

VIBRACORE LOG

Project: <u>TOWN OF PALM BEACH</u> Core No: <u>12</u>		
Coordinates: N = <u>861196.2</u> E = <u>818146.5</u>	Date: <u>12-16-87</u> Start Time <u>1909</u> End Time <u>1915</u>	Water Depth <u>33'</u> NGVD Driller <u>M.L. CLARKE</u> <u>JEFF ANDREWS</u> Client Rep. <u>FRED KAUB</u>

	Elev.	Depth	Legend	Description	Samp. No.	Remarks
Core Diam. <u>3.0"</u> Length of Barrel <u>200'</u> Penetration Depth <u>200'</u> Length Recovered <u>19'9"</u> Length Retained <u>19'9"</u> Remarks: <u>PENETRATION TIME 6 MIN</u>		0		GREY SAND (104R 6/1)		
Support Vessel <u>G.W. PIERCE</u> Positioning System <u>TRISPONDER</u> Positioning Remarks:		5		GREY SAND (104R 7/2) W/ SCATTERED SHELL	40'	(SP)
		10		CORAL FRAG 2 1" DIA	90'	(SP)
Weather <u>CLEAR</u> Wind Dir: <u>NW</u> Est. Speed <u>15-20K</u> Waves Dir: <u>NW</u> Height <u>1-3'</u> Current Dir: <u>N/A</u> Est. Speed:		15		GREY SAND (104R 7/2) W/ CEMENTED SAND FRAGS & SHELL	144'	(SP-GP)
		20		GREY SAND (104R 6/1) W/ CEMENTED SHELL & SAND CONSIDERABLE FRAGS	180'	(SP)
Analysis By: <u>FK</u> Date: <u>12-21-87</u> Analysis Method: <u>VISUAL LOG</u> <u>MECHANICAL LOG</u>						

GRADATION ANALYSIS REPORT
PALM BEACH VIBRACORE SAMPLES DECEMBER 1987

FOR: X SOIL CLASSIFICATION X CORING SAMPLES BEACH SAMPLES CONCRETE AGGREGATES

ENVIRONMENTAL STATION NATURAL SOIL FILL SAMPLES PIT SAMPLES

CORE NO.	11	11	12
SAMPLE DEPTH (FT)	14.0	18.0	4.0

U.S.C.S. DESCRIPTION	SP	SP	SP
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DRY SAMPLE WT (GRAMS)	252.71	221.75	228.62
SAMPLE WT AFTER WASH	248.32	216.51	225.72

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	GRAMS	% RET.	% PASS		GRAMS	% RET.	% PASS		GRAMS	% RET.	% PASS	
5	-2.00	4	0.39	0.15	99.85	,	0.00	0.00	100.00	,	0.30	0.13	99.87	,
7	-1.50	2.8	0.50	0.20	99.80	,	0.34	0.15	99.85	,	0.30	0.13	99.87	,
10	-1.00	2	0.72	0.28	99.72	,	1.09	0.49	99.51	,	0.42	0.18	99.82	,
14	-0.50	1.4	1.05	0.42	99.58	,	2.20	0.99	99.01	,	0.50	0.22	99.78	,
18	0.00	1	1.90	0.75	99.25	,	3.64	1.64	98.36	,	0.71	0.31	99.69	,
25	0.50	0.71	3.13	1.24	98.76	,	5.86	2.64	97.36	,	1.82	0.80	99.20	,
35	1.00	0.5	5.53	2.19	97.81	,	10.82	4.88	95.12	,	5.34	2.34	97.66	,
45	1.50	0.355	8.82	3.49	96.51	,	22.81	10.29	89.71	,	24.87	10.88	89.12	,
60	2.00	0.25	33.80	13.38	86.62	,	61.04	27.53	72.47	,	68.97	30.17	69.83	,
80	2.50	0.18	149.71	59.24	40.76	,	134.59	60.69	39.31	,	126.06	55.14	44.86	,
120	3.00	0.125	217.61	86.11	13.89	,	192.25	86.70	13.30	,	195.31	85.43	14.57	,
170	3.50	0.09	246.45	97.52	2.48	,	215.21	97.05	2.95	,	224.26	98.09	1.91	,
200	3.75	0.075	247.55	97.96	2.04	,	215.80	97.32	2.68	,	225.00	98.42	1.58	,
230	4.00	0.063	247.81	98.06	1.94	,	216.10	97.45	2.55	,	225.40	98.59	1.41	,
PAN			248.00	98.14		,	216.24	97.52		,	225.47	98.62		,

SIEVE LOSS	0.32	0.27	0.25
WEIGHTED AVE (mm)	0.182	0.212	0.195
SILT-CLAY %	1.92	2.56	1.47

GRADATION ANALYSIS REPORT
PALM BEACH VIBRACORE SAMPLES DECEMBER 1987

FOR: X SOIL CLASSIFICATION X CORING SAMPLES BEACH SAMPLES CONCRETE AGGREGATES

 ENVIRONMENTAL STATION NATURAL SOIL FILL SAMPLES PIT SAMPLES

CORE NO.	12		12	12
SAMPLE DEPTH (FT)	9.0		14.4	18.0

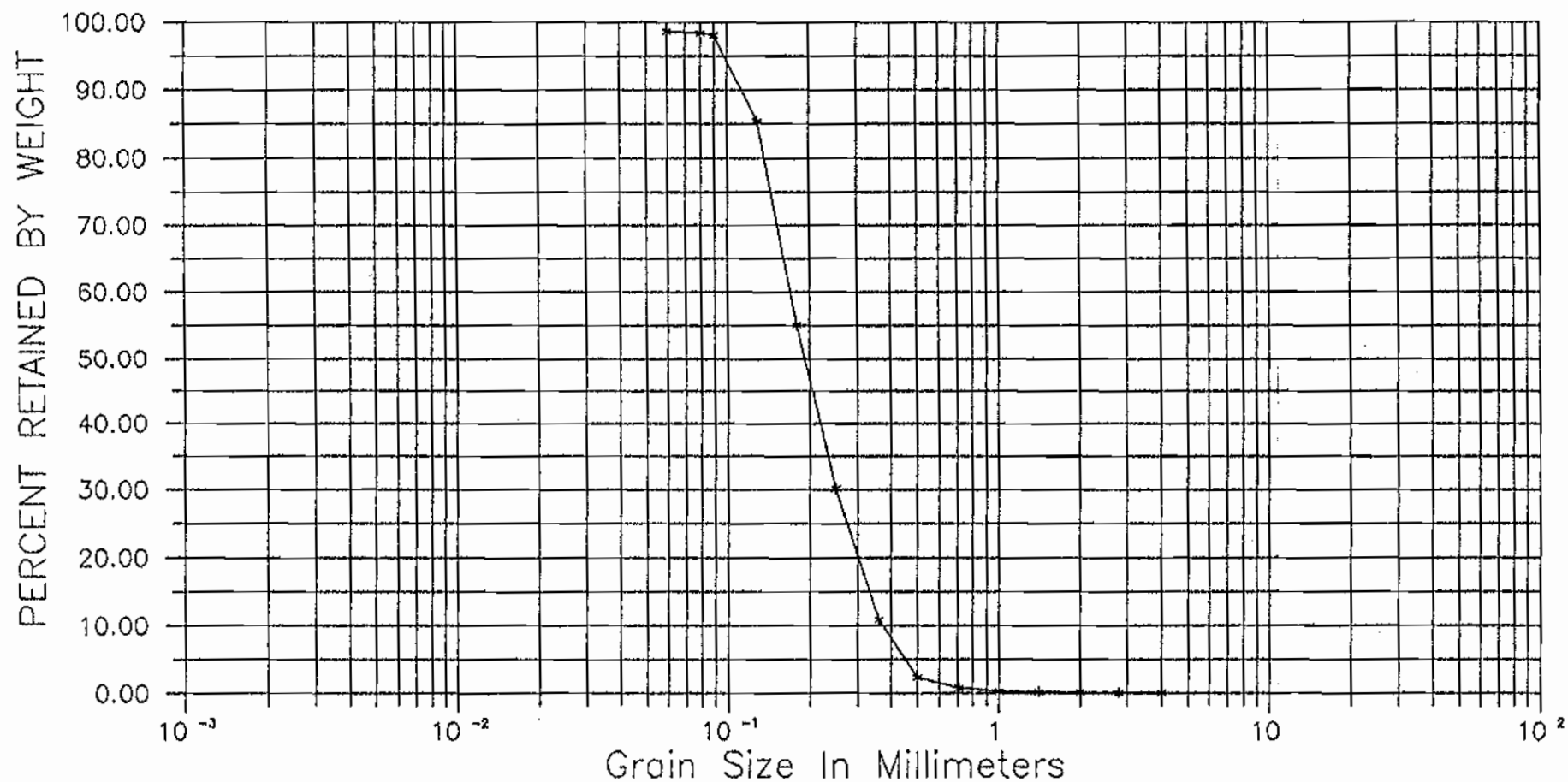
U.S.C.S. DESCRIPTION	SP		SP-GP	SP
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DRY SAMPLE WT (GRAMS)	241.84		257.64	224.82
SAMPLE WT AFTER WASH	238.24		253.93	220.95

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	GRAMS	% RET.	% PASS		GRAMS	% RET.	% PASS		GRAMS	% RET.	% PASS
5	-2.00	4	0.30	0.12	99.88	,	26.03	10.10	89.90	,	2.75	1.22	98.78
7	-1.50	2.8	0.30	0.12	99.88	,	35.00	13.58	86.42	,	3.21	1.43	98.57
10	-1.00	2	0.41	0.17	99.83	,	46.95	18.22	81.78	,	3.62	1.61	98.39
14	-0.50	1.4	0.62	0.26	99.74	,	64.32	24.97	75.03	,	4.44	1.97	98.03
18	0.00	1	1.09	0.45	99.55	,	89.86	34.88	65.12	,	5.72	2.54	97.46
25	0.50	0.71	1.85	0.76	99.24	,	119.75	46.48	53.52	,	8.00	3.56	96.44
35	1.00	0.5	3.41	1.41	98.59	,	146.72	56.95	43.05	,	11.27	5.01	94.99
45	1.50	0.355	6.79	2.81	97.19	,	160.48	62.29	37.71	,	16.45	7.32	92.68
60	2.00	0.25	32.73	13.53	86.47	,	172.70	67.03	32.97	,	31.35	13.94	86.06
80	2.50	0.18	145.51	60.17	39.83	,	205.39	79.72	20.28	,	112.86	50.20	49.80
120	3.00	0.125	213.79	88.40	11.60	,	236.48	91.79	8.21	,	169.60	75.44	24.56
170	3.50	0.09	237.09	98.04	1.96	,	251.74	97.71	2.29	,	219.07	97.44	2.56
200	3.75	0.075	237.96	98.40	1.60	,	252.70	98.08	1.92	,	220.60	98.12	1.88
230	4.00	0.063	238.03	98.42	1.58	,	252.95	98.18	1.82	,	220.63	98.14	1.86
PAN			238.10	98.45		,	253.05	98.22		,	220.65	98.15	

SIEVE LOSS	0.14		0.88	0.30
WEIGHTED AVE(mm)	0.177		1.078	0.213
SILT-CLAY %	1.55		1.58	1.74

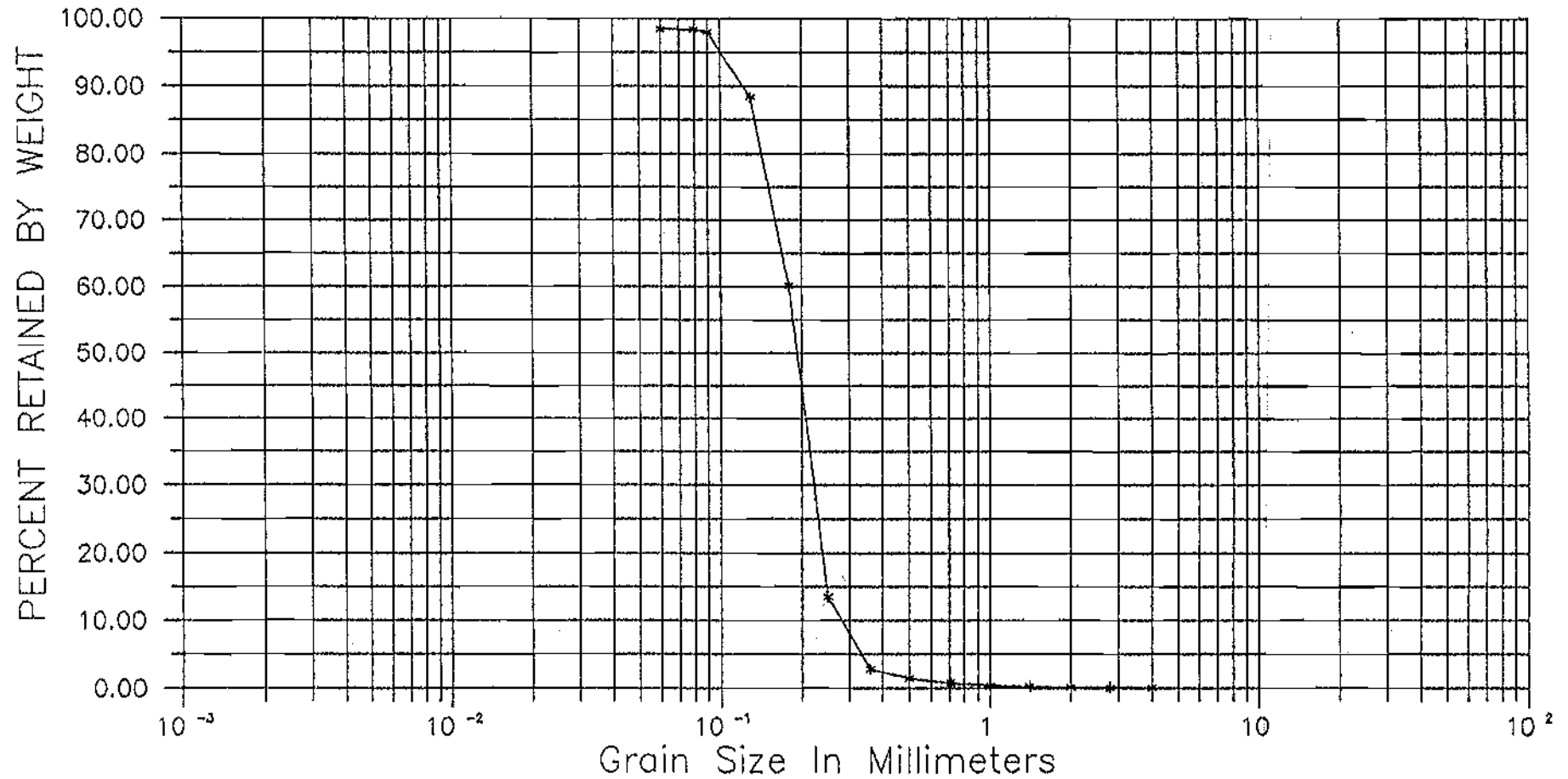
MECHANICAL ANALYSIS CHART



SILT OR CLAY		SAND			GRAVEL	
		FINE	MEDIUM	COARSE	FINE	COARSE

SAMPLE NO.	CLASSIFICATION		
12	MEAN	MEDIAN	SORTING
4'	.21mm	.19mm	.65
	.20mm	.19mm	.63
	GREY POORLY GRADED SAND-(SP)		

MECHANICAL ANALYSIS CHART



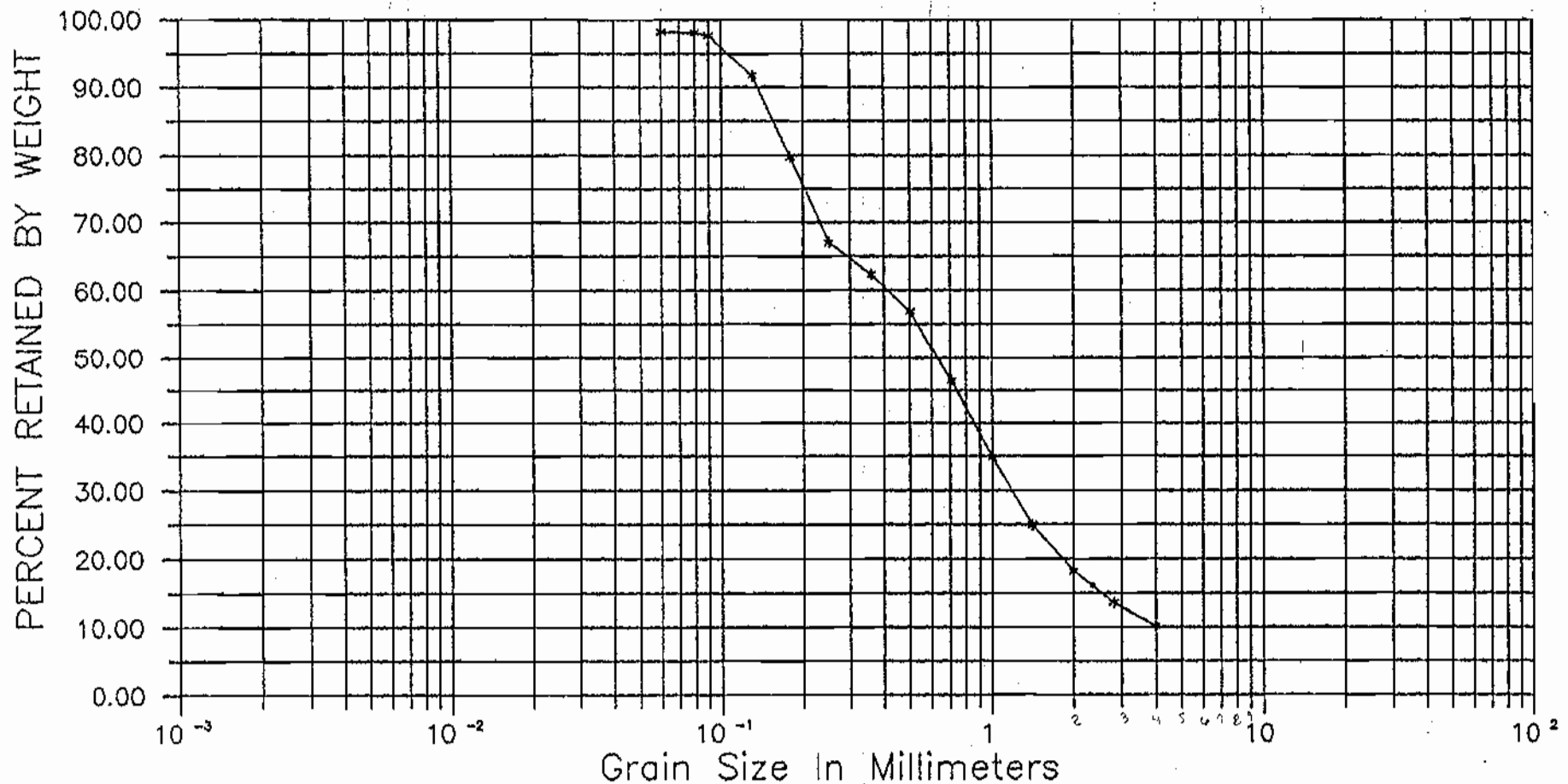
SILT OR CLAY	SAND			GRAVEL	
	FINE	MEDIUM	COARSE	FINE	COARSE

SAMPLE NO.

CLASSIFICATION

12	MEAN	MEDIAN	SORTING
91	.19mm	.19mm	.42
	.19mm	.20mm	.36
	GREY POORLY GRADED SAND & SHELL FRAGMENTS - (SP)		

MECHANICAL ANALYSIS CHART



SILT OR CLAY	SAND			GRAVEL	
	FINE	MEDIUM	COARSE	FINE	COARSE

SAMPLE NO.	CLASSIFICATION		
	MEAN	MEDIAN	SORTING
12	0.65mm	0.64mm	
14.4	0.60	0.61	1.97
GREY POORLY GRADED SAND, SHELL FRAGMENTS, & CEMENTED SAND			
(SP-GP)			

The graph shows the grain size distribution of a soil sample. The y-axis represents the percentage of soil retained on a sieve of a given size, ranging from 0.00% to 100.00%. The x-axis represents the sieve size in millimeters on a logarithmic scale, ranging from 10^{-3} mm to 10^2 mm. The curve starts at 100% retention for sieve sizes up to approximately 0.075 mm, then drops sharply to about 14% at 0.25 mm, and continues to decrease more gradually, reaching near 0% retention for sieve sizes greater than 1 mm.

Grain Size (mm)	Percent Retained (%)
0.075	98
0.075	97
0.075	96
0.075	95
0.075	94
0.075	93
0.075	92
0.075	91
0.075	90
0.075	89
0.075	88
0.075	87
0.075	86
0.075	85
0.075	84
0.075	83
0.075	82
0.075	81
0.075	80
0.075	79
0.075	78
0.075	77
0.075	76
0.075	75
0.075	74
0.075	73
0.075	72
0.075	71
0.075	70
0.075	69
0.075	68
0.075	67
0.075	66
0.075	65
0.075	64
0.075	63
0.075	62
0.075	61
0.075	60
0.075	59
0.075	58
0.075	57
0.075	56
0.075	55
0.075	54
0.075	53
0.075	52
0.075	51
0.075	50
0.075	49
0.075	48
0.075	47
0.075	46
0.075	45
0.075	44
0.075	43
0.075	42
0.075	41
0.075	40
0.075	39
0.075	38
0.075	37
0.075	36
0.075	35
0.075	34
0.075	33
0.075	32
0.075	31
0.075	30
0.075	29
0.075	28
0.075	27
0.075	26
0.075	25
0.075	24
0.075	23
0.075	22
0.075	21
0.075	20
0.075	19
0.075	18
0.075	17
0.075	16
0.075	15
0.075	14
0.075	13
0.075	12
0.075	11
0.075	10
0.075	9
0.075	8
0.075	7
0.075	6
0.075	5
0.075	4
0.075	3
0.075	2
0.075	1
0.075	0

SILT OR CLAY	SAND			GRAVEL	
	FINE	MEDIUM	COARSE	FINE	COARSE

SAMPLE NO.	CLASSIFICATION		
	MEAN	MEDIAN	SORTING
12			
18'	.18mm	.18mm	.53
	.17	.18	.47
	GREY POORLY GRADED SAND-(SP)		

(LX)