

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 5/99

SAMPLE NO.: VC99 4#1  
SAMPLE ELEV. (FT. NGVD): -37.9  
SAMPLE DEPTH (FT.): 1.5  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 93.39  
SAMPLE WEIGHT AFTER WASH (GRAMS): 90.35

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	0.00	0.00	100.00
7	-1.50	2.800	0.00	0.00	100.00
10	-1.00	2.000	0.11	0.12	99.88
14	-0.50	1.400	0.28	0.30	99.70
18	0.00	1.000	0.57	0.61	99.39
25	0.50	0.710	1.10	1.18	98.82
35	1.00	0.500	2.59	2.77	97.23
45	1.50	0.355	5.70	6.10	93.90
60	2.00	0.250	12.30	13.17	86.83
80	2.50	0.180	27.76	29.72	70.28
120	3.00	0.125	69.97	74.92	25.08
170	3.50	0.090	88.99	95.29	4.71
200	3.75	0.075	90.24	96.63	3.37
230	4.00	0.063	91.85	98.35	1.65
PAN			93.38	99.99	0.01

PHI (5): 1.33                      PHI (16): 2.09                      PHI (25): 2.36  
PHI (50): 2.72                      PHI (75): 3.00                      PHI (84): 3.22  
PHI (95): 3.49

SIEVE LOSS (g): 0.01                      SILT/CLAY: 3.37%  
SKEWNESS: -0.546                      KURTOSIS: 1.372

GRAPHIC METHOD

MEAN (PHI): 2.57                      SORTING: 0.57  
MEAN (mm): 0.17                      MEDIAN (mm): 0.15  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.61                      SORTING: 0.65  
MEAN (mm): 0.16

DATA FILE NAME: VC99-4#1.TAB

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: RW ON: 5/99

SAMPLE NO.: VC99 4#2  
SAMPLE ELEV. (FT. NGVD): -41.1  
SAMPLE DEPTH (FT.): 4.7  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 96.74  
SAMPLE WEIGHT AFTER WASH (GRAMS): 95.45

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	1.57	1.62	98.38
7	-1.50	2.800	3.72	3.85	96.15
10	-1.00	2.000	6.23	6.44	93.56
14	-0.50	1.400	11.28	11.66	88.34
18	0.00	1.000	18.86	19.50	80.50
25	0.50	0.710	29.70	30.70	69.30
35	1.00	0.500	47.54	49.14	50.86
45	1.50	0.355	58.10	60.06	39.94
60	2.00	0.250	67.50	69.77	30.23
80	2.50	0.180	75.30	77.84	22.16
120	3.00	0.125	87.10	90.04	9.96
170	3.50	0.090	95.01	98.21	1.79
200	3.75	0.075	95.26	98.47	1.53
230	4.00	0.063	95.99	99.23	0.77
PAN			96.66	99.92	0.08

PHI(5): -1.28      PHI(16): -0.22      PHI(25): 0.25  
PHI(50): 1.04      PHI(75): 2.32      PHI(84): 2.75  
PHI(95): 3.30

SIEVE LOSS (g): 0.08      SILT/CLAY: 1.53%  
SKEWNESS: -0.018      KURTOSIS: 0.903

GRAPHIC METHOD

MEAN (PHI): 1.12      SORTING: 1.49  
MEAN (mm): 0.46      MEDIAN (mm): 0.49  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.13      SORTING: 1.38  
MEAN (mm): 0.46

DATA FILE NAME: VC99-4#2.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 5/99

SAMPLE NO.: VC99 4#3  
 SAMPLE ELEV. (FT. NGVD): -43.9  
 SAMPLE DEPTH (FT.): 7.5  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 92.11  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 90.32

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	0.31	0.34	99.66
7	-1.50	2.800	0.97	1.05	98.95
10	-1.00	2.000	1.89	2.05	97.95
14	-0.50	1.400	4.65	5.05	94.95
18	0.00	1.000	16.67	18.10	81.90
25	0.50	0.710	31.29	33.97	66.03
35	1.00	0.500	46.64	50.64	49.36
45	1.50	0.355	58.60	63.62	36.38
60	2.00	0.250	68.51	74.38	25.62
80	2.50	0.180	84.60	91.85	8.15
120	3.00	0.125	89.99	97.70	2.30
170	3.50	0.090	90.26	97.99	2.01
200	3.75	0.075	90.29	98.02	1.98
230	4.00	0.063	91.20	99.01	0.99
PAN			92.10	99.99	0.01

PHI (5): -0.51                      PHI (16): -0.08                      PHI (25): 0.22  
 PHI (50): 0.98                      PHI (75): 2.02                      PHI (84): 2.28  
 PHI (95): 2.77

SIEVE LOSS (g): 0.01                      SILT/CLAY: 1.98%  
 SKEWNESS: 0.127                      KURTOSIS: 0.746

GRAPHIC METHOD

MEAN (PHI): 1.09                      SORTING: 1.18  
 MEAN (mm): 0.47                      MEDIAN (mm): 0.51

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.04                      SORTING: 1.08  
 MEAN (mm): 0.49

DATA FILE NAME: VC99-4#3.TAB

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH 4/99  
TESTED BY: ID ON: 4/99

SAMPLE NO.: VC99 4#4  
SAMPLE ELEV. (FT. NGVD): -47.2  
SAMPLE DEPTH (FT.): 10.8  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 96.01  
SAMPLE WEIGHT AFTER WASH (GRAMS): 94.53

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	0.68	0.71	99.29
7	-1.50	2.800	2.17	2.26	97.74
10	-1.00	2.000	3.26	3.40	96.60
14	-0.50	1.400	5.95	6.20	93.80
18	0.00	1.000	10.63	11.07	88.93
25	0.50	0.710	17.14	17.85	82.15
35	1.00	0.500	27.18	28.31	71.69
45	1.50	0.355	34.22	35.64	64.36
60	2.00	0.250	42.58	44.35	55.65
80	2.50	0.180	51.52	53.66	46.34
120	3.00	0.125	76.43	79.61	20.39
170	3.50	0.090	94.04	97.95	2.05
200	3.75	0.075	94.49	98.42	1.58
230	4.00	0.063	95.26	99.22	0.78
PAN			96.01	100.00	0.00

PHI(5): -0.71      PHI(16): 0.36      PHI(25): 0.84  
PHI(50): 2.30      PHI(75): 2.91      PHI(84): 3.12  
PHI(95): 3.42

SIEVE LOSS (g): 0.00      SILT/CLAY: 1.58%  
SKEWNESS: -0.690      KURTOSIS: 0.819

GRAPHIC METHOD

MEAN (PHI): 1.70      SORTING: 1.38  
MEAN (mm): 0.31      MEDIAN (mm): 0.20

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.83      SORTING: 1.35  
MEAN (mm): 0.28

DATA FILE NAME: VC99-4#4.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 4/99

SAMPLE NO.: VC99 4#5  
 SAMPLE ELEV. (FT. NGVD): -47.7  
 SAMPLE DEPTH (FT.): 11.3  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SW

DRY SAMPLE WEIGHT (GRAMS): 89.31  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 87.19

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	2.97	3.33	96.67
7	-1.50	2.800	6.16	6.90	93.10
10	-1.00	2.000	10.93	12.24	87.76
14	-0.50	1.400	19.55	21.89	78.11
18	0.00	1.000	30.28	33.90	66.10
25	0.50	0.710	41.80	46.80	53.20
35	1.00	0.500	55.39	62.02	37.98
45	1.50	0.355	63.29	70.87	29.13
60	2.00	0.250	70.80	79.27	20.73
80	2.50	0.180	75.75	84.82	15.18
120	3.00	0.125	82.25	92.09	7.91
170	3.50	0.090	86.96	97.37	2.63
200	3.75	0.075	87.17	97.60	2.40
230	4.00	0.063	88.25	98.81	1.19
PAN			89.31	100.00	0.00

PHI (5): -1.77                      PHI (16): -0.81                      PHI (25): -0.37  
 PHI (50): 0.61                      PHI (75): 1.75                      PHI (84): 2.43  
 PHI (95): 3.28

SIEVE LOSS (g): 0.00                      SILT/CLAY: 2.40%  
 SKEWNESS: 0.093                      KURTOSIS: 0.976

GRAPHIC METHOD

MEAN (PHI): 0.75                      SORTING: 1.62  
 MEAN (mm): 0.60                      MEDIAN (mm): 0.66

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.65                      SORTING: 1.47  
 MEAN (mm): 0.64

DATA FILE NAME: VC99-4#5.TAB

GRADATION ANALYSIS REPORT  
 TOWN OF PALM BEACH 4/99  
 TESTED BY: ID ON: 4/99

SAMPLE NO.: VC99 4#6  
 SAMPLE ELEV. (FT. NGVD): -48.9  
 SAMPLE DEPTH (FT.): 12.5  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 78.21  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 76.35

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	0.00	0.00	100.00
7	-1.50	2.800	0.19	0.24	99.76
10	-1.00	2.000	0.52	0.66	99.34
14	-0.50	1.400	1.09	1.39	98.61
18	0.00	1.000	1.86	2.38	97.62
25	0.50	0.710	2.88	3.68	96.32
35	1.00	0.500	4.97	6.35	93.65
45	1.50	0.355	7.61	9.73	90.27
60	2.00	0.250	13.64	17.44	82.56
80	2.50	0.180	24.36	31.15	68.85
120	3.00	0.125	49.90	63.80	36.20
170	3.50	0.090	75.55	96.60	3.40
200	3.75	0.075	76.31	97.57	2.43
230	4.00	0.063	77.27	98.80	1.20
PAN			78.21	100.00	0.00

PHI(5): 0.75                      PHI(16): 1.91                      PHI(25): 2.28  
 PHI(50): 2.79                      PHI(75): 3.17                      PHI(84): 3.31  
 PHI(95): 3.48

SIEVE LOSS(g): 0.00                      SILT/CLAY: 2.43%  
 SKEWNESS: -0.967                      KURTOSIS: 1.250

GRAPHIC METHOD

MEAN (PHI): 2.45                      SORTING: 0.70  
 MEAN (mm) : 0.18                      MEDIAN (mm): 0.14  
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.57                      SORTING: 0.87  
 MEAN (mm) : 0.17

DATA FILE NAME: VC99-4#6.TAB

GRADATION ANALYSIS REPORT  
 TOWN OF PALM BEACH  
 TESTED BY: RW ON: 4/99

SAMPLE NO.: VC99 4#7  
 SAMPLE ELEV. (FT. NGVD): -49.6  
 SAMPLE DEPTH (FT.): 13.2  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 90.04  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 88.38

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.00	16.000	0.00	0.00	100.00
5/16	-3.00	8.000	0.00	0.00	100.00
5	-2.00	4.000	0.24	0.27	99.73
7	-1.50	2.800	0.30	0.33	99.67
10	-1.00	2.000	0.46	0.51	99.49
14	-0.50	1.400	0.77	0.86	99.14
18	0.00	1.000	1.11	1.23	98.77
25	0.50	0.710	1.56	1.73	98.27
35	1.00	0.500	2.48	2.75	97.25
45	1.50	0.355	4.10	4.55	95.45
60	2.00	0.250	11.52	12.79	87.21
80	2.50	0.180	28.81	32.00	68.00
120	3.00	0.125	62.44	69.35	30.65
170	3.50	0.090	87.77	97.48	2.52
200	3.75	0.075	88.37	98.15	1.85
230	4.00	0.063	89.21	99.08	0.92
PAN			90.04	100.00	0.00

PHI (5): 1.53                      PHI (16): 2.08                      PHI (25): 2.32  
 PHI (50): 2.74                      PHI (75): 3.10                      PHI (84): 3.26  
 PHI (95): 3.46

SIEVE LOSS (g): 0.00                      SILT/CLAY: 1.85%  
 SKEWNESS: -0.424                      KURTOSIS: 1.010

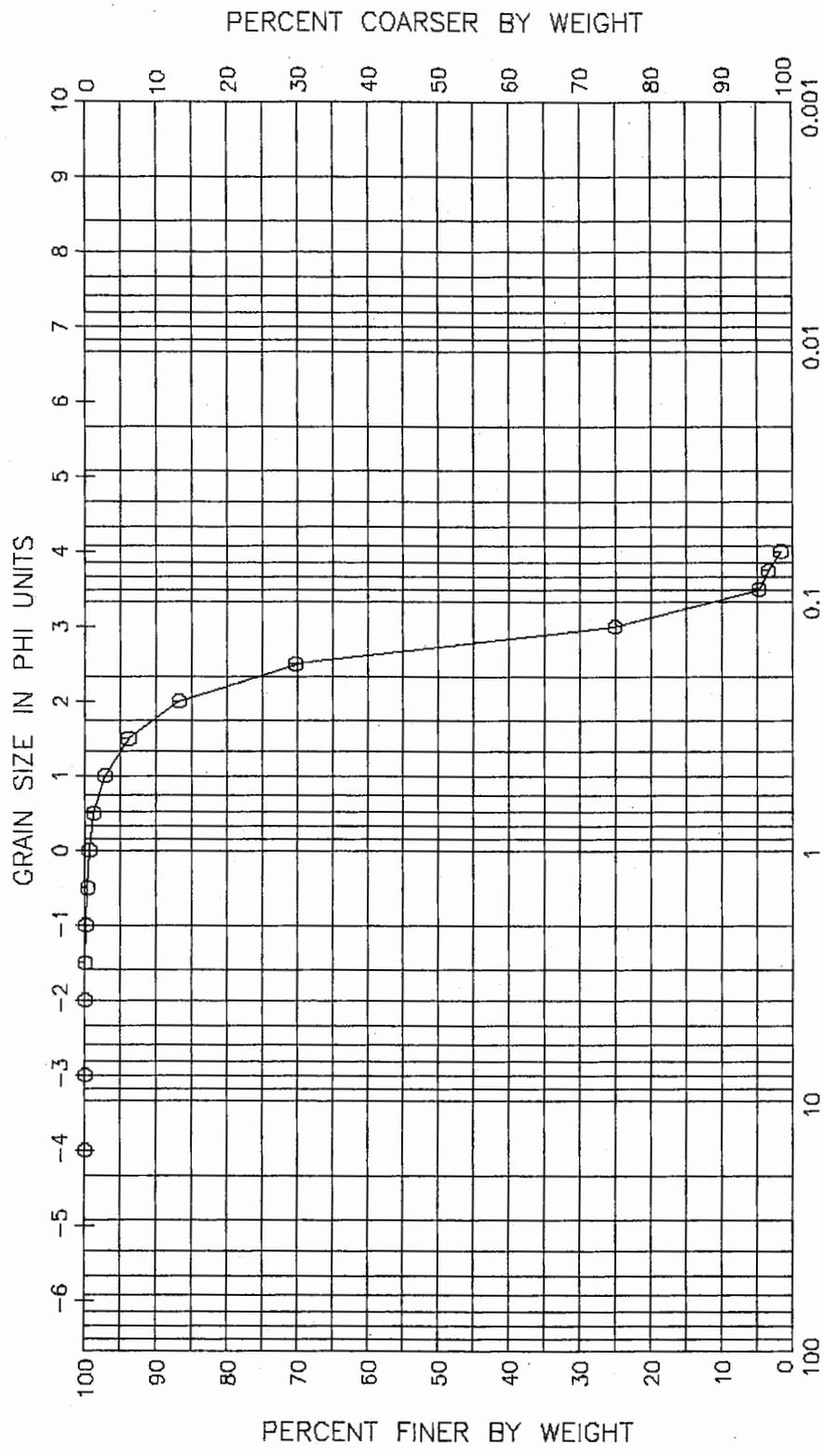
GRAPHIC METHOD

MEAN (PHI): 2.61                      SORTING: 0.59  
 MEAN (mm): 0.16                      MEDIAN (mm): 0.15  
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

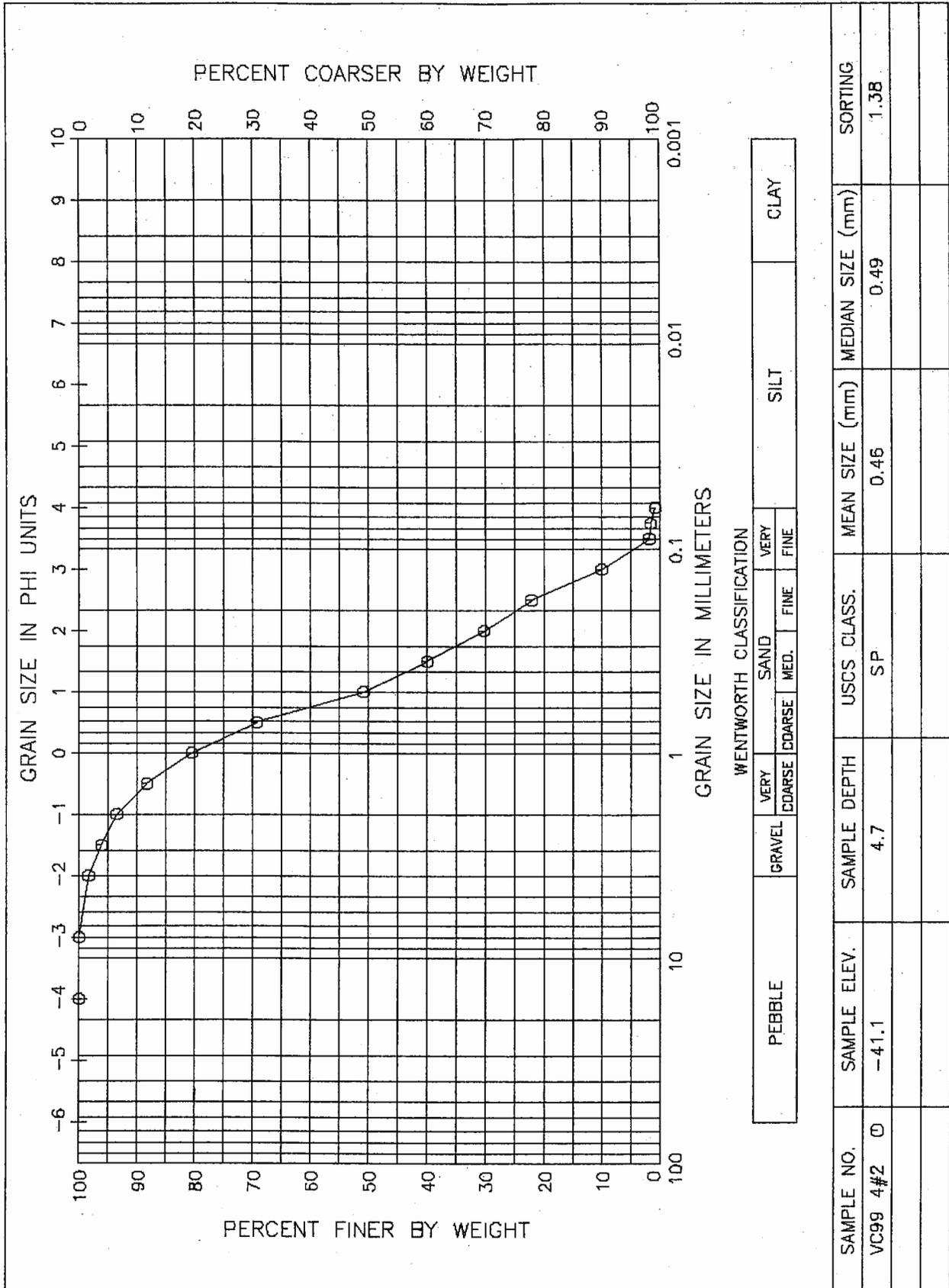
MEAN (PHI): 2.62                      SORTING: 0.71  
 MEAN (mm): 0.16

DATA FILE NAME: VC99-4#7.TAB

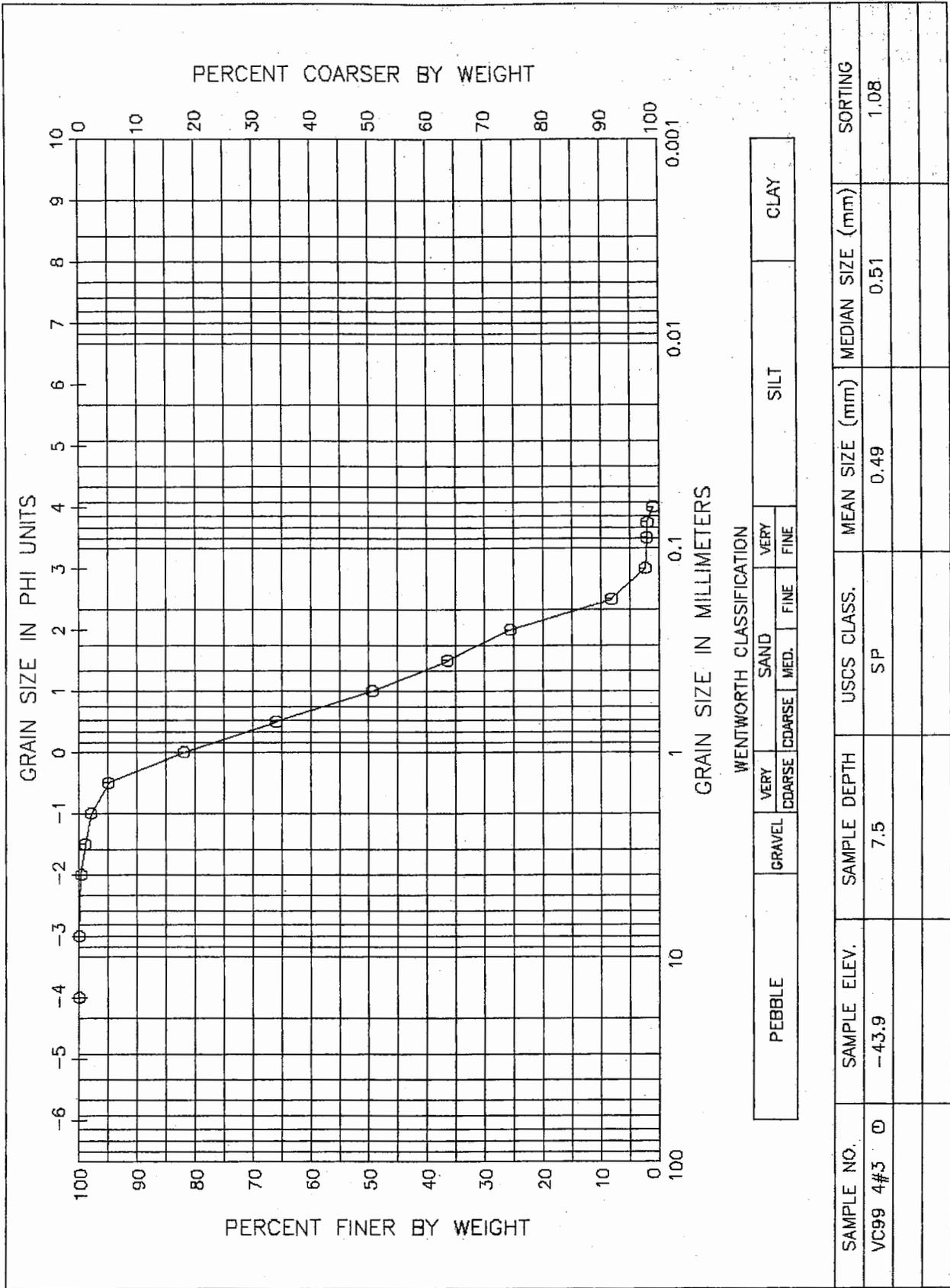


SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 4#1	-37.9	1.5	SP	0.16	0.15	0.65

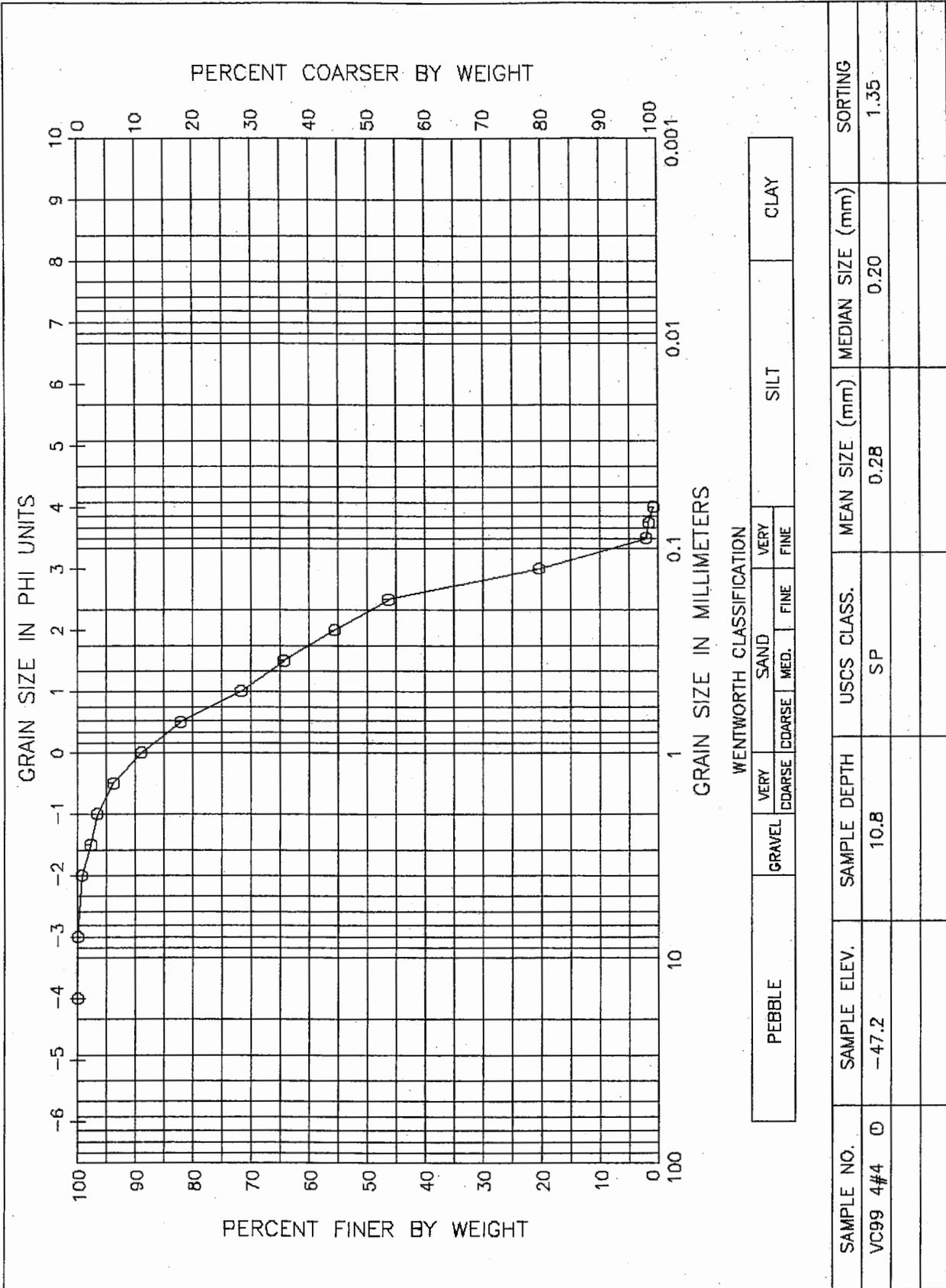
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



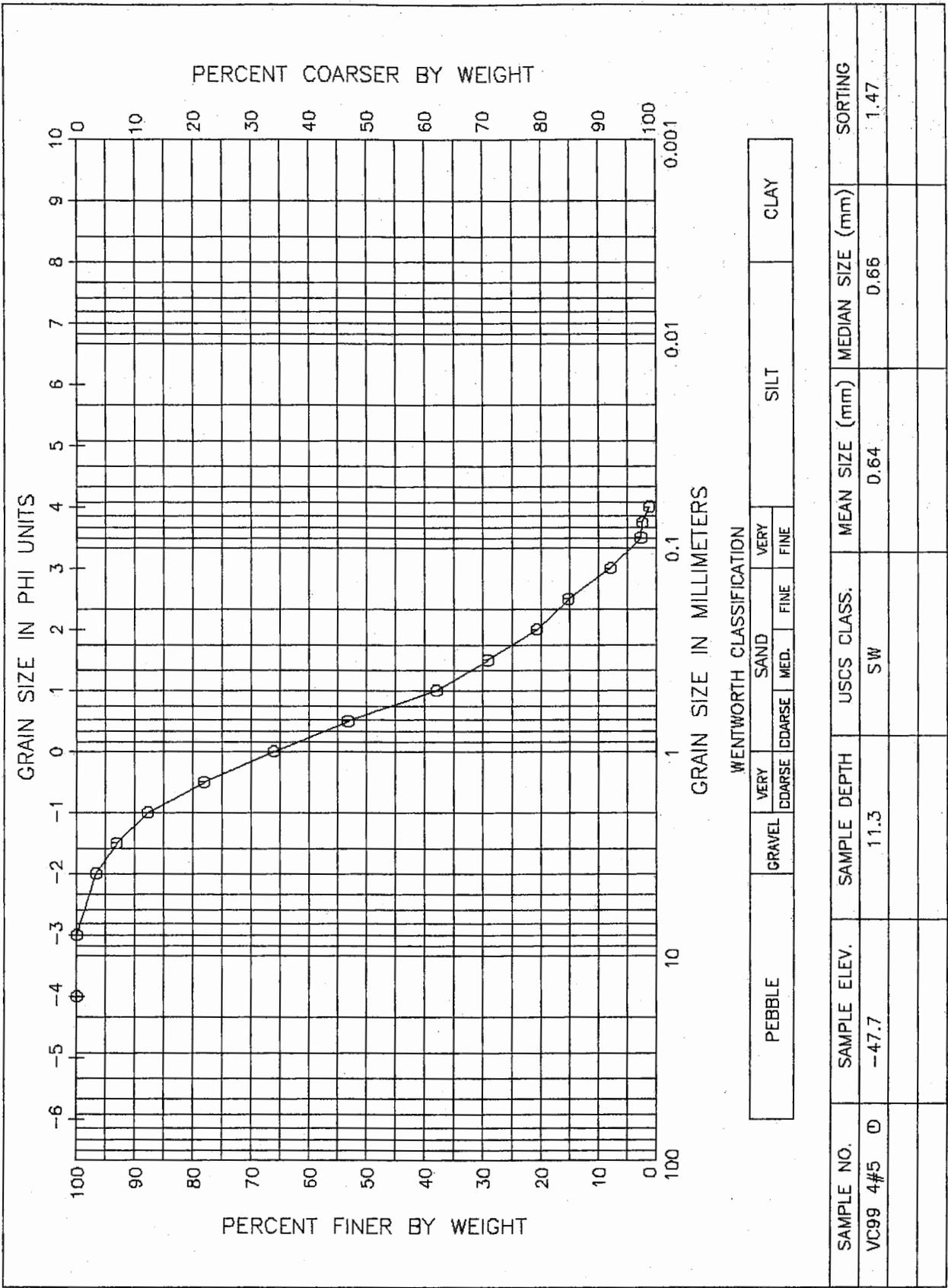
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



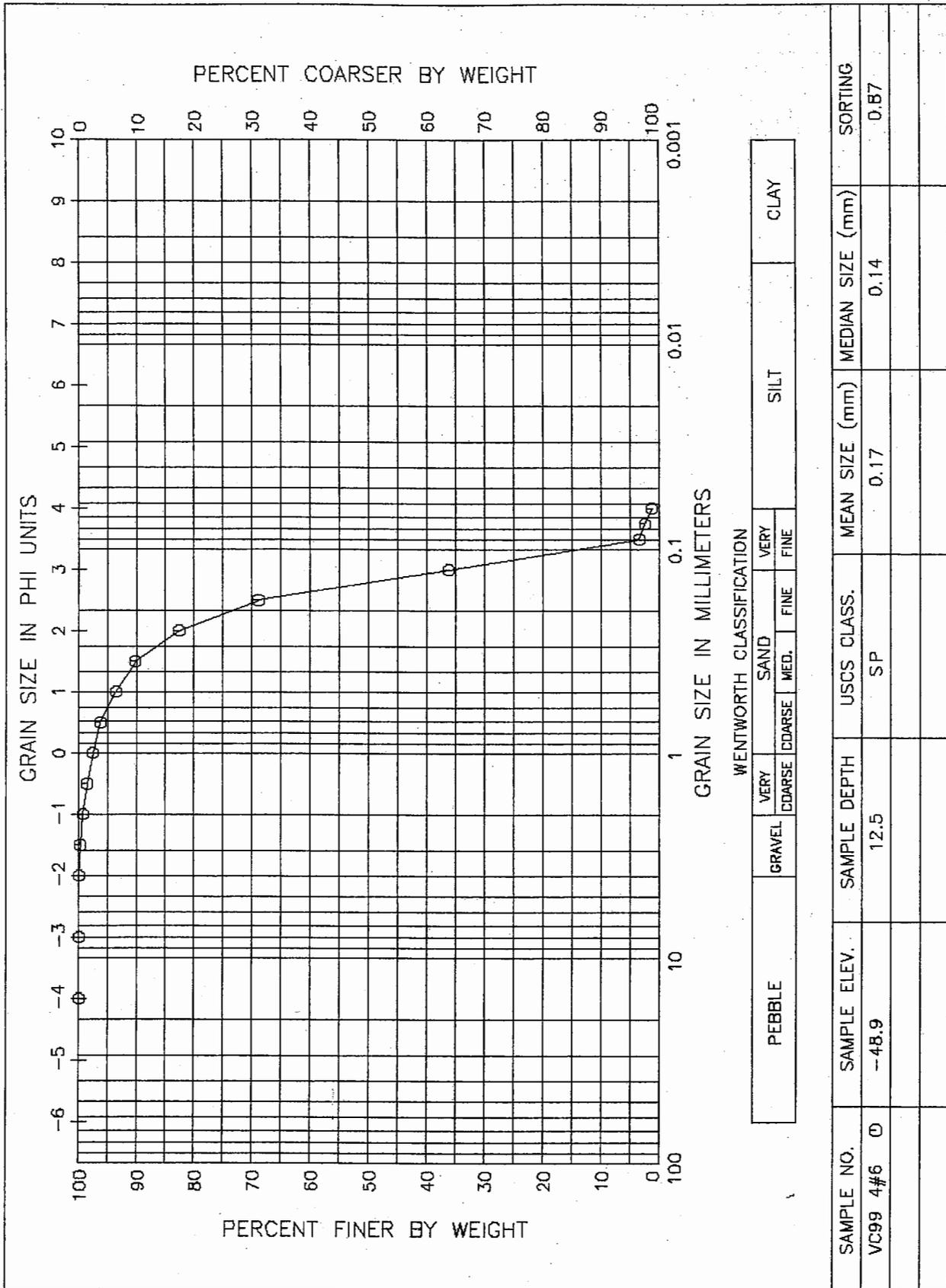
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



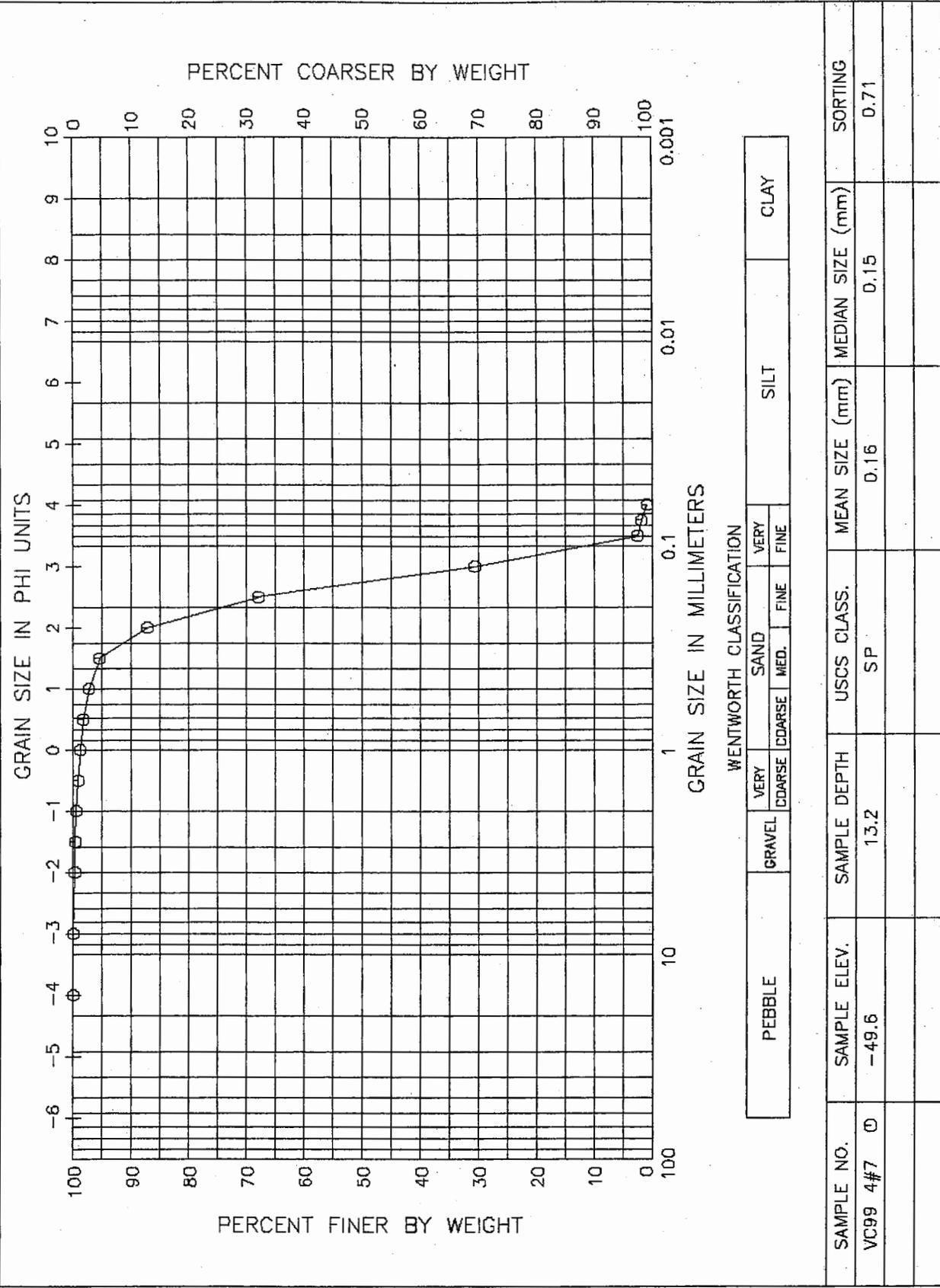
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH 4/99



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH 4/99



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH