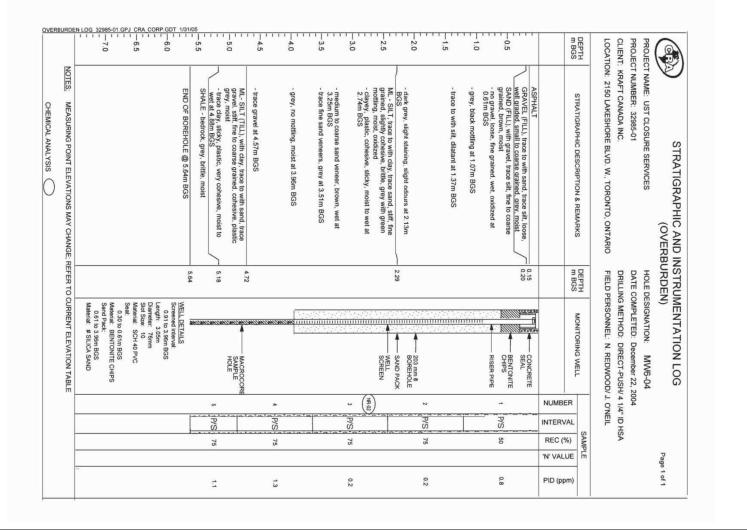
	00EN.LOG 32995-01.GPJ CR4_CORP.GDT 1/31/05 0 0 0 0 0 0 0 0 0	4 4 5	цітіцітіці а 3.0 р. љ 0 љ	-1.0	0.5	DEPTH m BGS	
CHEMICAL ANALYSIS	END OF BOREHOLE @ 4.97m BGS VIEL DETALS Screened interval: Legit: 306m Sid Size 10 Material: SCH 40 PVC So 30 to 1.22m BGS O.30 to 1.22m BGS Sand Pace: 1.22 to 4.57m BGS 1.22 to 4.57m BGS 1.22 to 4.57m BGS 1.22 to 4.57m BGS Naterial: #1 SILICIA SAND VIDTES: MEASUBING POINT ELEVATIONS MAY CHANGE: BEFED TO CLIDERANT ELEVATION TARE	- with gravel at 4.57m BGS	- moist at 3.35m BGS	mottled gray/green, moist - wet at 2.29m BGS	ASPHALT SAND (FILL), dense, brown, moist - 81t with sand, laminated, mottled gray/green at 0.61m BGS SILT, trace sand, trace gravel, firm, laminated,	STRATIGRAPHIC DESCRIPTION & REMARKS	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN) PROJECT NAME: UST CLOSURE SERVICES PROJECT NUMBER: 32985-01 CLIENT: KRAFT CANADA INC. LOCATION: 2150 LAKESHORE BLVD. W., TORONTO, ONTARIO FIELD PERSONNEL: B. IOTZOV
					0.46	DEPTH m BGS	URDE HOLE E DATE C DRILLIN
עטראבואד ברביארווטוא ואפרב	MELL DETAILS Screened interval: 1.52 to 4.57m BGS Length: 3.05m Stot Size: 10 Material: SCH 40 PVC Seal: 0.30 to 122m BGS Sand Pack: 1.22 to 4.57m BGS Material: #1 SLL/CIA SAND	CHIPS BENTONTE	Swyb PACK		SEAL CONCRETE	MONITOR INSTALLATION	STRUMENTATION LOG IRDEN) HOLE DESIGNATION: MW2-04 DATE COMPLETED: January 21, 2004 DRILLING METHOD: 4 1/4" ID HSA FIELD PERSONNEL: B. IOTZOV
		~ (*)	о ъ	3 2 1 N A N	-	NUMBER	4
			65 65	,	75	INTERVAL REC (%)	
		¥62	5 5 23 4	3 18	16	REC (%)	Pag
		o o	o o	o o	o	PID (ppm)	Page 1 of 1

	ENLOG 32985-01.0PJ CRA_CORP.GDT 1/31/0 0 0 0 0 0 0 0 0		4.0 	3.5			2.0	1.5	-1.0	0.5		iii buo	DEPTH	PROJEC PROJEC CLIENT	
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE, REFER TO CURRENT ELEVATION TABLE CHEMICAL ANALYSIS	END OF BOREHOLE @ 5.18m BGS	- with sand, with gravel at 4.88m BGS	ML - SILT (TILL), trace sand, trace gravel, stiff, medium plasticity, laminated, grav/olive, moist to wet	- trace gravel, trace sand, trace clay at 3.66m BGS				- saturaled at 1.22m bios	SAND and SILT (TILL), firm, gray	SAND and GRAVEL (FILL), dense. gray/brown, slight petroleum hydrocarbon odour	ASPHALT		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: UST CLOSURE SERVICES PROJECT NUMBER: 32985-01 CLIENT: KRAFT CANADA INC. LOCATION: 2150 LAKESHORE BLVD. W., TORONTO, ONTARIO	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
REFER TO		5 18	4.27						0.91	0.30			DEPTH	HOLE D DATE C DRILLIN FIELD P	NSTRU
CURRENT ELEVATION TABLE	WELL DETAILS Screened interval: 1.52 to 4.57m BGS Length: 3.05m States: 51m States: 51m 0.30 to 1.27m BGS Material: BENTOWITE CHIPS 53m7 Pack: 1.22 to 4.77m BGS Material: #1 SLUCA SAND	BENTONITE			WELL	BOREHOLE		[11]		BENTONITE	CONCRETE		MONITOR INSTALLATION	HOLE DESIGNATION: MW3-04 DATE COMPLETED: January 21, 2004 DRILLING METHOD: 4 1/4" ID HSA DRILLING METHOD: 4 1/4" ID HSA FIELD PERSONNEL: B. IOTZOV	MENTATION LOG
			(°)	5		*	3		2	-		NUMBER		4	
		$ \times $				\leq	50		\leq	5		REC (%)	SA		
		71 17	6	100 4		38 4	8		0 13	6 41	-	'N' VALUE	SAMPLE		Pa
		0	0	0		0	0		1	0	-	PID (ppm)			Page 1 of 1

NOTES: ME	5 5 0 Plastic	-4.0 - sand at 4.1 -4.5 ML - SI hard, w	-2.5 - with c -3.0 - black grained grained wet, - not di	-1.5 vegeta vegeta - trace - motiling - 2.0 1.83m	-0.5 SAND [FI] grained, p gravet, met, no - grey with -1.0 MI - SILT	m BGS STR/	PROJECT NAME: UST CLOSU PROJECT NUMBER: 32985-01 CLIENT: KRAFT CANADA INC. LOCATION: 2150 LAKESHORE
MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE	END OF BOREHOLE @ 4.57m BGS	-sand seam for 102mm, with silt, fine grained, grey at 4.11m BGS ML - SILT (TILL), with clay, trace gravel, trace sand, hard, well graded, fine to coarse grained, cohesive,	 - with clay, green mottling at 2.44m BGS - black vegetative debris at 3.05m BGS SMML - SANDY SILT, slightly cohesive, fine grained, non plastic, slightly dilatent, grey, moist to wet, - not dilatent, moist at 3.51m BGS 	sightly to non-plastic, grey with green mottling, vegetative debris, moist - with sand, fine grained, trace oxidation, no vegetative debris at 1.22m BGS - trace sand, coarse grained, grey oxidation mottling, moist to wet, sheen, storig petroleum hydrocarbon odour, black grease from 1.52 to 1.83m BGS	GSPHALT GRAVEL (FLL), with sand, trace sitt loose, fine to coarse grained, well graded, brownish grev, moist SAND (FLL), trace sitt, compact, fine to medium grained, poorly graded, brown with oxidation, moist to wet, no adours grey with dark grey mottling, wet, no odours at 0.76m BGS 0.76m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	COVERBURDEN) PROJECT NAME: UST CLOSURE SERVICES PROJECT NUMBER: 32985-01 CLIENT: KRAFT CANADA INC. LOCATION: 2150 LAKESHORE BLVD. W., TORONTO, ONTARIO DIRILLING METHOD: DIRECT-PUS LOCATION: 2150 LAKESHORE BLVD. W., TORONTO, ONTARIO FIELD PERSONNEL: N. REDWOO
EFER TO	4.88	4.57	3.20		0.20 0.38 0.97	DEPTH m BGS	HOLE D DATE C DRILLIN FIELD F
CURRENT ELEVATION TABLE	=TAILS =TAILS 3 interval: 0.4.57m BC 0.4.57m BC SCH 40 F SCH 40 F		SOREEN	<u>a da kanada kanada kana</u> K	RISER PIPE	MONITORING WELL	IRDEN) HOLE DESIGNATION: MV5-04 DATE COMPLETED: December 22, 2004 DRILLING METHOD: DIRECT-PUSH/ 4 1/4" ID HSA FIELD PERSONNEL: N. REDWOOD/ J. O'NEIL
		4	ω (RP.04	2 (NR.03)		NUMBER	2004 1 4 1/4" J. O'N
		P/S	Pys	PVS	P/S		EIL ID HS
		75	75	75	75	REC (%)	
		1.0	1.4	0.6	0,6	'N' VALUE m	Page 1 of 1



		<u>NLOG 32985-0</u> ດາ ເກ	1 1 1	6.0	5,5	 , , , , , , , , , , , , , , , , , , ,	- 4.5	-4.0	- 3.5	-3.0	- 2.5		- 1.5		5	-0.5			DEPTH m BGS	LOCATI	PROJEC	PROJEC	
CHEMICAL ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE							и ж		Note: Borehole was backfilled with bentonite chips and a concrete surface.	MUCL - CLAYEY SILT, firm to stiff, dark grey, moist, no odour END OF BOREHOLE @ 2.59m BGS		odour				GRANULAR FILL, no odour or staining		STRATIGRAPHIC DESCRIPTION & REMARKS	E BLVD. W., TORONTO, ONTARIO	PROJECT NUMBER: 32865-02 DATE COMPLETED: November 14, 2005 CLIENT: KRAFT CANADA INC. DRILLING METHOD: 2" PERCUSSION/BOSCH	PROJECT NAME: UST CLOSURE SERVICES HOLE DESIGNATION: BH	STRATIGRAPHIC LOG (OVERBURDEN)
	V TABLE										2.51		<u>د</u> م	1.37			0.10		DEPTH m BGS	ER	ber 14, 2 CUSSIO	BH201-05	
												SS-3		SS-2		SS-1		NUMBE	ER		005 N/ROS	01	
												\times	Sec.	\times	\square	\times	J	INTERV			CH CH		
														100		5		REC (9	- P				
	-																	'N' VAL					Page 1 of 1
												0	0	0		0		Eagle (p	pm)				1 of 1

	N LOG 329	6.5	6.0	8P.GDT 1/6	 111	- 4.5	-4.0	3.5	- 3.0		- 2.5		11 11 1.5	- 1.0	0.5			mpoo	DEPTH	LOCATI	CLIENT:	PROJEC	
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE									Note: Borehole was backfilled with bentonite chips and a concrete surface. Borehole was redrilled from 1.5 to 2.3 m bgs.	END OF BOREHOLE @ 2.59m BGS		- searris ur sity uey, yiey, sini, inuasi nurri 1.54 ta 2.39m boo	 strong petroleum hydrocarbon odour, some sheen on soil surface at 1.37m BGS wet/saturated, dilatant, moderate petroleum hydrocarbon odour, fainter with depth at 1.52m BGS 		ML/SM - SILTY SAND/SANDY SILT, compact/firm, fine grained, dark grey, moist, mild petroleum hydrocarbon odour - dark grey/black staining, stronger petroleum hydrocarbon odour from 0.61 to 0.76m BGS	GRANULAR FILL			STRATIGRAPHIC DESCRIPTION & REMARKS	EBLVD. W., TORONTO, ONTARIO FIELD PERSONNEL:	DATE COMPLETED: NOVEMBER: 3298-02 CLIENT: KRAFT CANADA INC. DRILLING METHOD: 2" PERCUSSION/B	RE SERVICES	STRATIGRAPHIC LOG (OVERBURDEN)
NTABLE										2.09	5			Ø		ŝ		mBGS	DEPTH	TER	November 14, 2005 2" PERCUSSION/BOSCH	BH202-05	
ľ												SS-3		SS-2	SS-1	BH202-0.5-2	NU	MBER	Γ		2005 DN/BO	G	
											>	<	\square	5-5	\supset	25	INTE	ERVAL			SCH		
												0		10	20		RE	C (%)	SAMPLE				
-																	'N' \	/ALUE	Ē				Page 1 of 1
												0		5)	10	Eagle	e (ppm)					of 1

	EN LOG 32985-02.G	6.0	 - 5.0	4.5	-4.0	3.5	- 3.0	2.5	-2.0	-1.5	-1.0	-0.5			DEPTH m BGS	LOCATIO	PROJEC	
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE CHEMICAL ANALYSIS									Note: Borehole was backfilled with bentonite chips and a concrete surface.	END OF BOREHOLE @ 1.52m BGS	- silly, dark grey, wet/saturated, dilatant, faint petroleum hydrocarbon odour at 0.76m BGS	SM - SAND with slit, compact, fine to medium grained, brown, moist, some black coal clasts	GRANULAR FILL, no staining or odour		STRATIGRAPHIC DESCRIPTION & REMARKS	CLIENT: KRAFT CANADA INC. LOCATION: 2150 LAKESHORE BLVD. W., TORONTO, ONTARIO FIELD PERSONNEL: K. PETER	RESERVICES	STRATIGRAPHIC LOG (OVERBURDEN)
T ELEVATION TABLE										1.52		0.46	0.15 S-BH203-0,5,2,5 0	NUMBE INTERV REC (9 'N' VAL! Eagle (p	AL SAMPLE	DRILLING METHOD: 2" PERCUSSION/BOSCH FIELD PERSONNEL: K. PETER	HOLE DESIGNATION: BH203-05 DATE COMPLETED: November 14, 2005	Page 1 of 1

	NLOG 32985-02.GF 1 1 1 1 1 1 ອາ ອາ	6.0	5.5	 4.5	4.0	3.5	- 3.0	- 2.5	-2.0	- 1.5		0.5		DEPTH	PROJE(PROJE(CLIENT LOCATI	
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE								END OF BOREHOLE @ 2.29m BGS Note: Borehole was backfilled with bentonite chips and a concrete surface.	CL/ML - CLAYEY SILT, stiff, grey, moist, no odour or staining	 - dark grey, faint petroleum hydrocarbon odour, some staining/sheen on soil at 1.37m BGS 	ML/SM - SILTY SAND, soft, fine grained, brown, saturated, dilatant	- no recovery, very soft, spoons appear saturated from 0.20 to 0.76m BGS		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: UST CLOSURE SERVICES HOLE DESIGNATION: BH204-05 PROJECT NUMBER: 32985-02 DATE COMPLETED: November 14, 2005 DRILLING METHOD: 2" PERCUSSION/BOSCH LOCATION: 2150 LAKESHORE BLVD. W., TORONTO, ONTARIO FIELD PERSONNEL: K. PETER	STRATIGRAPHIC LOG (OVERBURDEN)
ON TABLE								4.40	3 3 0		s	0.20		DEPTH	BH204-05 /ember 14, 20 PERCUSSION	
Ī									SS-3		(1204-2.5 BH204-2.5	SS-1	NUMBER		5 2005 DN/BOS	
									>	\bigcirc		\times	INTERVAL		SCH	
-									100		20	0	REC (%)	SAMPLE		-
-									σ	σı	σı		'N' VALUE Eagle (ppn			Page 1 of 1

		:N LOG 32985-02.G 1 1 1 1 1 1 ດາ ເກ	6.0	5 5	5.0	- 4.5	-4.0	- 3.5	- 3.0	-2.5	-2.0	- 1.5	1.0	0.5		DEPTH m BGS	PROJEC PROJEC CLIENT LOCATI	
CHEMICAL ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE										Note: Borehole was backfiled with bentonite chips and a concrete surface.	END OF BOREHOLE @ 1.52m BGS	- saturated, grey, trace clay at 1.07m BGS	CONCRETE FLOOR SLAB SMML - SILTY SAND, compact to dense, fine grained, brown, moist, no odour or staining		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: UST CLOSURE SERVICES HOLE DESIGNATION: BHZ05-05 PROJECT NUMBER: 32985-02 DATE COMPLETED: November 14, 2005 CLIENT: KRAFT CANADA INC. DRILLING METHOD: 2" PERCUSSION/BOSCH LOCATION: 2150 LAKESHORE BLVD. W., TORONTO, ONTARIO FIELD PERSONNEL: K. PETER	STRATIGRA (OVERBU
	EVATION TABLE											1.52		0.15		DEPTH m BGS	I: BH205-05 November 14, 20 2" PERCUSSION K. PETER	
													(H205-2	SS-1	NUMBE	R	5 2005 DN/BO	1
													5.5	\times	INTERVA		SCH	
													100	70	REC (%	- 17		
															'N' VALU	E Fin		Page 1 of 1
													0	o	Eagle (pp	m)		1 of 1

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 2.GPJ SPL.GDT 12/5/13 თ თ	5 N								6 0	0 2	(m) DEPTH		DATUM: Local BH LOCATION	PROJE	PROJEC	
GROUNDWATER ELEVATIONS Shallow/ Single Installation 🕎 👤 Deep/Dual Installation 📡	 Ento OF Botsela LE 5 m Enorbols backfilled with bentonite upon completion. 	SHALE weathered shale	trace gravel							SILTY CLAY grey, wet	ATS mm of reinforced concrete FILL sand and slit, trace gravel, saturated	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CI IENT	SPL CONSUITANTS LIMITED Geotechnical Environmental Materials Hydrogeology
illation			Ż	<i>††††</i> ;	<i>++++</i>	+++++	<i>†††††</i>	<i>††††</i>	<i>++++</i> ;	222	- (STRATA PLOT			d, Toro		ogeolog
			5AUNDIS	4BUNDIST	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIST	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	SAN		onto, O		2
		0	DIST	DIST	TSID	DIST	DIST	DIST	DIST	DIST		TYPE "N" <u>BLOWS</u> 0.3 m	SAMPLES		ž		5
<u>GRAPH</u> NOTES												GROUND WATE CONDITIONS	R				G OF
.+ .ω												ELEVATION					B
3 \times 3 . Numbers refer $^{\circ}$ $^{\epsilon}$ =3												20 40 60 80 100 SHEAR STRENGTH (FPa) UNCONF NED + 6 5-1610 XME 50 100 150 200 250 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/06/2013	Diameter:	DRILLING DATA	Log of Borehole Bhi-1
⊖ ^e =3% Strain at Failure												WATER CONTENT (%)		ENCL NO.:	REF. NO.: 1889-220		
												POCKET PEN (Cu) (kPa) NATURAL UNIT (Mg/m ³)	wт		1889-2		
												GRAIN SIZE DISTRIBUTION (%) GR SA SI CL			220		1 OF 1

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 2.GPJ SPL.GDT 12/5/13															-
GROUI	ග ග							1 2	0.6	02	(m) ELEV DEPTH		DATU BH Lu	PRO.	PROJECT	۰
GROUNDWATER ELEVATIONS Shallow/ Single Installation 🖳 👤 Deep/Dual Installation 🔨	 Sample refuse.eta 1.5 m. Borehole backfilled with bentonite upon completion. 	trace grave, trace sand						SILTY CLAY trace sand, trace gravel, grey, wet	CLAYEY SILT trace sand, grey/brown, moist	230 mm of reinforced concrete FILL sand and silt, grey/brown, moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	SPL Consultants Limited Geotechnical Environmental Materials Hydrogeology
tion 🖉			7777	+++++	+++++;	+++++	<i>4444</i>	77777			STRATA PLOT	_	4	Toro		eolog
×		5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIST	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	SAI		nto, C		4
		DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	TYPE	SAMPLES		ž		
IZ IO											"N" <u>BLOWS</u> 0.3 m	S				5
<u>GRAPH</u> NOTES											GROUND WATE CONDITIONS	ER				0 D
											ELEVATION		1			FB
3,×3;												RESIS	Date:	Diameter:	DRILI Metho	OREH
+ 3, × 3: Numbers refer to Sensitivity											40 60 AR STRENGTH VCONF NED JICK TRIAXIAL 00 100 150	ANCE PLO	Date: Nov/06/2013	eter:	DRILLING DATA Method: Geo Probe	Log of Borehole BHI-2
○ ^ε =3% Strain at Failure											20 40 60 80 100 SHEAR STRENGTH (PA) ● OUICXTFINXIAL × LAB VANE 50 100 150 200 250	N ALION				
at Failure											WATER CONTENT 10 20	PLASTIC NATURAL LIQUID	ENCL NO .:	REF. NO.: 1889-220		
											POCKET PEN (Cu) (kPa)		ē.	0.: 1		
											NATURAL UNIT (Mg/m ³)	WT]	889-22		
											GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		20		1 OF 1

	4 9				2.4		- N	6.0	02	ELEV DEPTH	(m)	BHLO		PROJ
	 Semple retura 14.9 m. Borehole backfilled with bentontie upon completion 				SILTY CLAY brown, moist		SILT some clay, trace sand, trace gravel, brown, moist	SILTY CLAY trace sand, trace gravel, brown,	150 mm of reinfoced concrete FIL sand, trace gravel, trace silt, brown, moist	DESCRIPTION	SOIL PROFILE		CLIENT: PROJECT LOCATION: 2150 Lke Shore Bivd, Toronto, ON	PROJECT: Mr.Christie
		<i>444</i>	<i>444</i>	7777	+++++	× × × ×	× × ×	RZ	\otimes	STRATA PLO	от		d, Torc	
		4BU	4AU	зви	3AU	2BU	2AU	1BU	1AU	NUMBER	v	1	onto, C	
		4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	TYPE	SAMPLES		ž	
		-				-			-	"N" <u>BLOWS</u> 0.3 m	5			
GRAPH										GROUND W.				
+ ω										ELEVATION				
.3.×3:										SHEAR STRENGTH (kPa) UNICONF NED + FIELD VANE SUNCONF NED + FIELD VA	RESI		Method: G Diameter:	DRIL
Numbe										AR ST	STANC 20		od: G	LING
Numbers refer										RENC		DVNAMIC CONE DENE	Method: Geo Probe Diameter:	DRILLING DATA
										150 × + (k	-®		5 B	
ି ^ଅ = 3 %										Pa) FIELD LAB \ LAB \	-8	TION		
strain at Failure										VANE /ANE 250	-00			
- AF Egi											T D	1		
ure										MATER CONTENT (%)	TIC NO			
											MOISTURE			
										POCKET (Cu) (kF	PEN. Pai		REF. NO.: 1889-220	
										NATURAL U (Mg/m	JNIT WT 3)	1	889-2	
										GR SA SI CL	REMARKS AND		20	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 2.GPJ SPL.GDT 12/5/13																1
<u>GROU</u> Shallow		n					18			02	00	(m) ELEV DEPTH		DATU BH L	PRO,	PROJECT:	
GROUNDWATER ELEVATIONS	 Sample retrisul at 5.5 m. Borehou backfilled with bentonite upon completion. 	trace weathered shale		wet			SILTY CLAY grey, saturated			FILL sand and silt, brown/grey,moist	CONCRETE 230 mm of reinforced concrete	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
Deen/Dual Installation	artonite									ist	ate -				hore Blv		ials Hydr
allation			77777 77777	<i>++++;</i>	+++++	+++++	+++++			\times	ь. P	STRATA PLOT			rd, Tor		ogeolo
		5AU	4BU	4AU	зви	злU	2BU	2AU	1BU	1AU		NUMBER	ş		onto,		gy C
◀		5AUNDIS	4BUNDIS	4AUNDIST	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIST	1BUNDIST	1AUNDIS		TYPE	SAMPLES		Q		
		-		-	-		-	-		-		"N" <u>BLOWS</u> 0.3 m	ES				5
<u>GRAPH</u> NOTES												GROUND WATER CONDITIONS	3	1			0.00
+												ELEVATION					FBO
$3, \times 3$: Numbers refer $\circ \epsilon_{=3\%}$ Strain at Failure to Sensitivity												20 40 60 100 SHEAR STRENGTH (kPa) • UNCONF NED + FIELD VANE • CUNCK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/06/2013	Diameter:	DRILLING DATA Method: Geo Probe	LOG OF BOREHOLE BHI-4
at Failure												WATER CONTENT CONTENT (%) WATER CONTENT (%) 10 20 30 NATURAL UNIT W (%)		ENCL NO.:	REF. NO.: 1889-220		
												AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		220		1 OF 1

GROUN										0.0	02	(m) DEPTH		DATU BH LC	PROJECT CLIENT: PROJECT	}
GROUNDWATER ELEVATIONS	 END OF BOREHOLE 1. Sample retusa at 6.6 m. 2. Develove backfinde with bentonite upon completion. 			trace gravel		wet	saturated	grey, wet		SILT CLAT trace sand, brown, moist	50 mm of reinforced concrete FILL sand, trace silt, brown, moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	
		++++	<i>++++</i> ;	+++++ +++++	<i>+++++</i>	<i>++++</i>	<i>++++</i>	+++++ +++++	++++? ++++?	++++7		STRATA PLOT			/d, Tor	
		5BUNDIS	5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS:	NUMBER TYPE	SAMPLES		onto, ON	
					4							"N" <u>BLOWS</u> 0.3 m	ES			
GRAPH												GROUND WATE CONDITIONS	R			
2												ELEVATION				
- 3 < 3. Numbers refer 💫 8=3% 🦕 = -												20 40 60 80 100 SHEAR STRENGTH ((Fa) UNCONFINED + Field VANE QUICK THAXAL + A Sensitivity 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/07/2013	DRILLING DATA Method: Geo Probe Diameter:	
												WATER CONTENT LIMIT 10 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PLASTIC NATURAL LIQUID	ENCL NO .:	REF. NO.: 1889-220	
												AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		ŏ	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 3.GPJ SPL.GDT	12/5/13															
<u>GROUN</u> Shallow						3.7			_1 8	1.4	0	000	(m) ELEV DEPTH		CLIENT: PROJEC DATUM: I BH LOCA	PROJ	٠
GROUNDWATER ELEVATIONS Shallow Single Installation 🕎 👤 Deep/Dual Installation 🕎	 Semple refuse! at 6.7 m Borehole baddilled with bentonite upon completion. 			wet		SILTY CLAY grey, moist			CLAYEY SILT grey, moist	SILT trace clay, grey, moist	FILT and transverse workers FILT sand, trace silt, gravel, brown, moist	CONCRETE 150 mm of reinforced concrete	DESCRIPTION	SOIL PROFILE	CUENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie	SPL Consultants Limited Geolechnical Environmental Materials Hydrogeology
nstallatio	ō	<i>77777</i>	<i>++++</i> ;	<i>t††††</i>	77777	<i>t+t+t</i> ,	<u> </u>		<u> </u>	××	st (- s	TRATA PLOT		Blvd, Te		mite
		64	5BU	5AU	4BC	4AU	3BU	3AU	2BU	× × I	IBU 1AU	N	IUMBER	s	pronto,		d
A		6AUNDIS	5BUNDIS	5AUNDIS	4BUNDIS	4AUNDIS1	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIST	18UNDIS	т	YPE	SAMPLES	Q		
		7	7	-	-	-	7		-	-		4"	N" <u>BLOWS</u> 0.3 m	ES			5
<u>GRAPH</u> NOTES													ROUND WATER	<i>بد</i>			GO
													LEVATION				FBO
$+$ ³ , \times ³ : Numbers refer \odot to Sensitivity													20 40 60 80 100 SHEAR STRENGTH (kPa) O UNCONFINED + EED VANE O UNCONFINAXIA, X LAB VANE O UNCK TRIAXIA, X LAB VANE	RESISTANCE PLOT	Method: Geo Probe Diameter: Date: Nov/07/2013	DRILLING DATA	log of Borehole Bhi-6
€=3% Strain at Failure												00					
Failure													IR CONTENT (%)		REF. NO.: 1889-220 ENCL NO.:		
													POCKET PEN. (Cu) (kPa) NATURAL UNIT V	ντ	1889		
												GR SA SI CL	(Mg/m ³) GRAIN SIZE (%) (%)	REMARKS	-220		1 OF 1

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 2.GPJ SPL.GDT 12/5/13 on						2.4			1		00	(m) ELEV DEPTH		DATU BH L	PROJEC	
GROUNDWATER ELEVATIONS	END OF BORELADLE Sample returation Sample returation Sem. Benchole backfilled with sand to Sem. Somm-diameter monitoring well installed. Water encountered at 3.4 mbg on Nov 6, 2013.		saturated				SILTY CLAY grey, wet		Sonie vidy, provin, invist	SILT		150 mm of reinforced concrete	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT : MILCHINSINE CLIENT:	ITOT: Ma Objetio
		<i>7777</i>	<i>444</i>		<i>++++</i> +		<i>++++</i> +	× × ×	× × × ×	× 🗱		Ì.	STRATA PLOT			/d, To	
		5BUNDIS	5AUI	4BUI	4AUNDIS	зви	3AUNDIS	2BUNDIS	2AUNDIS	1BUI	170	-	NUMBER	/S		ronto,	
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20								•					"N" <u>BLOWS</u> 0.3 m	S			
GRAPH		III										হেন্দ্র বিষয়	GROUND WATER	R			
+ 60						W. L. 3.							ELEVATION				
- ³ , × ³ :						. 3.4 mBGL 1, 2013							●○SH	RESI	Date	Meth	
Numbe						3 BGL							20 INCONI	STANCI	Nov	Method: Ge Diameter:	1105
Numbers refer													20 40 60 100 SHEAR STRENGTH (VPa) • UNCONF VED + Canadative • QUICK TRAVAL + LAB VANC 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/06/2013	Method: Geo Probe Diameter:	TATA
0													50 HH 8	VETRA	ω	De	
°=3%													Pa) FIELD	TION			
Strain													ANE 250				
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													UT (%)	0	ENCL NO .:	EF.	
													POCKET PEN. (Cu) (kPa)		ō	REF. NO.: 1889-220	
													NATURAL UNIT V (Mg/m ³)	ντ		89-22	
													AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		Ó	
													ND BUTION SI CL	ARKS			

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 2.GPJ SPL.GDT 12/5/13																-
<u>GROUI</u> Shallow	თ დ				3.7		2 2.4			U.6		00	(m) ELEV DEPTH		PRO, DATU BH Lu	PROJEC	
GROUNDWATER ELEVATIONS Shallow' Single Installation	END OF BOLSENDLE Somple refuse at 15 g m, 2 30mm-dameter monitoring well installed, are recountered at 2.4 mbg Nov. 6, 2013	trace sand, trace gravel			SILTY CLAY grey, wet		CLAYEY SILT grey, wet		grey/brown	Some clay, trace sand, grey, moist	FILL silt, grey/brown, moist	250 mm of reinforced-concrete	DESCRIPTION	SOIL PROFILE	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie	SPL Consultants Limited Geolechnical Environmental Materials Hydrogeology
ation		777	++++;	+++++	+++++ +++++			× × × × × ×	× × × × ×	× × × > × × ×		5 a a y	STRATA PLOT		, Toro		teology
×		5BUNDIS	5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS:	-		NUMBER	SAN	nto, O		
		DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	ISI	-		TYPE	SAMPLES	Ž		
RB			Maria da Arti	a ta carte a	1								0.3 m				6
<u>GRAPH</u> NOTES		<u>IIII</u>						\leq				E 2		`			Q
+ ³ ,× ³ :							W. L. 2. Jun 11,						ELEVATION				B
$ imes 3^\circ$. Numbers refer \circ ^{E=3%} Strain at Failure to Sensitivity							, 2013						20 40 60 100 SHEAR STRENGTH (KPa) • UNCONF VED + 8 Soucher 50 100 150 200 250	RESISTANCE PLOT	Diameter: Diameter: Date: Nov/06/2013	DRILLING DATA	Log of Borehole Bhi-8
n at Failure													WATER CONTENT (%) 10 20 30 ATURAL UNIT (%) 10 20 30 10 20 30		REF. NO.: 1889-220 ENCL NO.:		1 OF 1

	.2 4				02	(m) ELEV DEPTH		DATU BH LO	PROJECT CLIENT:
	END OF EOREMOLE 1. Sample refusal at 2.4 m. 2. Somm-diarneter monitoring well installed. 3. Water encountered at 2.1 mbg Nov. 5, 2013	grey	wet		150 mm of reinforced-concrete FILL sand, trace gracel, trace silt, brown,	DESCRIPTION	SOIL PROFILE	PROJECT LOCATION: 2150 Lke Shore Blvd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT:
					XXF:	STRATA PLOT		i, Torc	
		2BU	2AU	1BU	1AU	NUMBER	s,	onto, C	
		2BUNDIS	2AUNDIST	1BUNDIST	1AUNDIS	TYPE	SAMPLES	ž	
		7				"N" <u>BLOWS</u> 0.3 m	ËS		
						GROUND WATER CONDITIONS	3		
		W. L. May 1				ELEVATION			
		.2.1 mBGL				20 40 60 100 SHEAR STRENGTH (KPa) • UNCOMP NED + Ramwary 50 100 150 200 250	PRESISTANCE PLOT	Diameter: Date: Nov/05/2013	DRILLING DATA Method: Geo Probe
						WATER CONTENT (%) WATER CONTENT (%) 10 20 30 POLICIENT (%) 10 20 POLICIENT (%	<u>р</u> л	REF. NO.: 1889-220 ENCL NO.:	
						AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 2.GPJ SPL.GDT 12/5/13																-
<u>GROUI</u> Shallow	ය ප	55					2.4			0.6	02	0 0	(m) ELEV DEPTH		PRO, DATL BH L	PROJEC	
GROUNDWATER ELEVATIONS Shallow Single Installation	 ENO FE desized at 5.8 m. Somhe refusal at 5.8 m. Somher adameter monitoring well installed. Water encountered at 3.6 mbg Nov. 6, 2013 	SHALE shale, grey					SILTY CLAY trace sand, grey, wet	grey, wet	grey/brown	SILT trace sand, trace gravel, trace clay, brown, oxidation, moist	FILL sand and silt, brown, moist	230 mm of reinforced concrete	DESCRIPTION	SOIL PROFILE	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT:	SPL Consultants Limited Geotechnical Environmental Materials Hydrogeology
ation			++++,	7777,	77777	+++++	7777					- B- S-	STRATA PLOT		, Torc		ited
Ā		5BUNDIS	5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS		NUMBER	SA	onto, (20
12		DIST	IDIS	DIST	JDIST	JDIST	DIST	IDIS	DIST	IDIS	DIST		TYPE	SAMPLES	N		
								·		•			"N" <u>BLOWS</u> 0.3 m	S			5
<u>GRAPH</u> NOTES		шп											GROUND WATER CONDITIONS	R			GO
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ια ×					, 2	- 								20		≤ □	۱ <u>א</u>
$3, \times 3$: Numbers refer to Sensitivity					Jun 11, 2013	2							20 40 60 80 100 SHEAR STRENGTH (kPa) 0 UNCONF VIED + FELD VANE 50 100 150 200 250	RESISTANCE PLOT	Diameter: Date: Nov/06/2013	DRILLING DATA Method: Geo Probe	LOG OF BOREHOLE BHI-10
○ ^ε =3% Strain at Failure																	
t Failure													WATER CONTENT (%)	PLASTIC NATURAL LIQUID	REF. NO.: 1889-220 ENCL NO.:		
												_	POCKET PEN. (Cu) (kPa) NATURAL UNIT V	NT			
													(Mg/m ³)	_	9-220		
													AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS			1 OF 1

GROUI	۵. 4		49					18	12	0.6	02	(m) ELEV DEPTH		DATL	PROJEC
	 Possible backretucal at 6.4m. Borehole backrilled with bentomite upon completion 	CLAY TILL grey, moist	grey/brown, wet	moist to very moist	dry with fine sand layers		brown, some organics	CLAYEY SILT trace sand, grey, wet	SILT some clay, grey, moist	SILT TILL some sand, trace clay	230 mm of reinforced concrete FILL sand, trace silt, trace gravel, brown	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie
		Ì	+++++++++							• •		STRATA PLOT	1		ł
		6 UNDIST	5AUNDIST 5BUNDIST	4BUNDIST	4AUNDIST	3BUNDIST	3AUNDIST	2BUNDIST	2AUNDIST	1BUNDIST	1AUNDIST	NUMBER TYPE "N" <u>BLOWS</u>	SAMPLES	ilo, CIV	2
GRAPH												0.3 m GROUND WATER CONDITIONS			
⊦ 3												ELEVATION			
+ 3 X 3; Numbers refer O &=3% Strain at Failure												20 40 60 90 100 SHEAR STRENGTH (FPa) • CIURCINE NED + FIELD VANE • CUURC TRAVAL - L 45 VANE 50 100 150 200 250	DYNAMIC CONE PENETRATION RESISTANCE PLOT	Date: Nov/05/2013	DRILLING DATA Method: Geo Probe
at Failure												WATER CONTENT (%) 10 20 30 POCKET PERI 10 20 30 POCKET PERI POCKET PERI PERI POCKET PERI POCKET PERI	NATURAL LIQUID	ENCL NO.:	
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	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 1.GPJ SPL.GDT 12/5/13	·																
GROUN	ວ ເ					30						02 00	(m) <u>ELEV</u> DEPTH		DATL BH L(CLIENT:	PRO.	۹
GROUNDWATER ELEVATIONS Shallow Sincle Installation ∇ ■ Deen/Dutal Installation ▼	Evan pris restusat 6.2 m. Sorehole backfilled with bentonite upon completion.		trace gravel			SILTY CLAY grey, wet			greycown		FILL silt, some clay, grey, moist	200 mm of reinfoced concrete	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	CLIENT: PROJECT LOCATION: 2150 Lke Shore Bivd, Toronto, ON	PROJECT: Mr.Christie	Geotechnical Environmental Materials Hydrogeology
ation \		7777	77772 77777	+++++ +++++	+++++	++++++					\times		STRATA PLOT			Toro		geolog
T		5BUNDIS 6AUNDIS	SAUNDIS	4BUNDIS	4AU	3BUNDIS	3AUNDIS	2BUI	2AUNDIS	1BUNDIS		1	NUMBER	٨S		nto, C		ΨQ
7					4AUNDIST	DIST		2BUNDIST	DIST	DIST	i i		TYPE	SAMPLES		ž		
												•	"N" <u>BLOWS</u> 0.3 m	SE				5
<u>GRAPH</u> NOTES													GROUND WATER	R				GOF
													ELEVATION					Log of Borehole BHI-12
+ ³ , $ imes$ ³ : Numbers refer to Sensitivity													● ○ SH	PES	Date	Met	물	REY
Numb to Ser													20 40 60 80 100 SHEAR STRENGTH (kPa) 0 UNCONF NED + selective 0 QUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/06/2013	Method: Geo Probe Diameter:	DRILLING DATA	
ers refe nsitivity													TREN TREN	E PLC	//06/2	ieo Pr	DAT	막
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																REF. NO.: 1889-220		
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GROUN			ហ						2.1	18			02	0 0	(m) ELEV DEPTH		DATU BH LC	PROJECT CLIENT: PROJECT	}
GROUNDWATER ELEVATIONS	END OF Bolketi AC 7 m. 2. Somm-diameter monitoring well installed.		trace gravel		saturated				SILTY CLAY grey, wet	SILT trace clay, brown, wet			FILL sand, brown, moist	CONCRETE	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: CONTINN: 2150 Lake Shore Blvd, Toronto, ON	
				7777	<i>7777</i>	<i>++++</i> ;	<i>7777</i>	<u>++++</u>	777;	× ×8				A y S	STRATA PLOT			lvd, To	
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zia														-	N" <u>BLOWS</u> 0.3 m				
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_ 3 , X 3. Numbers refer O ^{& =3%} Strain at Failure														55 55 55 55 55 55 55	20 40 60 80 100 SHEAR STRENGTH (kPa) 0 UNCONFINED + 6 50 000 150 200 250 0 000C TRIAXIAL × LAB WARE 50 100 150 250 250	RESISTANCE PLOT	Date: Nov/07/2013	DRILLING DATA Method: Geo Probe Diameter:	
at Failure																NATURAL HOUD 5	ENCL NO.:	REF. NO.: 1889-220	
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	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 3.GPJ SPL.GDT 12/5/13									_	<u> </u>			
BOU		3.7	22 0	0 0 0	18	23 8		2 6 2 6 2 6 2 6	(m) ELEV DEPTH 25.6		BHL	PRO,	PROJECT	
GROUNDWATER ELEVATIONS	3. Water at 3.1 mbg Nov. 7, 2013	END OF BOREHOLE 1. Sample refusal at 3.7 m. 2. 50mm-diameter monitoring well			SILT some sand, trace gravel, strong PHC odour, brown, moist					SOIL PROFILE	BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
				× × × × × ×	× × × × × ×				STRATA PLOT			d, Toi		ogeolo
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3 × 3. Numbers refer			22	23		24		25		8		ק ק	s 9	
									20 40 60 80 100 SHEAR STRENGTH (kPa) • UNCONFINED + FIELD VANE • QUICK TRIAXIAL × LAB VANE 50 100 150 200 250			Diameter:	DRILLING DATA Method: Geo Probe	
nbers n									NF NF NF 40	NOE PI		r:	Geo F	
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€=3% Strain at Failure									WP CONTENT WATER CONTEN 10 20	PLAST				
Ď									WATER CONTENT (%)					
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t									NATURAL UNIT (Mg/m ³)	TWT]	889-2		
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l									c gr	S				-

	BOREHOLE LOGS SET 4.GPJ SPL.GDT					N IN	!			<u>،</u>	N		DEPTH 05.6		₽₽	및 C 및	٦,
	 Sample rousal at G.7 m. Borehole backfilled with bentonite upon completion. 					22.1 35 SANDY SILT 218 brown	strong PHC odour between 3-4.5 m trace gravel		15 CLAYEY SILT trace sand, brown, moist	dayey silt, brown, moist	sandy silt, brown, moist	28:4 ASPHALT 75 mm of asphalt		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: PROJECT I OCATION: 2150 I ake Shore Rivel Toronto ON	Control i lintar mananan matanan i iyu ogoorogy
			77777	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>;;;;;;;;</i> ;;;;;;;;;;;;;;;;;;;;;;;;;;;;				<i>111111</i>	****		\otimes	STRATA PLOT	1		5 2	- ango
		5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	SHONDIS		2BUNDIS	2AUNDIS	1BUNDIS	A		NUMBER			ronto	0)
			UDIST	VDIST	UDIST				UDIST				TYPE	SAMPLES		Z	
<u>م</u>													"N" <u>BLOWS</u> 0.3 m		-		
GRAPH													GROUND WATE	R			
- 		19	20	N	2	22		23	24		25		ELEVATION				
S <													20 40 60 100 SHEAR STRENGTH (KPa) • UNCONFNED + 6 5000000 • QUICK TRIMXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/08/2013	DRILLING DATA Method: Geo Probe Diameter	
														PLASTIC NATURAL LIQUID	ENCL NO.:	REF NO - 1880-220	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 4.GPJ SPL.GD	12/5/13	3														-
GROUNDWATER ELEVATIONS		190	6.1	10	4.6	21.1	30	v v	24 0 1.7		28. - 9	(m) ELEV DEPTH 25.7		BHL	PRO	PROJECT:	
GROUNDWATER ELEVATIONS	 Sample refusal at 6 7 m, 2 Borchole backfilled with bentonite upon completion. 		SHALE shale, grey		CLAYEY SILT dayey silt, brown, moist		SILTY CLAY sity day, brown, moist		CLAVEY SILT clayey silt, trace sand, brown, moist		ASPHALT YOO mm of asphalt FILL sand, trace silt, brown, moist		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotecrinical Environmental Materials Hydrogeology
		υ	1	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	<u>4111111</u> 4	+++++	<i>±±±±±±±</i>					STRATA PLOT	-		Toron		(Foina)
		5AUNDIS	;	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIST	2AUNDIS	1BUNDIS	1AUNDIST	TYPE	SAMPLES		ito, ON		
		IST	5	IST	IST	IST	IST	IST	<u>IS</u>	IST	IST	"N" <u>BLOWS</u> 0.3 m	PLES		2		
GRAPH												GROUND WATER	R				
		10		20	21		22	23	24		25	ELEVATION		1			
+ 3 X 3; Numbers refer O &=3% Strain at Failure												20 40 60 80 100 SHEAR STRENGTH (kPa) • LINCONF NED + SELEVINE • QUICK TRIUXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/08/2013	Diameter:	DRILLING DATA Method: Geo Probe	
- A PP - Ny was												WATER CONTENT (%) 10 20 30 NATURAL QUE NATURAL QUE NA	LIQUID	ENCL NO.:	REF. NO.: 1889-220		
												유 모 ·	RE		220		

6. 7	18 9			43	21.4				-	24.4		22 89 29 29 29 29	(m) ELEV DEPTH 25.6		DATU BH LC	PROJECT
Exproper backfilled with bentonite upon completion.		saturated		SILTY CLAY grey, wet	some clay, trace sand, wet				trace sand, trace clay, brown, moist	trace clay	125 mm of concrete FILL silt, trace sand, grey, moist	50 mm of asphalt	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: CLIENT: C
 ite	<i>++++</i>	<i>1111</i>	7777	££££		× × >	<	× × >		×			STRATA PLOT		1	P S
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	IST	IST	IST	IST	IST	IST	IST	IST	IST	<u>.</u>	5	IST	"N" <u>BLOWS</u> 0.3 m	SAMPLES		-
													GROUND WATER CONDITIONS	3		
	19	20		21	N N N N N N N N N N N N N N N N N N N	8	23		24		25		ELEVATION		_	
													20 40 60 80 100 SHEAR STRENGTH (kPa) UNCONFINED + a FIELD WAR 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/08/2013	DRILLING DATA Method: Geo Probe
													60 80 100 GTH (KPa) + FIELD VANE AL × LAB VANE 150 200 250		ω	ŏ
													. 5	PLASTIC NA		
													WATER CONTENT (%)		ENCL NO .:	DEE NO - 1880.330
													POCKET PEN. (Cu) (kPa) NATURAL UNIT W		Ō.	D. 188
													(Mg/m ³)		ļ	0 220
													AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		

	PL SOIL LOG 1889-220 BOREHOLE LOGS SET 3.GPJ SPL	.GDT 6.7 18.7				21.1 4.6						23 9		22	(m) ELEV DEPTH		BH DA	PR	CLI PR].
GEOLINDWATER ELEVATIONS	 END OF DOREHOLE (D) Formation at 7.0 m. Sample retures at 7.0 m. Borehole backfilled with bentonite upon completion. 	.7 SHALE .7 shale, grey	<u>0</u>	saturated			saturated				8 CLAY dark brown, moist			400 mm of asphalt FILL sand and gravel, brown, moist		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr. Christie CLIENT:	
ŀ	U		77777 77777	<i>77777</i>	<i>t†††</i> †	75		\square						\longrightarrow	STRATA PLOT	1		lvd, To		60
ľ			6AU	5BU	5AU	4BU			BU	3AU	2BU	2AU	1BU	1A L	NUMBER	Ś	1	ronto,		
			6AUNDIS1	5BUNDIS1	5AUNDIS1	4BUNDIST	i		3BUNDIS1	3AUNDIS1	2BUNDIS1	2AUNDIST	1BUNDIST	1AUNDIST	TYPE	SAMPLES		Q		
															"N" <u>BLOWS</u> 0.3 m	S				
															GROUND WATER CONDITIONS	R				
		ā	10	20		21		22		23		24	Ľ	о л	ELEVATION]			
3 3 Numbers refer															20 40 60 80 100 SHEAR STRENGTH (kPa) 0 LINCONF NED + Encloying 0 CUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/08/2013	Diameter:	DRILLING DATA Method: Geo Probe	
															WATER CONTENT (%) 10 20 30 FOR CONTENT (%) 10 20 50 FOR CONTENT (%) 10		ENCL NO.:	REF. NO.: 1889-220		
															AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS				

	70	18.6		49	20 8	3.7	22 0	2.4	23 2	2 2 11	12	24.4	03	22 22 2 2000 2 2000 2	(m) ELEV DEPTH		DATL BH L(PROJEC	}
	END OF BOREHOLE I. Borehole backfilled with bentonite upon completion.			SILTY CLAY silty clay, grey, wet		CLAYEY SILT clayey silt, brown, wet	some clay	SILI trace sand, brown, saturated	CLAY dark grey, moist	grey	SILT trace sand, grey/brown, moist	brown, moist		ASPHALT 100 mm of asphalt	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr. Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	
	W	<i>777777</i>	77777	7777			× × × ×	× × >	$\langle \rangle$		<		\geq		STRATA PLOT			Nd, To	
		6AU	SBU	5AU	48	4AU	BE	3AU	2BU		2AU	1BU	Z		NUMBER	ç		ronto,	
		6AUNDIS	5BUNDIS	5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS		2AUNDIS	1BUNDIS			TYPE	SAMPLES		Q	
		-	-	-		-		-	-		-	-			"N" <u>BLOWS</u> 0.3 m	ES			
GRAPH															GROUND WATER CONDITIONS	1			
- 		19	20		21	c.	3	23			24		25		ELEVATION				
.3 ∠ 3. Numbers refer 															20 40 60 80 100 SHEAR STRENGTH (KPa) O UNCOVE NED + FIELD VANE O UNICK TRIAXIAL × LAB VANE 50 100 150 200 250	DYNAMIC CONE PENETRATION RESISTANCE PLOT	Date: Nov/08/2013	DRILLING DATA Method: Geo Probe Diameter:	
															Image: content content (%) Image: content(%) Image: content (%) <thi< td=""><td>NATURAL INCIDE</td><td>ENCL NO .:</td><td>REF. NO.: 1889-220</td><td></td></thi<>	NATURAL INCIDE	ENCL NO .:	REF. NO.: 1889-220	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 3.GPJ SPL.GDT				3	23.1 22.5 22.5		24 9 0.6	(m) ELEV 25 5	9	BH	R CL PR	
	 END OF BOREHOLE upon completion. 			brown, moist	0 SILTY CLAY grey, wet		trace clay	FL Sand and gravel, trace silt, brown Sand and gravel, trace silt, brown FILL slit, some sand, grey/brown, moist]	SOIL PROFILE	ר העברי דעראי, בישע במיפ סוועופ מוענ, וסוטווע, טע DATUM: Local BH LOCATION:	PROJECT: Mr. Christie	Geotechnical Environmental Materials Hydrogeology
	-	+++++++	<i>+++++++</i> ;	<i>;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;</i>	+++++++++	× × × × ×			STRATA PLOT		vä, i o	1	rogeolo
• •		6AUNDIS	5AUNDIST	4BUNDIST	3BUNDIS 4AUNDIS	3AUNDIS	2AUNDIST	1AUNDIST	NUMBER	SAN	0110, 0)	y s
		UIST I		T		TSIC			"N" <u>BLOWS</u> 0.3 m	SAMPLES	2	2	
<u>GRAPH</u> NOTES									GROUND WATER CONDITIONS				6
		19	20	21	22	23	24	25	ELEVATION	_			
$+$ ³ , \times ³ : Numbers refer \circ ² =3% Strain at Failure						<u> </u>			20 40 60 80 100 SHEAR STRENGTH (kPa) UNCOVENED + ELED VANE OUICK TRIAXIAL × LUB VARE 50 100 150 200 250 10 250 200 250	DYNAMIC CONE PENETRATION	Date: Nov/08/2013	DRILLING DATA Method: Geo Probe	Log of Borehole BH7
ain at Failure									WATER CONTENT WL 10 20 30	NATURAL INCID	ENCL NO .:		
									POCKET PEN. (Cu) (kPa) NATURAL UNIT W (Mg/m ³)	т	D.:		
									유 모 ·	REMARKS			1 OF 1

	6.7	6.1	-1 9 7	20.7 4 9		22.1 3 5	23	3		299 02	(m) ELEV DEPTH 25.6		PROJECT PROJECT DATUM: L BH LOCA
	 END OF BOREHOLE Sampler enussi at 6,7 m. Derehoe backfulled with bentonite upon completion. 	SHALE shale, grey		SILTY CLAY silty clay, grey/brown, moist		CLAYEY SILT some sand, grey, moist	SILTY CLAY brown, moist			ASPTALI 350 mm of asphalt FILL sand and gravel, brown, moist		SOIL PROFILE	CLENT: Mr.Criniste CLENT: PROJECT LOCATION: 2150 Lake Shore Bird, Toronto, ON DATUM: Local BH LOCATION:
	¢		<i>++++++</i>	<i>7777</i>		<u> </u>	<i>77777</i>				STRATA PLOT	-	ivd, To
		5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	SA	ronto, (
-		IDIST			DIST		DIST	DIST	DIST	IDIST	TYPE	SAMPLES	2 2
<u>ه</u>										333	"N" <u>BLOWS</u> 0.3 m GROUND WATE		
GRAPH	-									XX		:n	
+ ω × ω	i	10	20		21	22	23	24		25	ELEVATION		
ω. 2											20 40 60 80 100 SHEAR STRENGTH (IPA) - UNCONFINED + FELOVANE - QUICK TRANXAL × LAB VANE - 50 100 150 200 250	RESISTANCE PLOT	Method: Geo Probe Diameter: Date: Nov/08/2013
Numbers refer											CK TRIA	NOCE PL	: Geo F er: lov/08/
afer											NGTH		Probe 2013
•											200 × + (kPa) 200 LAF	V RATIO	
											100 ID VANE B VANE 250	2	
											. 5	PL	
											WATER CONTENT LIN WATER CONTENT (%)	STIC N	
												ATURAL	
												LIQUID	REF. NO.: 1889-220 ENCL NO.:
											POCKET PEN (Cu) (kPa)		NO.: 1
											NATURAL UNIT (Mg/m ³)	WT	389-22
											AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS	20

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 4.GPJ SPL.GDT 12/5/13														-
<u>GROU</u> Shallow	م ب	19.1	4.6 198	8	30	22.1	- 5	23.6 8	28.4 24.4	(m) ELEV DEPTH		DATU BH L	PRO,	CI IENT-	
GROUNDWATER ELEVATIONS Shallow' Single Installation ∇	END or BOREHOLE Everage Everage I. Boreshole backfilled with bemonite upon completion.			- 	 SILT some clay, trace sand, brown, moist 			i FIL clayey silt, some sand, brown/grey, moist			SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie	Geotechnical Environmental Materials Hydrogeology
ation			<i>777777</i>	~	0	77777	7777777			STRATA PLOT			, Toro		Jeolog
		4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	NUMBER	SAI		nto, C		4
-		DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	TYPE	SAMPLES		ž		
QN										"N" <u>BLOWS</u> 0.3 m					5
<u>GRAPH</u> NOTES											R				۵ 0
			20	21	22		23	24	25	ELEVATION		1			F B
$+$ ³ , \times ³ : Numbers refer to Sensitivity				1	<u> </u>		<u> </u>	4	5	은 약 문 · · ·	RES	Date	Diar		LOG OF BOREHOLE BH9
Numb to Sei										20 40 60 100 SHEAR STRENGTH (kPa) 0 LINCONF NED + SELEVANE 0 QUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/11/2013	Diameter:	DRILLING DATA	풀
oers refi nsitivity										40 60 TRENGTH VF NED TRIAXIAL 100 150	DE PLO	/11/2	0	DAT	EB
e,										150 A 150 F	N/H	013	000	nhe A	ප
°										200 A # 16 80	VATIO				
-3% St										Pa) FIELD VANE & Sensitivity LAB VANE 200 250	Z				
○ ^ε =3% Strain at Failure											P	4			
Failure										WP W WATER CONTENT	LASTIC				
										MIT CONSTRUCT Mo W W WATER CONTENT (%) 10 20 30	NATU				
												Ē	RE		
										1 1	LIQUID	ENCL NO .:	F. NC		
										POCKET PEN. (Cu) (kPa)] [.] .	REF. NO.: 1889-220		
										NATURAL UNIT ((Mg/m ³)	WT		89-22		
										AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REM		0		_
										AND IAIN SIZE FRIBUTIO (%) SA SI (REMARKS				OF 1
										- CL	ŝ				_

		4 3	20.4	21 3 3.4		18	1 2 22 8	23.4	03	24.6	(m) ELEV DEPTH		DATU BH LC	PROJECT
		END OF BOREHOLE 1. Borehole backfilled with bentonite upon completion.		SILTY CLAY grey, wet	organics brown	SILT trace clay, brown	FILL silt, red and grey, wet	sand & silt, grey/brown, moist	FILL sand and gravel	ASPHALT	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr. Christie
			7777)	<u>777 × ×</u>	<	· · · · ·			$\overline{\mathbb{X}}$	s s	TRATA PLOT			vd. T
			4AUNDIST	3BUNDIST	3AUNDIST	2BUNDIST	2AUNDIST	1BUNDIST	1AUNDIST		UMBER YPE	SAMPLES		oronto, ON
GRAPH										G	I" BLOWS 0.3 m ROUND WATEF ONDITIONS			
⊦ ω			r	2	22		23		24		LEVATION			
3 < 3. Numbers refer → 6=3% results on Texture											100 VANE VANE	DYNAMIC CONE PENETRATION RESISTANCE PLOT	Date: Nov/08/2013	DRILLING DATA Method: Geo Probe Diameter:
										GR SA SI	B CONTENT LIMIT W, W, W, (GU) (GU) (KPa) NATURAL UNITY (GU) (KPa) NATURAL UNITY (Mg/m ³)	NATURAL LIQUID 5	ENCL NO .:	REF. NO.: 1889-220

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 4.GPJ SPL.GDT 12/5/13	200	20.6		23	23 O		23 8 23 8	ELEV DEPTH 24 5	(m)	뽀	DA.	CLI	
	ENDOP BORHENDE Sample reveletione Sample and As m installed				3 SILTY CLAY trace gravel, grey, very moist	0 5 SANDY SILT trace clay, brown, moist	8 FILL silly clay, trace sand, trace gravel, brown, moist			SOL PROFILE		PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON DATUM: Local	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
			77	++++++	<i></i>	X			STRATA PLO	от		vd, Tor		rogeolo
		3BUNDIS		3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS1	1AUNDIST	NUMBER	SA		onto, (gy
~		UDIST				DIST		DIST	TYPE	SAMPLES		S		
<u>a</u> s									"N" <u>BLOWS</u> 0.3 m		1			5
<u>GRAPH</u> NOTES			ΠÜ					XX XX						LOG OF BOREHOLE BH11
+ 3		20		21	22	23		24	ELEVATION					BO
+ 3, × 3. Numbers refer to Sensitivity									SHEAR STRENGTH (kPa) UNCONF NED + FELD VANE OUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESIS		Diameter: Date: Nov	DRIL Meth	臣
Numbe to Sens									AR ST	RESISTANCE PLOT		Diameter: Date: Nov/11/2013	DRILLING DATA Method: Geo Probe	16
rs refer itivity									RENG	-40 EPLOT		11/201	o Prot	모
									50 × + (k	-® /		ω	æ	=
°=3%									Pa) FIELD V LAB V LAB V	-8	TION			
Strain									ANE 50	-00				
○ ^ε =3% Strain at Failure									₹ T *	PLASTIC NATURAL LIMIT CONTENT	1			
re									WATER CONTENT (%)					
									-20 NTEN	STURAL	,	m 20		
									30 VT (%)	- 5		REF. NO .:		
ľ									POCKET (Cu) (kF	PEN. Pa)		REF. NO .: 1889-220		
									NATURAL U (Mg/m	JNIT WT 3)		89-22		
									GR SA SI CL	AND		20		1 OF 1

GROUNI	2.4	2.1 22 3	22.6	24. I 0.6	00	(m) ELEV DEPTH 24.7	ВНГО	DATU	PROJECT	
GROUNDWATER ELEVATIONS	END OF BOREHOLE 1. Borehole backfilled with bentonite upon completion.	CLAYEY SILT grey/brown, moist	FILL sand & silt, grey/brown, saturated	FILL silt & sand, trace gravel, trace brick, brown, moist	TOPSOIL topsoil, dark brown, moist	DESCRIPTION	SOIL PROFILE	PHOUECT LOCATION: 2150 Lake Shore Bivd, Toronto, ON DATUM: Local BLI CONTION:	PROJECT: Mr.Christie CLIENT:	
						STRATA PLOT		ă, 10		
			2AUNDIS	1BUI	1AUNDIS	NUMBER	ş	ronto,		
			2AUNDIST	1BUNDIST	NDIST	TYPE	SAMPLES	QN		
						"N" <u>BLOWS</u> 0.3 m	S			
GRAPH						GROUND WATER CONDITIONS				
+ ω			23	24		ELEVATION				
3, × 3. Numbers refer O = 3% Strain at Failure						100 VANE VANE	DYNAMIC CONE PENETRATION	Date: Nov/11/2013	DRILLING DATA Method: Geo Probe	
at Failura						WATER CONTENT W. 10 20 30 POCKET PEN 10 20 30 POCKET PEN (M) (PR) POCKET PEN (M) (PR) (M) (PR) (r	REF. NO.: 1889-220 ENCL NO.:		
						AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	EMARKS			

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 5.GPJ SPL.GDT 12/5/13	-															-
GROUNDWATER ELEVATIONS	4 ت	198			30	21.7				03	2 28 24: 4	(m) ELEV DEPTH 24.7		BHL	PRO.	PROJECT	
GROUNDWATER ELEVATIONS	 Benaloe Backlinde with bentonite upon completion. 		trace shale fragments		CLAYEY SILT grey, moist				some clay, trace sand, gravel, brown, moist			DESCRIPTION	SOIL PROFILE	DA I UM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Centerininal Environmental Materials Libriroferiogy
		344	<u></u>	<u>,,,,,,,,,</u>				1				STRATA PLOT			, Toro		Rouge
		╞	4BUNDIS	4AUNDIS	3BUNDIST	3AUNDIS	2BUNDIS	2AUNDIST	1BUNDIS			NUMBER	SAI		onto, C		9
		+	DIST	DIST	DIST	DIST	DIST	DIST	DIST			TYPE	SAMPLES		ž		
K Q		╞										"N" <u>BLOWS</u> 0.3 m					
GRAPH		L										GROUND WATE	=H				
+ 3			20	N	2	22		23	5	24		ELEVATION					
+ 3, × 3; Numbers refer												20 40 60 80 100 SHEAR STRENGTH (FPa) • UNCONFINED + 5 estability • QUICK TRAVAL × LAB VANE 50 100 150 200 250	ANCE PLO	Date: Nov/11/2013	Diameter:	DRILLING DATA Method: Geo Probe	
⊖ ^ε =3% Strain at Failure												TH (kPa) + Somsitivity × LAB VANE 50 200 250			,	œ	
At Ealling												We w w w WATER CONTENT (%)	PLASTIC NATURAL				
		t										30 NT (%)	LIQUID	ENCL NO .:	REF. NO.: 1889-220		
		t										POCKET PER (Cu) (kPa)	۹.	j ő	0.: 18		
												NATURAL UNIT (Mg/m ³)	WT		389-22		
												GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		ŏ		-

	6.7	18 9	1 9 9	19.7	4.6	21 0		32	3		24.1			28 05		Ì	BHLO	PROJ	PROJECT CLIENT:
	END OF BOREHOLE 1. Sample refusal at 6.7 m. 2. 50mm-diameter monitoring well installed.	SHALE grey	CLAY grey, moist		SILTY CLAY grey, moist			SILT trace clay, gravel, grey/brown, moist	dark grey	grey, wet	SILTY CLAY		FILL sand and gravel, brown, moist	ASPHALT 75 mm of asphalt	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr. Christie CLIENT:
			M	++++ ++++	, <i>†††††</i>				++++++	++++++ ++++++			•		STRATA PLC	т		vd, Tor	
		5AUNDIS		4BUNDIS	4AUNDIST		3BUNDIS.	3AUNDIS	2BUNDIST	2AUNDIS	_	1BUNDIST	1AUNDIST	1	IUMBER	SA		onto, C	
		DIST	_	DIST	DIST		DIST	DIST	DIST	DIST			DIST			SAMPLES		ž	
B	terestat t														N" BLOWS 0.3 m		4		
GRAPH															CONDITIONS		4		
3		19		20	<u>1</u>	2		22	23		24		25		LEVATION			_	
3. N														:	SHEAR STRENGTH (kPa) UNCONF NED UNCONF NED UNCK TRIAXIAL × LAB VANE OULCK TRIAXIAL × LAB VANE		Date: Nov/08/2013	Diameter:	DRILLING DATA Method: Geo Probe
3 3. Numbers refer															R STRI	ANCE P	Nov/08	er	NG D/
refer																.0 10 10	/2013		ATA Probe
2														!	,×+(xPa				
€=3% c.															LD VANE BED VANE	100			
																5P	-		
Ottoin at Fallura															W ₂ W W WATER CONTENT (%)	PLASTIC N			
																MOISTURE			
															30 ENT (%		ENCL NO .:	REF.	
															POCKET I (Cu) (kP			REF. NO.: 1889-220	
															NATURAL U (Mg/m ³		1	1889-2	
														01 07 01		R]	220	
														2	AIN SI (%) (%)	REMARKS AND			

SPL SOIL L	LOG 1889-220 BOREHOLE LOGS SET 3.GPJ SPL.GDT 12/5/13	,									_					-
GROU		4 9	20.7		30	22 5	18	2 I 2	24 3	221 0750 28540	(m) ELEV DEPTH		BHL	PRO	CLIENT:	-
GROUNDWATER ELEVATIONS		 END OF BOREHOLE Barehole backfilled with bentonite upon completion. 	v wet		grey, moist			silty clay, grey, wet		FILL sand and gravel, brown, moist		SOIL PROFILE	BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	оеотеонност стиноплаетна матегать пулгодеоюду
			<i>++++;</i>	+++++	+++++		\$ <u>} }</u>				STRATA PLOT			d, Tor		Acres
			4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIST	1BUNDIS	1AUNDIS:	NUMBER	- sA		onto, (07
			IDIST	IDIST	IDIST	IDIST	IDIST	IDIST		IDIST	TYPE	SAMPLES		Z		
n											"N" <u>BLOWS</u> 0.3 m	ŝ				
GRAPH											GROUND WATE CONDITIONS	R				
- ω		20	21		22	23		24		25	ELEVATION]			
→ 3 × 3. Numbers refer											20 40 60 80 100 SHEAR STRENGTH (Pa) 0 UNCONF NED + FIELD VANE 0 UNCONF NED + Strendbardy 0 CUICK THAVAAL - LAB VANE 50 100 150 200 250		Date: NOV/06/2013	Diameter:	DRILLING DATA Method: Geo Probe	
											POCKET PEN (Cu) (kPa) NATURAL UNIT (Mg/m ³)			REF. NO.: 1889-220		
											AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		20		

4 ω	20 5	2.4	23 2 1 5 22 3	249.68 03.28	(m) ELEV DEPTH 24.7	PROJEC
 Bereinele backflied upon completion. 	trace sand, trace shale, some gravel	CLAYEY SILT clayey silt, brown, moist	SILTY CLAY trace sand, organics, grey, wet	Topsoli Topsoli FILL send, brown, moist SILT trace sand, some clay, brown, moist	DESCRIPTION	T: Mr.C T LOC/ Local TION:
			<i>*****</i> *****		STRATA PLOT	d, Tora
	3BUNDIS 4AUNDIS	3AUNDIS	2AUNDIS 2BUNDIS	1AUNDIS 1BUNDIS		onto, O
		DIST			TYPE	ž
					0.3 m	<u></u>
					GROUND WATER CONDITIONS	_
	21	22	23	24	ELEVATION	
					PESISTANCE PLOT 20 40 60 80 100 SHEAR STRENGTH (Pa) 0 LINCONF NED + FILLD WAR 50 100 150 200 250	DRILLING DATA Method: Geo Probe Diameter: Date: Nov/08/2013 Date: Nov/08/2013
					< 52	- -
					ATURAL LIQUID	REF. NO.: 1889-220 ENCL NO.:
					POCKET PEN. (Cu) (kPa) NATUBAL UNIT WT	0.1188
					NATURAL UNIT WT (Mg/m ²)	9-220
					REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 5.GPJ SPL.GDT 12/5/13															-
GROUI		.2 .4	22.1	22 5				03	2222 2429 3439	ELEV DEPTH 24.6	Ê		DATU	PRO,	PRO,	
		END OF BOREHOLE 1. Sample refusal at 2.4 m. 2. Borehole backfilled with bentonite upon completion.		CLAY clay, brick and glass fragments	q	grey/brown	FILL silt, some clay, grey, moist					SOIL PROFILE	DATUM: Local	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
			$\backslash\rangle$	XX		XX		\otimes	$\land \land$	STRATA PLO	т			i, Toro		geolog
◄ ◀			2BUNDIS		2AUNDIST		1BUNDIS			NUMBER	_	SA		onto, (Υ.
~					IDIST		IDIST	Č.		TYPE		SAMPLES		Z		
									.	"N" <u>BLOWS</u> 0.3 m		S.				5
<u>GRAPH</u> NOTES										GROUND W						60
+					23		,	24		ELEVATION						BC
$^3, \times$ 3 ; Numbers refer $_{\odot}$ $^{\epsilon}$ =3% Strain at Failure to Sensitivity										SHEAR STRENGTH (kPa) UINCONF NED + FIELD VANE OULICK TRIAXIAL × LAB VANE 50 100 150 200 250		DYNAMIC CONE PENETRATION	Date: Nov/11/2013	Diameter:	DRILLING DATA Method: Geo Probe	Log of Borehole BH17
at Failure										WATER CONTENT (%) 10 20 30 10 20 3	PEN. Pa) JNIT WT		ENCL NO .:	REF. NO.: 1889-220		1 OF

GROUN	4							ç	24 2 0 3	0 0 24 5	(m) ELEV DEPTH 24 8		PROJ DATU BH LC	PROJEC
	Ecorebacterioure upon completion.				grey, wet	oxidation		some clay, trace sand, brown, moist	FILL silt, brown, moist	TOPSOIL topsoil, dark brown, moist	DESCRIPTION	SOIL PROFILE	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr. Christie CLIENT:
	u .							-	×		STRATA PLOT	1	Vd, To	
		4BU	4AU	зви	зAU	2BU	2AU	1BUI		1 AU	NUMBER	s.	ronto,	
		4BUNDIST	4AUNDIST	3BUNDIST	3AUNDIST	2BUNDIST	2AUNDIST	1BUNDIST	00	1AI INDIST	TYPE	SAMPLES	9	
G											"N" <u>BLOWS</u> 0.3 m			
GRAPH											GROUND WATE CONDITIONS	R		
- ω		3	21		22		23	24			ELEVATION			
3 < 3. Numbers refer											20 40 60 100 SHEAR STRENGTH (KPa) 0 UNCONFINED + 6 5 000000 50 100 150 200 250	RESISTANCE PLOT	Diameter: Date: Nov/11/2013	DRILLING DATA Method: Geo Probe
											WATER CONTENT 10 20 30 NATURAL UMITEN 10 20 30 NATURAL UNIT		REF. NO.: 1889-220 ENCL NO.:	
											AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		

	7.6	178					29	22.4	15	23 8	25 0 0 3	(m) ELEV DEPTH 25 3		DATU BH L	CLIENT:	PRO.
-	END OF BOREHOLE Sample refusal at 7.6 m. Service backfilled with bentonite upon completion.			wet			SILTY-CLAY grey, very moist		SILT trace clay, brown, moist		ropsoli, dark brown FILL silt, trace clay, brown, damp		SOIL PROFILE	DATUM: Local BH LOCATION:	CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie
ľ		<i>7777</i>	<i>++++++</i> +	<i>+++++;</i>	++++++	<i>777777777777777777777777777777777777</i>	++++++++	× × × ×	× × × × × ×			STRATA PLOT			id, Tor	JECT: Mr.Christie
		5BUNDIS	5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS:	2BUNDIS	2AUNDIST	1BUNDIST	1AUNDIST	NUMBER	SA		onto, (
		DIST	DIST	IDIST		DIST	DIST	DIST	DIST	DIST		TYPE	SAMPLES		ž	
												"N" <u>BLOWS</u> 0.3 m				
											CK CK		R			
		18	19		20	22	22	Į	23	24	25	ELEVATION				
ſ												20 40 60 80 100 SHEAR STRENGTI (kPa) 0 UNCONF NED + FELD VANE 0 UNCK TRIAXIAL × LAB VANE 50 100 150 200 250	PYNA	Date:	Method: G Diameter:	
												AR ST JUICK T	STANCE	Nov/	od: Ge	DRILLING DATA
-												F NED F NED 100 1	RESISTANCE PLOT	Date: Nov/11/2013	Method: Geo Probe Diameter:	DRILLING DATA
-												150 × + (k	NETRA	13	e	
												KPa) FIELD 200 :	TION			
-												250				
-													PLAS	1		
												W _P W W WATER CONTENT (%) 10 20 30				
												20 VITENT	TURAL	_	-	
													LIQUID	ENCL NO .:	REF. NO.: 1889-220	
┢												POCKET PEN (Cu) (kPa)		NO.:	0 	
ľ												NATURAL UNIT (Mg/m ³)		1	889-2	
												GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	R		20	

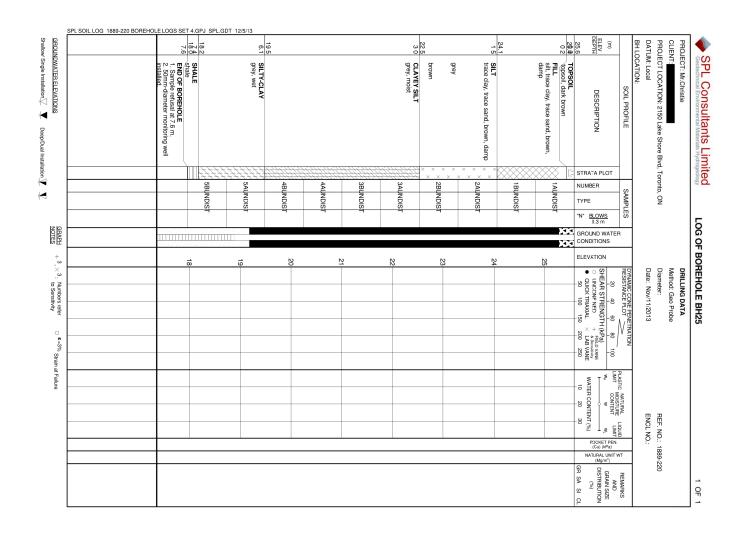
23 9 1 5	03	(m) ELEV DEPTH 25.4 0 0	PROJ DATU BH LC	PROJEC
END OF BOREHOLE 1. Borehole backfilled with bentontie upon completion.	FIL FIL sill, trace sand, oxidized, brown	DESCRIPTION	PROLECT LOCATION: 2150 Lake Shore Bind, Toronto, ON DATUM: Local BH LOCATION: BH LOCATION: SOIL PROFILE SAME	PROJECT: Mr.Christie CLIENT:
8		STRATA PLOT	d, To	
	1AUNDIST	NUMBER TYPE "N" <u>BLOWS</u> 0.3 m	ronto, ON SAMPLES	
		0.3 m GROUND WATER CONDITIONS	-	
) N	ELEVATION		
		100 Silivity VANE 250	Diameter: Date: Nov/11/2013 DYNAMIC CONE PENETRATION RESISTANCE PLOT	DRILLING DATA Method: Geo Probe
		LIMIT CONTENT LOUDU LIMIT CONTENT LOUDU MATER CONTENT (%) 10 20 30 10 20 30	EF. NO.: 1889-220 VCL NO.:	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 5.GPJ SPL.GDT 12/5/13	43 209	21 2				24 0	0 2 25 3	(m) DEPTH		DATU BH L	PRO.	PROJEC	•
GROUNDWATER ELEVATIONS	 Bend be becklived upon completion. 					brown, wet		Some clay, trace sand, brown, moist		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie	Geotechnical Environmental Materials Hydrogeology
		77	<i>[[]]</i>	<u> </u>					STRATA PLOT	1		d, To		ogeolo
			BU	3AU	2BU	2AU	1BU	1AU	NUMBER	_ v	1	ronto,		gy
			3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	TYPE	SAMPLES		N		
			-	-			-	-	"N" <u>BLOWS</u> 0.3 m] ES				
<u>GRAPH</u> NOTES									GROUND WATE CONDITIONS	R	1			LOG OF BOREHOLE BH21
		21		22	23		24	25	ELEVATION		1			
+ ³ , × ³ : Numbers refer to Sensitivity		Ť		N	ω		4	<u> </u>	20 40 60 80 100 SHEAR STRENGTH (kPa) • CIUIC/NEND + FED VANE • CUUIC/ TRIAXIAL × LAB VANE 50 100 150 200 250	RES	Dat	Diar	DRI	
to Se										ISTAN	e: No	Diameter:	LLING	Þ
pers ret									100 STRET	CE PLO	Date: Nov/12/2013		DRILLING DATA Method: Geo Probe	
<u> </u>		-							15 GTH 6		2013		robe	
୍ଚ		-							200 A SEE - 80	N R				
=3% SI		_							ED VAN B VAN 250	z				
○ ^ε =3% Strain at Failure														
Failure									WP W WATER CONTEN	LASTIC				
									WI CONTENT LIN W5 W W WATER CONTENT (%) 10 20 30	NATU				
											E E	R		
									0 (%) _ w	LIQUID	ENCL NO.:	FNC		
									POCKET PEN (Cu) (kPa)	4.	<u></u>	REF. NO.: 1889-220		
-		-							NATURAL UNIT (Mg/m ³)	WT	-	89-22		
									GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		0]_
		1							AIN S AIN S AIN S A S	; ₽	1			ç

SPL SOIL LOG 1889-220 BOREHOLE LOGS SET	4 0	20.7					24.1 1 5	c.c	299 293 2503		(j)	BHLC	CLIENT: PROJEC	PROJ
GROUNDWITER ELEVATIONS	 BoreHoLE 1. Borelove backfilled with bentonite upon completion. 	moist		grey/brown, wet			CLAYEY SILT grey, moist	SILT Itrace sand, some clay, brown, moist	ASPHALI 450 mm of asphalt FILL sand and gravel, brown, moist FIL	DESCRIPTION	SOIL PROFILE	BH LOCATION:	CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie
							XXXX	× × × ``		STRATA PLO	т		d, Tor	
		4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	s		onto,	
					DIST					TYPE	SAMPLES		N	
										"N" <u>BLOWS</u> 0.3 m	Si li			
GRAPH										GROUND W				DRILLING DATA
+ ω		21		22	23		24		25	ELEVATION				
3. ~ 3. Numbers refer										SHEAR STRENGTH (kPa) UNCONF NED + Fill VANE OUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESIS		Method: G Diameter:	PRIL
Numbe											20 2		od: Ge eter:	
srefer										RENG RIAXIAI	20 40 60 80	DAILE: NOV/VO/ZU 13	Method: Geo Probe Diameter:	DRILLING DATA
0										2×+(K	° /		ა ნ	
• 6 6 6 7 7 7 7 7 7 7 7										Pa) FIELD V LAB V	-8 /	TION		
Strain										50 ANE				
										_ NA _ MP	PLASTIC LIMIT	1		
Ď										TIO 2	IC NAT			
										WATER CONTENT (%)	MOISTURE	ļ	, R	
										-	70	ENCL NO.:	E NO	
										POCKET (Cu) (kP			2 :: 188	
)	-	REF. NO.: 1889-220	
										GR SA SI CL	REMARKS AND		-	
										CL N	ί γ			

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 5.GPJ SPL.GDT 12/5/13	N									סי	0 7	٦.
INDOE	4 დ	21.1		22	23 24		0 2	(m) ELEV DEPTH 25.6			ROJE	CLIENT:	
GROUNDWATER ELEVATIONS	 Berchole backfluid upon completion. 			SILTY CLAY grey, moist		wet	SILT some clay, trace sand, trace gravel, brown, moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	
			<i>++++++</i>	<i>77777</i>				STRATA PLOT	1		/d, To		000
		звu	3AU	2BU	2AU	1BU	1AU	NUMBER	s.	1	ronto,		
		3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	TYPE	SAMPLES		Q		
		-	-	-	7	-	-	"N" <u>BLOWS</u> 0.3 m	S				
GRAPH								GROUND WATE CONDITIONS	R	1			
			22	23	24		25	ELEVATION		1			
+ 3 X 3; Numbers refer O 8=3% Strain at Failure								20 40 60 80 100 SHEAR STRENGTH ((Pa)) • UNCONFNED + FIELD VANE • QUICKTRUAVAL + A Sensibility 50 100 150 200 250		Date: Nov/12/2013	Diameter:	DRILLING DATA Method: Geo Probe	
At Eally								WATER CONTENT 10 20 30 NATURAL (MUTTIN 10 30 NATURAL (MUTTIN	LIQUID	ENCL NO.:	REF. NO.: 1889-220		
								AND GRAIN SIZE (%) GR SA SI CL	REMARKS		-220		

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 5.GPJ SPL.GDT 12/5/13	N	N				N	.	N	(m) ELEV DEPTH 25.7			0 1	٦,
OUND	* ŏ	43 21.1	1.4			 @			0280				PROJECT:	G
GROUNDWATER ELEVATIONS	 Borance backfilled with bentonite upon completion. 	Grey, wet			saturated	SILT brown, wet	CLAY dark grey, wet	grey	Appsoil SILT Some clay, trace sand, trace gravel, brown	DESCRIPTION	SOIL PROFILE	PHOJEC I LOCA I ION: 2150 Lake Shore Bivd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
		14					\square			STRATA PLOT				geoiu
			3BUNDIS	3AUI	2BUNDIS	2AUNDIS		1BUNDIS	1AU	NUMBER	٩S	onto,		ЧУ
			NDIST	3AUNDIST	NDIST	VDIST		NDIST	1AUNDIST	TYPE	SAMPLES	l S		
										"N" <u>BLOWS</u> 0.3 m	ŝ			
GRAPH										GROUND WATER CONDITIONS				
+ 3				22	23		24		25	ELEVATION				
. 3, × 3; Numbers refer O ⁸ =3% Strain at Failure										100 100 VANE VANE 250	RESISTANCE PLOT	Diameter: Date: Nov/12/2013	DRILLING DATA Method: Geo Probe	
at Failure										WATER CONTENT (%) 10 20 30 10 20 3	т	REF. NO.: 1889-220 ENCL NO.:		
										AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	MARKS			CF T



GROUND	PL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13		21 8 4 0		2.4			Co	253	(m) ELEV DEPTH		DATUM: Local BH LOCATION	PROJEC CLIENT: PROJEC	1
GROUNDWATER ELEVATIONS	 Benchole backflied upon completion. 		CLAYEY SILT brown, moist, hard		SILTY CLAY grey, wet		oxidation organics	silt, some clay, trace sand and gravel, greyish brown, moist	TOPSOIL brown, moist, loose	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	
	-			+++++	<i>++++</i> +					STRATA PLOT			vd, Tor	
		4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	SA		onto, C	
-		DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	TYPE "N" <u>BLOWS</u> 0.3 m	SAMPLES		ž	
GRAPH										GROUND WATE	R			
. [CONDITIONS				
_3 < 3.		21		22	23	1	2	25			REDY	Da	Dia Dia	,
Numt										20 40 60 80 100 SHEAR STRENGTH (FPa) - UNCONFINED + (FED VANE - QUICK TRAXAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/13/2013	DRILLING DATA Method: Geo Probe Diameter:	
Numbers refer										40 TREN TRIAXI	CE PLO	v/13/20	àeo Pro	
_										150 × + (k	N	13	be	
ε =3%										KPa) FIELD V 200 2	TION			
⊖ 8=3% Studie of Follows										Wp W WATER CONTENT 10 20	PLASTI			
										WATER CONTENT (%) 10 20 30				
												Ð	R	
											LIQUID	ENCL NO .:	REF. NO.: 1889-220	
+										POCKET PEN (Cu) (kPa) NATURAL UNIT (Mg/m ³)	NT	i.	: 1889	
┢										(Mg/m ³) GR DG G	л		-220	
										GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS			
											ŝ			

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13									-
<u>GROU</u> Shallov	 ת	24.1		28-0 1-0	(m) ELEV DEPTH 25.7		BHL	PRO	CLIE	
GROUNDWATER ELEVATIONS Shallow' Single Installation ∇	EDGPEDDE Endende backfilled with bentontie upon completion	grey, very moist	occassional brick	FIL FIL silt, brown, moist, loose		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	CLIENT:	Geotechnical Environmental Materials Hydrogeology
allation		**	<u> </u>		STRATA PLOT	1		vd, To		rogeolo
			Ē	IAL	NUMBER	_ s	1	ronto,		ygy
			1BUNDIS	1AUNDIST	TYPE	SAMPLES		Q		
			-	4	"N" <u>BLOWS</u> 0.3 m	۳.				5
<u>GRAPH</u> NOTES					GROUND WATE	R	1			60
					ELEVATION		1) Ť
+ ³ ,× ³ :				25		REPY				澋
to Sensitivity					20 40 60 HEAR STRENGTH UNCONF NED QUICK TRIAXIAL 50 100 150	RESISTANCE PLOT	Date: NOV/13/2013	Diameter:	Method: Geo Probe	LOG OF BOREHOLE BH27
○ ^ε =3 [%] Strain at Failure					H (KPa) H (KPa) + BIELD VANE + & Sensitivity × LAB VANE 200 250				ų	
at Failure					LIMIT CONTENT LIMI We w w WATER CONTENT (%) 10 20 30	PLASTIC NATURAL LIQUID		REF. NO.: 1889-220		
					POCKET PEN (Cu) (kPa)	<u>5</u>		0.: 1		
					NATURAL UNIT (Mg/m ³)	WΤ		1889-2		
					AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		20		1 OF 1

	202	(m) ELEV DEPTH 25.7		BHL	PROJEC
END OF BOREHOLE 1. Sample refusal at 1.5 m 2. Berehole backfilled with bentonite upon completion.	90 mm FILL Stand gravel SLT SLT SLT SLT Tace sand, oxidation, brown, moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON
	~~~ <u>`</u>	STRATA PLOT	1		d, To
	1AL	NUMBER	6	1	ronto
story	1AUNDIST	TYPE	SAMPLES		, Q
		"N" <u>BLOWS</u> 0.3 m	ES		
		GROUND WAT	ĒR		
		ELEVATION		1	
	25	• ़ <b>थ</b>	교업		
		20 40 68 100 SHEAR STRENGTH (KPa) UNCONFINED + REMUNITION OULICK TRIAVIAL × LAB VANE 50 100 150 200 250	ANCE PLO	Date: Nov/13/2013	Method: Geo Probe Diameter:
		H (kPa) + Field VANE + Sensitivity × LAB VANE 0 200 250	MAIION		Ū
		P CONTENT	PLASTIC NATURAL LIC	ENCL NO .:	REF.
			LIQUID	No	NO.::
		POCKET PEI (Cu) (kPa) NATURAL UNIT			REF. NO.: 1889-220
		(Mg/m ³ )			3-220
		GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		-

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13														
<u>GROUI</u> Shallow	4 0	20 9							255 03	(m) ELEV DEPTH		BHL	PRO,	PROJECT	
GROUNDWATER ELEVATIONS Shallow/ Single Installation 🕎 👤 Deep/Dual Installation 📡	<ol> <li>Experience backfulder Experience backfulder upon completion.     </li> </ol>				oxidation zone		organic layer	brown, moist, compact	Some clay, trace sand and gravel,		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
allation		× × < × ×	× × × × × ×	× × × × ×	× × × × × ×	× × × ×	× × × × × ×	× × × × × ×	×_×511	STRATA PLOT	1		rd, To		ogeolo
ĀĀ		4BUI	4AU	3BUNDIS	3AUNDIS	2BUI	2AU	1BUNDIS	1AUNDIS	NUMBER	_s	1	ronto,		gy C
D.		4BUNDIST	4AUNDIST	VDIST	VDIST	2BUNDIST	2AUNDIST	VDIST	VDIST	TYPE	SAMPLES		N		
220						•				"N" <u>BLOWS</u> 0.3 m	S				5
<u>GRAPH</u> NOTES										GROUND WATE CONDITIONS	R				0.0
+ 3		21	22		23		24	25		ELEVATION		1			BO
$+$ 3 , $\times$ 3 ; Numbers refer $\circ$ $\epsilon$ =3% Strain at Failure										20 40 60 80 100 SHEAR STRENGTH (kPa) • UNCONFINED + Field VANE • QUICK TRUXAL + LAS VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/13/2013	Diameter:	DRILLING DATA Method: Geo Probe	LOG OF BOREHOLE BH29
at Failure										POCKET PEN (Cu) (kPa) NATURAL UNIT (Mg/m ³ )		ENCL NO.:	REF. NO.: 1889-220		
										AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS				1 OF 1

0 0	6.6 19 0	6.1 193	198							60	2 0 1 0	25.00	(m) ELEV DEPTH		DATU	PROJECT CLIENT:
END OF BOREHOLE 1. Sample retusat 8.8 m 2. 50 mm-diameter monitoring well Installed								organics at 2 m (thickness 0.7 m)	organic layers	SILT some clay, greyish brown, moist, very stiff	SANU trace silt, brown, very moist, loose	dark brown, moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON
			× × × × × × × × × × × × × × × × × × ×	× × × × ×	<	× × × × ×	× × × × × ×	× × × × ×	× × ×	γ × × × × ×	• . • .	•     _x s	STRATA PLOT	1		vd, To
		5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS		1 BUNDIS	1 AUNDIS	N	IUMBER	SA		onto, (
		DIST	DIST	DIST	DIST	DIST	DIST	DIST		DIST	DIST		YPE	SAMPLES		ž
													N" BLOWS 0.3 m			
													CONDITIONS			
	\$		20	21	22		23	24		5	ວ ກ		LEVATION		_	
												ę	20 40 60 80 100 SHEAR STRENGTH (kPa) UNICOME NED 4 FIELD VANE OLICICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/12/2013	DRILLING DATA Method: Geo Probe Diameter:
													CK TRIA	NICE PI	Jov/12	: Geo F
												į	NGTH 60		2013	Probe
													>00 × + (kPa) LAB = 00	V RATIO		
													100 Ensitivity B VANE	2		
														P		
														PLASTIC M		
														MOISTURAL	_	
													ENT (%)		ENCL NO .:	REF. NO.: 1889-220
													POCKET PEN (Cu) (kPa)		NO.:	0 .: 1
													NATURAL UNIT (Mg/m ³ )	WT		889-2
												GH SA SI CI	AND STRIBUTI (%)	REMARKS		20

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13																	_
	4 0	20 9	40	21 9								2 <b>8</b> .0	(m) ELEV DEPTH 25 8		BHL	PRO.	CLIENT:	
GROUNDWATER ELEVATIONS	<ol> <li>Berahole backflied upon completion.</li> </ol>	wet							organic layer at 1.4 m (thickness 200 mm)	very moist	SILT some clay, trace sand, trace gravel, brown, moist	dark brown, moist	DESCRIPTION	SOIL PROFILE	DATOM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	CLIENT:	Geotecrinical Environmental Materials Hydrogeology
				××	× × × × × ×	× × × × ×	× × × × ×	× × ×	× × × × ×	× × >	< × × ×	XE	STRATA PLOT	_	4	, Toro		Jeology
		4B	4A	>	зв	3A	6	ŭ	2A	1B		\$	NUMBER	SAN		nto, O		
													"N" <u>BLOWS</u> 0.3 m	SAMPLES		z		
GRAPH NOTES													GROUND WATE	R	-			
													CONDITIONS		$\left\{ \right.$			
+ ³ ,×		21		22		23		24		25				20		, ,	< 0	
$+$ ³ , $\times$ ³ ; Numbers refer $\circ$ ^{$\epsilon$} =3% Strain at Failure													20 40 69 80 100 SHEAR STRENGTH (kPa) • UNCONF NED + 6 Genearby • OUICK TRAVAL + 48 WANE 50 100 150 200 250	RESISTANCE PLOT		Diameter:	DRILLING DATA Method: Geo Probe	
at Failure													POCKET PEN (Cu) (kPa) NATURAL UNIT (Mg/m ³ )	LIQUID	ENCL NU:	REF. NO.: 1889-220		
													GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	R		220		

GROUN	PL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13 س س		4	219				24 3 1 5			29.9 0.2	(m) ELEV DEPTH		DATU BH LC	PROJEC	
GROUNDWATER ELEVATIONS	1. So for EPOLE     1. So form-diameter monitoring well     installed     vater encountered at 0.9 mbg     Nov. 12, 2013.	shale	grey, wet, soft				occasional grey fissures	SILT some clay, brown, moist, hard		FILL silt, some clay, trace sand and gravel, greyish brown, wet, loose	TOPSOIL 150 mm, dark brown, wet, loose	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: MIT-UTITISTIE CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	IEOT. Mr. Obvictio
ľ			+++++++		× × × × ×	× × × × × ×	× × × ×	×		****	X E s	TRATA PLOT			rd, Tor	
		Ę					Ę			Ę		IUMBER	SA		onto, C	
-		UNDIST	UNDIST			UNDIST	UNDIST			UNDIST		YPE	SAMPLES		ž	
g, i		a sugar		i en text								N" BLOWS 0.3 m				
GRAPH									× 7<			ONDITIONS				
- 3 <u>-</u> 3 -			21	22		23	24	2	40v 12	2		LEVATION		_		
з. х									23 W. L. 24.9 m Nov 12, 2013				RESIST	Date: Nov/12/2013	Method: Geo Probe Diameter:	
Numbers refer													ANCE F	Nov/12	ter:	
refer													PENE	2/2013	Probe	
												20 40 60 80 100 SHEAR STRENGTH (kPa) O LINCCNF NED + FIELD VANE O LUCK TRIAXIA + Associativity O LUCK TRIAXIA + LAB VANE	N H			
S = 3% cm = 1 = 1												100 ELD VAN B VAN	ž			
													7			
													ASTIC			
													NATUR			
-													₽,₽ 	ENC	REF.	
												POCKET PEN (Cu) (kPa)	LIQUID	ENCL NO .:	NO.:	
ŀ												(Cu) (kPa) NATURAL UNIT (Mg/m ³ )			REF. NO.: 1889-220	
ľ											g	DIST	R		220	
													REMARKS			

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13												_
GROUI	ற் ப	19.7	4.6	2	30	22 8			25 2 0.6	(m) ELEV DEPTH		PROJECT CLIENT: PROJECT DATUM: L BH LOCA	
GROUNDWATER ELEVATIONS	Exp of BoartHOLE     Evade backfilled with bentonite upon completion.	shale fragments	grey, wet, sott	-	<ul> <li>SAND trace silt, brownish grey, saturated clayey silt, grey</li> </ul>			zones of oxida ion, brown, moist	90 mm 91 FIL silt, some clay, trace sand and silt, some clay, trace sand and silt, some clay, trace sand and		SOIL PROFILE	CLENT: Mr.Christie CLENT PROJECT LOCATION: 2150 Lake Shore Bivd, Toronto, ON DATUM: Local BH LOCATION:	Geotechnical Environmental Materials Hydrogeology
		++++++ ++++++	<i><u> </u></i>			77777	+++++++	++++++	<u> </u>	STRATA PLOT		I, Toro	geolog
		4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIST	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	NUMBER	SAN	nto, O	4
		DIST	DIST	DIST	DIST	DIST	DIST	DIST	T	TYPE	SAMPLES	z	
NGR										"N" BLOWS 0.3 m			5
<u>GRAPH</u> NOTES										CONDITIONS			<b>P</b>
+ ,,,		20	21	22		23	24	S	0 n	ELEVATION			B
$\pm$ 3 , $\times$ 3 . Numbers refer $$\odot^{\epsilon=3\%}$$ Strain at Failure										20 40 60 80 100 SHEAR STRENGTH (KPa) 0 UNCONF NED + FIELD VINIE 0 UNCONF NED + A Sensitivity 50 100 150 200 250	RESISTANCE PLOT	DRILLING DATA Method: Geo Probe Diameter: Date: Nov/12/2013	LOG OF BOREHOLE BH33
at Failure										WATER CONTENT (%) 10 20 30 NATURAL (MIT EN 10		REF. NO.: 1889-220 ENCL NO.:	
										AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		1 OF 1

GRO	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13	21 3				-1 51	24 0	25.1	28 0 0.1	(m) DEPTH		BH DA PR	CLI
GROUNDWATER ELEVATIONS	EVD OF EPICLE     Sample refusal at 4.6 m     Bonchole backfilled with bentonite     upon completion.			damp/moist		5 CLAYEY SILT clayey silt, trace sand, brown, damp	silty clay, brown, moist			DESCRIPTION	SOIL PROFILE	PROJECT LOCATION: 2150 Lake Shore Bivd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT:
									*	STRATA PLOT		d, Tor	
		3BUNDIST		3AUNDIST	2BUNDIST	2AUNDIST	1BUNDIST			NUMBER TYPE "N" <u>BLOWS</u> 0.3 m	SAMPLES	onto, ON	
GRAPH										GROUND WATER CONDITIONS	1		
+ ω			22		23	24	ŗ	vл		ELEVATION			
3, × 3. Numbers refer O = 3% Strain at Failure										100 VANE VANE	RESISTANCE PLOT	Diameter: Date: Nov/13/2013	DRILLING DATA Method: Geo Probe
at Ealling										WATER CONTENT (%) 10 20 30 10 20 3		REF. NO.: 1889-220 ENCL NO.:	
										AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		

	L SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13	20					12	0.6 24.4	25	(m) ELEV DEPTH		BH DA	PR	CLI PR
GROUNDWATER ELEVATIONS	<ul> <li>END OF BOREHOLE</li> <li>1. Borehole backfilled with bentonite upon completion</li> </ul>			clayey siit, occasional silt layers			2 SILT some clay, grey, moist, hard	.6 FILL silt, some clay, trace sand and gravel, brown, moist, compact			SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:
		× × ×	× × × ×	× × × × × × ×	× × × × × ×	× × × × × ×	× × × × × ×		$\otimes$	STRATA PLOT	1		/d, To	
		4BUNDIST	4AUNDIST	3BUNDIST	3AUNDIST	2BUNDIST	2AUNDIST	1BUNDIST	1AUNDIST	NUMBER TYPE "N" <u>BLOWS</u> 0.3 m	SAMPLES		ronto, ON	
GRAPH										GROUND WATE CONDITIONS	R			
		21		22	23		24	25		ELEVATION				
+ 3 × 3. Numbers refer © 8=3% strain at Failure										20 40 60 80 100 SHEAR STRENGTH (KPa) • UNCONFINED + FELL VANE • QUICK TRIVXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/13/2013	Diameter:	DRILLING DATA Method: Geo Probe
										WATER CONTENT 10 20 20 (KPa) NATURAL UNIT 10 20 10 (W) 10 20 10 (W)	LIQUID	ENCL NO.:	REF. NO.: 1889-220	
										GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		220	

24 3 1 5		28.9 0.9	(m) ELEV DEPTH 25.9		DATU	PROJEC
END OF FOREHOLE 1. Borehole backfilled with bentonite upon completion.	grey	PLL silt, trace clay and sand, brown, moist	DESCRIPTION	SOIL PROFILE	PHOUECT LOCATION: 2150 Lake Shore Bivd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT:
X	****	****	STRATA PLOT		ĝ,	
	1BL	1AL	NUMBER	6	ronto	
	1BUNDIS	1AUNDIS:	TYPE	SAMPLES	Ç	
	4	<u>0</u>	"N" <u>BLOWS</u> 0.3 m	ES		
			GROUND WATER CONDITIONS	3		
			ELEVATION			
	25		• े <del>भ</del>	REDY	Da	
			100 VANE VANE 250	DYNAMIC CONE PENETRATION RESISTANCE PLOT	Diameter: Date: Nov/13/2013	DRILLING DATA Method: Geo Probe
			Image: Construct         Construct         Construct         AND           w         ∞         w         Construct         Construct		HEF. NO.: 1889-220 ENCL NO.:	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13							· · ·						
GROU	8	21 2				23.7	24 3	25.0	(m) ELEV DEPTH		BHL	PRO.	PROJECT	
GROUNDWATER ELEVATIONS Shallow/ Single Installation $\nabla$ $\bullet$ Deep Dual Installation $\nabla$	<ul> <li>Leschuid Vinture Vontonite upon completion.</li> </ul>			brown/grey	clayey silt, trace sand, brown, moist	SILTY CLAY     Silty clay, trace sand, grey, very moist     CLAYEY SILT     CLAYEY SILT			DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie	Geotechnical Environmental Materials Hydrogeology
tion 🗸			<u>ω</u>	1111	<u></u>	447777   12		•••••••	STRATA PLOT	-	-	Toron		eology
		3BUNDIS	3AUNDIS		2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	TYPE	SAM		nto, Of		
		- IST	- IS		IST	- ST	- ST	- IS	"N" <u>BLOWS</u> 0.3 m	SAMPLES		2		
GRAPH NOTES									GROUND WATE	R				LOG OF BOREHOLE BH37
1									CONDITIONS		-			유
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+ ³ , × ³ : Numbers refer to Sensitivity									20 40 60 80 100 SHEAR STRENGTH (kPa) • UNCONF NED + FIELD VANE • QUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/13/2013	Diameter:	DRILLING DATA Method: Geo Probe	EHO
nbers re iensitivit			_						STRE	NCE PL	ov/13/		Geo F	
y y			_						XIAL 150 NGTH	I PER	2013		robe	H37
୍ଷ									200 × + (kPa) 200 A	VIAIO				
O [€] =3% Strain at Failure									ED VANE B VANE 250	2				
ain at F			_							P	-			
ailure			_							ASTIC				
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			_								ENCI	REF		
									POCKET PEN (Cu) (kPa)		ENCL NO.:	REF. NO.: 1889-220		
									(Cu) (kPa) NATURAL UNIT (Mg/m ³ )		1	1889-:		
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									AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS				1 0F
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	ـــ ە	24.2	25.1 0.6	28.9 0.1	(III) ELEV DEPTH 25.7		DATU BH LC	CLIENT:
GROUNDWATER EI EVATIONS	<ol> <li>Bercihole backflied upon completion.</li> </ol>	soft soft	sand and gravel, brown, moist	90 mm FILL	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	CLIENT: 2150 Lake Shore Bivd, Toronto, ON
		*****		<b>i</b>	STRATA PLO			d, To
		1BUNDIS		1AUNDIS	NUMBER	{v}	1	ronto,
		VDIST			TYPE	SAMPLES		Q
					"N" <u>BLOWS</u> 0.3 m	S		
GRAPH					GROUND WA	FER		
+			25		ELEVATION		1	
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E=3% Strain at Failure						3		
Failure					R CONTEN	PLASTIC NATURAL LIQUID	ENCL NO .:	REF. NO.: 1889-220
ŀ					NATURAL UN (Mg/m ³ )	IT WT	1	1889-2
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	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET	7.GPJ SI	PL.GDT 12/5/1	3													_
GROUNDWATER ELEVATIONS	7.6	18.1	18.7	5 8	19 9			30	22.6	-1 5	24.2	29 0.1 9 24 8	(m) ELEV DEPTH 25.7		DATL BH L	CLIENT:	PRO.
GROUNDWATER ELEVATIONS	END OF BOREHOLE 1. Samble refusa at 7.1 m. 2. Somm-diameter monitoring well installed at 7.6 m.		SHALE	SILTY CLAY silty clay, grey, very moist trace gravel, trace shale fragments				CLAYEY SILT clayey silt, trace sand, grey, moist		SILT some sand, trace clay, brown, damp/moist	FILL clayey silt, some sand, trace gravel, brown/red, moist	ASPHALT 25 mm of asphalt FILL sand and gravel, brown, damp		SOIL PROFILE	DATUM: Local BH LOCATION:	CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie
			77777	+++++	<u>7777</u>								STRATA PLOT			d, Torr	- month
			5AUNDIS 5BUNDIS		4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	SA		onto, C	57
					DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	TYPE	SAMPLES		ž	
<u>G</u>												158	"N" <u>BLOWS</u> 0.3 m				
GRAPH				ШШ								000		R			
+ ω			19		20	2		22	23	24		25	ELEVATION				
× 3: 1													20 40 60 100 SHEAR STRENGTH (KPa) C UNCONFNED + Gaussiav 0 QUICK TRUXAL + LAB VANE 50 100 150 200 250	PESIS	Date:	Method: G Diameter:	
3 × 3. Numbers refer													AR STI	RESISTANCE PLOT	Date: Nov/13/2013	Method: Geo Probe Diameter:	DRILLING DATA
s refer														PLOT	3/201	o Prob	DATA
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<b>e</b> =3%													Pa) FIELD V & Bensil	TION			
Strain													50 May 10				
○ ^ε =3% Strain at Failure													WATER CONTENT 10 20 3	PLAST	1		
¢													WATER CONTENT (%) WATER CONTENT (%)	NAT			
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													UT (%)	LIQUIE	ENCL NO .:	REF. NO.: 1889-220	
													POCKET PEN. (Cu) (kPa)			0.: 18	
													NATURAL UNIT V (Mg/m ³ )	ΝT		89-22	
													AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		0	-

GROUN	4 \$	21.1				08	24.9	(m) ELEV DEPTH 25.7	9	PRO. DATL	PROJEC
GROUNDWATER ELEVATIONS	1. Sample relius at 4.6 m.     2. Borehole backfilled with bentonite upon completion.	grey			trace sand, brown	CLAYEY SILT brick fragments, brown/red, moist			SOIL PROFILE	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON DATUM: Local RH I OCATION:	PROJECT: Mr.Christie CLIENT:
		<u> </u>						STRATA PLOT		d, Torc	
-		3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	SAM	nto, Of	
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GRAPH								GROUND WATEF	1		
+			22	23	24	,	v تر	ELEVATION			
3,×3: Numbers refer © [€] =3% Strain at Failure							л 	20 40 60 100 SHEAR STRENGTH (kPa) 0 LINCONFINED + FELD WARE 50 100 150 200 250	DYNAMIC CONE PENETRATION	Diameter: Date: Nov/13/2013	DRILLING DATA Method: Geo Probe
4 E-211-20								WATER CONTENT CHANT WATER CONTENT (%) WATER CONTENT (%) POCKET PENN POCKET PENN MATURAL UNIT MATURAL UNIT MATURAL UNIT MATURAL UNIT MATURAL UNIT	NATURAL INCIDE	REF. NO.: 1889-220 ENCL NO.:	
								AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13										1	_
GROUI		4.6	21 2	30	22.7	- 5	24 2	28. - 9	(m) ELEV DEPTH		PROJECT PROJECT DATUM: L BH LOCA	
GROUNDWATER ELEVATIONS		<b>END OF BOREHOLE</b> 1. Borehole backfilled with bentonite upon completion.		CLAYEY SILT brown, moist/very moist		FILL clayey silt, some sand, trace organics, black/brown, moist	brick fragments, asphalt fragments, grey			SOIL PROFILE	: Mr.C LOC/ Local TION:	
									STRATA PLOT		d, To	0
			3BUNDIS	3AUNDIS:	2BUNDIS	2AUNDIS	1BUNDIS	1AU	NUMBER	s	onto,	
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GRAPH NOTES									GROUND WATE CONDITIONS	R	]	
				22	23	24	ŗ	ວ ກ	ELEVATION		1	
,×3:					<u> </u>	4		<u>л</u>	20 40 60 80 100 SHEAR STRENGTH (FPa) • UNCONFINED + FELO VANE • QUICK FINAXAL × LAB VANE 50 100 150 200 250	RESI	Dian Date	
$+$ ³ , $\times$ ³ : Numbers refer to Sensitivity									S0 S		DHILLING DATA Method: Geo Probe Diameter: Date: Nov/13/2013	
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् <b>६</b> =3									200 LAB	VAION	TION	
^{1%} Stra									VANE 250			
○ ^ε =3% Strain at Failure										PL	-	
ilure									We www www. WATER CONTENT (%) 10 20 30	STIC		
									CONTEN 20	IATURA		
											ENCI	
									POCKET PEN (Cu) (kPa)		REF. NO.: ENCL NO.:	
									(Cu) (kPa) NATURAL UNIT (Mg/m ³ )		REF. NO.: 1889-220 ENCL NO.:	
									(Mg/m ² ) GR DS G		-220	
									GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		
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GROUN		4 9 20 3	20 9			2.4	23 3		25 0.1	(m) ELEV DEPTH 25.8		CLIENT: PROJEC DATUM: BH LOC/	PROJ
GROUNDWATER ELEVATIONS	<ol> <li>Serverbore Description at 55 m.</li> <li>Borehole backfilled with bentonite upon completion.</li> </ol>	SHALE				CLAYEY SILT occasional sand layer, grey, moist	grey	silt, trace clay and sand, brown, moist	FILL sand, trace gravel, brown, moist	DESCRIPTION	SOIL PROFILE	CLENT: PROJECT LOCATION: 2150 Lake Shore Bivd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie
			2222	<u> </u>	11111					STRATA PLOT	1	d, To	
		5AU	4BU	4AU	BE	3AU	28U	1BU	1AU	NUMBER	ŝ	ronto,	
		5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	1BUNDIS	1AUNDIST	TYPE	SAMPLES	Ŷ	
										"N" <u>BLOWS</u> 0.3 m	ES		
GRAPH NOTES								·		GROUND WATE CONDITIONS	R		
+ 			21	22		23	24	25		ELEVATION			
3, × 3. Numbers refer to Sensitivity										20 40 60 80 100 SHEAR STRENGTH (kPa) 0 UNCONF NED + FIELD VANE 0 UNCK TRIAXIAL × LAB VANE 50 100 150 200 250	DYNA	Method: G Diameter: Date: Nov	DRIL
Number										AR ST	TANCE	od: Ge eter: Nov/	DRILLING DATA
's refer tivitv										F NED F NED F NED 100 1	RESISTANCE PLOT	Method: Geo Probe Diameter: Date: Nov/13/2013	DATA
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○ ^ε =3% Strain at Fallure										KPa) FIELD 200 2	TION		
Strain										250			
at Failu										WP W WATER CONTENT	PLAST		
re										WATER CONTENT LIN WATER CONTENT (%)			
												REF. NO.: ENCL NO.:	
										POCKET PEN (Cu) (kPa)		REF. NO.: 1889-220 ENCL NO.:	
										NATURAL UNIT (Mg/m ³ )	WT	89-22	
										AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REM	ö	
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	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13								-	. – –			۰ ۲
<u>GROU</u> Shallov	4. •	21 0				60	280 0.1 0.1	(m) ELEV DEPTH		BHL	PRO	CLIE	
GROUNDWATER ELEVATIONS	<ul> <li>EVEX</li> <li>EVEX</li> <li>Sample refusal at 4.6 m.</li> <li>Borehole backfilled with bentontle upon completion.</li> </ul>					CLAVEY SILT     trace sand, brown, moist	ASPHALI 125 mm of asphalt FILL sand and gravel, brown, moist		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
• llation								STRATA PLOT	1		vd, To		rogeolo
		звu	3AU	2BU	2AU	Ē	ĨĂ	NUMBER	v	1	ronto,		y C
▼		3BUNDIS	3AUNDIS	2BUNDIS1	2AUNDIS	1BUNDIS	1AUNDIST	TYPE	SAMPLES		Q		
		7			-	-	-	"N" <u>BLOWS</u> 0.3 m	ES				5
<u>GRAPH</u> NOTES								GROUND WATER CONDITIONS	R	1			0.00
1		21	22	23		24	25	ELEVATION		1			FBO
+ ³ , × ³ : Numbers refer to Sensitivity								20 40 SHEAR STREN • UNCONF NED • QUICK TRIAXI 50 100	RESISTANCE PLOT	Date: Nov/13/2013	Diameter:	DRILLING DATA Method: Geo Probe	LOG OF BOREHOLE BH43
r ں ^د =3% Strain at Failure								20 40 60 100 SHEAR STRENGTH ((Pa) 0 UNCONFINED 4 50 0000000 50 100 150 200 250 50 100 150 200 250		013	5	obe	43
at Failure								WATER CONTENT 10 20 3	PLASTIC NATURAL	ENC	REF		
								·	QUID	ENCL NO.:	NO		
								POCKET PEN. (Cu) (kPa) NATURAL UNIT V (Mg/m ³ )			REF. NO.: 1889-220		
								9 P 0	R		-220		1 OF 1

END O 1. Bore upon co	grav	Sance Sector		t []	~ = ?	
END OF BOREHOLE 1. Borehole backfilled with bentonite upon completion.	FILL silt, some clay, trace sand and gravel, brown, very moist	ASHPHALT 20 mm FIL sand and gravel, brown, moist, loose	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT:
			STRATA PLOT		ç	1
 	1BUNDIST	1AUNDIS	NUMBER	SA	onio,	anto
	IDIST		ТҮРЕ	SAMPLES	4	2
			"N" <u>BLOWS</u> 0.3 m			
			GROUND WATER CONDITIONS	'		
		25	ELEVATION			
			100 100 sitivity VANE 250	DYNAMIC CONE PENETRATION RESISTANCE PLOT	Date: Nov/13/2013	DRILLING DATA Method: Geo Probe
			MATER CONTERT LUMPER W. WTER CONTENT LUMPER WATER CONTENT (%) 10 20 30 20 20 20 20 20 20 20 20 20 20 20 20 20		ENCL NO.:	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13														
GROU			2 <b>8 8</b> 4.7	21 0			23.1 2.4		0	24 8	26 A	(m) ELEV DEPTH		CLIENT: PROJECT DATUM: I BH LOCA	PRO
	<ol> <li>Sample rotusal at 4.7 m.</li> <li>Sommediameter monitoring well installed at 5.3 m.</li> </ol>		3 SHALE 7 Shale, grey				CLAYEY SILT     clayey silt, trace sand, brown, moist	trace wood fragments				DESCRIPTION	SOIL PROFILE	CLENT: PROJECT LOCATION: 2:150 Lake Shore Bird, Toromo, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie
1				///	7777 7777		<i>illilli</i> X				~~~~	STRATA PLOT		d, Toro	
1			4AUNDIS		3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	!	NUMBER	SA	onto, (	
~			IDIST		IDIST	IDIST		IDIST	IDIST	IDIST		TYPE	SAMPLES	2 Z	
20												"N" <u>BLOWS</u> 0.3 m	ŝ		
GRAPH NOTES											1999 ( 1997 (	GROUND WATER	R		
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+ ³ , × ³ : Numbers refer to Sensitivity				3		22	23	4	2	25		● ़ ¥	RES	Dia Dat	DRILLING DATA
to Se												20 40 60 100 SHEAR STRENGTH (kPa) • UNCOVE NED + FELD VANE • CUICK TRUXXAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Method: Geo Probe Diameter: Date: Nov/14/2013	DRILLING DATA
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e												IS IGTH	N/F	013	
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												- E		REF. NO.: ENCL NO.:	
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ŀ											2			9-220	
											9	AND GRAIN SIZE DISTRIBUTION (%) GB SA SI CI	REMARKS		
		1									9	SIZE SIZE	ᆛ		

GROUN		24.1 1 5	80	24.9	2 <b>8.9</b>	(m) ELEV DEPTH 25.6		DATU BH LC	PROJ	PROJEC
	<ol> <li>Sample refusal at 15 m.</li> <li>Berehole backfland with bentonite upon completion.</li> </ol>	END OF BOREHOLE	FILL silt mixed with slag, brown, moist	FILL sand and gravel, brown, moist	ASPHALT 90 mm of asphalt	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie
		X			Ì	STRATA PLOT			d, To	
			1BU	1AU		NUMBER	ş		ronto,	
			1BUNDIST	1AUNDIS		TYPE	SAMPLES		Q	
				_		"N" <u>BLOWS</u> 0.3 m	S			
GRAPH		Τ				GROUND WATER CONDITIONS	1			
+		T		25		ELEVATION				
$3 \ge 3$ . Numbers refer				5		20 40 60 100 SHEAR STRENGTH (KPa) UNCOVE NUED + 6 5 000000 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/13/2013	Diameter:	DRILLING DATA
C 8=3% Studio at Falling						- 5				
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						g _	REMARKS		220	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13														- ٦
<u>GROU</u> Shallov		4.6	210	30	20		24.2	24 8 0 8	28 	(m) ELEV DEPTH 25.6		BHL	PRO	PROJECT	
GROUNDWATER ELEVATIONS Shallow/ Single Installation ∑ ▼ Deeo/Dual Installation ▼	upor i compressione	1. Borehole backfilled with bentonite	grey	<ul> <li>CLAYEY SILT TILL shale fragments, trace gravel, brown, moist</li> </ul>	-	naco sano, promi, camprinos			100 mm of asphalt 100 mm of asphalt FILL sand and gravel, brown, damp		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
tallatior			10/1/	ב. (م) / م) /			<u> </u>			STRATA PLOT	r		lvd, To		irogeol
			BU	3AU	2BU	24	Ē		1AL	NUMBER		1	pronto,		ogy
▼			3BUNDIS	3AUNDIS	2BUNDIS1	2AUNDIS			1AUNDIST	TYPE	SAMPLES		Q		
			-	-	-				-	"N" <u>BLOWS</u> 0.3 m	ES				5
<u>GRAPH</u> NOTES										GROUND WA	TER	1			0.00
1		r	,	22	23	,	2		25	ELEVATION		1			B
$+$ 3 , $\times$ 3 . Numbers refer $\circ$ $\epsilon$ =3% Strain at Failure to Sensitivity			·							SHEAR STRENGTH ((Pa) UNCONF NED + Prediction CULICK TRIAXIAL × LAB VANE 50 100 150 200 250		Date: Nov/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	LOG OF BOREHOLE BH47
at Failure										POCKET P (Cu) (kPa) (Mg/m ³ )	IT WT	ENCL NO:	REF. NO.: 1889-220		
										GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS AND		0		1 OF 1

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13	(m) ELEV DEPTH 25.6 0 0	PROJEC CLIENT: PROJEC DATUM: BH LOC/
	FIL slt, some clay, greyish brown, moist END OF BOREHOLE 1. Borehole backfilled with bentonite upon completion.	DESCRIPTION FIL sand and gravel, brown with black,	T: Mr.C T LOC/ Local ATION:
		STRATA PLOT	d, Tor
		NUMBER TYPE	onto, ON
		"N" <u>BLOWS</u> 0.3 m	3
GRAPH		GROUND WATER CONDITIONS	
- ω	N Vi	ELEVATION	
3 × 3. Numbers refer C 8=3% estado et Enlluro		PressTwace PLOT     PLOT	DRILLING DATA Method: Geo Probe Diameter: Date: Nov/13/2013 Date: Nov/13/2013
· · · · ·		PACETIC MATURAL LULIUM UMITER CONTENT (MATURAL UNIT 10 20 30 POCKET (PR) NATURAL UNIT POCKET (PR) NATURAL UNIT	REF. NO.: 1889-220 ENCL NO.:
		(Mg/m ² ) AND GRAIN SIZE (%) GR SA SI CL	÷220

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13							<u>г</u>		-	-			- ٦
GROU		21 0 4.6	မ စ	21 8		1 5 1 5	08	2 <b>8</b> 0. <b>1</b> 248	(m) ELEV DEPTH 25.6		BHL	PRO	PROJECT	
GROUNDWATER ELEVATIONS	upor completion.		SILTY CLAY silty clay, trace gravel, grey, very moist			CLAYEY SILT trace gravel, brown/grey, moist	FILL clayey silt, some sand, some gravel, brown, moist			SOIL PROFILE	BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
			+++++ +++++			<i>HHHH</i> X		•	STRATA PLOT			d, Ton		geolog
			3BU	3AU	2BU	2AU	1BU	1AU	NUMBER	s		onto,		gy C
3			3BUNDIS	3AUNDIS	2BUNDIS1	2AUNDIS	1BUNDIST	1AUNDIST	TYPE	SAMPLES		Q		
			-	7	-	-	-	-	"N" <u>BLOWS</u> 0.3 m	ES				5
GRAPH NOTES									GROUND WATE CONDITIONS	R	1			LOG OF BOREHOLE BH49
1				N	N	N		N	ELEVATION		1			1 B
+ 3, × 3. Numbers refer to Sensitivity		Ŧ		22	23	24		25	• ः <u>भ</u>	REN	e Da			1
to S		_							20 40 60 80 100 SHEAR STRENGTH (kPa) • UNCONFINED + FIELD VANE • QUICK FINAVAL × LAB VANE 50 100 150 200 250		Date: NOV/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	<u>5</u>
nbers n ensitivi									STRE		0V/14/		Geo F	
əfer İy										OTEN	2013	2012	<b>TA</b> Probe	142
0									× + (k 200 ⊾%⊒8					1
<b>e</b> =3%									a) a) a) a) a) a) a) a) a) a) a) a) a) a	Q2				
Strain														
⊖ ^ε =3% Strain at Failure									We WATER CONTENT	PLAS	1			
ГӨ									WATER CONTENT (%)	TC NO.₽				
		-							NITEN	TURAL				
								_		LIQUID		REF.		
		+							POCKET PEN (Cu) (kPa)		ENCL NO .:	NO.:		
		+							(Cu) (kPa) NATURAL UNIT (Mg/m ³ )	WT	1	REF. NO.: 1889-220		
		+							GR DS G		1	-220		
									GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS				
										KS				OF 1

	 20 20 24 24	3	12	0.6	00	(m) ELEV DEPTH 25.7		DATUN BH LOI	PROJEC
GROUNDWATER E EKAATONS	END OF BOREHOLE 1. Borehole backfilled with bentonite upon completion.	wet	FILL silty clay, trace sand, grey, moist	FILL silt with some clay, greyish brown, moist	FILL gravel with some sand and silt, brown, moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd. Toronto. ON
		****				STRATA PLOT			и Тог
		2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	AS		onto. C
		DIST	DIST	DIST	DIST	TYPE "N" <u>BLOWS</u> 0.3 m	SAMPLES		ž
аварн						GROUND WATE CONDITIONS	R		
_			24	25		ELEVATION			
3 × 3: Numbers refer						20 40 60 80 100 SHEAR STRENGTH (KPa) • UNCONF VED + 6 Sensitivity • QUICK TRAVAL × LAB VARIAN 50 100 150 200 250	DYNAMIC CONE PENETRATION RESISTANCE PLOT	Date: Nov/14/2013	DRILLING DATA Method: Geo Probe Diameter:
						UMIT CONTENT W TEN CONTENT LIMITEN WATER CONTENT (%) 10 20 30 NATURAL UNIT NATURAL UNIT	NATURAL LIQUID	ENCL NO .:	REE NO · 1889-220
						AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13								_				-
GROU		2.4	3	15	24 5		.28 .49	(m) ELEV DEPTH 26.0			PRO,	PRO,	
GROUNDWATER ELEVATIONS	upon completion.	END OF BOREHOLE 1 Borehole backfilled with bentonite		FILL silty clay, grey, wet		and grey, wet			SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Concontinuer Letter entrienten materialen i PoroScorogy
-	ā	etir	~~~~	~~				STRATA PLOT			Blvd, T		ijaiogoo
ŀ		ľ				<u> </u>	 5	NUMBER			oront		fRou
ŀ			2BUNDIS	2AUNDIS	;	1BUNDIST	1AUNDIS	ТҮРЕ	SAM		o, ON		
		+	IS	IST		IST	IST	"N" <u>BLOWS</u> 0.3 m	SAMPLES		-		
GRAPH		╡						GROUND WATE	R				
- F		╡				25		ELEVATION		1			
+ 3 X 3. Numbers refer 0 8=3% Strain at Failure			24					20 40 60 100 SHEAR STRENGTH ((Fa) UNCONFINED + 5 8-600 50 100 150 200 250 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	
at Dall-wa								WATER CONTENT (%) WATER CONTENT (%) 10 20 30 VEX (%) 10 20 30 GR SA SI CL	LIQUID	ENCL NO.:	REF. NO.: 1889-220		

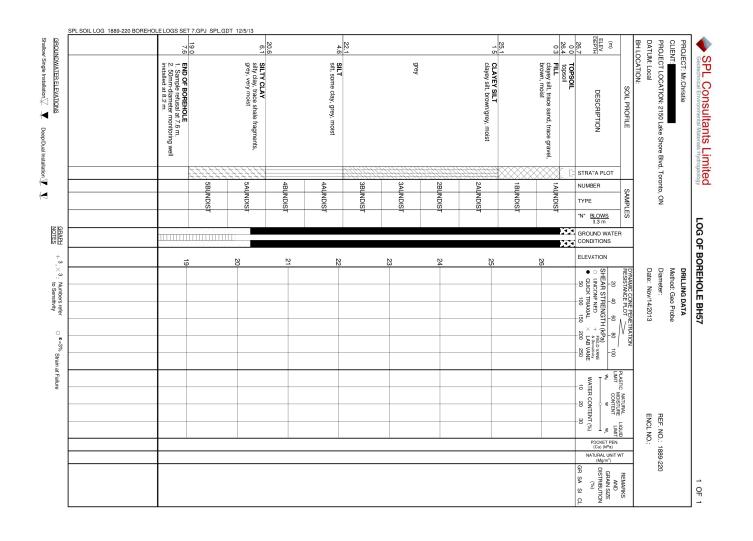
70							24.6 1.7	c	25 5 2	(m) ELEV DEPTH 26.3		DATU BH LO	PROJECT CLIENT:
END OF BOREHOLE 1. Sample refusal at 7.0 m. 2. 50mm-diameter monitoring well installed at 7.6 m.					grey, moist		CLAYEY SILT brown/grey, moist	clayey silt, trace sand, trace gravel, brown, moist	FILE silt, some clay, some sand, some gravel, brown, moist	DESCRIPTION	SOIL PROFILE	PHOLEC I LOCATION: 2130 Lake Shore Bivd, Toronto, ON DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT:
3114							X			STRATA PLOT	-	IVa, Ton	
	5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	NUMBER	SAM	onto, Or	!
 	- IS	ŝ	ŝ	ŝ	ŝ	IST I	IST I	ŝ	- IST	"N" <u>BLOWS</u> 0.3 m	SAMPLES	2	
									10 10	GROUND WATE	R		
19	20		21	22	23		24	25	26	ELEVATION			
										20 40 60 80 100 SHEAR STRENGTH (kPa) • UNCOW WED + FIELD VANE • QUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/14/2013	DRILLING DATA Method: Geo Probe
 										40 STREN DNF NEE	NCE PLC	er: ov/14/2	Geo Pr
										AL + (K		013	obe
										Pa) FIELD VM & Sensitive AB VAI 250 251	TION		
											PLASTIC NATURAL		
											ATURAL	пд	
										10 T (%)	LIQUID	HEF. NO.: 1889-220 ENCL NO.:	
										POCKET PEN (Cu) (kPa) NATURAL UNIT		.: 1889 D.:	
										AND GRAIN SIZE (%) GR SA SI CL	72	-220	
										AIN SA (%)	REMARKS		

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13	1											-
GROU		12 .4	23 3	15	24 2		28.0	(m) ELEV DEPTH		BHL	PRO,	CLIEI	
GROUNDWATER ELEVATIONS		<ol> <li>END OF BOREHOLE</li> <li>Sample refused at 2.4 m.</li> <li>Borehole backfilled with bentonite upon completion.</li> </ol>		clayey silt, grey, wet		FILL sand, trace silt, brown, saturated		DESCRIPTION	SOIL PROFILE	DA I UM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
1		¢	****	~~				STRATA PLOT			lvd, To		drogeol
			2BE	L L	e p	********	2000	NUMBER	s	1	pronto,		ogy
			2BUNDIST		1BUNDIST			TYPE	SAMPLES		9 N		
			-	-	-	-		"N" <u>BLOWS</u> 0.3 m	] Es				5
<u>GRAPH</u> NOTES								GROUND WATE	R	1			LOG OF BOREHOLE BH53
				24		25		ELEVATION		1			FBC
+ ³ , × ³ : Numbers refer to Sensitivity				4		<u>5</u>		20 40 60 100 SHEAR STRENGTH (KPa) UNCONFINED + FEDDANE OLUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESI	Date	Dian	DRI	
Numb to Sen								AR S		Date: Nov/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	
ers refei sitivity									E PLOT	/14/20		DATA eo Pro	모
								150 × + (	N	13		be	53
°=3								(KPa) + FIELD A Bons 200					
○ ^ε =3% Strain at Failure								D VANE 3 VANE 250					
at Failu								WATER CONTENT 10 20 3	PLAST	1			
re								WATER CONTENT (%) WATER CONTENT (%)					
								W W NTENT	URAL		R		
								UIT (%)	LIQUID	ENCL NO.:	REF. NO.: 1889-220		
								POCKET PEN (Cu) (kPa)			D.: 18		
								NATURAL UNIT (Mg/m ³ )	ΝT	4	89-22		
								AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		õ		1 OF 1

GROUN		2.4	20	24.4	0 2	26.4 26.2	(m) ELEV DEPTH		DATU BH LC	PROJEC	3
GROUNDWATER ELEVATIONS	upor completion.	END OF BOREHOLE 1. Sample refusal at 2.4 m. 2. Borehole backfilled with bentonite	SILT CLAY grey, wet	wet	FIL FIL sill with some clay, trace sand, brown, moist,	TOPSOIL	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd. Toronto. ON	
ŀ			777 777			)   <u>×</u> . 	RATA PLOT			vd. To	
			2BUNDIS	2AUNDIST	1AUNDIS 1BUNDIS	NL	JMBER	SA		ronto. (	
			IDIST	IDIST		TY "N	PE	SAMPLES		Z	
8		_					BLOWS 0.3 m				
GRAPH							ONDITIONS	<u> </u>			
+ 3 × 3.				25	26		EVATION	70	_		
3. Nu						5	20 40 60 80 100 SHEAR STRENGTH (kPa) O LINCONF NED + Resulting O LUICK TRIAXIAL × LAB VANE	DYNAMIC CONE PENETRATION	Date: Nov/14/2013	DRILLING DATA Method: Geo Probe Diameter:	
Numbers refer						10	STRE	NCE PL	ov/14/2	Geo P	
fer							NGTH 60	OFENETI	2013	robe	1
) 8						20	× (kPa) FIEL	¥ RATION			
⊖ 8=3% Strain at Failure							100 D VANE Nailivity VANE	-			
1		_				-	- 57	2			
B							WATER CONTENT (%)	N N			
·						18	ER CONTEN	TURAL	т	п	
						8	UMIT (%)		ENCL NO .:	RFF NO · 1889-220	
ļ							POCKET PEN. (Cu) (kPa)		0	- - 18	
		_				្ន	NATURAL UNIT W (Mg/m ³ )	m		20-22	
						GR SA SI CI	AND GRAIN SIZE DISTRIBUTION (%)	REMARKS		-	

10	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 6.GPJ SPL.GDT 12/5/13								_				-
GROUNDWATER ELEVATIONS		2 2	22				2 <b>9 9</b>	(m) ELEV DEPTH		BHL	PRO	CLIENT:	
GROUNDWATER ELEVATIONS		END OF BOREHOLE     1. Sample refusal at 2.4 m.     2. Borehole backfilled with bentonite     upon completion				FILL sand, cinders brown, moist	ASPHALT 120 mm	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie	Geotechnical Environmental Materials Hydrogeology
		onite						STRATA PLOT			e Blvd, Tc		Hydrogeol
			28	24	Ē	Į	5	NUMBER	6	1	pronto		ogy
			2BUNDIST	2AUNDIS	1BUNDIST			TYPE	SAMPLES		, N		
			- <del>1</del>			-		"N" <u>BLOWS</u> 0.3 m	Es				
GRAPH								GROUND WATE	R				
+				N		N		ELEVATION		1			
+ 3, × 3: Numbers refer O ==3% Strain at Failure				24				20 40 60 100 SHEAR STRENGTH (kPa) 0 UNICONF NED + FELD VAVE 0 UNICONF TRIAXIAL × LAB VAVE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	
1 :								WATER CONTENT 10 20 30 NATURAL UNIT 10 20 30		ENCL NO.:	REF. NO.: 1889-220		
								AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	EMARKS				-

	 24.	2			0.1 0.1	(m) ELEV DEPTH 26.5		DATU) BH LO	PROJEC
GROUNNWATER EI EVANTONS	END OF BOREHOLE 1. Sample refusal at 4.9 m. 2. Borehole backfilled with bentonite upon completion.	silty clay, grey, wet		SILT some clay, trace sand, brown, moist, hard, iron staining	FILL silt, trace sand and clay, brown, very moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: CLIENT: C
						STRATA PLOT			d. Tor
	 	2BUNDIS	2AUNDIST	1BUNDIS	1AUNDIS:	NUMBER	SAN		onto. C
		DIST	DIST	DIST		TYPE "N" <u>BLOWS</u> 0.3 m	SAMPLES		ž
						0.3 m GROUND WATER CONDITIONS	۲.		
+					N)	ELEVATION			
3 <			25		26	20 40 60 80 100 SHEAR STRENGTH (kPa) 0 UNCONF NED + FIELD VAR 0 UNCK THIAXIAL + A UNAVANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/14/2013	DRILLING DATA Method: Geo Probe Diameter:
• <b>6</b> <b>6</b> <b>6</b> <b>7</b> <b>6</b> <b>7</b> <b>6</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b> <b>1</b>						- 5			
						R CONTENT (%)	NATURAL	ENCL NO .:	REF. NO.: 1889-220
	 					POCKET PEN. (Cu) (kPa) NATURAL UNIT V	VT	Ĕ	1889
							- 1		3-220



	2.4	18 23.2	2 2 0		25 3 0 3	(m) ELEV DEPTH 25.6		DATL BH LC	PROJEC
	<ol> <li>Sample refusal at 2.4 m.</li> <li>Sample refusal at 2.4 m.</li> <li>Borehole backfilled with bentonite upon completion.</li> </ol>	SILTY CLAY		trace clay, trace sand, trace gravel, brown, moist some clay, grey, wet	TOPSOIL trace sand, trace gravel, dark brown, moist SILT	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr. Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON
	5	<i>111</i>				STRATA PLOT	1		d, Tor
		2BUNDIS	2AUNDIST	1BUNDIS	1AUNDIST	NUMBER TYPE	SAMPLES		onto, ON
						"N" <u>BLOWS</u> 0.3 m	-ES		
OB A DH						GROUND WATE CONDITIONS	R		
			24	25		ELEVATION			
3 Numbers refer 8-30/-						20 40 60 100 SHEAR STRENGTH ((Fa) UNCONFUED T+ (s Sensitivity 0 UINCRIFUXAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/14/2013	DRILLING DATA Method: Geo Probe Diameter:
							PLASTIC NATUR		
						POCKET PEN. (Cu) (kPa)	LIQUID	ENCL NO .:	REF. NO.: 1889-220
									89-220
						AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		0

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13											_				-
GROU		49	20 7		30	22 5				05-00-00-00-00-00-00-00-00-00-00-00-00-0	(m) ELEV DEPTH 25.5		BHL	PRO,	PROJECT	
	uppor completion;	END OF BOREHOLE     1. Sample refusal at 4.9 m.     2 Borshole backfilled with bentonite			SILT CLAY grey, wet				black SILT some clay, trace sand, brown, wet			SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
			7777 7777	+++++ +++++	+++++					<u> </u>	STRATA PLOT			d, Tor		geolog
			4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	s		onto, (		уy
			IDIST	IDIST	IDIST	IDIST	IDIST	IDIST	IDIST	IDIST	TYPE	SAMPLES		Z		
asi											"N" <u>BLOWS</u> 0.3 m					5
GRAPH NOTES											GROUND WAT CONDITIONS	ER				
+ 3			21		22	23		24		25	ELEVATION					8
$^3, \times ^3$ . Numbers refer $^{\circ}$ $^{\epsilon=3\%}$ Strain at Failure											SHEAR STRENGTH (KPa)     UNCONFINED     UNCONFINED     UNCONFINED     UNCONFINED     UNCONFINED     UNCONFINED     UNCONFINED     S0     100     150     200     250		Date: Nov/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	
t Failure											POCKET PE (Cu) (kPa) NATURAL UNI (Mg/m ³ )		ENCL NO.:	REF. NO.: 1889-220		
											GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		20		-

		79	18 3		6.1	8	4.6	21.6	30 0	23 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	24.1 2 <b>3</b> .9		03	25 9	(m) ELEV DEPTH		DATU	CLIENT:
	END OF BOREHOLE     1. Sample refusal at 7.9 m.     2. Somm-diameter monitoring well     installed at 8.4 m.				SILTY CLAY silty clay, grey, saturated		SILT silt, some sand, trace gravel, brown, saturated		CLAYEY SILT clayey silt, brown, moist	organic silt SILT silt, some clay, trace sand, brown, moist	SILT		o // <b>-</b>	TOPSOIL topsoil, dark brown, moist	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION: 2130 Lake Shore Bivd, Toronid, ON	PROJECT: Mr.Christie
			<i>77777</i>	<i>+++++</i>	££2			<u> </u>			; 🔛			<u>)</u> (2 s	STRATA PLOT		Vd, 10	
			6AU	- PAG		4BU	4AU	3BL	3AL	2BU	2AU	1BU	IA I	N	NUMBER	ş	ronio,	
			6AUNDIS			4BUNDIS	4AUNDIS	3BUNDIST	3AUNDIST	2BUNDIST	2AUNDIS	1BUNDIST	1AUNDIST	т	TYPE	SAMPLES	Q	2
						7		7		7				_	"N" <u>BLOWS</u> 0.3 m	ËS		
															GROUND WATER	1		
		18	er.	:	20		21	22	23		24	25			ELEVATION			
		Ĩ									Ī				● ° SHE	PESIS	Date: Nov	Meth
															20 40 60 80 100 SHEAR STRENGTH (kPa) UNCONF NED + FIELD VANE O UNCONF NAXUAL + A Soundary O UNCK TRUXXAL × LAB VANE 50 100 150 200 250	DYNAMIC CONE PENETRATION	Date: Nov/15/2013	DRILLING DATA Method: Geo Probe
																PLOT	15/2010	o Prob
															0 TH 0 8	VETRAT	ω	Φ
															a) a) field VA A Bensitiv A Bensitiv	TION		
														2				
															WATE			
															WATER CONTENT (%)	NATU		
															UTENT 0			1
															5 16	2	ENCL NO .:	
															POCKET PEN. (Cu) (kPa) NATURAL UNIT W	π	ENCL NO .: 1889-220	
														9	(Mg/m ³ )	_	9-220	
															AND GRAIN SIZE DISTRIBUTION (%)	REMARKS		
1														19		λ.		

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13										_				-
GROUN	4 0	20 9						0.6	25.2	(m) ELEV DEPTH		BHLO	PRO	PROJECT	
	<ol> <li>Sample refusel ALE</li> <li>Sample refusel at 4.9 m.</li> <li>Borehole backfilled with bentonite upon completion.</li> </ol>				saturated	wet	some clay, grey	some clay, trace sand, brown/grey, moist			SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
		~	N	6	6	N)	N			STRATA PLOT		-	Toro		eology
		4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIS	NUMBER	SAN		nto, O		
		DIST	- DIST	DIST	ISIC	- Dist	JISIT	ISI	ISIC	"N" <u>BLOWS</u> 0.3 m	SAMPLES		z		
GRAPH NOTES										GROUND WATE		-			
										CONDITIONS		-			1
+ 3,×		21	22		23		24	25		ELEVATION	70		_	~ •	
$^3, \times ^3$ ; Numbers refer $^{\circ}$ $^{\circ}$ $^{\circ}$ $^{\circ}$ Strain at Fallure										20 40 60 90 100 SHEAR STRENGTH (KPa) - UNCONFINED + FIELD VANE - QUICK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	
at Failure										POCKET PEN (Cu) (kPa) NATURAL UNIT (Mg/m ³ )		ENCL NO.:	REF. NO.: 1889-220		
										GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		20		-

d	19.6						24 0 1 8		28.4 25.4	(m) ELEV DEPTH 25.8		CLIENT: PROJEC DATUM: BH LOCA
Sample refusal at 6.2 m.     Somm-diameter monitoring well     Installed at 6.7 m.			wet				CLAVEY SILT grey, moist	brown, moist	ASPTALI 75 mm of asphalt FILL sand and gravel, brown, moist SILT SULT	DESCRIPTION	SOIL PROFILE	CLENT.
	22							1		STRATA PLOT	1	d, Toro
 _	5AUNDIS	4BUNDIS	4AUNDIS	3BUNDIS	3AUNDIS	2BUNDIS	2AUNDIS	1BUNDIS	1AUNDIST	NUMBER	SAI	onto, C
 _	DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	DIST	TYPE	SAMPLES	ž
- 1		Ang tana	rinder ind						22	"N" <u>BLOWS</u> 0.3 m GROUND WATE		
 									)XX			
		20	21		<u>v</u>	23	24	ŗ	о л	ELEVATION		
											PESIST.	Method: G Diameter: Date: Nov
										20 40 60 80 100 SHEAR STRENGTH ((Fa) UNCONFINED T+ (ELD VANE 5 0000 150 200 250 50 100 150 200 250	RESISTANCE PLOT	Method: Geo Probe Diameter: Date: Nov/15/2013
										NGTH		Probe 2013
_										× + (kPa) 200 - 200		
_										100 Prositivity 3 VANE 250	~	
										. 5	P	
										WATER CONTENT (%)	STIC	
 _										CONTE	ATURAL	
 _										NT (%)		REF. NO.: ENCL NO.:
										POCKET PEN. (Cu) (kPa)	-	REF. NO.: 1889-220 ENCL NO.:
										NATURAL UNIT \ (Mg/m ³ )	NΤ	389-22
1										AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS	ö
1										AND AIN SIZ RIBUTIO (%) A SI	ARK	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT 12/5/13											_
GROU		2.4	23 0	12	24.3	299.29 29-24 3	(m) ELEV DEPTH 25.5		BHL	PRO.	CLIE	
		<ul> <li>END OF BOREHOLE</li> <li>Sample refusal at 2.4 m.</li> <li>Borehole backfilled with bentonite upon completion.</li> </ul>		SILTY CLAY grey, moist				SOIL PROFILE	1.77	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	осонол плоять втитотные протодоогоду
			+++++	<i>444</i>			STRATA PLOT			d, To		Bo
			2BUNDIS	2AU	1BUI	1 AUNDIS	NUMBER	s		onto,		37
			VDIST	2AUNDIS1	1BUNDIS1	VDIST	TYPE	SAMPLES		Q		
						7	"N" <u>BLOWS</u> 0.3 m	S				
GRAPH							GROUND WAT CONDITIONS	ER				
				24		25	ELEVATION		1			
ہ ہ				4		5	SHEAR STRENGTH (KPa) UNICONF NED + 6 RELAYING OLIUCK TRIAXIAL × LAB VANE 50 100 150 200 250	RES		Dia	Met	
Numbers refer							EAR S	ISTAN	IAMIC 0	Diameter:	DRILLING DATA Method: Geo Probe	
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				_			150 JGTH	⁸ // ⁹	PENETE	012	A obe	
							200 AB	1 3	ATION			
							D VANE VANE 250	ŝ				
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							WATER CONTENT (%)	PLASTIC NATURAL				
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							POCKET PI (Cu) (kPa)		- ?	REF. NO .: 1889-220		
							NATURAL UN (Mg/m ³ )	T WT	1	1889-2		
							GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		220		

GROUN	2.4 2.4	о Эл		24 8 1.1	02	25.9	(m) ELEV DEPTH		DATU BH LC	PROJEC
GROUNNWATER ELEVATIONS	END OF BOREHOLE 1. Sample refusal at 2.4 m. 2. Borehole backfilled with bentonite upon completion.	grey, wet	some clay	SILT	FILL silt, some clay, trace sand, brown, moist	TOPSOIL dark brown	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PHOJECT: Mr.Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON
	 					125	STRATA PLOT			д. То
		2BU	2AU	1BU	1A	١	NUMBER	s		ronto,
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GRAPH NOTES							GROUND WATE	٦		
+ ω		24		25			ELEVATION			
							20 40 60 100 SHEAR STRENGTH (kPa) • UNCOMFINED + FIELD VANE • OUNC TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/14/2013	DHILLING DATA Method: Geo Probe Diameter:
Strain at Failure							UMIT CONTENT LIMIT IN CONTENT LIMIT CONTENT LIMIT CONTENT CONTENT CONTENT CONTENT (%) WATER CONTENT (%) CGUIDE CAN SIZE (%) CG		ENCL NO .:	REF. NO.: 1889-220

r	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 7.GPJ SPL.GDT		10					15	<u> </u>	299 0.1	(m) ELEV 25.6		뿌꺙	2 73	우림	1
GROUNDWATER ELEVATIONS	END OF BOREHOLE 1. Sample release at 6.1 m, 2. 50mm-diameter monitoring well installed at 6.7 m.	<u>6.1</u>	9.5 dry	shale tragments, wet				CLAVEY SILT     clayey silt, trace sand, grey, very     moist	<ul> <li>b) Pills, Line Sand, trace gravel, brown/red, moist</li> </ul>			SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	овотвонниса сполонителна мателать пуслодеоюду
											STRATA PLOT			rd, Toro		Complexed of
			4BUNDIST	4AUNDIST	3BUNDIST	3AUNDIST	2BUNDIST	2AUNDIST	1BUNDIST	1AUNDIST	TYPE "N" <u>BLOWS</u> 0.3 m	SAMPLES		into, ON		
GRAPH											GROUND WATER	3				
1		19	20	N	2	22	23	24		25	ELEVATION					
$\pm$ 3 $\times$ 3. Numbers refer $\bigcirc$ $\epsilon$ =3% Strain at Failure											100 VANE VANE 250	RESISTANCE PLOT	Date: Nov/14/2013	Diameter:	DRILLING DATA Method: Geo Probe	
											WATER CONTENT CONTENT CONTENT CONTENT WATER CONTENT (%) 10 20 30 POCKET PEN (GJ) (KPR) NATURAL UNIT W (Mg/m ² )		ENCL NO.:	REF. NO.: 1889-220		
											AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		20		

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 8.GPJ SPL.GDT 12/5/13	_							, ,			(m) ELEV DEPTH		80	τοτ	,
	თ 							-1			25.6	PTH D		DATUM: Local BH LOCATION	PROJEC	
	<ol> <li>Sample refusated 6.2 m.</li> <li>Sample refusated 8.2 m.</li> <li>Borehole backfilled with bentontle upon completion.</li> </ol>							SILTY CLAY grey, wet	some clay, brown, moist	FILL sand and gravel, trace silt, brown, moist SILT	ASPHALT 75 mm of asphalt	DESCRIPTION	SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	
t		77. 72	<i>++++</i>	77777	77772, 77772,	+++++;	<i>+++++;</i>	<i>77777</i>			s s	TRATA PLOT			d, Tor	0
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GRAPH												ROUND WATER	٦			
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												● ○ SHE	RESI	Date	DRILLING Method: G Diameter:	
3 . 3 Numbers refer												AR ST	STANC	: Nov	od: G	222
are refer											Ē		RESISTANCE PLOT	Date: Nov/15/2013	DRILLING DATA Method: Geo Probe Diameter:	
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) 8  }						_						KPa) FIELD LAB	TION			
~												20 40 60 80 100 SHEAR STRENGTH (kPa) O LINCONF NED + FIELD VANE O DUCK TRIAXIA, × LAB VANE EDUCK TRIAXIA, × LAB VANE				
£=3%												- 5	PIAS			
ľ												WATER CONTENT (%)	IC NA			
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ŀ														ENCL NO.:	REF. NO.: 1889-220	
ŀ												POCKET PEN. (Cu) (kPa)	2	ō	0:: 1	
												NATURAL UNIT W (Mg/m ³ )	VT		389-22	
											GH SA SI CI	AND RAIN SIZ STRIBUTI	REMARKS		20	

	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 8.GPJ SPL.GDT 12/5/13		N		N			N				<u>φ</u> ς	קק	Ω₽	•
IOUND)		4.6		30				24 9 0.6	280.5		-			PROJECT:	G C
GROUNDWATER ELEVATIONS Shallow/ Single Installation ∑ ▼ Deeo/Dual Installation ▼		END OF BOREHOLE 1. Sample refusal at 2.4 m. 2. Borehole backfilled with bentonite upon completion.	grey, wet	CLAYEY SILT				FIL sand and gravel, brown, moist SILTY CLAY organics, black, moist	ASPHALT 25 mm of asphalt	DESCRIPTION	SOIL PROFILE	BH LOCATION:	PROJECT LOCATION: 2150 Lake Shore Blvd, Toronto, ON	PROJECT: Mr.Christie CLIENT:	Geotechnical Environmental Materials Hydrogeology
allation		-			77777 77777	<i>77777</i>	7777	2222 XXX	s s	STRATA PLOT	1		vd, To		rogeolo
			зви	3AU	2BU	2AU	1BU	ĨĄ	N	NUMBER	Ś	1	ronto,		ygy C
			3BUNDIS	3AUNDIS	2BUNDIST	2AUNDIS	1BUNDIS	1AUNDIST	Т	TYPE	SAMPLES		Q		
			-	-	-			-	"	N" <u>BLOWS</u> 0.3 m	ES				5
<u>GRAPH</u> NOTES										GROUND WATE	R	1			LOG OF BOREHOLE BH67
1			Ņ	22	23		24	25		ELEVATION		1			FB
+ ³ , $ imes$ ³ . Numbers refer to Sensitivity			1	2	<u>ل</u>		4	<u> </u>		20 40 60 100 SHEAR STRENGTH (kPa) O UNCONFINED + FED VANE O UNCONFINAVAL × LAB VANE 50 100 150 200 250	RES	Date	Diar	DRII Meth	<u>F</u>
Numb to Ser									Ę	AR S	RESISTANCE PLOT	Date: NOV/15/2013	Diameter:	DRILLING DATA Method: Geo Probe	ġ
ers refe isitivity									Ē	TREN TREN	E PLO	/10/20	15/00	eo Pro	9
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○ ^ε =3% Strain at Failure										- 5	PS	1			
ilure										UMIT CONTENT LIN We W W WATER CONTENT (%)	STIC				
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										POCKET PEN. (Cu) (kPa)		ENCL NO .:	NO.:		
										(Cu) (kPa) NATURAL UNIT \ (Mg/m ³ )			REF. NO .: 1889-220		
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									UH SA SI U	AND GRAIN SIZE DISTRIBUTION (%)	REMARKS				1 OF
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GROUNDWATER EI EVATIONS	SPL SOIL LOG 1889-220 BOREHOLE LOGS SET 8.GPJ SPL.GDT 12/5/13 ത	19	20 2				23 8 1 8		ġ	(m) ELEV DEPTH 25.6		DA1	
	<ol> <li>END OF POREHOLE</li> <li>Sample revisal at 6.2 m.</li> <li>Borehole backfilled with bentonite upon completion.</li> </ol>						8 CLAYEY SILT grey, moist		Sinn of asphalt SILT some clay, trace sand, trace gravel, grey/orange, moist		SOIL PROFILE	DATUM: Local BH LOCATION:	PROJECT: Mr.Christie CLIENT: PROJECT I OCATION: 2150 I ake Shore Rivel Toronto ON
		7777		<u> </u>	<u> </u>	<u> </u>				STRATA PLOT	1		а 5
		5 4BU	4AU	3BU	3AU	280	2AU	1BU	1AU	NUMBER	_v	1	ronto
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ממעמת										GROUND WATE CONDITIONS	R		
5		20	ŗ	2	22	23	24		25	ELEVATION		1	
										20 40 60 80 100 SHEAR STRENGTH (FPa) • CUNCAN NED + FIELD VANE • CUNCK TRIAXIAL × LAB VANE 50 100 150 200 250	RESISTANCE PLOT	Date: Nov/15/2013	DRILLING DATA Method: Geo Probe Diameter:
										40 60 FRENGTI FNED TRIAXIAL 100 150	E PLOT	/15/201	DATA eo Prot
										2 × + 1	NETRA	ω	ŏ
2 00/										KPa) FIELD VANE A Sensitivity LAB VANI 200 250	TION		
											2	-	
										WATEF	PLASTIC		
										R CONTEN	MOISTIRE		
											LIQUID	ENCL NO .:	REF NO : 1880-220
										POCKET PEN (Cu) (kPa)		Ő.	
										NATURAL UNIT (Mg/m ³ )	WT	]	80-53
										GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		ŏ

	2 92.4 9.1 END OF BOREHOLE Borehole dry upon completion. Water Level Readings: Uptie Oct. 22/04 3.25	2011201120		95.4 94.5		4.6 SILT some clay,	2101102101			(A)B	I pocc. origenity	CLAYEY SILI mottled brown-grey stiff to very stiff	0.0 TOPSOIL 25mm Still, trace sand, trace gravel and clay, trace gravel and clay, 0.6 (Possible FILL)	(m) DESCRIPTION	SOIL PROFILE	DATUM ELEVATION: Assumed Datum - See Drawing No. 1 for LocalDate: October 15, 2009	CLIENT: Kraft Canada Inc. PROJECT: Transformer Upgrades LOCATION: Toronto	GEO-CANADA
L			@ 	1 177777777777777777777777777777777777		8		5	2743	4		N	-	NUMBER	1-1	wing No.		
F		RAR	SS 55	SS 12		SS 32		SS 17		SS 18	SS 21	SS 14	SS 10	TYPE "N" <u>BLOWS</u> D.3 m	SAMPLES	. 1 for Lo		
GRAPH NOTES		'  minimini	550/											GROUND WAT	ER	calitate:	Metho	
+3		8		g	<u></u> 8		9	^s II				5	101	ELEVATION		October	Method: Continuo Diameter: 110mm	
×														O UNCO     ZO	RESISTANCE PLOT	15, 2004	Method: Continuous flight solid-stem augers Diameter: 110mm	LOG OF BOREHOLE 1
Numbers refer to Sensitivity									-	_				AD CTRIAXIA	ICE PLOT		pht solid-	DLE 1
e" O																	stem aug	
														SHEAR STRENGTH (KPa) O UNCONFINED + FIELD VANE O QUICK TRNXIAL X LAB YANE 20 40 60 60 100	j z		Jers	
€=3% Strain at Falture													0		PLASTIC	1		
lure			0	+		Ĵ		0		9	0			WATER CONTENT (%)	MOISTURAL		REF. NO.: G ENCL NO.: 1	
								_									REF. NO.: G-04.0903 ENCL NO.: 1	
												L		(f2 , U		1	4,0903	
			Spiil spoon wet.			8 73 19						c, 89 ,	5	-	AND			1 OF 1

G	EO-CANADA SOIL LOG B	OREHOLE LOGS G040903.GPJ	SEO-CANADA TEMPLATE.	GDT 2/11/04					Sm -	_		
	9.1	орания и страна Сорания и страна Сорани	95.6 6.1		3.0	98.7	101.1 0.6	101.7 0.0	(m) ELEV DEPTH	ORE	ROJI	
	1 END OF BOREHOLE Borahole dry upon completion. Water Level Readings: Date WL Depth (m) Oct. 22/04 5.45	, SHALE (Interred) grey		very noist dayey	sone clay, occ. very thin silt partings grey stiff very stiff		COURS, NOW     CAVEY SILT     CONTROL SILVEY     CONTROL SILVEY     CONTROL SILVES     Very slift to hard		SOIL PROFILE DESCRIPTION	BOREHOLE LOCATION: Refer to Drawing No. 1	CLENT: Kraft Canada Inc. CLENT: Kraft Canada Inc. PROJECT: Transformer Upgrades LOCATION: Toronio LOCATION: Ficulto Assumed Datum - See Drawing No. 1 for LocaDzee: October 15, 2004	GEO-CANADA
								<u> </u>		<u> </u>	Drawi	Þ
		ω ∞	7	6	5	4	ωΝ				ng No	ļ
		SS	SS	SS	S	S	SS SS	~~	YPE MULE		, 1 fo	
		50/ 5mm	ω	17	22	32	25 18	16	N" <u>BLOWS</u> 0.3 m	ⁱ	r Loca	
GRAPH				mmun					GROUND WATER		DRIL Meth Dian	ဝို
							~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		ELEVATION	-	DRILLING DATA Method: Continuot Diameter: 110mm Date: October 15,	유
+ ³ ,× ³ :		93 94	95		8		100			12	DAT/ ontinu 110m ber 1:	BO
ີ ສຸຂ									20 40 60 80 100 SHEAR STRENGTH (KPa) 0 UKCONFINED + FIELD VANE 0 QUICK TRIAVALL × LAB VANE 0 QUICK TRIAVALL × LAB VANE	DYNAMIC CONE PENETRATION	DRILLING DATA Method: Continuous flight solid-stem augers Diameter: 110mm (Bzte: October 15, 2004	LOG OF BOREHOLE 2
to Sensibivity									20 40 60 EAR STRENGT UNCONFINED QUICK TRIAXIAL 20 40 69	CON	ight so 4	l E
s refer livity										PEN	olid-st	N
			1.7-						H (kPa) + FIELD VAN + FIELD VAN × LAB VANE × LAB VANE	TRAT	em a	
0 8 13									(100 (100 (100 (100 (100)(100)(100)(100)	Ĩ0	Igers	
^{3%} Stra									100 VANE 100			
O ^{8=3%} Strain at Failure								。	< 5₽			
ailure		o o			0		•		PLASTIC MATURE LIQU		무 곪	
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							<u>· · · · · · · · · · · · · · · · · · · </u>		5 46		REF. NO.: G-04.0803 ENCL NO.: 2	
										·	609	
							7 65 28		AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL	REMARKS		1 OF 1

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	JORDE	N LOG 08121 	9.0	08 05	8.0	^{3/13} 7.5	7.0	6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0		швер	DEPTH	LOCAT	PROJE	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE															- low plasticity, grey END OF BOREHOLE @ 2.59m BGS		CL-SILTY CLAY (TILL), trace gravel, stiff, medium plasticity, brown, moist	SM-SILTY SAND (FILL), trace gravel, compact, I've grained, poorly graded, brown, moist CL-SILTY CLAY, stiff, medium plasticity, brown, moist	CONCRETE FLOOR		STRATIGRAPHIC DESCRIPTION & REMARKS	CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	EFER TO CUP															2.6			0.5	<u> </u>	mbGS	DEPTH	FIELD F	HOLE D DATE C	C AND INSTRUM (OVERBURDEN)
	RRENT ELEVATION TABLE																	BENTONITE SEAL	SEAL	CONCRETE		BOREHOLE	DRILLING METHOD: SPLIT-SPOON FIELD PERSONNEL: K. Vander Meulen	HOLE DESIGNATION: BH1-13 DATE COMPLETED: March 2, 2013	MENTATION LOG V)
																	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(n)	-	N	JMBER		2		
																		0.76	0.76			S I			
																č	76	76	76		EC (m) VALUE	SAMPLE			Pa
																-	04	0.8	0.5	PI	D (ppm)				Page 1 of 1

OVERB	URDE	N LOG 08	 111		прп														T			30			т т		1
		9.5	9.0	-8.5	8.0	7.5	7.0	6.5	- 6.0	5.5	5.0	4.5	4.0	- 3.5	3.0	2.5	2.0	1.5	1.0	0.5		DEPTH m BGS		CATI	ROJE		
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE																END OF BOREHOLE @ 1.83m BGS		CL-SILTY CLAY, stiff, medium plasticity, brown, very moist	L), trace gravel, compact, aded, brown, moist	CONURETE ELOOR	STRATIGRAPHIC DESCRIPTION & REMARKS		CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West. Toronto	PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)	
	FER TO CU																1.8			0.5	\$	M BGS	_	FIELD	DATE	C AND INSTRUM (OVERBURDEN)	
	RRENT ELEVATION TABLE																	SEA	BENTONITE	SEAL		BOREHOLE		DRILLING METHOD: SPLIT-SPOON FIELD PERSONNEL: K. Vander Meulen	DATE COMPLETED: March 2, 2013	JMENTATION LOG	
	-																	2	(- )		NUME	VAL		2			
			 															0.61	0.61		REC	<u>7</u>				P	
	-																	2.4	5.1		PID (p					Page 1 of 1	

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERFUNCTION CONCERPT Multiplication and Plane Tro ESA PROJECT NUMBER 201211 CULTAR: Mondeal: Consume Team To ESA PROJECT NUMBER 20121 CULTAR: Mondeal: Consume Team To ESA PROJECT NUMBER 2012 CULTAR: Mondeal: Consume Team To ESA PROJECT NUMBER 2012 TEAM TO ESCRETTION & REALINAS TEAM TO ESCRETTION AND TO ESCRETTION TO AREA TEAM TO ESCRETTION TO AREA TEAM TO ESCRETTION AND TO AREA TEAM TO ESCRETTION AND TO AREA TEAM TO ESCRETTION TO AREA TEAM TO ESCRE	OVERBL	RDE	LOG 081	211.GPJ		ORP.GD	3/3/13													11111						1
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN) Investigation and Phase Two ESA DALE COMPLETES March 2: 03 DALE COMPLETES March 2: 03 DALE OPERSONIE: K Vander Meuter FELD PERSONIE: K Vander Meuter March 2: 0000 Tim. medum plastely, grey. 000 Tim. medum plastely, grey. 1,5 0LE @ 152m BGS 0LE @ 152m BGS 0LE @ 152m BGS			9.5	9.0	8.5	8.0	7.5	-7.0	6.5	6.0	5.5	- 5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5		DEPTH m BGS	LOCATI	PROJE	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$																			END OF BOREHOLE @ 1.52m BGS	- very moist to wet			STRATIGRAPHIC DESCRIPTION & REMARKS	: Mondelez Canada Inc. ON: 2150 Lake Shore Blvd. West, Toronto	CT NAME: Geotechnical Investigation and Phase Two ESA CT NUMBER: 081211	STRATIGRAPHIC AND
Image: Section of the section of t		ER TO CUF																	.5				DEPTH m BGS	FIELD F	HOLE D DATE C	NSTRU BURDEI
Image: Second state		RENT ELEVATION TABLE																		BENTONITE	SEAL		BOREHOLE	4G METHOD: SPLIT-SPOON PERSONNEL: K. Vander Meulen	COMPLETED: March 2, 2013	IMENTATION LOG N)
0.5 0.7 76 REC (m)																			(	~		NUMBE	R	2		
State																			Ď	×1	$\times$	INTERV	'AL			
Image: N' VALUE     Image: N' VALUE     Image: N' VALUE       S     S     PID (ppm)																				0.61	0.76	REC (r	n) SAM			
Big																						'N' VAL				Pag
																				0.8	0.8	PID (pp	m)			ye 1 of 1

9.5	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5		m BGS	DEPTH	PROJEC CLIENT: LOCATIO	PROJEC	
																	END OF BOREHOLE @ 0.91m BGS	AVEL (FILL), fine to coarse brown, moist	CONCRETE FLOOR	STRATIGRAPHIC DESCRIPTION & REMARKS		PROJECT NUMBER: 081211 CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
																	0.9			m BGS	DEPTH	DATE ( PRILLIN FIELD F	HOLE [	OVERBURDEN
																		BENTONITE		BOREHOLE		DATE COMPLETED: March 2, 2013 DRILLING METHOD: SPLIT-SPOON FIELD PERSONNEL: K. Vander Meulen	HOLE DESIGNATION: BH4-13	JMENTATION LOG N)
																	_	_	NUM			5		
																		0.76	INTE		SA			
			 															76	'N' V/		SAMPLE			Pa
			 															0.4	PID (	ppm)				Page 1 of 1

IZ	1111	9.5	9.0	CRA_CC 	8.0	7.5	7.0	6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	- <u>1</u> .5	1.0	0.5		m BGS	DEPTH	LOCATIO	PROJECT		
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE																				AVEL (FILL)			STRATIGRAPHIC DESCRIPTION & REMARKS	LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NUMBER: 0812111 CI IENT: Mondelez Canada Inc	FNAME: Opphophiscal prostigation and Dhapp Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG
-ER TO CUI																				0.3	§	m BGS	DEPTH	FIELD F			CAND INSTRUM
RRENT ELEVATION TABLE																				SEAL				FIELD PERSONNEL: K. Vander Meulen	DATE COMPLETED: March 2, 2013		JMENTATION LOG N)
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		N LOG 08 9.5		0011 00 07	8.0	7.5	7.0	 6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.5		DEPTH m BGS	LOCATIO	CLIENT:	PROJEC		
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE															END OF BOREHOLE @ 2.44m BGS		- stiff, brown, moist	CL-SIL IY CLAY, firm, low plasticity, grey, moist	SP-SAND (FILL), fine grained, poorly graded, brown, moist		STRATIGRAPHIC DESCRIPTION & REMARKS	LOCATION: 2150 Lake Shore Blvd. West, Toronto	CLIENT: Mondelez Canada Inc.	PROJECT NAME: Geotechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)	
	FER TO CUP		 													12.4		*****	HHB HHB	0.2	§	DEPTH m BGS	FIELD F	DRILLIN	HOLE D	C AND INSTRUM (OVERBURDEN)	
	RENT ELEVATION TABLE																	SEAL		SEAL SEAL		BOREHOLE	FIELD PERSONNEL: K. Vander Meulen	DRILLING METHOD: SPLIT-SPOON	HOLE DESIGNATION: BH6-13 DATE COMPLETED: March 2, 2013	IMENTATION LOG V)	
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	-																0.61	0.76		0.76	REC (r	— Ī				т	
	-																0.1	0.2		0.1	PID (pp					Page 1 of 1	

		N LOG 08121 	9.0	00 07 07	8.0 0	7.5	7.0	 6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	1.5	 1.0	0.5		DEPTH m BGS	CLIENT LOCATI	PROJE	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE							END OF BUREHOLE @ 0.10111 BGS						- brown, moist to wet		- medium plasticity		CL-SIL1Y CLAY, low plasticity, grey, moist	MCGW SAND& GRAVEL (FILL), coarse to medium grained, well graded, brown, moist	6 22 5 1	STRATIGRAPHIC DESCRIPTION & REMARKS	CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	FER TO CUP								<u>,</u>	<i>HHHH</i>		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							×××××		DEPTH m BGS	DRILLIN FIELD F	HOLE D DATE C	C AND INSTRUM (OVERBURDEN)
	RRENT ELEVATION TABLE													SEAL	BEATOMITE						BOREHOLE	DRILLING METHOD: GEOPROBE FIELD PERSONNEL: L. Griffith	HOLE DESIGNATION: BH101-13 DATE COMPLETED: February 7, 2013	IMENTATION LOG N)
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	-								0.61	0.0	2	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	REC (I	- 11			_
									0.0	000	2	0.1	0.6	159	1.3	9.3	3.3	0.9	0.1	PID (pp				Page 1 of 1

OVERE	BURDE	N LOG 0812 9.5	11.GPJ ( 11   11 9.0	00 05	P.GDT 2/	7.5	7.0	0 5	6.0	5.0	4.5	4.0	3.5		2.5	2.0			0.5		DEPTH m BGS	PROJ CLIEN LOCA	PROJ	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE							END OF BOREHOLE @ 6.10m BGS		<ul> <li>less slit content, high plasticity, grey, moist to wet</li> </ul>	CL-SILTY CLAY, medium plasticity, grey, moist	SM-SILTY SAND, fine grained, poorly graded, brown, wet	CL-SILTY CLAY, medium plasticity, grey, moist	- 152 mm section of coarse gravel , grey, slight	- moist to wet, slight black staining, slight odour			SP-SAND (FILL), medium grained, poorly graded, brown, moist	ASPHALT SW-GW SAND & GRAVEL (FILL), well graded, grey, moist		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NUMBER: 081211 CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	REFER TO CU							<u>e</u>				4.0		3.0					0.2		M BGS	DATE ( DRILLII FIELD	HOLE	C AND INSTRUM
	RRENT ELEVATION TABLE													BENTONITE							BOREHOLE	DATE COMPLETED: February 7, 2013 DRILLING METHOD: GEOPROBE FIELD PERSONNEL: L. Griffith	HOLE DESIGNATION: BH102-13	JMENTATION LOG
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									1.4	1.2	21.9	1.4	283		10.3	0.3	5.2	1.6	1.5	PID (pp	m)			Page 1 of 1

		90 50 51	9.0	8.5 .5	8.0	7.5	7.0	 6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	;	רוון כ ת		DEPTH m BGS	LOCATI	CLIENT	PROJEC	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE							END OF BOREHOLE (0,0,10m BGS				- trace fine sand, brown, moist			- 152 mm section of moist to wet, slight odour	- medium plasticity, grey, slight odour	CL-SILTY CLAY, low plasticity, brown, moist	- dark brown, slightly oxidized	- black staining, no odour	SP-SAND (FILL), fine grained, poorly graded,	SAND & GRAVEL (FILL), coarse to medium		STRATIGRAPHIC DESCRIPTION & REMARKS	LOCATION: 2150 Lake Shore Blvd. West, Toronto	CLIENT: Mondelez Canada Inc.	PROJECT NAME: Geotechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	EFER TO CUI								<u>A</u>		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;							*****	****	×***	×		DEPTH m BGS	FIELD F	DRILLIN	HOLE D	C AND INSTRUM (OVERBURDEN)
	RENT ELEVATION TABLE													SEAL	BENTONITE								BOREHOLE	FIELD PERSONNEL: L. Griffith	DRILLING METHOD: GEOPROBE	HOLE DESIGNATION: BH103-13	IMENTATION LOG N)
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									4.4		0.1	3.1	114	299	3	474	9.7	4.4	0.7		0.7	'N' VALU PID (ppr	-				Page 1 of 1

	ILGS 081211.0PJ CRA_CORP.GDT 225413	DEPTH m BGS	
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE LABORATORY ANALYSIS	ASPHALT ASPHALT SMC-GW SAND & GRAVEL (FILL), oarse to medium grained, weil graded, grey, moist CL-SILTY CLAY, low plasticity, brown, moist CL-SILTY CLAY, low plasticity, brown, moist CL-SILTY CLAY, low plasticity, brown, moist - medium plasticity, grey, moist to wet END OF BOREHOLE @ 6.10m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)         PROJECT NAME: Geolechnical Investigation and Phase Two ESA       HOLE DESIGNATION: BH104.         PROJECT NUMBER: 081211       DATE COMPLETED: February 7, 20         CLIENT: Mondelez Canada Inc.       DRILLING METHOD: GEOPROBE         LOCATION: 2150 Lake Shore Bivd. West, Toronto       FIELD PERSONNEL: L. Griffith
FER TO CUP		DEPTH m BGS	C AND INSTRUM (OVERBURDEN) ) ESA HOLE DES DATE COM DRILLING I FIELD PER
RRENT ELEVATION TABLE	SEATONE	BOREHOLE	STRUMENTATION LOG IRDEN) HOLE DESIGNATION: BH104-13 DATE COMPLETED: February 7, 2013 DRILLING METHOD: GEOPROBE FIELD PERSONNEL: L. Griffith
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	P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P         P		
		-12	Page 1 of 1

	JORDE	N LOG 0812 11111111 0 5	9.0	00 00 05	P.GDT 2 	7.5	7.0	 6.5	6.0	ບາ ບາ ບາ	5.0	4.5		4.0	3.5	3.0	2.5	2.0			 >	0.5		m BGS	DEPTH	CLIENT	PROJE	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE							END OF BOREHOLE @ 6.10m BGS		- medium plasticity, arey, moist to wet	- slightly oxidized	- slightly oxidized	- slightly oxidized		- moist to wet		- niowi i giey, siginiy oxiazed, sigin odoal		CL-SILTY CLAY, low plasticity, brown, moist - slight black staining, no odour	SM-SILTY SAND (FILL), medium grained, poorly graded, moist, oxidized	SP-SAND (FILL), medium grained, poorly graded, brown, moist	SW-GW SAND & GRAVEL (FILL), coarse to medium grained, well graded, grey, moist	5 22 24 4	STRATIGRAPHIC DESCRIPTION & REMARKS		CLENT: Mondelez Canada Inc. CLENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
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	RRENT ELEVATION TABLE															BENTONITE								BOREHOLE		DRILLING METHOD: GEOPROBE FIELD PERSONNEL: L. Griffith	HOLE DESIGNATION: BH105-13	MENTATION LOG V)
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									P/S	- " <n 1<="" td=""><td>Pys</td><td>P/S</td><td></td><td>P/S</td><td>Ū</td><td>5 a 2 a 2</td><td>P/S</td><td>P/S</td><td>P/S</td><td>12 12</td><td>ν P/S</td><td>P/S</td><td></td><td></td><td>0</td><td></td><td></td><td></td></n>	Pys	P/S		P/S	Ū	5 a 2 a 2	P/S	P/S	P/S	12 12	ν P/S	P/S			0			
	-								0.61		0.61	0.61		0.61	0.01	2	0.61	0.61	0.61		0.61	0.61	REC (	m)	SAMPLE			_
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OVER		N LOG 0812 9 9 5	.0 .0	00 05	.00 .0	7.5	7.0	 6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0		 -1.0	0.5		DEPTH m BGS	CLIENT:	PROJEC	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE							END OF BOREHOLE @ 6.10m BGS		<ul> <li>- 152 mm section of tine slity sand, brown, wet</li> <li>- grey, moist</li> </ul>		- grey	- slight odour, brown	- strong odour, moist	- strong odour, wet		CL-SILTY CLAY, Iow plasticity, grey, moist, slightly oxidized - slight odour, grey	SP-SAND (FILL), fine grained, poorly graded, brown, moist	ASPHALT SW-GW SAND & GRAVEL (FILL), medium to fine grained, well graded, brown, moist		STRATIGRAPHIC DESCRIPTION & REMARKS	CLIENT: Mondelez Canada Inc.	PROJECT NAME: Geotechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	FER TO CUP							 	*****		****	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	******				<u></u>	<u>.</u>			DEPTH m BGS	DRILLIN	HOLE D	C AND INSTRUM (OVERBURDEN)
	RRENT ELEVATION TABLE													BENTONITE SEAL							BOREHOLE	DRILLING METHOD: GEOPROBE	HOLE DESIGNATION: BH106-13 DATE COMPLETED: February 7. 2013	NMENTATION LOG
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								 P/S 0.61	× => => '	P/S 0.61	P/S 0.61	P/S 0.61	× 42 12 V		P/S 0	P/S 0.61	P/S 0.61	P/S 0	4P/S 0.61	INTERV				
	ŀ							 61		61	61	61		<u>n</u>	0.61	61	61	0.61	61	REC (r 'N' VAL	- 2			Ра
								0.2		0.6	1.4	0.8		203	82.3	105	6,5	0.9	1.8	PID (pp	m)			Page 1 of 1

		N LOG 0812 	9.0	00 05	P.GDT 2 	7.5	7.0	 6.5	 6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0		1.0	0.5		m BGS		PROJEC CLIENT LOCATI	PROJEC	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE							END OF BOREHOLE @ 6.10m BGS			- moist to wet	- medium plasticity, grey	- wet			- slight odour, moist to wet		CL-SILTY CLAY, low plasticity, brown, moist - strong odour, brown / grey	SP-SAND (FILL), fine grained, poorly graded, brown, moist	SW-GW SAND & GRAVEL (FILL), coarse to medium grained, well graded, grey, moist		STRATIGRAPHIC DESCRIPTION & REMARKS		PROJECT NUMBER: 081211 CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	ER TO CUF								Kuun								,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			, 		m BGS		DATE C DRILLIN FIELD P	HOLE D	URDE
	RRENT ELEVATION TABLE													C F	BENTONITE							BOREHOLE		DATE COMPLETED: February 7, 2013 DRILLING METHOD: GEOPROBE FIELD PERSONNEL: L. Griffith	HOLE DESIGNATION: BH107-13	IMENTATION LOG V)
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9.5	9.0	8.5	8.0DT 8.0 0	7.5	7.0	 6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0		 	0.5		DEPTH m BGS	PROJEC CLIENT: LOCATIC	PROJEC	
NOTES: MEASUBING DOINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TARLE															- Refusal END OF BOREHOLE @ 1.89m BGS	CONCRETE (FILL)	SP-SAND (FILL), fine grained, poorly graded, brown, moist	CONCHETE SWACHVSAND & GRAVEL (FILL) coarse to medium grained, weil graded, brown, moist	2	STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NUMBER: 081211 CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
															1.8		, with the second se			DEPTH m BGS	DATE C DRILLIN FIELD F	HOLE	C AND INSTRUM (OVERBURDEN)
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																3/di		N 1 P/S		/AL			
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																			'N' VAL	UE			Page 1 of 1

		9.5	8.5	8.0	7.5	7.0		6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	 1.0	0.5		m BGS		PROJE CLIENT LOCATI	PROJE	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE						בואט טר פטאברוטבב (00 מ. וטוזו פעס			- moist to wet, grey	- slignny oxialzea, no oaour		- medium plasticity, grey			- strong odour	CL-SILTY CLAY, low plasticity, brown, moist	son-suc ir sonu (r-icu,) ittue day, ittie grained, poorly graded, brown, moist - slightly oxidized	SW-GW SAND & GRAVEL (FILL), coarse to medium grained, brown, moist		STRATIGRAPHIC DESCRIPTION & REMARKS		PROJECT NUMBER: 081211 CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Bivd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	ER TO CU							<u>"</u>		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;				, , ,	<u>i</u> xxxxx		8	m BGS	7	DATE C DRILLIN FIELD F	HOLE D	NSTRL ;URDE
	RRENT ELEVATION TABLE													BENTONITE						3	BOREHOLE		=ebn GEO	HOLE DESIGNATION: BH109-13	JMENTATION LOG N)
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99 90 8.5 5.5 4.5 90 90 90 8.5 5.5 4.5 90 90 90 90 90 90 90 90 90 90 90 90 90		DEPTH m BGS	5233.	$\sim$
NOTE / /		SS 코	ROJE	
L.S.ILTY CLAY (FILL), frm, low plasticity, grey, promotis present of the providence		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: Geolechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211 CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
		DEPTH m BGS	Hole di Date co Drillin Field P	STRU
RENT ELEVATION TABLE		BOREHOLE	HOLE DESIGNATION: BH110-13 DATE COMPLETED: February 22, 2013 DRILLING METHOD: HAND DRILL FIELD PERSONNEL: L. Griffith	MENTATION LOG V)
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		VAL		
	REC (	(m) LUE		
	'N' VAL			Page
8	PID (pr	pm)		Page 1 of 1

		N LOG 0812 9.5	9.0	8.5	8.0	7.5	7.0	6.5	6.0	5.5	5.0	4.5	4.0	3.5		2.0	1.5	 .0	0.5			DEPTH	LOCATIO	PROJEC	
LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE									END OF BOREHOLE @ 4.88m BGS	- Refusal (Shale fragments)						CL-SILTY CLAY, stiff, low plasticity, grey, moist - medium plasticity, very moist	SM-SILTY SAND (FILL), compact, fine grained, poorly graded, brown, moist	CL-SILTY CLAY (FILL), stiff, low plasticity, grey, moist	SW-GW SAND & GRAVEL (FILL)		STRATIGRAPHIC DESCRIPTION & REMARKS	CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	PROJECT NAME: Geotechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
	ER TO CUR										2224.9											DEPTH	FIELD PI	HOLE DE DATE CO	USTRU URDEN
	RENT ELEVATION TABLE														SEAL							BOREHOLE	DRILLING METHOD: GEOPROBE FIELD PERSONNEL: L. Griffth	HOLE DESIGNATION: BH111-13 DATE COMPLETED: February 22, 2013	MENTATION LOG V)
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												P/S	S/A	P/S	P/S	P/S	PIS	P/S	* a> [ a>	PIS	INTERVA				
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												0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	PID (pp	m)					of 1

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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE LABORATORY ANALYSIS			END OF BOREHOLE @ 6.10m BGS	- Refusal (Shale fragments)	- nigri prasucay, very morsk		- međium plasticity				siignty oxiaized	CL-SIL IY CLAY, firm, low plasticity, grey, moist,	SW-GW SAND & GRAVEL (FILL)		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: Geotechnical Investigation and Phase Two ESA PROJECT NUMBER: 081211 CLIENT: Mondelez Canada Inc. LOCATION: 2150 Lake Shore Blvd. West, Toronto	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
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				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	PID (ppn	n)		Page 1 of 1

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LABORATORY ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE							END OF BOREHOLE @ 6.10m BGS	CL-SILTY CLAY (TILL), firm, low plasticity, grey, moist - Refusal (Shale framents)			- high plasticity							CL-SILTY CLAY, firm, low plasticity, grey, moist - slight black discolouration	SW-GW SAND & GRAVEL (FILL)		STRATIGRAPHIC DESCRIPTION & REMARKS	LOCATION: 2150 Lake Shore Blvd. West, Toronto	CLIENT: Mondelez Canada Inc.	PROJECT NUMBER: 081211	PROJECT NAME: Geotechnical Investigation and Phase Two ESA	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
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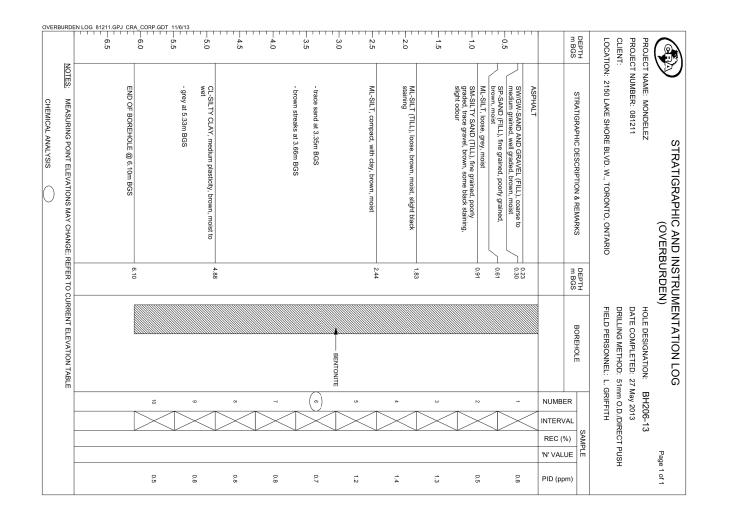
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CHEMICAL ANALYSIS	NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE					- Refusal, concrete at 4.27m BGS END OF BOREHOLE @ 4.27m BGS		SM-SILTY SAND, fine grained, poorly graded, grey, moist - wet at 3.51m BGS						Construct Product of the construction of	ASPHALT		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: MONDELEZ PROJECT NUMBER: 081211 CLIENT: LOCATION: 2150 LAKE SHORE BLVD. W., TORONTO, ONTARIO	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
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	URRENT ELEVATION TABLE										BENTONITE						BOREHOLE	HOLE DESIGNATION: BH201-13 DATE COMPLETED: 27 May 2013 DRILLING METHOD: 51mm O.D./DIRECT PUSH FIELD PERSONNEL: L. GRIFFITH	IMENTATION LOG N)
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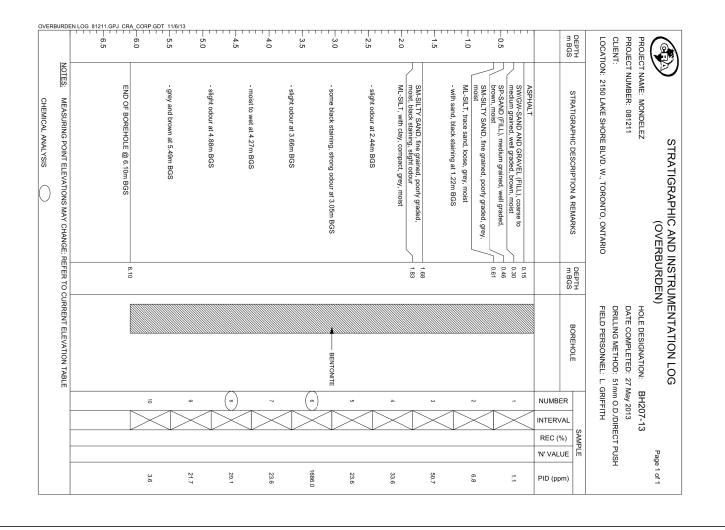
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NOTES:													EN - R		S	N: 2150	t name: T numbe	Ð
MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE													- Refusal at 0.15m BGS END OF BOREHOLE @ 0.15m BGS		STRATIGRAPHIC DESCRIPTION & REMARKS	LOCATION: 2150 LAKE SHORE BLVD. W., TORONTO, ONTARIO	PROJECT NAME: MONDELEZ PROJECT NUMBER: 081211 CLIENT:	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
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SURRENT ELEVATION TABLE															BOREHOLE	FIELD PERSONNEL: L. GRIFFITH	HOLE DESIGNATION: BHZUZ-13 DATE COMPLETED: 27 May 2013 DRILLING METHOD: 51mm O.D./DIRECT PUSH	_
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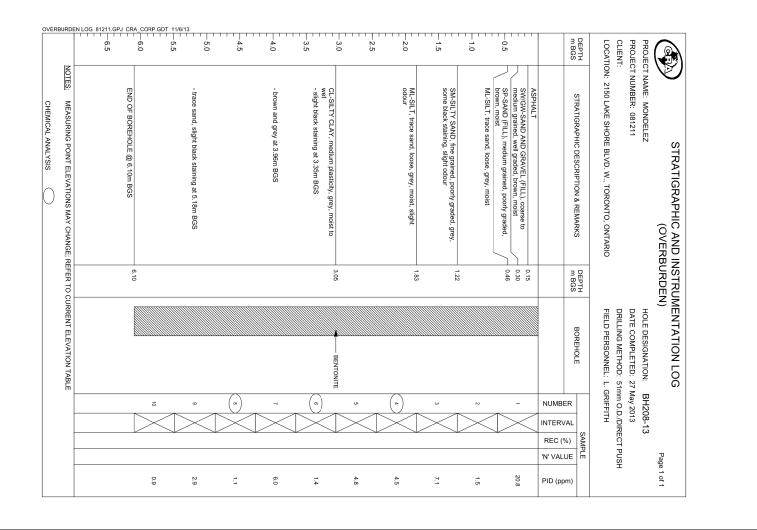
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MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE													END OF BOREHOLE @ 0.15m BGS	ASPHALT - Refusal at 0.15m BGS		STRATIGRAPHIC DESCRIPTION & REMARKS	CLIENT: LOCATION: 2150 LAKE SHORE BLVD. W., TORONTO, ONTARIO	PROJECT NAME: MONDELEZ PROJECT NUMBER: 081211	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
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CURRENT ELEVATION TABLE																BOREHOLE	DRILLING METHOD: 51mm O.D./DIRECT PUSH FIELD PERSONNEL: L. GRIFFITH	HOLE DESIGNATION: BH203- DATE COMPLETED: 27 May 2013	JMENTATION LOG N)
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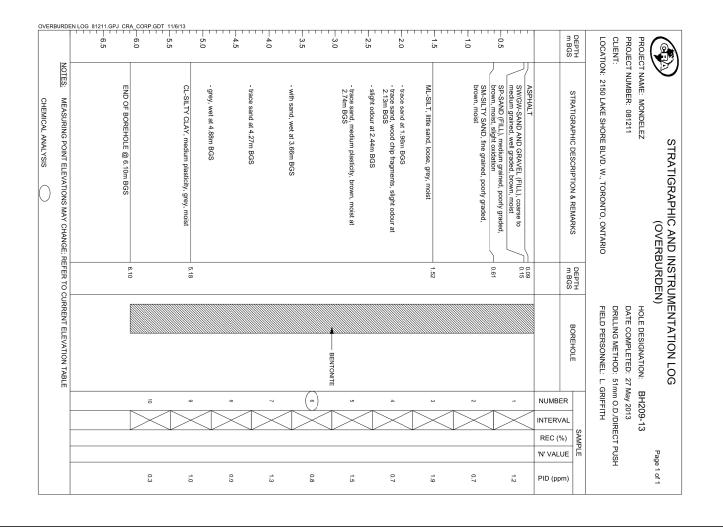
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE	END OF BOREHOLE @ 6.10m Bes		- medium plasticity, moist to wet at 4.88m BGS	CL-SILTY CLAY, low plasticity, grey, moist to wet - trace sand at 4.27m BGS - low plasticity, moist at 4.57m BGS	ML-SILT, trace clay, low plasticity, brown, moist, slight oxidation	SP-SAND, fine grained, poorly graded, brown,			- little sand, wet, slight oxidation at 1.83m BGS	ML-SILT, trace clay, low plasticity, brown, moist	SM-SILTY SAND, fine grained, poorly graded, brown, moist	SP-SAND (FILL), fine grained, poorly graded, brown, moist	ASPHALT SWIGW-SAND AND GRAVEL (FILL), coarse to medium grained, well graded, brown, moist		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: MONDELEZ PROJECT NUMBER: 081211 CLIENT: LOCATION: 2150 LAKE SHORE BLVD. W., TORONTO, ONTARIO	STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)
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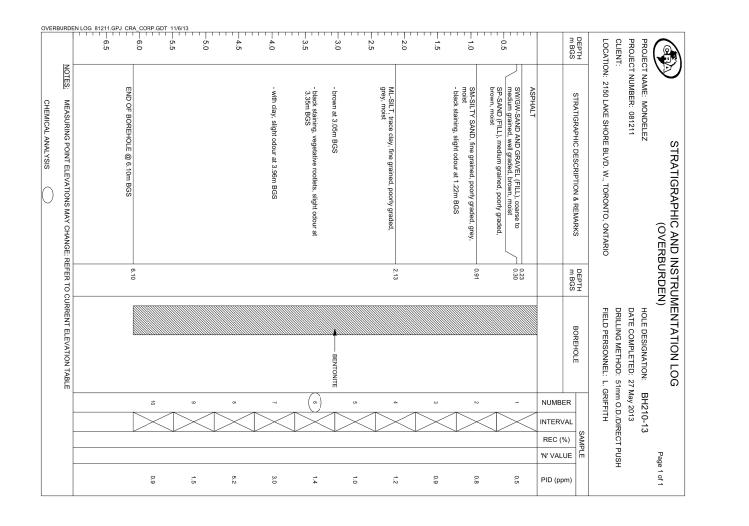
IZ	6.5	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	- 2.0			1.0	0.5		m BGS	DEPTH	PROJEC PROJEC CLIENT: LOCATIC	
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE		END OF BOREHOLE @ 6.10m BGS			CL-SILTY CLAY, medium plasticity, arey moist		- trace sand, loose, moist to wet at 3.66m BGS	ML-SILT, trace clay, compact, brown, moist			- black staining at 1.52m BGS	- wood fragments, slight odour at 1.22m BGS	ML-SILT (TILL), trace clay, compact, grey, moist	SW/GW-SAND AND GRAVEL (FILL), coarse to medium grained, well graded, brown, moist	ASPHALT		STRATIGRAPHIC DESCRIPTION & REMARKS	PROJECT NAME: MONDELEZ PROJECT NUMBER: 081211 CLIENT: LOCATION: 2150 LAKE SHORE BLVD. W., TORONTO, ONTARIO	OVERBURDEN)
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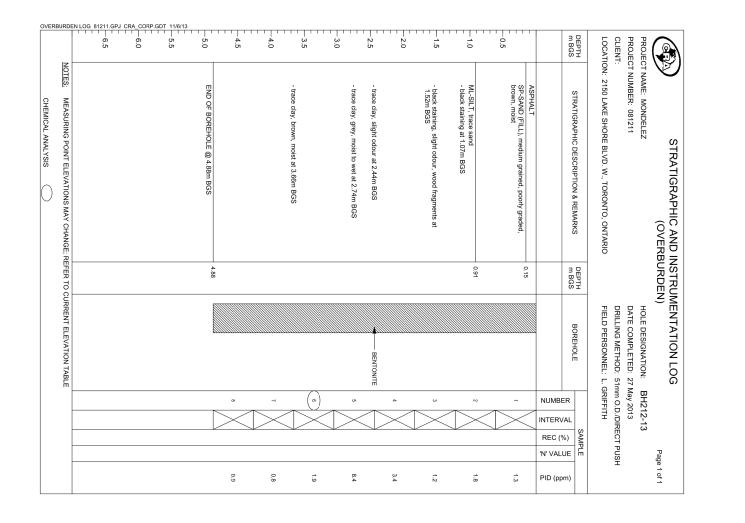








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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE		END OF BOREHOLE @ 6.10m BGS		- with clay at 4.88m BGS			- trace vegetative matter, vegetative staining at 3.05m BGS		ML-SILT, trace clay, fine grained, poorly graded, grey, moist	SM-SILTY SAND, fine grained, poorly graded, brown, moist	brewn, moist	SW/GW-SAND AND GRAVEL (FILL), coarse to medium grained, well graded, brown, moist SP-SAND (FILL), medium grained, poorly graded,	ASPHALT	STRATIGRAPHIC DESCRIPTION & REMARKS		PROJECT NUMBER: 081211 CLENT: LOCATION: 2150 LAKE SHORE BLVD. W., TORONTO, ONTARIO		STRATIGRAPHIC AND INSTRUMENTATION LOG
REFER TO		6.10							1.52	1.22		0.30		m BGS	DEPTH		BURDE	NSTRL
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Hydrological Review Summary Form

| Issue 01 | May 15, 2020 | Arup Canada Inc.

August 2018

#### HYDROLOGICAL REVIEW SUMMARY

The form is to be completed by the Professional that prepared the Hydrological Review. Use of the form by the City of Toronto is not to be construed as verification of engineering/hydrological content.

Refer to the Terms of Reference, Hydrological Review: Link to Terms of Reference Hydrological Review

For City Staff Use Only:	
Name of ECS Case Manager (Please print)	
Date Review Summary provided to to TW, EM&P	

IF ANY OF THE REQUIREMENTS LISTED BELOW HAVE NOT BEEN INLCUDED IN THE HYDROLOGICAL REVIEW, THE REVIEW WILL BE CONSIDERED INCOMPLETE.

THE GREY SHADED BOXES WILL REQUIRE A CONSISTANCY CHECK BY THE ECS CASE MANAGER.

#### **Summary of Key Information:**

SITE INFO	RMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
Site Address	2150-2194 Lake Shore Boulevard West and 23 Park Lawn Rd	Page 3 Section 1.1	
Postal Code	M8V 1A3	Page 5 Section 2	
Property Owner (on request for comments memo)	FCR (Park Lawn) LP and CPPIB Park Lawn Canada Inc	Page 3 Section 1.1	
Proposed description of the project (if applicable) (point towers, number of podiums)	Fifteen towers with basement, mid-rise and low-rise buildings, new Park Lawn GO Station, a public park	Page 3 Section 1.1	
Land Use (ex. commercial, residential, mixed, institutional, industrial)	Mixed (residential, offices, services/retail, institutional)	Page 3 Section 1.1	
Number of below grade levels for the proposed structure	3 to 5	Page 3 and 4 Section 1.1	
HYDROLOGI	CAL REVIEW INFORMATION		
Date Hydrological Review was prepared:	15 May 2020	Cover Page	
Who Performed the Hydrological Review (Consulting Firm)	Arup Canada Inc	Cover Page	
Name of Author of Hydrological Review	James Collins	Cover Page	



SITE INFOR	RMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
Check the directories on the website for Professional Geoscientists and/or Professional Engineers of Ontario been checked to ensure that the Hydrological Report has been prepared by a qualified person who is a licensed Professional Geoscientist as set out in the Professional Geoscientist Act of Ontario or a Professional Engineer? PEO: <u>Professional Engineers of Ontario</u> APGO: <u>Association of Professional Geoscientists of Ontario</u>		N/A	
<ul> <li>Has the Hydrological Review been prepared in accordance with all the following:</li> <li>Ontario Water Resources Act</li> <li>Ontario Regulation 387/04</li> <li>Toronto Municipal Code Chapter 681-Sewers</li> </ul>	Yes	Page 4 Section 1.2	
		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)



SITE INFO	RMATION					Page # & Section # of Review	Review Includes this Information City Staff (Check)
Total Volume (L/day) Short Term Discharge of groundwater (construction dewatering) with safety factor included	What safety factor Factor of Safety of 1.5 was used Values for each basement have been tabulated and are presented in the report. Report text includes values in L/d.	-Table 7 - Anticipated Basement Phase Phase 1 Phase 2 Phase 3 Phase 5 Phase 6		0 Masimum Generation Discharge (m²d) (unfactored) 47 41 49 38 34 34 34	Mastimum Autriputed Groundwater Discharge (ni/d) (factored) 70 62 73 57 51 51	Page 20 Section 5.2.3	
Total Volume (L/day) Short Term Discharge of groundwater (construction dewatering) without safety factor included	Values for each basement have been tabulated and are presented in the report. Report text includes values in L/d.	Table 7 - Anticipated Basement Phase Phase 1 Phase 2 Phase 3 Phase 5 Phase 5 Phase 6 Phase 1-5	21 dicharge includes a Factor of Groundwater Discharge Minimum Anticipated Groundwater Discharge (m/4) (unfactored) 5 4 4 5 4 3 3 2 21 dicharge include a Factor of	20 Maximum Anticipated Groundwater Discharge (m)40 (unfactored) (unfactored) 47 47 41 41 49 38 34 34 34 209	313 Maximum Anticipated Groundwater Discharge (mk/ord) (factored) (factored) 51 51 51 31 313	Page 20 Section 5.2.3	
Total Volume (L/day) Long Term drainage of groundwater (from foundation drainage, weeping tiles, sub slab drainage) <b>with safety factor included</b> If the development is part of a multiple tower complex, include total volume for each separate tower	What safety factor Factor of Safety of 1.5 was used Values for each basement have been tabulated and are presented in the report. Report text includes values in L/d.	Dr WGS USE Table 5 – Anticipated Basement Phase Phase 1 Phase 2 Phase 3 Phase 4 Phase 5 Phase 6 Phase 6 Phase 1-5 Note: Facted groundwater dickar	Groundwater Disch Maximum (m ³ /d)	Anticipated Ground with Secant Pile Per (factored) 18 15 18 14 13 13 78 dety of 15	Jwater Discharge rimeter Wall	Page 21 Section 5.4	
List the nearest surface water (river, creek, lake)	Mimico Creek, appro Lake Ontario is locat the southeast .	ximately 20 ed approxir	0 m to the nately 250	southwes m to 300	it. m to	Page 5 Section 2.2	



SITE INFO	RMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
Lowest basement elevation	+89 masl	Page 18 Section 5.2.2	
Foundation elevation	Anticipated to be within the shale bedrock which was encountered between 70.7 masl and 82.6 masl	Page 16 Section 5.1	
Ground elevation	The site is generally flat, with existing elevation across the site typically ranging from approximately +84 masl and +86 masl.	Page 5 Section 2.1	
STUDY AREA MAP		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)
Study area map(s) have been included in the report.	X Yes Site Location Plan - Page 3, Section 1.1 Borehole Location Plan - Appendix A	Page 3 Section 1.1 and Appendix A	N/A
Study area map(s) been prepared according to the Hydrological Review Terms of Reference.	⊗ Yes		N/A
WATER LEVEL AND WELLS		Page # & Section # of every occurrence	Review Includes this Information (City Staff Initial)



SITE INFORMATION		Page # & Section # of Review	Review Includes this Information City Staff (Check)
		in the Review	
The groundwater level has been monitored using all wells located on site (within property boundary).	Yes	Page 12 Section 4.2	
The static water level measurements have been monitored at all monitoring wells for a minimum of 3 months with samples taken every 2 weeks for a minimum of 6 samples. The intent is for the qualified professional to use professional judgement to estimate the seasonally high groundwater level.	No. Existing monitoring data is provided at various seasons but not consistently for 3 months. Based on the available data a conservative estimate of groundwater level has been made, and groundwater assumed to be 1 m below ground surface.	Page 16 Section 5.2	
All water levels in the wells have been measured with respect to masl.	Yes	Page 12 Section 4.2	
A table of geology/soil stratigraphy for the property has been included.	Yes	Page 10 Section 3.3 and Page 11 Section 4.1	
GEOLOGY AND PHYSICAL HYDROLOGY		Page # & Section # of every occurrence in the Review	Review Includes this Information (City Staff Initial)
The review has made reference to the soil materials including thickness, composition and texture, and bedrock environments.	Yes	Page 10 Section 3.3	
Key aquifers and the site's proximity to nearby surface water has been identified.	(X) Yes	Page 5 Section 2.2 and Page 11 Section 4.1	N/A



SITE INFO	RMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
PUMP TEST/SLUG TEST/DRAWDOWN ANALYSIS		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)
A summary of the pumping test data and analysis is included in the review.	Pumping tests have not yet been carried out. In situ permeability testing is proposed for future design stages, which is discussed in Section 7 Summary and Further Work	Page 23 Section 7	
The pump test been carried out for at least 24 hours if possible. If not, has a slug test been conducted?	Slug tests have not been conducted. In situ permeability testing is proposed for future design stages, which is discussed in Section 7 Summary and Further Work	Page 23 Section 7	
Have the monitoring well(s) have been monitored using digital devices? If yes how frequently?	Not monitored using digital devices	N/A	
If a slug or pump test has been conducted has the static groundwater level been monitored at all monitoring well(s) multiple times to measure recovery? -prior to the slug or pumping test(s)? -post slug or pumping test(s)?	<b>Yes</b> Pumping nor slug tests tests have not yet been carried out. In situ permeability testing is proposed for future design stages, which is discussed in Section 7 Summary and Further Work	N/A	N/A
The above noted slug or pump tests have been included in the report.	<b>Yes</b> Pumping nor slug tests tests have not yet been carried out. In situ permeability testing is proposed for future design stages, which is discussed in Section 7 Summary and Further Work	N/A	
WATER QUALITY		Page # & Section # of every occurrence in the Review	Review Includes this Information City Staff (Check)



SITE INFO	RMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
The report includes baseline water quality samples from a laboratory. The water quality must be analyzed for all parameters listed in Tables 1 and 2 of Chapter 681 Sewers of the Toronto Municipal Code (found in Appendix A) and the samples must have to be taken unfiltered within 9 months of the date of submission.	The report discusses known contamination at the site and the requirements of Tables 1 and Table 2 of The City of Toronto Sewers By-Law. Required tests are to be carried out during ground investigation for future design stages.	Page 15 Section 4.5	
The water quality data templates in Appendix A have been completed for each sample taken for both sanitary/combined and storm sewer limits.	For sanitary discharge- See the sanitary/combined sewer parameter limit template	N/A	
	For storm discharge- See the storm sewer parameter limit template		
Qualified professional to list all sample parameters that have violated the Bylaw limits for each sample taken for the sanitary/combined Bylaw limits If there are any sample parameter Exceedances the groundwater can't be discharged as is.	The report discusses known contamination at the site and the requirements of Tables 1 and Table 2 of The City of Toronto Sewers By-Law. Required tests are to be carried out during ground investigation for future design stages.	Page 15 Section 4.5	
Qualified professional to list all sample parameters that have violated the Bylaw limits for each sample taken for the storm Bylaw limits.	The report discusses known contamination at the site and the requirements of Tables 1 and Table 2 of The City of Toronto Sewers By-Law. Required tests are to be carried out during ground investigation for future design stages.	Page 15 Section 4.5	
If there are any sample parameter exceedances the groundwater can't be discharged as is.			
The water quality samples have been analyzed by a Canadian laboratory accredited and licensed by Standards Council of Canada and/or Canadian Association for Laboratory Accreditation.	Yes The report discusses known contamination at the site and the requirements of Tables 1 and Table 2 of The City of Toronto Sewers By-Law. Required tests are to be carried out during ground investigation for future design stages.	Page 15 Section 4.5	N/A



SITE INFO	RMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
List of Canadian accredited laboratories:			
Standards Council of Canada	N/A	N/A	
A chain of custody record for the samples is			
included with the report.	N/A	N/A	
Has the chain of custody reference any filtered			
sample? If yes, the report has to be amended and re-submitted to include only non-filtered samples.	N/A	N/A	
List any of the sample parameters that exceed the			
Bylaw limits with the reporting detection limit (RDL) included.	N/A	N/A	
A true copy of the Certificate of Analysis report, is			
included with the report.	N/A	N/A	
EVALUATION OF IMPACT		Page # & Section # of	Review Includes this
		every	Information
		occurrence	City Staff
		in the Review	(Check)
Does the report recommend a back-up system or relief safety valve(s)?	🔿 Yes 🛞 No		
Does the associated Geotechnical report	🔿 Yes 🛛 🛞 No		
recommend a back-up system or relief safety valve(s)?			
The taking and discharging of groundwater on site	○ Yes		N/A
has been analyzed to ensure that no negative			



#### HYDROLOGICAL REVIEW SUMMARY

SITE INFO	RMATION	Page # & Section # of Review	Review Includes this Information City Staff (Check)
impacts will occur to: the City sewage works in terms of quality and quantity (including existing infrastructure), the natural environment, and settlement issues.	Review has been carried out in terms of groundwater quantity. Further review of groundwater quality and detailed settlement analysis will be carried out during ground investigation and future design stages.	Page 22 Section 5.6	
Has it been determined that there will be a negative impact to the natural environment, City sewage works, or surrounding properties has the study identified the following: the extent of the negative impact, the detail of the precondition state of all the infrastructure, City sewage works, and natural environment within the effected zone and the proposed remediation and monitoring plan?	○ Yes If yes, identify impact: ⊗ No		N/A

Summary of Additional Information and Key Items (if applicable):



#### HYDROLOGICAL REVIEW SUMMARY

#### Appendix A:

#### SANITARY/COMBINED

Sample Location:

Inorganics		Sample Result	Sample Result with upper RDL included	
Parameter	<u>mg/L</u>	_		<u>ug/L</u>
BOD	300			300,000
Fluoride	10			10,000
TKN	100			100,000
рН	6.0 - 11.5			6.0 - 11.5
Phenolics 4AAP	1			1,000
TSS	350			350,000
Total Cyanide	2			2,000
Metals				
Chromium Hexavalent	2			2,000
Mercury	0.01			10
Total Aluminum	50			50,000
Total Antimony	5			5,000
Total Arsenic	1			1,000
Total Cadmium	0.7			700
Total Chromium	4			4,000
Total Cobalt	5			5,000
Total Copper	2			2,000
Total Lead	1			1,000
Total Manganese	5			5,000
Total Molybdenum	5			5,000
Total Nickel	2			2,000
Total Phosphorus	10			10,000
Total Selenium	1			1,000
Total Silver	5			5,000
Total Tin	5			5,000
Total Titanium	5			5,000
Total Zinc	2			2,000
Petroleum Hydrocarbons				
Animal/Vegetable Oil & Grease	150			150,000
Mineral/Synthetic Oil & Grease	15			15,000

August 2018

#### HYDROLOGICAL REVIEW SUMMARY

Volatile Organics		Sample Result	Sample Result with upper RDL included	
Parameter	<u>mg/L</u>	_		<u>ug/L</u>
Benzene	0.01			10
Chloroform	0.04			40
1,2-Dichlorobenzene	0.05			50
1,4-Dichlorobenzene	0.08			80
Cis-1,2-Dichloroethylene	4			4,000
Trans-1,3-Dichloropropylene	0.14			140
Ethyl Benzene	0.16			160
Methylene Chloride	2			2,000
1,1,2,2-Tetrachloroethane	1.4			1,400
Tetrachloroethylene	1			1,000
Toluene	0.016			16
Trichloroethylene	0.4			400
Total Xylenes	1.4			1,400
Semi-Volatile Organics				
Di-n-butyl Phthalate	0.08			80
Bis (2-ethylhexyl) Phthalate	0.012			12
3,3'-Dichlorobenzidine	0.002			2
Pentachlorophenol	0.005			5
Total PAHs	0.005			5
Misc Parameters				
Nonylphenols	0.02			20
Nonylphenol Ethoxylates	0.2			200

Sample Collected: Temperature:

August 2018

STORM	Sample Location:			
Inorganics		Sample Result	Sample Result with upper RDL included	
Parameter	mg/L			ug/L
рН	6.0 - 9.5			
BOD	15			15,000
Phenolics 4AAP	0.008			8
TSS	15			15,000
Total Cyanide	0.02			20
Metals				
Total Arsenic	0.02			20
Total Cadmium	0.008			8
Total Chromium	0.08			80
Chromium Hexavalent	0.04			40
Total Copper	0.04			40
Total Lead	0.12			120
Total Manganese	0.05			50
Total Mercury	0.0004			0.4
Total Nickel	0.08			80
Total Phosphorus	0.4			400
Total Selenium	0.02			20
Total Silver	0.12			120
Total Zinc	0.04			40
Microbiology				
E.coli	200			200,000
Volatile Organics				
Parameter	mg/L			ug/L
Benzene	0.002			2
Chloroform	0.002			2
1,2-Dichlorobenzene	0.0056			6
1,4-Dichlorobenzene	0.0068			7
Cis-1,2-Dichloroethylene	0.0056			6
Trans-1,3-Dichloropropylene	0.0056			6
Ethyl Benzene	0.002			2
Methylene Chloride	0.0052			5
1,1,2,2-Tetrachloroethane	0.017			17
Tetrachloroethylene	0.0044			4
Toluene	0.002			2
Trichloroethylene	0.0076			8
Total Xylenes	0.0044			4

August 2018

#### HYDROLOGICAL REVIEW SUMMARY

Semi-Volatile Organics		Sample Result	Sample Result with upper RDL included	
Di-n-butyl Phthalate	0.015			5
Bis (2-ethylhexyl) Phthalate	0.0088			8.8
3,3'-Dichlorobenzidine	0.0008			0.8
Pentachlorophenol	0.002			2
Total PAHs	0.002			2
PCBs	0.0004			0.4
Misc Parameters				
Nonylphenols	0.001			1
Nonylphenol Ethoxylates	0.01			10

Sample Collected: Temperature:

	Arup
Consulting Firm that prepared Hydrological Report:	7.1.00

Qualified Professional who completed the report summary:	James Collins	A A A
	Print Name	Contraction of the second seco
Qualified Professional who completed the report summary:	See stamp	0 N TARIO 15/05/2020
	Signature	Date & Stamp