

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

SAMPLE NO.: VC99-36 #1  
SAMPLE ELEV. (FT. NGVD): -35.4  
SAMPLE DEPTH (FT.): 1.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 205.61  
SAMPLE WEIGHT AFTER WASH (GRAMS): 203.00

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	1.26	0.61	99.39
5	-2.00	4.000	2.39	1.16	98.84
7	-1.50	2.800	3.38	1.64	98.36
10	-1.00	2.000	4.15	2.02	97.98
14	-0.50	1.400	5.39	2.62	97.38
18	0.00	1.000	6.44	3.13	96.87
25	0.50	0.710	7.99	3.89	96.11
35	1.00	0.500	9.95	4.84	95.16
45	1.50	0.355	12.63	6.14	93.86
60	2.00	0.250	19.39	9.43	90.57
80	2.50	0.180	31.96	15.54	84.46
120	3.00	0.125	129.61	63.04	36.96
170	3.50	0.090	200.97	97.74	2.26
200	3.75	0.075	202.71	98.59	1.41
230	4.00	0.063	204.27	99.35	0.65
PAN			205.61	100.00	0.00

PHI(5): 1.06 PHI(16): 2.50 PHI(25): 2.60  
PHI(50): 2.86 PHI(75): 3.17 PHI(84): 3.30  
PHI(95): 3.46

SIEVE LOSS(g): 0.00 SILT/CLAY: 1.41%  
SKEWNESS: -1.509 KURTOSIS: 1.716

GRAPHIC METHOD

MEAN (PHI): 2.64 SORTING: 0.40  
MEAN (mm): 0.16 MEDIAN (mm): 0.14  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.68 SORTING: 0.97  
MEAN (mm): 0.16

DATA FILE NAME: VC99-36#1.TAB

## GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW

ON: 6/17/99

SAMPLE NO.: VC99 36#2

SAMPLE ELEV. (FT. NGVD): -37.4

SAMPLE DEPTH (FT.): 3.0

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 190.65

SAMPLE WEIGHT AFTER WASH (GRAMS): 187.47

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	0.79	0.41	99.59
5	-2.00	4.000	1.02	0.54	99.46
7	-1.50	2.800	1.23	0.65	99.35
10	-1.00	2.000	1.46	0.77	99.23
14	-0.50	1.400	1.93	1.01	98.99
18	0.00	1.000	2.57	1.35	98.65
25	0.50	0.710	3.60	1.89	98.11
35	1.00	0.500	5.79	3.04	96.96
45	1.50	0.355	9.33	4.89	95.11
60	2.00	0.250	20.18	10.58	89.42
80	2.50	0.180	50.40	26.44	73.56
120	3.00	0.125	138.72	72.76	27.24
170	3.50	0.090	183.63	96.32	3.68
200	3.75	0.075	187.19	98.19	1.81
230	4.00	0.063	188.96	99.11	0.89
PAN			190.64	99.99	0.01

PHI(5): 1.51

PHI(16): 2.17

PHI(25): 2.45

PHI(50): 2.75

PHI(75): 3.05

PHI(84): 3.24

PHI(95): 3.47

SIEVE LOSS(g): 0.01

SILT/CLAY: 1.81%

SKEWNESS: -0.494

KURTOSIS: 1.357

## GRAPHIC METHOD

MEAN (PHI): 2.63

SORTING: 0.53

MEAN (mm): 0.16

MEDIAN (mm): 0.15

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 2.63

SORTING: 0.77

MEAN (mm): 0.16

DATA FILE NAME: VC99-36#2.TAB

## GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW

ON: 6/17/99

SAMPLE NO.: VC99 36#3

SAMPLE ELEV. (FT. NGVD): -38.8

SAMPLE DEPTH (FT.): 4.4

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 243.82

SAMPLE WEIGHT AFTER WASH (GRAMS): 239.96

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	0.95	0.39	99.61
7	-1.50	2.800	1.32	0.54	99.46
10	-1.00	2.000	1.74	0.71	99.29
14	-0.50	1.400	2.60	1.07	98.93
18	0.00	1.000	3.79	1.55	98.45
25	0.50	0.710	5.49	2.25	97.75
35	1.00	0.500	10.27	4.21	95.79
45	1.50	0.355	22.08	9.06	90.94
60	2.00	0.250	54.29	22.27	77.73
80	2.50	0.180	111.12	45.57	54.43
120	3.00	0.125	199.84	81.96	18.04
170	3.50	0.090	237.96	97.60	2.40
200	3.75	0.075	239.73	98.32	1.68
230	4.00	0.063	241.84	99.19	0.81
PAN			243.83	100.00	0.00

PHI(5): 1.08

PHI(16): 1.76

PHI(25): 2.06

PHI(50): 2.56

PHI(75): 2.90

PHI(84): 3.07

PHI(95): 3.42

SIEVE LOSS(g): -0.01

SILT/CLAY: 1.68%

SKEWNESS: -0.479

KURTOSIS: 1.132

## GRAPHIC METHOD

MEAN (PHI): 2.38

SORTING: 0.65

MEAN (mm): 0.19

MEDIAN (mm): 0.17

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 2.40

SORTING: 0.78

MEAN (mm): 0.19

DATA FILE NAME: VC99-36#3.TAB

## GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/17/99

SAMPLE NO.: VC99 36#4

SAMPLE ELEV. (FT. NGVD): -40.2

SAMPLE DEPTH (FT.): 5.8

SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 185.73

SAMPLE WEIGHT AFTER WASH (GRAMS): 183.89

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	1.47	0.79	99.21
7	-1.50	2.800	2.99	1.61	98.39
10	-1.00	2.000	5.66	3.05	96.95
14	-0.50	1.400	12.07	6.50	93.50
18	0.00	1.000	20.40	10.98	89.02
25	0.50	0.710	35.29	19.00	81.00
35	1.00	0.500	61.74	33.24	66.76
45	1.50	0.355	86.85	46.76	53.24
60	2.00	0.250	114.83	61.83	38.17
80	2.50	0.180	138.83	74.75	25.25
120	3.00	0.125	168.11	90.51	9.49
170	3.50	0.090	182.47	98.24	1.76
200	3.75	0.075	183.68	98.90	1.10
230	4.00	0.063	184.67	99.43	0.57
PAN			185.73	100.00	0.00

PHI (5): -0.72	PHI (16): 0.31	PHI (25): 0.71
PHI (50): 1.61	PHI (75): 2.51	PHI (84): 2.79
PHI (95): 3.29		

SIEVE LOSS (g): 0.00	SILT/CLAY: 1.10%
SKEWNESS: -0.259	KURTOSIS: 0.914

## GRAPHIC METHOD

MEAN (PHI): 1.46	SORTING: 1.24
MEAN (mm): 0.36	MEDIAN (mm): 0.33

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 1.50	SORTING: 1.22
MEAN (mm): 0.35	

DATA FILE NAME: VC99-36#4.TAB

## GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/17/99

SAMPLE NO.: VC99 36#5  
SAMPLE ELEV. (FT. NGVD): -43.4  
SAMPLE DEPTH (FT.): 9.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 238.68  
SAMPLE WEIGHT AFTER WASH (GRAMS): 234.71

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	1.01	0.42	99.58
7	-1.50	2.800	2.13	0.89	99.11
10	-1.00	2.000	3.93	1.65	98.35
14	-0.50	1.400	6.34	2.66	97.34
18	0.00	1.000	9.41	3.94	96.06
25	0.50	0.710	14.88	6.23	93.77
35	1.00	0.500	26.70	11.19	88.81
45	1.50	0.355	44.70	18.73	81.27
60	2.00	0.250	68.75	28.80	71.20
80	2.50	0.180	109.58	45.91	54.09
120	3.00	0.125	195.69	81.99	18.01
170	3.50	0.090	233.29	97.74	2.26
200	3.75	0.075	234.11	98.09	1.91
230	4.00	0.063	236.41	99.05	0.95
PAN			238.66	99.99	0.01

PHI(5): 0.23 PHI(16): 1.32 PHI(25): 1.81  
PHI(50): 2.56 PHI(75): 2.90 PHI(84): 3.06  
PHI(95): 3.41

SIEVE LOSS(g): 0.02 SILT/CLAY: 1.91%  
SKEWNESS: -0.842 KURTOSIS: 1.194

## GRAPHIC METHOD

MEAN (PHI): 2.12 SORTING: 0.87  
MEAN (mm): 0.23 MEDIAN (mm): 0.17

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

## MOMENT METHOD

MEAN (PHI): 2.23 SORTING: 1.01  
MEAN (mm): 0.21

DATA FILE NAME: VC99-36#5.TAB

## GRADATION ANALYSIS REPORT

TOWN OF PALM BEACH

TESTED BY: RW ON: 6/17/99

SAMPLE NO.: VC99 36#6  
SAMPLE ELEV. (FT. NGVD): -49.4  
SAMPLE DEPTH (FT.): 15.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 250.64  
SAMPLE WEIGHT AFTER WASH (GRAMS): 247.16

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	0.09	0.04	99.96
7	-1.50	2.800	0.19	0.08	99.92
10	-1.00	2.000	0.47	0.19	99.81
14	-0.50	1.400	0.84	0.34	99.66
18	0.00	1.000	1.22	0.49	99.51
25	0.50	0.710	1.72	0.69	99.31
35	1.00	0.500	2.83	1.13	98.87
45	1.50	0.355	5.12	2.04	97.96
60	2.00	0.250	13.84	5.52	94.48
80	2.50	0.180	46.79	18.67	81.33
120	3.00	0.125	147.77	58.96	41.04
170	3.50	0.090	244.17	97.42	2.58
200	3.75	0.075	246.69	98.42	1.58
230	4.00	0.063	248.68	99.22	0.78
PAN			250.62	99.99	0.01

PHI(5): 1.93 PHI(16): 2.40 PHI(25): 2.58  
PHI(50): 2.89 PHI(75): 3.21 PHI(84): 3.33  
PHI(95): 3.47

SIEVE LOSS(g): 0.02 SILT/CLAY: 1.58%  
SKEWNESS: -0.414 KURTOSIS: 1.004

## GRAPHIC METHOD

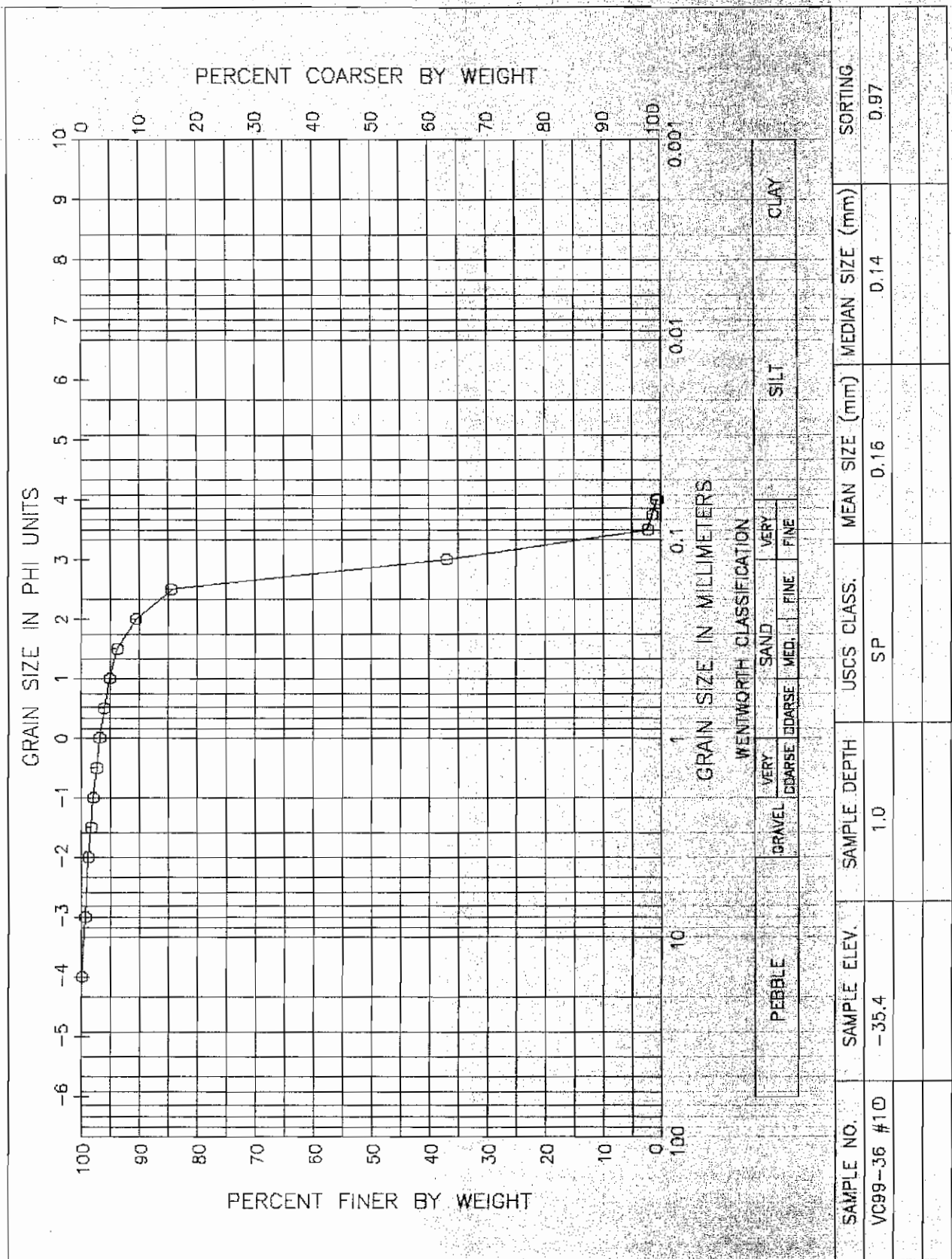
MEAN (PHI): 2.80 SORTING: 0.46  
MEAN (mm): 0.14 MEDIAN (mm): 0.14

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

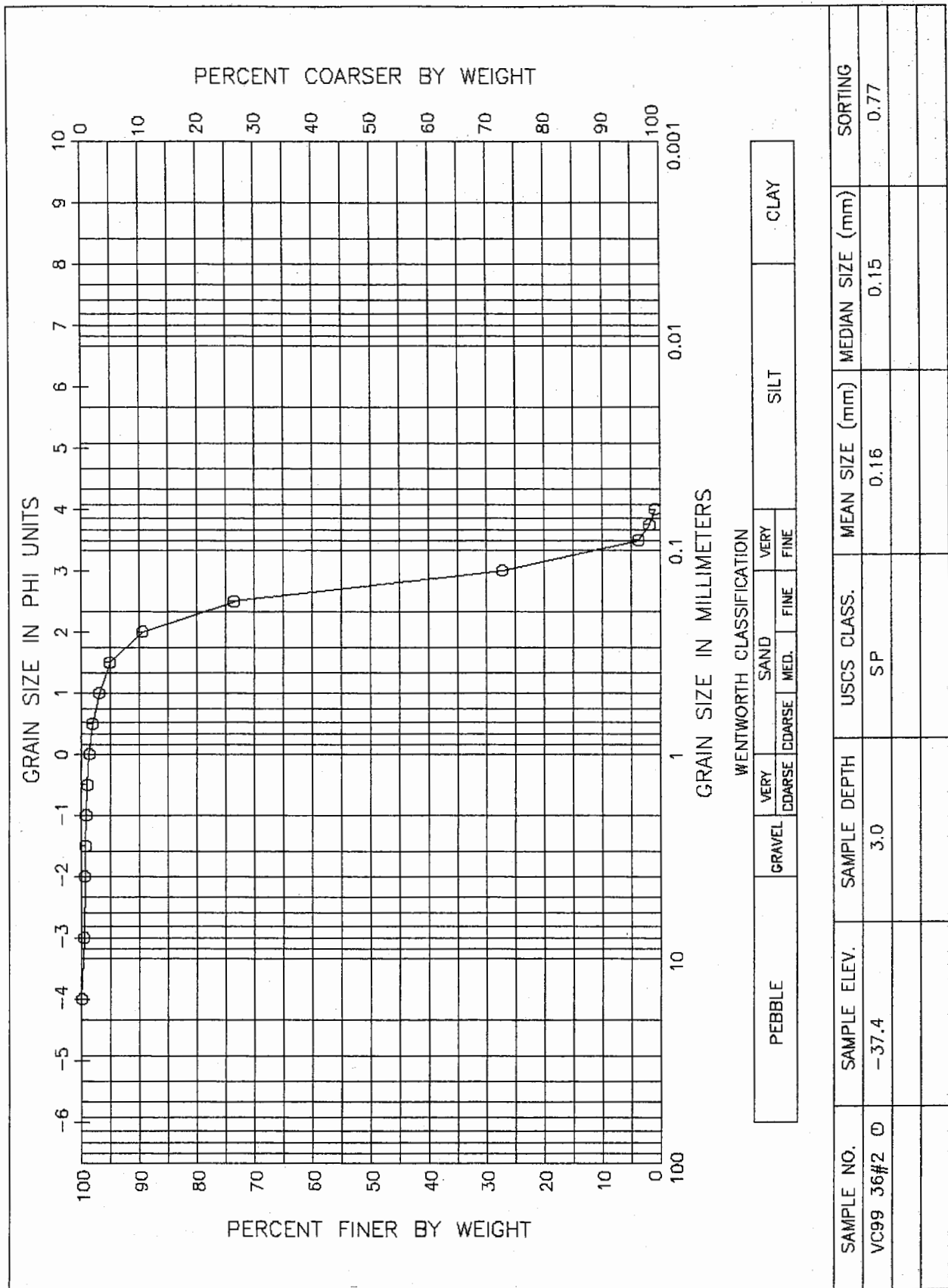
## MOMENT METHOD

MEAN (PHI): 2.81 SORTING: 0.55  
MEAN (mm): 0.14

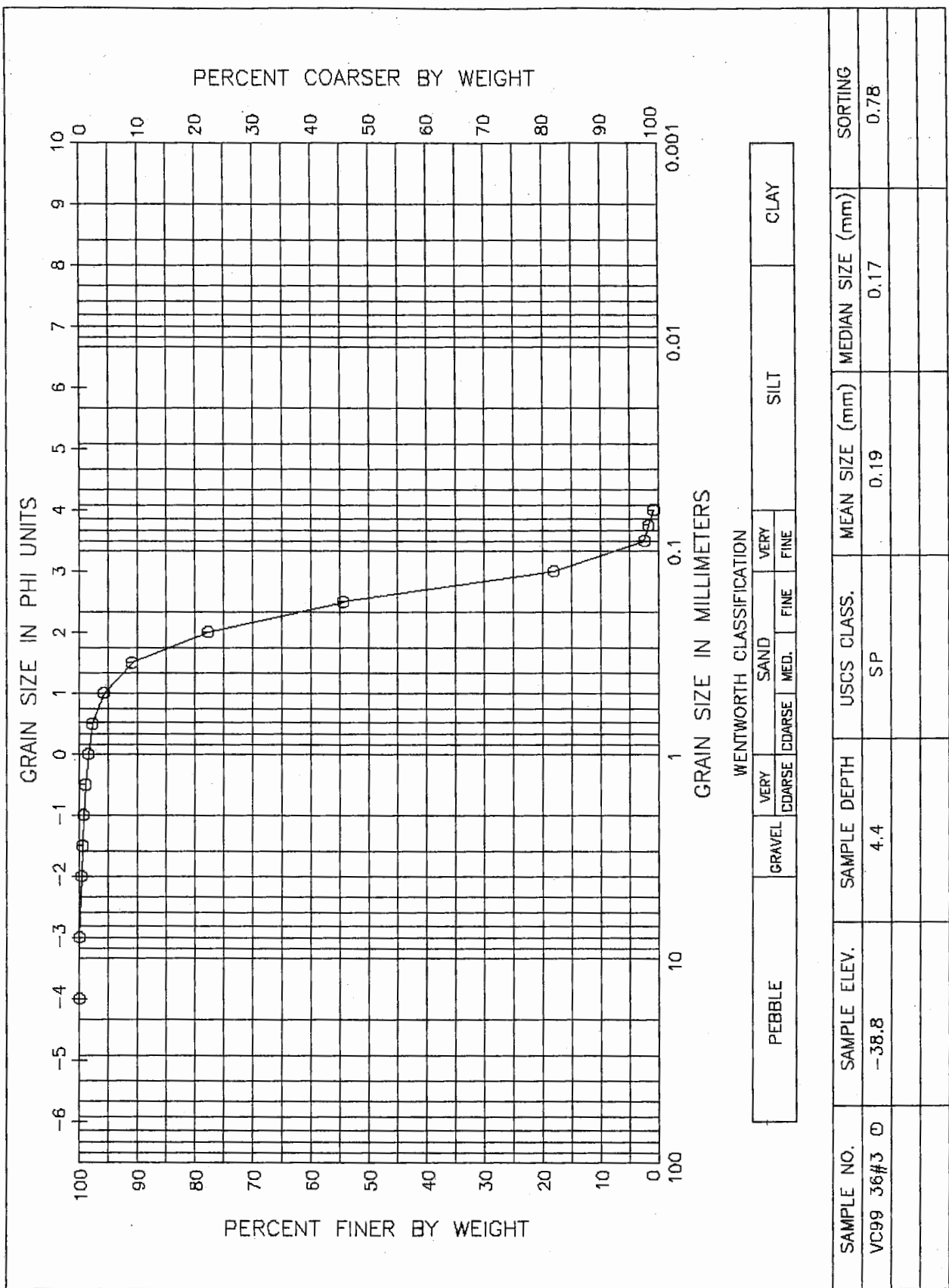
DATA FILE NAME: VC99-36#6.TAB



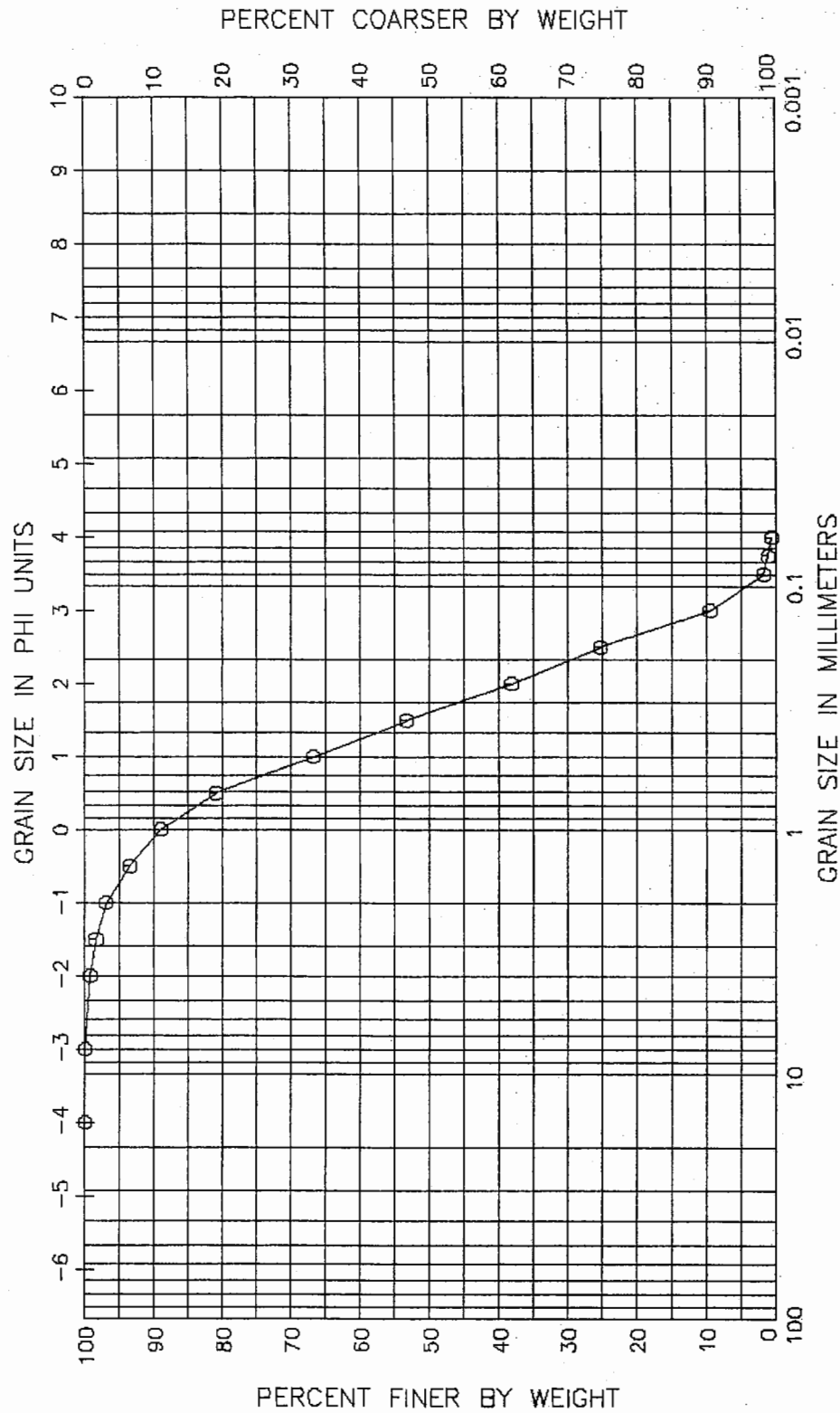
GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH







GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH



WENTWORTH CLASSIFICATION

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

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
VC99 36#4 ①	-40.2	5.8	SP	0.35	0.33	1.22

GRAIN SIZE DISTRIBUTION CURVE  
TOWN OF PALM BEACH

