

APPENDIX A

TEST HOLE LOGS

PROJECT: Moorgate/Strathmillan Sewer Relief Project	CLIENT: City of Winnipeg - Water and Waste Dept.	TESTHOLE NO: TH-01
LOCATION: 2 metres west and 4 metres south 2394 Portage Ave. deck		PROJECT NO.: 41-02-D265-096-03
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 5" Soil Stem Auger with Ranger 24 Rig	ELEVATION (m):
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	

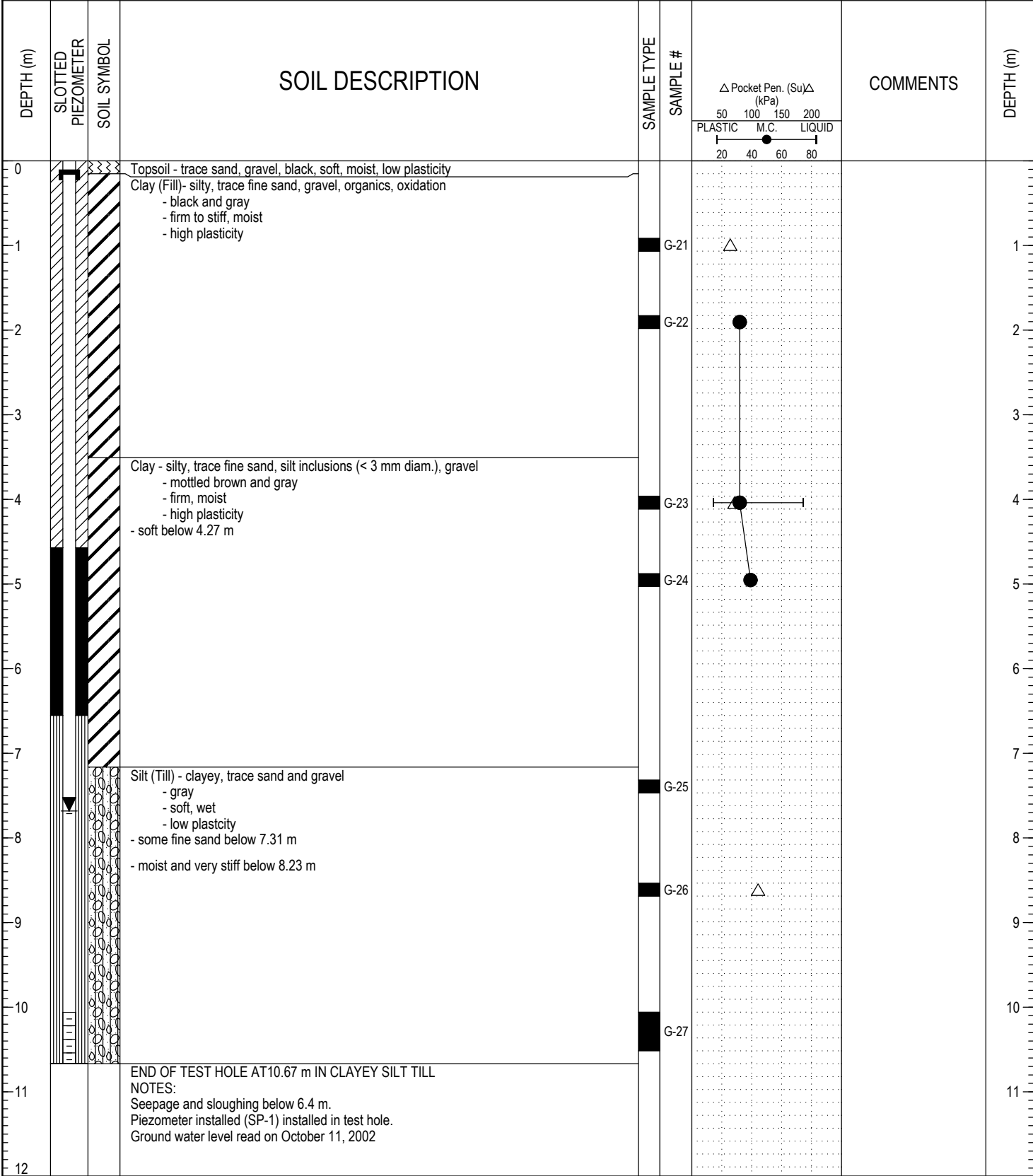
DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	PLASTIC M.C. LIQUID	COMMENTS	DEPTH (m)
0		Topsoil - some sand, organics, black, firm, moist, low plasticity					
0-1		Clay (Fill) - silty, trace fine sand, organics - black - stiff, moist - medium to high plasticity					
1				G-106			1
1-2		Silt - some clay, fine sand - dark gray to brown - soft, moist - low plasticity					
2				G-107			2
2-6		Silt - some clay, fine sand - dark gray to brown - soft, moist - low plasticity - trace oxidation below 4.57 m					
3							3
4				G-108			4
5							5
6		Gravel - sandy, trace cobbles, brown, compact, wet, fine sand to gravel					
6		Clay - silty, trace oxidation, fine sand, dark gray, soft, moist, high plasticity					
6		Gravel - sandy, trace cobbles, brown - compact, wet, fine sand to gravel		G-109 G-110			6
7		Clay - silty, trace oxidation, fine sand, dark gray, soft, moist, high plasticity					
7		Silt (Till) - clayey, some fine sand, trace gravel - light gray - stiff, moist - low plasticity - wet below 7.62 m		G-111			7
8		END OF TEST HOLE AT 7.92 m IN CLAYEY SILT TILL NOTES: Water level recorded at 6.40 m upon completion of the test hole. Auger refusal at 7.92 m.					8
9							9
10							10
11							11
12							12

LOG OF TESTHOLE STRATH-1.GPJ UMA.GDT 1/12/03



LOGGED BY: Nelson Ferreira	COMPLETION DEPTH: 7.92 m
REVIEWED BY: Jeff Tallin	COMPLETION DATE: 26/9/02
PROJECT ENGINEER: Nelson Ferreira	Page 1 of 1

PROJECT: Moorgate/Strathmillan Sewer Relief Project		CLIENT: City of Winnipeg - Water and Waste Dept.		TESTHOLE NO: TH-02	
LOCATION: 5 metres south of Portage Ave. at Strathmillan Rd. and 5 metres east of proposed sewer				PROJECT NO.: 41-02-D265-096-03	
CONTRACTOR: Paddock Drilling Ltd.		METHOD: 5" Soil Stem Auger with Acker MP5-T Rig		ELEVATION (m):	
SAMPLE TYPE		GRAB	SHELBY TUBE	SPLIT SPOON	BULK
BACKFILL TYPE		BENTONITE	GRAVEL	SLOUGH	GROUT
				NO RECOVERY	CORE
				CUTTINGS	SAND

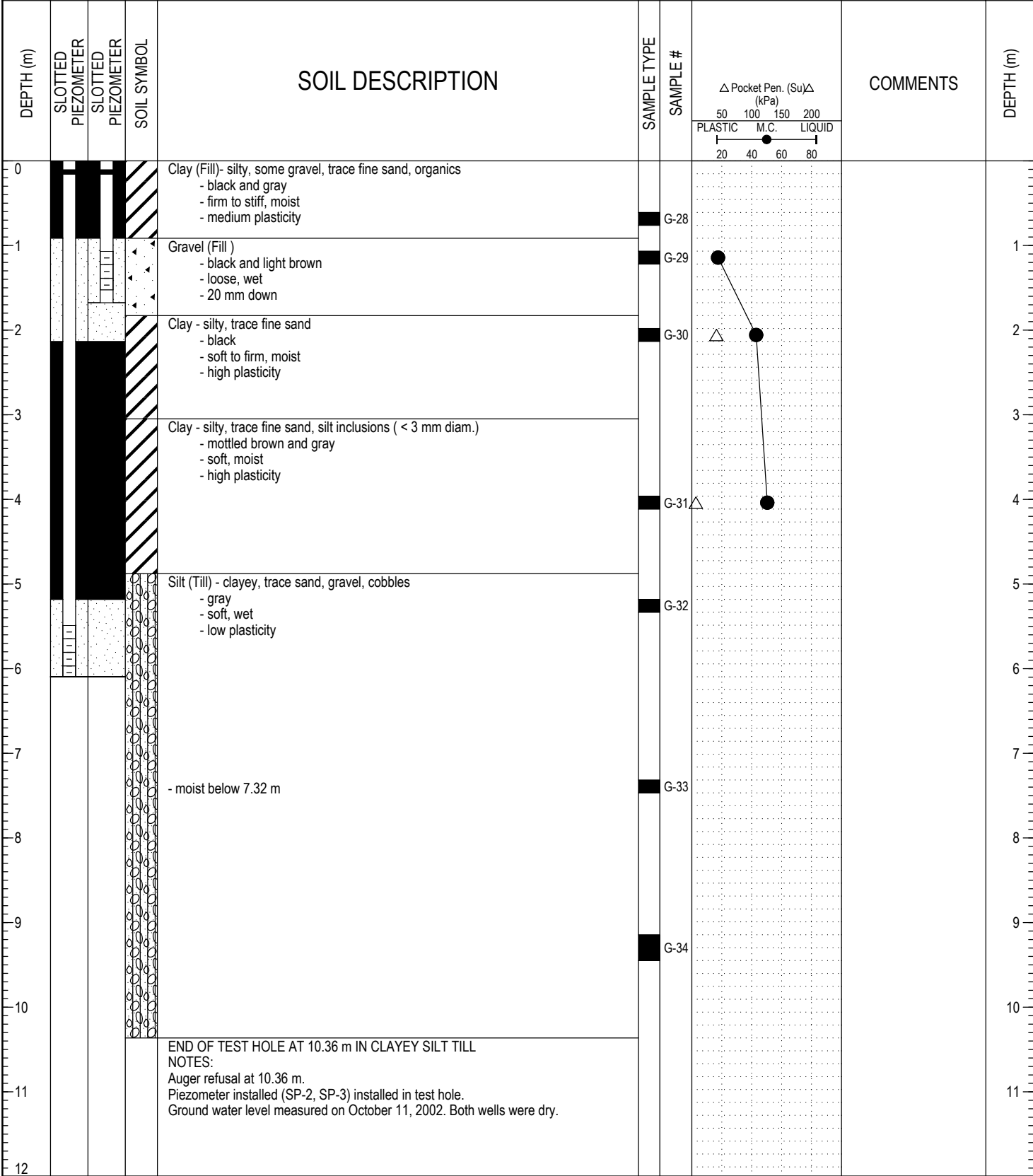


LOG OF TESTHOLE STRATH-1.GPJ UMA.GDT 1/12/03



LOGGED BY: Nelson Ferreira	COMPLETION DEPTH: 10.67 m
REVIEWED BY: Jeff Tallin	COMPLETION DATE: 23/9/02
PROJECT ENGINEER: Nelson Ferreira	Page 1 of 1

PROJECT: Moorgate/Strathmillan Sewer Relief Project		CLIENT: City of Winnipeg - Water and Waste Dept.		TESTHOLE NO: TH-03		
LOCATION: 50 metres north of Portage Ave. and 3 metres west of Strathmillan Rd. curb				PROJECT NO.: 41-02-D265-096-03		
CONTRACTOR: Paddock Drilling Ltd.		METHOD: 5" Soil Stem Auger with Ranger 24 Rig		ELEVATION (m):		
SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
BACKFILL TYPE	BENTONITE	GRAVEL	SLOUGH	GROUT	CUTTINGS	SAND

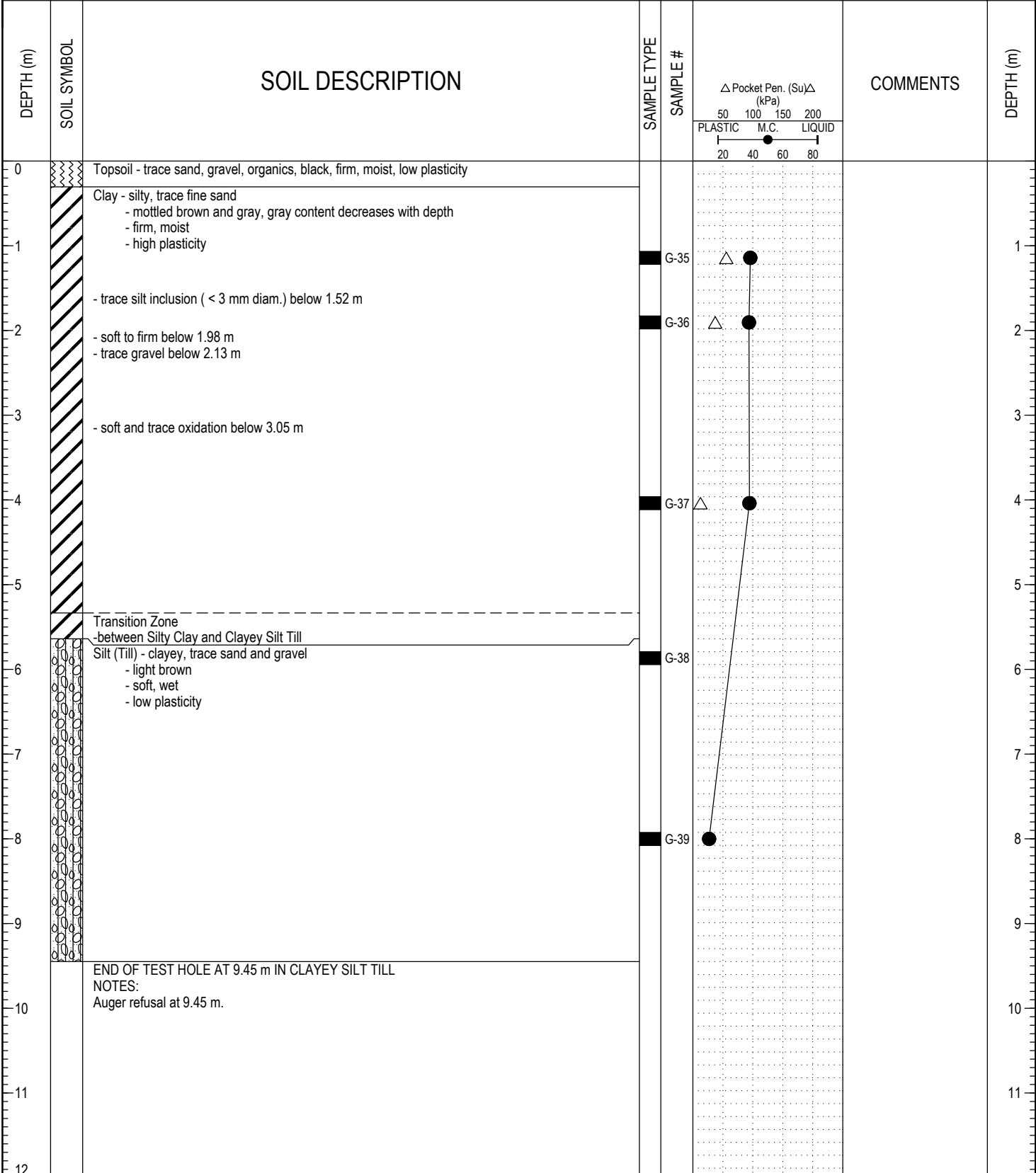


LOG OF TESTHOLE STRATH-1 GPJ UMA.GDT 1/12/03



LOGGED BY: Nelson Ferreira	COMPLETION DEPTH: 10.36 m
REVIEWED BY: Jeff Tallin	COMPLETION DATE: 23/9/02
PROJECT ENGINEER: Nelson Ferreira	Page 1 of 1

PROJECT: Moorgate/Strathmillan Sewer Relief Project	CLIENT: City of Winnipeg - Water and Waste Dept.	TESTHOLE NO: TH-04
LOCATION: Corner of Strathmillan Rd. and Lodge Ave., 4 metres east of curb.		PROJECT NO.: 41-02-D265-096-03
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 5" Soil Stem Auger with Acker MP5-T Rig	ELEVATION (m):
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	

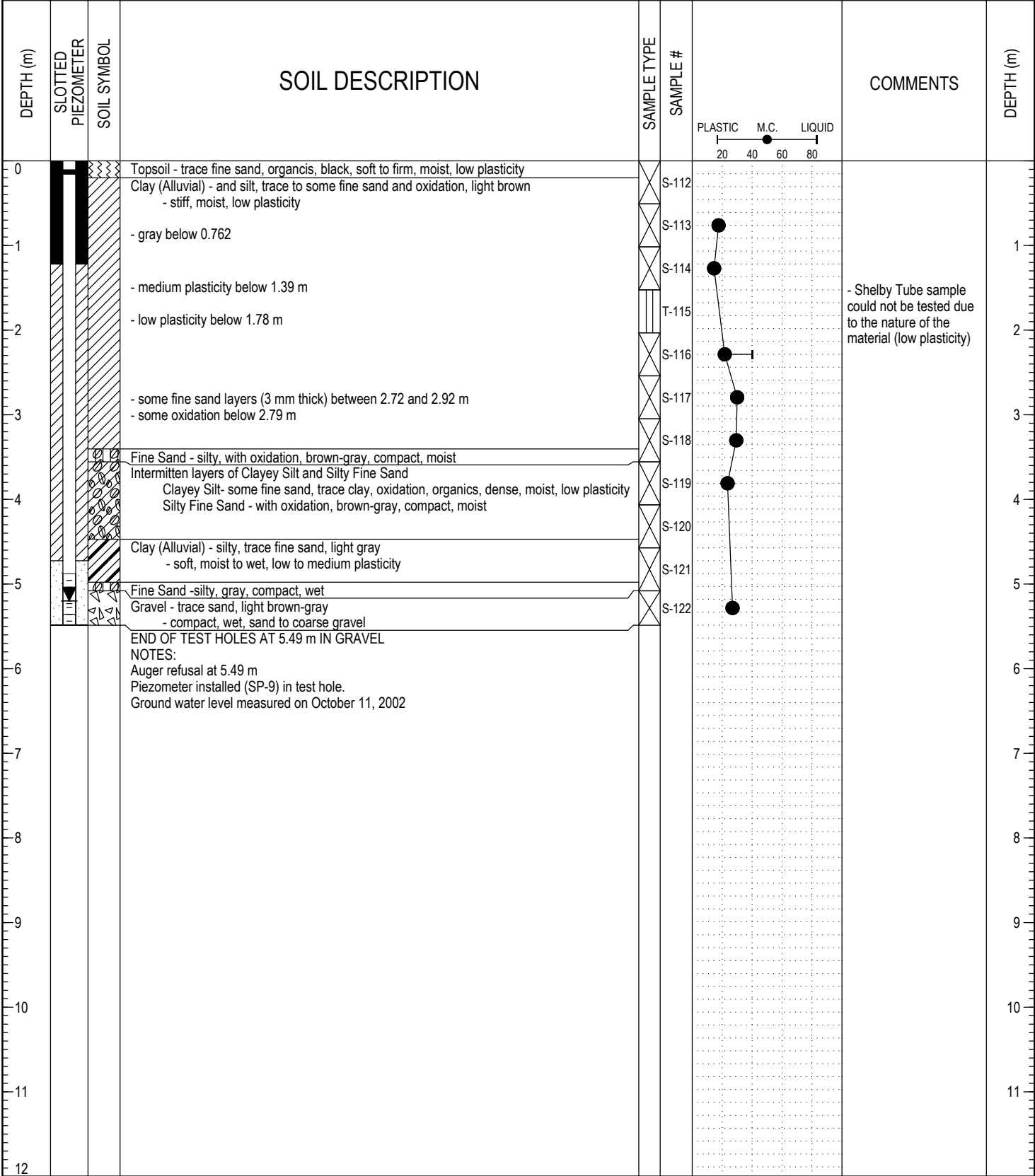


LOG OF TESTHOLE STRATH-1.GPJ UMA.GDT 1/12/03



LOGGED BY: Nelson Ferreira	COMPLETION DEPTH: 9.45 m
REVIEWED BY: Jeff Tallin	COMPLETION DATE: 24/9/02
PROJECT ENGINEER: Nelson Ferreira	Page 1 of 1

PROJECT: Moorgate/Strathmillan Sewer Relief Project		CLIENT: City of Winnipeg - Water and Waste Dept.		TESTHOLE NO: TH-24		
LOCATION: Strathmillan Ave., existng outfall location, top of river bank				PROJECT NO.: 41-02-D265-096-03		
CONTRACTOR: Paddock Drilling Ltd.		METHOD: 7" Solid Stem Auger with Ranger 24 Rig		ELEVATION (m):		
SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
BACKFILL TYPE	BENTONITE	GRAVEL	SLOUGH	GROUT	CUTTINGS	SAND

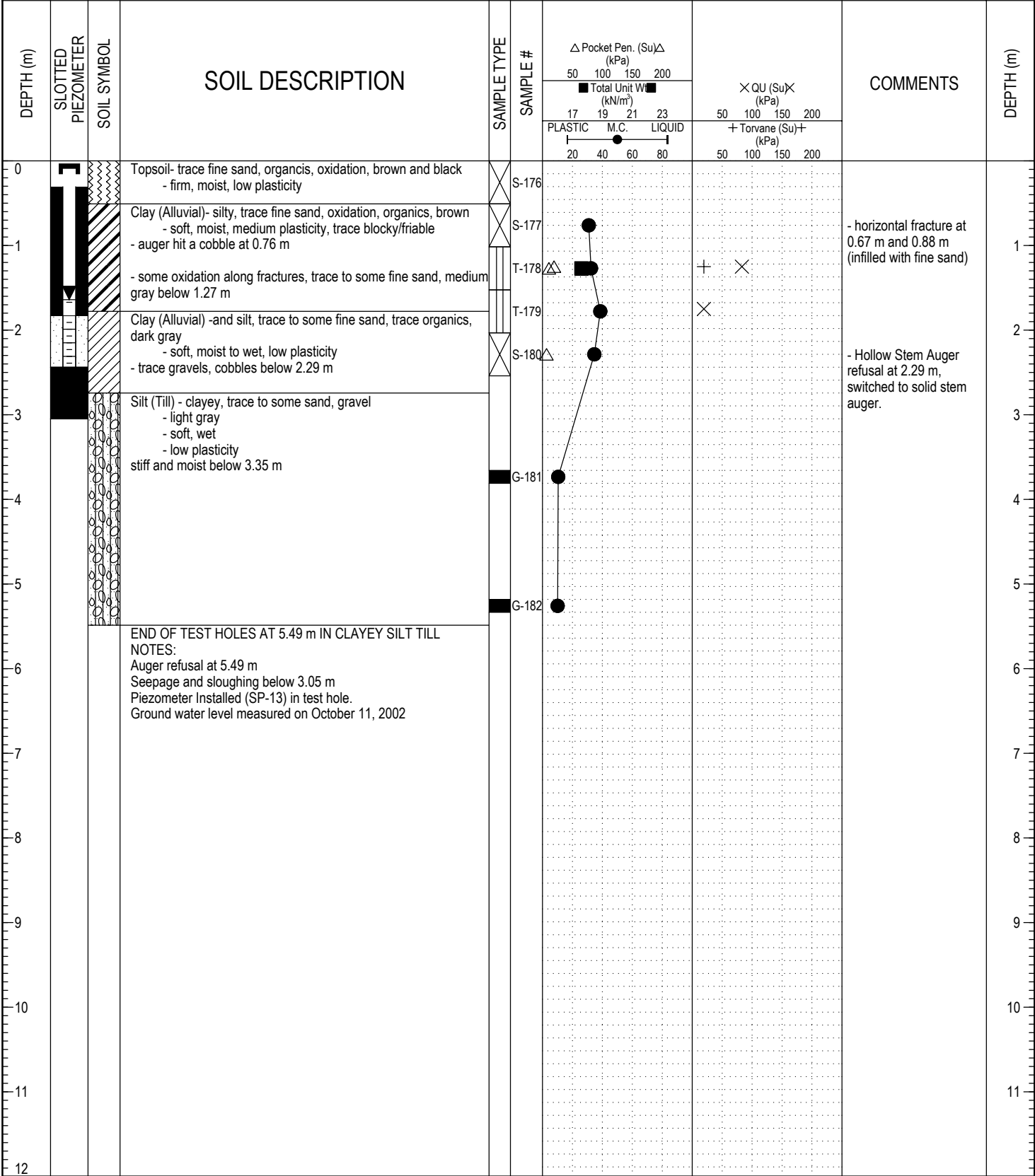


LOG OF TESTHOLE STRATH-1.GPJ UMA.GDT 1/12/03



LOGGED BY: Nelson Ferreira	COMPLETION DEPTH: 5.49 m
REVIEWED BY: Jeff Tallin	COMPLETION DATE: 30/9/02
PROJECT ENGINEER: Nelson Ferreira	Page 1 of 1

PROJECT: Moorgate/Strathmillan Sewer Relief Project		CLIENT: City of Winnipeg - Water and Waste Dept.		TESTHOLE NO: TH-25		
LOCATION: Strathmillan Rd., existing outfall location, top of river bank				PROJECT NO.: 41-02-D265-096-03		
CONTRACTOR: Paddock Drilling Ltd.		METHOD: 7" Solid Stem Auger with Acker SS		ELEVATION (m):		
SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
BACKFILL TYPE	BENTONITE	GRAVEL	SLOUGH	GROUT	CUTTINGS	SAND



LOG OF TESTHOLE STRATH-1.GPJ UMA.GDT 1/12/03



LOGGED BY: Nelson Ferreira	COMPLETION DEPTH: 5.49 m
REVIEWED BY: Jeff Tallin	COMPLETION DATE: 11/10/02
PROJECT ENGINEER: Nelson Ferreira	Page 1 of 1

PROJECT: Moorgate Strathmillan Sewer Relief	CLIENT: City of Winnipeg	TESTHOLE NO: TH-26
LOCATION: Between 241 and 243 Strathmillan Rd., 0.7 m east of east curb.		PROJECT NO.: 41-02-D265-096-03
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: 125 mm solid stem augers.	ELEVATION (m):
SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB <input type="checkbox"/> SHELBY TUBE <input type="checkbox"/> SPLIT SPOON <input type="checkbox"/> BULK <input checked="" type="checkbox"/> NO RECOVERY <input type="checkbox"/> CORE	

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	PLASTIC	M.C.	LIQUID	COMMENTS	DEPTH (m)
0	TOPSOIL								
0	CLAY (FILL)	- roots - black to brown - medium plasticity - nuggety		1G1					
3	CLAY	- trace silt - grey - moist - soft - medium plastic		1G2					
4				1G3					
6				1G4					
8	SILT (TILL)	- trace clay - grey - wet - soft - increasing sand content with depth		1G5					
9				1G6					
10.67				1G7					
11		END OF TEST HOLE AT 10.7 METRES (35') IN SILT TILL - sloughing to 7.0 metres (23') - no seepage							

LOG OF TESTHOLE TEST HOLE LOGS.GPJ UMA.GDT 1/12/03



LOGGED BY: Darryl Schmidt	COMPLETION DEPTH: 10.67 m
REVIEWED BY: Darryl Schmidt	COMPLETION DATE: 1/10/03
PROJECT ENGINEER: Jeff Tallin	Page 1 of 1