

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#18-93						
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121						
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)						
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE			
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID				
				10 20 30 40		20 40 60 80				
				10 20 30 40		20 40 60 80				
				10 20 30 40		20 40 60 80				
				10 20 30 40		20 40 60 80				
0.0				-silts and rootlets, moist, orange-light brown				ML-PT		0.0
				0.10M						
-1.0		151		-gravelly silty sand, fine sand, medium dense, damp, light-brown				SM		-1.0
-2.0		152		-gravelly silty sand, fine sand, medium dense, damp, light-brown						-2.0
				2.15M						
-3.0		153		-silty gravelly sand, traces of oxidation, fine grained sand, medium dense to dense, moist, brown				SM		-3.0
-4.0		154		-silty gravelly sand, traces of oxidation, fine grained sand, medium dense to dense, moist, brown						-4.0
				End of hole @ 4.00M						
-5.0				-Visible 50-100mm aggregate brought to the surface by auger action during drilling.						-5.0
-6.0				-Surface boulders to 500mm in size noted.						-6.0
-7.0									-7.0	
8.0									8.0	

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Edmonton, Alberta

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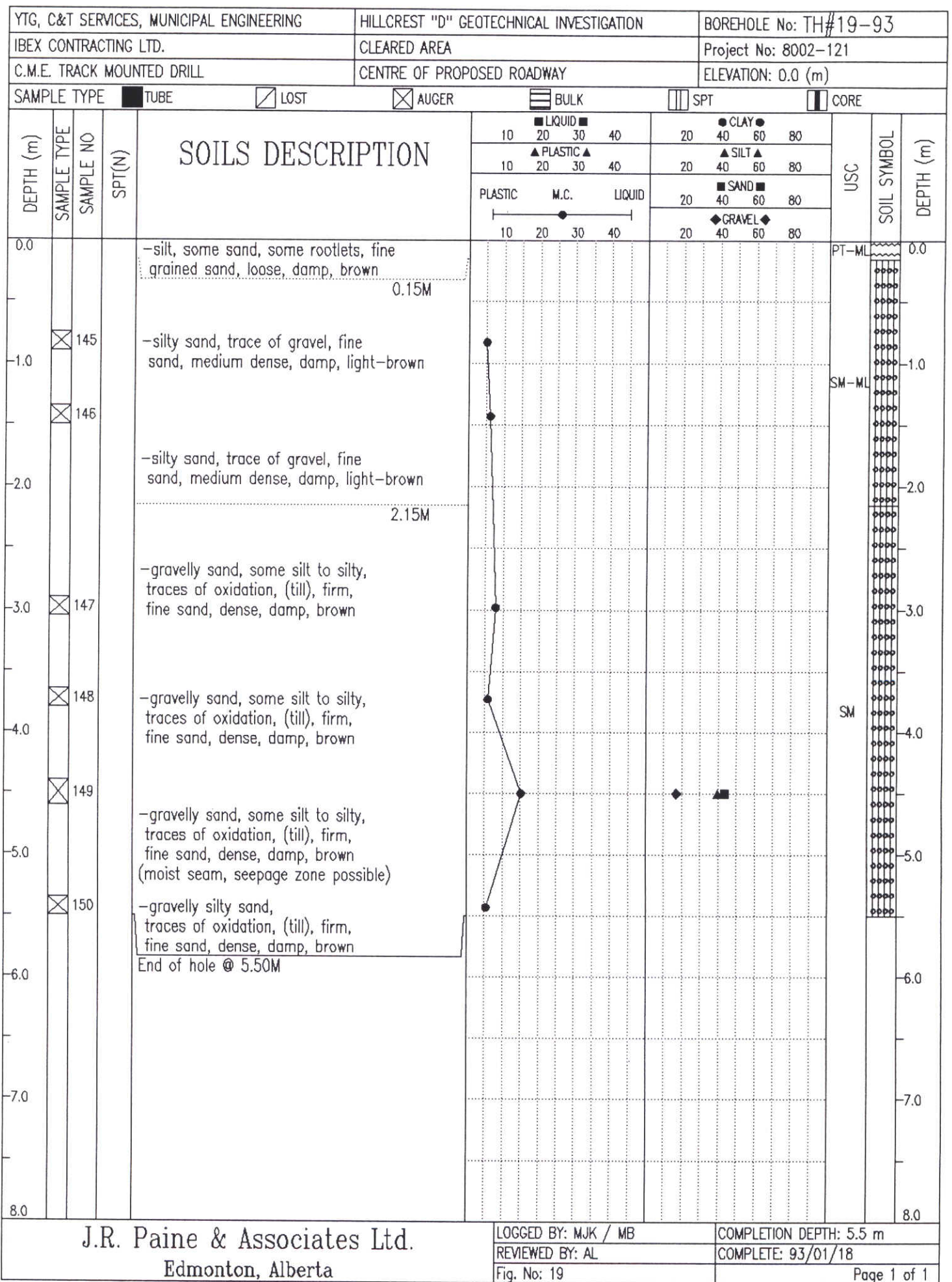
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Fig. No: 18

COMPLETION DEPTH: 4.0 m

COMPLETE: 93/01/18

Page 1 of 1



YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#20-93								
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121								
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)								
SAMPLE TYPE <input checked="" type="checkbox"/> TUBE		<input type="checkbox"/> LOST		<input checked="" type="checkbox"/> AUGER								
		<input type="checkbox"/> BULK		<input type="checkbox"/> SPT								
				<input type="checkbox"/> CORE								
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION						USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID	CLAY	SILT	SAND			
				10 20 30 40			20 40 60 80					
				10 20 30 40			20 40 60 80					
							20 40 60 80					
							20 40 60 80					
0.0												0.0
-1.0		191										-1.0
-2.0		192										-2.0
-3.0		193										-3.0
-4.0		194										-4.0
-5.0												-5.0
-6.0		195										-6.0
-7.0		197										-7.0
8.0												8.0
				-silt, some sand to sandy, fine grained sand, some rootlets, loose, moist, light-brown 0.10M						ML-Pt		
				-silty sand, trace to some gravel, fine grained sand, medium dense, damp, brown						SM		
				-silty sand, trace to some gravel, fine grained sand, medium dense, damp, brown 2.00M								
				-gravelly sand, some silt to silty, fine grained sand, firm, medium dense, moist, brown								
				-gravelly sand, some silt to silty, fine grained sand, firm, medium dense, moist, brown								
				-gravelly sand, some silt to silty, fine grained sand, firm, medium dense, traces of oxidation, moist, brown						SW-SM		
				-gravelly sand, some silt to silty, fine grained sand, firm, medium dense, traces of oxidation, moist, brown								
				End of hole @ 7.50M Standpipe installed. Dry @ 0 hrs								
J.R. Paine & Associates Ltd. Edmonton, Alberta				LOGGED BY: MJK / MB				COMPLETION DEPTH: 7.5 m				
				REVIEWED BY: AL				COMPLETE: 93/01/18				
				Fig. No: 20				Page 1 of 1				

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#21-93	
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121	
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)	
SAMPLE TYPE <input checked="" type="checkbox"/> TUBE		<input checked="" type="checkbox"/> LOST		<input checked="" type="checkbox"/> AUGER	
		<input type="checkbox"/> BULK		<input type="checkbox"/> SPT	
				<input type="checkbox"/> CORE	

DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION	LIQUID		CLAY		USC	SOIL SYMBOL	DEPTH (m)				
					10	20	30	40				20	40	60	80
					▲ PLASTIC ▲		▲ SILT ▲					SAND		GRAVEL	
					10	20	30	40				20	40	60	80
PLASTIC		M.C.		LIQUID											
10		20		30		40									
0.0				-sandy silt, odd gravel, fine sand, loose, damp, light-brown 0.10M					ML		0.0				
1.0		198		-gravelly silty sand, fine grained, medium dense, damp, light-brown							1.0				
2.0		199		-gravelly silty sand, fine grained sand, medium dense, damp, brown							2.0				
3.0		200		-sand, some gravel to gravelly, trace to some silt, medium to fine grained, medium dense, damp, brown 2.45M							3.0				
4.0		201		-sand, some gravel to gravelly, trace to some silt, medium to fine grained, medium dense, damp, brown					SP-SM		4.0				
5.0				End of hole @ 4.60M 1ST refusal @ 2.30 metres moved ahead 2.50 metres. S04 @ Sample #200=no trace							5.0				
6.0											6.0				
7.0											7.0				
8.0											8.0				

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		REVIEWED BY: AL	COMPLETE: 93/01/18
		Fig. No: 21	Page 1 of 1

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#22-93			
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121			
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)			
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input checked="" type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE

DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				USC				SOIL SYMBOL	DEPTH (m)				
				PLASTIC		M.C.		LIQUID		CLAY				SILT			
				10	20	30	40	20	40	60	80			20	40	60	80
				▲ PLASTIC ▲				■ SAND ■		● CLAY ●				▲ SILT ▲		◆ GRAVEL ◆	
0.0				-silts and organics, moist, orange-light brown								ML-PT	0.0				
				0.10M													
1.0	⊗	202		-sand, some silt, some gravel, fine to medium grained, medium dense, damp, light-brown								SM	1.0				
				1.30M													
2.0	⊗	203		-silty sand, some gravel, fine grained sand, medium dense, damp, brown									2.0				
				2.15M													
3.0	⊗	204		-silty gravelly sand, fine grained sand, firm, moist, brown								SW-SM	3.0				
4.0	⊗	205		-silty gravelly sand, fine grained sand, firm, moist, brown									4.0				
				End of hole @ 4.00M													
5.0													5.0				
6.0													6.0				
7.0													7.0				
8.0													8.0				

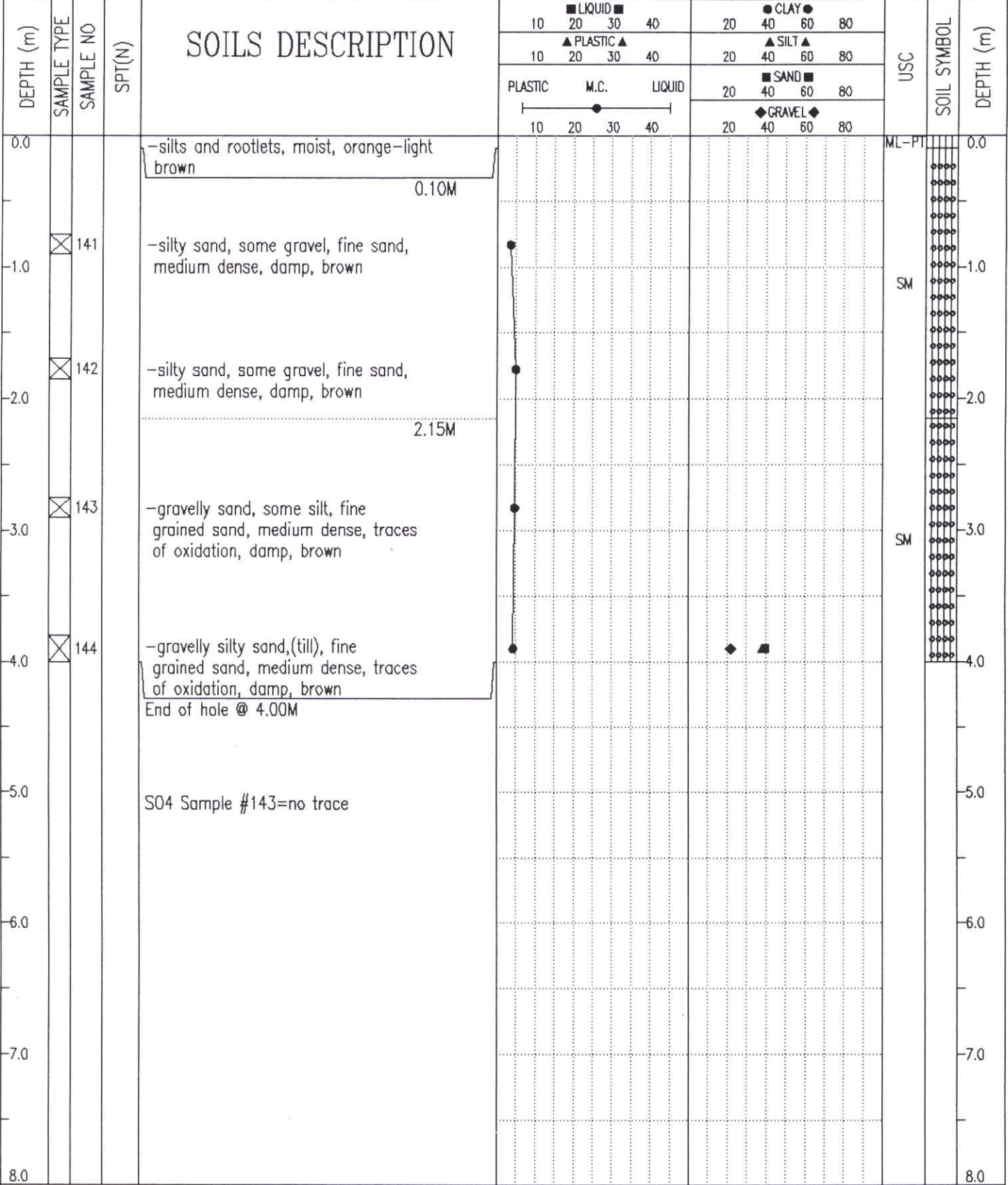
  

J.R. Paine & Associates Ltd. Edmonton, Alberta		LOGGED BY: MJK / MB	COMPLETION DEPTH: 4.0 m
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		Fig. No: 22	Page 1 of 1

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#23-93										
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121										
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)										
SAMPLE TYPE <input checked="" type="checkbox"/> TUBE		<input checked="" type="checkbox"/> LOST		<input checked="" type="checkbox"/> AUGER										
		<input type="checkbox"/> BULK		<input type="checkbox"/> SPT										
				<input type="checkbox"/> CORE										
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION								USC	SOIL SYMBOL	DEPTH (m)
				<input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> PLASTIC <input type="checkbox"/> M.C. <input type="checkbox"/> LIQUID				<input type="checkbox"/> CLAY <input type="checkbox"/> SILT <input type="checkbox"/> SAND <input type="checkbox"/> GRAVEL						
				10	20	30	40	20	40	60	80			
				10	20	30	40	20	40	60	80			
0.0				-silts and rootlets, moist, orange-light brown								ML-PT		0.0
				0.15M										
-1.0	<input checked="" type="checkbox"/>	106		-silty sand, trace to some gravel, fine sand, dense, dry, brown								SM-ML		1.0
				1.05M										
-2.0	<input checked="" type="checkbox"/>	107		-silty sand, trace to some gravel, fine, medium dense, damp, brown								SM		2.0
				1.85M										
-3.0	<input checked="" type="checkbox"/>	108		-silty gravelly sand, fine sand, medium dense, moist, brown (50mm aggregate coming to the top of the hole during at this depth, not present on the auger sample)								SM		3.0
-4.0	<input checked="" type="checkbox"/>	109		-gravelly silty sand, fine sand, medium dense, moist, brown (as above)										4.0
				End of hole @ 3.50M										4.0
8.0														8.0
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				REVIEWED BY: AL				COMPLETE: 93/01/18						
				Fig. No: 23				Page 1 of 1						

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#24-93						
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121						
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)						
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE			
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				USC	SOIL SYMBOL	DEPTH (m)
				PLASTIC	M.C.	LIQUID				
				■ LIQUID ■ ▲ PLASTIC ▲ 10 20 30 40 10 20 30 40		● CLAY ● ▲ SILT ▲ 20 40 60 80 20 40 60 80				
						■ SAND ■ ◆ GRAVEL ◆ 20 40 60 80 20 40 60 80				
0.0				-silt, some sand to sandy, fine grained sand, some rootlets, loose, moist, light-brown				ML-PT	0.0	
0.15										
1.0		118		-gravelly silt, some sand to sandy, fine sand, traces of oxidation, medium dense, damp, brown				ML	1.0	
1.20										
2.0		119		-gravelly silty sand, (till), fine grained sand, medium dense, firm, moist, brown					2.0	
2.15										
3.0		120		-gravelly sand, some silt to silty, 25-50mm clean fine grained sand lenses throughout, firm, moist, brown					3.0	
3.20										
4.0		121		-silty sand to sandy silt, some gravel, 25-50mm clean fine sand lenses throughout, firm, moist, brown				SM	4.0	
4.5										
5.0		122		-silty sand, some gravel, fine grained sands, firm, moist, brown					5.0	
5.5										
6.0		123		-silty sand, some gravel, fine grained sand, firm, moist, brown					6.0	
6.5										
7.0		124		-silty sand, some gravel, fine grained sand lenses, firm, moist, brown					7.0	
7.5				End of hole @ 7.50M Standpipe installed. 1ST refusal @ 1.35 metres, moved ahead 1.00 metres.					7.5	
8.0									8.0	
9.0									9.0	
10.0									10.0	
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SAMPLE TYPE  TUBE     LOST     AUGER     BULK     SPT     CORE



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Fig. No: 25

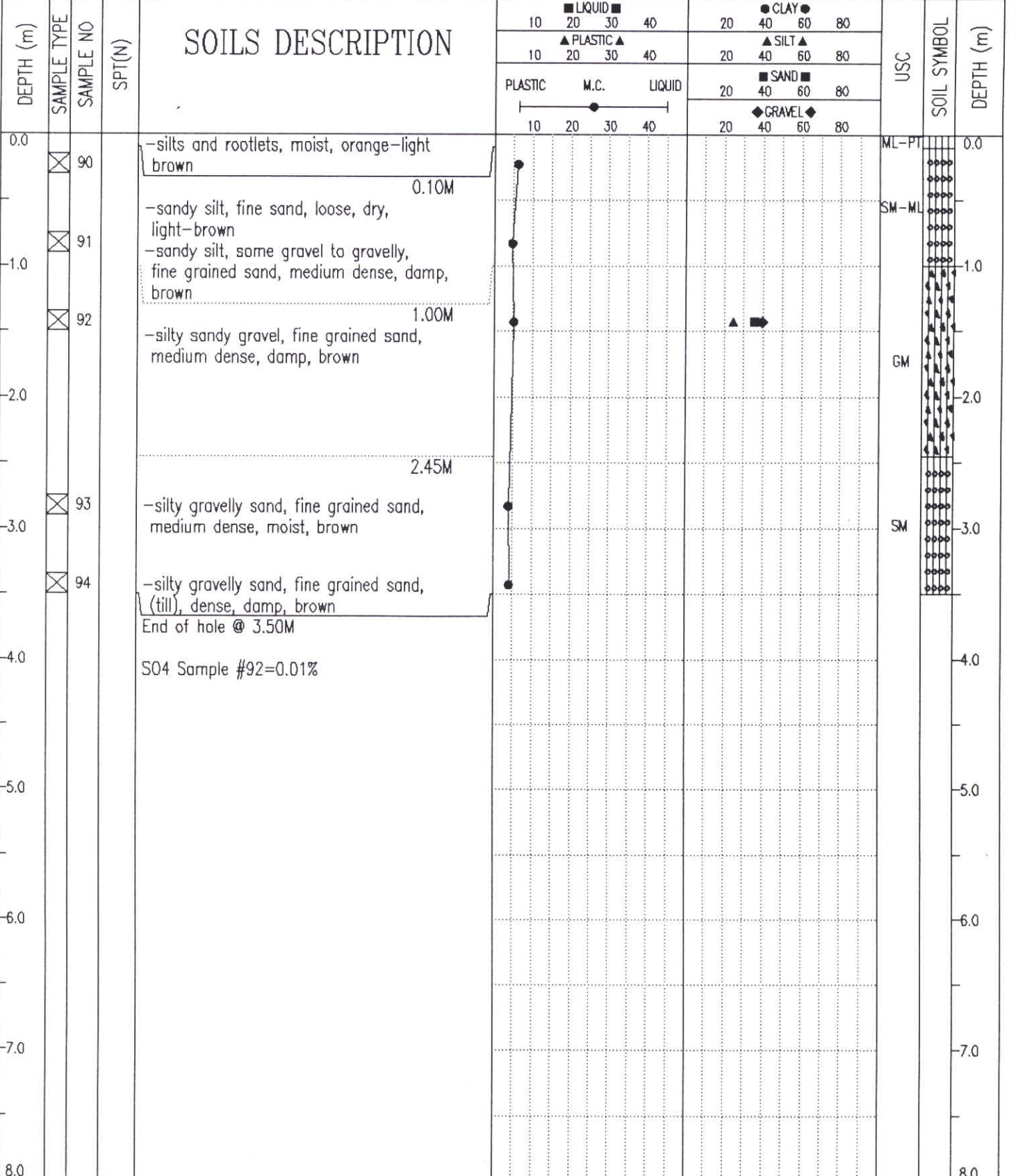
COMPLETION DEPTH: 4.0 m  
COMPLETE: 93/01/18

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#26-93										
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121										
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)										
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE							
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				USC	SOIL SYMBOL	DEPTH (m)				
				10	20	30	40				20	40	60	80
				10	20	30	40				20	40	60	80
				PLASTIC	M.C.	LIQUID	20				40	60	80	
				10	20	30	40	20	40	60	80			
0.0	×	6		-silt, some fine grained sand, some rootlets, loose, dry, light-brown to orange								ML-PT		0.0
	×	7		-sandy silty gravel, fine grained sand, loose, dry, brown	0.10M							GM		-1.0
-1.0	×	8		-silty sand, some gravel, fine grained sand, dry, dark-brown	1.05M							SM		-2.0
	×	9		-gravelly sand, some silt, fine grained sand, some oxidation, medium dense, damp, brown	2.15M							SM-SW		-3.0
-2.0	×	10		-gravelly sand, some silt, fine grained sand, some oxidation, medium dense, damp, brown										-4.0
-3.0				End of hole @ 3.50M										-4.0
-4.0														-5.0
-5.0														-6.0
-6.0														-7.0
-7.0														-8.0
8.0														8.0
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				Fig. No: 26				Page 1 of 1						

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#27-93									
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121									
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)									
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE						
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				USC	SOIL SYMBOL	DEPTH (m)			
				<input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> PLASTIC 10 20 30 40      10 20 30 40		<input type="checkbox"/> CLAY <input type="checkbox"/> SILT 20 40 60 80      20 40 60 80					PLASTIC      M.C.      LIQUID 10 20 30 40	<input type="checkbox"/> SAND <input type="checkbox"/> GRAVEL 20 40 60 80      20 40 60 80	
0.0				-silt, some sand, some rootlets, fine grained sand, loose, damp, brown				PT-ML	0.0				
				0.10M									
-1.0	<input checked="" type="checkbox"/>	1		-sandy silt, trace of gravel, fine grained sand, loose, dry, light-brown					-1.0				
				1.05M									
-2.0	<input checked="" type="checkbox"/>	2		-gravelly silty sand, fine grained sand, medium dense, brown					-2.0				
				2.30M									
-3.0	<input checked="" type="checkbox"/>	3		-silty sand, some gravels, fine grained sand, medium dense, damp, brown					-3.0				
				4.90M				SM					
-4.0	<input checked="" type="checkbox"/>	4		-silty sand, some gravels, fine grained sand, medium dense, damp, brown					-4.0				
				4.90M									
-5.0	<input checked="" type="checkbox"/>	5		-gravelly silty sand, fine grained sand, (till), dense, damp, brown					-5.0				
				End of hole @ 5.50M									
-6.0				Standpipe installed Dry @ 0hrs Dry @ 7days					-6.0				
-7.0									-7.0				
-8.0									-8.0				
J.R. Paine & Associates Ltd. Edmonton, Alberta				LOGGED BY: MJK / MB		COMPLETION DEPTH: 5.5 m							
				REVIEWED BY: AL		COMPLETE: 93/01/18							
				Fig. No: 27				Page 1 of 1					

YTG, C&T SERVICES, MUNICIPAL ENGINEERING	HILLCREST "D" GEOTECHNICAL INVESTIGATION	BOREHOLE No: TH#28-93
IBEX CONTRACTING LTD.	CLEARED AREA	Project No: 8002-121
C.M.E. TRACK MOUNTED DRILL	CENTRE OF PROPOSED ROADWAY	ELEVATION: 0.0 (m)

SAMPLE TYPE  TUBE  LOST  AUGER  BULK  SPT  CORE



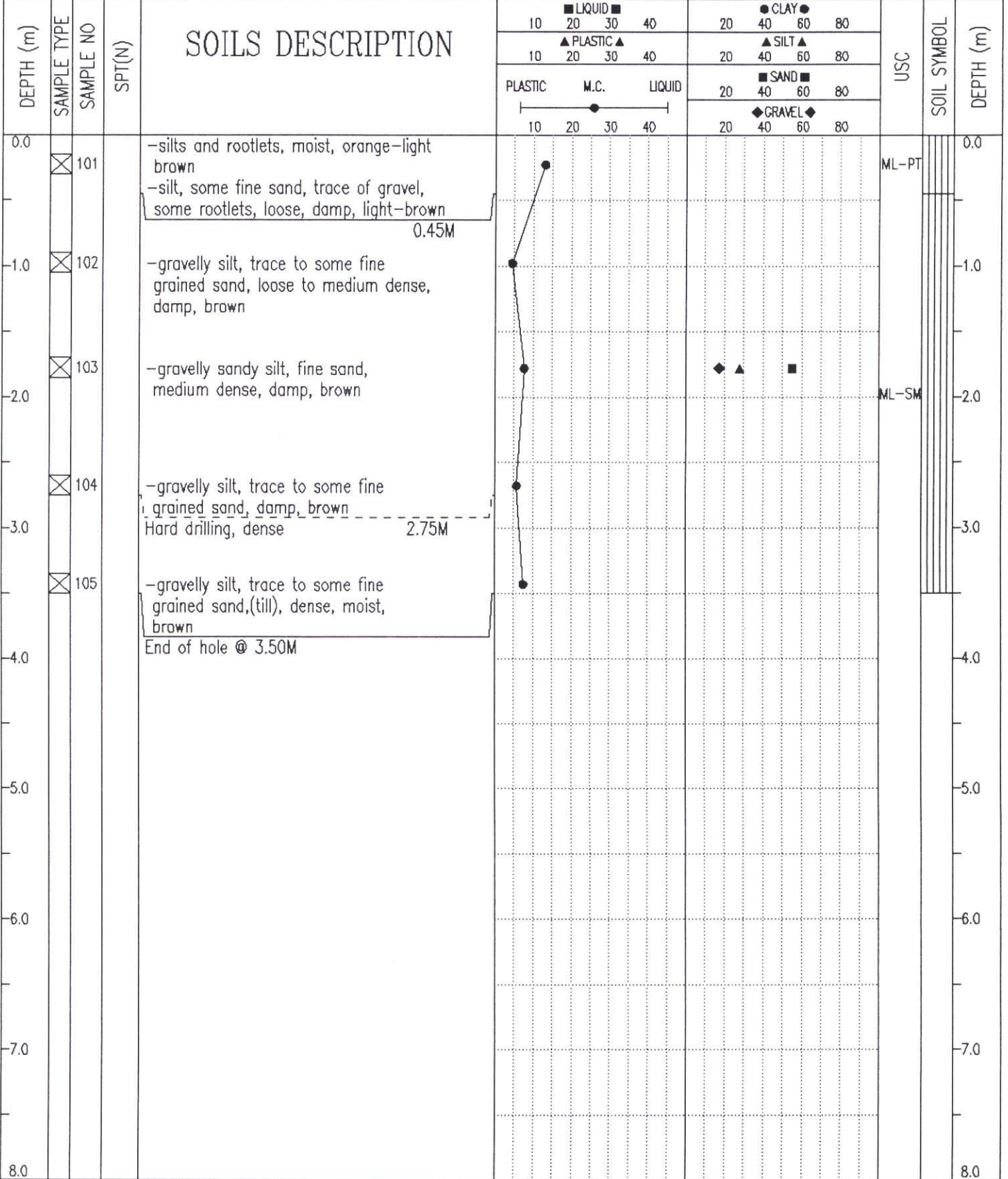
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Fig. No: 28

COMPLETION DEPTH: 3.5 m  
COMPLETE: 93/01/18

YTG, C&T SERVICES, MUNICIPAL ENGINEERING	HILLCREST "D" GEOTECHNICAL INVESTIGATION	BOREHOLE No: TH#29-93
IBEX CONTRACTING LTD.	CLEARED AREA	Project No: 8002-121
C.M.E. TRACK MOUNTED DRILL	CENTRE OF PROPOSED ROADWAY	ELEVATION: 0.0 (m)

SAMPLE TYPE  TUBE  LOST  AUGER  BULK  SPT  CORE



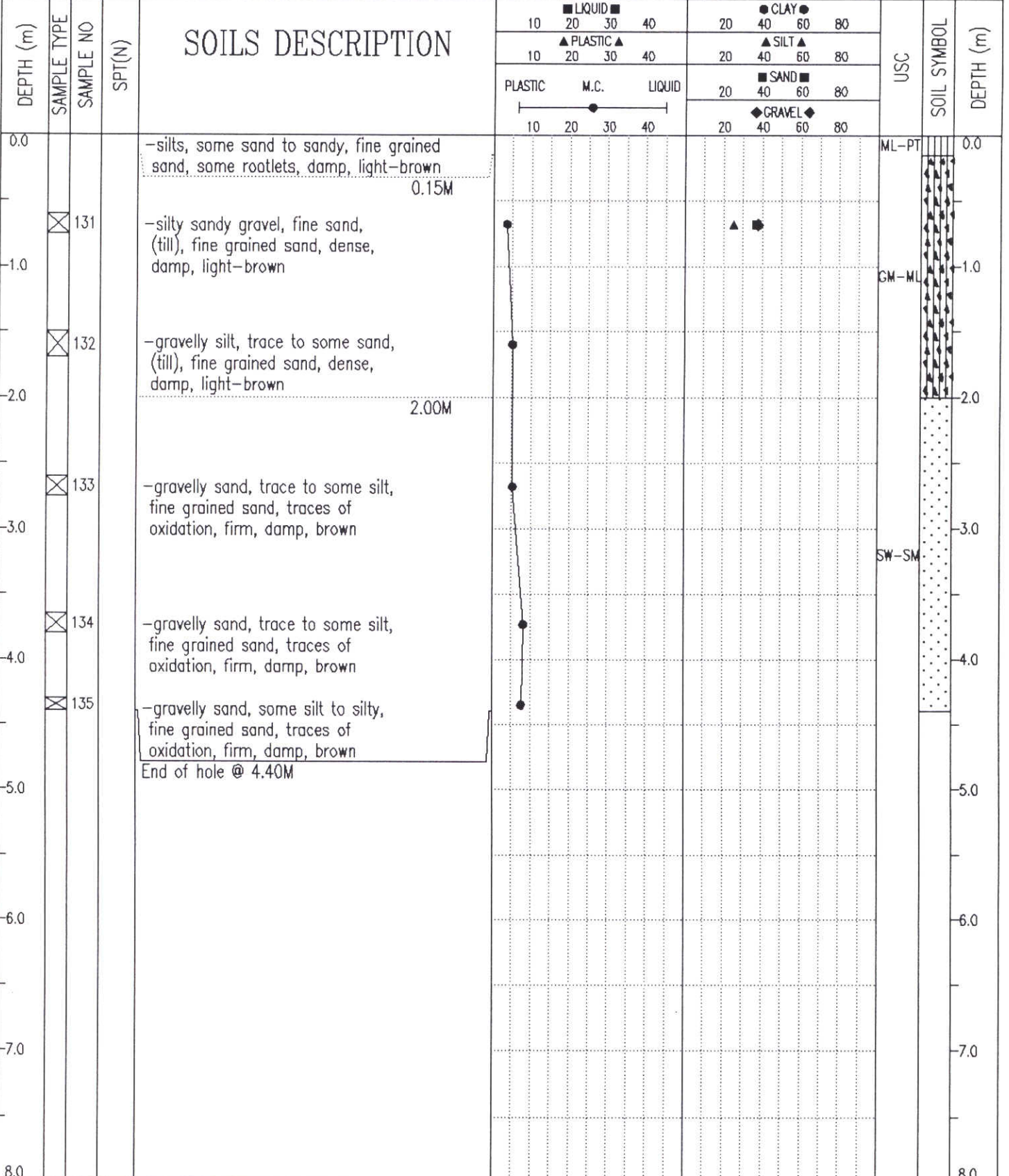
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REVIEWED BY: AL  
Fig. No: 29

COMPLETION DEPTH: 3.5 m  
COMPLETE: 93/01/18

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#30-93						
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121						
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)						
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE			
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				USC	SOIL SYMBOL	DEPTH (m)
				10 20 30 40 PLASTIC M.C. LIQUID 10 20 30 40	20 40 60 80 CLAY 20 40 60 80 SILT 20 40 60 80 SAND 20 40 60 80 GRAVEL					
0.0	<input checked="" type="checkbox"/>	125		-silt, some sand, odd gravel, some rootlets, loose, dry, light-brown				ML-PT		0.0
				0.30M						
-1.0	<input checked="" type="checkbox"/>	126		-silty sand, to sandy silt, some gravel, fine sand, loose, damp, light-brown				SM-ML		-1.0
-2.0	<input checked="" type="checkbox"/>	127		-sandy silt, fine sand, some gravel, medium dense, damp, brown						-2.0
				2.00M						
-3.0	<input checked="" type="checkbox"/>	128		-gravelly sand, some silt to silty(till), fine sand, medium dense, damp, brown				SW-SM		-3.0
-4.0	<input checked="" type="checkbox"/>	129		-gravelly sand, some silt to silty(till), fine sand, some oxidation, medium dense, damp, brown						-4.0
-5.0	<input checked="" type="checkbox"/>	130		-gravelly sand, some silt to silty(till), fine sand, trace of oxidation, medium dense, damp, brown						-5.0
				End of hole @ 5.05M						
-6.0										-6.0
-7.0										-7.0
-8.0										-8.0
J.R. Paine & Associates Ltd. Edmonton, Alberta				LOGGED BY: MJK / MB REVIEWED BY: AL Fig. No: 30		COMPLETION DEPTH: 5.1 m COMPLETE: 93/01/18		Page 1 of 1		

SAMPLE TYPE  TUBE     LOST     AUGER     BULK     SPT     CORE

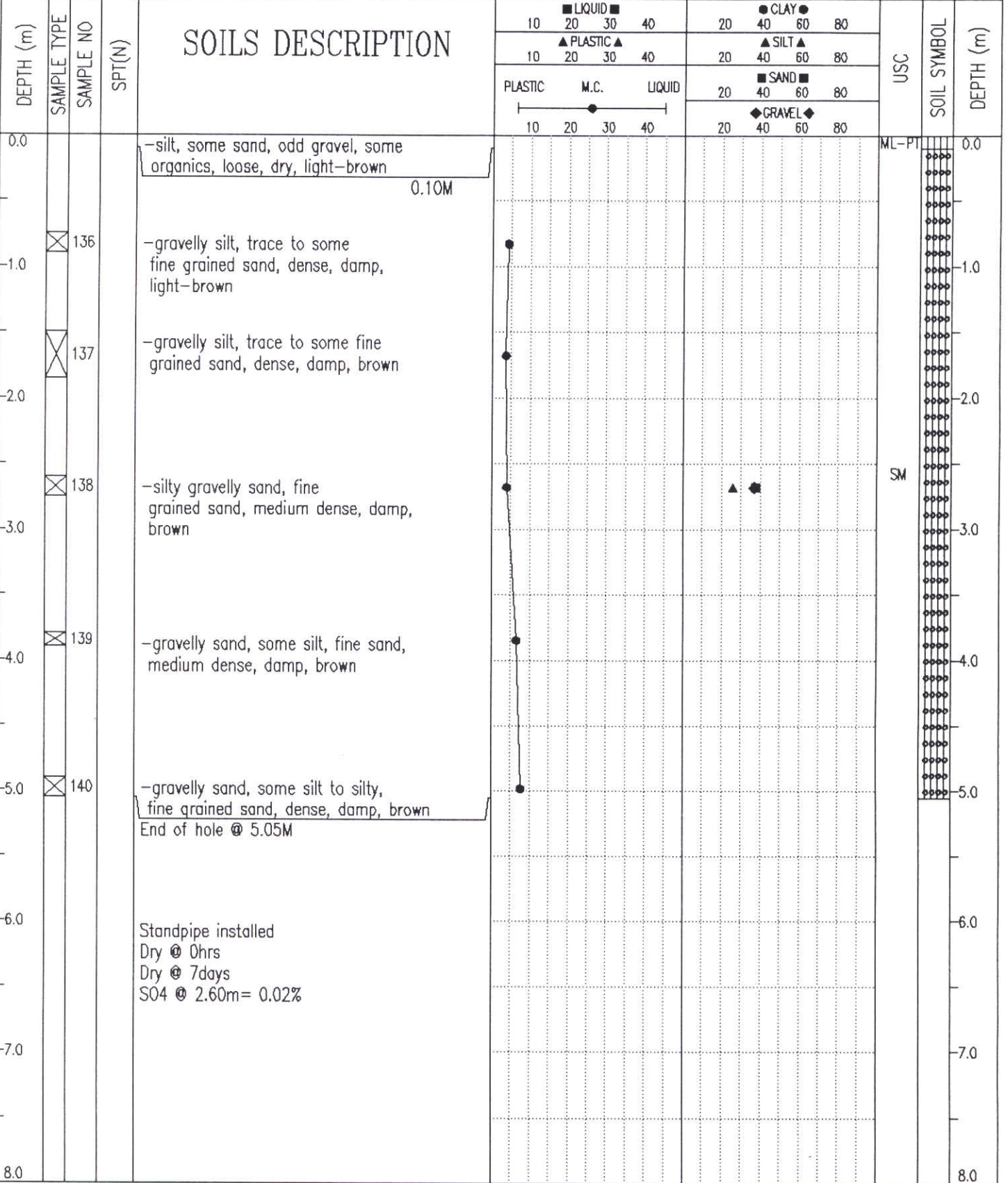


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Fig. No: 31	Page 1 of 1

YTG, C&T SERVICES, MUNICIPAL ENGINEERING	HILLCREST "D" GEOTECHNICAL INVESTIGATION	BOREHOLE No: TH#32-93
IBEX CONTRACTING LTD.	CLEARED AREA	Project No: 8002-121
C.M.E. TRACK MOUNTED DRILL	CENTRE OF PROPOSED ROADWAY	ELEVATION: 0.0 (m)

SAMPLE TYPE  TUBE  LOST  AUGER  BULK  SPT  CORE

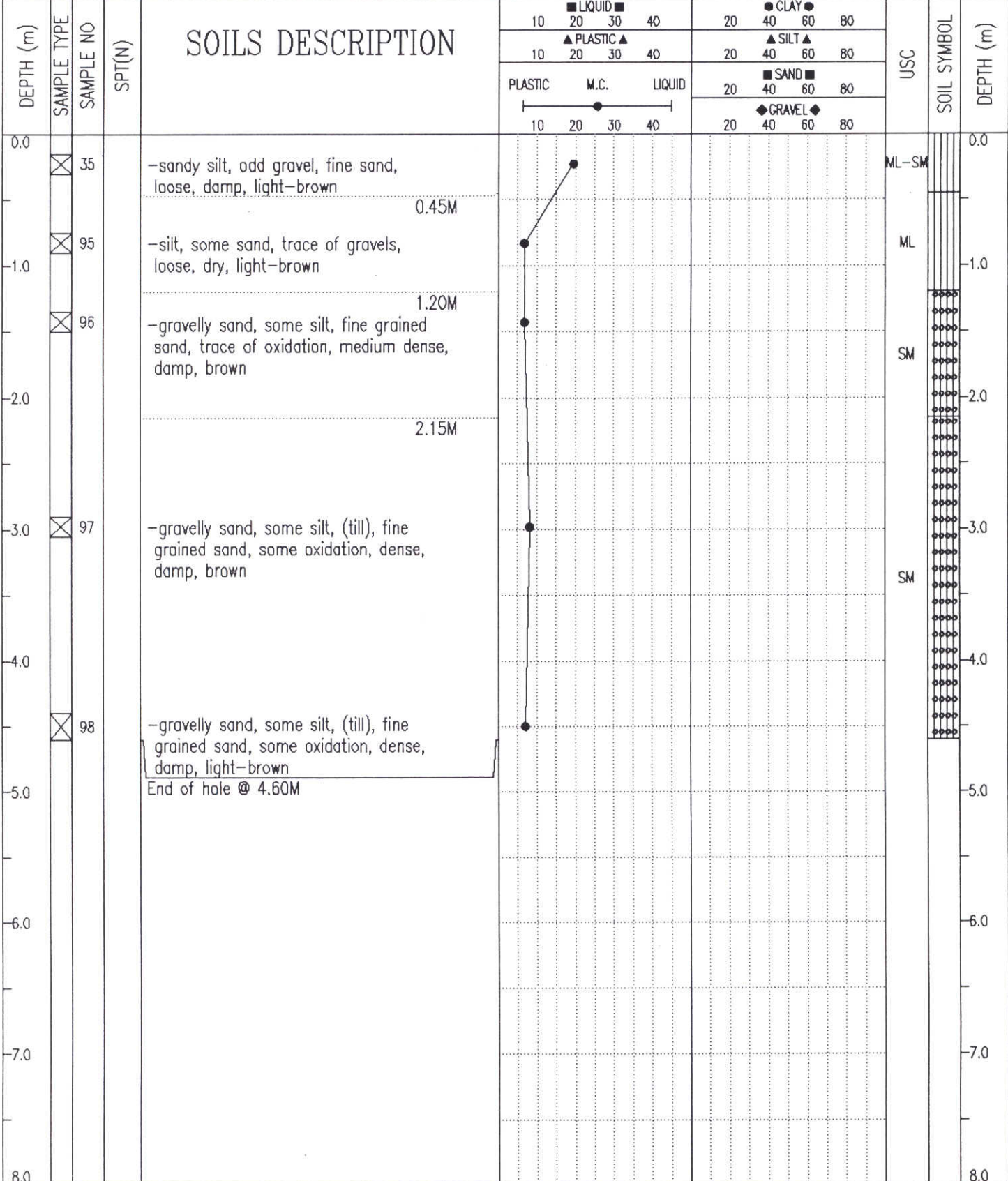


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Fig. No: 32

COMPLETION DEPTH: 5.1 m  
COMPLETE: 93/01/18

SAMPLE TYPE  TUBE     LOST     AUGER     BULK     SPT     CORE



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Edmonton, Alberta

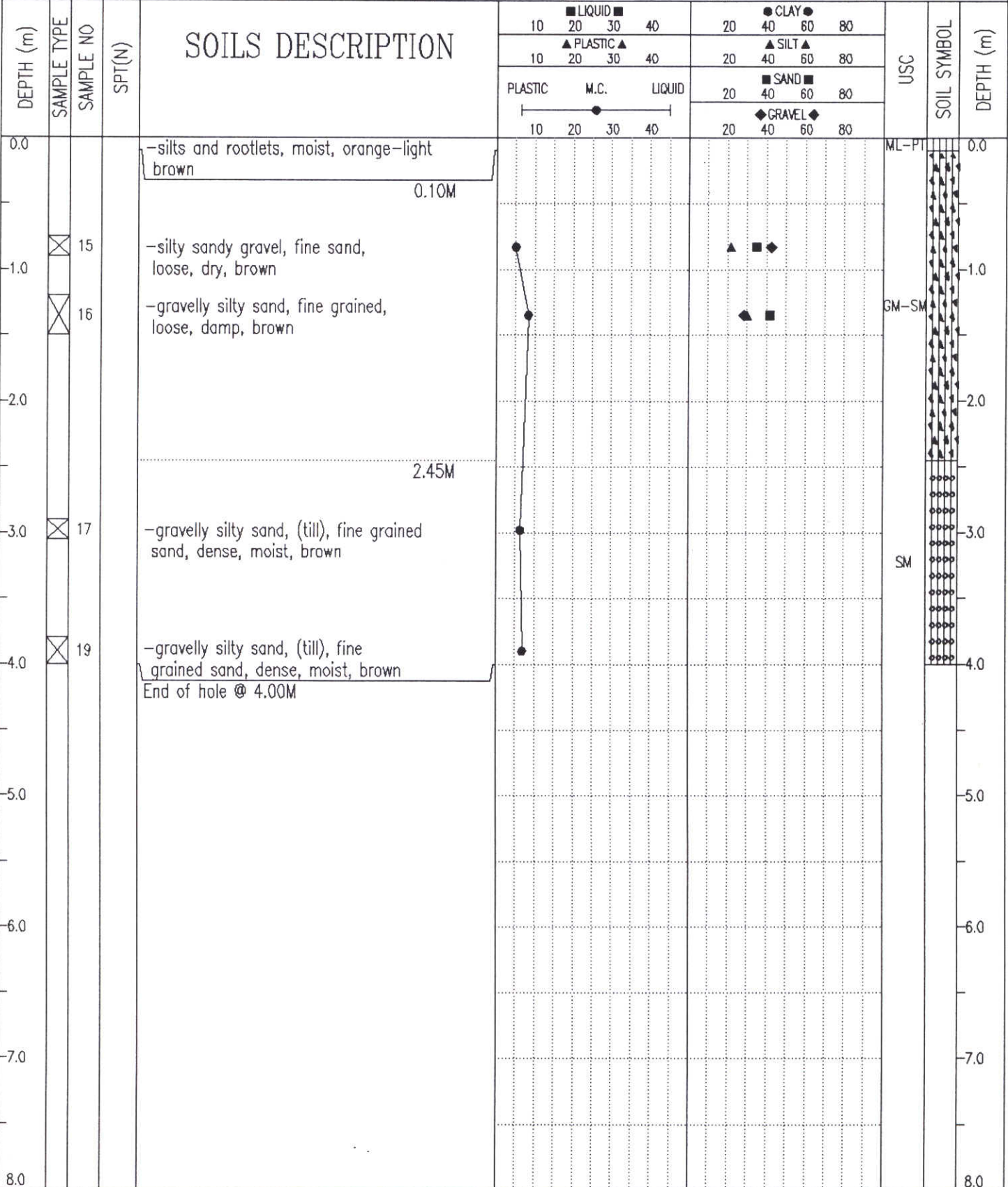
LOGGED BY: MJK / MB  
REVIEWED BY: AL  
Fig. No: 33

COMPLETION DEPTH: 4.6 m  
COMPLETE: 93/01/18

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#34-93										
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121										
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)										
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE <input type="checkbox"/> LOST <input checked="" type="checkbox"/> AUGER <input type="checkbox"/> BULK <input type="checkbox"/> SPT <input type="checkbox"/> CORE												
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION						USC	SOIL SYMBOL	DEPTH (m)		
				PLASTIC			LIQUID							
				10	20	30	40	20	40	60	80			
				10	20	30	40	20	40	60	80			
				M.C.			LIQUID			<input type="checkbox"/> CLAY <input type="checkbox"/> SILT <input type="checkbox"/> SAND <input type="checkbox"/> GRAVEL				
				10	20	30	40	20	40	60	80			
0.0				-silt, some sand, some rootlets, fine grained sand, loose, damp, brown						PT-ML		0.0		
				0.10M										
-1.0		30		-gravelly silty sand, fine, loose, dry, light-brown								-1.0		
		31		-silty sand, some gravel, loose, dry, brown										
-2.0				1.85M								-2.0		
-3.0		32		-gravelly silty sand, fine sand, dense, moist, brown						SM		-3.0		
-4.0												-4.0		
-5.0		33		-gravelly silty sand, (till), fine sand, some oxidation, dense, moist, brown								-5.0		
-6.0		34		-gravelly silty sand, (till), fine sand, some oxidation, dense, moist, brown								-6.0		
				End of hole @ 5.50M										
				Standpipe installed										
				Dry @ 0hrs										
				Dry @ 7days										
8.0												8.0		
J.R. Paine & Associates Ltd.				LOGGED BY: MJK / MB				COMPLETION DEPTH: 5.5 m						
Edmonton, Alberta				REVIEWED BY: AL				COMPLETE: 93/01/18						
				Fig. No: 34				Page 1 of 1						

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#35-93								
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121								
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)								
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE					
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				<input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> CLAY <input type="checkbox"/> PLASTIC <input type="checkbox"/> SILT <input type="checkbox"/> SAND <input type="checkbox"/> GRAVEL <input type="checkbox"/> M.C. <input type="checkbox"/> LIQUID	USC	SOIL SYMBOL	DEPTH (m)	
								10 20 30 40				20 40 60 80
								10 20 30 40				20 40 60 80
								10 20 30 40				20 40 60 80
0.0				-silts and rootlets, moist, orange-light brown				ML-PT		0.0		
				0.15M								
-1.0		26		-silty gravelly sand, dry, light-brown				SM		-1.0		
		27		-sandy silty gravel, fine grained sand, loose, dry, brown								
-2.0				2.15M								
-3.0		28		-silty sand, fine grained sand, some gravel, dense, moist, brown				SM-ML		-3.0		
		29		-silty sand, fine grained sand, some gravel, dense, moist, brown								
-4.0				End of hole @ 4.00M						-4.0		
-5.0										-5.0		
-6.0										-6.0		
-7.0										-7.0		
-8.0										-8.0		
J.R. Paine & Associates Ltd. Edmonton, Alberta				LOGGED BY: MJK / MB		COMPLETION DEPTH: 4.0 m						
				REVIEWED BY: AL		COMPLETE: 93/01/18						
				Fig. No: 35		Page 1 of 1						

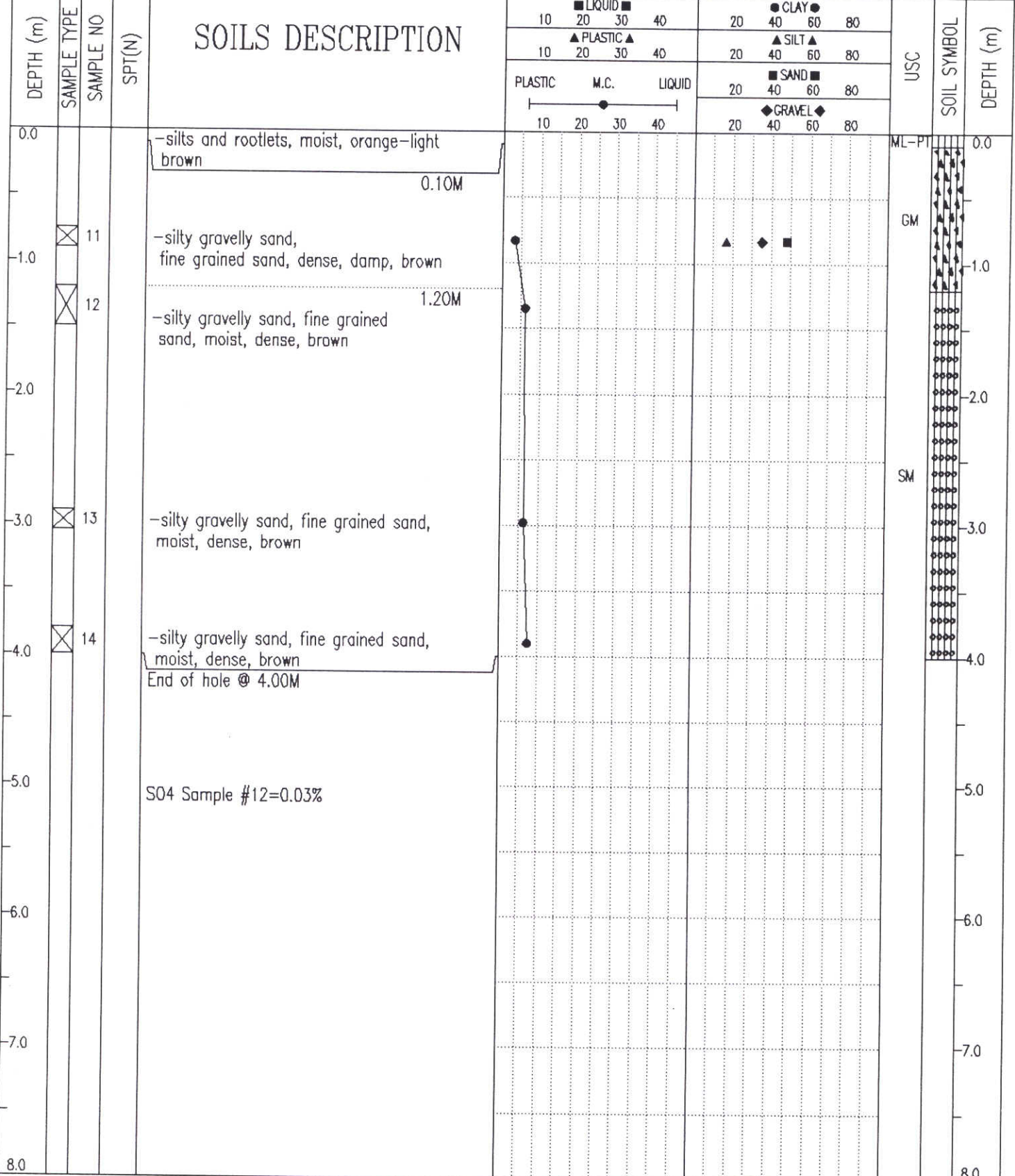
SAMPLE TYPE  TUBE     LOST     AUGER     BULK     SPT     CORE



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Edmonton, Alberta

LOGGED BY: MJK / MB	COMPLETION DEPTH: 4.0 m
REVIEWED BY: AL	COMPLETE: 93/01/18
Fig. No: 36	Page 1 of 1

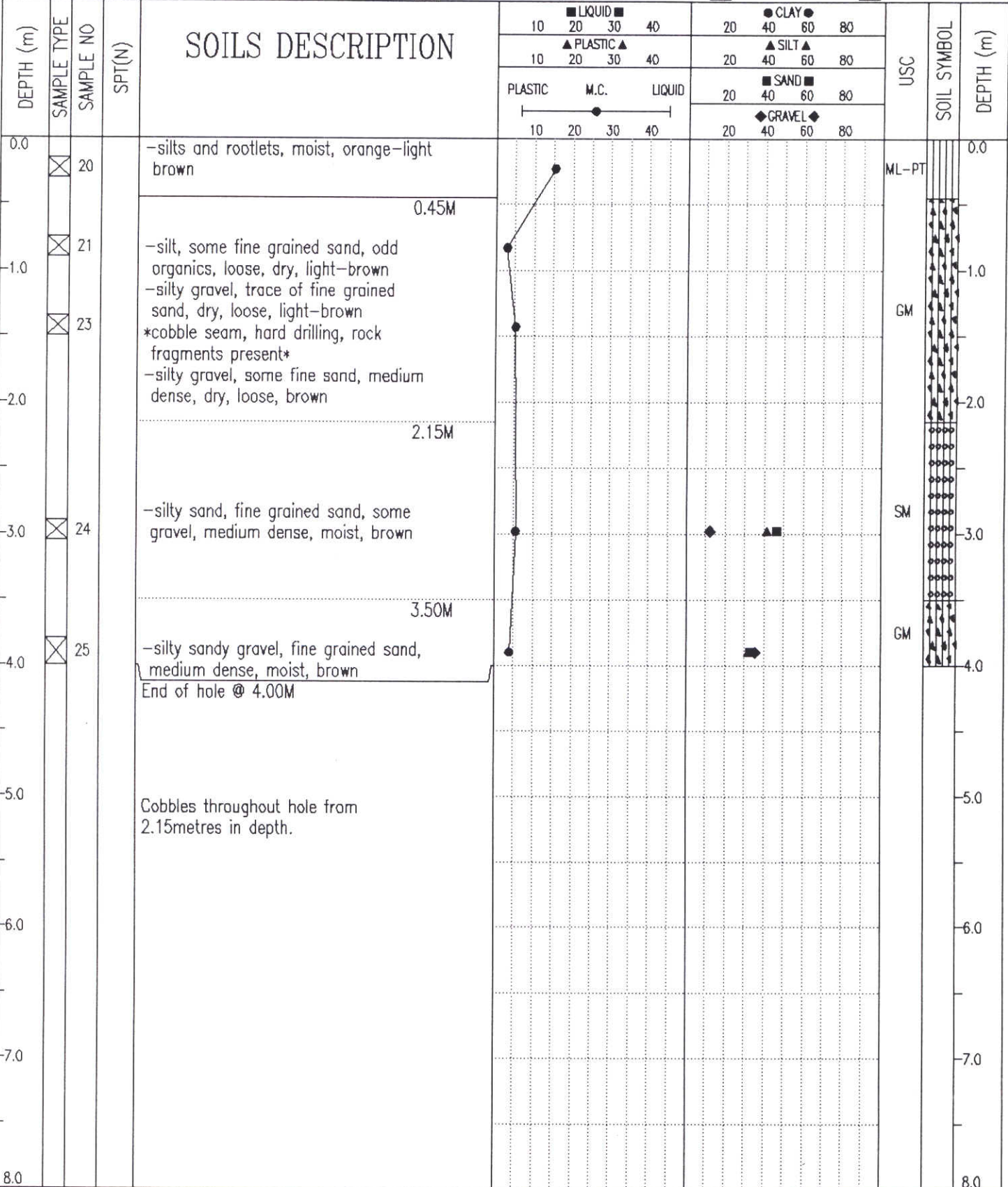
SAMPLE TYPE  TUBE  LOST  AUGER  BULK  SPT  CORE



J.R. Paine & Associates Ltd.  
Edmonton, Alberta

LOGGED BY: MJK / MB	COMPLETION DEPTH: 4.0 m
REVIEWED BY: AL	COMPLETE: 93/01/18
Fig. No: 37	Page 1 of 1

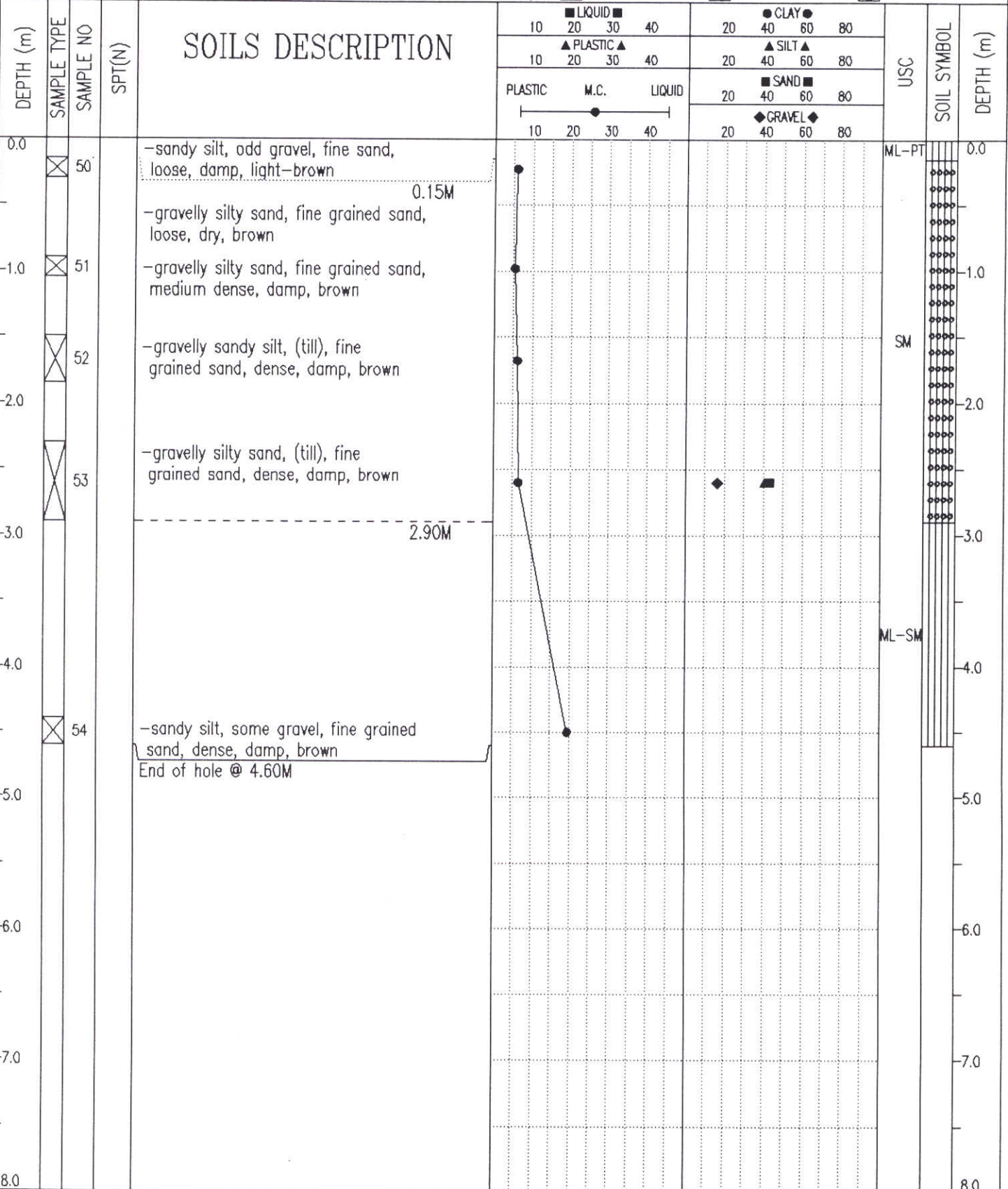
SAMPLE TYPE  TUBE     LOST     AUGER     BULK     SPT     CORE



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LOGGED BY: MJK / MB	COMPLETION DEPTH: 4.0 m
REVIEWED BY: AL	COMPLETE: 93/01/18
Fig. No: 38	Page 1 of 1

SAMPLE TYPE  TUBE     LOST     AUGER     BULK     SPT     CORE



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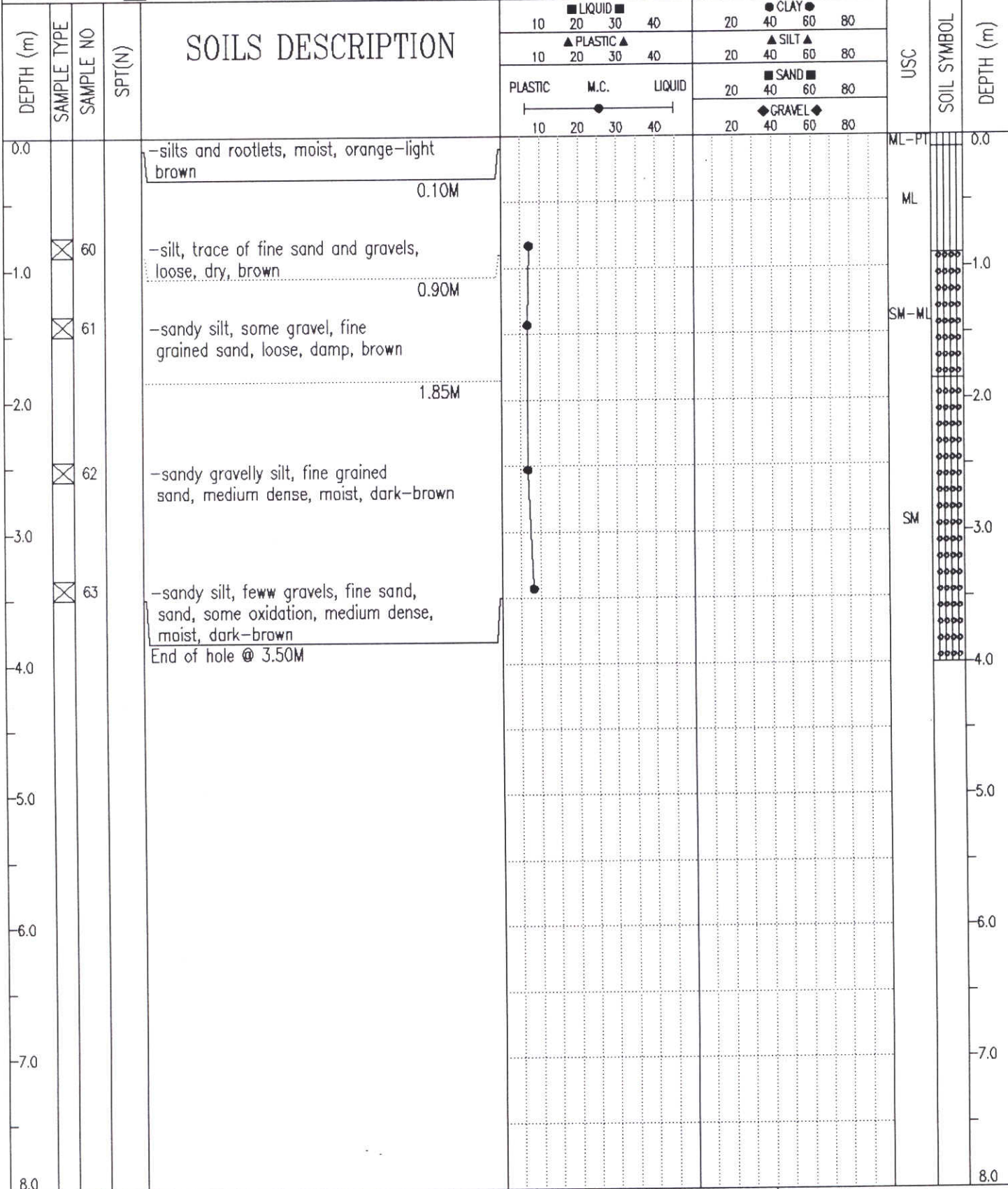
LOGGED BY: MJK / MB	COMPLETION DEPTH: 4.6 m
REVIEWED BY: AL	COMPLETE: 93/01/18
Fig. No: 39	Page 1 of 1

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#40-93														
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121														
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)														
SAMPLE TYPE		<input checked="" type="checkbox"/> TUBE	<input type="checkbox"/> LOST	<input checked="" type="checkbox"/> AUGER	<input type="checkbox"/> BULK	<input type="checkbox"/> SPT	<input type="checkbox"/> CORE											
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION				10	20	30	40	20	40	60	80	USC	SOIL SYMBOL	DEPTH (m)
								10	20	30	40	20	40	60	80			
								PLASTIC	M.C.	LIQUID								
								10	20	30	40	20	40	60	80			
0.0				-silt, some sand, odd gravel, some rootlets, loose, dry, light-brown	0.10M									ML-PT		0.0		
-1.0		64		-sandy silt, some gravel, fine sand, loose, damp, brown												-1.0		
		65		-sandy silt, some gravel, fine sand, loose, damp, brown														
-2.0					2.10M													
-3.0		66		-gravelly silty sand, fine sand, dense, moist, dark-brown														
														SM				
-4.0		67		-gravelly silty sand, fine sand, dense, moist, dark-brown														
					4.30M													
-5.0		68		-sandy gravelly silt, (till), dense, fine sand, trace of oxidation, moist, brown														
				End of hole @ 5.05M														
-6.0				Standpipe installed Dry @ 0hrs Dry @ 7days														
-7.0																		
-8.0																		
J.R. Paine & Associates Ltd. Edmonton, Alberta				LOGGED BY: MJK / MB				COMPLETION DEPTH: 5.1 m										
				REVIEWED BY: AL				COMPLETE: 93/01/18										
				Fig. No: 40				Page 1 of 1										

YTG, C&T SERVICES, MUNICIPAL ENGINEERING		HILLCREST "D" GEOTECHNICAL INVESTIGATION		BOREHOLE No: TH#41-93										
IBEX CONTRACTING LTD.		CLEARED AREA		Project No: 8002-121										
C.M.E. TRACK MOUNTED DRILL		CENTRE OF PROPOSED ROADWAY		ELEVATION: 0.0 (m)										
SAMPLE TYPE <input checked="" type="checkbox"/> TUBE		<input checked="" type="checkbox"/> LOST		<input checked="" type="checkbox"/> AUGER										
		<input type="checkbox"/> BULK		<input type="checkbox"/> SPT										
				<input type="checkbox"/> CORE										
DEPTH (m)	SAMPLE TYPE	SAMPLE NO	SPT(N)	SOILS DESCRIPTION						USC	SOIL SYMBOL	DEPTH (m)		
				PLASTIC			LIQUID							
				10	20	30	40	20	40	60	80			
				▲ PLASTIC ▲				▲ SILT ▲						
								■ SAND ■						
								◆ GRAVEL ◆						
0.0	<input checked="" type="checkbox"/>	55		-silts and rootlets, moist, orange-light brown							ML-PT	0.0		
	<input checked="" type="checkbox"/>	56		-gravelly silt, some fine grained sand, organics present, loose, dry, light-brown										
-1.0				0.30M										
	<input checked="" type="checkbox"/>	57		-sandy silt, fine grained sand, some gravel, loose, dry, brown							SM			
	<input checked="" type="checkbox"/>	57		-sandy silt, fine grained sand, some gravel, loose, dry, brown										
-2.0				2.15M										
-3.0	<input checked="" type="checkbox"/>	58		-silty gravelly sand, medium grained sand, medium dense, trace of oxidation, damp, brown							SM-GM			
				3.35M										
-4.0	<input checked="" type="checkbox"/>	59		-silt, some gravel and fine grained sand, traces of oxidation, dense, (till), moist, brown							ML			
				End of hole @ 4.00M										
-5.0				S04 Sample #56=no trace										
-6.0														
-7.0														
-8.0														
J.R. Paine & Associates Ltd.				LOGGED BY: MJK / MB				COMPLETION DEPTH: 4.0 m						
Edmonton, Alberta				REVIEWED BY: AL				COMPLETE: 93/01/18						
				Fig. No: 41				Page 1 of 1						

YTG, C&T SERVICES, MUNICIPAL ENGINEERING	HILLCREST "D" GEOTECHNICAL INVESTIGATION	BOREHOLE No: TH#42-93
IBEX CONTRACTING LTD.	CLEARED AREA	Project No: 8002-121
C.M.E. TRACK MOUNTED DRILL	CENTRE OF PROPOSED ROADWAY	ELEVATION: 0.0 (m)

SAMPLE TYPE  TUBE  LOST  AUGER  BULK  SPT  CORE



J.R. Paine & Associates Ltd.  
Edmonton, Alberta

LOGGED BY: MJK / MB  
REVIEWED BY: AL  
Fig. No: 42

COMPLETION DEPTH: 3.5 m  
COMPLETE: 93/01/18