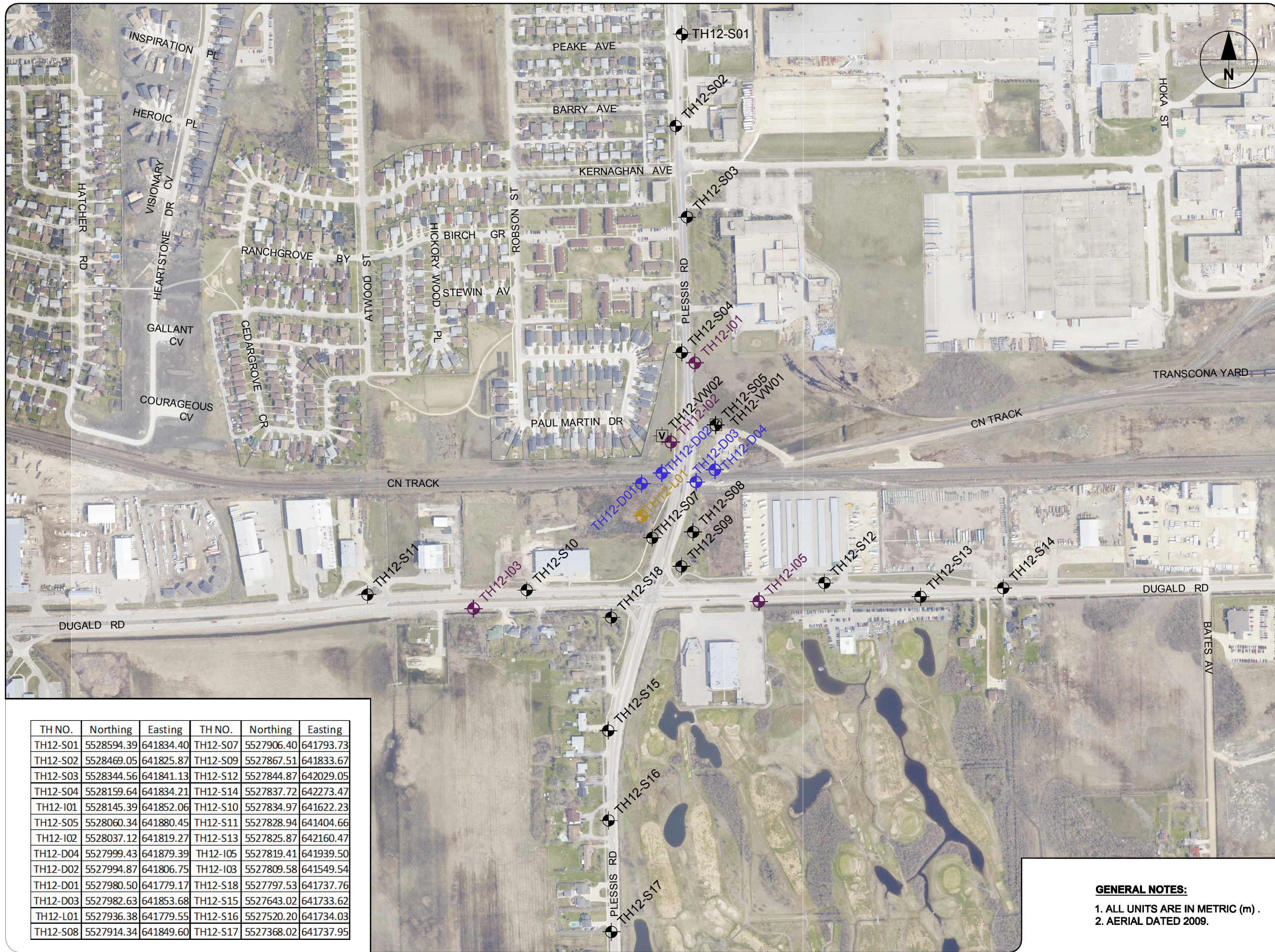


APPENDIX 'A'






GEOTECHNICAL REPORT

P:\16027304\1000-CADD\102-SHEETS\160273041-20-SHT-B-001_RX.dwg



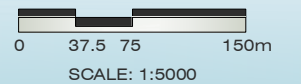
Winnipeg
PLESSIS ROAD UNDERPASS STUDY

TEST HOLE LOCATION PLAN

-  SHALLOW TEST HOLE
-  INTERMEDIATE TEST HOLE
-  DEEP TEST HOLE
-  LIFT STATION TEST HOLE
-  VIBRATING WIRE PIEZOMETER

TH NO.	Northing	Easting	TH NO.	Northing	Easting
TH12-S01	5528594.39	641834.40	TH12-S07	5527906.40	641793.73
TH12-S02	5528469.05	641825.87	TH12-S09	5527867.51	641833.67
TH12-S03	5528344.56	641841.13	TH12-S12	5527844.87	642029.05
TH12-S04	5528159.64	641834.21	TH12-S14	5527837.72	642273.47
TH12-I01	5528145.39	641852.06	TH12-S10	5527834.97	641622.23
TH12-S05	5528060.34	641880.45	TH12-S11	5527828.94	641404.66
TH12-I02	5528037.12	641819.27	TH12-S13	5527825.87	642160.47
TH12-D04	5527999.43	641879.39	TH12-I05	5527819.41	641939.50
TH12-D02	5527994.87	641806.75	TH12-I03	5527809.58	641549.54
TH12-D01	5527980.50	641779.17	TH12-S18	5527797.53	641737.76
TH12-D03	5527982.63	641853.68	TH12-S15	5527643.02	641733.62
TH12-L01	5527936.38	641779.55	TH12-S16	5527520.20	641734.03
TH12-S08	5527914.34	641849.60	TH12-S17	5527368.02	641737.95

GENERAL NOTES:
 1. ALL UNITS ARE IN METRIC (m) .
 2. AERIAL DATED 2009.



AECOM Canada Ltd.

GENERAL STATEMENT

NORMAL VARIABILITY OF SUBSURFACE CONDITIONS

The scope of the investigation presented herein is limited to an investigation of the subsurface conditions as to suitability for the proposed project. This report has been prepared to aid in the evaluation of the site and to assist the engineer in the design of the facilities. Our description of the project represents our understanding of the significant aspects of the project relevant to the design and construction of earth work, foundations and similar. In the event of any changes in the basic design or location of the structures as outlined in this report or plan, we should be given the opportunity to review the changes and to modify or reaffirm in writing the conclusions and recommendations of this report.

The analysis and recommendations presented in this report are based on the data obtained from the borings and test pit excavations made at the locations indicated on the site plans and from other information discussed herein. This report is based on the assumption that the subsurface conditions everywhere are not significantly different from those disclosed by the borings and excavations. However, variations in soil conditions may exist between the excavations and, also, general groundwater levels and conditions may fluctuate from time to time. The nature and extent of the variations may not become evident until construction. If subsurface conditions differ from those encountered in the exploratory borings and excavations, are observed or encountered during construction, or appear to be present beneath or beyond excavations, we should be advised at once so that we can observe and review these conditions and reconsider our recommendations where necessary.

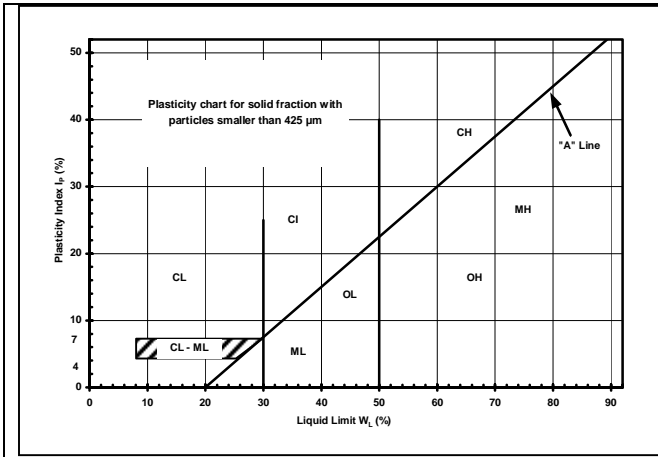
Since it is possible for conditions to vary from those assumed in the analysis and upon which our conclusions and recommendations are based, a contingency fund should be included in the construction budget to allow for the possibility of variations which may result in modification of the design and construction procedures.

In order to observe compliance with the design concepts, specifications or recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated, we recommend that all construction operations dealing with earth work and the foundations be observed by an experienced soils engineer. We can be retained to provide these services for you during construction. In addition, we can be retained to review the plans and specifications that have been prepared to check for substantial conformance with the conclusions and recommendations contained in our report.

EXPLANATION OF FIELD & LABORATORY TEST DATA

Description			AECOM Log Symbols	USCS Classification	Laboratory Classification Criteria				
					Fines (%)	Grading	Plasticity	Notes	
COARSE GRAINED SOILS	GRAVELS (More than 50% of coarse fraction of gravel size)	CLEAN GRAVELS (Little or no fines)	Well graded gravels, sandy gravels, with little or no fines		GW	0-5	$C_u > 4$ $1 < C_c < 3$	Dual symbols if 5-12% fines. Dual symbols if above "A" line and $4 < W_p < 7$ $C_u = \frac{D_{60}}{D_{10}}$ $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$	
			Poorly graded gravels, sandy gravels, with little or no fines		GP	0-5	Not satisfying GW requirements		
		DIRTY GRAVELS (With some fines)	Silty gravels, silty sandy gravels		GM	> 12			Atterberg limits below "A" line or $W_p < 4$
			Clayey gravels, clayey sandy gravels		GC	> 12			Atterberg limits above "A" line or $W_p < 7$
	SANDS (More than 50% of coarse fraction of sand size)	CLEAN SANDS (Little or no fines)	Well graded sands, gravelly sands, with little or no fines		SW	0-5	$C_u > 6$ $1 < C_c < 3$		
			Poorly graded sands, gravelly sands, with little or no fines		SP	0-5	Not satisfying SW requirements		
		DIRTY SANDS (With some fines)	Silty sands, sand-silt mixtures		SM	> 12			Atterberg limits below "A" line or $W_p < 4$
			Clayey sands, sand-clay mixtures		SC	> 12			Atterberg limits above "A" line or $W_p < 7$
FINE GRAINED SOILS	SILTS (Below 'A' line negligible organic content)	$W_L < 50$	Inorganic silts, silty or clayey fine sands, with slight plasticity		ML		Classification is Based upon Plasticity Chart		
		$W_L > 50$	Inorganic silts of high plasticity		MH				
	CLAYS (Above 'A' line negligible organic content)	$W_L < 30$	Inorganic clays, silty clays, sandy clays of low plasticity, lean clays		CL				
		$30 < W_L < 50$	Inorganic clays and silty clays of medium plasticity		CI				
		$W_L > 50$	Inorganic clays of high plasticity, fat clays		CH				
	ORGANIC SILTS & CLAYS (Below 'A' line)	$W_L < 50$	Organic silts and organic silty clays of low plasticity		OL				
		$W_L > 50$	Organic clays of high plasticity		OH				
	HIGHLY ORGANIC SOILS		Peat and other highly organic soils		Pt	Von Post Classification Limit		Strong colour or odour, and often fibrous texture	
	Asphalt		Till			AECOM			
	Concrete		Bedrock (Undifferentiated)						
	Fill		Bedrock (Limestone)						

When the above classification terms are used in this report or test hole logs, the designated fractions may be visually estimated and not measured.



FRACTION	SEIVE SIZE (mm)		DEFINING RANGES OF PERCENTAGE BY WEIGHT OF MINOR COMPONENTS		
	Passing	Retained	Percent	Identifier	
Gravel	Coarse	76	19	35-50	and
	Fine	19	4.75		
Sand	Coarse	4.75	2.00	20-35	"y" or "ey" *
	Medium	2.00	0.425		
	Fine	0.425	0.075		
Silt (non-plastic) or Clay (plastic)	< 0.075 mm		10-20	1-10	some
			1-10		
* for example: gravelly, sandy clayey, silty					
Definition of Oversize Material					
COBBLES: 76mm to 300mm diameter					
BOULDERS: >300mm diameter					

LEGEND OF SYMBOLS

Laboratory and field tests are identified as follows:

- qu - undrained shear strength (kPa) derived from unconfined compression testing.
- Tv - undrained shear strength (kPa) measured using a torvane
- pp - undrained shear strength (kPa) measured using a pocket penetrometer.
- Lv - undrained shear strength (kPa) measured using a lab vane.
- Fv - undrained shear strength (kPa) measured using a field vane.
- γ - bulk unit weight (kN/m³).
- SPT - Standard Penetration Test. Recorded as number of blows (N) from a 63.5 kg hammer dropped 0.76 m (free fall) which is required to drive a 51 mm O.D. Raymond type sampler 0.30 m into the soil.
- DPPT - Drive Point Pentrometer Test. Recorded as number of blows from a 63.5 kg hammer dropped 0.76 m (free fall) which is required to drive a 50 mm drive point 0.30 m into the soil.
- w - moisture content (WL, Wp)

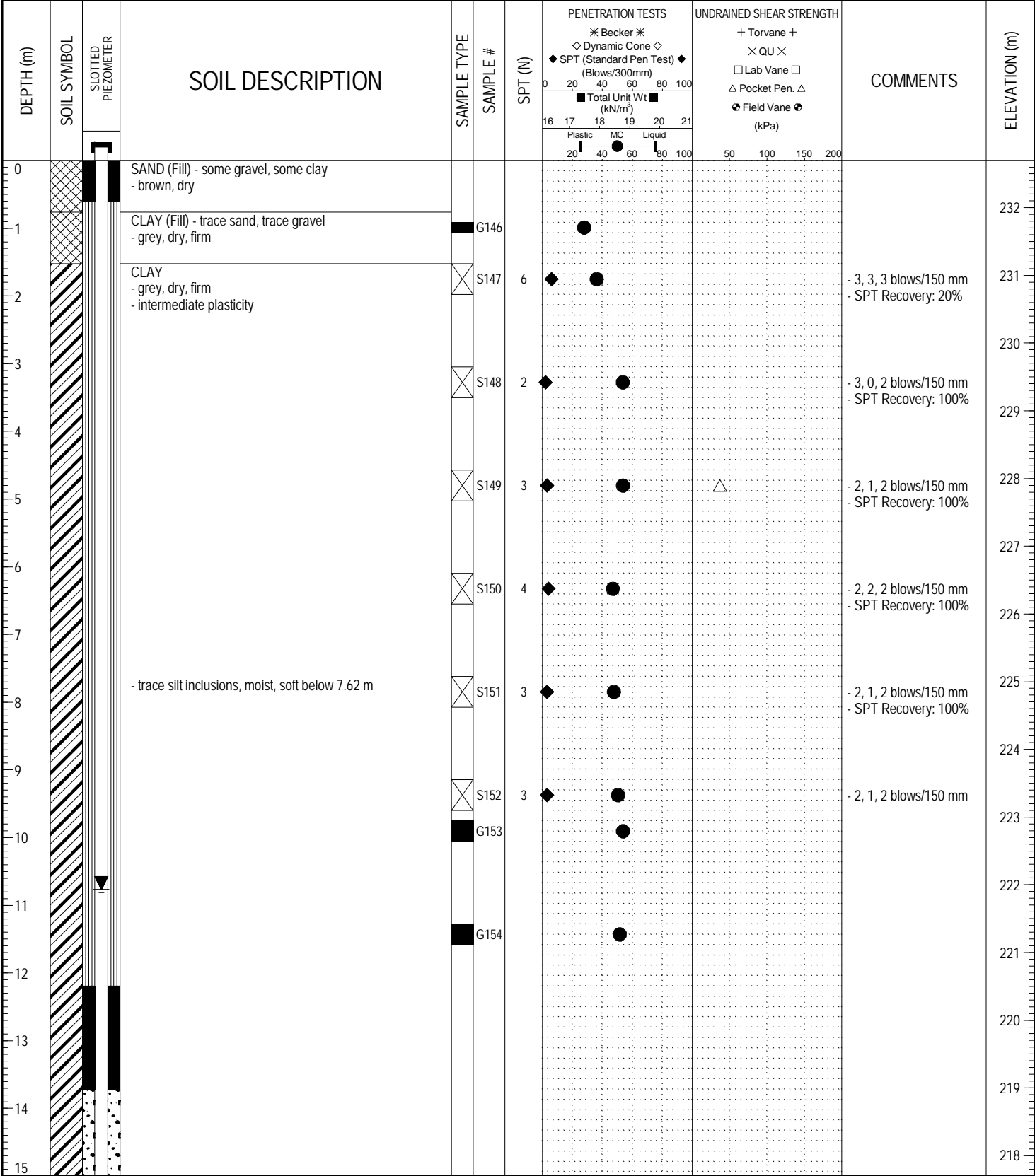
The undrained shear strength (Su) of a cohesive soil can be related to its consistency as follows:

Su (kPa)	CONSISTENCY
<12	very soft
12 – 25	soft
25 – 50	medium or firm
50 – 100	stiff
100 – 200	very stiff
200	hard

The resistance (N) of a non-cohesive soil can be related to compactness condition as follows

N – BLOWS/0.30 m	COMPACTNESS
0 - 4	very loose
4 - 10	loose
10 - 30	compact
30 - 50	dense
50	very dense

PROJECT: Plessis Road Underpass		CLIENT: City of Winnipeg		TESTHOLE NO: TH12-D01			
LOCATION: Plessis South Bound/CN Rail Intersection, West Shoulder Lawn				PROJECT NO.: 60273041			
CONTRACTOR: Maple Leaf Drilling Ltd.		METHOD: Mobile B-40, 125 mm SSA		ELEVATION (m): 232.70			
SAMPLE TYPE		GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
BACKFILL TYPE		BENTONITE	GRAVEL	SLOUGH	GROUT	CUTTINGS	SAND

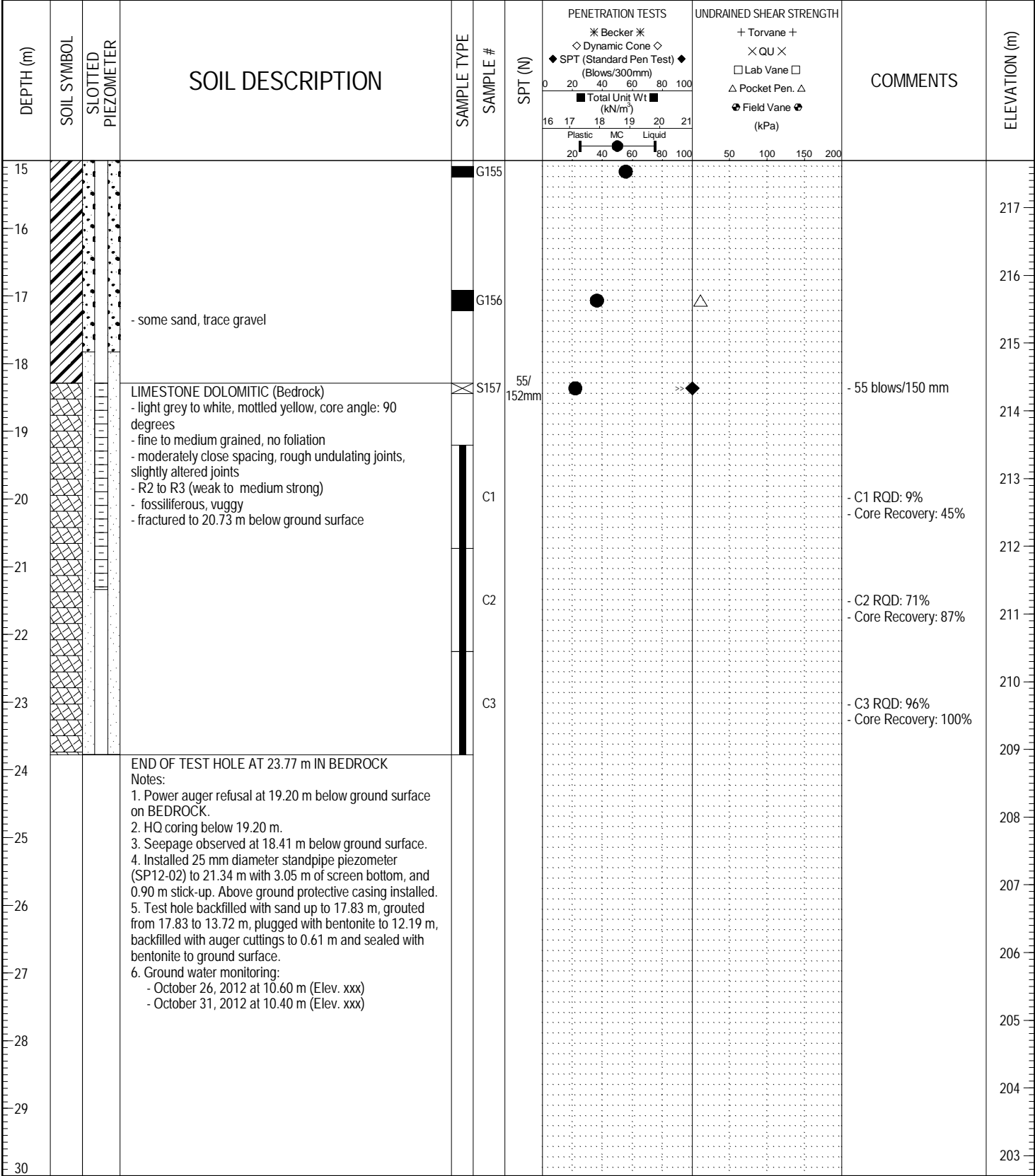


LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 23.77 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/26
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 2

PROJECT: Plessis Road Underpass		CLIENT: City of Winnipeg		TESTHOLE NO: TH12-D01		
LOCATION: Plessis South Bound/CN Rail Intersection, West Shoulder Lawn		METHOD: Mobile B-40, 125 mm SSA		PROJECT NO.: 60273041		
CONTRACTOR: Maple Leaf Drilling Ltd.		METHOD: Mobile B-40, 125 mm SSA		ELEVATION (m): 232.70		
SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
BACKFILL TYPE	BENTONITE	GRAVEL	SLOUGH	GROUT	CUTTINGS	SAND



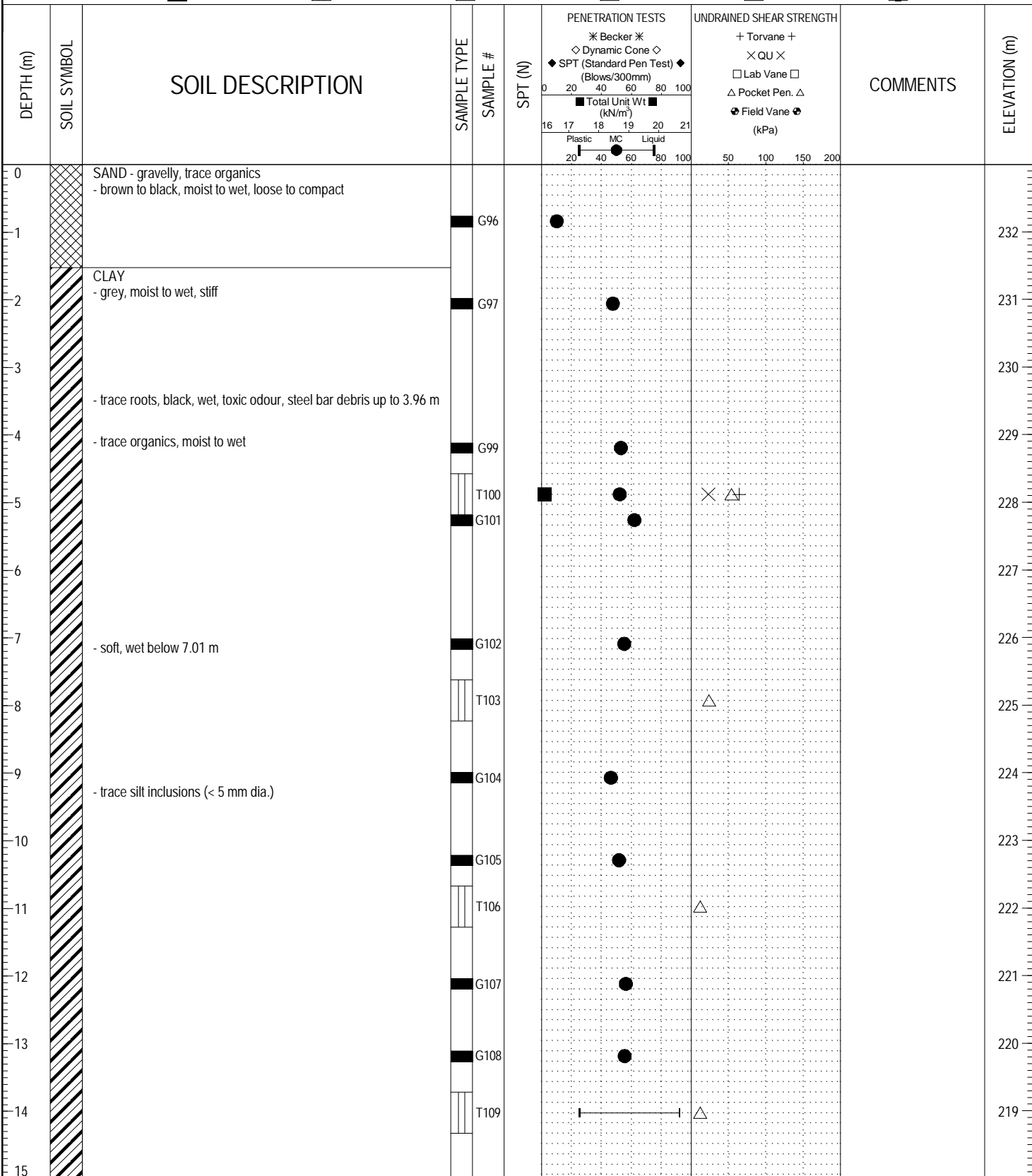
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 23.77 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/26
PROJECT ENGINEER: Zeyad Shukri	Page 2 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-D02
LOCATION: Plessis South Bound/CN Rail Intersection, West Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Mobile B-40, 125 mm SSA	ELEVATION (m): 232.99

SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
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LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 21.95 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/22
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-D02
LOCATION: Plessis South Bound/CN Rail Intersection, West Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Mobile B-40, 125 mm SSA	ELEVATION (m): 232.99

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH		COMMENTS	ELEVATION (m)
						Becker	Dynamic Cone	Torvane	QU		
15				G110	55						217
16				G111	55						216
17				G112	55						215
18											214
19		LIMESTONE (Bedrock)		C1						- C1 ROD: 26%	213
20		- light grey to white, core angle: 90 degrees - fine to medium grained, no foliation - close spacing, rough undulating joints, slightly altered joints - R2 to R3 (weak to medium strong) - fossiliferous, filled vugs - high calcium limestone		C2						- Core Recovery: 66%	212
21											211
22		END OF TEST HOLE AT 21.95 m IN BEDROCK									210
23		Notes: 1. Power auger refusal at 18.90 m below ground surface on BEDROCK. 2. HQ coring below 18.90 m. 3. Test hole grouted up to 13.72 m, plugged with bentonite from 13.72 to 12.80 m and backfilled with auger cuttings to ground surface.									209
24											208
25											207
26											206
27											205
28											204
29											203
30											202

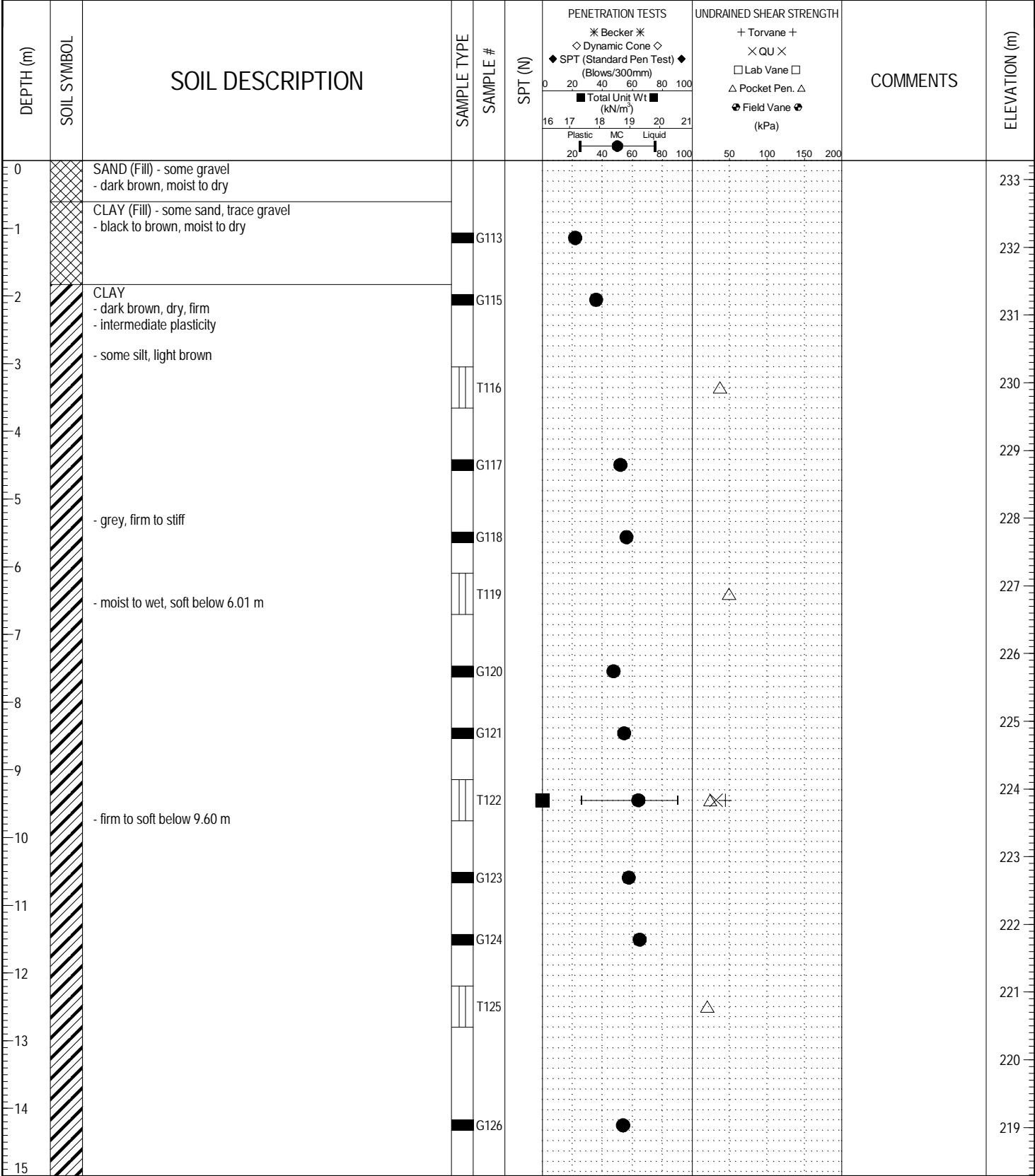
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 21.95 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/22
PROJECT ENGINEER: Zeyad Shukri	Page 2 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-D03
LOCATION: Plessis North Bound/CN Rail Intersection, East Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Mobile B-40, 125 mm SSA	ELEVATION (m): 233.28

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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LOGGED BY: Sam O.	COMPLETION DEPTH: 22.25 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/23
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-D03
LOCATION: Plessis North Bound/CN Rail Intersection, East Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Mobile B-40, 125 mm SSA	ELEVATION (m): 233.28

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH	COMMENTS	ELEVATION (m)
						* Becker * ◇ Dynamic Cone ◇ ◆ SPT (Standard Pen Test) ◆ (Blows/300mm) Total Unit Wt (kN/m³)	+ Torvane + × QU × □ Lab Vane □ △ Pocket Pen. △ ⊕ Field Vane ⊕ (kPa)			
15										218
16										217
17										216
18		- some gravel, trace cobbles below 17.98 m		G127						215
19										214
20		LIMESTONE DOLOMITIC (Bedrock) - light grey to white, mottled yellow, core angle: 90 degrees - fine to medium grained, no foliation - close spacing, rough undulating joints, unaltered joints - R2 to R3 (weak to medium strong) - fossiliferous, vuggy - healed joint - slightly altered joint below 20.12 m		C1					- C1 ROD: 73% - Core Recovery: 92%	213
21										212
22		- rough planar joint		C2					- C2 ROD: 60% - Core Recovery: 94%	211
23		END OF TEST HOLE AT 21.95 m IN BEDROCK Notes: 1. Power auger refusal at 18.90 m below ground surface on BEDROCK. 2. HQ coring below 18.90 m. 3. Test hole backfilled with bentonite and auger cuttings.								210
24										209
25										208
26										207
27										206
28										205
29										204
30										204

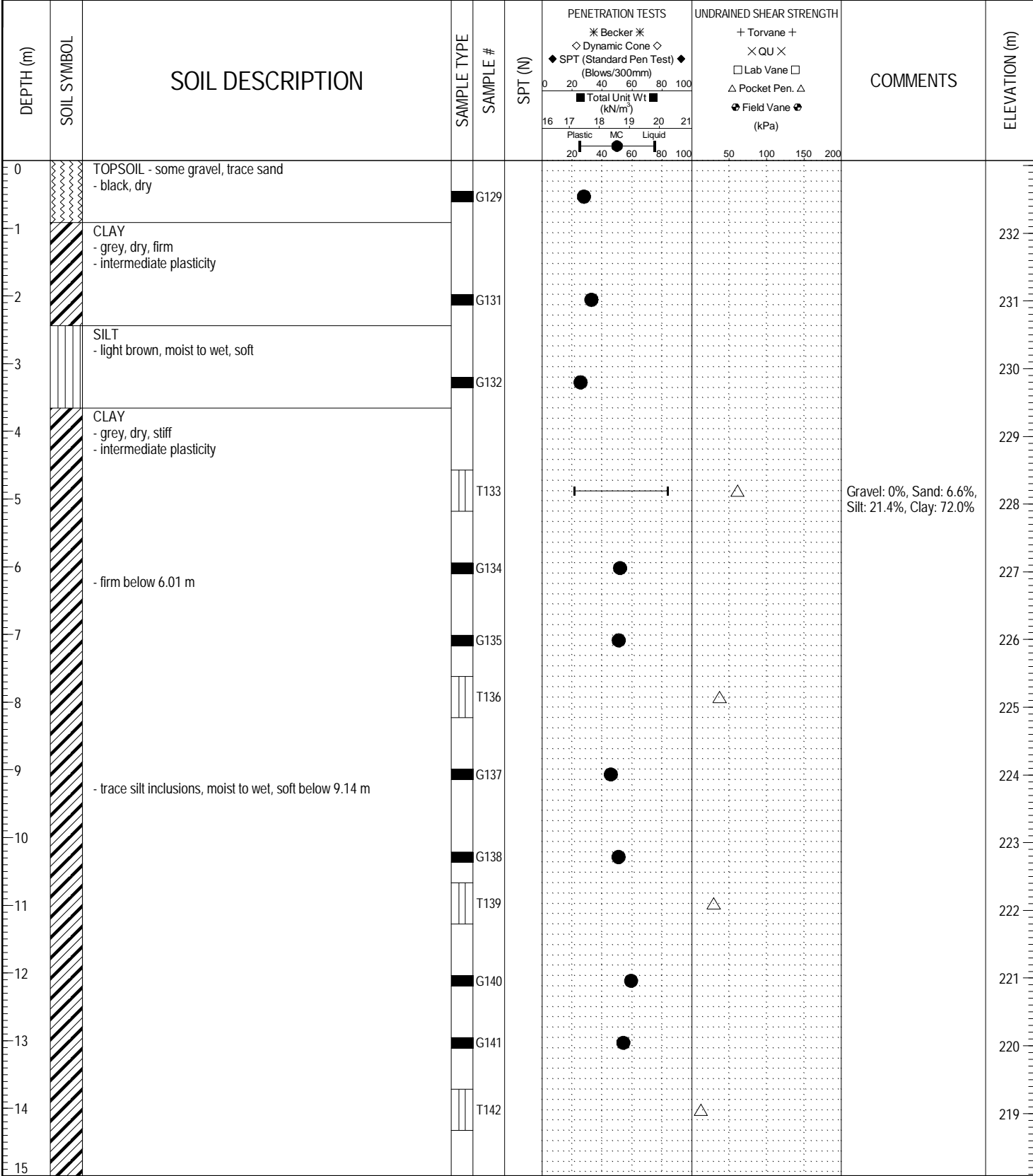
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 22.25 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/23
PROJECT ENGINEER: Zeyad Shukri	Page 2 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-D04
LOCATION: Plessis North Bound/CN Rail Intersection, East Shoulder Lawn		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Mobile B-40, 175 mm HSA	ELEVATION (m): 233.08

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
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LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 23.77 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/24
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-D04
LOCATION: Plessis North Bound/CN Rail Intersection, East Shoulder Lawn		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Mobile B-40, 175 mm HSA	ELEVATION (m): 233.08

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH	COMMENTS	ELEVATION (m)
						Becker	Dynamic Cone			
15										
16				G143						217
17		- trace gravel, wet below 16.76 m		G144						216
18		LIMESTONE (Bedrock) - light grey to white, core angle: 90 degrees - fine to medium grained, no foliation - moderately close spacing, rough undulating joints, unaltered joints		C1					- C1 RQD: 33% - Core Recovery: 82%	215
19		- R2 to R3 (weak to medium strong) - fossiliferous, filled vugs - high calcium limestone - rough planar joint		C2					- C2 RQD: 35% - Core Recovery: 100%	214
20				C3					- C3 RQD: 45% - Core Recovery: 100%	213
21				C4					- C4 RQD: 99% - Core Recovery: 100%	212
22										211
23										210
24		END OF TEST HOLE AT 23.77 m IN BEDROCK Notes: 1. Power auger refusal at 17.68 m below ground surface on BEDROCK. 2. HQ coring below 17.68 m. 3. Seepage observed at 16.76 m below ground surface. 4. Test hole backfilled with bentonite and auger cuttings.								209
25										208
26										207
27										206
28										205
29										204
30										

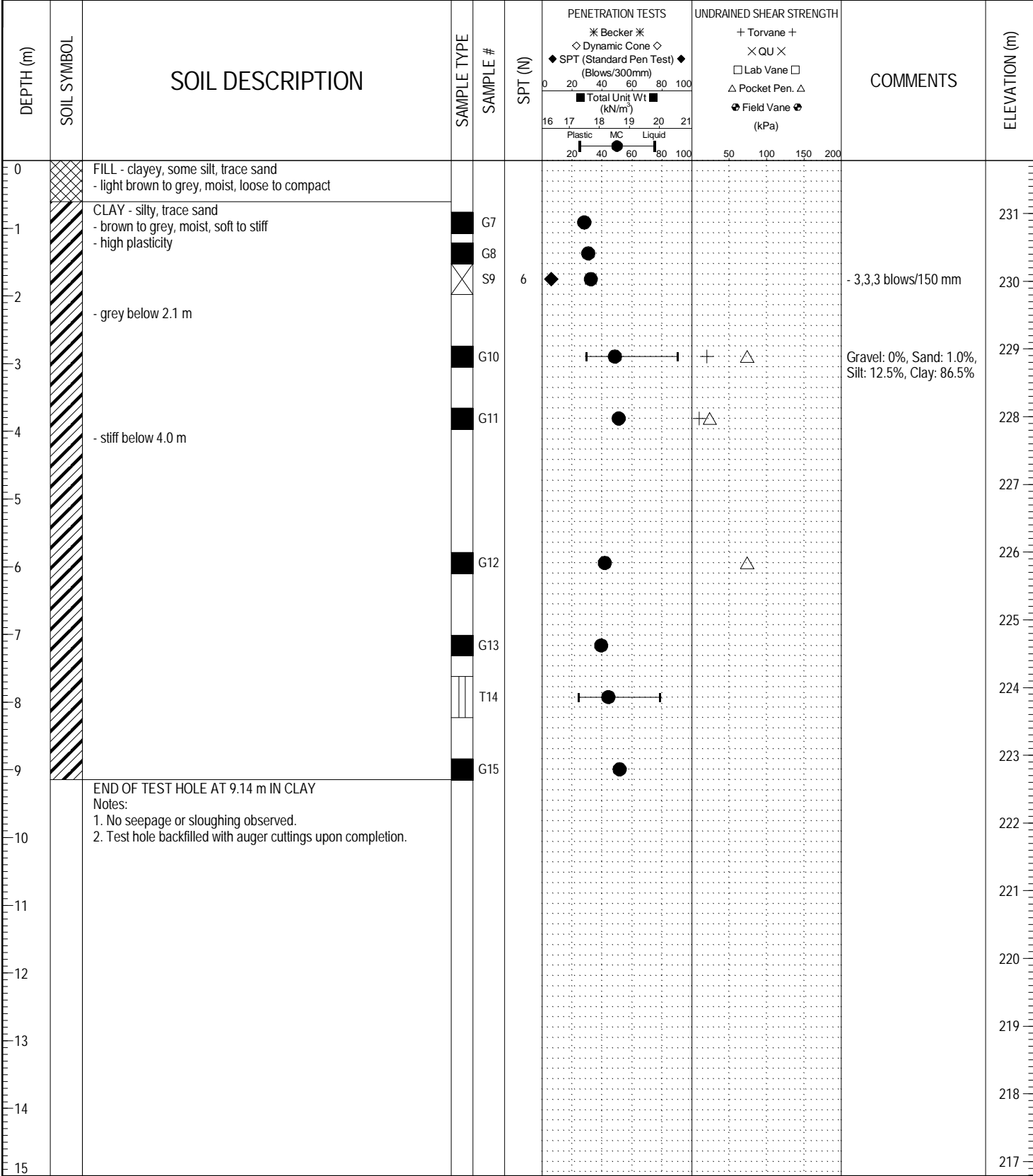
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 23.77 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/24
PROJECT ENGINEER: Zeyad Shukri	Page 2 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-I01
LOCATION: Plessis Road North Bound, East Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 231.78

SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
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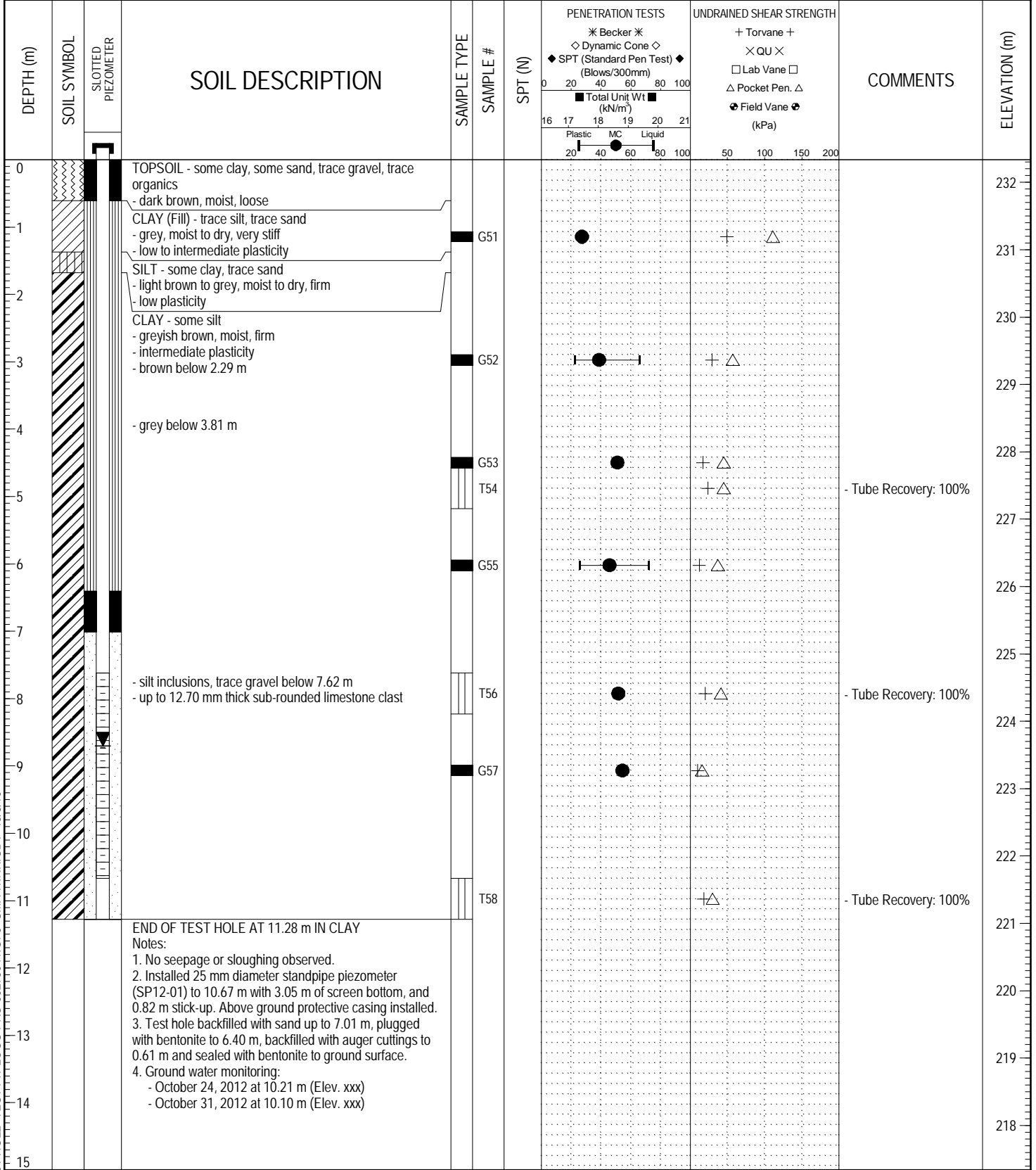


LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 9.14 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/9
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass		CLIENT: City of Winnipeg		TESTHOLE NO: TH12-I02		
LOCATION: Plessis Road South Bound, West Shoulder Lawn				PROJECT NO.: 60273041		
CONTRACTOR: Maple Leaf Drilling Ltd.		METHOD: Track Mounted MP5, 125 mm SSA		ELEVATION (m): 232.34		
SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
BACKFILL TYPE	BENTONITE	GRAVEL	SLOUGH	GROUT	CUTTINGS	SAND



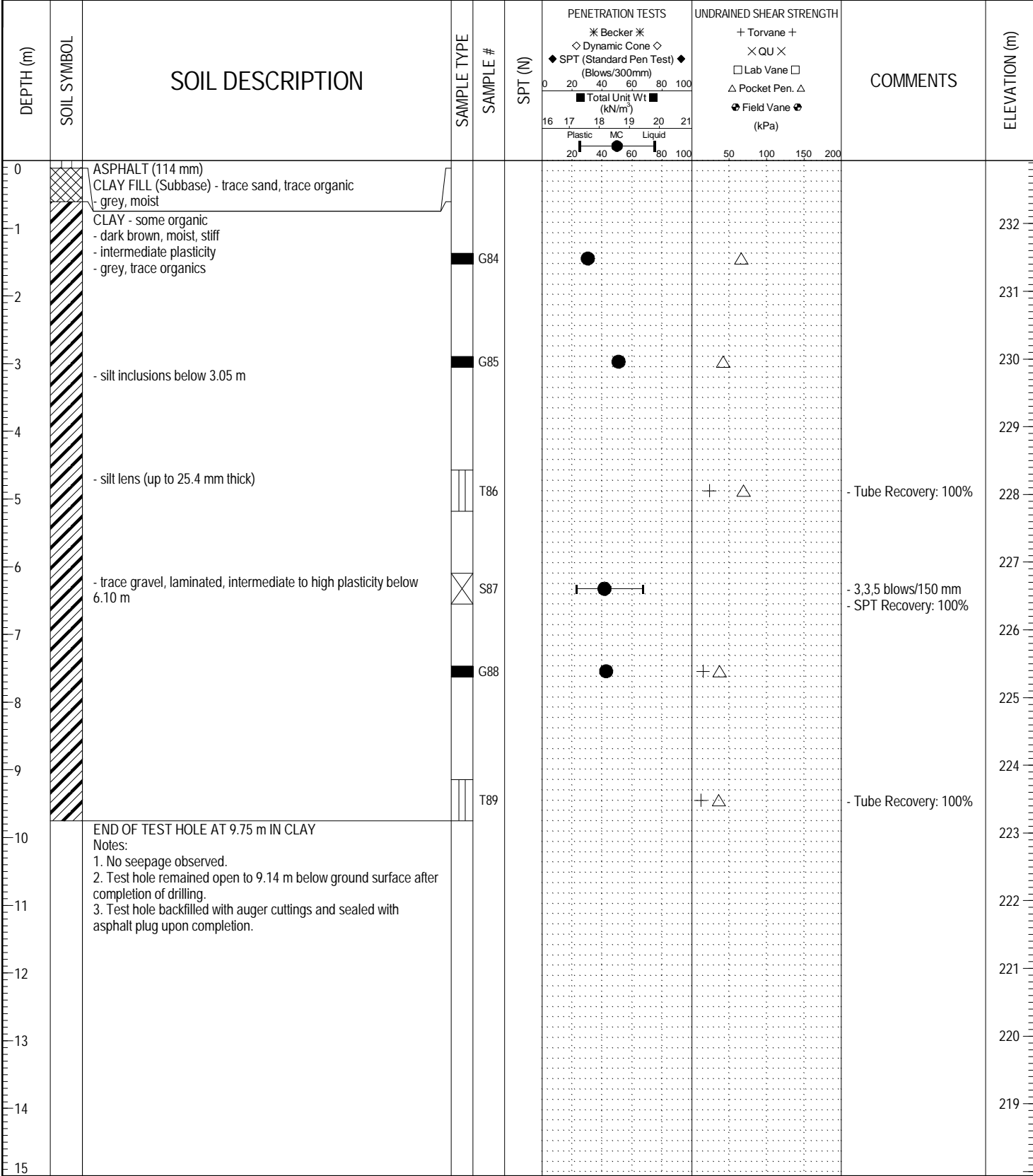
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 11.28 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/10
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-I03
LOCATION: Dugald Road East Bound, Curb Lane		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.93

SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
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LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 9.75 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/11/10
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-I05
LOCATION: Dugal Road East Bound, South Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 229.94

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	PENETRATION TESTS	UNDRAINED SHEAR STRENGTH	COMMENTS	ELEVATION (m)
0		Sand and Gravel (Fill) - trace silt - brown, moist, compact	<input checked="" type="checkbox"/>	G16	●			229.94
1		CLAY - trace silt - brown to black, moist, stiff - intermediate plasticity - silty to 1.52 m - some silt, brownish grey to grey below 1.52 m	<input checked="" type="checkbox"/>	G17	●			229
2			<input checked="" type="checkbox"/>	G18	●			228
3			<input checked="" type="checkbox"/>	G19	●	+ △		227
4			<input checked="" type="checkbox"/>	G20	●			226
5			<input checked="" type="checkbox"/>	G21	●	+ △		225
6			<input checked="" type="checkbox"/>	G22	●			224
7			<input checked="" type="checkbox"/>	G23	●			223
8		END OF TEST HOLE AT 7.62 m IN CLAY Notes: 1. No seepage or sloughing observed. 2. Test hole backfilled with auger cuttings upon completion.						222
9								221
10								220
11								219
12								218
13								217
14								216
15								215

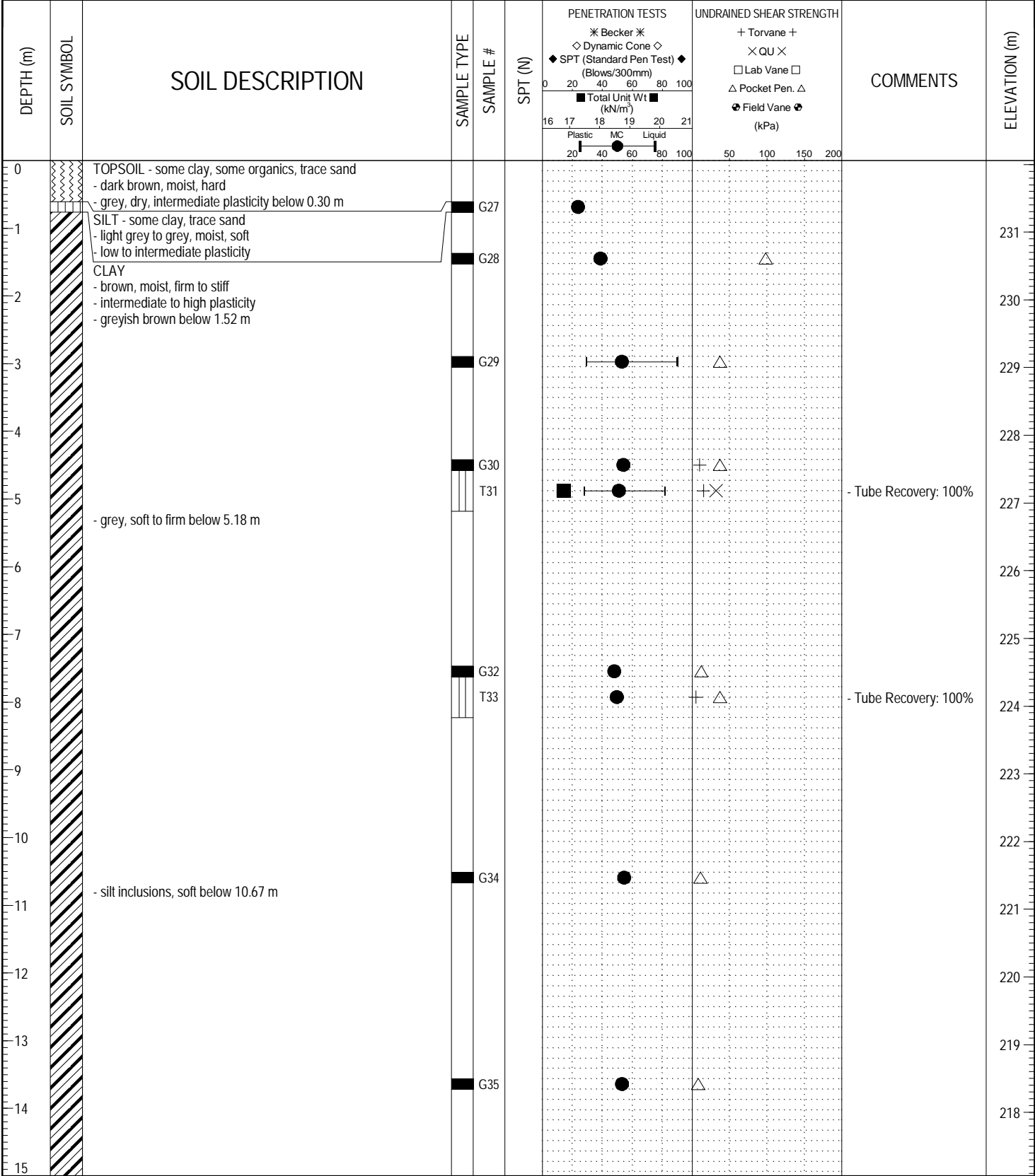
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 7.62 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/9
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-L01
LOCATION: East of Plessis Road		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.06

SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
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LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 17.98 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/10
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-L01
LOCATION: East of Plessis Road		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.06

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH		COMMENTS	ELEVATION (m)
						Blows/300mm	Total Unit Wt (kN/m ³)	(kPa)	(kPa)		
15											
16											
17				G36							
18		- limestone cobble up to 0.08 m thick		G37							
18		END OF TEST HOLE AT 17.98 m ON BEDROCK									
19		Notes: 1. Power auger refusal at 17.98 m below ground surface on BEDROCK. 2. Seepage observed at 10.97 m below ground surface. 3. Test hole remained open to 12.80 m below ground surface after completion of drilling. 4. Test hole backfilled with auger cuttings upon completion.									
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 17.98 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/10
PROJECT ENGINEER: Zeyad Shukri	Page 2 of 2

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S01
LOCATION: Plessis Road North Bound, Curb Lane		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.68

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH	COMMENTS	ELEVATION (m)
						Becker * Dynamic Cone ◊ SPT (Standard Pen Test) ◆ (Blows/300mm)	Total Unit Wt (kN/m ³)			
0		ASPHALT (114 mm) CONCRETE (Base) - grey, dry, bonded								232
1		SILT - clayey, trace sand - brown, moist, soft - low to intermediate plasticity		G165						231
2		CLAY - trace sand - brown, moist, stiff - intermediate plasticity, silt lenses (up to 25.4 mm thick dia.) - greyish brow, laminated below 1.52 m		G166						230
3				G167						229
4		- grey, firm below 3.05 m		S168	6	◆		△	- 2, 2, 4 blows/150 mm - SPT Recovery: 100%	228
5		- moist to wet below 3.96 m		G169				△		227
5		END OF TEST HOLE AT 4.57 m IN CLAY Notes: 1. No seepage or sloughing observed. 2. Test hole backfilled with auger cuttings and sealed with asphalt plug upon completion.								226
6										225
7										224
8										223
9										222
10										221
11										220
12										219
13										218
14										217
15										216

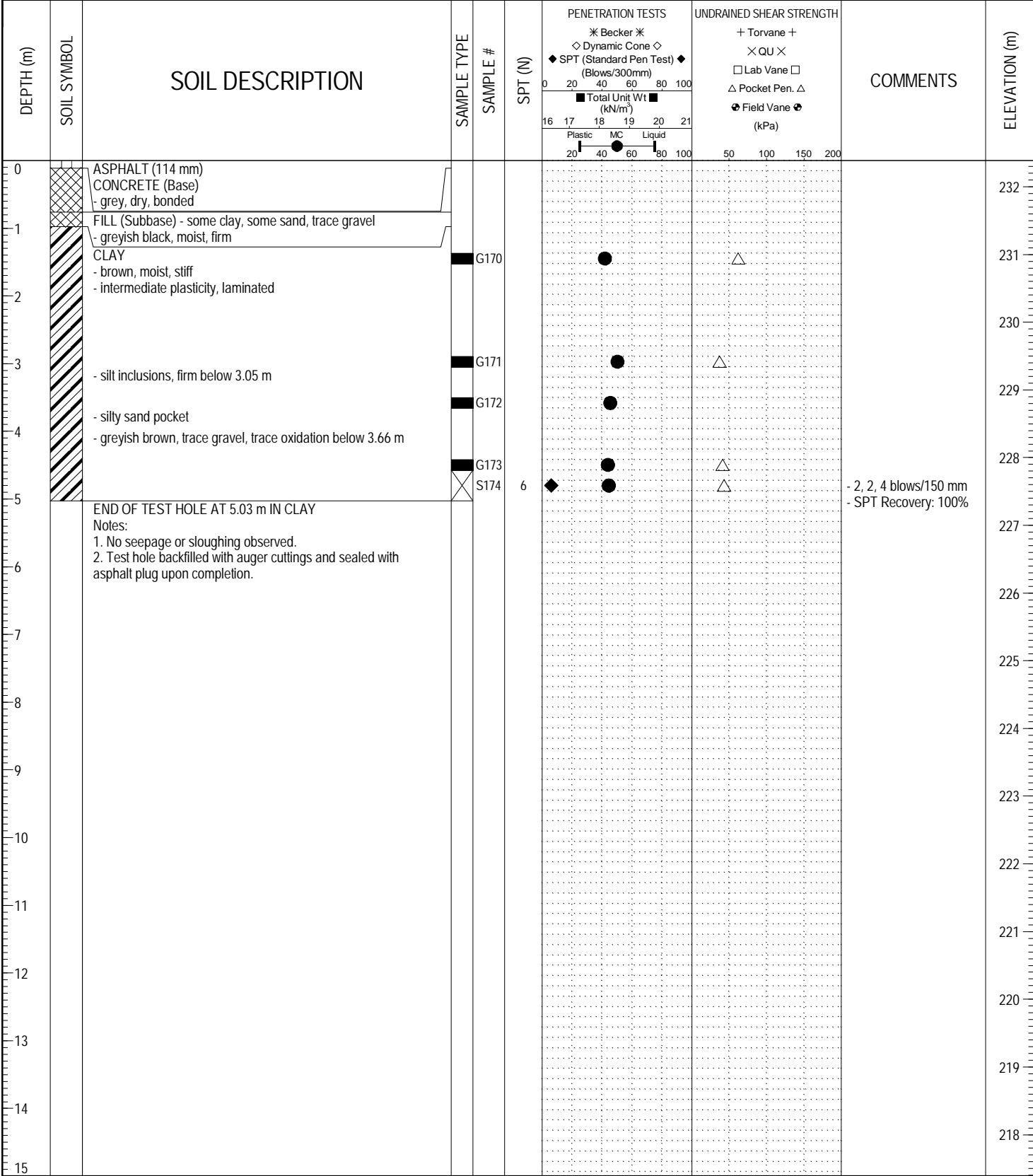
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 4.57 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/31
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S02
LOCATION: Plessis Road South Bound, Curb Lane		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.39

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE



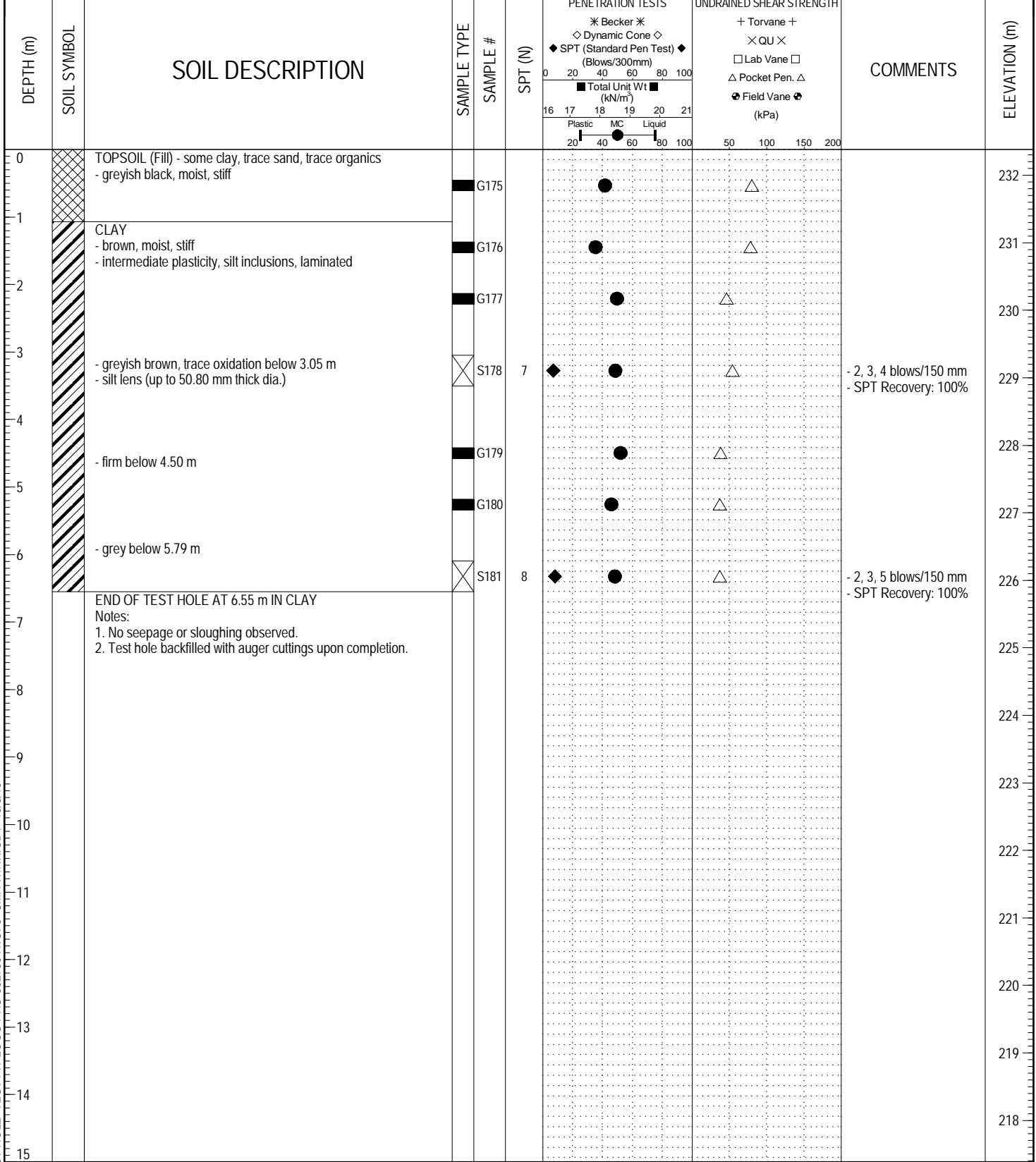
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 5.03 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/31
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S03
LOCATION: Plessis Road North Bound, East Shoulder Lawn		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.38

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE



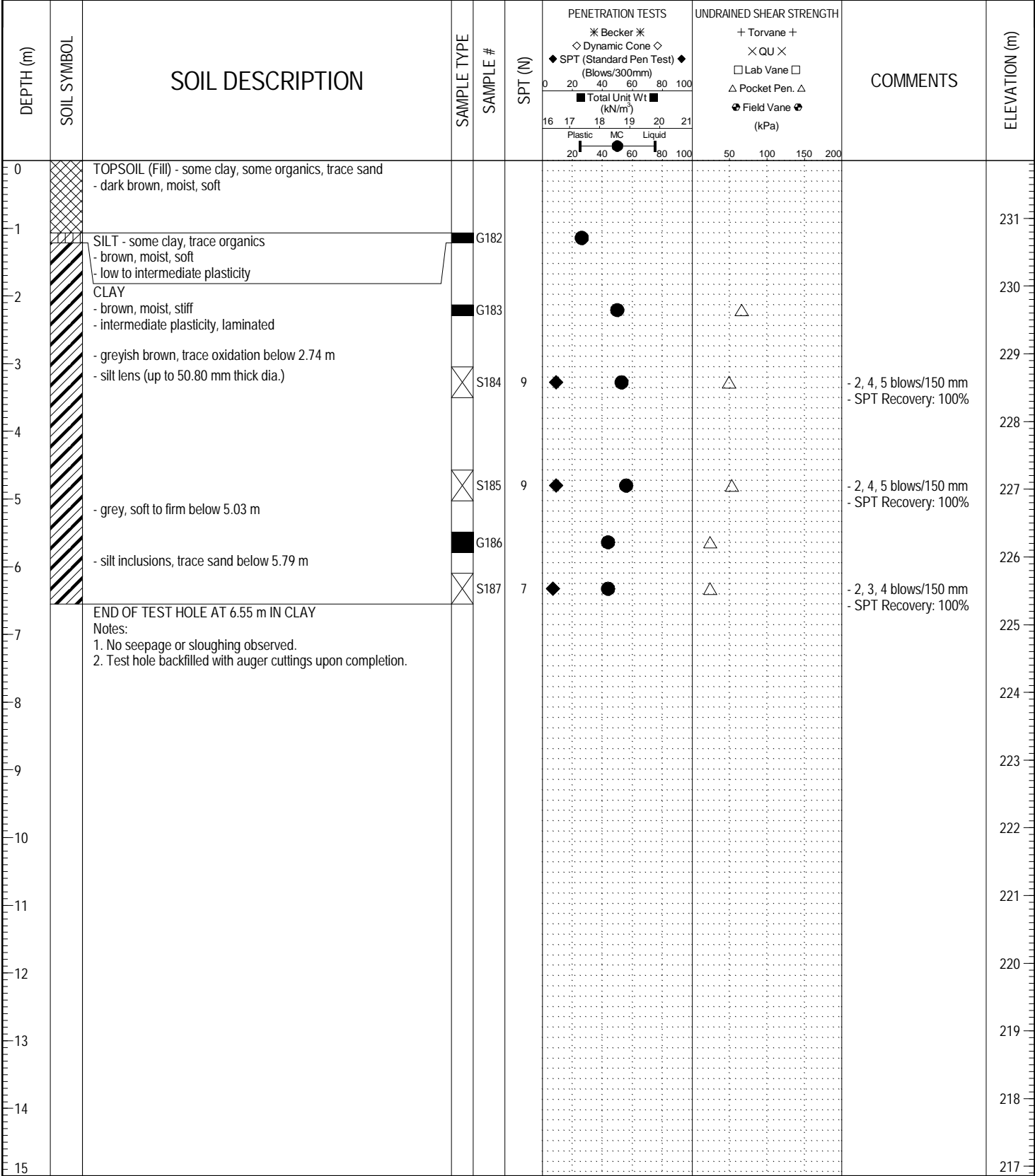
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 6.55 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/31
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S04
LOCATION: Plessis Road South Bound, West Shoulder Lawn		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 231.85

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE



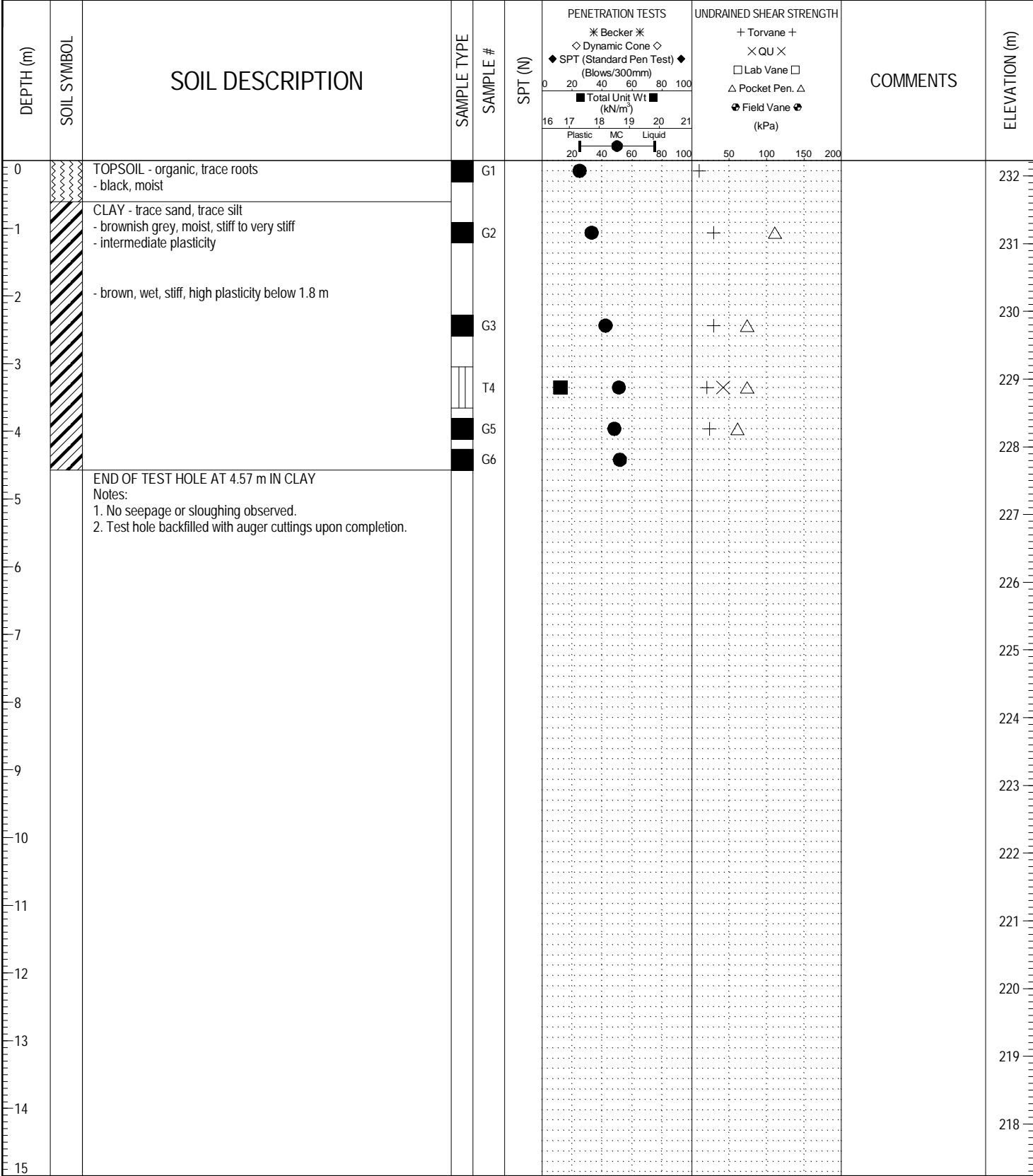
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 6.55 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/31
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S05
LOCATION: Plessis Road North Bound, East Shoulder Lawn		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.23

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE



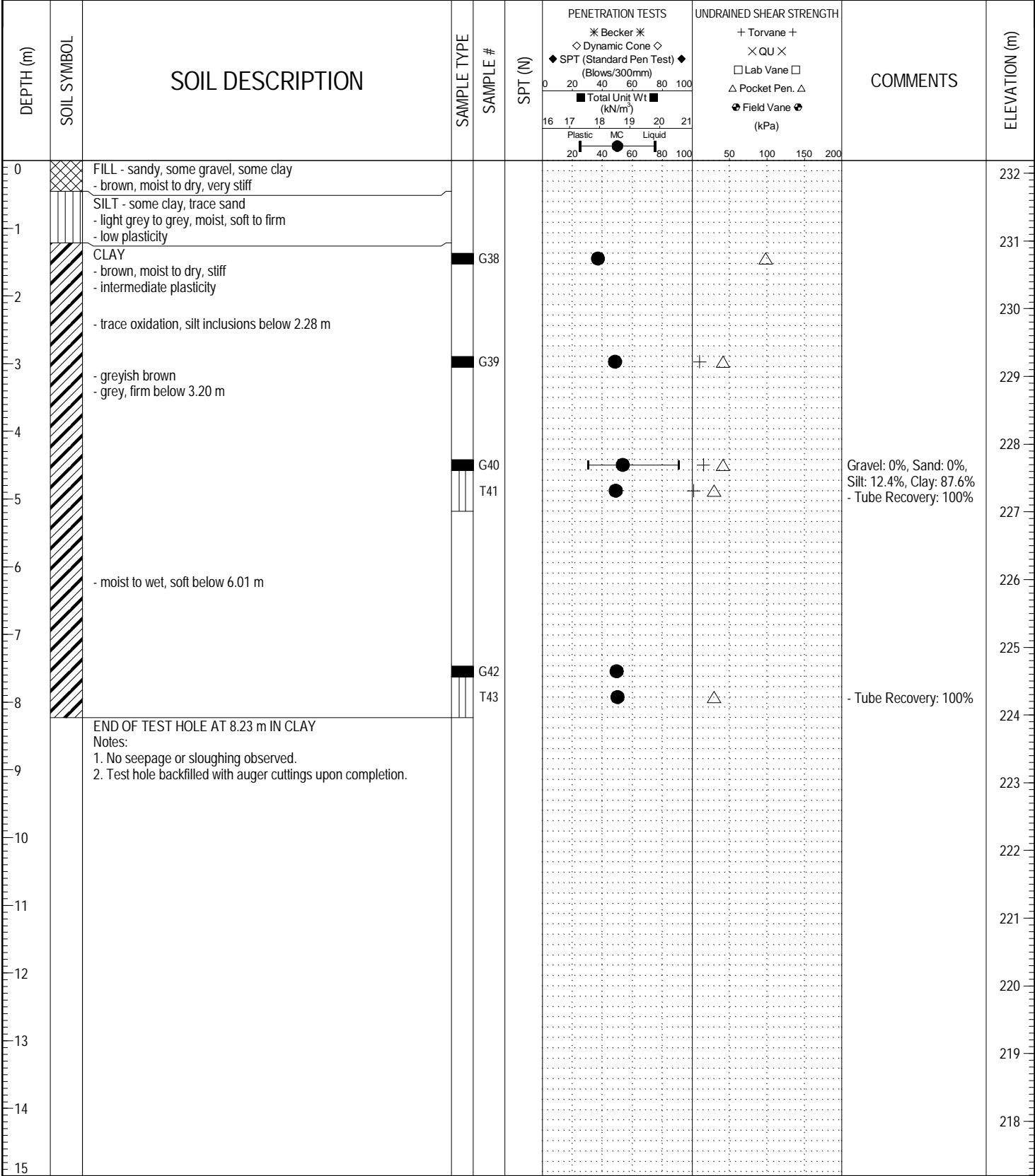
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 4.57 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/9
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass CLIENT: City of Winnipeg TESTHOLE NO: TH12-S07
 LOCATION: Plessis Road South Bound, West Shoulder Lawn PROJECT NO.: 60273041
 CONTRACTOR: Maple Leaf Drilling Ltd. METHOD: Track Mounted MP5, 125 mm SSA ELEVATION (m): 232.19

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE



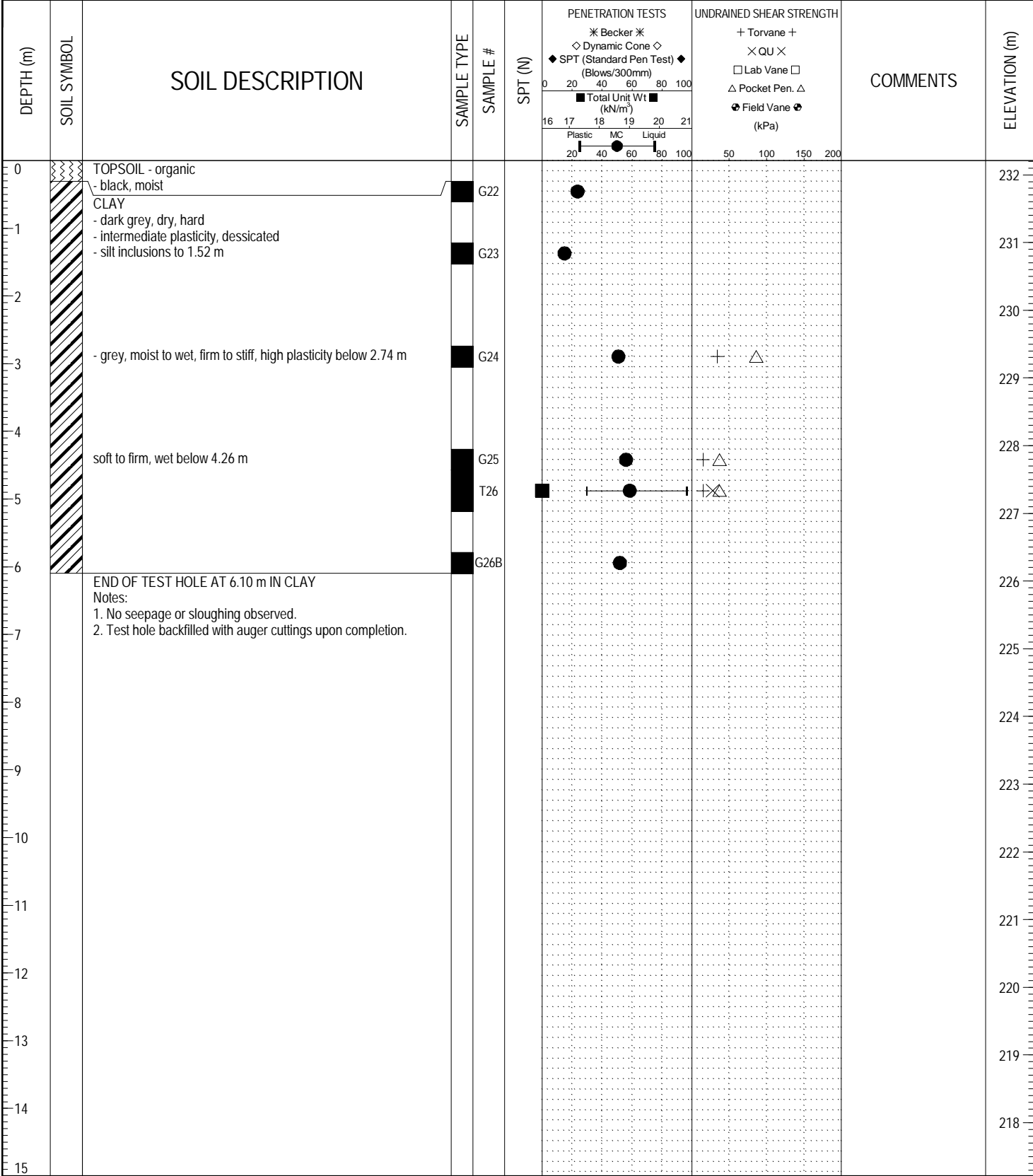
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O. COMPLETION DEPTH: 8.23 m
 REVIEWED BY: Omer Eissa COMPLETION DATE: 12/10/10
 PROJECT ENGINEER: Zeyad Shukri Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S08
LOCATION: Plessis Road North Bound, East Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.21

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE



LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/9/10
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S09
LOCATION: Plessis/Dugald Intersection, North East Corner Lawn		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Mobile B-40, 125 mm SSA	ELEVATION (m): 232.26

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH (kPa)	COMMENTS	ELEVATION (m)
						Becker * Dynamic Cone ◊ SPT (Standard Pen Test) ◆ (Blows/300mm)	Total Unit Wt (kN/m³)			
0		TOPSOIL - some clay, some organics, trace sand - dark brown, moist								232
1		CLAY - trace sand - brown, moist, stiff - intermediate plasticity - silt lens (25.4 mm thick) - greyish brown, silt inclusions, firm, trace oxidation below 1.52 m		G158						231
2				G159						230
3				S160					- 1, 2, 3 blows/150 mm - SPT Recovery: 100%	229
4		- grey, intermediate to high plasticity below 3.35 m		G161						228
5										227
6				S162					- 1, 2, 3 blows/150 mm - SPT Recovery: 100%	226
7										225
8				G163						224
9										223
10		END OF TEST HOLE AT 9.60 m IN CLAY Notes: 1. No seepage or sloughing observed. 2. Test hole backfilled with auger cuttings and sealed with bentonite at ground surface upon completion.		S164					- 1, 2, 3 blows/150 mm - SPT Recovery: 100%	223
11										222
12										221
13										220
14										219
15										218

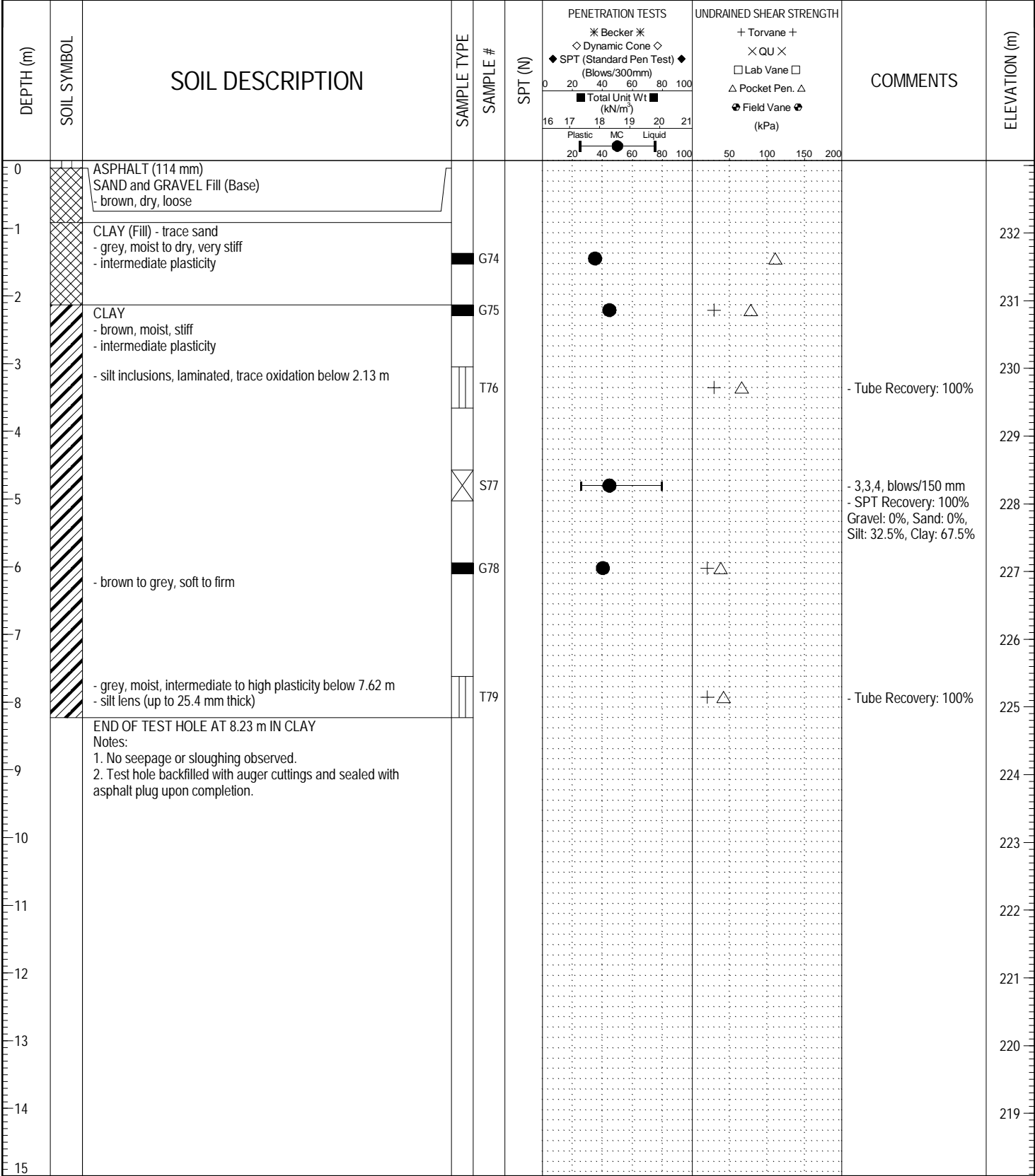
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 9.60 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/27
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S10
LOCATION: Dugald Road West Bound, Curb Lane		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 233.07

SAMPLE TYPE	GRAB	SHELBY TUBE	SPLIT SPOON	BULK	NO RECOVERY	CORE
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LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 8.23 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/11
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S11
LOCATION: Dugald Road West Bound, North Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.65

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH		COMMENTS	ELEVATION (m)
						Becker * Dynamic Cone ◊ SPT (Standard Pen Test) ◆ (Blows/300mm)	Total Unit Wt (kN/m ³)	Torvane + QU × Lab Vane □ Pocket Pen. △ Field Vane ⊕	(kPa)		
0		SAND and GRAVEL (Fill) - trace clay, trace organics - brown, dry, loose									232
1		CLAY - trace sand, trace gravel - grey, moist, stiff - intermediate plasticity - silt inclusions, silt lens (up to 51 mm thick) below 1.52 m		G80							231
3				S81	7	◆	■	+	△	- 2,3,4 blows/150 mm - SPT Recovery: 100%	229
5		- greyish brown, trace oxidation, laminated below 4.27 m		T82				+	△	- Tube Recovery: 100%	228
6		END OF TEST HOLE AT 6.10 m IN CLAY		G83				+	△		227
7		Notes: 1. No seepage observed. 2. Test hole remained open to 4.57 m below ground surface after completion of drilling. 3. Test hole backfilled with auger cuttings upon completion.									226
8											225
9											224
10											223
11											222
12											221
13											220
14											219
15											218

LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/11/10
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass CLIENT: City of Winnipeg TESTHOLE NO: TH12-S12
 LOCATION: Dugald Road West Bound, North Shoulder PROJECT NO.: 60273041
 CONTRACTOR: Maple Leaf Drilling Ltd. METHOD: Track Mounted MP5, 125 mm SSA ELEVATION (m): 232.99

SAMPLE TYPE GRAB SHELBY TUBE SPLIT SPOON BULK NO RECOVERY CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH		COMMENTS	ELEVATION (m)
						Becker * Dynamic Cone ◊ SPT (Standard Pen Test) ◆ (Blows/300mm)	Total Unit Wt (kN/m³)	Torvane + QU × Lab Vane □ Pocket Pen. △ Field Vane ⊗	(kPa)		
0		SAND and GRAVEL (Fill) - trace clay, trace organics - brown, moist, loose									
0.61		CLAY (Fill) - trace gravel, trace sand - grey, moist to dry, stiff to very stiff - intermediate plasticity									232
1.8		- brown, very stiff, intermediate to high plasticity - silt seam (0.61 m thick) - grey, wet, oxidized - low plasticity		G71	●			+	△		231
2.4				G72	●			+	△		230
3.35		END OF TEST HOLE AT 3.35 m IN CLAY		T73							229
4.0		Notes: 1. Seepage observed at 0.30 m below ground surface. 2. No sloughing observed. 3. Test hole backfilled with auger cuttings and sealed with bentonite upon completion.									228
5.0											227
6.0											226
7.0											225
8.0											224
9.0											223
10.0											222
11.0											221
12.0											220
13.0											219

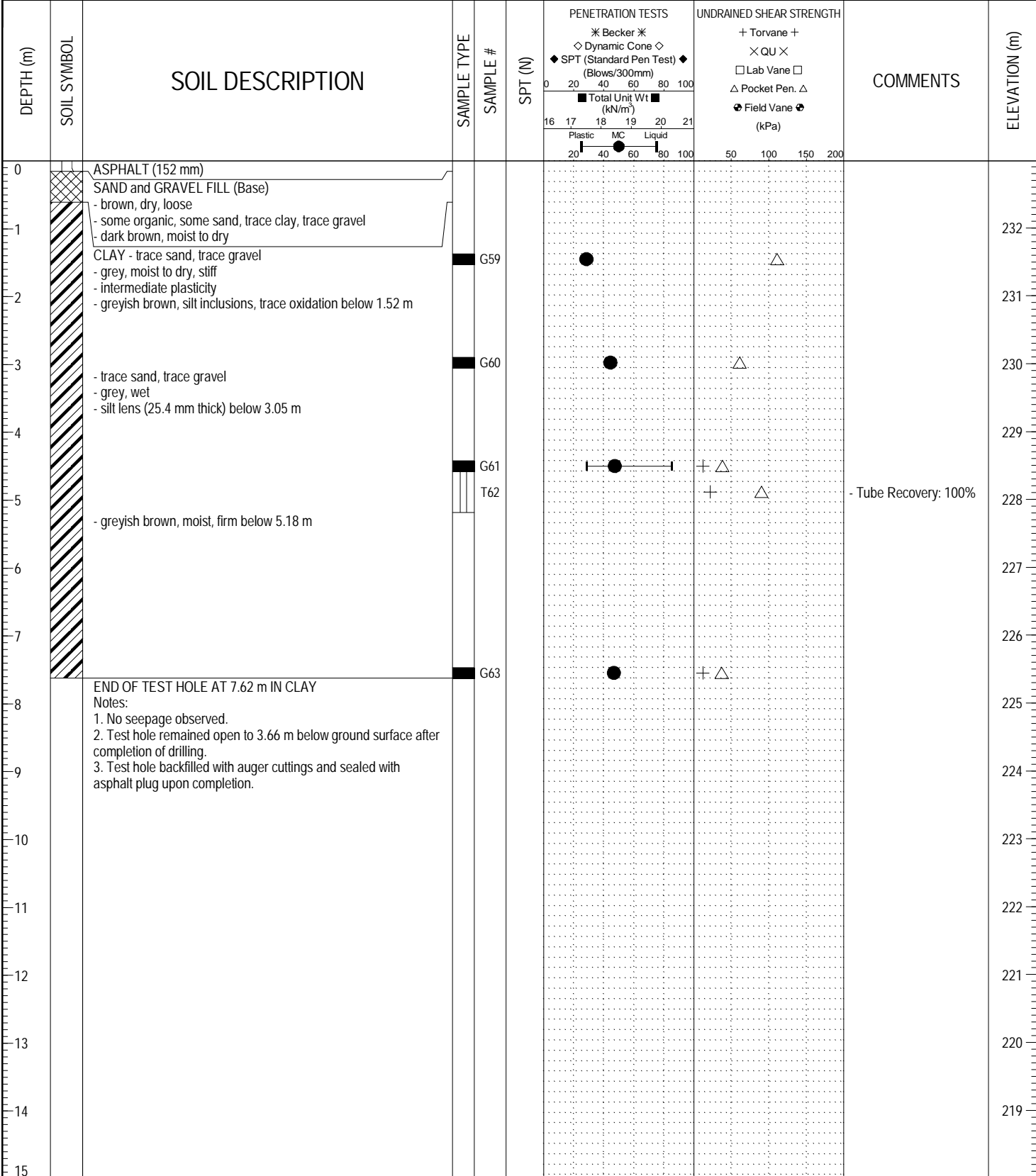
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O. COMPLETION DEPTH: 3.35 m
 REVIEWED BY: Omer Eissa COMPLETION DATE: 12/10/11
 PROJECT ENGINEER: Zeyad Shukri Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S13
LOCATION: Dugald Road East Bound, Curb Lane		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.99

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
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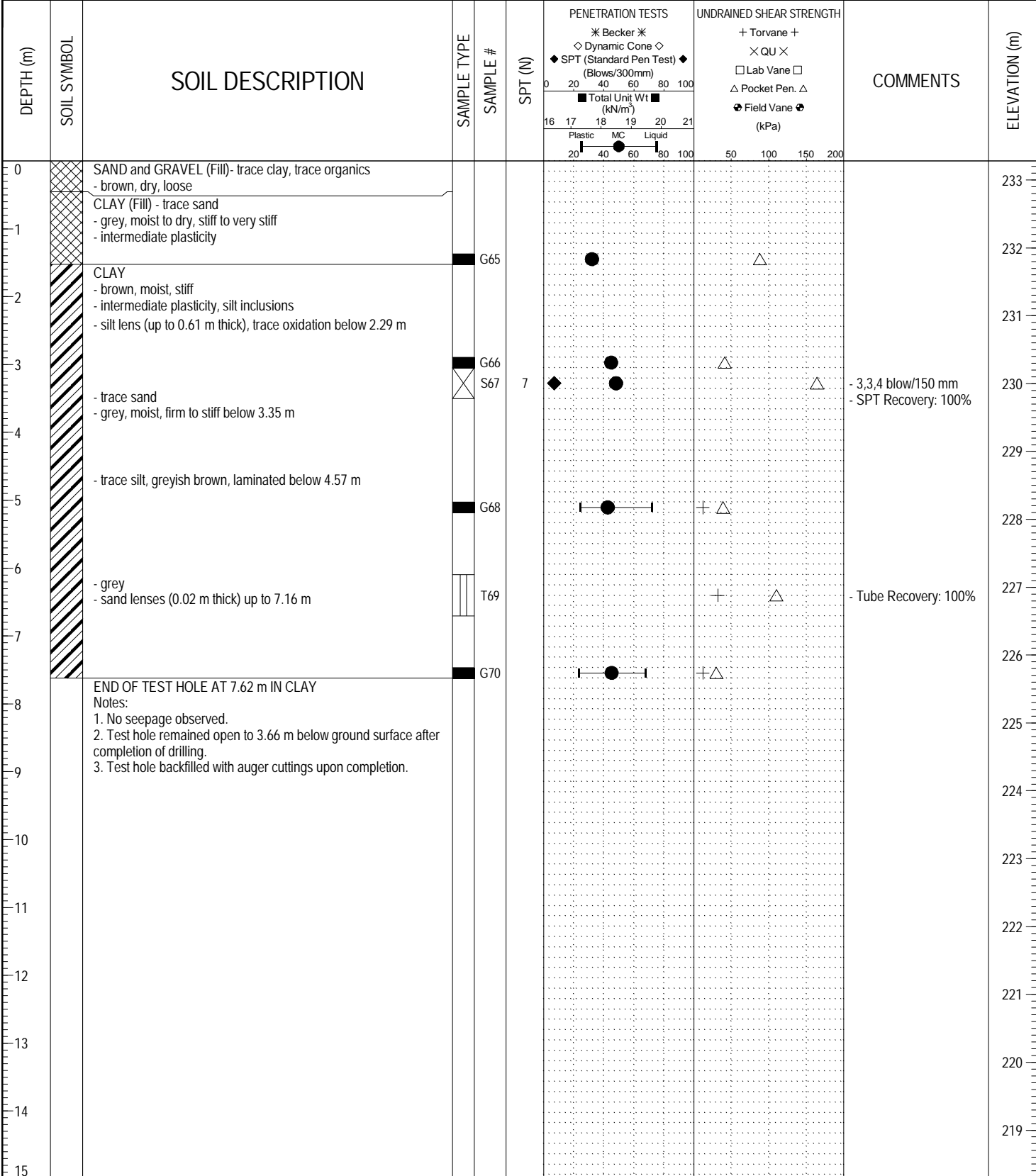
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 7.62 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/11
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S14
LOCATION: Dugald Road West Bound, North Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 233.28

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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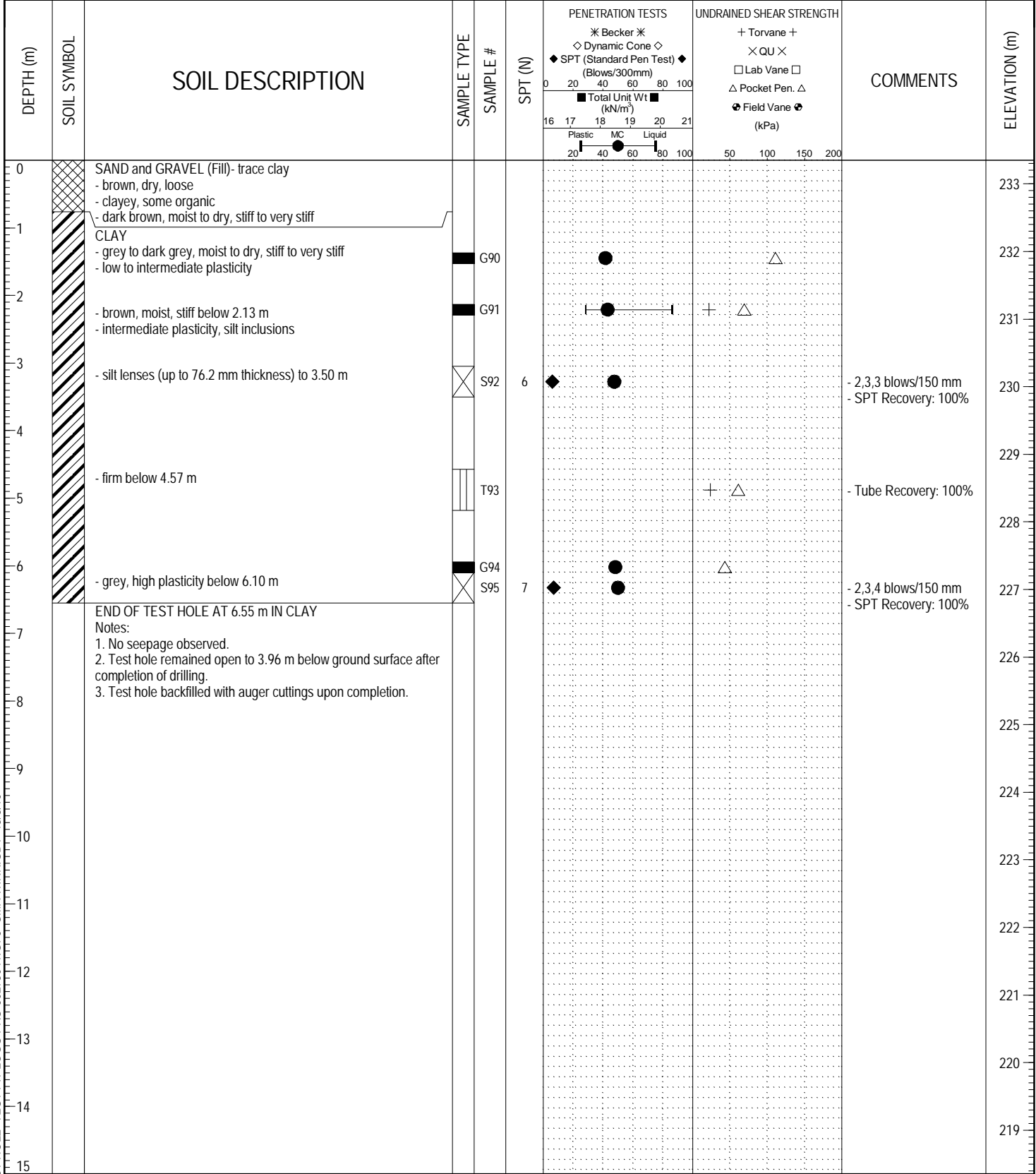
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 7.62 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/11
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S15
LOCATION: Plessis Road South Bound, West Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 233.35

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 6.55 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/11
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S16
LOCATION: Plessis Road South Bound, West Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 233.55

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	SPT (N)	PENETRATION TESTS		UNDRAINED SHEAR STRENGTH		COMMENTS	ELEVATION (m)
						Becker * Dynamic Cone ◊ SPT (Standard Pen Test) ◆ (Blows/300mm)	Total Unit Wt (kN/m ³)	Torvane + QU × Lab Vane □ Pocket Pen. △ Field Vane ⊗	(kPa)		
0		SAND and GRAVEL (Fill) - trace clay, trace organics - brown, moist, loose to compact									233
1		CLAY (Fill) - trace organics, trace sand - dark brown to black, moist, stiff - low to intermediate plasticity		G188							232
2		CLAY - trace sand - brown, moist, firm to stiff - intermediate plasticity, silt inclusions, laminated		G189							231
3				G189							230
4		- silt lens (up to 76.20 mm thick) - trace oxidation below 3.51 m		G190							229
5		- grey, below 4.57 m		S191	7	◆				- 2, 3, 4 blows/150 mm - SPT Recovery: 100%	228
5.03		END OF TEST HOLE AT 5.03 m IN CLAY Notes: 1. No seepage or sloughing observed. 2. Test hole backfilled with auger cuttings upon completion.									227
6											226
7											225
8											224
9											223
10											222
11											221
12											220
13											219

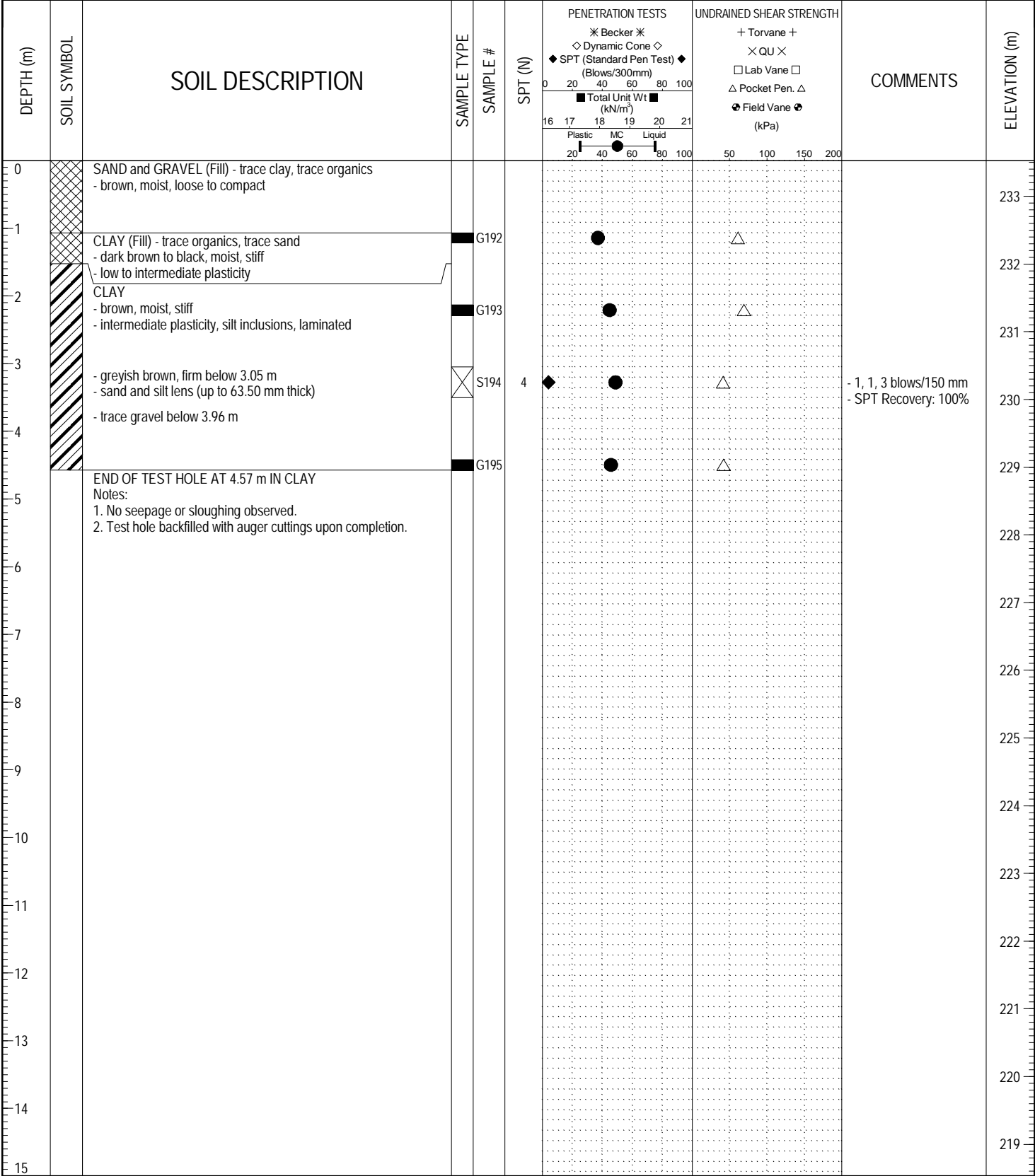
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 5.03 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/31
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S17
LOCATION: Plessis Road South Bound, West Shoulder		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 233.53

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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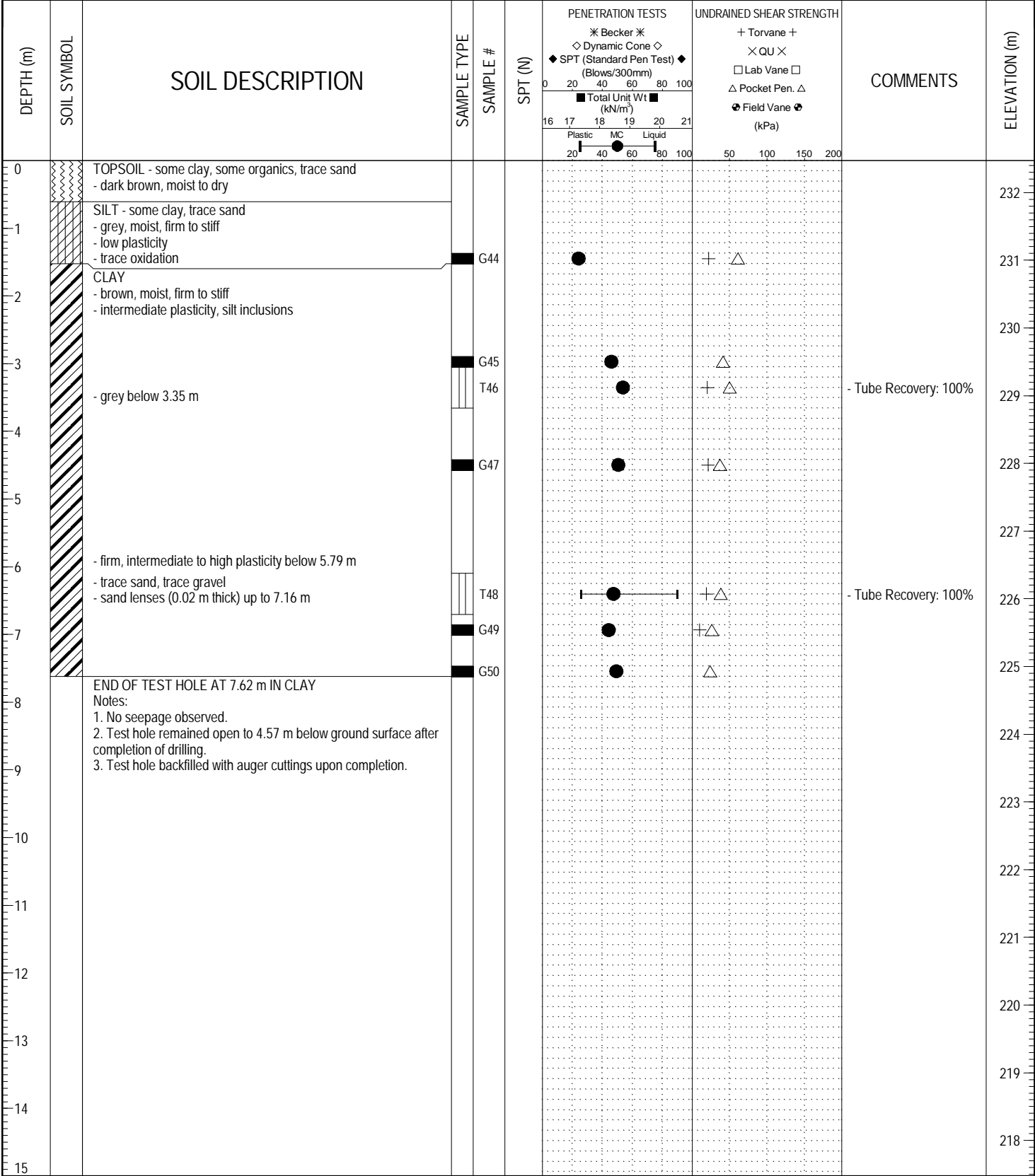
LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 4.57 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/31
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1

PROJECT: Plessis Road Underpass	CLIENT: City of Winnipeg	TESTHOLE NO: TH12-S18
LOCATION: Plessis/Dugald Intersection, South West Corner Lawn		PROJECT NO.: 60273041
CONTRACTOR: Maple Leaf Drilling Ltd.	METHOD: Track Mounted MP5, 125 mm SSA	ELEVATION (m): 232.47

SAMPLE TYPE	<input checked="" type="checkbox"/> GRAB	<input type="checkbox"/> SHELBY TUBE	<input checked="" type="checkbox"/> SPLIT SPOON	<input type="checkbox"/> BULK	<input checked="" type="checkbox"/> NO RECOVERY	<input type="checkbox"/> CORE
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LOG OF TEST HOLE TEST PIT LOGS-PRU-60273041.GPJ UMA WINN.GDT 13/3/19



LOGGED BY: Sam O.	COMPLETION DEPTH: 7.62 m
REVIEWED BY: Omer Eissa	COMPLETION DATE: 12/10/10
PROJECT ENGINEER: Zeyad Shukri	Page 1 of 1