

GEOTECHNICAL INVESTIGATIONS

2 of 5

Yukon

Community and Transportation Services
Transportation Engineering Branch

Geotechnical Services

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GR-01-087

HIGHWAY CONSTRUCTION

GEOTECHNICAL INVESTIGATION
KM 1803.95 TO KM 1820.4
YUKON, 2000-2001

ALASKA HIGHWAY #1

HIGHWAY CONSTRUCTION
km 1803.95 to km 1820.4
ALASKA HIGHWAY #1
Yukon, 2000-2001
Volume 2 of 5

This Data Package prepared for project viewing:

February, 2000

Transportation Engineering Branch
Geotechnical Services
461 Range Road
Whitehorse, Yukon

VOLUME CONTENTS

VOLUME 1 OF 5

Introduction

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

VOLUME 2 OF 5

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

VOLUME 3 OF 5

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

VOLUME 4 OF 5

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

VOLUME 5 OF 5

Granular testing - km 1819 LHS

CONTENTS

INTRODUCTION

Investigation notes, classification methods and legends.

CENTRELINE TESTING

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

Auger Testing

1999	TEST HOLES 350 to 400	shown on logs with prefix 509-
	TEST HOLES 401 to 425	shown on logs with prefix 511-
	TEST HOLES 426 to 436	shown on logs with prefix 512-
	TEST HOLES 440 to 448	shown on logs with prefix 512-
	TEST HOLES 429 to 500	shown on logs with prefix 513-
	TEST HOLES 501 to 512	shown on logs with prefix 514-
	TEST HOLES 563 to 566	shown on logs with prefix 519-
	TEST HOLES 572 to 575	shown on logs with prefix 519-
	TEST HOLES 620 to 644	shown on logs with prefix 520-
	TEST HOLES 645 to 658	shown on logs with prefix 521-
	TEST HOLES 659 to 709	shown on logs with prefix 526-
	TEST HOLES 710 to 731	shown on logs with prefix 527-
	TEST HOLES 834 to 844	shown on logs with prefix 531-
	TEST HOLES 485 to 849	shown on logs with prefix 532-

Notes on plotting of Centreline Holes:

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

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

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

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

Backhoe Testing

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

Auger Testing

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

HIGHWAY CONSTRUCTION

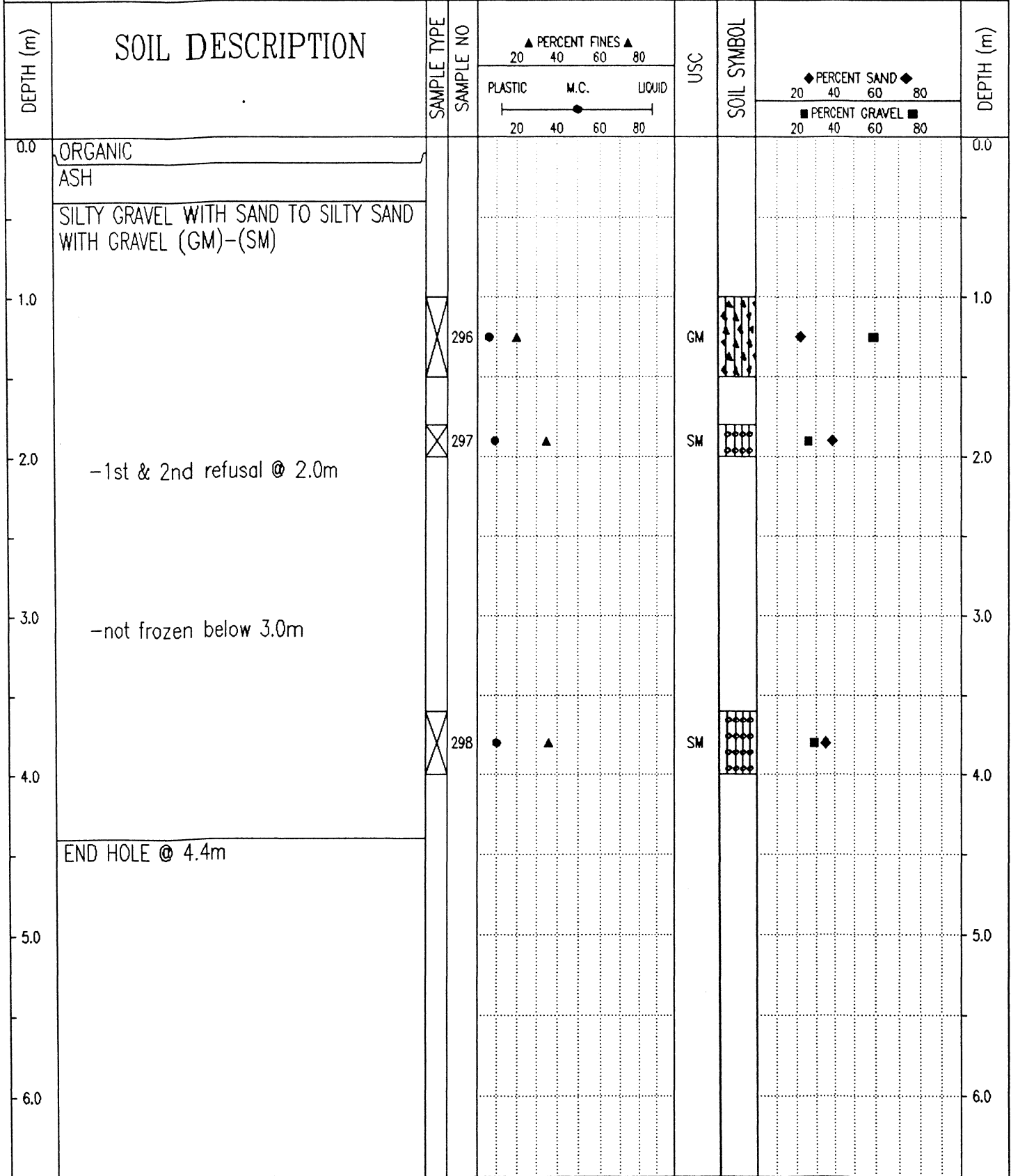
GEOTECHNICAL INVESTIGATION
KM 1803.95 TO KM 1820.4
YUKON, 2000-2001

ALASKA HIGHWAY #1

CENTRELINE TESTING

km 1810+000 to km 1820+400
Subsurface Exploration & Testing Reports

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-458
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1810+050 CENTRELINE	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		



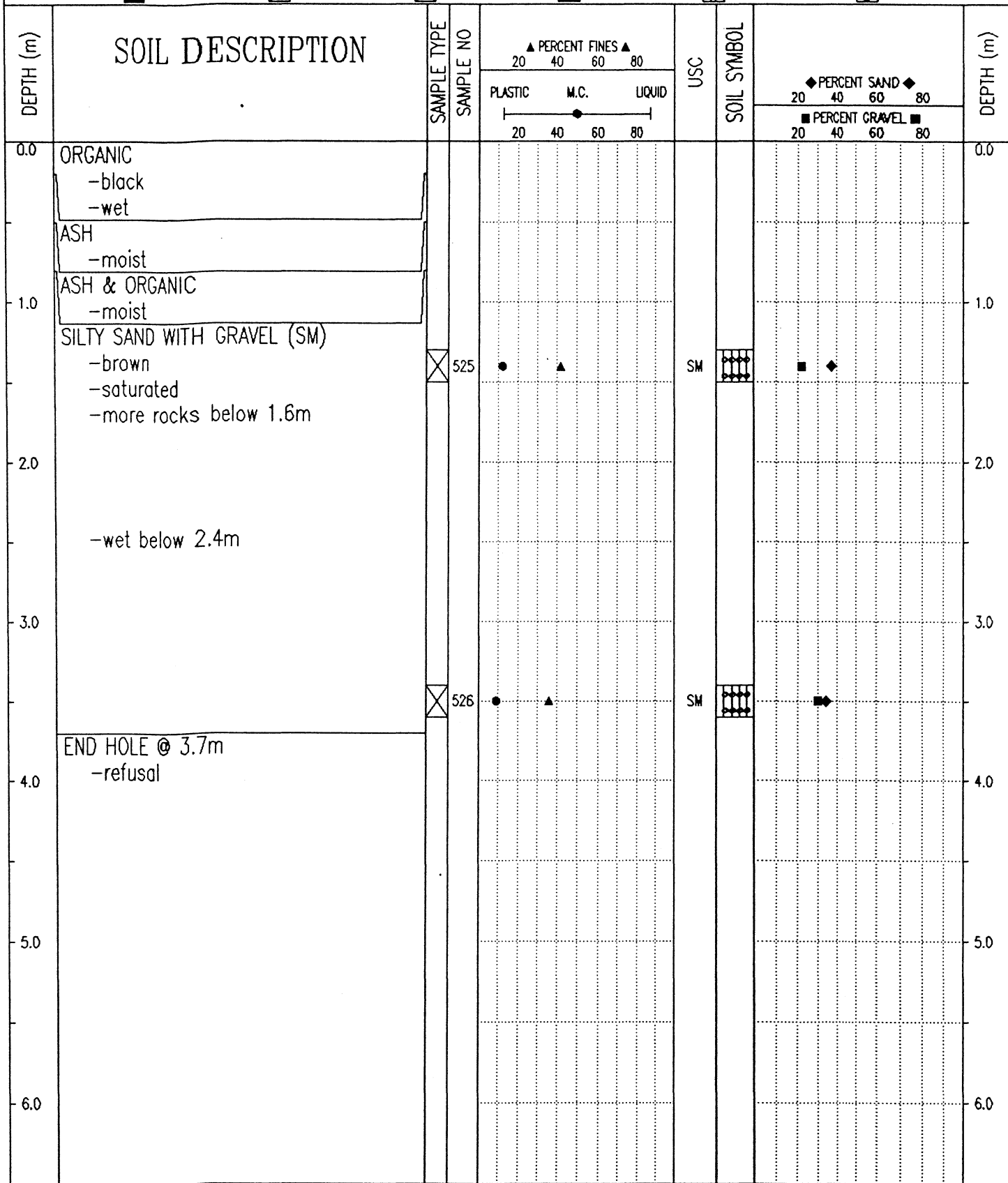
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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.4 m
COMPLETE: 99/05/03

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-640							
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329							
MOBILE B-40L		LOCATION: 1810+075 32 RHS		ELEVATION: 0.00 (m)							
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲		USC	SOIL SYMBOL	◆ PERCENT SAND ◆		DEPTH (m)	
				PLASTIC	M.C.			LIQUID	20		40
0.0	ORGANIC -brown -damp									0.0	
1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (SM)-(GM)-(SM) -brown -wet									1.0	
2.0		⊗	527	●	▲	SM	◆	■		2.0	
3.0		⊗	528	●	▲	GM	◆	■		3.0	
4.0		⊗	529	●	▲	SM	◆	■		4.0	
5.0	END HOLE @ 4.5m									5.0	
6.0										6.0	
Government of Yukon Transportation Engineering						LOGGED BY: W.E. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 99/08/05 Page 1 of 1			

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-639
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1810+175 37 RHS	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: 3.7 m
COMPLETE: 99/08/05

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-457								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1810+200 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER								
RETURN		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	ORGANIC											0.0
	ASH											
	ORGANIC -frozen											
1.0	SILTY SAND TO SILTY SAND WITH GRAVEL (SM) -frozen -grindy drilling	X	294	●	▲		SM	◆	■			1.0
2.0	-rough drilling END HOLE @ 2.0m -refusal @ 2.0m -2nd refusal @ 1.8m	X	295	●	▲		SM	◆	■			2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 2.0 m				
				REVIEWED BY:				COMPLETE: 99/05/03				
				Fig. No:				Page 1 of 1				

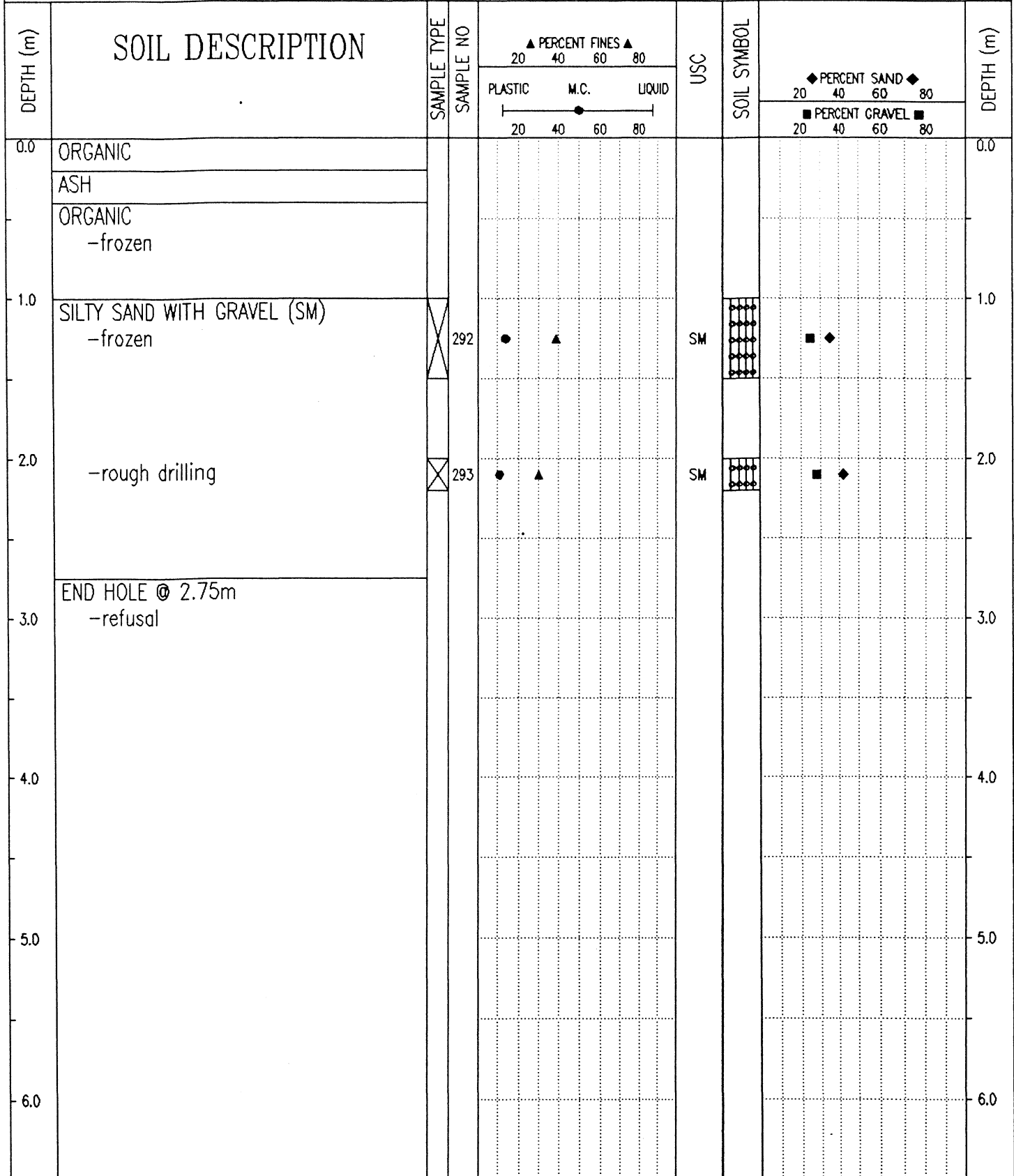
SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-638
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1810+265 36 RHS	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> 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			20	40	60	
0.0	ORGANIC -black -moist											0.0
	ASH -moist											
1.0	ASH & ORGANIC -wet											1.0
	SILT (ML) -moist -frozen (Vx) below 1.2m -grindy below 1.6m	<input checked="" type="checkbox"/>	624	●		▲	ML	▨	◆			
2.0	END HOLE @ 2.0m -refusal - rock dust											2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0

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Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-456
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1810+275 CENTRELINE	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		

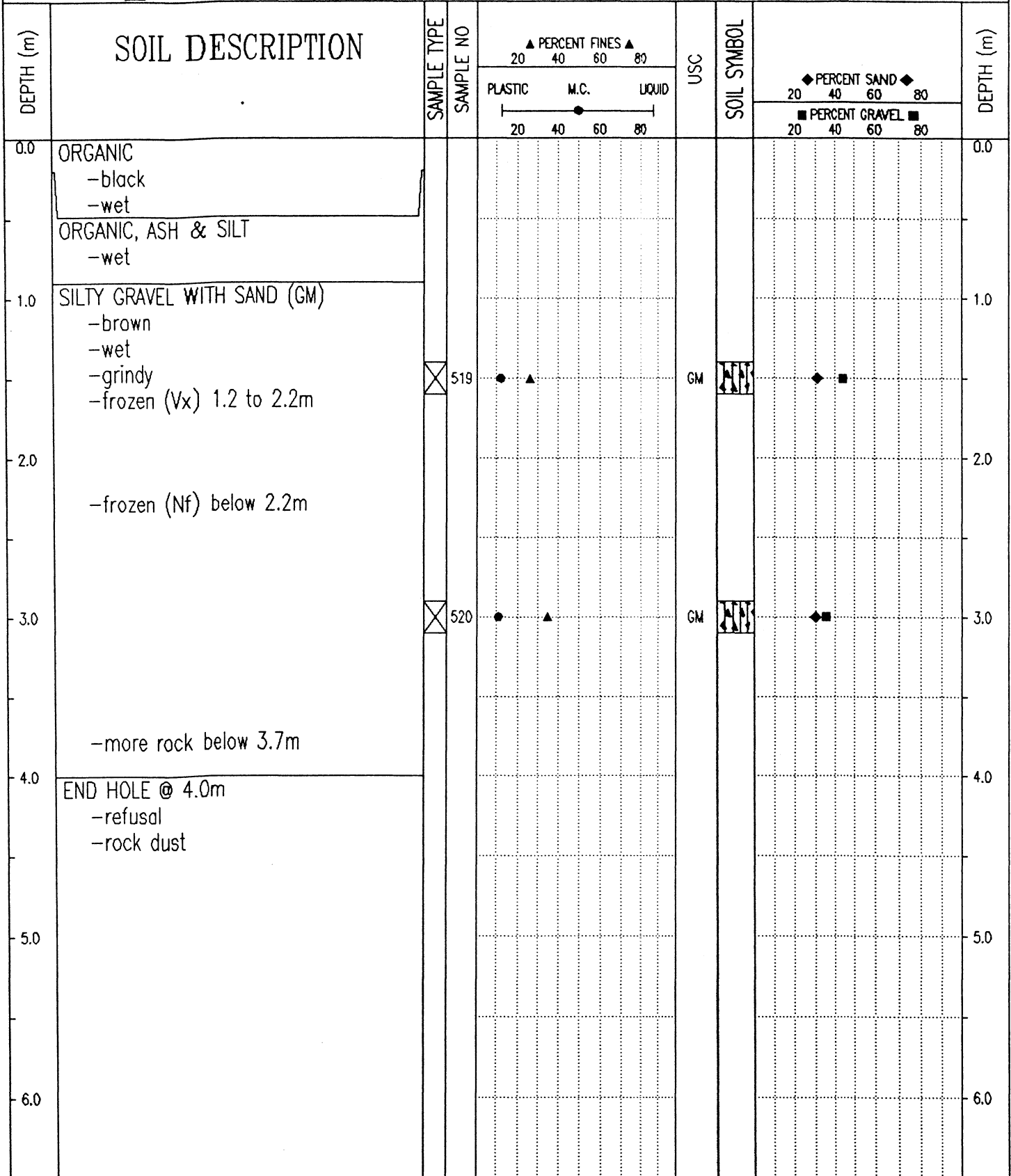


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COMPLETION DEPTH: 2.8 m
COMPLETE: 99/05/03

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-636
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1810+345 38 RHS (INLET)	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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COMPLETION DEPTH: 4.0 m
COMPLETE: 99/08/05

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-637								
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329								
MOBILE B-40L		LOCATION: 1810+350 18 LHS		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE		
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC -black -wet										0.0	
1.0	ORGANIC, ASH & SILT -frozen (Vx) below .5m										1.0	
2.0	SILTY SAND TO SILTY SAND WITH GRAVEL (ML)-(SM) -brown -frozen (Nf) -grindy drilling	☒	521	●	▲		ML	■	◆		2.0	
3.0		☒	522	●	▲		SM	■	◆		3.0	
4.0	-not frozen below 3.5m										4.0	
5.0	EDN HOLE @ 4.5m	☒	523	●	▲		SM	■	◆		5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: W.E. REVIEWED BY: Fig. No:				COMPLETION DEPTH: 4.5 m COMPLETE: 99/08/05 Page 1 of 1				

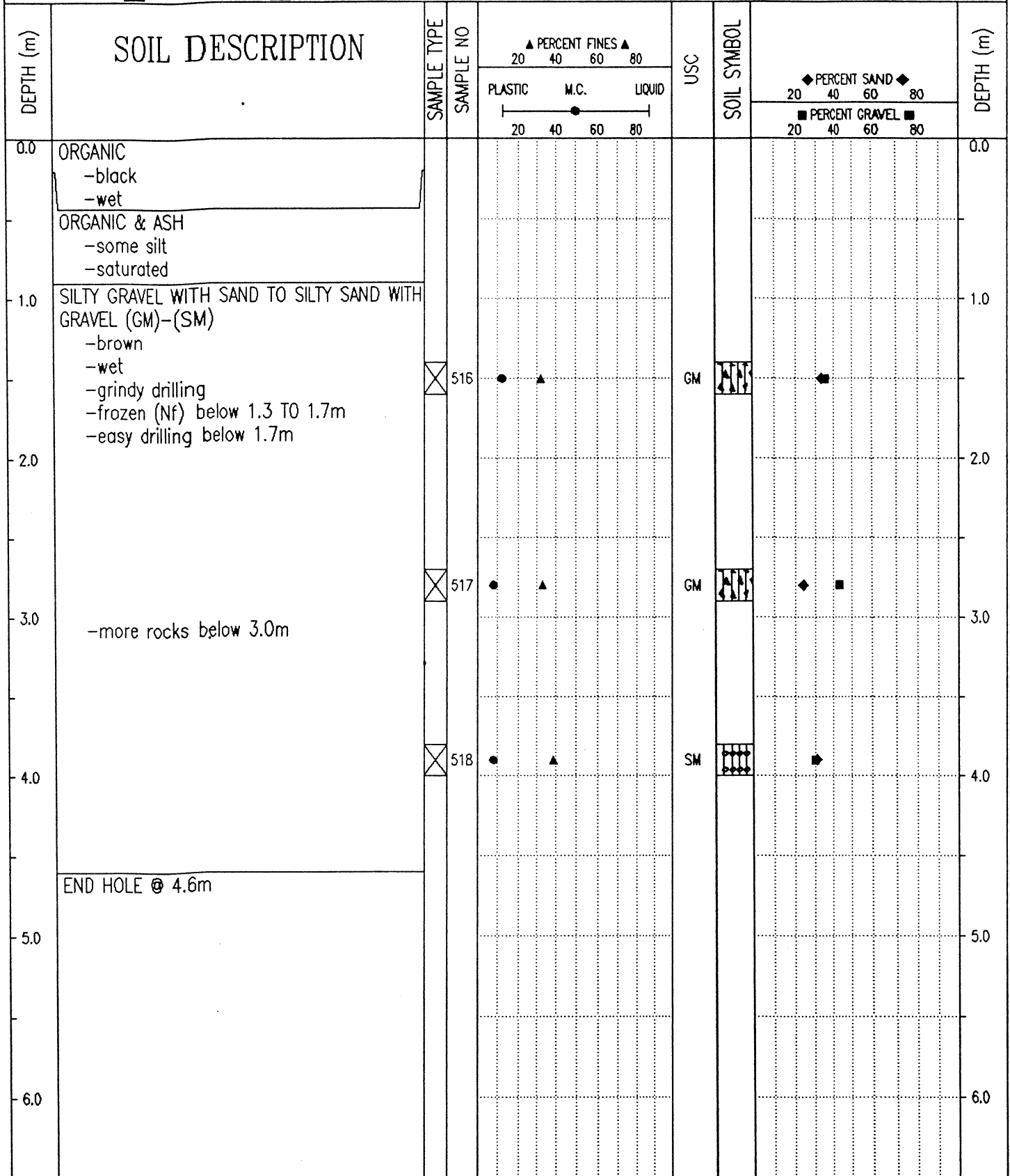
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-455							
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329							
NODWELL B-40L		LOCATION: 1810+375 CENTRELINE		ELEVATION: 0.00 (m)							
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)			
0.0	ORGANIC							0.0			
	ASH										
	ORGANIC -frozen										
1.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM)	X	288	● ▲	GM	◆ ■		1.0			
2.0	-1st refusal @ 1.7m -wet below 1.8m -easy drilling below 1.8m	X	289	● ▲	GM	◆ ■		2.0			
3.0		X	290	● ▲	GM	◆ ■		3.0			
4.0		X	291	● ▲	SM	◆ ■		4.0			
5.0	END HOLE @ 4.5m							5.0			
6.0								6.0			

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COMPLETION DEPTH: 4.5 m
COMPLETE: 99/05/03

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-635
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1810+415 20 RHS (INLET)	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

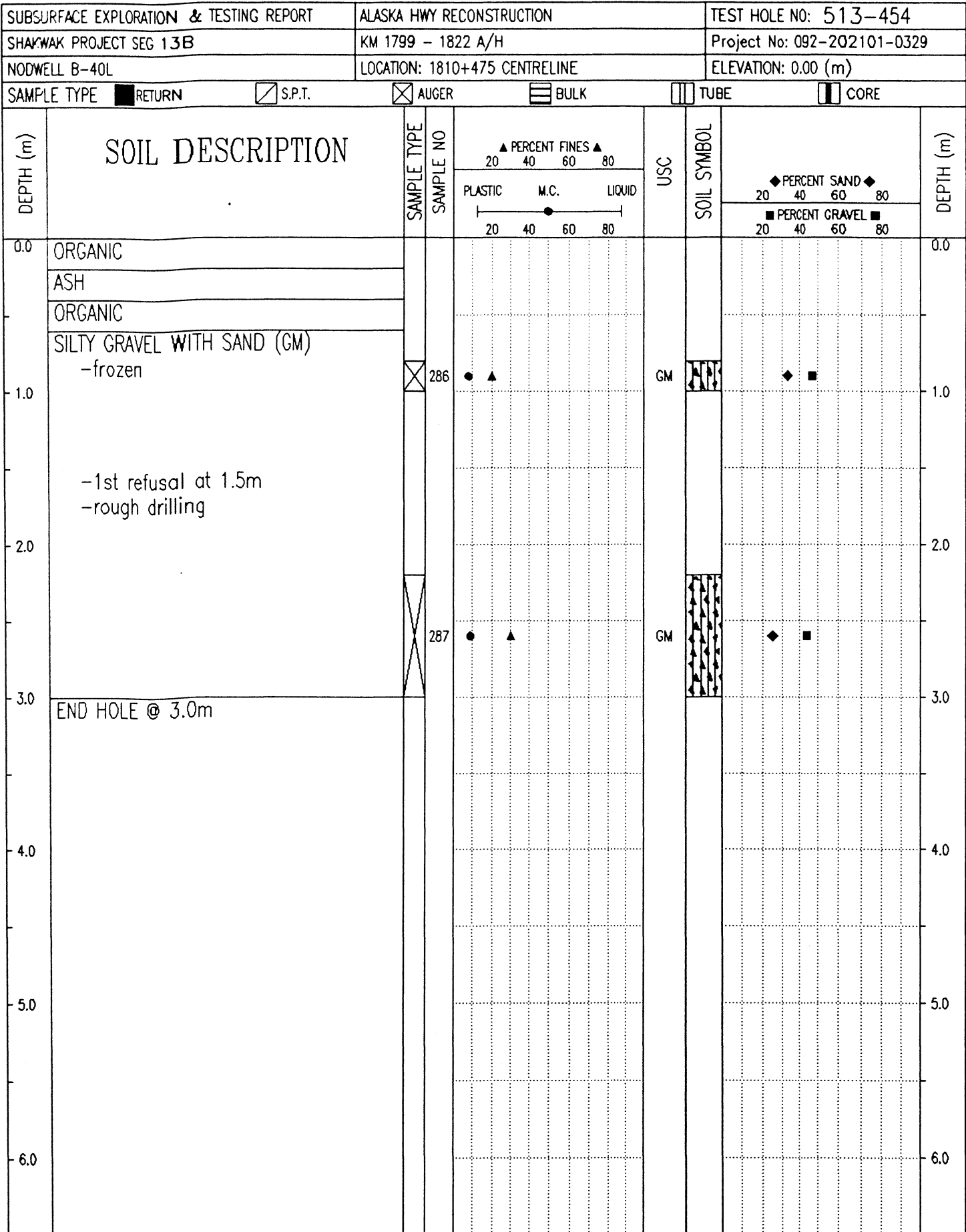


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COMPLETION DEPTH: 4.6 m
COMPLETE: 99/08/05

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-634						
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329						
MOBILE B-40L		LOCATION: 1810+415 20 LHS (OUTLET)		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	ORGANIC -some ash -wet									0.0
1.0	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Nf) -grindy below 1.3m									1.0
2.0		<input checked="" type="checkbox"/>	515	●	▲		GM	◆	■	2.0
3.0	-more rock below 1.5m									3.0
4.0	END HOLE @ 2.8m -refusal									4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: W.E. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.8 m COMPLETE: 99/08/04		Page 1 of 1		



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COMPLETION DEPTH: 3.0 m
COMPLETE: 99/05/03

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-633								
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329								
MOBILE B-40L		LOCATION: 1810+490 19 LHS (OUTLET)		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES		USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	40	60	
0.0	ORGANIC -wet											0.0
1.0	SILTY GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SAND (GM)-(GP) -saturated -grindy below 1.3m -more rock below 1.3m											1.0
2.0												2.0
3.0	END HOLE @ 3.0m											3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: W.E. REVIEWED BY: Fig. No:				COMPLETION DEPTH: 3.0 m COMPLETE: 99/08/04				

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 520-632

SHAKWAK SEG 13 KM 1796-1822 A/H Project No: 092-202101-0329

MOBILE B-40L LOCATION: 1810+490 17 RHS (INLET) ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC -moist										0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -greyish brown -moist -grindy drilling	<input checked="" type="checkbox"/>	511	●	▲		SM	■◆			1.0	
2.0											2.0	
3.0	END HOLE @ 3.0m -refusal	<input checked="" type="checkbox"/>	512	●	▲		SM	■◆			3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/08/04

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-631											
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329											
MOBILE B-40L		LOCATION: 1810+535 33M RHS		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	ORGANIC ASH ASH & ORGANIC -moist													0.0	
1.0	SILTY GRAVEL WITH SAND (GM) -greyish brown -frozen -moist	<input checked="" type="checkbox"/>	509	●	▲		GM	▲▲▲	◆	■				1.0	
2.0														2.0	
3.0	END HOLE @ 3.0m -refusal	<input checked="" type="checkbox"/>	510	●	▲		GM	▲▲▲	◆	■				3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	

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REVIEWED BY:	COMPLETE: 99/08/04
Fig. No:	Page 1 of 1

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
				20 40 60 80	20 40 60 80	20 40 60 80		20 40 60 80	20 40 60 80	20 40 60 80		
0.0	ORGANIC										0.0	
	ASH											
	SANDY SILT (ML) -frozen											
1.0		<input checked="" type="checkbox"/>	282	●	▲		ML	■ ◆			1.0	
	SANDY SILT WITH GRAVEL TO SILTY SAND WITH GRAVEL (ML)-(SM) -not frozen											
2.0		<input checked="" type="checkbox"/>	283	●	▲		ML	■ ◆			2.0	
3.0		<input checked="" type="checkbox"/>	284	●	▲		SM	■ ◆			3.0	
4.0		<input checked="" type="checkbox"/>	285	●	▲		SM	■ ◆			4.0	
	END HOLE @ 4.5m											
5.0											5.0	
6.0											6.0	

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Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-452								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1810+625 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		METHOD		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		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	40	60	
0.0	ORGANIC											0.0
	ASH											
	SILTY GRAVEL WITH SAND (GM) -frozen -surface water 0.4-0.6m											
1.0		X	280	●	▲		GM	◆	■			1.0
2.0	SILTY SAND WITH GRAVEL (SM) -not frozen											2.0
3.0	END HOLE @ 3.0m	X	281	●	▲		SM	◆	■			3.0
4.0												4.0
5.0												5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/05/03

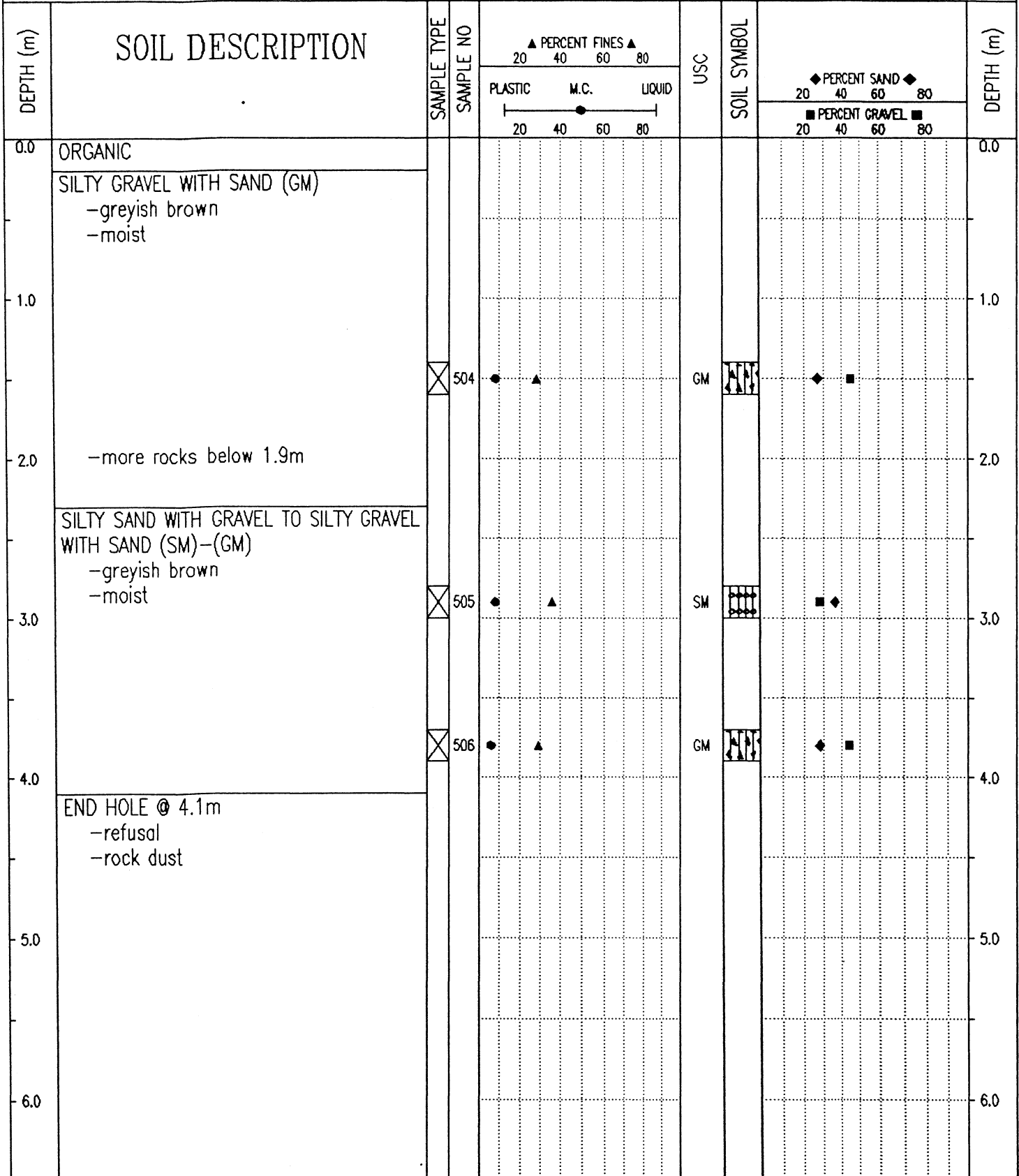
SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-629								
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329								
MOBILE B-40L		LOCATION: 1810+625 25M RHS (INLET)		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" 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	PERCENT GRAVEL ■			
0.0	ORGANIC			20	40	60	80	20	40	60	80	0.0
	ASH & ORGANIC -saturated											
1.0												1.0
2.0	SILTY SAND WITH GRAVEL (SM) -brown -saturated -grinding drilling											2.0
3.0		<input checked="" type="checkbox"/>	507									3.0
4.0												4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: W.E. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 99/08/04		Page 1 of 1				

SUB-SURFACE EXPLORATION & TESTING REPORT ALASKA HWY RE-CONSTRUCTION TEST HOLE NO: 520-628

SHAKWAK SEG 13 KM 1796-1822 A/H Project No: 092-202101-0329

MOBILE B-40L LOCATION: 1810+720 33M RHS ELEVATION: 0.00 (m)

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



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COMPLETION DEPTH: 4.1 m
COMPLETE: 99/08/04

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-451							
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329							
NODWELL B-40L		LOCATION: 1810+750 CENTRELIN		ELEVATION: 0.00 (m)							
SAMPLE TYPE		RETURN		S.P.T.							
		AUGER		BULK							
		TUBE		CORE							
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲		USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.			LIQUID	20		
0.0	ORGANICS										0.0
	ASH										
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM)										
	-frozen										
1.0		⊗	277	●	▲		GM	◆	■		1.0
3.0		⊗	278	●	▲		GM	◆	■		3.0
4.0		⊗	279	●	▲		SM	◆	■		4.0
4.5	END HOLE @ 4.5m										

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Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-627											
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329											
MOBILE B-40L		LOCATION: 1810+800 34M RHS		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 ◆			PERCENT GRAVEL ■			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC													0.0	
	ORGANIC & ASH														
1.0	ORGANIC -frozen (Vx)													1.0	
2.0	SILTY SAND WITH GRAVEL (SM) -greyish brown -frozen (Nf) -grindy drilling	<input checked="" type="checkbox"/>	502	●	▲		SM	■◆						2.0	
	-brown below 2.5m														
3.0		<input checked="" type="checkbox"/>	503	●	▲		SM	■◆						3.0	
4.0	END HOLE @ 3.8m -refusal -rock dust on bit													4.0	
5.0														5.0	
6.0														6.0	

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Fig. No:

COMPLETION DEPTH: 3.8 m

COMPLETE: 99/08/04

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 513-450								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1810+850 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES		USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	40	60	
0.0	ORGANICS											0.0
	ASH											
	ORGANICS -frozen											
1.0												1.0
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM)	X	274	●	▲		GM	◆	■			
2.0		X	275	●	▲		SM	◆	■			2.0
	-first refusal 2.5m											
3.0		X	276	●	▲		SM	◆	■			3.0
	END HOLE @ 3.0m -refusal											
4.0												4.0
5.0												5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/05/03

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-625						
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329						
MOBILE B-40L		LOCATION: 1810+875 21M RHS (INLET)		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	PERCENT GRAVEL ■	
0.0	ORGANIC -saturated									0.0
	ASH & ORGANIC -saturated									
1.0	SILT WITH SAND (ML) -brown -frozen (Vx) -grindy									1.0
		<input checked="" type="checkbox"/>	500			ML				
2.0										2.0
3.0	END HOLE @ 2.8m -refusal -rock dust on bit									3.0
4.0										4.0
5.0										5.0
6.0										6.0

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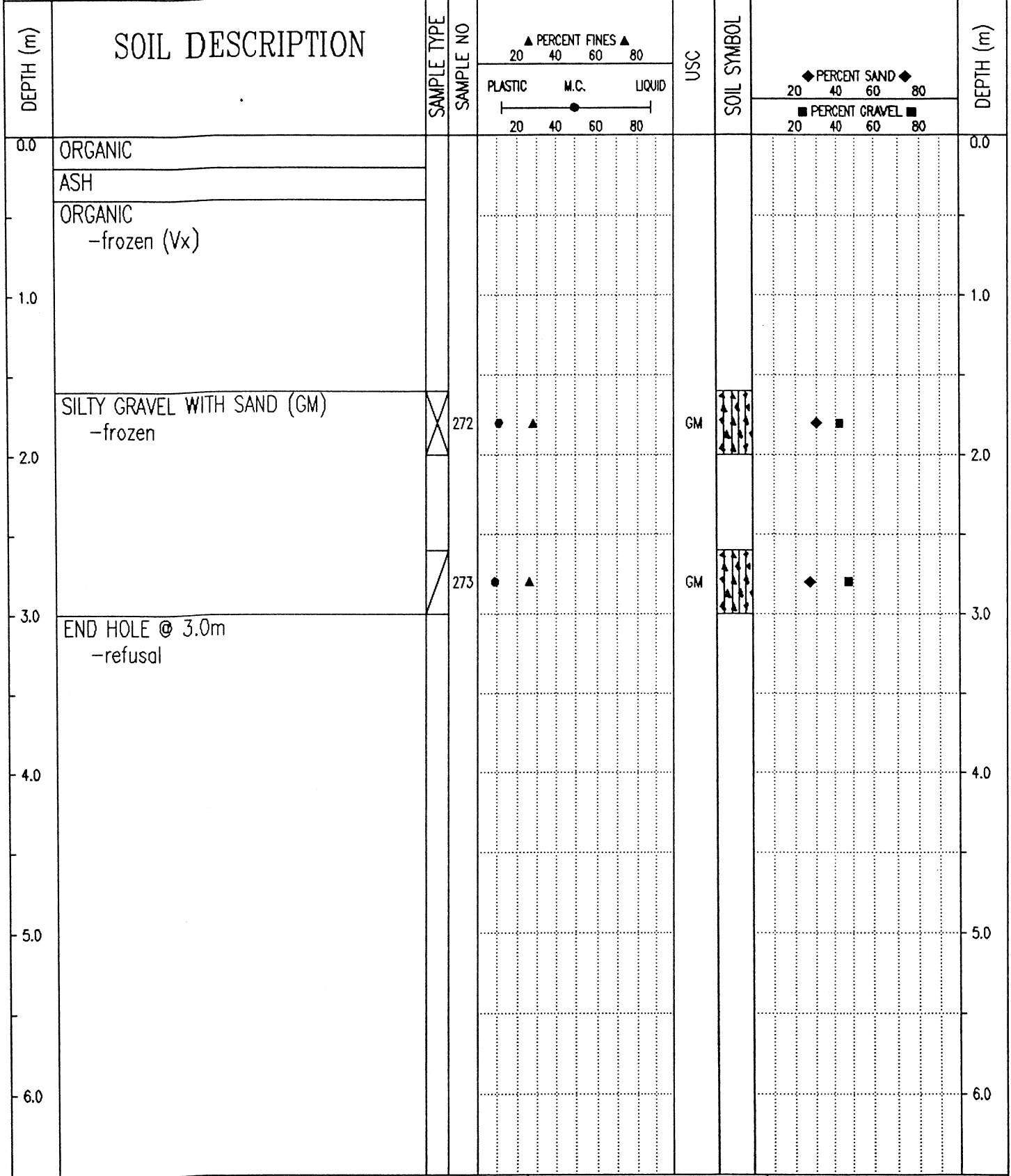
COMPLETION DEPTH: 2.8 m
COMPLETE: 99/08/04

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-626						
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329						
MOBILE B-40L		LOCATION: 1810+875 21M LHS (OUTLET)		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	ORGANIC									0.0
	ORGANIC & ASH -saturated -frozen below 0.6m									
1.0										1.0
	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nf) -grindy drilling -sample #501 contaminated with ash, organic & water	<input checked="" type="checkbox"/>	501	●▲			SM	■◆		
2.0										2.0
	END HOLE @ 2.5m -refusal									
3.0										3.0
4.0										4.0
5.0										5.0
6.0										6.0

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REVIEWED BY:	COMPLETE: 99/08/04
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 513-449
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1810+950 CENTRELINE	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			



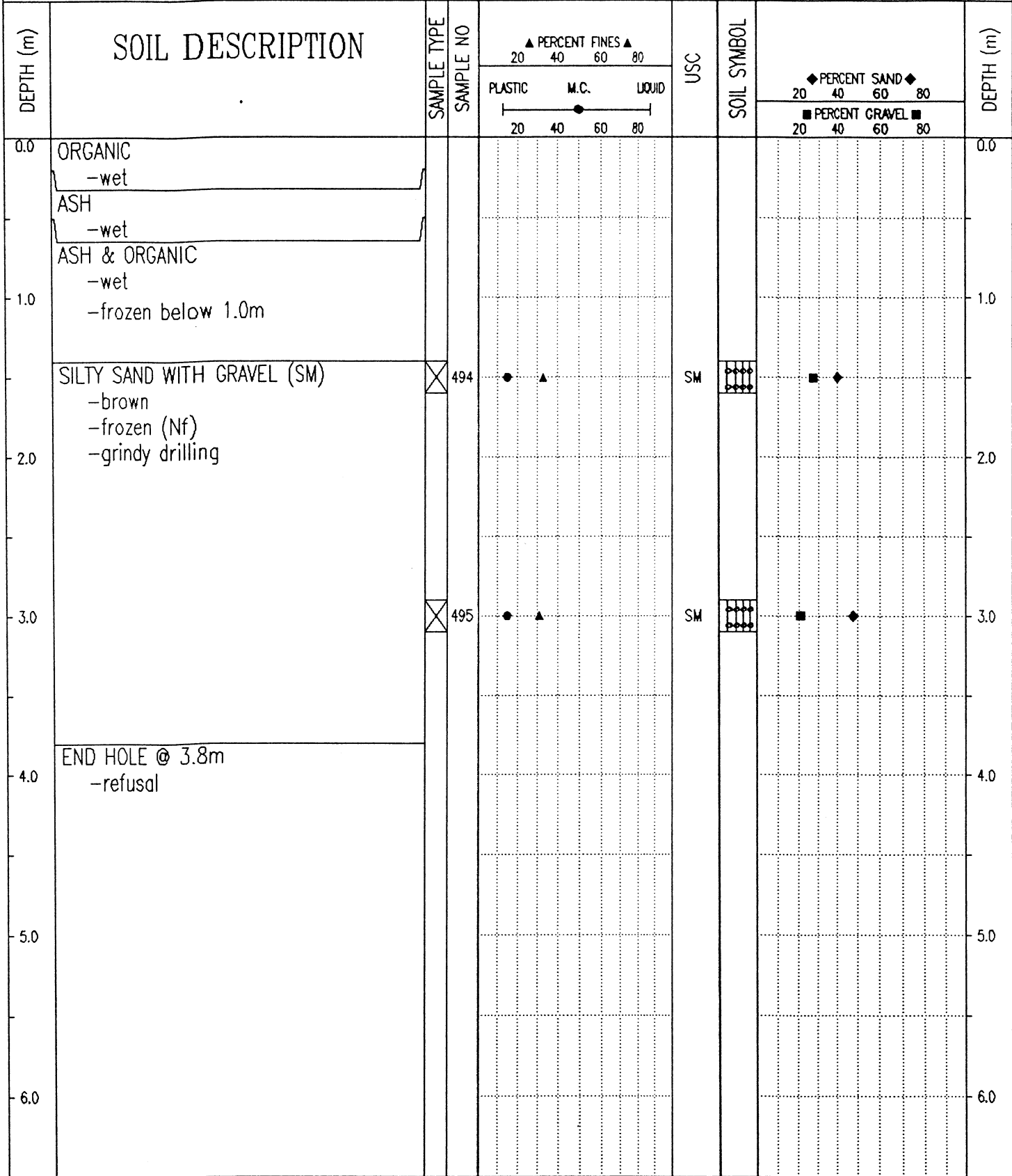
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LOGGED BY: G.C.	COMPLETION DEPTH: 3.0 m
REVIEWED BY:	COMPLETE: 99/05/03
Fig. No:	Page 1 of 1

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-624								
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329								
MOBILE B-40L		LOCATION: 1810+950 34M RHS		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	ORGANIC ORGANIC & MOSTLY ASH -wet										0.0	
1.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (GM)-(SM)-(GM) -brown -grindy -frozen below 1.5m	<input checked="" type="checkbox"/>	497	●	▲		GM	▲▲▲▲	◆		1.0	
2.0											2.0	
3.0	-sample #498 contaminated with ash & organic -more rocks below 3.5m	<input checked="" type="checkbox"/>	498	●	▲		SM	◆◆◆◆	■◆		3.0	
4.0		<input checked="" type="checkbox"/>	499	●	▲		GM	▲▲▲▲	◆■		4.0	
5.0	END HOLE @ 4.5m										5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: W.E.		COMPLETION DEPTH: 4.5 m						
				REVIEWED BY:		COMPLETE: 99/08/04						
				Fig. No:		Page 1 of 1						

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION		TEST HOLE NO: 520-623						
SHAKWAK SEG 13		KM 1796-1822 A/H		Project No: 092-202101-0329						
MOBILE B-40L		LOCATION: 1811+035 23M LHS (OUTLET)		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 ▲ 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC M.C. LIQUID 20 40 60 80				■ PERCENT GRAVEL ■ 20 40 60 80		
0.0	ORGANIC -wet									0.0
	ASH -wet									
	ORGANIC & ASH -wet									
1.0	-frozen below 1.0m									1.0
	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Nf) -grindy drilling									
2.0										2.0
3.0	-sample # 496 contaminated with ash	<input checked="" type="checkbox"/>	496	●	▲	SM	▣	■	◆	3.0
	END HOLE @ 3.0. -refusal									
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: W.E. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 99/08/04				

SUB-SURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-622
SHAKWAK SEG 13		KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L		LOCATION: 1811+040 21M RHS (INLET)	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:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-448								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1811+050 CENTRELINE		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			PERCENT GRAVEL ■			
0.0	ORGANICS										0.0	
	ASH											
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen -tough grindy drilling											
1.0			270	●	▲		GM	◆	■		1.0	
2.0												
3.0			271	●	▲		GM	◆	■		3.0	
3.0	END HOLE @ 3.0m											
4.0												
5.0												
6.0												
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 3.0 m				
				REVIEWED BY:				COMPLETE: 99/04/30				
				Fig. No:				Page 1 of 1				

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-621
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1811+125 30M RHS	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 ◆		PERCENT GRAVEL ■		DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	
0.0	ORGANIC ASH											0.0	
	ORGANIC, ASH & SILT												
1.0												1.0	
	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Nf) -grindy drilling -more rocks below 1.8m	<input checked="" type="checkbox"/>	492	●	▲		GM	◆	■				
2.0												2.0	
	-ash & organic contamination samp#493	<input checked="" type="checkbox"/>	493	●	▲		GM	◆	■				
3.0												3.0	
	END HOLE @ 3.7m -refusal												
4.0												4.0	
5.0												5.0	
6.0												6.0	

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Fig. No:

COMPLETION DEPTH: 3.7 m
COMPLETE: 99/08/04

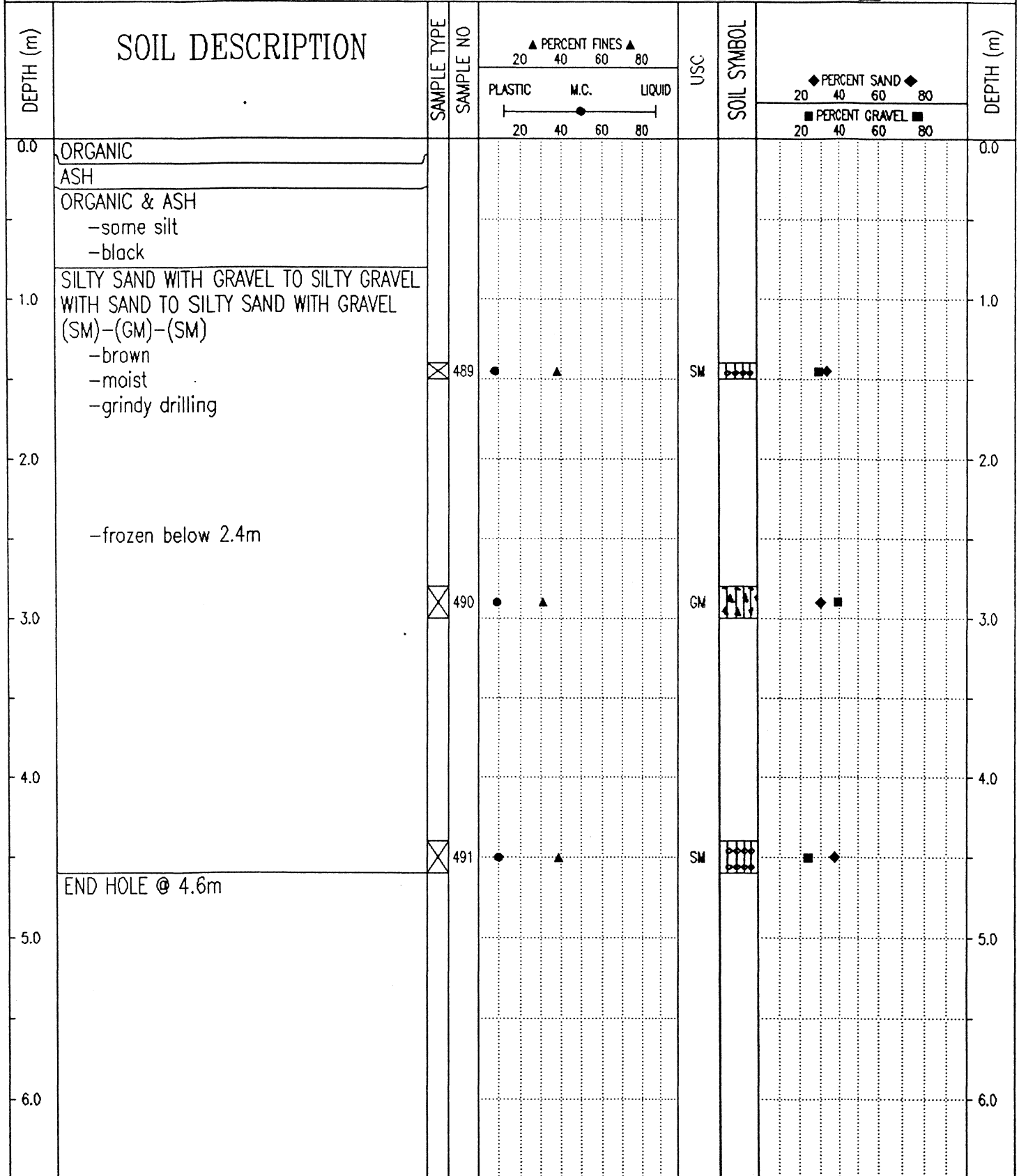
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SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329											
NODWELL B-40L		LOCATION: 1811+160 CENTRELINE		ELEVATION: 0.00 (m)											
SAMPLE TYPE		RETURN		S.P.T.											
AUGER		BULK		TUBE											
CORE															
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC ASH ORGANICS -frozen (Vx)													0.0	
2.0	SILTY GRAVEL WITH SAND (GM) -frozen -grindy drilling	X	268	●	▲		GM	▩	◆	■				2.0	
3.0	END HOLE @ 3.2m -refusal	X	269	●	▲		GM	▩	◆	■				3.0	

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Fig. No:

COMPLETION DEPTH: 3.2 m
COMPLETE: 99/04/30

SUB-SURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RE-CONSTRUCTION	TEST HOLE NO: 520-620
SHAKWAK SEG 13	KM 1796-1822 A/H	Project No: 092-202101-0329
MOBILE B-40L	LOCATION: 1811+225 31M RHS	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: 4.5 m
COMPLETE: 99/08/04

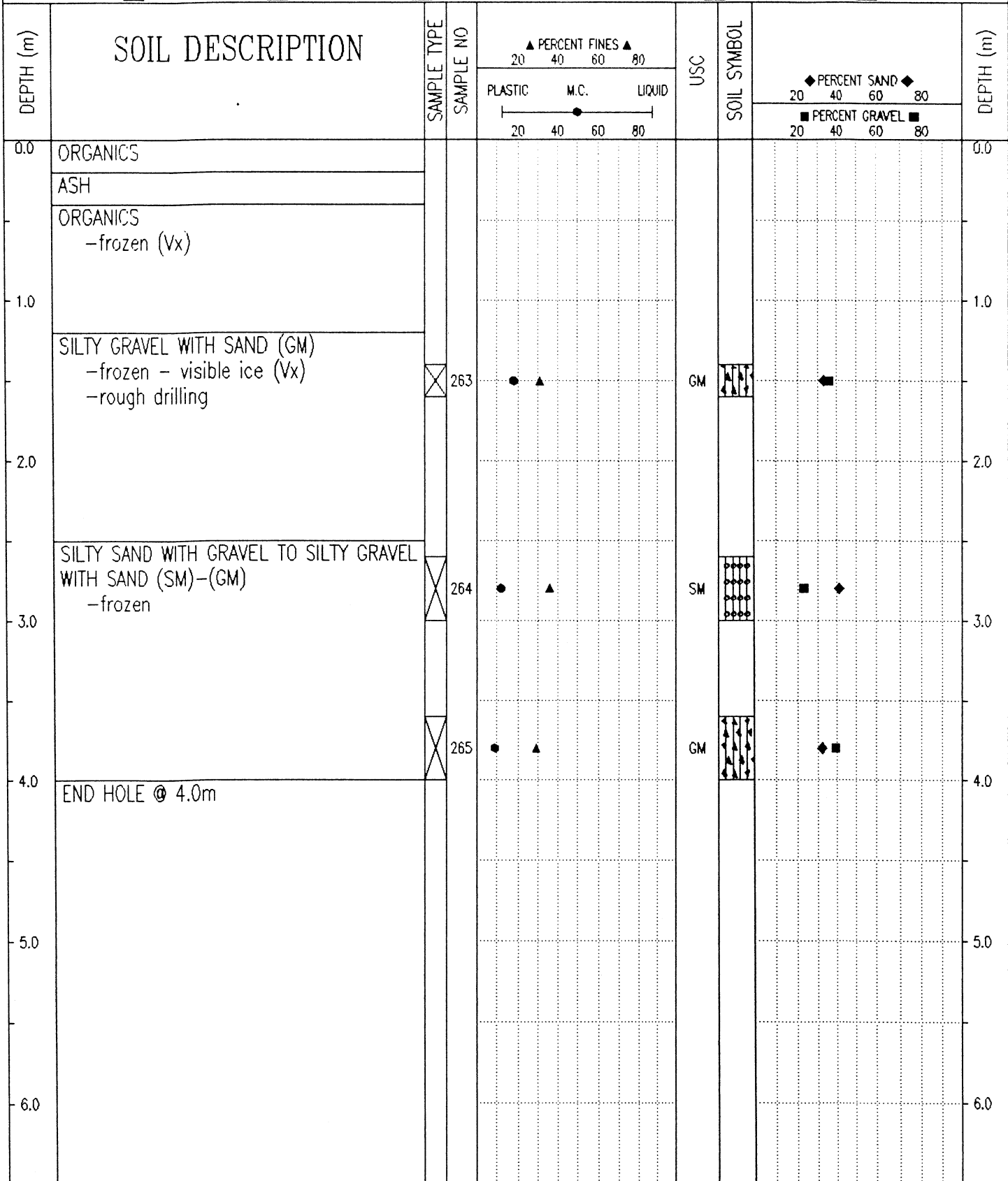
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-446								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1811+275 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER								
RETURN		BULK		TUBE								
CORE												
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL			
0.0	ORGANICS										0.0	
	ASH											
	ORGANICS WITH SILT -frozen (Nf)											
1.0		X	266				ML				1.0	
	SILTY GRAVEL WITH SAND (GM) -frozen -rough grindy drilling											
2.0		X	267				GM				2.0	
3.0	END HOLE @ 3.0m										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/04/30

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 512-445
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1811+400 CENTRELINE	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		



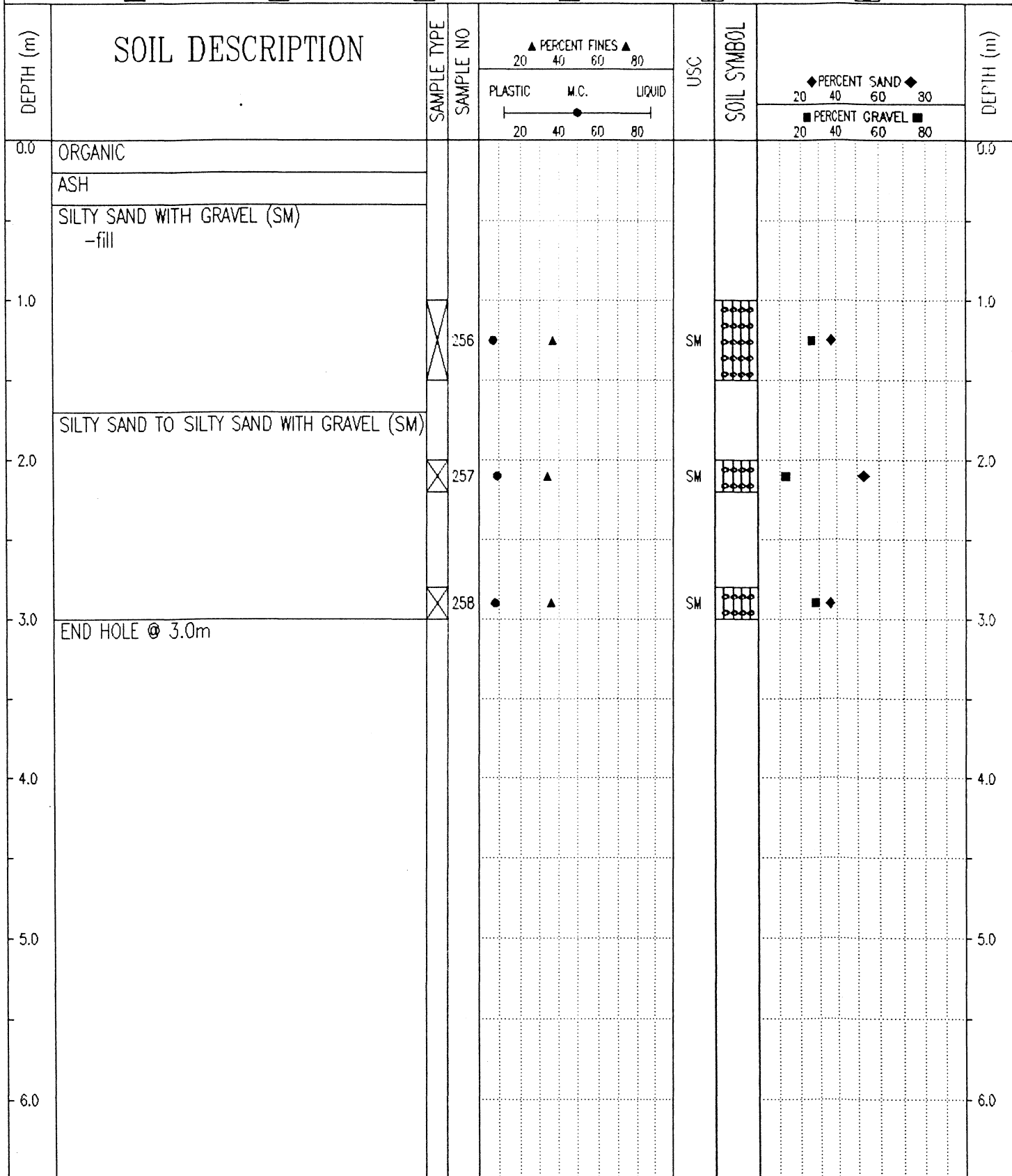
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LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 99/04/30
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-444											
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329											
NODWELL B-40L		LOCATION: 1811+492 CENTRELIN		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			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC ASH													0.0	
1.0	SILTY SAND WITH GRAVEL (SM) -with ash contamination -frozen -grindy drilling	<input checked="" type="checkbox"/>	260	●	▲		SM	▨▨▨▨		●				1.0	
2.0	SILTY GRAVEL WITH SAND (GM) -frozen -rough drilling	<input checked="" type="checkbox"/>	261	●	▲		GM	▨▨▨▨		◆	■			2.0	
3.0	END HOLE @ 3.0m	<input checked="" type="checkbox"/>	262	●	▲		GM	▨▨▨▨		◆	■			3.0	
4.0														4.0	
5.0														5.0	
6.0														6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 3.0 m							
				REVIEWED BY:				COMPLETE: 99/04/30							
				Fig. No:				Page 1 of 1							

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-443				
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329				
NODWELL B-40L		LOCATION: 1811+575 CENTRELINE		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			■ PERCENT GRAVEL ■	
0.0	ORGANICS							0.0
	SILTY GRAVEL WITH SAND(GM) -frozen							
1.0	END HOLE 1.0M -4 refusals @ 1.0m -Note: test hole 1.5m above water in creek - could possibly be boulder patch.	<input checked="" type="checkbox"/>	259	● ▲	GM	▲ ◆ ■	◆ ■	1.0
2.0								2.0
3.0								3.0
4.0								4.0
5.0								5.0
6.0								6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 1.0 m		
				REVIEWED BY:		COMPLETE: 99/04/30		
				Fig. No:		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 512-442
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1811+700 CENTRELINE	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



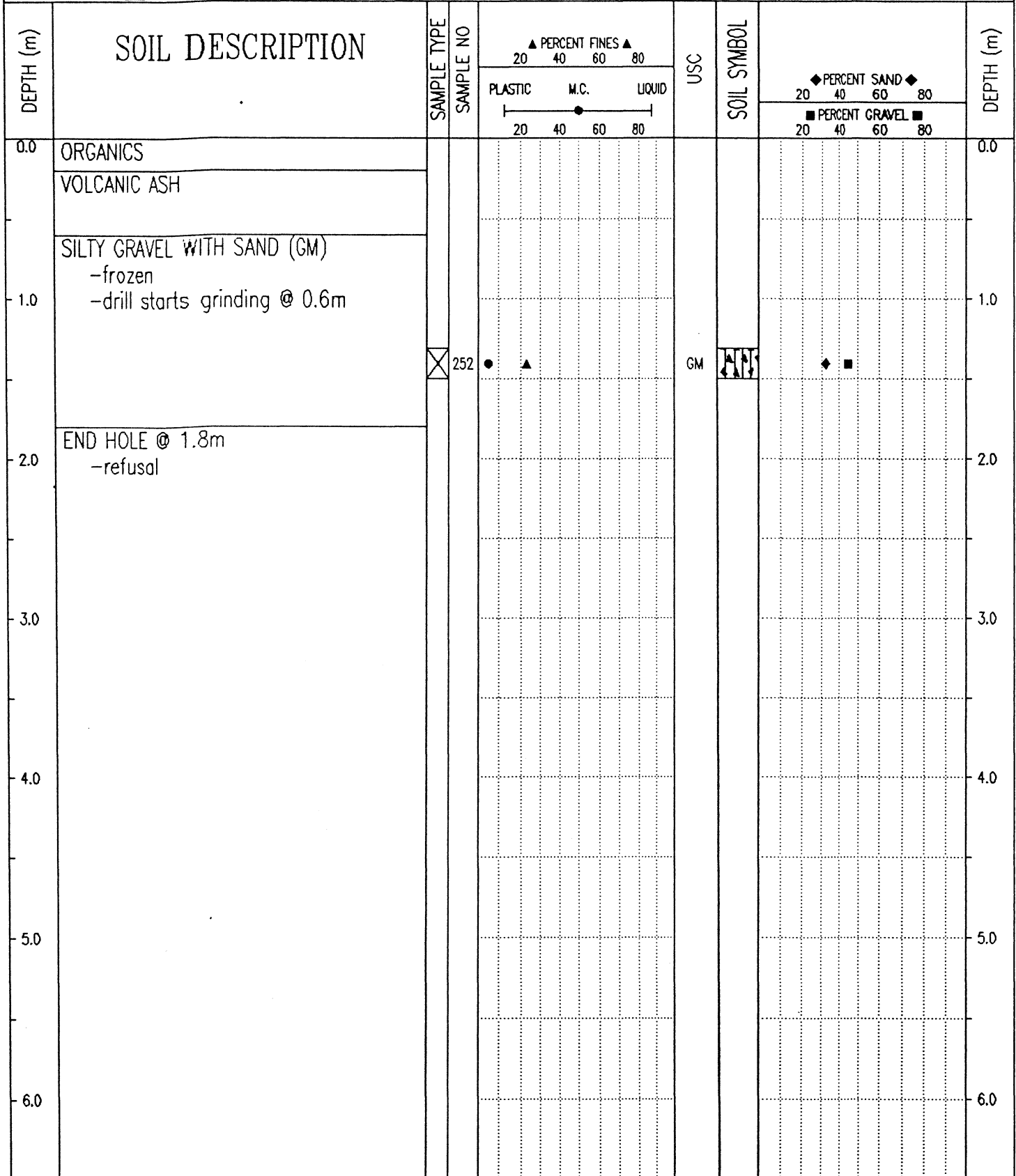
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Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-441								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1811+800 CENTRELINE		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	MIXTURE OF ORGANICS, ASH & SAND GRAVEL -not layered -frozen										0.0	
1.0	ORGANIC & SILT -frozen -smooth drilling from 1.0m										1.0	
2.0	SANDY SILT WITH GRAVEL (SM) -frozen	<input checked="" type="checkbox"/>	254	●	▲		SM	■◆			2.0	
3.0	SILTY GRAVEL WITH SAND (GM) -frozen -grinding drilling										3.0	
4.0	END HOLE @ 4.0m -refusal	<input checked="" type="checkbox"/>	255	●	▲		GM	■			4.0	
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 4.0 m				
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				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-440								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1811+900 CENTRELIN		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			20	40	60	
0.0	ORGANICS WITH ICE -(Vx)											0.0
1.0												1.0
2.0	ORGANIC -with silt -frozen	<input checked="" type="checkbox"/>	253		55	65	ML	◆				2.0
3.0	END HOLE @ 3.0m Note: ice rich at 3.0m											3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 3.0 m						
				REVIEWED BY:		COMPLETE: 99/04/30						
				Fig. No:		Page 1 of 1						

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 512-436
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1811+955 5M LT	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		

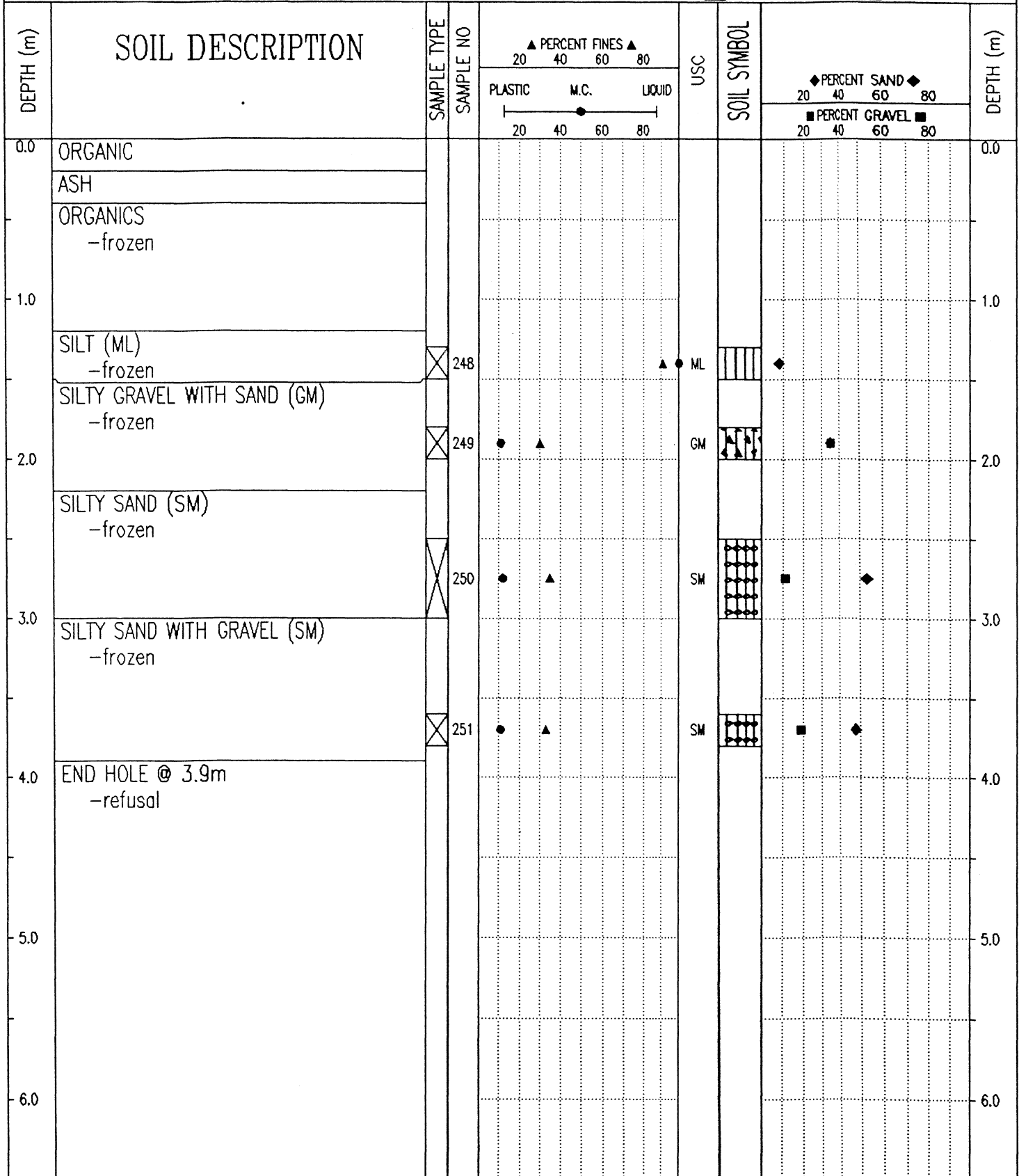


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Fig. No:

COMPLETION DEPTH: 1.8 m
COMPLETE: 99/04/28

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 512-435
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1812+025 CENTRELIN	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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COMPLETION DEPTH: 3.9 m
COMPLETE: 99/04/28

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-434						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1812+125 CENTRELINE		ELEVATION: 0.00 (m)						
SAMPLE TYPE		RETURN		S.P.T.						
		AUGER		BULK						
		TUBE		CORE						
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲		USC	SOIL SYMBOL	PERCENT SAND ◆		DEPTH (m)
				PLASTIC	M.C.			LIQUID	PERCENT GRAVEL ■	
0.0	ORGANICS									0.0
	ASH									
1.0	ORGANICS WITH ICE -frozen (Vx)									1.0
2.0	SILTY SAND WITH GRAVEL TO SILTY SAND (SM) -frozen -drill starts grinding @ 1.5m	X	246	●	▲	SM	◻	■	◆	2.0
3.0	END HOLE @ 2.8m -refusal	X	247	●	▲	SM	◻	■	◆	3.0
4.0										4.0
5.0										5.0
6.0										6.0

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Fig. No:

COMPLETION DEPTH: 2.8 m

COMPLETE: 99/04/28

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-433									
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329									
NODWELL B-40L		LOCATION: 1812+225 CENTRELINE		ELEVATION: 0.00 (m)									
SAMPLE TYPE		RETURN		S.P.T.									
		AUGER		BULK									
		TUBE		CORE									
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60		
0.0	ORGANICS												0.0
	ASH												
	ORGANICS -frozen												
1.0													1.0
	SILT (ML) -with organics	X	244				ML						
2.0													2.0
	SILTY SAND (SM) -frozen -grindy drilling @ 2.0m	X	245				ML						
3.0													3.0
	END HOLE @ 3.0m -rock dust on bit Note: Sample #245 may be ground up gravel or rock (rough drilling)												
4.0													4.0
5.0													5.0
6.0													6.0

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COMPLETION DEPTH: 3.0 m
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SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-432								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1812+325 CENTRELINE		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	ORGANICS										0.0	
	ICE & ASH											
	SILTY SAND WITH GRAVEL (SM)											
	-frozen											
	-rough drilling											
1.0			243	●	▲		SM	■	◆		1.0	
2.0	END HOLE @ 1.8m										2.0	
	-refusal											
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 1.8 m		REVIEWED BY:		COMPLETE: 99/04/28		
				Fig. No:						Page 1 of 1		

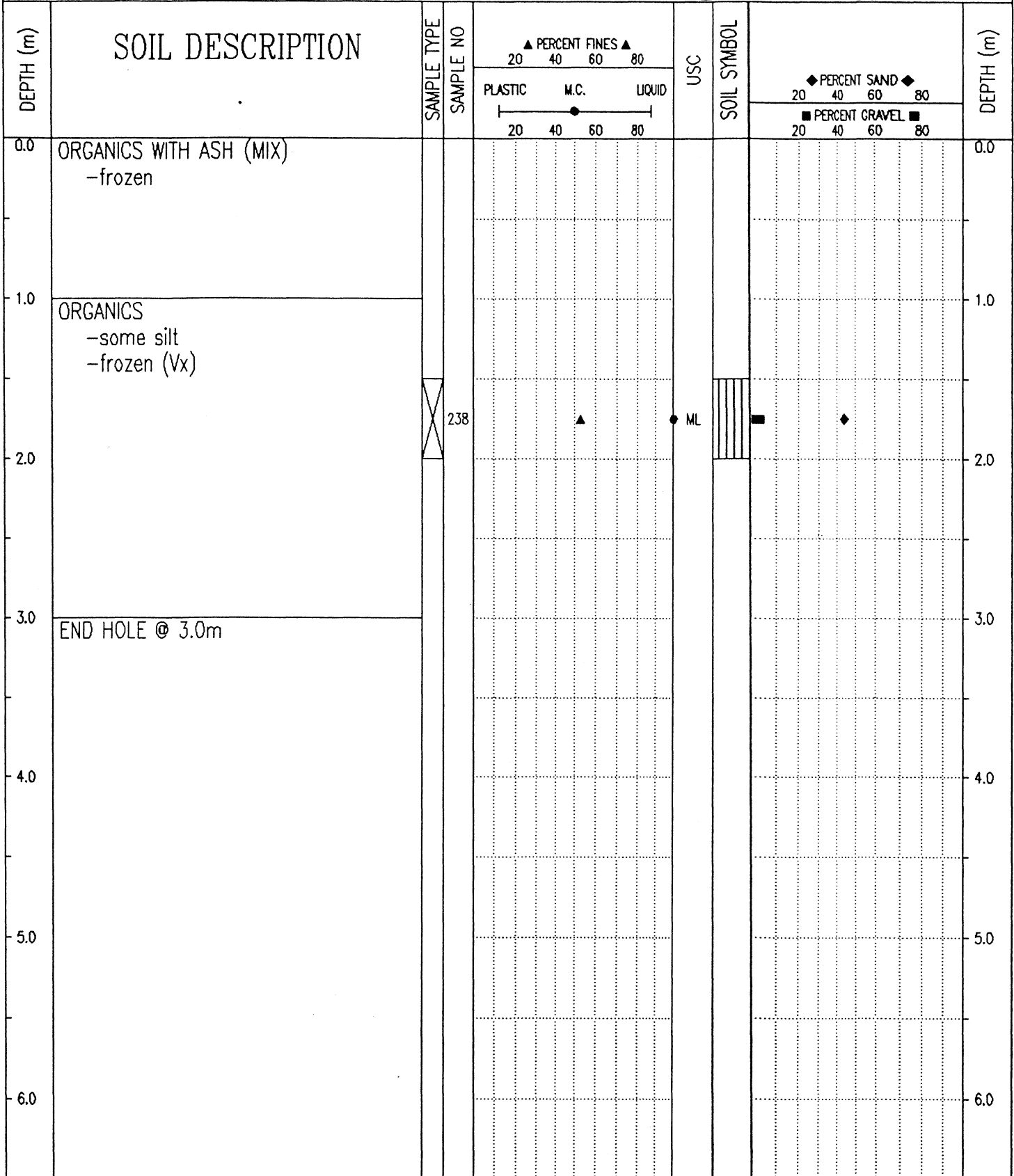
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-431								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1812+425 CENTRELIN		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN		<input 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	ORGANICS											0.0
	ASH & ICE											
	SILTY SAND WITH GRAVEL (SM) - frozen (Vx)											
1.0		<input checked="" type="checkbox"/>	241	●	▲		SM	◆	■			1.0
2.0												2.0
3.0		<input checked="" type="checkbox"/>	242	●	▲		SM	◆	■			3.0
3.3	END HOLE @ 3.3m											
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 3.3 m						
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				Fig. No:		Page 1 of 1						

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 512-430
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1812+500 CENTRELINE	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		
0.0	ORGANIC										0.0	
	ASH											
	SILTY SAND WITH GRAVEL (SM)											
	-frozen											
	-drill starts grinding @ 0.6m											
	-rough drilling below 1.0m											
1.0			239	●	▲		SM	■	◆		1.0	
2.0											2.0	
			240	●	▲		SM	■	◆		3.0	
3.0											3.0	
4.0	END HOLE @ 3.4M										4.0	
	-refusal											
5.0											5.0	
6.0											6.0	

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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 512-429
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1812+525 CENTRELINE	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:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-428								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1812+725 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL			
0.0	ORGANIC										0.0	
	ASH											
	ORGANICS -frozen (Vx)											
1.0											1.0	
	SILTY SAND WITH GRAVEL (SM) -frozen (Vx)		235				SM					
2.0			236				SM				2.0	
3.0			237				SM				3.0	
4.0	END HOLE @ 3.6m -refusal										4.0	
5.0											5.0	
6.0											6.0	

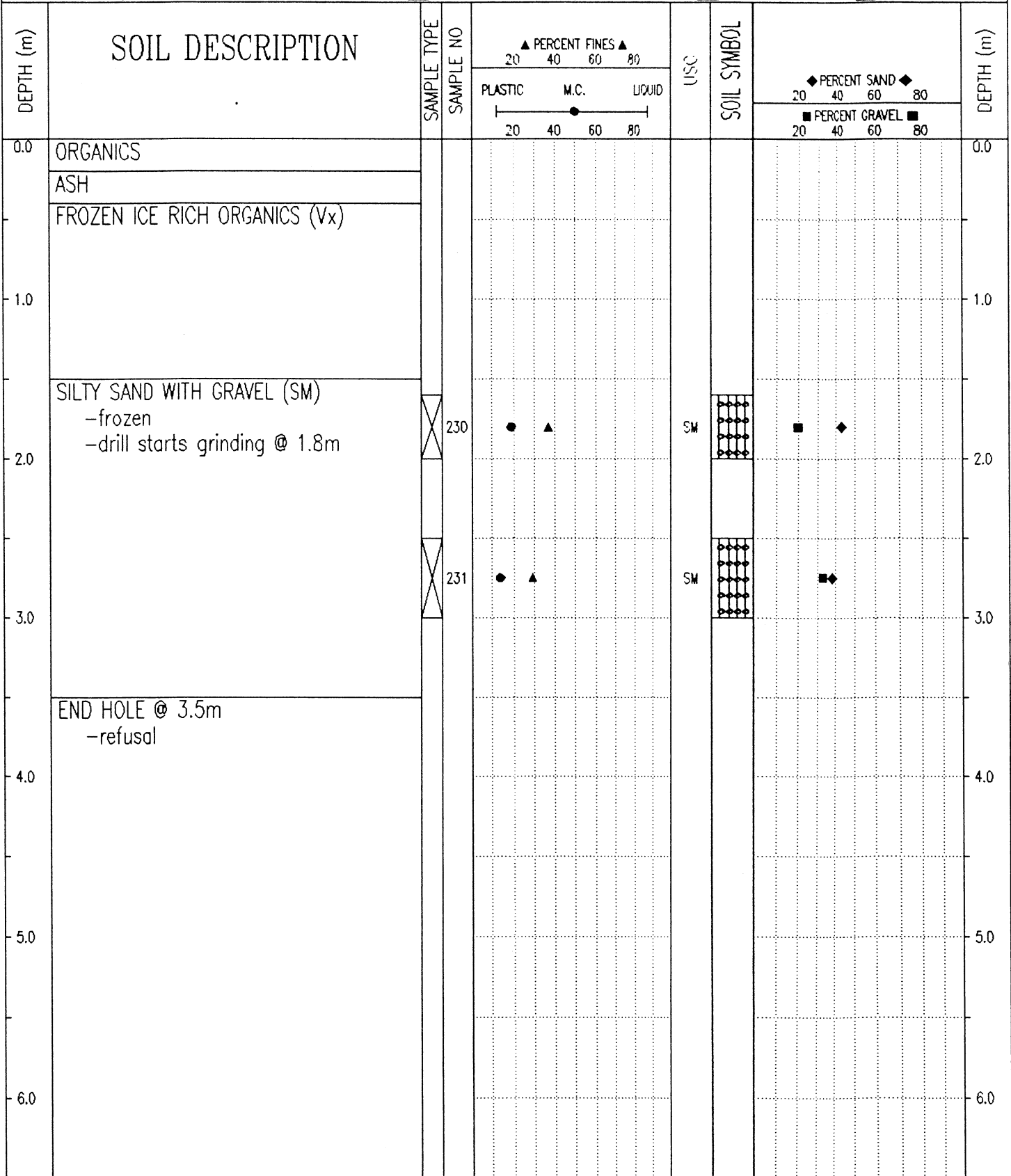
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COMPLETION DEPTH: 3.6 m
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SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 512-427								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1812+825 CENTRELINE		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	ORGANICS										0.0	
	ASH											
	ORGANICS WITH ICE -frozen (Vx)											
1.0											1.0	
	SILTY SAND WITH GRAVEL (SM) -frozen -drill starts grinding @ 1.5m -first refusal @ 2.0m	X	232	●	▲		SM	■	◆			
2.0											2.0	
	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen	X	233	●	▲		GM	■	◆			
3.0											3.0	
		X	234	●	▲		SM	■	◆			
4.0	END HOLE @ 4.0m -refusal										4.0	
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 4.0 m						
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				Fig. No:		Page 1 of 1						

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 512-426
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1812+925 CENTRELINE	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		

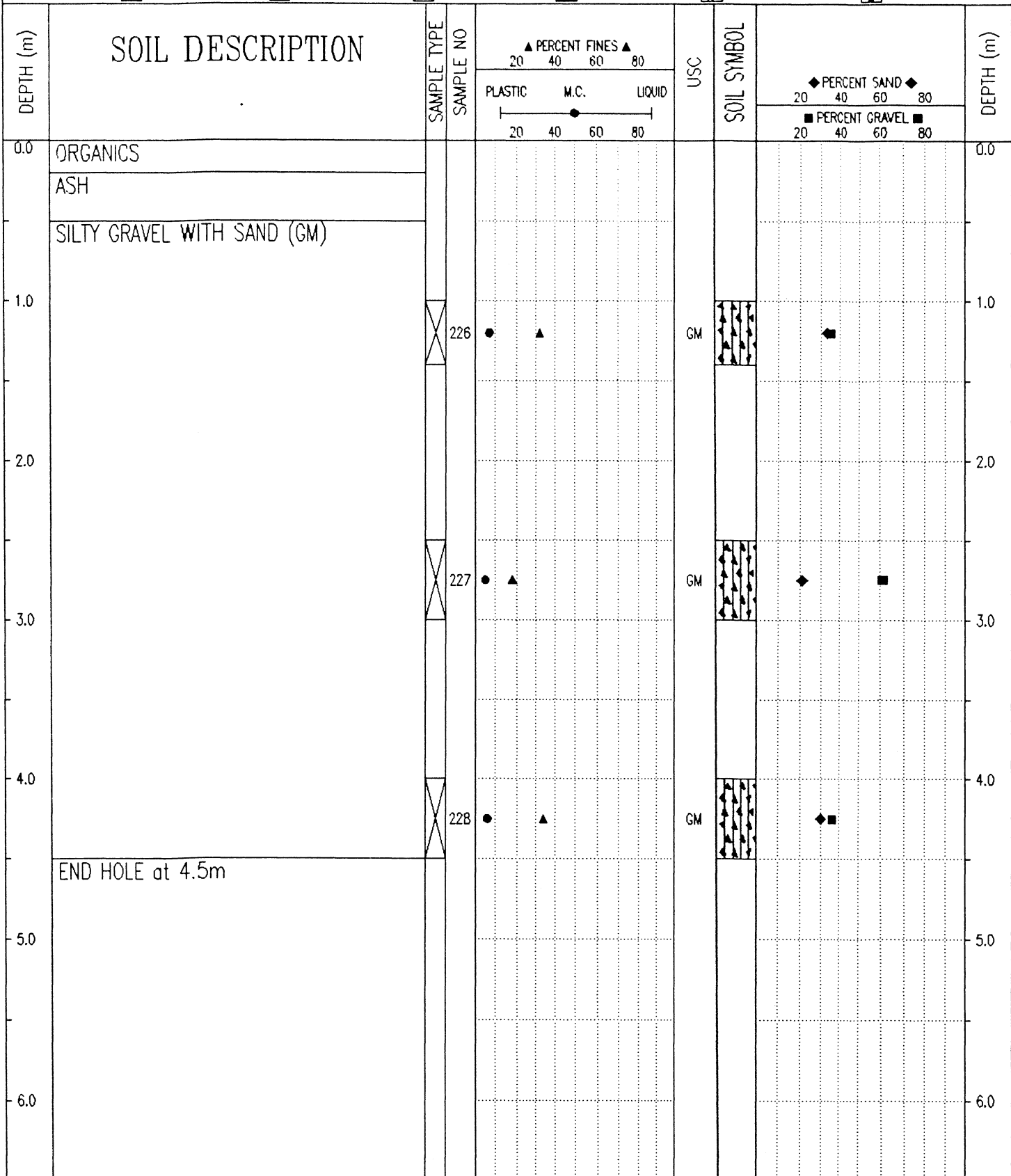


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COMPLETION DEPTH: 3.5 m
COMPLETE: 99/04/28

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-425		
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329		
NODWELL B-40L		LOCATION: 1813+050 CENTRELINE		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 ▲ 20 40 60 80 PLASTIC M.C. LIQUID ----- ----- ----- 20 40 60 80	USC SOIL SYMBOL ◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANICS -frozen ICE RICH VOLCANIC ASH					0.0
1.0						1.0
2.0	ORGANICS -frozen (Vx)					2.0
3.0	END HOLE @3.0m					3.0
4.0						4.0
5.0						5.0
6.0						6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 3.0 m
				REVIEWED BY:		COMPLETE: 99/04/28
				Fig. No:		Page 1 of 1



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Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-423							
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329							
NODWELL B-40L		LOCATION: 1813+275 CENTRELINE		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 ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.			LIQUID	20		
0.0	ORGANICS										0.0
	ASH										
1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND(SM)-(GM) -grindy drilling										1.0
		X	224	●	▲		SM	■	◆		
2.0	END HOLE @ 2.0m -2 refusals	X	225	●	▲		GM	■	◆		2.0
3.0											3.0
4.0											4.0
5.0											5.0
6.0											6.0

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Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-422								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1813+375 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE		
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL			
0.0	ORGANICS										0.0	
	ASH											
	SILT & ASH (MIX) -wet											
1.0											1.0	
	SILTY GRAVEL WITH SAND (GM) -grindy drilling		221	●	▲		GM	▲▲▲▲	◆	■		
2.0											2.0	
			222	●	▲		GM	▲▲▲▲	◆	■		
3.0											3.0	
			223	●	▲		GM	▲▲▲▲	◆	■		
4.0											4.0	
	END HOLE @ 4.5m											
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/27

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-421								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1813+450 CENTRELINE		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			20	40	60	
0.0	ORGANICS											0.0
	ASH											
	ORGANICS & ASH (MIX)											
1.0												1.0
	SILTY GRAVEL WITH SAND (GM)											
	-wet											
	-grindy drilling											
2.0												2.0
			219	●	▲		GM	◆	■			
3.0												3.0
4.0			220	●	▲		GM	◆	■			4.0
	END HOLE @ 4.5m											
5.0												5.0
6.0												6.0

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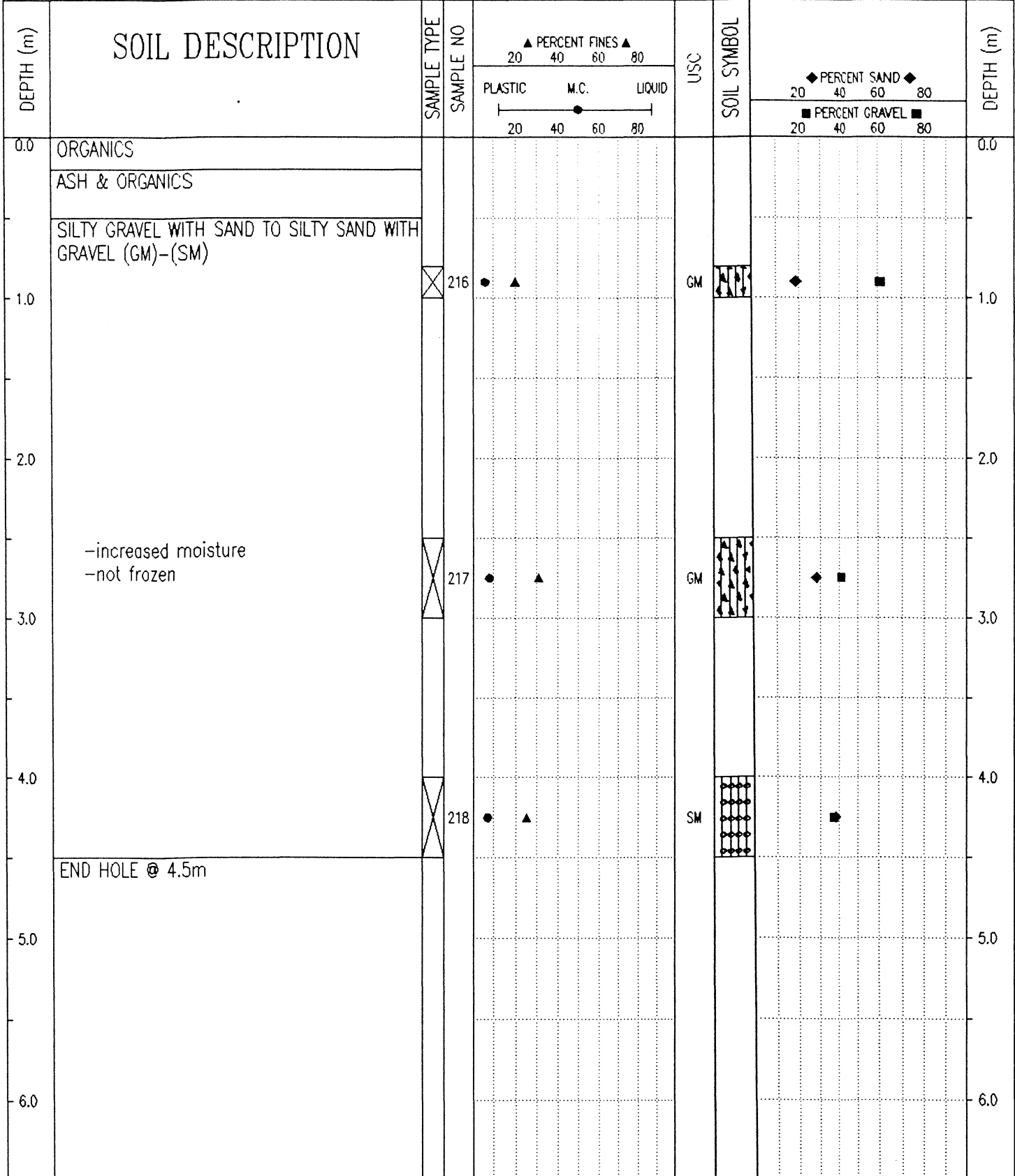
Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 99/04/27

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-420
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1813+525 CENTRELIN	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: 4.5 m

COMPLETE: 99/04/27

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-419								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1813+625 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE		
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANICS											0.0
	ASH											
	SILT WITH ORGANICS -frozen											
1.0	SILTY GRAVEL WITH SAND (GM)		213	●	▲		GM	◆	■			1.0
	-first refusal @ 1.6m											
	-rougher drilling below 2.0m											
2.0												
3.0			214	●	▲		GM	◆	■			3.0
4.0			215	●	▲		GM	◆	■			4.0
5.0	END HOLE @ 4.5M											5.0
6.0												6.0

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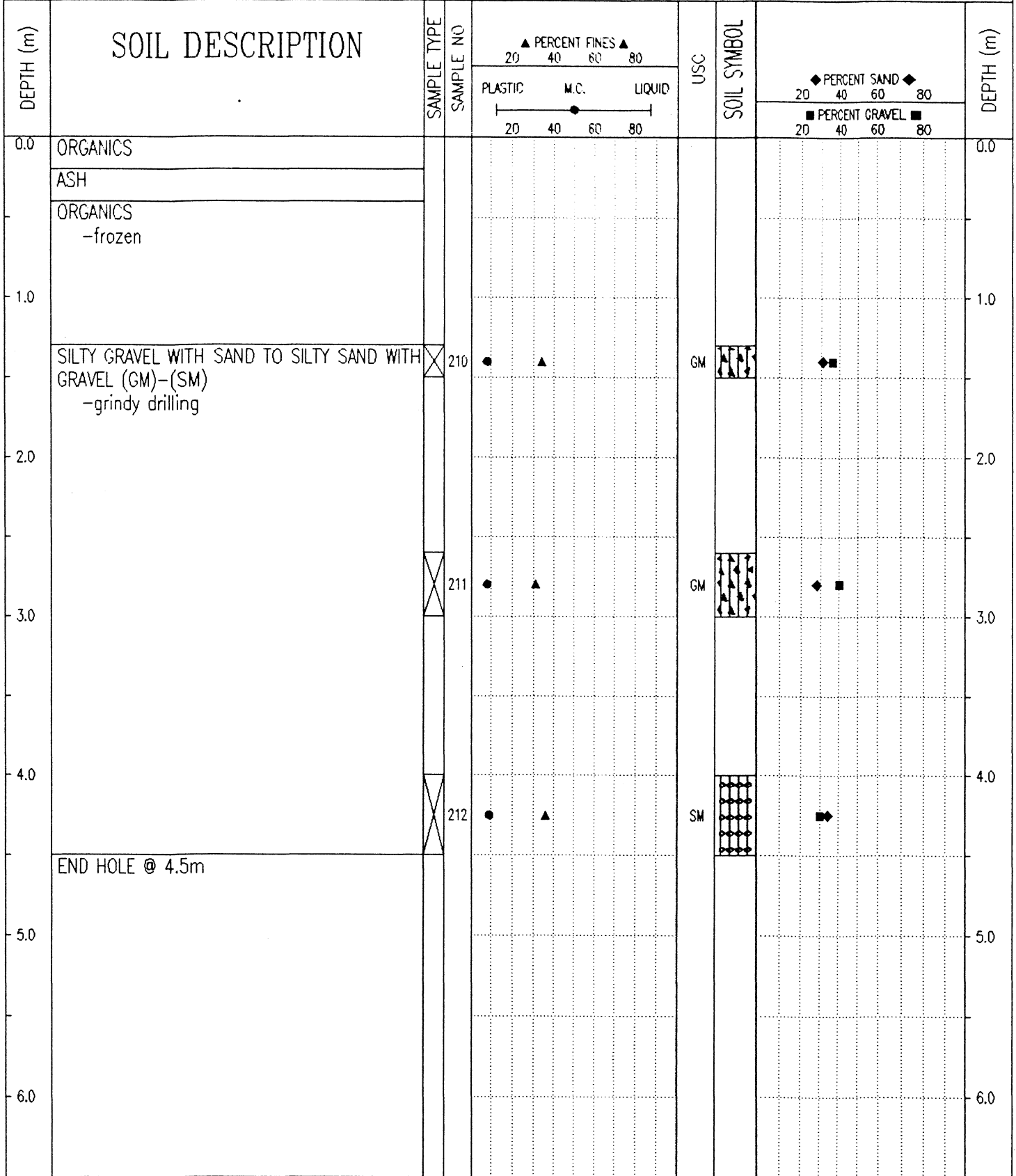
Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 99/04/27

Page 1 of 1

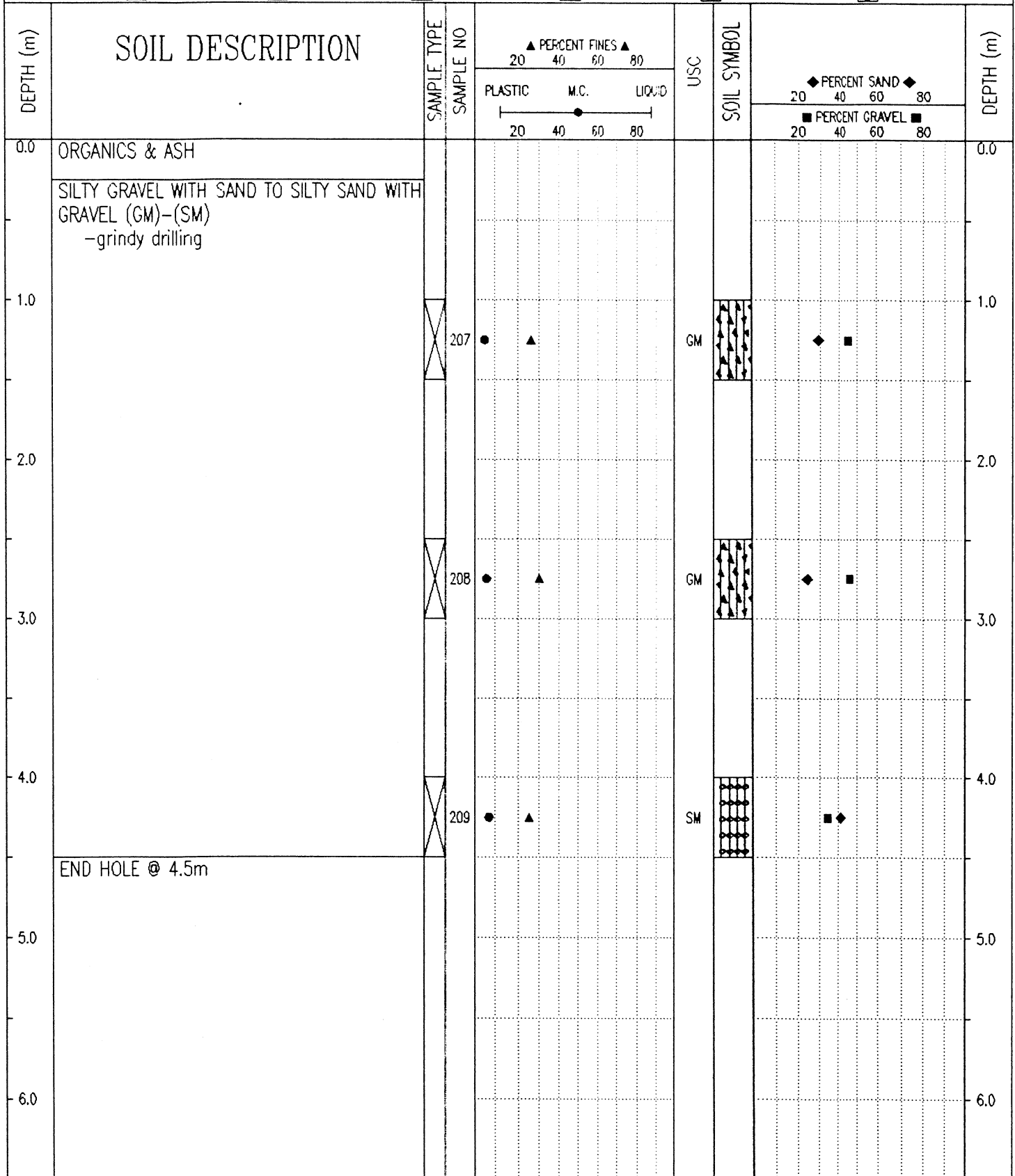
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-418
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L		LOCATION: 1813+725 CENTRELINE	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> 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:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-417
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1813+825 CENTRELINE	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:	Page 1 of 1

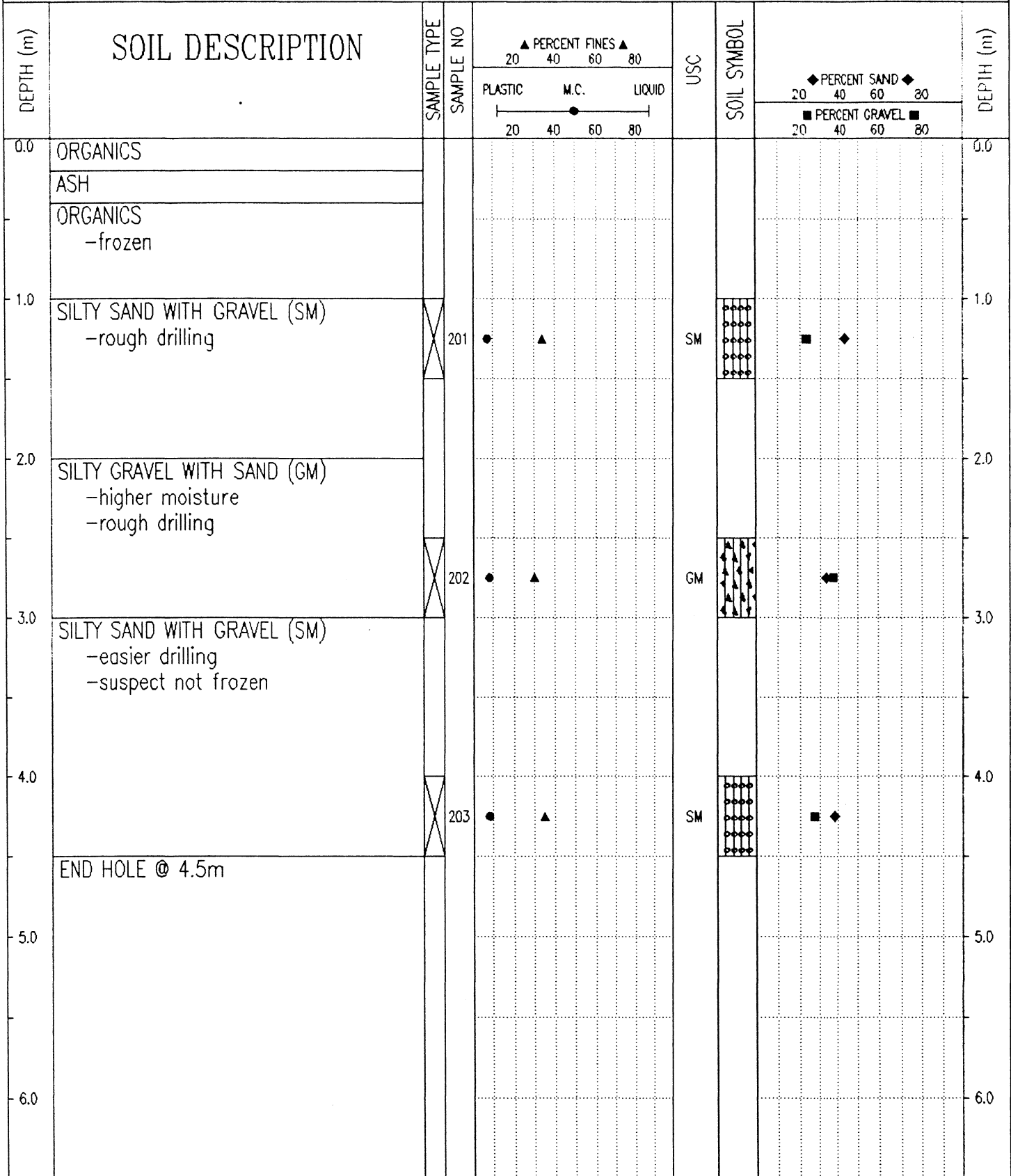
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SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1813+875 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TIJBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC & ASH										0.0	
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL TO SAND (GM) -grindy drilling											
1.0			204	●	▲		SM	■	◆		1.0	
2.0											2.0	
3.0	-sample #205 has ash contamination from above.		205	●	▲		GM	■	◆		3.0	
4.0			206	●	▲		GM	■	◆		4.0	
5.0	END HOLE @ 4.5m										5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-415
SHANAWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0323
NODWELL B-40L	LOCATION: 1813+975 CENTRELINE	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		

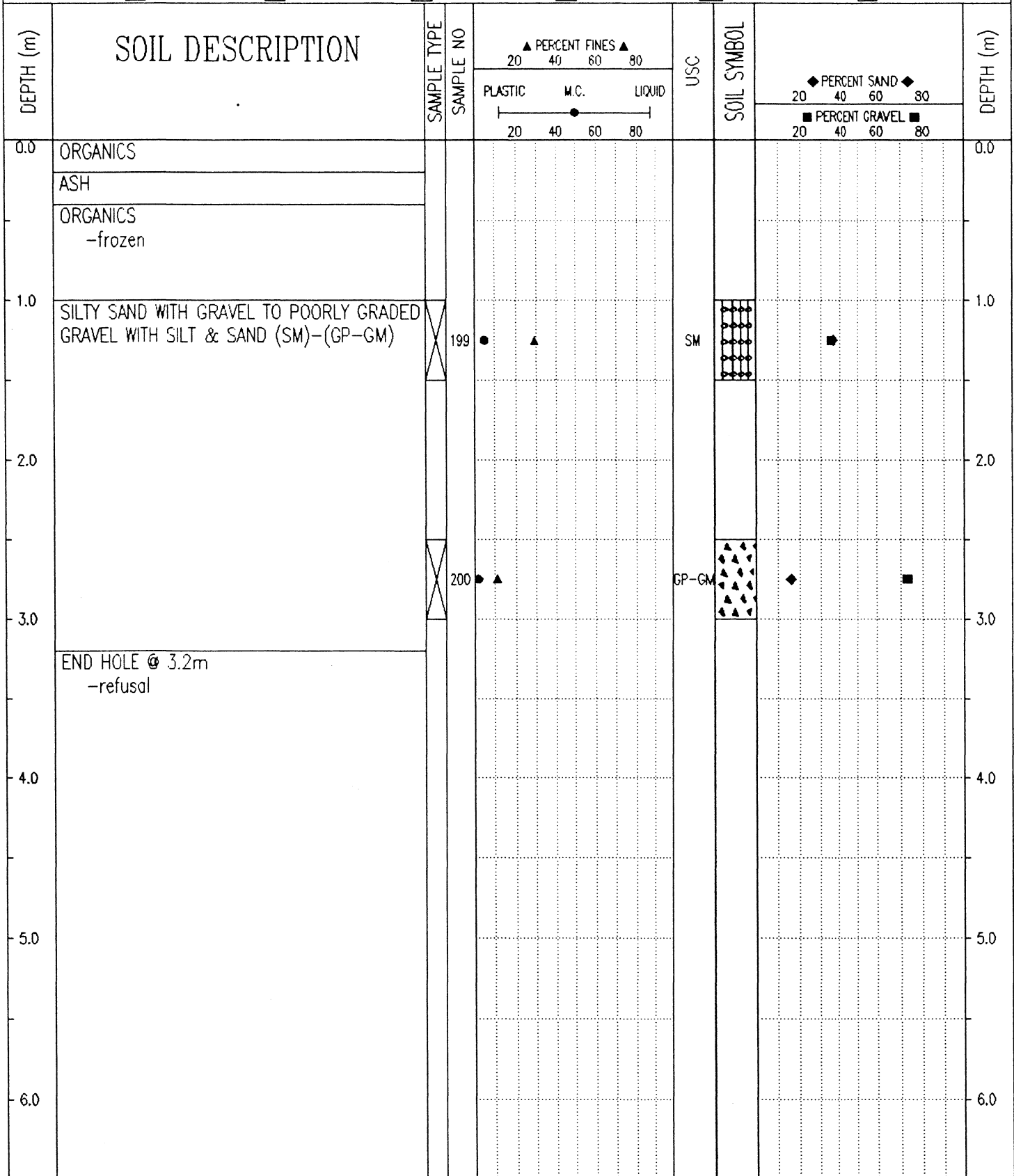


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Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-414
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1814+075 CENTRELINE	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:	Page 1 of 1

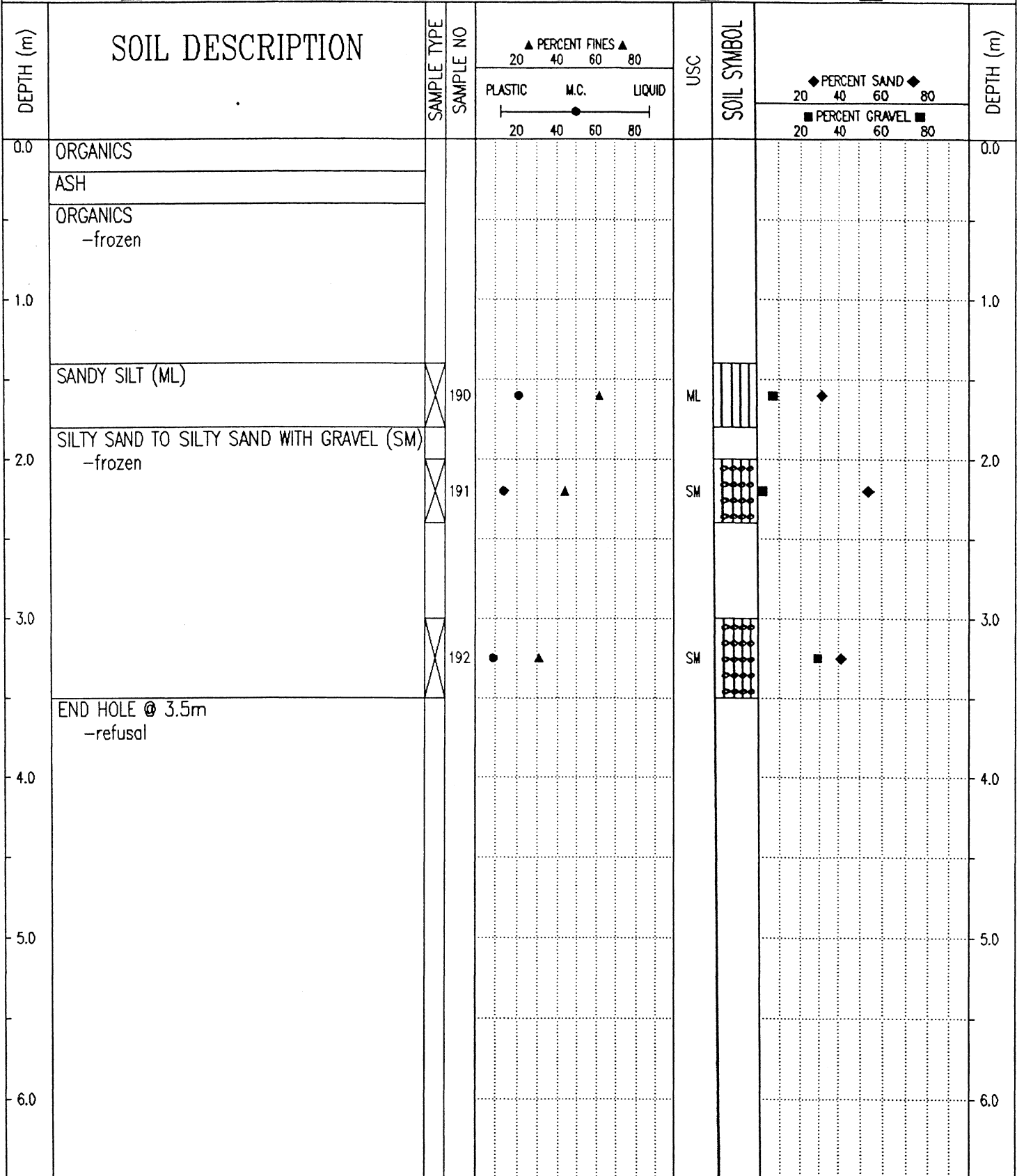
SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-413								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1814+175 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANICS											0.0
	ASH											
	ORGANIC -frozen											
1.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -drilling starts grinding 1.0m -rough drilling	X	196	●	▲		SM	◐◑◒◓◔◕◖◗◘◙◚◛◜◝◞◟◠◡◢◣◤◥◦◧◨◩◪◫◬◭◮◯◰◱◲◳◴◵◶◷◸◹◺◻◼◽◾◿◠◡◢◣◤◥◦◧◨◩◪◫◬◭◮◯◰◱◲◳◴◵◶◷◸◹◺◻◼◽◾◿	■	◆		1.0
2.0												2.0
3.0		X	197	●	▲		GM	◐◑◒◓◔◕◖◗◘◙◚◛◜◝◞◟◠◡◢◣◤◥◦◧◨◩◪◫◬◭◮◯◰◱◲◳◴◵◶◷◸◹◺◻◼◽◾◿	■	◆		3.0
4.0		X	198	●	▲		GM	◐◑◒◓◔◕◖◗◘◙◚◛◜◝◞◟◠◡◢◣◤◥◦◧◨◩◪◫◬◭◮◯◰◱◲◳◴◵◶◷◸◹◺◻◼◽◾◿	■	◆		4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-411
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1814+375 CENTRELINE	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	

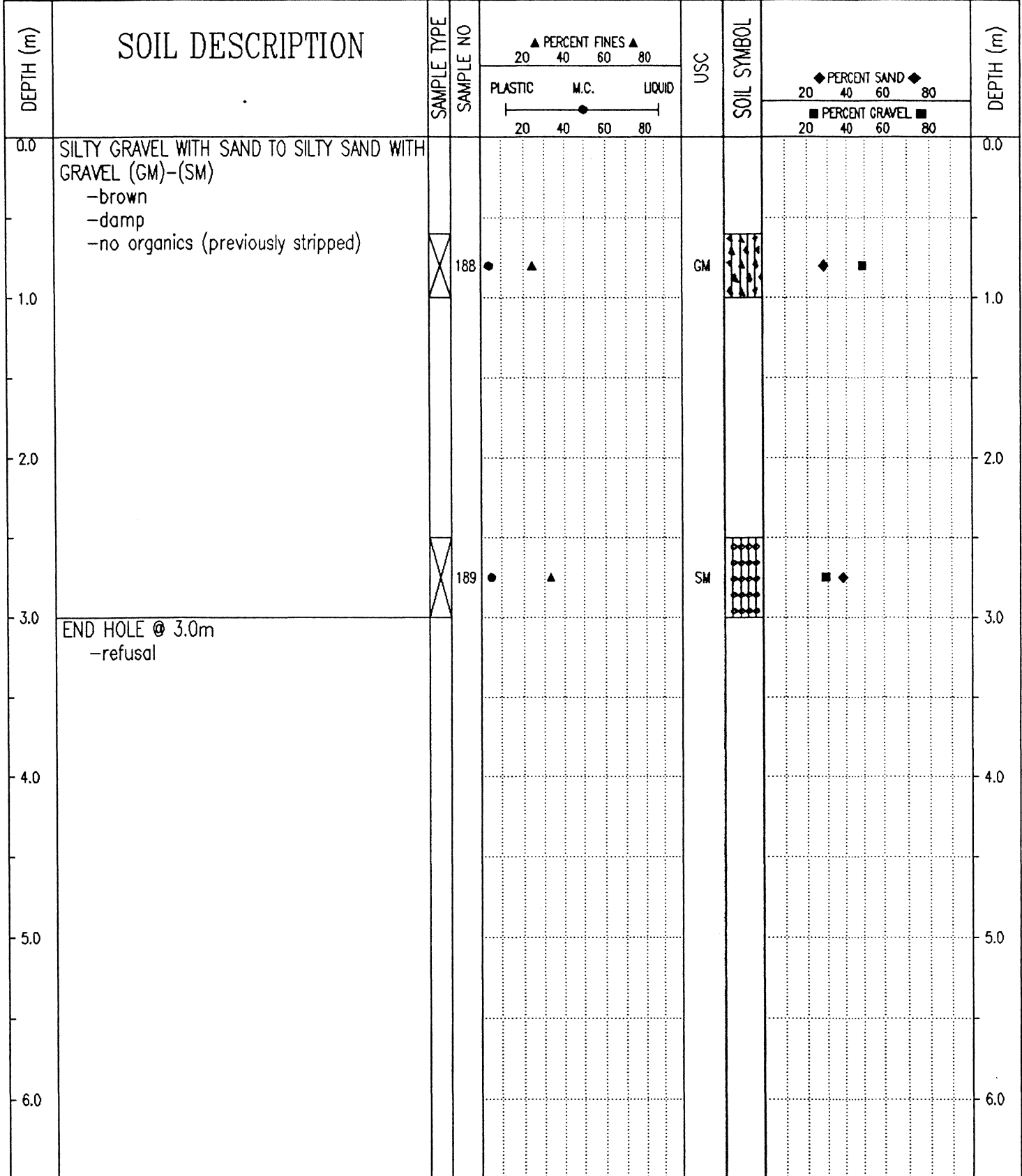


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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.5 m
COMPLETE: 99/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-410
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1814+400 15M RT	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		

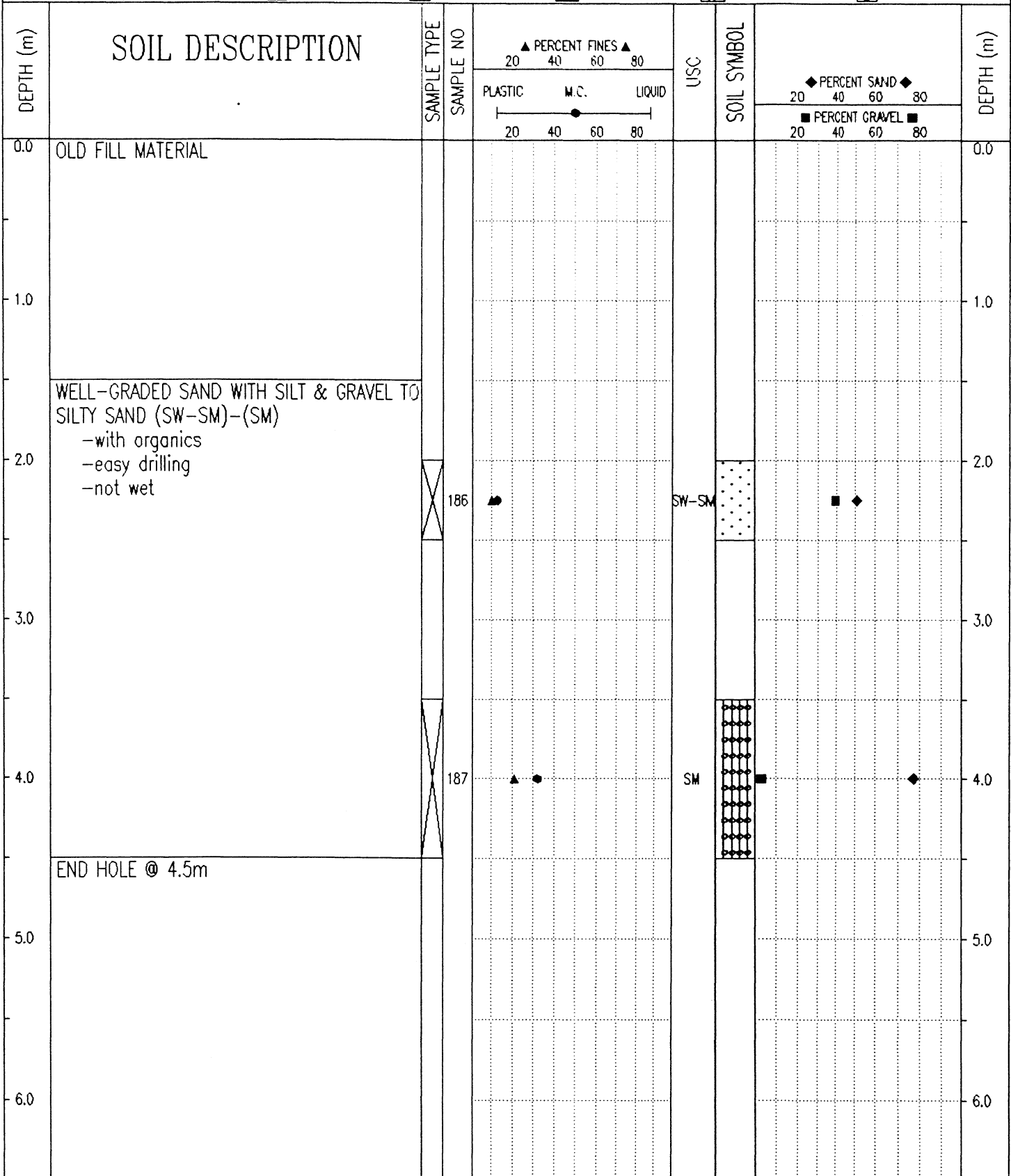


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Fig. No:

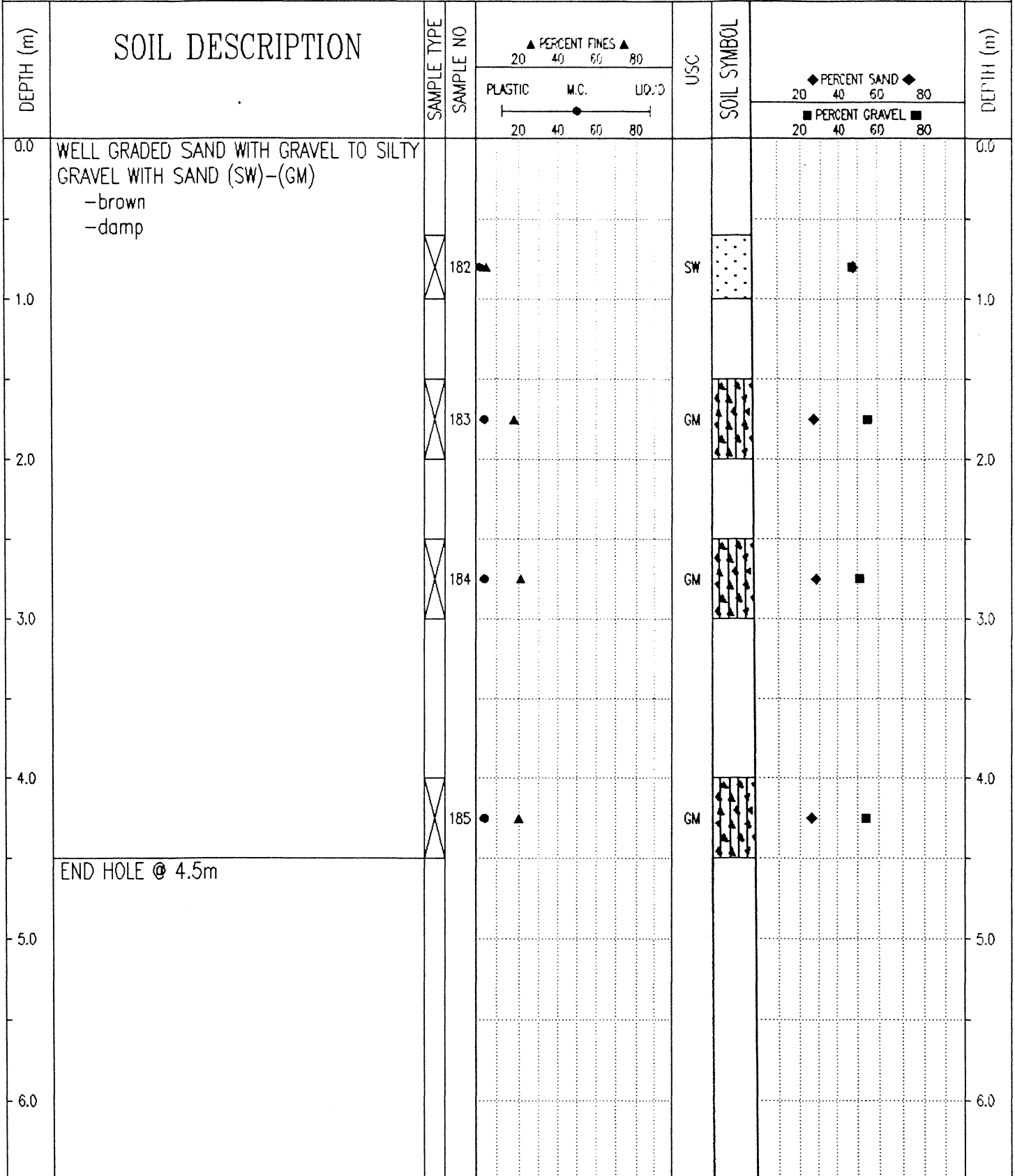
COMPLETION DEPTH: 3.0 m
COMPLETE: 99/04/27

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-409
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1814+550 20M LT	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:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-408
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1814+625 CENTRELINE	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
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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-407						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1814+750 10M RT		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 ▲ 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANICS									0.0
	VOLCANIC ASH									
1.0	ORGANIC -frozen									1.0
	SILTY SAND WITH GRAVEL (SM -frozen									
2.0		<input checked="" type="checkbox"/>	179	●	▲		SM	■	◆	2.0
	SILTY GRAVEL WITH SAND (GM)									
3.0		<input checked="" type="checkbox"/>	180	●	▲		GM	■	◆	3.0
4.0		<input checked="" type="checkbox"/>	181	●	▲		GM	■	◆	4.0
5.0	END HOLE @ 4.5m									5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 4.5 m				
				REVIEWED BY:		COMPLETE: 99/04/26				
				Fig. No:		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-406								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1814+850 5M RT		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	ORGANICS VOLCANIC ASH										0.0	
1.0	ORGANICS -frozen										1.0	
2.0	SILTY GRAVEL WITH SAND TO POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)	<input checked="" type="checkbox"/>	176	●	▲		GM	▲▲▲▲	◆	■	2.0	
3.0	SILTY GRAVEL WITH SAND (GM)	<input checked="" type="checkbox"/>	177	●	▲		GP-GM	▲▲▲▲	◆	■	3.0	
4.0	SILTY GRAVEL WITH SAND (GM)	<input checked="" type="checkbox"/>	178	●	▲		GM	▲▲▲▲	◆	■	4.0	
5.0	END HOLE @ 4.5m										5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 4.5 m				
				REVIEWED BY:				COMPLETE: 99/04/26				
				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-405								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1814+950 CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN		<input 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	ORGANICS & ASH MIX											0.0
1.0	ORGANICS -frozen											1.0
2.0	-thawed layer of organics 1.4 to 1.8											2.0
3.0	ORGANIC & ICE											3.0
4.0	SILT (ML) -with ice											4.0
4.0	END HOLE @ 4.0m		175				▲◆ ML					4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 4.0 m				
				REVIEWED BY:				COMPLETE: 99/04/23				
				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-404						
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1815+120 10M RT		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	
0.0	ORGANICS									0.0
	ASH									
1.0	ORGANICS -frozen -trace of visible ice -slow penetration									1.0
2.0										2.0
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -frozen (Vx) -grindy drilling	<input checked="" type="checkbox"/>	174	▲	●		GP-GM	◆	■	3.0
	END HOLE @ 3.2m Note: T.H. at culvert installation site.									
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY:		COMPLETION DEPTH: 3.2 m COMPLETE: 99/04/23		Page 1 of 1		

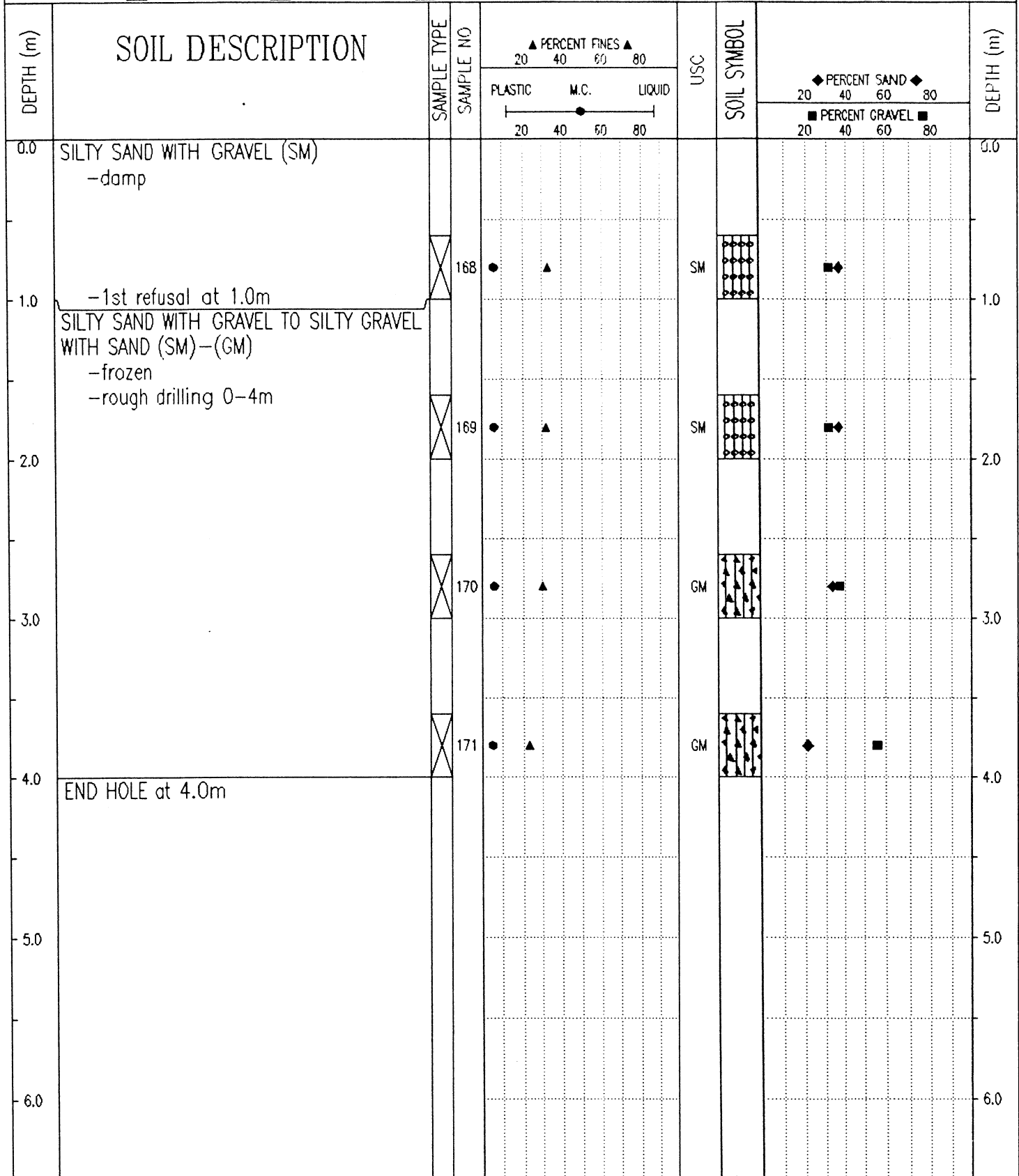
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SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329						
NODWELL B-40L		LOCATION: 1815+200 CENTRELINE		ELEVATION: 0.00 (m)						
SAMPLE TYPE		RETURN		S.P.T.						
		AUGER		BULK						
		TUBE		CORE						
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES		USC	SOIL SYMBOL	PERCENT SAND		DEPTH (m)
				PLASTIC	M.C.			LIQUID	20	
0.0	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM) -brown -damp -rough drilling (fill area)		172	20	40	60	80	20	80	0.0
1.0										1.0
2.0			173	20	40	60	80	20	80	2.0
3.0	END HOLE @ 2.5m -refusal									3.0
4.0										4.0
5.0										5.0
6.0										6.0

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 2.5 m
COMPLETE: 99/04/23

SUBSURFACE EXPLORATION & TESTING REPORT	ALASKA HWY RECONSTRUCTION	TEST HOLE NO: 511-402
SHAKWAK PROJECT SEG 13B	KM 1799 - 1822 A/H	Project No: 092-202101-0329
NODWELL B-40L	LOCATION: 1815+400 CENTRELINE	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: 4.0 m
COMPLETE: 99/04/23

SUBSURFACE EXPLORATION & TESTING REPORT		ALASKA HWY RECONSTRUCTION		TEST HOLE NO: 511-401								
SHAKWAK PROJECT SEG 13B		KM 1799 - 1822 A/H		Project No: 092-202101-0329								
NODWELL B-40L		LOCATION: 1815+500 CENTRELINE		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	STRIPPING FROM EXISTING HIGHWAY										0.0	
1.0	FROZEN ORGANICS										1.0	
	ASH											
2.0	SILTY SAND WITH GRAVEL (SM) -frozen -drill starts grinding @ 1.8m	<input checked="" type="checkbox"/>	165	●	▲		SM	◆	■		2.0	
3.0		<input checked="" type="checkbox"/>	166	●	▲		SM	◆	■		3.0	
4.0	END HOLE @ 4.3m										4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

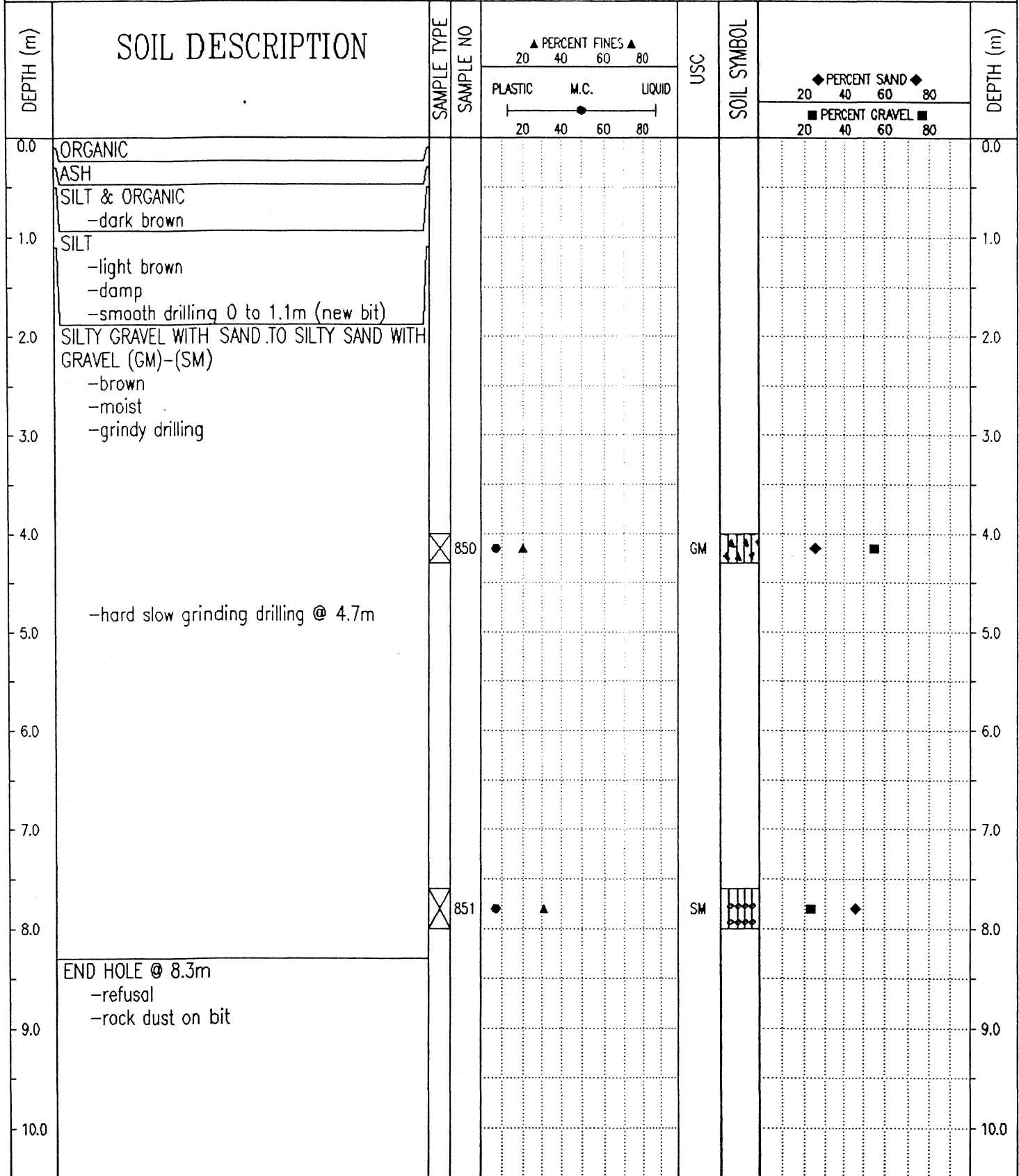
COMPLETION DEPTH: 4.3 m

COMPLETE: 99/04/23

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-400						
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329						
NODWELL B40-L		LOCATION: 1815+600 CENTRELINE		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 ▲ 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC ASH									0.0
1.0	SILTY GRAVEL WITH SAND (GM)									1.0
	-frozen below 1.6m									
2.0			162				GM			2.0
3.0			163				GM			3.0
4.0			164				GM			4.0
4.0	END HOLE @ 4.0m -refusal									4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.0 m COMPLETE: 99/04/23				

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 531-834
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1815+600 10M RT	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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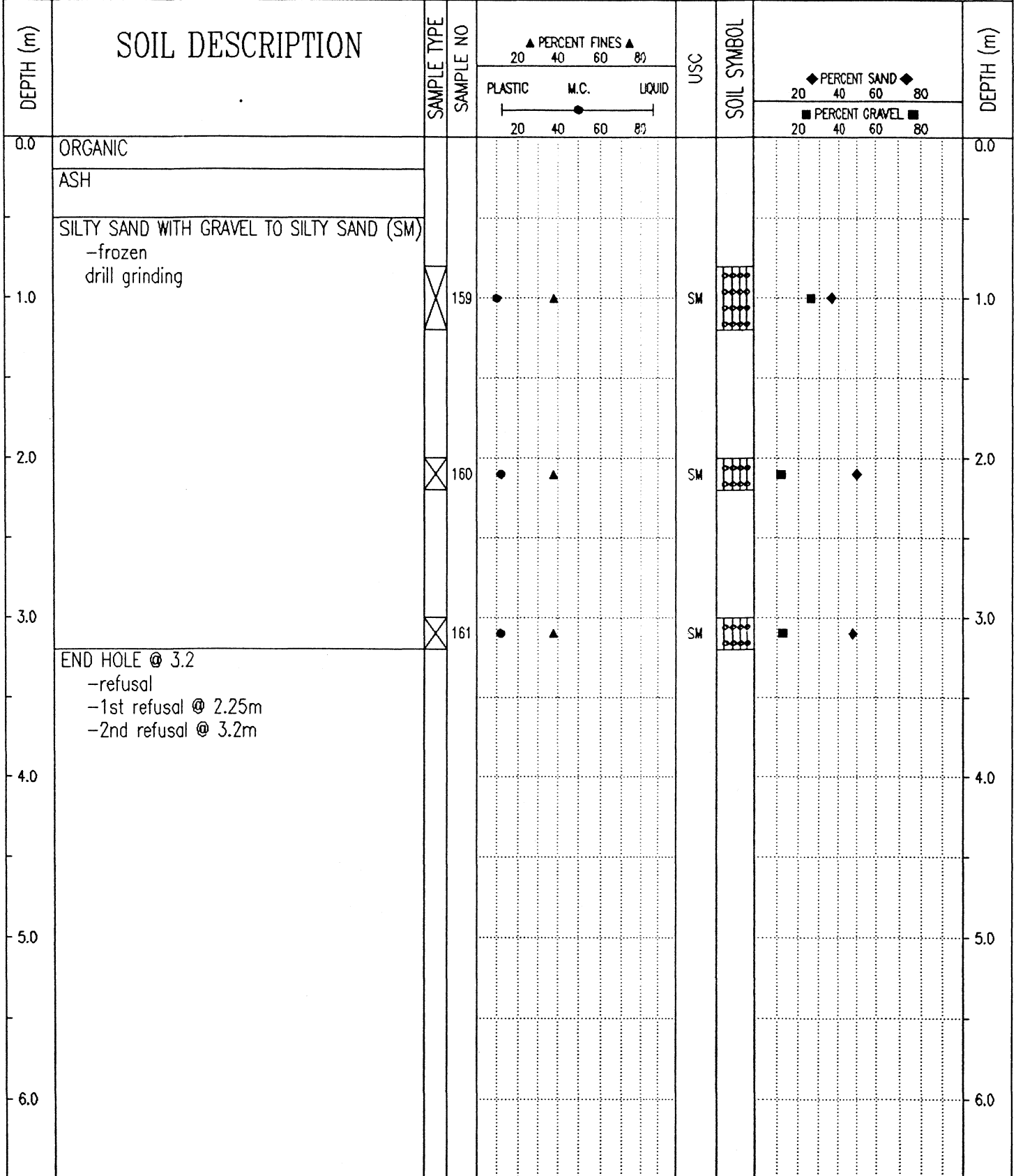
LOGGED BY: D.T	COMPLETION DEPTH: 8.3 m
REVIEWED BY:	COMPLETE: 99/10/20
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK PROJECT SEG 13 TEST HOLE NO: 509-399

ENGINEERING CAPITAL KM 1820-1815 A/H Project No: 092-202101-0329

NODWELL B40-L LOCATION: 1815+700 CENTRELIN ELEVATION: 0.00 (m)

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



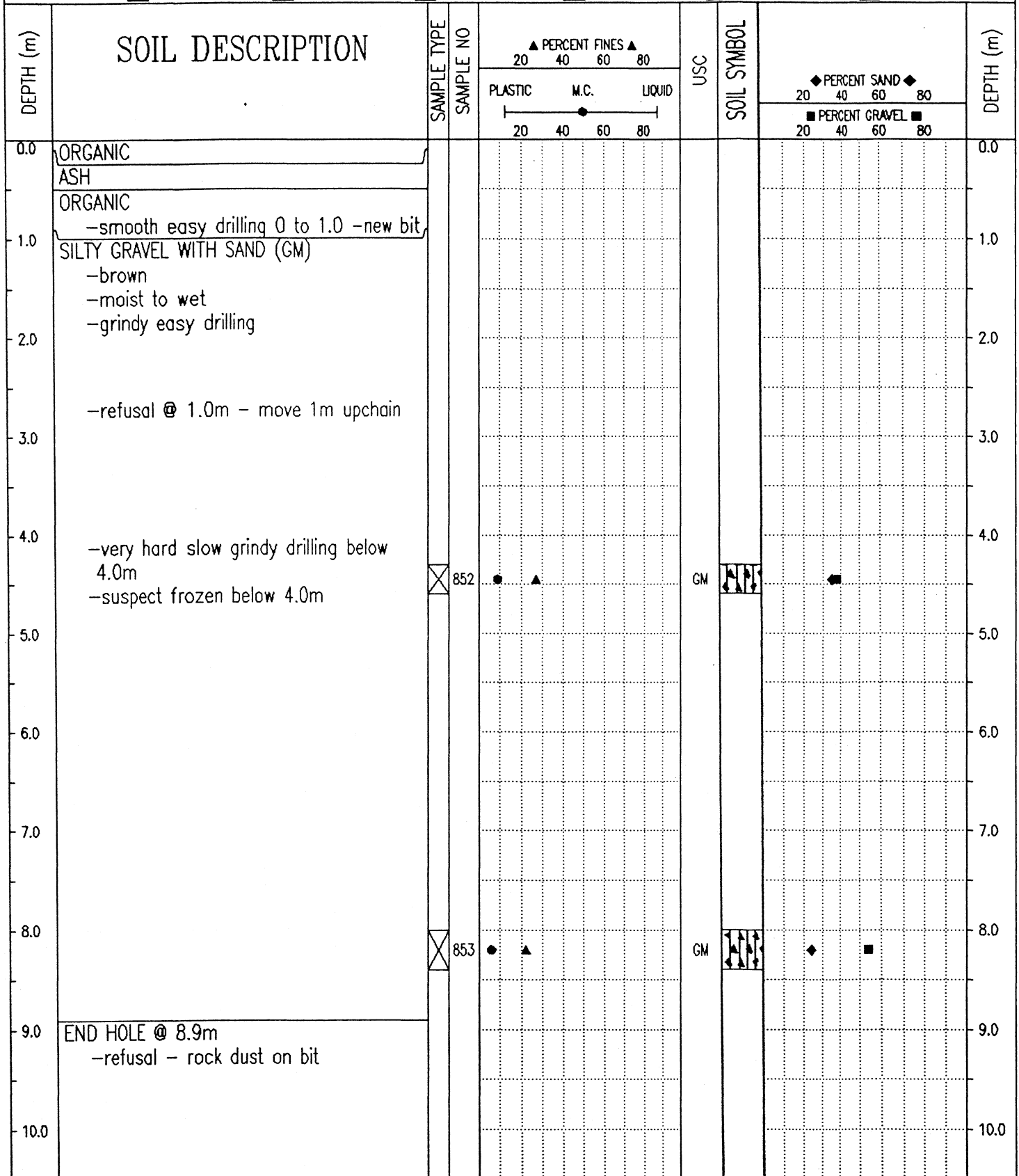
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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.2 m
COMPLETE: 99/04/23

99/11/02 10:25AM

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 531-835
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1815+700 10M RT	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: D.T	COMPLETION DEPTH: 8.9 m
REVIEWED BY:	COMPLETE: 99/10/20
Fig. No:	Page 1 of 1

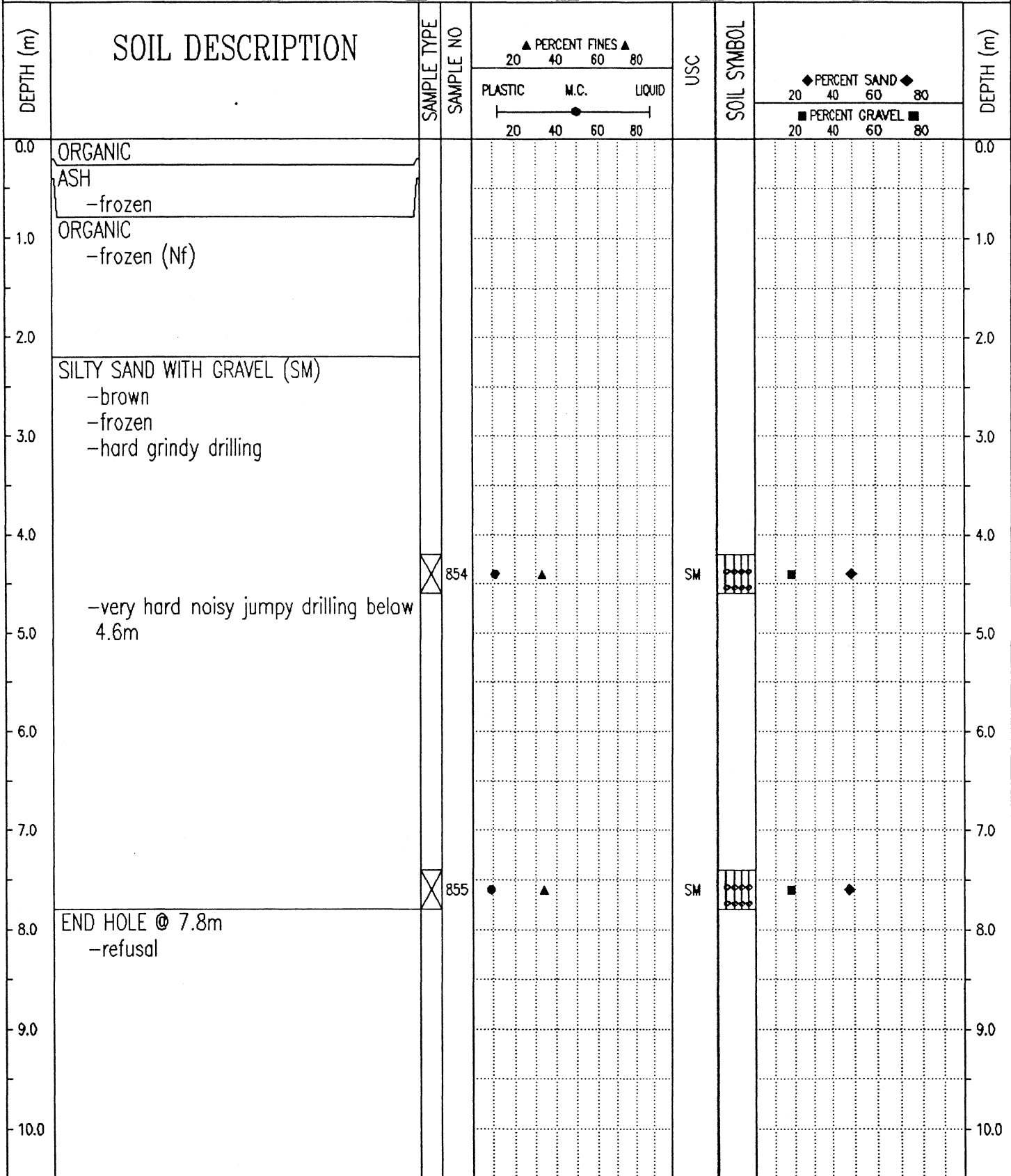
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-398			
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329			
NODWELL B40-L		LOCATION: 1815+800 CENTRELIN		ELEVATION: 0.00 (m)			
SAMPLE TYPE		RETURN		S.P.T.			
		AUGER		BULK			
		TUBE		CORE			
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80	USC SOIL SYMBOL	PERCENT SAND ◆ 20 40 60 80 PERCENT GRAVEL ■ 20 40 60 80	DEPTH (m)
0.0	ORGANIC						0.0
	VOLCANIC ASH						
1.0							1.0
	ORGANICS -frozen (Vx)						
2.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM)-(SM) -frozen -drill starts grinding @ 2.0m	X	156	● ▲	GM	◆ ■	2.0
3.0		X	157	● ▲	SM	■ ◆	3.0
4.0		X	158	● ▲	SM	■ ◆	4.0
	END HOLE @ 4.2m -refusal						
5.0							5.0
6.0							6.0

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Fig. No:

COMPLETION DEPTH: 4.2 m
COMPLETE: 99/04/23

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 531-836
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1815+800 10M RT	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: 99/10/20
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-397								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-22101-0329								
NODWELL B40-L		LOCATION: 1815+900 CENTRELINE		ELEVATION: 0.00 (~)								
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	50	
0.0	ORGANIC VOLCANIC ASH											0.0
1.0	ORGANIC -frozen no visible ice											1.0
2.0	SILTY GRAVEL WITH SAND (GM) -frozen	<input checked="" type="checkbox"/>	154				GM					2.0
2.5		<input checked="" type="checkbox"/>	155				GM					2.5
3.0	END HOLE @ 2.5m -refusal -1st refusal @ 2.5m -2nd refusal @ 1.8m -3RD REFUSAL @ 2.5M											3.0
4.0												4.0
5.0												5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 2.5 m
COMPLETE: 99/04/23

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 531-837									
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329									
B-40L MOBILE DRILL 6" AUGER		LOCATION: 1815+900		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)
				20	40	60			80	20	40		
0.0	ORGANIC ASH -frozen @ .3m												0.0
1.0	ORGANIC -frozen -first refusal @ 1.0m -new bit & shank - old one sheared off -hard grindy drilling (GRAVEL?)												1.0
2.0													2.0
3.0	END HOLE @ 2.9m -refusals @ 2.3m & 2.6m -moved 2m upchain - lost bit												3.0
4.0													4.0
5.0													5.0
6.0													6.0
Government of Yukon Transportation Engineering				LOGGED BY: D.T				COMPLETION DEPTH: 2.9 m					
				REVIEWED BY:				COMPLETE: 99/10/20					
				Fig. No:				Page 1 of 1					

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-396											
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329											
NODWELL B40-L		LOCATION: 1816+000 15M RT CENTRELINE		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			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC VOLCANIC ASH														0.0
1.0	SILTY SAND WITH GRAVEL (SM) -frozen -some ice -grinding rough drilling	<input checked="" type="checkbox"/>	152	●	▲		SM	◈	■	◈					1.0
2.0															2.0
3.0		<input checked="" type="checkbox"/>	153	●	▲		SM	◈	■	◈					3.0
4.0	END HOLE @ 3.8M -refusal -refusals @ 1816+000 2.0m @ 1816+003 1.8M @ 1816+006 3.8m														4.0
5.0															5.0
6.0															6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 3.8 m							
				REVIEWED BY:				COMPLETE: 99/04/22							
				Fig. No:				Page 1 of 1							

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 531-838							
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
B-40L MOBILE DRILL 6" AUGER		LOCATION: 1816+000 25M RT		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 ▲ 20 40 60 80 PLASTIC M.C. LIQUID -----●----- 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80		DEPTH (m)	
0.0	ORGANIC ASH -frozen @ .3m								0.0		
1.0	ORGANIC -frozen (Nf)								1.0		
2.0	SILTY GRAVEL WITH SAND (GM) -brown -frozen (Nf) -maximum 75mm material augered up -hard slow grindy drilling								2.0		
3.0									3.0		
4.0		<input checked="" type="checkbox"/>	856	● ▲		GM	▲ ◆ ■		4.0		
5.0									5.0		
6.0									6.0		
7.0	SILT (ML) -brown -frozen -ice rich - ranging from (Vx) to ice & silt -smooth easy drilling								7.0		
8.0									8.0		
9.0		<input checked="" type="checkbox"/>	857	● ▲		ML	■ ◆		9.0		
10.0	END HOLE @ 9.9M								10.0		
Government of Yukon Transportation Engineering				LOGGED BY: D.T		COMPLETION DEPTH: 9.9 m					
				REVIEWED BY:		COMPLETE: 99/10/20					
				Fig. No:						Page 1 of 1	

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-395								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1816+150 CENTRELIN		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			20	40	60	
0.0	ORGANIC											0.0
	VOLCANIC ASH - SILT -dry											
1.0	MIX OF ASH SILT & ROCKS -suspect ditching material											1.0
2.0	SILT (ML) WITH ICE -frozen -estimate 50/50 ice with silt @ 2.0m											2.0
3.0	-less ice (Vx) below 3.0m		150				▲	ML				3.0
4.0			151				▲	ML				4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 4.5 m				
				REVIEWED BY:				COMPLETE: 99/04/22				
				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 531-840
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1816+225 43M RT	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 ◆			PERCENT GRAVEL ■	DEPTH (m)
				20	40	60			80	20	40		
0.0	ICE H2O											0.0	
0.0 - 1.0	SANDY SILTY GRAVEL -brown -free water											1.0	
1.0 - 2.0												2.0	
2.0 - 3.0	SANDY GRAVELLY SILT -dark brown -wet to saturated											3.0	
3.0 - 4.0												4.0	
4.0 - 5.0												5.0	
5.0 - 6.0	SANDY SILTY GRAVEL -suspect frozen -very hard grindy drilling -no material recovered											6.0	
6.0 - 10.0	END HOLE @ 5.9m											10.0	

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	REVIEWED BY:	COMPLETE: 99/10/21
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 531-839
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER		LOCATION: 1816+230 10M RT	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			20	40	60	
0.0	ICE H2O											0.0
0.0 - 3.0	SILTY SANDY GRAVEL -dark brown -free water -no sample											1.0
3.0 - 5.0	SANDY SILT -some gravel -dark brown -free water											3.0
5.0 - 5.9	SANDY SILT -light grey -saturated											5.0
5.9 - 10.0	END HOLE @ 5.9m Note: Test hole in creek bed											6.0
												7.0
												8.0
												9.0
												10.0

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REVIEWED BY:	COMPLETE: 99/10/21
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 531-841
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1816+230 10M LT	ELEVATION: 0.00 (m)

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

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	ORGANIC SANDY SILTY GRAVEL WITH ORGANIC										0.0	
1.0	-dark brown										1.0	
	-wet .2 to 1.7m											
2.0	-saturated 1.7 to 3.1m										2.0	
3.0											3.0	
4.0	-free water 3.1 to 4.5m										4.0	
5.0	END HOLE @ 4.5m										5.0	
6.0											6.0	
7.0											7.0	
8.0											8.0	
9.0											9.0	
10.0											10.0	
11.0											11.0	
12.0											12.0	
13.0											13.0	
14.0											14.0	
15.0											15.0	
16.0											16.0	

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/10/21

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-394
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1816+250 5M RT CENTRELINE	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		
0.0	OLD FILL MATERIAL -grinding										0.0	
0.0 - 1.0	ORGANICS & WOOD -thawed										1.0	
1.0 - 2.0	SATUATED ORGANICS -with a few rounded cobbles -not frozen (slurry)										2.0	
2.0 - 3.0											3.0	
3.0		<input checked="" type="checkbox"/>	149A	▲	●		GM	◆	■		3.0	
3.0 - 4.5											4.0	
4.0 - 5.0											5.0	
5.0	END HOLE @ 4.5 Note: test hole is 10m upchain of existing culvert										5.0	
5.0 - 6.0											6.0	

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/22

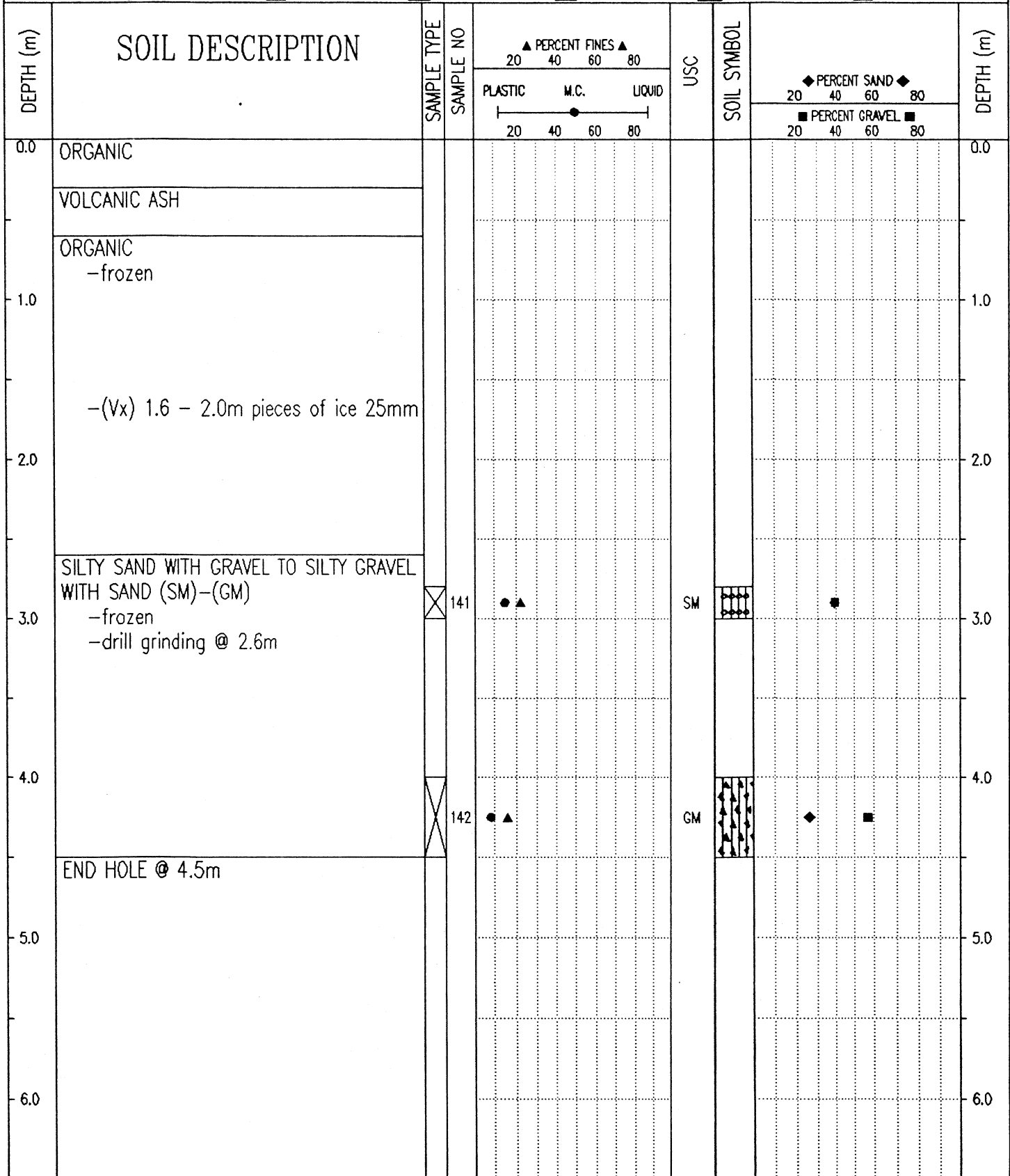
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-393								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1816+300 15M RT CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER								
RETURN		S.P.T.		AUGER								
BULK		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL	PERCENT SAND	PERCENT GRAVEL	
0.0	ORGANIC ASH											0.0
1.0	SANDY SILT WITH GRAVEL (ML) -with ice		146	●	▲		ML	■	◆			1.0
2.0	SANDY SILT (ML) -less ice (Vx)		147	●	▲		ML	■	◆			2.0
3.0	ORGANIC & ICE (Vx) -with wood (trees)		148		▲	●	ML	■	◆			3.0
4.0	SILT WITH SAND (ML) -frozen		149	●	▲		ML	■	◆			4.0
5.0	END HOLE @ 4.5m											5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 4.5 m				
				REVIEWED BY:				COMPLETE: 99/04/22				
				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-392								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1816+500 10M RT CENTRELINE		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	ORGANIC			20	40	60	80	20	40	60	80	0.0
	MIX OF SILT, ORGANIC & ASH											
1.0												1.0
	-with ice (Vx) below 1.5m											
2.0												2.0
3.0												3.0
			143									
4.0												4.0
	SILTY SAND WITH GRAVEL TO SILTY GRAVEL WITH SAND (SM)-(GM)		144									
5.0												5.0
	END HOLE @ 5.0m		145									
6.0												6.0

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LOGGED BY: G.C.	COMPLETION DEPTH: 5.0 m
REVIEWED BY:	COMPLETE: 99/04/22
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-391
ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1816+600 10M RT CENTRELINE	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

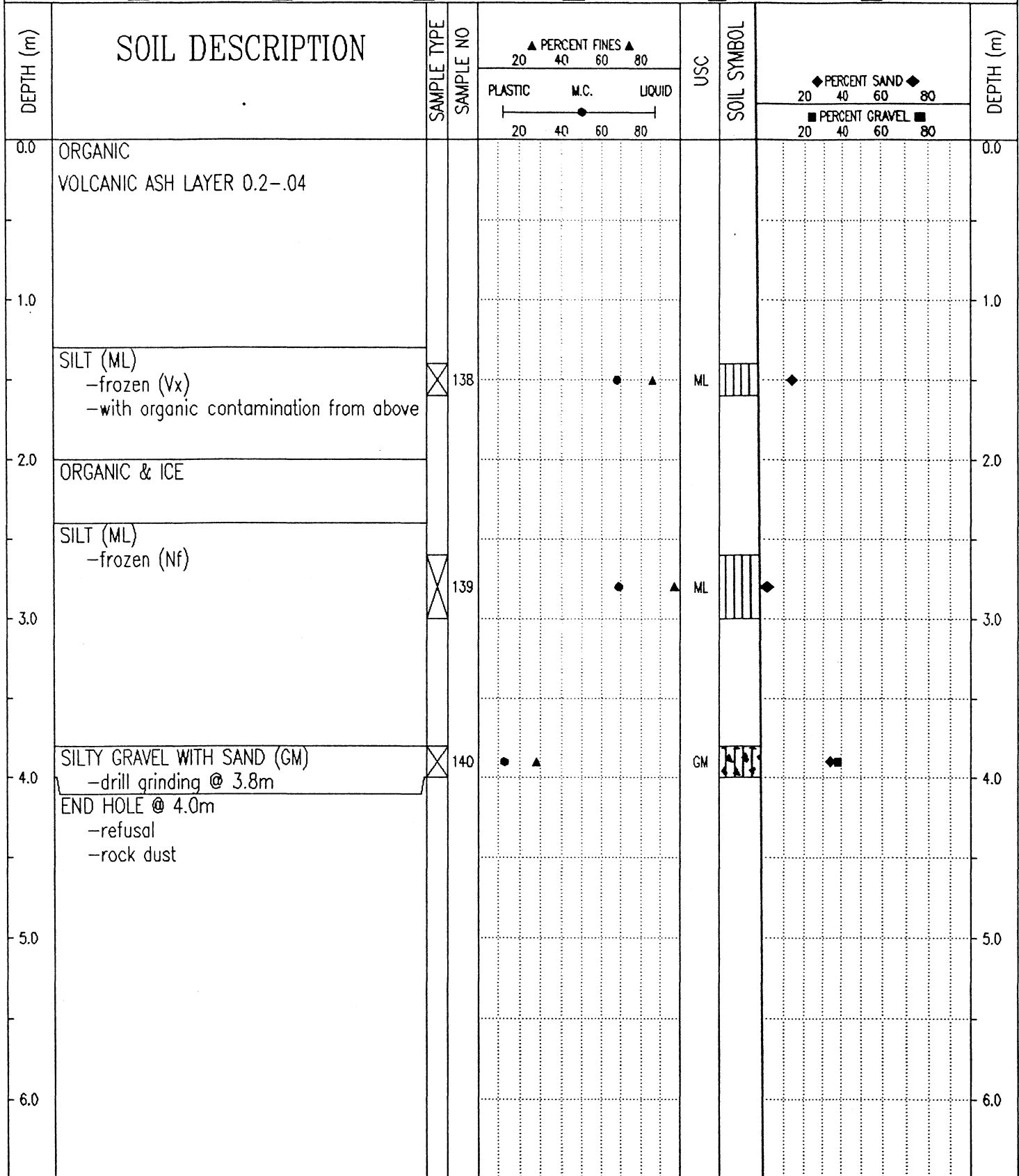


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LOGGED BY: G.C.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/22

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-390
ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1816+725 CENTRELINE	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

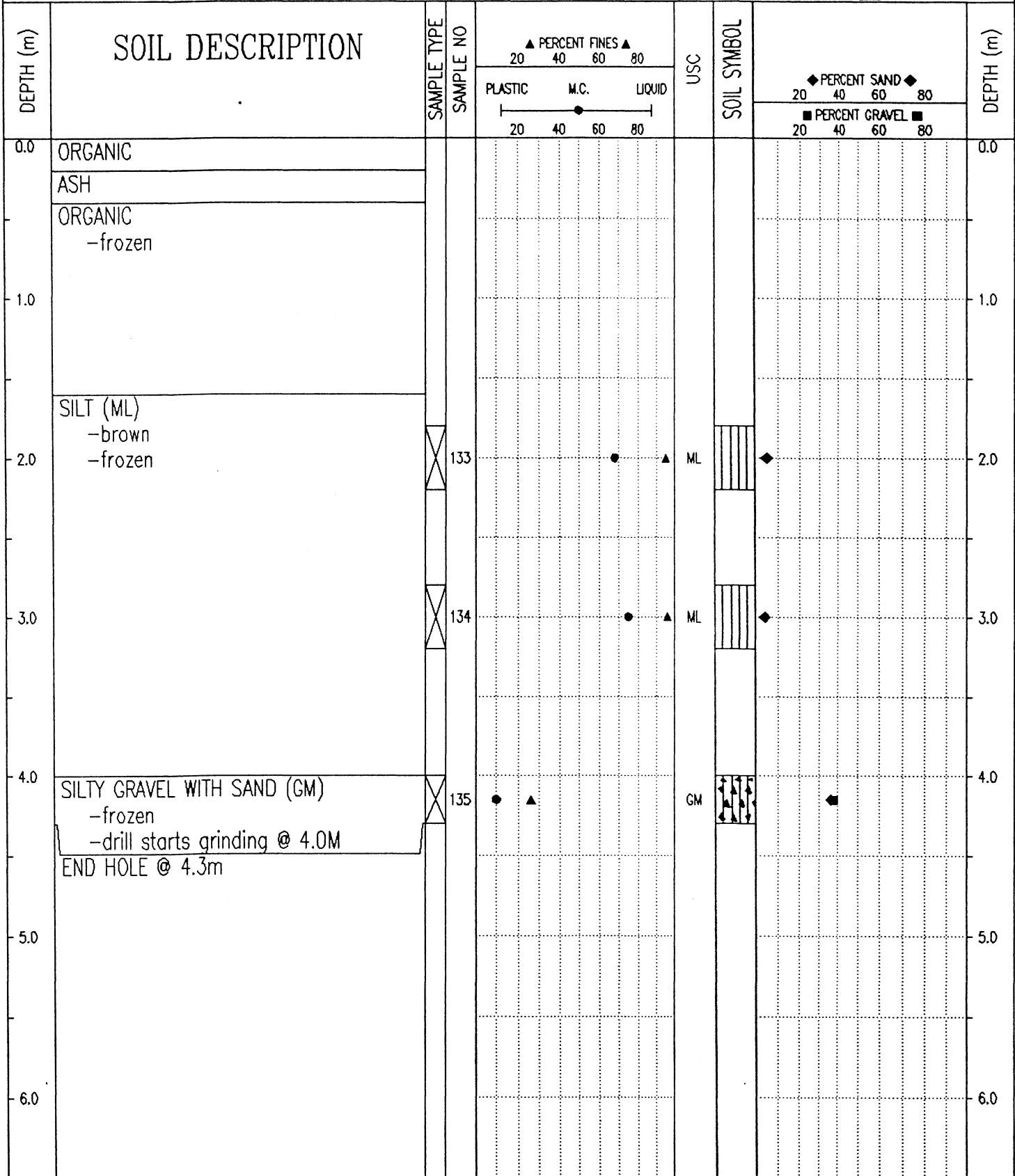


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LOGGED BY: G.C.	COMPLETION DEPTH: 4.0 m
REVIEWED BY:	COMPLETE: 99/04/22
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-389									
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329									
NODWELL B40-L		LOCATION: 1816+800 15M RT CENTRELINE		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	80	
0.0	ORGANIC												0.0
	ASH												
1.0	ORGANIC -frozen below .6m												1.0
2.0	-visible ice below 2.0m												2.0
3.0	SILTY SAND WITH GRAVEL (SM) -frozen (Vx) -drill starts grinding @ 2.8m	<input checked="" type="checkbox"/>	136	●	▲		SM		■	◆			3.0
4.0	END HOLE @ 4.0m	<input checked="" type="checkbox"/>	137	●	▲		SM		■	◆			4.0
5.0													5.0
6.0													6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 4.0 m							
				REVIEWED BY:		COMPLETE: 99/04/22							
				Fig. No:		Page 1 of 1							

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-388
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1816+900 25M RT CENTRELINE	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: 99/04/22
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK PROJECT SEG 13 TEST HOLE NO: 509-387

ENGINEERING CAPITAL KM 1820-1815 A/H Project No: 092-202101-0329

NODWELL B40-L LOCATION: 1816+950 15M RT CENTRELINE ELEVATION: 0.00 (m)

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

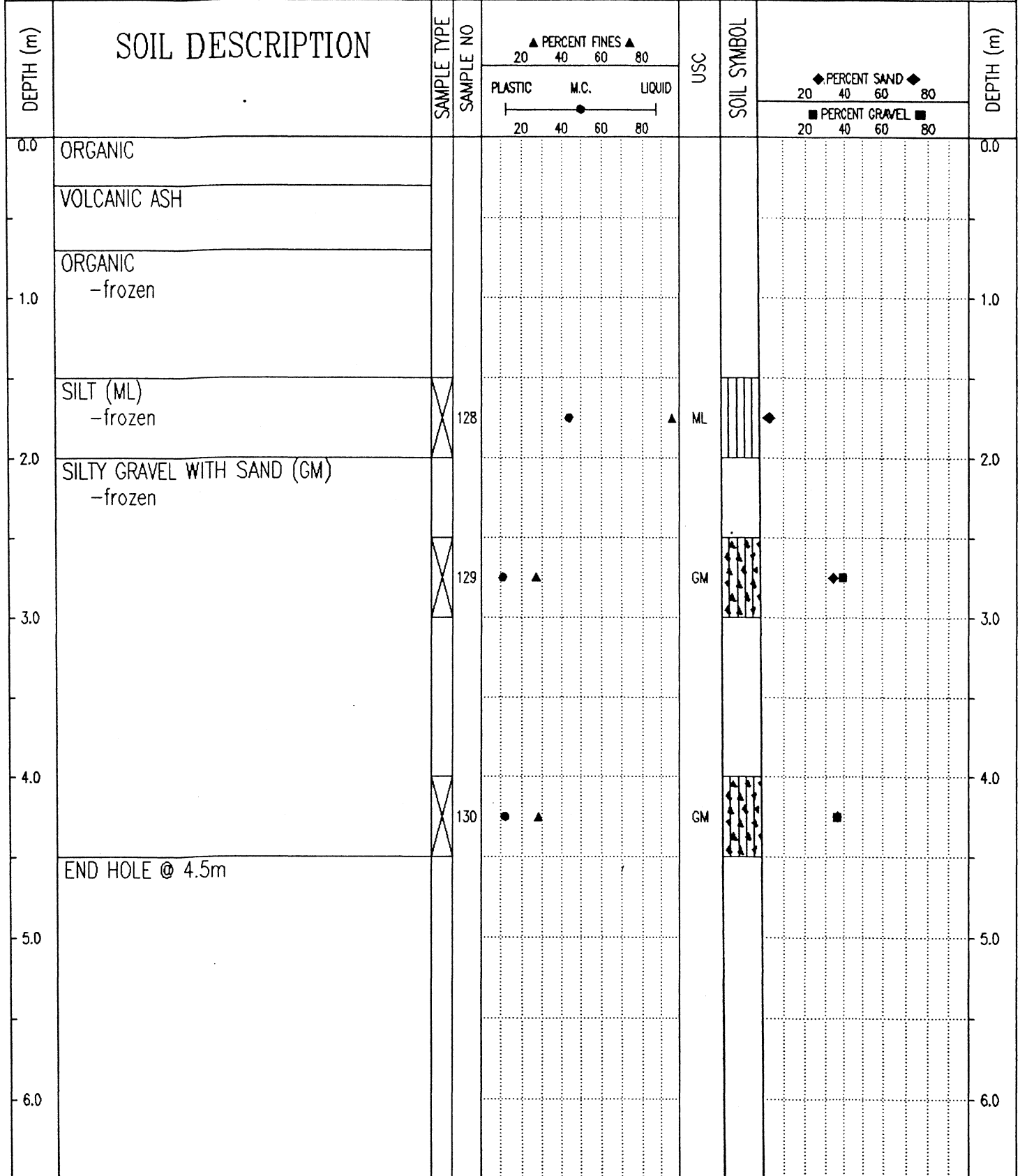
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	
0.0	ORGANIC											0.0
	VOLCANIC ASH											
1.0	ORGANIC -frozen (Nf)											1.0
2.0												2.0
3.0	SILT (ML) -with organic -frozen	<input checked="" type="checkbox"/>	131				▲ ML	◆				3.0
4.0		<input checked="" type="checkbox"/>	132				● ▲ ML	◆				4.0
5.0	END HOLE @ 4.6m											5.0
6.0												6.0

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Fig. No:

COMPLETION DEPTH: 4.0 m
COMPLETE: 99/04/22

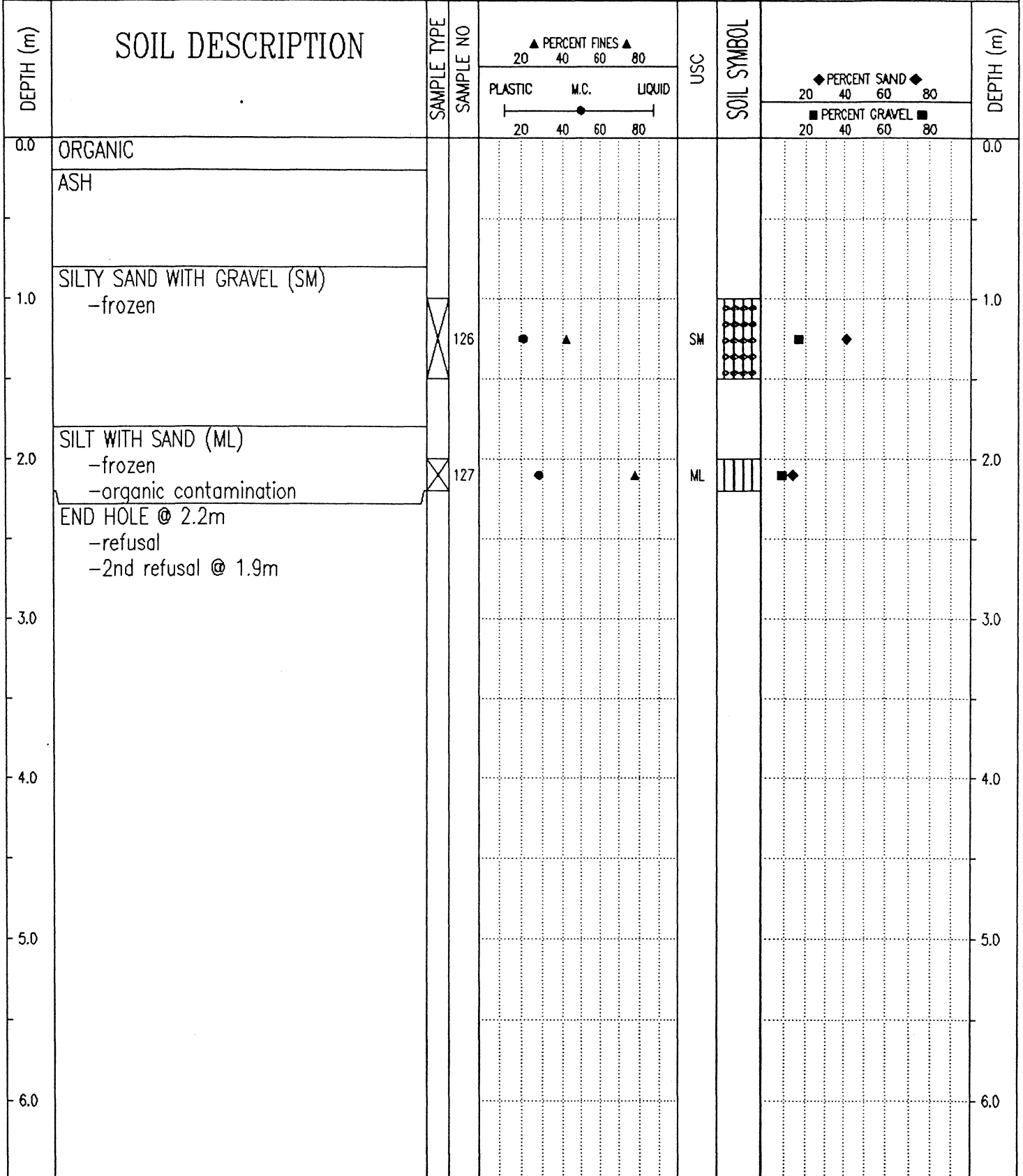
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-386
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1817+050 25M RT CENTRELINE	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> 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: 99/04/22
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-385
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1817+150 30M RT CENTRELINE	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



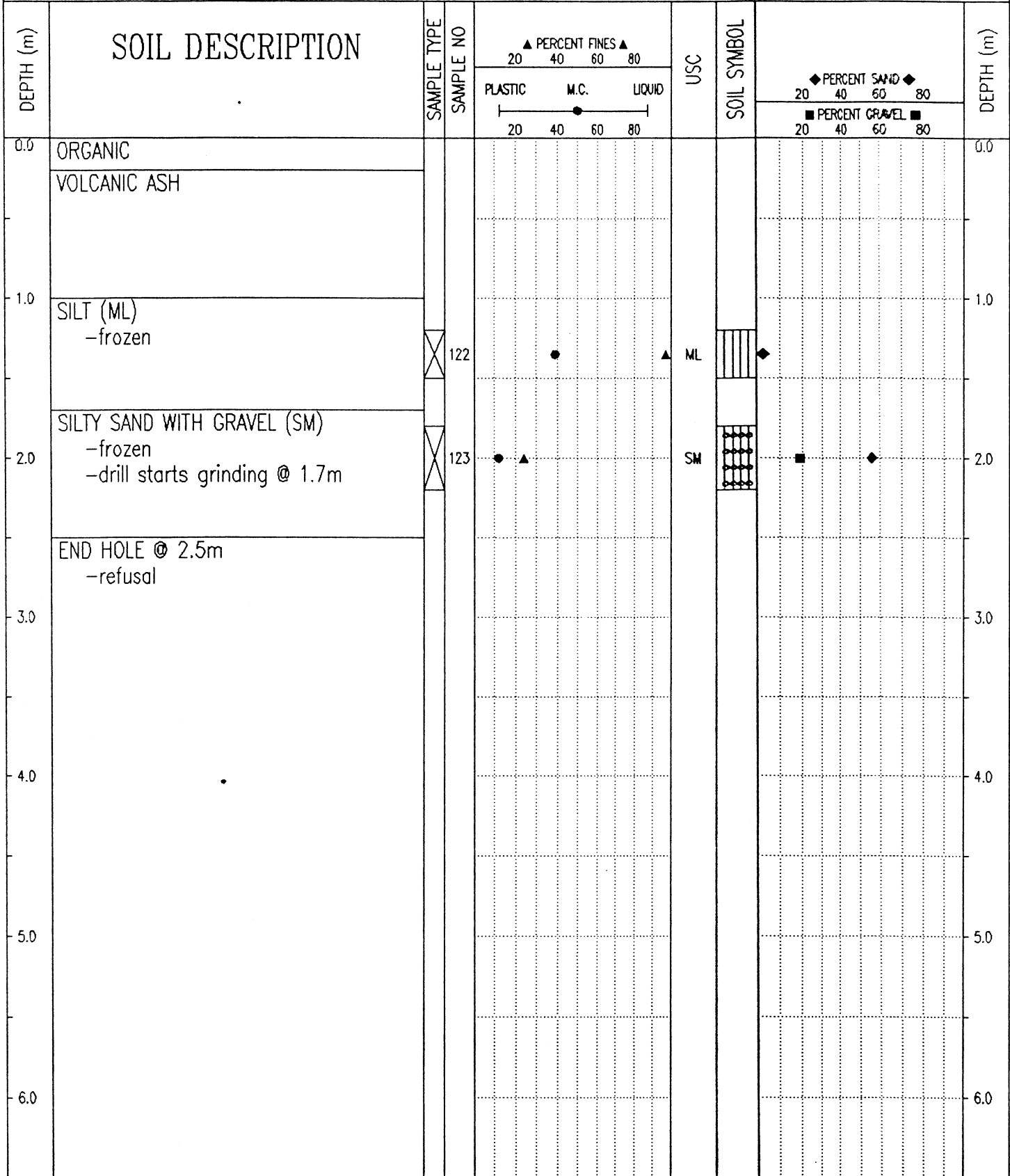
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Fig. No:

COMPLETION DEPTH: 2.2 m
COMPLETE: 99/04/21

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-384						
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329						
NODWELL B40-L		LOCATION: 1817+175 25M RT CENTRELINE		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 ▲ 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC M.C. LIQUID 20 40 60 80				■ PERCENT GRAVEL ■ 20 40 60 80		
0.0	ORGANIC VOLCANIC ASH									0.0
1.0	ORGANIC -frozen with small ice lenses									1.0
2.0	SILTY GRAVEL WITH SAND TO SILTY SAND (GM)-(SM) -frozen -drill starts grinding @ 1.5m -rough drilling	<input checked="" type="checkbox"/>	124	● ▲		GM	▲ ◆ ■			2.0
3.0	END HOLE @ 3.0m -refusal	<input checked="" type="checkbox"/>	125	● ▲		SM	■ ◆			3.0
4.0										4.0
5.0										5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.0 m COMPLETE: 99/04/21		Page 1 of 1		

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-383
ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1817+275 30M RT CENTRELINE	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: 2.5 m
COMPLETE: 99/04/21

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-382								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1817+365 40M RT CENTRELINE		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			PERCENT GRAVEL ■			
0.0	ORGANIC & ASH & GRAVEL (MIX)										0.0	
1.0	SILTY GRAVEL WITH SAND (GM) -frozen										1.0	
2.0		<input checked="" type="checkbox"/>	120	●	▲		GM	◆	■		2.0	
3.0	-wet below 3.0m										3.0	
4.0	END HOLE @ 4.0m Note: Test hole is in old channel	<input checked="" type="checkbox"/>	121	●	▲		GM	◆	■		4.0	
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.0 m COMPLETE: 99/04/21		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-381								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1817+370 CENTRELINE		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		
0.0	ORGANIC & ASH											0.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)											
	-brown											
	-dry											
	-sample #118 has some ash contamination from above	<input checked="" type="checkbox"/>	118				GP-GM					1.0
	-rough drilling											
	END HOLE @ 2.0m	<input checked="" type="checkbox"/>	119				GP-GM					2.0
2.0												2.0
3.0												3.0
4.0												4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.				COMPLETION DEPTH: 2.0 m				
				REVIEWED BY:				COMPLETE: 99/04/21				
				Fig. No:				Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-380								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1817+500 25M RT CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE		
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC SILT (ML) -dry										0.0	
1.0	-frozen below 1.0m										1.0	
2.0	SILTY GRAVEL WITH SAND (GM) -brown -damp		116	●▲			SM	◆■			2.0	
3.0	SILTY SAND (SM) -with pebbles -frozen		117	●▲			SM	◆■			3.0	
4.0	END HOLE @ 3.5 -refusal -green rock dust on bit										4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

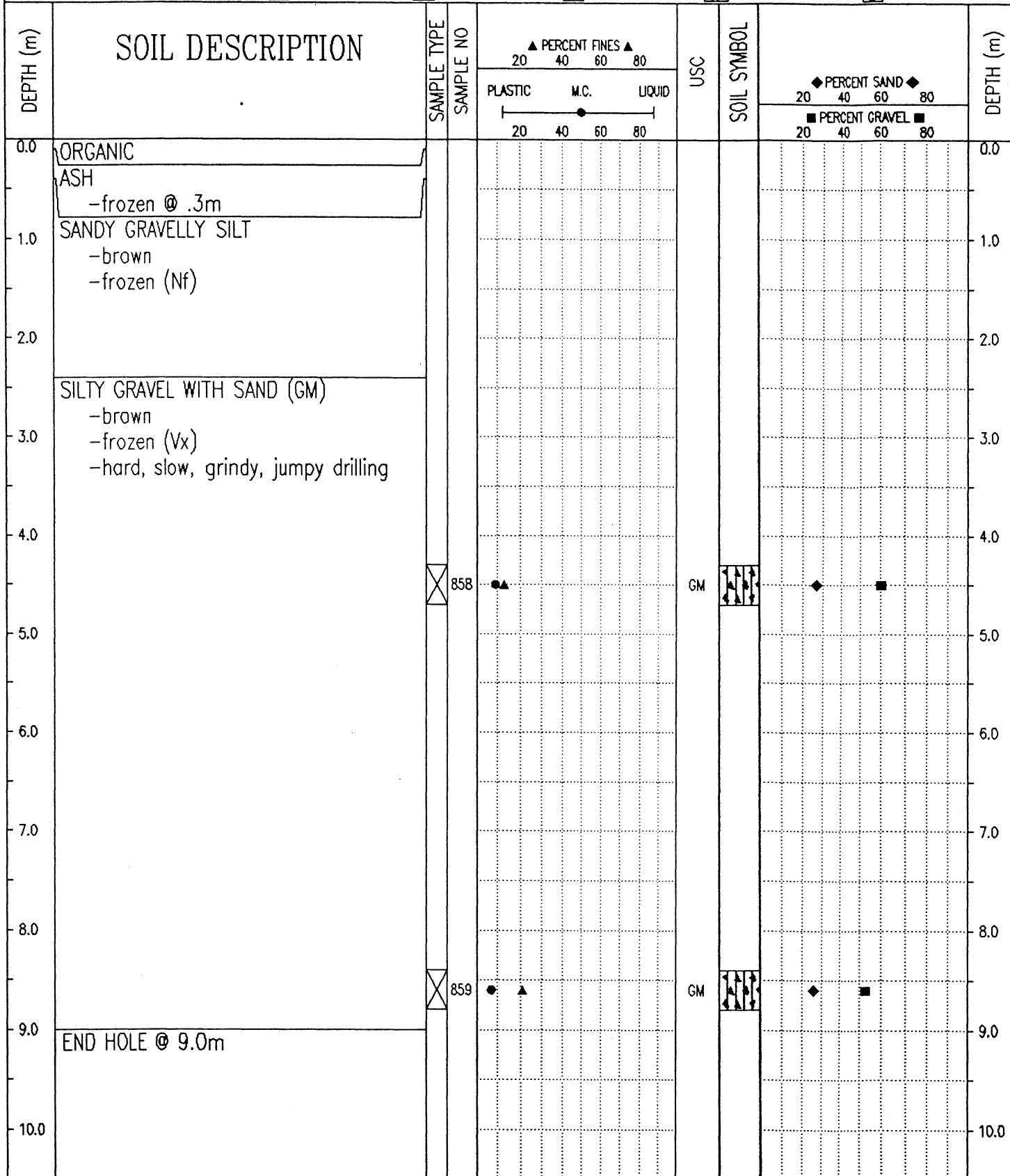
COMPLETION DEPTH: 3.5 m
COMPLETE: 99/04/21

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK PROJECT SEG 13 TEST HOLE NO: 531-842

ENGINEERING CAPITAL KM 1799-1822 A/H Project No: 092-202101-0329

B-40L MOBILE DRILL 6" AUGER LOCATION: 1817+500 25M RT ELEVATION: 0.00 (m)

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



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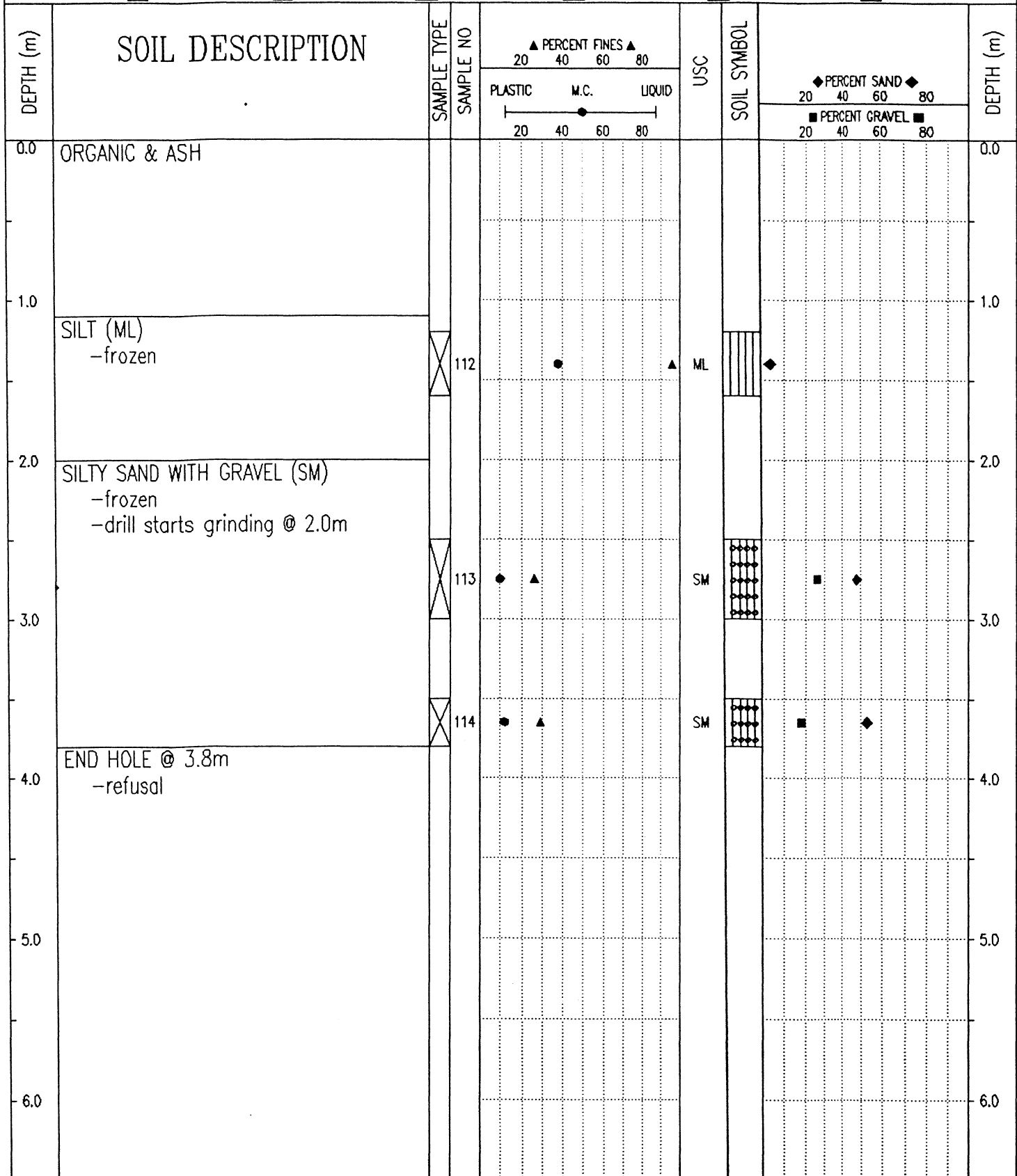
Fig. No:

COMPLETION DEPTH: 9.0 m

COMPLETE: 99/10/21

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-379
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1817+600 20M RT CENTRELINE	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: 3.8 m
COMPLETE: 99/04/21

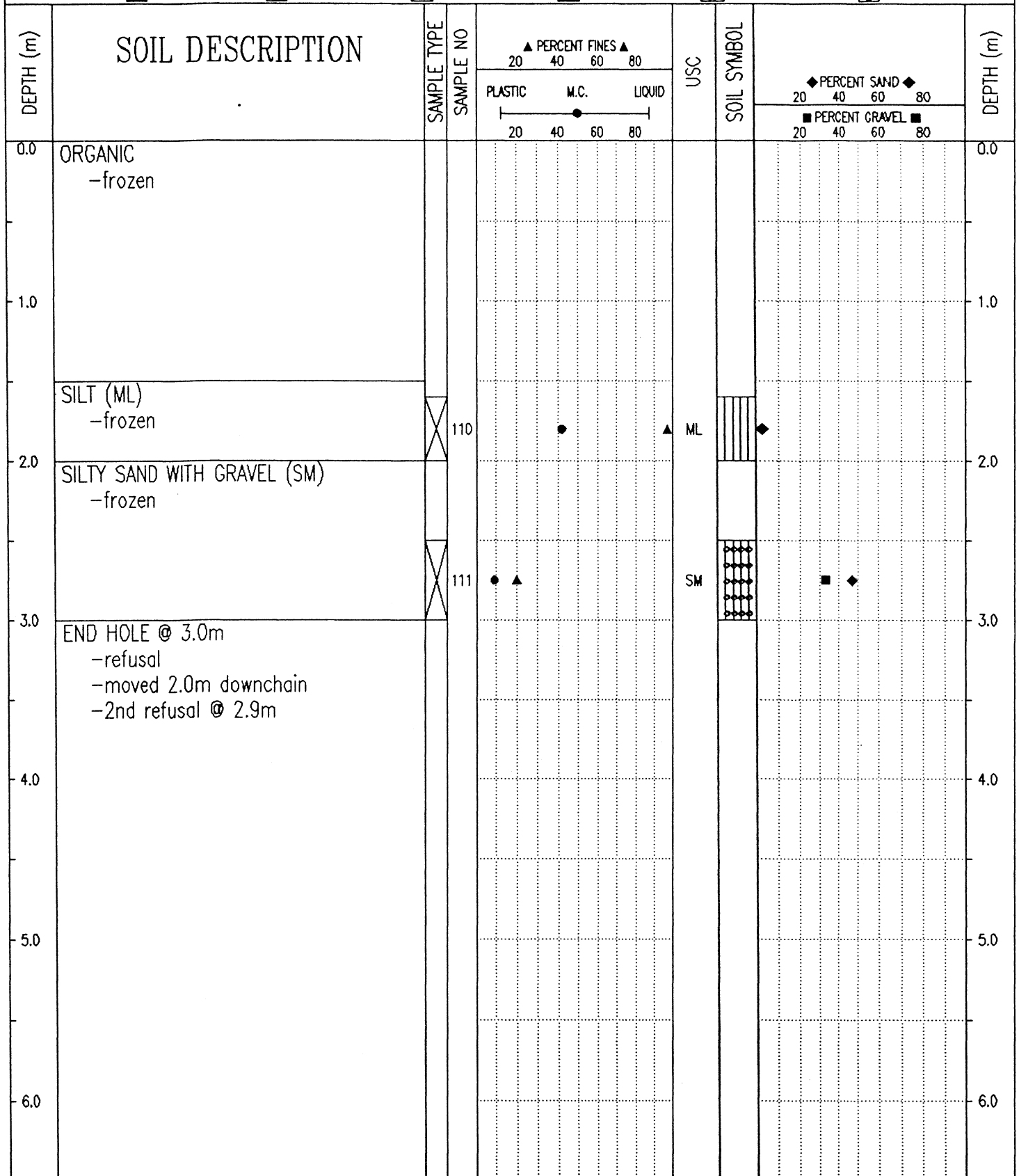
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 531-843							
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329							
B-40L MOBILE DRILL 6" AUGER		LOCATION: 1817+601 12M RT		ELEVATION: 0.00 (m)							
SAMPLE TYPE		RETURN		S.P.T.							
		<input checked="" 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 ■		
				20	40	60	80	20	40	60	80
0.0	ORGANIC										0.0
	ASH										
	ORGANIC										
1.0	-frozen (Vx)										1.0
	SANDY SILT										
	-light brown										
	-frozen (Vx)										
2.0	SANDY SILTY GRAVELS										2.0
	-brown										
	-frozen (Vx)										
	-slow grindy drilling										
3.0											3.0
4.0	SILTY SAND WITH GRAVEL (SM)										4.0
	-brown										
	-easier grindy drilling										
5.0		<input checked="" type="checkbox"/>	860				SM				5.0
	-hard slow dirlling below 5.2m										
6.0											6.0
	-grey below 6.0m										
7.0											7.0
8.0											8.0
	-sample # 861 was frozen in-situ but thawed upon retrieval										
	-wet to sat										
9.0	END HOLE @ 9.0m	<input checked="" type="checkbox"/>	861				SM				9.0
	-refusal										
10.0											10.0

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 8.8 m
COMPLETE: 99/10/22

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-378
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1817+700 20M RT CENTRELINE	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: G.C.
REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/04/21

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 531-844
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER		LOCATION: 1817+706 14M RT	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			PERCENT GRAVEL ■			
0.0	ORGANIC ASH										0.0	
0.0 - 0.5	ORGANIC SANDY SILT -light brown -frozen (Nf)										0.5	
0.5 - 2.0	SILTY SANDY GRAVEL -brown -frozen (Vx) -grindy drilling										2.0	
2.0 - 3.5	ICE WITH GRAVELLY SAND & SILT -brown -smooth easy drilling										3.5	
3.5 - 4.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Vx) -hard slow grindy drilling	<input checked="" type="checkbox"/>	862	●	▲		SM	◆	■		4.0	
4.0 - 7.0	-no sample recovered										7.0	
7.0 - 9.0	END HOLE @ 9.0m -lead auger broke off										9.0	
9.0 - 10.0											10.0	

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LOGGED BY: D.T	COMPLETION DEPTH: 9.0 m
REVIEWED BY:	COMPLETE: 99/10/22
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 532-845
ENGINEERING CAPITAL		KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER		LOCATION: 1817+815 20M RT	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		PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC ASH -frozen below 0.2m											0.0
0.2	ORGANIC -frozen											1.0
1.0	SILT -light brown -some sand -frozen (Nf)											2.0
2.0	SILTY SAND WITH GRAVEL (SM) -brown -frozen (Vx) -hard grindy drilling											3.0
3.0												4.0
4.0												5.0
5.0												6.0
6.0	END HOLE @ 6.0m		863	●	▲		SM	◆	◆	■		6.0

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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 6.1 m
COMPLETE: 99/10/25

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-377						
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329						
NODWELL B40-L		LOCATION: 1817+875 20M RT CENTRELINE		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	ORGANIC -frozen (Vx) with ice									0.0
1.0										1.0
2.0										2.0
3.0	SILT (ML)	<input checked="" type="checkbox"/>	107				ML			3.0
4.0	SILTY SAND WITH GRAVEL (SM) -drill starts grinding @ 3.5m	<input checked="" type="checkbox"/>	108				SM			4.0
4.0	SILT (ML) -frozen	<input checked="" type="checkbox"/>	109				ML			4.0
5.0	END HOLE @ 4.5m									5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C.		COMPLETION DEPTH: 4.5 m				
				REVIEWED BY:		COMPLETE: 99/04/21				
				Fig. No:		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 532-846								
ENGINEERING CAPITAL		KM 1799-1822 A/H		Project No: 092-202101-0329								
B-40L MOBILE DRILL 6" AUGER		LOCATION: 1817+890 15M RT		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		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	ORGANIC ASH -frozen below .2m											0.0
1.0	ORGANIC -frozen											1.0
2.0	SILT -some sand -light brown -frozen (Vx)											2.0
3.0	SANDY SILTY GRAVEL -brown -frozen (Vx) -hard grindy drilling											3.0
4.0	ICE & SANDY SILT -trace +5mm material -easier drilling											4.0
5.0	SILTY GRAVEL WITH SAND TO SILTY SAND WITH GRAVEL (GM) - (SM) -brown -frozen (Vx) -hard grindy drilling -very hard slow grindy drilling below 5.0m	<input checked="" type="checkbox"/>	864	●	▲		GM	▲	◆	■		5.0
7.0	END HOLE @ 7.0m	<input checked="" type="checkbox"/>	865	●	▲		SM	■	◆			7.0
8.0												8.0
9.0												9.0
10.0												10.0

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Fig. No:

COMPLETION DEPTH: 7.0 m
COMPLETE: 99/10/25

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-374
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1817+895 40M RT CENTRELINE	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			PERCENT GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40	60	80	20	40	
0.0	ORGANIC -frozen														0.0
2.0	SILT (ML) -frozen -grinding drilling @ 2.0m	<input checked="" type="checkbox"/>	102		●	▲	ML								2.0
3.0	END HOLE @ 2.7m -refusal -light green rock dust														3.0
4.0															4.0
5.0															5.0
6.0															6.0

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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-373
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1817+900 10M RT CENTRELINE	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		
0.0	NO DATA RECORDED										0.0	
	ORGANIC & PEAT -frozen											
1.0											1.0	
2.0											2.0	
	SILT WITH SAND (ML) -frozen											
3.0			101	●	▲		ML	▨	◆	■	3.0	
	END HOLE @ 3.0m -refusal											
4.0											4.0	
5.0											5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 3.0 m
COMPLETE: 99/04/20

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-376							
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329							
NODWELL B40-L		LOCATION: 1817+930 40M RT CENTRELINE		ELEVATION: 0.00 (m)							
SAMPLE TYPE		S.P.T.		AUGER		BULK		TUBE		CORE	
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES	USC	SOIL SYMBOL	PERCENT SAND	PERCENT GRAVEL	DEPTH (m)		
				▲ PERCENT FINES ▲ 20 40 60 80 PLASTIC M.C. LIQUID 20 40 60 80			◆ PERCENT SAND ◆ 20 40 60 80 ■ PERCENT GRAVEL ■ 20 40 60 80				
0.0	ORGANIC -frozen								0.0		
1.0									1.0		
2.0	SILT (ML) -frozen		105		ML				2.0		
2.0	SILTY SAND WITH GRAVEL (SM) -light brown -angular -drill starts grinding @ 2.0m		106		SM				2.0		
3.0	END HOLE @ 2.8m -refusal								3.0		
4.0									4.0		
5.0									5.0		
6.0									6.0		

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Fig. No:

COMPLETION DEPTH: 2.8 m
COMPLETE: 99/04/21

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK PROJECT SEG 13 TEST HOLE NO: 509-375

ENGINEERING CAPITAL KM 1820-1815 A/H Project No: 092-202101-0329

NODWELL B40-L LOCATION: 1817+940 10M RT CENTRELINE ELEVATION: 0.00 (m)

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

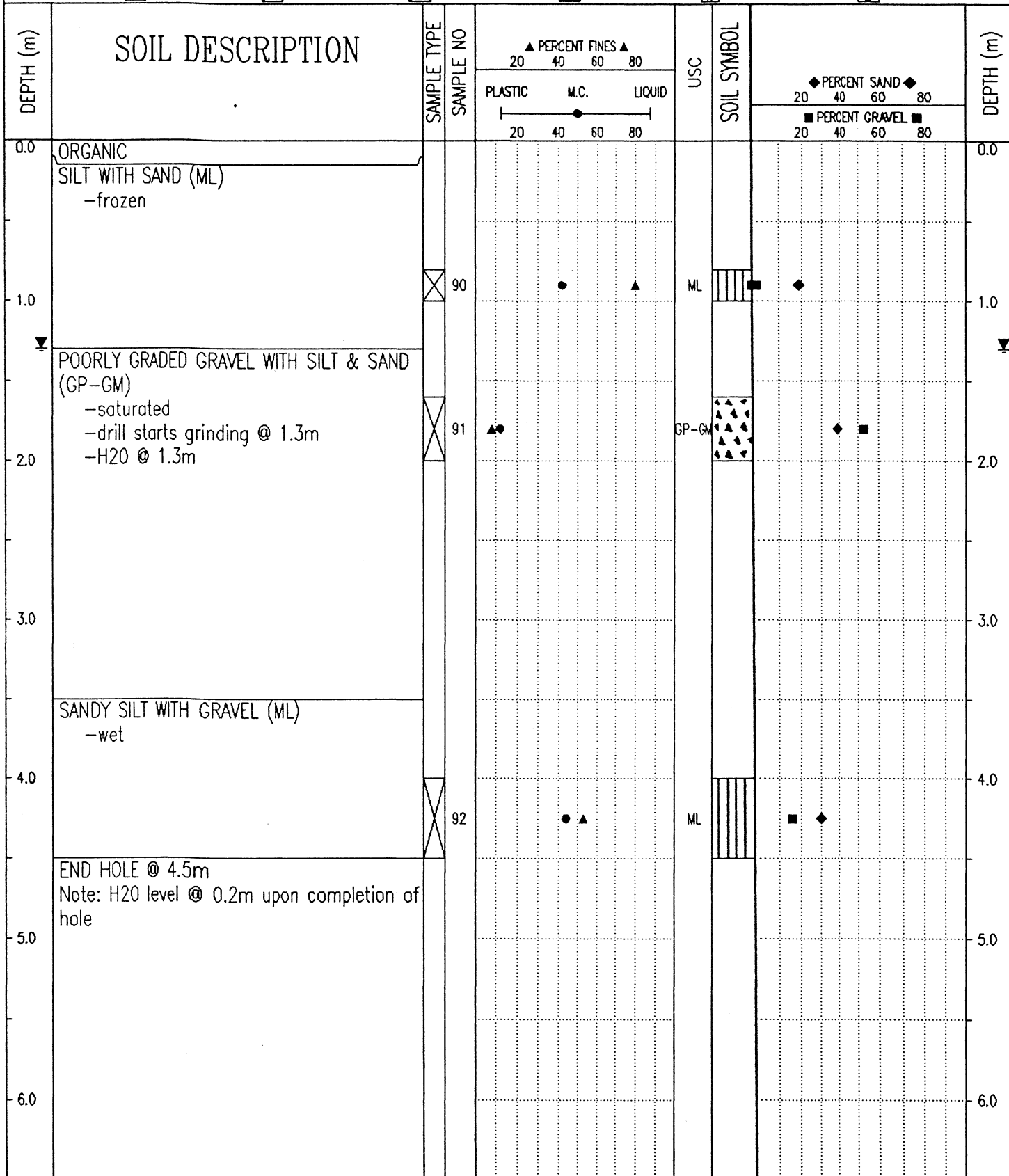
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ORGANIC -frozen with ice lenses											
1.0											1.0	
	SILT (ML) -frozen											
2.0		<input checked="" type="checkbox"/>	103				ML				2.0	
	-drill starts grinding @ 2.4m											
3.0	SILT WITH GRAVEL -frozen -lost sample # 104										3.0	
4.0	END HOLE @ 3.5m -refusal -rock dust										4.0	
5.0											5.0	
6.0											6.0	

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LOGGED BY: G.C. COMPLETION DEPTH: 3.5 m
 REVIEWED BY: COMPLETE: 99/04/21
 Fig. No: Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-372						
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329						
NODWELL B40-L		LOCATION: 1818+000 10M LT CENTRELINE		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 ▲ 20 40 60 80		USC	SOIL SYMBOL	◆ PERCENT SAND ◆ 20 40 60 80		DEPTH (m)
				PLASTIC	M.C.			LIQUID	■ PERCENT GRAVEL ■ 20 40 60 80	
0.0	ORGANIC POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -damp	<input checked="" type="checkbox"/>	97	▲			GP-GM	◆	■	0.0
2.0	POORLY GRADED GRAVEL WITH SAND (GP) -frozen with ice lenses (Vx) -tougher drilling @ 2.0m	<input checked="" type="checkbox"/>	98	●			GP	◆	■	2.0
3.0	SILTY GRAVEL WITH SAND TO WELL GRADED GRAVEL WITH SILT & SAND (GW-GM) -wet -easy drilling below 3.0M	<input checked="" type="checkbox"/>	99	● ▲			GM	◆	■	3.0
4.0	-saturated below 4.0m	<input checked="" type="checkbox"/>	100	●			GW-GM	◆	■	4.0
5.0	END HOLE @ 4.5m									5.0
6.0										6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 4.5 m COMPLETE: 99/04/20				

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-370
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1818+100 10M RT CENTRELINE	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: 99/04/20
	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-371								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1818+110 15M LT CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
				TUBE								
				CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES			USC	SOIL SYMBOL	PERCENT SAND & GRAVEL			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT SAND	PERCENT GRAVEL		
0.0	SILT (ML) -frozen										0.0	
1.0	WELL-GRADED SAND WITH SILT & GRAVEL (SW-SM) -frozen		93				ML				1.0	
2.0			94				SW-SM				2.0	
3.0	WELL-GRADED GRAVEL WITH SAND (GW) -saturated		95				GW				3.0	
4.0			96				GW				4.0	
5.0	END HOLE @ 4.5m										5.0	
6.0											6.0	

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Fig. No:

COMPLETION DEPTH: 4.5 m

COMPLETE: 99/04/20

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-369								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1818+200 CENTRELIN		ELEVATION: 0.00 (m)								
SAMPLE TYPE		RETURN		S.P.T.								
		AUGER		BULK								
		TUBE		CORE								
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	▲ PERCENT FINES ▲			USC	SOIL SYMBOL	◆ PERCENT SAND ◆			DEPTH (m)
				PLASTIC	M.C.	LIQUID			PERCENT GRAVEL ■			
0.0	ORGANIC										0.0	
	ASH											
	-frozen											
1.0	FROZEN ORGANICS WITH ICE										1.0	
2.0											2.0	
3.0	SILTY SAND WITH GRAVEL (SM)		89				SM				3.0	
	-frozen											
	-ice rich											
	-drill starts grinding @ 2.5m											
	-easier drilling below 3.0m											
4.0	END HOLE @ 4.0m										4.0	
	-refusal											
	Note: Could not access knob RHS between 368 & 369 (Steep)											
5.0											5.0	
6.0											6.0	

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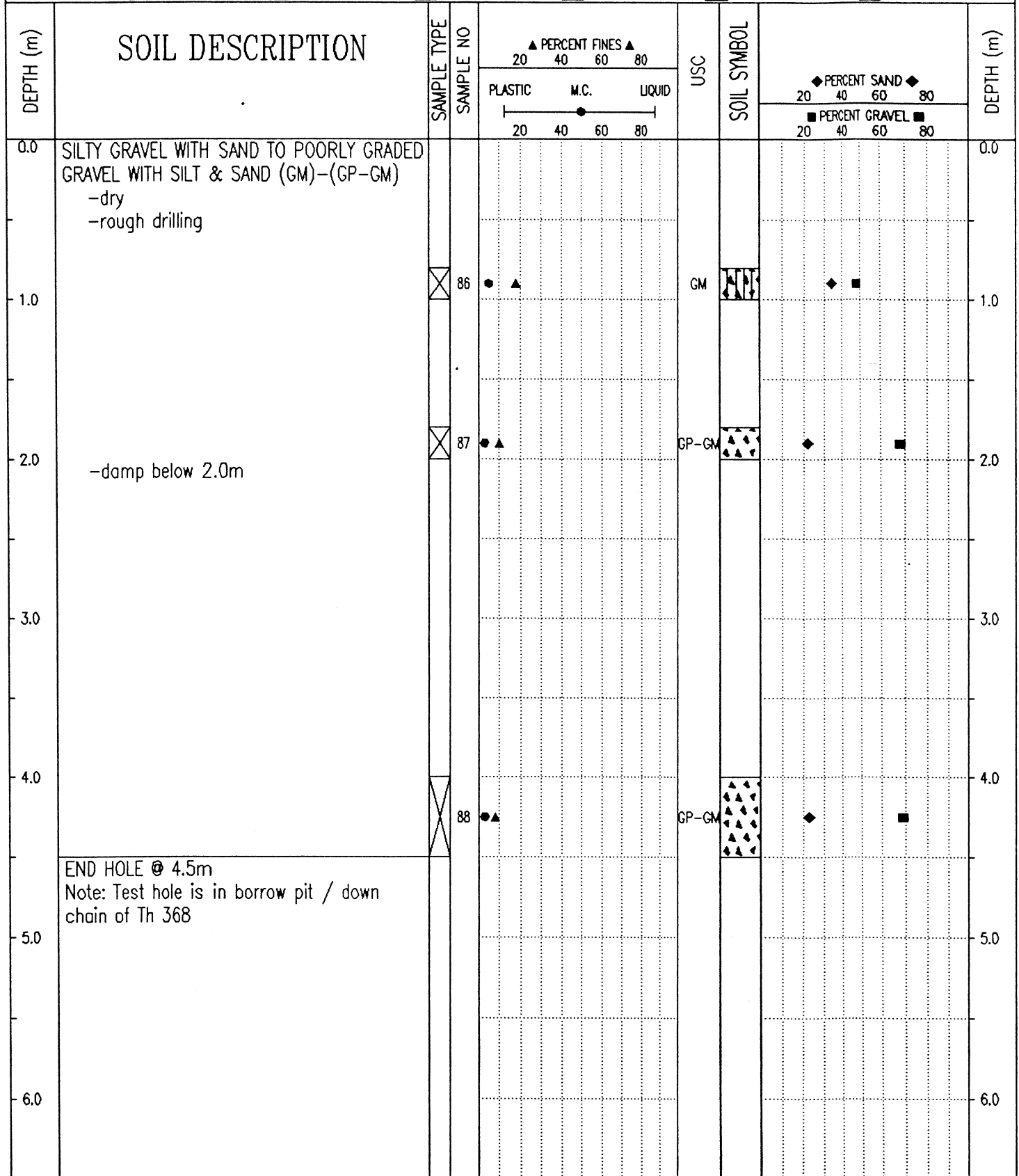
Fig. No:

COMPLETION DEPTH: 4.0 m

COMPLETE: 99/04/20

Page 1 of 1

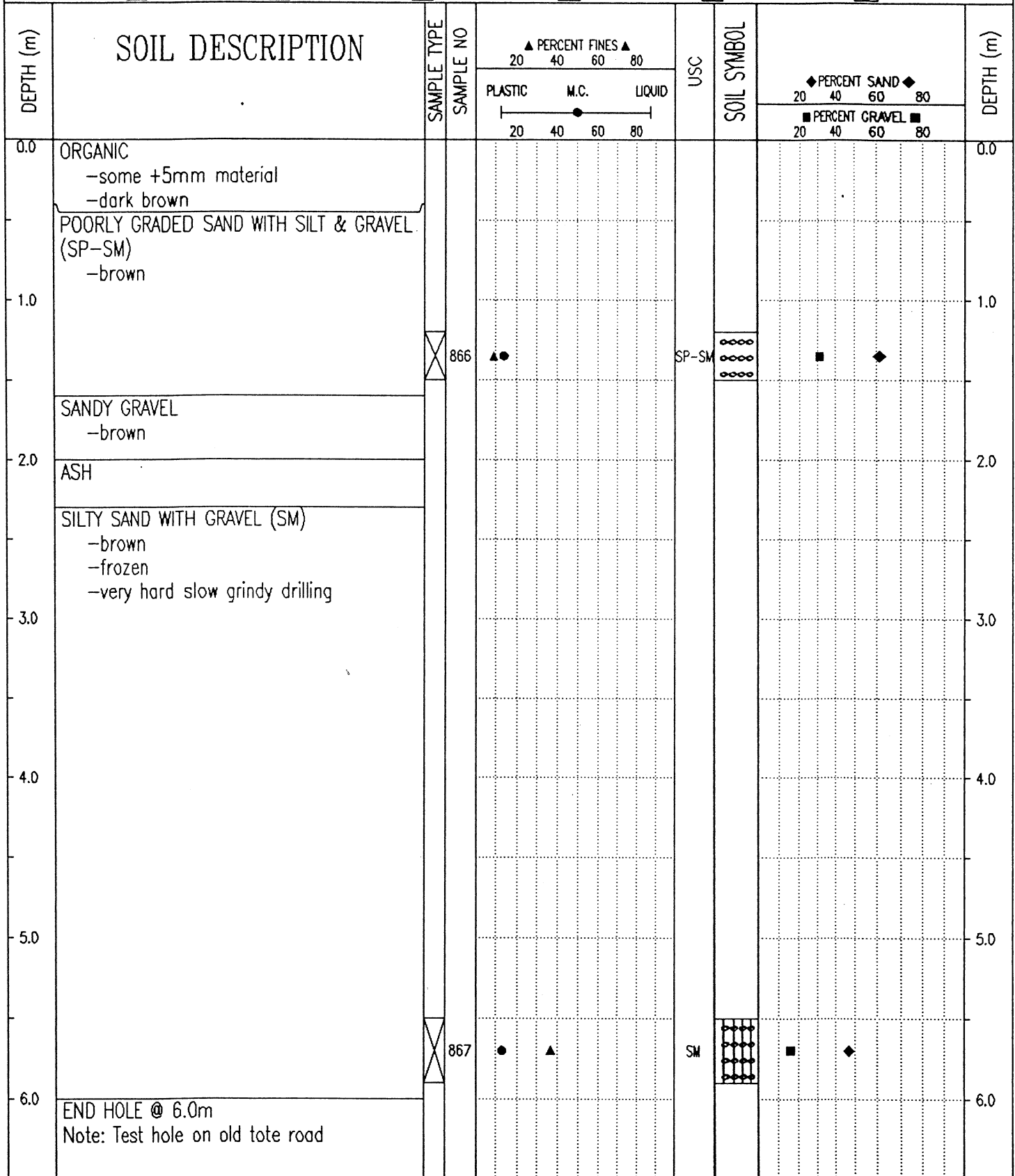
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ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1818+275 5M RT CENTRELINE	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE	



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REVIEWED BY:	COMPLETE: 99/04/20
Fig. No:	Page 1 of 1

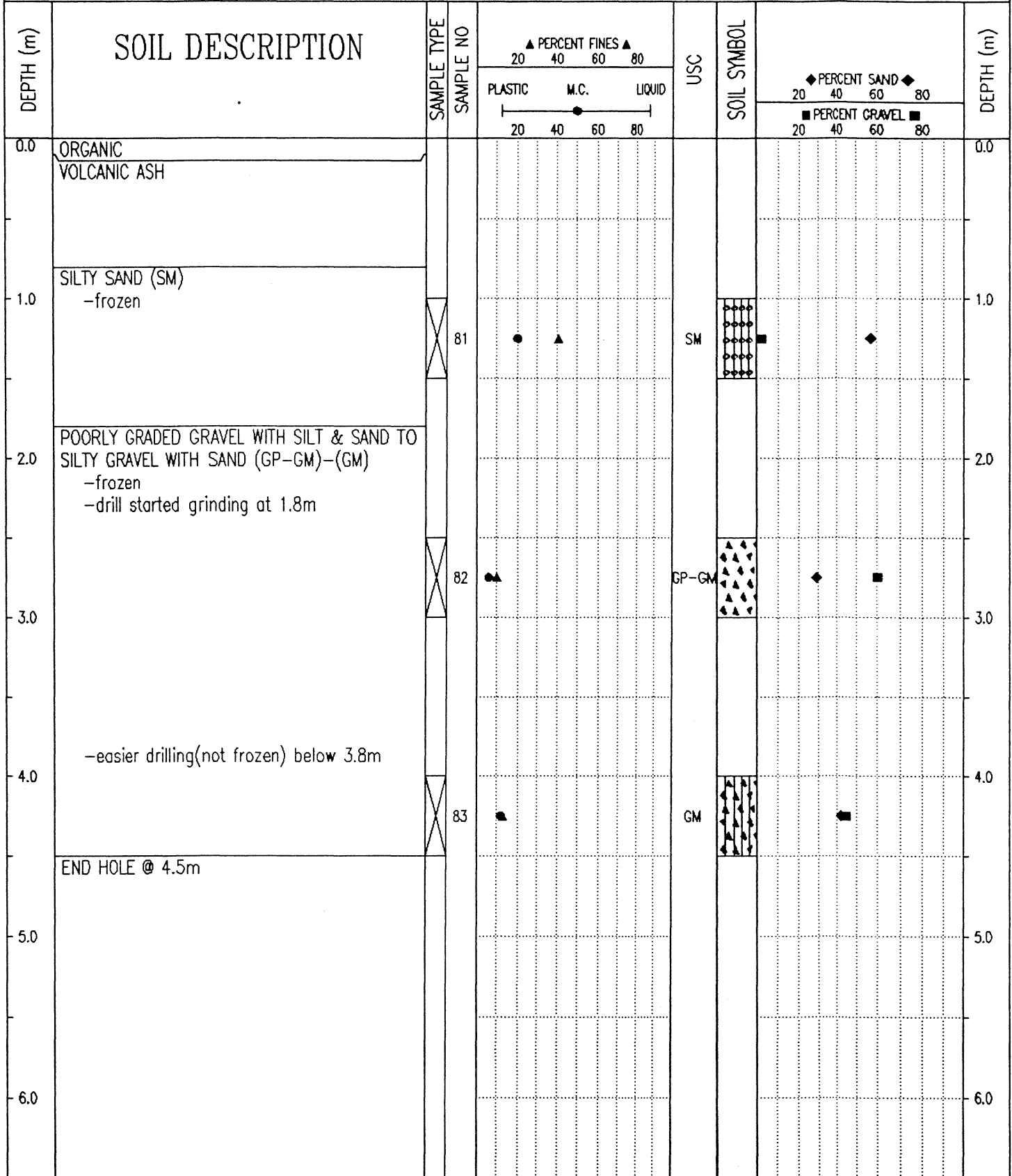
SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 532-847
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1818+325 15M RT	ELEVATION: 0.00 (m)
SAMPLE TYPE <input checked="" type="checkbox"/> RETURN <input checked="" type="checkbox"/> 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:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-367								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1818+350 20M RT CENTRELINE		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	ORGANIC			20	40	60	80	20	40	60	80	0.0
	VOLCANIC ASH											
1.0	PEAT & ORGANIC -frozen											1.0
	ICE											
2.0	SANDY SILT (ML) -frozen with ice											2.0
		X	84									
3.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -frozen -drill starts grinding @ 2.8m											3.0
		X	85									
4.0	END HOLE @ 3.6m -refusal											4.0
5.0												5.0
6.0												6.0
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 3.6 m COMPLETE: 99/04/20						

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-366
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1818+355 CENTRELINE	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



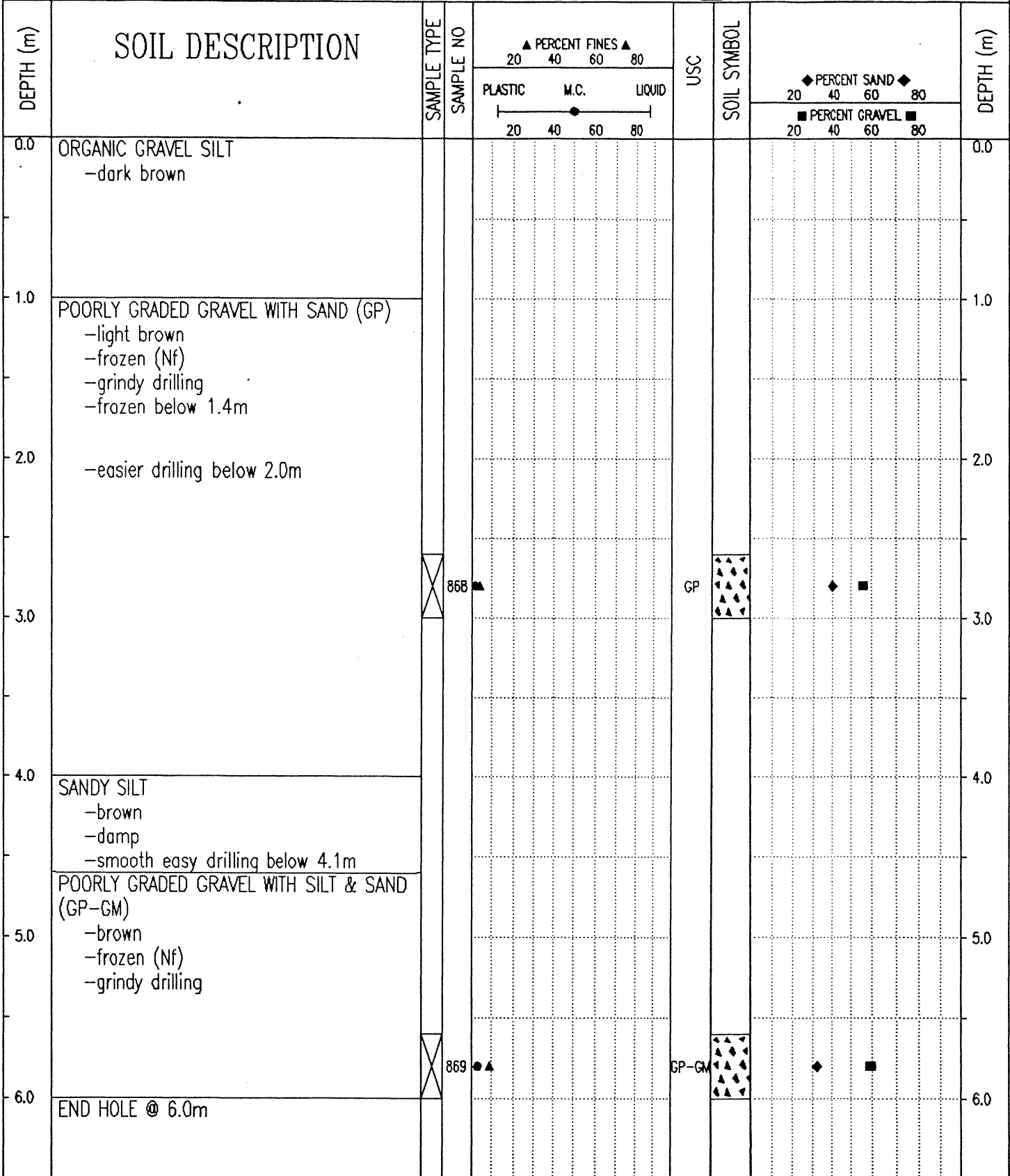
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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/20

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 532-848
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1818+477 15M RT	ELEVATION: 0.00 (m)

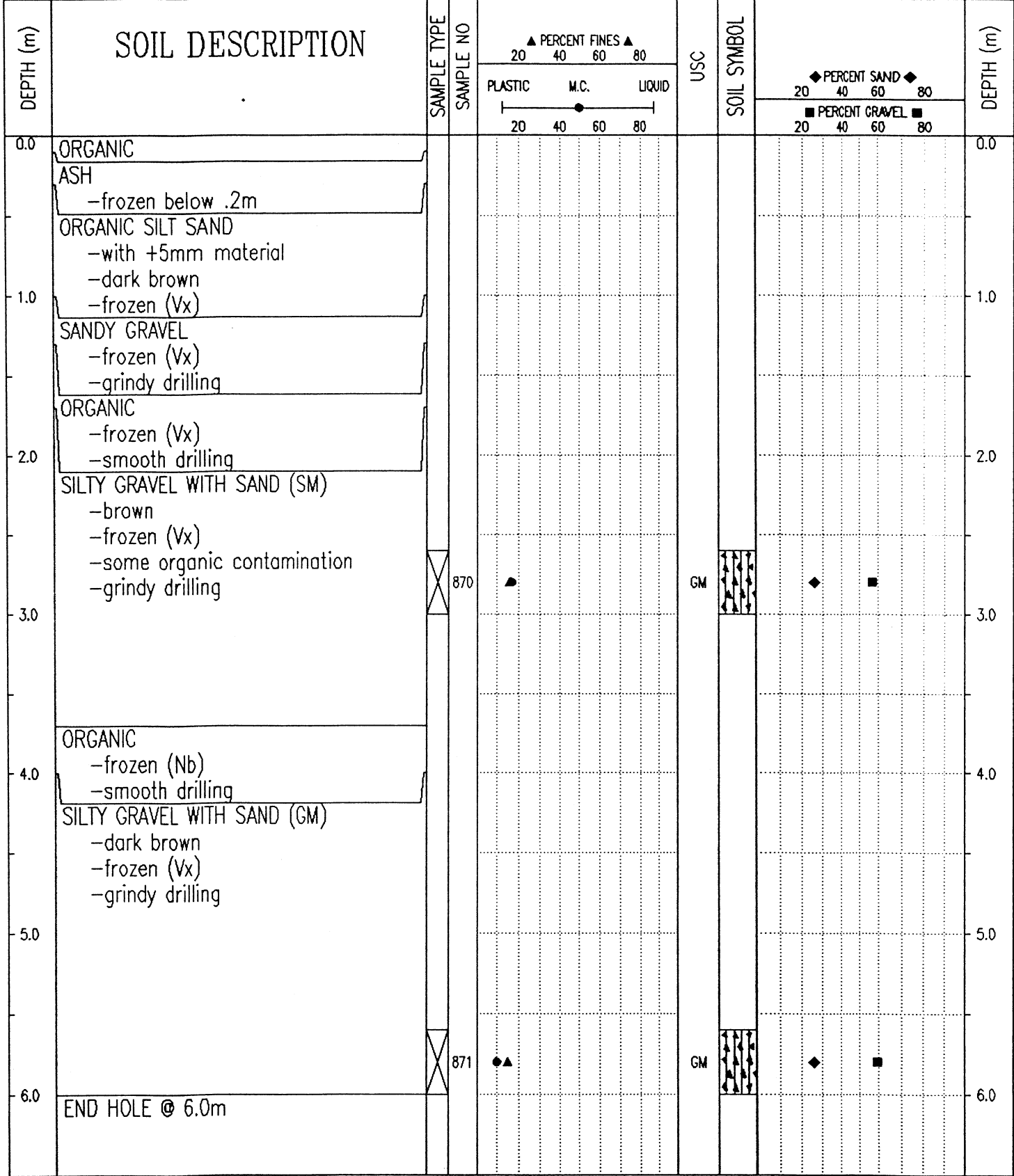
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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	Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 532-849
ENGINEERING CAPITAL	KM 1799-1822 A/H	Project No: 092-202101-0329
B-40L MOBILE DRILL 6" AUGER	LOCATION: 1818+600 10M RT	ELEVATION: 0.00 (m)

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



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Fig. No:

COMPLETION DEPTH: 6.0 m
COMPLETE: 99/10/26
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-365							
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329							
NODWELL B40-L		LOCATION: 1818+725 10M RT CENTRELINE		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			20	40	
0.0	ORGANIC ASH										0.0
0.0 - 1.0	SILTY GRAVEL WITH SAND (GM) -mixed with ash & organics										
1.0		X	79	●			GM	◆	■		1.0
1.0 - 2.0	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM)										
2.0		X	80	▲			GP-GM	◆	■		2.0
2.0 - 3.0	END HOLE @ 3.0m -refusal										
3.0											3.0
3.0 - 4.0											
4.0											4.0
4.0 - 5.0											
5.0											5.0
5.0 - 6.0											
6.0											6.0

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REVIEWED BY:	COMPLETE: 99/04/20
Fig. No:	Page 1 of 1

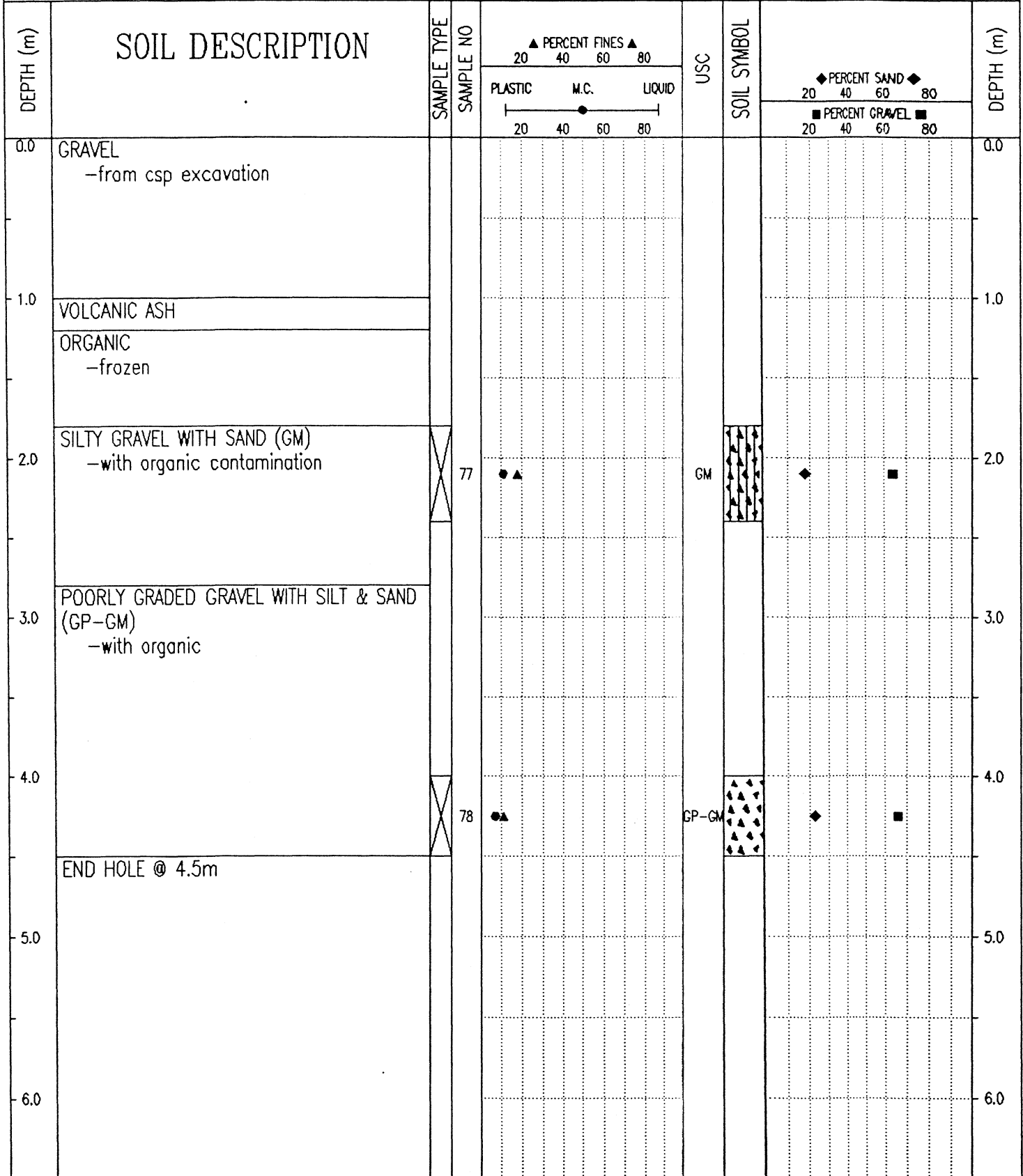
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-363								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1818+775 20M RT CENTRELINE		ELEVATION: 0.00 (m)								
SAMPLE TYPE <input type="checkbox"/> RETURN		<input 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 ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC										0.0	
	VOLCANIC ASH											
	ORGANIC, PEAT ETC.											
1.0		<input checked="" type="checkbox"/>	75	●	▲		SM	■	◆		1.0	
	SILT -with ash contamination -frozen											
2.0		<input checked="" type="checkbox"/>	76	●	▲		SM	■			2.0	
	SILTY SAND WITH GRAVEL (SM) -with ash contamination -frozen											
3.0	END HOLE @ 2.4m -refusal -rock dust										3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	
Government of Yukon Transportation Engineering				LOGGED BY: G.C. REVIEWED BY: Fig. No:		COMPLETION DEPTH: 2.4 m COMPLETE: 99/04/20		Page 1 of 1				

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK PROJECT SEG 13 TEST HOLE NO: 509-364

ENGINEERING CAPITAL KM 1820-1815 A/H Project No: 092-202101-0329

NODWELL B40-L LOCATION: 1818+775 10M LT CENTRELINE 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: 99/04/20

Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-362
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1819+000 CENTRELINE	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

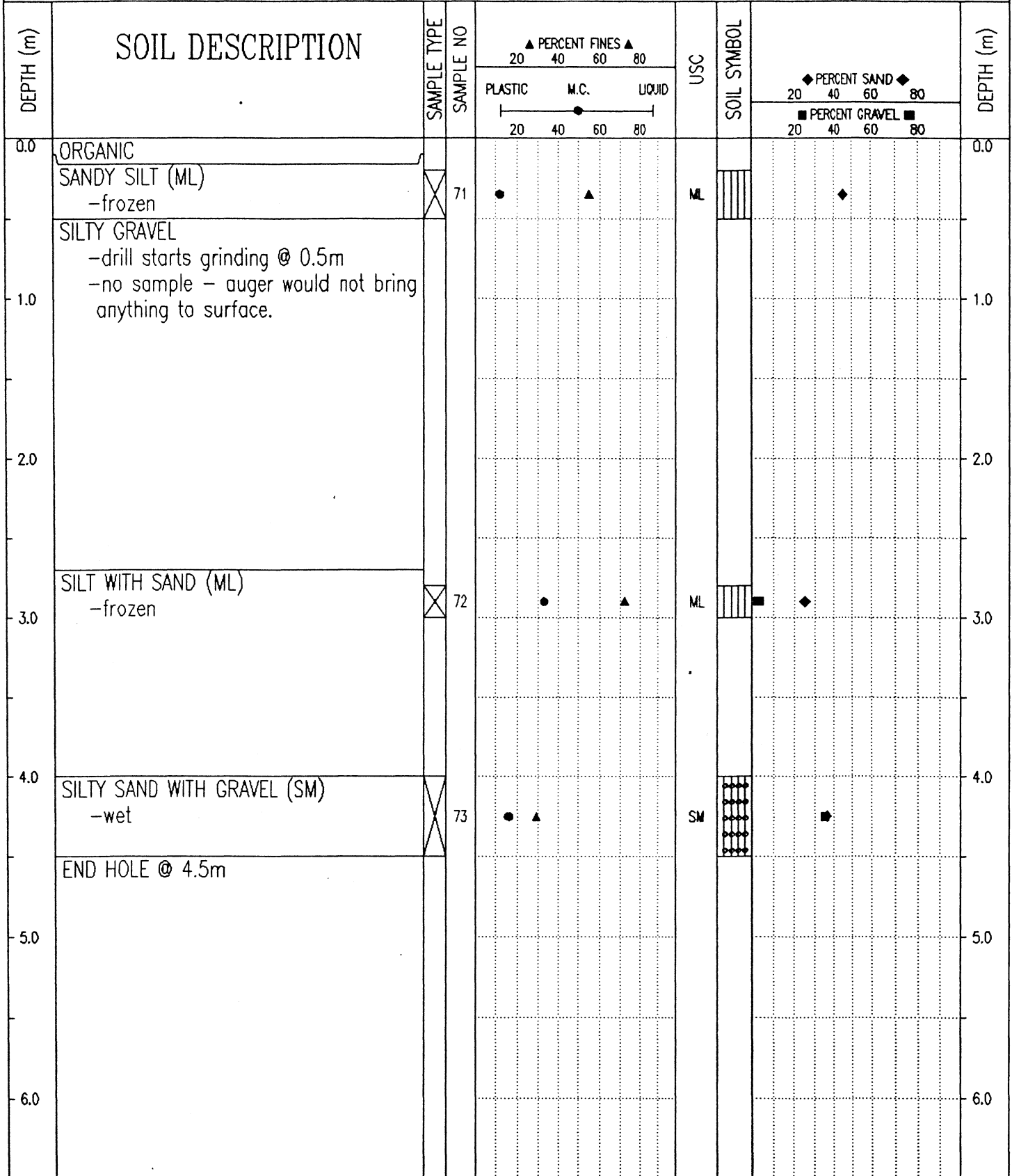
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES ▲			USC	SOIL SYMBOL	PERCENT SAND ◆		PERCENT GRAVEL ■	DEPTH (m)
				PLASTIC	M.C.	LIQUID			20	40		
0.0	ORGANIC										0.0	
	VOLCANIC ASH											
1.0	ORGANIC -with silt -frozen										1.0	
	SILTY SAND WITH GRAVEL (SM) -frozen with ice & ash -drill starts grinding @ 1.3m	<input checked="" type="checkbox"/>	74	▲	●		SM	◆	◆	■		
2.0	END HOLE @ 2.0M -refusal Note: 2nd refusal @ 1.3m 3rd refusal @ 2.4m										2.0	
3.0											3.0	
4.0											4.0	
5.0											5.0	
6.0											6.0	

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REVIEWED BY:
Fig. No:

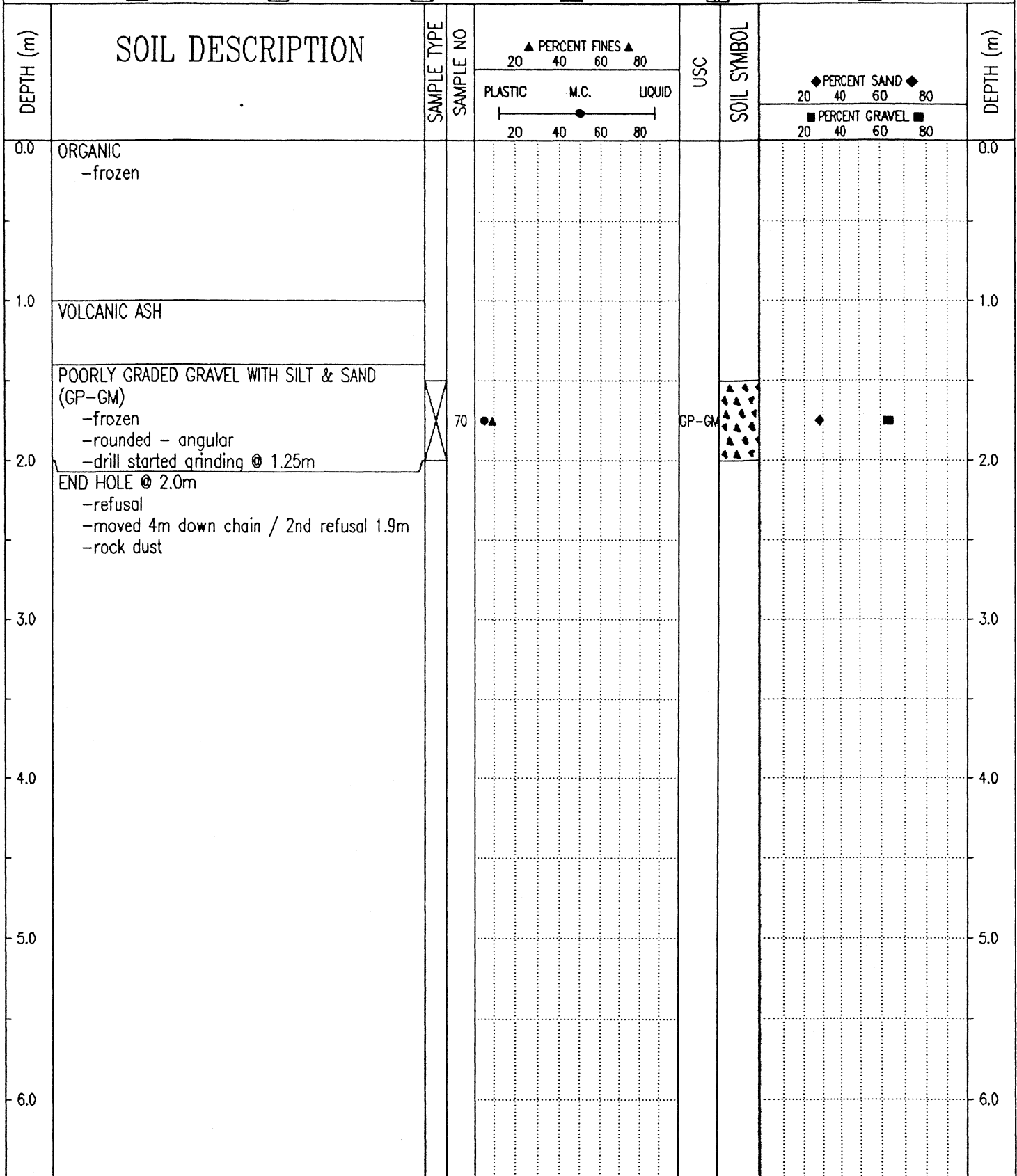
COMPLETION DEPTH: 2.0 m
COMPLETE: 99/04/20

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-361
ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1819+100 CENTRELINE	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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	REVIEWED BY:	COMPLETE: 99/04/19
	Fig. No:	Page 1 of 1

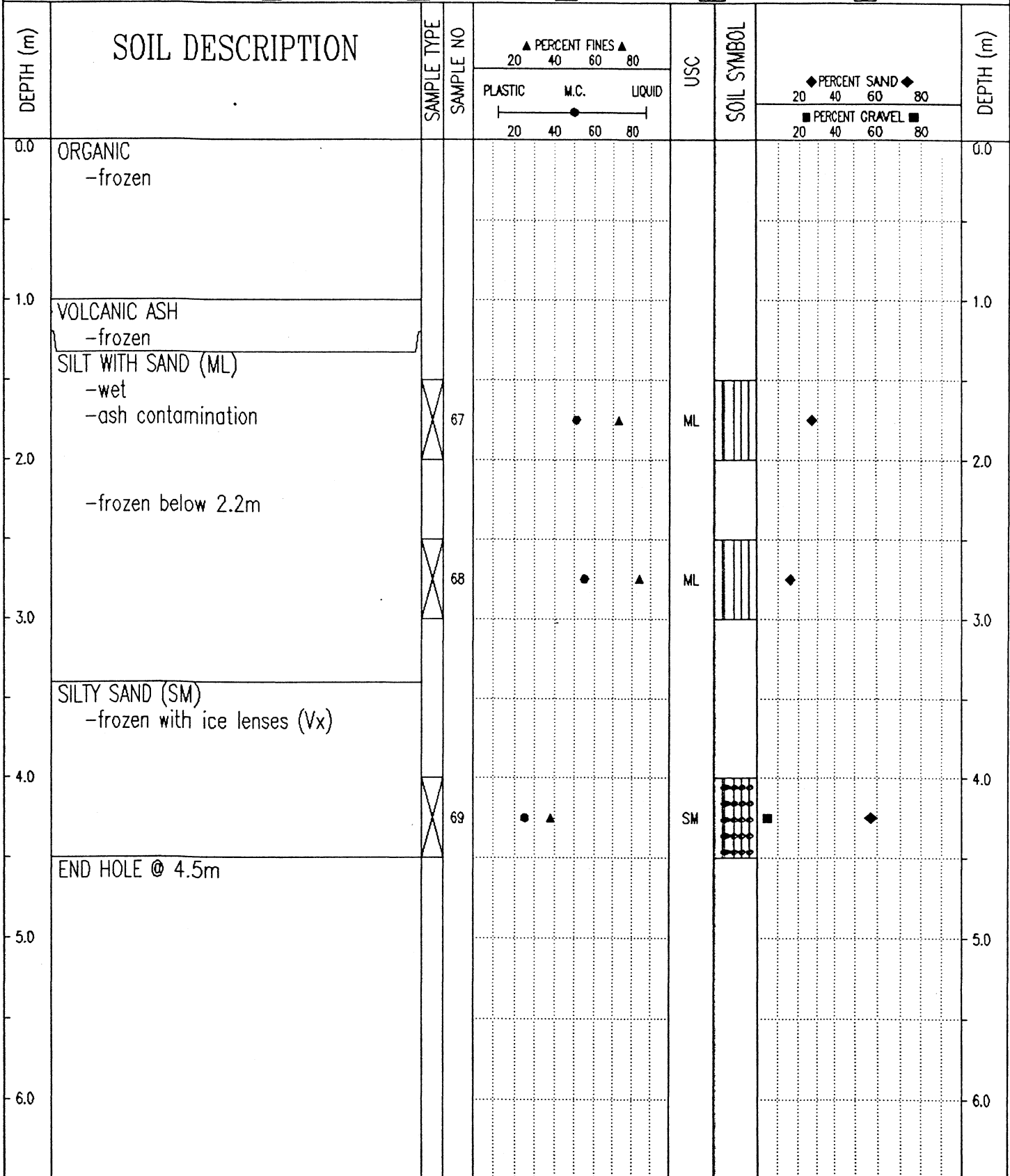
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-360
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1819+200 CENTRELINE(NO STAKES)	ELEVATION: 0.00 (m)
SAMPLE TYPE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE			



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REVIEWED BY:	COMPLETE: 99/04/19
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-359
ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1819+275 1M RT CENTRELINE	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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REVIEWED BY:
Fig. No:

COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/19

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-358							
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329							
NODWELL B40-L		LOCATION: 1819+375 CENTRELINE		ELEVATION: 0.00 (m)							
SAMPLE TYPE		RETURN		S.P.T.							
		AUGER		BULK							
		TUBE		CORE							
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE NO	PERCENT FINES		USC	SOIL SYMBOL	PERCENT SAND		PERCENT GRAVEL	DEPTH (m)
				PLASTIC	M.C.			LIQUID	20		
0.0	ORGANIC -frozen										0.0
1.0											1.0
	ASH - VOLCANIC -frozen										
2.0											2.0
	SILT (ML) -frozen										
		X	65				ML				
3.0											3.0
	POORLY GRADED GRAVEL WITH SILT & SAND (GP-GM) -damp - moist -drill starts grinding @ 2.7m										
4.0		X	70				GP-GM				4.0
5.0											5.0
	END HOLE @ 4.5m										
6.0											6.0

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Fig. No:

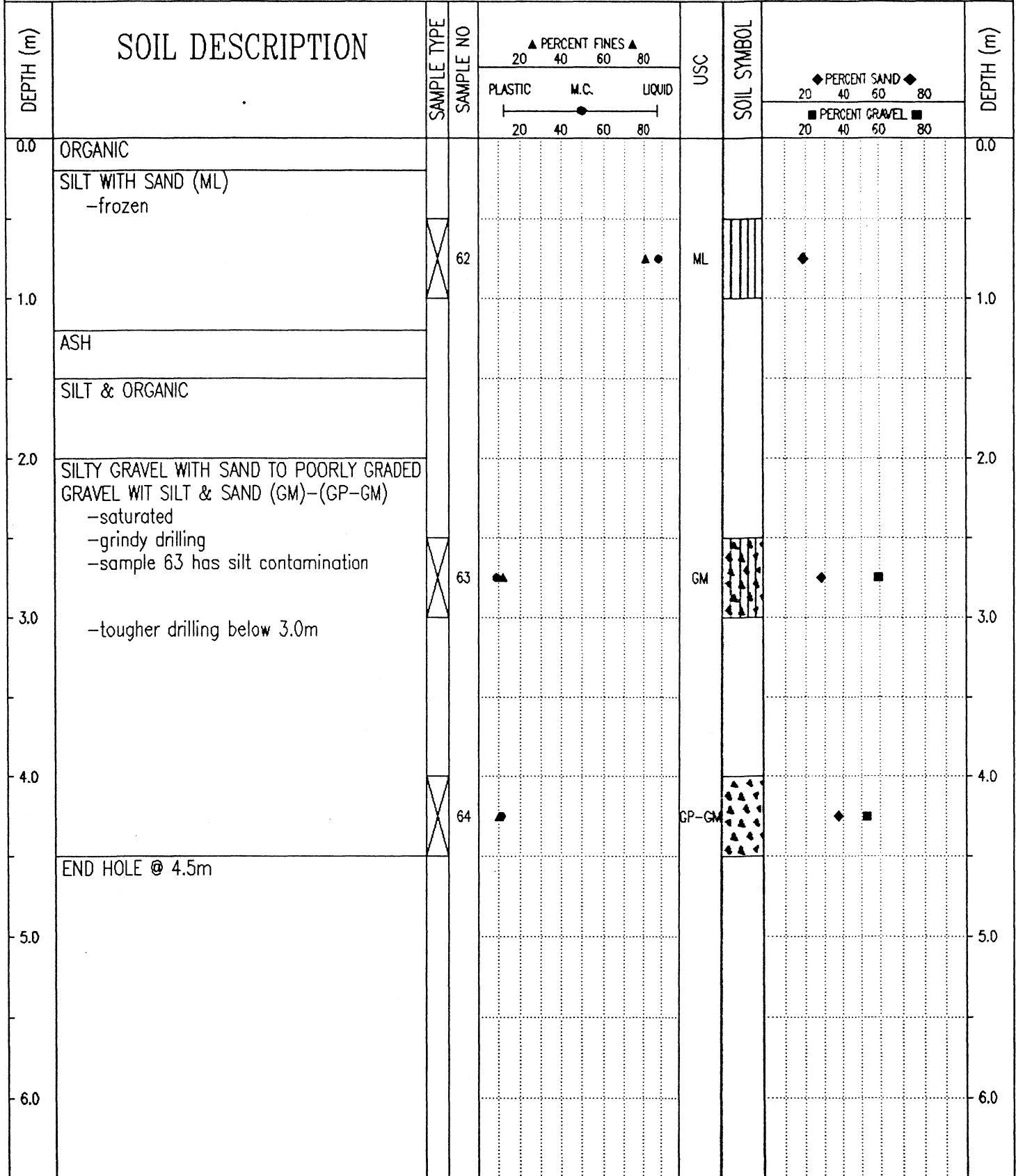
COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/19

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK PROJECT SEG 13 TEST HOLE NO: 509-357

ENGINEERING CAPITAL KM 1820-1815 A/H Project No: 092-202101-0329

NODWELL B40-L LOCATION: 1819+475 CENTRELINE ELEVATION: 0.00 (m)

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



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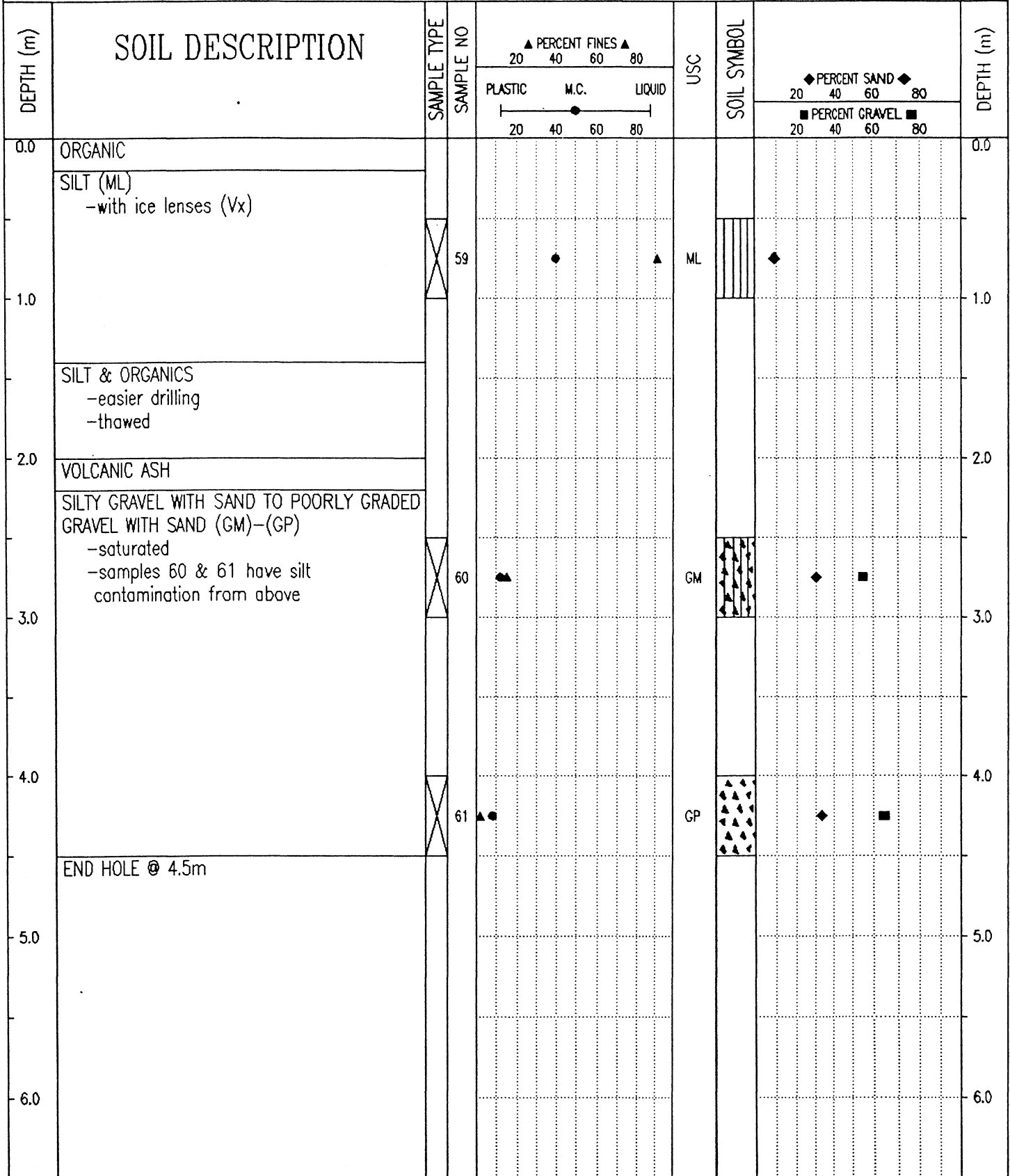
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COMPLETION DEPTH: 4.5 m

COMPLETE: 99/04/19

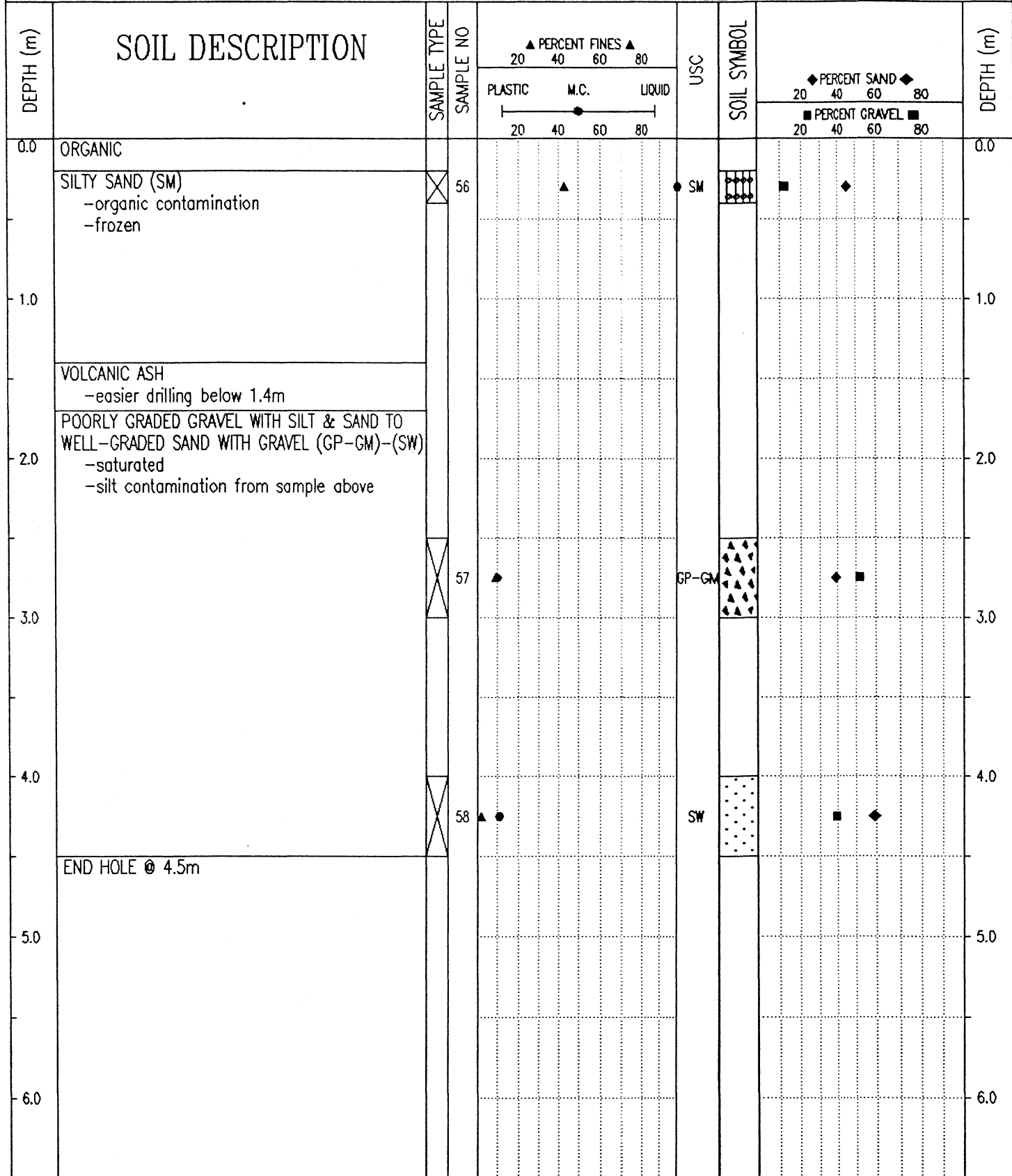
Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-356
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1819+575 2M RT CENTRELINE	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: 99/04/19
	Fig. No:	Page 1 of 1

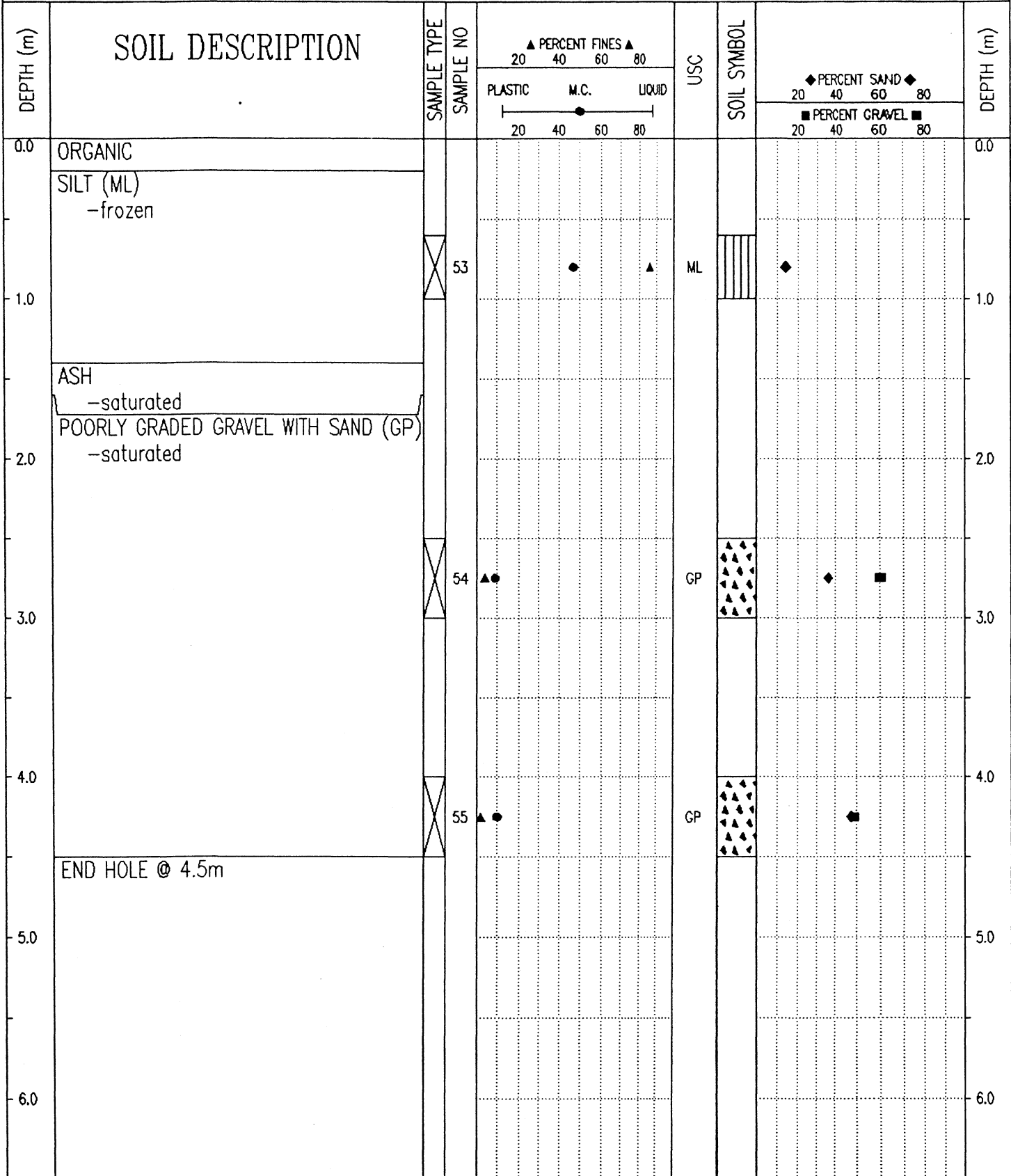
SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-355
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1819+675 20M LT CENTRELINE	ELEVATION: 0.00 (m)
SAMPLE TYPE	<input checked="" type="checkbox"/> RETURN	<input checked="" type="checkbox"/> 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: 99/04/19
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-354
ENGINEERING CAPITAL		KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L		LOCATION: 1819+675 CENTRELINE	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:	Page 1 of 1

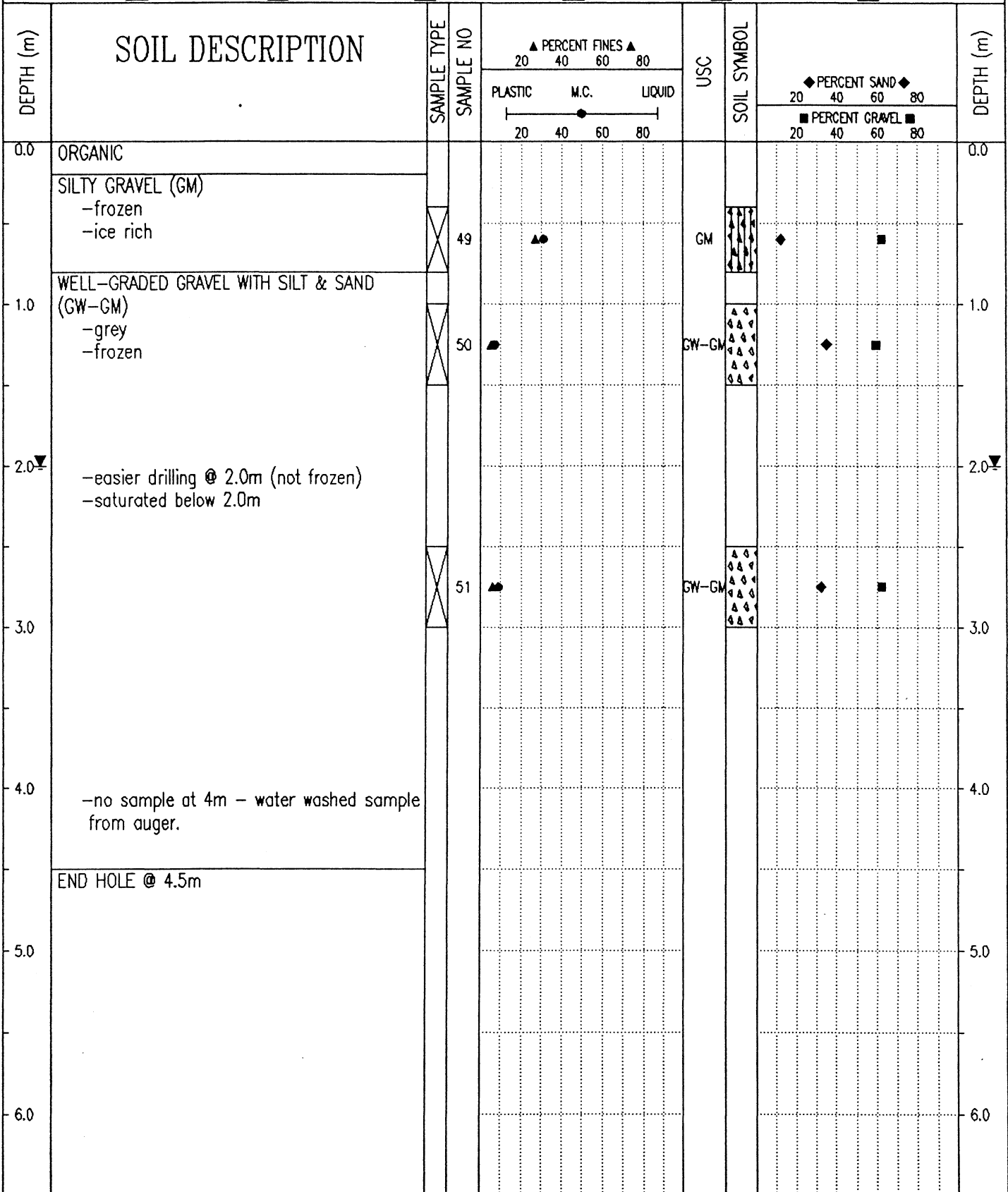
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ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329			
NODWELL B40-L		LOCATION: 1819+725 CENTRELINE		ELEVATION: 0.00 (m)			
SAMPLE TYPE		SAMPLE NO		USC			
<input type="checkbox"/> RETURN <input checked="" type="checkbox"/> S.P.T. <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> TUBE <input type="checkbox"/> CORE		52		SM			
DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	PERCENT FINES			SOIL SYMBOL	DEPTH (m)
			PLASTIC	M.C.	LIQUID		
0.0	ORGANIC						0.0
0.0 - 1.0	SILTY SAND (SM) -frozen		●	▲		■ ◆	0.0 - 1.0
1.0 - 2.0	SANDY GRAVEL -saturated -smoother / easier drilling below 1.5 -grindy drilling / water -no sample recovered from auger						2.0
2.0 - 3.0							3.0
3.0 - 4.0							4.0
4.0 - 5.0							5.0
5.0 - 6.0	END HOLE @ 4.5m						6.0

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Fig. No:

COMPLETION DEPTH: 4.5 m
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SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-352
ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1819+825 2M RT OF CENTRELINE	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: 99/04/19
Fig. No:	Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT		SHAKWAK PROJECT SEG 13		TEST HOLE NO: 509-351 A								
ENGINEERING CAPITAL		KM 1820-1815 A/H		Project No: 092-202101-0329								
NODWELL B40-L		LOCATION: 1819+875 2M RT OF CENTRELINE		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			PERCENT GRAVEL ■			
0.0	ORGANIC SILT (ML) -grey -frozen										0.0	
1.0	POOR GRADED SAND WITH SILT (SP-SM) -frozen		46				ML				1.0	
2.0	WELL-GRADED GRAVEL WITH SAND (GW) -grey -wet -grindy drilling @ 1.5m -easier drilling below 2.0m -H2O @ 2.0m		47				SP-SM				2.0	
3.0	SANDY GRAVEL -saturated -no sample - washed off auger		48				GW				3.0	
4.5	END HOLE @ 4.5m										4.5	

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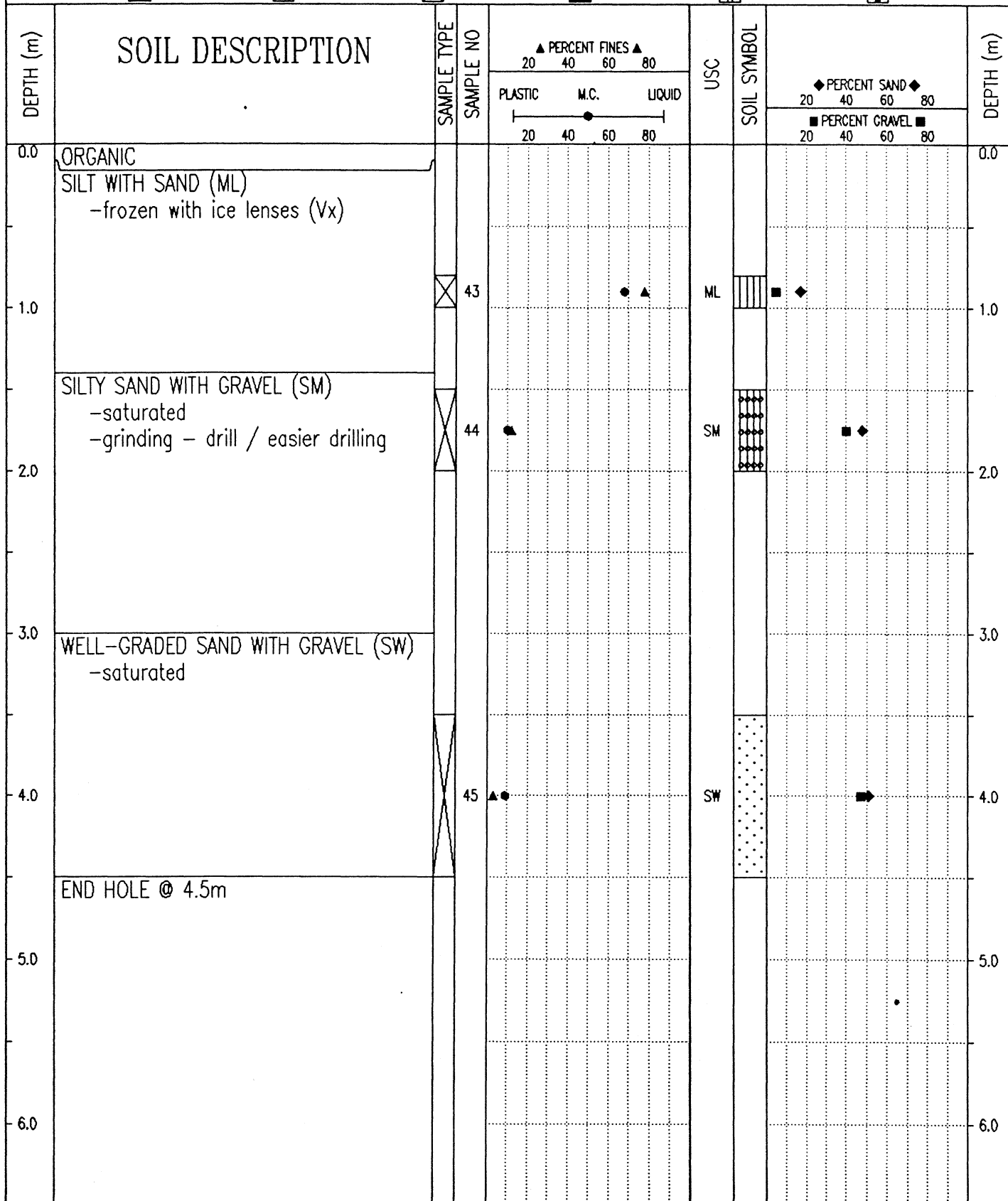
COMPLETION DEPTH: 4.5 m
COMPLETE: 99/04/19

SUBSURFACE EXPLORATION & TESTING REPORT SHAKWAK PROJECT SEG 13 TEST HOLE NO: 509-351

ENGINEERING CAPITAL KM 1820-1815 A/H Project No: 092-202101-0329

NODWELL B40-L LOCATION: 1820+000 CENTRELINE ELEVATION: 0.00 (m)

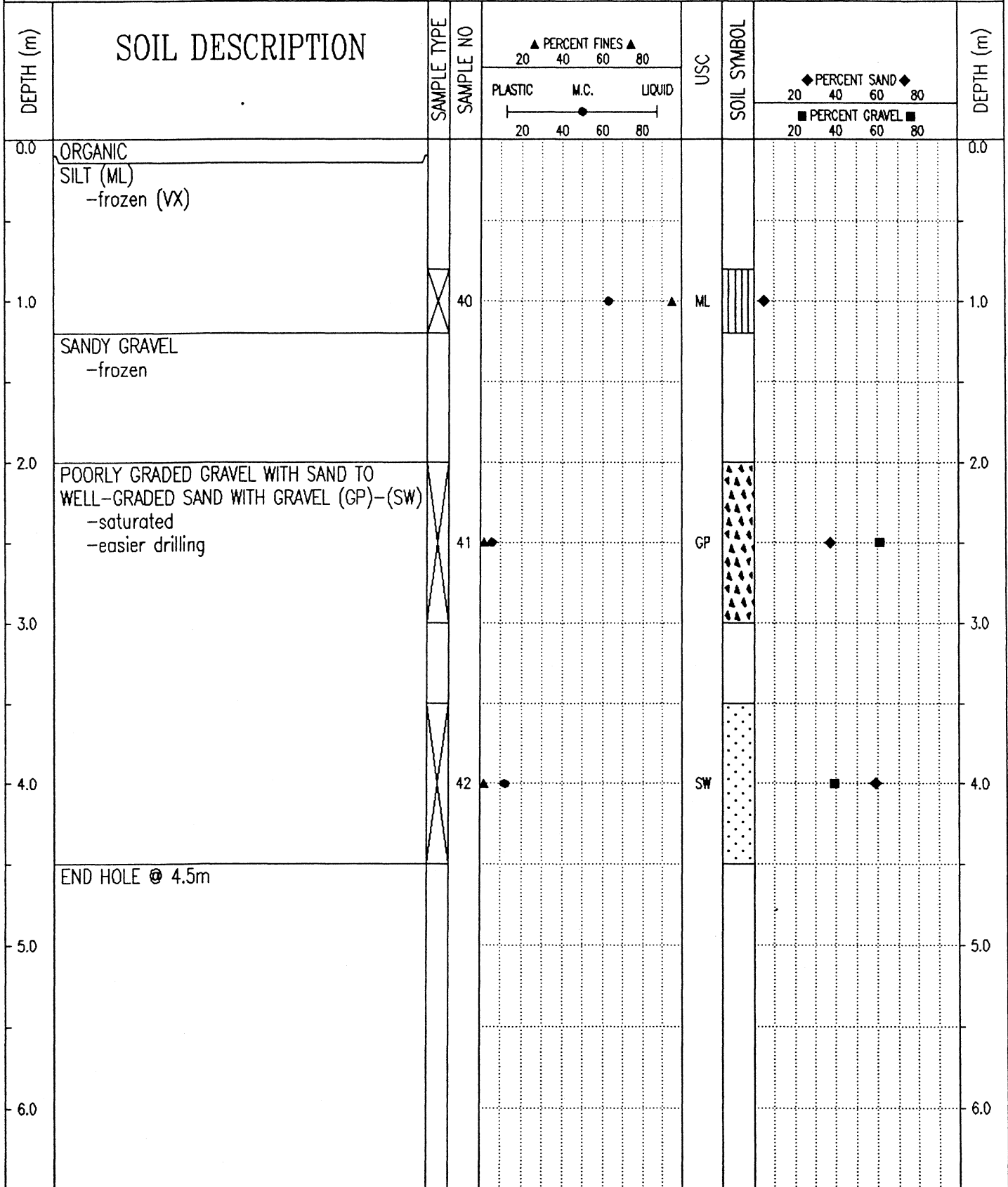
SAMPLE TYPE RETURN S.P.T. AUGER BULK TUBE CORE



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 REVIEWED BY: COMPLETE: 99/04/19
 Fig. No: Page 1 of 1

SUBSURFACE EXPLORATION & TESTING REPORT	SHAKWAK PROJECT SEG 13	TEST HOLE NO: 509-350
ENGINEERING CAPITAL	KM 1820-1815 A/H	Project No: 092-202101-0329
NODWELL B40-L	LOCATION: 1820+050 CENTRELINE	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: 99/04/19
	Fig. No:	Page 1 of 1