FIELD BORING LOG

Project Name: TRINITY RIVER - WALLISVILLE, TEXAS		Project No. 93-312 G
Location: TRINITY RIVER		Client: ARMY CORP OF ENGINEERS
Boring No.: 93-277	Date Started: 3-8-94	El. of River: +3.202
Water Depth: 10.0	Date Completed: 3-9-94	Easting: 3,353,675.63
Time Started: 3:00 PM	Northing: 744,278.89	Driller: PAT STEPHENS
Time Completed: 11:45 AM	Logger: D. CANADA	Depth to caving:
Rig: MOBIL B-61	Weather: CLOUDY & WINDY 80° DEGREES	

DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE	HAND PENETROMETER
0	S1	J	////	DK GR. ~~CL.~~ Sludge Material	PT					
	S2	J	////	LT. GR. SA.	SP					
5										
10	S3	P	X	MED. DENSE LT. GR. SA.	SP	11	12	14		
15										
	S4	P	X	VERY DENSE LT. GR. TA. SA.	SP	6	22	36		
20										
	S5	P	X	VERY DENSE LT. GR. SA. w/SHELL	SP	15	36	50		
25										
30										

FIELD BORING LOG

Boring No.: 93-277

DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE	HAND PENETROMETER (TSF)
30	S6	P	X	LOOSE LT. GR. SA	SP	1	4	5		
35										
	S7	P	X	MED. DENSE LT TA. GR. SA w/Rocks GRAVEL	SP	3	5	7		
40										
45	S8	P	X	LOOSE. LT TA GR. SA w/Rocks GRAVEL	SP	5	5	3		
50										
	S9	J		stiff TA. LT. GR. SIL. CL w/FER	CH ~~CL~~					2.0
	S10	J		~~medium~~ stiff TA. LT. GR. SIL. CL w/FER	~~CL~~ CH					1.5
55	S11	J		V/S Sbt TA. LT. GR SIL. CL	CL					<.25
				NO RECOVERY						
60										
65	S12	P	X	VERY DENSE TA. LT. GR. CL. SA	SC	15	25	29		
70										

FIELD BORING LOG

Boring No.: 93-277

DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE	HAND PENETROMETER
70										
	S13	P	X	V/dense LT. GR. SA.	SP	34	50/5"			
75										
	S14	P	X	V/dense LT. GR. TA. SA.	SP	20	50/5"			
80										
85										
90										
95										
100										
105										
110										

LOG OF SOIL BORING

Project Name: Trinity River Soil Borings
Project No. 93-312G
ring No.: 93-277
ıd Line Elevation: -6.8 feet (NGVD)
Completion Depth: 79.5 feet
Water Depth: 10.0 feet

Weather: Cloudy and windy
Date: March 8, 1994
Technician: David Canada
Driller: Pat Stevens
Drilling Rig: Mobil B-61

ELEV. DEPTH, FEET	SOIL AND SAMPLER SYMBOLS	SOIL DESCRIPTION	BLOWS PER FOOT	% PASSING NO. 4 SIEVE	% PASSING NO. 10 SIEVE	% PASSING NO. 40 SIEVE	% PASSING NO. 100 SIEVE	% PASSING NO. 200 SIEVE	DRY DENSITY PCF
0		Dark gray CLAY w/ sand		100	100	99	86	81	
-10 / 5		Gray CLAYEY SAND		100	100	100	33	15	
-15 / 10		Medium dense gray SAND w/ clay to 10.5'	26	100	100	100	21	6	
-20 / 15		very dense w/ gravel below 16'	58	98	96	90	6	3	
20									
-30 / 25		w/ shell below 23'	86	99	99	75	4	3	
-35 / 30		Loose gray CLAYEY SAND w/ silt	9	100	100	99	59	35	
-40 / 35									
-45 / 40		Medium dense tan SAND w/ gravel	12	97	94	64	5	3	
-50 / 45		loose, tan and gray w/ silt below 44'	8	98	93	65	7	5	
-55 / 50									
		Stiff reddish brown CLAY w/ calcareous and ferrous nodules		100	100	99	99	98	

STRENGTH, TSF: ● 0.7 ■ 1.4 ▲ 2.1 ✱ 2.8 3.5 4.2

MOISTURE CONTENT, % — PLASTIC LIMIT ⊢⊣ LIQUID LIMIT: 20 40 60 80 100 120

● = Direct Hand Penetrometer ■ = Torvane ▲ = Unconfined Compression ✱ = Shear Stress

Plate 9A

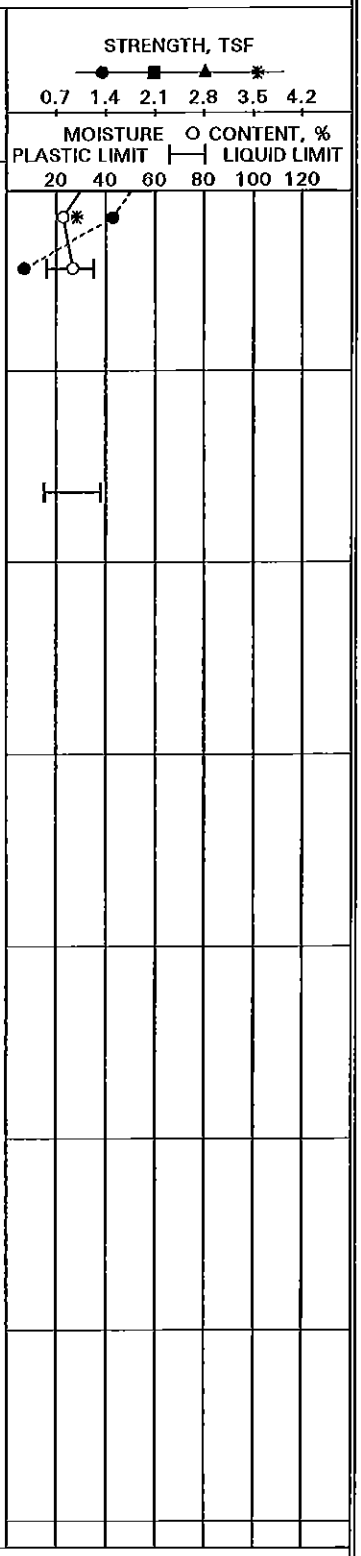
HVJ ASSOCIATES, INC.

LOG OF SOIL BORING

Project Name: Trinity River Soil Borings
Project No. 93-312G
ring No.: 93-277
ıd Line Elevation: -6.8 feet (NGVD)
Completion Depth: 79.5 feet
Water Depth: 10.0 feet

Weather: Cloudy and windy
Date: March 8, 1994
Technician: David Canada
Driller: Pat Stevens
Drilling Rig: Mobil B-61

ELEV. DEPTH, FEET	SOIL AND SAMPLER SYMBOLS	SOIL DESCRIPTION	BLOWS PER FOOT	% PASSING NO. 4 SIEVE	% PASSING NO. 10 SIEVE	% PASSING NO. 40 SIEVE	% PASSING NO. 100 SIEVE	% PASSING NO. 200 SIEVE	DRY DENSITY PCF
-60 / 55		tan and gray below 53'		100	100	99	96	87	
		Very soft tan and gray SILTY CLAY w/ sand w/ gravel to 57'		100	99	99	97	85	
-65 / 60									
-70 / 65		hard w/ sand partings below 64'	54	100	100	99	98	78	
-75 / 70									
		Very dense gray SILTY SAND	50/5"	100	100	99	87	13	
75									
-85 / 80		gray and tan below 78'	50/5"	100	100	98	76	17	
-90 / 85									
-95 / 90									
-100 / 95									
-105 / 100									
-110 / 105									

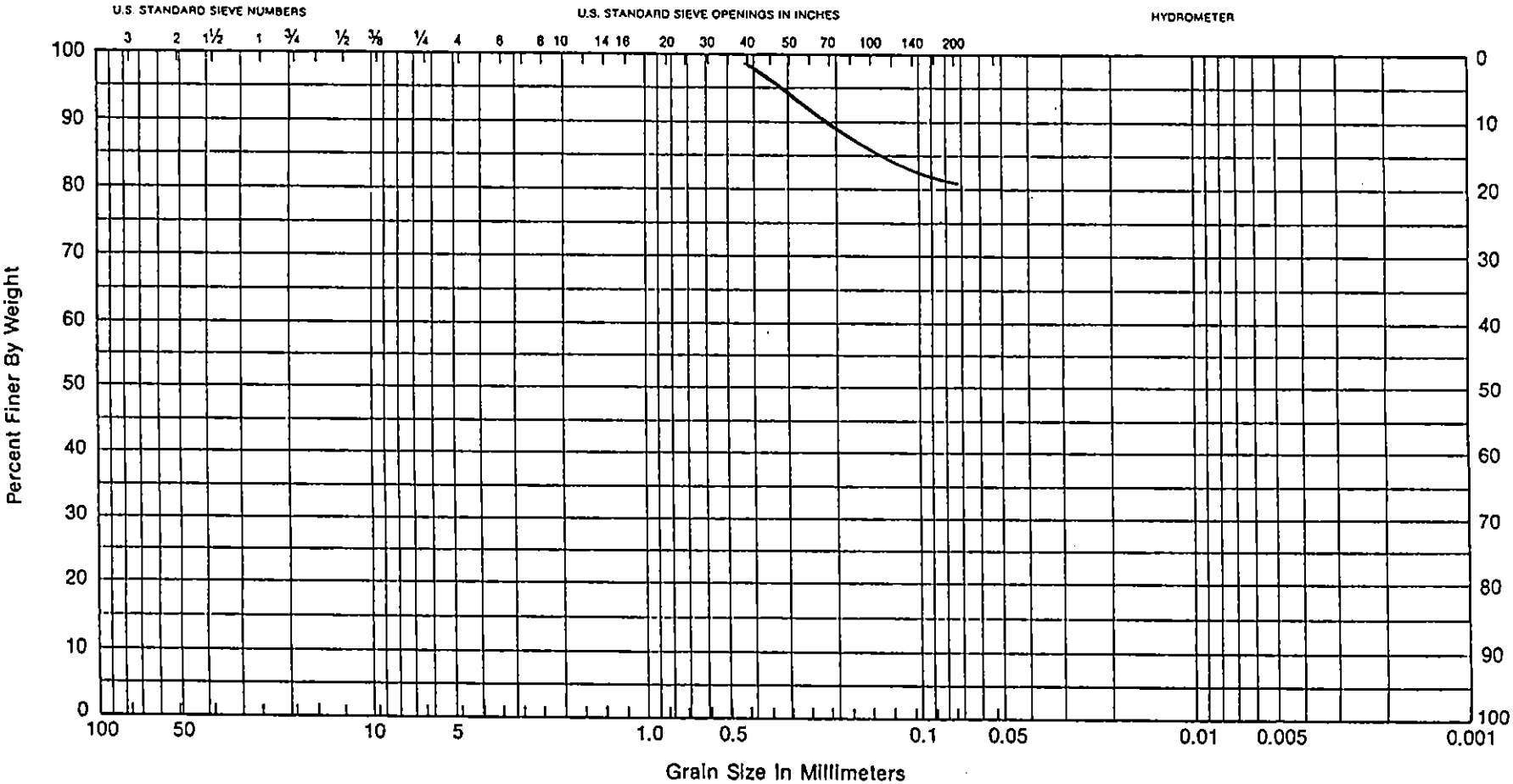


● = Direct Hand Penetrometer ■ = Torvane ▲ = Unconfined Compression ✱ = Shear Stress

Plate 9B

HVJ ASSOCIATES, INC.

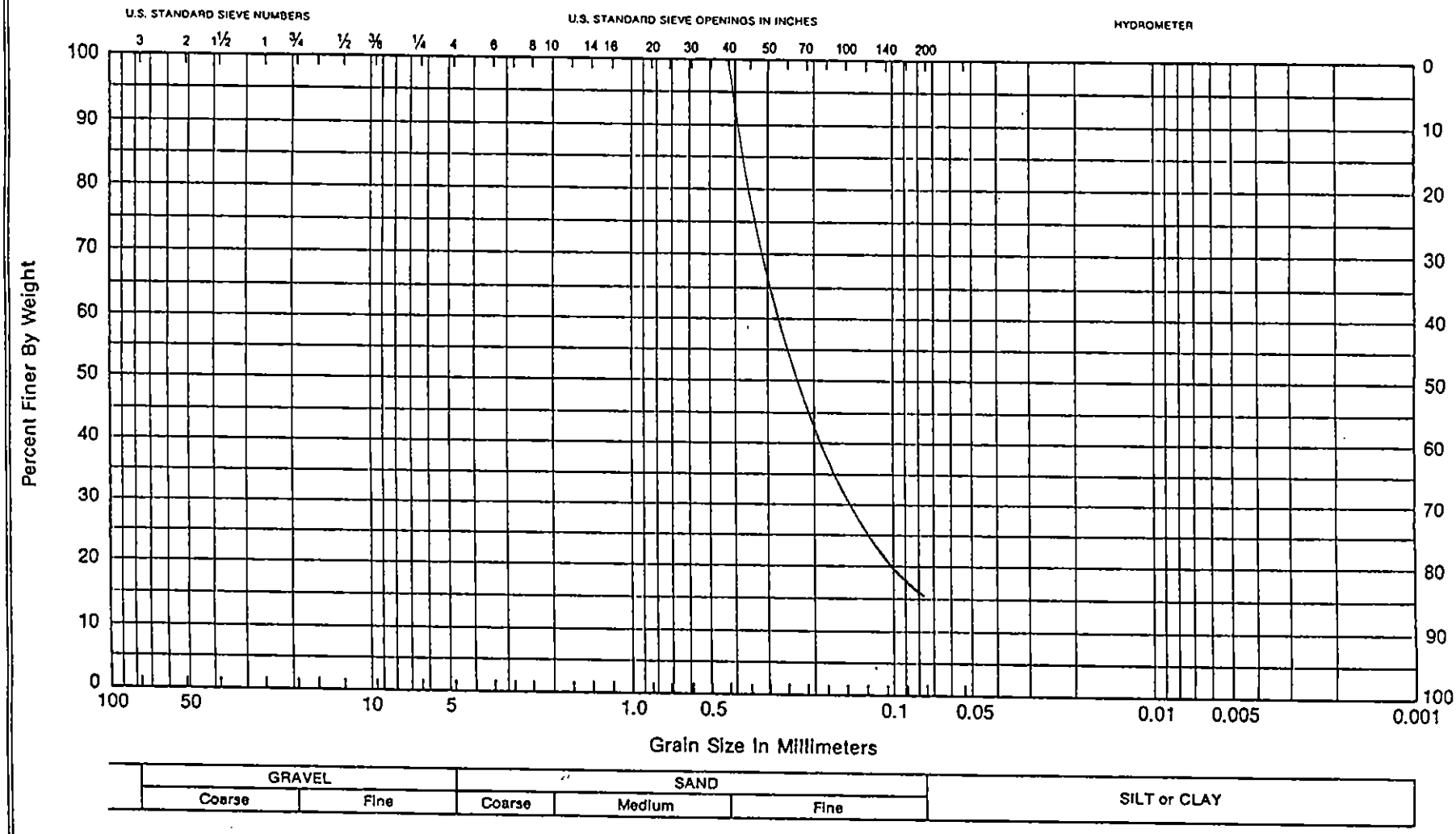
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

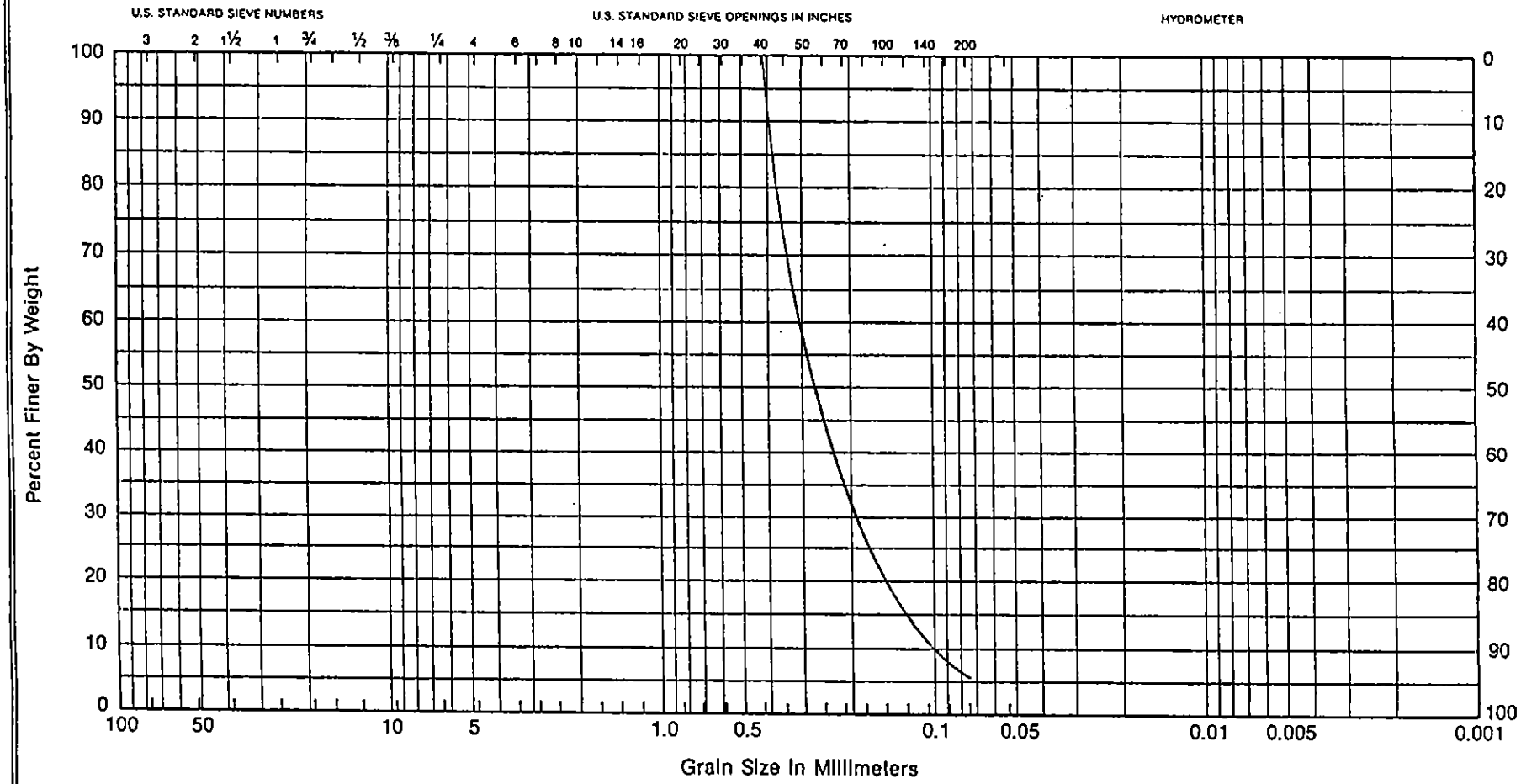
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S1, 0' - 2'
HVJ 93-312G
DARK GRAY SLUDGE

GRAIN SIZE CURVES



DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S2, 2' - 4'
HVJ 93-312G
GRAY SAND WITH SLUDGE POCKETS

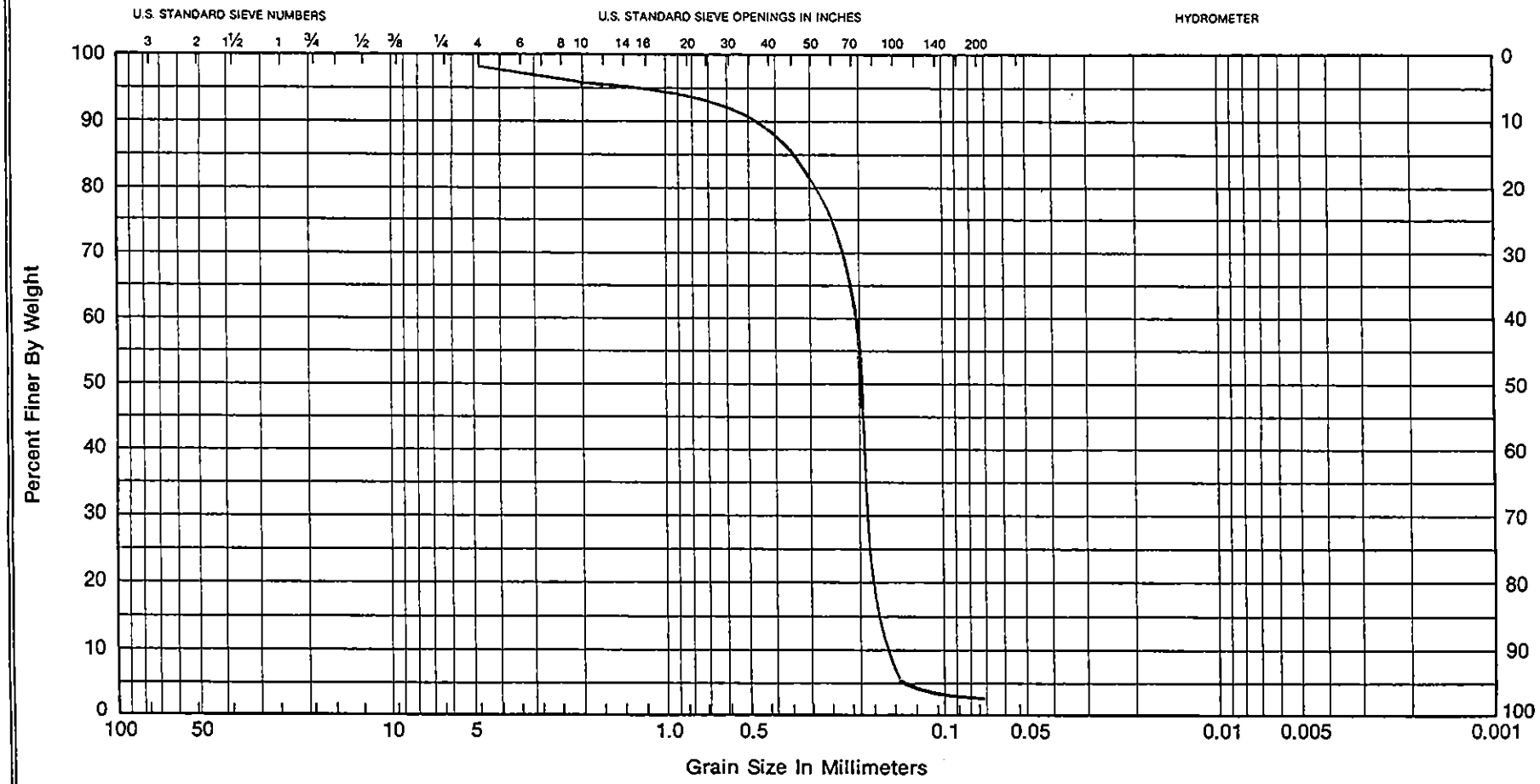
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S3, 9' - 10.5'
HVJ 93-312G
GRAY SAND WITH SLUDGE POCKETS

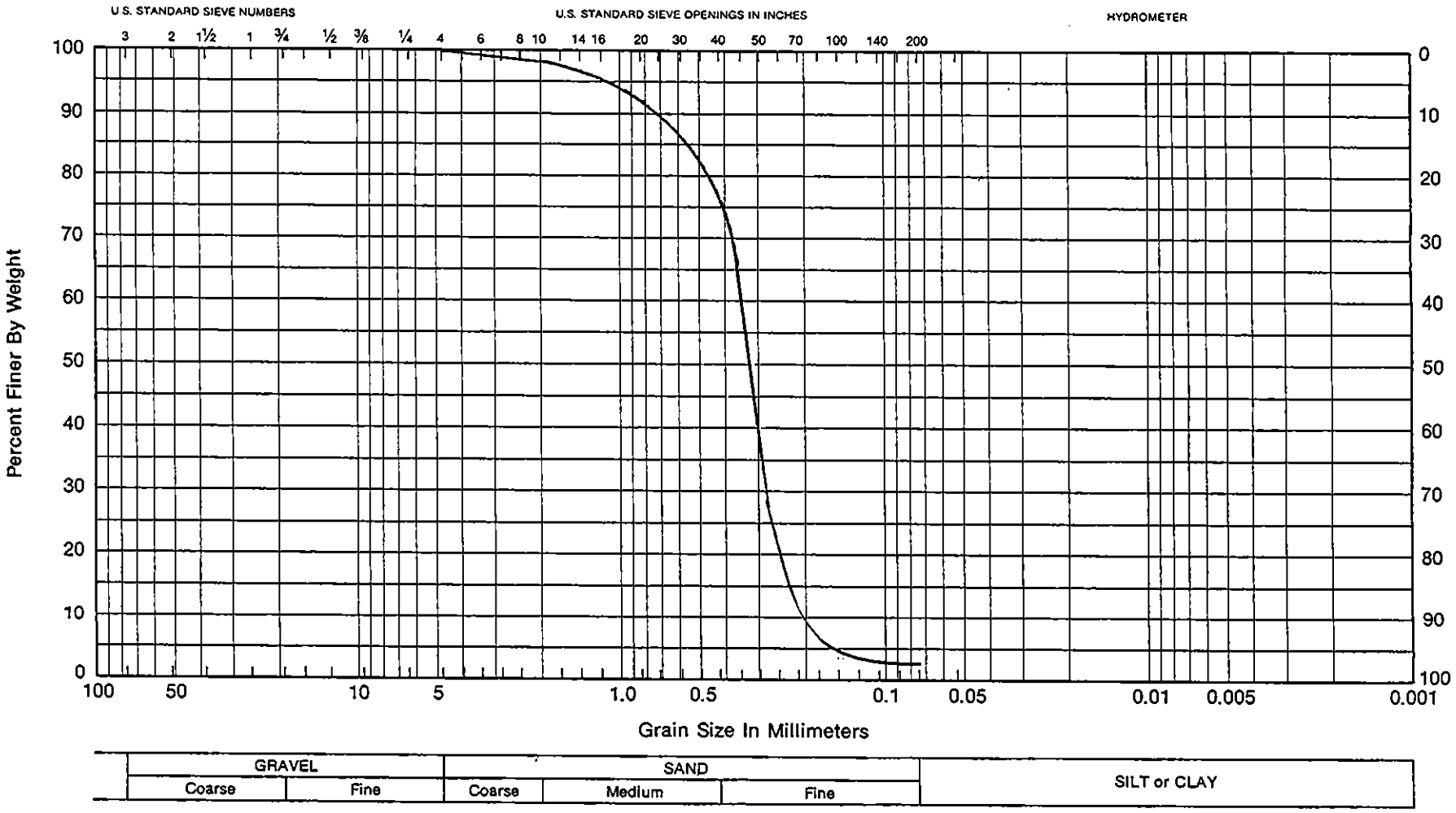
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

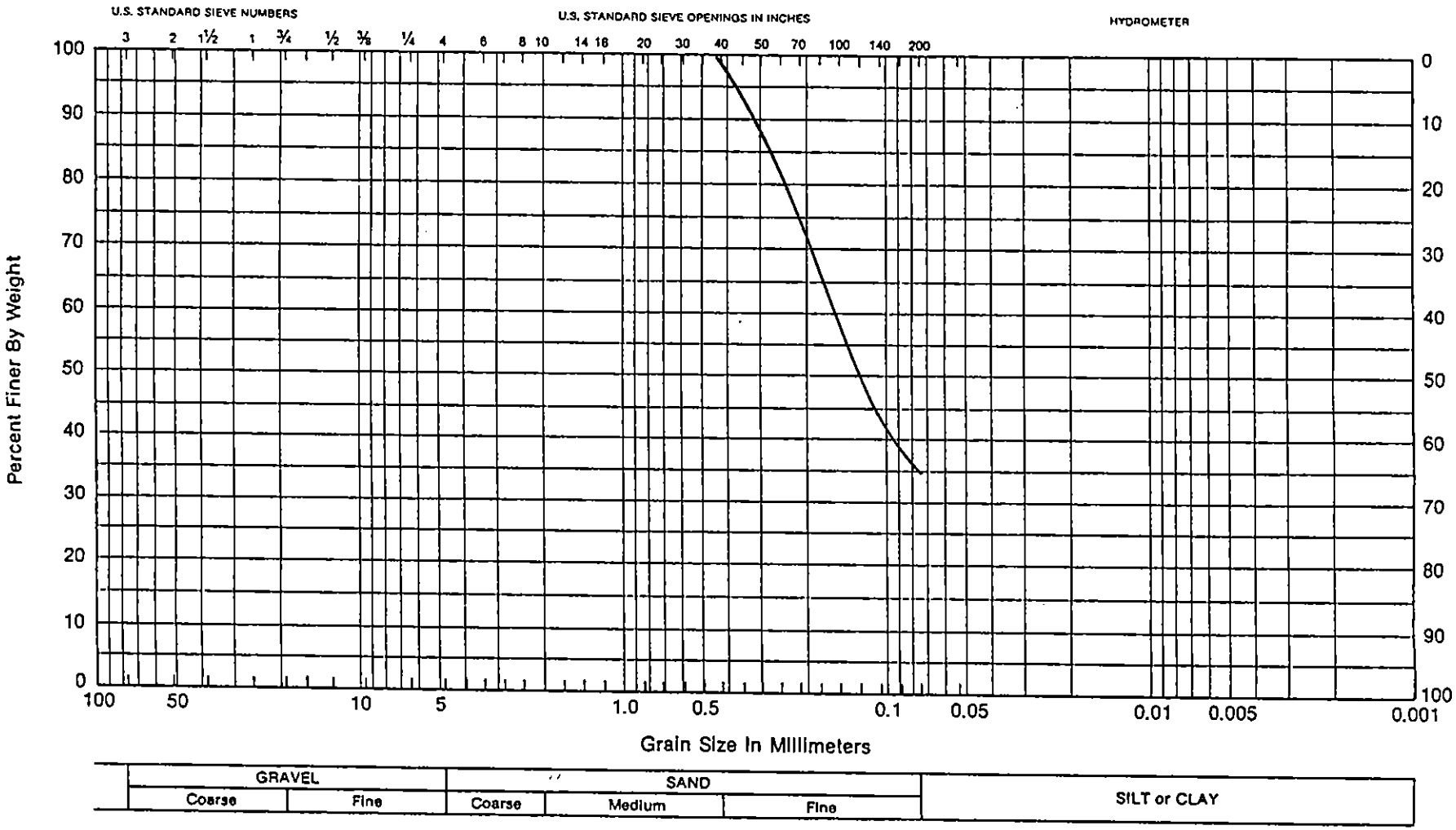
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S4, 16' - 17.5'
HVJ 93-312G
GRAY COARSE SAND WITH SILT,
GRAVEL AND CLAY CLUMPS

GRAIN SIZE CURVES



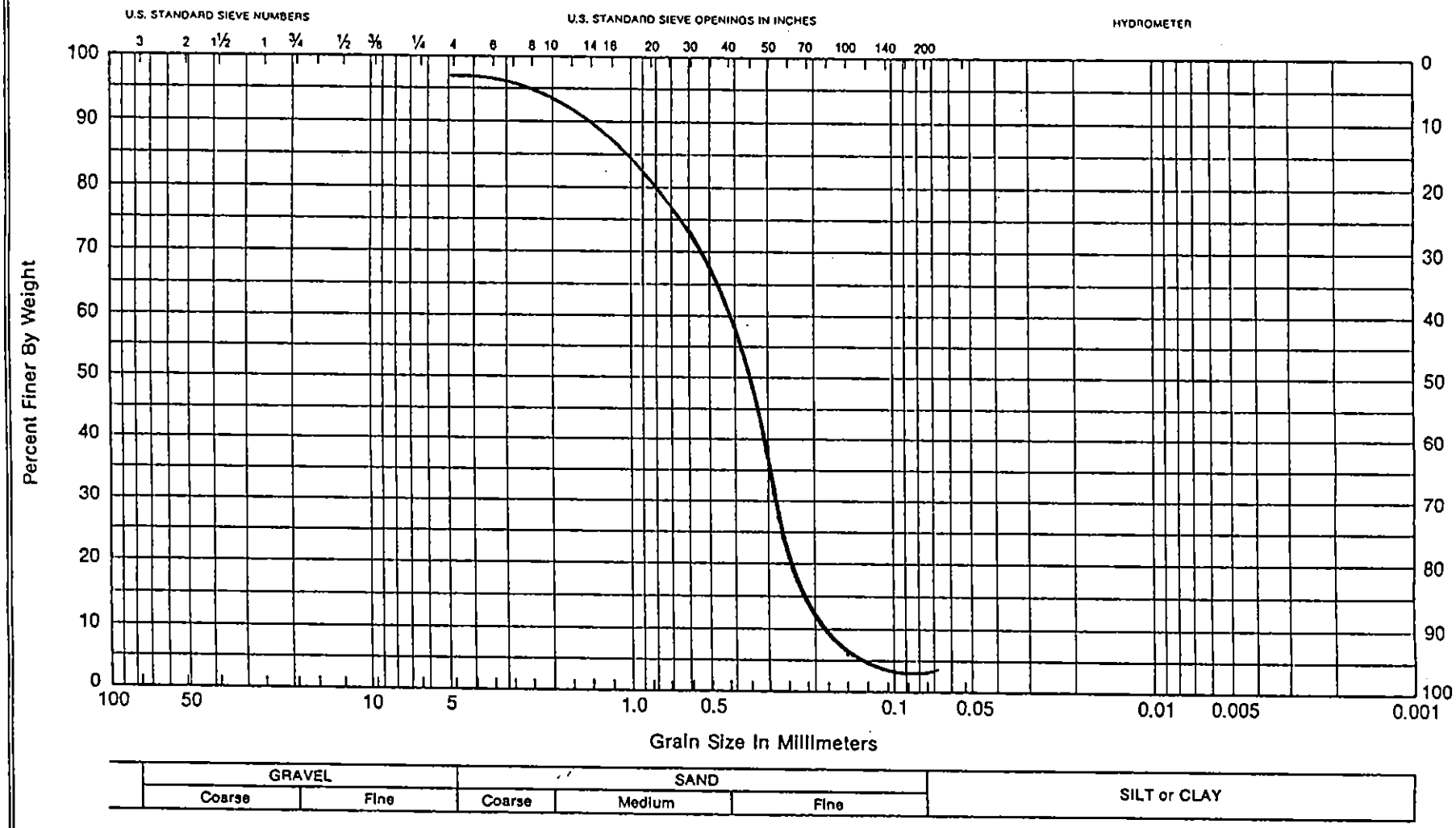
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S5, 23' - 24.5'
HVJ 93-312G
GRAY SAND WITH SILT, GRAVEL,
SHELL AND CLAY CLUMPS

GRAIN SIZE CURVES



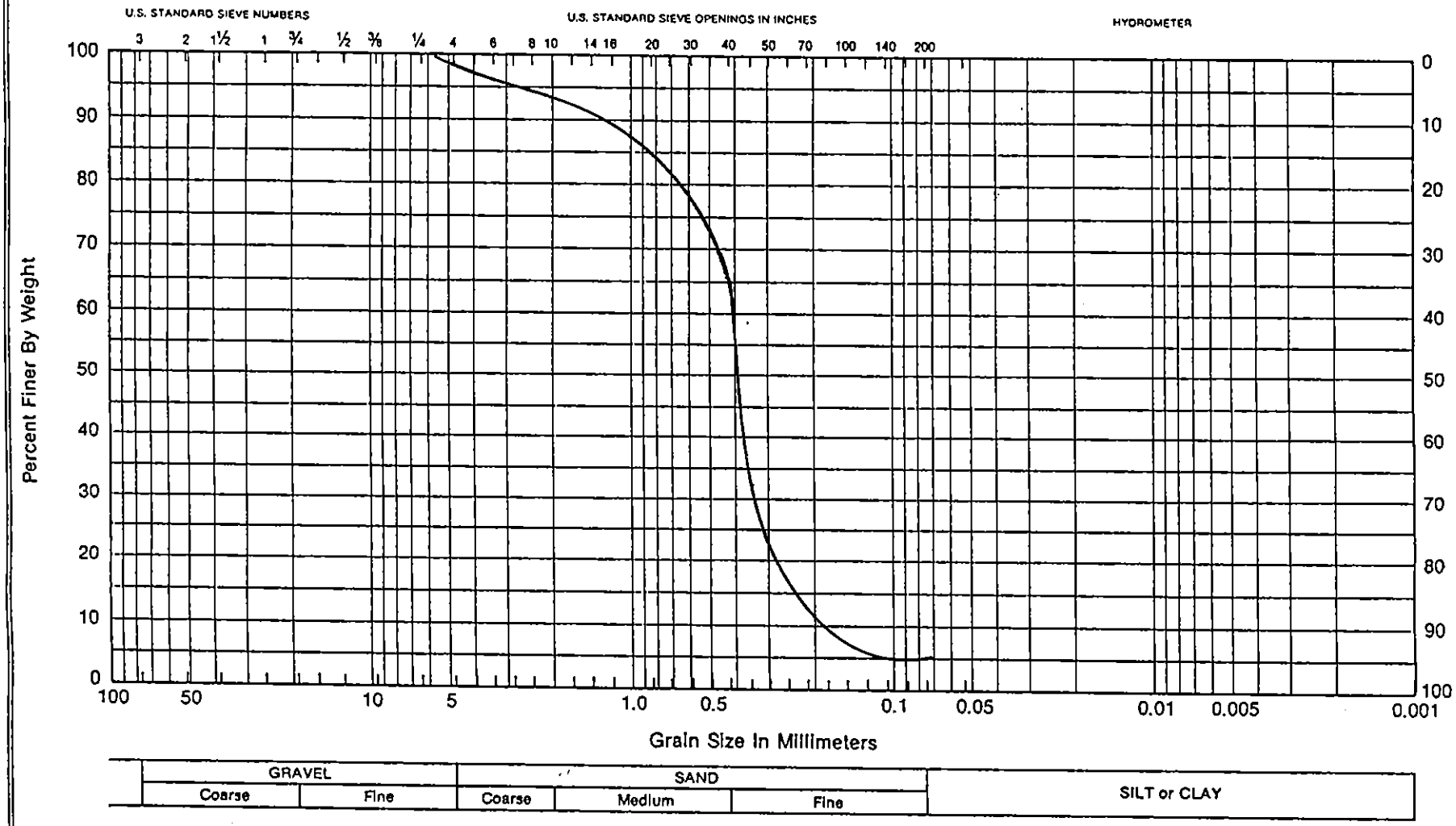
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S6, 30' - 31.5'
HVJ 93-312G
GRAY SANDY CLAY WITH SILT

GRAIN SIZE CURVES



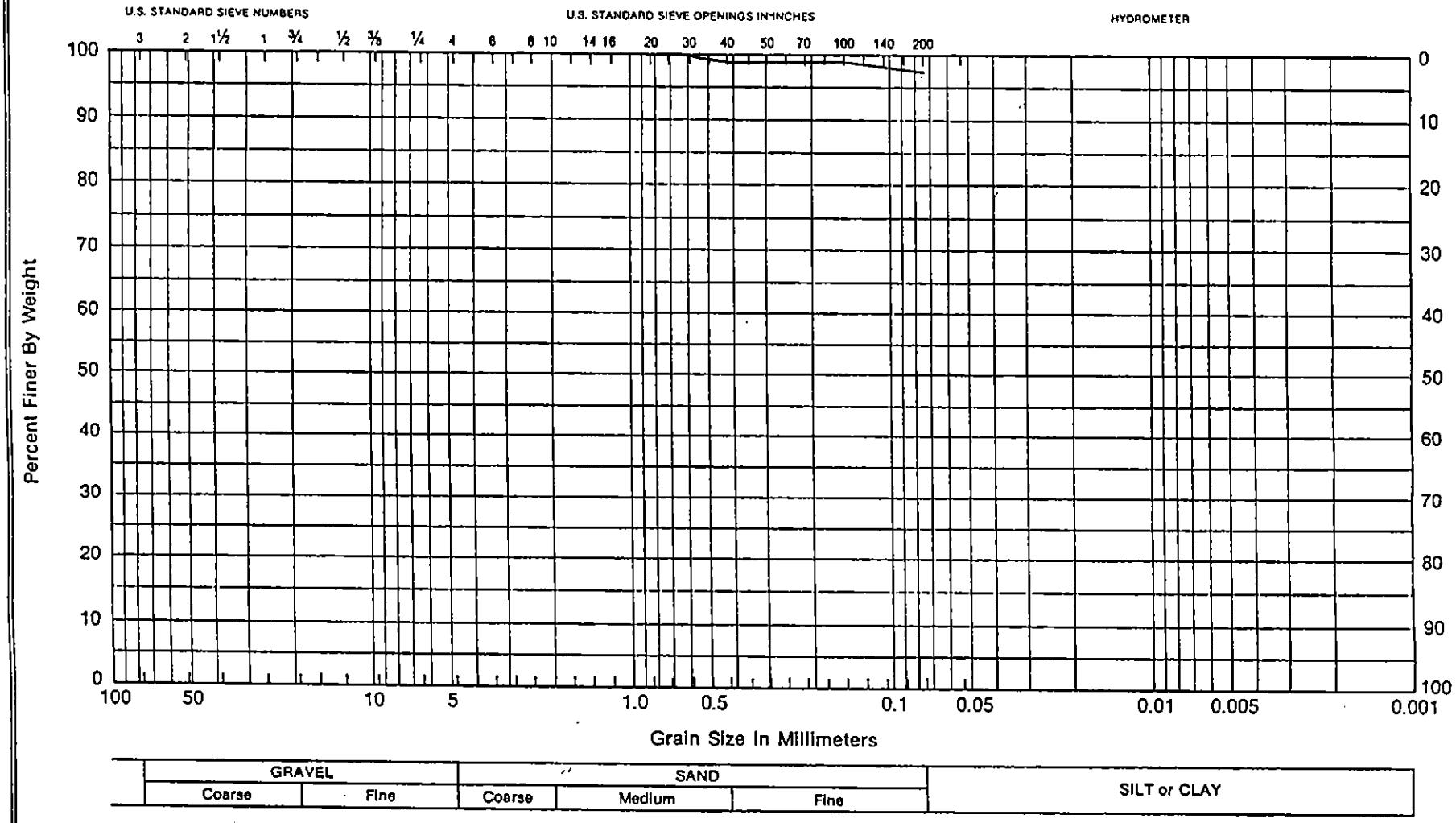
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S7, 37' - 38.5'
HVJ 93-312G
TAN COARSE SAND WITH GRAVEL

GRAIN SIZE CURVES



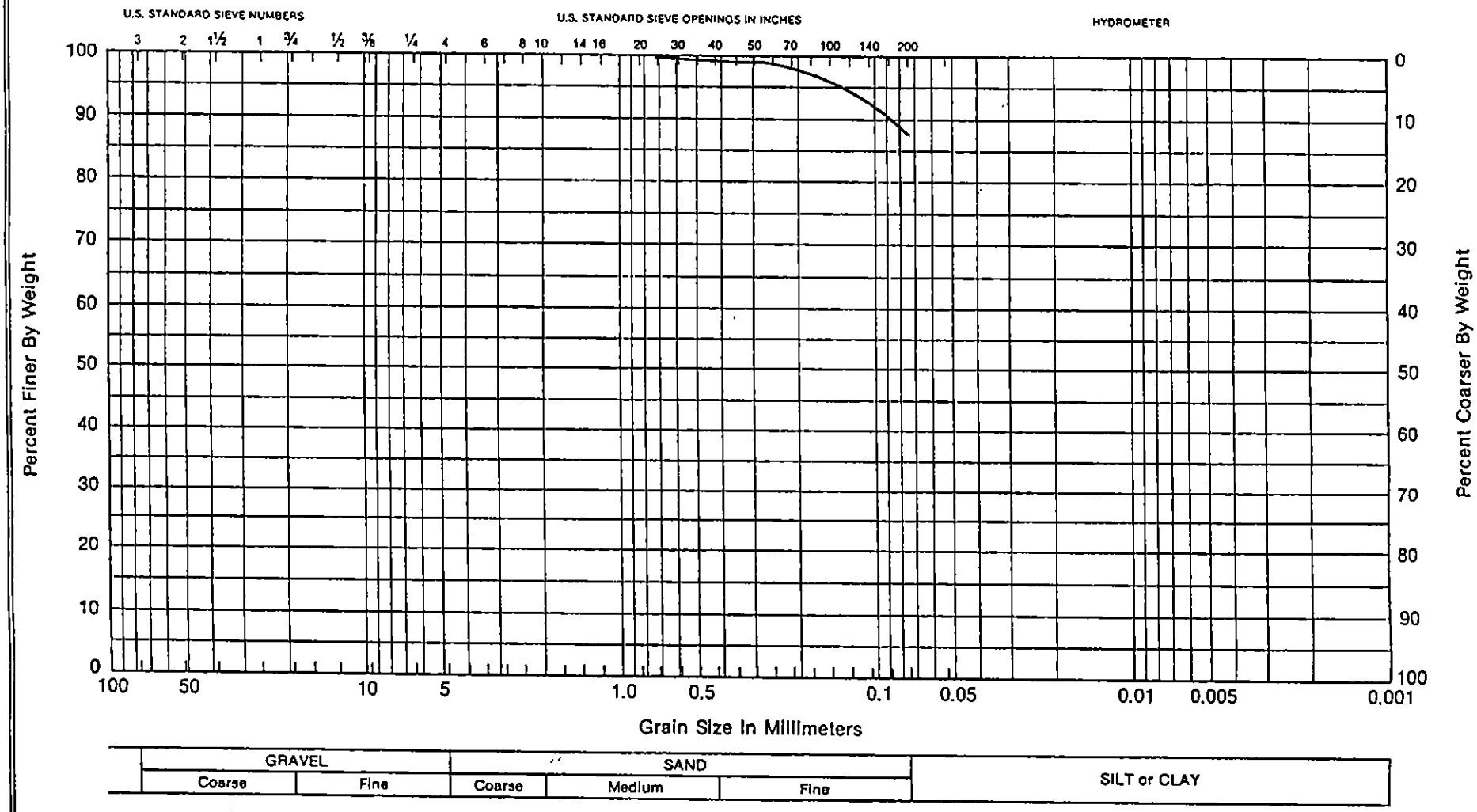
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S8, 44' - 45.5'
HVJ 93-312G
TAN AND GRAY SAND WITH
GRAVEL AND SANDY CLAY CLUMPS

GRAIN SIZE CURVES



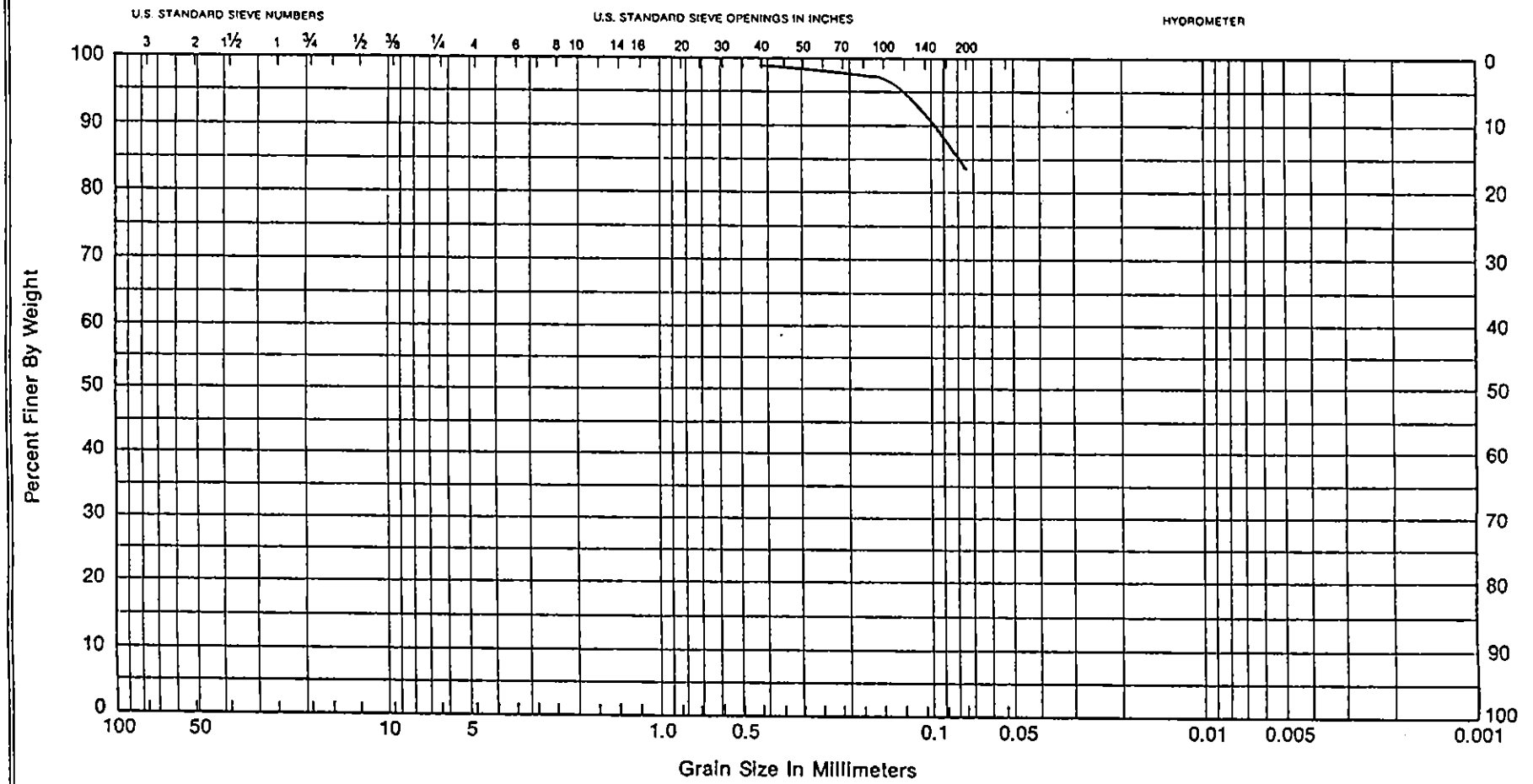
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S9, 51' - 53'
HVJ 93-312G
REDDISH BROWN CLAY WITH SILT,
CALCAREOUS NODULES AND FERROUS NODULES

GRAIN SIZE CURVES



DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S10, 53' - 55'
HVJ 93-312G
TAND AND GRAY SANDY CLAY WITH CLAY SEAMS,
SILT, CALCAREOUS NODULES AND FERROUS NODULES

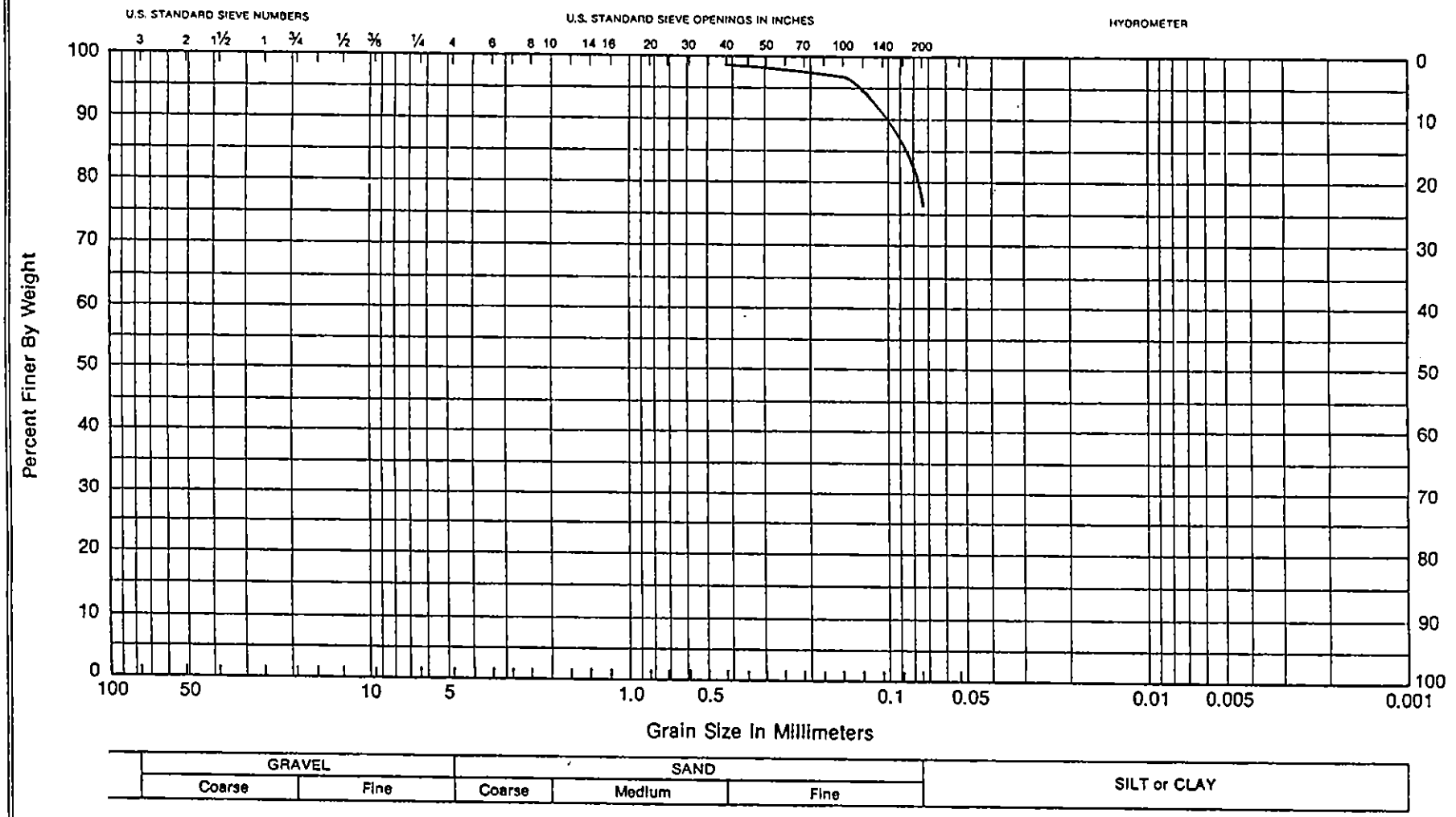
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

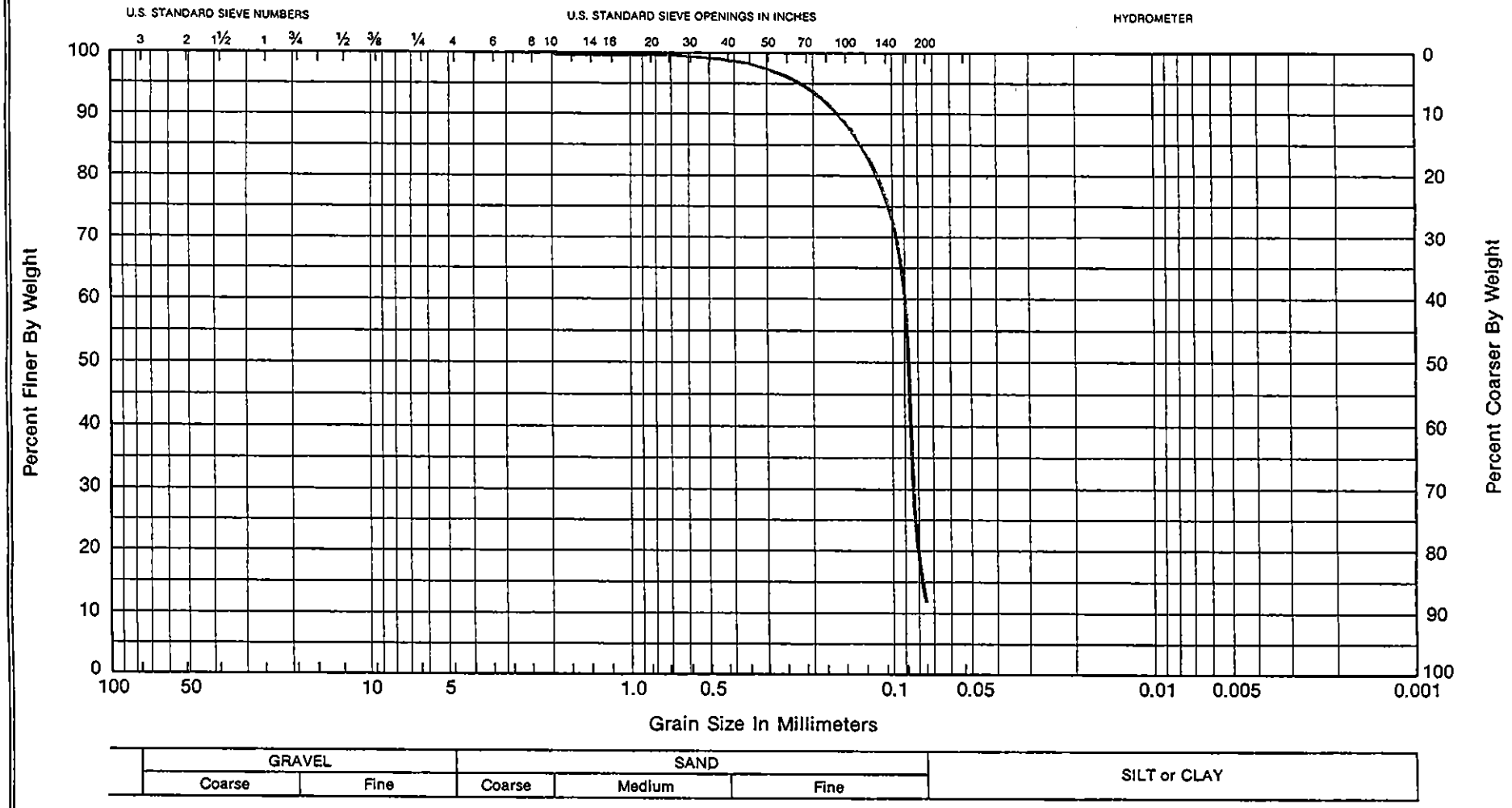
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S11, 55' - 57'
HVJ 93-312G
TAN AND GRAY SILTY CLAY
WITH SAND AND GRAVEL

GRAIN SIZE CURVES



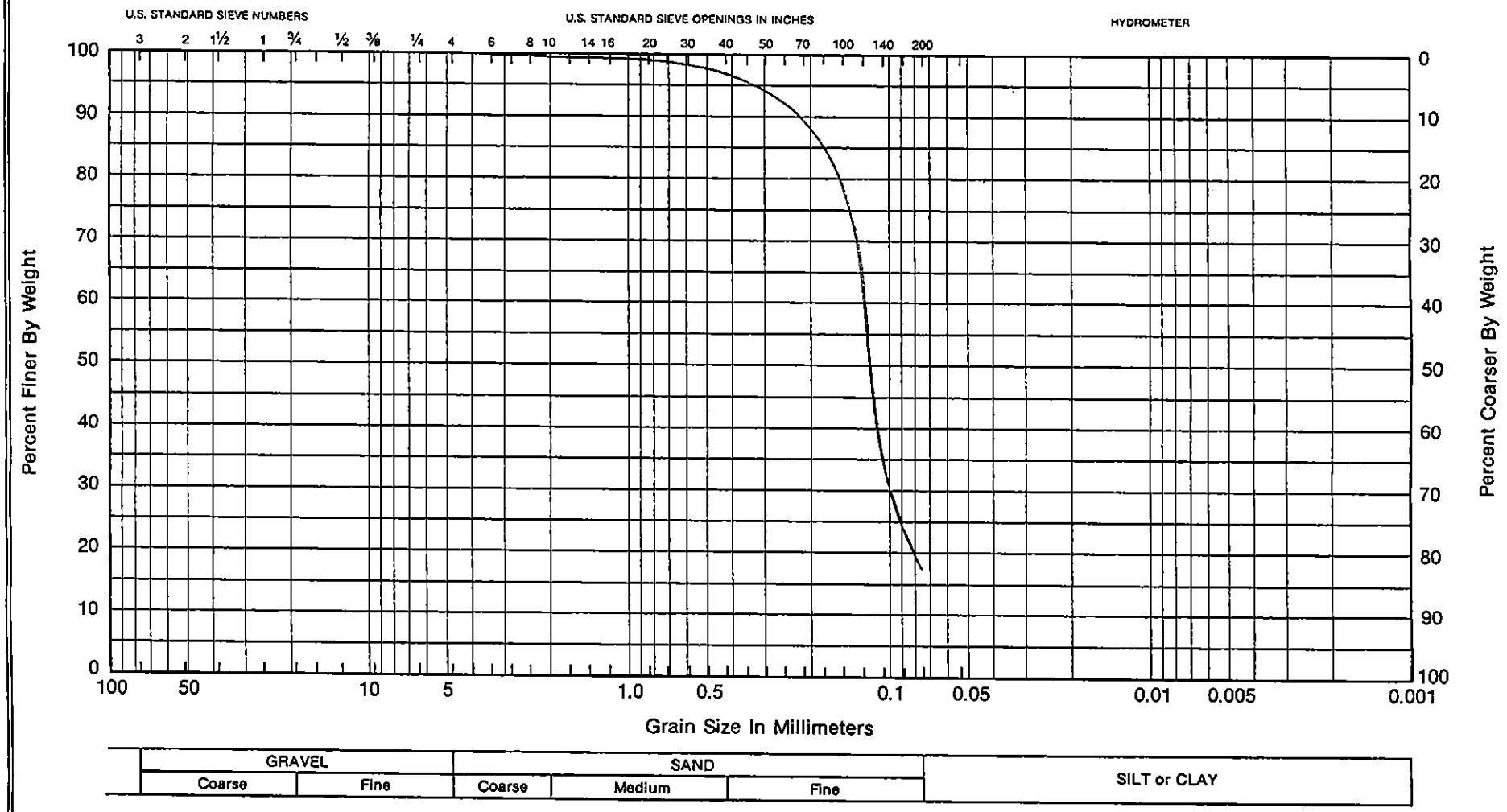
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S12, 64' - 65.5'
HVJ 93-312G
TAN AND GRAY SANDY CLAY WITH
SILT AND SAND PARTINGS

GRAIN SIZE CURVES



DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S13, 71' - 72.5'
HVJ 93-312G
GRAY SILTY SAND

GRAIN SIZE CURVES



DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-277, S14, 78' - 79.5'
HVJ 93-312G
GRAY AND TAN SILTY SAND WITH CLAY