

DRILLING LOG		HUMISTON & MOORE ENGINEERS		INSTALLATION		SHEET 11 OF 12 SHEETS	
1. PROJECT KNIGHT ISLAND BEACH NOURISHMENT				10. SIZE AND TYPE OF BIT 2.5 INCHES			
2. LOCATION CHARLOTTE COUNTY, FLORIDA				11. DATUM FOR ELEVATION SHOWN NGVD			
3. DRILLING AGENCY EXMAR				12. MANUFACTURERS DESIGNATION OF DRILL VIBRACORE			
4. HOLE NO. 9A				13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		DISTURBED NA	UNDISTURBED NA
5. NAME OF DRILLER MIKE CLARK				14. TOTAL NUMBER OF CORE BOXES (SECTIONS) 2			
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED _____ DEG. FROM VERT.				15. ELEVATION OF GROUND WATER TIDAL			
7. THICKNESS OF OVERBURDEN NA				16. DATE HOLE		STARTED 9/19/93	FINISHED 9/19/93
8. DEPTH DRILLED INTO ROCK NONE				17. ELEVATION TOP OF HOLE -6.9 FEET NGVD			
9. TOTAL DEPTH OF HOLE 6.5 FEET				18. TOTAL CORE RECOVERY FOR BORING 6 FEET			
				19. SIGNATURE OF INSPECTOR			

ELEVATION (Feet) a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOV- ERY e	BOX OR SAMPLE NO. f	REMARKS g	
	1	S	FINE QUARTZ SAND, SLIGHTLY SILTY, (SM), TRACE SHELL				
	2					9A-1	EL. = -8.9
	3						
	4						
-11.7	5	S S	SHELLY SAND, (SW) TR. SILT				
-12.1			GRAY SHELLY SAND, (SW)		9A-2	EL. = -11.4	
-12.7	6					REFUSAL AT 6 FEET DEPTH OF PENETRATION DUE TO FINE SAND PACKING IN BIT	
	7						
	8						
	9						
	10						
	11						
	12						
	13						
	14						
	15						
	16						
	17						
	18						
	19						

LAW ENGINEERING
3627 PROGRESS AVENUE
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REPORT OF GRAINSIZE ANALYSIS WITH WASH 200 AND WATER CONTENT

CLIENT: Humiston, Moore Engineers

DATE: October 22, 1993

PROJECT: Knight Island Beach Restoration Project

TECHNICIAN: SC

JOB NUMBER: 76-611005-01

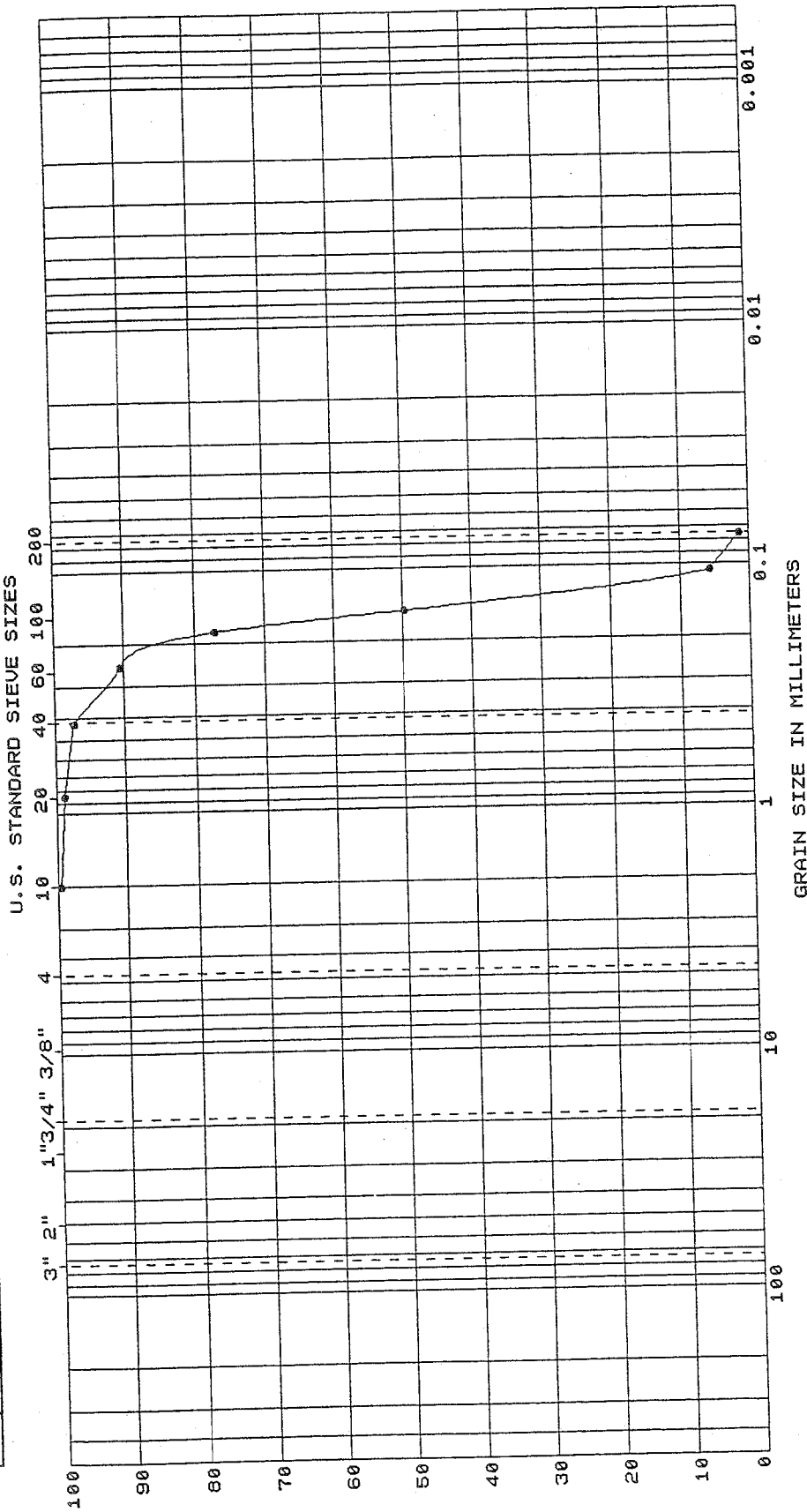
BORING NUMBER: 9A

SAMPLE NUMBER: 1

Sample Description: Gray fine SAND

SIEVE NO.	WEIGHT RETAINED	% RETAINED	% PASSING
1 in.	0.0	0.0	100.0
3/4 in.	0.0	0.0	100.0
1/2 in.	0.0	0.0	100.0
3/8 in.	0.0	0.0	100.0
4	0.0	0.0	100.0
10	1.3	0.5	99.5
20	3.5	1.2	98.8
40	7.9	2.8	97.2
60	26.9	9.5	90.5
80	64.9	22.9	77.1
100	142.6	50.3	49.7
140	267.2	94.3	5.7
200	279.4	98.6	1.4

Boulders	GRAVEL		SAND			FINES	
	Coarse	Fine	Coarse	Medium	Fine	Silt Sizes	Clay Sizes



PERCENT FINER BY WEIGHT

DESCRIPTION					
DEPTH	NAT WC	LL	PL	PI	
0.0					Gray fine SAND

GRAIN SIZE DISTRIBUTION	
SAMPLE 1	
BORING NUMBER	9A
PROJECT NUMBER	76-611005-01
PROJECT	KNIGHT ISLAND BEACH RESTORATION
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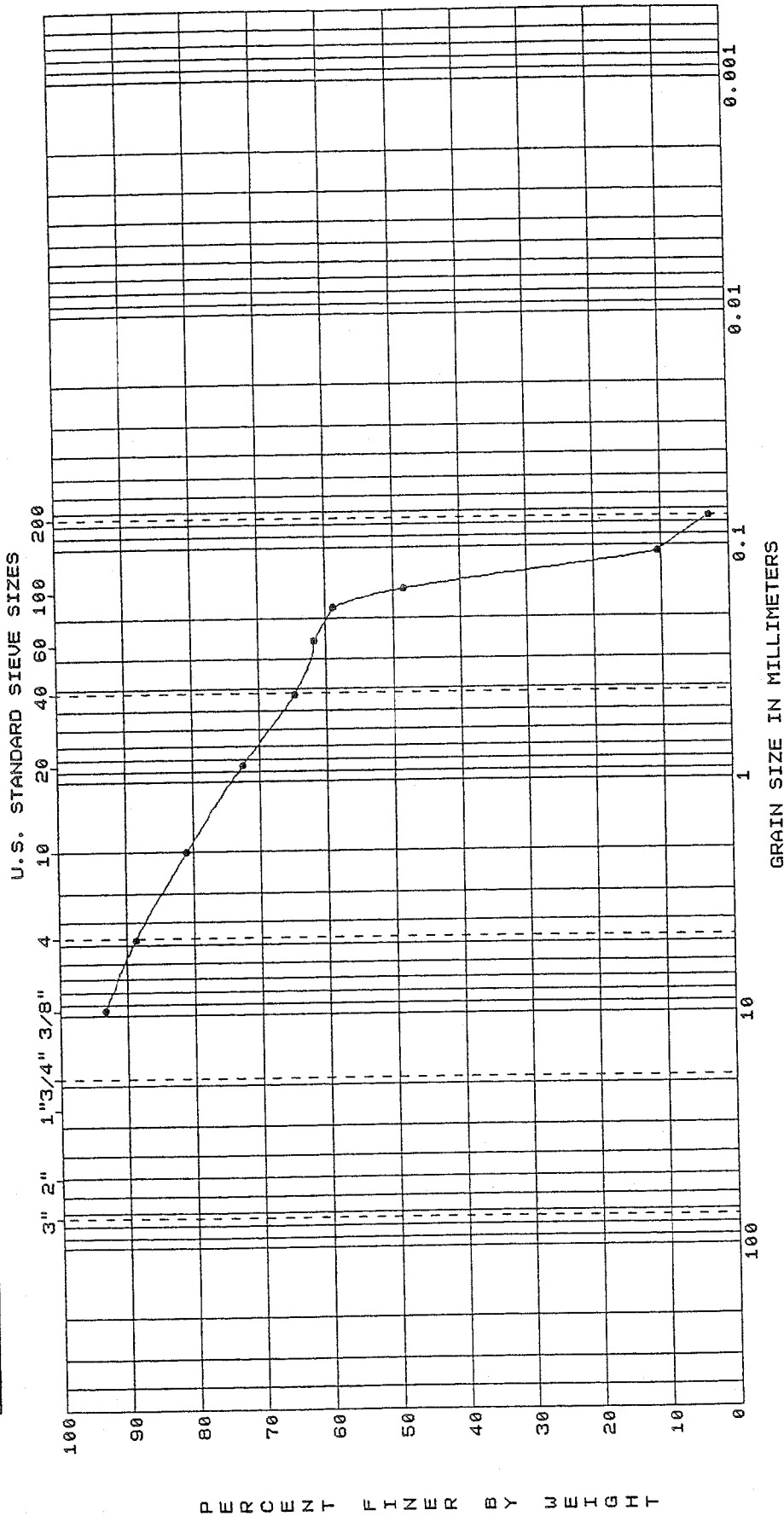
REPORT OF GRAINSIZE ANALYSIS WITH WASH 200 AND WATER CONTENT

CLIENT: Humiston, Moore Engineers DATE: October 22, 1993
PROJECT: Knight Island Beach Restoration Project TECHNICIAN: SC
JOB NUMBER: 76-611005-01 BORING NUMBER: 9A SAMPLE NUMBER: 2

Sample Description: Gray fine SAND with shell

SIEVE NO.	WEIGHT RETAINED	% RETAINED	% PASSING
1 in.	0.0	0.0	100.0
3/4 in.	0.0	0.0	100.0
1/2 in.	0.0	0.0	100.0
3/8 in.	18.0	6.7	93.3
4	30.8	11.4	88.6
10	51.3	19.0	81.0
20	74.7	27.6	72.4
40	95.4	35.3	64.7
60	103.7	38.3	61.7
80	111.6	41.2	58.8
100	139.5	51.6	48.4
140	242.2	89.5	10.5
200	262.7	97.1	2.9

Boulders	GRAVEL		SAND			FINES	
	Coarse	Fine	Coarse	Medium	Fine	Silt Sizes	Clay Sizes



DESCRIPTION				
DEPTH	NAT WC	LL	PL	PI
0.0				
Gray fine SAND with shell				

GRAIN SIZE DISTRIBUTION	
SAMPLE	2
BORING NUMBER	9A
PROJECT NUMBER	76-611005-01
PROJECT	KNIGHT ISLAND BEACH RESTORATION
LAW ENGINEERING	