

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: 4/13/08

SAMPLE IDENTIFICATION: B-2321UD, UD-15

(A) Mass of oven-dried soil, grams:	48.26
(B) Mass of pycnometer filled with water at test temperature (T), grams:	655.75
(C) Mass of pycnometer, water and soil, grams:	686.22
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	21.3
(G) Specific Gravity at observed temperature:	$A / [B - (C - A)]$ 2.713
(F) Correction factor:	0.99972
(G x F) SPECIFIC GRAVITY @ 20°C:	2.712

MATERIAL TESTED:

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- # 4

☐

- # 10

PREPARATION METHOD:

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DRY

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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

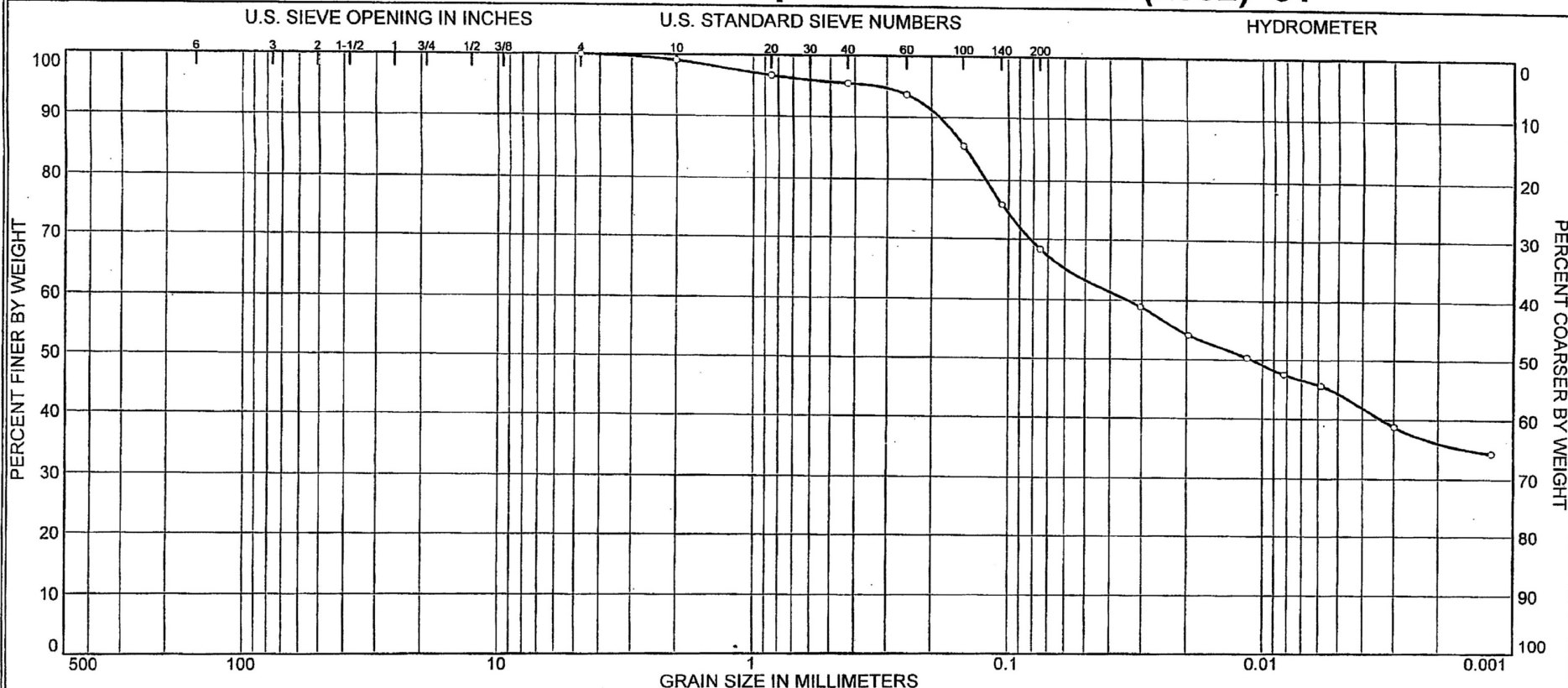
PYCNOMETER : P-3

TESTED BY: CS

REVIEWED BY: Brian Johnson

KAW 5/8/08

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	0.9	3.6	27.2	24.1	44.2

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-2352UD	UD-1	3.5-5.2 Ft	2/1/08	CL	Pale Brown Sandy Lean CLAY	17.3	46	19

Client Bechtel
 Project Exelon Texas COL (Victoria)
 Project No. 6468-07-1777 Lab No. 8361

**MACTEC ENGINEERING
 AND
 CONSULTING, INC.**

Tested by: EH Reviewed by: HJ
 NM value from first strength test performed.
 Specific Gravity = 2.70 (ASTM D 854-06)
 Organic Content = 1.0% (ASTM D2974-07a)

KAW 4-15-08

GRAIN SIZE DISTRIBUTION TEST DATA

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

Sample Data

Source: B-2352UD
Sample No.: UD-1
Elev. or Depth: 3.5-5.2 Ft Sample Length(in./cm.): ID#8361
Location: B-2352UD
Description: Pale Brown Sandy Lean CLAY
Date: 2/1/08 PL: 19 LL: 46 PI: 27
USCS Classification: CL AASHTO Classification:
Testing Remarks: Tested by: EH Reviewed by: HJ

NM value from first strength test performed.
Specific Gravity = 2.70 (ASTM D 854-06)
Organic Content = 1.0% (ASTM D2974-07a)

Mechanical Analysis Data

	Initial	
Dry sample and tare=	68.05	
Tare =	16.62	
Dry sample weight =	51.43	
Tare for cumulative weight retained=	.00	
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.45	99.1
# 20	1.68	96.7
# 40	2.31	95.5
# 60	3.22	93.7
# 100	7.43	85.6
# 140	12.38	75.9
# 200	16.28	68.3

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 68.3
Weight of hydrometer sample: 35.15
Calculated biased weight= 51.46
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.703
Specific gravity correction factor= 0.988
Hydrometer type: 152H
Effective depth $L = 16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.6	36.0	30.7	0.0133	36.0	10.4	0.0304	58.9
5.00	20.6	33.5	28.2	0.0133	33.5	10.8	0.0196	54.1
15.00	20.6	31.5	26.2	0.0133	31.5	11.1	0.0115	50.3
30.00	20.6	30.0	24.7	0.0133	30.0	11.4	0.0082	47.4
60.00	20.6	29.0	23.7	0.0133	29.0	11.5	0.0058	45.5
240.00	20.8	25.5	20.2	0.0133	25.5	12.1	0.0030	38.8
1440.00	21.7	23.0	17.9	0.0132	23.0	12.5	0.0012	34.4

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

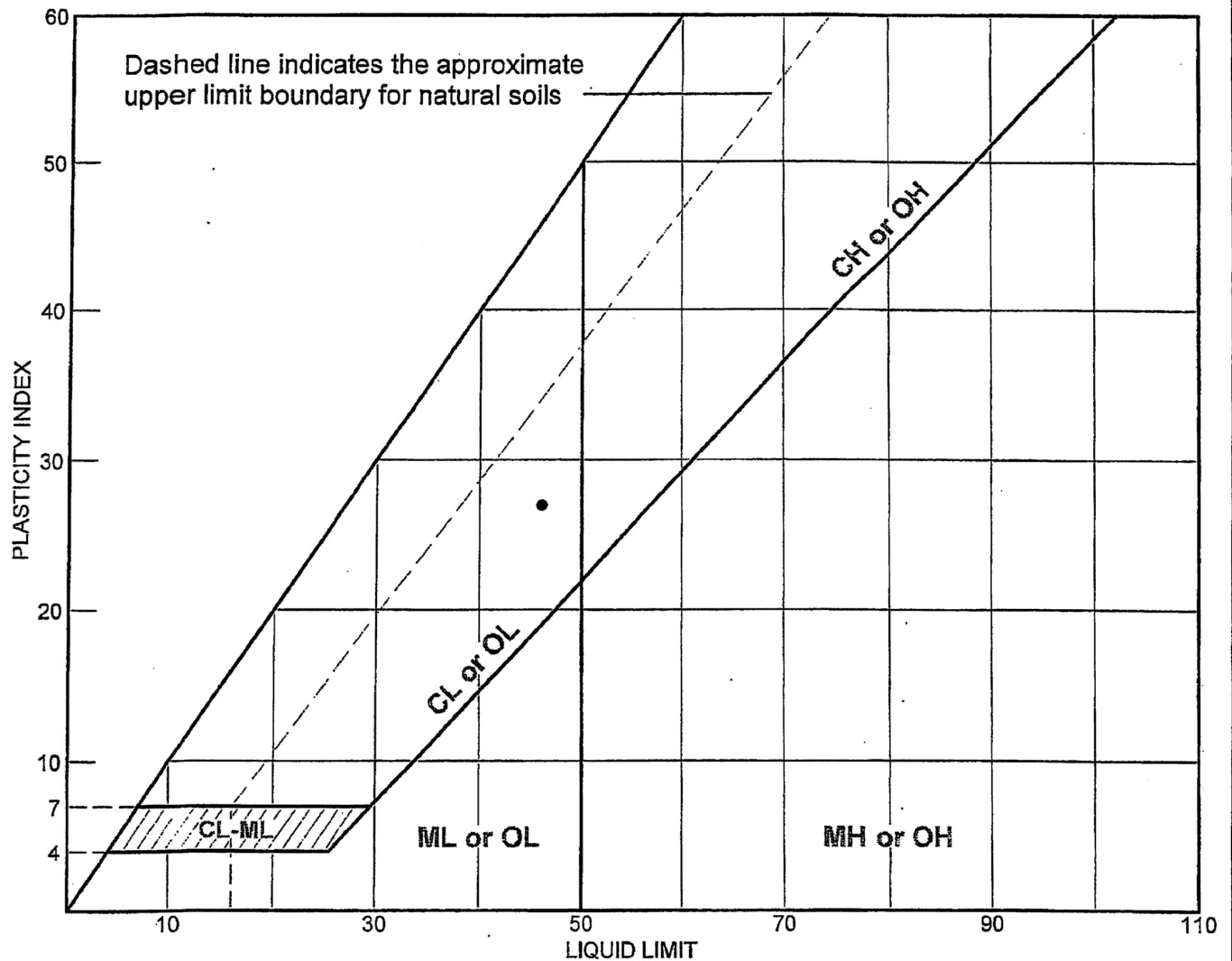
% COBBLES = % GRAVEL =

% SAND = 31.7 (% coarse = 0.9 % medium = 3.6 % fine = 27.2)

% SILT = 24.1 % CLAY = 44.2

D₈₅= 0.15 D₆₀= 0.03 D₅₀= 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-2352UD	UD-1	3.5-5.2 Ft	17.3	19	46	27	CL

**MACTEC ENGINEERING
AND
CONSULTING, INC.**

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project No.: 6468-07-1777

Lab No. 8361

LIQUID AND PLASTIC LIMIT TEST DATA

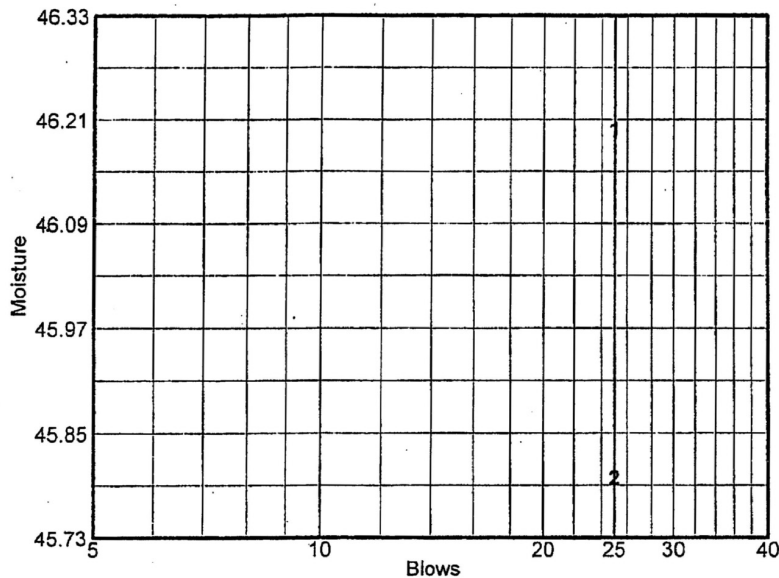
Client: Bechtel
 Project: Exelon Texas COL (Victoria)
 Project Number: 6468-07-1777

Sample Data

Source: B-2352UD
 Sample No.: UD-1
 Elev. or Depth: 3.5-5.2 Ft Sample Length(in./cm.): ID#8361
 Location: B-2352UD
 Description: Pale Brown Sandy Lean CLAY
 Water Content: 17.3 USCS: CL AASHTO:

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	33.03	32.20				
Dry+Tare	29.09	28.47				
Tare	20.57	20.32				
# Blows	25	25				
Moisture	46.2	45.8				



Liquid Limit= 46
 Plastic Limit= 19
 Plasticity Index= 27

Plastic Limit Data

Run No.	1	2	3	4
Wet+Tare	29.41	28.91		
Dry+Tare	27.93	27.58		
Tare	20.21	20.59		
Moisture	19.2	19.0		

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: 3/4/08

SAMPLE IDENTIFICATION: B-2352UD, UD-1 @ 3.5-5.2 Ft.

(A) Mass of oven-dried soil, grams:	36.20
(B) Mass of pycnometer filled with water at test temperature (T), grams:	341.45
(C) Mass of pycnometer, water and soil, grams:	364.26
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	21.7
(G) Specific Gravity at observed temperature:	$A / [B - (C - A)]$ 2.704
(F) Correction factor:	0.99963
(G x F) SPECIFIC GRAVITY @ 20°C:	2.703

MATERIAL TESTED:

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- # 4

☒

- # 10

PREPARATION METHOD:

☒

DRY

☐

WET (dispersed)

REMARKS: Estimated % Passing # 4 : 100

Lean CLAY (CL)

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER : 2759

PYCNOMETER : 2057

TESTED BY: EH

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

REVIEWED BY:

Harry Johnson

HJ

KAW 4.15.08



ORGANIC CONTENT

(ASTM D2974-07a)

Project No. 6468-07-1777
Tested By HJ
Test Date 3/10/2008

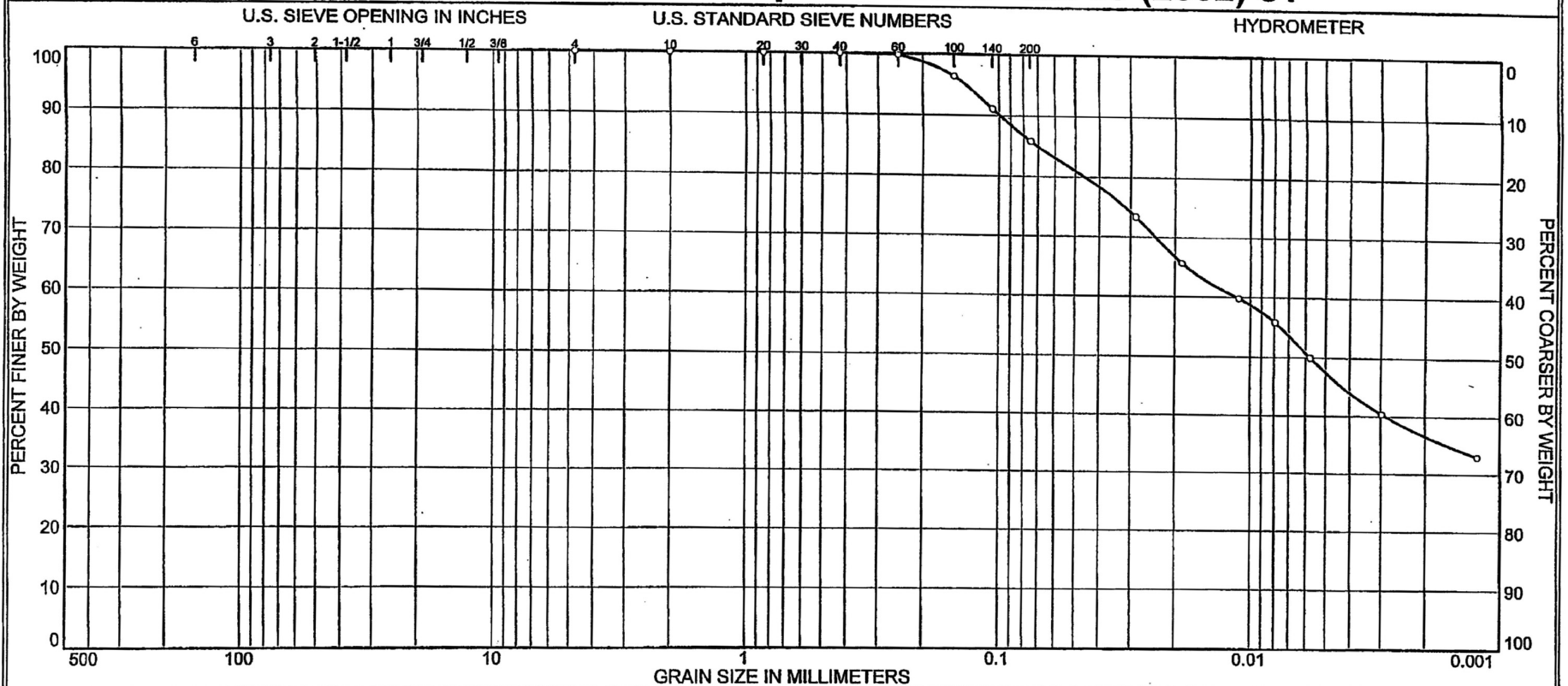
Project Name Exelon Texas COL (Victoria)
Reviewed By JW
Review Date 4/14/08

Boring No.	B-2352UD			
Sample No.	UD-1			
Sample Depth, Ft.	3.5-5.2 Ft			
Lab No.	8361			
A) Tare No.	X			
B) Tare Weight, grams	109.80			
C) Wet Soil + Tare, grams	238.41			
D) Dry Soil + Tare, grams	235.26			
E) Weight of Dry Soil, grams [D - B]	125.46			
F) Weight of Moisture, grams [C - D]	3.15			
G) Moisture Content, % $[F * 100 / E]$	2.5			
(based on over-dried weight)				
H) Tare No.	X			
I) Weight of Tare, grams	109.80			
J) Weight of Over-Dried Soil + Tare, grams	235.26			
K) Weight of Oven- Dried Soil, grams [J - I]	125.46			
L) Weight of Ignited Soil + Tare, grams	234.01			
M) Ash, grams [L - I]	124.21			
N) Ash Content, % $[M * 100 / K]$	99.0			
O) Organic Matter, % $[100 - N]$	1.0			

KAW 4.15.08

Remarks:

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	14.1	38.4	47.5

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-2352UD	UD-3	11.5-13.2 Ft	2/1/08	CL	Yellowish Brown Lean CLAY	18.4	39	18

Client Bechtel		MACTEC ENGINEERING AND CONSULTING, INC.	Tested by: EH Reviewed by: HJ NM value from first strength test performed. Specific Gravity = 2.71 (ASTM D 854-06)
Project Exelon Texas COL (Victoria)			
Project No. 6468-07-1777	Lab No. 8362		

KAW 4-15-08

GRAIN SIZE DISTRIBUTION TEST DATA

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

Sample Data

Source: B-2352UD
Sample No.: UD-3
Elev. or Depth: 11.5-13.2 Ft Sample Length(in./cm.): ID#8362
Location: B-2352UD
Description: Yellowish Brown Lean CLAY
Date: 2/1/08 PL: 18 LL: 39 PI: 21
USCS Classification: CL AASHTO Classification:
Testing Remarks: Tested by: EH Reviewed by: HJ

NM value from first strength test performed.
Specific Gravity = 2.71 (ASTM D 854-06)

Mechanical Analysis Data

	Initial	
Dry sample and tare=	66.32	
Tare =	15.64	
Dry sample weight =	50.68	
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	0.12	99.8
# 100	1.89	96.3
# 140	4.52	91.1
# 200	7.15	85.9

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 85.9
Weight of hydrometer sample: 43.53
Calculated biased weight= 50.68
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.708
Specific gravity correction factor= 0.987
Hydrometer type: 152H
Effective depth L= $16.294964 - 0.164 \times R_m$

Elapsed time, min	Temp, deg C	Actual reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer
2.00	20.6	43.0	37.7	0.0133	43.0	9.2	0.0286	73.4
5.00	20.6	39.0	33.7	0.0133	39.0	9.9	0.0187	65.6
15.00	20.6	36.0	30.7	0.0133	36.0	10.4	0.0111	59.8
30.00	20.6	34.0	28.7	0.0133	34.0	10.7	0.0080	55.9
60.00	20.6	31.0	25.7	0.0133	31.0	11.2	0.0058	50.0
240.00	20.8	26.0	20.7	0.0133	26.0	12.0	0.0030	40.4
1440.00	21.7	22.0	16.9	0.0131	22.0	12.7	0.0012	33.0

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

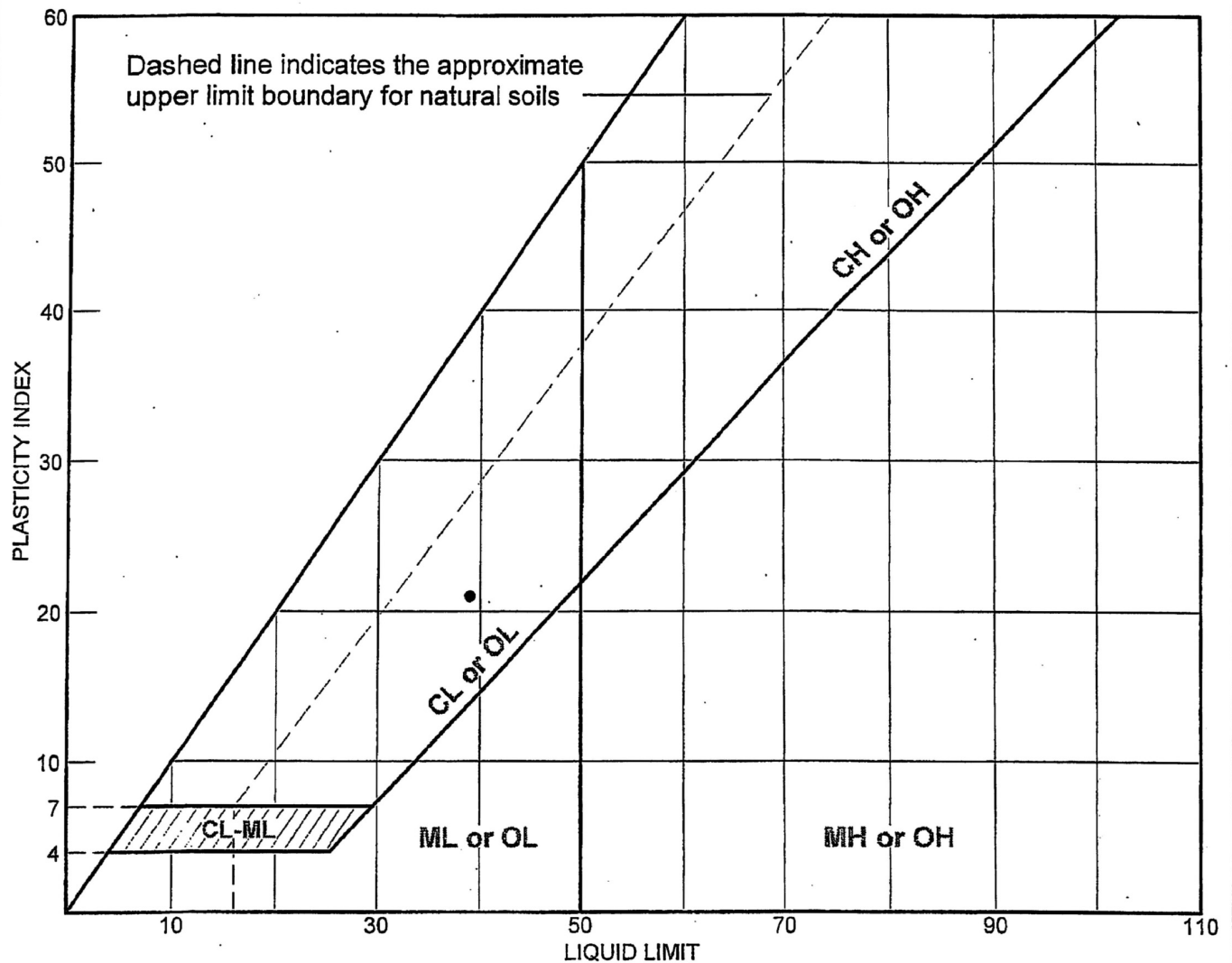
% COBBLES = % GRAVEL =

% SAND = 14.1 (% coarse = 0.0 % medium = 0.0 % fine = 14.1)

% SILT = 38.4 % CLAY = 47.5

D85= 0.07 D60= 0.01 D50= 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-2352UD	UD-3	11.5-13.2 Ft	18.4	18	39	21	CL

**MACTEC ENGINEERING
AND
CONSULTING, INC.**

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project No.: 6468-07-1777

Lab No. 8362

LIQUID AND PLASTIC LIMIT TEST DATA

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

Sample Data

Source: B-2352UD
Sample No.: UD-3
Elev. or Depth: 11.5-13.2 Ft Sample Length(in./cm.): ID#8362
Location: B-2352UD
Description: Yellowish Brown Lean CLAY
Water Content: 18.4 USCS: CL AASHTO:

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	32.73	32.77				
Dry+Tare	29.33	29.35				
Tare	20.78	20.75				
# Blows	22	23				
Moisture	39.8	39.8				

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

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	31.61	30.29			
Dry+Tare	29.99	28.83			
Tare	20.90	20.56			
Moisture	17.8	17.7			

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: 3/4/08

SAMPLE IDENTIFICATION: B-2352UD, UD-3 @11.5-13.2 Ft.

(A) Mass of oven-dried soil, grams:	36.47
(B) Mass of pycnometer filled with water at test temperature (T), grams:	339.50
(C) Mass of pycnometer, water and soil, grams:	362.51
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	22.2
(G) Specific Gravity at observed temperature:	$A / [B - (C - A)]$ 2.710
(F) Correction factor:	0.99952
(G x F) SPECIFIC GRAVITY @ 20°C:	2.708

MATERIAL TESTED:

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- # 4

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- # 10

PREPARATION METHOD:

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DRY

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WET (dispersed)

REMARKS: Estimated % Passing # 4 : 100

Lean CLAY (CL)

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER : 2759

PYCNO METER : 2053

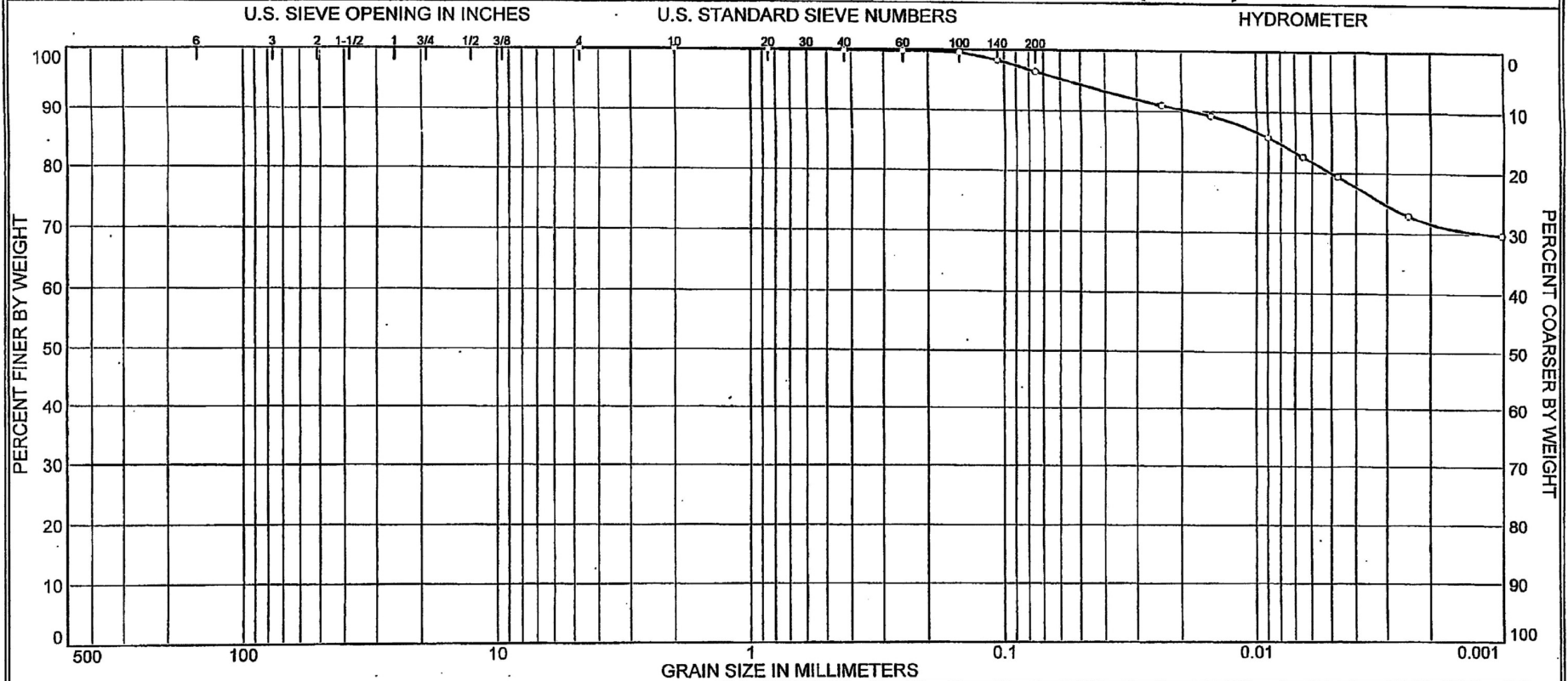
TESTED BY: EH

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

REVIEWED BY: Harry Johnson

KAW 4.15.08

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

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Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468-07-1777

Lab No. 8363

**MACTEC ENGINEERING
AND
CONSULTING, INC.**

○ Tested by: EH Reviewed by: HJ

NM value from first strength test performed.
Specific Gravity = 2.67 (ASTM D 854-06)

KAW 4-15-08

GRAIN SIZE DISTRIBUTION TEST DATA

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

Sample Data

Source: B-2352UD
Sample No.: UD-5
Elev. or Depth: 24-25.7 F Sample Length(in./cm.): ID#8363
Location: B-2352UD
Description: Brownish Yellow Fat CLAY
Date: 2/1/08 PL: 29 LL: 67 PI: 38
USCS Classification: CH AASHTO Classification:
Testing Remarks: Tested by: EH Reviewed by: HJ

NM value from first strength test performed.
Specific Gravity = 2.67 (ASTM D 854-06)

Mechanical Analysis Data

	Initial	
Dry sample and tare=	76.16	
Tare =	16.04	
Dry sample weight =	60.12	
Tare for cumulative weight retained=	.00	
Sieve	Cumul. Wt. retained	Percent finer
# 4	0.00	100.0
# 10	0.00	100.0
# 20	0.09	99.9
# 40	0.12	99.8
# 60	0.13	99.8
# 100	0.23	99.6
# 140	1.02	98.3
# 200	2.13	96.5

Hydrometer Analysis Data

Separation sieve is #200
Percent -#200 based upon complete sample= 96.5
Weight of hydrometer sample: 57.99
Calculated biased weight= 60.09
Automatic temperature correction
Composite correction at 20 deg C = -5.4

Meniscus correction only= 0
Specific gravity of solids= 2.671
Specific gravity correction factor= 0.995
Hydrometer type: 152H
Effective depth L= 16.294964 - 0.164 x Rm

Elapsed time, min	Temp, Actual deg C reading	Corrected reading	K	Rm	Eff. depth	Diameter mm	Percent finer	
2.00	21.7	60.0	54.9	0.0133	60.0	6.5	0.0239	91.0
5.00	21.7	59.0	53.9	0.0133	59.0	6.6	0.0153	89.3
15.00	21.7	57.0	51.9	0.0133	57.0	6.9	0.0090	86.0
30.00	21.7	55.0	49.9	0.0133	55.0	7.3	0.0065	82.7
60.00	21.7	53.0	47.9	0.0133	53.0	7.6	0.0047	79.4
240.00	22.0	49.0	44.0	0.0132	49.0	8.3	0.0025	72.9
1440.00	22.5	47.0	42.1	0.0131	47.0	8.6	0.0010	69.8

Fractional Components

Gravel/Sand based on #4

Sand/Fines based on #200

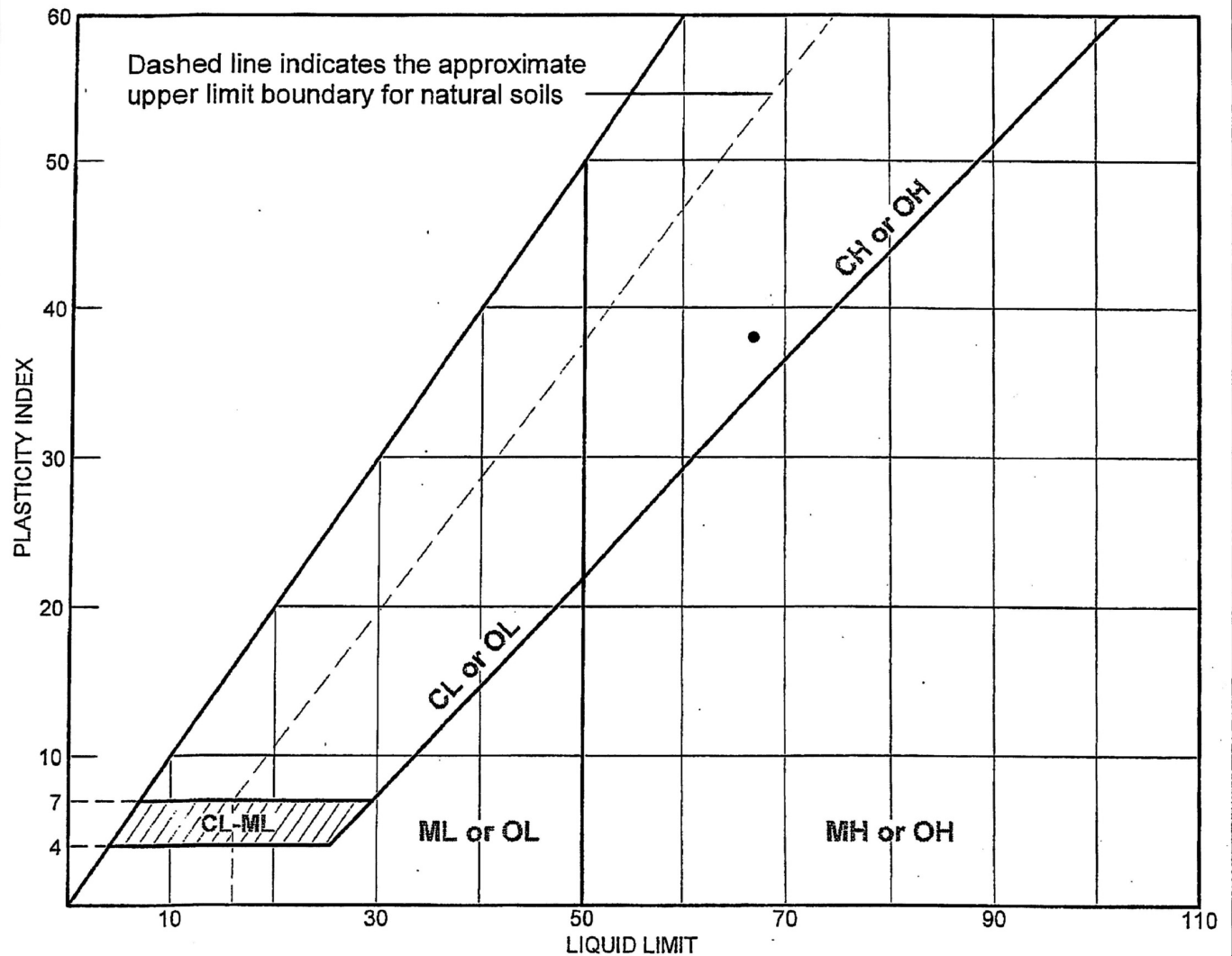
% COBBLES = % GRAVEL =

% SAND = 3.5 (% coarse = 0.0 % medium = 0.2 % fine = 3.3)

% SILT = 16.5 % CLAY = 80.0

D₈₅ = 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-2352UD	UD-5	24-25.7 F	28.0.	29	67	38	CH

**MACTEC ENGINEERING
AND
CONSULTING, INC.**

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project No.: 6468-07-1777

Lab No. 8363

LIQUID AND PLASTIC LIMIT TEST DATA

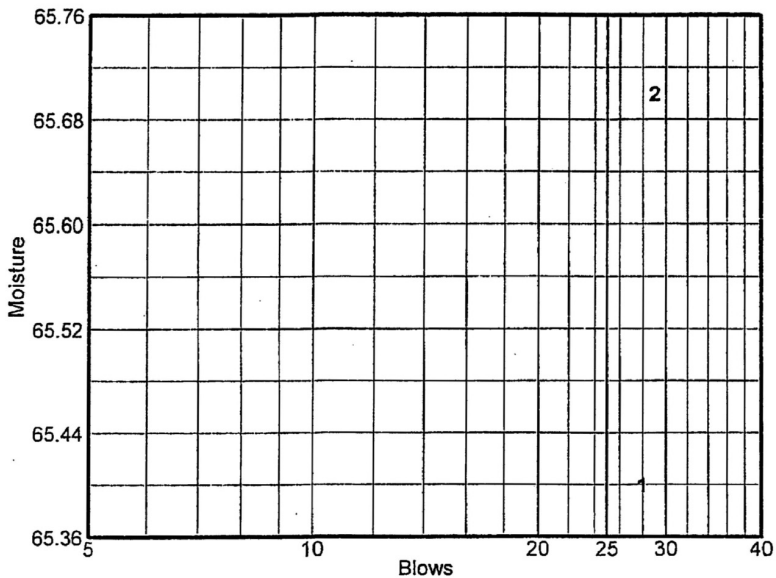
Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468-07-1777

Sample Data

Source: B-2352UD
Sample No.: UD-5
Elev. or Depth: 24-25.7 F Sample Length(in./cm.): ID#8363
Location: B-2352UD
Description: Brownish Yellow Fat CLAY
Water Content: 28.0. USCS: CH AASHTO:

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	31.13	30.77				
Dry+Tare	26.84	26.90				
Tare	20.28	21.01				
# Blows	28	29				
Moisture	65.4	65.7				



Liquid Limit= 67
Plastic Limit= 29
Plasticity Index= 38

Plastic Limit Data

Run No.	1	2	3	4	
Wet+Tare	26.51	27.56			
Dry+Tare	25.04	26.04			
Tare	20.03	20.77			
Moisture	29.3	28.8			

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: 3/12/08

SAMPLE IDENTIFICATION: B-2352UD, UD-5 @ 24-25.7 Ft.

(A) Mass of oven-dried soil, grams:	37.51
(B) Mass of pycnometer filled with water at test temperature (T), grams:	343.40
(C) Mass of pycnometer, water and soil, grams:	366.88
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	24.7
(G) Specific Gravity at observed temperature:	$A / [B - (C - A)]$ 2.674
(F)	Correction factor: 0.99892
(G x F)	SPECIFIC GRAVITY @ 20°C: 2.671

MATERIAL TESTED:

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- # 4

☒

- # 10

PREPARATION METHOD:

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DRY

☐

WET (dispersed)

REMARKS: Estimated % Passing # 4 : 100

Fat CLAY (CH)

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER : 2759

PYCNOMETER : 2052

TESTED BY: EH

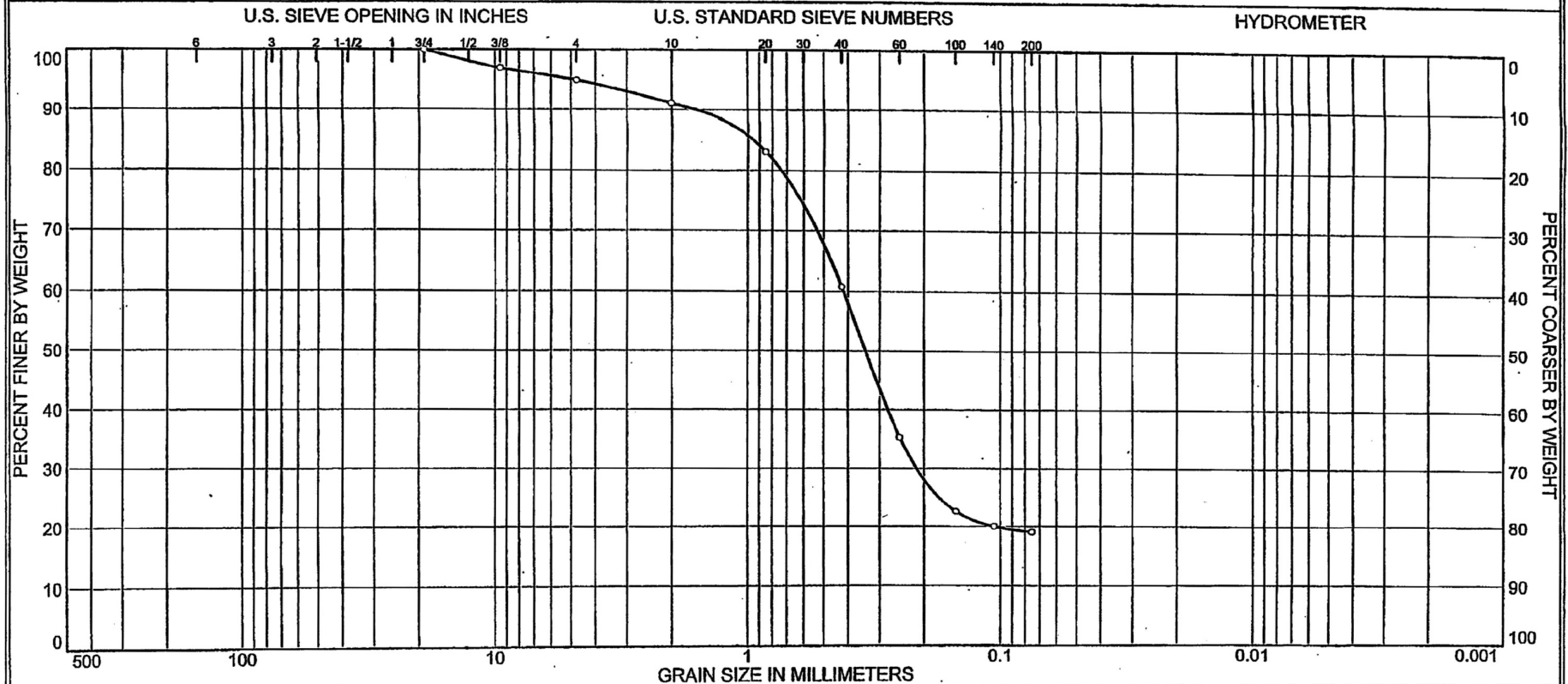
\\Test Reports\\Soils\\SPECIFIC GRAVITY(ref).xls

REVIEWED BY: Harry Johnson



KAW 4.15.08

Particle Size Distribution Report ASTM D6913-04 e1



% COBBLES	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
0.0	0.0	5.1	3.8	30.3	41.8	19.0	

SOURCE	SAMPLE #	DEPTH/ELEV.	DATE SAMPLED	USCS	MATERIAL DESCRIPTION	NM %	LL	PL
B-2352UD	UD-8	68-69.35 Ft	2/1/08	SM	Light Gray Silty SAND (Visual)	14.4	ND	ND

Client Bechtel		MACTEC ENGINEERING AND CONSULTING, INC.	☐ Tested by: EH Reviewed by: HJ 
Project Exelon Texas COL (Victoria)			Sieve Analysis Only
			NM value from average of strength tests performed.
			Specific Gravity = 2.68 (ASTM D 854-06)
Project No. 6468-07-1777	Lab No. 8365		ND = Not Determined.

KAW 4-15-08

GRAIN SIZE DISTRIBUTION TEST DATA

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

Sample Data

Source: B-2352UD
Sample No.: UD-8
Elev. or Depth: 68-69.35 Ft Sample Length(in./cm.): ID#8365
Location: B-2352UD
Description: Light Gray Silty SAND (Visual)
Date: 2/1/08 PL: ND LL: ND PI: ND
USCS Classification: SM AASHTO Classification:
Testing Remarks: Tested by: EH Reviewed by: HJ

Sieve Analysis Only
NM value from average of strength tests performed.
Specific Gravity = 2.68 (ASTM D 854-06)
ND = Not Determined.

Mechanical Analysis Data

	Initial	
Dry sample and tare=	265.45	
Tare =	96.46	
Dry sample weight =	168.99	
Tare for cumulative weight retained=	.00	
Sieve	Cumul. Wt. retained	Percent finer
0.75 inch	0.00	100.0
.375 inch	5.09	97.0
# 4	8.58	94.9
# 10	15.04	91.1
# 20	28.60	83.1
# 40	66.19	60.8
# 60	109.33	35.3
# 100	130.74	22.6
# 140	135.24	20.0
# 200	136.90	19.0

Fractional Components

Gravel/Sand based on #4
Sand/Fines based on #200
% COBBLES = % GRAVEL = 5.1 (% coarse = % fine = 5.1)
% SAND = 75.9 (% coarse = 3.8 % medium = 30.3 % fine = 41.8)
% FINES = 19.0

D85= 0.95 D60= 0.42 D50= 0.34
D30= 0.21

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: 4/7/08

SAMPLE IDENTIFICATION: B-2352UD, UD-8 @ 68-69.35 Ft.

(A) Mass of oven-dried soil, grams:	37.26
(B) Mass of pycnometer filled with water at test temperature (T), grams:	338.33
(C) Mass of pycnometer, water and soil, grams:	361.70
(T) Temperature of pycnometer, water and soil, °C when mass (C) determined:	24.4
(G) Specific Gravity at observed temperature:	$A / [B - (C - A)]$ 2.683
(F) Correction factor:	0.99899
(G x F)	SPECIFIC GRAVITY @ 20°C: 2.680

MATERIAL TESTED:

☐
- # 4☒
- # 10

PREPARATION METHOD:

☒
DRY☐
WET (dispersed)

REMARKS: Estimated % Passing # 4 : 95

Silty SAND (SM) - Visual

EQUIPMENT USED

SCALES : 418

OVEN : 144

THERMOMETER : 2759

PYCNOMETER : 2054

TESTED BY: EH

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

REVIEWED BY:

Harry Johnson



KAW 4.15.08