FIELD BORING LOG

Project Name: TRINITY RIVER - WALLISVILLE, TEXAS		Project No. 93-312G
Location: TRINITY RIVER		Client: ARMY CORP. OF ENG.
Boring No.: 93-279	Date Started: 3-5-94	El. of River: +2.88
Water Depth: 20.0'	Date Completed: 3-5-94	Easting: 3,353,567.57
Time Started: 12:45 PM	Northing: 744,107.48	Driller: PAT STEPHENS
Time Completed: 5:30 PM	Logger: D. CANADA	Depth to caving:
Rig: MOBIL B-61	Weather: 76 DEGREES COOL & CLOUDY	

DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE	HAND PENETROMETER
0				NO RECOVERY						
	S1	L		~~Stiff~~ GR. ~~TA. CL SA~~ SI CL w/SA	~~SC~~ CL					1.75
5										
10	S2	J		LT. GR. SA.	SP					
15					CL					
	S3	S		~~MED.~~ V/ STIFF GR. TA. SA. CL. w/ CAL.	~~SC~~				.6	2.5
	S4	S		~~VERY SOFT~~ Medium stiff GR. TA. SA. CL. w/ CAL.	~~SC~~ CL				.1	1.5
20										
25	S5	P	X	MED. DENSE GR. TA. SA	SP	3	4	14		
30										

FIELD BORING LOG

Boring No.: 93-279

DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE (tsf)	HAND PENETROMETER (tsf)
30										
	S6	P	X	VERY DENSE GR. SA	SP	16	25	37		
35										
40	S7	P	X	VERY DENSE GR. TA. SA	SP	13	26	36		
45				w/ Stiff	CH					
	S8	P	X	~~MED. DENSE~~ TA LT GR ~~SIL~~. CL w/ CAL	~~SM~~	10	9	18		
	S9 (B)	S		MED. STIFF TA LT GR SIL. CL w/ SA PKTS CAL, FER	SC				.5	2.0
50	S10 (S)	S		SOFT TA LT GR SIL. CL. SA w/ SA PKTS	SC				.4	2.5
	S11	J		(TA. ~~SIL SA~~ Stiff CL	CH. SM					1.75
55										
				Hard.	CL					
60	S12	P	X	~~DENSE~~ LT TA, LT. GR. ~~SIL~~. SA CL, w/ SI	~~SM~~	13	26	18		
65				Hard	CL					
	S13	P	X	V. ~~DENSE~~ LT. TA. LT. GR. ~~CL~~. SA CL. w/ SA. PKTS.	~~SM~~	20	25	36		
70										

NOTE: (S) SHORT SAMPLES
(B) BROKEN SAMPLES

FIELD BORING LOG

Boring No.: 93-279

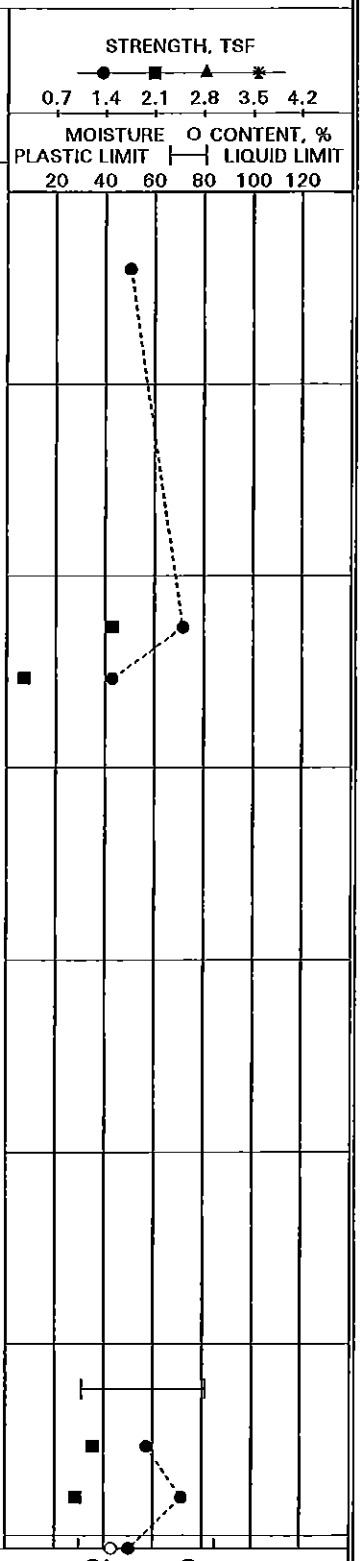
DEPTH	SAMPLE NO.	SAMPLE TYPE	SAMPLES	SOIL DESCRIPTION	SOIL CLASSIFICATION	BLOWS/6"	BLOWS/6"	BLOWS/6"	TORVANE	HAND PENETROMETER
70				V/dense						
	S14	P	X	LT. GR. SA	SP	50/5"				
75										
80										
85										
90										
95										
100										
105										
110										

LOG OF SOIL BORING

Project Name: Trinity River Soil Borings
Project No. 93-312G
Boring No.: 93-279
Ground Line Elevation: -17.12 feet (NGVD)
Completion Depth: 74.5 feet
Water Depth: 20.0 feet

Weather: Cool and cloudy
Date: March 5, 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		No recovery							
-20 / 5		Stiff gray and tan SILTY CLAY w/ ferrous nodules		100	100	100	97	84	
-25 / 10		Gray SAND w/ shell		99	98	82	4	2	
-30 / 15		stiff to very stiff sandy clay layer 16'-20'							
20									
-40 / 25		Medium dense tan and gray SILTY SAND w/ sandy clay seams	18	100	100	94	40	13	
-45 / 30									
-50 / 35		Very dense tan SAND w/ gravel	62	99	97	70	6	3	
-55 / 40		w/ silt below 39'	62	98	92	53	10	7	
-60 / 45									
-65 / 50		Stiff to very stiff brown and gray CLAY w/ silt, ferrous and calcareous nodules w/ slickensides to 54'	27	100	99	98	97	97	



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

Plate 11A

HVJ ASSOCIATES, INC.

LOG OF SOIL BORING

Project Name: Trinity River Soil Borings
Project No. 93-312G
Boring No.: 93-279
Mud Line Elevation: -17.12 feet (NGVD)
Completion Depth: 74.5 feet
Water Depth: 20.0 feet

Weather: Cool and cloudy
Date: March 5, 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
				98	96	92	85	82	
-75 / 60		w/ sand below 59'	44	100	100	100	99	84	
-80 / 65		Very dense tan and gray CLAYEY SAND w/ ferrous nodules, silt, and sand partings	61	100	100	100	97	47	
-85 / 70		Very dense gray and tan SILTY SAND w/ clay pockets	50/ 5"	100	99	98	94	35	
-95 / 80									
-100 / 85									
-105 / 90									
-110 / 95									
-115 / 100									
-120 / 105									

STRENGTH, TSF
0.7 1.4 2.1 2.8 3.5 4.2

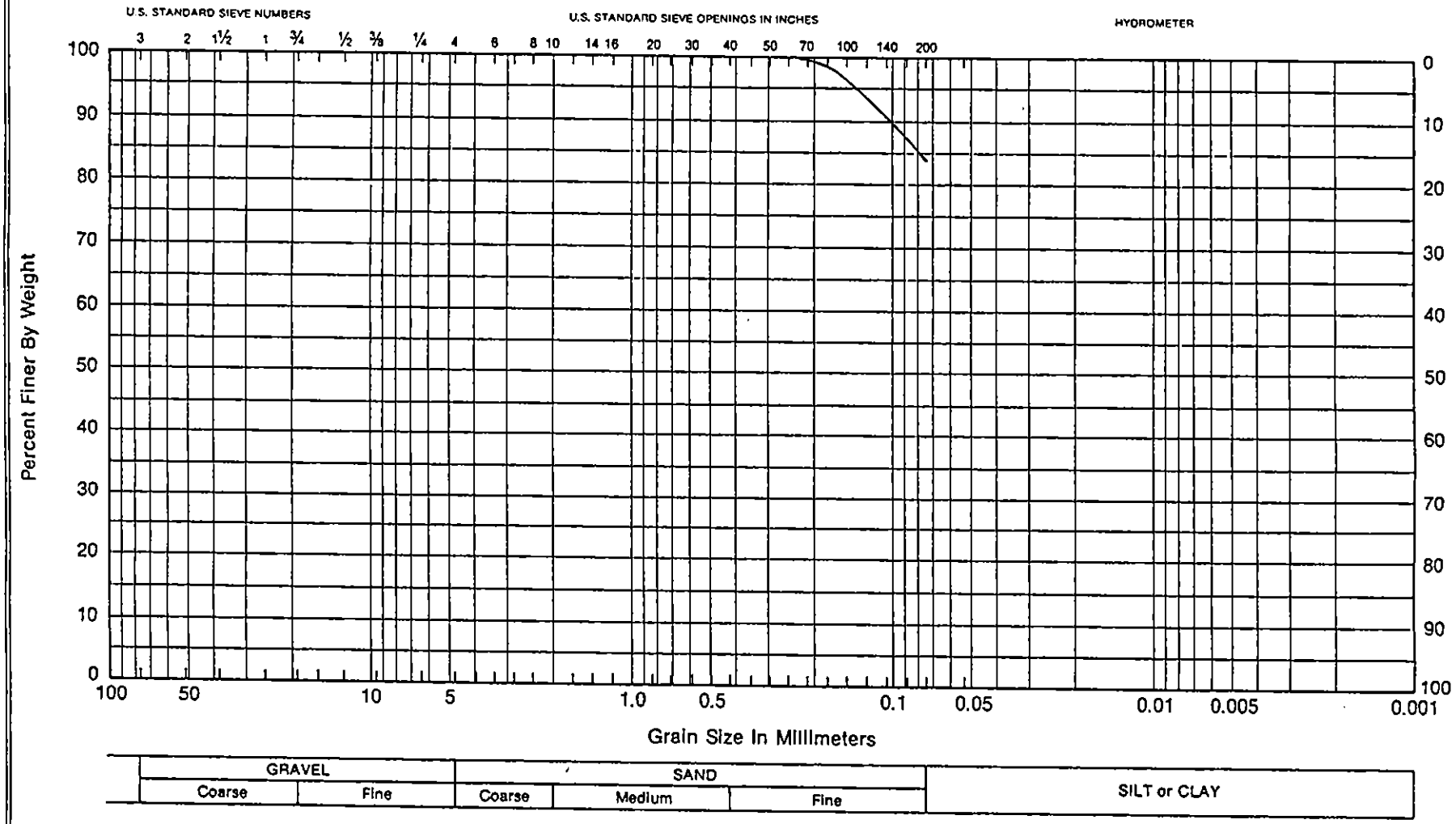
MOISTURE CONTENT, %
PLASTIC LIMIT — LIQUID LIMIT
20 40 60 80 100 120

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

Plate 11B

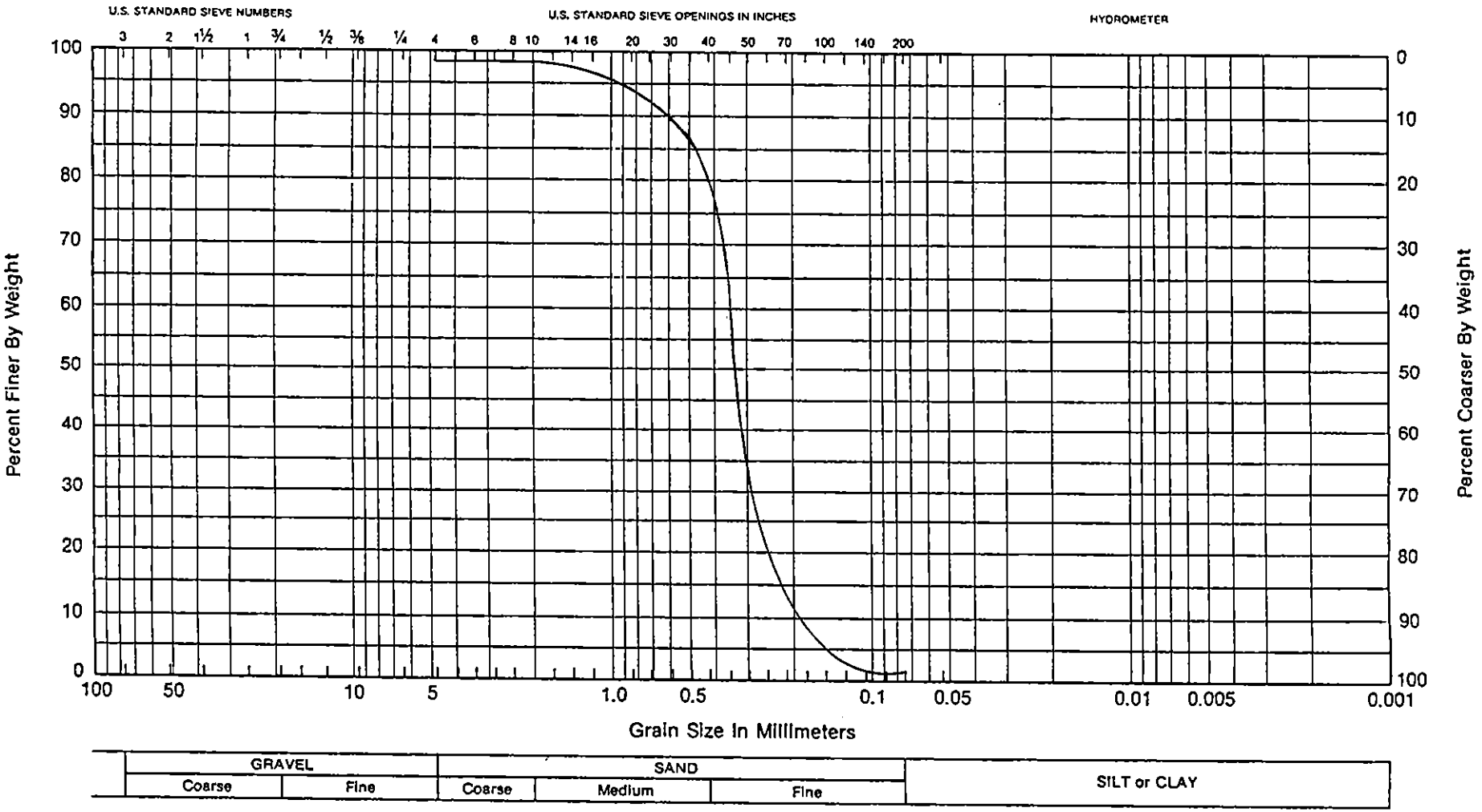
HVJ ASSOCIATES, INC.

GRAIN SIZE CURVES



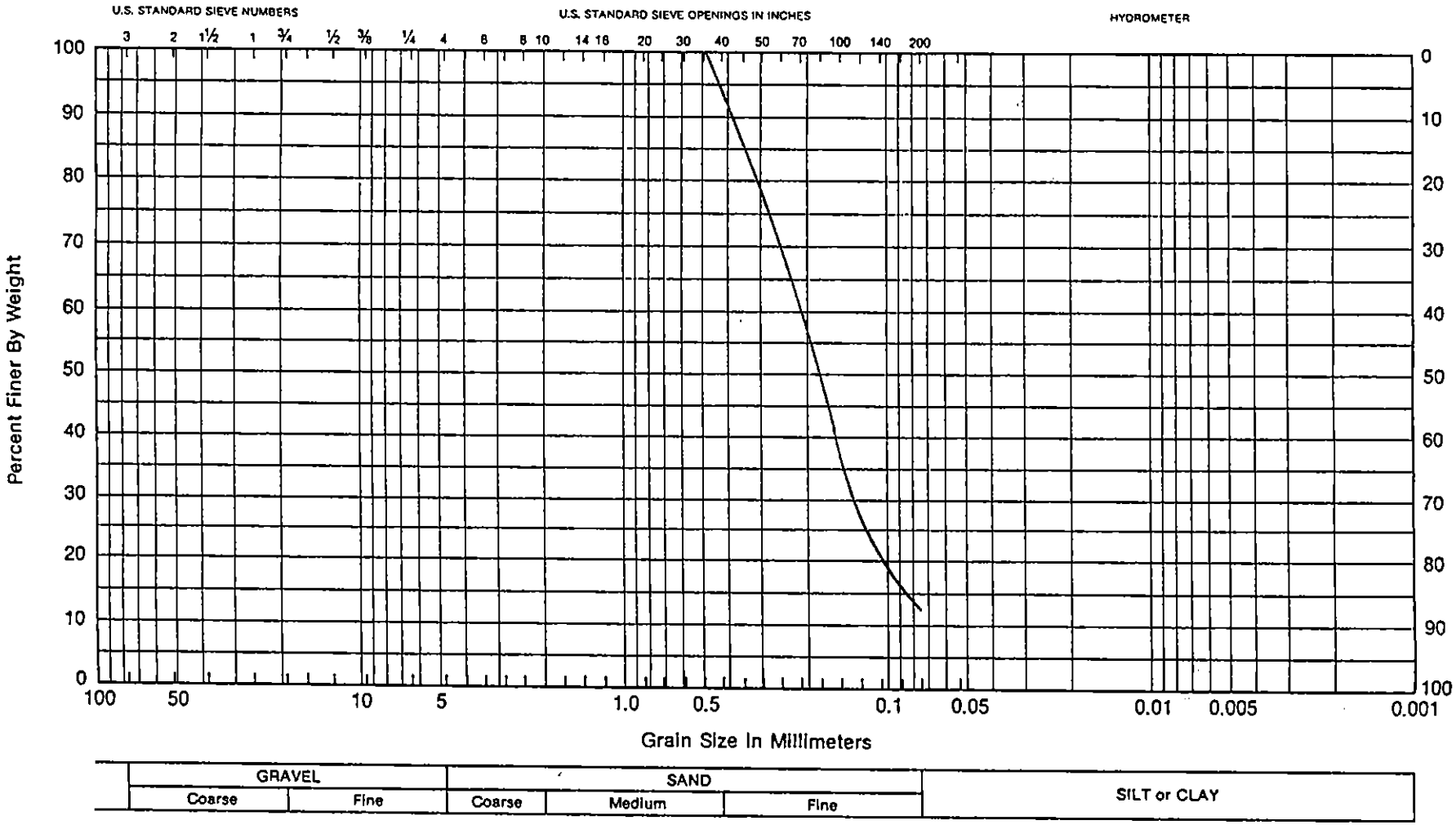
DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-279, S1, 2' - 4'
HVJ 93-312G
GRAY AND TAN SILTY CLAY WITH SAND AND FERROUS NODULES

GRAIN SIZE CURVES



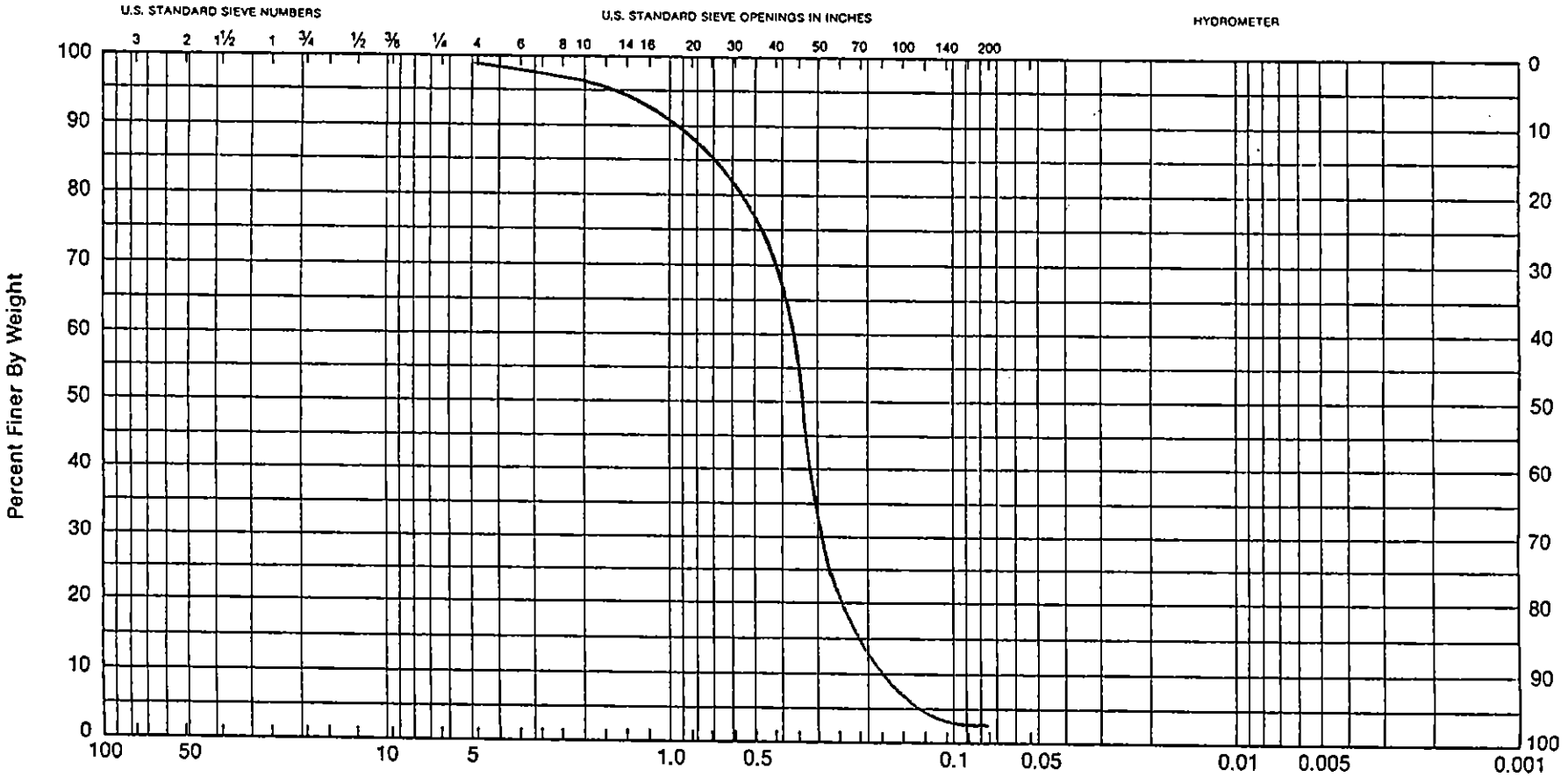
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S2, 9' - 11'
HVJ 93-312G
GRAY SAND WITH SHELL

GRAIN SIZE CURVES



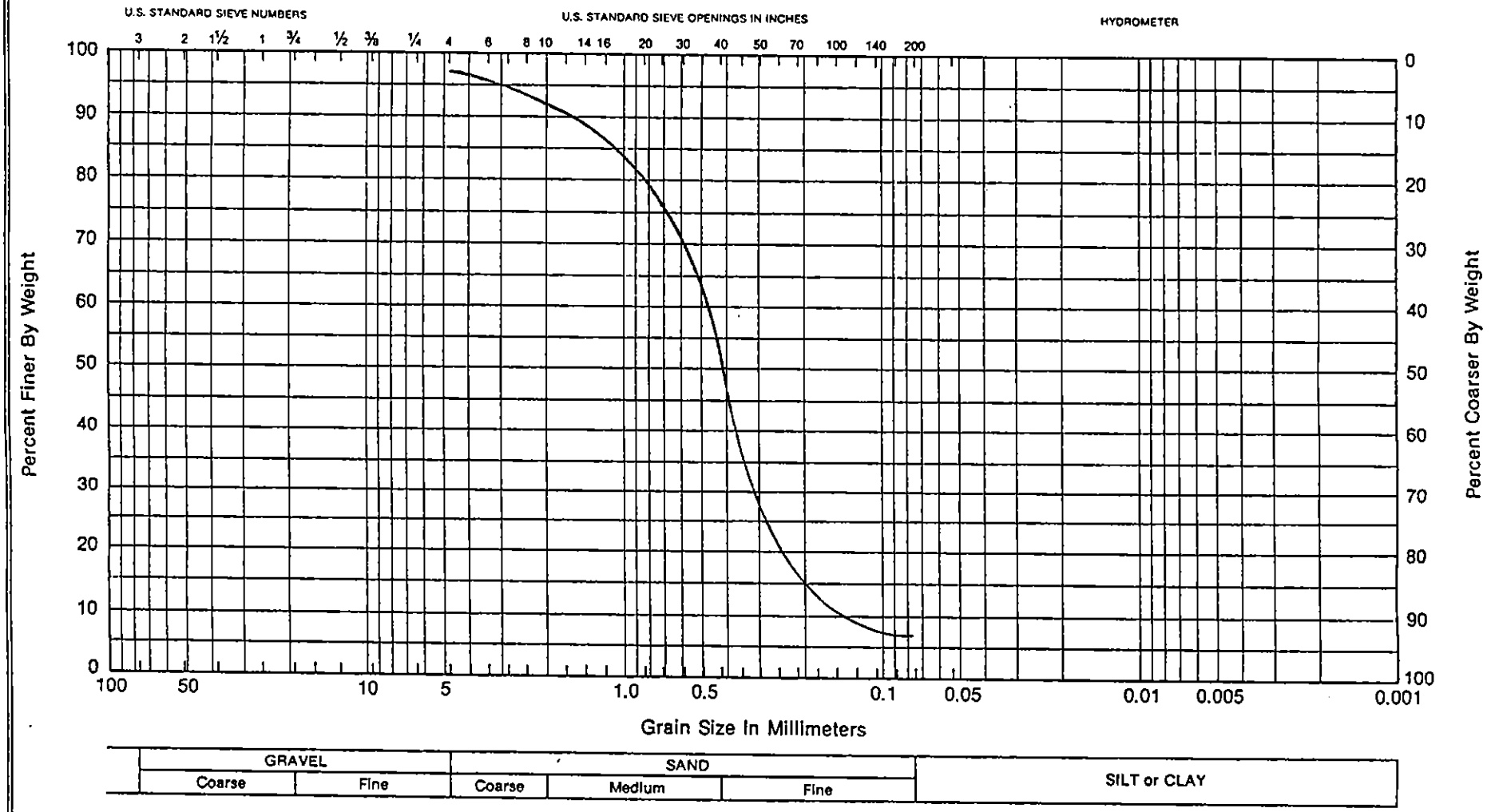
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S5, 25' - 26.5'
HVJ 93-312G
TAN AND GRAY SILTY SAND
WITH SANDY CLAY SEAMS

GRAIN SIZE CURVES



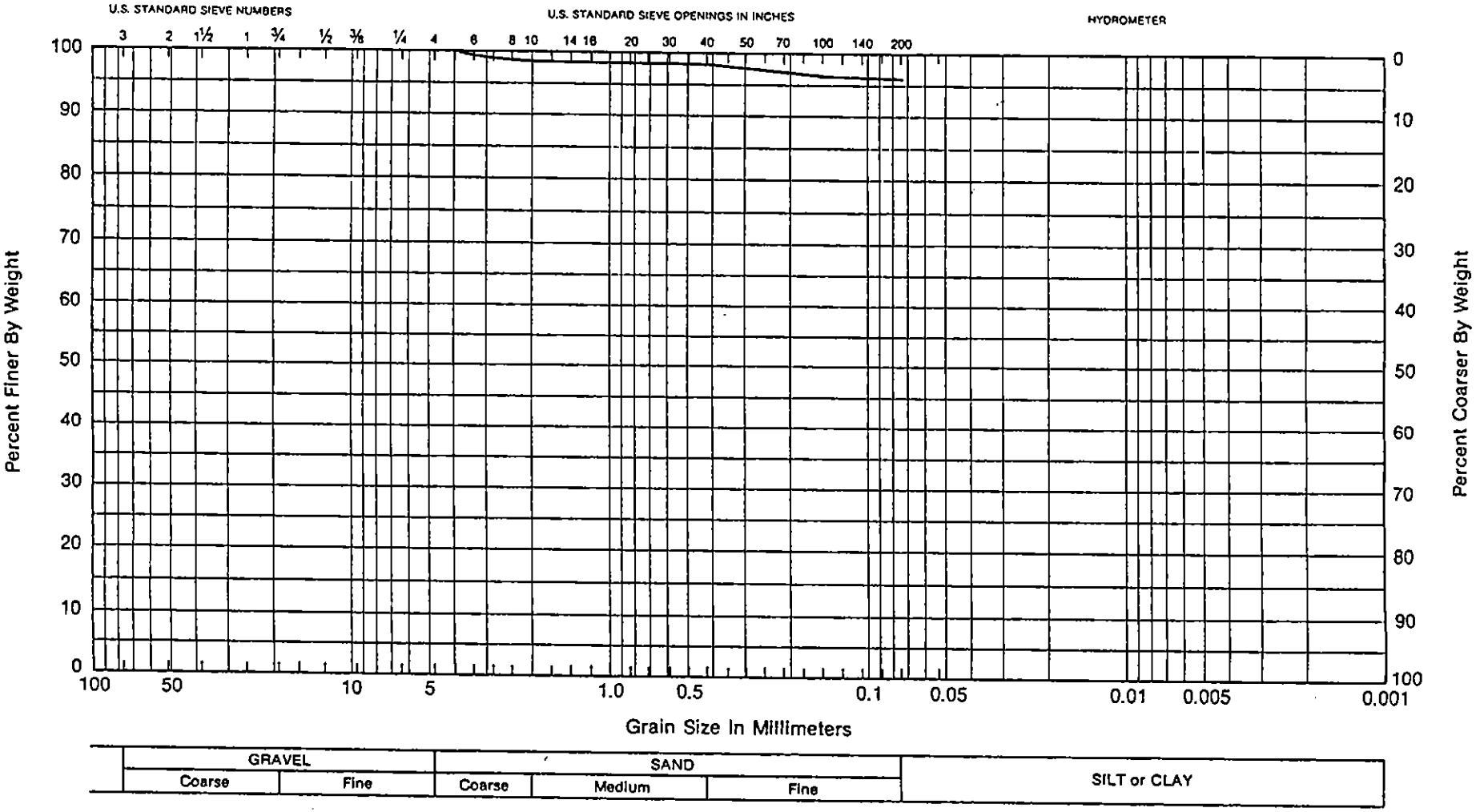
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S6, 32' - 33.5'
HVJ 93-312G
TAN COARSE SAND WITH GRAVEL

GRAIN SIZE CURVES



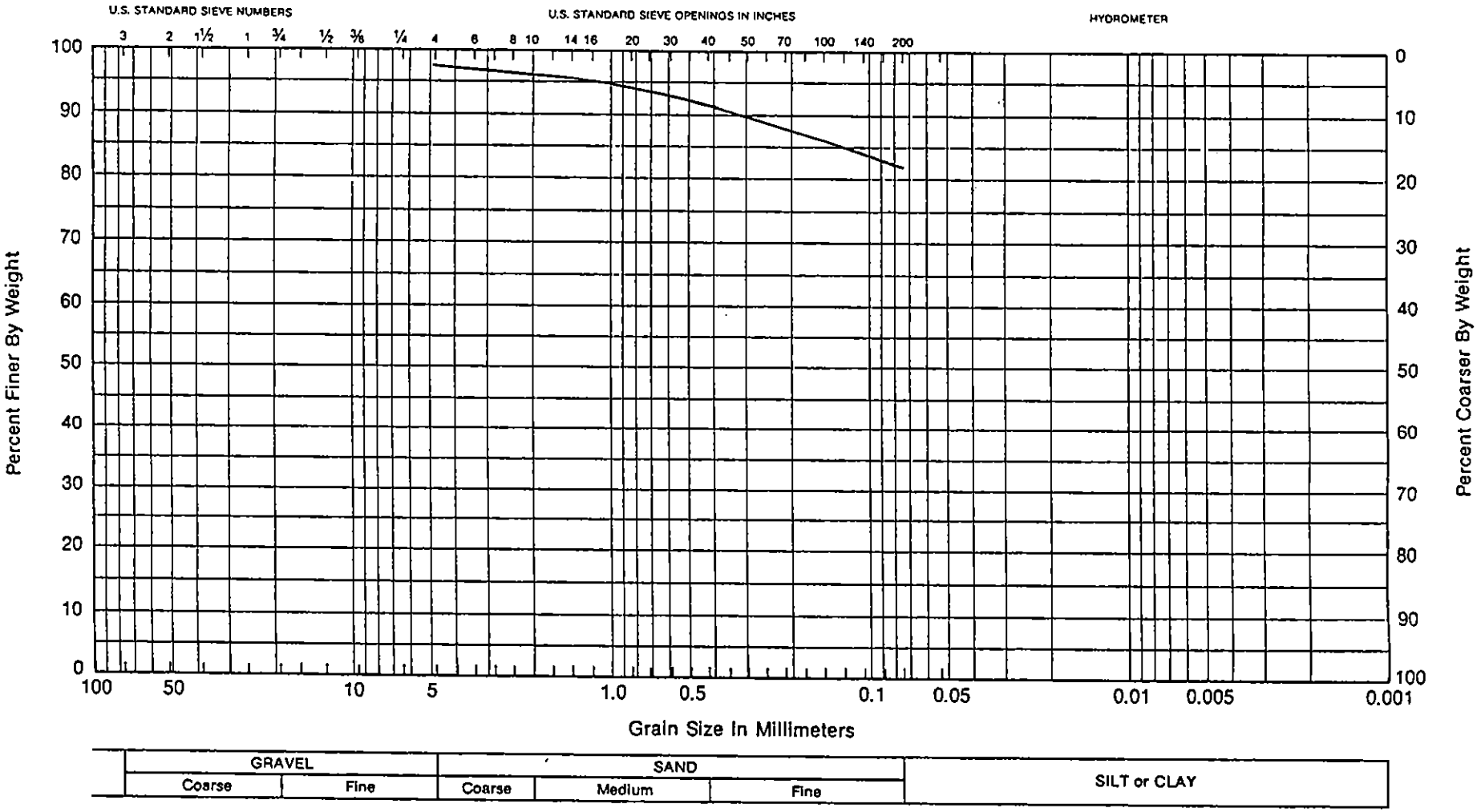
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S7, 39' - 40.5'
HVJ 93-312G
TAN COARSE SAND WITH SILT AND GRAVEL

GRAIN SIZE CURVES



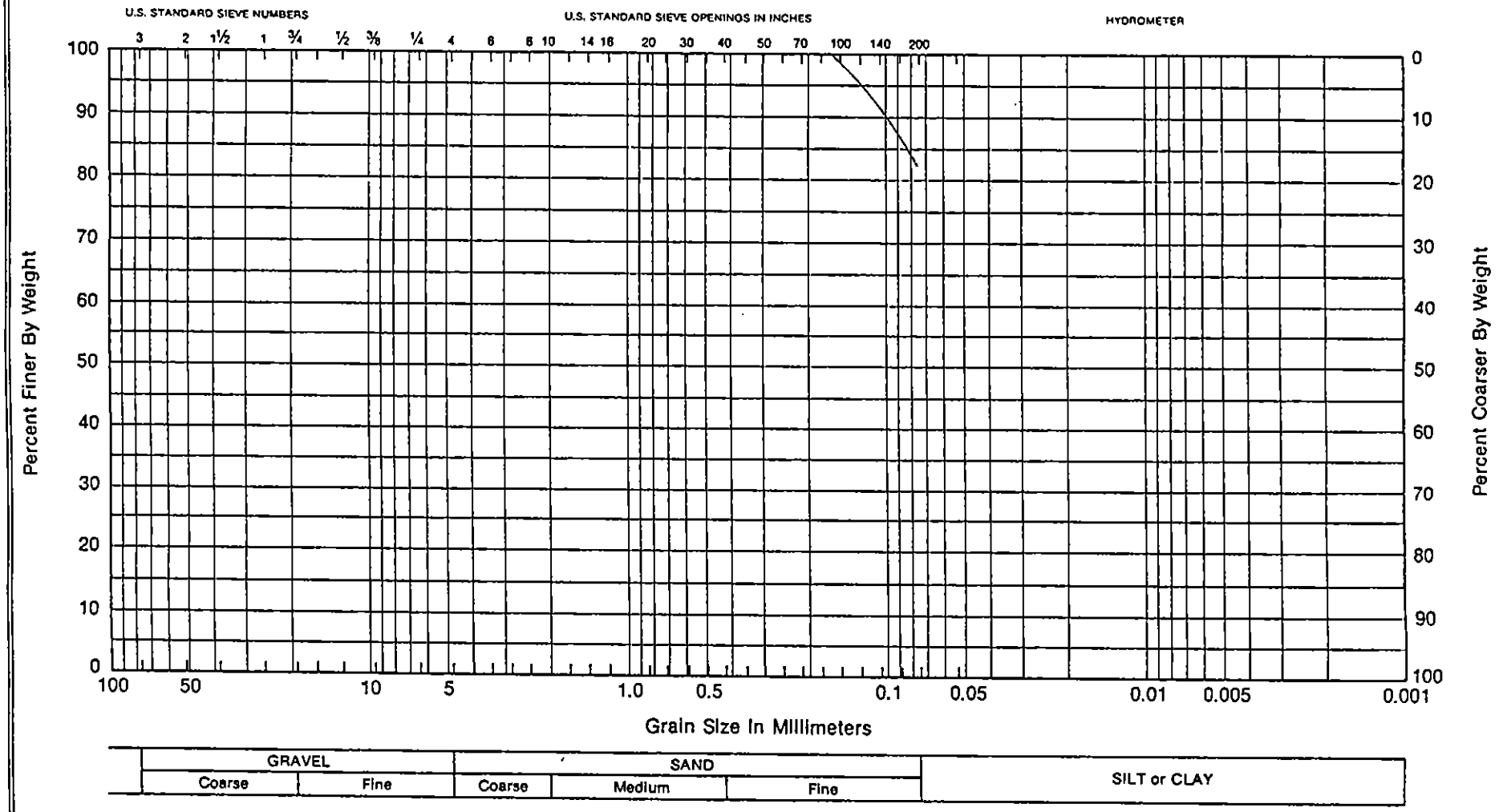
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S8, 46' - 47.5'
HVJ 93-312G
BROWN AND GRAY CLAY WITH SILT, FERROUS NODULES AND CALCAREOUS NODULES

GRAIN SIZE CURVES



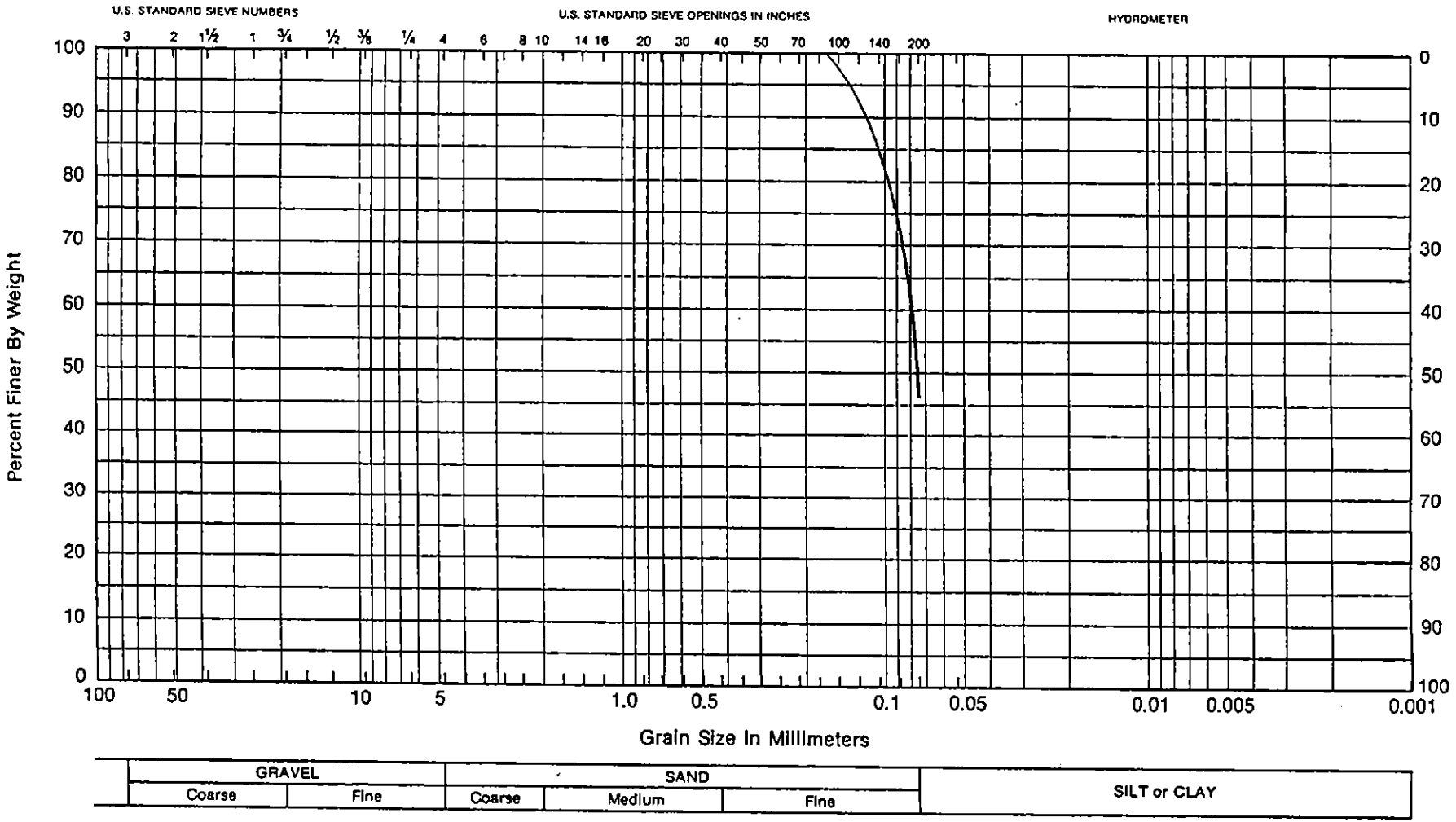
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S11, 52' - 54'
HVJ 93-312G
REDDISH BROWN AND GRAY CLAY
WITH FERROUS NODULES AND SILT

GRAIN SIZE CURVES



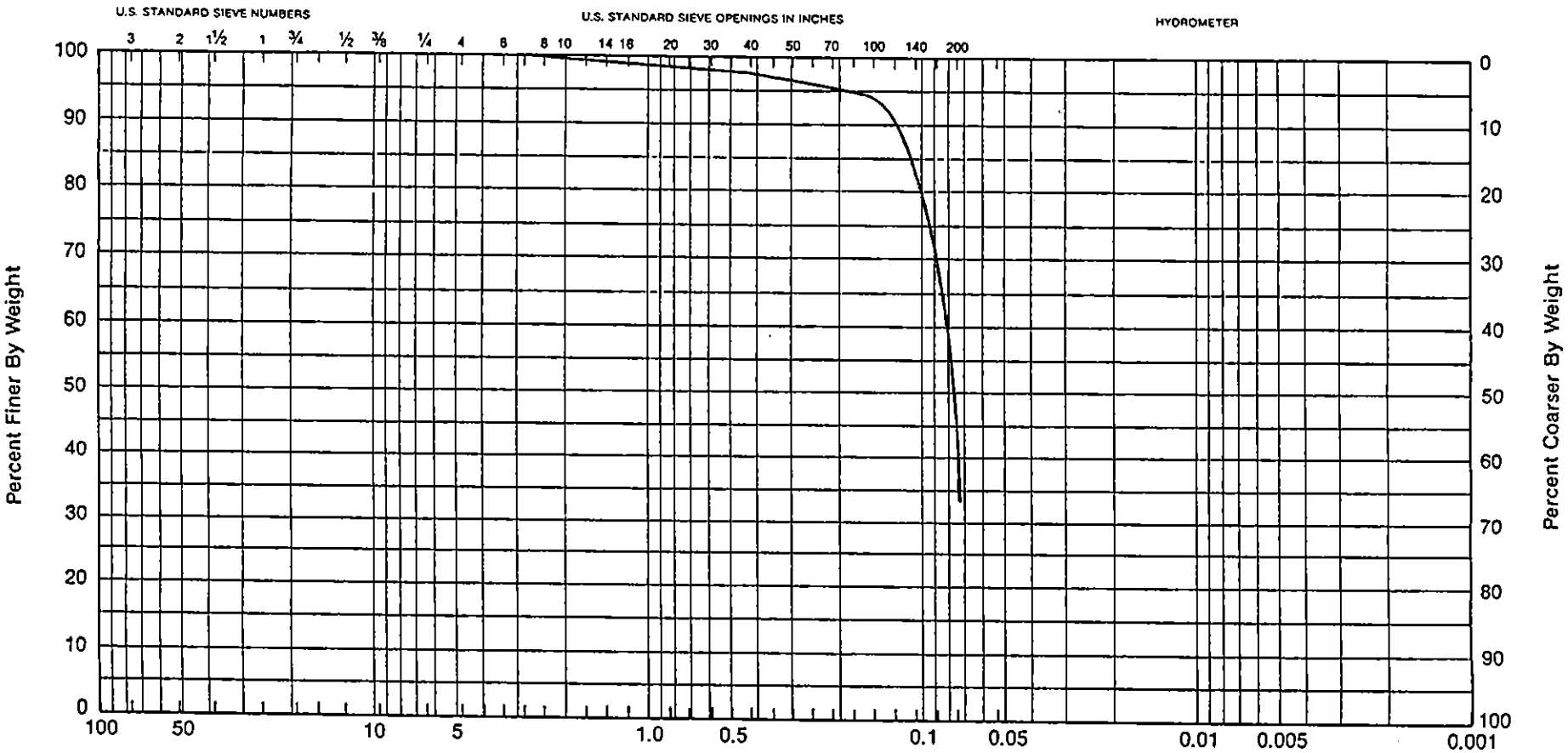
DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S12, 59' - 60.5'
HVJ 93-312G
TAN, GRAY AND RED SANDY CLAY WITH SILT, SANDY SILT SEAMS, CALCAREOUS NODULES AND FERROUS NODULES

GRAIN SIZE CURVES



DACW 64-94-R-0011
WALLISVILLE RESERVOIR
93-279, S13, 66' - 67.5'
HVJ 93-312G
TAN AND GRAY CLAYEY SAND WITH SILT AND SAND PARTINGS

GRAIN SIZE CURVES



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

DACW 94-64-R-0011
WALLISVILLE RESERVOIR
93-279, S14, 73' - 74.5'
HVJ 93-312G
GRAY AND TAN SILTY SAND
WITH CLAY POCKETS