

GEOTECHNICAL INVESTIGATIONS

**Highway Construction
Km 1723.2 to 1734.6 Alaska Highway #1
Yukon, 2003-2004
Volume 3 of 3**



**Transportation Engineering Branch
Geotechnical Services**

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ORIGINAL - Do Not Remove From File

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1723.2 to 1734.6
YUKON 2003-2004

ALASKA HIGHWAY #1

Highway Construction
Km 1723.2 to 1734.6
Alaska Highway #1
Yukon 2003-2004
Volume 3 of 3

This Data Package prepared for project viewing:

January, 2003

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

CONTENTS

Volume 1 of 3

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING ALASKA HIGHWAY

Subsurface Exploration and Testing Report Sheets are provided.

The reports for the centreline holes are arranged according to project location, starting at Km 1723+140 and increasing to Km 1734+776.

TEST HOLES 343 to 379	shown with prefix 612-
TEST HOLES 380 to 384	shown with prefix 613-
TEST HOLES 385 to 409	shown with prefix 615-
TEST HOLES 410 to 434	shown with prefix 616-
TEST HOLES 435 to 459	shown with prefix 617-
TEST HOLES 460 to 484	shown with prefix 618-
TEST HOLES 485 to 500	shown with prefix 619-

NOTE:

Centreline Test Hole locations indicated on the Subsurface Exploration and Testing Report Sheets are approximate. Actual Test Hole locations, located by GPS survey or field survey, are as shown on project plans.

CONTENTS (continued)

Volume 2 of 3

CENTRELINE TESTING ALASKA HIGHWAY

Laboratory Testing Result Sheets are provided.

The reports for the centreline holes are arranged according to test hole number, starting at 612-343 and increasing to 619-500.

TEST HOLES 343 to 379	shown with prefix 612-
TEST HOLES 380 to 384	shown with prefix 613-
TEST HOLES 385 to 409	shown with prefix 615-
TEST HOLES 410 to 434	shown with prefix 616-
TEST HOLES 435 to 459	shown with prefix 617-
TEST HOLES 460 to 484	shown with prefix 618-
TEST HOLES 485 to 500	shown with prefix 619-

NOTE:

Centreline Test Hole locations indicated on the Subsurface Exploration and Testing Report Sheets are approximate. Actual Test Hole locations, located by GPS survey or field survey, are as shown on project plans.

CONTENTS (continued)**Volume 3 of 3****GRANULAR SOURCE Km 1730.2 LHS (Nines Creek) ALASKA HIGHWAY**

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

Auger Testing

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

Backhoe Testing

2002	TEST PITS 2460 to 2520	shown with prefix 638-
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GRANULAR SOURCE Km 1732.0 RHS (Mines Creek) ALASKA HIGHWAY

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

History of Aggregate Production

1986	20 mm B.S.T. Aggregate
1994	20 mm B.S.T. Aggregate
1994	20 mm Granular "A" Base Course
2000	10 mm Crushed Sanding Aggregate

Backhoe Testing

2002	TEST PITS 2451 to 2459	shown with prefix 637-
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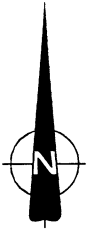
HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1723.2 to 1734.6
YUKON 2003-2004

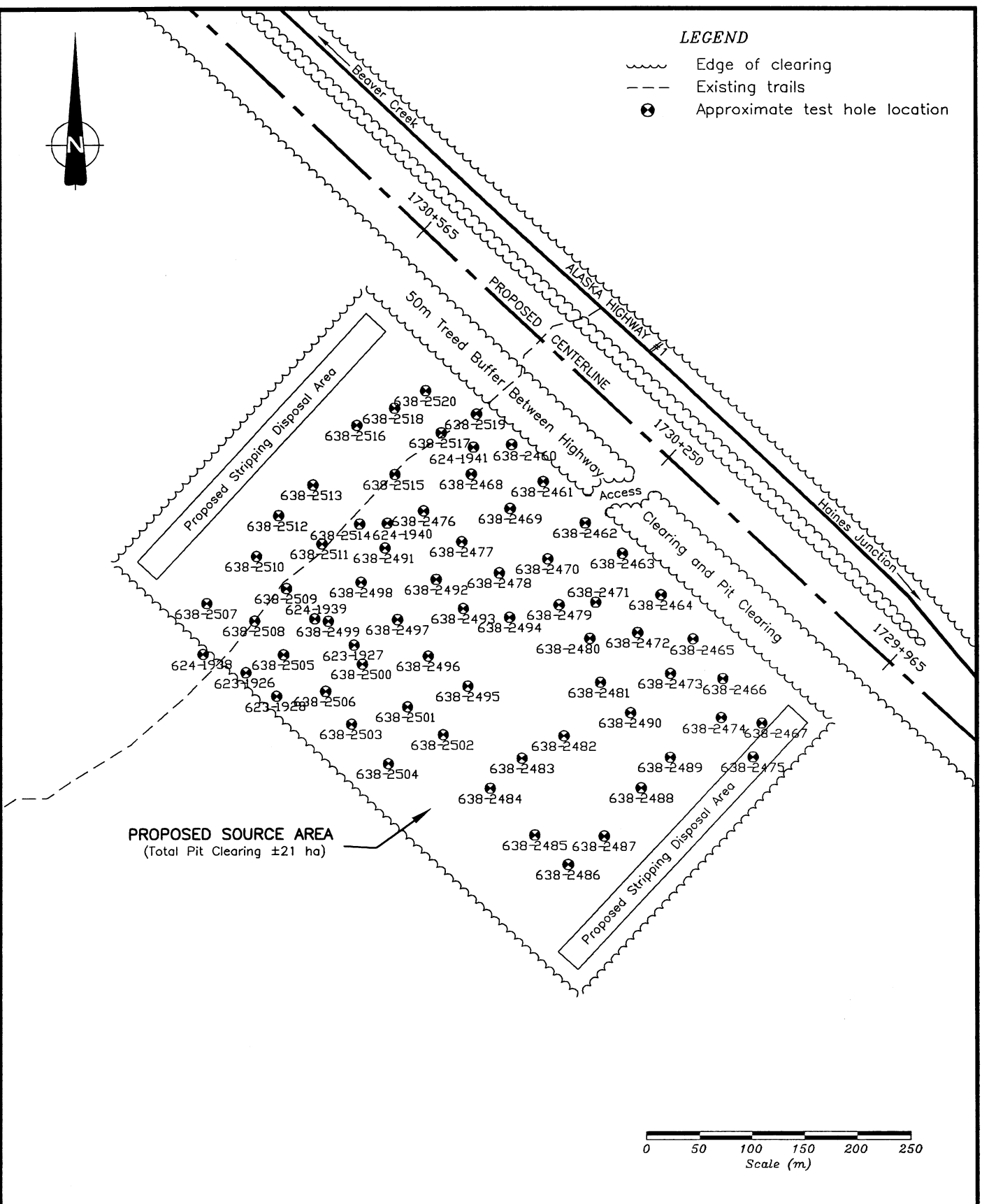
ALASKA HIGHWAY #1

GRANULAR SOURCE TESTING
Km 1730.2 LHS
(Nines Creek)
ALASKA HIGHWAY

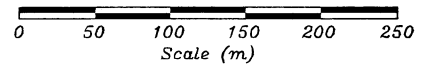


LEGEND

- ~~~~~ Edge of clearing
- Existing trails
- ⊙ Approximate test hole location



PROPOSED SOURCE AREA
(Total Pit Clearing ±21 ha)



Yukon
Infrastructure
Transportation Division

Transportation Engineering Branch

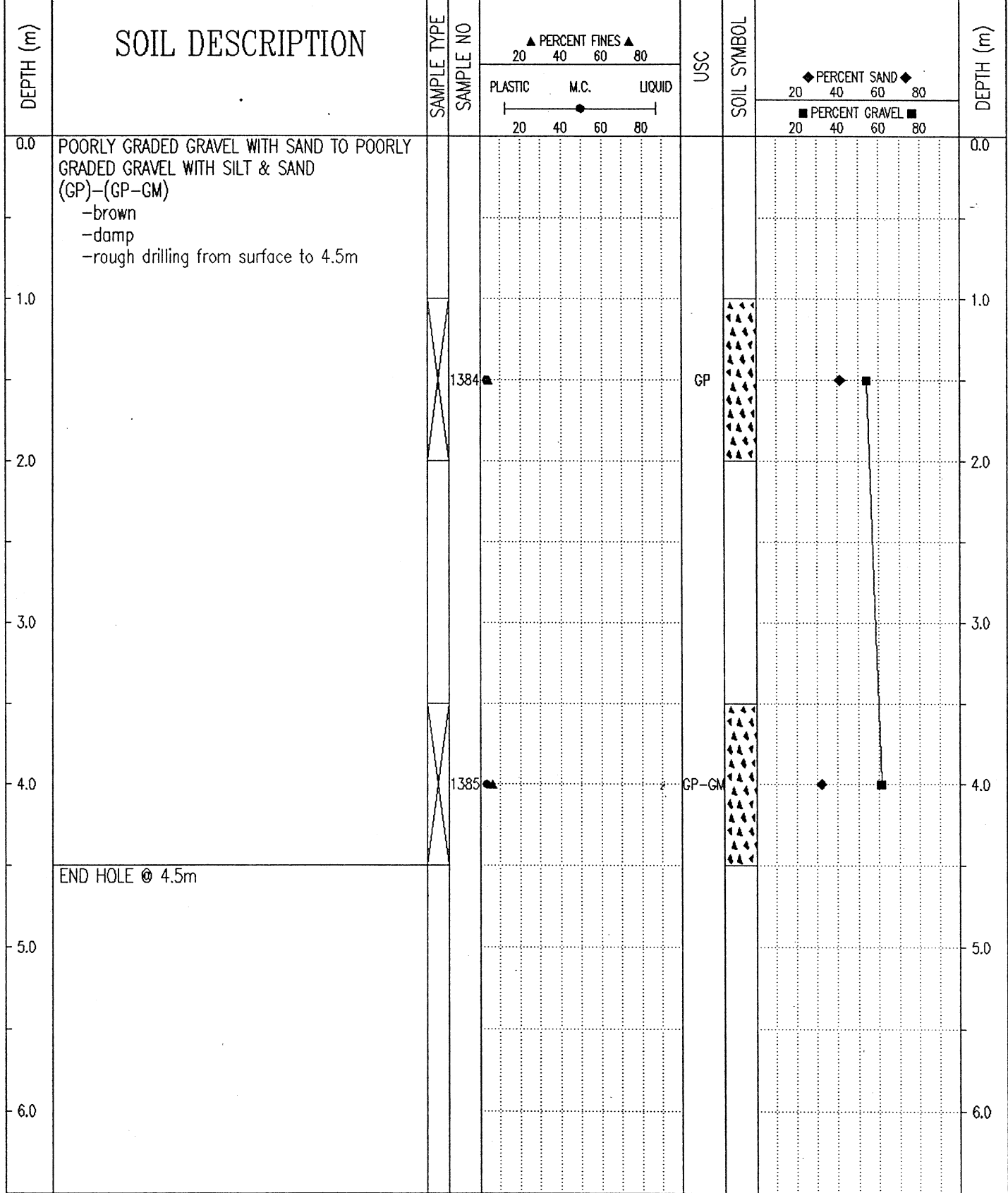
SITE PLAN
GRANULAR PIT
Km 1730.2 L.H.S.
(Nines Creek)
ALASKA HWY. YUKON

pit file: 115 G-21
revision: 03-Proposed
drawn: JJM
date: 03-01-02
scale: 1: 5000
drwg: 115g-21S

Km 1734.4 LHS Alaska Highway #1
Pit Ident. 115 G-21
(Nines Creek)

September 2001
Book # 623
Auger Hole Logs

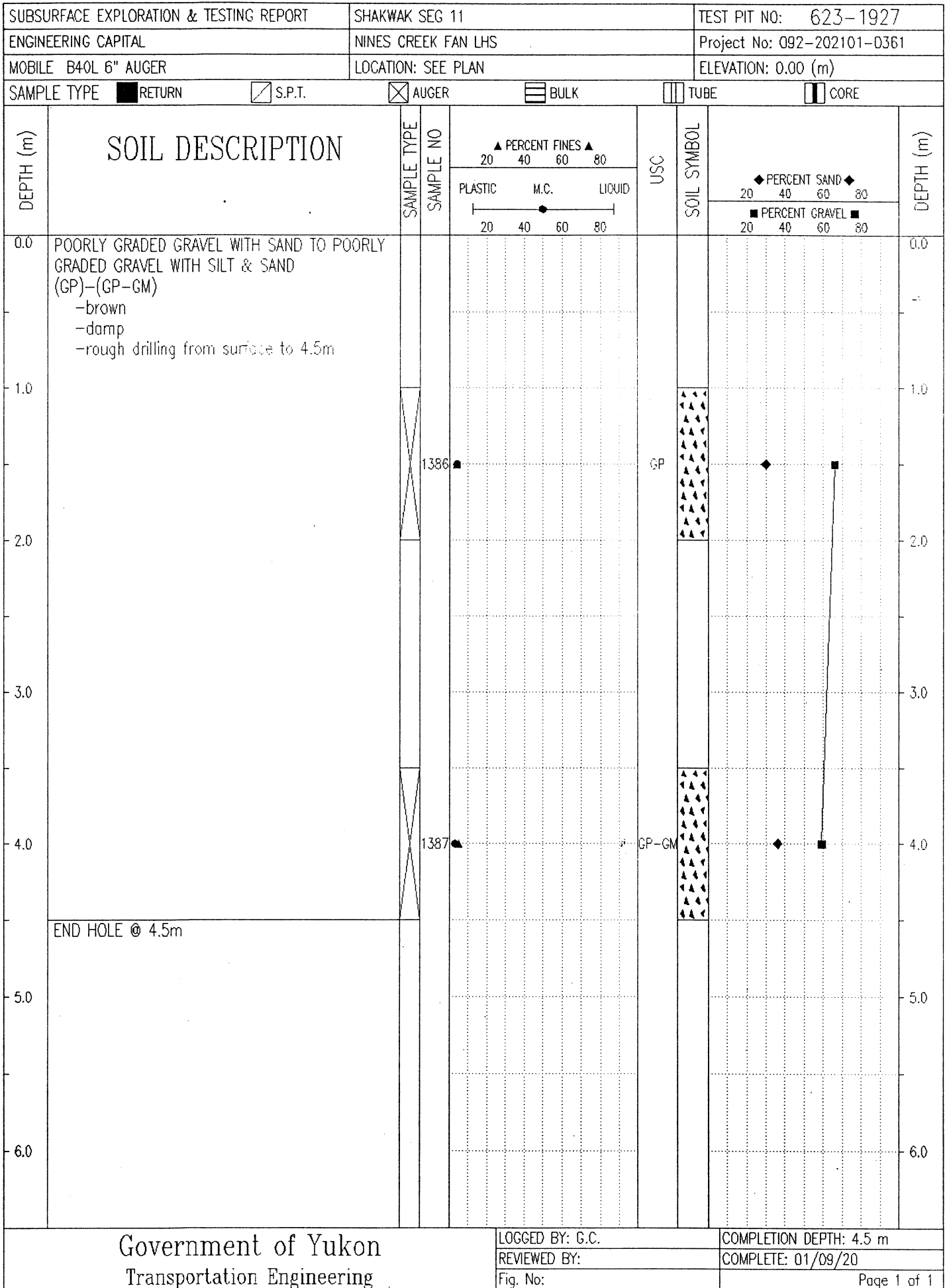
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 623-1926
ENGINEERING CAPITAL	NINES CREEK FAN LHS	Project No: 092-202101-D361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

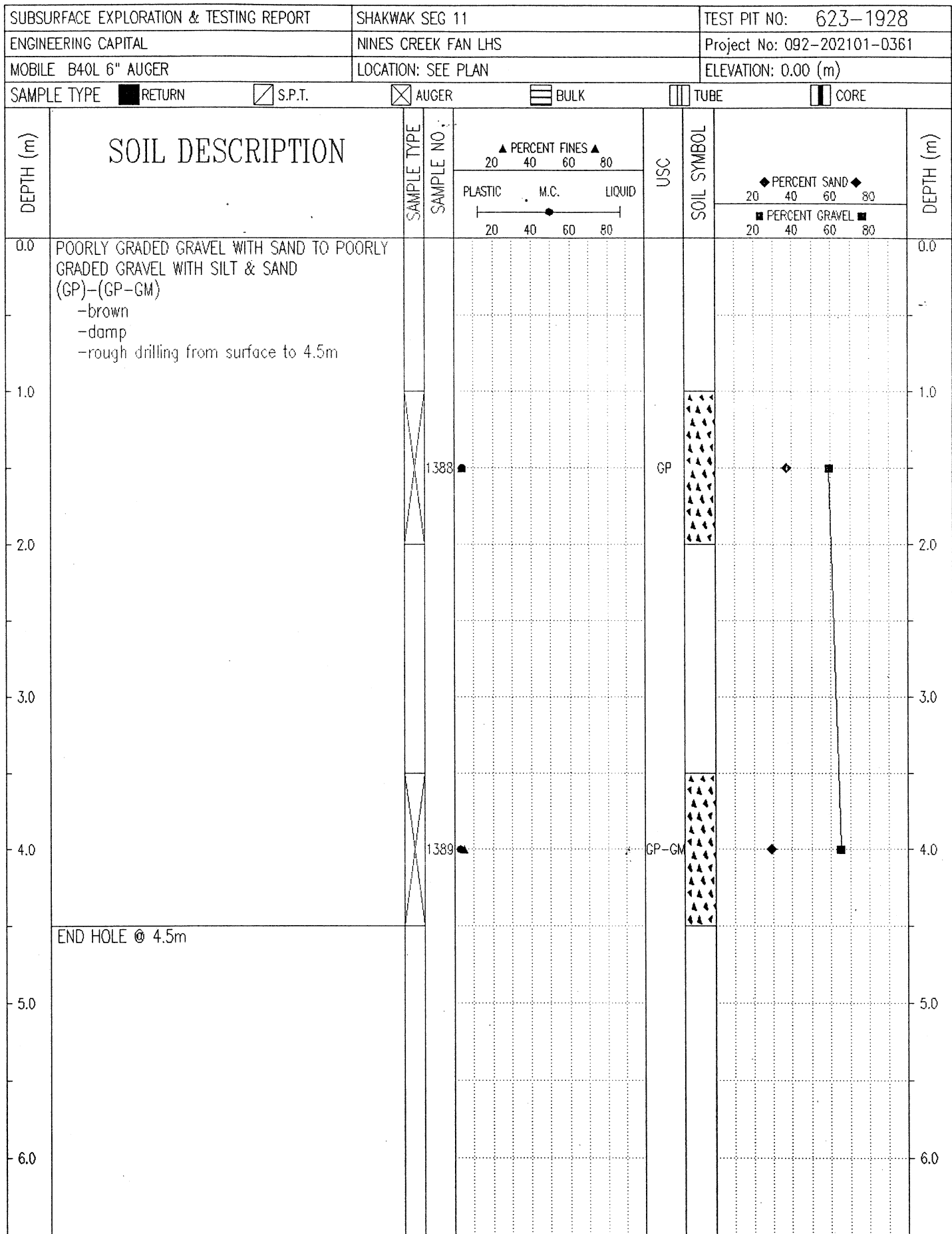


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 Transportation Engineering

LOGGED BY: G.C.
 REVIEWED BY:
 Fig. No:

COMPLETION DEPTH: 4.5 m
 COMPLETE: 01/09/20





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Transportation Engineering

LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
REVIEWED BY:	COMPLETE: 01/09/20
Fig. No:	Page 1 of 1

Km 1734.4 LHS Alaska Highway #1
Pit Ident. 115 G-21
(Nines Creek)

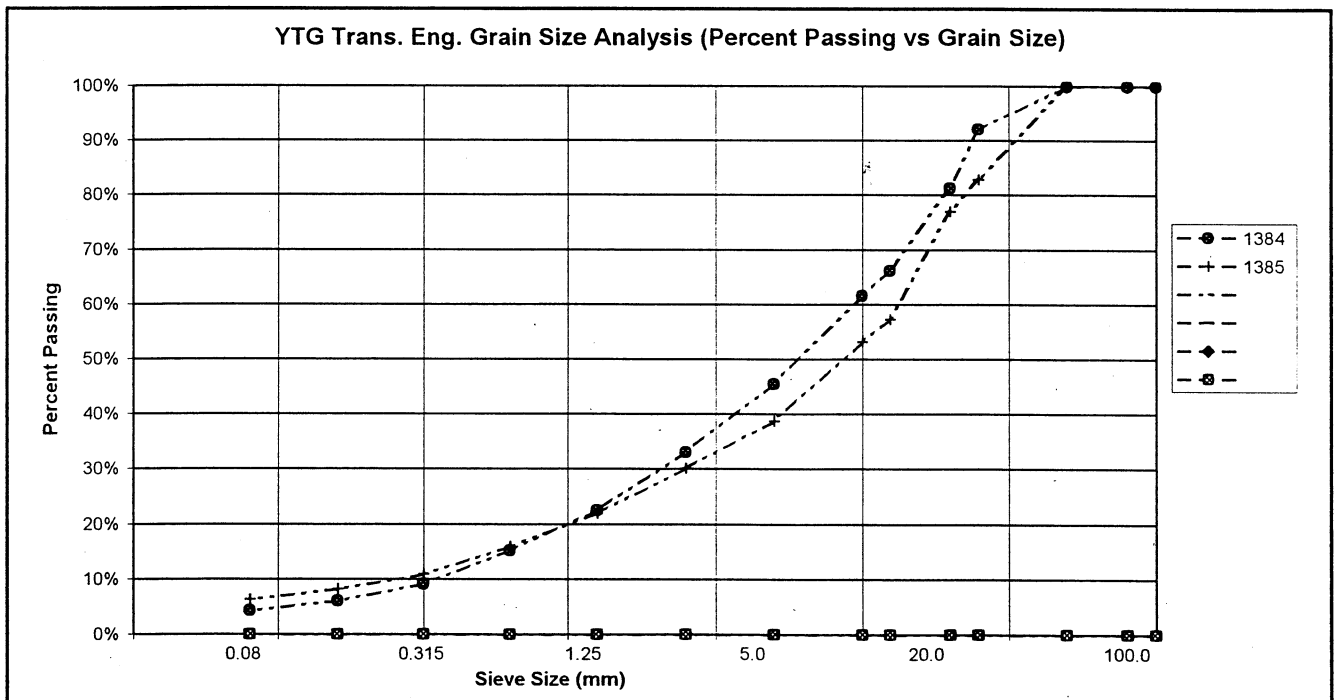
September 2001
Book # 623
Auger Sample Results

PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: NINES CREEK CHANNEL
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Test Hole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 623-1926

DATE COMP: 2001/09/20

FIELD NO:	1384	1385			
LAB NO:	2161	2162			
DEPTH:	1.0-2.0	3.5-4.5			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	92%	83%			
20.0	81%	77%			
12.5	66%	57%			
10.0	62%	53%			
5.0	46%	39%			
2.5	33%	30%			
1.25	23%	22%			
0.630	15%	16%			
0.315	9%	11%			
0.160	6%	8%			
0.080	4%	6%			
M.C.(%):	3%	3%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	54	61			
% SAND:	41	32			
% FINES:	4	6			
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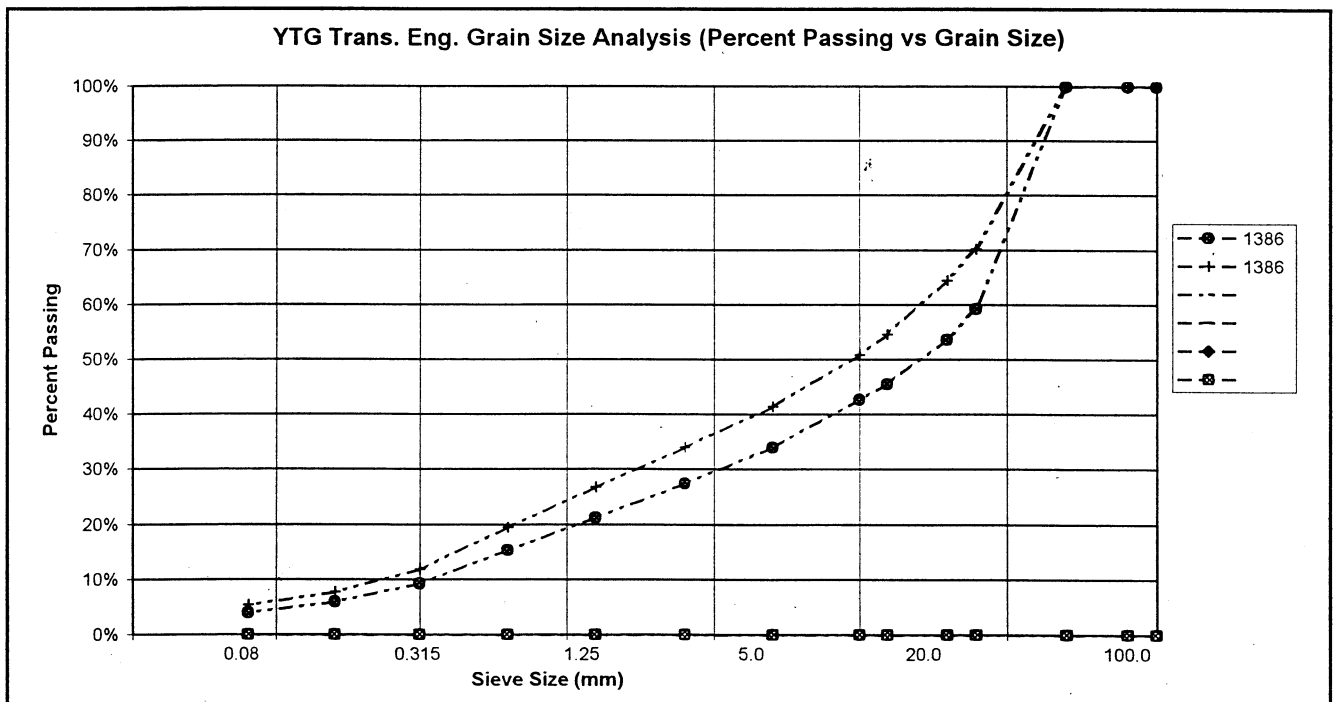


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: NINES CREEK CHANNEL
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Test Hole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 623-1927

DATE COMP: 2001/09/20

FIELD NO:	1386	1386				
LAB NO:	2163	2164				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	59%	70%				
20.0	54%	64%				
12.5	46%	55%				
10.0	43%	51%				
5.0	34%	41%				
2.5	28%	34%				
1.25	21%	27%				
0.630	15%	19%				
0.315	9%	12%				
0.160	6%	8%				
0.080	4%	5%				
M.C.(%)	4%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	66	59				
% SAND:	30	36				
% FINES:	4	5				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)				

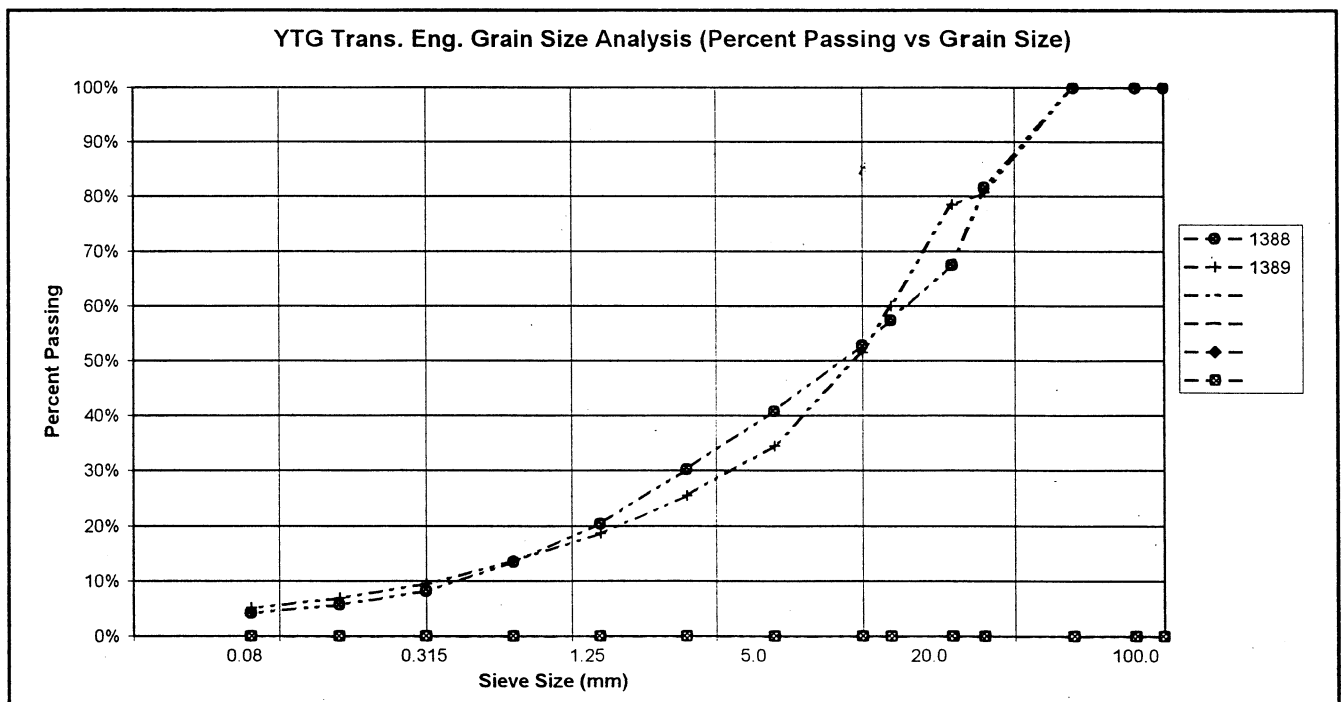


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: NINES CREEK CHANNEL
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Test Hole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 623-1928

DATE COMP: 2001/09/20

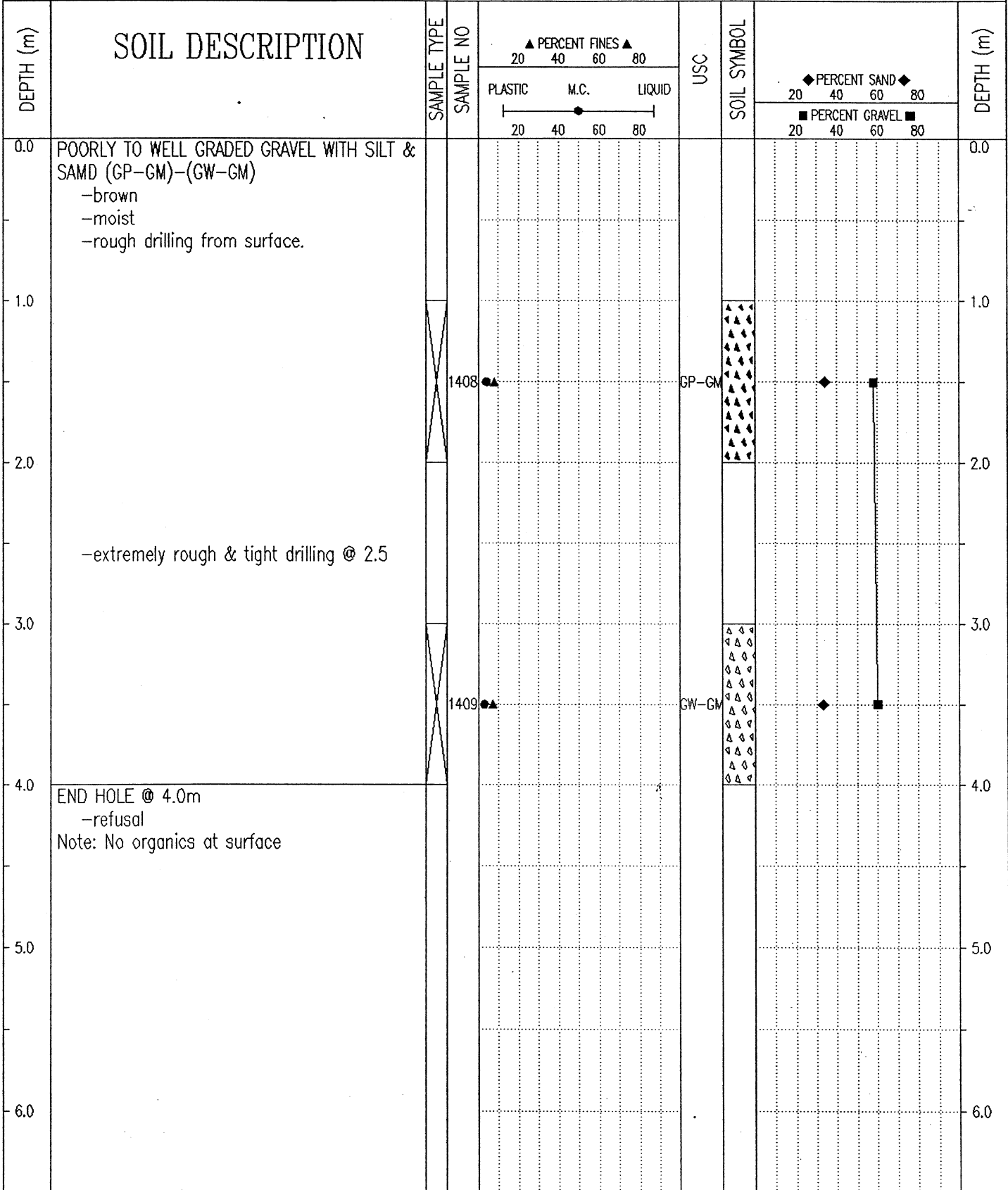
FIELD NO:	1388	1389			
LAB NO:	2165	2166			
DEPTH:	1.0-2.0	3.5-4.5			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	82%	81%			
20.0	67%	78%			
12.5	57%	60%			
10.0	53%	51%			
5.0	41%	35%			
2.5	30%	25%			
1.25	20%	19%			
0.630	14%	14%			
0.315	8%	9%			
0.160	6%	7%			
0.080	4%	5%			
M.C.(%):	4%	3%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	59	65			
% SAND:	37	29			
% FINES:	4	5			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



Km 1734.4 LHS Alaska Highway #1
Pit Ident. 115 G-21
(Nines Creek)

September 2001
Book # 624
Auger Hole Logs

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11	TEST PIT NO: 624-1938
ENGINEERING CAPITAL		NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

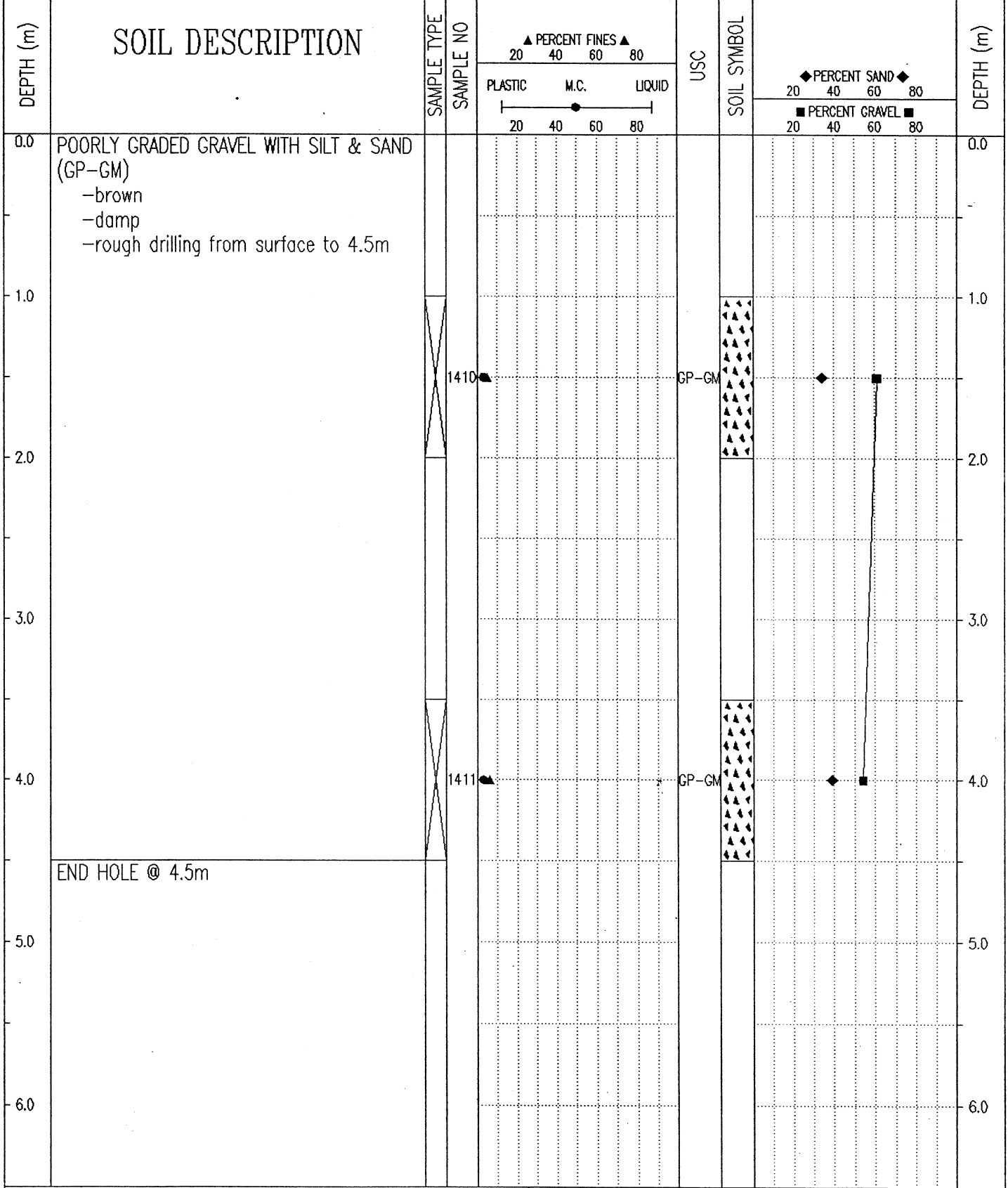


Government of Yukon
 Transportation Engineering

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 REVIEWED BY:
 Fig. No:

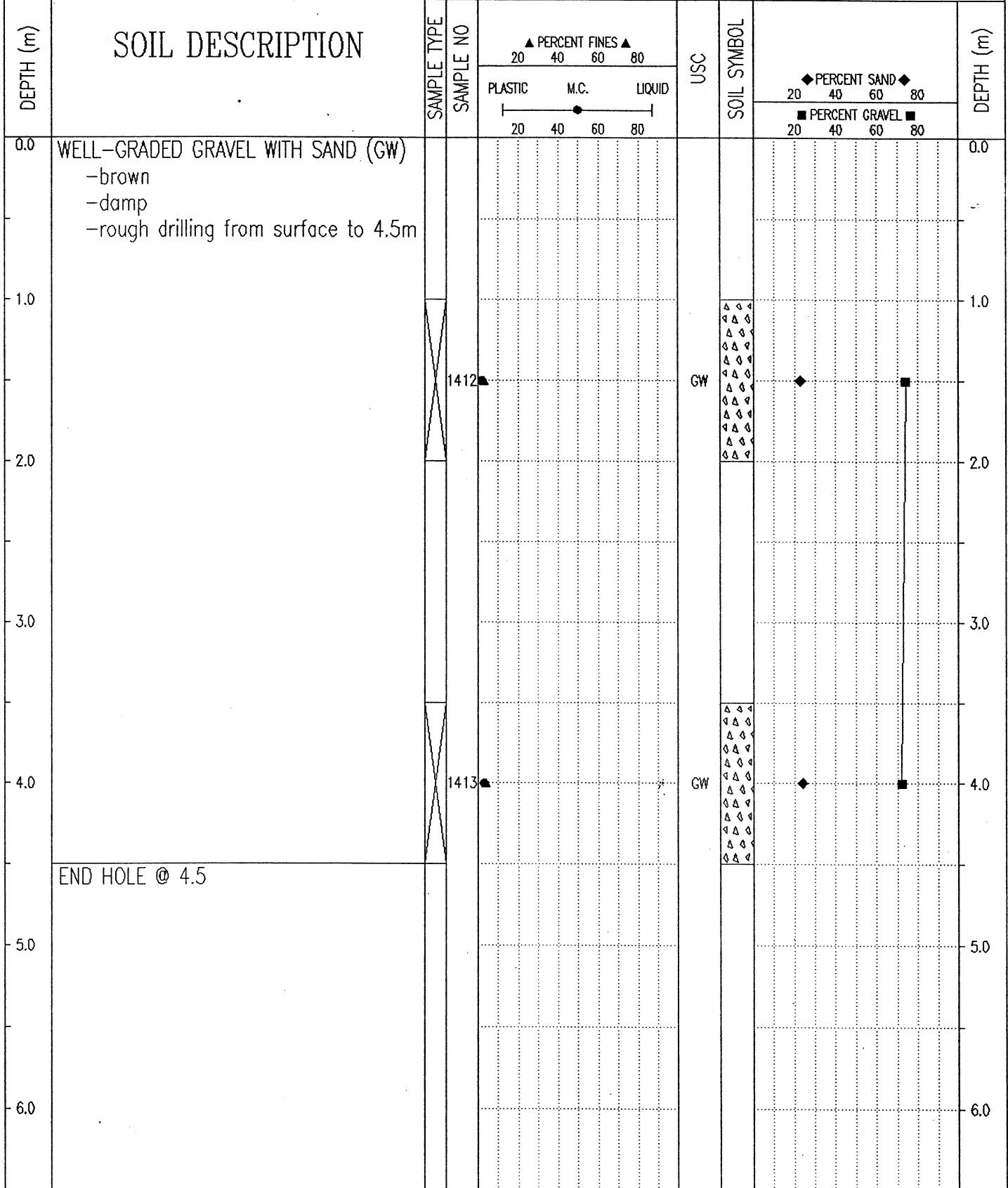
COMPLETION DEPTH: 4.0 m
 COMPLETE: 01/09/21

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEG 11	TEST PIT NO: 624-1939
ENGINEERING CAPITAL		NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



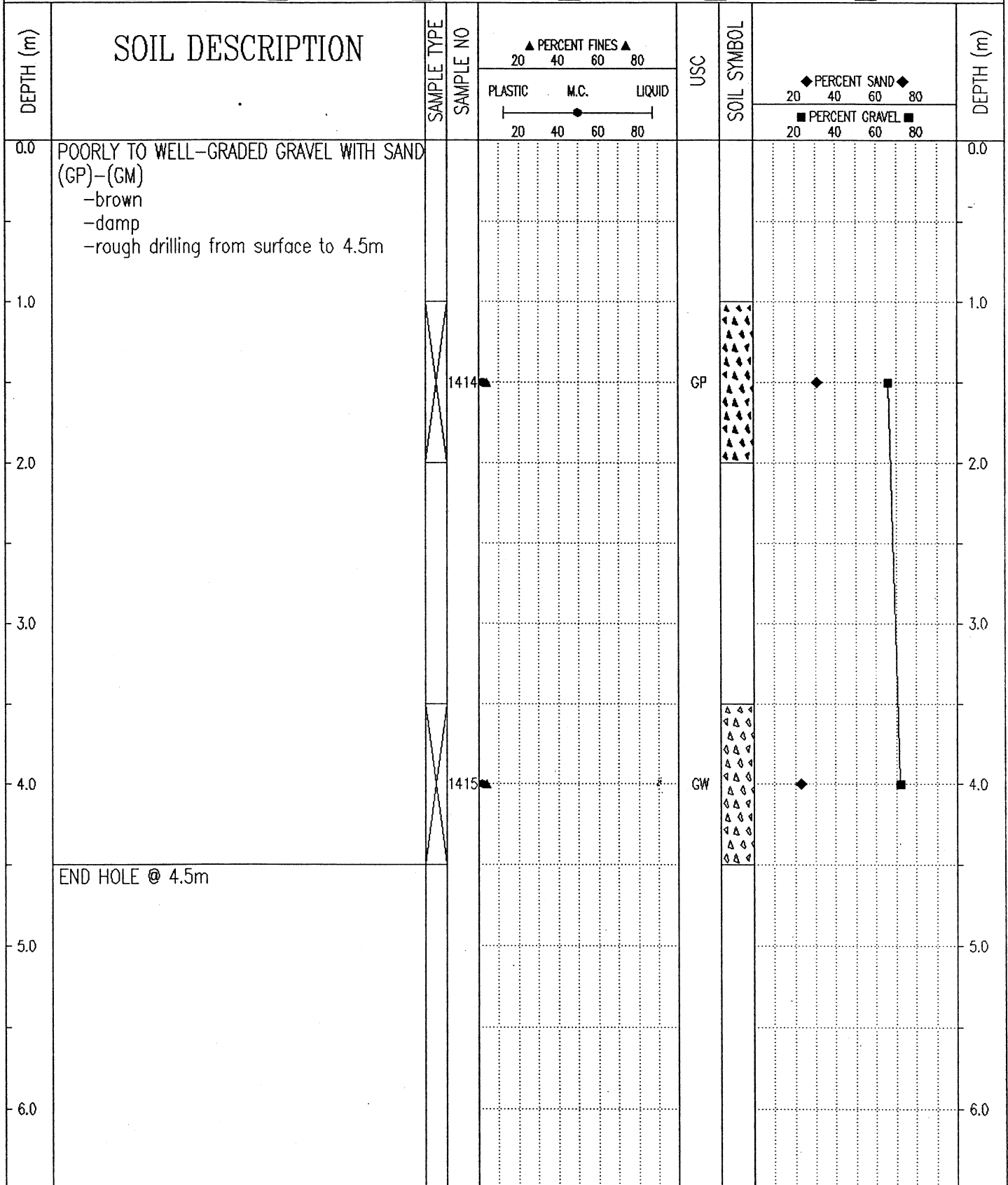
Government of Yukon Transportation Engineering		LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
		REVIEWED BY:	COMPLETE: 01/09/21
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 624-1940
ENGINEERING CAPITAL	NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: G.C.	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 01/09/21
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEG 11	TEST PIT NO: 624-1941
ENGINEERING CAPITAL	NINES CREEK LHS	Project No: 092-202101-0361
MOBILE B40L 6" AUGER	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon
 Transportation Engineering

LOGGED BY: G.C.

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 01/09/21

Page 1 of 1

Km 1734.4 LHS Alaska Highway #1
Pit Ident. 115 G-21
(Nines Creek)

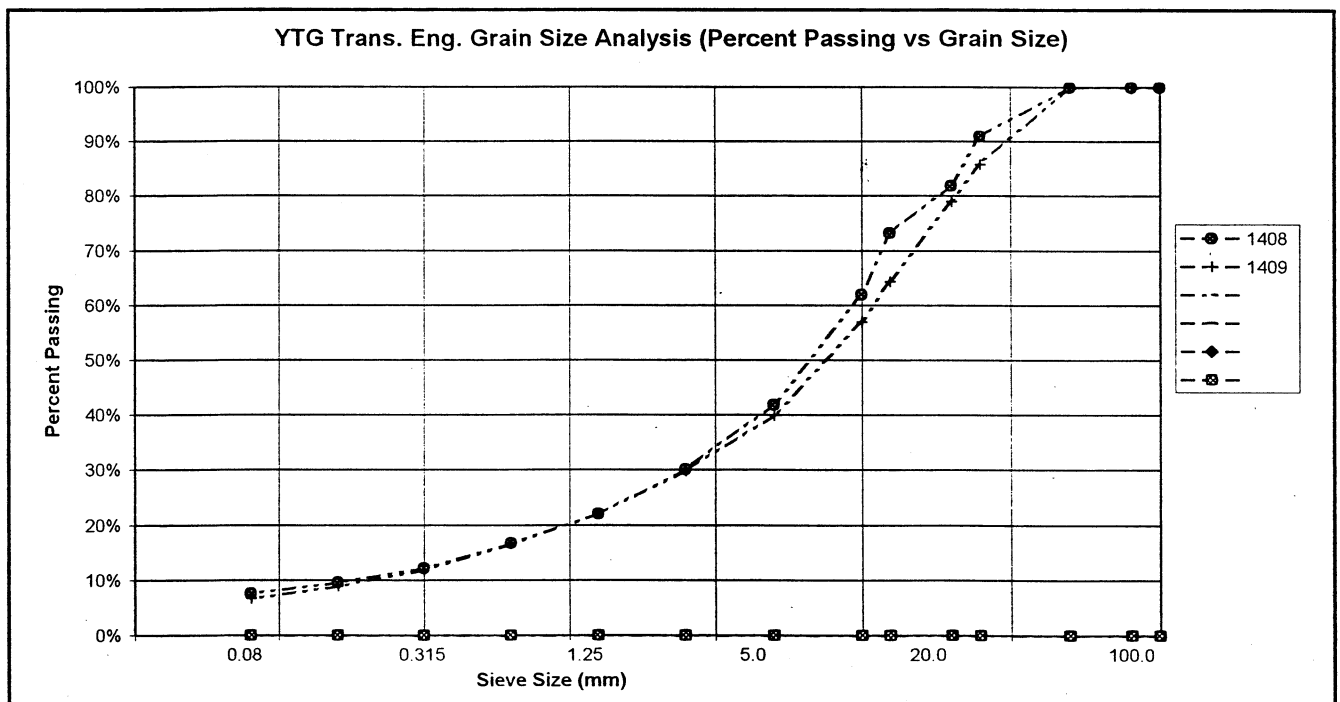
September 2001
Book # 624
Auger Sample Results

PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Km 1729.6-1787 A/H
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 624-1938

DATE COMP: 2001/09/20

FIELD NO:	1408	1409				
LAB NO:	2185	2189				
DEPTH:	1.0-2.0	3.0-4.0				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	91%	86%				
20.0	82%	79%				
12.5	73%	64%				
10.0	62%	57%				
5.0	42%	40%				
2.5	30%	30%				
1.25	22%	22%				
0.630	17%	17%				
0.315	12%	12%				
0.160	10%	9%				
0.080	8%	7%				
M.C.(%)	4%	3%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	58	60				
% SAND:	34	33				
% FINES:	8	7				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SILT & SAND (GW-GM)				

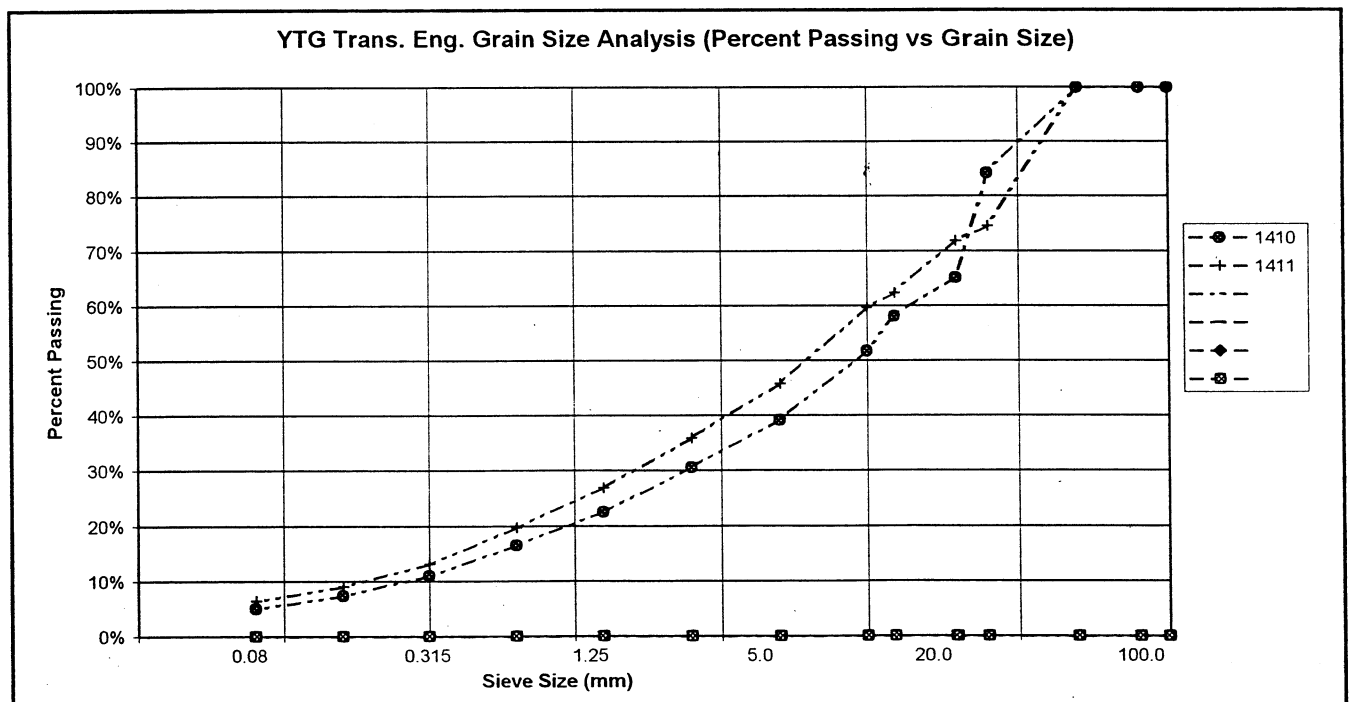


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Km 1729.6-1787 A/H
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 624-1939

DATE COMP: 2001/09/20

FIELD NO:	1410	1411			
LAB NO:	2190	2191			
DEPTH:	1.0-2.0	3.5-4.5			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	84%	74%			
20.0	65%	72%			
12.5	58%	62%			
10.0	52%	60%			
5.0	39%	46%			
2.5	31%	36%			
1.25	23%	27%			
0.630	17%	20%			
0.315	11%	13%			
0.160	7%	9%			
0.080	5%	6%			
M.C.(%):	3%	3%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX:	0.0	0.0			
% GRAVEL:	61	54			
% SAND:	34	39			
% FINES:	5	6			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)			



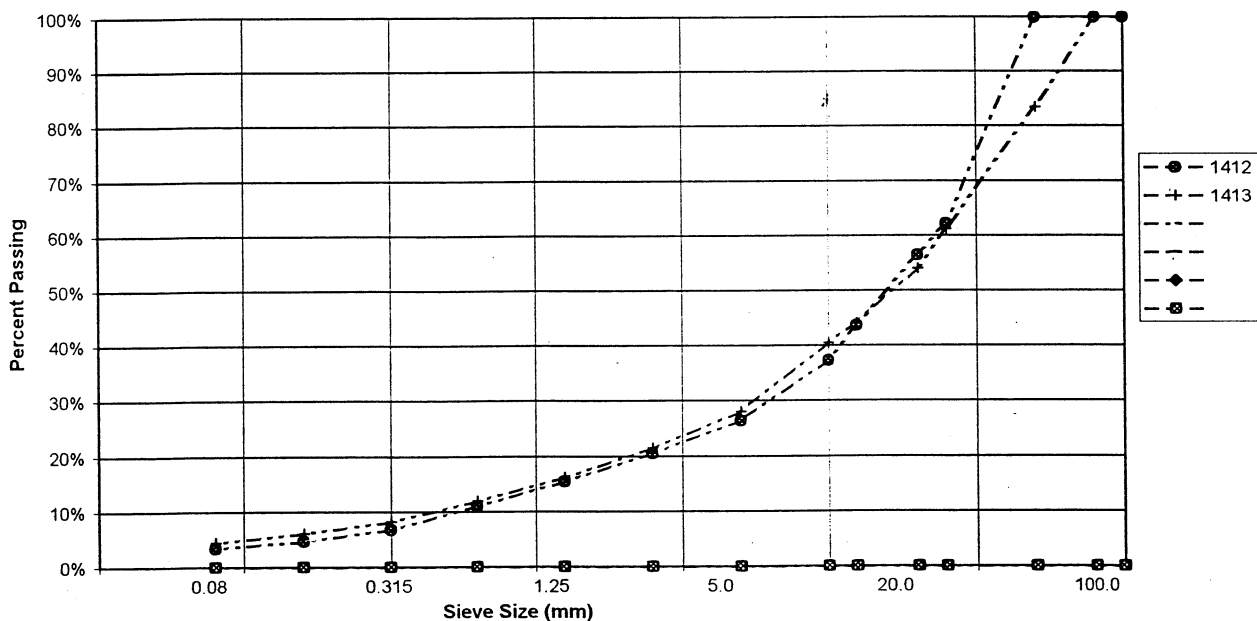
PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Km 1729.6-1787 A/H
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 624-1940

DATE COMP: 2001/09/20

FIELD NO:	1412	1413			
LAB NO:	2192	2193			
DEPTH:	1.0-2.0	3.5-4.5			
TYPE:	AUGER	AUGER	AUGER	AUGER	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	83%			
25.0	62%	61%			
20.0	56%	54%			
12.5	44%	44%			
10.0	37%	40%			
5.0	26%	28%			
2.5	21%	21%			
1.25	15%	16%			
0.630	11%	12%			
0.315	7%	8%			
0.160	5%	6%			
0.080	3%	4%			
M.C.(%):	2%	3%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX..:	0.0	0.0			
% GRAVEL:	74	72			
% SAND:	23	24			
% FINES:	3	4			
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	WELL-GRADED GRAVEL WITH SAND (GW)			

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

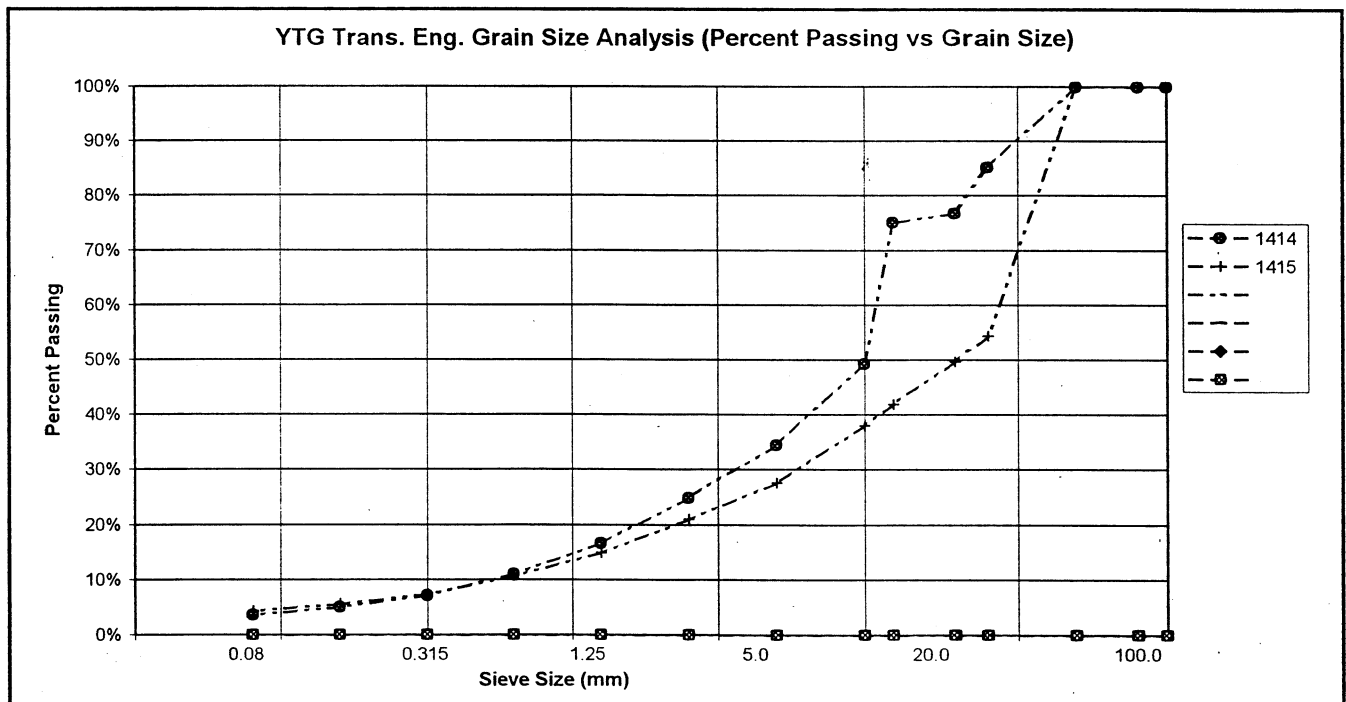


PROJECT NUMBER: 092-202101-0361-1
 CLIENT: ENGINEERING CAPITAL
 PROJECT NAME: SHAKWAK SEG 11
 PROJECT LOCATION: Km 1729.6-1787 A/H
 DRILL UNIT: MOBILE B40 L
 HOLE LOCATION: See Testhole Log Sheet
 LOGGED BY: G.C.

HOLE No.: 624-1941

DATE COMP: 2001/09/20

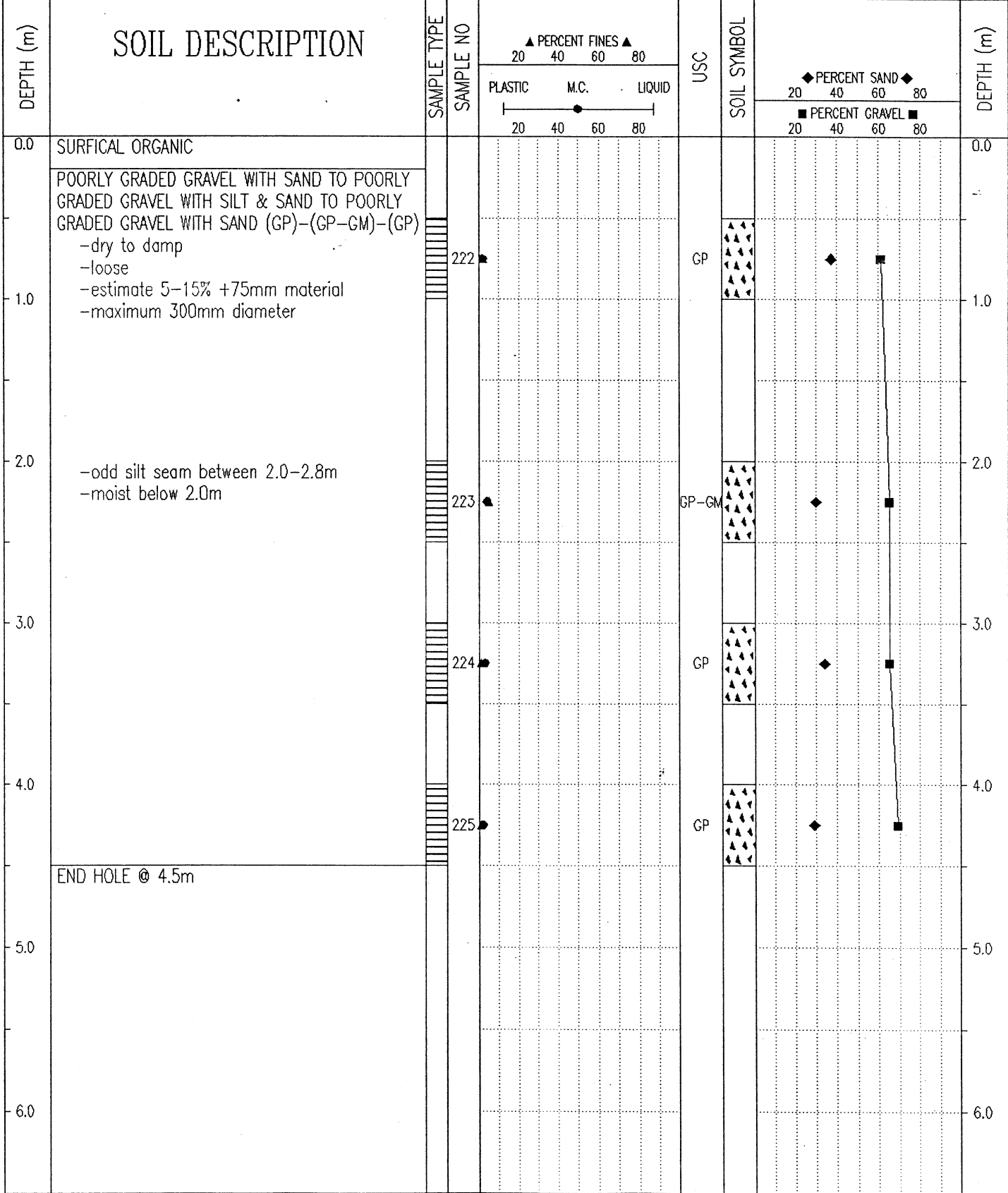
FIELD NO:	1414	1415				
LAB NO:	2194	2195				
DEPTH:	1.0-2.0	3.5-4.5				
TYPE:	AUGER	AUGER	AUGER	AUGER		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING				
100.0	100%	100%				
80.0	100%	100%				
50.0	100%	100%				
25.0	85%	54%				
20.0	77%	50%				
12.5	75%	42%				
10.0	49%	38%				
5.0	34%	28%				
2.5	25%	21%				
1.25	17%	15%				
0.630	11%	11%				
0.315	7%	7%				
0.160	5%	6%				
0.080	4%	4%				
M.C.(%):	2%	2%				
LIQUID LIMIT:	0.0	0.0				
PLASTIC LIMIT:	0.0	0.0				
PLASTIC INDEX.:	0.0	0.0				
% GRAVEL:	66	72				
% SAND:	31	23				
% FINES:	4	4				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)				



Km 1734.4 LHS Alaska Highway #1
Pit Ident. 115 G-21
(Nines Creek)

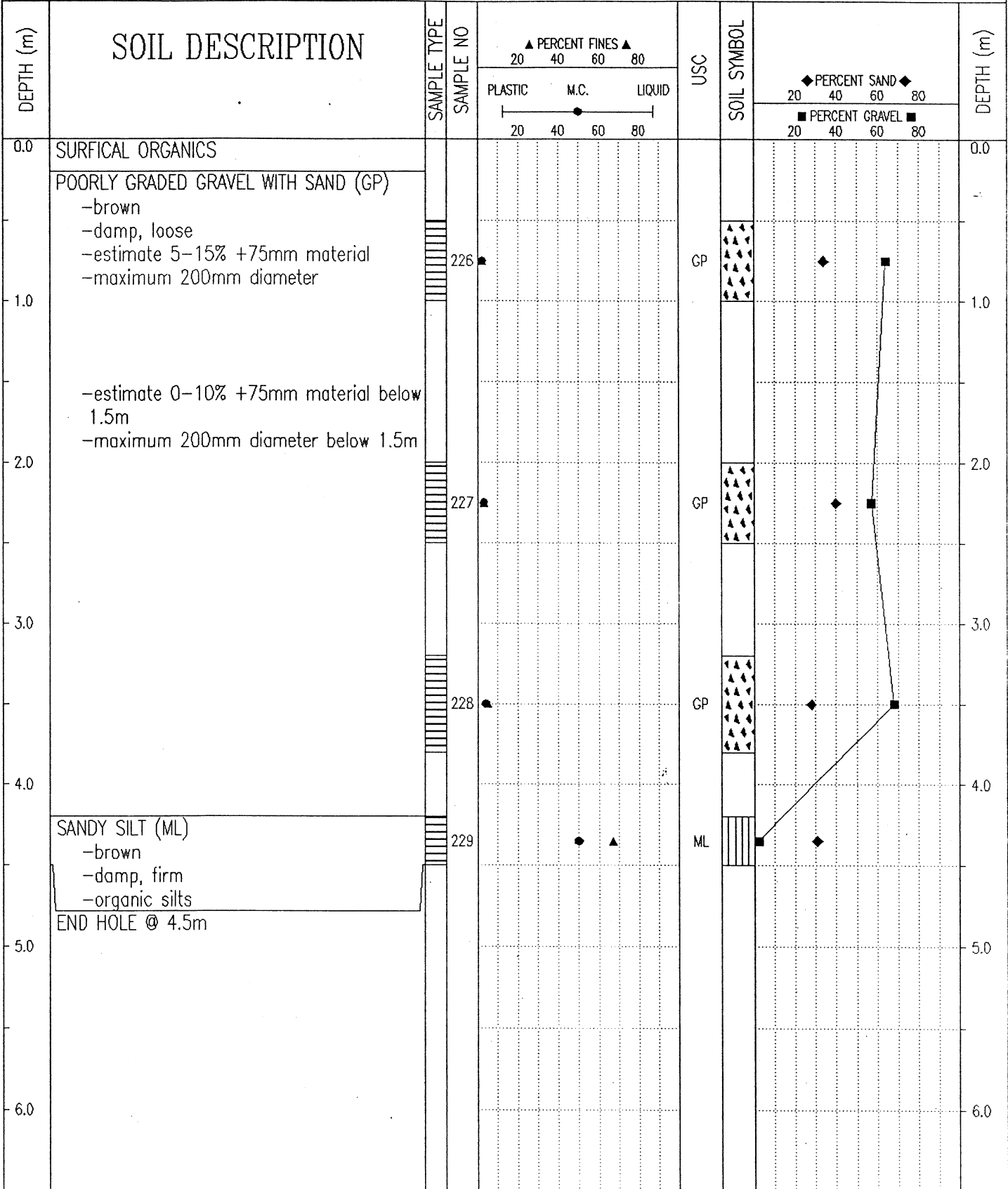
September 2002
Book # 638
Test Pit Logs

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11	TEST PIT NO: 638-2460
ENGINEERING CAPITAL		NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
			<input type="checkbox"/> BULK
			<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



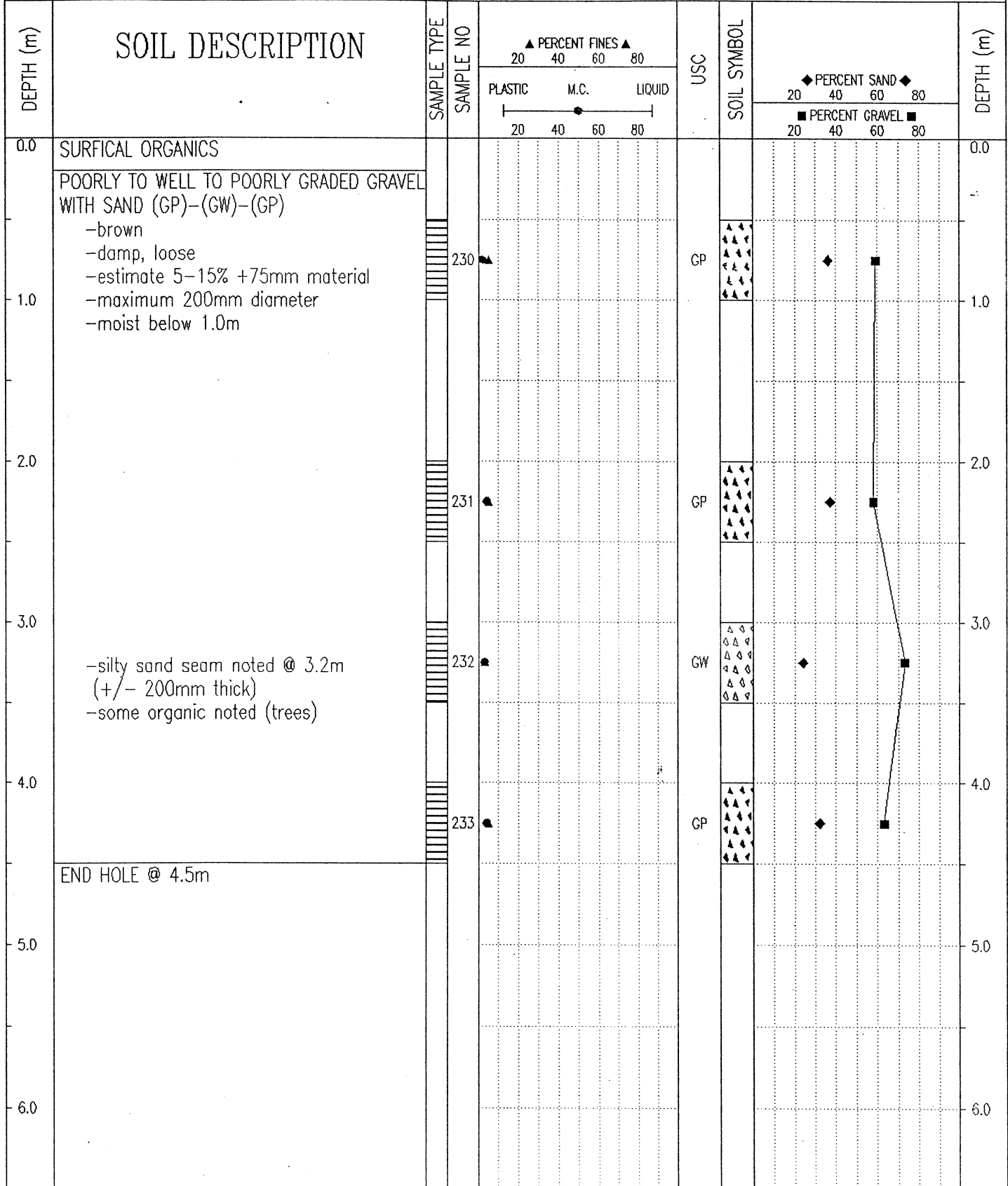
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2461
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

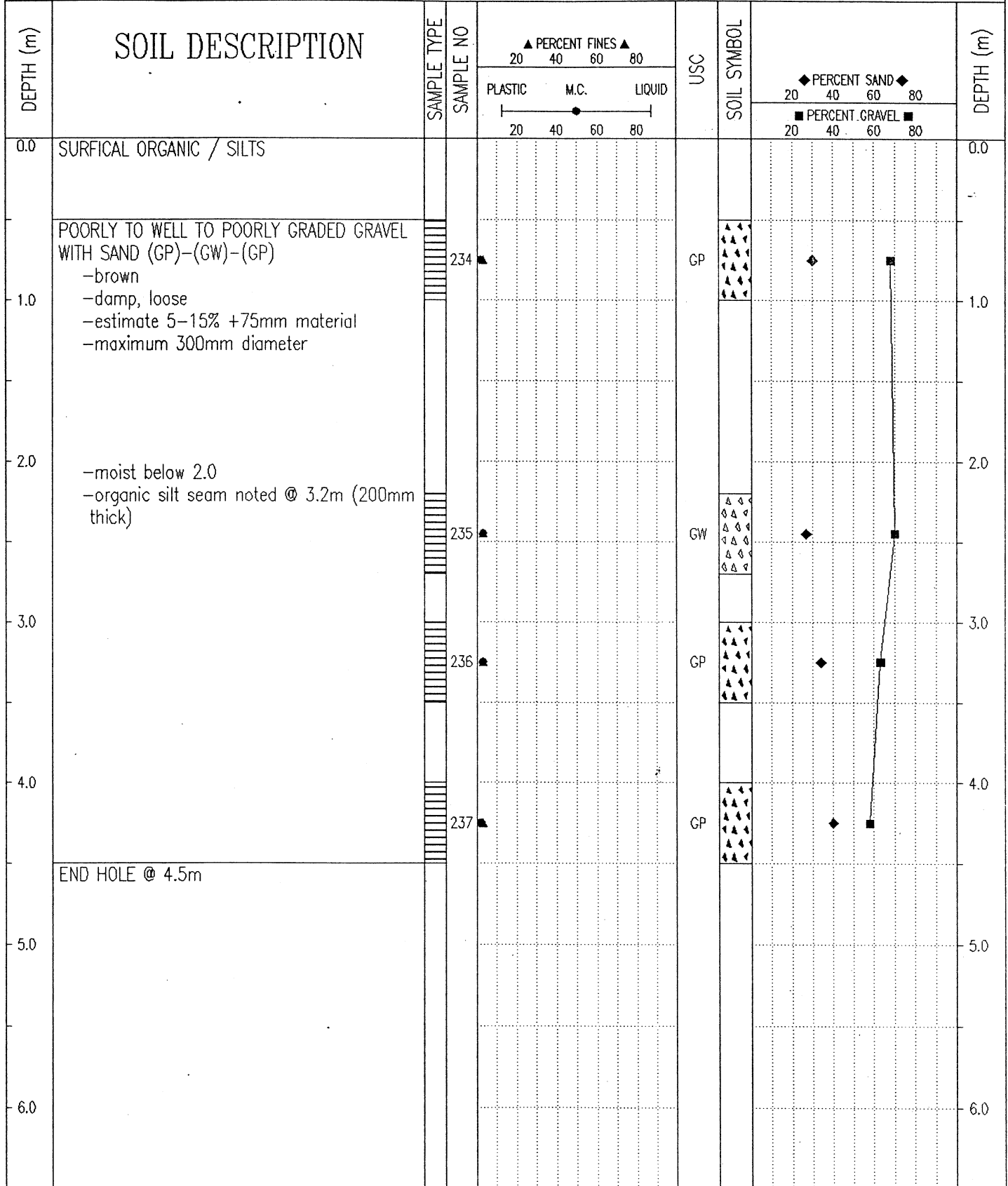


Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

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

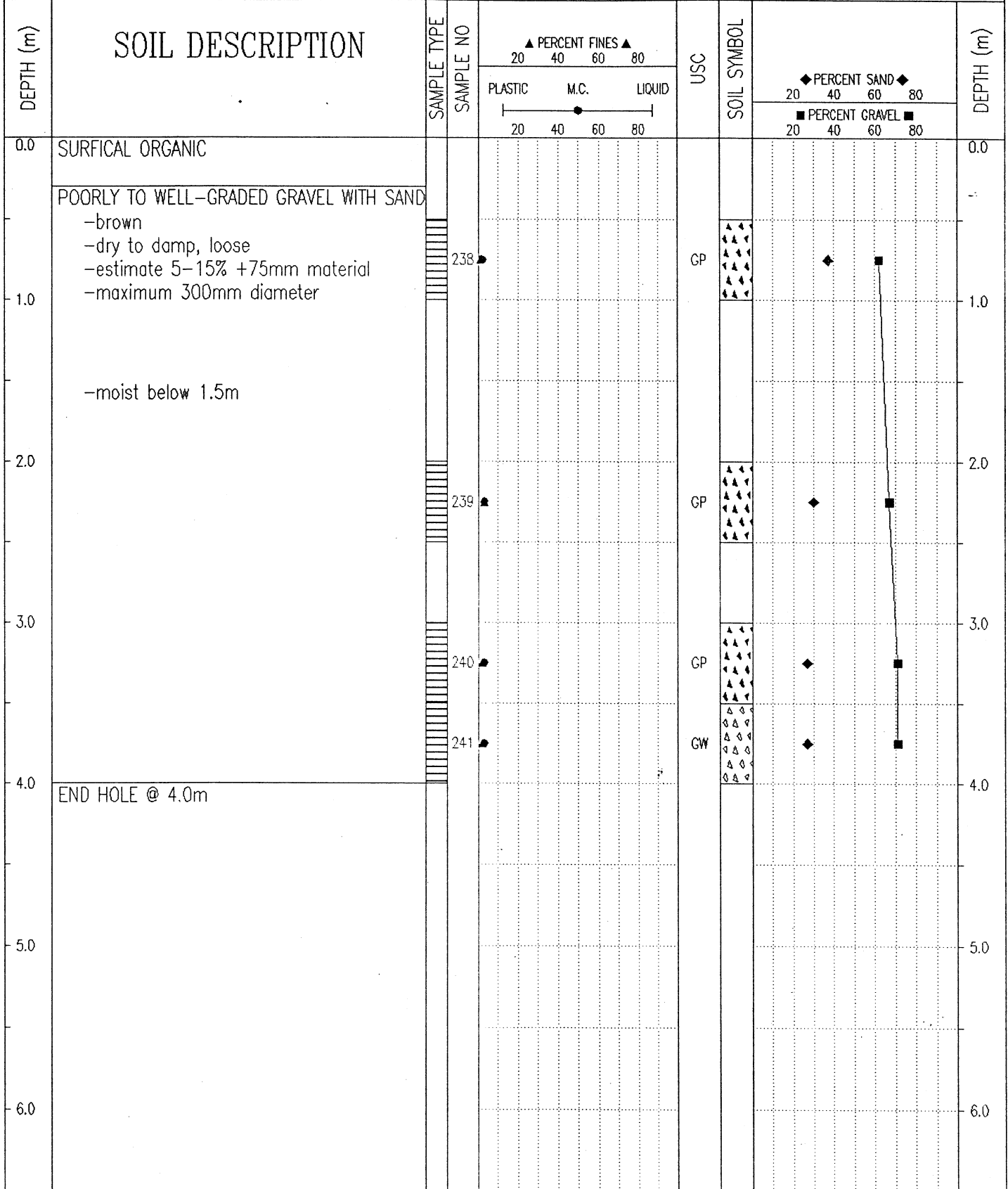


SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2463
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: JRP REVIEWED BY: Fig. No:	COMPLETION DEPTH: 4.5 m COMPLETE: 02/09/23
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2464
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

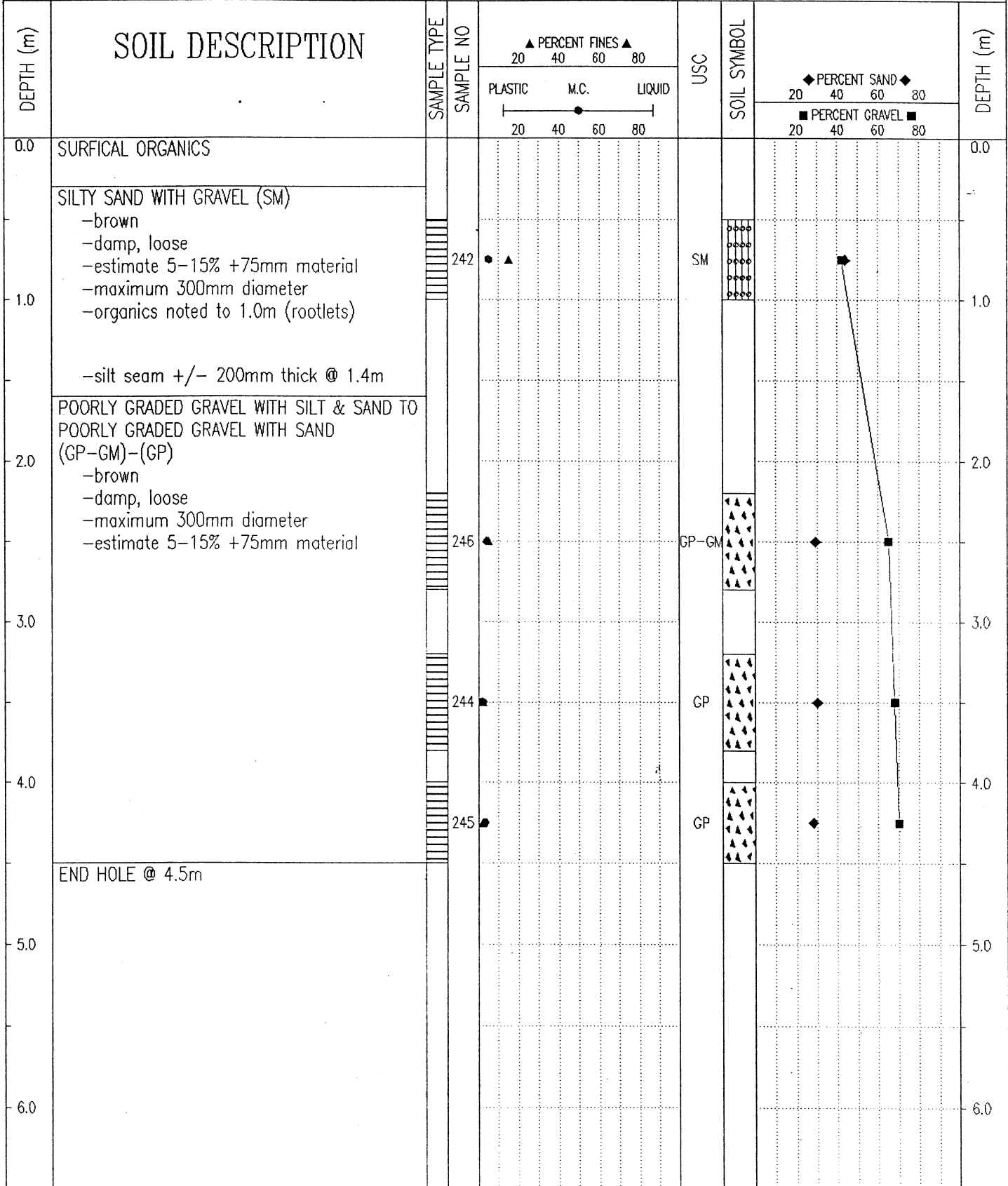


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Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 02/09/23

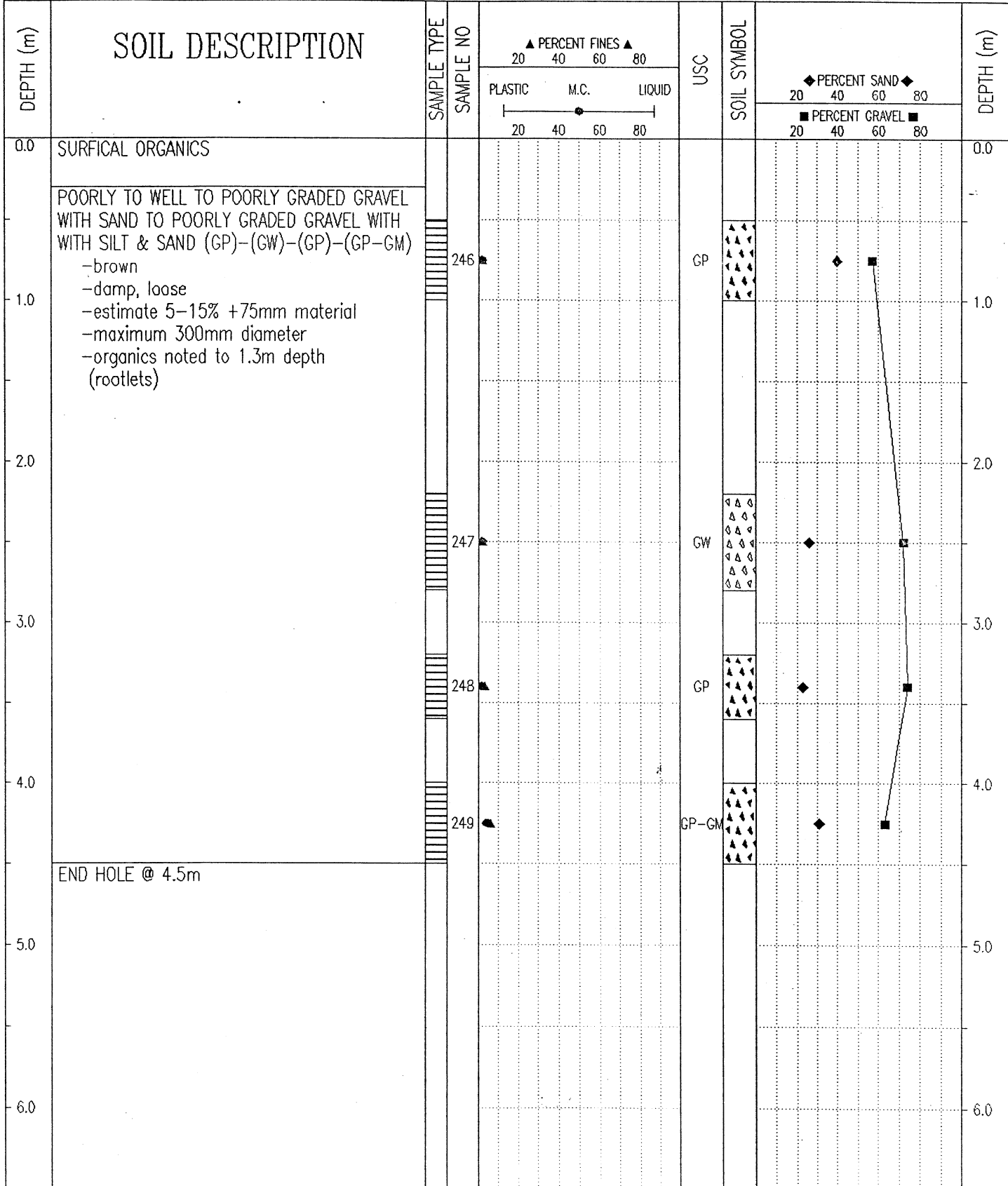
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11	TEST PIT NO: 638-2465
ENGINEERING CAPITAL		NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



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REVIEWED BY:	COMPLETE: 02/09/23
Fig. No:	Page 1 of 1

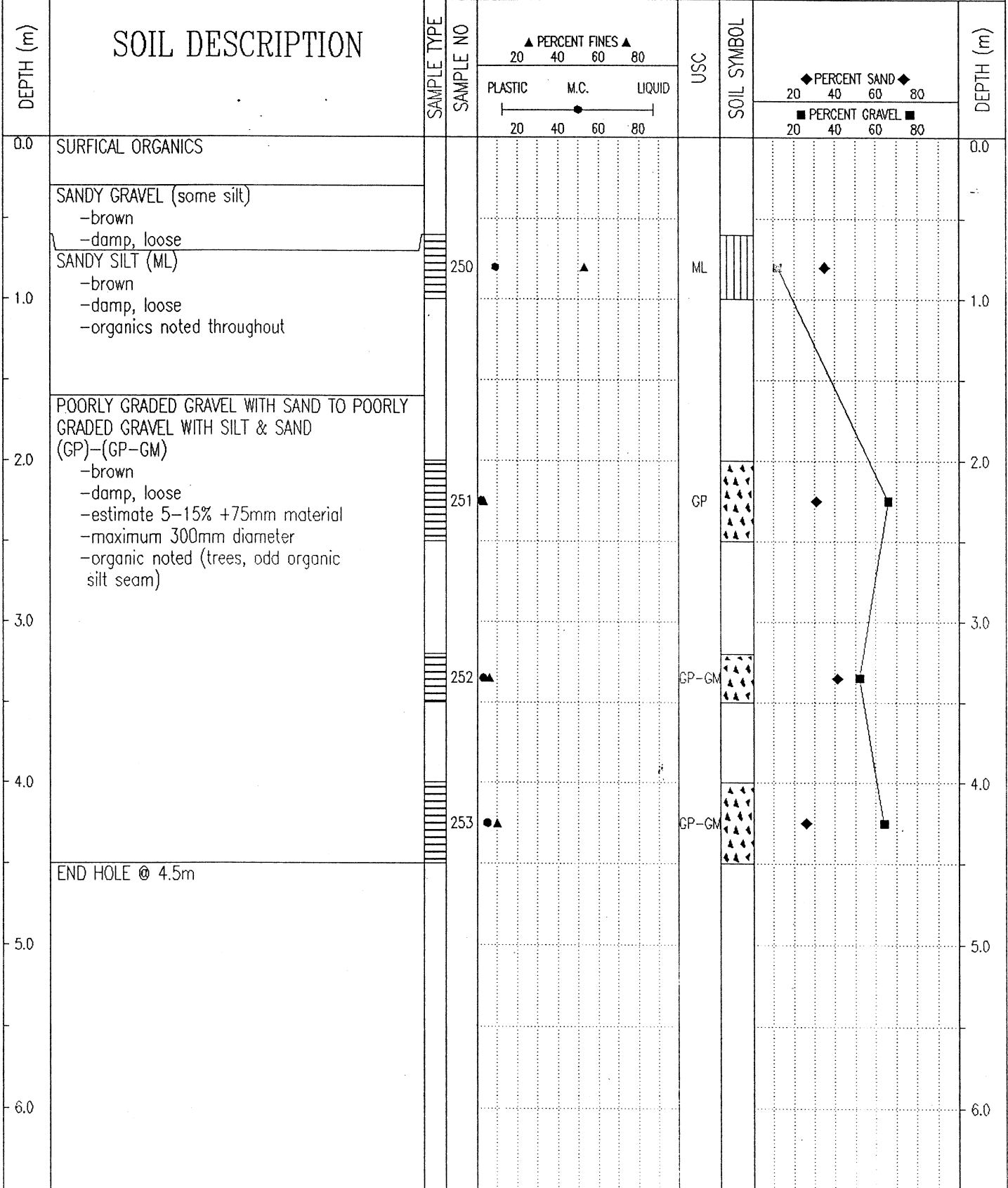
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



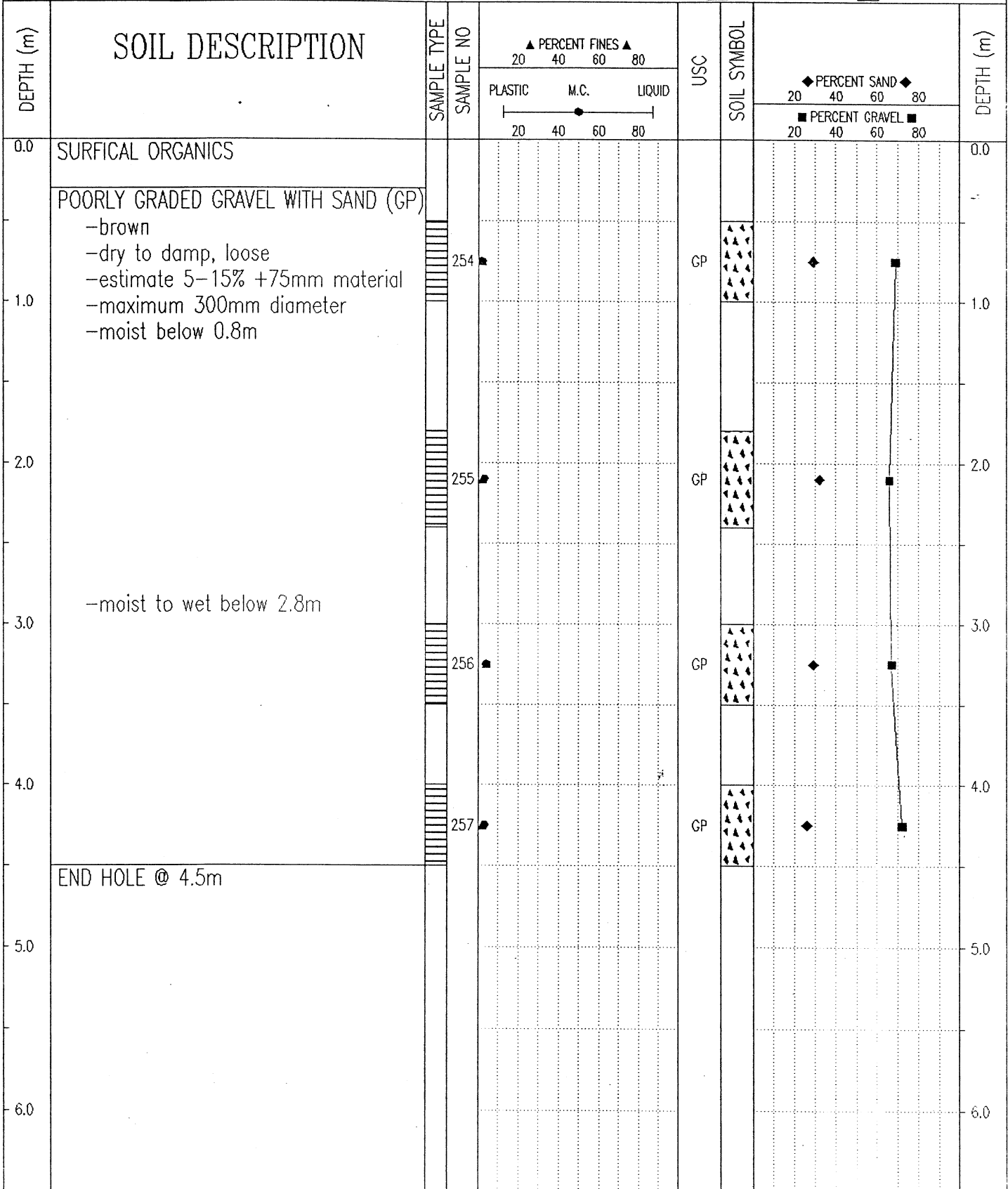
IC712/31 01.03-44

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2467
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2468
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 02/23/23

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11		TEST PIT NO: 638-2469								
ENGINEERING CAPITAL		NINES CREEK		Project No: 552-202101-0361								
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	SURFICAL ORGANICS											0.0
0.0 - 1.0	SANDY GRAVEL -trace silt -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameter											1.0
1.0 - 2.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -brown -damp, loose		258	◆	▲		SW-SM	◆	◆	◆		2.0
2.0 - 3.0	POORLY GRADED GRAVEL WITH SAND TO SILTY GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SAND (GP)-(GM)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameter		259	◆	▲		GP	◆	◆	◆		3.0
3.0 - 4.0												4.0
4.0 - 5.0	-organic silt seam @ 3.6m 300mm thick -tree encountered		260	◆	▲		GM	◆	◆	◆		4.0
5.0 - 6.0			261	◆	▲		GP	◆	◆	◆		5.0
5.0	END HOLE @ 5.0m											5.0
6.0												6.0

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Fig. No:

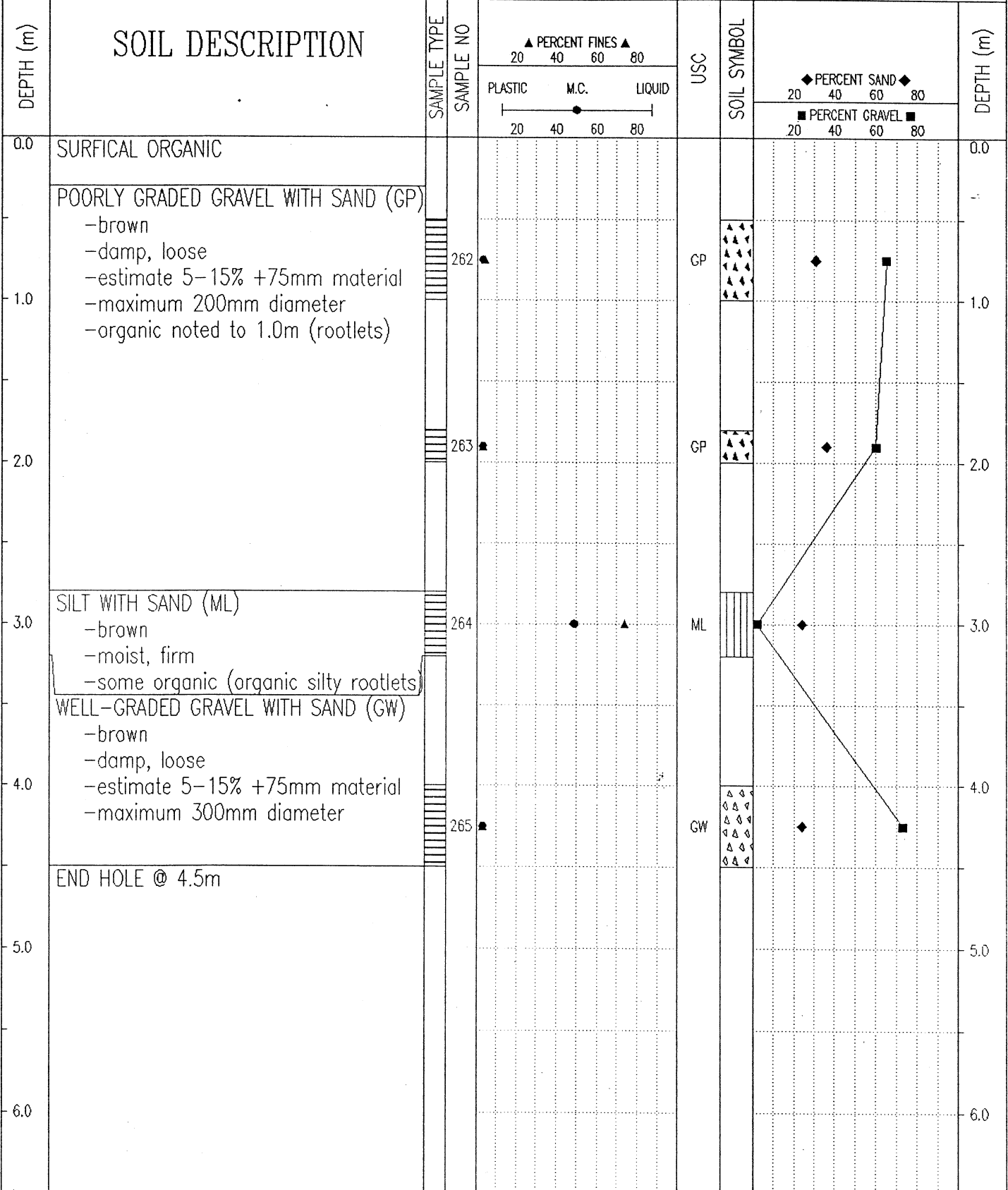
COMPLETION DEPTH: 5.0 m

COMPLETE: 02/09/23

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2470
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

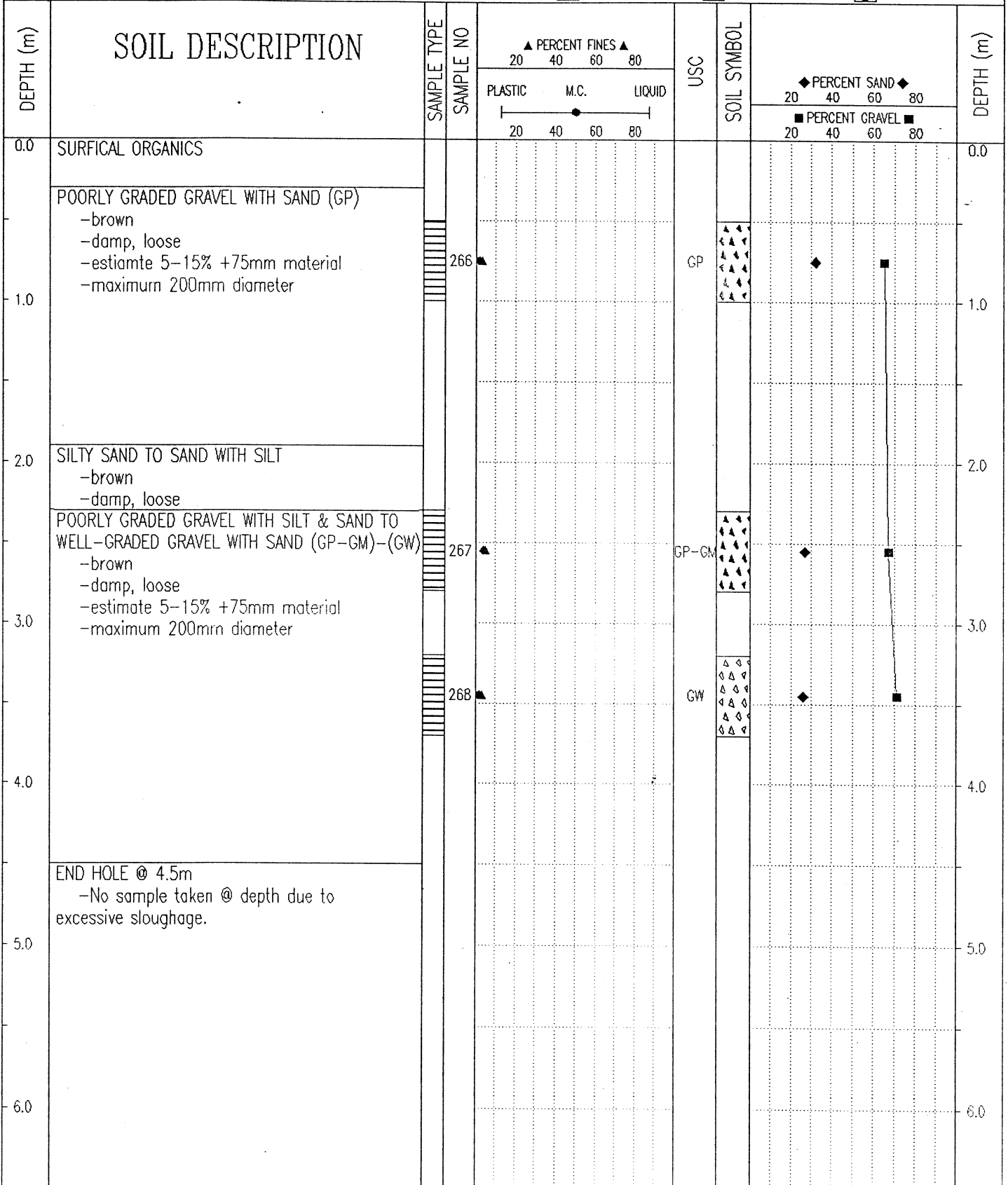
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

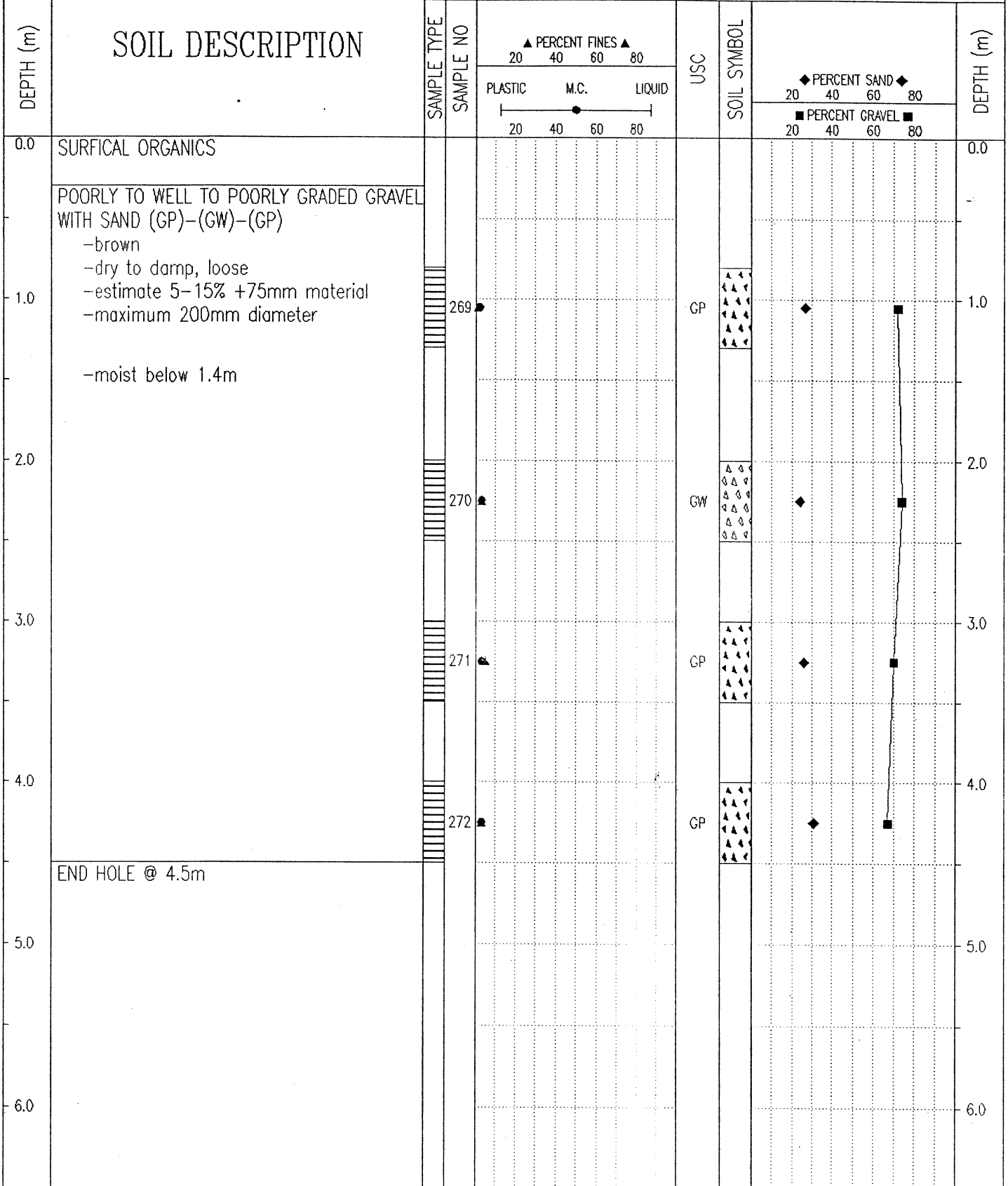
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2471
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2472
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

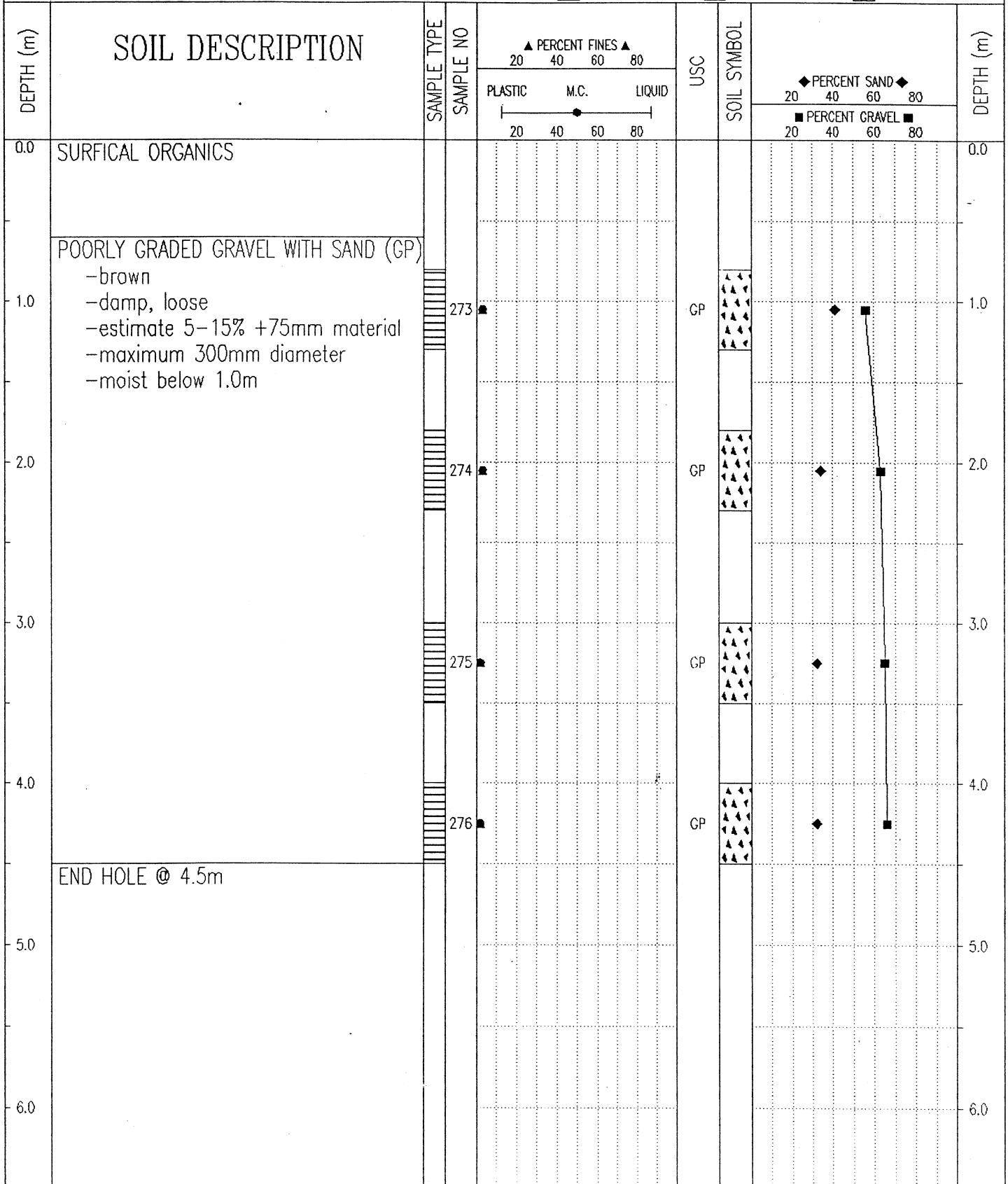
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: JF	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2473
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

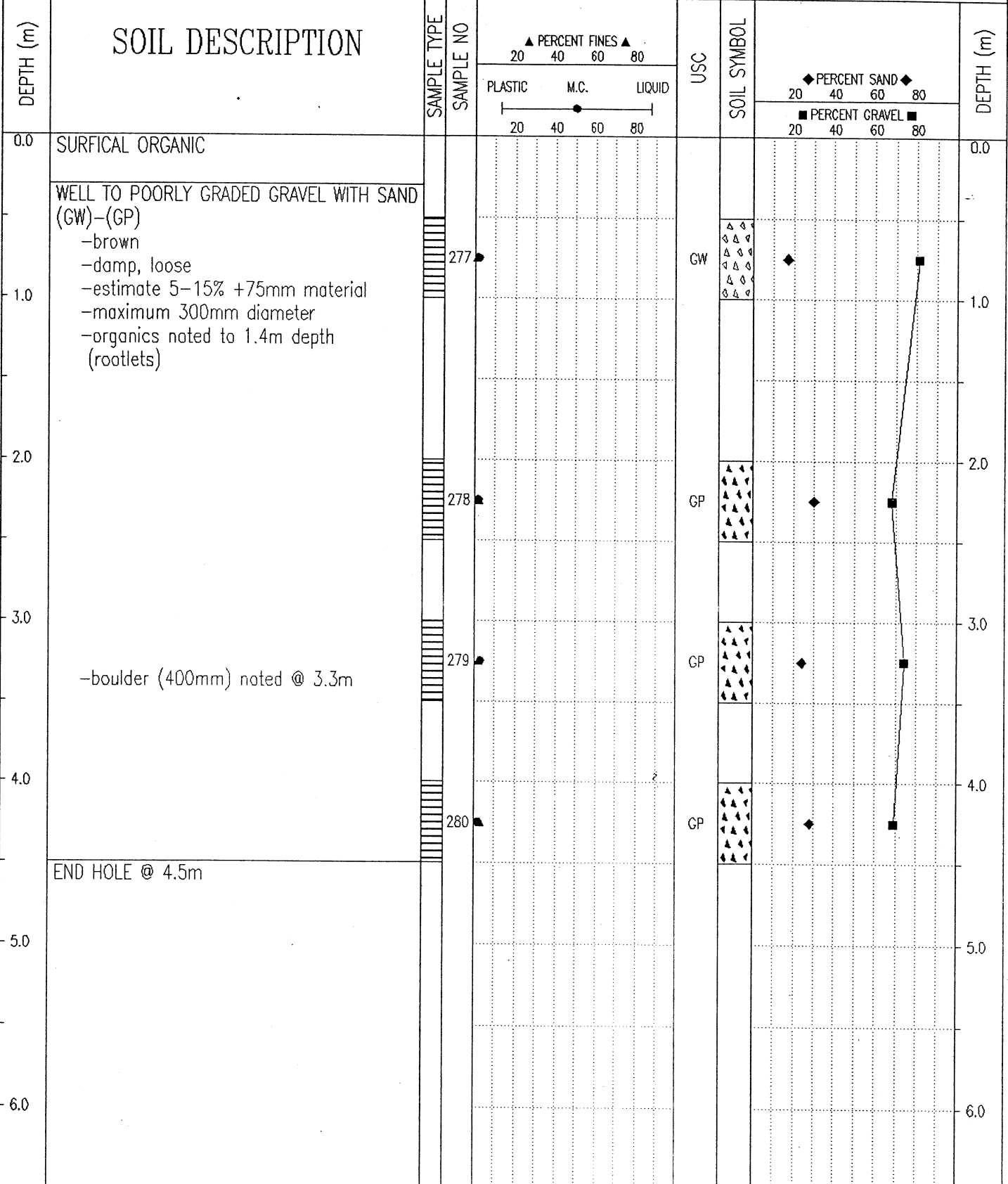
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2474
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

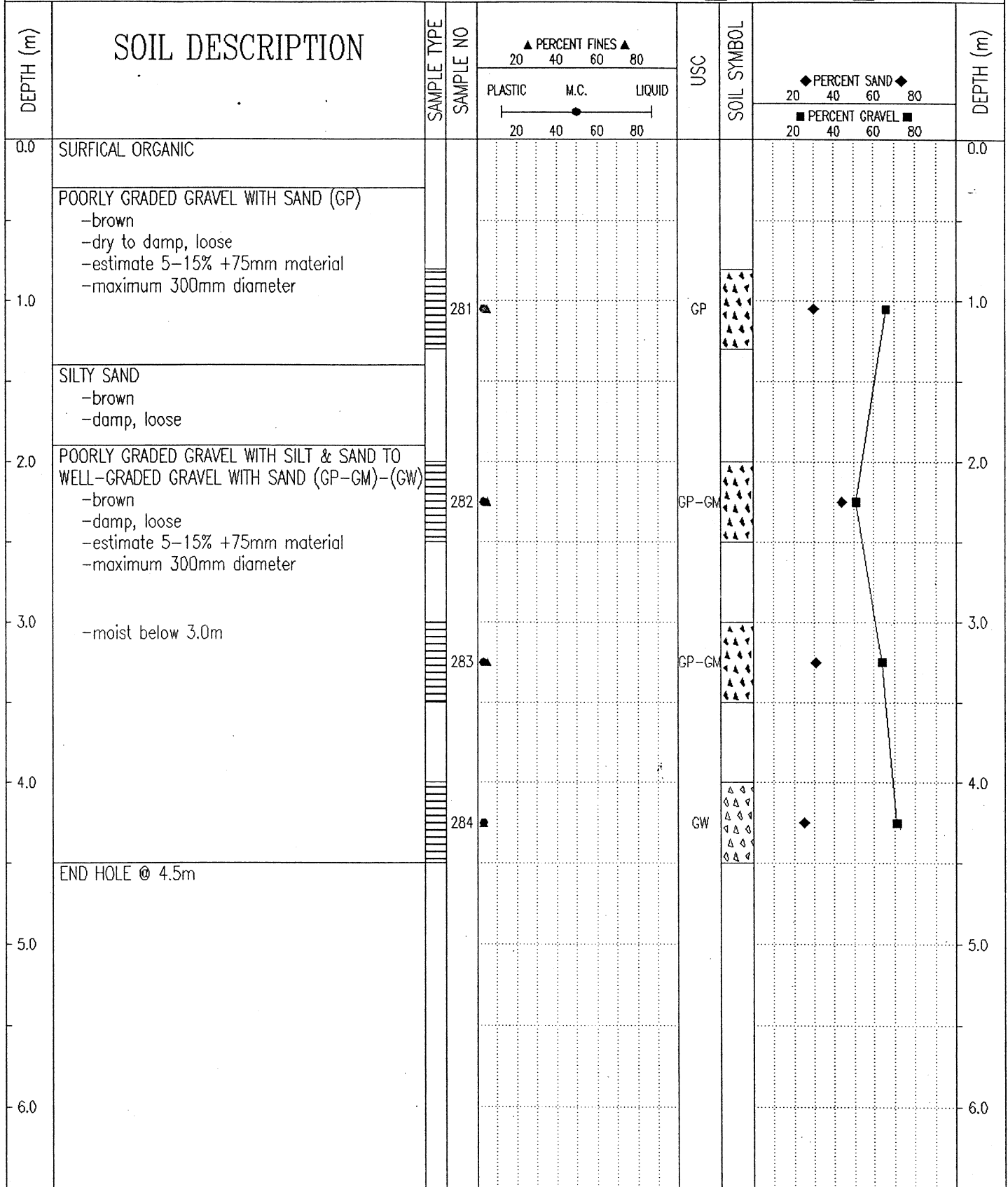
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP REVIEWED BY:	COMPLETION DEPTH: 4.5 m COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2475
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

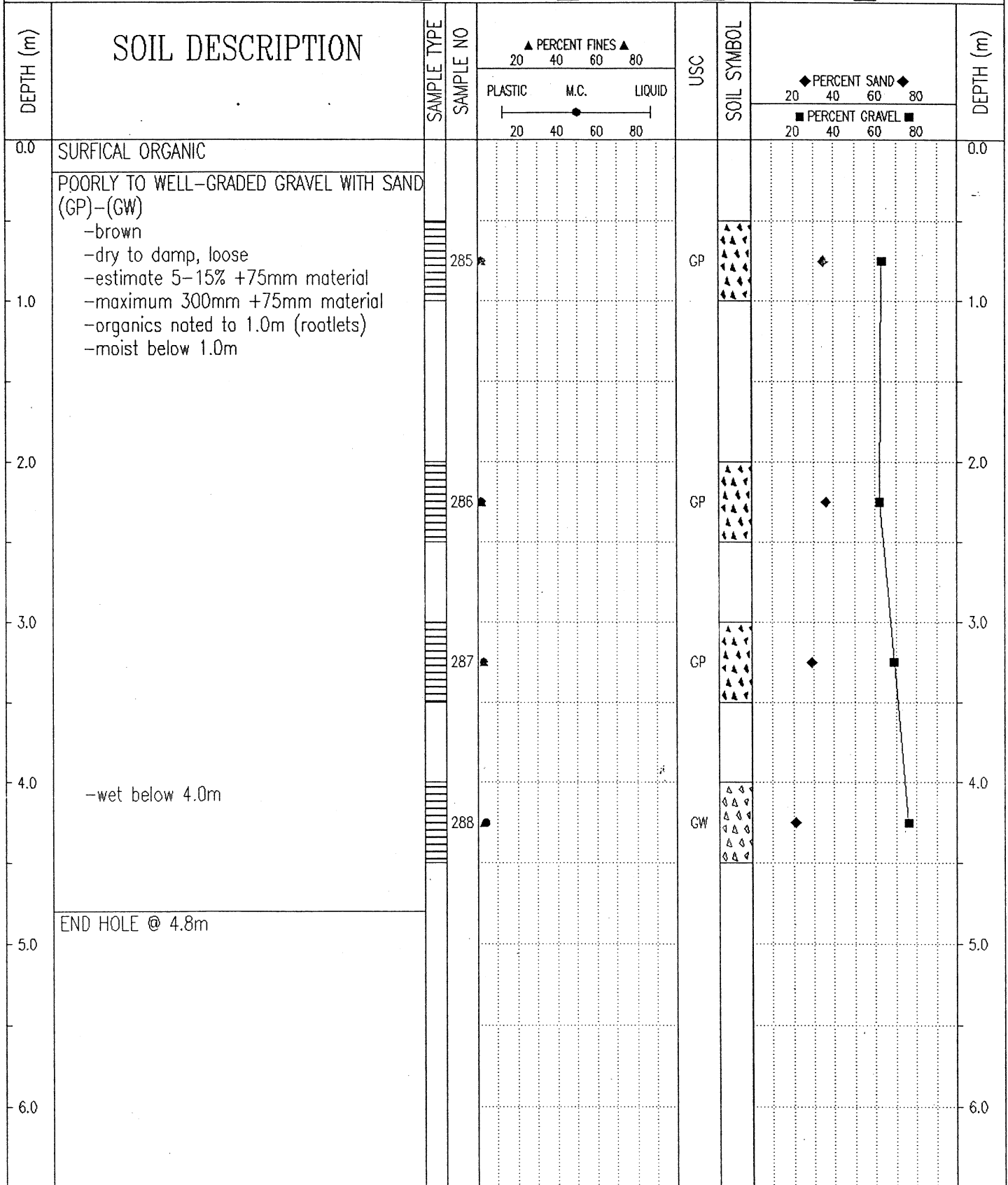


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Fig. No:

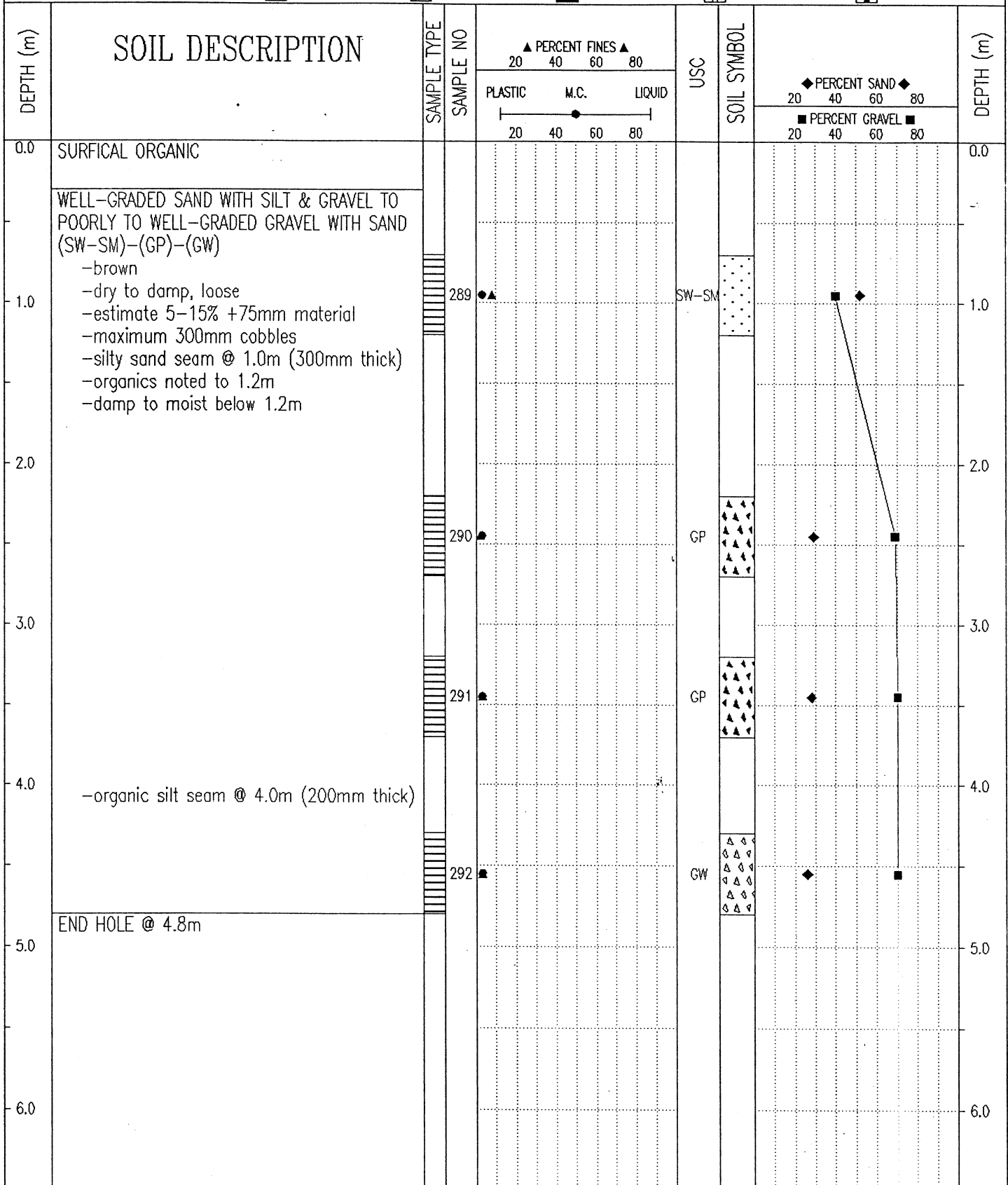
COMPLETION DEPTH: 4.5 m
COMPLETE: 02/09/23

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2476
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2477
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



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Fig. No:

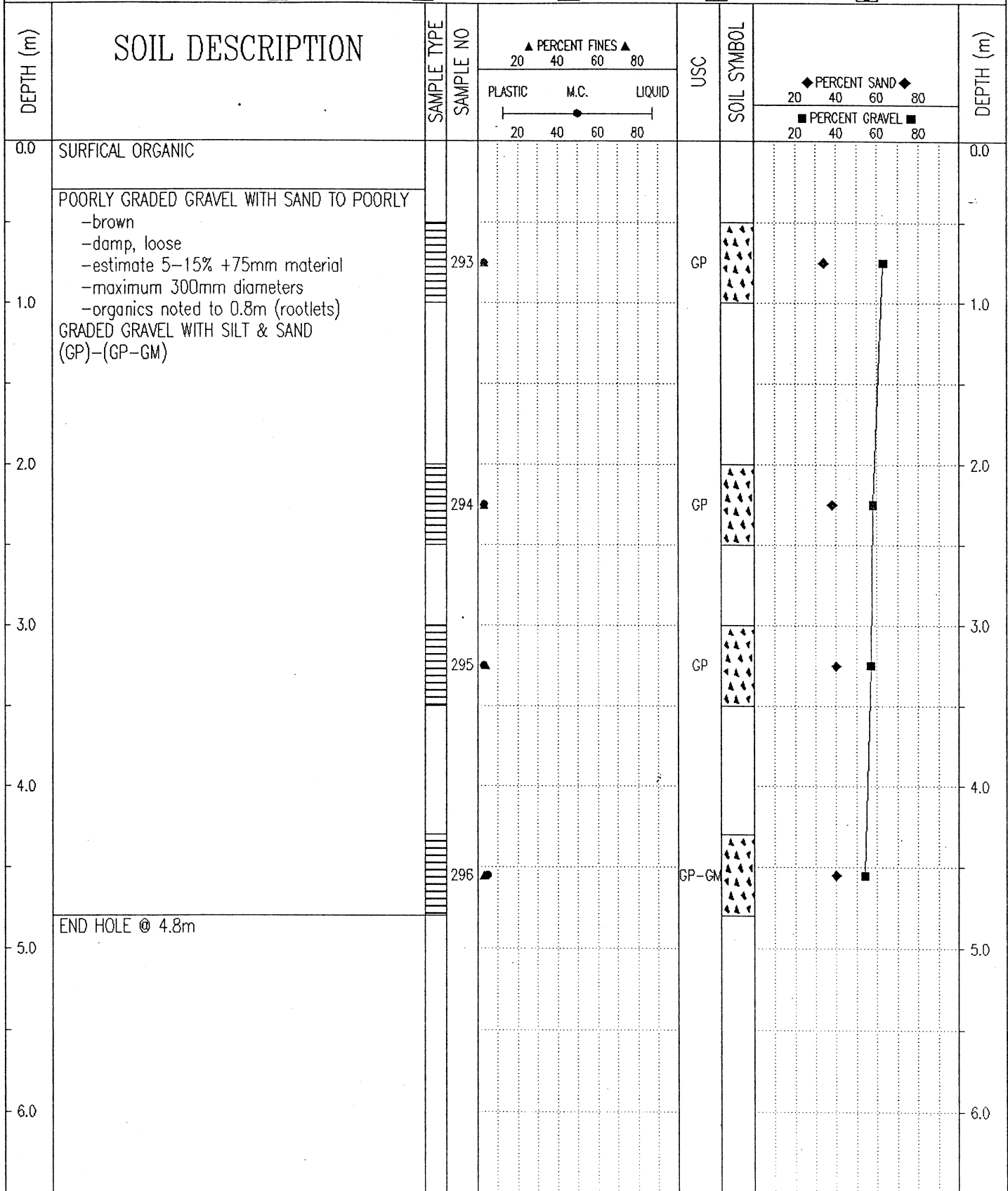
COMPLETION DEPTH: 4.8 m

COMPLETE: 02/09/23

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2478
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

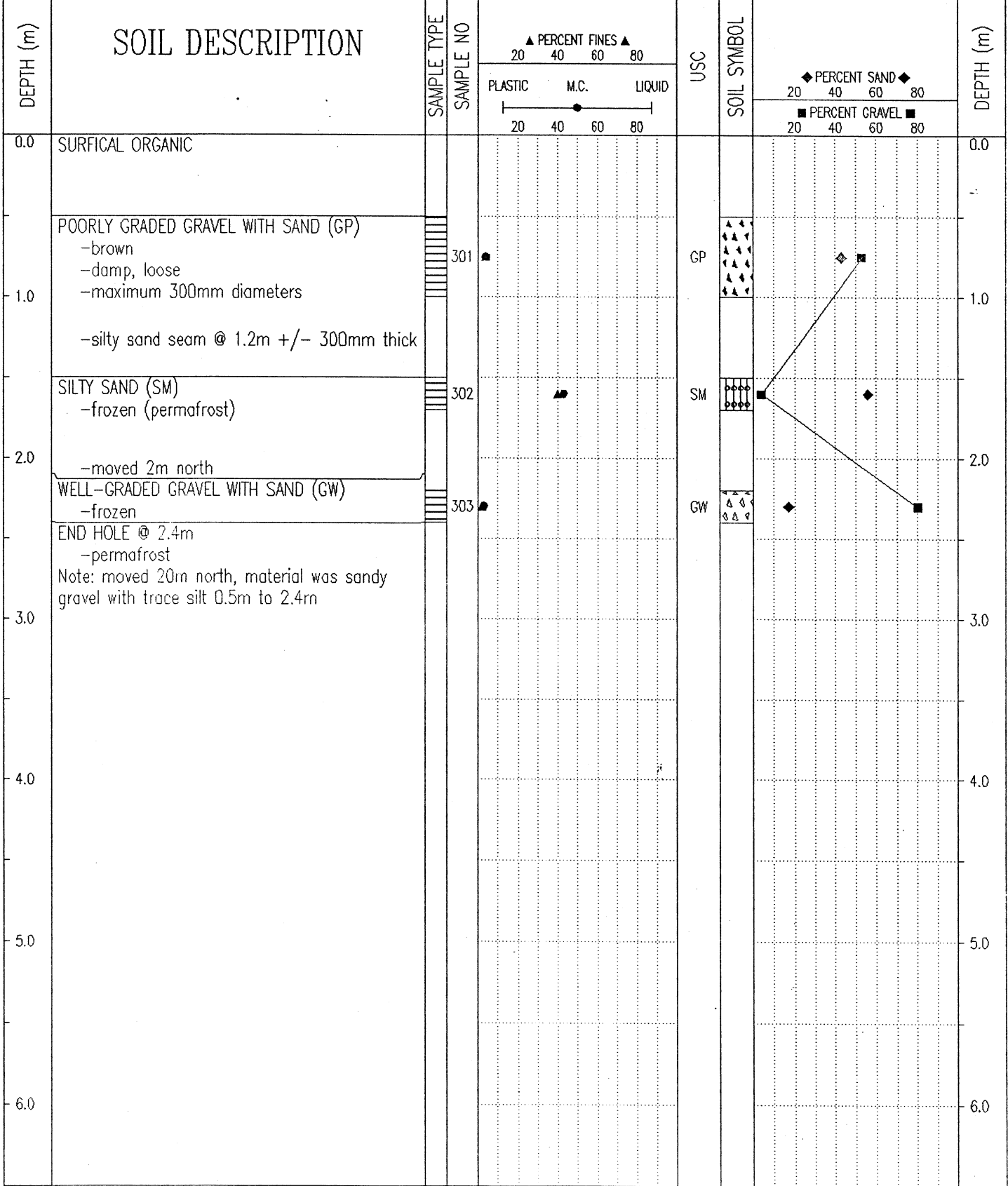
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11		TEST PIT NO: 638-2479											
ENGINEERING CAPITAL		NINES CREEK		Project No: 552-202101-0361											
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)											
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER											
				<input type="checkbox"/> BULK											
				<input type="checkbox"/> TUBE											
				<input type="checkbox"/> CORE											
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	SURFICAL ORGANIC													0.0	
1.0	WELL-GRADED SAND WITH GRAVEL (SW) -brown -damp, loose -estimate 5-15% +75mm material -maximum 200mm diameters		297				SW							1.0	
2.0	SILTY SAND / SILTY SAND -brown -dry to damp, loose													2.0	
3.0	POORLY GRADED GRAVEL WITH SILT & SAND TO POORLY GRADED GRAVEL WITH SAND (GP-GM)-(GP) -brown -damp, loose -estimate 5-15% +75mm material -some organic throughout (trees)		298				GP-GM							3.0	
4.0			299				GP							4.0	
5.0			300				GP							5.0	
5.0	END HOLE @ 4.8m													5.0	

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Fig. No:

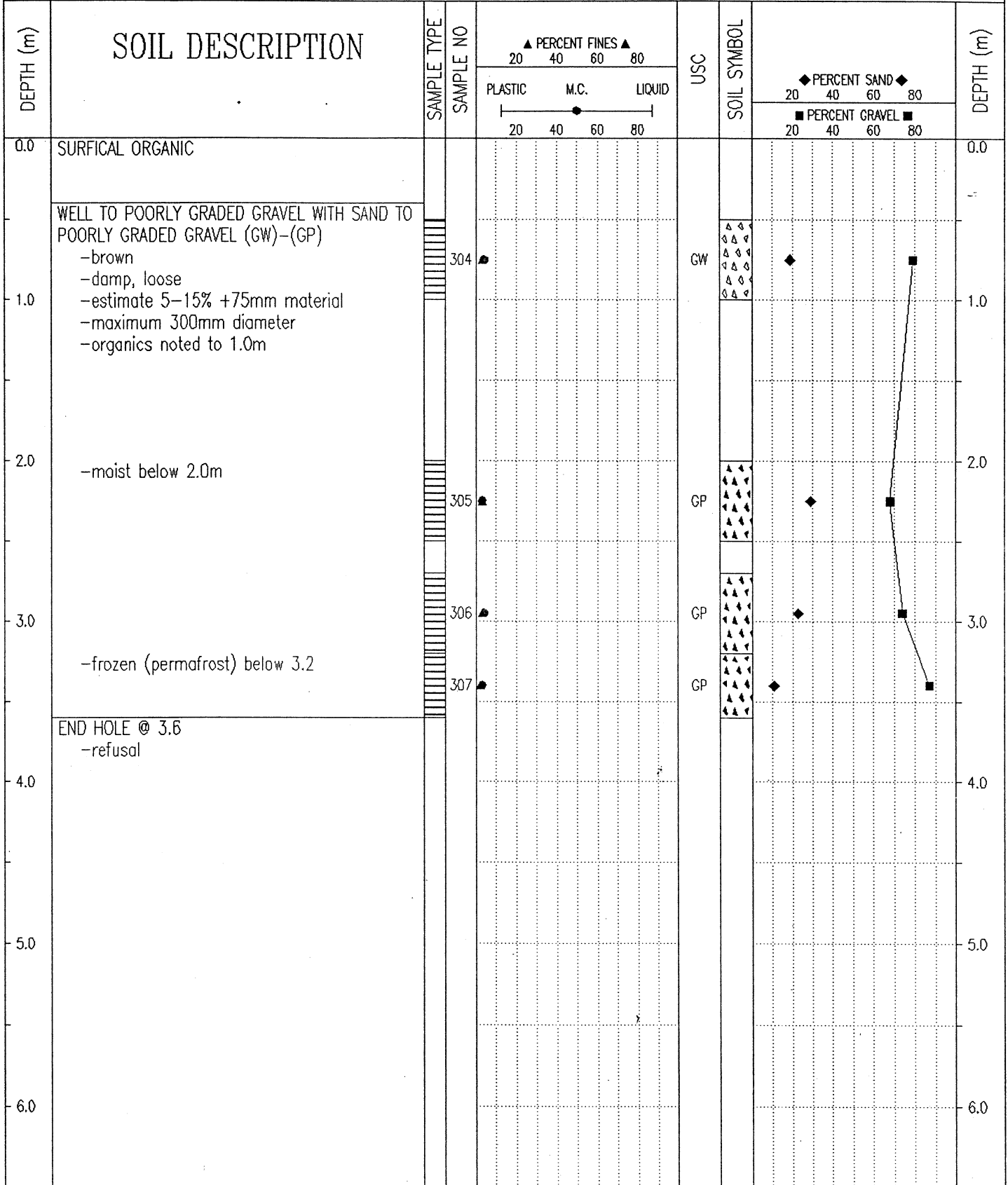
COMPLETION DEPTH: 4.8 m
COMPLETE: 02/09/23

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2480
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



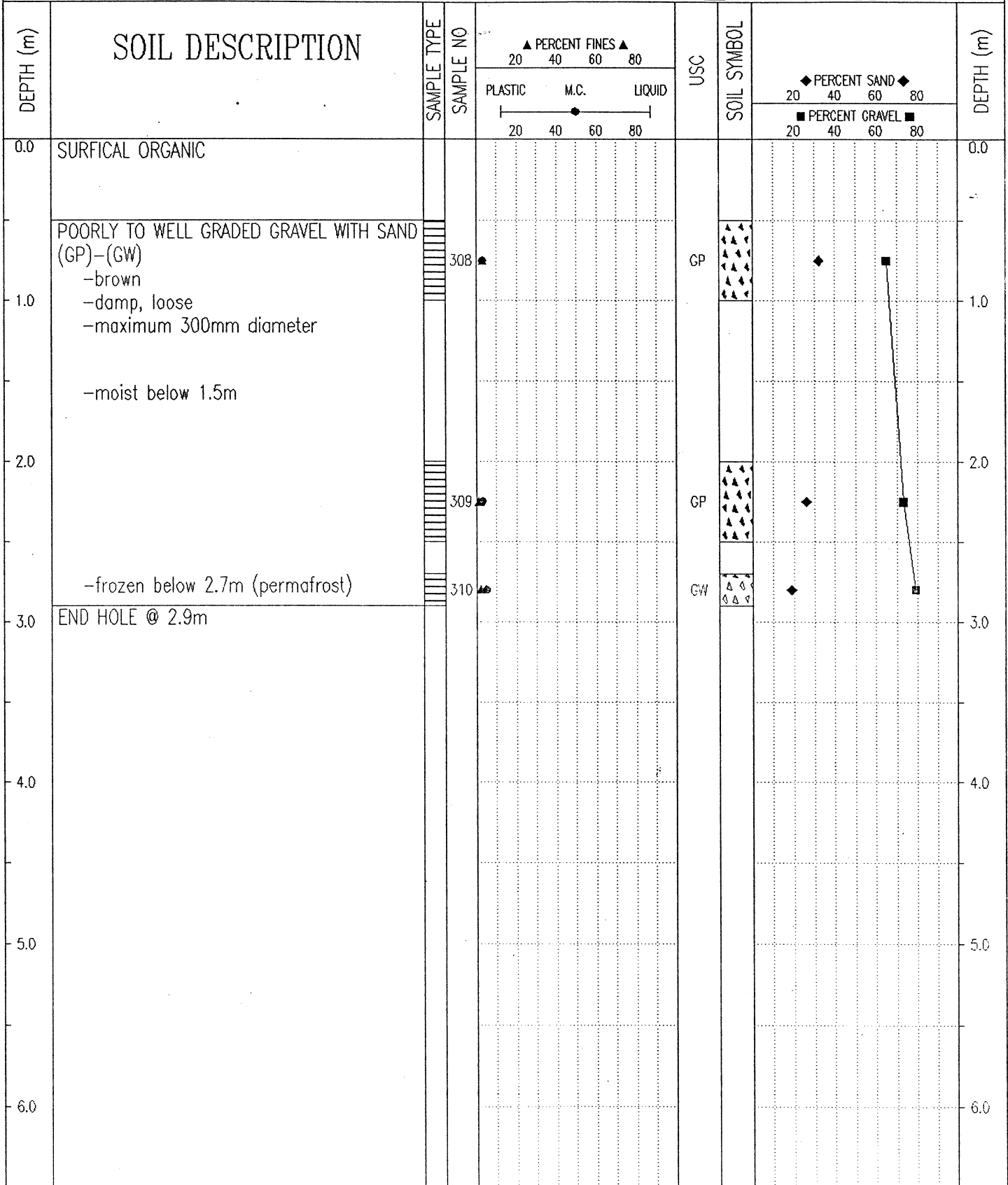
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 2.4 m
	REVIEWED BY:	COMPLETE: 02/09/23
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2481
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 3.6 m
	REVIEWED BY:	COMPLETE: 02/09/24
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2482
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 2.9 m
	REVIEWED BY:	COMPLETE: 02/09/24
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11		TEST PIT NO: 638-2483								
ENGINEERING CAPITAL		NINES CREEK		Project No: 552-202101-0361								
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input checked="" type="checkbox"/> S.P.T.		<input checked="" type="checkbox"/> AUGER								
		<input type="checkbox"/> BULK		<input type="checkbox"/> TUBE								
				<input type="checkbox"/> CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	SURFICAL ORGANICS										0.0	
1.0	POORLY GRADED GRAVEL WITH SAND (GP) -brown -damp, loose -estimate 5-15% +75mm material -maximum 300mm diameter		311				GP				1.0	
2.0	-frozen below 2.1m		312				GP				2.0	
2.3	END HOLE @ 2.3m										2.3	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: JRP		COMPLETION DEPTH: 2.3 m						
				REVIEWED BY:		COMPLETE: 02/09/24						
				Fig. No:		Page 1 of 1						

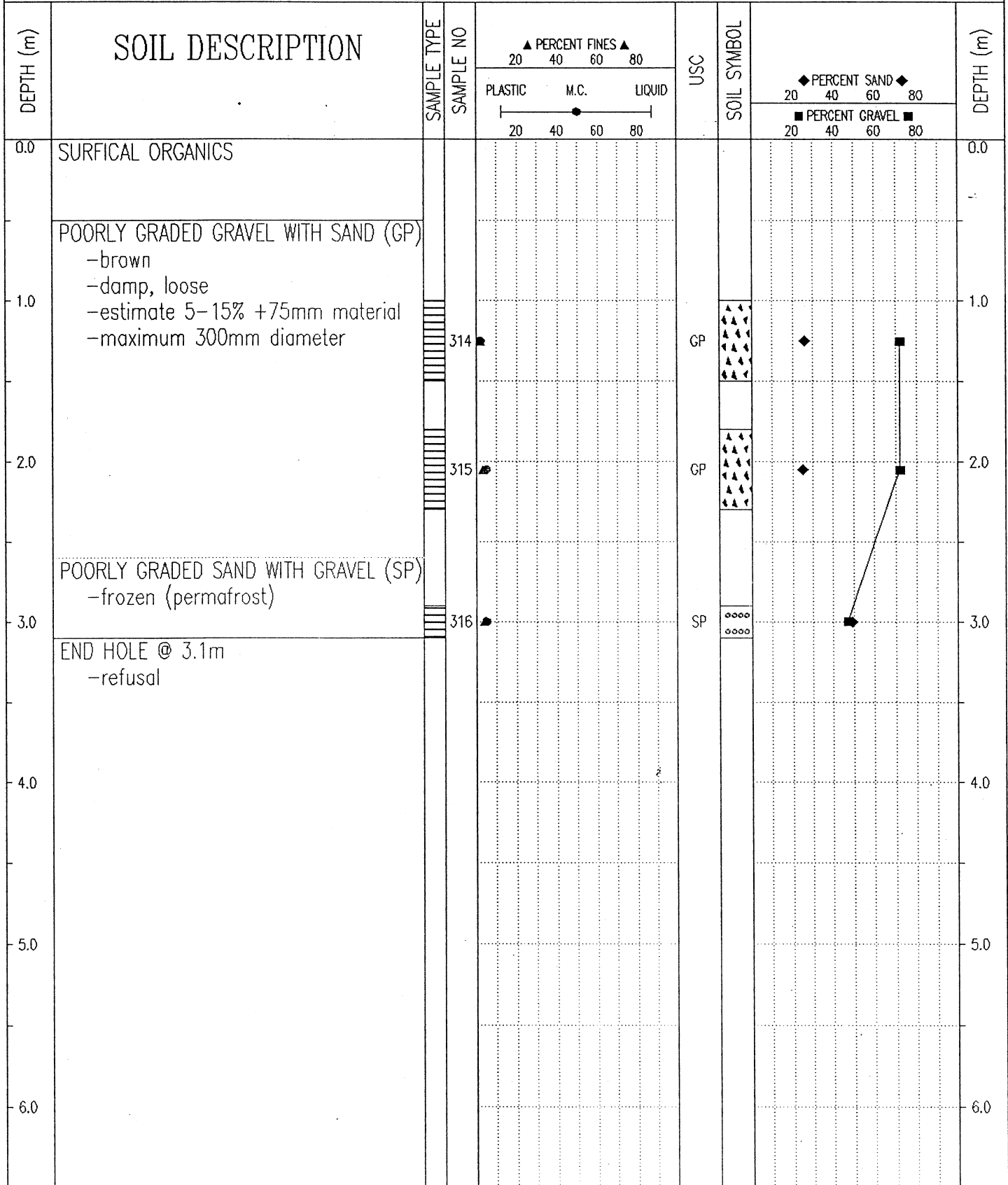
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2484
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	
0.0	SURFICAL ORGANICS										0.0
0.0 - 1.0	POORLY GRADED GRAVEL WITH SAND (GP) -frozen (permafrost)		313	▲	●		GP	▲▲▲▲	◆	■	1.0
1.0 - 1.6	END HOLE @ 1.6m -refusal										1.6
1.6 - 2.0											2.0
2.0 - 3.0											3.0
3.0 - 4.0											4.0
4.0 - 5.0											5.0
5.0 - 6.0											6.0

Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 1.6 m
	REVIEWED BY:	COMPLETE: 02/09/24
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2485
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

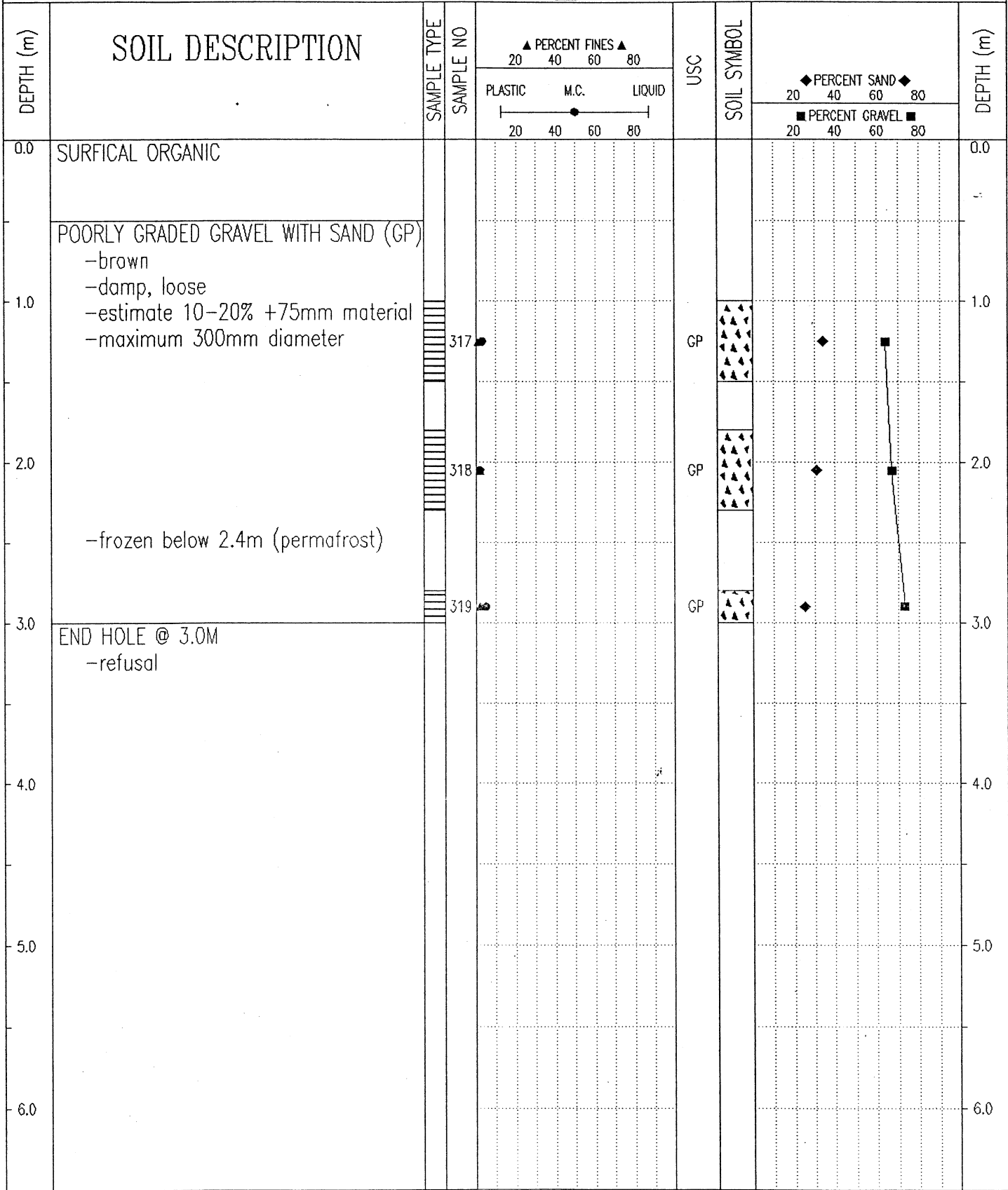


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Fig. No:

COMPLETION DEPTH: 3.1 m
COMPLETE: 02/09/24

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2486
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		

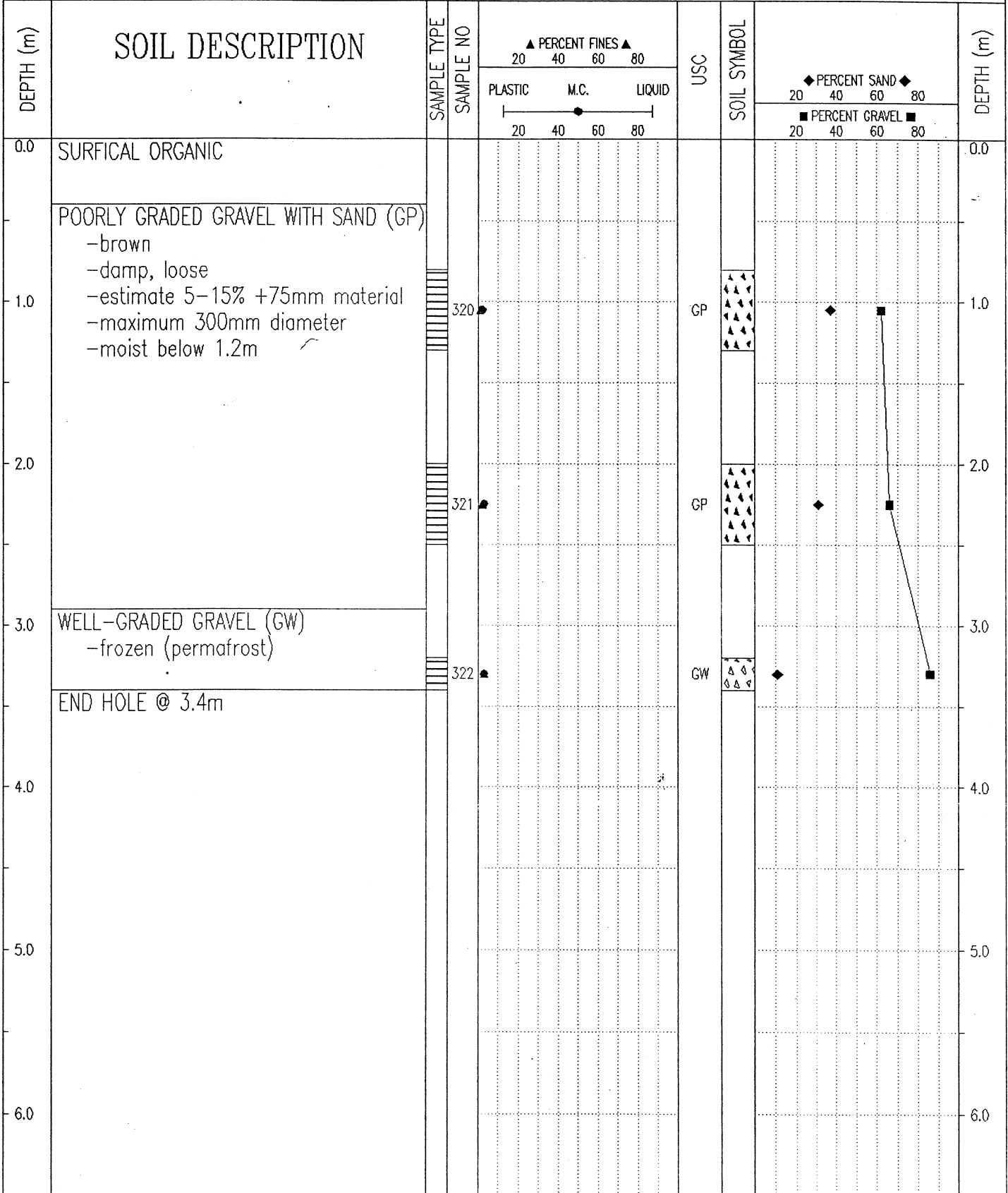


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 Fig. No:

COMPLETION DEPTH: 3.0 m
 COMPLETE: 02/09/24

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2487
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



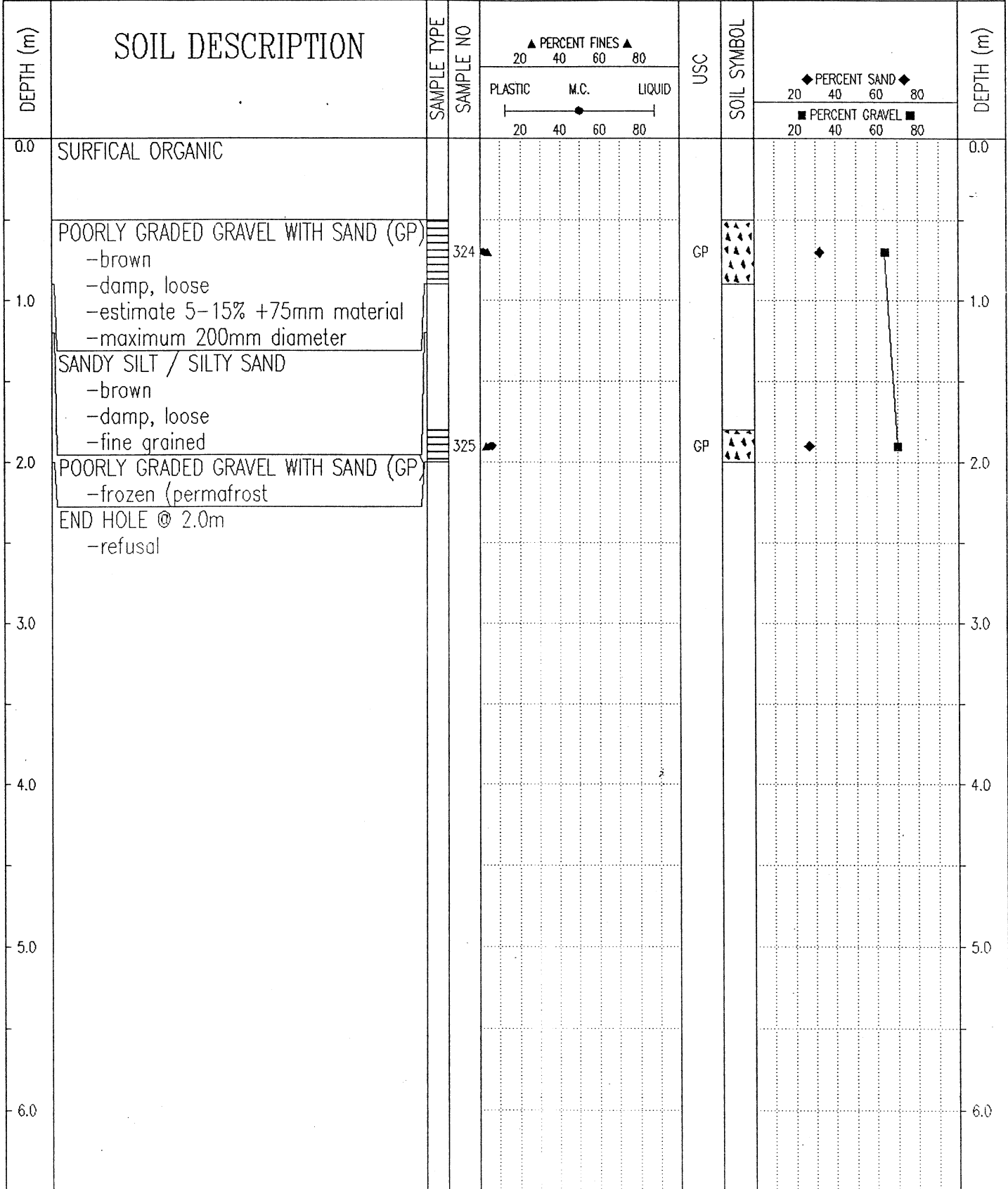
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 3.4 m
	REVIEWED BY:	COMPLETE: 02/09/24
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11	TEST PIT NO: 638-2488
ENGINEERING CAPITAL		NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	SURFICAL ORGANICS / SILTS											0.0
1.0	POORLY GRADED GRAVEL WITH SAND (GP) -frozen (permafrost)		323					GP				1.0
2.0	END HOLE @ 1.6m -refusal											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2489
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

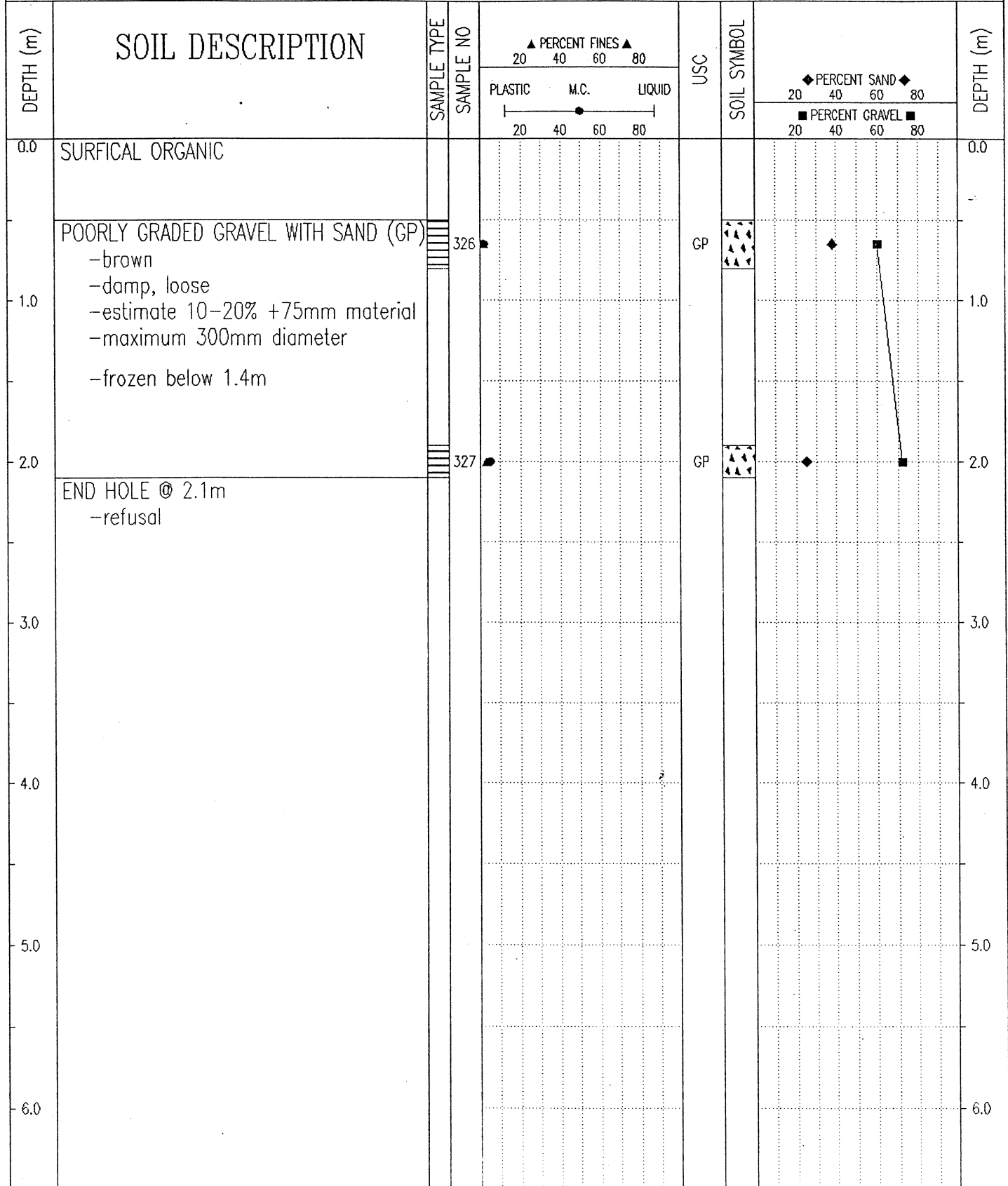
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 2.0 m
	REVIEWED BY:	COMPLETE: 02/09/24
	Fig. No:	Page 1 of 1

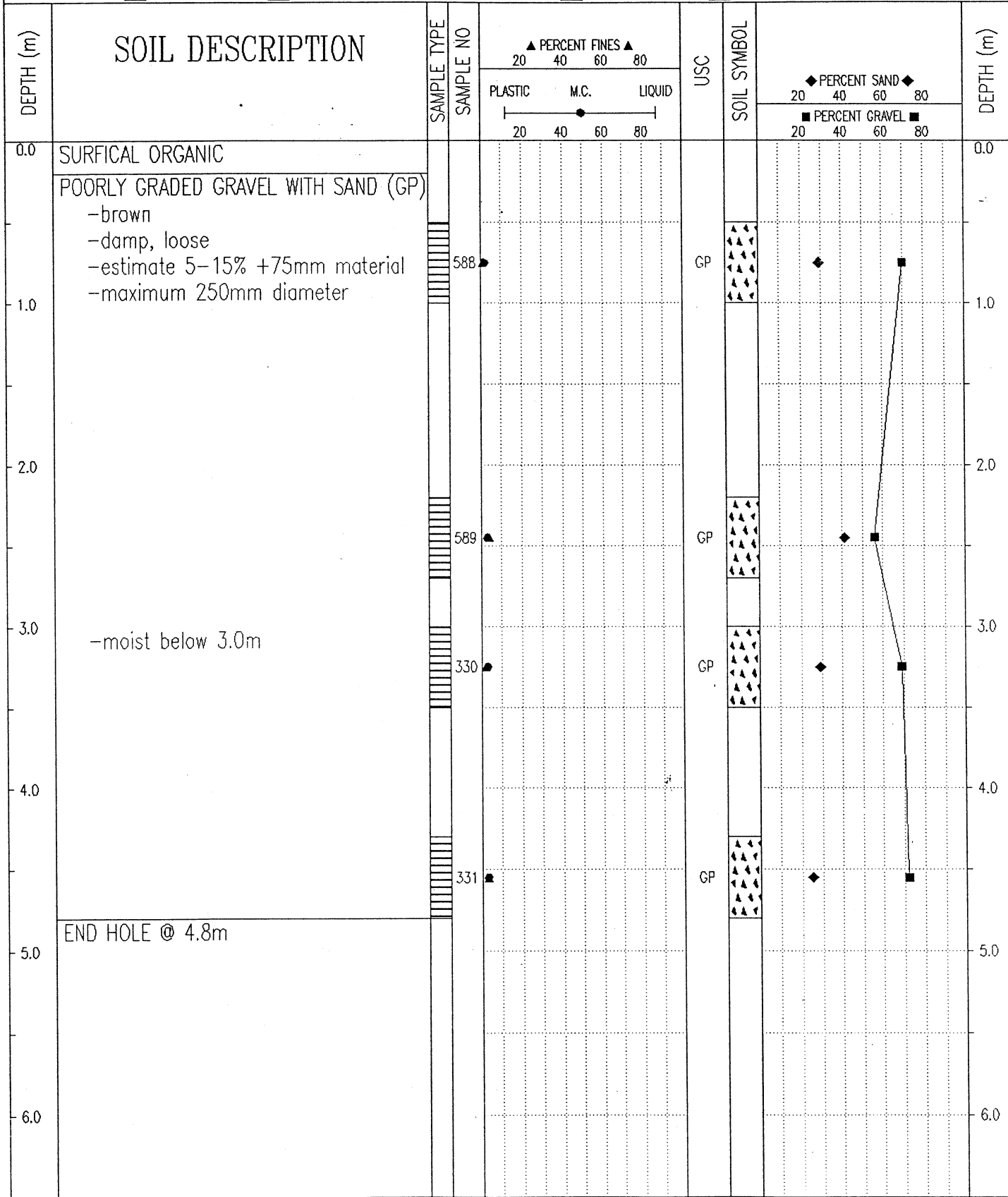
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2490
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 2.1 m
	REVIEWED BY:	COMPLETE: 02/09/24
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2491
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE

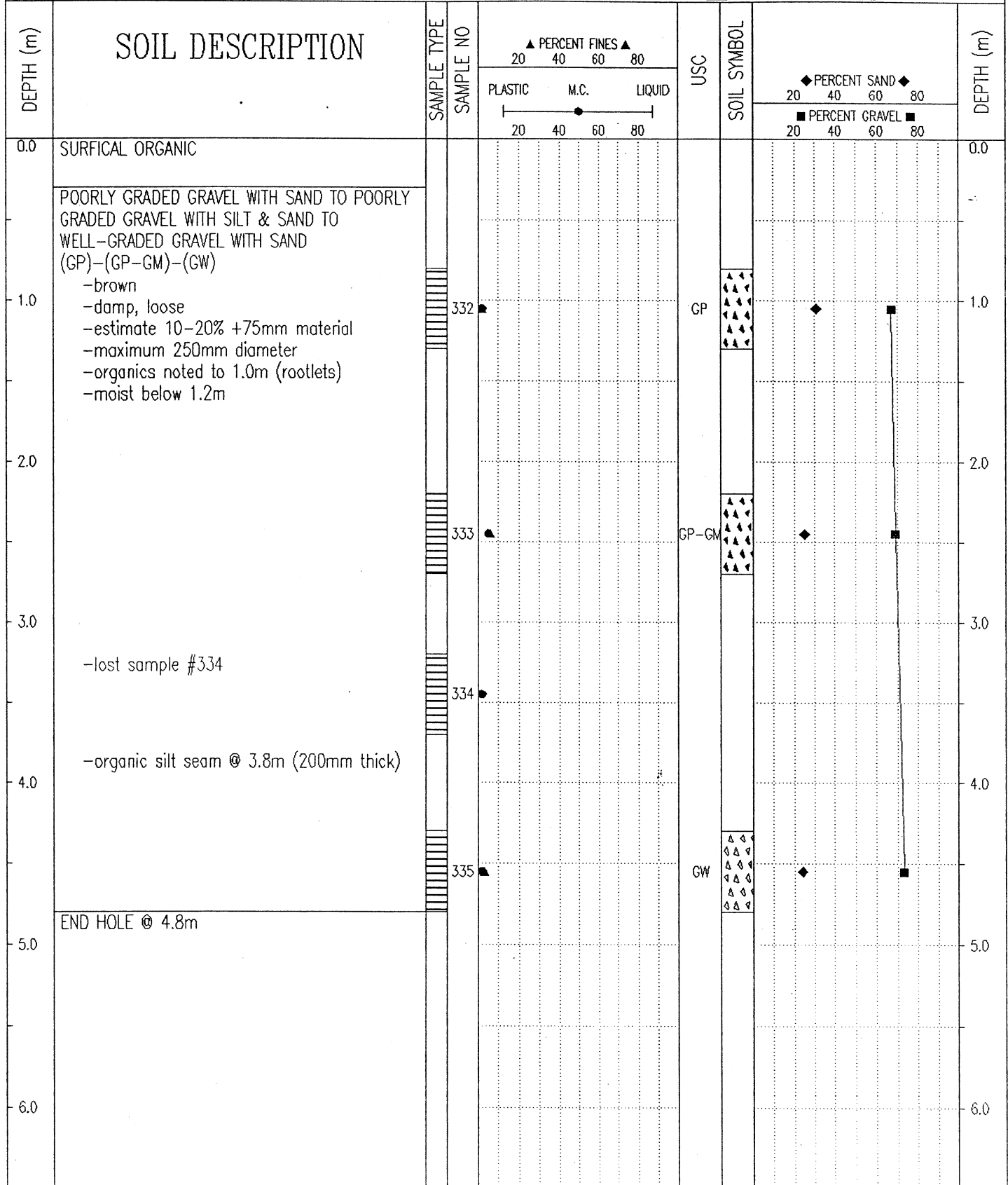


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Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

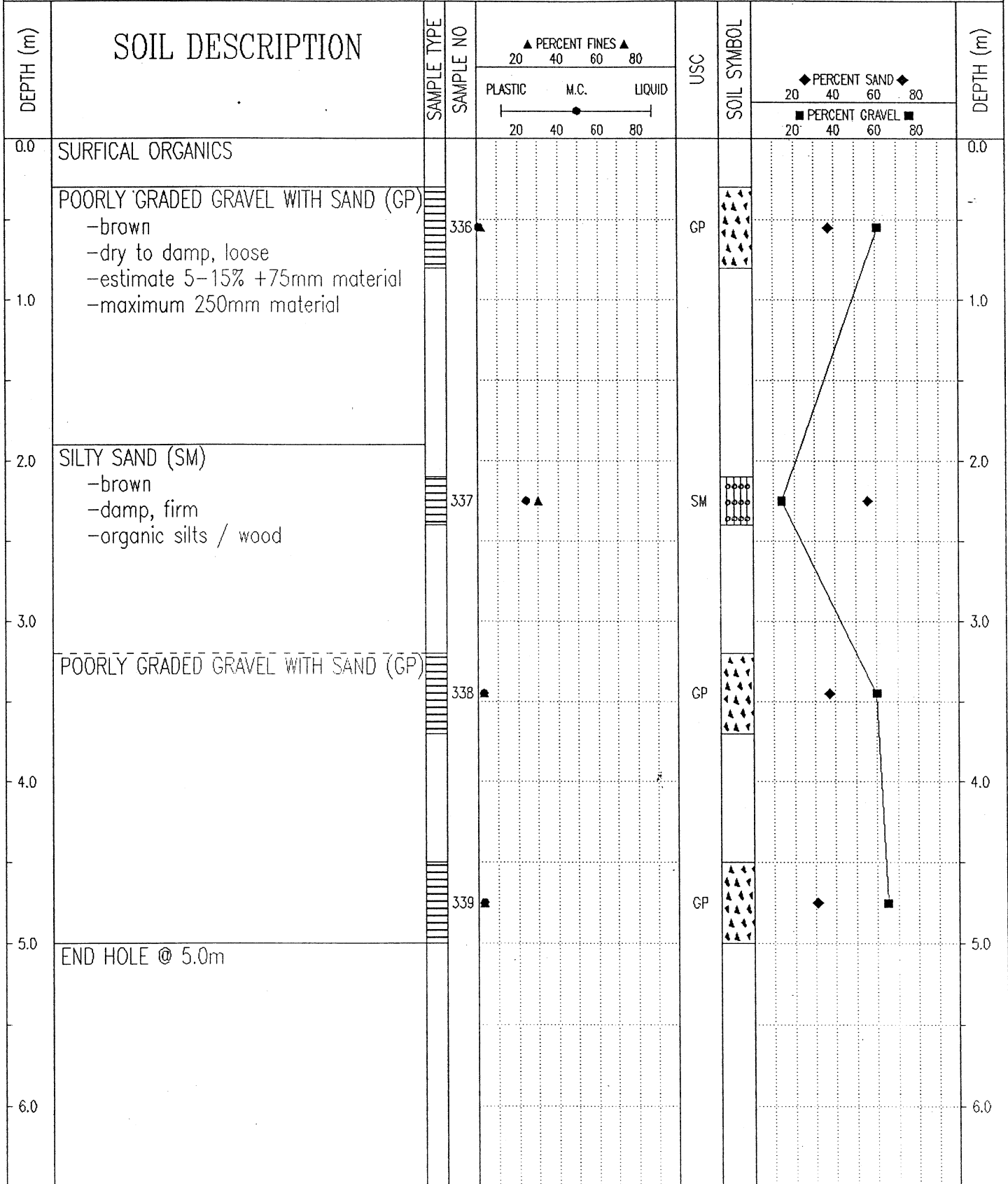
COMPLETION DEPTH: 4.8 m
COMPLETE: 02/09/24

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11	TEST PIT NO: 638-2492
ENGINEERING CAPITAL		NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



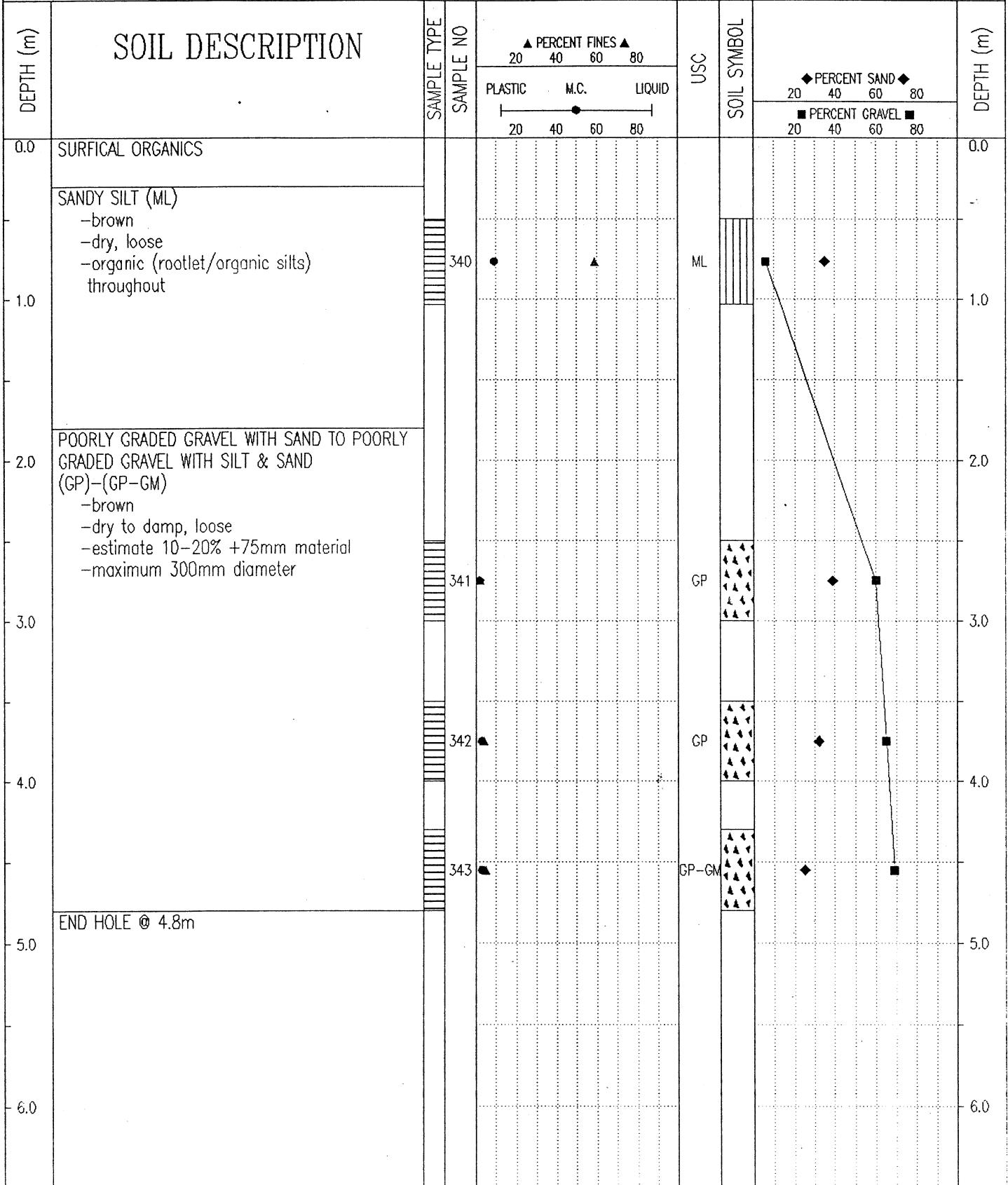
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/24
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2493
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



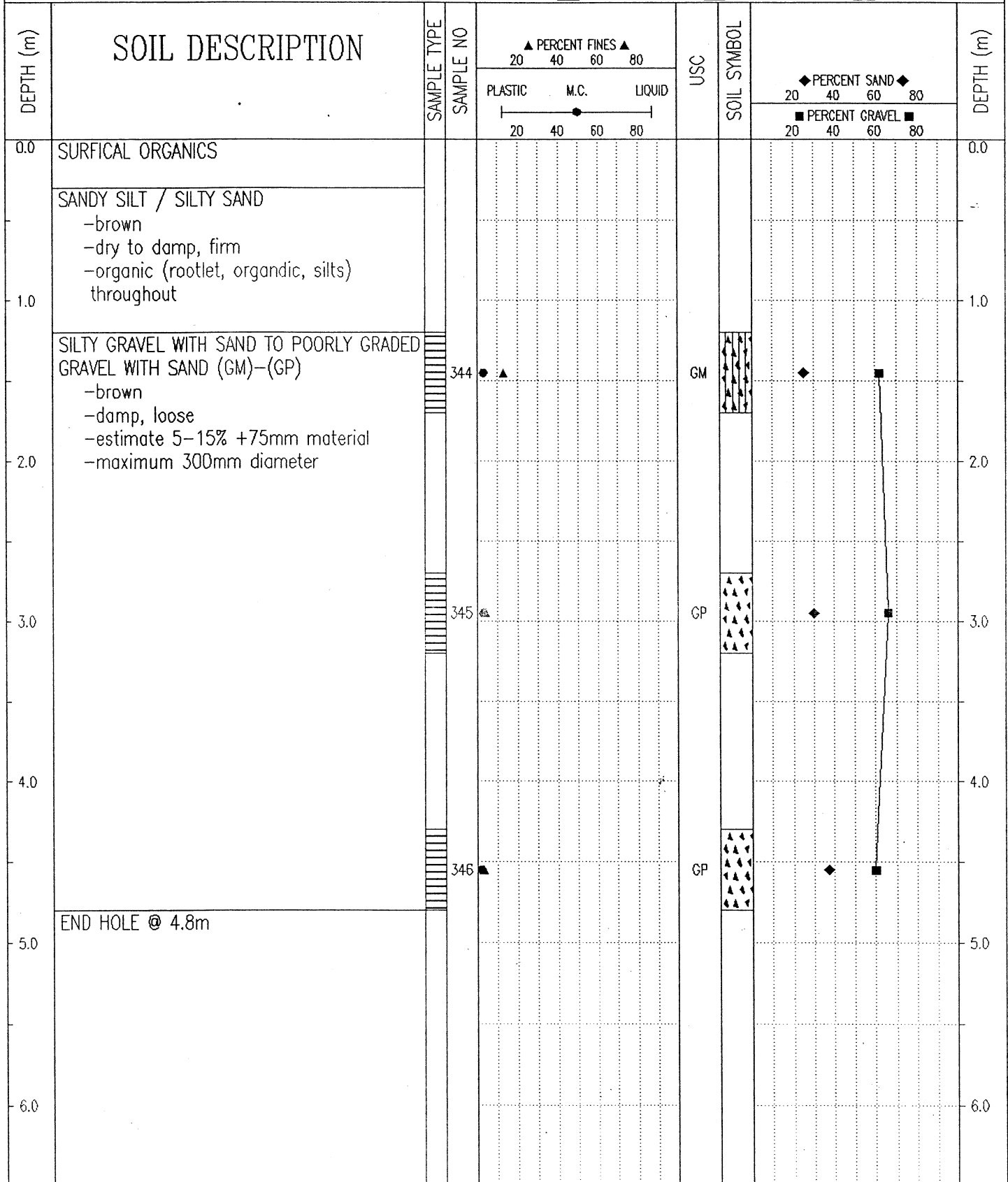
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 02/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2494
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION: DEPT-: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09 25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2495
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE

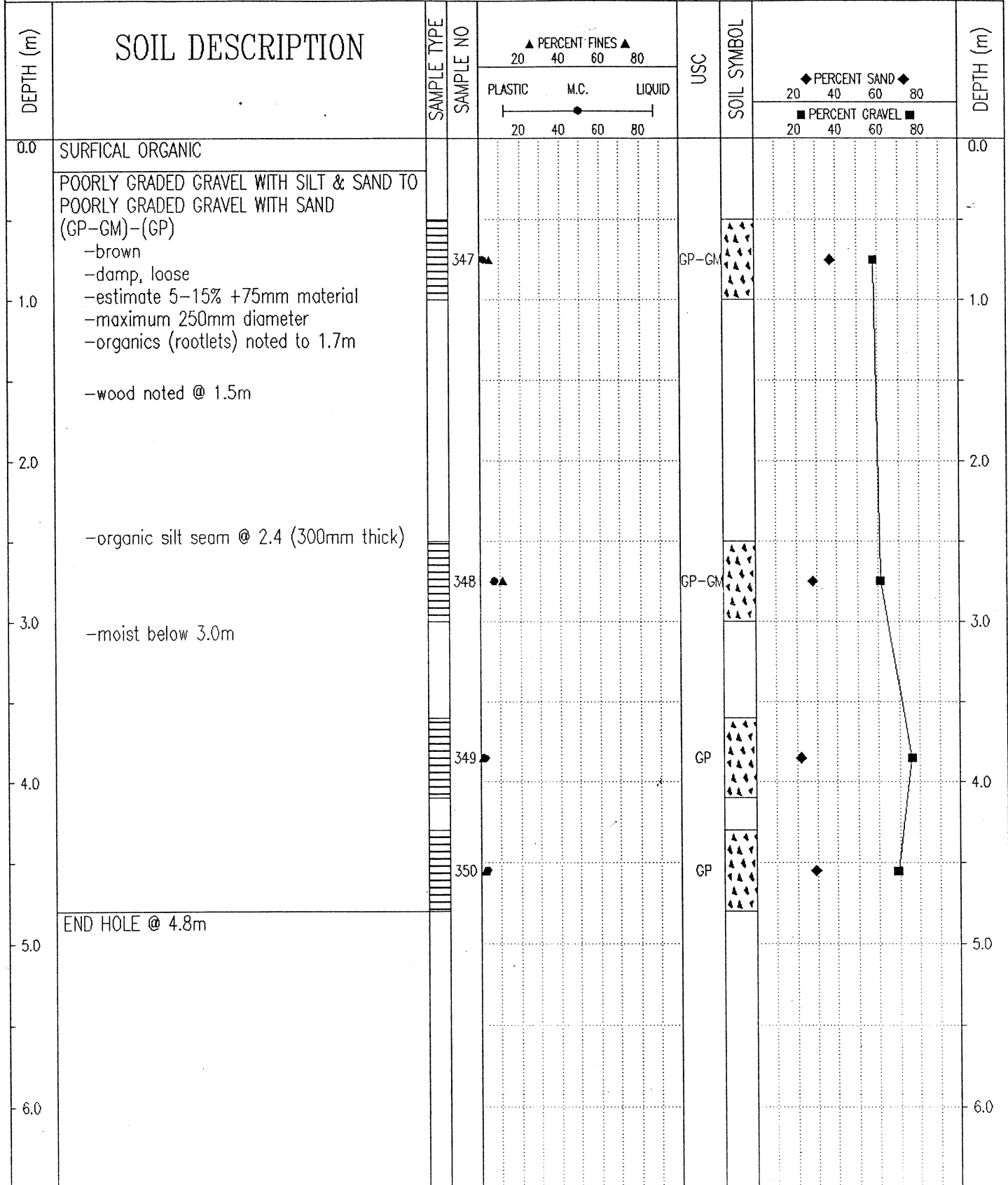


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LOGGED BY: JRP
 REVIEWED BY:
 Fig. No:

COMPLETION DEPTH: 4.8 m
 COMPLETE: 02/09/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2496
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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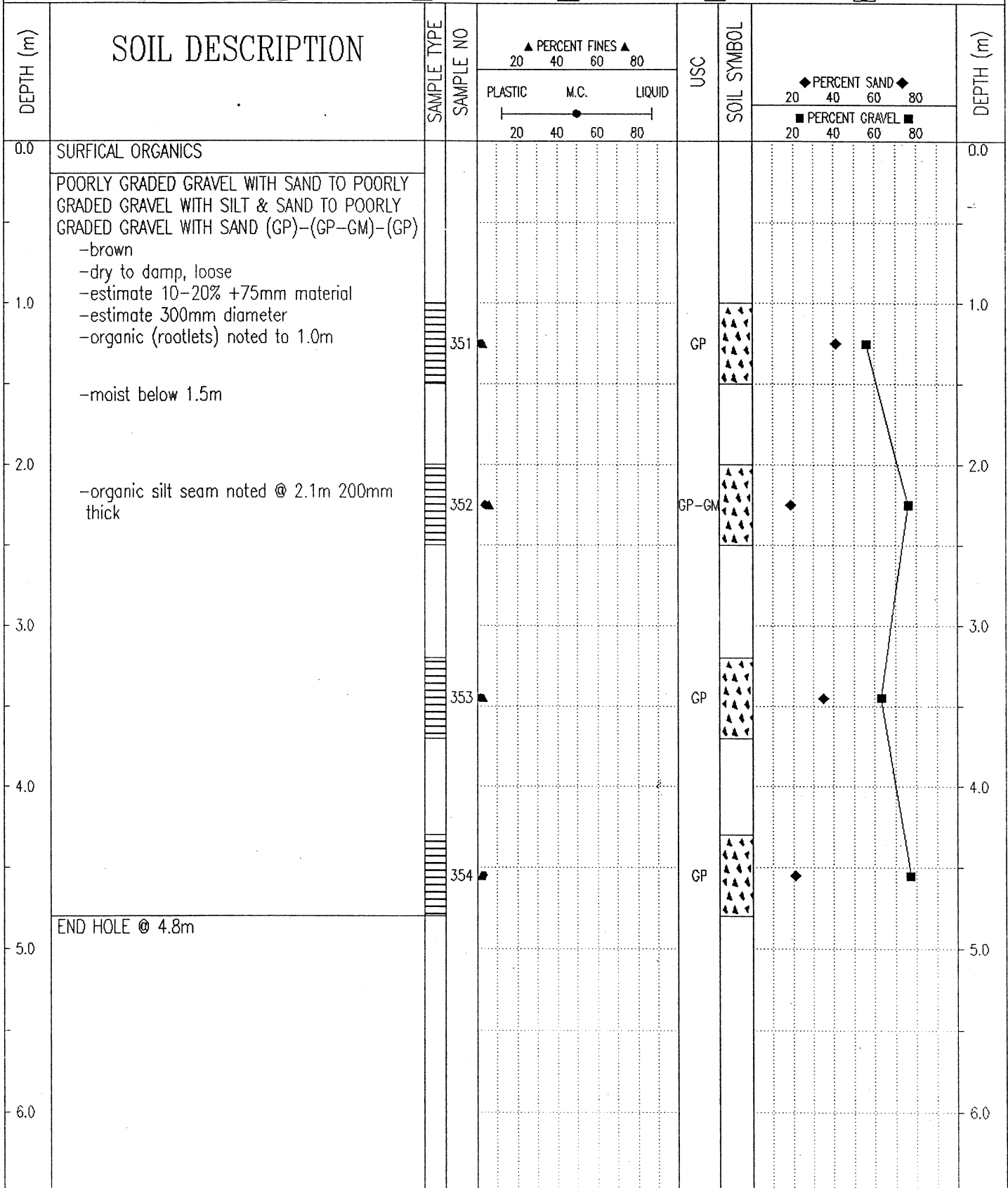


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Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No.:

COMPLETION DEPTH: 4.8 m
COMPLETE: 02/09/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2497
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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LOGGED BY: JRP

REVIEWED BY:

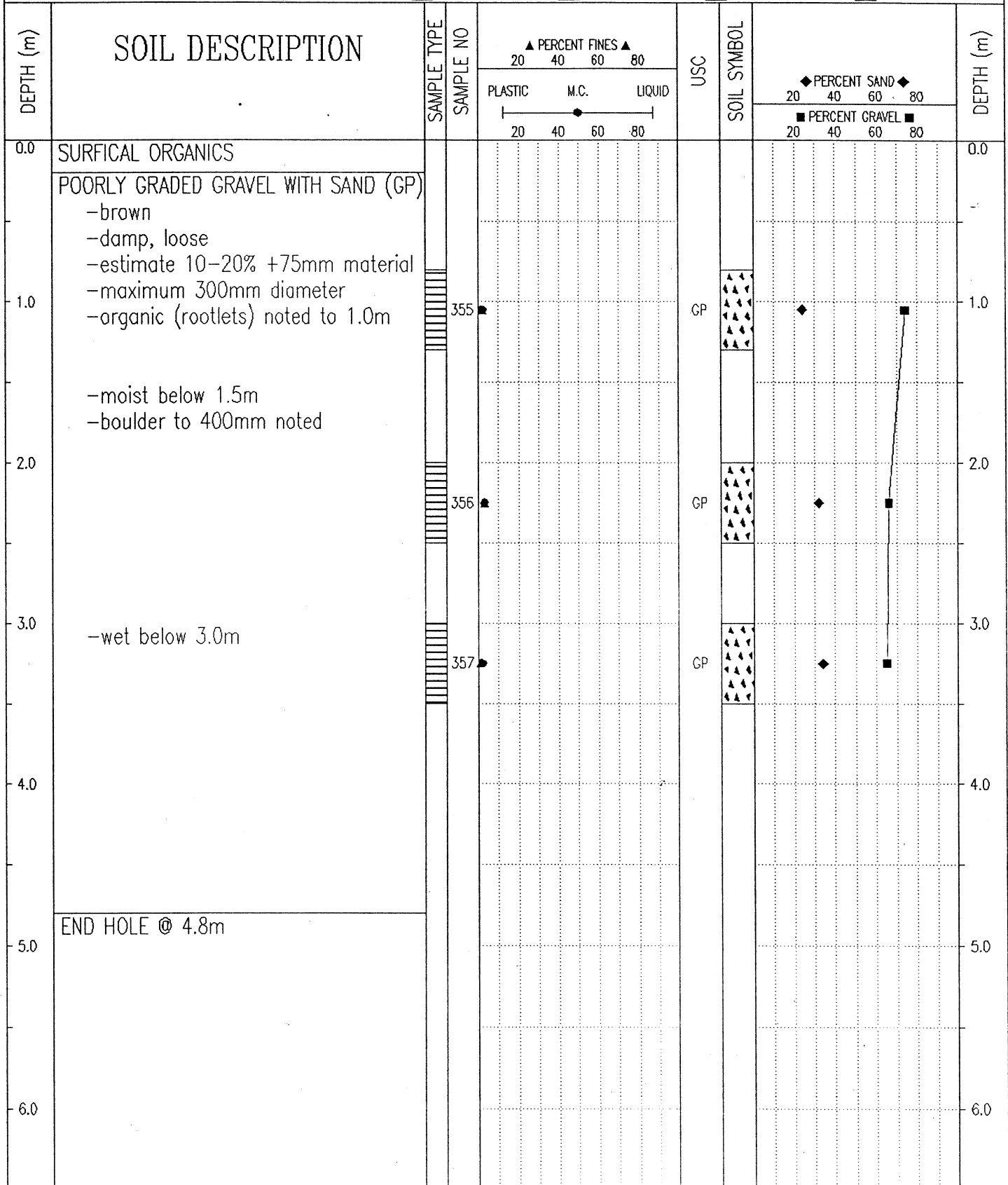
Fig. No:

COMPLETION DEPTH: 4.8 m

COMPLETE: 02/09/25

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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2498
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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LOGGED BY: JRP

REVIEWED BY:

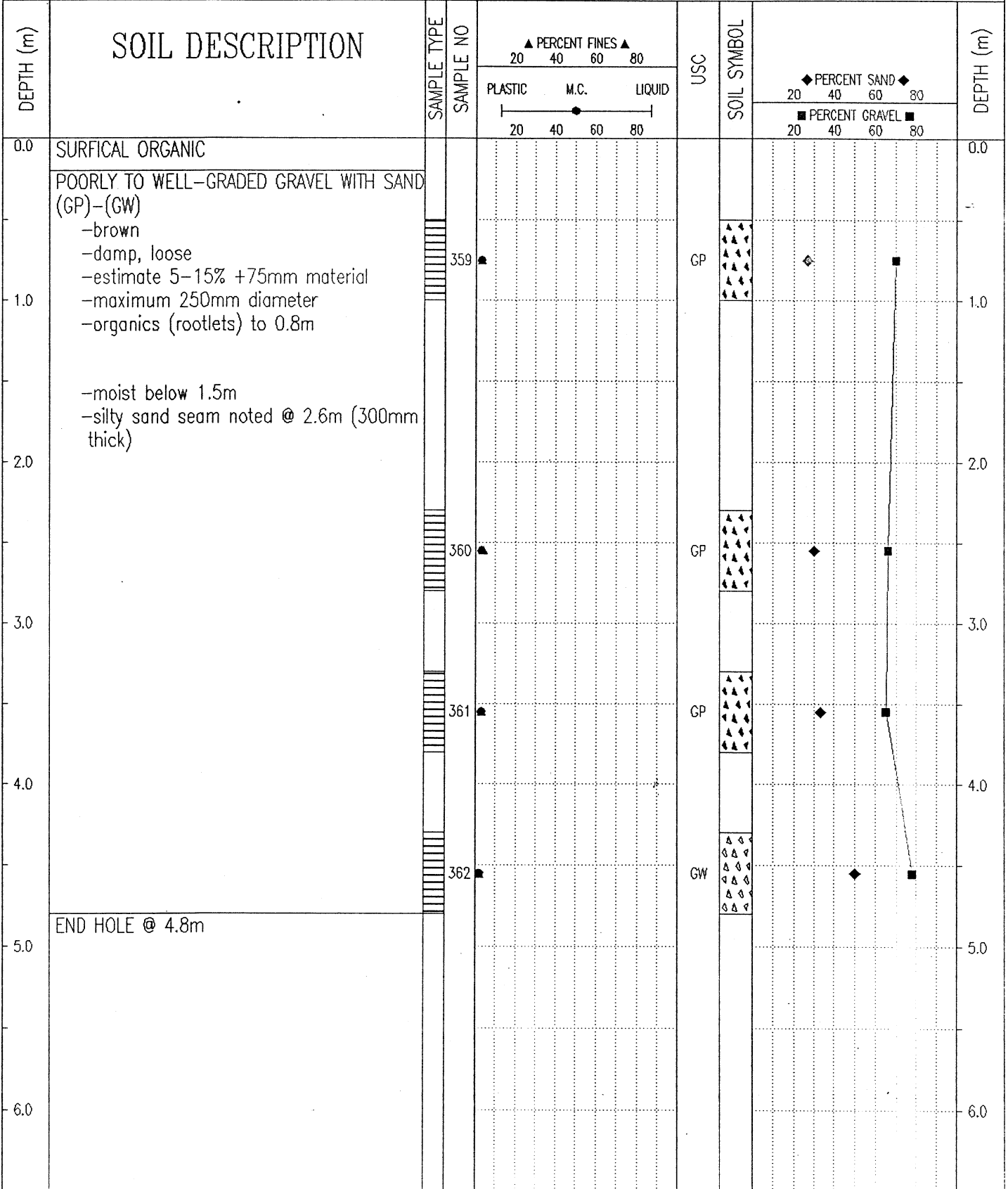
Fig. No:

COMPLETION DEPTH: 4.8 m

COMPLETE: 02/09/25

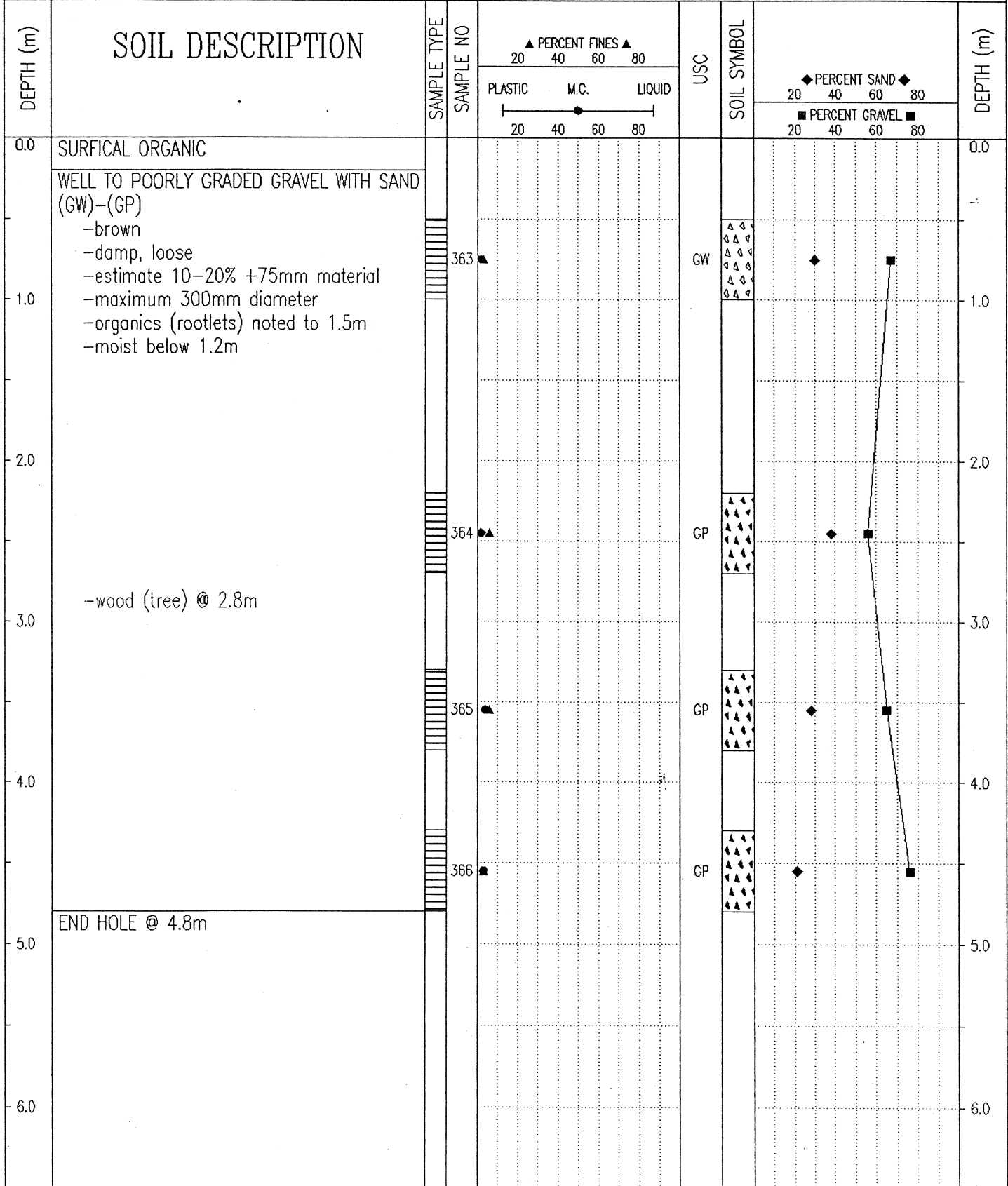
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK SEGMENT 11	TEST PIT NO: 638-2499
ENGINEERING CAPITAL		NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



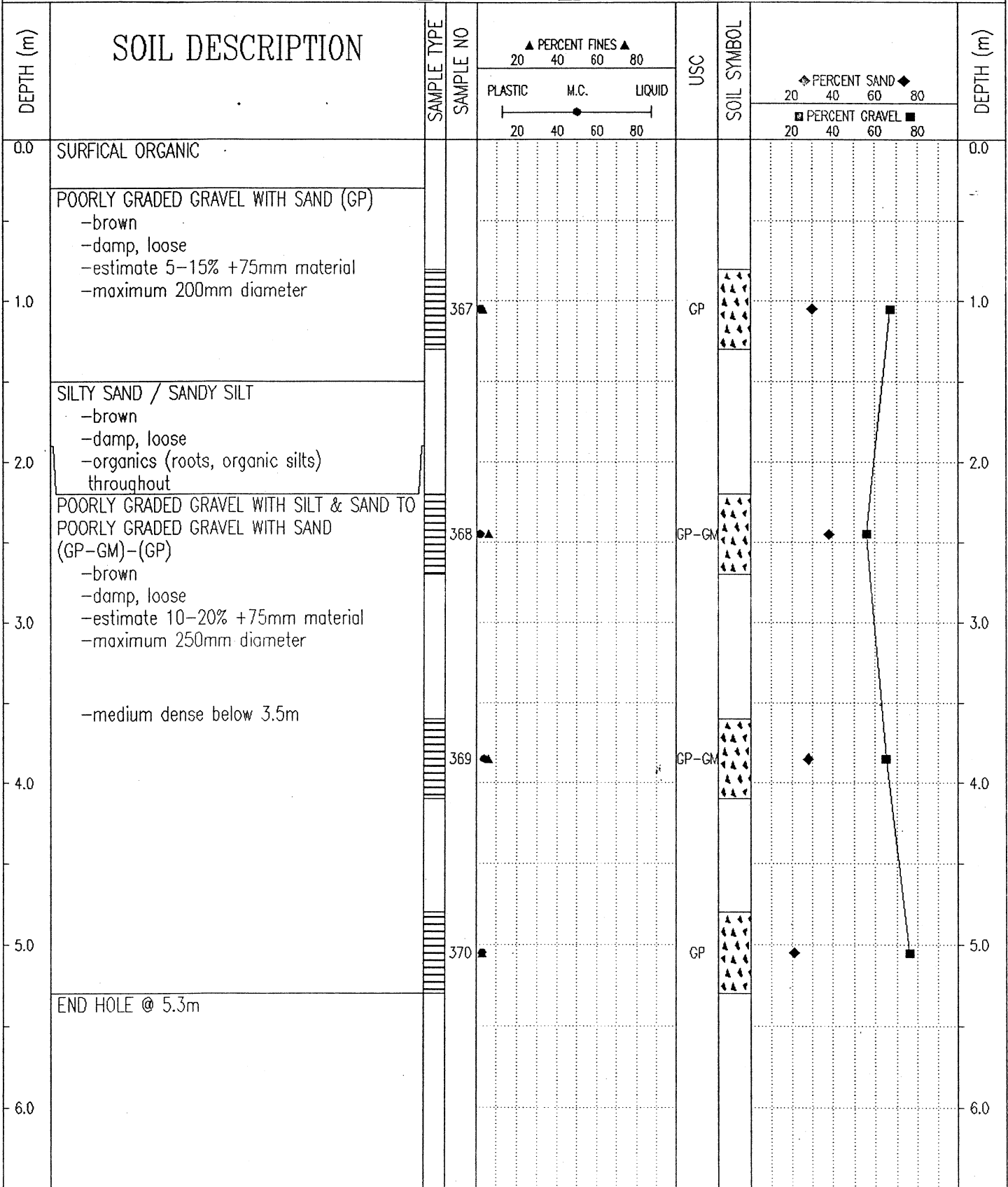
Government of Yukon Transportation Engineering		LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
		REVIEWED BY:	COMPLETE: 02/09/25
		Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2500
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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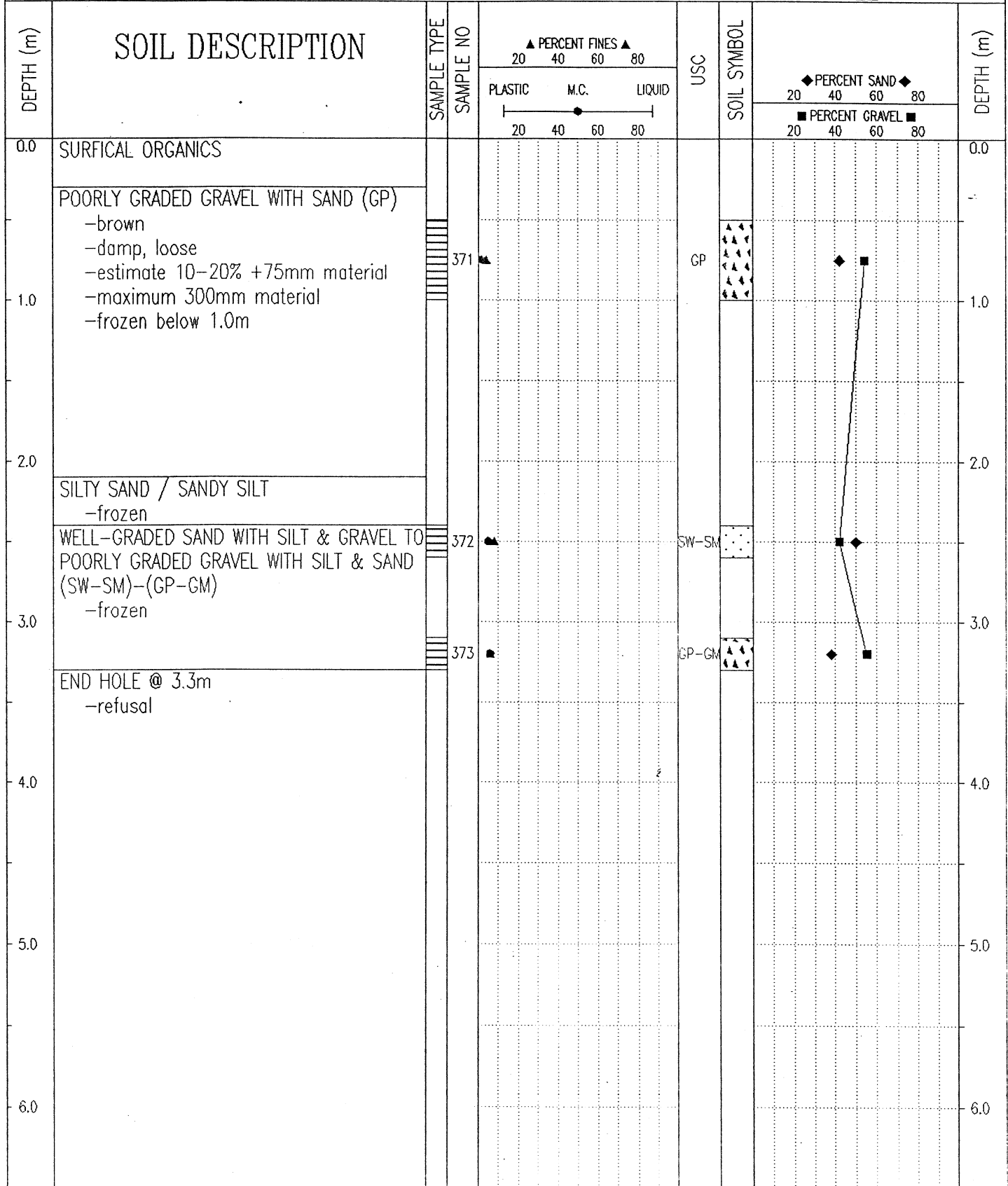
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/25
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2501
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
		<input type="checkbox"/> CORE



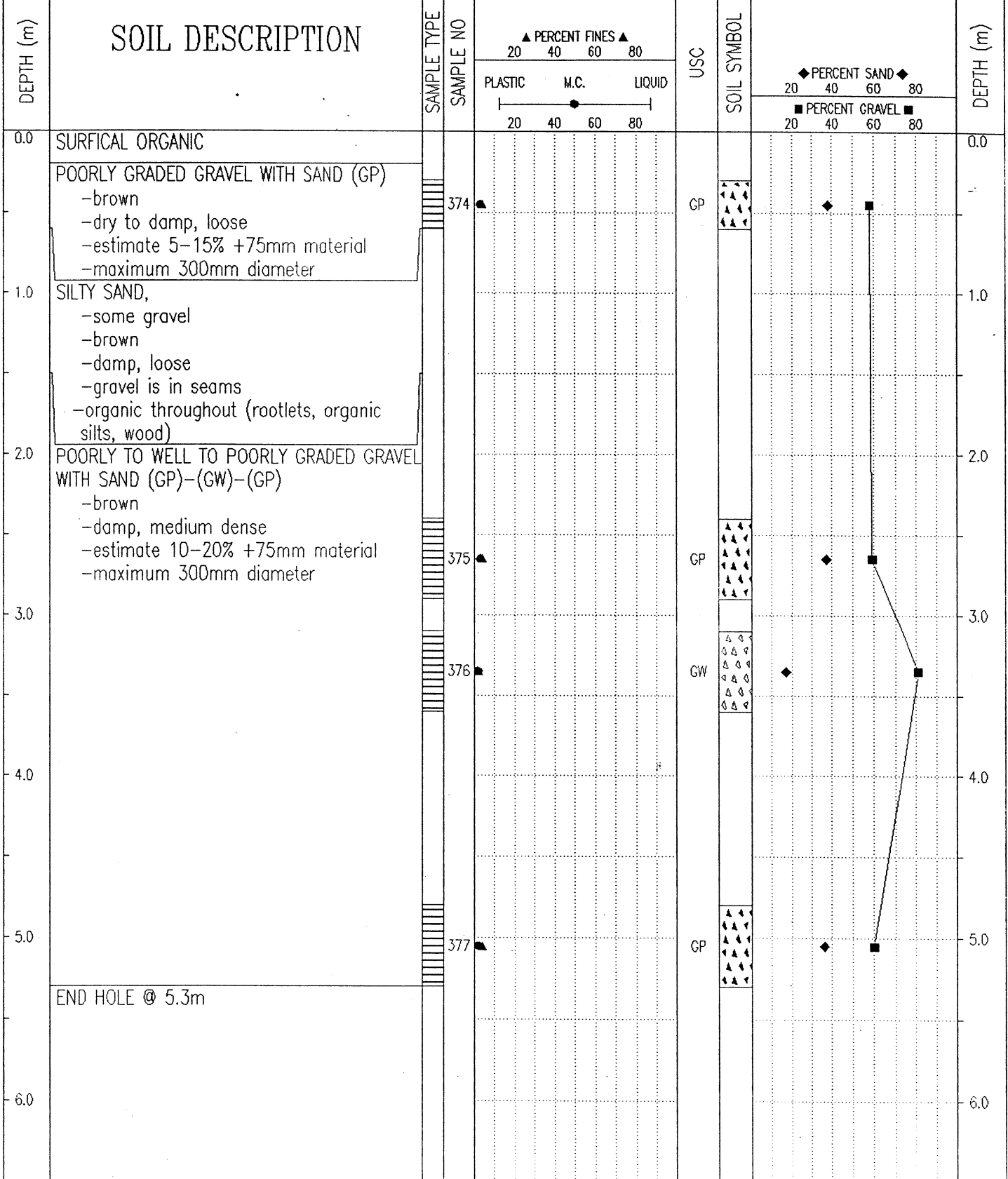
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 5.3 m
	REVIEWED BY:	COMPLETE: 02/09/25
	FIG. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2502
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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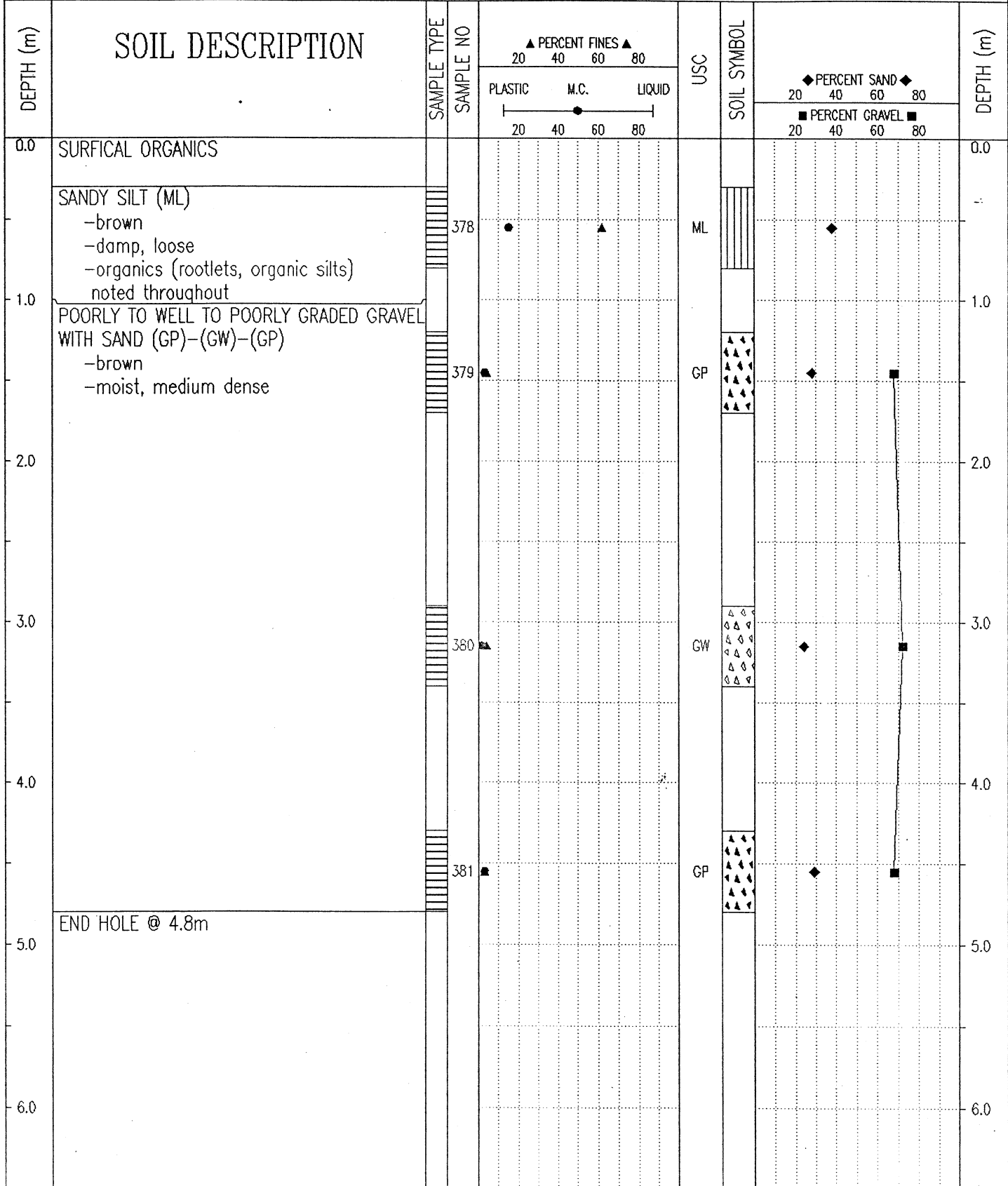
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 3.3 m
	REVIEWED BY:	COMPLETE: 02/09/25
	Fig. No:	Page 1 of 1

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



02/12/25 01:22PM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2504
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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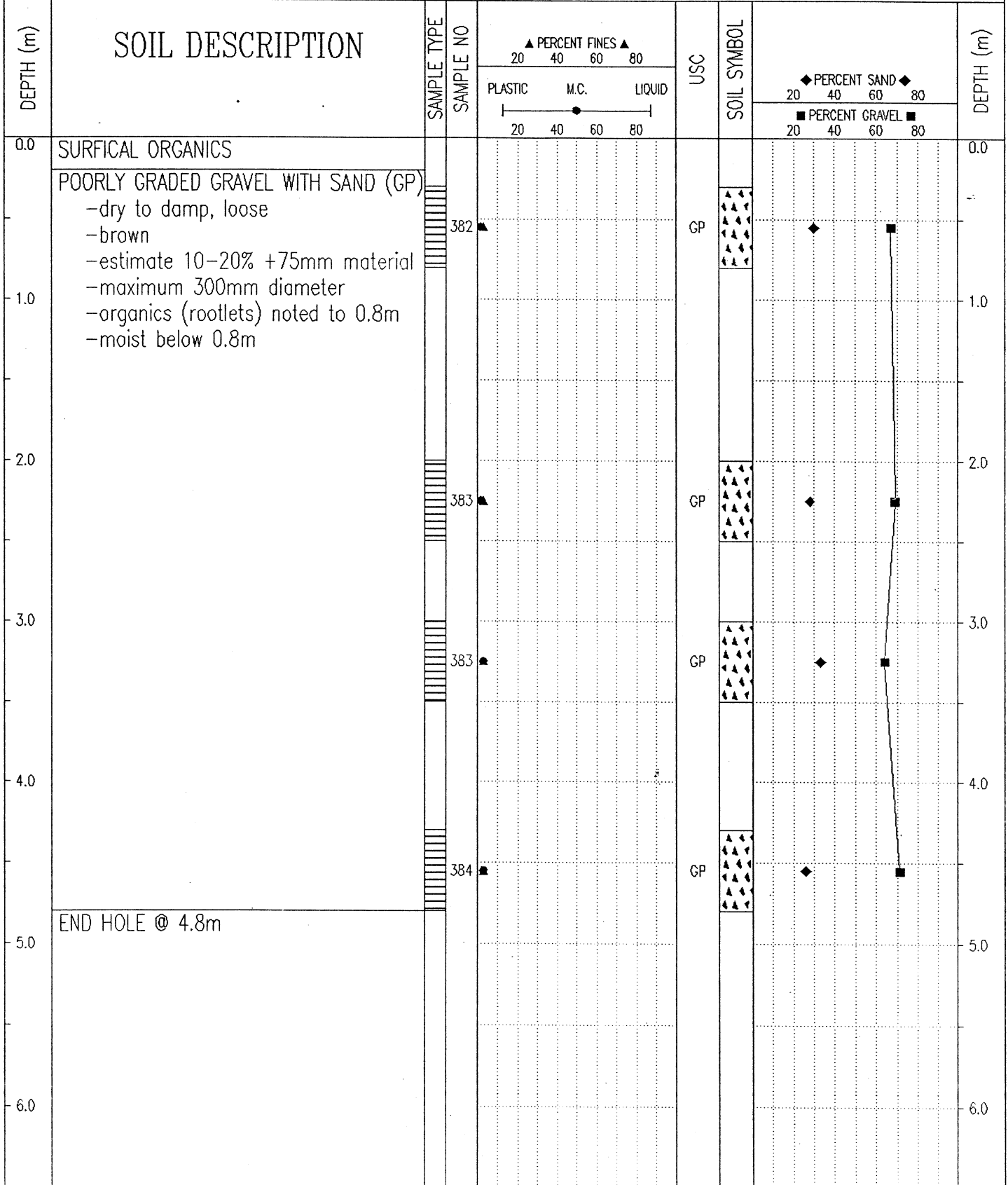
Government of Yukon
 Transportation Engineering

LOGGED BY: JRP
 REVIEWED BY:
 Fig. No:

COMPLETION DEPTH: 4.8 m
 COMPLETE: 02/09/25

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2505
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

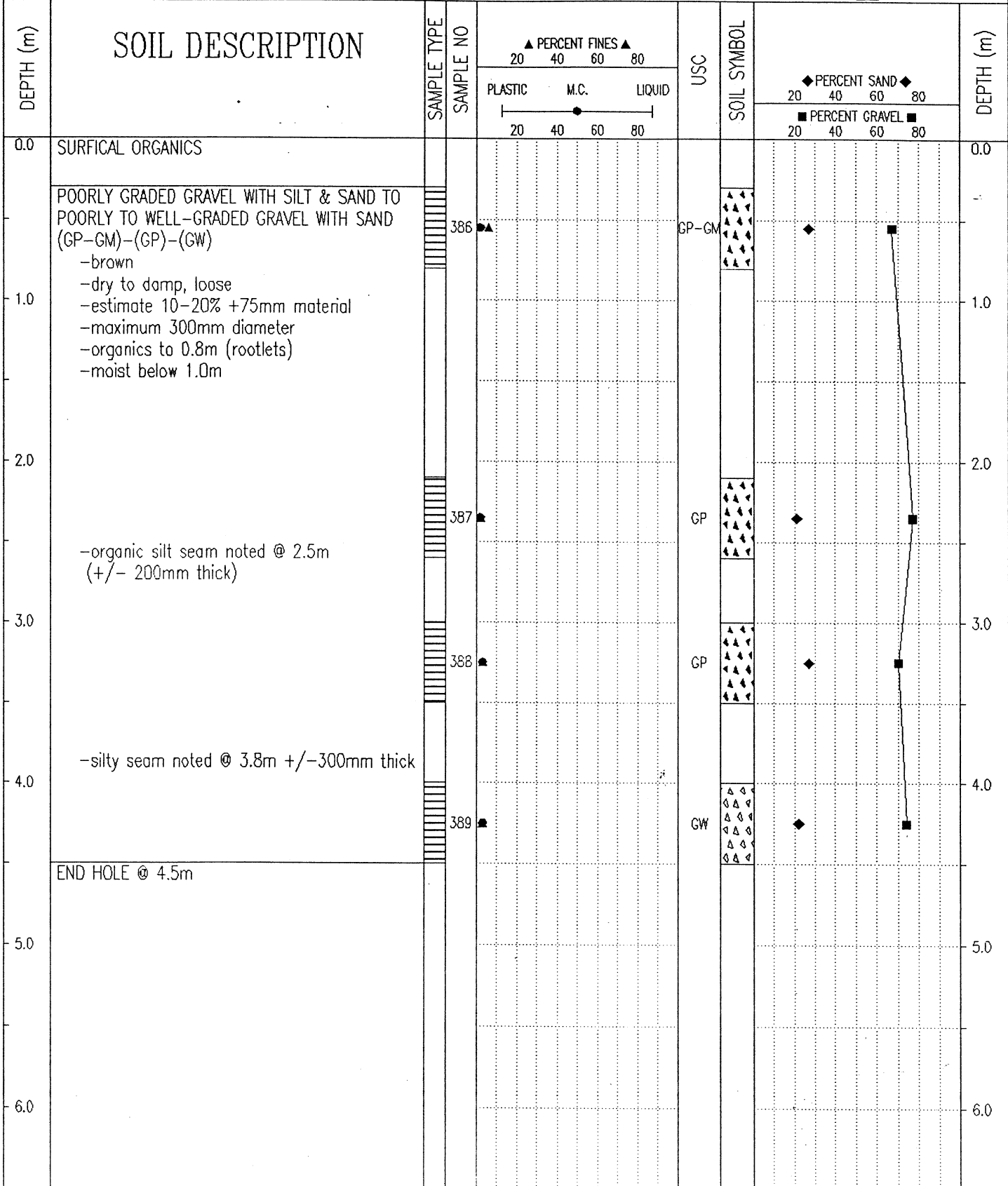
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP REVIEWED BY:	COMPLETION DEPTH: 4.8 m COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2506
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



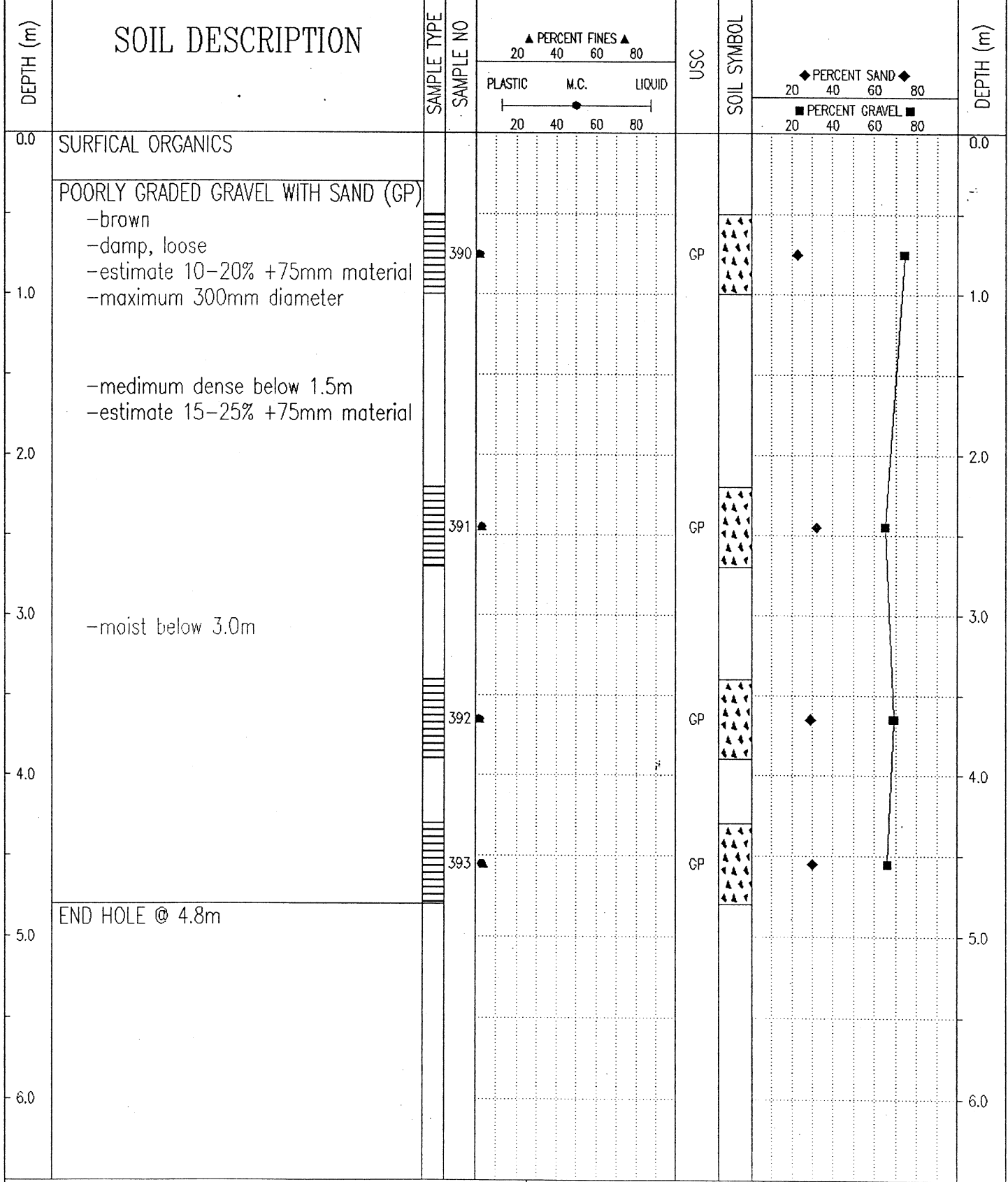
Government of Yukon
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LOGGED BY: JRP
REVIEWED BY:
Fig. No:

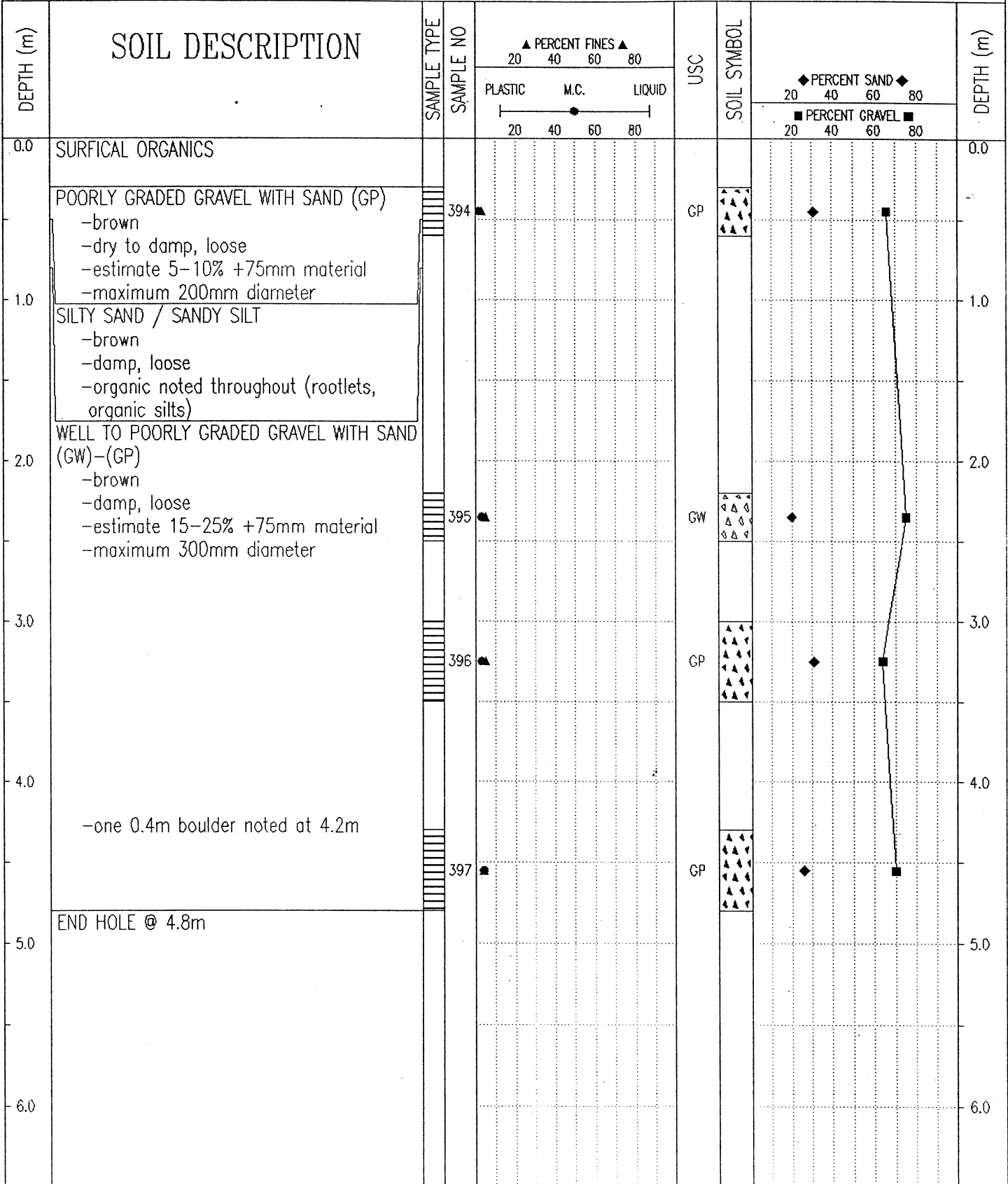
COMPLETION DEPTH: 4.5 m
COMPLETE: 02/09/26

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2507
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

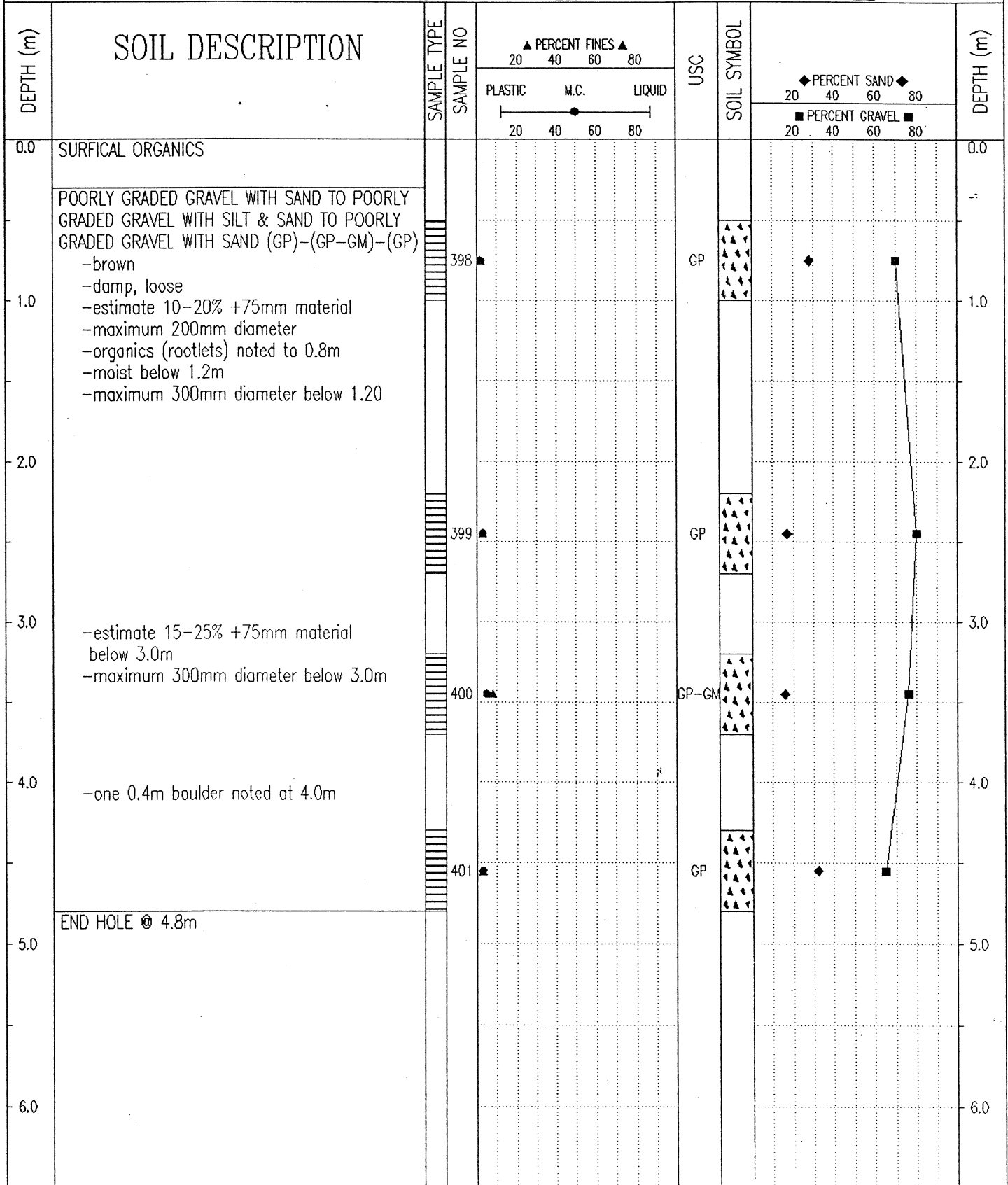


SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2508
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



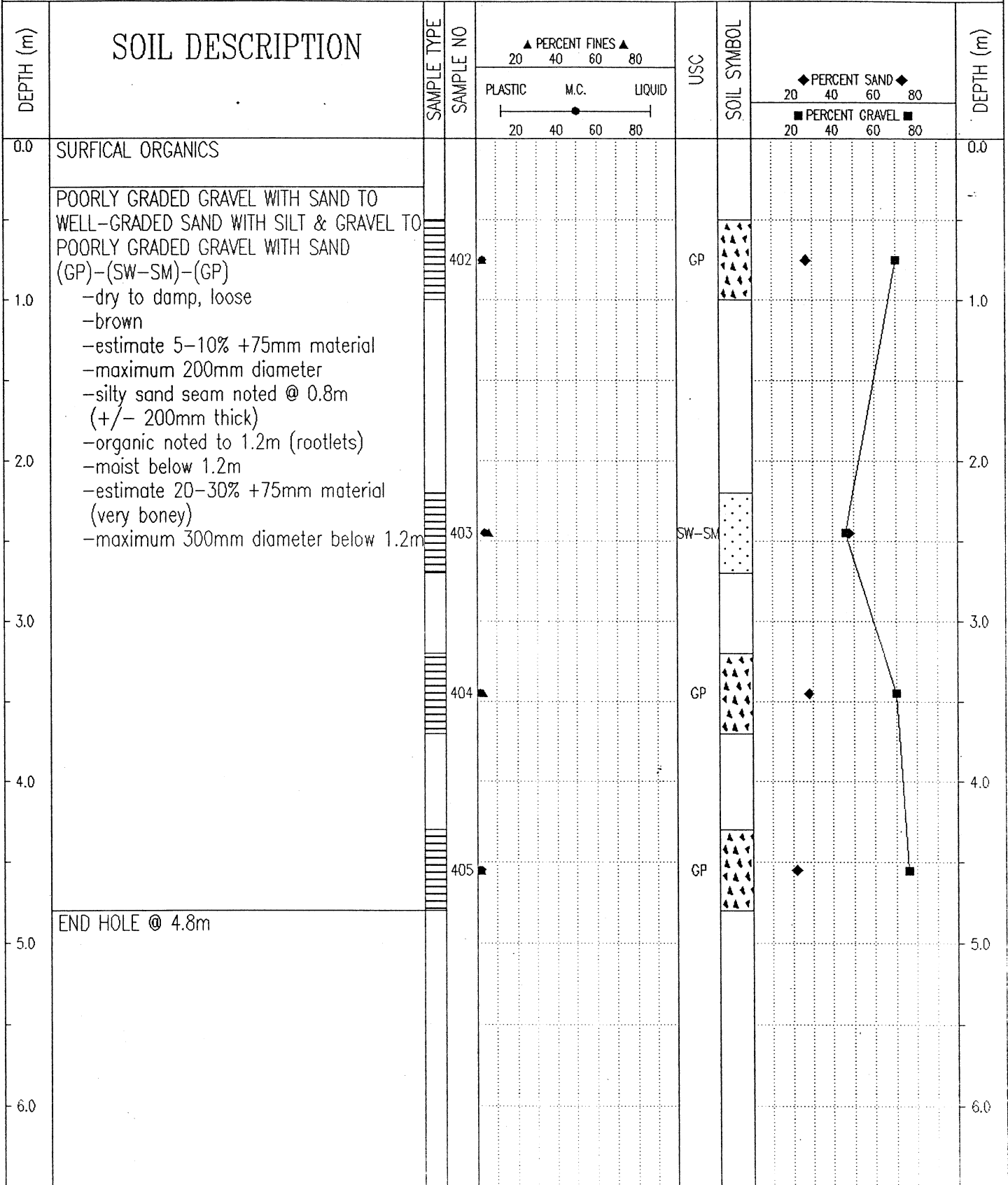
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2509
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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Government of Yukon Transportation Engineering	LOGGED BY: JRP REVIEWED BY:	COMPLETION DEPTH: 4.8 m COMPLETE: 02/09/26
	FIG. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2510
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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Government of Yukon Transportation Engineering	LOGGED BY: JRP REVIEWED BY:	COMPLETION DEPTH: 4.8 m COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

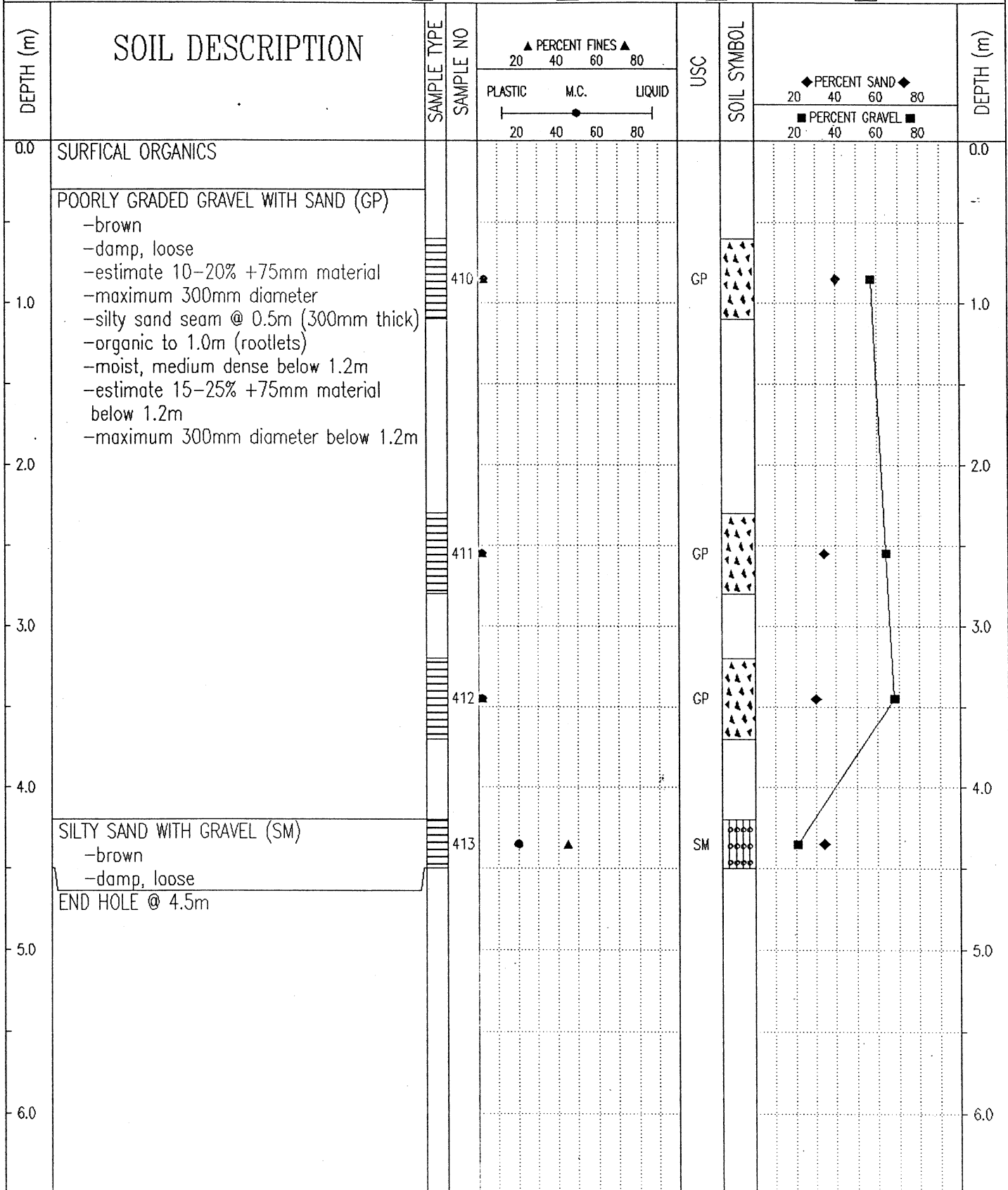
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ENGINEERING CAPITAL		NINES CREEK		Project No: 552-202101-0361								
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	SURFICAL ORGANICS											0.0
0.0 - 4.8	POORLY TO WELL-GRADED GRAVEL WITH SAND (GP)-(GW) -brown -dry to damp, loose -estimate 10-20% +75mm material -maximum 300mm diameter -organic noted to 1.0m (rootlets) -moist, medium dense below 1.2m -estimate 15-25% +75mm material below 1.2m -maximum 300mm diameter below 1.2m		406 407 408 409				GP GP GP GW					0.0 1.0 2.0 3.0 4.0 5.0
5.0	END HOLE @ 4.8m											5.0
6.0												6.0

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LOGGED BY: JRP
REVIEWED BY:
FIG. NO:

COMPLETION DEPTH: 4.8 m
COMPLETE: 02/09/25

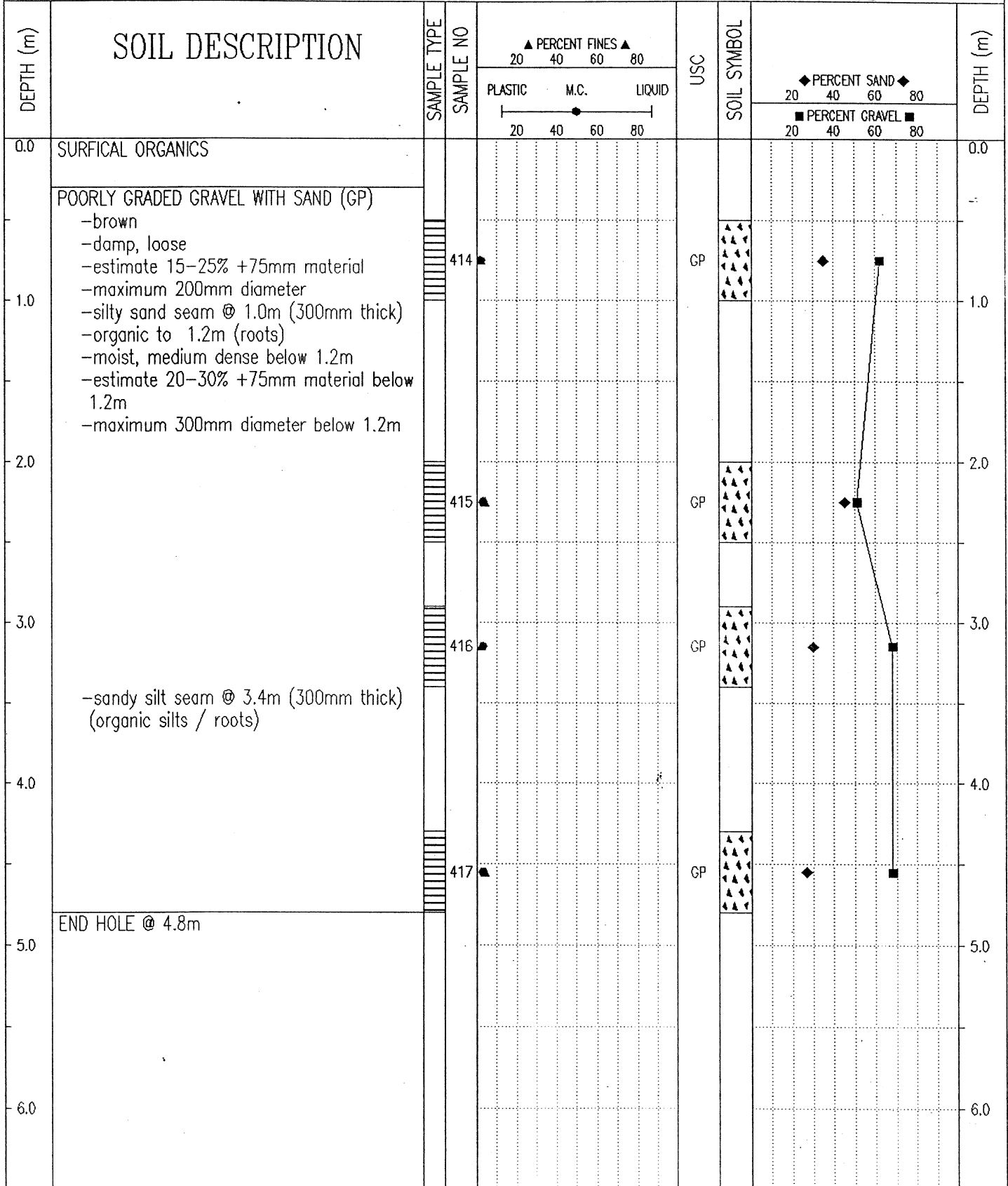
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ENGINEERING CAPITAL		NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE		LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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		<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
			<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

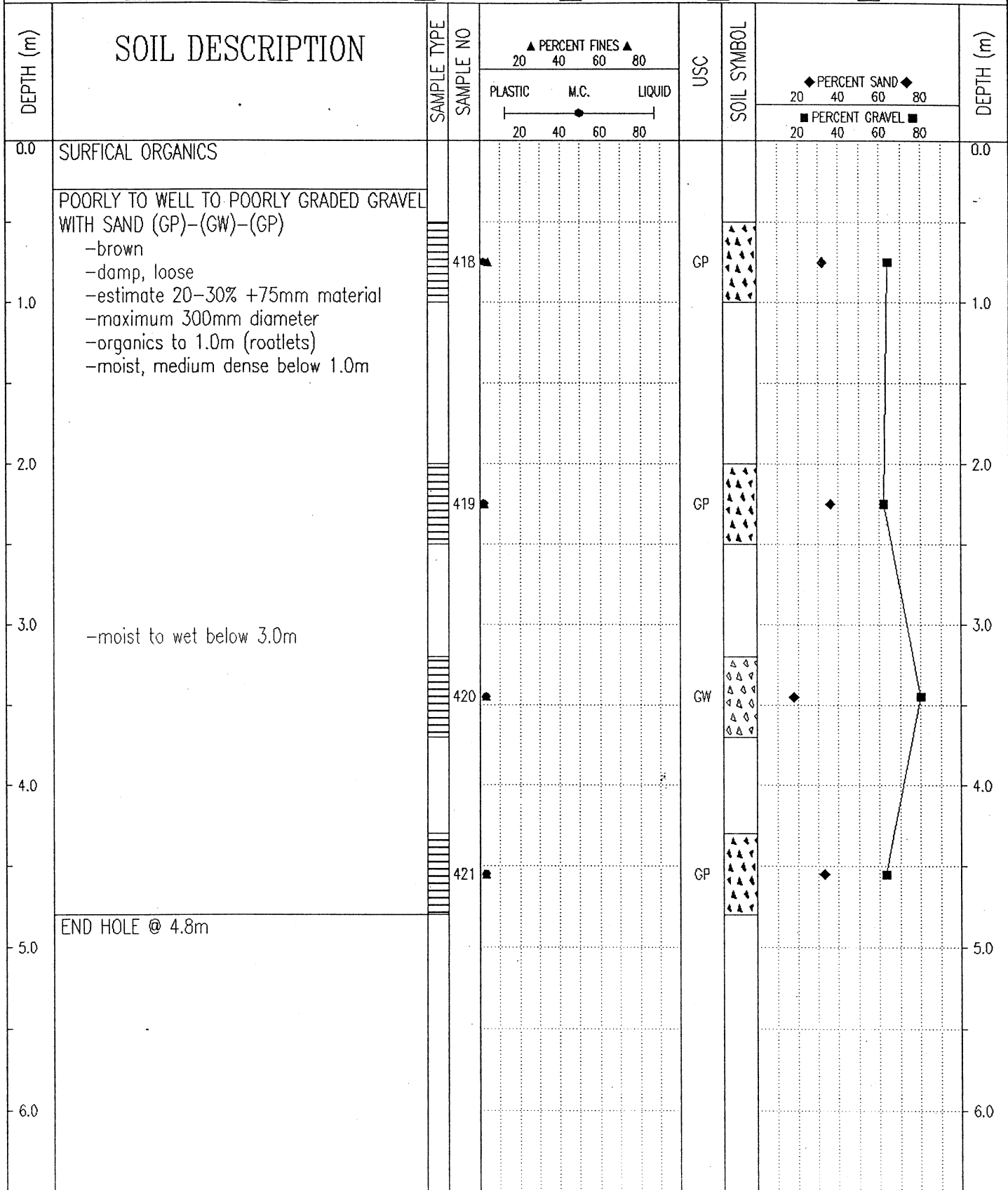
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ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2514
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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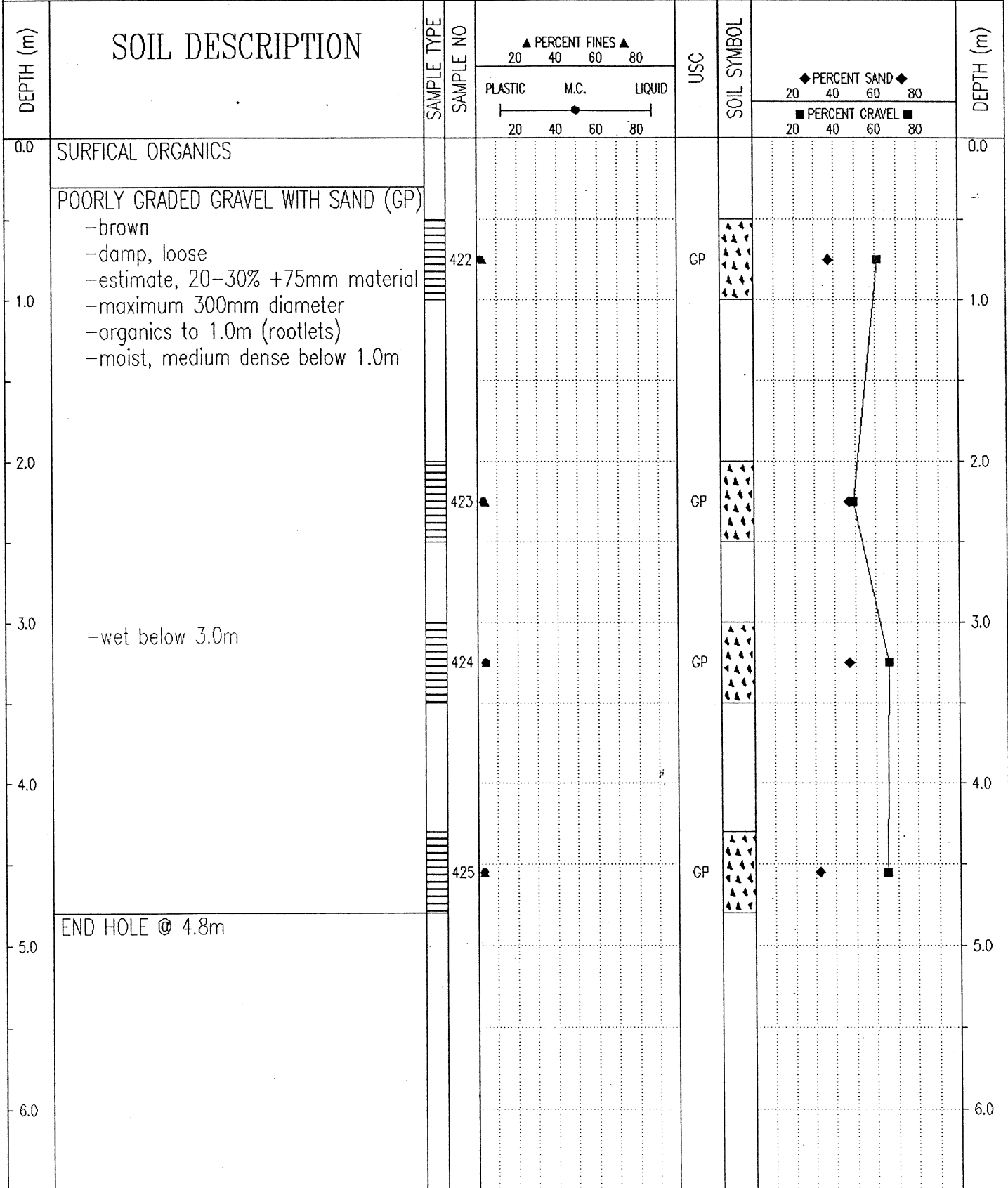
Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.8 m
COMPLETE: 02/09/26

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2515
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

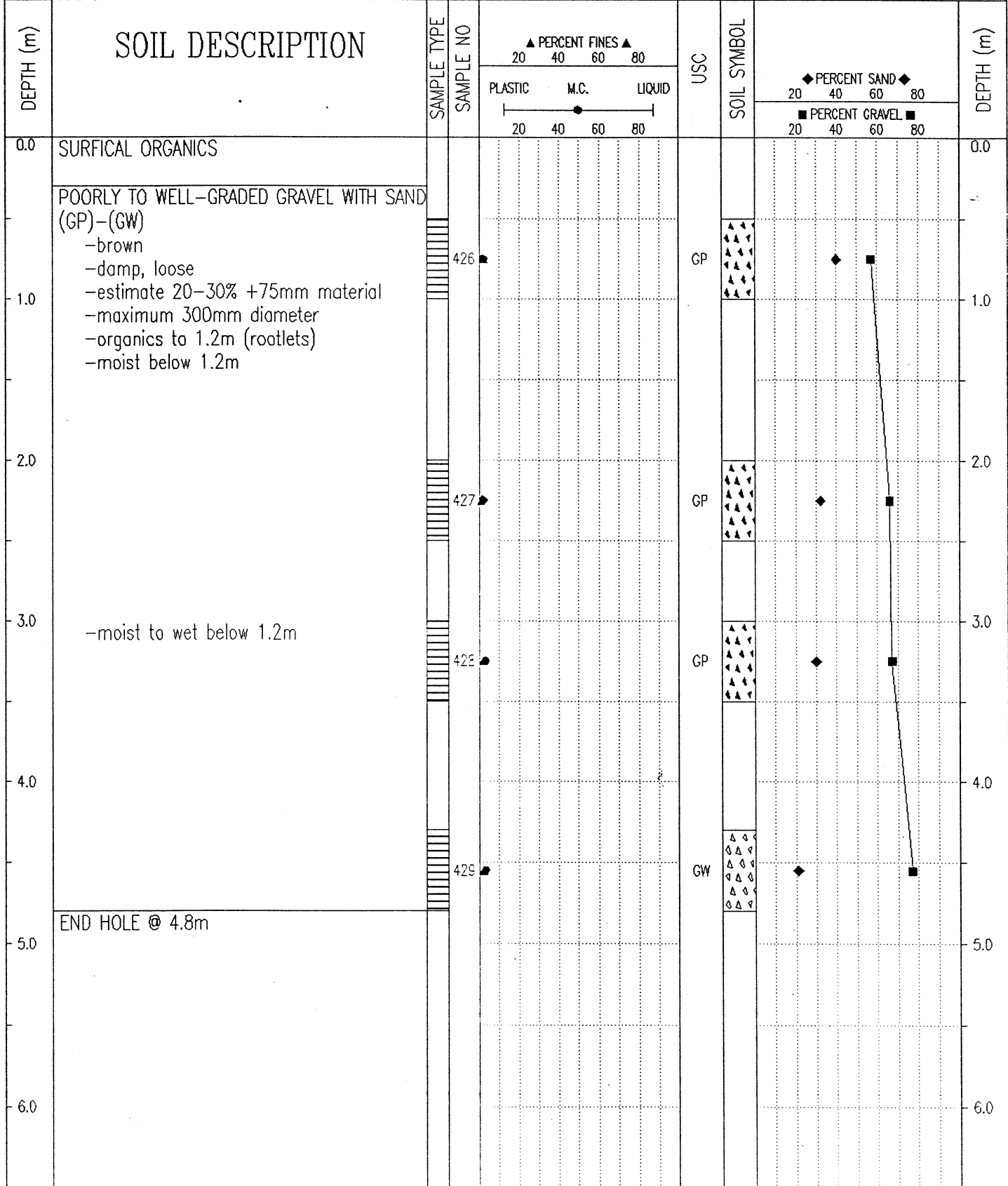
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2516
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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

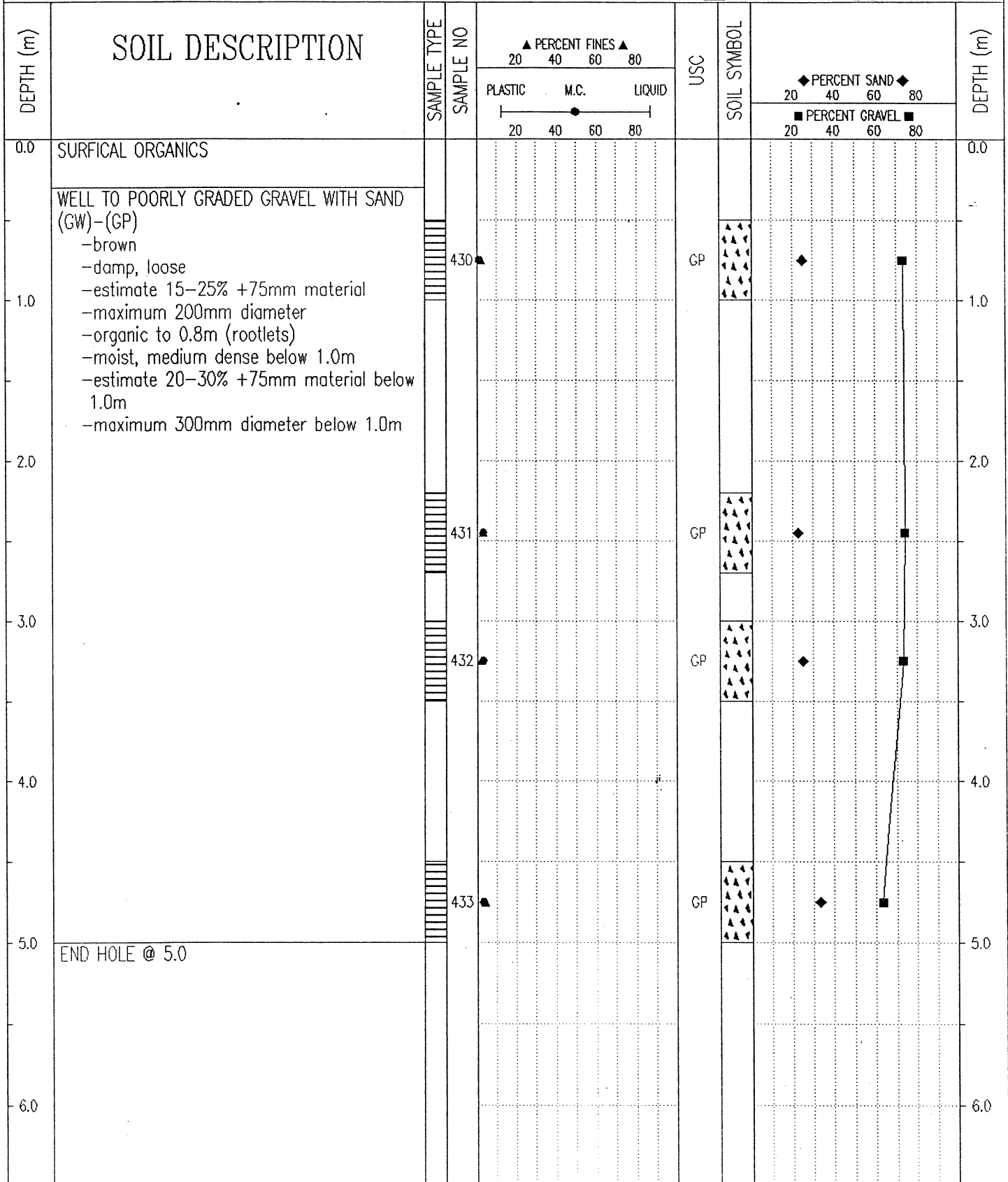


Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

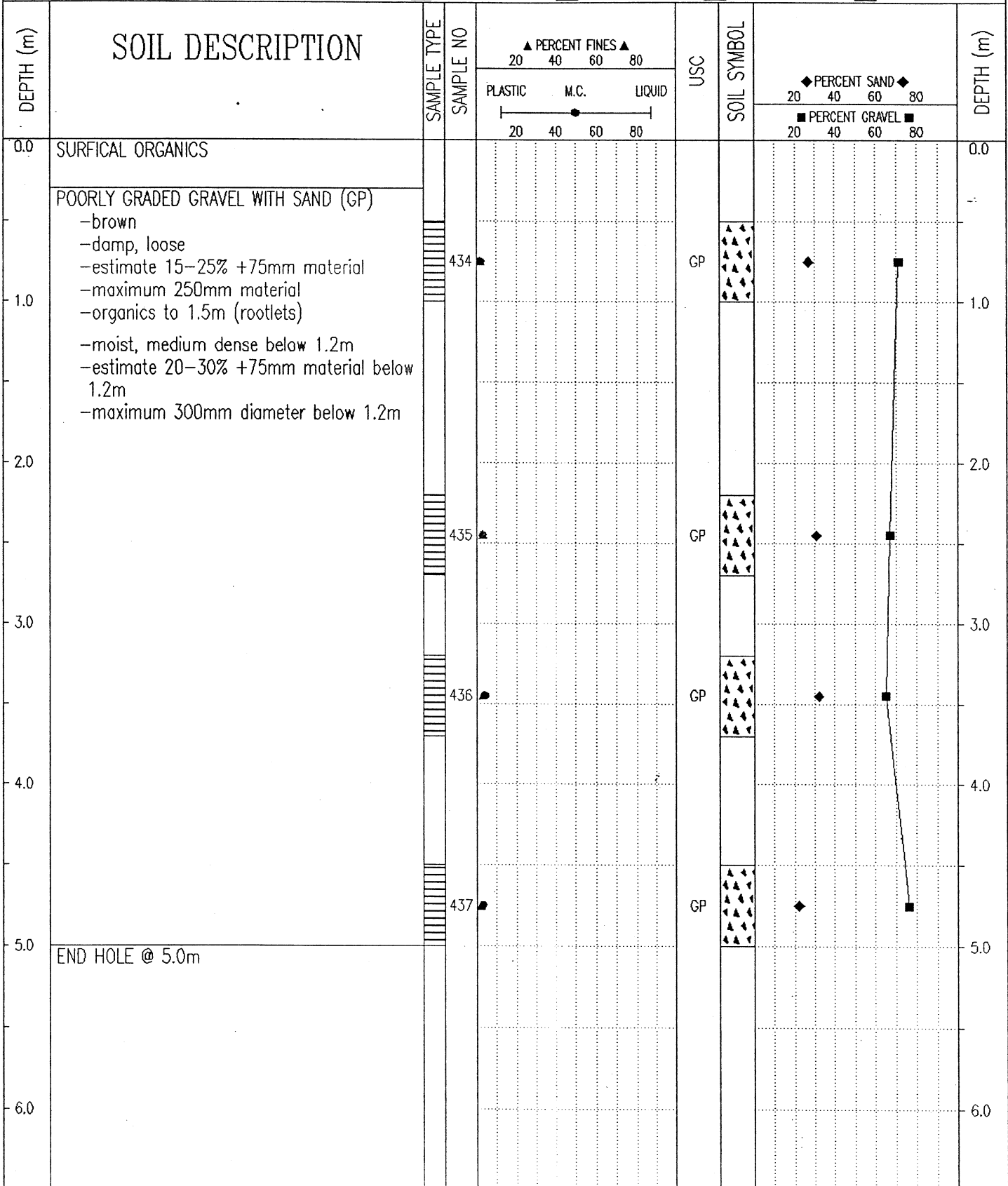
COMPLETION DEPTH: 4.8 m
COMPLETE: 02/09/26

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2517
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.	<input checked="" type="checkbox"/> AUGER
	<input type="checkbox"/> BULK	<input type="checkbox"/> TUBE
	<input type="checkbox"/> CORE	



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

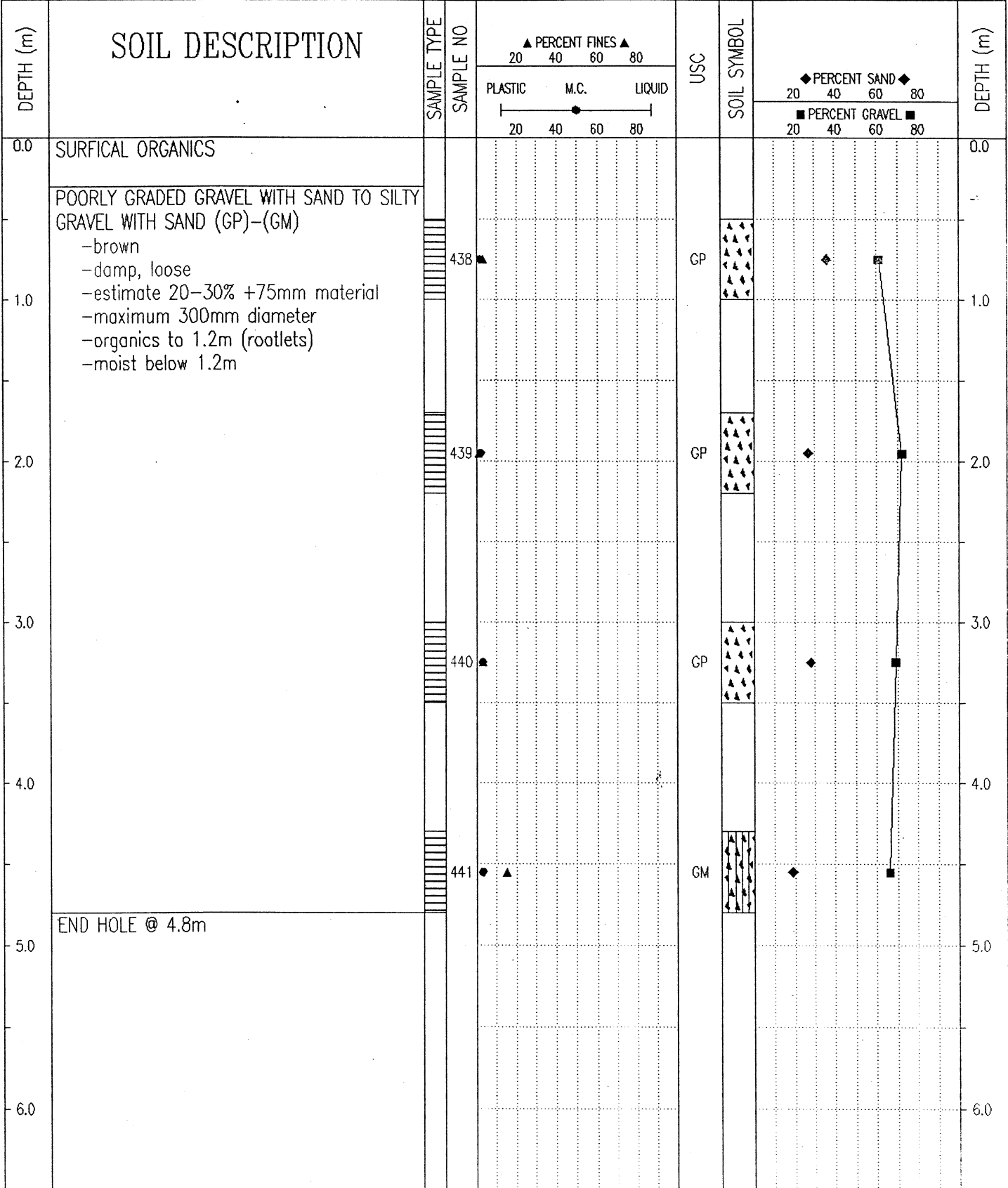
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2518
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

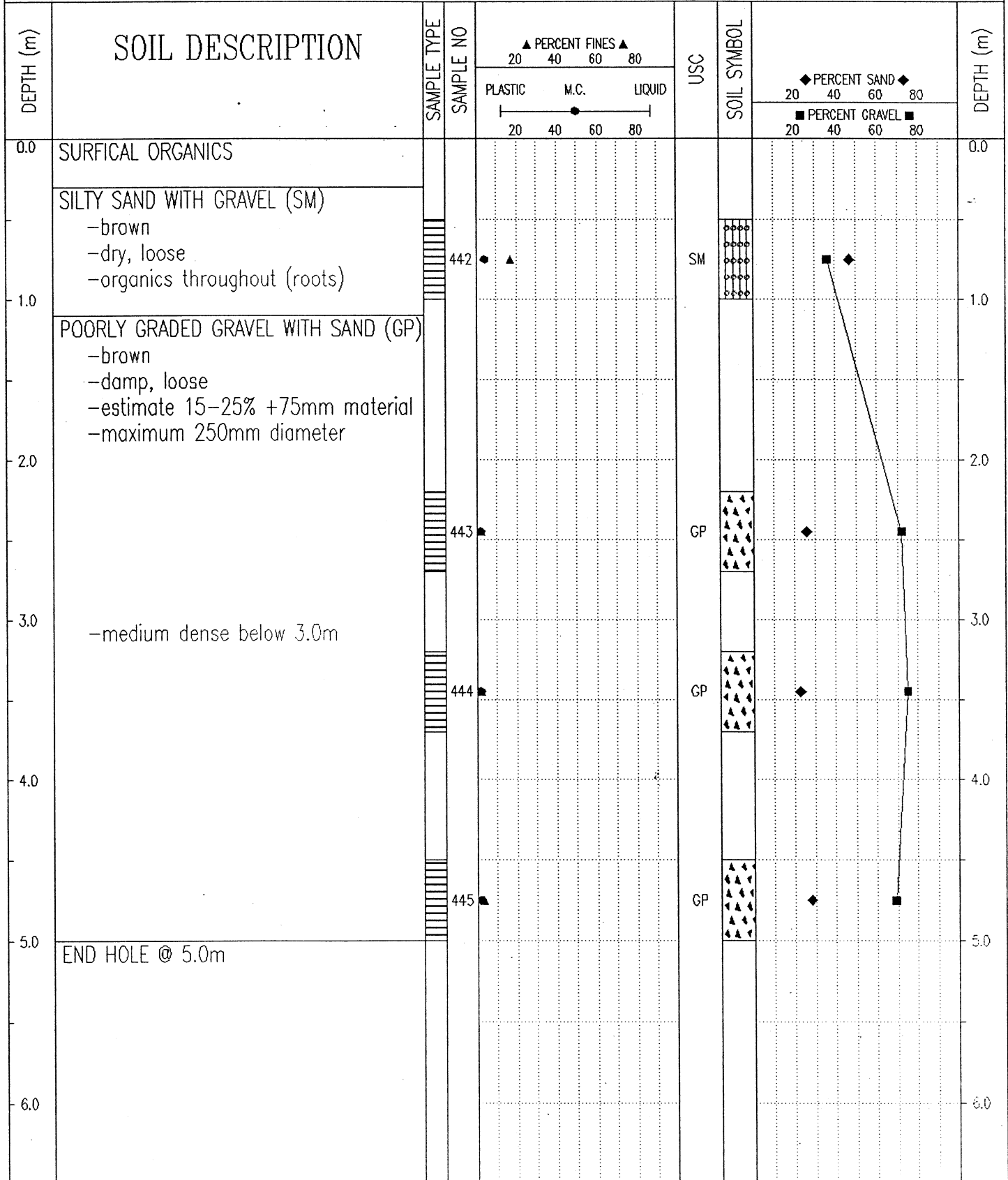
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2519
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: JEP	COMPLETION DEPTH: 4.8 m
	REVIEWED BY:	COMPLETE: 02/09/26
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 638-2520
ENGINEERING CAPITAL	NINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



Government of Yukon
Transportation Engineering

LOGGED BY: JRP

REVIEWED BY:

Fig. No:

COMPLETION DEPTH: 5.0 m

COMPLETE: 02/09/26

Km 1734.4 LHS Alaska Highway #1
Pit Ident. 115 G-21
(Nines Creek)

September 2002
Book # 638
Pit Run Sample Results

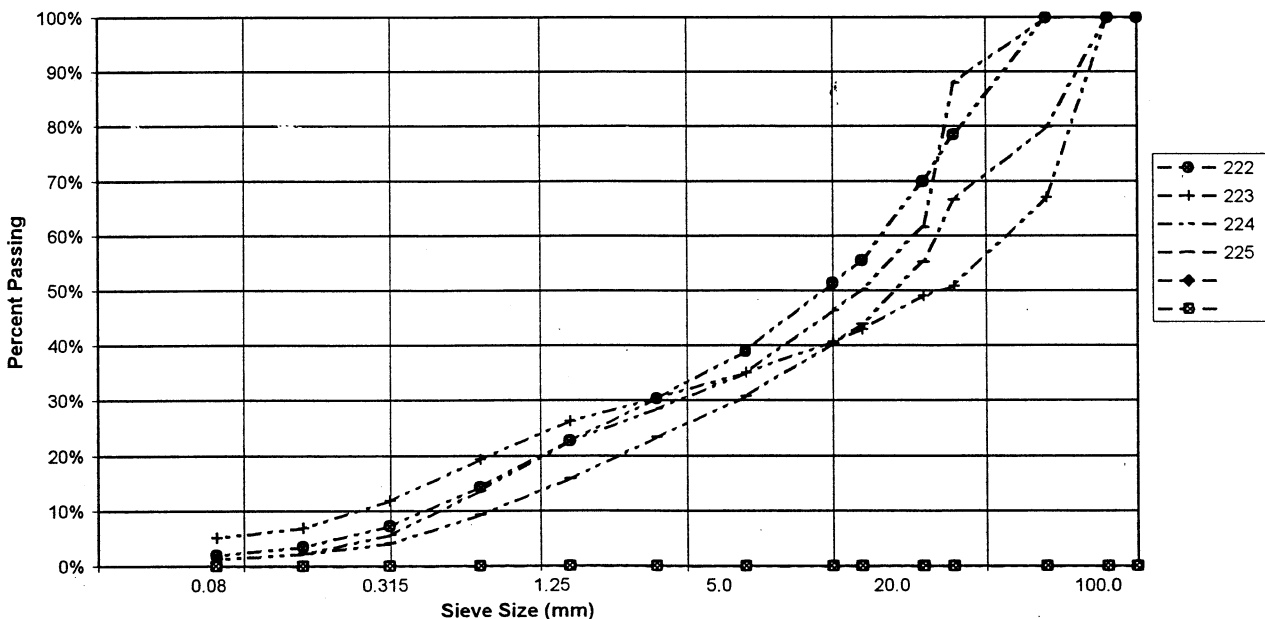
PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2460

DATE COMP: SEPT 23/02

FIELD NO:	222	223	224	225		
LAB NO:	482	483	484	485		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	67%	100%	80%		
25.0	79%	51%	88%	67%		
20.0	70%	49%	62%	55%		
12.5	56%	43%	50%	44%		
10.0	51%	41%	46%	40%		
5.0	39%	35%	35%	31%		
2.5	30%	31%	29%	23%		
1.25	23%	26%	23%	16%		
0.630	14%	19%	14%	9%		
0.315	7%	12%	6%	4%		
0.160	4%	7%	2%	2%		
0.080	2%	5%	1%	1%		
M.C.(%)	2%	4%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	65	65	69		
% SAND:	37	30	34	29		
% FINES:	2	5	1	1		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

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

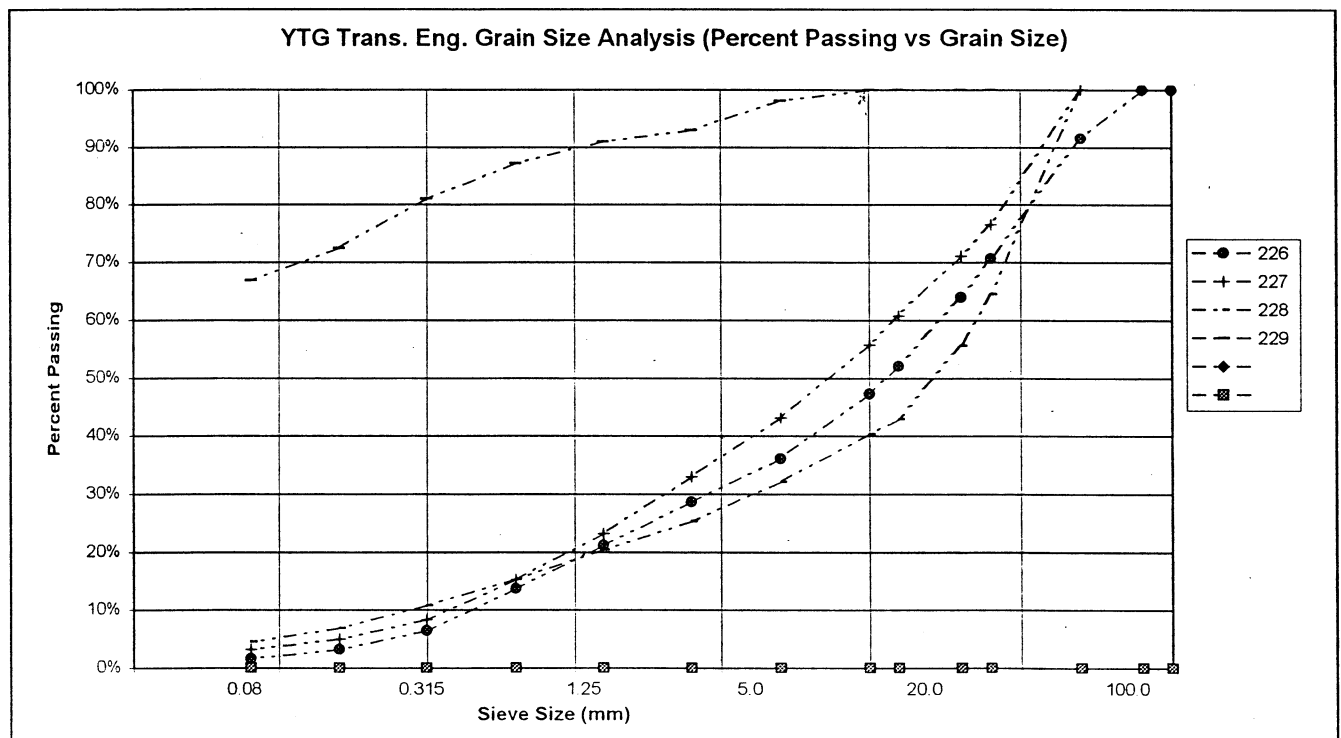


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2461

DATE COMP: SEPT 23/02

FIELD NO:	226	227	228	229		
LAB NO:	486	487	488	489		
DEPTH:	0.5-1.0	2.0-2.5	3.2-3.8	4.2-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	92%	100%	100%	100%		
25.0	71%	77%	65%	100%		
20.0	64%	71%	56%	100%		
12.5	52%	61%	43%	100%		
10.0	47%	56%	40%	100%		
5.0	36%	43%	32%	98%		
2.5	29%	33%	25%	93%		
1.25	21%	23%	20%	91%		
0.630	14%	15%	15%	87%		
0.315	7%	8%	11%	81%		
0.160	3%	5%	7%	72%		
0.080	2%	3%	5%	67%		
M.C.(%):	2%	3%	4%	50%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	64	57	68	2		
% SAND:	34	40	28	31		
% FINES:	2	3	5	67		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)		

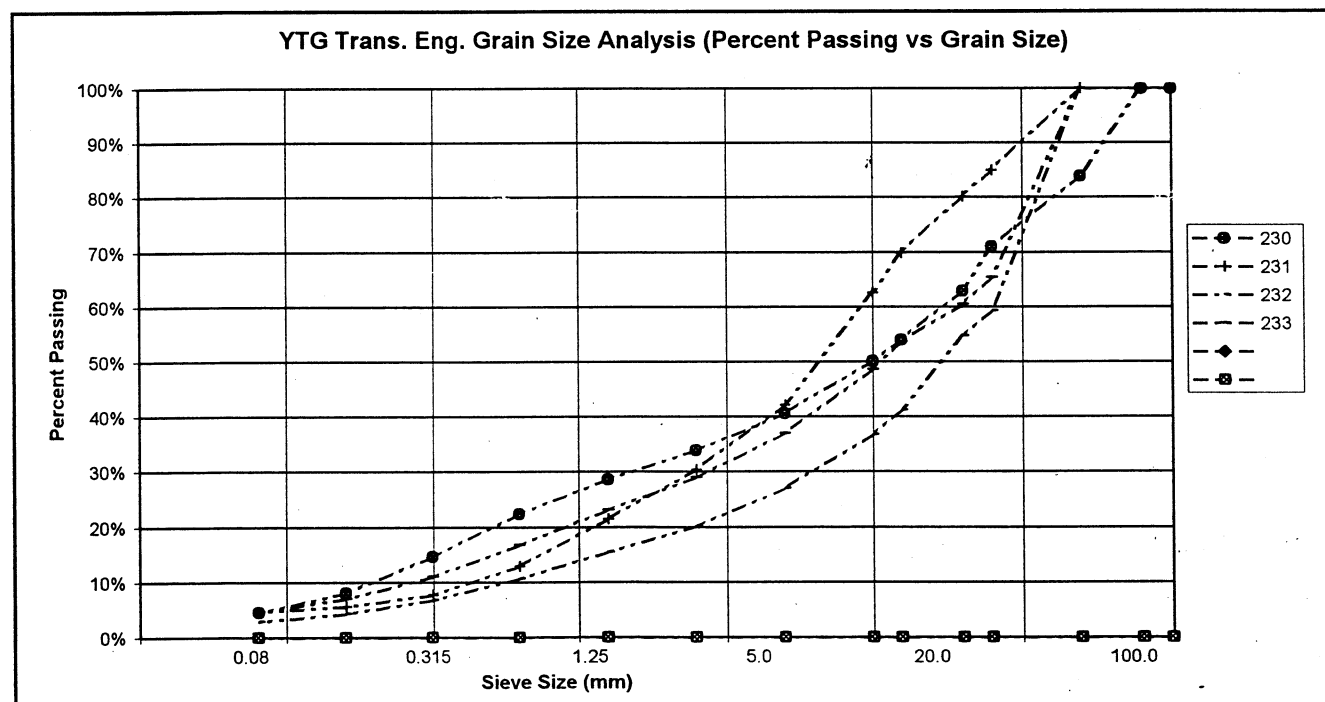


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2462

DATE COMP: SEPT 23/02

FIELD NO:	230	231	232	233		
LAB NO:	490	491	492	493		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	84%	100%	100%	100%		
25.0	71%	85%	59%	65%		
20.0	63%	80%	55%	60%		
12.5	54%	70%	41%	54%		
10.0	50%	63%	37%	49%		
5.0	41%	42%	27%	37%		
2.5	34%	30%	20%	29%		
1.25	29%	22%	15%	23%		
0.630	22%	13%	11%	17%		
0.315	15%	8%	7%	11%		
0.160	8%	6%	4%	7%		
0.080	5%	5%	3%	5%		
M.C.(%)	2%	4%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	59	58	73	63		
% SAND:	36	37	24	32		
% FINES:	5	5	3	5		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		

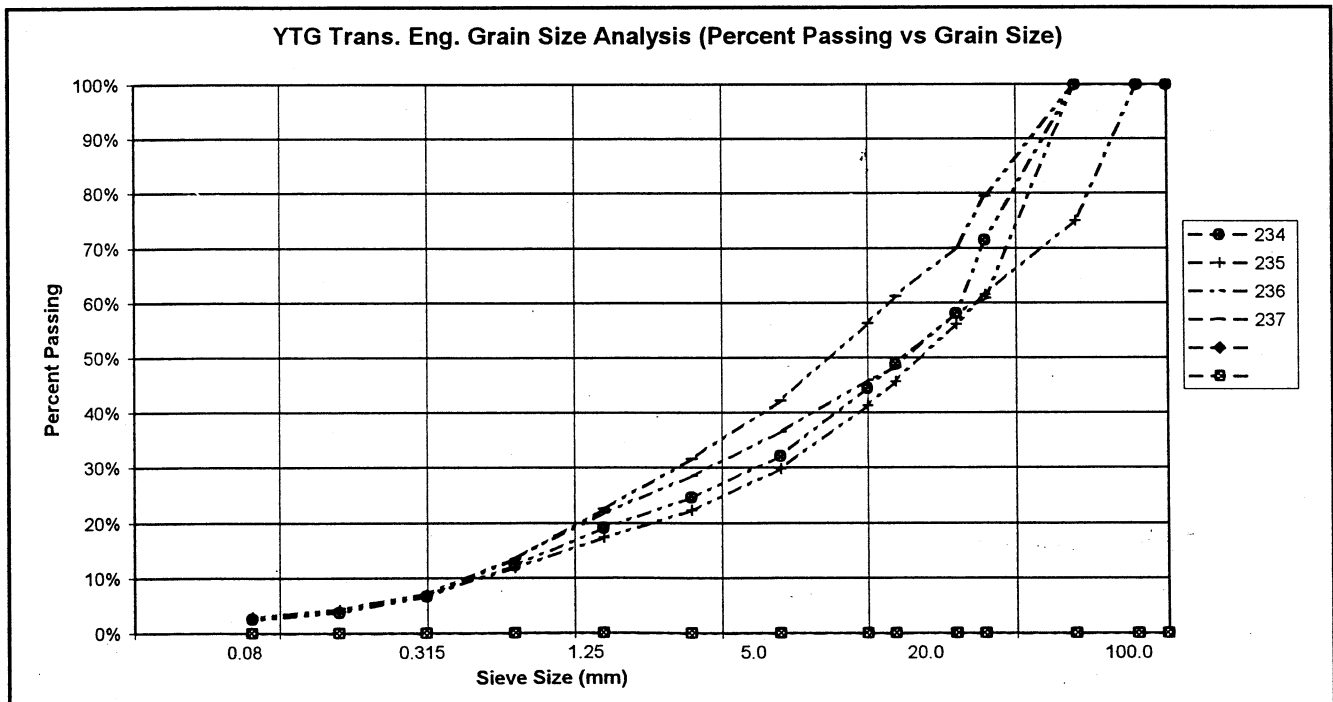


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2463

DATE COMP: SEPT 23/02

FIELD NO:	234	235	236	237		
LAB NO:	494	495	496	497		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	75%	100%	100%		
25.0	72%	61%	61%	79%		
20.0	58%	56%	58%	70%		
12.5	49%	46%	48%	61%		
10.0	44%	41%	46%	56%		
5.0	32%	30%	37%	42%		
2.5	25%	22%	28%	32%		
1.25	19%	17%	22%	23%		
0.630	12%	12%	14%	13%		
0.315	7%	7%	7%	7%		
0.160	4%	4%	4%	4%		
0.080	3%	3%	3%	3%		
M.C.(%)	2%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	68	70	63	58		
% SAND:	30	27	34	40		
% FINES:	3	3	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

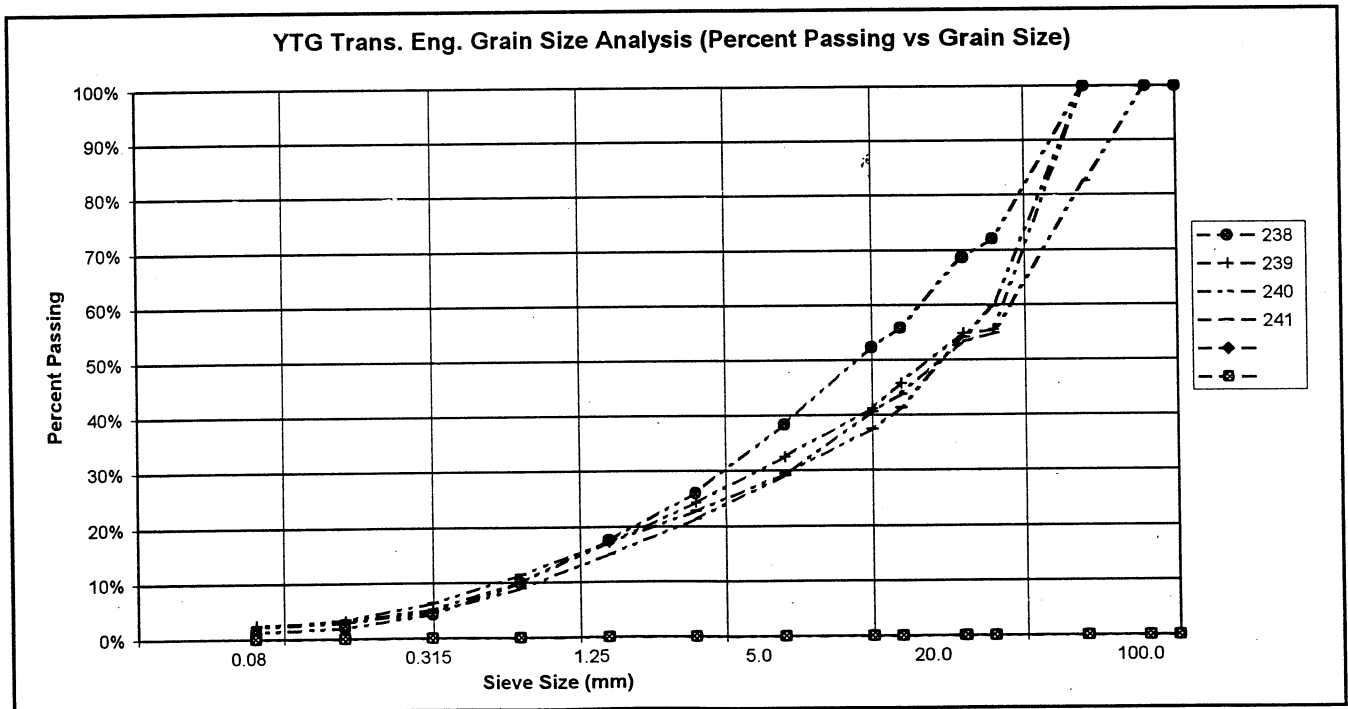


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2464

DATE COMP: SEPT 23/02

FIELD NO:	238	239	240	241		
LAB NO:	498	499	500	501		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	3.5-4.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	82%	100%		
25.0	72%	56%	55%	60%		
20.0	69%	55%	53%	54%		
12.5	56%	46%	44%	41%		
10.0	52%	41%	41%	37%		
5.0	38%	33%	29%	29%		
2.5	26%	24%	21%	23%		
1.25	18%	17%	15%	17%		
0.630	10%	10%	9%	11%		
0.315	4%	5%	5%	6%		
0.160	2%	3%	3%	3%		
0.080	1%	3%	2%	2%		
M.C.(%)	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	67	71	71		
% SAND:	37	30	27	27		
% FINES:	1	3	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

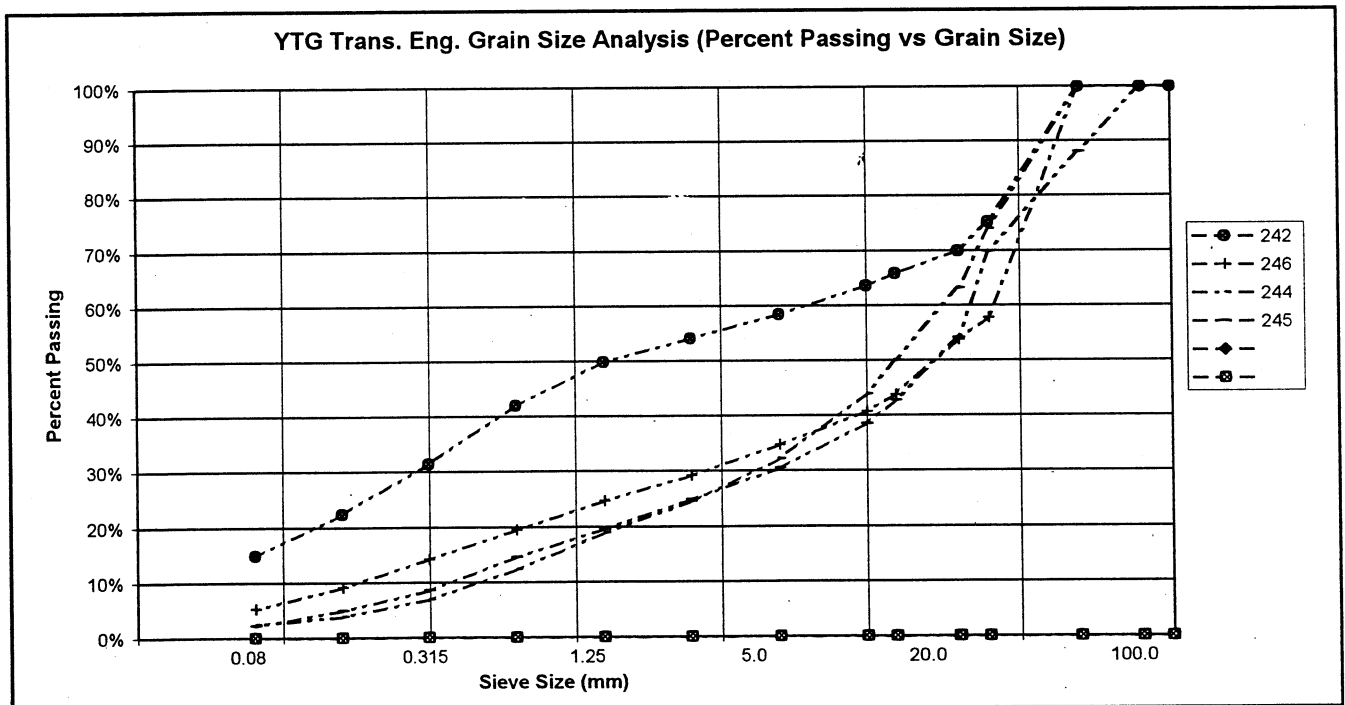


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2465

DATE COMP: SEPT 23/02

FIELD NO:	242	246	244	245		
LAB NO:	502	503	504	505		
DEPTH:	0.5-1.0	2.2-2.8	3.2-3.8	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	88%		
25.0	75%	58%	74%	70%		
20.0	70%	54%	63%	54%		
12.5	66%	44%	50%	43%		
10.0	64%	41%	44%	39%		
5.0	58%	35%	32%	30%		
2.5	54%	29%	25%	25%		
1.25	50%	25%	19%	20%		
0.630	42%	19%	12%	15%		
0.315	31%	14%	7%	9%		
0.160	22%	9%	4%	5%		
0.080	15%	5%	2%	2%		
M.C.(%)	5%	4%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	42	65	68	70		
% SAND:	44	29	30	28		
% FINES:	15	5	2	2		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

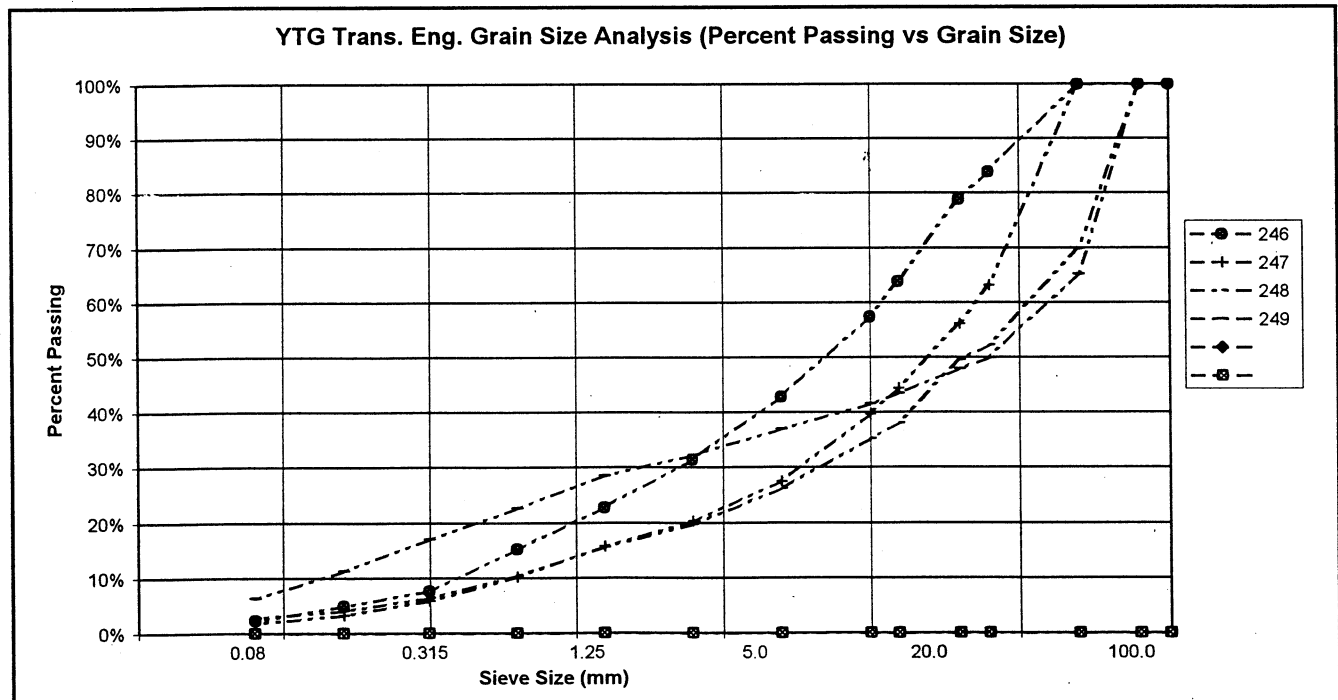


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2466

DATE COMP: SEPT 23/02

FIELD NO:	246	247	248	249		
LAB NO:	506	507	508	509		
DEPTH:	0.5-1.0	2.2-2.8	3.2-3.6	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	70%	65%		
25.0	84%	63%	52%	50%		
20.0	79%	56%	49%	48%		
12.5	64%	44%	38%	43%		
10.0	57%	40%	35%	42%		
5.0	43%	28%	26%	37%		
2.5	31%	20%	20%	32%		
1.25	23%	16%	16%	29%		
0.630	15%	10%	10%	23%		
0.315	8%	6%	6%	17%		
0.160	5%	3%	4%	11%		
0.080	2%	2%	3%	6%		
M.C.(%)	2%	2%	2%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	72	74	63		
% SAND:	40	26	23	31		
% FINES:	2	2	3	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

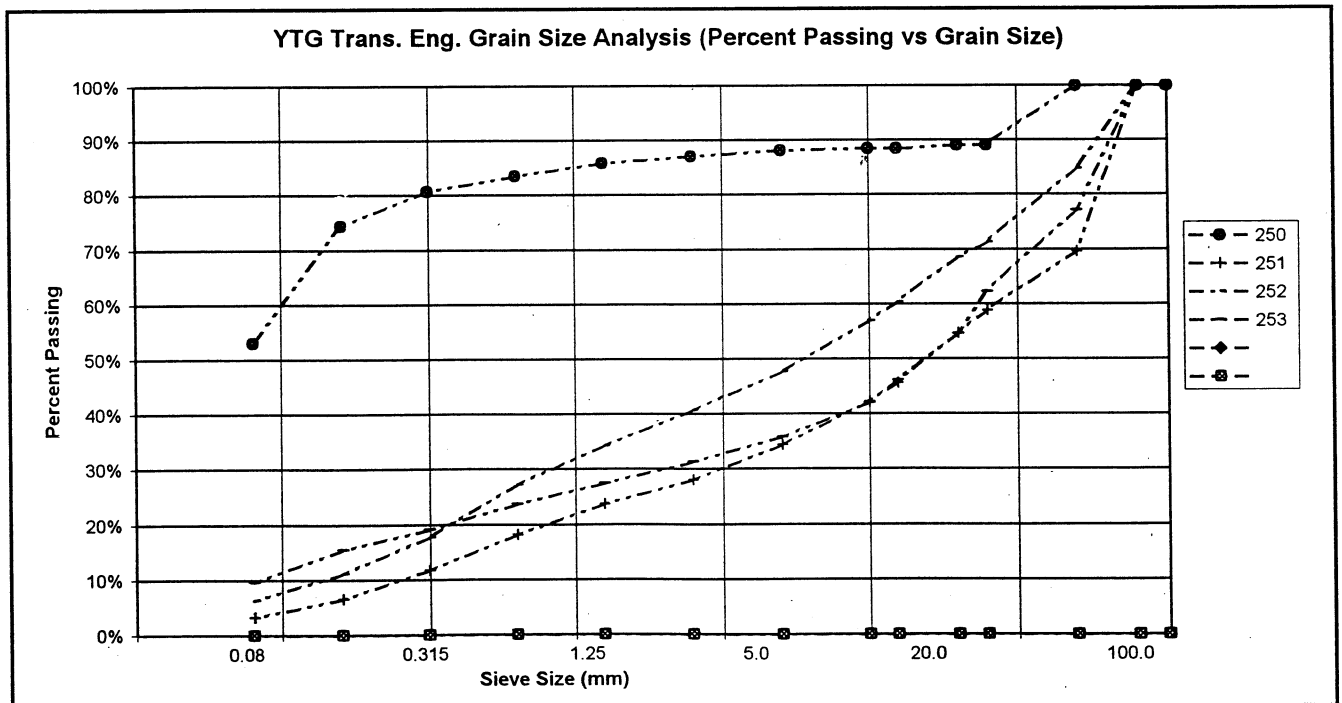


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2467

DATE COMP: SEPT 23/02

FIELD NO:	250	251	252	253		
LAB NO:	510	511	512	513		
DEPTH:	0.6-1.0	2.0-2.5	3.2-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	70%	85%	77%		
25.0	89%	59%	71%	62%		
20.0	89%	55%	69%	55%		
12.5	89%	46%	60%	46%		
10.0	89%	42%	57%	42%		
5.0	88%	34%	48%	36%		
2.5	87%	28%	41%	31%		
1.25	86%	24%	34%	27%		
0.630	84%	18%	27%	24%		
0.315	81%	12%	18%	19%		
0.160	74%	7%	11%	16%		
0.080	53%	3%	6%	10%		
M.C.(%)	9%	2%	3%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	12	66	52	64		
% SAND:	35	31	41	26		
% FINES:	53	3	6	10		
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

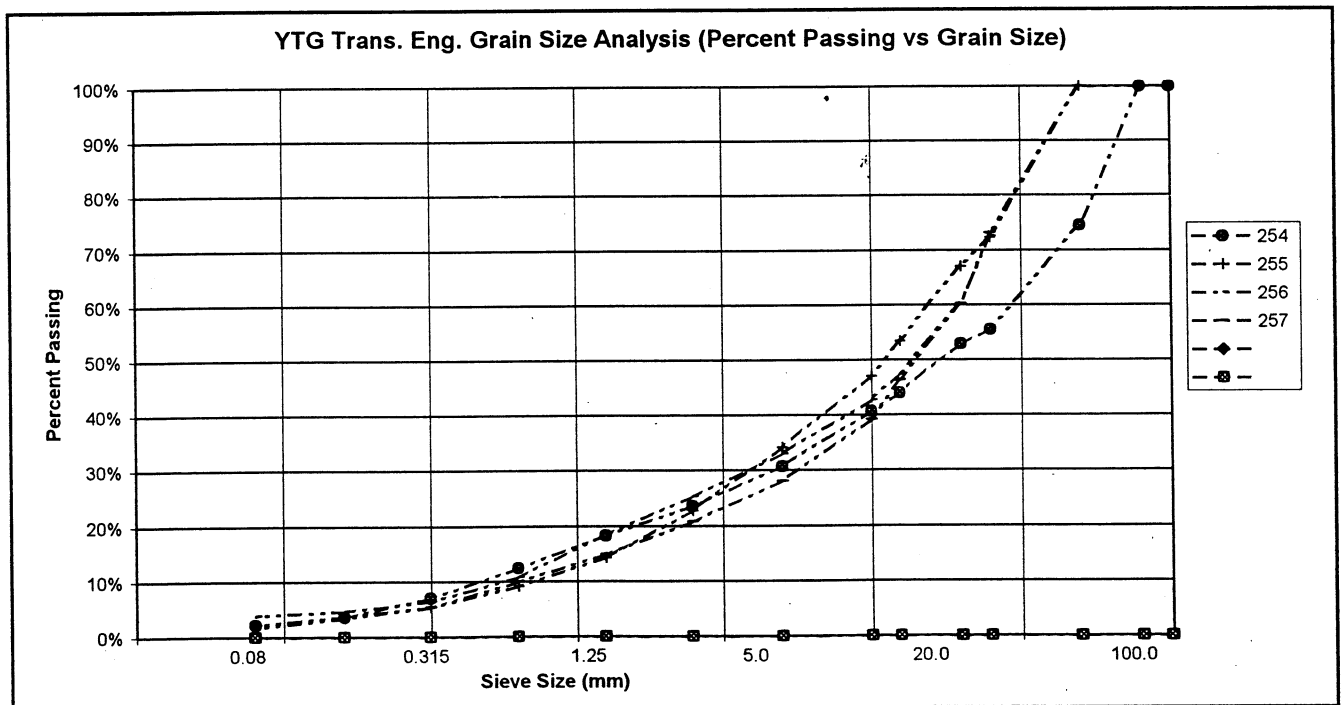


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2468

DATE COMP: SEPT 23/02

FIELD NO:	254	255	256	257		
LAB NO:	514	515	516	517		
DEPTH:	0.5-1.0	1.8-2.4	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	75%	100%	100%	100%		
25.0	56%	72%	72%	73%		
20.0	53%	67%	60%	60%		
12.5	44%	53%	47%	46%		
10.0	41%	47%	43%	39%		
5.0	31%	34%	33%	28%		
2.5	24%	23%	25%	21%		
1.25	18%	14%	19%	15%		
0.630	12%	9%	11%	10%		
0.315	7%	5%	6%	5%		
0.160	4%	3%	5%	4%		
0.080	2%	2%	4%	2%		
M.C.(%)	2%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	69	66	67	72		
% SAND:	29	32	29	26		
% FINES:	2	2	4	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

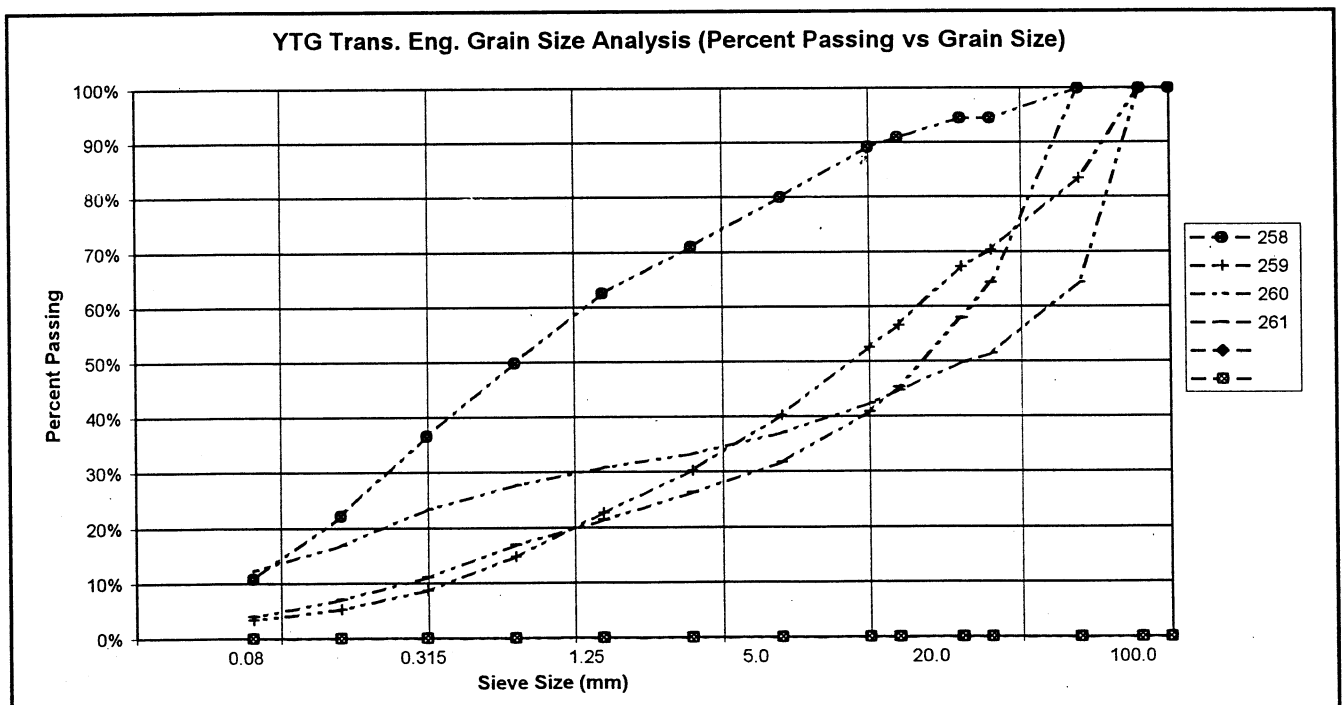


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2469

DATE COMP: SEPT 23/02

FIELD NO:	258	259	260	261
LAB NO:	518	519	520	521
DEPTH:	1.6-2.0	2.2-2.8	3.6-4.2	4.5-5.0
TYPE:	BULK	BULK	BULK	BULK
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING
100.0	100%	100%	100%	100%
80.0	100%	100%	100%	100%
50.0	100%	83%	64%	100%
25.0	94%	70%	51%	64%
20.0	94%	67%	50%	58%
12.5	91%	57%	45%	45%
10.0	89%	53%	42%	41%
5.0	80%	40%	37%	32%
2.5	71%	30%	33%	26%
1.25	63%	23%	31%	21%
0.630	50%	15%	28%	17%
0.315	37%	9%	23%	11%
0.160	22%	5%	17%	7%
0.080	11%	3%	12%	4%
M.C.(%)	4%	3%	12%	4%
LIQUID LIMIT:	0.0	0.0	0.0	0.0
PLASTIC LIMIT:	0.0	0.0	0.0	0.0
PLASTIC INDEX:	0.0	0.0	0.0	0.0
% GRAVEL:	20	60	63	68
% SAND:	69	37	25	28
% FINES:	11	3	12	4
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SAND (GP)

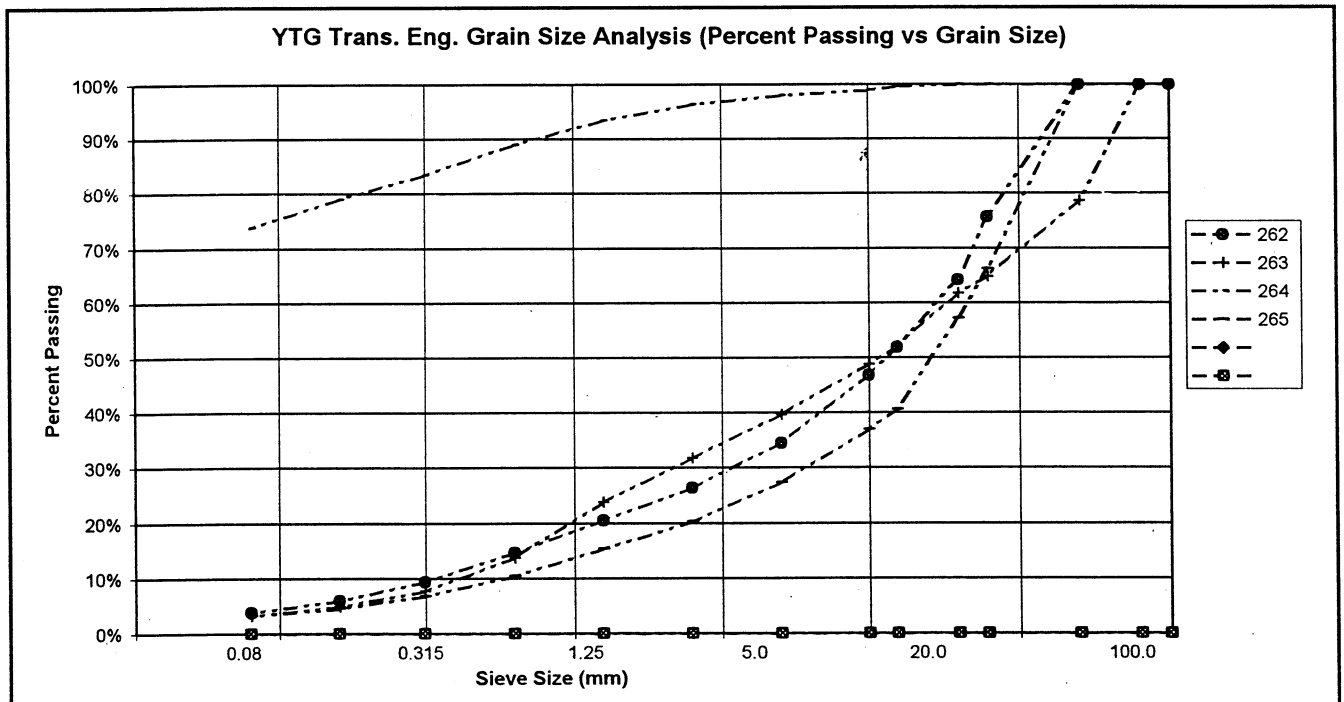


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2470

DATE COMP: SEPT 23/02

FIELD NO:	262	263	264	265		
LAB NO:	522	523	524	525		
DEPTH:	0.5-1.0	1.8-2.3	2.8-3.2	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	79%	100%	100%		
25.0	76%	65%	100%	66%		
20.0	64%	62%	100%	57%		
12.5	52%	52%	100%	41%		
10.0	47%	49%	99%	37%		
5.0	35%	40%	98%	27%		
2.5	26%	32%	96%	20%		
1.25	21%	24%	93%	15%		
0.630	15%	14%	89%	10%		
0.315	9%	8%	83%	7%		
0.160	6%	5%	79%	5%		
0.080	4%	3%	74%	3%		
M.C.(%)	3%	3%	49%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	65	60	2	73		
% SAND:	31	36	24	24		
% FINES:	4	3	74	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILT WITH SAND (ML)	WELL-GRADED GRAVEL WITH SAND (GW)		

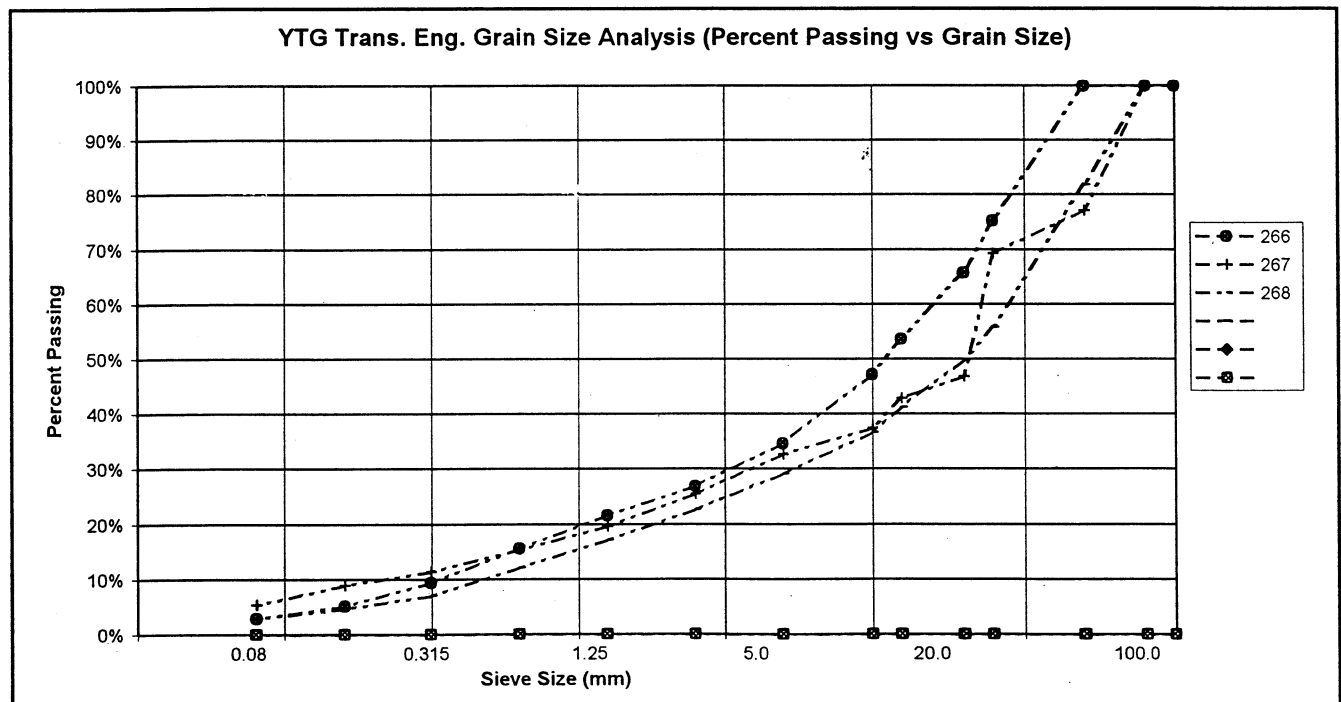


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2471

DATE COMP: SEPT 23/02

FIELD NO:	266	267	268		
LAB NO:	526	527	528		
DEPTH:	0.5-1.0	2.3-2.8	3.2-3.7		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	77%	82%		
25.0	75%	69%	56%		
20.0	66%	47%	50%		
12.5	54%	43%	41%		
10.0	47%	37%	37%		
5.0	35%	33%	29%		
2.5	27%	26%	23%		
1.25	22%	20%	17%		
0.630	16%	15%	12%		
0.315	9%	11%	7%		
0.160	5%	9%	5%		
0.080	3%	5%	3%		
M.C.(%)	2%	4%	2%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	65	67	71		
% SAND:	32	27	26		
% FINES:	3	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)		

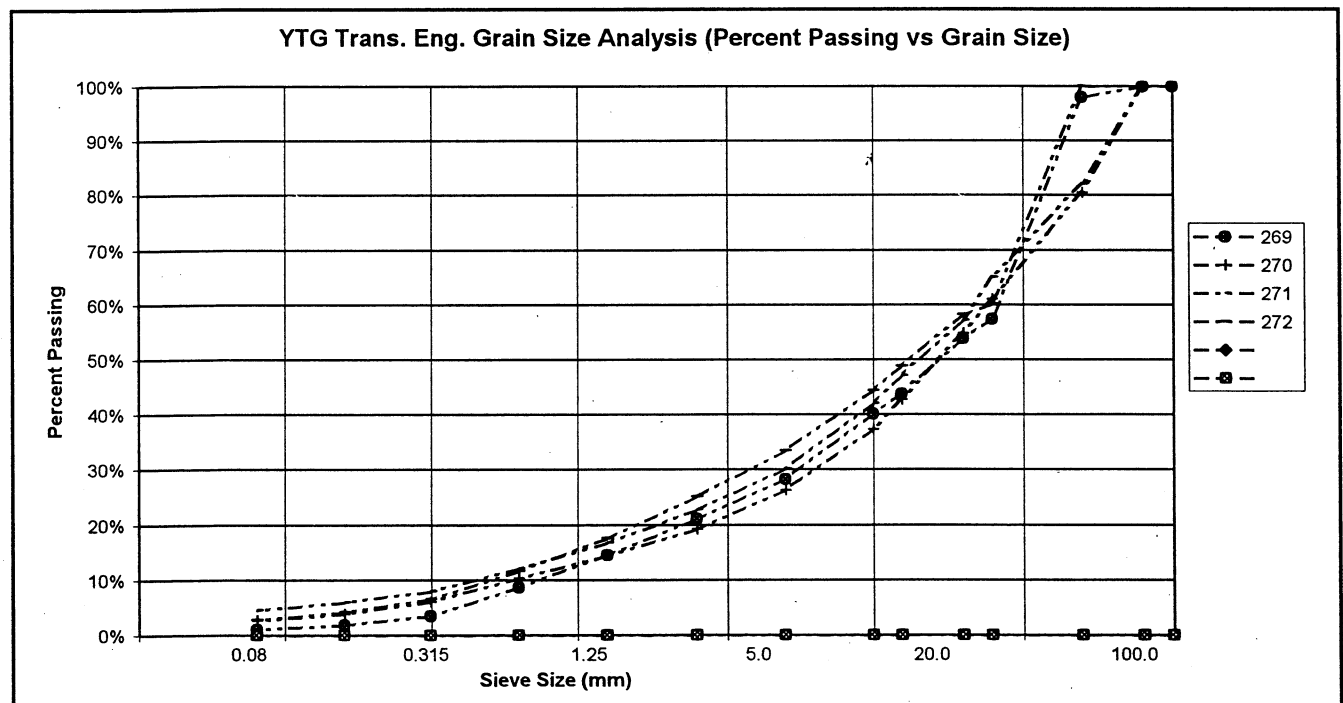


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2472

DATE COMP: SEPT 23/02

FIELD NO:	269	270	271	272		
LAB NO:	529	230	231	532		
DEPTH:	0.8-1.3	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	98%	81%	82%	100%		
25.0	57%	61%	65%	60%		
20.0	54%	55%	57%	58%		
12.5	44%	43%	47%	49%		
10.0	40%	37%	42%	44%		
5.0	28%	26%	30%	33%		
2.5	21%	19%	23%	25%		
1.25	15%	14%	17%	18%		
0.630	9%	10%	12%	12%		
0.315	4%	6%	8%	7%		
0.160	2%	4%	6%	4%		
0.080	1%	3%	5%	3%		
M.C.(%)	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	72	74	70	67		
% SAND:	27	24	26	31		
% FINES:	1	3	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

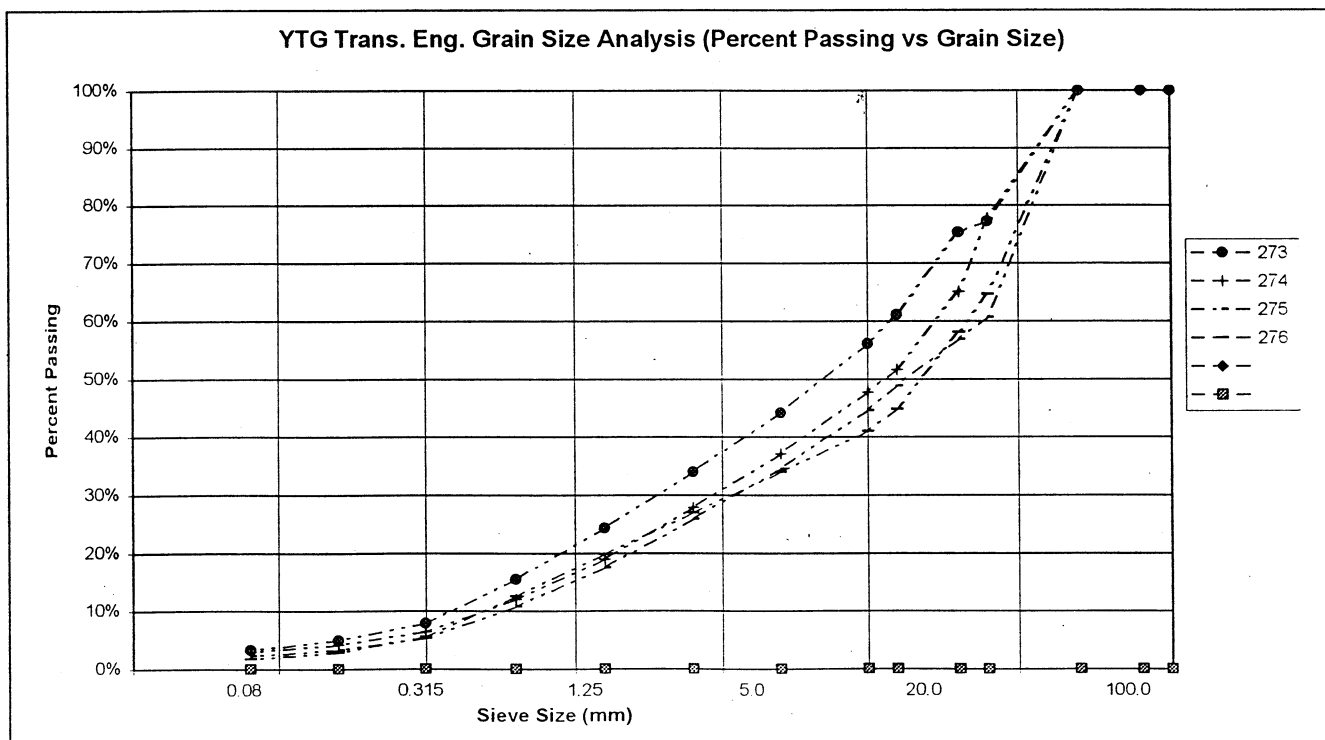


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2473

DATE COMP: SEPT 23/02

FIELD NO:	273	274	275	276		
LAB NO:	533	534	535	536		
DEPTH:	0.8-1.3	1.8-2.3	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	77%	78%	61%	65%		
20.0	75%	65%	57%	58%		
12.5	61%	52%	49%	45%		
10.0	56%	48%	45%	41%		
5.0	44%	37%	35%	34%		
2.5	34%	28%	26%	27%		
1.25	24%	19%	18%	20%		
0.630	15%	12%	11%	13%		
0.315	8%	6%	5%	6%		
0.160	5%	4%	3%	3%		
0.080	3%	3%	2%	2%		
M.C.(%)	3%	3%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	63	65	66		
% SAND:	41	34	32	32		
% FINES:	3	3	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

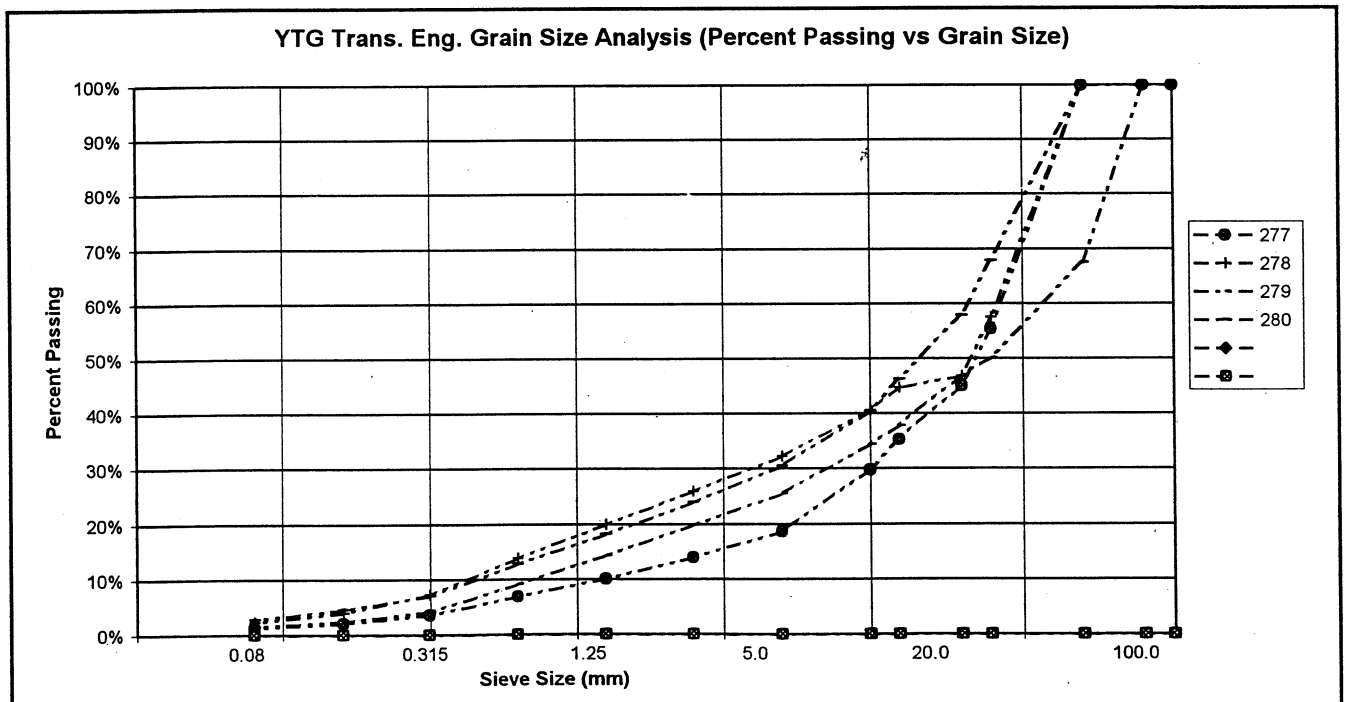


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2474

DATE COMP: SEPT 23/02

FIELD NO:	277	278	279	280		
LAB NO:	537	538	539	540		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	67%	100%		
25.0	55%	58%	50%	68%		
20.0	45%	47%	47%	58%		
12.5	35%	45%	38%	46%		
10.0	30%	41%	34%	40%		
5.0	19%	32%	26%	31%		
2.5	14%	25%	20%	24%		
1.25	10%	20%	14%	18%		
0.630	7%	14%	9%	13%		
0.315	4%	7%	4%	7%		
0.160	2%	4%	2%	5%		
0.080	1%	2%	2%	3%		
M.C.(%)	2%	2%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	81	68	74	69		
% SAND:	17	30	24	28		
% FINES:	1	2	2	3		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

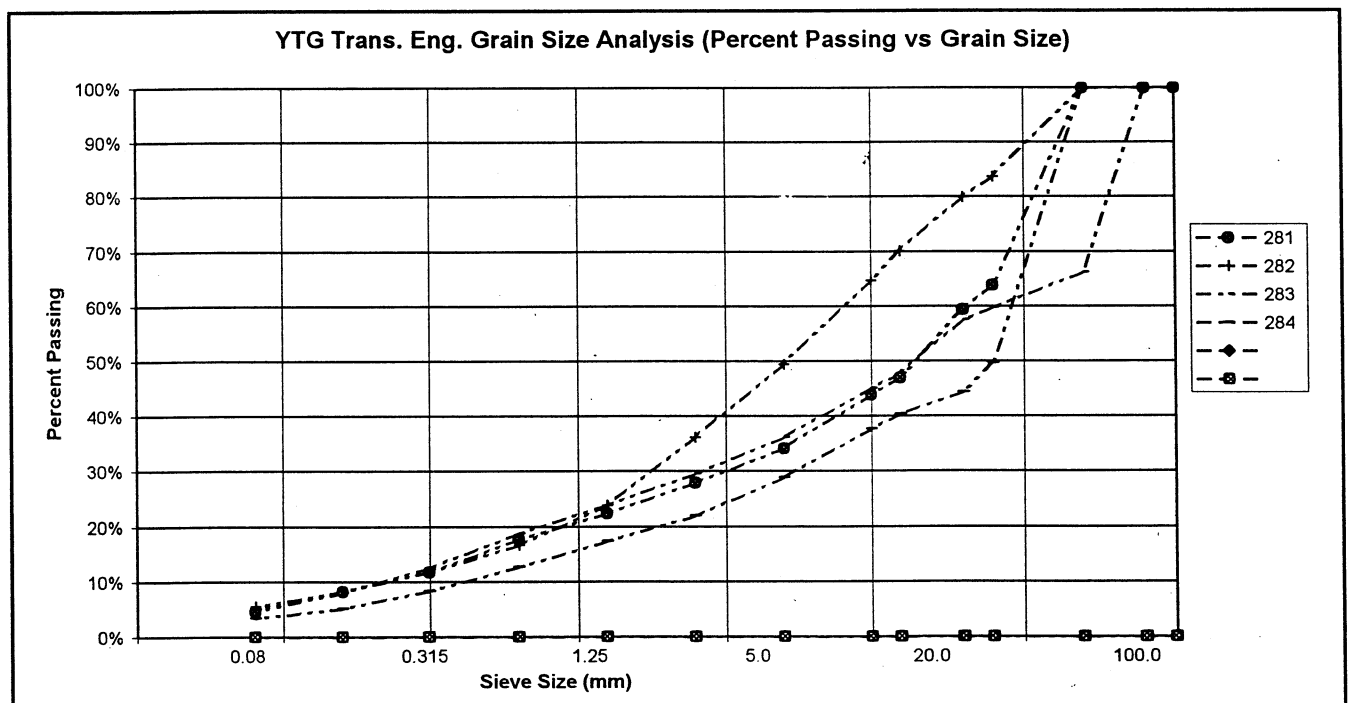


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2475

DATE COMP: SEPT 23/02

FIELD NO:	281	282	283	284		
LAB NO:	541	542	543	544		
DEPTH:	0.8-1.3	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	66%	100%		
25.0	64%	84%	60%	50%		
20.0	59%	80%	58%	44%		
12.5	47%	70%	48%	40%		
10.0	44%	65%	45%	38%		
5.0	34%	49%	36%	29%		
2.5	28%	36%	30%	22%		
1.25	22%	24%	24%	17%		
0.630	18%	17%	19%	13%		
0.315	12%	12%	13%	8%		
0.160	8%	8%	8%	5%		
0.080	5%	5%	5%	3%		
M.C.(%)	3%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	51	64	71		
% SAND:	30	44	31	25		
% FINES:	5	5	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	WELL-GRADED GRAVEL WITH SAND (GW)		

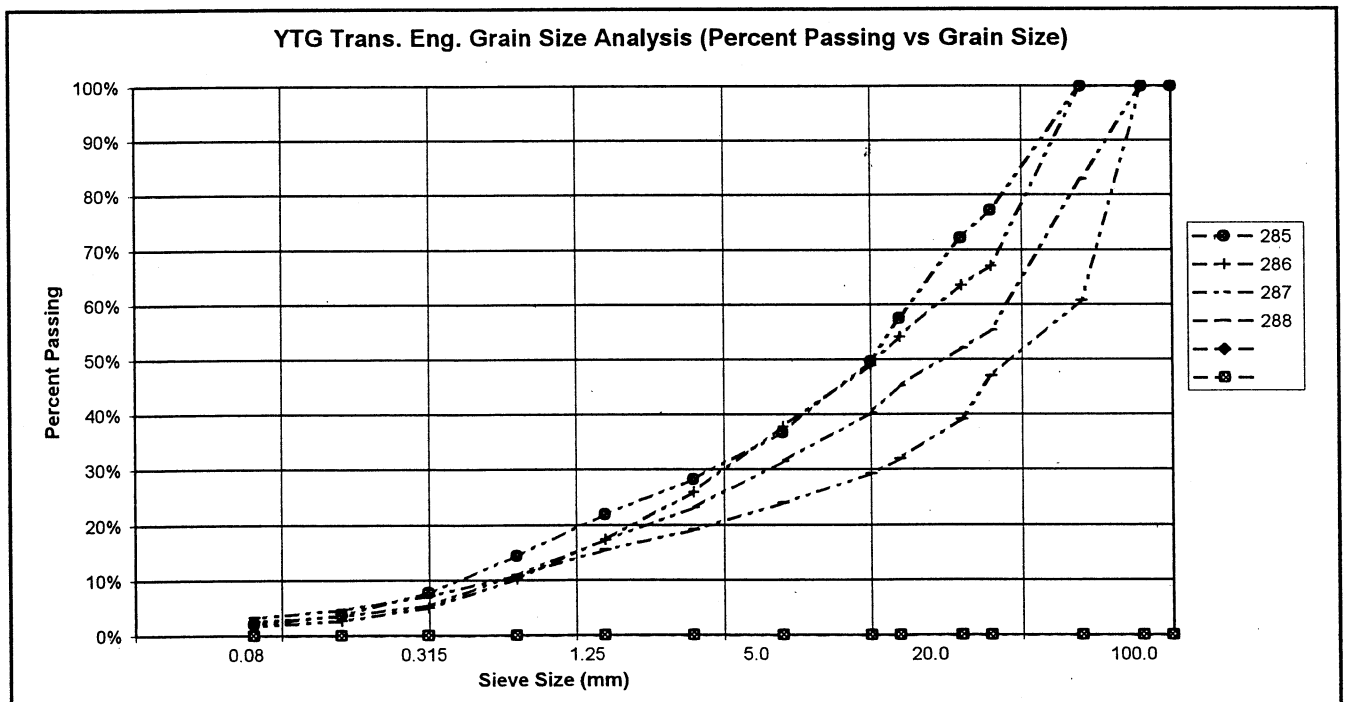


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2476

DATE COMP: SEPT 24/02

FIELD NO:	285	286	287	288		
LAB NO:	545	546	547	548		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	83%	61%		
25.0	77%	67%	55%	47%		
20.0	72%	63%	52%	39%		
12.5	57%	54%	45%	32%		
10.0	50%	49%	40%	29%		
5.0	37%	38%	31%	24%		
2.5	28%	26%	23%	19%		
1.25	22%	17%	17%	15%		
0.630	14%	10%	11%	11%		
0.315	8%	5%	6%	7%		
0.160	4%	3%	4%	5%		
0.080	2%	2%	3%	3%		
M.C.(%)	2%	2%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	62	69	76		
% SAND:	35	36	29	21		
% FINES:	2	2	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

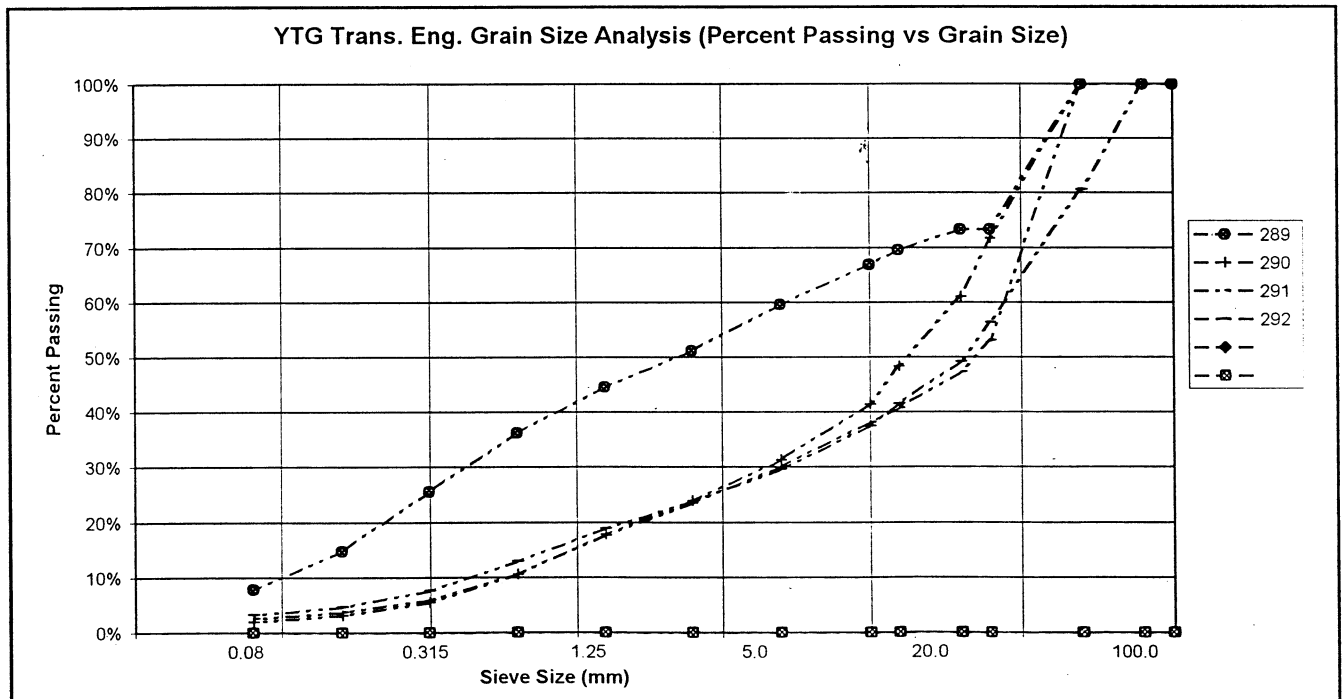


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2477

DATE COMP: SEPT 24/02

FIELD NO:	289	290	291	292		
LAB NO:	549	550	551	552		
DEPTH:	0.7-1.2	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	81%		
25.0	73%	72%	53%	56%		
20.0	73%	61%	47%	49%		
12.5	70%	48%	41%	42%		
10.0	67%	41%	38%	37%		
5.0	60%	31%	30%	30%		
2.5	51%	24%	23%	24%		
1.25	45%	18%	18%	19%		
0.630	36%	11%	11%	13%		
0.315	26%	5%	6%	8%		
0.160	15%	3%	4%	5%		
0.080	8%	2%	3%	3%		
M.C.(%)	3%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	40	69	70	70		
% SAND:	52	29	28	26		
% FINES:	8	2	3	3		
CLASSIFICATION	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

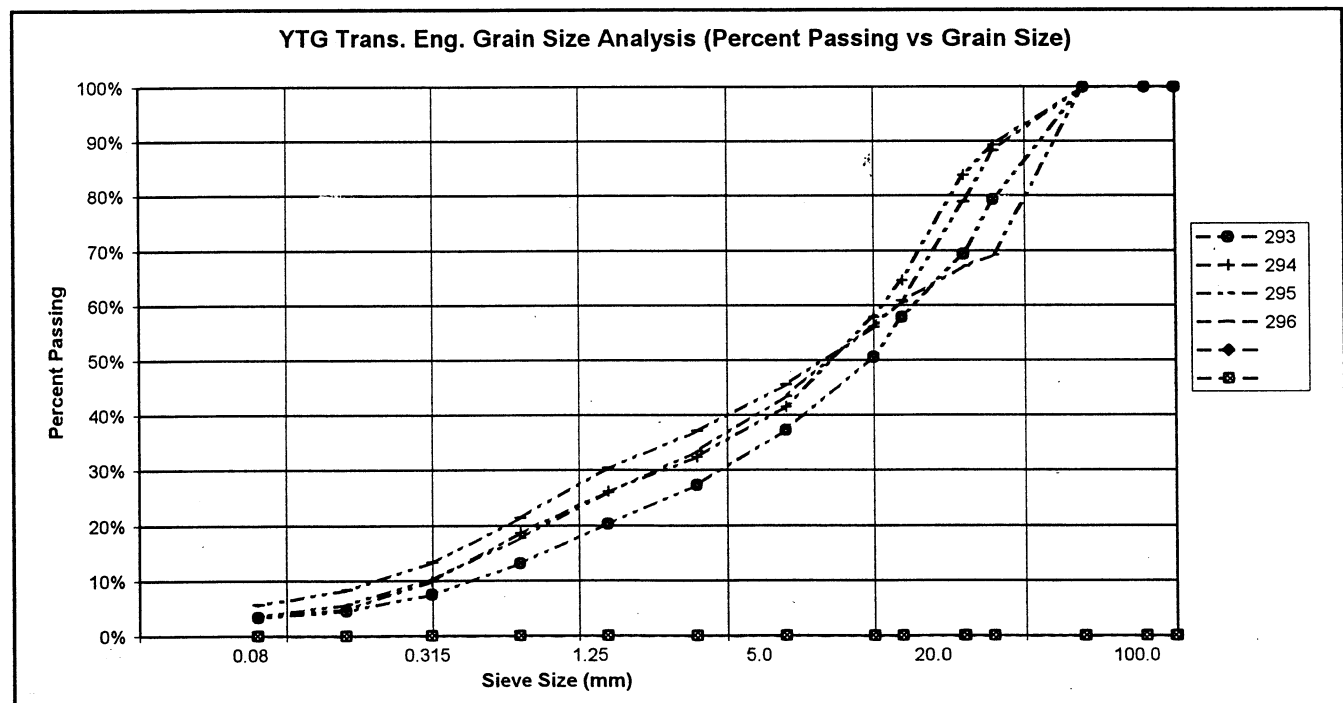


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2478

DATE COMP: SEPT 24/02

FIELD NO:	293	294	295	296		
LAB NO:	553	554	555	556		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	79%	89%	69%	88%		
20.0	69%	84%	67%	79%		
12.5	58%	65%	61%	61%		
10.0	51%	58%	57%	56%		
5.0	37%	42%	43%	46%		
2.5	27%	32%	33%	37%		
1.25	20%	26%	26%	30%		
0.630	13%	19%	18%	21%		
0.315	7%	10%	10%	13%		
0.160	5%	5%	6%	8%		
0.080	3%	3%	4%	6%		
M.C.(%)	3%	3%	3%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	63	58	57	54		
% SAND:	34	38	40	40		
% FINES:	3	3	4	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

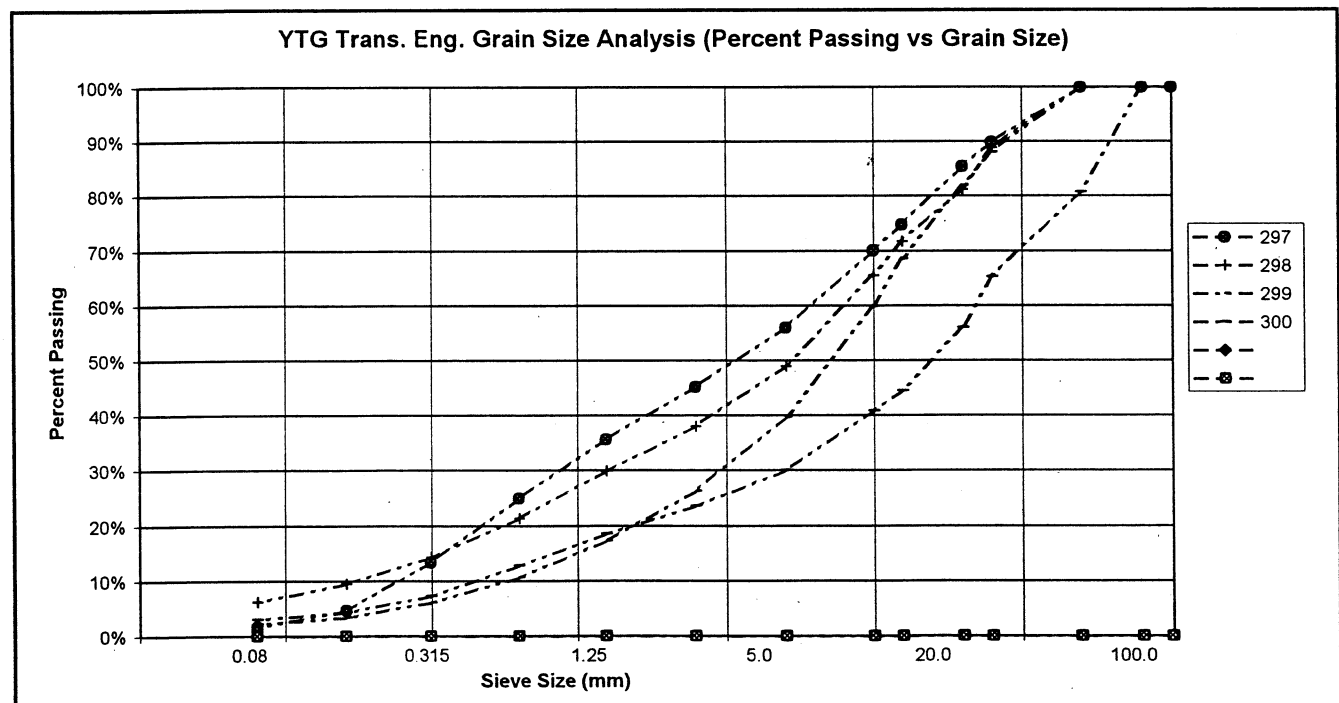


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2479

DATE COMP: SEPT 24/02

FIELD NO:	297	298	299	300		
LAB NO:	557	558	559	560		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	81%		
25.0	90%	89%	88%	65%		
20.0	85%	81%	82%	56%		
12.5	75%	72%	68%	45%		
10.0	70%	66%	60%	41%		
5.0	56%	49%	40%	30%		
2.5	45%	38%	26%	24%		
1.25	36%	30%	17%	19%		
0.630	25%	21%	11%	13%		
0.315	13%	14%	6%	7%		
0.160	5%	10%	3%	4%		
0.080	2%	6%	2%	3%		
M.C.(%)	2%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	44	51	60	70		
% SAND:	54	43	37	27		
% FINES:	2	6	2	3		
CLASSIFICATION	WELL-GRADED SAND WITH GRAVEL (SW)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

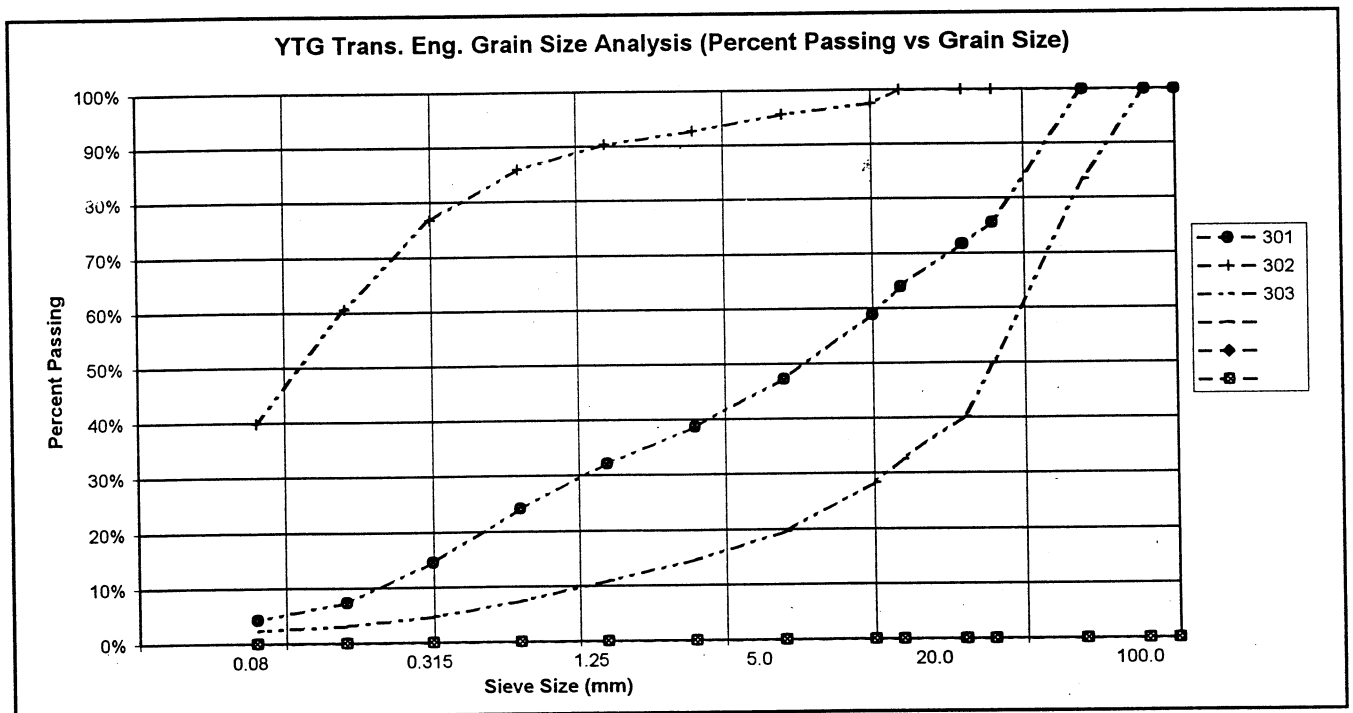


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2480

DATE COMP: SEPT 24/02

FIELD NO:	301	302	303		
LAB NO:	561	562	563		
DEPTH:	0.5-1.0	1.5-1.7	2.2-2.4		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	83%		
25.0	76%	100%	50%		
20.0	72%	100%	40%		
12.5	64%	100%	33%		
10.0	59%	98%	28%		
5.0	47%	96%	20%		
2.5	39%	93%	15%		
1.25	32%	90%	11%		
0.630	24%	86%	7%		
0.315	15%	77%	5%		
0.160	7%	61%	3%		
0.080	4%	40%	2%		
M.C.(%)	4%	43%	3%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	53	4	80		
% SAND:	43	56	17		
% FINES:	4	40	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)	WELL-GRADED GRAVEL WITH SAND (GW)		

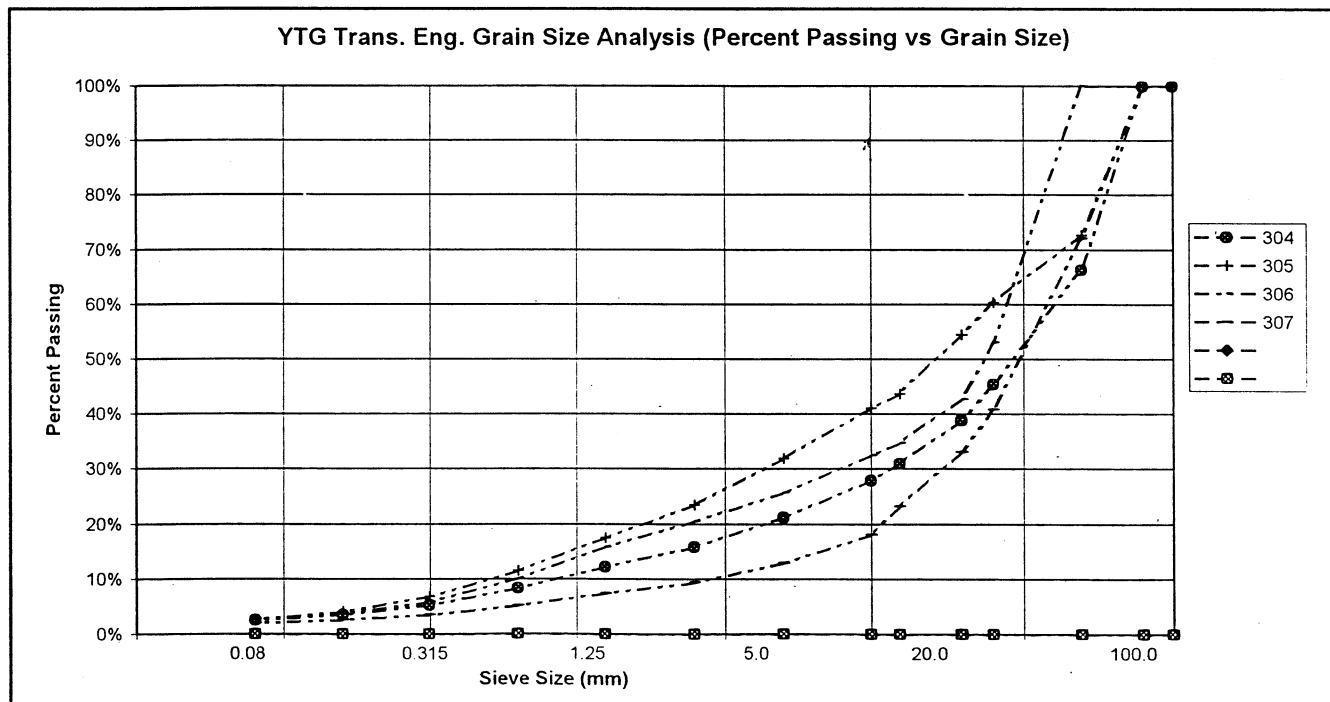


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2481

DATE COMP: SEPT 24/02

FIELD NO:	304	305	306	307		
LAB NO:	564	565	566	567		
DEPTH:	0.5-1.0	2.0-2.5	2.7-3.2	3.2-3.6		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	66%	73%	100%	72%		
25.0	45%	60%	53%	41%		
20.0	39%	54%	43%	33%		
12.5	31%	44%	35%	23%		
10.0	28%	41%	33%	18%		
5.0	21%	32%	26%	13%		
2.5	16%	23%	20%	9%		
1.25	12%	17%	16%	7%		
0.630	8%	12%	10%	5%		
0.315	5%	7%	6%	4%		
0.160	4%	4%	4%	3%		
0.080	3%	3%	3%	2%		
M.C.(%)	4%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	79	68	74	87		
% SAND:	19	29	23	11		
% FINES:	3	3	3	2		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL (GP)		

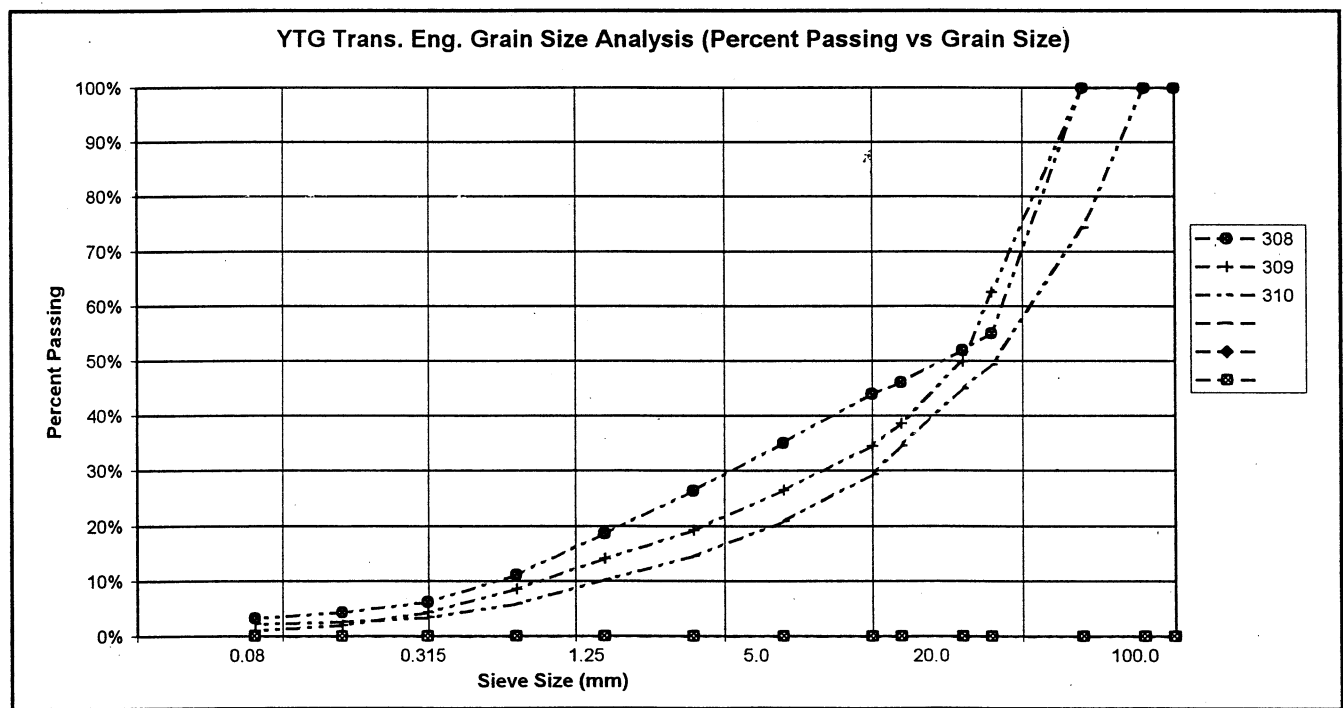


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2482

DATE COMP: SEPT 24/02

FIELD NO:	308	309	310		
LAB NO:	568	569	570		
DEPTH:	0.5-1.0	2.0-2.5	2.7-2.9		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	74%		
25.0	55%	63%	49%		
20.0	52%	50%	45%		
12.5	46%	39%	35%		
10.0	44%	34%	29%		
5.0	35%	27%	21%		
2.5	26%	19%	15%		
1.25	19%	14%	10%		
0.630	11%	9%	6%		
0.315	6%	4%	3%		
0.160	4%	2%	3%		
0.080	3%	1%	2%		
M.C.(%)	3%	3%	5%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	65	73	79		
% SAND:	32	26	19		
% FINES:	3	1	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

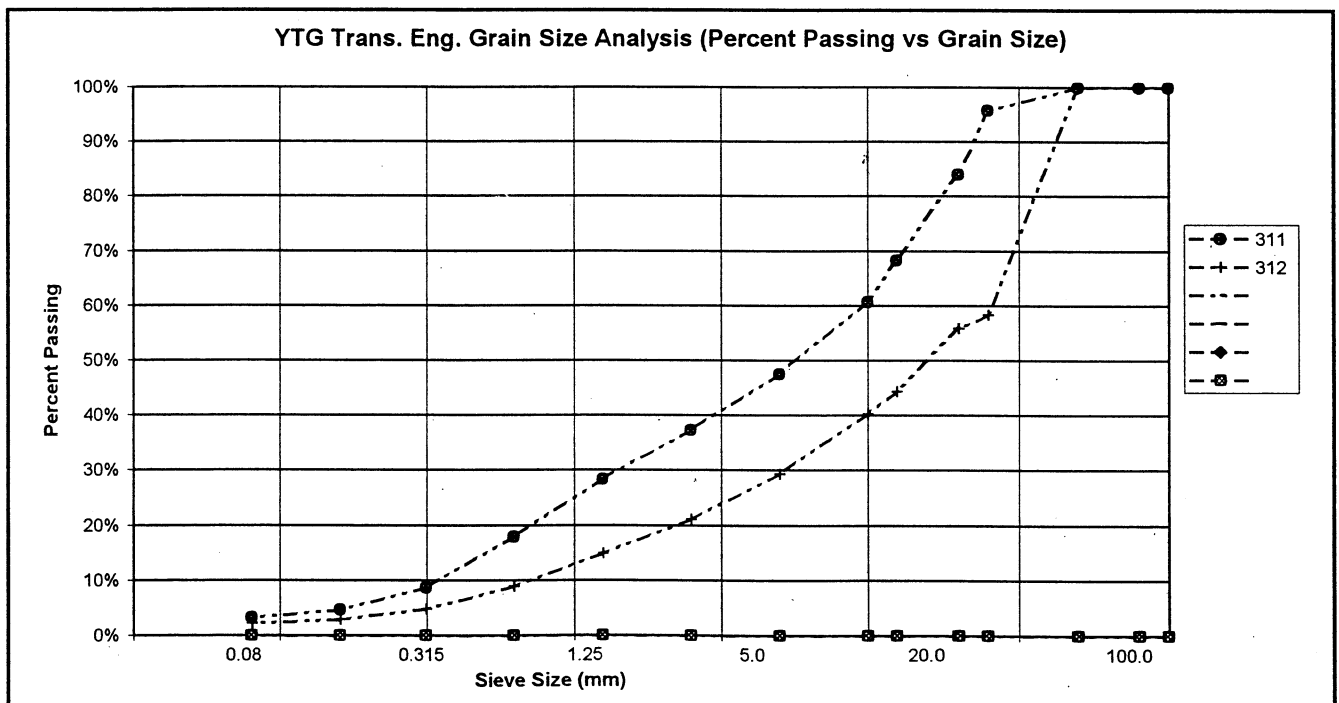


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2483

DATE COMP: SEPT 24/02

FIELD NO:	311	312			
LAB NO:	571	572			
DEPTH:	0.5-1.0	2.1-2.3			
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	96%	58%			
20.0	84%	56%			
12.5	68%	44%			
10.0	61%	40%			
5.0	48%	29%			
2.5	37%	21%			
1.25	28%	15%			
0.630	18%	9%			
0.315	9%	5%			
0.160	5%	3%			
0.080	3%	2%			
M.C.(%):	3%	6%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	52	71			
% SAND:	44	27			
% FINES:	3	2			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

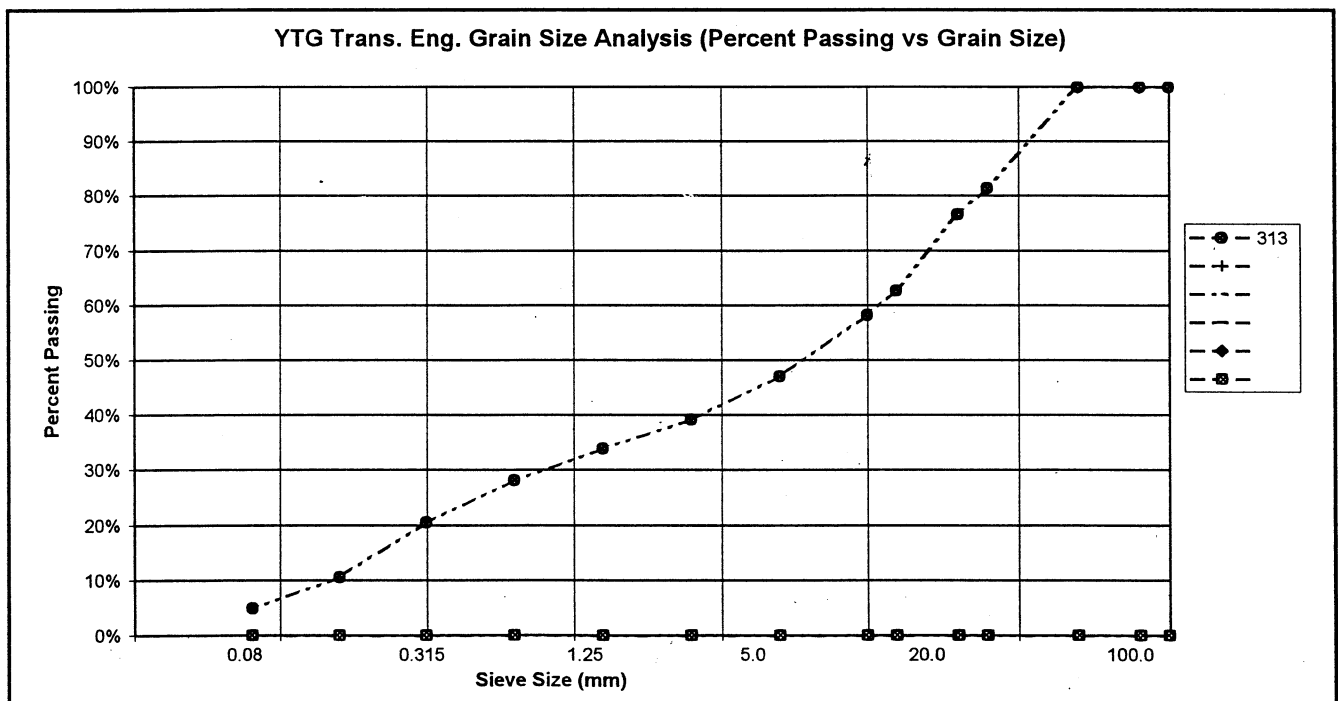


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2484

DATE COMP: SEPT 24/02

FIELD NO:	313				
LAB NO:	573				
DEPTH:	0.5-1.0				
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	81%				
20.0	77%				
12.5	63%				
10.0	58%				
5.0	47%				
2.5	39%				
1.25	34%				
0.630	28%				
0.315	21%				
0.160	11%				
0.080	5%				
M.C.(%):	12%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX:	0.0				
% GRAVEL:	53				
% SAND:	42				
% FINES:	5				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)				

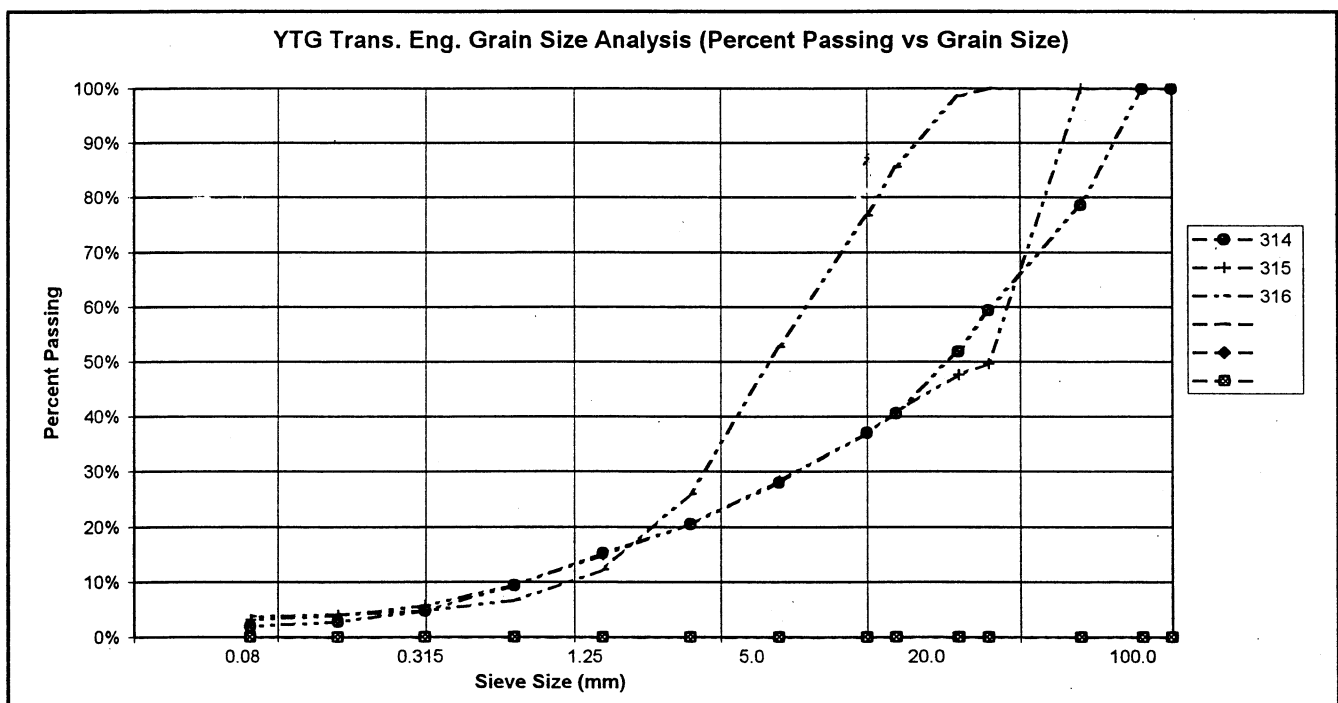


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2485

DATE COMP: SEPT 24/02

FIELD NO:	314	315	316		
LAB NO:	574	575	576		
DEPTH:	1.0-1.5	1.8-2.3	2.9-3.1		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	79%	100%	100%		
25.0	59%	50%	100%		
20.0	52%	48%	99%		
12.5	41%	41%	86%		
10.0	37%	37%	77%		
5.0	28%	28%	53%		
2.5	21%	21%	26%		
1.25	15%	15%	12%		
0.630	9%	9%	7%		
0.315	5%	6%	5%		
0.160	3%	4%	4%		
0.080	2%	3%	4%		
M.C.(%)	2%	5%	5%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	72	72	47		
% SAND:	26	25	49		
% FINES:	2	3	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED SAND WITH GRAVEL (SP)		

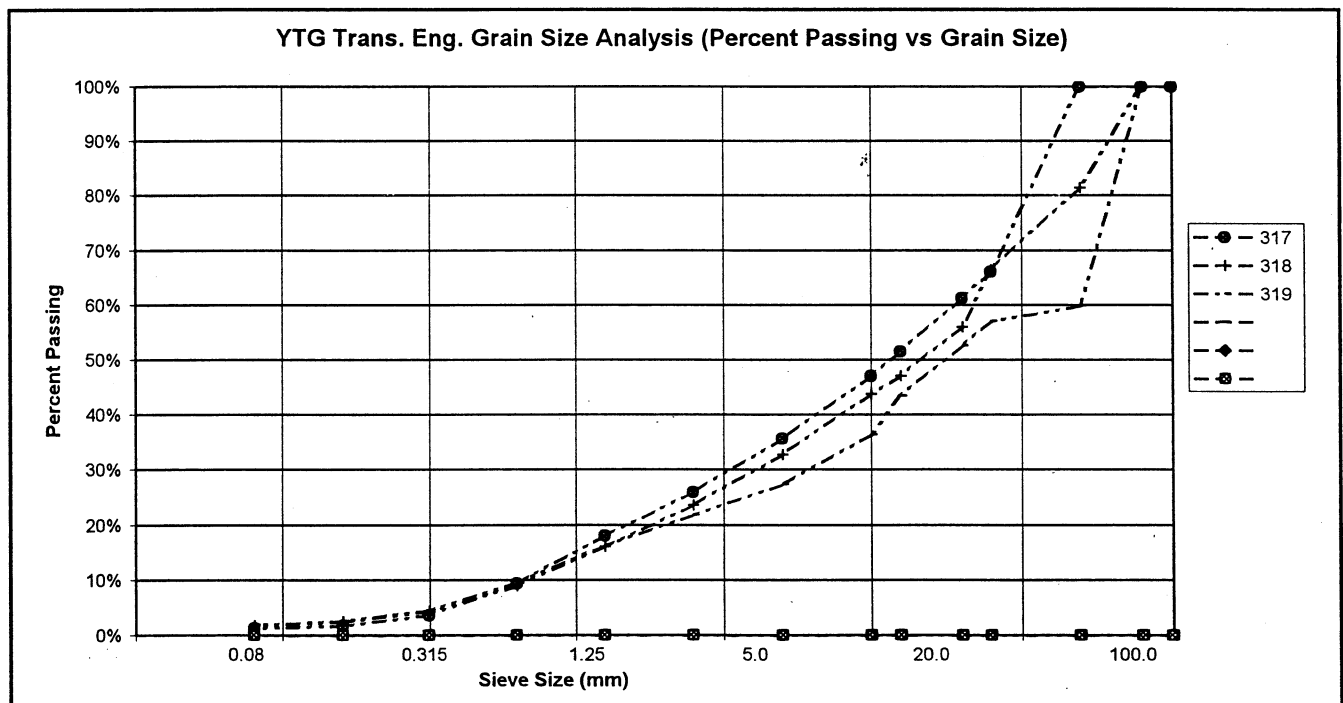


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2486

DATE COMP: SEPT 24/02

FIELD NO:	317	318	319		
LAB NO:	577	578	579		
DEPTH:	0.5-1.0	1.8-2.3	2.8-3.0		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	81%	60%		
25.0	66%	66%	57%		
20.0	61%	56%	53%		
12.5	52%	47%	43%		
10.0	47%	44%	36%		
5.0	36%	33%	27%		
2.5	26%	24%	22%		
1.25	18%	16%	16%		
0.630	9%	9%	10%		
0.315	4%	4%	5%		
0.160	2%	3%	3%		
0.080	1%	2%	2%		
M.C.(%):	3%	2%	5%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	64	67	73		
% SAND:	34	31	25		
% FINES:	1	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

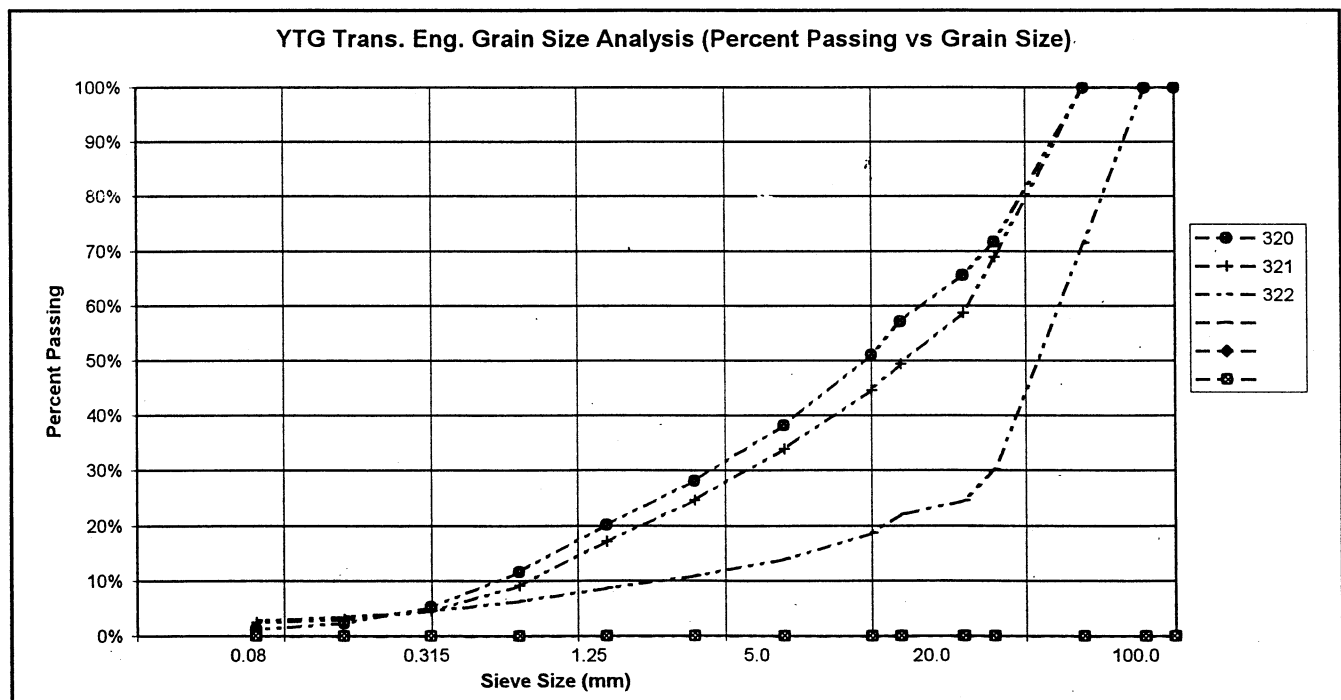


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2487

DATE COMP: SEPT 24/02

FIELD NO.:	320	321	322		
LAB NO.:	580	581	582		
DEPTH:	0.8-1.3	2.0-2.5	3.2-3.4		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	72%		
25.0	72%	69%	30%		
20.0	66%	59%	25%		
12.5	57%	49%	22%		
10.0	51%	45%	19%		
5.0	38%	34%	14%		
2.5	28%	25%	11%		
1.25	20%	17%	9%		
0.630	12%	9%	6%		
0.315	5%	5%	5%		
0.160	2%	3%	3%		
0.080	1%	2%	3%		
M.C.(%):	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	62	66	86		
% SAND:	37	31	11		
% FINES:	1	2	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL (GW)		

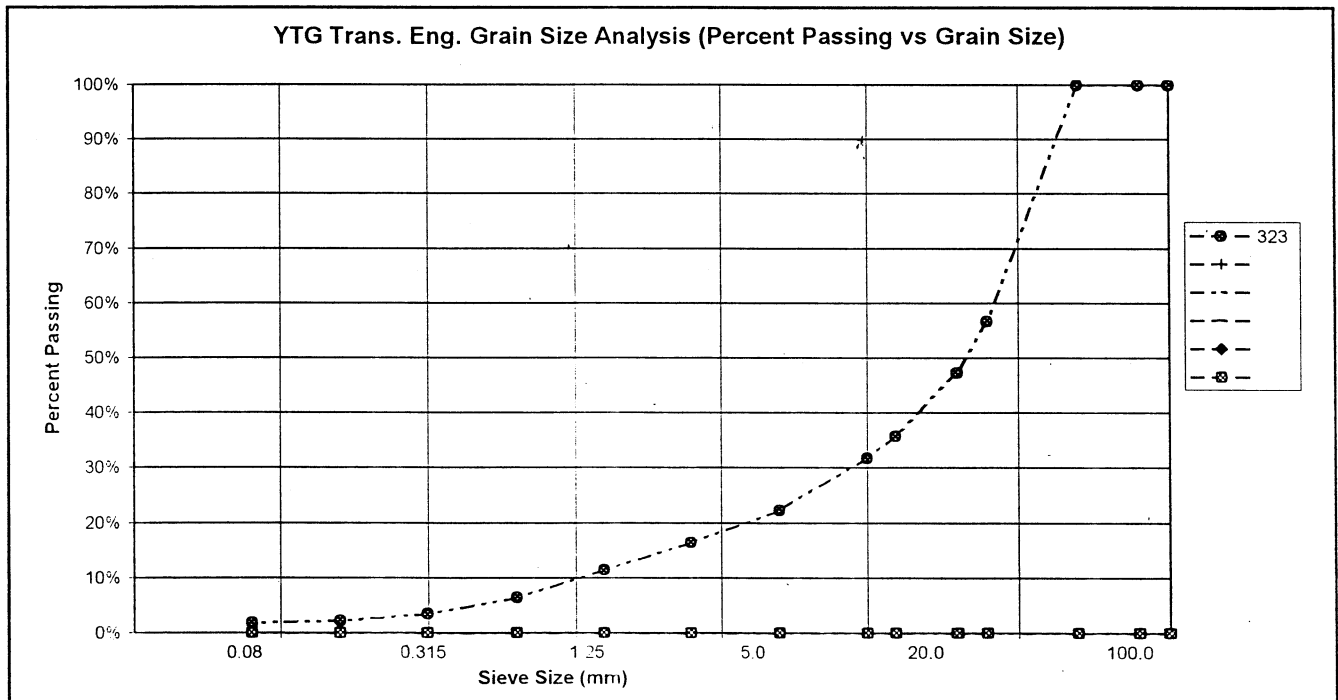


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2488

DATE COMP: SEPT 24/02

FIELD NO:	323				
LAB NO:	583				
DEPTH:	1.0-1.2				
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING				
100.0	100%				
80.0	100%				
50.0	100%				
25.0	57%				
20.0	47%				
12.5	36%				
10.0	32%				
5.0	22%				
2.5	16%				
1.25	11%				
0.630	6%				
0.315	3%				
0.160	2%				
0.080	2%				
M.C.(%)	4%				
LIQUID LIMIT:	0.0				
PLASTIC LIMIT:	0.0				
PLASTIC INDEX:	0.0				
% GRAVEL:	78				
% SAND:	20				
% FINES:	2				
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)				

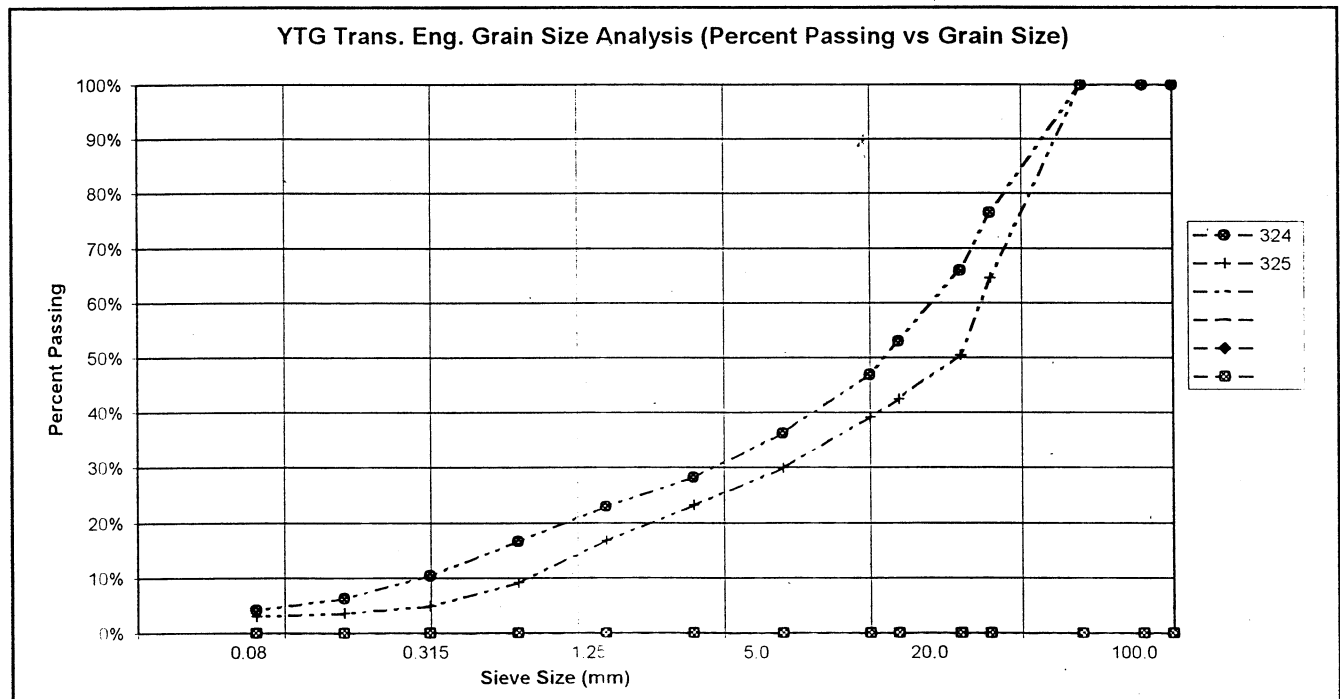


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2489

DATE COMP: SEPT 24/02

FIELD NO:	324	325			
LAB NO:	584	585			
DEPTH:	0.5-0.9	1.8-2.0			
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	100%			
25.0	77%	65%			
20.0	66%	50%			
12.5	53%	42%			
10.0	47%	39%			
5.0	36%	30%			
2.5	28%	23%			
1.25	23%	17%			
0.630	17%	9%			
0.315	10%	5%			
0.160	6%	4%			
0.080	4%	3%			
M.C.(%):	2%	6%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	64	70			
% SAND:	32	27			
% FINES:	4	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

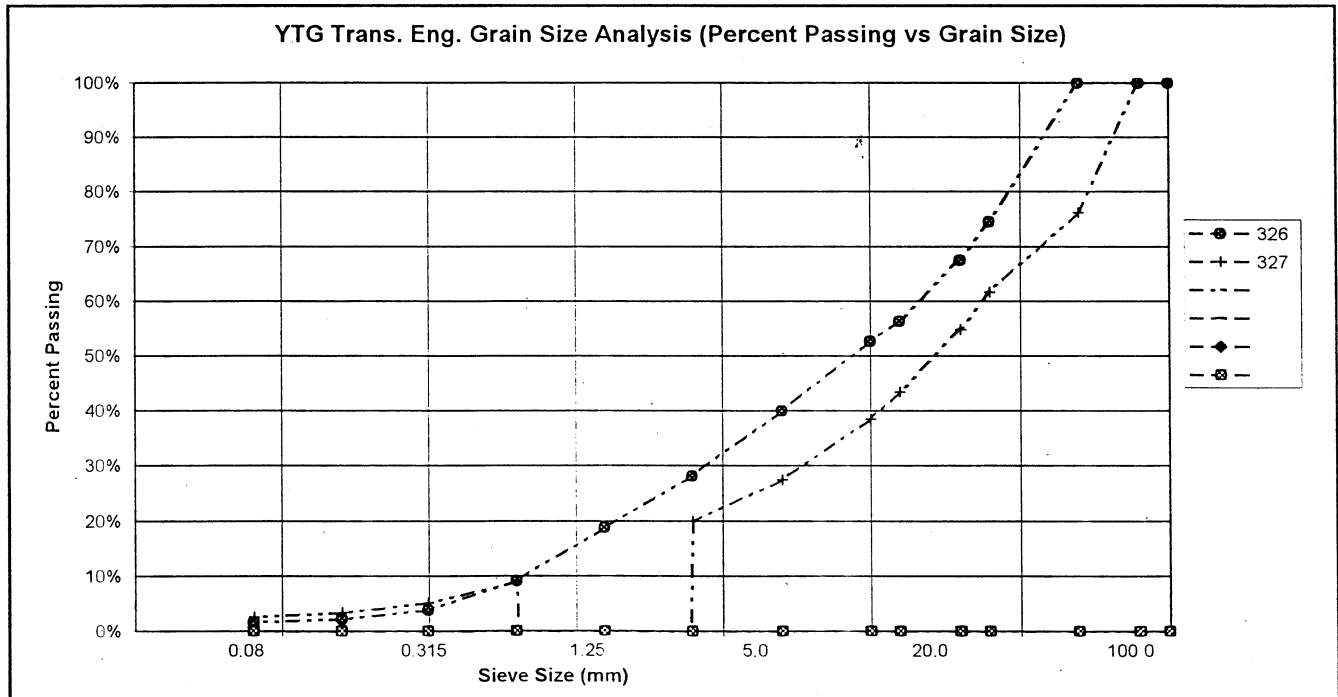


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2490

DATE COMP: SEPT 24/02

FIELD NO:	326	327			
LAB NO:	586	587			
DEPTH:	0.5-0.8	1.9-2.1			
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING			
100.0	100%	100%			
80.0	100%	100%			
50.0	100%	76%			
25.0	75%	62%			
20.0	67%	55%			
12.5	56%	43%			
10.0	53%	39%			
5.0	40%	28%			
2.5	28%	20%			
1.25	19%	-759%			
0.630	9%	9%			
0.315	4%	5%			
0.160	2%	3%			
0.080	2%	3%			
M.C.(%):	2%	5%			
LIQUID LIMIT:	0.0	0.0			
PLASTIC LIMIT:	0.0	0.0			
PLASTIC INDEX.:	0.0	0.0			
% GRAVEL:	60	72			
% SAND:	38	25			
% FINES:	2	3			
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)			

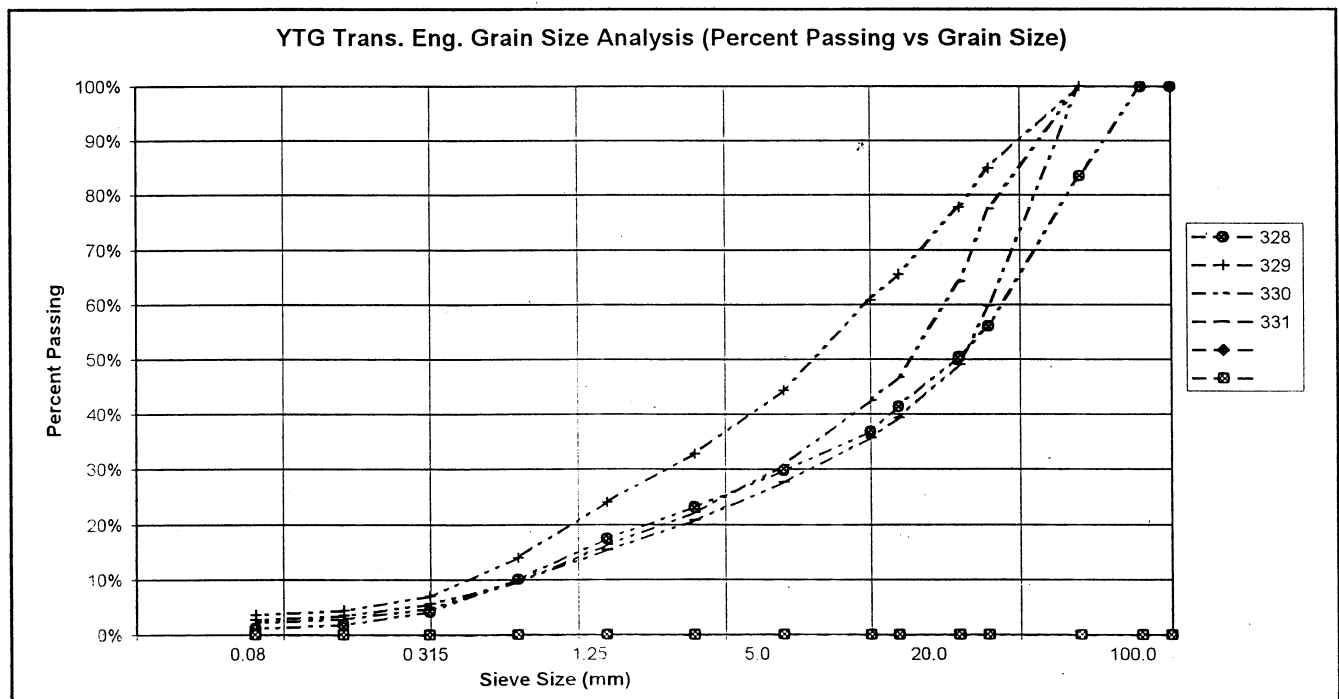


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2491

DATE COMP: SEPT 24/02

FIELD NO:	328	329	330	331		
LAB NO:	588	589	590	591		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	84%	100%	100%	100%		
25.0	56%	85%	77%	60%		
20.0	50%	78%	64%	49%		
12.5	41%	65%	47%	39%		
10.0	37%	61%	42%	36%		
5.0	30%	44%	31%	28%		
2.5	23%	33%	22%	21%		
1.25	17%	24%	16%	15%		
0.630	10%	14%	10%	10%		
0.315	4%	7%	5%	6%		
0.160	2%	5%	3%	4%		
0.080	1%	4%	2%	3%		
M.C.(%)	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	56	69	72		
% SAND:	29	41	29	25		
% FINES:	1	4	2	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

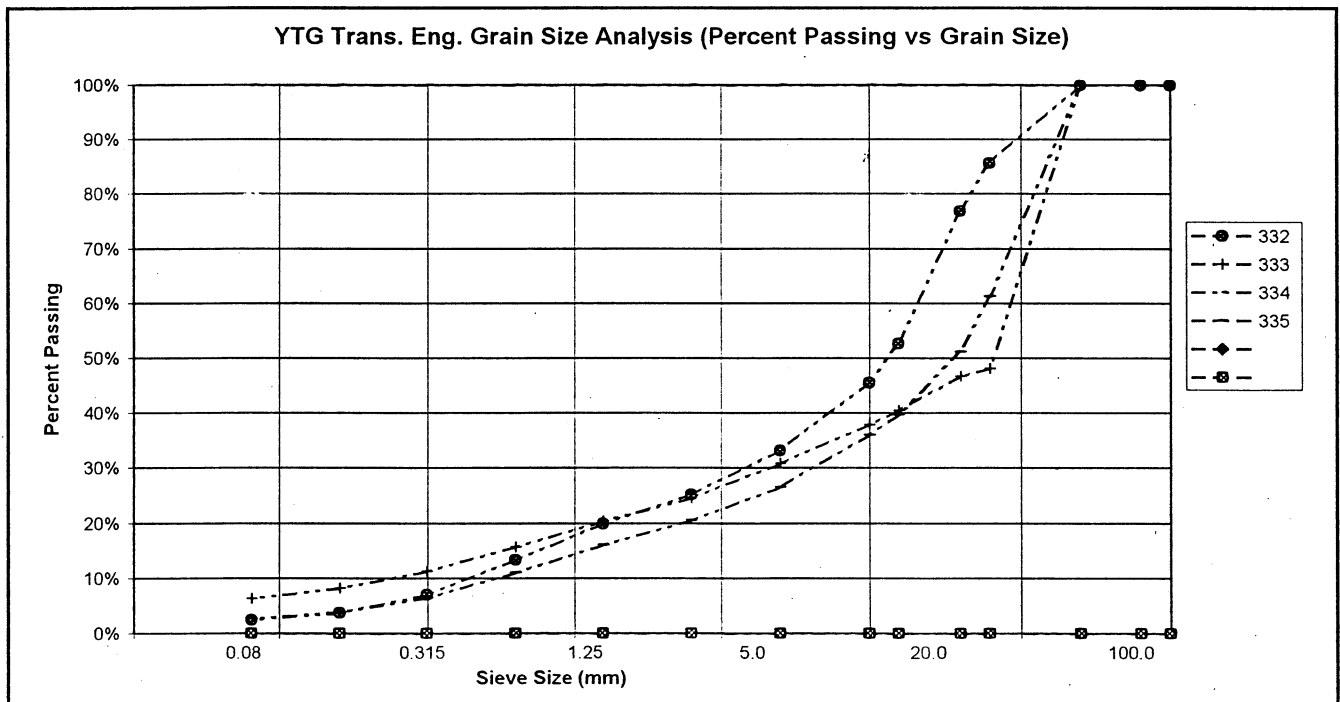


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2492

DATE COMP: SEPT 24/02

FIELD NO:	332	333	334	335		
LAB NO:	592	593	lost	595		
DEPTH:	0.8-1.3	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	86%	48%	100%	61%		
20.0	77%	47%	100%	51%		
12.5	53%	41%	100%	40%		
10.0	46%	38%	100%	36%		
5.0	33%	31%	100%	27%		
2.5	25%	25%	100%	21%		
1.25	20%	20%	100%	16%		
0.630	13%	16%	100%	11%		
0.315	7%	11%	100%	6%		
0.160	4%	8%	100%	4%		
0.080	2%	6%	100%	3%		
M.C.(%)	2%	5%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	69	0	73		
% SAND:	31	25	0	24		
% FINES:	2	6	100	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILT- CL	WELL-GRADED GRAVEL WITH SAND (GW)		

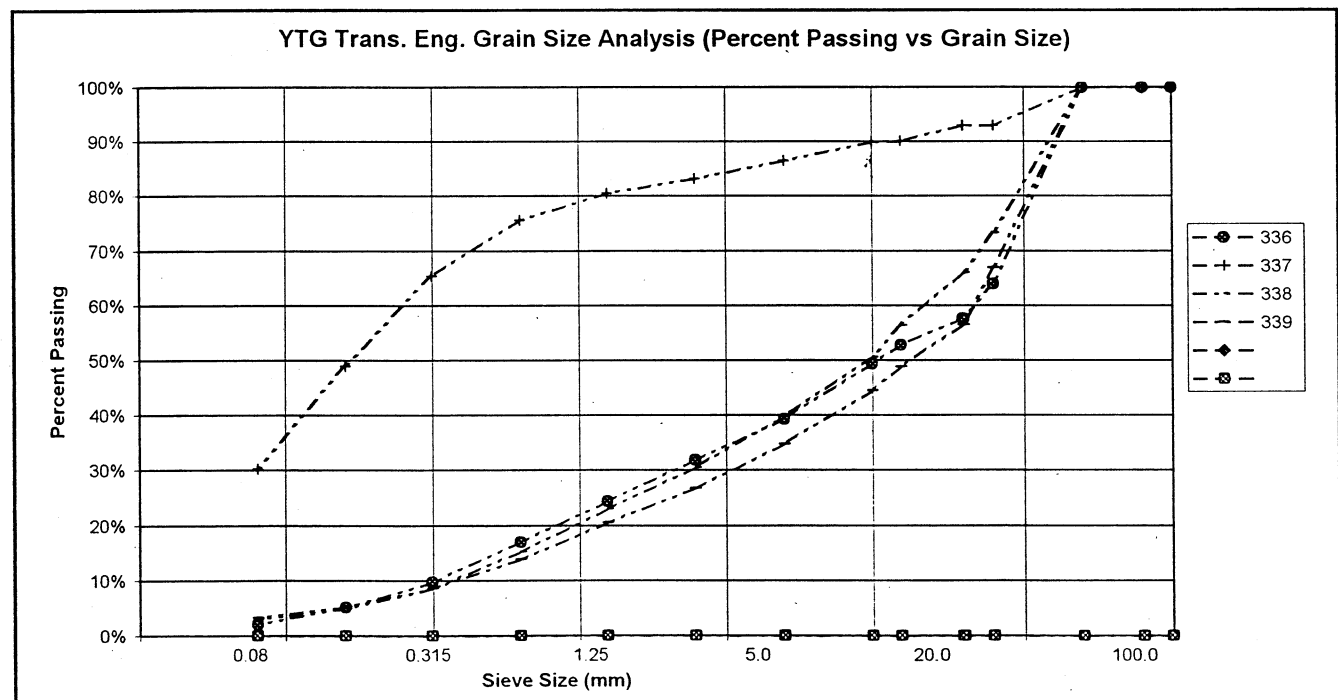


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2493

DATE COMP: SEPT 24/02

FIELD NO:	336	337	338	339		
LAB NO:	596	597	598	599		
DEPTH:	0.3-0.8	2.1-2.4	3.2-3.7	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	64%	93%	73%	67%		
20.0	58%	93%	66%	56%		
12.5	53%	90%	56%	49%		
10.0	49%	90%	51%	45%		
5.0	39%	86%	40%	35%		
2.5	32%	83%	31%	27%		
1.25	24%	80%	23%	20%		
0.630	17%	76%	15%	14%		
0.315	10%	65%	9%	9%		
0.160	5%	49%	5%	5%		
0.080	2%	30%	3%	3%		
M.C.(%)	1%	24%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	14	60	65		
% SAND:	37	56	37	31		
% FINES:	2	30	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

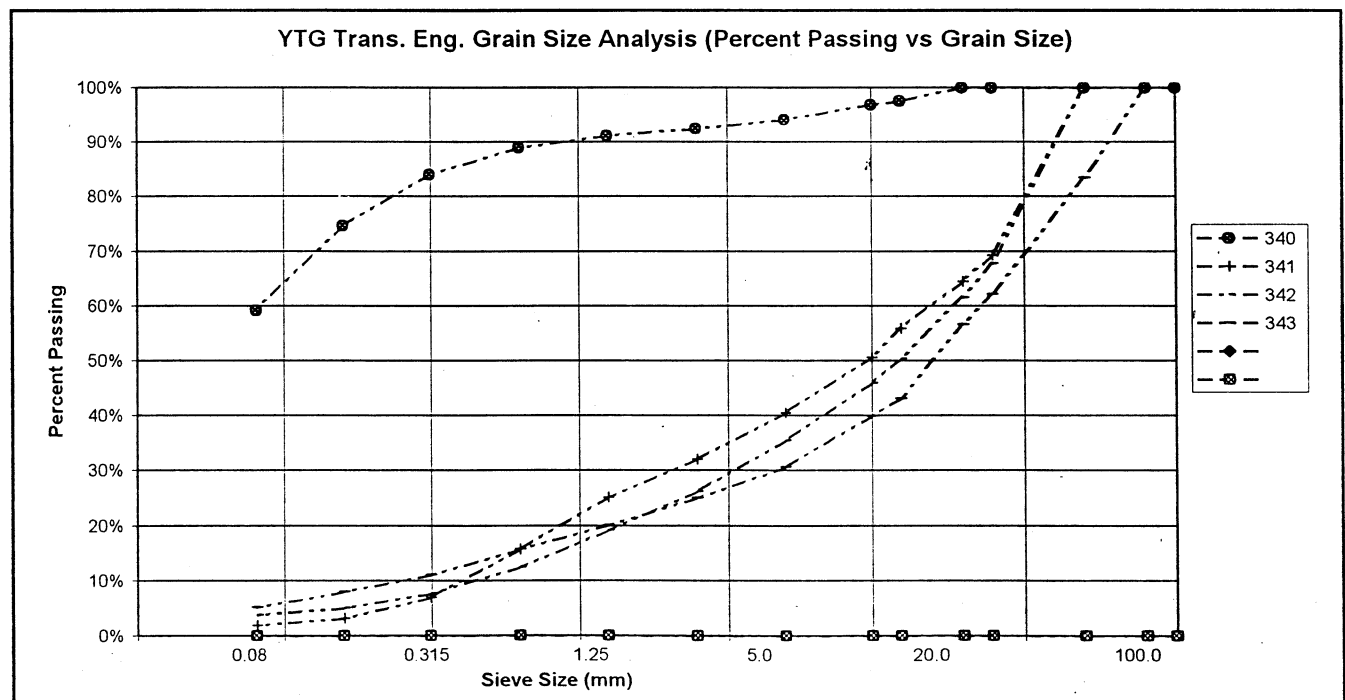


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2494

DATE COMP: SEPT 25/02

FIELD NO:	340	341	342	343		
LAB NO:	600	601	602	603		
DEPTH:	0.5-1.0	2.5-3.0	3.5-4.0	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	83%		
25.0	100%	69%	68%	62%		
20.0	100%	64%	61%	57%		
12.5	98%	56%	50%	43%		
10.0	97%	51%	46%	40%		
5.0	94%	40%	35%	31%		
2.5	93%	32%	26%	25%		
1.25	91%	25%	19%	20%		
0.630	89%	16%	12%	16%		
0.315	84%	7%	8%	11%		
0.160	75%	3%	5%	8%		
0.080	59%	2%	4%	5%		
M.C.(%)	9%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	6	60	65	69		
% SAND:	35	39	32	25		
% FINES:	59	2	4	5		
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

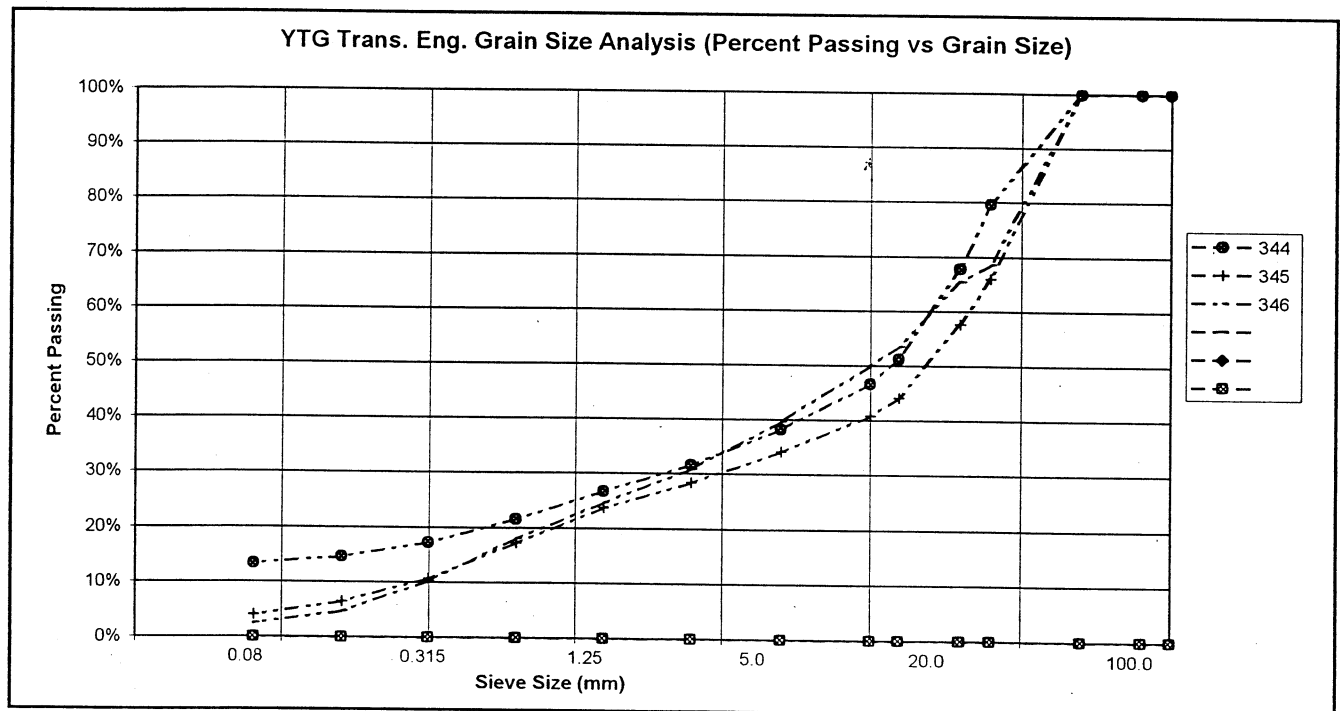


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2495

DATE COMP: SEPT 25/02

FIELD NO:	344	345	346		
LAB NO:	604	605	606		
DEPTH:	1.2-1.7	2.7-3.2	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	80%	66%	69%		
20.0	68%	58%	65%		
12.5	51%	44%	54%		
10.0	47%	41%	50%		
5.0	38%	34%	40%		
2.5	32%	28%	31%		
1.25	27%	24%	25%		
0.630	22%	17%	18%		
0.315	17%	11%	10%		
0.160	15%	6%	5%		
0.080	13%	4%	3%		
M.C.(%):	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	62	66	60		
% SAND:	25	30	37		
% FINES:	13	4	3		
CLASSIFICATION	SILTY GRAVEL WITH SAND (GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

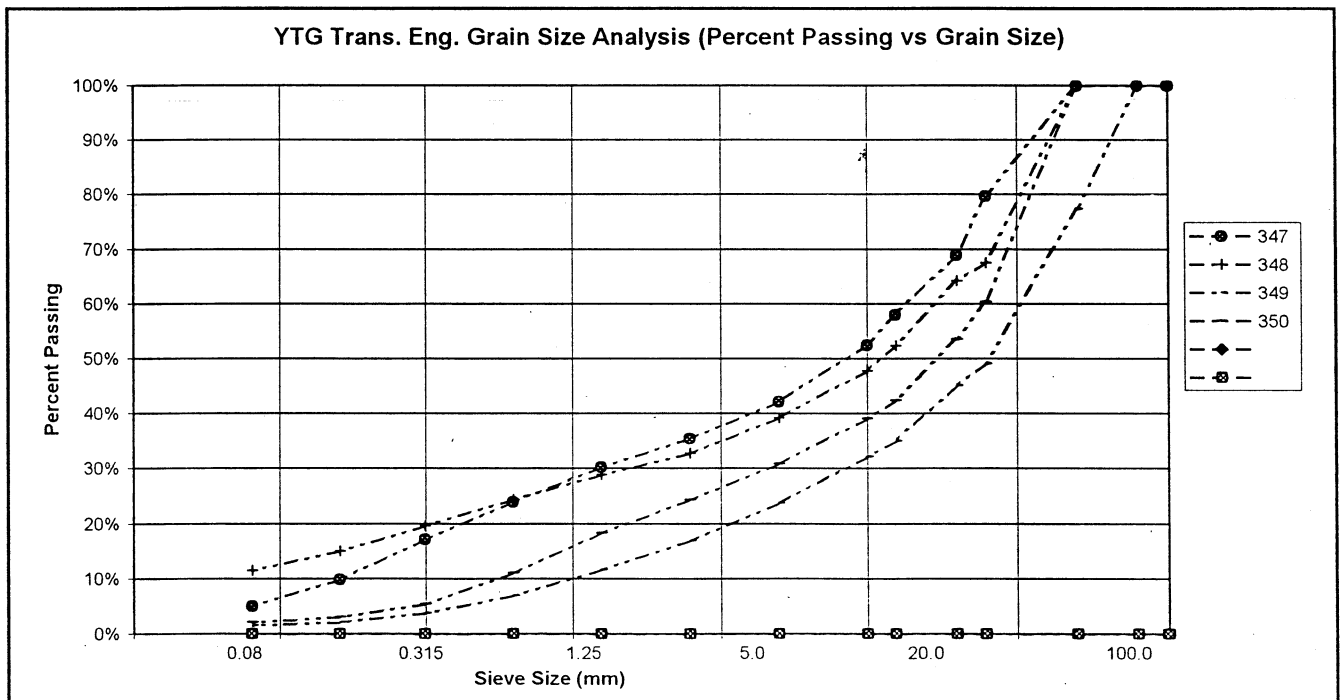


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2496

DATE COMP: SEPT 25/02

FIELD NO:	347	348	349	350		
LAB NO:	607	608	609	610		
DEPTH:	0.5-1.0	2.5-3.0	3.6-4.1	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	77%	100%		
25.0	80%	68%	49%	60%		
20.0	69%	64%	45%	54%		
12.5	58%	52%	35%	42%		
10.0	53%	48%	32%	39%		
5.0	42%	39%	24%	31%		
2.5	35%	33%	17%	24%		
1.25	30%	29%	12%	18%		
0.630	24%	24%	7%	11%		
0.315	17%	20%	4%	5%		
0.160	10%	15%	2%	3%		
0.080	5%	11%	1%	2%		
M.C.(%)	2%	7%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	58	61	76	69		
% SAND:	37	28	22	29		
% FINES:	5	11	1	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

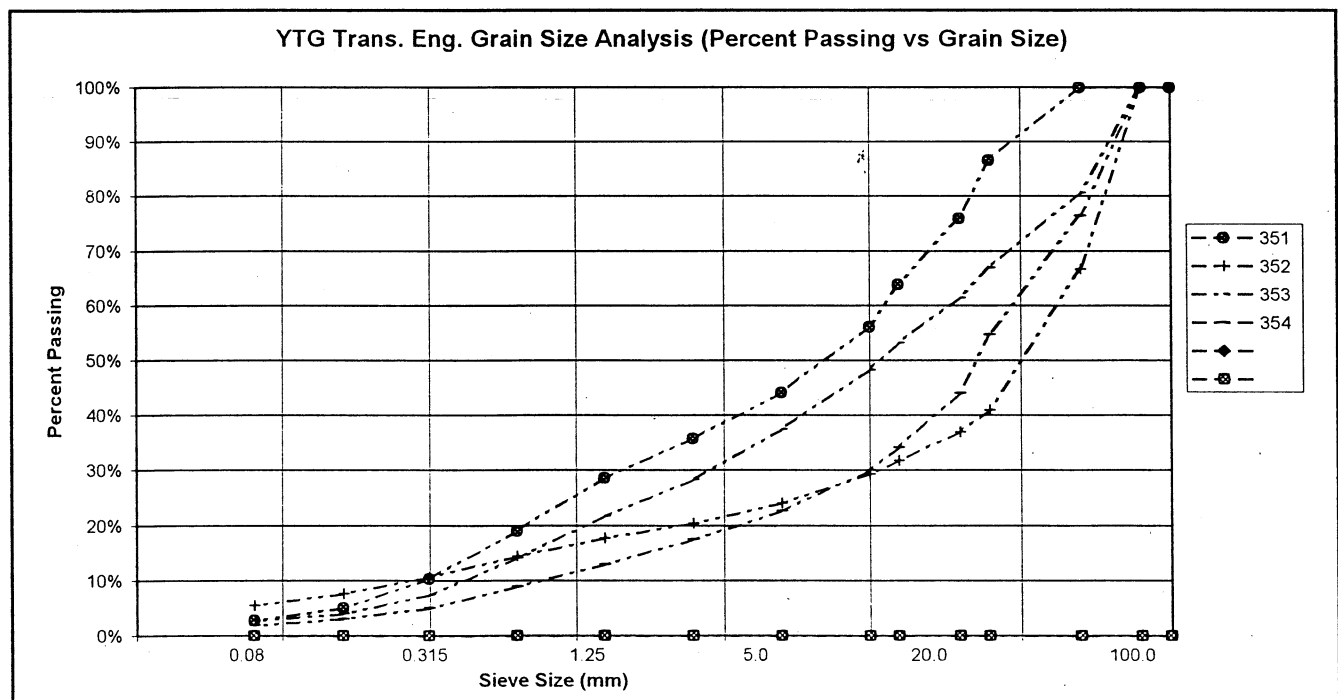


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2497

DATE COMP: SEPT 25/02

FIELD NO:	351	352	353	354		
LAB NO:	611	612	613	614		
DEPTH:	1.0-1.5	2.0-2.5	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	67%	81%	76%		
25.0	87%	41%	67%	55%		
20.0	76%	37%	61%	44%		
12.5	64%	32%	53%	34%		
10.0	56%	29%	48%	30%		
5.0	44%	24%	37%	23%		
2.5	36%	20%	28%	18%		
1.25	29%	18%	22%	13%		
0.630	19%	14%	14%	9%		
0.315	10%	11%	7%	5%		
0.160	5%	8%	4%	3%		
0.080	3%	6%	3%	2%		
M.C.(%)	2%	4%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	76	63	77		
% SAND:	41	19	35	21		
% FINES:	3	6	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

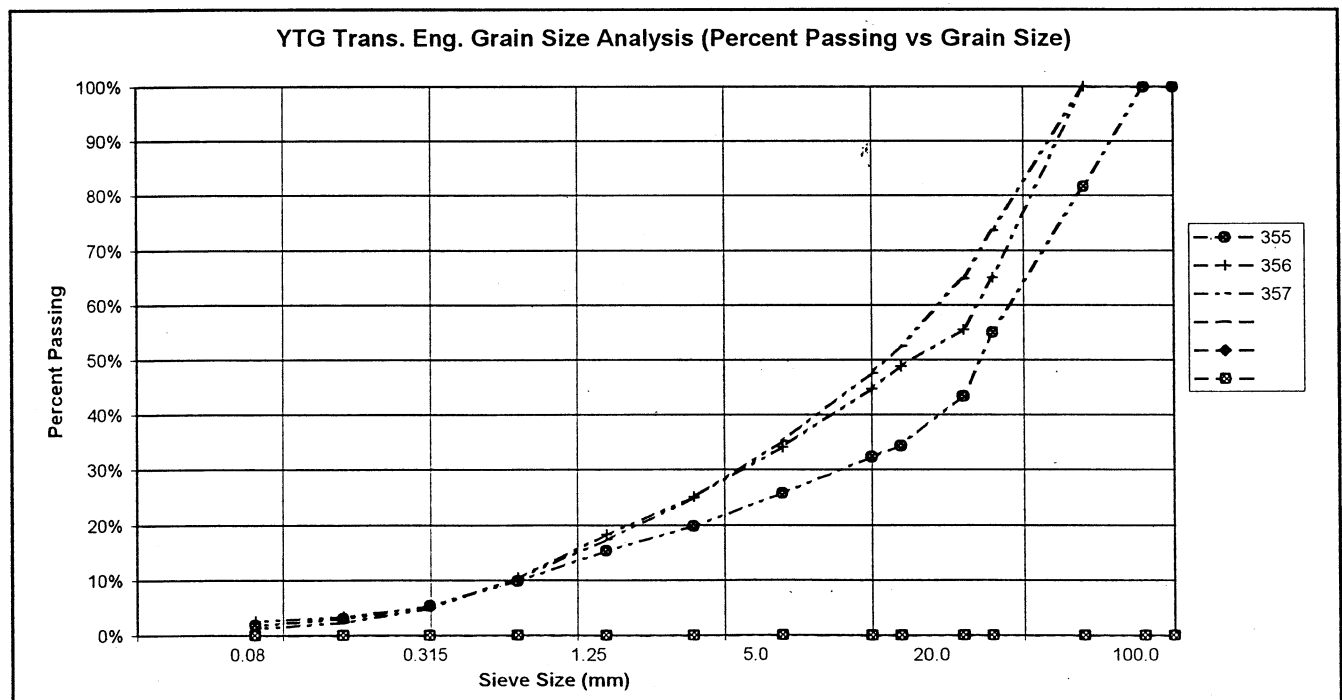


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2498

DATE COMP: SEPT 25/02

FIELD NO:	355	356	357		
LAB NO:	615	616	617		
DEPTH:	0.8-1.3	2.0-2.5	3.0-3.5		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	82%	100%	100%		
25.0	55%	65%	74%		
20.0	43%	56%	65%		
12.5	34%	49%	53%		
10.0	32%	45%	48%		
5.0	26%	34%	35%		
2.5	20%	25%	25%		
1.25	15%	18%	17%		
0.630	10%	10%	10%		
0.315	5%	5%	5%		
0.160	3%	3%	2%		
0.080	2%	3%	1%		
M.C.(%):	2%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0		
% GRAVEL:	74	66	65		
% SAND:	24	32	34		
% FINES:	2	3	1		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

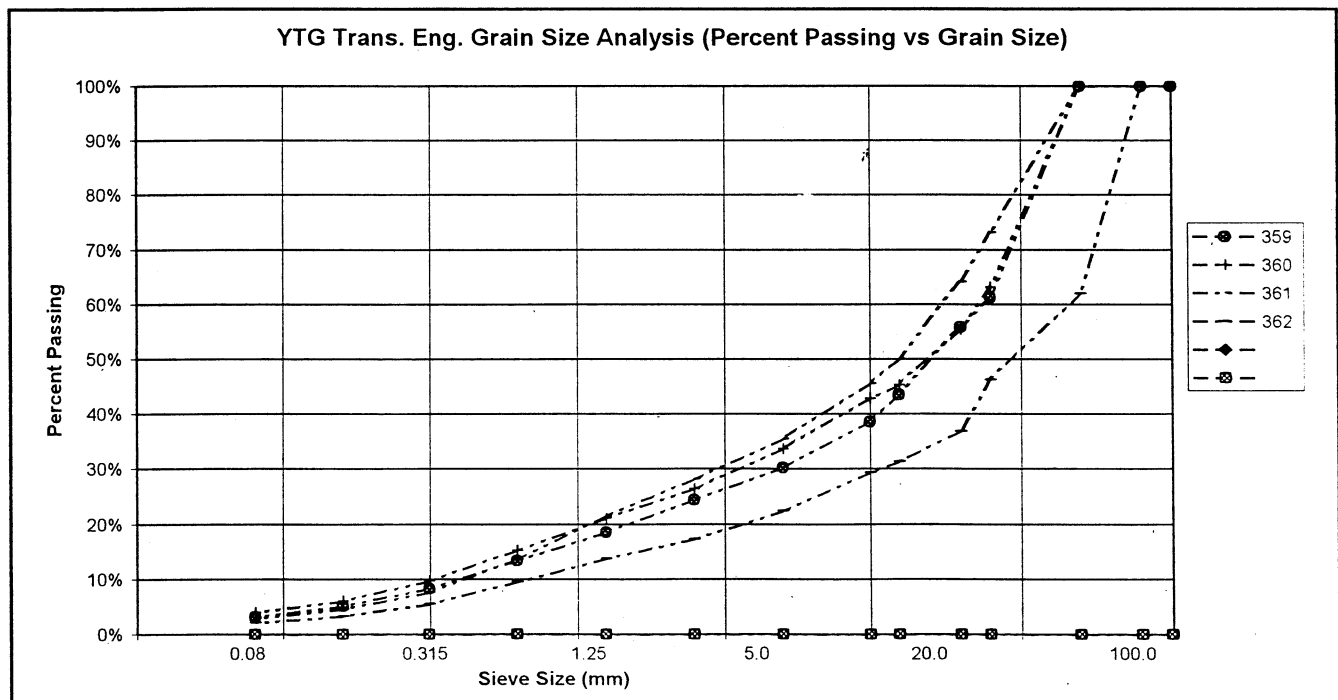


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2499

DATE COMP: SEPT 25/02

FIELD NO:	359	360	361	362		
LAB NO:	618	619	620	621		
DEPTH:	0.5-1.0	2.3-2.8	3.3-3.8	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	62%		
25.0	61%	63%	73%	46%		
20.0	56%	55%	64%	37%		
12.5	44%	45%	50%	31%		
10.0	39%	43%	46%	29%		
5.0	30%	34%	35%	22%		
2.5	24%	26%	28%	17%		
1.25	18%	21%	22%	14%		
0.630	13%	15%	14%	9%		
0.315	8%	10%	8%	6%		
0.160	5%	6%	5%	3%		
0.080	3%	4%	3%	2%		
M.C.(%)	3%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	66	65	78		
% SAND:	27	30	33	20		
% FINES:	3	4	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

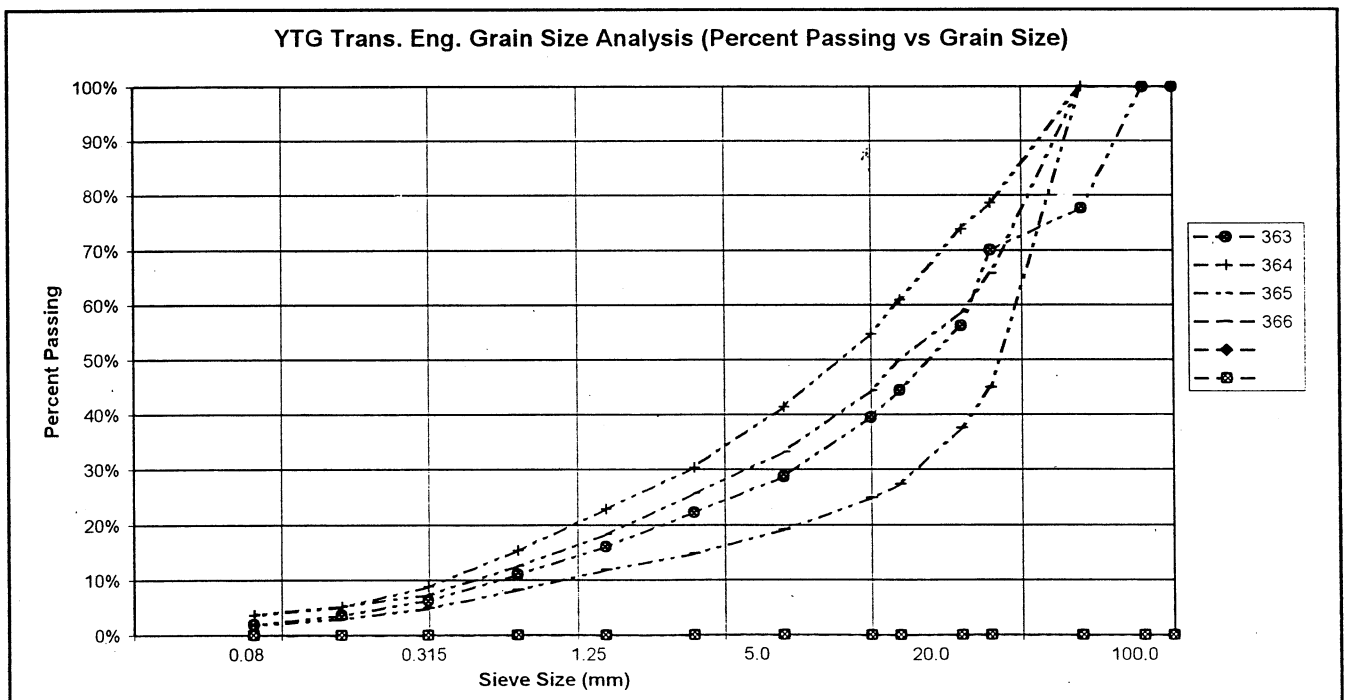


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2500

DATE COMP: SEPT 25/02

FIELD NO:	363	364	365	366		
LAB NO:	622	623	624	625		
DEPTH:	0.5-1.0	2.2-2.7	3.3-3.8	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	78%	100%	100%	100%		
25.0	70%	79%	66%	45%		
20.0	56%	74%	59%	38%		
12.5	45%	61%	50%	27%		
10.0	40%	55%	44%	25%		
5.0	29%	41%	33%	19%		
2.5	22%	30%	26%	15%		
1.25	16%	23%	18%	12%		
0.630	11%	15%	13%	8%		
0.315	6%	9%	7%	5%		
0.160	4%	5%	5%	3%		
0.080	2%	4%	4%	2%		
M.C.(%)	3%	3%	3%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	71	59	67	81		
% SAND:	27	38	29	17		
% FINES:	2	4	4	2		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

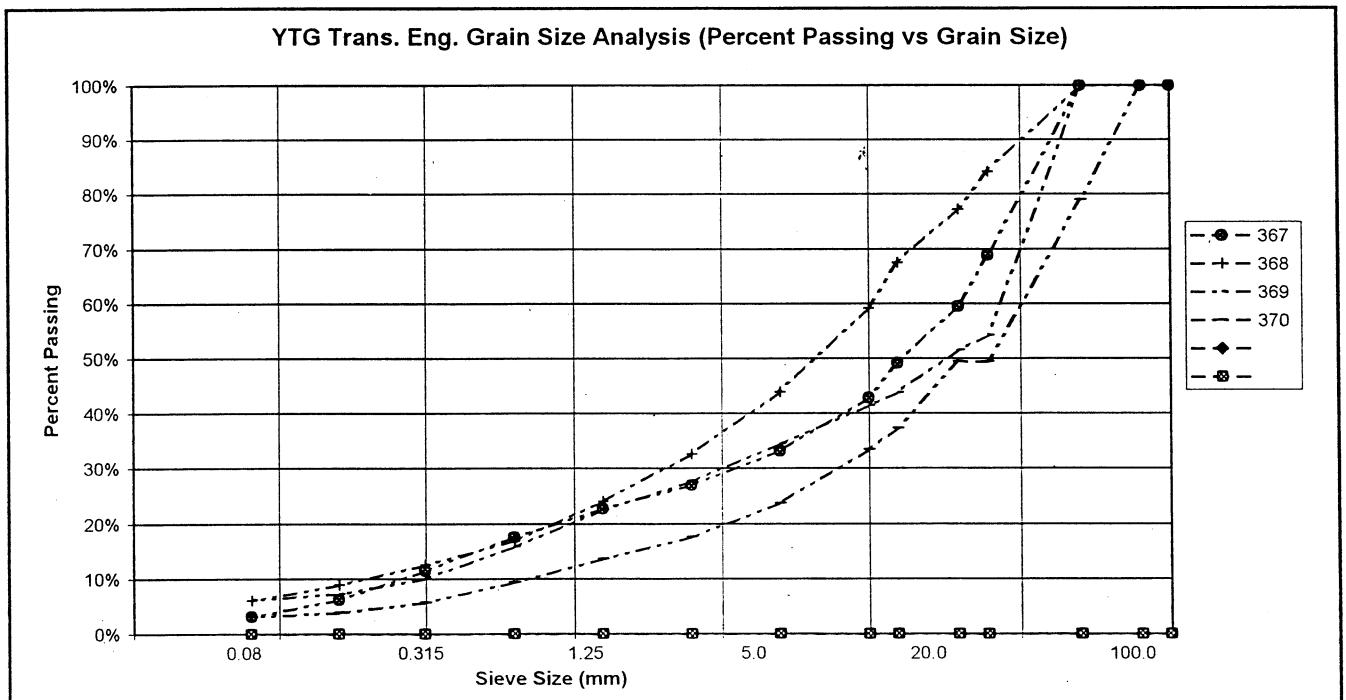


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2501

DATE COMP: SEPT 25/02

FIELD NO:	367	368	369	370		
LAB NO:	626	627	628	629		
DEPTH:	0.8-1.3	2.2-2.7	3.6-4.1	4.8-5.3		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	79%		
25.0	69%	84%	54%	49%		
20.0	60%	77%	52%	49%		
12.5	49%	68%	44%	37%		
10.0	43%	59%	41%	33%		
5.0	33%	44%	35%	24%		
2.5	27%	33%	28%	18%		
1.25	23%	24%	22%	14%		
0.630	18%	17%	16%	9%		
0.315	12%	13%	10%	6%		
0.160	6%	9%	7%	4%		
0.080	3%	6%	6%	3%		
M.C.(%)	2%	2%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	56	65	76		
% SAND:	30	38	28	21		
% FINES:	3	6	6	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

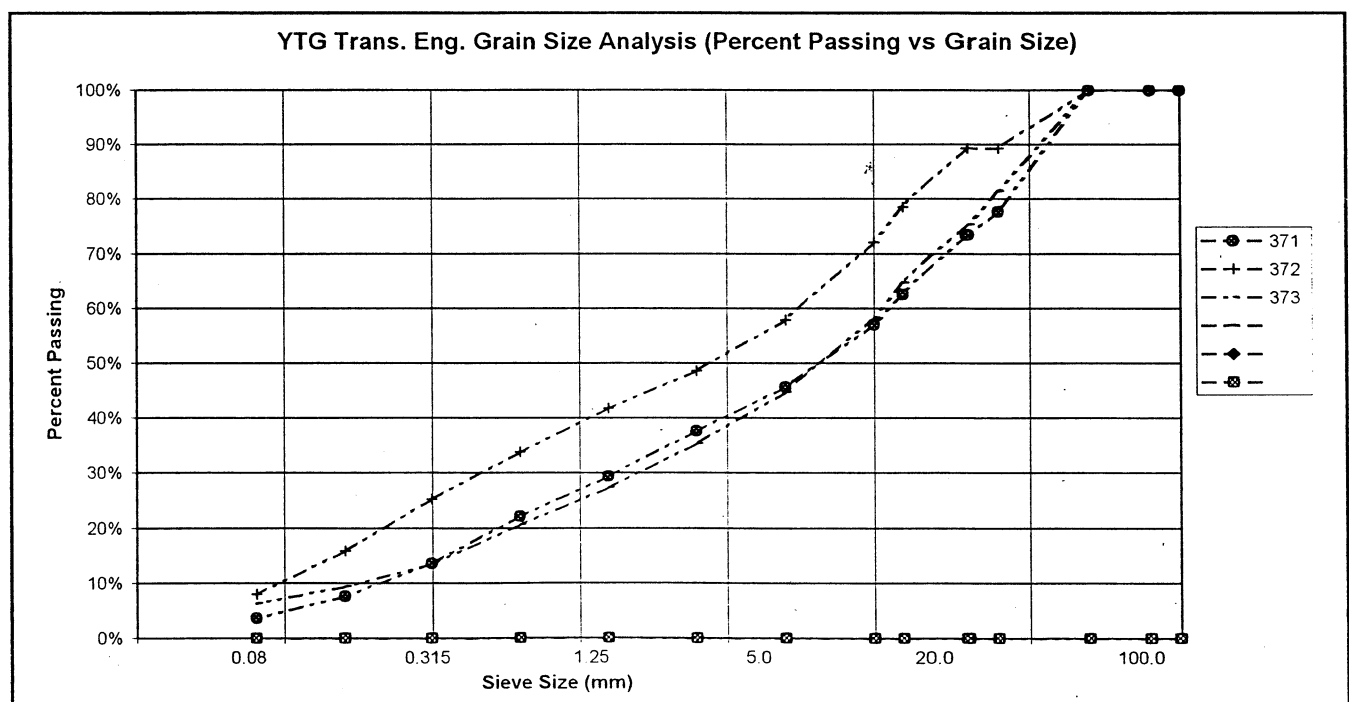


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2502

DATE COMP: SEPT 25/02

FIELD NO:	371	372	373		
LAB NO:	630	631	632		
DEPTH:	0.5-1.0	2.4-2.6	3.1-3.3		
TYPE:	BULK	BULK	BULK	BULK	
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%		
80.0	100%	100%	100%		
50.0	100%	100%	100%		
25.0	78%	89%	81%		
20.0	74%	89%	75%		
12.5	63%	79%	65%		
10.0	57%	72%	58%		
5.0	46%	58%	45%		
2.5	38%	49%	35%		
1.25	29%	42%	27%		
0.630	22%	34%	21%		
0.315	14%	25%	14%		
0.160	8%	16%	9%		
0.080	4%	8%	6%		
M.C.(%)	2%	5%	6%		
LIQUID LIMIT:	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0		
% GRAVEL:	54	42	55		
% SAND:	42	50	38		
% FINES:	4	8	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

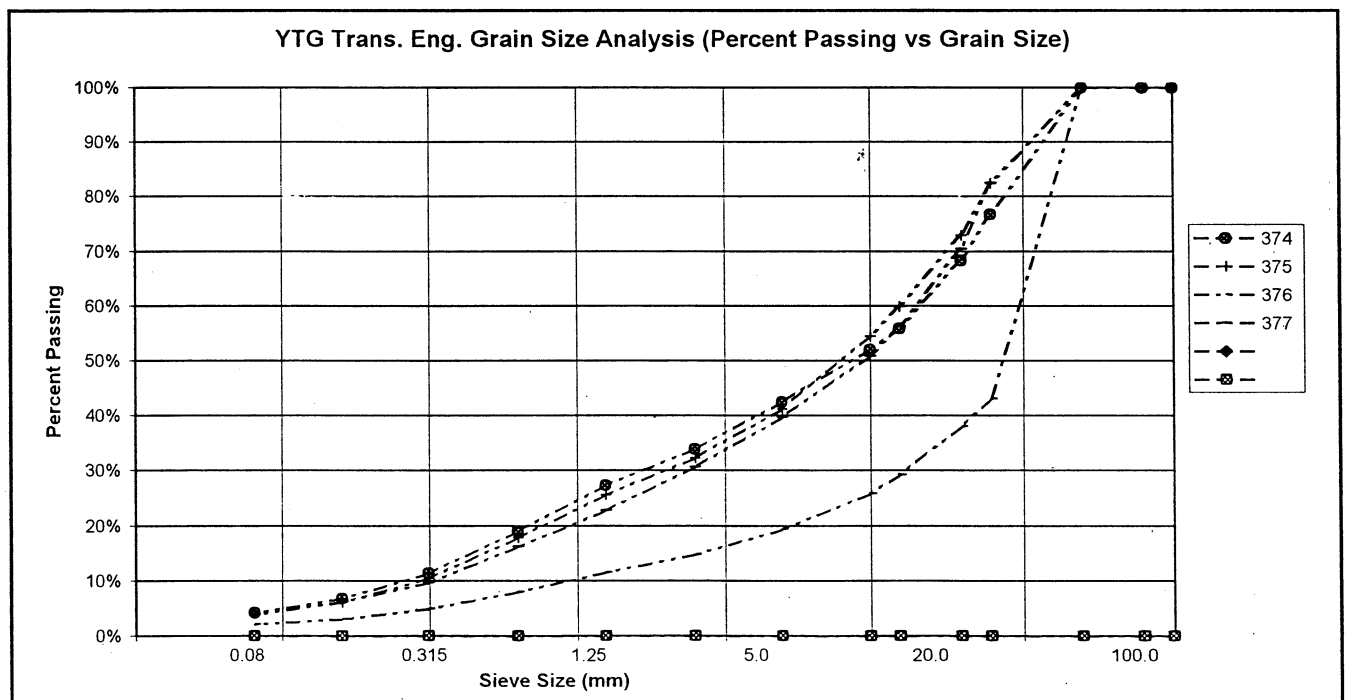


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2503

DATE COMP: SEPT 25/02

FIELD NO:	374	375	376	377		
LAB NO:	633	634	635	636		
DEPTH:	0.3-0.6	2.4-2.9	3.1-3.6	4.8-5.3		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	77%	82%	43%	83%		
20.0	68%	73%	38%	70%		
12.5	56%	60%	29%	56%		
10.0	52%	55%	26%	51%		
5.0	42%	41%	19%	40%		
2.5	34%	32%	15%	31%		
1.25	27%	26%	11%	23%		
0.630	19%	18%	8%	16%		
0.315	11%	10%	5%	10%		
0.160	7%	6%	3%	6%		
0.080	4%	4%	2%	4%		
M.C.(%)	3%	3%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	58	59	81	60		
% SAND:	38	37	17	36		
% FINES:	4	4	2	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		

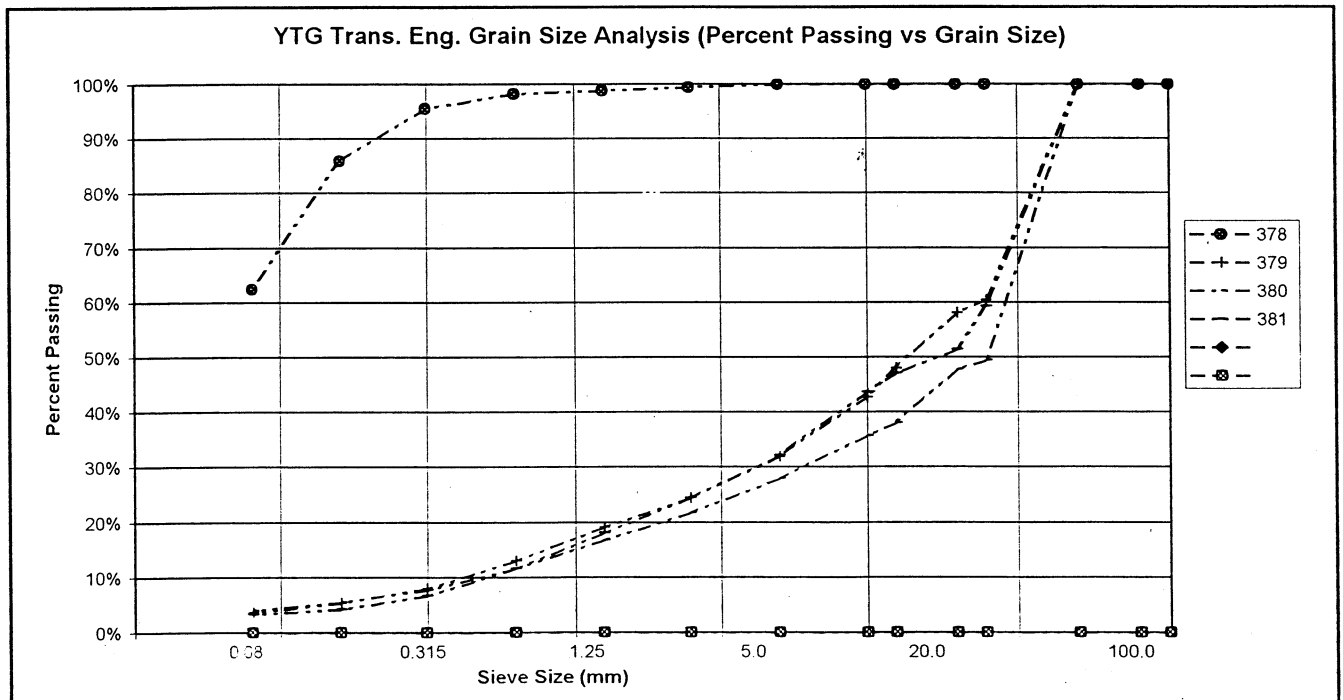


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2504

DATE COMP: SEPT 25/02

FIELD NO:	378	379	380	381		
LAB NO:	637	638	639	640		
DEPTH:	0.3-0.8	1.2-1.7	2.9-3.4	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	100%	60%	49%	59%		
20.0	100%	58%	48%	51%		
12.5	100%	48%	38%	47%		
10.0	100%	43%	36%	44%		
5.0	100%	32%	28%	32%		
2.5	99%	24%	22%	24%		
1.25	99%	19%	17%	18%		
0.630	98%	13%	12%	12%		
0.315	96%	8%	8%	7%		
0.160	86%	5%	6%	4%		
0.080	62%	4%	4%	3%		
M.C.(%)	15%	3%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	0	68	72	68		
% SAND:	38	28	24	29		
% FINES:	62	4	4	3		
CLASSIFICATION	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		

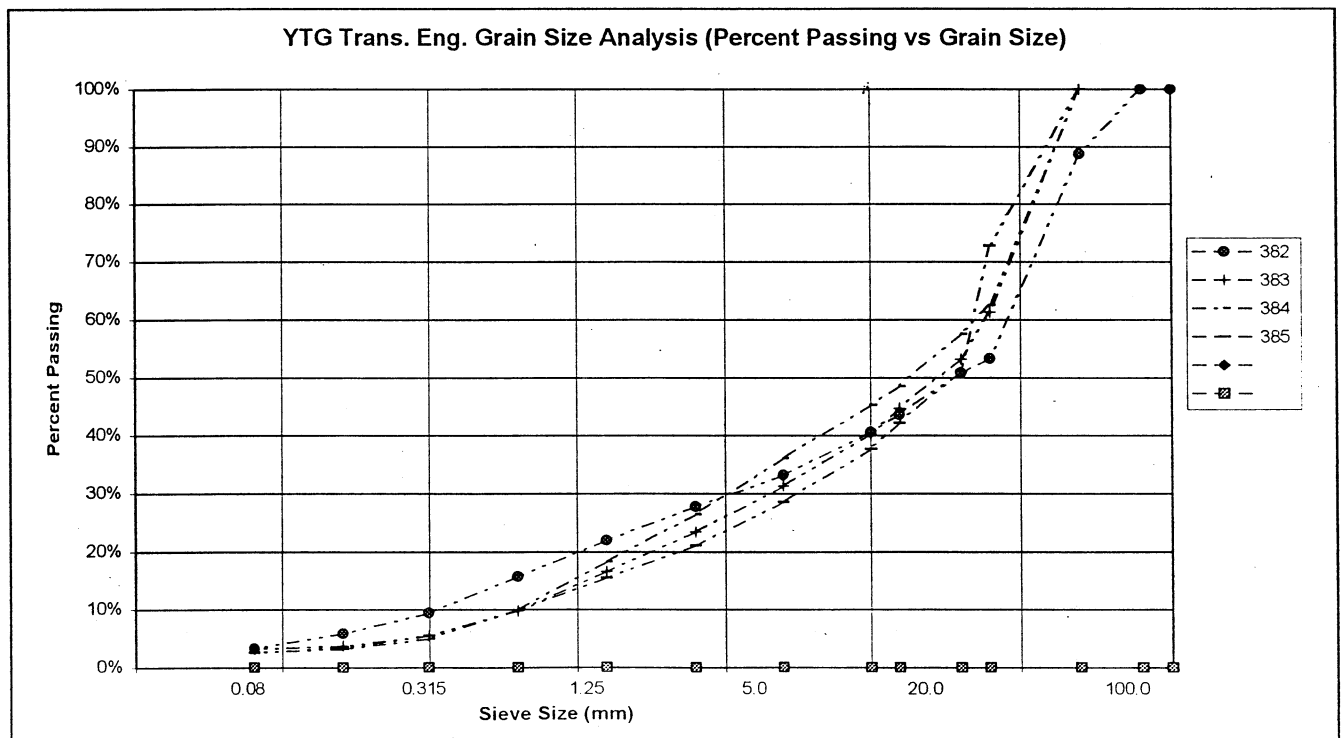


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2505

DATE COMP: SEPT 26/02

FIELD NO:	382	383	384	385		
LAB NO:	641	642	643	644		
DEPTH:	0.3-0.8	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	89%	100%	100%	100%		
25.0	53%	61%	63%	73%		
20.0	51%	53%	58%	51%		
12.5	44%	45%	48%	42%		
10.0	41%	40%	45%	38%		
5.0	33%	31%	36%	29%		
2.5	28%	23%	26%	21%		
1.25	22%	17%	18%	16%		
0.630	16%	10%	10%	10%		
0.315	10%	6%	5%	6%		
0.160	6%	4%	3%	3%		
0.080	3%	3%	3%	3%		
M.C.(%):	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	69	64	71		
% SAND:	30	28	33	26		
% FINES:	3	3	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

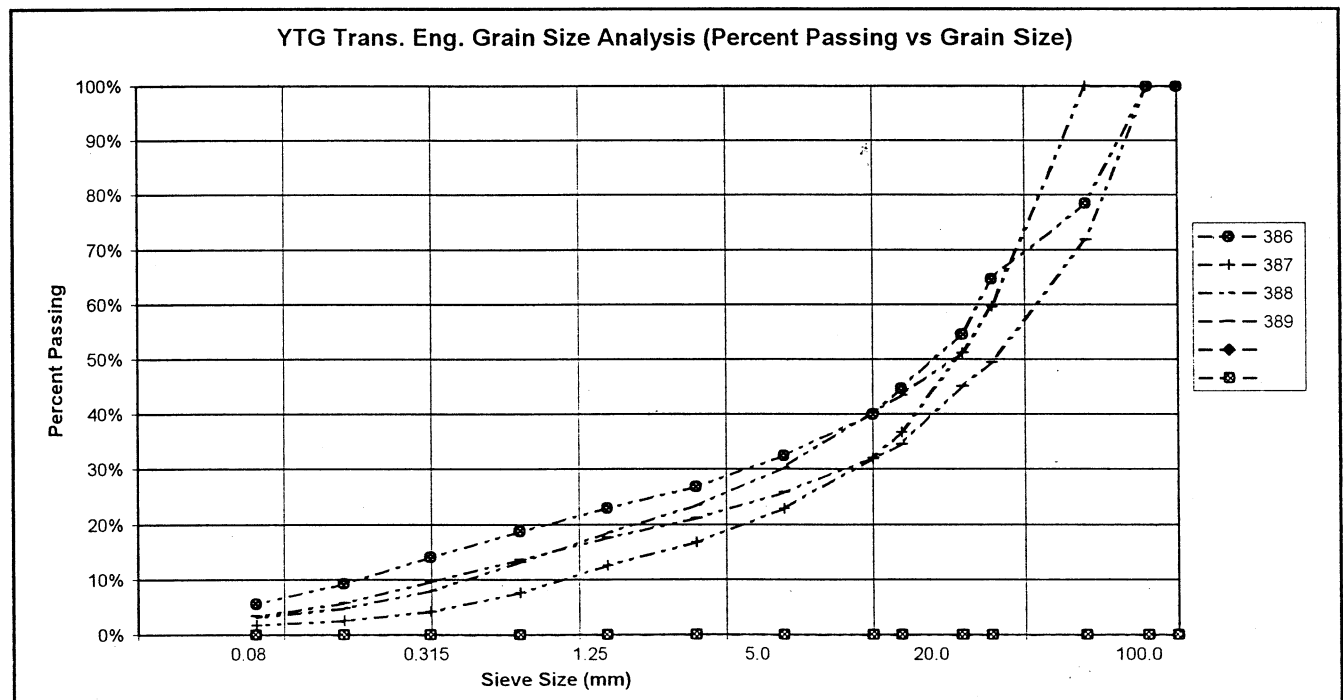


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2506

DATE COMP: SEPT 26/02

FIELD NO:	386	387	388	389		
LAB NO:	645	646	647	648		
DEPTH:	0.3-0.8	2.1-2.6	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	79%	100%	100%	72%		
25.0	65%	60%	60%	49%		
20.0	55%	51%	51%	45%		
12.5	45%	37%	43%	34%		
10.0	40%	32%	40%	32%		
5.0	33%	23%	30%	26%		
2.5	27%	17%	23%	21%		
1.25	23%	13%	19%	18%		
0.630	19%	8%	13%	14%		
0.315	14%	4%	8%	10%		
0.160	9%	3%	5%	6%		
0.080	6%	2%	3%	3%		
M.C.(%)	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	67	77	70	74		
% SAND:	27	21	27	22		
% FINES:	6	2	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

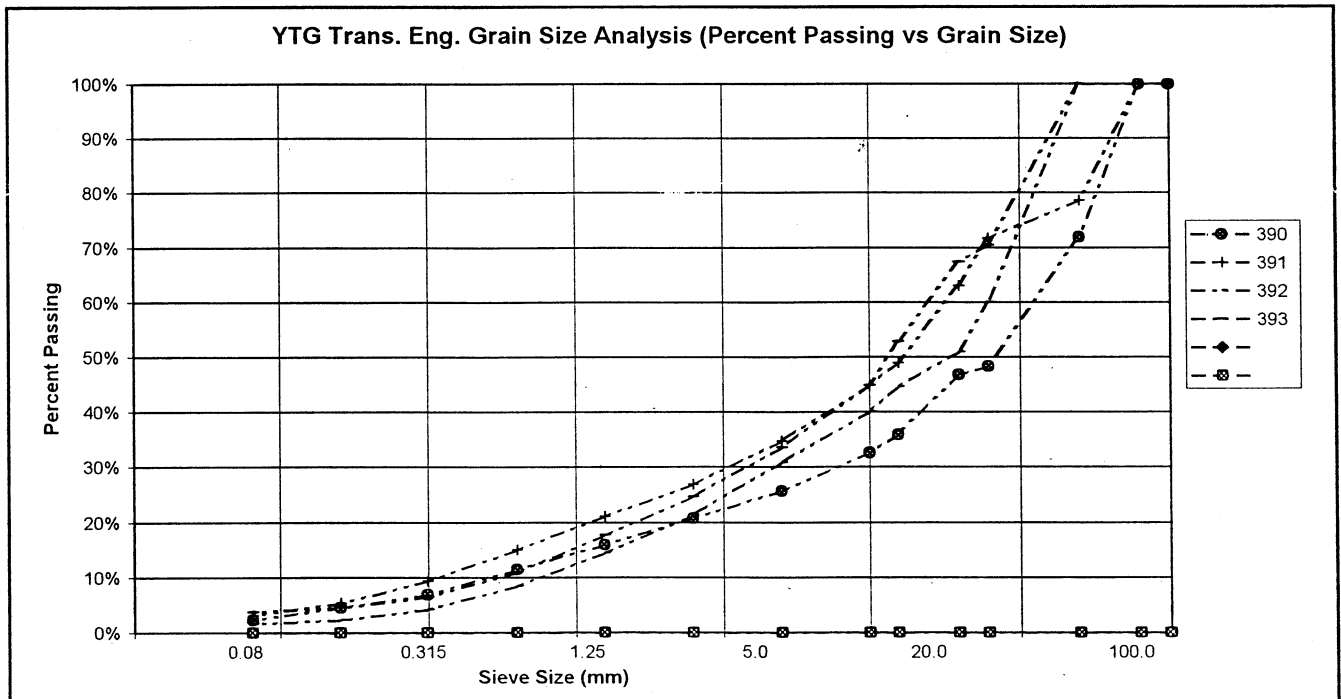


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2507

DATE COMP: SEPT 26/02

FIELD NO:	390	391	392	393		
LAB NO:	649	650	651	652		
DEPTH:	0.5-1.0	2.2-2.7	3.4-3.9	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	72%	79%	100%	100%		
25.0	48%	72%	60%	70%		
20.0	47%	63%	51%	67%		
12.5	36%	49%	45%	53%		
10.0	33%	45%	40%	45%		
5.0	26%	35%	31%	34%		
2.5	21%	27%	21%	25%		
1.25	16%	21%	14%	18%		
0.630	11%	15%	8%	11%		
0.315	7%	9%	4%	6%		
0.160	5%	5%	2%	5%		
0.080	2%	3%	2%	4%		
M.C.(%)	2%	3%	2%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	74	65	69	66		
% SAND:	23	32	29	30		
% FINES:	2	3	2	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

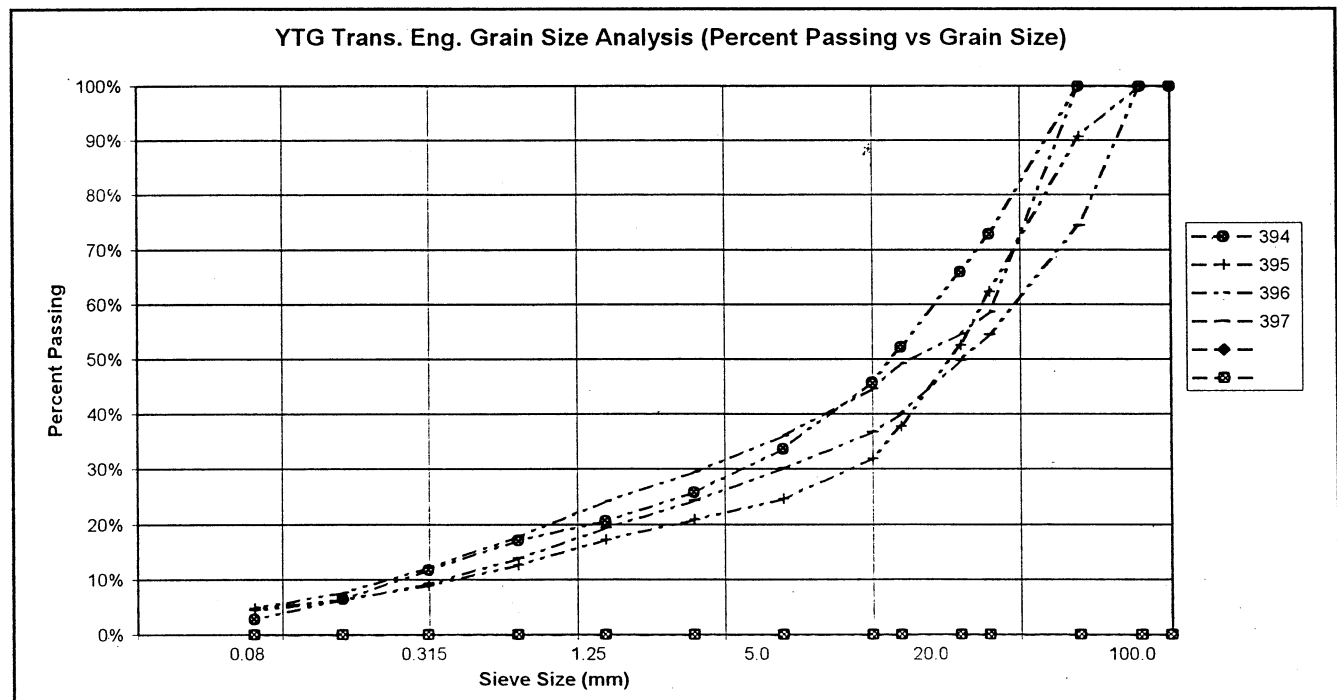


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2508

DATE COMP: SEPT 26/02

FIELD NO:	394	395	396	397		
LAB NO:	653	654	655	656		
DEPTH:	0.3-0.6	2.2-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	91%	100%	74%		
25.0	73%	62%	59%	54%		
20.0	66%	53%	55%	50%		
12.5	52%	38%	49%	40%		
10.0	46%	32%	45%	37%		
5.0	34%	25%	36%	30%		
2.5	26%	21%	29%	24%		
1.25	21%	17%	24%	19%		
0.630	17%	13%	18%	14%		
0.315	12%	9%	12%	9%		
0.160	6%	6%	8%	6%		
0.080	3%	5%	5%	4%		
M.C.(%)	2%	3%	3%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	75	64	70		
% SAND:	31	20	31	26		
% FINES:	3	5	5	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

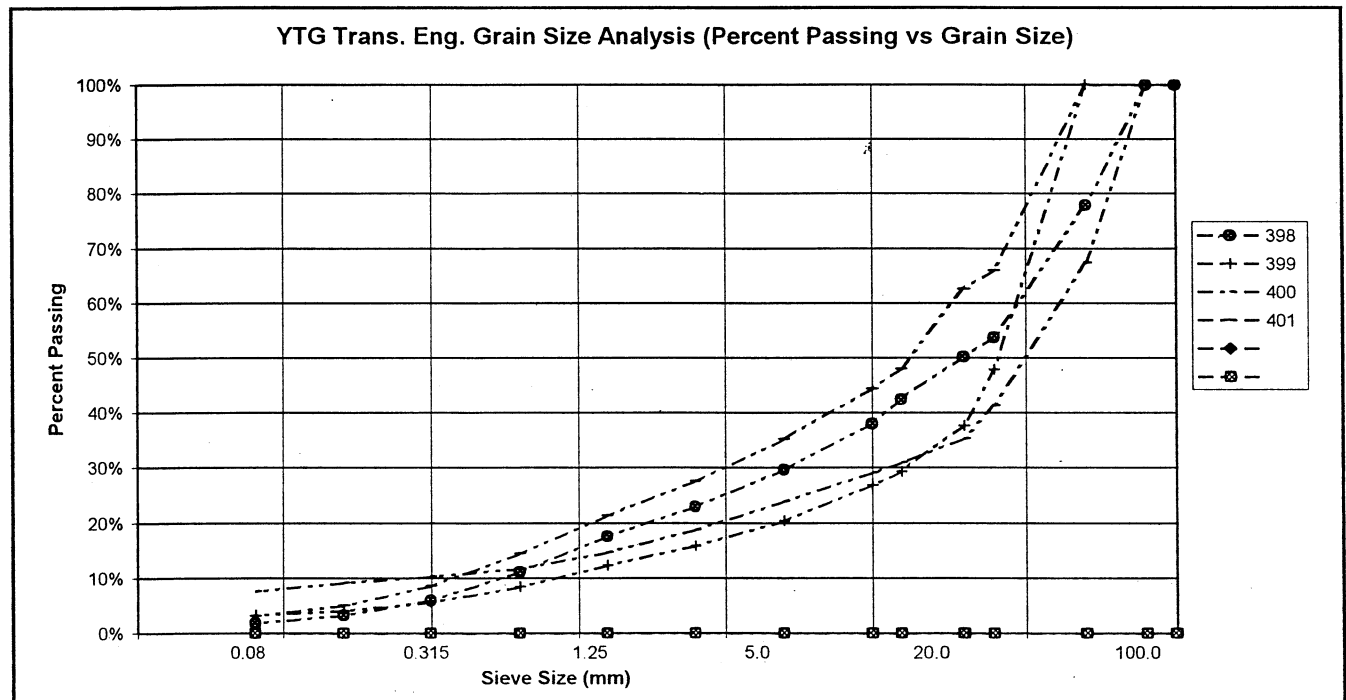


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2509

DATE COMP: SEPT 26/02

FIELD NO:	398	399	400	401		
LAB NO:	657	658	660	661		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	78%	100%	67%	100%		
25.0	54%	48%	41%	66%		
20.0	50%	38%	35%	63%		
12.5	43%	29%	31%	48%		
10.0	38%	27%	29%	44%		
5.0	30%	20%	24%	35%		
2.5	23%	16%	19%	28%		
1.25	18%	12%	15%	21%		
0.630	11%	8%	12%	14%		
0.315	6%	6%	10%	9%		
0.160	3%	4%	9%	5%		
0.080	2%	3%	8%	3%		
M.C.(%):	2%	3%	5%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	80	76	65		
% SAND:	28	17	16	32		
% FINES:	2	3	8	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

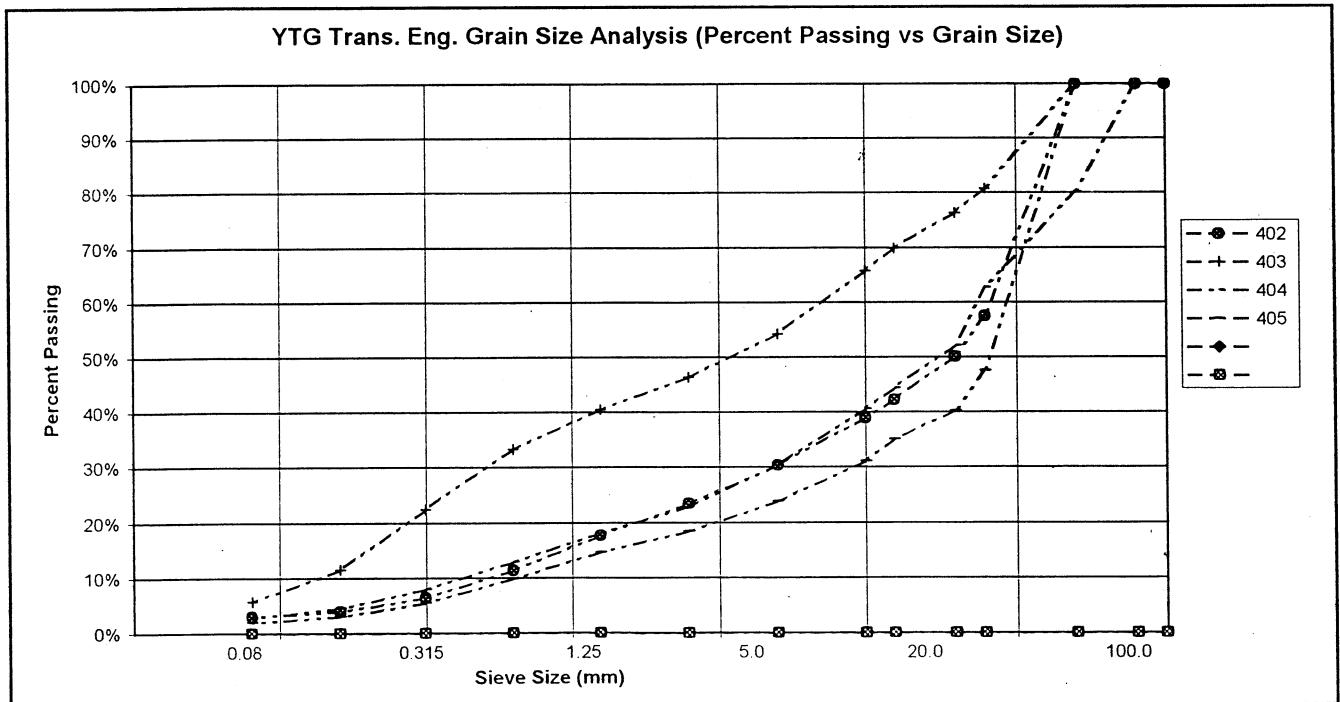


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2510

DATE COMP: SEPT 26/02

FIELD NO:	402	403	404	405		
LAB NO:	661	662	663	664		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	80%	100%		
25.0	58%	81%	63%	48%		
20.0	50%	76%	52%	40%		
12.5	42%	70%	44%	35%		
10.0	39%	66%	41%	31%		
5.0	30%	54%	30%	24%		
2.5	23%	46%	23%	18%		
1.25	18%	41%	18%	15%		
0.630	11%	33%	13%	10%		
0.315	6%	22%	8%	5%		
0.160	4%	11%	5%	3%		
0.080	3%	6%	3%	2%		
M.C.(%)	3%	4%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	46	70	76		
% SAND:	27	48	28	22		
% FINES:	3	6	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

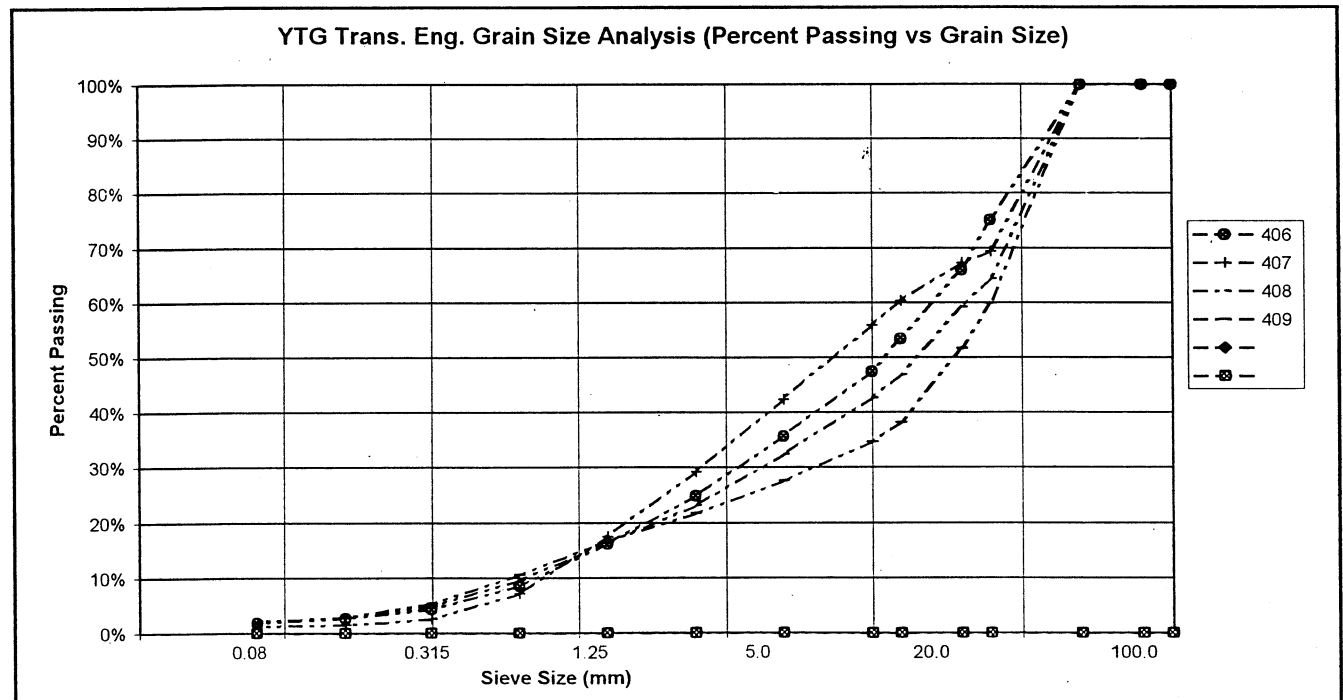


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2511

DATE COMP: SEPT 26/02

FIELD NO:	406	407	408	409		
LAB NO:	665	666	667	668		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	75%	69%	64%	60%		
20.0	66%	67%	59%	52%		
12.5	53%	60%	47%	38%		
10.0	47%	56%	43%	35%		
5.0	36%	42%	32%	28%		
2.5	25%	29%	23%	22%		
1.25	16%	17%	16%	17%		
0.630	9%	7%	10%	11%		
0.315	4%	3%	5%	5%		
0.160	3%	1%	3%	3%		
0.080	2%	1%	2%	2%		
M.C.(%)	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	64	58	68	72		
% SAND:	34	41	30	26		
% FINES:	2	1	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

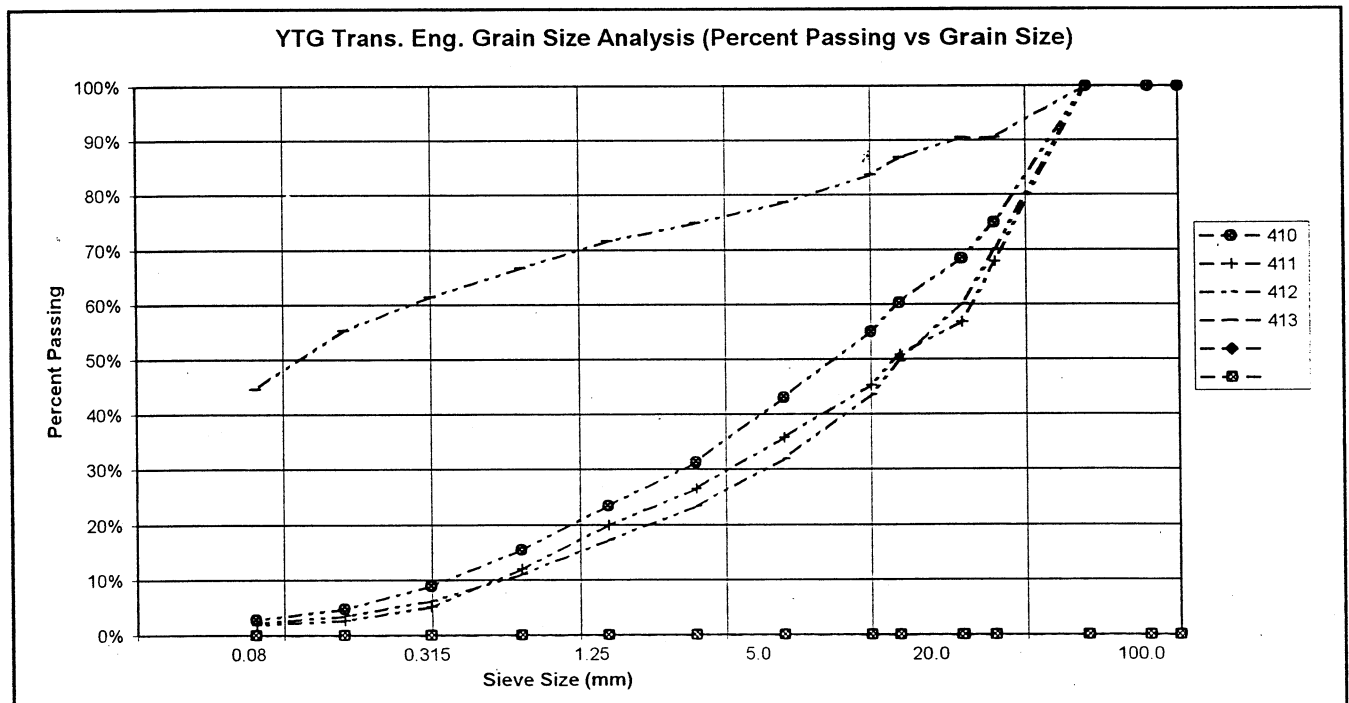


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2512

DATE COMP: SEPT 26/02

FIELD NO:	410	411	412	413		
LAB NO:	669	670	671	672		
DEPTH:	0.6-1.1	2.3-2.8	3.2-3.7	4.2-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	75%	68%	70%	91%		
20.0	68%	57%	60%	91%		
12.5	60%	51%	50%	87%		
10.0	55%	45%	44%	84%		
5.0	43%	36%	32%	79%		
2.5	31%	27%	23%	75%		
1.25	23%	20%	17%	72%		
0.630	16%	12%	11%	67%		
0.315	9%	5%	6%	61%		
0.160	5%	3%	4%	55%		
0.080	3%	2%	2%	45%		
M.C.(%)	3%	2%	2%	20%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	64	68	21		
% SAND:	40	34	30	34		
% FINES:	3	2	2	45		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)		

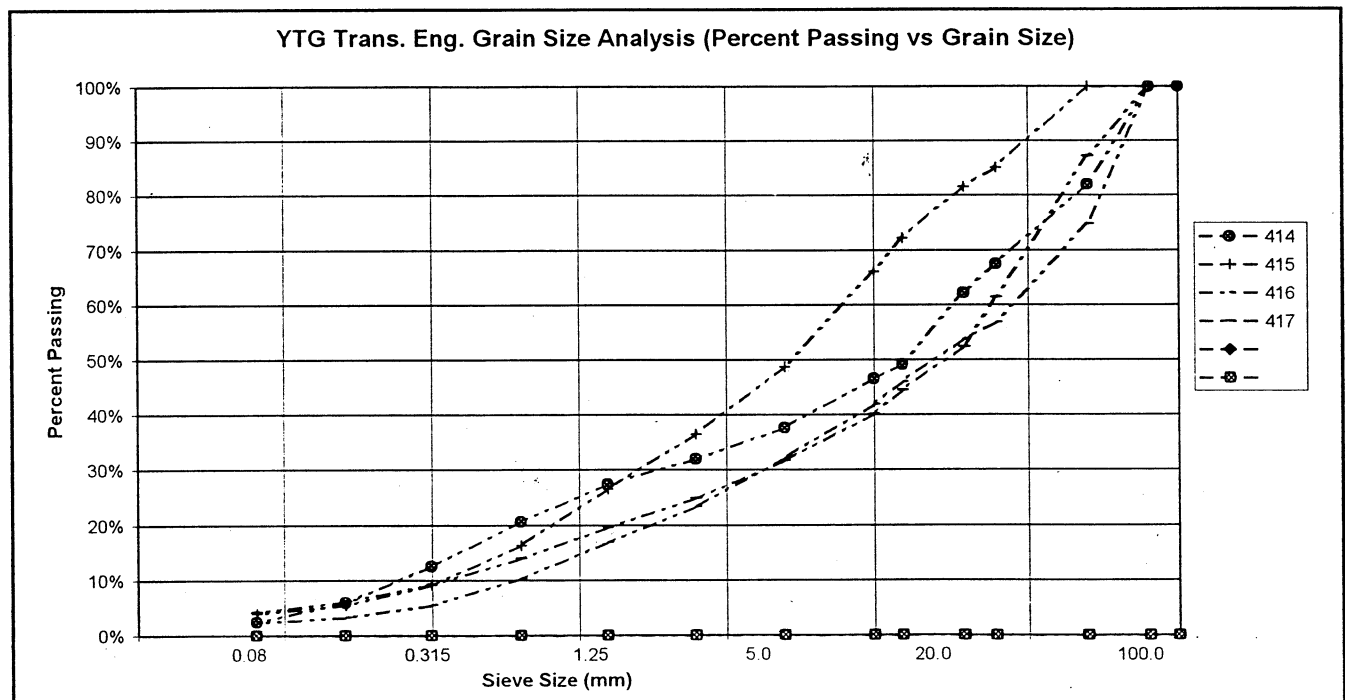


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2513

DATE COMP: SEPT 26/02

FIELD NO:	414	415	416	417		
LAB NO:	673	674	675	676		
DEPTH:	0.5-1.0	2.0-2.5	2.9-3.4	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	82%	100%	75%	87%		
25.0	67%	85%	57%	61%		
20.0	62%	82%	54%	52%		
12.5	49%	72%	46%	44%		
10.0	47%	66%	42%	40%		
5.0	38%	49%	32%	32%		
2.5	32%	36%	23%	25%		
1.25	27%	27%	17%	20%		
0.630	21%	16%	10%	14%		
0.315	13%	9%	6%	9%		
0.160	6%	6%	3%	6%		
0.080	2%	4%	2%	4%		
M.C.(%)	2%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	62	51	68	68		
% SAND:	35	45	30	27		
% FINES:	2	4	2	4		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

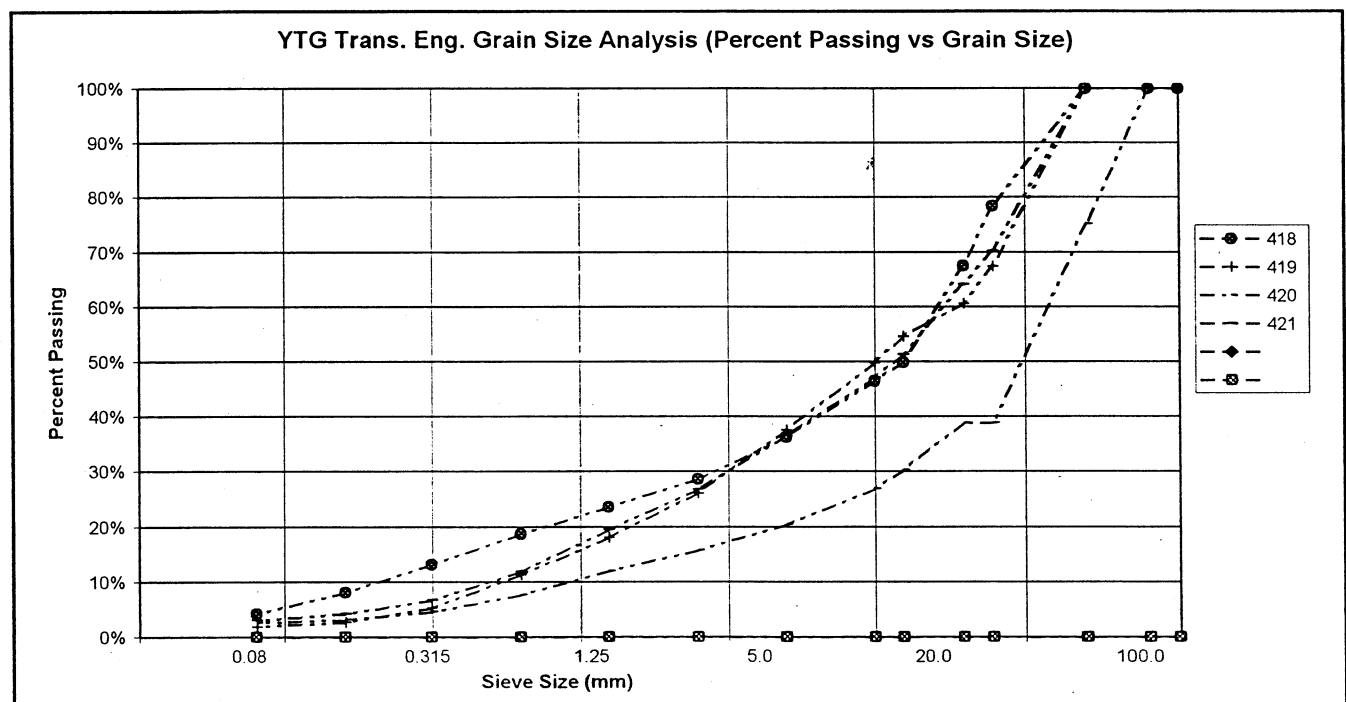


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS AVH Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2514

DATE COMP: SEPT 26/02

FIELD NO:	418	419	420	421		
LAB NO:	677	678	679	680		
DEPTH:	0.5-1.0	2.0-2.5	3.2-3.7	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	75%	100%		
25.0	78%	67%	39%	70%		
20.0	67%	61%	39%	64%		
12.5	50%	55%	30%	51%		
10.0	46%	50%	27%	47%		
5.0	36%	38%	20%	37%		
2.5	29%	26%	16%	27%		
1.25	24%	18%	12%	20%		
0.630	19%	11%	8%	12%		
0.315	13%	5%	5%	7%		
0.160	8%	3%	3%	4%		
0.080	4%	2%	3%	3%		
M.C.(%)	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	64	62	80	63		
% SAND:	32	36	18	33		
% FINES:	4	2	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)		

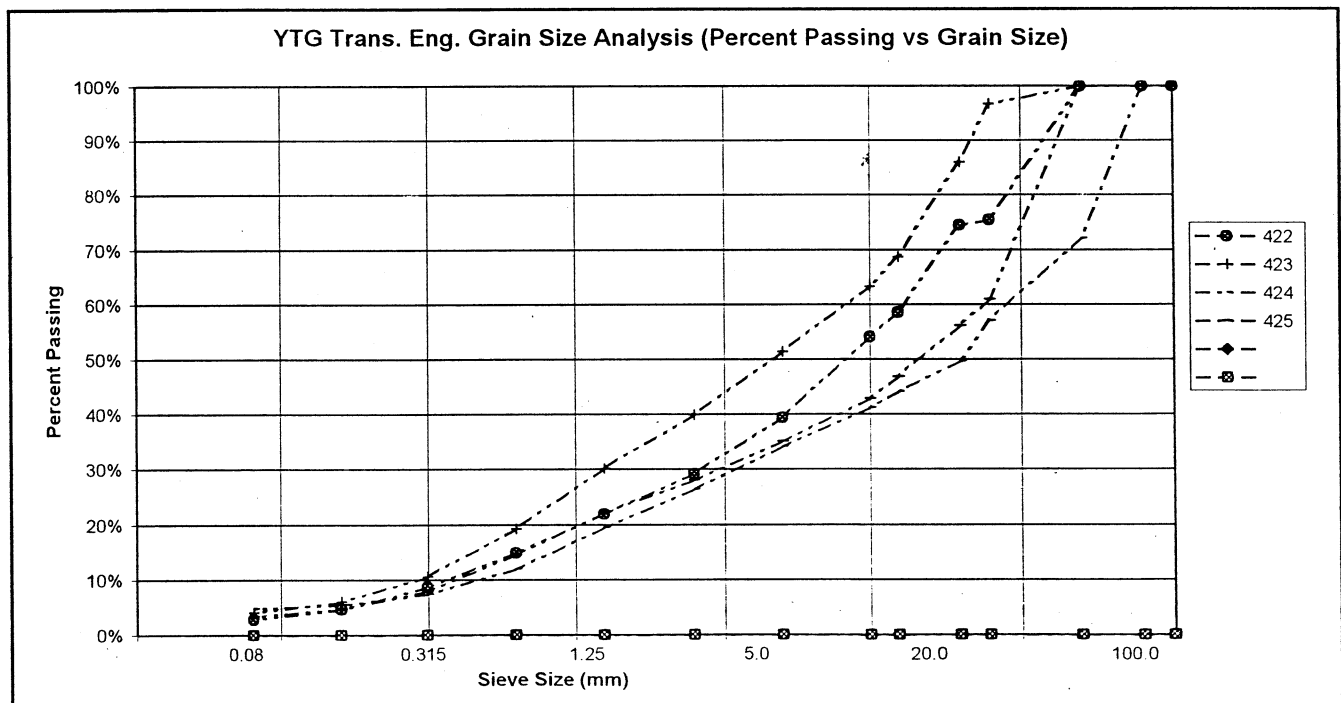


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2515

DATE COMP: SEPT 26/02

FIELD NO:	422	423	424	425		
LAB NO:	681	682	683	684		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	72%	100%		
25.0	76%	97%	57%	61%		
20.0	75%	86%	50%	56%		
12.5	59%	69%	44%	47%		
10.0	54%	63%	41%	43%		
5.0	39%	51%	34%	35%		
2.5	29%	40%	26%	28%		
1.25	22%	30%	19%	22%		
0.630	15%	19%	12%	15%		
0.315	9%	11%	7%	8%		
0.160	5%	6%	6%	5%		
0.080	3%	4%	5%	3%		
M.C.(%)	2%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	49	66	65		
% SAND:	37	47	29	32		
% FINES:	3	4	5	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

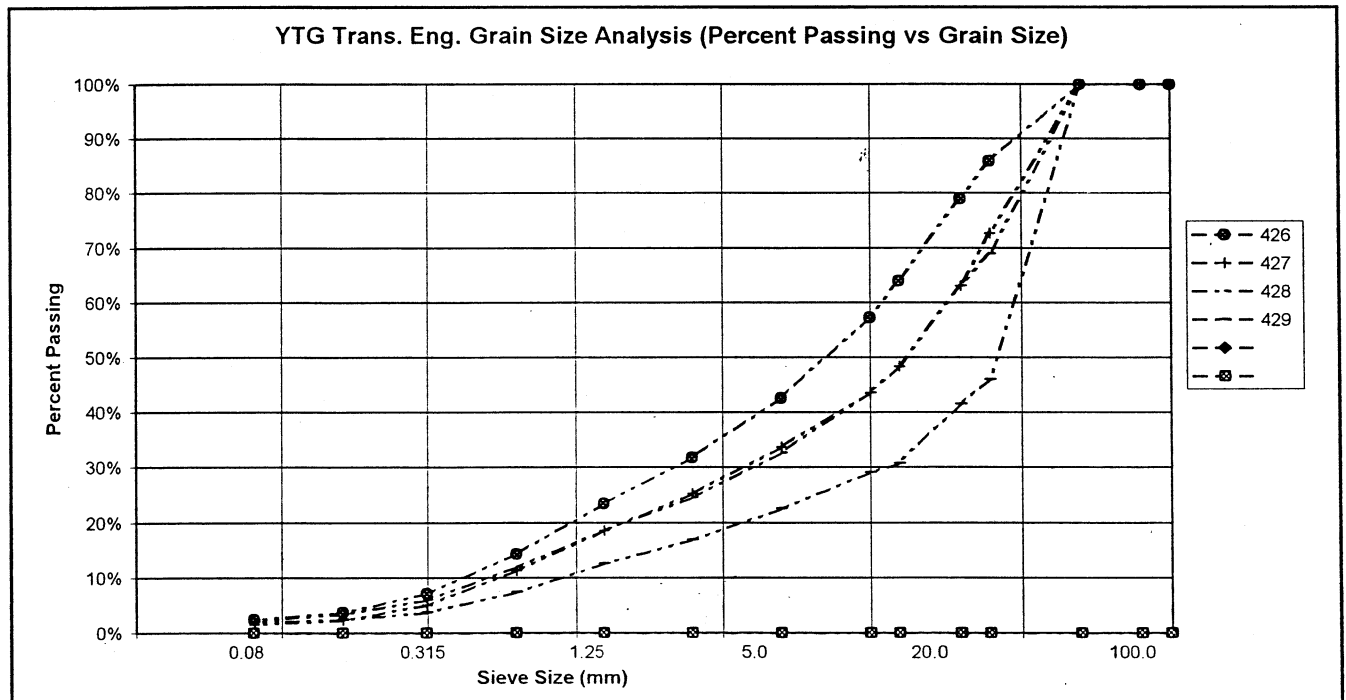


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2516

DATE COMP: SEPT 26/02

FIELD NO:	426	427	428	429		
LAB NO:	685	686	687	689		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	86%	73%	69%	46%		
20.0	79%	63%	63%	42%		
12.5	64%	48%	48%	31%		
10.0	57%	44%	44%	29%		
5.0	43%	34%	33%	23%		
2.5	32%	25%	25%	17%		
1.25	24%	19%	19%	13%		
0.630	14%	11%	12%	7%		
0.315	7%	5%	6%	4%		
0.160	4%	2%	3%	2%		
0.080	2%	1%	2%	2%		
M.C.(%)	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	66	67	77		
% SAND:	40	32	30	21		
% FINES:	2	1	2	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)		

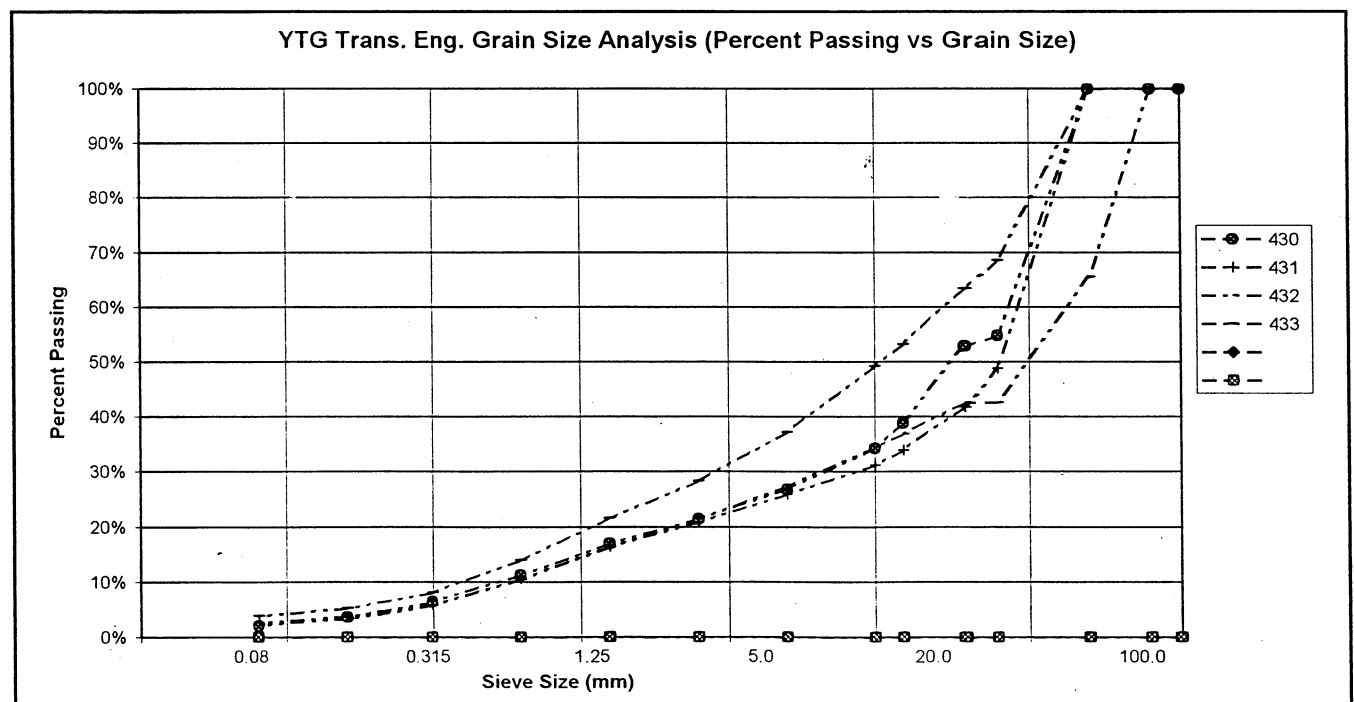


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2717

DATE COMP: SEPT 26/02

FIELD NO:	430	431	432	433		
LAB NO:	689	690	691	692		
DEPTH:	0.5-1.0	2.2-2.7	3.0-3.5	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	65%	100%		
25.0	55%	49%	43%	69%		
20.0	53%	42%	43%	63%		
12.5	39%	34%	37%	53%		
10.0	34%	31%	35%	49%		
5.0	27%	26%	27%	37%		
2.5	22%	21%	22%	28%		
1.25	17%	16%	16%	22%		
0.630	11%	11%	10%	14%		
0.315	6%	6%	6%	8%		
0.160	4%	4%	3%	5%		
0.080	2%	3%	2%	4%		
M.C.(%)	1%	3%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	73	74	73	63		
% SAND:	25	23	25	33		
% FINES:	2	3	2	4		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



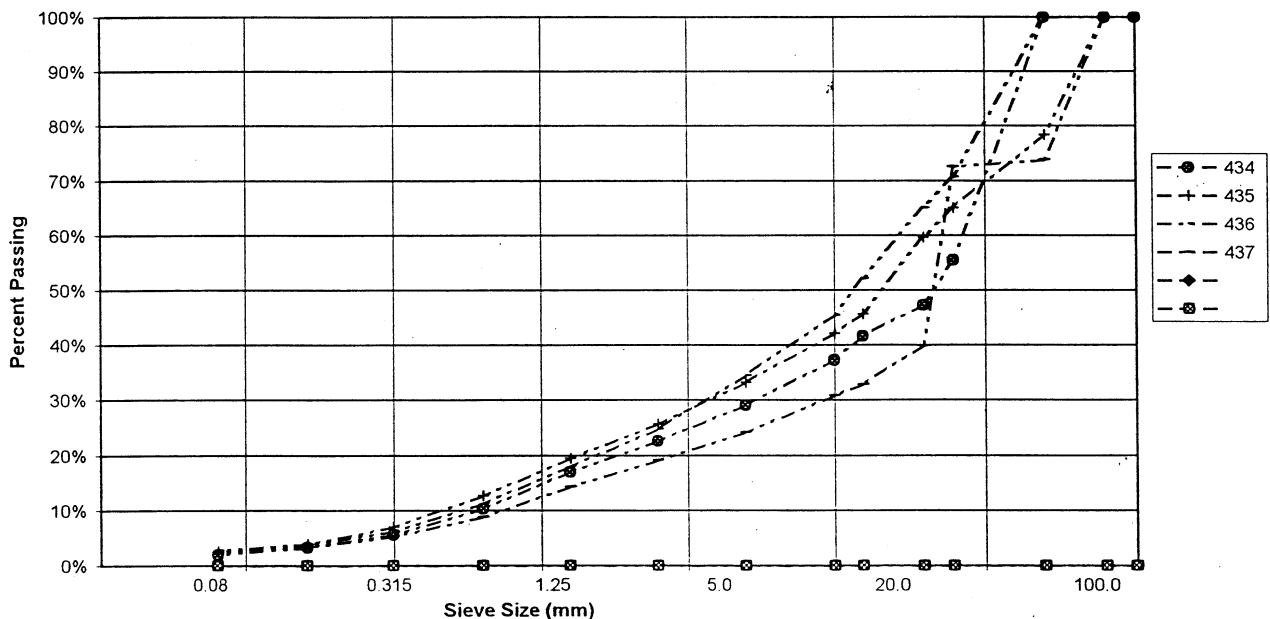
PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2518

DATE COMP: SEPT 26/02

FIELD NO:	434	435	436	437		
LAB NO:	693	694	695	696		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	78%	100%	74%		
25.0	56%	65%	71%	73%		
20.0	47%	60%	65%	40%		
12.5	42%	46%	52%	33%		
10.0	37%	42%	45%	31%		
5.0	29%	33%	35%	24%		
2.5	23%	26%	25%	19%		
1.25	17%	20%	18%	14%		
0.630	10%	13%	11%	9%		
0.315	6%	7%	6%	5%		
0.160	3%	4%	4%	3%		
0.080	2%	3%	3%	2%		
M.C.(%)	2%	3%	4%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	71	67	65	76		
% SAND:	27	31	32	22		
% FINES:	2	3	3	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

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

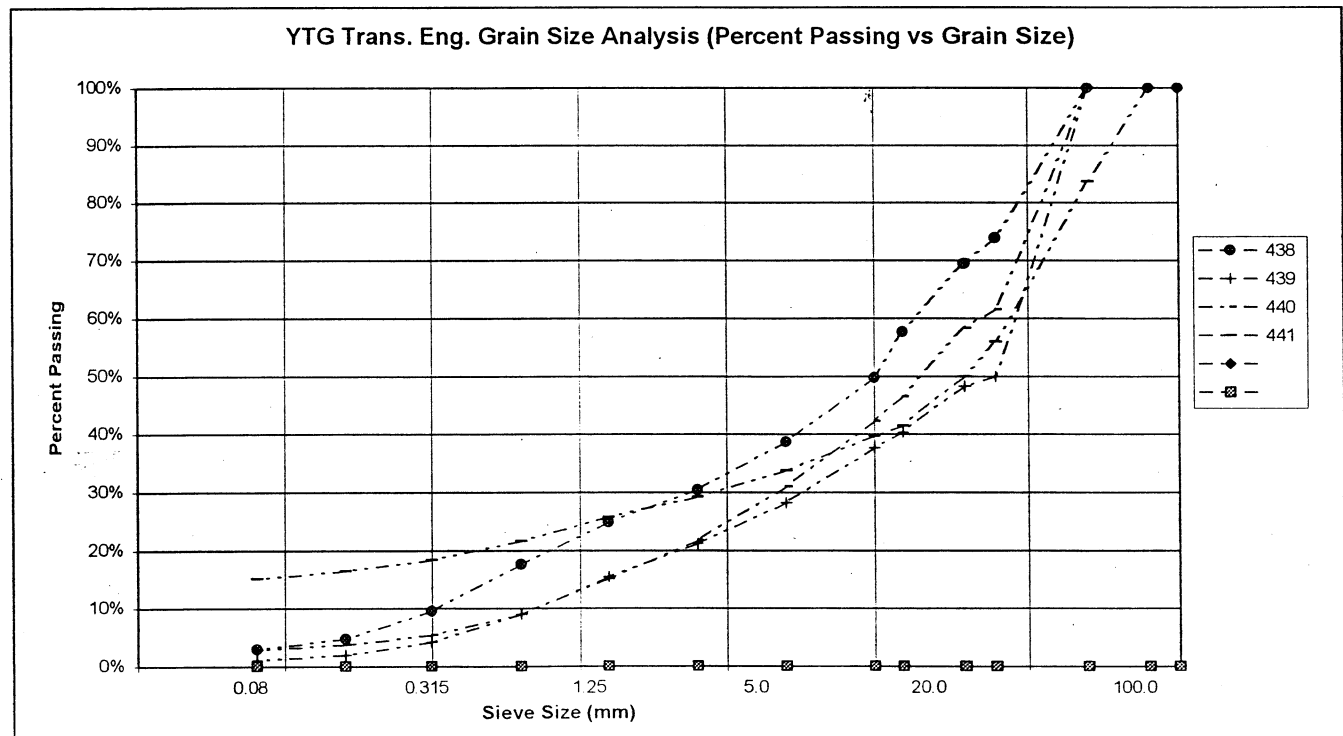


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2519

DATE COMP: SEPT 26/02

FIELD NO:	438	439	440	441		
LAB NO:	697	698	699	700		
DEPTH:	0.5-1.0	1.7-2.2	3.0-3.5	4.3-4.8		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	84%		
25.0	74%	50%	62%	56%		
20.0	69%	48%	58%	50%		
12.5	58%	40%	47%	41%		
10.0	50%	38%	42%	40%		
5.0	39%	28%	31%	34%		
2.5	30%	21%	22%	29%		
1.25	25%	16%	15%	26%		
0.630	18%	9%	9%	22%		
0.315	10%	4%	5%	18%		
0.160	5%	2%	4%	16%		
0.080	3%	1%	3%	15%		
M.C.(%):	2%	2%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	72	69	66		
% SAND:	36	27	28	19		
% FINES:	3	1	3	15		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY GRAVEL WITH SAND (GM)		

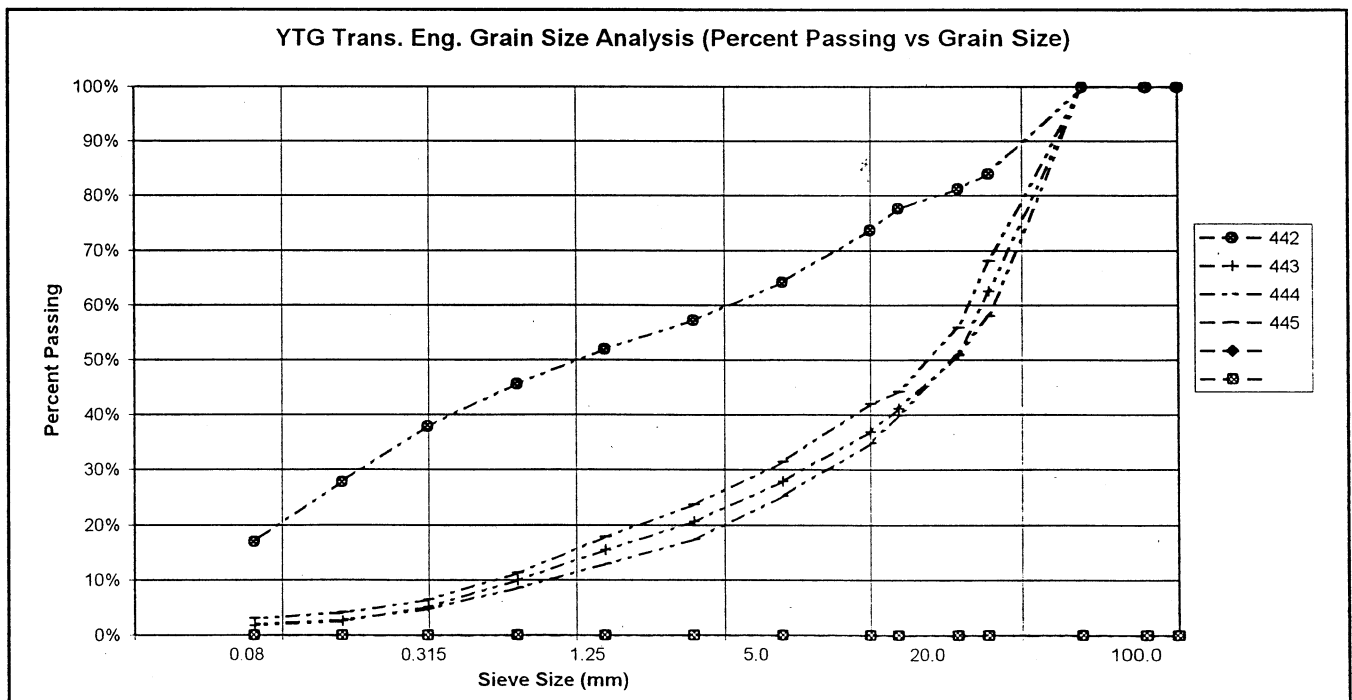


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Km 1734.4 LHS A/H Pit # 115-G-21
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: SEE PLAN
 LOGGED BY: JRP R.W.

HOLE No.: 638-2520

DATE COMP: SEPT 26/02

FIELD NO:	442	443	444	445		
LAB NO:	701	702	703	704		
DEPTH:	0.5-1.0	2.2-2.7	3.2-3.7	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	84%	63%	58%	68%		
20.0	81%	51%	51%	56%		
12.5	78%	41%	40%	44%		
10.0	74%	37%	35%	42%		
5.0	64%	28%	25%	31%		
2.5	57%	21%	17%	24%		
1.25	52%	15%	13%	18%		
0.630	46%	10%	9%	11%		
0.315	38%	5%	5%	6%		
0.160	28%	3%	3%	4%		
0.080	17%	2%	2%	3%		
M.C.(%)	4%	2%	2%	2%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	36	72	75	69		
% SAND:	47	26	23	28		
% FINES:	17	2	2	3		
CLASSIFICATION	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		



HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION

Km 1723.2 to 1734.6
YUKON 2003-2004

ALASKA HIGHWAY #1

GRANULAR SOURCE TESTING
Km 1732.0 RHS
(Mines Creek)
ALASKA HIGHWAY

HISTORY OF AGGREGATE PRODUCTION

Alaska Highway Km 1736.1 RHS
115 G-02

Average Crusher Run Characteristics of Material Produced

File Number --- 2142-5-47 ? Contractor --- Wayne Ent.
Commenced --- 86-05-01 Completed --- 86-05-09 No. of tests --- 31
Type of aggregate --- 20 mm B.S.T. Aggregate Type II
Amount Produced --- ? m³

Sieve Size mm - 20.0 12.5 5.00 2.50 1.25 0.315 0.080
Percent Passing - 100 90.0 56.5 40.7 29.4 12.7 5.2
Moisture Content - 3.5 % Standard Proctor
Fracture - 68.1 % Kg/m³ @ % moisture
=====

File Number --- 2145-4 Contractor --- Nuway
Commenced --- 94-03-30 Completed --- 94-02-02 No. of tests --- 17
Type of aggregate --- 20 mm B.S.T. Aggregate
Amount Produced --- 7,969 m³

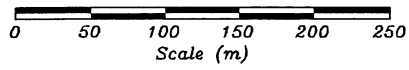
Sieve Size mm - 20.0 12.5 5.00 2.50 1.25 0.315 0.080
Percent Passing - 100.0 79.8 48.0 34.6 24.6 10.4 3.6
Moisture Content - 2.5 % Standard Proctor
Fracture - 64.6 % Kg/m³ @ % moisture
=====

File Number --- 2145-4 Contractor --- Nuway
Commenced --- 94-04-01 Completed --- 94-04-03 No. of tests --- 19
Type of aggregate --- 20 mm Granular Base
Amount Produced --- 8,665 m³




Sieve Size mm - 20.0 12.5 5.00 2.50 1.25 0.315 0.080
Percent Passing - 100 82.9 51.0 - 26.4 11.0 3.7
Moisture Content - 2.7 % Standard Proctor
Fracture - 65.4 % Kg/m³ @ % moisture
=====

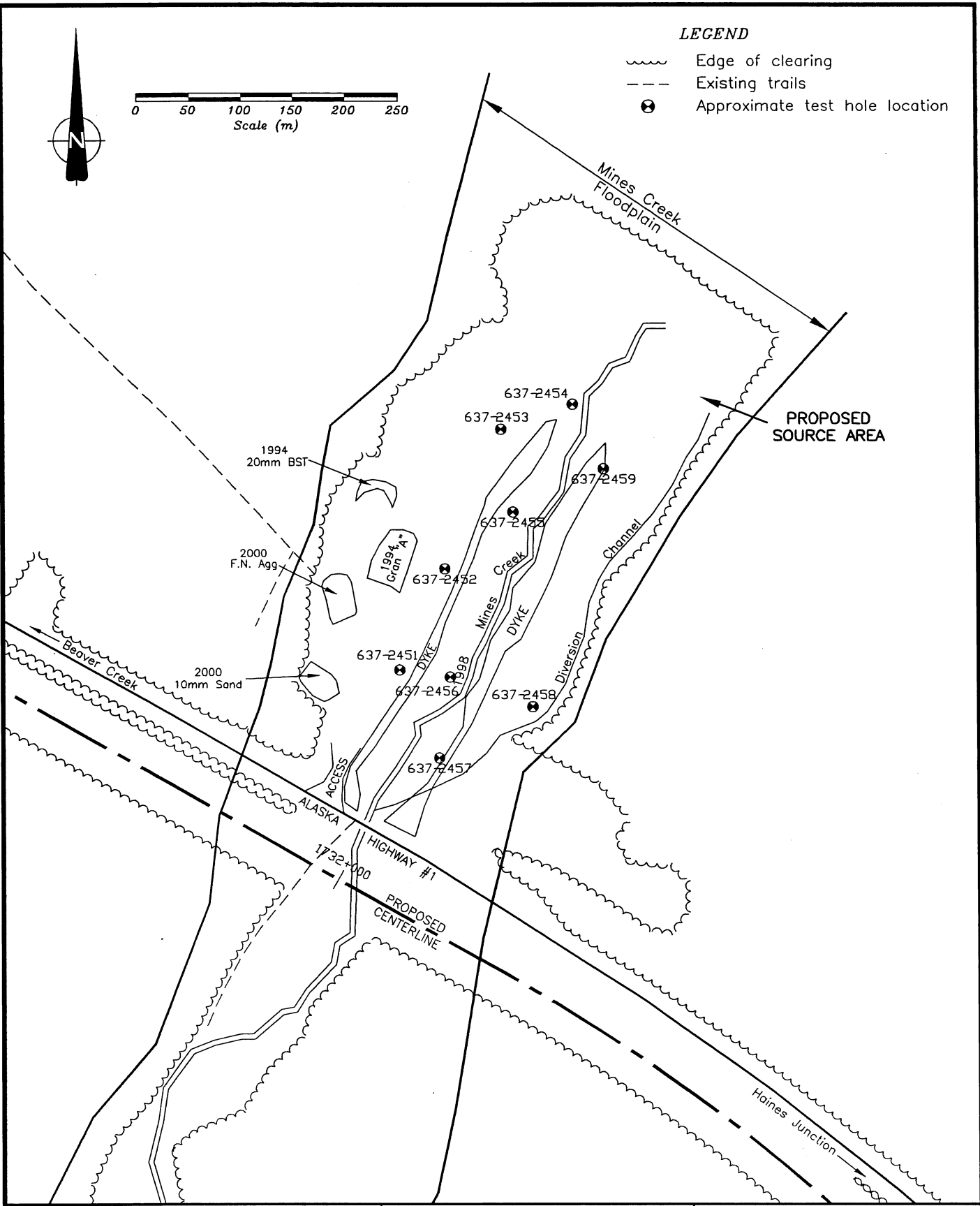
File Number --- 4100-60-34 Contractor --- Nuway Crushing Ltd.
Commenced --- 00-09-20 Completed --- 00-09-24 No. of tests --- 38
Type of aggregate --- 10 mm Crushed Fine Sanding Aggregate
Amount Produced --- 8,869 m³

Sieve Size mm - 20.0 12.5 10.0 5.00 2.50 1.25 0.315 0.080
Percent Passing - 100 100 98.7 68.2 45.7 - 13.2 4.8
Moisture Content - 4.1 % Standard Proctor
Fracture - 67.7 % Kg/m³ @ % moisture
=====



LEGEND

-  Edge of clearing
-  Existing trails
-  Approximate test hole location



Yukon
 Infrastructure
 Transportation Division

Transportation Engineering Branch

SITE PLAN
 GRANULAR PIT
 Km 1732.0 R.H.S.
 (Mines Creek)
 ALASKA HWY. YUKON

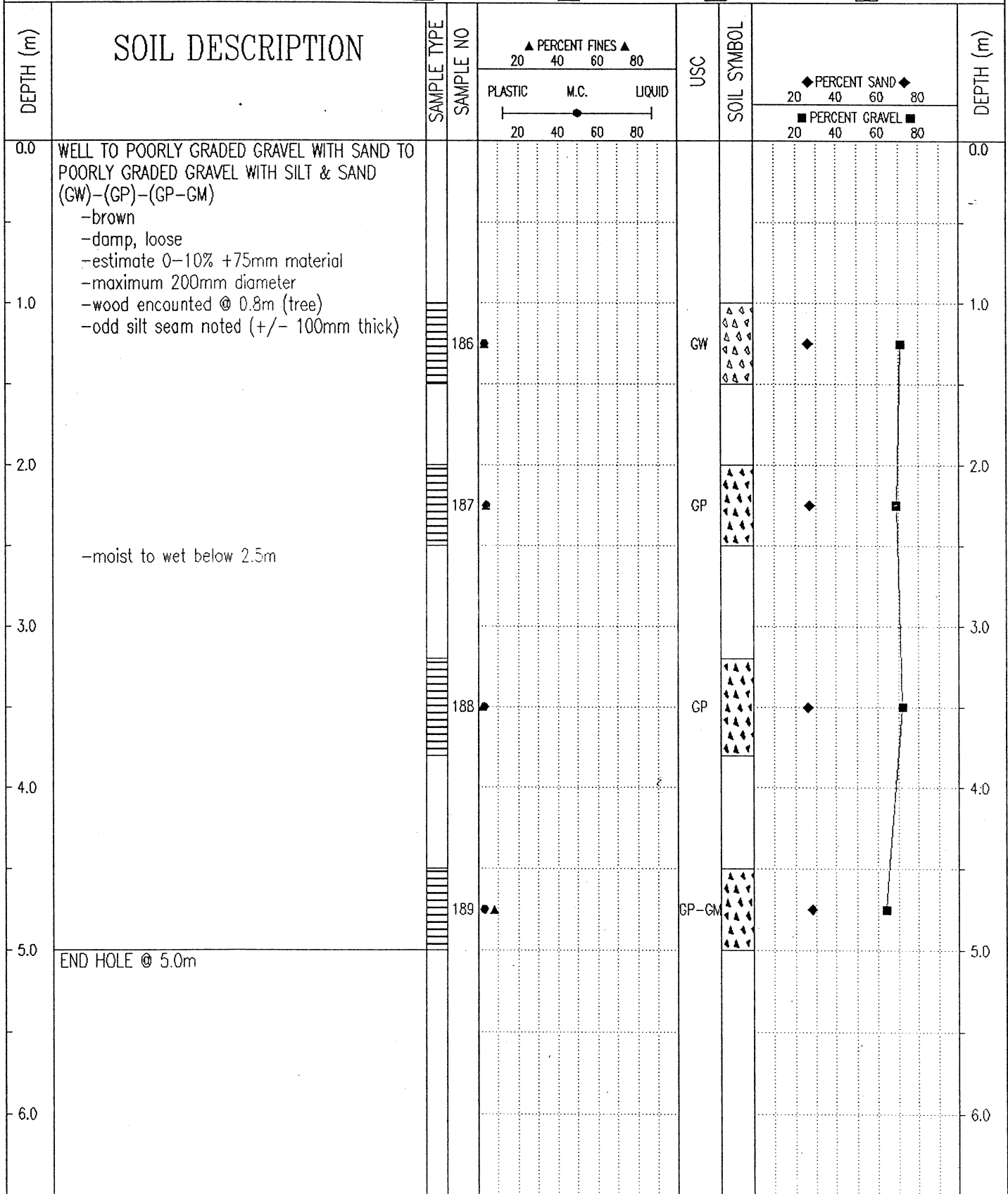
pit file:	115 G-02
revision:	03-Proposed
drawn:	JJM
date:	03-01-02
scale:	1: 5000
drwg:	115g-02S

Km 1732.0 RHS Alaska Highway #1
Pit Ident. 115 G-02
(Mines Creek)

September 2002
Book # 637
Test Pit Logs

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2451
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



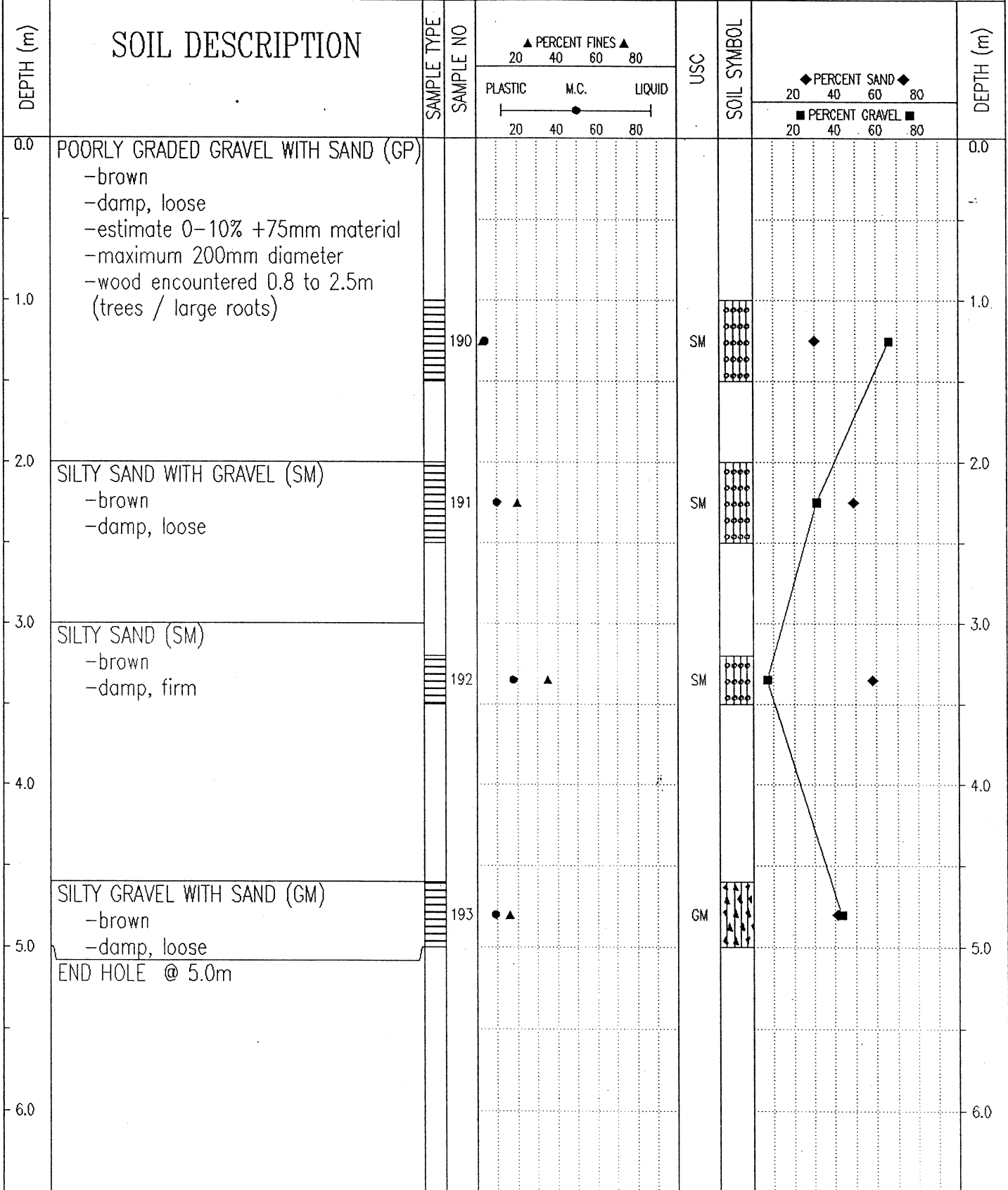
Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 5.0 m
COMPLETE: 02/09/22

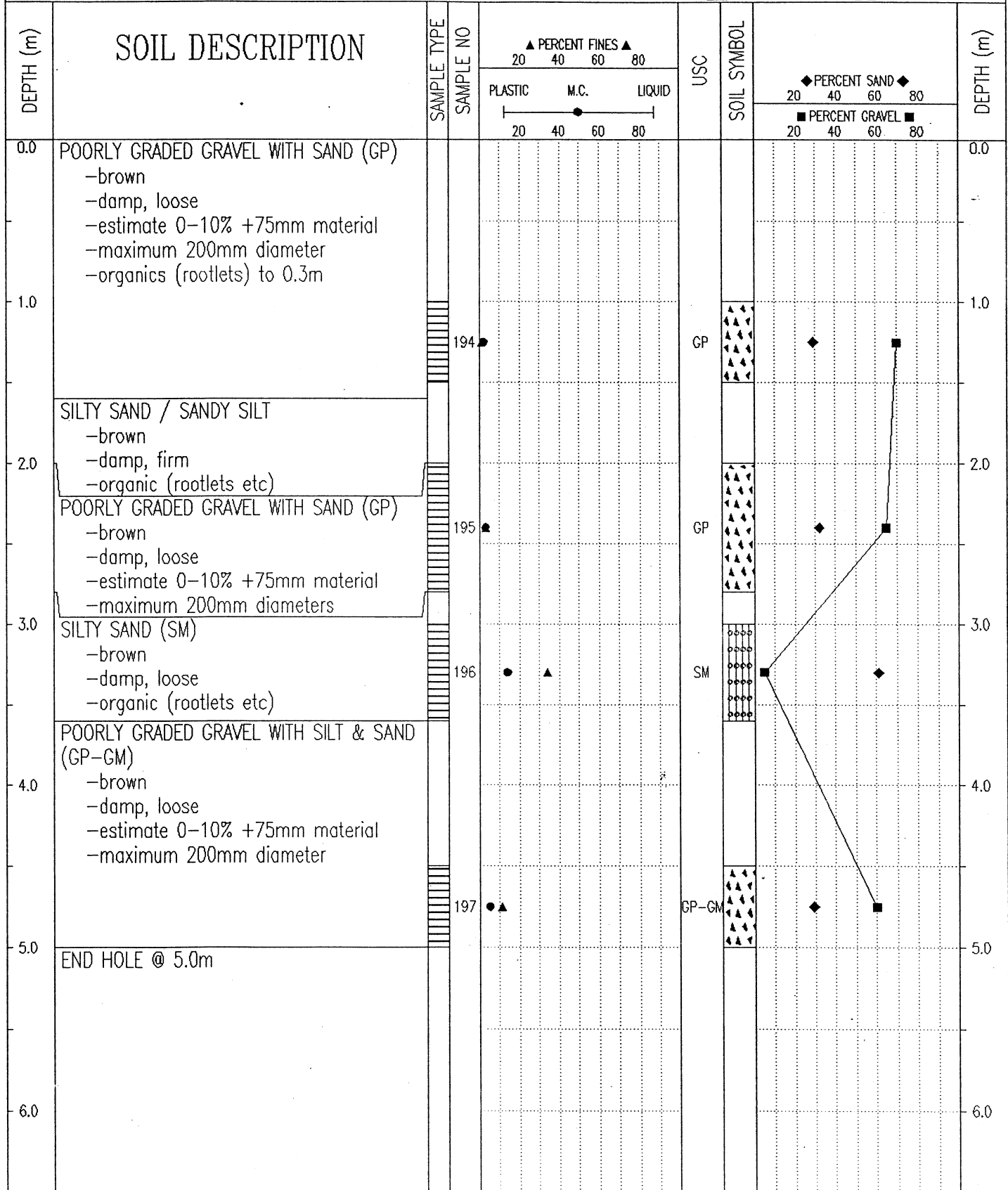
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2452
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 02/09/22
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2453
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



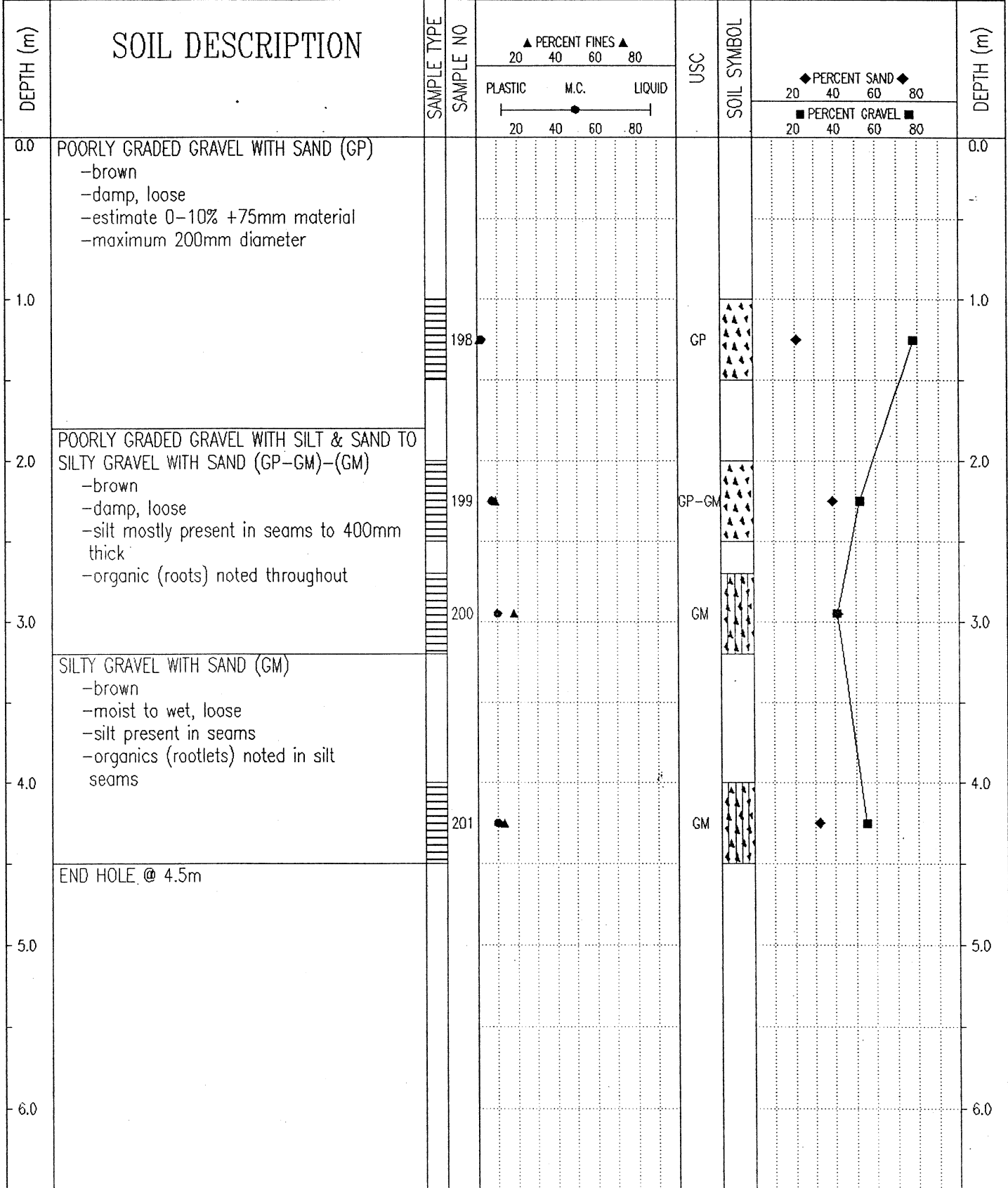
Government of Yukon
Transportation Engineering

LOGGED BY: JRP
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 5.0 m
COMPLETE: 02/09/22

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2454
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

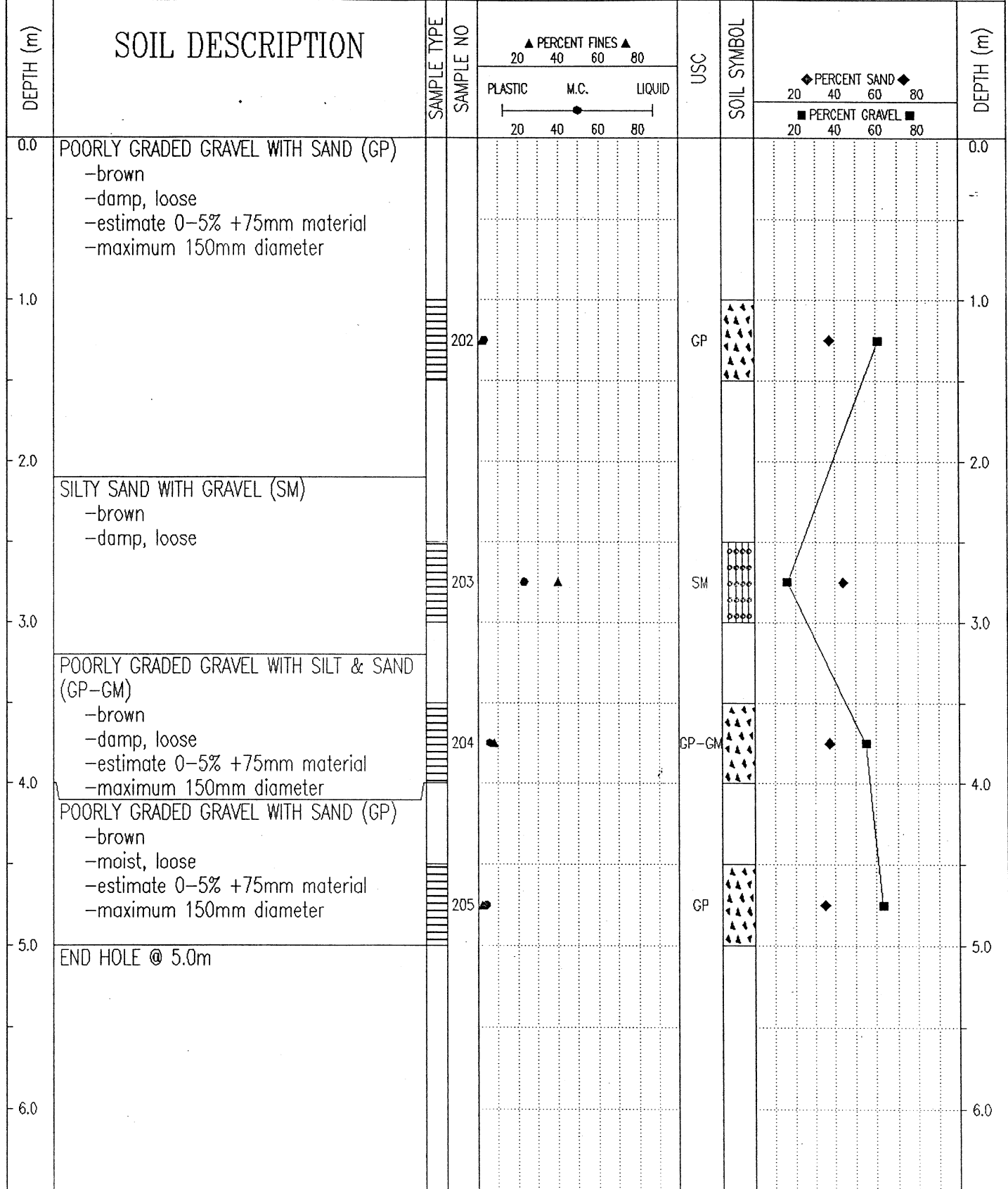
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



Government of Yukon
Transportation Engineering

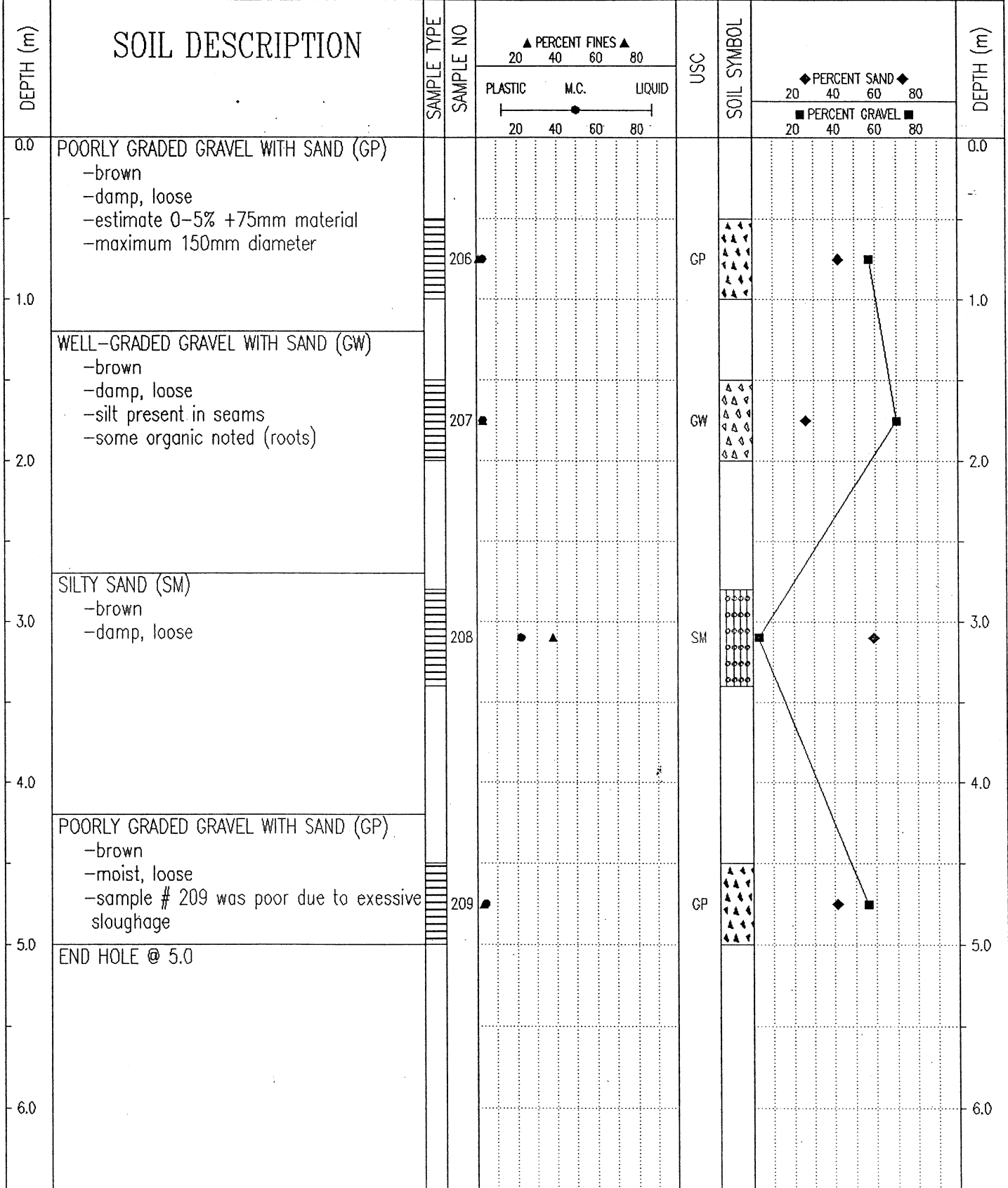
LOGGED BY: JRP
REVIEWED BY:
Fig. No:
COMPLETION DEPTH: 4.5 m
COMPLETE: 02/09/22
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2455
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



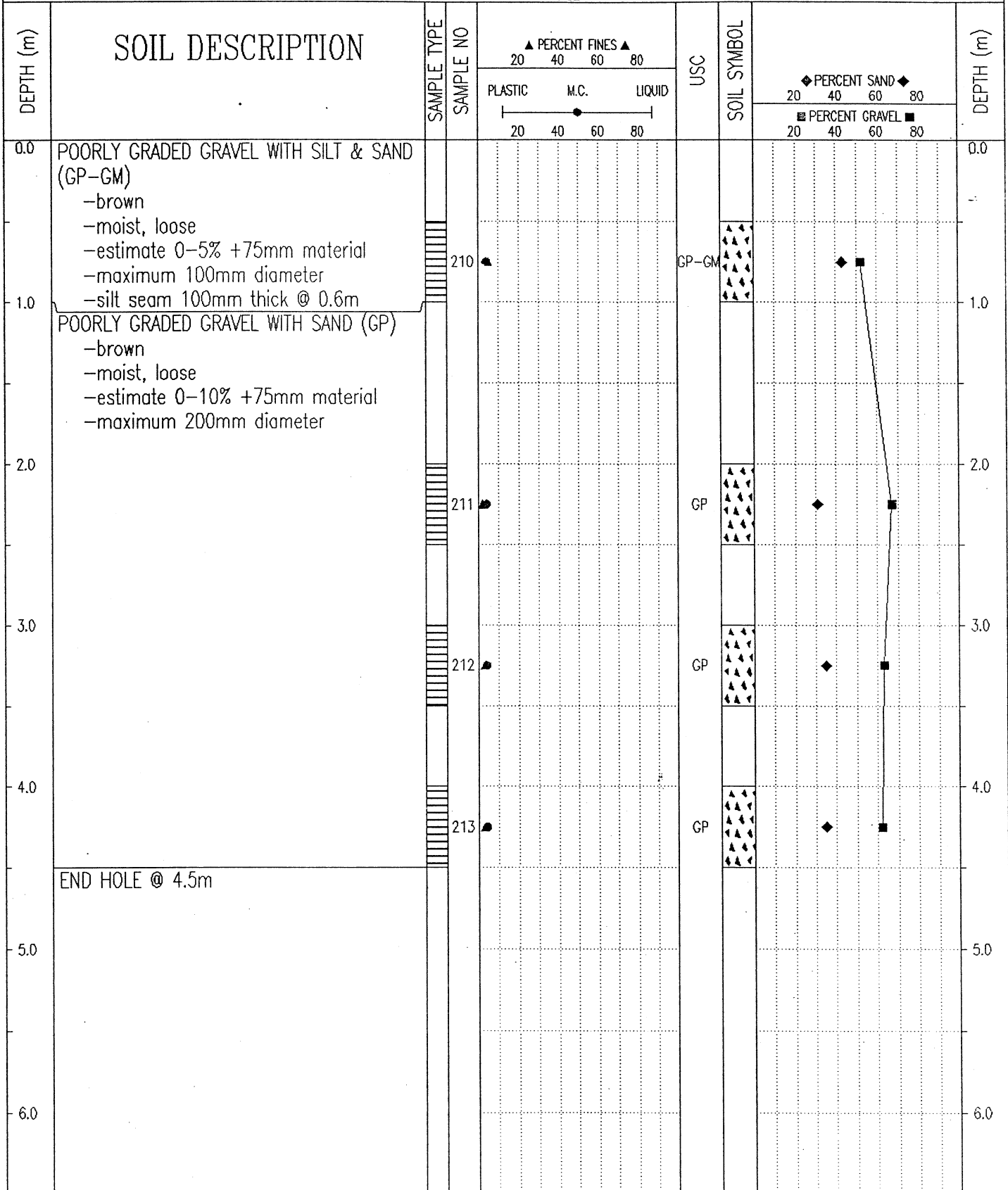
02/12/11 10:52AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2456
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
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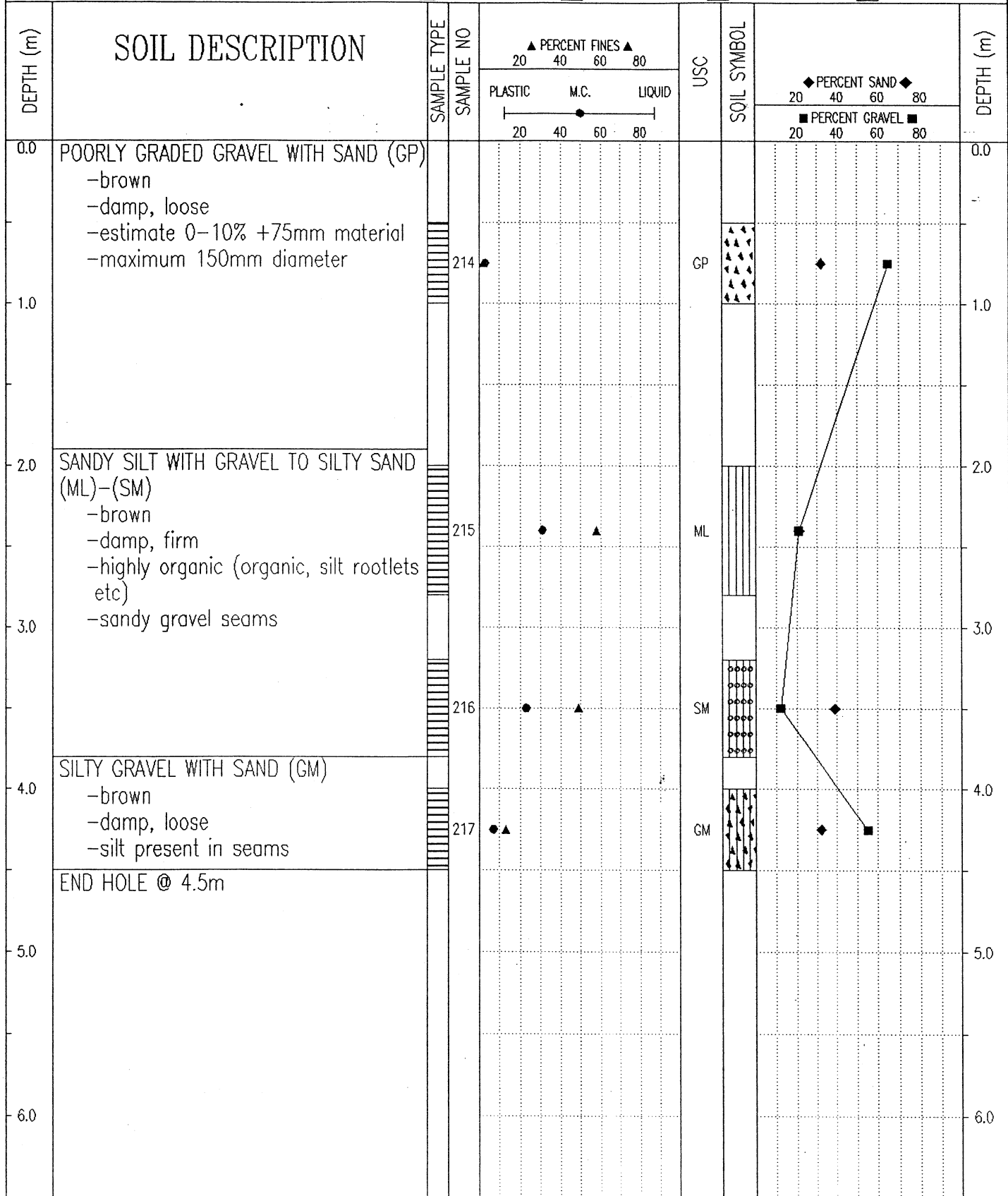
Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 5.0 m
	REVIEWED BY:	COMPLETE: 02/09/22
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2457
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> S.P.T.
	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK
	<input type="checkbox"/> TUBE	<input type="checkbox"/> CORE



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/22
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2458
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		



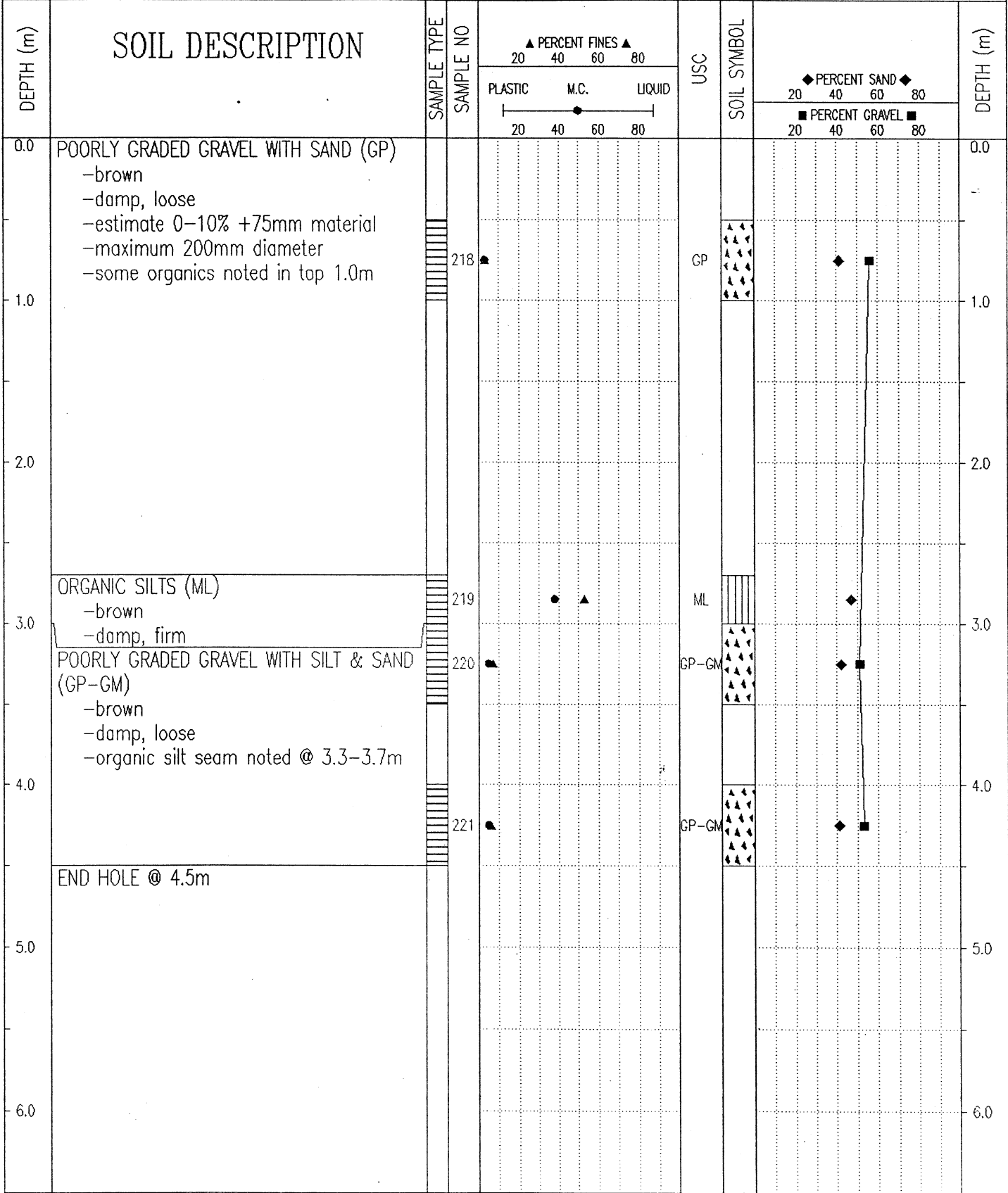
Government of Yukon
 Transportation Engineering

LOGGED BY: JRP
 REVIEWED BY:
 Fig. No:

COMPLETION DEPTH: 4.5 m
 COMPLETE: 02/09/22

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK SEGMENT 11	TEST PIT NO: 637-2459
ENGINEERING CAPITAL	MINES CREEK	Project No: 552-202101-0361
KOEHRING 6625 BACKHOE	LOCATION: SEE PLAN	ELEVATION: 0.00 (m)

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



Government of Yukon Transportation Engineering	LOGGED BY: JRP	COMPLETION DEPTH: 4.5 m
	REVIEWED BY:	COMPLETE: 02/09/22
	Fig. No:	Page 1 of 1

Km 1732.0 RHS Alaska Highway #1
Pit Ident. 115 G-02
(Mines Creek)

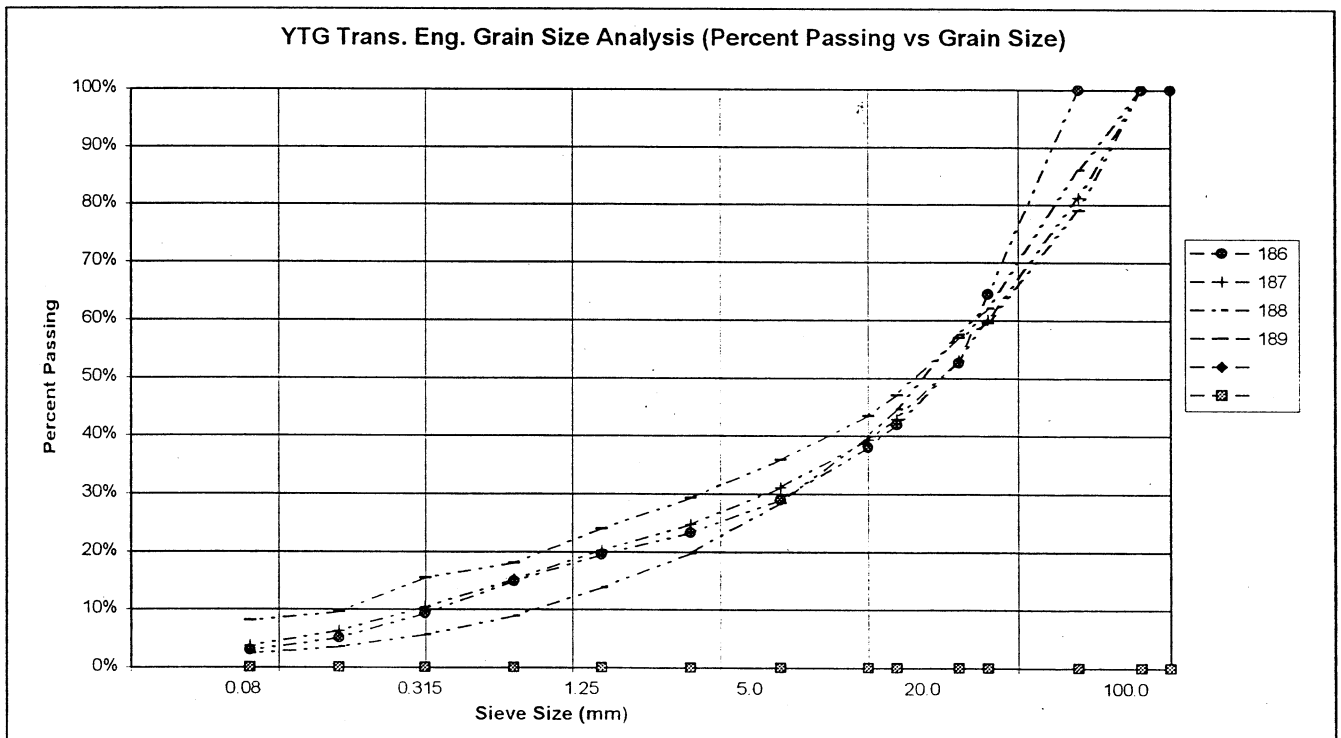
September 2002
Book # 637
Pit Run Sample Results

PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2451

DATE COMP: Sept 22/02

FIELD NO:	186	187	188	189		
LAB NO:	446	447	448	449		
DEPTH:	1.0-1.5	2.0-2.5	3.2-3.8	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	81%	86%	79%		
25.0	65%	60%	62%	60%		
20.0	53%	53%	57%	57%		
12.5	42%	43%	45%	47%		
10.0	38%	39%	40%	44%		
5.0	29%	31%	28%	36%		
2.5	23%	25%	20%	29%		
1.25	20%	20%	14%	24%		
0.630	15%	15%	9%	18%		
0.315	9%	10%	6%	16%		
0.160	5%	6%	4%	10%		
0.080	3%	4%	2%	8%		
M.C.(%)	3%	4%	3%	3%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	71	69	72	64		
% SAND:	26	27	26	28		
% FINES:	3	4	2	8		
CLASSIFICATION	WELL-GRADED GRAVEL WITH SAND (GW)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

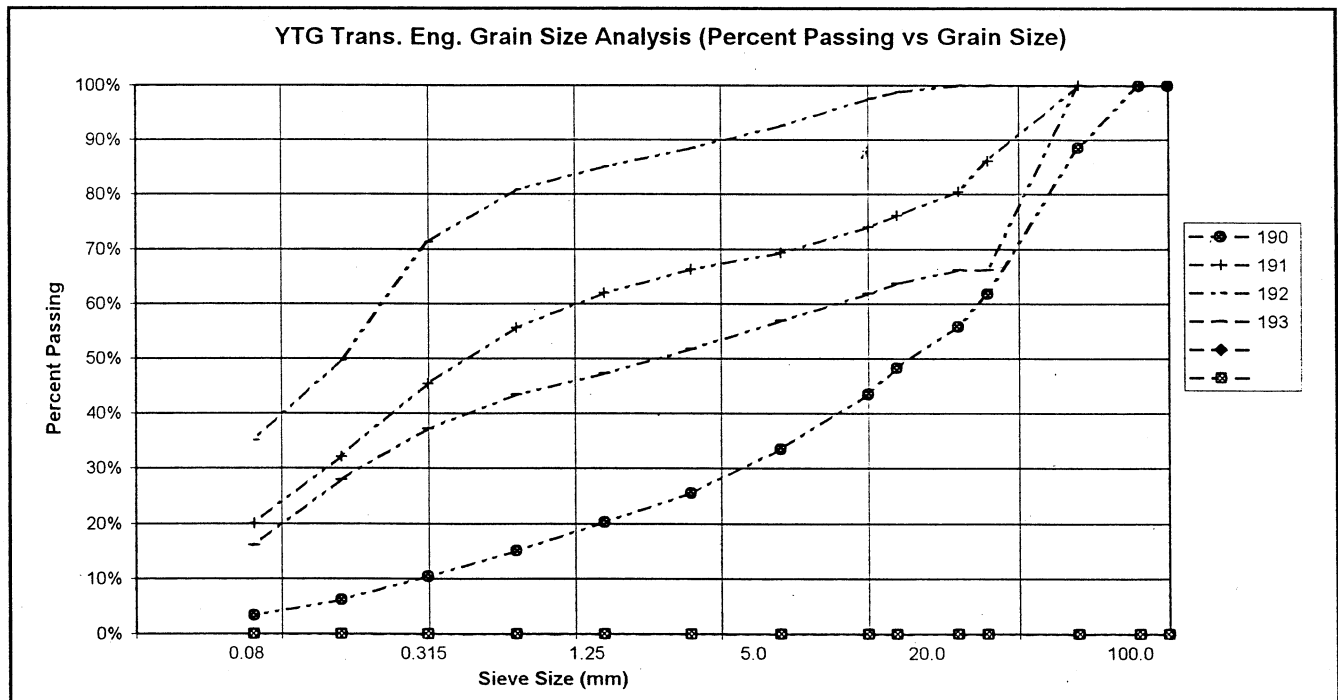


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2452

DATE COMP: Sept 22/02

FIELD NO:	190	191	192	193		
LAB NO:	450	451	452	453		
DEPTH:	1.0-1.5	2.0-2.5	3.2-3.8	4.6-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	89%	100%	100%	100%		
25.0	62%	86%	100%	66%		
20.0	56%	81%	100%	66%		
12.5	48%	76%	99%	64%		
10.0	44%	74%	98%	62%		
5.0	34%	69%	93%	57%		
2.5	26%	66%	88%	52%		
1.25	20%	62%	85%	47%		
0.630	15%	56%	81%	43%		
0.315	10%	45%	71%	37%		
0.160	6%	32%	50%	28%		
0.080	3%	20%	35%	16%		
M.C.(%)	4%	10%	18%	9%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	66	31	7	43		
% SAND:	30	49	58	41		
% FINES:	3	20	35	16		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	SILTY SAND (SM)	SILTY GRAVEL WITH SAND (GM)		

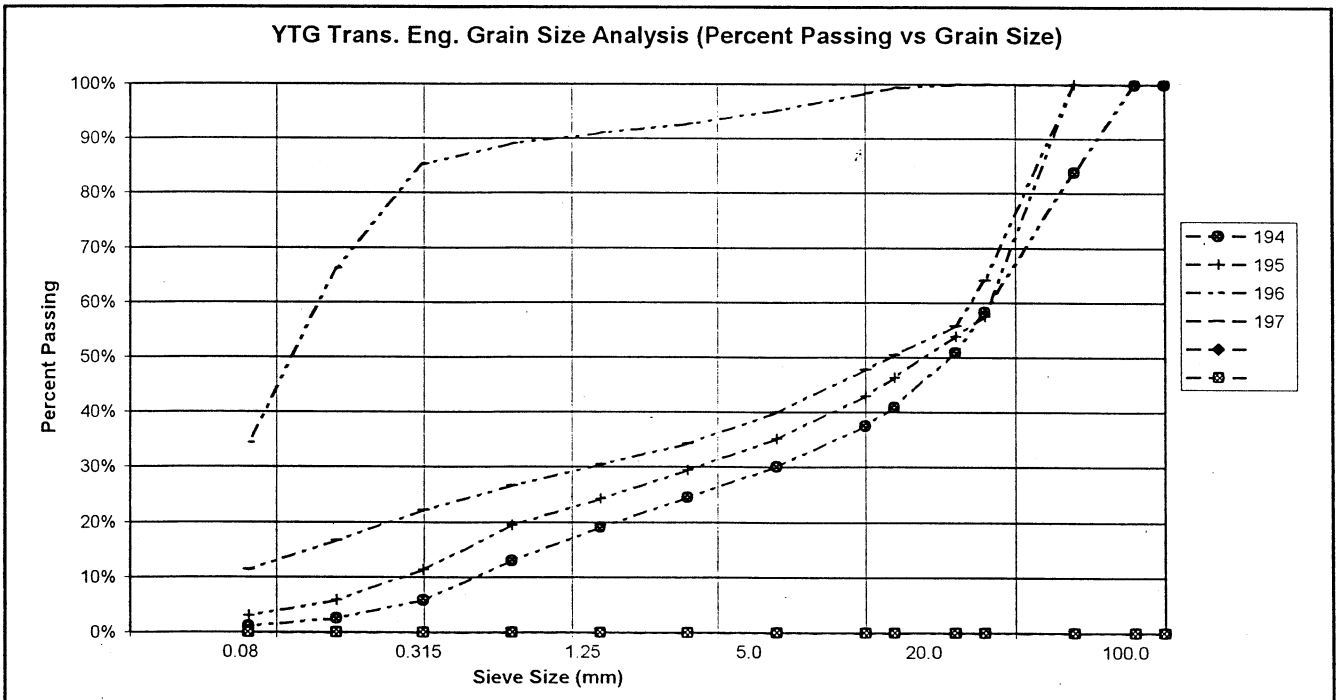


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2453

DATE COMP: Sept 22/02

FIELD NO:	194	195	196	197		
LAB NO:	454	455	456	457		
DEPTH:	1.0-1.5	2.0-2.8	3.0-3.6	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	84%	100%	100%	100%		
25.0	58%	58%	100%	64%		
20.0	51%	54%	100%	56%		
12.5	41%	46%	99%	50%		
10.0	38%	43%	98%	48%		
5.0	30%	35%	95%	40%		
2.5	25%	29%	93%	34%		
1.25	19%	24%	91%	31%		
0.635	13%	19%	89%	27%		
0.315	6%	11%	85%	22%		
0.160	3%	6%	66%	17%		
0.080	1%	3%	34%	11%		
M.C.(%)	2%	3%	14%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	70	65	5	60		
% SAND:	29	32	61	29		
% FINES:	1	3	34	11		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

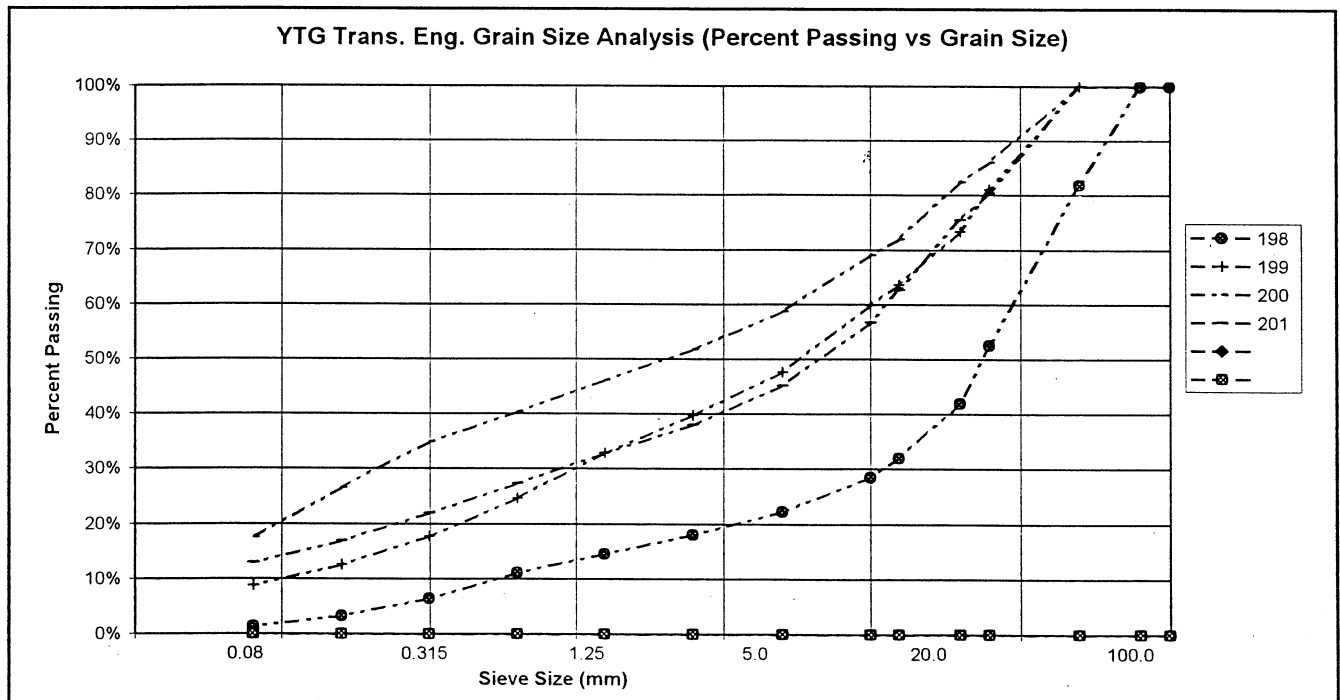


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2454

DATE COMP: Sept 22/02

FIELD NO:	198	199	200	201		
LAB NO:	458	459	460	461		
DEPTH:	1.0-1.5	2.0-2.5	2.7-3.2	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	82%	100%	100%	100%		
25.0	53%	81%	86%	80%		
20.0	42%	73%	82%	75%		
12.5	32%	64%	72%	63%		
10.0	28%	60%	69%	57%		
5.0	22%	48%	59%	45%		
2.5	18%	40%	52%	38%		
1.25	15%	33%	46%	33%		
0.630	11%	25%	40%	27%		
0.315	6%	18%	35%	22%		
0.160	3%	13%	27%	17%		
0.080	1%	9%	18%	13%		
M.C.(%)	2%	7%	10%	10%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	78	52	41	55		
% SAND:	21	39	41	32		
% FINES:	1	9	18	13		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	SILTY GRAVEL WITH SAND (GM)	SILTY GRAVEL WITH SAND (GM)		

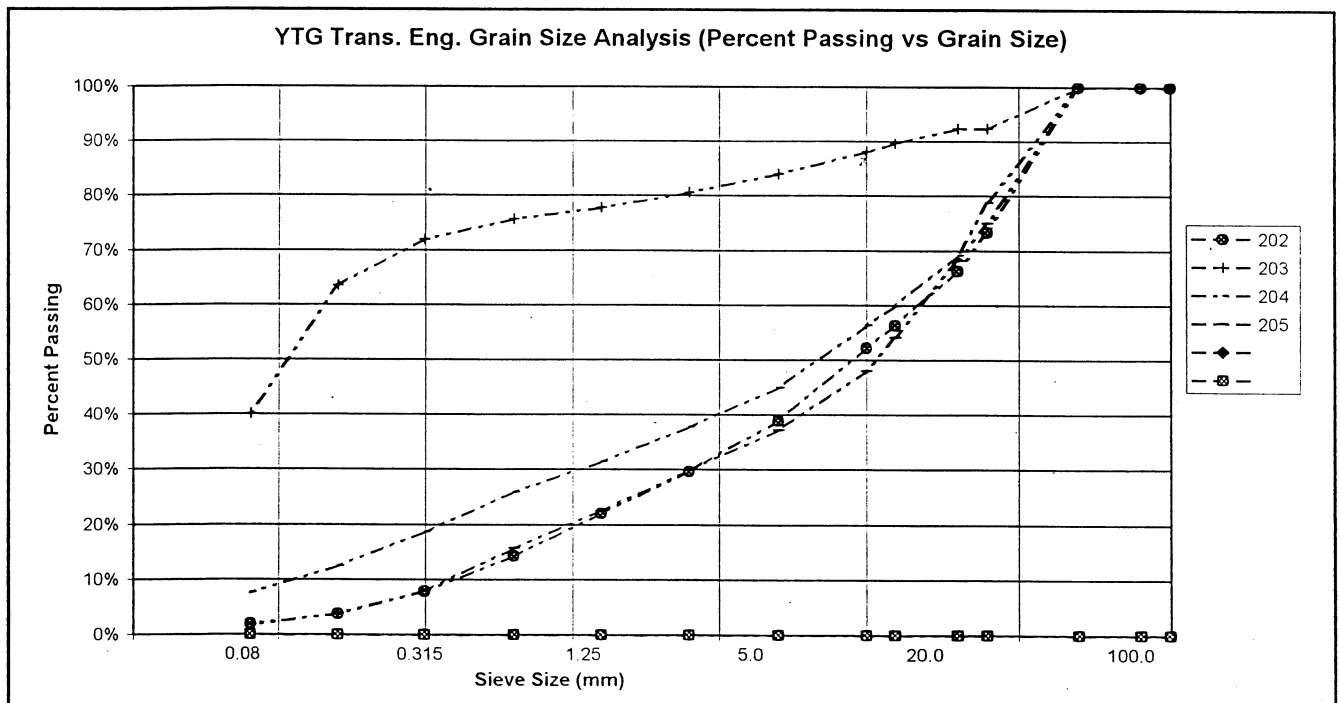


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2455

DATE COMP: Sept 22/02

FIELD NO:	202	203	204	205		
LAB NO:	462	463	464	465		
DEPTH:	1.0-1.5	2.5-3.0	3.5-4.0	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	73%	92%	79%	75%		
20.0	66%	92%	69%	68%		
12.5	56%	90%	60%	54%		
10.0	52%	88%	56%	48%		
5.0	39%	84%	45%	37%		
2.5	30%	81%	38%	30%		
1.25	22%	78%	31%	23%		
0.630	14%	76%	26%	16%		
0.315	8%	72%	19%	8%		
0.160	4%	63%	12%	4%		
0.080	2%	40%	8%	2%		
M.C.(%)	3%	23%	6%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	61	16	55	63		
% SAND:	37	44	37	35		
% FINES:	2	40	8	2		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SILTY SAND WITH GRAVEL (SM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)		

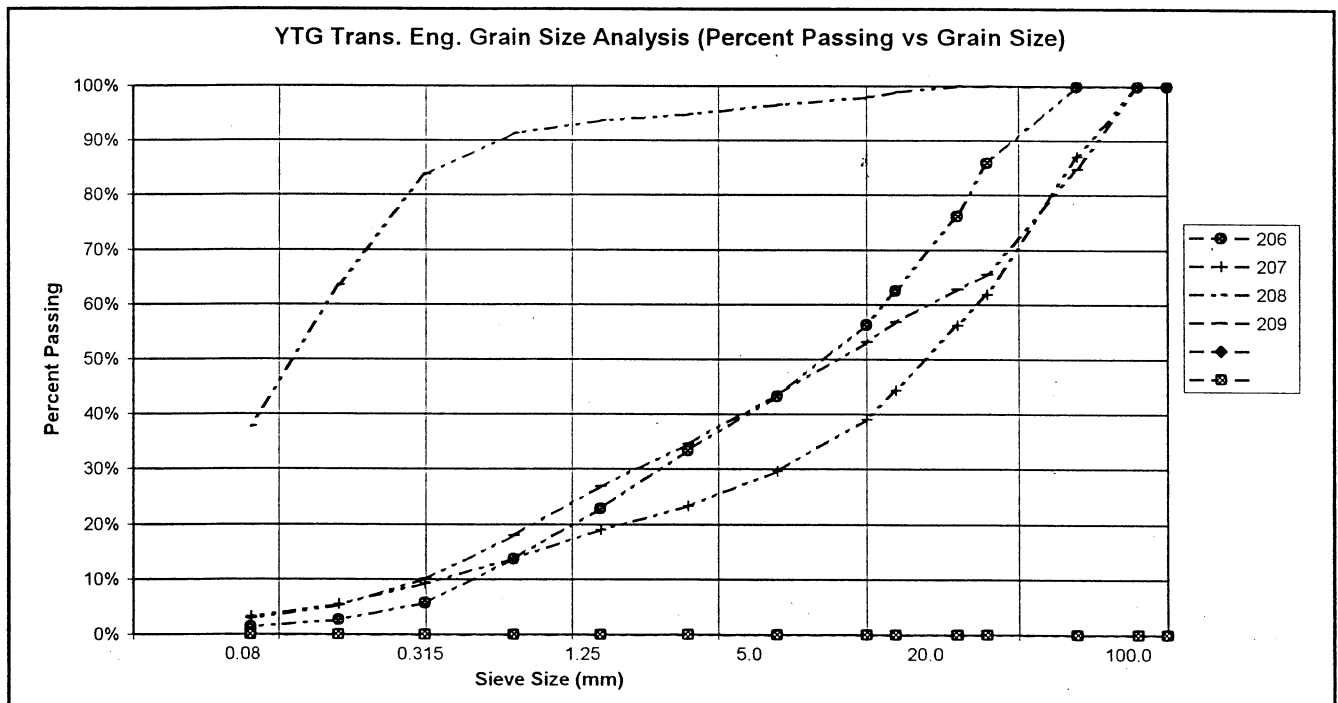


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2456

DATE COMP: Sept 22/02

FIELD NO:	206	207	208	209		
LAB NO:	466	467	468	469		
DEPTH:	0.5-1.0	1.5-2.0	2.8-3.4	4.5-5.0		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	87%	100%	85%		
25.0	86%	62%	100%	66%		
20.0	76%	56%	100%	63%		
12.5	63%	44%	99%	57%		
10.0	56%	39%	98%	53%		
5.0	43%	30%	97%	44%		
2.5	33%	23%	95%	35%		
1.25	23%	19%	94%	27%		
0.630	14%	14%	91%	18%		
0.315	6%	9%	84%	10%		
0.160	3%	6%	63%	5%		
0.080	1%	3%	38%	3%		
M.C.(%)	3%	3%	22%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	57	70	3	56		
% SAND:	42	26	59	41		
% FINES:	1	3	38	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	WELL-GRADED GRAVEL WITH SAND (GW)	SILTY SAND (SM)	POORLY GRADED GRAVEL WITH SAND (GP)		

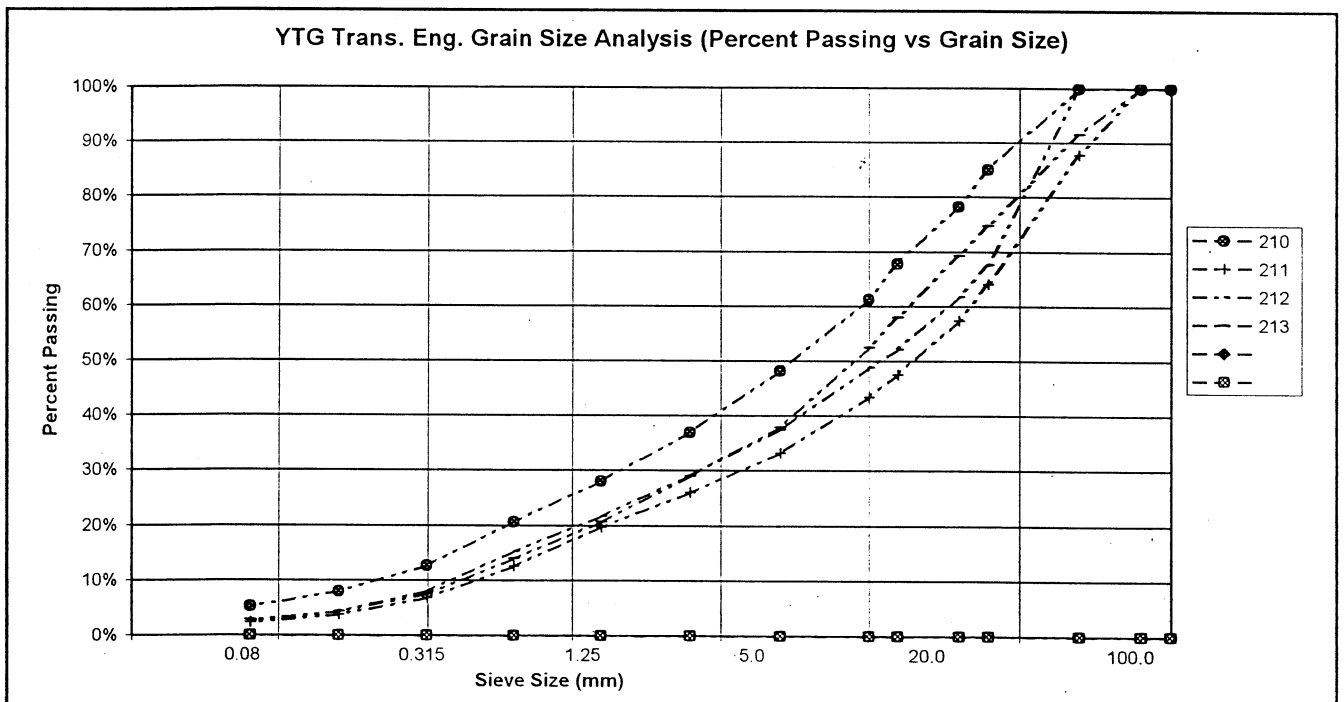


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2457

DATE COMP: Sept 22/02

FIELD NO:	210	211	212	213		
LAB NO:	470	471	472	473		
DEPTH:	0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	88%	100%	92%		
25.0	85%	64%	68%	75%		
20.0	78%	57%	62%	69%		
12.5	68%	48%	52%	58%		
10.0	61%	43%	49%	53%		
5.0	48%	33%	37%	38%		
2.5	37%	26%	29%	29%		
1.25	28%	20%	22%	21%		
0.630	21%	13%	15%	14%		
0.315	13%	7%	8%	8%		
0.160	8%	4%	4%	4%		
0.080	5%	2%	3%	3%		
M.C.(%)	4%	4%	4%	4%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	52	67	63	62		
% SAND:	43	31	35	35		
% FINES:	5	2	3	3		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)	POORLY GRADED GRAVEL WITH SAND (GP)		

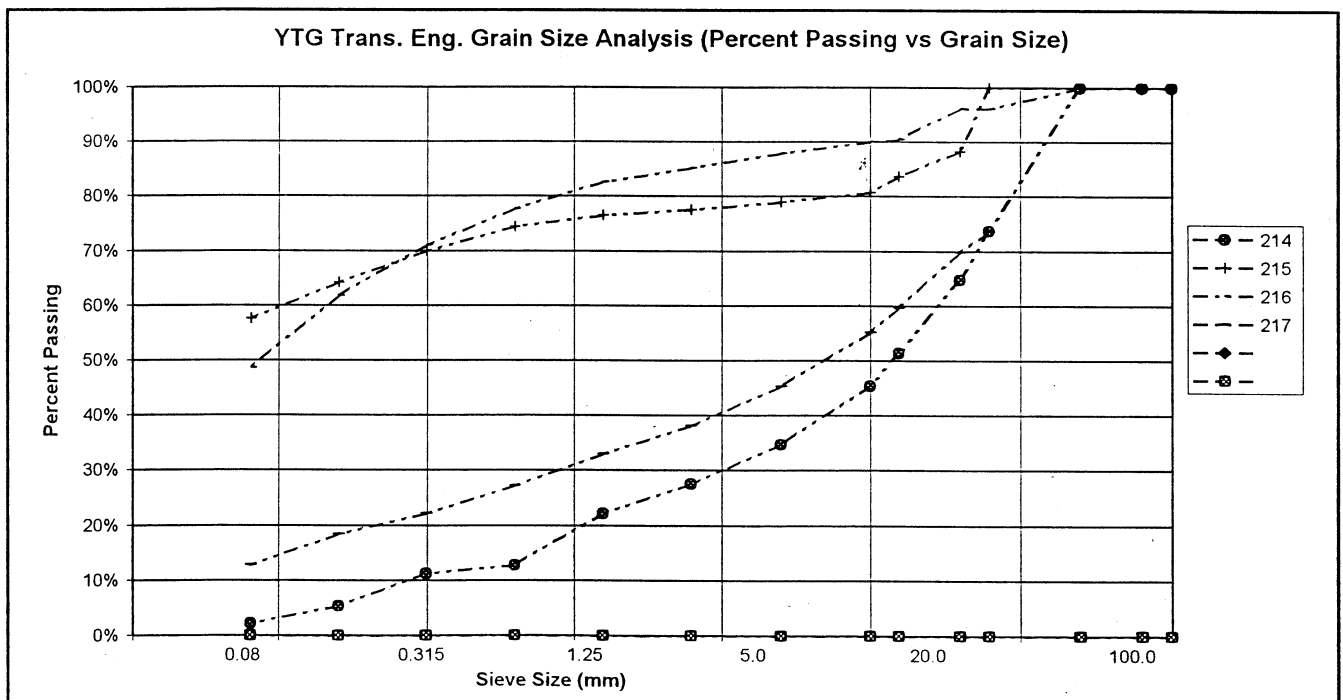


PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2458

DATE COMP: Sept 22/02

FIELD NO:	214	215	216	217		
LAB NO:	474	475	476	477		
DEPTH:	0.5-1.0	2.2-2.8	3.2-3.8	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	74%	100%	96%	74%		
20.0	65%	88%	96%	70%		
12.5	51%	84%	90%	60%		
10.0	45%	81%	90%	55%		
5.0	35%	79%	88%	45%		
2.5	28%	78%	85%	38%		
1.25	22%	77%	83%	33%		
0.630	13%	74%	78%	27%		
0.315	11%	70%	71%	22%		
0.160	5%	64%	62%	18%		
0.080	2%	58%	49%	13%		
M.C.(%):	3%	31%	23%	7%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX:	0.0	0.0	0.0	0.0		
% GRAVEL:	65	21	12	55		
% SAND:	32	21	39	32		
% FINES:	2	58	49	13		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT WITH GRAVEL (ML)	SILTY SAND (SM)	SILTY GRAVEL WITH SAND (GM)		



PROJECT NUMBER: 552-202101-0361-1
 CLIENT: Engineering Capital
 PROJECT NAME: Shakwak Granular Investigation
 PROJECT LOCATION: Mines Creek, Km 1736.1 RHS
 DRILL UNIT: Koehring 6625 Backhoe
 HOLE LOCATION: See Plan
 LOGGED BY: JRP R.W.

HOLE No.: 637-2459

DATE COMP: Sept 22/02

FIELD NO:	218	219	220	221		
LAB NO:	478	479	480	481		
DEPTH:	0.5-1.0	2.7-3.0	3.0-3.5	4.0-4.5		
TYPE:	BULK	BULK	BULK	BULK		
SIEVE SIZE	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING	PERCENT PASSING		
100.0	100%	100%	100%	100%		
80.0	100%	100%	100%	100%		
50.0	100%	100%	100%	100%		
25.0	76%	100%	83%	73%		
20.0	73%	100%	76%	68%		
12.5	63%	100%	68%	60%		
10.0	58%	100%	62%	56%		
5.0	44%	100%	49%	47%		
2.5	34%	96%	40%	40%		
1.25	23%	94%	32%	35%		
0.630	15%	90%	25%	28%		
0.315	8%	82%	18%	19%		
0.160	5%	70%	12%	11%		
0.080	3%	53%	7%	6%		
M.C.(%)	3%	38%	5%	5%		
LIQUID LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC LIMIT:	0.0	0.0	0.0	0.0		
PLASTIC INDEX.:	0.0	0.0	0.0	0.0		
% GRAVEL:	56	0	51	53		
% SAND:	41	47	42	41		
% FINES:	3	53	7	6		
CLASSIFICATION	POORLY GRADED GRAVEL WITH SAND (GP)	SANDY SILT (ML)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)		

