

GEOTECHNICAL INVESTIGATIONS

4 of 5



Community and Transportation Services
Transportation Engineering Branch

Geotechnical Services

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ORIGINAL - Do Not Remove From File

GR-01-087

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

KM 1803.95 TO KM 1820.4
YUKON, 2000-2001

ALASKA HIGHWAY #1

HIGHWAY CONSTRUCTION

km 1803.95 to km 1820.4

ALASKA HIGHWAY #1

Yukon, 2000-2001

Volume 4 of 5

This Data Package prepared for project viewing:

February, 2000

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

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VOLUME 1 OF 5

Introduction

Centreline "Subsurface Exploration & Testing Report" sheets for holes located from km 1803+925 to km 1810+000

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Centreline "Subsurface Exploration & Testing Report" sheets for holes located from km 1810+000 to km 1820+400

VOLUME 3 OF 5

Centreline laboratory sample test result sheets for holes numbered 350 to 500

VOLUME 4 OF 5

Centreline laboratory sample test result sheets for holes numbered 501 to 849

VOLUME 5 OF 5

Granular testing - km 1819 LHS

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INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING

“Subsurface Exploration & Testing Report” sheets and laboratory sample test result sheets are provided. The “Subsurface Exploration & Testing Report” sheets for the centreline holes are arranged according to project location, starting at km 1803+925 and increasing to km 1820+400. The laboratory sample test result sheets are arranged according to hole number.

Auger Testing

1999	TEST HOLES 350 to 400	shown on logs with prefix 509-
	TEST HOLES 401 to 425	shown on logs with prefix 511-
	TEST HOLES 426 to 436	shown on logs with prefix 512-
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	TEST HOLES 429 to 500	shown on logs with prefix 513-
	TEST HOLES 501 to 512	shown on logs with prefix 514-
	TEST HOLES 563 to 566	shown on logs with prefix 519-
	TEST HOLES 572 to 575	shown on logs with prefix 519-
	TEST HOLES 620 to 644	shown on logs with prefix 520-
	TEST HOLES 645 to 658	shown on logs with prefix 521-
	TEST HOLES 659 to 709	shown on logs with prefix 526-
	TEST HOLES 710 to 731	shown on logs with prefix 527-
	TEST HOLES 834 to 844	shown on logs with prefix 531-
	TEST HOLES 485 to 849	shown on logs with prefix 532-

Notes on plotting of Centreline Holes:

1. Hole 495 shown at ~ 1807+225 on Sheet 5 of 19 should be removed
2. Hole 400 shown at ~ 1808+520 on Sheet 6 of 19 should be removed
3. Add Hole 440 at 1811+870 (centreline) on Sheet 9 of 19
4. Add Hole 408 at 1814+625 (centreline) on Sheet 12 of 19
5. Hole 391 shown at ~ 1816+500 on Sheet 14 of 19 should read Hole 392
6. Hole 392 shown at ~ 1816+600 on Sheet 14 of 19 should read Hole 391
7. Hole 843 shown at ~ 1817+700 on Sheet 15 of 19 should read Hole 378

CONTENTS (continued)**GRANULAR TESTING - KM 1819 LHS**

“Subsurface Exploration & Testing Report” sheets, laboratory sample test result sheets, and location plans are provided.

The “Subsurface Exploration & Testing Report” sheets and the laboratory sample test result sheets are arranged according to hole number

Backhoe Testing

1994	TEST HOLES 4 to 10	shown with prefix 316-
1995	TEST HOLES 230 to 247, 249 to 250, & 252 to 253	shown with prefix 369-

Auger Testing

1995	TEST HOLES 1 to 9	shown with prefix 351-
	TEST HOLES 10 to 26	shown with prefix 352-

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

KM 1803.95 TO KM 1820.4
YUKON, 2000-2001

ALASKA HIGHWAY #1

CENTRELINE TESTING

**hole 501 to hole 849
Laboratory Sample Test Results**

PROJECT NUMBER:	092-202101-0329	HOLE No.:	514-501
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	NODWELL B-40L		
HOLE LOCATION:	1805+700 CENTRELINE		
LOGGED BY:	G.C.	DATE COMP	99-05-06

FIELD NO:	395	FIELD No:	396	FIELD No:	397
LAB NO:	404	LAB No:	405	LAB No:	406
DEPTH:	1.0-1.5	DEPTH:	2.8-3.0	DEPTH:	3.8-4.0
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER

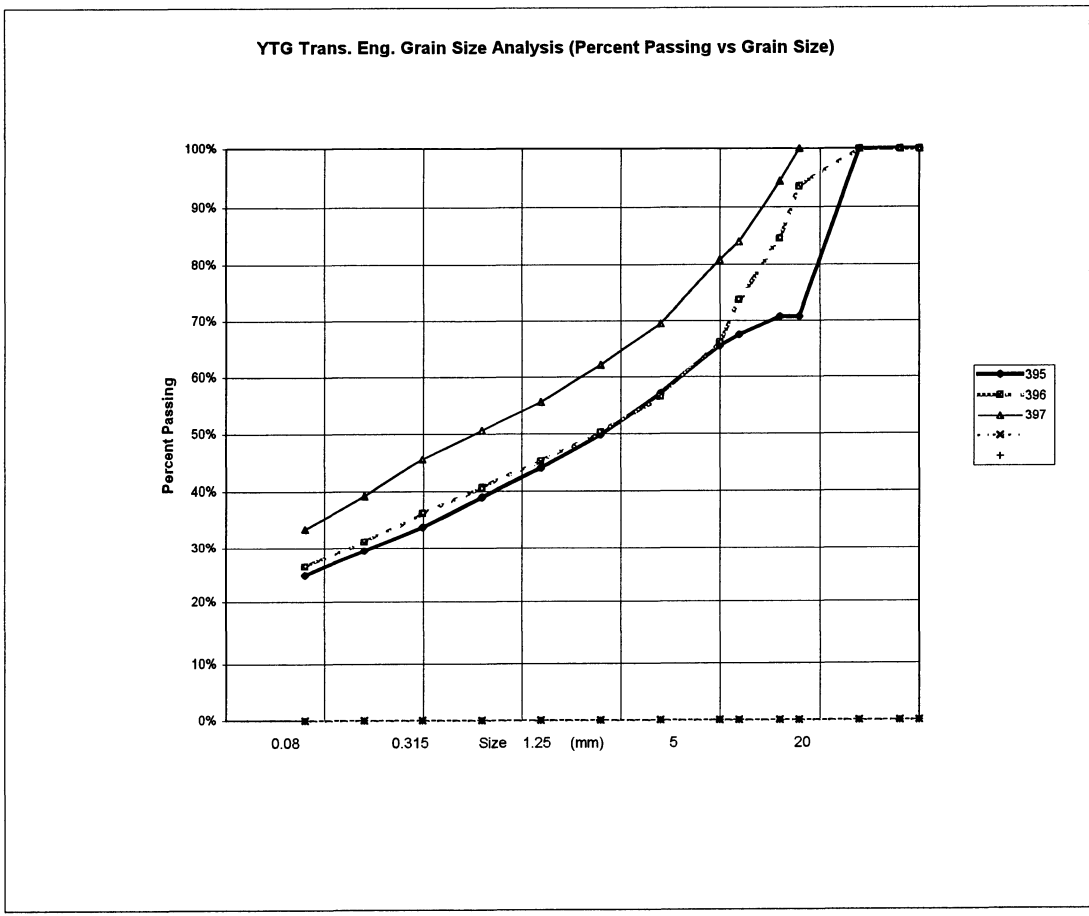
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	71%	25.0	93%	25.0	100%
20.0	71%	20.0	84%	20.0	94%
12.5	67%	12.5	74%	12.5	84%
10.0	65%	10.0	66%	10.0	81%
5.0	57%	5.0	57%	5.0	69%
2.5	50%	2.5	50%	2.5	62%
1.25	44%	1.25	45%	1.25	56%
0.630	39%	0.630	41%	0.630	51%
0.315	34%	0.315	36%	0.315	45%
0.160	29%	0.160	31%	0.160	39%
0.080	25%	0.080	26%	0.080	33%

M.C.(%):	4%	M.C.(%):	11%	M.C.(%):	8%
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LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0

% GRAVEL:	43	% GRAVEL:	43	% GRAVEL:	31
% SAND:	32	% SAND:	30	% SAND:	36
% FINES:	25	% FINES:	26	% FINES:	33

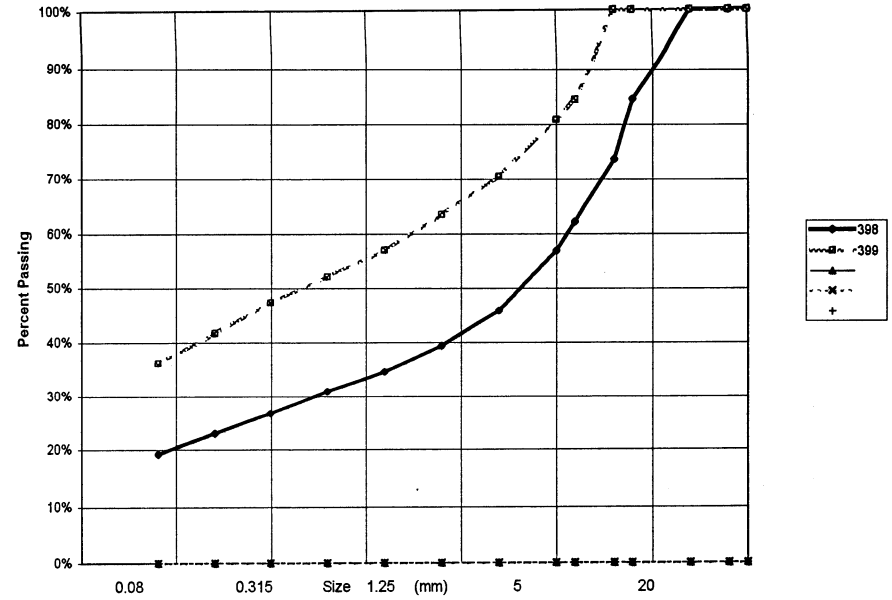
CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-502
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1805+575 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-06

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	85%	25.0	100%
20.0	74%	20.0	100%
12.5	62%	12.5	84%
10.0	57%	10.0	81%
5.0	46%	5.0	71%
2.5	39%	2.5	63%
1.25	35%	1.25	57%
0.630	31%	0.630	52%
0.315	27%	0.315	47%
0.160	23%	0.160	42%
0.080	19%	0.080	36%
M.C.(%):	8%	M.C.(%):	12%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	54	% GRAVEL:	29
% SAND:	27	% SAND:	34
% FINES:	19	% FINES:	36
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

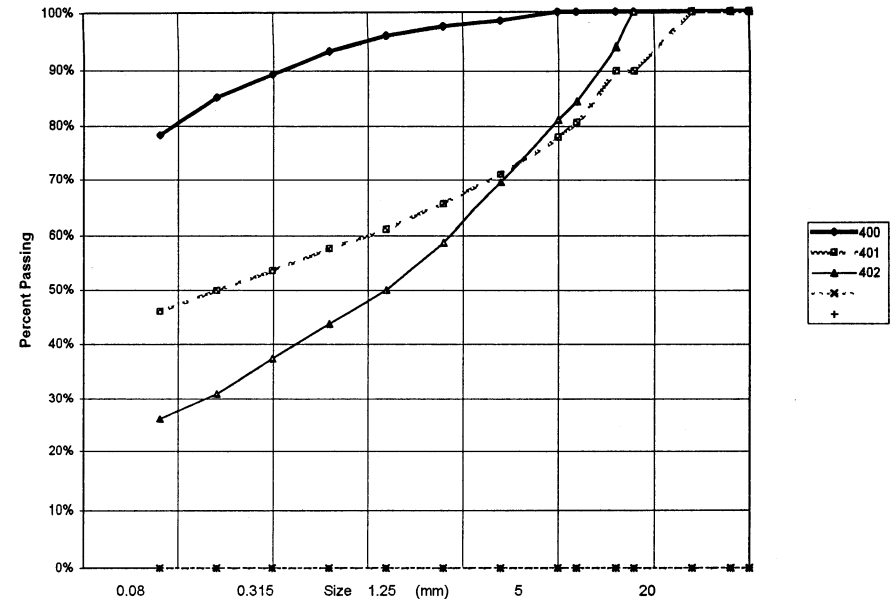
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-503
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1805+450 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-07

FIELD NO: 400		FIELD No. 401		FIELD No: 402	
LAB NO: 409		LAB No. 410		LAB No: 411	
DEPTH: 1.8-2.0		DEPTH 2.8-3.0		DEPTH: 3.8-4.0	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	90%	25.0	100%
20.0	100%	20.0	90%	20.0	94%
12.5	100%	12.5	81%	12.5	85%
10.0	100%	10.0	78%	10.0	81%
5.0	98%	5.0	71%	5.0	70%
2.5	98%	2.5	65%	2.5	59%
1.25	96%	1.25	61%	1.25	50%
0.630	93%	0.630	58%	0.630	44%
0.315	89%	0.315	54%	0.315	37%
0.160	85%	0.160	50%	0.160	31%
0.080	78%	0.080	46%	0.080	26%
M.C.(%):	25%	M.C.(%):	11%	M.C.(%):	10%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	2	% GRAVEL:	29	% GRAVEL:	30
% SAND:	20	% SAND:	25	% SAND:	44
% FINES:	78	% FINES:	46	% FINES:	26
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-504
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1805+350 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-07

FIELD NO: 403 FIELD No. 404
 LAB NO: 412 LAB No. 413
 DEPTH: 2.0-2.3 DEPTH 2.8-3.0
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	91%	25.0	79%
20.0	83%	20.0	79%
12.5	79%	12.5	77%
10.0	78%	10.0	76%
5.0	76%	5.0	74%
2.5	75%	2.5	72%
1.25	74%	1.25	71%
0.630	72%	0.630	69%
0.315	69%	0.315	67%
0.160	64%	0.160	63%
0.080	56%	0.080	55%

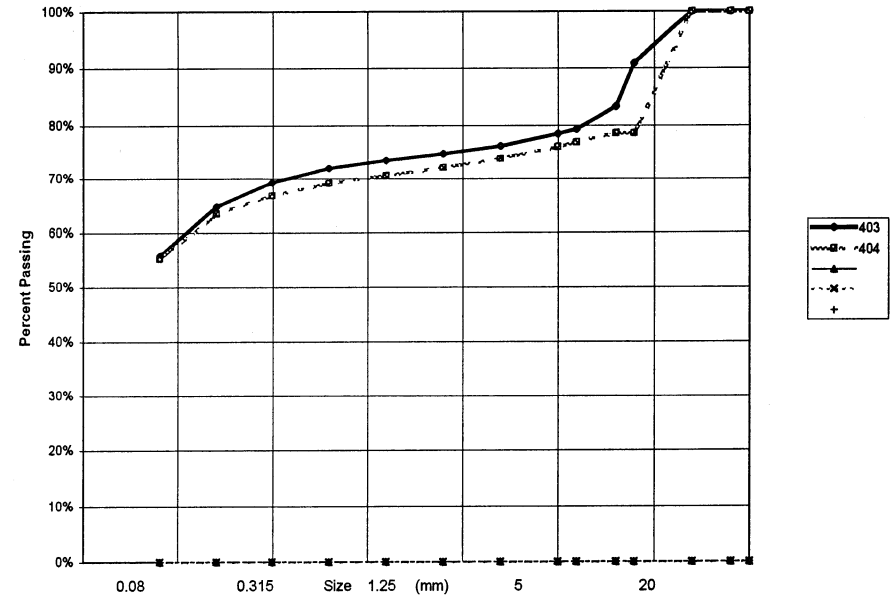
M.C.(%): 17% M.C.(%): 8%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 24 % GRAVEL: 26
 % SAND: 20 % SAND: 19
 % FINES: 56 % FINES: 55

CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)
 CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)

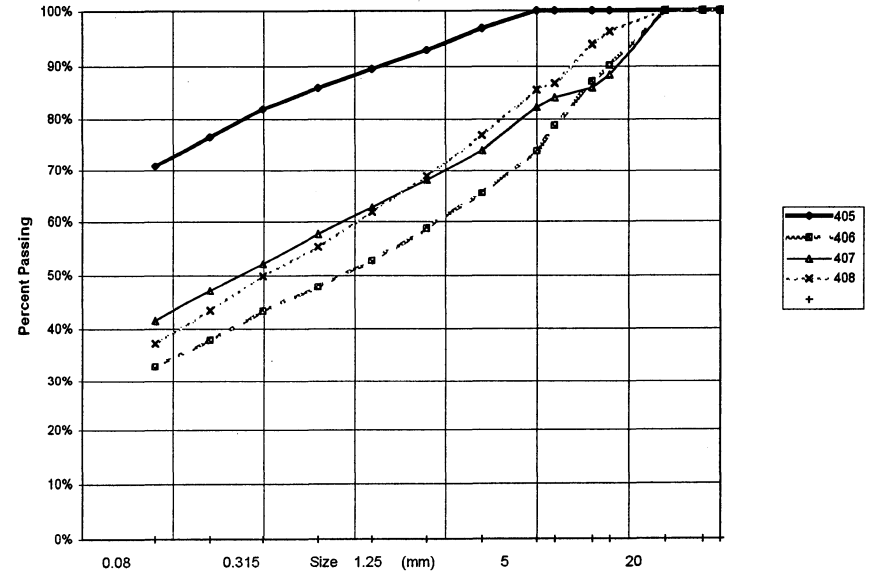
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-505
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1805+175 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-07

FIELD NO: 405		FIELD No. 406		FIELD No: 407		FIELD No: 408	
LAB NO: 414		LAB No. 415		LAB No: 416		LAB No: 417	
DEPTH: 0.8-1.0		DEPTH 1.8-2.0		DEPTH: 2.8-3.0		DEPTH: 4.0-4.4	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	90%	25.0	88%	25.0	96%
20.0	100%	20.0	87%	20.0	86%	20.0	94%
12.5	100%	12.5	79%	12.5	84%	12.5	87%
10.0	100%	10.0	74%	10.0	82%	10.0	86%
5.0	97%	5.0	65%	5.0	74%	5.0	77%
2.5	93%	2.5	59%	2.5	68%	2.5	69%
1.25	90%	1.25	53%	1.25	63%	1.25	62%
0.630	86%	0.630	48%	0.630	58%	0.630	56%
0.315	82%	0.315	43%	0.315	52%	0.315	50%
0.160	77%	0.160	38%	0.160	47%	0.160	43%
0.080	71%	0.080	33%	0.080	41%	0.080	37%
M.C.(%):	36%	M.C.(%):	13%	M.C.(%):	14%	M.C.(%):	10%
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	35	% GRAVEL:	26	% GRAVEL:	23
% SAND:	26	% SAND:	32	% SAND:	33	% SAND:	40
% FINES:	71	% FINES:	33	% FINES:	41	% FINES:	37
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

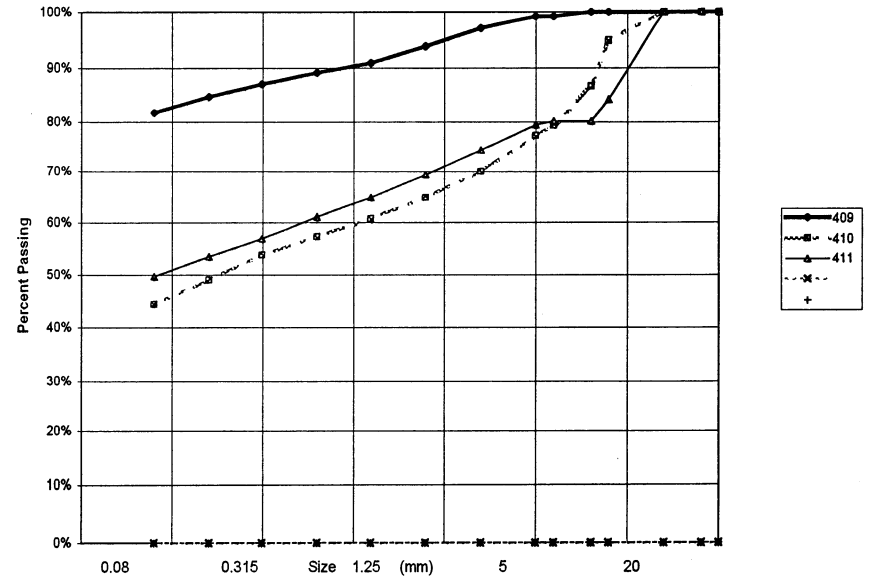
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-506
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1805+050 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-07

FIELD NO: 409		FIELD No. 410		FIELD No: 411	
LAB NO: 418		LAB No. 419		LAB No: 420	
DEPTH: 1.2-1.4		DEPTH 2.0-2.2		DEPTH: 3.0-3.2	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	95%	25.0	84%
20.0	100%	20.0	87%	20.0	80%
12.5	99%	12.5	79%	12.5	80%
10.0	99%	10.0	77%	10.0	79%
5.0	97%	5.0	70%	5.0	74%
2.5	94%	2.5	65%	2.5	69%
1.25	91%	1.25	61%	1.25	65%
0.630	89%	0.630	57%	0.630	61%
0.315	87%	0.315	54%	0.315	57%
0.160	85%	0.160	49%	0.160	53%
0.080	82%	0.080	44%	0.080	50%
M.C.(%):	98%	M.C.(%):	17%	M.C.(%):	22%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	30	% GRAVEL:	26
% SAND:	15	% SAND:	26	% SAND:	25
% FINES:	82	% FINES:	44	% FINES:	50
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-507
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1804-950 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-07

FIELD NO: 412 FIELD No. 413
 LAB NO: 421 LAB No. 422
 DEPTH: 1.6-2.0 DEPTH 2.8-3.0
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	94%	25.0	100%
20.0	91%	20.0	100%
12.5	80%	12.5	98%
10.0	75%	10.0	94%
5.0	65%	5.0	86%
2.5	59%	2.5	75%
1.25	54%	1.25	65%
0.630	50%	0.630	58%
0.315	45%	0.315	50%
0.160	40%	0.160	43%
0.080	35%	0.080	36%

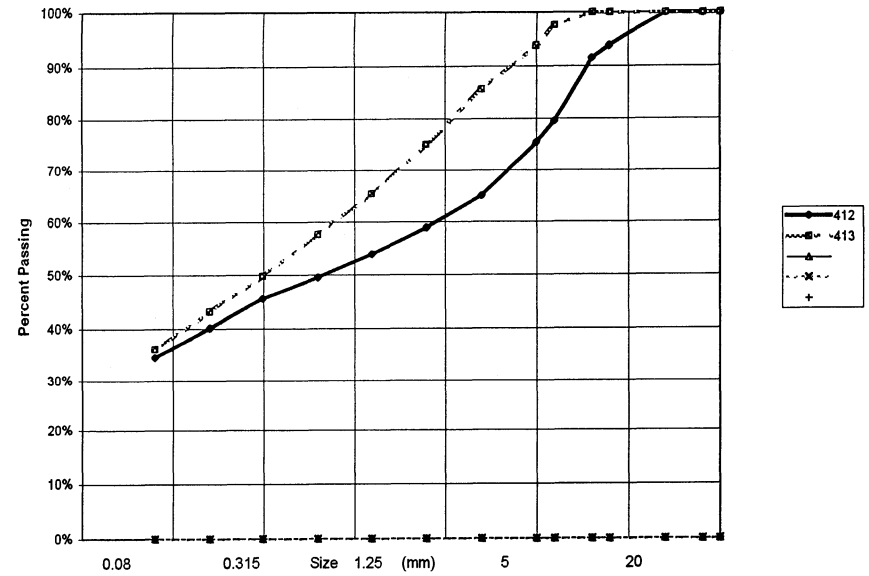
M.C.(%): 24% M.C.(%): 9%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 35 % GRAVEL: 14
 % SAND: 30 % SAND: 49
 % FINES: 35 % FINES: 36

CLASSIFICATION: CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM) SILTY SAND (SM)

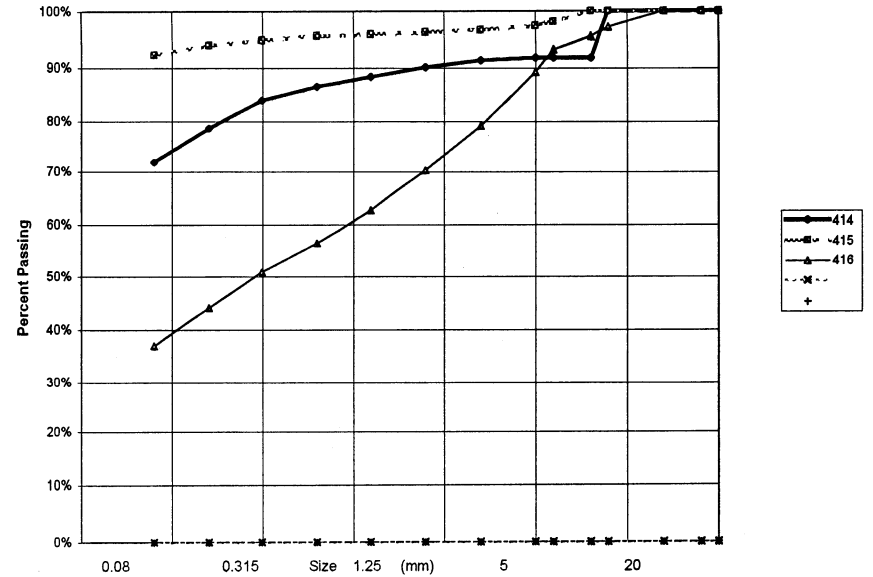
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514+508
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1804+850 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-07

FIELD NO: 414		FIELD No. 415		FIELD No: 416	
LAB NO: 423		LAB No. 424		LAB No: 425	
DEPTH: 1.8-2.0		DEPTH 2.7-3.0		DEPTH: 3.8-4.0	
TYPE: BULK		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	97%
20.0	92%	20.0	100%	20.0	95%
12.5	92%	12.5	98%	12.5	93%
10.0	92%	10.0	97%	10.0	89%
5.0	91%	5.0	97%	5.0	79%
2.5	90%	2.5	96%	2.5	70%
1.25	88%	1.25	96%	1.25	63%
0.630	87%	0.630	96%	0.630	56%
0.315	84%	0.315	95%	0.315	51%
0.160	79%	0.160	94%	0.160	44%
0.080	72%	0.080	92%	0.080	37%
M.C.(%):	154%	M.C.(%):	39%	M.C.(%):	13%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	9	% GRAVEL:	3	% GRAVEL:	21
% SAND:	19	% SAND:	4	% SAND:	42
% FINES:	72	% FINES:	92	% FINES:	37
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILT (ML)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER:	092-202101-0329	HOLE No.:	514-509
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	NODWELL B-40L		
HOLE LOCATION:	1804+725 CENTRELINE		
LOGGED BY:	G.C.	DATE COMP	99-05-07

FIELD NO:	417	FIELD No:	418	FIELD No:	419
LAB NO:	426	LAB No:	427	LAB No:	428
DEPTH:	1.4-1.6	DEPTH	2.8-3.0	DEPTH:	3.8-4.0
TYPE:	BULK	TYPE	AUGER	TYPE:	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	100%	12.5	94%	12.5	94%
10.0	100%	10.0	88%	10.0	90%
5.0	98%	5.0	74%	5.0	79%
2.5	97%	2.5	66%	2.5	70%
1.25	95%	1.25	59%	1.25	62%
0.630	94%	0.630	54%	0.630	56%
0.315	91%	0.315	49%	0.315	49%
0.160	87%	0.160	43%	0.160	43%
0.080	82%	0.080	37%	0.080	37%

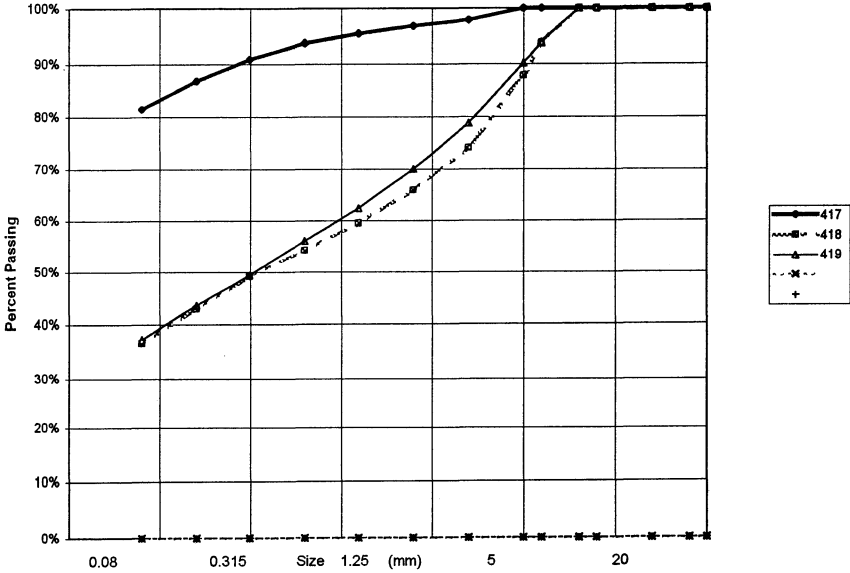
M.C.(%):	66%	M.C.(%):	13%	M.C.(%):	14%
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LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0

% GRAVEL:	2	% GRAVEL:	26	% GRAVEL:	21
% SAND:	16	% SAND:	38	% SAND:	41
% FINES:	82	% FINES:	37	% FINES:	37

CLASSIFICATION:	CLASSIFICATION:	CLASSIFICATION:
SILT WITH SAND (ML)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 514-510
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: NODWELL B-40L
 HOLE LOCATION: 1804+550 CENTRELINE
 LOGGED BY: G.C. DATE COMP 99-05-07

FIELD NO: 420
 LAB NO: 429
 DEPTH: 2.6-3.0
 TYPE: BULK

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	94%
10.0	91%
5.0	81%
2.5	69%
1.25	58%
0.630	49%
0.315	40%
0.160	28%
0.080	21%

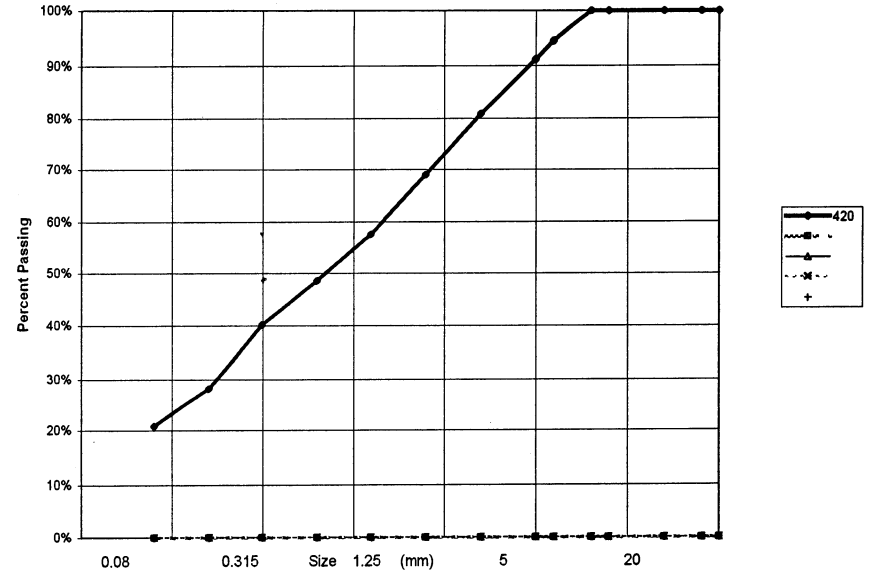
M.C.(%): 11%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 19
 % SAND: 60
 % FINES: 21

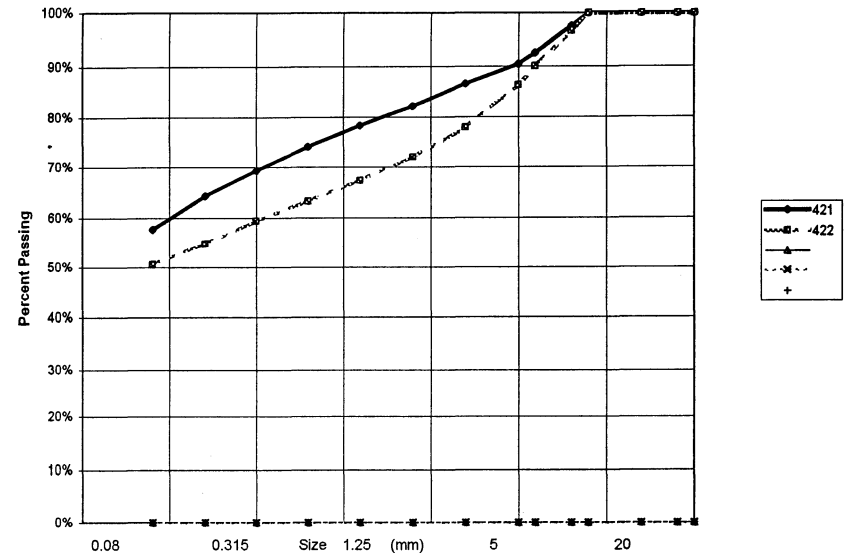
CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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



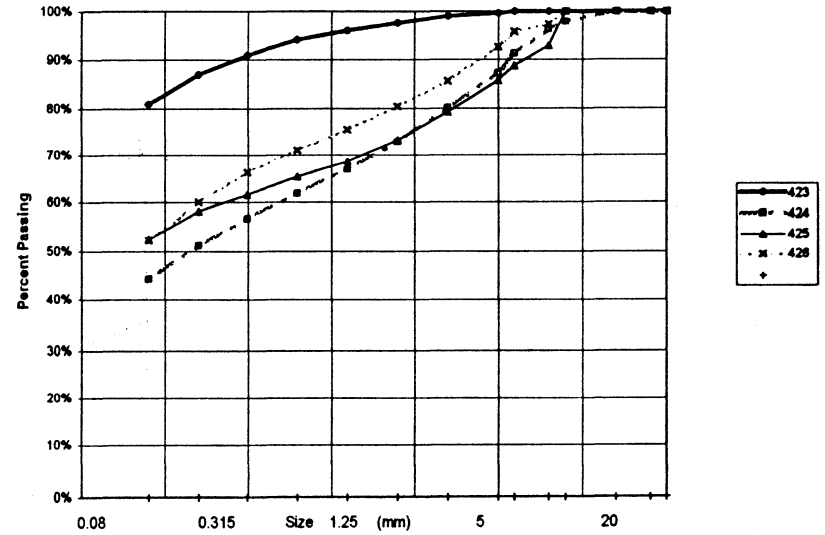
PROJECT NUMBER:	092-202101-0329	HOLE No.:	514-511
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	NODWELL B-40L		
HOLE LOCATION:	1804+450 CENTRELINE	DATE COMP	99-05-07
LOGGED BY:	G.C.		
=====			
FIELD NO:	421	FIELD No.	422
LAB NO:	430	LAB No.	431
DEPTH:	2.0-2.2	DEPTH	2.8-3.0
TYPE:	BULK	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	97%
12.5	93%	12.5	90%
10.0	90%	10.0	86%
5.0	87%	5.0	78%
2.5	82%	2.5	72%
1.25	78%	1.25	67%
0.630	74%	0.630	63%
0.315	69%	0.315	59%
0.160	64%	0.160	55%
0.080	58%	0.080	51%
=====			
M.C.(%):	36%	M.C.(%):	24%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	13	% GRAVEL:	22
% SAND:	29	% SAND:	27
% FINES:	58	% FINES:	51
CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SANDY SILT WITH GRAVEL (ML)	

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



PROJECT NUMBER: 092-202101-0329		HOLE No.: 514-512					
CLIENT: ENGINEERING CAPITAL							
PROJECT NAME: SHAKWAK PROJECT							
PROJECT LOCATION: KM 1799-1822 A/H							
DRILL UNIT: NODWELL B-40L							
HOLE LOCATION: 1804+275 CENTRELINE		DATE COMP 99-05-07					
LOGGED BY: G.C.							
=====		=====					
FIELD NO: 423	FIELD No. 424	FIELD No: 425	FIELD No: 426				
LAB NO: 432	LAB No. 433	LAB No: 434	LAB No: 435				
DEPTH: 0.4-0.8	DEPTH 1.0-1.2	DEPTH: 1.8-2.0	DEPTH: 2.8-3.0				
TYPE: BULK	TYPE AUGER	TYPE: AUGER	TYPE: AUGER				
=====	=====	=====	=====				
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	98%	25.0	100%	25.0	100%
20.0	100%	20.0	96%	20.0	93%	20.0	97%
12.5	100%	12.5	91%	12.5	89%	12.5	96%
10.0	100%	10.0	87%	10.0	86%	10.0	92%
5.0	99%	5.0	80%	5.0	79%	5.0	86%
2.5	97%	2.5	73%	2.5	73%	2.5	80%
1.25	96%	1.25	67%	1.25	69%	1.25	76%
0.630	94%	0.630	62%	0.630	65%	0.630	71%
0.315	91%	0.315	57%	0.315	61%	0.315	66%
0.160	87%	0.160	51%	0.160	58%	0.160	60%
0.080	81%	0.080	44%	0.080	52%	0.080	52%
M.C.(%): 18%	M.C.(%): 15%	M.C.(%): 20%	M.C.(%): 18%				
LIMITS	LIMITS	LIMITS	LIMITS				
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0				
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0				
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0	P.I.: 0.0				
% GRAVEL: 1	% GRAVEL: 20	% GRAVEL: 21	% GRAVEL: 14				
% SAND: 18	% SAND: 36	% SAND: 27	% SAND: 33				
% FINES: 81	% FINES: 44	% FINES: 52	% FINES: 52				
CLASSIFICATION: SILT WITH SAND (ML)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SANDY SILT WITH GRAVEL (ML)	CLASSIFICATION: SANDY SILT (ML)				

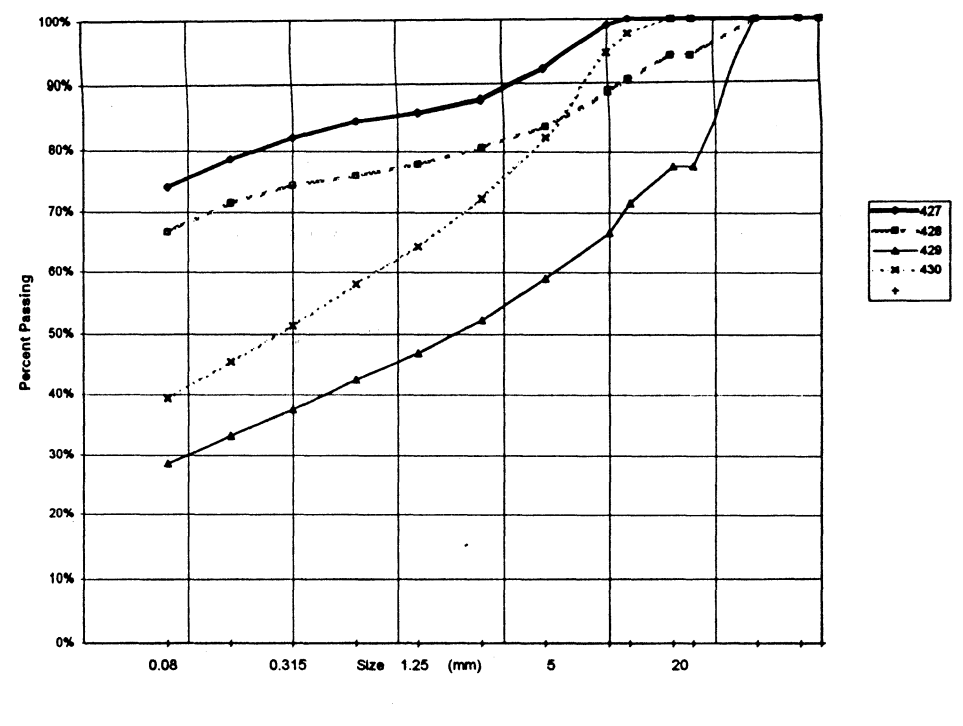
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-563
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+225 35M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO: 427		FIELD No. 428		FIELD No: 429		FIELD No: 430	
LAB NO: 528		LAB No. 527		LAB No: 528		LAB No: 529	
DEPTH: 0.5-0.9		DEPTH 1.3-1.5		DEPTH: 2.6-3.0		DEPTH: 3.6-4.0	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	94%	25.0	78%	25.0	100%
20.0	100%	20.0	94%	20.0	78%	20.0	100%
12.5	100%	12.5	90%	12.5	71%	12.5	97%
10.0	99%	10.0	89%	10.0	67%	10.0	94%
5.0	92%	5.0	84%	5.0	59%	5.0	82%
2.5	88%	2.5	81%	2.5	52%	2.5	72%
1.25	88%	1.25	78%	1.25	47%	1.25	64%
0.830	85%	0.830	76%	0.830	42%	0.830	58%
0.315	82%	0.315	74%	0.315	37%	0.315	51%
0.160	79%	0.160	71%	0.160	33%	0.160	45%
0.080	74%	0.080	67%	0.080	29%	0.080	39%
M.C.(%):	52%	M.C.(%):	76%	M.C.(%):	11%	M.C.(%):	15%
LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	8	% GRAVEL:	18	% GRAVEL:	41	% GRAVEL:	18
% SAND:	18	% SAND:	17	% SAND:	30	% SAND:	43
% FINES:	74	% FINES:	67	% FINES:	29	% FINES:	39
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SANDY SILT WITH GRAVEL (ML)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

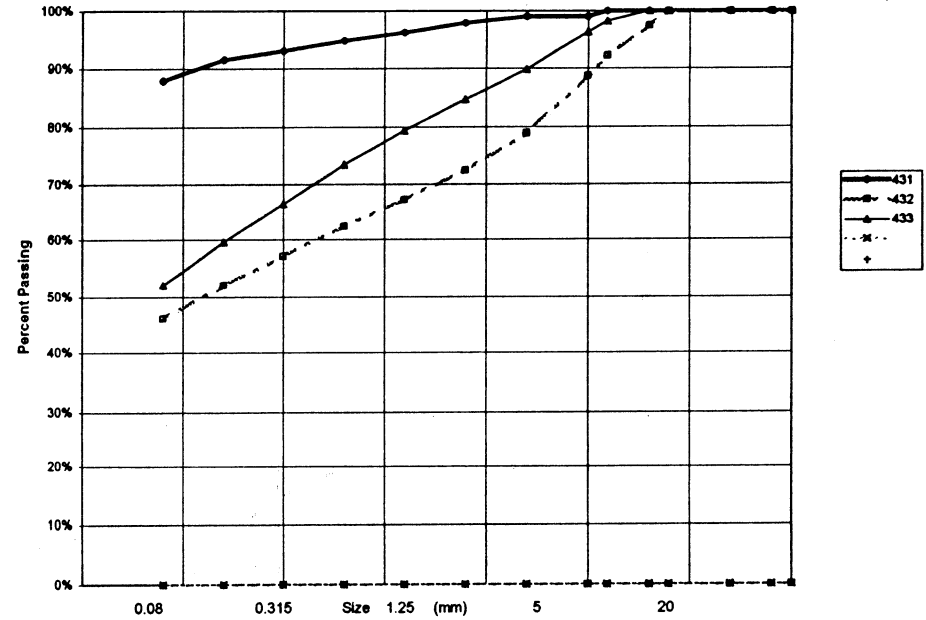
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-564
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+150 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	97%	20.0	100%
12.5	100%	12.5	92%	12.5	98%
10.0	99%	10.0	89%	10.0	96%
5.0	99%	5.0	79%	5.0	90%
2.5	98%	2.5	72%	2.5	85%
1.25	96%	1.25	67%	1.25	79%
0.630	95%	0.630	62%	0.630	74%
0.315	93%	0.315	57%	0.315	66%
0.160	91%	0.160	52%	0.160	60%
0.080	88%	0.080	46%	0.080	52%
M.C.(%):	105%	M.C.(%):	17%	M.C.(%):	19%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	1	% GRAVEL:	21	% GRAVEL:	10
% SAND:	11	% SAND:	33	% SAND:	38
% FINES:	88	% FINES:	46	% FINES:	52
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT (ML)		SILTY SAND WITH GRAVEL (SM)		SANDY SILT (ML)	

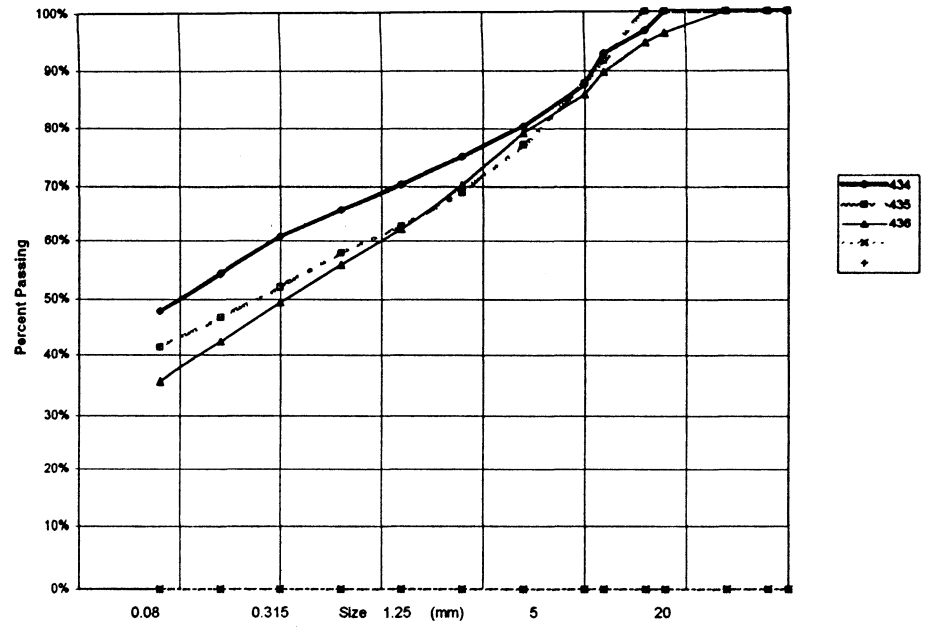
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-585
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+050 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:
434	533	0.6-0.8	AUGER	435	534	1.3-1.5	AUGER	436	535	2.6-3.0	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	98%	25.0	98%	25.0	98%	25.0	98%
20.0	97%	20.0	100%	20.0	95%	20.0	95%	20.0	95%	20.0	95%
12.5	93%	12.5	92%	12.5	90%	12.5	90%	12.5	90%	12.5	90%
10.0	88%	10.0	88%	10.0	86%	10.0	86%	10.0	86%	10.0	86%
5.0	80%	5.0	77%	5.0	79%	5.0	79%	5.0	79%	5.0	79%
2.5	75%	2.5	69%	2.5	70%	2.5	70%	2.5	70%	2.5	70%
1.25	70%	1.25	63%	1.25	62%	1.25	62%	1.25	62%	1.25	62%
0.630	66%	0.630	58%	0.630	56%	0.630	56%	0.630	56%	0.630	56%
0.315	61%	0.315	52%	0.315	49%	0.315	49%	0.315	49%	0.315	49%
0.160	54%	0.160	47%	0.160	42%	0.160	42%	0.160	42%	0.160	42%
0.080	48%	0.080	41%	0.080	36%	0.080	36%	0.080	36%	0.080	36%
M.C.(%):	15%	M.C.(%):	17%	M.C.(%):	11%	M.C.(%):	11%	M.C.(%):	11%	M.C.(%):	11%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	20	% GRAVEL:	23	% GRAVEL:	21	% GRAVEL:	21	% GRAVEL:	21	% GRAVEL:	21
% SAND:	33	% SAND:	36	% SAND:	44	% SAND:	44	% SAND:	44	% SAND:	44
% FINES:	48	% FINES:	41	% FINES:	36	% FINES:	36	% FINES:	36	% FINES:	36
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-568
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+975 30M LT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO: 437 FIELD No. 438
 LAB NO: 536 LAB No. 537
 DEPTH: 1.3-1.5 DEPTH 2.8-3.0
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	93%
20.0	91%	20.0	88%
12.5	84%	12.5	81%
10.0	79%	10.0	76%
5.0	67%	5.0	64%
2.5	60%	2.5	56%
1.25	55%	1.25	50%
0.630	50%	0.630	45%
0.315	46%	0.315	40%
0.160	42%	0.160	35%
0.080	36%	0.080	30%

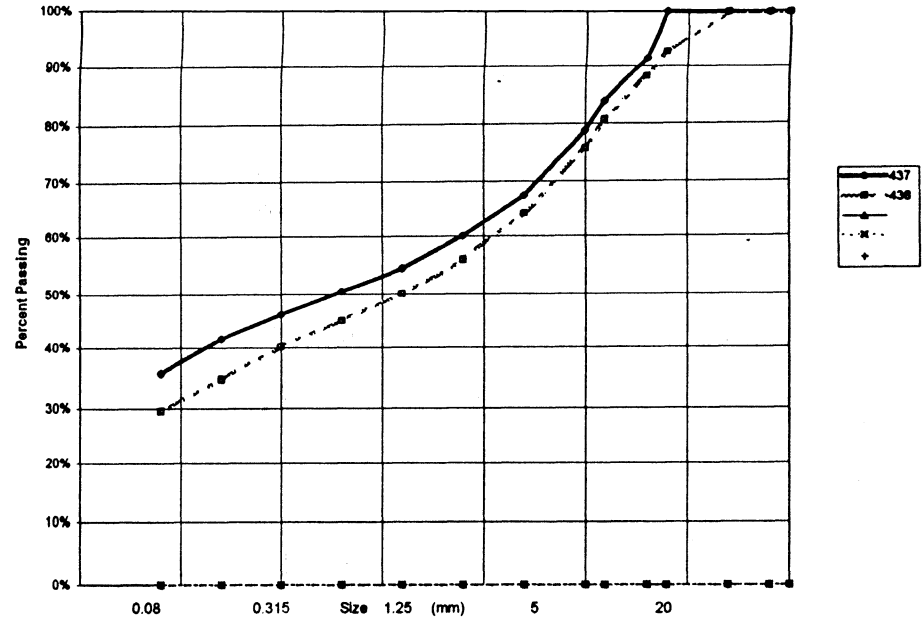
M.C.(%): 17% M.C.(%): 12%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 33 % GRAVEL: 36
 % SAND: 32 % SAND: 35
 % FINES: 36 % FINES: 30

CLASSIFICATION: CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM) SILTY GRAVEL WITH SAND (GM)

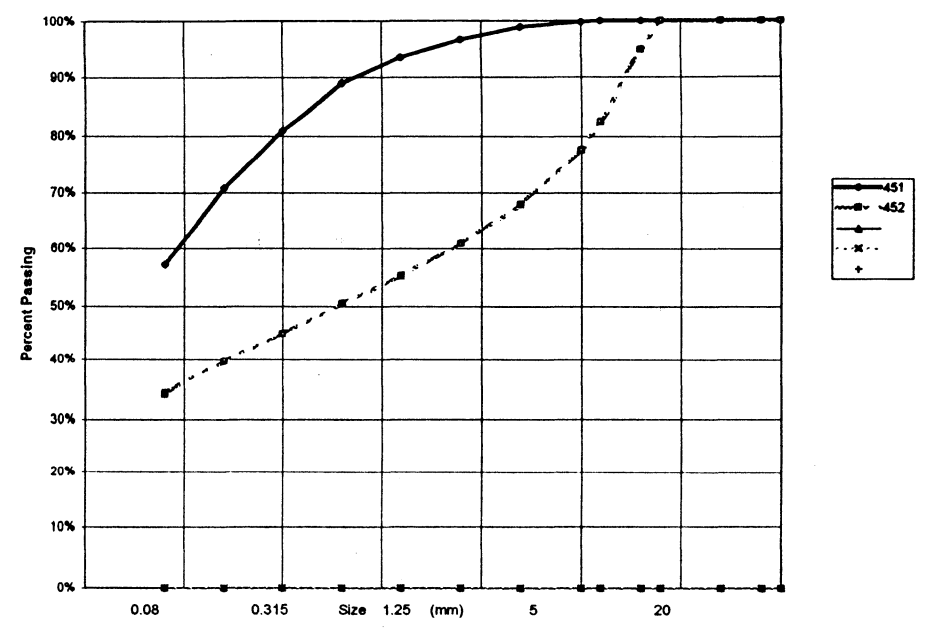
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-572
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1803+925 2m RT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO: 451		FIELD No. 452	
LAB NO: 550		LAB No. 551	
DEPTH: 1.3-1.6		DEPTH 2.8-3.0	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	95%
12.5	100%	12.5	83%
10.0	100%	10.0	78%
5.0	89%	5.0	68%
2.5	97%	2.5	61%
1.25	93%	1.25	55%
0.630	89%	0.630	50%
0.315	81%	0.315	45%
0.160	71%	0.160	40%
0.080	57%	0.080	34%
M.C.(%): 35%		M.C.(%): 13%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	1	% GRAVEL:	32
% SAND:	42	% SAND:	34
% FINES:	57	% FINES:	34
CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-573
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1798-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+025 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-05

FIELD NO: 453 FIELD No. 454
 LAB NO: 552 LAB No. 553
 DEPTH: 1.3-1.5 DEPTH 2.8-3.0
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	98%
20.0	93%	20.0	96%
12.5	89%	12.5	87%
10.0	85%	10.0	82%
5.0	72%	5.0	71%
2.5	63%	2.5	64%
1.25	58%	1.25	58%
0.630	51%	0.630	52%
0.315	45%	0.315	47%
0.180	39%	0.180	41%
0.080	33%	0.080	35%

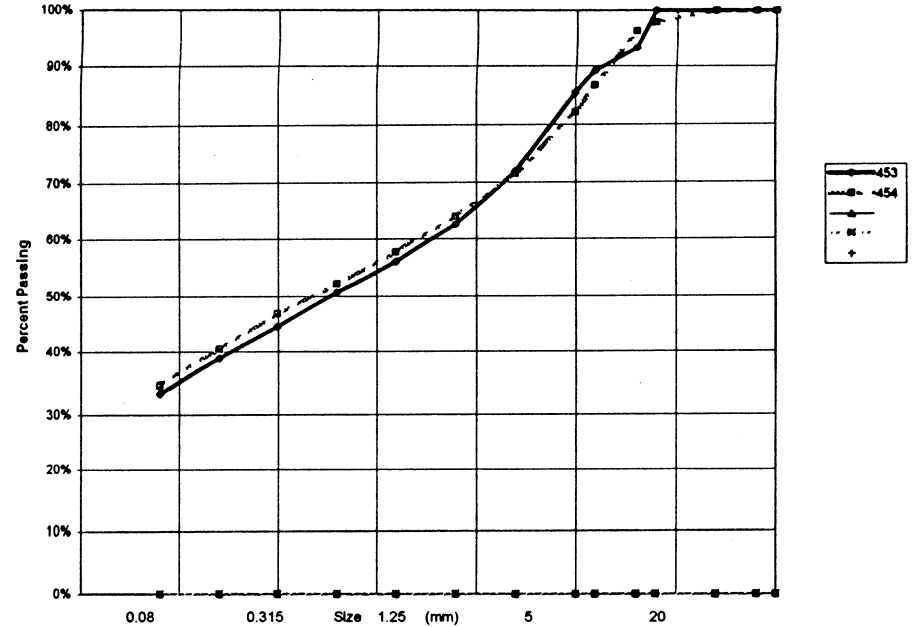
M.C.(%): 27% M.C.(%): 13%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 28 % GRAVEL: 29
 % SAND: 39 % SAND: 37
 % FINES: 33 % FINES: 35

CLASSIFICATION: CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM) SILTY SAND WITH GRAVEL (SM)

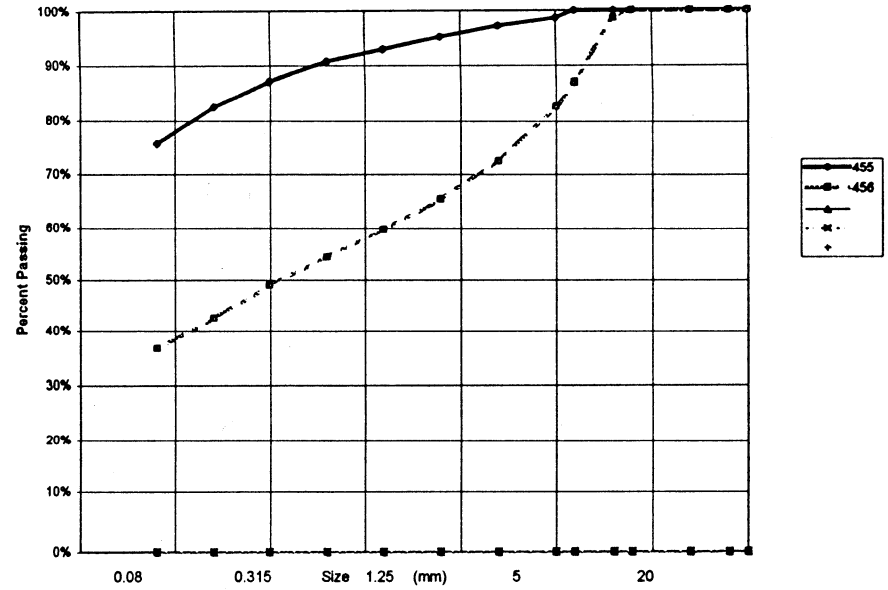
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 519-574
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1804+125 2M RT
 LOGGED BY: S.H. DATE COMP 99-07-05

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	99%
12.5	100%	12.5	87%
10.0	99%	10.0	83%
5.0	97%	5.0	72%
2.5	95%	2.5	66%
1.25	93%	1.25	60%
0.830	91%	0.830	54%
0.315	87%	0.315	49%
0.160	83%	0.160	43%
0.080	76%	0.080	37%
M.C.(%):	73%	M.C.(%):	17%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	28
% SAND:	22	% SAND:	36
% FINES:	76	% FINES:	37
CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILTY SAND WITH GRAVEL (SM)	

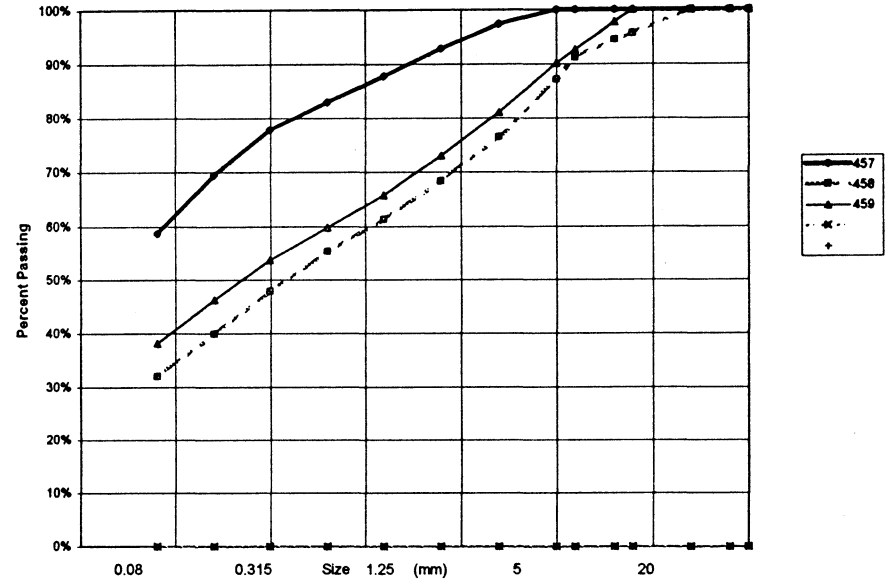
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	519-575
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1789-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1804+225 2M RT		
LOGGED BY:	S.H.	DATE COMP	99-07-05

FIELD NO: 457		FIELD No. 458		FIELD No: 459	
LAB NO: 556		LAB No. 557		LAB No: 558	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0		DEPTH: 3.7-3.9	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	96%	25.0	100%
20.0	100%	20.0	95%	20.0	98%
12.5	100%	12.5	91%	12.5	93%
10.0	100%	10.0	87%	10.0	90%
5.0	97%	5.0	77%	5.0	81%
2.5	93%	2.5	68%	2.5	73%
1.25	88%	1.25	61%	1.25	66%
0.630	83%	0.630	55%	0.630	60%
0.315	78%	0.315	48%	0.315	54%
0.180	69%	0.180	40%	0.180	46%
0.080	59%	0.080	32%	0.080	38%
M.C.(%): 85%		M.C.(%): 13%		M.C.(%): 15%	
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	3	% GRAVEL:	23	% GRAVEL:	19
% SAND:	39	% SAND:	44	% SAND:	43
% FINES:	59	% FINES:	32	% FINES:	38
CLASSIFICATION: SANDY SILT (ML)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

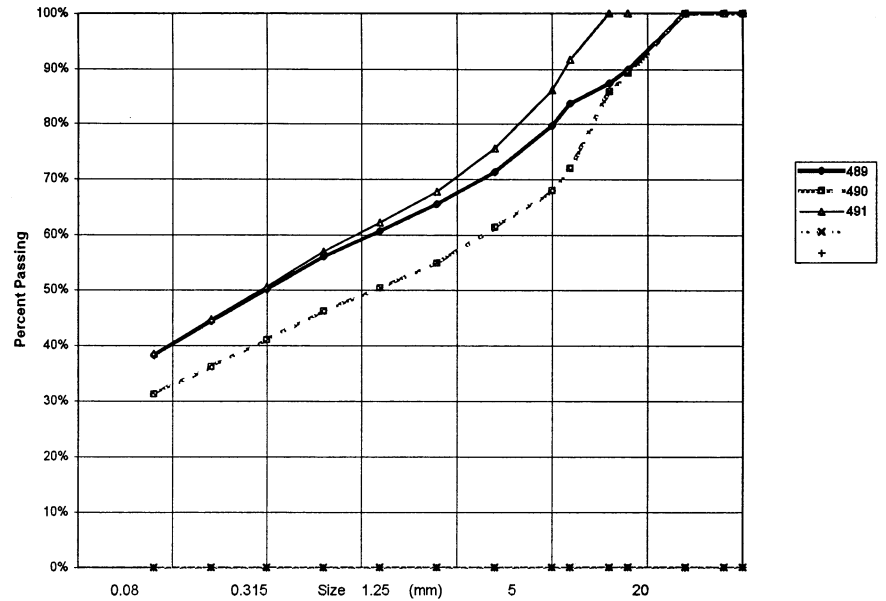
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-620
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1811+225 31M RT
 LOGGED BY: W.E. DATE COMP 99-08-04

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH	TYPE	FIELD No:	LAB No:	DEPTH:	TYPE:
489	585	1.4-1.5	AUGER	490	586	2.8-3.0	AUGER	491	587	4.4-4.6	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	90%	25.0	89%	25.0	100%	25.0	100%	25.0	100%	25.0	100%
20.0	87%	20.0	86%	20.0	100%	20.0	100%	20.0	100%	20.0	100%
12.5	84%	12.5	72%	12.5	92%	12.5	92%	12.5	92%	12.5	92%
10.0	80%	10.0	68%	10.0	86%	10.0	86%	10.0	86%	10.0	86%
5.0	71%	5.0	61%	5.0	76%	5.0	76%	5.0	76%	5.0	76%
2.5	65%	2.5	55%	2.5	68%	2.5	68%	2.5	68%	2.5	68%
1.25	61%	1.25	50%	1.25	62%	1.25	62%	1.25	62%	1.25	62%
0.630	56%	0.630	46%	0.630	57%	0.630	57%	0.630	57%	0.630	57%
0.315	50%	0.315	41%	0.315	51%	0.315	51%	0.315	51%	0.315	51%
0.160	44%	0.160	36%	0.160	45%	0.160	45%	0.160	45%	0.160	45%
0.080	38%	0.080	31%	0.080	39%	0.080	39%	0.080	39%	0.080	39%
M.C.(%):	8%	M.C.(%):	9%	M.C.(%):	10%	M.C.(%):	10%	M.C.(%):	10%	M.C.(%):	10%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	29	% GRAVEL:	39	% GRAVEL:	24	% GRAVEL:	24	% GRAVEL:	24	% GRAVEL:	24
% SAND:	33	% SAND:	30	% SAND:	37	% SAND:	37	% SAND:	37	% SAND:	37
% FINES:	38	% FINES:	31	% FINES:	39	% FINES:	39	% FINES:	39	% FINES:	39
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

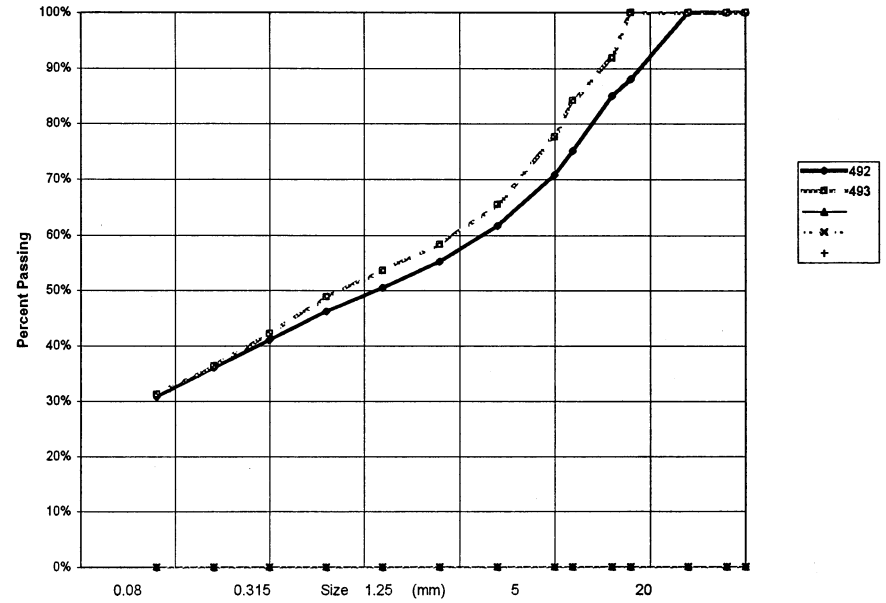
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-621
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1811+125 30M RT
 LOGGED BY: W.E. DATE COMP 99-08-04

FIELD NO: 492		FIELD No. 493	
LAB NO: 588		LAB No. 589	
DEPTH: 1.4-1.5		DEPTH 2.8-3.0	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	88%	25.0	100%
20.0	85%	20.0	92%
12.5	75%	12.5	84%
10.0	71%	10.0	78%
5.0	62%	5.0	65%
2.5	55%	2.5	58%
1.25	51%	1.25	54%
0.630	46%	0.630	49%
0.315	41%	0.315	42%
0.160	36%	0.160	36%
0.080	31%	0.080	31%
M.C.(%):	12%	M.C.(%):	13%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	38	% GRAVEL:	35
% SAND:	31	% SAND:	34
% FINES:	31	% FINES:	31
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-622
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1811+040 INLET 21M RT
 LOGGED BY: W.E. DATE COMP 99-08-04

FIELD NO: 494	FIELD No. 495
LAB NO: 590	LAB No. 591
DEPTH: 1.4-1.6	DEPTH 2.9-3.1
TYPE: AUGER	TYPE AUGER

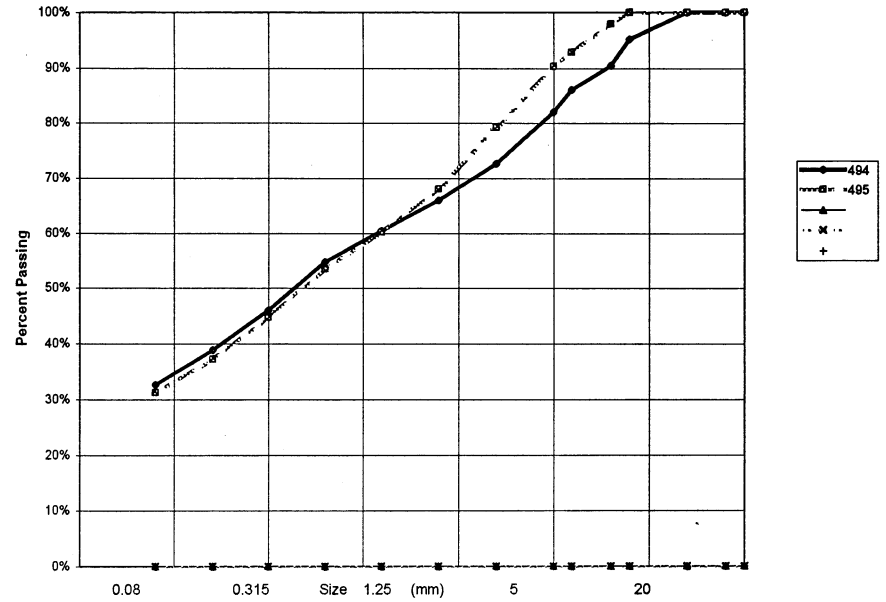
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	100%
20.0	90%	20.0	98%
12.5	86%	12.5	93%
10.0	82%	10.0	90%
5.0	73%	5.0	79%
2.5	66%	2.5	68%
1.25	60%	1.25	60%
0.630	55%	0.630	53%
0.315	46%	0.315	45%
0.160	39%	0.160	37%
0.080	33%	0.080	31%

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

% GRAVEL: 27	% GRAVEL: 21
% SAND: 40	% SAND: 48
% FINES: 33	% FINES: 31

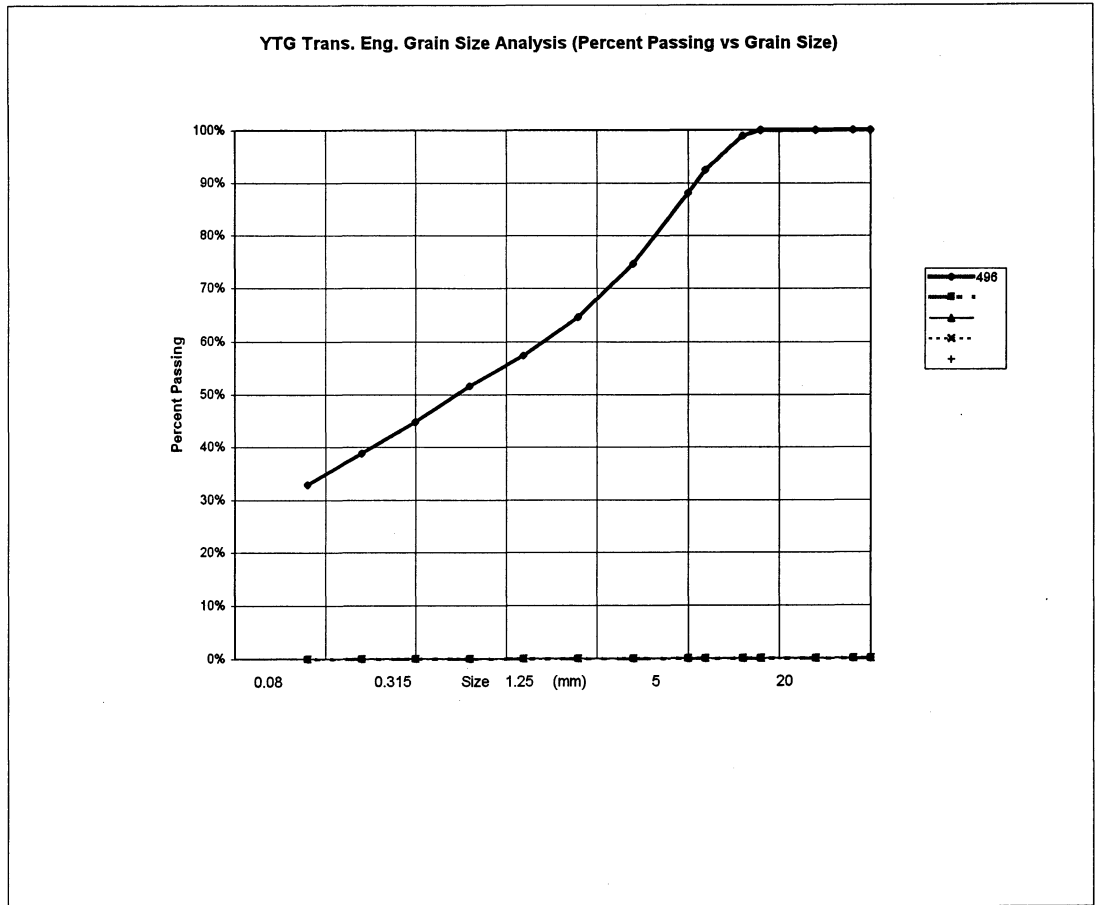
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)
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YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	520-623
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1811+035 OUTLET 23M LT		
LOGGED BY:	W.E.	DATE COMP	8/4/99

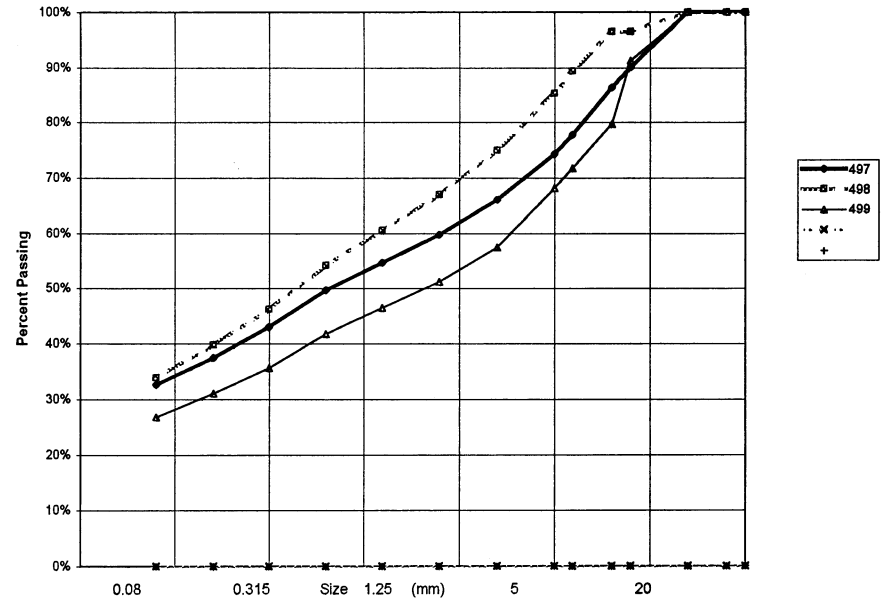
FIELD NO:	496		
LAB NO:	592		
DEPTH:	2.8-3.0		
TYPE:	AUGER		
SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	100%		
20.0	99%		
12.5	92%		
10.0	88%		
5.0	75%		
2.5	65%		
1.25	57%		
0.630	51%		
0.315	45%		
0.160	39%		
0.080	33%		
M.C.(%):	12%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL:	25		
% SAND:	42		
% FINES:	33		
CLASSIFICATION:			
SILTY SAND WITH GRAVEL (SM)			



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	520-624
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1810+950 34M RT		
LOGGED BY:	W.E.	DATE COMP	99-08-04

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:
497	593	1.5-1.7	AUGER	498	594	3.0-3.2	AUGER	499	595	3.9-4.1	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	90%	25.0	97%	25.0	91%	25.0	97%	25.0	91%	25.0	97%
20.0	86%	20.0	97%	20.0	80%	20.0	97%	20.0	80%	20.0	97%
12.5	78%	12.5	89%	12.5	72%	12.5	89%	12.5	72%	12.5	89%
10.0	74%	10.0	85%	10.0	68%	10.0	85%	10.0	68%	10.0	85%
5.0	66%	5.0	75%	5.0	57%	5.0	75%	5.0	57%	5.0	75%
2.5	60%	2.5	67%	2.5	51%	2.5	67%	2.5	51%	2.5	67%
1.25	55%	1.25	61%	1.25	46%	1.25	61%	1.25	46%	1.25	61%
0.630	50%	0.630	54%	0.630	42%	0.630	54%	0.630	42%	0.630	54%
0.315	43%	0.315	46%	0.315	36%	0.315	46%	0.315	36%	0.315	46%
0.160	37%	0.160	40%	0.160	31%	0.160	40%	0.160	31%	0.160	40%
0.080	33%	0.080	34%	0.080	27%	0.080	34%	0.080	27%	0.080	34%
M.C. (%)	9%	M.C. (%)	13%	M.C. (%)	12%	M.C. (%)	12%	M.C. (%)	12%	M.C. (%)	12%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	34	% GRAVEL:	25	% GRAVEL:	43	% GRAVEL:	25	% GRAVEL:	43	% GRAVEL:	25
% SAND:	33	% SAND:	41	% SAND:	31	% SAND:	41	% SAND:	31	% SAND:	41
% FINES:	33	% FINES:	34	% FINES:	27	% FINES:	34	% FINES:	27	% FINES:	34
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-625
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1810-875 21M RT INLET
 LOGGED BY: S.H. DATE COMP 99-08-04

FIELD NO: 500
 LAB NO: 596
 DEPTH: 1.4-1.6
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	100%
10.0	100%
5.0	100%
2.5	99%
1.25	97%
0.630	94%
0.315	89%
0.160	85%
0.080	82%

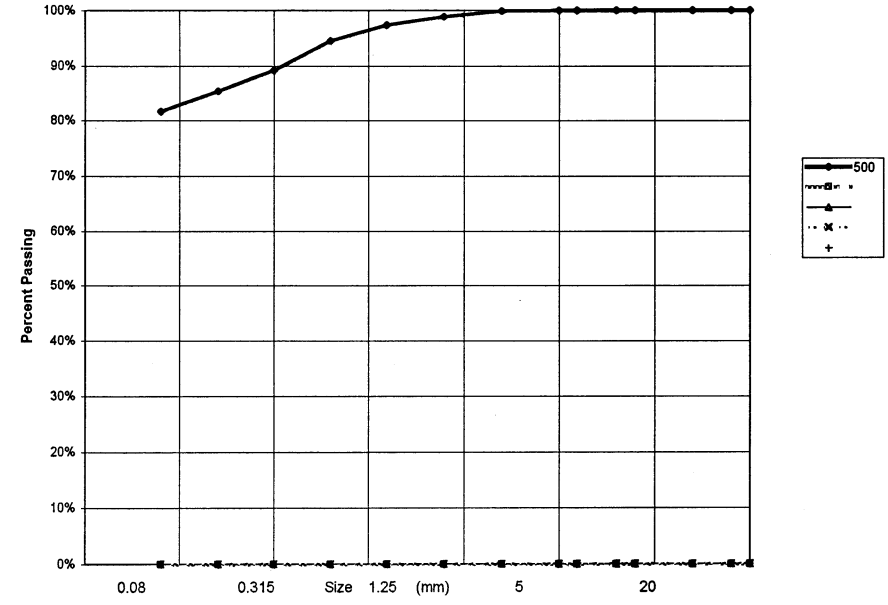
M.C.(%): 46%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

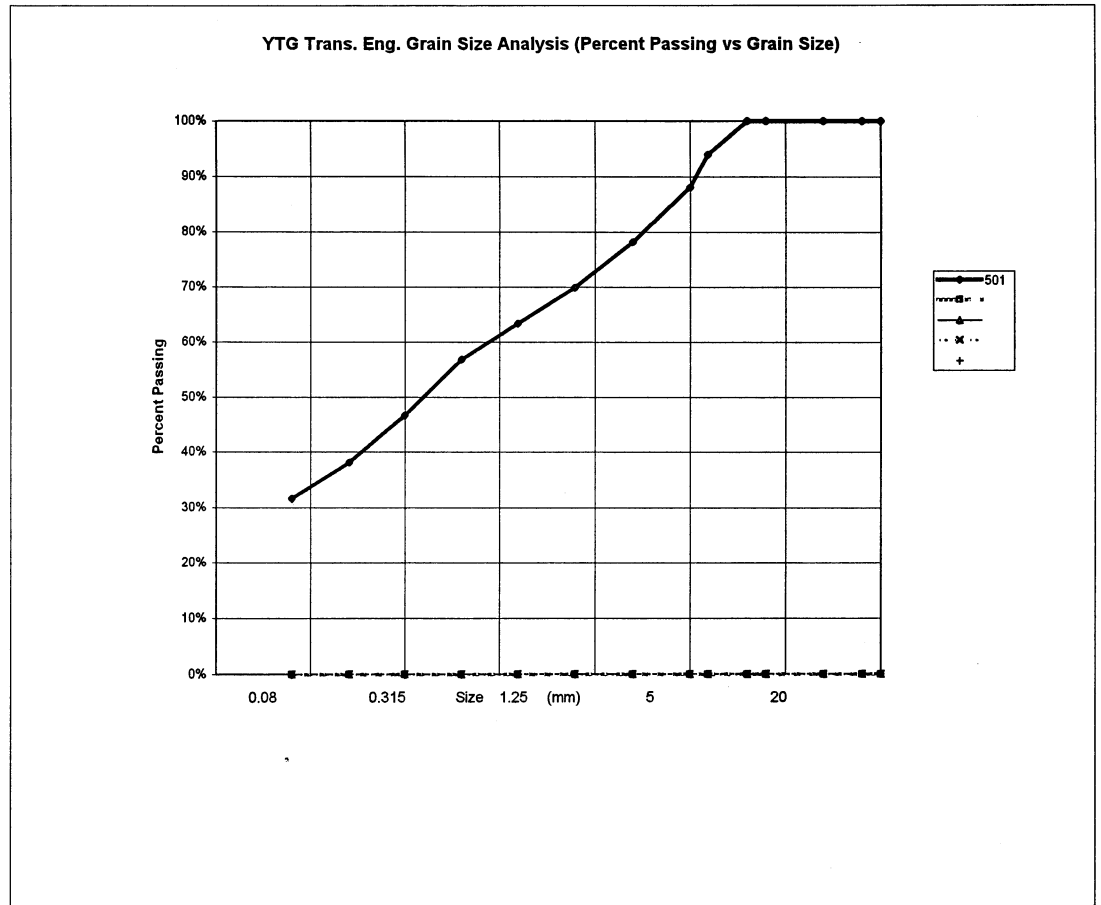
% GRAVEL: 0
 % SAND: 18
 % FINES: 82

CLASSIFICATION:
 SILT WITH SAND (ML)

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



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	520-626
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1810+875 21m It outlet		
LOGGED BY:	W.E.	DATE COMP	99-08-04
=====			
FIELD NO:	501		
LAB NO:	597		
DEPTH:	1.4-1.6		
TYPE:	AUGER		
SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	100%		
20.0	100%		
12.5	94%		
10.0	88%		
5.0	78%		
2.5	70%		
1.25	63%		
0.630	57%		
0.315	47%		
0.160	38%		
0.080	32%		
M.C.(%):	26%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL:	22		
% SAND:	46		
% FINES:	32		
CLASSIFICATION:			
SILTY SAND WITH GRAVEL (SM)			

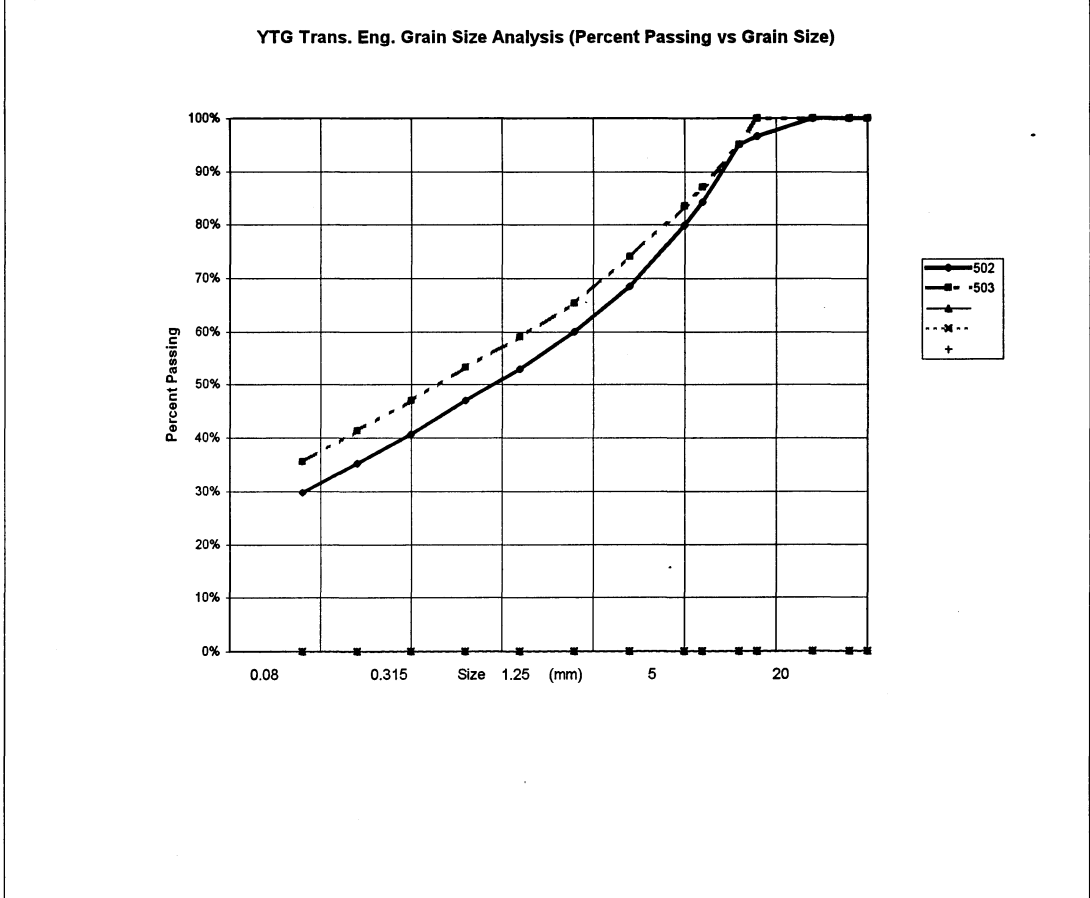


PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	520-627
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1810+800 34M RT		
LOGGED BY:	S.H.	DATE COMP	8/4/99

FIELD NO:	502	FIELD No.	503
LAB NO:	598	LAB No.	599
DEPTH:	2.0-2.2	DEPTH	3.1-3.3
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	97%	25.0	100%
20.0	95%	20.0	95%
12.5	84%	12.5	87%
10.0	80%	10.0	84%
5.0	68%	5.0	74%
2.5	60%	2.5	65%
1.25	53%	1.25	59%
0.630	47%	0.630	53%
0.315	41%	0.315	47%
0.160	35%	0.160	41%
0.080	30%	0.080	36%

M.C.(%):	9%	M.C.(%):	12%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	32	% GRAVEL:	26
% SAND:	39	% SAND:	38
% FINES:	30	% FINES:	36
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

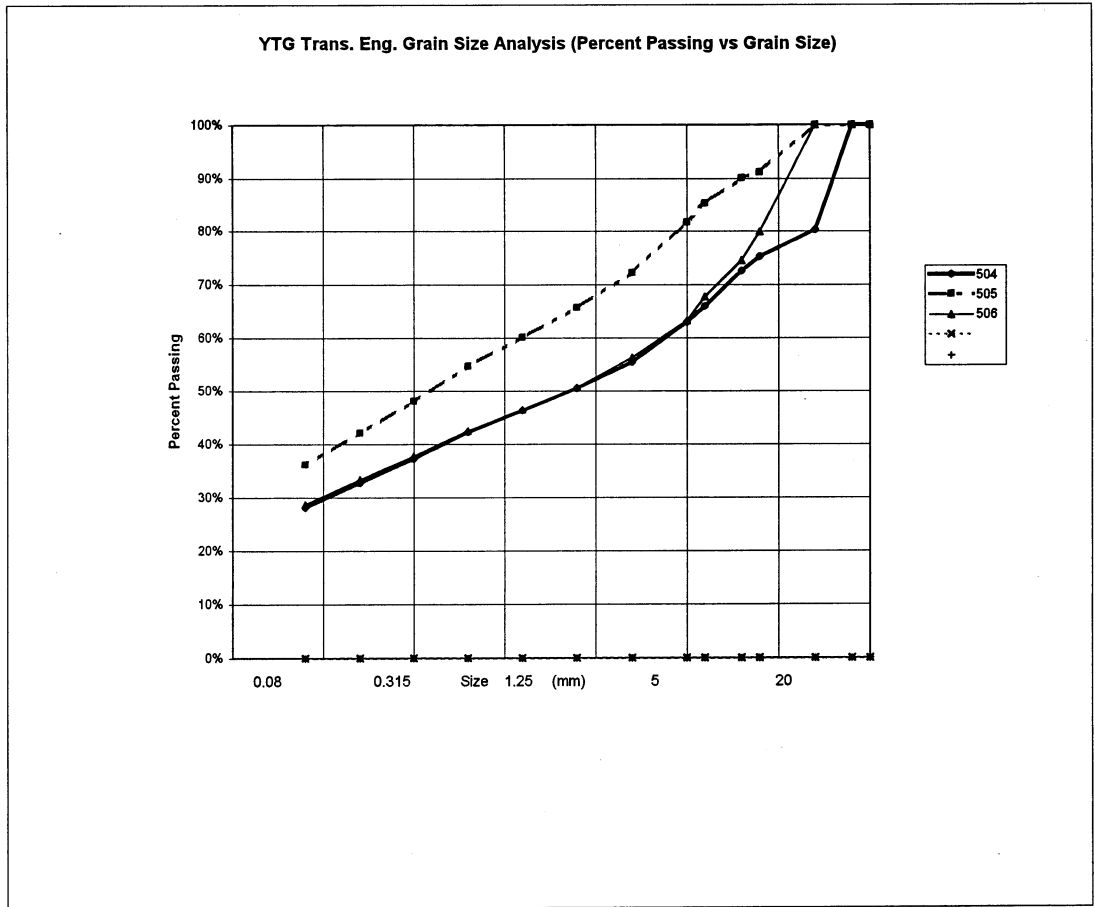


PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	520-628
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1810+720 33M RT		
LOGGED BY:	S.H.	DATE COMP	8/4/99

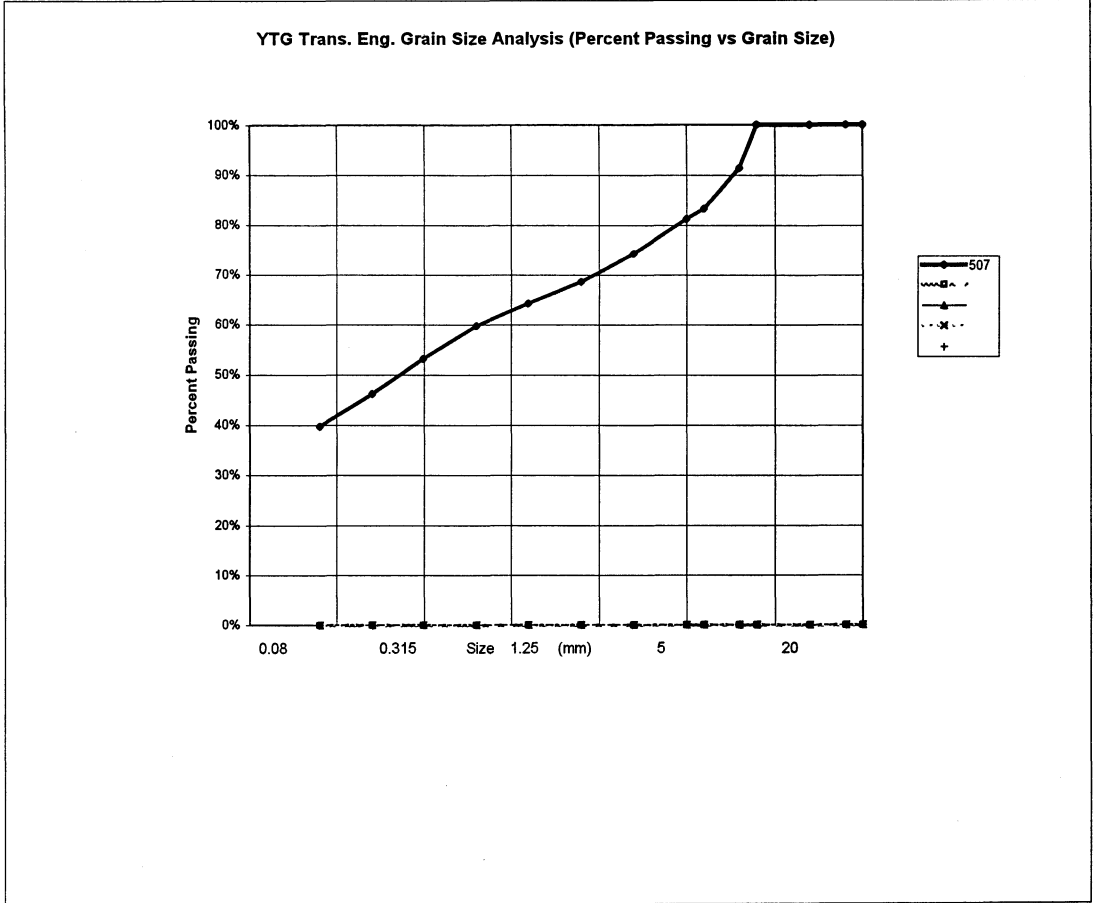
FIELD NO:	504	FIELD No.	505	FIELD No.:	506
LAB NO:	600	LAB No.	601	LAB No:	602
DEPTH:	1.4-1.6	DEPTH	2.8-3.0	DEPTH:	3.7-3.9
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	80%	50.0	100%	50.0	100%
25.0	75%	25.0	91%	25.0	80%
20.0	73%	20.0	90%	20.0	75%
12.5	66%	12.5	85%	12.5	68%
10.0	63%	10.0	82%	10.0	63%
5.0	55%	5.0	72%	5.0	56%
2.5	50%	2.5	66%	2.5	51%
1.25	46%	1.25	60%	1.25	46%
0.630	42%	0.630	55%	0.630	43%
0.315	37%	0.315	48%	0.315	38%
0.160	33%	0.160	42%	0.160	33%
0.080	28%	0.080	36%	0.080	29%

M.C.(%):	8%	M.C.(%):	8%	M.C.(%):	6%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	45	% GRAVEL:	28	% GRAVEL:	44
% SAND:	27	% SAND:	36	% SAND:	28
% FINES:	28	% FINES:	36	% FINES:	29
CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	520-629
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1810+625 25M RT		
LOGGED BY:	S.H.	DATE COMP	99-08-04
=====			
FIELD NO:	507		
LAB NO:	603		
DEPTH:	2.9-3.1		
TYPE:	AUGER		
SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	100%		
20.0	91%		
12.5	83%		
10.0	81%		
5.0	74%		
2.5	69%		
1.25	64%		
0.630	60%		
0.315	53%		
0.160	46%		
0.080	40%		
M.C.(%):	14%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL:	26		
% SAND:	34		
% FINES:	40		
CLASSIFICATION:			
SILTY SAND WITH GRAVEL (SM)			



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-630
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1810+620 18M LT OUTLET
 LOGGED BY: S.H. DATE COMP 99-08-04

FIELD NO: 508
 LAB NO: 604
 DEPTH: 2.7-2.9
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	92%
20.0	92%
12.5	86%
10.0	82%
5.0	75%
2.5	69%
1.25	63%
0.630	58%
0.315	51%
0.160	45%
0.080	38%

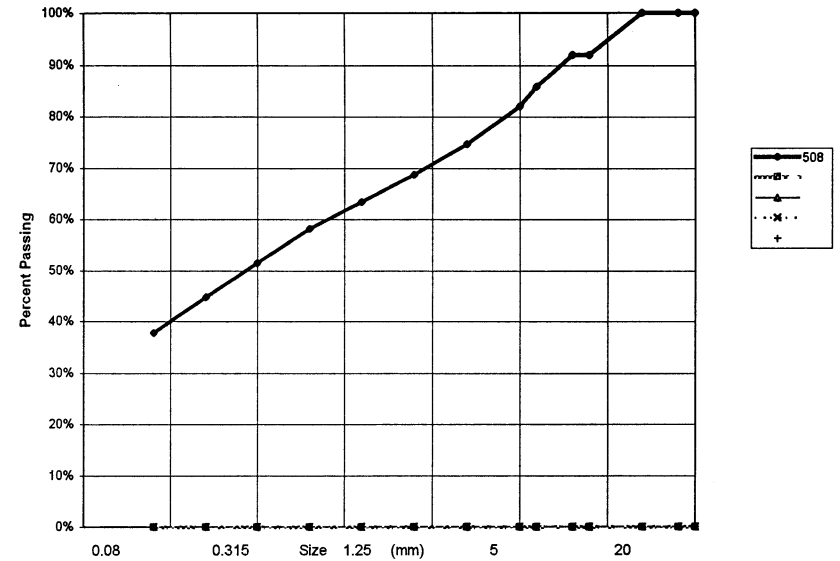
M.C.(%): 12%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 25
 % SAND: 37
 % FINES: 38

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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



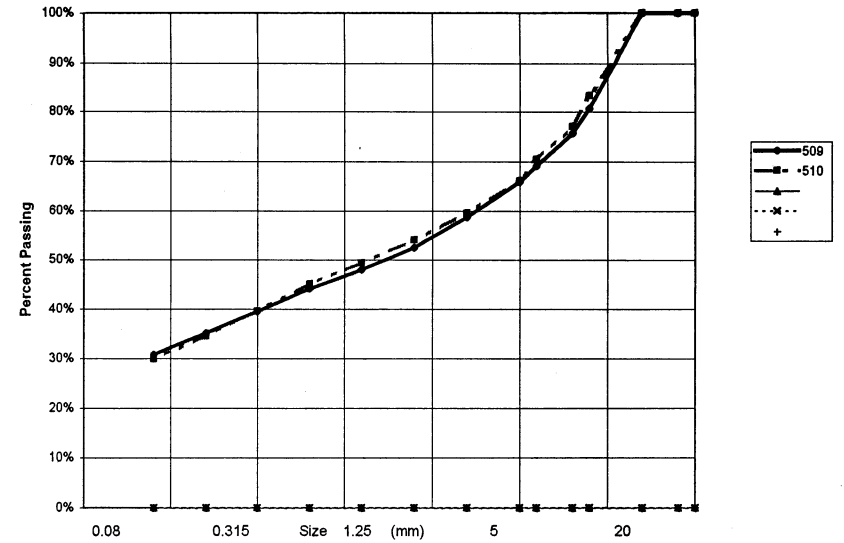
PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-631
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1810+535 33M RT
 LOGGED BY: S.H. DATE COMP 8/4/99

FIELD NO:	509	FIELD No.	510
LAB NO:	605	LAB No.	606
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	81%	25.0	83%
20.0	76%	20.0	77%
12.5	69%	12.5	71%
10.0	66%	10.0	66%
5.0	59%	5.0	60%
2.5	52%	2.5	54%
1.25	48%	1.25	49%
0.630	44%	0.630	45%
0.315	40%	0.315	40%
0.160	35%	0.160	35%
0.080	31%	0.080	30%

M.C.(%):	13%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	41	% GRAVEL:	40
% SAND:	28	% SAND:	30
% FINES:	31	% FINES:	30
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

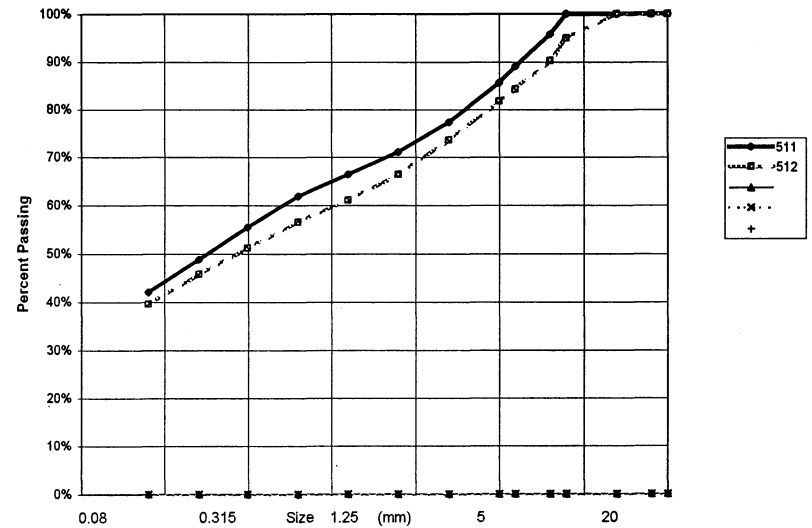
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-632
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1810+490 17M RT
 LOGGED BY: S.H. DATE COMP 99-08-04

FIELD NO: 511		FIELD No. 512	
LAB NO: 607		LAB No. 608	
DEPTH: 1.4-1.6		DEPTH 2.8-3.0	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	95%
20.0	96%	20.0	90%
12.5	89%	12.5	84%
10.0	86%	10.0	82%
5.0	77%	5.0	74%
2.5	71%	2.5	66%
1.25	66%	1.25	61%
0.630	62%	0.630	57%
0.315	56%	0.315	51%
0.160	49%	0.160	46%
0.080	42%	0.080	40%
M.C.(%): 13%		M.C.(%): 11%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	23	% GRAVEL:	26
% SAND:	35	% SAND:	34
% FINES:	42	% FINES:	40
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

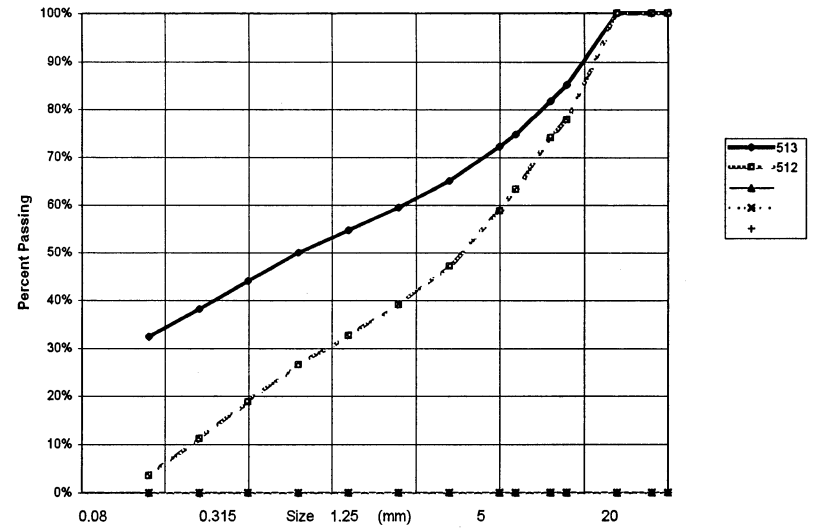
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 520-633
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1810+490 19M LT OUTLET
 LOGGED BY: S.H. DATE COMP 99-08-04

FIELD NO: 513		FIELD No. 512	
LAB NO: 609		LAB No. 608	
DEPTH: 1.4-1.6		DEPTH 2.8-3.0	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	85%	25.0	78%
20.0	82%	20.0	74%
12.5	75%	12.5	63%
10.0	72%	10.0	59%
5.0	65%	5.0	47%
2.5	59%	2.5	39%
1.25	55%	1.25	33%
0.630	50%	0.630	27%
0.315	44%	0.315	19%
0.160	38%	0.160	11%
0.080	32%	0.080	4%
M.C.(%): 9%		M.C.(%): 8%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	35	% GRAVEL:	53
% SAND:	33	% SAND:	44
% FINES:	32	% FINES:	4
CLASSIFICATION:	SILTY GRAVEL WITH SAND (GM)	CLASSIFICATION:	POORLY GRADED GRAVEL WITH SAND (GP)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-634
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1810+415 20M LT OUTLET
 LOGGED BY: W.E DATE COMP 99-08-04

FIELD NO: 515
 LAB NO: 611
 DEPTH: 1.4-1.6
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	74%
20.0	69%
12.5	67%
10.0	64%
5.0	58%
2.5	54%
1.25	50%
0.630	47%
0.315	42%
0.160	37%
0.080	32%

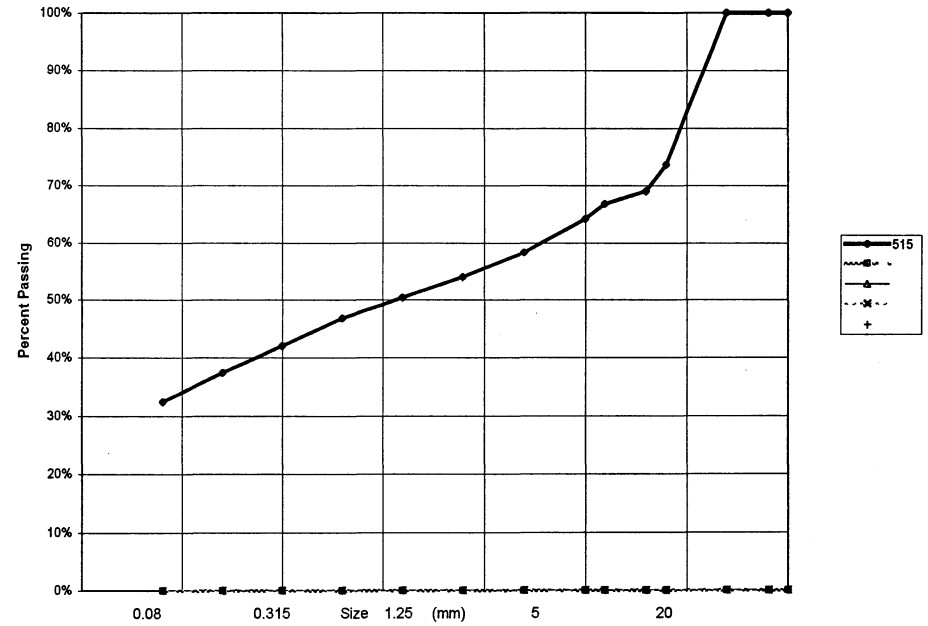
M.C. (%): 17%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 42
 % SAND: 26
 % FINES: 32

CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM)

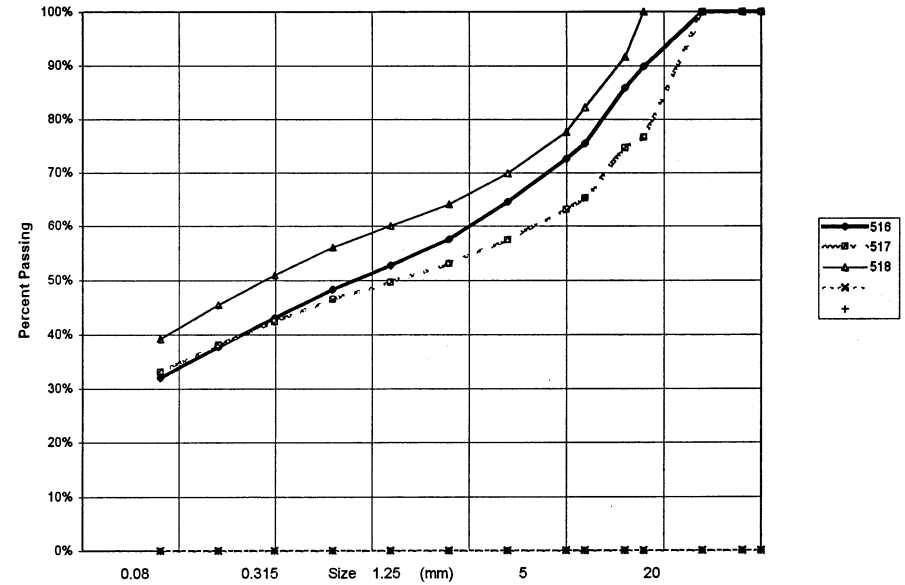
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-635
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 AH
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1810 415 20M RT INLET
 LOGGED BY: W.E DATE COMP 99-08-05

FIELD NO: 516		FIELD No. 517		FIELD No: 518	
LAB NO:	612	LAB No.	613	LAB No:	614
DEPTH:	1.4-1.6	DEPTH	2.7-2.9	DEPTH:	3.8-4.0
TYPE:	AUGER	TYPE	AUGER	TYPE:	BULK
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	90%	25.0	77%	25.0	100%
20.0	86%	20.0	75%	20.0	92%
12.5	75%	12.5	65%	12.5	82%
10.0	73%	10.0	63%	10.0	78%
5.0	65%	5.0	57%	5.0	70%
2.5	57%	2.5	53%	2.5	64%
1.25	53%	1.25	50%	1.25	60%
0.630	48%	0.630	46%	0.630	56%
0.315	43%	0.315	42%	0.315	51%
0.160	38%	0.160	38%	0.160	45%
0.080	32%	0.080	33%	0.080	39%
M.C.(%):	12%	M.C.(%):	8%	M.C.(%):	8%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	35	% GRAVEL:	43	% GRAVEL:	30
% SAND:	33	% SAND:	24	% SAND:	31
% FINES:	32	% FINES:	33	% FINES:	39
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER:	092-202101-0329	HOLE No.:	520-636
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1810+345 38M RT		
LOGGED BY:	W.E	DATE COMP	99-08-05

FIELD NO:	519	FIELD No.	520
LAB NO:	615	LAB No.	616
DEPTH:	1.4-1.6	DEPTH	2.9-3.1
TYPE:	AUGER	TYPE	AUGER

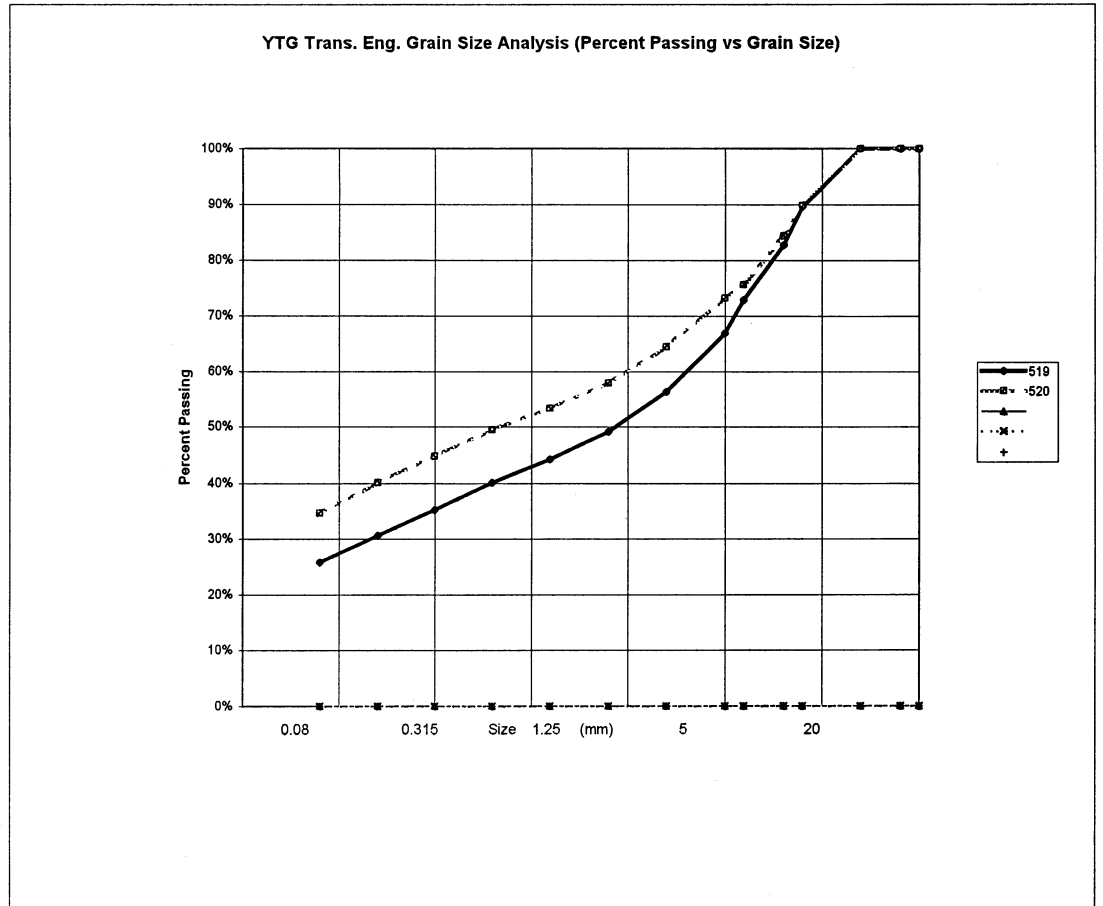
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	90%	25.0	90%
20.0	83%	20.0	84%
12.5	73%	12.5	76%
10.0	67%	10.0	73%
5.0	56%	5.0	65%
2.5	49%	2.5	58%
1.25	44%	1.25	53%
0.630	40%	0.630	49%
0.315	35%	0.315	45%
0.160	30%	0.160	40%
0.080	26%	0.080	35%

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

% GRAVEL:	44	% GRAVEL:	35
% SAND:	31	% SAND:	30
% FINES:	26	% FINES:	35

CLASSIFICATION:	CLASSIFICATION:
SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)



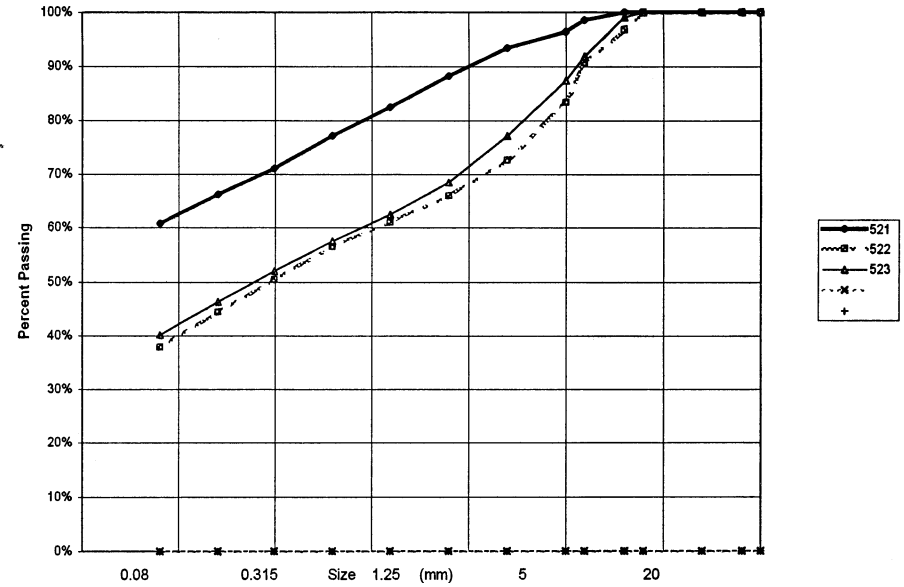
PROJECT NUMBER:	092-202101-0329	HOLE No.:	520-637
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1789-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1810+350 18M LT		
LOGGED BY:	W.E	DATE COMP	99-08-05

FIELD NO:	521	FIELD No.	522	FIELD No:	523
LAB NO:	617	LAB No.	618	LAB No:	619
DEPTH:	1.7-1.9	DEPTH	2.9-3.1	DEPTH:	4.2-4.4
TYPE:	AUGER	TYPE	AUGER	TYPE:	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	97%	20.0	99%
12.5	99%	12.5	91%	12.5	92%
10.0	96%	10.0	83%	10.0	87%
5.0	93%	5.0	73%	5.0	77%
2.5	88%	2.5	66%	2.5	68%
1.25	82%	1.25	61%	1.25	62%
0.630	77%	0.630	56%	0.630	57%
0.315	71%	0.315	50%	0.315	52%
0.160	66%	0.160	44%	0.160	46%
0.080	61%	0.080	38%	0.080	40%

M.C.(%):	38%	M.C.(%):	15%	M.C.(%):	9%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	7	% GRAVEL:	27	% GRAVEL:	23
% SAND:	33	% SAND:	35	% SAND:	37
% FINES:	61	% FINES:	38	% FINES:	40
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-638
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1810+265 36M RT
 LOGGED BY: W.E DATE COMP 8/5/99

FIELD NO: 524
 LAB NO: 620
 DEPTH: 1.3-1.5
 TYPE: AUGER

SIEVE SIZE PERCENT PASSING

100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	100%
10.0	100%
5.0	99%
2.5	99%
1.25	99%
0.630	98%
0.315	96%
0.160	94%
0.080	90%

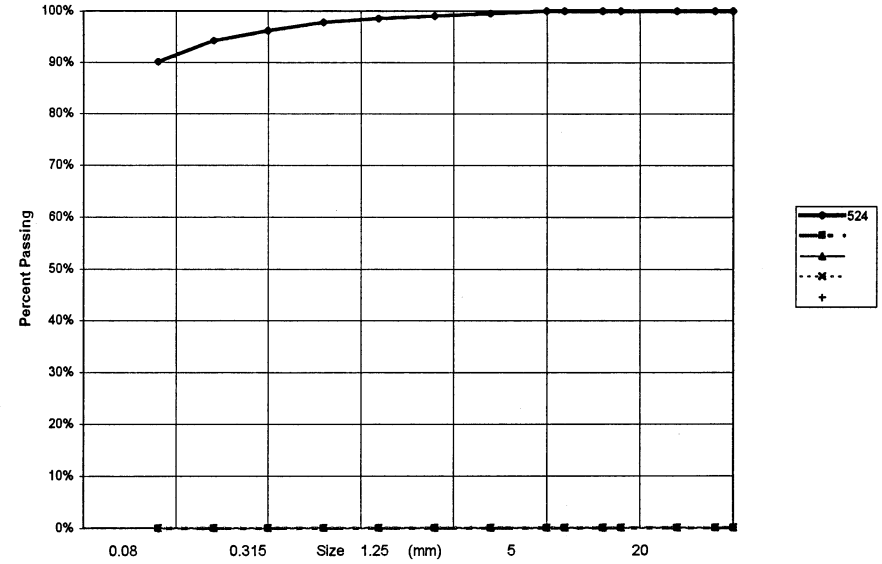
M.C.(%): 32%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 1
 % SAND: 9
 % FINES: 90

CLASSIFICATION:
 SILT (ML)

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



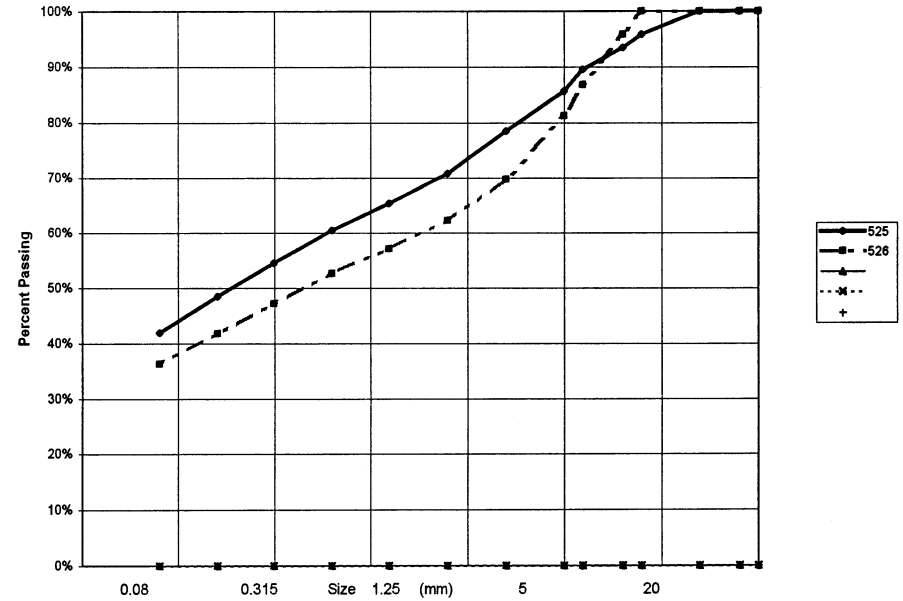
PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-639
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1810+175 37M RT
 LOGGED BY: W.E DATE COMP 8/5/99

FIELD NO:	525	FIELD No.	526
LAB NO:	621	LAB No.	622
DEPTH:	1.3-1.5	DEPTH	3.4-3.6
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	96%	25.0	100%
20.0	93%	20.0	96%
12.5	89%	12.5	87%
10.0	86%	10.0	81%
5.0	78%	5.0	70%
2.5	71%	2.5	62%
1.25	65%	1.25	57%
0.630	61%	0.630	53%
0.315	54%	0.315	47%
0.160	48%	0.160	42%
0.080	42%	0.080	36%

M.C.(%):	12%	M.C.(%):	9%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	22	% GRAVEL:	30
% SAND:	37	% SAND:	34
% FINES:	42	% FINES:	36
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

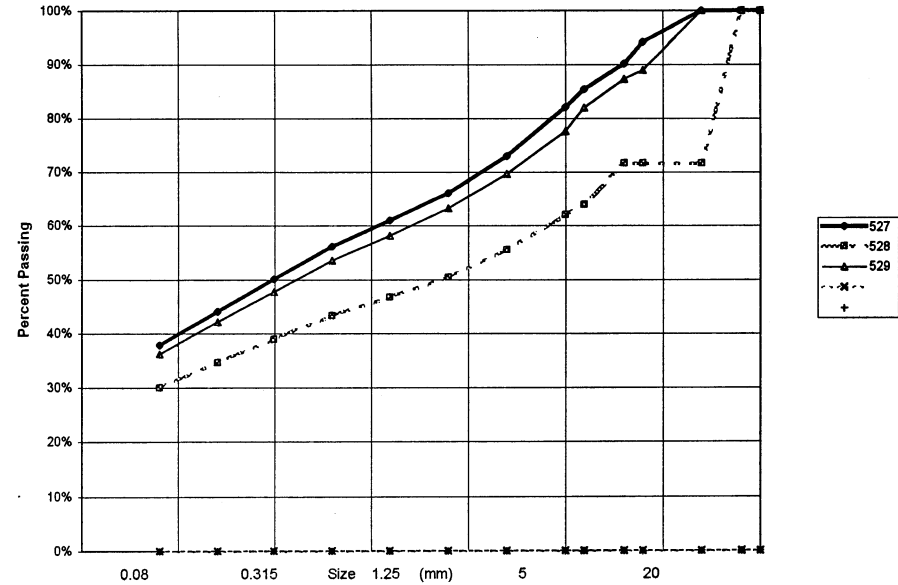
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-640
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1810+075 32M RT
 LOGGED BY: W.E DATE COMP 99-08-05

FIELD NO: 527		FIELD No. 528		FIELD No: 529	
LAB NO: 623		LAB No. 624		LAB No: 625	
DEPTH: 1.4-1.6		DEPTH 2.8-3.0		DEPTH: 4.2-4.4	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	72%	50.0	100%
25.0	94%	25.0	72%	25.0	89%
20.0	90%	20.0	72%	20.0	87%
12.5	85%	12.5	64%	12.5	82%
10.0	82%	10.0	62%	10.0	78%
5.0	73%	5.0	55%	5.0	70%
2.5	66%	2.5	50%	2.5	63%
1.25	61%	1.25	47%	1.25	58%
0.630	56%	0.630	43%	0.630	53%
0.315	50%	0.315	39%	0.315	48%
0.160	44%	0.160	35%	0.160	42%
0.080	38%	0.080	30%	0.080	36%
M.C. (%): 9%		M.C. (%): 10%		M.C. (%): 9%	
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	27	% GRAVEL:	45	% GRAVEL:	30
% SAND:	35	% SAND:	25	% SAND:	34
% FINES:	38	% FINES:	30	% FINES:	36
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

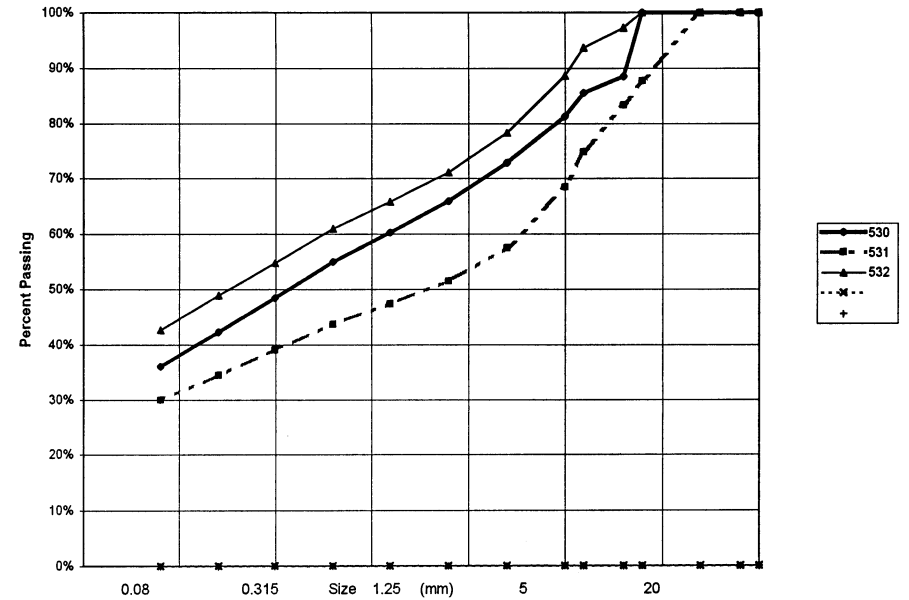
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-641
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1809+990 18M RT
 LOGGED BY: W.E DATE COMP 8/5/99

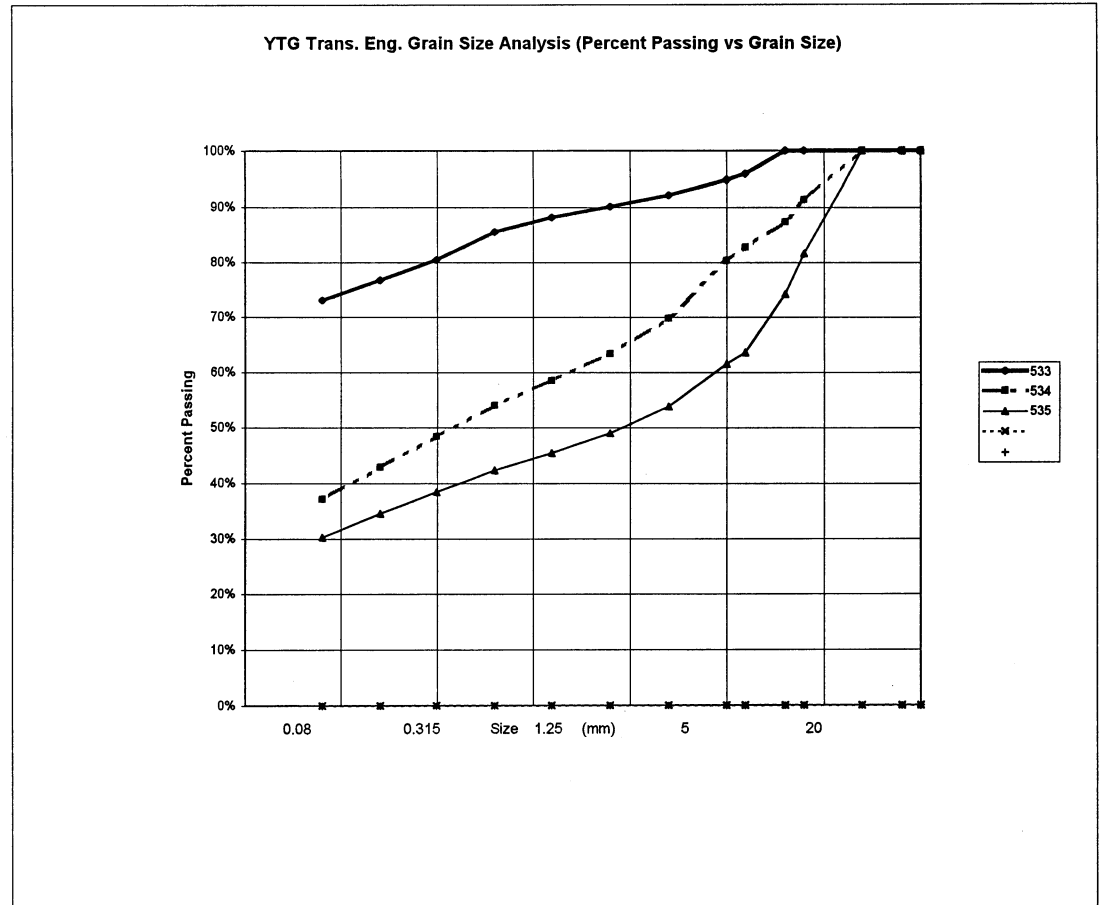
FIELD NO:	530	FIELD No:	531	FIELD No:	532
LAB NO:	626	LAB No:	327	LAB No:	628
DEPTH:	1.4-1.6	DEPTH:	2.9-3.1	DEPTH:	4.2-4.4
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	88%	25.0	100%
20.0	89%	20.0	83%	20.0	97%
12.5	86%	12.5	75%	12.5	94%
10.0	81%	10.0	68%	10.0	89%
5.0	73%	5.0	57%	5.0	78%
2.5	66%	2.5	52%	2.5	71%
1.25	60%	1.25	47%	1.25	66%
0.630	55%	0.630	44%	0.630	61%
0.315	48%	0.315	39%	0.315	55%
0.160	42%	0.160	34%	0.160	49%
0.080	36%	0.080	30%	0.080	43%
M.C.(%):	11%	M.C.(%):	9%	M.C.(%):	9%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	27	% GRAVEL:	43	% GRAVEL:	22
% SAND:	37	% SAND:	28	% SAND:	36
% FINES:	36	% FINES:	30	% FINES:	43
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-642
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1809+990 18M LT
 LOGGED BY: W.E DATE COMP 8/5/99

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:
533	629	0.4-0.6	AUGER	534	630	1.6-1.8	AUGER	535	631	3.0-3.2	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	91%	25.0	82%	25.0	82%	25.0	82%	25.0	82%
20.0	100%	20.0	87%	20.0	74%	20.0	74%	20.0	74%	20.0	74%
12.5	96%	12.5	83%	12.5	64%	12.5	64%	12.5	64%	12.5	64%
10.0	95%	10.0	80%	10.0	62%	10.0	62%	10.0	62%	10.0	62%
5.0	92%	5.0	70%	5.0	54%	5.0	54%	5.0	54%	5.0	54%
2.5	90%	2.5	63%	2.5	49%	2.5	49%	2.5	49%	2.5	49%
1.25	88%	1.25	59%	1.25	45%	1.25	45%	1.25	45%	1.25	45%
0.630	85%	0.630	54%	0.630	42%	0.630	42%	0.630	42%	0.630	42%
0.315	80%	0.315	48%	0.315	38%	0.315	38%	0.315	38%	0.315	38%
0.160	77%	0.160	43%	0.160	34%	0.160	34%	0.160	34%	0.160	34%
0.080	73%	0.080	37%	0.080	30%	0.080	30%	0.080	30%	0.080	30%
M.C.(%):	30%	M.C.(%):	13%	M.C.(%):	9%	M.C.(%):	9%	M.C.(%):	9%	M.C.(%):	9%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	8	% GRAVEL:	30	% GRAVEL:	46	% GRAVEL:	46	% GRAVEL:	46	% GRAVEL:	46
% SAND:	19	% SAND:	33	% SAND:	24	% SAND:	24	% SAND:	24	% SAND:	24
% FINES:	73	% FINES:	37	% FINES:	30	% FINES:	30	% FINES:	30	% FINES:	30
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	



PROJECT NUMBER:	092-202101-0329	HOLE No.:	520-643
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1809+895 28M RT		
LOGGED BY:	W.E	DATE COMP	99-08-05

FIELD NO:	536	FIELD No.	537
LAB NO:	632	LAB No.	633
DEPTH:	1.4-1.6	DEPTH	2.9-3.1
TYPE:	AUGER	TYPE	AUGER

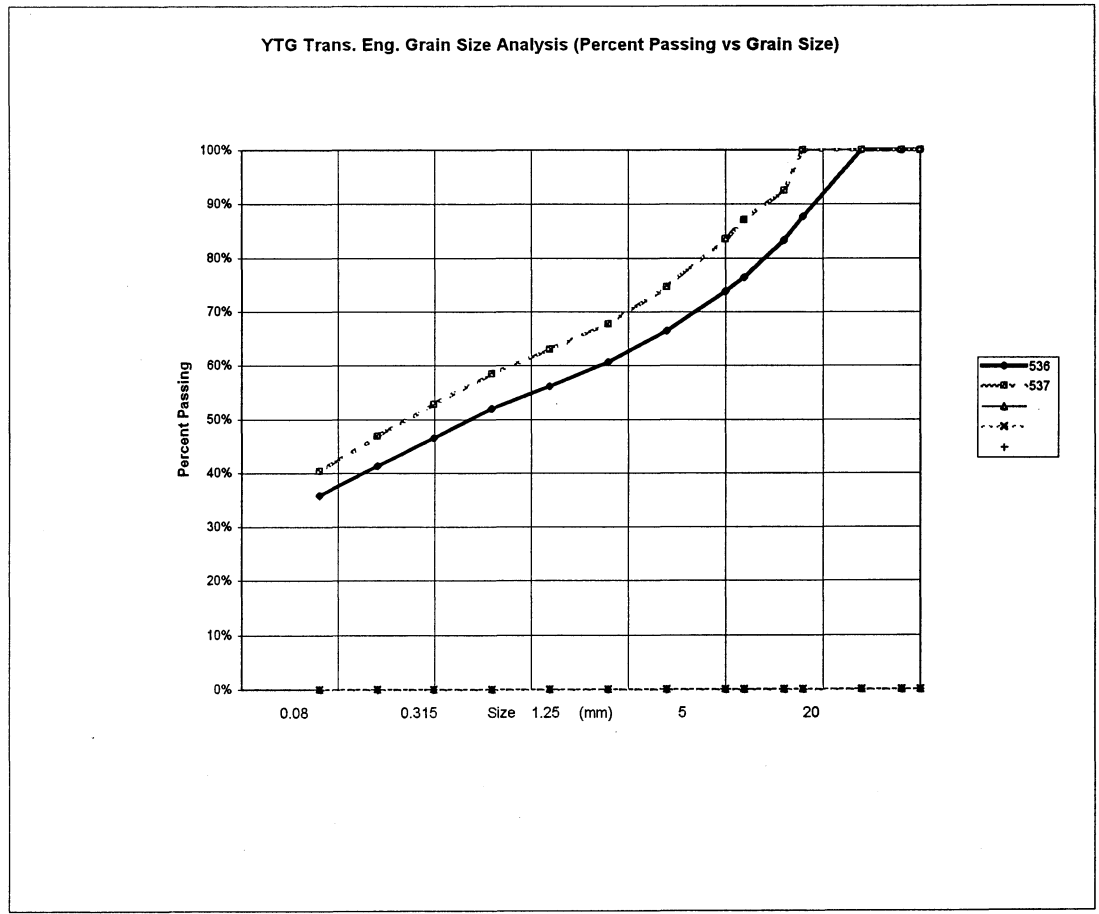
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	88%	25.0	100%
20.0	83%	20.0	93%
12.5	76%	12.5	87%
10.0	74%	10.0	84%
5.0	66%	5.0	75%
2.5	61%	2.5	68%
1.25	56%	1.25	63%
0.630	52%	0.630	59%
0.315	47%	0.315	53%
0.160	41%	0.160	47%
0.080	36%	0.080	40%

M.C.(%):	9%	M.C.(%):	11%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	34	% GRAVEL:	25
% SAND:	31	% SAND:	34
% FINES:	36	% FINES:	40

CLASSIFICATION:	CLASSIFICATION:
SILTY GRAVEL WITH SAND (GM)	SILTY SAND WITH GRAVEL (SM)



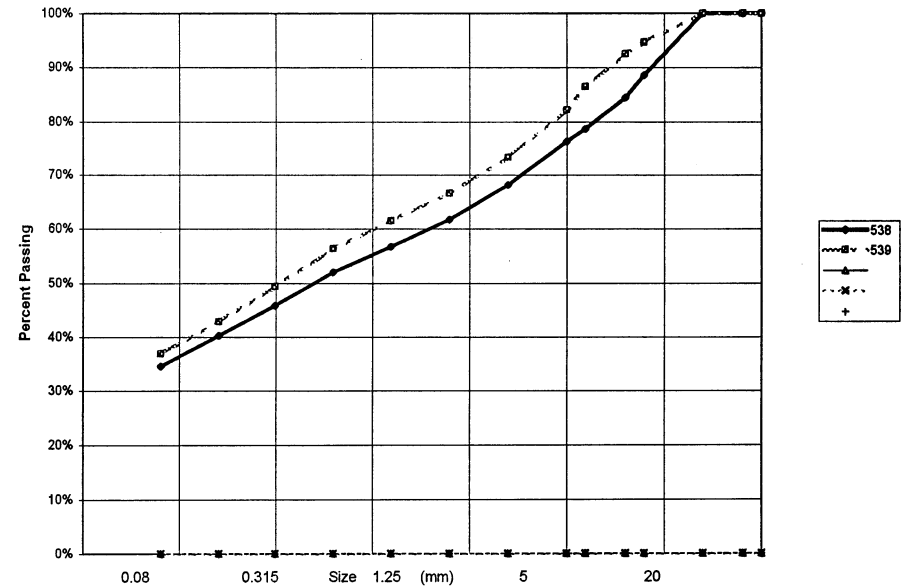
PROJECT NUMBER: 092-202101-0329 HOLE No.: 520-644
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1809+800 40M RT
 LOGGED BY: W.E DATE COMP 99-08-05

FIELD NO:	538	FIELD No.	539
LAB NO:	634	LAB No.	635
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	89%	25.0	95%
20.0	84%	20.0	93%
12.5	79%	12.5	87%
10.0	76%	10.0	82%
5.0	68%	5.0	73%
2.5	62%	2.5	67%
1.25	57%	1.25	61%
0.630	52%	0.630	56%
0.315	46%	0.315	49%
0.160	40%	0.160	43%
0.080	35%	0.080	37%

M.C.(%):	8%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	32	% GRAVEL:	27
% SAND:	34	% SAND:	36
% FINES:	35	% FINES:	37
CLASSIFICATION:	CLASSIFICATION:		
SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)		

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



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	521-646
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1809+675 21M LT		
LOGGED BY:	WE	DATE COMP	99-08-05

FIELD NO:	540	FIELD No.	541
LAB NO:	636	LAB No.	637
DEPTH:	1.8-2.0	DEPTH	4.2-4.4
TYPE:	AUGER	TYPE	AUGER

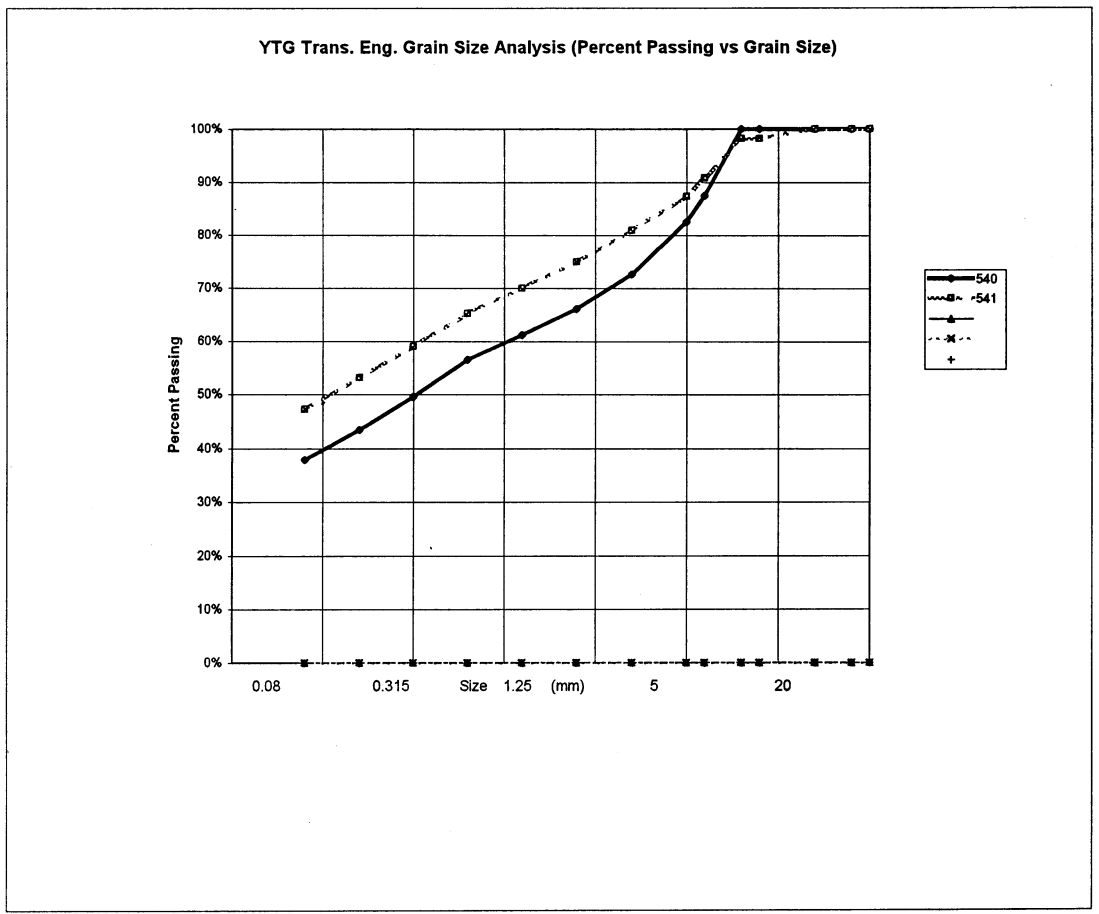
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	98%
20.0	100%	20.0	98%
12.5	87%	12.5	91%
10.0	83%	10.0	87%
5.0	73%	5.0	81%
2.5	66%	2.5	75%
1.25	61%	1.25	70%
0.630	56%	0.630	65%
0.315	50%	0.315	59%
0.160	43%	0.160	53%
0.080	38%	0.080	47%

M.C.(%):	18%	M.C.(%):	20%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	27	% GRAVEL:	19
% SAND:	35	% SAND:	34
% FINES:	38	% FINES:	47

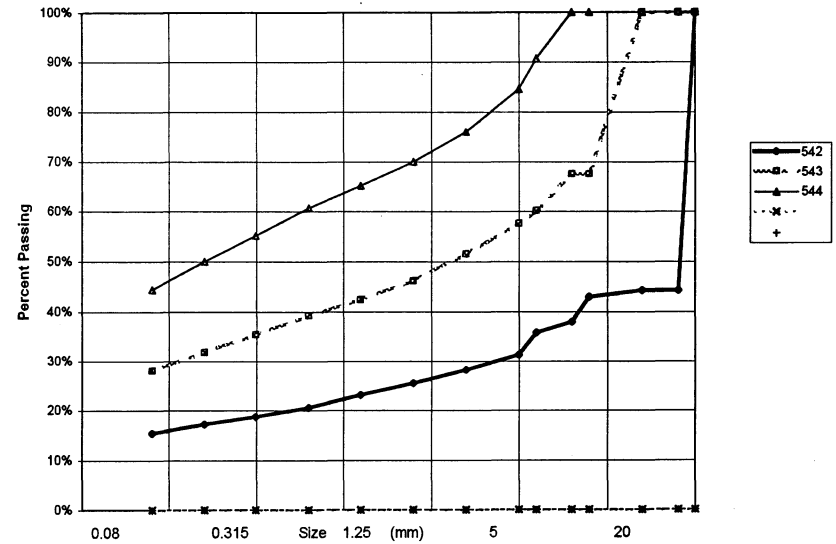
CLASSIFICATION:	CLASSIFICATION:
SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-647
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1809+530 18M RT
 LOGGED BY: WE DATE COMP 99-08-05

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:	FIELD No:	LAB No:	DEPTH:	TYPE:
542	638	1.8-2.0	AUGER	543	639	2.8-3.0	AUGER	544	640	3.8-4.0	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	44%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	44%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	43%	25.0	68%	25.0	100%	25.0	100%	25.0	100%	25.0	100%
20.0	38%	20.0	68%	20.0	100%	20.0	100%	20.0	100%	20.0	100%
12.5	36%	12.5	60%	12.5	91%	12.5	91%	12.5	91%	12.5	91%
10.0	31%	10.0	58%	10.0	84%	10.0	84%	10.0	84%	10.0	84%
5.0	28%	5.0	52%	5.0	76%	5.0	76%	5.0	76%	5.0	76%
2.5	26%	2.5	46%	2.5	70%	2.5	70%	2.5	70%	2.5	70%
1.25	23%	1.25	42%	1.25	65%	1.25	65%	1.25	65%	1.25	65%
0.630	20%	0.630	39%	0.630	61%	0.630	61%	0.630	61%	0.630	61%
0.315	19%	0.315	35%	0.315	55%	0.315	55%	0.315	55%	0.315	55%
0.160	17%	0.160	32%	0.160	50%	0.160	50%	0.160	50%	0.160	50%
0.080	15%	0.080	28%	0.080	44%	0.080	44%	0.080	44%	0.080	44%
M.C.(%):	7%	M.C.(%):	11%	M.C.(%):	17%	M.C.(%):	17%	M.C.(%):	17%	M.C.(%):	17%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	72	% GRAVEL:	48	% GRAVEL:	24	% GRAVEL:	24	% GRAVEL:	24	% GRAVEL:	24
% SAND:	13	% SAND:	23	% SAND:	32	% SAND:	32	% SAND:	32	% SAND:	32
% FINES:	15	% FINES:	28	% FINES:	44	% FINES:	44	% FINES:	44	% FINES:	44
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-648
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1809+520 20M LT
 LOGGED BY: WE DATE COMP 99-08-05

FIELD NO: 545	FIELD No. 546	FIELD No: 547
LAB NO: 641	LAB No. 642	LAB No: 643
DEPTH: 1.4-1.6	DEPTH 2.9-3.1	DEPTH: 3.9-4.1
TYPE: AUGER	TYPE AUGER	TYPE: AUGER

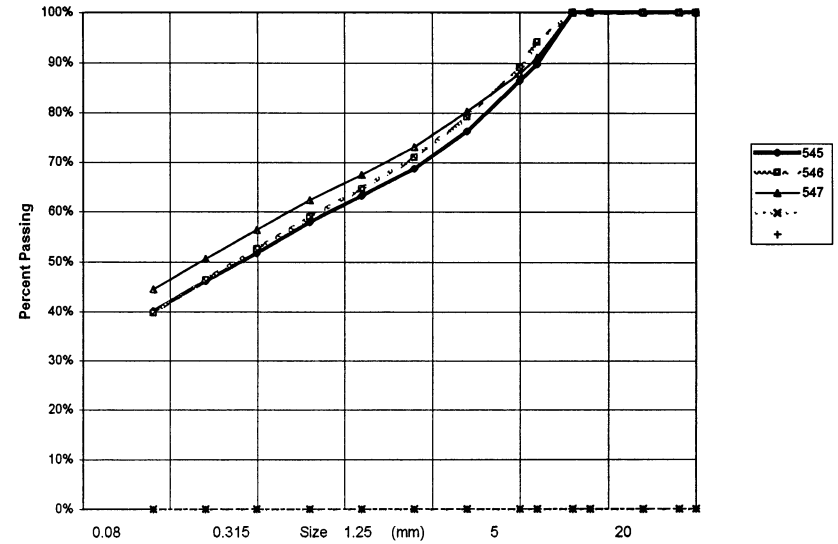
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	100%
20.0	100%	20.0	100%	20.0	100%
12.5	90%	12.5	94%	12.5	91%
10.0	86%	10.0	89%	10.0	88%
5.0	76%	5.0	79%	5.0	80%
2.5	69%	2.5	71%	2.5	73%
1.25	63%	1.25	65%	1.25	67%
0.630	58%	0.630	59%	0.630	62%
0.315	52%	0.315	53%	0.315	56%
0.160	46%	0.160	46%	0.160	51%
0.080	40%	0.080	40%	0.080	44%

M.C.(%): 16%	M.C.(%): 11%	M.C.(%): 14%
LIMITS	LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0	P.I.: 0.0

% GRAVEL: 24	% GRAVEL: 21	% GRAVEL: 20
% SAND: 36	% SAND: 39	% SAND: 36
% FINES: 40	% FINES: 40	% FINES: 44

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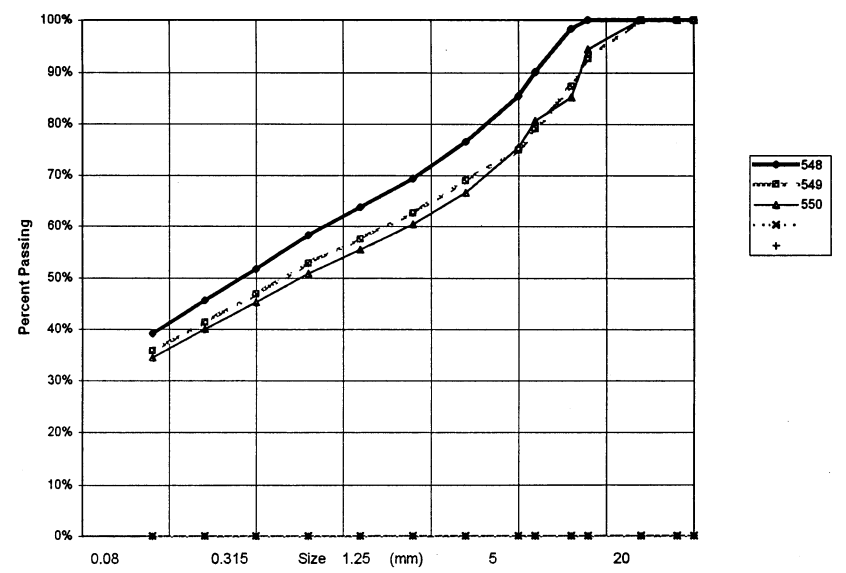
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-649
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1809+410 40 M RT
 LOGGED BY: WE DATE COMP 99-08-06

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH:	TYPE:
548	644	1.3-1.5	AUGER	549	645	2.9-3.1	AUGER	550	646	4.2-4.4	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	93%	25.0	94%	25.0	94%	25.0	94%	25.0	94%
20.0	98%	20.0	87%	20.0	85%	20.0	85%	20.0	85%	20.0	85%
12.5	90%	12.5	79%	12.5	81%	12.5	81%	12.5	81%	12.5	81%
10.0	86%	10.0	75%	10.0	75%	10.0	75%	10.0	75%	10.0	75%
5.0	77%	5.0	69%	5.0	67%	5.0	67%	5.0	67%	5.0	67%
2.5	69%	2.5	63%	2.5	60%	2.5	60%	2.5	60%	2.5	60%
1.25	64%	1.25	58%	1.25	55%	1.25	55%	1.25	55%	1.25	55%
0.630	58%	0.630	53%	0.630	51%	0.630	51%	0.630	51%	0.630	51%
0.315	52%	0.315	47%	0.315	45%	0.315	45%	0.315	45%	0.315	45%
0.160	46%	0.160	41%	0.160	40%	0.160	40%	0.160	40%	0.160	40%
0.080	39%	0.080	36%	0.080	34%	0.080	34%	0.080	34%	0.080	34%
M.C.(%):	8%	M.C.(%):	9%	M.C.(%):	8%	M.C.(%):	8%	M.C.(%):	8%	M.C.(%):	8%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	23	% GRAVEL:	31	% GRAVEL:	33	% GRAVEL:	33	% GRAVEL:	33	% GRAVEL:	33
% SAND:	37	% SAND:	33	% SAND:	33	% SAND:	32	% SAND:	32	% SAND:	32
% FINES:	39	% FINES:	36	% FINES:	36	% FINES:	34	% FINES:	34	% FINES:	34
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-650
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK-SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1809+255 21M RT
 LOGGED BY: WE DATE COMP 99-08-06

FIELD NO: 551
 LAB NO: 647
 DEPTH: 2.6-2.8
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	100%
10.0	99%
5.0	95%
2.5	91%
1.25	86%
0.630	75%
0.315	47%
0.160	26%
0.080	18%

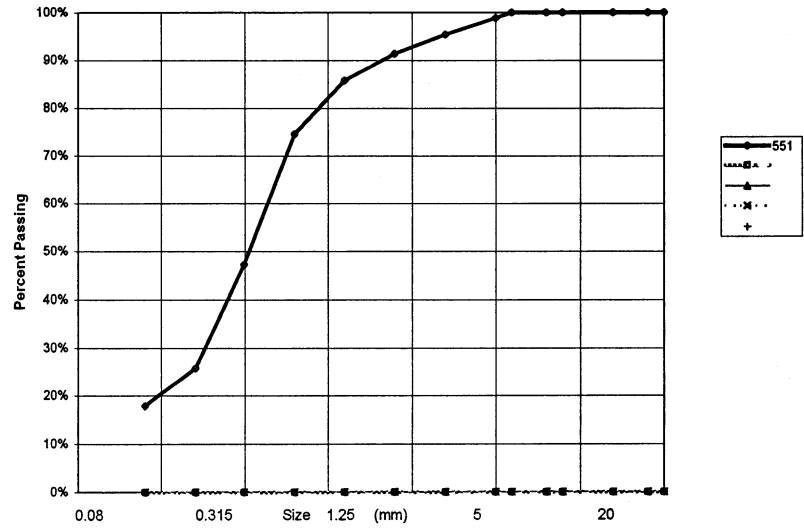
M.C.(%): 26%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 5
 % SAND: 77
 % FINES: 18

CLASSIFICATION:
 SILTY SAND (SM)

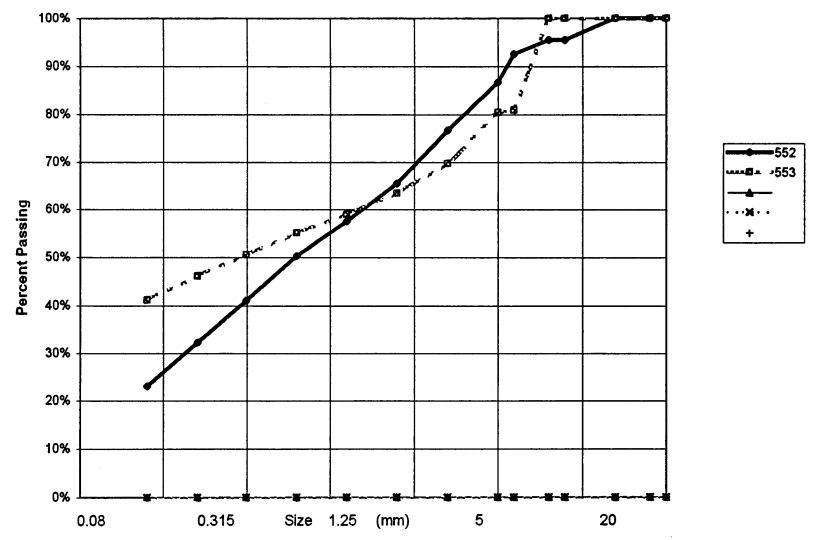
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-651
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1809+250 20M RT
 LOGGED BY: WE DATE COMP 99-08-06

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	96%	25.0	100%
20.0	96%	20.0	100%
12.5	92%	12.5	81%
10.0	87%	10.0	80%
5.0	77%	5.0	70%
2.5	65%	2.5	63%
1.25	58%	1.25	59%
0.630	50%	0.630	55%
0.315	41%	0.315	50%
0.160	32%	0.160	46%
0.080	23%	0.080	41%
M.C.(%):	12%	M.C.(%):	18%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	23	% GRAVEL:	30
% SAND:	54	% SAND:	29
% FINES:	23	% FINES:	41
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

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



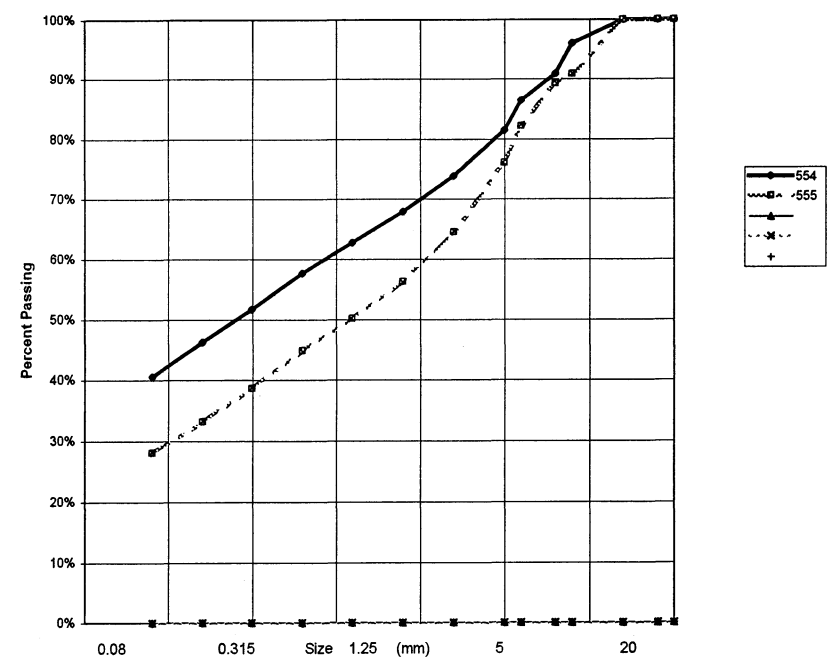
PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	521-652
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1809+150 35M RT		
LOGGED BY:	WE	DATE COMP	99-08-06

FIELD NO:	554	FIELD No.	555
LAB NO:	650	LAB No.	651
DEPTH:	1.2-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	96%	25.0	91%
20.0	91%	20.0	89%
12.5	86%	12.5	82%
10.0	81%	10.0	76%
5.0	74%	5.0	65%
2.5	68%	2.5	56%
1.25	63%	1.25	50%
0.630	58%	0.630	45%
0.315	52%	0.315	39%
0.160	46%	0.160	33%
0.080	41%	0.080	28%

M.C.(%):	13%	M.C.(%):	9%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	26	% GRAVEL:	35
% SAND:	33	% SAND:	36
% FINES:	41	% FINES:	28
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-653
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1809+025 21M RT
 LOGGED BY: WE DATE COMP 99-08-06

FIELD NO: 556
 LAB NO: 652
 DEPTH: 1.6-1.8
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	95%
20.0	89%
12.5	86%
10.0	82%
5.0	74%
2.5	65%
1.25	60%
0.630	55%
0.315	49%
0.160	43%
0.080	36%

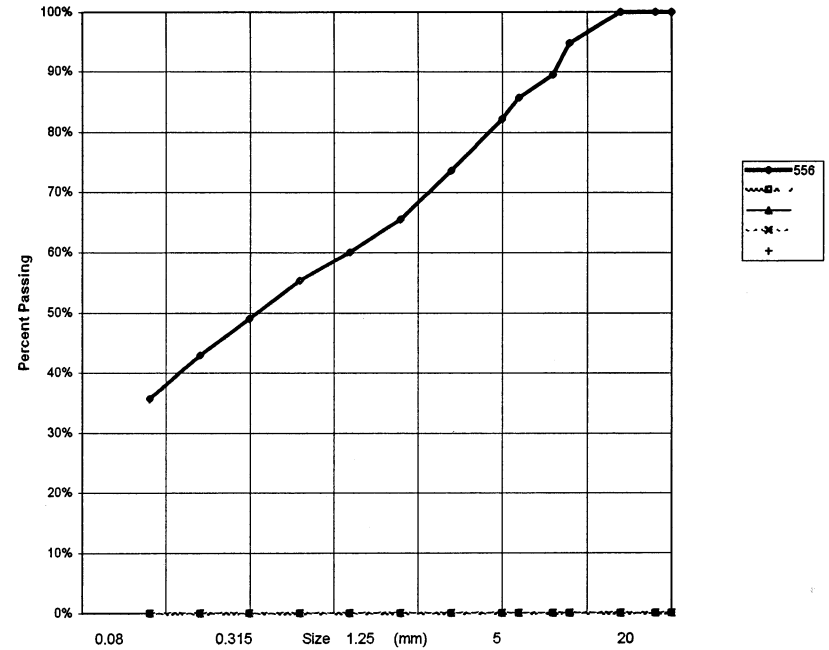
M.C.(%): 17%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 26
 % SAND: 38
 % FINES: 36

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-654
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1809+025 25M RT
 LOGGED BY: WE DATE COMP 99-08-06

FIELD NO: 557
 LAB NO: 653
 DEPTH: 2.8-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	92%
20.0	89%
12.5	77%
10.0	73%
5.0	65%
2.5	58%
1.25	53%
0.630	48%
0.315	43%
0.160	38%
0.080	33%

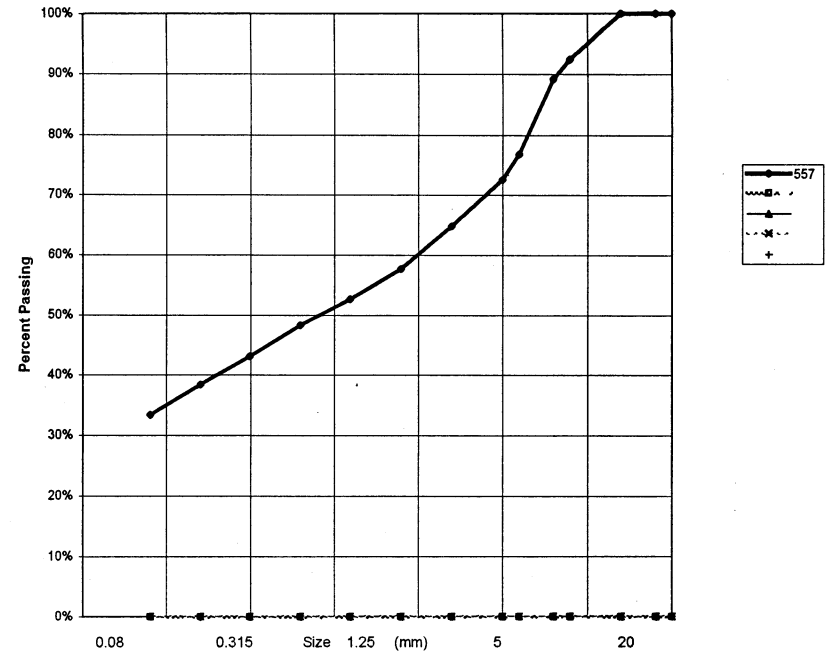
M.C.(%): 11%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 35
 % SAND: 31
 % FINES: 33

CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM)

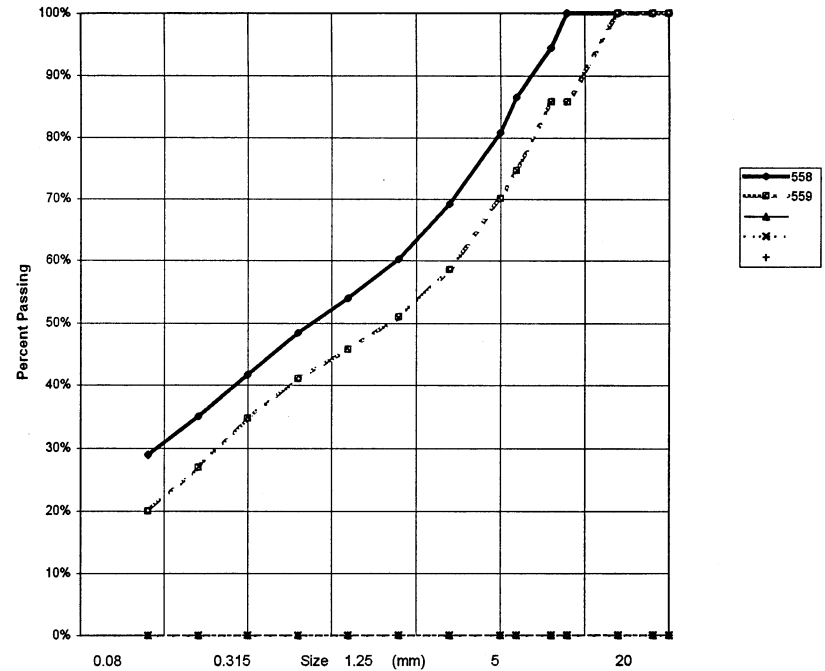
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-655
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1808+950 40M RT
 LOGGED BY: WE DATE COMP 99-08-06

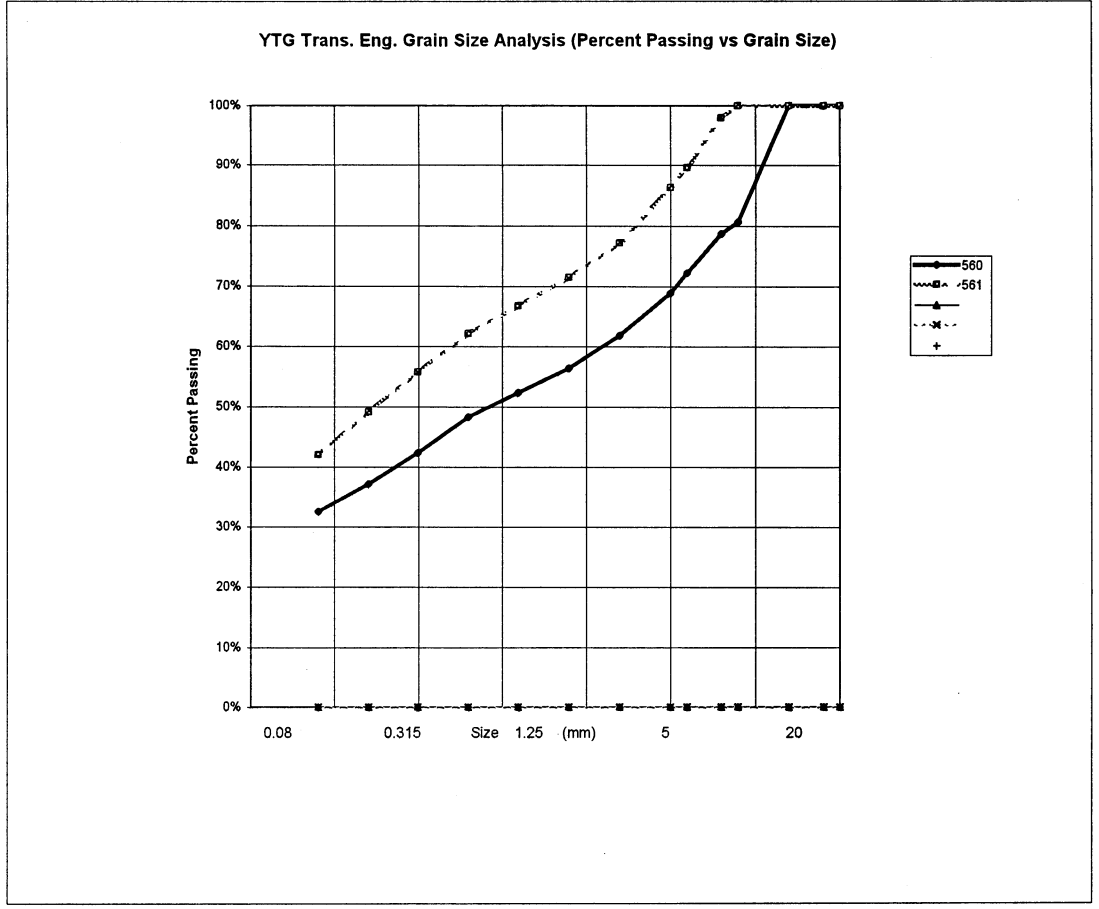
FIELD NO: 558		FIELD No. 559	
LAB NO: 654		LAB No. 655	
DEPTH: 1.6-1.8		DEPTH 2.8-3.0	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	86%
20.0	94%	20.0	86%
12.5	87%	12.5	75%
10.0	81%	10.0	70%
5.0	69%	5.0	59%
2.5	60%	2.5	51%
1.25	54%	1.25	46%
0.630	48%	0.630	41%
0.315	42%	0.315	35%
0.160	35%	0.160	27%
0.080	29%	0.080	20%
M.C.(%): 11%		M.C.(%): 10%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	31	% GRAVEL:	41
% SAND:	40	% SAND:	39
% FINES:	29	% FINES:	20
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-656
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1808+865 22M RT
 LOGGED BY: WE DATE COMP 99-08-06

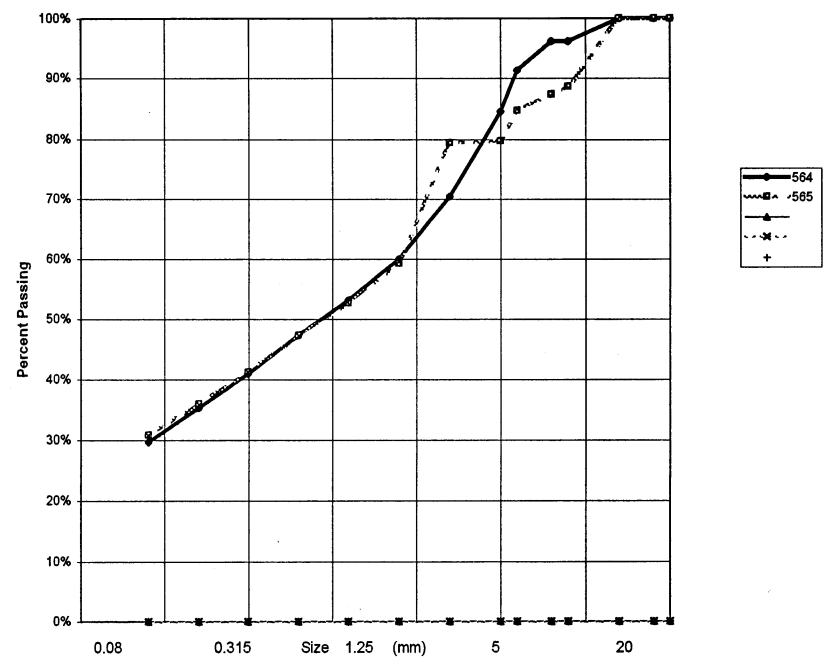
FIELD NO: 560		FIELD No. 561	
LAB NO: 656		LAB No. 657	
DEPTH: 1.6-1.8		DEPTH 2.6-2.8	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	81%	25.0	100%
20.0	79%	20.0	98%
12.5	72%	12.5	90%
10.0	69%	10.0	86%
5.0	62%	5.0	77%
2.5	56%	2.5	71%
1.25	52%	1.25	67%
0.630	48%	0.630	62%
0.315	42%	0.315	56%
0.160	37%	0.160	49%
0.080	33%	0.080	42%
M.C.(%): 12%		M.C.(%): 17%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	38	% GRAVEL:	23
% SAND:	29	% SAND:	35
% FINES:	33	% FINES:	42
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 521-658
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1808+750 37M RT
 LOGGED BY: WE DATE COMP 99-08-06

FIELD NO:	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
564	100%	100.0	100%
660	100%	80.0	100%
2.8-3.0	100%	50.0	100%
AUGER		25.0	89%
		20.0	87%
		12.5	85%
		10.0	80%
		5.0	79%
		2.5	59%
		1.25	53%
		0.630	47%
		0.315	41%
		0.160	36%
		0.080	31%
M.C.(%):	11%	M.C.(%):	14%
LIMITS			
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	30	% GRAVEL:	21
% SAND:	41	% SAND:	49
% FINES:	30	% FINES:	31
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

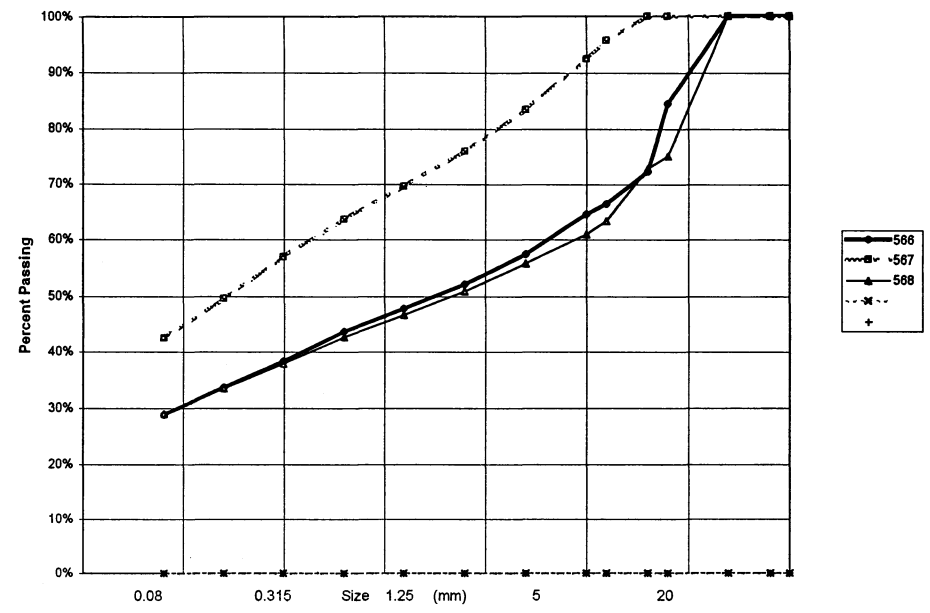
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-659
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+650 30M RT
 LOGGED BY: G.C. DATE COMP 99-08-10

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH	TYPE	FIELD No:	LAB No:	DEPTH:	TYPE:
566	662	1.1-1.5	AUGER	567	662	2.6-3.0	AUGER	568	664	4.2-4.6	BULK
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%	50.0	100%
25.0	84%	25.0	100%	25.0	100%	25.0	75%	25.0	75%	25.0	75%
20.0	72%	20.0	100%	20.0	100%	20.0	73%	20.0	73%	20.0	73%
12.5	66%	12.5	96%	12.5	63%	12.5	63%	12.5	63%	12.5	63%
10.0	65%	10.0	92%	10.0	61%	10.0	61%	10.0	61%	10.0	61%
5.0	57%	5.0	83%	5.0	56%	5.0	56%	5.0	56%	5.0	56%
2.5	52%	2.5	76%	2.5	51%	2.5	51%	2.5	51%	2.5	51%
1.25	48%	1.25	70%	1.25	47%	1.25	47%	1.25	47%	1.25	47%
0.630	44%	0.630	64%	0.630	43%	0.630	43%	0.630	43%	0.630	43%
0.315	38%	0.315	57%	0.315	38%	0.315	38%	0.315	38%	0.315	38%
0.160	34%	0.160	50%	0.160	33%	0.160	33%	0.160	33%	0.160	33%
0.080	29%	0.080	43%	0.080	29%	0.080	29%	0.080	29%	0.080	29%
M.C.(%):	7%	M.C.(%):	10%	M.C.(%):	6%	M.C.(%):	6%	M.C.(%):	6%	M.C.(%):	6%
LIMITS		LIMITS		LIMITS		LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	43	% GRAVEL:	17	% GRAVEL:	44	% GRAVEL:	44	% GRAVEL:	44	% GRAVEL:	44
% SAND:	29	% SAND:	41	% SAND:	27	% SAND:	27	% SAND:	27	% SAND:	27
% FINES:	29	% FINES:	43	% FINES:	29	% FINES:	29	% FINES:	29	% FINES:	29
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

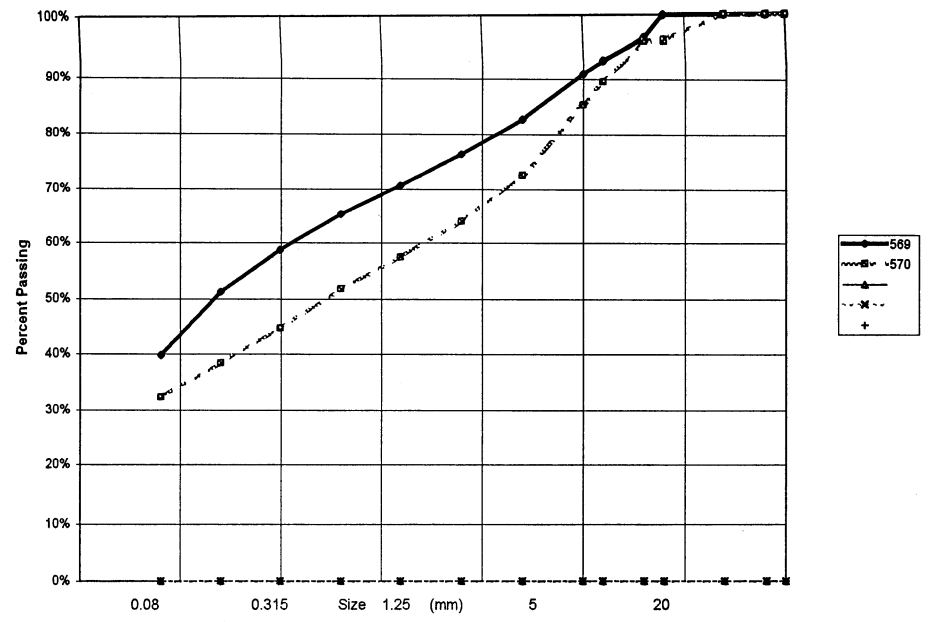
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-660
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+575 20M RT
 LOGGED BY: G.C. DATE COMP 1999-08-10

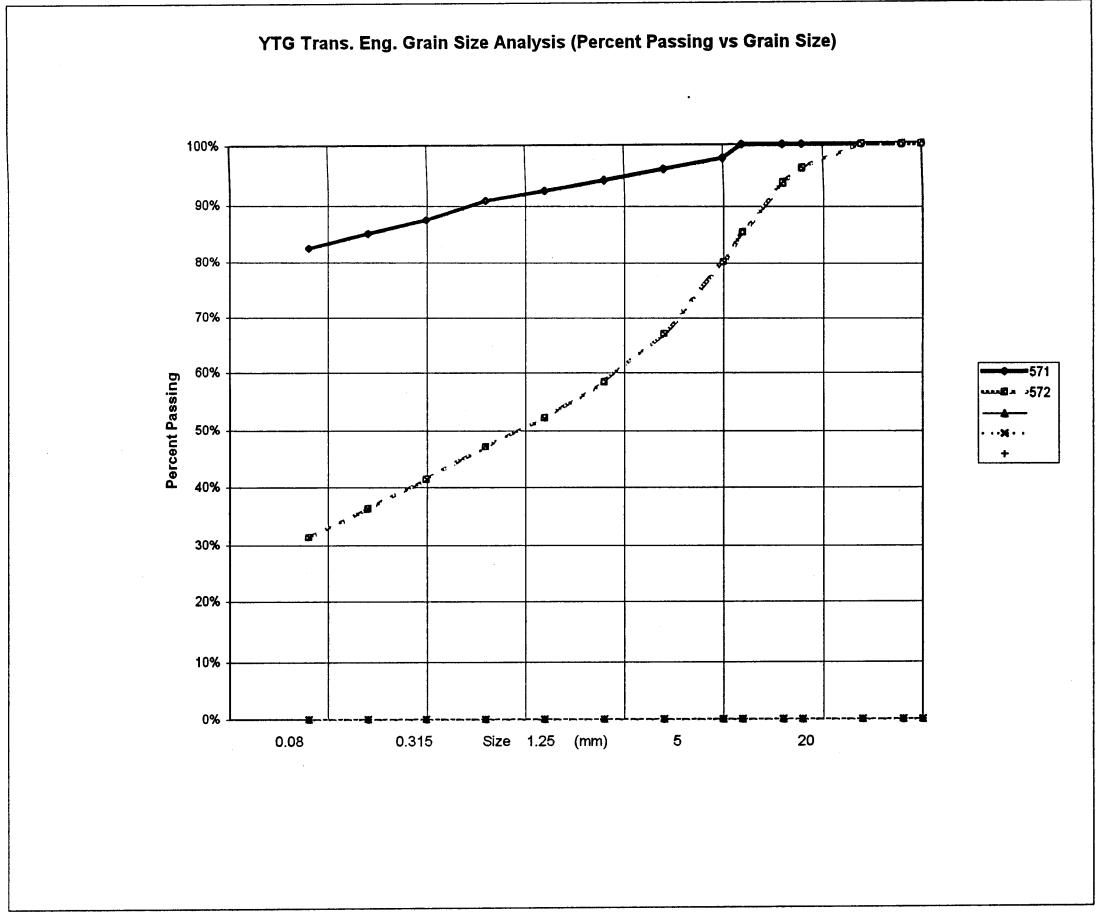
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	96%
20.0	97%	20.0	96%
12.5	93%	12.5	89%
10.0	91%	10.0	85%
5.0	83%	5.0	73%
2.5	76%	2.5	64%
1.25	71%	1.25	57%
0.630	65%	0.630	52%
0.315	59%	0.315	45%
0.160	51%	0.160	38%
0.080	40%	0.080	32%
M.C.(%): 12%		M.C.(%): 16%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	17	% GRAVEL:	27
% SAND:	43	% SAND:	40
% FINES:	40	% FINES:	32
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-661
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+575 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-11

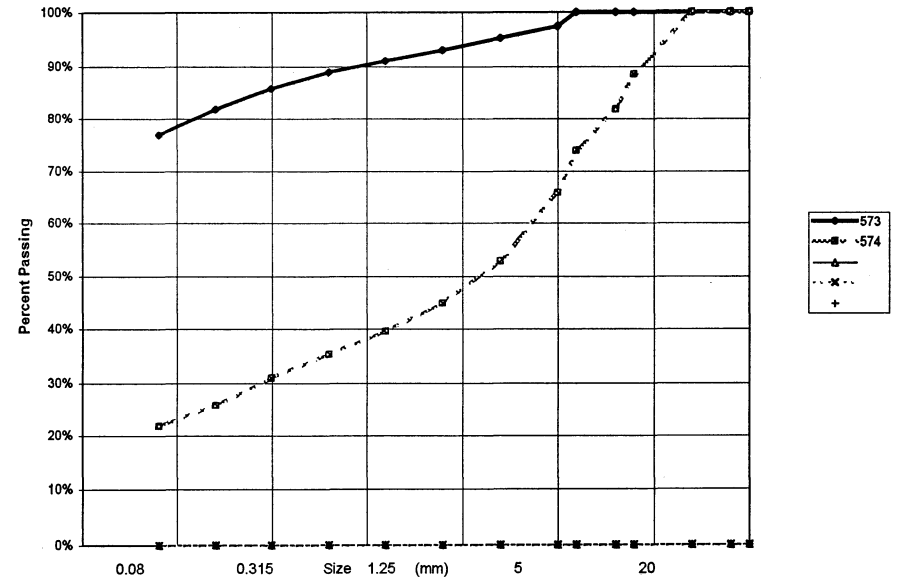
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	96%
20.0	100%	20.0	94%
12.5	100%	12.5	85%
10.0	98%	10.0	80%
5.0	96%	5.0	67%
2.5	94%	2.5	58%
1.25	93%	1.25	52%
0.630	91%	0.630	47%
0.315	88%	0.315	41%
0.160	85%	0.160	36%
0.080	82%	0.080	31%
M.C.(%): 77%		M.C.(%): 14%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	4	% GRAVEL:	33
% SAND:	13	% SAND:	36
% FINES:	82	% FINES:	31
CLASSIFICATION:	SILT WITH SAND (ML)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-662
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+510 15M RT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	89%
20.0	100%	20.0	82%
12.5	100%	12.5	74%
10.0	97%	10.0	66%
5.0	95%	5.0	53%
2.5	93%	2.5	45%
1.25	91%	1.25	40%
0.630	89%	0.630	35%
0.315	86%	0.315	31%
0.160	82%	0.160	26%
0.080	77%	0.080	22%
M.C.(%): 32%		M.C.(%): 10%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	5	% GRAVEL:	47
% SAND:	18	% SAND:	31
% FINES:	77	% FINES:	22
CLASSIFICATION: SILT WITH SAND (ML)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-663
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+510 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-10

FIELD NO: 575
 LAB NO: 671
 DEPTH: 1.4-1.6
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	93%
12.5	89%
10.0	86%
5.0	80%
2.5	75%
1.25	70%
0.630	65%
0.315	58%
0.160	52%
0.080	48%

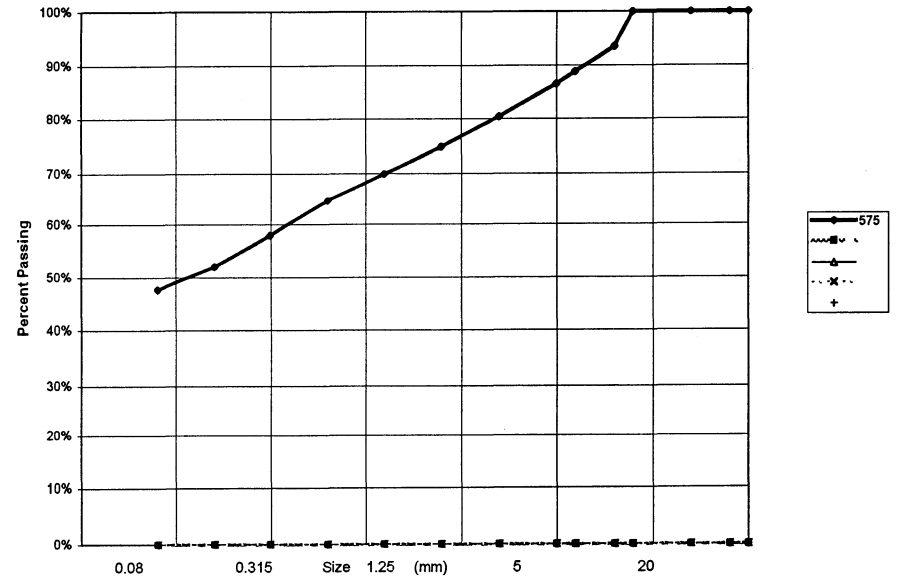
M.C.(%): 21%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 20
 % SAND: 33
 % FINES: 48

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

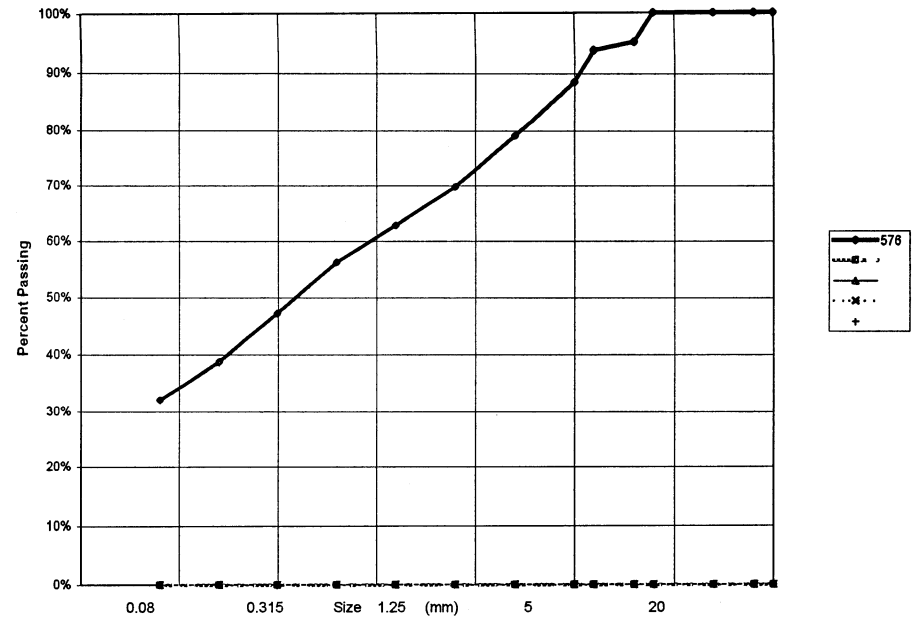
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-664
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+450 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-10

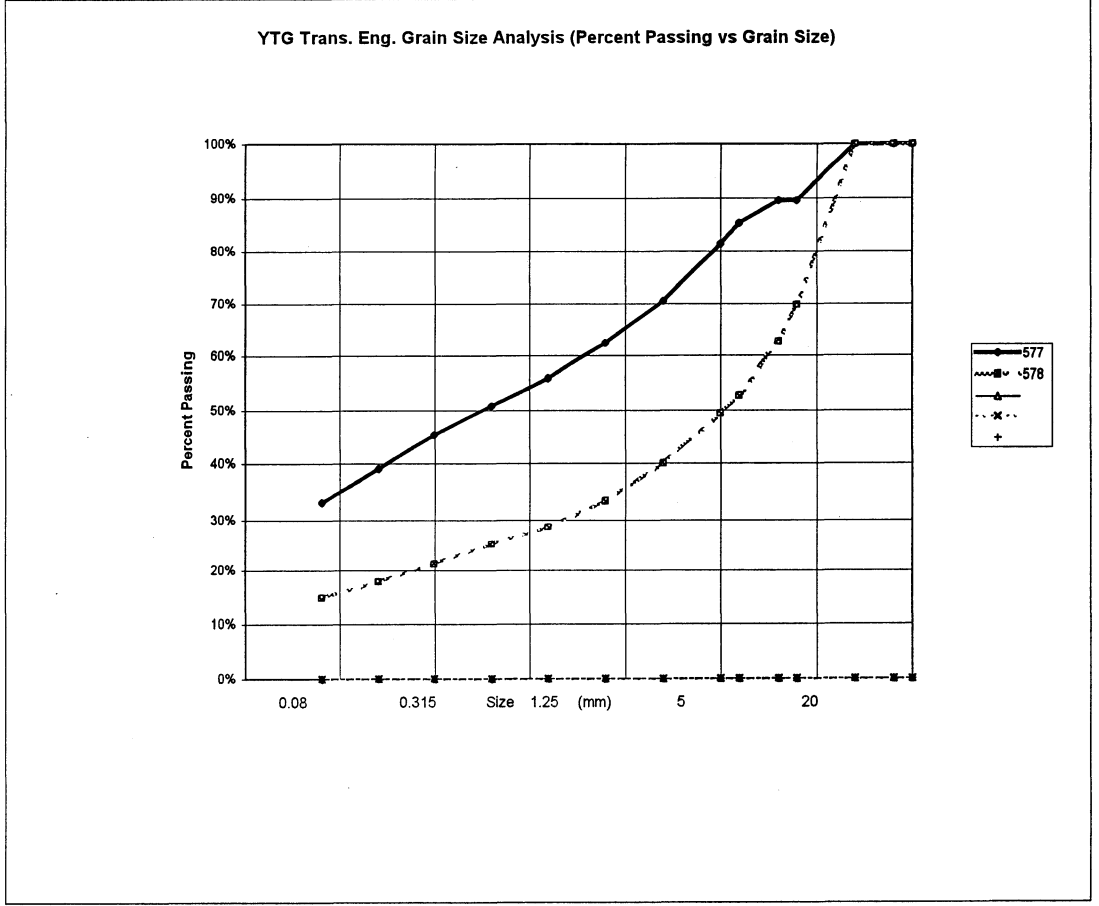
FIELD NO: 576			
LAB NO: 672			
DEPTH: 2.2-2.5			
TYPE: AUGER			
SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	100%		
20.0	95%		
12.5	94%		
10.0	89%		
5.0	79%		
2.5	70%		
1.25	63%		
0.630	56%		
0.315	47%		
0.160	39%		
0.080	32%		
M.C.(%):	10%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL:	21		
% SAND:	47		
% FINES:	32		
CLASSIFICATION:			
SILTY SAND WITH GRAVEL (SM)			

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-665
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+350 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-10

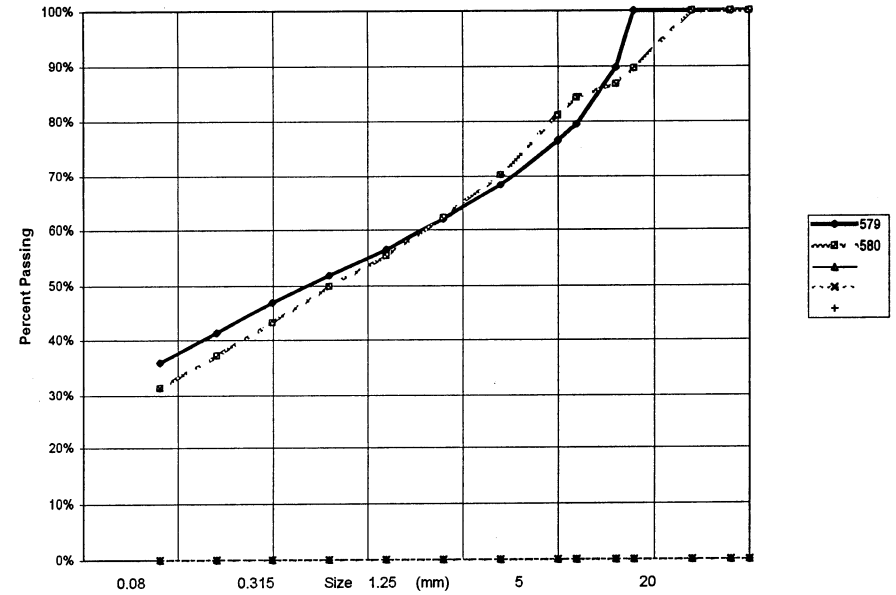
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	89%	25.0	70%
20.0	89%	20.0	63%
12.5	85%	12.5	53%
10.0	81%	10.0	49%
5.0	71%	5.0	40%
2.5	62%	2.5	33%
1.25	56%	1.25	29%
0.630	51%	0.630	25%
0.315	45%	0.315	21%
0.160	39%	0.160	18%
0.080	33%	0.080	15%
M.C.(%):	14%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	29	% GRAVEL:	60
% SAND:	37	% SAND:	25
% FINES:	33	% FINES:	15
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-666
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-122 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+250 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-10

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	90%
20.0	90%	20.0	87%
12.5	79%	12.5	84%
10.0	76%	10.0	81%
5.0	68%	5.0	70%
2.5	62%	2.5	62%
1.25	57%	1.25	55%
0.630	52%	0.630	50%
0.315	47%	0.315	43%
0.160	41%	0.160	37%
0.080	36%	0.080	31%
M.C.(%): 11%		M.C.(%): 10%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	32	% GRAVEL:	30
% SAND:	32	% SAND:	39
% FINES:	36	% FINES:	31
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

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



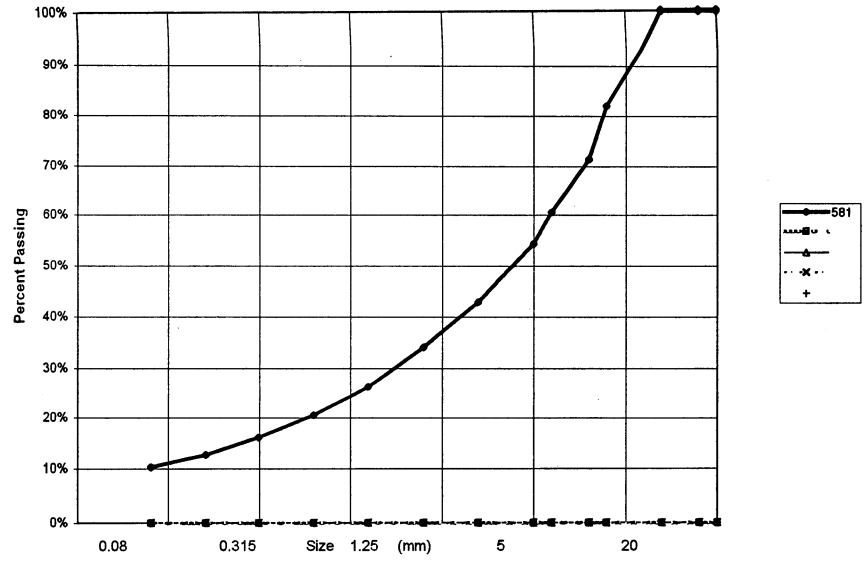
PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-667
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+200 15M RT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	82%
20.0	71%
12.5	61%
10.0	54%
5.0	43%
2.5	34%
1.25	26%
0.630	21%
0.315	16%
0.160	13%
0.080	10%

M.C.(%)	6%
LIMITS	
LIQUID:	0.0
PLASTIC:	0.0
P.I.:	0.0
% GRAVEL:	57
% SAND:	33
% FINES:	10

CLASSIFICATION:
 POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)

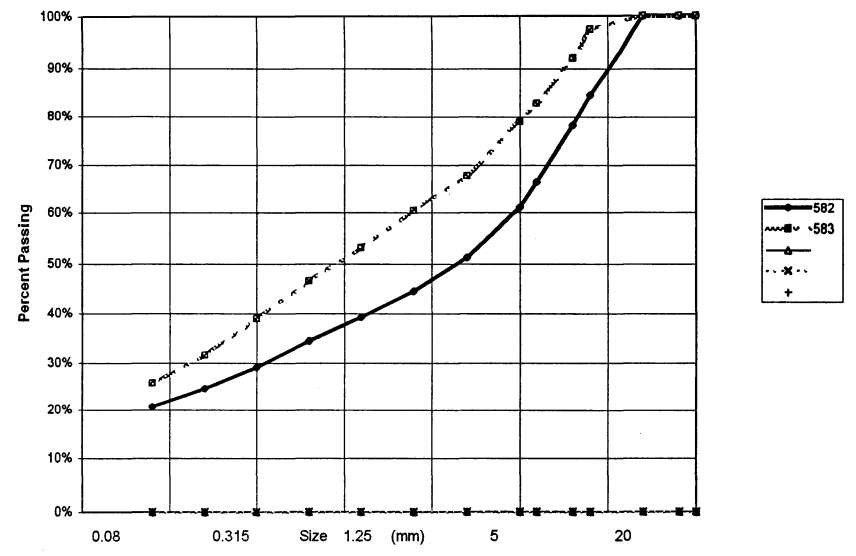
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-668
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+200 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	85%	25.0	97%
20.0	78%	20.0	92%
12.5	66%	12.5	83%
10.0	61%	10.0	79%
5.0	51%	5.0	68%
2.5	44%	2.5	60%
1.25	39%	1.25	53%
0.630	34%	0.630	47%
0.315	29%	0.315	39%
0.160	25%	0.160	32%
0.080	21%	0.080	26%
M.C.(%): 10%		M.C.(%): 9%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	49	% GRAVEL:	32
% SAND:	31	% SAND:	42
% FINES:	21	% FINES:	26
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

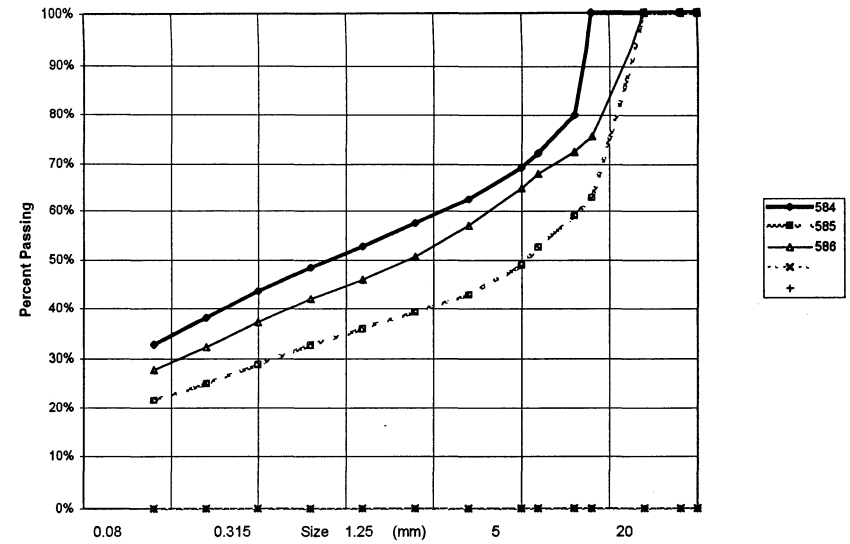
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-669
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+130 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-11

FIELD NO:	584	FIELD No:	585	FIELD No:	586
LAB NO:	680	LAB No:	681	LAB No:	682
DEPTH:	1.2-1.4	DEPTH:	2.8-3.0	DEPTH:	3.8-4.0
TYPE:	AUGER	TYPE:	AUGER	TYPE:	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	63%	25.0	76%
20.0	80%	20.0	59%	20.0	72%
12.5	72%	12.5	53%	12.5	68%
10.0	69%	10.0	49%	10.0	65%
5.0	62%	5.0	43%	5.0	57%
2.5	57%	2.5	39%	2.5	51%
1.25	53%	1.25	36%	1.25	46%
0.630	48%	0.630	33%	0.630	42%
0.315	44%	0.315	29%	0.315	37%
0.160	38%	0.160	25%	0.160	32%
0.080	33%	0.080	22%	0.080	28%
M.C.(%):	6%	M.C.(%):	5%	M.C.(%):	7%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	38	% GRAVEL:	57	% GRAVEL:	43
% SAND:	30	% SAND:	21	% SAND:	29
% FINES:	33	% FINES:	22	% FINES:	28
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

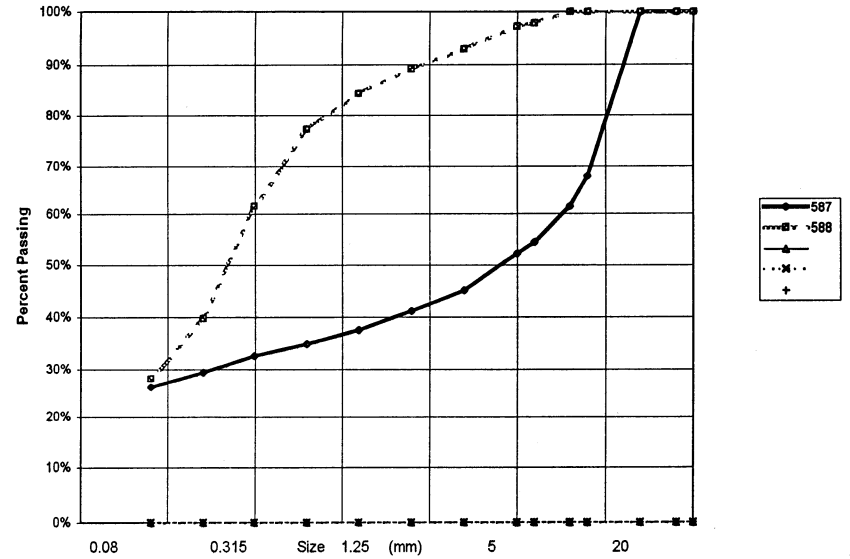
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-670
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+035 20M RT
 LOGGED BY: G.C. DATE COMP 1999-08-11

FIELD NO: 587		FIELD No. 588	
LAB NO: 683		LAB No. 684	
DEPTH: 1.3-1.5		DEPTH 2.8-3.0	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	68%	25.0	100%
20.0	61%	20.0	100%
12.5	55%	12.5	98%
10.0	52%	10.0	97%
5.0	45%	5.0	93%
2.5	41%	2.5	89%
1.25	38%	1.25	84%
0.630	35%	0.630	77%
0.315	33%	0.315	62%
0.160	29%	0.160	40%
0.080	26%	0.080	28%
M.C.(%):	16%	M.C.(%):	15%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	55	% GRAVEL:	7
% SAND:	19	% SAND:	65
% FINES:	26	% FINES:	28
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-671
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1789-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1808+035 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-11

FIELD NO: 589 FIELD No. 590
 LAB NO: 685 LAB No. 686
 DEPTH: 1.4-1.6 DEPTH 2.8-3.0
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	93%	20.0	100%
12.5	88%	12.5	96%
10.0	85%	10.0	87%
5.0	78%	5.0	84%
2.5	69%	2.5	66%
1.25	63%	1.25	60%
0.630	57%	0.630	54%
0.315	52%	0.315	47%
0.160	45%	0.160	38%
0.080	39%	0.080	34%

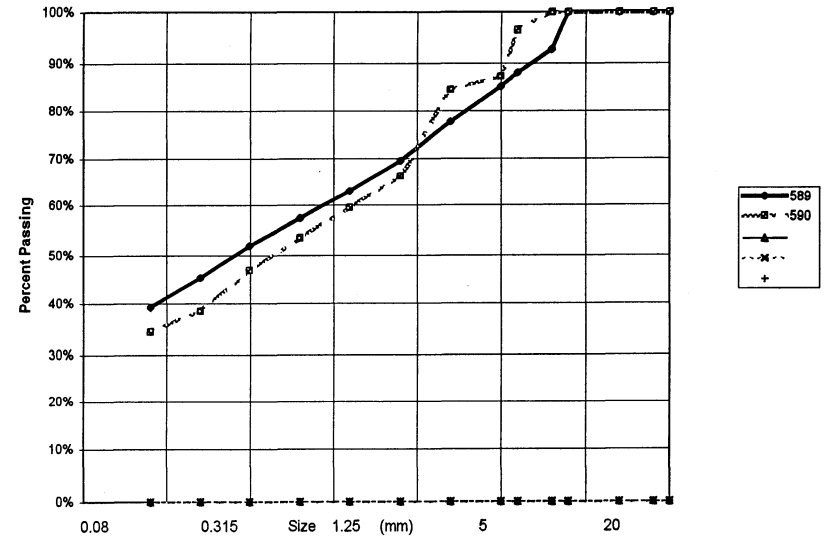
M.C.(%): 18% M.C.(%): 7%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 22 % GRAVEL: 16
 % SAND: 38 % SAND: 50
 % FINES: 39 % FINES: 34

CLASSIFICATION: CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM) SILTY SAND WITH GRAVEL (SM)

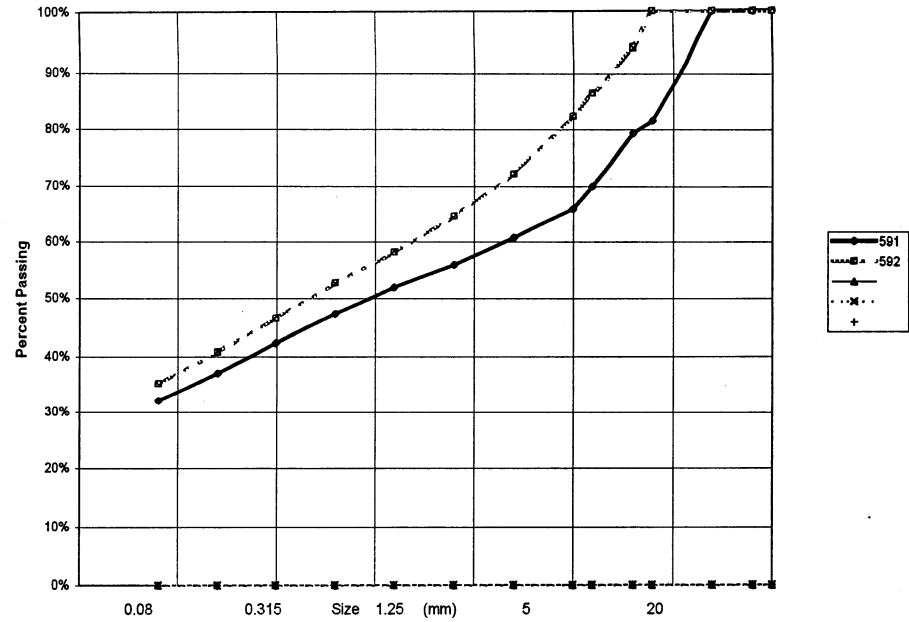
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-672
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+950 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	82%	25.0	100%
20.0	79%	20.0	94%
12.5	70%	12.5	86%
10.0	66%	10.0	82%
5.0	61%	5.0	72%
2.5	56%	2.5	65%
1.25	52%	1.25	58%
0.630	47%	0.630	53%
0.315	42%	0.315	46%
0.160	37%	0.160	41%
0.080	32%	0.080	35%
M.C.(%):	12%	M.C.(%):	12%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	39	% GRAVEL:	28
% SAND:	29	% SAND:	37
% FINES:	32	% FINES:	35
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

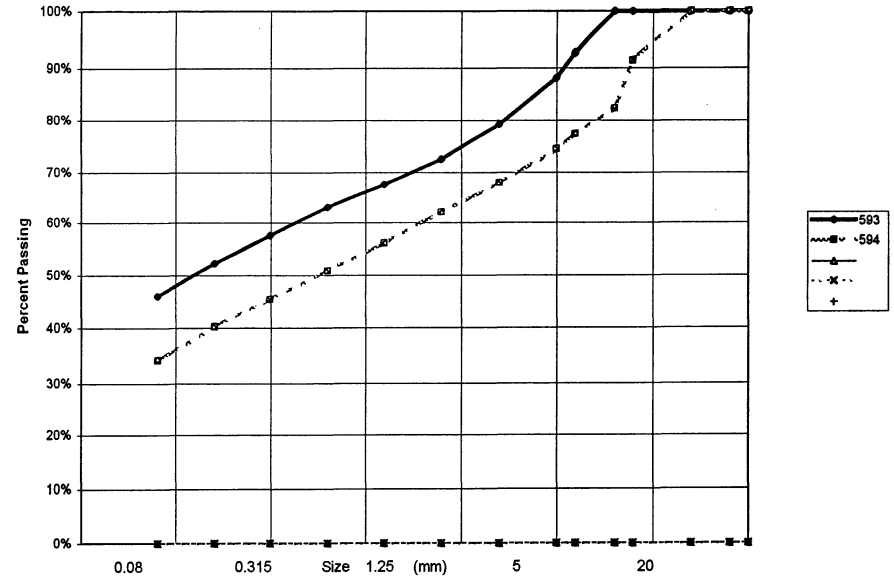
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-673
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+880 20M RT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	91%
20.0	100%	20.0	82%
12.5	93%	12.5	77%
10.0	88%	10.0	74%
5.0	79%	5.0	68%
2.5	73%	2.5	62%
1.25	68%	1.25	56%
0.630	63%	0.630	51%
0.315	58%	0.315	46%
0.160	52%	0.160	40%
0.080	46%	0.080	34%
M.C.(%):	18%	M.C.(%):	9%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	21	% GRAVEL:	32
% SAND:	33	% SAND:	34
% FINES:	46	% FINES:	34
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-674
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+880 20MLT
 LOGGED BY: G.C. DATE COMP 1999-08-11

FIELD NO:	595	FIELD No.	596
LAB NO:	691	LAB No.	692
DEPTH:	1.3-1.5	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	74%	25.0	100%
20.0	68%	20.0	100%
12.5	65%	12.5	89%
10.0	61%	10.0	85%
5.0	54%	5.0	77%
2.5	49%	2.5	72%
1.25	44%	1.25	67%
0.630	40%	0.630	63%
0.315	36%	0.315	58%
0.160	31%	0.160	52%
0.080	26%	0.080	46%

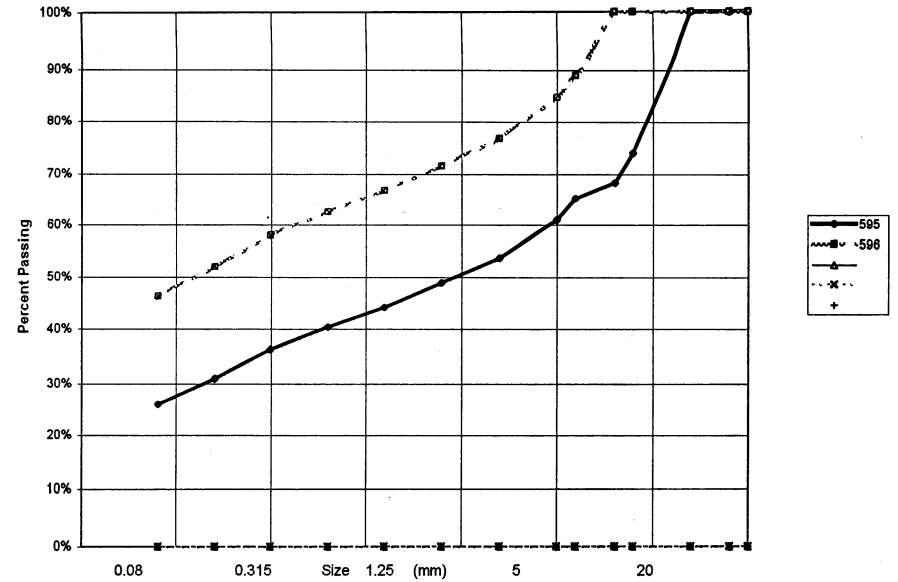
M.C. (%): 17% M.C. (%): 11%

LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	46	% GRAVEL:	23
% SAND:	28	% SAND:	30
% FINES:	26	% FINES:	46

CLASSIFICATION: SILTY GRAVEL WITH SAND (GM) CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)

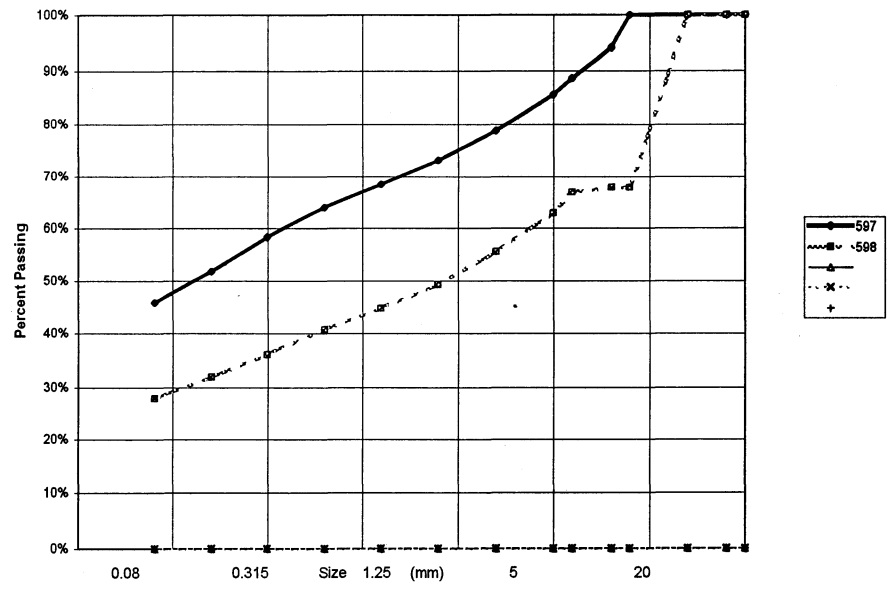
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-675
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-122 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+825 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	68%
20.0	94%	20.0	68%
12.5	89%	12.5	67%
10.0	86%	10.0	63%
5.0	79%	5.0	56%
2.5	73%	2.5	49%
1.25	68%	1.25	45%
0.630	64%	0.630	41%
0.315	58%	0.315	36%
0.160	52%	0.160	32%
0.080	46%	0.080	28%
M.C.(%):	12%	M.C.(%):	9%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	21	% GRAVEL:	44
% SAND:	33	% SAND:	28
% FINES:	46	% FINES:	28
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER:	092-202101-0329	HOLE No.:	526-676
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1807+725 20M LT		
LOGGED BY:	G.C.	DATE COMP	1999-08-11

FIELD NO:	599	FIELD No.	600
LAB NO:	695	LAB No.	696
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	63%
20.0	89%	20.0	63%
12.5	88%	12.5	61%
10.0	82%	10.0	60%
5.0	76%	5.0	55%
2.5	72%	2.5	52%
1.25	68%	1.25	49%
0.630	63%	0.630	45%
0.315	59%	0.315	42%
0.160	52%	0.160	37%
0.080	46%	0.080	33%

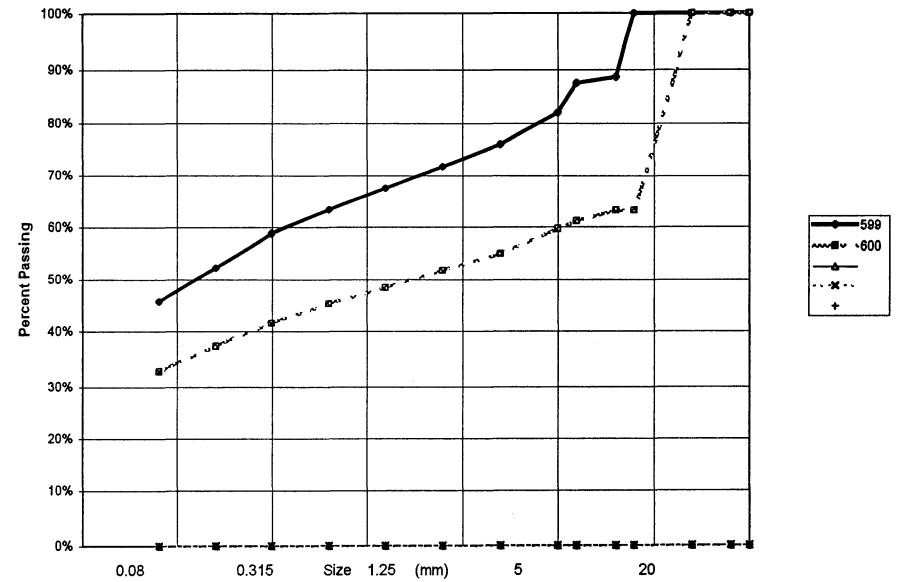
M.C.(%):	17%	M.C.(%):	10%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	24	% GRAVEL:	45
% SAND:	30	% SAND:	22
% FINES:	46	% FINES:	33

CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

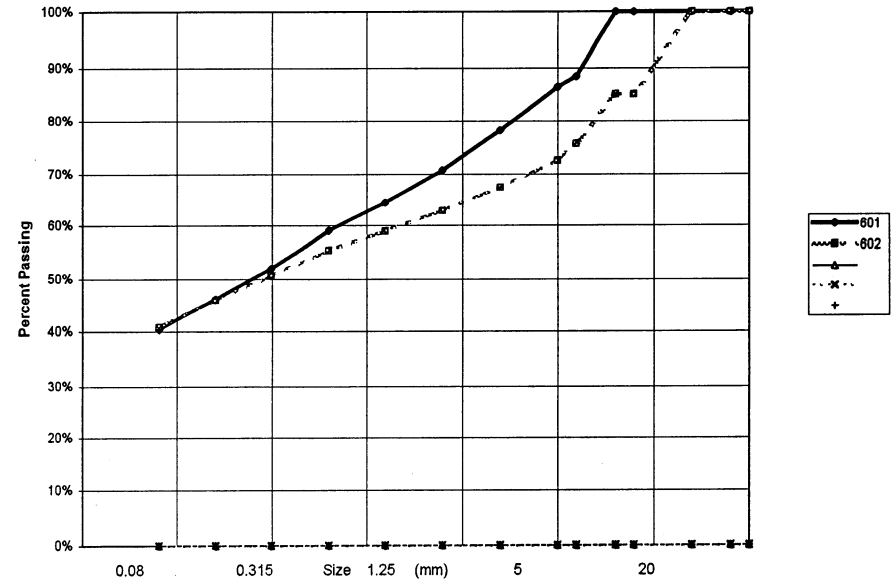
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-677
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+725 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	85%
20.0	100%	20.0	85%
12.5	88%	12.5	76%
10.0	86%	10.0	73%
5.0	78%	5.0	67%
2.5	71%	2.5	63%
1.25	64%	1.25	59%
0.630	59%	0.630	55%
0.315	52%	0.315	51%
0.160	46%	0.160	46%
0.080	40%	0.080	41%
M.C.(%): 16%		M.C.(%): 13%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	22	% GRAVEL:	33
% SAND:	38	% SAND:	27
% FINES:	40	% FINES:	41
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	

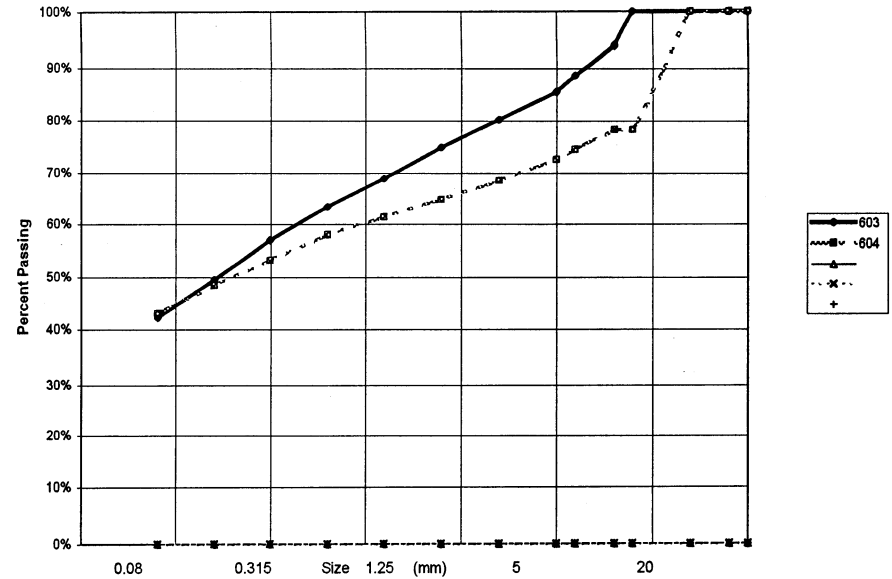
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-678
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+640 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	78%
20.0	94%	20.0	78%
12.5	89%	12.5	75%
10.0	86%	10.0	73%
5.0	80%	5.0	69%
2.5	75%	2.5	65%
1.25	69%	1.25	61%
0.630	63%	0.630	58%
0.315	57%	0.315	53%
0.160	50%	0.160	48%
0.080	42%	0.080	43%
M.C.(%): 15%		M.C.(%): 12%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	20	% GRAVEL:	31
% SAND:	38	% SAND:	26
% FINES:	42	% FINES:	43
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	

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



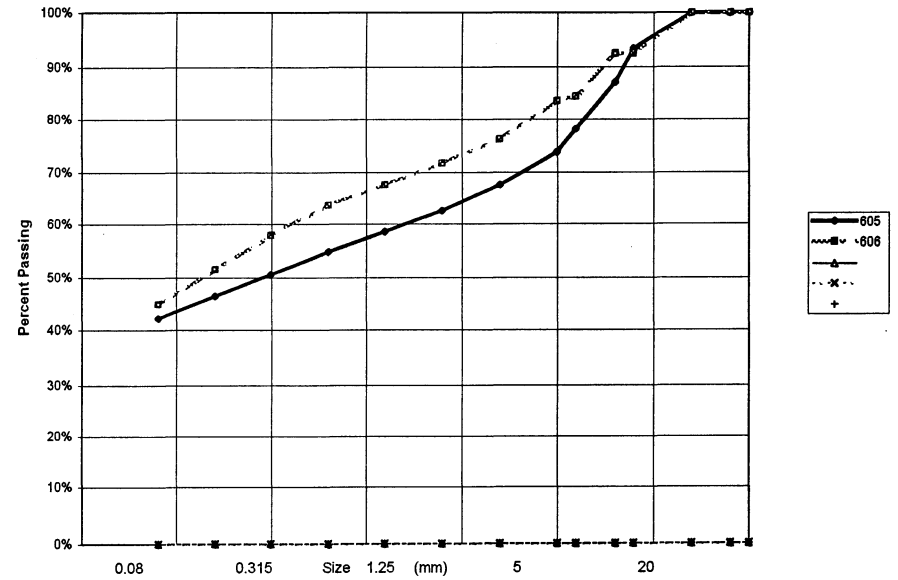
PROJECT NUMBER:	092-202101-0329	HOLE No.:	526-679
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1807+640 20m rt		
LOGGED BY:	G.C.	DATE COMP	1999-08-11

FIELD NO:	605	FIELD No.	606
LAB NO:	701	LAB No.	702
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	92%
20.0	87%	20.0	92%
12.5	78%	12.5	84%
10.0	74%	10.0	84%
5.0	68%	5.0	76%
2.5	63%	2.5	72%
1.25	58%	1.25	68%
0.630	55%	0.630	64%
0.315	51%	0.315	58%
0.160	47%	0.160	52%
0.080	42%	0.080	45%

M.C.(%):	17%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	32	% GRAVEL:	24
% SAND:	25	% SAND:	31
% FINES:	42	% FINES:	45
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



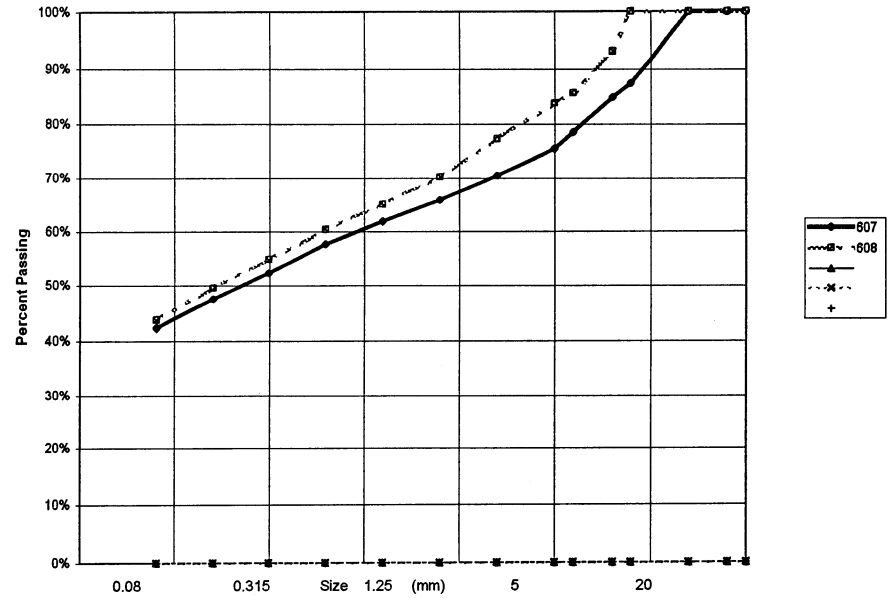
PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-680
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+600 30m rt
 LOGGED BY: G.C. DATE COMP 1999-08-11

FIELD NO:	607	FIELD No.	608
LAB NO:	703	LAB No.	704
DEPTH:	1.3-1.5	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	88%	25.0	100%
20.0	85%	20.0	93%
12.5	79%	12.5	86%
10.0	76%	10.0	84%
5.0	70%	5.0	77%
2.5	66%	2.5	70%
1.25	62%	1.25	65%
0.630	58%	0.630	60%
0.315	52%	0.315	55%
0.160	47%	0.160	50%
0.080	42%	0.080	44%

M.C.(%):	29%	M.C.(%):	17%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	30	% GRAVEL:	23
% SAND:	28	% SAND:	34
% FINES:	42	% FINES:	44
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



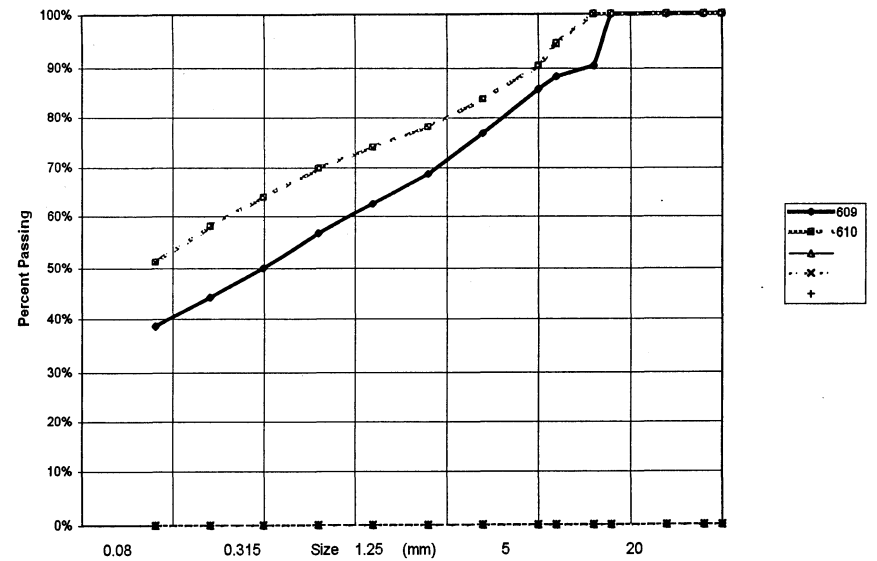
PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-681
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+500 30m rt
 LOGGED BY: G.C. DATE COMP 1999-08-11

FIELD NO:	609	FIELD No.	610
LAB NO:	705	LAB No.	706
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	90%	20.0	100%
12.5	88%	12.5	95%
10.0	86%	10.0	90%
5.0	77%	5.0	84%
2.5	69%	2.5	78%
1.25	63%	1.25	74%
0.630	57%	0.630	70%
0.315	50%	0.315	64%
0.160	44%	0.160	58%
0.080	39%	0.080	51%

M.C.(%):	3%	M.C.(%):	13%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	23	% GRAVEL:	16
% SAND:	38	% SAND:	33
% FINES:	39	% FINES:	51
CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)	CLASSIFICATION:	SANDY SILT WITH GRAVEL (ML)

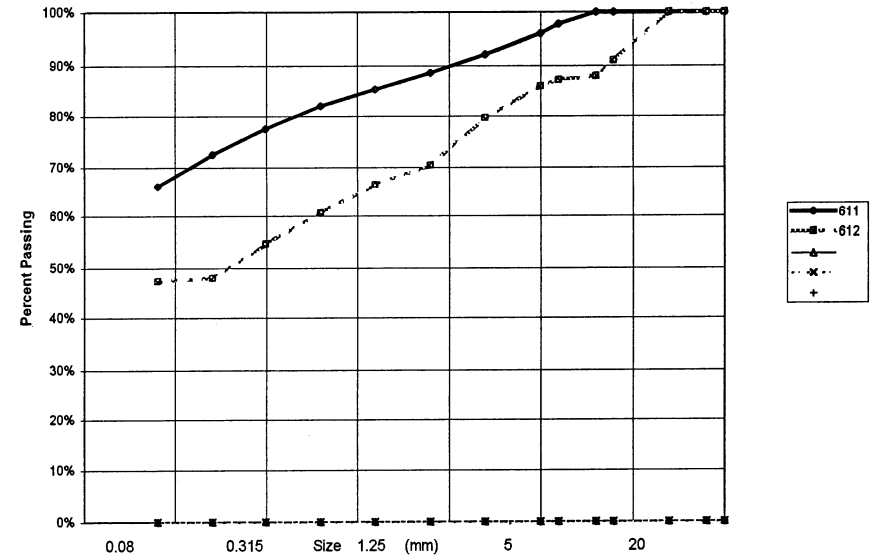
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER:	092-202101-0329	HOLE No.:	526-682
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1807+400 30m rt		
LOGGED BY:	G.C.	DATE COMP	1999-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	91%
20.0	100%	20.0	88%
12.5	98%	12.5	87%
10.0	96%	10.0	86%
5.0	92%	5.0	80%
2.5	89%	2.5	70%
1.25	85%	1.25	66%
0.630	82%	0.630	61%
0.315	77%	0.315	55%
0.160	73%	0.160	48%
0.080	66%	0.080	47%
M.C.(%): 35%		M.C.(%): 13%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	8	% GRAVEL:	20
% SAND:	26	% SAND:	32
% FINES:	66	% FINES:	47
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY SAND WITH GRAVEL (SM)

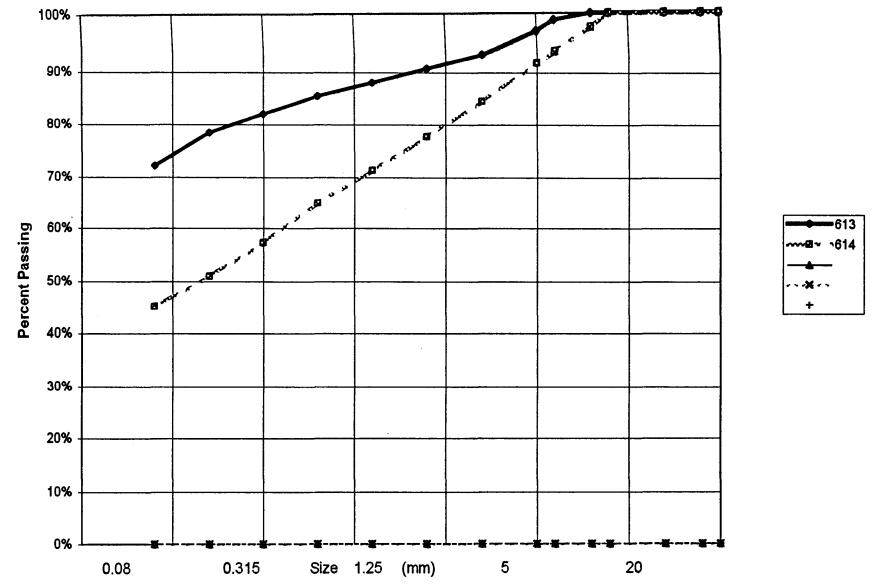
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-683
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+345 20m Rt
 LOGGED BY: G.C. DATE COMP 99-08-11

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	98%
12.5	99%	12.5	94%
10.0	97%	10.0	92%
5.0	93%	5.0	85%
2.5	91%	2.5	78%
1.25	88%	1.25	71%
0.630	86%	0.630	65%
0.315	82%	0.315	57%
0.160	78%	0.160	51%
0.080	72%	0.080	45%
M.C.(%):	53%	M.C.(%):	21%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	7	% GRAVEL:	15
% SAND:	21	% SAND:	40
% FINES:	72	% FINES:	45
CLASSIFICATION:		CLASSIFICATION:	
SILT WITH SAND (ML)		SILTY SAND WITH GRAVEL (SM)	

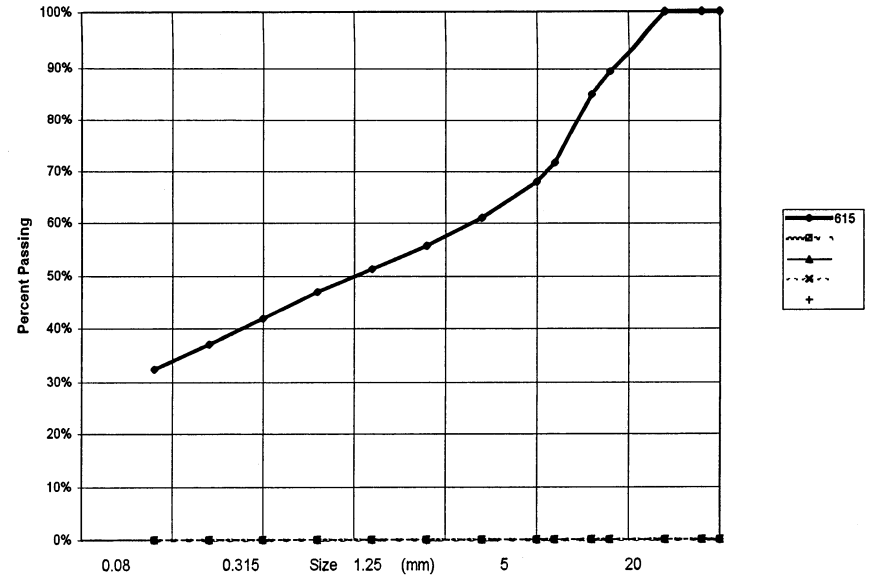
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-683A
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+350 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-12

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	90%
20.0	85%
12.5	72%
10.0	68%
5.0	61%
2.5	56%
1.25	51%
0.630	47%
0.315	42%
0.160	37%
0.080	32%
M.C.(%): 18%	
LIMITS	
LIQUID:	0.0
PLASTIC:	0.0
P.I.:	0.0
% GRAVEL:	39
% SAND:	29
% FINES:	32
CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-684
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-122 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+300 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-12

FIELD NO: 616	FIELD No. 617
LAB NO: 712	LAB No. 713
DEPTH: 1.3-1.5	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	94%
20.0	97%	20.0	94%
12.5	91%	12.5	90%
10.0	87%	10.0	84%
5.0	79%	5.0	72%
2.5	71%	2.5	61%
1.25	66%	1.25	53%
0.630	61%	0.630	46%
0.315	56%	0.315	38%
0.160	51%	0.160	32%
0.080	46%	0.080	27%

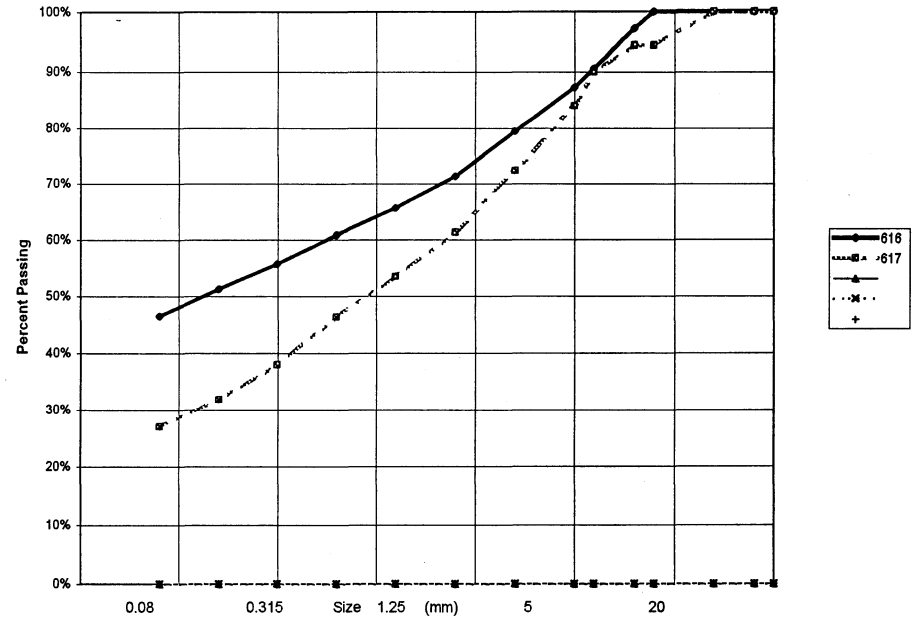
M.C.(%): 20% M.C.(%): 12%

LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	21	% GRAVEL:	28
% SAND:	33	% SAND:	46
% FINES:	46	% FINES:	27

CLASSIFICATION: SILTY SAND WITH GRAVEL (SM) CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)

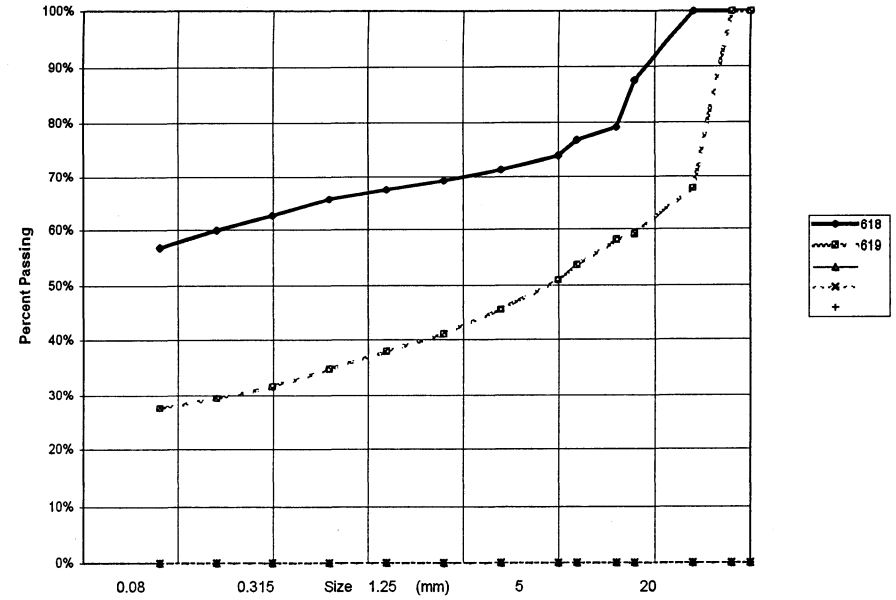
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-686
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+200 30M RT
 LOGGED BY: G.C. DATE COMP 99-08-12

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	68%
25.0	87%	25.0	59%
20.0	79%	20.0	58%
12.5	77%	12.5	54%
10.0	74%	10.0	51%
5.0	71%	5.0	45%
2.5	69%	2.5	41%
1.25	67%	1.25	38%
0.630	66%	0.630	35%
0.315	63%	0.315	32%
0.160	60%	0.160	29%
0.080	57%	0.080	28%
M.C.(%):	33%	M.C.(%):	11%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	29	% GRAVEL:	55
% SAND:	14	% SAND:	18
% FINES:	57	% FINES:	28
CLASSIFICATION:		CLASSIFICATION:	
GRAVELLY SILT (ML)		SILTY GRAVEL WITH SAND (GM)	

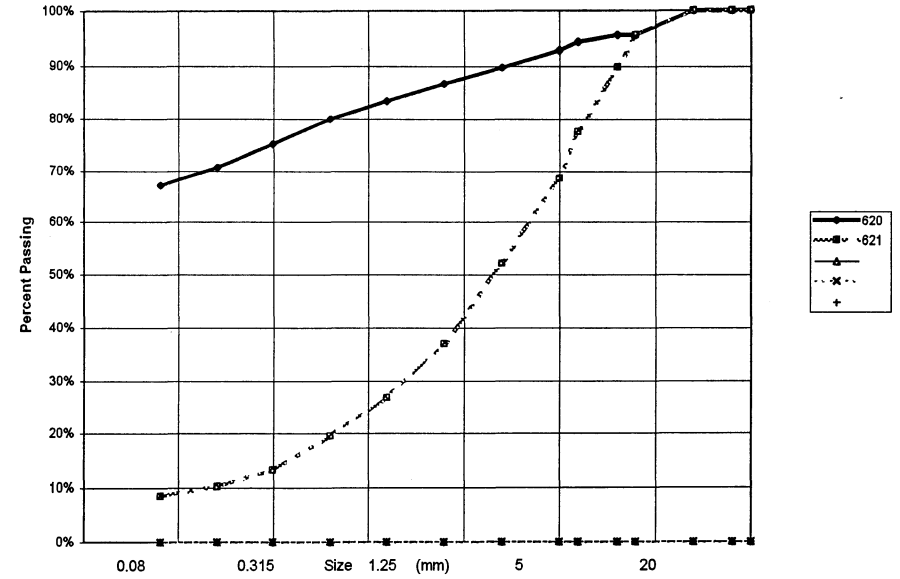
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-687
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+125 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-12

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	96%	25.0	96%
20.0	96%	20.0	90%
12.5	94%	12.5	78%
10.0	93%	10.0	69%
5.0	90%	5.0	52%
2.5	87%	2.5	37%
1.25	83%	1.25	27%
0.630	80%	0.630	19%
0.315	75%	0.315	13%
0.160	71%	0.160	10%
0.080	67%	0.080	9%
M.C.(%):	2%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	10	% GRAVEL:	48
% SAND:	22	% SAND:	44
% FINES:	67	% FINES:	9
CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT (ML)		POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-688
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+060 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-12

FIELD NO: 622
 LAB NO: 718
 DEPTH: 2.5-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	93%
20.0	93%
12.5	86%
10.0	85%
5.0	80%
2.5	75%
1.25	70%
0.630	65%
0.315	57%
0.160	50%
0.080	45%

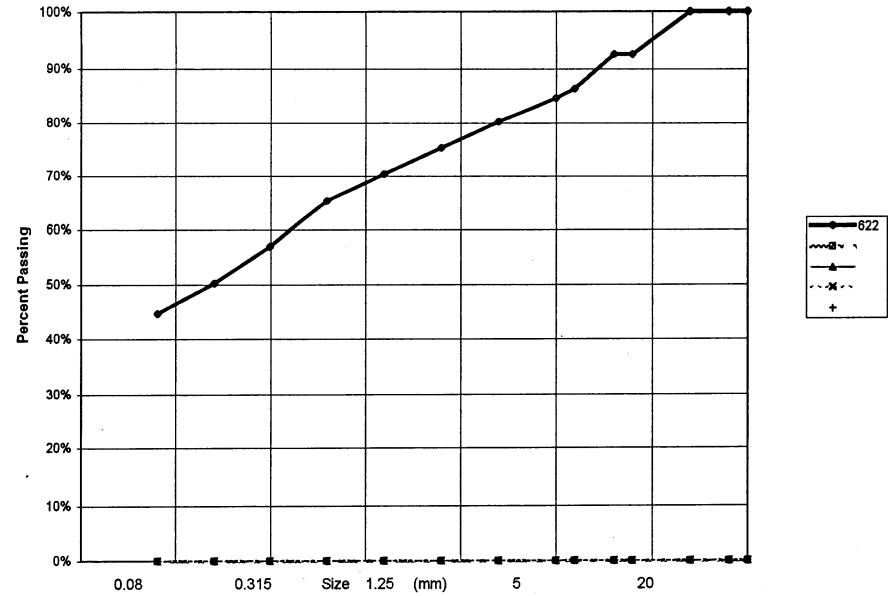
M.C.(%): 29%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 20
 % SAND: 35
 % FINES: 45

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

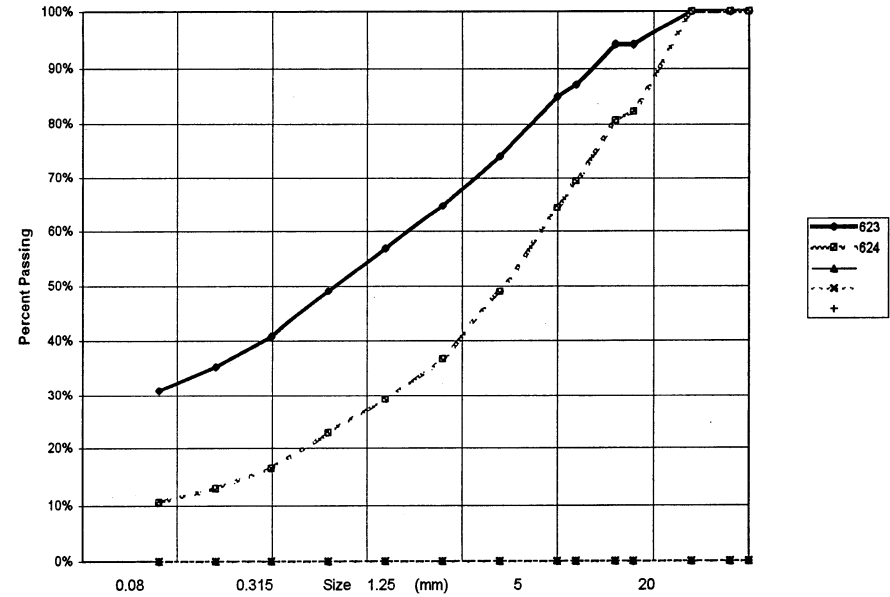
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-689
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1807+060 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-12

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	94%	25.0	82%
20.0	94%	20.0	81%
12.5	87%	12.5	69%
10.0	85%	10.0	64%
5.0	74%	5.0	49%
2.5	65%	2.5	37%
1.25	57%	1.25	29%
0.630	49%	0.630	23%
0.315	41%	0.315	16%
0.160	35%	0.160	13%
0.080	31%	0.080	11%
M.C.(%):	15%	M.C.(%):	8%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	26	% GRAVEL:	51
% SAND:	43	% SAND:	38
% FINES:	31	% FINES:	11
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	

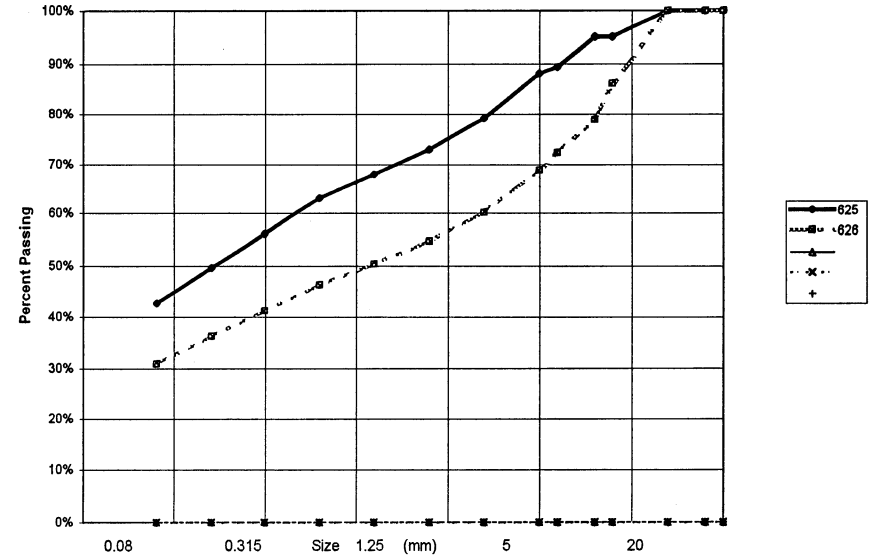
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-691
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+950 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-12

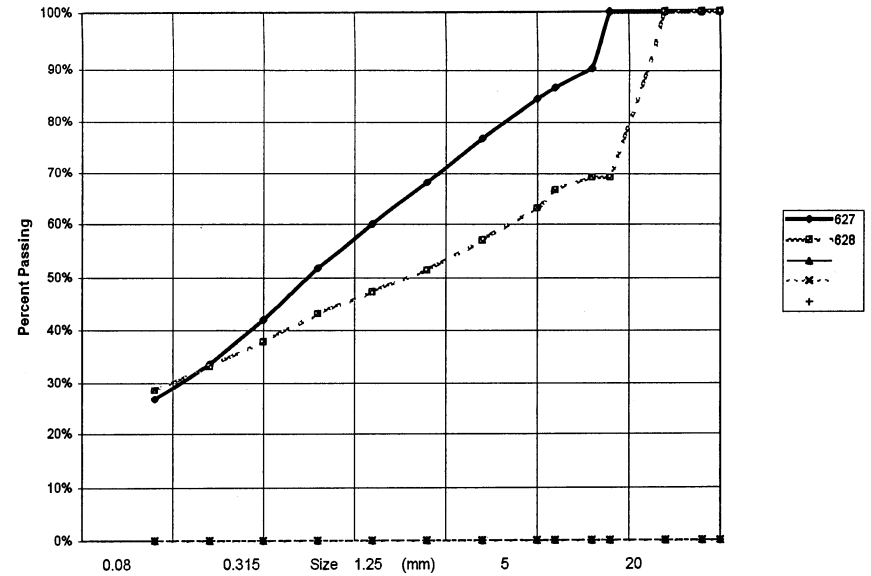
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	86%
20.0	95%	20.0	79%
12.5	89%	12.5	72%
10.0	88%	10.0	69%
5.0	79%	5.0	60%
2.5	73%	2.5	55%
1.25	68%	1.25	50%
0.630	63%	0.630	46%
0.315	56%	0.315	41%
0.160	50%	0.160	36%
0.080	43%	0.080	31%
M.C.(%): 8%		M.C.(%): 6%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	21	% GRAVEL:	40
% SAND:	36	% SAND:	29
% FINES:	43	% FINES:	31
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER:	092-202101-0329	HOLE No.:	526-692
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1806+887 20M RT		
LOGGED BY:	G.C.	DATE COMP	99-08-12
=====			
FIELD NO:	627	FIELD No.	628
LAB NO:	723	LAB No.	724
DEPTH:	1.8-2.0	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	69%
20.0	90%	20.0	69%
12.5	87%	12.5	67%
10.0	85%	10.0	63%
5.0	77%	5.0	57%
2.5	68%	2.5	51%
1.25	60%	1.25	47%
0.630	52%	0.630	43%
0.315	42%	0.315	38%
0.160	34%	0.160	33%
0.080	27%	0.080	29%
=====			
M.C.(%):	13%	M.C.(%):	13%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	23	% GRAVEL:	43
% SAND:	50	% SAND:	28
% FINES:	27	% FINES:	29
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

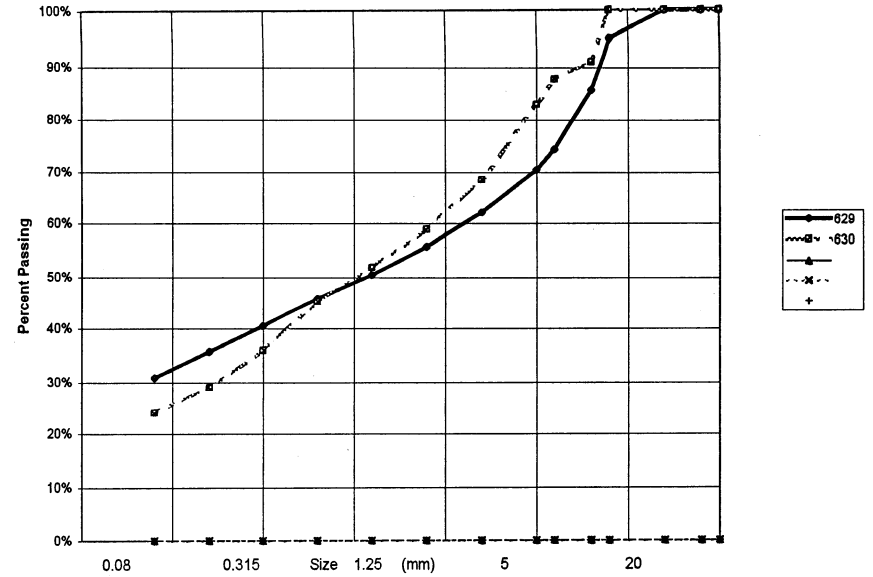
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-893
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+887 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-12

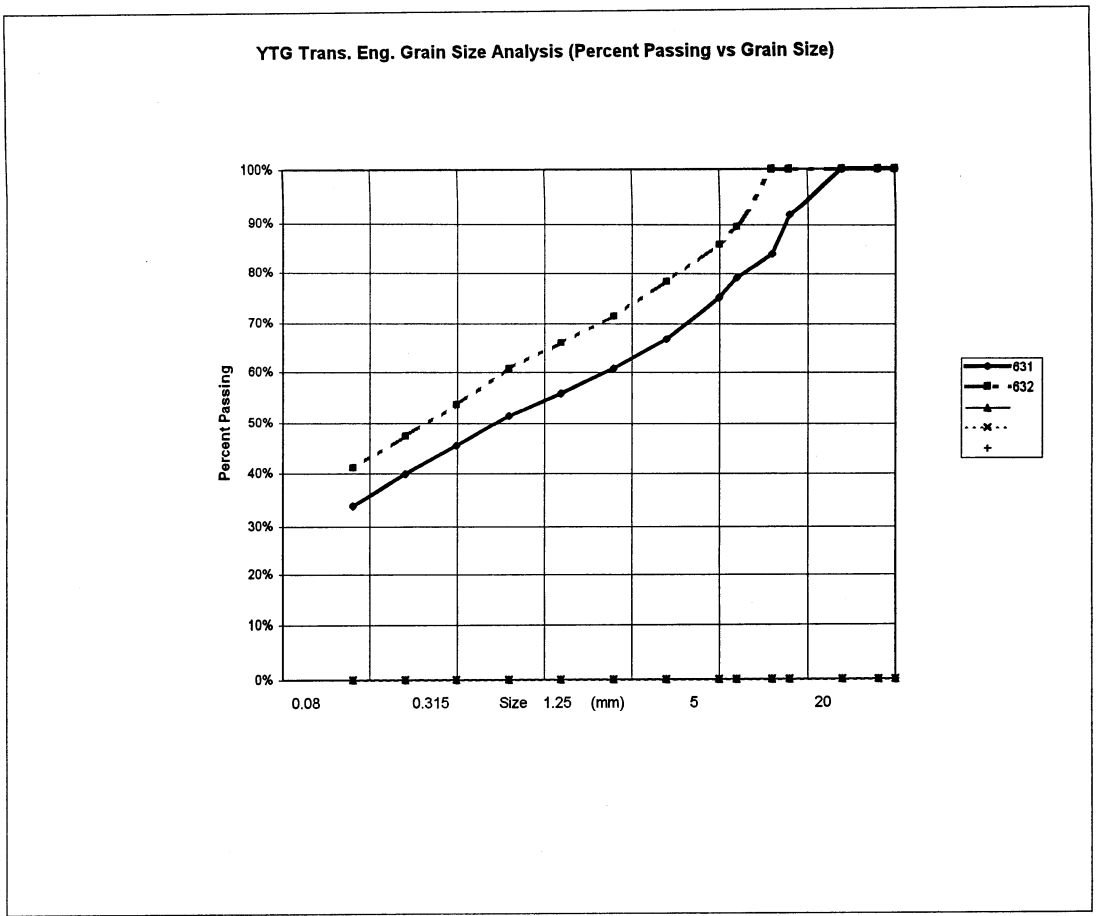
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	100%
20.0	86%	20.0	91%
12.5	74%	12.5	88%
10.0	70%	10.0	83%
5.0	62%	5.0	69%
2.5	56%	2.5	59%
1.25	50%	1.25	52%
0.630	46%	0.630	45%
0.315	40%	0.315	36%
0.160	36%	0.160	29%
0.080	31%	0.080	24%
M.C.(%): 17%		M.C.(%): 11%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	38	% GRAVEL:	31
% SAND:	31	% SAND:	45
% FINES:	31	% FINES:	24
CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-694
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+800 30M RT
 LOGGED BY: G.C. DATE COMP 8/12/99

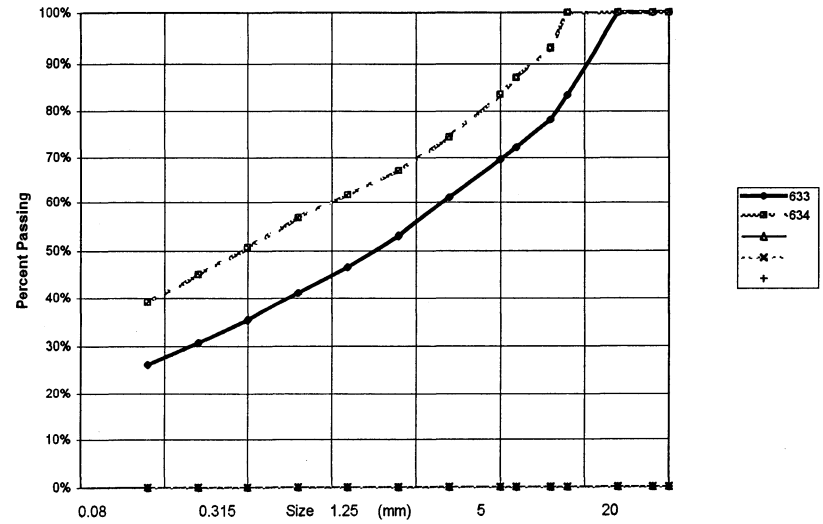
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	92%	25.0	100%
20.0	84%	20.0	100%
12.5	79%	12.5	90%
10.0	75%	10.0	86%
5.0	67%	5.0	78%
2.5	61%	2.5	72%
1.25	56%	1.25	66%
0.630	52%	0.630	61%
0.315	46%	0.315	54%
0.160	40%	0.160	47%
0.080	34%	0.080	41%
M.C.(%): 6%		M.C.(%): 9%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	33	% GRAVEL:	22
% SAND:	33	% SAND:	37
% FINES:	34	% FINES:	41
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	



PROJECT NUMBER: 092-202101-0329 HOLE No.: 529-695
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+695 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-12

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	83%	25.0	100%
20.0	78%	20.0	93%
12.5	72%	12.5	87%
10.0	70%	10.0	84%
5.0	61%	5.0	74%
2.5	53%	2.5	67%
1.25	47%	1.25	62%
0.630	41%	0.630	57%
0.315	35%	0.315	51%
0.160	31%	0.160	45%
0.080	26%	0.080	39%
M.C.(%):	11%	M.C.(%):	17%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	39	% GRAVEL:	26
% SAND:	35	% SAND:	35
% FINES:	26	% FINES:	39
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-696
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1899-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+705 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-12

FIELD NO: 635	FIELD No. 636
LAB NO: 731	LAB No. 732
DEPTH: 1.8-2.0	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	99%	12.5	98%
10.0	98%	10.0	96%
5.0	94%	5.0	89%
2.5	89%	2.5	83%
1.25	84%	1.25	77%
0.630	79%	0.630	71%
0.315	73%	0.315	63%
0.160	67%	0.160	55%
0.080	61%	0.080	48%

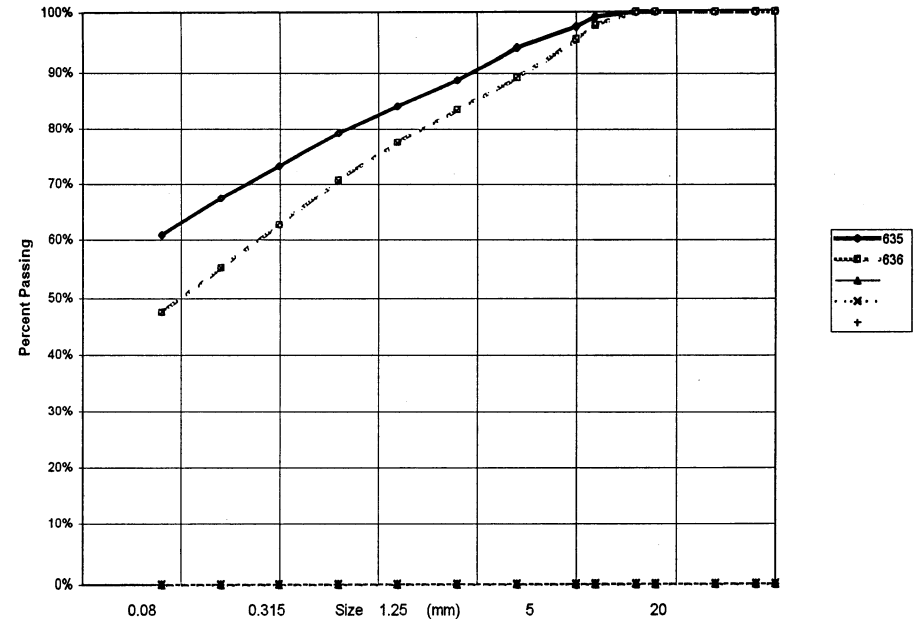
M.C.(%): 37% M.C.(%): 16%

LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	6	% GRAVEL:	11
% SAND:	33	% SAND:	42
% FINES:	61	% FINES:	48

CLASSIFICATION: SANDY SILT (ML) CLASSIFICATION: SILTY SAND (SM)

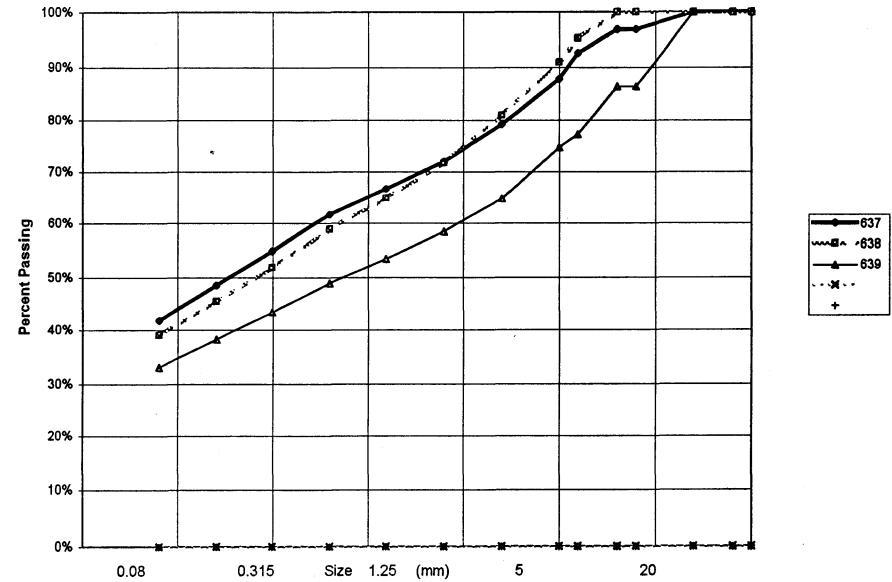
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-697
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+575 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-12

FIELD NO: 637		FIELD No. 638		FIELD No: 639	
LAB NO: 733		LAB No. 734		LAB No: 735	
DEPTH: 1.2-1.4		DEPTH: 2.8-3.0		DEPTH: 4.3-4.5	
TYPE: AUGER		TYPE: AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	97%	25.0	100%	25.0	86%
20.0	97%	20.0	100%	20.0	86%
12.5	93%	12.5	95%	12.5	77%
10.0	88%	10.0	91%	10.0	75%
5.0	79%	5.0	81%	5.0	65%
2.5	72%	2.5	72%	2.5	58%
1.25	67%	1.25	65%	1.25	54%
0.630	62%	0.630	59%	0.630	49%
0.315	55%	0.315	52%	0.315	43%
0.160	49%	0.160	46%	0.160	38%
0.080	42%	0.080	39%	0.080	33%
M.C.(%):	9%	M.C.(%):	11%	M.C.(%):	8%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	21	% GRAVEL:	19	% GRAVEL:	35
% SAND:	37	% SAND:	42	% SAND:	32
% FINES:	42	% FINES:	39	% FINES:	33
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-698
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+470 20M RT
 LOGGED BY: G.C. DATE COMP 1999-08-12

FIELD NO: 640
 LAB NO: 736
 DEPTH: 3.0-3.2
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	80%
20.0	80%
12.5	69%
10.0	64%
5.0	45%
2.5	34%
1.25	28%
0.630	21%
0.315	14%
0.160	12%
0.080	10%

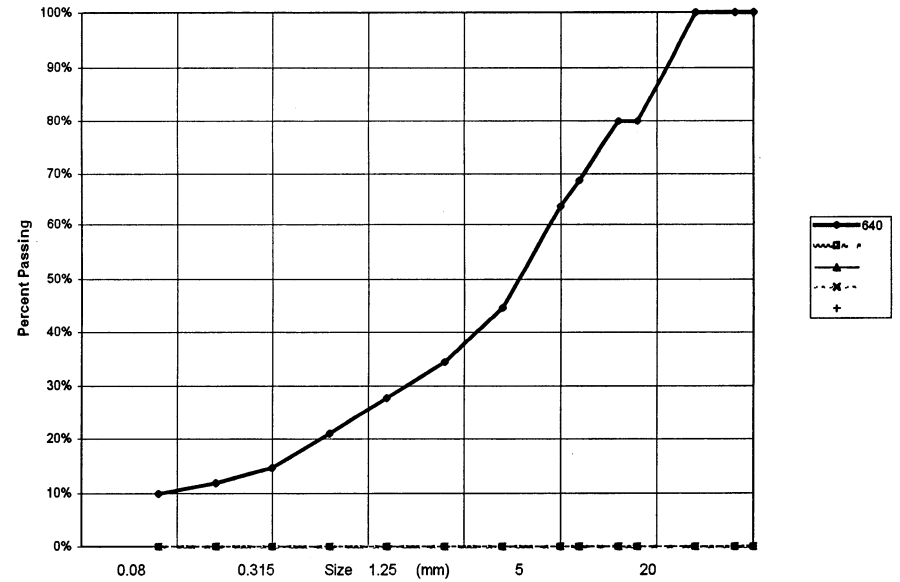
M.C.(%): 9%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 55
 % SAND: 35
 % FINES: 10

CLASSIFICATION:
 POORLY GRADED GRAVEL WITH
 SILT & SAND (GP-GM)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-699
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+470 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-12

FIELD NO: 641
 LAB NO: 737
 DEPTH: 2.8-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	93%
20.0	85%
12.5	67%
10.0	61%
5.0	43%
2.5	35%
1.25	30%
0.630	26%
0.315	23%
0.160	20%
0.080	18%

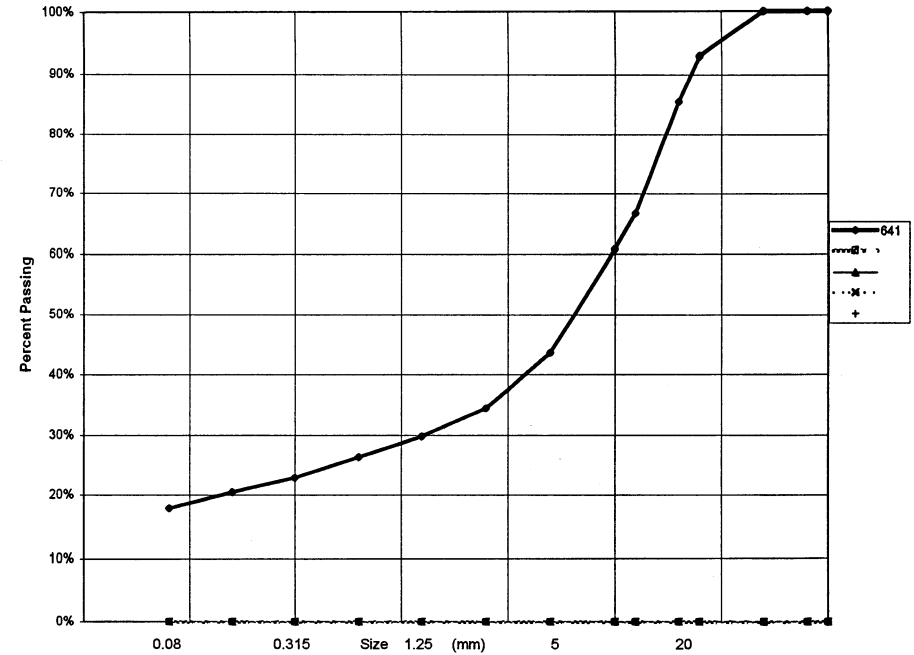
M.C. (%): 12%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 57
 % SAND: 26
 % FINES: 18

CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 528-700
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+400 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-12

FIELD NO: 642 FIELD No. 643
 LAB NO: 738 LAB No. 739
 DEPTH: 1.2-1.4 DEPTH 2.8-3.0
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	92%	25.0	100%
20.0	92%	20.0	96%
12.5	84%	12.5	91%
10.0	81%	10.0	88%
5.0	74%	5.0	84%
2.5	67%	2.5	81%
1.25	62%	1.25	77%
0.630	57%	0.630	75%
0.315	51%	0.315	72%
0.160	46%	0.160	69%
0.080	40%	0.080	67%

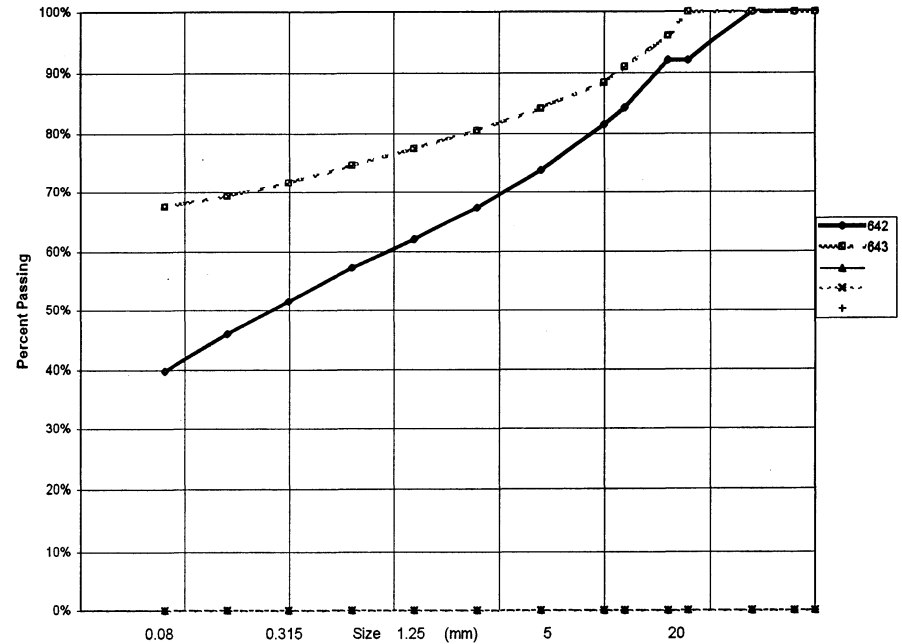
M.C.(%): 22% M.C.(%): 20%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 26 % GRAVEL: 16
 % SAND: 34 % SAND: 17
 % FINES: 40 % FINES: 67

CLASSIFICATION: CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM) SANDY SILT WITH GRAVEL (ML)

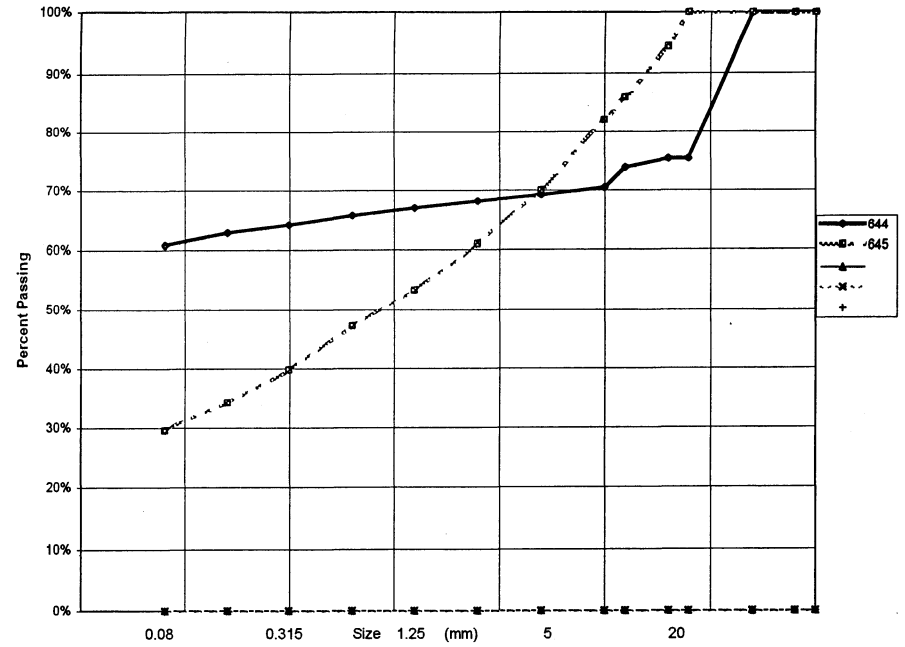
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-701
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+300 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-12

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	75%	25.0	100%
20.0	75%	20.0	94%
12.5	74%	12.5	86%
10.0	70%	10.0	82%
5.0	69%	5.0	70%
2.5	68%	2.5	61%
1.25	67%	1.25	53%
0.630	66%	0.630	47%
0.315	64%	0.315	40%
0.160	63%	0.160	34%
0.080	61%	0.080	30%
M.C.(%): 53%		M.C.(%): 12%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	31	% GRAVEL:	30
% SAND:	8	% SAND:	40
% FINES:	61	% FINES:	30
CLASSIFICATION:		CLASSIFICATION:	
GRAVELLY SILT (ML)		SILTY SAND WITH GRAVEL (SM)	

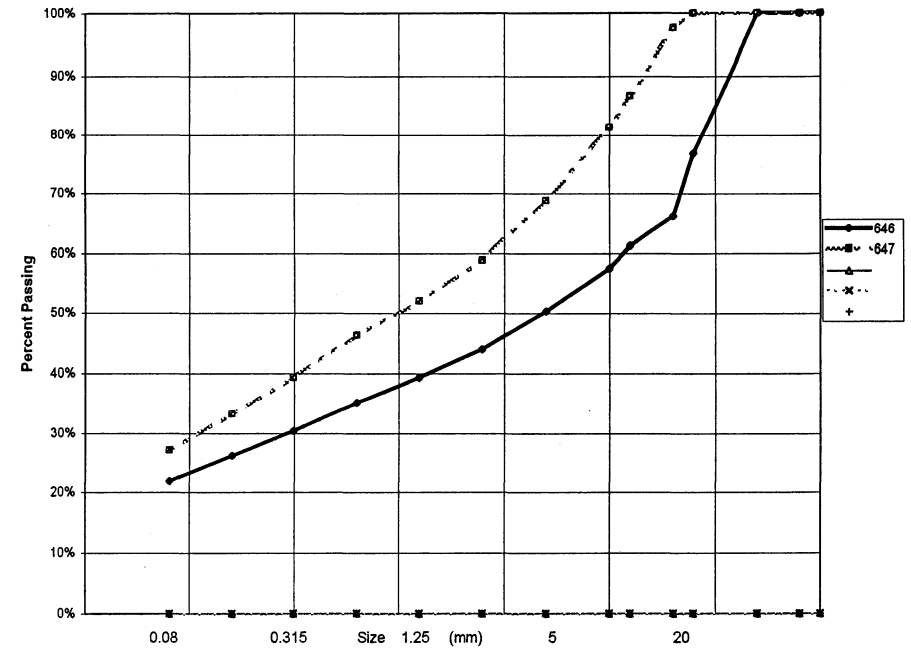
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-702
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+200 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-13

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	77%	25.0	100%
20.0	66%	20.0	98%
12.5	61%	12.5	87%
10.0	57%	10.0	81%
5.0	50%	5.0	69%
2.5	44%	2.5	59%
1.25	39%	1.25	52%
0.630	35%	0.630	46%
0.315	30%	0.315	39%
0.160	26%	0.160	33%
0.080	22%	0.080	27%
M.C.(%):	13%	M.C.(%):	11%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	50	% GRAVEL:	31
% SAND:	28	% SAND:	42
% FINES:	22	% FINES:	27
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



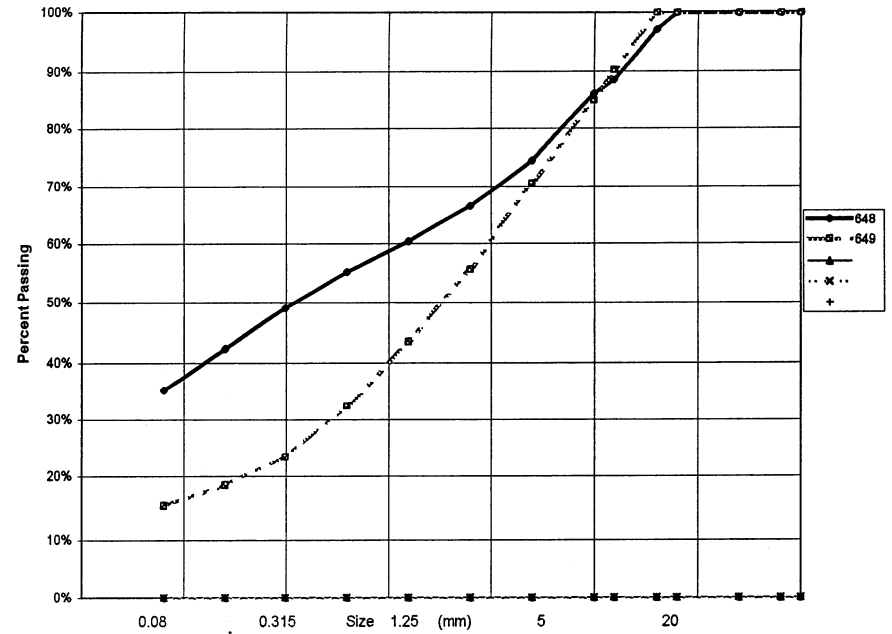
PROJECT NUMBER:	092-202101-0329	HOLE No.:	526-703
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1522 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1806+100 30M RT		
LOGGED BY:	G.C.	DATE COMP	1999-08-13

FIELD NO:	648	FIELD No.	649
LAB NO:	744	LAB No.	745
DEPTH:	1.2-1.4	DEPTH	2.6-2.9
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	100%
12.5	89%	12.5	90%
10.0	86%	10.0	85%
5.0	74%	5.0	71%
2.5	66%	2.5	56%
1.25	60%	1.25	43%
0.630	55%	0.630	32%
0.315	49%	0.315	23%
0.160	42%	0.160	19%
0.080	35%	0.080	15%

M.C.(%):	13%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	26	% GRAVEL:	29
% SAND:	39	% SAND:	55
% FINES:	35	% FINES:	15
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

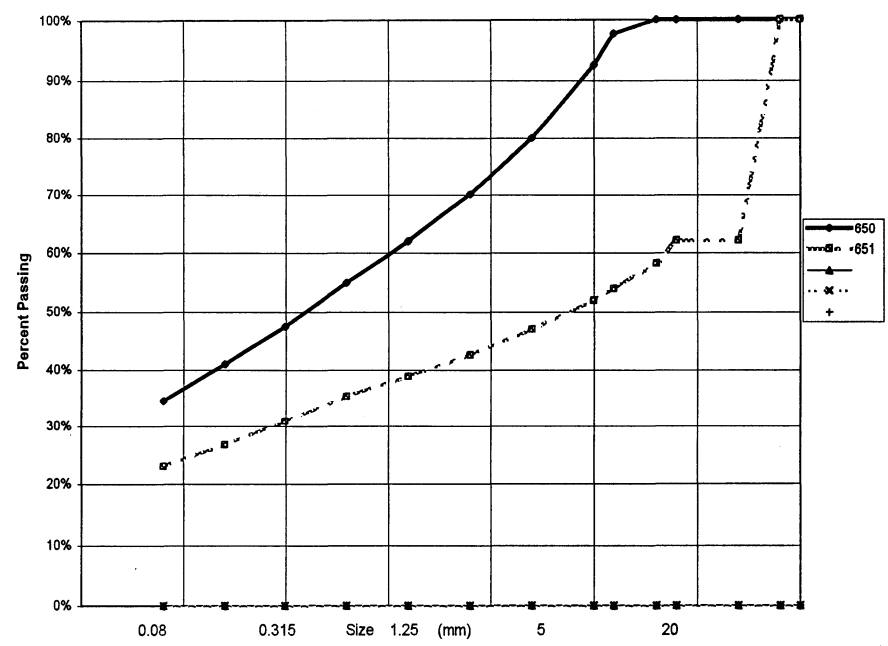
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-704
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1#22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1806+000 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-13

FIELD NO: 650		FIELD No. 651	
LAB NO: 746		LAB No. 747	
DEPTH: 1.2-1.4		DEPTH 2.4-2.6	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	62%
25.0	100%	25.0	62%
20.0	100%	20.0	58%
12.5	98%	12.5	54%
10.0	93%	10.0	52%
5.0	80%	5.0	47%
2.5	70%	2.5	42%
1.25	62%	1.25	39%
0.630	55%	0.630	35%
0.315	47%	0.315	31%
0.160	41%	0.160	27%
0.080	35%	0.080	23%
M.C.(%):	11%	M.C.(%):	8%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	20	% GRAVEL:	53
% SAND:	45	% SAND:	24
% FINES:	35	% FINES:	23
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

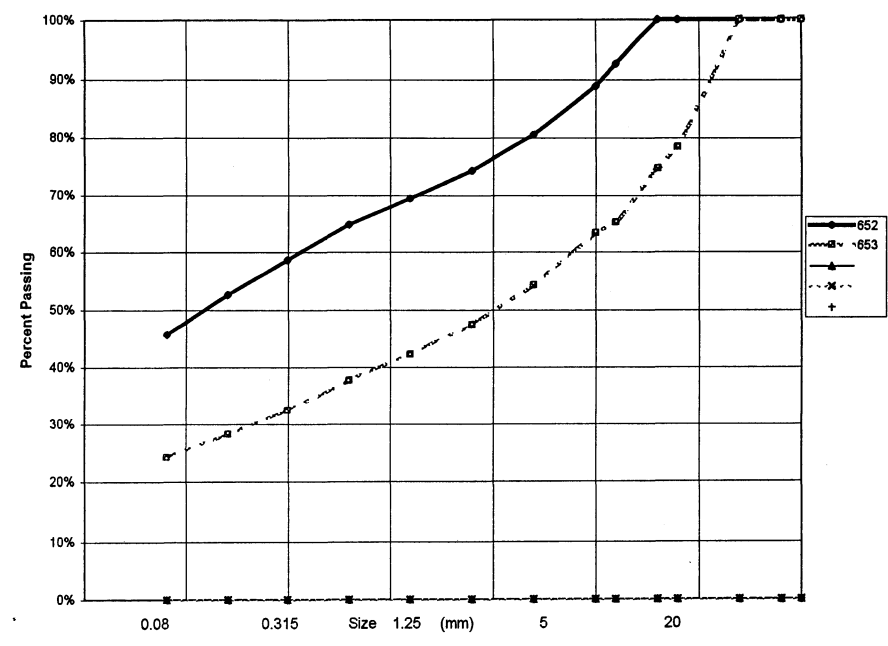
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-705
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+915 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-14

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	79%
20.0	100%	20.0	75%
12.5	93%	12.5	65%
10.0	89%	10.0	63%
5.0	81%	5.0	54%
2.5	74%	2.5	47%
1.25	69%	1.25	42%
0.630	65%	0.630	38%
0.315	59%	0.315	33%
0.160	53%	0.160	28%
0.080	46%	0.080	24%
M.C. (%)	13%	M.C. (%)	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	19	% GRAVEL:	46
% SAND:	35	% SAND:	30
% FINES:	46	% FINES:	24
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-706
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1 22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+915 20M LT
 LOGGED BY: G.C. DATE COMP 1999-08-14

FIELD NO: 654
 LAB NO: 750
 DEPTH: 2.6-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	93%
20.0	84%
12.5	79%
10.0	73%
5.0	61%
2.5	49%
1.25	40%
0.630	34%
0.315	28%
0.160	23%
0.080	19%

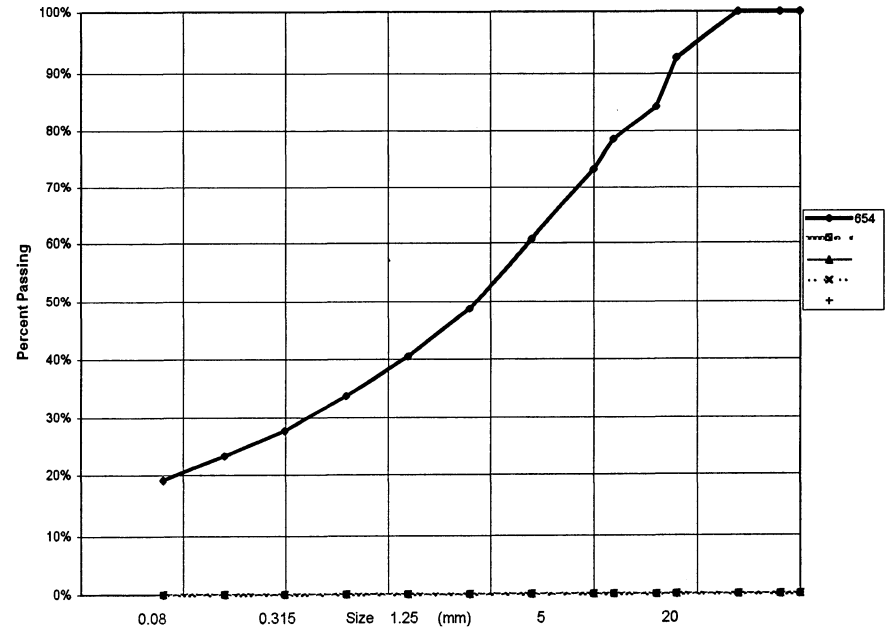
M.C.(%): 11%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 39
 % SAND: 41
 % FINES: 19

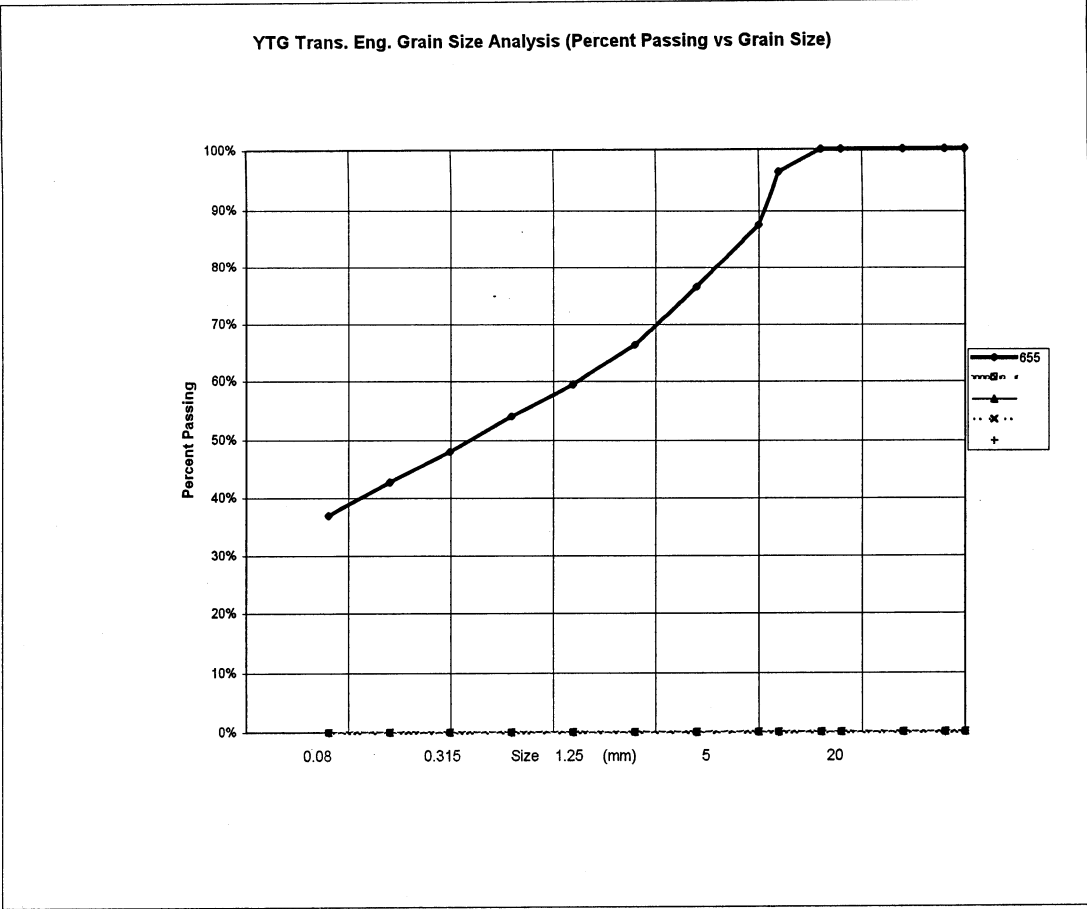
CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-707
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+800 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-14

FIELD NO:	655		
LAB NO:	751		
DEPTH:	1.0-1.2		
TYPE:	AUGER		
SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	100%		
25.0	100%		
20.0	100%		
12.5	96%		
10.0	88%		
5.0	77%		
2.5	66%		
1.25	59%		
0.630	54%		
0.315	48%		
0.160	43%		
0.080	37%		
M.C.(%)	16%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL:	23		
% SAND:	40		
% FINES:	37		
CLASSIFICATION:			
SILTY SAND WITH GRAVEL (SM)			



PROJECT NUMBER:	092-202101-0329	HOLE No.:	526-708
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1722 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1805+700 30M RT		
LOGGED BY:	G.C.	DATE COMP	1999-08-14

FIELD NO:	656	FIELD No.	657
LAB NO:	752	LAB No.	753
DEPTH:	1.6-1.8	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

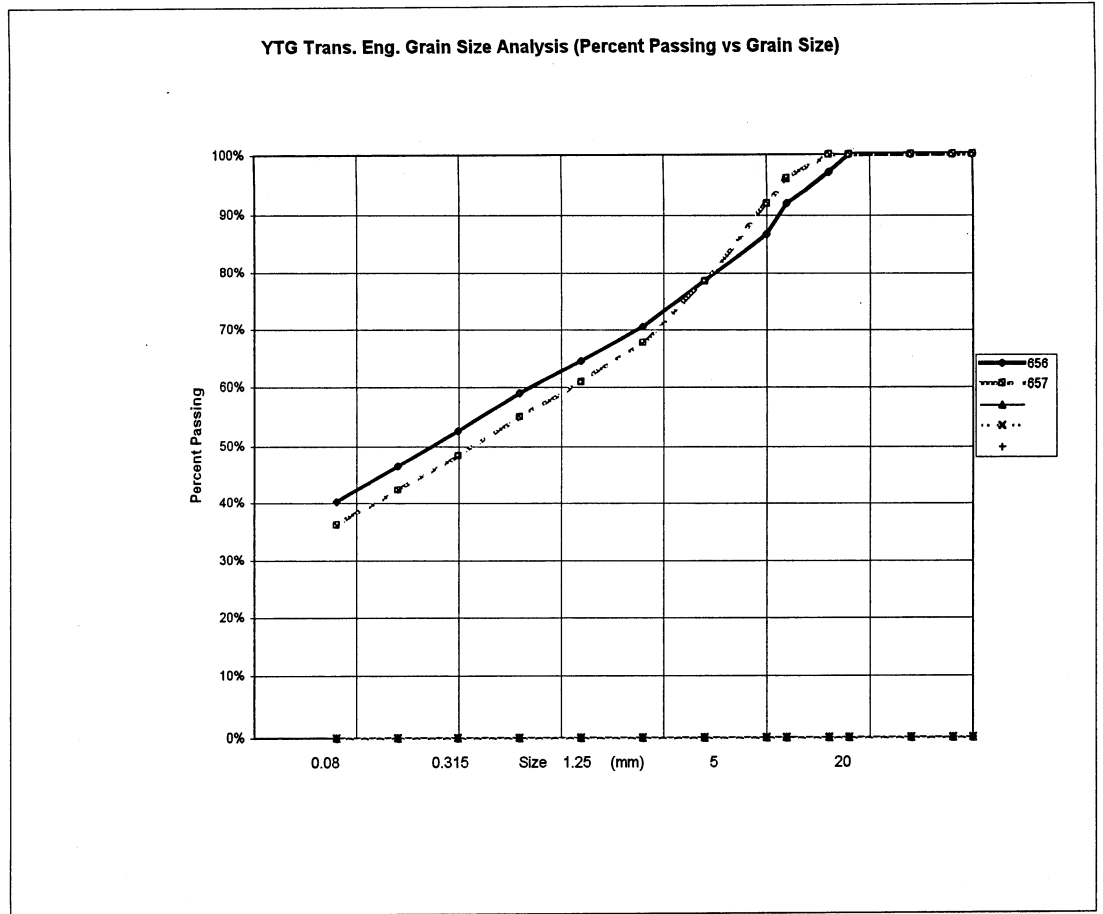
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	97%	20.0	100%
12.5	92%	12.5	96%
10.0	87%	10.0	92%
5.0	79%	5.0	78%
2.5	70%	2.5	68%
1.25	64%	1.25	61%
0.630	59%	0.630	55%
0.315	53%	0.315	48%
0.160	46%	0.160	42%
0.080	40%	0.080	36%

M.C.(%):	13%	M.C.(%):	10%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	21	% GRAVEL:	22
% SAND:	38	% SAND:	42
% FINES:	40	% FINES:	36

CLASSIFICATION:	CLASSIFICATION:
SILTY SAND WITH GRAVEL (SM)	SILTY SAND WITH GRAVEL (SM)



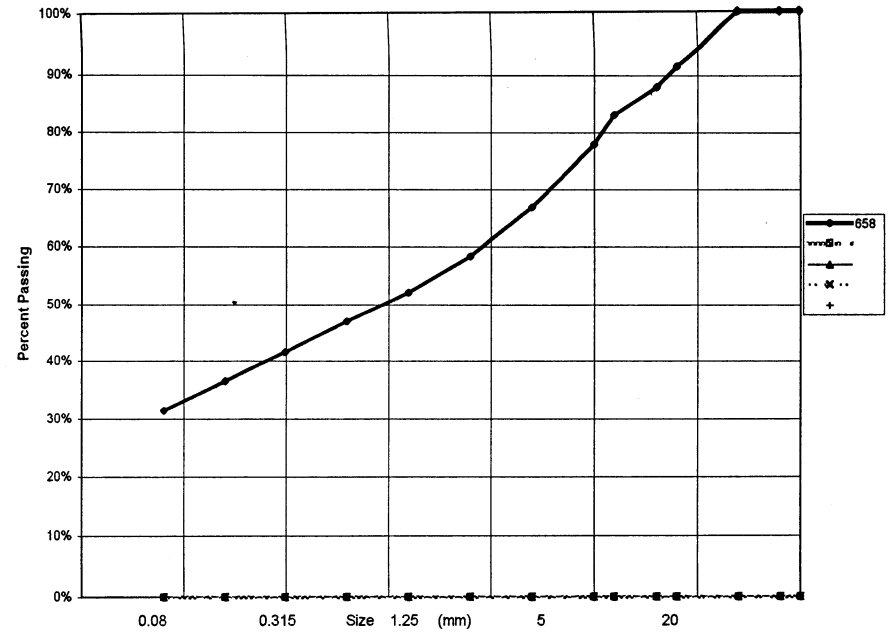
PROJECT NUMBER: 092-202101-0329 HOLE No.: 526-709
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-122 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+590 30M RT
 LOGGED BY: G.C. DATE COMP 1999-08-14

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	92%
20.0	88%
12.5	83%
10.0	78%
5.0	67%
2.5	58%
1.25	52%
0.630	47%
0.315	41%
0.160	37%
0.080	31%

M.C. (%)	10%
LIMITS	
LIQUID:	0.0
PLASTIC:	0.0
P.I.:	0.0
% GRAVEL:	33
% SAND:	35
% FINES:	31

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

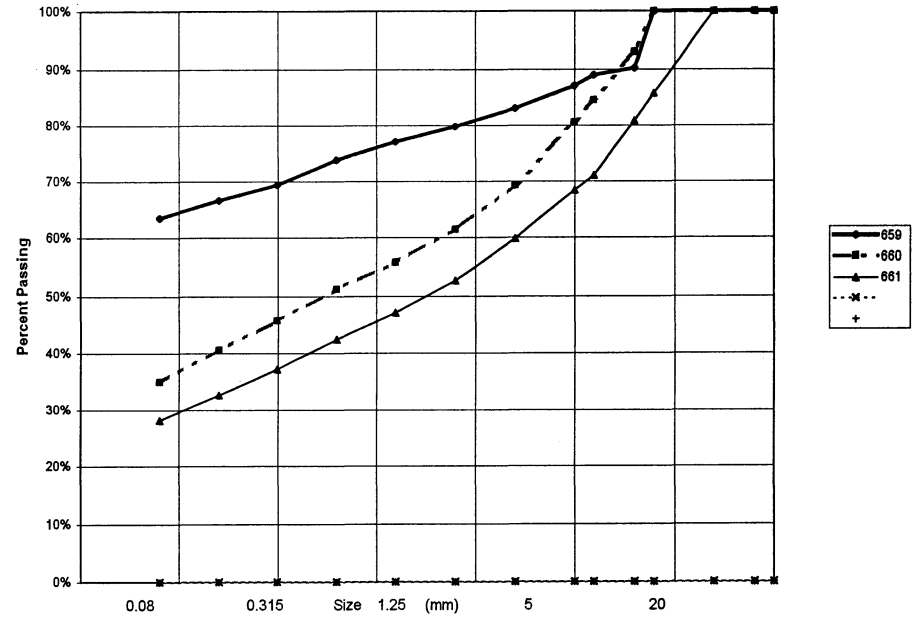
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-710
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+550 20 RT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 659		FIELD No. 660		FIELD No: 661	
LAB NO: 758		LAB No. 759		LAB No: 760	
DEPTH: 1.2-1.4		DEPTH 2.0-2.2		DEPTH: 3.6-4.0	
TYPE: AUGER		TYPE AUGER		TYPE: AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%	100.0	100%
80.0	100%	80.0	100%	80.0	100%
50.0	100%	50.0	100%	50.0	100%
25.0	100%	25.0	100%	25.0	86%
20.0	90%	20.0	93%	20.0	81%
12.5	89%	12.5	84%	12.5	71%
10.0	87%	10.0	81%	10.0	68%
5.0	83%	5.0	69%	5.0	60%
2.5	80%	2.5	61%	2.5	53%
1.25	77%	1.25	56%	1.25	47%
0.630	74%	0.630	51%	0.630	42%
0.315	69%	0.315	46%	0.315	37%
0.160	67%	0.160	40%	0.160	33%
0.080	63%	0.080	35%	0.080	28%
M.C.(%):	31%	M.C.(%):	12%	M.C.(%):	7%
LIMITS		LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0	P.I.:	0.0
% GRAVEL:	17	% GRAVEL:	31	% GRAVEL:	40
% SAND:	20	% SAND:	34	% SAND:	32
% FINES:	63	% FINES:	35	% FINES:	28
CLASSIFICATION:		CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT WITH GRAVEL (ML)		SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

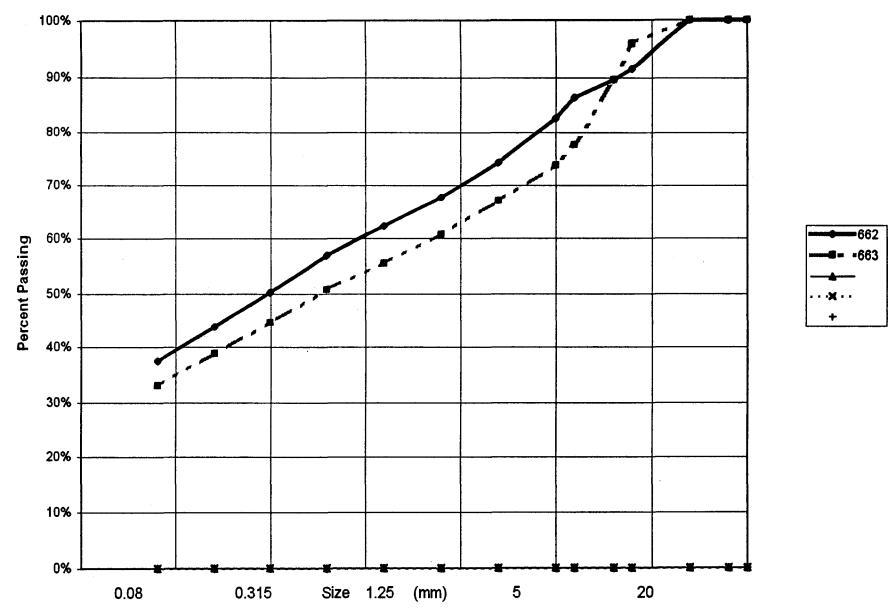
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-711
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+550 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	92%	25.0	96%
20.0	90%	20.0	90%
12.5	86%	12.5	78%
10.0	83%	10.0	74%
5.0	74%	5.0	67%
2.5	68%	2.5	61%
1.25	62%	1.25	56%
0.630	57%	0.630	51%
0.315	50%	0.315	45%
0.160	44%	0.160	39%
0.080	38%	0.080	33%
M.C.(%): 7%		M.C.(%): 10%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	26	% GRAVEL:	33
% SAND:	37	% SAND:	34
% FINES:	38	% FINES:	33
CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-712
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+450 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 664	FIELD No. 665
LAB NO: 763	LAB No. 764
DEPTH: 1.8-2.0	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	89%	25.0	94%
20.0	87%	20.0	88%
12.5	71%	12.5	79%
10.0	68%	10.0	75%
5.0	59%	5.0	63%
2.5	52%	2.5	53%
1.25	47%	1.25	46%
0.630	43%	0.630	40%
0.315	38%	0.315	33%
0.160	33%	0.160	28%
0.080	28%	0.080	24%

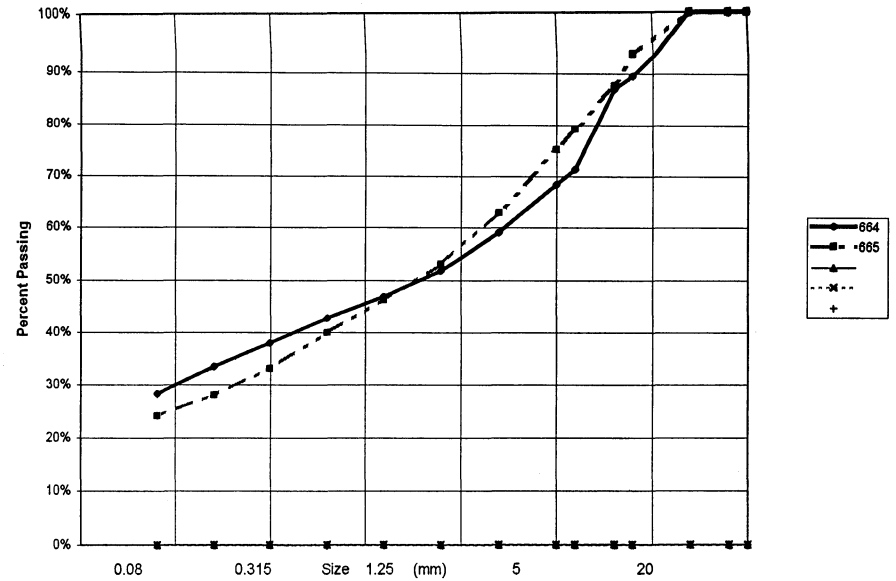
M.C.(%): 10% M.C.(%): 9%

LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	41	% GRAVEL:	37
% SAND:	31	% SAND:	39
% FINES:	28	% FINES:	24

CLASSIFICATION: CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM) SILTY SAND WITH GRAVEL (SM)

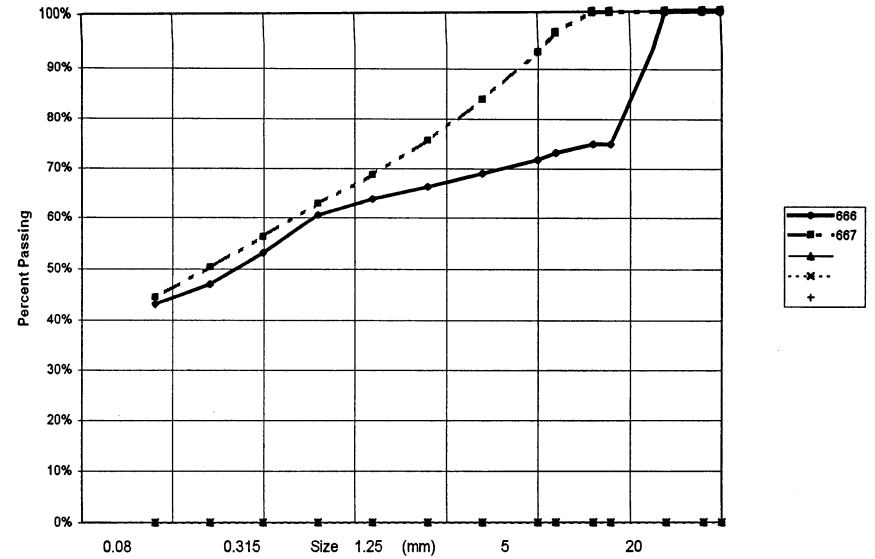
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-713
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+550 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-17

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	75%	25.0	100%
20.0	75%	20.0	100%
12.5	73%	12.5	97%
10.0	72%	10.0	93%
5.0	69%	5.0	84%
2.5	66%	2.5	76%
1.25	64%	1.25	69%
0.630	61%	0.630	63%
0.315	53%	0.315	56%
0.160	47%	0.160	50%
0.080	43%	0.080	45%
M.C.(%):	22%	M.C.(%):	12%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	31	% GRAVEL:	16
% SAND:	26	% SAND:	39
% FINES:	43	% FINES:	45
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-714
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+425 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 668
 LAB NO: 767
 DEPTH: 2.8-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	85%
20.0	85%
12.5	81%
10.0	78%
5.0	69%
2.5	63%
1.25	60%
0.630	56%
0.315	51%
0.160	46%
0.080	42%

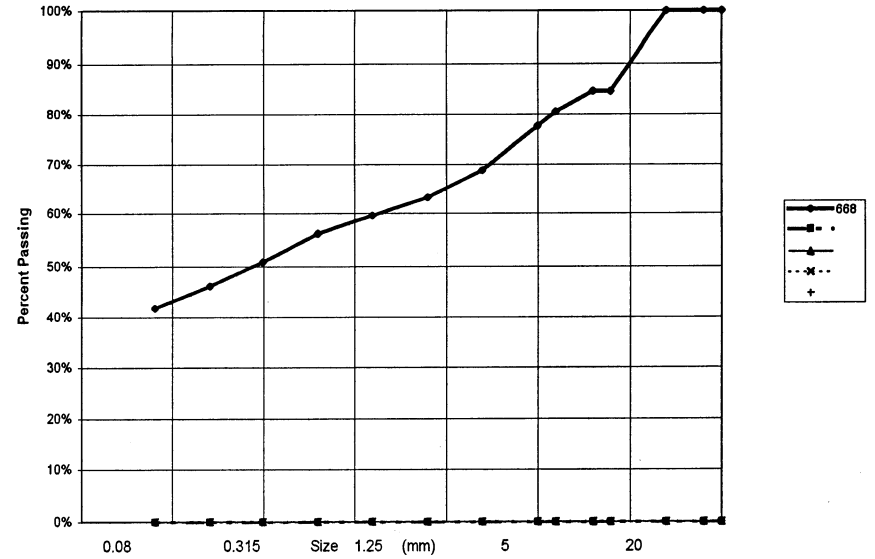
M.C.(%): 17%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 31
 % SAND: 27
 % FINES: 42

CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-715
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+425 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 669	FIELD No. 669A
LAB NO: 768	LAB No. 769
DEPTH: 1.5-1.7	DEPTH 2.8-3.0
TYPE: AUGER	TYPE AUGER

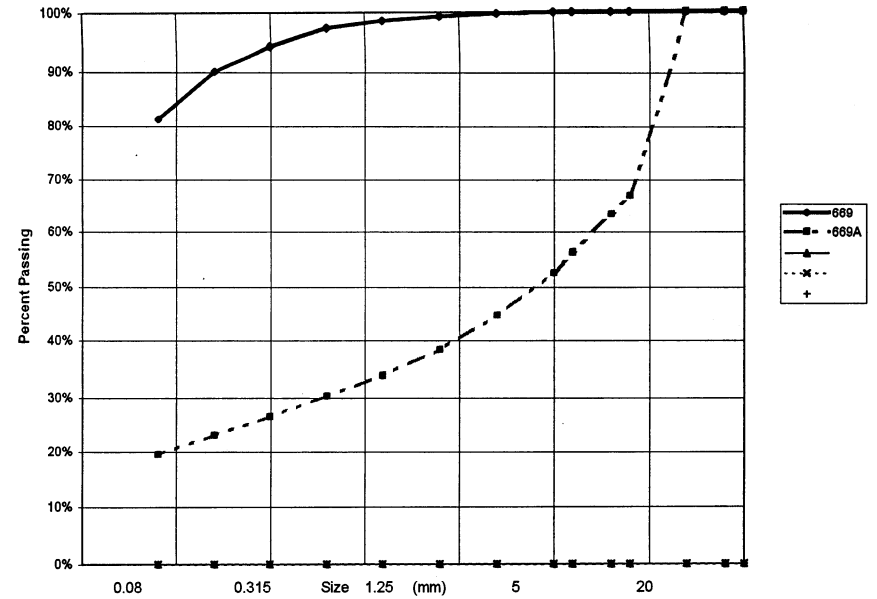
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	67%
20.0	100%	20.0	63%
12.5	100%	12.5	56%
10.0	100%	10.0	53%
5.0	100%	5.0	45%
2.5	99%	2.5	38%
1.25	99%	1.25	34%
0.630	97%	0.630	30%
0.315	94%	0.315	26%
0.160	90%	0.160	23%
0.080	81%	0.080	20%

M.C.(%): 45%	M.C.(%): 7%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 0	% GRAVEL: 55
% SAND: 18	% SAND: 25
% FINES: 81	% FINES: 20

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-716
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+425 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 670
 LAB NO: 770
 DEPTH: 2.0-2.2
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	100%
12.5	88%
10.0	84%
5.0	73%
2.5	64%
1.25	58%
0.630	53%
0.315	47%
0.160	42%
0.080	36%

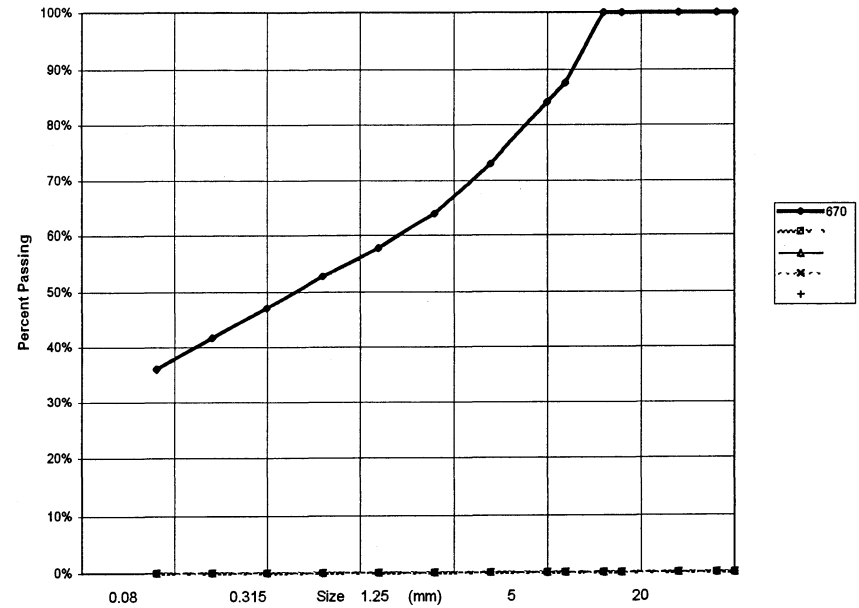
M.C.(%): 13%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 27
 % SAND: 37
 % FINES: 36

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-717
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+325 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 671
 LAB NO: 771
 DEPTH: 2.6-2.8
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	98%
20.0	98%
12.5	96%
10.0	94%
5.0	82%
2.5	74%
1.25	68%
0.630	63%
0.315	55%
0.160	49%
0.080	44%

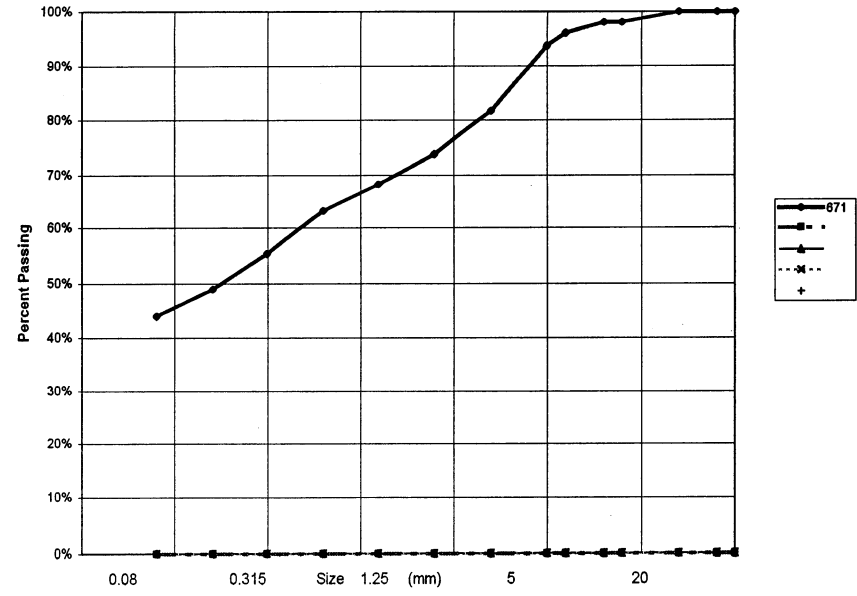
M.C.(%): 19%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 18
 % SAND: 38
 % FINES: 44

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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

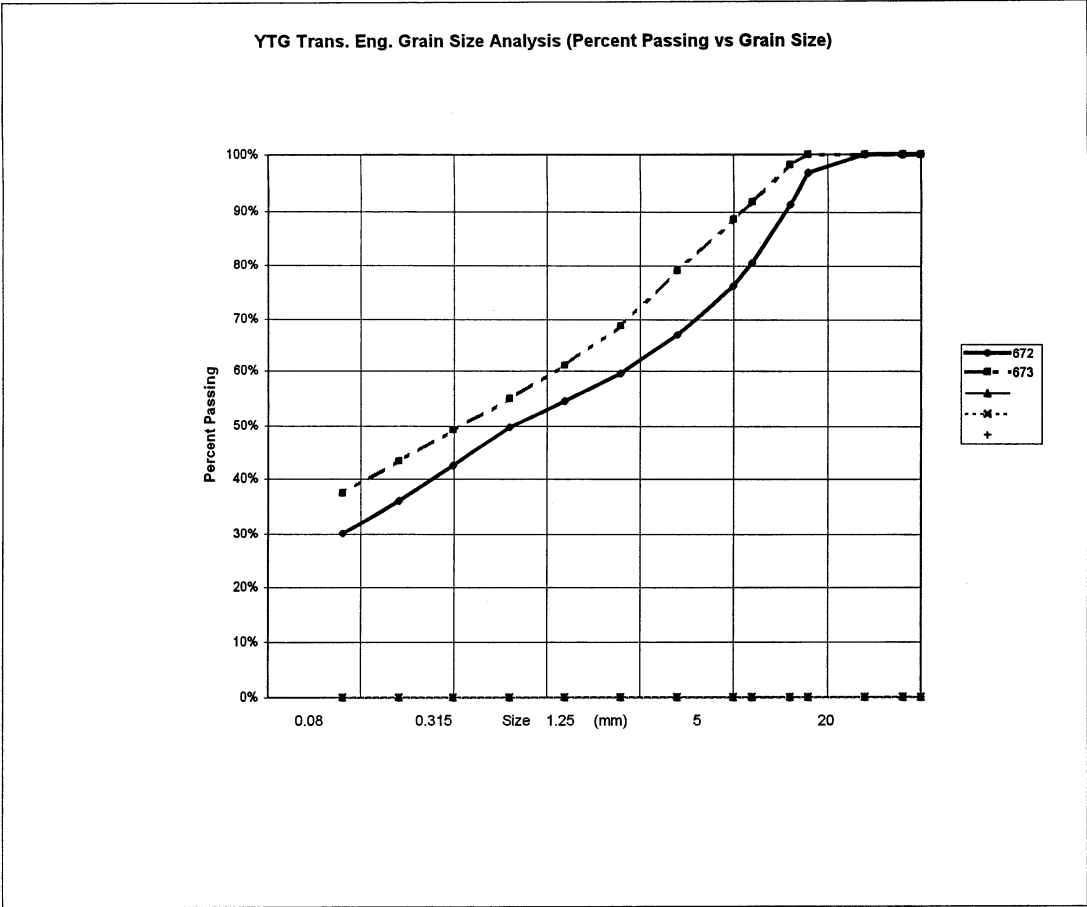


PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-718
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1805+275 30M RT		
LOGGED BY:	G.C.	DATE COMP	99-08-17

FIELD NO:	672	FIELD No.	673
LAB NO:	772	LAB No.	773
DEPTH:	1.3-1.5	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	97%	25.0	100%
20.0	91%	20.0	98%
12.5	81%	12.5	92%
10.0	76%	10.0	89%
5.0	67%	5.0	79%
2.5	60%	2.5	69%
1.25	55%	1.25	61%
0.630	50%	0.630	55%
0.315	42%	0.315	49%
0.160	36%	0.160	43%
0.080	30%	0.080	37%

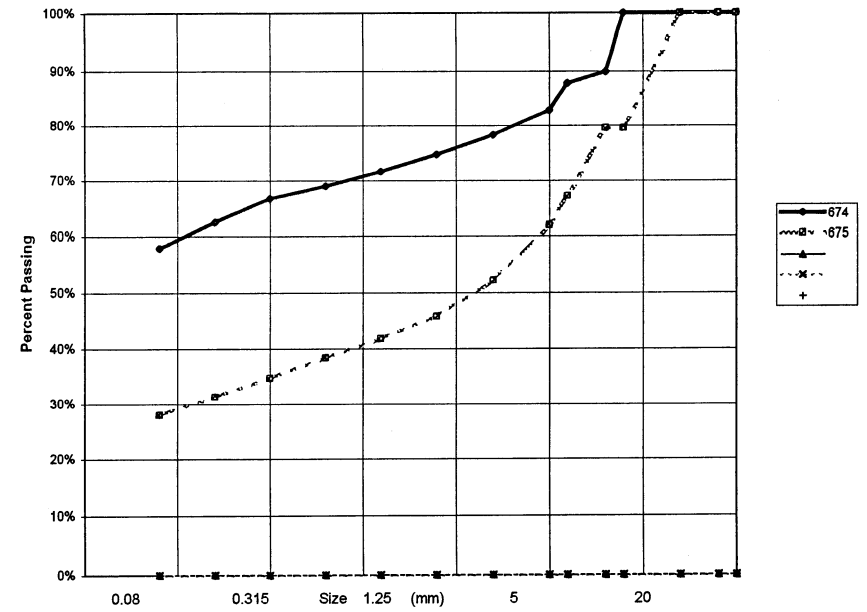
M.C.(%):	17%	M.C.(%):	17%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	33	% GRAVEL:	21
% SAND:	37	% SAND:	42
% FINES:	30	% FINES:	37
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-719
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1805+172 30 RT
 LOGGED BY: G.C. DATE COMP 99-08-17

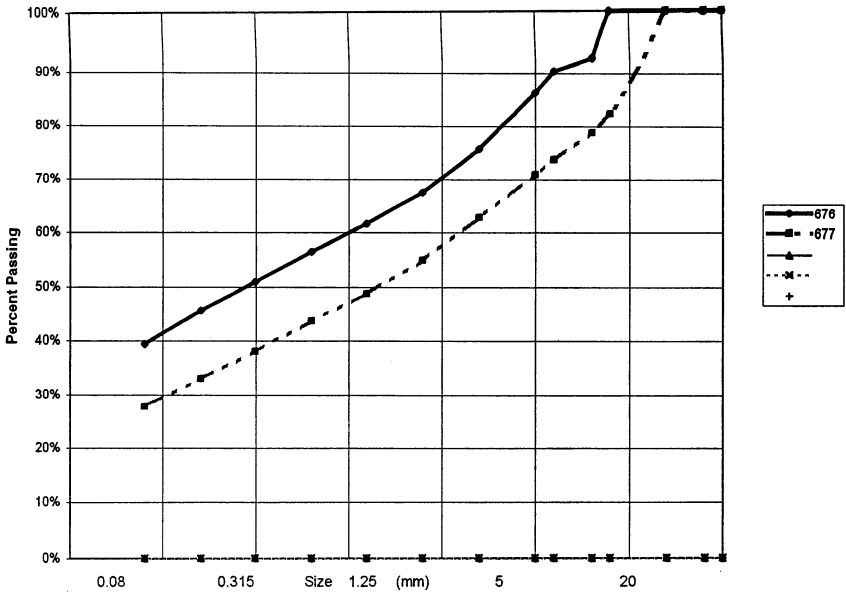
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	80%
20.0	90%	20.0	80%
12.5	88%	12.5	67%
10.0	83%	10.0	62%
5.0	78%	5.0	52%
2.5	75%	2.5	46%
1.25	72%	1.25	42%
0.630	69%	0.630	38%
0.315	67%	0.315	35%
0.160	62%	0.160	31%
0.080	58%	0.080	28%
M.C.(%): 26%		M.C.(%): 11%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	22	% GRAVEL:	48
% SAND:	20	% SAND:	24
% FINES:	58	% FINES:	28
CLASSIFICATION: GRAVELLY SILT WITH SAND (ML)		CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-720
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1322 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1805+070 30M RT		
LOGGED BY:	G.C.	DATE COMP	99-08-17
=====			
FIELD NO:	676	FIELD No.	677
LAB NO:	776	LAB No.	777
DEPTH:	1.4-1.6	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER
=====			
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	82%
20.0	93%	20.0	79%
12.5	90%	12.5	74%
10.0	86%	10.0	71%
5.0	76%	5.0	63%
2.5	67%	2.5	55%
1.25	62%	1.25	49%
0.630	57%	0.630	44%
0.315	51%	0.315	38%
0.160	45%	0.160	33%
0.080	39%	0.080	28%
=====			
M.C.(%):	19%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	24	% GRAVEL:	37
% SAND:	36	% SAND:	35
% FINES:	39	% FINES:	28
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY GRAVEL WITH SAND (GM)	

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-721
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+960 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 678
 LAB NO: 778
 DEPTH: 2.0-2.2
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	72%
20.0	66%
12.5	62%
10.0	58%
5.0	52%
2.5	47%
1.25	43%
0.630	40%
0.315	35%
0.160	30%
0.080	26%

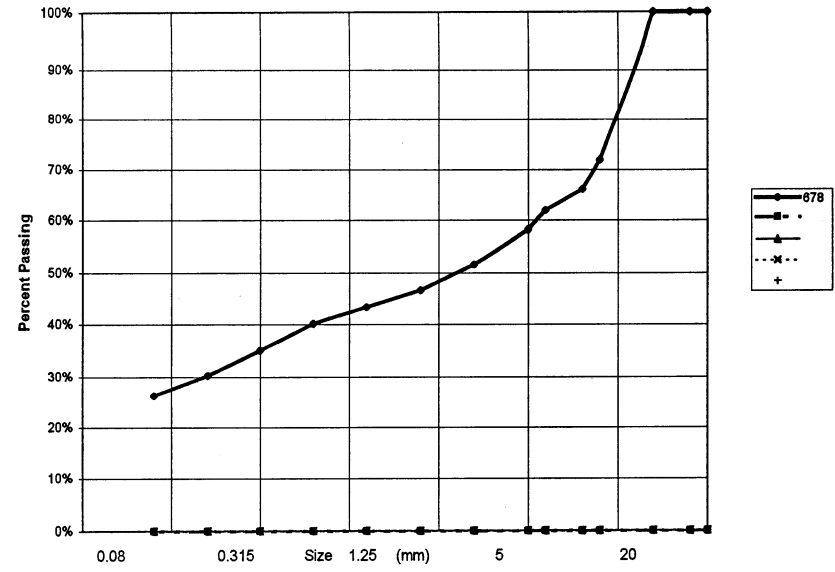
M.C.(%): 15%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 48
 % SAND: 26
 % FINES: 26

CLASSIFICATION:
 SILTY GRAVEL WITH SAND (GM)

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



PROJECT NUMBER:	092-202101-0329	HOLE No.:	527-722
CLIENT:	ENGINEERING-CAPITAL		
PROJECT NAME:	SHAKWAK PROJECT		
PROJECT LOCATION:	SEG 13 KM 1799-1X22 A/H		
DRILL UNIT:	NODWELL B40-L		
HOLE LOCATION:	1804+960 20M LT		
LOGGED BY:	G.C.	DATE COMP	99-08-17

FIELD NO:	679	FIELD No.	680
LAB NO:	779	LAB No.	780
DEPTH:	2.0-2.2	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

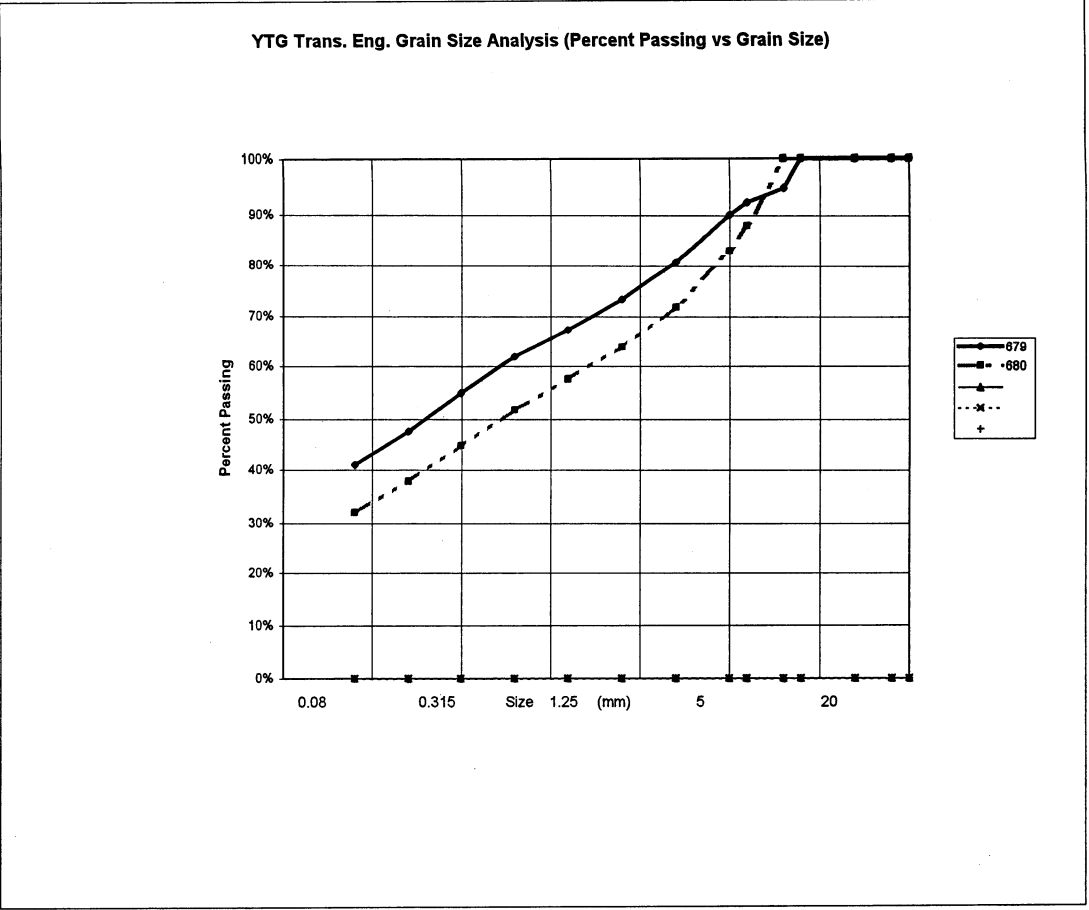
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	95%	20.0	100%
12.5	92%	12.5	88%
10.0	90%	10.0	83%
5.0	81%	5.0	72%
2.5	73%	2.5	64%
1.25	67%	1.25	58%
0.630	62%	0.630	52%
0.315	55%	0.315	45%
0.160	48%	0.160	38%
0.080	41%	0.080	32%

M.C.(%):	17%	M.C.(%):	16%
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LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0

% GRAVEL:	19	% GRAVEL:	28
% SAND:	40	% SAND:	40
% FINES:	41	% FINES:	32

CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	



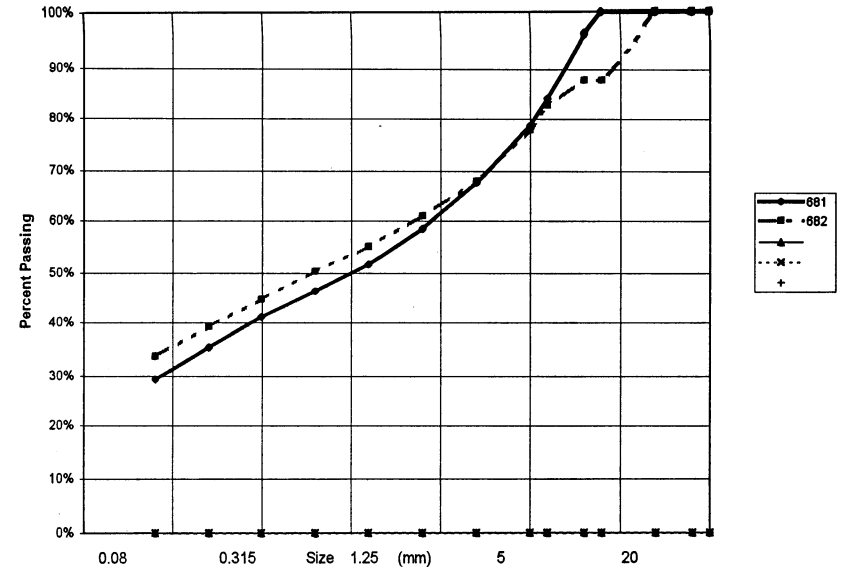
PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-723
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+870 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO:	681	FIELD No.	682
LAB NO:	781	LAB No.	782
DEPTH:	1.8-2.0	DEPTH	2.8-3.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	88%
20.0	97%	20.0	88%
12.5	84%	12.5	83%
10.0	79%	10.0	78%
5.0	68%	5.0	68%
2.5	58%	2.5	61%
1.25	52%	1.25	55%
0.630	46%	0.630	50%
0.315	41%	0.315	45%
0.160	35%	0.160	39%
0.080	29%	0.080	34%

M.C.(%):	9%	M.C.(%):	11%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	32	% GRAVEL:	32
% SAND:	38	% SAND:	34
% FINES:	29	% FINES:	34
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

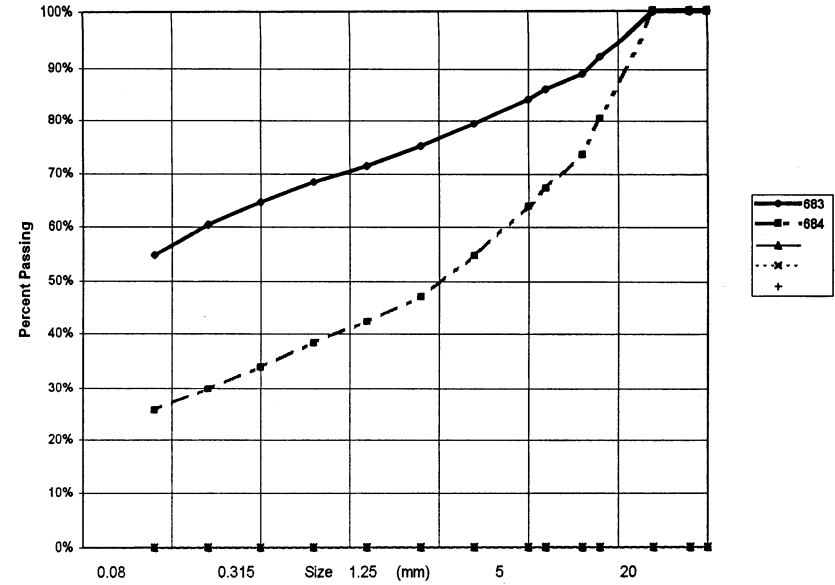
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-724
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1822 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+775 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	92%	25.0	81%
20.0	89%	20.0	74%
12.5	86%	12.5	67%
10.0	84%	10.0	64%
5.0	79%	5.0	55%
2.5	75%	2.5	47%
1.25	71%	1.25	42%
0.630	68%	0.630	38%
0.315	65%	0.315	34%
0.160	60%	0.160	30%
0.080	55%	0.080	26%
M.C.(%):	23%	M.C.(%):	9%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	21	% GRAVEL:	45
% SAND:	25	% SAND:	29
% FINES:	55	% FINES:	26
CLASSIFICATION:		CLASSIFICATION:	
SANDY SILT WITH GRAVEL (ML)		SILTY GRAVEL WITH SAND (GM)	

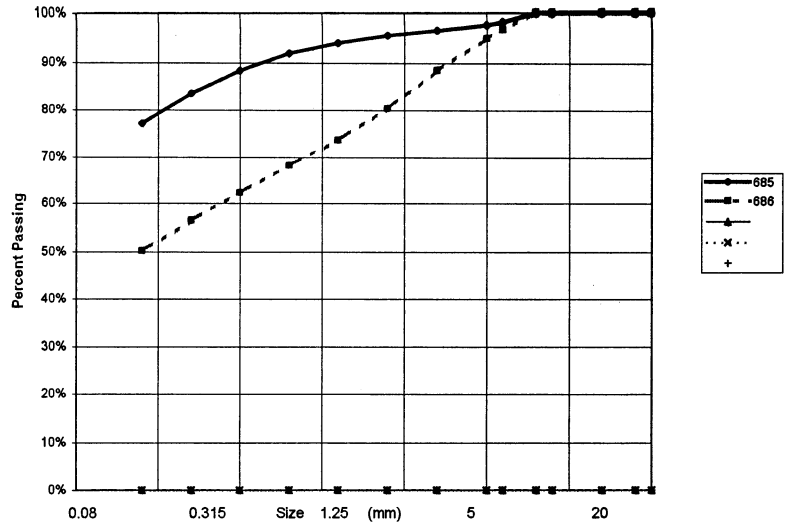
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-725
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1522 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+650 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO:	LAB NO:	DEPTH:	TYPE:	FIELD No.	LAB No.	DEPTH	TYPE
685	785	2.0-2.2	AUGER	686	786	2.8-3.0	AUGER
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING				
100.0	100%	100.0	100%				
80.0	100%	80.0	100%				
50.0	100%	50.0	100%				
25.0	100%	25.0	100%				
20.0	100%	20.0	100%				
12.5	98%	12.5	97%				
10.0	98%	10.0	95%				
5.0	97%	5.0	88%				
2.5	96%	2.5	80%				
1.25	94%	1.25	74%				
0.630	92%	0.630	68%				
0.315	88%	0.315	62%				
0.160	84%	0.160	57%				
0.080	77%	0.080	50%				
M.C.(%):	34%	M.C.(%):	17%				
LIMITS		LIMITS					
LIQUID:	0.0	LIQUID:	0.0				
PLASTIC:	0.0	PLASTIC:	0.0				
P.I.:	0.0	P.I.:	0.0				
% GRAVEL:	3	% GRAVEL:	12				
% SAND:	20	% SAND:	38				
% FINES:	77	% FINES:	50				
CLASSIFICATION:		CLASSIFICATION:					
SILT WITH SAND (ML)		SANDY SILT (ML)					

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-726
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1322 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+575 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO: 687
 LAB NO: 787
 DEPTH: 2.8-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	94%
12.5	92%
10.0	89%
5.0	82%
2.5	72%
1.25	63%
0.630	58%
0.315	52%
0.160	46%
0.080	40%

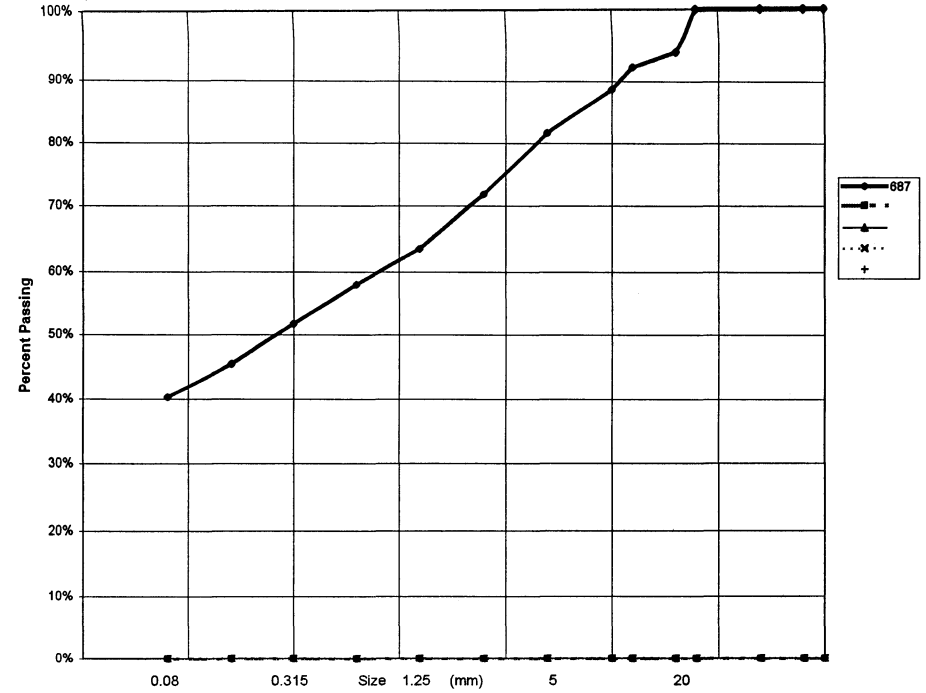
M.C.(%): 17%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 18
 % SAND: 41
 % FINES: 40

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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

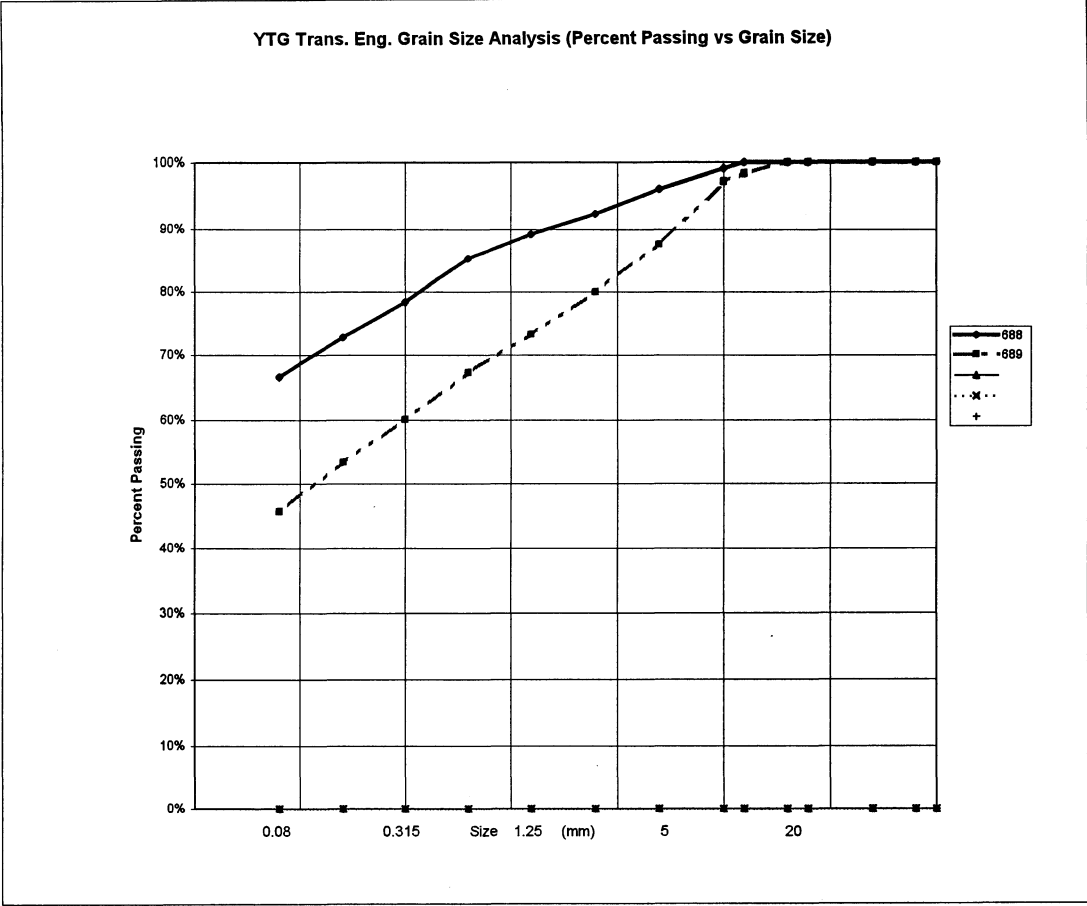


PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-727
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1X22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+575 20M RT
 LOGGED BY: G.C. DATE COMP 99-08-17

FIELD NO:	688	FIELD No:	689
LAB NO:	788	LAB No:	789
DEPTH:	1.0-1.2	DEPTH:	2.6-3.0
TYPE:	AUGER	TYPE:	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	98%
10.0	99%	10.0	97%
5.0	96%	5.0	88%
2.5	92%	2.5	80%
1.25	89%	1.25	73%
0.630	85%	0.630	67%
0.315	78%	0.315	60%
0.160	73%	0.160	53%
0.080	67%	0.080	46%

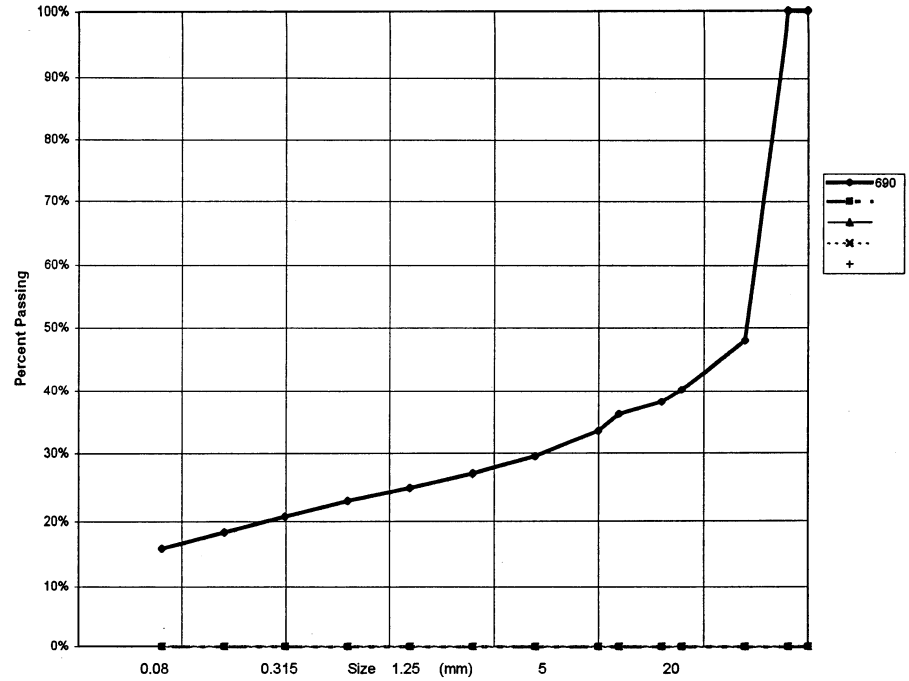
M.C.(%):	37%	M.C.(%):	15%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	4	% GRAVEL:	12
% SAND:	30	% SAND:	42
% FINES:	67	% FINES:	46
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY SAND (SM)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-728
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+420 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

FIELD NO: 690			
LAB NO: 790			
DEPTH: 2.8-3.0			
TYPE: AUGER			
SIEVE SIZE	PERCENT PASSING		
100.0	100%		
80.0	100%		
50.0	48%		
25.0	40%		
20.0	38%		
12.5	36%		
10.0	33%		
5.0	30%		
2.5	27%		
1.25	25%		
0.630	23%		
0.315	21%		
0.160	18%		
0.080	16%		
M.C.(%):	10%		
LIMITS			
LIQUID:	0.0		
PLASTIC:	0.0		
P.I.:	0.0		
% GRAVEL:	70		
% SAND:	14		
% FINES:	16		
CLASSIFICATION:			
SILTY GRAVEL (GM)			

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-729
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1¹/₂ A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+325 30M LT
 LOGGED BY: G.C. DATE COMP 99-08-1⁵

FIELD NO: 691
 LAB NO: 791
 DEPTH: 2.75-3.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	94%
20.0	92%
12.5	84%
10.0	82%
5.0	73%
2.5	66%
1.25	60%
0.630	55%
0.315	47%
0.160	40%
0.080	34%

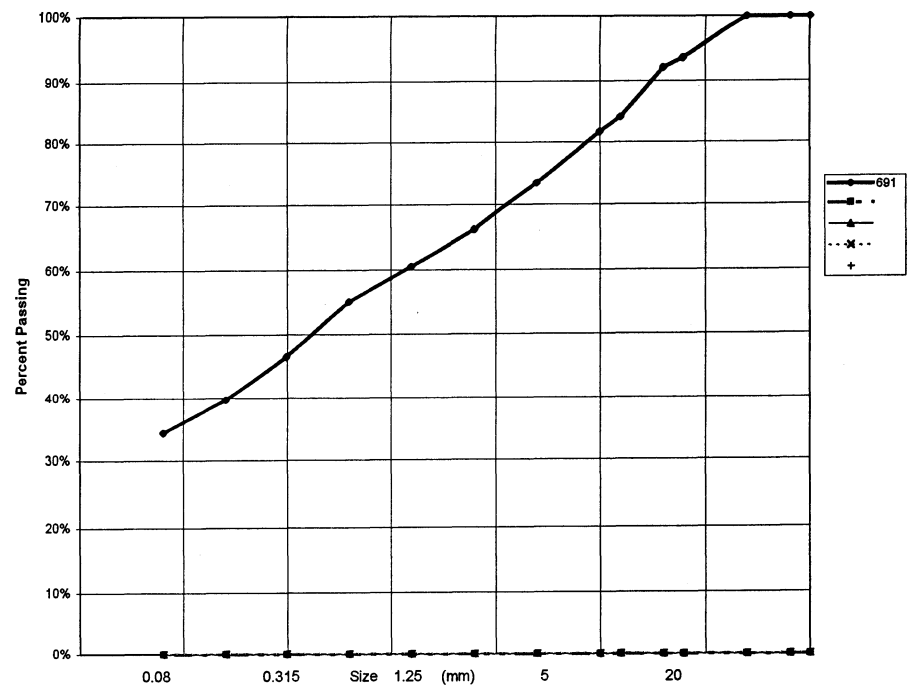
M.C.(%): 16%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 27
 % SAND: 39
 % FINES: 34

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-730
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1#22 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+125 20M LT
 LOGGED BY: G.C. DATE COMP 99-08-18

FIELD NO: 692	FIELD No. 693
LAB NO: 792	LAB No. 793
DEPTH: 1.4-1.8	DEPTH 2.6-3.0
TYPE: AUGER	TYPE AUGER

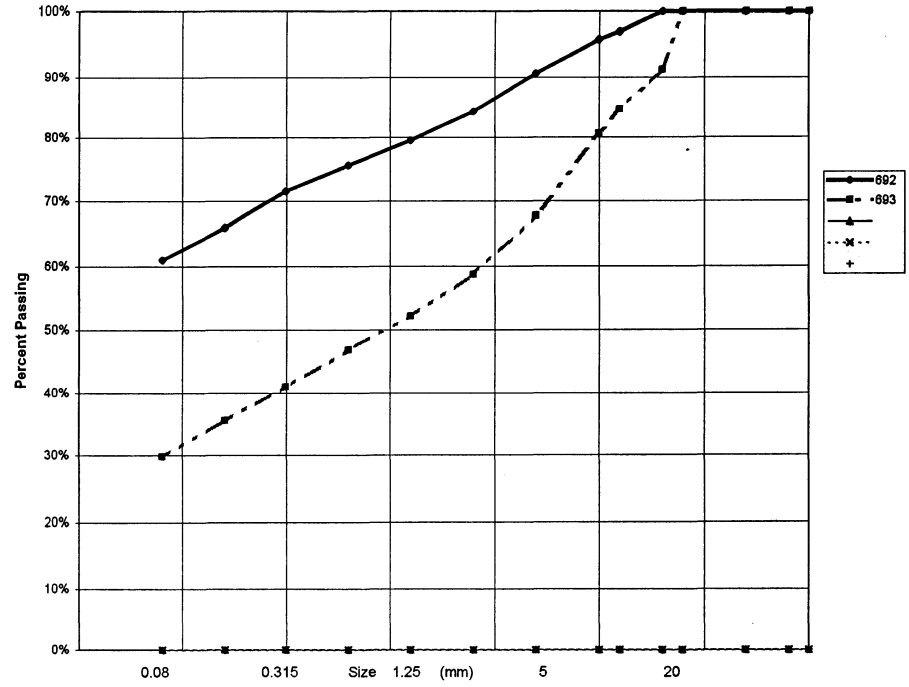
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	91%
12.5	97%	12.5	85%
10.0	96%	10.0	81%
5.0	91%	5.0	68%
2.5	84%	2.5	59%
1.25	80%	1.25	52%
0.630	76%	0.630	47%
0.315	71%	0.315	41%
0.160	66%	0.160	36%
0.080	61%	0.080	30%

M.C.(%): 21%	M.C.(%): 10%
LIMITS	LIMITS
LIQUID: 0.0	LIQUID: 0.0
PLASTIC: 0.0	PLASTIC: 0.0
P.I.: 0.0	P.I.: 0.0

% GRAVEL: 9	% GRAVEL: 32
% SAND: 30	% SAND: 38
% FINES: 61	% FINES: 30

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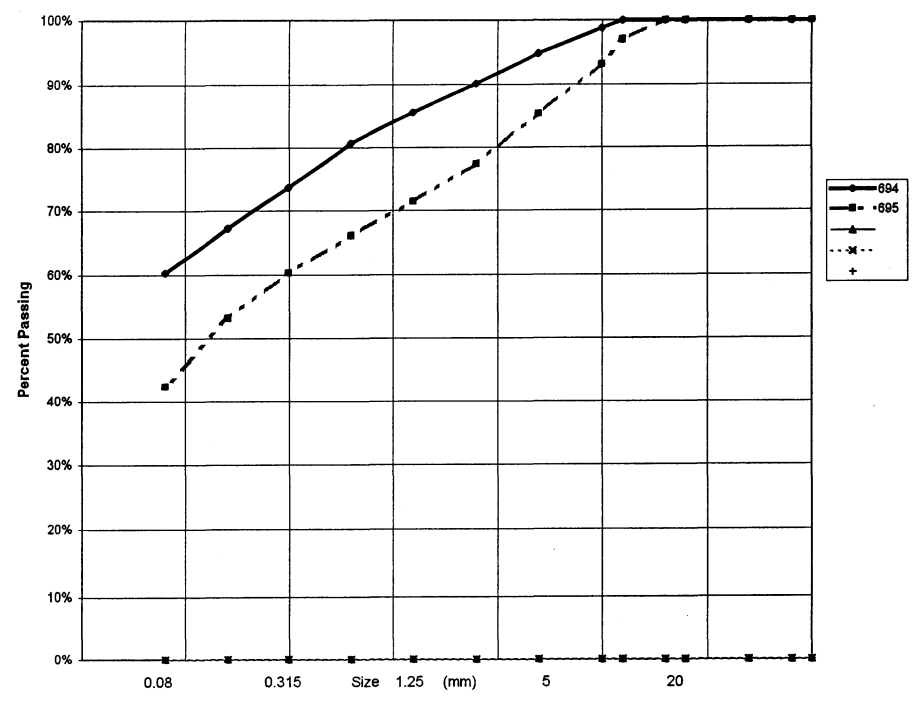
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 092-202101-0329 HOLE No.: 527-731
 CLIENT: ENGINEERING-CAPITAL
 PROJECT NAME: SHAKWAK PROJECT
 PROJECT LOCATION: SEG 13 KM 1799-1722 A/H
 DRILL UNIT: NODWELL B40-L
 HOLE LOCATION: 1804+125 20M RT
 LOGGED BY: G. C. DATE COMP 99-08-18

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	100%
12.5	100%	12.5	97%
10.0	99%	10.0	93%
5.0	95%	5.0	85%
2.5	90%	2.5	77%
1.25	86%	1.25	71%
0.630	81%	0.630	66%
0.315	74%	0.315	60%
0.160	67%	0.160	53%
0.080	60%	0.080	43%
M.C.(%):	42%	M.C.(%):	15%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	5	% GRAVEL:	15
% SAND:	35	% SAND:	43
% FINES:	60	% FINES:	43
CLASSIFICATION:	SANDY SILT (ML)	CLASSIFICATION:	SILTY SAND (SM)

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 531-834
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1815+600 10M RT
 LOGGED BY: DT DATE COMP 99-10-20

FIELD NO: 850 FIELD No. 851
 LAB NO: 952 LAB No. 953
 DEPTH: 4.0-4.3 DEPTH 7.6-8.0
 TYPE: AUGER TYPE AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	73%	25.0	100%
20.0	71%	20.0	100%
12.5	59%	12.5	93%
10.0	54%	10.0	89%
5.0	45%	5.0	77%
2.5	39%	2.5	67%
1.25	35%	1.25	59%
0.630	31%	0.630	52%
0.315	27%	0.315	45%
0.160	23%	0.160	38%
0.080	20%	0.080	31%

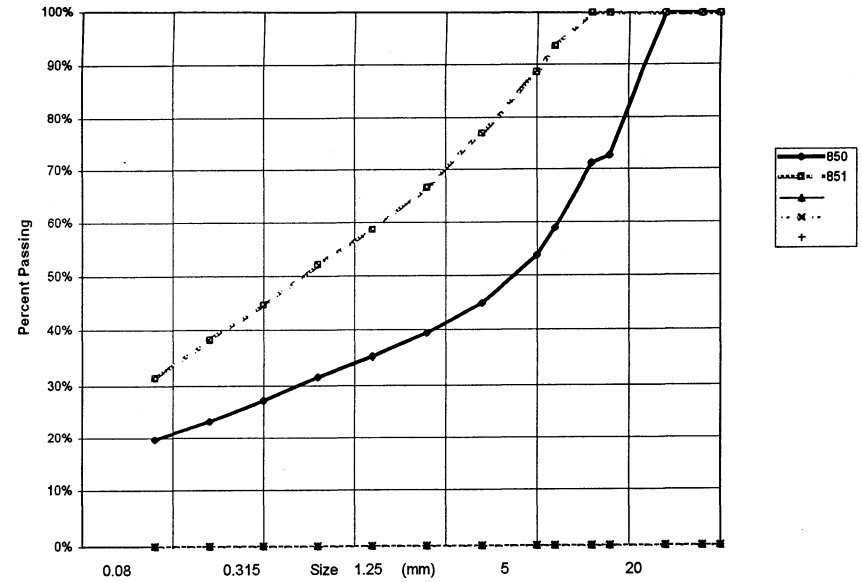
M.C.(%): 7% M.C.(%): 7%

LIMITS
 LIQUID: 0.0 LIQUID: 0.0
 PLASTIC: 0.0 PLASTIC: 0.0
 P.I.: 0.0 P.I.: 0.0

% GRAVEL: 55 % GRAVEL: 23
 % SAND: 25 % SAND: 46
 % FINES: 20 % FINES: 31

CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)
 CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)

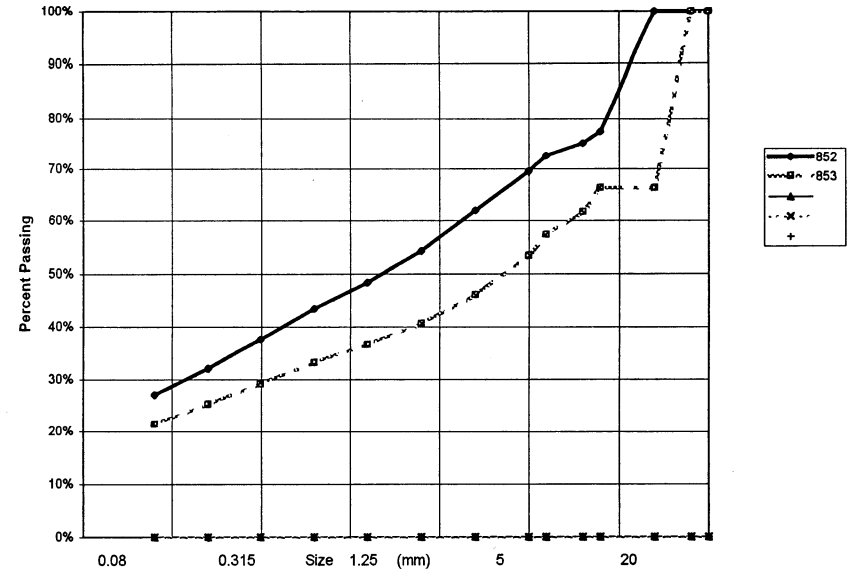
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 531-835
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1815+700 10M RT
 LOGGED BY: DT DATE COMP 99-10-20

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	66%
25.0	77%	25.0	66%
20.0	75%	20.0	62%
12.5	73%	12.5	57%
10.0	70%	10.0	53%
5.0	62%	5.0	46%
2.5	54%	2.5	41%
1.25	48%	1.25	37%
0.630	43%	0.630	33%
0.315	37%	0.315	29%
0.160	32%	0.160	25%
0.080	27%	0.080	22%
M.C.(%):	9%	M.C.(%):	6%
LIMITS			
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	38	% GRAVEL:	54
% SAND:	35	% SAND:	24
% FINES:	27	% FINES:	22
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

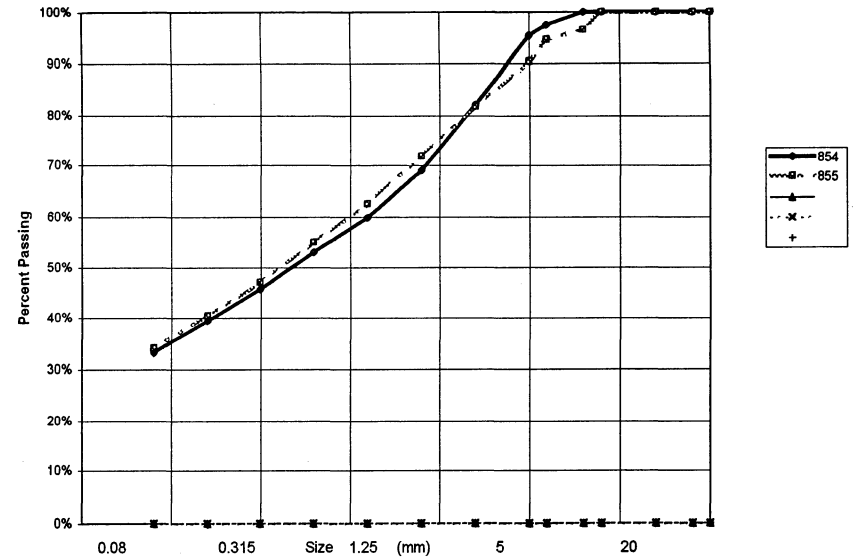
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 531-836
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1815+800 10M RT
 LOGGED BY: DT DATE COMP 99-10-20

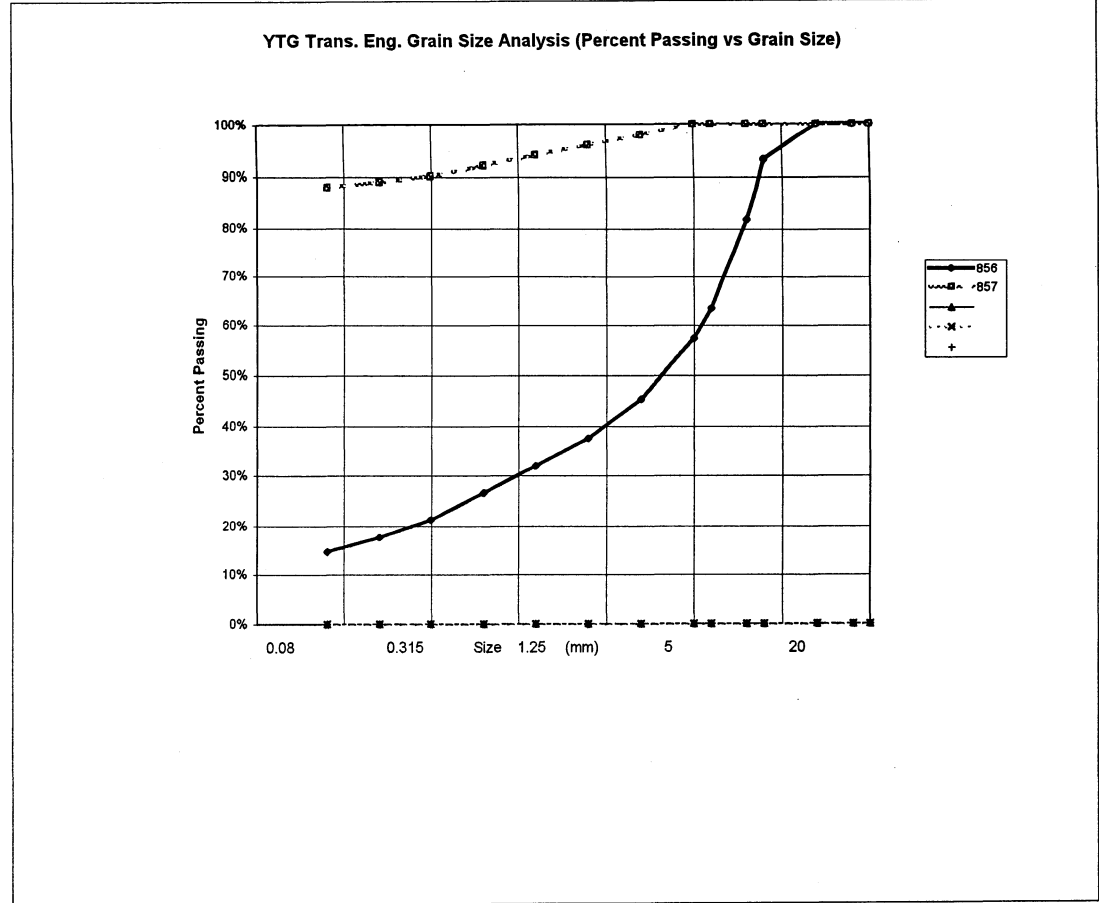
FIELD NO: 854		FIELD No. 855	
LAB NO: 956		LAB No. 957	
DEPTH: 4.2-4.6		DEPTH 7.4-7.8	
TYPE: AUGER		TYPE AUGER	
SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	100%	25.0	100%
20.0	100%	20.0	96%
12.5	97%	12.5	94%
10.0	95%	10.0	90%
5.0	82%	5.0	82%
2.5	69%	2.5	72%
1.25	60%	1.25	63%
0.630	53%	0.630	55%
0.315	46%	0.315	47%
0.160	39%	0.160	40%
0.080	33%	0.080	34%
M.C.(%):	11%	M.C.(%):	9%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	18	% GRAVEL:	18
% SAND:	49	% SAND:	48
% FINES:	33	% FINES:	34
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 531-838
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1816+000 25M RT
 LOGGED BY: DT DATE COMP 99-10-21

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	93%	25.0	100%
20.0	82%	20.0	100%
12.5	64%	12.5	100%
10.0	57%	10.0	100%
5.0	45%	5.0	98%
2.5	38%	2.5	96%
1.25	32%	1.25	94%
0.630	27%	0.630	92%
0.315	21%	0.315	90%
0.160	18%	0.160	89%
0.080	15%	0.080	88%
M.C.(%): 8%		M.C.(%): 29%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	55	% GRAVEL:	2
% SAND:	31	% SAND:	10
% FINES:	15	% FINES:	88
CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SILT (ML)	

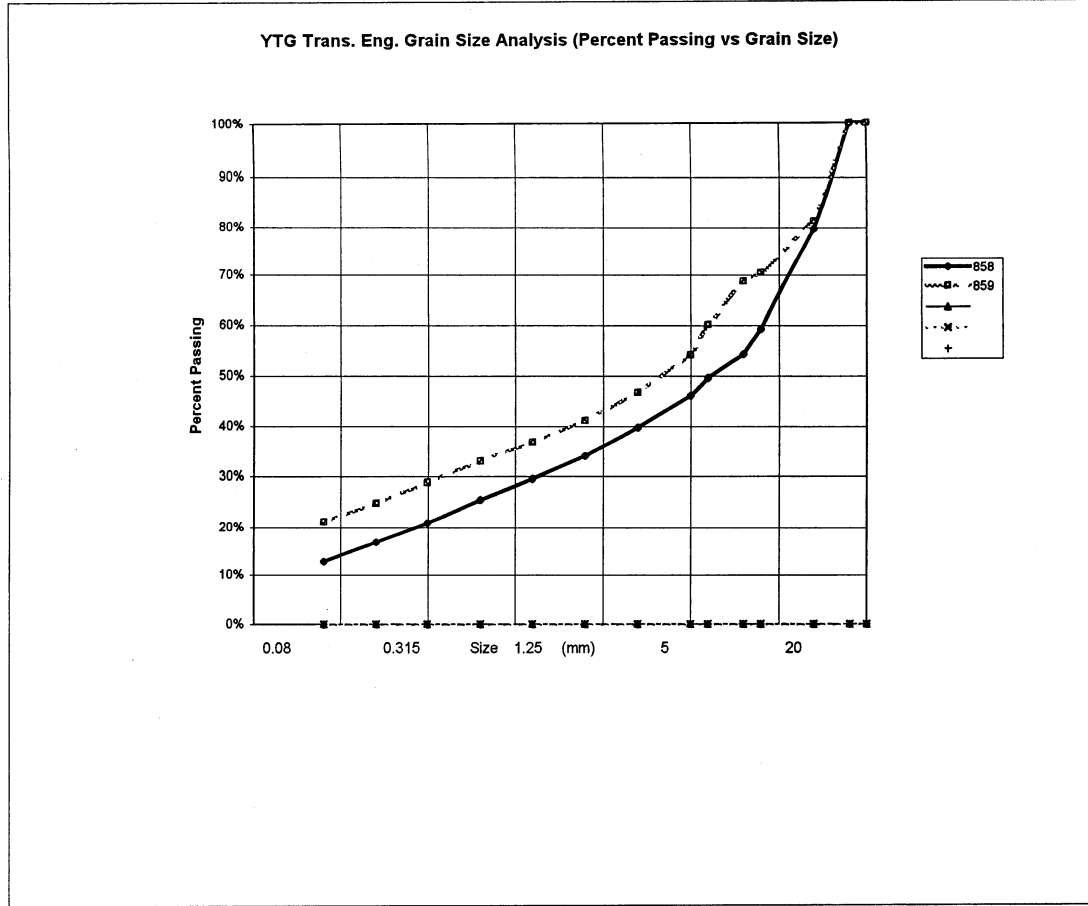


PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 531-842
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1817+500 25M RT
 LOGGED BY: DT DATE COMP 99-10-21

FIELD NO:	858	FIELD No.	859
LAB NO:	960	LAB No.	961
DEPTH:	4.3-4.7	DEPTH	8.4-8.8
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	80%	50.0	81%
25.0	59%	25.0	71%
20.0	54%	20.0	69%
12.5	50%	12.5	60%
10.0	46%	10.0	54%
5.0	40%	5.0	47%
2.5	34%	2.5	41%
1.25	29%	1.25	37%
0.630	25%	0.630	33%
0.315	21%	0.315	29%
0.160	17%	0.160	25%
0.080	13%	0.080	21%

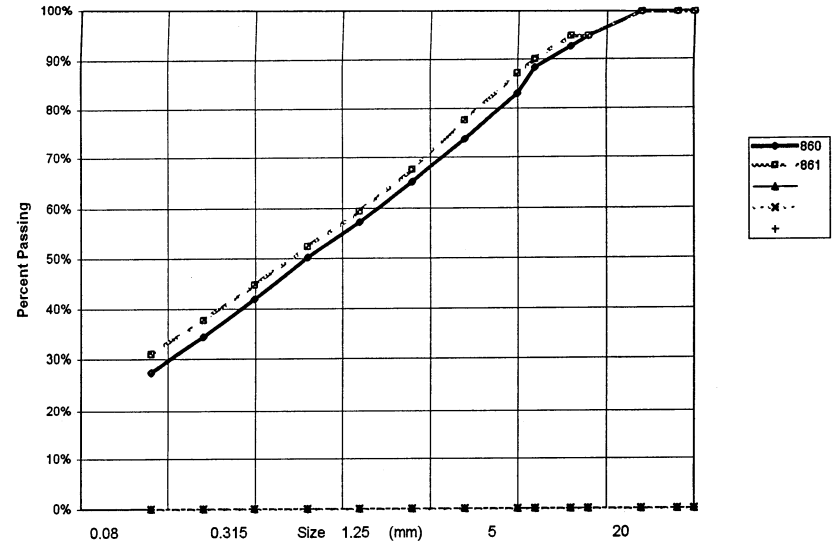
M.C.(%):	9%	M.C.(%):	7%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	60	% GRAVEL:	53
% SAND:	27	% SAND:	26
% FINES:	13	% FINES:	21
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 531-843
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1817+601 12M RT
 LOGGED BY: DT DATE COMP 99-10-21

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	95%	25.0	95%
20.0	93%	20.0	95%
12.5	88%	12.5	90%
10.0	83%	10.0	87%
5.0	74%	5.0	78%
2.5	65%	2.5	68%
1.25	57%	1.25	59%
0.630	50%	0.630	52%
0.315	42%	0.315	45%
0.160	34%	0.160	38%
0.080	27%	0.080	31%
M.C.(%):	15%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	26	% GRAVEL:	22
% SAND:	46	% SAND:	47
% FINES:	27	% FINES:	31
CLASSIFICATION:		CLASSIFICATION:	
SILTY SAND WITH GRAVEL (SM)		SILTY SAND WITH GRAVEL (SM)	

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 831-844
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1817+706 14M RT
 LOGGED BY: DT DATE COMP 99-10-22

FIELD NO: 862
 LAB NO: 964
 DEPTH: 3.6-4.0
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	95%
12.5	88%
10.0	83%
5.0	72%
2.5	64%
1.25	58%
0.630	53%
0.315	47%
0.160	42%
0.080	37%

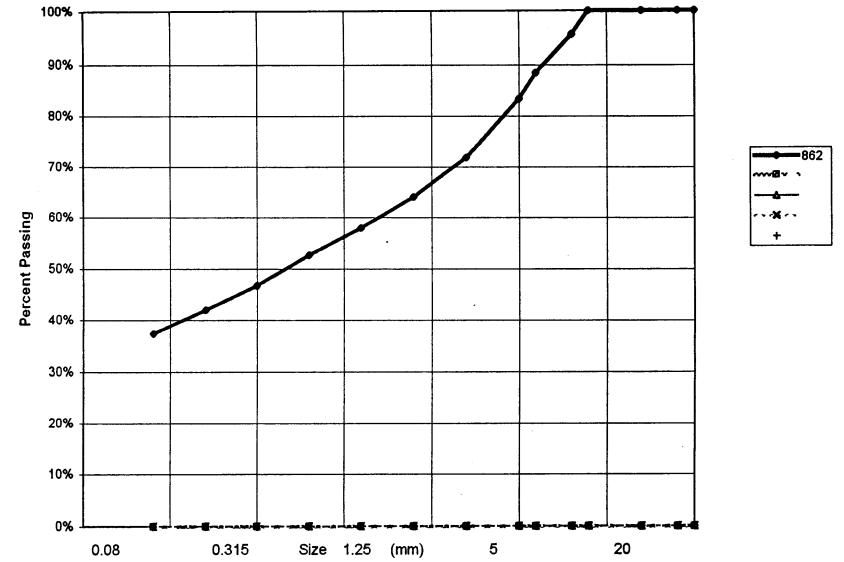
M.C.(%): 19%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 28
 % SAND: 34
 % FINES: 37

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

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



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 532-845
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1817+815 20M RT
 LOGGED BY: DT DATE COMP 99-10-22

FIELD NO: 863
 LAB NO: 965
 DEPTH: 5.5-5.9
 TYPE: AUGER

SIEVE SIZE	PERCENT PASSING
100.0	100%
80.0	100%
50.0	100%
25.0	100%
20.0	92%
12.5	84%
10.0	77%
5.0	65%
2.5	54%
1.25	47%
0.630	42%
0.315	36%
0.160	30%
0.080	24%

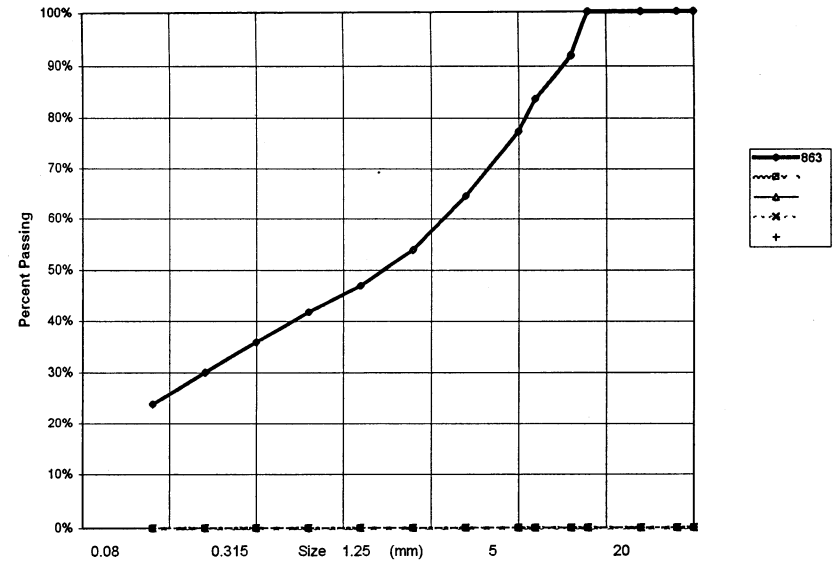
M.C.(%): 11%

LIMITS
 LIQUID: 0.0
 PLASTIC: 0.0
 P.I.: 0.0

% GRAVEL: 35
 % SAND: 41
 % FINES: 24

CLASSIFICATION:
 SILTY SAND WITH GRAVEL (SM)

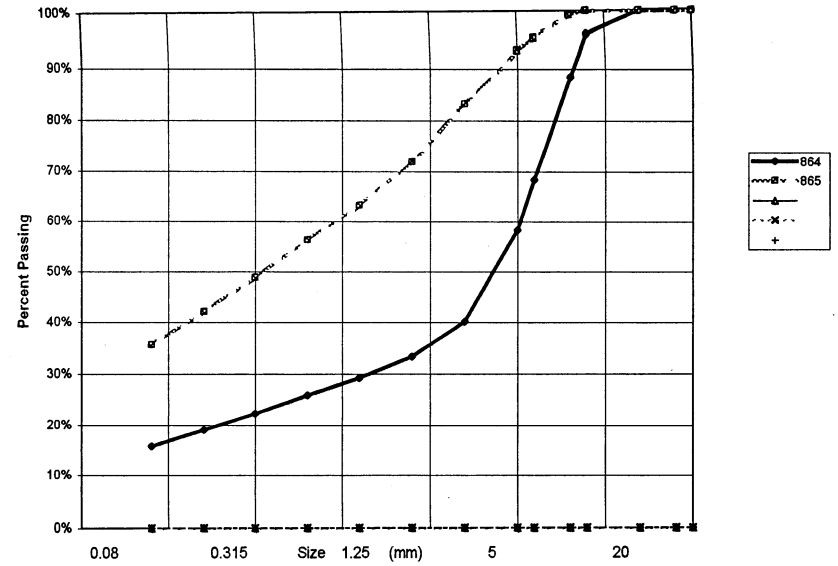
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 532-846
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1817+890 15M RT
 LOGGED BY: DT DATE COMP 99-10-25

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	96%	25.0	100%
20.0	88%	20.0	99%
12.5	68%	12.5	95%
10.0	58%	10.0	93%
5.0	40%	5.0	83%
2.5	33%	2.5	72%
1.25	29%	1.25	63%
0.630	26%	0.630	56%
0.315	22%	0.315	49%
0.160	19%	0.160	42%
0.080	16%	0.080	36%
M.C.(%): 9%		M.C.(%): 13%	
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	60	% GRAVEL:	17
% SAND:	24	% SAND:	48
% FINES:	16	% FINES:	36
CLASSIFICATION: SILTY GRAVEL WITH SAND (GM)		CLASSIFICATION: SILTY SAND WITH GRAVEL (SM)	

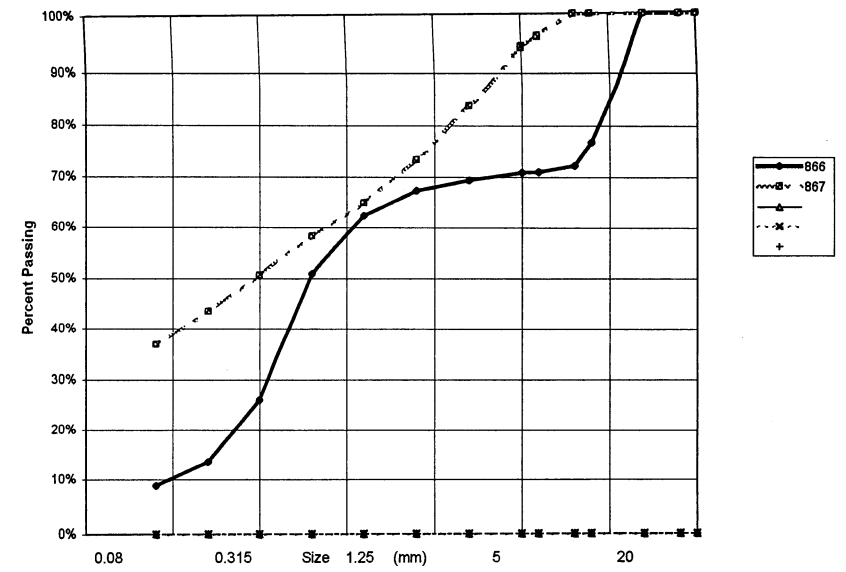
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 532-847
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1818+325 15M RT
 LOGGED BY: DT DATE COMP 99-10-25

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	77%	25.0	100%
20.0	72%	20.0	100%
12.5	71%	12.5	96%
10.0	71%	10.0	94%
5.0	69%	5.0	84%
2.5	67%	2.5	73%
1.25	62%	1.25	65%
0.630	51%	0.630	58%
0.315	26%	0.315	51%
0.160	13%	0.160	43%
0.080	9%	0.080	37%
M.C.(%):	14%	M.C.(%):	13%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	31	% GRAVEL:	16
% SAND:	61	% SAND:	47
% FINES:	9	% FINES:	37
CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED SAND WITH SILT & GRAVEL (SP-SM)		SILTY SAND WITH GRAVEL (SM)	

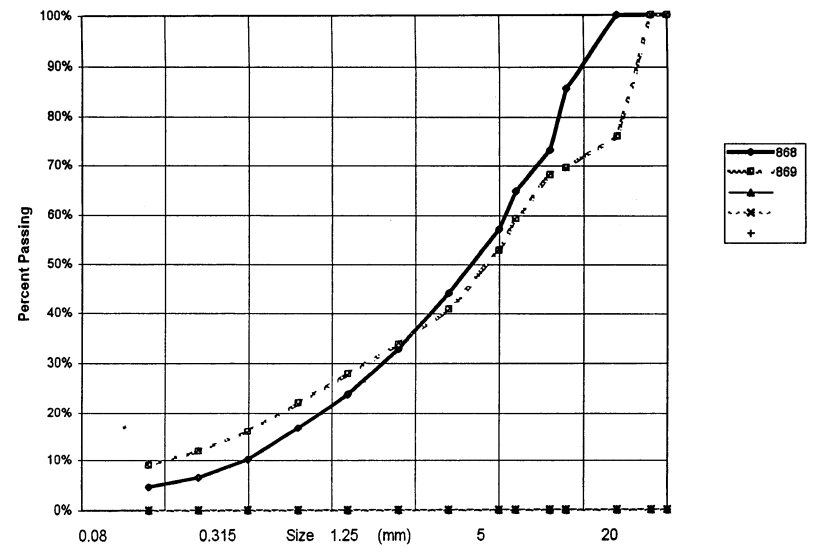
YTG Trans. Eng. Grain Size Analysis (Percent Passing vs Grain Size)



PROJECT NUMBER: 091-202101-0329-199 HOLE No.: 532-848
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 13
 PROJECT LOCATION: KM 1799-1822 A/H
 DRILL UNIT: B-40-L Nodwell
 HOLE LOCATION: 1818+477 15M RT
 LOGGED BY: DT DATE COMP 99-10-25

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	78%
25.0	86%	25.0	70%
20.0	73%	20.0	68%
12.5	65%	12.5	59%
10.0	57%	10.0	53%
5.0	44%	5.0	41%
2.5	33%	2.5	34%
1.25	24%	1.25	28%
0.630	17%	0.630	22%
0.315	10%	0.315	16%
0.160	6%	0.160	12%
0.080	4%	0.080	9%
M.C.(%):	2%	M.C.(%):	3%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	56	% GRAVEL:	59
% SAND:	40	% SAND:	32
% FINES:	4	% FINES:	9
CLASSIFICATION:		CLASSIFICATION:	
POORLY GRADED GRAVEL WITH SAND (GP)		POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	

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



PROJECT NUMBER:	091-202101-0329-199	HOLE No.:	532-849
CLIENT:	ENGINEERING CAPITAL		
PROJECT NAME:	SHAKWAK SEG 13		
PROJECT LOCATION:	KM 1799-1822 A/H		
DRILL UNIT:	B-40-L Nodwell		
HOLE LOCATION:	1818+600+10M RT		
LOGGED BY:	DT	DATE COMP	99-10-26

FIELD NO:	870	FIELD No.	871
LAB NO:	972	LAB No.	973
DEPTH:	2.6-3.0	DEPTH	5.6-6.0
TYPE:	AUGER	TYPE	AUGER

SIEVE SIZE	PERCENT PASSING	SIEVE SIZE	PERCENT PASSING
100.0	100%	100.0	100%
80.0	100%	80.0	100%
50.0	100%	50.0	100%
25.0	77%	25.0	86%
20.0	69%	20.0	79%
12.5	55%	12.5	59%
10.0	50%	10.0	52%
5.0	43%	5.0	41%
2.5	36%	2.5	33%
1.25	32%	1.25	29%
0.630	28%	0.630	25%
0.315	24%	0.315	21%
0.160	20%	0.160	18%
0.080	16%	0.080	15%

M.C.(%):	17%	M.C.(%):	10%
LIMITS		LIMITS	
LIQUID:	0.0	LIQUID:	0.0
PLASTIC:	0.0	PLASTIC:	0.0
P.I.:	0.0	P.I.:	0.0
% GRAVEL:	57	% GRAVEL:	59
% SAND:	26	% SAND:	26
% FINES:	16	% FINES:	15
CLASSIFICATION:		CLASSIFICATION:	
SILTY GRAVEL WITH SAND (GM)		SILTY GRAVEL WITH SAND (GM)	

