

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/14/99

SAMPLE NO.: VC99 76#1
SAMPLE ELEV. (FT. NGVD): -31.3
SAMPLE DEPTH (FT.): 1.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 172.37
SAMPLE WEIGHT AFTER WASH (GRAMS): 170.28

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	0.52	0.30	99.70
5	-2.00	4.000	1.78	1.03	98.97
7	-1.50	2.800	2.45	1.42	98.58
10	-1.00	2.000	3.35	1.94	98.06
14	-0.50	1.400	5.33	3.09	96.91
18	0.00	1.000	8.06	4.68	95.32
25	0.50	0.710	12.14	7.04	92.96
35	1.00	0.500	20.28	11.77	88.23
45	1.50	0.355	26.73	15.51	84.49
60	2.00	0.250	33.69	19.55	80.45
80	2.50	0.180	46.65	27.06	72.94
120	3.00	0.125	106.56	61.82	38.18
170	3.50	0.090	168.11	97.53	2.47
200	3.75	0.075	170.04	98.65	1.35
230	4.00	0.063	171.29	99.37	0.63
PAN			172.36	99.99	0.01

PHI(5): 0.07 PHI(16): 1.56 PHI(25): 2.36
PHI(50): 2.83 PHI(75): 3.18 PHI(84): 3.31
PHI(95): 3.46

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.35%
SKEWNESS: -1.216 KURTOSIS: 1.694

GRAPHIC METHOD

MEAN (PHI): 2.25 SORTING: 0.87
MEAN (mm): 0.21 MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.47 SORTING: 1.13
MEAN (mm): 0.18

DATA FILE NAME: VC99-76#1.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/14/99

SAMPLE NO.: VC99 76#2

SAMPLE ELEV. (FT. NGVD): -32.4

SAMPLE DEPTH (FT.): 2.1

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 219.13

SAMPLE WEIGHT AFTER WASH (GRAMS): 216.66

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	0.74	0.34	99.66
7	-1.50	2.800	1.58	0.72	99.28
10	-1.00	2.000	2.62	1.20	98.80
14	-0.50	1.400	5.51	2.51	97.49
18	0.00	1.000	10.36	4.73	95.27
25	0.50	0.710	21.93	10.01	89.99
35	1.00	0.500	50.14	22.88	77.12
45	1.50	0.355	78.16	35.67	64.33
60	2.00	0.250	102.53	46.79	53.21
80	2.50	0.180	139.34	63.59	36.41
120	3.00	0.125	192.41	87.81	12.19
170	3.50	0.090	216.90	98.98	1.02
200	3.75	0.075	216.54	98.82	1.18
230	4.00	0.063	217.88	99.43	0.57
PAN			219.13	100.00	0.00

PHI (5): 0.03	PHI (16): 0.73	PHI (25): 1.08
PHI (50): 2.10	PHI (75): 2.74	PHI (84): 2.92
PHI (95): 3.32		

SIEVE LOSS (g): 0.00	SILT/CLAY: 1.18%
SKEWNESS: -0.385	KURTOSIS: 0.817

GRAPHIC METHOD

MEAN (PHI): 1.82	SORTING: 1.09
MEAN (mm): 0.28	MEDIAN (mm): 0.23

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.86	SORTING: 1.07
MEAN (mm): 0.27	

DATA FILE NAME: VC99-76#2.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/14/99

SAMPLE NO.: VC99 76#3

SAMPLE ELEV. (FT. NGVD): -34.5

SAMPLE DEPTH (FT.): 4.2

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 240.58

SAMPLE WEIGHT AFTER WASH (GRAMS): 238.52

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	4.71	1.96	98.04
5	-2.00	4.000	8.37	3.48	96.52
7	-1.50	2.800	11.04	4.59	95.41
10	-1.00	2.000	16.74	6.96	93.04
14	-0.50	1.400	29.19	12.13	87.87
18	0.00	1.000	51.42	21.37	78.63
25	0.50	0.710	91.94	38.22	61.78
35	1.00	0.500	161.72	67.22	32.78
45	1.50	0.355	196.11	81.52	18.48
60	2.00	0.250	207.90	86.42	13.58
80	2.50	0.180	215.01	89.37	10.63
120	3.00	0.125	228.66	95.05	4.95
170	3.50	0.090	237.89	98.88	1.12
200	3.75	0.075	238.41	99.10	0.90
230	4.00	0.063	239.51	99.56	0.44
PAN			240.57	100.00	0.00

PHI(5): -1.41

PHI(16): -0.29

PHI(25): 0.11

PHI(50): 0.70

PHI(75): 1.27

PHI(84): 1.75

PHI(95): 3.00

SIEVE LOSS(g): 0.01

SILT/CLAY: 0.90%

SKEWNESS: 0.086

KURTOSIS: 1.552

GRAPHIC METHOD

MEAN (PHI): 0.75

SORTING: 1.02

MEAN (mm): 0.59

MEDIAN (mm): 0.61

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.68

SORTING: 1.27

MEAN (mm): 0.62

DATA FILE NAME: VC99-76#3.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/14/99

SAMPLE NO.: VC99 76#4
SAMPLE ELEV. (FT. NGVD): -38.8
SAMPLE DEPTH (FT.): 8.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 209.82
SAMPLE WEIGHT AFTER WASH (GRAMS): 204.92

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	0.85	0.41	99.59
7	-1.50	2.800	1.19	0.57	99.43
10	-1.00	2.000	1.53	0.73	99.27
14	-0.50	1.400	2.09	1.00	99.00
18	0.00	1.000	2.78	1.32	98.68
25	0.50	0.710	3.96	1.89	98.11
35	1.00	0.500	5.53	2.64	97.36
45	1.50	0.355	7.63	3.64	96.36
60	2.00	0.250	14.43	6.88	93.12
80	2.50	0.180	39.43	18.79	81.21
120	3.00	0.125	149.89	71.44	28.56
170	3.50	0.090	203.33	96.91	3.09
200	3.75	0.075	204.36	97.40	2.60
230	4.00	0.063	207.16	98.73	1.27
PAN			209.82	100.00	0.00

PHI(5): 1.71 PHI(16): 2.38 PHI(25): 2.56
PHI(50): 2.80 PHI(75): 3.07 PHI(84): 3.25
PHI(95): 3.46

SIEVE LOSS(g): 0.00 SILT/CLAY: 2.60%
SKEWNESS: -0.486 KURTOSIS: 1.405

GRAPHIC METHOD

MEAN (PHI): 2.72 SORTING: 0.43
MEAN (mm): 0.15 MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.71 SORTING: 0.69
MEAN (mm): 0.15

DATA FILE NAME: VC99-76#4.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/14/99

SAMPLE NO.: VC99 76#5

SAMPLE ELEV. (FT. NGVD): -43.3

SAMPLE DEPTH (FT.): 13.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 194.89

SAMPLE WEIGHT AFTER WASH (GRAMS): 190.92

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	0.25	0.13	99.87
5	-2.00	4.000	0.84	0.43	99.57
7	-1.50	2.800	1.59	0.82	99.18
10	-1.00	2.000	2.59	1.33	98.67
14	-0.50	1.400	3.40	1.74	98.26
18	0.00	1.000	3.87	1.99	98.01
25	0.50	0.710	4.68	2.40	97.60
35	1.00	0.500	6.17	3.17	96.83
45	1.50	0.355	7.96	4.08	95.92
60	2.00	0.250	12.32	6.32	93.68
80	2.50	0.180	28.56	14.65	85.35
120	3.00	0.125	125.57	64.43	35.57
170	3.50	0.090	188.86	96.91	3.09
200	3.75	0.075	190.39	97.69	2.31
230	4.00	0.063	192.60	98.83	1.17
PAN			194.87	99.99	0.01

PHI(5): 1.70

PHI(16): 2.51

PHI(25): 2.60

PHI(50): 2.86

PHI(75): 3.16

PHI(84): 3.30

PHI(95): 3.47

SIEVE LOSS(g): 0.02

SILT/CLAY: 2.31%

SKEWNESS: -0.679

KURTOSIS: 1.295

GRAPHIC METHOD

MEAN (PHI): 2.77

SORTING: 0.39

MEAN (mm): 0.15

MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.74

SORTING: 0.77

MEAN (mm): 0.15

DATA FILE NAME: VC99-76#5.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: ID ON: 10/99

SAMPLE NO.: VC-99#76-6

SAMPLE ELEV. (FT. NGVD): 0.0

SAMPLE DEPTH (FT.): 5.6

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 103.51

SAMPLE WEIGHT AFTER WASH (GRAMS): 98.42

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	0.15	0.14	99.86
7	-1.50	2.800	0.28	0.27	99.73
10	-1.00	2.000	0.60	0.58	99.42
14	-0.50	1.400	1.13	1.09	98.91
18	0.00	1.000	1.92	1.85	98.15
25	0.50	0.710	3.21	3.10	96.90
35	1.00	0.500	5.40	5.22	94.78
45	1.50	0.355	7.40	7.15	92.85
60	2.00	0.250	11.66	11.26	88.74
80	2.50	0.180	23.99	23.18	76.82
120	3.00	0.125	66.25	64.00	36.00
170	3.50	0.090	97.75	94.44	5.56
200	3.75	0.075	98.27	94.94	5.06
230	4.00	0.063	100.96	97.53	2.47
PAN			103.51	100.00	0.00

PHI(5): 0.95	PHI(16): 2.20	PHI(25): 2.52
PHI(50): 2.83	PHI(75): 3.18	PHI(84): 3.33
PHI(95): 3.76		

SIEVE LOSS(g): 0.00	SILT/CLAY: 5.06%
SKEWNESS: -0.843	KURTOSIS: 1.748

GRAPHIC METHOD

MEAN (PHI): 2.61	SORTING: 0.56
MEAN (mm): 0.16	MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.66	SORTING: 0.80
MEAN (mm): 0.16	

DATA FILE NAME: VC-99#76-6.TAB

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

SAMPLE NO.: VC-99#76-7
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 7.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 110.61
SAMPLE WEIGHT AFTER WASH (GRAMS): 105.79

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	0.09	0.08	99.92
14	-0.50	1.400	0.26	0.24	99.76
18	0.00	1.000	0.45	0.41	99.59
25	0.50	0.710	0.79	0.71	99.29
35	1.00	0.500	1.35	1.22	98.78
45	1.50	0.355	2.43	2.20	97.80
60	2.00	0.250	7.17	6.48	93.52
80	2.50	0.180	21.23	19.19	80.81
120	3.00	0.125	78.07	70.58	29.42
170	3.50	0.090	104.91	94.85	5.15
200	3.75	0.075	105.71	95.57	4.43
230	4.00	0.063	108.19	97.81	2.19
PAN			110.61	100.00	0.00

PHI (5): 1.83	PHI (16): 2.37	PHI (25): 2.56
PHI (50): 2.80	PHI (75): 3.09	PHI (84): 3.28
PHI (95): 3.55		

SIEVE LOSS(g): 0.00	SILT/CLAY: 4.43%
SKEWNESS: -0.243	KURTOSIS: 1.323

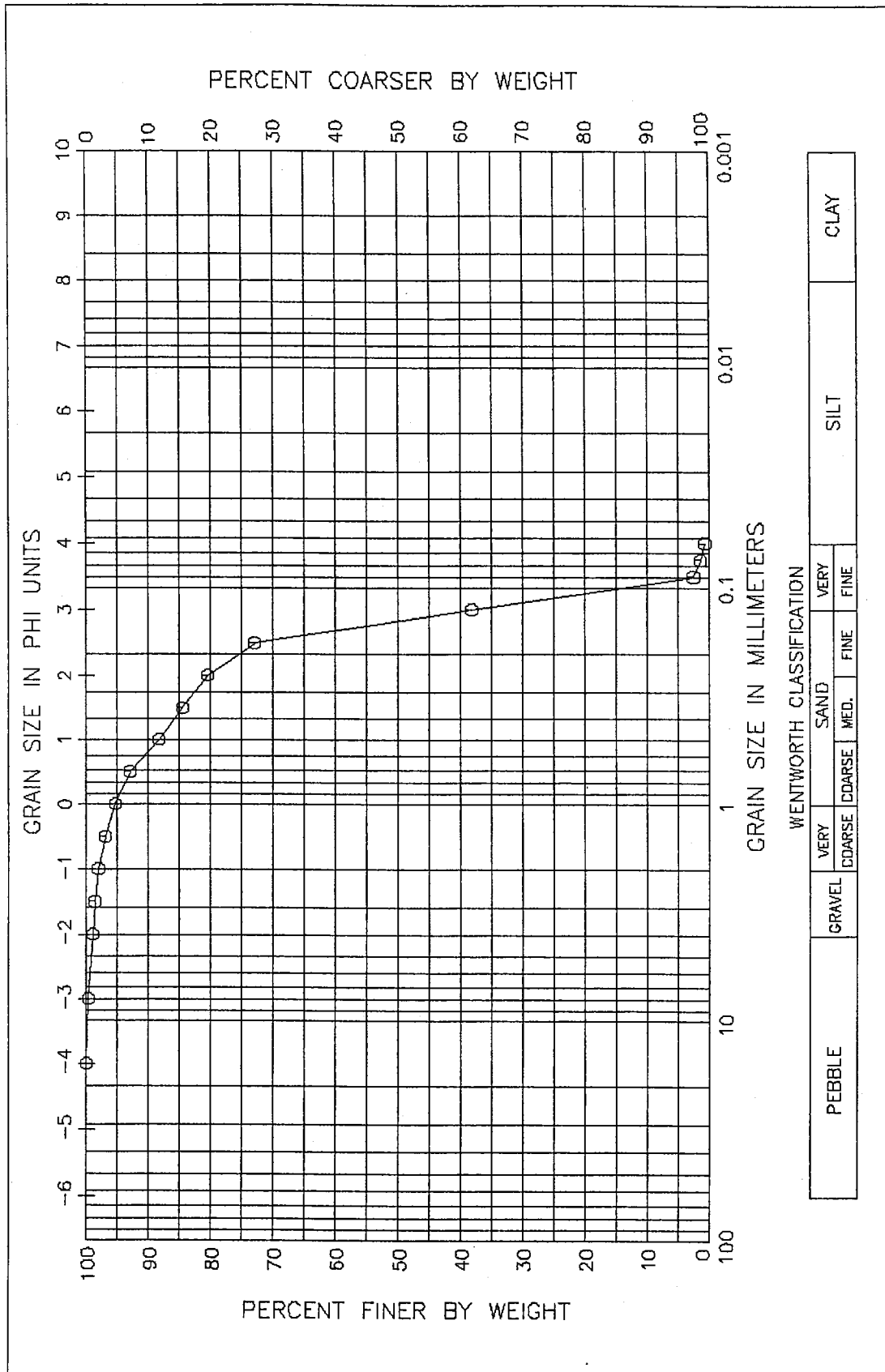
GRAPHIC METHOD

MEAN (PHI): 2.77	SORTING: 0.45
MEAN (mm): 0.15	MEDIAN (mm): 0.14
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

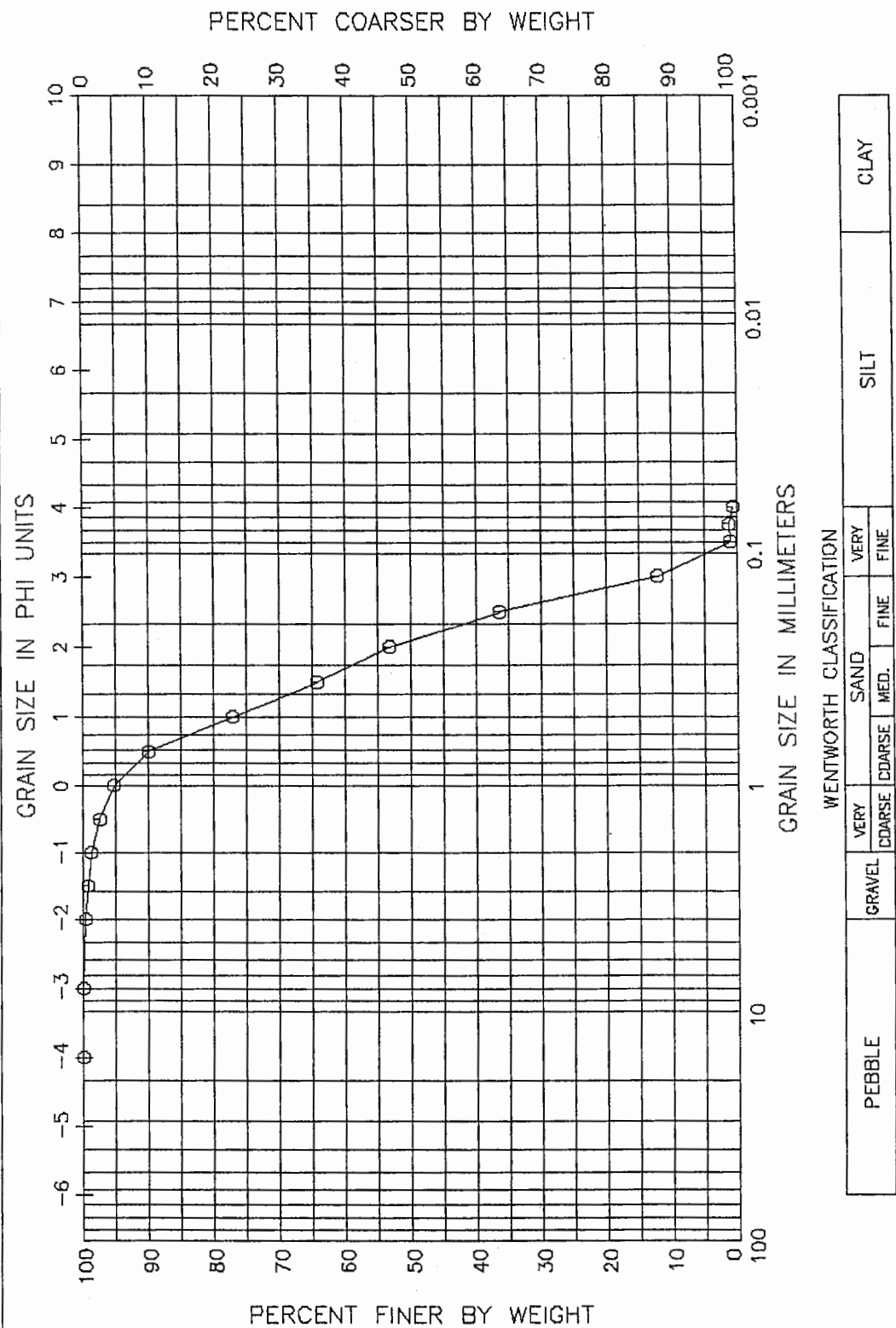
MEAN (PHI): 2.75	SORTING: 0.53
MEAN (mm): 0.15	

DATA FILE NAME: VC-99#76-7.TAB



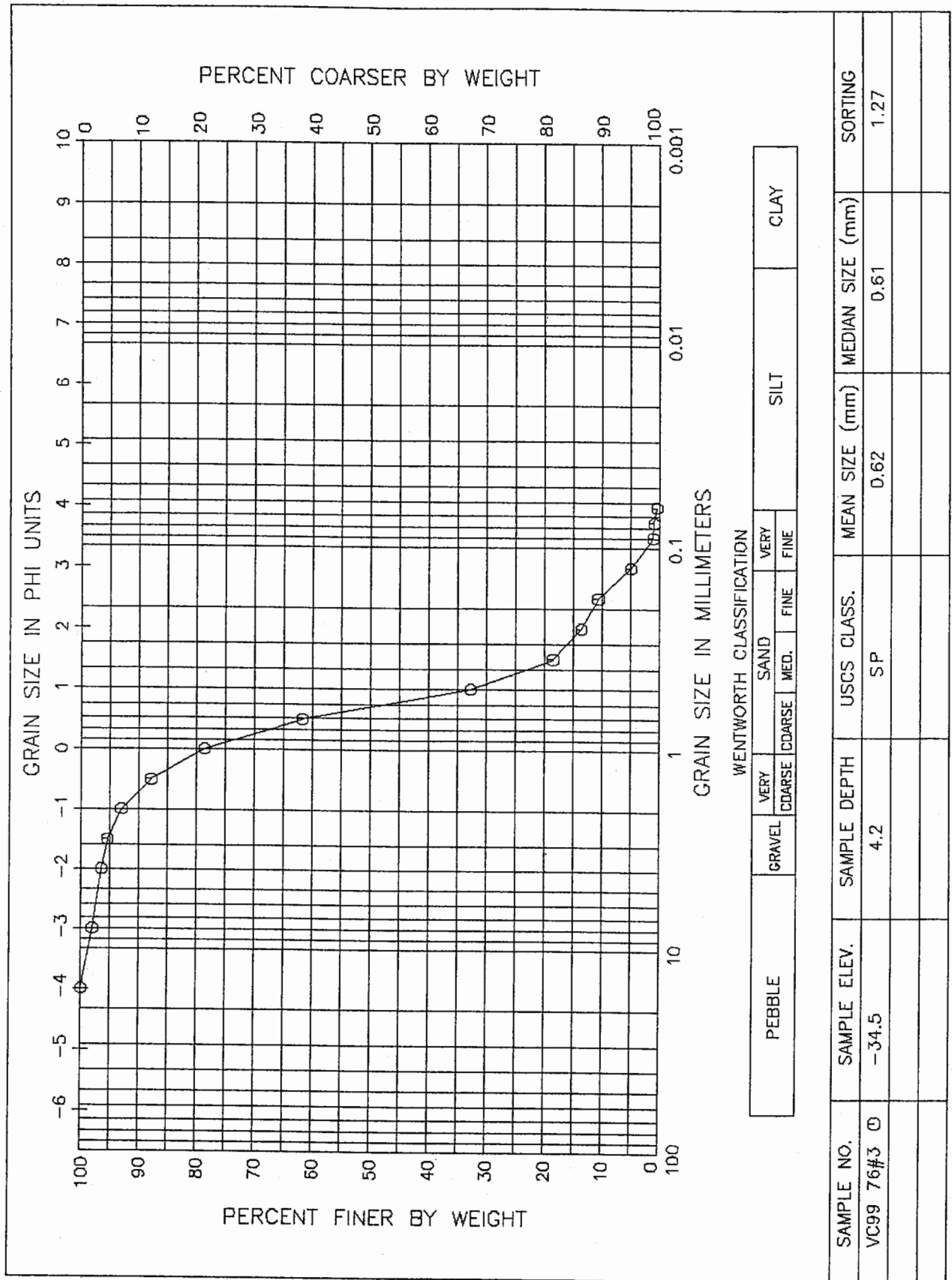
SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 76#1 Ø	-31.3	1.0	SP	0.18	0.14	1.13

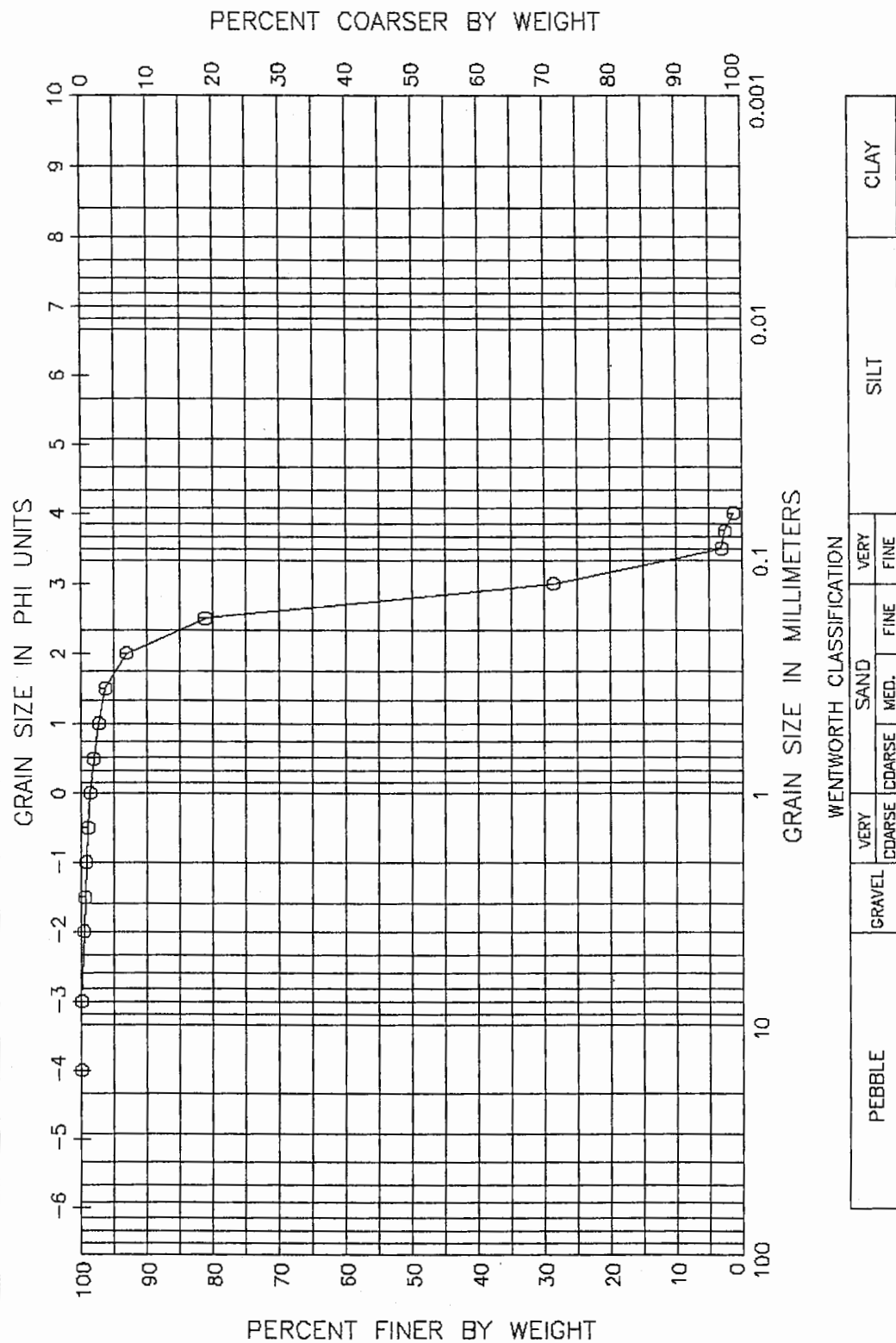
GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH



SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 76#2 0	-32.4	2.1	SP	0.27	0.23	1.07

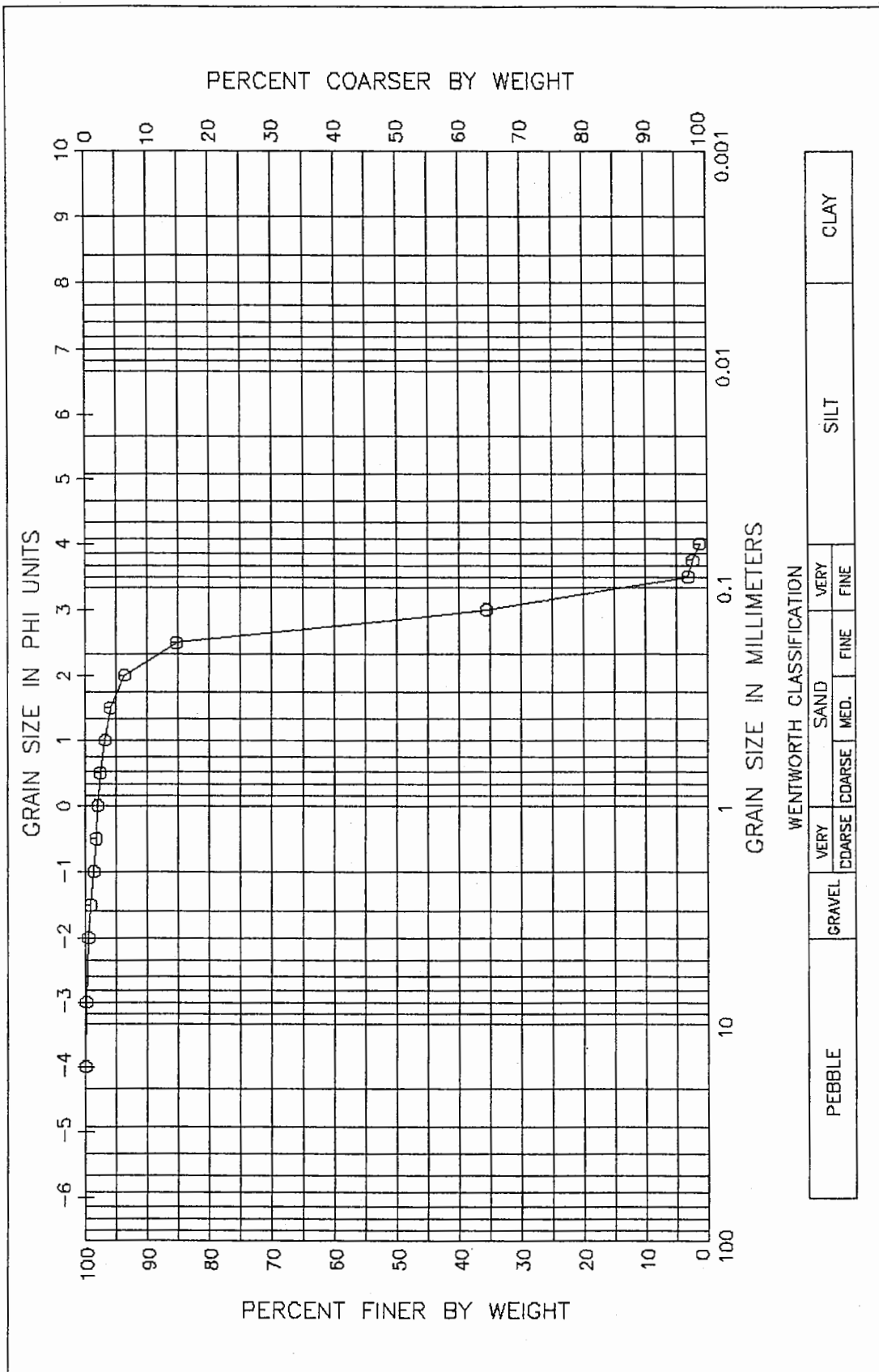
GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH





SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 76#4	-38.8	8.5	SP	0.15	0.14	0.69

GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH



SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 76#5 0	-43.3	13.0	SP	0.15	0.14	0.77

GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH

