



SHEET 4 OF 4

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Liles							
SITE DESCRIPTION Exelon COL Project				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)							
BORING NO. B-2151		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND		24 HR. ND							
GROUND SURFACE ELEV. 80.4 ft (NAVD88)		NORTHING 13,412,637		US ft (NAD83)		EASTING 2,599,654		US ft (NAD83)							
TOTAL DEPTH 200.0 ft		DRILL MACHINE CME-550		DRILLER: L. Carter/C. Harden		HAMMER (ID) 140 lb. Auto (MEC 03)									
DATE STARTED 12/13/07		COMPLETED 12/14/07		CASING DEPTH: 3.5 ft		BITS USED: 2 15/16" Drag Bit									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT						SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100					
-87.9					Continued from previous page										
-89.2	169.6	27	23	23							SS-30		-89.2	169.6	POORLY GRADED SAND with silt (SP-SM), light gray (10YR7/2), dense, wet, ferrous black flakes, carbonate nodules, strong HCl reaction (visual)
-99.2	179.6	18	20	24								SS-31		-99.2	179.6
-109.2	189.6	50/0.4									SS-32		-109.2	189.6	POORLY GRADED SAND with gravel (SP), light gray (10YR7/2), very dense, wet, fine grained, trace gravel, carbonate nodules, strong HCl reaction (visual)
-119.2	199.6	50/0.4										SS-33		-119.6	200.0

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/16/08



GEOTECHNICAL BORING LOG

Prepared By JPX Date 6-12-08Checked By KAW Date 7-10-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST J. Jarvis						
SITE DESCRIPTION Exelon COL Project (Victoria Site)					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)						
BORING NO. B-2152		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND						
GROUND SURFACE ELEV. 80.3 ft (NAVD88)		NORTHING 13,412,706			US ft (NAD83)		EASTING 2,599,720		US ft (NAD83)		24 HR. ND					
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-45			DRILLER: J. Warren/J. Alexander					HAMMER (ID) 140 lb. Auto (MEC 12)						
DATE STARTED 12/3/07		COMPLETED 12/5/07			CASING DEPTH: N/A					BITS USED: 2 15/16" Roller cone						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION			
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100						
80.3					Ground Surface								80.3	0.0		
80.3	0.0	2	2	3						SS-1			FAT CLAY with sand (CH), dark greenish gray (10G4/1), firm, moist, little sand, carbonate nodules, ferrous staining, no HCl reaction			
76.8	3.5	4	5	6						SS-2			3.5ft: pinkish gray (7.5YR7/2), stiff			
74.3	6.0	5	5	5						SS-3			LEAN CLAY with sand (CL), light brownish gray (10YR6/2), stiff, carbonate nodules, little sand, strong HCl reaction			
71.8	8.5	11	17	25						SS-4			8.5ft: hard			
69.3	11.0	11	13	12						SS-5			11.0ft: very stiff			
66.8	13.5	8	9	10						SS-6			FAT CLAY (CH), pale brown (10YR6/3), stiff to very stiff, mottled brownish yellow (10YR6/8)			
61.8	18.5	5	6	6						SS-7			18.5ft: light gray (10YR7/1), to brownish yellow (10YR6/6), weak HCl reaction			
56.7	23.6	6	7	9						SS-8			23.6ft: mottled light gray (10YR7/2)			
51.7	28.6	6	7	8						SS-9						
46.7	33.6	6	9	12						SS-10			33.6ft: mottled gray (10YR6/1)			
41.8	38.5	5	6	9						SS-11			38.5ft: mottled light greenish gray (10Y8/1)			
36.8	43.5	4	7	9						SS-12			43.5ft: no HCl reaction			
31.8	48.5	9	14	19						SS-13			Clayey SAND (SC), pale yellow (2.5YR7/3), mottled yellow (2.5Y7/6), dense, moist, fine grained, little fines, more clay in lenses, no HCl reaction			
27.5	52.8	19	23	32						SS-14			52.8ft: mottled brownish yellow (10YR6/8), very dense, trace carbonate nodules, strong HCl reaction			

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



GEOTECHNICAL BORING LOG

Prepared By WJD Date 6-16-08Checked By KAW Date 7-10-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Jarvis					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2153		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND					
GROUND SURFACE ELEV. 80.2 ft (NAVD88)		NORTHING 13,412,822		US ft (NAD83)		EASTING 2,599,843		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 150.1 ft		DRILL MACHINE CME-45		DRILLER: J. Warren/J. Alexander				HAMMER (ID) 140 lb. Auto (MEC 12)					
DATE STARTED 11/27/07		COMPLETED 12/2/07		CASING DEPTH: N/A				BITS USED: 2 15/16" Drag Bit					
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI		G
80.2					Ground Surface							80.2	0.0
80.2	0.0	1	2	1	● 3					SS-1		FAT CLAY (CH), very dark gray (5YR3/1), soft, moist, trace sand, ferrous staining, no HCl reaction	
76.6	3.6	2	3	5	● 8					SS-2		3.6ft: dark gray (5YR4/1), firm, few sand, trace carbonate nodules	
74.2	6.0	4	5	6	● 11					SS-3		6.0ft: light brown (7.5YR6/3), stiff, weak HCl reaction	
71.7	8.5	4	6	7	● 13					SS-4		71.7	8.5
69.0	11.2	7	8	11	● 19					SS-5		LEAN CLAY with sand (CL), light brown (7.5YR6/3), stiff, moist, little sand, black staining, carbonate nodules, strong HCl reaction	
66.7	13.5	4	5	8	● 13					SS-6		11.2ft: very stiff, mottled strong brown (7.5YR5/8)	
61.6	18.6	3	7	8	● 15					SS-7		13.5ft: stiff	
56.5	23.7	3	4	5	● 9					SS-8		18.6ft: light brownish gray (10YR6/2), little sand	
51.6	28.6	3	6	7	● 13					SS-9		56.5	23.7
46.6	33.6	4	6	9	● 15					SS-10		FAT CLAY (CH), strong brown (7.5YR5/8), mottled light brownish gray (10YR6/2), stiff, moist, few sand, strong HCl reaction	
41.7	38.5	5	8	10	● 18					SS-11		28.6ft: mottled strong brown (7.5YR5/8)	
36.7	43.5	6	13	13	● 26					SS-12		33.6ft: pale brown (10YR6/3), mottled yellowish brown (10YR5/8)	
31.7	48.5	10	12	14	● 26					SS-13A/B		38.5ft: pinkish gray (7.5YR6/2), mottled strong brown (7.5YR5/8), very stiff	
26.6	53.6	13	14	16	● 30					SS-14A/B		38.2	42.0
												POORLY GRADED SAND with clay (SP-SC), reddish yellow (7.5YR6/8), mottled pinkish gray (7.5YR7/2), very firm, moist, coarse grained, few fines, no HCl reaction	
												30.9	49.3
												FAT CLAY with sand (CH) pinkish gray (7.5YR7/2) very stiff, moist, little coarse grained sand, strong HCl reaction	
												25.8	54.4

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/16/08



SHEET 2 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Jarvis						
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)						
BORING NO. B-2153		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR.		ND				
GROUND SURFACE ELEV. 80.2 ft (NAVD88)		NORTHING 13,412,822		US ft (NAD83)		EASTING 2,599,843		US ft (NAD83)		24 HR. ND				
TOTAL DEPTH 150.1 ft		DRILL MACHINE CME-45		DRILLER: J. Warren/J. Alexander				HAMMER (ID) 140 lb. Auto (MEC 12)						
DATE STARTED 11/27/07		COMPLETED 12/2/07		CASING DEPTH: N/A				BITS USED: 2 15/16" Drag Bit						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI			
24.1					Continued from previous page									
21.6	58.6											21.3	POORLY GRADED SAND with clay (SP-SC), reddish yellow (7.5YR6/8), very firm, moist, coarse grained, weak HCl reaction, few fines (continued)	58.9
		6	11	14									FAT CLAY (CH), pinkish gray (7.5YR7/2), mottled reddish yellow (7.5YR6/8), very stiff, few to little sand, strong HCl reaction	
16.6	63.6												63.5ft: light reddish brown (5YR6/3), ferrous and black stains, strong HCl reaction	
		5	7	10										
11.7	68.5												68.5ft: reddish brown (5YR5/3), trace carbonate nodules	
		5	7	9										
6.6	73.6												73.6ft: pinkish gray (5YR7/2)	
		9	10	12										
1.6	78.6												78.6ft: no HCl reaction	79.3
		6	8	8									Clayey SAND (SC), light gray (10YR7/1), firm, moist, coarse grained, some fines, ferrous stains, carbonate nodules, no HCl reaction	
-3.4	83.6												83.6ft: pinkish gray (7.5YR7/2), very firm, little fines	
		6	8	18										
-8.3	88.5												88.5ft: loose	
		4	5	5										
-13.3	93.5												Field notes do not indicate that SS-22 was split into separate jars	94.0
		14	40	24									FAT CLAY (CH), very pale brown (10YR7/3), hard, moist, little sand, strong HCl reaction	
-18.4	98.6												94.0 to 95.0ft: carbonate layering	
		50/0.3												
-28.3	108.5												108.5ft: mottled reddish yellow (7.5YR6/8), very stiff, trace carbonate nodules	
		8	9	11										

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/16/08



SHEET 3 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Jarvis					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2153		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR.		ND					
GROUND SURFACE ELEV. 80.2 ft (NAVD88)		NORTHING 13,412,822		US ft (NAD83)		EASTING 2,599,843		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 150.1 ft		DRILL MACHINE CME-45		DRILLER: J. Warren/J. Alexander		HAMMER (ID) 140 lb. Auto (MEC 12)							
DATE STARTED 11/27/07		COMPLETED 12/2/07		CASING DEPTH: N/A		BITS USED: 2 15/16" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT						SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
-32.0					Continued from previous page								
-38.4	118.6	8	8	11	19						SS-25		FAT CLAY (CH), very pale brown (10YR7/3), hard, moist, little sand, strong HCl reaction 94.0 to 95.0ft: carbonate layering (continued) 118.6ft: light gray (2.5YR7/1), black stains, ferrous stains
-48.3	128.5	14	19	25	44						SS-26		Clayey SAND (SC), light gray (5Y7/1), dense, moist, coarse grained, few to little fines, carbonate deposits throughout, strong HCl reaction
-58.3	138.5	6	29	24	53						SS-27		Field notes do not indicate that SS-27 was split into separate jars
-68.4	148.6	19	27	25	52						SS-28		POORLY GRADED SAND (SP), very pale brown (10YR7/3), very dense, moist, coarse grained, trace fines, strong HCl reaction
													Boring Terminated at Elevation -69.9 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/16/08



GEOTECHNICAL BORING LOG

Prepared By JPZ Date 6-12-08Checked By RAW Date 7-10-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST C. Gandy				
SITE DESCRIPTION Exelon COL Project (Victoria Site)					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)				
BORING NO. B-2154		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND				
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,412,451		US ft (NAD83)	EASTING 2,599,620		US ft (NAD83)		24 HR. ND					
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-55 LC			DRILLER: D. White/O. Smith					HAMMER (ID) 140 lb. Auto (MEC 02)				
DATE STARTED 11/9/07		COMPLETED 11/11/07			CASING DEPTH: N/A					BITS USED: 2 7/8" Wing Bit				
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100				
80.5					Ground Surface							80.5		0.0
80.5	0.0	3	3	3						SS-1			FAT CLAY (CH), dark gray (7.5YR4/1), firm, moist, fine-grained sand, weak HCl reaction, trace carbonate nodules, roots and organics present, thinly laminated	
77.0	3.5	3	4	5						SS-2			3.5ft: gray (10YR6/1), stiff, few sand, strong HCl reaction, iron nodules	
74.5	6.0	5	7	7						SS-3		74.5		6.0
72.0	8.5	7	10	11						SS-4			LEAN CLAY with sand (CL), very pale brown (10YR7/3), stiff, moist, little sand, carbonate nodules, strong HCl reaction	
69.5	11.0	7	8	11						SS-5			8.5ft: very stiff, little fine sand	
67.0	13.5	6	7	7						SS-6		11.0ft: light gray (10YR7/2)		
												13.5ft: very pale brown (10YR8/3), stiff		
62.0	18.5	4	5	7						SS-7		62.0		18.5
													FAT CLAY (CH), very pale brown (10YR8/2), mottled with brownish yellow (10YR6/6), stiff, moist, few sand, carbonate nodules, strong HCl reaction, organics	
57.0	23.5	5	6	7						SS-8			23.5ft: yellow (10YR7/8), mottled light greenish gray (10Y8/1)	
												28.5ft: mottled very pale (10YR7/4)		
52.0	28.5	3	5	6						SS-9				
												33.5ft: slightly mottled brownish yellow (10YR6/6)		
47.0	33.5	5	5	8						SS-10				
												43.5ft: light yellowish brown (10YR6/4), mottled light greenish gray (10Y8/1), trace carbonate nodules		
42.0	38.5	4	5	9						SS-11				
												48.5ft: very pale brown (10YR7/3), very stiff, no HCl reaction, iron staining		
37.0	43.5	5	5	9						SS-12				
32.0	48.5	6	9	11						SS-13				
27.0	53.5	8	9	12						SS-14				

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 2 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST C. Gandy				
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)				
BORING NO. B-2154		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR.		ND		
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,412,451		US ft (NAD83)		EASTING 2,599,620		US ft (NAD83)		24 HR. ND		
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-55 LC		DRILLER: D. White/O. Smith				HAMMER (ID) 140 lb. Auto (MEC 02)				
DATE STARTED 11/9/07		COMPLETED 11/11/07		CASING DEPTH: N/A				BITS USED: 2 7/8" Wing Bit				
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100		
24.4					Continued from previous page							
22.0	58.5									SS-15		Silty SAND (SM), very pale brown (10YR7/3), very firm, moist, some fines, no HCl reaction, iron staining, 0.2'-thick clay seam (continued) 58.5ft: light gray (10YR7/2), little to some fines
17.0	63.5	17	15	9								
17.0	63.5	5	6	10						SS-16		17.0 FAT CLAY with sand (CH), yellow (10YR7/8), very stiff, moist, little sand, strong HCl reaction, iron staining, trace carbonate nodules
12.0	68.5											
		5	6	7						SS-17		68.5ft: brownish yellow (10YR6/8), mottled light greenish gray (10Y8/1), stiff, few fine sand, weak HCl reaction, thinly laminated
7.0	73.5											
		6	8	10						SS-18		73.5ft: very pale brown (10YR7/4), very stiff, some fine sand
2.0	78.5											
		5	12	15						SS-19		78.5ft: very pale brown (10YR8/3), little fine sand, no HCl reaction
-3.0	83.5											
		11	24	36						SS-20		-3.0 POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR7/3), very dense, wet, few fines, strong HCl reaction, carbonate nodules
-8.0	88.5											
		8	9	12						SS-21		-8.0 LEAN CLAY with sand (CL), very pale brown (10YR7/4), mottled brownish yellow (10YR6/8), very stiff, moist, little fine sand, carbonate nodules, strong HCl reaction
-13.0	93.5											
		17	45	50/0.1						SS-22		-13.0 Clayey SAND (SC), very pale brown (10YR7/3), trace mottling, very dense, wet, some fines, no HCl reaction
-18.0	98.5											
		37	38	48						SS-23		-18.0 POORLY GRADED SAND (SP), very pale brown (10YR8/4), very dense, wet, few fines, coarse grained, strong HCl reaction, carbonate nodules
-28.0	108.5											
		17	15	20						SS-24		-28.0 FAT CLAY (CH), very pale brown (10YR7/4), mottled brownish yellow (10YR6/8), hard, moist, few sand, carbonate nodules, strong HCl reaction

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 3 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST C. Gandy					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2154		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR.		ND			
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,412,451		US ft (NAD83)		EASTING 2,599,620		US ft (NAD83)		24 HR.			
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-55 LC		DRILLER: D. White/O. Smith				HAMMER (ID) 140 lb. Auto (MEC 02)					
DATE STARTED 11/9/07		COMPLETED 11/11/07		CASING DEPTH: N/A				BITS USED: 2 7/8" Wing Bit					
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT						SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
-31.7					Continued from previous page								
-38.0	118.5	6	8	10	●18						SS-25		FAT CLAY (CH), very pale brown (10YR7/4), mottled brownish yellow (10YR6/8), hard, moist, few sand, carbonate nodules, strong HCl reaction (continued)
-48.0	128.5	10	13	17	●30						SS-26		118.5ft: very stiff, dry, little fine sand, weak HCl reaction, thinly laminated
-58.0	138.5	6	7	8	●15						SS-27		Clayey SAND (SC), white (10YR8/1), very firm, moist, trace carbonate nodules, no HCl reaction, little fines
-68.0	148.5	9	11	18	●29						SS-28		FAT CLAY (CH), yellow (10YR7/8), mottled light greenish gray (5GY8/1), stiff, few fine grained sand, carbonate nodules, thinly laminated
-69.5													POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR6/2), very firm, wet, fine to coarse grained, few fines, no HCl reaction, 0.1'-thick clayey sand seam, trace rounded gravel
													Boring Terminated at Elevation -69.5 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



GEOTECHNICAL BORING LOG

Prepared By 272 Date 6-12-08Checked By KAW Date 7-10-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Jarvis					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2155		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND					
GROUND SURFACE ELEV. 80.4 ft (NAVD88)		NORTHING 13,412,471		US ft (NAD83)		EASTING 2,599,699		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-45		DRILLER: D. Rhodes/K. Guy				HAMMER (ID) 140 lb. Auto (MEC 13)					
DATE STARTED 12/5/07		COMPLETED 12/5/07		CASING DEPTH: N/A				BITS USED: 2 15/16" Drag Bit					
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI		
80.4					Ground Surface							80.4	0.0
80.4	0.0	1	3	4	● 7					SS-1		FAT CLAY (CH), very dark gray (5YR3/1), firm, moist, few fine grained sand, no HCl reaction	
76.9	3.5	1	3	4	● 7					SS-2		3.5ft: gray (5YR5/1), carbonate nodules	
74.4	6.0	3	4	6	● 16					SS-3		6.0ft: stiff, brown (7.5YR5/2)	
71.9	8.5	5	6	7	● 13					SS-4		8.5ft: light brownish gray (10YR6/2), to light gray (10YR7/2), black and ferrous staining, strong HCl reaction	
69.4	11.0	6	8	10	● 18					SS-5		11.0ft: very stiff	
66.9	13.5	6	7	10	● 17					SS-6			
61.9	18.5	5	6	8	● 14					SS-7		LEAN CLAY with sand (CL), very pale brown (10YR7/3), mottled brownish yellow (10YR6/8), stiff, moist, little sand, weak to strong HCl reaction	18.5
56.9	23.5	4	6	11	● 17					SS-8		23.5ft: very stiff	
51.9	28.5	4	7	9	● 16					SS-9		51.9	28.5
46.9	33.5	7	9	11	● 20					SS-10		FAT CLAY (CH), brownish yellow (10YR6/8), mottled light gray (10YR7/2), very stiff, moist, weak to strong HCl reaction	
41.9	38.5	3	6	9	● 15					SS-11		38.5ft: stiff	
36.9	43.5	5	5	8	● 13					SS-12			
31.9	48.5	6	7	10	● 17					SS-13		48.5ft: light reddish brown (5YR6/4), very stiff, carbonate nodules	
26.9	53.5	8	10	14	● 24					SS-14A/B		26.4	54.0
												Clayey SAND (SC), light gray (10YR7/2), very firm, moist, coarse grained, some to little fines, no HCl reaction	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 2 OF 3

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST J. Jarvis				
SITE DESCRIPTION Exelon COL Project (Victoria Site)					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)				
BORING NO. B-2155		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND				
GROUND SURFACE ELEV. 80.4 ft (NAVD88)		NORTHING 13,412,471		US ft (NAD83)		EASTING 2,599,699		US ft (NAD83)		24 HR. ND				
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-45			DRILLER: D. Rhodes/K. Guy					HAMMER (ID) 140 lb. Auto (MEC 13)				
DATE STARTED 12/5/07		COMPLETED 12/5/07			CASING DEPTH: N/A					BITS USED: 2 15/16" Drag Bit				
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80					100
24.3					Continued from previous page									
21.9	58.5									SS-15			Clayey SAND (SC), light gray (10YR7/2), very firm, moist, coarse grained, some to little fines, no HCl reaction (continued) 58.5ft: firm	
		8	10	9										
16.9	63.5									SS-16			16.5 63.9	
		6	8	9									FAT CLAY (CH), light gray (10YR7/2), mottled brownish yellow (10YR6/8), very stiff, moist, few sand, carbonate nodules, weak HCl reaction	
11.9	68.5									SS-17A/B			10.6 69.8	
		4	7	17									POORLY GRADED SAND (SP) light gray (10YR7/2), very firm, moist, coarse grained, trace fines, no HCl reaction	
6.9	73.5									SS-18			6.9 73.5	
		8	10	17									FAT CLAY with sand (CH), light gray (10YR7/2), very stiff, moist, little sand, ferrous staining, carbonate nodules, strong to weak HCl reaction	
1.9	78.5									SS-19				
		6	8	8									83.5ft: some sand	
-3.1	83.5									SS-20A/B			-3.8 84.2	
		7	16	16									POORLY GRADED SAND (SP), pinkish gray (7.5YR6/2), dense, moist, coarse grained, trace fines, no HCl reaction	
-8.1	88.5									SS-21			-8.1 88.5	
		6	8	9									FAT CLAY (CH), light gray (10YR7/2), mottled, brownish yellow (10YR7/6), very stiff, moist, few sand, strong HCl reaction	
-13.1	93.5									SS-22				
		11	11	12										
-18.1	98.5									SS-23			-18.1 98.5	
		3	6	9									POORLY GRADED SAND (SP), pale brown (10YR6/3), firm, moist, coarse grained, trace fines, strong HCl reaction	
													-24.6 105.0	
													FAT CLAY (CH), light gray (10YR7/2), mottled brownish yellow (10YR6/8), very stiff, moist, few sand, carbonate nodules, strong HCl reaction	
-28.1	108.5									SS-24				
		7	9	13										

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 3 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Jarvis				
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)				
BORING NO. B-2155		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND		24 HR. ND		
GROUND SURFACE ELEV. 80.4 ft (NAVD88)		NORTHING 13,412,471		US ft (NAD83)		EASTING 2,599,699		US ft (NAD83)				
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-45		DRILLER: D. Rhodes/K. Guy				HAMMER (ID) 140 lb. Auto (MEC 13)				
DATE STARTED 12/5/07		COMPLETED 12/5/07		CASING DEPTH: N/A				BITS USED: 2 15/16" Drag Bit				
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80			
-31.8					Continued from previous page							
-38.1	118.5	9	10	21	●31					SS-25		FAT CLAY (CH), light gray (10YR7/2), mottled brownish yellow (10YR6/8), very stiff, moist, few sand, carbonate nodules, strong HCl reaction (continued)
-48.1	128.5	12	14	17	●31					SS-26		118.5ft: pinkish gray (7/5YR7/2), hard, black and ferrous staining, weak HCl reaction
-58.1	138.5	9	15	15	●30					SS-27A/B		128.5ft: light gray (10YR7/1), little sand, strong HCl reaction
-58.1	138.5	9	15	15	●30					SS-27A/B		POORLY GRADED SAND (SP), pale brown (10YR6/3), very firm, wet, coarse grained, trace fines, no HCl reaction
-58.9	139.3				●30					SS-27A/B		FAT CLAY with sand (CH), light gray (10YR7/1), very stiff, moist, little sand, strong HCl reaction
-64.6	145.0				●30					SS-27A/B		POORLY GRADED SAND (SP), pale brown (10Y6/3), firm, wet, coarse grained, trace fines, weak HCl reaction
-68.1	148.5	8	7	9	●16					SS-28A/B		FAT CLAY (CH), light gray (10YR7/1), very stiff, moist, few sand, strong HCl reaction
-68.7	149.1				●16					SS-28A/B		Boring Terminated at Elevation -69.6 ft
-69.6	150.0				●16					SS-28A/B		

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



GEOTECHNICAL BORING LOG

Prepared By JPZ Date 6-12-08Checked By KAW Date 7-10-08

SHEET 1 OF 4

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST B. Taylor				
SITE DESCRIPTION Exelon COL Project					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)				
BORING NO. B-2156		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND				
GROUND SURFACE ELEV. 80.3 ft (NAVD88)		NORTHING 13,412,548 US ft (NAD83)			EASTING 2,599,761 US ft (NAD83)		24 HR. ND							
TOTAL DEPTH 201.5 ft		DRILL MACHINE CME-750			DRILLER: G. Bray/T. Bray/T. Ellerson			HAMMER (ID) 140 lb. Auto (263048)						
DATE STARTED 12/3/07		COMPLETED 12/6/07			CASING DEPTH: N/A			BITS USED: 2 7/8" Drag Bit						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100	
80.3					Ground Surface							80.3		
80.3	0.0	2	4	4						SS-1		FAT CLAY (CH), very dark brown (10YR2/2), firm, moist, few sand, no to weak HCl reaction, roots		
76.8	3.5	3	5	7						SS-2		3.5ft: gray (10YR6/1), stiff		
74.3	6.0	5	6	6						SS-3		6.0ft: carbonate nodules		
71.8	8.5	6	6	10						SS-4		8.5ft: light gray (10YR7/1), very stiff, strong to weak HCl reaction		
69.3	11.0	9	10	10						SS-5				
66.8	13.5	6	8	9						SS-6				
60.3	20.0	8	7	7						SS-7		20.0ft: stiff		
55.3	25.0	6	9	11						SS-8		55.3		
												FAT CLAY (CH), light gray (10YR7/1), mottled brownish yellow (10YR6/6), very stiff, moist, few sand, strong HCl reaction, two 45-degree slickensides		
50.3	30.0	7	8	10						SS-9		30.0ft: brownish yellow (10YR6/6), no to strong HCl reaction		
45.3	35.0	8	11	14						SS-10				
40.3	40.0	5	5	7						SS-11		40.0ft: stiff		
35.3	45.0	5	7	10						SS-12		45.0ft: very stiff		
30.3	50.0	8	12	12						SS-13		50.0ft: pale brown (10YR6/3)		
25.3	55.0	9	12	15						SS-14		55.0ft: light gray (10YR7/1), little sand, no HCl		

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08

EXELON COL BORE EXELON~2.GPJ EXELON COL.GDT 6/12/08



BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST B. Taylor							
SITE DESCRIPTION Exelon COL Project				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)							
BORING NO. B-2156		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND		24 HR. ND					
GROUND SURFACE ELEV. 80.3 ft (NAVD88)		NORTHING 13,412,548		US ft (NAD83)		EASTING 2,599,761		US ft (NAD83)							
TOTAL DEPTH 201.5 ft		DRILL MACHINE CME-750		DRILLER: G. Bray/T. Bray/T. Ellerson				HAMMER (ID) 140 lb. Auto (263048)							
DATE STARTED 12/3/07		COMPLETED 12/6/07		CASING DEPTH: N/A				BITS USED: 2 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT						SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100					
-32.0					Continued from previous page										
-39.8	120.0	12	11	8	●19						SS-25			FAT CLAY (CH), light gray (10YR7/2), mottled brownish yellow (10YR6/6), stiff to hard, moist, few sand, strong HCl reaction (continued)	
-49.8	130.0	6	10	9	●19						SS-26			120.0ft: gray (10YR6/1)	
-59.8	140.0	10	18	19	●37						SS-27			130.0ft: light gray (10YR7/2), little sand, strong to no HCl reaction	
-69.8	150.0	3	5	6	●11						SS-28			150.0ft: stiff, few sand, weak HCl reaction	
-79.8	160.0	19	34	23	●57						SS-29			Clayey SAND (SC), light gray (10YR7/1), very dense, moist, fine grained, little fines, no HCl reaction	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 4 OF 4

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST B. Taylor					
SITE DESCRIPTION Exelon COL Project				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2156		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND		24 HR. ND					
GROUND SURFACE ELEV. 80.3 ft (NAVD88)		NORTHING 13,412,548		US ft (NAD83)		EASTING 2,599,761		US ft (NAD83)					
TOTAL DEPTH 201.5 ft		DRILL MACHINE CME-750		DRILLER: G. Bray/T. Bray/T. Ellerson		HAMMER (ID) 140 lb. Auto (263048)							
DATE STARTED 12/3/07		COMPLETED 12/6/07		CASING DEPTH: N/A		BITS USED: 2 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				100
-88.1					Continued from previous page								
-89.8	170.0	17	41	39						SS-30		Clayey SAND (SC), light gray (10YR7/1), very dense, moist, fine grained, little fines, no HCl reaction <i>(continued)</i> 170.0ft: light brownish gray (10YR6/2), strong HCl reaction	
-99.8	180.0	26	27	49						SS-31			
-109.8	190.0	50/0.3								SS-32			
-119.8	200.0	11	22	43						SS-33		FAT CLAY with sand (CH), light gray (10YR7/1), hard, moist, little sand, strong HCl reaction, carbonate nodules	
												Boring Terminated at Elevation -121.3 ft	

EXELON COL BORE EXELON-2.GPJ EXELON COL GDT 6/12/08



BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST M. Harvey					
SITE DESCRIPTION Exelon COL Project					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)					
BORING NO. B-2157		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND					
GROUND SURFACE ELEV. 80.1 ft (NAVD88)		NORTHING 13,412,624			US ft (NAD83)		EASTING 2,599,823		US ft (NAD83)		24 HR. ND				
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-45			DRILLER: J. Warren/J. Alexander					HAMMER (ID) 140 lb. Auto (MEC 12)					
DATE STARTED 12/6/07		COMPLETED 12/11/07			CASING DEPTH: N/A					BITS USED: 2 15/16" Roller					
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION			
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100					NO.
80.1					Ground Surface							80.1			0.0
80.1	0.0	1	2	3						SS-1		FAT CLAY (CH), firm, moist, few sand, no HCl reaction			
76.6	3.5	5	7	7						SS-2		3.5ft: gray (2.5YR5/1), stiff, little sand, black staining, carbonate nodules, no HCl reaction			
74.1	6.0	5	7	10						SS-3		6.0ft: light brownish gray (2.5Y6/2), very stiff, some sand, weak HCl reaction			
71.6	8.5	7	13	13						SS-4		71.6		8.5	
69.1	11.0	6	11	15						SS-5		Sandy LEAN CLAY (CL), pale yellow (2.5Y7/4), very stiff, moist, some sand, strong HCl reaction, carbonate nodules			
66.6	13.5	9	13	11						SS-6		13.5ft: no recovery			
65.1	15.0	5	10	13						SS-7		65.1		15.0	
												FAT CLAY with sand (CH), pale yellow (5Y8/2), very stiff, moist, little sand, weak HCl reaction			
61.6	18.5	6	8	8						SS-8		18.5ft: light gray (5Y8/2), mottled yellow (10Y7/8), few sand, carbonate nodules			
56.6	23.5	4	6	8						SS-9		23.5ft: yellow (10YR7/8), mottled light grayish green (10Y7/1), stiff, black staining, no HCl reaction			
51.6	28.5	5	8	10						SS-10		28.5ft: yellow (10YR7/6), mottled light gray (5Y7/1), very stiff, strong HCl reaction			
46.6	33.5	6	9	11						SS-11		33.5ft: yellow (10YR7/6), mottled light greenish gray (10Y8/1)			
41.6	38.5	6	8	10						SS-12		38.5ft: brownish yellow (10YR6/6), mottled light greenish gray (5GY8/1), weak HCl reaction			
36.6	43.5	6	10	10						SS-13		38.6		41.5	
												Silty SAND (SM), yellow (2.5Y8/6), mottled pale yellow (5Y8/2), firm, wet, fine grained, trace fines, weak to no HCl reaction			
31.6	48.5	10	16	18						SS-14		48.5ft: yellow (10YR7/6), mottled pale yellow (5Y8/2), dense			
26.6	53.5	9	15	19						SS-15A/B		26.6		53.5	
												26.1		52.0	
												POORLY GRADED SAND with clay (SP-SC), light gray (5Y7/2), dense, moist, few fines, no HCl reaction			

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 2 OF 3

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST M. Harvey							
SITE DESCRIPTION Exelon COL Project					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)							
BORING NO. B-2157		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND							
GROUND SURFACE ELEV. 80.1 ft (NAVD88)		NORTHING 13,412,624		US ft (NAD83)		EASTING 2,599,823		US ft (NAD83)		24 HR. ND							
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-45			DRILLER: J. Warren/J. Alexander					HAMMER (ID) 140 lb. Auto (MEC 12)							
DATE STARTED 12/6/07		COMPLETED 12/11/07			CASING DEPTH: N/A					BITS USED: 2 15/16" Roller							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION					
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100							
24.0					Continued from previous page												
21.6	58.5									SS-16		FAT CLAY (CH), light gray (2.5Y8/2), hard, moist, few sand and gravel, weak HCl reaction, carbonate nodules, black staining (continued) 58.5ft: pale yellow (2.5Y7/3), very stiff, stained black, yellow and orange, strong to no HCl reaction					
16.6	63.5	5	9	9													
16.6	63.5	3	5	11						SS-17							
11.6	68.5	5	7	10						SS-18							
6.6	73.5	7	13	16						SS-19		73.5ft: light gray (2.5Y7/2), little carbonate gravel					
1.6	78.5	7	12	12						SS-20		78.5ft: light greenish gray (10Y8/1), mottled red (2.5YR4/6), some sand and gravel, no HCl reaction					
-3.4	83.5	11	16	16						SS-21		-0.9 POORLY GRADED SAND (SP), pale yellow (5Y8/2), dense, wet, no fines, no HCl reaction 81.0					
-8.4	88.5	3	5	6						SS-22		-5.0 Sandy FAT CLAY (CH), light greenish gray (5GY8/1), mottled yellow (10YR7/6), stiff, moist, some sand, no HCl reaction 85.1					
-13.4	93.5	50/0.5								SS-23		-13.4 WELL-GRADED SAND with gravel (SW), white (5Y8/1), very dense, wet, fine to coarse grained, few fines, strong to weak HCl reaction 93.5					
-18.4	98.5	50/0.3								SS-24		98.5ft: no recovery					
-23.9												-23.9 FAT CLAY (CH), light greenish gray (5GY8/1), mottled brownish yellow (10YR6/8), very stiff, moist, few sand and gravel, weak HCl reaction, black staining, carbonate nodules 104.0					
-28.4	108.5	5	9	10						SS-25							

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 3 OF 3

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST M. Harvey					
SITE DESCRIPTION Exelon COL Project				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2157		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND		24 HR. ND			
GROUND SURFACE ELEV. 80.1 ft (NAVD88)		NORTHING 13,412,624		US ft (NAD83)		EASTING 2,599,823		US ft (NAD83)					
TOTAL DEPTH 150.0 ft		DRILL MACHINE CME-45		DRILLER: J. Warren/J. Alexander				HAMMER (ID) 140 lb. Auto (MEC 12)					
DATE STARTED 12/6/07		COMPLETED 12/11/07		CASING DEPTH: N/A				BITS USED: 2 15/16" Roller					
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
-32.1					Continued from previous page								
-38.4	118.5	6	8	10	● 18					SS-26		FAT CLAY (CH), light greenish gray (5GY8/1), mottled brownish yellow (10YR6/8), very stiff, moist, few sand and gravel, weak HCl reaction, black staining, carbonate nodules (continued)	
-48.4	128.5	7	12	15	● 27					SS-27A/B		118.5ft: light gray (5Y7/1), little sand and gravel, red staining, no HCl reaction	
-58.4	138.5	25	48	49	● 97					SS-28		128.5ft: pale yellow (5Y8/2), weak HCl reaction, black staining	
-68.4	148.5	17	26	20	● 46					SS-29		Clayey SAND (SC), pale yellow (5Y8/2), very firm, moist, some fines, weak HCl reaction, carbonate nodules, black staining	
												POORLY GRADED SAND (SP), very pale brown (10YR8/2), very dense, wet, trace fines, weak HCl reaction	
												POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR 8/2), dense, wet, few fines, weak HCl reaction	
												Boring Terminated at Elevation -69.9 ft	

EXELON COL BORE EXELON-2.DPJ EXELON COL.CDT 6/12/08



GEOTECHNICAL BORING LOG

Prepared By JPF Date 6-12-08Checked By KAW Date 7-10-08

SHEET 1 OF 2

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Jarvis					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2158		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND					
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,412,750 US ft (NAD83)		EASTING 2,599,929 US ft (NAD83)		24 HR. ND							
TOTAL DEPTH 100.0 ft		DRILL MACHINE CME-45		DRILLER: J. Warren/J. Alexander				HAMMER (ID) 140 lb. Auto (MEC 12)					
DATE STARTED 11/17/07		COMPLETED 11/18/07		CASING DEPTH: N/A				BITS USED: 2 15/16" Roller Cone					
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
80.5					Ground Surface							80.5	0.0
79.5	1.0	3	4	5	●9					SS-1		FAT CLAY (CH), gray (5YR5/1), stiff, moist, few sand, trace iron and possible manganese stain, no HCl reaction	
76.7	3.8	3	3	4	●7					SS-2		3.8ft: firm	
74.1	6.4	2	3	4	●7					SS-3		6.4ft: Very pale brown (10YR7/3), few sand, trace iron and possible manganese stain, trace carbonate nodules, strong HCl reaction	
71.9	8.6	4	12	12	●24					SS-4		8.6ft: very stiff	
69.2	11.3	4	7	9	●16					SS-5			
66.8	13.7	3	6	7	●13					SS-6		13.7ft: light gray (10YR7/2), stiff, moist, little sand, trace carbonate nodules, strong HCl reaction	
62.0	18.5	5	7	7	●14					SS-7		62.0	18.5
56.9	23.6	4	5	5	●10					SS-8		FAT CLAY (CH) light gray (10YR7/2, 10YR7/1) mottled yellowish brown (10YR 5/8), and brownish yellow (10YR6/8), stiff, moist, few sand, strong HCl reaction	
51.6	28.9	7	9	11	●20					SS-9		28.9ft: very stiff	
46.9	33.6	4	5	6	●11					SS-10		33.6ft: stiff, possible manganese staining	
42.0	38.5	13	13	14	●27					SS-11		42.0	38.5
36.8	43.7	5	10	15	●25					SS-12		Silty SAND (SM), very pale brown (10YR7/4), mottled reddish yellow (7.5YR7/8), to light yellowish brown (10YR7/8), very firm, moist, coarse grained, little fines, trace carbonate nodules, strong HCl reaction	
32.0	48.5	12	16	25	●41					SS-13		48.5ft: dense	
26.8	53.7	24	24	31	●55					SS-14		53.7ft: very dense	

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08



SHEET 2 OF 2

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST J. Jarvis								
SITE DESCRIPTION Exelon COL Project (Victoria Site)					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)								
BORING NO. B-2158		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND								
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,412,750			US ft (NAD83)		EASTING 2,599,929			US ft (NAD83)		24 HR. ND						
TOTAL DEPTH 100.0 ft		DRILL MACHINE CME-45			DRILLER: J. Warren/J. Alexander					HAMMER (ID) 140 lb. Auto (MEC 12)								
DATE STARTED 11/17/07		COMPLETED 11/18/07			CASING DEPTH: N/A					BITS USED: 2 15/16" Roller Cone								
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	L O G	SOIL AND ROCK DESCRIPTION					
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100								
24.3					Continued from previous page													
22.0	58.5																	
		13	15	17											SS-15	22.0	FAT CLAY with sand (CH), light gray (10YR7/2), hard, moist, little sand, trace carbonate nodules, trace iron stain, strong HCl reaction	58.5
17.0	63.5	6	8	9											SS-16		63.5ft: light gray (10YR7/2), mottled pale red (10R6/4), and brownish yellow (10YR6/6), very stiff, moist, few sand, trace iron and possible manganese staining, trace carbonate nodules, weak to strong HCl reaction	
11.9	68.6	13	13	17											SS-17			
7.0	73.5	8	9	10											SS-18			
1.7	78.8	5	8	12											SS-19		78.8ft: light gray (7.5YR7/1), very stiff, moist, little sand, trace iron stain, trace carbonate nodules, strong HCl reaction	
-3.5	83.9	8	12	16											SS-20		83.9ft: some sand, trace iron stain	
-8.1	88.6	13	17	17											SS-21	-8.1	POORLY GRADED SAND with silt (SP-SM), light reddish gray (2.5YR7/1), dense, wet, few fines, trace iron stain, no HCl reaction	88.6
-13.2	93.6	5	6	10											SS-22	-13.2	Clayey SAND (SC), very pale brown (10YR7/3), firm, wet, coarse grained, little fines, trace iron stain, no HCl reaction	93.6
-18.2	98.6	27	21	50/0.4											SS-23	-18.2	POORLY GRADED SAND (SP), pinkish gray (7.5YR6/2), very dense, wet, few fines, trace iron stain, trace carbonate nodules, strong HCl reaction	98.6
																-19.6	Boring Terminated at Elevation -19.6 ft	100.0

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 6/12/08