

VIBRACORE LOG							
PROJECT: <u>NORTH BOCA RATON BORROW AREA (1994)</u>				CORE NO: <u>NBR - 10</u>			
COORDINATES:		DATE: SEPT. 24, 1994		WATER DEPTH: 55.0 FL NGVD			
N = 741775		START TIME: 1603		DRILLER: EXMAR			
E = 807918		END TIME: 1634		CLIENT REP : M. ANDREWS			
CORE DIAMETER: 3.0" LENGTH OF BARREL: 20.0' PENETRATION DEPTH: 19.0' LENGTH RECOVERED: 17.2' PERCENT RECOVERED: 80 % LENGTH RETAINED : 17.2'	ELEV.	DEPTH	LEGEND	DESCRIPTION	SAMP NO.	REMARKS	
	55.0'	0.0					
	56.0'		---	GRAY, MEDIUM QUARTZOSE SAND WITH GRAY & BLACK CALCAREOUS SHELL HASH	1 1.0'	2.25 Phi 0.21 mm 1.2 % SILT (SP)	
SUPPORT VESSEL: SEAWARD EXPLORER POSITIONING: DGPS MOTOROLA LGT 1000 / OMNISTAR DGPS	58.0'		---		2 4.0'	CUT 1.39 Phi 0.27 mm 1.5 % SILT (SP)	
<u>WEATHER:</u> <u>WIND:</u> DIR: SOUTH SPEED: 10-15 Kt <u>WAVES:</u> DIR: SOUTH HEIGHT: 2-4 FL <u>CURRENT:</u> DIR: SOUTH SPEED: STRONG	63.0'		---	GRAY, MEDIUM QUARTZOSE SAND WITH GRAY & BLACK CALCAREOUS SHELL HASH	3 8.0'	CUT 1.55 Phi 0.34 mm 2.1 % SILT (SP)	
		10.0	---	GRAY, MEDIUM QUARTZOSE SAND WITH GRAY & BLACK CALCAREOUS SHELL HASH		CUT	
			---	GRAY, MEDIUM QUARTZOSE SAND WITH GRAY & BLACK CALCAREOUS SHELL HASH			
		15.0	---	GRAY, MEDIUM QUARTZOSE SAND WITH GRAY & BLACK CALCAREOUS SHELL HASH			

	74.0'	19.0'	---				
		20.0					

SAND

SHELLS

CORAL FRAG.

SHELL FRASH

ROCK

NOTE: MEAN WAS CALCULATED USING MOMENT METHOD
 NOTE: COORDINATE SYSTEM - FLORIDA STATE PLANE NAD 1927
 NOTE : CORE WEIGHTED COMPOSITE 0.30 mm

COASTAL PLANNING & ENGINEERING, INC

GRADATION ANALYSIS REPORT
N. BOCA RATON VIBRACORE 9-94
TESTED BY: MDA ON: 11-14-94

SAMPLE NO.: NBR10 S#1
SAMPLE ELEV. (FT. NGVD): -56.0
SAMPLE DEPTH (FT.): -1.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 77.26
SAMPLE WEIGHT AFTER WASH (GRAMS): 76.36

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.0	16.000	.00	.00	100.00
5/16	-3.0	8.000	.00	.00	100.00
5	-2.0	4.000	.00	.00	100.00
7	-1.5	2.800	.00	.00	100.00
10	-1.0	2.000	.16	.21	99.79
14	-0.5	1.400	.38	.49	99.51
18	0.0	1.000	.74	.96	99.04
25	0.5	.710	1.47	1.90	98.10
35	1.0	.500	2.76	3.57	96.43
45	1.5	.355	6.32	8.18	91.82
60	2.0	.250	19.52	25.27	74.73
80	2.5	.180	49.20	63.68	36.32
120	3.0	.125	73.33	94.91	5.09
170	3.5	.090	76.27	98.72	1.28
200	3.75	.075	76.31	98.77	1.23
230	4.0	.063	76.77	99.37	.63
PAN			77.23	99.96	.04

PHI(5): 1.15 PHI(16): 1.73 PHI(25): 1.99
PHI(50): 2.32 PHI(75): 2.68 PHI(84): 2.83
PHI(95): 3.01

SIEVE LOSS(g): .03 SILT/CLAY: 1.23%
SKEWNESS: -.478 KURTOSIS: 1.104

GRAPHIC METHOD

MEAN (PHI): 2.21 SORTING: .55
MEAN (mm) : .22 MEDIAN (mm): .20
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.25 SORTING: .62
MEAN (mm) : .21

DATA FILE NAME: A:VC10S#1.TAB

GRADATION ANALYSIS REPORT
N. BOCA RATON VIBRACORE 9-94
TESTED BY: MDA ON: 11-14-94

SAMPLE NO.: NBR10 S#2
SAMPLE ELEV. (FT. NGVD): -59.0
SAMPLE DEPTH (FT.): -4.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 79.68
SAMPLE WEIGHT AFTER WASH (GRAMS): 78.50

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.0	16.000	.00	.00	100.00
5/16	-3.0	8.000	.00	.00	100.00
5	-2.0	4.000	.00	.00	100.00
7	-1.5	2.800	.08	.10	99.90
10	-1.0	2.000	.26	.33	99.67
14	-0.5	1.400	.73	.92	99.08
18	0.0	1.000	1.24	1.56	98.44
25	0.5	.710	2.67	3.35	96.65
35	1.0	.500	7.50	9.41	90.59
45	1.5	.355	16.61	20.85	79.15
60	2.0	.250	42.69	53.58	46.42
80	2.5	.180	66.53	83.50	16.50
120	3.0	.125	77.29	97.00	3.00
170	3.5	.090	78.44	98.44	1.56
200	3.75	.075	78.47	98.48	1.52
230	4.0	.063	79.07	99.23	.77
PAN			79.67	99.99	.01

PHI(5): .64 PHI(16): 1.29 PHI(25): 1.56
PHI(50): 1.95 PHI(75): 2.36 PHI(84): 2.52
PHI(95): 2.93

SIEVE LOSS(g): .01 SILT/CLAY: 1.52%
SKEWNESS: -.329 KURTOSIS: 1.181

GRAPHIC METHOD

MEAN (PHI): 1.86 SORTING: .62
MEAN (mm): .27 MEDIAN (mm): .26
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.89 SORTING: .70
MEAN (mm): .27

DATA FILE NAME: A:VC10S#2.TAB

GRADATION ANALYSIS REPORT
N. BOCA RATON VIBRACORE 9-94
TESTED BY: MDA ON: 11-14-94

SAMPLE NO.: NBR10 S#3
SAMPLE ELEV. (FT. NGVD): -63.0
SAMPLE DEPTH (FT.): -8.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 65.44
SAMPLE WEIGHT AFTER WASH (GRAMS): 64.11

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.0	16.000	.00	.00	100.00
5/16	-3.0	8.000	.00	.00	100.00
5	-2.0	4.000	.67	1.02	98.98
7	-1.5	2.800	1.15	1.76	98.24
10	-1.0	2.000	1.43	2.19	97.81
14	-0.5	1.400	2.39	3.65	96.35
18	0.0	1.000	3.54	5.41	94.59
25	0.5	.710	6.36	9.72	90.28
35	1.0	.500	13.32	20.35	79.65
45	1.5	.355	23.68	36.19	63.81
60	2.0	.250	45.43	69.42	30.58
80	2.5	.180	59.63	91.12	8.88
120	3.0	.125	63.59	97.17	2.83
170	3.5	.090	64.03	97.85	2.15
200	3.75	.075	64.07	97.91	2.09
230	4.0	.063	64.75	98.94	1.06
PAN			65.41	99.95	.05

PHI(5):	-.12	PHI(16):	.80	PHI(25):	1.15
PHI(50):	1.71	PHI(75):	2.13	PHI(84):	2.34
PHI(95):	2.82				

SIEVE LOSS(g):	.03	SILT/CLAY:	2.09%
SKEWNESS:	-.712	KURTOSIS:	1.226

GRAPHIC METHOD

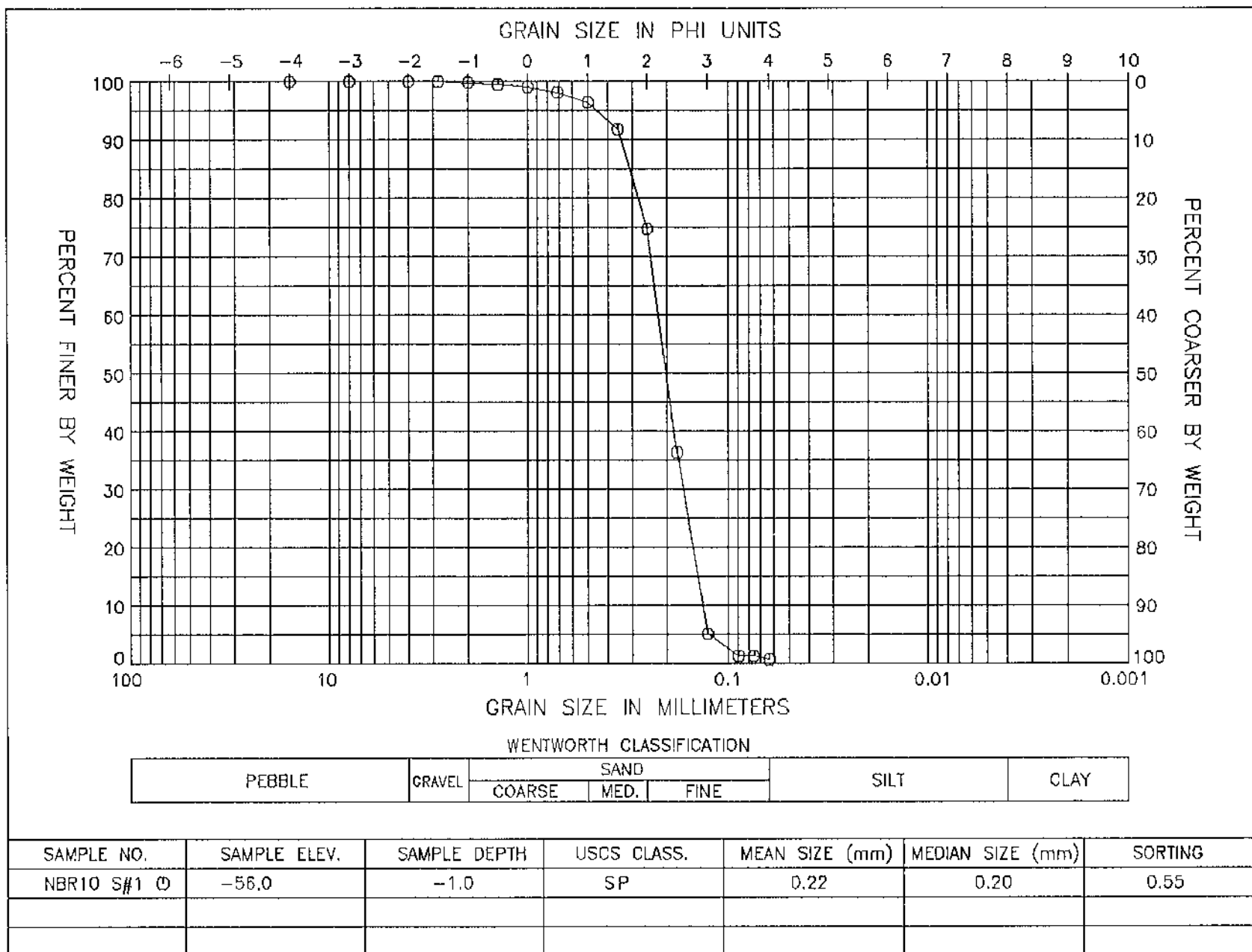
MEAN (PHI):	1.51	SORTING:	.77
MEAN (mm):	.35	MEDIAN (mm):	.31
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD			

MOMENT METHOD

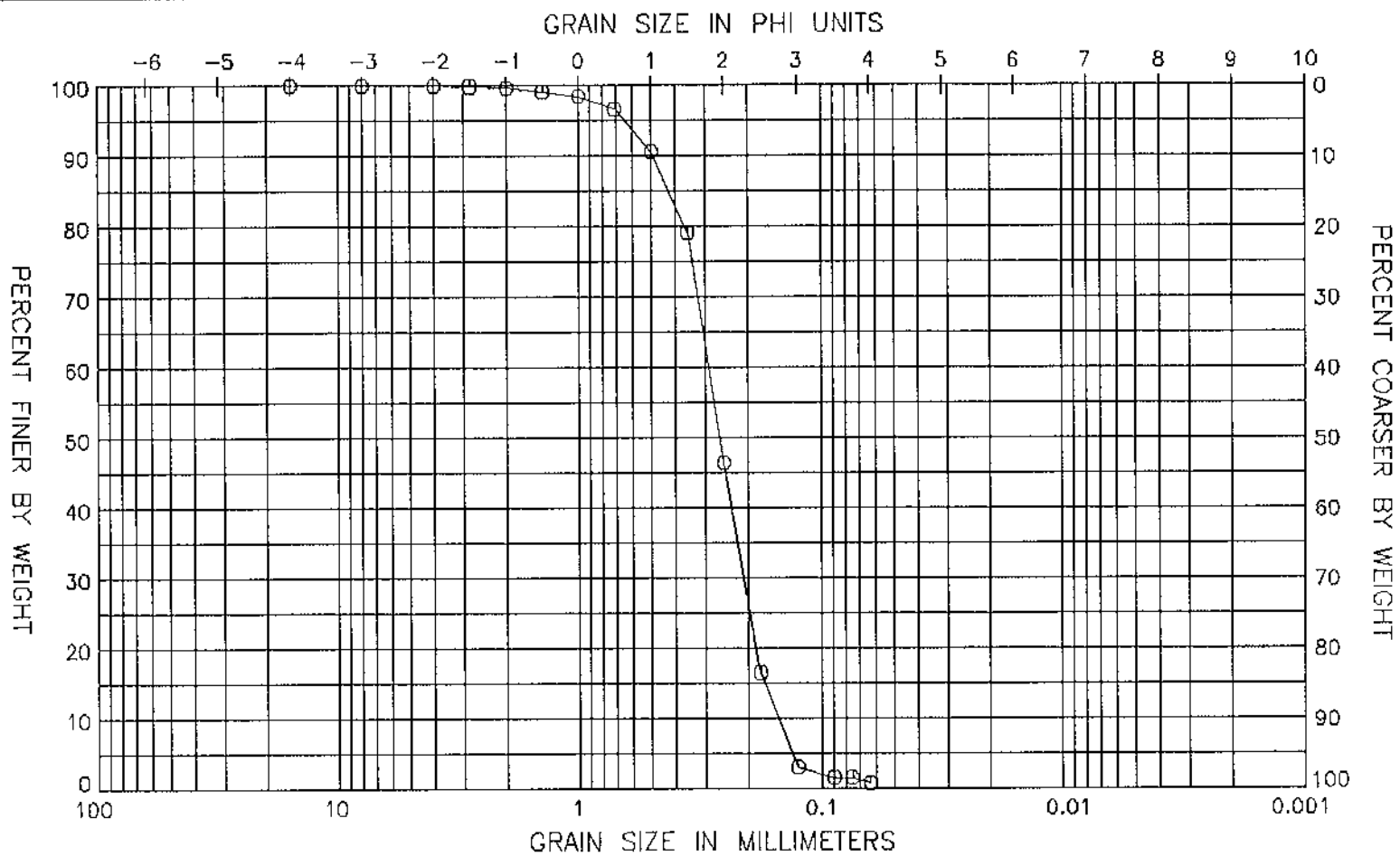
MEAN (PHI):	1.55	SORTING:	.93
MEAN (mm):	.34		

DATA FILE NAME: A:VC10S#3.TAB

GRAIN SIZE DISTRIBUTION CURVE
N. BOCA RATON VIBRACORE 9-94



GRAIN SIZE DISTRIBUTION CURVE
N. BOCA RATON VIBRACORE 9-94



WENTWORTH CLASSIFICATION						
PEBBLE	GRAVEL	SAND			SILT	CLAY
		COARSE	MED.	FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
NBR10 S#2 ①	-59.0	-4.0	SP	0.27	0.26	0.62

GRAIN SIZE DISTRIBUTION CURVE
N. BOCA RATON VIBRACORE 9-94

