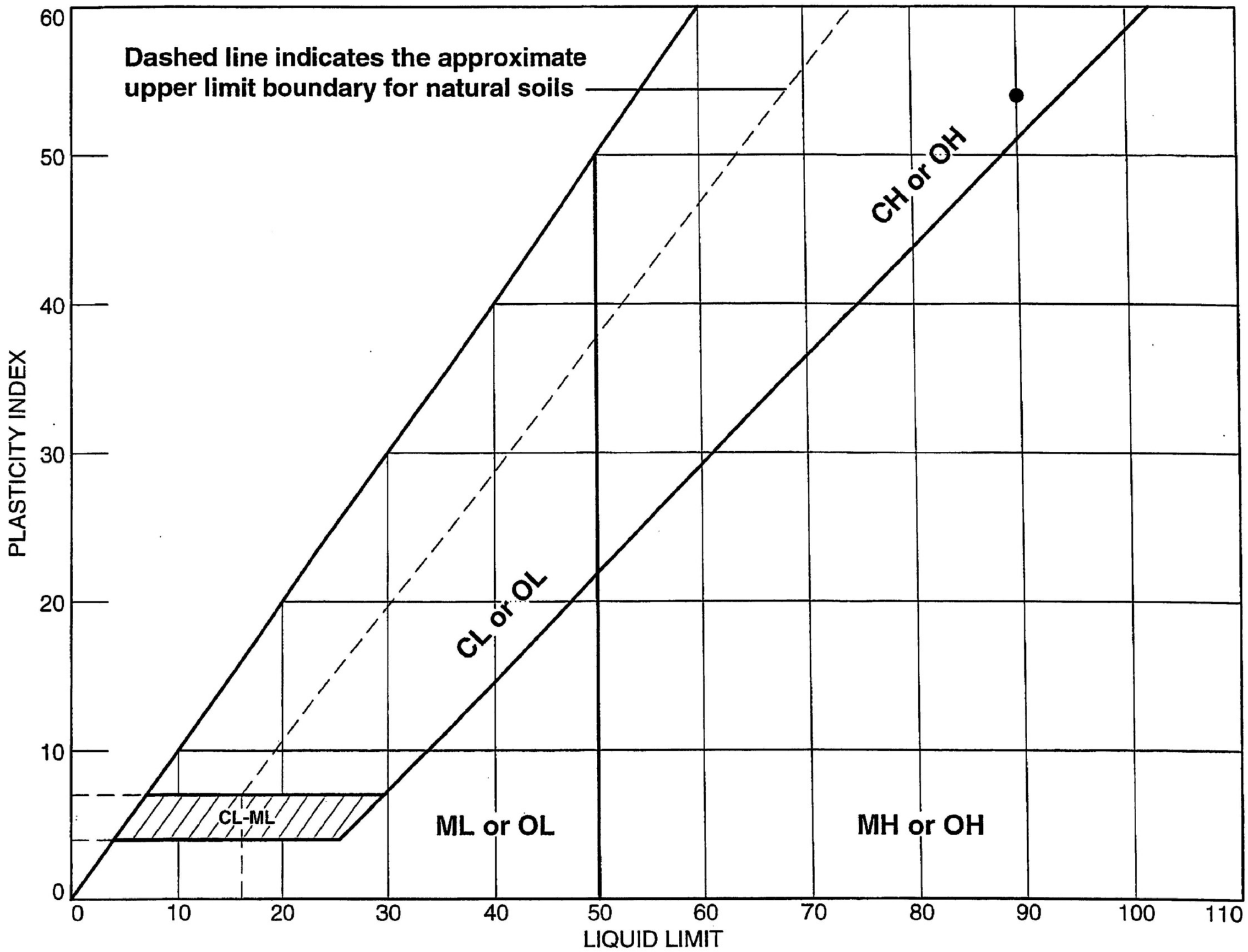
LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Boring B-2174A	SS-46	458.8-460.3	27.8	36	90	54	CH

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

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

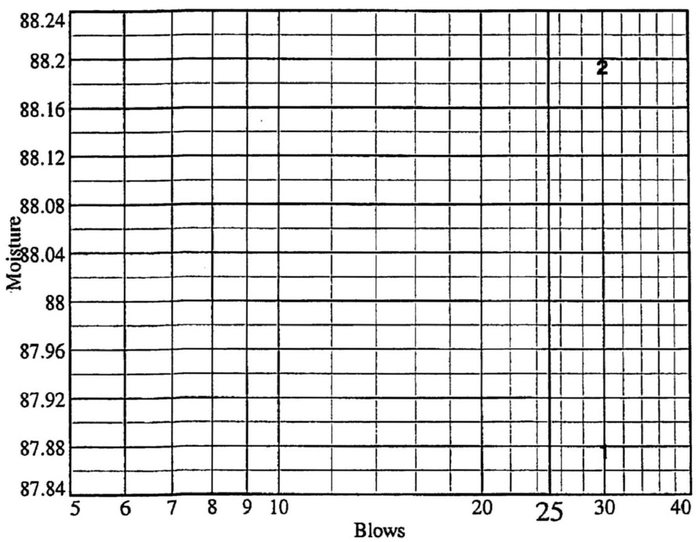
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 458.8-460.3
Sample Number: SS-46
Material Description: Light Gray Fat CLAY
USCS: CH
AASHTO: A-7-5(63)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	34.94	31.43				
Dry+Tare	25.88	23.96				
Tare	15.57	15.49				
# Blows	30	30				
Moisture	87.9	88.2				



Liquid Limit= 90
Plastic Limit= 36
Plasticity Index= 54
Natural Moisture= 27.8
Liquidity Index= -0.2

Plastic Limit Data

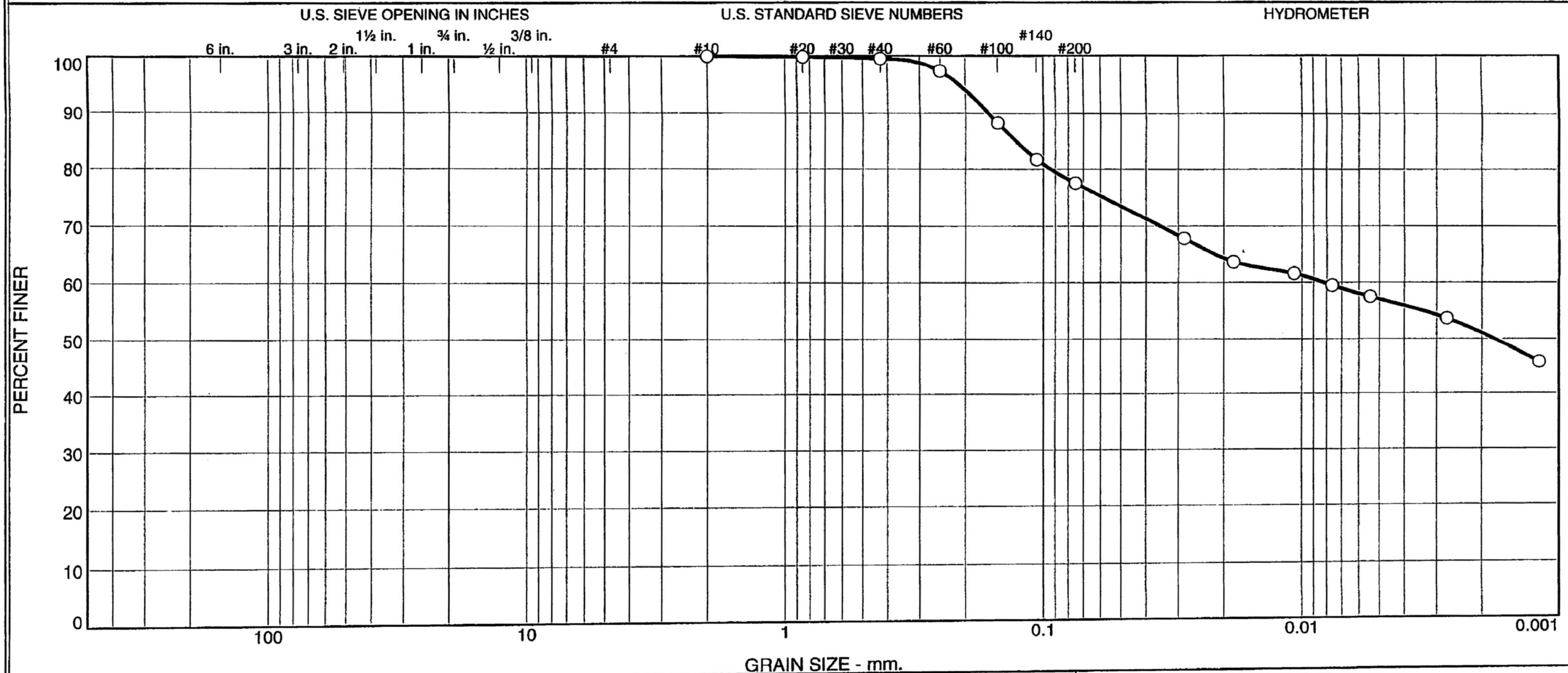
Run No.	1	2	3	4
Wet+Tare	25.68	26.23		
Dry+Tare	22.99	23.41		
Tare	15.48	15.61		
Moisture	35.8	36.2		

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
115.78	92.58	9.24	27.8

MACTEC, Inc.

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



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
O	0.0	0.0	0.0	0.0	0.4	22.1	20.4	57.1

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
O	Boring B-2174A	SS-47	478.8-480.3	12-19-07	ML	Light Gray SILT with sand	20.6	39	26

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

O Specific Gravity is assumed

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 478.8-480.3 **Sample Number:** SS-47
Material Description: Light Gray SILT with sand
Date: 12-19-07 **Natural Moisture:** 20.6
Liquid Limit: 39 **Plastic Limit:** 26 **USCS Class.:** ML
Testing Remarks: Specific Gravity is assumed
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
260.69	0.00	0.00	#10	0.00	100.0
49.28	0.00	0.00	#20	0.07	99.9
			#40	0.22	99.6
			#60	1.31	97.3
			#100	5.77	88.3
			#140	9.02	81.7
			#200	11.08	77.5

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =49.28
Hygroscopic moisture correction:
- **Moist weight and tare =** 29.62
- **Dry weight and tare =** 29.27
- **Tare weight =** 15.45
- **Hygroscopic moisture =** 2.5%

Table of composite correction values:

Temp., deg. C:	11.2	28.4
Comp. corr.:	-8.0	-4.0

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	23.9	38.0	33.0	0.0128	39.0	9.9	0.0285	67.8
5.00	23.8	36.0	30.9	0.0128	37.0	10.2	0.0184	63.6
15.00	23.8	35.0	29.9	0.0128	36.0	10.4	0.0107	61.6
30.00	23.8	34.0	28.9	0.0128	35.0	10.6	0.0076	59.5
60.00	23.9	33.0	28.0	0.0128	34.0	10.7	0.0054	57.5
240.00	24.5	31.0	26.1	0.0127	32.0	11.0	0.0027	53.7
1440.00	20.8	28.0	22.2	0.0133	29.0	11.5	0.0012	45.7

MACTEC, Inc.

Fractional Components

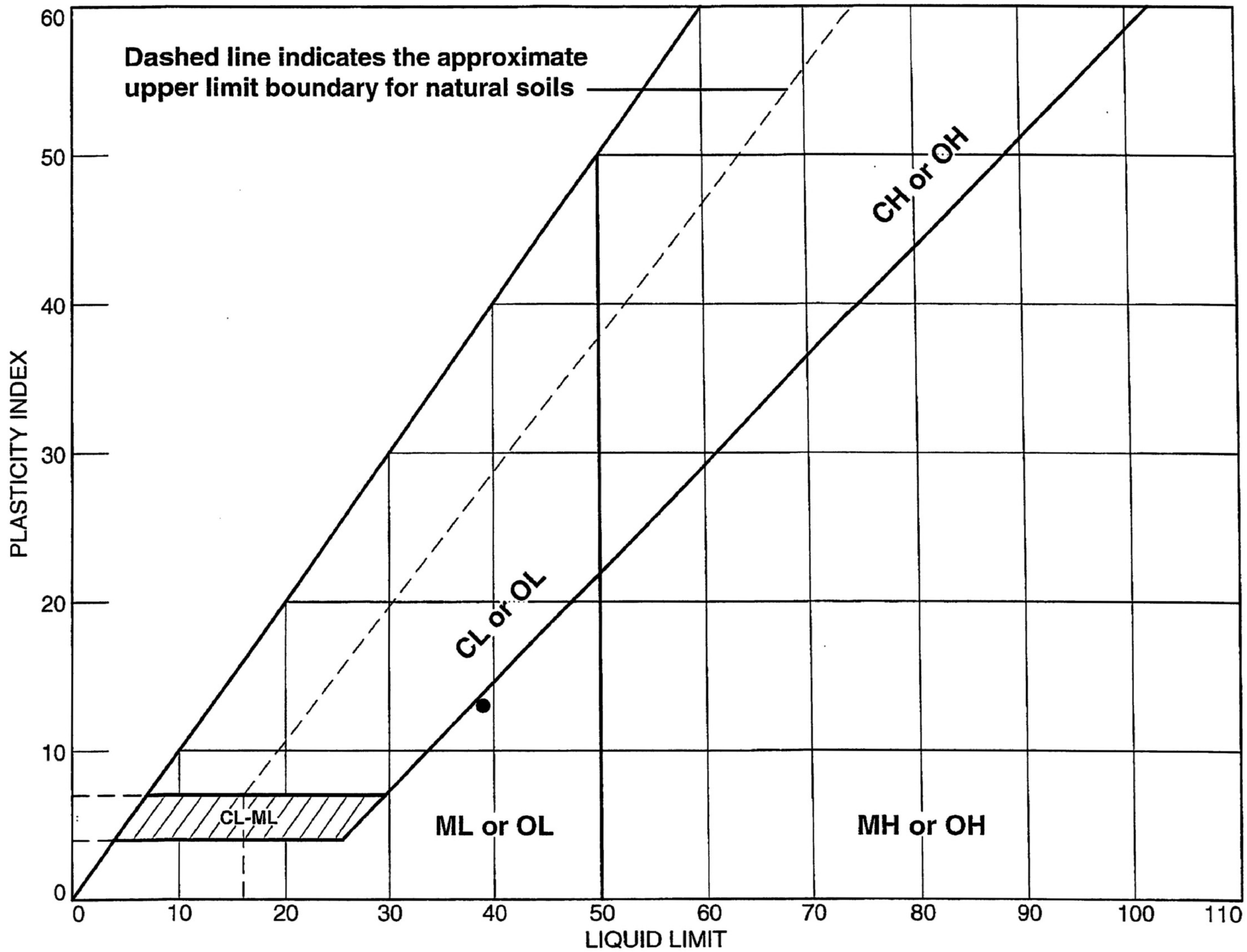
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.4	22.1	22.5	20.4	57.1	77.5

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0018	0.0082	0.0939	0.1276	0.1628	0.2116

Fineness Modulus
0.13

MACTEC, Inc.

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Boring B-2174A	SS-47	478.8-480.3	20.6	26	39	13	ML

MACTEC, Inc.

Raleigh, North Carolina

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

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

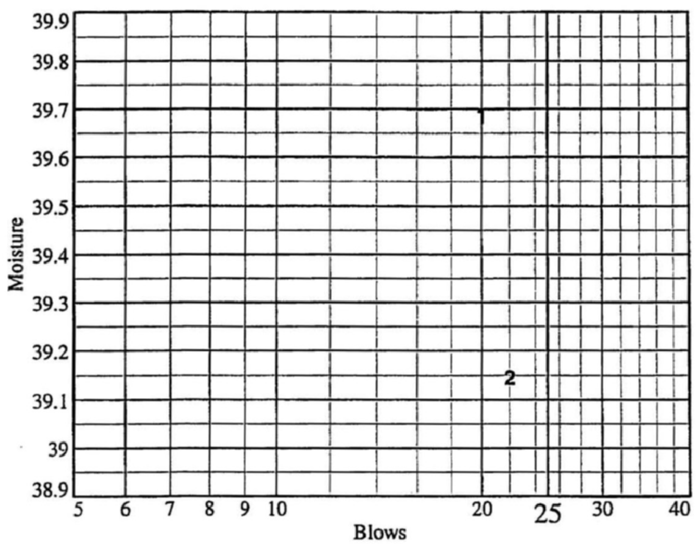
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 478.8-480.3
Sample Number: SS-47
Material Description: Light Gray SILT with sand
USCS: ML
AASHTO: A-6(10)
Tested by: CS
Checked by: LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	35.12	34.52				
Dry+Tare	29.54	29.20				
Tare	15.48	15.61				
# Blows	20	22				
Moisture	39.7	39.1				



Liquid Limit= 39
Plastic Limit= 26
Plasticity Index= 13
Natural Moisture= 20.6
Liquidity Index= -0.4

Plastic Limit Data

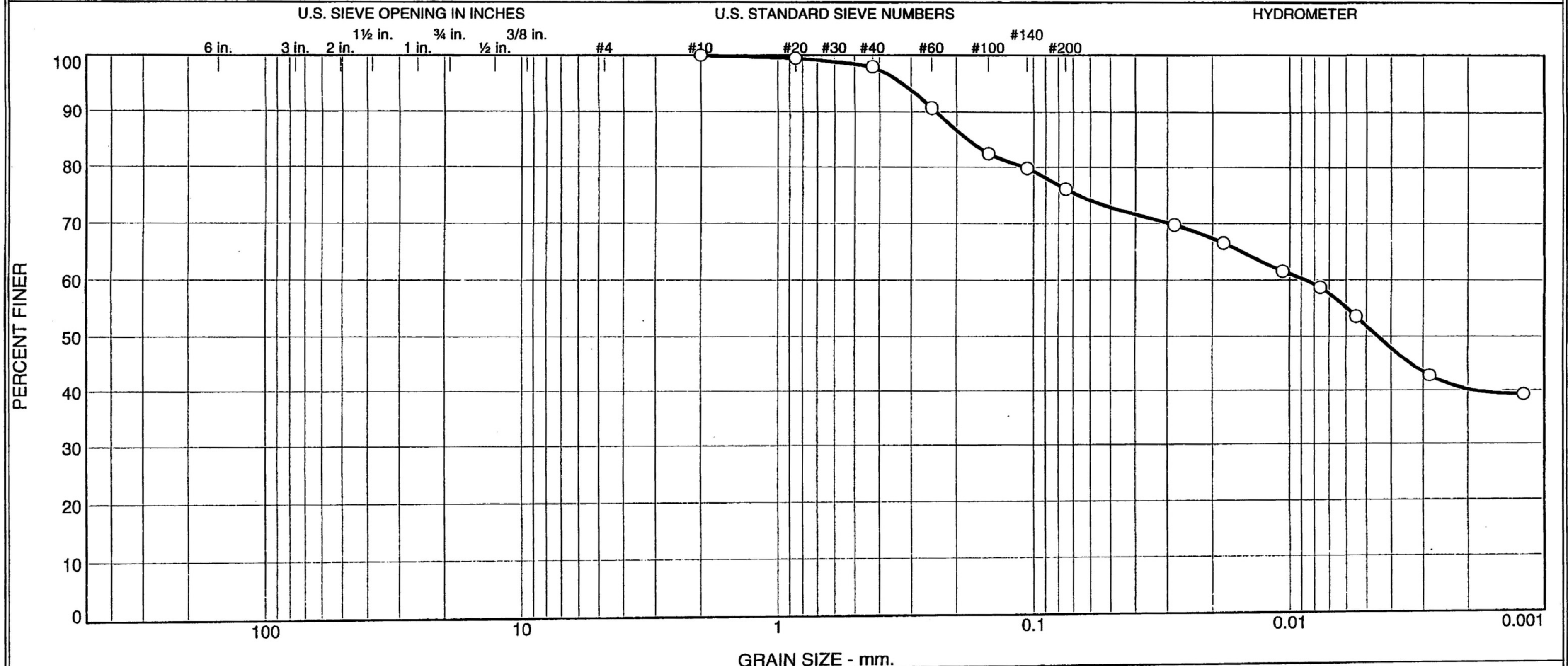
Run No.	1	2	3	4
Wet+Tare	24.57	24.24		
Dry+Tare	22.70	22.40		
Tare	15.49	15.48		
Moisture	25.9	26.6		

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
121.64	102.34	8.46	20.6

MACTEC, Inc.

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



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
O	0.0	0.0	0.0	0.0	2.1	21.8	24.2	51.9

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
O	Boring B-2174A	SS-49A	518.7-519.7	1-2-08	CH	Pale Brown Fat CLAY with sand	26.1	52	26

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

O Specific Gravity is assumed

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 518.7-519.7 **Sample Number:** SS-49A
Material Description: Pale Brown Fat CLAY with sand
Date: 1-2-08 **Natural Moisture:** 26.1
Liquid Limit: 52 **Plastic Limit:** 26 **USCS Class.:** CH
Testing Remarks: Specific Gravity is assumed
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
232.76	0.00	0.00	#10	0.00	100.0
50.50	0.00	0.00	#20	0.28	99.4
			#40	1.06	97.9
			#60	4.69	90.7
			#100	8.86	82.5
			#140	10.19	79.8
			#200	12.08	76.1

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =50.50
Hygroscopic moisture correction:
Moist weight and tare = 28.45
Dry weight and tare = 28.02
Tare weight = 15.44
Hygroscopic moisture = 3.4%
Table of composite correction values:

Temp., deg. C:	11.2	28.4
Comp. corr.:	-8.0	-4.0

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	23.9	39.5	34.5	0.0128	40.5	9.7	0.0282	69.8
5.00	23.6	38.0	32.9	0.0129	39.0	9.9	0.0181	66.6
15.00	23.8	35.5	30.4	0.0128	36.5	10.3	0.0106	61.6
30.00	24.1	34.0	29.0	0.0128	35.0	10.6	0.0076	58.7
60.00	23.9	31.5	26.5	0.0128	32.5	11.0	0.0055	53.6
240.00	24.6	26.0	21.1	0.0127	27.0	11.9	0.0028	42.8
1440.00	21.5	25.0	19.4	0.0132	26.0	12.0	0.0012	39.3

MACTEC, Inc.

Fractional Components

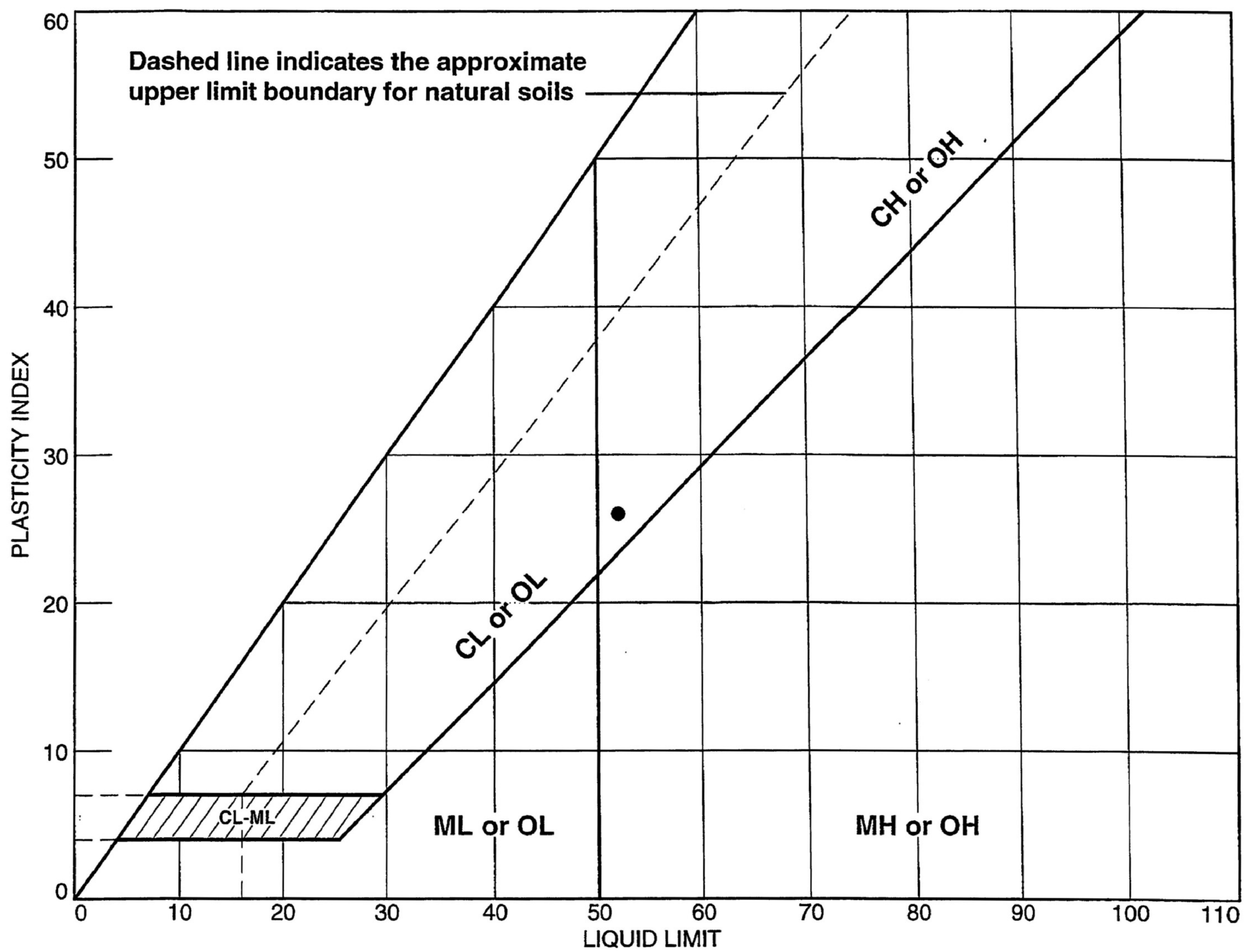
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	2.1	21.8	23.9	24.2	51.9	76.1

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
				0.0045	0.0086	0.1083	0.1810	0.2402	0.3271

Fineness Modulus
0.25

MACTEC, Inc.

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Boring B-2174A	SS-49A	518.7-519.7	26.1	26	52	26	CH

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

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

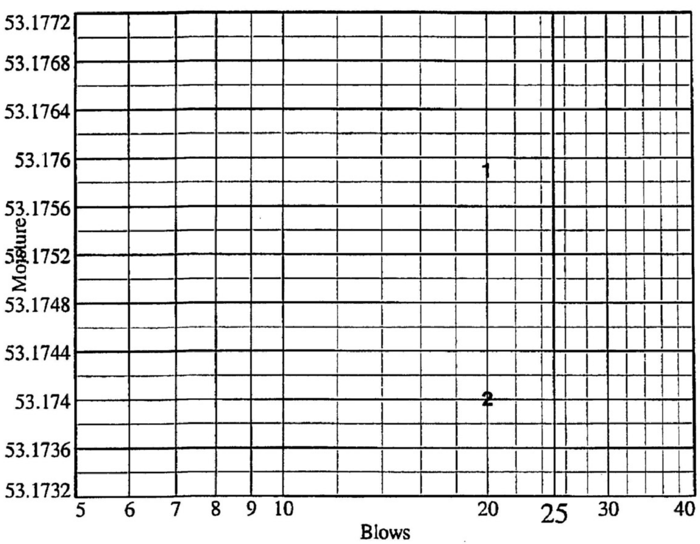
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 518.7-519.7 **Sample Number:** SS-49A
Material Description: Pale Brown Fat CLAY with sand
USCS: CH **AASHTO:** A-7-6(20)
Tested by: CS **Checked by:** LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	34.33	35.96				
Dry+Tare	27.80	28.84				
Tare	15.52	15.45				
# Blows	20	20				
Moisture	53.2	53.2				



Liquid Limit= 52
Plastic Limit= 26
Plasticity Index= 26
Natural Moisture= 26.1
Liquidity Index= 0.0

Plastic Limit Data

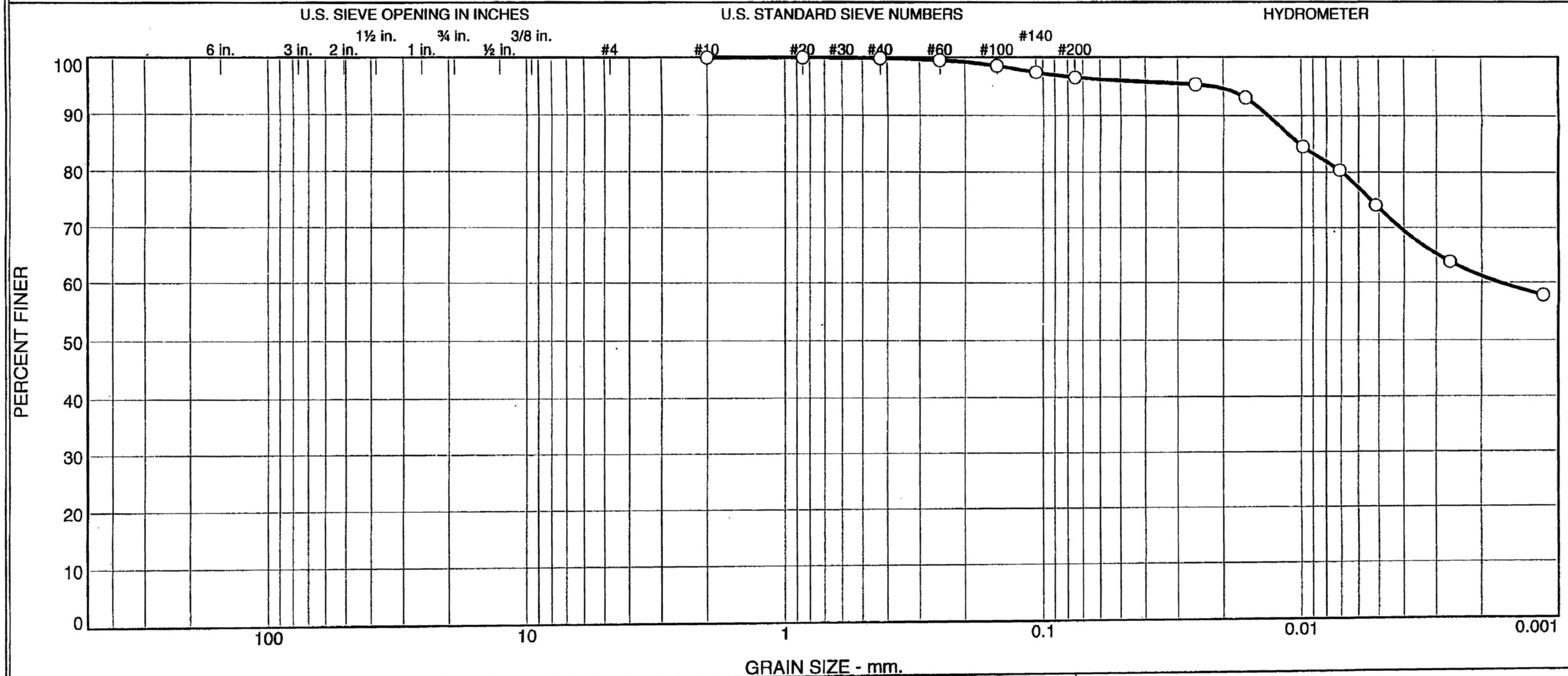
Run No.	1	2	3	4	
Wet+Tare	24.57	21.17			
Dry+Tare	22.70	20.01			
Tare	15.49	15.51			
Moisture	25.9	25.8			

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
129.98	104.44	6.57	26.1

MACTEC, Inc.

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



	% +3"	% Gravel Coarse	% Gravel Fine	% Sand Coarse	% Sand Medium	% Sand Fine	% Fines Silt	% Fines Clay
O	0.0	0.0	0.0	0.0	0.1	3.4	23.0	73.5

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
O	Boring B-2174A	SS-51	543.7-545.2	12-20-07	CH	Brown Mottled with Light Gray Fat CLAY	22.7	69	25

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

O Specific Gravity is assumed

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 543.7-545.2 **Sample Number:** SS-51
Material Description: Brown Mottled with Light Gray Fat CLAY
Date: 12-20-07 **Natural Moisture:** 22.7
Liquid Limit: 69 **Plastic Limit:** 25 **USCS Class.:** CH
Testing Remarks: Specific Gravity is assumed
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
246.50	0.00	0.00	#10	0.00	100.0
48.69	0.00	0.00	#20	0.01	100.0
			#40	0.06	99.9
			#60	0.23	99.5
			#100	0.69	98.6
			#140	1.25	97.4
			#200	1.68	96.5

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 100.0
Weight of hydrometer sample =48.69
Hygroscopic moisture correction:
Moist weight and tare = 29.23
Dry weight and tare = 28.64
Tare weight = 15.52
Hygroscopic moisture = 4.5%
Table of composite correction values:

Temp., deg. C:	11.2	28.4
Comp. corr.:	-8.0	-4.0

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	23.7	50.0	44.9	0.0129	51.0	7.9	0.0256	95.3
5.00	23.5	49.0	43.9	0.0129	50.0	8.1	0.0164	93.1
15.00	23.5	45.0	39.9	0.0129	46.0	8.8	0.0098	84.6
30.00	23.5	43.0	37.9	0.0129	44.0	9.1	0.0071	80.4
60.00	23.6	40.0	34.9	0.0129	41.0	9.6	0.0051	74.0
240.00	24.3	35.0	30.0	0.0128	36.0	10.4	0.0027	63.8
1440.00	20.8	33.0	27.2	0.0133	34.0	10.7	0.0011	57.8

MACTEC, Inc.

Fractional Components

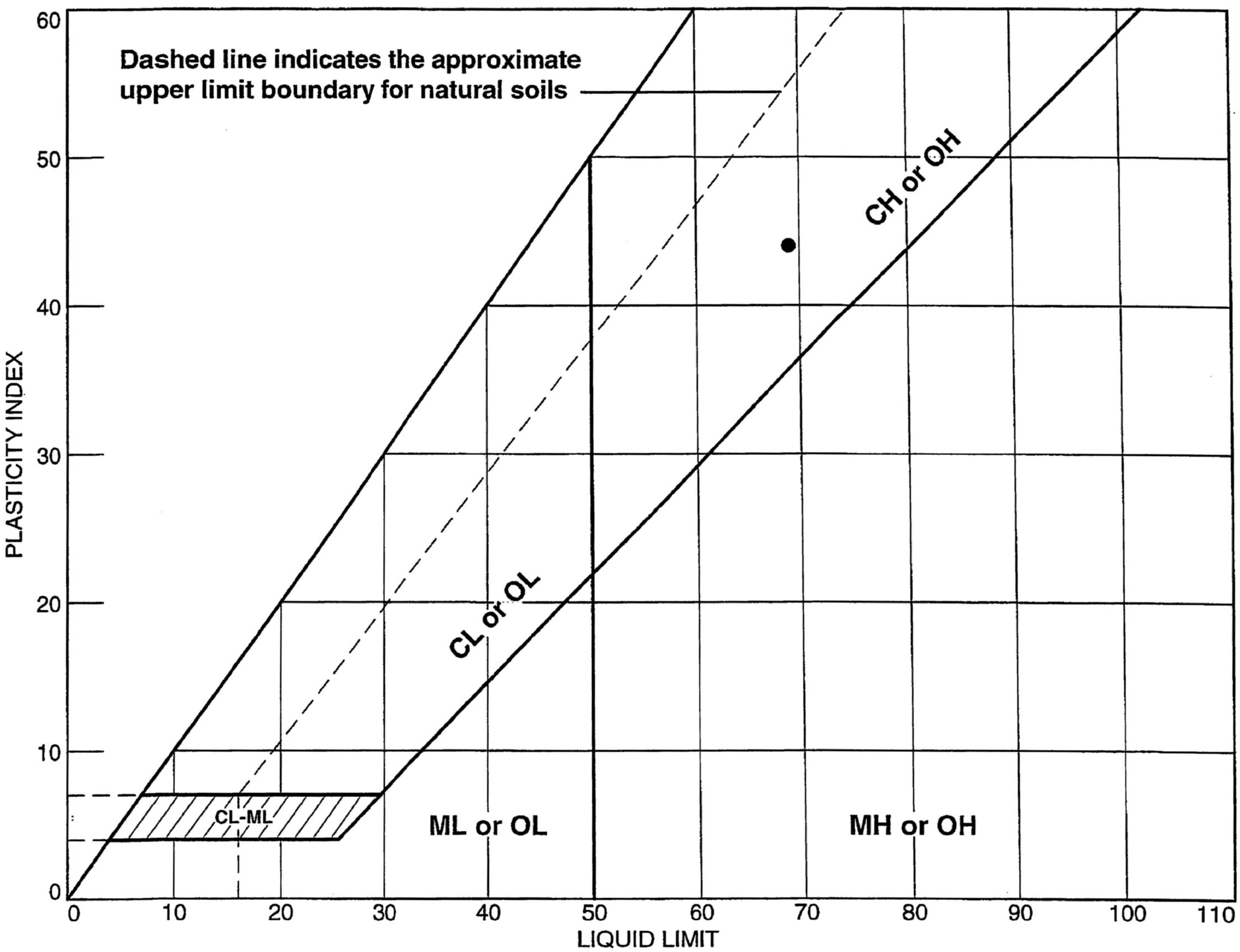
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.1	3.4	3.5	23.0	73.5	96.5

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
					0.0017	0.0069	0.0101	0.0134	0.0217

Fineness Modulus
0.02

MACTEC, Inc.

LIQUID AND PLASTIC LIMITS TEST REPORT ASTM D4318 (05)



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Boring B-2174A	SS-51	543.7-545.2	22.7	25	69	44	CH

MACTEC, Inc.

Raleigh, North Carolina

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

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

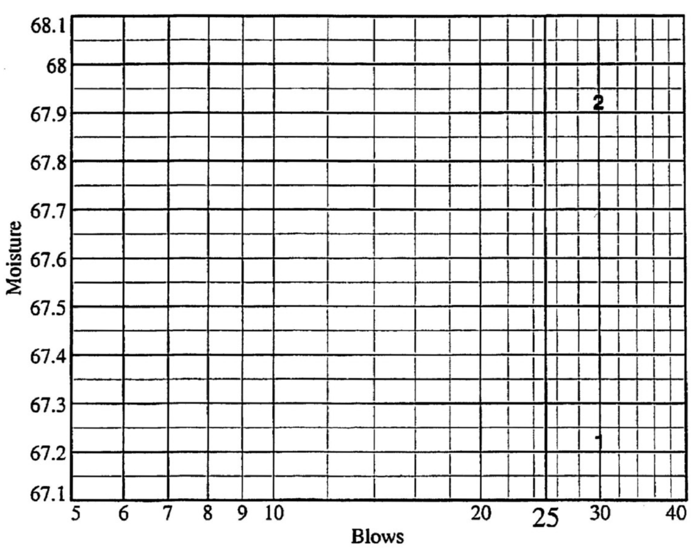
LIQUID AND PLASTIC LIMIT TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 543.7-545.2 **Sample Number:** SS-51
Material Description: Brown Mottled with Light Gray Fat CLAY
USCS: CH **AASHTO:** A-7-6(49)
Tested by: CS **Checked by:** LBJ

Liquid Limit Data

Run No.	1	2	3	4	5	6
Wet+Tare	31.54	33.79				
Dry+Tare	25.08	26.40				
Tare	15.47	15.52				
# Blows	30	30				
Moisture	67.2	67.9				



Liquid Limit= 69
Plastic Limit= 25
Plasticity Index= 44
Natural Moisture= 22.7
Liquidity Index= -0.1

Plastic Limit Data

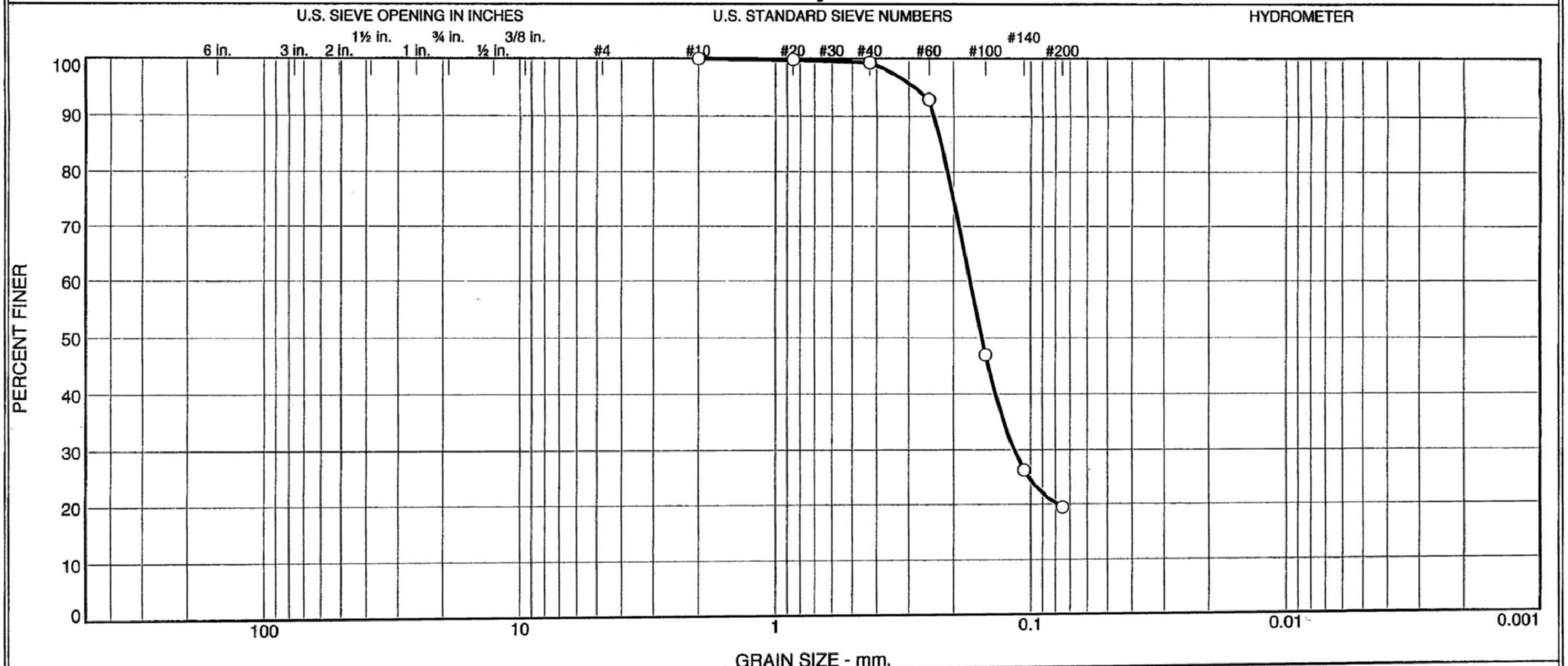
Run No.	1	2	3	4
Wet+Tare	22.32	22.61		
Dry+Tare	21.00	21.20		
Tare	15.57	15.58		
Moisture	24.3	25.1		

Natural Moisture Data

Wet+Tare	Dry+Tare	Tare	Moisture
124.88	103.51	9.18	22.7

MACTEC, Inc.

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	0.7	79.9	19.4	

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	Boring B-2174A	SS-52	558.6-560.1	12-20-07	SM	Light Gray Silty SAND (Visual)	ND	ND	ND

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ SIEVE ANALYSIS ONLY
ND = Not Determined

Tested By: CS **Checked By:** LBJ ZHU 4-28-08

GRAIN SIZE DISTRIBUTION TEST DATA

4/10/2008

Client: Bechtel
Project: Exelon Texas COL (Victoria)
Project Number: 6468071777
Location: Boring B-2174A
Depth: 558.6-560.1 **Sample Number:** SS-52
Material Description: Light Gray Silty SAND (Visual)
Date: 12-20-07 **Natural Moisture:** ND
Liquid Limit: ND **Plastic Limit:** ND **USCS Class.:** SM
Testing Remarks: SIEVE ANALYSIS ONLY
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
191.52	0.00	0.00	#10	0.00	100.0
103.53	0.00	0.00	#20	0.21	99.8
			#40	0.77	99.3
			#60	7.42	92.8
			#100	54.88	47.0
			#140	76.29	26.3
			#200	83.44	19.4

Fractional Components

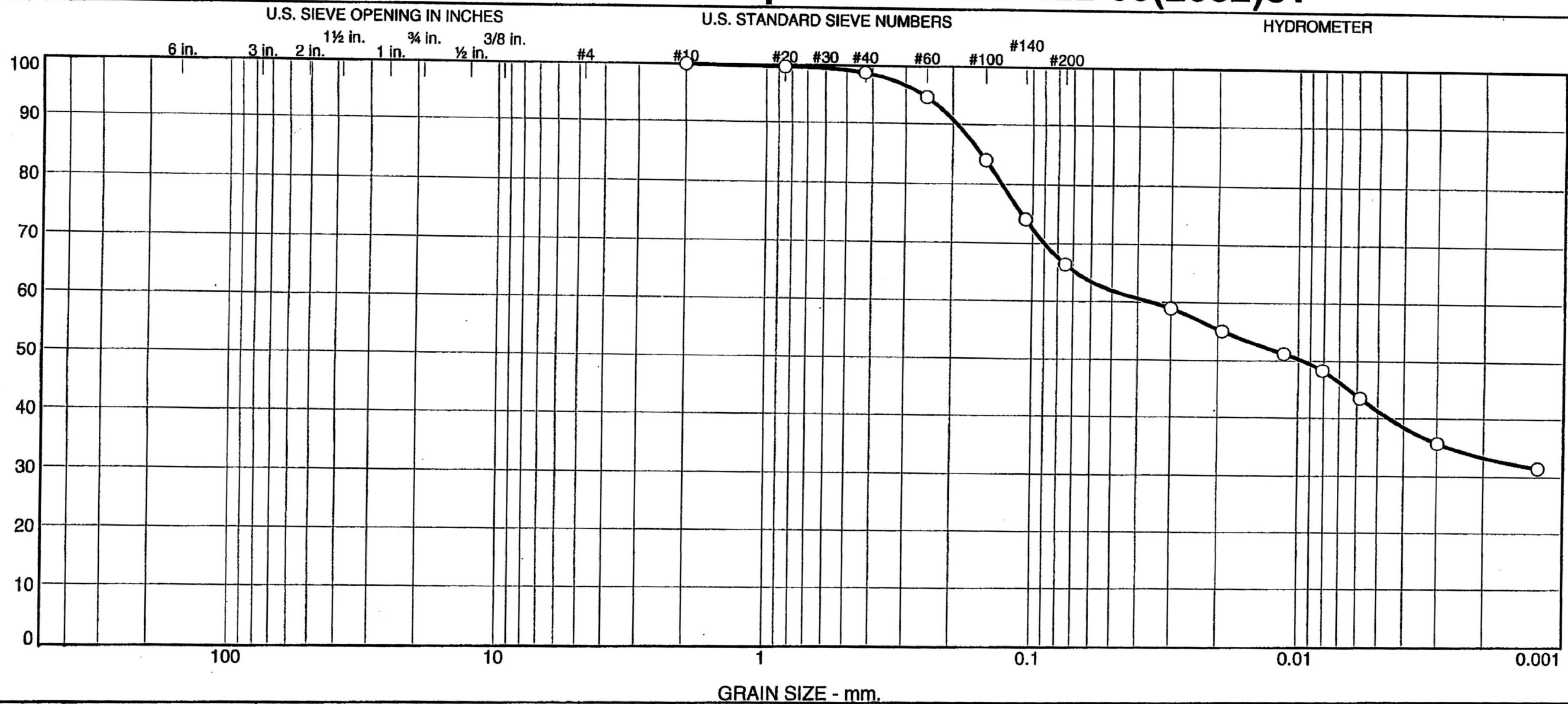
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.0	0.7	79.9	80.6			19.4

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
		0.0786	0.1159	0.1552	0.1723	0.2112	0.2237	0.2390	0.2869

Fineness Modulus
0.58

MACTEC, Inc.

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



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	0.0	0.0	1.3	32.4	25.1	41.2

	Source	Sample #	Depth/Elev.	Date Sampled	USCS	Material Description	NM %	LL	PL
○	Boring B-2174A	SS-53	578.7-580.2	1-05-08	CL	Pinkish Gray Sandy Lean CLAY	17.5	42	12

Client Bechtel

Project Exelon Texas COL (Victoria)

Project No. 6468071777 Figure NA

MACTEC, Inc.

Raleigh, North Carolina

○ Specific Gravity = 2.706 (ASTM D854-06)

Tested By: CS **Checked By:** LBJ DSC 1-26-08