MACTEC

GEOTECHNICAL BORING LOG

Prepared By WSD Date 8-10-09

Checked 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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
23.9					Continued from previous page				Drill without sampling from 0.0 - 148.5 feet. *(continued)*
									83.5 to 85.0 ft: hard drilling
									95.5 to 96.5 ft: hard drilling
									99.0 to 100.0 ft: hard drilling
									104.5 to 105.0 ft: hard drilling

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-32.2					Continued from previous page				Drill without sampling from 0.0 - 148.5 feet. *(continued)*
									146.0 to 146.5 ft: hard drilling
-68.5	148.5	7	8	11	19	SS-1			CLAYEY SAND (SC), light gray (10YR 7/2), reddish yellow (7.5YR 6/6), firm, wet, fine grained, little fines, weak HCl reaction
-78.5	158.5	8	10	11	21	SS-2			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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-88.3					Continued from previous page				
-88.5	168.5	18	16	10	26	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	53	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	92	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	22	SS-6A/B/C			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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBT Date 8-10-09

Checked 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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
80.1					Ground Surface				
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	8	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			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			SANDY FAT CLAY (CH), greenish gray (10Y 6/1), very stiff, moist, some fine grained sand, strong HCl reaction, calcium carbonate fragments

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
24.0					Continued from previous page				
21.6	58.5	10	12	18	30	SS-15			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	13	SS-16			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	15	SS-17			63.5 ft: greenish gray (5GY 6/1), stiff, trace sand, strong HCl reaction, calcium carbonate fragments
6.5	73.6	4	7	14	21	SS-18			68.3 ft: brown (7.5YR 5/4), with a few intermittent lenses of silty, fine sand
1.6	78.5	5	10	12	22	SS-19			72.0
-3.4	83.5	50/0.2			50/0.2	SS-20			SILTY SAND (SM), light gray (5Y 7/2), very firm, moist, fine grained, some fines, strong HCl reaction, calcium carbonate fragments
-8.5	88.6	29	50/0.2		79/0.7	SS-21			80.0 - 81.0 ft: hard drilling, rig chatter
-13.4	93.5	28	42	50	92	SS-22			83.0 - 85.5 ft: hard drilling, rig chatter 83.5 ft: very dense, no recovery
-18.3	98.4	42	40	39	79	SS-23			88.6
-28.3	108.4	9	9	12	21	SS-24			SANDY SILT (ML), white (5Y 8/1), hard, moist, some fine grained sand, strong HCl reaction, calcium carbonate fragments
									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
									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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-32.1					Continued from previous page				
									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)*
-37.9	118.0								
-38.4	118.5	4	7	10	17	SS-25			FAT CLAY with sand (CH), light gray (5Y 7/1), very stiff, moist, little fine grained sand, no HCl reaction
-48.4	128.5	9	10	12	22	SS-26			POORLY GRADED SAND with silt (SP-SM), light gray (5Y 7/1), very firm, moist, medium to coarse grained, few fines, no HCl reaction
-58.4	138.5	9	16	26	42	SS-27			138.5 ft: dense, wet, fine to coarse grained
-68.5	148.6	10	10	15	25	SS-28			148.6 ft: pale yellow (2.5YR 8/3), very firm, fine grained, 1/8-inch thick lens of soft, fat clay
-78.4	158.5	10	11	13	24	SS-29			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
-84.9	165.0								
-88.3	168.4								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

MACTEC

SHEET 4 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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-88.2					Continued from previous page				
		30	37	29	66	SS-30/MB			-89.3 169.4 SANDY FAT CLAY (CH), light gray (5Y 7/1), hard, moist, some medium grained sand, strong HCl reaction
-98.3	178.4	24	42	47	89	SS-31			-98.3 178.4 POORLY GRADED SAND with silt (SP-SM), pale brown (10YR 6/3), very dense, wet, fine to coarse grained, trace gravel, few fines, weak HCl reaction
-108.4	188.5	41	38	46	84	SS-32			188.5 ft: fine to medium grained
-114.9	195.0								SILTY SAND (SM), pale brown (10YR 6/3), dense, moist, fine grained, little fines, FAT CLAY (CH) lenses, weak HCl reaction
-118.4	198.5	8	15	18	33	SS-33			
-119.9	200.0								Boring Terminated at Elevation -119.9 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 8-10-09

Checked 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-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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
80.0					Ground Surface				80.0 0.0
80.0	0.0	4	8	5	13	SS-1			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								76.5 3.5
		5	7	8	15	SS-2			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								74.0 6.0
		5	6	6	12	SS-3			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	17	SS-4			8.5 ft: very stiff
69.0	11.0								
		6	9	10	19	SS-5			11.0 ft: orange staining
66.5	13.5								
		6	7	8	15	SS-6			13.5 ft: stiff
61.5	18.5								
		4	5	7	12	SS-7			18.5 ft: reddish yellow (7.5YR 6/6), trace calcium carbonate nodules
56.5	23.5								
		4	5	9	14	SS-8			23.5 ft: some calcium carbonate nodules, slickensides
51.5	28.5								
		4	7	8	15	SS-9			28.5 ft: stiff, weak HCl reaction, no calcium carbonate nodules observed
46.5	33.5								
		5	7	10	17	SS-10			33.5 ft: very stiff, no slickensides observed
41.5	38.5								
		4	5	7	12	SS-11			38.5 ft: stiff, slickensides
36.5	43.5								
		3	6	6	12	SS-12			43.5 ft: trace calcium carbonate nodules
31.5	48.5								
		6	5	8	13	SS-13			48.5 ft: no slickensides observed
26.5	53.5								
		6	6	9	15	SS-14			53.5 ft: few fine grained sand

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

MACTEC

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)	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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
23.9					Continued from previous page				
21.5	58.5	12	16	17	33	SS-15			FAT CLAY (CH), light gray (10YR 7/2), stiff, moist, few fine grained sand, weak HCl reaction, calcium carbonate nodules, black staining *(continued)*
									21.5 — 58.5 SILTY SAND (SM), light gray (10YR 7/2), dense, wet, fine grained, some fines, no HCl reaction
16.5	63.5	6	5	6	11	SS-16A/B			16.5 — 63.5
									16.0 — 64.0 SANDY FAT CLAY (CH), light gray (10YR 7/2), stiff, moist, some fine grained sand, no HCl reaction
									FAT CLAY (CH), reddish yellow (7.5YR 6/6), stiff, moist, few fine grained sand, weak HCl reaction, calcium carbonate nodules
11.5	68.5	6	9	12	21	SS-17			11.5 — 68.5 SANDY FAT CLAY (CH), light gray (10YR 7/2), very stiff, wet, some fine grained sand, weak HCl reaction, calcium carbonate nodules
6.5	73.5	9	12	15	27	SS-18			6.5 — 73.5 SILTY SAND (SM), very pale brown (10YR 7/3), very firm, wet, fine grained, some fines, weak HCl reaction
1.5	78.5	11	8	19	27	SS-19			78.5 ft: no recovery
0.0	80.0	12	13	11	24	SS-20			80.0 ft: weak HCl reaction on sand, strong HCl reaction on caliche, caliche
-3.5	83.5	10	14	14	28	SS-21			-3.9 — 83.9 83.5 ft: little fines, weak HCl reaction
									FAT CLAY (CH), light gray (10YR 7/2), very stiff, moist, few fine grained sand, strong HCl reaction, calcium carbonate nodules, orange staining
-8.5	88.5	17	36	50/0.3	86/0.8	SS-22			88.5 ft: hard, black staining
-13.5	93.5	14	18	19	37	SS-23			-13.5 — 93.5 POORLY GRADED SAND (SP), very pale brown (10YR 7/3), dense, wet, fine grained, trace to few fines, no HCl reaction
-18.5	98.5	49	48	55/0.5	103/1.0	SS-24			98.5 ft: very pale brown (10YR 8/4), very dense, fine to coarse grained
-28.5	108.5	6	11	13	24	SS-25			-28.5 — 108.5 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.GPJ EXELON COL.GDT 8/10/09

MACTEC

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)	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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-32.2					Continued from previous page				
									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)*
-38.5	118.5	6	8	11	19	SS-26			118.5 ft: few fine grained sand, orange staining
-48.5	128.5	17	27	32	59	SS-27			POORLY GRADED SAND (SP), light gray (10YR 7/2), very dense, wet, fine to medium grained, trace to few fines, no HCl reaction
-58.5	138.5	11	17	25	42	SS-28			138.5 ft: dense, fine grained, clay nodules
-68.5	148.5	5	7	11	18	SS-29			FAT CLAY (CH), light gray (10YR 7/2), very stiff, moist, weak HCl reaction, calcium carbonate nodules, black and orange staining
-78.5	158.5	8	10	11	21	SS-30			158.5 ft: reddish yellow (7.5YR 6/6)

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

MACTEC

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)	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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-88.3					Continued from previous page				
-88.5	168.5	17	24	43	67	SS-31			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	87/0.9	SS-32			178.5 ft: very pale brown (10YR 8/4), fine to coarse grained
-108.5	188.5	50/0.3			50/0.3	SS-33			188.5 ft: fine to medium grained
-118.5	198.5	5	7	17	24	SS-34			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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WSD Date 11-10-09

Checked By RAM Date 11/10/09

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)	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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
24.0					Continued from previous page				
22.6	57.5	11	11	17	28	SS-15			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
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
17.6	62.5	7	5	8	13	SS-16			
12.6	67.5	6	7	8	15	SS-17			FAT CLAY (CH), pale yellow (5Y 8/2) mottled yellow (10YR 7/6), stiff, moist, few fine grained sand, strong HCl reaction
7.6	72.5	11	12	17	29	SS-18			LEAN CLAY with sand (CL), pale yellow (5Y 8/2), very stiff, moist, fine grained sand, strong HCl reaction
3.6	76.5	11	12	29	41	SS-19			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
-2.4	82.5	100/0.3			100/0.3	SS-20			81.0 ft: calcium carbonate fragments and sand in cuttings 82.5 ft: light gray (5Y 7/2), very dense, fine to medium grained, few gravel-sized calcium carbonate fragments
-4.9	85.0								82.5 to 85.0 ft: rig chatter CLAYEY SAND (SC), very pale brown (10YR 8/2), very dense, wet, fine to medium grained, caliche at 88.5 feet, strong HCl reaction
-7.4	87.5	16	22	50/0.3	72/0.8	SS-21			
-12.4	92.5	36	23	45	68	SS-22A/B			FAT CLAY with sand (CH), light gray (5Y 7/2), hard, moist, little fine grained sand, trace calcium carbonate nodules, strong HCl reaction, caliche from 92.8 to 93.4 feet
-13.3	93.4								SILTY SAND (SM), very pale brown (10YR 7/3), very dense, wet, fine to medium grained, trace carbonate nodules, strong HCl reaction
-17.4	97.5	100/0.5			100/0.5	SS-23			POORLY GRADED SAND with silt (SP-SM), very pale brown (10YR 7/3), very dense, wet, fine to medium grained, strong HCl reaction, trace calcium carbonate nodules, few organic matter
-22.4	102.5	30	50	55/0.5	105/1.0	SS-24			SILTY SAND (SM), very pale brown (10YR 7/3), very dense, wet, fine to medium grained, trace coarse sand and fine gravel, strong HCl reaction, few angular gravel (6mm)
-26.9	107.0								106.0 - 107.0 ft: rig chatter and sand in cuttings FAT CLAY (CH), pale yellow (5Y 8/2), brownish yellow (10YR 6/6), very stiff, moist, trace calcium carbonate nodules, strong HCl reaction

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-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			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
-62.4	142.5	12	20	17	37	SS-28			CLAYEY SAND (SC), light gray (10YR 7/2), dense, moist, fine grained, strong HCl reaction
-72.4	152.5	10	30	22	52	SS-29			POORLY GRADED SAND with silt (SP-SM), light gray (10YR 7/2), very dense, wet, fine to medium grained, no HCl reaction
-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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-88.2					Continued from previous page				
-92.4	172.5								POORLY GRADED SAND with silt (SP-SM), light gray (10YR 7/2), very dense, wet, fine to medium grained, no HCl reaction *(continued)*
		25	35	42	77	SS-31			172.5 ft: fine grained, strong HCl reaction, no calcium carbonate nodules observed
-100.9									181.0 to 182.5 ft: hard drilling, rig chatter
-102.4	182.5								181.0
-102.7									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
		26	80	100/0.5	180/1.0	SS-32A/B			182.6
									SILTY SAND (SM), very pale brown (10YR 8/2), very dense, moist, fine to medium grained, strong HCl reaction
-112.4	192.5								
		20	31	41	72	SS-33			192.5 ft: light gray (10YR 7/2), wet
									200.5 - 202.0 ft: rig chatter
-121.9									202.0
-122.4	202.5								CLAYEY SAND (SC), light gray (10YR 7/2), dense, wet, fine grained, strong HCl reaction
		10	13	25	38	SS-34			
-128.4									208.5
-132.4	212.5								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
		8	12	13	25	SS-35			
-136.9									217.0 to 218.0 ft: rig chatter
-142.4	222.5								217.0
									CLAYEY SAND (SC), light gray (10YR 7/2) mottled yellow (10YR 7/6), very dense, moist, fine grained, strong HCl reaction
		24	30	38	68	SS-36			

EXELON COL_BORE_VICTORIA PHASE III.GPJ EXELON COL.GDT 10/20/09

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-144.3					Continued from previous page				
									CLAYEY SAND (SC), light gray (10YR 7/2) mottled yellow (10YR 7/6), very dense, moist, fine grained, strong HCl reaction *(continued)*
-151.4									231.5 to 232.5 ft: hard drilling, rig chatter
-152.4	232.5	6	10	15	25	SS-37			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
									237.0 to 238.5 ft: rig chatter
-162.4	242.5	6	12	15	27	SS-38			242.5 ft: mottled brownish yellow (10YR 6/6), fine grained sand
									249.5 ft: rig chatter, possible sand
-172.4	252.5	29	25	36	61	SS-39			FAT CLAY with sand (CH), very pale brown (10YR 7/3) mottled brownish yellow (10YR 6/6), hard, moist, little fine grained sand, no HCl reaction
									SILTY SAND (SM), light gray (10YR 7/2), very dense, wet, fine grained, no HCl reaction
-182.4	262.5	22	29	33	62	SS-40			262.5 ft: strong HCl reaction
-192.4	272.5	17	31	29	60	SS-41A/B			272.5 ft: very pale brown (10YR 8/2), moist, fine to medium grained, no HCl reaction
-193.1									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.GPJ EXELON COL.GDT 10/20/09

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-200.4					Continued from previous page				
-202.4	282.5								FAT CLAY with sand (CH), light gray (10YR 7/2), hard, moist, little fine grained sand, no HCl reaction *(continued)*
		9	15	17	32	SS-42			FAT CLAY (CH), light gray (5Y 7/2) mottled brownish yellow (10YR 6/6), hard, moist, fine grained sand, strong HCl reaction
-212.4	292.5								
		10	16	22	38	SS-43			
-222.4	302.5								
		9	17	26	43	SS-44			302.5 ft: mottled reddish brown (5YR 6/4)
-232.4	312.5								
		8	14	14	28	SS-45			312.5 ft: mottled brownish yellow (10YR 6/6), very stiff, calcium carbonate nodule
-242.4	322.5								-242.4 322.5
		25	42	54	96	SS-46			SILTY SAND (SM), very pale brown (10YR 7/3), very dense, wet, fine grained, strong HCl reaction
									327.0 ft: hard drilling
-252.4	332.5								
		60	110/0.5		170/1.0	SS-47			332.2 ft: hard drilling 332.5 ft: yellow (10YR 7/6)

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-256.5					Continued from previous page				
									SILTY SAND (SM), very pale brown (10YR 7/3), very dense, wet, fine grained, strong HCl reaction *(continued)*
-258.9	339.0								FAT CLAY (CH), light gray (10YR 7/2) mottled yellow (10YR 7/6), hard, moist, trace calcium carbonate nodules, strong HCl reaction
-262.4	342.5	12	18	24	42	SS-48			
-271.7	351.8								CLAYEY SAND (SC), very pale brown (10YR 7/3), very dense, wet, fine grained, strong HCl reaction
-272.4	352.5	23	43	46	89	SS-49			
-277.9	358.0								FAT CLAY (CH), light gray (10YR 7/2) mottled brownish yellow (10YR 6/6), very stiff, moist, trace fine grained sand, strong HCl reaction
-282.4	362.5	7	12	17	29	SS-50			
-292.4	372.5	8	15	19	34	SS-51			372.5 ft: hard
-302.4	382.5	6	8	16	24	SS-52			382.5 ft: very stiff
-312.4	392.5								

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-312.6					Continued from previous page				
		7	12	12	24	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	35	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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBT Date 8-10-09

Checked 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 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	5	5	4	9	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	6	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	12	SS-3			6.6 ft: grayish brown (2.5Y 5/2)
71.1	8.5	6	7	9	16	SS-4			8.5 ft: very stiff, no HCl reaction, no calcium carbonate nodules observed
68.8	10.8	3	6	7	13	SS-5			68.8 10.8 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
66.3	13.3	3	6	7	13	SS-6			13.3 ft: light yellowish brown (2.5Y 6/3), few fine grained sand
61.4	18.2	4	5	7	12	SS-7			18.2 ft: light gray (2.5Y 7/2) mottled brownish yellow (10YR 6/8)
56.3	23.3	4	5	6	11	SS-8			23.3 ft: no HCl reaction, no calcium carbonate nodules observed
51.3	28.3	4	6	9	15	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	13	SS-10			33.3 ft: mottled with light gray (2.5Y 7/2), no HCl reaction
41.3	38.3	7	11	18	29	SS-11			41.3 38.3 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
36.3	43.3	15	18	22	40	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	18	SS-13			31.3 48.3 POORLY GRADED SAND with clay (SP-SC), pale yellow (2.5Y 7/3), firm, wet, fine grained, few fines, weak HCl reaction
26.3	53.3	4	4	5	9	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

MACTEC

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 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				
21.3	58.3								21.3 — 58.3
		4	3	10	13	SS-15			CLAYEY SAND (SC), pale yellow (2.5Y 7/3), firm, wet, fine grained, little fines, weak HCl reaction
16.3	63.3								16.3 — 63.3
		4	7	8	15	SS-16			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								11.3 — 68.3
		6	12	14	26	SS-17			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	20	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								1.3 — 78.3
		6	7	15	22	SS-19			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	107/0.7	SS-20			83.3 ft: very dense
-8.7	88.3								
		35	28	27	55	SS-21A/B			-9.6 — 89.2
-13.7	93.3								POORLY GRADED SAND (SP), pale yellow (2.5Y 7/3), very dense, moist, fine grained, few fines, no HCl reaction
		100/0.2			100/0.2	SS-22			93.3 ft: weak HCl reaction
-18.7	98.3								
		62	50/0.2		112/0.7	SS-23			98.3 ft: trace fines
-28.7	108.3								-21.4 — 101.0
		4	8	10	18	SS-24			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

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

MACTEC

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 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				
									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)*
-38.7	118.3	7	11	10	21	SS-25			118.3 ft: light gray (2.5Y 7/2), no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction
-48.7	128.3	9	10	13	23	SS-26			128.3 ft: pale yellow (2.5Y 8/2) mottled brownish yellow (10YR 6/6), few calcium carbonate nodules
-58.7	138.3	4	6	8	14	SS-27			138.3 ft: pale yellow (2.5Y 8/3), stiff, trace calcium carbonate nodules
-68.7	148.3	4	6	11	17	SS-28			148.3 ft: pale yellow (2.5Y 8/2), very stiff, weak HCl reaction, no calcium carbonate nodules observed
-78.7	158.3	10	13	16	29	SS-29			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
-88.7	168.3								-88.7 168.3

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-88.7					Continued from previous page				
		32	27	27	54	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								
		35	32	33	65	SS-31			178.2 ft: wet, fine to medium grained
-108.7	188.3								
		35	40	42	82	SS-32			188.3 ft: fine grained, few fines, weak HCl reaction
									-112.4 192.0
									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
-118.7	198.3								
		11	16	32	48	SS-33A/B			-119.7 199.3
									POORLY GRADED SAND (SP), pale yellow (2.5Y 8/3), dense, moist, fine grained, few fines, no HCl reaction
-128.7	208.3								
		9	10	22	32	SS-34			-128.7 208.3
									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
-138.7	218.3								
		6	42	50/0.2	92/0.7	SS-35			-138.7 218.3
									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.GPJ EXELON COL.GDT 8/10/09

MACTEC

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-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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-144.8					Continued from previous page				
-148.7	228.3								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)*
		9	20	17	37	SS-36			228.3 ft: light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/6), few fine grained sand, few calcium carbonate nodules
-158.7	238.3								
		24	28	32	60	SS-37			238.3 ft: light gray (2.5Y 7/2) mottled light yellowish brown (10YR 6/4), trace fine grained sand, black staining
-168.7	248.3								
-168.9	248.5	21	25	31	56	SS-38			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
-178.7	258.3								
		24	28	32	60	SS-39			POORLY GRADED SAND (SP), pale yellow (2.5Y 8/2), very dense, wet, fine grained, no HCl reaction
-188.7	268.3								
-188.7	268.3	19	26	21	47	SS-40			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
-196.7	278.3								
-199.0	278.6	12	10	14	24	SS-41A/B			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 III.GPJ EXELON COL.GDT 8/10/09

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-200.9					Continued from previous page				
									FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, few fine grained sand, no HCl reaction *(continued)*
-208.7	288.3	12	20	25	45	SS-42			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	42	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
-220.2	299.8								Boring Terminated at Elevation -220.2 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBQ Date 11-10-09

Checked By PAH 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. (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
78.1					Ground Surface				78.1 0.0
78.1	0.0	5	5	6	11	SS-1			LEAN CLAY (CL), black (2.5Y 2.5/1), stiff, dry, low fine grained sand, no HCl reaction, trace roots
74.6	3.5	4	4	5	9	SS-2			74.6 3.5 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
72.1	6.0	5	8	12	20	SS-3			72.1 6.0 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
70.0	8.1	9	10	13	23	SS-4			8.1 ft: light brownish gray (2.5Y 6/2)
67.6	10.5	7	8	10	18	SS-5			67.6 10.5 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
64.8	13.3	7	9	11	20	SS-6			
59.9	18.2	6	10	12	22	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	14	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	23	SS-9			28.2 ft: very stiff, trace sand
44.7	33.4	4	5	6	11	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	14	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	22	SS-12			34.8 43.3 CLAYEY SAND (SC), pale yellow (5Y 8/2), olive yellow (2.5Y 6/8), very firm, moist, fine grained, little fines, no HCl reaction
29.9	48.2	9	9	13	22	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	43	SS-14			24.9 53.2 POORLY GRADED SAND (SP), light yellowish brown (2.5Y 6/4), dense, moist, fine grained, trace fines, no HCl reaction

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
22.0					Continued from previous page				
19.9	58.2	12	15	18	33	SS-15			FAT CLAY with sand (CH), pale yellow (2.5Y 8/2), hard, moist, little fine grained sand, no HCl reaction
13.0	65.1	7	11	23	34	SS-16			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
9.9	68.2	10	11	15	26	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	40	SS-18			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
-0.1	78.2	11	16	19	35	SS-19			78.2 ft: light gray (2.5Y 7.2)
-5.1	83.2	50/0.5			50/0.5	SS-20			83.2 ft: no recovery
-10.2	88.3	8	9	11	20	SS-21			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
-15.2	93.3	15	28	47	75	SS-22			CLAYEY SAND (SC), pale yellow (2.5Y 8/2), very dense, moist, medium grained, little fines, weak HCl reaction
-20.1	98.2	50	46	47	93	SS-23			POORLY GRADED SAND (SP), pale yellow (2.5Y 8/4), very dense, moist, medium grained, trace to few fines, weak HCl reaction
-30.3	108.4	9	11	13	24	SS-24			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

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-34.1					Continued from previous page				
									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 *(continued)*
-40.2	118.3	11	16	17	33	SS-25			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
-50.2	128.3	7	14	16	30	SS-26			128.3 ft: pale yellow (2.5Y 7/3), very stiff, trace fine grained sand, weak HCl reaction on clay
-60.2	138.3	10	10	14	24	SS-27			138.3 ft: light gray (2.5Y 7/2), no calcium carbonate nodules observed
-70.2	148.3	22	28	37	65	SS-28			-70.2 148.3 POORLY GRADED SAND (SP), pale yellow (5Y 8/3), very dense, moist, fine grained, trace fines, weak HCl reaction
-80.3	158.4	13	16	24	40	SS-29			-80.3 158.4 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
-90.3	168.4								-90.3 168.4

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

MACTEC

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)	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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-90.2					Continued from previous page				
		50	50/0.4		100/0.9	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		89/0.9	SS-31			178.3 ft: no HCl reaction
-110.4	188.5								
		40	45	47	92	SS-32			188.5 ft: wet, fine to medium grained, trace fines
-120.4	198.5								-120.4 198.5
		7	9	13	22	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								-130.5 208.6
		20	32	37	69	SS-34A/B			CLAYEY SAND (SC), pale yellow (2.5Y 8/2), very dense, moist, fine grained, little fines, weak HCl reaction; POORLY GRADED SAND (SP), pale yellow (2.5Y 8/2), very dense, moist, fine grained, trace fines, no HCl reaction
-140.4	218.5								-140.4 218.5
		27	26	30	56	SS-35			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

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-146.3					Continued from previous page				
-150.3	228.4								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)*
		17	21	26	47	SS-36			-150.3 228.4 FAT CLAY with sand (CH), pale yellow (2.5Y 8/3), hard, moist, little fine grained sand, weak HCl reaction
-160.3	238.4								-160.3 238.4
		23	24	27	51	SS-37			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
-167.9	246.0								POORLY GRADED SAND (SP), pale yellow (5Y 8/2), yellow (2.5Y 7/8), very dense, moist, fine grained, few fines, strong HCl reaction
-170.3	248.4	36	50/0.5		86/1.0	SS-38			
-180.3	258.4								255.0-257.5 ft: hard drilling
		35	45	39	84	SS-39			258.4 ft: light gray (7.5YR 7/1), wet, fine to medium grained, trace fines, no HCl reaction
-183.9	262.0								FAT CLAY (CH), pale yellow (5Y 8/2), hard, moist, few fine grained sand, weak HCl reaction
-190.4	268.5								
		14	18	22	40	SS-40			273.0-277.0 ft: hard drilling
-200.3	278.4								-200.3 278.4
		21	18	30	48	SS-41			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

MACTEC

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)	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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-202.4					Continued from previous page				
									FAT CLAY with sand (CH), pale yellow (2.5Y 8/2), hard, moist, little fine grained sand, no HCl reaction *(continued)*
-210.4	288.5								-210.4 288.5
		17	20	26	46	SS-42			FAT CLAY (CH), light gray (2.5Y 7/2), hard, moist, few fine grained sand, weak HCl reaction
-220.3	298.4								
		18	21	25	46	SS-43			298.4 ft: pale yellow (2.5Y 8/2), brownish yellow (10YR 6/6), trace fine grained sand, black staining
-221.8	299.9								Boring Terminated at Elevation -221.8 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By DAW Date 8/10/09

Checked 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)	24 HR. ND
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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
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

MACTEC

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)	24 HR. ND
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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
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

MACTEC

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)	24 HR. ND
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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-32.3					Continued from previous page				
									Drill without sampling from 0.0 - 148.6 feet. *(continued)*
-68.7	148.6	10	13	17	30	SS-1			SANDY FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, some fine grained sand, no HCl reaction on clay, few calcium carbonate nodules
-78.7	158.6	8	8	13	21	SS-2			FAT CLAY (CH), light gray (2.5Y 7/2) mottled brownish yellow (10YR 6/6), very stiff, moist, few fine grained sand, strong HCl reaction, trace calcium carbonate nodules

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

MACTEC

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)	24 HR. ND
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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-88.4					Continued from previous page				
-88.7	168.6	44	48	46	94	SS-3			POORLY GRADED SAND with clay (SP-SC), pale yellow (2.5Y 7/3), very dense, moist, fine grained, few fines, weak HCl reaction
-98.7	178.6	28	25	22	47	SS-4			SANDY FAT CLAY (CH), light gray (2.5Y 7/2), yellowish brown (10YR 5/8), hard, moist, some fine grained sand, strong HCl reaction, trace calcium carbonate nodules
-108.7	188.6	30	43	50/0.5	93/1.0	SS-5			POORLY GRADED SAND with clay (SP-SC), pale yellow (2.5Y 7/3), very dense, wet, fine grained, few fines, strong HCl reaction, trace calcium carbonate nodules
-118.7	198.6	14	15	10	25	SS-6			198.6 ft: light gray (10YR 7/2), very firm
-120.2	200.1								Boring Terminated at Elevation -120.2 ft

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

MACTEC

GEOTECHNICAL BORING LOG

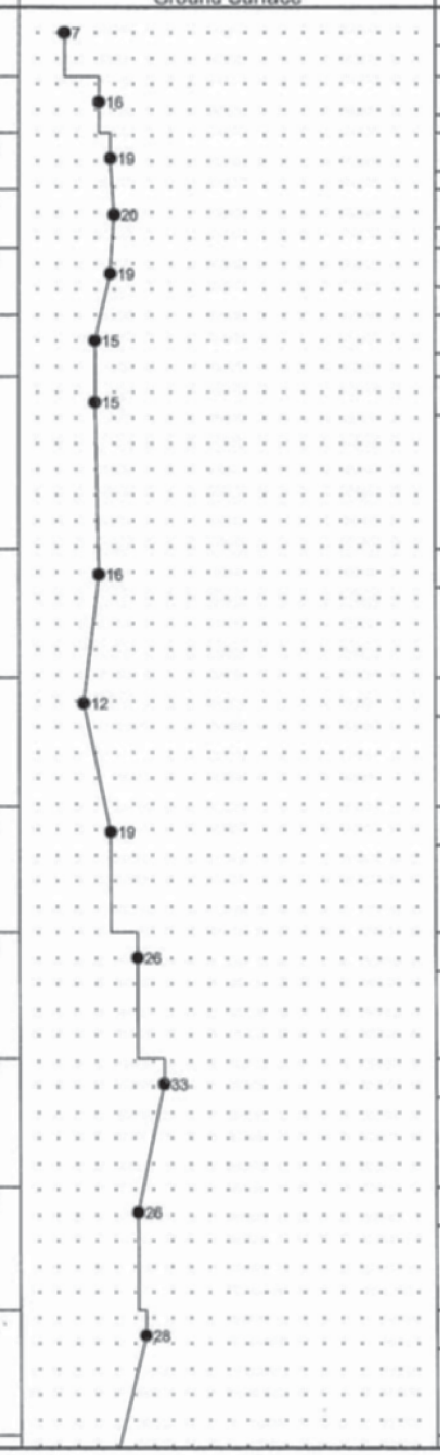
Prepared By AM Date 8/10/09

Checked By KAW Date 8-10-09

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-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 0.5ft	0.5ft	0.5ft	SAMP. NO.	SOIL AND ROCK DESCRIPTION
79.7						Ground Surface
79.7	0.0	2	2	5	SS-1	SANDY LEAN CLAY (CL), very dark gray (2.5Y 3/1), firm, dry, some fine grained sand, no HCl reaction, trace small roots
77.0	2.7	6	7	9	SS-2	SANDY FAT CLAY (CH), gray (2.5Y 5/1), very stiff, moist, some fine grained sand, trace calcium carbonate nodules, strong HCl reaction
74.8	4.9	6	9	10	SS-3	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
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	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
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	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
38.8	40.9	14	16	17	SS-12	POORLY GRADED SAND with clay (SP-SC), pale yellow (2.5Y 7/4), dense, moist, fine grained, few fines, calcium carbonate, strong HCl reaction
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	50.0 ft: bit chatter 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
24.1	55.6					



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

MACTEC

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 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				
		11	8	12	20	SS-15A/B			23.0 55.6 ft: firm, some fines, weak HCl reaction, orange staining 55.7
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	30	SS-16A/B			18.5 60.7 ft: very firm, trace fines, no HCl reaction 61.2
14.0	65.7								CLAYEY SAND (SC), light gray (2.5Y 7/2), very firm, moist, fine grained, some fines, no HCl reaction
		5	6	20	26	SS-17			14.0 65.7
9.1	70.6								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
		5	6	12	18	SS-18			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
4.0	75.7								
		9	10	13	23	SS-19			75.7 ft: orange staining
-1.1	80.8								
		8	9	13	22	SS-20			-1.1 80.8
-6.1	85.8								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
		6	6	7	13	SS-21			-5.2 84.9
-11.1	90.8								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
		10	29	36	65	SS-22			90.8 ft: hard, caliche zones, strong HCl reaction
-16.0	95.7								-13.3 93.0
		12	14	25	39	SS-23			POORLY GRADED SAND (SP), light gray (2.5Y 7/1), dense, wet, fine grained, trace fines, no HCl reaction
-21.0	100.7								
		36	49	50/0.2	99/0.7	SS-24			100.7 ft: light yellowish brown (2.5Y 6/3), very dense, fine to medium grained, strong HCl reaction, caliche at bottom of sample
-31.0	110.7								108.5 ft: hard drilling
		5	7	9	16	SS-25			-31.0 110.7

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

MACTEC

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 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				
									FAT CLAY (CH), light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/8), very stiff, moist, weak HCl reaction, black stains *(continued)* 114.0 to 115.0 ft: hard drilling
-41.1	120.8								-41.1 120.8
		6	9	10	19	SS-26			FAT CLAY with sand (CH), light olive gray (5Y 6/2), very stiff, moist, little fine grained sand, no HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange and black staining
-51.0	130.7								-51.0 130.7
		16	11	19	30	SS-27			SANDY FAT CLAY (CH), light gray (5Y 7/2), very stiff, moist, some fine grained sand, weak HCl reaction on clay, orange staining, caliche, strong HCl reaction on caliche
-61.0	140.7								
		16	19	15	34	SS-28			140.7 ft: hard, no HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
-71.0	150.7								-71.0 150.7
		15	11	17	28	SS-29			POORLY GRADED SAND with clay (SP-SC), light gray (2.5Y 7/2) and yellowish brown (10YR 5/8), very firm, wet, fine grained, weak HCl reaction, alternating layers of SP and SC, thin CH layer
-81.0	160.7								-81.0 160.7
		11	16	16	32	SS-30			FAT CLAY (CH), light gray (2.5Y 7/2), hard, moist, weak HCl reaction, orange staining

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-88.6					Continued from previous page				
-91.1	170.8	25	40	39	79	SS-31			-90.1 / 169.8 POORLY GRADED SAND (SP), light gray (2.5Y 7/2), very dense, wet, fine grained, weak HCl reaction
-101.0	180.7	100/0.1			100/0.1	SS-32			180.0 - 180.7 ft: bit chatter and hard drilling 180.7 ft: no recovery
-104.0	183.7	100/0.3			100/0.3	SS-33			183.7 ft: pale yellow (2.5Y 7/3), caliche, strong HCl reaction
-111.1	190.8	46	32	46	78	SS-34			190.8 ft: pale yellow (2.5Y 7/4), weak HCl reaction
-121.0	200.7	26	28	30	58	SS-35			
-131.1	210.8	16	14	17	31	SS-36			-129.6 / 209.3 FAT CLAY (CH), strong brown (7.5YR 5/6) mottled light gray (2.5Y 7/2), hard, moist, no HCl reaction on clay, 1-inch thick layer of caliche, strong HCl reaction on caliche
-141.1	220.8	29	35	22	57	SS-37			-139.3 / 219.0 POORLY GRADED SAND (SP), light gray (2.5Y 7/2), very dense, wet, fine grained, no HCl reaction on sand, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-144.7					Continued from previous page				
									POORLY GRADED SAND (SP), light gray (2.5Y 7/2), very dense, wet, fine grained, no HCl reaction on sand, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules *(continued)*
-151.1	230.8								-151.1 230.8
		10	9	14	23	SS-38			FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange staining
-161.0	240.7								-161.0 240.7
		30	31	30	61	SS-39			FAT CLAY with sand (CH), light brownish gray (2.5Y 6/2), hard, moist, little fine grained sand, orange staining, 2-inch thick layer of caliche, strong HCl reaction
-171.1	250.8								-171.1 250.8
		13	22	26	48	SS-40			FAT CLAY (CH), light brownish gray (2.5Y 6/2), hard, moist, weak HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange staining
-179.0	258.7								-179.0 258.7
									POORLY GRADED SAND (SP), pale yellow (2.5Y 7/3), very dense, wet, fine to medium grained, no HCl reaction
-181.0	260.7	32	33	45	78	SS-41			
-191.0	270.7								-191.0 270.7
		17	30	49	79	SS-42			POORLY GRADED SAND with clay (SP-SC), light gray (2.5Y 7/2), very dense, moist, fine grained, few fines, no HCl reaction, orange staining
									-199.1 278.8

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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-200.8					Continued from previous page				
-202.0	281.7	14	34	41	75	SS-43A/B			CLAYEY SAND (SC), light gray (2.5Y 7/2), very dense, moist, fine grained, little fines, no HCl reaction, orange staining *(continued)*
									POORLY GRADED SAND (SP), light gray (2.5Y 7/2), very dense, wet, fine grained, few fines, no HCl reaction, orange staining
-208.1	287.8								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
-211.1	290.8	14	15	22	37	SS-44			
-221.1	300.8	13	17	25	42	SS-45			300.8 ft: weak HCl reaction, no calcium carbonate nodules observed
-231.1	310.8	8	12	20	32	SS-46			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	73/0.8	SS-47			POORLY GRADED SAND (SP), light gray (10YR 7/2), very dense, wet, fine grained, weak to strong HCl reaction
-251.0	330.7	49	64	50/0.2	114/0.7	SS-48			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

MACTEC

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 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 20 40 60 80 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-256.9					Continued from previous page				
-259.3									POORLY GRADED SAND (SP), light gray (10YR 7/2), very dense, wet, fine grained, weak to strong HCl reaction *(continued)*
-261.2	340.9	6	11	21	32	SS-49			FAT CLAY (CH), light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/6), hard, moist, weak to strong HCl reaction
-271.0	350.7	21	38	100/0.4	138/0.9	SS-50			CLAYEY SAND (SC), light yellowish brown (10YR 6/4), very dense, moist, fine grained, little fines, strong HCl reaction
-278.3									FAT CLAY (CH), light brownish gray (2.5Y 6/2), hard, moist, weak HCl reaction
-281.1	360.8	9	12	19	31	SS-51			360.8 ft: no recovery, residue on sample catcher indicates clay
-291.1	370.8	6	11	14	25	SS-52			370.8 ft: very stiff, no recovery, soil observed on drill bit indicates clay
-302.6	382.3	10	10	19	29	SS-53			
-311.1	390.8	8	13	19	32	SS-54			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

MACTEC

SHEET 8 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 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 brownish gray (2.5Y 6/2), hard, moist, weak HCl reaction *(continued)*
-321.1	400.8	9	11	20	31	SS-55			400.8 ft: few fine grained sand, strong HCl reaction, trace calcium carbonate nodules
								-322.6	402.3 Boring Terminated at Elevation -322.6 ft

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

MACTEC

GEOTECHNICAL BORING LOG

Prepared By WBD Date 11-10-09

Checked By RAR 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. (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
79.4					Ground Surface				79.4 0.0
79.4	0.0	9	10	10	20	SS-1			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								76.5 2.9
		9	6	7	13	SS-2			FAT CLAY with sand (CH), very dark grayish brown (2.5Y 3/2), stiff, moist, little fine grained sand, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, trace small roots
74.2	5.2								74.2 5.2
		9	11	15	26	SS-3			FAT CLAY (CH), light brownish gray (2.5Y 6/2), very stiff, moist, little fine grained sand, no HCl reaction on clay, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
72.2	7.2								69.6 9.8
		9	12	14	26	SS-4			7.2 ft: light yellowish brown (2.5Y 6/3), trace fine grained sand, strong HCl reaction, calcium carbonate, orange and black staining
69.6	9.8								67.1 12.3
		14	16	18	34	SS-5			FAT CLAY with sand (CH), light brownish gray (2.5Y 6/2), hard, dry, little fine grained sand, weak HCl reaction on clay, calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange and black staining
67.1	12.3								
		11	10	9	19	SS-6			FAT CLAY (CH), light brownish gray (2.5Y 6/2), very stiff, moist, few fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange stains
63.6	15.8								15.8 ft: light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/6), trace black staining
		7	8	10	18	SS-7			
58.7	20.7								20.7 ft: mottled brownish yellow (10YR 6/6), weak HCl reaction on clay, no calcium carbonate nodules observed
		8	8	9	17	SS-8			
53.7	25.7								
		5	8	12	20	SS-9			
48.8	30.6								30.6 ft: stiff
		8	4	11	15	SS-10			
43.4	36.0								
		5	6	6	12	SS-11			
38.6	40.8								38.6 40.8
		9	17	20	37	SS-12			CLAYEY SAND (SC), brownish yellow (10YR 6/6) mottled light gray (2.5Y 7/2), dense, moist, fine grained, little fines, weak HCl reaction on sand, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
33.5	45.9								
		7	11	17	28	SS-13			45.9 ft: olive yellow (2.5Y 6/6), very firm, strong HCl reaction
28.5	50.9								
		4	12	12	24	SS-14			50.9 ft: mottled strong brown (7.5YR 5/8), weak HCl reaction on sand, caliche, strong HCl reaction on caliche
23.4	56.0								23.4 56.0

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

MACTEC

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.	MOI	LOG	SOIL AND ROCK DESCRIPTION
23.2					Continued from previous page				
18.6	60.8	8	9	14	23	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								CLAYEY SAND (SC), light yellowish brown (2.5Y 6/4), dense, moist, fine grained, little fines, no HCl reaction 61.3
13.6	65.8	8	20	22	42	SS-16A/B			POORLY GRADED SAND (SP), light yellowish brown (2.5Y 6/4), dense, moist, fine grained, trace fines, no HCl reaction 65.0
14.4	65.0								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	9	13	18	31	SS-17			
8.6	70.8								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	7	6	10	16	SS-18			
3.6	75.8								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	6	8	10	18	SS-19			
-0.2	79.5								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	10	14	31	45	SS-20			
-6.5	85.8								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 88.5
-9.2	88.5								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 90.0 - 95.0 ft: rig chatter 90.0 to 98.5 ft: hard drilling
-11.5	90.8	8	12	50/0.3	62/0.8	SS-21			
-11.5	90.8	90	100/0.1		190/0.6	SS-22			
-16.5	95.8								95.8 ft: no recovery
-16.5	95.8	100/0.1			100/0.1	SS-23			
-21.5	100.8								100.8 ft: pale yellow (2.5Y 7/4), fine to medium grained, no HCl reaction
-21.5	100.8	74	90	50/0.2	140/0.7	SS-24			
-27.7	107.0								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
-31.5	110.8	9	10	15	25	SS-25			

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

MACTEC

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.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-32.9					Continued from previous page				
									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 *(continued)*
									118.5 ft: rig chatter
-41.5	120.8	7	10	16	26	SS-26			120.8 ft: no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange staining
-51.5	130.8	6	9	11	20	SS-27			
-61.6	140.9	4	8	11	19	SS-28			140.9 ft: trace fine grained sand, no HCl reaction, no calcium carbonate nodules observed
									-67.7 147.0 POORLY GRADED SAND (SP), light gray (2.5Y 7/2), very firm, wet, fine grained, weak HCl reaction
-71.5	150.8	15	14	16	30	SS-29			
									-79.7 159.0 FAT CLAY (CH), light gray (2.5Y 7/2), very stiff, moist, trace fine grained sand, weak HCl reaction, orange staining
-81.5	160.8	10	11	15	26	SS-30			
									-88.7 168.0

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

MACTEC

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.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-89.0					Continued from previous page				
-91.5	170.8	35	45	50/0.3	95/0.8	SS-31			POORLY GRADED SAND (SP), pale yellow (2.5Y 7/3), very dense, wet, fine grained, trace fines, weak HCl reaction *(continued)*
-101.5	180.8	100/0.3			100/0.3	SS-32			180.8 ft: moist
-111.5	190.8	26	35	50	85	SS-33			
-121.5	200.8	21	32	34	66	SS-34			200.8 ft: olive yellow (2.5Y 6/6), wet, no HCl reaction
-131.5	210.8	27	18	23	41	SS-35A/B			-131.7 210.8 ft: pale yellow (2.5Y 8/2), dense 211.0
-141.5	220.8	22	33	39	72	SS-36			FAT CLAY (CH), light gray (2.5Y 7/2), brownish yellow (10YR 6/8), hard, moist, trace fine grained sand, weak HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules -134.7 214.0 CLAYEY SAND (SC), light gray (2.5Y 7/2), very dense, moist, fine to medium grained, little fines, weak HCl reaction on sand, few calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules 224.0 ft: rig chatter

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

MACTEC

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.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-145.1					Continued from previous page				
									-148.2 227.5 FAT CLAY (CH), light gray (2.5Y 7/2) mottled yellowish brown (10YR 5/6), hard, moist, trace fine grained sand, no HCl reaction on clay, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules
-151.6	230.9	11	15	22	37	SS-37			
-161.6	240.9	14	22	26	48	SS-38			240.9 ft: few fine grained sand, weak HCl reaction on sand, orange staining, no calcium carbonate nodules observed
-171.6	250.9	32	48	50	98	SS-39			-171.6 250.9 POORLY GRADED SAND (SP), light gray (2.5Y 7/1), very dense, wet, fine grained, trace fines, no HCl reaction
-181.5	260.8	30	34	37	71	SS-40			
-187.7	267.0								FAT CLAY with sand (CH), light gray (2.5Y 7/2), very stiff, moist, some fine grained sand, no HCl reaction, orange staining
-191.5	270.8	10	9	12	21	SS-41			
-195.7	275.0								CLAYEY SAND (SC), light gray (2.5Y 7/2), very dense, moist, fine grained, little fines, no HCl reaction

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

MACTEC

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.	MOI	LOG	SOIL AND ROCK DESCRIPTION
-201.2					Continued from previous page				
-201.5	280.8	17	27	28	55	SS-42			CLAYEY SAND (SC), light gray (2.5Y 7/2), very dense, moist, fine grained, little fines, no HCl reaction *(continued)*
-205.7	285.0								FAT CLAY (CH), light gray (2.5Y 7/2), hard, moist, weak HCl reaction, orange staining
-211.6	290.9	12	15	22	37	SS-43			
-221.6	300.9	13	19	24	43	SS-44			300.9 ft: mottled yellowish brown (10YR 5/6), black staining
-231.6	310.9	9	13	18	31	SS-45			310.9 ft: mottled strong brown (7.5YR 5/6), no HCl reaction
-241.6	320.9	7	12	13	25	SS-46			CLAYEY SAND (SC), light gray (2.5Y 7/2), very firm, moist, fine grained, little fines, weak HCl reaction on sand, trace calcium carbonate nodules, strong HCl reaction on calcium carbonate nodules, orange staining
-243.7	323.0								POORLY GRADED SAND (SP), light yellowish brown (10YR 6/4), very dense, wet, fine grained, trace fines, strong HCl reaction
-251.2	330.5	72	115	50/0.2	165/0.7	SS-47			
-254.7	334.0								

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