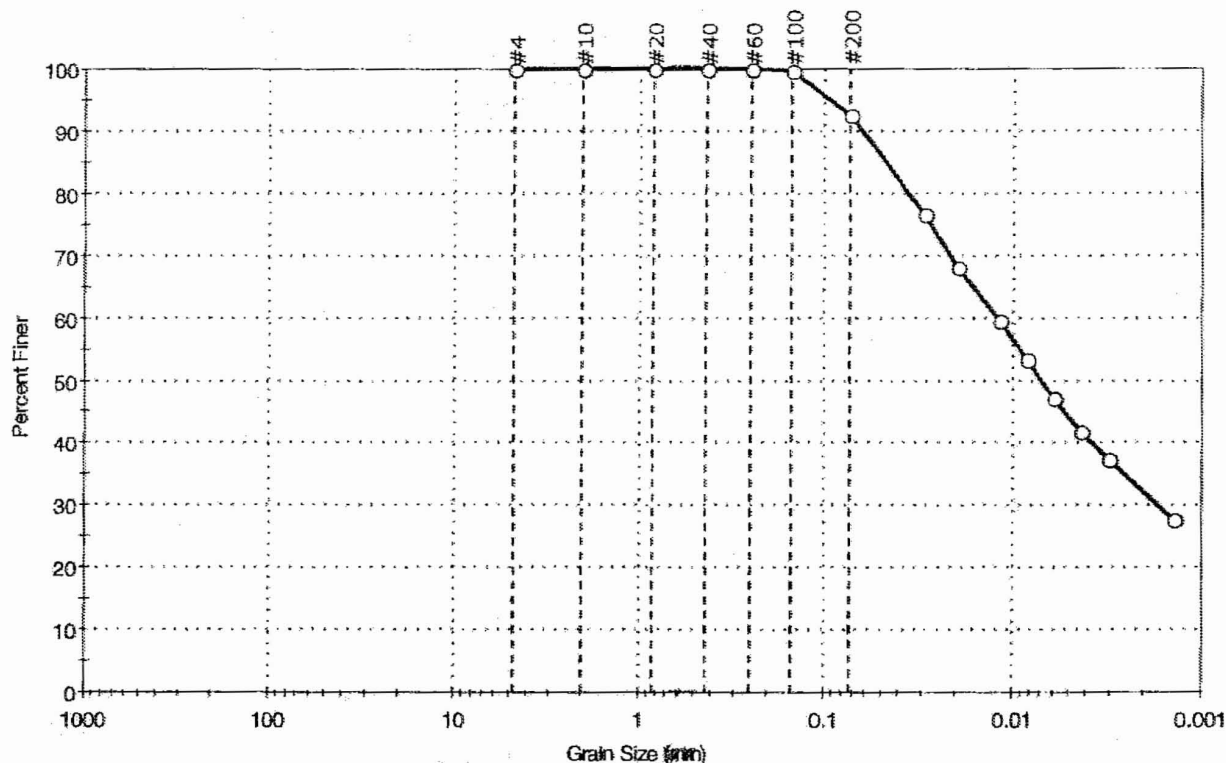


Client: Schnabel Engineering, Inc.
 Project: Subsurface Investigation Calvert Cliffs Nuclear PP
 Location: Calvert County, MD Project No: GTX-6880
 Boring ID: B-729 Sample Type: tube Tested By: md
 Sample ID: UD-1 Test Date: 10/31/06 Checked By: mcm
 Depth: 68.5-70.0 ft Test ID: 97948
 Test Comment: ---
 Sample Description: Moist, dark greenish gray organic clay with sand
 Sample Comment: ---

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	7.3	92.7

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	100		
#40	0.425	100		
#60	0.25	100		
#100	0.15	100		
#200	0.075	93		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0299	77		
---	0.0195	68		
---	0.0116	60		
---	0.0085	53		
---	0.0061	47		
---	0.0043	42		
---	0.0031	38		
---	0.0014	28		

Coefficients

$D_{85} = 0.0479$ mm $D_{30} = 0.0017$ mm
 $D_{60} = 0.0118$ mm $D_{15} = N/A$
 $D_{50} = 0.0070$ mm $D_{10} = N/A$
 $C_u = N/A$ $C_c = N/A$

Classification

ASTM organic clay (OH)
AASHTO Clayey Soils (A-7-6 (42))

Sample/Test Description

Sand/Gravel Particle Shape : ---
 Sand/Gravel Hardness : HARD

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Client: Schnabel Engineering, Inc.

Project: Subsurface Investigation Calvert Cliffs Nuclear PP

Location: Calvert County, MD

Project No: GTX-6880

Boring ID: B-732

Sample Type: tube

Tested By: sam

Sample ID: UD-1

Test Date: 09/28/06

Checked By: mcm

Depth: 15-17 ft

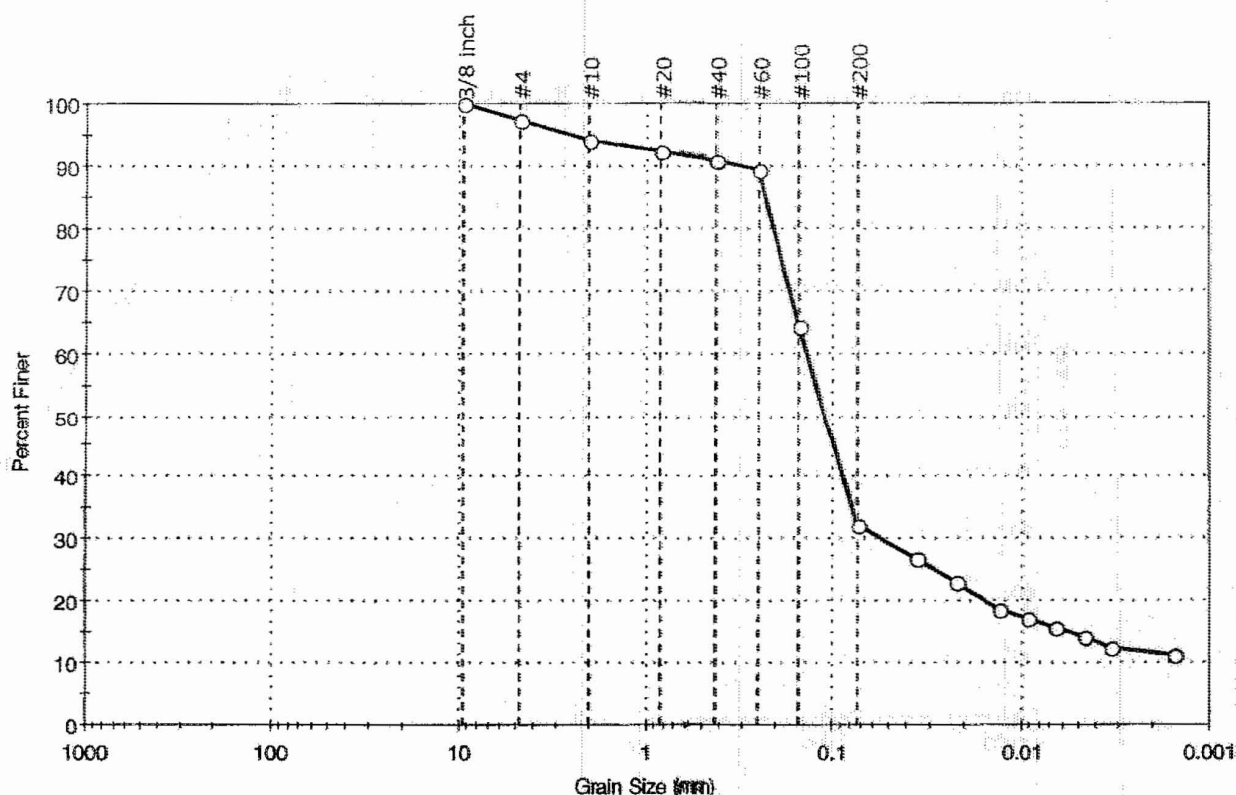
Test ID: 98021

Test Comment: ---

Sample Description: Moist, mottled pale yellow and brownish yellow clayey sand

Sample Comment: ---

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	2.7	65.3	32.0

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
3/8 inch	9.51	100		
#4	4.75	97		
#10	2.00	94		
#20	0.84	92		
#40	0.42	91		
#60	0.25	90		
#100	0.15	64		
#200	0.074	32		
Particle Size (mm)	Percent Finer	Spec. Percent	Complies	
0.0360	27			
0.0225	23			
0.0130	19			
0.0092	17			
0.0065	16			
0.0045	14			
0.0033	12			
0.0015	11			

Coefficients

$D_{85} = 0.2279$ mm $D_{30} = 0.0555$ mm
 $D_{60} = 0.1359$ mm $D_{15} = 0.0058$ mm
 $D_{50} = 0.1094$ mm $D_{10} = 0.0006$ mm
 $C_u = N/A$ $C_c = N/A$

Classification

ASTM Clayey sand (SC)

AASHTO Silty Gravel and Sand (A-2-4 (0))

Sample/Test Description

Sand/Gravel Particle Shape: ANGULAR

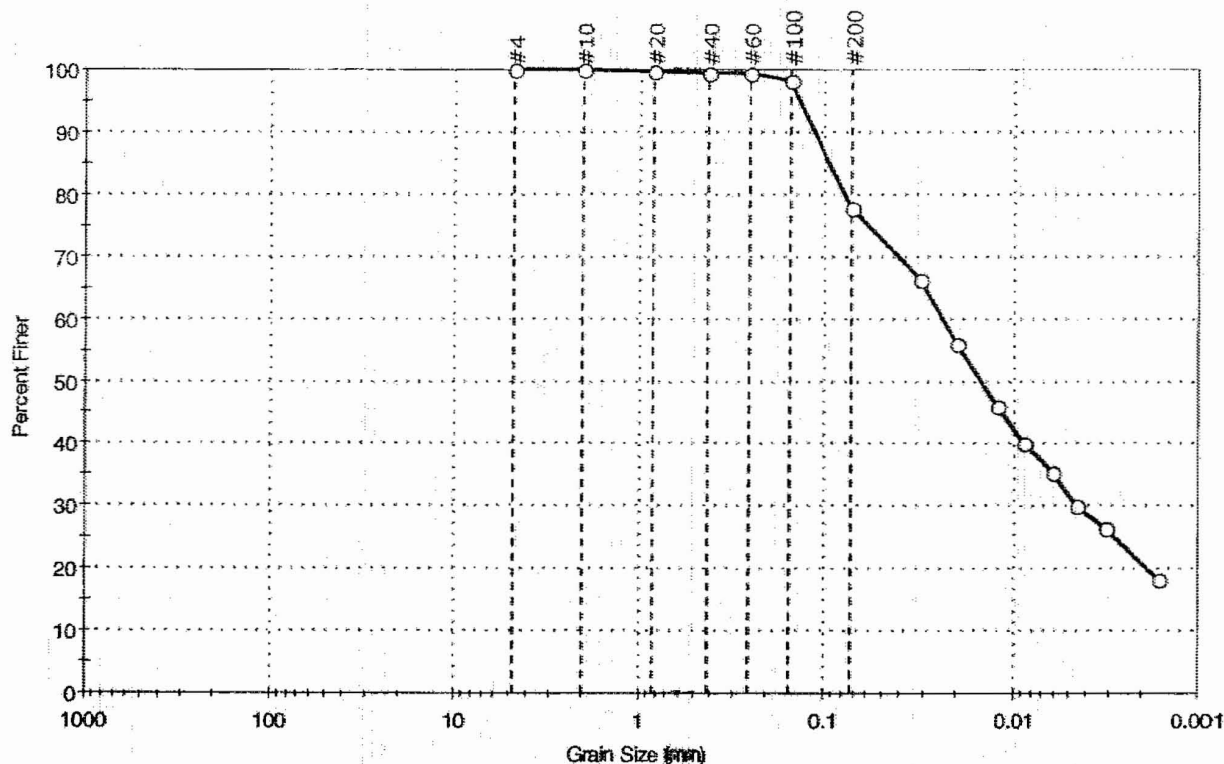
Sand/Gravel Hardness: HARD

GeoTesting express

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Client: Schnabel Engineering, Inc.	Project: Subsurface Investigation Calvert Cliffs Nuclear PP	Project No: GTX-6880
Location: Calvert County, MD	Boring ID: B-733	Sample Type: tube
Sample ID: UD-1	Test Date: 09/22/06	Tested By: sam
Depth: 23.5-25.5	Test ID: 98022	Checked By: mcm
Test Comment: ---		
Sample Description: Moist, dark olive gray clay with sand		
Sample Comment: ---		

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	22.0	78.0

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	100		
#40	0.425	99		
#60	0.25	98		
#100	0.15	78		
#200	0.075	66		
—	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
—	0.0321	56		
—	0.0200	46		
—	0.0122	35		
—	0.0087	30		
—	0.0062	27		
—	0.0045	18		
—	0.0032			
—	0.0016			

Coefficients

D ₈₅ = 0.0944 mm	D ₃₀ = 0.0044 mm
D ₆₀ = 0.0239 mm	D ₁₅ = N/A
D ₅₀ = 0.0148 mm	D ₁₀ = N/A
C _u = N/A	C _c = N/A

Classification

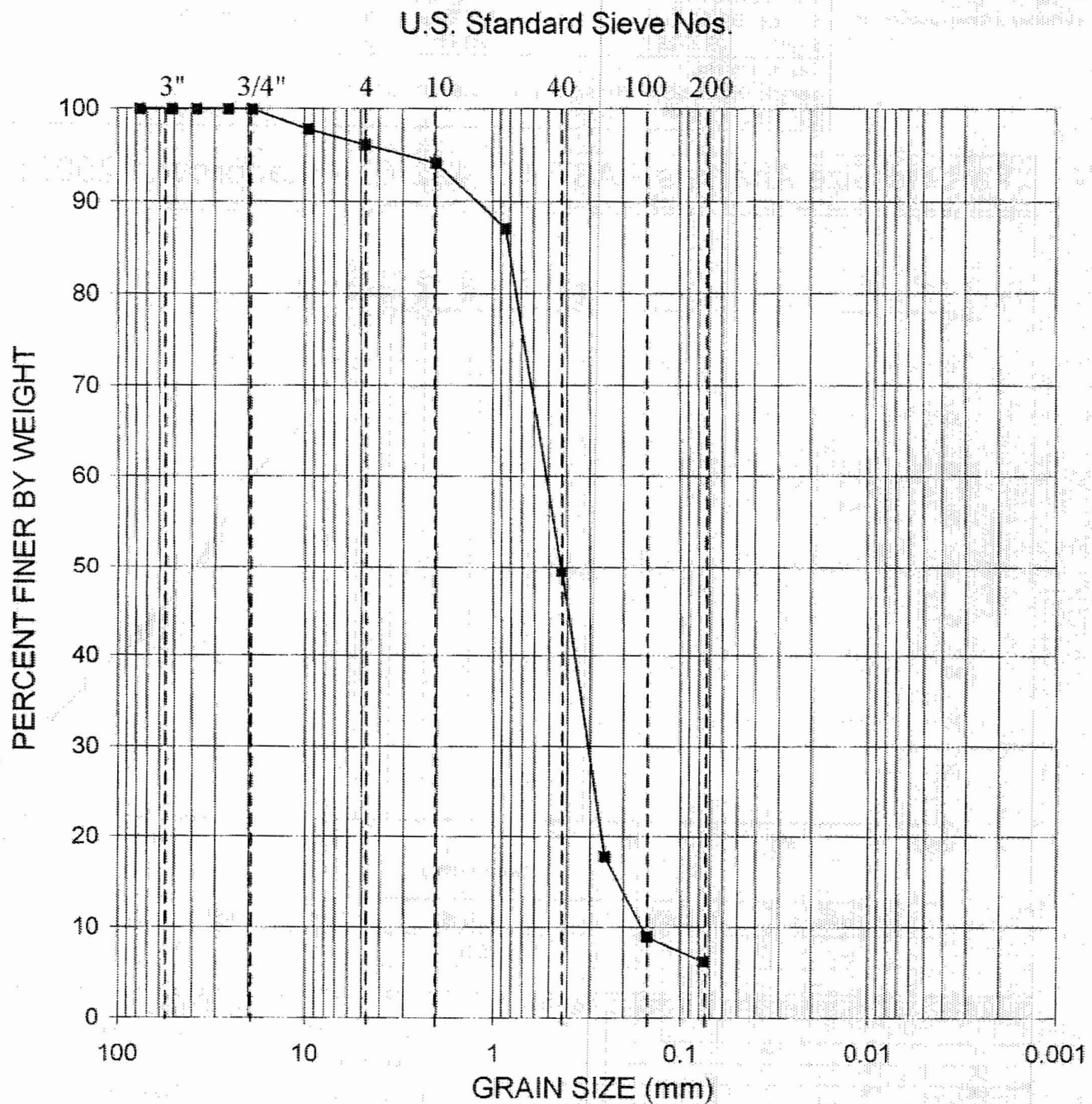
ASTM fat clay with sand (CH)

AASHTO Clayey Soils (A-7-6 (31))

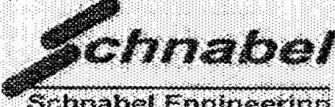
Sample/Test Description

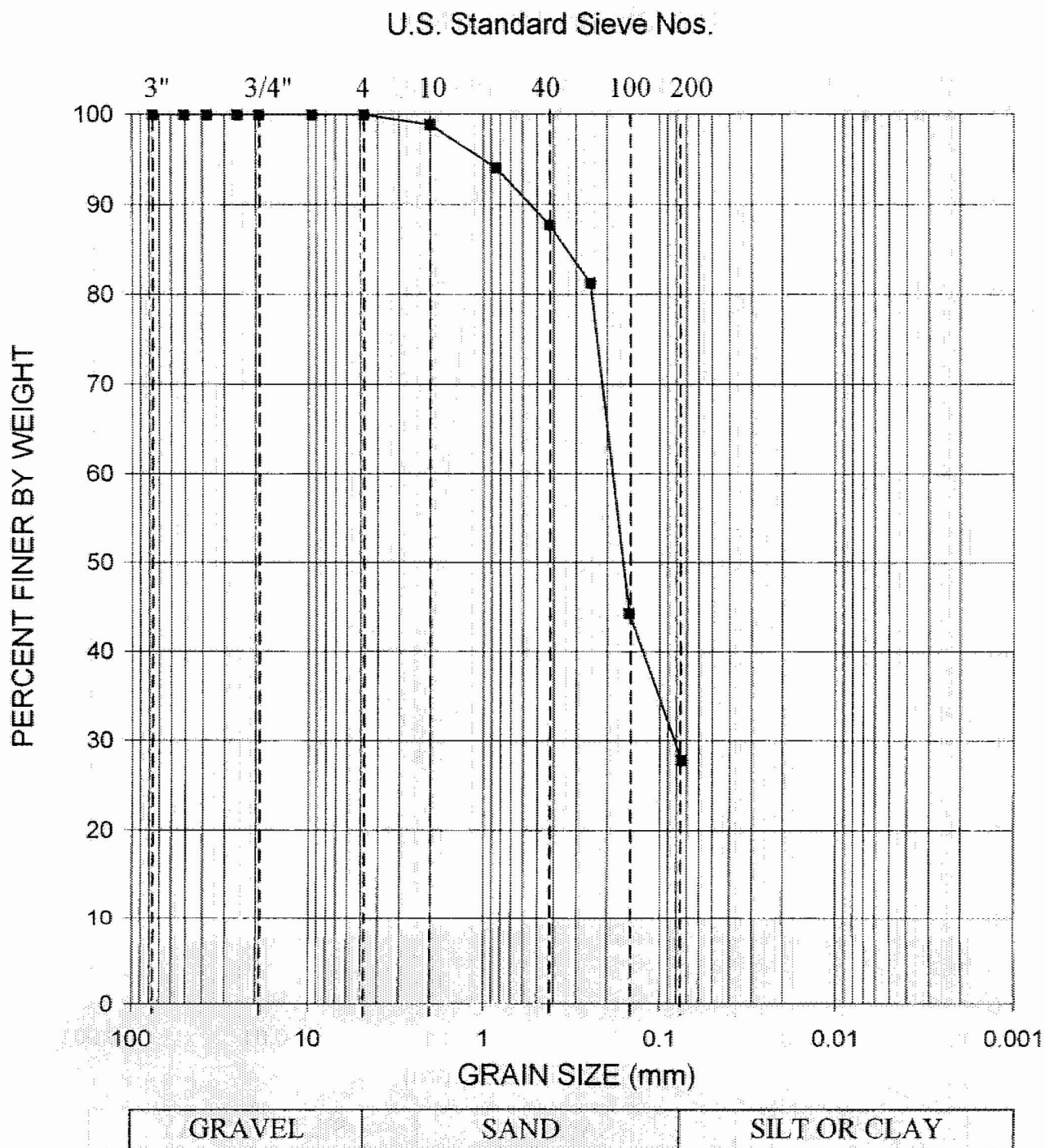
Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---



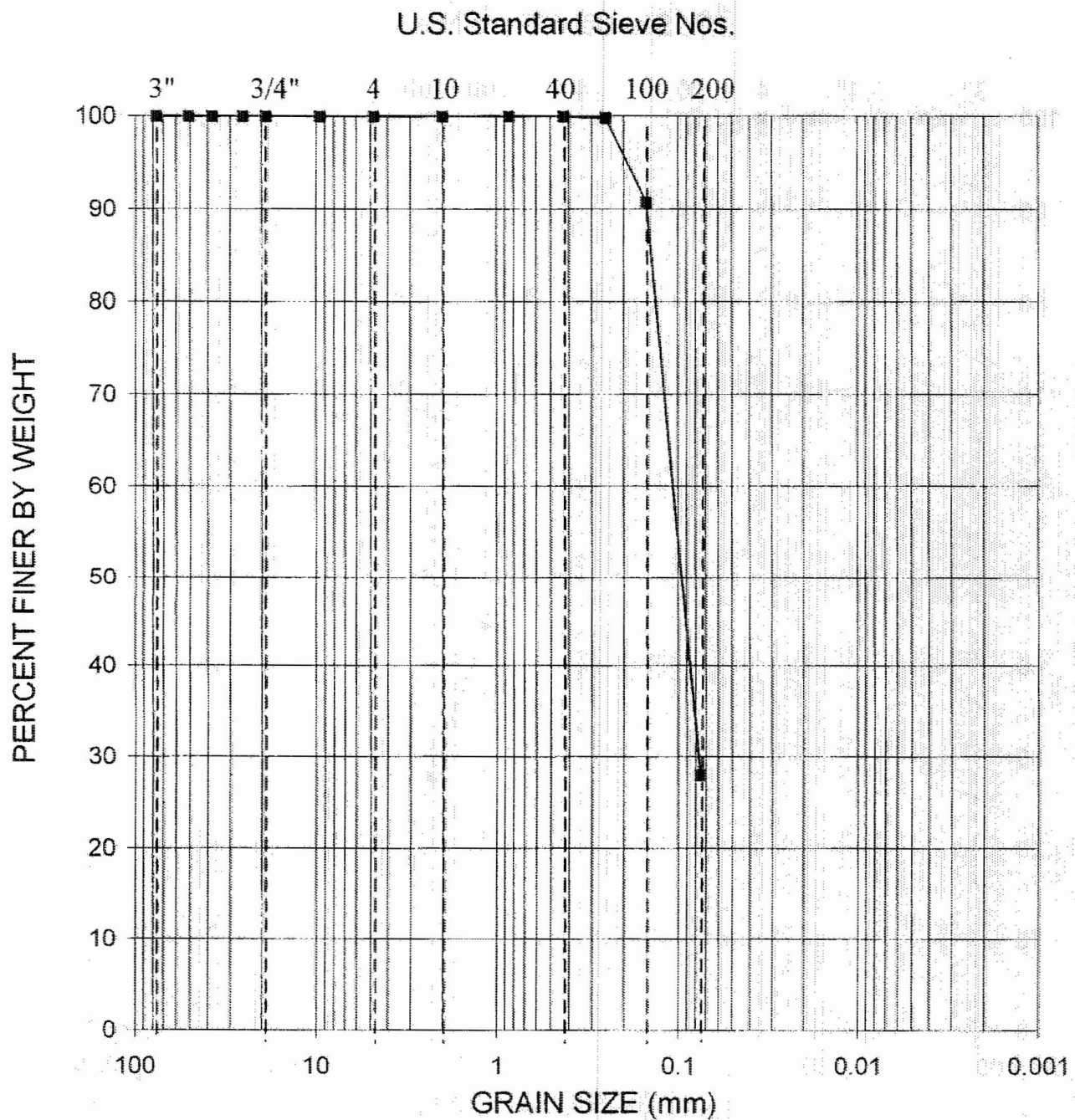
GRADATION CURVE
ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland				Contract No.:	06120048.00	Date:	9/22/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI			
B-735	2.5	Poorly Graded SAND, with silt, trace gravel, brown	SP-SM					



GRADATION CURVE
ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.:	06120048.00	Date:	9/22/2006
Boring No.:	Depth (ft)	Sample Description	Class	LL	PI		
B-735	10.5	Silty SAND, light brown	SM				



GRADATION CURVE

ASTM D422

Project	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland				Contract No.:	06120048.00	Date:	9/28/2006
Boring No.	Depth (ft)	Sample Description	Class	LL	PI			
B-735	18.5	Silty SAND, yellow-gray	SM	NP	NP			

Client: Schnabel Engineering, Inc.

Project: Subsurface Investigation Calvert Cliffs Nuclear PP

Location: Calvert County, MD

Project No: GTX-6880

Boring ID: B-735

Sample Type: tube

Tested By: sam

Sample ID: S-9

Test Date: 09/22/06

Checked By: mcm

Depth: 28-30 ft

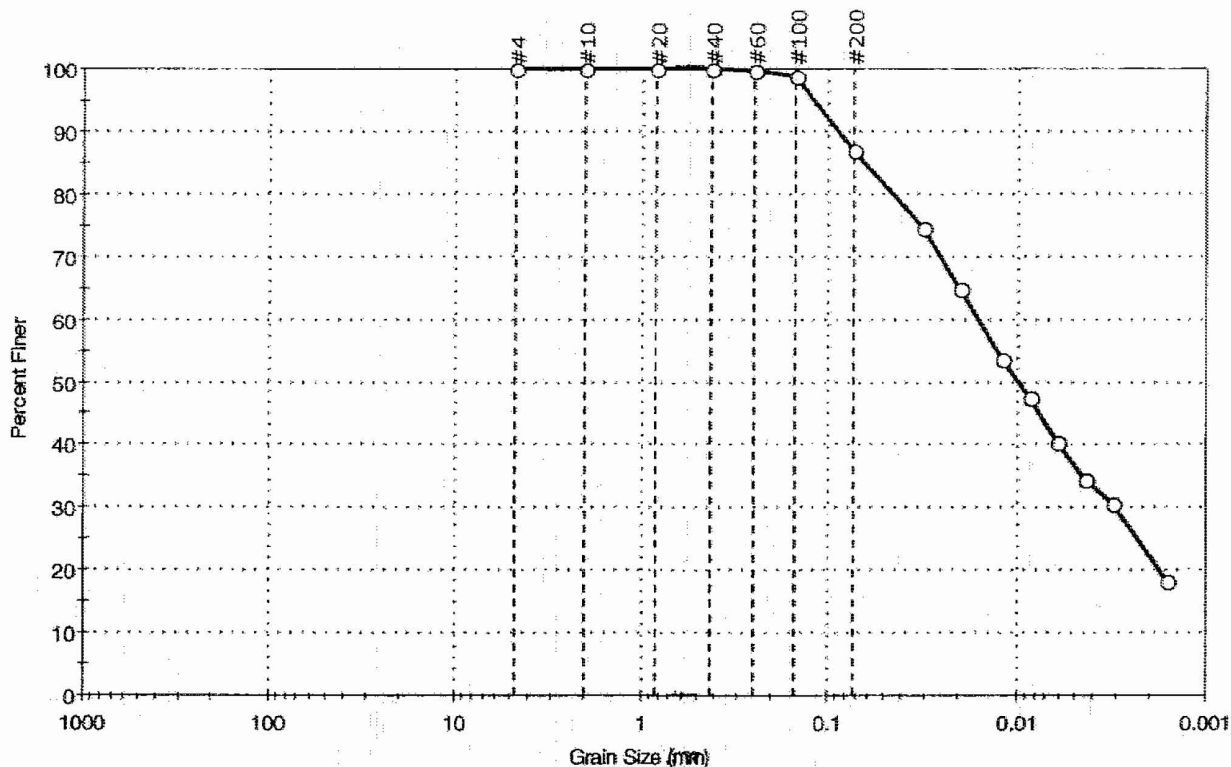
Test ID: 97987

Test Comment: ---

Sample Description: Moist, dark gray clay

Sample Comment: ---

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	12.9	87.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	100		
#40	0.425	100		
#60	0.25	100		
#100	0.15	99		
#200	0.075	87		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0310	75		
---	0.0198	65		
---	0.0118	54		
---	0.0085	47		
---	0.0061	41		
---	0.0044	34		
---	0.0031	31		
---	0.0016	18		

Coefficients

$D_{85} = 0.0639$ mm $D_{30} = 0.0030$ mm
 $D_{60} = 0.0159$ mm $D_{15} = N/A$
 $D_{50} = 0.0098$ mm $D_{10} = N/A$
 $C_u = N/A$ $C_c = N/A$

Classification

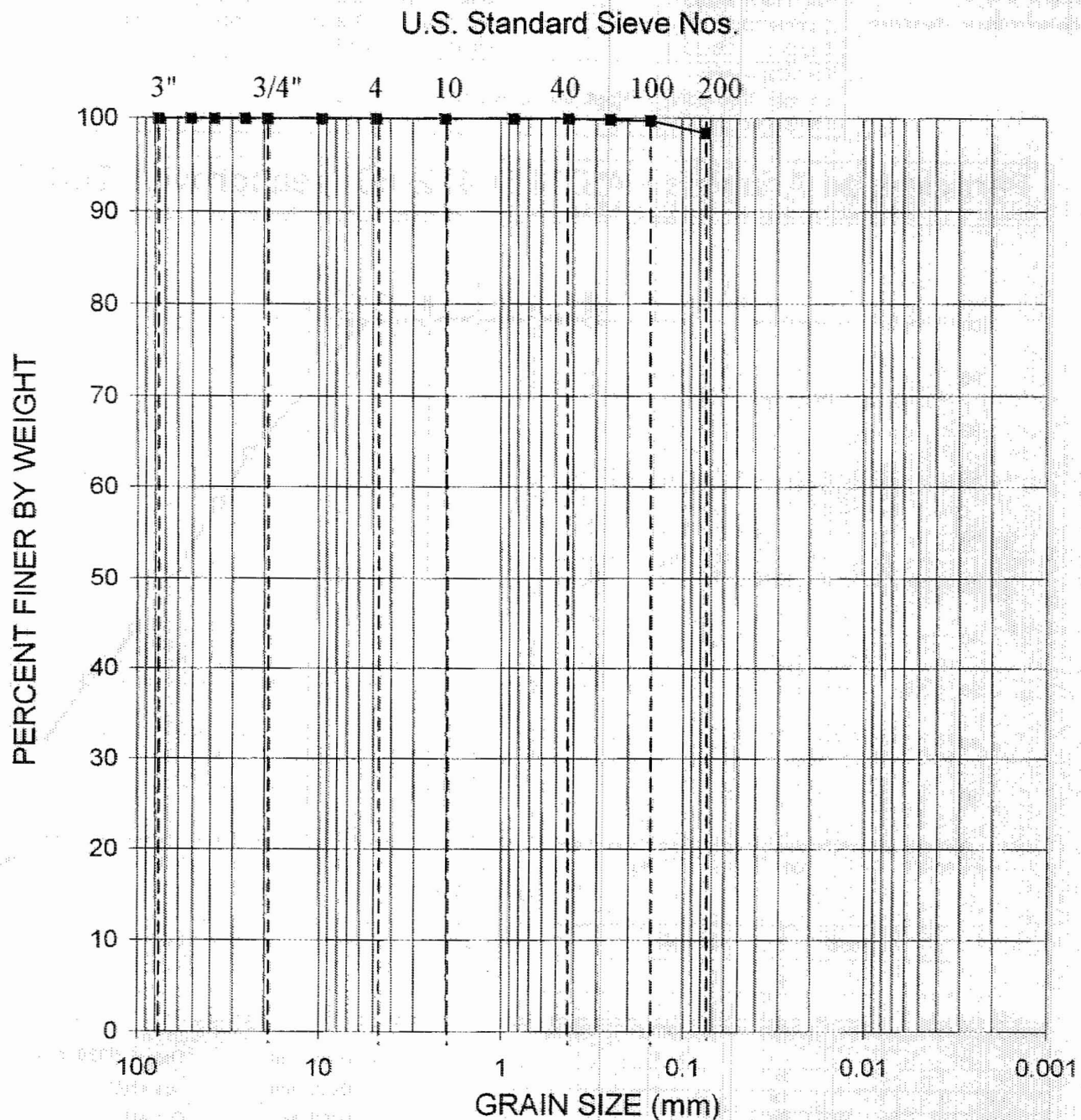
ASTM fat clay (CH)

AASHTO Clayey Soils (A-7-6 (35))

Sample/Test Description

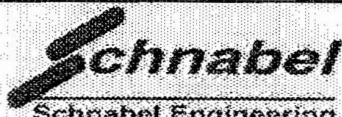
Sand/Gravel Particle Shape: ---

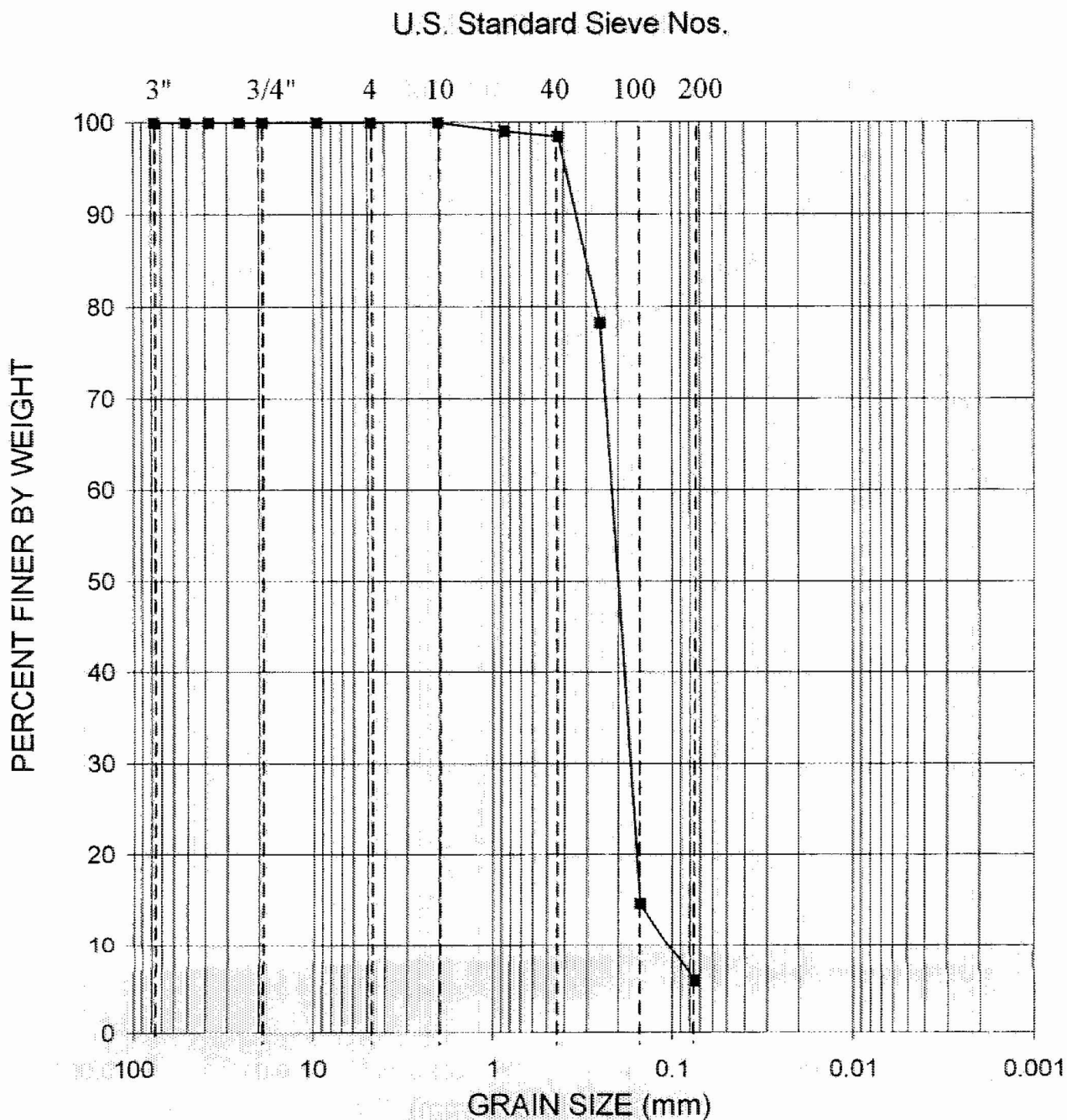
Sand/Gravel Hardness: ---



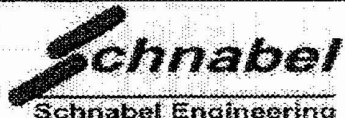
GRAVEL	SAND	SILT OR CLAY
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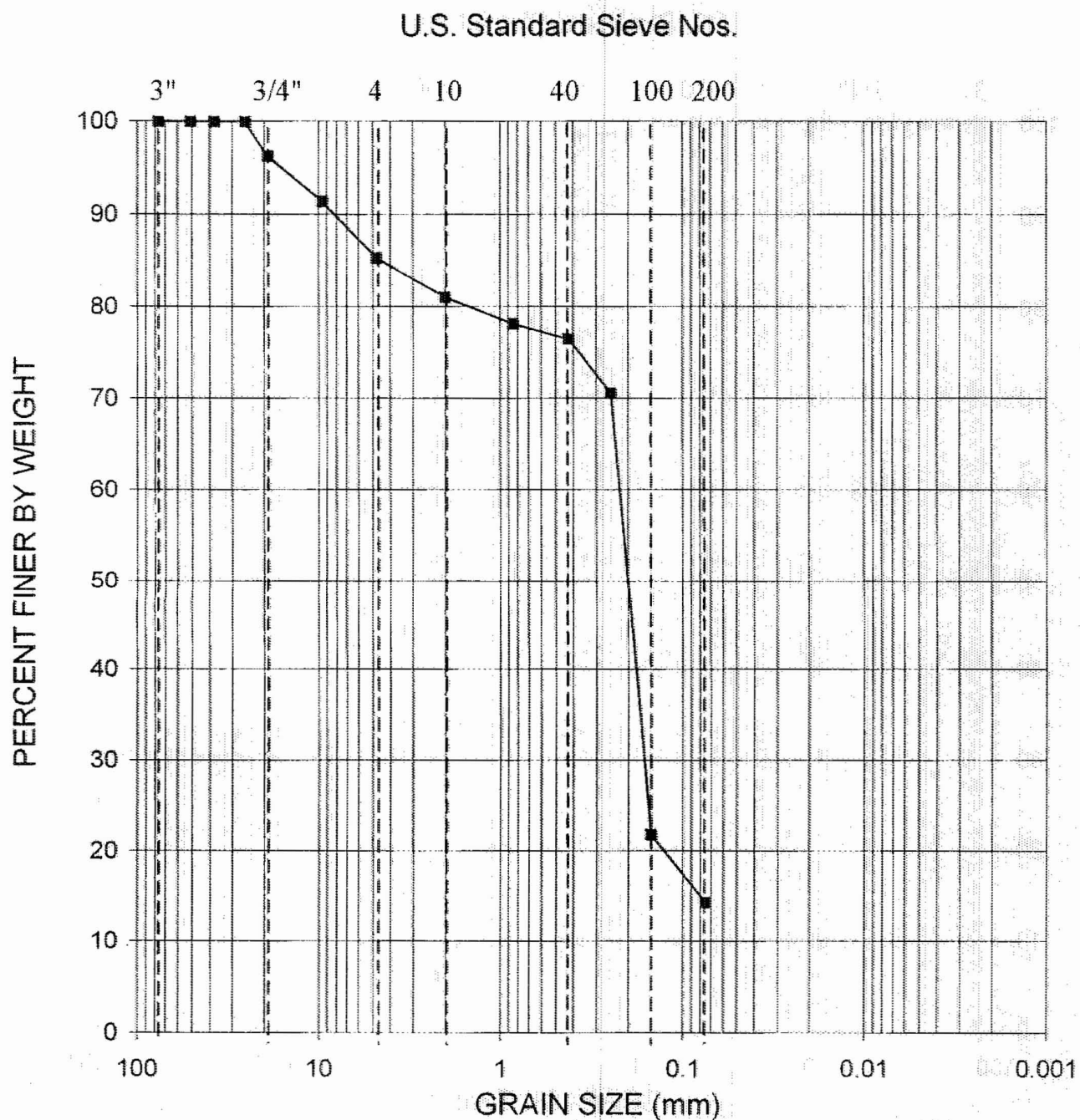
GRADATION CURVE
ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.:	06120048 00	Date:	9/28/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI		
B-735	43.5	FAT CLAY, trace sand, gray	CH	85	55		



GRADATION CURVE
ASTM D422

Project:		Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland		Contract No. 06120048.00		Date: 9/22/2006	
Boring No.	Depth (ft)	Sample Description		Class	LL	PI	
B-735	58.5	Poorly Graded SAND, with silt, gray		SP-SM			



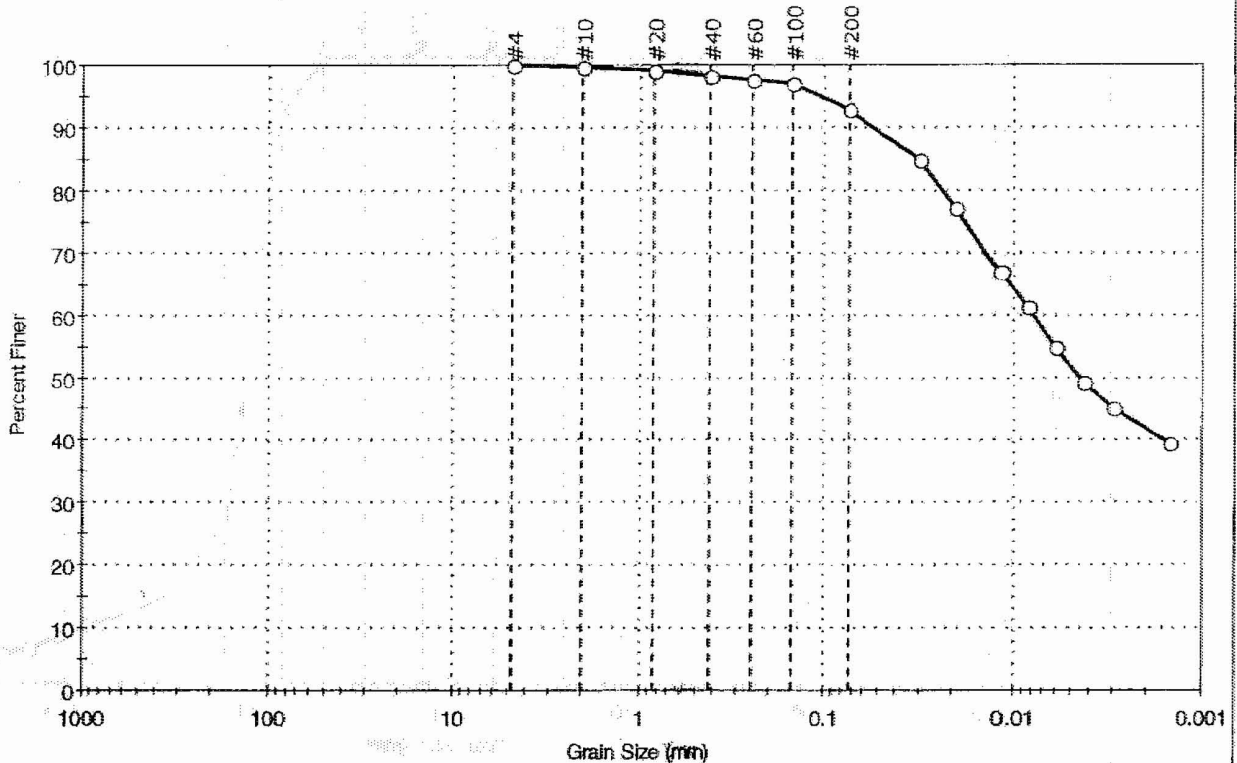
GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.:	06120048.00	Date:	9/22/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI		
B-735	73.5	Silty SAND, with shells, dark green	SM				

Client: Schnabel Engineering, Inc.	Project: Subsurface Investigation Calvert Cliffs Nuclear PP	Project No: GTX-6880
Location: Calvert County, MD	Boring ID: B-737	Sample Type: tube
Sample ID: UD-1	Test Date: 09/22/06	Tested By: sam
Depth: 10.5-12.5 ft	Test ID: 97988	Checked By: mcm
Test Comment: ---	Sample Description: Moist, very pale brown clay	Sample Comment: ---

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	7.1	92.9

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	99		
#40	0.425	98		
#60	0.25	98		
#100	0.15	97		
#200	0.075	93		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.036	85		
---	0.015	77		
---	0.0115	67		
---	0.0083	61		
---	0.0059	55		
---	0.0043	49		
---	0.0030	45		
---	0.0015	39		

Coefficients

D ₈₅ = 0.0303 mm	D ₃₀ = N/A
D ₆₀ = 0.0077 mm	D ₁₅ = N/A
D ₅₀ = 0.0045 mm	D ₁₀ = N/A
C _u = N/A	C _c = N/A

Classification

ASTM fat clay (CH)

AASHTO Clayey Soils (A-7-6 (61))

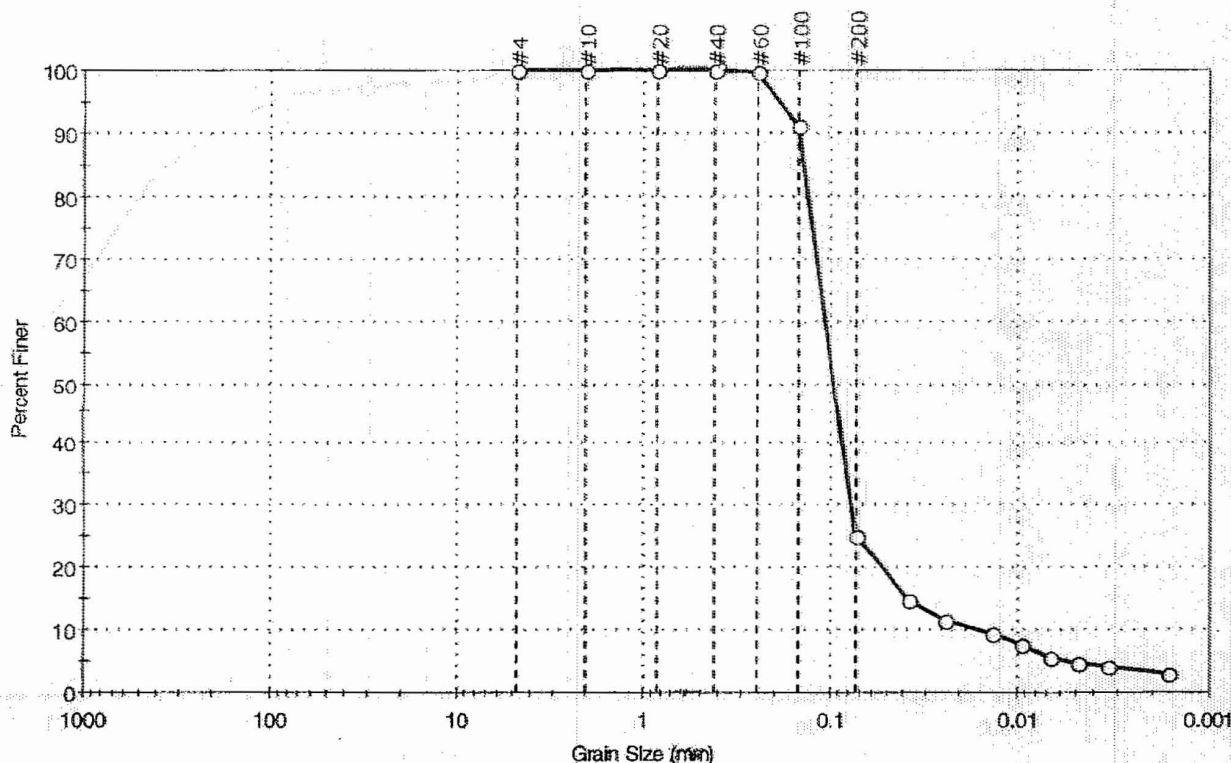
Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---

Client: Schnabel Engineering, Inc.	Project: Subsurface Investigation Calvert Cliffs Nuclear PP	Project No: GTX-6880
Location: Calvert County, MD	Boring ID: B-738	Sample Type: tube
Sample ID: UD-1	Test Date: 09/22/06	Tested By: sam
Depth: 35-37 ft	Test ID: 98023	Checked By: mcm
Test Comment: ---		
Sample Description: Moist, dark olive gray silty, clayey sand		
Sample Comment: ---		

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	—	74.9	25.1

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	100		
#40	0.425	100		
#60	0.25	100		
#100	0.15	91		
#200	0.075	25		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0375	15		
---	0.0237	12		
---	0.0136	10		
---	0.0094	6		
---	0.0068	6		
---	0.0048	5		
---	0.0034	4		
---	0.0017	3		

Coefficients

D ₈₅ = 0.1397 mm	D ₃₀ = 0.0779 mm
D ₆₀ = 0.1071 mm	D ₁₅ = 0.0387 mm
D ₅₀ = 0.0964 mm	D ₁₀ = 0.0153 mm
C _u = N/A	C _c = N/A

Classification

ASTM	Silty, clayey sand (SC-SM)
AASHTO	Silty Gravel and Sand (A-2-4 (0))

Sample/Test Description

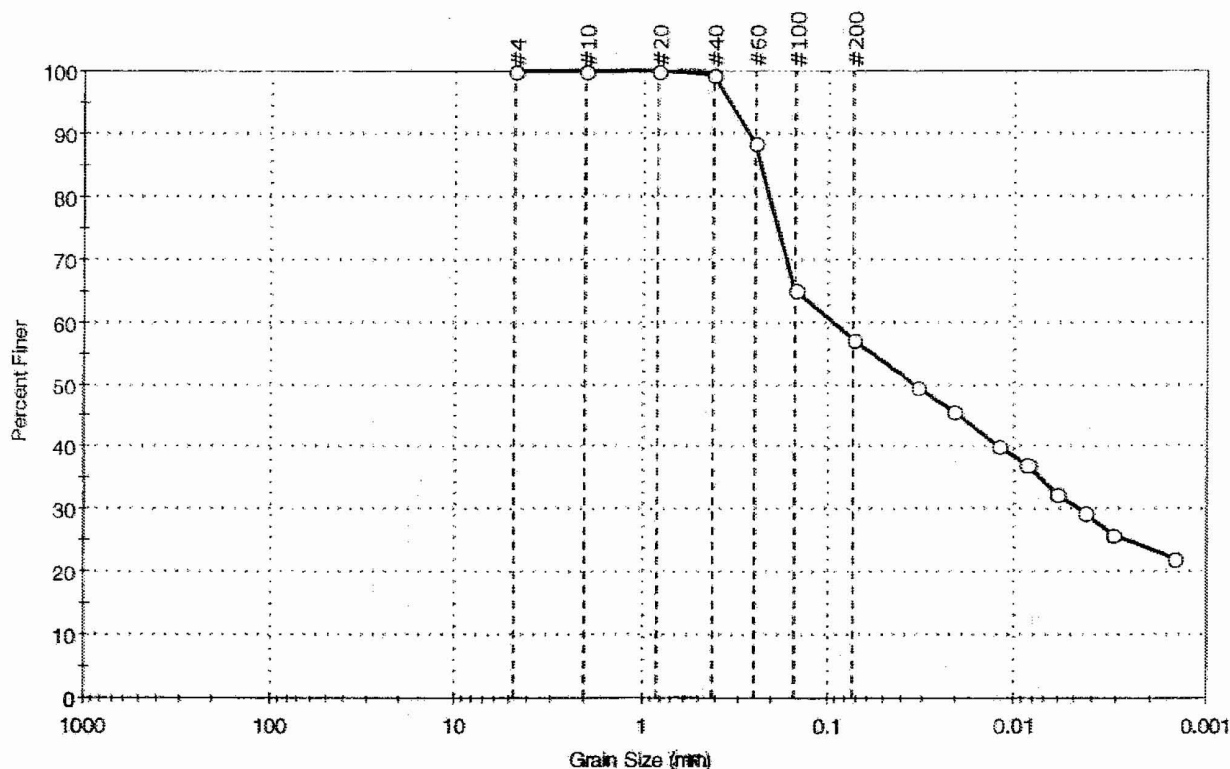
Sand/Gravel Particle Shape : ---
Sand/Gravel Hardness : ---

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Client:	Schnabel Engineering, Inc.	Project No:	GTX-6880
Project:	Subsurface Investigation Calvert Cliffs Nuclear PP		
Location:	Calvert County, MD		
Boring ID:	B-743	Sample Type:	tube
Sample ID:	UD-1	Test Date:	09/28/06
Depth:	23.5-25.5 ft	Test Id:	97989
Test Comment:	---	Tested By:	sam
Sample Description:	Moist, mottled pale yellow, weak red, and brownish yellow clay with sand	Checked By:	mcm
Sample Comment:	---		

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	42.8	57.2

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.85	100		
#40	0.425	99		
#60	0.25	65		
#100	0.15	55		
#200	0.075	57		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0328	50		
---	0.0207	46		
---	0.0121	40		
---	0.0086	37		
---	0.0062	32		
---	0.0044	30		
---	0.0031	26		
---	0.0015	22		

Coefficients

D ₈₅ = 0.2310 mm	D ₃₀ = 0.0046 mm
D ₆₀ = 0.0942 mm	D ₁₅ = N/A
D ₅₀ = 0.0343 mm	D ₁₀ = N/A
C _u = N/A	C _c = N/A

Classification

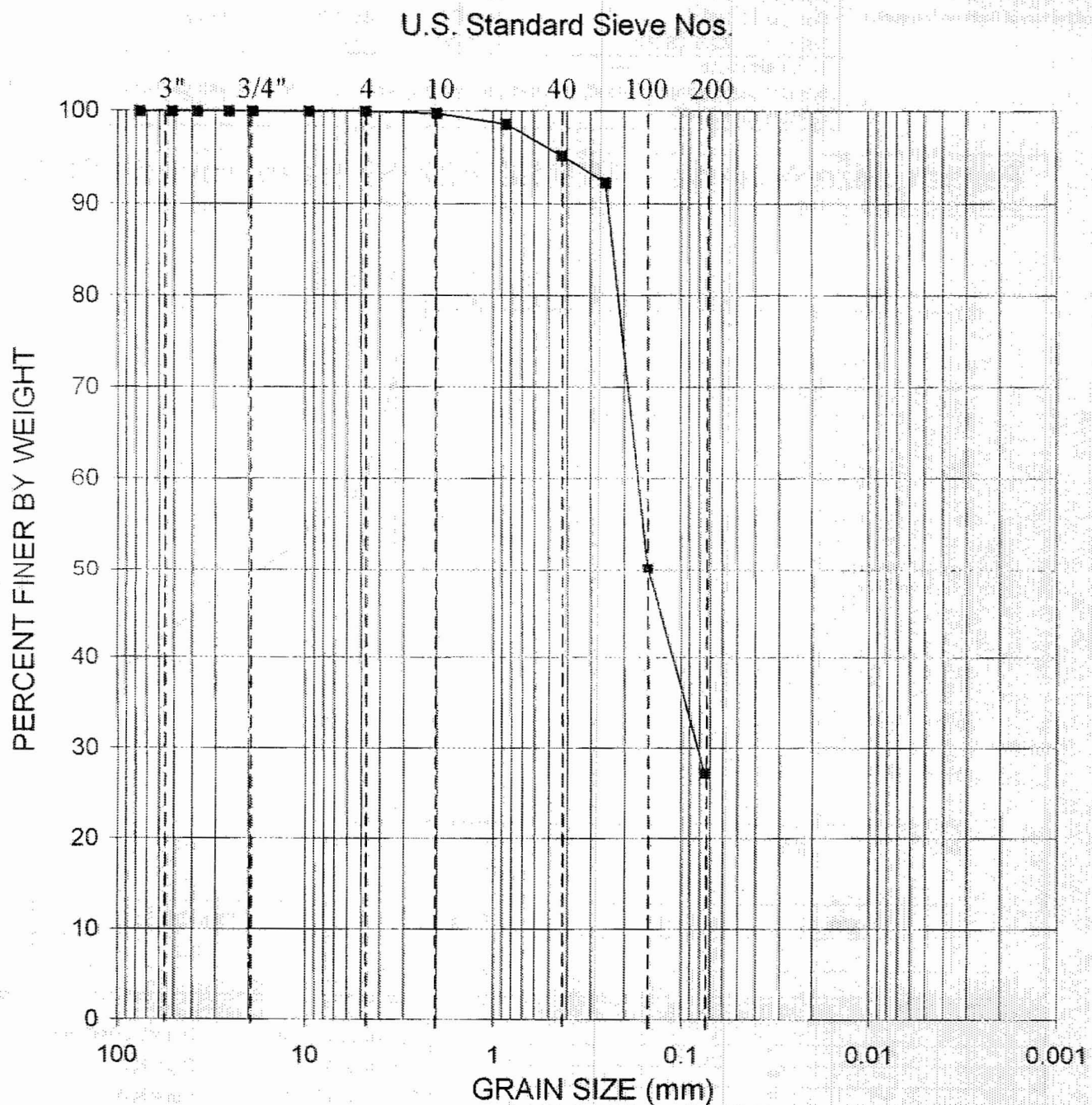
ASTM Sandy lean clay (CL)

AASHTO Clayey Soils (A-6 (13))

Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : HARD

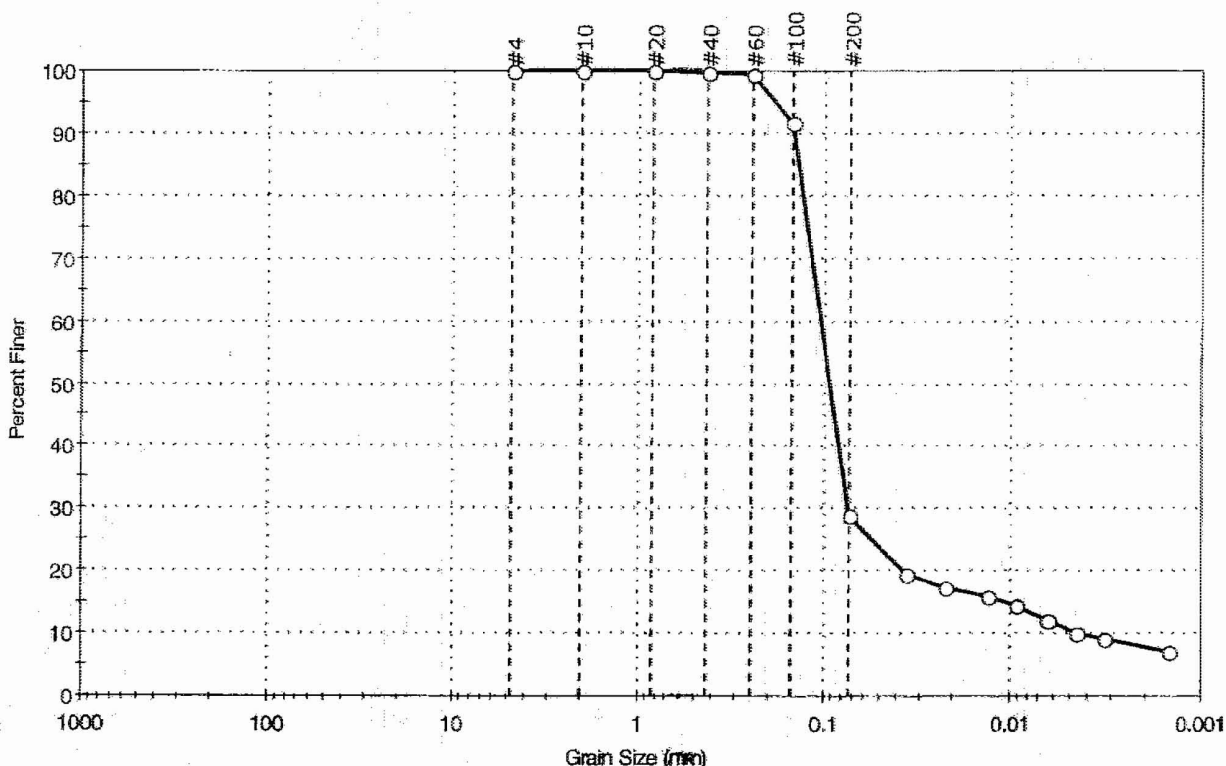


GRADATION CURVE
ASTM D422

Project:		Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.: 06120048.00		Date: 10/4/2006	
Boring No.	Depth (ft)	Sample Description		Class	LL	PI		
B-746	7.5	Silty SAND, red-brown		SM				

Client: Schnabel Engineering, Inc.	Project: Subsurface Investigation Calvert Cliffs Nuclear PP	Project No: GTX-6880
Location: Calvert County, MD	Boring ID: B-746	Sample Type: tube
Sample ID: S-6	Test Date: 11/08/06	Tested By: sam
Depth: 13.5-15.5 ft	Test Id: 102400	Checked By: mcm
Test Comment: ---		
Sample Description: Moist, dark olive gray silty, clayey sand		
Sample Comment: ---		

Particle Size Analysis - ASTM D 422-63 (reapproved 2002)



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	—	71.2	28.8

Sieve Name	Sieve Size, mm	Percent Finer	Spec. Percent	Complies
#4	4.75	100		
#10	2.00	100		
#20	0.84	100		
#40	0.42	100		
#60	0.25	99		
#100	0.15	92		
#200	0.074	29		
Particle Size (mm)				
—	0.0362	19		
—	0.0220	18		
—	0.0132	16		
—	0.0082	15		
—	0.0065	12		
—	0.0046	10		
—	0.0033	9		
—	0.0015	7		

Coefficients

D ₈₅ = 0.1383 mm	D ₃₀ = 0.0750 mm
D ₆₀ = 0.1047 mm	D ₁₅ = 0.0103 mm
D ₅₀ = 0.0937 mm	D ₁₀ = 0.0047 mm
C _u = N/A	C _c = N/A

Classification

ASTM Silty, clayey sand (SC-SM)

AASHTO Silty Gravel and Sand (A-2-4 (0))

Sample/Test Description

Sand/Gravel Particle Shape : ---

Sand/Gravel Hardness : ---