MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** DSC

Test Date 1/16-26/08 **Review Date** 3-13-08

Boring No.	B-2170R	B-2170R	B-2170R	B-2170R
Sample No.	SS-26	SS-27	SS-34	SS-36
Sample Depth, Ft.	123.5 -125.0	133.5 - 135.0	208.5-210.0	248.5 - 250.0
A) Tare No.	F-1	JP-5	81	92
B) Tare Weight, grams	9.20	6.84	6.70	13.80
C) Wet Soil + Tare, grams	163.56	145.28	166.20	220.70
D) Dry Soil + Tare, grams	131.20	119.50	136.90	194.51
E) Weight of Dry Soil, grams [D - B]	122.00	112.66	130.20	180.71
F) Weight of Moisture, grams [C - D]	32.36	25.78	29.30	26.19
G) Moisture Content, % [F * 100 / E]	26.5	22.9	22.5	14.5
(based on oven-dried weight)				
H) Tare No.	Q	S	H	Q
I) Weight of Tare, grams	51.14	53.43	52.07	51.14
J) Weight of Over-Dried Soil + Tare, grams	103.14	164.22	181.97	133.12
K) Weight of Oven- Dried Soil, grams [J - I]	52.00	110.79	129.90	81.98
L) Weight of Ignited Soil + Tare, grams	101.11	159.79	177.10	130.25
M) Ash, grams [L - I]	49.97	106.36	125.03	79.11
N) Ash Content, % [M *100 / K]	96.1	96.0	96.3	96.5
O) Organic Matter, % [100 - N]	**3.9**	**4.0**	**3.7**	**3.5**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** DSC

Test Date 1/26-28/08 **Review Date** 3-13-08

Boring No.	B-2182A	B-2182A	B-2182A	B-2182A
Sample No.	SS-1	SS-3	SS-7	SS-9
Sample Depth, Ft.	0 - 1.5	6 - 7.5	18.5 - 20	28.5 - 30
A) Tare No.	76	L	75	7
B) Tare Weight, grams	6.60	7.10	6.60	9.20
C) Wet Soil + Tare, grams	124.10	185.10	161.30	121.40
D) Dry Soil + Tare, grams	105.97	159.08	130.35	96.50
E) Weight of Dry Soil, grams [D - B]	99.37	151.98	123.75	87.30
F) Weight of Moisture, grams [C - D]	18.13	26.02	30.95	24.90
G) Moisture Content, % [F * 100 / E]	18.2	17.1	25.0	28.5
(based on oven-dried weight)				
H) Tare No.	Q	9	S	N
I) Weight of Tare, grams	51.14	52.57	53.42	55.57
J) Weight of Over-Dried Soil + Tare, grams	114.90	122.69	109.78	163.13
K) Weight of Oven- Dried Soil, grams [J - I]	63.76	70.12	56.36	107.56
L) Weight of Ignited Soil + Tare, grams	113.40	121.64	108.80	161.13
M) Ash, grams [L - I]	62.26	69.07	55.38	105.56
N) Ash Content, % [M *100 / K]	97.6	98.5	98.3	98.1
O) Organic Matter, % [100 - N]	**2.4**	**1.5**	**1.7**	**1.9**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** DSC

Test Date 1/26-28/08 **Review Date** 3-13-08

Boring No.	B-2182A	B-2182A	B-2182A	B-2182A
Sample No.	SS-16	SS-21	SS-29	SS-36
Sample Depth, Ft.	63.5 - 65.0	88.5 - 90.0	158.3 - 159.8	258.3 - 259.8
A) Tare No.	B-1	Q		
B) Tare Weight, grams	9.30	6.82	Moisture Content	Moisture Content
C) Wet Soil + Tare, grams	190.30	148.63	not Assigned	not Assigned
D) Dry Soil + Tare, grams	153.35	116.14		
E) Weight of Dry Soil, grams [D - B]	144.05	109.32		
F) Weight of Moisture, grams [C - D]	36.95	32.49		
G) Moisture Content, % [F * 100 / E]	25.7	29.7		
(based on oven-dried weight)				
H) Tare No.	R	Q	9	L
I) Weight of Tare, grams	51.53	51.14	52.57	51.50
J) Weight of Over-Dried Soil + Tare, grams	151.67	153.14	122.69	131.64
K) Weight of Oven- Dried Soil, grams [J - I]	100.14	102.00	70.12	80.14
L) Weight of Ignited Soil + Tare, grams	150.07	151.10	122.55	130.44
M) Ash, grams [L - I]	98.54	99.96	69.98	78.94
N) Ash Content, % [M *100 / K]	98.4	98.0	99.8	98.5
O) Organic Matter, % [100 - N]	**1.6**	**2.0**	**0.2**	**1.5**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** DSC

Test Date 1/26-28/08 **Review Date** 3-13-08

Boring No.	B-2182A			
Sample No.	SS-42			
Sample Depth, Ft.	378.9 - 380.4			
A) Tare No.	RR			
B) Tare Weight, grams	6.80			
C) Wet Soil + Tare, grams	130.40			
D) Dry Soil + Tare, grams	99.37			
E) Weight of Dry Soil, grams [D - B]	92.57			
F) Weight of Moisture, grams [C - D]	31.03			
G) Moisture Content, % [F * 100 / E]	33.5			
(based on oven-dried weight)				
H) Tare No.	6			
I) Weight of Tare, grams	53.07			
J) Weight of Over-Dried Soil + Tare, grams	121.96			
K) Weight of Oven- Dried Soil, grams [J - I]	68.89			
L) Weight of Ignited Soil + Tare, grams	120.38			
M) Ash, grams [L - I]	67.31			
N) Ash Content, % [M *100 / K]	97.7			
O) Organic Matter, % [100 - N]	**2.3**			

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 12/24/2007

Project Name Exelon COL
Reviewed By [signature]
Review Date 1/26/08
KAW 1/26/08

Boring No.	B-2251	B-2251	B-2251	B-2251
Sample No.	SS-1	SS-3	SS-5	SS-7
Sample Depth, Ft.	0 - 1.5	6 - 7	11 - 12.5	18.5 - 20
A) Tare No.	UA	JP-7	513	JJ
B) Tare Weight, grams	8.25	6.76	9.23	9.09
C) Wet Soil + Tare, grams	138.53	161.78	154.28	125.24
D) Dry Soil + Tare, grams	116.98	139.95	129.46	97.95
E) Weight of Dry Soil, grams [D - B]	108.73	133.19	120.23	88.86
F) Weight of Moisture, grams [C - D]	21.55	21.83	24.82	27.29
G) Moisture Content, % [F * 100 / E]	19.8	16.4	20.6	30.7
(based on oven-dried weight)				
H) Tare No.	A	S	S	A
I) Weight of Tare, grams	55.49	52.60	52.60	55.49
J) Weight of Over-Dried Soil + Tare, grams	116.47	187.82	175.61	99.02
K) Weight of Oven- Dried Soil, grams [J - I]	60.98	135.22	123.01	43.53
L) Weight of Ignited Soil + Tare, grams	113.16	183.36	171.40	95.64
M) Ash, grams [L - I]	57.67	130.76	118.80	40.15
N) Ash Content, % [M *100 / K]	94.6	96.7	96.6	92.2
O) Organic Matter, % [100 - N]	**5.4**	**3.3**	**3.4**	**7.8**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL
Tested By CS **Reviewed By**
Test Date 12/24/2007 **Review Date** 1·26·08

Boring No.	B-2251	B-2251	B-2251	B-2251
Sample No.	SS-9	SS-11	SS-17	SS-19
Sample Depth, Ft.	28.5 - 30	38.5 - 40	68.5 - 70	78.5 - 80
A) Tare No.	305	Orange	JP-22	2P-5
B) Tare Weight, grams	9.47	9.18	6.80	6.90
C) Wet Soil + Tare, grams	119.89	149.29	94.06	169.80
D) Dry Soil + Tare, grams	102.00	128.20	72.12	144.60
E) Weight of Dry Soil, grams [D - B]	92.53	119.02	65.32	137.70
F) Weight of Moisture, grams [C - D]	17.89	21.09	21.94	25.20
G) Moisture Content, % [F * 100 / E]	19.3	17.7	33.6	18.3
(based on oven-dried weight)				
H) Tare No.	S	A	R	R
I) Weight of Tare, grams	52.69	55.49	52.26	52.26
J) Weight of Over-Dried Soil + Tare, grams	148.59	127.25	117.56	144.32
K) Weight of Oven- Dried Soil, grams [J - I]	95.90	71.76	65.30	92.06
L) Weight of Ignited Soil + Tare, grams	144.35	124.59	115.56	140.07
M) Ash, grams [L - I]	91.66	69.10	63.30	87.81
N) Ash Content, % [M *100 / K]	95.6	96.3	96.9	95.4
O) Organic Matter, % [100 - N]	**4.4**	**3.7**	**3.1**	**4.6**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL
Tested By CS **Reviewed By**
Test Date 12/24/2007 **Review Date** 1-26-08

Boring No.	B-2251	B-2251	B-2251	
Sample No.	SS-23	SS-25	SS-28	
Sample Depth, Ft.	98.5 - 100	118.5 - 120	148.5 - 150	
A) Tare No.	305	2P-25	318	
B) Tare Weight, grams	9.45	6.85	9.24	
C) Wet Soil + Tare, grams	160.06	145.04	156.55	
D) Dry Soil + Tare, grams	142.03	110.50	130.08	
E) Weight of Dry Soil, grams [D - B]	132.58	103.65	120.84	
F) Weight of Moisture, grams [C - D]	18.03	34.54	26.47	
G) Moisture Content, % [F * 100 / E]	13.6	33.3	21.9	
(based on oven-dried weight)				
H) Tare No.	N	R	R	
I) Weight of Tare, grams	55.55	52.25	52.25	
J) Weight of Over-Dried Soil + Tare, grams	134.88	105.15	125.05	
K) Weight of Oven- Dried Soil, grams [J - I]	79.33	52.90	72.80	
L) Weight of Ignited Soil + Tare, grams	133.14	103.63	122.67	
M) Ash, grams [L - I]	77.59	51.38	70.42	
N) Ash Content, % [M *100 / K]	97.8	97.1	96.7	
O) Organic Matter, % [100 - N]	**2.2**	**2.9**	**3.3**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** [signature]

Test Date 1/12-23/08 **Review Date** 1·26·08

Boring No.	B-2265	B-2265	B-2265	B-2265
Sample No.	SS-1	SS-2	SS-4	SS-6
Sample Depth, Ft.	0 - 1.5	3.5 - 5	8.5 - 10	13.5 - 15
A) Tare No.	76	UA	Orange	JP-17
B) Tare Weight, grams	7.04	8.24	9.18	6.90
C) Wet Soil + Tare, grams	124.22	145.18	125.45	169.23
D) Dry Soil + Tare, grams	107.21	125.51	107.42	140.06
E) Weight of Dry Soil, grams [D - B]	100.17	117.27	98.24	133.16
F) Weight of Moisture, grams [C - D]	17.01	19.67	18.03	29.17
G) Moisture Content, % [F * 100 / E]	17.0	16.8	18.4	21.9
(based on oven-dried weight)				
H) Tare No.	R	A	N	Q
I) Weight of Tare, grams	51.51	55.45	55.56	52.05
J) Weight of Over-Dried Soil + Tare, grams	152.49	116.98	152.94	131.15
K) Weight of Oven- Dried Soil, grams [J - I]	100.98	61.53	97.38	79.10
L) Weight of Ignited Soil + Tare, grams	147.36	115.01	150.28	128.75
M) Ash, grams [L - I]	95.85	59.56	94.72	76.70
N) Ash Content, % [M *100 / K]	94.9	96.8	97.3	97.0
O) Organic Matter, % [100 - N]	**5.1**	**3.2**	**2.7**	**3.0**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** [signature]

Test Date 1/12-23/08 **Review Date** 1/26/08

KAW 1/26/08

Boring No.	B-2265	B-2265	B-2265	B-2265
Sample No.	SS-10	SS-18	SS-26	SS-21
Sample Depth, Ft.	33.5 - 35	73.5 - 75	128.5 - 130	88.5 - 90
A) Tare No.	JP-15	LB	JP -7	I
B) Tare Weight, grams	6.90	9.31	6.90	9.10
C) Wet Soil + Tare, grams	163.52	176.96	182.60	170.58
D) Dry Soil + Tare, grams	141.16	150.84	156.00	142.12
E) Weight of Dry Soil, grams [D - B]	134.26	141.53	149.10	133.02
F) Weight of Moisture, grams [C - D]	22.36	26.12	26.60	28.46
G) Moisture Content, % [F * 100 / E]	16.7	18.5	17.8	21.4
(based on oven-dried weight)				
H) Tare No.	S	9	8	S
I) Weight of Tare, grams	53.43	51.66	52.07	52.60
J) Weight of Over-Dried Soil + Tare, grams	133.84	140.20	145.64	143.16
K) Weight of Oven- Dried Soil, grams [J - I]	80.41	88.54	93.57	90.56
L) Weight of Ignited Soil + Tare, grams	131.85	138.81	144.82	141.89
M) Ash, grams [L - I]	78.42	87.15	92.75	89.29
N) Ash Content, % [M *100 / K]	97.5	98.4	99.1	98.6
O) Organic Matter, % [100 - N]	**2.5**	**1.6**	**0.9**	**1.4**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** [signature]

Test Date 1/12-23/08 **Review Date** 1.26.08

Boring No.	B-2265	B-2265		
Sample No.	SS-12	SS-14		
Sample Depth, Ft.	43.5 - 45	53.5 - 55		
A) Tare No.	3071	JP-4		
B) Tare Weight, grams	9.43	6.85		
C) Wet Soil + Tare, grams	162.61	68.10		
D) Dry Soil + Tare, grams	140.94	58.80		
E) Weight of Dry Soil, grams [D - B]	131.51	51.95		
F) Weight of Moisture, grams [C - D]	21.67	9.30		
G) Moisture Content, % [F * 100 / E]	16.5	17.9		
(based on oven-dried weight)				
H) Tare No.	N	9		
I) Weight of Tare, grams	55.50	51.66		
J) Weight of Over-Dried Soil + Tare, grams	139.63	153.26		
K) Weight of Oven- Dried Soil, grams [J - I]	84.13	101.60		
L) Weight of Ignited Soil + Tare, grams	138.54	151.58		
M) Ash, grams [L - I]	83.04	99.92		
N) Ash Content, % [M *100 / K]	98.7	98.3		
O) Organic Matter, % [100 - N]	**1.3**	**1.7**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** Lee Blue Johnson

Test Date 11/20-23/07 **Review Date** 1/26/08

KAW 1/26/08

Boring No.	B-2269	B-2269	B-2269	B-2269
Sample No.	SS-1	SS-3	SS-5	SS-7
Sample Depth, Ft.	0 - 1.5	6 - 7.5	11 - 12.5	20.4 - 21.9
A) Tare No.	309	ID	I	R
B) Tare Weight, grams	9.41	6.60	9.16	6.79
C) Wet Soil + Tare, grams	189.59	142.19	159.20	174.42
D) Dry Soil + Tare, grams	163.64	117.72	136.32	137.66
E) Weight of Dry Soil, grams [D - B]	154.23	111.12	127.16	130.87
F) Weight of Moisture, grams [C - D]	25.95	24.47	22.88	36.76
G) Moisture Content, % [F * 100 / E]	16.8	22.0	18.0	28.1
(based on oven-dried weight)				
H) Tare No.	R	S	N	R
I) Weight of Tare, grams	51.44	53.40	55.55	51.48
J) Weight of Over-Dried Soil + Tare, grams	164.83	163.56	174.59	162.60
K) Weight of Oven- Dried Soil, grams [J - I]	113.39	110.16	119.04	111.12
L) Weight of Ignited Soil + Tare, grams	160.54	158.85	170.90	155.22
M) Ash, grams [L - I]	109.10	105.45	115.35	103.74
N) Ash Content, % [M *100 / K]	96.2	95.7	96.9	93.4
O) Organic Matter, % [100 - N]	**3.8**	**4.3**	**3.1**	**6.6**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** [signature]

Test Date 1/21-27/08 **Review Date** 1/26/08

KAW 1/26/08

Boring No.	B-2269	B-2269	B-2269	B-2269
Sample No.	SS-9	SS-11	SS-16	SS-21
Sample Depth, Ft.	30.4 - 31.9	40.4 - 41.9	65.4 - 66.9	90.4 - 91.9
A) Tare No.	3	302	B	CHIP
B) Tare Weight, grams	9.34	9.53	6.63	9.10
C) Wet Soil + Tare, grams	176.61	142.24	145.19	144.40
D) Dry Soil + Tare, grams	154.12	117.87	119.05	114.63
E) Weight of Dry Soil, grams [D - B]	144.78	108.34	112.42	105.53
F) Weight of Moisture, grams [C - D]	22.49	24.37	26.14	29.77
G) Moisture Content, % [F * 100 / E]	15.5	22.5	23.3	28.2
(based on oven-dried weight)				
H) Tare No.	A	S	S	R
I) Weight of Tare, grams	56.10	53.44	53.43	51.44
J) Weight of Over-Dried Soil + Tare, grams	171.29	165.31	172.55	156.23
K) Weight of Oven- Dried Soil, grams [J - I]	115.19	111.87	119.12	104.79
L) Weight of Ignited Soil + Tare, grams	166.60	160.23	171.50	155.10
M) Ash, grams [L - I]	110.50	106.79	118.07	103.66
N) Ash Content, % [M *100 / K]	95.9	95.5	99.1	98.9
O) Organic Matter, % [100 - N]	**4.1**	**4.5**	**0.9**	**1.1**

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** [signature]

Test Date 11/20-28/08 **Review Date** 1/26/08

KAW 1/28/08

Boring No.	B-2269	B-2269	B-2269	
Sample No.	SS-29	SS-36	SS-42	
Sample Depth, Ft.	161.7 - 163.2	261.8 - 263.3	381.8 - 383.3	
A) Tare No.	2	L	Purple	
B) Tare Weight, grams	6.80	7.17	9.30	
C) Wet Soil + Tare, grams	120.00	136.15	119.60	
D) Dry Soil + Tare, grams	98.71	114.60	91.50	
E) Weight of Dry Soil, grams [D - B]	91.91	107.43	82.20	
F) Weight of Moisture, grams [C - D]	21.29	21.55	28.10	
G) Moisture Content, % [F * 100 / E]	23.2	20.1	34.2	
(based on oven-dried weight)				
H) Tare No.	R	N	R	
I) Weight of Tare, grams	51.47	55.56	51.47	
J) Weight of Over-Dried Soil + Tare, grams	146.59	163.48	135.03	
K) Weight of Oven- Dried Soil, grams [J - I]	95.12	107.92	83.56	
L) Weight of Ignited Soil + Tare, grams	142.61	162.61	129.51	
M) Ash, grams [L - I]	91.14	107.05	78.04	
N) Ash Content, % [M *100 / K]	95.8	99.2	93.4	
O) Organic Matter, % [100 - N]	**4.2**	**0.8**	**6.6**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

Soil Index Test Results (Test Pits)

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/5/2008 **Review Date** 3/22/2008 5-7-08

Boring No.	TP-2101	TP-2101	TP-2101	
Sample No.	J-1	J-2	J-3	
Sample Depth, Ft.	4.5	8.0	10.0	
A) Tare No.	T	JP-15	22	
B) Tare Weight, grams	6.77	6.81	6.78	
C) Wet Soil + Tare, grams	168.14	196.21	198.51	
D) Dry Soil + Tare, grams	146.78	167.96	178.62	
E) Weight of Dry Soil, grams [D - B]	140.01	161.15	171.84	
F) Weight of Moisture, grams [C - D]	21.36	28.25	19.89	
G) Moisture Content, % [F * 100 / E]	15.3	17.5	11.6	
(based on oven-dried weight)				

H) Tare No.	H			
I) Weight of Tare, grams	52.08			
J) Weight of Over-Dried Soil + Tare, grams	136.33			
K) Weight of Oven- Dried Soil, grams [J - I]	84.25			
L) Weight of Ignited Soil + Tare, grams	135.50			
M) Ash, grams [L - I]	83.42			
N) Ash Content, % [M *100 / K]	99.0			
O) Organic Matter, % [100 - N]	**1.0**			

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/5/2008 **Review Date** 3/22/2008 5-7-08

Boring No.	TP-2102	TP-2102	TP-2102	TP-2102
Sample No.	J-1	J-2	J-3	J-4
Sample Depth, Ft.	1.0	3.0	5.5	8.0
A) Tare No.	84	TT	78	JP-11
B) Tare Weight, grams	6.64	6.72	6.65	6.76
C) Wet Soil + Tare, grams	230.62	198.92	166.90	193.33
D) Dry Soil + Tare, grams	188.50	166.43	143.36	167.99
E) Weight of Dry Soil, grams [D - B]	181.86	159.71	136.71	161.23
F) Weight of Moisture, grams [C - D]	42.12	32.49	23.54	25.34
G) Moisture Content, % [F * 100 / E]	23.2	20.3	17.2	15.7
(based on oven-dried weight)				

H) Tare No.	S	9	Q	
I) Weight of Tare, grams	53.42	53.87	51.13	
J) Weight of Over-Dried Soil + Tare, grams	136.99	158.17	133.22	
K) Weight of Oven- Dried Soil, grams [J - I]	83.57	104.30	82.09	
L) Weight of Ignited Soil + Tare, grams	135.91	156.55	132.97	
M) Ash, grams [L - I]	82.49	102.68	81.84	
N) Ash Content, % [M *100 / K]	98.7	98.4	99.7	
O) Organic Matter, % [100 - N]	**1.3**	**1.6**	**0.3**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/5/2008 **Review Date** 3/22/2008 5-7-08

Boring No.	TP-2102			
Sample No.	J-5			
Sample Depth, Ft.	10.0			
A) Tare No.	JP-12			
B) Tare Weight, grams	6.69			
C) Wet Soil + Tare, grams	158.00			
D) Dry Soil + Tare, grams	136.85			
E) Weight of Dry Soil, grams [D - B]	130.16			
F) Weight of Moisture, grams [C - D]	21.15			
G) Moisture Content, % [F * 100 / E]	16.2			
(based on oven-dried weight)				

H) Tare No.				
I) Weight of Tare, grams				
J) Weight of Over-Dried Soil + Tare, grams				
K) Weight of Oven- Dried Soil, grams [J - I]				
L) Weight of Ignited Soil + Tare, grams				
M) Ash, grams [L - I]				
N) Ash Content, % [M *100 / K]				
O) Organic Matter, % [100 - N]				

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/5/2008 **Review Date** 3/22/2008 5-7-08

Boring No.	TP-2103	TP-2103	TP-2103	TP-2103
Sample No.	J-1	J-2	J-3	J-4
Sample Depth, Ft.	1.0	3.0	5.0	8.0
A) Tare No.	75	84	318	PURPLE
B) Tare Weight, grams	6.87	6.67	9.28	9.23
C) Wet Soil + Tare, grams	187.74	192.58	181.28	230.99
D) Dry Soil + Tare, grams	155.30	157.24	155.97	183.95
E) Weight of Dry Soil, grams [D - B]	148.43	150.57	146.69	174.72
F) Weight of Moisture, grams [C - D]	32.44	35.34	25.31	47.04
G) Moisture Content, % [F * 100 / E]	21.9	23.5	17.3	26.9
(based on oven-dried weight)				

H) Tare No.	L	G	R	
I) Weight of Tare, grams	51.55	53.10	52.51	
J) Weight of Over-Dried Soil + Tare, grams	149.55	140.33	134.91	
K) Weight of Oven- Dried Soil, grams [J - I]	98.00	87.23	82.40	
L) Weight of Ignited Soil + Tare, grams	146.32	137.07	133.67	
M) Ash, grams [L - I]	94.77	83.97	81.16	
N) Ash Content, % [M *100 / K]	96.7	96.3	98.5	
O) Organic Matter, % [100 - N]	**3.3**	**3.7**	**1.5**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/5/2008 **Review Date** 3/22/2008 5-7-08

Boring No.	TP-2103			
Sample No.	J-5			
Sample Depth, Ft.	10.0			
A) Tare No.	16			
B) Tare Weight, grams	9.28			
C) Wet Soil + Tare, grams	182.19			
D) Dry Soil + Tare, grams	163.76			
E) Weight of Dry Soil, grams [D - B]	154.48			
F) Weight of Moisture, grams [C - D]	18.43			
G) Moisture Content, % [F * 100 / E]	11.9			
(based on oven-dried weight)				

H) Tare No.				
I) Weight of Tare, grams				
J) Weight of Over-Dried Soil + Tare, grams				
K) Weight of Oven- Dried Soil, grams [J - I]				
L) Weight of Ignited Soil + Tare, grams				
M) Ash, grams [L - I]				
N) Ash Content, % [M *100 / K]				
O) Organic Matter, % [100 - N]				

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/5/2008 **Review Date** 3/22/2008 5-7-08

Boring No.	TP-2104	TP-2104	TP-2104	TP-2104
Sample No.	J-1	J-2	J-3	J-4
Sample Depth, Ft.	1.0	3.0	5.0	8.0
A) Tare No.	C-21	81	C-21	318
B) Tare Weight, grams	9.25	6.70	9.25	9.31
C) Wet Soil + Tare, grams	164.60	121.64	126.05	145.17
D) Dry Soil + Tare, grams	141.41	108.73	113.72	131.63
E) Weight of Dry Soil, grams [D - B]	132.16	102.03	104.47	122.32
F) Weight of Moisture, grams [C - D]	23.19	12.91	12.33	13.54
G) Moisture Content, % [F * 100 / E]	17.5	12.7	11.8	11.1
(based on oven-dried weight)				

H) Tare No.	N	9	S	
I) Weight of Tare, grams	55.55	53.87	53.45	
J) Weight of Over-Dried Soil + Tare, grams	162.18	131.55	131.56	
K) Weight of Oven- Dried Soil, grams [J - I]	106.63	77.68	78.11	
L) Weight of Ignited Soil + Tare, grams	159.21	130.79	130.60	
M) Ash, grams [L - I]	103.66	76.92	77.15	
N) Ash Content, % [M *100 / K]	97.2	99.0	98.8	
O) Organic Matter, % [100 - N]	**2.8**	**1.0**	**1.2**	

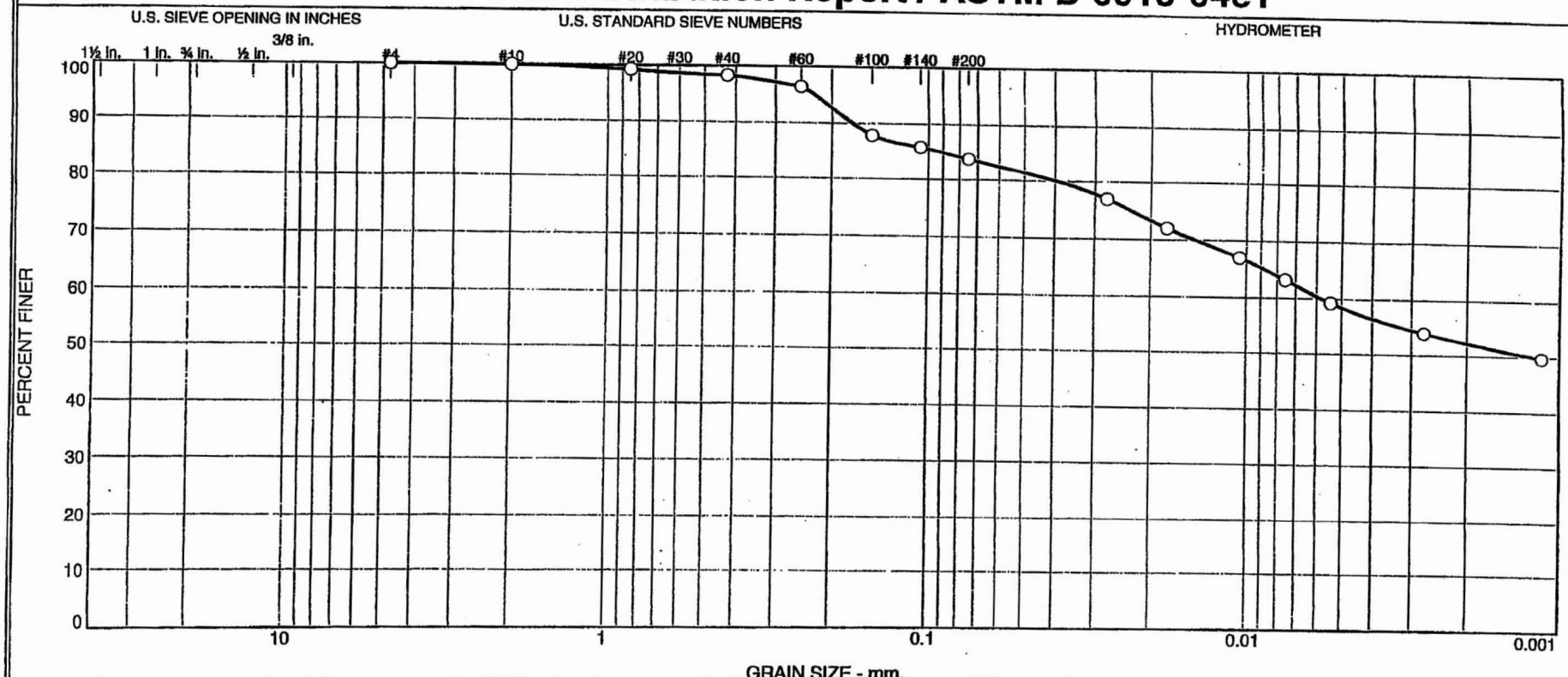
Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.19

Particle Size Distribution Report / ASTM D 6913-04e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	1.6	14.7	25.2	58.5

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	TP-2101	TP-2101, Bulk 1	8	1/17/08	CH	Light Yellowish Brown Fat CLAY with sand	17.5	54	17

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ Specific Gravity = 2.728 (ASTM D-584-06)
Natural Moisture obtained from Sample J-2,8'

Tested By: CS **Checked By:** LBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/9/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2101
Depth: 8 **Sample Number:** TP-2101,Bulk 1
Material Description: Light Yellowish Brown Fat CLAY with sand
Date: 1/17/08 **Natural Moisture:** 17.5
Liquid Limit: 54 **Plastic Limit:** 17 **USCS Class.:** CH
Testing Remarks: Specific Gravity = 2.728 (ASTM D-584-06)
Natural Moisture obtained from Sample J-2,8'
Tested by: CS **Checked by:** LBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
276.32	0.00	0.00	#4	0.00	100.0
			#10	0.11	100.0
50.96	0.00	0.00	#20	0.37	99.2
			#40	0.81	98.4
			#60	1.80	96.4
			#100	6.15	87.9
			#140	7.21	85.8
			#200	8.28	83.7

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =50.96
Hygroscopic moisture correction:
Moist weight and tare = 28.25
Dry weight and tare = 28.02
Tare weight = 15.49
Hygroscopic moisture = 1.8%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.728
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.0	44.0	39.2	0.0130	45.0	8.9	0.0275	77.0
5.00	21.9	41.5	36.7	0.0130	42.5	9.3	0.0178	72.0
15.00	21.7	39.0	34.1	0.0131	40.0	9.7	0.0105	67.0
30.00	21.9	37.0	32.2	0.0130	38.0	10.1	0.0075	63.2
60.00	22.0	35.0	30.2	0.0130	36.0	10.4	0.0054	59.3
240.00	22.9	32.0	27.5	0.0129	33.0	10.9	0.0027	54.1
1440.00	22.3	30.0	25.3	0.0130	31.0	11.2	0.0011	49.7

MACTEC, Inc.

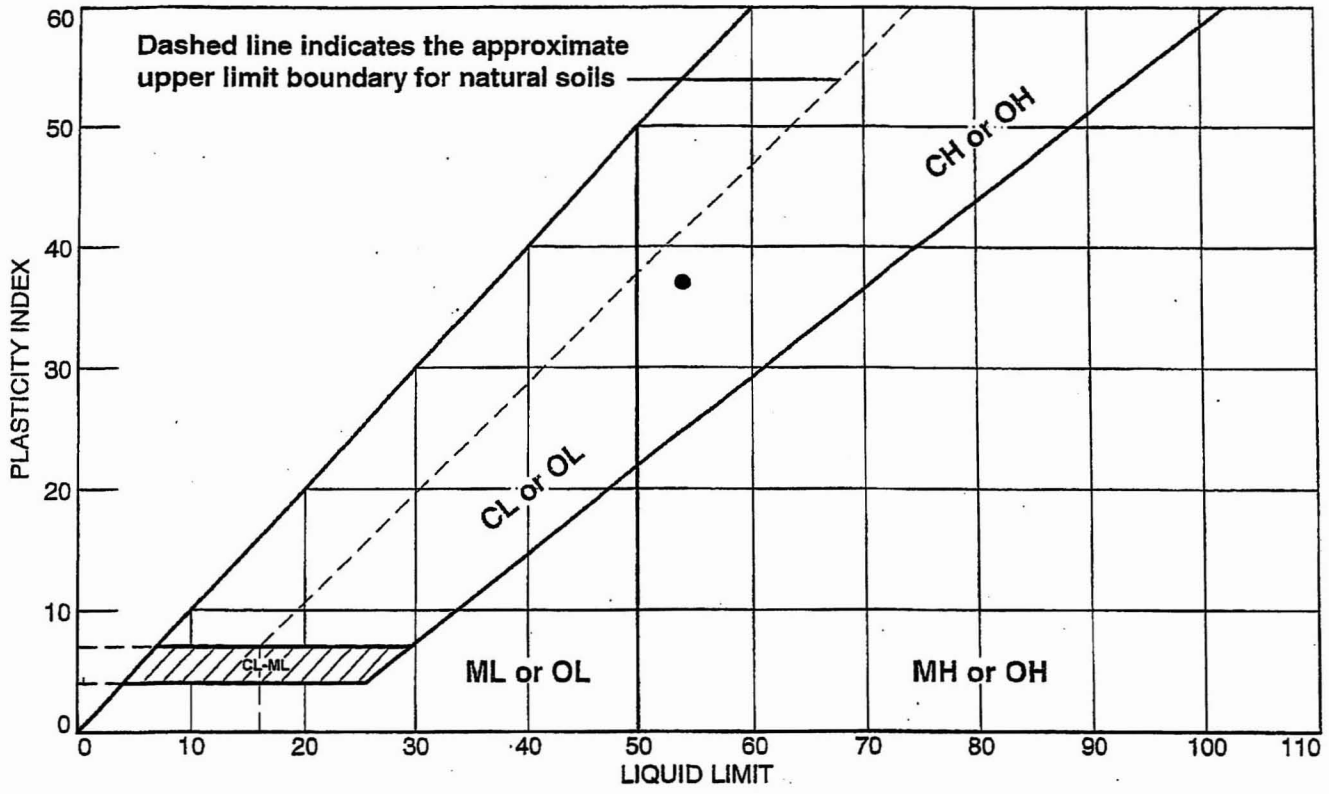
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	1.6	14.7	16.3	25.2	58.5	83.7

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0012	0.0058	0.0395	0.0914	0.1728	0.2269

Fineness Modulus
0.17

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2101	TP-2101,Bulk 1	8	17.5	17	54	37	CH

MACTEC, Inc. **Raleigh, North Carolina**	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468071777 **Figure** N/A

Tested By: CS **Checked By:** LBJ DSC 5-7-08

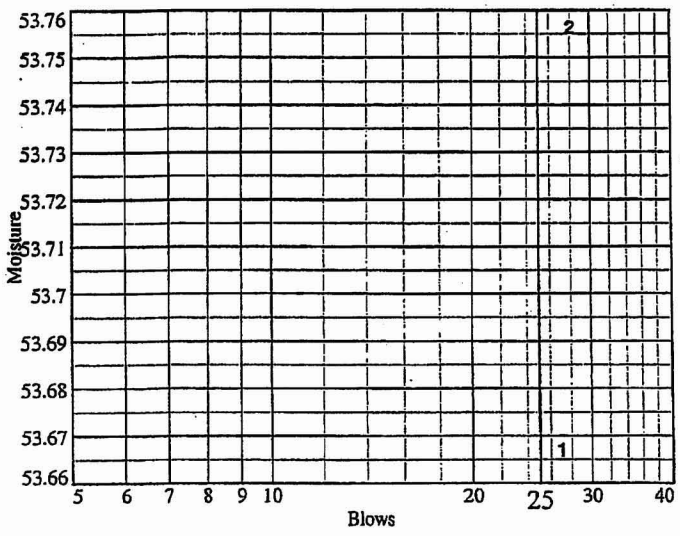
LIQUID AND PLASTIC LIMIT TEST DATA

4/9/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2101
Depth: 8 **Sample Number:** TP-2101,Bulk 1
Material Description: Light Yellowish Brown Fat CLAY with sand
USCS: CH **AASHTO:** A-7-6(32)
Tested by: CS **Checked by:** LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	28.68	27.40				
Dry+Tare	24.07	23.25				
Tare	15.48	15.53				
# Blows	27	28				
Moisture	53.7	53.8				



Liquid Limit= 54
Plastic Limit= 17
Plasticity Index= 37
Natural Moisture= 17.5
Liquidity Index= 0.0

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	25.55	26.54			
Dry+Tare	24.09	25.03			
Tare	15.49	15.64			
Moisture	17.0	16.1			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
196.21	167.96	6.81	17.5

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/14/08

SAMPLE IDENTIFICATION: TP-2101 BULK 1

(A) Mass of oven-dried soil, grams:	50.08
(B) Mass of pycnometer filled with water at test temperature (T), grams:	655.68
(C) Mass of pycnometer, water and soil, grams:	687.41
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	21.5
(G) Specific Gravity at observed temperature: A / [B - (C - A)]	2.729
(F) ***Correction factor:***	0.99968
(G x F) **SPECIFIC GRAVITY @ 20°C:**	2.728

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100

Fat CLAY with sand (CH)

EQUIPMENT USED

SCALES : 3.1.99

OVEN : 5.1.16

THERMOMETER :5.1.01

PYCNOMETER : P=3

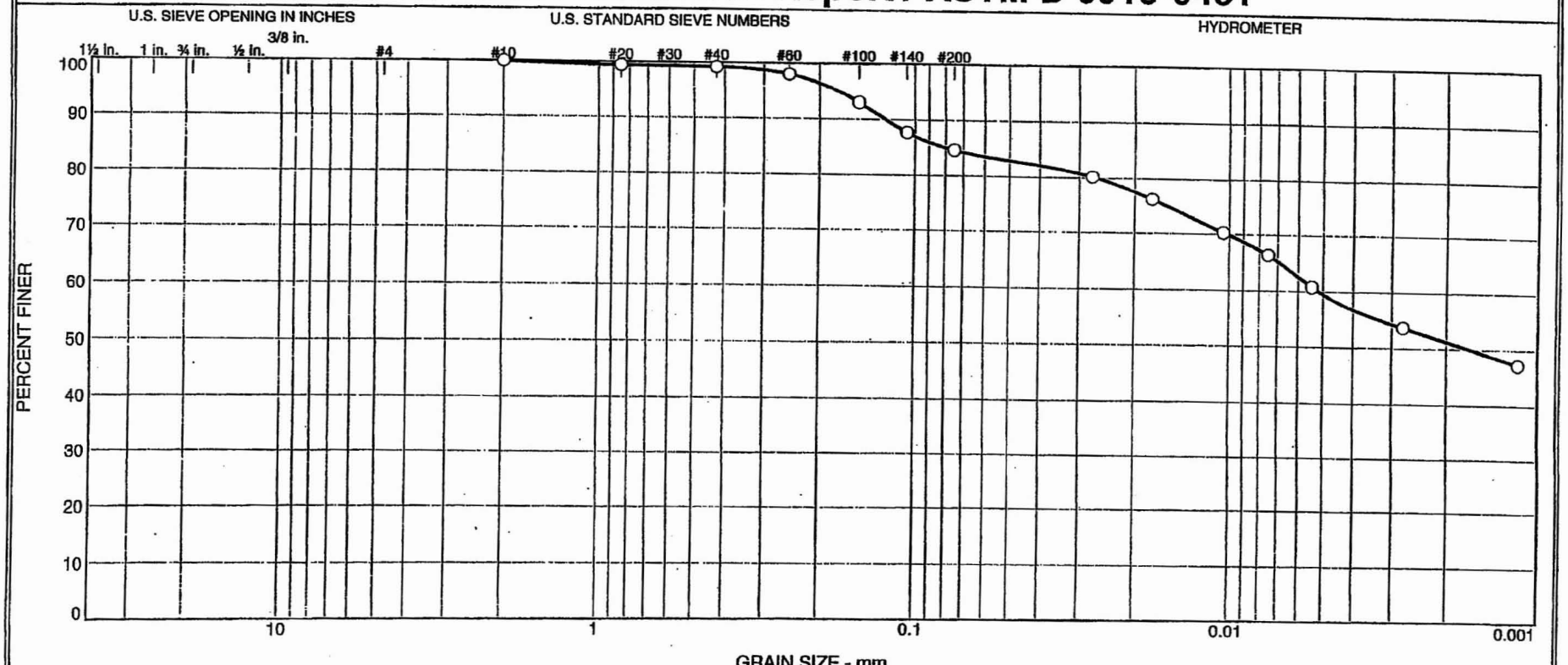
TESTED BY: CS

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: **Brian Johnson**

ZHU 5-7-08

Particle Size Distribution Report / ASTM D 6913-04e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.8	14.5	25.2	59.5

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	TP-2102	TP 2102, BULK 1	8'	1/17/08	CH	Light Olive Brown Fat CLAY with sand	15.7	50	16

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ Specific Gravity = 2.700 (ASTM D854-06)
Natural Moisture obtained from Sample J-4,8'

Tested By: CS **Checked By:** IBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/9/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2102
Depth: 8' **Sample Number:** TP 2102,BULK 1
Material Description: Light Olive Brown Fat CLAY with sand
Date: 1/17/08 **Natural Moisture:** 15.7
Liquid Limit: 50 **Plastic Limit:** 16 **USCS Class.:** CH
Testing Remarks: Specific Gravity = 2.700 (ASTM D854-06)
Natural Moisture obtained from Sample J-4,8'
Tested by: CS **Checked by:** lBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
301.32	0.00	0.00	#10	0.00	100.0
51.74	0.00	0.00	#20	0.32	99.4
			#40	0.43	99.2
			#60	1.06	98.0
			#100	3.64	93.0
			#140	6.32	87.8
			#200	7.90	84.7

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =51.74
Hygroscopic moisture correction:
Moist weight and tare = 23.69
Dry weight and tare = 23.44
Tare weight = 11.05
Hygroscopic moisture = 2.0%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.700
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	46.0	41.1	0.0131	47.0	8.6	0.0272	80.2
5.00	21.6	44.0	39.1	0.0132	45.0	8.9	0.0176	76.2
15.00	21.6	41.0	36.1	0.0132	42.0	9.4	0.0104	70.3
30.00	21.6	39.0	34.1	0.0132	40.0	9.7	0.0075	66.4
60.00	21.9	36.0	31.2	0.0131	37.0	10.2	0.0054	60.8
240.00	22.9	32.0	27.5	0.0130	33.0	10.9	0.0028	53.7
1440.00	22.3	29.0	24.3	0.0131	30.0	11.4	0.0012	47.4

MACTEC, Inc.

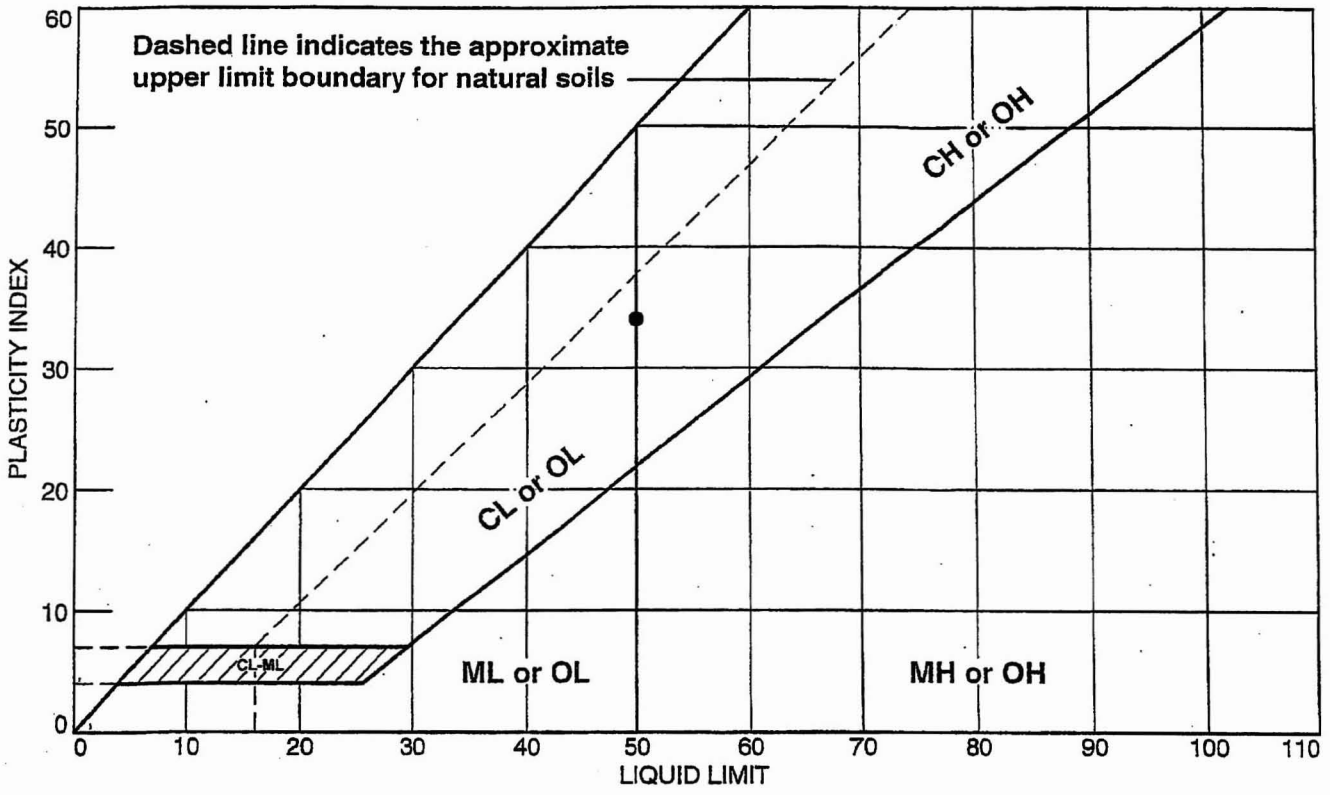
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.8	14.5	15.3	25.2	59.5	84.7

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0017	0.0052	0.0264	0.0783	0.1237	0.1756

Fineness Modulus
0.10

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2102	TP 2102, BULK 1	8'	15.7	16	50	34	CH

MACTEC, Inc.	**Client:** Bechtel
Raleigh, North Carolina	**Project:** Exelon Texas COL (Victoria)
	Project No.: 6468071777 **Figure** NA

Tested By: CS **Checked By:** LBJ DSC 5-7-08

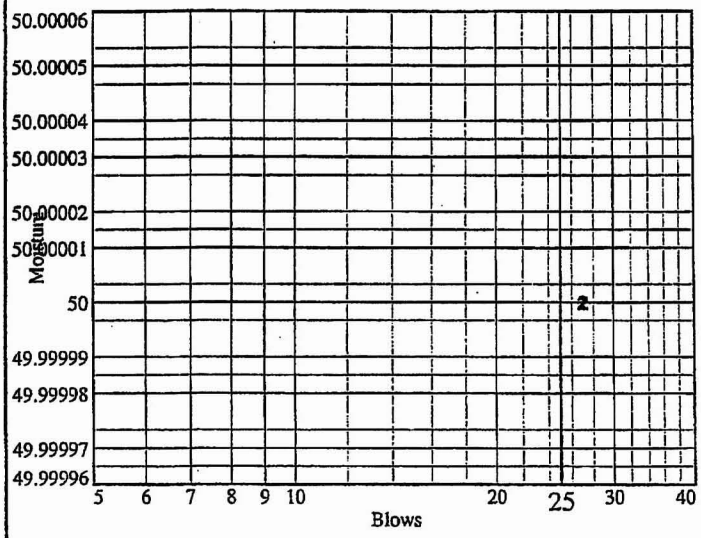
LIQUID AND PLASTIC LIMIT TEST DATA

4/9/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2102
Depth: 8'
Sample Number: TP 2102,BULK 1
Material Description: Light Olive Brown Fat CLAY with sand
USCS: CH
AASHTO: A-7-6(29)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	30.46	31.19				
Dry+Tare	25.47	26.00				
Tare	15.49	15.62				
# Blows	27	27				
Moisture	50.0	50.0				



Liquid Limit= 50
Plastic Limit= 16
Plasticity Index= 34
Natural Moisture= 15.7
Liquidity Index= 0.0

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	22.61	20.67			
Dry+Tare	21.64	19.96			
Tare	15.48	15.44			
Moisture	15.7	15.7			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
193.33	167.99	6.76	15.7

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/14/08

SAMPLE IDENTIFICATION: TP-2102 BULK 1

(A) Mass of oven-dried soil, grams:		50.23
(B) Mass of pycnometer filled with water at test temperature (T), grams:		656.51
(C) Mass of pycnometer, water and soil, grams:		688.14
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:		21.5
(G) Specific Gravity at observed temperature:	A / [B - (C - A)]	2.701
(F)	***Correction factor:***	0.99968
(G x F)	**SPECIFIC GRAVITY @ 20°C:**	2.700

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100
Fat CLAY with sand (CH)

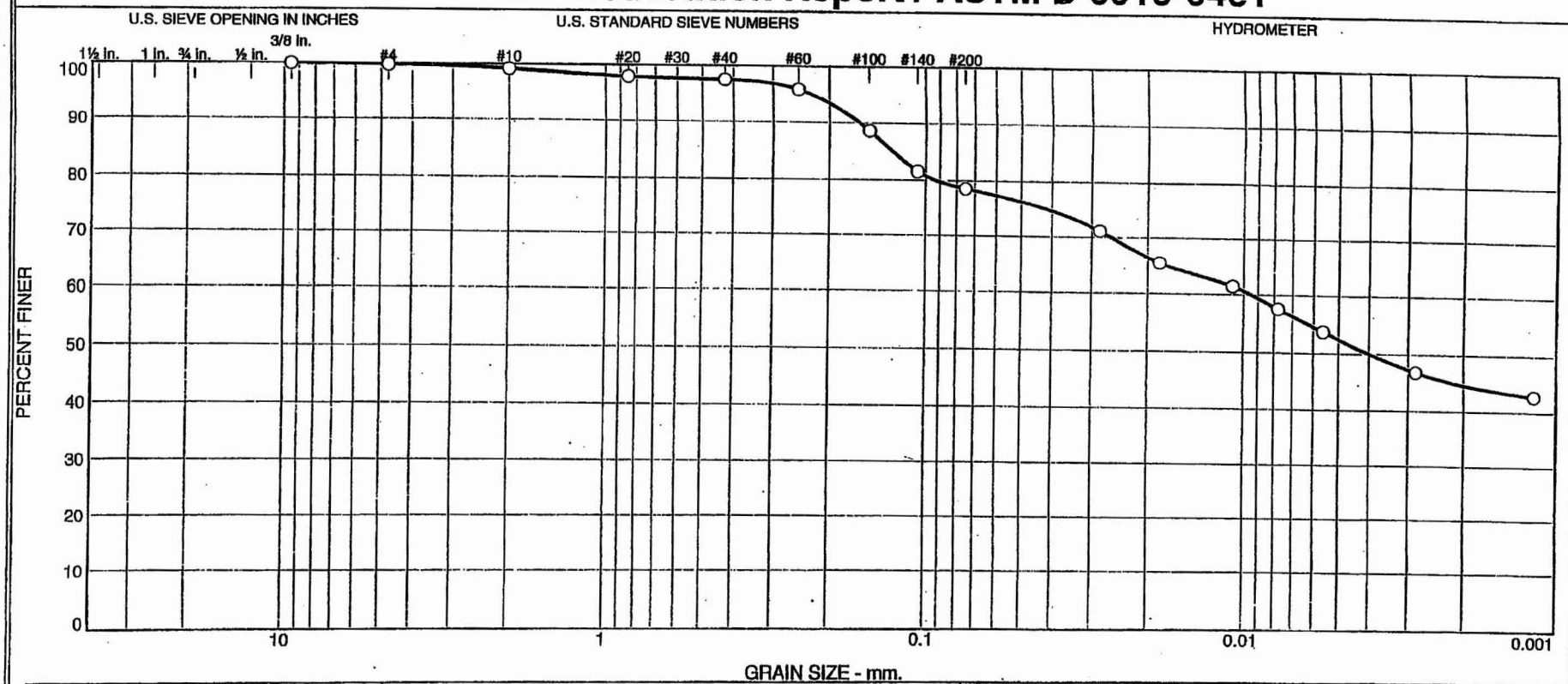
EQUIPMENT USED
SCALES : 3.1.99
OVEN : 5.1.16
THERMOMETER :5.1.01
PYCNOMETER : P-6

TESTED BY: CS

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls **REVIEWED BY:** **Brian Johnson**

ZHU 5-7-08

Particle Size Distribution Report / ASTM D 6913-04e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
O	0.0	0.2	0.6	1.7	18.9	26.1	52.5

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
O	TP-2103	TP-2103, BULK 1	8'	1/17/08	CL	Pale Brown Lean CLAY with sand	26.9	49	15

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

O Specific Gravity = 2.688 (ASTM D854-06)
Natural moisture obtained from Sample J-4,8'

Tested By: CS **Checked By:** LBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/9/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2103
Depth: 8'
Sample Number: TP-2103,BULK 1
Material Description: Pale Brown Lean CLAY with sand
Date: 1/17/08
Natural Moisture: 26.9
Liquid Limit: 49
Plastic Limit: 15
USCS Class.: CL
Testing Remarks: Specific Gravity = 2.688 (ASTM D854-06)
Natural moisture obtained from Sample J-4,8'
Tested by: CS
Checked by: LBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
290.57	0.00	0.00	3/8	0.00	100.0
			#4	0.51	99.8
			#10	2.36	99.2
52.43	0.00	0.00	#20	0.63	98.0
			#40	0.87	97.5
			#60	1.75	95.9
			#100	5.59	88.6
			#140	9.32	81.6
			#200	10.88	78.6

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 99.2
Weight of hydrometer sample =52.43
Hygroscopic moisture correction:
Moist weight and tare = 29.62
Dry weight and tare = 29.34
Tare weight = 15.51
Hygroscopic moisture = 2.0%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.688
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.9	42.0	37.2	0.0132	43.0	9.2	0.0283	71.1
5.00	21.9	39.0	34.2	0.0132	40.0	9.7	0.0184	65.4
15.00	21.7	37.0	32.1	0.0132	38.0	10.1	0.0108	61.4
30.00	21.7	35.0	30.1	0.0132	36.0	10.4	0.0078	57.6
60.00	21.7	33.0	28.1	0.0132	34.0	10.7	0.0056	53.8
240.00	22.7	29.0	24.5	0.0131	30.0	11.4	0.0028	46.8
1440.00	22.4	27.0	22.4	0.0131	28.0	11.7	0.0012	42.8

MACTEC, Inc.

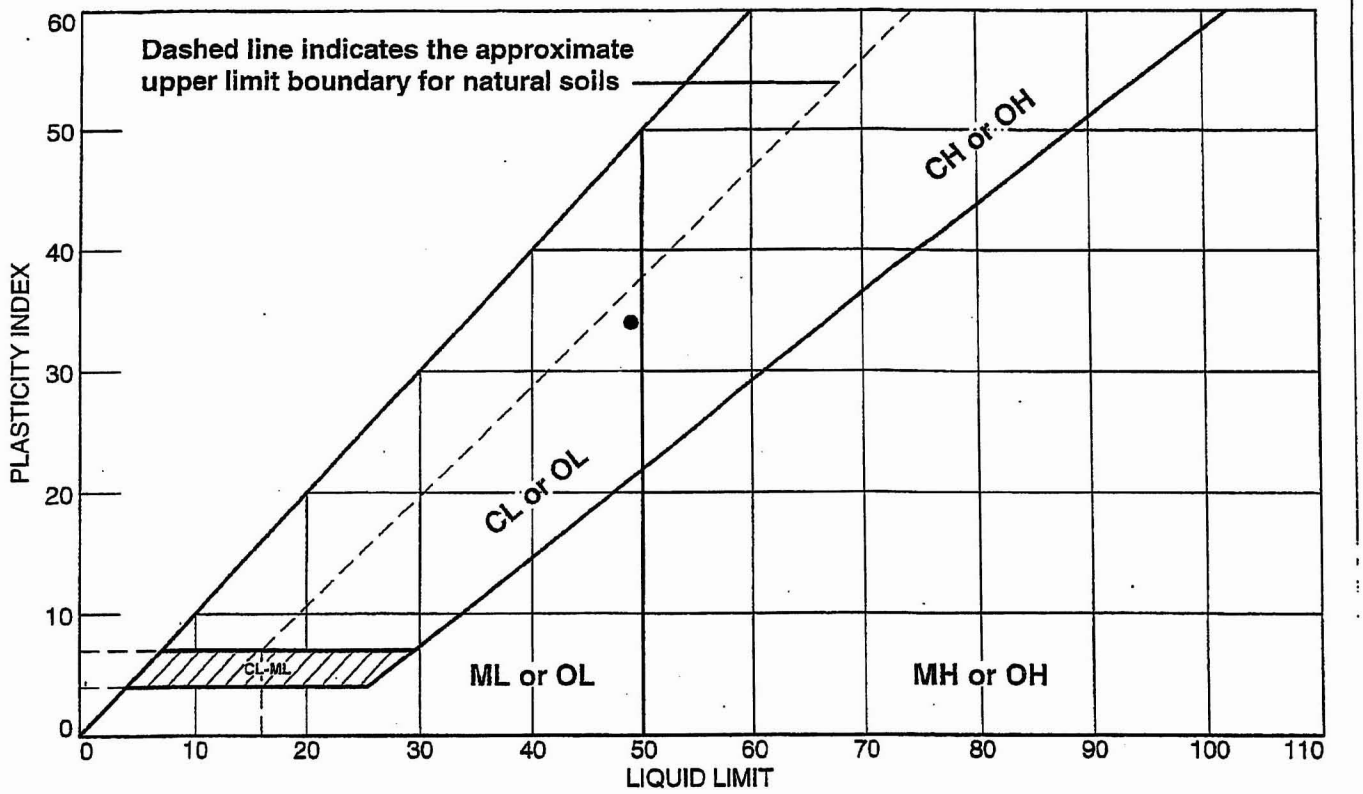
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.2	0.2	0.6	1.7	18.9	21.2	26.1	52.5	78.6

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0040	0.0094	0.0930	0.1270	0.1609	0.2267

Fineness Modulus
0.19

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2103	TP-2103, BULK 1	8'	26.9	15	49	34	CL

MACTEC, Inc. **Raleigh, North Carolina**	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468071777 **Figure** NA

Tested By: CS **Checked By:** LBJ DSC 5-7-08

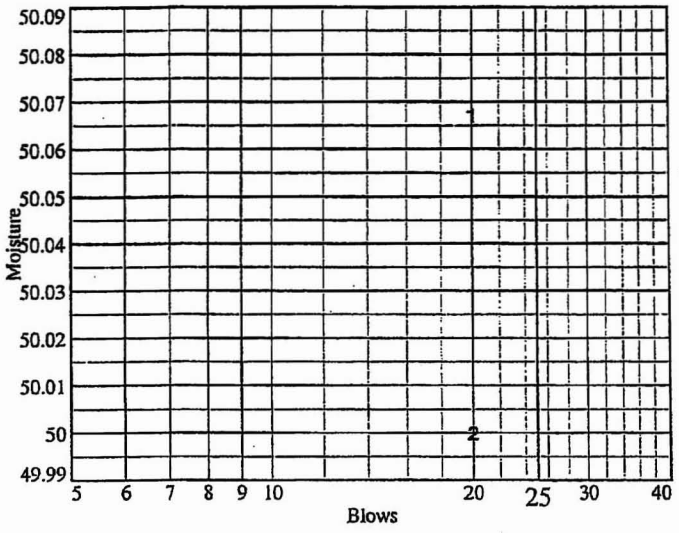
LIQUID AND PLASTIC LIMIT TEST DATA

4/9/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2103
Depth: 8'
Sample Number: TP-2103,BULK 1
Material Description: Pale Brown Lean CLAY with sand
USCS: CL
AASHTO: A-7-6(26)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	26.65	28.65				
Dry+Tare	22.92	24.24				
Tare	15.47	15.42				
# Blows	20	20				
Moisture	50.1	50.0				



Liquid Limit= 49
Plastic Limit= 15
Plasticity Index= 34
Natural Moisture= 26.9
Liquidity Index= 0.3

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	24.34	23.70			
Dry+Tare	23.18	22.63			
Tare	15.44	15.43			
Moisture	15.0	14.9			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
230.99	183.95	9.23	26.9

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/15/08

SAMPLE IDENTIFICATION: TP-2103 BULK 1

(A) Mass of oven-dried soil, grams:		52.87
(B) Mass of pycnometer filled with water at test temperature (T), grams:		656.47
(C) Mass of pycnometer, water and soil, grams:		689.68
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:		21.9
(G) Specific Gravity at observed temperature:	A / [B - (C - A)]	2.689
(F)	***Correction factor:***	0.99959
(G x F)	**SPECIFIC GRAVITY @ 20°C:**	2.688

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100

Lean CLAY with sand (CL)

EQUIPMENT USED

SCALES : 3.1.99

OVEN : 5.1.16

THERMOMETER :5.1.01

PYCNOMETER : P-6

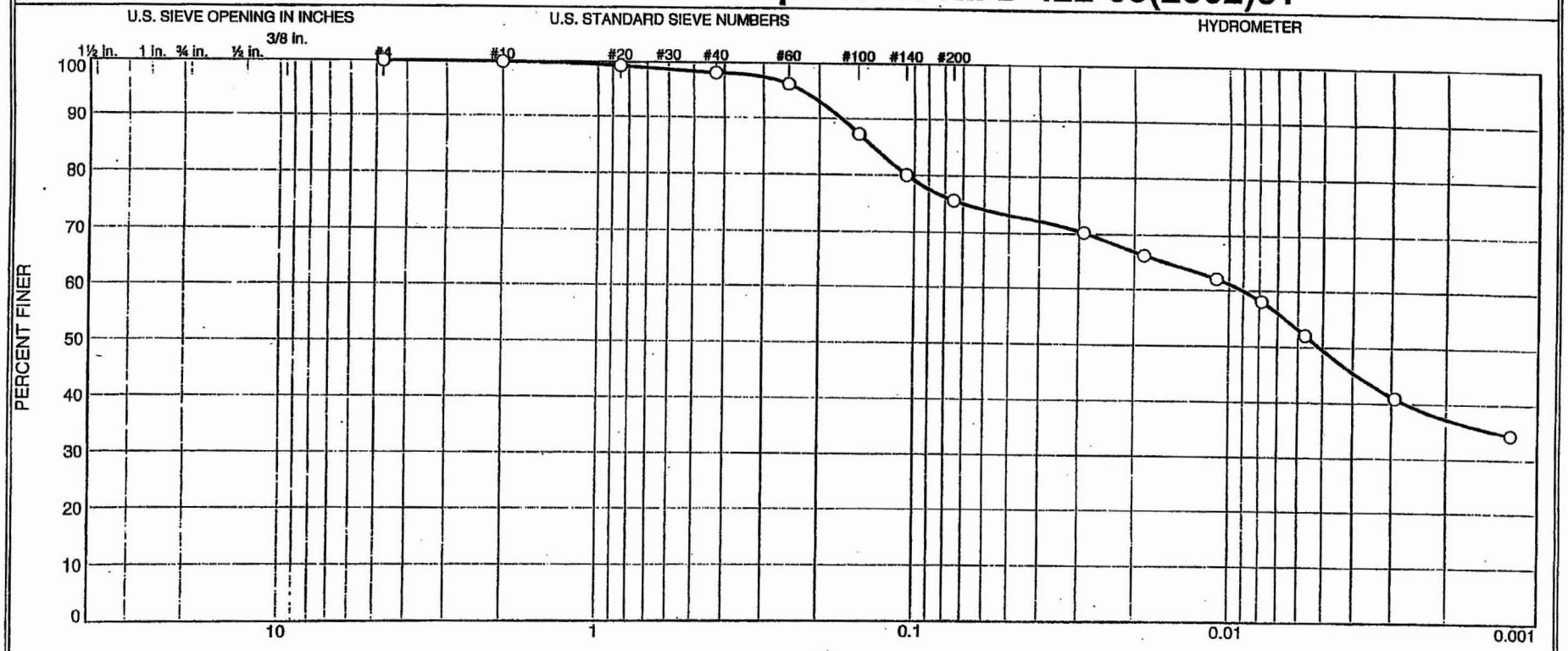
TESTED BY: CS

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: **Brian Johnson**

DSC 5-7-08

Particle Size Distribution Report / ASTM D 422-63(2002)e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
O	0.0	0.0	0.1	1.7	22.5	26.2	49.5

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
O	TP-2104	2104,B1	8'	1/18/08	CL	Pale Brown Lean CLAY with sand	11.1	38	13

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

O Specific Gravity = 2.677 (ASTM D854-06)
Natural Moisture obtained from Sample J-4,8'

Tested By: CS **Checked By:** LBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2104
Depth: 8'
Sample Number: 2104,B1
Material Description: Pale Brown Lean CLAY with sand
Date: 1/18/08
Natural Moisture: 11.1
Liquid Limit: 38
Plastic Limit: 13
USCS Class.: CL
Testing Remarks: Specific Gravity = 2.677 (ASTM D854-06)
Natural Moisture obtained from Sample J-4,8'
Tested by: CS
Checked by: LBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
304.79	0.00	0.00	#4	0.00	100.0
50.37	0.00	0.00	#10	0.04	99.9
			#20	0.35	99.3
			#40	0.93	98.2
			#60	1.92	96.2
			#100	6.38	87.3
			#140	10.03	80.1
			#200	12.22	75.7

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 99.9
Weight of hydrometer sample =50.37
Hygroscopic moisture correction:
Moist weight and tare = 28.60
Dry weight and tare = 28.44
Tare weight = 15.62
Hygroscopic moisture = 1.2%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.677
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.9	40.0	35.2	0.0132	41.0	9.6	0.0289	70.2
5.00	21.8	38.0	33.1	0.0132	39.0	9.9	0.0186	66.2
15.00	21.7	36.0	31.1	0.0133	37.0	10.2	0.0109	62.1
30.00	21.7	34.0	29.1	0.0133	35.0	10.6	0.0079	58.1
60.00	21.6	31.0	26.1	0.0133	32.0	11.0	0.0057	52.0
240.00	22.8	25.0	20.5	0.0131	26.0	12.0	0.0029	40.9
1440.00	22.1	22.0	17.2	0.0132	23.0	12.5	0.0012	34.4

MACTEC, Inc.

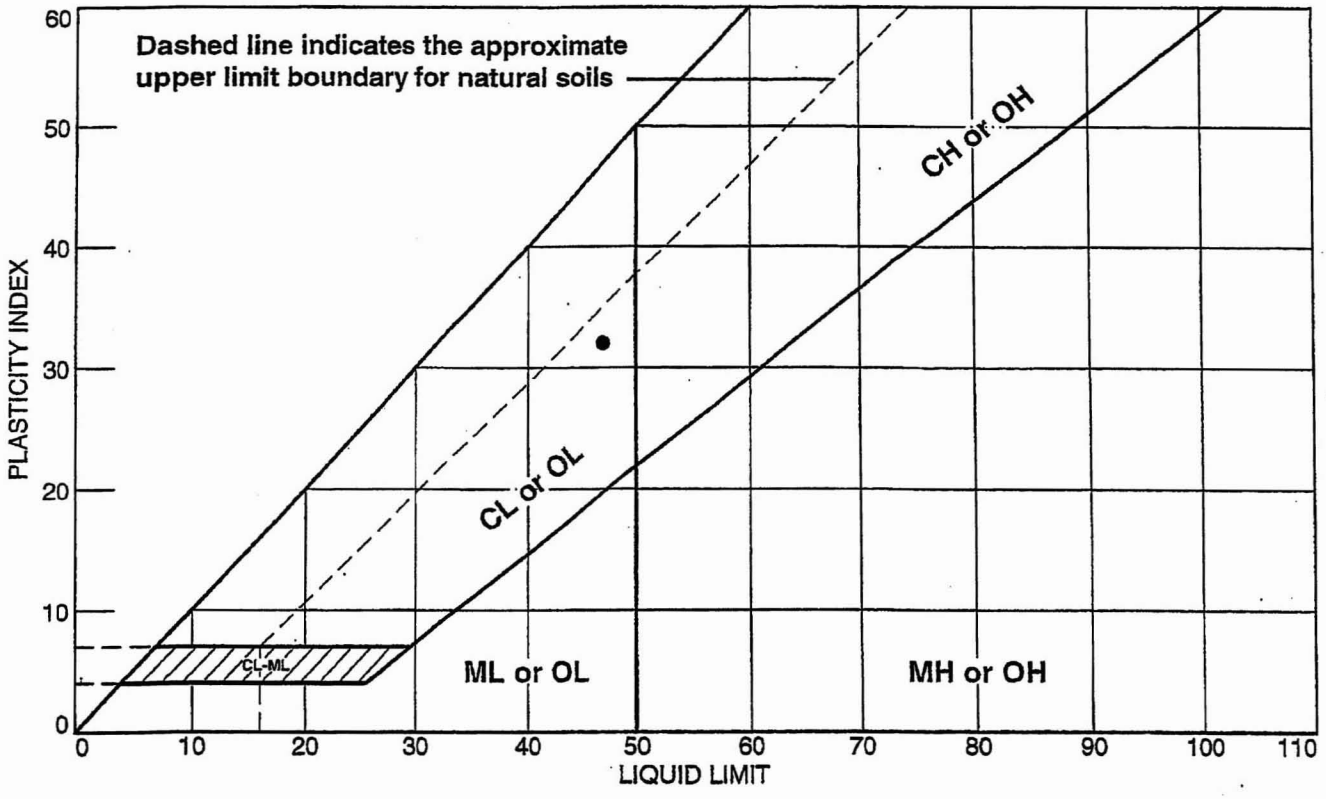
Fraction Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.1	1.7	22.5	24.3	26.2	49.5	75.7

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0051	0.0090	0.1055	0.1350	0.1700	0.2263

Fineness Modulus
0.17

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2201	2201,B1	5-10'	18.1	15	47	32	CL

MACTEC, Inc. **Raleigh, North Carolina**	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468071777 **Figure** NA

Tested By: CS **Checked By:** LBJ DSC 5-7-08

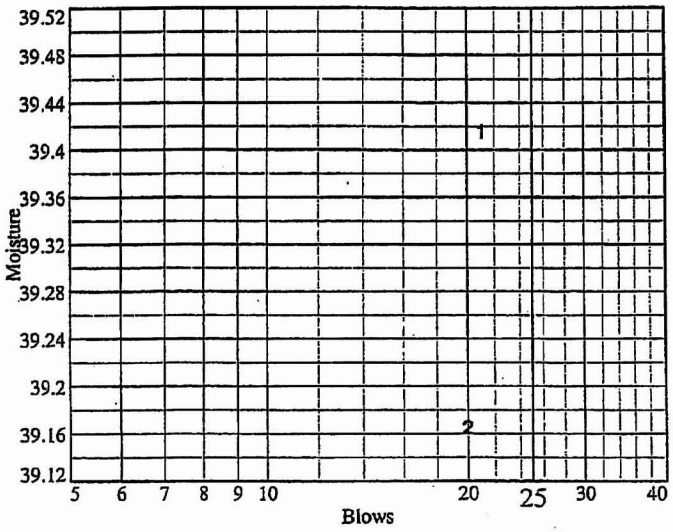
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2104
Depth: 8'
Sample Number: 2104,B1
Material Description: Pale Brown Lean CLAY with sand
USCS: CL
AASHTO: A-6(17)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	28.93	29.18				
Dry+Tare	25.15	25.33				
Tare	15.56	15.50				
# Blows	21	20				
Moisture	39.4	39.2				



Liquid Limit= 38
Plastic Limit= 13
Plasticity Index= 25
Natural Moisture= 11.1
Liquidity Index= -0.1

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	25.64	26.76			
Dry+Tare	24.49	25.50			
Tare	15.51	15.45			
Moisture	12.8	12.5			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
145.17	131.63	9.31	11.1

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/15/08

SAMPLE IDENTIFICATION: TP-2104 BULK 1

(A) Mass of oven-dried soil, grams:	52.91
(B) Mass of pycnometer filled with water at test temperature (T), grams:	655.63
(C) Mass of pycnometer, water and soil, grams:	688.78
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	21.9
(G) Specific Gravity at observed temperature: A / [B - (C - A)]	2.678
(F) ***Correction factor:***	0.99959
(G x F) **SPECIFIC GRAVITY @ 20°C:**	2.677

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100

Lean CLAY with sand (CL)

EQUIPMENT USED

SCALES : 3.1.99

OVEN : 5.1.16

THERMOMETER :5.1.01

PYCNOMETER : P-3

TESTED BY: CS

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: Brian Johnson

DSC 5-7-08

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/11/2008 **Review Date** 4/11/2008 5-7-08

Boring No.	TP-2201	TP-2201	
Sample No.	J-1	B1-J	
Sample Depth, Ft.	2	5	
A) Tare No.	75	LL	
B) Tare Weight, grams	6.86	6.80	
C) Wet Soil + Tare, grams	175.46	255.84	
D) Dry Soil + Tare, grams	154.36	217.69	
E) Weight of Dry Soil, grams [D - B]	147.50	210.89	
F) Weight of Moisture, grams [C - D]	21.10	38.15	
G) Moisture Content, % [F * 100 / E]	14.3	18.1	
(based on oven-dried weight)			
H) Tare No.	Q	H	
I) Weight of Tare, grams	51.44	52.07	
J) Weight of Over-Dried Soil + Tare, grams	150.89	149.53	
K) Weight of Oven- Dried Soil, grams [J - I]	99.45	97.46	
L) Weight of Ignited Soil + Tare, grams	148.95	147.96	
M) Ash, grams [L - I]	97.51	95.89	
N) Ash Content, % [M *100 / K]	98.0	98.4	
O) Organic Matter, % [100 - N]	**2.0**	**1.6**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.99

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/11/2008 **Review Date** 4/11/2008 5-7-08

Boring No.	TP-2202	TP-2202	TP-2202
Sample No.	J-1	B1-J	J-2
Sample Depth, Ft.	5	5-10	10
A) Tare No.	84	TT	T
B) Tare Weight, grams	6.67	6.77	6.86
C) Wet Soil + Tare, grams	150.12	205.81	271.19
D) Dry Soil + Tare, grams	128.18	173.21	237.99
E) Weight of Dry Soil, grams [D - B]	121.51	166.44	231.13
F) Weight of Moisture, grams [C - D]	21.94	32.60	33.20
G) Moisture Content, % [F * 100 / E]	18.1	19.6	14.4
(based on oven-dried weight)			

H) Tare No.	S	Q	
I) Weight of Tare, grams	53.42	51.14	
J) Weight of Over-Dried Soil + Tare, grams	128.30	134.93	
K) Weight of Oven- Dried Soil, grams [J - I]	74.88	83.79	
L) Weight of Ignited Soil + Tare, grams	126.85	133.06	
M) Ash, grams [L - I]	73.43	81.92	
N) Ash Content, % [M *100 / K]	98.1	97.8	
O) Organic Matter, % [100 - N]	**1.9**	**2.2**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17

scales: 3.1.99

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COI

Tested By CS **Reviewed By** LBJ DSC

Test Date 3/13/2008 **Review Date** 4/11/2008 5-7-08

Boring No.	TP-2203	TP-2203	TP-2203	TP-2203	TP-2203
Sample No.	J-1	J-2	J-3	J-4	J-5
Sample Depth, Ft.	1.0	3.0	5.0	8.0	10.0
A) Tare No.	CHIP	516	F-1	DIP	78
B) Tare Weight, grams	9.21	9.41	9.19	9.11	6.76
C) Wet Soil + Tare, grams	185.98	149.96	199.54	158.61	128.99
D) Dry Soil + Tare, grams	166.59	128.59	170.54	136.08	113.92
E) Weight of Dry Soil, grams [D - B]	157.38	119.18	161.35	126.97	107.16
F) Weight of Moisture, grams [C - D]	19.39	21.37	29.00	22.53	15.07
G) Moisture Content, % [F * 100 / E]	12.3	17.9	18.0	17.7	14.1
(based on oven-dried weight)					
H) Tare No.	H	9	N		
I) Weight of Tare, grams	52.08	53.89	55.57		
J) Weight of Over-Dried Soil + Tare, grams	151.05	137.65	142.51		
K) Weight of Oven- Dried Soil, grams [J - I]	98.97	83.76	86.94		
L) Weight of Ignited Soil + Tare, grams	148.80	135.36	139.67		
M) Ash, grams [L - I]	96.72	81.47	84.10		
N) Ash Content, % [M *100 / K]	97.7	97.3	96.7		
O) Organic Matter, % [100 - N]	**2.3**	**2.7**	**3.3**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furna 5.1.17

scales: 3.1.99

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL
Tested By CS **Reviewed By** LBJ DSC
Test Date 3/11/2008 **Review Date** 4/11/2008 5-7-08

Boring No.	TP-2204	TP-2204	TP-2204
Sample No.	J-1	B1-J	J-2
Sample Depth, Ft.	1.0	5-10	10
A) Tare No.	77	3071	JP-17
B) Tare Weight, grams	6.65	9.40	6.82
C) Wet Soil + Tare, grams	193.85	236.48	226.52
D) Dry Soil + Tare, grams	165.35	203.14	198.46
E) Weight of Dry Soil, grams [D - B]	158.70	193.74	191.64
F) Weight of Moisture, grams [C - D]	28.50	33.34	28.06
G) Moisture Content, % [F * 100 / E]	18.0	17.2	14.6
(based on oven-dried weight)			

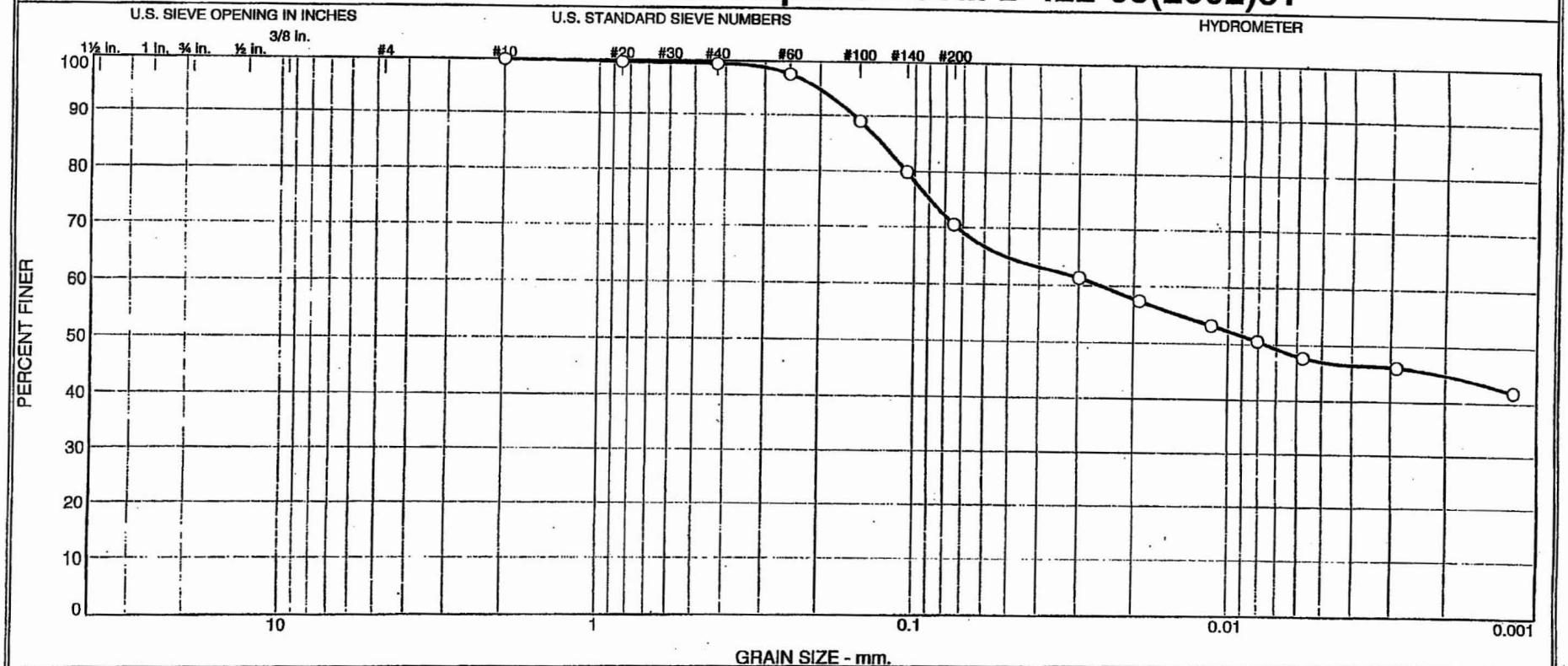
H) Tare No.	R	G	
I) Weight of Tare, grams	52.50	53.10	
J) Weight of Over-Dried Soil + Tare, grams	160.53	147.59	
K) Weight of Oven- Dried Soil, grams [J - I]	108.03	94.49	
L) Weight of Ignited Soil + Tare, grams	156.94	145.68	
M) Ash, grams [L - I]	104.44	92.58	
N) Ash Content, % [M *100 / K]	96.7	98.0	
O) Organic Matter, % [100 - N]	**3.3**	**2.0**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.99

Particle Size Distribution Report / ASTM D 422-63(2002)e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.6	28.8	23.6	47.0

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	TP-2201	2201,B1	5-10'	1/17/08	CL	Pale Yellow Lean CLAY with sand	18.1	47	15

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ Specific gravity = 2.678 (ASTM D854-06)
Organic content = 1.6% (ASTM D2974-07)
Natural moisture obtained from Sample B1-J,5'

Tested By: CS **Checked By:** LBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2201
Depth: 5-10' **Sample Number:** 2201,B1
Material Description: Pale Yellow Lean CLAY with sand
Date: 1/17/08 **Natural Moisture:** 18.1
Liquid Limit: 47 **Plastic Limit:** 15 **USCS Class.:** CL
Testing Remarks: Specific gravity = 2.678 (ASTM D854-06)
Organic content = 1.6% (ASTM D2974-07)
Natural moisture obtained from Sample B1-J,5'
Tested by: CS **Checked by:** LBj

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
283.33	0.00	0.00	#10	0.00	100.0
51.28	0.00	0.00	#20	0.16	99.7
			#40	0.29	99.4
			#60	1.20	97.7
			#100	5.62	89.0
			#140	10.30	79.9
			#200	15.09	70.6

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =51.28
Hygroscopic moisture correction:
Moist weight and tare = 29.90
Dry weight and tare = 29.68
Tare weight = 15.57
Hygroscopic moisture = 1.6%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.678
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.9	36.0	31.2	0.0132	37.0	10.2	0.0299	61.4
5.00	21.9	34.0	29.2	0.0132	35.0	10.6	0.0192	57.4
15.00	21.6	32.0	27.1	0.0133	33.0	10.9	0.0113	53.3
30.00	21.9	30.5	25.7	0.0132	31.5	11.1	0.0081	50.5
60.00	22.0	29.0	24.2	0.0132	30.0	11.4	0.0057	47.6
240.00	22.7	28.0	23.5	0.0131	29.0	11.5	0.0029	46.2
1440.00	22.2	26.0	21.3	0.0132	27.0	11.9	0.0012	41.9

MACTEC, Inc.

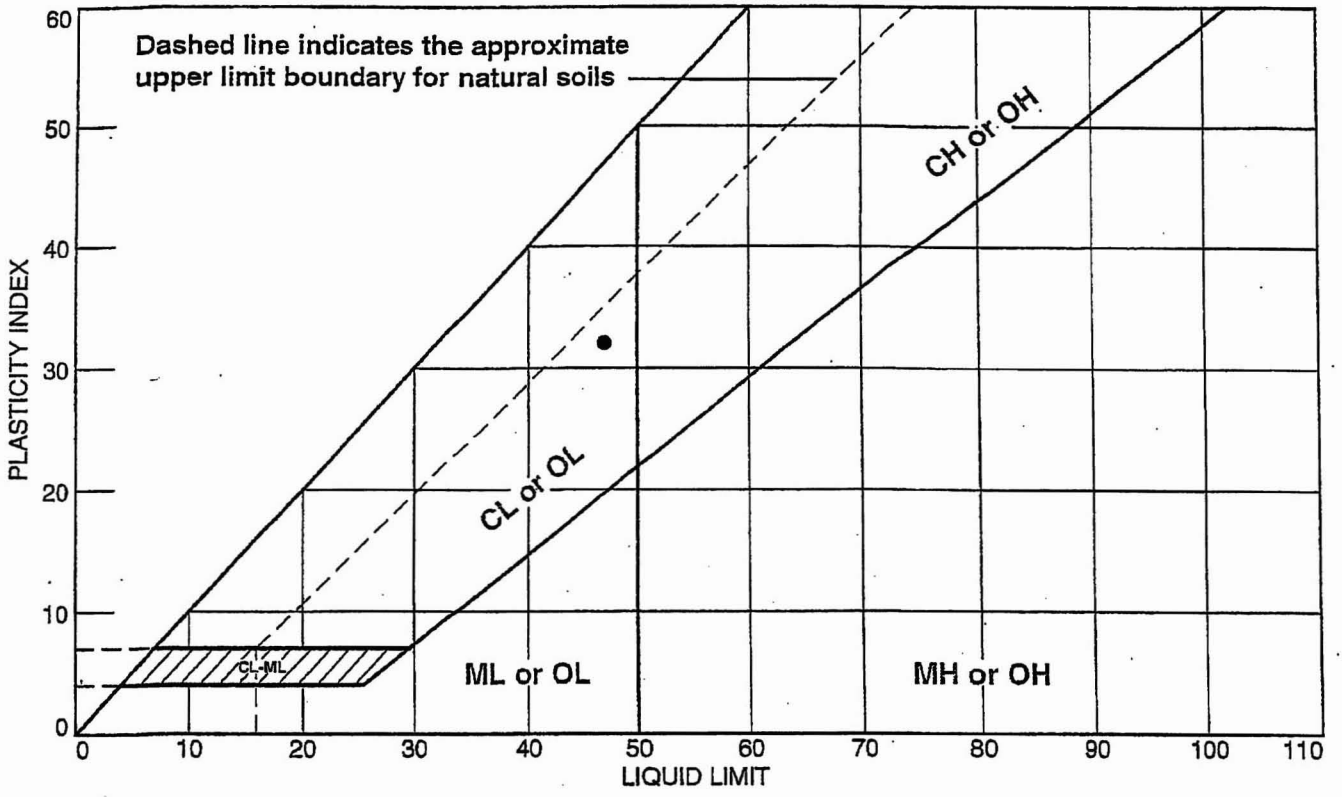
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.6	28.8	29.4	23.6	47.0	70.6

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0076	0.0254	0.1063	0.1275	0.1564	0.2027

Fineness Modulus
0.13

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2201	TP-2201, BULK 1	5-10'	18.1	15	47	32	CL

MACTEC, Inc.

Raleigh, North Carolina

Client: Bechtel

Project: Exelon Texas COL (Victoria)

Project No.: 6468071777

Figure NA

Tested By: CS **Checked By:** LBJ DSC 5-7-08

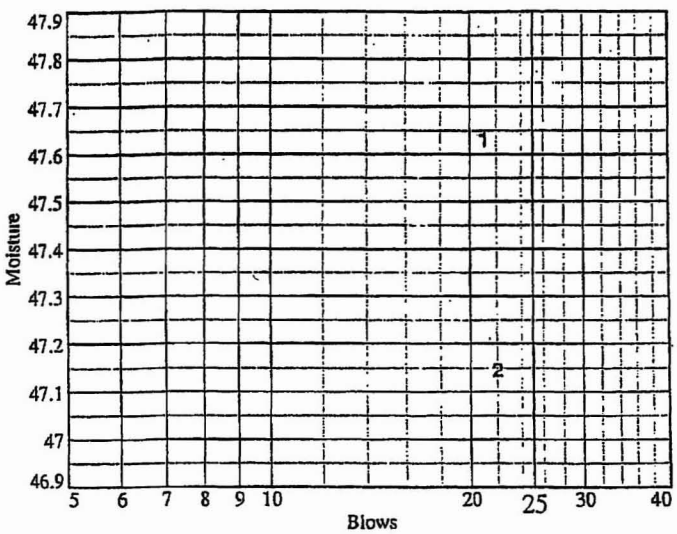
LIQUID AND PLASTIC LIMIT TEST DATA

3/22/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2201
Depth: 5-10'
Sample Number: TP-2201,BULK 1
Material Description: Pale Yellow Lean CLAY with sand
USCS: CL
AASHTO: A-7-6(21)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	26.41	27.36				
Dry+Tare	22.89	23.56				
Tare	15.50	15.50				
# Blows	21	22				
Moisture	47.6	47.1				



Liquid Limit= 47
Plastic Limit= 15
Plasticity Index= 32
Natural Moisture= 18.1
Liquidity Index= 0.1

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	24.79	26.98			
Dry+Tare	23.54	25.46			
Tare	15.45	15.50			
Moisture	15.5	15.3			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
255.84	217.69	6.80	18.1

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/16/08

SAMPLE IDENTIFICATION: TP-2201 .BULK 1

(A) Mass of oven-dried soil, grams:		50.17
(B) Mass of pycnometer filled with water at test temperature (T), grams:		655.72
(C) Mass of pycnometer, water and soil, grams:		687.16
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:		21.1
(G) Specific Gravity at observed temperature:	A / [B - (C - A)]	2.679
(F)	***Correction factor:***	0.99977
(G x F)	**SPECIFIC GRAVITY @ 20°C:**	2.678

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100

Lean CLAY with sand (CL)

EQUIPMENT USED

SCALES : 3.1.99

OVEN : 5.1.16

THERMOMETER :5.1.01

PYCNOMETER : P-3

TESTED BY: CS

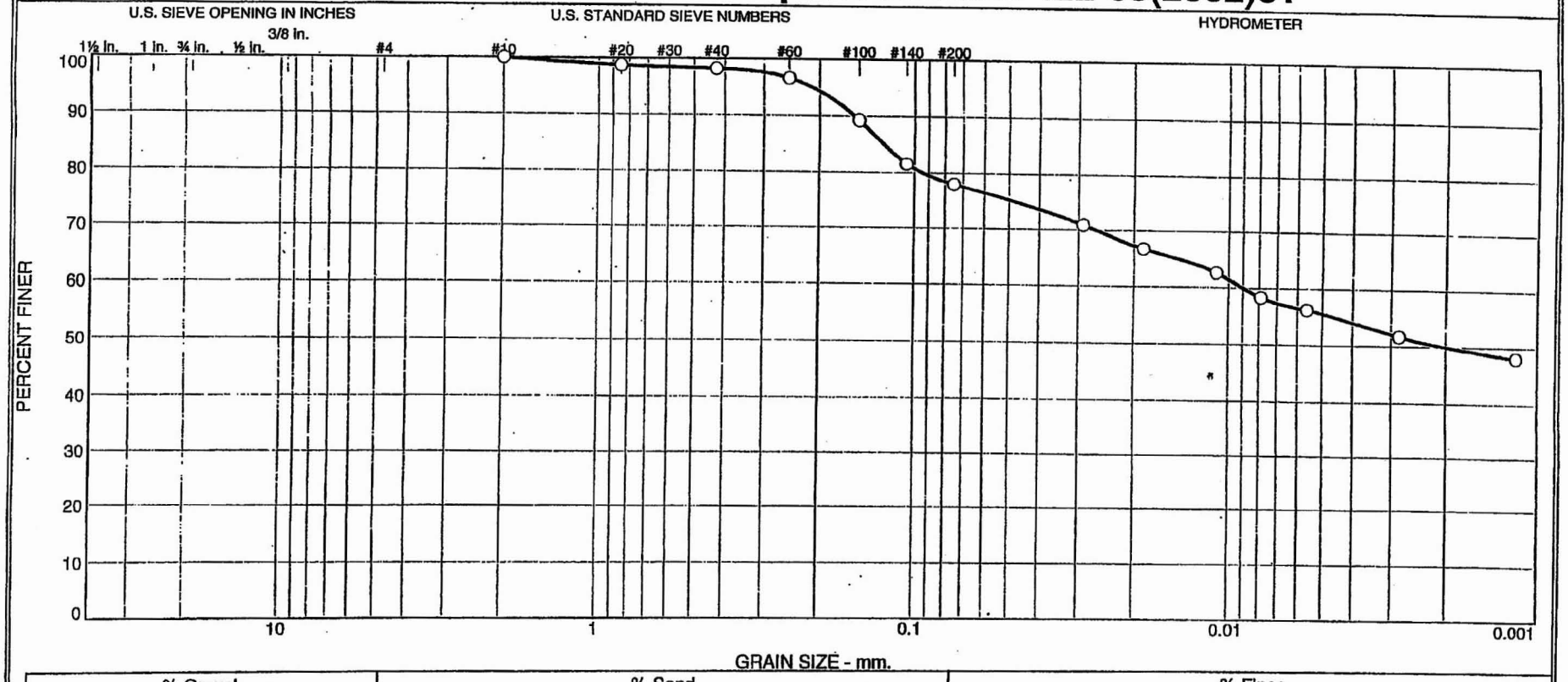
\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: **Brian Johnson**

DSC 5-7-08

ORIGINAL

Particle Size Distribution Report / ASTM D 422-63(2002)e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	1.8	20.2	22.3	55.7

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	TP-2202	2202,B1	8'	1/17/08	CH	Pale Yellow Fat CLAY with sand	19.6	50	17

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ Specific Gravity = 2.684 (ASTM D854-06)
Organic Content = 2.2% (ASTM 2974-07)
Natural moisture value determined from Sample B1-J,5-10'

Tested By: CS **Checked By:** LBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2202
Depth: 8'
Sample Number: 2202,B1
Material Description: Pale Yellow Fat ClAY with sand
Date: 1/17/08
Natural Moisture: 19.6
Liquid Limit: 50
Plastic Limit: 17
USCS Class.: CH
Testing Remarks: Specific Gravity = 2.684 (ASTM D854-06)
Organic Content = 2.2% (ASTM 2974-07)
Natural moisture value determined from Sample B1-J,5-10'
Tested by: CS
Checked by: LBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
236.67	0.00	0.00	#10	0.00	100.0
49.34	0.00	0.00	#20	0.64	98.7
			#40	0.89	98.2
			#60	1.67	96.6
			#100	5.25	89.4
			#140	9.05	81.7
			#200	10.85	78.0

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =49.34
Hygroscopic moisture correction:
Moist weight and tare = 28.97
Dry weight and tare = 28.59
Tare weight = 15.60
Hygroscopic moisture = 2.9%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.685
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.1	39.0	34.2	0.0132	40.0	9.7	0.0290	70.9
5.00	22.1	37.0	32.2	0.0132	38.0	10.1	0.0187	66.7
15.00	22.1	35.0	30.2	0.0132	36.0	10.4	0.0110	62.6
30.00	22.0	33.0	28.2	0.0132	34.0	10.7	0.0079	58.4
60.00	22.0	32.0	27.2	0.0132	33.0	10.9	0.0056	56.3
240.00	22.9	29.5	25.0	0.0130	30.5	11.3	0.0028	51.8
1440.00	22.1	28.0	23.2	0.0132	29.0	11.5	0.0012	48.1

MACTEC, Inc.

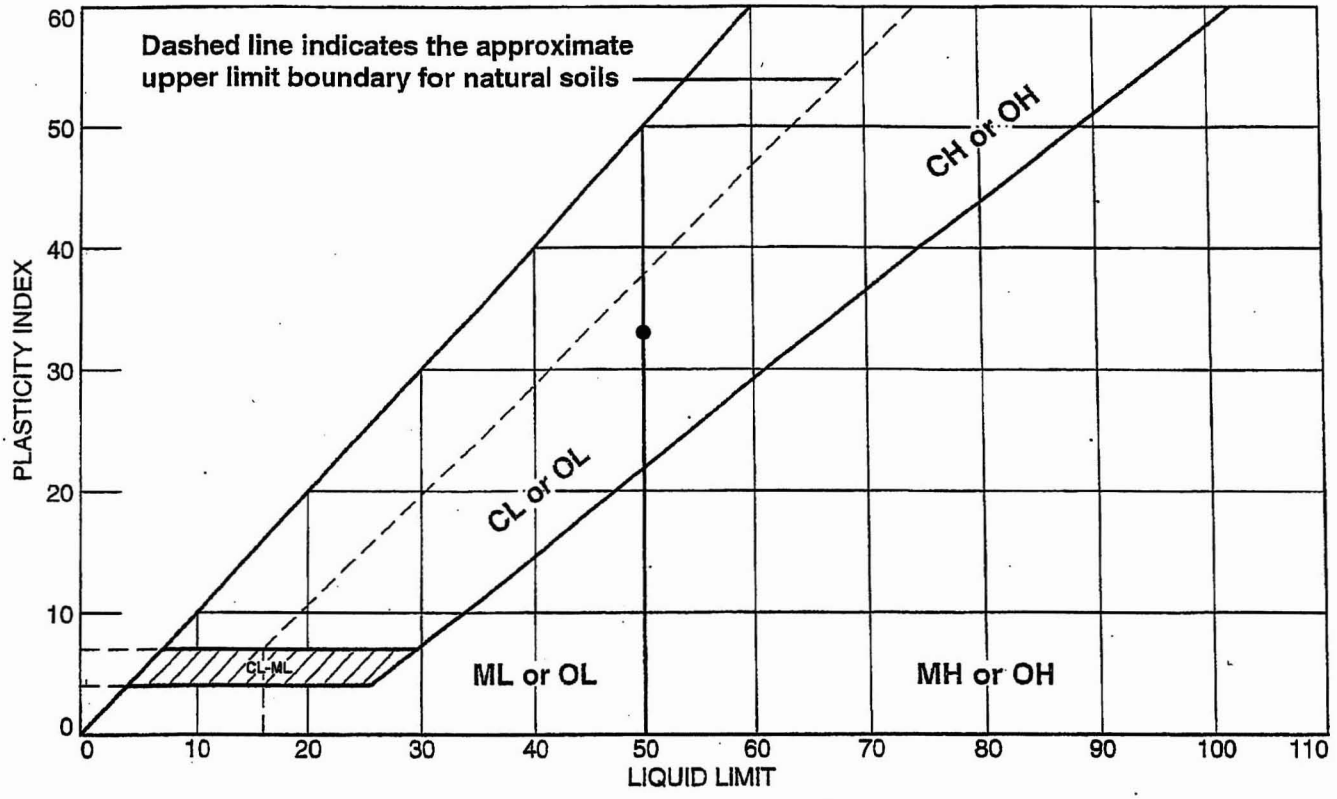
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	1.8	20.2	22.0	22.3	55.7	78.0

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0020	0.0090	0.0944	0.1244	0.1546	0.2108

Fineness Modulus
0.16

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2202	2202,B1	8'	19.6	17	50	33	CH

MACTEC, Inc. **Raleigh, North Carolina**	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468071777 **Figure** NA

Tested By: CS **Checked By:** LBJ DSC 5-7-08

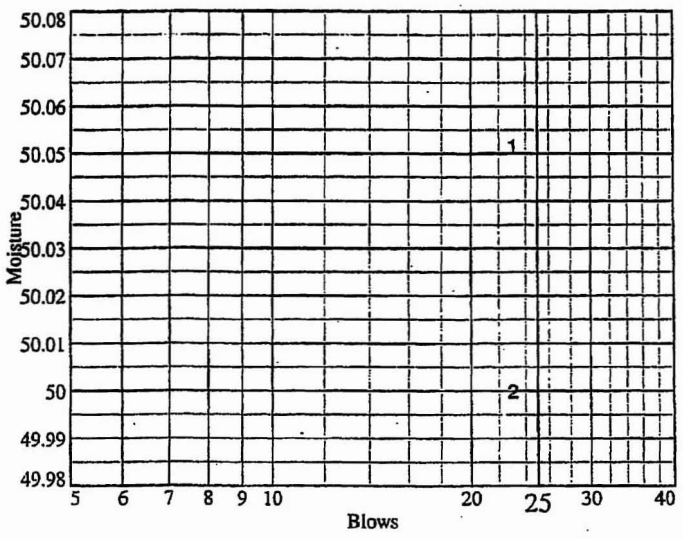
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2202
Depth: 8'
Sample Number: 2202,B1
Material Description: Pale Yellow Fat CLAY with sand
USCS: CH
AASHTO: A-7-6(25)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	29.95	31.22				
Dry+Tare	25.10	26.01				
Tare	15.41	15.59				
# Blows	23	23				
Moisture	50.1	50.0				



Liquid Limit= 50
Plastic Limit= 17
Plasticity Index= 33
Natural Moisture= 19.6
Liquidity Index= 0.1

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	23.73	21.96			
Dry+Tare	22.57	21.09			
Tare	15.45	15.93			
Moisture	16.3	16.9			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
205.81	173.21	6.77	19.6

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/16/08

SAMPLE IDENTIFICATION: TP-2202 BULK 1

(A) Mass of oven-dried soil, grams:		49.95
(B) Mass of pycnometer filled with water at test temperature (T), grams:		656.55
(C) Mass of pycnometer, water and soil, grams:		687.90
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:		21.1
(G) Specific Gravity at observed temperature:	A / [B - (C - A)]	2.684
(F)	***Correction factor:***	0.99977
(G x F)	**SPECIFIC GRAVITY @ 20°C:**	2.685

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100

Fat CLAY with sand (CH)

EQUIPMENT USED

SCALES : 3.1.99

OVEN : 5.1.16

THERMOMETER :5.1.01

PYCNOMETER : P-6

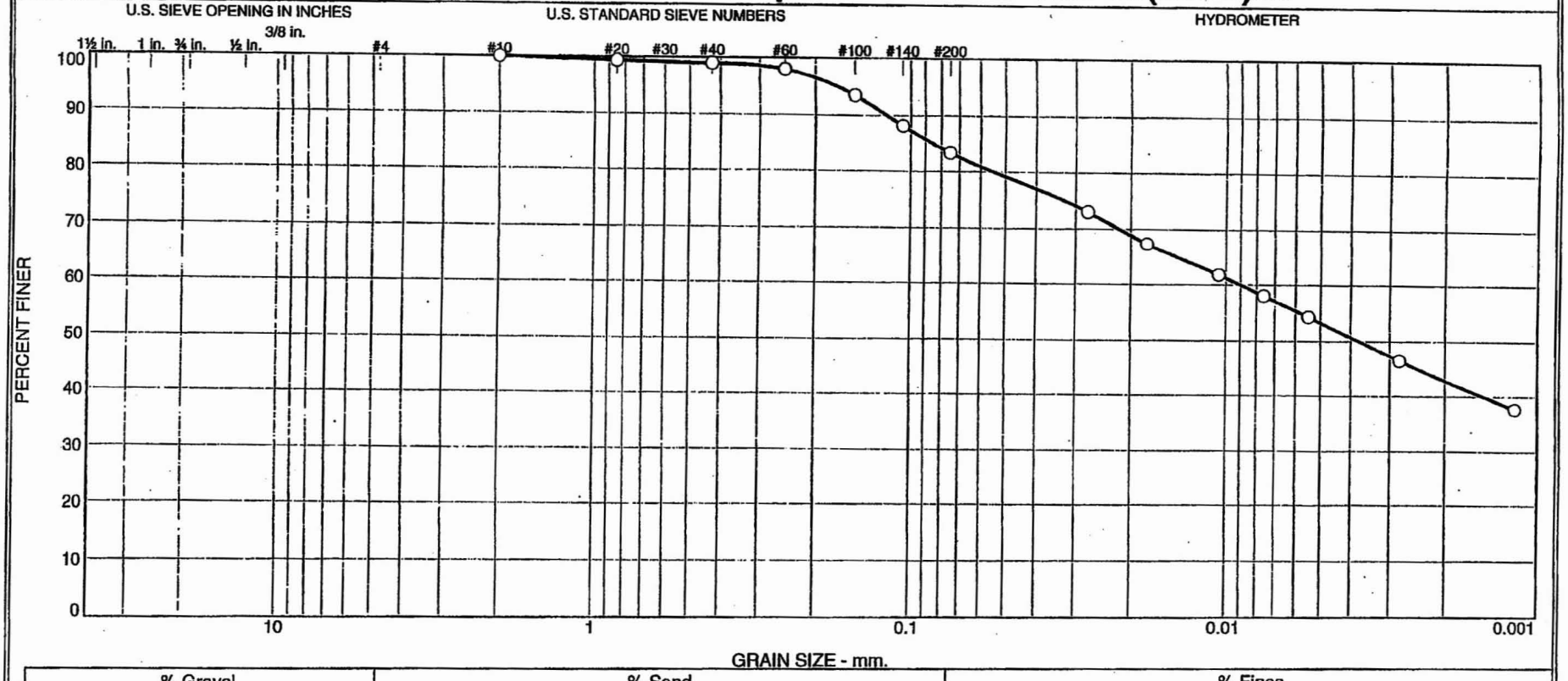
TESTED BY: CS

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: **Brian Johnson**

DSC 5-7-08

Particle Size Distribution Report / ASTM D 422-63(2002)e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	1.0	15.6	30.0	53.4

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	TP-2203	TP-2203,B1	8'	1/18/08	CL	Pale Brown Lean CLAY with sand	17.7	48	15

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ Specific Gravity = 2.729 (ASTM D854-06)
Natural Moisture obtained from Sample J-4,8'

Tested By: CS **Checked By:** LBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2203
Depth: 8'
Sample Number: TP-2203,B1
Material Description: Pale Brown Lean CLAY with sand
Date: 1/18/08
Natural Moisture: 17.7
Liquid Limit: 48
Plastic Limit: 15
USCS Class.: CL
Testing Remarks: Specific Gravity = 2.729 (ASTM D854-06)
Natural Moisture obtained from Sample J-4,8'
Tested by: CS
Checked by: LBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
276.29	0.00	0.00	#10	0.00	100.0
53.66	0.00	0.00	#20	0.34	99.4
			#40	0.55	99.0
			#60	1.06	98.0
			#100	3.51	93.5
			#140	6.33	88.2
			#200	8.89	83.4

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =53.66
Hygroscopic moisture correction:
Moist weight and tare = 30.28
Dry weight and tare = 30.06
Tare weight = 15.52
Hygroscopic moisture = 1.5%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.729
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.2	44.0	39.3	0.0130	45.0	8.9	0.0274	73.0
5.00	22.2	41.0	36.3	0.0130	42.0	9.4	0.0178	67.5
15.00	22.2	38.0	33.3	0.0130	39.0	9.9	0.0105	61.9
30.00	22.1	36.0	31.2	0.0130	37.0	10.2	0.0076	58.1
60.00	22.1	34.0	29.2	0.0130	35.0	10.6	0.0054	54.4
240.00	22.9	29.5	25.0	0.0129	30.5	11.3	0.0028	46.5
1440.00	22.2	25.0	20.3	0.0130	26.0	12.0	0.0012	37.7

MACTEC, Inc.

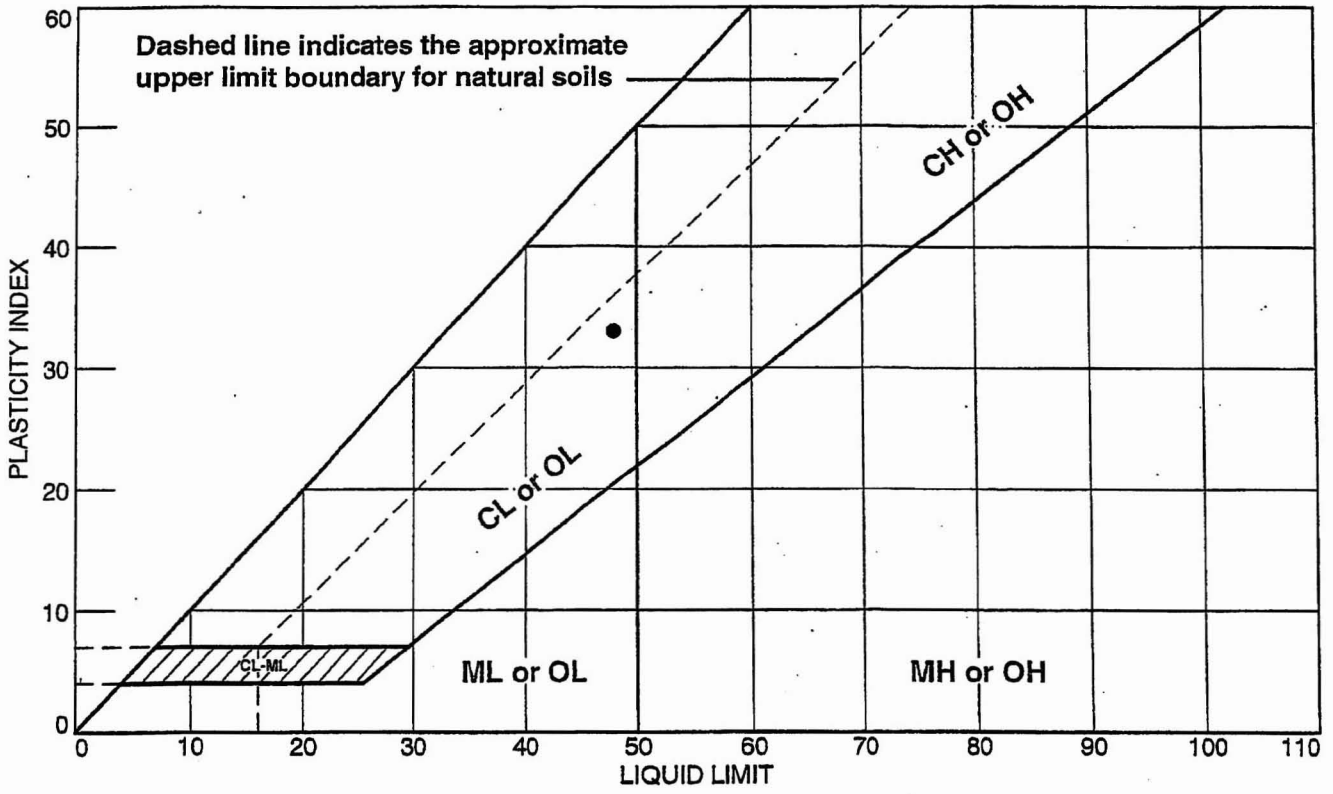
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	1.0	15.6	16.6	30.0	53.4	83.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0038	0.0089	0.0545	0.0848	0.1190	0.1700

Fineness Modulus
0.09

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2203	TP-2203,B1	8'	17.7	15	48	33	CL

MACTEC, Inc. **Raleigh, North Carolina**	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468071777 **Figure** NA

Tested By: CS **Checked By:** LBJ DSC 5-7-08

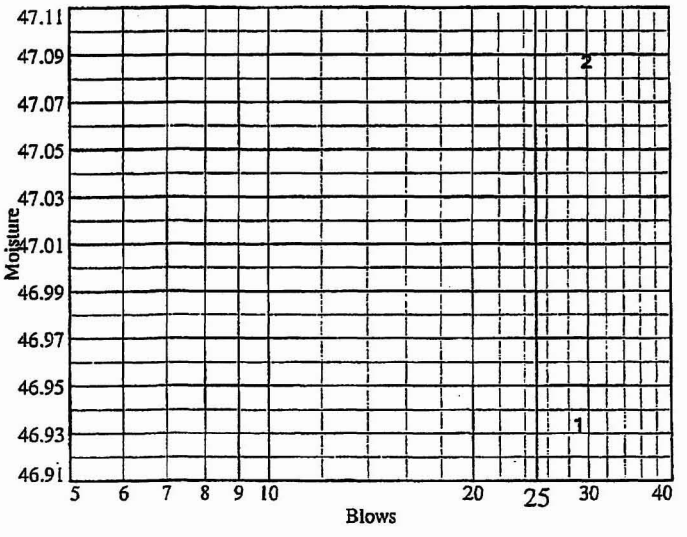
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2203
Depth: 8'
Sample Number: TP-2203,B1
Material Description: Pale Brown Lean CLAY with sand
USCS: CL
AASHTO: A-7-6(27)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	27.29	30.55				
Dry+Tare	23.54	25.70				
Tare	15.55	15.40				
# Blows	29	30				
Moisture	46.9	47.1				



Liquid Limit= 48
Plastic Limit= 15
Plasticity Index= 33
Natural Moisture= 17.7
Liquidity Index= 0.1

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	27.94	28.90			
Dry+Tare	26.33	27.21			
Tare	15.50	15.49			
Moisture	14.9	14.4			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
158.61	136.08	9.11	17.7

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/17/08

SAMPLE IDENTIFICATION: TP-2203 BULK 1

(A) Mass of oven-dried soil, grams:		51.70
(B) Mass of pycnometer filled with water at test temperature (T), grams:		656.55
(C) Mass of pycnometer, water and soil, grams:		689.31
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:		21.1
(G) Specific Gravity at observed temperature:	A / [B - (C - A)]	2.730
(F)	***Correction factor:***	0.99977
(G x F)	**SPECIFIC GRAVITY @ 20°C:**	2.729

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100

Lean CLAY with sand (CL)

EQUIPMENT USED

SCALES : 3.1.99

OVEN : 5.1.16

THERMOMETER :5.1.01

PYCNOMETER : P-6

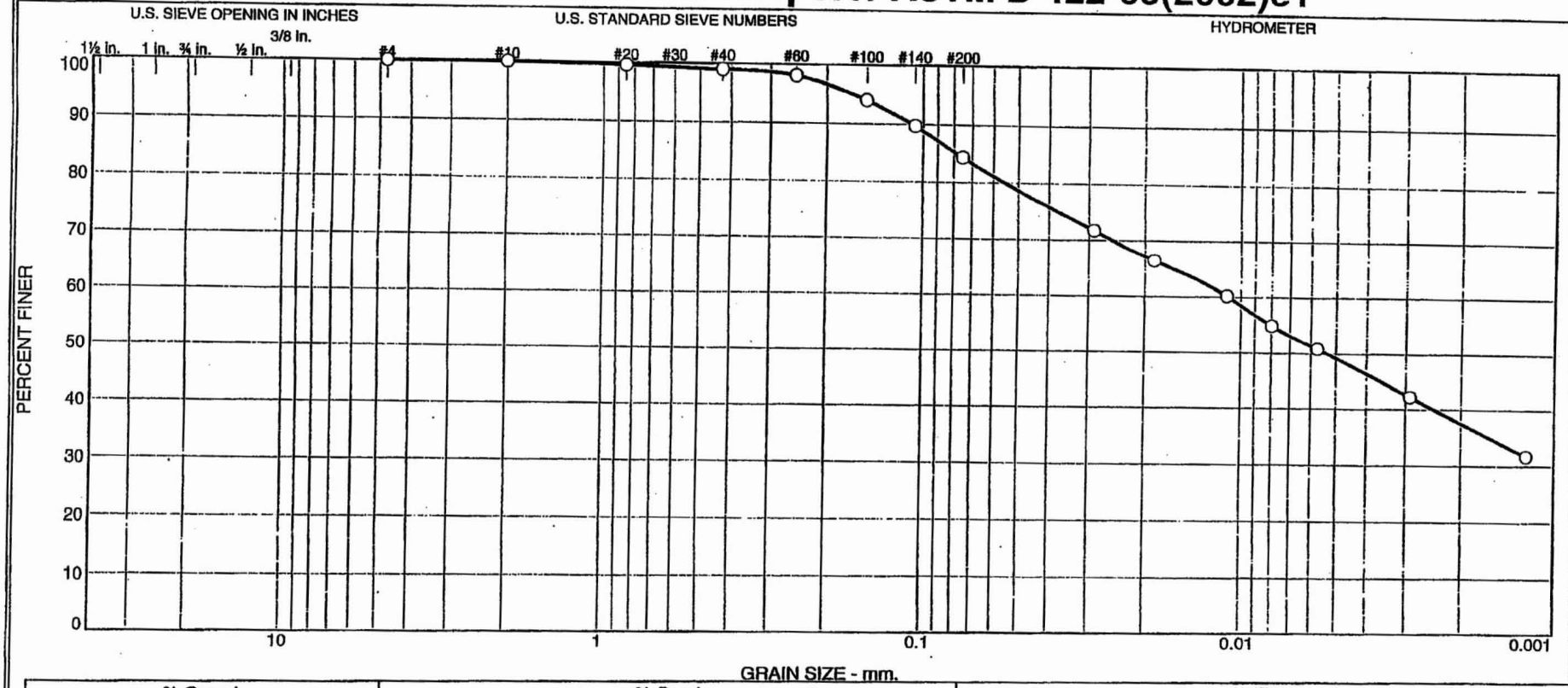
TESTED BY: CS

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: Brian Johnson

DSC 5-7-08

Particle Size Distribution Report / ASTM D 422-63(2002)e1



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
O	0.0	0.0	0.0	1.0	14.6	35.2	49.2

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
O	TP-2204	2204,B1	5-10'	1/17/08	CL	Pale Brown Lean CLAY with sand	17.2	43	14

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

O Specific gravity = 2.709 (ASTM D854-06)
Organic Content = 2.0% (ASTM D2974-07)
Natural Moisture obtained from Sample B1-J,5- 10'

Tested By: CS **Checked By:** LBJ DSC 5-7-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2204
Depth: 5-10'
Sample Number: 2204,B1
Material Description: Pale Brown Lean CLAY with sand
Date: 1/17/08
Natural Moisture: 17.2
Liquid Limit: 43
Plastic Limit: 14
USCS Class.: CL
Testing Remarks: Specific gravity = 2.709 (ASTM D854-06)
Organic Content = 2.0% (ASTM D2974-07)
Natural Moisture obtained from Sample B1-J,5- 10'
Tested by: CS
Checked by: LBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
381.75	0.00	0.00	#4	0.00	100.0
			#10	0.06	100.0
48.36	0.00	0.00	#20	0.19	99.6
			#40	0.48	99.0
			#60	0.92	98.1
			#100	2.86	94.1
			#140	4.94	89.8
			#200	7.52	84.4

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =48.36
Hygroscopic moisture correction:
Moist weight and tare = 29.80
Dry weight and tare = 29.60
Tare weight = 15.96
Hygroscopic moisture = 1.5%
Table of composite correction values:

Temp., deg. C:	12.9	29.9
Comp. corr.:	-8.0	-2.0

Meniscus correction only = 1.0
Specific gravity of solids = 2.709
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.7	39.5	34.6	0.0131	40.5	9.7	0.0288	71.7
5.00	21.6	37.0	32.1	0.0131	38.0	10.1	0.0186	66.4
15.00	21.6	34.0	29.1	0.0131	35.0	10.6	0.0110	60.2
30.00	21.4	31.5	26.5	0.0132	32.5	11.0	0.0080	54.9
60.00	21.5	29.5	24.5	0.0132	30.5	11.3	0.0057	50.8
240.00	22.6	25.0	20.4	0.0130	26.0	12.0	0.0029	42.3
1440.00	22.3	20.0	15.3	0.0130	21.0	12.9	0.0012	31.7

MACTEC, Inc.

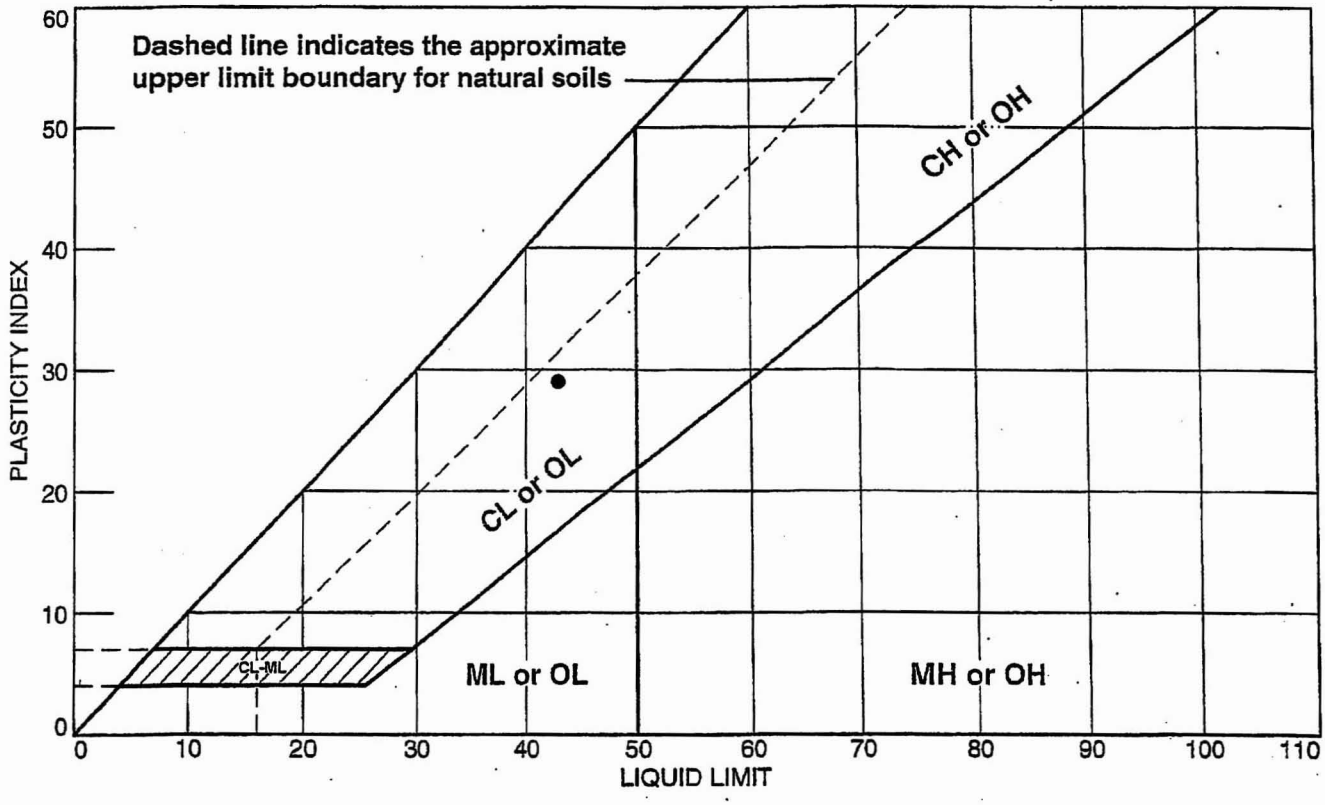
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	1.0	14.6	15.6	35.2	49.2	84.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0053	0.0109	0.0552	0.0778	0.1077	0.1642

Fineness Modulus
0.08

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	TP-2204	2204,B1	5-10'	17.2	14	43	29	CL

MACTEC, Inc.

Raleigh, North Carolina

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project No.: 6468071777 **Figure** NA

Tested By: CS **Checked By:** LBJ DSC 5-7-08

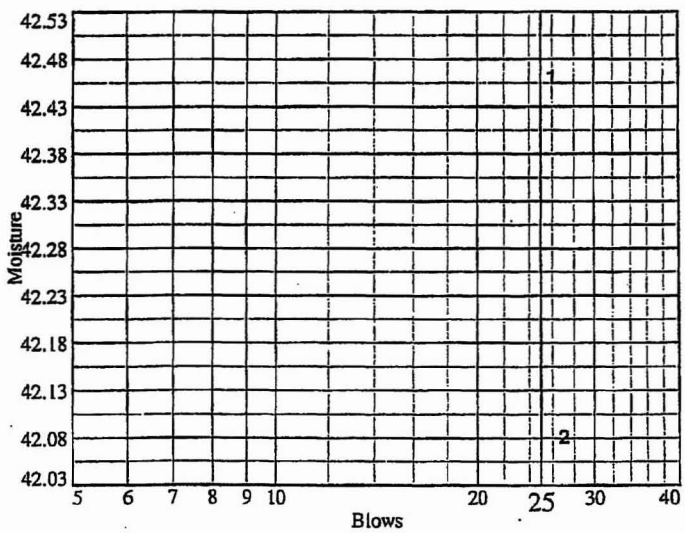
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: TP-2204
Depth: 5-10'
Sample Number: 2204,B1
Material Description: Pale Brown Lean CLAY with sand
USCS: CL
AASHTO: A-7-6(24)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	30.47	32.02				
Dry+Tare	26.02	27.21				
Tare	15.54	15.78				
# Blows	26	27				
Moisture	42.5	42.1				



Liquid Limit= 43
Plastic Limit= 14
Plasticity Index= 29
Natural Moisture= 17.2
Liquidity Index= 0.1

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	25.96	29.60			
Dry+Tare	24.63	27.86			
Tare	15.48	15.57			
Moisture	14.5	14.2			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
236.48	203.14	9.40	17.2

MACTEC, Inc.

MACTEC ENGINEERING AND CONSULTING, INC.
RALEIGH, NORTH CAROLINA

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/18/08

SAMPLE IDENTIFICATION: TP-2204 BULK 1

(A) Mass of oven-dried soil, grams:	48.88
(B) Mass of pycnometer filled with water at test temperature (T), grams:	655.65
(C) Mass of pycnometer, water and soil, grams:	686.49
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	21.7
(G) Specific Gravity at observed temperature: A / [B - (C - A)]	2.710
(F) ***Correction factor:***	0.99963
(G x F) **SPECIFIC GRAVITY @ 20°C:**	2.709

MATERIAL TESTED: [X] **- # 4** [ ] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100

Lean CLAY with sand

EQUIPMENT USED

SCALES : 3.1.99

OVEN : 5.1.16

THERMOMETER :5.1.01

PYCNOMETER : P-3

TESTED BY: CS

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

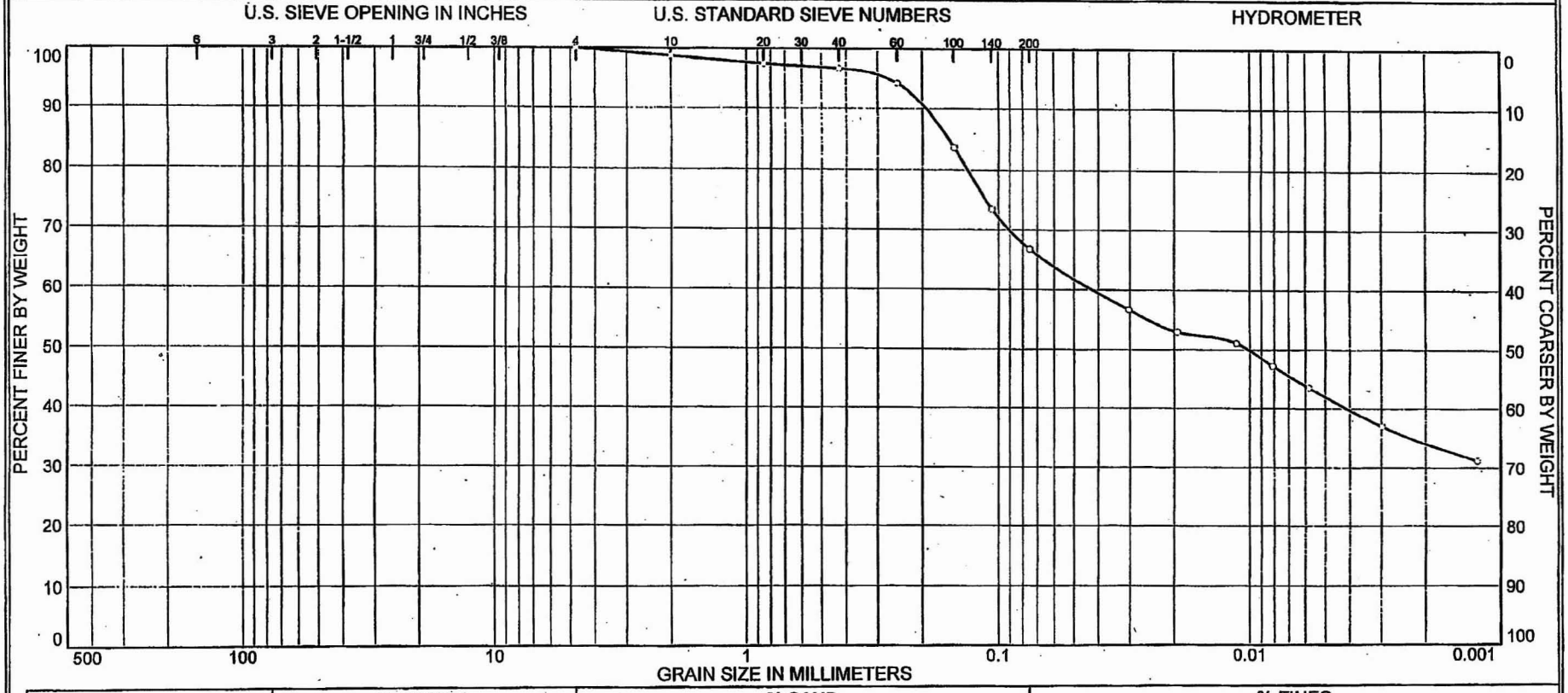
REVIEWED BY: **Brian Johnson**

DSC 5-7-08

Index Testing for Undisturbed Samples

Boring B-2174 UD

Particle Size Distribution Report ASTM D 422-63 (2002) e1



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0.0	0.0	0.0	1.2	2.1	29.9	24.8	42.0

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-2174UD	UD-1	10-11.7 Ft.	1/16/08	CL	Light Greenish Gray Sandy Lean CLAY	19.5	37	13

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468-07-1777 Lab No. 8433

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: EH Reviewed by: HJ AD

NM value from average of strength tests performed.
Specific Gravity = 2.67 (ASTM D 854-06) DSC 3-31-08

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-1
Elev. or Depth: 10-11.7 Ft **Sample Length(in./cm.):** ID#8433
Location: B-2174UD
Description: Light Greenish Gray Sandy Lean CLAY
Date: 1/16/08 **PL:** 13 **LL:** 37 **PI:** 24
USCS Classification: CL **AASHTO Classification:**
Testing Remarks: Tested by: EH Reviewed by: HJ

NM value from average of strength tests performed.
Specific Gravity = 2.67 (ASTM D 854-06)

Mechanical Analysis Data

	Initial
Dry sample and tare=	69.30
Tare =	16.42
Dry sample weight =	52.88

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.64	98.8
# 20	1.34	97.5
# 40	1.74	96.7
# 60	3.07	94.2
# 100	8.55	83.8
# 140	14.08	73.4
# 200	17.55	66.8

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 66.8
Weight of hydrometer sample: 35.33
Calculated biased weight= 52.89
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.669
Specific gravity correction factor= 0.996
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

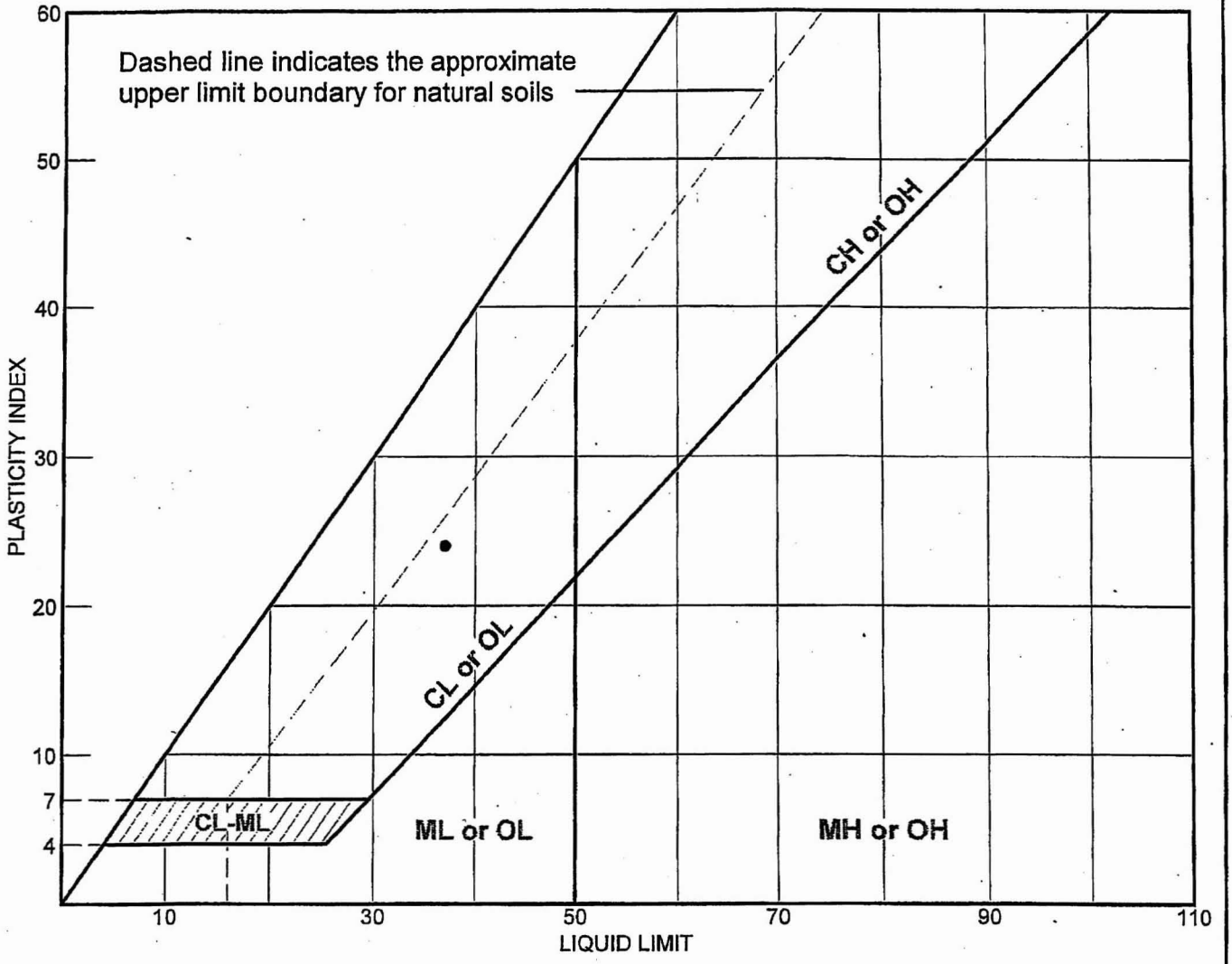
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.5	35.0	30.1	0.0132	35.0	10.6	0.0302	56.7
5.00	22.5	33.0	28.1	0.0132	33.0	10.9	0.0194	53.0
15.00	22.5	32.0	27.1	0.0132	32.0	11.0	0.0113	51.1
30.00	22.5	30.0	25.1	0.0132	30.0	11.4	0.0081	47.3
60.00	22.5	28.0	23.1	0.0132	28.0	11.7	0.0058	43.6
240.00	22.5	24.5	19.6	0.0132	24.5	12.3	0.0030	37.0
1440.00	22.2	21.5	16.6	0.0132	21.5	12.8	0.0012	31.2

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 33.2 **(% coarse =** 1.2 **% medium =** 2.1 **% fine =** 29.9**)**
% SILT = 24.8 **% CLAY =** 42.0

D_{85}= 0.16 D_{60}= 0.04 D_{50}= 0.01

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-2174UD	UD-1	10-11.7 Ft.	19.5	13	37	24	CL

MACTEC ENGINEERING AND CONSULTING, INC.	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468-07-1777 **Lab No.** 8433

DSC 3-31-08

LIQUID AND PLASTIC LIMIT TEST DATA

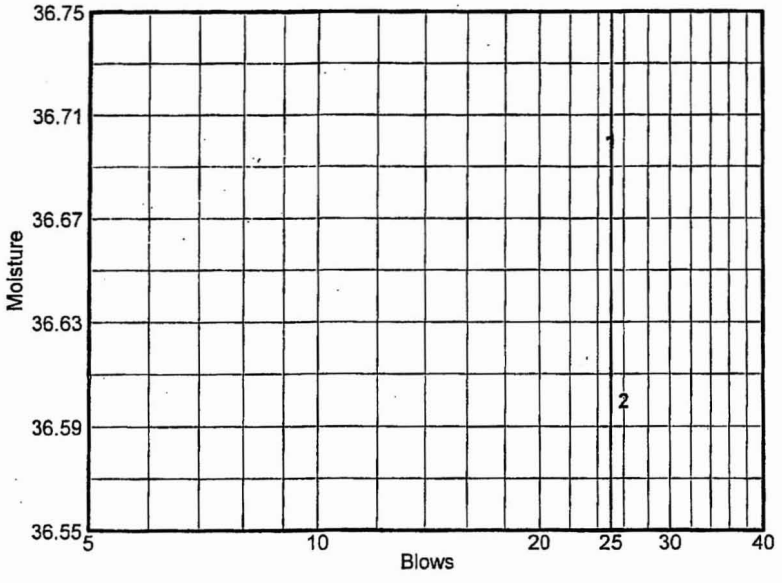
Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-1
Elev. or Depth: 10-11.7 Ft **Sample Length(in./cm.):** ID#8433
Location: B-2174UD
Description: Light Greenish Gray Sandy Lean CLAY
Water Content: 19.5 **USCS:** CL **AASHTO:**

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	30.88	29.04				
Dry+Tare	28.17	26.91				
Tare	20.78	21.09				
# Blows	25	26				
Moisture	36.7	36.6				



Liquid Limit= 37
Plastic Limit= 13
Plasticity Index= 24

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	30.44	31.01			
Dry+Tare	29.23	29.75			
Tare	19.92	20.31			
Moisture	13.0	13.3			

MACTEC ENGINEERING AND CONSULTING, INC.

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/19/08

SAMPLE IDENTIFICATION: B-2174UD,UD-1 @ 10-11.7 Ft.

(A) Mass of oven-dried soil, grams:	37.58
(B) Mass of pycnometer filled with water at test temperature (T), grams:	338.35
(C) Mass of pycnometer, water and soil, grams:	361.86
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	23.9
(G) Specific Gravity at observed temperature: A / [B - (C - A)]	2.671
(F) ***Correction factor:***	0.99912
(G x F) **SPECIFIC GRAVITY @ 20°C:**	2.669

MATERIAL TESTED: [ ] **- # 4** [X] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100%

Sandy Lean CLAY (CL)

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER :2759

PYCNOMETER : 2054

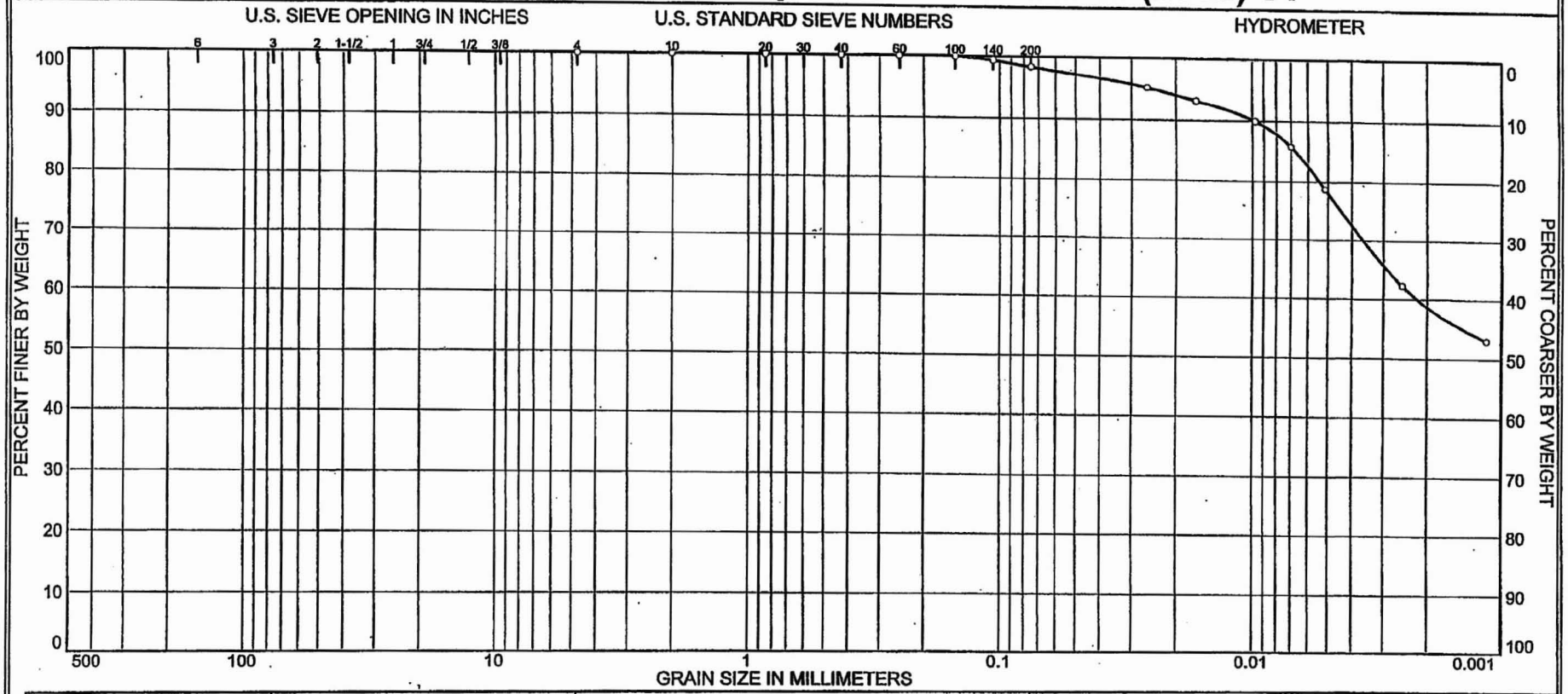
TESTED BY: EH

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: Harry Johnson HJ

DSC 3-31-08

Particle Size Distribution Report ASTM D 422-63 (2002) e1



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0.0	0.0	0.0	0.0	0.0	1.6	20.3	78.1

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-2174UD	UD-2	30-31.7 Ft.	1/16/08	CH	Light Greenish Gray Fat CLAY	24.0	68	25

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468-07-1777 Lab No. 8434

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: EH Reviewed by: HJ HJ

NM Value from average of strength tests performed.
Specific Gravity = 2.75 (ASTM D 854-06)

DSC
4-2-08

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-2
Elev. or Depth: 30-31.7 Ft **Sample Length(in./cm.):** ID#8434
Location: B-2174UD
Description: Light Greenish Gray Fat CLAY
Date: 1/16/08 **PL:** 25 **LL:** 68 **PI:** 43
USCS Classification: CH **AASHTO Classification:**
Testing Remarks: Tested by: EH Reviewed by: HJ

NM Value from average of strength tests performed.
Specific Gravity = 2.75 (ASTM D 854-06)

Mechanical Analysis Data

	Initial
Dry sample and tare=	64.13
Tare =	16.20
Dry sample weight =	47.93

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.00	100.0
# 40	0.00	100.0
# 60	0.01	100.0
# 100	0.02	100.0
# 140	0.28	99.4
# 200	0.76	98.4

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 98.4
Weight of hydrometer sample: 47.17
Calculated biased weight= 47.94
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.7
Specific gravity correction factor= 0.989
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

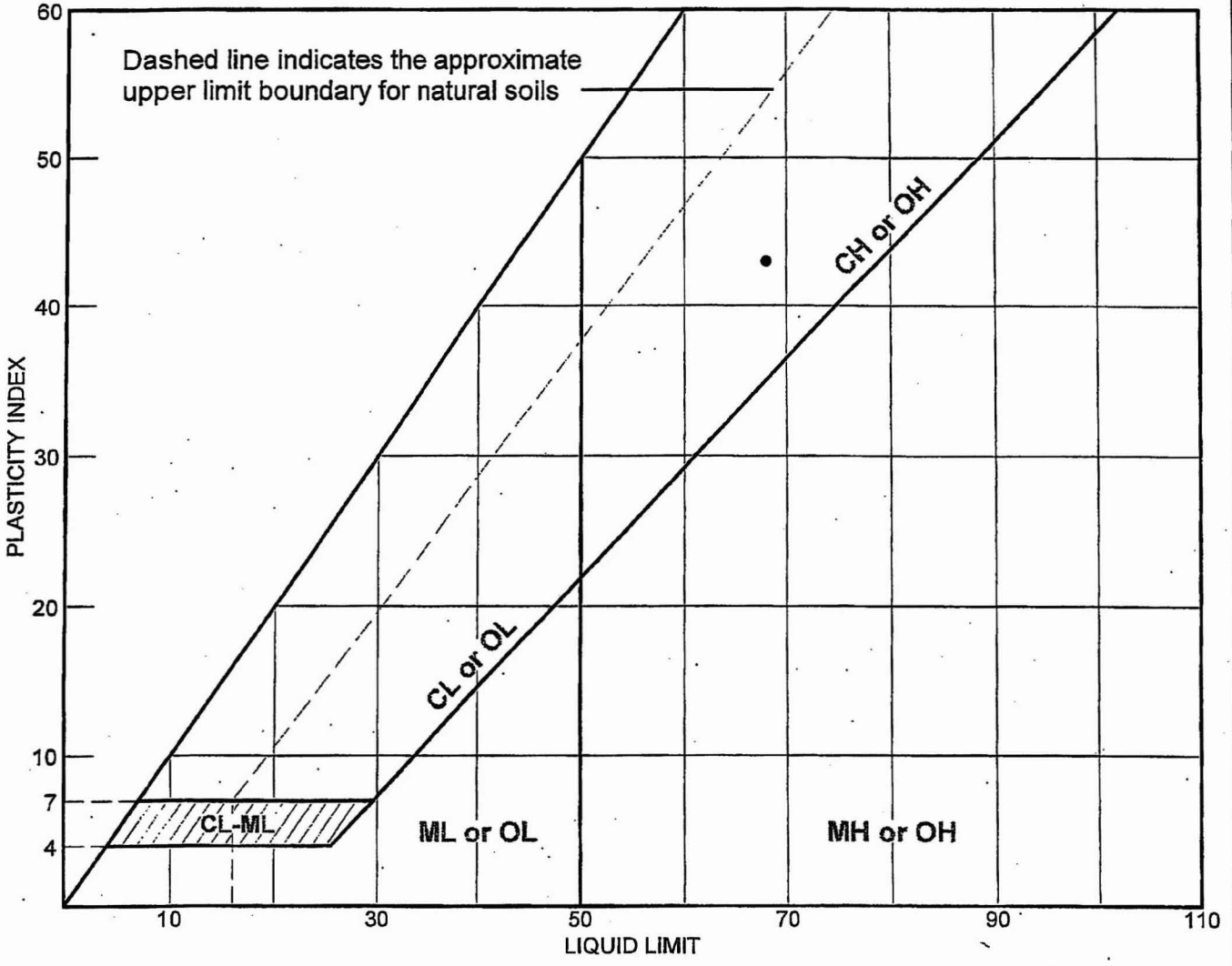
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	22.5	51.0	46.1	0.0130	51.0	7.9	0.0260	95.2
5.00	22.5	50.0	45.1	0.0130	50.0	8.1	0.0166	93.1
15.00	22.5	48.5	43.6	0.0130	48.5	8.3	0.0097	90.0
30.00	22.5	46.5	41.6	0.0130	46.5	8.7	0.0070	85.9
60.00	22.5	43.0	38.1	0.0130	43.0	9.2	0.0051	78.7
280.00	22.8	35.0	30.2	0.0130	35.0	10.6	0.0025	62.3
1440.00	22.8	30.5	25.7	0.0130	30.5	11.3	0.0012	53.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL =**
% SAND = 1.6 **(% coarse =** 0.0 **% medium =** 0.0 **% fine =** 1.6)
% SILT = 20.3 **% CLAY =** 78.1

D_{85}= 0.01 D_{60}= 0.00

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-2174UD	UD-2	30-31.7 Ft.	24.0	25	68	43	CH

MACTEC ENGINEERING AND CONSULTING, INC.	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468-07-1777 **Lab No.** 8434

DSC 3-31-08

LIQUID AND PLASTIC LIMIT TEST DATA

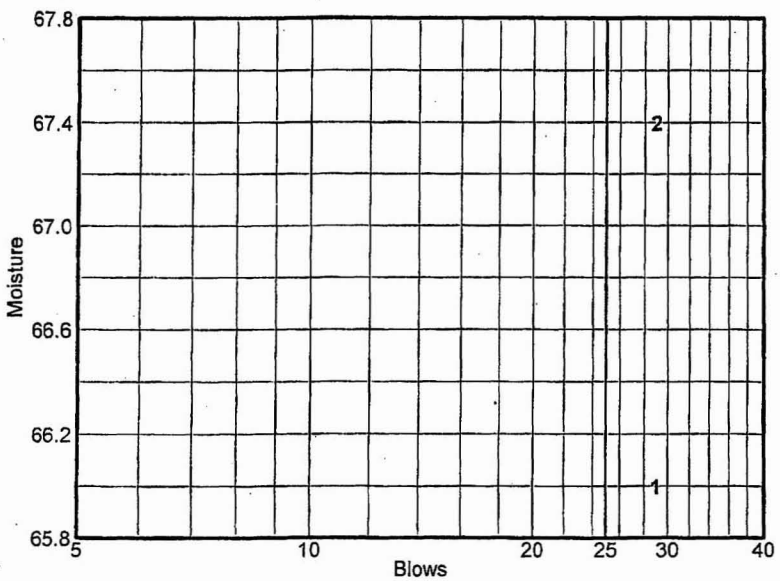
Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-2
Elev. or Depth: 30-31.7 Ft **Sample Length(in./cm.):** ID#8434
Location: B-2174UD
Description: Light Greenish Gray Fat CLAY
Water Content: 24.0 **USCS:** CH **AASHTO:**

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	31.16	30.10				
Dry+Tare	27.13	26.16				
Tare	21.02	20.31				
# Blows	29	29				
Moisture	66.0	67.4				



Liquid Limit= 68
Plastic Limit= 25
Plasticity Index= 43

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	28.57	27.72			
Dry+Tare	26.87	26.44			
Tare	19.96	21.26			
Moisture	24.6	24.7			

MACTEC ENGINEERING AND CONSULTING, INC.

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/19/08

SAMPLE IDENTIFICATION: B-2174UD,UD-2 @ 30-31.7 Ft.

(A) Mass of oven-dried soil, grams:		37.38
(B) Mass of pycnometer filled with water at test temperature (T), grams:		363.65
(C) Mass of pycnometer, water and soil, grams:		387.44
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:		23.3
(G) Specific Gravity at observed temperature:	A / [B - (C - A)]	2.751
(F)	***Correction factor:***	0.99926
(G x F)	**SPECIFIC GRAVITY @ 20°C:**	2.749

MATERIAL TESTED: [ ] **- # 4** [X] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 100%

Fat CLAY (CH)

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER :2759

PYCNOMETER : 2184

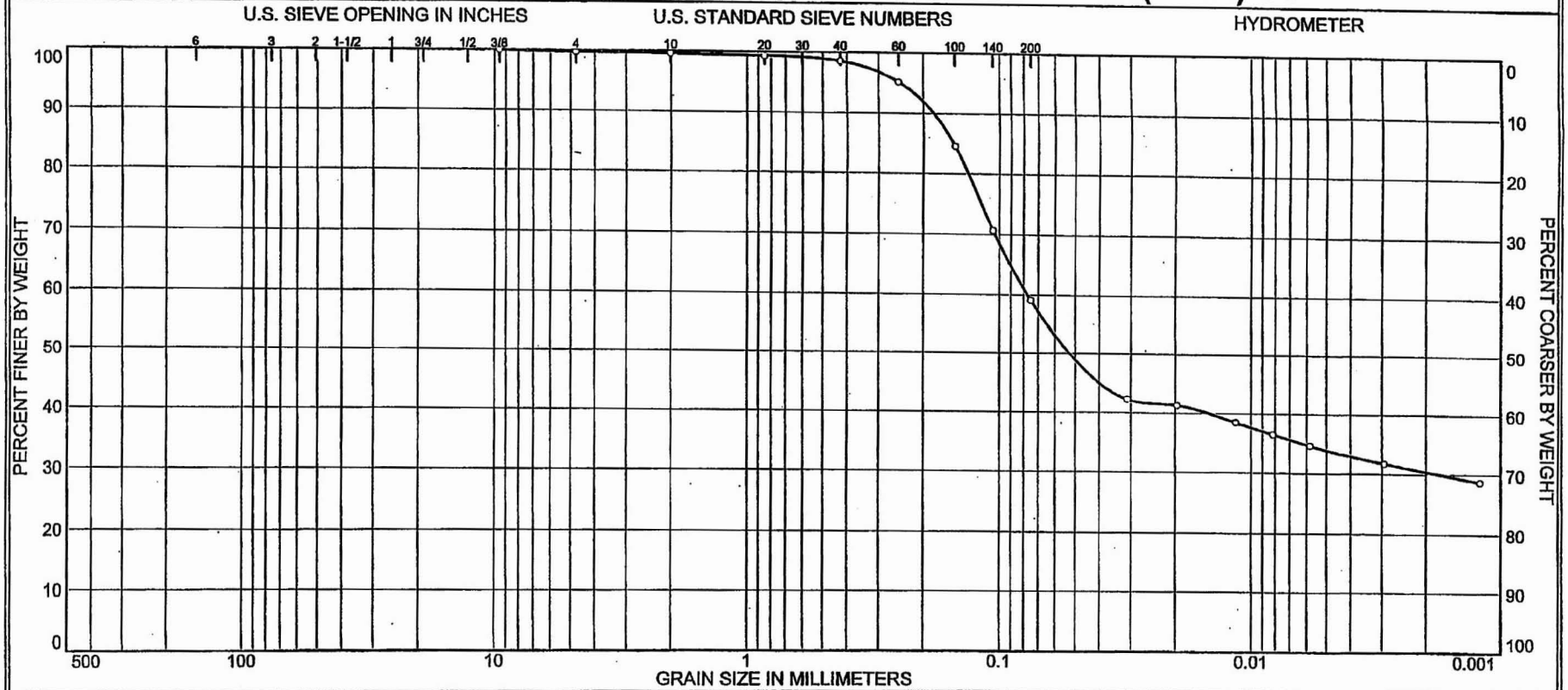
TESTED BY: EH

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: Harry Johnson HJ

DSC 3-31-08

Particle Size Distribution Report ASTM D 422-63 (2002) e1



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0.0	0.0	0.3	0.1	1.0	39.5	25.1	34.0

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-2174UD	UD-3	75-76.7 Ft.	1/16/08	CL	Light Greenish Gray Sandy Lean CLAY	15.8	38	18

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468-07-1777 Lab No. 8435

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: EH Reviewed by: JW JW

NM value from the strength test performed.
Specific Gravity = 2.76 (ASTM D 854-06)

DSC
4-2-08

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-3
Elev. or Depth: 75-76.7 Ft **Sample Length(in./cm.):** ID#8435
Location: B-2174UD
Description: Light Greenish Gray Sandy Lean CLAY
Date: 1/16/08 **PL:** 18 **LL:** 38 **PI:** 20
USCS Classification: CL **AASHTO Classification:**
Testing Remarks: Tested by: EH Reviewed by: JW

NM value from the strength test performed.
Specific Gravity = 2.76 (ASTM D 854-06)

Mechanical Analysis Data

	Initial
Dry sample and tare=	67.26
Tare =	15.79
Dry sample weight =	51.47

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.16	99.7
# 10	0.23	99.6
# 20	0.36	99.3
# 40	0.73	98.6
# 60	2.45	95.2
# 100	7.93	84.6
# 140	15.10	70.7
# 200	21.04	59.1

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 59.1
Weight of hydrometer sample: 30.43
Calculated biased weight= 51.49
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only=
Specific gravity of solids= 2.76
Specific gravity correction factor= 0.976
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

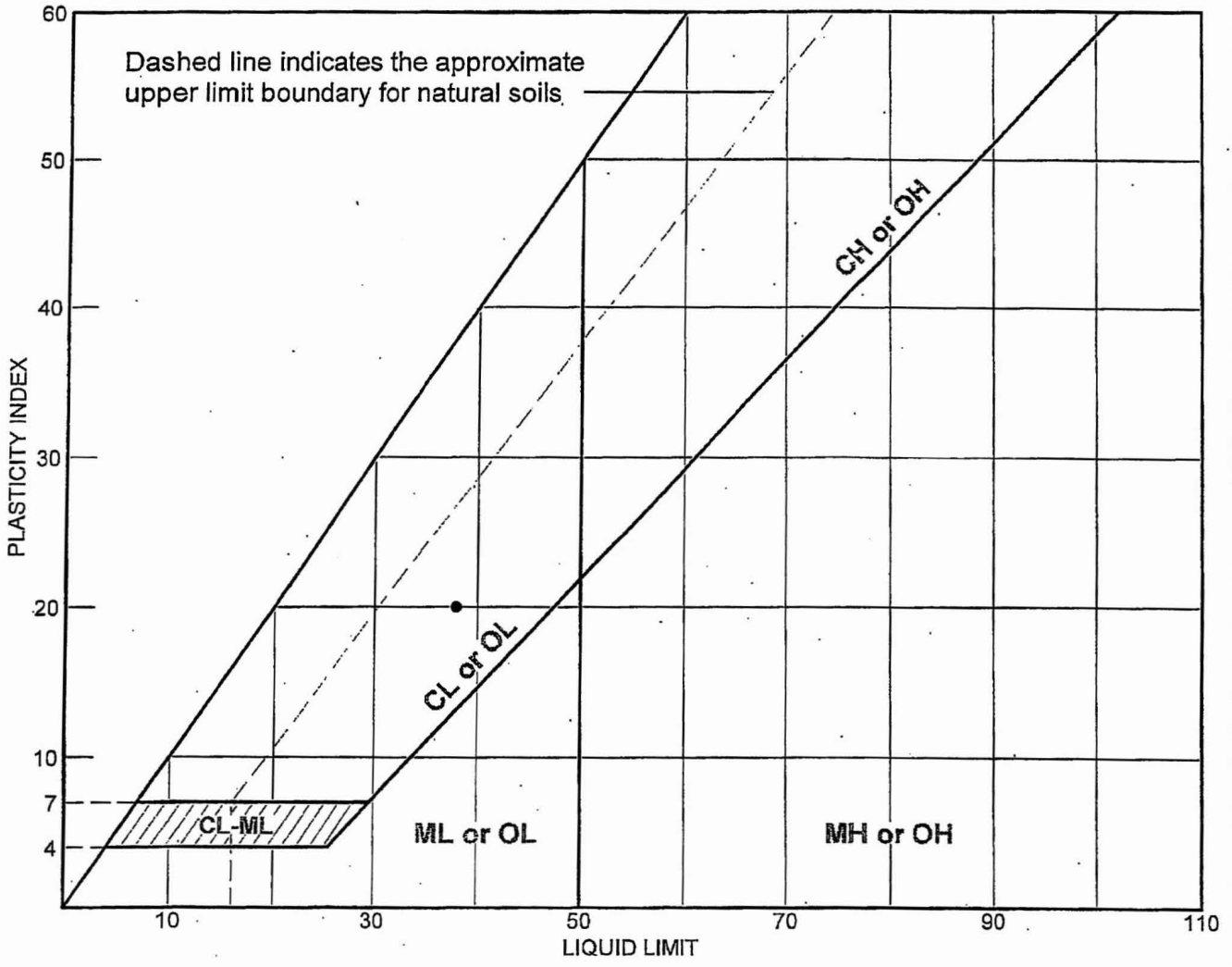
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.1	27.0	22.3	0.0127	27.0	11.9	0.0310	42.3
5.00	23.1	26.5	21.8	0.0127	26.5	11.9	0.0197	41.3
15.00	23.1	25.0	20.3	0.0127	25.0	12.2	0.0115	38.5
30.00	23.1	24.0	19.3	0.0127	24.0	12.4	0.0082	36.6
60.00	23.1	23.0	18.3	0.0127	23.0	12.5	0.0058	34.7
240.00	23.1	21.5	16.8	0.0127	21.5	12.8	0.0029	31.8
1440.00	22.8	20.0	15.2	0.0128	20.0	13.0	0.0012	28.8

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL** = 0.3 (**% coarse =** **% fine** = 0.3)
% SAND = 40.6 (**% coarse** = 0.1 **% medium** = 1.0 **% fine** = 39.5)
% SILT = 25.1 **% CLAY** = 34.0

D_{85}= 0.15 D_{60}= 0.08 D_{50}= 0.05
D_{30}= 0.00

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-2174UD	UD-3	75-76.7 Ft.	15.8	18	38	20	CL

MACTEC ENGINEERING AND CONSULTING, INC.	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468-07-1777 **Lab No.** 8435

DSC
3-31-08

LIQUID AND PLASTIC LIMIT TEST DATA

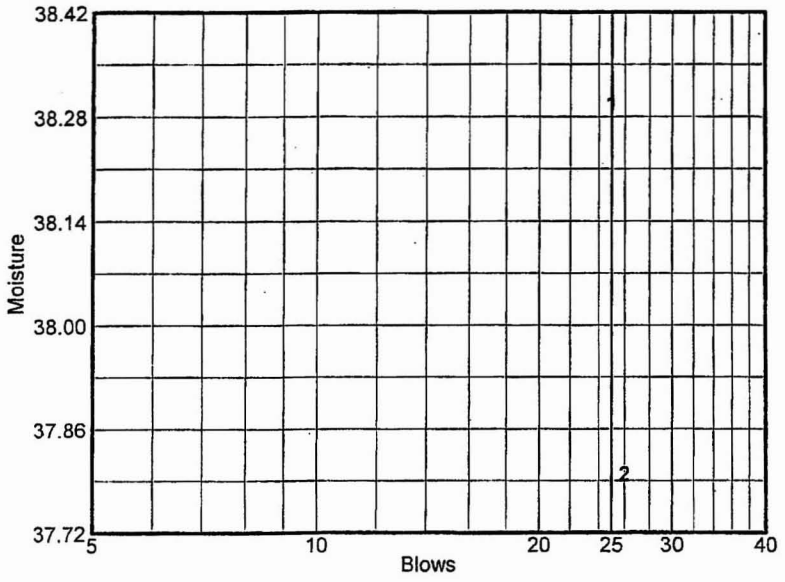
Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-3
Elev. or Depth: 75-76.7 Ft **Sample Length(in./cm.):** ID#8435
Location: B-2174UD
Description: Light Greenish Gray Sandy Lean CLAY
Water Content: 15.8 **USCS:** CL **AASHTO:**

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	30.85	29.73				
Dry+Tare	28.16	27.21				
Tare	21.13	20.55				
# Blows	25	26				
Moisture	38.3	37.8				



Liquid Limit= 38
Plastic Limit= 18
Plasticity Index= 20

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	26.91	27.85			
Dry+Tare	25.96	26.79			
Tare	20.74	20.98			
Moisture	18.2	18.2			

MACTEC ENGINEERING AND CONSULTING, INC.

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/19/08

SAMPLE IDENTIFICATION: B-2174UD,UD-3 @ 75-76.7 Ft.

(A) Mass of oven-dried soil, grams:	37.38
(B) Mass of pycnometer filled with water at test temperature (T), grams:	366.20
(C) Mass of pycnometer, water and soil, grams:	390.05
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	23.6
(G) Specific Gravity at observed temperature: A / [B - (C - A)]	2.763
(F) ***Correction factor:***	0.99919
(G x F) **SPECIFIC GRAVITY @ 20°C:**	2.761

MATERIAL TESTED: [ ] **- # 4** [X] **- # 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 99%

Sandy Lean CLAY (CL)

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER :2759

PYCNOMETER : 2192

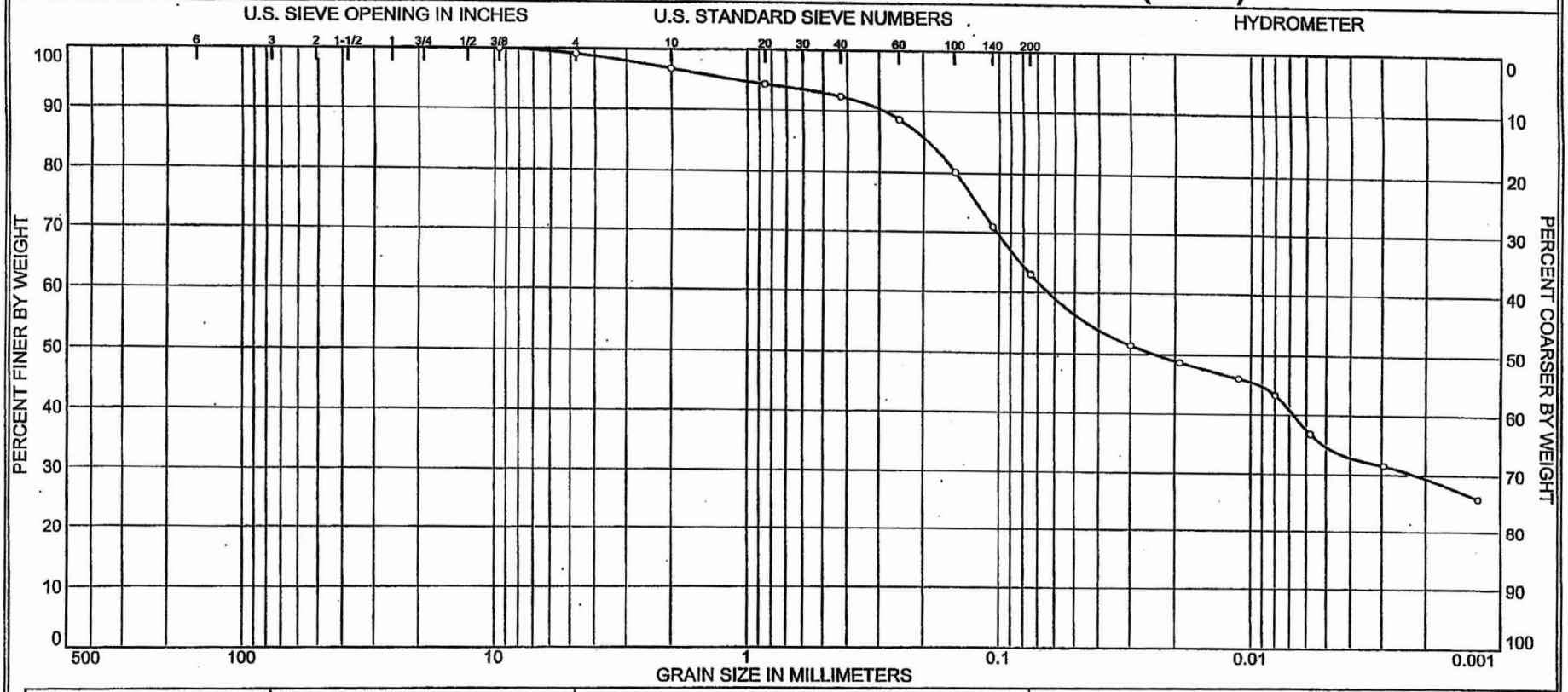
TESTED BY: EH

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: Jianren Wang

DSC 3-31-08

Particle Size Distribution Report ASTM D 422-63 (2002) e1



	% COBBLES	% GRAVEL		% SAND			% FINES	
		COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
○	0.0	0.0	0.8	2.4	4.4	29.4	28.3	34.7

	SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
○	B-2174UD	UD-4	90-90.9 Ft.	1/17/08	CL	Light Greenish Sandy Lean CLAY	15.6	39	18

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468-07-1777 Lab No. 8436

MACTEC ENGINEERING AND CONSULTING, INC.

○ Tested by: EH Reviewed by: JW JW

NM value from the strength test performed.
Specific Gravity = 2.73 (ASTM D 854-06)

DSC
4-2-08

GRAIN SIZE DISTRIBUTION TEST DATA

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-4
Elev. or Depth: 90-90.9 Ft. **Sample Length(in./cm.):** 8436
Location: B-2174UD
Description: Light Greenish Sandy Lean CLAY
Date: 1/17/08 **Natural Moisture:** 15.6
Liquid Limit: 39 **Plastic Limit:** 18 **USCS Class.:** CL
Testing Remarks: Tested by: EH Reviewed by: JW JW

NM value from the strength test performed.
Specific Gravity = 2.73 (ASTM D8054-06)

Mechanical Analysis Data

	Initial
Dry sample and tare=	67.91
Tare =	15.49
Dry sample weight =	52.42

Tare for cumulative weight retained= .00

Sieve	Cumul. Wt. retained	Percent finer
.375 inch	0.00	100.0
# 4	0.43	99.2
# 10	1.70	96.8
# 20	3.00	94.3
# 40	3.97	92.4
# 60	5.90	88.7
# 100	10.43	80.1
# 140	15.18	71.0
# 200	19.38	63.0

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 63.0
Weight of hydrometer sample: 34.04
Calculated biased weight= 54.03
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only=
Specific gravity of solids= 2.73
Specific gravity correction factor= 0.983
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

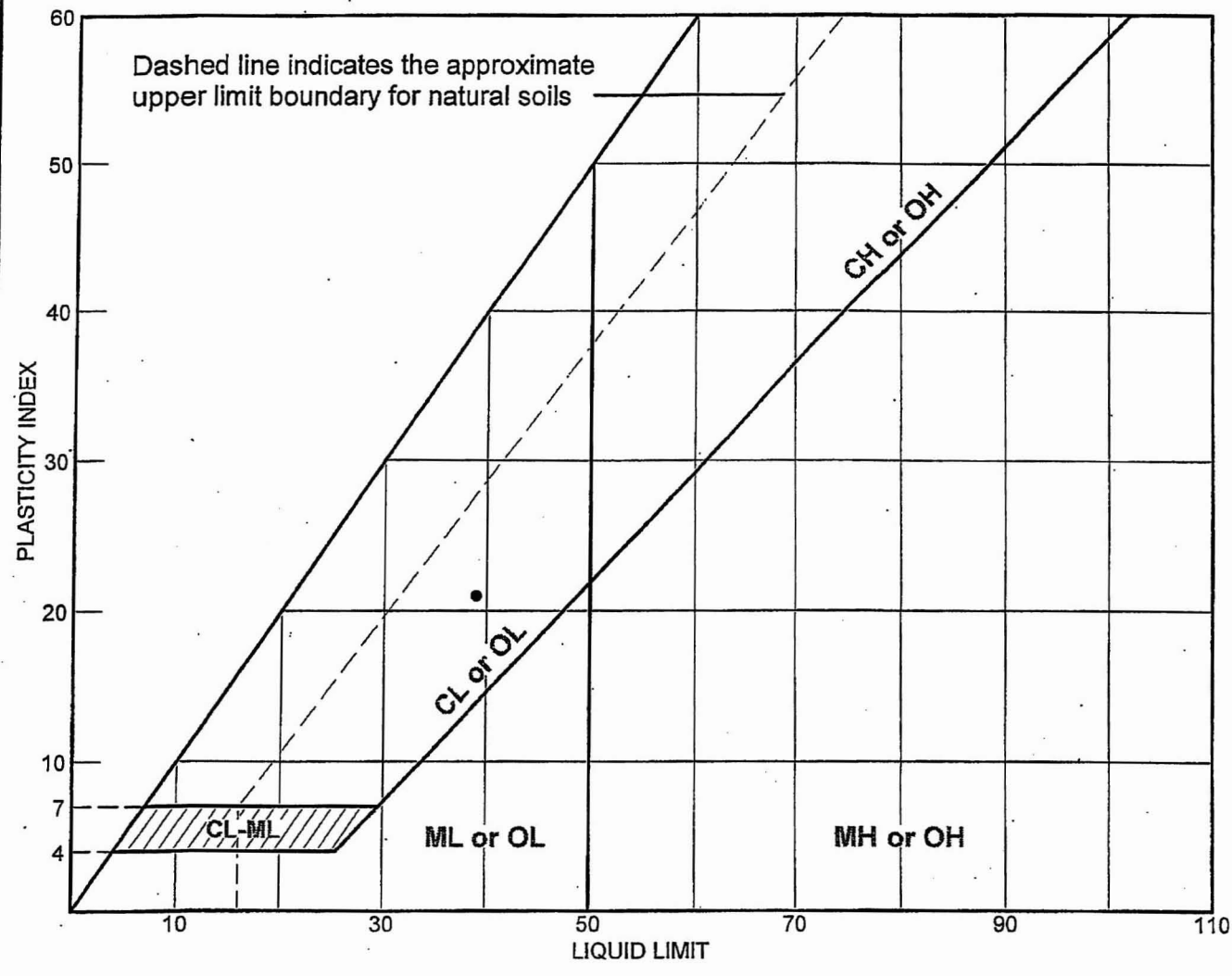
Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	23.1	33.0	28.3	0.0128	33.0	10.9	0.0299	51.5
5.00	23.1	31.5	26.8	0.0128	31.5	11.1	0.0191	48.7
15.00	23.1	30.0	25.3	0.0128	30.0	11.4	0.0112	46.0
30.00	23.1	28.5	23.8	0.0128	28.5	11.6	0.0080	43.3
60.00	23.1	25.0	20.3	0.0128	25.0	12.2	0.0058	36.9
240.00	23.1	22.0	17.3	0.0128	22.0	12.7	0.0030	31.5
1440.00	22.8	19.0	14.2	0.0129	19.0	13.2	0.0012	25.9

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = **% GRAVEL = 0.8** **(% coarse =** **% fine = 0.8)**
% SAND = 36.2 **(% coarse = 2.4** **% medium = 4.4** **% fine = 29.4)**
% SILT = 28.3 **% CLAY = 34.7**

D_{85}= 0.19 D_{60}= 0.06 D_{50}= 0.02
D_{30}= 0.00

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-2174UD	UD-4	90-90.9 Ft.	15.6	18	39	21	CL

MACTEC ENGINEERING AND CONSULTING, INC.	**Client:** Bechtel **Project:** Exelon Texas COL (Victoria) **Project No.:** 6468-07-1777 **Lab No.** 8436

DSC
3-31-08

LIQUID AND PLASTIC LIMIT TEST DATA

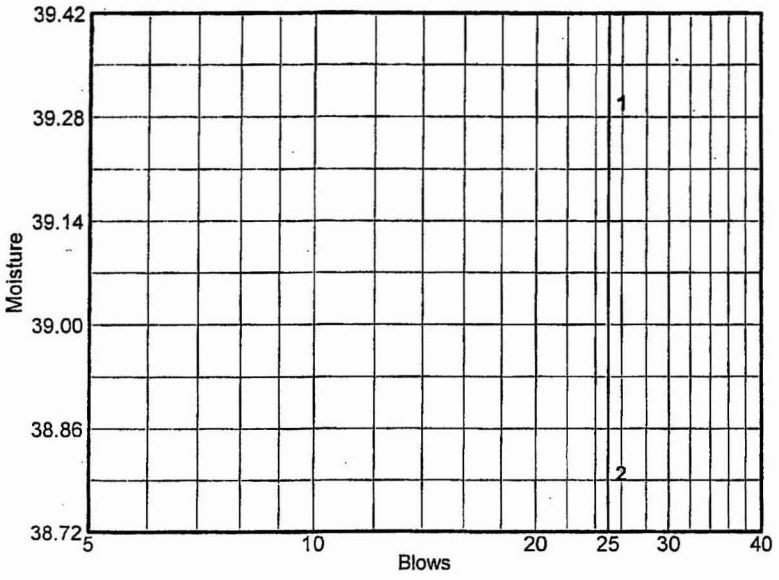
Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2174UD
Sample No.: UD-4
Elev. or Depth: 90-90.9 Ft **Sample Length(in./cm.):** ID#8436
Location: B-2174UD
Description: Light Greenish Sandy Lean CLAY
Water Content: 15.6 **USCS:** CL **AASHTO:**

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	33.91	32.37				
Dry+Tare	30.24	29.17				
Tare	20.9	20.92				
# Blows	26	26				
Moisture	39.3	38.8				



Liquid Limit= 39
Plastic Limit= 18
Plasticity Index= 21

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	28.45	28.51			
Dry+Tare	27.20	27.29			
Tare	20.17	20.59			
Moisture	17.8	18.2			

MACTEC ENGINEERING AND CONSULTING, INC.

REPORT OF THE STANDARD TEST METHOD FOR SPECIFIC GRAVITY OF SOILS
Performed in General Accordance with ASTM D 854-06 (Method B)

PROJECT NAME:EXELON COL PROJECT (VICTORIA)

PROJECT NUMBER: 6468071777

DATE: 3/25/08

SAMPLE IDENTIFICATION: B-2174UD,UD-4 @ 90-90.9 Ft.

(A) Mass of oven-dried soil, grams:	37.44
(B) Mass of pycnometer filled with water at test temperature (T), grams:	338.40
(C) Mass of pycnometer, water and soil, grams:	362.12
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	22.8
(G) Specific Gravity at observed temperature: A / [B - (C - A)]	2.729
(F) ***Correction factor:***	0.99938
(G x F) **SPECIFIC GRAVITY @ 20°C:**	2.727

MATERIAL TESTED: [ ] **-# 4** [X] **-# 10**

PREPARATION METHOD: [X] **DRY** [ ] **WET (dispersed)**

REMARKS: Estimated % Passing # 4 : 99%

Sandy Lean CLAY (CL)

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER :2759

PYCNOMETER : 2054

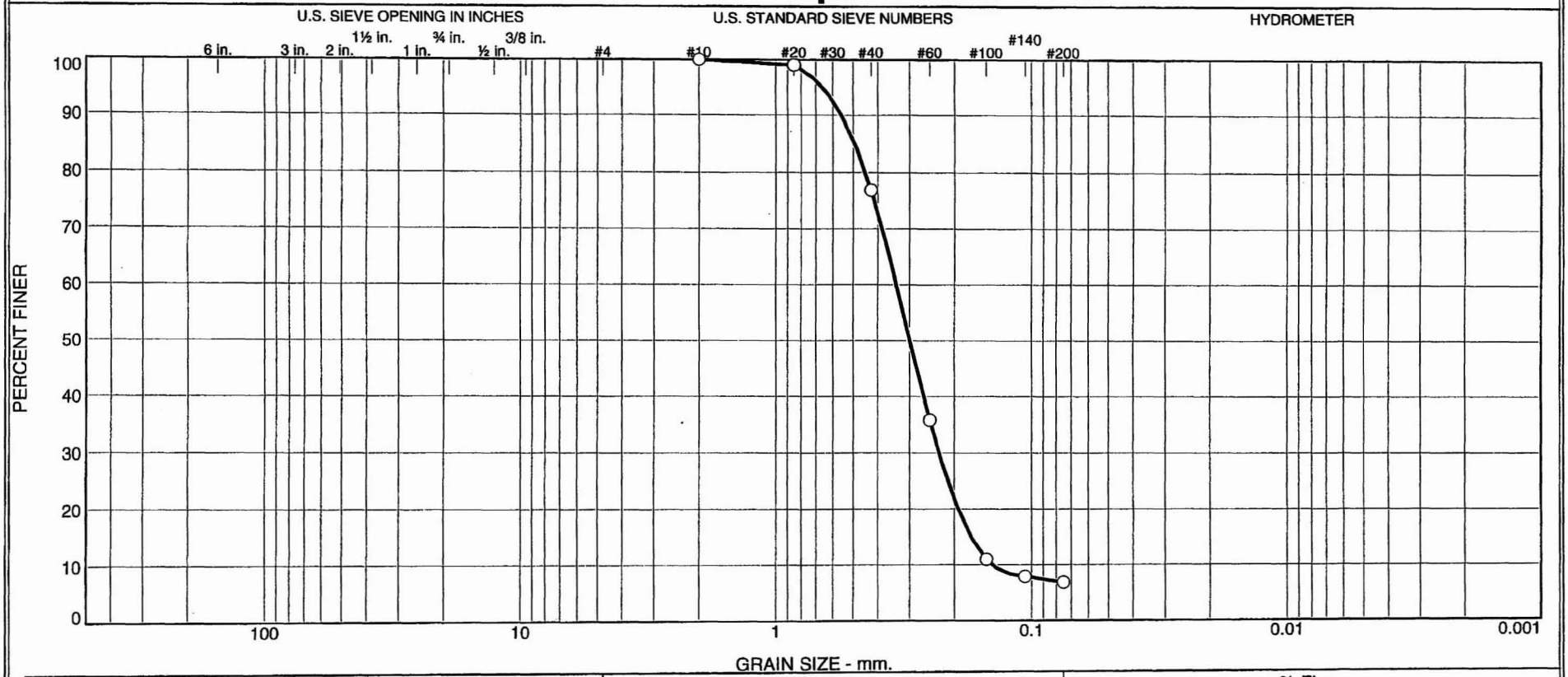
TESTED BY: EH

\Test Reports\Soils\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: Jianren Wang JW

DSC 3-31-08

Particle Size Distribution Report / ASTM D 6913-04e1



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.0	23.1	70.1	6.8	

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	Boring B-2174UD	UD-6	95-96.4	1-31-08	SP-SC	Pale Brown Poorly Graded SAND with Clay (Visual)	10.8	ND	ND

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ SIEVE ANALYSIS ONLY
Specific Gravity = 2.681 (ASTM D854-06)
ND = Not Determined

Tested By: CS **Checked By:** LBJ DSC 4-30-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/24/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174UD
Depth: 95-96.4 **Sample Number:** UD-6
Material Description: Pale Brown Poorly Graded SAND with Clay (Visual)
Date: 1-31-08 **Natural Moisture:** 10.8
Liquid Limit: ND **Plastic Limit:** ND **USCS Class.:** SP-SC
Testing Remarks: SIEVE ANALYSIS ONLY
Specific Gravity = 2.681 (ASTM D854-06)
ND = Not Determined
Tested by: CS **Checked by:** LBJ

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
269.46	0.00	0.00	#10	0.00	100.0
99.39	0.00	0.00	#20	0.98	99.0
			#40	22.96	76.9
			#60	63.78	35.8
			#100	88.49	11.0
			#140	91.49	7.9
			#200	92.59	6.8

Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	23.1	70.1	93.2			6.8

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.1425	0.1720	0.1932	0.2298	0.2994	0.3382	0.4473	0.4922	0.5555	0.6603

Fineness Modulus	C_u	C_c
1.47	2.37	1.10