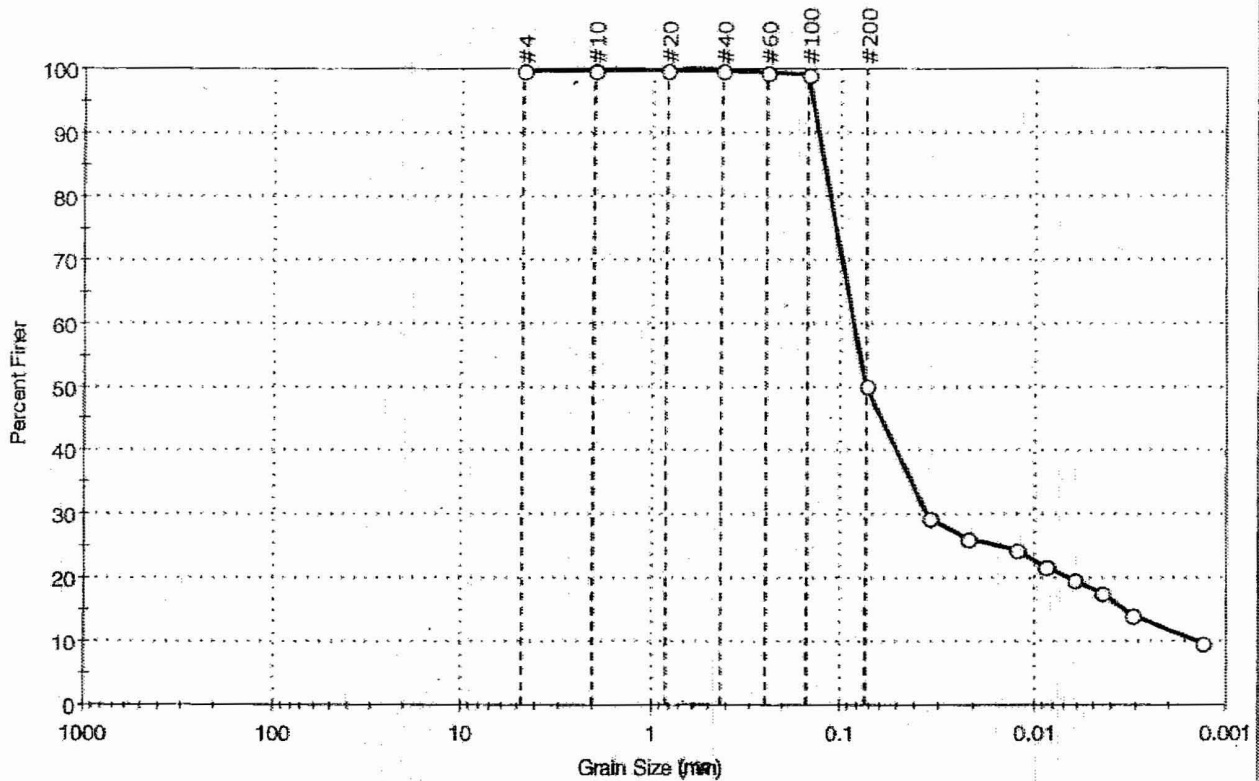


# GeoTesting express

a subsidiary of Geocomp Corporation

Client: Schnabel Engineering, Inc.	Project No: GTX-6880	
Project: Subsurface Investigation Calvert Cliffs Nuclear PP	Tested By: sam	
Location: Calvert County, MD	Sample Type: tube	Checked By: mcm
Boring ID: B-420	Test Date: 10/27/06	Test Id: 98593
Sample ID: S-29	Sample Description: Moist, very dark grayish brown sandy organic clay	
Depth: 128.5-130.3 ft	Sample Comment: ---	

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



% Cobble	% Gravel	% Sand	% Silt & Clay Size
—	0.3	49.6	50.1

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	99		
#100	0.15	99		
#200	0.075	50		
---	Particle Size (mm)	Percent Finer	Spec. Percent	Complies
---	6.0339	29		
---	6.0217	26		
---	6.0124	24		
---	6.0088	22		
---	6.0063	20		
---	6.0045	18		
---	6.0032	14		
---	6.0013	10		

**Coefficients**

D <sub>85</sub> = 0.1219 mm	D <sub>30</sub> = 0.0347 mm
D <sub>60</sub> = 0.0853 mm	D <sub>15</sub> = 0.0035 mm
D <sub>50</sub> = 0.0738 mm	D <sub>10</sub> = 0.0014 mm
C <sub>u</sub> = N/A	C <sub>c</sub> = N/A

**Classification**

ASTM Sandy organic silt (OH)

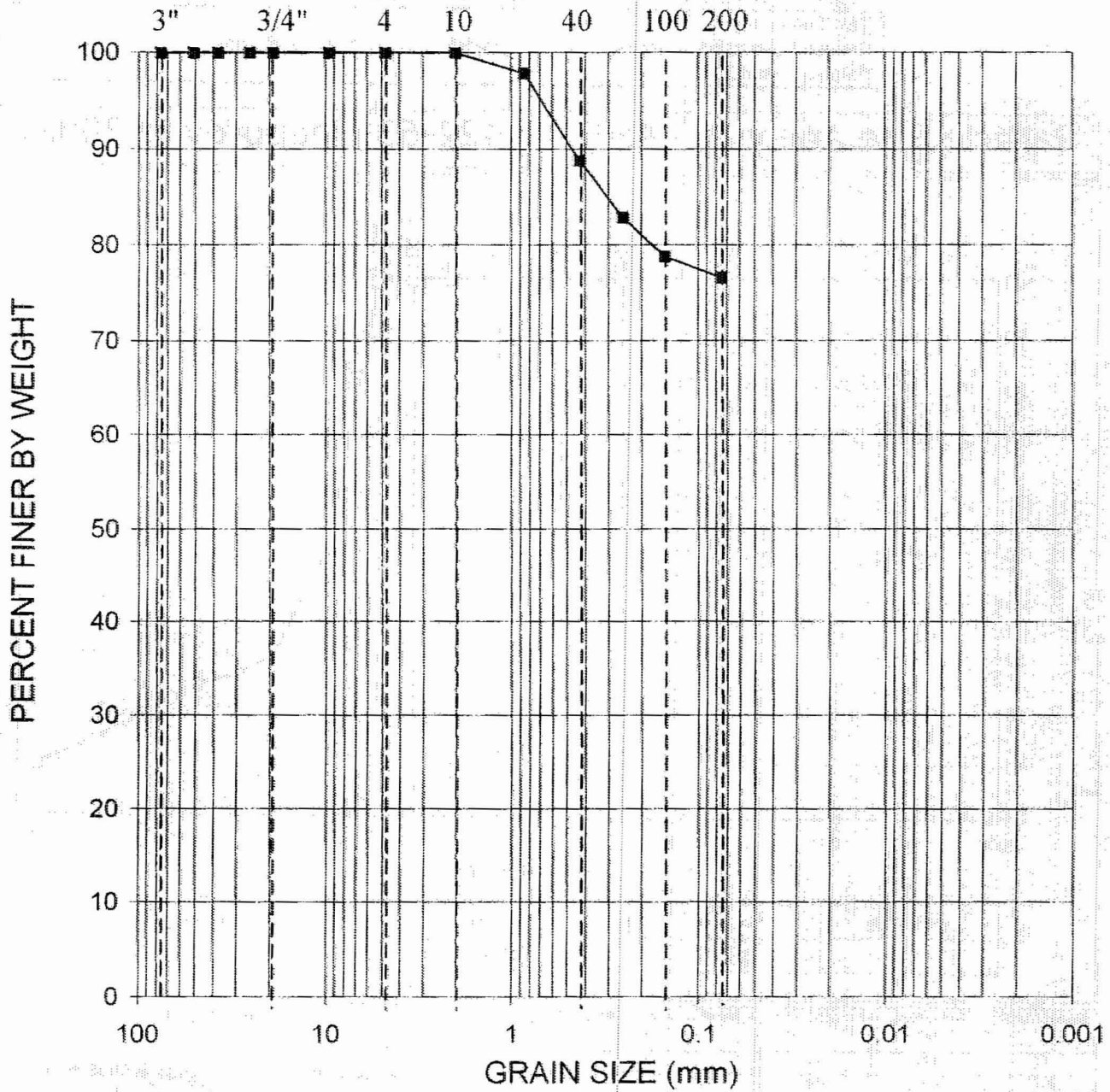
AASHTO Clayey Soils (A-7-5 (12))

**Sample / Test Description**

Sand/Gravel Particle Shape : ---


Sand/Gravel Hardness : ---

U.S. Standard Sieve Nos.

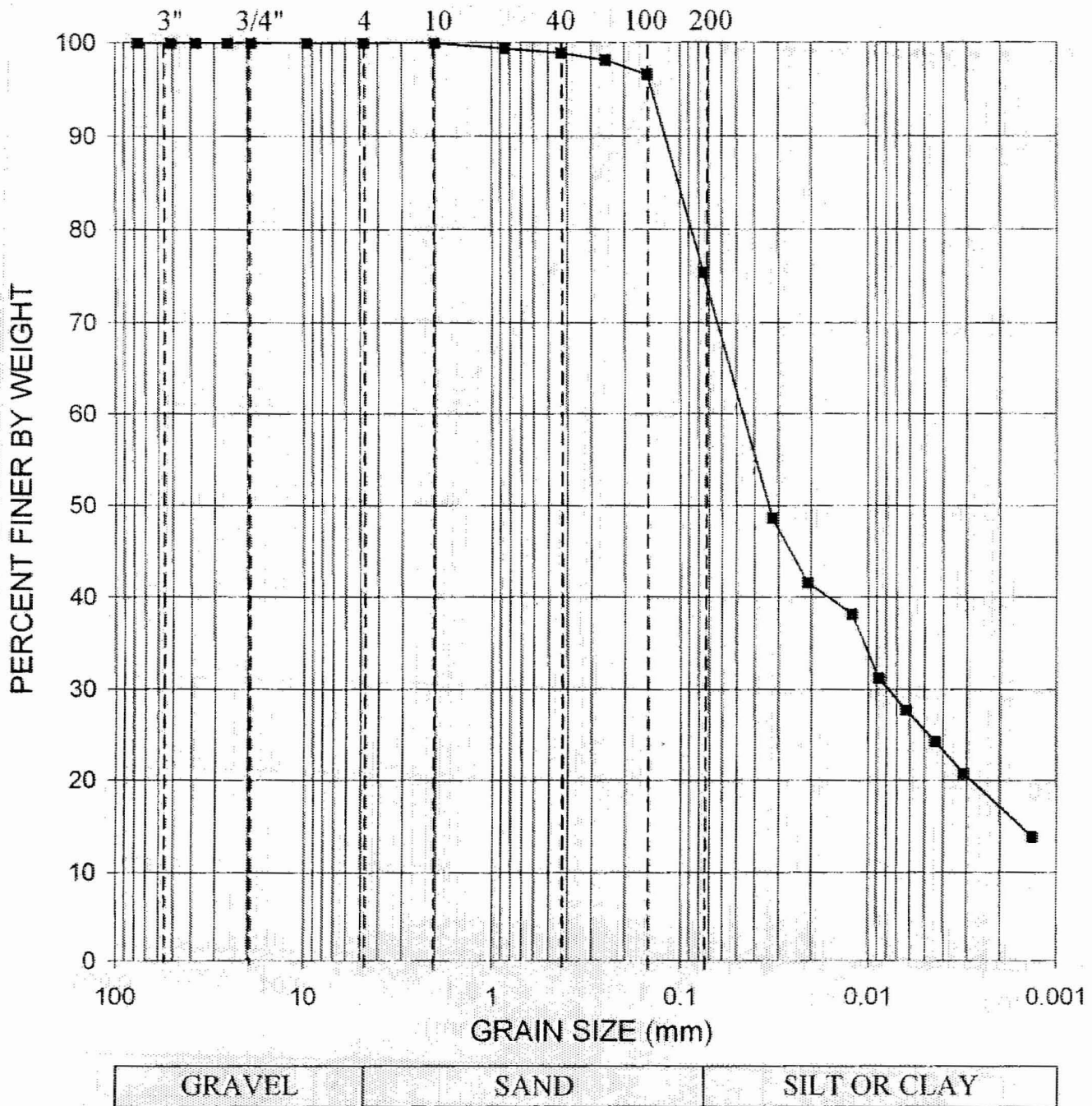


GRAVEL	SAND	SILT OR CLAY
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**GRADATION CURVE**  
ASTM D422

Project	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.	06120048.00	Date	9/13/2006
Boring No.	Depth (ft)	Sample Description	Class	LL	PI		
B-420	133.5	ELASTIC SILT, with sand, dark green	MH	147	72		

U.S. Standard Sieve Nos.

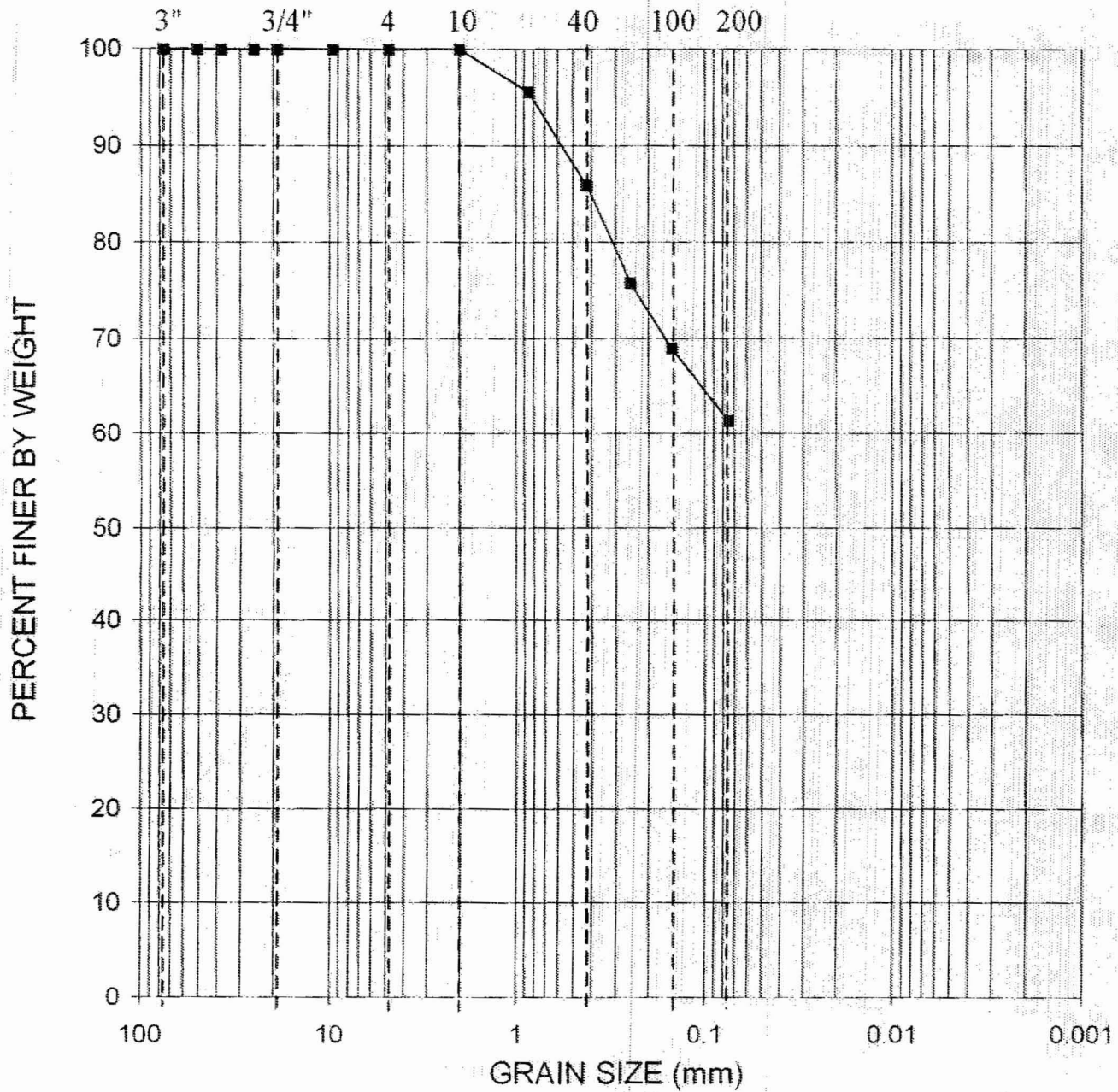


GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.:	06120048.00	Date:	9/19/2006
Boring No.:	Depth (ft):	Sample Description:	Class:	LL:	PI:		
B-420	143.5	ELASTIC SILT, with sand, dark green	MH	107	51		


U.S. Standard Sieve Nos.



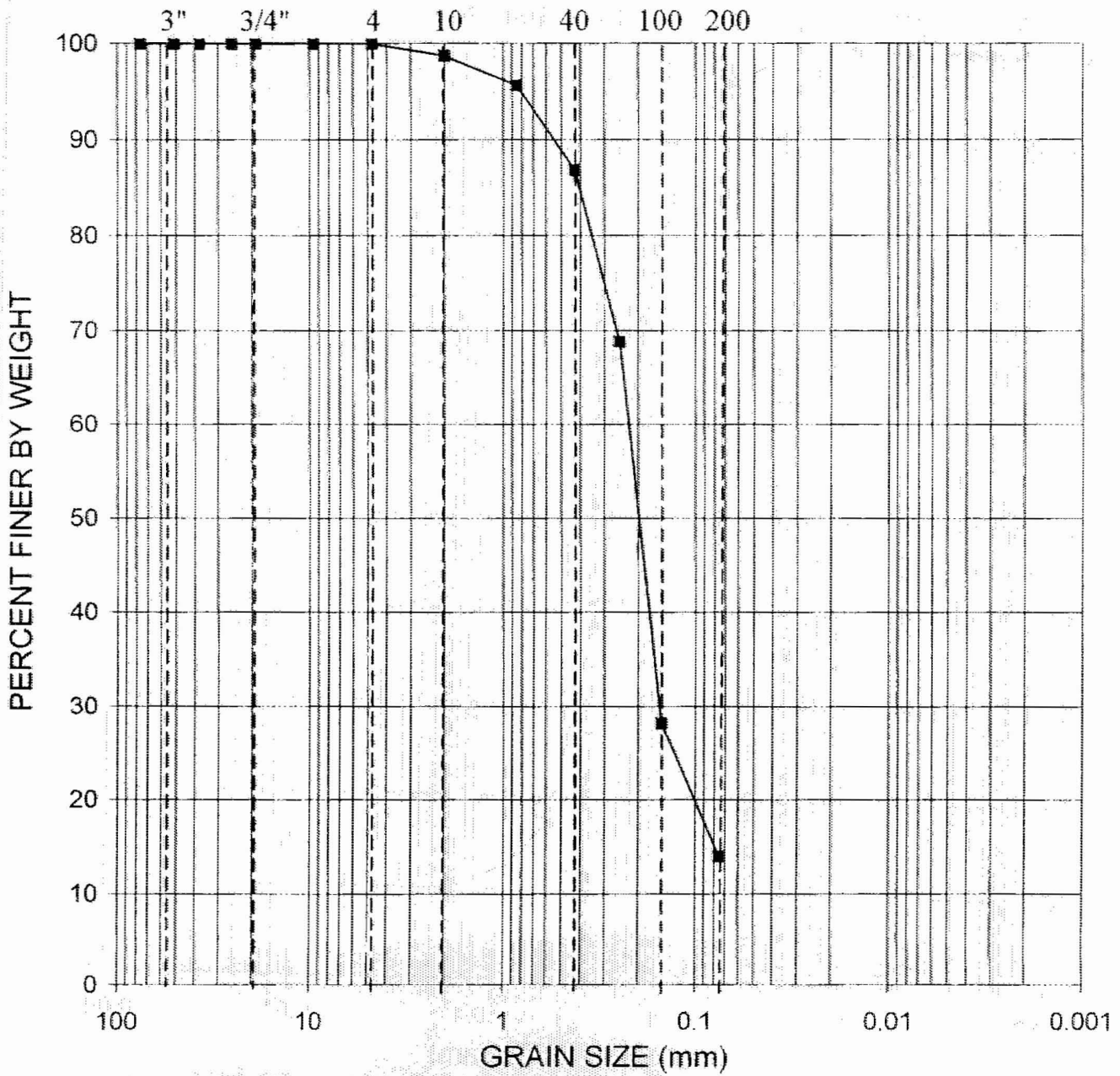
GRAVEL	SAND	SILT OR CLAY
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GRADATION CURVE

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.:	06120048.00	Date:	9/13/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI		
B-420	148.5	Sandy ELASTIC SILT, dark green	MH	127	27		

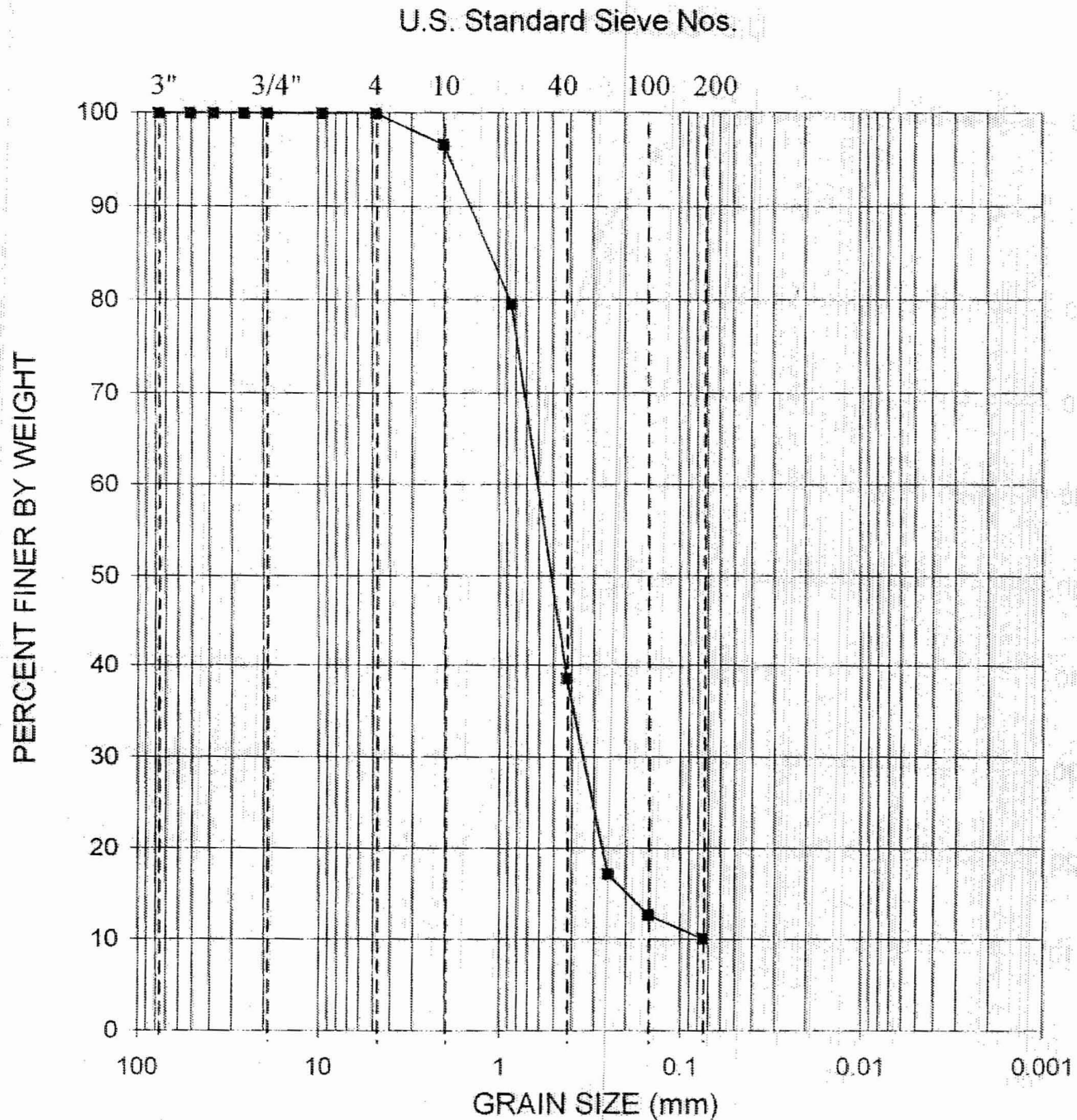
U.S. Standard Sieve Nos.



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:	9/14/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI	
B-421	7.5	Silty SAND, light brown	SM			



GRAVEL	SAND	SILT OR CLAY
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**GRADATION CURVE**  
ASTM D422

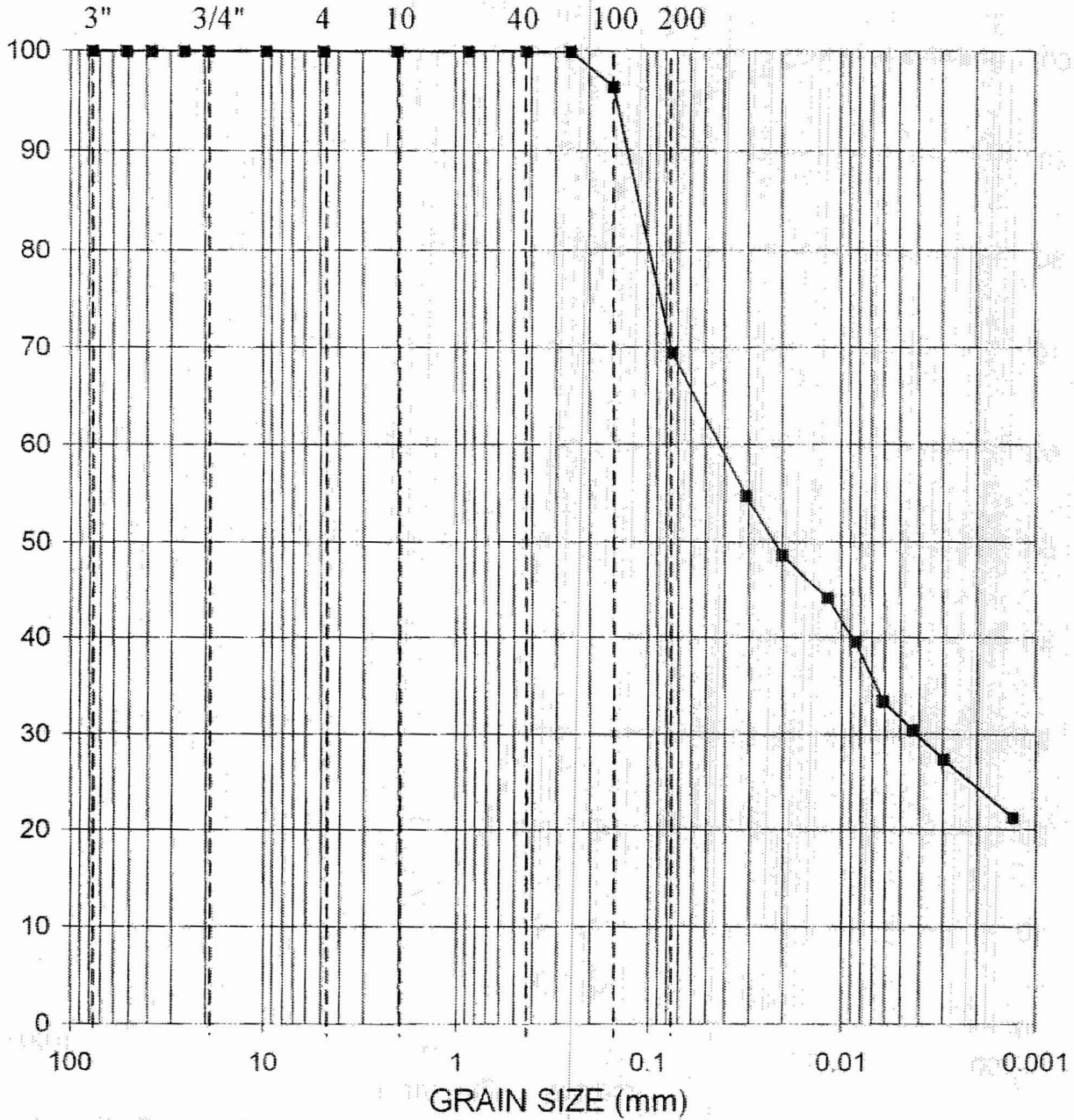
Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland	Contract No.: 06120048.00	Date: 9/14/2006		
Boring No.	Depth (ft)	Sample Description	Class	LL	PI
B-421	18.5	Well Graded SAND, with silt, light brown	SW-SM		





PERCENT FINER BY WEIGHT

U.S. Standard Sieve Nos.



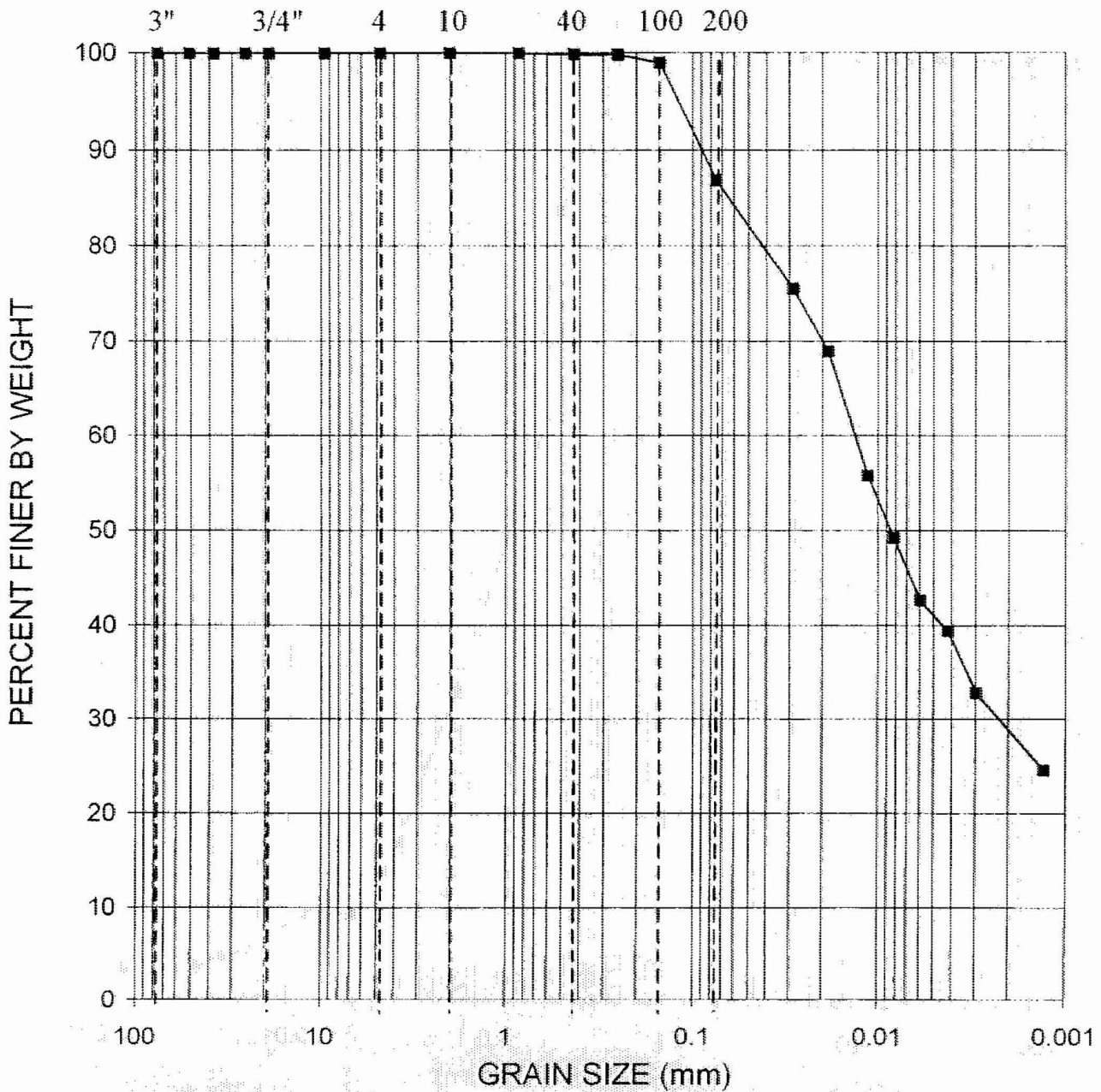
GRAVEL	SAND	SILT OR CLAY
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**GRADATION CURVE**  
ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.:	06120048.00	Date:	9/20/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI		
B-421	48.5	Sandy FAT CLAY, gray	CH	50	32		



U.S. Standard Sieve Nos.



GRAVEL	SAND	SILT OR CLAY
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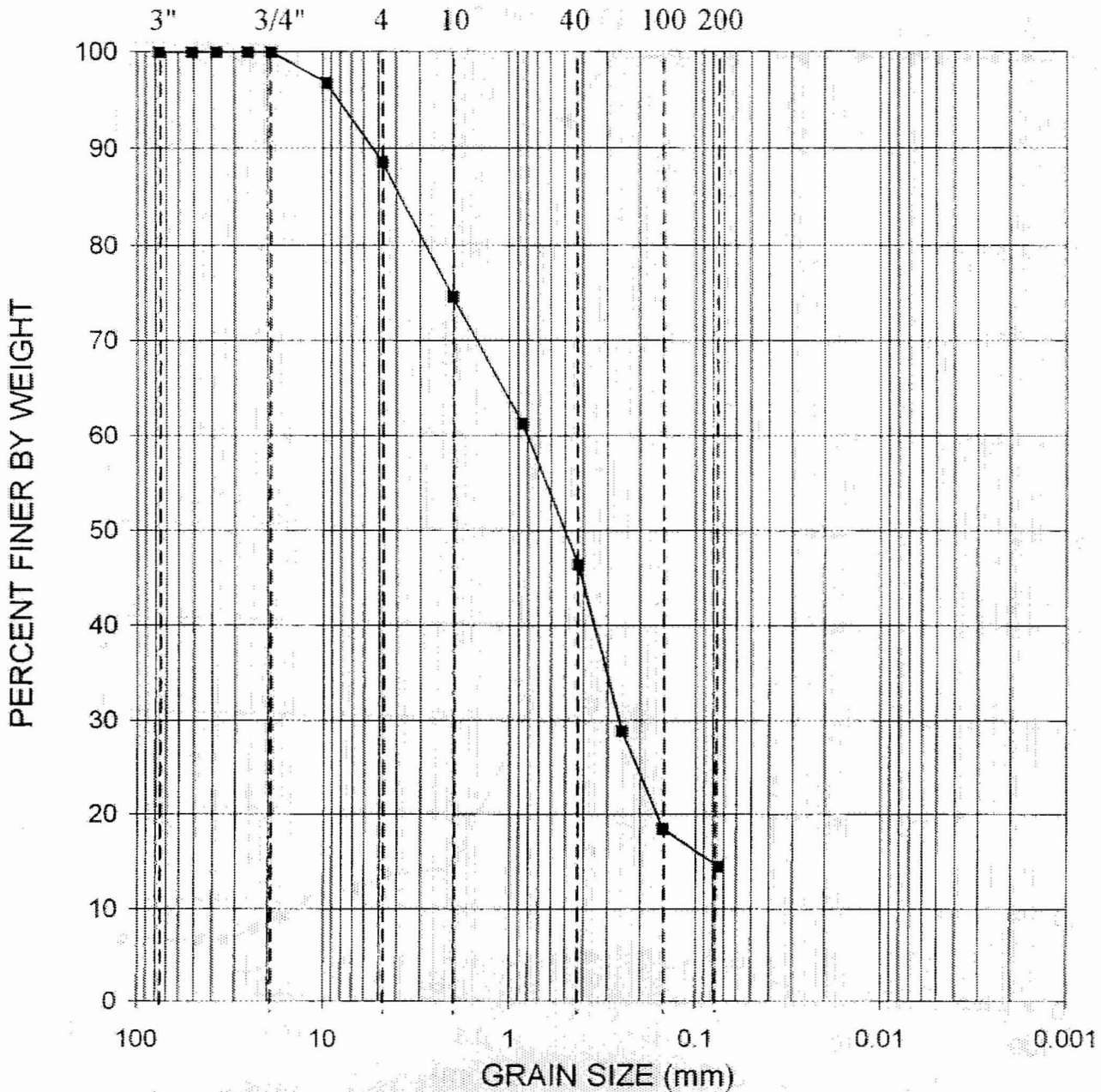
GRADATION CURVE

ASTM D422

Project:		Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland		Contract No.: 06120048.00		Date: 9/20/2006	
Boring No.	Depth (ft)	Sample Description		Class	LL	PI	
B-421	58.5	FAT CLAY, trace sand, dark gray		CH	78	46	



U.S. Standard Sieve Nos.



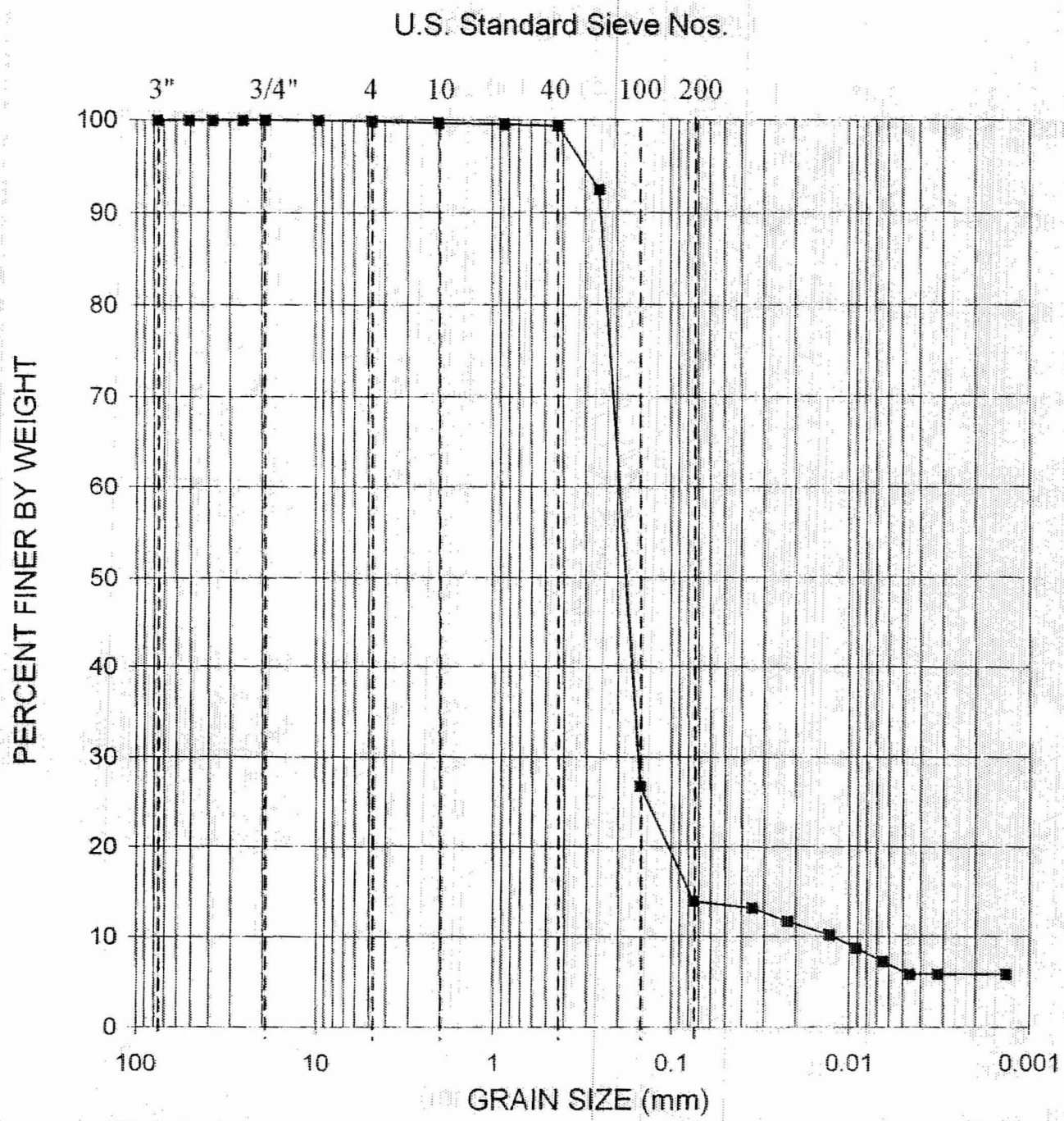
GRAVEL	SAND	SILT OR CLAY
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**GRADATION CURVE**

ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland	Contract No.:	06120048.00	Date:	9/14/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI
B-421	88.5	Silty SAND, trace shells, dark gray	SM		



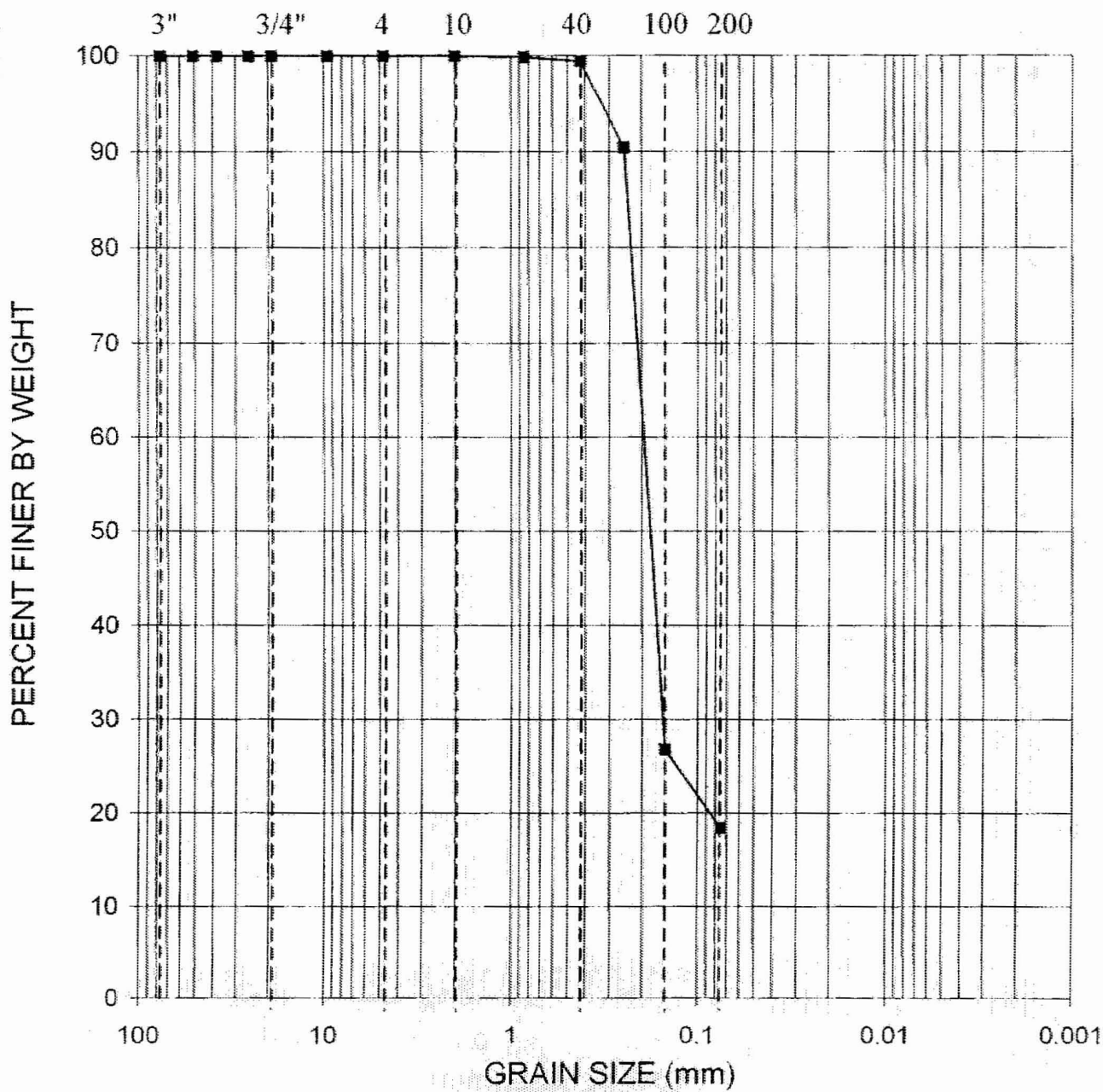


**GRADATION CURVE**  
ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland	Contract No.: 06120048.00	Date: 9/20/2006
Boring No.	Depth (ft)	Sample Description	Class    LL    PI
B-421	108.5	Silty SAND, dark green	SM    NP    NP



U.S. Standard Sieve Nos.



GRAVEL                      SAND                      SILT OR CLAY

GRADATION CURVE  
ASTM D422

Project:	Constellation Energy Group COLA Project, Calvert Cliffs Nuclear Power Plant (CCNPP), Calvert County, Maryland			Contract No.	06120048.00	Date:	9/14/2006
Boring No.	Depth (ft)	Sample Description	Class.	LL	PI		
B-421	113.5	Silty SAND, green	SM				

U.S. Standard Sieve Nos.

