO:	571	572				
DEPTH:	0.5-1.0	2.1-2.3				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	96%	58%				
20.0	84%	56%				
12.5	68%	44%				
10.0	61%	40%				
5.0	48%	29%				
2.5	37%	21%				
1.25	28%	15%				
0.630	18%	9%				
0.315	9%	5%				
0.160	5%	3%				
0.080	3%	2%				
M.C.(%):	3%	6%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	52	71				
% SAND:	44	27				
% FINES:	3	2				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)				



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2484
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 24/02

FIELD NO:	313					
LAB NO:	573					
DEPTH:	0.5-1.0					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	81%					
20.0	77%					
12.5	63%					
10.0	58%					
5.0	47%					
2.5	39%					
1.25	34%					
0.630	28%					
0.315	21%					
0.160	11%					
0.080	5%					
M.C.(%):	12%					
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	53					
% SAND:	42					
% FINES:	5					
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)					

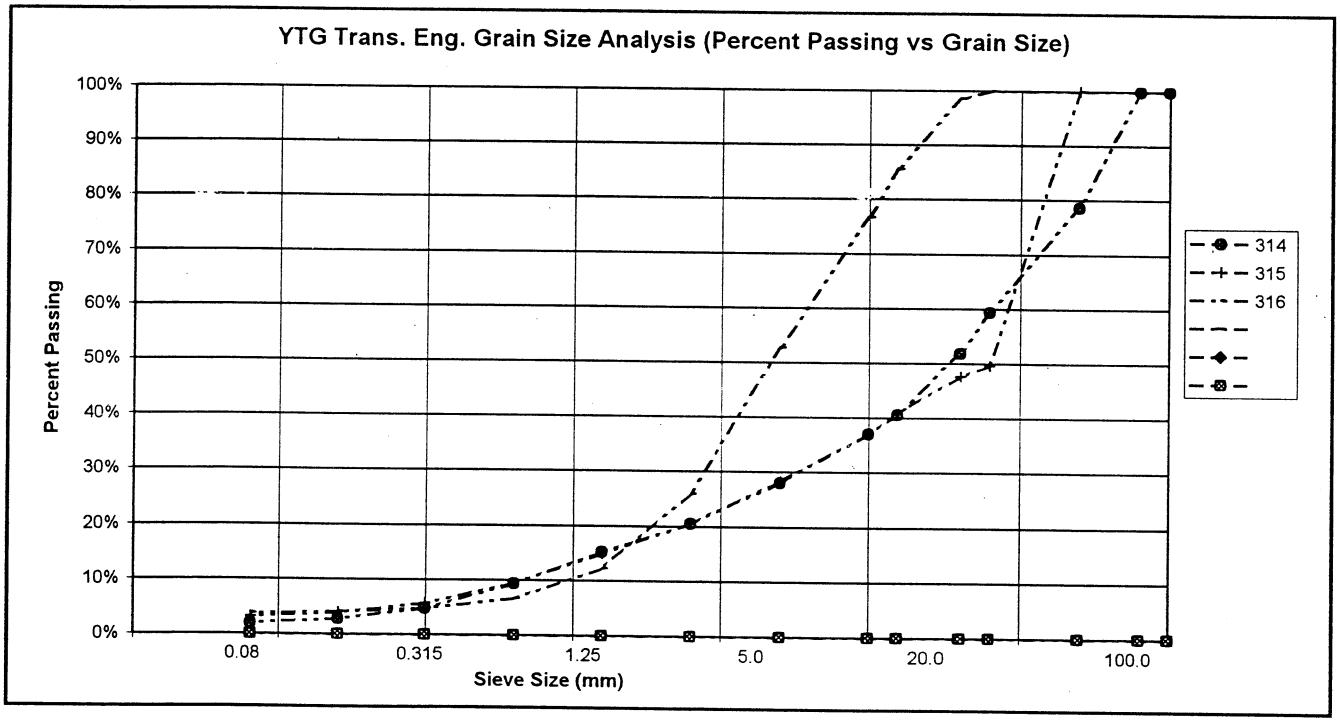


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2485

DATE COMP: SEPT 24/02

FIELD NO:	314	315	316			
LAB NO:	574	575	576			
DEPTH:	1.0-1.5	1.8-2.3	2.9-3.1			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	79%	100%	100%			
25.0	59%	50%	100%			
20.0	52%	48%	99%			
12.5	41%	41%	86%			
10.0	37%	37%	77%			
5.0	28%	28%	53%			
2.5	21%	21%	26%			
1.25	15%	15%	12%			
0.630	9%	9%	7%			
0.315	5%	6%	5%			
0.160	3%	4%	4%			
0.080	2%	3%	4%			
M.C.(%):	2%	5%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	72	72	47			
% SAND:	26	25	49			
% FINES:	2	3	4			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED SAND WITH GRAVEL (SP)			

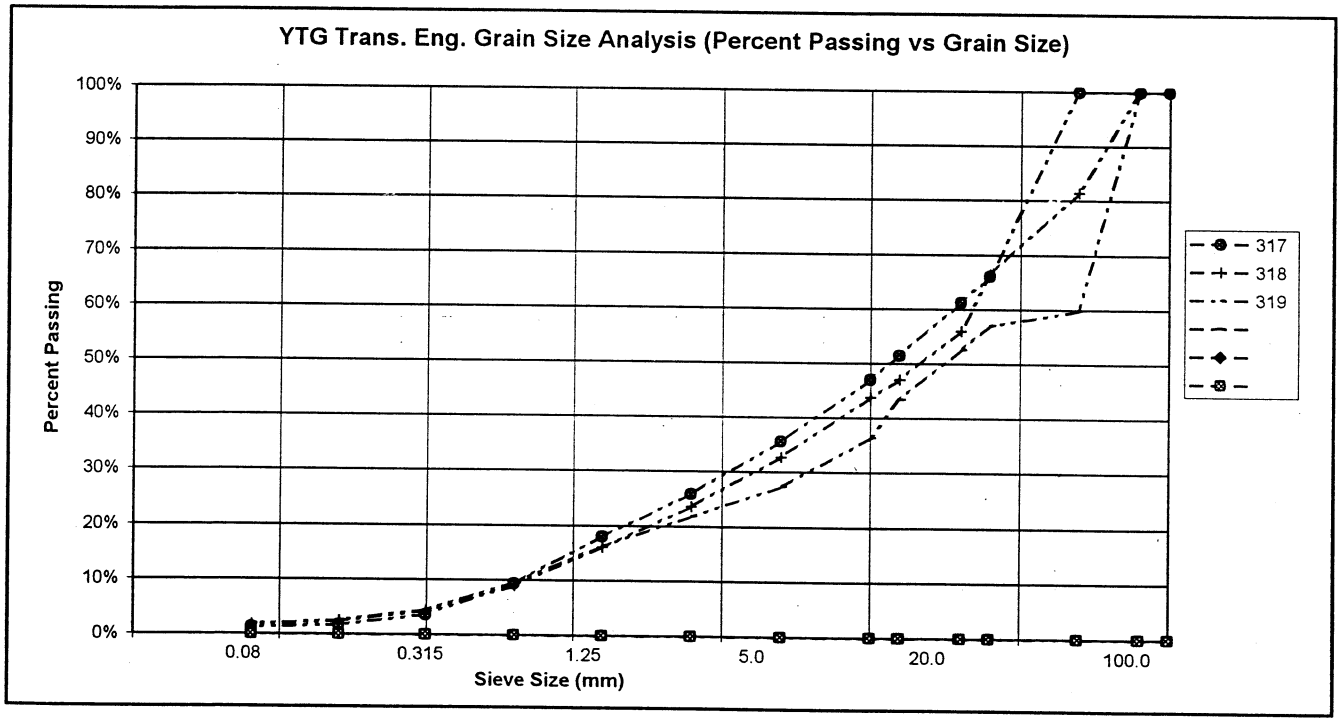


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2486

DATE COMP: SEPT 24/02

FIELD NO:	317	318	319			
LAB NO:	577	578	579			
DEPTH:	0.5-1.0	1.8-2.3	2.8-3.0			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	81%	60%			
25.0	66%	66%	57%			
20.0	61%	56%	53%			
12.5	52%	47%	43%			
10.0	47%	44%	36%			
5.0	36%	33%	27%			
2.5	26%	24%	22%			
1.25	18%	16%	16%			
0.630	9%	9%	10%			
0.315	4%	4%	5%			
0.160	2%	3%	3%			
0.080	1%	2%	2%			
M.C.(%):	3%	2%	5%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	64	67	73			
% SAND:	34	31	25			
% FINES:	1	2	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

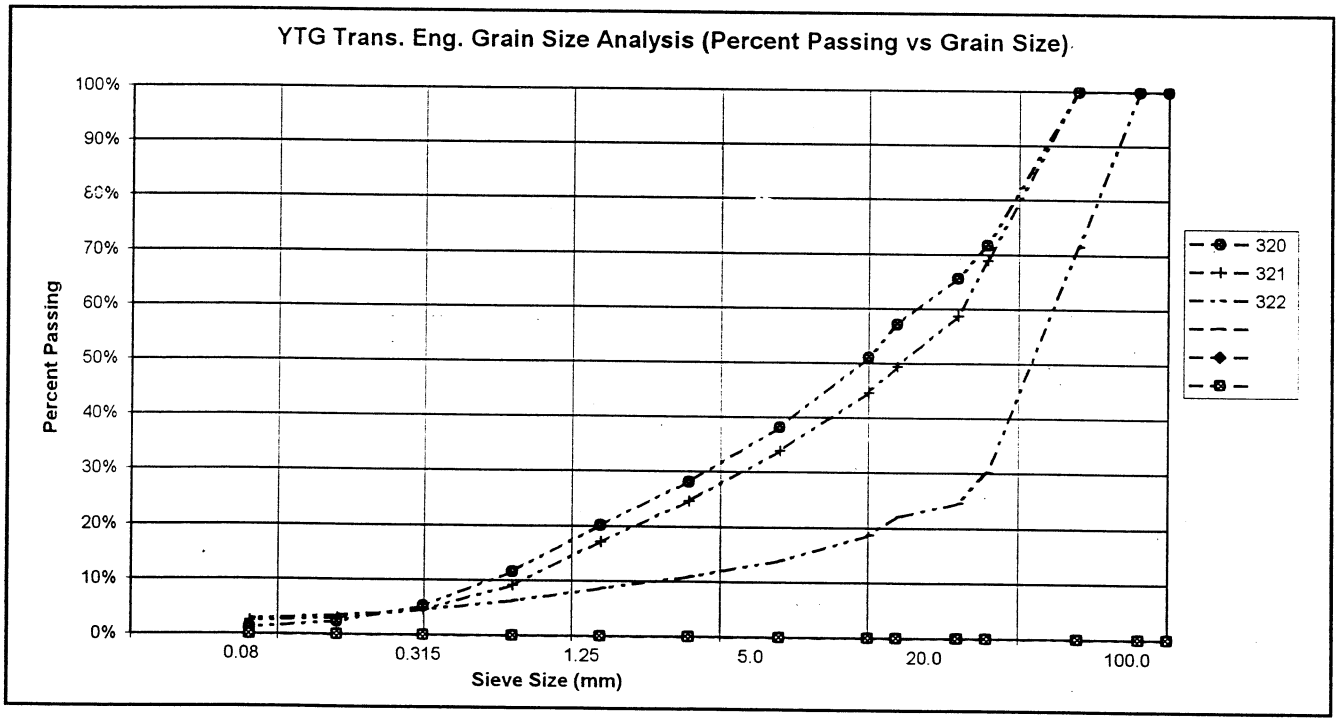


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2487

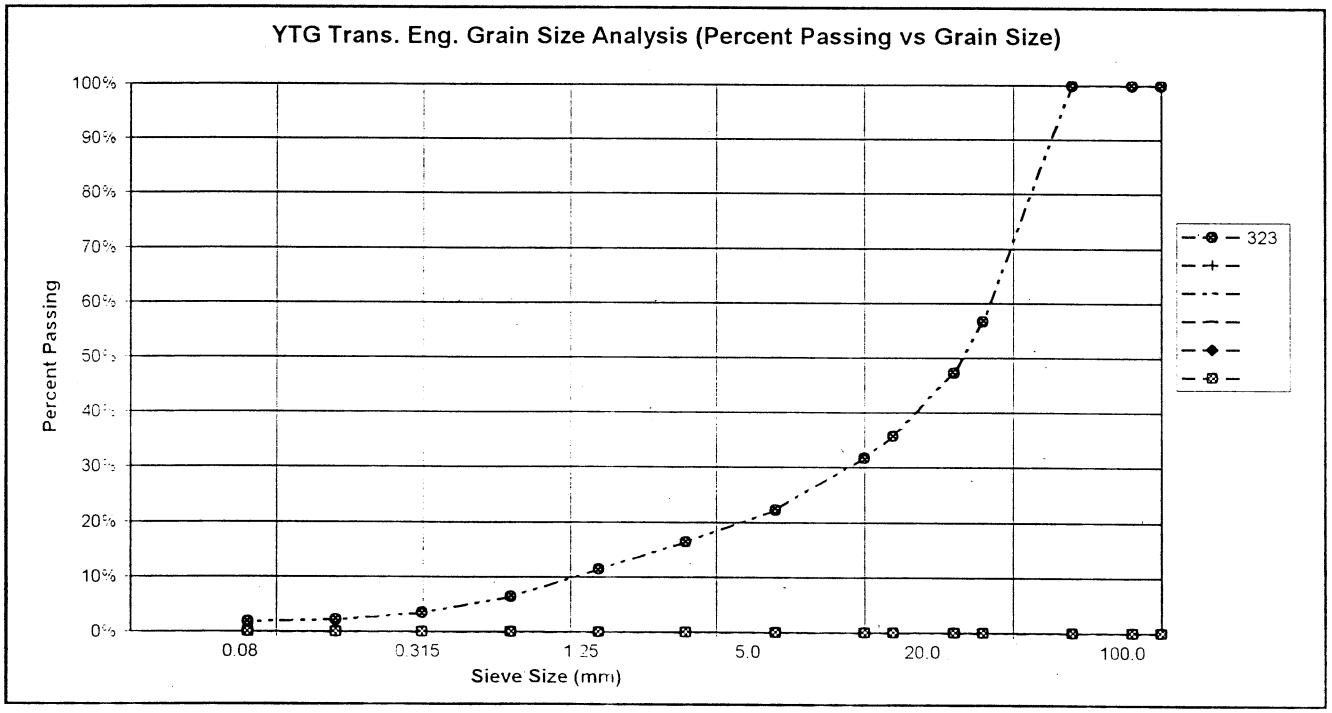
DATE COMP: SEPT 24/02

FIELD NO:	320	321	322			
LAB NO:	580	581	582			
DEPTH:	0.8-1.3	2.0-2.5	3.2-3.4			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	72%			
25.0	72%	69%	30%			
20.0	66%	59%	25%			
12.5	57%	49%	22%			
10.0	51%	45%	19%			
5.0	38%	34%	14%			
2.5	28%	25%	11%			
1.25	20%	17%	9%			
0.630	12%	9%	6%			
0.315	5%	5%	5%			
0.160	2%	3%	3%			
0.080	1%	2%	3%			
M.C.(%):	2%	3%	3%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	62	66	86			
% SAND:	37	31	11			
% FINES:	1	2	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL (GW)			



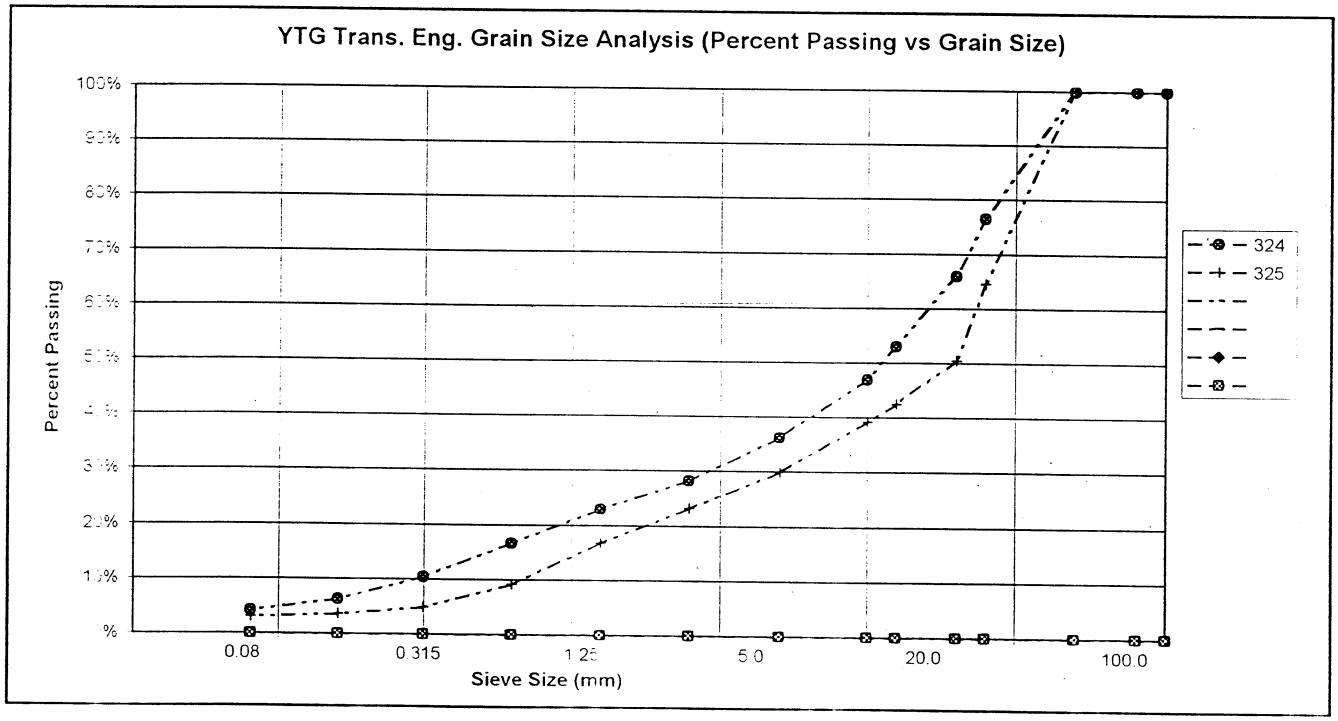
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2488
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 24/02

FIELD NO:	323					
LAB NO:	583					
DEPTH:	1.0-1.2					
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**					
100.0	100%					
80.0	100%					
50.0	100%					
25.0	57%					
20.0	47%					
12.5	36%					
10.0	32%					
5.0	22%					
2.5	16%					
1.25	11%					
0.630	6%					
0.315	3%					
0.160	2%					
0.080	2%					
M.C.(%):	4%					
LIQUID LIMIT:	0.0					
PLASTIC LIMIT:	0.0					
PLASTIC INDEX.:	0.0					
% GRAVEL:	78					
% SAND:	20					
% FINES:	2					
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)					



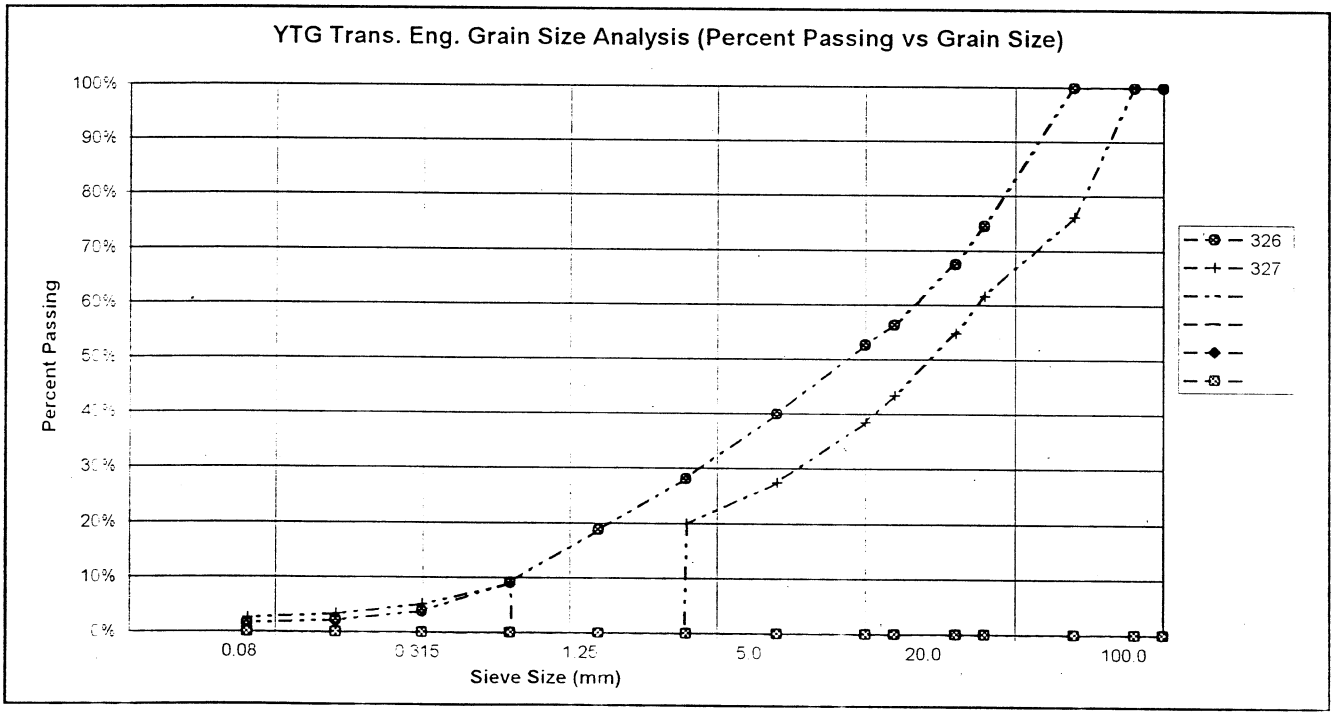
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2489
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 24/02

FIELD NO:	324	325				
LAB NO:	584	585				
DEPTH:	0.5-0.9	1.8-2.0				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	77%	65%				
20.0	66%	50%				
12.5	53%	42%				
10.0	47%	39%				
5.0	36%	30%				
2.5	28%	23%				
1.25	23%	17%				
0.630	17%	9%				
0.315	10%	5%				
0.160	6%	4%				
0.080	4%	3%				
M.C.(%):	2%	6%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	64	70				
% SAND:	32	27				
% FINES:	4	3				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)				



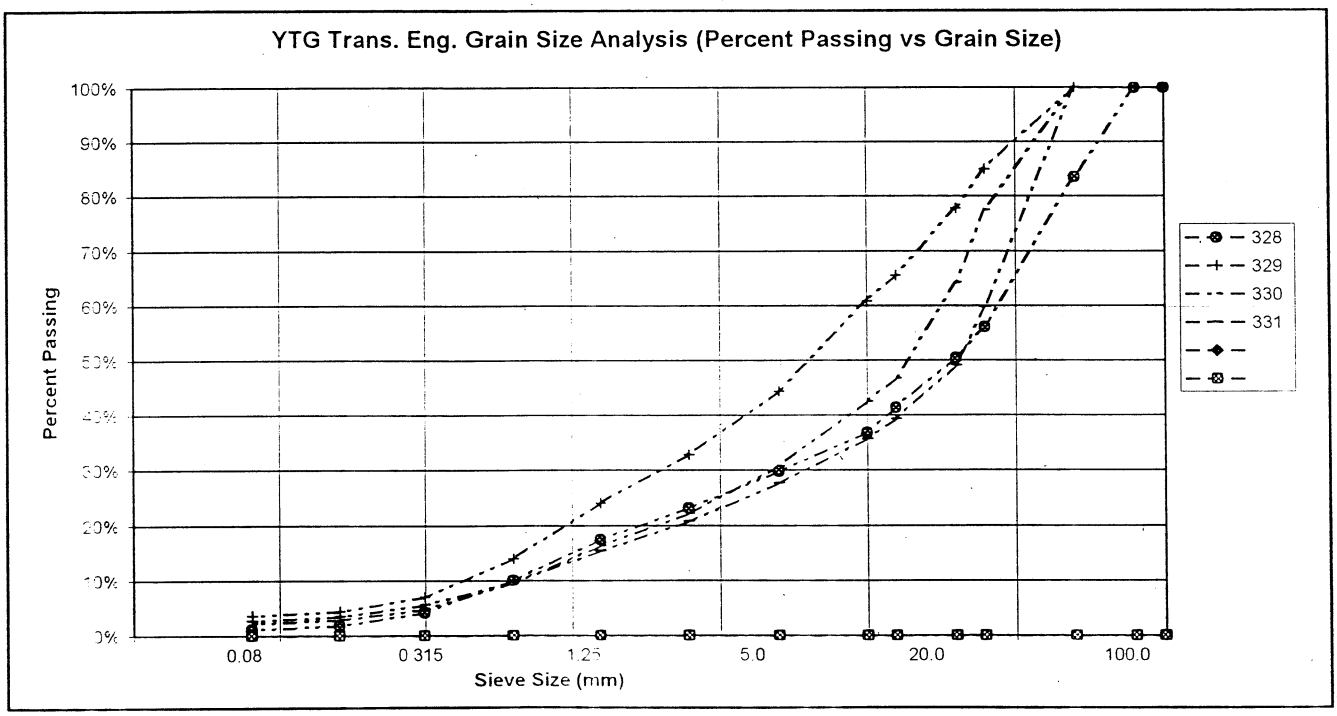
PROJECT NUMBER:	552-202101-0361-1			HOLE No.: 638-2490		
CLIENT:	Engineering Capital					
PROJECT NAME:	Shakwak Granular Investigation					
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21					
DRILL UNIT:	Koehring 6625 Backhoe					
HOLE LOCATION:	SEE PLAN					
LOGGED BY:	JRP R.W.			DATE COMP: SEPT 24/02		

FIELD NO:	326	327				
LAB NO:	586	587				
DEPTH:	0.5-0.8	1.9-2.1				
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	76%				
25.0	75%	62%				
20.0	67%	55%				
12.5	56%	43%				
10.0	53%	39%				
5.0	40%	28%				
2.5	28%	20%				
1.25	19%	-759%				
0.630	9%	9%				
0.315	4%	5%				
0.160	2%	3%				
0.080	2%	3%				
M.C.(%):	2%	5%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	60	72				
% SAND:	38	25				
% FINES:	2	3				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)				



PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2491
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 24/02

FIELD NO:	328	329	330	331		
LAB NO:	588	589	590	591		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	84%	100%	100%	100%		
25.0	56%	85%	77%	60%		
20.0	50%	78%	64%	49%		
12.5	41%	65%	47%	39%		
10.0	37%	61%	42%	36%		
5.0	30%	44%	31%	28%		
2.5	23%	33%	22%	21%		
1.25	17%	24%	16%	15%		
0.630	10%	14%	10%	10%		
0.315	4%	7%	5%	6%		
0.160	2%	5%	3%	4%		
0.080	1%	4%	2%	3%		
M.C.(%):	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	56	69	72		
% SAND:	29	41	29	25		
% FINES:	1	4	2	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

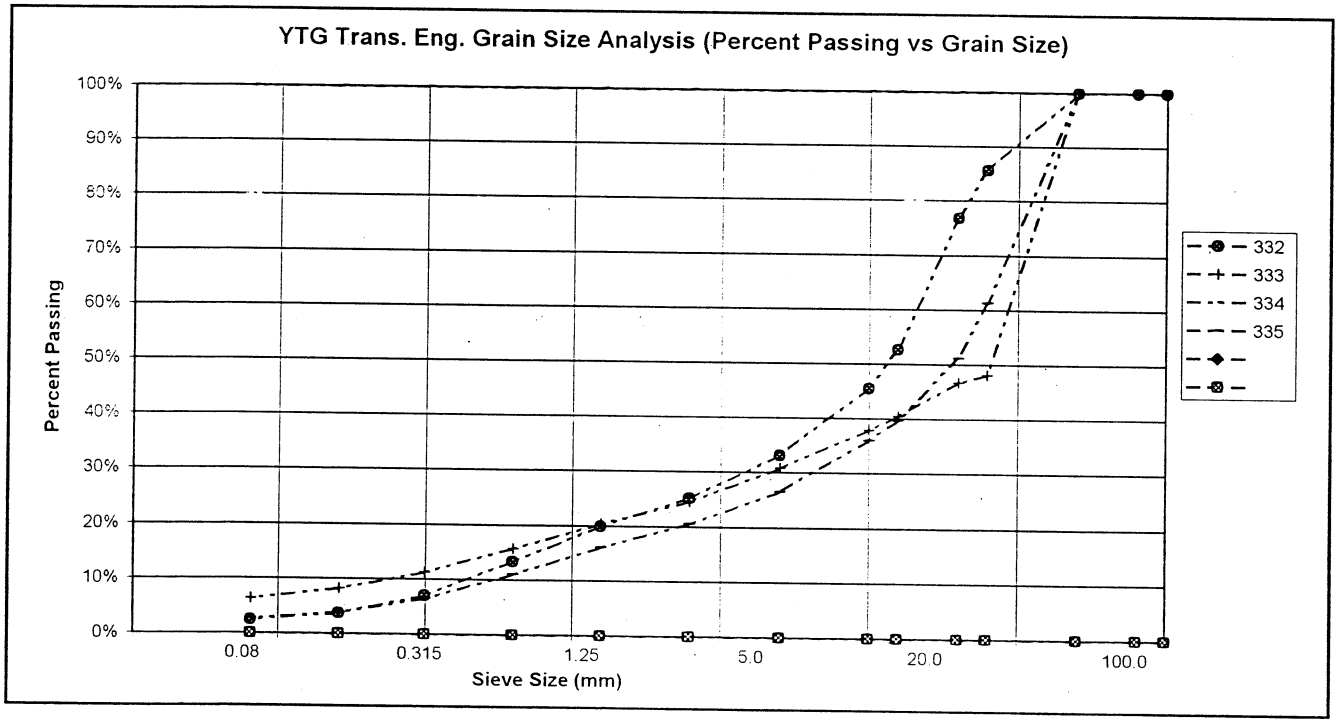


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2492

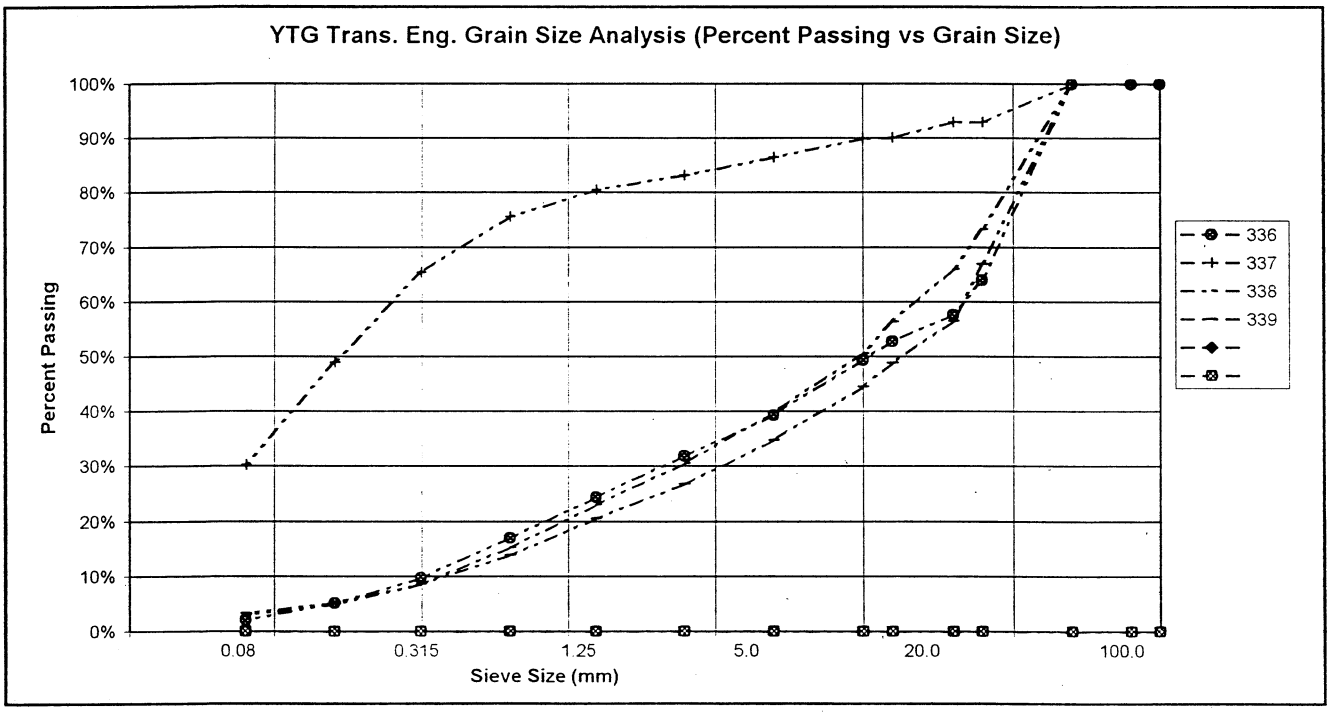
DATE COMP: SEPT 24/02

FIELD NO:	332	333	334	335		
LAB NO:	592	593	lost	595		
DEPTH:	0.8-1.3	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	86%	48%	100%	61%		
20.0	77%	47%	100%	51%		
12.5	53%	41%	100%	40%		
10.0	46%	38%	100%	36%		
5.0	33%	31%	100%	27%		
2.5	25%	25%	100%	21%		
1.25	20%	20%	100%	16%		
0.630	13%	16%	100%	11%		
0.315	7%	11%	100%	6%		
0.160	4%	8%	100%	4%		
0.080	2%	6%	100%	3%		
M.C.(%):	2%	5%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	69	0	73		
% SAND:	31	25	0	24		
% FINES:	2	6	100	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILT ~~(ML)~~	WELL-GRADED GRAVEL WITH SAND (GW)		



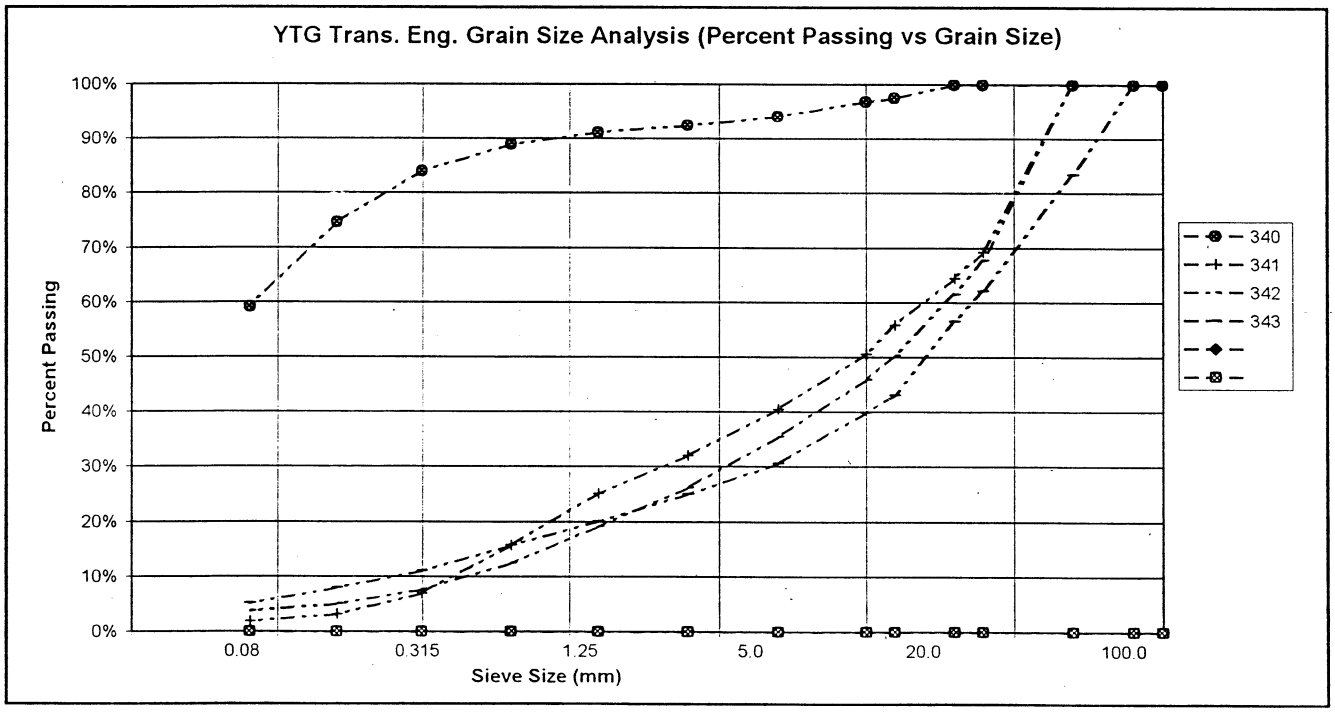
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2493
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 24/02

FIELD NO:	336	337	338	339		
LAB NO:	596	597	598	599		
DEPTH:	0.3-0.8	2.1-2.4	3.2-3.7	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	64%	93%	73%	67%		
20.0	58%	93%	66%	56%		
12.5	53%	90%	56%	49%		
10.0	49%	90%	51%	45%		
5.0	39%	86%	40%	35%		
2.5	32%	83%	31%	27%		
1.25	24%	80%	23%	20%		
0.630	17%	76%	15%	14%		
0.315	10%	65%	9%	9%		
0.160	5%	49%	5%	5%		
0.080	2%	30%	3%	3%		
M.C.(%):	1%	24%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	14	60	65		
% SAND:	37	56	37	31		
% FINES:	2	30	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



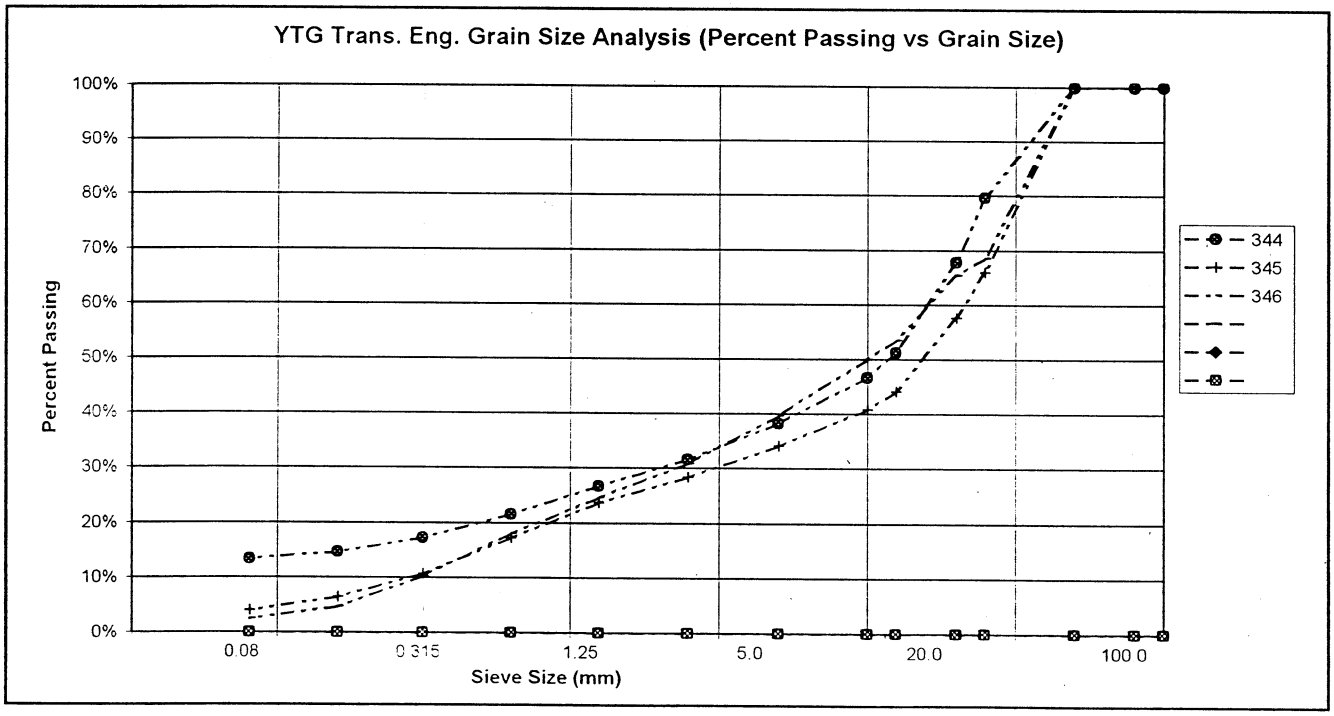
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2494
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 25/02

FIELD NO:	340	341	342	343		
LAB NO:	600	601	602	603		
DEPTH:	0.5-1.0	2.5-3.0	3.5-4.0	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	83%		
25.0	100%	69%	68%	62%		
20.0	100%	64%	61%	57%		
12.5	98%	56%	50%	43%		
10.0	97%	51%	46%	40%		
5.0	94%	40%	35%	31%		
2.5	93%	32%	26%	25%		
1.25	91%	25%	19%	20%		
0.630	89%	16%	12%	16%		
0.315	84%	7%	8%	11%		
0.160	75%	3%	5%	8%		
0.080	59%	2%	4%	5%		
M.C.(%):	9%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	6	60	65	69		
% SAND:	35	39	32	25		
% FINES:	59	2	4	5		
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2495
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 25/02

FIELD NO:	344	345	346			
LAB NO:	604	605	606			
DEPTH:	1.2-1.7	2.7-3.2	4.3-4.8			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	80%	66%	69%			
20.0	68%	58%	65%			
12.5	51%	44%	54%			
10.0	47%	41%	50%			
5.0	38%	34%	40%			
2.5	32%	28%	31%			
1.25	27%	24%	25%			
0.630	22%	17%	18%			
0.315	17%	11%	10%			
0.160	15%	6%	5%			
0.080	13%	4%	3%			
M.C.(%):	3%	3%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	62	66	60			
% SAND:	25	30	37			
% FINES:	13	4	3			
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

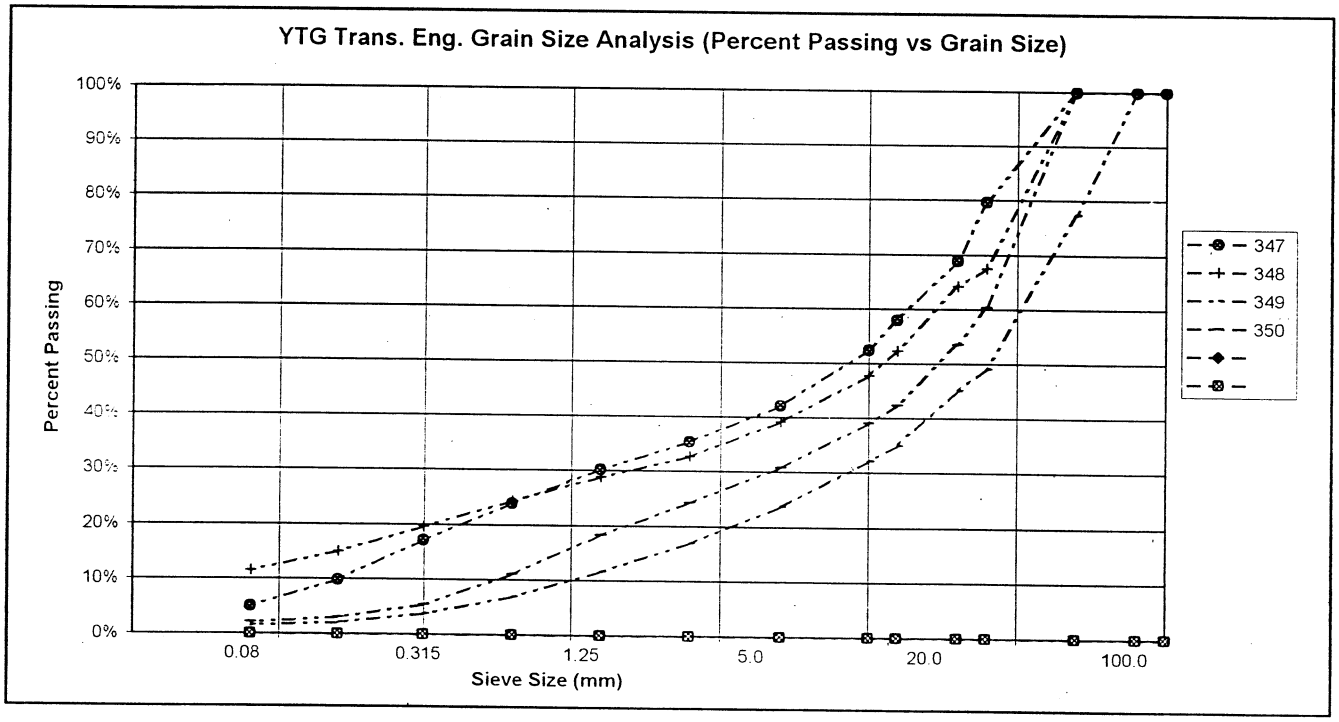


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2496

DATE COMP: SEPT 25/02

FIELD NO:	347	348	349	350		
LAB NO:	607	608	609	610		
DEPTH:	0.5-1.0	2.5-3.0	3.6-4.1	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	77%	100%		
25.0	80%	68%	49%	60%		
20.0	69%	64%	45%	54%		
12.5	58%	52%	35%	42%		
10.0	53%	48%	32%	39%		
5.0	42%	39%	24%	31%		
2.5	35%	33%	17%	24%		
1.25	30%	29%	12%	18%		
0.630	24%	24%	7%	11%		
0.315	17%	20%	4%	5%		
0.160	10%	15%	2%	3%		
0.080	5%	11%	1%	2%		
M.C.(%):	2%	7%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	58	61	76	69		
% SAND:	37	28	22	29		
% FINES:	5	11	1	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

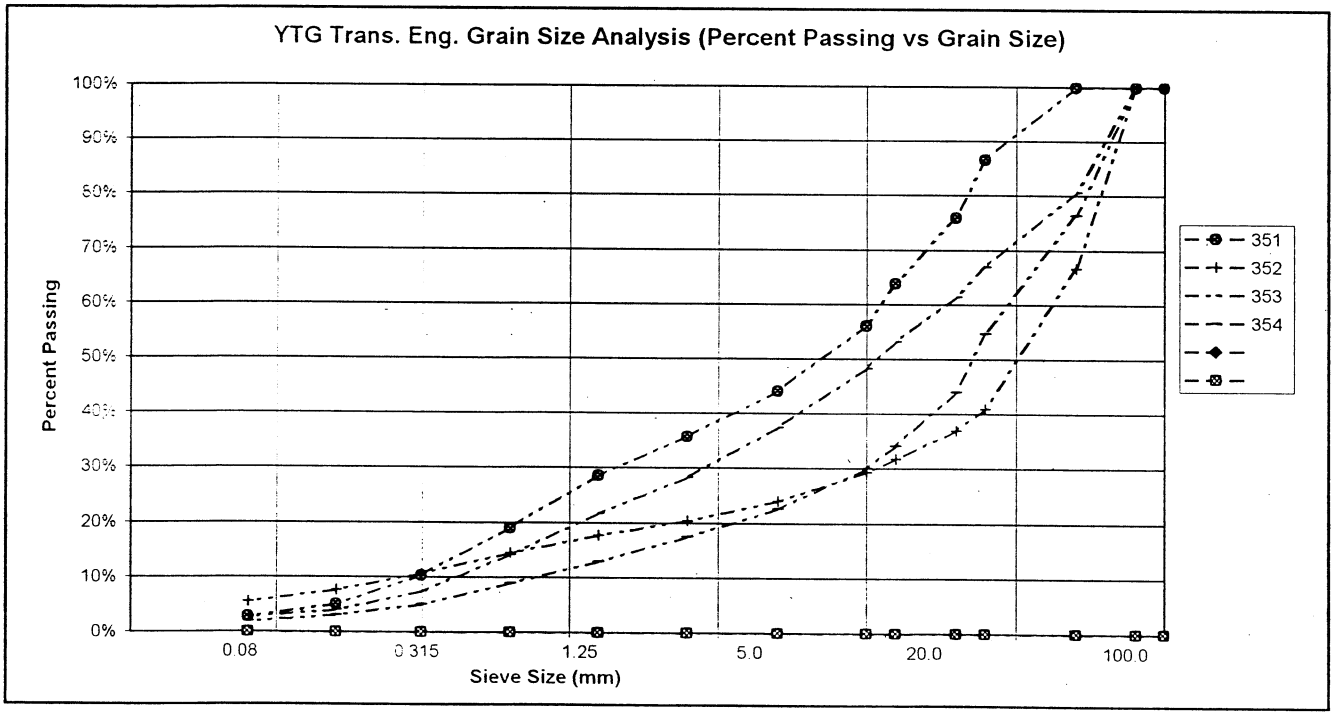


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2497

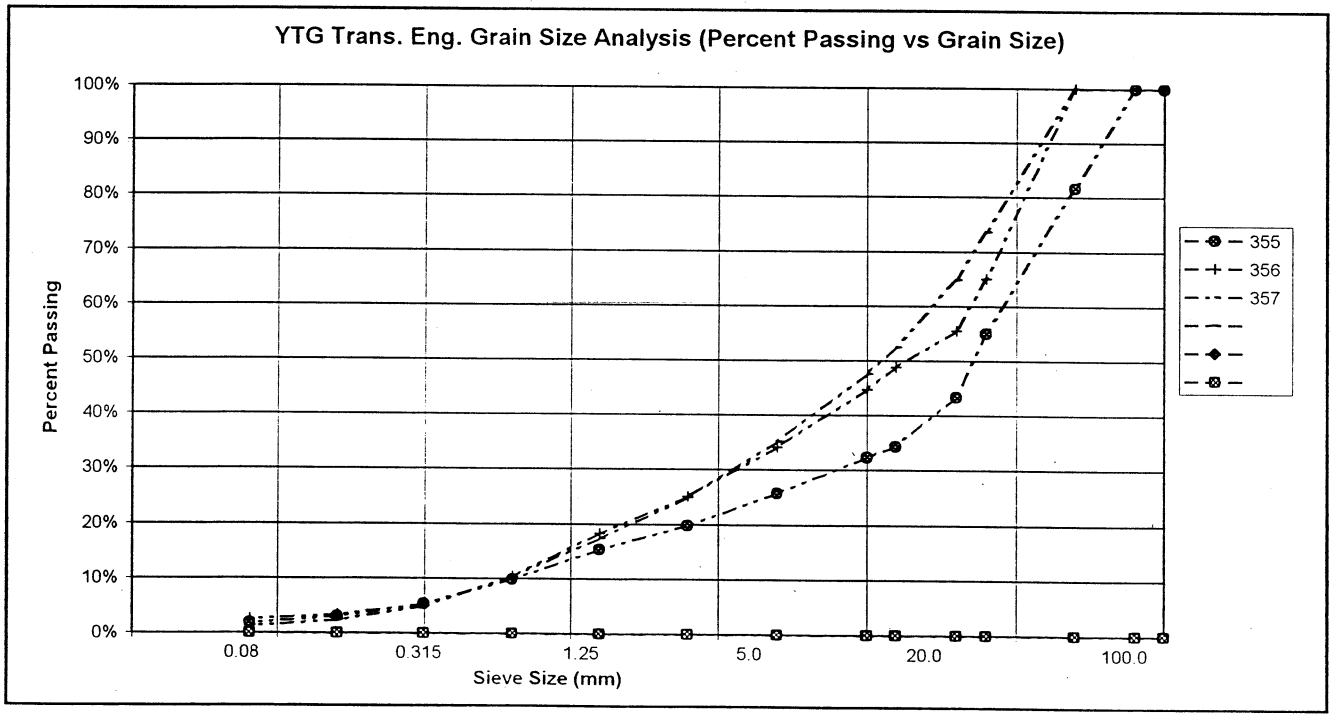
DATE COMP: SEPT 25/02

FIELD NO:	351	352	353	354		
LAB NO:	611	612	613	614		
DEPTH:	1.0-1.5	2.0-2.5	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	67%	81%	76%		
25.0	87%	41%	67%	55%		
20.0	76%	37%	61%	44%		
12.5	64%	32%	53%	34%		
10.0	56%	29%	48%	30%		
5.0	44%	24%	37%	23%		
2.5	36%	20%	28%	18%		
1.25	29%	18%	22%	13%		
0.630	19%	14%	14%	9%		
0.315	10%	11%	7%	5%		
0.160	5%	8%	4%	3%		
0.080	3%	6%	3%	2%		
M.C.(%):	2%	4%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	76	63	77		
% SAND:	41	19	35	21		
% FINES:	3	6	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



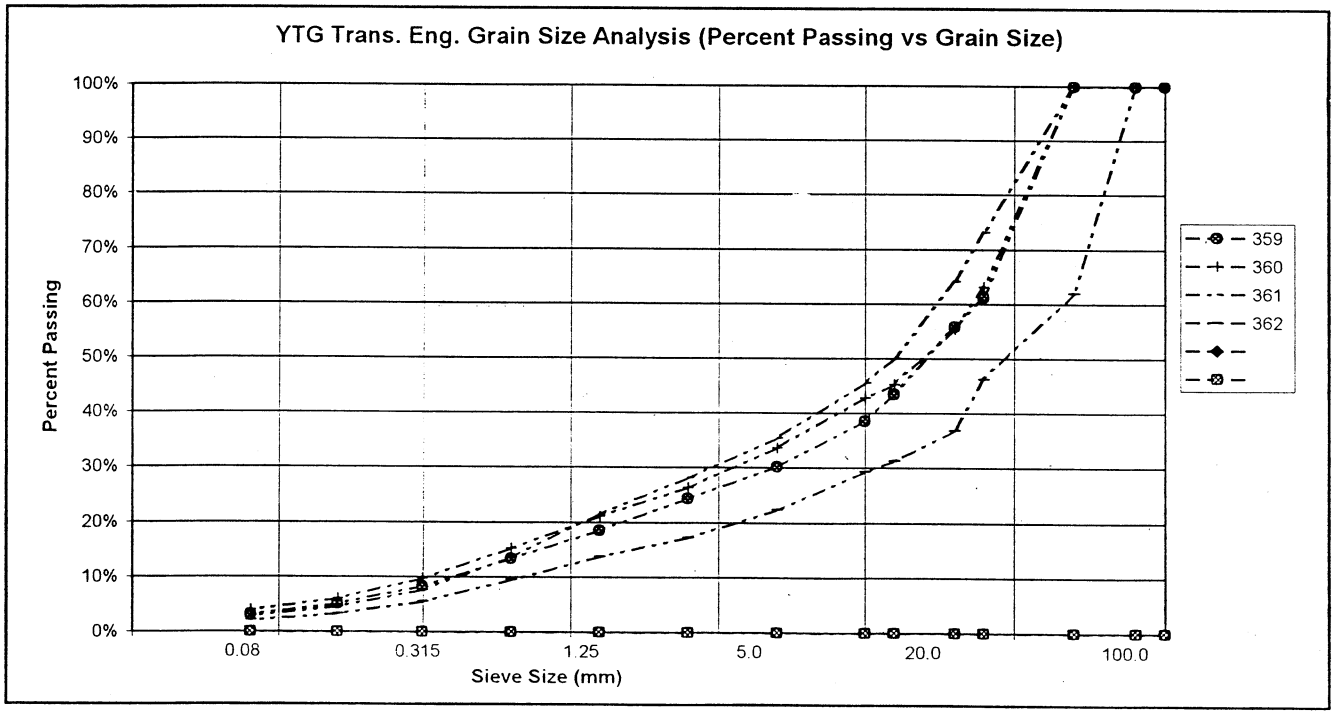
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2498
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 25/02

FIELD NO:	355	356	357			
LAB NO:	615	616	617			
DEPTH:	0.8-1.3	2.0-2.5	3.0-3.5			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	82%	100%	100%			
25.0	55%	65%	74%			
20.0	43%	56%	65%			
12.5	34%	49%	53%			
10.0	32%	45%	48%			
5.0	26%	34%	35%			
2.5	20%	25%	25%			
1.25	15%	18%	17%			
0.630	10%	10%	10%			
0.315	5%	5%	5%			
0.160	3%	3%	2%			
0.080	2%	3%	1%			
M.C.(%):	2%	3%	2%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	74	66	65			
% SAND:	24	32	34			
% FINES:	2	3	1			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			



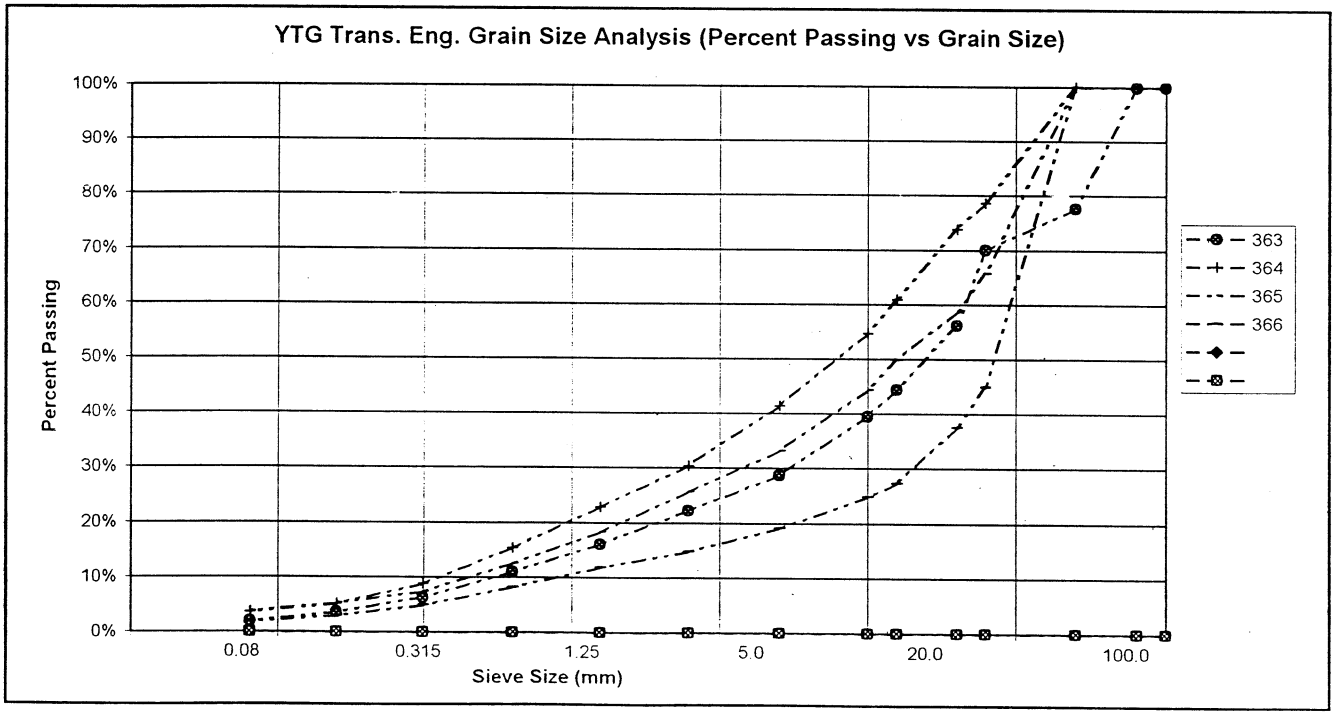
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2499	
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 25/02	

FIELD NO:	359	360	361	362		
LAB NO:	618	619	620	621		
DEPTH:	0.5-1.0	2.3-2.8	3.3-3.8	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	62%		
25.0	61%	63%	73%	46%		
20.0	56%	55%	64%	37%		
12.5	44%	45%	50%	31%		
10.0	39%	43%	46%	29%		
5.0	30%	34%	35%	22%		
2.5	24%	26%	28%	17%		
1.25	18%	21%	22%	14%		
0.630	13%	15%	14%	9%		
0.315	8%	10%	8%	6%		
0.160	5%	6%	5%	3%		
0.080	3%	4%	3%	2%		
M.C.(%):	3%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	66	65	78		
% SAND:	27	30	33	20		
% FINES:	3	4	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		



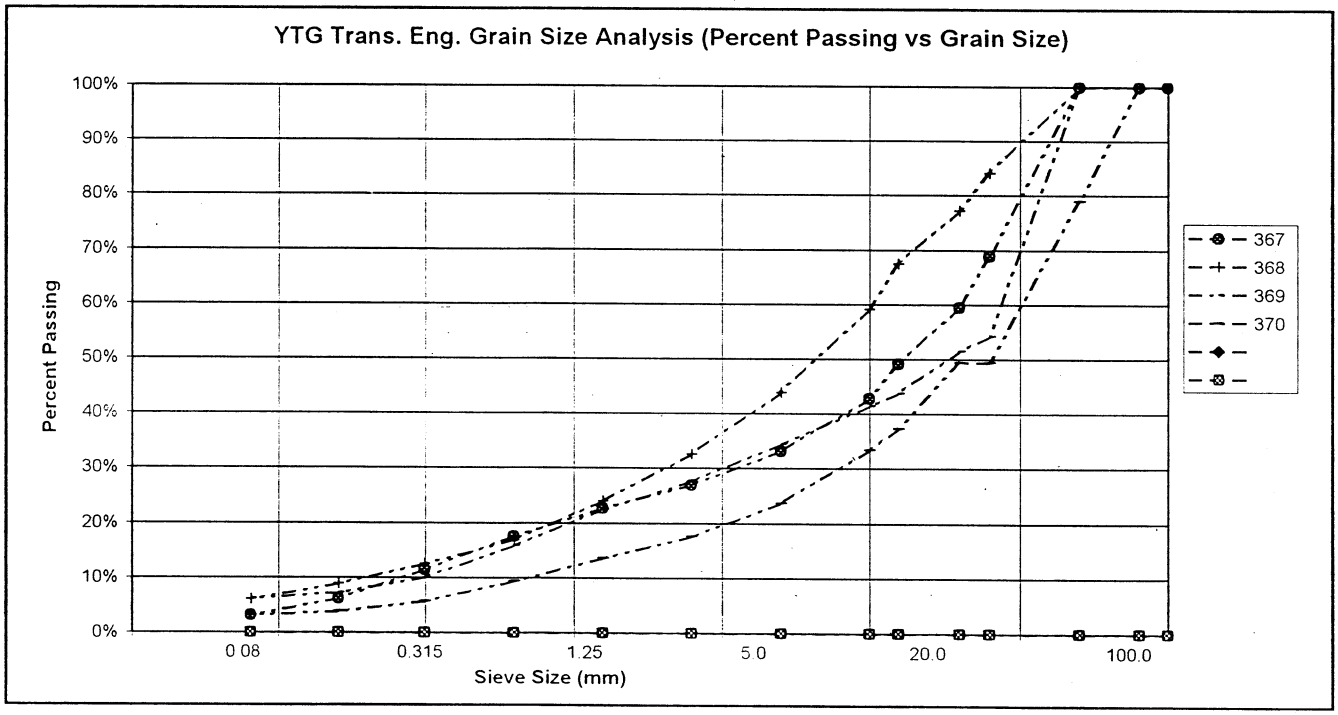
PROJECT NUMBER:	552-202101-0361-1	HOLE No.:	638-2500
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.	DATE COMP:	SEPT 25/02

FIELD NO:	363	364	365	366		
LAB NO:	622	623	624	625		
DEPTH:	0.5-1.0	2.2-2.7	3.3-3.8	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	78%	100%	100%	100%		
25.0	70%	79%	66%	45%		
20.0	56%	74%	59%	38%		
12.5	45%	61%	50%	27%		
10.0	40%	55%	44%	25%		
5.0	29%	41%	33%	19%		
2.5	22%	30%	26%	15%		
1.25	16%	23%	18%	12%		
0.630	11%	15%	13%	8%		
0.315	6%	9%	7%	5%		
0.160	4%	5%	5%	3%		
0.080	2%	4%	4%	2%		
M.C.(%):	3%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	71	59	67	81		
% SAND:	27	38	29	17		
% FINES:	2	4	4	2		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



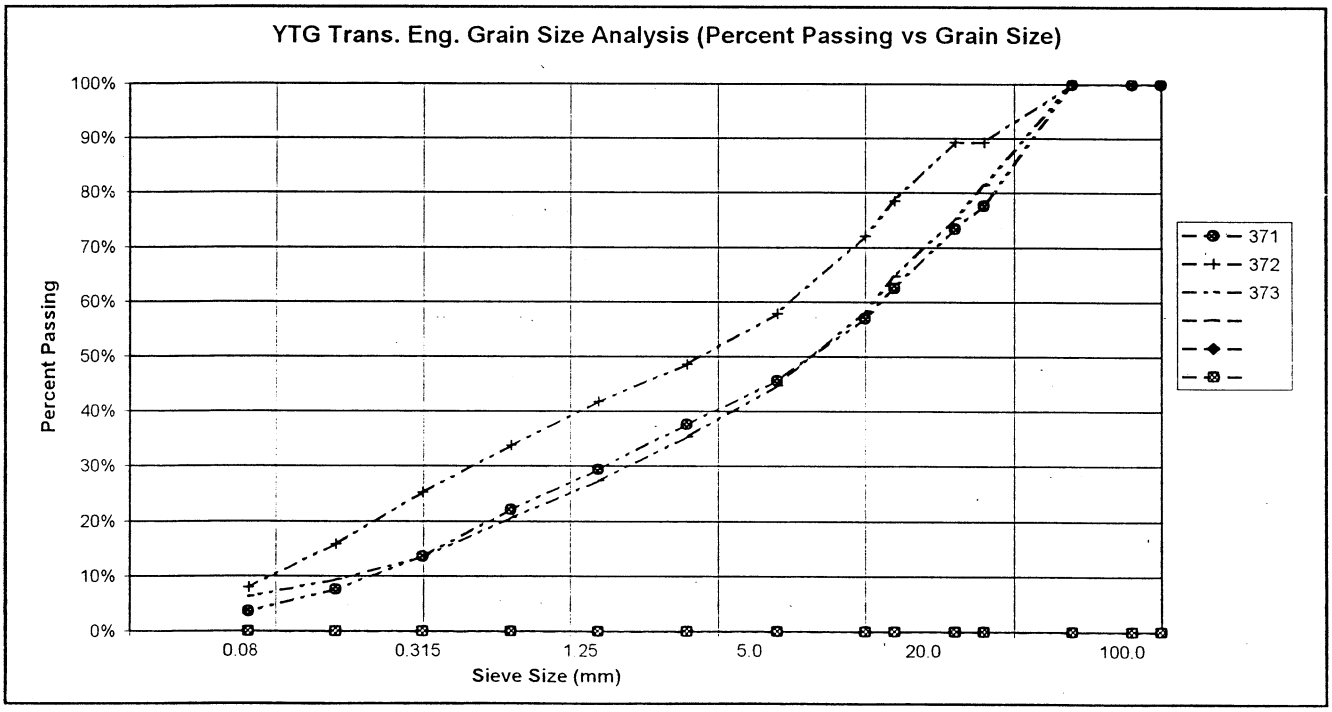
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2501
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 25/02

FIELD NO:	367	368	369	370		
LAB NO:	626	627	628	629		
DEPTH:	0.8-1.3	2.2-2.7	3.6-4.1	4.8-5.3		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	79%		
25.0	69%	84%	54%	49%		
20.0	60%	77%	52%	49%		
12.5	49%	68%	44%	37%		
10.0	43%	59%	41%	33%		
5.0	33%	44%	35%	24%		
2.5	27%	33%	28%	18%		
1.25	23%	24%	22%	14%		
0.630	18%	17%	16%	9%		
0.315	12%	13%	10%	6%		
0.160	6%	9%	7%	4%		
0.080	3%	6%	6%	3%		
M.C.(%):	2%	2%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	56	65	76		
% SAND:	30	38	28	21		
% FINES:	3	6	6	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2502
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 25/02

FIELD NO:	371	372	373			
LAB NO:	630	631	632			
DEPTH:	0.5-1.0	2.4-2.6	3.1-3.3			
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**			
100.0	100%	100%	100%			
80.0	100%	100%	100%			
50.0	100%	100%	100%			
25.0	78%	89%	81%			
20.0	74%	89%	75%			
12.5	63%	79%	65%			
10.0	57%	72%	58%			
5.0	46%	58%	45%			
2.5	38%	49%	35%			
1.25	29%	42%	27%			
0.630	22%	34%	21%			
0.315	14%	25%	14%			
0.160	8%	16%	9%			
0.080	4%	8%	6%			
M.C.(%):	2%	5%	6%			
LIQUID LIMIT:	0.0	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0	0.0			
% GRAVEL:	54	42	55			
% SAND:	42	50	38			
% FINES:	4	8	6			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			

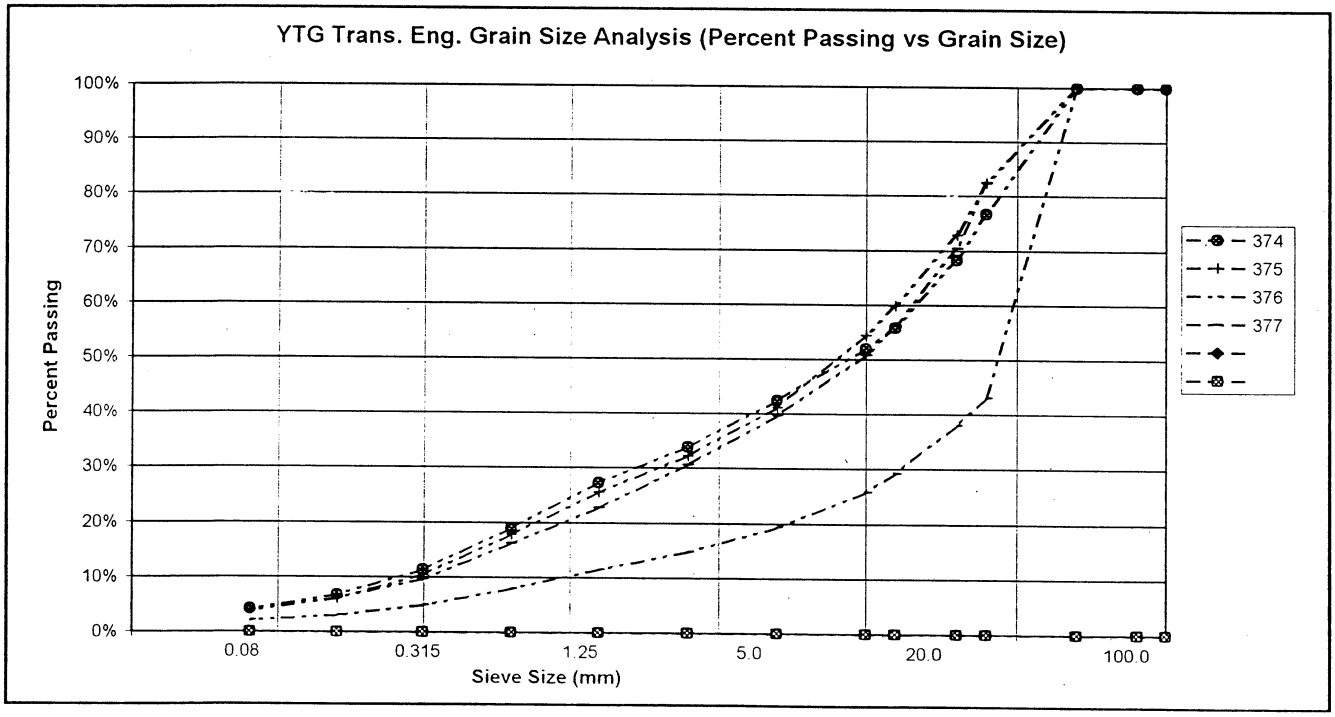


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2503

DATE COMP: SEPT 25/02

FIELD NO:	374	375	376	377		
LAB NO:	633	634	635	636		
DEPTH:	0.3-0.6	2.4-2.9	3.1-3.6	4.8-5.3		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	77%	82%	43%	83%		
20.0	68%	73%	38%	70%		
12.5	56%	60%	29%	56%		
10.0	52%	55%	26%	51%		
5.0	42%	41%	19%	40%		
2.5	34%	32%	15%	31%		
1.25	27%	26%	11%	23%		
0.630	19%	18%	8%	16%		
0.315	11%	10%	5%	10%		
0.160	7%	6%	3%	6%		
0.080	4%	4%	2%	4%		
M.C.(%):	3%	3%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	58	59	81	60		
% SAND:	38	37	17	36		
% FINES:	4	4	2	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		

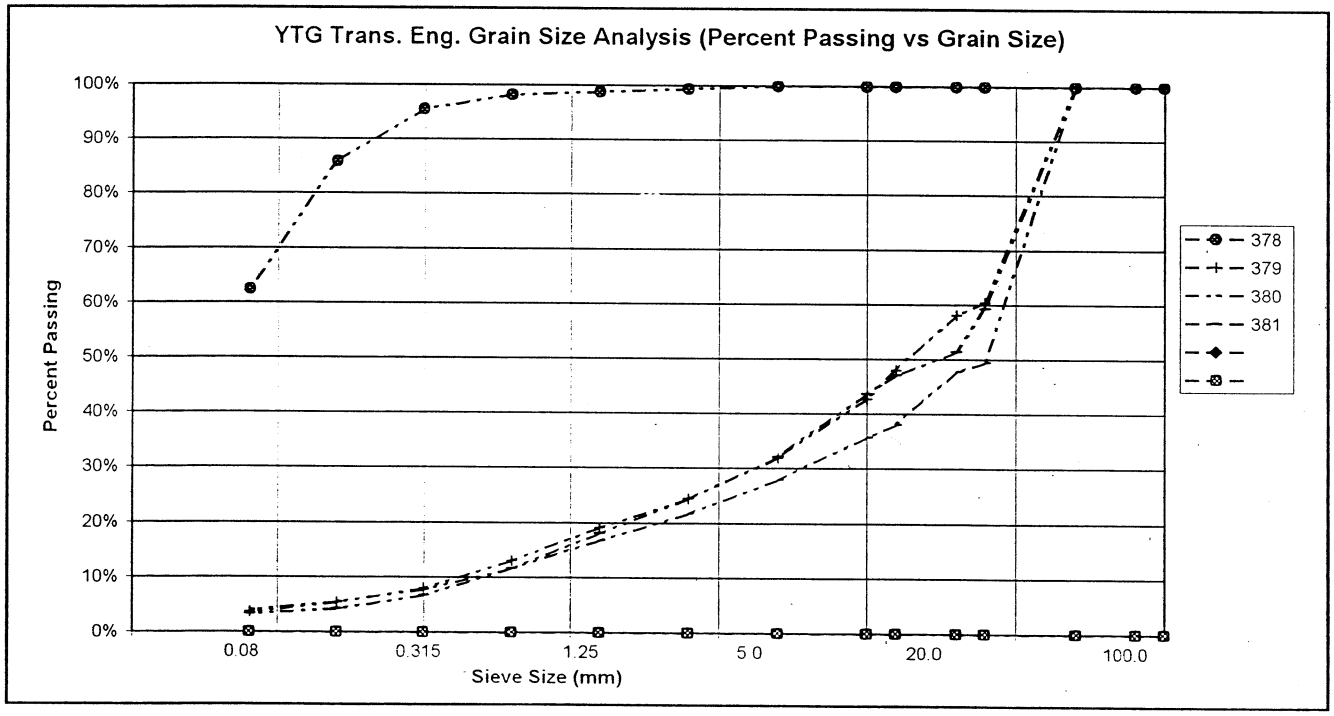


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2504

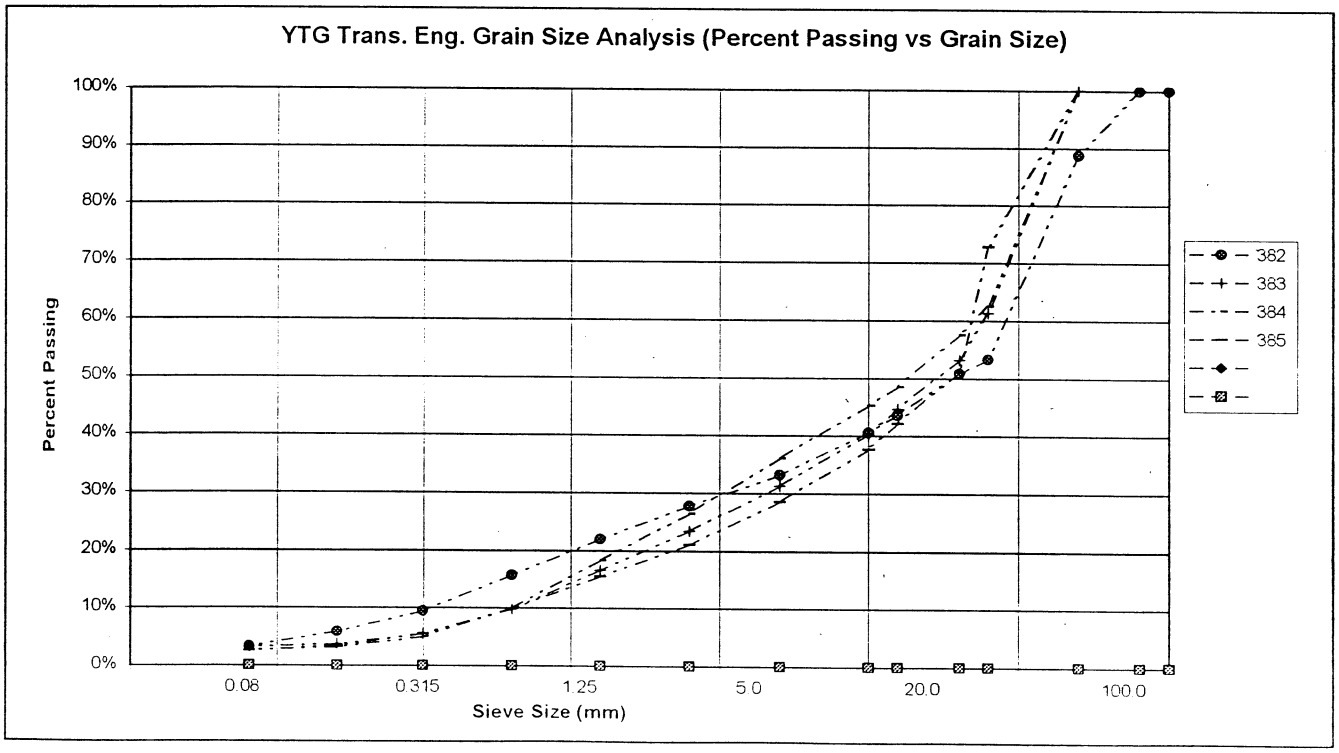
DATE COMP: SEPT 25/02

FIELD NO:	378	379	380	381		
LAB NO:	637	638	639	640		
DEPTH:	0.3-0.8	1.2-1.7	2.9-3.4	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	60%	49%	59%		
20.0	100%	58%	48%	51%		
12.5	100%	48%	38%	47%		
10.0	100%	43%	36%	44%		
5.0	100%	32%	28%	32%		
2.5	99%	24%	22%	24%		
1.25	99%	19%	17%	18%		
0.630	98%	13%	12%	12%		
0.315	96%	8%	8%	7%		
0.160	86%	5%	6%	4%		
0.080	62%	4%	4%	3%		
M.C.(%):	15%	3%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	68	72	68		
% SAND:	38	28	24	29		
% FINES:	62	4	4	3		
CLASSIFICATION	SANDY SILT (ML	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2505
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 26/02

FIELD NO:	382	383	384	385		
LAB NO:	641	642	643	644		
DEPTH:	0.3-0.8	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	89%	100%	100%	100%		
25.0	53%	61%	63%	73%		
20.0	51%	53%	58%	51%		
12.5	44%	45%	48%	42%		
10.0	41%	40%	45%	38%		
5.0	33%	31%	36%	29%		
2.5	28%	23%	26%	21%		
1.25	22%	17%	18%	16%		
0.630	16%	10%	10%	10%		
0.315	10%	6%	5%	6%		
0.160	6%	4%	3%	3%		
0.080	3%	3%	3%	3%		
M.C.(%):	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	69	64	71		
% SAND:	30	28	33	26		
% FINES:	3	3	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

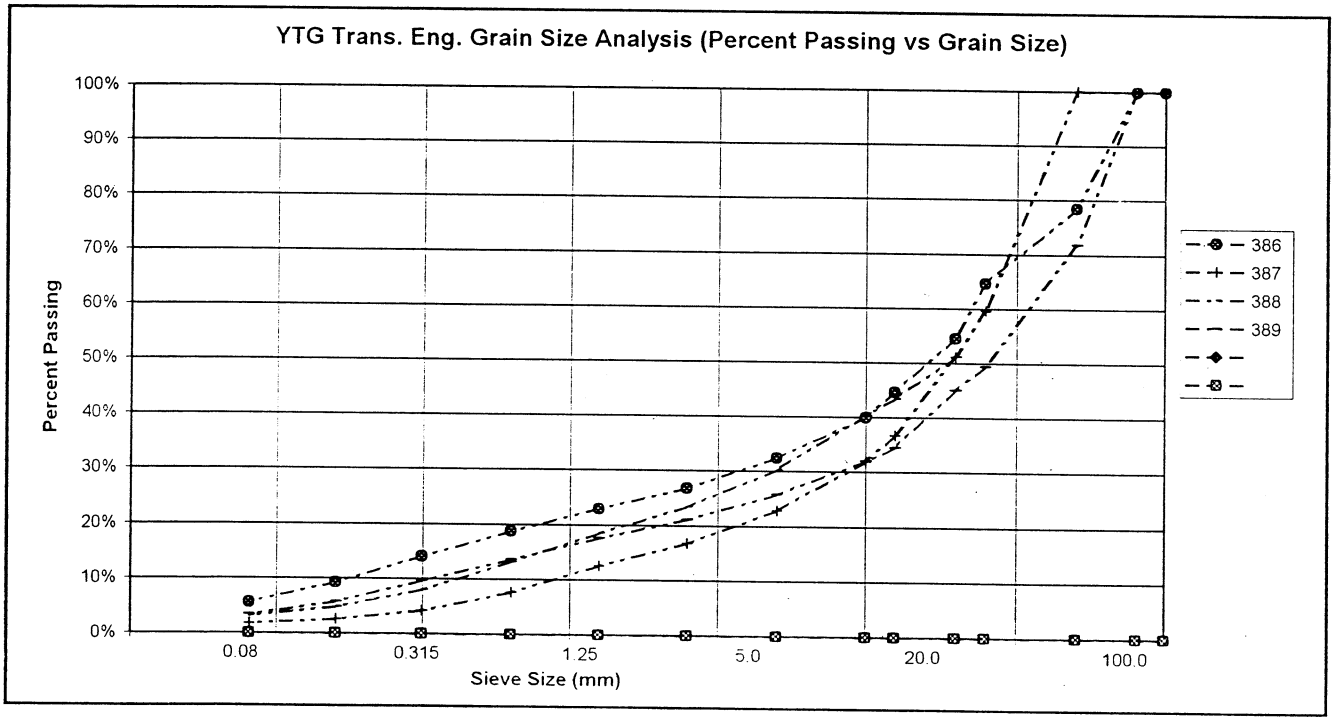


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2506

DATE COMP: SEPT 26/02

FIELD NO:	386	387	388	389		
LAB NO:	645	646	647	648		
DEPTH:	0.3-0.8	2.1-2.6	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	79%	100%	100%	72%		
25.0	65%	60%	60%	49%		
20.0	55%	51%	51%	45%		
12.5	45%	37%	43%	34%		
10.0	40%	32%	40%	32%		
5.0	33%	23%	30%	26%		
2.5	27%	17%	23%	21%		
1.25	23%	13%	19%	18%		
0.630	19%	8%	13%	14%		
0.315	14%	4%	8%	10%		
0.160	9%	3%	5%	6%		
0.080	6%	2%	3%	3%		
M.C.(%):	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	77	70	74		
% SAND:	27	21	27	22		
% FINES:	6	2	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

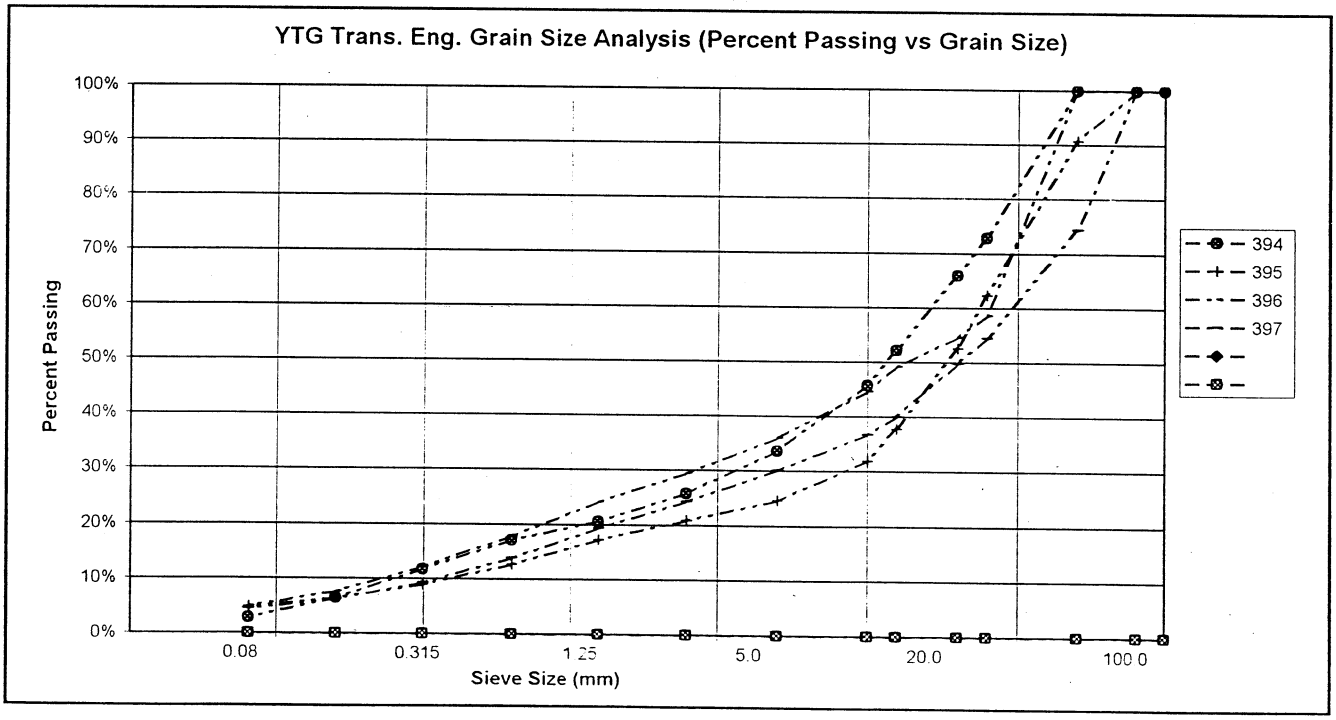


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2508

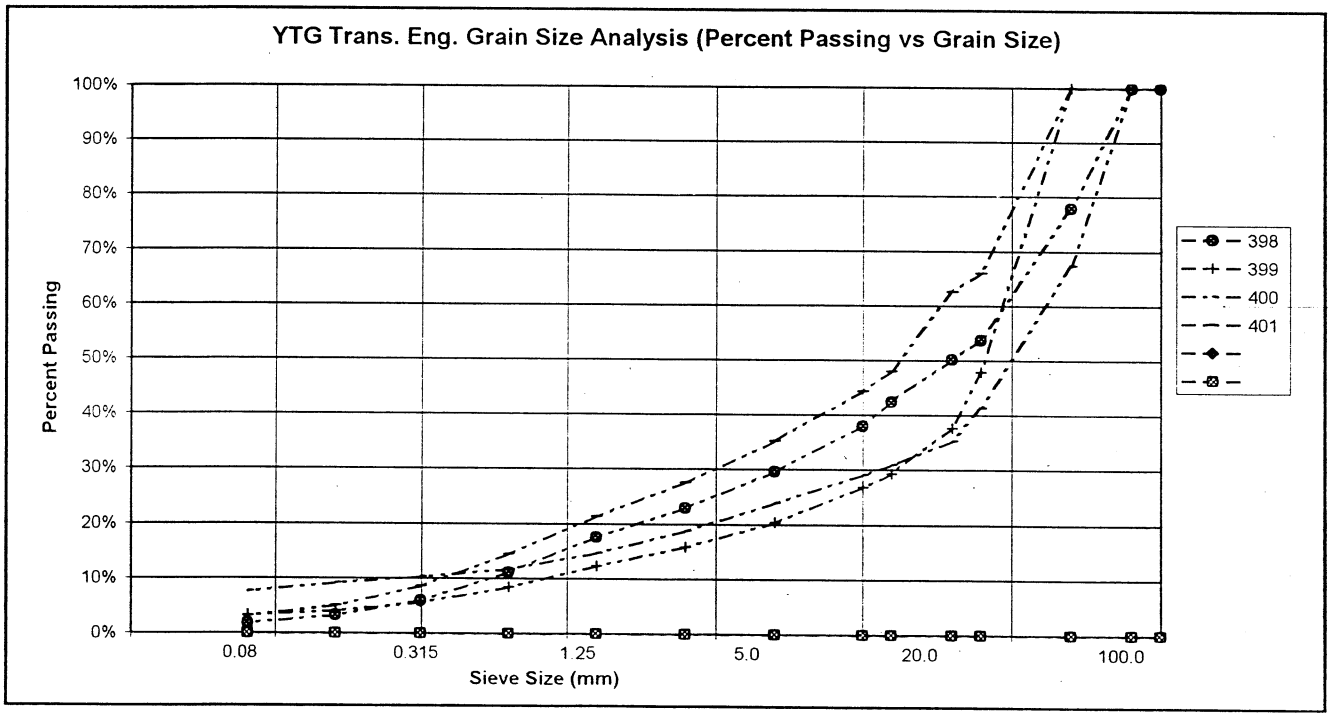
DATE COMP: SEPT 26/02

FIELD NO:	394	395	396	397		
LAB NO:	653	654	655	656		
DEPTH:	0.3-0.6	2.2-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	91%	100%	74%		
25.0	73%	62%	59%	54%		
20.0	66%	53%	55%	50%		
12.5	52%	38%	49%	40%		
10.0	46%	32%	45%	37%		
5.0	34%	25%	36%	30%		
2.5	26%	21%	29%	24%		
1.25	21%	17%	24%	19%		
0.630	17%	13%	18%	14%		
0.315	12%	9%	12%	9%		
0.160	6%	6%	8%	6%		
0.080	3%	5%	5%	4%		
M.C.(%):	2%	3%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	75	64	70		
% SAND:	31	20	31	26		
% FINES:	3	5	5	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2509
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 26/02

FIELD NO:	398	399	400	401		
LAB NO:	657	658	660	661		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	78%	100%	67%	100%		
25.0	54%	48%	41%	66%		
20.0	50%	38%	35%	63%		
12.5	43%	29%	31%	48%		
10.0	38%	27%	29%	44%		
5.0	30%	20%	24%	35%		
2.5	23%	16%	19%	28%		
1.25	18%	12%	15%	21%		
0.630	11%	8%	12%	14%		
0.315	6%	6%	10%	9%		
0.160	3%	4%	9%	5%		
0.080	2%	3%	8%	3%		
M.C.(%):	2%	3%	5%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	80	76	65		
% SAND:	28	17	16	32		
% FINES:	2	3	8	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

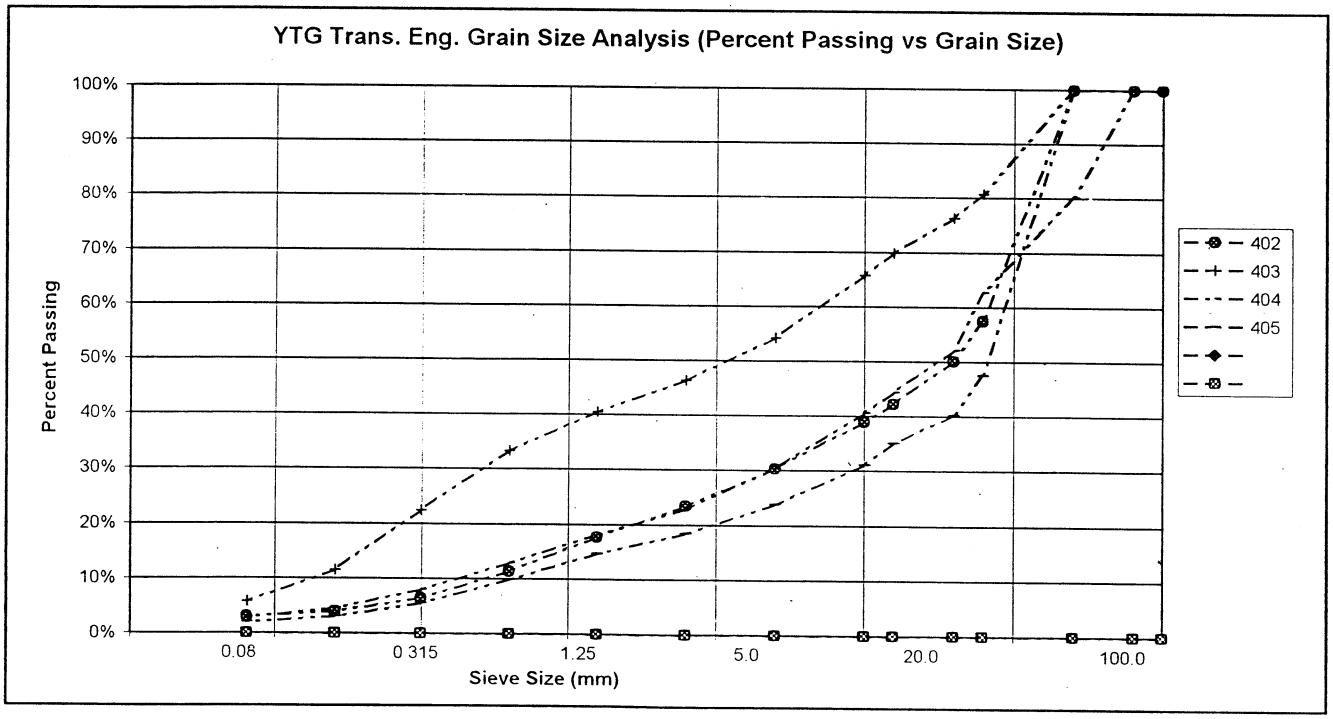


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2510

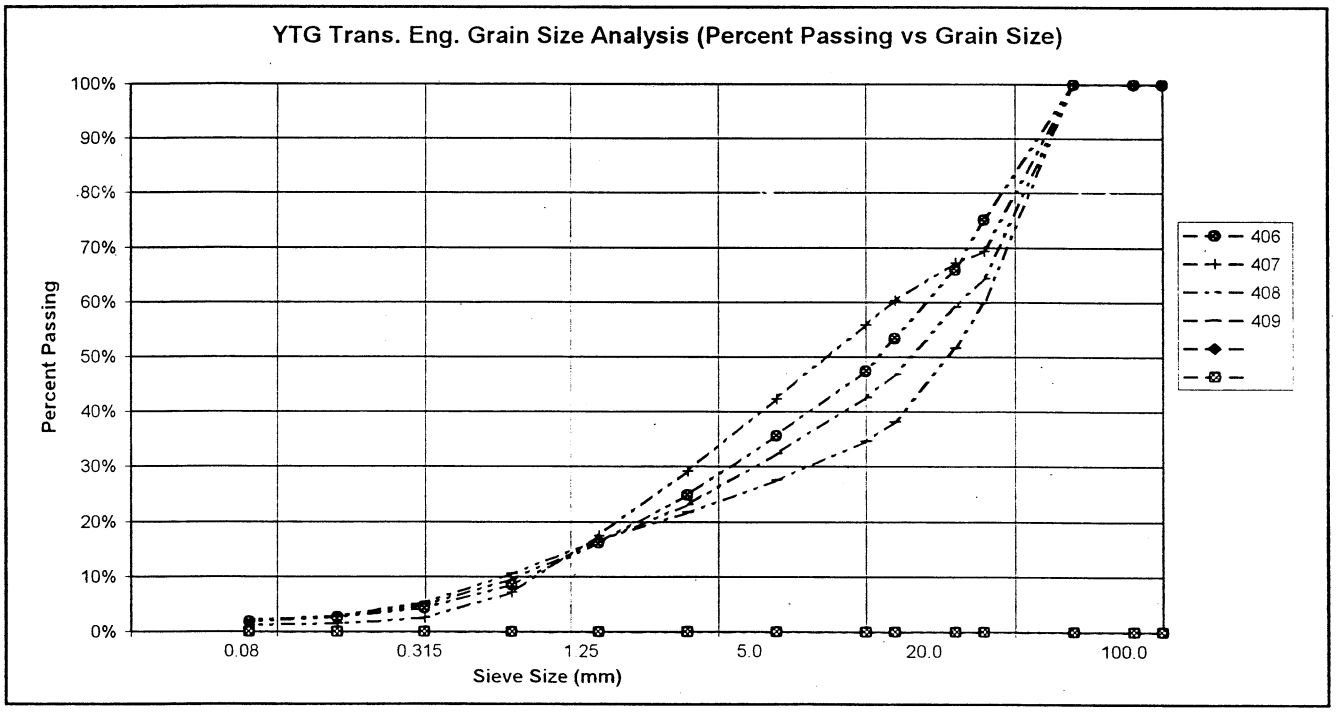
DATE COMP: SEPT 26/02

FIELD NO:	402	403	404	405		
LAB NO:	661	662	663	664		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	80%	100%		
25.0	58%	81%	63%	48%		
20.0	50%	76%	52%	40%		
12.5	42%	70%	44%	35%		
10.0	39%	66%	41%	31%		
5.0	30%	54%	30%	24%		
2.5	23%	46%	23%	18%		
1.25	18%	41%	18%	15%		
0.630	11%	33%	13%	10%		
0.315	6%	22%	8%	5%		
0.160	4%	11%	5%	3%		
0.080	3%	6%	3%	2%		
M.C.(%):	3%	4%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	46	70	76		
% SAND:	27	48	28	22		
% FINES:	3	6	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



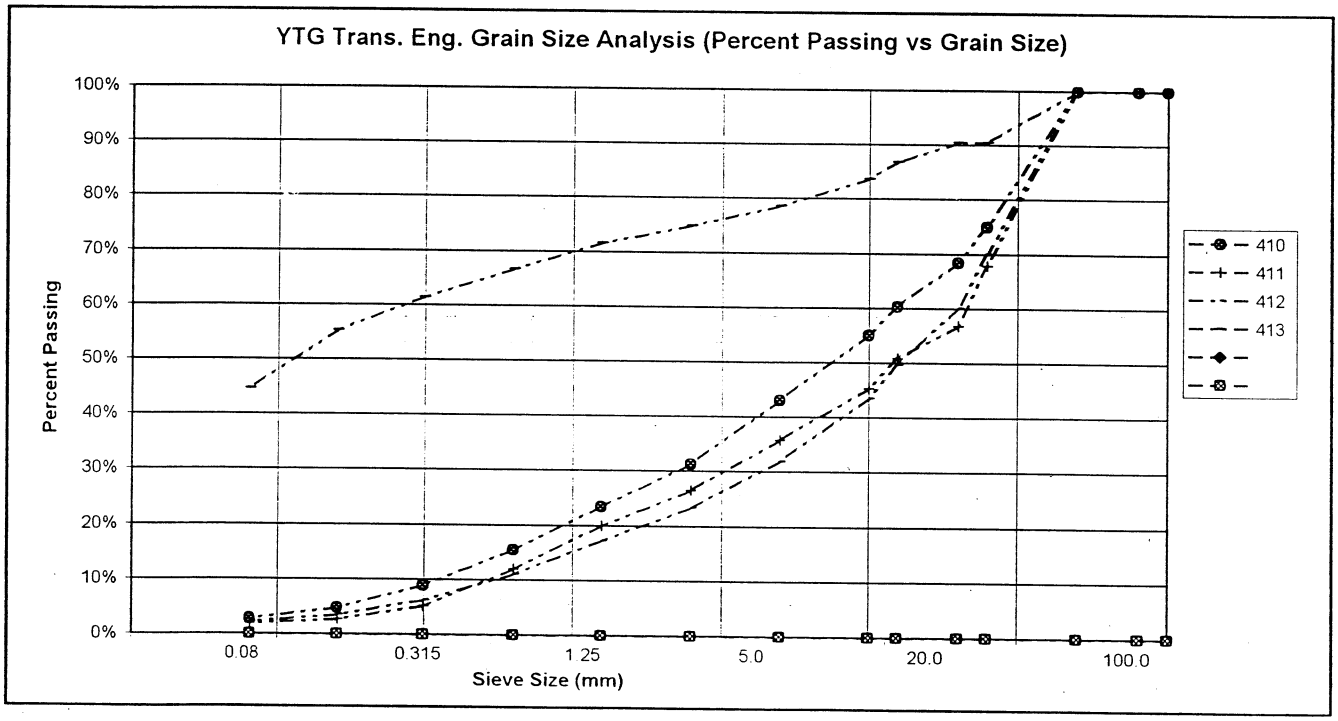
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2511
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 26/02

FIELD NO:	406	407	408	409		
LAB NO:	665	666	667	668		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	75%	69%	64%	60%		
20.0	66%	67%	59%	52%		
12.5	53%	60%	47%	38%		
10.0	47%	56%	43%	35%		
5.0	36%	42%	32%	28%		
2.5	25%	29%	23%	22%		
1.25	16%	17%	16%	17%		
0.630	9%	7%	10%	11%		
0.315	4%	3%	5%	5%		
0.160	3%	1%	3%	3%		
0.080	2%	1%	2%	2%		
M.C.(%):	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	64	58	68	72		
% SAND:	34	41	30	26		
% FINES:	2	1	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		



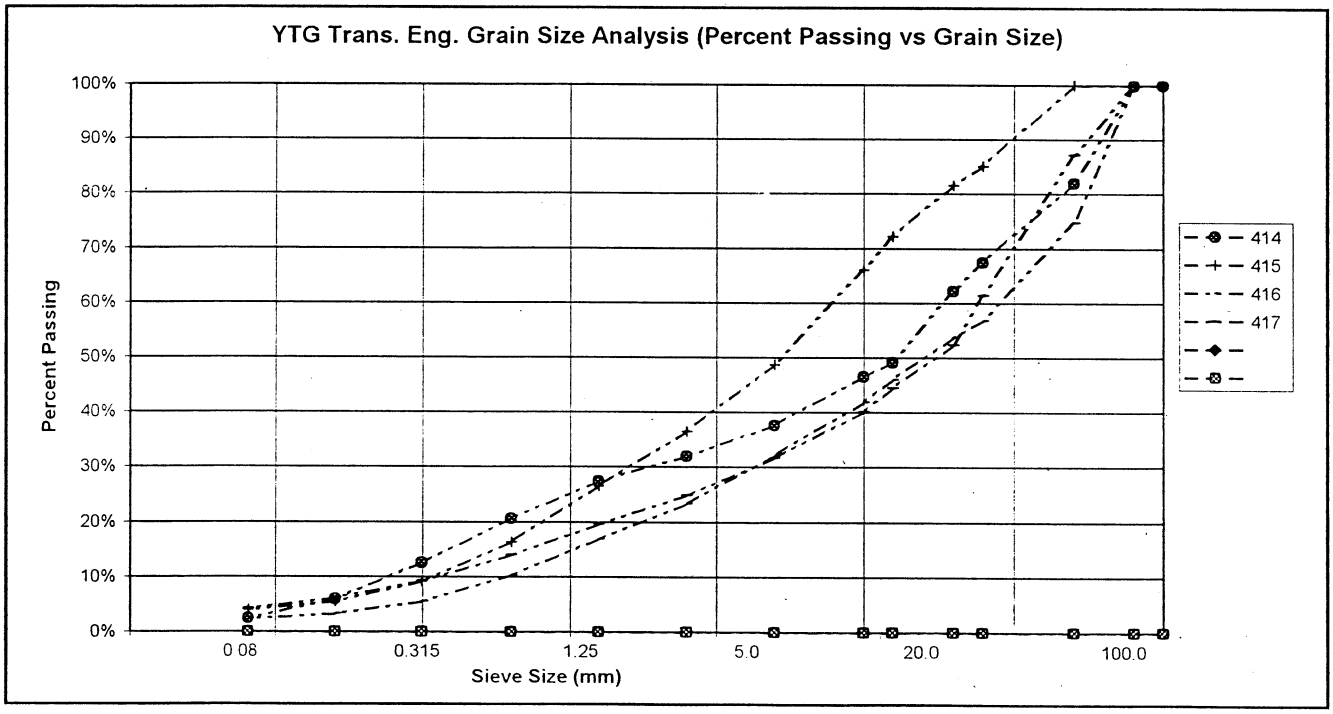
PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2512
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 26/02

FIELD NO:	410	411	412	413		
LAB NO:	669	670	671	672		
DEPTH:	0.6-1.1	2.3-2.8	3.2-3.7	4.2-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	75%	68%	70%	91%		
20.0	68%	57%	60%	91%		
12.5	60%	51%	50%	87%		
10.0	55%	45%	44%	84%		
5.0	43%	36%	32%	79%		
2.5	31%	27%	23%	75%		
1.25	23%	20%	17%	72%		
0.630	16%	12%	11%	67%		
0.315	9%	5%	6%	61%		
0.160	5%	3%	4%	55%		
0.080	3%	2%	2%	45%		
M.C.(%):	3%	2%	2%	20%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	64	68	21		
% SAND:	40	34	30	34		
% FINES:	3	2	2	45		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)		



PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2513
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 26/02

FIELD NO:	414	415	416	417		
LAB NO:	673	674	675	676		
DEPTH:	0.5-1.0	2.0-2.5	2.9-3.4	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	82%	100%	75%	87%		
25.0	67%	85%	57%	61%		
20.0	62%	82%	54%	52%		
12.5	49%	72%	46%	44%		
10.0	47%	66%	42%	40%		
5.0	38%	49%	32%	32%		
2.5	32%	36%	23%	25%		
1.25	27%	27%	17%	20%		
0.630	21%	16%	10%	14%		
0.315	13%	9%	6%	9%		
0.160	6%	6%	3%	6%		
0.080	2%	4%	2%	4%		
M.C.(%):	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	51	68	68		
% SAND:	35	45	30	27		
% FINES:	2	4	2	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

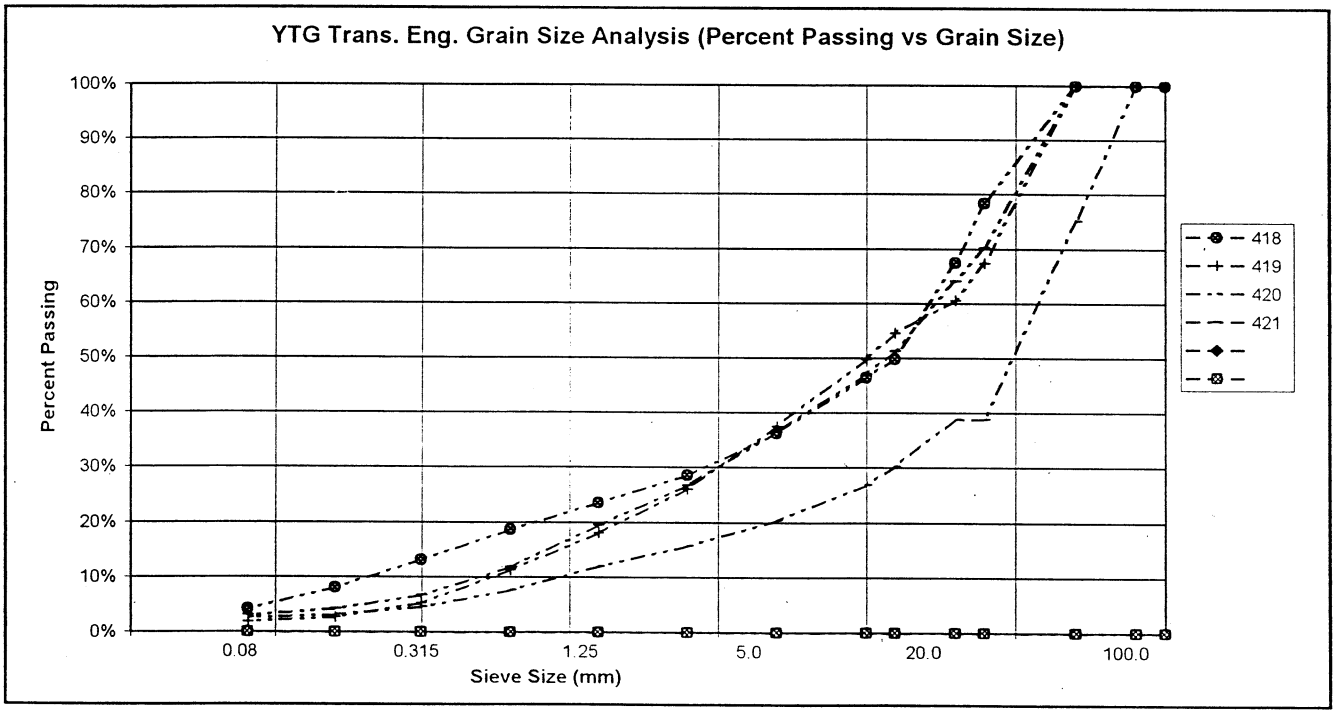


PROJECT NUMBER: 552-202101-0361-1
CLIENT: Engineering Capital
PROJECT NAME: Shakwak Granular Investigation
PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT: Koehring 6625 Backhoe
HOLE LOCATION: SEE PLAN
LOGGED BY: JRP R.W.

HOLE No.: 638-2514

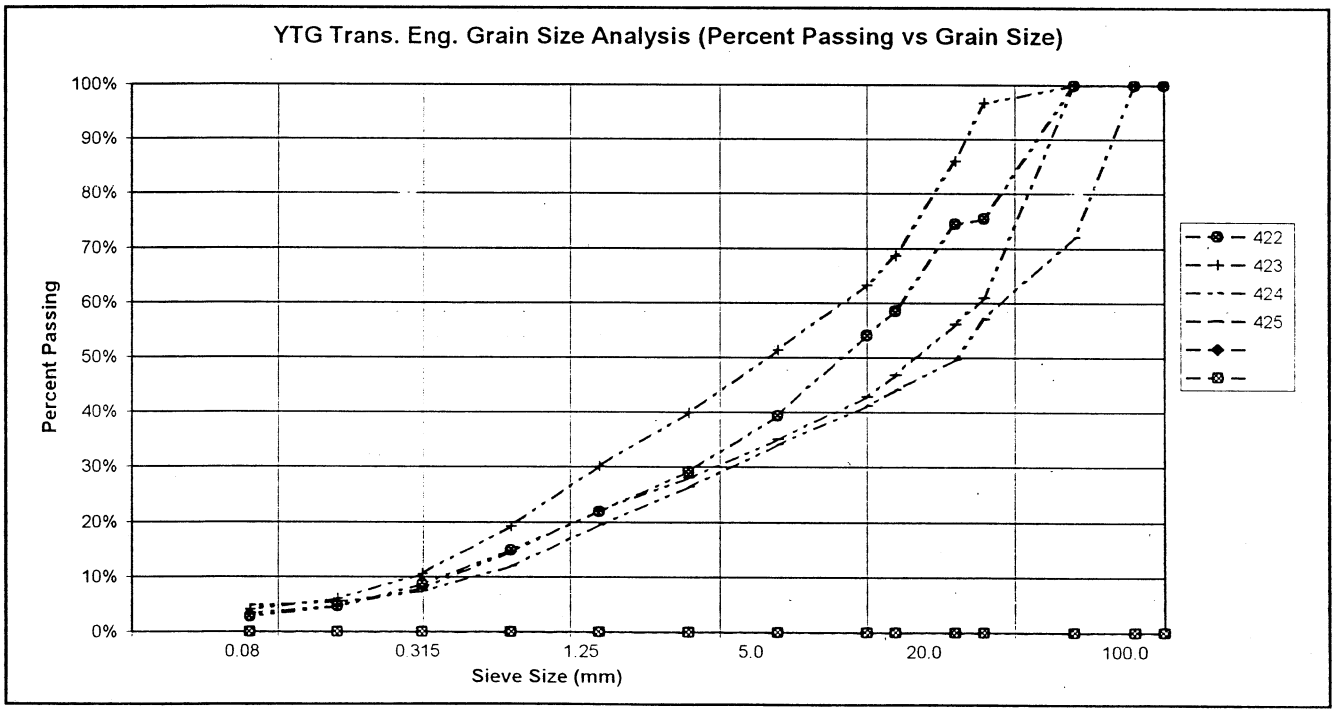
DATE COMP: SEPT 26/02

FIELD NO:	418	419	420	421		
LAB NO:	677	678	679	680		
DEPTH:	0.5-1.0	2.0-2.5	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	75%	100%		
25.0	78%	67%	39%	70%		
20.0	67%	61%	39%	64%		
12.5	50%	55%	30%	51%		
10.0	46%	50%	27%	47%		
5.0	36%	38%	20%	37%		
2.5	29%	26%	16%	27%		
1.25	24%	18%	12%	20%		
0.630	19%	11%	8%	12%		
0.315	13%	5%	5%	7%		
0.160	8%	3%	3%	4%		
0.080	4%	2%	3%	3%		
M.C.(%):	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	64	62	80	63		
% SAND:	32	36	18	33		
% FINES:	4	2	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2515
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 26/02

FIELD NO:	422	423	424	425		
LAB NO:	681	682	683	684		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	72%	100%		
25.0	76%	97%	57%	61%		
20.0	75%	86%	50%	56%		
12.5	59%	69%	44%	47%		
10.0	54%	63%	41%	43%		
5.0	39%	51%	34%	35%		
2.5	29%	40%	26%	28%		
1.25	22%	30%	19%	22%		
0.630	15%	19%	12%	15%		
0.315	9%	11%	7%	8%		
0.160	5%	6%	6%	5%		
0.080	3%	4%	5%	3%		
M.C.(%):	2%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	49	66	65		
% SAND:	37	47	29	32		
% FINES:	3	4	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

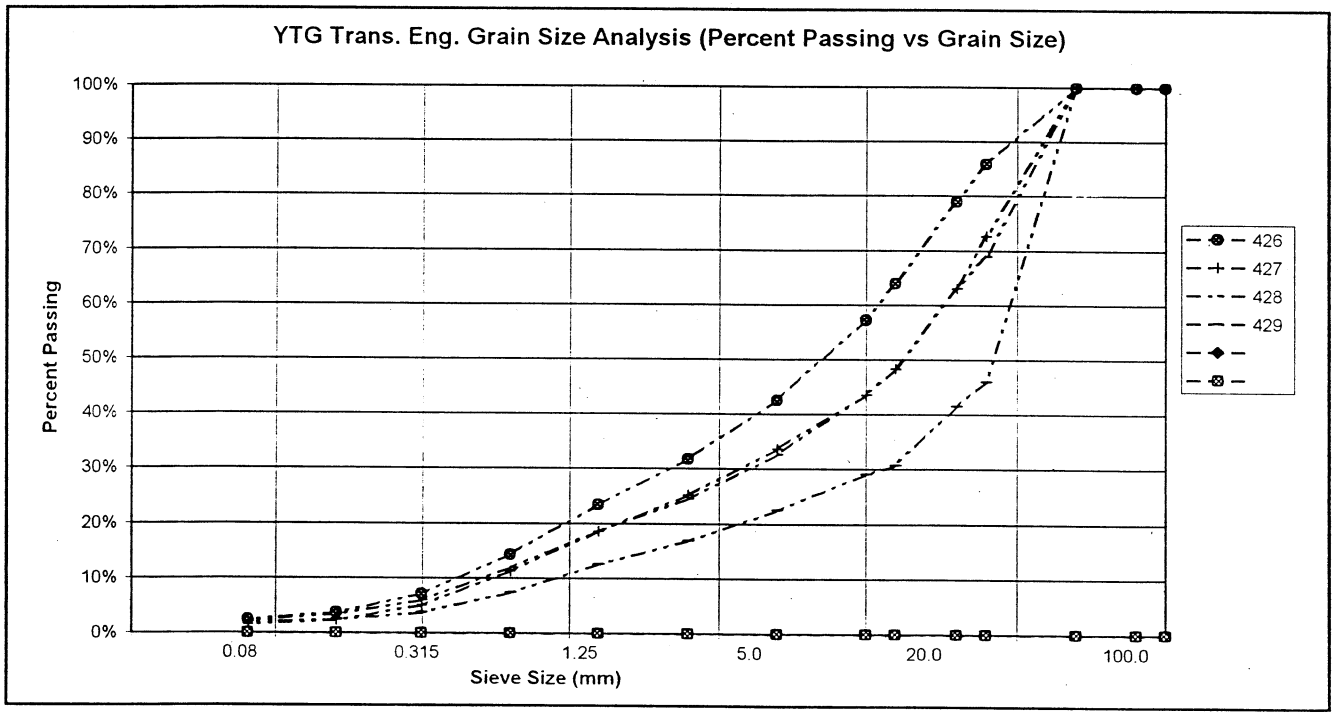


PROJECT NUMBER:	552-202101-0361-1
CLIENT:	Engineering Capital
PROJECT NAME:	Shakwak Granular Investigation
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21
DRILL UNIT:	Koehring 6625 Backhoe
HOLE LOCATION:	SEE PLAN
LOGGED BY:	JRP R.W.

HOLE No.: 638-2516

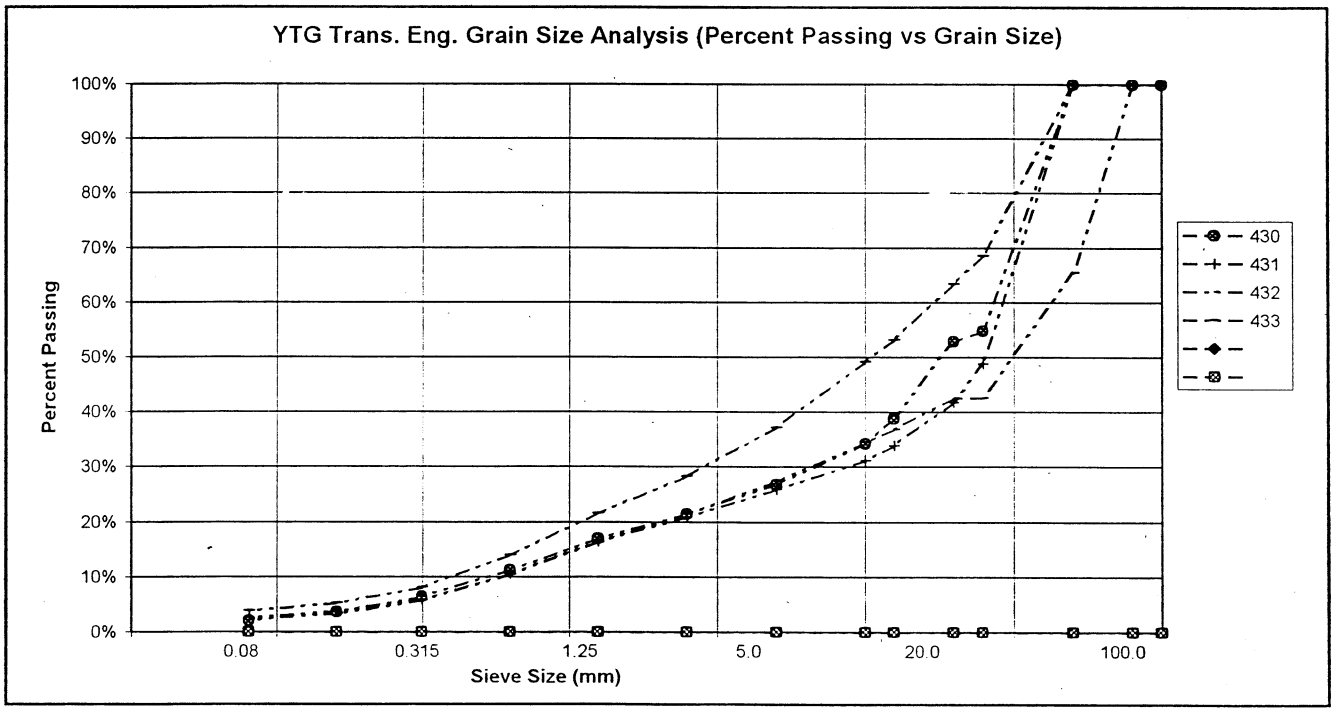
DATE COMP: SEPT 26/02

FIELD NO:	426	427	428	429		
LAB NO:	685	686	687	689		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	86%	73%	69%	46%		
20.0	79%	63%	63%	42%		
12.5	64%	48%	48%	31%		
10.0	57%	44%	44%	29%		
5.0	43%	34%	33%	23%		
2.5	32%	25%	25%	17%		
1.25	24%	19%	19%	13%		
0.630	14%	11%	12%	7%		
0.315	7%	5%	6%	4%		
0.160	4%	2%	3%	2%		
0.080	2%	1%	2%	2%		
M.C.(%):	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	66	67	77		
% SAND:	40	32	30	21		
% FINES:	2	1	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		



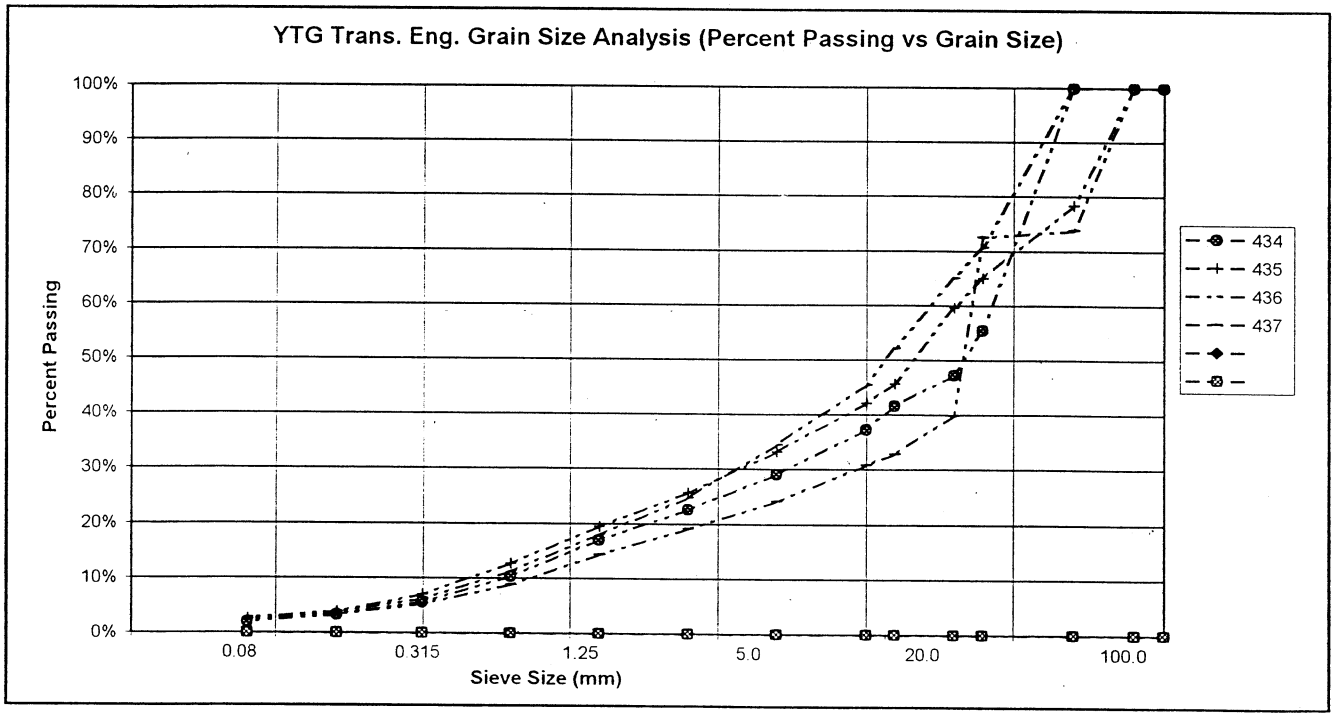
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2717
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 26/02

FIELD NO:	430	431	432	433		
LAB NO:	689	690	691	692		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	65%	100%		
25.0	55%	49%	43%	69%		
20.0	53%	42%	43%	63%		
12.5	39%	34%	37%	53%		
10.0	34%	31%	35%	49%		
5.0	27%	26%	27%	37%		
2.5	22%	21%	22%	28%		
1.25	17%	16%	16%	22%		
0.630	11%	11%	10%	14%		
0.315	6%	6%	6%	8%		
0.160	4%	4%	3%	5%		
0.080	2%	3%	2%	4%		
M.C.(%):	1%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	73	74	73	63		
% SAND:	25	23	25	33		
% FINES:	2	3	2	4		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



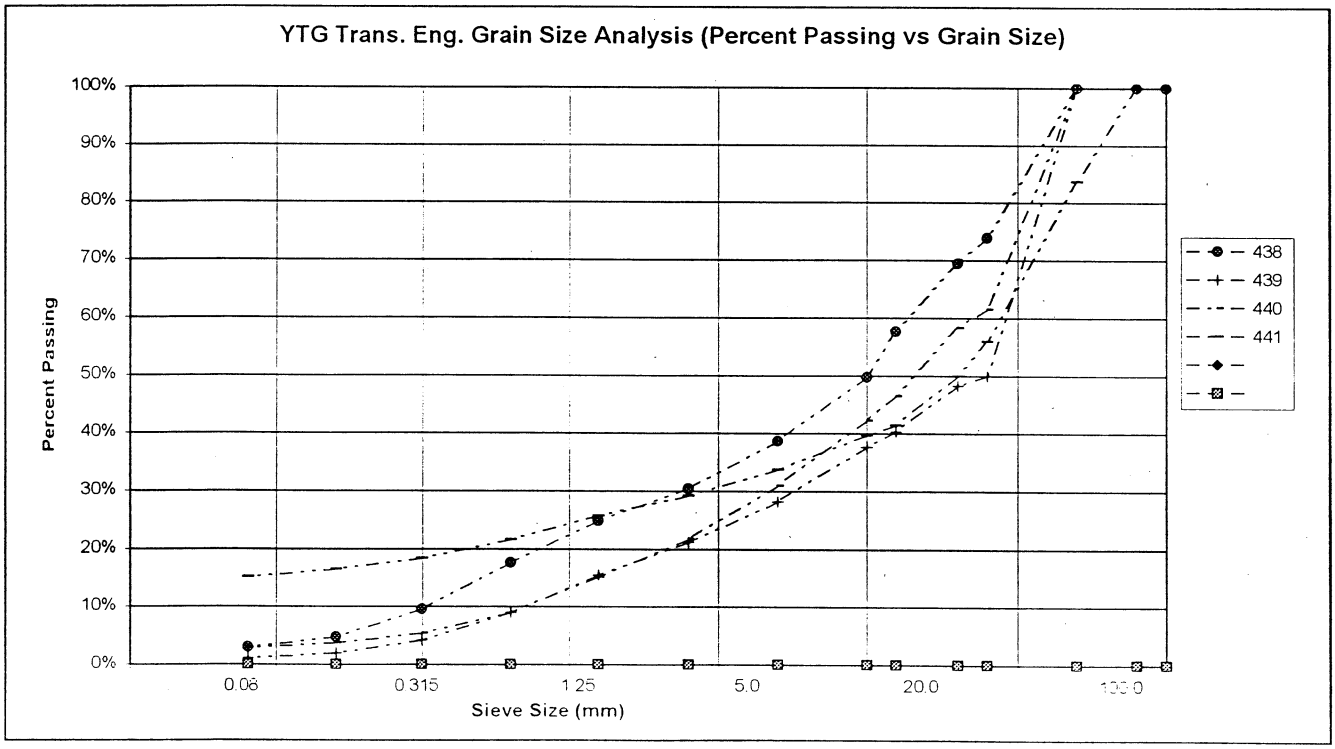
PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2518
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 26/02

FIELD NO:	434	435	436	437		
LAB NO:	693	694	695	696		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	78%	100%	74%		
25.0	56%	65%	71%	73%		
20.0	47%	60%	65%	40%		
12.5	42%	46%	52%	33%		
10.0	37%	42%	45%	31%		
5.0	29%	33%	35%	24%		
2.5	23%	26%	25%	19%		
1.25	17%	20%	18%	14%		
0.630	10%	13%	11%	9%		
0.315	6%	7%	6%	5%		
0.160	3%	4%	4%	3%		
0.080	2%	3%	3%	2%		
M.C.(%):	2%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	71	67	65	76		
% SAND:	27	31	32	22		
% FINES:	2	3	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



PROJECT NUMBER:	552-202101-0361-1		HOLE No.: 638-2519
CLIENT:	Engineering Capital		
PROJECT NAME:	Shakwak Granular Investigation		
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21		
DRILL UNIT:	Koehring 6625 Backhoe		
HOLE LOCATION:	SEE PLAN		
LOGGED BY:	JRP R.W.		DATE COMP: SEPT 26/02

FIELD NO:	438	439	440	441		
LAB NO:	697	698	699	700		
DEPTH:	0.5-1.0	1.7-2.2	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	84%		
25.0	74%	50%	62%	56%		
20.0	69%	48%	58%	50%		
12.5	58%	40%	47%	41%		
10.0	50%	38%	42%	40%		
5.0	39%	28%	31%	34%		
2.5	30%	21%	22%	29%		
1.25	25%	16%	15%	26%		
0.630	18%	9%	9%	22%		
0.315	10%	4%	5%	18%		
0.160	5%	2%	4%	16%		
0.080	3%	1%	3%	15%		
M.C.(%):	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	72	69	66		
% SAND:	36	27	28	19		
% FINES:	3	1	3	15		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)		



PROJECT NUMBER:	552-202101-0361-1	HOLE No.: 638-2520
CLIENT:	Engineering Capital	
PROJECT NAME:	Shakwak Granular Investigation	
PROJECT LOCATION:	Km 1734.4 LHS A/H Pit # 115-G-21	
DRILL UNIT:	Koehring 6625 Backhoe	
HOLE LOCATION:	SEE PLAN	
LOGGED BY:	JRP R.W.	DATE COMP: SEPT 26/02

FIELD NO:	442	443	444	445		
LAB NO:	701	702	703	704		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**	**PERCENT PASSING**		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	84%	63%	58%	68%		
20.0	81%	51%	51%	56%		
12.5	78%	41%	40%	44%		
10.0	74%	37%	35%	42%		
5.0	64%	28%	25%	31%		
2.5	57%	21%	17%	24%		
1.25	52%	15%	13%	18%		
0.630	46%	10%	9%	11%		
0.315	38%	5%	5%	6%		
0.160	28%	3%	3%	4%		
0.080	17%	2%	2%	3%		
M.C.(%):	4%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	36	72	75	69		
% SAND:	47	26	23	28		
% FINES:	17	2	2	3		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)