

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

SAMPLE NO.: VC9943R2#1
SAMPLE ELEV. (FT. NGVD): -33.6
SAMPLE DEPTH (FT.): 5.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 170.74
SAMPLE WEIGHT AFTER WASH (GRAMS): 169.79

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	0.65	0.38	99.62
5	-2.00	4.000	2.02	1.18	98.82
7	-1.50	2.800	3.62	2.12	97.88
10	-1.00	2.000	7.01	4.11	95.89
14	-0.50	1.400	17.04	9.98	90.02
18	0.00	1.000	29.40	17.22	82.78
25	0.50	0.710	54.80	32.10	67.90
35	1.00	0.500	96.33	56.42	43.58
45	1.50	0.355	122.20	71.57	28.43
60	2.00	0.250	138.07	80.87	19.13
80	2.50	0.180	149.05	87.30	12.70
120	3.00	0.125	162.70	95.29	4.71
170	3.50	0.090	169.57	99.31	0.69
200	3.75	0.075	169.70	99.39	0.61
230	4.00	0.063	170.21	99.69	0.31
PAN			170.71	99.98	0.02

PHI (5): -0.92 PHI (16): -0.08 PHI (25): 0.26
PHI (50): 0.87 PHI (75): 1.68 PHI (84): 2.24
PHI (95): 2.98

SIEVE LOSS (g): 0.03 SILT/CLAY: 0.61%
SKEWNESS: 0.138 KURTOSIS: 1.125

GRAPHIC METHOD

MEAN (PHI): 1.02 SORTING: 1.16
MEAN (mm): 0.49 MEDIAN (mm): 0.55
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 0.95 SORTING: 1.18
MEAN (mm): 0.52

DATA FILE NAME: VC99-43R2#1.TAB

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

SAMPLE NO.: VC99-43R2#2
SAMPLE ELEV. (FT. NGVD): -35.6
SAMPLE DEPTH (FT.): 7.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 191.88
SAMPLE WEIGHT AFTER WASH (GRAMS): 188.71

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	1.03	0.54	99.46
7	-1.50	2.800	1.73	0.90	99.10
10	-1.00	2.000	2.71	1.41	98.59
14	-0.50	1.400	4.13	2.15	97.85
18	0.00	1.000	6.16	3.21	96.79
25	0.50	0.710	9.59	5.00	95.00
35	1.00	0.500	17.41	9.07	90.93
45	1.50	0.355	29.63	15.44	84.56
60	2.00	0.250	48.85	25.46	74.54
80	2.50	0.180	69.97	36.47	63.53
120	3.00	0.125	148.20	77.24	22.76
170	3.50	0.090	186.91	97.41	2.59
200	3.75	0.075	188.29	98.13	1.87
230	4.00	0.063	190.14	99.10	0.90
PAN			191.87	99.99	0.01

PHI(5): 0.50 PHI(16): 1.53 PHI(25): 1.98
PHI(50): 2.67 PHI(75): 2.97 PHI(84): 3.17
PHI(95): 3.44

SIEVE LOSS(g): 0.01 SILT/CLAY: 1.87%
SKEWNESS: -0.849 KURTOSIS: 1.210

GRAPHIC METHOD

MEAN (PHI): 2.26 SORTING: 0.82
MEAN (mm): 0.21 MEDIAN (mm): 0.16
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.36 SORTING: 0.98
MEAN (mm): 0.19

DATA FILE NAME: VC99-43R2#2.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW

ON: 6/10/99

SAMPLE NO.: VC9943R2#3

SAMPLE ELEV. (FT. NGVD): -38.6

SAMPLE DEPTH (FT.): 10.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 200.16

SAMPLE WEIGHT AFTER WASH (GRAMS): 196.48

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	0.10	0.05	99.95
7	-1.50	2.800	0.44	0.22	99.78
10	-1.00	2.000	0.75	0.37	99.63
14	-0.50	1.400	1.26	0.63	99.37
18	0.00	1.000	1.61	0.80	99.20
25	0.50	0.710	2.36	1.18	98.82
35	1.00	0.500	3.85	1.92	98.08
45	1.50	0.355	6.99	3.49	96.51
60	2.00	0.250	19.31	9.65	90.35
80	2.50	0.180	49.24	24.60	75.40
120	3.00	0.125	143.05	71.47	28.53
170	3.50	0.090	193.80	96.82	3.18
200	3.75	0.075	195.88	97.86	2.14
230	4.00	0.063	198.14	98.99	1.01
PAN			200.16	100.00	0.00

PHI(5): 1.62

PHI(16): 2.21

PHI(25): 2.50

PHI(50): 2.77

PHI(75): 3.07

PHI(84): 3.25

PHI(95): 3.46

SIEVE LOSS(g): 0.00

SILT/CLAY: 2.14%

SKEWNESS: -0.440

KURTOSIS: 1.335

GRAPHIC METHOD

MEAN (PHI): 2.66

SORTING: 0.52

MEAN (mm): 0.16

MEDIAN (mm): 0.15

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.68

SORTING: 0.63

MEAN (mm): 0.16

DATA FILE NAME: VC99-43R2#3.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/10/99

SAMPLE NO.: VC9943R2#4

SAMPLE ELEV. (FT. NGVD): -40.2

SAMPLE DEPTH (FT.): 11.6

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 198.06

SAMPLE WEIGHT AFTER WASH (GRAMS): 196.27

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	0.94	0.47	99.53
5	-2.00	4.000	6.54	3.30	96.70
7	-1.50	2.800	11.51	5.81	94.19
10	-1.00	2.000	28.80	14.54	85.46
14	-0.50	1.400	34.53	17.43	82.57
18	0.00	1.000	40.20	20.30	79.70
25	0.50	0.710	48.14	24.31	75.69
35	1.00	0.500	66.13	33.39	66.61
45	1.50	0.355	83.92	42.37	57.63
60	2.00	0.250	110.22	55.65	44.35
80	2.50	0.180	137.54	69.44	30.56
120	3.00	0.125	177.60	89.67	10.33
170	3.50	0.090	195.61	98.76	1.24
200	3.75	0.075	196.00	98.96	1.04
230	4.00	0.063	197.04	99.48	0.52
PAN			198.05	99.99	0.01

PHI (5): -1.66

PHI (16): -0.75

PHI (25): 0.54

PHI (50): 1.79

PHI (75): 2.64

PHI (84): 2.86

PHI (95): 3.29

SIEVE LOSS (g): 0.01

SILT/CLAY: 1.04%

SKEWNESS: -0.539

KURTOSIS: 0.967

GRAPHIC METHOD

MEAN (PHI): 1.11

SORTING: 1.80

MEAN (mm): 0.46

MEDIAN (mm): 0.29

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.35

SORTING: 1.60

MEAN (mm): 0.39

DATA FILE NAME: VC99-43R2#4.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW

ON: 6/10/99

SAMPLE NO.: VC9943R2#5

SAMPLE ELEV. (FT. NGVD): -41.6

SAMPLE DEPTH (FT.): 13.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 211.59

SAMPLE WEIGHT AFTER WASH (GRAMS): 208.51

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	0.05	99.95
7	-1.50	2.800	0.22	0.10	99.90
10	-1.00	2.000	0.65	0.31	99.69
14	-0.50	1.400	0.90	0.43	99.57
18	0.00	1.000	1.18	0.56	99.44
25	0.50	0.710	1.72	0.81	99.19
35	1.00	0.500	2.78	1.31	98.69
45	1.50	0.355	4.98	2.35	97.65
60	2.00	0.250	12.33	5.83	94.17
80	2.50	0.180	39.03	18.45	81.55
120	3.00	0.125	152.44	72.04	27.96
170	3.50	0.090	207.60	98.11	1.89
200	3.75	0.075	208.22	98.41	1.59
230	4.00	0.063	209.90	99.20	0.80
PAN			211.59	100.00	0.00

PHI(5): 1.88

PHI(16): 2.40

PHI(25): 2.56

PHI(50): 2.79

PHI(75): 3.06

PHI(84): 3.23

PHI(95): 3.44

SIEVE LOSS(g): 0.00

SILT/CLAY: 1.59%

SKEWNESS: -0.324

KURTOSIS: 1.290

GRAPHIC METHOD

MEAN (PHI): 2.75

SORTING: 0.41

MEAN (mm): 0.15

MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.74

SORTING: 0.54

MEAN (mm): 0.15

DATA FILE NAME: VC99-43R2#5.TAB

GRADATION ANALYSIS REPORT
TOWN OF PALM BEACH
TESTED BY: RW ON: 6/10/99

SAMPLE NO.: VC9943R2#6
SAMPLE ELEV. (FT. NGVD): -44.1
SAMPLE DEPTH (FT.): 15.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 174.93
SAMPLE WEIGHT AFTER WASH (GRAMS): 172.81

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	2.40	1.37	98.63
7	-1.50	2.800	4.63	2.65	97.35
10	-1.00	2.000	9.27	5.30	94.70
14	-0.50	1.400	20.77	11.87	88.13
18	0.00	1.000	36.04	20.60	79.40
25	0.50	0.710	57.79	33.04	66.96
35	1.00	0.500	82.68	47.26	52.74
45	1.50	0.355	94.76	54.17	45.83
60	2.00	0.250	105.58	60.36	39.64
80	2.50	0.180	119.28	68.19	31.81
120	3.00	0.125	150.39	85.97	14.03
170	3.50	0.090	172.31	98.50	1.50
200	3.75	0.075	172.63	98.69	1.31
230	4.00	0.063	173.83	99.37	0.63
PAN			174.92	99.99	0.01

PHI (5): -1.06	PHI (16): -0.26	PHI (25): 0.18
PHI (50): 1.20	PHI (75): 2.69	PHI (84): 2.94
PHI (95): 3.36		

SIEVE LOSS (g): 0.01	SILT/CLAY: 1.31%
SKEWNESS: -0.029	KURTOSIS: 0.720

GRAPHIC METHOD

MEAN (PHI): 1.24	SORTING: 1.60
MEAN (mm): 0.42	MEDIAN (mm): 0.44
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

MEAN (PHI): 1.29	SORTING: 1.47
MEAN (mm): 0.41	

DATA FILE NAME: VC99-43R2#6.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/10/99

SAMPLE NO.: VC9943R2#7

SAMPLE ELEV. (FT. NGVD): -45.6

SAMPLE DEPTH (FT.): 17.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 171.63

SAMPLE WEIGHT AFTER WASH (GRAMS): 167.42

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	0.00	0.00	100.00
7	-1.50	2.800	0.26	0.15	99.85
10	-1.00	2.000	1.04	0.61	99.39
14	-0.50	1.400	2.04	1.19	98.81
18	0.00	1.000	3.16	1.84	98.16
25	0.50	0.710	5.24	3.05	96.95
35	1.00	0.500	9.61	5.60	94.40
45	1.50	0.355	15.69	9.14	90.86
60	2.00	0.250	27.21	15.85	84.15
80	2.50	0.180	45.71	26.63	73.37
120	3.00	0.125	104.07	60.64	39.36
170	3.50	0.090	165.96	96.70	3.30
200	3.75	0.075	167.14	97.38	2.62
230	4.00	0.063	169.46	98.73	1.27
PAN			171.63	100.00	0.00

PHI (5): 0.88	PHI (16): 2.01	PHI (25): 2.42
PHI (50): 2.84	PHI (75): 3.20	PHI (84): 3.32
PHI (95): 3.48		

SIEVE LOSS(g): 0.00	SILT/CLAY: 2.62%
SKEWNESS: -1.009	KURTOSIS: 1.372

GRAPHIC METHOD

MEAN (PHI): 2.51	SORTING: 0.66
MEAN (mm): 0.18	MEDIAN (mm): 0.14
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

MEAN (PHI): 2.63	SORTING: 0.83
MEAN (mm): 0.16	

DATA FILE NAME: VC99-43R2#7.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/10/99

SAMPLE NO.: VC9943R2#8

SAMPLE ELEV. (FT. NGVD): -47.1

SAMPLE DEPTH (FT.): 18.5

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 245.65

SAMPLE WEIGHT AFTER WASH (GRAMS): 242.07

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	1.27	0.52	99.48
7	-1.50	2.800	2.85	1.16	98.84
10	-1.00	2.000	5.40	2.20	97.80
14	-0.50	1.400	10.81	4.40	95.60
18	0.00	1.000	17.83	7.26	92.74
25	0.50	0.710	28.26	11.50	88.50
35	1.00	0.500	44.57	18.14	81.86
45	1.50	0.355	59.63	24.27	75.73
60	2.00	0.250	80.19	32.64	67.36
80	2.50	0.180	105.80	43.07	56.93
120	3.00	0.125	177.68	72.33	27.67
170	3.50	0.090	240.59	97.94	2.06
200	3.75	0.075	241.76	98.42	1.58
230	4.00	0.063	243.72	99.21	0.79
PAN			245.64	100.00	0.00

PHI (5): -0.40

PHI (16): 0.84

PHI (25): 1.54

PHI (50): 2.62

PHI (75): 3.05

PHI (84): 3.23

PHI (95): 3.44

SIEVE LOSS (g): 0.01

SILT/CLAY: 1.58%

SKEWNESS: -0.916

KURTOSIS: 1.042

GRAPHIC METHOD

MEAN (PHI): 1.95

SORTING: 1.19

MEAN (mm): 0.26

MEDIAN (mm): 0.16

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.16

SORTING: 1.22

MEAN (mm): 0.22

DATA FILE NAME: VC99-43R2#8.TAB

GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/10/99

SAMPLE NO.: VC9943R2#9

SAMPLE ELEV. (FT. NGVD): -48.4

SAMPLE DEPTH (FT.): 19.8

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 178.49

SAMPLE WEIGHT AFTER WASH (GRAMS): 175.13

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	0.08	99.92
7	-1.50	2.800	0.66	0.37	99.63
10	-1.00	2.000	1.51	0.85	99.15
14	-0.50	1.400	3.15	1.76	98.24
18	0.00	1.000	5.15	2.89	97.11
25	0.50	0.710	7.87	4.41	95.59
35	1.00	0.500	12.41	6.95	93.05
45	1.50	0.355	18.36	10.29	89.71
60	2.00	0.250	32.27	18.08	81.92
80	2.50	0.180	56.02	31.39	68.61
120	3.00	0.125	117.98	66.10	33.90
170	3.50	0.090	173.61	97.27	2.73
200	3.75	0.075	174.83	97.95	2.05
230	4.00	0.063	176.72	99.01	0.99
PAN			178.48	99.99	0.01

PHI(5): 0.62	PHI(16): 1.87	PHI(25): 2.26
PHI(50): 2.77	PHI(75): 3.14	PHI(84): 3.29
PHI(95): 3.46		

SIEVE LOSS(g): 0.01	SILT/CLAY: 2.05%
SKEWNESS: -1.025	KURTOSIS: 1.322

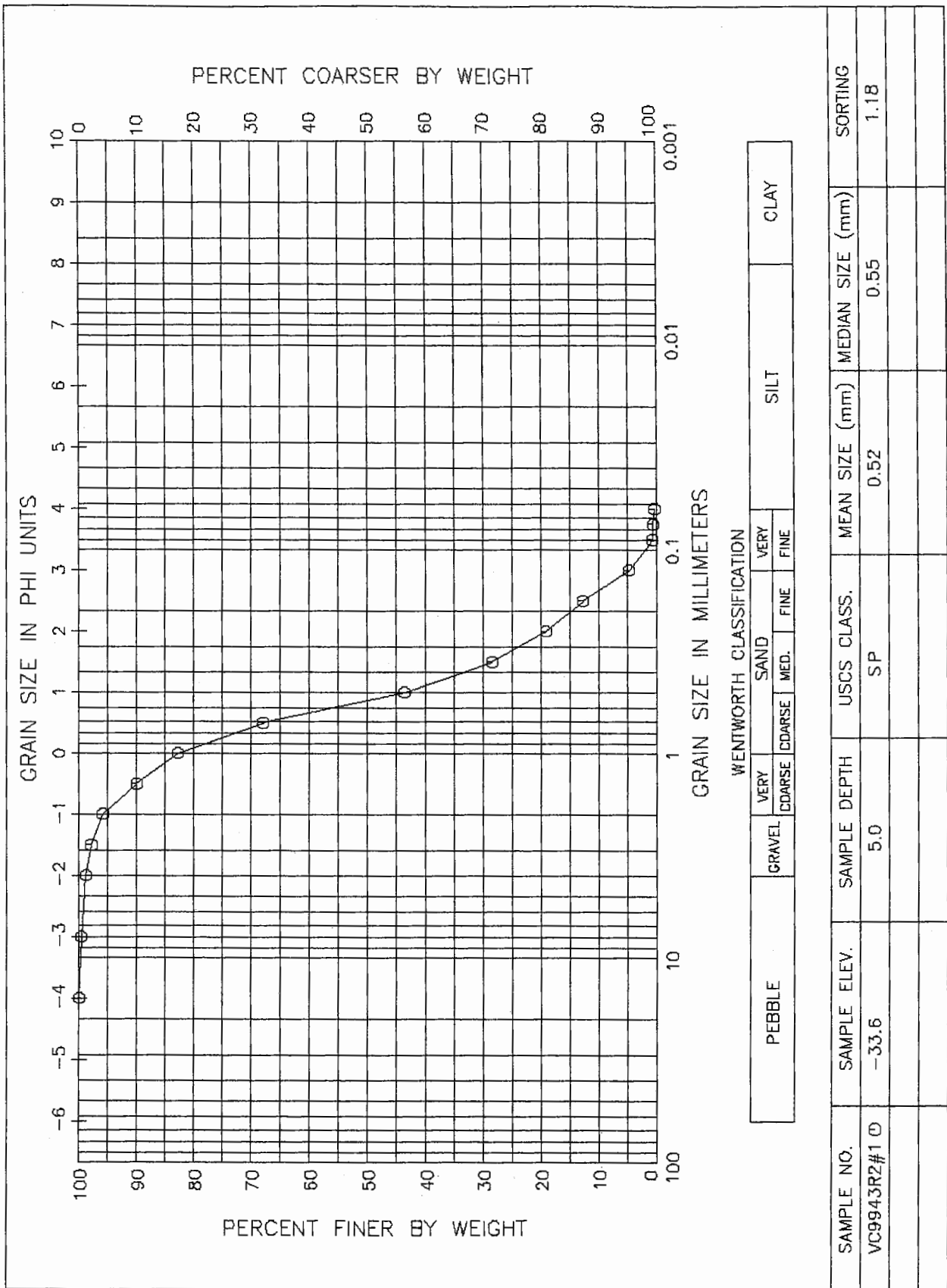
GRAPHIC METHOD

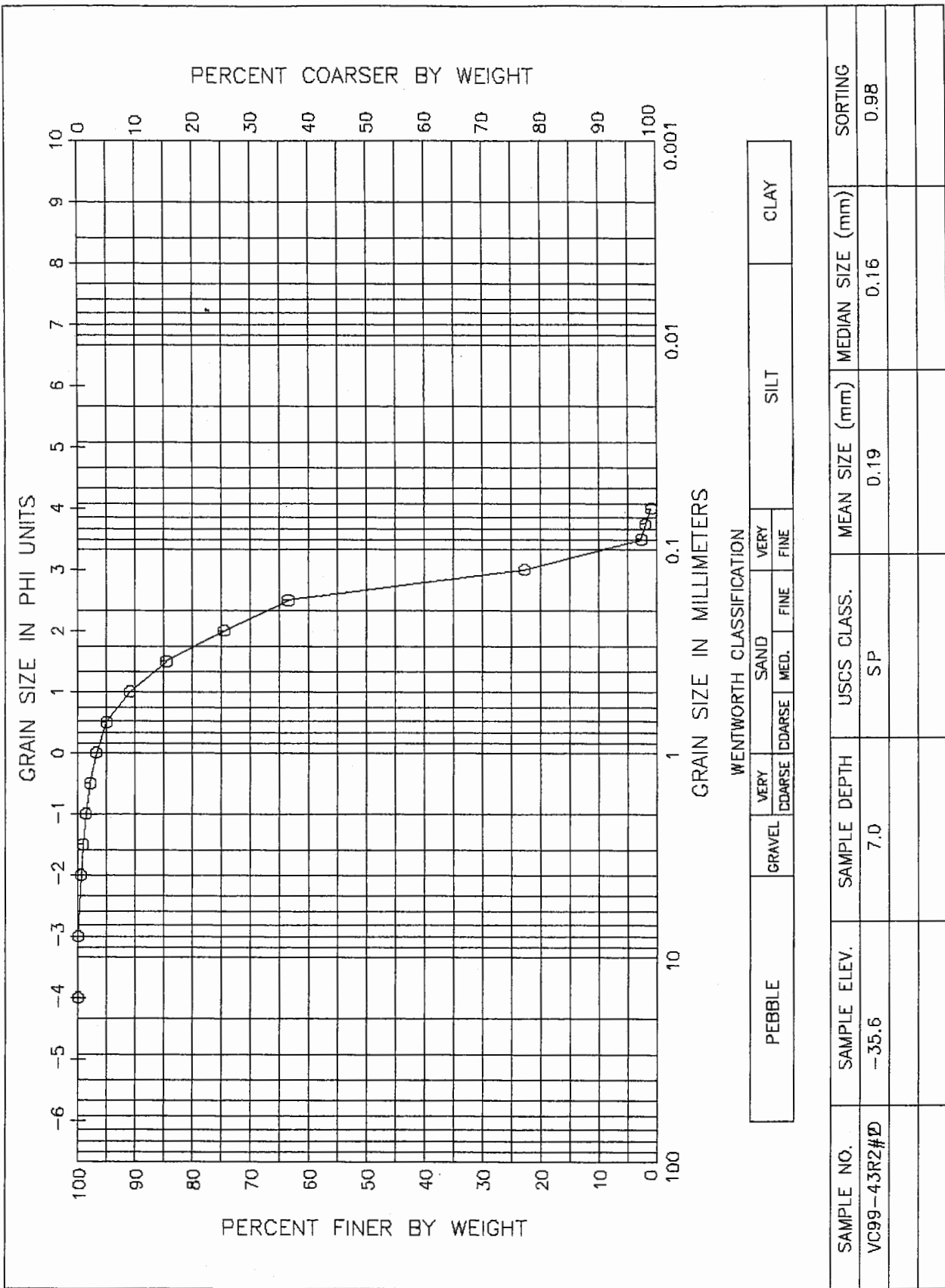
MEAN (PHI): 2.40	SORTING: 0.71
MEAN (mm): 0.19	MEDIAN (mm): 0.15
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD	

MOMENT METHOD

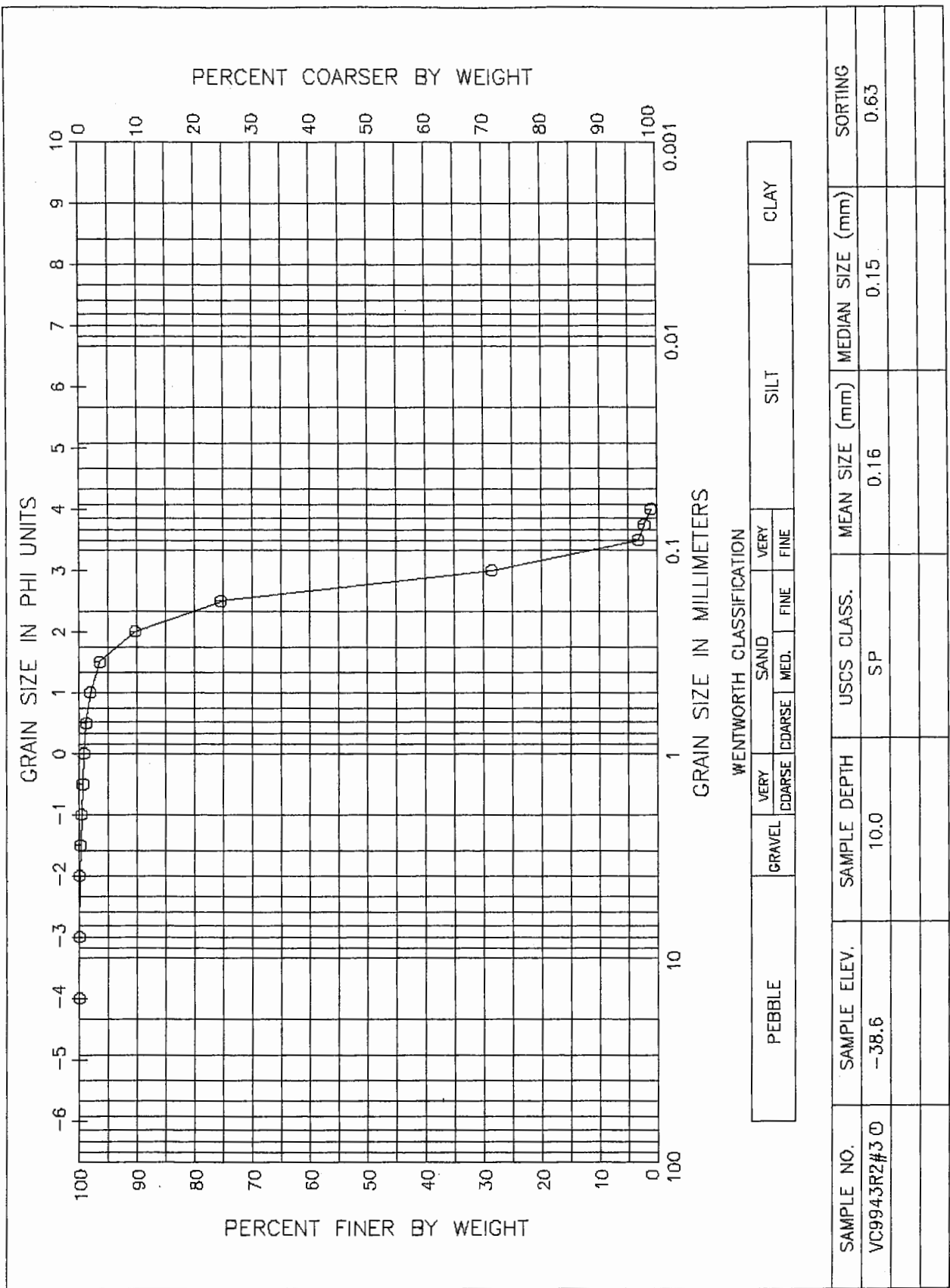
MEAN (PHI): 2.54	SORTING: 0.90
MEAN (mm): 0.17	

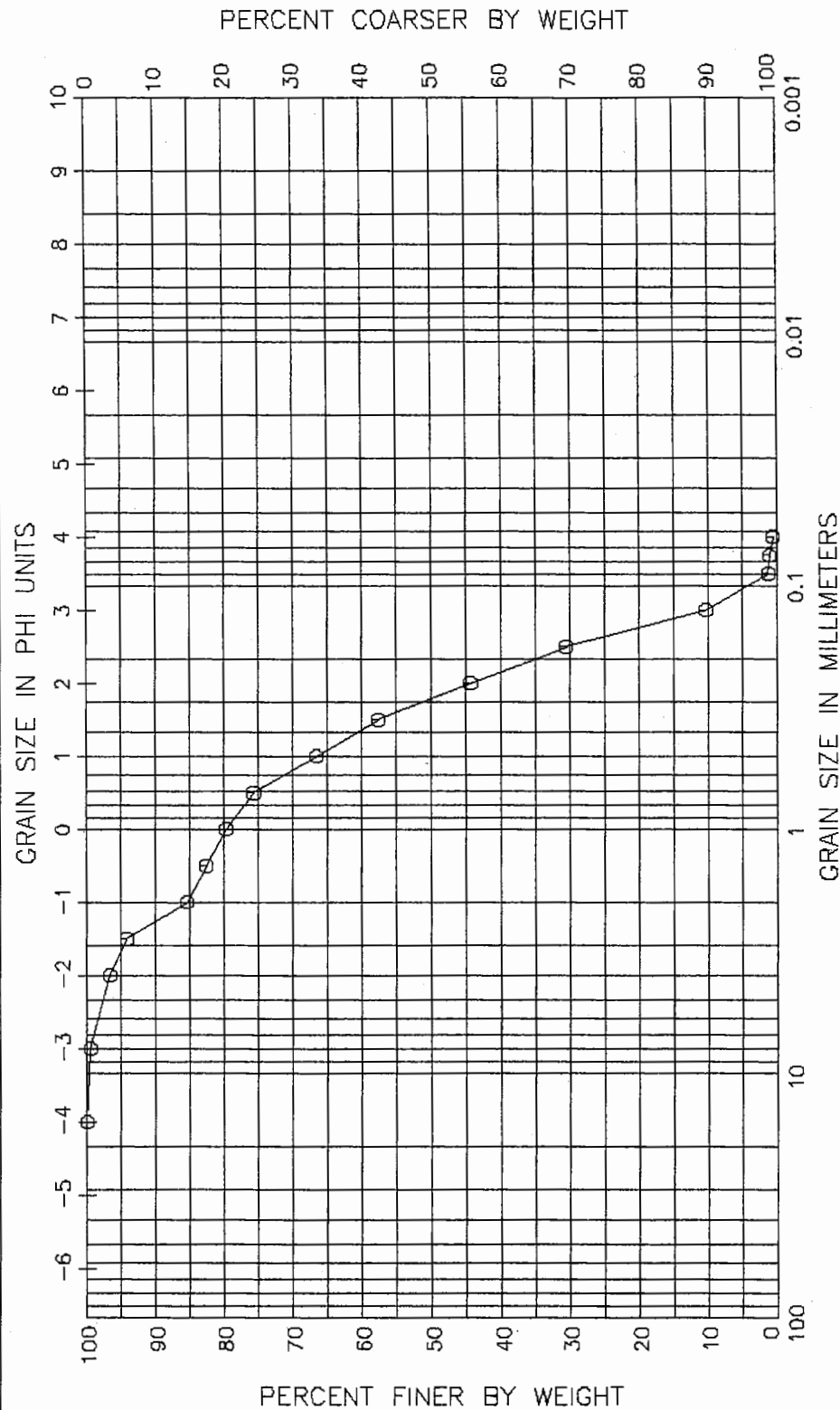
DATA FILE NAME: VC99-43R2#9.TAB





GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH



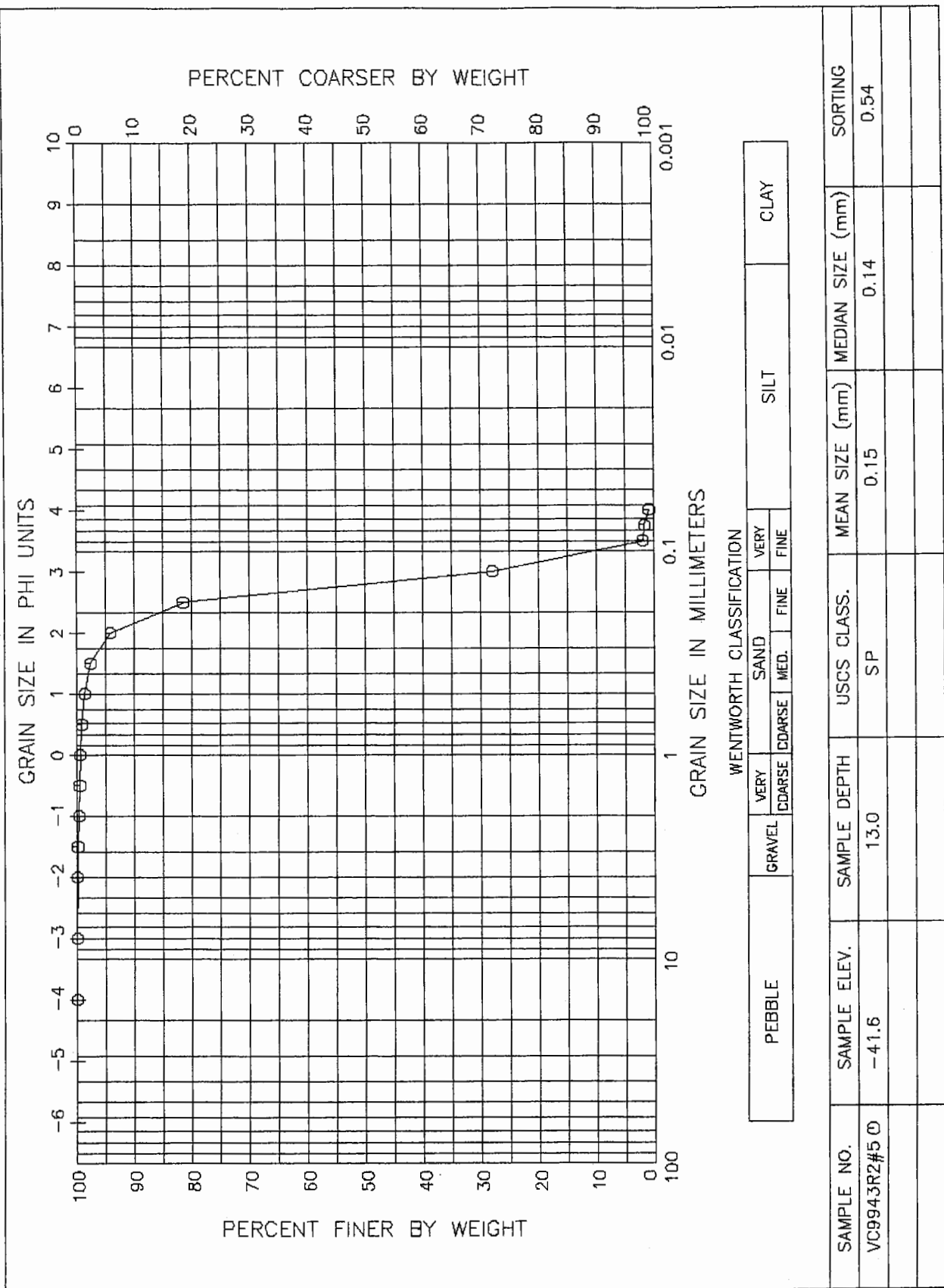


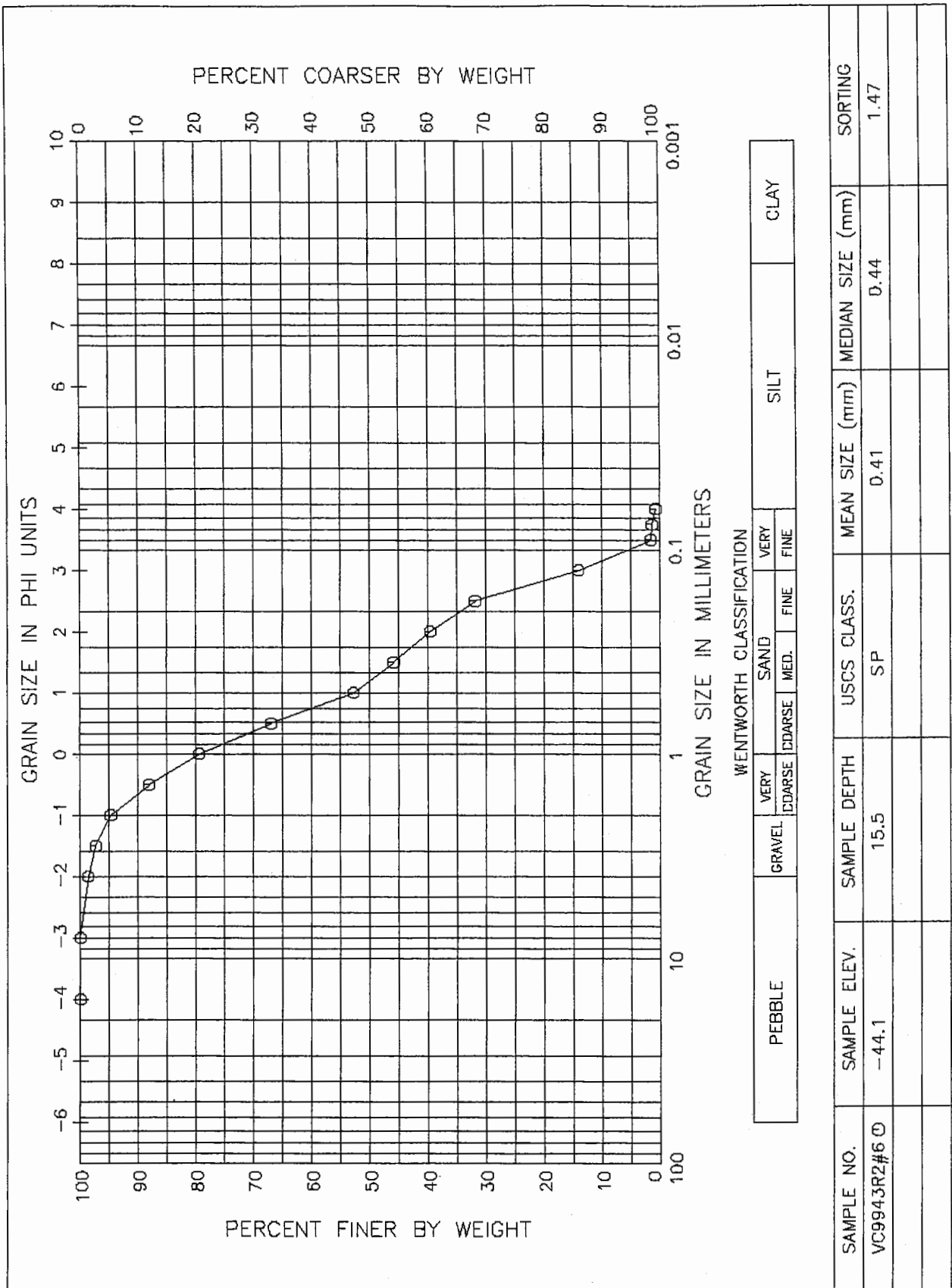
WENTWORTH CLASSIFICATION

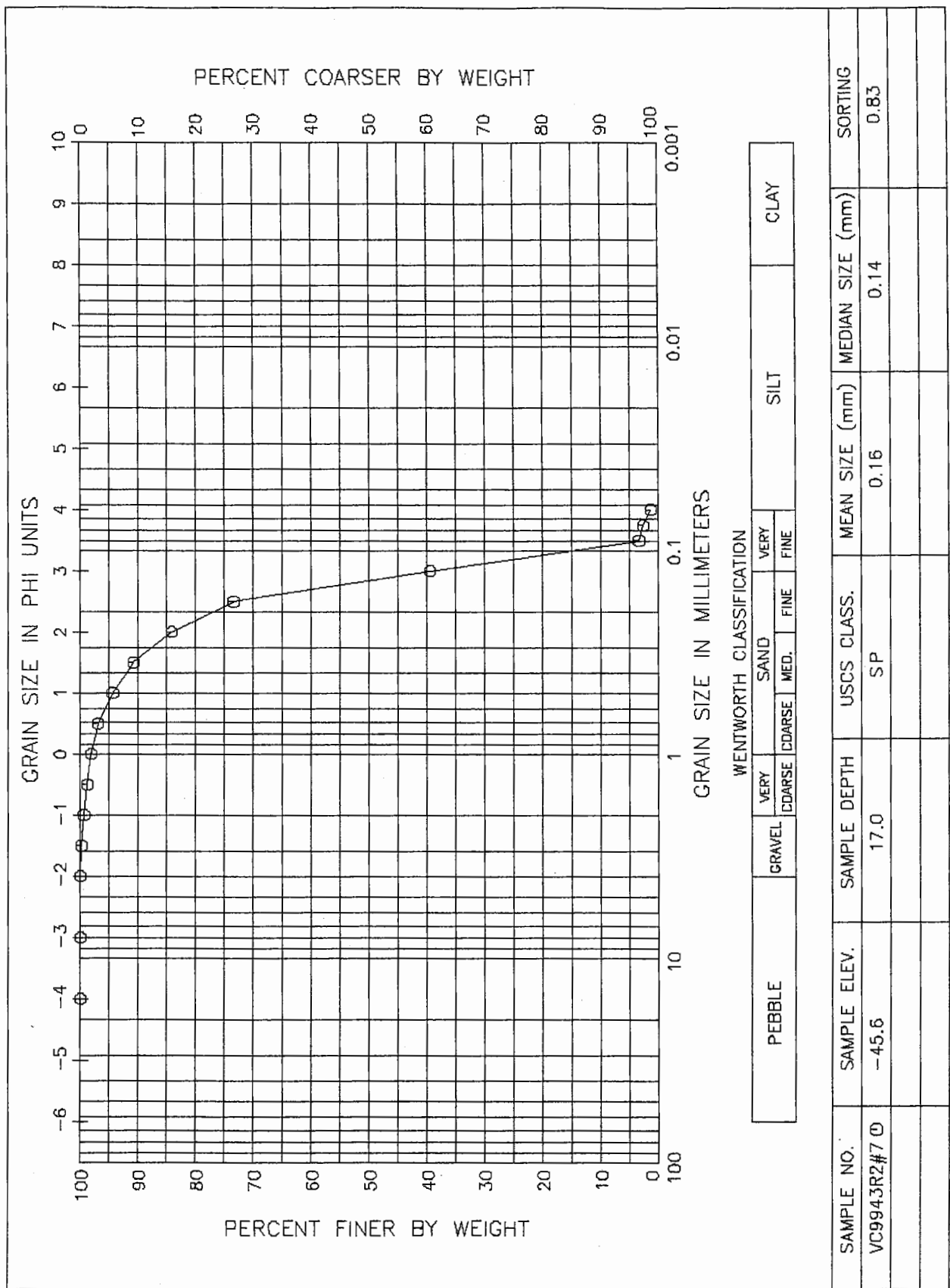
PEBBLE	GRAVEL	SAND				SILT	CLAY
		VERY COARSE	COARSE	MED.	FINE		

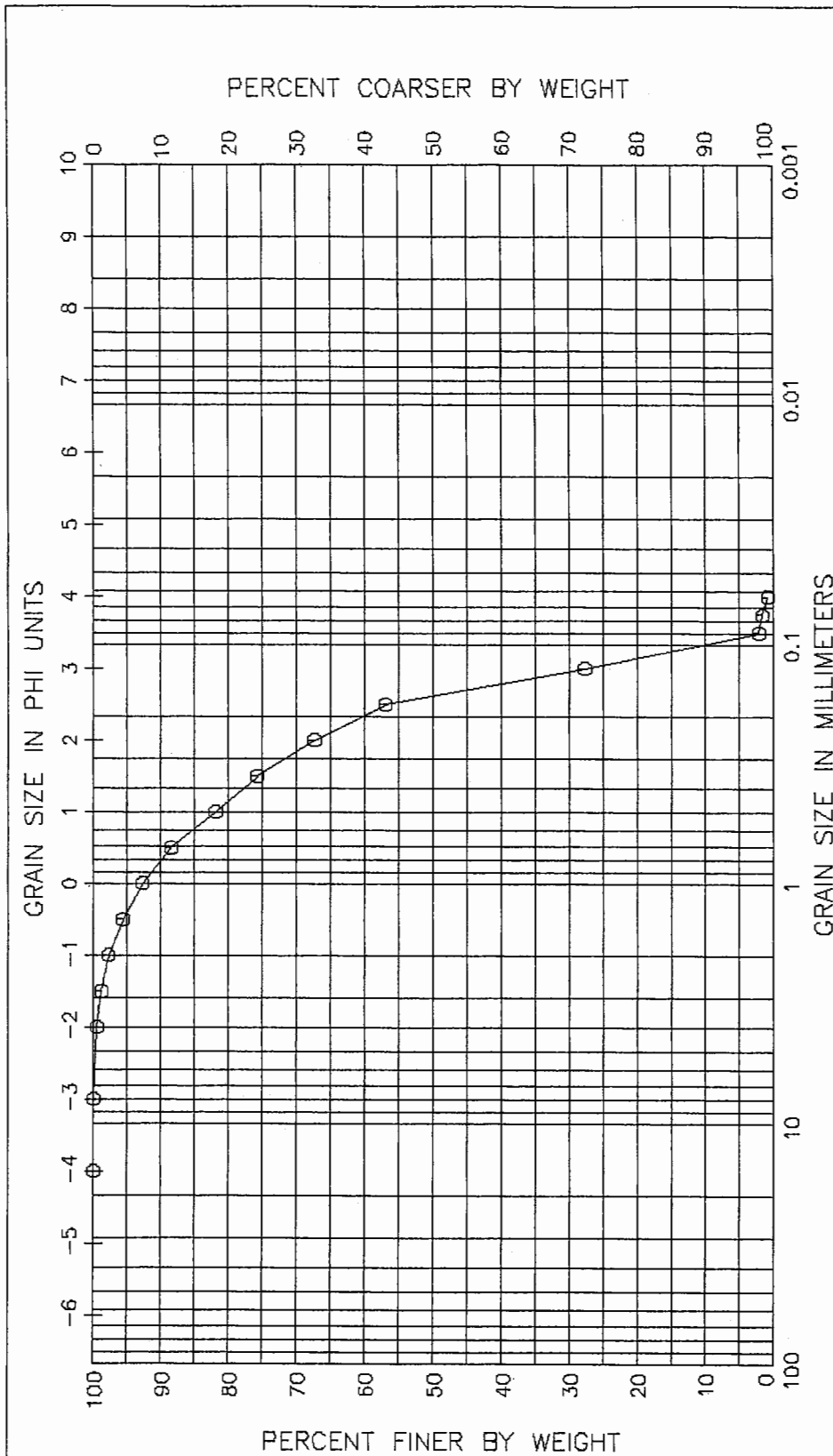
SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC9943R2#4	-40.2	11.6	SP	0.39	0.29	1.60

GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH

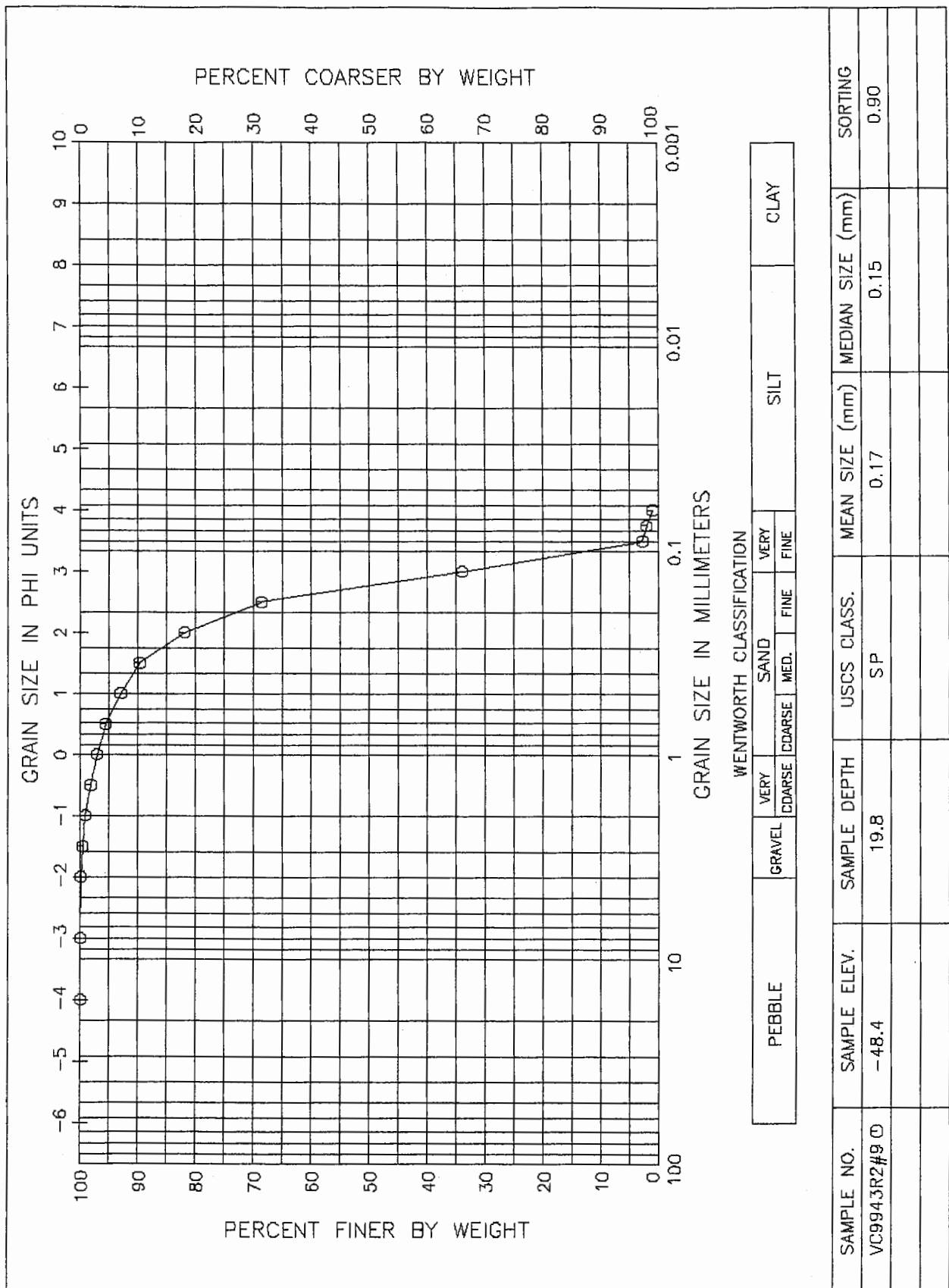








SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC9943R2#B 0	-47.1	18.5	SP	0.22	0.16	1.22



GRAIN SIZE DISTRIBUTION CURVE
TOWN OF PALM BEACH