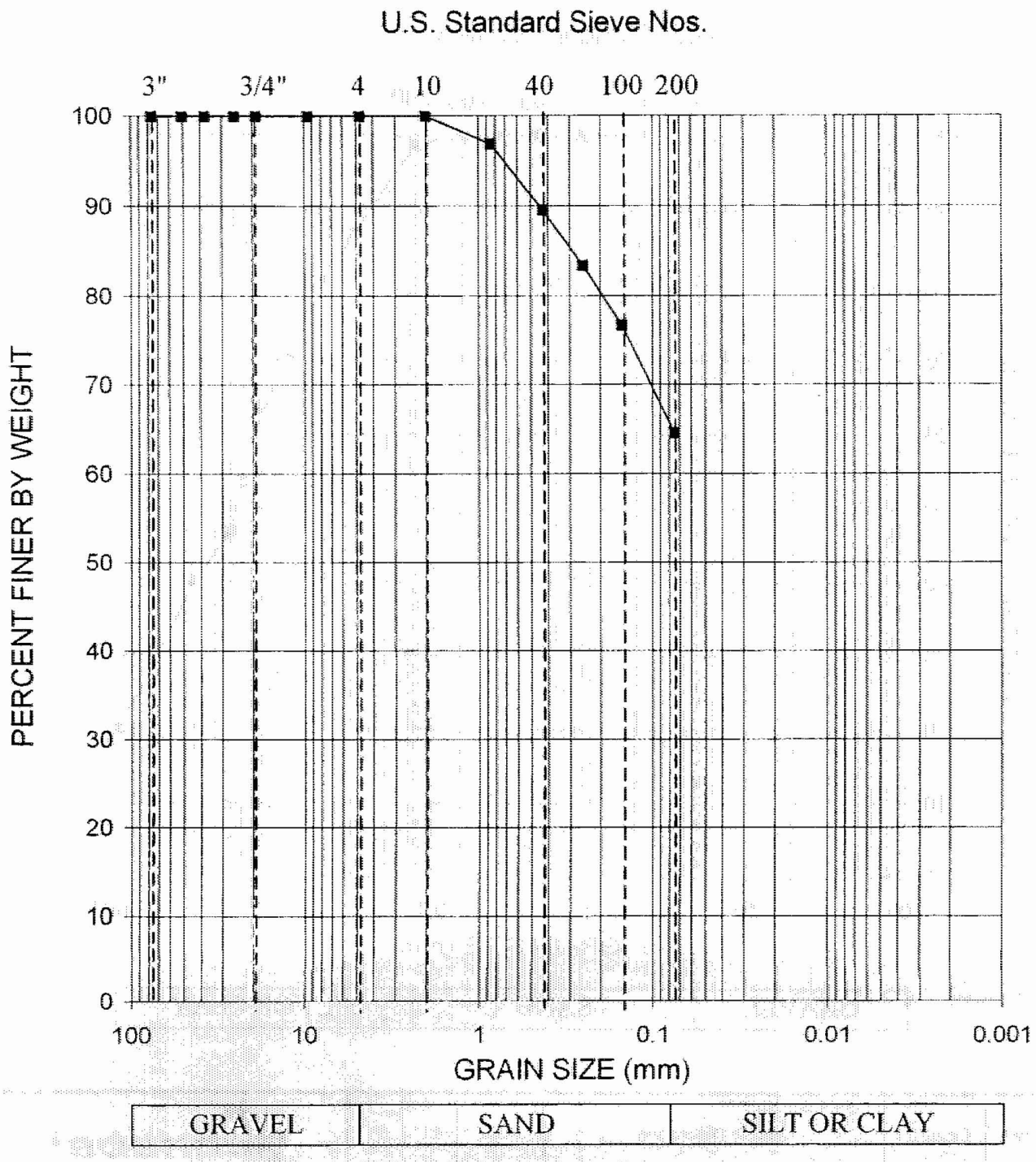

GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.	06120048.00	Date:	9/11/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-401	218.5	Sandy ELASTIC SILT, dark green	MH		

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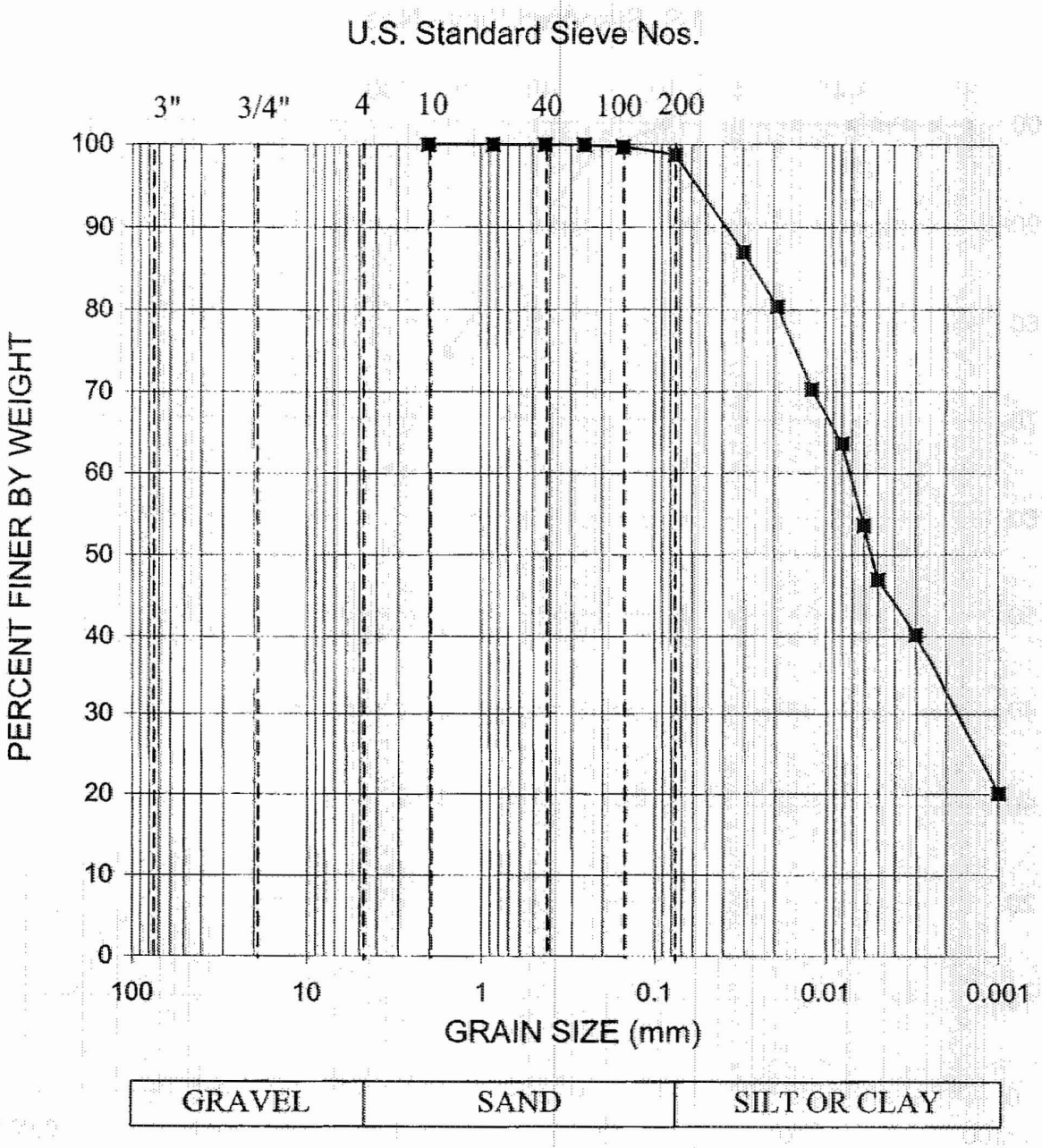

Key	Sample	Depth(ft.)	Sample Description	Class.	LL	PI
■	B-401	243.5-244.4	ELASTIC SILT - light gray	MH	140	75
▲						
●						

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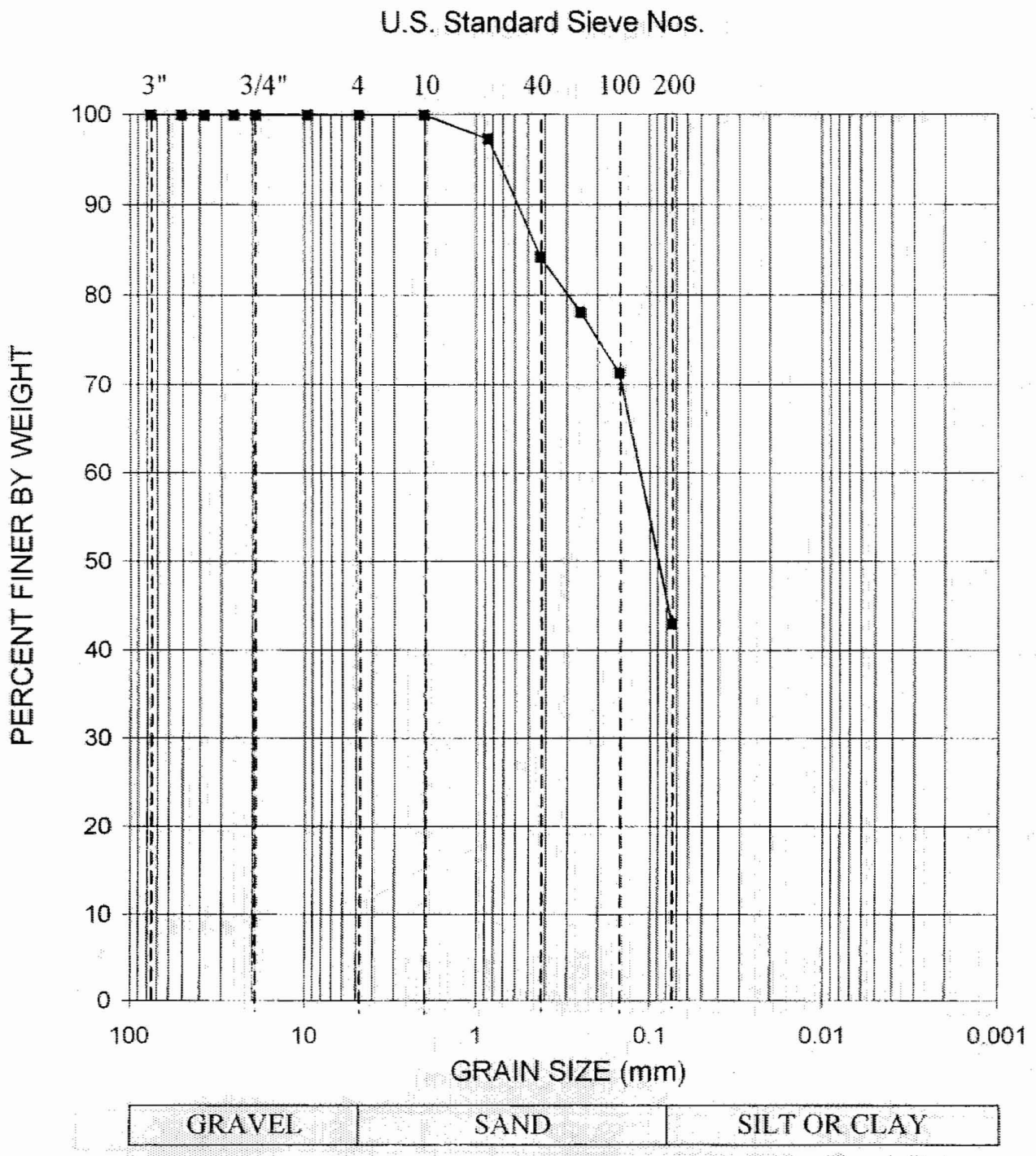
GRADATION CURVES

Project: Calvert Cliffs Nuclear Power Plant

Contract No. 06120048

Date: 11/13/06 Method: ASTM D422



GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/11/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-401	268.5	Silty SAND, dark green	SM		

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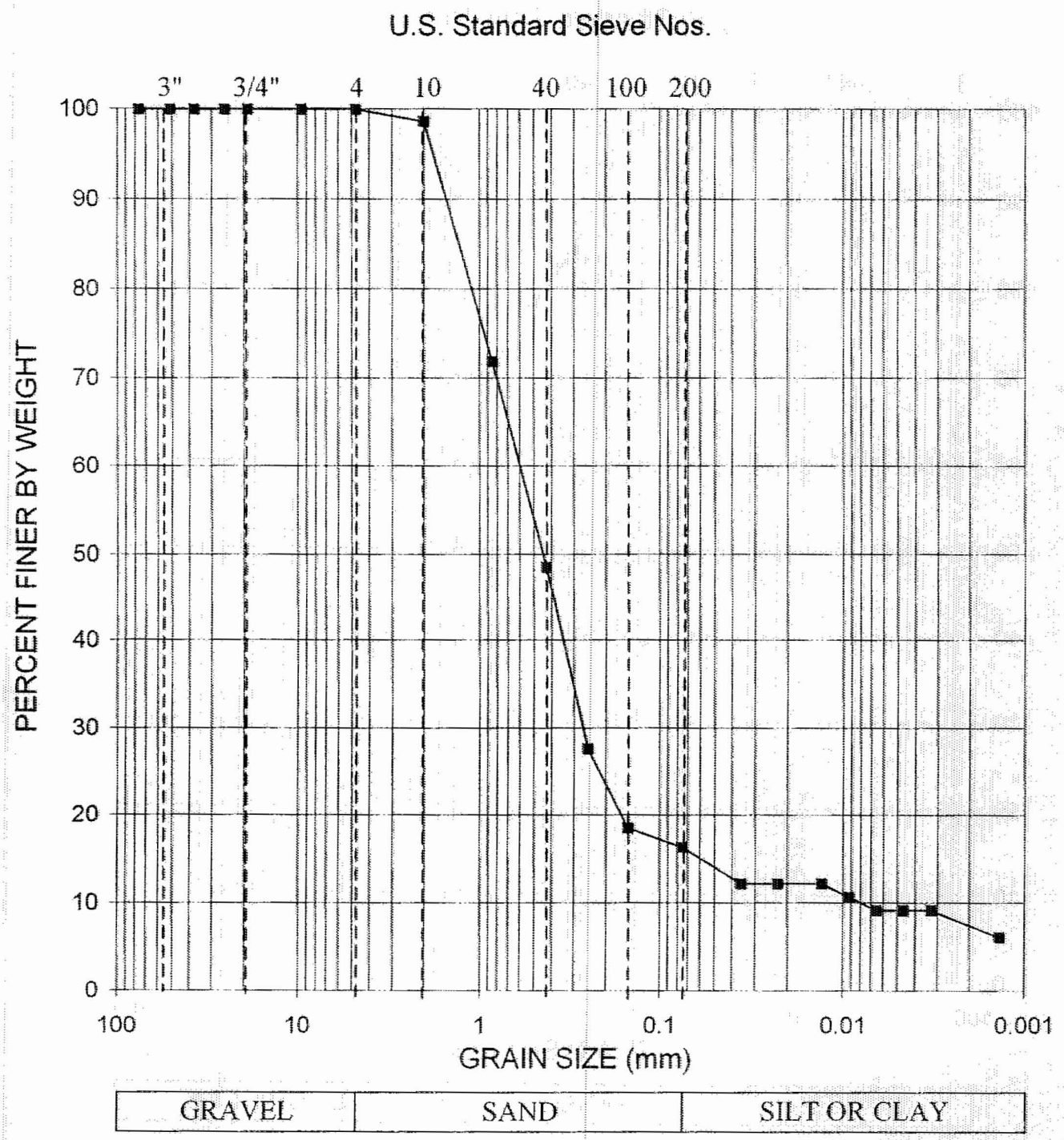

GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland		Contract No.:	06120048.00	Date:	9/12/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI	
B-401	307.5	Silty SAND, dark green	SM	57	15	

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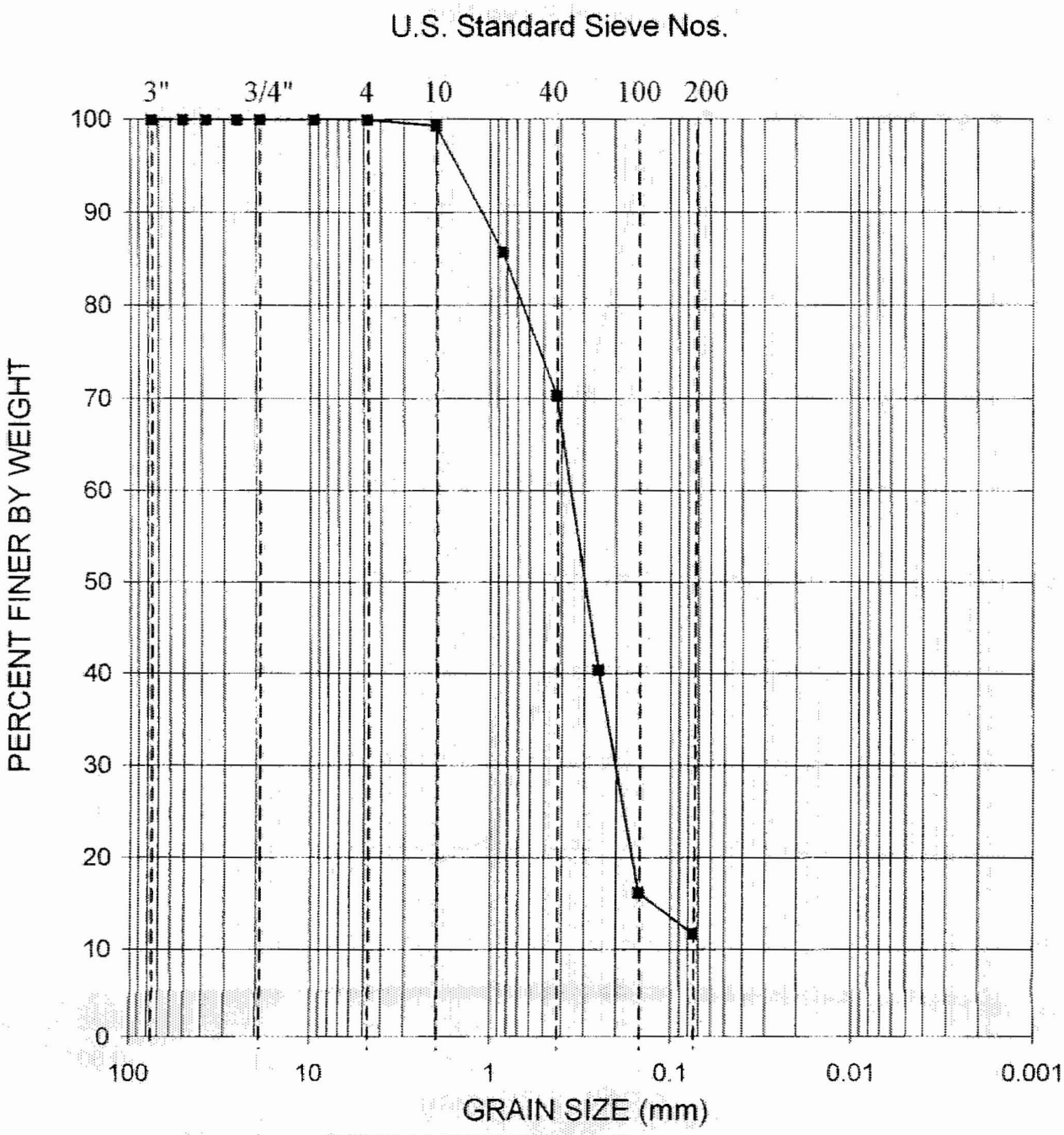

GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/11/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-401	368.5	Poorly Graded SAND, with silt, black	SP-SM		

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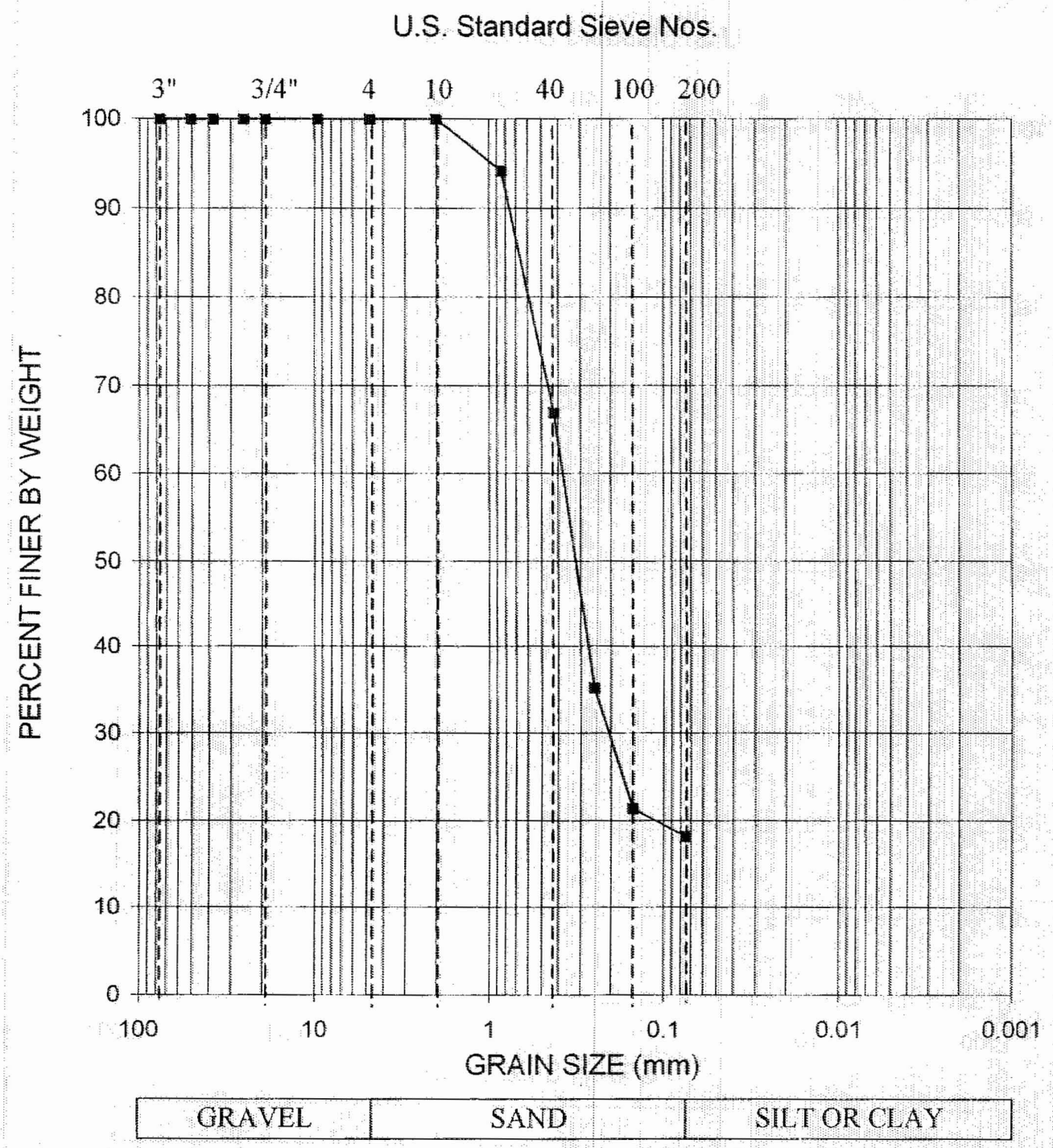

GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.	06120048.00	Date:	9/11/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-401	400.0	Silty SAND, black	SM		

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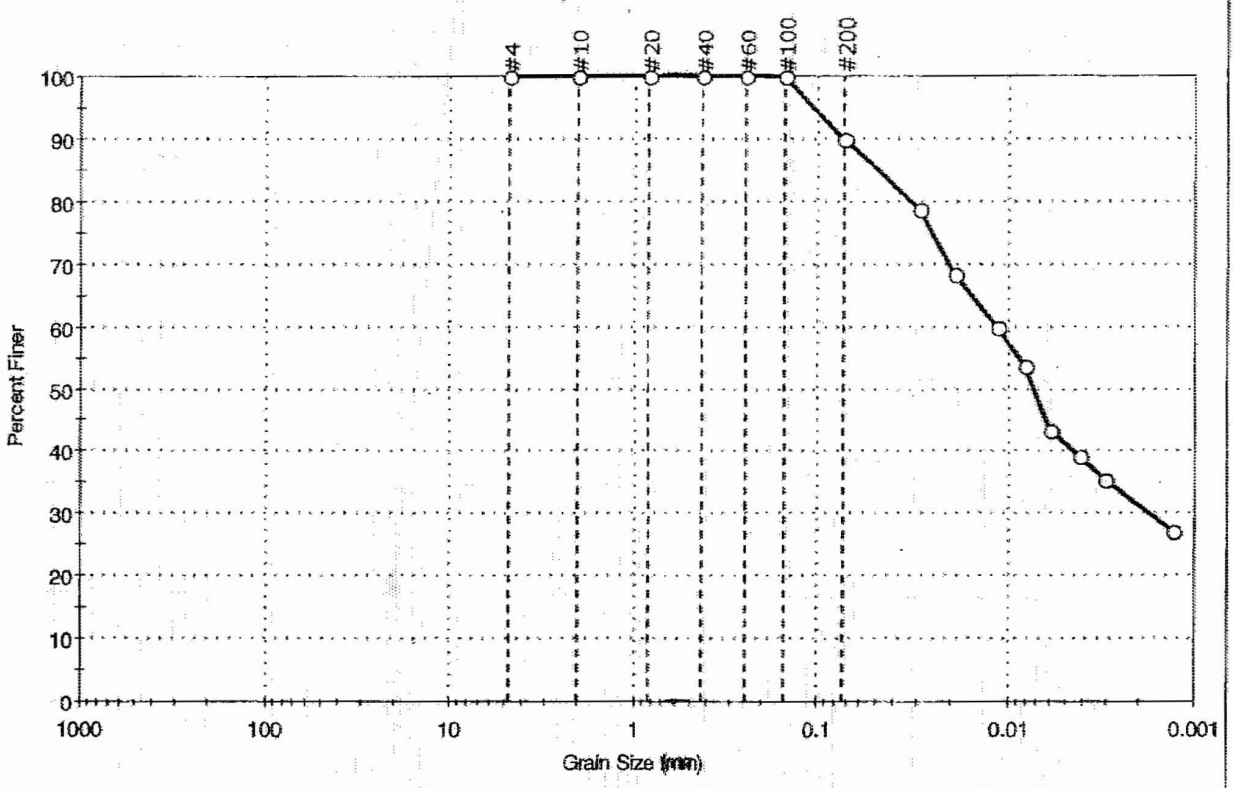
GeoTesting express
a subsidiary of Geocomp Corporation

Client:	Schnabel Engineering, Inc.		
Project:	Subsurface Investigation Calvert Cliffs Nuclear PP		
Location:	Calvert County, MD	Project No:	GTX-6880
Boring ID: B-406	Sample Type: tube	Tested By:	sam
Sample ID: S-16	Test Date: 10/17/06	Checked By:	mcm
Depth : 63.5-65.5 ft	Test Id: 100603		

Test Comment: ---
Sample Description: Moist, very dark gray organic clay with sand
Sample Comment:

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



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.0	9.9	90.1

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	100		
#100	0.15	100		
#200	0.074	90		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	0.0296	79		
---	0.0191	68		
---	0.0113	60		
---	0.0082	54		
---	0.0060	43		
---	0.0042	39		
---	0.0030	35		
---	0.0013	27		

Coefficients

D_{85}=0.0492 mm D_{30}=0.0017 mm
D_{60}=0.0113 mm D_{15}=N/A
D_{50}=0.0073 mm D_{10}=N/A
C_u =N/A C_c =N/A

Classification

ASTM organic clay (OH)

AASHTO Clayey Soils (A-7-6 (48))

Sample/Test Description

Sand/Gravel Particle Shape : ANGULAR

Sand/Gravel Hardness : HARD

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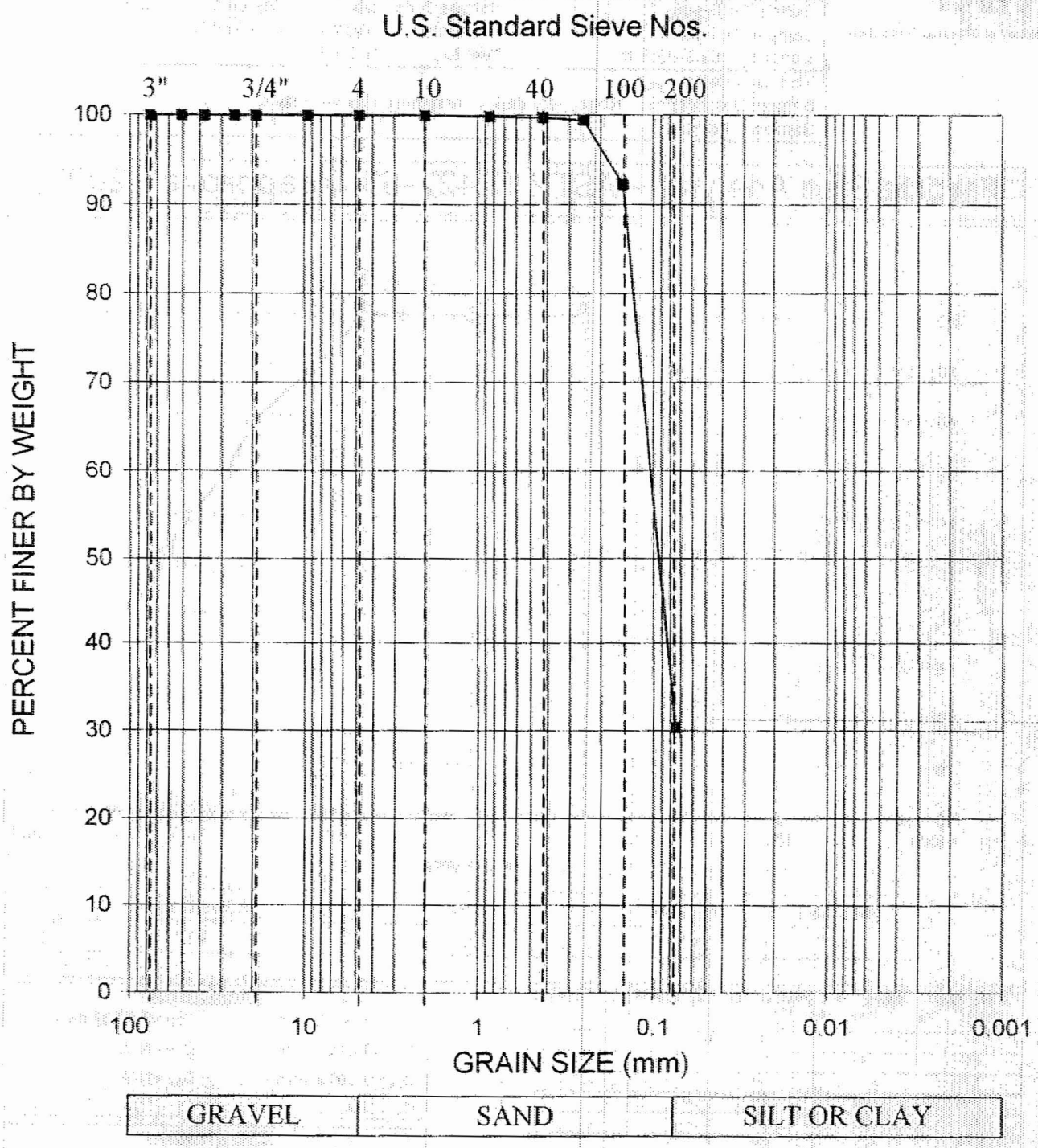

GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/12/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-407	18.5	Silty SAND, trace sand, light brown	SM		

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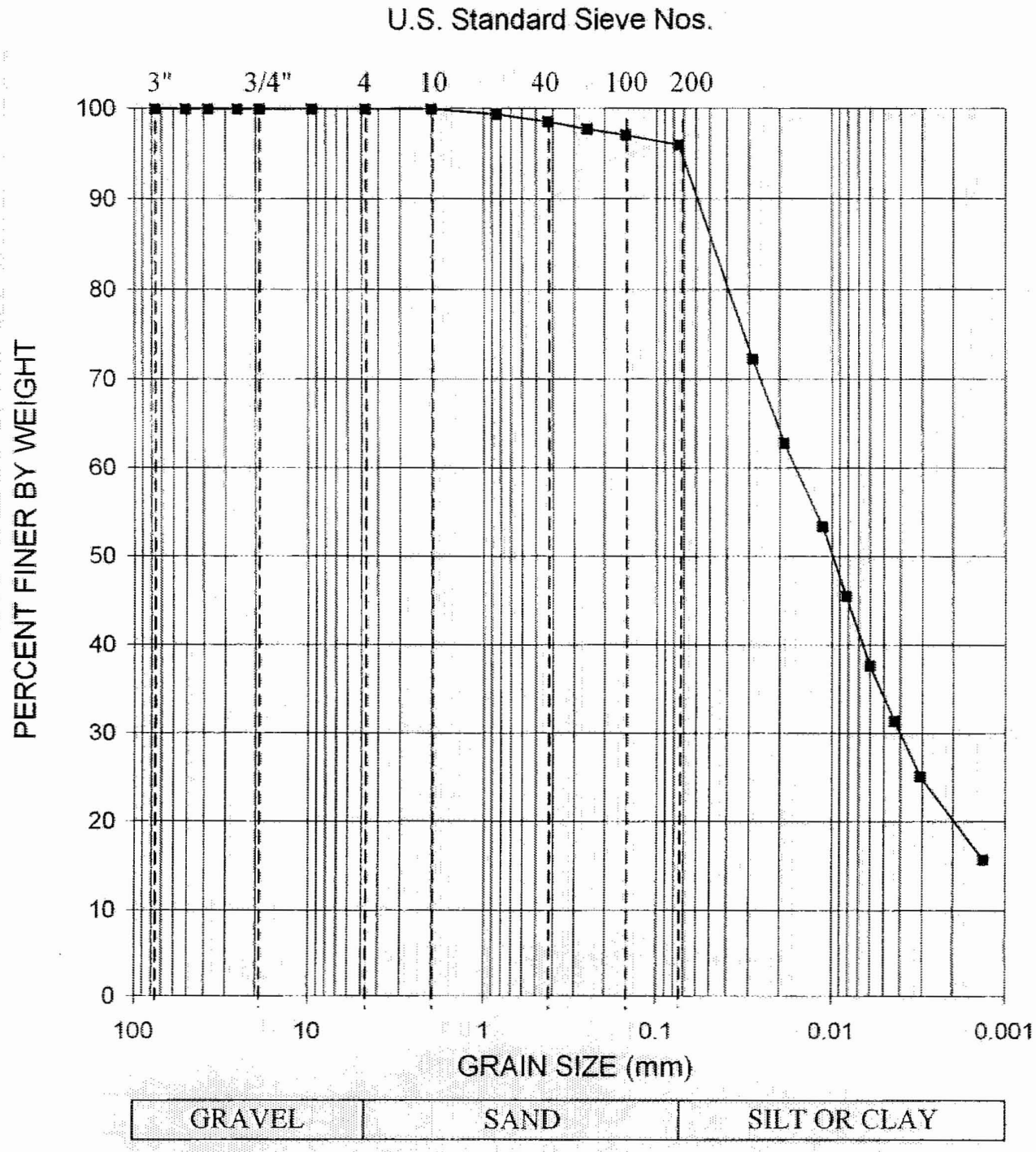

GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/13/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-407	33.5	ELASTIC SILT, trace sand, dark gray	MH	77	34

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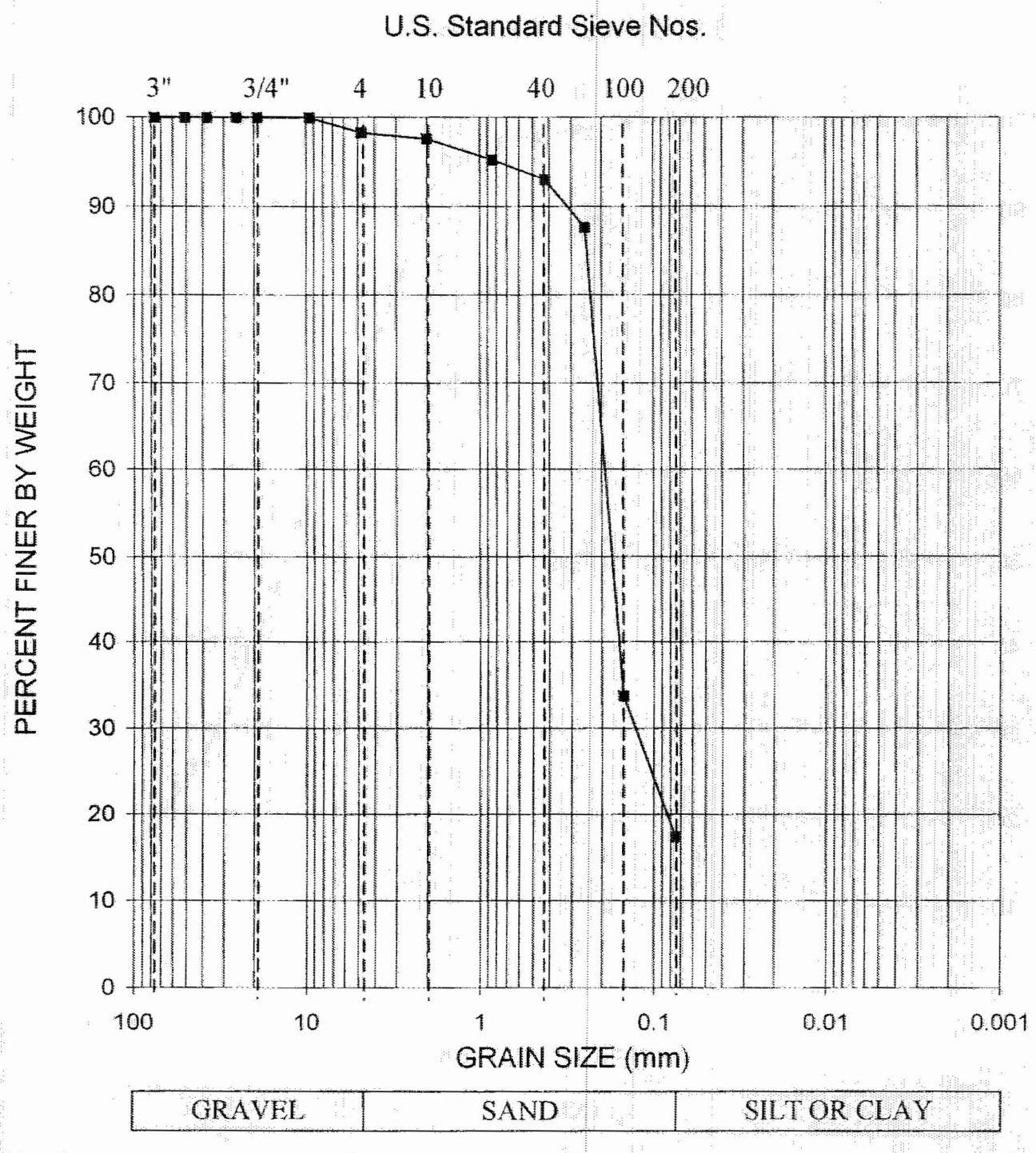

GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/12/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-407	43.5	Silty SAND, trace cemented sand, green-brown	SM		

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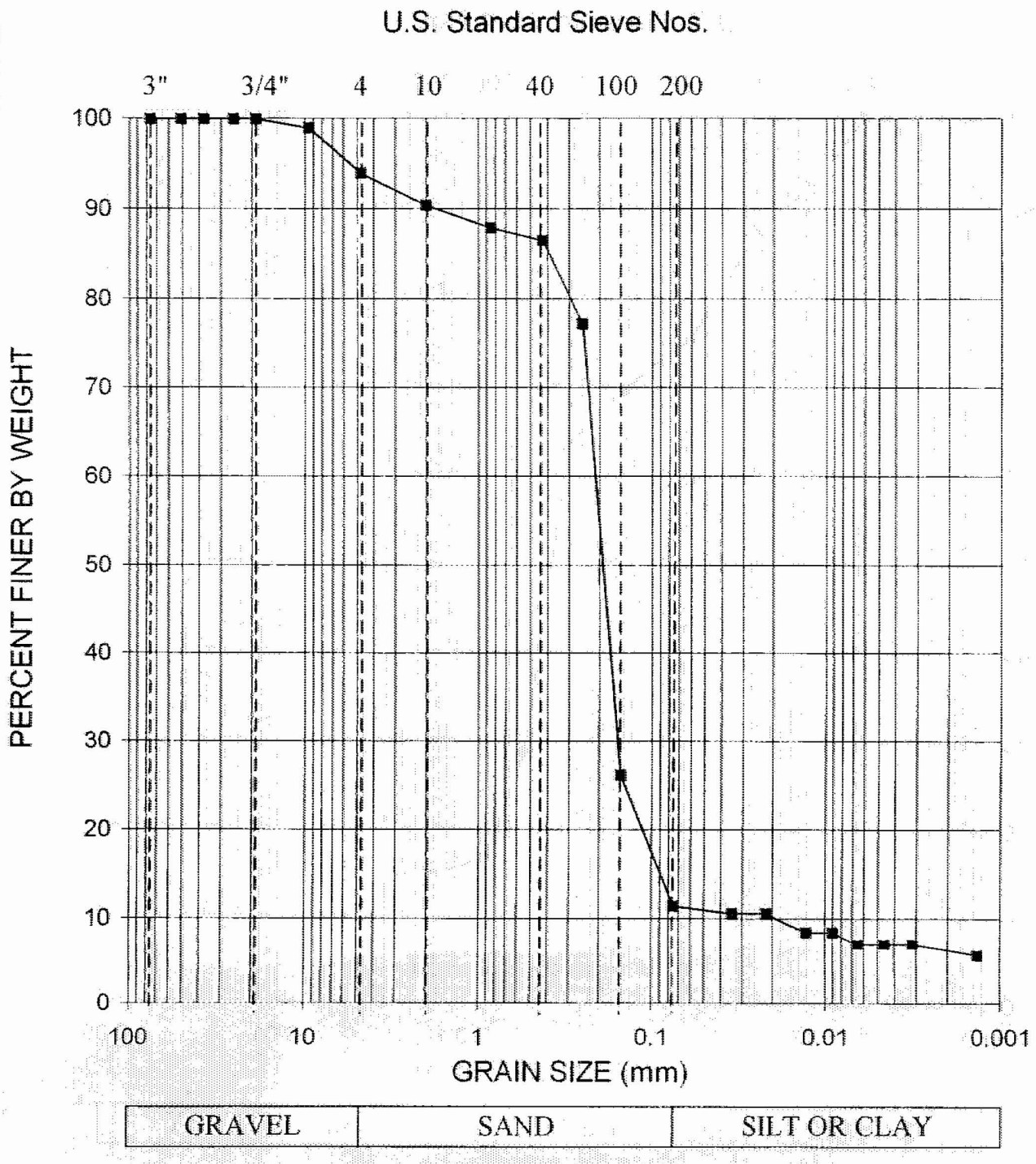
Schnabel Engineering



GRADATION CURVE

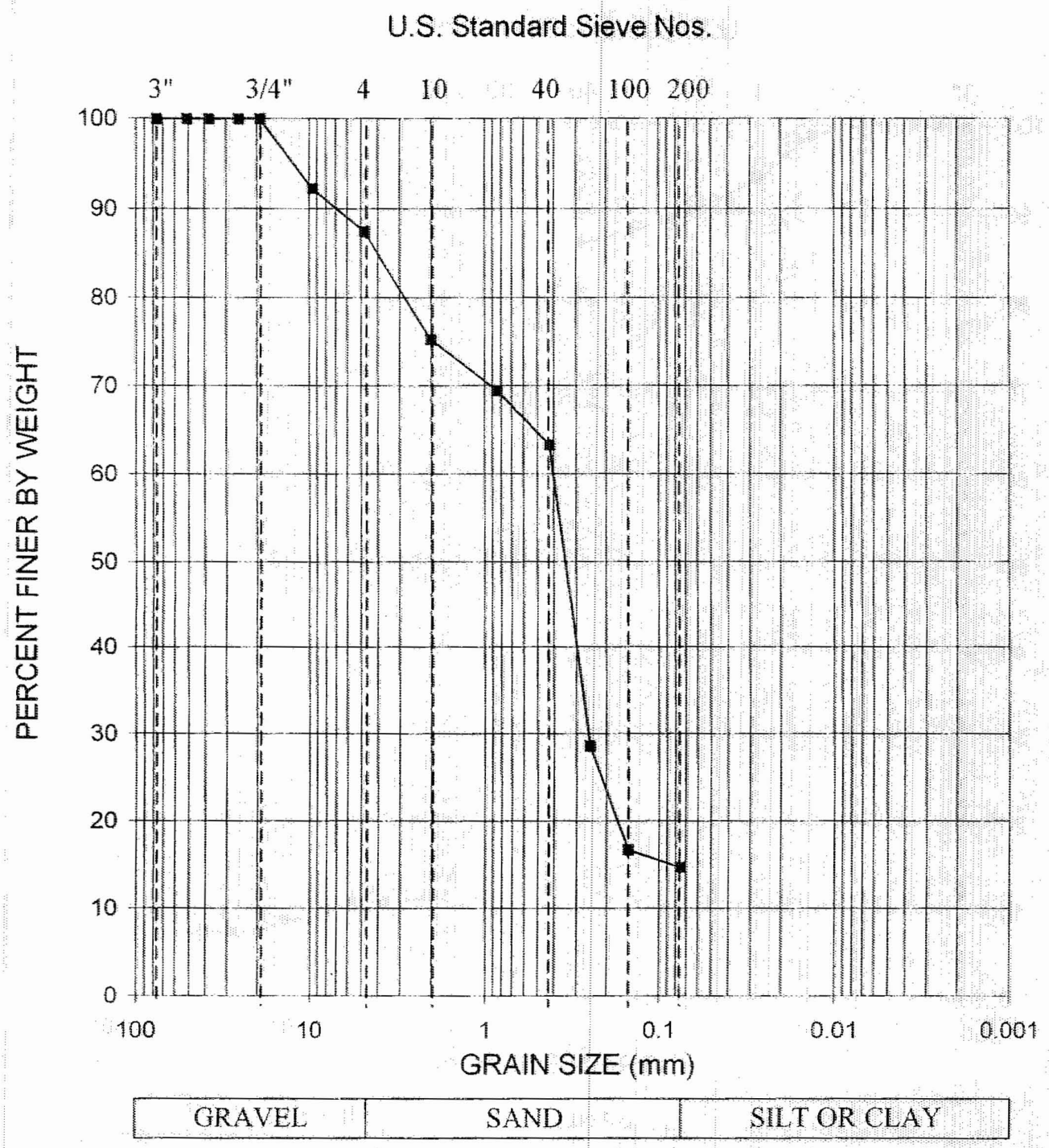
ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/19/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-407	68.5	Silty SAND, trace shells, dark green	SM		

Schnabel

Schnabel Engineering



GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.	06120048.00	Date:	9/12/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-407	83.5	Silty SAND, trace shells, green	SM		

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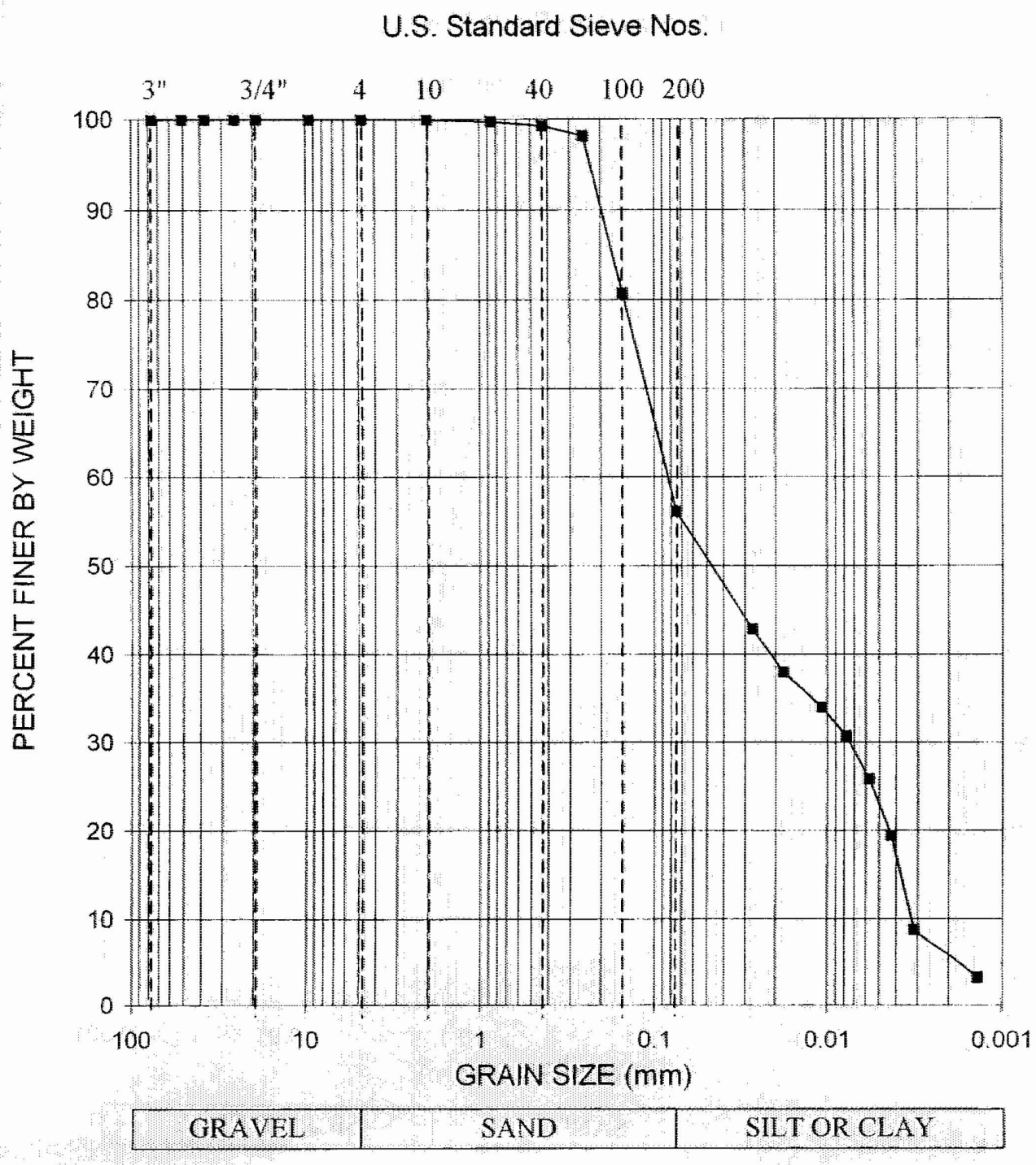
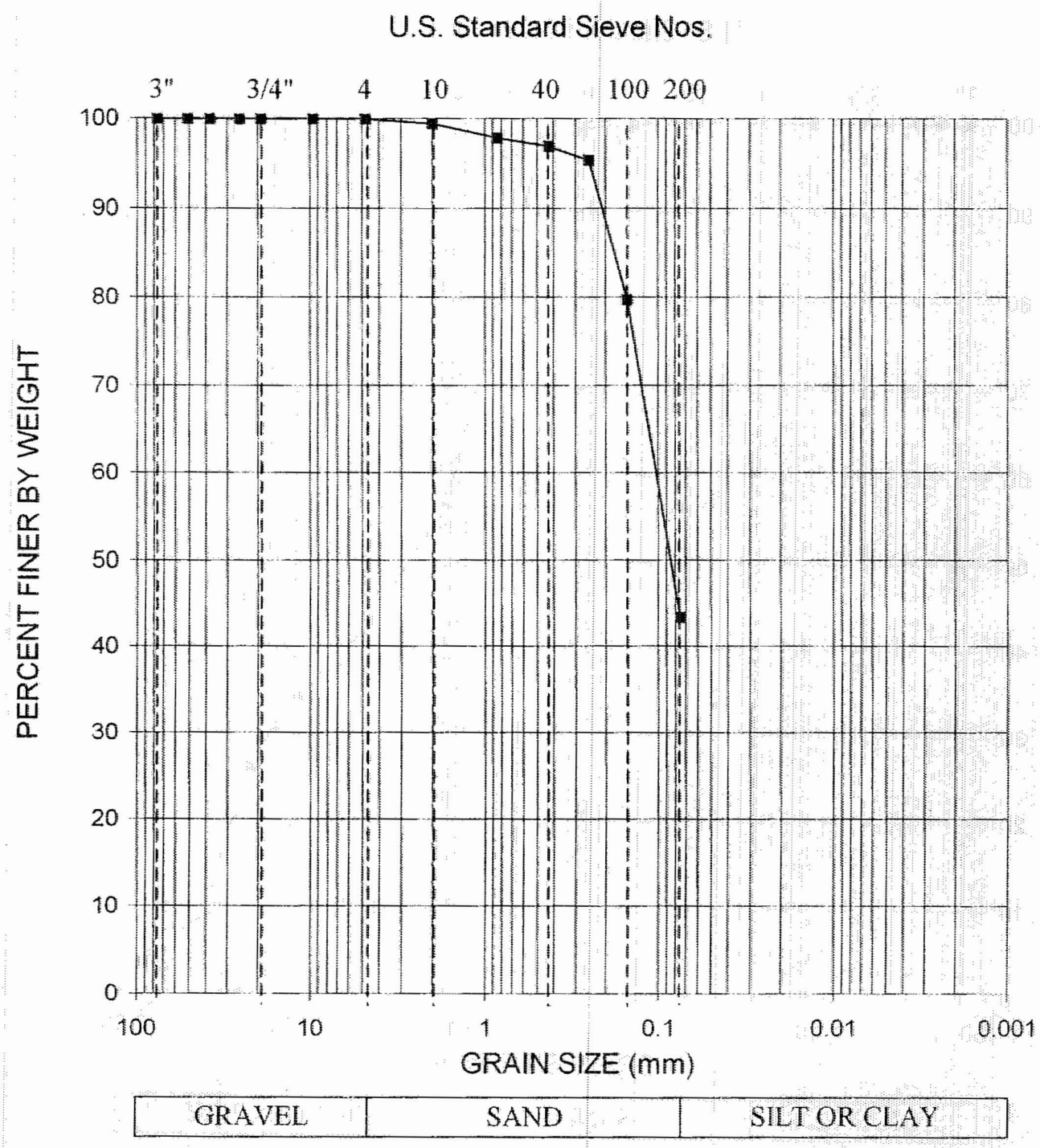
Schnabel Engineering



GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland		Contract No.:	06120048.00	Date:	9/19/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI	
B-407	108.5	Sandy SILT, gray	ML			Schnabel Engineering



GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs NuclearPower Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/12/2006

Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-407	138.5	Silty SAND, contains shells, dark gray	SM		

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