



GEOTECHNICAL BORING LOG

Prepared By WSD Date 8-10-09Checked By KAW Date 8-10-09

SHEET 1 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: B. Mabie								
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS						GROUND WATER (ft)								
BORING NO.: B-3120		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND								
GROUND SURFACE ELEV.: 80.0 ft (NAVD88)		NORTHING: 13,412,271 US ft (NAD83)		EASTING: 2,599,685 US ft (NAD83)		24 HR. ND								
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 550		DRILLER: L. Carter (MACTEC ATL)		HAMMER (ID): 140 lb. Auto (CME-08)								
DATE STARTED: 1/26/09		COMPLETED: 1/27/09		CASING DEPTH: 5.0 ft		BITS USED: 2 15/16" Drag Bit								
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100				
80.0					Ground Surface								80.0	0.0
Drill without sampling from 0.0 - 148.5 feet.														

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09

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EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL GDT 8/10/09



SHEET 3 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: B. Mable							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft) 0 HR. ND 24 HR. ND						
BORING NO.: B-3120		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT									
GROUND SURFACE ELEV.: 80.0 ft (NAVD88)		NORTHING: 13,412,271 US ft (NAD83)		EASTING: 2,599,685 US ft (NAD83)									
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 550		DRILLER: L. Carter (MACTEC ATL)		HAMMER (ID): 140 lb. Auto (CME-08)							
DATE STARTED: 1/26/09		COMPLETED: 1/27/09		CASING DEPTH: 5.0 ft		BITS USED: 2 15/16" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				
-32.2					Continued from previous page								
-68.5	148.5	7	8	11						SS-1			Drill without sampling from 0.0 - 148.5 feet. (continued)
-78.5	158.5	8	10	11						SS-2			146.0 to 146.5 ft: hard drilling
													CLAYEY SAND (SC), light gray (10YR 7/2), reddish yellow (7.5YR 6/6), firm, wet, fine grained, little fines, weak HCl reaction
													FAT CLAY (CH), light gray (10YR 7/2) mottled reddish yellow (7.5YR 6/6), very stiff, moist, calcium carbonate nodules, caliche, black staining

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



SHEET 4 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: B. Mable							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3120		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 80.0 ft (NAVD88)		NORTHING: 13,412,271		US ft (NAD83)		EASTING: 2,599,685 US ft (NAD83)							
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 550		DRILLER: L. Carter (MACTEC ATL)		HAMMER (ID): 140 lb. Auto (CME-08)							
DATE STARTED: 1/26/09		COMPLETED: 1/27/09		CASING DEPTH: 5.0 ft		BITS USED: 2 15/16" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				
-88.3					Continued from previous page								
-88.5	158.5	18	16	10						SS-3			POORLY GRADED SAND (SP), very pale brown (10YR 7/3), very firm, wet, fine to coarse grained, trace gravel, strong HCl reaction, calcium carbonate nodules 171.5 - 173.0 ft: hard drilling, rig chatter
-98.5	178.5	19	23	30						SS-4			178.5 ft: pale yellow (2.5YR 8/3), very dense, weak HCl reaction, trace calcium carbonate fragments
-108.5	188.5	40	49	43						SS-5			188.5 ft: very pale brown (10YR 7/3), trace calcium carbonate nodules 195.0 - 196.0 ft: hard drilling, rig chatter
-118.5	198.5	4	14	8						SS-6A/B/C			-118.5 -118.5 -119.5 -120.0 FAT CLAY (CH), light gray (10YR 7/2), reddish yellow (7.5YR 6/6), very stiff, moist, small pieces of calcium carbonate, black staining POORLY GRADED SAND with silt (SP-SM), very pale brown (10YR 7/3), very firm, wet, fine grained, few fines, strong HCl reaction, no calcium carbonate nodules observed FAT CLAY (CH), light gray (10YR 7/2) mottled reddish yellow (7.5YR 6/6), very stiff, moist, few fine grained sand, weak HCl reaction, orange staining Boring Terminated at Elevation -120.0 ft

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



GEOTECHNICAL BORING LOG

Prepared By WSP Date 8-10-09Checked By KAW Date 8-10-09

SHEET 1 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: A. Mwembeshi								
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)							
BORING NO.: B-3121		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND						
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,286		US ft (NAD83)		EASTING: 2,599,733 US ft (NAD83)	24 HR.	ND						
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 75 Truck		DRILLER: J. Cook (MILLER)			HAMMER (ID): 140 lb. Auto (100)							
DATE STARTED: 1/11/09		COMPLETED: 1/14/09		CASING DEPTH: 3.6 ft			BITS USED: 2 15/16" Wing Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI			
80.1					Ground Surface							80.1	0.0	
80.1	0.0	1	1	2	● 3					SS-1		FAT CLAY with sand (CH), black (2.5Y 2.5/1), soft, moist, little fine grained sand, few gravel, no HCl reaction		
76.6	3.5	2	4	4	● 5					SS-2		3.5 ft: gray (10YR 5/1), firm, dry, weak HCl reaction		
74.1	6.0	2	5	6	● 11					SS-3		6.0 ft: light gray (5Y 7/2), stiff, moist, strong HCl reaction, few calcium carbonate nodules		
71.6	8.5	2	5	5	● 10					SS-4		71.6	8.5	FAT CLAY (CH), very pale brown (10YR 8/3), stiff, moist, trace sand, strong HCl reaction, calcium carbonate nodules
69.2	10.9	5	6	8	● 14					SS-5		11.0 ft: greenish gray (10Y 6/1), few fine grained sand, weak HCl reaction, calcium carbonate fragments		
66.7	13.4	3	5	6	● 11					SS-6		13.4 ft: trace sand		
61.6	18.5	5	7	9	● 16					SS-7		18.0 ft: light gray (5Y 7/1), strong brown (7.5YR 5/6), very stiff		
56.6	23.5	4	4	7	● 11					SS-8		23.5 ft: stiff, black stains, no calcium carbonate nodules observed		
51.7	28.4	3	5	7	● 12					SS-9				
46.7	33.4	4	6	8	● 14					SS-10				
41.6	38.5	3	5	7	● 12					SS-11		38.5 ft: no HCl reaction		
36.4	43.7	3	6	8	● 14					SS-12		43.7 ft: trace fine grained sand, weak HCl reaction, trace calcium carbonate nodules		
31.6	48.5	4	6	8	● 14					SS-13		48.5 ft: yellowish brown (10YR 5/4)		
26.6	53.5	4	9	12	● 21					SS-14		26.6	53.5	SANDY FAT CLAY (CH), greenish gray (10Y 6/1), very stiff, moist, some fine grained sand, strong HCl reaction, calcium carbonate fragments

EXELON COL BORSE VICTORIA PHASE III GPT EXELON COL GDT 8/10/09



SHEET 2 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: A. Mwembeshi																
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)															
BORING NO.: B-3121		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND														
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,286		US ft (NAD83)		EASTING: 2,599,733 US ft (NAD83)	24 HR.	ND														
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 75 Truck		DRILLER: J. Cook (MILLER)			HAMMER (ID): 140 lb. Auto (100)															
DATE STARTED: 1/11/09		COMPLETED: 1/14/09		CASING DEPTH: 3.6 ft			BITS USED: 2 15/16" Wing Bit															
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION										
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI											
24.0					Continued from previous page																	
21.6	58.5	10	12	18									21.6	58.5	SANDY FAT CLAY (CH), greenish gray (10Y 6/1), very stiff, moist, some fine grained sand, strong HCl reaction, calcium carbonate fragments (continued)							
16.6	63.5	4	5	8											FAT CLAY (CH), strong brown (7.5YR 5/6), very stiff, moist, no HCl reaction, lenses of light gray (5Y 7/1), silty, fine sand, wet							
11.8	68.3	5	6	9											63.5 ft: greenish gray (5GY 6/1), stiff, trace sand, strong HCl reaction, calcium carbonate fragments							
6.5	73.6	4	7	14											68.3 ft: brown (7.5YR 5/4), with a few intermittent lenses of silty, fine sand							
1.6	78.5	5	10	12											8.1	72.0	SILTY SAND (SM), light gray (5Y 7/2), very firm, moist, fine grained, some fines, strong HCl reaction, calcium carbonate fragments					
-3.4	83.5	50/0.2															80.0 - 81.0 ft: hard drilling, rig chatter					
-8.5	88.6	29	50/0.2														83.0 - 85.5 ft: hard drilling, rig chatter					
-13.4	93.5	28	42	50													83.5 ft: very dense, no recovery					
-18.3	98.4	42	40	39													-8.5	88.6	SANDY SILT (ML), white (5Y 6/1), hard, moist, some fine grained sand, strong HCl reaction, calcium carbonate fragments			
-28.3	108.4	9	9	12														-13.4	93.5	POORLY GRADED SAND with silt (SP-SM), very pale brown (10YR 8/2), very dense, wet, coarse grained, few fines, weak HCl reaction		
																				98.4 ft: moist, medium to coarse grained, trace gravel, weak HCl reaction, calcium carbonate fragments		
																				-24.9	105.0	FAT CLAY (CH), strong brown (7.5YR 5/6), gray (5Y 6/1), very stiff, moist, trace sand, weak HCl reaction, calcium carbonate fragments

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



SHEET 3 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: A. Mwembeshi							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3121		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND					
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,286		US ft (NAD83)		EASTING: 2,599,733 US ft (NAD83)		24 HR.	ND				
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 75 Truck		DRILLER: J. Cook (MILLER)			HAMMER (ID): 140 lb. Auto (100)						
DATE STARTED: 1/11/09		COMPLETED: 1/14/09		CASING DEPTH: 3.6 ft			BITS USED: 2 15/16" Wing Bit						
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION	
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			NO.
-32.1					Continued from previous page								
-38.4	118.5	4	7	10							SS-25		FAT CLAY (CH), strong brown (7.5YR 5/6), gray (5Y 6/1), very stiff, moist, trace sand, weak HCl reaction, calcium carbonate fragments (continued)
-48.4	128.5	9	10	12							SS-26		FAT CLAY with sand (CH), light gray (5Y 7/1), very stiff, moist, little fine grained sand, no HCl reaction
-58.4	138.5	9	16	26							SS-27		POORLY GRADED SAND with silt (SP-SM), light gray (5Y 7/1), very firm, moist, medium to coarse grained, few fines, no HCl reaction
-68.5	148.6	10	10	15							SS-28		138.5 ft: dense, wet, fine to coarse grained
-78.4	158.5	10	11	13							SS-29		148.6 ft: pale yellow (2.5YR 8/3), very firm, fine grained, 1/8-inch thick lens of soft, fat clay
-88.3	168.4												FAT CLAY (CH), strong brown (7.5YR 5/6), light gray (5Y 7/1), very stiff, moist to dry, trace sand, strong HCl reaction, calcium carbonate fragments
													POORLY GRADED SAND with silt and gravel (SP-SM), pale brown (10YR 6/3), very dense, wet, medium to coarse grained, little gravel, few fines, weak HCl reaction

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



GEOTECHNICAL BORING LOG

Prepared By WED Date 8-10-09Checked By KAW Date 8-10-09

SHEET 1 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: B. Mable										
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)									
BORING NO.: B-3122		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND								
GROUND SURFACE ELEV.: 80.0 ft (NAVD88)		NORTHING: 13,412,236		US ft (NAD83)		EASTING: 2,599,763 US ft (NAD83)	24 HR.	ND								
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 550		DRILLER: L. Carter (MACTEC ATL)			HAMMER (ID): 140 lb. Auto (CME-08)									
DATE STARTED: 1/11/09		COMPLETED: 1/12/09		CASING DEPTH: 5.0 ft			BITS USED: 2 15/16" Drag Bit									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT						SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100						
80.0					Ground Surface									80.0	0.0	
80.0	0.0	4	8	5							SS-1			80.0	0.0	LEAN CLAY with sand (CL), very dark brown (10YR 2/2), stiff, dry to moist, little fine grained sand, no HCl reaction, organics, roots and grass
76.5	3.5	5	7	8							SS-2			76.5	3.5	FAT CLAY with sand (CH), dark gray (10YR 4/1), stiff, moist, little fine grained sand, weak HCl reaction, calcium carbonate nodules
74.0	6.0	5	6	6							SS-3			74.0	6.0	FAT CLAY (CH), light gray (10YR 7/2), stiff, moist, few fine grained sand, weak HCl reaction, calcium carbonate nodules, black staining
71.5	8.5	5	8	9							SS-4					8.5 ft: very stiff
69.0	11.0	6	9	10							SS-5					11.0 ft: orange staining
66.5	13.5	6	7	8							SS-6					13.5 ft: stiff
61.5	18.5	4	5	7							SS-7					18.5 ft: reddish yellow (7.5YR 6/6), trace calcium carbonate nodules
56.5	23.5	4	5	9							SS-8					23.5 ft: some calcium carbonate nodules, slickensides
51.5	28.5	4	7	8							SS-9					28.5 ft: stiff, weak HCl reaction, no calcium carbonate nodules observed
46.5	33.5	5	7	10							SS-10					33.5 ft: very stiff, no slickensides observed
41.5	38.5	4	5	7							SS-11					38.5 ft: stiff, slickensides
36.5	43.5	3	6	6							SS-12					43.5 ft: trace calcium carbonate nodules
31.5	48.5	6	5	8							SS-13					48.5 ft: no slickensides observed
26.5	53.5	6	6	9							SS-14					53.5 ft: low fine grained sand

EXELON COL BORE VICTORIA PHASE III GP1 EXELON COL GDT 8/10/09



SHEET 2 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: B. Mabie							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS						GROUND WATER (ft)							
BORING NO.: B-3122		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 80.0 ft (NAVD88)		NORTHING: 13,412,236		US ft (NAD83)		EASTING: 2,599,763 US ft (NAD83)							
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 550		DRILLER: L. Carter (MACTEC ATL)		HAMMER (ID): 140 lb. Auto (CME-08)							
DATE STARTED: 1/11/09		COMPLETED: 1/12/09		CASING DEPTH: 5.0 ft		BITS USED: 2 15/16" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
23.9					Continued from previous page								
21.5	58.5	12	16	17									FAT CLAY (CH), light gray (10YR 7/2), stiff, moist, few fine grained sand, weak HCl reaction, calcium carbonate nodules, black staining (continued)
16.5	63.5	6	5	6									SILTY SAND (SM), light gray (10YR 7/2), dense, wet, fine grained, some fines, no HCl reaction
11.5	68.5	6	9	12									SANDY FAT CLAY (CH), light gray (10YR 7/2), stiff, moist, some fine grained sand, no HCl reaction
6.5	73.5	9	12	15									FAT CLAY (CH), reddish yellow (7.5YR 6/6), stiff, moist, few fine grained sand, weak HCl reaction, calcium carbonate nodules
1.5	78.5	11	8	19									SANDY FAT CLAY (CH), light gray (10YR 7/2), very stiff, wet, some fine grained sand, weak HCl reaction, calcium carbonate nodules
0.0	80.0	12	13	11									SILTY SAND (SM), very pale brown (10YR 7/3), very firm, wet, fine grained, some fines, weak HCl reaction
-3.5	83.5	10	14	14									78.5 ft: no recovery
-8.5	88.5	17	36	50/0.3									80.0 ft: weak HCl reaction on sand, strong HCl reaction on caliche, caliche
-13.5	93.5	14	18	19									83.5 ft: little fines, weak HCl reaction
-18.5	98.5	49	48	55/0.5									FAT CLAY (CH), light gray (10YR 7/2), very stiff, moist, few fine grained sand, strong HCl reaction, calcium carbonate nodules, orange staining
-28.5	108.5	6	11	13									88.5 ft: hard, black staining
													POORLY GRADED SAND (SP), very pale brown (10YR 7/3), dense, wet, fine grained, trace to few fines, no HCl reaction
													98.5 ft: very pale brown (10YR 8/4), very dense, fine to coarse grained
													FAT CLAY (CH), light gray (10YR 7/2), reddish yellow (7.5YR 6/6), very stiff, moist, weak HCl reaction, black staining, calcium carbonate nodules

EXELON COL BORE VICTORIA PHASE III GPF EXELON COL GDT 8/10/09



SHEET 3 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: B. Mable						
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, including UHS							GROUND WATER (ft)					
BORING NO.: B-3122		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND						
GROUND SURFACE ELEV.: 80.0 ft (NAVD88)		NORTHING: 13,412,236		US ft (NAD83)		EASTING: 2,599,763 US ft (NAD83)						
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 550		DRILLER: L. Carter (MACTEC ATL)		HAMMER (ID): 140 lb. Auto (CME-08)						
DATE STARTED: 1/11/09		COMPLETED: 1/12/09		CASING DEPTH: 5.0 ft		BITS USED: 2 15/16" Drag Bit						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80			
-32.2					Continued from previous page							
-38.5	118.5	6	8	11	19					SS-26		FAT CLAY (CH), light gray (10YR 7/2), reddish yellow (7.5YR 6/6), very stiff, moist, weak HCl reaction, black staining, calcium carbonate nodules (continued)
-48.5	128.5	17	27	32	59					SS-27		118.5 ft: few fine grained sand, orange staining
-58.5	138.5	11	17	25	42					SS-28		POORLY GRADED SAND (SP), light gray (10YR 7/2), very dense, wet, fine to medium grained, trace to few fines, no HCl reaction
-68.5	148.5	5	7	11	18					SS-29		138.5 ft: dense, fine grained, clay nodules
-78.5	158.5	8	10	11	21					SS-30		68.5 ft: FAT CLAY (CH), light gray (10YR 7/2), very stiff, moist, weak HCl reaction, calcium carbonate nodules, black and orange staining
												158.5 ft: reddish yellow (7.5YR 6/6)

EXELON COL BORE VICTORIA PHASE III GPF EXELON COL GDT 8/10/09



SHEET 4 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: B. Mabie													
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)												
BORING NO.: B-3122		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND													
GROUND SURFACE ELEV.: 80.0 ft (NAVD88)		NORTHING: 13,412,236		US ft (NAD83)		EASTING: 2,599,763 US ft (NAD83)													
TOTAL DEPTH: 200.0 ft		DRILL MACHINE: CME 550		DRILLER: L. Carter (MACTEC ATL)		HAMMER (ID): 140 lb. Auto (CME-08)													
DATE STARTED: 1/11/09		COMPLETED: 1/12/09		CASING DEPTH: 5.0 ft		BITS USED: 2 15/16" Drag Bit													
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION						
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100									
-88.3					Continued from previous page														
-88.5	168.5	17	24	43											SS-31		-88.5	POORLY GRADED SAND (SP), light gray (10YR 7/2), very dense, wet, fine grained, trace to few fines, weak HCl reaction	
-98.5	178.5	19	37	50/0.4											SS-32		178.5 ft	very pale brown (10YR 8/4), fine to coarse grained	
-108.5	188.5	50/0.3													SS-33		188.5 ft	fine to medium grained	
-118.5	198.5	5	7	17											SS-34		-118.5	FAT CLAY (CH), light gray (10YR 7/2), reddish yellow (7.5YR 6/6), very stiff, moist, few fine grained sand, weak HCl reaction, trace carbonate nodules	
																	-120.0	200.0	Boring Terminated at Elevation -120.0 ft

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



GEOTECHNICAL BORING LOG

Prepared By WSD Date 11-10-09Checked By RAK Date 11/10/09

SHEET 1 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Moore								
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)							
BORING NO.: B-3123		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND						
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,304		US ft (NAD83)		EASTING: 2,599,851 US ft (NAD83)		24 HR.	ND					
TOTAL DEPTH: 404.0 ft		DRILL MACHINE: CME 750			DRILLER: G. Bilbrey (MILLER)		HAMMER (ID): 140 lb. Auto (07)							
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 4.0 ft			BITS USED: 3 7/8" Step Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI			
80.1					Ground Surface							80.1	0.0	
80.1	0.0	4	5	7	●12					SS-1		FAT CLAY (CH), dark gray (5Y 4/1), stiff, moist, few white calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules		
76.6	3.5	3	4	8	●12					SS-2		3.5 ft: gray (5Y 6/1), black staining		
74.1	6.0	3	5	6	●11					SS-3		6.0 ft: pale yellow (5Y 7/3)		
71.6	8.5	3	6	6	●12					SS-4		8.5 ft: very pale brown (10YR 8/2)		
69.1	11.0	5	6	8	●14					SS-5		11.0 ft: mottled yellow (10YR 7/6)		
66.6	13.5	4	5	7	●12					SS-6				
62.6	17.5	4	5	7	●12					SS-7		17.5 ft: light gray (5YR 7/2)		
57.6	22.5	3	6	7	●13					SS-8		22.5 ft: pale yellow (5Y 8/2) mottled brownish yellow (10YR 6/6)		
52.6	27.5	4	6	8	●14					SS-9		27.5 ft: brownish yellow (10YR 6/6) mottled with very pale brown (10YR 8/2), no calcium carbonate nodules observed, strong HCl reaction		
47.6	32.5	4	7	9	●16					SS-10		32.5 ft: very stiff, trace organic matter		
42.6	37.5	8	9	17	●26					SS-11		37.5 ft: very pale brown (10Y 7/3) mottled brownish yellow (10YR 6/6), trace calcium carbonate nodules, strong HCl reaction on caliche 37.9-38.1 ft: caliche layer		
37.6	42.5	11	12	16	●28					SS-12		37.6	42.5	FAT CLAY with sand (CH), brownish yellow (10YR 6/6) mottled pale yellow (5Y 8/2), very stiff, moist, little fine grained sand, strong HCl reaction
32.6	47.5	25	24	28	●52					SS-13		47.5 ft: hard 48.0 - 48.4 ft: caliche layer		
27.6	52.5	15	19	18	●37					SS-14		52.5 ft: light gray (5Y 7/2) mottled brownish yellow (10YR 6/6), few calcium carbonate nodules, sand lenses		

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09



SHEET 2 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Moore										
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS						GROUND WATER (ft)										
BORING NO.: B-3123		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND										
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,304		US ft (NAD83)		EASTING: 2,599,851 US ft (NAD83)										
24 HR. ND																
TOTAL DEPTH: 404.0 ft		DRILL MACHINE: CME 750		DRILLER: G. Bilbrey (MILLER)		HAMMER (ID): 140 lb. Auto (07)										
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 4.0 ft		BITS USED: 3 7/8" Step Drag Bit										
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION				
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100						
24.0					Continued from previous page											
22.6	57.5	11	11	17									22.6	57.5	SILTY SAND (SM), very pale brown (10YR 7/4), very firm, wet, fine to medium grained, trace coarse sand and fine gravel, trace calcium carbonate nodules, strong HCl reaction	57.5
													20.1	60.0	FAT CLAY with sand (CH), very pale brown (10YR 7/3) mottled brownish yellow (10YR 6/6), stiff, moist, fine grained sand, strong HCl reaction, trace organic matter	60.0
17.6	62.5	7	5	8												
													12.6	67.5	FAT CLAY (CH), pale yellow (5Y 8/2) mottled yellow (10YR 7/6), stiff, moist, few fine grained sand, strong HCl reaction	67.5
12.6	67.5	6	7	8												
													7.6	72.5	LEAN CLAY with sand (CL), pale yellow (5Y 8/2), very stiff, moist, fine grained sand, strong HCl reaction	72.5
7.6	72.5	11	12	17												
													3.6	76.5	SILTY SAND (SM), pale yellow (5Y 8/2), dense, wet, fine to medium grained, trace coarse sand and fine gravel, strong HCl reaction, caliche layer 78.5 to 80.0 feet	76.5
2.6	77.5	11	12	29												
-2.4	82.5	100/0.3														
-7.4	87.5	16	22	50/0.3												
-12.4	92.5	36	23	45												
-17.4	97.5	100/0.5														
-22.4	102.5	30	50	55/0.5												

EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL.GDT 10/20/09



BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Moore							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3123		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,304		US ft (NAD83)		EASTING: 2,599,851 US ft (NAD83)							
TOTAL DEPTH: 404.0 ft		DRILL MACHINE: CME 750		DRILLER: G. Bilbrey (MILLER)		HAMMER (ID): 140 lb. Auto (07)							
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 4.0 ft		BITS USED: 3 7/8" Step Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
-32.1					Continued from previous page								
-32.4	112.5	7	8	12	●20					SS-25		FAT CLAY (CH), pale yellow (5Y 8/2), brownish yellow (10YR 6/6), very stiff, moist, trace calcium carbonate nodules, strong HCl reaction (continued)	
-42.4	122.5	5	8	10	●18					SS-26		122.5 ft: light gray (5Y 7/2) mottled brownish yellow (10YR 6/6), trace fine grained sand, black streaks, no calcium carbonate nodules observed, no HCl reaction noted	
-52.4	132.5	11	24	36	●60					SS-27		-52.4 SILTY SAND (SM), light gray (10YR 7/2), very dense, wet, fine to medium grained, trace fine gravel, (up to 1/4-inch), no HCl reaction 132.5	
-62.4	142.5	12	20	17	●37					SS-28		-62.4 CLAYEY SAND (SC), light gray (10YR 7/2), dense, moist, fine grained, strong HCl reaction 142.5	
-72.4	152.5	10	30	22	●32					SS-29		-72.4 POORLY GRADED SAND with silt (SP-SM), light gray (10YR 7/2), very dense, wet, fine to medium grained, no HCl reaction 152.5	
-82.4	162.5	20	35	43	●78					SS-30		162.5 ft: very pale brown (10YR 7/3), strong HCl reaction, little white calcium carbonate grains	

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09



BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Moore						
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)					
BORING NO.: B-3123		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND						
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,304		US ft (NAD83)		EASTING: 2,599,851 US ft (NAD83)						
TOTAL DEPTH: 404.0 ft		DRILL MACHINE: CME 750		DRILLER: G. Bilbrey (MILLER)		HAMMER (ID): 140 lb. Auto (07)						
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 4.0 ft		BITS USED: 3 7/8" Step Drag Bit						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI	
-88.2					Continued from previous page							
-92.4	172.5	25	35	42							SS-31	POORLY GRADED SAND with silt (SP-SM), light gray (10YR 7/2), very dense, wet, fine to medium grained, no HCl reaction (continued)
												172.5 ft: fine grained, strong HCl reaction, no calcium carbonate nodules observed
-102.4	182.5	26	80	100/0.5							SS-32A/B	181.0 to 182.5 ft: hard drilling, rig chatter
												FAT CLAY (CH), light gray (5Y 7/2) mottled very pale brown (10YR 7/4), hard, moist, few fine grained sand, caliche layer from 182.5 to 182.6 feet, strong HCl reaction
-112.4	192.5	20	31	41							SS-33	SILTY SAND (SM), very pale brown (10YR 8/2), very dense, moist, fine to medium grained, strong HCl reaction
												192.5 ft: light gray (10YR 7/2), wet
-122.4	202.5	10	13	25							SS-34	200.5 - 202.0 ft: rig chatter
												CLAYEY SAND (SC), light gray (10YR 7/2), dense, wet, fine grained, strong HCl reaction
-132.4	212.5	8	12	13							SS-35	208.5 ft: FAT CLAY (CH), light gray (10YR 7/2) mottled brownish yellow (10YR 6/6), very stiff, moist, trace white calcium carbonate nodules, strong HCl reaction
												217.0 to 218.0 ft: rig chatter
-142.4	222.5	24	30	38							SS-36	CLAYEY SAND (SC), light gray (10YR 7/2) mottled yellow (10YR 7/6), very dense, moist, fine grained, strong HCl reaction

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09



SHEET 5 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Moore						
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)					
BORING NO.: B-3123		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND						
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,304		US ft (NAD83)		EASTING: 2,599,851 US ft (NAD83)						
TOTAL DEPTH: 404.0 ft		DRILL MACHINE: CME 750		DRILLER: G. Bilbrey (MILLER)		HAMMER (ID): 140 lb. Auto (07)						
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 4.0 ft		BITS USED: 3 7/8" Step Drag Bit						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI	
-144.3					Continued from previous page							
-152.4	232.5	6	10	15	25					SS-37		CLAYEY SAND (SC), light gray (10YR 7/2) mottled yellow (10YR 7/6), very dense, moist, fine grained, strong HCl reaction (continued)
-162.4	242.5	6	12	15	27					SS-38		231.5 to 232.5 ft: hard drilling, rig chatter FAT CLAY (CH), light gray (5Y 7/2) mottled light yellowish brown (10YR 6/4), very stiff, moist, few fine grained sand, strong HCl reaction
-172.4	252.5	29	25	36	61					SS-39		237.0 to 238.5 ft: rig chatter 242.5 ft: mottled brownish yellow (10YR 6/6), fine grained sand
-182.4	262.5	22	29	33	62					SS-40		249.5 ft: rig chatter, possible sand
-192.4	272.5	17	31	29	80					SS-41A/B		252.5 ft: strong HCl reaction 272.5 ft: very pale brown (10YR 8/2), moist, fine to medium grained, no HCl reaction
												FAT CLAY with sand (CH), light gray (10YR 7/2), hard, moist, little fine grained sand, no HCl reaction

EXELON COL BORE VICTORIA PHASE III GCPJ EXELON COL GDT 10/20/09



SHEET 7 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Moore							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3123		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND					
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,304		US ft (NAD83)		EASTING: 2,599,851 US ft (NAD83)		24 HR.	ND				
TOTAL DEPTH: 404.0 ft		DRILL MACHINE: CME 750		DRILLER: G. Bilbrey (MILLER)			HAMMER (ID): 140 lb. Auto (07)						
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 4.0 ft			BITS USED: 3 7/8" Step Drag Bit						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI		
-256.5					Continued from previous page								
													SILTY SAND (SM), very pale brown (10YR 7/3), very dense, wet, fine grained, strong HCl reaction (continued)
-262.4	342.5	12	18	24						SS-48			FAT CLAY (CH), light gray (10YR 7/2) mottled yellow (10YR 7/6), hard, moist, trace calcium carbonate nodules, strong HCl reaction
-272.4	352.5	23	43	46						SS-49			CLAYEY SAND (SC), very pale brown (10YR 7/3), very dense, wet, fine grained, strong HCl reaction
-282.4	362.5	7	12	17						SS-50			FAT CLAY (CH), light gray (10YR 7/2) mottled brownish yellow (10YR 6/6), very stiff, moist, trace fine grained sand, strong HCl reaction
-292.4	372.5	8	15	19						SS-51			372.5 ft: hard
-302.4	382.5	6	8	16						SS-52			382.5 ft: very stiff
-312.4	392.5												

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09



SHEET 8 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Moore								
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)							
BORING NO.: B-3123		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND								
GROUND SURFACE ELEV.: 80.1 ft (NAVD88)		NORTHING: 13,412,304		US ft (NAD83)		EASTING: 2,599,851 US ft (NAD83)								
TOTAL DEPTH: 404.0 ft		DRILL MACHINE: CME 750		DRILLER: G. Bilbrey (MILLER)		HAMMER (ID): 140 lb. Auto (07)								
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 4.0 ft		BITS USED: 3 7/8" Step Drag Bit								
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100				
-312.6					Continued from previous page									
		7	12	12						SS-53		FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, trace fine grained sand, weak HCl reaction (continued)		
-322.4	402.5													
		9	15	20						SS-54		402.5 ft: hard, few fine grained sand		
												-323.9	404.0	
Boring Terminated at Elevation -323.9 ft														

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09



GEOTECHNICAL BORING LOG

Prepared By WSD Date 8-10-09Checked By KAW Date 8-10-09

SHEET 1 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3124		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND					
GROUND SURFACE ELEV.: 79.6 ft (NAVD88)		NORTHING: 13,412,384		US ft (NAD83)		EASTING: 2,599,937 US ft (NAD83)	24 HR.	ND					
TOTAL DEPTH: 299.8 ft		DRILL MACHINE: CME 55 Track		DRILLER: T. Hahn (MACTEC RAL)			HAMMER (ID): 140 lb. Auto (MEC 21)						
DATE STARTED: 2/20/09		COMPLETED: 2/24/09		CASING DEPTH: 15.0 ft			BITS USED: 3 7/8" Drag Bit						
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI		
79.6					Ground Surface							79.6	0.0
79.6	0.0	5	5	4						SS-1		LEAN CLAY (CL), black (2.5Y 2.5/1), stiff, dry, few fine grained sand, no HCl reaction on clay, trace roots	
76.1	3.5	2	2	4						SS-2		3.5 ft: gray (2.5Y 5/1), firm, moist, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	
73.0	6.6	4	5	7						SS-3		6.6 ft: grayish brown (2.5Y 5/2)	
71.1	8.5	6	7	9						SS-4		8.5 ft: very stiff, no HCl reaction, no calcium carbonate nodules observed	
68.8	10.8	3	6	7						SS-5		10.8 ft: FAT CLAY (CH), light brownish gray (2.5Y 6/2), stiff, moist, trace fine grained sand, weak HCl reaction, trace calcium carbonate nodules, strong HCl reaction, black staining	10.8
66.3	13.3	3	6	7						SS-6		13.3 ft: light yellowish brown (2.5Y 6/3), few fine grained sand	
61.4	18.2	4	5	7						SS-7		18.2 ft: light gray (2.5Y 7/2) mottled brownish yellow (10YR 6/8)	
56.3	23.3	4	5	6						SS-8		23.3 ft: no HCl reaction, no calcium carbonate nodules observed	
51.3	28.3	4	6	9						SS-9		28.3 ft: brownish yellow (10YR 6/6) mottled pale yellow (2.5Y 8/2), weak HCl reaction	
46.3	33.3	4	5	8						SS-10		33.3 ft: mottled with light gray (2.5Y 7/2), no HCl reaction	
41.3	38.3	7	11	18						SS-11		38.3 ft: SANDY FAT CLAY (CH), yellow (2.5Y 7/6), very stiff, moist, some fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules	38.3
36.3	43.3	15	18	22						SS-12		43.3 ft: pale yellow (2.5Y 7/4), hard, few calcium carbonate nodules, strong HCl reaction	
31.3	48.3	4	4	14						SS-13		48.3 ft: POORLY GRADED SAND with clay (SP-SC), pale yellow (2.5Y 7/3), firm, wet, fine grained, few fines, weak HCl reaction	48.3
26.3	53.3	4	4	5						SS-14		53.3 ft: pale yellow (2.5Y 8/3), loose	

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS						GROUND WATER (ft)							
BORING NO.: B-3124		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 79.6 ft (NAVD88)		NORTHING: 13,412,384		US ft (NAD83)		EASTING: 2,599,937 US ft (NAD83)							
TOTAL DEPTH: 299.8 ft		DRILL MACHINE: CME 55 Track		DRILLER: T. Hahn (MACTEC RAL)		HAMMER (ID): 140 lb. Auto (MEC 21)							
DATE STARTED: 2/20/09		COMPLETED: 2/24/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
23.5		Continued from previous page											
21.3	58.3	4	3	10						SS-15	21.3	58.3	CLAYEY SAND (SC), pale yellow (2.5Y 7/3), firm, wet, fine grained, little fines, weak HCl reaction
16.3	63.3	4	7	8						SS-16	16.3	63.3	FAT CLAY (CH), pale yellow (2.5Y 7/3), stiff, moist, trace fine grained sand, weak HCl reaction, trace calcium carbonate nodules, strong HCl reaction, black staining
11.3	68.3	6	12	14						SS-17	11.3	68.3	FAT CLAY with sand (CH), pale yellow (2.5Y 7/3), very stiff, moist, little fine grained sand, no HCl reaction
6.3	73.3	7	8	12						SS-18			73.3 ft: light yellowish brown (2.5Y 6/3), weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction
1.3	78.3	6	7	15						SS-19	1.3	78.3	POORLY GRADED SAND with clay (SP-SC), pale yellow (2.5Y 8/2), very stiff, moist, fine grained, few fines, weak HCl reaction
-3.7	83.3	11	57	50/0.2						SS-20			83.3 ft: very dense
-8.7	88.3	35	28	27						SS-21A/B	-9.6	89.2	POORLY GRADED SAND (SP), pale yellow (2.5Y 7/3), very dense, moist, fine grained, few fines, no HCl reaction
-13.7	93.3	100/0.2						SS-22			93.3 ft: weak HCl reaction		
-18.7	98.3	62	50/0.2						SS-23			98.3 ft: trace fines	
-28.7	108.3	4	8	10						SS-24	-21.4	101.0	FAT CLAY (CH), pale yellow (2.5Y 8/2) mottled brownish yellow (10YR 6/6), very stiff, moist, trace fine grained sand, weak HCl reaction, black staining



SHEET 3 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3124		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 79.6 ft (NAVD88)		NORTHING: 13,412,384		US ft (NAD83)		EASTING: 2,599,937 US ft (NAD83)							
TOTAL DEPTH: 299.8 ft		DRILL MACHINE: CME 55 Track		DRILLER: T. Hahn (MACTEC RAL)		HAMMER (ID): 140 lb. Auto (MEC 21)							
DATE STARTED: 2/20/09		COMPLETED: 2/24/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
-32.6					Continued from previous page								
-38.7	118.3	7	11	10	21					SS-25		FAT CLAY (CH), pale yellow (2.5Y 8/2) mottled brownish yellow (10YR 6/6), very stiff, moist, trace fine grained sand, weak HCl reaction, black staining (continued)	
-48.7	128.3	9	10	13	23					SS-26		118.3 ft: light gray (2.5Y 7/2), no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction	
-58.7	138.3	4	6	8	14					SS-27		128.3 ft: pale yellow (2.5Y 8/2) mottled brownish yellow (10YR 6/6), few calcium carbonate nodules	
-68.7	148.3	4	6	11	17					SS-28		138.3 ft: pale yellow (2.5Y 8/3), stiff, trace calcium carbonate nodules	
-78.7	158.3	10	13	16	29					SS-29		148.3 ft: pale yellow (2.5Y 8/2), very stiff, weak HCl reaction, no calcium carbonate nodules observed	
-88.7	168.3											158.3 ft: mottled brownish yellow (10YR 6/6), few calcium carbonate nodules, weak HCl reaction on clay, strong HCl reaction on calcium carbonate nodules	

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



SHEET 4 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell								
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)							
BORING NO.: B-3124		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND						
GROUND SURFACE ELEV.: 79.6 ft (NAVD88)		NORTHING: 13,412,384		US ft (NAD83)		EASTING: 2,599,937 US ft (NAD83)		24 HR.	ND					
TOTAL DEPTH: 299.8 ft		DRILL MACHINE: CME 55 Track		DRILLER: T. Hahn (MACTEC RAL)			HAMMER (ID): 140 lb. Auto (MEC 21)							
DATE STARTED: 2/20/09		COMPLETED: 2/24/09		CASING DEPTH: 15.0 ft			BITS USED: 3 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100				
-88.7					Continued from previous page									
		32	27	27						SS-30			POORLY GRADED SAND (SP), pale yellow (2.5Y 8/2), very dense, moist, medium grained, no HCl reaction (continued)	
-98.7	178.3													178.2 ft: wet, fine to medium grained
		35	32	33										
-108.7	188.3													188.3 ft: fine grained, few fines, weak HCl reaction
		35	40	42										
-118.7	198.3													CLAYEY SAND (SC), pale yellow (2.5Y 7/3), dense, moist, fine grained, some fines, weak HCl reaction on sand, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
		11	16	32										
-128.7	208.3													POORLY GRADED SAND (SP), pale yellow (2.5Y 8/3), dense, moist, fine grained, few fines, no HCl reaction
		9	10	22										
-138.7	218.3													SANDY FAT CLAY (CH), pale yellow (2.5Y 7/3) mottled strong brown (7.5Y 5/6), hard, moist, some fine grained sand, weak HCl reaction
		6	42	50/0.2										
														FAT CLAY (CH), pale yellow (2.5Y 8/3), hard, moist, trace fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules

EXELON COL BORE VICTORIA PHASE III.GP1 EXELON COL.GDT 8/10/09



BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell						
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)					
BORING NO.: B-3124		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND						
GROUND SURFACE ELEV.: 79.6 ft (NAVD88)		NORTHING: 13,412,384		US ft (NAD83)		EASTING: 2,599,937 US ft (NAD83)						
TOTAL DEPTH: 299.8 ft		DRILL MACHINE: CME 55 Track		DRILLER: T. Hahn (MACTEC RAL)		HAMMER (ID): 140 lb. Auto (MEC 21)						
DATE STARTED: 2/20/09		COMPLETED: 2/24/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit						
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100		
-144.8					Continued from previous page							
-148.7	228.3	9	20	17						SS-36		FAT CLAY (CH), pale yellow (2.5Y 8/3), hard, moist, trace fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules (continued)
-158.7	238.3	24	28	32						SS-37		228.3 ft: light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/6), few fine grained sand, few calcium carbonate nodules
-168.7	248.3	21	25	31						SS-38		238.3 ft: light gray (2.5Y 7/2) mottled light yellowish brown (10YR 6/4), trace fine grained sand, black staining
-178.7	258.3	24	28	32						SS-39		-168.9 248.5 FAT CLAY (CH), pale yellow (2.5Y 8/2), hard, moist, little fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
-188.7	268.3	19	26	21						SS-40		-178.7 258.3 POORLY GRADED SAND (SP), pale yellow (2.5Y 8/2), very dense, wet, fine grained, no HCl reaction
-198.7	278.3	12	10	14						SS-41A/B		-188.7 268.3 CLAYEY SAND (SC), pale yellow (2.5Y 7/3), dense, moist, medium grained, little fines, weak HCl reaction on sand, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
												-199.0 278.6 278.3 ft: very firm, no HCl reaction, no calcium carbonate nodules observed FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, few fine grained sand, no HCl reaction

EXELON COL BORE VICTORIA PHASE IILGPJ EXELON COL-GDT 8/10/09



SHEET 6 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3124		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR. ND						
GROUND SURFACE ELEV.: 79.6 ft (NAVD88)		NORTHING: 13,412,384		US ft (NAD83)		EASTING: 2,599,937 US ft (NAD83)	24 HR. ND						
TOTAL DEPTH: 299.8 ft		DRILL MACHINE: CME 55 Track		DRILLER: T. Hahn (MACTEC RAL)		HAMMER (ID): 140 lb. Auto (MEC 21)							
DATE STARTED: 2/20/09		COMPLETED: 2/24/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80				
-200.9					Continued from previous page								
-208.7	288.3	12	20	25						SS-42		FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, few fine grained sand, no HCl reaction (continued) 288.3 ft: mottled yellowish brown (10YR 5/6), hard, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, black staining	
-218.7	298.3	11	19	23						SS-43			
													298.3 ft: very pale brown (10YR 8/2) mottled light brown (7.5YR 6/4), weak HCl reaction, no calcium carbonate nodules observed Boring Terminated at Elevation -220.2 ft

EXELON COL BORE VICTORIA PHASE III/GPJ EXELON COL.GDT 8/10/09



GEOTECHNICAL BORING LOG

Prepared By WBD Date 11/10/09Checked By PM Date 11/10/09

SHEET 1 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell								
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)							
BORING NO.: B-3125		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND						
GROUND SURFACE ELEV.: 78.1 ft (NAVD88)		NORTHING: 13,412,466		US ft (NAD83)		EASTING: 2,599,992 US ft (NAD83)		24 HR.	ND					
TOTAL DEPTH: 299.9 ft		DRILL MACHINE: CME 550		DRILLER: M. Casteel (MACTEC CLT)			HAMMER (ID): 140 lb. Auto (ME 05)							
DATE STARTED: 1/10/09		COMPLETED: 1/22/09		CASING DEPTH: 15.0 ft			BITS USED: 3 7/8" Drag Bit							
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION		
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			NO.	
78.1					Ground Surface							78.1	0.0	
78.1	0.0	5	5	6						SS-1		78.1	LEAN CLAY (CL), black (2.5Y 2.5/1), stiff, dry, few fine grained sand, no HCl reaction, trace roots	0.0
74.6	3.5	4	4	5						SS-2		74.6	LEAN CLAY with sand (CL), dark gray (2.5Y 4/1) stiff, dry, little fine grained sand, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	3.5
72.1	6.0	5	8	12						SS-3		72.1	FAT CLAY with sand (CH), light gray (2.5Y 7/2), very stiff, moist, little fine grained sand, weak HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	6.0
70.0	8.1	9	10	13						SS-4		67.6	8.1 ft: light brownish gray (2.5Y 6/2)	10.5
67.6	10.5	7	8	10						SS-5		67.6	FAT CLAY (CH), pale yellow (2.5Y 8/2), very stiff, moist, few fine grained sand, weak HCl reaction on clay, black staining, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	10.5
64.8	13.3	7	9	11						SS-6				
59.9	18.2	6	10	12						SS-7			18.2 ft: light gray (2.5Y 7/2) mottled olive yellow (2.5Y 6/8), trace calcium carbonate nodules	
54.5	23.6	5	6	8						SS-8			23.6 ft: strong brown (7.5YR 5/6) mottled with yellow (2.5Y 8/5), stiff, weak HCl reaction, no calcium carbonate nodules observed	
49.9	28.2	6	9	14						SS-9			28.2 ft: very stiff, trace sand	
44.7	33.4	4	5	6						SS-10			33.4 ft: light brown (7.5YR 6/4) mottled yellow (2.5Y 8/6), stiff, weak to no HCl reaction	
39.8	38.3	6	6	8						SS-11			38.3 ft: brownish yellow (10YR 6/6), trace fine grained sand, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	
34.8	43.3	11	11	11						SS-12		34.8	CLAYEY SAND (SC), pale yellow (5Y 8/2), olive yellow (2.5Y 6/8), very firm, moist, fine grained, little fines, no HCl reaction	43.3
29.9	48.2	9	9	13						SS-13			48.2 ft: white (5Y 8/1) mottled olive yellow (2.5Y 6/8), no HCl reaction on sand, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	
24.9	53.2	11	17	26						SS-14		24.9	POORLY GRADED SAND (SP), light yellowish brown (2.5Y 6/4), dense, moist, fine grained, trace fines, no HCl reaction	53.2

EXELON COL BORE VICTORIA PHASE III GPPJ EXELON COL GDT 10/20/09



SHEET 2 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell										
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS						GROUND WATER (ft)										
BORING NO.: B-3125		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR.	ND									
GROUND SURFACE ELEV.: 78.1 ft (NAVD88)		NORTHING: 13,412,466 US ft (NAD83)		EASTING: 2,599,992 US ft (NAD83)		24 HR.	ND									
TOTAL DEPTH: 299.9 ft		DRILL MACHINE: CME 550		DRILLER: M. Casteel (MACTEC CLT)		HAMMER (ID): 140 lb. Auto (ME 05)										
DATE STARTED: 1/10/09		COMPLETED: 1/22/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit										
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION				
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100						
22.0					Continued from previous page											
19.9	58.2	12	15	18							SS-15	19.9	FAT CLAY with sand (CH), pale yellow (2.5Y 8/2), hard, moist, little fine grained sand, no HCl reaction	58.2		
13.0	65.1	7	11	23							SS-16	13.0	FAT CLAY (CH), light yellowish brown (2.5Y 6/3), hard, moist, few fine grained sand, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, black staining	65.1		
9.9	68.2	10	11	15							SS-17	68.2 ft: mottled olive yellow (2.5Y 6/8), very stiff, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction				
4.9	73.2	7	14	26							SS-18	4.9	FAT CLAY with sand (CH), pale yellow (2.5Y 7/3), hard, moist, little fine grained sand, no HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	73.2		
-0.1	78.2	11	16	19							SS-19	78.2 ft: light gray (2.5Y 7.2)				
-5.1	83.2	50/0.5									SS-20	83.2 ft: no recovery				
-10.2	88.3	8	9	11							SS-21	-10.2	FAT CLAY (CH), pale yellow (2.5Y 8/2), brownish yellow (10YR 6/6), very stiff, moist, few fine grained sand, weak HCl reaction, black staining	88.3		
-15.2	93.3	15	28	47							SS-22	-15.2	CLAYEY SAND (SC), pale yellow (2.5Y 8/2), very dense, moist, medium grained, little fines, weak HCl reaction	93.3		
-20.1	98.2	50	46	47							SS-23	-20.1	POORLY GRADED SAND (SP), pale yellow (2.5Y 8/4), very dense, moist, medium grained, trace to few fines, weak HCl reaction	98.2		
-30.3	108.4	9	11	13							SS-24	-30.3	FAT CLAY (CH), pale yellow (2.5Y 8/3) mottled brownish yellow (10YR 6/6), very stiff, moist, few fine grained sand, weak HCl reaction, black staining	108.4		

EXELON COL BORE VICTORIA PHASE III CPJ EXELON COL GDT 10/20/09



SHEET 3 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell									
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)								
BORING NO.: B-3125		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND									
GROUND SURFACE ELEV.: 78.1 ft (NAVD88)		NORTHING: 13,412,466 US ft (NAD83)		EASTING: 2,599,992 US ft (NAD83)		24 HR. ND									
TOTAL DEPTH: 299.9 ft		DRILL MACHINE: CME 550		DRILLER: M. Casteel (MACTEC CLT)		HAMMER (ID): 140 lb. Auto (ME 05)									
DATE STARTED: 1/10/09		COMPLETED: 1/22/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100					
-34.1					Continued from previous page										
-40.2	118.3	11	16	17						SS-25			FAT CLAY (CH), pale yellow (2.5Y 8/3) mottled brownish yellow (10YR 6/5), very stiff, moist, few fine grained sand, weak HCl reaction, black staining (continued)		
-50.2	128.3	7	14	16						SS-26			118.3 ft: light gray (2.5Y 7/2), hard, no HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules		
-60.2	138.3	10	10	14						SS-27			128.3 ft: pale yellow (2.5Y 7/3), very stiff, trace fine grained sand, weak HCl reaction on clay		
-70.2	148.3	22	28	37						SS-28			138.3 ft: light gray (2.5Y 7/2), no calcium carbonate nodules observed		
-80.3	158.4	13	16	24						SS-29			148.3 ft: POORLY GRADED SAND (SP), pale yellow (5Y 8/3), very dense, moist, fine grained, trace fines, weak HCl reaction		
-90.3	168.4												158.4 ft: FAT CLAY (CH), pale yellow (2.5Y 8/3), hard, moist, trace fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules		
													168.4 ft		

EXELON COL BORE VICTORIA PHASE III GPP EXELON COL GDT 10/20/09



SHEET 4 OF 6

BECHTEL NO.: 25352			MACTEC NO.: 6468-07-1777			COUNTY: Victoria, TX			GEOLOGIST: R. Harwell			
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS									GROUND WATER (ft)			
BORING NO.: B-3125			DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT			0 HR.	ND		
GROUND SURFACE ELEV.: 78.1 ft (NAVD88)			NORTHING: 13,412,466			US ft (NAD83)			EASTING: 2,599,992 US ft (NAD83)			
TOTAL DEPTH: 299.9 ft			DRILL MACHINE: CME 550			DRILLER: M. Casteel (MACTEC CLT)			HAMMER (ID): 140 lb. Auto (ME 05)			
DATE STARTED: 1/10/09			COMPLETED: 1/22/09			CASING DEPTH: 15.0 ft			BITS USED: 3 7/8" Drag Bit			
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI	
-90.2					Continued from previous page							
		50	50/0.4							SS-30		POORLY GRADED SAND (SP), pale yellow (2.5Y 8/3), very dense, moist, fine to coarse grained, few fines, weak HCl reaction
-100.2	178.3	39	50/0.4							SS-31		178.3 ft: no HCl reaction
-110.4	188.5	40	45	47						SS-32		188.5 ft: wet, fine to medium grained, trace fines
-120.4	198.5	7	9	13						SS-33		FAT CLAY (CH), pale yellow (2.5Y 7/3), very stiff, moist, few fine grained sand, weak HCl reaction
-130.5	208.6	20	32	37						SS-34A/B		CLAYEY SAND (SC), pale yellow (2.5Y 8/2), very dense, moist, fine grained, little fines, weak HCl reaction
-140.4	218.5	27	26	30						SS-35		POORLY GRADED SAND (SP), pale yellow (2.5Y 8/2), very dense, moist, fine grained, trace fines, no HCl reaction
												FAT CLAY (CH), pale yellow (2.5Y 8/2), hard, moist, few fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules



SHEET 5 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3125		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 78.1 ft (NAVD88)		NORTHING: 13,412,466		US ft (NAD83)		EASTING: 2,599,992 US ft (NAD83)							
24 HR. ND													
TOTAL DEPTH: 299.9 ft		DRILL MACHINE: CME 550		DRILLER: M. Casteel (MACTEC CLT)		HAMMER (ID): 140 lb. Auto (ME 05)							
DATE STARTED: 1/10/09		COMPLETED: 1/22/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
-146.3					Continued from previous page								
-150.3	228.4	17	21	26						SS-36		FAT CLAY (CH), pale yellow (2.5Y 8/2), hard, moist, few fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules (continued)	
-160.3	238.4	23	24	27						SS-37		FAT CLAY with sand (CH), pale yellow (2.5Y 8/3), hard, moist, little fine grained sand, weak HCl reaction	
-170.3	248.4	36	50/0.5							SS-38		FAT CLAY (CH), pale yellow (2.5Y 8/2) mottled brownish yellow (10YR 6/6), hard, moist, few fine grained sand, weak HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	
-180.3	258.4	35	45	39						SS-39		POORLY GRADED SAND (SP), pale yellow (5Y 8/2), yellow (2.5Y 7/8), very dense, moist, fine grained, few fines, strong HCl reaction	
-190.4	268.5	14	18	22						SS-40		255.0-257.5 ft: hard drilling	
-200.3	278.4	21	18	30						SS-41		258.4 ft: light gray (7.5YR 7/1), wet, fine to medium grained, trace fines, no HCl reaction	
												FAT CLAY (CH), pale yellow (5Y 8/2), hard, moist, few fine grained sand, weak HCl reaction	
												273.0-277.0 ft: hard drilling	
												FAT CLAY with sand (CH), pale yellow (2.5Y 8/2), hard, moist, little fine grained sand, no HCl reaction	

EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL.GDT 10/20/09



SHEET 6 OF 6

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: R. Harwell							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, including UHS							GROUND WATER (ft)						
BORING NO.: B-3125		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 78.1 ft (NAVD88)		NORTHING: 13,412,466		US ft (NAD83)		EASTING: 2,599,992 US ft (NAD83)							
TOTAL DEPTH: 299.9 ft		DRILL MACHINE: CME 550		DRILLER: M. Casteel (MACTEC CLT)		HAMMER (ID): 140 lb. Auto (ME 05)							
DATE STARTED: 1/10/09		COMPLETED: 1/22/09		CASING DEPTH: 15.0 ft		BITS USED: 3 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
-202.4					Continued from previous page								
-210.4	288.5	17	20	26						SS-42		FAT CLAY with sand (CH), pale yellow (2.5Y 8/2), hard, moist, little fine grained sand, no HCl reaction (continued)	
-220.3	298.4	18	21	25						SS-43		FAT CLAY (CH), light gray (2.5Y 7/2), hard, moist, few fine grained sand, weak HCl reaction	
												298.4 ft: pale yellow (2.5Y 8/2), brownish yellow (10YR 6/6), trace fine grained sand, black staining	
												Boring Terminated at Elevation -221.8 ft	

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09



GEOTECHNICAL BORING LOG

Prepared By DAK Date 8/10/09Checked By KAW Date 8-10-09

SHEET 1 OF 4

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: G. Pillappa							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS						GROUND WATER (ft)							
BORING NO.: B-3126		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND							
GROUND SURFACE ELEV.: 79.9 ft (NAVD88)		NORTHING: 13,412,175		US ft (NAD83)		EASTING: 2,599,784 US ft (NAD83)							
TOTAL DEPTH: 200.1 ft		DRILL MACHINE: CME 45 C Track		DRILLER: D. Rhodes (MACTEC RAL)		HAMMER (ID): 140 lb. Auto (MEC 12)							
DATE STARTED: 1/24/09		COMPLETED: 1/26/09		CASING DEPTH: 10.0 ft		BITS USED: 2 7/8" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT			SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			
79.9					Ground Surface							79.9	0.0
Drill without sampling from 0.0 - 148.6 feet.													
40.0 to 50.0 ft: lost circulation													

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09

BECHTEL NO.: 25352			MACTEC NO.: 6468-07-1777			COUNTY: Victoria, TX			GEOLOGIST: G. Pillappa			
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS									GROUND WATER (ft) 0 HR. ND 24 HR. ND			
BORING NO.: B-3126			DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT						
GROUND SURFACE ELEV.: 79.9 ft (NAVD88)			NORTHING: 13,412,175			US ft (NAD83)			EASTING: 2,599,784 US ft (NAD83)			
TOTAL DEPTH: 200.1 ft			DRILL MACHINE: CME 45 C Track			DRILLER: D. Rhodes (MACTEC RAL)			HAMMER (ID): 140 lb. Auto (MEC 12)			
DATE STARTED: 1/24/09			COMPLETED: 1/26/09			CASING DEPTH: 10.0 ft			BITS USED: 2 7/8" Drag Bit			
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI	
23.8					Continued from previous page							
												Drill without sampling from 0.0 - 148.6 feet. (continued)
												95.0 to 96.0 ft: hard drilling

EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL GDT 8/10/09

EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL GDT 8/10/09

GEOTECHNICAL BORING LOG

Prepared By AMM Date 8/10/09

Checked By KAW Date 8-16-09

SHEET 1 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Liles						
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)					
BORING NO.: B-3127		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND				
GROUND SURFACE ELEV.: 79.7 ft (NAVD88)		NORTHING: 13,412,253		US ft (NAD83)		EASTING: 2,599,968		24 HR.	ND			
TOTAL DEPTH: 402.3 ft		DRILL MACHINE: CME 550		DRILLER: R. White (MILLER)			HAMMER (ID): 140 lb. Auto (353)					
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 3.6 ft			BITS USED: 3 1/2" Drag Bit					
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100		
79.7					Ground Surface							
79.7	0.0	2	2	5						SS-1		79.7 SANDY LEAN CLAY (CL), very dark gray (2.5Y 3/1), firm, dry, some fine grained sand, no HCl reaction, trace small roots 0.0
77.0	2.7	6	7	9						SS-2		77.0 SANDY FAT CLAY (CH), gray (2.5Y 5/1), very stiff, moist, some fine grained sand, trace calcium carbonate nodules, strong HCl reaction 2.7
74.8	4.9	6	9	10						SS-3		74.8 FAT CLAY with sand (CH), grayish brown (2.5Y 5/2), very stiff, moist, little fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange and black staining 4.9
72.6	7.1	8	9	11						SS-4		7.1 ft: light gray (2.5Y 7/1), few calcium carbonate modules
70.3	9.4	7	9	10						SS-5		
67.7	12.0	6	7	8						SS-6		12.0 ft: light brownish gray (2.5Y 6/2), stiff, trace calcium carbonate nodules
65.3	14.4	6	7	8						SS-7		65.3 FAT CLAY (CH), light gray (5Y 7/2) mottled brownish yellow (10YR 6/6), stiff, moist, few fine grained sand, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules 14.4
58.6	21.1	5	8	8						SS-8		21.1 ft: very stiff, trace fine grained sand, weak HCl reaction, black staining, no calcium carbonate nodules observed
53.6	26.1	5	5	7						SS-9		26.1 ft: stiff, weak HCl reaction on clay, strong HCl reaction on calcium carbonate nodules
48.6	31.1	6	8	11						SS-10		31.1 ft: reddish yellow (7.5YR 6/6) mottled with light gray (5Y 7/2), very stiff, no calcium carbonate nodules observed
43.7	36.0	7	11	15						SS-11		43.7 CLAYEY SAND (SC), light brownish gray (2.5Y 6/2) mottled olive yellow (2.5Y 6/6), very firm, moist, fine grained, little fines, weak HCl reaction, black staining 36.0
38.8	40.9	14	16	17						SS-12		38.8 POORLY GRADED SAND with clay (SP-SC), pale yellow (2.5Y 7/4), dense, moist, fine grained, few fines, calcium carbonate, strong HCl reaction 40.9
33.8	45.9	10	13	13						SS-13		45.9 ft: very firm, weak HCl reaction, calcium carbonate nodules, strong HCl reaction
29.0	50.7	7	10	18						SS-14		29.0 50.0 ft: bit chatter 50.7
24.1	55.6											CLAYEY SAND (SC), light gray (2.5Y 7/2) mottled, pale yellow (2.5Y 7/4), very firm, moist, fine grained, few fines, strong HCL reaction, calcium carbonate nodules

EXELON COL BORE VICTORIA PHASE III GPI EXELON COL GDT 8/10/09



SHEET 2 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Liles								
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)							
BORING NO.: B-3127		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR. ND							
GROUND SURFACE ELEV.: 79.7 ft (NAVD88)		NORTHING: 13,412,253		US ft (NAD83)		EASTING: 2,599,968		US ft (NAD83)						
24 HR. ND		TOTAL DEPTH: 402.3 ft		DRILL MACHINE: CME 550		DRILLER: R. White (MILLER)		HAMMER (ID): 140 lb. Auto (353)						
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 3.6 ft			BITS USED: 3 1/2" Drag Bit							
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI			
23.6					Continued from previous page									
		11	8	12									55.6 ft: firm, some fines, weak HCl reaction, orange staining	56.7
19.0	60.7												POORLY GRADED SAND (SP), light gray (2.5Y 7/2), firm, wet, fine grained, few fines, weak HCl reaction	
		9	11	19									60.7 ft: very firm, trace fines, no HCl reaction	61.2
													CLAYEY SAND (SC), light gray (2.5Y 7/2), very firm, moist, fine grained, some fines, no HCl reaction	
14.0	65.7												14.0	65.7
		5	6	20									FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, trace fine grained sand, weak HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	
9.1	70.6												70.6 ft: mottled strong brown (7.5YR 5/6), no HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	
		5	6	12										
4.0	75.7												75.7 ft: orange staining	
		9	10	13										
-1.1	80.8													
		8	9	13									POORLY GRADED SAND with clay (SP-SC), light gray (2.5Y 7/2), very firm, moist, fine grained, few fines, no HCl reaction on sand, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	80.8
-6.1	85.8													
		6	6	7									FAT CLAY (CH), light gray (2.5Y 7/2), yellowish brown (10YR 5/6), stiff, moist, no HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	84.9
-11.1	90.8												90.8 ft: hard, caliche zones, strong HCl reaction	
		10	29	36										
-16.0	95.7												POORLY GRADED SAND (SP), light gray (2.5Y 7/1), dense, wet, fine grained, trace fines, no HCl reaction	93.0
		12	14	25										
-21.0	100.7												100.7 ft: light yellowish brown (2.5Y 6/3), very dense, fine to medium grained, strong HCl reaction, caliche at bottom of sample	
		36	49	50/0.2										
-31.0	110.7												108.5 ft: hard drilling	
		5	7	9										

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



SHEET 3 OF 8

BECHTEL NO.: 25352			MACTEC NO.: 6468-07-1777			COUNTY: Victoria, TX			GEOLOGIST: J. Liles			
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS									GROUND WATER (ft)			
BORING NO.: B-3127			DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT			0 HR. ND			
GROUND SURFACE ELEV.: 79.7 ft (NAVD88)			NORTHING: 13,412,253			US ft (NAD83)			EASTING: 2,599,968 US ft (NAD83)			
24 HR. ND												
TOTAL DEPTH: 402.3 ft			DRILL MACHINE: CME 550			DRILLER: R. White (MILLER)			HAMMER (ID): 140 lb. Auto (353)			
DATE STARTED: 1/9/09			COMPLETED: 1/20/09			CASING DEPTH: 3.6 ft			BITS USED: 3 1/2" Drag Bit			
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100	MOI	
-32.5					Continued from previous page							

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



SHEET 6 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Liles									
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)								
BORING NO.: B-3127		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND									
GROUND SURFACE ELEV.: 79.7 ft (NAVD88)		NORTHING: 13,412,253		US ft (NAD83)		EASTING: 2,599,968 US ft (NAD83)									
TOTAL DEPTH: 402.3 ft		DRILL MACHINE: CME 550		DRILLER: R. White (MILLER)		HAMMER (ID): 140 lb. Auto (353)									
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 3.6 ft		BITS USED: 3 1/2" Drag Bit									
ELEV. (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION			
		0.5ft	0.5ft	0.5ft	0	20	40	60	80	100					
-200.8					Continued from previous page										
-211.1	280.8	14	34	41									-202.0	CLAYEY SAND (SC), light gray (2.5Y 7/2), very dense, moist, fine grained, little fines, no HCl reaction, orange staining (continued)	281.7
														POORLY GRADED SAND (SP), light gray (2.5Y 7/2), very dense, wet, fine grained, few fines, no HCl reaction, orange staining	
-211.1	290.8	14	15	22									-206.1	FAT CLAY (CH), yellowish brown (10YR 5/6) mottled light gray (2.5Y 7/2), hard, moist, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, black staining	287.8
-221.1	300.8	13	17	25										300.8 ft: weak HCl reaction, no calcium carbonate nodules observed	
-231.1	310.8	8	12	20										310.8 ft: light gray (2.5Y 7/2), weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules	
-241.1	320.8	18	23	50/0.3									-241.1	POORLY GRADED SAND (SP), light gray (10YR 7/2), very dense, wet, fine grained, weak to strong HCl reaction	320.8
-251.0	330.7	49	64	50/0.2										330.7 ft: and brownish yellow (10YR 6/6), fine to medium grained, weak HCl reaction	

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09



SHEET 7 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Liles						
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)					
BORING NO.: B-3127		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND				
GROUND SURFACE ELEV.: 79.7 ft (NAVD88)		NORTHING: 13,412,253		US ft (NAD83)		EASTING: 2,599,968 US ft (NAD83)		24 HR.	ND			
TOTAL DEPTH: 402.3 ft		DRILL MACHINE: CME 550		DRILLER: R. White (MILLER)			HAMMER (ID): 140 lb. Auto (353)					
DATE STARTED: 1/9/09		COMPLETED: 1/20/09		CASING DEPTH: 3.6 ft			BITS USED: 3 1/2" Drag Bit					
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100		
-256.9					Continued from previous page							
-261.2	340.9	6	11	21						SS-49		POORLY GRADED SAND (SP), light gray (10YR 7/2), very dense, wet, fine grained, weak to strong HCl reaction (continued)
-271.0	350.7	21	38	100/0.4	138/0.9					SS-50		FAT CLAY (CH), light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/6), hard, moist, weak to strong HCl reaction
-281.1	360.8	9	12	19						SS-51		CLAYEY SAND (SC), light yellowish brown (10YR 6/4), very dense, moist, fine grained, little fines, strong HCl reaction
-291.1	370.8	6	11	14						SS-52		FAT CLAY (CH), light brownish gray (2.5Y 6/2), hard, moist, weak HCl reaction
-302.6	382.3	10	10	19						SS-53		360.8 ft: no recovery, residue on sample catcher indicates clay
-311.1	390.8	8	13	19						SS-54		370.8 ft: very stiff, no recovery, soil observed on drill bit indicates clay
												390.8 ft: hard, no recovery, trace sample observed in sampler indicates clay

EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 8/10/09

EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL GDT 8/10/09



GEOTECHNICAL BORING LOG

Prepared By WSD Date 11-10-09Checked By RAN Date 11/10/09

SHEET 1 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Liles							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3128		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR. ND						
GROUND SURFACE ELEV.: 79.4 ft (NAVD88)		NORTHING: 13,412,354		US ft (NAD83)		EASTING: 2,600,019		US ft (NAD83)					
24 HR. ND													
TOTAL DEPTH: 402.4 ft		DRILL MACHINE: CME 550		DRILLER: R. White (MILLER)			HAMMER (ID): 140 lb. Auto (353)						
DATE STARTED: 1/26/09		COMPLETED: 2/8/09		CASING DEPTH: 3.5 ft			BITS USED: 3 1/2" Drag Bit						
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION	
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			NO.
79.4					Ground Surface							79.4	0.0
79.4	0.0	9	10	10						SS-1		79.4	SANDY FAT CLAY (CH), very dark gray (2.5Y 3/1), very stiff, dry, some fine grained sand, no HCl reaction, few small roots
76.5	2.9	9	6	7						SS-2		76.5	2.9
74.2	5.2	9	11	15						SS-3		74.2	5.2
72.2	7.2	9	12	14						SS-4		72.2	7.2
69.6	9.8	14	16	18						SS-5		69.6	9.8
67.1	12.3	11	10	9						SS-6		67.1	12.3
63.6	15.8	7	8	10						SS-7		63.6	15.8
58.7	20.7	8	8	9						SS-8		58.7	20.7
53.7	25.7	5	8	12						SS-9		53.7	25.7
48.8	30.6	8	4	11						SS-10		48.8	30.6
43.4	36.0	5	6	6						SS-11		43.4	36.0
38.6	40.8	9	17	20						SS-12		38.6	40.8
33.5	45.9	7	11	17						SS-13		33.5	45.9
28.5	50.9	4	12	12						SS-14		28.5	50.9
23.4	56.0											23.4	56.0

EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL GDT 10/20/09



BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Liles							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)						
BORING NO.: B-3128		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT			0 HR.	ND					
GROUND SURFACE ELEV.: 79.4 ft (NAVD88)		NORTHING: 13,412,354		US ft (NAD83)		EASTING: 2,600,019 US ft (NAD83)		24 HR.	ND				
TOTAL DEPTH: 402.4 ft		DRILL MACHINE: CME 550		DRILLER: R. White (MILLER)			HAMMER (ID): 140 lb. Auto (353)						
DATE STARTED: 1/26/09		COMPLETED: 2/8/09		CASING DEPTH: 3.5 ft			BITS USED: 3 1/2" Drag Bit						
ELEV.	DEPTH	BLOW COUNT			BLOWS PER FOOT					SAMP.	LOG	SOIL AND ROCK DESCRIPTION	
(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			NO.
23.2					Continued from previous page								
		8	9	14							SS-15		POORLY GRADED SAND (SP), pale yellow (2.5Y 7/3), very firm, moist, fine grained, trace fines, weak HCl reaction on sand, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules (continued)
18.6	60.8	8	20	22							SS-16A/B		CLAYEY SAND (SC), light yellowish brown (2.5Y 6/4), dense, moist, fine grained, little fines, no HCl reaction
13.6	65.8												POORLY GRADED SAND (SP), light yellowish brown (2.5Y 6/4), dense, moist, fine grained, trace fines, no HCl reaction
		9	13	18							SS-17		FAT CLAY with sand (CH), light gray (2.5Y 7/2), hard, moist, little fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
8.6	70.8												
		7	6	10							SS-18		FAT CLAY (CH), yellowish brown (10YR 5/8) mottled light gray (2.5Y 7/2), very stiff, moist, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
3.6	75.8	6	8	10							SS-19		FAT CLAY with sand (CH), light gray (2.5Y 7/2), very stiff, moist, little fine grained sand, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, black staining
-1.5	80.8												
		10	14	31							SS-20		POORLY GRADED SAND (SP), light brownish gray (2.5Y 6/2), dense, wet, fine grained, few fines, no HCl reaction on sand, trace calcium carbonate, strong HCl reaction on calcium carbonate
-6.5	85.8	8	12	50/0.3							SS-21		CLAYEY SAND (SC), light gray (5Y 7/2), very dense, moist, fine grained, little fines, weak HCl reaction on sand, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange staining, caliche at bottom of sample
-11.5	90.8	90	100/0.1								SS-22		POORLY GRADED SAND (SP), light brownish gray (2.5Y 6/2), very dense, wet, fine grained, trace fines, weak HCl reaction on sand, few calcium carbonate nodules at bottom of sample, strong HCl reaction on calcium carbonate nodules
-16.5	95.8	100/0.1									SS-23		90.0 - 95.0 ft: rig chatter 90.0 to 98.5 ft: hard drilling
-21.5	100.8												95.8 ft: no recovery
		74	90	50/0.2							SS-24		100.8 ft: pale yellow (2.5Y 7/4), fine to medium grained, no HCl reaction
-31.5	110.8												
		9	10	15							SS-25		FAT CLAY (CH), light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/8), very stiff, moist, few fine grained sand, weak HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, black staining

EXELON COL BORE VICTORIA PHASE III GPJ EXELON COL GDT 10/20/09



SHEET 3 OF 8

BECHTEL NO.: 25352		MACTEC NO.: 6468-07-1777		COUNTY: Victoria, TX		GEOLOGIST: J. Liles																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS							GROUND WATER (ft)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
BORING NO.: B-3128		DRILL METHOD: Mud Rotary		SAMPLE METHODS: SPT		0 HR. ND																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
GROUND SURFACE ELEV.: 79.4 ft (NAVD88)		NORTHING: 13,412,354		US ft (NAD83)		EASTING: 2,600,019 US ft (NAD83)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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TOTAL DEPTH: 402.4 ft		DRILL MACHINE: CME 550		DRILLER: R. White (MILLER)		HAMMER (ID): 140 lb. Auto (353)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
DATE STARTED: 1/26/09		COMPLETED: 2/8/09		CASING DEPTH: 3.5 ft		BITS USED: 3 1/2" Drag Bit																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	20	40	60	80	100			NO.	MOI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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EXELON COL BORE VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09



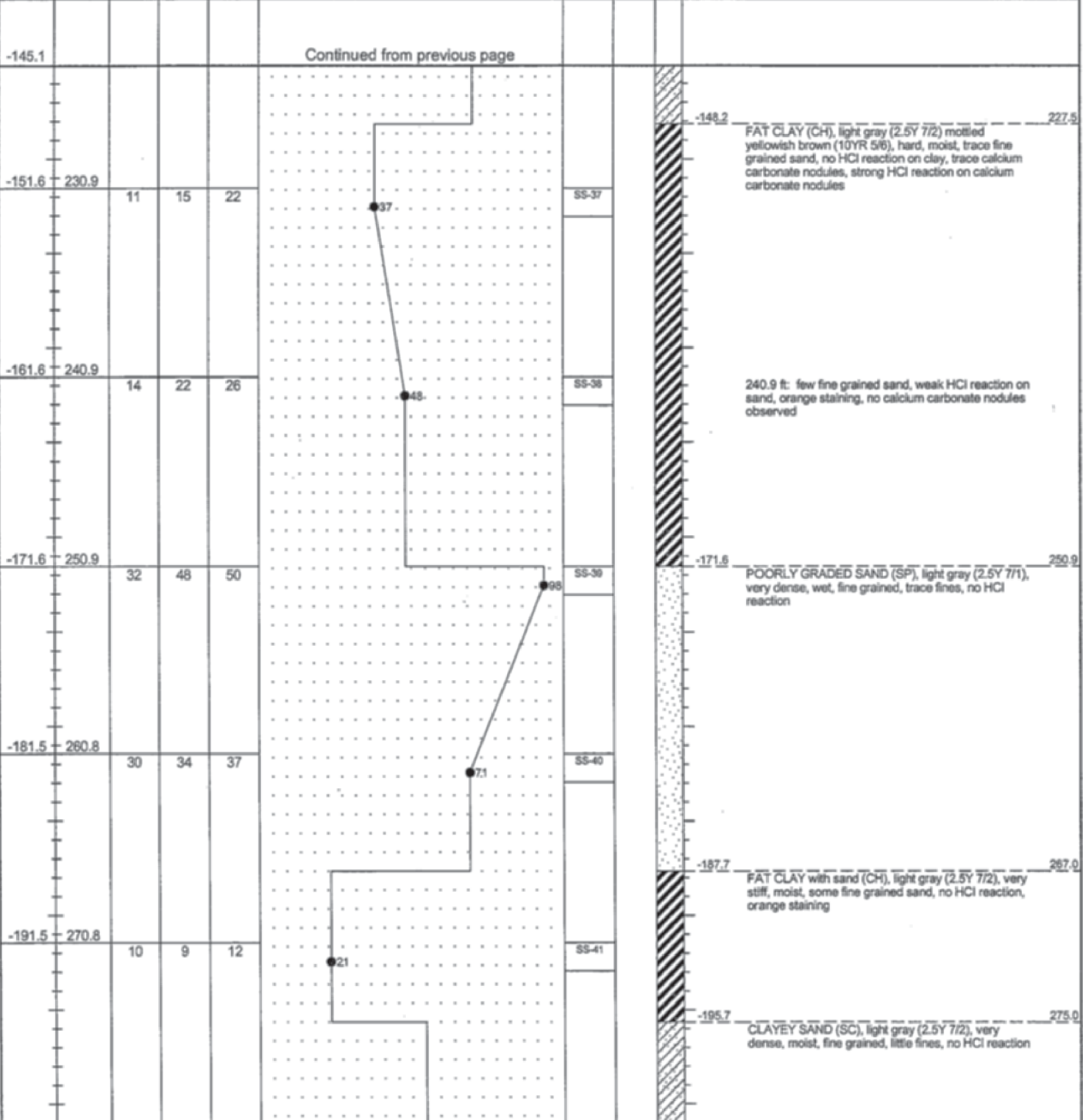
SHEET 4 OF 8

BECHTEL NO.: 25352			MACTEC NO.: 6468-07-1777			COUNTY: Victoria, TX			GEOLOGIST: J. Liles		
SITE DESCRIPTION: Exelon Texas COL Project - Supplemental Investigation, Including UHS									GROUND WATER (ft)		
BORING NO.: B-3128			DRILL METHOD: Mud Rotary			SAMPLE METHODS: SPT			0 HR. ND		
GROUND SURFACE ELEV.: 79.4 ft (NAVD88)			NORTHING: 13,412,354			US ft (NAD83)			EASTING: 2,600,019 US ft (NAD83)		
24 HR. ND			TOTAL DEPTH: 402.4 ft			DRILL MACHINE: CME 550			DRILLER: R. White (MILLER)		
HAMMER (ID): 140 lb. Auto (353)			DATE STARTED: 1/26/09			COMPLETED: 2/8/09			CASING DEPTH: 3.5 ft		
BITS USED: 3 1/2" 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.			LOG		
MOI			SOIL AND ROCK DESCRIPTION								
-89.0			Continued from previous page								
-91.5			170.8			35			45		
50/0.3											
-101.5			180.8			100/0.3					
-111.5			190.8			26			35		
50											
-121.5			200.8			21			32		
34											
-131.5			210.8			27			18		
23											
-141.5			220.8			22			33		
39											

EXELON COL BORE VICTORIA PHASE III CPJ EXELON COL GDT 10/20/09

BORING NO.: B-3128	DRILL METHOD: Mud Rotary	SAMPLE METHODS: SPT	0 HR.	ND
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TOTAL DEPTH: 402.4 ft	DRILL MACHINE: CME 550	DRILLER: R. White (MILLER)	HAMMER (ID): 140 lb. Auto (353)
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[illegible]

EXELON COL BORE VICTORIA PHASE IILGPI EXELON COL.GDT 10/20/09

