MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
24.4					Continued from previous page				
		6	15	15	30	SS-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	72	SS-16			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	13	SS-17			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	19	SS-18			71.2ft: pale brown (10YR6/3), very stiff, strong HCl reaction
4.3	76.2	7	10	12	22	SS-19			76.2ft: little sand, carbonate nodules
-0.6	81.1	12	34	21	55	SS-20			81.1ft: light gray (10YR7/2), hard, some sand
-5.5									86.0
-5.6	86.1	9	21	27	48	SS-21			Clayey SAND (SC), light gray (2.5Y7/2), dense, moist, some fines, carbonate nodules, strong HCl reaction
-10.5									91.0
-10.6	91.1	17	21	26	47	SS-22			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	94/0.8	SS-23			POORLY GRADED SAND (SP), light gray (2.5Y7/2), very dense, wet, fine grained, trace fines, strong HCl reaction
-20.6	101.1	40	40	32	72	SS-24			101.1ft: pale yellow (2.5Y7/4)
-30.6	111.1	36	43	46	89	SS-25			
-30.6									111.1

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-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	116.0								
									FAT CLAY (CH), light gray (5Y7/2), very stiff, moist, carbonate nodules, strong HCl reaction
-40.6	121.1	6	10	12	22	SS-26			
-47.5	128.0								
									Clayey SAND (SC), light gray (5Y7/2), very dense, moist, fine grained, little fines, strong HCl reaction
-50.6	131.1	16	22	31	53	SS-27			
-55.5	136.0								
									POORLY GRADED SAND (SP), light gray (5Y7/2), very dense, wet, fine grained, trace fines, strong HCl reaction
-60.6	141.1	28	35	50	85	SS-28			
-64.5	145.0								
									Sandy FAT CLAY (CH), light yellowish brown (2.5Y6/3), very stiff, moist, some sand, strong HCl reaction
-70.6	151.1	6	12	15	27	SS-29			
-75.5	156.0								
									POORLY GRADED SAND (SP), light brownish gray (10YR6/2), very dense, wet, fine to medium grained, trace fines, weak HCl reaction
-80.6	161.1	24	37	45	82	SS-30			

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-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)
-96.5	177.0								Sandy FAT CLAY (CH), light gray (2.5Y7/1), hard, moist, some sand, few gravel, strong HCl reaction
-100.7	181.2	33	50/0.2		83/0.7	SS-32			
-110.7	191.2	26	30	40	70	SS-33			POORLY GRADED SAND (SP), light gray (2.5Y7/1), very dense, wet, fine grained, trace fines, carbonate nodules
-120.7	201.2	50/0.2			50/0.2	SS-34			201.2ft: no recovery
-125.7	206.2	14	17	26	43	SS-35			206.2ft: light yellowish brown (2.5Y6/4), dense
-128.5	209.0								Clayey SAND (SC), light yellowish brown (2.5Y6/3), very dense, wet, fine grained, little fines, strong HCl reaction
-142.5	223.0	29	31	43	74	SS-36			

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-143.9					Continued from previous page				
									Clayey SAND (SC), light yellowish brown (2.5Y6/3), very dense, wet, fine grained, little fines, strong HCl reaction *(continued)*
-161.5	242.0								POORLY GRADED SAND with clay (SP-SC), light gray (2.5Y7/1), very dense, moist, fine grained, few fines, strong HCl reaction
-165.7	246.2	43	50/0.3		93/0.8	SS-37			
-182.5	263.0								POORLY GRADED SAND (SP), light gray (2.5Y7/1), very dense, wet, medium grained, trace fines, no HCl reaction
-185.7	266.2	15	33	45	78	SS-38			

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-200.1					Continued from previous page				
									-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
-205.7	286.2	WOH	6	47	53	SS-39			
-219.2	299.7	7	12	18	30	SS-40			299.7ft: very stiff, strong HCl reaction
									-220.7 Boring Terminated at Elevation -220.7 ft 301.2

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By JPZ Date 6-12-08

Checked By KAW Date 7.10.08

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
80.2					Ground Surface				80.2 — 0.0
80.2	0.0	3	3	4	7	SS-1			FAT CLAY (CH), very dark gray (N3), firm, moist, trace sand, trace organics, weak HCl reaction
76.7	3.5	1	1	2	3	SS-2			3.5ft: greenish gray (5GY6/1), mottled very dark gray (N3), soft, trace carbonate nodules, strong HCl reaction
74.2	6.0	2	3	5	8	SS-3			6.0ft: mottled brownish yellow (10YR6/8), firm, black stains
71.7	8.5	4	6	7	13	SS-4			71.7 — 8.5 LEAN CLAY (CL), greenish gray (5GY6/1), mottled brownish yellow (10YR6/8), stiff to firm, moist, few sand, carbonate nodules, strong HCl reaction
69.2	11.0	3	3	3	6	SS-5			
66.7	13.5	3	4	5	9	SS-6			
61.7	18.5	3	3	4	7	SS-7			61.7 — 18.5 FAT CLAY (CH), light yellowish brown (10YR6/4), mottled greenish gray (5GY6/1), firm, trace sand, carbonate nodules, weak to strong HCl reaction
56.7	23.5	3	5	6	11	SS-8			23.5ft: greenish gray (5GY6/1), mottled with light yellowish brown (10YR6/4), stiff, strong HCl reaction
51.7	28.5	5	6	6	12	SS-9			51.7 — 28.5 FAT CLAY with sand (CH), greenish gray (5GY6/1), stiff, moist, little sand, no HCl reaction
46.7	33.5	5	9	12	21	SS-10			33.5ft: very stiff
41.7	38.5	7	7	8	15	SS-11			38.5ft: mottled yellowish brown (10YR5/6), stiff
36.7	43.5	3	6	8	14	SS-12			36.7 — 43.5 FAT CLAY (CH), yellowish brown (10YR5/6), mottled greenish gray (5GY6/1), stiff, moist, trace sand, no HCl reaction
31.7	48.5	4	6	9	15	SS-13			
26.7	53.5	4	9	10	19	SS-14			53.5ft: light yellowish brown (10YR6/4), very stiff, strong HCl reaction

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
24.1					Continued from previous page				
21.7	58.5								FAT CLAY (CH), yellowish brown (10YR5/6), mottled greenish gray (5GY6/1), stiff, moist, trace sand, no HCl reaction *(continued)*
		11	15	11	26	SS-15			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	17	SS-16			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	13	SS-17			68.5ft: gray (10YR5/1), mottled light yellowish brown (10YR6/4), stiff
6.7	73.5								
		6	8	10	18	SS-18			73.5ft: very stiff
1.7	78.5								
		5	7	9	16	SS-19			
-3.3	83.5								
		8	10	9	19	SS-20			83.5ft: greenish gray (5GY6/1), little sand
-8.3	88.5								
		13	14	20	34	SS-21			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	74	SS-22			93.5ft: yellowish brown (10YR6/4), very dense, fine to medium grained
-18.3	98.5								
		20	50/0.4		70/0.9	SS-23			98.5ft: fine to coarse grained, trace clay at 99.5ft
-19.8	100.0								Boring Terminated at Elevation -19.8 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By J-PH Date 6-12-08

Checked 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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
80.7					Ground Surface				
80.7	0.0	3	5	6	11	SS-1			Sandy LEAN CLAY (CL), black (7.5YR2.5/1), stiff, moist, some sand, no HCl reaction
77.2	3.5	2	3	4	7	SS-2			FAT CLAY with sand (CH), light gray (5Y7/2), firm, moist, little sand, no HCl reaction
74.7	6.0	3	3	5	6	SS-3			6.0ft: black and brown staining
72.2	8.5	2	3	5	8	SS-4			LEAN CLAY (CL), mottled light gray (5Y7/2), and yellow (2.5Y7/8), firm, moist, trace sand, strong HCl reaction
70.8	9.9								FAT CLAY (CH), light gray (5Y7/2), mottled pale yellow (5Y8/2), very stiff, moist, some sand, strong HCl reaction, carbonate nodules
69.7	11.0	6	10	14	24	SS-5			
67.2	13.5	2	7	9	16	SS-6			13.5ft: no sand
62.8	17.9	3	5	6	11	SS-7			17.9ft: stiff
57.8	22.9	4	9	13	22	SS-8			22.9ft: very stiff, little sand
52.8	27.9	14	25	34	59	SS-9			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
47.8	32.9	11	17	14	31	SS-10			Silty SAND (SM), light gray (5Y7/1), dense, moist, fine grained, some fines, no HCl reaction
44.7	36.0								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
42.8	37.9	6	11	16	27	SS-11			
37.8	42.9	5	8	12	20	SS-12			
32.8	47.9	5	8	11	19	SS-13			47.9ft: mottled brownish yellow (10YR6/6), and pale yellow (2.5Y8/2)
27.8	52.9	4	8	9	17	SS-14			52.9ft: mottled reddish yellow (7.5YR6/6), and white (2.5Y8/1), few sand

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
24.6					Continued from previous page				
22.8	57.9	6	11	13	24	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)* 57.9ft: mottled light gray (5Y7/2), and olive yellow (2.5Y6/6), some sand, no HCl reaction
17.8	62.9	5	10	13	23	SS-16			62.9ft: few sand, strong HCl reaction
12.8	67.9	4	7	11	18	SS-17			12.8 — 67.9 FAT CLAY (CH), light brownish gray (2.5Y6/2), very stiff, moist, no sand, strong HCl reaction
7.8	72.9	5	8	11	19	SS-18			72.9ft: pale yellow (2.5Y7/4), weak HCl reaction
2.8	77.9	14	15	16	31	SS-19			77.9ft: light gray (2.5Y7/1), hard, some sand, no HCl reaction
-2.2	82.9	30	32	38	70	SS-20			82.9ft: trace sand, strong HCl reaction
-7.2	87.9	7	12	15	27	SS-21			87.9ft: mottled brownish yellow (10YR6/8), and pale yellow (2.5Y8/4), very stiff, few sand
-11.3	92.0								
-12.2	92.9	19	28	32	60	SS-22			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	97/0.9	SS-23			97.9ft: light yellowish brown (10YR6/4), and yellow (10YR7/6), some fines
-27.2	107.9	33	39	39	78	SS-24			-27.2 — 107.9 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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-31.5					Continued from previous page				
									-32.3 — 113.0 Sandy FAT CLAY (CH), pale yellow (2.5Y8/2), very stiff, moist, some sand, black staining, no HCl reaction
-37.2	117.9	WOR	12	16	28	SS-25			
-47.2	127.9	14	16	21	37	SS-26			127.9ft: hard, trace sand, strong HCl reaction
									-55.3 — 136.0 Silty SAND (SM), pale yellow (2.5Y7/4), very dense, moist, fine grained, little fines, strong HCl reaction
-57.2	137.9	28	50	50/0.4	100/0.9	SS-27			
-67.2	147.9	19	35	40	75	SS-28			-67.2 — 147.9 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		50/0.4	SS-29			-77.2 — 157.9 Silty SAND (SM), pale yellow (2.5Y8/2), very dense, moist, fine grained, some fines, weak HCl reaction
-87.2	167.9								-87.2 — 167.9

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-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								-97.6 178.3
		30	50/0.4		80/0.9	SS-31A/B			Sandy FAT CLAY (CH), white, (2.5Y8/1), hard, moist, some sand, strong HCl reaction
-107.2	187.9								-107.2 187.9
		39	50/0.5		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
-117.2	197.9								-117.2 197.9
		50/0.3			50/0.3	SS-33			POORLY GRADED SAND (SP), pale yellow (2.5Y8/2), very dense, moist, fine grained, no fines, strong HCl reaction
-127.2	207.9								
		29	50/0.5		79/1.0	SS-34			207.9ft: very pale brown (10YR8/3), weak HCl reaction
-137.2	217.9								
		50/0.4			50/0.4	SS-35			217.9ft: yellow (2.5Y8/6), coarse grained, trace fines

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-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)* 227.9ft: pale yellow (2.5Y8/2), fine grained, no HCl reaction
-157.2	237.9	17	30	35	65	SS-37			-157.2 237.9 Clayey SAND (SC), white (2.5Y8/1), and olive yellow (2.5Y6/8), very dense, wet, fine grained, some fines, carbonate nodules, strong HCl reaction
-167.2	247.9	50/0.3			50/0.3	SS-38			-167.2 247.9 POORLY GRADED SAND (SP), pale yellow (5Y8/2), very dense, moist, fine grained, trace fines, strong HCl reaction
-177.2	257.9	45	50/0.4		95/0.9	SS-39			-177.2 257.9 POORLY GRADED SAND with silt (SP-SM), white (2.5Y8/1), very dense, moist, fine grained, few fines, weak HCl reaction
-187.2	267.9	18	21	24	45	SS-40			-187.2 267.9 Clayey SAND (SC), mottled white (2.5Y8/1), and yellow (2.5Y7/6), dense, moist, fine grained, some fines, weak HCl reaction
-197.2	277.9	ND	45	41	86	SS-41			-197.2 277.9 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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-199.8					Continued from previous page				
									Silty SAND (SM), white (2.5Y8/1), very dense, moist, fine grained, little fines, no HCl reaction *(continued)*
-207.2	287.9								-207.2 — 287.9
		33	46	50/0.3	96/0.8	SS-42			POORLY GRADED SAND (SP), light gray (10YR7/1), very dense, moist, fine to coarse grained, trace fines, no HCl reaction
-210.3									-210.3 — 291.0
									FAT CLAY (CH), mottled light gray (2.5Y7/2), and brownish yellow (10YR6/6), hard, moist, few sand, carbonate nodules, strong HCl reaction
-217.2	297.9								
		12	21	25	46	SS-43			
-227.2	307.9								
		10	18	28	46	SS-44			307.9ft: white (2.5Y8/1), weak HCl reaction
-237.2	317.9								
		7	13	18	31	SS-45			317.9ft: light gray (2.5Y7/2), no sand
-247.2	327.9								
		6	13	17	30	SS-46			327.9ft: very stiff, some sand, carbonate nodules, strong HCl reaction
									-253.3 — 334.0
									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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-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)*
									-265.3 — 346.0
-267.2	347.9	7	12	14	26	SS-48			Sandy FAT CLAY (CH), mottled pale yellow (2.5Y8/2), and brownish yellow (10YR6/6), very stiff, moist, some sand, strong HCl reaction
									-274.3 — 355.0
-277.2	357.9	50/0.3			50/0.3	SS-49			POORLY GRADED SAND (SP), pale yellow (5Y8/2), very dense, moist, fine grained, trace fines, strong HCl reaction
-287.2	367.9	ND	8	13	21	SS-50			-287.2 — 367.9 FAT CLAY (CH), very pale brown (10YR7/3), very stiff, moist, few sand, strong HCl reaction
-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.GDT 6/12/08

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-312.0					Continued from previous page				
									FAT CLAY (CH), very pale brown (10YR7/3), very stiff, moist, few sand, strong HCl reaction *(continued)*
-317.2	397.9								397.9ft: 1.4'-thick interbedded layer of poorly graded sand with clay
		32	44	46	90	SS-53A/B			
-318.7	399.4								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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By [signature] Date 6-12-08

Checked 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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
80.9					Ground Surface				
80.9	0.0	3	4	7	11	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	6	SS-2			3.3ft: gray (2.5Y6/1), firm, strong HCl reaction
74.6	6.3	2	4	6	10	SS-3			6.3ft: stiff
71.6	9.3	2	3	5	8	SS-4			LEAN CLAY (CL), light yellowish brown (10YR6/4), firm, moist, strong HCl reaction, carbonate nodules
68.6	12.3	6	9	12	21	SS-5			12.3ft: very stiff
65.6	15.3	4	5	9	14	SS-6			15.3ft: yellowish brown (10YR5/4), stiff, light gray (10YR7/2), no sand
59.3	21.6	3	4	7	11	SS-7			
54.3	26.6	7	11	13	24	SS-8			Clayey SAND (SC), light brownish gray (2.5Y6/2), very firm, moist, fine grained, little fines, strong HCl reaction
49.3	31.6	7	16	18	34	SS-9			FAT CLAY with sand (CH), light brownish gray (2.5Y6/2), moist, fine grained sand, few carbonate nodules, strong HCl reaction
44.3	36.6	14	23	26	49	SS-10			POORLY GRADED SAND (SP), light gray (2.5Y7/2), dense, moist, fine grained, few to trace fines, no HCl reaction
39.3	41.6	8	11	15	26	SS-11			FAT CLAY with sand (CH), light gray (2.5Y7/2), mottled orange and black, very stiff, moist, little sand, no HCl reaction
34.3	46.6	9	14	11	25	SS-12			46.6ft: some sand
29.3	51.6	5	9	11	20	SS-13			51.6ft: little sand, carbonate nodules

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
24.8					Continued from previous page				
24.3	56.6	10	17	17	34	SS-14			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	25	SS-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	17	SS-16			
9.3	71.6	6	8	13	21	SS-17			
4.3	76.6	5	8	13	21	SS-18			Sandy LEAN CLAY (CL), light brownish gray (10YR6/2), very stiff, moist, some sand, no HCl reaction
0.9	80.0								
-0.7	81.6	8	12	12	24	SS-19			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	22	SS-20			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	38	SS-21			91.6ft: hard
-15.7	96.6	19	33	44	77	SS-22A/B			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	38	SS-23			101.6ft: trace sand
-28.1	109.0								POORLY GRADED SAND (SP), light yellowish brown (10YR6/4), very dense, wet, fine to coarse grained, little gravel, strong HCl reaction
-30.7	111.6					SS-24			

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