



SHEET 6 OF 6

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Osorio								
SITE DESCRIPTION Exelon COL Project (Victoria Site)						MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft) 0 HR. ND 24 HR. ND						
BORING NO. B-2270		DRILL METHOD: Mud Rotary				SAMPLE METHODS: SPT										
GROUND SURFACE ELEV. 80.6 ft (NAVD88)		NORTHING 13,413,179		US ft (NAD83)		EASTING 2,600,633		US ft (NAD83)								
TOTAL DEPTH 300.0 ft		DRILL MACHINE CME-75				DRILLER: T. Warren/N. Dagg				HAMMER (ID) 140 lb. Auto (MEC 09)						
DATE STARTED 11/7/07		COMPLETED 11/10/07				CASING DEPTH: N/A				BITS USED: 4 1/2" 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						
-199.9					Continued from previous page											
-217.9	298.5													Sandy FAT CLAY (CH), pale yellow (2.5YR7/3), to light greenish gray (5GY8/1), hard, moist, some sand, strong HCl reaction, trace carbonate nodules, strong HCl reaction (continued)		
		16	22	33												
														298.5ft: light brown (7.5YR6/3)		
														-219.4	Boring Terminated at Elevation -219.4 ft	300.0

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



GEOTECHNICAL BORING LOG

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

SHEET 1 OF 6

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Liles						
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)						
BORING NO. B-2271		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND		24 HR. ND						
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,413,253 US ft (NAD83)		EASTING 2,600,735 US ft (NAD83)										
TOTAL DEPTH 301.2 ft		DRILL MACHINE CME-85		DRILLER: R. White/J. Dugger		HAMMER (ID) 140 lb. Auto (MEC 10)								
DATE STARTED 11/15/07		COMPLETED 11/18/07		CASING DEPTH: N/A		BITS USED: 3 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	MOI		G	
80.5					Ground Surface								80.5	0.0
80.5	0.0	2	3	4	7					SS-1		FAT CLAY (CH), black (5Y2.5/1), firm, moist, trace sand, no HCl reaction, organics		
75.7	4.8	2	2	3	5					SS-2		4.7ft: dark gray (2.5Y4/1), few sand, weak HCl reaction		
74.0	6.5	2	3	5	8					SS-3		6.5ft: light gray (2.5Y7/2), strong HCl reaction		
71.9	8.6	3	3	3	6					SS-4		8.6ft: light yellowish brown (2.5Y6/3), trace sand, strong HCl reaction		
69.9	10.6	5	7	10	17					SS-5		10.6ft: light brown (7.5YR6/4), very stiff, no sand		
67.7	12.8	5	6	11	17					SS-6				
63.8	16.7	4	6	8	14					SS-7		16.7ft: yellowish brown (10YR5/4), stiff		
59.3	21.2	3	4	6	10					SS-8		21.2ft: light yellowish brown (10YR6/4), mottled gray		
54.3	26.2	4	6	10	16					SS-9		26.2ft: light brownish gray (2.5Y6/2), very stiff, few sand, carbonate nodules		
49.3	31.2	11	14	14	28					SS-10		51.9 Clayey SAND (SC), light gray (5Y7/2), very firm, moist, some fines, weak HCl reaction	28.6	
44.3	36.2	13	15	14	29					SS-11		44.3 POORLY GRADED SAND with clay (SP-SC), light gray (5Y7/2), very firm, moist, fine grained, few fines, no HCl reaction	36.2	
39.3	41.2	7	11	10	21					SS-12		39.3 FAT CLAY with sand (CH), light gray (5Y7/2), very stiff, moist, little sand, strong HCl reaction	41.2	
34.3	46.2	9	11	12	23					SS-13		35.5 POORLY GRADED SAND (SP), light gray (2.5Y7/2), very firm, wet, fine grained, no HCl reaction	45.0	
29.3	51.2	8	10	22	32					SS-14		51.2ft: dense, strong HCl reaction		
24.3	56.2												26.0	54.5

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



SHEET 2 OF 6

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Liles					
SITE DESCRIPTION Exelon COL Project (Victoria Site)						MACTEC PROJECT NO.: 6468-07-1777						GROUND WATER (ft)	
BORING NO. B-2271		DRILL METHOD: Mud Rotary				SAMPLE METHODS: SPT				0 HR. ND			
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,413,253		US ft (NAD83)		EASTING 2,600,735		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 301.2 ft		DRILL MACHINE CME-85				DRILLER: R. White/J. Dugger				HAMMER (ID) 140 lb. Auto (MEC 10)			
DATE STARTED 11/15/07		COMPLETED 11/18/07				CASING DEPTH: N/A				BITS USED: 3 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	MOI		
24.4					Continued from previous page								
		6	15	15									POORLY GRADED SAND with clay (SP-SC), light yellowish brown (2.5Y6/3), very firm, wet, fine grained, few fines, strong HCl reaction (continued)
													21.5 59.0
19.3	61.2	5	29	43									POORLY GRADED SAND (SP), light gray (2.5Y7/2), very dense, wet, fine grained, no HCl reaction
													16.5 64.0
14.3	66.2	3	5	8									FAT CLAY (CH), light brownish gray (2.5Y6/2), mottled orange and black, stiff, moist, strong HCl reaction
9.3	71.2	4	9	10									71.2ft: pale brown (10YR6/3), very stiff, strong HCl reaction
4.3	76.2	7	10	12									76.2ft: little sand, carbonate nodules
-0.6	81.1	12	34	21									81.1ft: light gray (10YR7/2), hard, some sand
-5.6	86.1	9	21	27									-5.5 86.0
													Clayey SAND (SC), light gray (2.5Y7/2), dense, moist, some fines, carbonate nodules, strong HCl reaction
-10.6	91.1	17	21	26									-10.5 91.0
													FAT CLAY with sand (CH), light gray (2.5Y7/2), mottled orange, hard, moist, little sand, carbonate nodules, strong HCl reaction
													-13.5 94.0
-15.6	96.1	35	44	50/0.3									POORLY GRADED SAND (SP), light gray (2.5Y7/2), very dense, wet, fine grained, trace fines, strong HCl reaction

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



SHEET 3 OF 6

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Liles				
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)				
BORING NO. B-2271		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND		24 HR. ND				
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,413,253		US ft (NAD83)		EASTING 2,600,735		US ft (NAD83)				
TOTAL DEPTH 301.2 ft		DRILL MACHINE CME-85		DRILLER: R. White/J. Dugger		HAMMER (ID) 140 lb. Auto (MEC 10)						
DATE STARTED 11/15/07		COMPLETED 11/18/07		CASING DEPTH: N/A		BITS USED: 3 7/8" 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			
-31.7					Continued from previous page							
												WELL-GRADED SAND (SW), pale yellow (2.5Y7/4), very dense, wet, fine to coarse grained, trace gravel, trace fines, strong HCl reaction (continued)
												-35.5
												FAT CLAY (CH), light gray (5Y7/2), very stiff, moist, carbonate nodules, strong HCl reaction
												116.0
-40.6	121.1	6	10	12						SS-26		
												-47.5
												Clayey SAND (SC), light gray (5Y7/2), very dense, moist, fine grained, little fines, strong HCl reaction
												128.0
-50.6	131.1	16	22	31						SS-27		
												-55.5
												POORLY GRADED SAND (SP), light gray (5Y7/2), very dense, wet, fine grained, trace fines, strong HCl reaction
												136.0
-60.6	141.1	28	35	50						SS-28		
												-64.5
												Sandy FAT CLAY (CH), light yellowish brown (2.5Y6/3), very stiff, moist, some sand, strong HCl reaction
												145.0
-70.6	151.1	6	12	15						SS-29		
												-75.5
												POORLY GRADED SAND (SP), light brownish gray (10YR6/2), very dense, wet, fine to medium grained, trace fines, weak HCl reaction
												156.0
-80.6	161.1	24	37	45						SS-30		

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



SHEET 4 OF 6

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Liles					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2271		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND					
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,413,253		US ft (NAD83)		EASTING 2,600,735		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 301.2 ft		DRILL MACHINE CME-85		DRILLER: R. White/J. Dugger				HAMMER (ID) 140 lb. Auto (MEC 10)					
DATE STARTED 11/15/07		COMPLETED 11/18/07		CASING DEPTH: N/A				BITS USED: 3 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			
-87.8					Continued from previous page								
-90.7	171.2	32	41	39	80						SS-31		POORLY GRADED SAND (SP), light brownish gray (10YR6/2), very dense, wet, fine to medium grained, trace fines, weak HCl reaction (continued) 171.2ft: light gray (2.5Y7/2)
-100.7	181.2	33	50/0.2		83/0.7						SS-32		
-110.7	191.2	26	30	40	70						SS-33		
-120.7	201.2	50/0.2			50/0.2						SS-34		POORLY GRADED SAND (SP), light gray (2.5Y7/1), very dense, wet, fine grained, trace fines, carbonate nodules 201.2ft: no recovery
-125.7	206.2	14	17	26	43						SS-35		206.2ft: light yellowish brown (2.5Y6/4), dense
-142.5	223.0	29	31	43	74						SS-36		Clayey SAND (SC), light yellowish brown (2.5Y6/3), very dense, wet, fine grained, little fines, 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



SHEET 6 OF 6

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Liles					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2271		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR. ND					
GROUND SURFACE ELEV. 80.5 ft (NAVD88)		NORTHING 13,413,253		US ft (NAD83)		EASTING 2,600,735		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 301.2 ft		DRILL MACHINE CME-85		DRILLER: R. White/J. Dugger				HAMMER (ID) 140 lb. Auto (MEC 10)					
DATE STARTED 11/15/07		COMPLETED 11/18/07		CASING DEPTH: N/A				BITS USED: 3 7/8" 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			
-200.1					Continued from previous page								
-205.7	286.2	WOH	6	47							SS-39		-200.5 Sandy FAT CLAY (CH), light gray (2.5Y7/1), and yellowish brown (10YR5/8), hard, moist, some sand, no HCl reaction -281.0
-219.2	299.7	7	12	18									

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 2

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Osorio				
SITE DESCRIPTION Exelon COL Project (Victoria Site)						MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)		
BORING NO. B-2272		DRILL METHOD: Mud Rotary				SAMPLE METHODS: SPT				0 HR.	ND	
GROUND SURFACE ELEV. 80.2 ft (NAVD88)		NORTHING 13,412,863		US ft (NAD83)		EASTING 2,600,473		US ft (NAD83)		24 HR.	ND	
TOTAL DEPTH 100.0 ft		DRILL MACHINE CME-75				DRILLER: D. Nalls/B. Turner				HAMMER (ID) 140 lb. Auto (MEC 11)		
DATE STARTED 11/17/07		COMPLETED 11/18/07				CASING DEPTH: N/A				BITS USED: 3" 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			
80.2					Ground Surface							80.2
80.2	0.0	3	3	4								0.0
76.7	3.5	1	1	2								
74.2	6.0	2	3	5								
71.7	8.5	4	6	7								71.7
69.2	11.0	3	3	3								
66.7	13.5	3	4	5								
61.7	18.5	3	3	4								61.7
56.7	23.5	3	5	6								
51.7	28.5	5	6	6								51.7
46.7	33.5	5	9	12								
41.7	38.5	7	7	8								
36.7	43.5	3	6	8								36.7
31.7	48.5	4	6	9								
26.7	53.5	4	9	10								

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



SHEET 2 OF 2

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Osorio					
SITE DESCRIPTION Exelon COL Project (Victoria Site)								MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)	
BORING NO. B-2272		DRILL METHOD: Mud Rotary				SAMPLE METHODS: SPT				0 HR. ND			
GROUND SURFACE ELEV. 80.2 ft (NAVD88)		NORTHING 13,412,863		US ft (NAD83)		EASTING 2,600,473		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 100.0 ft		DRILL MACHINE CME-75				DRILLER: D. Nalls/B. Turner				HAMMER (ID) 140 lb. Auto (MEC 11)			
DATE STARTED 11/17/07		COMPLETED 11/18/07				CASING DEPTH: N/A				BITS USED: 3" 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								
21.7	58.5	11	15	11								FAT CLAY (CH), yellowish brown (10YR5/6), mottled greenish gray (5GY6/1), stiff, moist, trace sand, no HCl reaction (continued)	
												POORLY GRADED SAND with clay (SP-SC), greenish gray (5GY6/1), very firm, moist, few fines, no HCl reaction	
16.7	63.5	7	7	10								FAT CLAY (CH), greenish gray (5GY6/1), mottled light yellowish brown (10YR6/4), very stiff, moist, trace sand, carbonate nodules, black stains, strong HCl reaction	
11.7	68.5	7	5	8								68.5ft: gray (10YR5/1), mottled light yellowish brown (10YR6/4), stiff	
6.7	73.5	6	8	10								73.5ft: very stiff	
1.7	78.5	5	7	9									
-3.3	83.5	8	10	9								83.5ft: greenish gray (5GY6/1), little sand	
-8.3	88.5	13	14	20								POORLY GRADED SAND (SP), greenish gray (5GY6/1), dense, moist, fine grained, trace fines, carbonate nodules, strong HCl reaction, trace pockets of clay at 89.5ft	
-13.3	93.5	28	36	38								93.5ft: yellowish brown (10YR6/4), very dense, fine to medium grained	
-18.3	98.5	20	50/0.4									98.5ft: fine to coarse grained, trace clay at 99.5ft	
										70/0.9		Boring Terminated at Elevation -19.8 ft	

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



GEOTECHNICAL BORING LOG

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

SHEET 1 OF 8

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST A. Taylor					
SITE DESCRIPTION Exelon COL Project (Victoria Site)					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)					
BORING NO. B-2273		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND					
GROUND SURFACE ELEV. 80.7 ft (NAVD88)		NORTHING 13,412,991			US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)		24 HR. ND				
TOTAL DEPTH 399.4 ft		DRILL MACHINE CME-550-X			DRILLER: R. Banks/R. Landaros					HAMMER (ID) 140 lb. Auto (MEC 05)					
DATE STARTED 1/3/08		COMPLETED 1/9/09			CASING DEPTH: N/A					BITS USED: 3 7/8" 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						
80.7					Ground Surface								80.7		0.0
80.7	0.0	3	5	6	11								Sandy LEAN CLAY (CL), black (7.5YR2.5/1), stiff, moist, some sand, no HCl reaction		
77.2	3.5	2	3	4	7								FAT CLAY with sand (CH), light gray (5Y7/2), firm, moist, little sand, no HCl reaction		3.5
74.7	6.0	3	3	5	8								6.0ft: black and brown staining		
72.2	8.5	2	3	5	8								LEAN CLAY (CL), mottled light gray (5Y7/2), and yellow (2.5Y7/8), firm, moist, trace sand, strong HCl reaction		8.5
69.7	11.0	6	10	14	24								FAT CLAY (CH), light gray (5Y7/2), mottled pale yellow (5Y8/2), very stiff, moist, some sand, strong HCl reaction, carbonate nodules		9.9
67.2	13.5	2	7	9	16								13.5ft: no sand		
62.8	17.9	3	5	6	11								17.9ft: stiff		
57.8	22.9	4	9	13	22								22.9ft: very stiff, little sand		
52.8	27.9	14	25	34	59								POORLY GRADED SAND (SP), mottled pale yellow (2.5Y8/2), and brownish yellow (10YR6/8), very dense, moist, fine grained, trace fines, no HCl reaction		27.9
47.8	32.9	11	17	14	31								Silty SAND (SM), light gray (5Y7/1), dense, moist, fine grained, some fines, no HCl reaction		32.9
42.8	37.9	6	11	16	27								Sandy FAT CLAY (CH), mottled light gray (2.5Y7/2), and yellow (10YR7/6), very stiff, moist, some sand, carbonate nodules, strong HCl reaction, black staining		36.0
37.8	42.9	5	8	12	20								47.9ft: mottled brownish yellow (10YR6/6), and pale yellow (2.5Y8/2)		
32.8	47.9	5	8	11	19								52.9ft: mottled reddish yellow (7.5YR6/6), and white (2.5Y8/1), few sand		
27.8	52.9	4	8	9	17										

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



SHEET 2 OF 8

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Taylor				
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)				
BORING NO. B-2273		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR.		ND		
GROUND SURFACE ELEV. 80.7 ft (NAVD88)		NORTHING 13,412,991		US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)		24 HR. ND		
TOTAL DEPTH 399.4 ft		DRILL MACHINE CME-550-X		DRILLER: R. Banks/R. Landaros				HAMMER (ID) 140 lb. Auto (MEC 05)				
DATE STARTED 1/3/08		COMPLETED 1/9/09		CASING DEPTH: N/A				BITS USED: 3 7/8" 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	MOI	
24.6					Continued from previous page							
22.8	57.9	6	11	13							SS-15	Sandy FAT CLAY (CH), mottled light gray (2.5Y7/2), and yellow (10YR7/6), very stiff, moist, some sand, carbonate nodules, strong HCl reaction, black staining (continued)
17.8	62.9	5	10	13							SS-16	57.9ft: mottled light gray (5Y7/2), and olive yellow (2.5Y6/6), some sand, no HCl reaction
												62.9ft: few sand, strong HCl reaction
12.8	67.9	4	7	11							SS-17	12.8ft: FAT CLAY (CH), light brownish gray (2.5Y6/2), very stiff, moist, no sand, strong HCl reaction
7.8	72.9	5	8	11							SS-18	72.9ft: pale yellow (2.5Y7/4), weak HCl reaction
2.8	77.9	14	15	16							SS-19	77.9ft: light gray (2.5Y7/1), hard, some sand, no HCl reaction
-2.2	82.9	30	32	38							SS-20	82.9ft: trace sand, strong HCl reaction
-7.2	87.9	7	12	15							SS-21	87.9ft: mottled brownish yellow (10YR6/8), and pale yellow (2.5Y8/4), very stiff, few sand
-12.2	92.9	19	28	32							SS-22	11.3ft: Clayey SAND (SC), pale yellow (2.5Y8/4), very dense, moist, fine to medium grained, little fines, strong HCl reaction
-17.2	97.9	30	47	50/0.4							SS-23	97.9ft: light yellowish brown (10YR6/4), and yellow (10YR7/6), some fines
-27.2	107.9	33	39	39							SS-24	107.9ft: POORLY GRADED SAND with silt (SP-SM), pale yellow (2.5Y8/3), very dense, moist, fine grained, few fines, strong HCl reaction

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



SHEET 3 OF 8

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Taylor					
SITE DESCRIPTION Exelon COL Project (Victoria Site)						MACTEC PROJECT NO.: 6468-07-1777						GROUND WATER (ft)	
BORING NO. B-2273		DRILL METHOD: Mud Rotary				SAMPLE METHODS: SPT						0 HR.	ND
GROUND SURFACE ELEV. 80.7 ft (NAVD88)		NORTHING 13,412,991		US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)		24 HR.	ND		
TOTAL DEPTH 399.4 ft		DRILL MACHINE CME-550-X				DRILLER: R. Banks/R. Landaros				HAMMER (ID) 140 lb. Auto (MEC 05)			
DATE STARTED 1/3/08		COMPLETED 1/9/09				CASING DEPTH: N/A				BITS USED: 3 7/8" 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			
-31.5					Continued from previous page								
-37.2	117.9	WOR	12	16							SS-25		Sandy FAT CLAY (CH), pale yellow (2.5Y8/2), very stiff, moist, some sand, black staining, no HCl reaction
-47.2	127.9	14	16	21							SS-26		127.9ft: hard, trace sand, strong HCl reaction
-57.2	137.9	28	50	50/0.4							SS-27		Silty SAND (SM), pale yellow (2.5Y7/4), very dense, moist, fine grained, little fines, strong HCl reaction
-67.2	147.9	19	35	40							SS-28		POORLY GRADED SAND with silt (SP-SM), light gray (5Y7/1), very dense, moist, fine grained, few fines, strong HCl reaction
-77.2	157.9	WOR	50/0.4								SS-29		Silty SAND (SM), pale yellow (2.5Y8/2), very dense, moist, fine grained, some fines, weak HCl reaction
-87.2	167.9												

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



SHEET 4 OF 8

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Taylor						
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)						
BORING NO. B-2273		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND		24 HR. ND						
GROUND SURFACE ELEV. 80.7 ft (NAVD88)		NORTHING 13,412,991		US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)						
TOTAL DEPTH 399.4 ft		DRILL MACHINE CME-550-X		DRILLER: R. Banks/R. Landaros		HAMMER (ID) 140 lb. Auto (MEC 05)								
DATE STARTED 1/3/08		COMPLETED 1/9/09		CASING DEPTH: N/A		BITS USED: 3 7/8" 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				
-87.6					Continued from previous page									
		25	31	50/0.4	81/0.9						SS-30		POORLY GRADED SAND (SP), pale yellow (2.5Y8/4), very dense, moist, fine grained, no fines, weak to strong HCl reaction (continued)	
-97.2	177.9				80/0.9						SS-31A/B		Sandy FAT CLAY (CH), white, (2.5Y8/1), hard, moist, some sand, strong HCl reaction	
		30		50/0.4										
-107.2	187.9				89/0.9						SS-32		POORLY GRADED SAND with silt (SP-SM), pale yellow (2.5Y8/2), very dense, moist, fine grained, few fines, strong HCl reaction	
		39		50/0.5										
-117.2	197.9				50/0.3						SS-33		POORLY GRADED SAND (SP), pale yellow (2.5Y8/2), very dense, moist, fine grained, no fines, strong HCl reaction	
		50/0.3												
-127.2	207.9				79/1.0						SS-34		207.9ft: very pale brown (10YR8/3), weak HCl reaction	
		29		50/0.5										
-137.2	217.9				50/0.4						SS-35		217.9ft: yellow (2.5Y8/6), coarse grained, trace fines	
		50/0.4												

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



SHEET 5 OF 8

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Taylor					
SITE DESCRIPTION Exelon COL Project (Victoria Site)						MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)			
BORING NO. B-2273		DRILL METHOD: Mud Rotary				SAMPLE METHODS: SPT				0 HR. ND			
GROUND SURFACE ELEV. 80.7 ft (NAVD88)		NORTHING 13,412,991		US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 399.4 ft		DRILL MACHINE CME-550-X				DRILLER: R. Banks/R. Landaros				HAMMER (ID) 140 lb. Auto (MEC 05)			
DATE STARTED 1/3/08		COMPLETED 1/9/09				CASING DEPTH: N/A				BITS USED: 3 7/8" 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			
-143.7					Continued from previous page								
-147.2	227.9	42	50/0.3		92/0.8						SS-36		POORLY GRADED SAND (SP), pale yellow (2.5Y8/2), very dense, moist, fine grained, no fines, strong HCl reaction (continued)
-157.2	237.9	17	30	35	65						SS-37		227.9ft: pale yellow (2.5Y8/2), fine grained, no HCl reaction
-167.2	247.9	50/0.3			50/0.3						SS-38		Clayey SAND (SC), white (2.5Y8/1), and olive yellow (2.5Y8/8), very dense, wet, fine grained, some fines, carbonate nodules, strong HCl reaction
-177.2	257.9	45	50/0.4		95/0.9						SS-39		POORLY GRADED SAND (SP), pale yellow (5Y8/2), very dense, moist, fine grained, trace fines, strong HCl reaction
-187.2	267.9	18	21	24	45						SS-40		POORLY GRADED SAND with silt (SP-SM), white (2.5Y8/1), very dense, moist, fine grained, few fines, weak HCl reaction
-197.2	277.9	ND	45	41	86						SS-41		Clayey SAND (SC), mottled white (2.5Y8/1), and yellow (2.5Y7/6), dense, moist, fine grained, some fines, weak HCl reaction
													Silty SAND (SM), white (2.5Y8/1), very dense, moist, fine grained, little fines, no HCl reaction

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



SHEET 6 OF 8

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Taylor				
SITE DESCRIPTION Exelon COL Project (Victoria Site)						MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)		
BORING NO. B-2273		DRILL METHOD: Mud Rotary				SAMPLE METHODS: SPT				0 HR. ND		
GROUND SURFACE ELEV. 80.7 ft (NAVD88)		NORTHING 13,412,991		US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)		24 HR. ND		
TOTAL DEPTH 399.4 ft		DRILL MACHINE CME-550-X				DRILLER: R. Banks/R. Landaros				HAMMER (ID) 140 lb. Auto (MEC 05)		
DATE STARTED 1/3/08		COMPLETED 1/9/09		CASING DEPTH: N/A				BITS USED: 3 7/8" Roller Cone				
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			
-199.8					Continued from previous page							
-207.2	287.9	33	46	50/0.3	96/0.8					SS-42		Silty SAND (SM), white (2.5Y8/1), very dense, moist, fine grained, little fines, no HCl reaction (continued)
-210.3												
-217.2	297.9	12	21	25	46					SS-43		POORLY GRADED SAND (SP), light gray (10YR7/1), very dense, moist, fine to coarse grained, trace fines, no HCl reaction
-227.2	307.9	10	18	28	46					SS-44		FAT CLAY (CH), mottled light gray (2.5Y7/2), and brownish yellow (10YR6/6), hard, moist, few sand, carbonate nodules, strong HCl reaction
-237.2	317.9	7	13	18	31					SS-45		307.9ft: white (2.5Y8/1), weak HCl reaction
-247.2	327.9	6	13	17	30					SS-46		317.9ft: light gray (2.5Y7/2), no sand
-253.3												327.9ft: very stiff, some sand, carbonate nodules, strong HCl reaction
-253.3												POORLY GRADED SAND (SP), pale yellow (2.5Y8/4), very dense, moist, fine to medium grained, trace fines, strong HCl reaction

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



SHEET 7 OF 8

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST A. Taylor					
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)					
BORING NO. B-2273		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR.		ND			
GROUND SURFACE ELEV. 80.7 ft (NAVD88)		NORTHING 13,412,991		US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)		24 HR. ND			
TOTAL DEPTH 399.4 ft		DRILL MACHINE CME-550-X		DRILLER: R. Banks/R. Landaros				HAMMER (ID) 140 lb. Auto (MEC 05)					
DATE STARTED 1/3/08		COMPLETED 1/9/09		CASING DEPTH: N/A				BITS USED: 3 7/8" Roller Cone					
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			
-255.9					Continued from previous page								
-257.2	337.9	50/0.4			50/0.4						SS-47		POORLY GRADED SAND (SP), pale yellow (2.5Y8/4), very dense, moist, fine to medium grained, trace fines, strong HCl reaction (continued)
-267.2	347.9	7	12	14	26						SS-48		-265.3 Sandy FAT CLAY (CH), mottled pale yellow (2.5Y8/2), and brownish yellow (10YR6/6), very stiff, moist, some sand, strong HCl reaction 346.0
-277.2	357.9	50/0.3			50/0.3						SS-49		-274.3 POORLY GRADED SAND (SP), pale yellow (5Y8/2), very dense, moist, fine grained, trace fines, strong HCl reaction 355.0
-287.2	367.9	ND	8	13	21						SS-50		-287.2 FAT CLAY (CH), very pale brown (10YR7/3), very stiff, moist, few sand, strong HCl reaction 367.9
-297.2	377.9	9	19	26	45						SS-51		377.9ft: mottled pale yellow (5Y8/2), and brownish yellow (10YR6/6), hard, no sand
-307.2	387.9	10	23	24	47						SS-52		

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



SHEET 8 OF 8

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST A. Taylor						
SITE DESCRIPTION Exelon COL Project (Victoria Site)										MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft) 0 HR. ND 24 HR. ND	
BORING NO. B-2273			DRILL METHOD: Mud Rotary					SAMPLE METHODS: SPT								
GROUND SURFACE ELEV. 80.7 ft (NAVD88)			NORTHING 13,412,991		US ft (NAD83)		EASTING 2,600,585		US ft (NAD83)							
TOTAL DEPTH 399.4 ft			DRILL MACHINE CME-550-X					DRILLER: R. Banks/R. Landaros			HAMMER (ID) 140 lb. Auto (MEC 05)					
DATE STARTED 1/3/08			COMPLETED 1/9/09			CASING DEPTH: N/A					BITS USED: 3 7/8" 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		
-312.0					Continued from previous page											
-317.2	397.9									SS-53A/B			FAT CLAY (CH), very pale brown (10YR7/3), very stiff, moist, few sand, strong HCl reaction (<i>continued</i>)			
		32	44	46												
													399.3ft: light gray (5Y7/2), no sand			
													Boring Terminated at Elevation -318.7 ft			

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



GEOTECHNICAL BORING LOG

Prepared By 2726 Date 6-12-08Checked By KAW Date 7-10-08

SHEET 1 OF 11

BECHTEL PROJECT NO.: 25352				COUNTY Victoria				GEOLOGIST J. Liles				
SITE DESCRIPTION Exelon COL Project (Victoria Site)				MACTEC PROJECT NO.: 6468-07-1777				GROUND WATER (ft)				
BORING NO. B-2274A		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT				0 HR.		ND		
GROUND SURFACE ELEV. 80.9 ft (NAVD88)		NORTHING 13,413,066		US ft (NAD83)		EASTING 2,600,643		US ft (NAD83)		24 HR. ND		
TOTAL DEPTH 594.7 ft		DRILL MACHINE CME-85		DRILLER: R. White/J. Dugger				HAMMER (ID) 140 lb. Auto (MEC 10)				
DATE STARTED 11/27/07		COMPLETED 1/3/08		CASING DEPTH: N/A				BITS USED: 3 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	MOI	
80.9					Ground Surface							80.9
80.9	0.0	3	4	7						SS-1		FAT CLAY (CH), dark gray (2.5Y4/1), stiff, moist, trace sand, roots, no HCl reaction
77.6	3.3	2	2	4						SS-2		3.3ft: gray (2.5Y6/1), firm, strong HCl reaction
74.6	6.3	2	4	6						SS-3		6.3ft: stiff
71.6	9.3	2	3	5						SS-4		71.6
68.6	12.3	6	9	12						SS-5		LEAN CLAY (CL), light yellowish brown (10YR6/4), firm, moist, strong HCl reaction, carbonate nodules
65.6	15.3	4	5	9						SS-6		12.3ft: very stiff
59.3	21.6	3	4	7						SS-7		15.3ft: yellowish brown (10YR5/4), stiff, light gray (10YR7/2), no sand
54.3	26.6	7	11	13						SS-8		56.9
49.3	31.6	7	16	18						SS-9		Clayey SAND (SC), light brownish gray (2.5Y6/2), very firm, moist, fine grained, little fines, strong HCl reaction
44.3	36.6	14	23	26						SS-10		51.3
39.3	41.6	8	11	15						SS-11		FAT CLAY with sand (CH), light brownish gray (2.5Y6/2), moist, fine grained sand, few carbonate nodules, strong HCl reaction
34.3	46.6	9	14	11						SS-12		49.3
29.3	51.6	5	9	11						SS-13		POORLY GRADED SAND (SP), light gray (2.5Y7/2), dense, moist, fine grained, few to trace fines, no HCl reaction
												31.6
												41.6
												</

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



SHEET 2 OF 11

BECHTEL PROJECT NO.: 25352					COUNTY Victoria					GEOLOGIST J. Liles					
SITE DESCRIPTION Exelon COL Project (Victoria Site)					MACTEC PROJECT NO.: 6468-07-1777					GROUND WATER (ft)					
BORING NO. B-2274A		DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT					0 HR. ND					
GROUND SURFACE ELEV. 80.9 ft (NAVD88)		NORTHING 13,413,066		US ft (NAD83)	EASTING 2,600,643		US ft (NAD83)		24 HR. ND						
TOTAL DEPTH 594.7 ft		DRILL MACHINE CME-85			DRILLER: R. White/J. Dugger					HAMMER (ID) 140 lb. Auto (MEC 10)					
DATE STARTED 11/27/07		COMPLETED 1/3/08			CASING DEPTH: N/A					BITS USED: 3 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					
24.8					Continued from previous page										
24.3	56.6	10	17	17									FAT CLAY with sand (CH), light gray (2.5Y7/2), mottled orange and black, very stiff, moist, little sand, no HCl reaction (continued) 56.6ft: hard, some sand		
19.3	61.6	8	10	15									FAT CLAY (CH), light yellowish brown (2.5Y6/4), very stiff, moist, trace sand, no HCl reaction		
14.3	66.6	4	9	8											
9.3	71.6	6	8	13											
4.3	76.6	5	8	13									Sandy LEAN CLAY (CL), light brownish gray (10YR6/2), very stiff, moist, some sand, no HCl reaction		
-0.7	81.6	8	12	12									Clayey SAND (SC), light gray (2.5Y7/2), very firm, moist, fine grained, some fines, few carbonate nodules		
-5.7	86.6	9	9	13									LEAN CLAY with sand (CL), light gray (2.5Y7/2), very stiff to strong, moist, little sand, carbonate nodules, strong HCl reaction		
-10.7	91.6	10	17	21									91.6ft: hard		
-15.7	96.6	19	33	44									97.6ft: interbedded well graded sand, pale yellow (2.5Y8/4), very dense, wet, fine to coarse grained, trace gravel and clay		
-20.7	101.6	9	16	22									101.6ft: trace sand		
-30.7	111.6												POORLY GRADED SAND (SP), light yellowish brown (10YR6/4), very dense, wet, fine to coarse grained, little gravel, strong HCl reaction		

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