

DRILLING LOG		HUMISTON & MOORE ENGINEERS		INSTALLATION		SHEET 1 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. 1				13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		DISTURBED NA	
				UNDISTURBED NA			
5. NAME OF DRILLER MIKE CLARK				14. TOTAL NUMBER OF CORE BOXES (SECTIONS) 3			
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED _____ DEG. FROM VERT.				15. ELEVATION OF GROUND WATER TIDAL			
				16. DATE HOLE		STARTED 9/18/93 FINISHED 9/18/93	
7. THICKNESS OF OVERBURDEN NA				17. ELEVATION TOP OF HOLE -11.1 FEET NGVD			
8. DEPTH DRILLED INTO ROCK NONE				18. TOTAL CORE RECOVERY FOR BORING 9.9 FEET			
9. TOTAL DEPTH OF HOLE 9.9 FEET				19. SIGNATURE OF INSPECTOR			

ELEVATION (Feet)	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOV- ERY	BOX OR SAMPLE NO.	REMARKS
a	b	c	d	e	f	g
	1		FINE QUARTZ SAND (SP) GRAY WITH TRACES OF SHELL AND SILT		1-1	EL. = -13.4
	2					
	3					
	4					
-15.7						
	5		FINE SILTY SAND (SM)		1-2	EL. = 16.5
	6					
-16.9						
	7		FINE QUARTZ SAND (SP) GRAY WITH TRACES OF SHELL AND SILT		1-3	EL. = 17.9
	8					
-18.5						
	9		FINE SILTY SAND (SM)		1-4	EL. = 19.1
	10					
-19.3						
	11		SHELLY SILTY SAND (SP)		1-5	EL. = 20.2
	12					
	13					
	14					
-20.9						
	15					
	16					
	17					
	18					
	19					

LAW ENGINEERING
3627 PROGRESS AVENUE
NAPLES, FLORIDA 33942
(813) 643-4747

REPORT OF GRAINSIZE ANALYSIS WITH WASH 200 AND WATER CONTENT

CLIENT: Humiston, Moore Engineers

DATE: October 20, 1993

PROJECT: Knight Island Beach Restoration Project

TECHNICIAN: SC

JOB NUMBER: 76-611005-01

BORING NUMBER: 1

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	0.0	0.0	100.0
20	0.3	0.1	99.9
40	0.6	0.3	99.7
60	1.2	0.5	99.5
80	4.2	1.8	98.2
100	29.1	12.7	87.3
140	181.9	79.4	20.6
200	220.4	96.2	3.8

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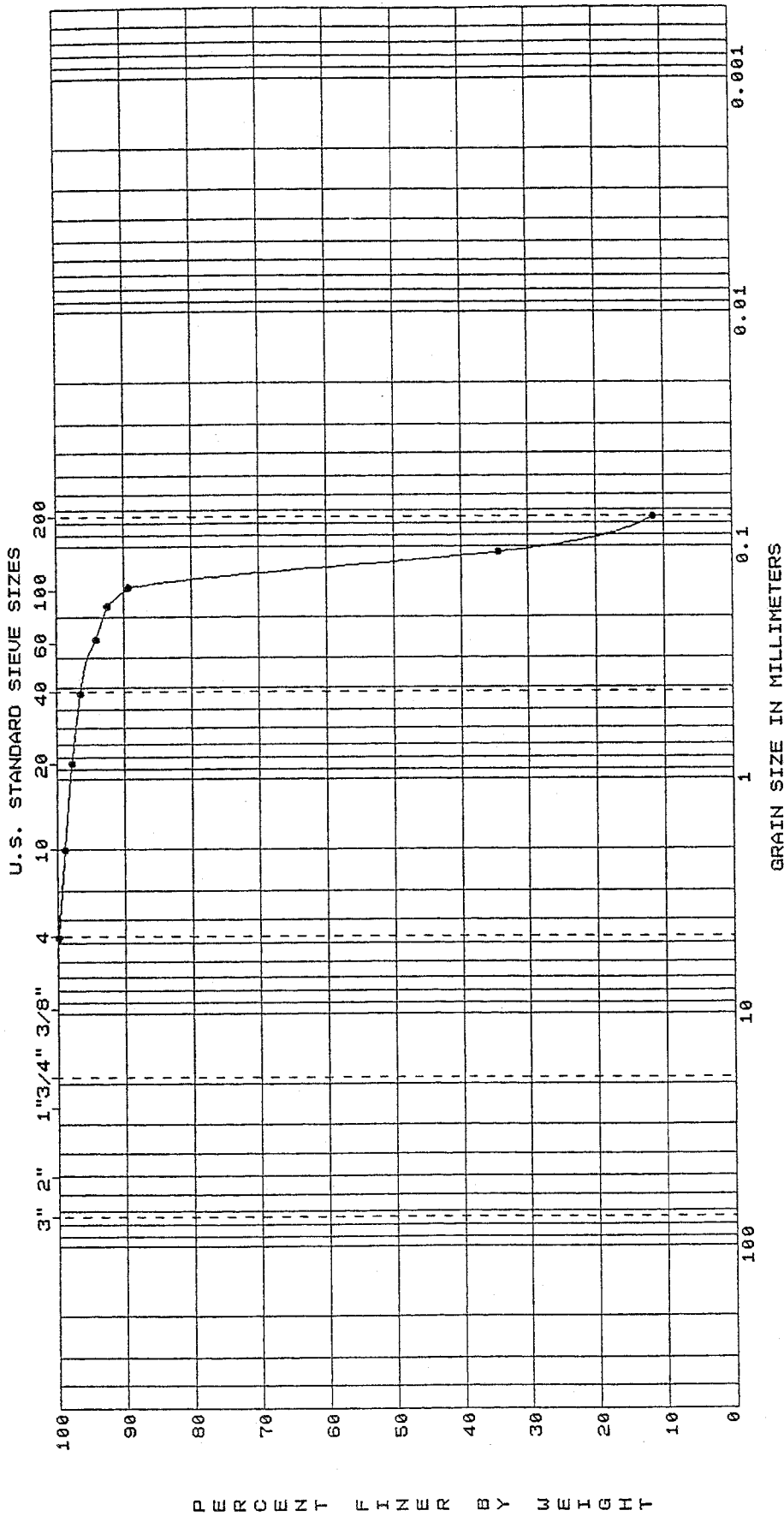
BORING NUMBER: 1

SAMPLE NUMBER: 2

Sample Description: Gray slightly silty 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	0.5	0.2	99.8
10	2.9	1.2	98.8
20	5.8	2.3	97.7
40	9.1	3.6	96.4
60	14.7	5.9	94.1
80	18.9	7.6	92.4
100	26.9	10.8	89.2
140	163.9	65.6	34.4
200	220.7	88.4	11.6

Boul ders	COBBLES		GRAVEL		SAND			FINES	
	Coarse	Fine	Coarse	Fine	Coarse	Medium	Fine	Silt Sizes	Clay Sizes



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REPORT OF GRAINSIZE ANALYSIS WITH WASH 200 AND WATER CONTENT

CLIENT: Humiston, Moore Engineers

DATE: October 23, 1993

PROJECT: Knight Island Beach Restoration Project

TECHNICIAN: SC

JOB NUMBER: 76-611005-01

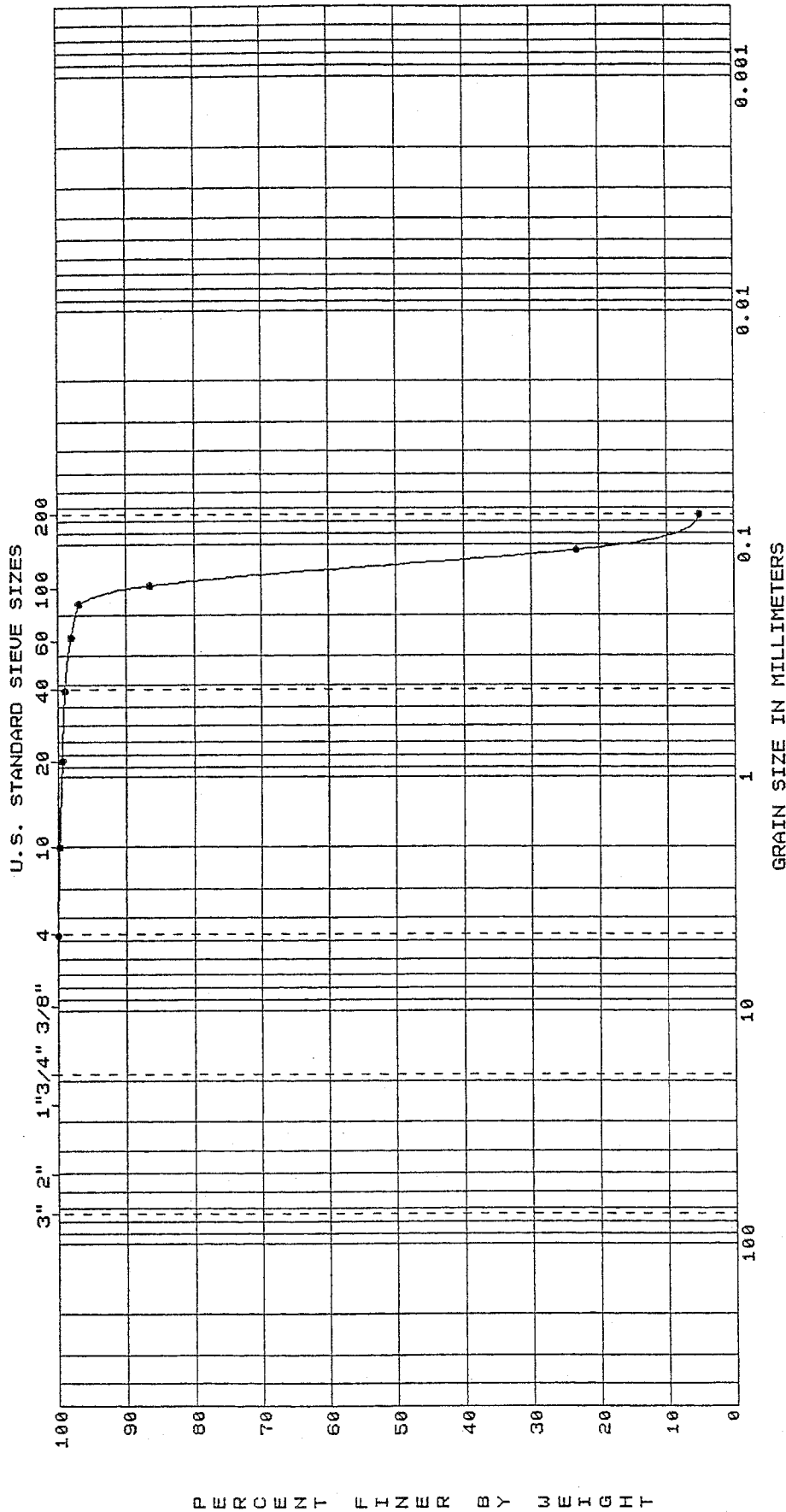
BORING NUMBER: 1

SAMPLE NUMBER: 3

Sample Description: Gray slightly silty fine SAND

<i>SIEVE NO.</i>	<i>WEIGHT RETAINED</i>	<i>% RETAINED</i>	<i>% PASSING</i>
<i>1 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>3/4 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>1/2 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>3/8 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>4</i>	<i>0.3</i>	<i>0.1</i>	<i>99.9</i>
<i>10</i>	<i>0.8</i>	<i>0.3</i>	<i>99.7</i>
<i>20</i>	<i>1.5</i>	<i>0.7</i>	<i>99.3</i>
<i>40</i>	<i>2.6</i>	<i>1.1</i>	<i>98.9</i>
<i>60</i>	<i>4.5</i>	<i>2.0</i>	<i>98.0</i>
<i>80</i>	<i>7.2</i>	<i>3.1</i>	<i>96.9</i>
<i>100</i>	<i>30.8</i>	<i>13.5</i>	<i>86.5</i>
<i>140</i>	<i>175.3</i>	<i>76.7</i>	<i>23.3</i>
<i>200</i>	<i>217.1</i>	<i>94.9</i>	<i>5.1</i>

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



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REPORT OF GRAINSIZE ANALYSIS WITH WASH 200 AND WATER CONTENT

CLIENT: Humiston, Moore Engineers

DATE: October 20, 1993

PROJECT: Knight Island Beach Restoration Project

TECHNICIAN: SC

JOB NUMBER: 76-611005-01

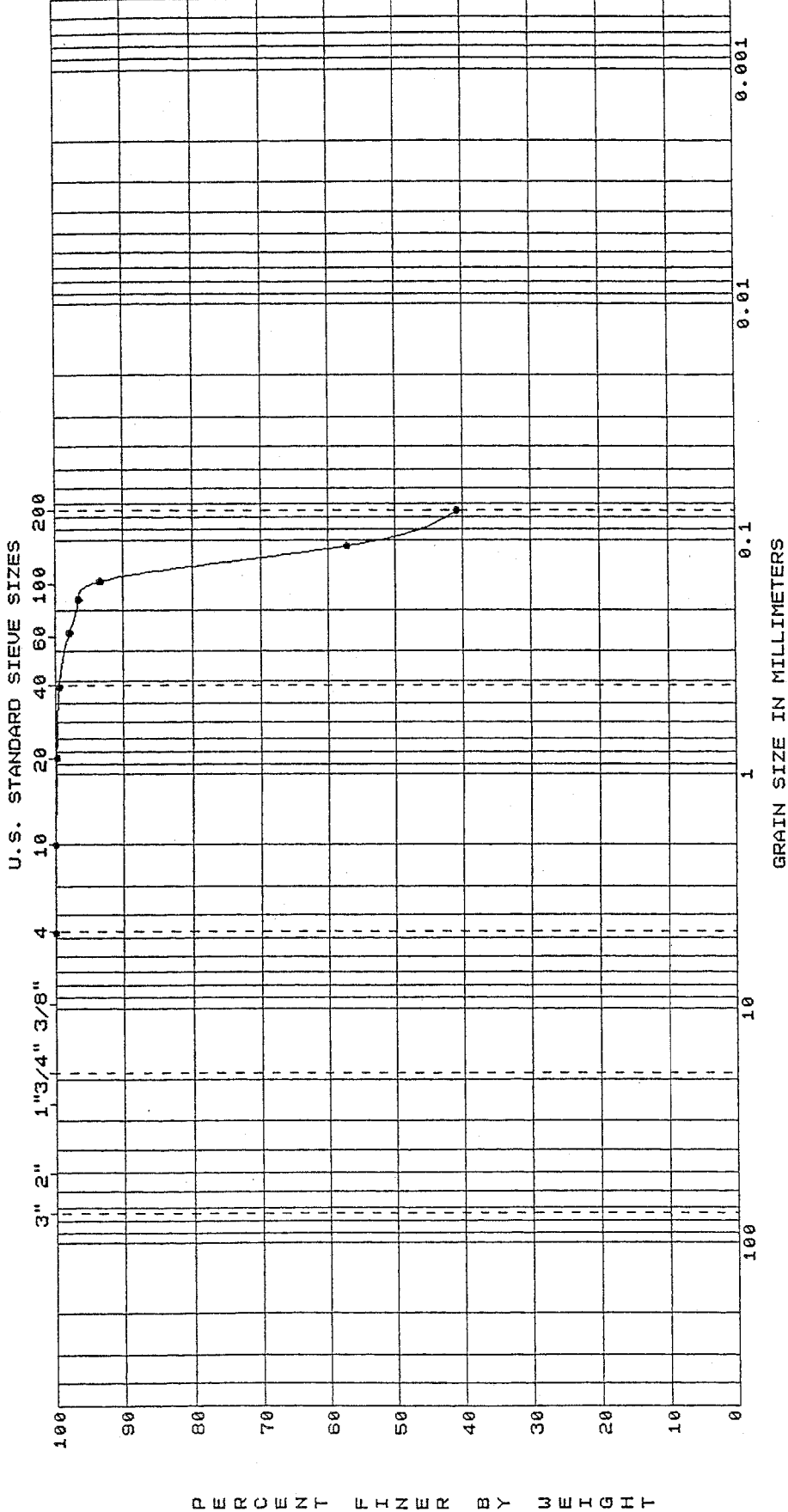
BORING NUMBER: 1

SAMPLE NUMBER: 4

Sample Description: Gray very slightly silty fine SAND

<i>SIEVE NO.</i>	<i>WEIGHT RETAINED</i>	<i>% RETAINED</i>	<i>% PASSING</i>
<i>1 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>3/4 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>1/2 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>3/8 in.</i>	<i>0.0</i>	<i>0.0</i>	<i>100.0</i>
<i>4</i>	<i>0.1</i>	<i>0.1</i>	<i>99.9</i>
<i>10</i>	<i>0.2</i>	<i>0.1</i>	<i>99.9</i>
<i>20</i>	<i>0.6</i>	<i>0.3</i>	<i>99.7</i>
<i>40</i>	<i>1.3</i>	<i>0.7</i>	<i>99.3</i>
<i>60</i>	<i>4.1</i>	<i>2.2</i>	<i>97.8</i>
<i>80</i>	<i>6.5</i>	<i>3.5</i>	<i>96.5</i>
<i>100</i>	<i>12.3</i>	<i>6.7</i>	<i>93.3</i>
<i>140</i>	<i>78.5</i>	<i>42.9</i>	<i>57.1</i>
<i>200</i>	<i>108.3</i>	<i>59.1</i>	<i>40.9</i>

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



PERCENT FINER BY WEIGHT

DEPTH		NAT MC	LL	PL	PI	DESCRIPTION
●	0.0					Gray very silty fine sand

GRAIN SIZE DISTRIBUTION	
BORING NUMBER	SAMPLE 4
PROJECT NUMBER	76-611005-01
PROJECT	KNIGHT ISLAND BEACH RESTORATION
LAW ENGINEERING	

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DATE: October 20, 1993

PROJECT: Knight Island Beach Restoration Project

TECHNICIAN: SC

JOB NUMBER: 76-611005-01

BORING NUMBER: 1

SAMPLE NUMBER: 5

Sample Description: Gray slightly silty fine SAND, some shell fragments

<i>SIEVE NO.</i>	<i>WEIGHT RETAINED</i>	<i>% RETAINED</i>	<i>% PASSING</i>
<i>1 in.</i>	<i>21.1</i>	<i>8.5</i>	<i>91.5</i>
<i>3/4 in.</i>	<i>21.1</i>	<i>8.5</i>	<i>91.5</i>
<i>1/2 in.</i>	<i>21.1</i>	<i>8.5</i>	<i>91.5</i>
<i>3/8 in.</i>	<i>24.6</i>	<i>9.9</i>	<i>90.1</i>
<i>4</i>	<i>39.5</i>	<i>15.8</i>	<i>84.2</i>
<i>10</i>	<i>62.4</i>	<i>25.0</i>	<i>75.0</i>
<i>20</i>	<i>95.0</i>	<i>38.0</i>	<i>62.0</i>
<i>40</i>	<i>127.7</i>	<i>51.1</i>	<i>48.9</i>
<i>60</i>	<i>151.1</i>	<i>60.5</i>	<i>39.5</i>
<i>80</i>	<i>158.7</i>	<i>63.6</i>	<i>36.4</i>
<i>100</i>	<i>166.3</i>	<i>66.6</i>	<i>33.4</i>
<i>140</i>	<i>205.5</i>	<i>82.3</i>	<i>17.7</i>
<i>200</i>	<i>224.8</i>	<i>90.0</i>	<i>10.0</i>

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

