FIELD BORING LOG

Project Name: TRINITY RIVER - WALLISVILLE, TEXAS		Project No. 93-312G1
Location: TRINITY RIVER		Client: ARMY CORP. OF ENGINEERS
Boring No.: 93-273	Date Started: 3-9-94	El. of River: +2.447
Water Depth: 12.0	Date Completed: 3-10-94	Easting: 3,353,402.71
Time Started: 7:00AM	Northing: 744,200.17	Driller: PAT. STEPHENS
Time Completed: 11:00AM	Logger: D. CANADA	Depth to caving:
Rig: MOBIL B-61	Weather:	

DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE	HAND PENETROMETER CTS
0				NO RECOVERY THE MUCK AND SAND FELL-OUT						
5										
	S1	P	X	MED. DENSE DK.GR.TA.SA. W/SHELL	SP	11	12	13		
10										
15	S2	P	X	V/STIFF ~~MED. DENSE~~ LT. GR.TA.SA.CL	CL ~~SC~~	6	12	15		
20										
	S3	P	X	V/STIFF ~~MED DENSE~~ LT GR TA SA.CL.	CL ~~SC~~	6	11	17		
25										
	S4	P	X	V/~~STIFF~~ SOFT ~~MED. DENSE~~. LT. GR.TA SA.CL	CL ~~SC~~	7	13	16		
30										

FIELD BORING LOG

Boring No.: 93-273

DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE (tsf)	HAND PENETROMETER (tsf)
30										
35	S5	P	X	MED. DENSE LT. TA. SA	SP	6	5	7		
40										
	S6	P	X	VERY DENSE LT. TA. SA w/GRAVEL	SP	15	27	27		
45										
50	S7	P	X	V/stiff ~~MED. DENSE~~ LT. TA. GR ~~SIL~~. CL, w/FER CAL w/silt	CH ~~SM~~	9	9	13		
	S8	S		stiff ~~SOFT~~ LT TA GR ~~SIL~~. CL w/FER	~~CL~~ CH				~~.3~~	3.0
	S9	J		LT. TA. GR. SIL. CL w/FER CAL	CL				~~.45~~	2.0
55	S10	P	X	~~stiff~~ V/soft ~~MED. DENSE~~. LT. TA. GR. SA. CL	CL ~~SC~~	3	6	7		
60										
	S11	P	X	Hard sa. cl LT. GR. TA. ~~CL. SA.~~	CL ~~SC~~	15	50/5"			
65										
70	S12	P	X	Very Dense LT. GR. TA. SA.	SP	20	50/5"			

FIELD BORING LOG

Boring No.: 93-273

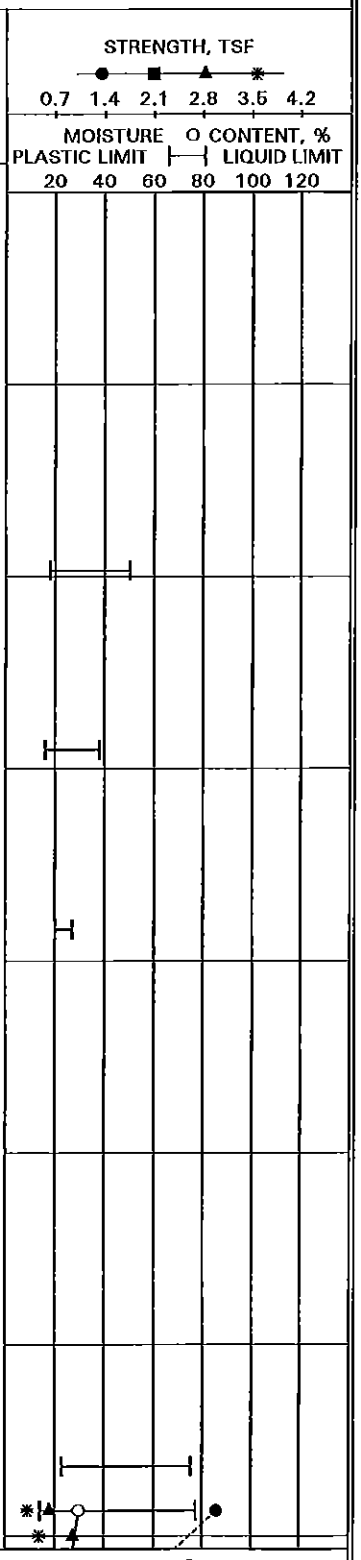
DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE	HAND PENETROMETER
70										
75	S13	P	X	V/dense. LT. GR. SA. →	SP	19	50/5"			
80										
85										
90										
95										
100										
105										
110										

LOG OF SOIL BORING

Project Name: Trinity River Soil Borings
Project No. 93-312G
ring No.: 93-273
ud Line Elevation: -9.55 feet (NGVD)
Completion Depth: 77.5 feet
Water Depth: 12.0 feet

Weather: -
Date: March 9, 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
-10 / 0		No recovery							
-15 / 5		Medium dense dark gray SILTY SAND w/ shell	25	93	90	84	45	18	
-20 / 10									
-25 / 15		Very stiff gray and tan SANDY CLAY w/ shell and calcareous nodules to 22.5'	27	99	98	97	76	71	
-30 / 20			28	99	99	97	92	69	
-35 / 25									
-40 / 30			29	100	100	99	91	54	
-45 / 35		Medium dense to very dense tan and gray SAND w/ gravel	12	98	96	78	19	5	
-50 / 40		tan below 42'	52	96	93	51	3	2	
-55 / 45									
50		Very stiff tan and gray CLAY w/ calcareous nodules w/ slickensides to 53'	22	100	99	97	95	93	
				100	99	99	99	97	94
									92



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

Plate 5A

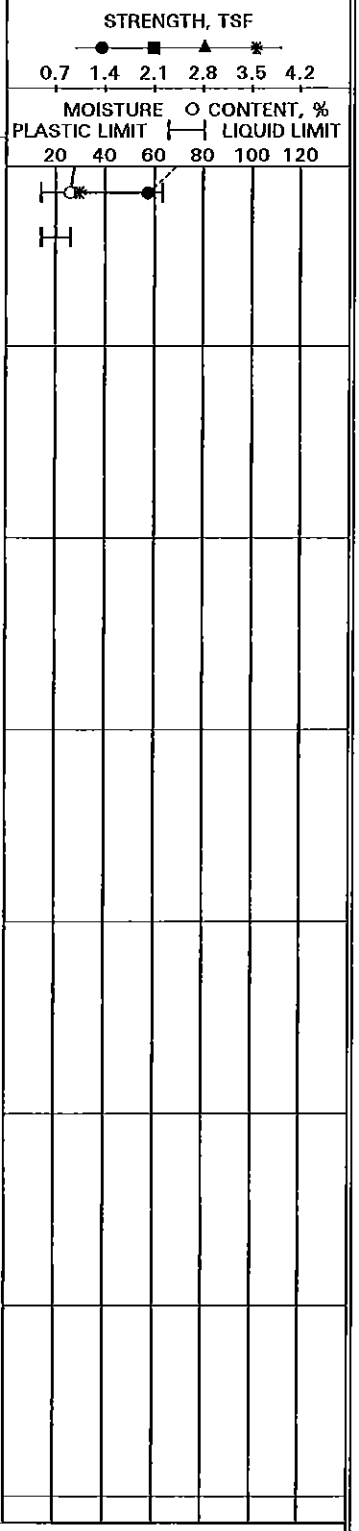
HVJ ASSOCIATES, INC.

LOG OF SOIL BORING

Project Name: Trinity River Soil Borings
Project No. 93-312G
ring No.: 93-273
ud Line Elevation: -9.55 feet (NGVD)
Completion Depth: 77.5 feet
Water Depth: 12.0 feet

Weather: -
Date: March 9, 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
		w/ shell and gravel below 53'		100	99	96	92	88	99
-65 55		Stiff tan and gray SILTY CLAY	13	100	100	100	99	83	
-70 60		Hard gray SANDY CLAY w/ sand partings	50/5"	95	95	95	94	70	
-75 65		Very dense gray SILTY SAND w/ gravel to 70'	50/5"	100	100	100	98	27	
-80 70			50/5"	100	100	100	98	34	
-85 75									
-90 80									
-95 85									
-100 90									
-105 95									
-110 100									
105									



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

Plate 5B

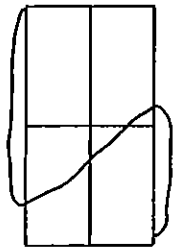
HVJ ASSOCIATES, INC.

UNCONFINED COMPRESSION TEST REPORT

Project: Trinity River - Wallisville, Texas
Project No. 93-312G
Boring No. 93-273
Sample No. S8
Depth: 51-52
El. -60.55
Date: 4/15/94
Type of specimen: undisturbed
Classification: Tan and gray silty clay

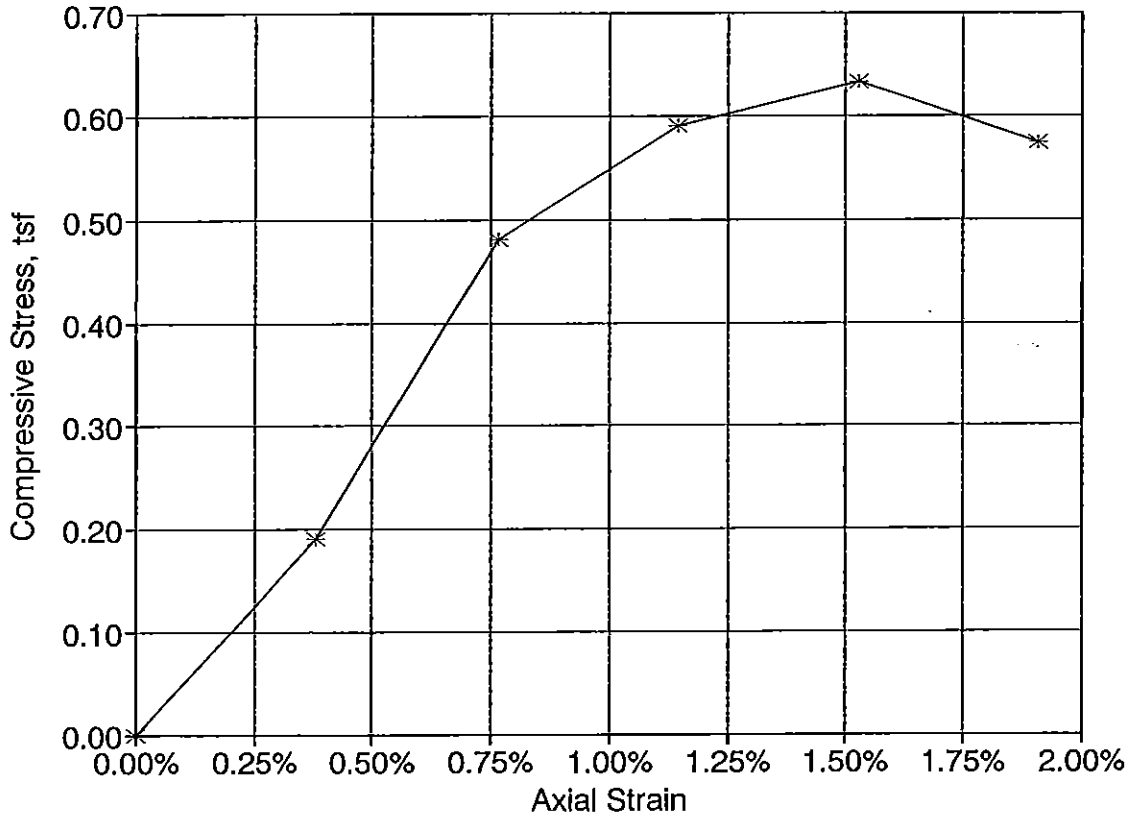
Initial water content	29.6
Dry density, pcf	93.8
Uncon. comp. strength, tsf	0.633
Undrained shear strength, tsf	0.317
Intitial specimen diameter, in	2.851
Initial specimen height, in	5.236
Liquid limit	77
Plastic limit	14
Plasticity index	63

Failure Sketch



☐ Controlled stress

☑ Controlled stain

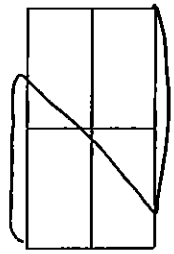


UNCONFINED COMPRESSION TEST REPORT

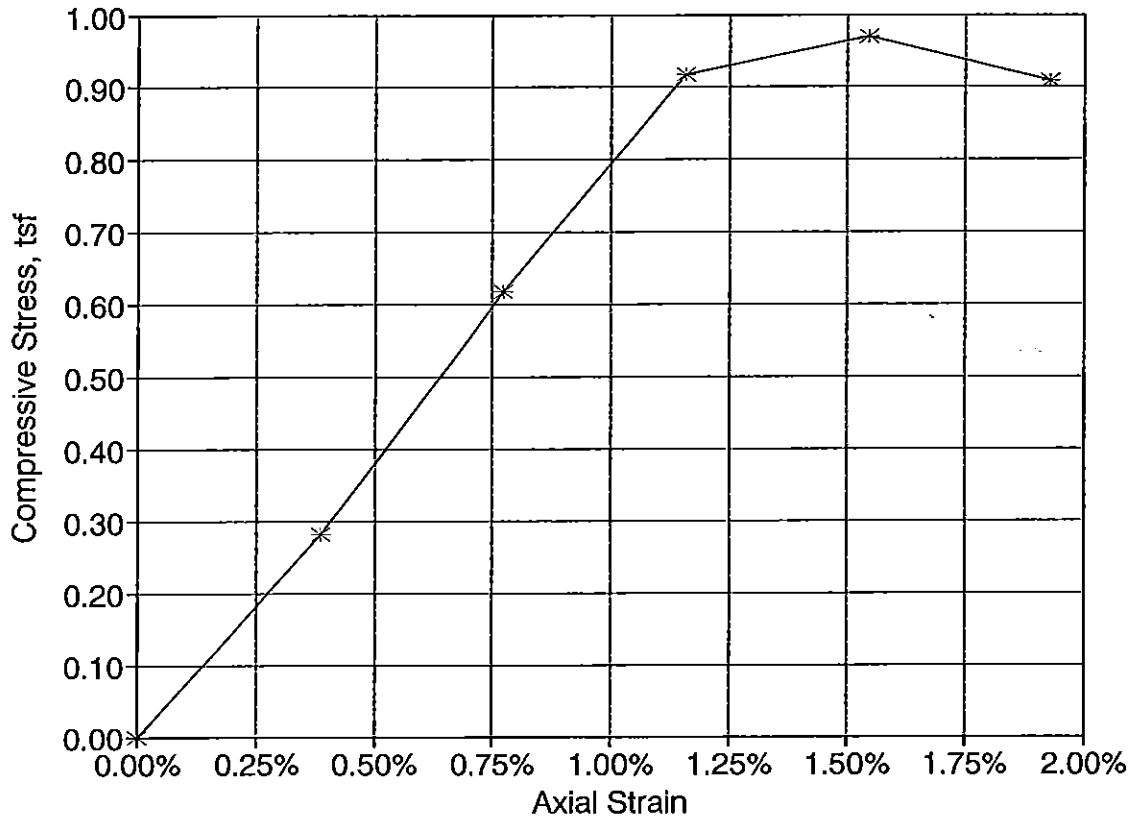
Project: Trinity River - Wallisville, Texas — Project No. 93-312G
Boring No. 93-273 — Sample No. S8 — Depth: 52-53
El. -61.55 — Date: 4/15/94
Type of specimen: undisturbed — Classification: Light brown and gray silty clay

Initial water content	29.6
Dry density, pcf	91.8
Uncon. comp. strength, tsf	0.969
Undrained shear strength, tsf	0.485
Intitial specimen diameter, in	2.846
Initial specimen height, in	5.178
Liquid limit	77
Plastic limit	14
Plasticity index	63

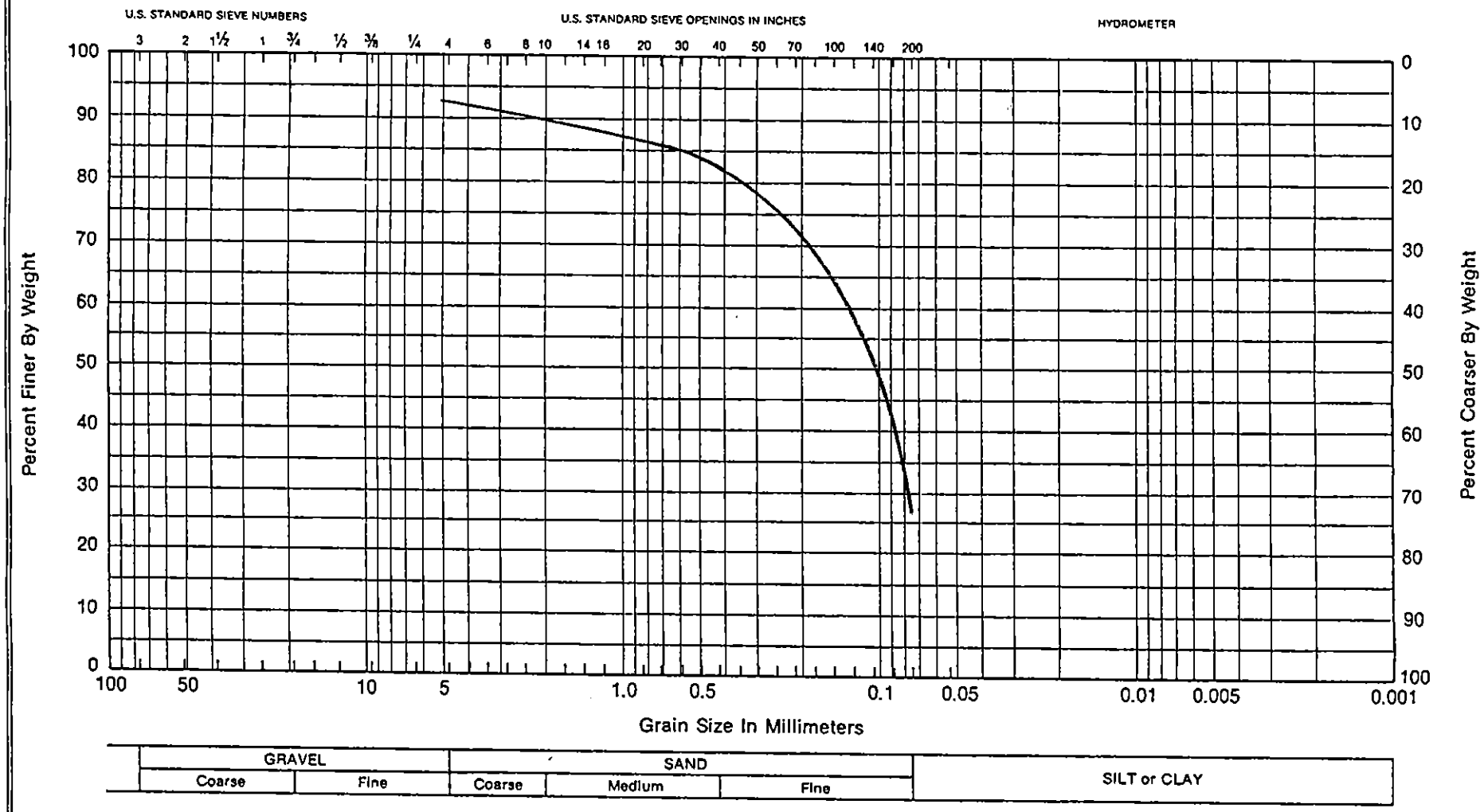
Failure Sketch



☐ Controlled stress ☑ Controlled stain

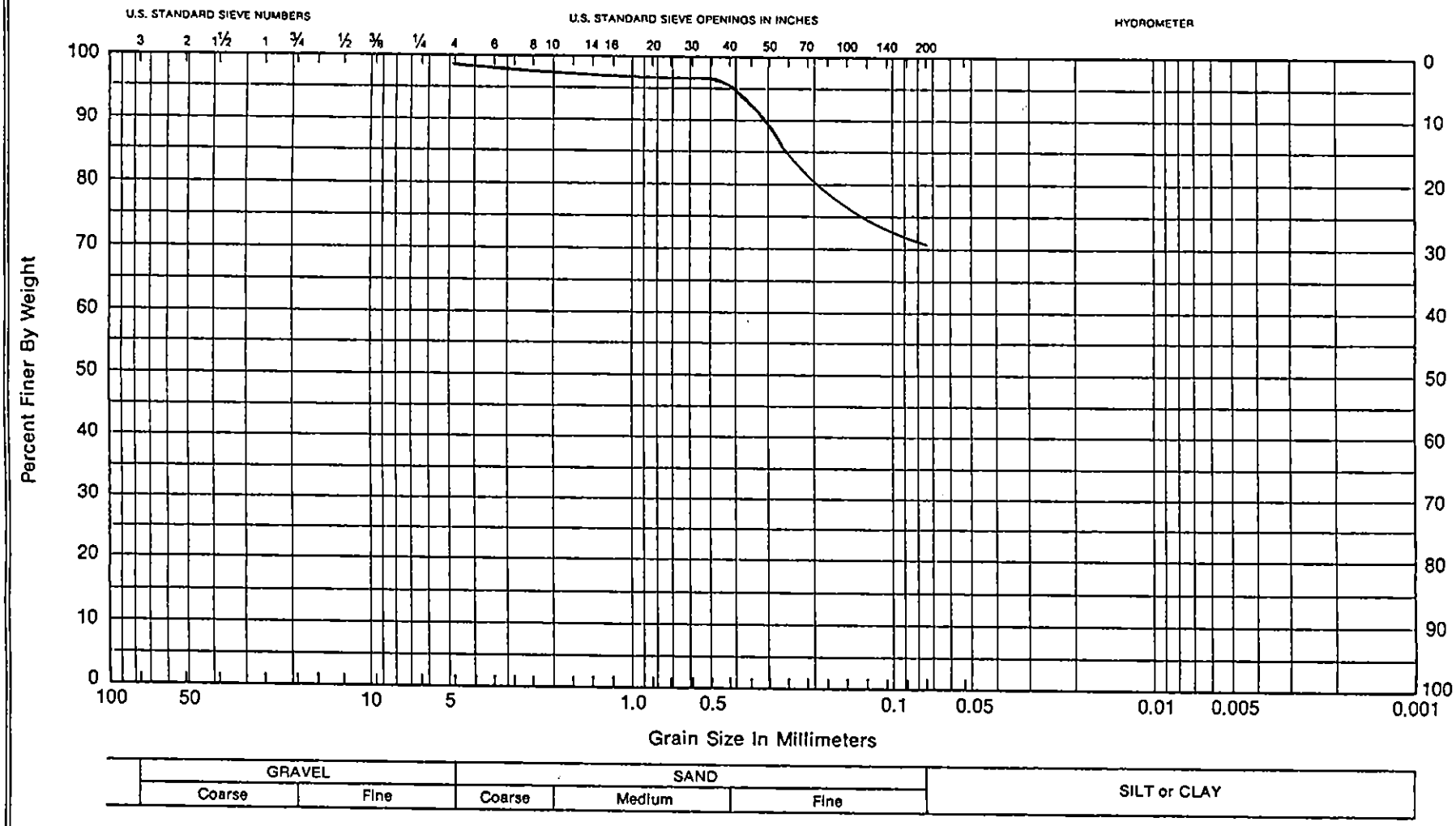


GRAIN SIZE CURVES



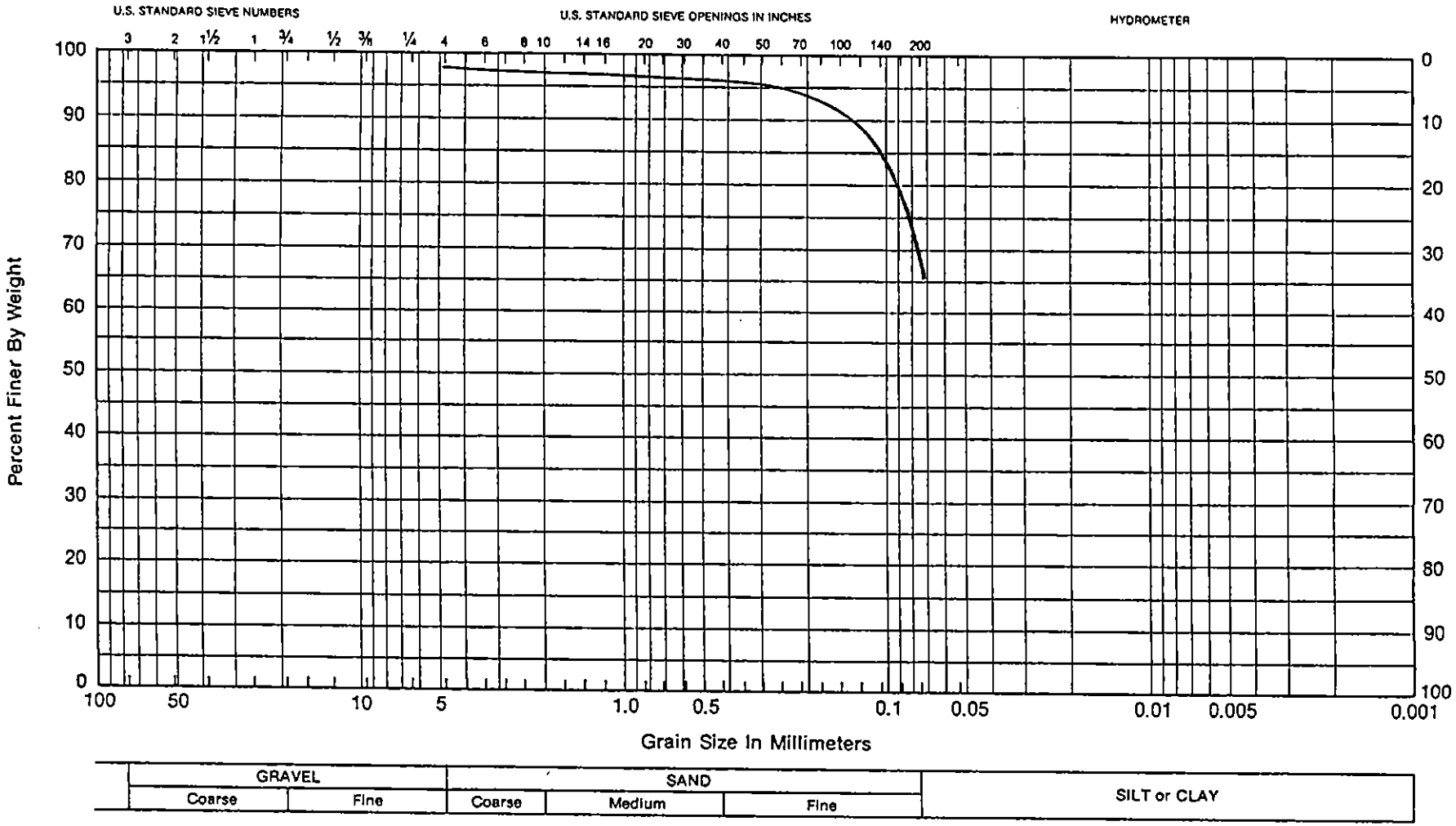
DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S1, 7' - 8.5'
HVJ 93-312G
DARK GRAY SAND WITH
SILT AND SHELL

GRAIN SIZE CURVES



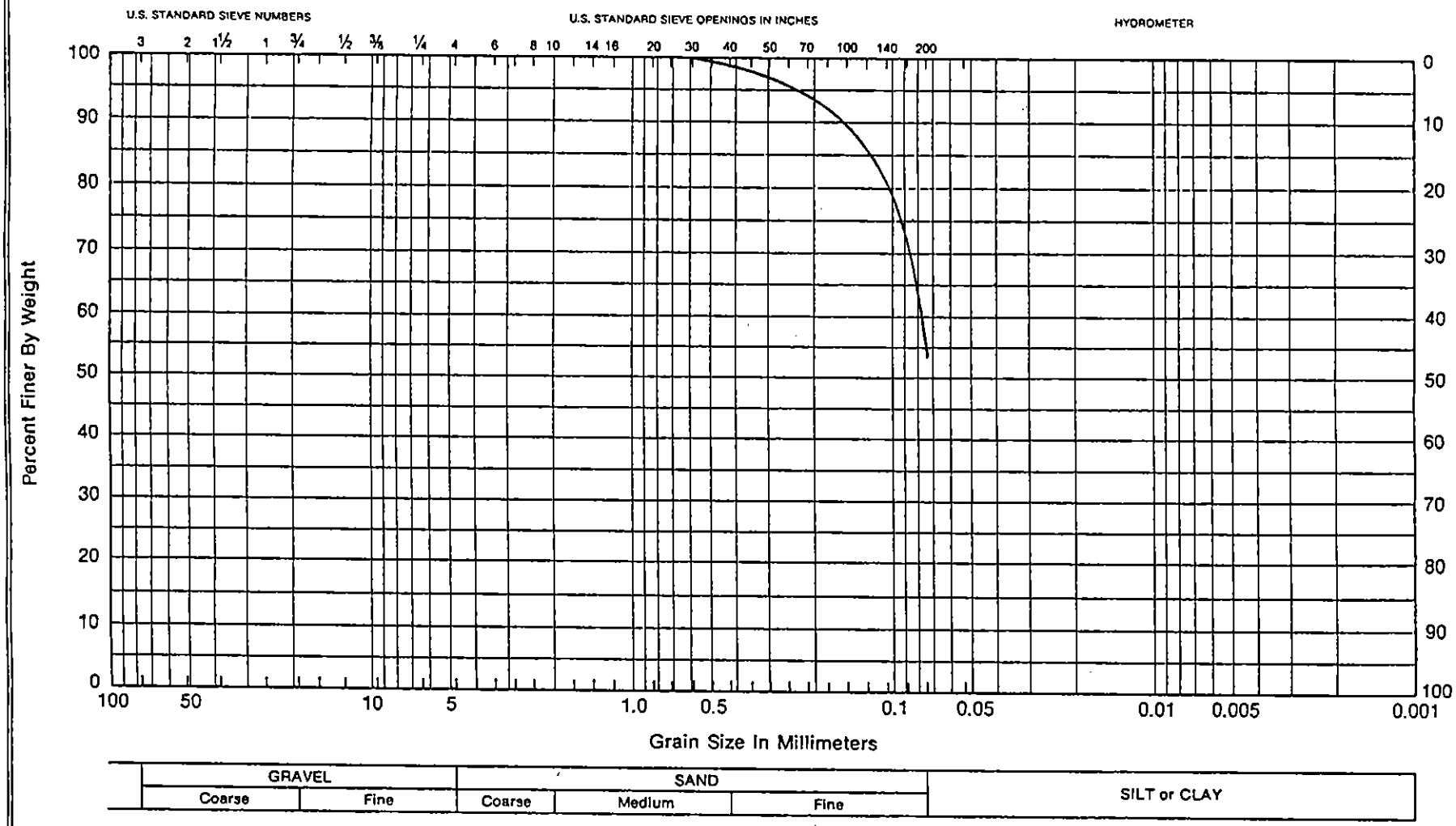
DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S2, 14' - 15.5'
HVJ 93-312G
GRAY AND TAN SANDY CLAY
WITH CALCAREOUS NODULES,
SILT AND SHELL

GRAIN SIZE CURVES



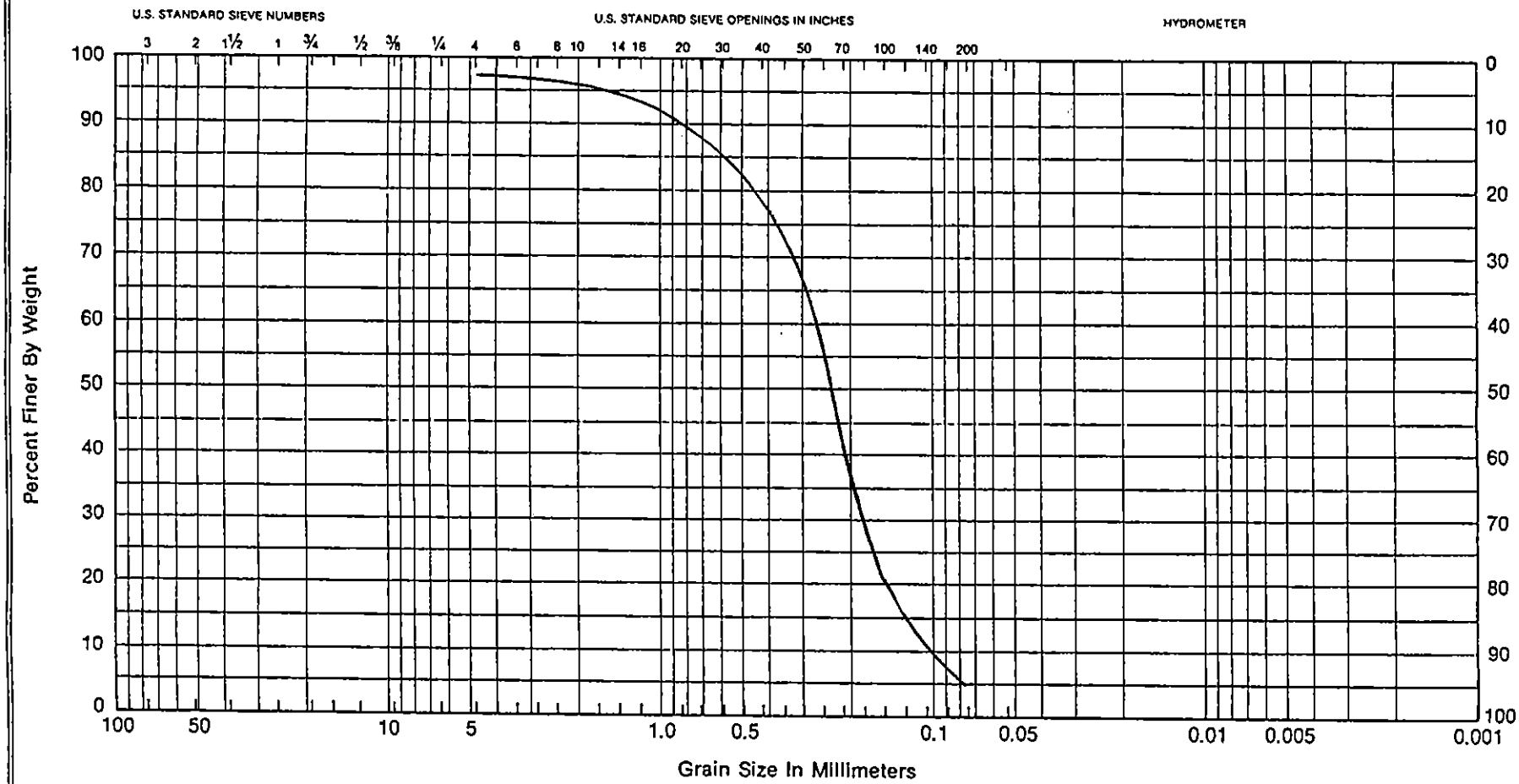
DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S3, 21' - 22.5'
HVJ 93-312G
GRAY AND TAN SANDY CLAY
WITH CALCAREOUS NODULES,
SILT AND SHELL

GRAIN SIZE CURVES



DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S4, 28' - 29.5'
HVJ 93-312G
TAN AND GRAY SANDY CLAY

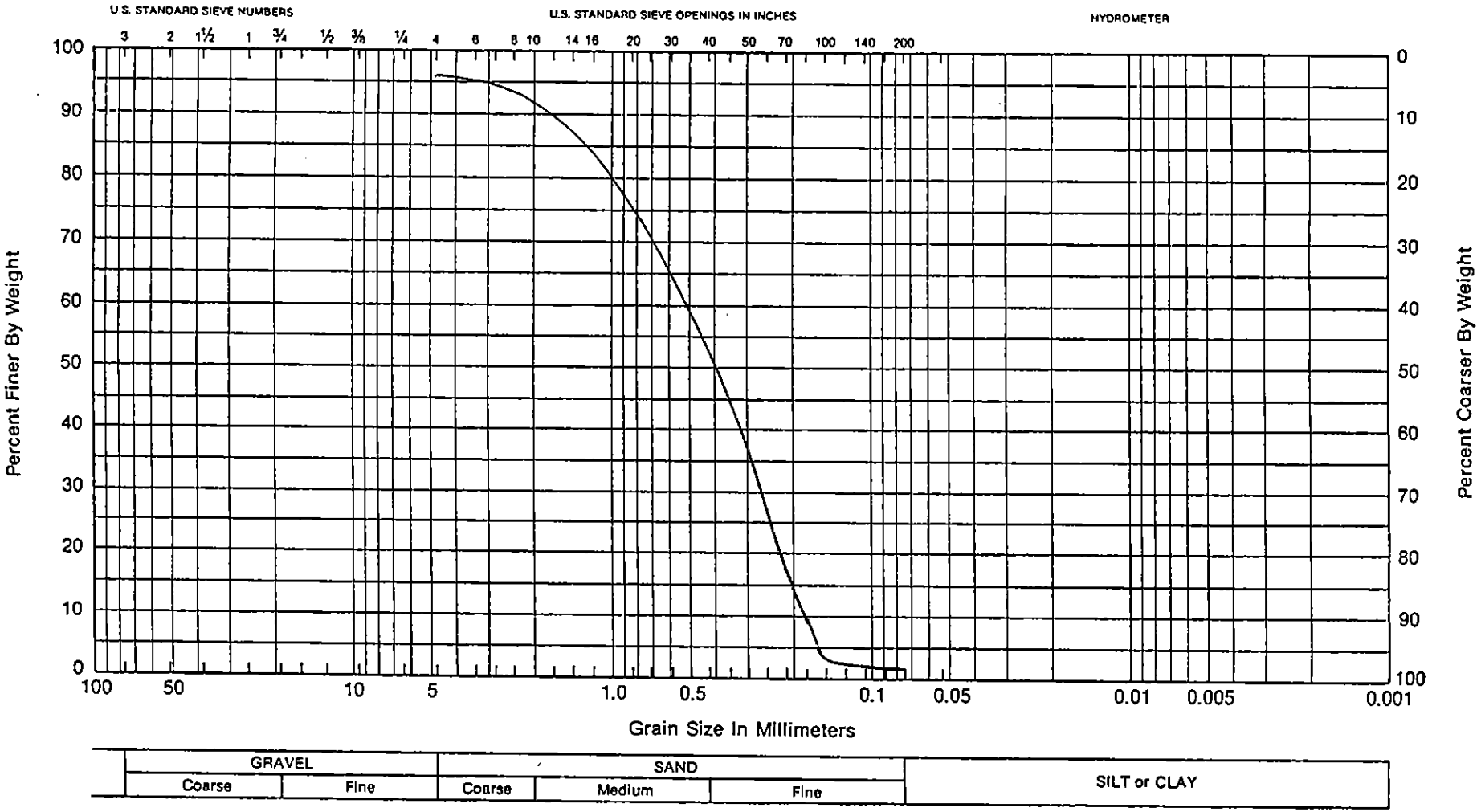
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S5, 35' - 36.5'
HVJ 93-312G
TAN AND GRAY SAND WITH GRAVEL

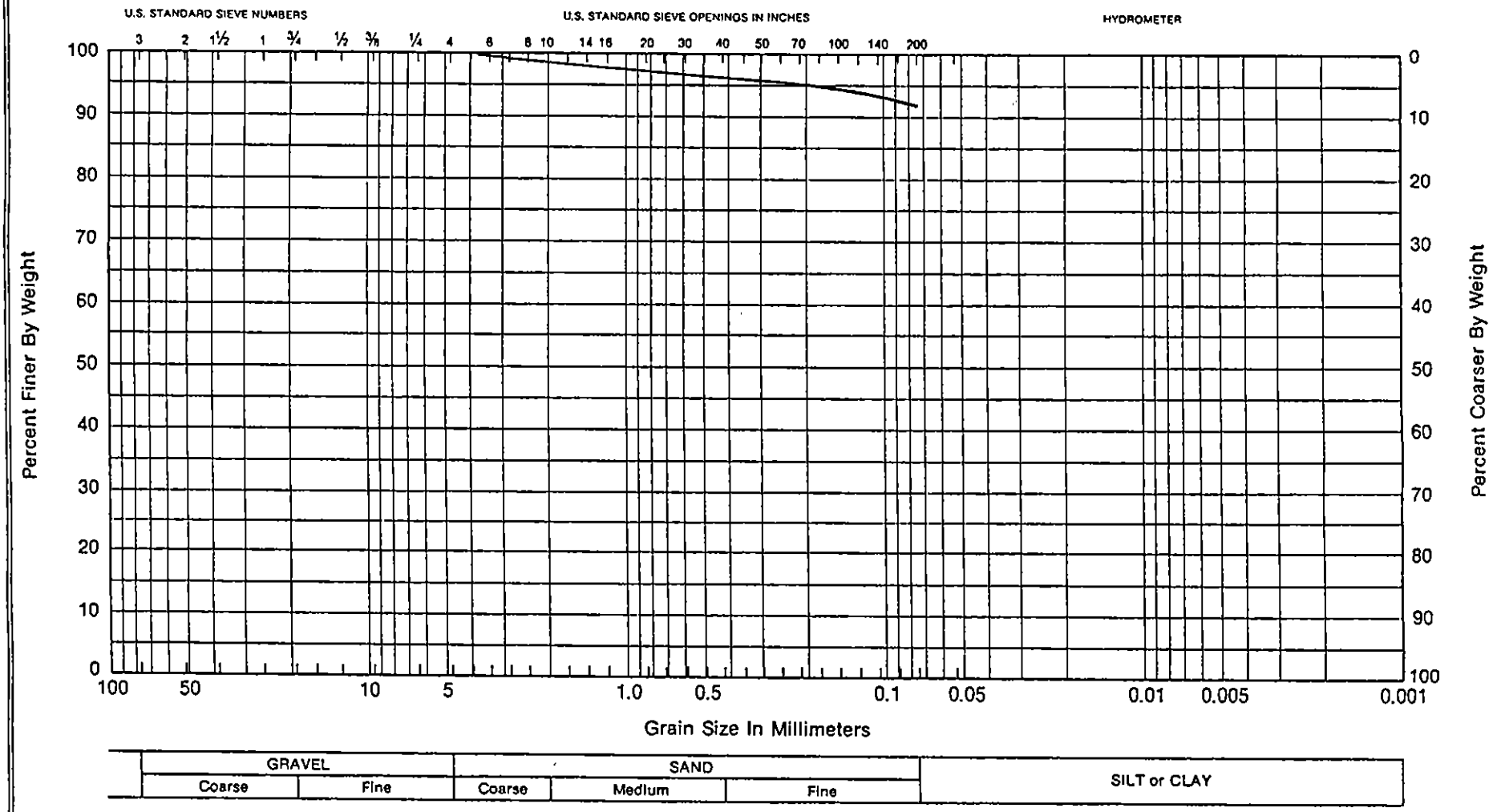
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

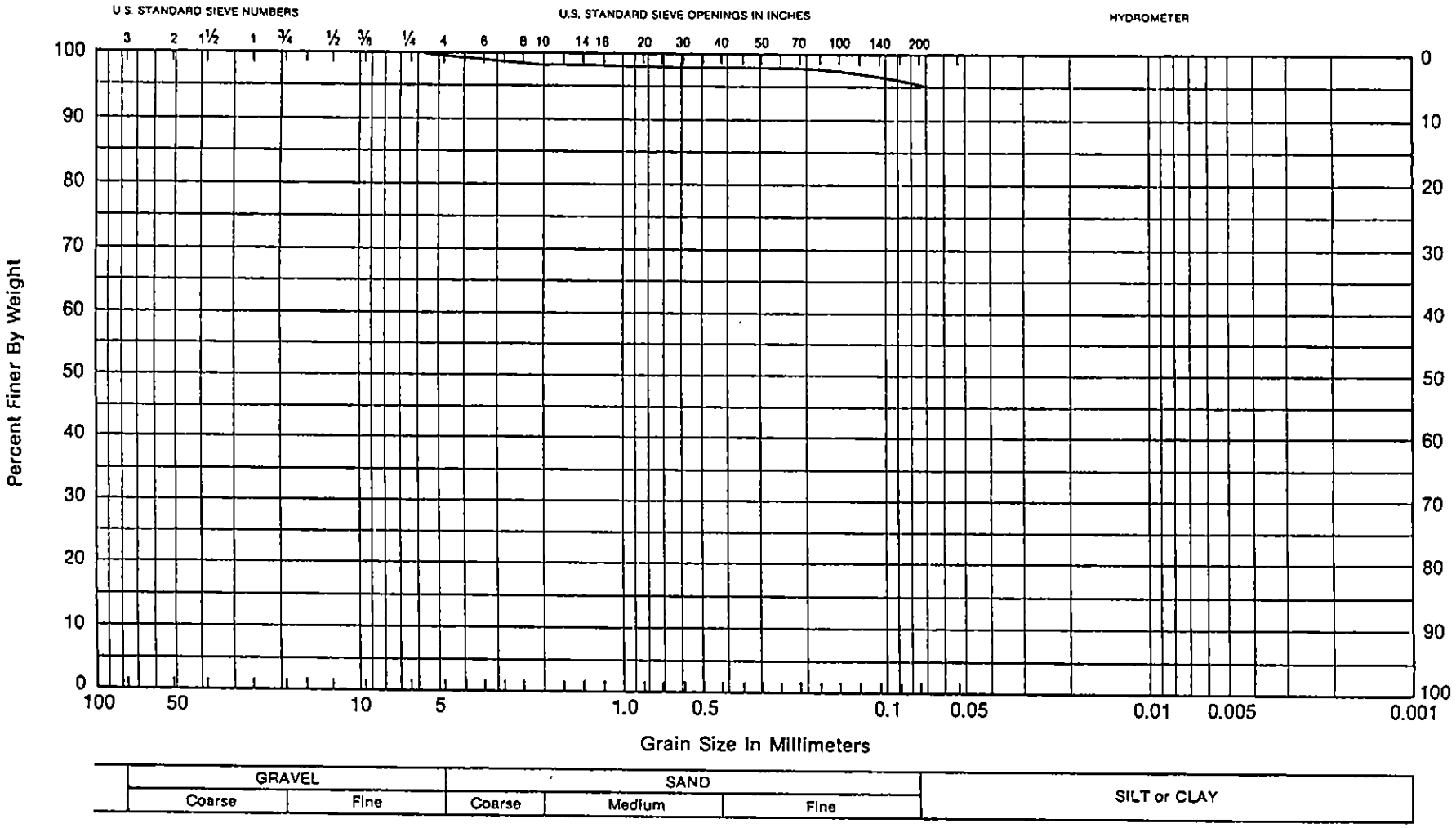
DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S6, 42' - 43.5'
HVJ 93-312G
TAN SAND WITH GRAVEL

GRAIN SIZE CURVES



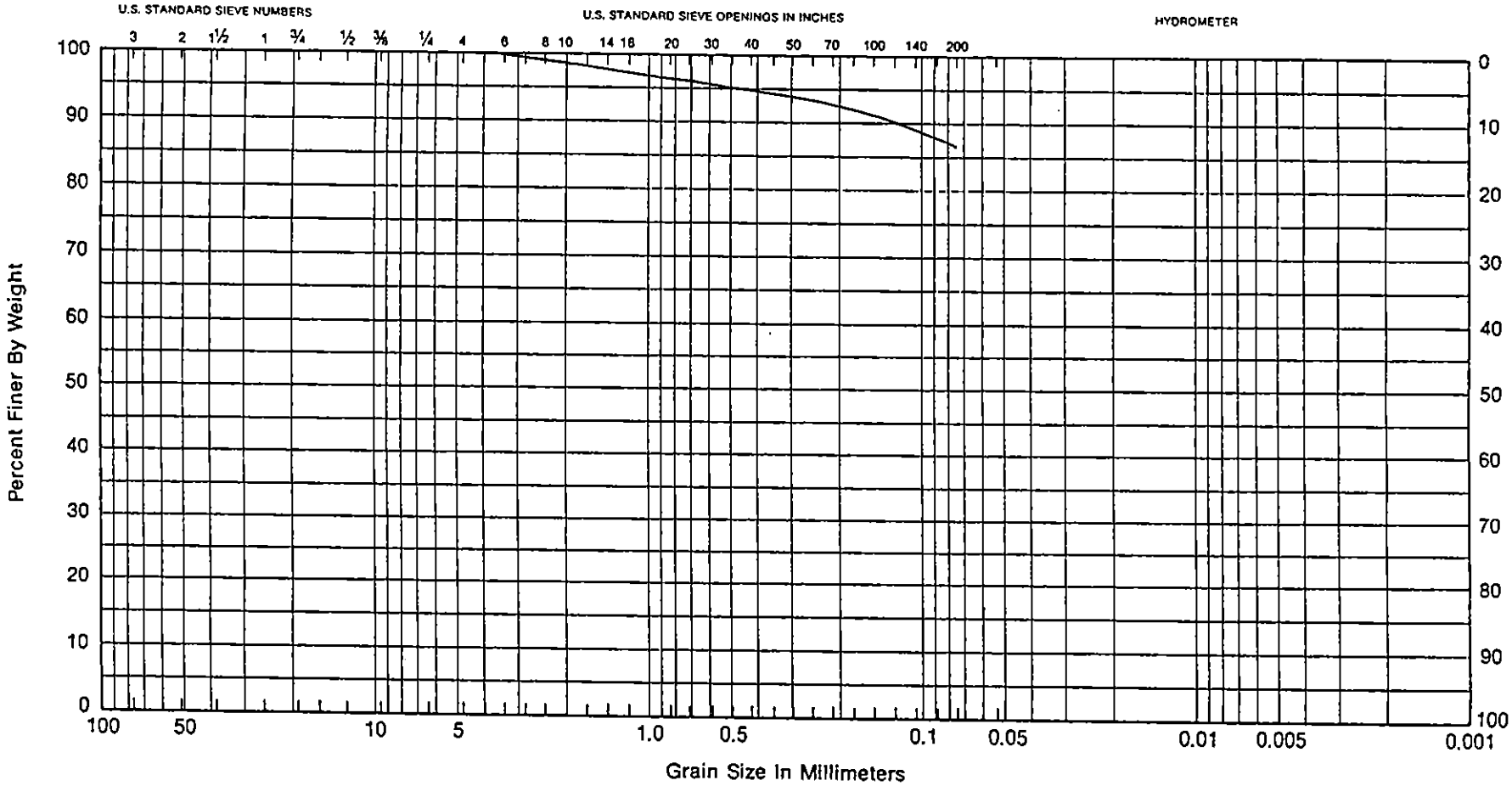
DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S7, 49' - 50.5'
HVJ 93-312G
TAN AND GRAY CLAY WITH
CALCAREOUS NODULES AND SILT

GRAIN SIZE CURVES



DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S8, 51' - 53'
HVJ 93-312G
BROWN AND GRAY CLAY WITH SILT, CALCAREOUS NODULES, AND FERROUS NODULES

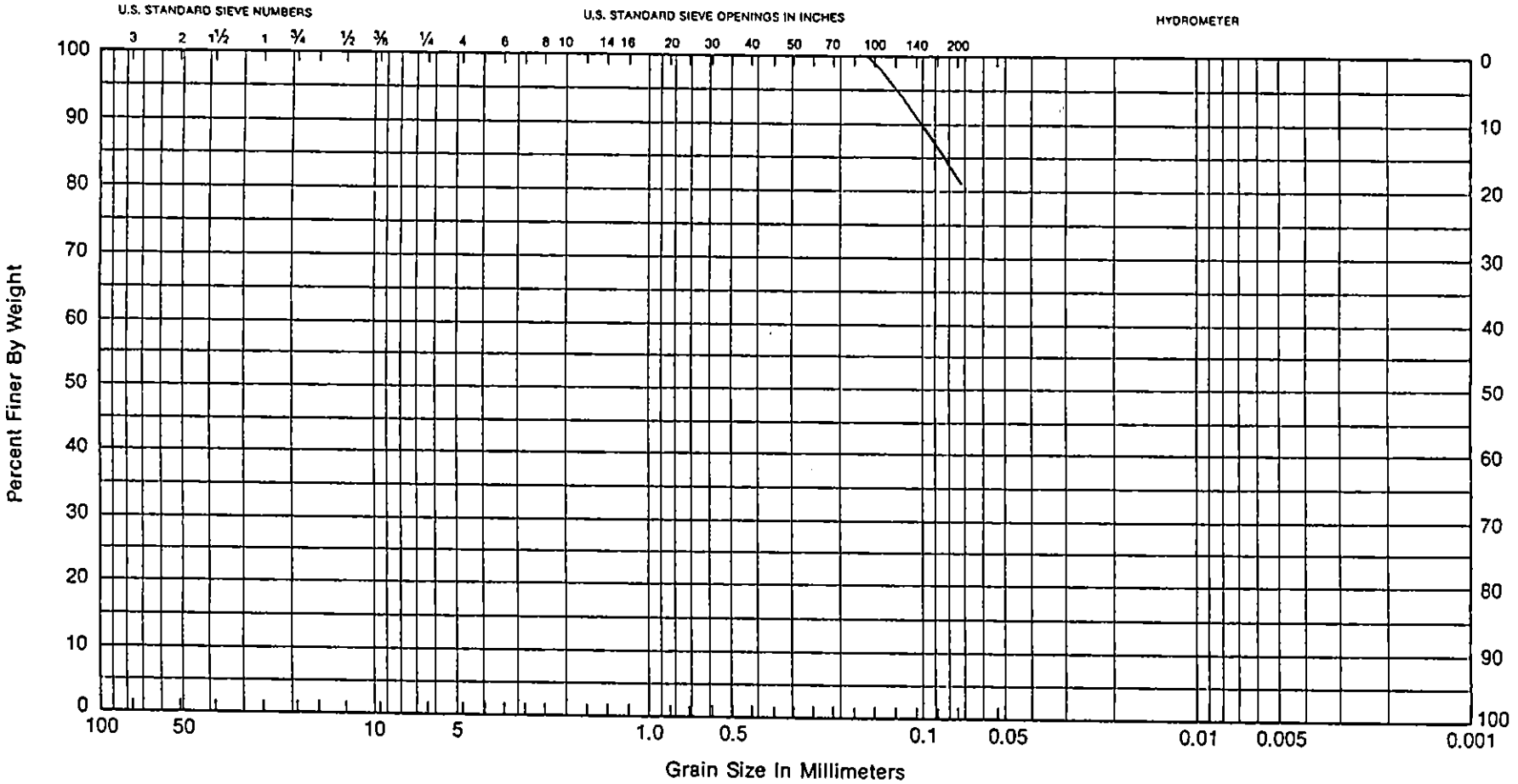
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S9, 53' - 55'
HVJ 93-312G
TAN AND GRAY CLAY WITH SAND
CALCAREOUS NODULES, SHELL
AND GRAVEL

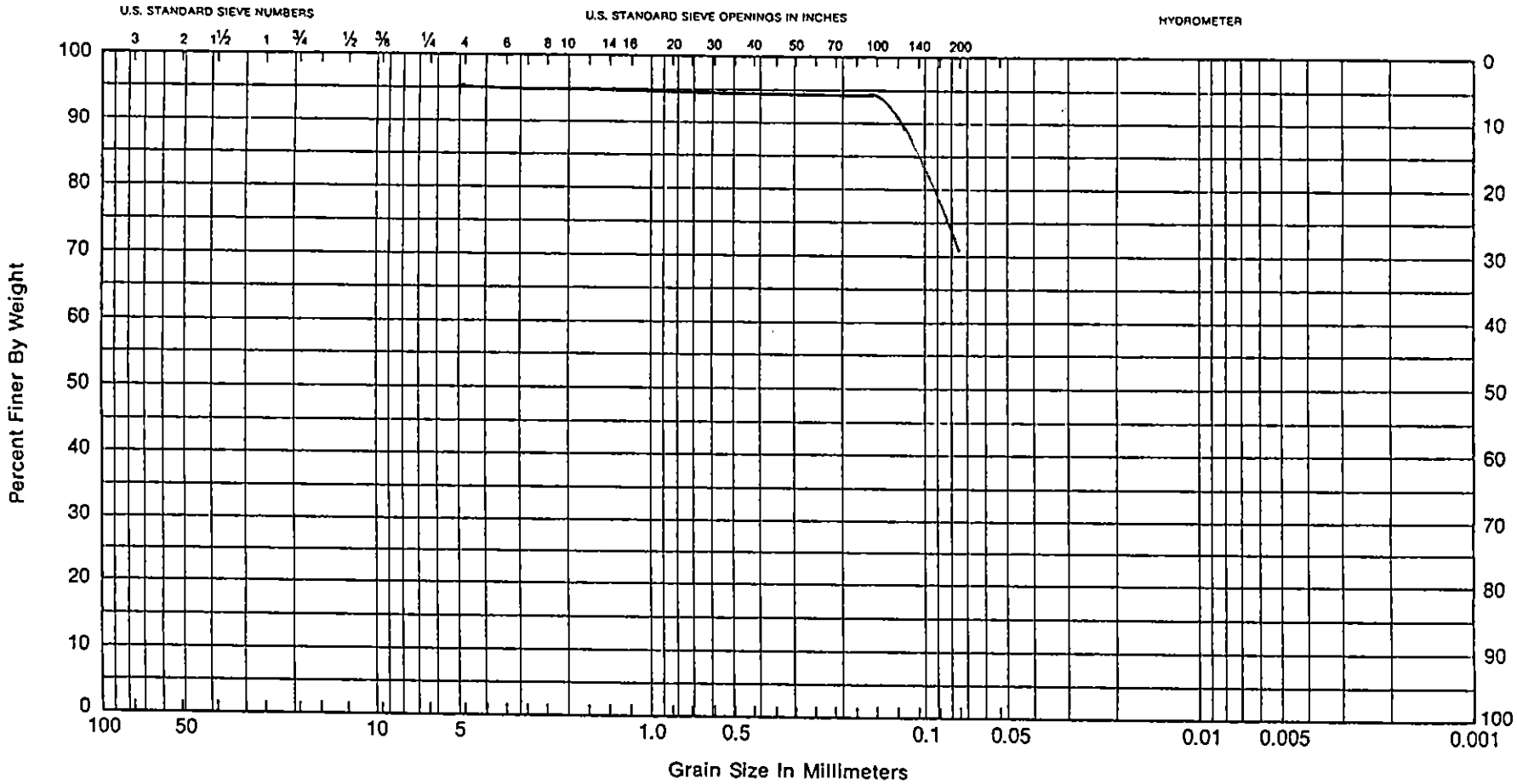
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S10, 55' - 56.5'
HVJ 93-312G
TAN AND GRAY SILTY CLAY WITH SAND

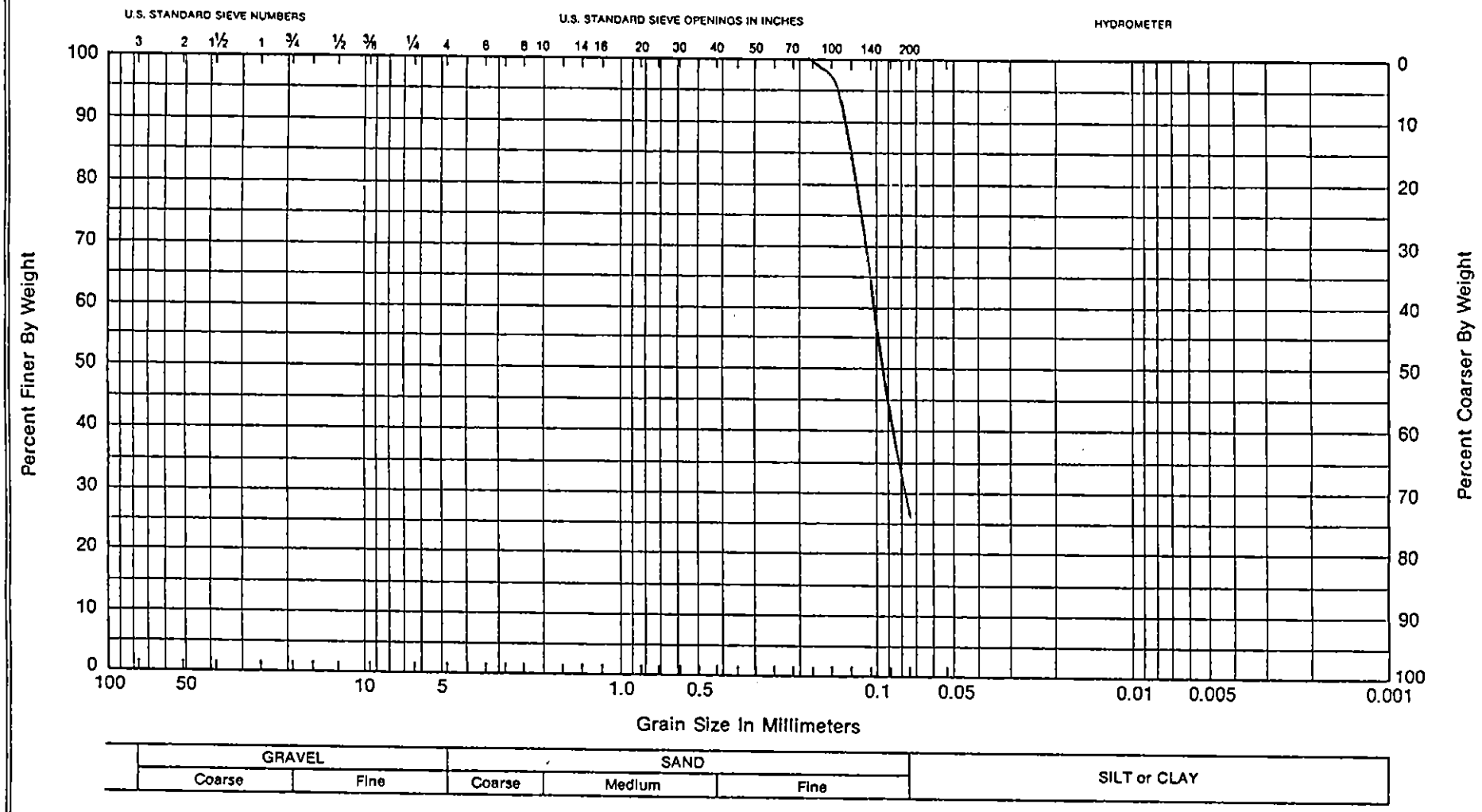
GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

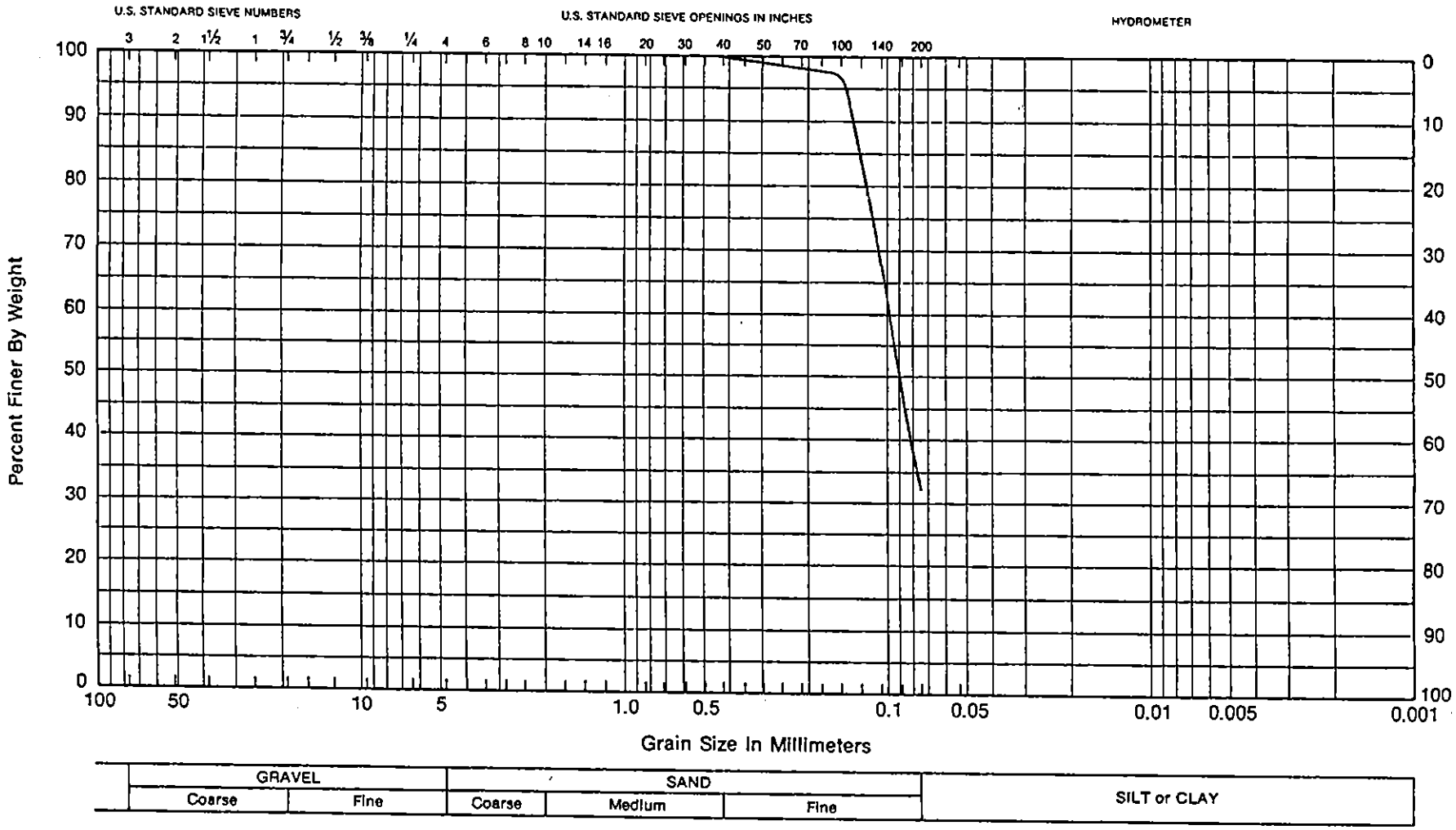
DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S11, 62' - 63.5'
HVJ 93-312G
GRAY SANDY CLAY WITH
SAND PARTINGS

GRAIN SIZE CURVES



DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S12, 69' - 70'
HVJ 93-312G
GRAY SILTY SAND WITH GRAVEL

GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-273, S12, 69' - 70'
HVJ 93-312G
GRAY SILTY SAND