

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: RW ON: 5/11/99

SAMPLE NO.: VC99 10#1  
SAMPLE ELEV. (FT. NGVD): -38.6  
SAMPLE DEPTH (FT.): 1.5  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 83.35  
SAMPLE WEIGHT AFTER WASH (GRAMS): 81.90

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	0.18	0.22	99.78
7	-1.50	2.800	0.35	0.42	99.58
10	-1.00	2.000	0.48	0.58	99.42
14	-0.50	1.400	0.70	0.84	99.16
18	0.00	1.000	0.94	1.13	98.87
25	0.50	0.710	1.37	1.64	98.36
35	1.00	0.500	2.43	2.92	97.08
45	1.50	0.355	4.82	5.78	94.22
60	2.00	0.250	9.73	11.67	88.33
80	2.50	0.180	10.03	12.03	87.97
120	3.00	0.125	56.97	68.35	31.65
170	3.50	0.090	80.65	96.76	3.24
200	3.75	0.075	81.70	98.02	1.98
230	4.00	0.063	82.46	98.93	1.07
PAN			83.32	99.96	0.04

PHI (5): 1.36                      PHI (16): 2.54                      PHI (25): 2.62  
PHI (50): 2.84                      PHI (75): 3.12                      PHI (84): 3.28  
PHI (95): 3.47

SIEVE LOSS (g): 0.03                      SILT/CLAY: 1.98%  
SKEWNESS: -1.137                      KURTOSIS: 1.719

GRAPHIC METHOD

MEAN (PHI): 2.70                      SORTING: 0.37  
MEAN (mm) : 0.15                      MEDIAN (mm): 0.14  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.73                      SORTING: 0.70  
MEAN (mm) : 0.15

DATA FILE NAME: VC99-10#1.TAB

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: RW            ON: 5/11/99

SAMPLE NO.: VC99 10#2  
SAMPLE ELEV. (FT. NGVD): -39.8  
SAMPLE DEPTH (FT.): 2.7  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 91.80  
SAMPLE WEIGHT AFTER WASH (GRAMS): 90.62

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	0.11	0.12	99.88
7	-1.50	2.800	0.38	0.41	99.59
10	-1.00	2.000	0.87	0.95	99.05
14	-0.50	1.400	1.70	1.85	98.15
18	0.00	1.000	2.86	3.12	96.88
25	0.50	0.710	5.15	5.61	94.39
35	1.00	0.500	10.95	11.93	88.07
45	1.50	0.355	23.34	25.42	74.58
60	2.00	0.250	42.82	46.64	53.36
80	2.50	0.180	63.01	68.64	31.36
120	3.00	0.125	82.14	89.48	10.52
170	3.50	0.090	90.09	98.14	1.86
200	3.75	0.075	90.53	98.62	1.38
230	4.00	0.063	91.15	99.29	0.71
PAN			91.77	99.97	0.03

PHI (5): 0.38            PHI (16): 1.15            PHI (25): 1.48  
PHI (50): 2.08            PHI (75): 2.65            PHI (84): 2.87  
PHI (95): 3.32

SIEVE LOSS (g): 0.03            SILT/CLAY: 1.38%  
SKEWNESS: -0.265            KURTOSIS: 1.032

GRAPHIC METHOD

MEAN (PHI): 1.96            SORTING: 0.86  
MEAN (mm): 0.26            MEDIAN (mm): 0.24

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.98            SORTING: 0.91  
MEAN (mm): 0.25

DATA FILE NAME: VC99-10#2.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 5/11/99

SAMPLE NO.: VC99 10#3  
 SAMPLE ELEV. (FT. NGVD): -41.6  
 SAMPLE DEPTH (FT.): 4.5  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 96.08  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 95.09

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	2.47	2.57	97.43
5	-2.00	4.000	8.00	8.33	91.67
7	-1.50	2.800	12.38	12.89	87.11
10	-1.00	2.000	19.72	20.52	79.48
14	-0.50	1.400	31.62	32.91	67.09
18	0.00	1.000	43.02	44.78	55.22
25	0.50	0.710	57.98	60.35	39.65
35	1.00	0.500	75.96	79.06	20.94
45	1.50	0.355	83.87	87.29	12.71
60	2.00	0.250	88.02	91.61	8.39
80	2.50	0.180	89.61	93.27	6.73
120	3.00	0.125	92.23	95.99	4.01
170	3.50	0.090	94.89	98.76	1.24
200	3.75	0.075	95.01	98.89	1.11
230	4.00	0.063	95.53	99.42	0.58
PAN			96.04	99.96	0.04

PHI (5): -2.58      PHI (16): -1.30      PHI (25): -0.82  
 PHI (50): 0.17      PHI (75): 0.89      PHI (84): 1.30  
 PHI (95): 2.82

SIEVE LOSS (g): 0.04      SILT/CLAY: 1.11%  
 SKEWNESS: -0.037      KURTOSIS: 1.293

GRAPHIC METHOD

MEAN (PHI): 0.08      SORTING: 1.30  
 MEAN (mm): 0.94      MEDIAN (mm): 0.89

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.05      SORTING: 1.44  
 MEAN (mm): 0.96

DATA FILE NAME: VC99-10#3.TAB

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: RW ON: 5/11/99

SAMPLE NO.: VC99 10#4  
SAMPLE ELEV. (FT. NGVD): -43.6  
SAMPLE DEPTH (FT.): 6.5  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 96.42  
SAMPLE WEIGHT AFTER WASH (GRAMS): 95.20

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	0.90	0.93	99.07
7	-1.50	2.800	2.14	2.22	97.78
10	-1.00	2.000	4.07	4.22	95.78
14	-0.50	1.400	7.77	8.06	91.94
18	0.00	1.000	13.40	13.90	86.10
25	0.50	0.710	23.59	24.47	75.53
35	1.00	0.500	41.52	43.06	56.94
45	1.50	0.355	52.54	54.49	45.51
60	2.00	0.250	62.09	64.40	35.60
80	2.50	0.180	70.12	72.72	27.28
120	3.00	0.125	85.21	88.37	11.63
170	3.50	0.090	94.82	98.34	1.66
200	3.75	0.075	95.05	98.58	1.42
230	4.00	0.063	95.74	99.29	0.71
PAN			96.40	99.98	0.02

PHI(5): -0.90      PHI(16): 0.10      PHI(25): 0.51  
PHI(50): 1.30      PHI(75): 2.57      PHI(84): 2.86  
PHI(95): 3.33

SIEVE LOSS(g): 0.02      SILT/CLAY: 1.42%  
SKEWNESS: -0.063      KURTOSIS: 0.842

GRAPHIC METHOD

MEAN (PHI): 1.34      SORTING: 1.38  
MEAN (mm): 0.40      MEDIAN (mm): 0.41  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.36      SORTING: 1.32  
MEAN (mm): 0.39

DATA FILE NAME: VC99-10#4.TAB

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: RW ON: 5/11/99

SAMPLE NO.: VC99 10#5  
SAMPLE ELEV. (FT. NGVD): -45.6  
SAMPLE DEPTH (FT.): 8.5  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 91.53  
SAMPLE WEIGHT AFTER WASH (GRAMS): 89.86

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	0.01	0.01	99.99
10	-1.00	2.000	0.11	0.12	99.88
14	-0.50	1.400	0.29	0.32	99.68
18	0.00	1.000	0.49	0.54	99.46
25	0.50	0.710	0.90	0.98	99.02
35	1.00	0.500	1.95	2.13	97.87
45	1.50	0.355	3.55	3.88	96.12
60	2.00	0.250	8.17	8.93	91.07
80	2.50	0.180	19.39	21.18	78.82
120	3.00	0.125	58.28	63.67	36.33
170	3.50	0.090	88.70	96.91	3.09
200	3.75	0.075	89.72	98.02	1.98
230	4.00	0.063	90.64	99.02	0.98
PAN			91.50	99.97	0.03

PHI (5): 1.61      PHI (16): 2.29      PHI (25): 2.54  
PHI (50): 2.84      PHI (75): 3.17      PHI (84): 3.31  
PHI (95): 3.47

SIEVE LOSS (g): 0.03      SILT/CLAY: 1.98%  
SKEWNESS: -0.586      KURTOSIS: 1.219

GRAPHIC METHOD

MEAN (PHI): 2.70      SORTING: 0.51  
MEAN (mm): 0.15      MEDIAN (mm): 0.14  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.75      SORTING: 0.60  
MEAN (mm): 0.15

DATA FILE NAME: VC99-10#5.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 5/11/99

SAMPLE NO.: VC99 10#6  
 SAMPLE ELEV. (FT. NGVD): -48.0  
 SAMPLE DEPTH (FT.): 10.9  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 90.04  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 88.47

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	0.66	0.73	99.27
7	-1.50	2.800	1.55	1.72	98.28
10	-1.00	2.000	2.96	3.29	96.71
14	-0.50	1.400	5.60	6.22	93.78
18	0.00	1.000	10.23	11.36	88.64
25	0.50	0.710	16.26	18.06	81.94
35	1.00	0.500	26.38	29.30	70.70
45	1.50	0.355	35.24	39.14	60.86
60	2.00	0.250	42.33	47.01	52.99
80	2.50	0.180	51.10	56.75	43.25
120	3.00	0.125	75.59	83.95	16.05
170	3.50	0.090	88.01	97.75	2.25
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): -0.71                      PHI (16): 0.35                      PHI (25): 0.81  
 PHI (50): 2.15                      PHI (75): 2.84                      PHI (84): 3.00  
 PHI (95): 3.40

SIEVE LOSS (g): 0.00                      SILT/CLAY: 1.85%  
 SKEWNESS: -0.608                      KURTOSIS: 0.831

GRAPHIC METHOD

MEAN (PHI): 1.64                      SORTING: 1.33  
 MEAN (mm) : 0.32                      MEDIAN (mm): 0.22  
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.75                      SORTING: 1.32  
 MEAN (mm) : 0.30

DATA FILE NAME: VC99-10#6.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 5/11/99

SAMPLE NO.: VC99 10#7  
 SAMPLE ELEV. (FT. NGVD): -52.6  
 SAMPLE DEPTH (FT.): 15.5  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 87.78  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 85.82

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	0.07	0.08	99.92
7	-1.50	2.800	0.24	0.27	99.73
10	-1.00	2.000	0.41	0.47	99.53
14	-0.50	1.400	0.64	0.73	99.27
18	0.00	1.000	0.86	0.98	99.02
25	0.50	0.710	1.19	1.36	98.64
35	1.00	0.500	1.76	2.01	97.99
45	1.50	0.355	2.79	3.18	96.82
60	2.00	0.250	6.48	7.38	92.62
80	2.50	0.180	17.63	20.08	79.92
120	3.00	0.125	53.47	60.91	39.09
170	3.50	0.090	84.05	95.75	4.25
200	3.75	0.075	85.69	97.62	2.38
230	4.00	0.063	86.78	98.86	1.14
PAN			87.78	100.00	0.00

PHI (5): 1.72                      PHI (16): 2.34                      PHI (25): 2.56  
 PHI (50): 2.87                      PHI (75): 3.20                      PHI (84): 3.33  
 PHI (95): 3.49

SIEVE LOSS (g): 0.00                      SILT/CLAY: 2.38%  
 SKEWNESS: -0.531                      KURTOSIS: 1.132

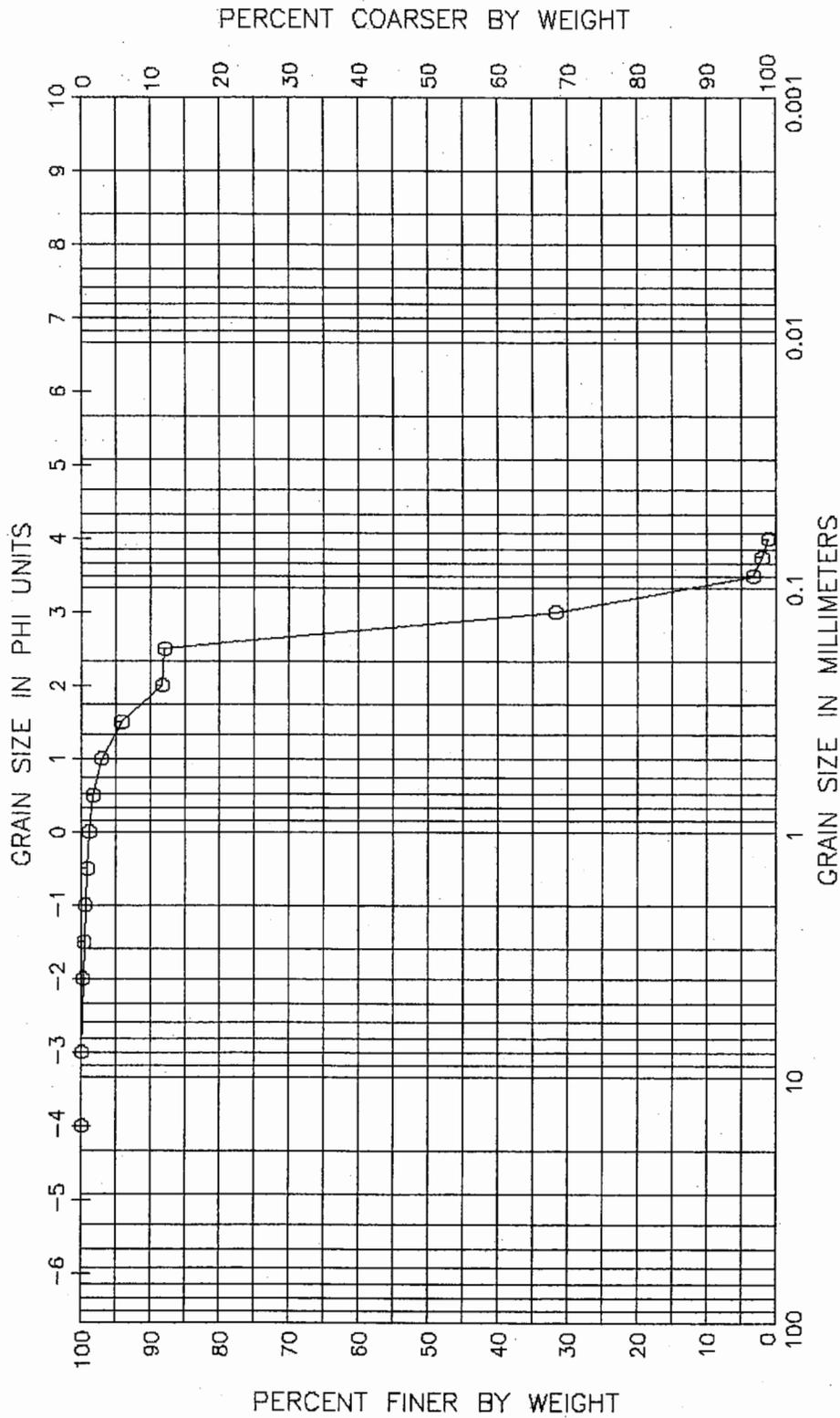
GRAPHIC METHOD

MEAN (PHI): 2.75                      SORTING: 0.50  
 MEAN (mm): 0.15                      MEDIAN (mm): 0.14  
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

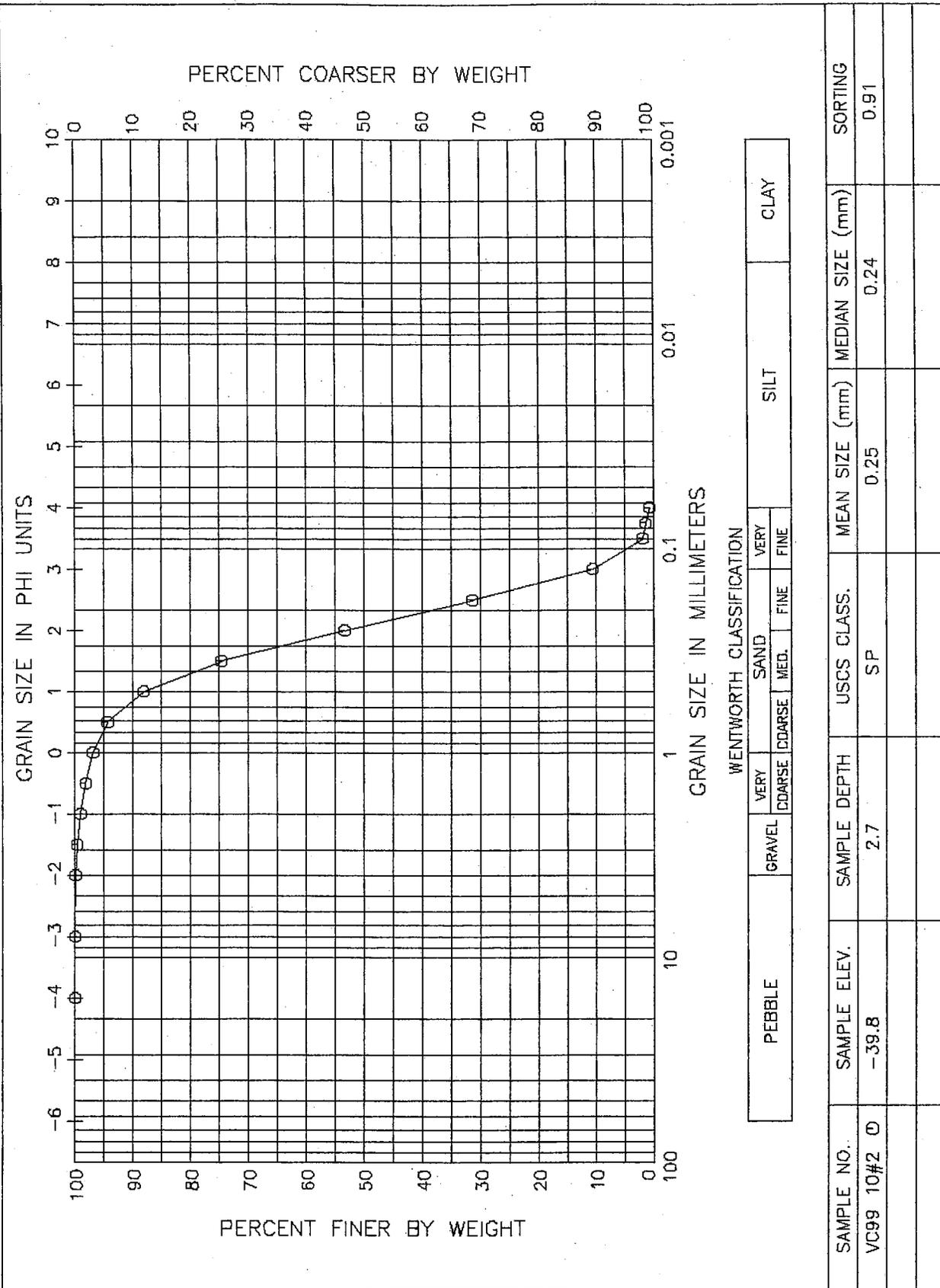
MEAN (PHI): 2.77                      SORTING: 0.65  
 MEAN (mm): 0.15

DATA FILE NAME: VC99-10#7.TAB

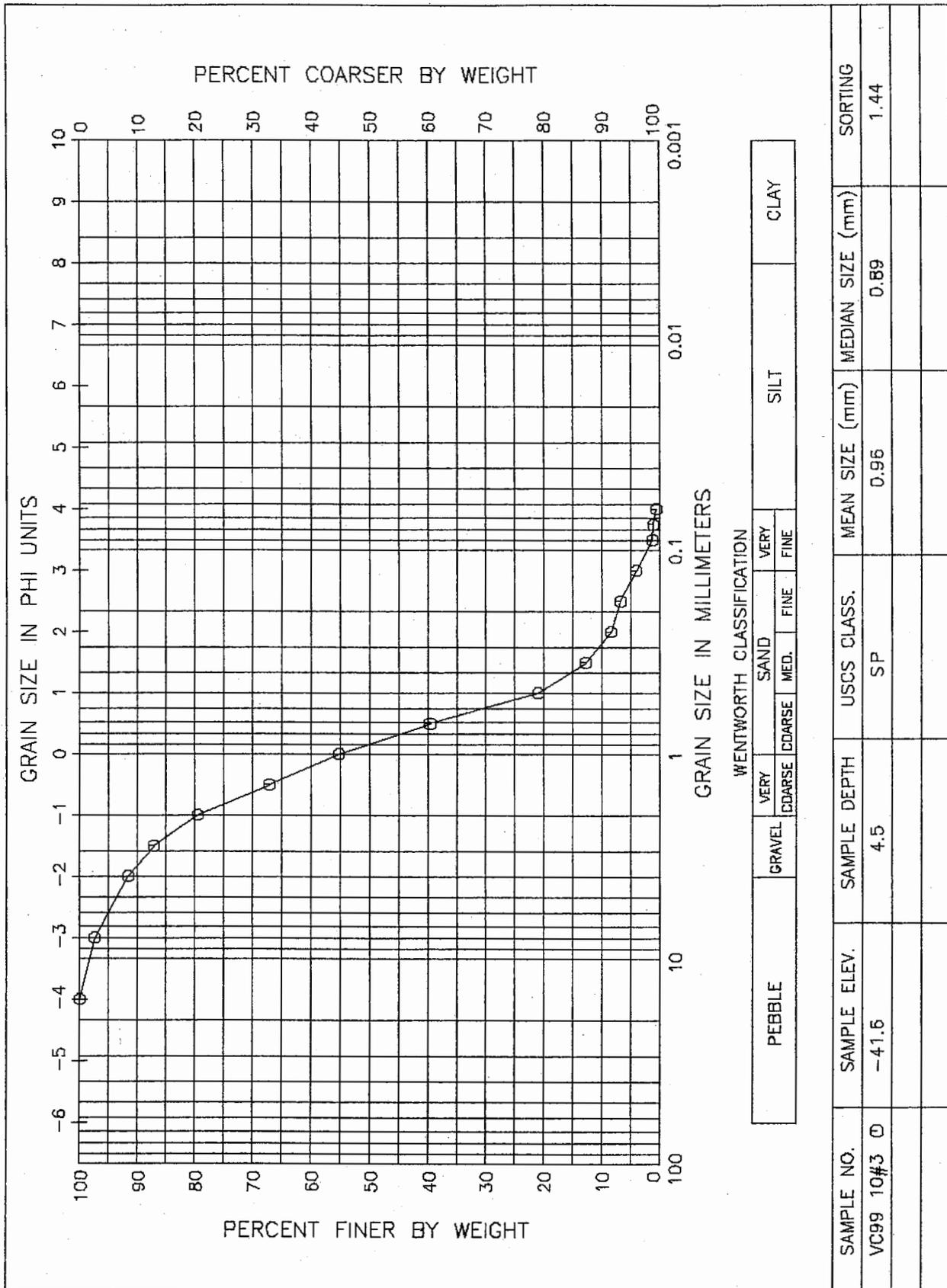


SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 10#1 O	-38.6	1.5	SP	0.15	0.14	0.70

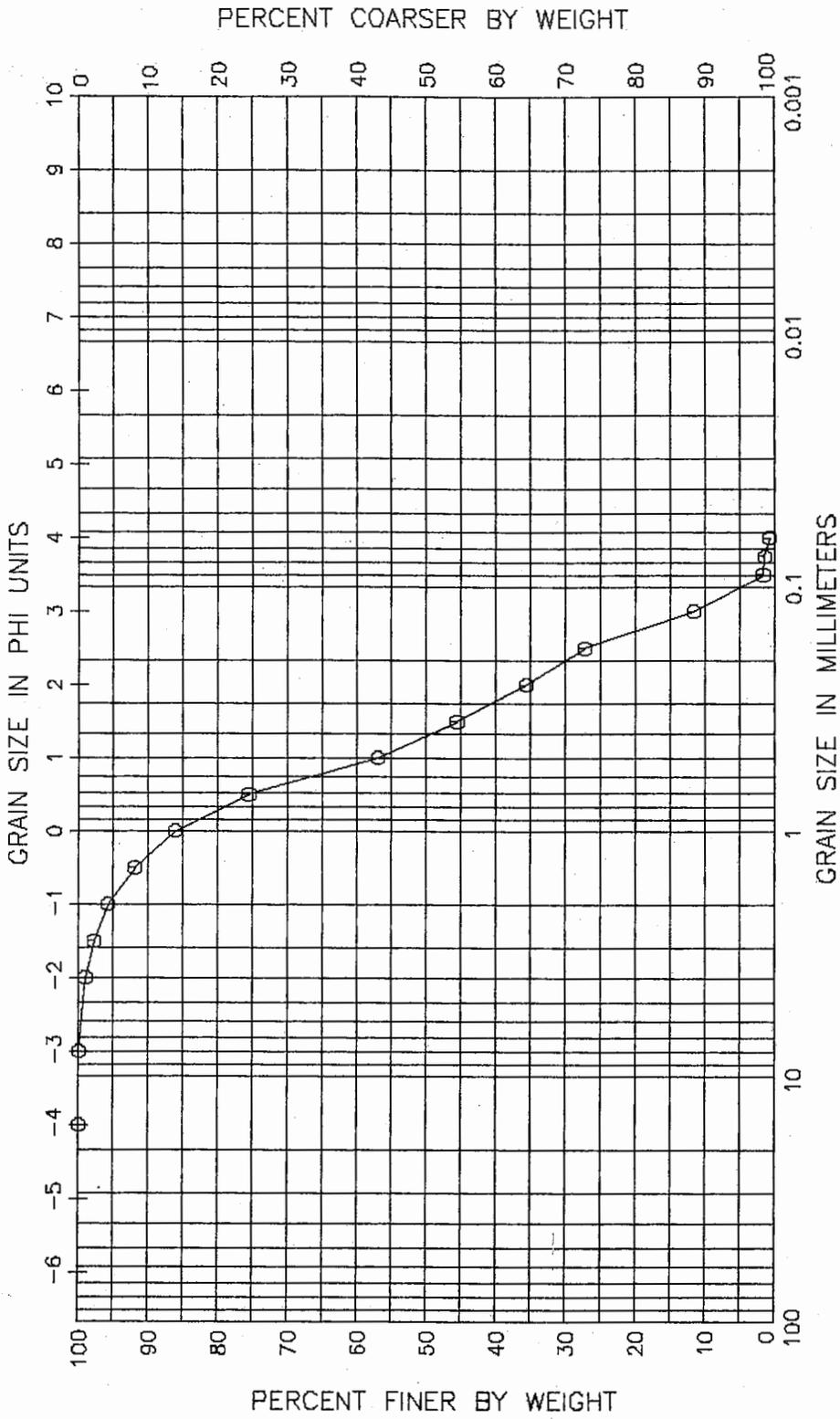
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH

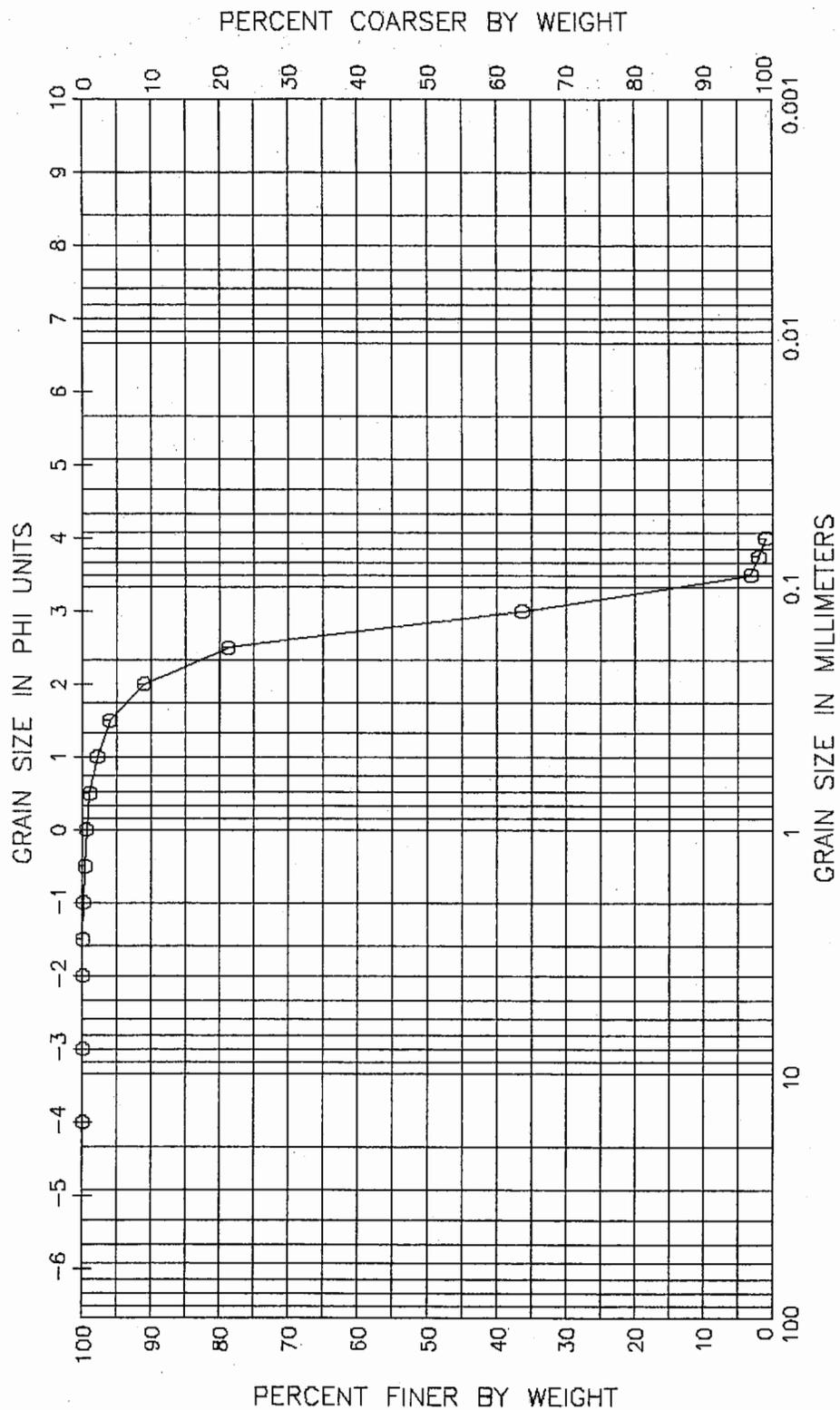


GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 10#4 0	-43.6	6.5	SP	0.39	0.41	1.32

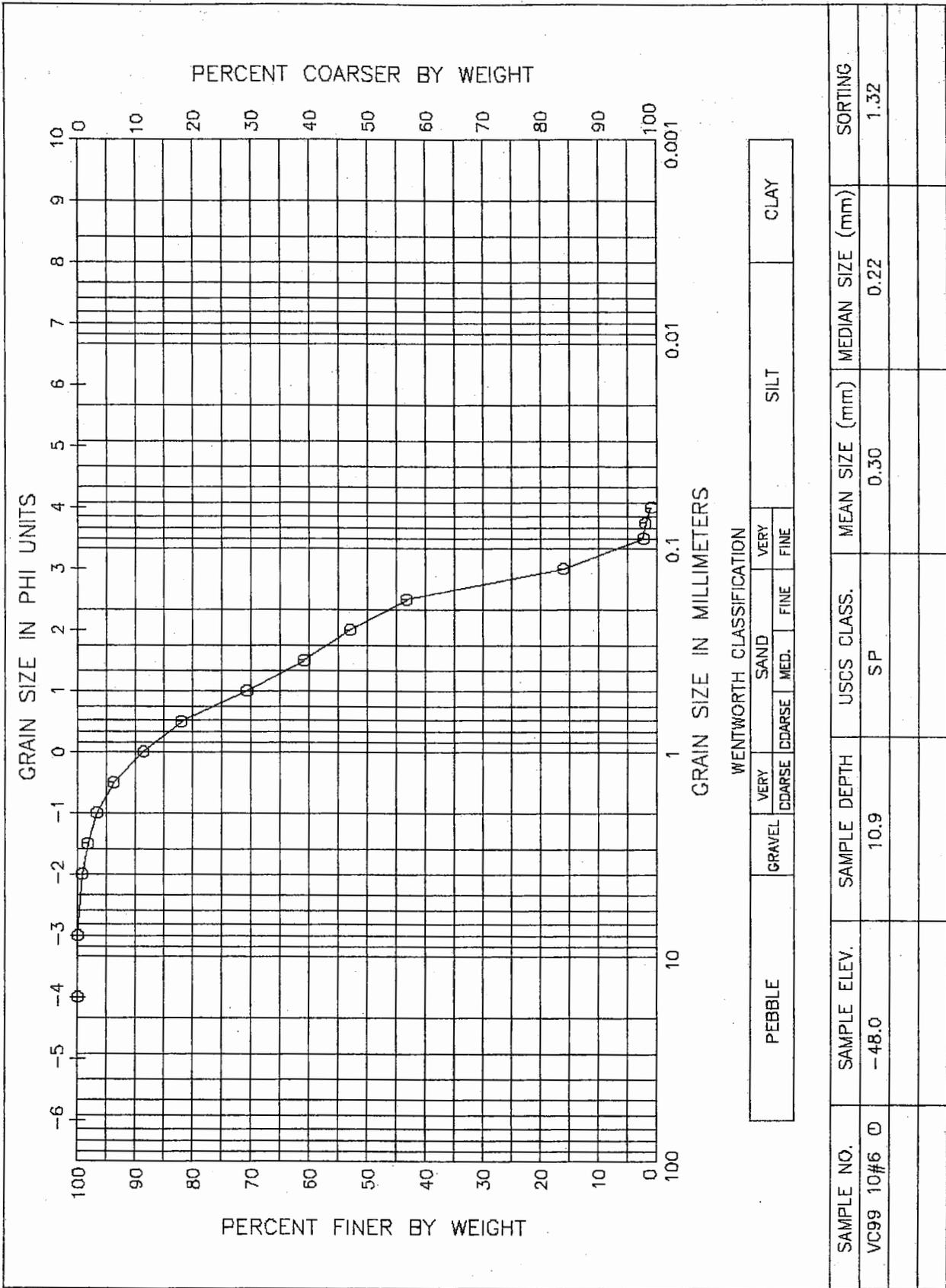
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



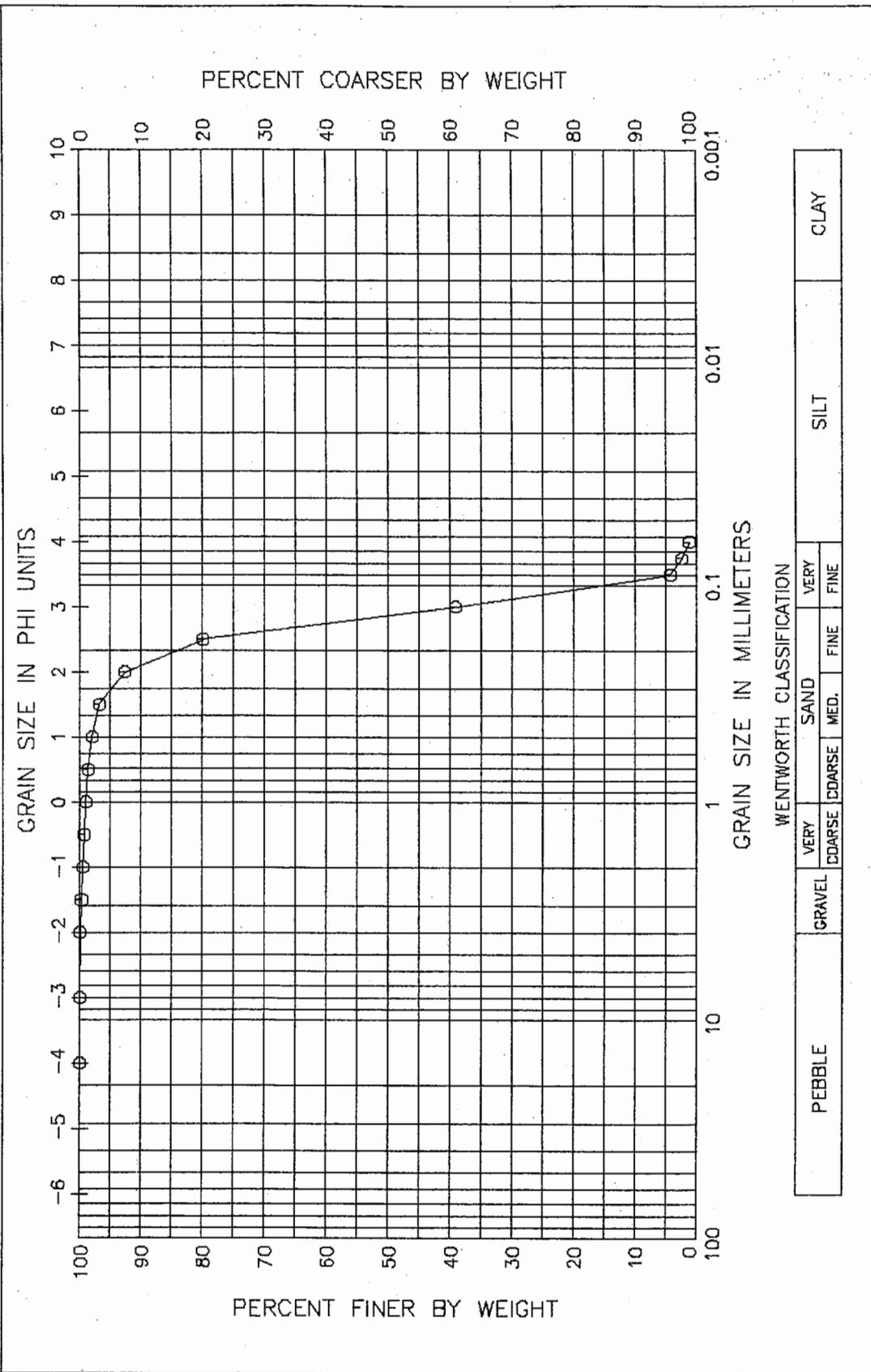
WENTWORTH CLASSIFICATION					
PEBBLE	GRAVEL		SAND		CLAY
	VERY COARSE	COARSE	MED.	FINE	

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 10#5	-45.6	8.5	SP	0.15	0.14	0.60

GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH