MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** H. Lyatus	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2182A	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: SPT**	**0 HR.** ND
GROUND SURFACE ELEV. 79.7 ft **(NAVD88)**	**NORTHING** 13,412,220 **US ft (NAD83)**	**EASTING** 2,600,133 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 399.8 ft	**DRILL MACHINE** CME-75	**DRILLER: T. Warren/N. Skoglund**	**HAMMER (ID)** 140 lb. Auto (MEC 09)
DATE STARTED 11/28/07	**COMPLETED** 12/6/07	**CASING DEPTH: N/A**	**BITS USED: 4 1/4" and 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
-313.0					Continued from previous page				
									FAT CLAY (CH) light gray (5Y7/2) mottled brown (10YR5/3), hard, moist, fine to medium grained sand, weak to strong HCl reaction *(continued)*
-318.6	398.3	21	25	31	56	SS-43			
									-320.1 399.8
									Note: strata adapted from B-2182UD Boring Terminated at Elevation -320.1 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By JDF Date 6-12-08

Checked By KAW Date 7-10-08

SHEET 1 OF 8

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** UD	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft (NAVD88)	**NORTHING** 13,412,207 US ft (NAD83)	**EASTING** 2,600,144 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER:** A. Palacios/A. Toriba	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH:** N/A	**BITS USED:** 5" 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
79.5					Ground Surface				79.5 / 0.0
69.5	10.0					UD-1			10.0ft: Sandy LEAN CLAY (CL), light gray (5Y7/1), mottled brownish yellow (10YR6/6), fine to coarse grained sand, trace carbonate nodules, strong HCl reaction - 1.7ft recovery
66.5	13.0					UD-2			13.0ft: no recovery
63.5	16.0					UD-3			16.0ft: FAT CLAY with sand (CH) light gray (5Y7/2), mottled brownish yellow (10YR6/6), trace carbonate nodules, strong HCl reaction - 1.7ft recovery
49.5	30.0					UD-4			30.0ft: no recovery
46.5	33.0					UD-5			33.0ft: FAT CLAY (CH), brownish yellow (10YR6/6), mottled light gray (5Y7/2), fine to coarse grained sand, fine gravel, trace carbonate nodules, strong HCl reaction - 1.7ft recovery
42.5	37.0					UD-6			37.0ft: Sandy LEAN CLAY (CL), light gray (5Y7/2), fine to coarse grained sand, fine gravel, trace carbonate nodules, strong HCl reaction - push refusal, 1.25ft recovery 38.5ft: bottom 0.7ft of tube smashed close

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

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BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: UD**	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,207 **US ft (NAD83)**	**EASTING** 2,600,144 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER: A. Palacios/A. Toriba**	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH: N/A**	**BITS USED: 5" 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
23.4					Continued from previous page				
14.5	65.0					UD-7			65.0ft: Clayey SAND (SC), light olive gray (5Y6/2), fine to medium grained sand, weak HCl reaction - 1.6ft recovery
11.5	68.0					UD-8			66.7ft: bottom of tube has POORLY GRADED SAND (SP), pale brown (10YR6/3) 68.0ft: Clayey SAND (SC), very pale brown (10YR7/4), strong HCl reaction - 1.6ft recovery 69.7ft: bottom of tube is FAT CLAY with sand (CH), light gray (10YR7/2), strong HCl reaction, trace carbonate nodules
-5.5	85.0					UD-9			85.0ft: FAT CLAY (CH), light gray (5Y7/2), mottled brownish yellow (10YR6/6), trace carbonate nodules, strong HCl reaction - 1.4ft recovery 86.7ft: bottom of tube bent, possibly by carbonate nodules 90.0ft: FAT CLAY (CH), very pale brown (10YR7/3), fine grained sand - push refusal, 0.4ft recovery May have refused on a carbonate nodule, switched to pitcher sampler at 95.0ft
-10.5	90.0					UD-10			
-11.0	90.5					UD-11			90.5ft: Sandy LEAN CLAY (CL), light gray (5Y7/1), mottled brownish yellow (10YR6/6), fine to coarse grained sand, fine gravel, trace carbonate nodules, strong HCl reaction - 2.35ft recovery
-15.5	95.0					UD-12			95.0ft: LEAN CLAY with sand (CL), light gray (5Y7/1), mottled brownish yellow (10YR6/6), fine to coarse grained sand, strong HCl reaction - 1.6ft recovery 97.5ft: bottom of tube is POORLY GRADED SAND with silt (SP-SM), very pale brown (10YR7/3), fine gravel, fine grained sand

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** UD	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,207 **US ft (NAD83)**	**EASTING** 2,600,144 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER:** A. Palacios/A. Toriba	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH:** N/A	**BITS USED:** 5" 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
-32.7					Continued from previous page				
-40.5	120.0					UD-13			120.0ft: Clayey SAND (SC), light gray (10YR7/2), fine to medium grained sand, carbonate nodules - 1.7ft recovery
-43.5	123.0					UD-14			123.0ft: SILT (ML), light gray (10YR7/2), fine grained, no HCl reaction - 1.55ft recovery
-65.5	145.0					UD-15			145.0ft: SILT (ML), very pale brown (10YR7/3), mottled brownish gray (10YR6/6), fine to medium sand, carbonate nodules, strong HCl reaction - 1.3ft recovery 147.5ft: bottom of tube damaged and blocked with hard layer of cemented sand, strong HCl reaction

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: UD**	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,207 **US ft (NAD83)**	**EASTING** 2,600,144 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER: A. Palacios/A. Toriba**	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH: N/A**	**BITS USED: 5" 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
-88.8					Continued from previous page				
-100.5	180.0					UD-16			180.0ft: Silty SAND (SM), very pale brown (10YR8/2), fine to coarse grained, little fines, carbonate nodules, strong HCl reaction - 1.35ft recovery
-135.5	215.0					UD-17			215.0ft: Sandy LEAN CLAY (CL), light gray (10YR7/2), fine to coarse grained sand, fine gravel, strong HCl reaction - 0.55ft recovery
-138.5	218.0					UD-18			218.0ft: FAT CLAY (CH), light gray (5Y7/2), mottled brownish yellow (10YR6/6), trace carbonate nodules - 1.2ft recovery

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

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BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: UD**	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,207 **US ft (NAD83)**	**EASTING** 2,600,144 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER: A. Palacios/A. Toriba**	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH: N/A**	**BITS USED: 5" 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
-144.9					Continued from previous page				
-160.5	240.0					UD-19			240.0ft: Silty SAND (SM), light gray (10YR7/2), fine to coarse grained sand, few carbonate nodules, strong HCl reaction - 0.5ft recovery
-162.5	242.0					UD-20			240.5ft: bottom 0.1ft of tube is bent 242.0ft: Silty Clayey SAND (SC-SM), light gray (10YR7/2), fine to coarse grained sand, fine gravel, strong HCl reaction - 0.45ft recovery
-185.5	265.0					UD-21			265.0ft: no recovery
-190.5	270.0					UD-22			270.0ft: FAT CLAY with sand (CH), light gray (5Y7/2), fine to coarse grained sand, fine gravel, trace carbonate nodules, strong HCl reaction - 0.45ft recovery
-195.5	275.0					UD-23			275.0ft: no recovery

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** UD	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,207 **US ft (NAD83)**	**EASTING** 2,600,144 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER:** A. Palacios/A. Toriba	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH:** N/A	**BITS USED:** 5" 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
-201.0					Continued from previous page				
-220.5	300.0					UD-24			300.0ft: FAT CLAY (CH), light gray (5Y7/2), fine to medium grained sand, trace carbonate nodules, strong HCl reaction - push refusal, 1.3ft recovery 301.3ft: bottom 0.1ft of tube damaged
-223.5	303.0					UD-25			303.0ft: FAT CLAY (CH), light gray (5Y7/2), fine to medium grained sand, trace carbonate nodules, strong HCl reaction - push refusal, 1.2ft recovery
-240.5	320.0					UD-26			320.0ft: LEAN CLAY with sand (CL), pale brown (10YR6/3), fine to medium grained sand, trace carbonate nodules, strong HCl reaction - push refusal, 1.45ft recovery 321.3ft: bottom of tube damaged
-243.5	323.0					UD-27			323.0ft: FAT CLAY (CH), pale brown (10YR6/3), fine grained sand, trace carbonate nodules - 0.3ft recovery 324.7ft: bottom of tube is Clayey SAND (SC), light gray (10YR7/2), fine grained sand, strong HCl reaction
-250.5	330.0					UD-28			330.0ft: FAT CLAY (CH), pale brown (10YR8/3), fine to medium grained sand, strong HCl reaction - 2.0ft recovery
-253.5	333.0					UD-29			332.5ft: bottom 0.15ft of tube is bent 333.0ft: FAT CLAY (CH), pale brown (10YR6/3), mottled light gray (5Y7/2), trace carbonate nodules, strong HCl reaction - 1.7ft recovery 334.7ft: bottom of tube is damaged

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: UD**	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,207 **US ft (NAD83)**	**EASTING** 2,600,144 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER: A. Palacios/A. Toriba**	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH: N/A**	**BITS USED: 5" 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
-257.1					Continued from previous page				
-260.5	340.0					UD-30			340.0ft: LEAN CLAY (CL), light gray (5Y7/2), fine to coarse grained sand, trace carbonate nodules, strong HCl reaction - push refusal, 1.05ft recovery
-263.5	343.0					UD-31			343.0ft: LEAN CLAY (CL), light gray (10YR7/2), fine to coarse grained sand, fine gravel, carbonate nodules, strong HCl reaction - 0.8ft recovery
-270.5	350.0					UD-32			350.0ft: POORLY GRADED SAND with clay (SP-SC), light gray (10YR7/2), strong HCl reaction - 2.6ft recovery 352.7ft: bottom of tube is POORLY GRADED SAND (SP), light yellowish brown (10YR6/4), fine gained sand, strong HCl reaction
-300.5	380.0					UD-33			380.0ft: FAT CLAY (CH), light gray (5Y7/2), mottled light yellowish brown (10YR6/4), fine grained sand, trace carbonate nodules, strong HCl reaction - 1.7ft recovery
-303.5	383.0					UD-34			383.0ft: FAT CLAY (CH), light gray (5Y7/1), no sand, strong HCl reaction - 1.7ft recovery 384.7ft: bottom of tube is bent
-310.5	390.0					UD-35			390.0ft: FAT CLAY (CH), light gray (2.5Y7/2), fine sand, strong HCl reaction - 1.5ft recovery 391.5ft: Tube damaged and sample disturbed

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** J. Moore	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2182UD	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** UD	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft (NAVD88)	**NORTHING** 13,412,207 US ft (NAD83)	**EASTING** 2,600,144 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 402.5 ft	**DRILL MACHINE** Failing 1500	**DRILLER:** A. Palacios/A. Toriba	**HAMMER (ID)** NA
DATE STARTED 12/11/07	**COMPLETED** 12/17/07	**CASING DEPTH:** N/A	**BITS USED:** 5" 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
-313.2					Continued from previous page				
-313.5	393.0					UD-36			393.0ft: FAT CLAY (CH), light gray (2.5Y7/2), fine grained sand, strong HCl reaction - 2.45ft recovery
-320.5	400.0					UD-37			398.0ft: LEAN CLAY with sand (CL), light gray (5Y7/2), mottled yellowish brown (10YR5/6), fine to medium grained sand, strong HCl reaction - 1.85ft recovery 400.0ft: LEAN CLAY with sand (CL), light gray (5Y7/2), mottled yellowish brown (10YR5/6), fine grained sand, strong HCl reaction
-323.0	402.5								Boring Terminated at Elevation -323.0 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By ZZZ Date 6-12-08

Checked By KAW Date 7.10.08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST L. Bisson
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2183	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 79.6 ft (NAVD88)	NORTHING 13,412,266 US ft (NAD83)	EASTING 2,600,166 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 151.3 ft	DRILL MACHINE CME-550	DRILLER: L. Carter/D. Juhan	HAMMER (ID) 140 lb. Auto (MEC 03)
DATE STARTED 11/10/07	COMPLETED 11/11/07	CASING DEPTH: N/A	BITS USED: 2 15/16" 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
79.6					Ground Surface				79.6 0.0
79.6	0.0	1	2	3	5	SS-1			FAT CLAY (CH), very dark gray (10YR3/1), firm, moist, trace sand, organics
76.1	3.5	8	10	11	21	SS-2			3.5ft: dark gray (2.5Y4/1), very stiff, few sand, trace carbonate and manganese nodules
73.6	6.0	7	8	8	16	SS-3			6.0ft: light olive gray (5Y6/2), trace sand, weak HCl reaction
71.1	8.5	7	8	12	20	SS-4			8.5ft: few sand, trace orange staining
68.6	11.0	8	8	9	17	SS-5			
66.1	13.5	7	8	10	18	SS-6			13.5ft: greenish gray (10Y6/1), no HCl reaction
59.8	19.8	6	6	10	16	SS-7			19.8ft: light olive gray (5YR6/2), black and orange staining
54.8	24.8	5	5	8	13	SS-8			24.8ft: greenish gray (10Y6/1), mottled reddish yellow (7.5YR6/8), stiff, no sand, weak HCl reaction, trace black staining
49.8	29.8	6	7	10	17	SS-9			29.8ft: strong brown (7.5YR5/8), mottled light greenish gray (10Y7/1), very stiff
44.8	34.8	4	6	10	16	SS10			34.8ft: trace carbonate nodules
39.8	39.8	8	11	19	30	SS-11			39.8 39.8 LEAN CLAY (CL), brownish yellow (10YR6/8), mottled light greenish gray (10Y8/1), very stiff, few sand, trace carbonate nodules, strong HCl reaction
34.8	44.8	10	18	28	46	SS-12A/B			33.8 45.8 Clayey SAND (SC), yellowish brown (10YR5/8), dense, wet, few fines, fine grained sand, strong HCl reaction
29.8	49.8	9	12	13	25	SS-13			49.8ft: very firm
24.8	54.8	9	12	17	29	SS-14			24.8 54.8

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

MACTEC

BECHTEL PROJECT NO.: 25352		COUNTY Victoria	GEOLOGIST L. Bisson
SITE DESCRIPTION Exelon COL Project (Victoria Site)		MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)
BORING NO. B-2183	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 79.6 ft (NAVD88)	NORTHING 13,412,266 US ft (NAD83)	EASTING 2,600,166 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 151.3 ft	DRILL MACHINE CME-550	DRILLER: L. Carter/D. Juhan	HAMMER (ID) 140 lb. Auto (MEC 03)
DATE STARTED 11/10/07	COMPLETED 11/11/07	CASING DEPTH: N/A	BITS USED: 2 15/16" 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
23.5					Continued from previous page				
20.1	59.5	6	8	11	19	SS-15			Sandy FAT CLAY (CH), brownish yellow (10YR5/6), very stiff, moist, some sand, strong HCl reaction, trace carbonate nodules; interbedded with poorly graded sand with clay (SP-SC) from 54.8 to 65.2ft *(continued)*
14.8	64.8	8	8	10	18	SS-16A/B			59.8ft: strong brown (7.5YR5/8), mottled light greenish gray (10Y7/1)
9.8	69.8	14	14	19	33	SS-17			65.2ft: light olive brown (2.5Y5/3), no HCl reaction
4.8	74.8	7	8	11	19	SS-18			69.8ft: light yellowish brown (2.5Y6/3), hard, some sand, trace carbonate gravel, weak HCl reaction
-0.2	79.8	8	15	15	30	SS-19			74.8ft: light gray (2.5Y7/2), mottled olive yellow (2.5Y6/6), very stiff, little sand
-5.2	84.8	6	7	9	16	SS-20			-0.2 / 79.8 Clayey SAND (SC), light gray (2.5Y7/2), very firm, wet, some fines, fine grained sand, no HCl reaction
-10.2	89.8	9	17	22	39	SS-21			-5.2 / 84.8 FAT CLAY (CH), greenish gray (10Y6/1), mottled strong brown (7.5YR5/8), very stiff, moist, trace sand, no HCl reaction, trace carbonate nodules
-15.2	94.8	7	9	11	20	SS-22			89.8ft: light olive gray (5Y6/2), to white (5Y8/1), hard, little gravel
-20.2	99.8	46	50/0.4		96/0.9	SS-23			-15.2 / 94.8 POORLY GRADED SAND with clay (SP-SC), pale brown (10YR6/3), firm, wet, fine to medium grained, few fines, weak HCl reaction, trace feldspar grains
-30.2	109.8	50/0.4			50/0.4	SS-24			99.8ft: very pale brown (10YR7/4), to light gray (2.5Y7/2), very dense, wet to moist, fine to coarse grained, weak to strong HCl reaction
									109.8ft: light gray (2.5Y7/2)

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2183	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: SPT**	**0 HR.** ND
GROUND SURFACE ELEV. 79.6 ft **(NAVD88)**	**NORTHING** 13,412,266 **US ft (NAD83)**	**EASTING** 2,600,166 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 151.3 ft	**DRILL MACHINE** CME-550	**DRILLER: L. Carter/D. Juhan**	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/10/07	**COMPLETED** 11/11/07	**CASING DEPTH: N/A**	**BITS USED: 2 15/16" 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
-32.6					Continued from previous page				
									POORLY GRADED SAND with clay (SP-SC), pale brown (10YR6/3), firm, wet, fine to medium grained, few fines, weak HCl reaction, trace feldspar grains *(continued)*
-40.2	119.8	8	8	9	17	SS-25			-40.2 FAT CLAY (CH), light greenish gray (10Y7/1), mottled strong brown (7.5YR5/8), very stiff, moist, few sand, no HCl reaction, trace carbonate nodules, trace black staining 119.8
-50.2	129.8	8	17	18	35	SS-26			129.8ft: greenish gray (10Y6/1), hard, weak HCl reaction
-60.2	139.8	31	50	23	73	SS-27			-60.2 LEAN CLAY with sand (CL), light yellowish brown (2.5Y6/3), hard, wet, weak HCl reaction, 2"-thick gravel layer at base of sand 139.8
-70.2	149.8	4	5	10	15	SS-28			149.8ft: stiff, weak HCl reaction, interbedded with poorly graded sand with clay
									-71.7 Boring Terminated at Elevation -71.7 ft 151.3

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By JPH Date 6-12-08

Checked By KAW Date 7-10-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2184	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 79.7 ft (NAVD88)	**NORTHING** 13,412,295 US ft (NAD83)	**EASTING** 2,600,305 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 151.2 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/D. Juhan	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/12/07	**COMPLETED** 11/13/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
79.7					Ground Surface				
79.7	0.0	4	5	5	10	SS-1			FAT CLAY (CH), dark olive brown (2.5Y3/3), stiff, moist, few sand, no HCl reaction, trace grass and manganese nodules
76.2	3.5	9	10	12	22	SS-2			3.5ft: dark gray (2.5Y4/1), very stiff, trace carbonate grains
73.7	6.0	3	5	7	12	SS-3			6.0ft: light olive gray (5Y6/2), stiff, weak HCl reaction
71.2	8.5	4	6	9	15	SS-4			8.5ft: mottled strong brown (7/5YR5/8)
68.7	11.0	6	9	11	20	SS-5			11.0ft: very stiff
66.2	13.5	5	6	8	14	SS-6			13.5ft: light brownish gray (2.5YR6/2), stiff
60.0	19.7	6	8	11	19	SS-7			19.7ft: light olive gray (5Y6/2), very stiff
55.0	24.7	5	4	6	10	SS-8			24.7ft: greenish gray (10YR6/1), mottled reddish yellow (7.5YR6/8), stiff
50.0	29.7	6	7	10	17	SS-9			29.7ft: reddish yellow (7.5YR6/8), mottled greenish gray (10Y6/1), very stiff, strong HCl reaction
45.0	34.7	5	5	7	12	SS-10			34.7ft: yellowish brown (10YR5/8), veined light greenish gray (10Y7/1), stiff, weak HCl reaction
40.0	39.7	5	6	9	15	SS-11			
35.0	44.7	7	9	15	24	SS-12			44.7ft: light olive brown (2.5YR5/4), very stiff, little sand, no HCl reaction
32.7									47.0
30.0	49.7	10	9	13	22	SS-13			Clayey SAND (SC), light yellowish brown (2.5Y6/4), trace yellowish brown (10YR5/8), very firm, some clay, no HCl reaction
25.0	54.7	6	8	9	17	SS-14			54.7ft: light gray (2.5Y7/1), firm

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2184	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 79.7 ft (NAVD88)	**NORTHING** 13,412,295 **US ft (NAD83)**	**EASTING** 2,600,305 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 151.2 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/D. Juhan	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/12/07	**COMPLETED** 11/13/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
23.6					Continued from previous page				
									22.7 — 57.0 FAT CLAY (CH), light yellowish brown (2.5Y6/3), very stiff, moist, trace sand, strong HCl reaction, trace carbonate nodules
20.0	59.7	12	10	13	23	SS-15			
15.0	64.7	5	6	9	15	SS-16			64.7ft: olive gray (5Y5/2), stiff, weak HCl reaction, trace manganese nodules
									12.2 — 67.5 Clayey SAND (SC), light yellowish brown (2.5Y6/4), very firm, moist, some fines, no HCL reaction, with interbedded fat clay layers
10.0	69.7	10	11	15	26	SS-17			
									7.2 — 72.5 FAT CLAY (CH), greenish gray (10Y6/1), very stiff, moist, trace sand, no HCl reaction, trace carbonate and manganese nodules
5.0	74.7	5	7	10	17	SS-18			
0.0	79.7	7	9	10	19	SS-19			
-5.0	84.7	5	7	8	15	SS-20			84.7ft: mottled strong brown (7.5YR5/8), stiff
-10.0	89.7	8	9	11	20	SS-21			89.7ft: very stiff, weak HCl reaction
-15.0	94.7	30	50/0.4		80/0.9	SS-22			94.7ft: light greenish gray (10Y8/1), hard, interbedded carbonate
									-18.3 — 98.0 WELL-GRADED SAND with clay (SW-SC), very pale brown (10YR7/4), to strong brown (7.5YR5/8), dense, wet, few fines, fine to coarse grained, weak HCl reaction
-20.0	99.7	28	20	26	46	SS-23A/B			-21.0 — 100.7 Sandy FAT CLAY (CH), light greenish gray (10Y7/1), hard, moist, some sand, weak HCl reaction
-30.0	109.7	9	12	13	25	SS-24			109.7ft: mottled strong brown (7.5YR5/8), very stiff, little sand, trace carbonate nodules, strong HCl reaction

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2184	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: SPT**	**0 HR.** ND
GROUND SURFACE ELEV. 79.7 ft **(NAVD88)**	**NORTHING** 13,412,295 **US ft (NAD83)**	**EASTING** 2,600,305 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 151.2 ft	**DRILL MACHINE** CME-550	**DRILLER: L. Carter/D. Juhan**	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/12/07	**COMPLETED** 11/13/07	**CASING DEPTH: N/A**	**BITS USED: 2 15/16" 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
-32.5					Continued from previous page				
									Sandy FAT CLAY (CH), light greenish gray (10Y7/1), hard, moist, some sand, weak HCl reaction *(continued)*
-40.0	119.7	9	10	14	24	SS-25			119.7ft: no HCl reaction
-50.0	129.7	20	18	22	40	SS-26			129.5ft: hard, few sand
-58.3	138.0								POORLY GRADED SAND with clay (SP-SC), light yellowish brown (10YR6/4), very dense, wet, few fines, fine grained sand, strong HCl reaction
-60.0	139.7	38	41	50	91	SS-27			
-70.0	149.7	13	19	19	38	SS-28			149.7ft: pale brown (10YR6/3), dense
-71.5	151.2								Boring Terminated at Elevation -71.5 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By JPL Date 6-12-08

Checked By KAW Date 7.10.08

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2185	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,321 **US ft (NAD83)**	**EASTING** 2,600,809 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 151.1 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/D. Juhan	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/16/07	**COMPLETED** 11/16/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
79.5					Ground Surface				
79.5	0.0	4	4	4	8	SS-1			FAT CLAY (CH), dark olive brown (2.5Y3/3), firm, moist, few sand, no HCl reaction, trace roots
76.0	3.5	9	9	11	20	SS-2			3.5ft: gray (2.5Y6/1), very stiff, weak HCl reaction, trace carbonate nodules
73.5	6.0	3	6	7	13	SS-3			6.0ft: stiff, strong HCl reaction,
71.0	8.5	8	13	15	28	SS-4			8.5ft: light brownish gray (2.5Y6/2), very stiff, trace manganese staining
68.5	11.0	6	11	13	24	SS-5			
66.0	13.5	7	9	11	20	SS-6			13.5ft: greenish gray (10Y6/1), no HCl reaction, trace manganese nodules
59.9	19.6	4	6	8	14	SS-7			19.6ft: light gray (10YR7/1), mottled yellowish brown (10YR5/8), stiff, weak HCl reaction
54.6	24.9	3	6	7	13	SS-8			24.6ft: light greenish gray (10YR7/1), no HCl reaction,
49.9	29.6	5	6	8	14	SS-9			29.6ft: greenish gray (10Y6/1), mottled strong brown (7.5YR5/8), weak HCl reaction
44.9	34.6	5	8	9	17	SS-10			LEAN CLAY with sand (CL), strong brown (7.5YR5/8), mottled greenish gray (10Y6/1), very stiff, little sand, carbonate nodules, strong HCl reaction
39.9	39.6	4	7	9	16	SS-11			39.6ft: veins of light greenish gray (10Y7/1), few sands
34.9	44.6	7	10	9	19	SS-12			44.6ft: brownish yellow (10YR6/8), some sand
32.5	47.0								Clayey SAND (SC), brownish yellow (10YR6/8), very firm, moist, fine grained, some fines, strong HCl reaction
29.9	49.6	5	7	14	21	SS-13			
24.9	54.6	5	6	8	14	SS-14			

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2185	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,321 **US ft (NAD83)**	**EASTING** 2,600,809 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 151.1 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/D. Juhan	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/16/07	**COMPLETED** 11/16/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
23.4					Continued from previous page				
19.9	59.6								FAT CLAY (CH), yellowish brown (10YR5/8), veined with greenish gray (10YR6/1), stiff, moist, few sand, weak HCl reaction, trace carbonate nodules *(continued)*
		6	9	9	18	SS-15			59.6ft: light olive gray (5Y6/2), very stiff, strong HCl reaction
14.9	64.6								
		8	10	13	23	SS-16			64.6ft: greenish gray (10Y6/1)
									11.5 — 68.0
9.6	69.9								POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR7/3), dense, wet, fine grained, few fines, no HCl reaction
		7	12	20	32	SS-17			
									6.5 — 73.0
4.9	74.6								FAT CLAY (CH), greenish gray (10YR6/1), very stiff, moist, trace sands, no HCl reaction, trace carbonate nodules
		5	7	14	21	SS-18			
-0.1	79.6								
		6	8	9	17	SS-19			
-5.1	84.6								
		6	6	9	15	SS-20			84.6ft: stiff, little sand, weak HCl reaction
-10.1	89.6								-10.1 — 89.6
		12	21	20	41	SS-21A/B			WELL-GRADED SAND (SW), light gray (2.5Y7/2), dense, fine to coarse grained, few fines, weak HCl reaction
									90.2 to 91.1ft: carbonate, white (N8), to brownish yellow (10YR6/8)
-15.1	94.6								-15.1 — 94.6
		31	50/0.4		81/0.9	SS-22			POORLY GRADED SAND (SP), reddish brown (7.5YR6/8), very dense, wet, fine grained, few fines, weak HCl reaction
-20.1	99.6								
		22	22	23	45	SS-23			99.6ft: light gray (10YR7/2), dense, trace angular carbonate gravel
-30.1	109.6								-30.1 — 109.6
		6	10	12	22	SS-24			FAT CLAY with sand (CH), greenish gray (10Y6/1), very stiff, moist, little sand, weak 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** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2185	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 79.5 ft **(NAVD88)**	**NORTHING** 13,412,321 **US ft (NAD83)**	**EASTING** 2,600,809 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 151.1 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/D. Juhan	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/16/07	**COMPLETED** 11/16/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
-32.7					Continued from previous page				
									FAT CLAY with sand (CH), greenish gray (10Y6/1), very stiff, moist, little sand, weak HCl reaction, trace carbonate nodules *(continued)*
-40.1	119.6	8	10	13	23	SS-25			119.6ft: trace sand, strong HCl reaction, trace angular carbonate gravel and nodules
-50.1	129.6	9	12	25	37	SS-26			129.6ft: light gray (2.5Y7/2), mottled yellowish brown (10YR5/8), hard
									-57.5 137.0
-60.1	139.6	11	20	23	43	SS-27			POORLY GRADED SAND with clay (SP-SC), brownish yellow (10YR6/6), to light brownish gray (10YR6/2 and 2.5Y6/2), dense, wet, few fines, strong HCl reaction, trace carbonate gravel
-70.1	149.6	18	22	26	48	SS-28			149.6ft: weak HCl reaction
									-71.6 151.1
									Boring Terminated at Elevation -71.6 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** L. Bisson
SITE DESCRIPTION Exelon COL Project	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**
BORING NO. B-2250 / **DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 81.1 ft (NAVD88) / **NORTHING** 13,413,327 **US ft (NAD83)** / **EASTING** 2,600,234 **US ft (NAD83)**		**24 HR.** ND
TOTAL DEPTH 151.3 ft / **DRILL MACHINE** CME-550	**DRILLER:** L. Carter/J. Landeros	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/27/07 / **COMPLETED** 11/28/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
81.1					Ground Surface				
81.1	0.0	4	5	5	10	SS-1			FAT CLAY (CH), very dark grayish brown (10YR3/2), stiff, moist, trace sand, trace roots, no HCl reaction
77.6	3.5	10	9	9	18	SS-2			3.5ft: gray (5Y6/1), very stiff, few sand, strong HCl reaction, trace carbonate nodules
75.1	6.0	4	5	5	10	SS-3			6.0ft: light gray (2.5Y7/2), stiff, weak HCl reaction
72.6	8.5	5	8	9	17	SS-4			8.5ft: light olive gray (5Y6/2), very stiff, strong HCl reaction
70.1	11.0	4	9	12	21	SS-5			11.0ft: reddish yellow (7.5YR6/6), to light greenish gray (10Y7/1), trace sand, weak HCl reaction, trace black staining
67.6	13.5	3	8	8	16	SS-6			13.5ft: strong brown (7.5YR5/8), to light brownish gray (2.5Y6/2)
61.3	19.8	3	5	6	11	SS-7			19.8ft: brownish yellow (10YR6/6), to greenish gray (10Y6/1), stiff, trace to few sand, strong HCl reaction
56.3	24.8	2	8	11	19	SS-8			28.4ft: very stiff
51.3	29.8	6	10	12	22	SS-9			29.8ft: light yellowish brown (2.5Y6/3), some sand, no HCl reaction
46.3	34.8	6	8	12	20	SS-10			34.8ft: light brownish gray (2.5Y6/2), little sand
43.1	38.0								Clayey SAND (SC), light gray (2.5Y7/2), very firm, moist, fine grained, little fines, no HCl reaction
41.3	39.8	8	10	13	23	SS-11			
36.3	44.8	7	11	10	21	SS-12			44.8ft: light yellowish brown (2.5Y6/3 to 6/4), wet, few carbonate nodules
31.3	49.8	6	12	10	22	SS-13			POORLY GRADED SAND with clay (SP-SC), brownish yellow (10YR6/6), to light gray (10YR7/2), very firm, wet, fine grained, few fines, no HCl reaction
26.3	54.8	14	10	18	28	SS-14			54.8ft: light brownish gray (2.5Y6/2), weak HCl

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project	**MACTEC PROJECT NO.:** 6468-07-1777	**GROUND WATER (ft)**	
BORING NO. B-2250	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 81.1 ft (NAVD88)	**NORTHING** 13,413,327 US ft (NAD83)	**EASTING** 2,600,234 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 151.3 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/J. Landeros	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/27/07	**COMPLETED** 11/28/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
24.9					Continued from previous page				
21.3	59.8								reaction, interbedded layers of fat clay with sand POORLY GRADED SAND with clay (SP-SC), brownish yellow (10YR6/6), to light gray (10YR7/2), very firm, wet, fine grained, few fines, no HCl reaction *(continued)*
		8	10	12	22	SS-15			FAT CLAY (CH), light brownish gray (2.5Y6/2), very stiff, moist, few sand, weak HCl reaction
16.3	64.8								
		6	8	8	16	SS-16			64.8ft: light olive gray (5Y6/2)
11.3	69.8								
		9	17	13	30	SS-17			69.8ft: strong brown (7.5YR5/6), hard, strong HCl reaction, trace carbonate nodules
6.3	74.8								
		6	8	11	19	SS-18			74.8ft: light brownish gray (2.5Y6/2), little sand, no HCl reaction
1.3	79.8								
		16	17	13	30	SS-19			Clayey SAND (SC), light gray (2.5YR7/2), very firm, moist, fine grained, some fines, no HCl reaction, trace carbonate nodules
-3.8	84.8								
		17	19	21	40	SS-20			POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR7/3), dense, wet, few fines, weak HCl reaction
-8.8	89.8								
		17	24	27	51	SS-21			Clayey SAND (SC), light gray (2.5YR7/2), very dense, moist, fine grained, some fines, strong HCl reaction, trace carbonate nodules
-13.8	94.8								
		39	50/0.2		89/0.7	SS-22			POORLY GRADED SAND with clay (SP-SC), pale brown (10YR6/3), very dense, wet, fine grained, little fines, weak HCl reaction, trace carbonate nodules
-18.8	99.8								
		29	50	50/0.3	100/0.8	SS-23			99.8ft: very pale brown (10YR7/4), , fine to coarse grained, few fines, no HCl reaction
-28.8	109.8								
		35	50/0.4		85/0.9	SS-24			

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2250	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: SPT**	**0 HR.** ND
GROUND SURFACE ELEV. 81.1 ft **(NAVD88)**	**NORTHING** 13,413,327 **US ft (NAD83)**	**EASTING** 2,600,234 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 151.3 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/J. Landeros	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/27/07	**COMPLETED** 11/28/07	**CASING DEPTH: N/A**	**BITS USED: 2 15/16" 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
-31.2					Continued from previous page				
									POORLY GRADED SAND (SP), light yellowish brown (10YR6/4), very dense, wet, fine to coarse grained, trace fines, weak HCl reaction, trace carbonate nodules *(continued)*
-34.0									115.0
									FAT CLAY (CH), light greenish gray (10Y7/1), very stiff, moist, no sand, trace carbonate nodules, black streaks
-38.8	119.8	10	10	19	29	SS-25			
-45.0									126.0
									POORLY GRADED SAND with clay (SP-SC), light brownish gray (2.5Y6/2), very dense, wet, fine grained, few fines, strong HCl reaction
-48.8	129.8	23	27	36	63.	SS-26			
-58.8	139.8	26	38	45	83.	SS-27			139.8ft: pale brown (10YR6/3)
-66.0									147.0
									FAT CLAY with sand (CH), light olive gray (5Y6/2), mottled yellowish brown (10YR5/6), very stiff, moist, little sand, strong HCl reaction, trace carbonate nodules
-68.8	149.8	10	10	16	26	SS-28A/B			
-69.8									150.8
-70.3									151.3
									POORLY GRADED SAND with clay (SP-SC), pale brown (10YR6/3), very firm, wet, fine grained, few fines, no HCl reaction
									Boring Terminated at Elevation -70.3 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBQ Date 11/11/11

Checked By RBA Date 12-1-2011

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST A. Osorio	
SITE DESCRIPTION Exelon COL Project	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2251	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.8 ft (NAVD88)	NORTHING 13,413,405 US ft (NAD83)	EASTING 2,600,298 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 210.0 ft	DRILL MACHINE CME-75	DRILLER: D. Nalls/B. Turner	HAMMER (ID) 140 lb. Auto (MEC 11)
DATE STARTED 12/3/07	COMPLETED 12/4/07	CASING DEPTH: 2.0 ft	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
80.8					Ground Surface				80.8 / 0.0
80.8	0.0	3	4	7	11	SS-1			Sandy LEAN CLAY (CL), black (2.5/N), stiff, moist, fine to medium grained sand, no HCl reaction, organics
77.3	3.5	2	3	5	8	SS-2			3.5ft: dark gray (4/N), firm, weak HCl reaction, trace carbonate nodules
74.8	6.0	2	3	5	8	SS-3			74.8 / 6.0 LEAN CLAY with sand (CL), greenish gray (10Y5/1), firm, moist, black and yellowish brown stains
72.3	8.5	4	7	10	17	SS-4			72.3 / 8.5 Silty, clayey SAND (SC-SM), yellowish brown (10YR5/4, 10YR5/6 and 10YR5/8), mottled greenish gray (10YR5/1), firm, moist, fine to medium grained sand, strong to weak HCl reaction
69.8	11.0	3	5	4	9	SS-5			69.8 / 11.0 LEAN CLAY with sand (CL), yellowish brown (10YR5/4), stiff, moist, fine to medium grained sand, organics
67.3	13.5	5	8	9	17	SS-6			67.3 / 13.5 LEAN CLAY (CL), yellowish brown (10YR5/4), very stiff, moist, fine to medium grained sand
62.3	18.5	4	4	5	9	SS-7			62.3 / 18.5 FAT CLAY (CH), yellowish brown (10YR5/4), stiff, moist, fine to medium grained sand, organics
57.3	23.5	3	6	7	13	SS-8			57.3 / 23.5 FAT CLAY with sand (CH), yellowish brown (10YR5/4), stiff, moist fine to medium grained sand
52.3	28.5	2	4	4	8	SS-9			52.3 / 28.5 LEAN CLAY with sand (CL), light greenish gray (10Y7/1), firm, moist, fine to medium grained sand, no to weak HCl reaction, organics
47.3	33.5	5	8	12	20	SS-10			47.3 / 33.5 Clayey SAND (SC), light greenish gray (10Y7/1), firm, moist, fine to medium grained sand
42.3	38.5	6	7	11	18	SS-11			38.5ft: organics
37.3	43.5	7	7	8	15	SS-12			43.5ft: fine to coarse grained sand, fine gravel (visual)
32.3	48.5	5	5	4	9	SS-13			48.5ft: loose, fine to medium grained sand (visual)
27.3	53.5	5	7	12	19	SS-14			53.5ft: firm (visual)

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 11/11/11

MACTEC

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST A. Osorio	
SITE DESCRIPTION Exelon COL Project	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2251	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.8 ft (NAVD88)	NORTHING 13,413,405 US ft (NAD83)	EASTING 2,600,298 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 210.0 ft	DRILL MACHINE CME-75	DRILLER: D. Nalls/B. Turner	HAMMER (ID) 140 lb. Auto (MEC 11)
DATE STARTED 12/3/07	COMPLETED 12/4/07	CASING DEPTH: 2.0 ft	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
24.7					Continued from previous page				
22.3	58.5								Clayey SAND (SC), light greenish gray (10Y7/1), firm, moist, fine to medium grained sand *(continued)*
		20	25	28	53	SS-15			22.3 — 58.5 Sandy LEAN CLAY (CL), light greenish gray (10Y7/1), hard, moist, fine to medium grained sand, no to weak HCl reaction
17.3	63.5								17.3 — 63.5
		17	8	9	17	SS-16			FAT CLAY (CH), greenish gray (10Y6/1), very stiff, moist, fine to medium sand, carbonate nodules, no HCl reaction
12.3	68.5								
		3	4	5	9	SS-17			68.5ft: gray (10YR6/1), stiff, yellowish brown stains, organics
7.3	73.5								7.3 — 73.5
		4	9	13	22	SS-18			Sandy LEAN CLAY (CL), gray (10YR6/1), very stiff, moist, fine to medium grained sand, no to weak HCl reaction
2.3	78.5								78.5ft: stiff, organics
		5	5	10	15	SS-19			
-2.7	83.5								-2.7 — 83.5
		8	11	12	23	SS-20			Clayey SAND (SC), light brownish gray (10YR6/2), very firm, moist, fine to coarse grained sand, carbonate nodules, no HCl reaction (visual)
-7.7	88.5								88.5ft: very dense, strong HCl reaction (visual)
		25	35	50/0.5	85/1.0	SS-21			
-12.7	93.5								93.5ft: fine gravel (visual)
		40	50/0.4		90/0.9	SS-22			
-17.7	98.5								98.5ft: 1.4'-thick interbedded layer of lean clay, light greenish gray (10Y7/1)
		45	50/0.5		95/1.0	SS-23			
-27.7	108.5								108.5ft: light brownish gray (10YR6/2) (visual)
		27	43	32	75	SS-24			

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 11/11/11

MACTEC

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST A. Osorio	
SITE DESCRIPTION Exelon COL Project	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2251	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.8 ft (NAVD88)	NORTHING 13,413,405 US ft (NAD83)	EASTING 2,600,298 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 210.0 ft	DRILL MACHINE CME-75	DRILLER: D. Nalls/B. Turner	HAMMER (ID) 140 lb. Auto (MEC 11)
DATE STARTED 12/3/07	COMPLETED 12/4/07	CASING DEPTH: 2.0 ft	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
-31.4					Continued from previous page				
									-32.7 / 113.5 FAT CLAY (CH), greenish gray (10Y6/1), very stiff, moist, fine to coarse grained sand, carbonate nodules, black and yellowish brown stains, no HCl reaction
-37.7	118.5	5	6	13	19	SS-25			
									-46.7 / 127.5 Clayey SAND (SC), gray (10YR6/1), very dense, moist, fine grained, strong HCl reaction (visual)
-47.7	128.5	27	25	50/0.4	75/0.5	SS-26			
-57.7	138.5	18	50	43	93	SS-27			138.5ft: very pale brown (10YR8/2), fine to medium grained sand, strong HCl reaction (visual)
									-64.2 / 145.0 Sandy LEAN CLAY (CL), very pale brown (10YR7/4), very stiff, moist, fine to medium grained sand, carbonate nodules, strong HCl reaction
-67.7	148.5	4	9	10	19	SS-28			
-77.7	158.5	18	42	50/0.4	92/0.5	SS-29			-77.7 / 158.5 POORLY GRADED SAND with silt (SP-SM), very pale brown (10YR8/2), very dense, fine to coarse grained sand, fine gravel (visual)

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 11/11/11

MACTEC

BECHTEL PROJECT NO.: 25352	COUNTY Victoria	GEOLOGIST A. Osorio	
SITE DESCRIPTION Exelon COL Project	MACTEC PROJECT NO.: 6468-07-1777	GROUND WATER (ft)	
BORING NO. B-2251	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR. ND
GROUND SURFACE ELEV. 80.8 ft (NAVD88)	NORTHING 13,413,405 US ft (NAD83)	EASTING 2,600,298 US ft (NAD83)	24 HR. ND
TOTAL DEPTH 210.0 ft	DRILL MACHINE CME-75	DRILLER: D. Nalls/B. Turner	HAMMER (ID) 140 lb. Auto (MEC 11)
DATE STARTED 12/3/07	COMPLETED 12/4/07	CASING DEPTH: 2.0 ft	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
-87.5					Continued from previous page				
-87.7	168.5	38	50/0.5		48/1.0	SS-30			POORLY GRADED SAND with silt (SP-SM), very pale brown (10YR8/2), very dense, fine to coarse grained sand, fine gravel (visual) *(continued)*
-97.7	178.5	27	27	34	61	SS-31			178ft: fine to coarse grained sand, fine gravel, carbonate nodules (visual)
-107.7	188.5	27	36	50/0.4	86/0.9	SS-32			-107.7 188.5 Clayey SAND (SC), very pale brown (10YR7/3), very dense, fine to medium grained sand, carbonate nodules, strong HCl reaction (visual)
-117.7	198.5	54	50/0.2		104/0.7	SS-33			
-127.7	208.5	25	26	29	55	SS-34			-127.7 208.5 Silty SAND (SM), very pale brown (10YR7/3), very dense, fine to coarse grained sand, fine gravel (visual) -129.2 210.0 Boring Terminated at Elevation -129.2 ft

EXELON COL BORE EXELON-2.GPJ EXELON COL.GDT 11/1/11

MACTEC

GEOTECHNICAL BORING LOG

Prepared By PM Date 6-12-08

Checked By KAW Date 7-10-08

SHEET 1 OF 3

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2252	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 80.7 ft (NAVD88)	**NORTHING** 13,413,478 US ft (NAD83)	**EASTING** 2,600,361 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 153.4 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/D. Juhan	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/7/07	**COMPLETED** 11/8/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
80.7					Ground Surface				
80.7	0.0	4	3	3	6	SS-1			Silty SAND (SM), grayish brown (10YR5/2), loose, moist, some fines, trace organics
77.2	3.5	10	17	13	30	SS-2A/B			FAT CLAY with sand (CH), dark gray (5YR4/1), very stiff, moist, little sand, trace carbonate nodules
74.7	6.0	4	7	13	20	SS-3			4.0-5.0ft: gray (7.5YR5/1), very stiff, dry, some sand, trace carbonate nodules
72.2	8.5	5	11	13	24	SS-4			6.0ft: light brownish gray (2.5YR6/2), very stiff, moist, little sand, trace carbonate and manganese nodules
69.7	11.0	7	14	17	31	SS-5			8.5ft: mottled light brownish gray (2.5YR6/2), to olive yellow (2.5YR6/6), wet to moist, few sand
67.2	13.5	5	7	10	17	SS-6			LEAN CLAY (CL), pale yellow (2.5Y7/3), mottled olive yellow (2.5Y6/8), hard, moist, few fine sand, trace carbonate nodules
61.0	19.7	4	5	6	11	SS-7			FAT CLAY (CH), reddish yellow (7.5YR6/6), mottled light greenish gray (5GY7/1), very stiff, moist, few sand, trace black staining, trace carbonate nodules
56.0	24.7	4	11	13	24	SS-8			19.7ft: stiff
51.0	29.7	3	5	7	12	SS-9			POORLY GRADED SAND with silt (SP-SM), light gray (10YR7/2), very firm, wet, fine grained, no HCl reaction
46.0	34.7	9	11	17	28	SS-10			Sandy FAT CLAY (CH), color not determined, stiff, moist, some fine sand
41.0	39.7	6	8	9	17	SS-11			LEAN CLAY with sand (CL), light greenish gray (10Y7/1), mottled strong brown (7.5YR5/8), very stiff, wet, some sand
36.0	44.7	6	12	14	26	SS-12			39.7ft: gray (10Y6/1), moist, trace black staining, few sand
31.0	49.7	7	10	9	19	SS-13			Clayey SAND (SC), light greenish gray (10Y7/1), very firm, moist, fine grained, some fines, trace carbonate nodules
26.0	54.7	6	12	22	34	SS-14			POORLY GRADED SAND with silt (SP-SM), light gray (10YR7/2), firm, wet, fine grained, few fines, trace black staining

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2252	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: SPT**	**0 HR.** ND
GROUND SURFACE ELEV. 80.7 ft (NAVD88)	**NORTHING** 13,413,478 US ft (NAD83)	**EASTING** 2,600,361 US ft (NAD83)	**24 HR.** ND
TOTAL DEPTH 153.4 ft	**DRILL MACHINE** CME-550	**DRILLER: L. Carter/D. Juhan**	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/7/07	**COMPLETED** 11/8/07	**CASING DEPTH: N/A**	**BITS USED: 2 15/16" 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
24.6					Continued from previous page				
21.0	59.7	50/0.2			50/0.2	SS-15			Sandy LEAN CLAY (CL), light brownish gray (2.5YR6/2), hard, wet, some fine sand, trace iron staining *(continued)* 59.7ft: no recovery
16.0	64.7	5	5	9	14	SS-16			16.0 — 64.7 FAT CLAY (CH), greenish gray (10Y6/1), stiff, moist, trace iron staining, trace carbonate nodules
11.0	69.7	5	6	8	14	SS-17			
6.0	74.7	4	5	8	13	SS-18			74.7ft: firm, little sand
1.0	79.7	8	9	11	20	SS-19			79.7ft: very stiff, some sand
-4.0	84.7	7	17	17	34	SS-20			-4.0 — 84.7 POORLY GRADED SAND (SP), light brownish gray (10YR6/2), dense, wet, trace fines, trace carbonate nodules
-9.1	89.8	30	35	46	81	SS-21			-9.1 — 89.8 POORLY GRADED SAND with silt (SP-SM), pale brown (10YR6/3), very dense, wet, few fines, trace carbonate nodules, trace black speckles
-14.1	94.8	15	35	50	85	SS-22A/B			-14.1 — 94.8 -14.9 — 95.6 FAT CLAY (CH), light greenish gray (10YR7/1), hard, moist, trace carbonate nodules, few sand POORLY GRADED SAND with silt (SP-SM), light gray (10YR7/2), very dense, wet, few fines, trace carbonate nodules and black specks
-19.1	99.8	22	48	60/0.1	108/0.6	SS-23			-19.1 — 99.8 POORLY GRADED SAND with clay (SP-SC), very pale brown (10YR8/3), very dense, wet, few fines, increasing clay with depth, trace feldspar and carbonate nodules
-29.1	109.8	30	35	21	56	SS-24			-29.1 — 109.8 POORLY GRADED SAND (SP), very pale brown (10YR7/4), very dense, wet, trace fines, trace feldspar grains, trace black grains

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

MACTEC

BECHTEL PROJECT NO.: 25352	**COUNTY** Victoria	**GEOLOGIST** L. Bisson	
SITE DESCRIPTION Exelon COL Project (Victoria Site)	**MACTEC PROJECT NO.: 6468-07-1777**	**GROUND WATER (ft)**	
BORING NO. B-2252	**DRILL METHOD:** Mud Rotary	**SAMPLE METHODS:** SPT	**0 HR.** ND
GROUND SURFACE ELEV. 80.7 ft **(NAVD88)**	**NORTHING** 13,413,478 **US ft (NAD83)**	**EASTING** 2,600,361 **US ft (NAD83)**	**24 HR.** ND
TOTAL DEPTH 153.4 ft	**DRILL MACHINE** CME-550	**DRILLER:** L. Carter/D. Juhan	**HAMMER (ID)** 140 lb. Auto (MEC 03)
DATE STARTED 11/7/07	**COMPLETED** 11/8/07	**CASING DEPTH:** N/A	**BITS USED:** 2 15/16" 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
-31.5					Continued from previous page				
									POORLY GRADED SAND (SP), very pale brown (10YR7/4), very dense, wet, trace fines, trace feldspar grains, trace black grains *(continued)*
-39.1	119.8	10	8	15	23	SS-25			-39.1 119.8 FAT CLAY (CH), light gray (2.5Y7/2), very stiff, moist, trace carbonate nodules
-49.1	129.8	11	17	22	39	SS-26			-49.1 129.8 POORLY GRADED SAND with silt (SP-SM), light gray (10YR7/2), dense, wet, few fines, weak HCl reaction, trace carbonate nodules
-59.1	139.8	50/0.5			50/0.5	SS-27			139.8ft: no recovery, very dense
-64.1	144.8	5	7	9	16	SS-28			-64.1 144.8 FAT CLAY (CH), light yellowish brown (10YR6/4), very stiff, moist, trace carbonate and manganese nodules
-69.1	149.8	5	7	9	16	SS-29			149.8ft: no recovery due to broken catcher. Driller assumes clay as bit was plugged up.
-71.2	151.9	5	7	12	19	SS30			151.9ft: weak HCl reaction
									-72.7 153.4 Boring Terminated at Elevation -72.7 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 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-2253	**DRILL METHOD: Mud Rotary**	**SAMPLE METHODS: SPT**	**0 HR.** ND
GROUND SURFACE ELEV. 80.9 ft **(NAVD88)**	**NORTHING** 13,413,588 **US ft (NAD83)**	**EASTING** 2,600,485 **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 11/7/07	**COMPLETED** 11/8/07	**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
80.9					Ground Surface				80.9 / 0.0
80.9	0.0	3	3	4	7	SS-1			LEAN CLAY with sand (CL), dark gray (2.5Y4/1), firm, moist, little sands, organics
77.4	3.5	3	3	4	7	SS-2			3.5ft: gray (2.5Y5/1), trace roots, strong HCl reaction, carbonate nodules
74.9	6.0	4	5	7	12	SS-3			6.0ft: light gray (5Y7/2), stiff, little sand, carbonate nodules
72.4	8.5	4	8	8	16	SS-4			8.5ft: light yellowish brown (10YR6/4), very stiff, trace lignite
69.9	11.0	9	12	14	26	SS-5			11.0ft: mottled, thinly laminated
67.4	13.5	7	7	7	14	SS-6			13.5ft: brownish yellow (10YR6/6), mottled light greenish gray (10Y7/1), stiff
62.4	18.5	4	4	7	11	SS-7			62.4 / 18.5 FAT CLAY (CH), brownish yellow (10YR6/6), mottled pale yellow (5Y8/2), stiff, moist, few sands, strong HCl reaction, trace organics
57.4	23.5	4	5	8	13	SS-8			23.5ft: light yellowish brown (10YR6/4),
52.4	28.5	5	7	10	17	SS-9			28.5ft: very stiff, little sand, pale brown (10YR7/3)
47.4	33.5	6	8	10	18	SS-10			33.5ft: brownish yellow (10YR6/6),
42.4	38.5	4	5	8	13	SS-11			38.5ft: stiff, organics
37.4	43.5	6	8	10	18	SS-12			43.5ft: very pale brown (10YR 7/3), very stiff, some sand, carbonate nodules
32.4	48.5	9	15	10	25	SS-13			48.5ft: iron staining, 0.2'-thick lense of coarse sand and gravel
27.4	53.5	7	10	12	22	SS-14			27.4 / 53.5 Clayey SAND (SC), light gray (10YR7/2), very firm, moist, some fines, weak HCl reaction

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