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: 2/26/08

SAMPLE IDENTIFICATION: TP-2352 BULK 1,4-5'

(A) Mass of oven-dried soil, grams:		50.29
(B) Mass of pycnometer filled with water at test temperature (T), grams:		656.53
(C) Mass of pycnometer, water and soil, grams:		687.95
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:		21.3
(G) Specific Gravity at observed temperature:	A / [B - (C - A)]	2.665
(F)	***Correction factor:***	0.99972
(G x F)	**SPECIFIC GRAVITY @ 20°C:**	2.664

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

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

REMARKS: Estimated % Passing # 4 : 100

Sandy Lean CLAY (CL) - Visual

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 3-4-08

Organic Content – Test Pits

MACTEC

ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
Reviewed By LBJ DSC
Review Date 2/29/2008 3-4-08

Boring No.	TP-2310	TP-2310	TP-2310	TP-2310
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	0.0-1.0	5	7.5	10.0
A) Tare No.	SS	F-1	80	JJ
B) Tare Weight, grams	6.88	9.21	6.67	6.78
C) Wet Soil + Tare, grams	237.96	232.61	157.75	254.28
D) Dry Soil + Tare, grams	204.16	205.69	137.87	235.23
E) Weight of Dry Soil, grams [D - B]	197.28	196.48	131.20	228.45
F) Weight of Moisture, grams [C - D]	33.80	26.92	19.88	19.05
G) Moisture Content, % [F * 100 / E]	17.1	13.7	15.2	8.3
(based on oven-dried weight)				
H) Tare No.	9	H		
I) Weight of Tare, grams	53.88	52.09		
J) Weight of Over-Dried Soil + Tare, grams	174.25	172.53		
K) Weight of Oven- Dried Soil, grams [J - I]	120.37	120.44		
L) Weight of Ignited Soil + Tare, grams	172.26	171.52		
M) Ash, grams [L - I]	118.38	119.43		
N) Ash Content, % [M *100 / K]	98.3	99.2		
O) Organic Matter, % [100 - N]	**1.7**	**0.8**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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(ASTM D2974-07)

Project No. 6468071777
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Test Date 2/19/2008

Project Name Exelon COL
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Review Date 2/29/2008 3-4-08

Boring No.	TP-2314	TP-2314	TP-2314	TP-2314
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	0.0-1.0	5.0	7.0	10.0
A) Tare No.	511	JP-16	305	317
B) Tare Weight, grams	9.51	6.80	9.51	9.34
C) Wet Soil + Tare, grams	205.77	183.25	242.76	207.10
D) Dry Soil + Tare, grams	177.40	153.77	205.35	170.49
E) Weight of Dry Soil, grams [D - B]	167.89	146.97	195.84	161.15
F) Weight of Moisture, grams [C - D]	28.37	29.48	37.41	36.61
G) Moisture Content, % [F * 100 / E]	16.9	20.1	19.1	22.7
(based on oven-dried weight)				
H) Tare No.	S	Q		
I) Weight of Tare, grams	53.45	51.15		
J) Weight of Over-Dried Soil + Tare, grams	167.45	158.35		
K) Weight of Oven- Dried Soil, grams [J - I]	114.00	107.20		
L) Weight of Ignited Soil + Tare, grams	165.92	151.18		
M) Ash, grams [L - I]	112.47	100.03		
N) Ash Content, % [M *100 / K]	98.7	93.3		
O) Organic Matter, % [100 - N]	**1.3**	**6.7**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
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Review Date 2/29/2008 3-4-08

Boring No.	TP-2317	TP-2317	TP-2317	TP-2317
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	3.5-5.0	5.0-8.0	8.0-10.0
A) Tare No.	84	H	81	519
B) Tare Weight, grams	6.63	6.54	6.68	9.16
C) Wet Soil + Tare, grams	182.39	208.21	151.37	202.36
D) Dry Soil + Tare, grams	156.17	175.89	131.00	178.74
E) Weight of Dry Soil, grams [D - B]	149.54	169.35	124.32	169.58
F) Weight of Moisture, grams [C - D]	26.22	32.32	20.37	23.62
G) Moisture Content, % [F * 100 / E]	17.5	19.1	16.4	13.9
(based on oven-dried weight)				
H) Tare No.	H	S		
I) Weight of Tare, grams	52.13	53.41		
J) Weight of Over-Dried Soil + Tare, grams	146.31	162.46		
K) Weight of Oven- Dried Soil, grams [J - I]	94.18	109.05		
L) Weight of Ignited Soil + Tare, grams	142.61	160.13		
M) Ash, grams [L - I]	90.48	106.72		
N) Ash Content, % [M *100 / K]	96.1	97.9		
O) Organic Matter, % [100 - N]	**3.9**	**2.1**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
Reviewed By LBJ DSC
Review Date 2/29/2008 3-4-08

Boring No.	TP-2319	TP-2319	TP-2319	TP-2319
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	3.5-5.0	6.5	10.0
A) Tare No.	Orange	T	LL	JP-23
B) Tare Weight, grams	9.19	6.74	6.80	6.74
C) Wet Soil + Tare, grams	257.13	207.41	174.25	188.03
D) Dry Soil + Tare, grams	228.50	184.24	154.95	171.87
E) Weight of Dry Soil, grams [D - B]	219.31	177.50	148.15	165.13
F) Weight of Moisture, grams [C - D]	28.63	23.17	19.30	16.16
G) Moisture Content, % [F * 100 / E]	13.1	13.1	13.0	9.8
(based on oven-dried weight)				
H) Tare No.	S	Q		
I) Weight of Tare, grams	53.46	51.18		
J) Weight of Over-Dried Soil + Tare, grams	148.70	157.62		
K) Weight of Oven- Dried Soil, grams [J - I]	95.24	106.44		
L) Weight of Ignited Soil + Tare, grams	147.70	154.75		
M) Ash, grams [L - I]	94.24	103.57		
N) Ash Content, % [M *100 / K]	99.0	97.3		
O) Organic Matter, % [100 - N]	**1.0**	**2.7**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
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Test Date 2/19/2008

Project Name Exelon COL
Reviewed By LBJ DSC
Review Date 3/1/2008 3-4-08

Boring No.	TP-2320	TP-2320	TP-2320	TP-2320
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	4.0	5.0-10.0	10.0
A) Tare No.	B	2B	B-1	319
B) Tare Weight, grams	6.67	9.39	9.24	9.26
C) Wet Soil + Tare, grams	214.17	114.37	183.27	160.85
D) Dry Soil + Tare, grams	177.86	100.53	164.63	148.00
E) Weight of Dry Soil, grams [D - B]	171.19	91.14	155.39	138.74
F) Weight of Moisture, grams [C - D]	36.31	13.84	18.64	12.85
G) Moisture Content, % [F * 100 / E]	21.2	15.2	12.0	9.3
(based on oven-dried weight)				
H) Tare No.	9	H	N	
I) Weight of Tare, grams	53.89	52.07	55.58	
J) Weight of Over-Dried Soil + Tare, grams	146.58	138.74	143.91	
K) Weight of Oven- Dried Soil, grams [J - I]	92.69	86.67	88.33	
L) Weight of Ignited Soil + Tare, grams	144.03	137.13	141.58	
M) Ash, grams [L - I]	90.14	85.06	86.00	
N) Ash Content, % [M *100 / K]	97.2	98.1	97.4	
O) Organic Matter, % [100 - N]	**2.8**	**1.9**	**2.6**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
Reviewed By LBJ DSC
Review Date 3/1/2008 3-4-08

Boring No.	TP-2321	TP-2321	TP-2321	TP-2321
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	4.0	7.0	10.0
A) Tare No.	DIP	HH	JP-12	VV
B) Tare Weight, grams	9.17	6.82	6.73	6.77
C) Wet Soil + Tare, grams	208.49	202.51	176.61	166.84
D) Dry Soil + Tare, grams	162.25	176.58	153.15	146.99
E) Weight of Dry Soil, grams [D - B]	153.08	169.76	146.42	140.22
F) Weight of Moisture, grams [C - D]	46.24	25.93	23.46	19.85
G) Moisture Content, % [F * 100 / E]	30.2	15.3	16.0	14.2
(based on oven-dried weight)				
H) Tare No.	G	L		
I) Weight of Tare, grams	53.10	51.53		
J) Weight of Over-Dried Soil + Tare, grams	153.41	167.36		
K) Weight of Oven- Dried Soil, grams [J - I]	100.31	115.83		
L) Weight of Ignited Soil + Tare, grams	146.52	163.20		
M) Ash, grams [L - I]	93.42	111.67		
N) Ash Content, % [M *100 / K]	93.1	96.4		
O) Organic Matter, % [100 - N]	**6.9**	**3.6**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT
(ASTM D2974-07)

Project No. 6468071777 **Project Name** Exelon COL
Tested By CS **Reviewed By** LBJ DSC
Test Date 2/19/2008 **Review Date** 3/1/2008 3-4-08

Boring No.	TP-2332	TP-2332	TP-2332	TP-2332	TP-2332
Sample No.	S-1	S-5	S-2	S-3	S-4
Sample Depth, Ft.	2.0	2.5	5.0	7.0	10.0
A) Tare No.	SS	BB	JP-11	L	P
B) Tare Weight, grams	6.90	9.47	6.95	9.17	6.85
C) Wet Soil + Tare, grams	244.81	135.37	133.40	171.92	159.85
D) Dry Soil + Tare, grams	216.65	115.35	119.37	155.92	148.94
E) Weight of Dry Soil, grams [D - B	209.75	105.88	112.42	146.75	142.09
F) Weight of Moisture, grams [C - D	28.16	20.02	14.03	16.00	10.91
G) Moisture Content, % [F * 100 / E	13.4	18.9	12.5	10.9	7.7
(based on oven-dried weight)					

H) Tare No.	R	N	R		
I) Weight of Tare, grams	52.49	55.59	52.49		
J) Weight of Over-Dried Soil + Tare	154.09	162.21	155.94		
K) Weight of Oven- Dried Soil, gran	101.60	106.62	103.45		
L) Weight of Ignited Soil + Tare, gra	153.10	158.60	154.00		
M) Ash, grams [L - I]	100.61	103.01	101.51		
N) Ash Content, % [M *100 / K]	99.0	96.6	98.1		
O) Organic Matter, % [100 - N]	**1.0**	**3.4**	**1.9**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furna 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
Reviewed By LBJ DSC
Review Date 3/1/2008 3-4-08

Boring No.	TP-2334	TP-2334	TP-2334	TP-2334
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	2.0-5.0	7.0	10.0
A) Tare No.	Purple	516	I	JP-15
B) Tare Weight, grams	9.33	9.44	9.10	6.87
C) Wet Soil + Tare, grams	198.96	174.67	138.32	188.22
D) Dry Soil + Tare, grams	171.81	153.34	121.28	167.39
E) Weight of Dry Soil, grams [D - B	162.48	143.90	112.18	160.52
F) Weight of Moisture, grams [C - D	27.15	21.33	17.04	20.83
G) Moisture Content, % [F * 100 / E	16.7	14.8	15.2	13.0
(based on oven-dried weight)				
H) Tare No.	H	Q		
I) Weight of Tare, grams	52.08	51.14		
J) Weight of Over-Dried Soil + Tare	148.71	147.42		
K) Weight of Oven- Dried Soil, gran	96.63	96.28		
L) Weight of Ignited Soil + Tare, gra	146.80	143.27		
M) Ash, grams [L - I]	94.72	92.13		
N) Ash Content, % [M *100 / K]	98.0	95.7		
O) Organic Matter, % [100 - N]	**2.0**	**4.3**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furna 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

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

Tested By CS **Reviewed By** LBJ DSC

Test Date 2/19/2008 **Review Date** 3/1/2008 3-4-08

Boring No.	TP-2335	TP-2335	TP-2335	TP-2335
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	2.0	4.0	6.0	10.0
A) Tare No.	81	514	DIP	2B
B) Tare Weight, grams	6.67	9.18	9.16	9.38
C) Wet Soil + Tare, grams	212.94	186.25	240.99	225.48
D) Dry Soil + Tare, grams	174.66	163.34	217.68	210.80
E) Weight of Dry Soil, grams [D - B	167.99	154.16	208.52	201.42
F) Weight of Moisture, grams [C - D	38.28	22.91	23.31	14.68
G) Moisture Content, % [F * 100 / E	22.8	14.9	11.2	7.3
(based on oven-dried weight)				
H) Tare No.	S	9	9	
I) Weight of Tare, grams	53.43	53.88	53.88	
J) Weight of Over-Dried Soil + Tare	154.32	154.87	157.70	
K) Weight of Oven- Dried Soil, gran	100.89	100.99	103.82	
L) Weight of Ignited Soil + Tare, gra	152.11	152.78	153.67	
M) Ash, grams [L - I]	98.68	98.90	99.79	
N) Ash Content, % [M *100 / K]	97.8	97.9	96.1	
O) Organic Matter, % [100 - N]	**2.2**	**2.1**	**3.9**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furna 5.1.17

scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
Reviewed By LBJ DSC
Review Date 3/1/2008 3-4-08

Boring No.	TP-2337	TP-2337	TP-2337	TP-2337
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	4.0	7.0	10.0
A) Tare No.	P	JP-11	JP-15	BB
B) Tare Weight, grams	6.83	6.88	6.88	9.66
C) Wet Soil + Tare, grams	234.57	235.03	214.28	231.07
D) Dry Soil + Tare, grams	194.36	199.09	182.92	198.53
E) Weight of Dry Soil, grams [D - B]	187.53	192.21	176.04	188.87
F) Weight of Moisture, grams [C - D]	40.21	35.94	31.36	32.54
G) Moisture Content, % [F * 100 / E]	21.4	18.7	17.8	17.2
(based on oven-dried weight)				
H) Tare No.	Q	S	Q	
I) Weight of Tare, grams	51.15	53.42	51.15	
J) Weight of Over-Dried Soil + Tare, grams	150.55	142.39	151.55	
K) Weight of Oven- Dried Soil, grams [J - I]	99.40	88.97	100.40	
L) Weight of Ignited Soil + Tare, grams	147.54	139.60	147.22	
M) Ash, grams [L - I]	96.39	86.18	96.07	
N) Ash Content, % [M *100 / K]	97.0	96.9	95.7	
O) Organic Matter, % [100 - N]	**3.0**	**3.1**	**4.3**	

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
Reviewed By LBJ DSC
Review Date 3/1/2008 3-4-08

Boring No.	TP-2351	TP-2351	TP-2351	TP-2351
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	4.0	6.0	3.5-10.0
A) Tare No.	305	CHIP	VV	JJ
B) Tare Weight, grams	9.66	9.31	6.75	6.80
C) Wet Soil + Tare, grams	239.30	253.80	214.64	239.74
D) Dry Soil + Tare, grams	184.74	225.76	199.86	224.63
E) Weight of Dry Soil, grams [D - B]	175.08	216.45	193.11	217.83
F) Weight of Moisture, grams [C - D]	54.56	28.04	14.78	15.11
G) Moisture Content, % [F * 100 / E]	31.2	13.0	7.7	6.9
(based on oven-dried weight)				
H) Tare No.	H	9		
I) Weight of Tare, grams	52.10	53.86		
J) Weight of Over-Dried Soil + Tare, grams	145.13	148.73		
K) Weight of Oven- Dried Soil, grams [J - I]	93.03	94.87		
L) Weight of Ignited Soil + Tare, grams	139.84	147.72		
M) Ash, grams [L - I]	87.74	93.86		
N) Ash Content, % [M *100 / K]	94.3	98.9		
O) Organic Matter, % [100 - N]	**5.7**	**1.1**		

Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

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ORGANIC CONTENT TEST REPORT

(ASTM D2974-07)

Project No. 6468071777
Tested By CS
Test Date 2/19/2008

Project Name Exelon COL
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Review Date 3/1/2008 3-4-08

Boring No.	TP-2352	TP-2352	TP-2352	TP-2352
Sample No.	S-1	S-2	S-3	S-4
Sample Depth, Ft.	1.0	4.0-5.0	7.0	10.0
A) Tare No.	JP-23	80	LL	BB
B) Tare Weight, grams	6.74	6.66	6.78	9.66
C) Wet Soil + Tare, grams	159.46	181.11	232.78	231.07
D) Dry Soil + Tare, grams	131.45	155.72	155.28	198.53
E) Weight of Dry Soil, grams [D - B]	124.71	149.06	148.50	188.87
F) Weight of Moisture, grams [C - D]	28.01	25.39	77.50	32.54
G) Moisture Content, % [F * 100 / E]	22.5	17.0	21.9	17.2
(based on oven-dried weight)				
H) Tare No.	Q	S	H	
I) Weight of Tare, grams	51.16	53.42	52.04	
J) Weight of Over-Dried Soil + Tare, grams	125.52	161.26	151.63	
K) Weight of Oven- Dried Soil, grams [J - I]	74.36	107.84	99.59	
L) Weight of Ignited Soil + Tare, grams	123.79	159.77	148.26	
M) Ash, grams [L - I]	72.63	106.35	96.22	
N) Ash Content, % [M *100 / K]	97.7	98.6	96.6	
O) Organic Matter, % [100 - N]	**2.3**	**1.4**	**3.4**	

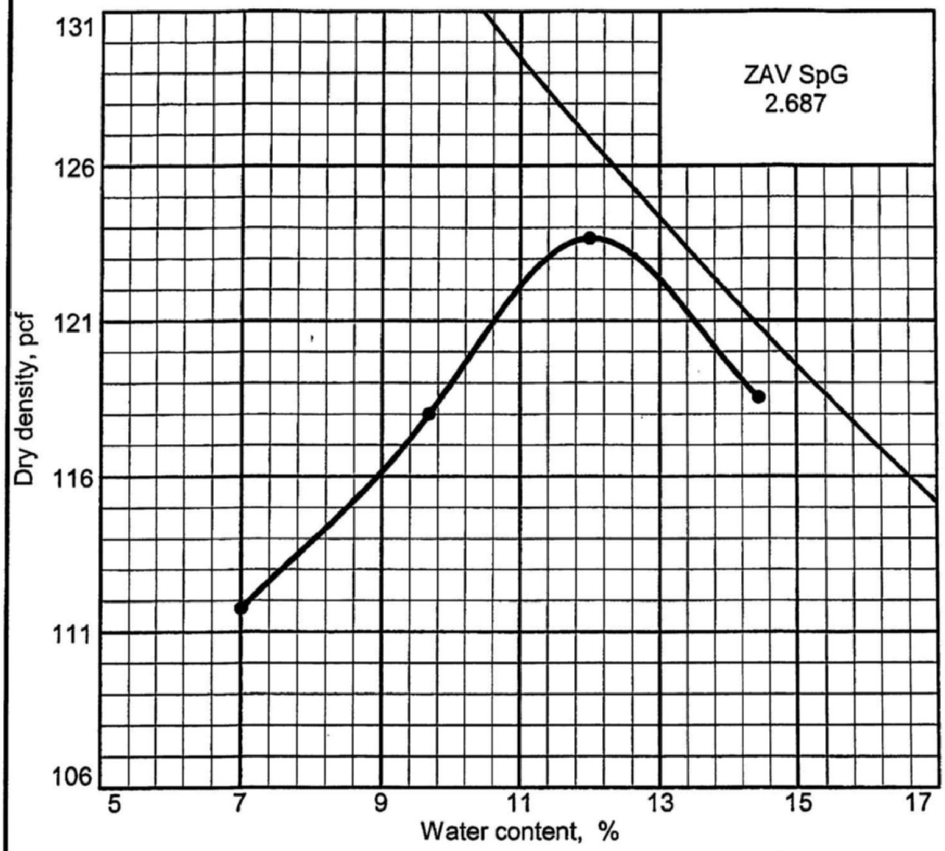
Remarks: Furnace temperature set @ 440° C

Equipment used:

oven: 5.1.16 muffle furnace 5.1.17
scales: 3.1.19

Modified Proctor Compaction Tests – Test Pits

COMPACTION TEST REPORT/ ASTM D-1557-02



Curve No.
TP- 2310 B1

Test Specification:
ASTM D 1557-02 Method A Modified

Preparation Method Dry
Hammer Wt. 10 lb.
Hammer Drop 18 in.(mechanical)
Number of Layers five
Blows per Layer 25
Mold Size .03317 cu.ft.
Test Performed on Material Passing No.4 **Sieve**

NM 13.7 **LL** 33 **PI** 18
Sp.G. (ASTM D 854) 2.687
%>No.4 0.0 **%<No.200** 57.6
USCS CL **AASHTO** A-6(7)
Date Sampled 1/23/08
Date Tested 2/28/08
Tested By AWH

TESTING DATA

	1	2	3	4	5	6
WM + WS	6006.7	6154.7	6291.6	6248.6		
WM	4205.9	4205.9	4205.9	4205.9		
WW + T #1	545.30	556.60	617.90	690.40		
WD + T #1	510.00	508.10	552.40	604.10		
TARE #1	6.60	6.90	6.70	7.00		
WW + T #2	N/A	N/A	N/A	N/A		
WD + T #2	N/A	N/A	N/A	N/A		
TARE #2	N/A	N/A	N/A	N/A		
MOISTURE	7.0	9.7	12.0	14.5		
DRY DENSITY	111.7	118.0	123.7	118.5		

TEST RESULTS

Maximum dry density = 123.5 pcf

Optimum moisture = 12.0 %

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

● **Source:** TP-2310 **Sample No.:** Bulk-1 **Elev./Depth:** 5.0'

MACTEC, Inc.
Raleigh, North Carolina

Material Description

Pale Yellow Sandy Lean CLAY

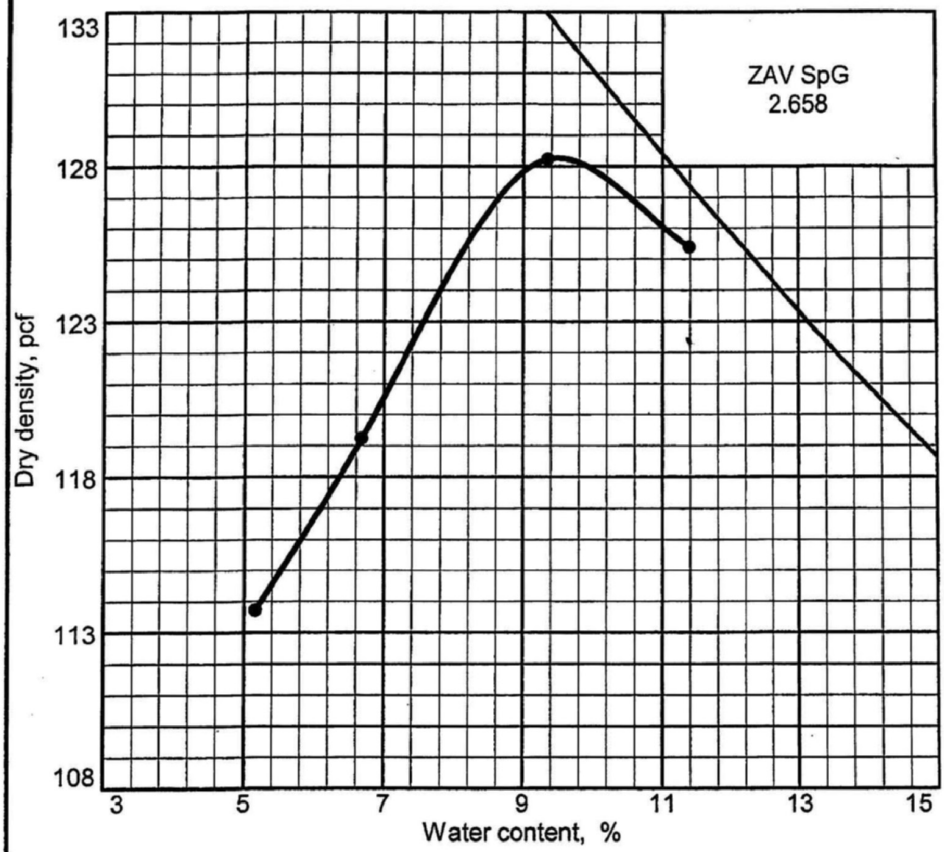
Remarks:
Natural Moisture obtained from Jar Sample S-2,5'

Checked by: LBJ
Title: LAB MANAGER

DSC
4-2-08

Figure NA

COMPACTION TEST REPORT/ ASTM D-1557-02



Curve No.
TP 2310 B2

Test Specification:
ASTM D 1557-02 Method A Modified

Preparation Method Dry
Hammer Wt. 10 lb.
Hammer Drop 18 in.(mechanical)
Number of Layers five
Blows per Layer 25
Mold Size .03317 cu.ft.
Test Performed on Material Passing No.4 **Sieve**

NM 8.3 **LL** 24 **PI** 7
Sp.G. (ASTM D 854) 2.658
%>No.4 0.0 **%<No.200** 28.9
USCS SC-SM **AASHTO** A-2-4(0)
Date Sampled 1/23/08
Date Tested 2/28/08
Tested By AWH

TESTING DATA

	1	2	3	4	5	6
WM + WS	6005.2	6119.7	6315.7	6307.3		
WM	4205.9	4205.9	4205.9	4205.9		
WW + T #1	547.60	530.50	557.70	701.20		
WD + T #1	521.00	497.70	510.60	630.20		
TARE #1	6.30	6.80	7.10	6.90		
WW + T #2	N/A	N/A	N/A	N/A		
WD + T #2	N/A	N/A	N/A	N/A		
TARE #2	N/A	N/A	N/A	N/A		
MOISTURE	5.2	6.7	9.4	11.4		
DRY DENSITY	113.7	119.2	128.2	125.4		

TEST RESULTS

Maximum dry density = 128.5 pcf

Optimum moisture = 9.5 %

Material Description

Olive Yellow Silty, Clayey SAND

Remarks:
Natural Moisture obtained from Jar Sample S-4, 10'

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

● **Source:** TP-2310 **Sample No.:** Bulk-2 **Elev./Depth:** 10.0'

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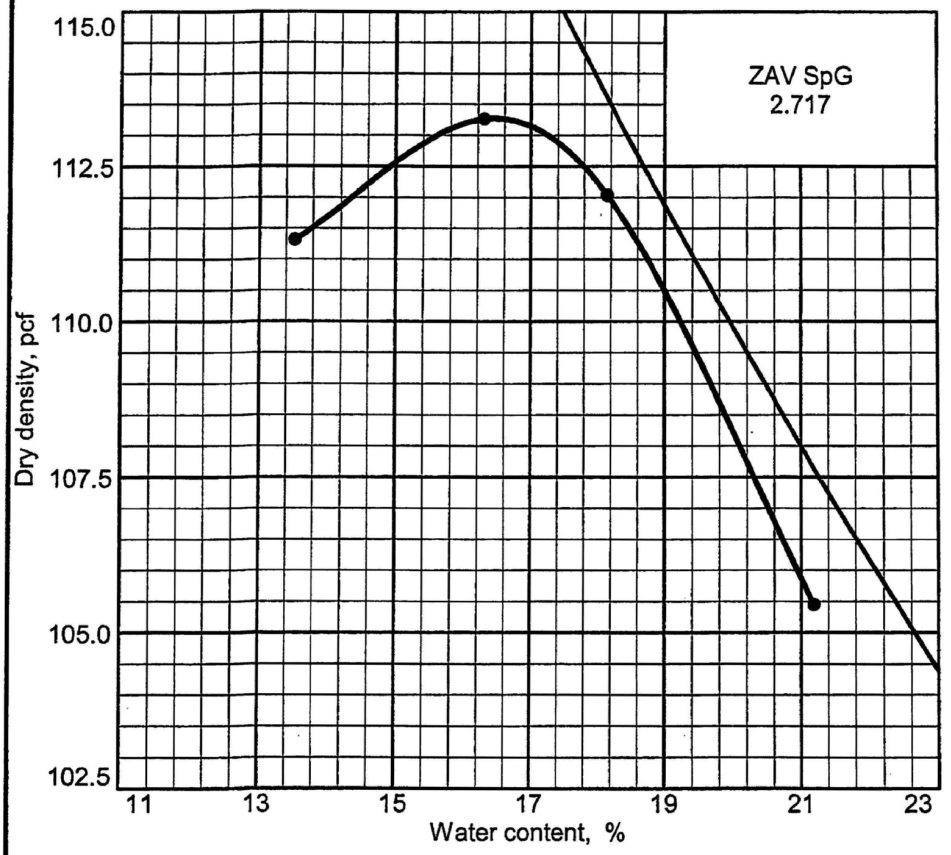
Raleigh, North Carolina

Checked by: LBJ
Title: LAB MANAGER

DSC
4-2-08

Figure NA

COMPACTION TEST REPORT/ ASTM D-1557-02



Curve No.
TP 2314 B2

Test Specification:
ASTM D 1557-02 Method A Modified

Preparation Method Dry
Hammer Wt. 10 lb.
Hammer Drop 18 in.(mechanical)
Number of Layers five
Blows per Layer 25
Mold Size .03317 cu.ft.
Test Performed on Material Passing No.4 **Sieve**

NM 22.7 **LL** 54 **PI** 31
Sp.G. (ASTM D 854) 2.717
%>No.4 0.0 **%<No.200** 95.7
USCS CH **AASHTO** A-7-6(33)
Date Sampled 1/22/08
Date Tested 2/28/08
Tested By AWH

TESTING DATA

	1	2	3	4	5	6
WM + WS	6107.3	6187.8	6197.4	6128.7		
WM	4205.9	4205.9	4205.9	4205.9		
WW + T #1	543.80	577.10	760.70	604.70		
WD + T #1	479.80	497.20	644.90	500.10		
TARE #1	6.80	6.90	6.70	6.60		
WW + T #2	N/A	N/A	N/A	N/A		
WD + T #2	N/A	N/A	N/A	N/A		
TARE #2	N/A	N/A	N/A	N/A		
MOISTURE	13.5	16.3	18.1	21.2		
DRY DENSITY	111.3	113.3	112.0	105.4		

TEST RESULTS

Maximum dry density = 113.5 pcf

Optimum moisture = 16.5 %

Material Description

Light Yellowish Brown Fat CLAY

Remarks:
Natural Moisture obtained from Jar Sample S-4,10'

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

● **Source:** TP-2314 **Sample No.:** Bulk-2 **Elev./Depth:** 5.0-10.0'

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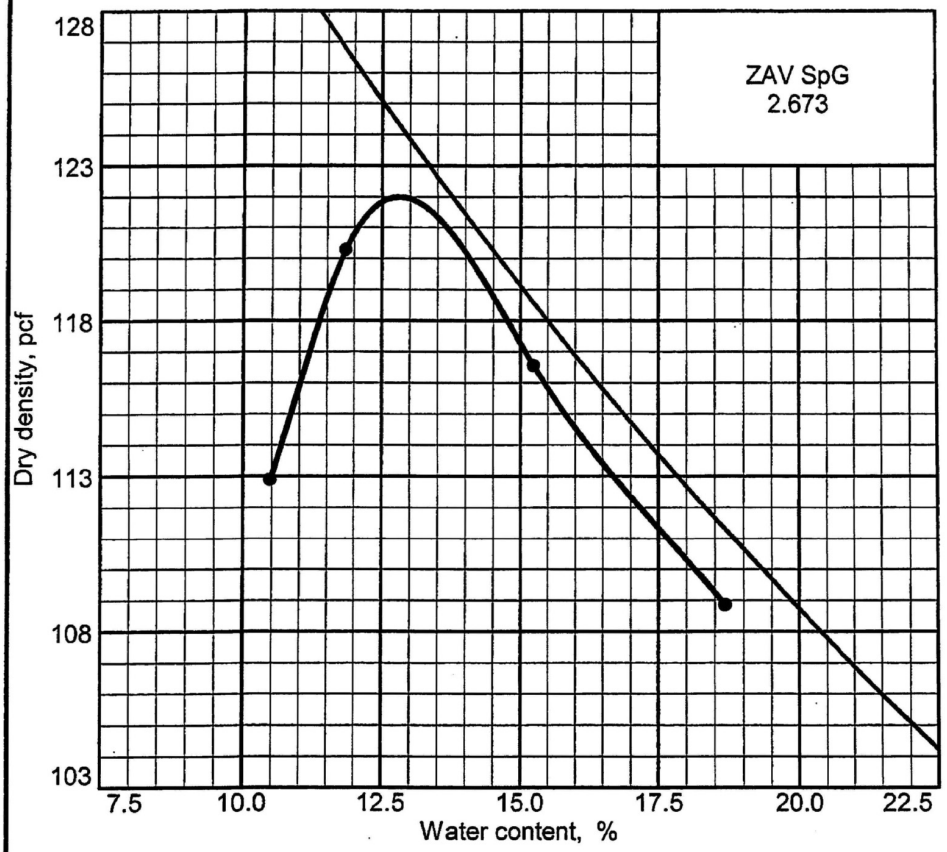
Raleigh, North Carolina

Checked by: LBJ
Title: LAB MANAGER

DSC 4-2-08

Figure NA

COMPACTION TEST REPORT/ ASTM D-1557-02



Curve No.
TP 2317 B1

Test Specification:
ASTM D 1557-02 Method A Modified

Preparation Method DRY
Hammer Wt. 10 lb.
Hammer Drop 18 in.(mechanical)
Number of Layers five
Blows per Layer 25
Mold Size .03317 cu.ft.
Test Performed on Material Passing No.4 **Sieve**

NM 19.1 **LL** 48 **PI** 24
Sp.G. (ASTM D 854) 2.673
%>No.4 0.0 **%<No.200** 69.0
USCS CL **AASHTO** A-7-6(16)
Date Sampled 1/22/08
Date Tested 2/28/08
Tested By AWH

TESTING DATA

	1	2	3	4	5	6
WM + WS	6082.4	6229.8	6226.8	6149.7		
WM	4205.9	4205.9	4205.9	4205.9		
WW + T #1	685.80	829.40	695.10	631.90		
WD + T #1	621.40	742.30	604.10	533.50		
TARE #1	6.70	6.80	6.90	6.80		
WW + T #2	N/A	N/A	N/A	N/A		
WD + T #2	N/A	N/A	N/A	N/A		
TARE #2	N/A	N/A	N/A	N/A		
MOISTURE	10.5	11.8	15.2	18.7		
DRY DENSITY	112.9	120.3	116.6	108.9		

TEST RESULTS

Maximum dry density = 122.0 pcf

Optimum moisture = 13.0 %

Material Description

Gray Sandy Lean CLAY

Remarks:
Natural Moisture obtained from Jar Sample S-2,3.5-5.0'

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

● **Source:** TP-2317 **Sample No.:** Bulk-1 **Elev./Depth:** 3.0-5.0'

Checked by: LBJ
Title: LAB MANAGER DSC 4-2-08

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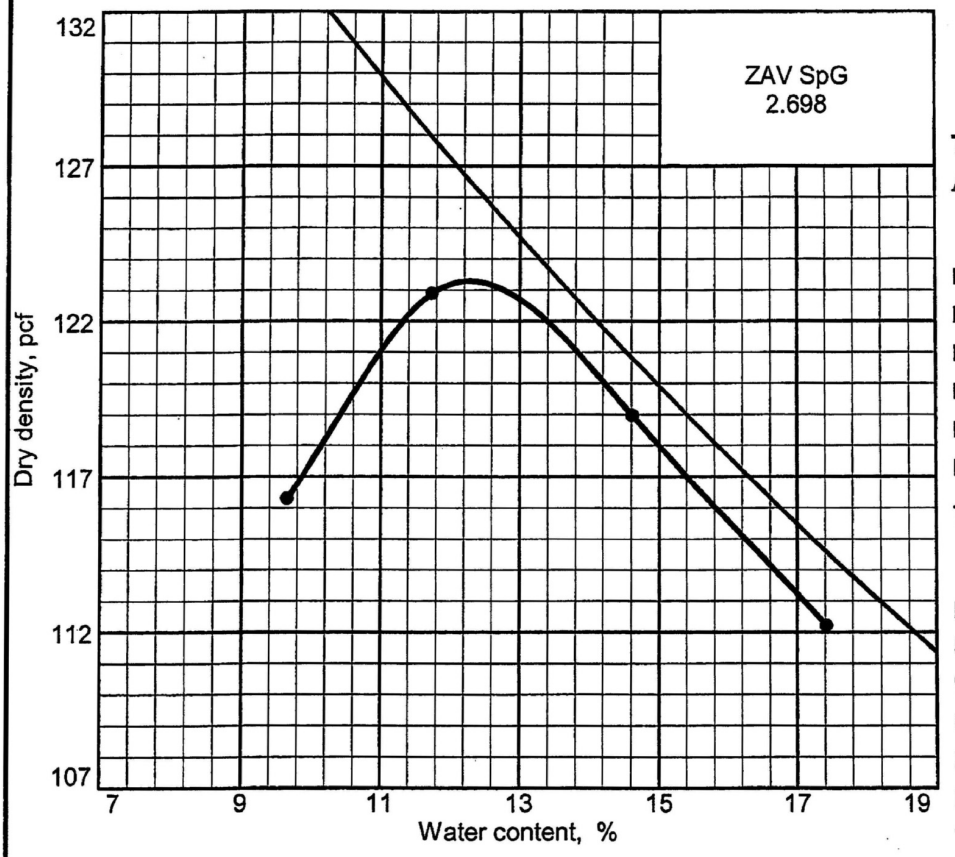
Raleigh, North Carolina

Figure NA

COMPACTION TEST REPORT/ ASTM D-1557-02



Curve No.
TP 2317 B2

Test Specification:
ASTM D 1557-02 Method A Modified

Preparation Method Dry
Hammer Wt. 10 lb.
Hammer Drop 18 in.(mechanical)
Number of Layers five
Blows per Layer 25
Mold Size .03317 cu.ft.
Test Performed on Material Passing No.4 **Sieve**

NM 16.4 **LL** 45 **PI** 28
Sp.G. (ASTM D 854) 2.698
%>No.4 0.0 **%<No.200** 79.5
USCS CL **AASHTO** A-7-6(22)
Date Sampled 1/22/08
Date Tested 2/28/08
Tested By AWH

TESTING DATA

	1	2	3	4	5	6
WM + WS	6124.6	6271.8	6257.4	6188.5		
WM	4205.9	4205.9	4205.9	4205.9		
WW + T #1	572.80	822.50	685.40	680.50		
WD + T #1	522.90	736.80	598.90	580.60		
TARE #1	6.20	6.70	7.00	7.30		
WW + T #2	N/A	N/A	N/A	N/A		
WD + T #2	N/A	N/A	N/A	N/A		
TARE #2	N/A	N/A	N/A	N/A		
MOISTURE	9.7	11.7	14.6	17.4		
DRY DENSITY	116.3	122.9	119.0	112.2		

TEST RESULTS

Maximum dry density = 123.5 pcf

Optimum moisture = 12.5 %

Material Description

Pale Yellow Lean CLAY with sand

Remarks:
Natural Moisture obtained from Jar Sample S-3 5.0-8.0'

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

● **Source:** TP-2317 **Sample No.:** Bulk-2 **Elev./Depth:** 5.0-10.0

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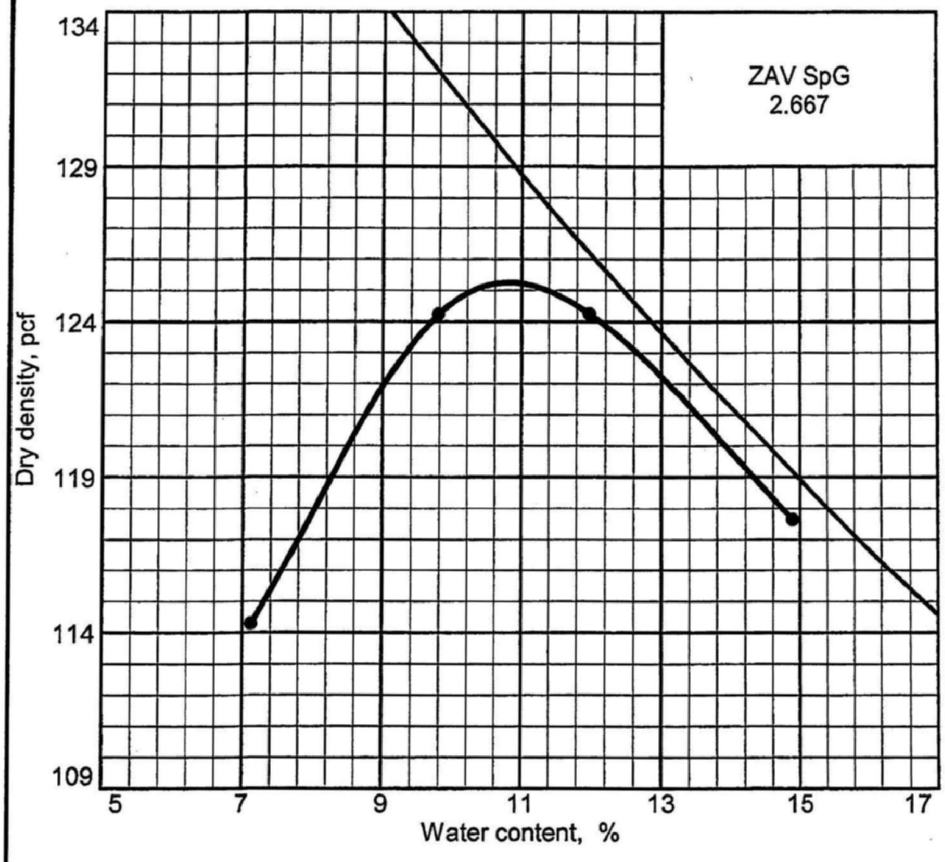
Checked by: LBJ
Title: LAB MANAGER DSC 4-2-08

Figure NA

COMPACTION TEST REPORT/ ASTM D-1557-02



Curve No.
TP 2319 B2

Test Specification:
ASTM D 1557-02 Method A Modified

Preparation Method Dry
Hammer Wt. 10 lb.
Hammer Drop 18 in.(mechanical)
Number of Layers five
Blows per Layer 25
Mold Size .03317 cu.ft.
Test Performed on Material Passing No.4 **Sieve**

NM 13.0 **LL** 32 **PI** 10
Sp.G. (ASTM D 854) 2.667
%>No.4 0.0 **%<No.200** 47.3
USCS SC **AASHTO** A-4(2)
Date Sampled 1/20/08
Date Tested 2/28/08
Tested By AWH

TESTING DATA

	1	2	3	4	5	6
WM + WS	6047.8	6257.9	6299.1	6239.5		
WM	4205.9	4205.9	4205.9	4205.9		
WW + T #1	683.90	579.90	767.00	731.90		
WD + T #1	638.90	528.80	685.70	637.90		
TARE #1	7.10	6.70	7.00	6.70		
WW + T #2	N/A	N/A	N/A	N/A		
WD + T #2	N/A	N/A	N/A	N/A		
TARE #2	N/A	N/A	N/A	N/A		
MOISTURE	7.1	9.8	12.0	14.9		
DRY DENSITY	114.3	124.2	124.2	117.6		

TEST RESULTS

Maximum dry density = 125.0 pcf

Optimum moisture = 11.0 %

Material Description

Light Brownish Gray Clayey SAND

Remarks:
Natural Moisture obtained from Jar Sample S-3,6.5'

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

● **Source:** TP-2319 **Sample No.:** Bulk-2 **Elev./Depth:** 3.0-10'

Checked by: LBJ
Title: LAB MANAGER DSC 4-2-08

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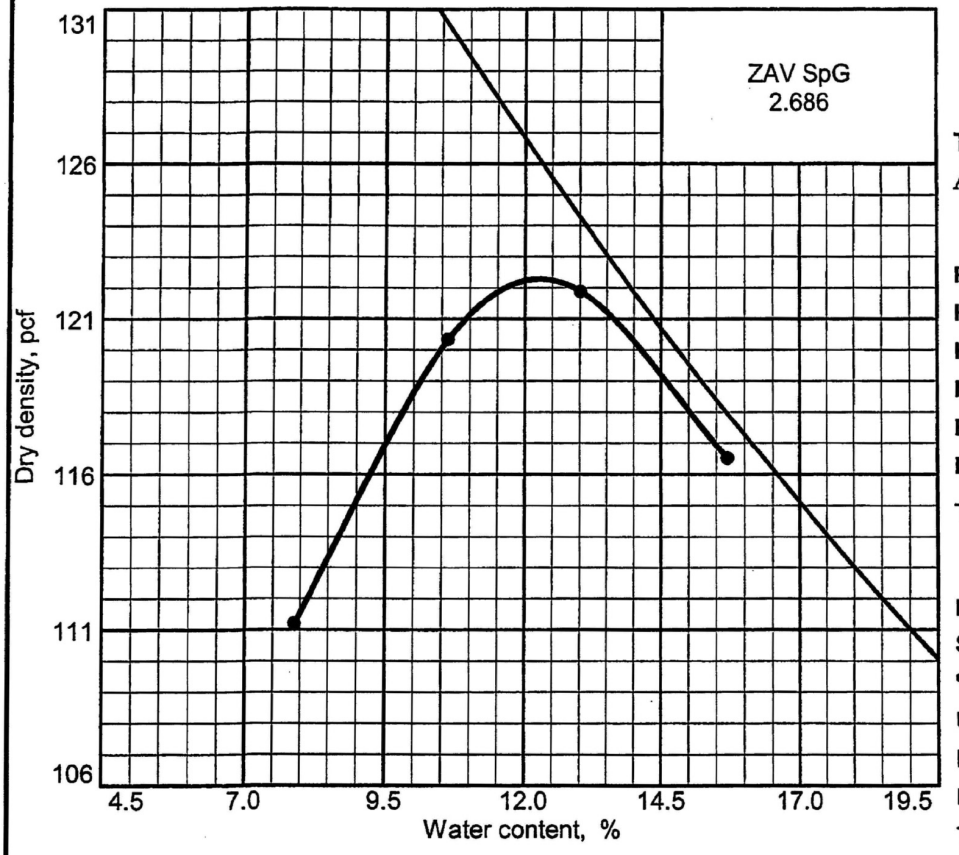
Figure NA

COMPACTION TEST REPORT/ ASTM D-1557-02



Curve No.
TP 2320 B1

Test Specification:
ASTM D 1557-02 Method A Modified

Preparation Method Dry
Hammer Wt. 10 lb.
Hammer Drop 18 in.(mechanical)
Number of Layers five
Blows per Layer 25
Mold Size .03317 cu.ft.
Test Performed on Material Passing No.4 **Sieve**

NM 12.0 **LL** 42 **PI** 25
Sp.G. (ASTM D 854) 2.686
%>No.4 0.0 **%<No.200** 61.8
USCS CL **AASHTO** A-7-6(13)
Date Sampled 1/19/08
Date Tested 2/28/08
Tested By AWH

TESTING DATA

	1	2	3	4	5	6
WM + WS	6011.2	6208.6	6278.3	6234.2		
WM	4205.9	4205.9	4205.9	4205.9		
WW + T #1	534.10	637.90	656.80	686.10		
WD + T #1	495.50	577.30	581.90	593.90		
TARE #1	7.00	6.50	6.40	6.70		
WW + T #2	N/A	N/A	N/A	N/A		
WD + T #2	N/A	N/A	N/A	N/A		
TARE #2	N/A	N/A	N/A	N/A		
MOISTURE	7.9	10.6	13.0	15.7		
DRY DENSITY	111.2	120.3	121.9	116.5		

TEST RESULTS

Maximum dry density = 122.5 pcf

Optimum moisture = 12.5 %

Material Description

Light Brownish Gray Sandy Lean CLAY

Remarks:
Natural Moisture obtained from Jar Sample S-3,5-10'

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

● **Source:** TP-2320 **Sample No.:** Bulk 1 **Elev./Depth:** 5.0'

Checked by: LBJ
Title: LAB MANAGER DSC 4-2-08

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Raleigh, North Carolina

Figure NA