

DRILLING LOG		DIVISION South Atlantic		INSTALLATION Jacksonville District		SHEET 1 OF 1	
1. PROJECT MARTIN COUNTY 999				10. SIZE AND TYPE OF BIT 4" VIBRACORE			
2. LOCATION (Coordinates or Station) X-778420.800 Y-1043411.700				11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MLLW			
3. DRILLING AGENCY Applied Technology and Management, Inc.				12. MANUFACTURER'S DESIGNATION OF DRILL PNEUMATIC VIBRACORE			
4. HOLE NO. (As shown on drawing title and file number) MC-5				13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN disturbed: 5 undisturbed: 0			
5. NAME OF DRILLER Mike Barnett, P.E.				14. TOTAL NUMBER OF CORE BOXES 2			
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED				15. ELEVATION GROUND WATER			
7. THICKNESS OF BURDEN 0 Ft.				16. DATE HOLE STARTED COMPLETED 7/30/99 7/30/99			
8. DEPTH DRILLED INTO ROCK 0 Ft.				17. ELEVATION TOP OF HOLE -29.2 Ft.			
9. TOTAL DEPTH OF HOLE 20.3 Ft.				18. TOTAL CORE RECOVERY FOR BORING 100 %			
				19. SIGNATURE OF G. ZARILLO, SEA, INC			

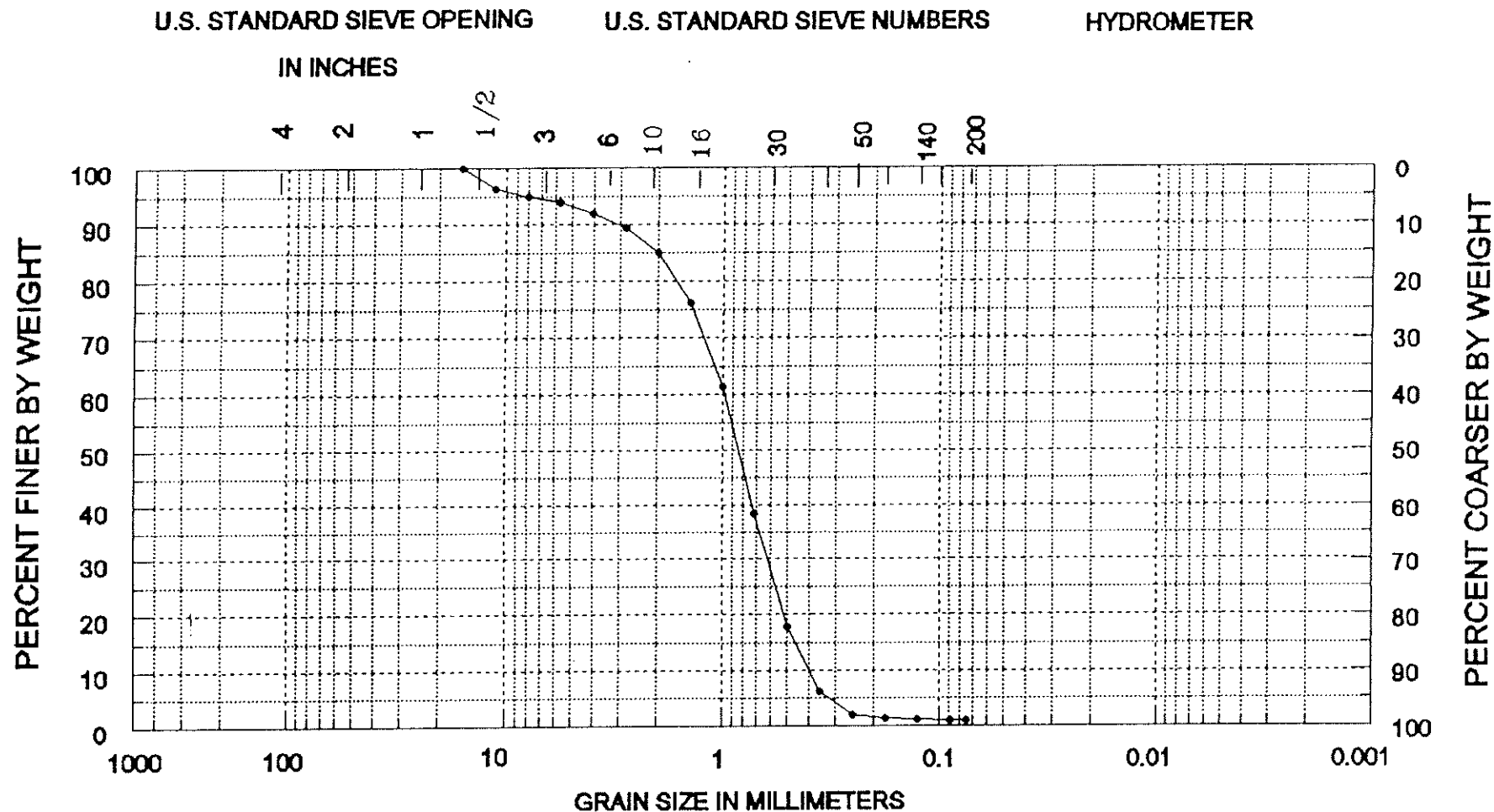
ELEV.	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	CORE REC %	SAMPLE NUMBER	REMARKS
-29.2	0					-29.2
			Tan medium sand and coarse shell material. (SP)		0.5	
-30.8	1.6			100		
			Tan medium sand, coarse shell material, whole shells to 2 inches.		4.0	
						-34.2
				100	8.0	
-38.5	9.3					
			Grey fine sand, shell fragments to 1/2 inch. (SP)			-39.2
-40.7	11.5					
-41.6	12.4		Grey very fine sand and silt. (SM)			
			Light grey fine sand and coarse shell material, whole shells to 1.5 inches. (SP)	100	13.5	
						-44.2
				100	17.5	
-48.8	19.6					
-49.2	20.0		Grey plastic mud. (CL)			
-49.5	20.3		Grey medium sand and coarse shells. (SW)			-49.7
						Composite 0-20 ft.

Sediment Analysis Data Sheet

Sample MC-5-0.5

Sieve	Size (mm)	Phi size	Wt %	Wt %	Cuml %	Folk	Statistics phi mm
	16.00	-4.00	0.00	0.00	0.00		
	11.31	-3.50	0.91	3.82	3.82		
	8.00	-3.00	0.31	1.31	5.13		
	5.66	-2.50	0.23	0.98	6.11	5%	-3.05 8.29
5	4.00	-2.00	0.46	1.93	8.04	16%	-0.95 1.93
7	2.83	-1.50	0.65	2.74	10.78	25%	-0.46 1.37
10	2.00	-1.00	1.03	4.33	15.11	50%	0.25 0.84
14	1.41	-0.50	2.05	8.61	23.72	75%	0.82 0.56
18	1.00	0.00	3.52	14.82	38.54	84%	1.08 0.47
25	0.71	0.50	5.49	23.12	61.67	95%	1.63 0.32
35	0.50	1.00	4.89	20.56	82.23		
45	0.35	1.50	2.77	11.64	93.86	Med.	0.25 0.84
60	0.25	2.00	1.00	4.21	98.08	Mean	0.13 0.92
80	0.18	2.50	0.13	0.53	98.60	St Dev.	1.22
120	0.13	3.00	0.04	0.16	98.76	Skew	-0.29
170	0.09	3.50	0.05	0.20	98.96	Kurt.	1.50
200	0.07	3.75	0.03	0.14	99.10	Sorting	0.22
Pan			0.00	0.00	99.10		
Total			23.55	99.10	99.10		
						Moment	Statistics
							Phi mm
Cu =	2.47		Gravel		7 %	Mean	0.19 0.88
			Coarse	Sand	8 %	St. Dev.	1.35 0.39
			Med.	Sand	73 %	Skewness	-1.21
Cc =	0.97		Fine	Sand	11 %	Kurtosis	4.51

SEA, INC.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

SAMPLE NO.	ELEV.	CLASSIFICATION	PROJECT
0.5	-29.7	Medium sand (SP)	Martin County-ATM
			AREA
			Martin County
			BORING NO.
			MC-5
			DATE
			July 30, 1999

Sediment Analysis Data Sheet

Sample MC-5-4.0

Sieve	Size (mm)	Phi size	Wt %	Wt %	Cuml %	Folk Statistics		
						phi	mm	
	16.00	-4.00	0.00	0.00	0.00			
	11.31	-3.50	0.00	0.00	0.00			
	8.00	-3.00	0.00	0.00	0.00			
	5.66	-2.50	0.00	0.00	0.00	5% :	-0.44	1.36
5	4.00	-2.00	0.02	0.08	0.08	16% :	0.09	0.94
7	2.83	-1.50	0.09	0.37	0.44	25% :	0.28	0.82
10	2.00	-1.00	0.18	0.71	1.15	50% :	0.72	0.61
14	1.41	-0.50	0.73	2.87	4.02	75% :	1.12	0.46
18	1.00	0.00	2.02	7.94	11.97	84% :	1.31	0.40
25	0.71	0.50	5.89	23.18	35.15	95% :	1.88	0.27
35	0.50	1.00	8.70	34.22	69.36			
45	0.35	1.50	5.95	23.39	92.75	Med.	0.61	0.61
60	0.25	2.00	0.76	2.97	95.72	Mean	0.71	0.61
80	0.18	2.50	0.13	0.49	96.21	St Dev.	0.66	
120	0.13	3.00	0.05	0.18	96.39	Skew	-0.01	
170	0.09	3.50	0.11	0.44	96.83	Kurt.	1.13	
200	0.07	3.75	0.04	0.14	96.96	Sorting	0.61	
Pan			0.01	0.04	97.00			
Total			24.67	97.00	97.00			
						Moment Statistics		
							Phi	mm
Cu =	1.83		Gravel		0 %	Mean	0.89	0.54
			Coarse	Sand	1 %	St. Dev.	0.67	0.63
			Med.	Sand	80 %	Skewness	-0.43	
Cc =	0.99		Fine	Sand	16 %	Kurtosis	5.80	

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Sediment Analysis Data Sheet

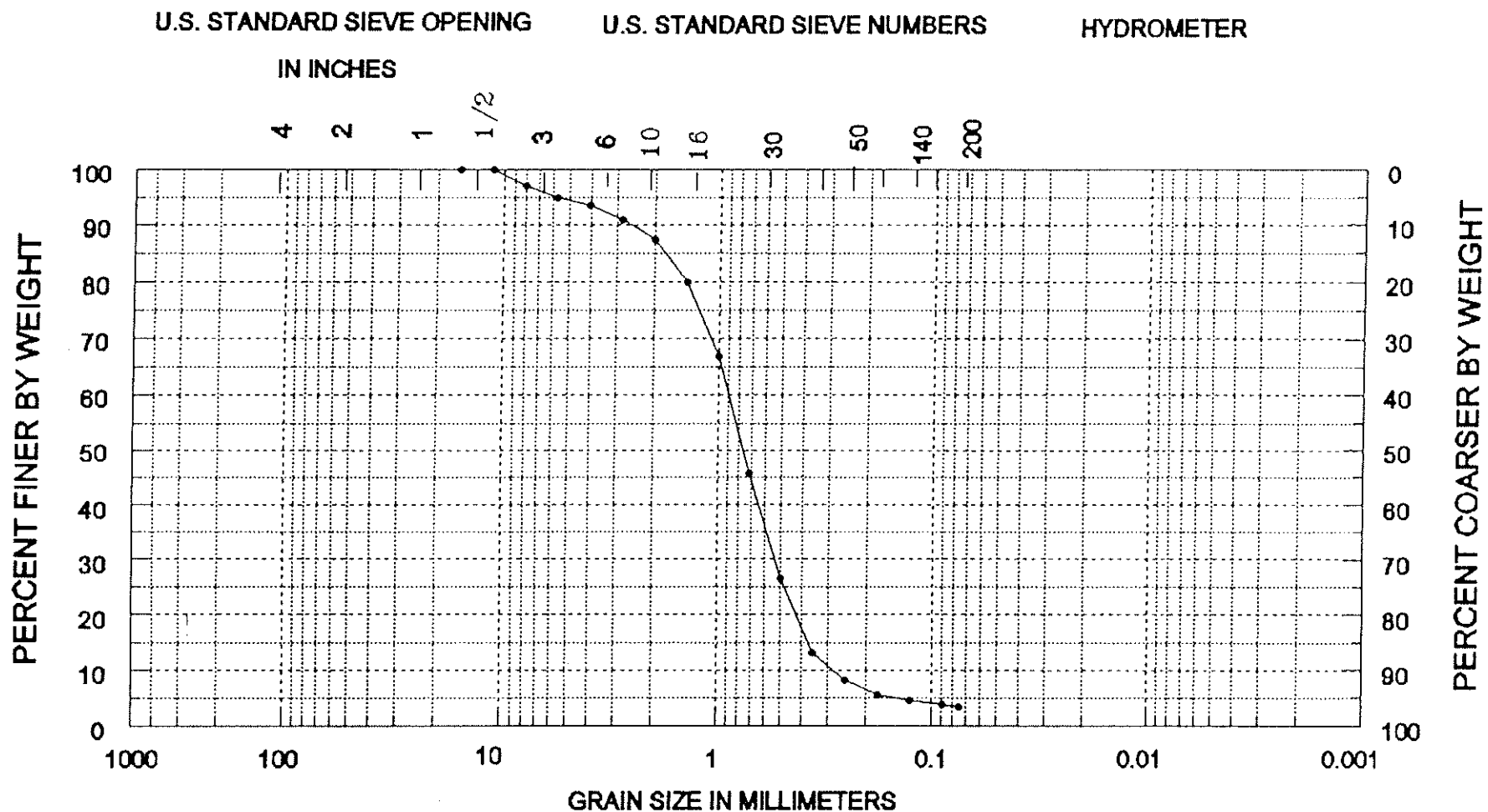
Sample MC-5-8.0

Sieve	Size (mm)	Phi size	Wt	Wt %	Cuml %	Folk Statistics		
						phi	mm	
	16.00	-4.00	0.00	0.00	0.00			
	11.31	-3.50	0.00	0.00	0.00			
	8.00	-3.00	0.86	3.07	3.07			
	5.66	-2.50	0.59	2.08	5.15	5% :	-2.54	5.80
5	4.00	-2.00	0.41	1.45	6.60	16% :	-0.78	1.71
7	2.83	-1.50	0.70	2.50	9.10	25% :	-0.31	1.24
10	2.00	-1.00	1.03	3.65	12.75	50% :	0.40	0.76
14	1.41	-0.50	2.04	7.25	20.00	75% :	1.06	0.48
18	1.00	0.00	3.64	12.97	32.98	84% :	1.39	0.38
25	0.71	0.50	5.95	21.20	54.17	95% :	2.80	0.14
35	0.50	1.00	5.43	19.33	73.51			
45	0.35	1.50	3.78	13.46	86.97	Med.	0.40	0.76
60	0.25	2.00	1.39	4.94	91.91	Mean	0.34	0.79
80	0.18	2.50	0.72	2.58	94.49	St Dev.	1.35	
120	0.13	3.00	0.24	0.86	95.35	Skew	-0.09	
170	0.09	3.50	0.27	0.94	96.29	Kurt.	1.60	
200	0.07	3.75	0.12	0.41	96.70			
Pan			0.00	0.00	96.70			
Total			27.15	96.70	96.70			

Moment		Statistics	
		Phi	mm
	Mean	0.42	0.75
	St. Dev.	1.33	0.40
	Skewness	-0.78	
	Kurtosis	3.97	

Cu =	3.12	Gravel	6	%
		Coarse Sand	7	%
		Med. Sand	67	%
Cc =	1.11	Fine Sand	16	%

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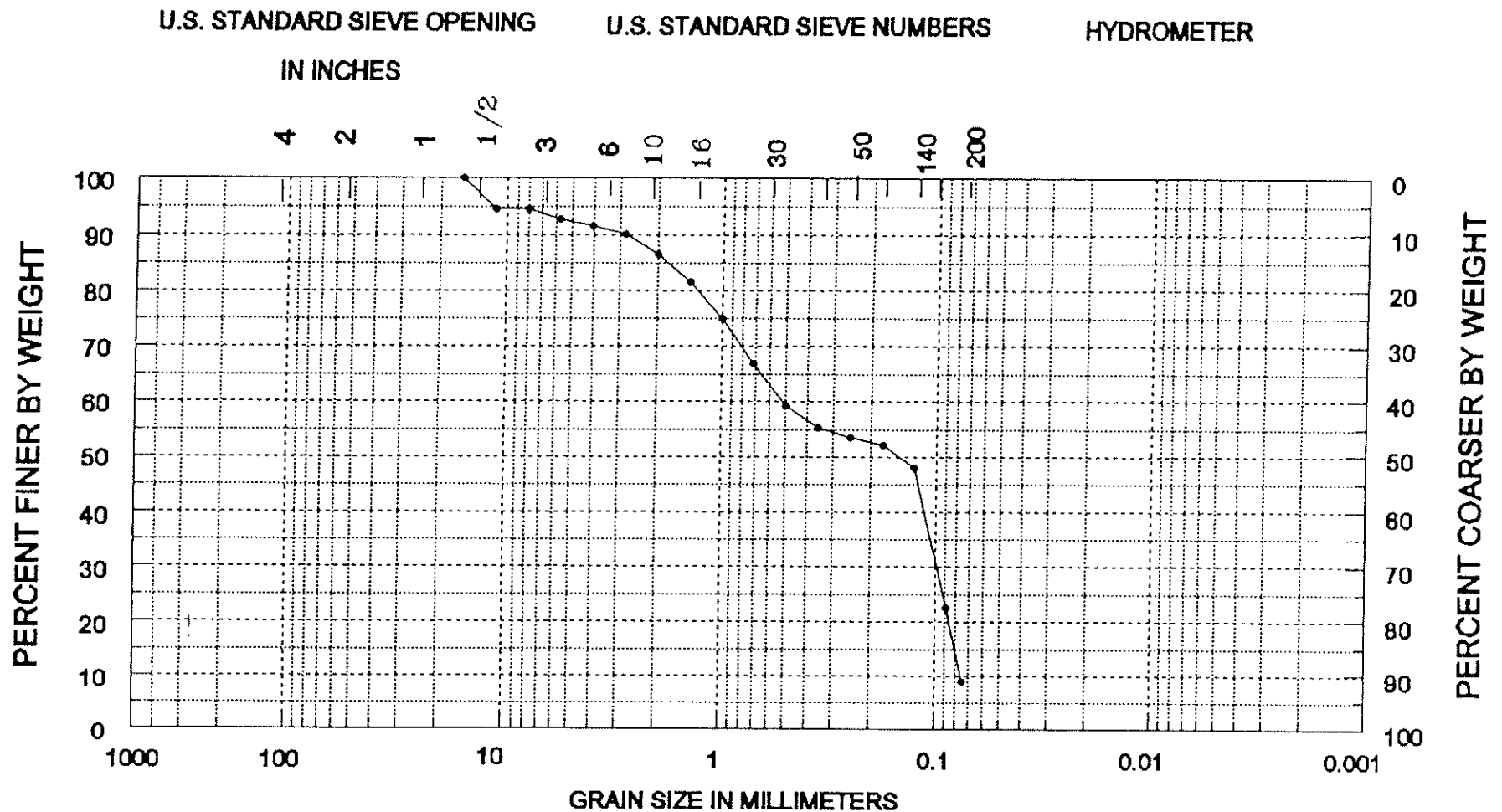


Sediment Analysis Data Sheet

Sample MC-5-13.5

Sieve	Size (mm)	Phi size	Wt %	Wt %	Cuml %	Folk Statistics phi mm
	16.00	-4.00	0.00	0.00	0.00	
	11.31	-3.50	1.30	5.51	5.51	
	8.00	-3.00	0.00	0.00	5.51	
	5.66	-2.50	0.41	1.75	7.26	5% : -3.55 11.68
5	4.00	-2.00	0.30	1.28	8.53	16% : -0.75 1.68
7	2.83	-1.50	0.32	1.37	9.91	25% : 0.00 1.00
10	2.00	-1.00	0.85	3.61	13.52	50% : 2.76 0.15
14	1.41	-0.50	1.15	4.89	18.40	75% : 3.45 0.09
18	1.00	0.00	1.55	6.59	25.00	84% : 3.49 0.09
25	0.71	0.50	1.91	8.11	33.11	95% : 3.80 0.07
35	0.50	1.00	1.81	7.69	40.80	
45	0.35	1.50	0.91	3.86	44.66	Med. 2.76 0.15
60	0.25	2.00	0.46	1.95	46.61	Mean 1.83 0.28
80	0.18	2.50	0.29	1.23	47.84	St Dev. 2.17
120	0.13	3.00	0.98	4.18	52.02	Skew -0.69
170	0.09	3.50	5.99	25.46	77.48	Kurt. 0.87
200	0.07	3.75	3.22	13.69	91.17	
Pan			0.29	1.23	92.40	Sorting 2.12
Total			21.73	92.40	92.40	
						Moment Statistics
						Phi mm
Cu =	6.77	Gravel		8	%	Mean 1.50 0.35
		Coarse Sand		6	%	St. Dev. 2.27 0.21
		Med. Sand		29	%	Skewness -0.77
Cc =	0.24	Fine Sand		48	%	Kurtosis 2.59

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COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

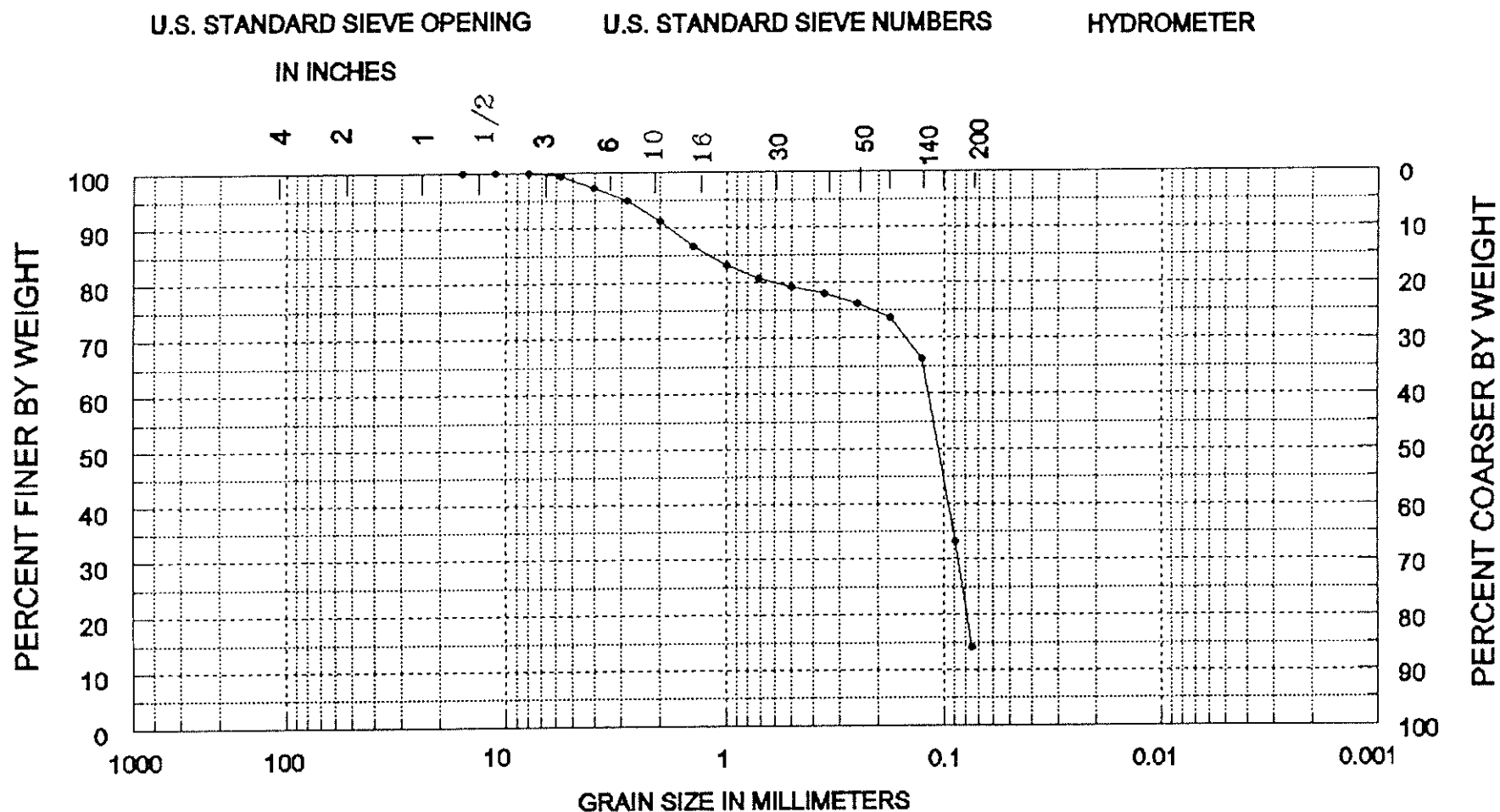
SAMPLE NO.	ELEV.	CLASSIFICATION	PROJECT
13.5	-42.7	Medium to fine sand, well graded (SW)	Martin County-ATM
			AREA Martin County
			BORING NO. MC-5
			DATE July 30, 1999

Sediment Analysis Data Sheet

Sample MC-5-17.5

Sieve	Size (mm)	Phi size	Wt %	Cuml %	Folk Statistics phi mm
	16.00	-4.00	0.00	0.00	
	11.31	-3.50	0.00	0.00	
	8.00	-3.00	0.00	0.00	
	5.66	-2.50	0.13	0.58	5% : -1.54 2.91
5	4.00	-2.00	0.50	2.14	16% : -0.12 1.09
7	2.83	-1.50	0.58	2.50	25% : 2.24 0.21
10	2.00	-1.00	0.86	3.69	50% : 3.25 0.11
14	1.41	-0.50	1.04	4.50	75% : 3.46 0.09
18	1.00	0.00	0.79	3.41	84% : 3.70 0.08
25	0.71	0.50	0.57	2.46	95% : 4.10 0.06
35	0.50	1.00	0.37	1.60	
45	0.35	1.50	0.27	1.18	Med. 3.25 0.11
60	0.25	2.00	0.40	1.73	Mean 2.28 0.21
80	0.18	2.50	0.58	2.51	St Dev. 1.81
120	0.13	3.00	1.72	7.43	Skew -0.73
170	0.09	3.50	7.66	33.08	Kurt. 1.89
200	0.07	3.75	4.42	19.07	
Pan			0.54	2.32	
Total			20.43	88.20	
					Moment Statistics
					Phi mm
Cu =	0.12	Gravel		2 %	Mean 2.33 0.20
		Coarse Sand		7 %	St. Dev. 1.87 0.27
		Med. Sand		13 %	Skewness -1.21
Cc =	0.08	Fine Sand		64 %	Kurtosis 3.04

SEA, INC.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

SAMPLE NO.	ELEV.	CLASSIFICATION	PROJECT
17.5	-46.7	Fine sand (SP)	Martin County-ATM
			AREA Martin County
			BORING NO. MC-5
			DATE July 30, 1999

Sediment Analysis Data Sheet

Sample MC-5-COMP

Sieve	Size (mm)	Phi size	Wt	Wt %	Cuml %	Folk	Statistics phi	mm
	16.00	-4.00	0.00	0.00	0.00			
	11.31	-3.50	0.00	0.00	0.00			
	8.00	-3.00	0.00	0.00	0.00			
	5.66	-2.50	0.32	1.09	1.09	5%	-0.97	1.95
5	4.00	-2.00	0.06	0.20	1.30	16%	-0.17	1.13
7	2.83	-1.50	0.40	1.39	2.68	25%	0.17	0.89
10	2.00	-1.00	0.57	1.96	4.65	50%	0.86	0.55
14	1.41	-0.50	1.50	5.17	9.82	75%	1.96	0.26
18	1.00	0.00	2.72	9.41	19.23	84%	3.20	0.11
25	0.71	0.50	4.86	16.78	36.01	95%	3.60	0.08
35	0.50	1.00	5.58	19.29	55.29			
45	0.35	1.50	4.36	15.08	70.37	Med.	0.86	0.55
60	0.25	2.00	1.45	5.02	75.39	Mean	1.30	0.41
80	0.18	2.50	0.49	1.69	77.07	St Dev.	1.53	
120	0.13	3.00	0.51	1.76	78.83	Skew	0.29	
170	0.09	3.50	3.70	12.79	91.62	Kurt.	1.04	
200	0.07	3.75	1.41	4.88	96.50			
Pan			0.00	0.00	96.50			
Total			27.93	96.50	96.50			
						Moment	Statistics	
							Phi	mm
Cu =	7.13		Gravel		1 %	Mean	1.25	0.42
			Coarse Sand		3 %	St. Dev.	1.43	0.37
			Med. Sand		58 %	Skewness	0.08	
Cc =	2.09		Fine Sand		34 %	Kurtosis	2.84	

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