AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

SUMMARY OF LABORATORY TEST DATA

PROJECT: Brazos River Floodgates and Colorado River Locks

BORING NUMBER	DEPTH IN FEET	MOISTURE, %	DRY DENSITY, PCF	COMPRES-SION, TSF	STRAIN, %	TYPE FAILURE	LAT. PRESSURE	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SIEVE (NO. 200)	CONSOLI-DATION	TORVANE (TSF)
87-267													
1C	0'-2'	30.5	92.3					48	22	26	86.0		0.6
2C	2'-4'	28.6											
3J	4'-6'	18.8									20.4		
4J	9'-11'	15.0									26.6		
5C	11'-13'	41.4											
6C	14'-16'	42.8	68.8					71	29	42	94.8		0.15
7C	16'-18'	27.1	82.4	0.63	8.33	Bulge		58	22	36	92.4		0.35
8C	18'-20'	27.5											
9C	20'-22'	22.5											0.25
10C	22'-24'	45.1	78.4	0.48	7.33	Bulge		87	34	53	91.8		0.55
11C	24'-26'	45.4											
12C	26'-28'	40.6			8.33	Bulge 45° S							
13C	28'-30'	38.7	82.3	1.03				94	31	63	89.0		
14C	30'-32'	33.5											
15C	32'-34'	16.3											
16C	34'-36'	18.4											
17C	36'-38'	13.9											
18J	38'-40'	15.3									58.3		
19C	40'-42'	24.9											
20C	42'-44'	20.8	109.4	1.99	7.33	Bulge		59	21	38	80.5		
21C	44'-46'	20.8											
22J	46'-48'	22.2									77.0		

AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

SUMMARY OF LABORATORY TEST DATA

PROJECT: Brazos River Floodgates and Colorado River Locks

BORING NUMBER	DEPTH IN FEET	MOISTURE, %	DRY DENSITY, PCF	COMPRES-SION, TSF	STRAIN, %	TYPE FAILURE	LAT. PRESSURE	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SIEVE (NO. 200)	CONSOLI-DATION	TORVANE
87-267													
23C	48'-50'	21.3			6.33	Bulge V.Split							
24C	50'-52'	28.3	99.1	1.37				57	24	33	99.4		
25C	52'-54'	24.1											
26C	54'-56'	25.0											
27C	58'-60'	29.4											

AVILES ENGINEERING CORP. GEOTECHNICAL ENGINEERS

PROJECT Brazos River Floodgates and Colorado River Locks, Gulf Intracoastal Waterway

BORING 87-267

DATE 01-27-88 TYPE 3" Core - Mayhew 200 LOCATION See Plan

SHEAR STRENGTH, TSF: O – POCKET PENETROMETER; X – LABORATORY CONFINED; ● – LABORATORY UNCONFINED; △ – TORVANE (0.5, 1.0, 1.5, 2.0, 2.5)

DEPTH IN FEET	SYMBOL	CORES	DESCRIPTION	BLOWS / FOOT	M.C., %	U.D.W., PCF	LIQUID LIMIT	PLASTIC LIMIT
0			Reddish Brown Sandy Clay (CL)		31	92	48	22
					29			
			Crushed Shell w/Clay & Sand Mixture	3	19			
5								
10				9	15			
			Brown Clay - Very Soft to Firm (CH) - w/Sand Partings 11'-18'		41			
15					43	69	71	29
					27	82	58	22
					28			
20					23			
			Gray & Brown 22'-26'		45	78	87	34
			Stiff to Very Stiff Below 24'		45			
25			Greenish Gray & Tan 26'-38'					
					41			
			w/Calcareous Nodules 28'-38'		39	82	94	31
30			w/Alternated Thin Layers of Sand & Silt 32'-39'		34			
					16			
35					18			
					14			
				25	15			
40					25			
					21	109	59	21
45			Tan & Gray Sandy Clay - Stiff to Very Stiff (CL)		21			
				11	22			
					21			
50								

AVILES ENGINEERING CORP. GEOTECHNICAL ENGINEERS

PROJECT Brazos River Floodgates and Colorado River Locks, Gulf Intracoastal Waterway

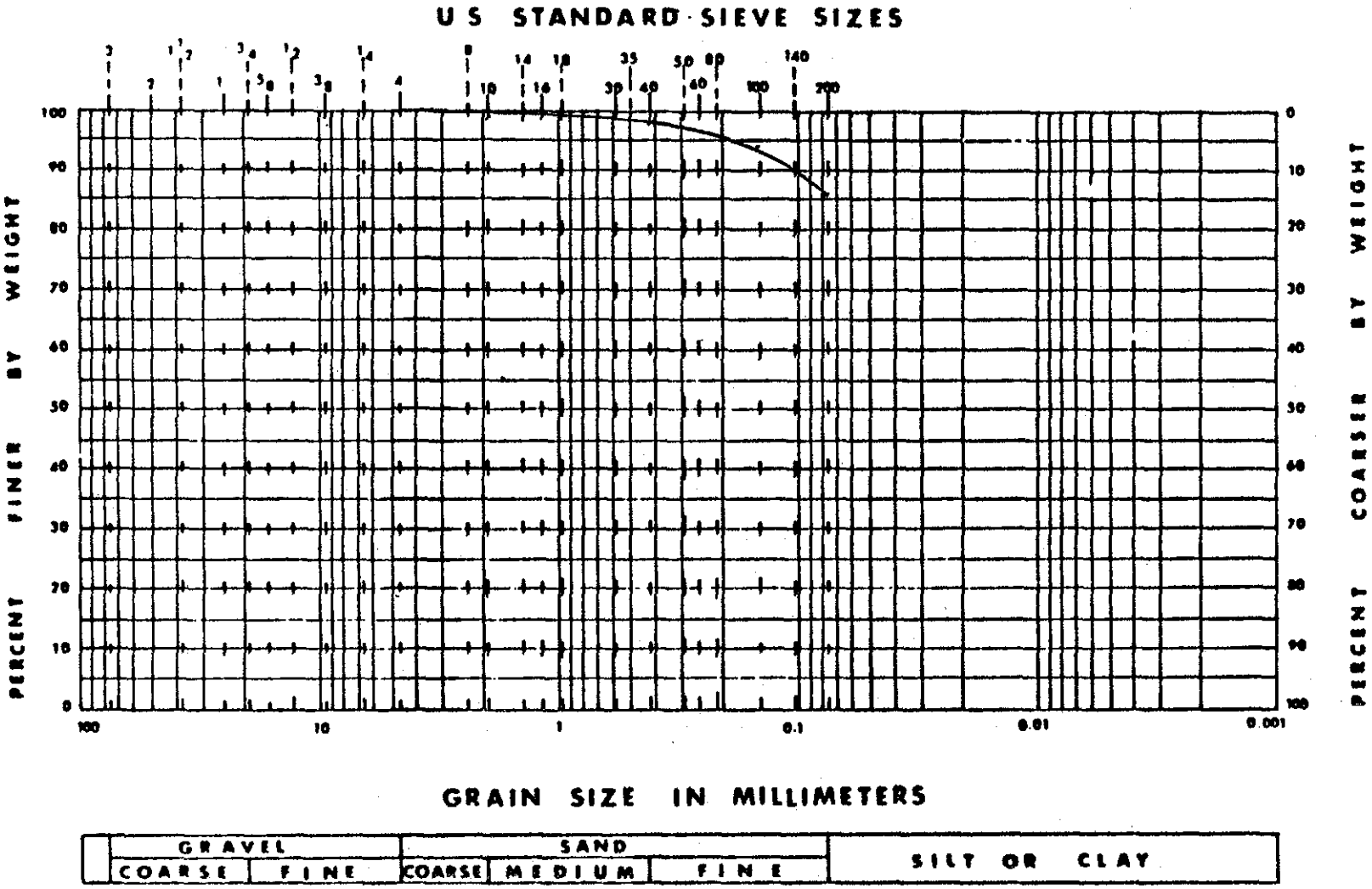
BORING 87-267

DATE 01-27-88 TYPE 3" Core - Mayhew 200 LOCATION See Plan

DEPTH IN FEET	SYMBOL	CORES	DESCRIPTION	BLOWS / FOOT	M.C., %	U.D.W., PCF	SHEAR STRENGTH, TSF (O – POCKET PENETROMETER; X – LABORATORY CONFINED; ● – LABORATORY UNCONFINED; 0.5 1.0 1.5 2.0 2.5)	LIQUID LIMIT	PLASTIC LIMIT
50			Reddish Brwon Clay - Stiff to Very Stiff (CH)		28	99		57	24
					24				
55			- w/Calcareous Nodules 54'-60'		25				
					29				
60			Bottom @ 60'						

Brazos River Floodgates and Colorado River Locks

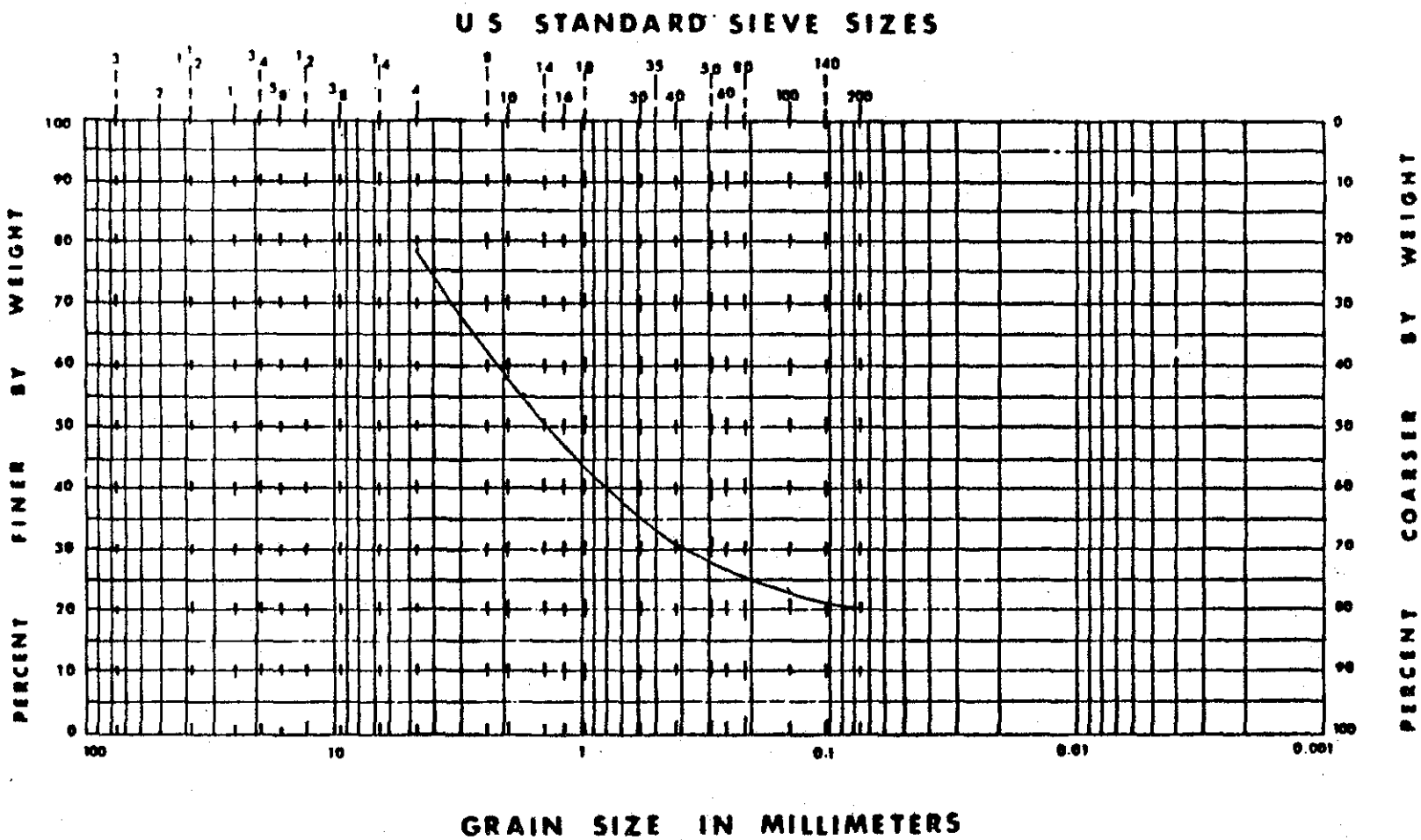
Boring No. 87-267 Sample 1C
Depth 0'-2'



AVLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

Boring No. 87-267 Sample 3J
Depth 4'-6'

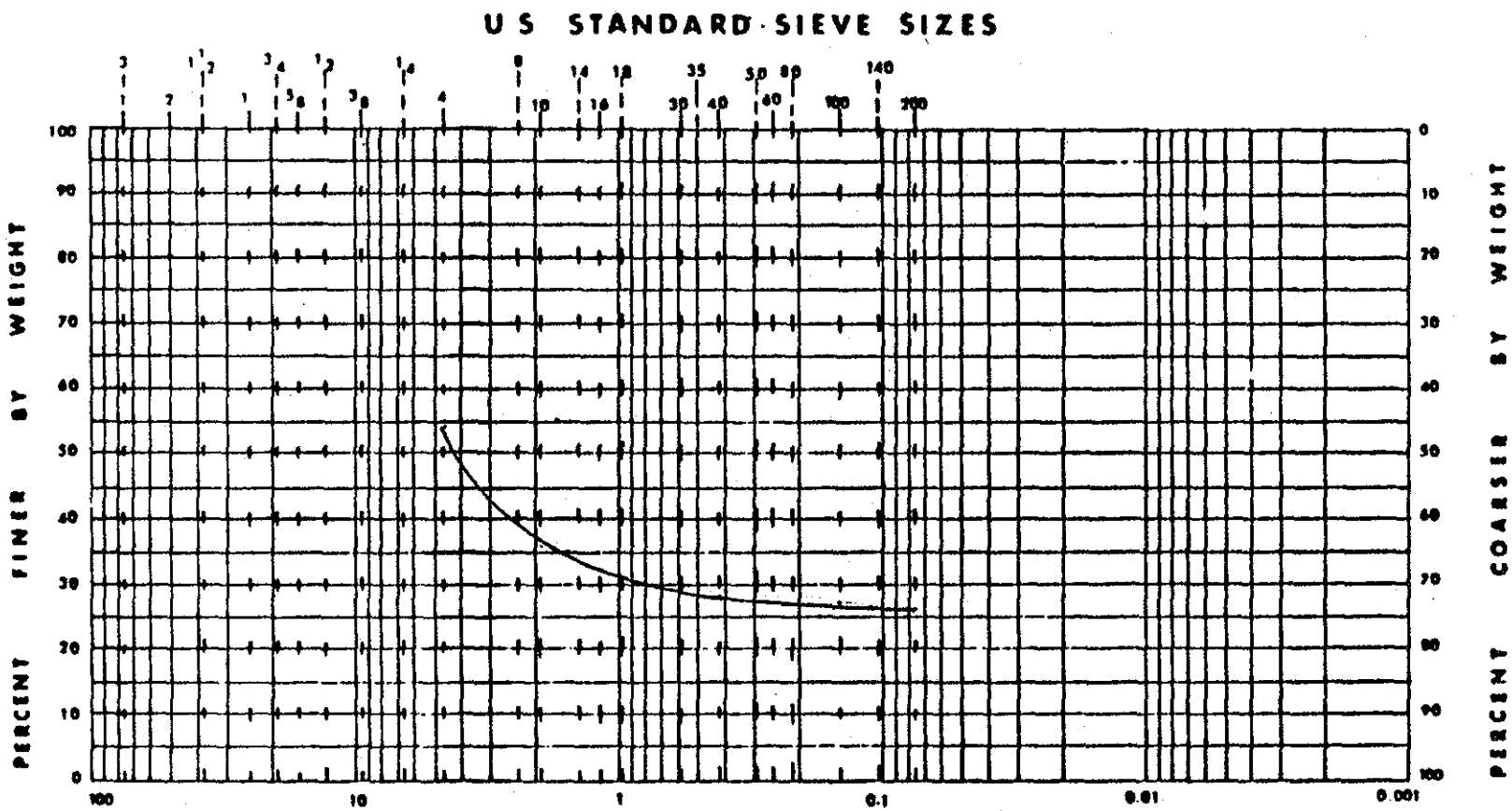


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

Boring No. 87-267 Sample 4J
Depth 9'-11'

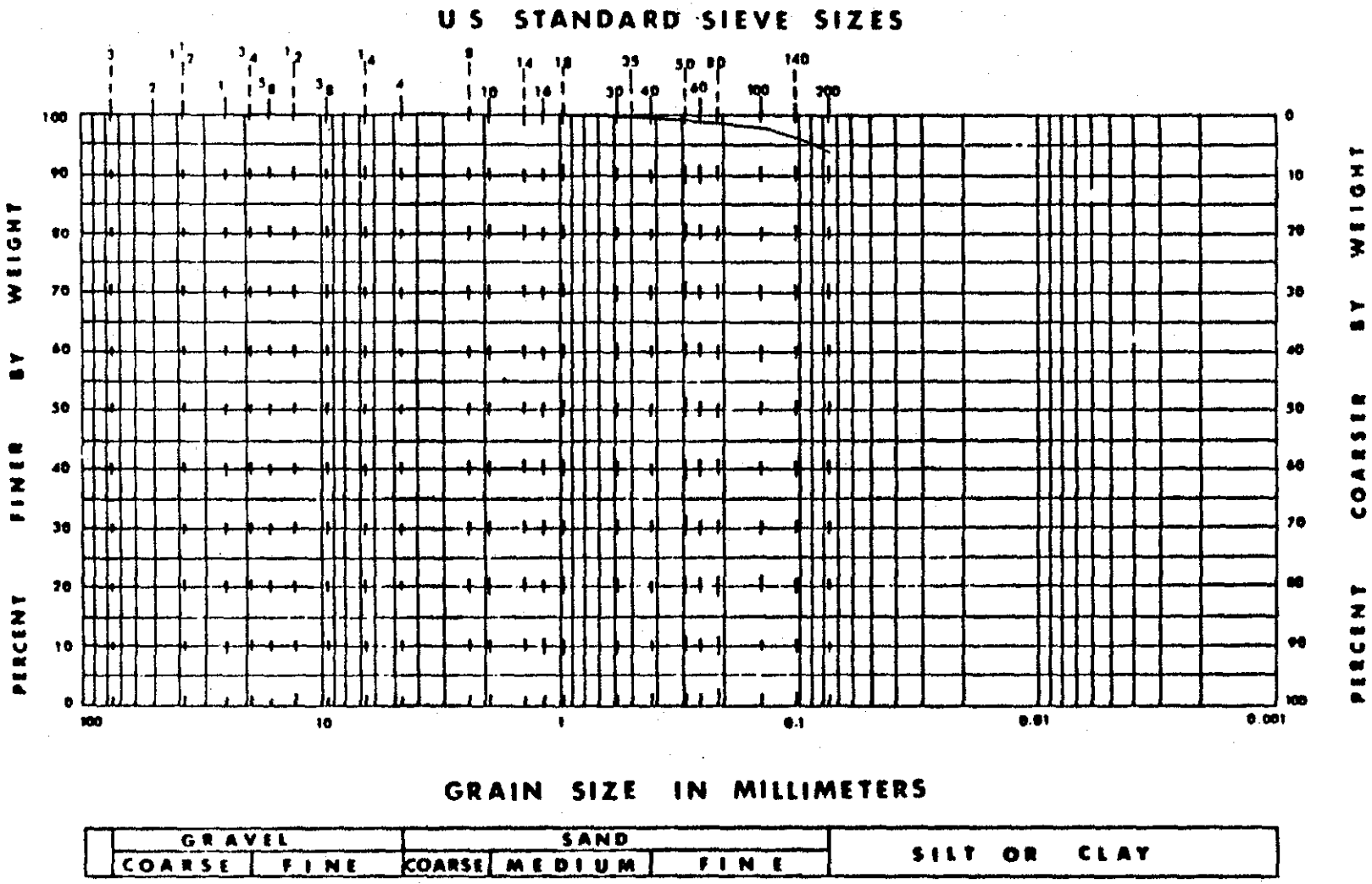


GRAVEL		SAND			SILT OR CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

AVLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

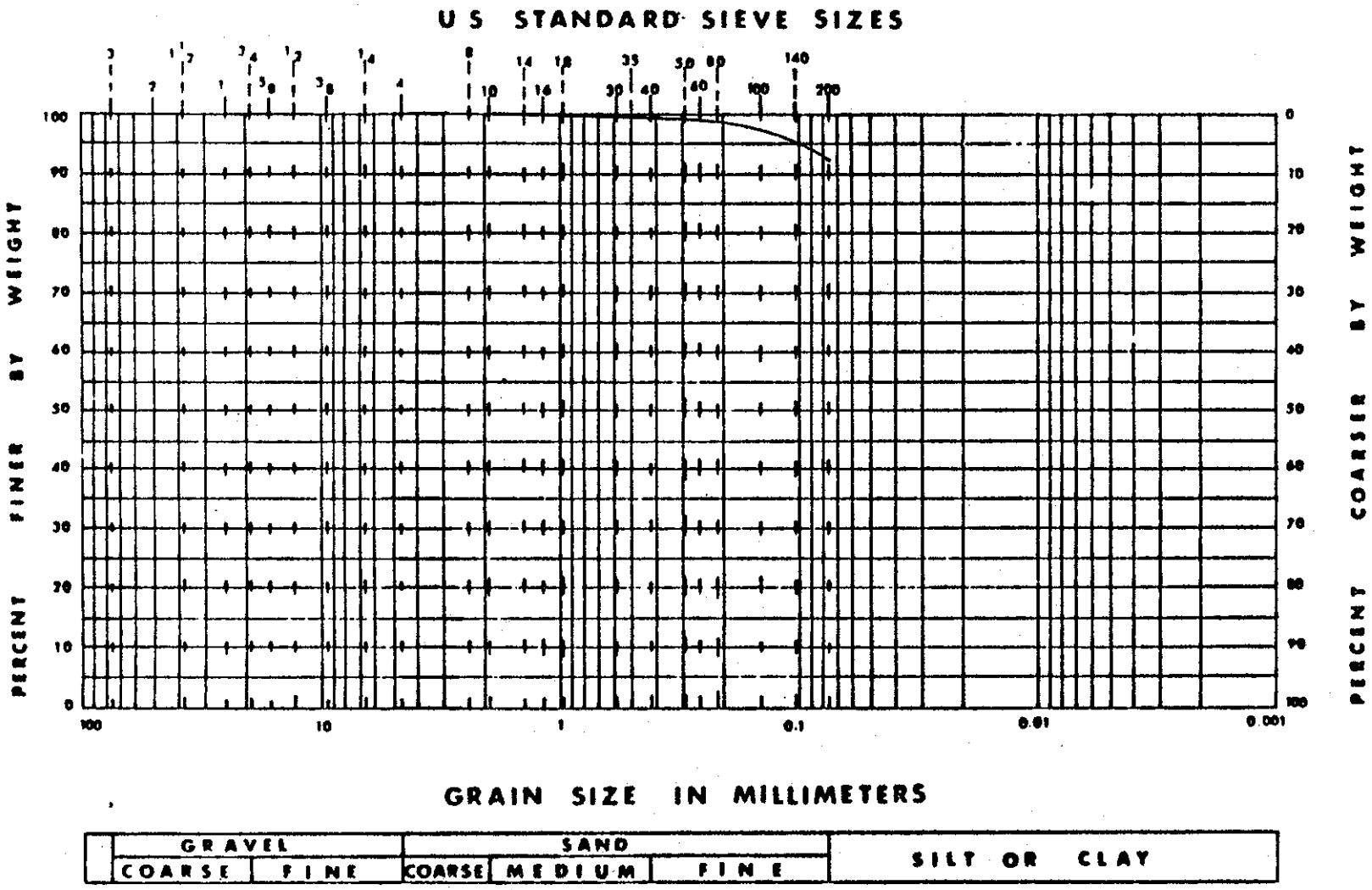
Boring No. 87-267 Sample 6C
Depth 14'-16'



AVLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

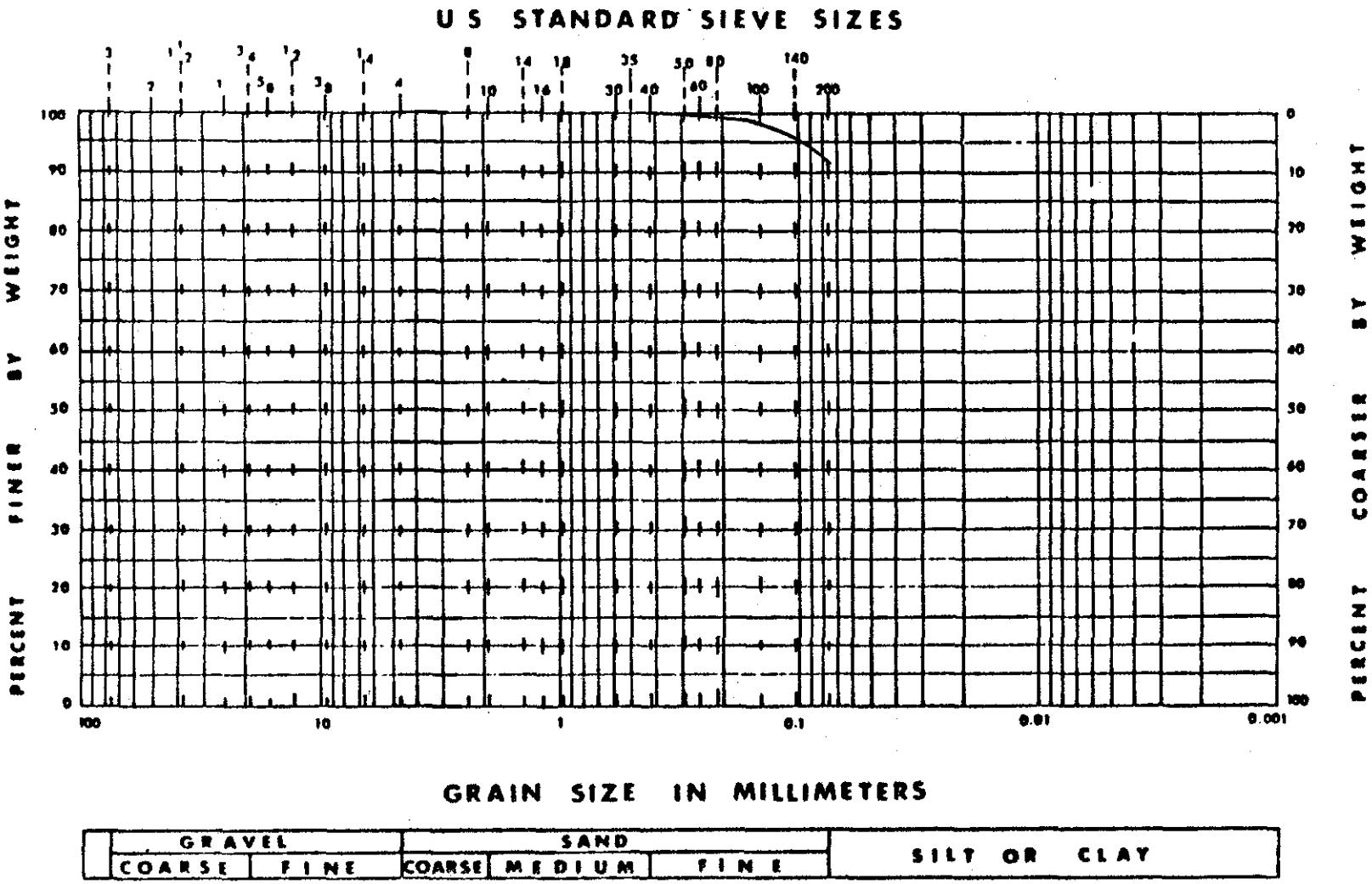
Boring No. 87-267 Sample 7C
Depth 16'-18'



AMLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

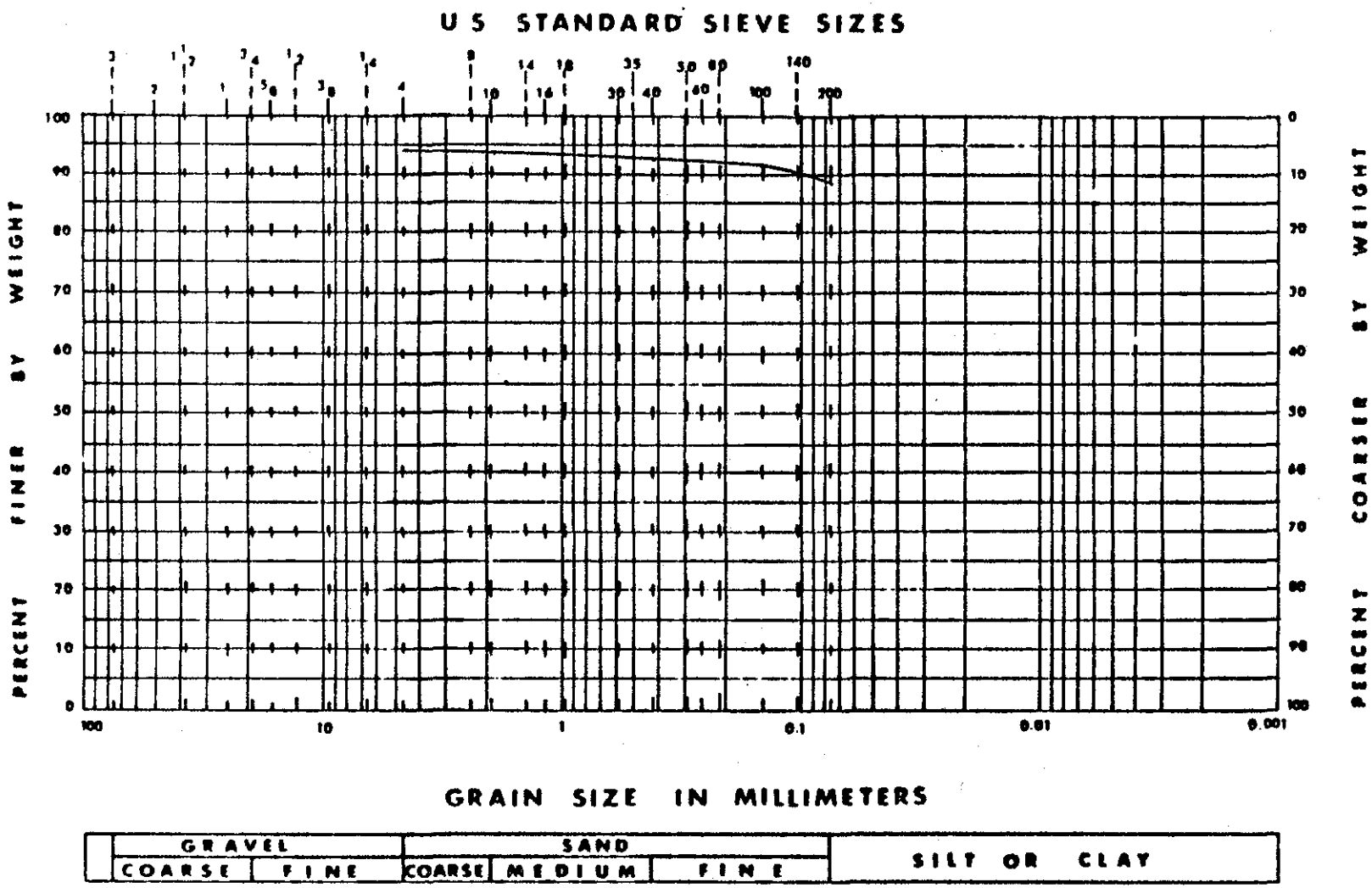
Boring No. 87-267 Sample 10C
Depth 22'-24'



AMLES ENGINEERING CORP
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

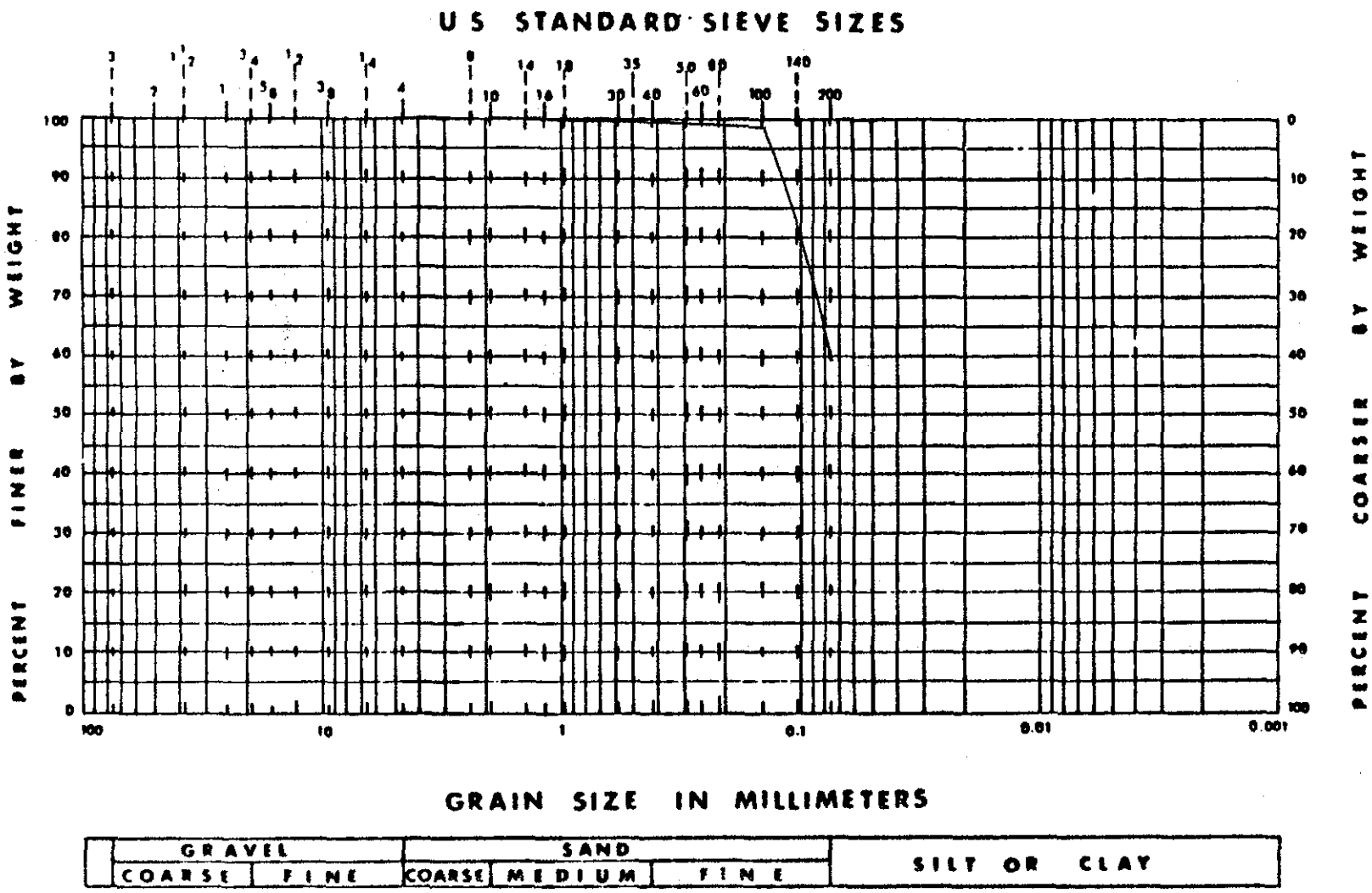
Boring No. 87-267 Sample 13C
Depth 28'-30'



AMLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

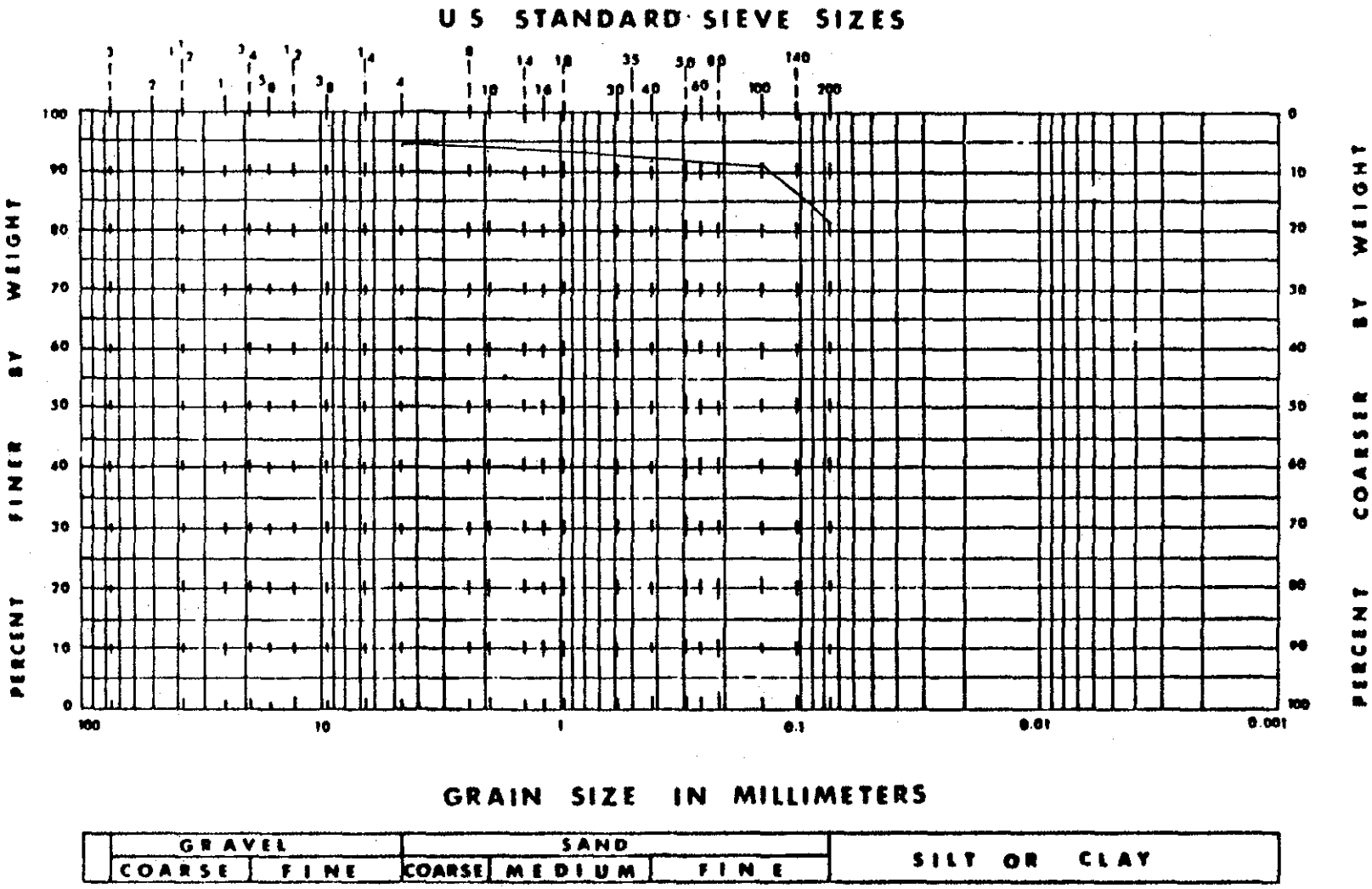
Boring No. 87-267 Sample 18J
Depth 38'-40'



ATLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

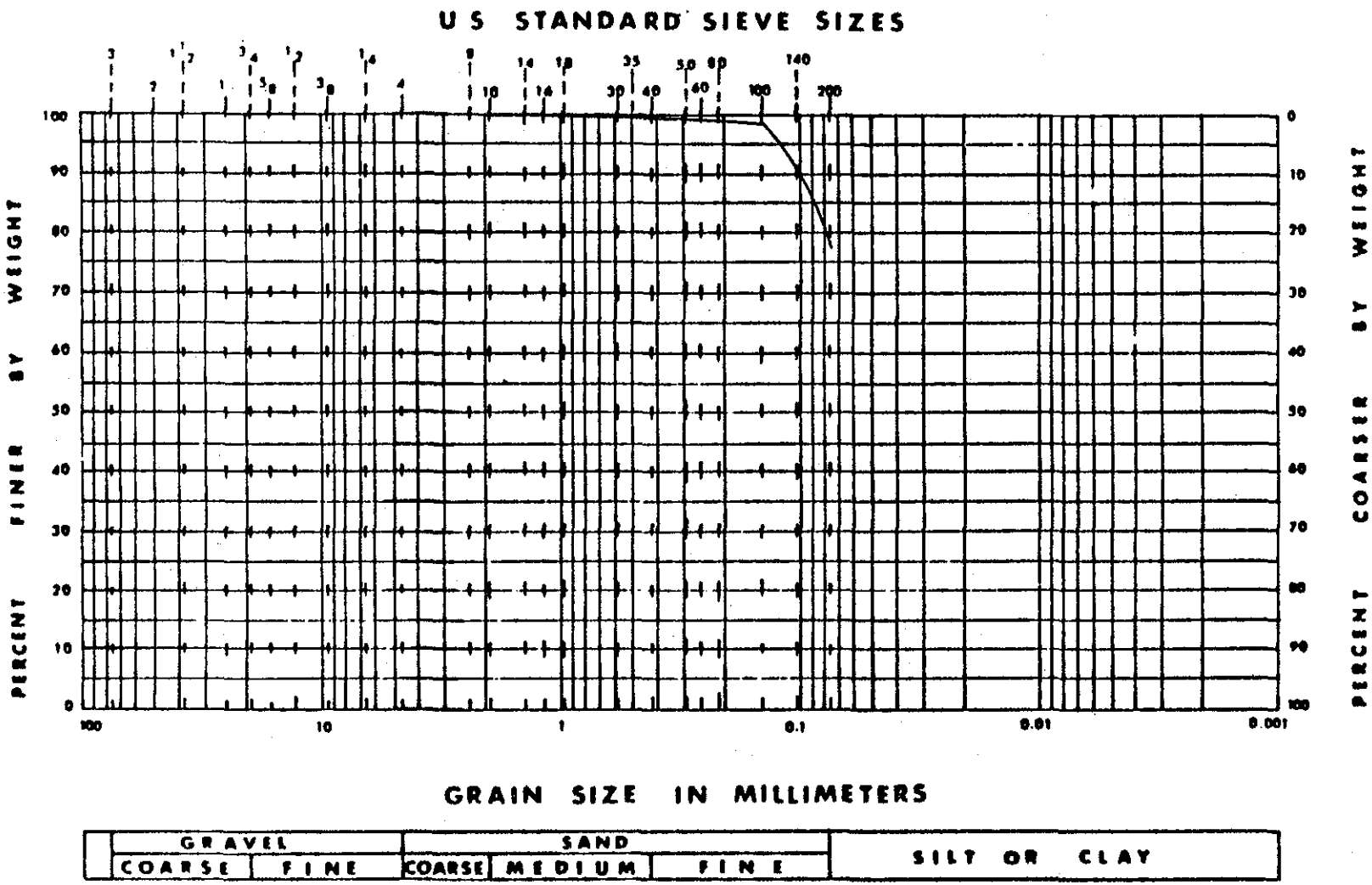
Boring No. 87-267 Sample 20C
Depth 42'-44'



AMLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

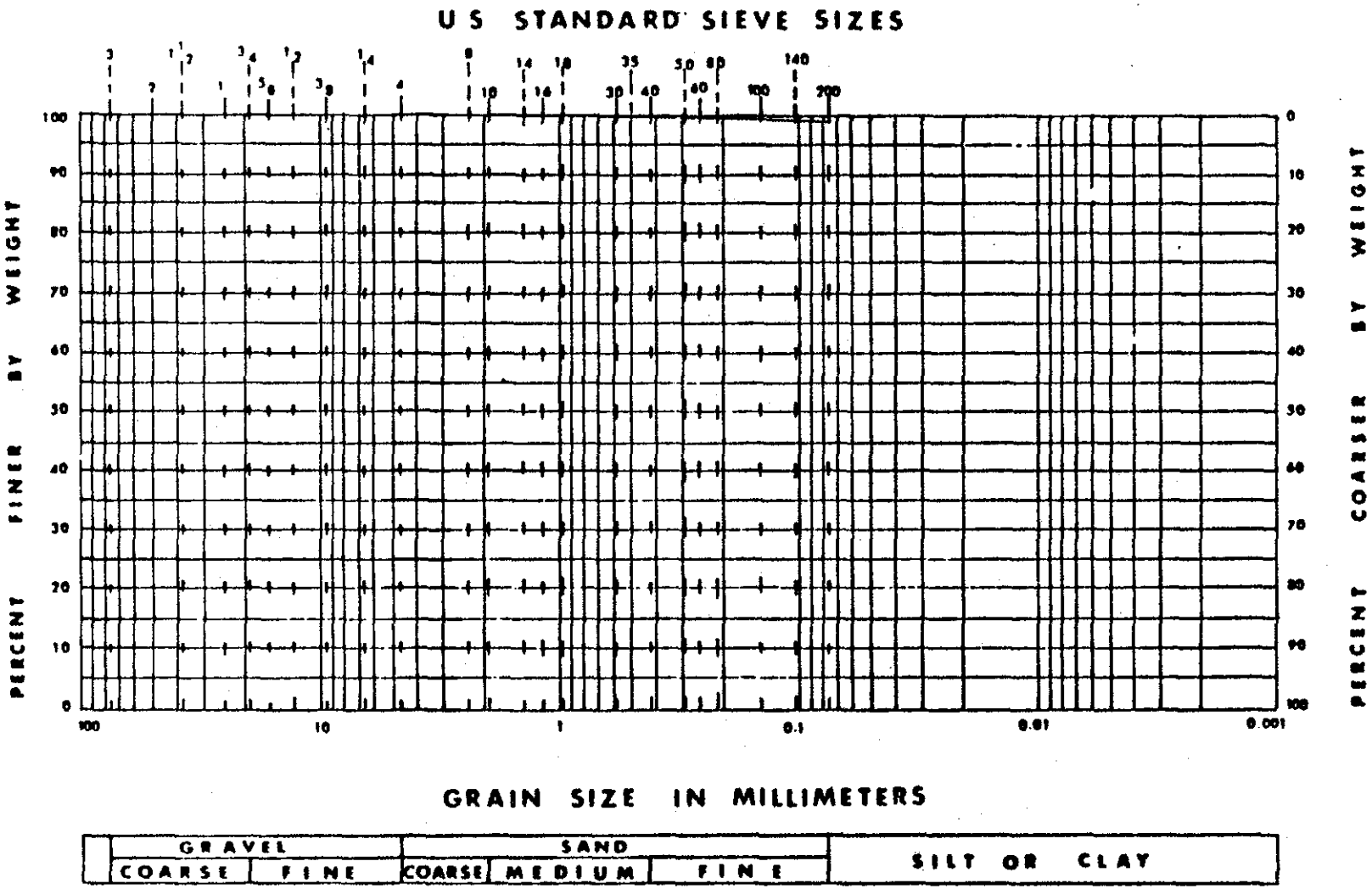
Boring No. 87-267 Sample 22J
Depth 46'-48'



AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

Brazos River Floodgates and Colorado River Locks

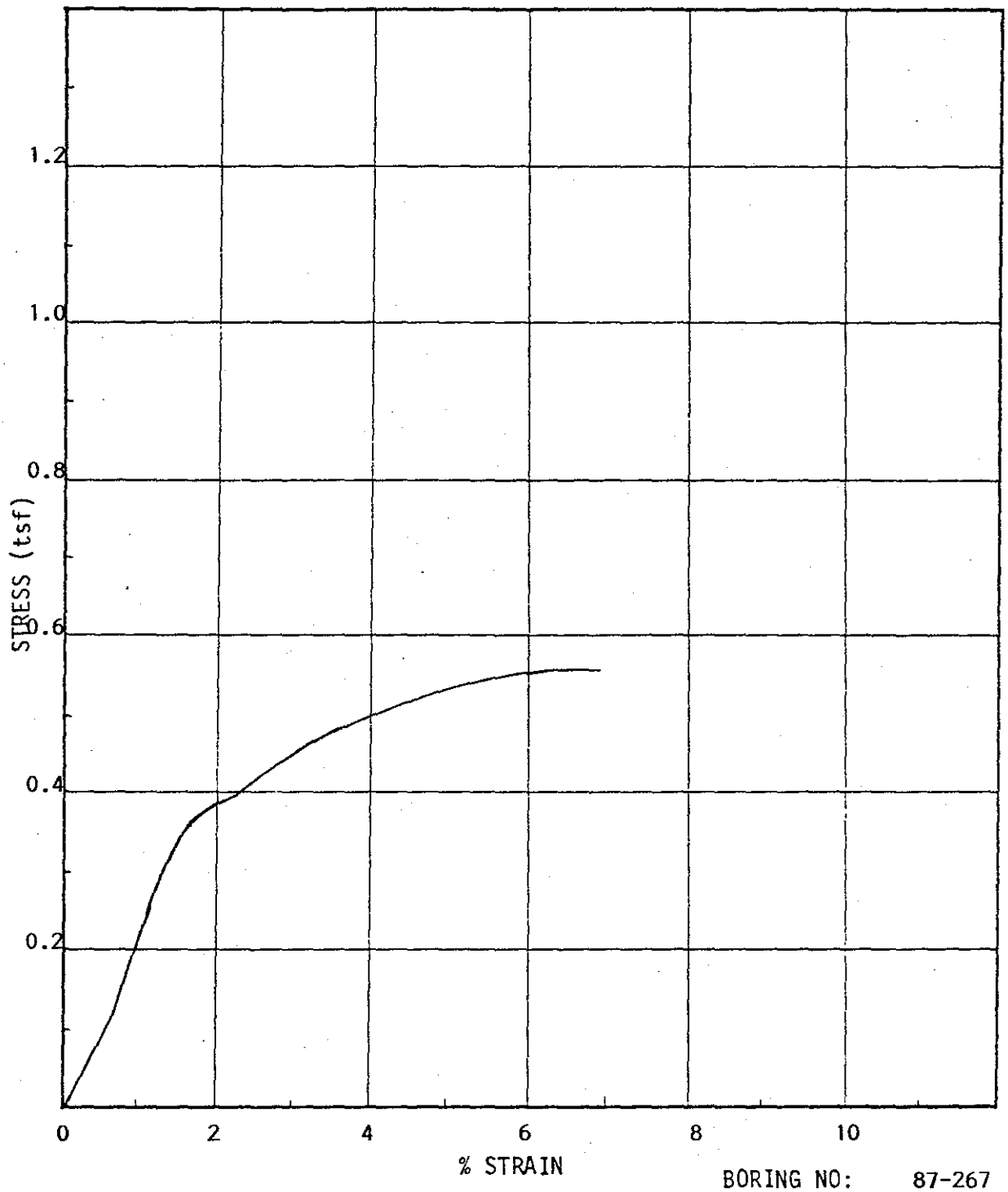
Boring No. 87-267 Sample 24C
Depth 50'-52'



AMLES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

UNCONFINED COMPRESSION TEST

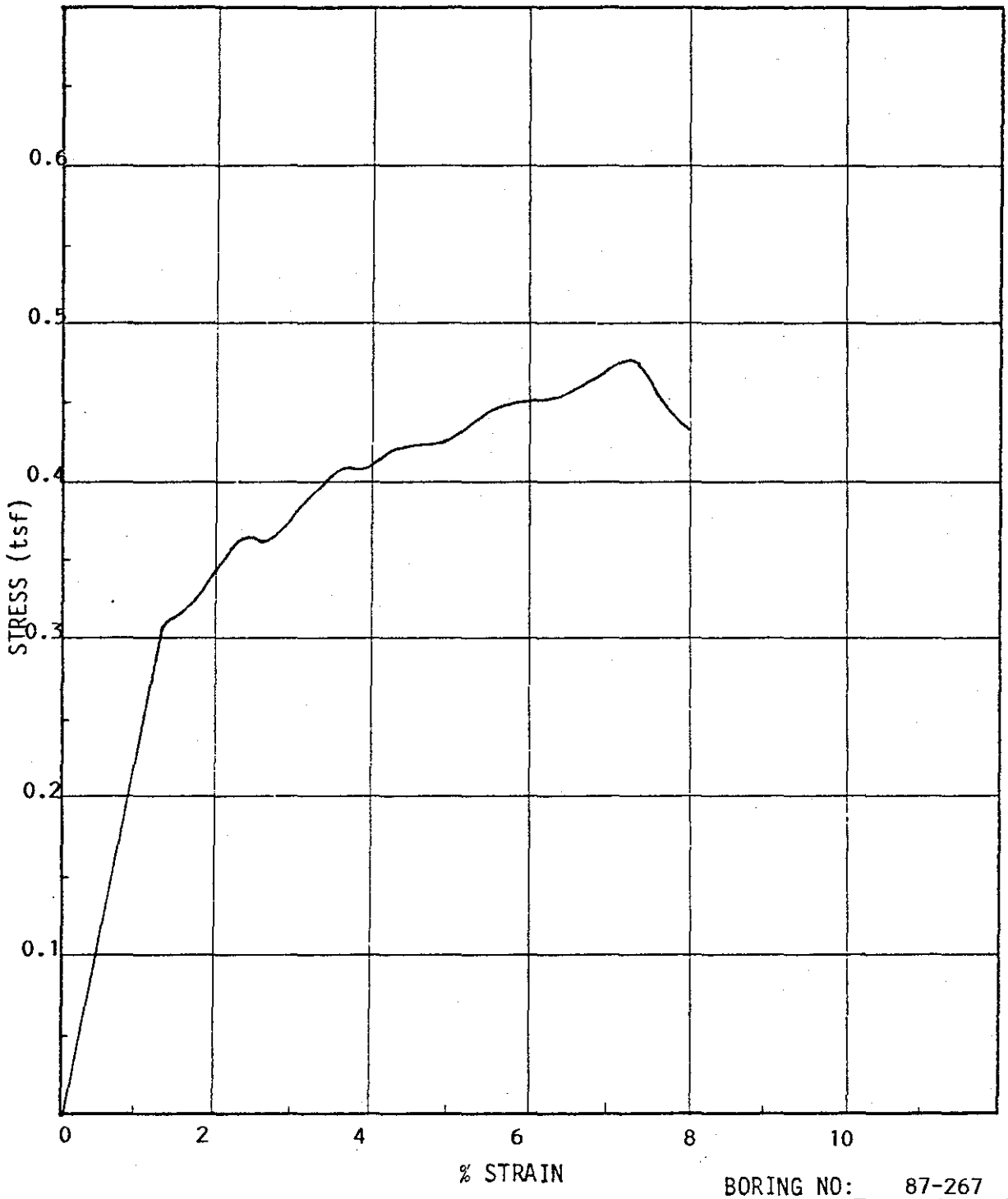


BORING NO: 87-267

SAMPLE DEPTH: 16'-18'

AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

UNCONFINED COMPRESSION TEST

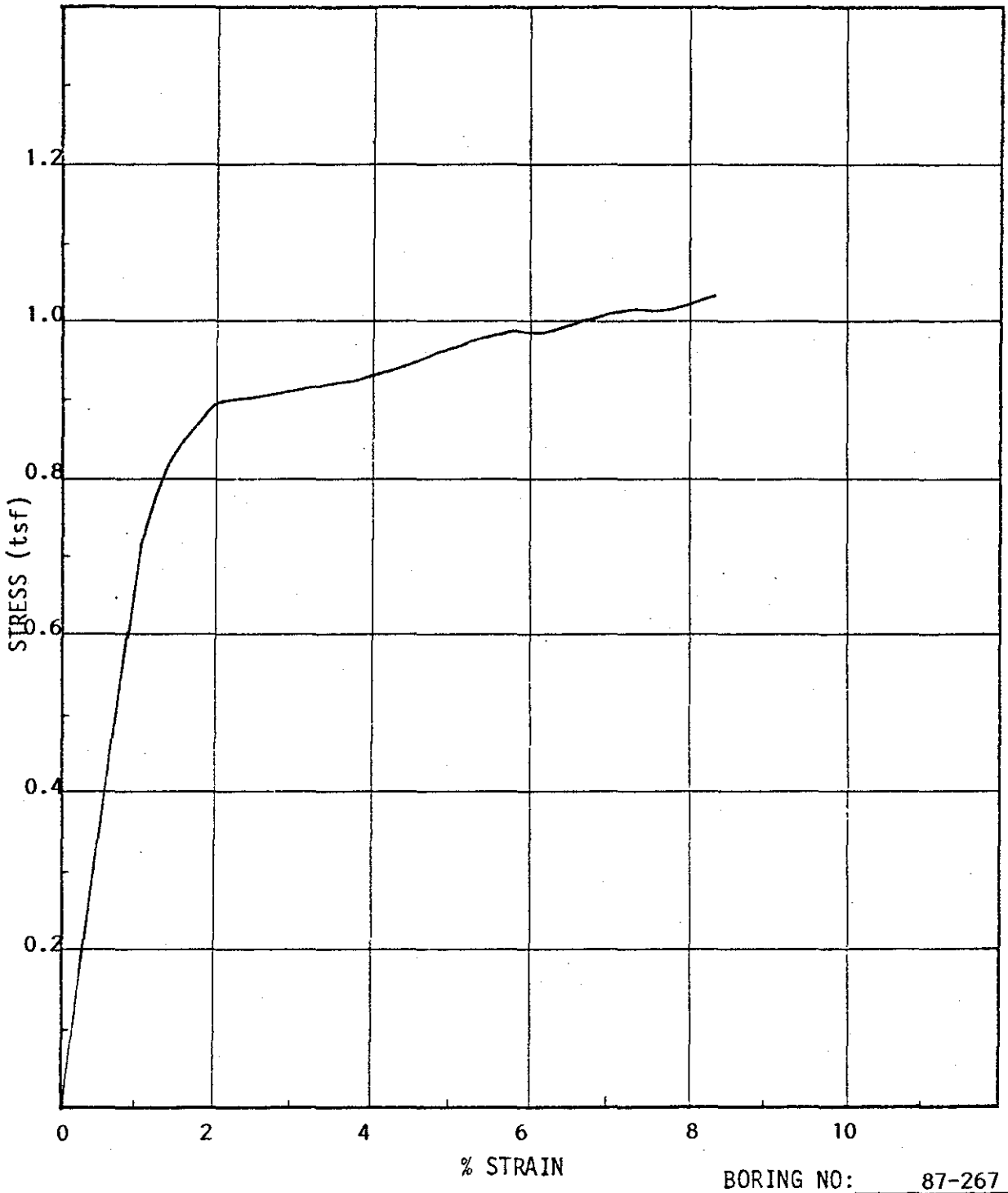


BORING NO: 87-267

SAMPLE DEPTH: 22'-24'

AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

UNCONFINED COMPRESSION TEST

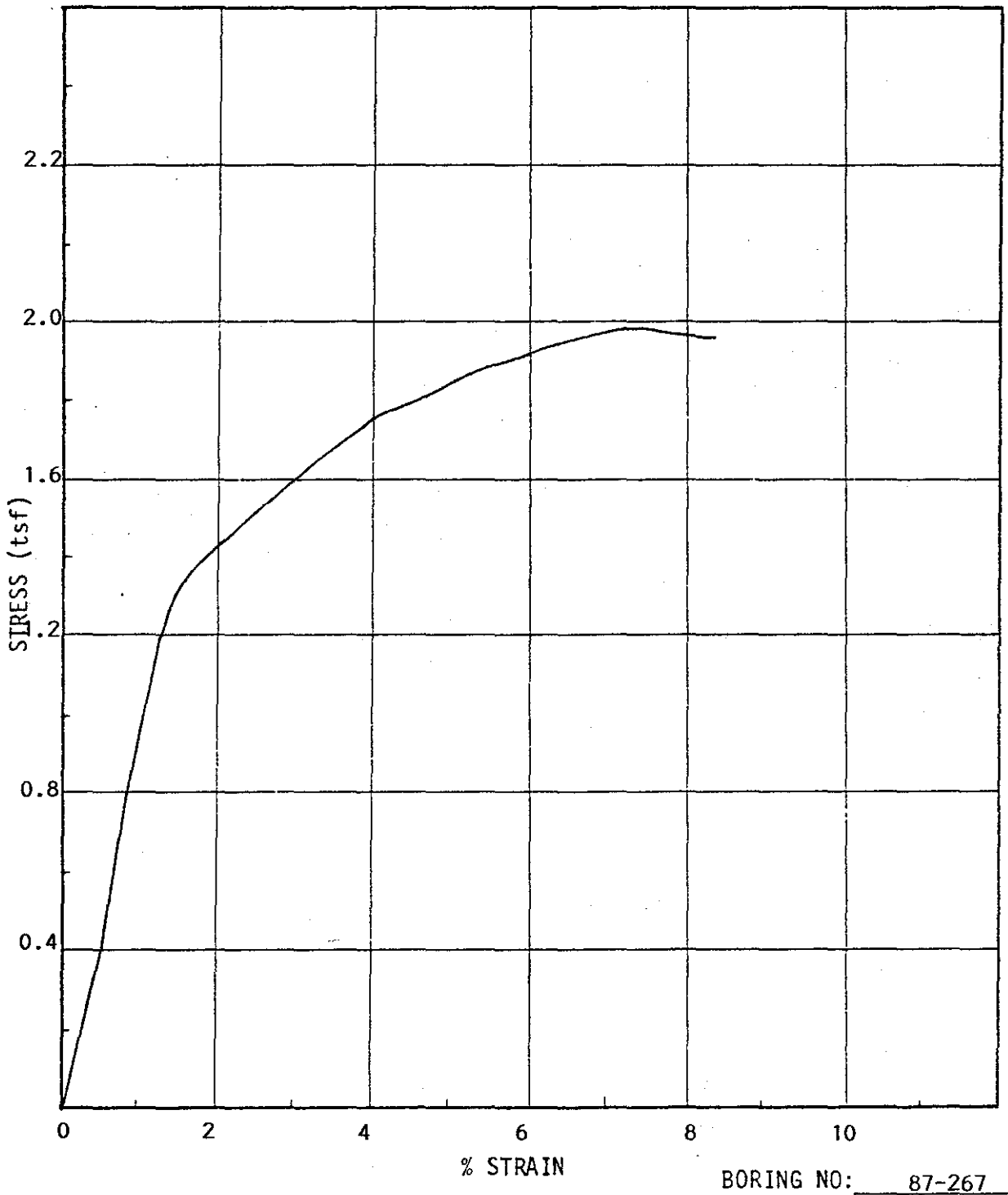


BORING NO: 87-267

SAMPLE DEPTH: 28'-30'

AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

UNCONFINED COMPRESSION TEST

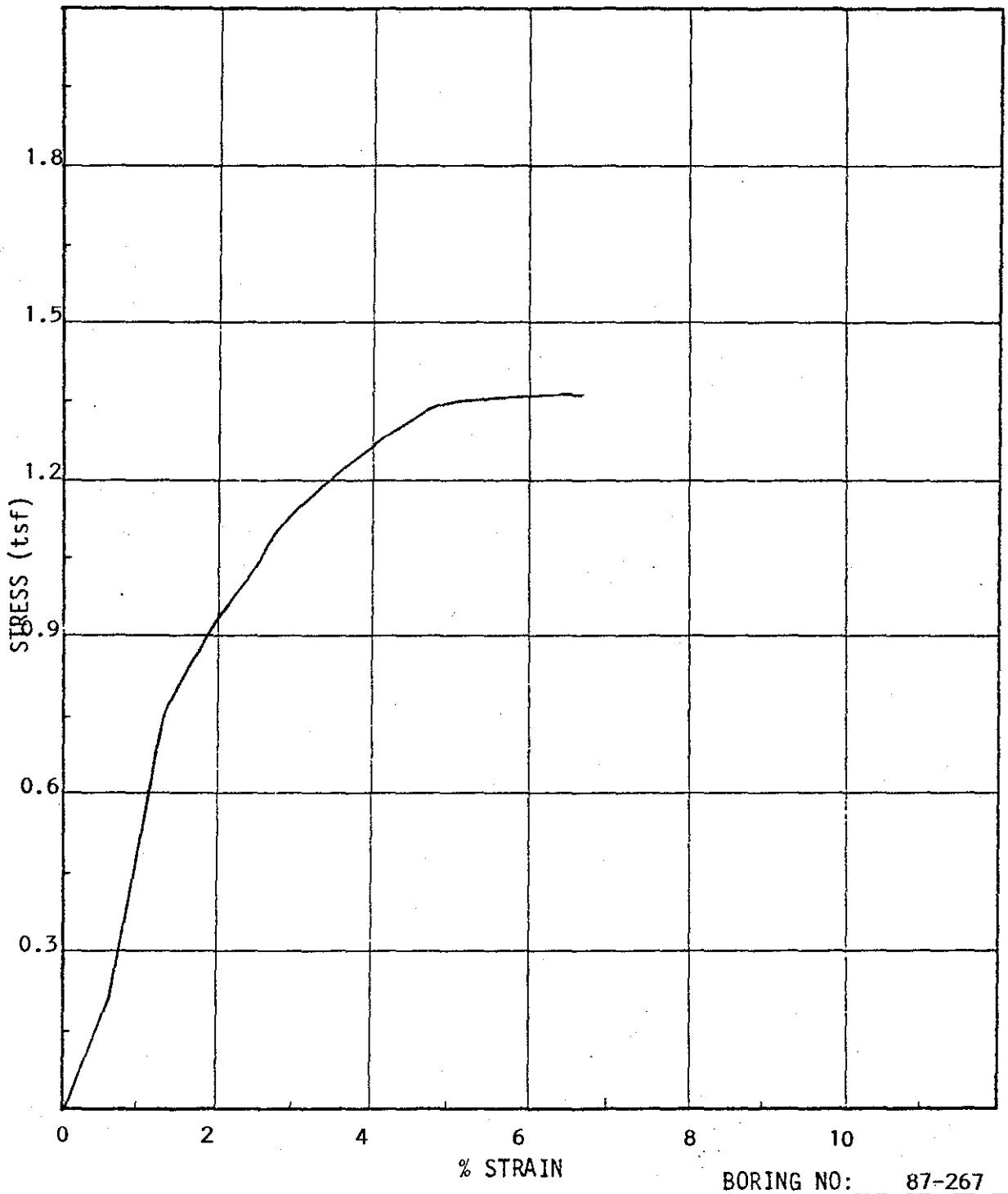


BORING NO: 87-267

SAMPLE DEPTH: 42'-44'

AVILES ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

UNCONFINED COMPRESSION TEST



BORING NO: 87-267

SAMPLE DEPTH: 50'-52'