MACTEC

GEOTECHNICAL BORING LOG

Prepared By JPR Date 6-12-08

Checked By KAW Date 7-10-08

SHEET 1 OF 4

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST B. Taylor	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2159	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,477 US ft (NAD83)	EASTING 2,599,789 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 211.5 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 12/1/07	COMPLETED 12/3/07	CASING DEPTH: N/A	BITS USED: 2 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
80.4					Ground Surface				
80.4	0.0	3	4	5	9	SS-1			FAT CLAY (CH), very dark gray (10YR3/1), stiff, moist, few sand, no HCl reaction, roots
76.9	3.5	3	4	5	9	SS-2			3.5ft: dark gray (10YR4/1)
74.4	6.0	4	6	6	12	SS-3			LEAN CLAY with sand (CH), gray (10YR6/1), stiff, moist, little sand, weak HCl reaction
71.9	8.5	4	4	4	8	SS-4			8.5ft: firm, strong HCl reaction, carbonate nodules
69.4	11.0	4	6	5	11	SS-5			11.0ft: light gray (10YR7/1), stiff, little sand
66.9	13.5	4	7	7	14	SS-6			13.5ft: gray (10YR6/1), black staining, few sand
60.4	20.0	4	5	5	10	SS-7			FAT CLAY (CH), light gray (10YR7/1), mottled brownish yellow (10YR6/6), stiff, moist, few sand, strong HCl reaction
55.4	25.0	4	4	6	10	SS-8			25.0ft: brownish yellow (10YR6/6)
50.4	30.0	4	5	7	12	SS-9			
45.4	35.0	5	7	7	14	SS-10			
40.4	40.0	4	5	6	11	SS-11			
35.4	45.0	5	7	9	16	SS-12			45.0ft: very stiff, yellow (10YR7/6), trace sand
30.4	50.0	7	7	14	21	SS-13			50.0ft: gray (10YR6/1), no HCl reaction
25.4	55.0	5	9	14	23	SS-14			55.0ft: little sand

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

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BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST B. Taylor	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2159	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,477 US ft (NAD83)	EASTING 2,599,789 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 211.5 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 12/1/07	COMPLETED 12/3/07	CASING DEPTH: N/A	BITS USED: 2 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
24.3					Continued from previous page				
									FAT CLAY (CH), light gray (10YR7/1), mottled brownish yellow (10YR6/6), stiff, moist, few sand, strong HCl reaction *(continued)*
20.4	60.0								
		5	5	8	13	SS-15			60.0ft: stiff
15.4	65.0								
		5	10	11	21	SS-16			65.0ft: very stiff, few sand, weak HCl reaction
10.4	70.0								10.4 — 70.0
		19	17	13	30	SS-17			Clayey SAND (SC), gray (10YR6/1), very firm, moist, little fines, no HCl reaction, carbonate nodules
5.4	75.0								5.4 — 75.0
		6	8	9	17	SS-18			FAT CLAY (CH), light gray (10YR7/1), very stiff, moist, few sand, weak HCl reaction, carbonate nodules
0.4	80.0								
		6	7	10	17	SS-19			80.0ft: gray (10YR6/1), no HCl reaction, some sand
-4.6	85.0								
		16	46	45	91	SS-20			85.0ft: hard, little sand, strong HCl reaction, some carbonate nodules
-9.6	90.0								
		5	5	7	12	SS-21			90.0ft: brownish yellow (10YR6/6), mottled light gray (10YR7/1), stiff, few sand
-14.6	95.0								-14.6 — 95.0
		7	14	21	35	SS-22			Clayey SAND (SC), light brownish gray (10YR6/2), dense, moist, little fines, no HCl reaction, trace carbonate nodules, increasing sand content with depth
-19.6	100.0								
		20	19	40	59	SS-23			100.0ft: brownish yellow (10YR6/6), very dense, ferrous staining, strong HCl reaction
-29.6	110.0								-29.6 — 110.0
		6	7	10	17	SS-24			FAT CLAY (CH), light gray (10YR7/1), mottled yellow (10YR7/6), very stiff, moist, few sand, strong HCl reaction

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

MACTEC

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST B. Taylor
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2159	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,477 US ft (NAD83)	EASTING 2,599,789 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 211.5 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 12/1/07	COMPLETED 12/3/07	CASING DEPTH: N/A	BITS USED: 2 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
-31.8					Continued from previous page				
									FAT CLAY (CH), light gray (10YR7/1), mottled yellow (10YR7/6), very stiff, moist, few sand, strong HCl reaction *(continued)*
-39.6	120.0								
		7	8	10	18	SS-25			120.0ft: no HCl reaction
-49.6	130.0								-49.6 — 130.0
		17	19	22	41	SS-26			Clayey SAND (SC), light gray (10YR7/1), dense, moist, fine grained, little fines, strong HCl reaction
-59.6	140.0								-59.6 — 140.0
		7	9	8	17	SS-27			FAT CLAY (CH), light gray (10YR7/1) very stiff, moist, few sand, strong HCl reaction
-69.6	150.0								-69.6 — 150.0
		6	9	17	26	SS-28			Clayey SAND (SC), gray (10YR6/1), very firm, moist, fine grained, little clay, no HCl reaction
-79.6	160.0								-79.6 — 160.0
		16	21	22	43	SS-29			FAT CLAY with sand (CH), gray (10YR6/1), hard, moist, little sand, strong HCl reaction, trace carbonate nodules

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

MACTEC

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST B. Taylor	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2159	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,477 US ft (NAD83)	EASTING 2,599,789 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 211.5 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 12/1/07	COMPLETED 12/3/07	CASING DEPTH: N/A	BITS USED: 2 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
-87.9					Continued from previous page				
-89.6	170.0								-89.6 — 170.0
		31	15	27	42	SS-30			Clayey SAND (SC), light gray (10YR7/1), dense, moist, fine grained, little clay, no HCl reaction
-99.6	180.0								-99.6 — 180.0
		32	23	25	48	SS-31			POORLY GRADED SAND with clay (SP-SC), light gray (10YR7/1), dense, moist, fine to medium grained, few fines, strong HCl reaction
-109.6	190.0								-109.6 — 190.0
		46	50/0.3		96/0.8	SS-32			Clayey SAND (SC), light gray (10YR7/1), very dense, moist, fine grained, little fines, no HCl reaction
-119.6	200.0								
		38	50/0.2		88/0.7	SS-33			200.0ft: strong HCl reaction
-129.6	210.0								
		35	50/0.2		85/0.7	SS-34			-131.1 — 211.5
									Boring Terminated at Elevation -131.1 ft

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 C. Gandy	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2160	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,181 US ft (NAD83)	EASTING 2,599,627 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 200.0 ft	DRILL MACHINE CME-55 LC	DRILLER: D. White/O. Smith	HAMMER (ID) 140 lb. Auto (MEC 02)
DATE STARTED 11/11/07	COMPLETED 11/12/07	CASING DEPTH: N/A	BITS USED: 2 7/8" Wing 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
80.4					Ground Surface				80.4 / 0.0
80.4	0.0	3	2	3	5	SS-1			Sandy FAT CLAY (CH), dark gray (7.5YR4/1), firm, moist, fine to medium grained sand, no HCl reaction, organics
76.9	3.5	1	2	1	3	SS-2			76.9 / 3.5 FAT CLAY with sand (CH) gray (10YR6/1), soft, carbonate nodules, weak HCl reaction, thinly laminated, organics
74.4	6.0	3	4	6	10	SS-3			74.4 / 6.0 LEAN CLAY with sand (CL), very pale brown (10YR7/3), stiff, moist, fine to coarse grained sand, carbonate nodules, organics, strong HCl reaction
71.9	8.5	5	5	6	11	SS-4			8.5ft: light gray (10YR7/2), stiff, moist, little fine sand, organics
69.4	11.0	7	9	12	21	SS-5			69.4 / 11.0 Sandy LEAN CLAY (CL), very pale brown (10YR8/3), very stiff, moist, fine to medium grained sand
66.9	13.5	6	5	7	12	SS-6			13.5ft: stiff, fine to coarse grained sand, organics
61.9	18.5	4	5	7	12	SS-7			61.9 / 18.5 FAT CLAY (CH), mottled brownish yellow (10YR6/8), stiff, fine to medium grained sand, trace iron nodules
56.9	23.5	4	5	6	11	SS-8			23.5 ft: brownish yellow (10YR6/6), mottled with very pale brown (10YR8/2), organics
51.9	28.5	4	6	9	15	SS-9			28.5 ft: mottled light gray (10YR7/2), trace carbonate nodules
46.9	33.5	5	6	8	14	SS-10			33.5 ft: mottled light greenish gray (10Y7/1), organics
41.9	38.5	4	5	7	12	SS-11			38.5 ft: yellow (10YR7/8), weak HCl reaction
36.9	43.5	5	5	12	17	SS-12			43.5ft: brownish yellow (10YR6/6), trace mottling, very stiff, moist, organics
31.9	48.5	5	7	10	17	SS-13			31.9 / 48.5 FAT CLAY with sand (CH), very pale brown (10YR7/4), very stiff, moist, fine to coarse grained sand, fine gravel
26.9	53.5	5	7	12	19	SS-14			53.5ft: fine to medium grained sand, organics

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

MACTEC

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-2160	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,181 US ft (NAD83)	EASTING 2,599,627 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 200.0 ft	DRILL MACHINE CME-55 LC	DRILLER: D. White/O. Smith	HAMMER (ID) 140 lb. Auto (MEC 02)
DATE STARTED 11/11/07	COMPLETED 11/12/07	CASING DEPTH: N/A	BITS USED: 2 7/8" Wing 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
24.3					Continued from previous page				
21.9	58.5								FAT CLAY with sand (CH), very pale brown (10YR7/4), very stiff, moist, fine to coarse grained sand, fine gravel *(continued)*
		9	11	18	29	SS-15			58.5ft: fine to coarse grained sand
16.9	63.5								
		5	7	9	16	SS-16			63.5ft: organics
11.9	68.5								11.9 — 68.5
		10	14	16	30	SS-17			Silty SAND (SM), very pale brown (10YR8/3), very firm, wet, fine to medium grained sand, no HCl reaction
6.9	73.5								6.9 — 73.5
		4	4	8	12	SS-18			Sandy FAT CLAY (CH), very pale brown (10YR8/3), stiff, moist, fine to medium grained sand, no HCl reaction
1.9	78.5								1.9 — 78.5
		6	9	50/0.3	59/0.8	SS-19			Clayey SAND (SC), very pale brown (10YR8/3), very dense, moist, fine to coarse grained sand, no HCl reaction, carbonate nodules
-3.1	83.5								-3.1 — 83.5
		12	19	18	37	SS-20			LEAN CLAY with sand (CL), very pale brown (10YR7/3), hard, moist, fine to coarse grained sand, fine gravel, strong HCl reaction, carbonate nodules
-8.1	88.5								-8.1 — 88.5
		12	35	50/0.3	85/0.8	SS-21			LEAN CLAY with sand (CL), very pale brown (10YR7/3), mottled with brownish yellow (10YR6/6), hard, moist, fine to medium grained sand
-13.1	93.5								-13.1 — 93.5
		14	18	21	39	SS-22			POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR7/3), dense, moist, fine to medium grained sand, no HCl reaction (visual)
-18.1	98.5								-18.1 — 98.5
		39	50/0.4		89/0.9	SS-23			Clayey SAND (SC), very pale brown (10YR8/2), very dense, moist, fine to medium grained sand, strong HCl reaction, carbonate nodules
-28.1	108.5								-28.1 — 108.5
		6	6	9	15	SS-24			FAT CLAY (CH), very pale brown (10YR8/3), mottled brownish yellow (10YR6/8), stiff, moist, fine to medium grained sand, strong HCl reaction, carbonate nodules, organics

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

MACTEC

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-2160	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,181 US ft (NAD83)	EASTING 2,599,627 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 200.0 ft	DRILL MACHINE CME-55 LC	DRILLER: D. White/O. Smith	HAMMER (ID) 140 lb. Auto (MEC 02)
DATE STARTED 11/11/07	COMPLETED 11/12/07	CASING DEPTH: N/A	BITS USED: 2 7/8" Wing 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
-31.8					Continued from previous page				
									FAT CLAY (CH), very pale brown (10YR8/3), mottled brownish yellow (10YR6/8), stiff, moist, fine to medium grained sand, strong HCl reaction, carbonate nodules, organics *(continued)*
-38.1	118.5								-38.1 118.5
		4	6	7	13	SS-25			Sandy FAT CLAY (CH), very pale brown (10YR8/3), trace mottling, stiff, moist, fine to medium grained sand, weak HCl reaction, trace carbonate nodules
-48.1	128.5								-48.1 128.5
		14	19	32	51	SS-26			POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR8/2), very dense, moist, fine to coarse grained sand, no HCl reaction (visual)
-58.1	138.5								
		18	25	25	50	SS-27			138.5 ft: dense, wet, strong HCl reaction
-68.1	148.5								-68.1 148.5
		10	13	18	31	SS-28			Sandy LEAN CLAY (CL), very pale brown (10YR7/3), mottled with brownish yellow (10YR6/8), hard, moist, fine to medium grained sand, weak HCl reaction, carbonate nodules, organics
-78.1	158.5								-78.1 158.5
		18	14	13	27	SS-29			FAT CLAY (CH), very pale brown (10YR7/3), mottled yellow (10YR7/8), very stiff, moist, fine to medium grained sand, strong HCl reaction

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

MACTEC

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-2160	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.4 ft (NAVD88)	NORTHING 13,412,181 US ft (NAD83)	EASTING 2,599,627 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 200.0 ft	DRILL MACHINE CME-55 LC	DRILLER: D. White/O. Smith	HAMMER (ID) 140 lb. Auto (MEC 02)
DATE STARTED 11/11/07	COMPLETED 11/12/07	CASING DEPTH: N/A	BITS USED: 2 7/8" Wing 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
-87.9					Continued from previous page				
-88.1	168.5	25	27	26	53	SS-30			POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR7/3), very dense, wet, fine to coarse grained sand, fine gravel, strong HCl reaction, trace carbonate nodules (visual)
-98.1	178.5	47	50	39	89	SS-31			
-108.1	188.5	50/0.1			50/0.1	SS-32			188.5 ft: no recovery
-111.6	192.0								Silty SAND (SM), very pale brown (10YR8/3), very dense, wet, fine to coarse grained sand, fine gravel, strong HCl reaction
-113.1	193.5	48	50/0.2		98/0.7	SS-33			
-118.1	198.5	17	8	11	19	SS-34			Clayey SAND (SC), very pale brown (10YR8/3), firm, wet, fine to coarse grained sand, strong HCl reaction, 0.05'-thick clay seam (visual)
-119.6	200.0								Boring Terminated at Elevation -119.6 ft

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

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy	
SITE DESCRIPTION Exelon COL Project	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2161	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.5 ft (NAVD88)	NORTHING 13,412,263 US ft (NAD83)	EASTING 2,599,698 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 12/5/07	COMPLETED 12/6/07	CASING DEPTH: N/A	BITS USED: 2 7/8" Wing Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
80.5					Ground Surface				
80.5	0.0	2	1	2	3	SS-1			FAT CLAY (CH), dark gray (7.5YR4/1), soft, moist, little sand, no HCl reaction, thinly laminated, organics, trace carbonate nodules
77.0	3.5	2	3	5	8	SS-2			3.5ft: brown (7.5YR4/2), to light brownish gray (10YR6/2), firm, weak HCl reaction
74.5	6.0	4	4	7	11	SS-3			LEAN CLAY with sand (CL), very pale brown (10YR7/3), stiff, moist, little sand, carbonate nodules, strong HCl reaction, ferrous staining
72.0	8.5	5	7	8	15	SS-4			
69.5	11.0	5	5	7	12	SS-5			11.0ft: light gray (10YR7/2) strong to weak HCl reaction
67.0	13.5	5	6	7	13	SS-6			
62.0	18.5	5	5	7	12	SS-7			18.5ft: very pale brown (10YR7/3), mottled brownish yellow (10YR6/6), few sand
57.0	23.5	6	6	7	13	SS-8			FAT CLAY (CH), very pale brown (10YR7/3), mottled brownish yellow (10YR6/8), stiff, moist, little sand, weak HCl reaction, carbonate nodules, organics
52.0	28.5	4	5	7	12	SS-9			28.5ft: trace sand
47.0	33.5	6	5	9	14	SS-10			33.5ft: yellow (10YR7/8), mottled light greenish gray (10YR8/1), few sand, strong to weak HCl reaction
42.0	38.5	5	5	8	13	SS-11			
37.0	43.5	4	5	8	13	SS-12			
32.0	48.5	5	6	9	15	SS-13			FAT CLAY with sand (CH), very pale brown (10YR7/3), mottled light greenish gray (10Y8/1), stiff, moist, little sand, weak HCl reaction, carbonate nodules, ferrous staining, trace organics
27.0	53.5	9	8	11	19	SS-14			Clayey SAND (SC), light gray (10YR7/2), firm, wet, fine grained, little fines, no HCl reaction

80.5 — 0.0; 74.5 — 6.0; 57.0 — 23.5; 32.0 — 48.5; 28.5 — 52.0

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

MACTEC

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy	
SITE DESCRIPTION Exelon COL Project	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2161	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.5 ft (NAVD88)	NORTHING 13,412,263 US ft (NAD83)	EASTING 2,599,698 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 12/5/07	COMPLETED 12/6/07	CASING DEPTH: N/A	BITS USED: 2 7/8" Wing Bit

ELEV. (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
24.4					Continued from previous page				
22.0	58.5	8	11	11	22	SS-15			23.0 — 57.5: FAT CLAY with sand (CH), yellow (10YR7/8), very stiff, moist, little sand, strong HCl reaction, interbedded clayey sand layers, trace carbonate nodules
17.0	63.5	7	10	14	24	SS-16			63.5ft: very pale brown (10YR7/3)
12.0	68.5	7	7	10	17	SS-17			13.0 — 67.5: Silty SAND (SM) light gray (10YR7/2), firm, moist, fine grained, some fines, weak HCl reaction; 73.5ft: very pale brown (10YR7/3), little fines
7.0	73.5	8	11	11	22	SS-18			6.4 — 74.1: Sandy FAT CLAY (CH), very pale brown (10YR7/3), very stiff, moist, some sand, no HCl reaction
2.0	78.5	8	7	7	14	SS-19			2.0 — 78.5: Clayey SAND (SC), light gray (10YR7/2), firm, moist to wet, little fines, no HCl reaction
-3.0	83.5	19	10	13	23	SS-20			83.5ft: pale yellow (5Y8/2), very firm, some fines, strong HCl reaction, little carbonate nodules
-8.0	88.5	30	46	50/0.5	96/1.0	SS-21			88.5ft: pinkish white (7.5YR8/2), very dense, little to some fines
-13.0	93.5	27	37	45	82	SS-22			-11.5 — 92.0: POORLY GRADED SAND (SP), very pale brown (10YR8/4), very dense, wet, medium to coarse grained, trace fines, strong HCl reaction, trace gravel
-18.0	98.5	50/0.4			50/0.4	SS-23			98.5ft: yellow (2.5Y7/6), fine to coarse grained, carbonate nodules, 0.1'-thick clay and gravel seam
-28.0	108.5	11	8	7	15	SS-24			-24.5 — 105.0: Clayey SAND (SC), pinkish white (7.5YR8/2), firm, wet, fine to medium grained, some fines, strong HCl reaction, trace gravel, carbonate nodules; -28.5 — 109.0: FAT CLAY (CH), light gray (10YR7/2), mottled brownish yellow (10YR6/6), stiff, moist, strong HCl reaction, carbonate nodules, ferrous staining

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

MACTEC

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST C. Gandy	
SITE DESCRIPTION Exelon COL Project	MACTEC PROJECT NO.: 6468-07-1777		GROUND WATER (ft)
BORING NO. B-2161	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.5 ft (NAVD88)	NORTHING 13,412,263 US ft (NAD83)	EASTING 2,599,698 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 12/5/07	COMPLETED 12/6/07	CASING DEPTH: N/A	BITS USED: 2 7/8" Wing 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				
									FAT CLAY (CH), light gray (10YR7/2), mottled brownish yellow (10YR6/6), stiff, moist, strong HCl reaction, carbonate nodules, ferrous staining *(continued)*
-38.0	118.5								-38.0 — 118.5
		8	11	12	23	SS-25			Sandy FAT CLAY (CH), light gray (10YR7/2), very stiff, moist, little sand, weak HCl reaction, carbonate nodules, ferrous staining, organics
									-44.5 — 125.0
									Clayey SAND (SC), light gray (10YR7/2), very firm, wet, fine to medium grained, little fines, no HCl reaction
-48.0	128.5								
		12	15	15	30	SS-26			
									-57.0 — 137.5
-58.0	138.5								POORLY GRADED SAND (SP) light gray (10YR7/2), to very pale brown (10YR7/3), very dense, wet, fine grained, trace fines, no HCl reaction
		17	24	37	61	SS-27			
									-63.5 — 144.0
									Clayey SAND (SC) very pale brown (10YR8/2), dense, moist, fine grained, little to some fines, strong HCl reaction, ferrous staining
-68.0	148.5								
		31	26	18	44	SS-28			
									-69.5 — 150.0
									Boring Terminated at Elevation -69.5 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By [illegible] Date 6-12-08

Checked By KAW Date 7-10-08

SHEET 1 OF 4

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST B. Taylor
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2162A	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.2 ft (NAVD88)	NORTHING 13,412,386 US ft (NAD83)	EASTING 2,599,799 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 202.8 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 11/24/07	COMPLETED 11/29/07	CASING DEPTH: N/A	BITS USED: 2 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
80.2					Ground Surface				
80.2	0.0	3	4	4	8	SS-1			FAT CLAY (CH), black (10YR2/1), firm, moist, few sand, roots, weak HCl reaction
76.7	3.5	3	5	6	11	SS-2			3.5ft: dark gray (10YR4/1), stiff
74.2	6.0	3	6	7	13	SS-3			LEAN CLAY with sand (CL), light gray (10YR7/1), stiff, little sand, strong HCl reaction, ferrous nodules
71.7	8.5	5	8	10	18	SS-4			8.5ft: mottled yellow (10YR7/8), very stiff, few sand
69.2	11.0	7	11	12	23	SS-5			11.0ft: gray (10YR6/1), little sand
66.9	13.3	6	10	9	19	SS-6			FAT CLAY (CH) light gray (10YR7/1), stiff to very stiff, moist, few sand, weak HCl reaction, slickensides
58.9	21.3	6	8	9	17	SS-7			
53.9	26.3	5	6	7	13	SS-8			
48.9	31.3	5	7	9	16	SS-9			31.3ft: mottled brownish yellow (10YR6/6)
43.9	36.3	5	7	8	15	SS-10			36.3ft: brownish yellow (10YR6/6), mottled light gray (10YR7/1)
38.9	41.3	4	5	11	16	SS-11			
33.9	46.3	9	13	18	31	SS-12			46.3ft: hard, little sand, trace carbonate nodules
28.9	51.3	11	14	12	26	SS-13			LEAN CLAY (CL), yellow brown (10YR5/4), very stiff, moist, some sand, strong HCl reaction, 0.5'-thick interbedded layer of clayey sand at 51.3' and 56.3'

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

MACTEC

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST B. Taylor
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2162A	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.2 ft (NAVD88)	NORTHING 13,412,386 US ft (NAD83)	EASTING 2,599,799 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 202.8 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 11/24/07	COMPLETED 11/29/07	CASING DEPTH: N/A	BITS USED: 2 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
24.1					Continued from previous page				
23.9	56.3	8	8	8	16	SS-14A/B			23.4 – 56.8: Silty SAND (SM), yellowish brown (10YR6/4), firm, moist, fine grained, trace fines, no HCl reaction
18.9	61.3	10	12	17	29	SS-15			18.9 – 61.3: Clayey SAND (SC), brown (10YR5/3), very firm, moist, little fines, strong HCl reaction
13.9	66.3	5	8	9	17	SS-16			13.9 – 66.3: FAT CLAY (CH), grayish brown (10YR5/2), very stiff, moist, few sand, strong HCl reaction
8.9	71.3	6	8	10	18	SS-17			8.9 – 71.3: Clayey SAND (SC), light gray (10YR7/2), firm, moist, some fines, no HCl reaction, two interbedded clay layers
3.9	76.3	10	15	16	31	SS-18			76.3ft: dense, little fines, weak HCl reaction
-1.1	81.3	7	8	12	20	SS-19			81.3ft: firm, carbonate nodules, no HCl reaction
-6.1	86.3	37	49	50/0.3	99/0.8	SS-20			86.3ft: very dense, little fines
-11.1	91.3	49	50/0.2		99/0.7	SS-21			-11.1 – 91.3: FAT CLAY (CH), brownish yellow (10YR6/6), hard, moist, little sand, strong HCl reaction, carbonate nodules
-16.1	96.3	50/0.2			50/0.2	SS-22			-16.1 – 96.3: 96.3ft: no recovery
-21.1	101.3	50/0.2			50/0.2	SS-23			Clayey SAND (SC), very pale brown (10YR8/3), very dense, moist, fine grained, few fines, strong HCl reaction
-31.1	111.3	4	8	9		SS-24			-31.1 – 111.3

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

MACTEC

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST B. Taylor
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2162A	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.2 ft (NAVD88)	NORTHING 13,412,386 US ft (NAD83)	EASTING 2,599,799 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 202.8 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 11/24/07	COMPLETED 11/29/07	CASING DEPTH: N/A	BITS USED: 2 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
-32.0					Continued from previous page				
					17				FAT CLAY (CH), light gray (10YR7/2), mottled brownish yellow (10YR6/6), very stiff, moist, few sand, strong HCl reaction *(continued)*
-41.1	121.3								
		7	8	12	20	SS-25			
-51.1	131.3								-51.1 — 131.3
		9	9	9	18	SS-26			Clayey SAND (SC), light gray (10YR7/1), firm, moist, some fines, no HCl reaction
-61.1	141.3								-61.1 — 141.3
		6	5	8	13	SS-27			FAT CLAY (CH), light gray (10YR7/1), stiff, moist, few sand, strong HCl reaction
-71.1	151.3								-69.8 — 150.0
		10	14	16	30	SS-28			Clayey SAND (SC), gray (10YR6/1), very firm, moist, little fines, no HCl reaction
-81.1	161.3								
		11	13	21	34	SS-29			161.3ft: light brownish gray (10YR6/2), dense, strong HCl reaction 0.8'-thick interbedded layer of fat clay at 161.3ft

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

MACTEC

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST B. Taylor
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2162A	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.2 ft (NAVD88)	NORTHING 13,412,386 US ft (NAD83)	EASTING 2,599,799 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 202.8 ft	DRILL MACHINE CME-750	DRILLER: G. Bray/T. Ellerson	HAMMER (ID) 140 lb. Auto (263048)
DATE STARTED 11/24/07	COMPLETED 11/29/07	CASING DEPTH: N/A	BITS USED: 2 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
-88.1					Continued from previous page				
									Clayey SAND (SC), gray (10YR6/1), very firm, moist, little fines, no HCl reaction *(continued)*
-91.1	171.3								
		11	4	18	22	SS-30			171.3ft: very firm, fine to medium grained
-101.1	181.3								
		32	43	27	70	SS-31			181.3ft: very dense, light gray (10YR7/2)
-111.1	191.3								
		50/0.2			50/0.2	SS-32			
-121.1	201.3								
		21	13	14	27	SS-33			201.3ft: very firm, yellowish brown (10YR5/6)
									-122.6 202.8
									Boring Terminated at Elevation -122.6 ft

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