

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: RW            ON: 7-20-99

SAMPLE NO.: VC99 81#1  
SAMPLE ELEV. (FT. NGVD): -52.6  
SAMPLE DEPTH (FT.): 0.5  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 139.22  
SAMPLE WEIGHT AFTER WASH (GRAMS): 137.61

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	3.33	2.39	97.61
5	-2.00	4.000	9.14	6.57	93.43
7	-1.50	2.800	12.30	8.83	91.17
10	-1.00	2.000	16.13	11.59	88.41
14	-0.50	1.400	26.48	19.02	80.98
18	0.00	1.000	36.91	26.51	73.49
25	0.50	0.710	59.77	42.93	57.07
35	1.00	0.500	84.05	60.37	39.63
45	1.50	0.355	98.75	70.93	29.07
60	2.00	0.250	106.02	76.15	23.85
80	2.50	0.180	112.60	80.88	19.12
120	3.00	0.125	125.54	90.17	9.83
170	3.50	0.090	136.96	98.38	1.62
200	3.75	0.075	137.35	98.66	1.34
230	4.00	0.063	138.29	99.33	0.67
PAN			139.20	99.99	0.01

PHI (5): -2.38                    PHI (16): -0.70                    PHI (25): -0.10  
PHI (50): 0.70                    PHI (75): 1.89                    PHI (84): 2.67  
PHI (95): 3.29

SIEVE LOSS (g): 0.02                    SILT/CLAY: 1.34%  
SKEWNESS: -0.144                    KURTOSIS: 1.167

GRAPHIC METHOD

MEAN (PHI): 0.72                    SORTING: 1.69  
MEAN (mm) : 0.61                    MEDIAN (mm) : 0.61

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.73                    SORTING: 1.61  
MEAN (mm) : 0.60

DATA FILE NAME: VC99-81#1.TAB

GRADATION ANALYSIS REPORT  
 TOWN OF PALM BEACH  
 TESTED BY: RW ON: 7-20-99

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 SAMPLE NO.: VC99-81#2  
 SAMPLE ELEV. (FT. NGVD): -56.1  
 SAMPLE DEPTH (FT.): 4.0  
 SAMPLE TYPE: CORE SAMPLE  
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USCS DESCRIPTION: SP  
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DRY SAMPLE WEIGHT (GRAMS) † 206.87  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 203.41  
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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	0.12	99.88
7	-1.50	2.800	0.64	0.31	99.69
10	-1.00	2.000	1.21	0.58	99.42
14	-0.50	1.400	2.19	1.06	98.94
18	0.00	1.000	3.37	1.63	98.37
25	0.50	0.710	5.34	2.58	97.42
35	1.00	0.500	7.72	3.73	96.27
45	1.50	0.355	10.22	4.94	95.06
60	2.00	0.250	13.68	6.61	93.39
80	2.50	0.180	23.73	11.47	88.53
120	3.00	0.125	111.11	53.71	46.29
170	3.50	0.090	200.35	96.85	3.15
200	3.75	0.075	202.73	98.00	2.00
230	4.00	0.063	204.82	99.01	0.99
PAN			206.84	99.99	0.01

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 PHI (5): 1.52                      PHI (16): 2.55                      PHI (25): 2.66  
 PHI (50): 2.96                      PHI (75): 3.25                      PHI (84): 3.35  
 PHI (95): 3.48  
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SIEVE LOSS (g): 0.03                      SILT/CLAY: 2.00%  
 SKEWNESS: -1.148                      KURTOSIS: 1.370  
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GRAPHIC METHOD

MEAN (PHI): 2.77                      SORTING: 0.40  
 MEAN (mm): 0.15                      MEDIAN (mm): 0.13  
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD  
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MOMENT METHOD

MEAN (PHI): 2.82                      SORTING: 0.72  
 MEAN (mm): 0.14  
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DATA FILE NAME: VC99-81#2.TAB

GRADATION ANALYSIS REPORT  
 TOWN OF PALM BEACH  
 TESTED BY: RW ON: 7-20-99

SAMPLE NO.: VC99 81#3  
 SAMPLE ELEV. (FT. NGVD): -59.1  
 SAMPLE DEPTH (FT.): 7.0  
 SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SW

DRY SAMPLE WEIGHT (GRAMS): 141.59  
 SAMPLE WEIGHT AFTER WASH (GRAMS): 139.00

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	5.13	3.62	96.38
5	-2.00	4.000	11.72	8.28	91.72
7	-1.50	2.800	14.95	10.56	89.44
10	-1.00	2.000	19.90	14.05	85.95
14	-0.50	1.400	32.85	23.20	76.80
18	0.00	1.000	49.36	34.86	65.14
25	0.50	0.710	77.40	54.66	45.34
35	1.00	0.500	105.14	74.26	25.74
45	1.50	0.355	115.56	81.62	18.38
60	2.00	0.250	118.46	83.66	16.34
80	2.50	0.180	120.90	85.39	14.61
120	3.00	0.125	130.86	92.42	7.58
170	3.50	0.090	138.31	97.68	2.32
200	3.75	0.075	138.76	98.00	2.00
230	4.00	0.063	140.22	99.04	0.96
PAN			141.59	100.00	0.00

PHI (5): -2.70                      PHI (16): -0.89                      PHI (25): -0.42  
 PHI (50): 0.38                      PHI (75): 1.05                      PHI (84): 2.10  
 PHI (95): 3.24

SIEVE LOSS (g): 0.00                      SILT/CLAY: 2.00%  
 SKEWNESS: -0.075                      KURTOSIS: 1.655

GRAPHIC METHOD  
 MEAN (PHI): 0.43                      SORTING: 1.50  
 MEAN (mm): 0.74                      MEDIAN (mm): 0.77  
 NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD  
 MEAN (PHI): 0.36                      SORTING: 1.58  
 MEAN (mm): 0.78

DATA FILE NAME: VC99-81#3.TAB

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: RW ON: 7-20-99

SAMPLE NO.: VC99-81 #4  
SAMPLE ELEV. (FT. NGVD): -65.1  
SAMPLE DEPTH (FT.): 13.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 177.58  
SAMPLE WEIGHT AFTER WASH (GRAMS): 172.77

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	0.92	0.52	99.48
5	-2.00	4.000	1.34	0.75	99.25
7	-1.50	2.800	2.03	1.14	98.86
10	-1.00	2.000	2.82	1.59	98.41
14	-0.50	1.400	4.06	2.29	97.71
18	0.00	1.000	5.88	3.31	96.69
25	0.50	0.710	9.01	5.07	94.93
35	1.00	0.500	15.92	8.96	91.04
45	1.50	0.355	26.68	15.02	84.98
60	2.00	0.250	43.06	24.25	75.75
80	2.50	0.180	83.25	46.88	53.12
120	3.00	0.125	156.43	88.09	11.91
170	3.50	0.090	171.67	96.67	3.33
200	3.75	0.075	172.20	96.97	3.03
230	4.00	0.063	174.93	98.50	1.50
PAN			177.58	100.00	0.00

PHI(5): 0.48                      PHI(16): 1.55                      PHI(25): 2.02  
PHI(50): 2.54                      PHI(75): 2.84                      PHI(84): 2.95  
PHI(95): 3.40

SIEVE LOSS(g): 0.00                      SILT/CLAY: 3.03%  
SKEWNESS: -0.854                      KURTOSIS: 1.453

GRAPHIC METHOD

MEAN (PHI): 2.18                      SORTING: 0.70  
MEAN (mm) : 0.22                      MEDIAN (mm): 0.17

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.25                      SORTING: 0.98  
MEAN (mm) : 0.21

DATA FILE NAME: VC99-81#4.TAB



GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: ID ON: 10/99

SAMPLE NO.: VC-99#81-6  
SAMPLE ELEV. (FT. NGVD): 0.0  
SAMPLE DEPTH (FT.): 5.2  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 92.01  
SAMPLE WEIGHT AFTER WASH (GRAMS): 69.94

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	0.41	0.45	99.55
10	-1.00	2.000	0.90	0.98	99.02
14	-0.50	1.400	1.82	1.98	98.02
18	0.00	1.000	2.85	3.10	96.90
25	0.50	0.710	4.47	4.86	95.14
35	1.00	0.500	6.31	6.86	93.14
45	1.50	0.355	7.73	8.40	91.60
60	2.00	0.250	9.52	10.35	89.65
80	2.50	0.180	13.83	15.03	84.97
120	3.00	0.125	39.15	42.55	57.45
170	3.50	0.090	67.73	73.61	26.39
200	3.75	0.075	69.01	75.00	25.00
230	4.00	0.063	80.93	87.96	12.04
PAN			91.99	99.98	0.02

PHI (5): 0.54                      PHI (16): 2.52                      PHI (25): 2.68  
PHI (50): 3.12                      PHI (75): 3.75                      PHI (84): 3.92  
PHI (95): 4.14

SIEVE LOSS (g): 0.02                      SILT/CLAY: 25.00%  
SKEWNESS: -1.116                      KURTOSIS: 1.381

GRAPHIC METHOD

MEAN (PHI): 2.85                      SORTING: 0.70  
MEAN (mm): 0.14                      MEDIAN (mm): 0.12  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.81                      SORTING: 1.01  
MEAN (mm): 0.14

DATA FILE NAME: VC-99#81-6.TAB

GRADATION ANALYSIS REPORT  
TOWN OF PALM BEACH  
TESTED BY: ID ON: 10/99

SAMPLE NO.: VC-99#81-7  
SAMPLE ELEV. (FT. NGVD): 0.0  
SAMPLE DEPTH (FT.): 10.5  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 107.24  
SAMPLE WEIGHT AFTER WASH (GRAMS): 104.76

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	0.72	0.67	99.33
7	-1.50	2.800	1.14	1.06	98.94
10	-1.00	2.000	1.49	1.39	98.61
14	-0.50	1.400	2.06	1.92	98.08
18	0.00	1.000	2.87	2.68	97.32
25	0.50	0.710	4.59	4.28	95.72
35	1.00	0.500	8.05	7.51	92.49
45	1.50	0.355	12.82	11.95	88.05
60	2.00	0.250	19.16	17.87	82.13
80	2.50	0.180	28.75	26.81	73.19
120	3.00	0.125	88.33	82.37	17.63
170	3.50	0.090	104.27	97.23	2.77
200	3.75	0.075	104.67	97.60	2.40
230	4.00	0.063	105.99	98.83	1.17
PAN			107.24	100.00	0.00

PHI (5): 0.61                      PHI (16): 1.84                      PHI (25): 2.40  
PHI (50): 2.71                      PHI (75): 2.93                      PHI (84): 3.05  
PHI (95): 3.42

SIEVE LOSS (g): 0.00                      SILT/CLAY: 2.40%  
SKEWNESS: -1.139                      KURTOSIS: 2.156

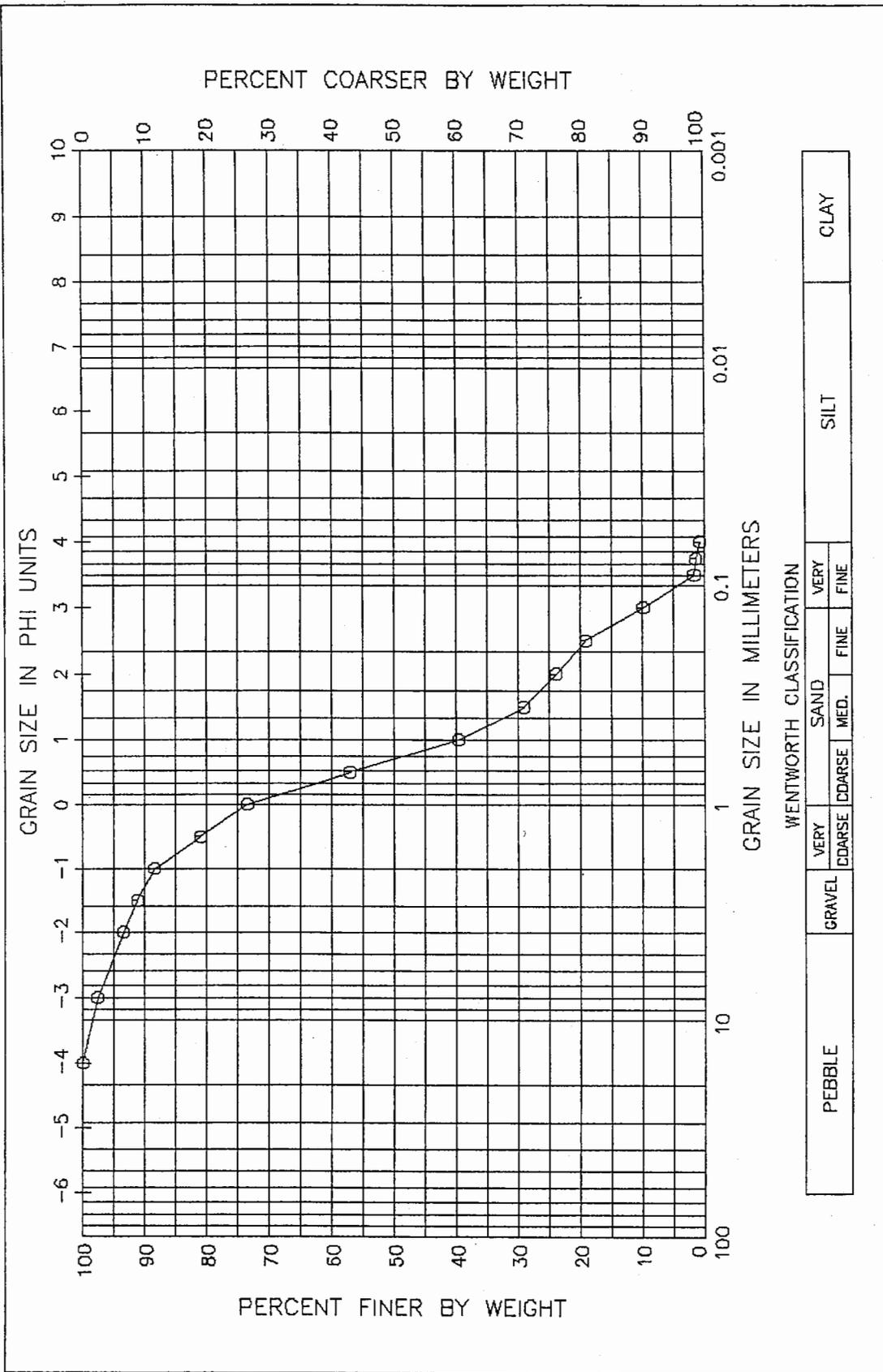
GRAPHIC METHOD

MEAN (PHI): 2.33                      SORTING: 0.61  
MEAN (mm): 0.20                      MEDIAN (mm): 0.15  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

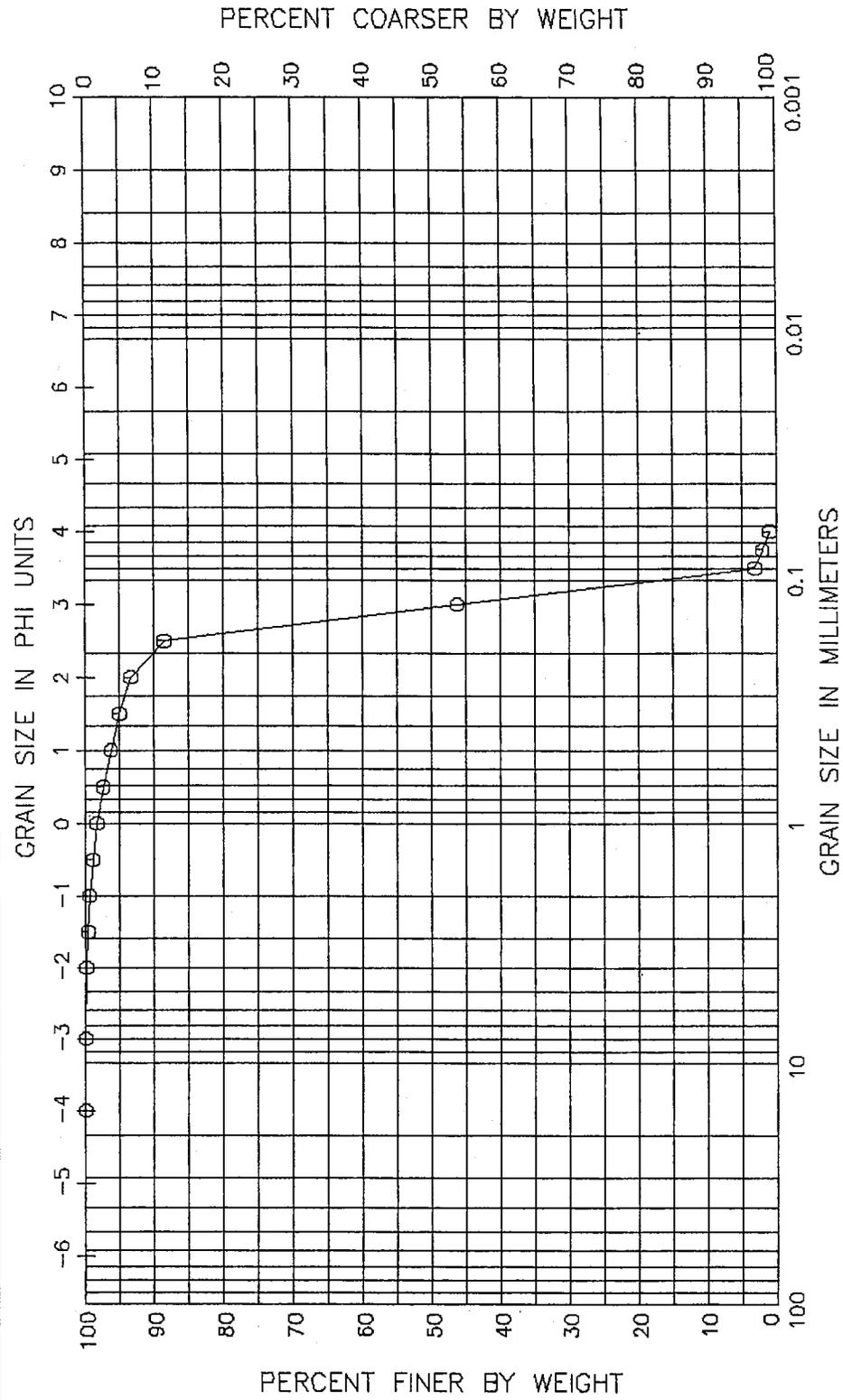
MEAN (PHI): 2.46                      SORTING: 0.92  
MEAN (mm): 0.18

DATA FILE NAME: VC-99#81-7.TAB



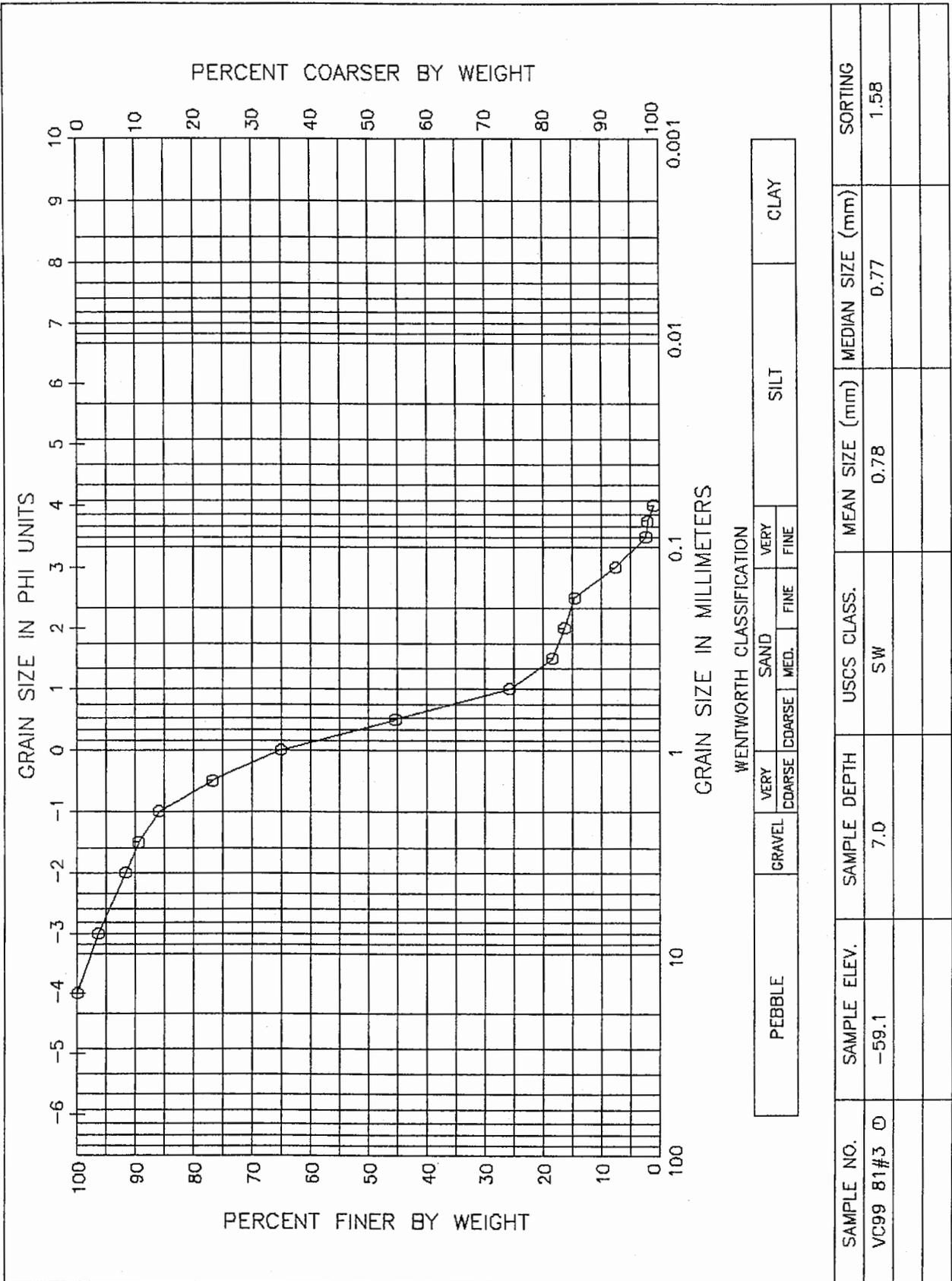
SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 81#1	-52.6	0.5	SP	0.60	0.61	1.61

GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH

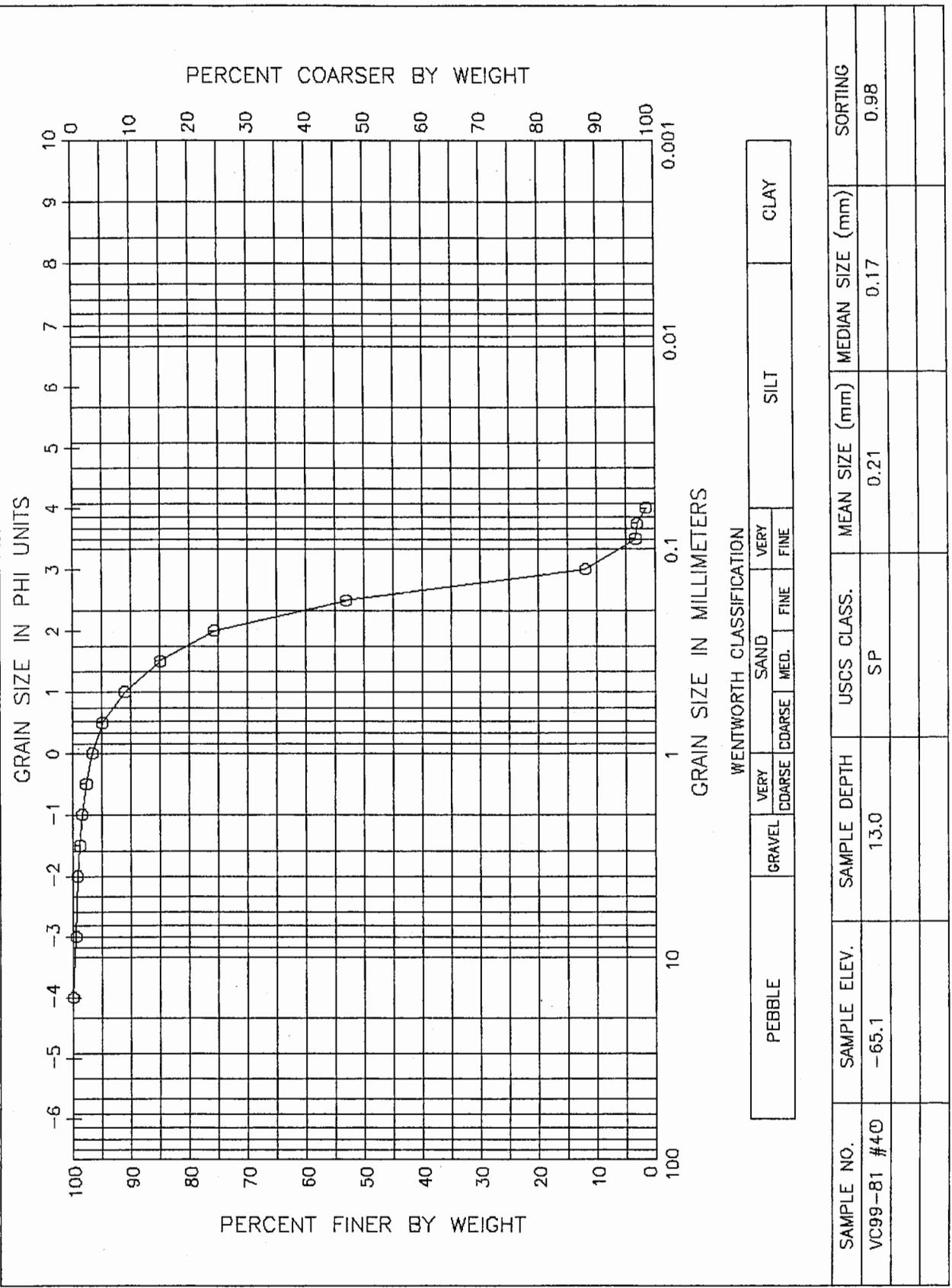


SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99-B1#2	-56.1	4.0	SP	0.14	0.13	0.72

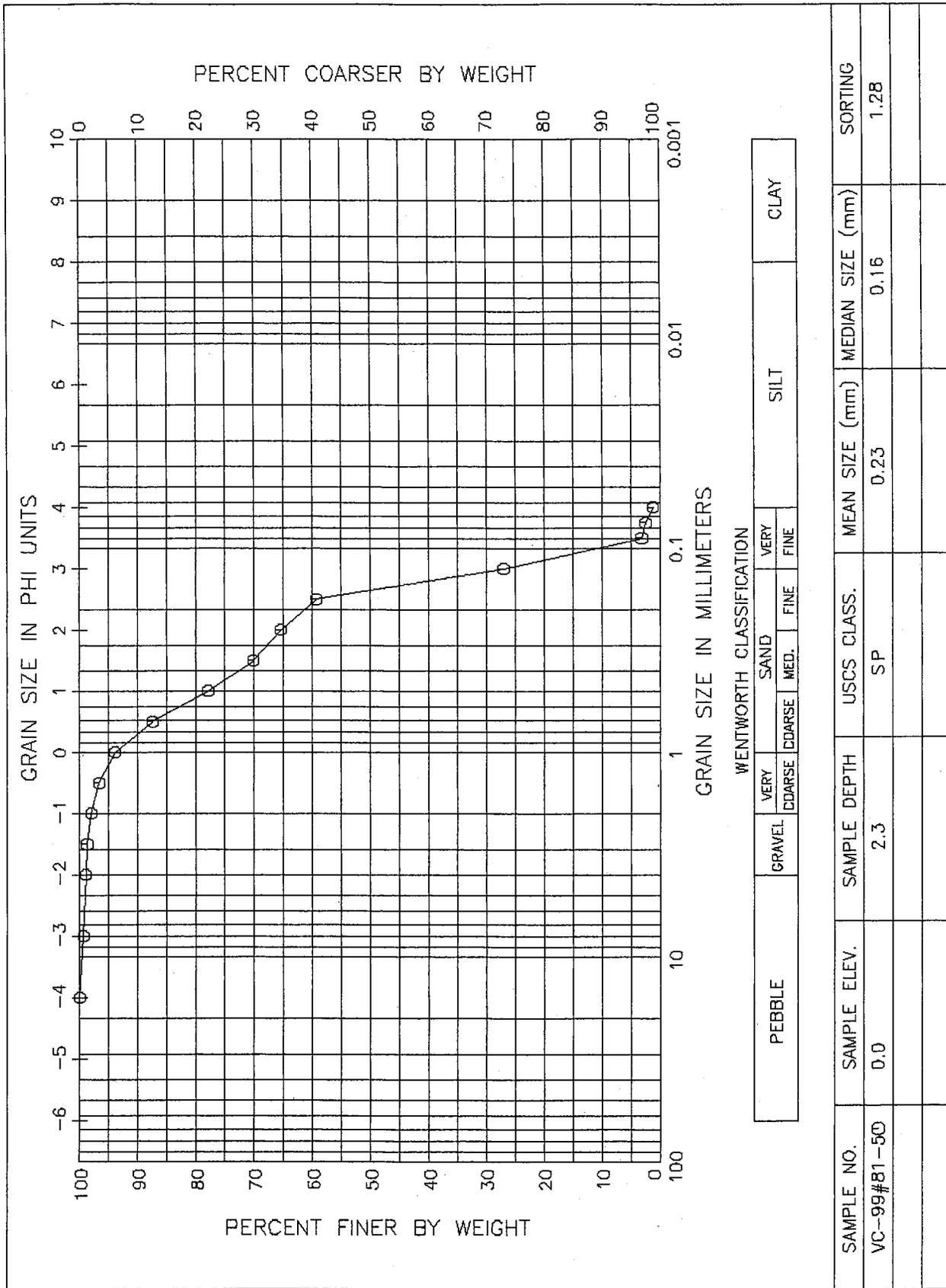
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



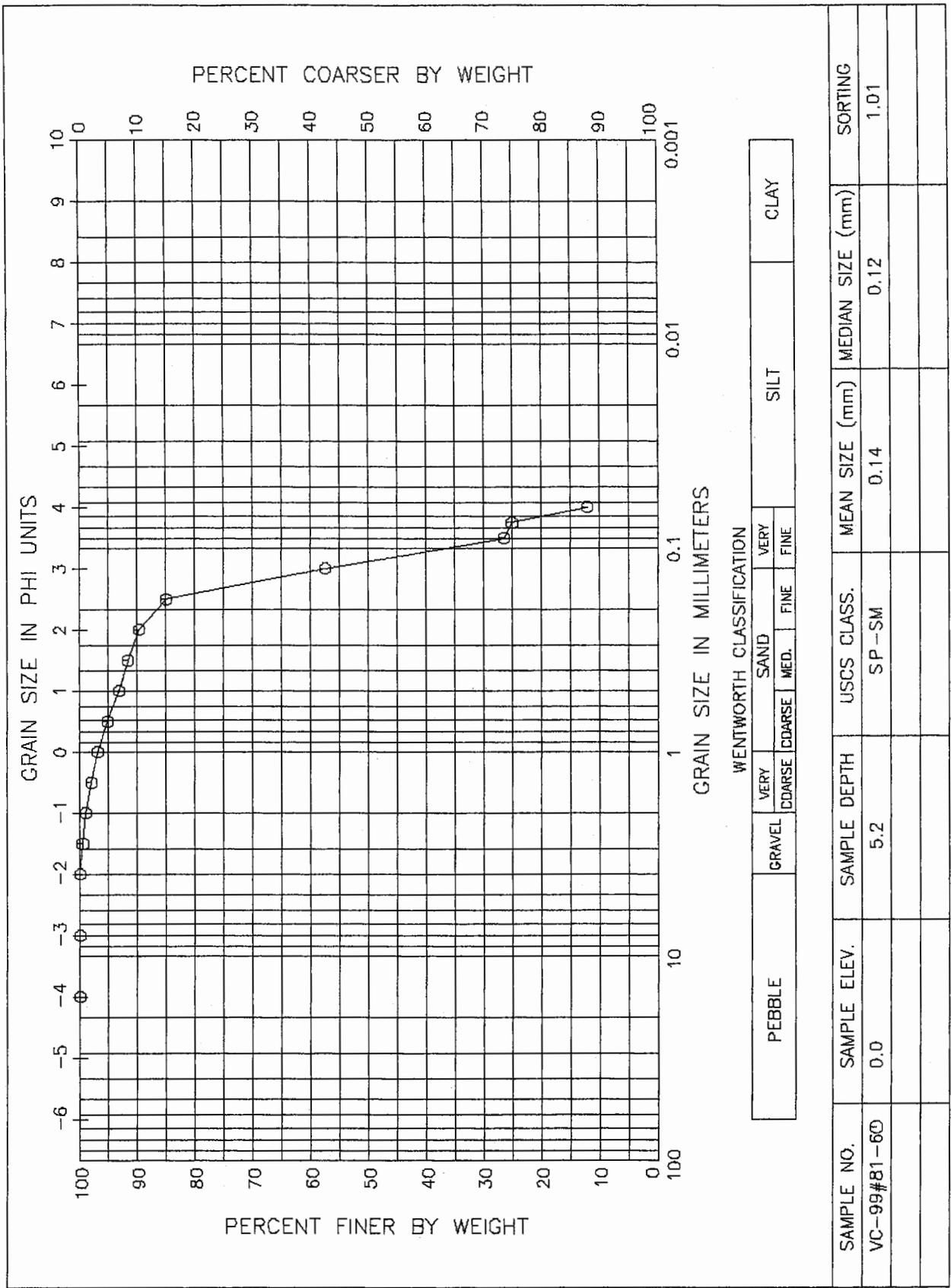
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



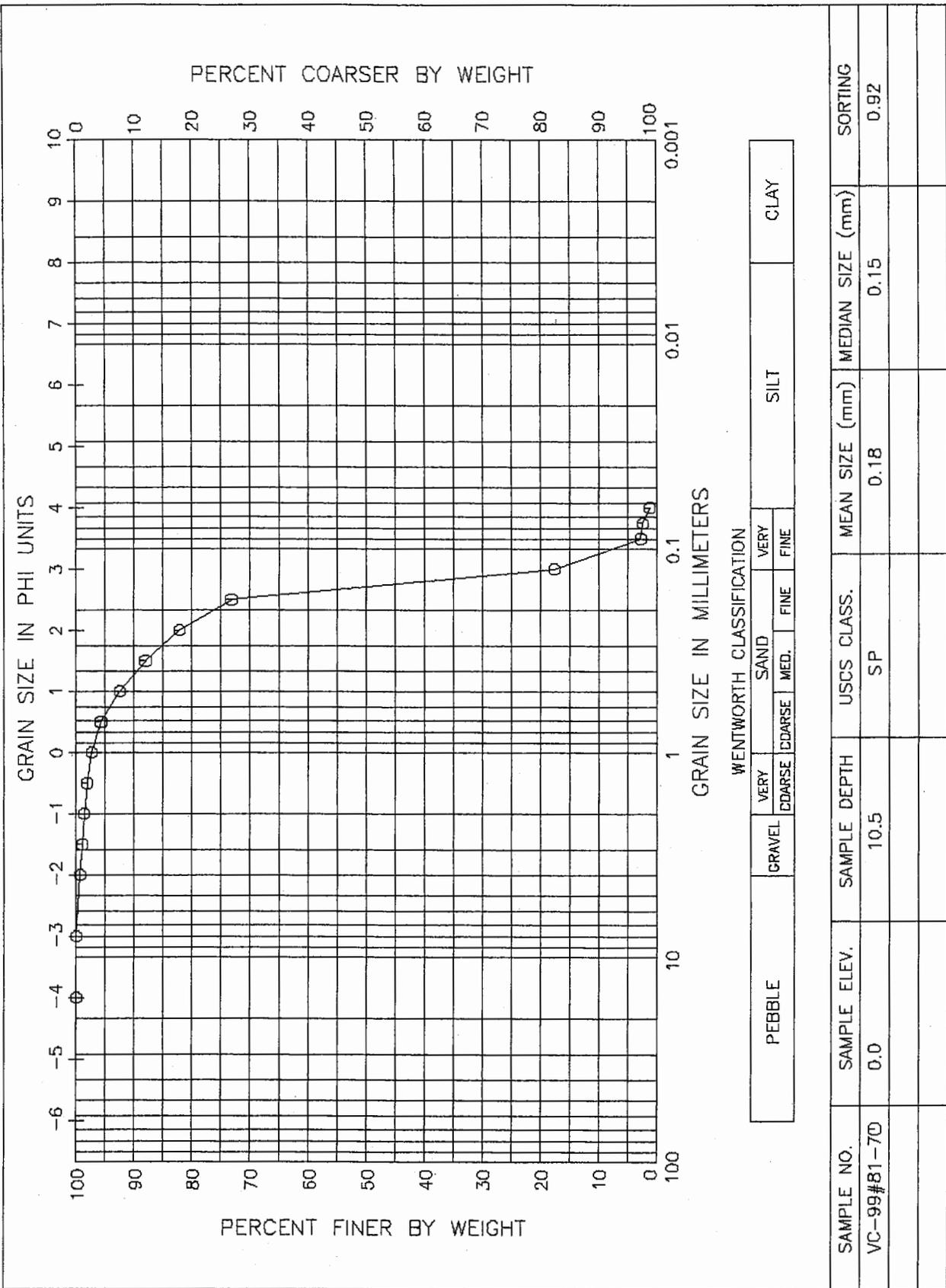
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH