

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

SAMPLE NO.: VC-99#92-1
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 0.8
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 116.02
SAMPLE WEIGHT AFTER WASH (GRAMS): 110.91

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	0.14	0.12	99.88
14	-0.50	1.400	0.30	0.26	99.74
18	0.00	1.000	0.62	0.53	99.47
25	0.50	0.710	1.78	1.53	98.47
35	1.00	0.500	5.17	4.46	95.54
45	1.50	0.355	10.04	8.65	91.35
60	2.00	0.250	16.30	14.05	85.95
80	2.50	0.180	23.77	20.49	79.51
120	3.00	0.125	63.06	54.35	45.65
170	3.50	0.090	108.58	93.59	6.41
200	3.75	0.075	110.32	95.09	4.91
230	4.00	0.063	113.24	97.61	2.39
PAN			116.00	99.98	0.02

PHI (5): 1.06 PHI (16): 2.15 PHI (25): 2.57
PHI (50): 2.94 PHI (75): 3.26 PHI (84): 3.38
PHI (95): 3.74

SIEVE LOSS (g): 0.02 SILT/CLAY: 4.91%
SKEWNESS: -0.873 KURTOSIS: 1.571

GRAPHIC METHOD
MEAN (PHI): 2.65 SORTING: 0.61
MEAN (mm) : 0.16 MEDIAN (mm) : 0.13
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD
MEAN (PHI): 2.74 SORTING: 0.75
MEAN (mm) : 0.15

DATA FILE NAME: VC-99#92-1.TAB

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

SAMPLE NO.: VC-99#92-2
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 2.2
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 114.01
SAMPLE WEIGHT AFTER WASH (GRAMS): 109.19

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	0.00	0.00	100.00
7	-1.50	2.800	0.07	0.06	99.94
10	-1.00	2.000	0.65	0.57	99.43
14	-0.50	1.400	1.95	1.71	98.29
18	0.00	1.000	3.90	3.42	96.58
25	0.50	0.710	7.70	6.75	93.25
35	1.00	0.500	14.92	13.09	86.91
45	1.50	0.355	21.26	18.65	81.35
60	2.00	0.250	26.31	23.08	76.92
80	2.50	0.180	32.11	28.16	71.84
120	3.00	0.125	61.07	53.57	46.43
170	3.50	0.090	107.58	94.36	5.64
200	3.75	0.075	108.87	95.49	4.51
230	4.00	0.063	111.52	97.82	2.18
PAN			114.00	99.99	0.01

PHI(5): 0.24 PHI(16): 1.26 PHI(25): 2.19
PHI(50): 2.93 PHI(75): 3.26 PHI(84): 3.37
PHI(95): 3.64

SIEVE LOSS(g): 0.01 SILT/CLAY: 4.51%
SKEWNESS: -0.939 KURTOSIS: 1.299

GRAPHIC METHOD

MEAN (PHI): 2.29 SORTING: 1.06
MEAN (mm): 0.20 MEDIAN (mm): 0.13
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.51 SORTING: 1.07
MEAN (mm): 0.18

DATA FILE NAME: VC-99#92-2.TAB

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

SAMPLE NO.: VC-99#92-3
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 3.3
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 111.17
SAMPLE WEIGHT AFTER WASH (GRAMS): 107.32

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	0.42	0.38	99.62
7	-1.50	2.800	0.99	0.89	99.11
10	-1.00	2.000	2.45	2.20	97.80
14	-0.50	1.400	6.03	5.42	94.58
18	0.00	1.000	10.98	9.88	90.12
25	0.50	0.710	20.36	18.31	81.69
35	1.00	0.500	39.03	35.11	64.89
45	1.50	0.355	51.27	46.12	53.88
60	2.00	0.250	59.37	53.40	46.60
80	2.50	0.180	65.77	59.16	40.84
120	3.00	0.125	82.39	74.11	25.89
170	3.50	0.090	106.10	95.44	4.56
200	3.75	0.075	106.14	95.48	4.52
230	4.00	0.063	108.89	97.94	2.06
PAN			111.15	99.98	0.02

PHI (5): -0.57 PHI (16): 0.36 PHI (25): 0.70
PHI (50): 1.77 PHI (75): 3.02 PHI (84): 3.23
PHI (95): 3.49

SIEVE LOSS (g): 0.02 SILT/CLAY: 4.52%
SKEWNESS: -0.212 KURTOSIS: 0.716

GRAPHIC METHOD

MEAN (PHI): 1.66 SORTING: 1.43
MEAN (mm): 0.32 MEDIAN (mm): 0.29

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.71 SORTING: 1.34
MEAN (mm): 0.31

DATA FILE NAME: VC-99#92-3.TAB

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

SAMPLE NO.: VC-99#92-4
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 4.4
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 123.25
SAMPLE WEIGHT AFTER WASH (GRAMS): 116.10

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	0.06	0.05	99.95
10	-1.00	2.000	0.23	0.19	99.81
14	-0.50	1.400	0.63	0.51	99.49
18	0.00	1.000	1.24	1.01	98.99
25	0.50	0.710	2.26	1.83	98.17
35	1.00	0.500	4.34	3.52	96.48
45	1.50	0.355	6.14	4.98	95.02
60	2.00	0.250	8.33	6.76	93.24
80	2.50	0.180	12.67	10.28	89.72
120	3.00	0.125	45.03	36.54	63.46
170	3.50	0.090	113.79	92.32	7.68
200	3.75	0.075	115.82	93.97	6.03
230	4.00	0.063	119.65	97.08	2.92
PAN			123.24	99.99	0.01

PHI(5): 1.51 PHI(16): 2.61 PHI(25): 2.78
PHI(50): 3.12 PHI(75): 3.34 PHI(84): 3.43
PHI(95): 3.83

SIEVE LOSS(g): 0.01 SILT/CLAY: 6.03%
SKEWNESS: -1.106 KURTOSIS: 1.690

GRAPHIC METHOD

MEAN (PHI): 2.90 SORTING: 0.41
MEAN (mm) : 0.13 MEDIAN (mm): 0.11
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.94 SORTING: 0.68
MEAN (mm) : 0.13

DATA FILE NAME: VC-99#92-4.TAB

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

SAMPLE NO.: VC-99#92-5
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 5.9
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 115.64
SAMPLE WEIGHT AFTER WASH (GRAMS): 113.08

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	1.71	1.48	98.52
7	-1.50	2.800	5.01	4.33	95.67
10	-1.00	2.000	10.59	9.16	90.84
14	-0.50	1.400	17.65	15.26	84.74
18	0.00	1.000	26.61	23.01	76.99
25	0.50	0.710	43.72	37.81	62.19
35	1.00	0.500	69.58	60.17	39.83
45	1.50	0.355	88.23	76.30	23.70
60	2.00	0.250	97.39	84.22	15.78
80	2.50	0.180	100.76	87.13	12.87
120	3.00	0.125	106.96	92.49	7.51
170	3.50	0.090	112.57	97.35	2.65
200	3.75	0.075	112.96	97.68	2.32
230	4.00	0.063	114.35	98.88	1.12
PAN			115.64	100.00	0.00

PHI(5): -1.43 PHI(16): -0.45 PHI(25): 0.07
PHI(50): 0.77 PHI(75): 1.46 PHI(84): 1.99
PHI(95): 3.26

SIEVE LOSS (g): 0.00 SILT/CLAY: 2.32%
SKEWNESS: 0.116 KURTOSIS: 1.380

GRAPHIC METHOD

MEAN (PHI): 0.83 SORTING: 1.22
MEAN (mm): 0.56 MEDIAN (mm): 0.59

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.77 SORTING: 1.28
MEAN (mm): 0.59

DATA FILE NAME: VC-99#92-5.TAB

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

SAMPLE NO.: VC-99#92-6
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 7.4
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 116.94
SAMPLE WEIGHT AFTER WASH (GRAMS): 111.00

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	2.17	1.86	98.14
5	-2.00	4.000	4.54	3.88	96.12
7	-1.50	2.800	8.75	7.48	92.52
10	-1.00	2.000	15.86	13.56	86.44
14	-0.50	1.400	24.70	21.12	78.88
18	0.00	1.000	33.88	28.97	71.03
25	0.50	0.710	45.48	38.89	61.11
35	1.00	0.500	62.41	53.37	46.63
45	1.50	0.355	73.32	62.70	37.30
60	2.00	0.250	82.47	70.52	29.48
80	2.50	0.180	89.10	76.19	23.81
120	3.00	0.125	98.86	84.54	15.46
170	3.50	0.090	109.51	93.65	6.35
200	3.75	0.075	110.64	94.61	5.39
230	4.00	0.063	113.96	97.45	2.55
PAN			116.94	100.00	0.00

PHI (5): -1.84 PHI (16): -0.84 PHI (25): -0.25
PHI (50): 0.88 PHI (75): 2.39 PHI (84): 2.97
PHI (95): 3.78

SIEVE LOSS(g): 0.00 SILT/CLAY: 5.39%
SKEWNESS: 0.045 KURTOSIS: 0.871

GRAPHIC METHOD

MEAN (PHI): 0.99 SORTING: 1.90
MEAN (mm): 0.50 MEDIAN (mm): 0.54
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.88 SORTING: 1.68
MEAN (mm): 0.54

DATA FILE NAME: VC-99#92-6.TAB

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

SAMPLE NO.: VC-99#92-7
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 9.9
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 111.72
SAMPLE WEIGHT AFTER WASH (GRAMS): 108.06

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	0.66	0.59	99.41
5	-2.00	4.000	4.04	3.62	96.38
7	-1.50	2.800	7.30	6.53	93.47
10	-1.00	2.000	11.86	10.62	89.38
14	-0.50	1.400	18.32	16.40	83.60
18	0.00	1.000	25.54	22.86	77.14
25	0.50	0.710	33.67	30.14	69.86
35	1.00	0.500	45.44	40.67	59.33
45	1.50	0.355	59.87	53.59	46.41
60	2.00	0.250	87.59	78.40	21.60
80	2.50	0.180	100.79	90.22	9.78
120	3.00	0.125	105.66	94.58	5.42
170	3.50	0.090	107.81	96.50	3.50
200	3.75	0.075	107.99	96.66	3.34
230	4.00	0.063	109.87	98.34	1.66
PAN			111.71	99.99	0.01

PHI (5): -1.76 PHI (16): -0.53 PHI (25): 0.15
PHI (50): 1.36 PHI (75): 1.93 PHI (84): 2.24
PHI (95): 3.11

SIEVE LOSS (g): 0.01 SILT/CLAY: 3.34%
SKEWNESS: -0.496 KURTOSIS: 1.119

GRAPHIC METHOD

MEAN (PHI): 0.88 SORTING: 1.39
MEAN (mm): 0.54 MEDIAN (mm): 0.39

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.97 SORTING: 1.41
MEAN (mm): 0.51

DATA FILE NAME: VC-99#92-7.TAB

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

SAMPLE NO.: VC-99#92-8
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 11.9
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 108.69
SAMPLE WEIGHT AFTER WASH (GRAMS): 106.45

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	0.00	0.00	100.00
7	-1.50	2.800	0.00	0.00	100.00
10	-1.00	2.000	0.10	0.09	99.91
14	-0.50	1.400	0.21	0.19	99.81
18	0.00	1.000	0.34	0.31	99.69
25	0.50	0.710	0.57	0.52	99.48
35	1.00	0.500	0.96	0.88	99.12
45	1.50	0.355	1.39	1.28	98.72
60	2.00	0.250	3.00	2.76	97.24
80	2.50	0.180	7.81	7.19	92.81
120	3.00	0.125	31.45	28.94	71.06
170	3.50	0.090	103.94	95.63	4.37
200	3.75	0.075	106.22	97.73	2.27
230	4.00	0.063	107.54	98.94	1.06
PAN			108.68	99.99	0.01

PHI(5): 2.25 PHI(16): 2.70 PHI(25): 2.91
PHI(50): 3.16 PHI(75): 3.35 PHI(84): 3.41
PHI(95): 3.50

SIEVE LOSS (g): 0.01 SILT/CLAY: 2.27%
SKEWNESS: -0.799 KURTOSIS: 1.168

GRAPHIC METHOD

MEAN (PHI): 3.00 SORTING: 0.36
MEAN (mm): 0.12 MEDIAN (mm): 0.11
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 3.05 SORTING: 0.46
MEAN (mm): 0.12

DATA FILE NAME: VC-99#92-8.TAB

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

SAMPLE NO.: VC-99#92-9
SAMPLE ELEV. (FT. NGVD): 0.0
SAMPLE DEPTH (FT.): 13.9
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 109.62
SAMPLE WEIGHT AFTER WASH (GRAMS): 108.22

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	0.33	0.30	99.70
7	-1.50	2.800	0.45	0.41	99.59
10	-1.00	2.000	0.62	0.57	99.43
14	-0.50	1.400	0.89	0.81	99.19
18	0.00	1.000	1.48	1.35	98.65
25	0.50	0.710	2.93	2.67	97.33
35	1.00	0.500	5.92	5.40	94.60
45	1.50	0.355	11.73	10.70	89.30
60	2.00	0.250	29.80	27.18	72.82
80	2.50	0.180	51.41	46.90	53.10
120	3.00	0.125	83.07	75.78	24.22
170	3.50	0.090	107.23	97.82	2.18
200	3.75	0.075	108.10	98.61	1.39
230	4.00	0.063	108.90	99.34	0.66
PAN			109.61	99.99	0.01

PHI (5): 0.93 PHI (16): 1.66 PHI (25): 1.93
PHI (50): 2.55 PHI (75): 2.99 PHI (84): 3.19
PHI (95): 3.44

SIEVE LOSS (g): 0.01 SILT/CLAY: 1.39%
SKEWNESS: -0.488 KURTOSIS: 0.977

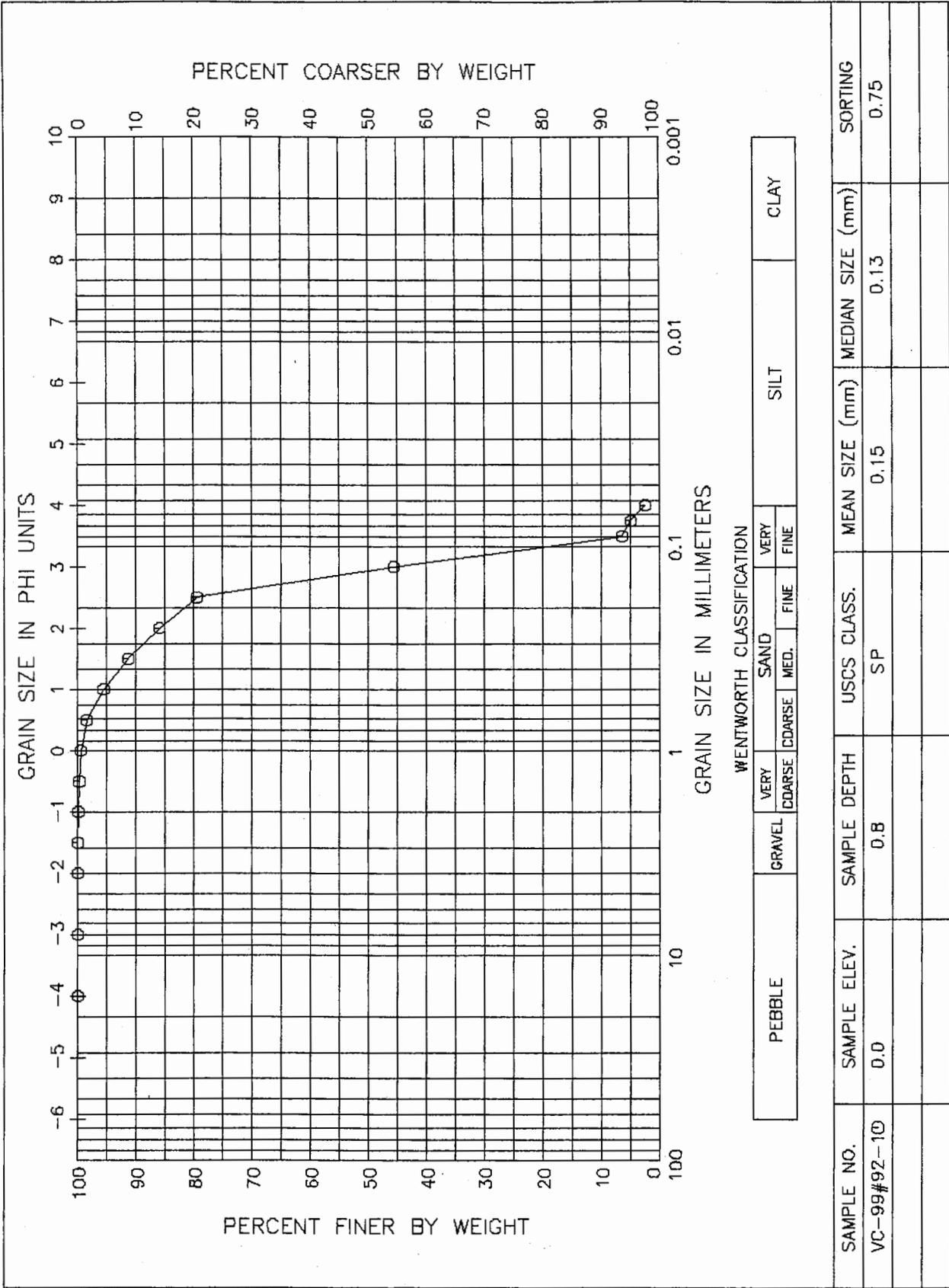
GRAPHIC METHOD

MEAN (PHI): 2.35 SORTING: 0.76
MEAN (mm): 0.20 MEDIAN (mm): 0.17
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

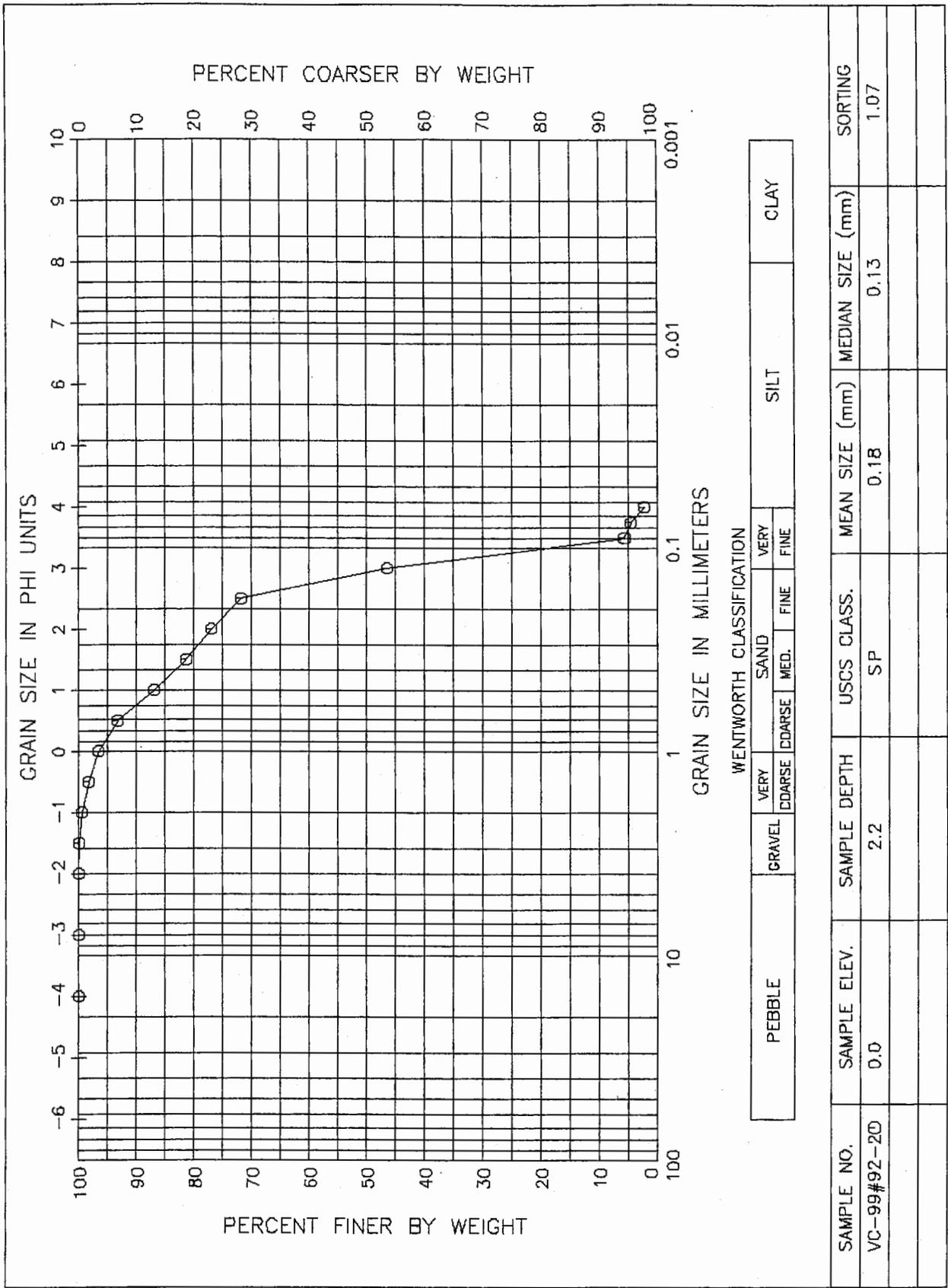
MOMENT METHOD

MEAN (PHI): 2.39 SORTING: 0.82
MEAN (mm): 0.19

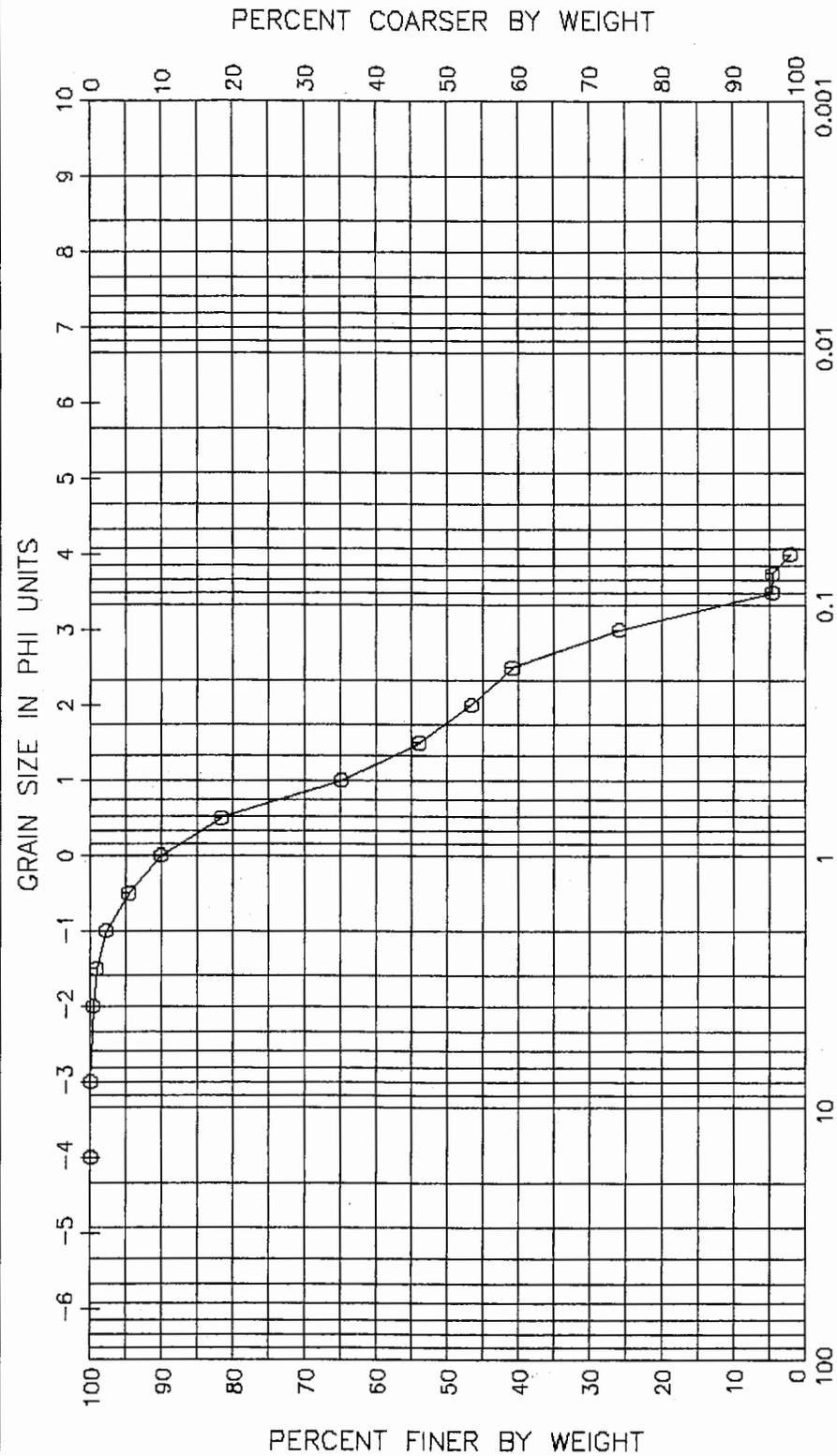
DATA FILE NAME: VC-99#92-9.TAB



GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99

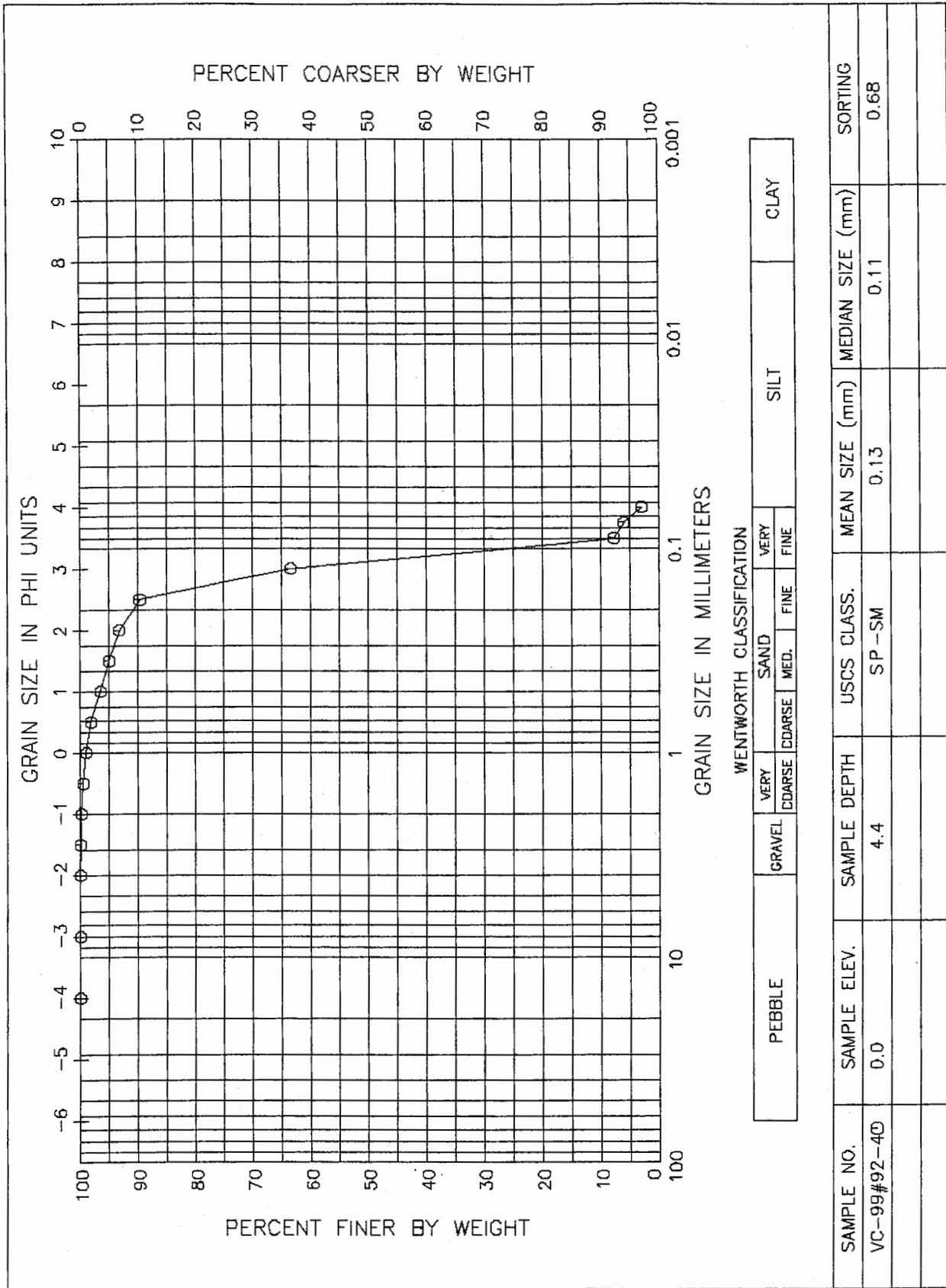


GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99

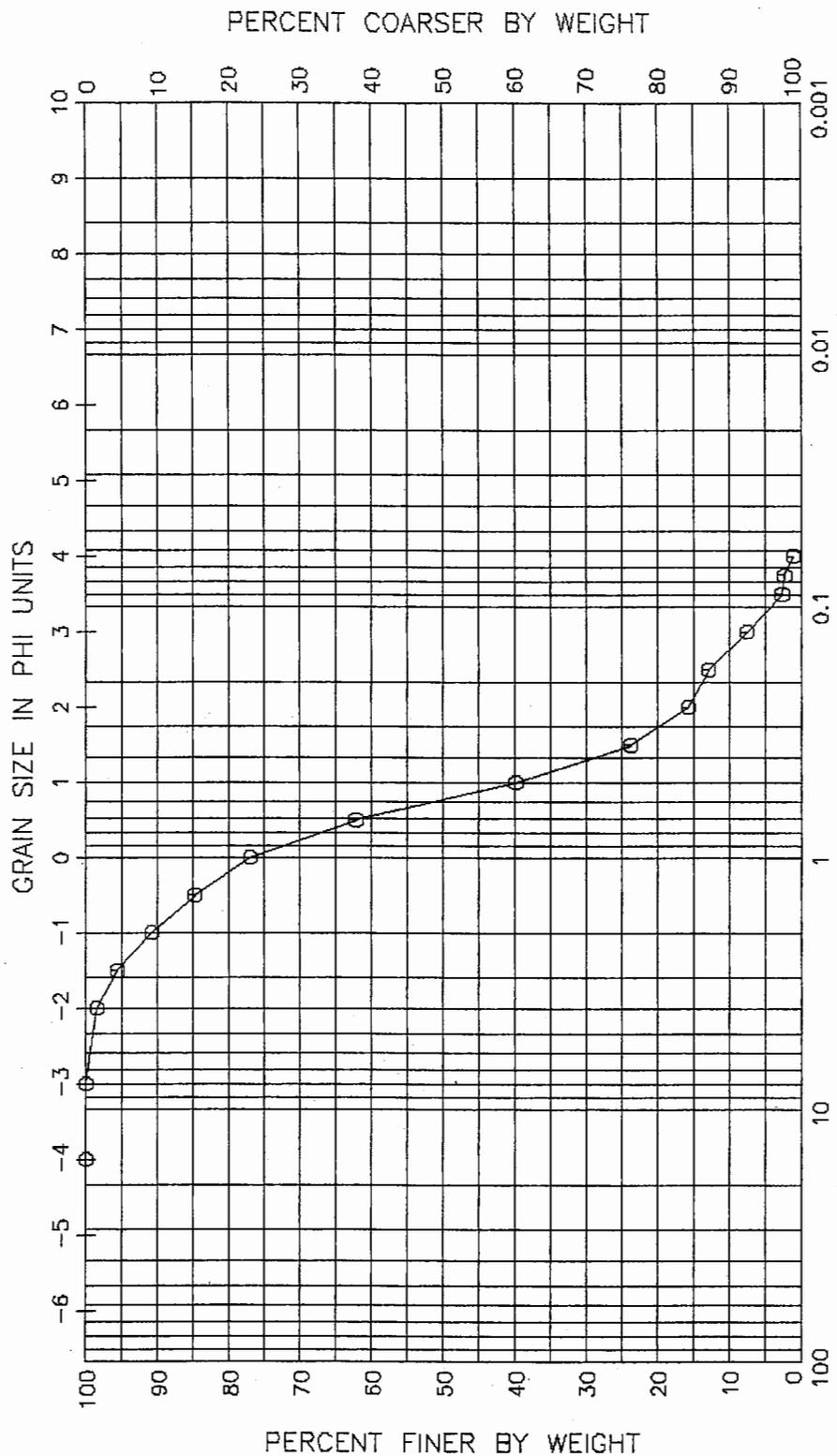


SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC-99#92-30	0.0	3.3	SP	0.31	0.29	1.34

GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99



GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99

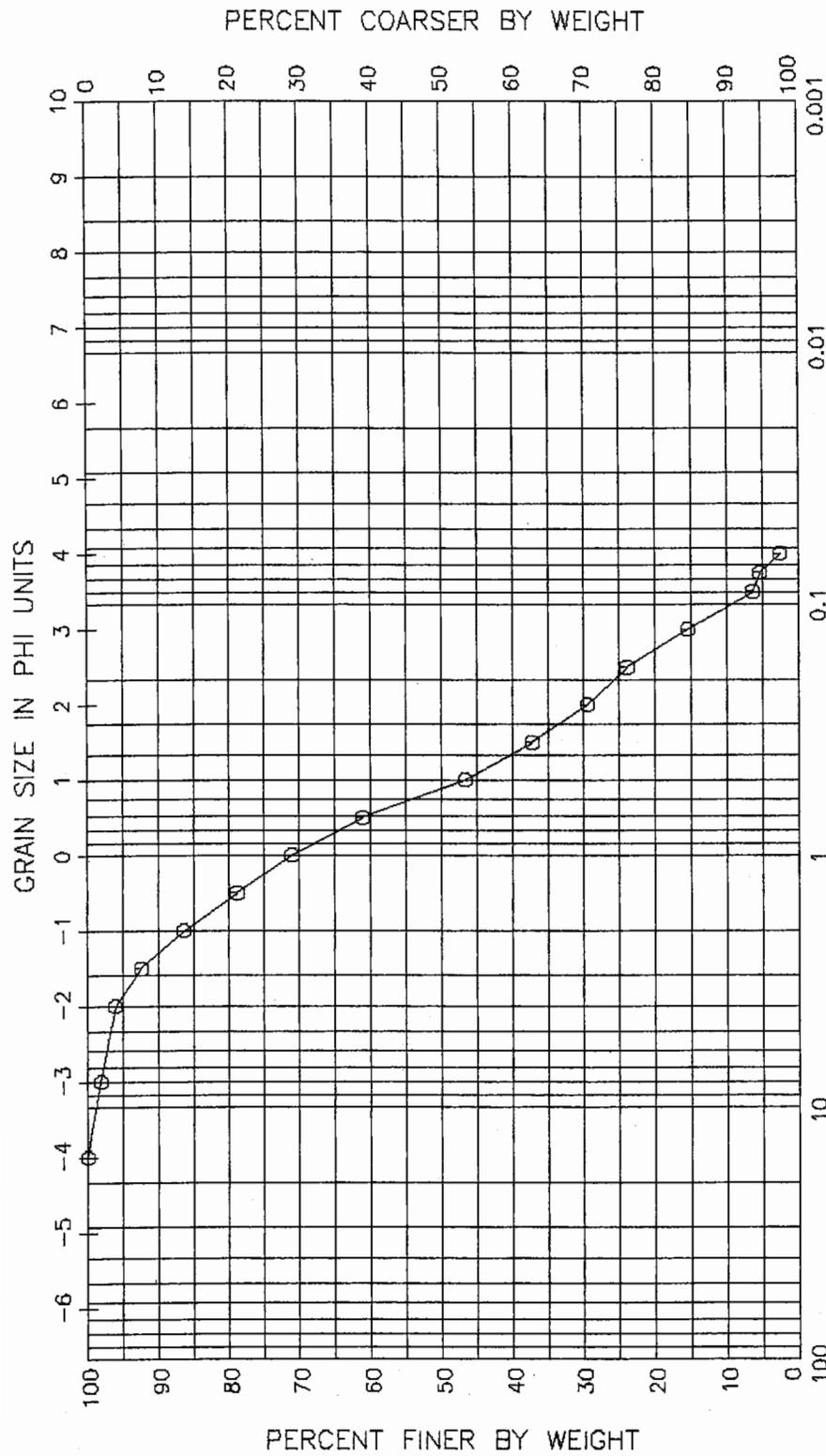


WENTWORTH CLASSIFICATION

PEBBLE	GRAVEL	SAND		SILT		CLAY
		VERY COARSE	MED. FINE	VERY FINE	CLAY	

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC-99#92-50	0.0	5.9	SP	0.59	0.59	1.28

GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99

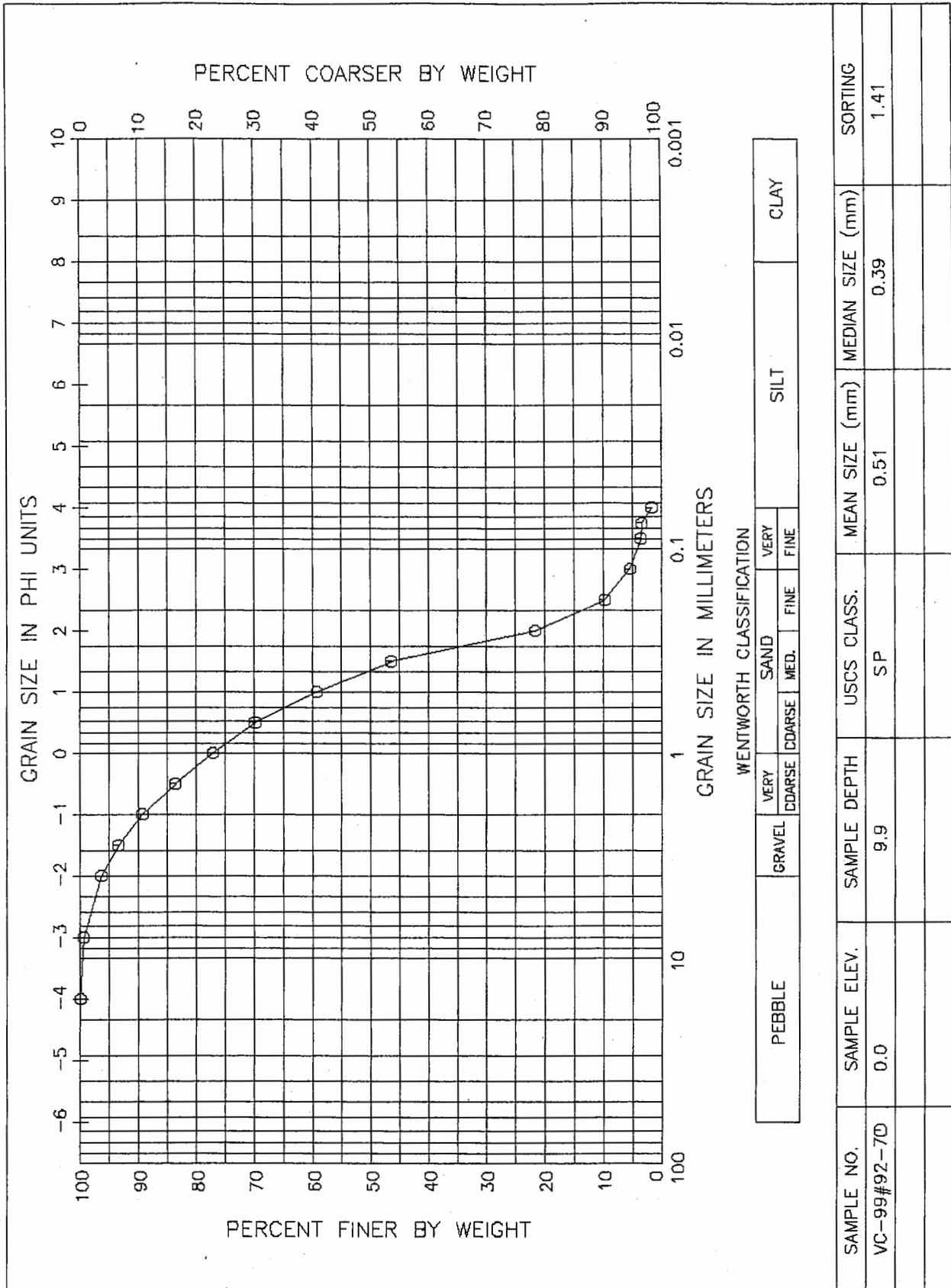


WENTWORTH CLASSIFICATION

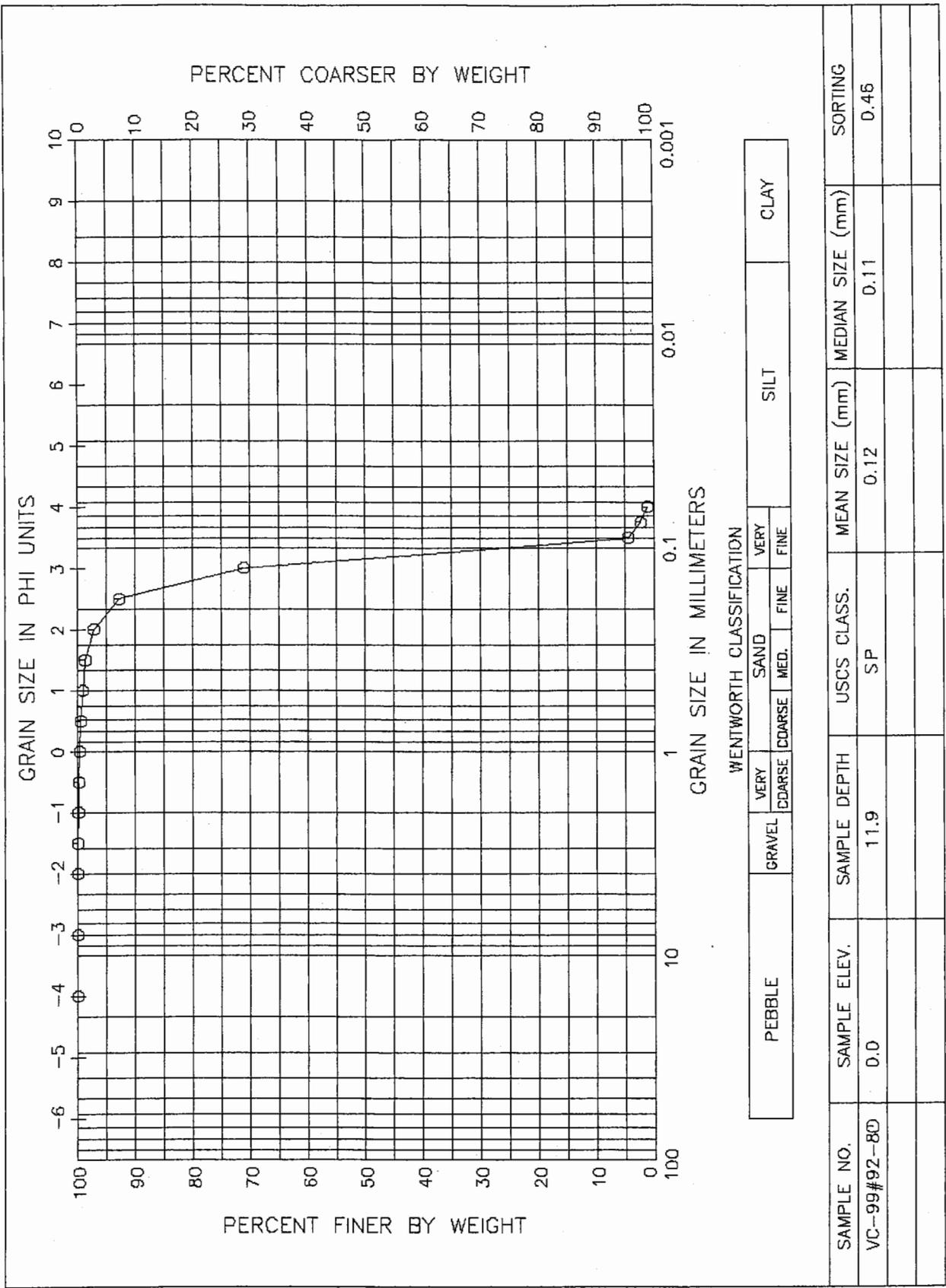
PEBBLE	GRAVEL	SAND		SILT		CLAY
		VERY COARSE	MED.	VERY FINE	FINE	

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC-99#92-60	0.0	7.4	SP-SM	0.54	0.54	1.68

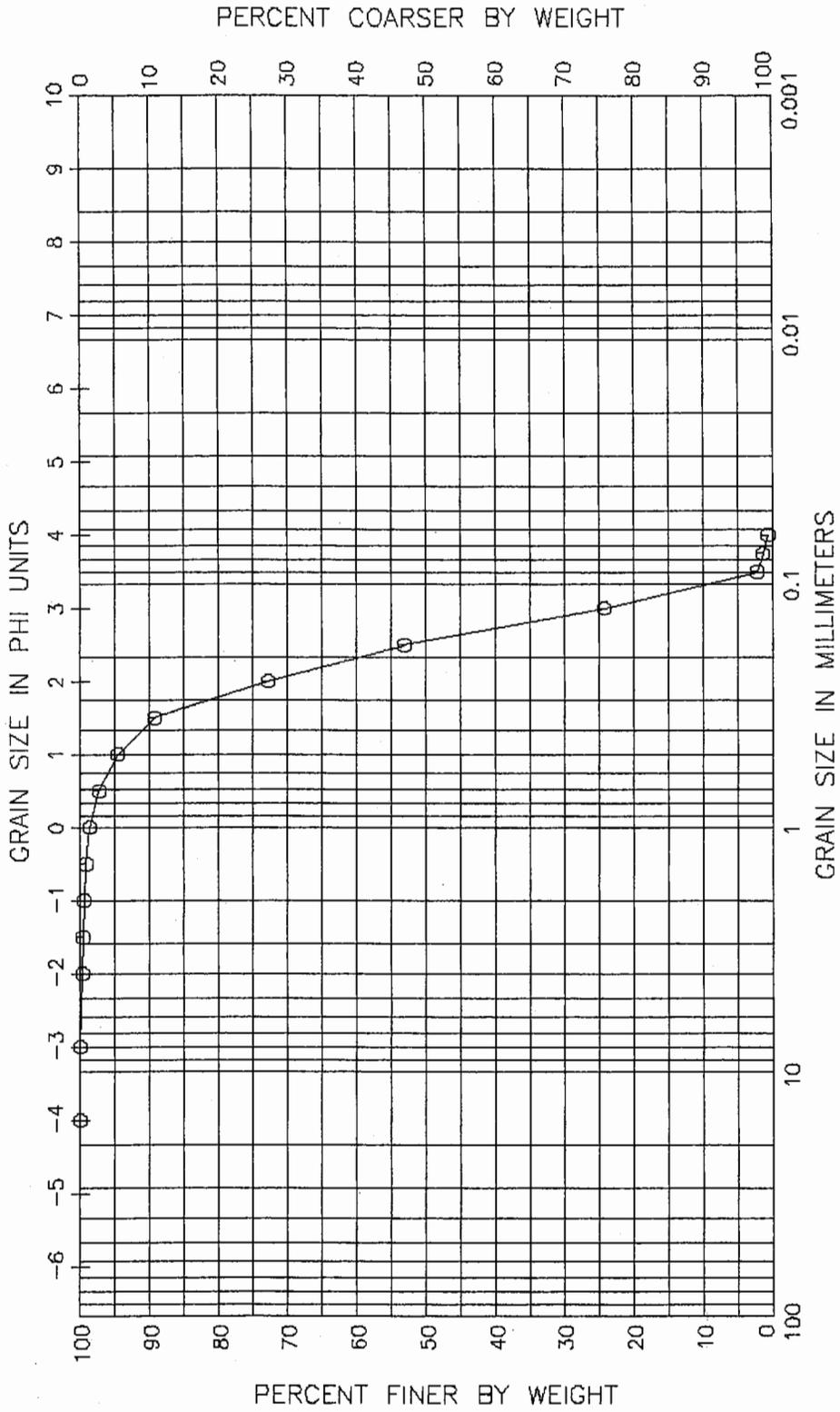
GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99



GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99



GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH 10/99



SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC-99#92-90	0.0	13.9	SP	0.19	0.17	0.82

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