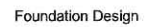


PROJECT 11-1191-0007		RECORD OF BOREHOLE No H3-4		1 OF 2 METRIC							
G.W.P. 156-98-00		LOCATION N 5137408.2; E 277963.6		ORIGINATED BY LK							
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring		COMPILED BY EC							
DATUM Geodetic		DATE June 21 and 22, 2012		CHECKED BY SEMC							
SOIL PROFILE		SAMPLES		GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER								
246.0	GROUND SURFACE										
0.0	ASPHALT (150 mm)										
0.2	Sand, some gravel, some silt, trace clay (FILL) Compact Brown Moist		1	AS	-						
			2	SS	13						
243.3	Silt, some sand, trace gravel (FILL) Compact Brown Moist to wet		3	SS	28						
242.0	Sand and gravel, containing blast rock (FILL) Compact Brown Wet		4	SS	20/0.05						
239.9	Silty SAND, some organics, some gravel Compact Grey Wet		5	SS	12						
238.8	CLAYEY SILT Firm Grey Wet		6	SS	WH						
237.3	CLAY Firm Grey Wet		7	SS	WH						
			8	SS	WH						
			9	TO	PH						
232.7	CLAYEY SILT to SILT Firm Grey Wet		10	SS	9						
13.3											

SUD-MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

Continued Next Page

+ 3, × 3. Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE



SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT		11-1191-0007		<b>RECORD OF BOREHOLE No H3-6</b>		1 OF 2 <b>METRIC</b>							
G.W.P.		156-98-00		LOCATION		N 5137455.2; E 277984.5							
DIST		HWY 17		BOREHOLE TYPE		108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring							
DATUM		Geodetic		DATE		June 26, 2012							
						ORIGINATED BY <u>LK</u>							
						COMPILED BY <u>EC</u>							
						CHECKED BY <u>SEMC</u>							
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES								
242.8	GROUND SURFACE												
0.0	PEAT (Fibrous), some sand, some silt, trace gravel Very soft Black Moist		1	AS	-		242						
240.9			2	SS	4		241						
1.9	Sand and gravel, some silt (FILL) Very loose Brown Wet						240						
			3	SS	3		239						
238.7													
4.1	SILTY CLAY, trace sand Firm Grey Wet		4	SS	4		238						
							237						
			5	TO	PH		236						
			6	SS	WH		235						
							234						
			7	SS	WH		233						
			8	SS	WH		232						
							231						
231.1			9	SS	WH		230						
11.7	CLAYEY SILT Stiff Grey Wet						229						
229.5			10	SS	6		228						
13.3	SILT, some sand, trace to some clay Loose Grey Wet												
228.0													
14.8													

SUD-MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

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+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT		11-1191-0007		RECORD OF BOREHOLE No H3-7		1 OF 2 METRIC											
G.W.P.		156-98-00		LOCATION		N 5137464.1; E 278012.6											
DIST		HWY 17		BOREHOLE TYPE		108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring											
DATUM		Geodetic		DATE		May 15, 2012											
				ORIGINATED BY		EHS											
				COMPILED BY		EC											
				CHECKED BY		SEMC											
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC NATURAL LIQUID			UNIT			REMARKS & GRAIN SIZE DISTRIBUTION (%)		
ELEV	DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa			WATER CONTENT (%)			γ		
244.0	0.0	GROUND SURFACE							20 40 60 80 100 ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED			W <sub>p</sub> — W — W <sub>L</sub> 20 40 60			kN/m <sup>3</sup> GR SA SI CL		
		Sandy gravel to sand, trace silt (FILL) Compact Brown Moist to wet		1	AS	-											
				2	SS	15		243									
242.2	1.8	Clayey silt, trace to some gravel, trace sand (FILL) Firm Brown Wet		3	SS	8		242									
241.7	2.3	Gravelly sand to sand, trace silt (FILL) Compact to very dense Brown Wet		4	SS	70		241									
				5	SS	91		240									
				6	SS	22		239									
239.2	4.9	PEAT		7	SS	4		238									
238.5	5.5	SAND, some organics, trace silt Loose Grey Wet						237									
		CLAY Firm Grey Wet		8	SS	4		236									
								235									
				9	SS	WH		234									
								233									
				10	SS	WH		232									
								231									
				11	SS	WH		230									
				12	SS	WH											
				13	SS	WH											
229.2	14.8	Varved below 9.1 m depth.															

SUD-MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

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+<sup>3</sup>, ×<sup>3</sup>: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE



CSUD MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

Continued Next Page

+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT		11-1191-0007		<b>RECORD OF BOREHOLE No H3-9</b>		1 OF 2 <b>METRIC</b>							
G.W.P.		156-98-00		LOCATION		N 5137499.1; E 278047.4							
DIST		HWY 17		BOREHOLE TYPE		108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring							
DATUM		Geodetic		DATE		May 14, 2012							
				ORIGINATED BY		EHS							
				COMPILED BY		EC							
				CHECKED BY		SEMC							
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES								
243.8	GROUND SURFACE												
0.0	Sandy gravel to sand, trace silt (FILL) Compact Brown Moist to wet		1	AS	-		243						
242.4			2	SS	20								
1.4	Clayey silt, trace sand, trace gravel (FILL) Stiff Brown		3	SS	10		242						
241.6													
2.2	Gravelly sand, some silt (FILL) Compact to dense Brown Wet		4	SS	49		241						
			5	SS	38		240						
			6	SS	26								
239.1													
4.7	CLAYEY SILT, some organics Firm Grey Wet		7	SS	4		239						
238.2													
5.6	SILTY CLAY, trace sand Soft to firm Grey Wet						238						
			8	SS	11		237						
			9	SS	WH		236						
							235						
			10	SS	WH		234						
			11	SS	WH		233						
							232						
			12	SS	WH		231						
							230						
			13	SS	WH								
							229						

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

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+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE



+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

SUD-MTO 001 11-1191-0007.GPJ GAL-MISS.GDT 30/06/15 DATA INPUT:

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PROJECT 11-1191-0007		<b>RECORD OF BOREHOLE No H3-11</b>		1 OF 2 <b>METRIC</b>									
G.W.P. 156-98-00		LOCATION N 5137534.4; E 278082.1		ORIGINATED BY EHS									
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring		COMPILED BY EC									
DATUM Geodetic		DATE May 10 and 11, 2012		CHECKED BY SEMC									
SOIL PROFILE		SAMPLES		GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT $\gamma$ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER TYPE "N" VALUES			SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED	WATER CONTENT (%)						
243.8 0.0	GROUND SURFACE Gravelly sand, trace silt, containing blast rock (FILL) Dense Brown to grey Moist	[Pattern]	1 AS -	▽	243								
			2 SS 38		242								
242.1 1.7	Clayey silt, trace sand (FILL) Stiff Grey to brown Moist		3 SS 14		241								
241.2 2.6	Gravelly sand, trace silt, containing blast rock (FILL) Compact to dense Brown Wet		4 SS 44		240								
			5 SS 44/0.15		239								
239.6	PEAT (Fibrous)	6A SS 25											
4.3	CLAYEY SILT, some organics Firm Brown to grey Wet	6B											
		7 SS 6	238										
238.2 5.6	SILTY CLAY, trace sand Soft to firm Grey Wet	[Pattern]	8 SS 4		237								
			9 SS WH		236								
			10 SS WH		235								
			11 SS WH		234								
			12 SS 1		233								
				232									
				231									
			13 SS WH	230									
			229										

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

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+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007			RECORD OF BOREHOLE No H3-12			1 OF 2 METRIC											
G.W.P. 156-98-00		LOCATION N 5137541.7; E 278110.8		ORIGINATED BY LK													
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring		COMPILED BY EC													
DATUM Geodetic		DATE June 13, 2012		CHECKED BY SEMC													
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC NATURAL LIQUID LIMIT			UNIT WEIGHT			REMARKS & GRAIN SIZE DISTRIBUTION (%)		
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED			W <sub>p</sub>	W	W <sub>L</sub>	UNIT WEIGHT γ	GR SA SI CL		
242.4	GROUND SURFACE																
0.0	Sandy TOPSOIL																
0.2	Silty sand to sand, some gravel, containing blast rock (FILL) Compact Brown to grey Moist to wet		1	SS	14		242										
240.0	CLAYEY SILT, trace sand, trace organics Firm Grey Wet		2	SS	WH		241										
2.4			3	SS	WH		240										
			4	SS	WH		239										
			5	SS	WH		238										
			6	SS	WH		237										
236.6	SILTY CLAY Firm to stiff Grey Wet		7	TO	PH		236										
5.8			8	SS	WH		235										
			9	SS	WH		234										
			10	SS	WH		233										
			11	SS	WH		232										
			12	SS	WH		231										
			13	SS	WH		230										
			14	SS	WH		229										
			15	SS	WH		228										
	Varved below 14.8 m depth.																

SUD-MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

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+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007			RECORD OF BOREHOLE No H3-13			1 OF 2 METRIC						
G.W.P. 156-98-00			LOCATION N 5137571.4; E 278114.9			ORIGINATED BY EHS						
DIST HWY 17			BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers			COMPILED BY EC						
DATUM Geodetic			DATE May 8, 2012			CHECKED BY SEMC						
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT			REMARKS & GRAIN SIZE DISTRIBUTION (%)			
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
243.9	GROUND SURFACE											
243.8	ASPHALT (320 mm)											
0.3	Sand and gravel, trace to some silt (FILL) Dense Brown Wet		1	AS	-		243					45 45 (10)
242.5			2	SS	37		242					
1.5	Silty clay, trace sand, trace organics (FILL) Very stiff Brown to grey		3	SS	22		241					
241.7			4	SS	40		240					
2.2	Moist Sand, trace silt, trace clay (FILL) Compact to dense Brown Wet		5	SS	18		239					
240.2			6	SS	2		238					
3.7	CLAYEY SILT, some organics Soft to firm Grey to black Wet		7	SS	4		237					
			8A	SS	4		236					
237.5			8B	SS			235					
6.4	SILTY CLAY Soft to stiff Grey Wet		9	SS	WH		234					
			10	SS	WH		233					
			11	SS	WH		232					
			12	SS	WH		231					
			13	SS	WH		230					
							229					

SUD-MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

Continued Next Page

+ 3, x 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007			RECORD OF BOREHOLE No H3-14			1 OF 2 METRIC			
G.W.P. 156-98-00		LOCATION N 5137341.5; E 277920.8		ORIGINATED BY EHS					
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring		COMPILED BY EC					
DATUM Geodetic		DATE May 23, 2012		CHECKED BY SEMC					
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT		UNIT WEIGHT $\gamma$ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE		
248.1	GROUND SURFACE								
0.0	ASPHALT (330 mm)								
247.8									
0.3	Sandy gravel to sand, trace silt (FILL) Compact to dense Brown Moist		1	AS	-				
			2	SS	25				
			3	SS	42				
244.0									
4.1	SAND to SAND and SILT, trace organics, trace clay Loose to compact Brown to grey Moist to wet		4	SS	9				
			5	SS	10				
240.9									
7.2	SILTY CLAY, varved Firm Grey Wet		6	SS	1				
			7	SS	WH				
237.9									
10.2	CLAYEY SILT to SILT Firm Grey Wet		8	SS	6				
236.2									
11.9	SAND, trace to some silt Compact Grey Wet		9	SS	26				
			10	SS	12				
233.8									
14.3									

SUD-MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:


Continued Next Page

+ 3, x 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT		11-1191-0007		<b>RECORD OF BOREHOLE No H3-15</b>		1 OF 1 <b>METRIC</b>							
G.W.P.		156-98-00		LOCATION		N 5137362.4; E 277931.0							
DIST		HWY 17		BOREHOLE TYPE		Portable Equipment, NW Casing, Wash Boring							
DATUM		Geodetic		DATE		June 19 and 20, 2012							
						ORIGINATED BY EHS							
						COMPILED BY EC							
						CHECKED BY SEMC							
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES								
243.1	GROUND SURFACE												
0.0	Sandy PEAT (Fibrous) Soft Brown Wet		1	SS	3		243						
242.4	Silty sand, trace to some clay (FILL) Very loose to compact Brown Wet		2	SS	1		242						
0.7	Some organics above 1.5 m depth.		3	SS	15		241						0 63 29 8
240.9	CLAY, varved Soft to stiff Grey Wet		4	SS	2		240						
2.2			5	SS	1		239						
			6	TO	PM		238						
			7	SS	1		237						
235.9	SILT, trace to some clay Loose Grey Wet		8	SS	7		236						
7.2							235						
234.3	SAND, some silt Loose to compact Grey Wet		9	SS	7		234						
8.8	Approximately 0.6 m of heave encountered at 9.7 m depth.		10	SS	10		233						0 82 (18)
			11	SS	66		232						
231.4	Gravelly SAND Very dense Grey Wet						231						
11.7													
230.3	END OF BOREHOLE												
12.8	Note: 1. Ponded water 0.2 m above ground surface (Elev. 243.3 m).												

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

+<sup>3</sup>, ×<sup>3</sup>: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007		RECORD OF BOREHOLE No H3-16				2 OF 2 METRIC									
G.W.P. 156-98-00		LOCATION N 5137370.0; E 277962.0				ORIGINATED BY EHS									
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring				COMPILED BY EC									
DATUM Geodetic		DATE May 24, 2012				CHECKED BY SEMC									
SOIL PROFILE			SAMPLES		GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE			"N" VALUES	SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED							
--- CONTINUED FROM PREVIOUS PAGE ---															
228.6	SILT, trace sand, trace to some clay Loose to compact Grey Wet		12	SS	5		231							0 2 88 10	
								230							
								229							
17.8	Sandy SILT Compact Grey Wet						228								
227.5			14	SS	26										
18.9	END OF BOREHOLE														
	Note: 1. Water level at a depth of 4.3 m below ground surface (Elev. 242.1 m) upon completion of drilling.														

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

PROJECT 11-1191-0007			RECORD OF BOREHOLE No H3-17			2 OF 2 METRIC												
G.W.P. 156-98-00			LOCATION N 5137379.3; E 277988.6			ORIGINATED BY LK												
DIST HWY 17			BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring			COMPILED BY EC												
DATUM Geodetic			DATE June 6, 2012			CHECKED BY SEMC												
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT			UNIT WEIGHT			REMARKS & GRAIN SIZE DISTRIBUTION (%)			
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED			WATER CONTENT (%) W <sub>p</sub> — W — W <sub>L</sub>			UNIT WEIGHT γ	GR SA SI CL			
— CONTINUED FROM PREVIOUS PAGE —																		
230.0	SILT, trace to some clay, trace sand Loose to compact Grey Wet		11	SS	12		231											0 5 83 12
16.3	Silty SAND, trace clay, trace gravel Compact Grey Wet		12	SS	13		230											
							229											
227.4			13	SS	17		228											
18.9	END OF BOREHOLE  Note:  1. Water level at a depth of 4.6 m below ground surface (Elev. 241.7 m) upon completion of drilling.																	

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

+ 3, × 3: Numbers refer to Sensitivity

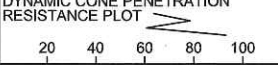

○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007		RECORD OF BOREHOLE No H3-18				2 OF 2 METRIC								
G.W.P. 156-98-00		LOCATION N 5137400.4; E 278003.2				ORIGINATED BY LK								
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring				COMPILED BY EC								
DATUM Geodetic		DATE May 28, 2012				CHECKED BY SEMC								
SOIL PROFILE			SAMPLES		GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT $\gamma$ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE			"N" VALUES	SHEAR STRENGTH kPa						
	--- CONTINUED FROM PREVIOUS PAGE ---						20 40 60 80 100 ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED 20 40 60 80 100			WATER CONTENT (%) 20 40 60				
228.9	SILT Very loose to loose Grey Wet		12	SS	6		230							0 1 87 12
16.3	SAND, some silt Loose Grey Wet		13	SS	9		229							
227.4	Sandy SILT Compact Grey Wet		14	SS	10		228							
225.2	END OF BOREHOLE SPOON REFUSAL (HAMMER BOUNCING)		15	SS	22/0.15		227							
20.0	Note: 1. Water level at a depth of 4.7 m below ground surface (Elev. 240.5 m) upon completion of drilling.						226							


SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

+ 3, × 3: Numbers refer to  
Sensitivity

○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007		RECORD OF BOREHOLE No H3-19				2 OF 2 METRIC						
G.W.P. 156-98-00		LOCATION N 5137426.7; E 278010.6				ORIGINATED BY EHS						
DIST HWY 17		BOREHOLE TYPE Portable Equipment, NW Casing, Wash Boring				COMPILED BY EC						
DATUM Geodetic		DATE June 18, 2012				CHECKED BY SEMC						
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT  SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED	PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT W <sub>p</sub> — W — W <sub>L</sub> WATER CONTENT (%)	UNIT WEIGHT γ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES							
223.1	SAND, some silt Loose to compact Grey Wet		12	SS	7		226					
							225					
							224					
18.7			14	SS	14							0 81 (19)
18.7	END OF BOREHOLE											
	Note: 1. Ponded water at 0.2 m above ground surface (Elev. 242.0 m).											

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

PROJECT <u>11-1191-0007</u>				<b>RECORD OF BOREHOLE No H3-20</b>				2 OF 2 <b>METRIC</b>							
G.W.P. <u>156-98-00</u>				LOCATION <u>N 5137433.7; E 278040.5</u>				ORIGINATED BY <u>LK</u>							
DIST <u>HWY 17</u>				BOREHOLE TYPE <u>108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring</u>				COMPILED BY <u>EC</u>							
DATUM <u>Geodetic</u>				DATE <u>May 29, 2012</u>				CHECKED BY <u>SEMP</u>							
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT $\gamma$ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
ELEV. DEPTH	DESCRIPTION	STRAT. PLOT	NUMBER	TYPE	"N" VALUES			SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED							
--- CONTINUED FROM PREVIOUS PAGE ---															
227.8	SILTY CLAY Soft to firm Grey Wet		11	SS	WH		229								
16.5	SILT, trace to some clay Loose to compact Grey Wet		12	SS	8		228								
226.5	Sandy SILT Compact Grey Wet						227								
17.8			13	SS	21		226								
224.9							225								
19.4	Silty SAND to SAND and SILT Compact Grey Wet		14	SS	10		224								
222.4			15	SS	20		223								
21.9	END OF BOREHOLE  Note:  1. Water level at a depth of 4.9 m below ground surface (Elev. 239.4 m) upon completion of drilling.														

SUD-MTO 001 11-1191-0007.GPJ GAL-MISS.GDT 10/04/14 DATA INPUT:

+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007			RECORD OF BOREHOLE No H3-21			2 OF 2 METRIC											
G.W.P. 156-98-00		LOCATION N 5137445.4; E 278065.0		ORIGINATED BY LK													
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring		COMPILED BY EC													
DATUM Geodetic		DATE June 7, 2012		CHECKED BY SEMC													
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC NATURAL LIQUID			UNIT WEIGHT			REMARKS & GRAIN SIZE DISTRIBUTION (%)		
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED			PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	GR SA SI CL		
--- CONTINUED FROM PREVIOUS PAGE ---																	
227.9	CLAY Firm Grey Wet		11	SS	WH		229										
16.5	CLAYEY SILT Firm Grey Wet		12	SS	WH		228										
226.4	SILT, trace to some clay, trace sand Loose to compact Grey Wet		13	SS	8		227										
18.0							226										
							225										
							224										
							223										
			14	SS	10		222										
221.2							221										
23.2	SAND and SILT Compact Grey Wet						220										
219.4			15	SS	20												
25.0	END OF BOREHOLE SPOON REFUSAL (HAMMER BOUNCING)  Note:  1. Water level at a depth of 4.0 m below ground surface (Elev. 240.4 m) upon completion of drilling.																

SUD-MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:

PROJECT 11-1191-0007			RECORD OF BOREHOLE No H3-22			2 OF 2 METRIC			
G.W.P. 156-98-00			LOCATION N 5137470.7; E 278075.6			ORIGINATED BY LK			
DIST HWY 17			BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring			COMPILED BY EC			
DATUM Geodetic			DATE May 30 and 31, 2012			CHECKED BY SEMC			
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT			
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	20 40 60 80 100 SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED 20 40 60 80 100 PLASTIC LIMIT NATURAL MOISTURE CONTENT LIQUID LIMIT W <sub>p</sub> — W — W <sub>L</sub> WATER CONTENT (%) 20 40 60 UNIT WEIGHT γ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
— CONTINUED FROM PREVIOUS PAGE —									
	SILTY CLAY to CLAY Firm Grey Wet		11	SS	WH		228	3 +	
			12	SS	WH		227	1 +	
226.0							226		
18.0	CLAYEY SILT Stiff Grey Wet		13	SS	WH		225	2 +	
224.5							224		0 0 88 12
19.5	SILT, trace to some clay, trace sand Loose to compact Grey Wet		14	SS	6		223		
			15	SS	6		222		
			16	SS	13		221		0 4 88 8
220.1							220		
23.9	Silty SAND Compact Grey Wet		17	SS	20		219		
219.0									
25.0	END OF BOREHOLE  Note:  1. Water level at a depth of 3.0 m below ground surface (Elev. 241.0 m) upon completion of drilling.								

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:















PROJECT 11-1191-0007		<b>RECORD OF BOREHOLE No H3-23</b>				2 OF 2 <b>METRIC</b>														
G.W.P. 156-98-00		LOCATION N 5137498.4; E 278083.8				ORIGINATED BY EHS														
DIST _____ HWY 17		BOREHOLE TYPE Portable Equipment, NW Casing, Wash Boring				COMPILED BY EC														
DATUM Geodetic		DATE June 12 and 13, 2012				CHECKED BY SEMC														
SOIL PROFILE			SAMPLES			DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC NATURAL LIQUID LIMIT MOISTURE LIMIT CONTENT			UNIT WEIGHT			REMARKS & GRAIN SIZE DISTRIBUTION					
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	SHEAR STRENGTH kPa					WATER CONTENT (%)			γ				
								○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED					W <sub>p</sub> — W — W <sub>L</sub>							
	— CONTINUED FROM PREVIOUS PAGE —							20	40	60	80	100	20	40	60	KN/m <sup>3</sup>	GR	SA	SI	CL
226.3			14	SS	2/0.20															
15.6	END OF BOREHOLE SPOON REFUSAL (HAMMER BOUNCING)  Note:  1. Water level at a depth of 3.2 m below ground surface (Elev. 238.7 m) upon completion of drilling.																			

SUD\_MTO 003 11-1191-0007.GPJ GAL-MASS.GDT 28/11/13 DATA INPUT:

+<sup>3</sup>, ×<sup>3</sup>: Numbers refer to  
Sensitivity

○ 3% STRAIN AT FAILURE

+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007				RECORD OF BOREHOLE No H3-25				2 OF 2 METRIC							
G.W.P. 156-98-00				LOCATION N 5137516.0; E 278139.2				ORIGINATED BY LK							
DIST HWY 17				BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring				COMPILED BY EC							
DATUM Geodetic				DATE June 8 and 11, 2012				CHECKED BY SEMC							
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT $\gamma$ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
ELEV. DEPTH	DESCRIPTION	STRAT. PLOT	NUMBER	TYPE	"N" VALUES			SHEAR STRENGTH kPa							
--- CONTINUED FROM PREVIOUS PAGE ---															
224.4	SILTY CLAY to CLAY Firm to stiff Grey Wet		11	SS	WH		227								0 1 82 17
226							226								
225					225										
224	CLAYEY SILT Firm Grey Wet		12	SS	WH		224								
223							223								
222					222										
221					221										
220					220										
219	SILT, trace to some sand, trace clay Loose to compact Grey Wet		13	SS	5		219								
218.7			14	SS	8										
217															
216															
215															
214			15	SS	12										
213															
212															
211															
210			16	SS	14										
209															
208															
207															
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PROJECT 11-1191-0007		<b>RECORD OF BOREHOLE No H3-26</b>				2 OF 2 <b>METRIC</b>							
G.W.P. 156-98-00		LOCATION N 5137549.1; E 278140.1				ORIGINATED BY LK							
DIST HWY 17		BOREHOLE TYPE 108 mm I.D. Continuous Flight Hollow Stem Augers, NW Casing, Wash Boring				COMPILED BY EC							
DATUM Geodetic		DATE May 31 to June 4, 2012				CHECKED BY SEMC							
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV. DEPTH	DESCRIPTION	STRAT. PLOT	NUMBER	TYPE	"N" VALUES								
--- CONTINUED FROM PREVIOUS PAGE ---													
227.5 16.3	SILTY CLAY Firm to stiff Grey Wet	11	11	TO	PH		228						
	CLAYEY SILT Firm Grey Wet		12	12	SS	WH		227					
									226				
225.8 18.0	SILT, trace clay, trace sand Loose to compact Grey Wet		13	13	SS	10		225					
								224					
								223					
								222					
220.6 23.2	SAND and SILT to SAND, some gravel Compact Grey Wet	14	14	SS	6		221						
								220					
218.8 25.0	END OF BOREHOLE	15	15	SS	24		219						
	Note: 1. Water level at a depth of 2.4 m below ground surface (Elev. 241.4 m) upon completion of drilling.												

SUD-MTO-003 11-1191-0007.GPJ GAL-MISS.GDT 28/11/13 DATA INPUT:



PROJECT <u>11-1191-0007</u>		<b>RECORD OF DCPT No H3-DC3</b>		1 OF 2 <b>METRIC</b>	
G.W.P. <u>156-98-00</u>		LOCATION <u>N 5137439.6; E 278001.6</u>		ORIGINATED BY <u>LK</u>	
DIST <u>          </u> HWY <u>17</u>		BOREHOLE TYPE <u>Dynamic Cone Penetration Test</u>		COMPILED BY <u>EC</u>	
DATUM <u>Geodetic</u>		DATE <u>June 20, 2012</u>		CHECKED BY <u>SEMC</u>	

SOIL PROFILE				SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT w <sub>p</sub>	NATURAL MOISTURE CONTENT w	LIQUID LIMIT w <sub>L</sub>	UNIT WEIGHT γ  kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%)  GR SA SI CL			
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	SHEAR STRENGTH kPa										WATER CONTENT (%)		
						○ UNCONFINED      + FIELD VANE ● QUICK TRIAXIAL    × REMOULDED												
244.6 0.0	GROUND SURFACE																	

SUD\_MTO.003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:

Continued Next Page

+ 3, x 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT <u>11-1191-0007</u>		<b>RECORD OF DCPT No H3-DC4</b>		1 OF 2 <b>METRIC</b>	
G.W.P. <u>156-98-00</u>	LOCATION <u>N 5137493.3; E 278018.0</u>	ORIGINATED BY <u>LK</u>			
DIST <u>          </u> HWY <u>17</u>	BOREHOLE TYPE <u>Dynamic Cone Penetration Test</u>	COMPILED BY <u>EC</u>			
DATUM <u>Geodetic</u>	DATE <u>June 27, 2012</u>	CHECKED BY <u>SEMC</u>			

SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT <div style="display: flex; justify-content: space-around; font-size: small;"> <span>20 40 60 80 100</span> </div>	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES								
242.4 0.0	GROUND SURFACE												
242													
241													
240													
239													
238													
237													
236													
235													
234													
233													
232													
231													
230													
229													
228													

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:

Continued Next Page

+ 3, x 3; Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT <u>11-1191-0007</u>		<b>RECORD OF DCPT No H3-DC5</b>		1 OF 2 <b>METRIC</b>	
G.W.P. <u>156-98-00</u>	LOCATION <u>N 5137509.4; E 278072.8</u>	ORIGINATED BY <u>LK</u>			
DIST <u>          </u> HWY <u>17</u>	BOREHOLE TYPE <u>Dynamic Cone Penetration Test</u>	COMPILED BY <u>EC</u>			
DATUM <u>Geodetic</u>	DATE <u>June 18, 2012</u>	CHECKED BY <u>SEMC</u>			

SOIL PROFILE					SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT   NATURAL MOISTURE CONTENT   LIQUID LIMIT			UNIT WEIGHT  γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)		
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	SHEAR STRENGTH kPa				W <sub>p</sub>	W	W <sub>L</sub>	WATER CONTENT (%)					
244.2 0.0	GROUND SURFACE					○ UNCONFINED	+ FIELD VANE								GR	SA	SI	CL
						● QUICK TRIAXIAL	× REMOULDED											
						20	40	60	80	100	20	40	60					
						</												

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:

Continued Next Page

+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

Continued Next Page

+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

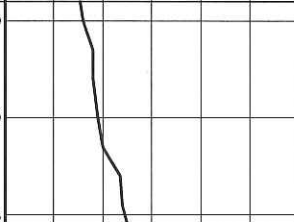
PROJECT <u>11-1191-0007</u>		<b>RECORD OF DCPT No H3-DC7</b>		1 OF 1 <b>METRIC</b>	
G.W.P. <u>156-98-00</u>	LOCATION <u>N 5137339.2; E 277954.6</u>	ORIGINATED BY <u>EHS</u>			
DIST <u>HWY 17</u>	BOREHOLE TYPE <u>Dynamic Cone Penetration Test</u>	COMPILED BY <u>EC</u>			
DATUM <u>Geodetic</u>	DATE <u>June 21, 2012</u>	CHECKED BY <u>SEMC</u>			

SOIL PROFILE				SAMPLES		GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT w <sub>p</sub>	NATURAL MOISTURE CONTENT w	LIQUID LIMIT w <sub>L</sub>	UNIT WEIGHT γ  kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%)  GR SA SI CL
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES			SHEAR STRENGTH kPa	WATER CONTENT (%)					
244.2 0.0	GROUND SURFACE							20 40 60 80 100	20 40 60					
							244							
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							236							
							235							
							234							
							233							
231.9 12.3	END OF DCPT REFUSAL TO FURTHER PENETRATION (HAMMER BOUNCING)						232							

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:



+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

PROJECT 11-1191-0007				<b>RECORD OF DCPT No H3-DC9</b>				2 OF 2 <b>METRIC</b>								
G.W.P. 156-98-00				LOCATION N 5137412.1; E 278026.4				ORIGINATED BY LK								
DIST HWY 17				BOREHOLE TYPE Dynamic Cone Penetration Test				COMPILED BY EC								
DATUM Geodetic				DATE June 12, 2012				CHECKED BY SEMC								
SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT			PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT $\gamma$ kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES			SHEAR STRENGTH kPa ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × REMOULDED								
--- CONTINUED FROM PREVIOUS PAGE ---																
227.9							230									
17.3	END OF DCPT REFUSAL TO FURTHER PENETRATION (HAMMER BOUNCING)  Note:  1. Augered through embankment fill and advanced DCPT starting at 6.1 m depth below ground surface.					229										
						228										

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:

PROJECT		RECORD OF DCPT No H3-DC10				2 OF 2 METRIC						
11-1191-0007												
G.W.P. 156-98-00		LOCATION N 5137463.4; E 278049.1				ORIGINATED BY EHS						
DIST HWY 17		BOREHOLE TYPE Dynamic Cone Penetration Test				COMPILED BY EC						
DATUM Geodetic		DATE June 14, 2012				CHECKED BY SEMC						
SOIL PROFILE		SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV. DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE								
-- CONTINUED FROM PREVIOUS PAGE --												
222.4												
19.5	END OF DCPT											

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:

PROJECT <u>11-1191-0007</u>		<b>RECORD OF DCPT No H3-DC11</b>		2 OF 3 <b>METRIC</b>	
G.W.P. <u>156-98-00</u>	LOCATION <u>N 5137480.3; E 278101.7</u>	ORIGINATED BY <u>LK</u>			
DIST <u>          </u> HWY <u>17</u>	BOREHOLE TYPE <u>Dynamic Cone Penetration Test</u>	COMPILED BY <u>EC</u>			
DATUM <u>Geodetic</u>	DATE <u>June 12, 2012</u>	CHECKED BY <u>SEMC</u>			

SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT γ	REMARKS & GRAIN SIZE DISTRIBUTION (%)
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES								
-- CONTINUED FROM PREVIOUS PAGE --													
								<div style="display: flex; justify-content: space-between;"> <span>20 40 60 80 100</span> <span>20 40 60 80 100</span> </div> <div style="display: flex; justify-content: space-between;"> <span>20 40 60 80 100</span> <span>20 40 60 80 100</span> </div>					
228													
227													
226													
225													
224													
223													
222													
221													
220													
219													
218													
217													
216													
215													
214													

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:

Continued Next Page

+ 3, x 3; Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE

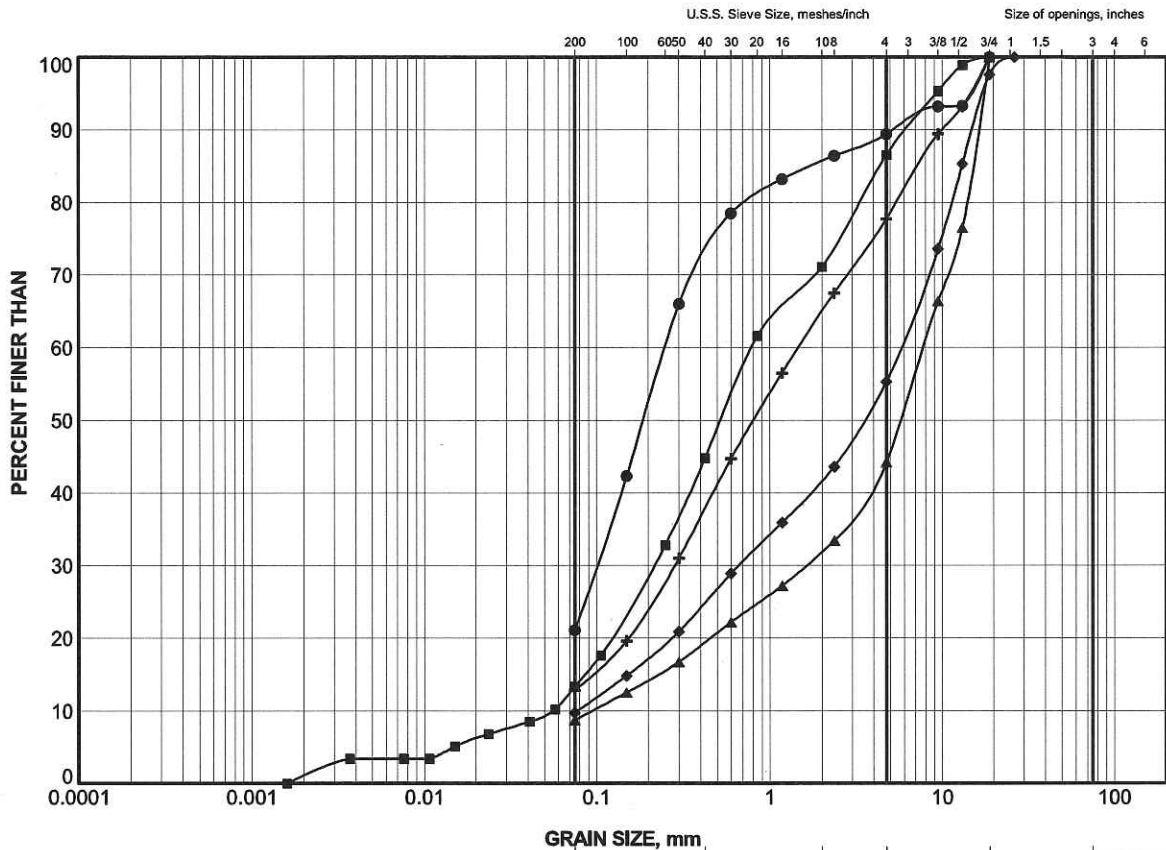
PROJECT <u>11-1191-0007</u>		<b>RECORD OF DCPT No H3-DC12</b>		1 OF 2 <b>METRIC</b>	
G.W.P. <u>156-98-00</u>	LOCATION <u>N 5137541.5; E 278120.2</u>	ORIGINATED BY <u>LK</u>			
DIST <u>          </u> HWY <u>17</u>	BOREHOLE TYPE <u>Dynamic Cone Penetration Test</u>	COMPILED BY <u>EC</u>			
DATUM <u>Geodetic</u>	DATE <u>June 14, 2012</u>	CHECKED BY <u>SEMC</u>			

SOIL PROFILE				SAMPLES			GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT		PLASTIC LIMIT W <sub>p</sub>	NATURAL MOISTURE CONTENT W	LIQUID LIMIT W <sub>L</sub>	UNIT WEIGHT  γ  kN/m <sup>3</sup>	REMARKS & GRAIN SIZE DISTRIBUTION (%)  GR SA SI CL	
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	"N" VALUES	SHEAR STRENGTH kPa			WATER CONTENT (%)							
						○ UNCONFINED			+ FIELD VANE	● QUICK TRIAXIAL						× REMOULDED
242.4 0.0	GROUND SURFACE															
										</						

SUD\_MTO 003 11-1191-0007.GPJ GAL-MISS.GDT 08/11/13 DATA INPUT:

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+ 3, × 3: Numbers refer to Sensitivity      ○ 3% STRAIN AT FAILURE



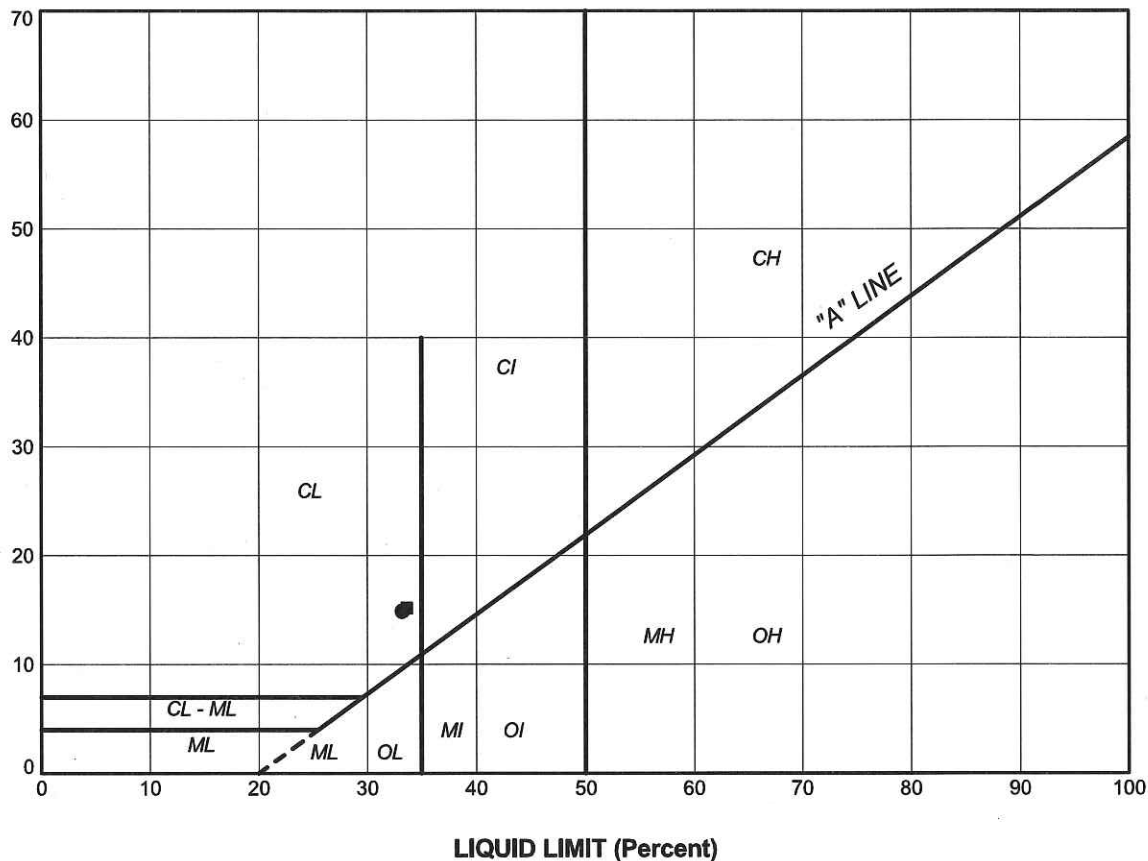
CLAY AND SILT	fine	medium	coarse	fine	coarse	Cobble Size
	SAND SIZE			GRAVEL SIZE		

#### LEGEND

SYMBOL	BOREHOLE	SAMPLE	ELEV (m)
●	H3-2	2	242.5
■	H3-4	2	244.2
▲	H3-5	1	244.5
+	H3-9	5	240.5
◆	H3-13	1	243.4

PROJECT				
HIGHWAY 17 STA 13+900 TO 14+200 (WBL)				
TITLE				
GRAIN SIZE DISTRIBUTION SANDY GRAVEL to SILTY SAND (FILL)				
PROJECT No.		11-1191-0007		FILE No.
DRAWN		TB	Nov 2013	SCALE N/A
CHECK		SEMP	Nov 2013	REV.
APPR			Nov 2013	
 <b>Golder Associates</b> SUDBURY, ONTARIO		<b>FIGURE C1</b>		

PLASTICITY INDEX (Percent)



**SOIL TYPE**  
C = Clay  
M = Silt  
O = Organic

**PLASTICITY**  
L = Low  
I = Intermediate  
H = High

### LEGEND

SYMBOL	BOREHOLE	SAMPLE	LL(%)	PL(%)	PI
●	H3-10	3	33.2	18.3	14.9
■	H3-12	3	33.6	18.4	15.2

PROJECT					
HIGHWAY 17 STA 13+900 TO 14+200 (WBL)					
TITLE					
PLASTICITY CHART CLAYEY SILT					
PROJECT No.		11-1191-0007		FILE No.	
DRAWN		TB		Nov 2013	
CHECK		SEMC		Nov 2013	
APPR				Nov 2013	
Golder Associates SUDBURY, ONTARIO		SCALE N/A REV.			
FIGURE C3					