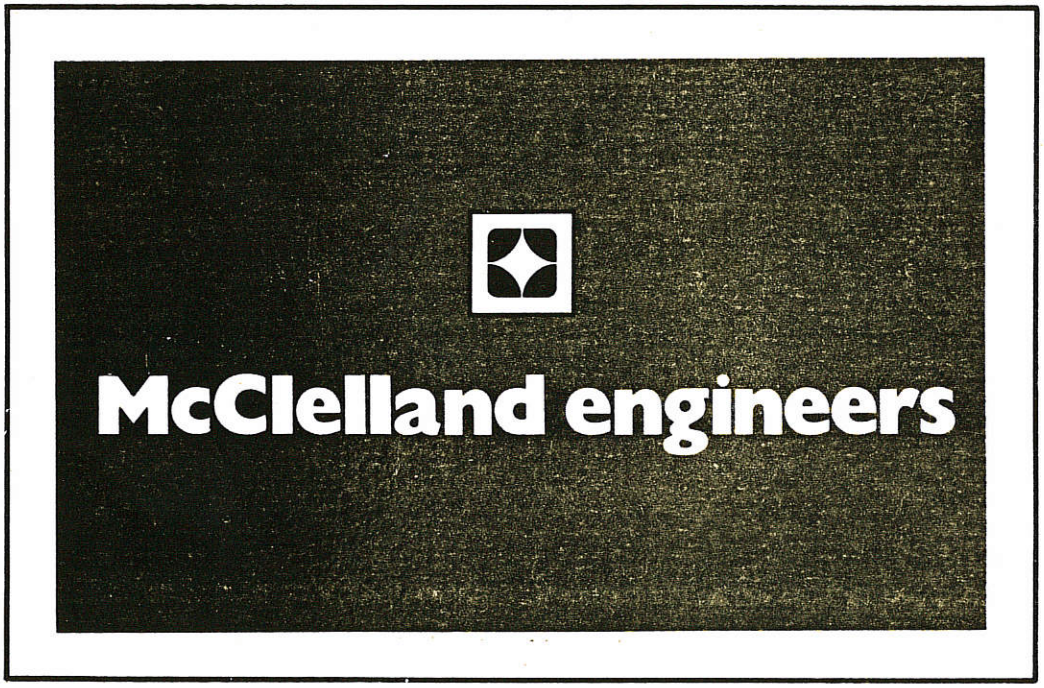
VOLUME IIB
GEOTECHNICAL DATA REPORT
LABORATORY DATA - 1
ISLES DERNIERES STABILIZATION PROJECT
STATE PROJECT NO. 750-55-01
TERREBONNE PARISH, LOUISIANA

REPORT TO

J. WAYNE PLAISANCE, INC./T. BAKER SMITH & SON, INC.
HOUMA, LOUISIANA



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R e p o r t

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J. WAYNE PLAISANCE, INC./T. BAKER SMITH & SON, INC.

Houma, Louisiana

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M c C L E L L A N D E N G I N E E R S, I N C.
Geoscience Consultants
Westlake, Louisiana

December 1987

McClelland engineers

Report No. 1087-1328
Volume IIb
December 23, 1987

J. WAYNE PLAISANCE, INC./T. BAKER SMITH & SON, INC.
550 South Van
Houma, Louisiana 70361

Attention: Mr. Marc Rogers, P.E., Project Manager

Geotechnical Data Report
Laboratory Data - I
Isles Dernieres Stabilization Project
State Project No. 750-55-01
Terrebonne Parish, Louisiana

Mr. Rogers, we are pleased to submit Volume IIb, of a three-volume report, for the geotechnical services performed for the proposed Isles Dernieres Beach Stabilization Project. This work was authorized in writing by Mr. Rogers on April 7, 1987, and our services were performed in general accordance with the signed agreement dated February 16, 1987. During the project, minor changes to the scope of work and method of data presentation were made in order to address the concerns of the design professionals involved with this project and as a result of the encountered soil conditions.

Volume II, submitted under separate cover, describes the laboratory testing procedures and explains our method of data presentation for the proposed borrow areas. Volume IIb presents the results of the mechanical grain size analyses performed on selected samples from the vibracores. Volume IIa presents the log of borings for the vibracores; Volume IIc contains additional laboratory data for the borrow areas, and they will be submitted separately. Volume I contains information from the three islands; Volume III is our Geotechnical Interpretive Report. These documents will also be submitted as separate documents. At various times during this project, we provided preliminary findings to the design team members. The information in the above referenced reports supersedes and replaces all previous data.

Mr. Rogers, we appreciate the opportunity to be of service to you and the design team on this initial phase of this very important study. We look forward to working with you on later phases of the study. After you receive this report, we will call you to answer your questions.

Sincerely,
McCLELLAND ENGINEERS, INC.

Andrew L. Shafer
Project Engineer

David E. Lourie, P.E.
Division Manager

ALS/DEL/me(R14.28)
Copies Submitted: (6)

CONTENTS

EXECUTIVE SUMMARY . . . . . Page i

MECHANICAL GRAIN SIZE ANALYSIS RESULTS

EXECUTIVE SUMMARY

A reconnaissance study was conducted as part of a comprehensive study for the proposed beach stabilization project for Isles Dernieres. McClelland Engineers performed field and laboratory studies on the three-island segments. A field investigation program was performed by Ocean Surveys, Inc., in the proposed borrow source areas north of Isles Dernieres. They used vibracoring methods to explore seafloor conditions to about 20-ft penetration. The samples obtained from the vibracoring were submitted to McClelland for laboratory testing.

The results of our involvement in this study are presented in three volumes. Volume IIb, the Geotechnical Data Report - Laboratory Data - 1, is presented here. Volume II, submitted under separate cover, contains a complete description of our laboratory procedures and method of data presentation. It also includes an overall plan of the proposed borrow areas showing the vibracore locations. Volume IIa contains the vibracore logs; additional laboratory data from the borrow area soils are presented in Volume IIc. Volume I contains information from the islands. Volume III, the Geotechnical Interpretive Report, also presented under separate cover, provides geotechnical recommendations for preliminary design of the beach restoration program.

The purpose of this study was to develop site-specific preliminary geotechnical information in the proposed borrow areas north of the islands and on the island segments. It should be recognized that while significant portions of the design concepts can be finalized using the information presented here, optimization of design alternatives requires additional study. To accomplish the purpose of this study, 256 vibracores were obtained and delivered to a dock in Cocodrie, Louisiana. They were then transported in the cores to our laboratory. Each core was logged in on arrival using the sample designation assigned to it by Ocean Surveys, Inc., and it was stored in a temperature controlled environment. At the time of extrusion, each core was measured and then it was split longitudinally and the soil materials were visually classified. Classifications included color, soil type, and consistency. Furthermore, we noted the presence and location of inclusions such as shells, wood, etc. Jar samples of representative material types were obtained from each core. At various times during the project, unused portions of the cores were packaged and given to the Louisiana Geological Survey and Louisiana State University.

Laboratory testing was performed on selected samples to evaluate pertinent engineering properties. Soil testing consisted of mechanical grain size analysis, hydrometer analysis, liquid and plastic limit tests, water contents, remolded miniature vane tests, standard Proctor density tests, and maximum-minimum density determinations.

This data report presents the results of the mechanical grain size analyses. The individual test results are presented in a tabular format that includes standard geotechnical and coastal engineering grain size parameters.

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 1 SAMPLE NO: 1 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 243.44

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.31	2.000	-1.00	99.9	0.1	
20	1.93	0.850	0.23	99.2	0.8	
40	3.09	0.425	1.23	98.7	1.3	
70	52.09	0.212	2.24	78.6	21.4	
100	145.61	0.150	2.74	40.2	59.8	
200	222.13	0.075	3.74	8.8	91.2	
PAN	242.93			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.349
16	1.836
25	2.275
50	2.585
75	3.116
84	3.419
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.091
30	0.127
60	0.183
85	0.292
90	0.345

POORLY GRADED Cu= 2.340 Cc= 1.128

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 1 SAMPLE NO: 2 PENETRATION, ft: 7.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 223.49

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.14	4.750	-2.25	99.9	0.1	
10	0.69	2.000	-1.00	99.7	0.3	
20	1.80	0.850	0.23	99.2	0.8	
40	3.28	0.425	1.23	98.5	1.5	
70	17.77	0.212	2.24	92.0	8.0	
100	107.36	0.150	2.74	52.0	48.0	
200	170.61	0.075	3.74	23.7	76.3	
PAN	222.84			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.635
16	2.320
25	2.421
50	2.784
75	3.665
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.093
60	0.163
85	0.202
90	0.209

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 2 SAMPLE NO: 3 PENETRATION, ft: 8

MATERIAL: OLIVE GRAY SILTY FINE SAND W/MANY SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 287.29

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	11.41	4.750	-2.25	96.0	4.0	
10	18.17	2.000	-1.00	93.7	6.3	
20	22.71	0.850	0.23	92.1	7.9	
40	24.98	0.425	1.23	91.3	8.7	
70	108.44	0.212	2.24	62.3	37.7	
100	199.43	0.150	2.74	30.6	69.4	
200	238.79	0.075	3.74	16.9	83.1	
PAN	286.44			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-2.170
16	1.394
25	1.651
50	2.403
75	3.047
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.147
60	0.208
85	0.387
90	0.417

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 5 SAMPLE NO: 1 PENETRATION, ft: 2
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 272.41

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.67	2.000	-1.00	99.4	0.6	
20	2.55	0.850	0.23	99.1	0.9	
40	3.37	0.425	1.23	98.8	1.2	
70	10.17	0.212	2.24	96.3	3.7	
100	113.47	0.150	2.74	58.3	41.7	
200	232.85	0.075	3.74	14.5	85.5	
PAN	271.98			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.251
16	2.374
25	2.487
50	2.871
75	3.409
84	3.685
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.076
30	0.103
60	0.153
85	0.194
90	0.202

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 5 SAMPLE NO: 2 PENETRATION, ft: 3.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 265.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.09	4.750	-2.25	100.0	0.0	
10	0.98	2.000	-1.00	99.6	0.4	
20	2.92	0.850	0.23	98.9	1.1	
40	4.49	0.425	1.23	98.3	1.7	
70	60.88	0.212	2.24	77.1	22.9	
100	192.92	0.150	2.74	27.4	72.6	
200	248.04	0.075	3.74	6.6	93.4	
PAN	265.13			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.329
16	1.769
25	2.254
50	2.479
75	2.815
84	3.177
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.107
30	0.154
60	0.192
85	0.304
90	0.354

POORLY GRADED Cu= 2.173 Cc= 1.394

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 5 SAMPLE NO: 3 PENETRATION, ft: 6.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 237.88

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.35	4.750	-2.25	99.9	0.1	
10	0.99	2.000	-1.00	99.6	0.4	
20	1.60	0.850	0.23	99.3	0.7	
40	2.31	0.425	1.23	99.0	1.0	
70	22.66	0.212	2.24	90.5	9.5	
100	74.31	0.150	2.74	68.8	31.2	
200	180.01	0.075	3.74	24.3	75.7	
PAN	237.49			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.567
16	2.363
25	2.567
50	3.060
75	3.713
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.085
60	0.136
85	0.197
90	0.211

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 5 SAMPLE NO: 4 PENETRATION, ft: 9
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 208.44

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.33	2.000	-1.00	99.8	0.2	
20	1.05	0.850	0.23	99.5	0.5	
40	1.85	0.425	1.23	99.1	0.9	
70	13.12	0.212	2.24	93.7	6.3	
100	65.31	0.150	2.74	68.7	31.3	
200	135.37	0.075	3.74	35.1	64.9	
PAN	208.12			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.872
16	2.403
25	2.586
50	3.185
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.132
85	0.191
90	0.203

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 6 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 222.90

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.17	2.000	-1.00	99.9	0.1	
20	0.55	0.850	0.23	99.8	0.2	
40	0.90	0.425	1.23	99.6	0.4	
70	4.49	0.212	2.24	98.0	2.0	
100	88.89	0.150	2.74	60.1	39.9	
200	195.97	0.075	3.74	12.1	87.9	
PAN	222.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.269
16	2.395
25	2.511
50	2.886
75	3.374
84	3.615
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.080
30	0.105
60	0.150
85	0.192
90	0.200

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 6 SAMPLE NO: 2 PENETRATION, ft: 1.5
MATERIAL: DARK GRAY,OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 224.89

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.07	4.750	-2.25	100.0	0.0	
10	0.38	2.000	-1.00	99.8	0.2	
20	1.08	0.850	0.23	99.5	0.5	
40	1.83	0.425	1.23	99.2	0.8	
70	6.09	0.212	2.24	97.3	2.7	
100	56.58	0.150	2.74	74.8	25.2	
200	200.42	0.075	3.74	10.9	89.1	
PAN	224.65			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.279
16	2.503
25	2.732
50	3.030
75	3.431
84	3.617
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.080
30	0.099
60	0.134
85	0.179
90	0.193

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 6 SAMPLE NO: 3 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 326.37

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.47	4.750	-2.25	99.9	0.1	
10	3.41	2.000	-1.00	99.0	1.0	
20	7.31	0.850	0.23	97.8	2.2	
40	9.89	0.425	1.23	97.0	3.0	
70	83.19	0.212	2.24	74.5	25.5	
100	206.84	0.150	2.74	36.6	63.4	
200	294.95	0.075	3.74	9.6	90.4	
PAN	326.08			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.286
16	1.667
25	2.198
50	2.532
75	3.068
84	3.413
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.076
15	0.091
30	0.133
60	0.189
85	0.324
90	0.369

POORLY GRADED Cu= 2.486 Cc= 1.223

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 6 SAMPLE NO: 4 PENETRATION, ft: 6

MATERIAL: OLIVE GRAY SILTY FINE SAND W/MANY SHELL FRAGMENTS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 275.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	3.13	4.750	-2.25	98.9	1.1	
10	5.93	2.000	-1.00	97.8	2.2	
20	10.82	0.850	0.23	96.1	3.9	
40	13.49	0.425	1.23	95.1	4.9	
70	60.32	0.212	2.24	78.1	21.9	
100	157.45	0.150	2.74	42.9	57.1	
200	220.84	0.075	3.74	19.9	80.1	
PAN	275.54			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.238
16	1.747
25	2.273
50	2.615
75	3.430
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.110
60	0.181
85	0.311
90	0.371

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 6 SAMPLE NO: 5 PENETRATION, ft: 8

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 333.36

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.18	4.750	-2.25	99.9	0.1	
10	1.73	2.000	-1.00	99.5	0.5	
20	3.66	0.850	0.23	98.9	1.1	
40	5.92	0.425	1.23	98.2	1.8	
70	29.53	0.212	2.24	91.1	8.9	
100	173.18	0.150	2.74	48.1	51.9	
200	261.20	0.075	3.74	21.6	78.4	
PAN	332.70			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.554
16	2.305
25	2.397
50	2.708
75	3.552
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.100
60	0.168
85	0.204
90	0.210

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 7 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: DARK GRAY,OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 234.17

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.06	4.750	-2.25	100.0	0.0	
10	0.30	2.000	-1.00	99.9	0.1	
20	1.24	0.850	0.23	99.5	0.5	
40	1.99	0.425	1.23	99.2	0.8	
70	6.08	0.212	2.24	97.4	2.6	
100	76.92	0.150	2.74	67.2	32.8	
200	215.48	0.075	3.74	8.0	92.0	
PAN	233.92			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.270
16	2.430
25	2.582
50	2.948
75	3.352
84	3.540
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.085
30	0.104
60	0.142
85	0.188
90	0.198

POORLY GRADED Cu= 1.820 Cc= 0.990

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 7 SAMPLE NO: 2 PENETRATION, ft: 4

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS,& MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 188.48

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.34	0.425	1.23	99.8	0.2	
70	3.14	0.212	2.24	98.3	1.7	
100	50.48	0.150	2.74	73.2	26.8	
200	137.28	0.075	3.74	27.2	72.8	
PAN	188.32			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.292
16	2.492
25	2.692
50	3.135
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.080
60	0.130
85	0.180
90	0.192

Cu= #N/A

Cc= #N/A

****

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 7 SAMPLE NO: 3 PENETRATION, ft: 7.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 241.44

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.09	2.000	-1.00	100.0	0.0	
20	1.38	0.850	0.23	99.4	0.6	
40	2.88	0.425	1.23	98.8	1.2	
70	18.75	0.212	2.24	92.2	7.8	
100	129.05	0.150	2.74	46.5	53.5	
200	184.37	0.075	3.74	23.6	76.4	
PAN	241.05			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.669
16	2.311
25	2.399
50	2.690
75	3.647
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.097
60	0.169
85	0.203
90	0.209

Cu= #N/A

Cc= #N/A

****

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 8 SAMPLE NO: 1 PENETRATION, ft: 2

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 228.25

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.81	2.000	-1.00	99.6	0.4	
20	2.34	0.850	0.23	99.0	1.0	
40	3.71	0.425	1.23	98.4	1.6	
70	38.12	0.212	2.24	83.3	16.7	
100	130.34	0.150	2.74	42.9	57.1	
200	191.74	0.075	3.74	16.0	84.0	
PAN	227.75			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.375
16	2.155
25	2.322
50	2.630
75	3.299
84	3.737
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.116
60	0.177
85	0.242
90	0.320

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 9 SAMPLE NO: 2 PENETRATION, ft: 5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 201.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.36	4.750	-2.25	99.8	0.2	
10	4.15	2.000	-1.00	97.9	2.1	
20	8.29	0.850	0.23	95.9	4.1	
40	9.55	0.425	1.23	95.3	4.7	
70	26.25	0.212	2.24	87.0	13.0	
100	78.21	0.150	2.74	61.2	38.8	
200	130.29	0.075	3.74	35.4	64.6	
PAN	201.26			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.253
16	2.284
25	2.440
50	3.070
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.147
85	0.208
90	0.302

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 10 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 183.90

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.59	2.000	-1.00	99.7	0.3	
20	2.94	0.850	0.23	98.4	1.6	
40	3.93	0.425	1.23	97.9	2.1	
70	11.70	0.212	2.24	93.6	6.4	
100	33.42	0.150	2.74	81.8	18.2	
200	133.86	0.075	3.74	27.2	72.8	
PAN	183.52			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.773
16	2.625
25	2.823
50	3.212
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.079
60	0.122
85	0.168
90	0.194

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 10 SAMPLE NO: 2 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 186.45

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.21	2.000	-1.00	99.9	0.1	
20	0.63	0.850	0.23	99.7	0.3	
40	1.01	0.425	1.23	99.5	0.5	
70	6.65	0.212	2.24	96.4	3.6	
100	32.45	0.150	2.74	82.6	17.4	
200	116.27	0.075	3.74	37.6	62.4	
PAN	186.15			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.279
16	2.674
25	2.855
50	3.367
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.114
85	0.161
90	0.184

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 10 SAMPLE NO: 4 PENETRATION, ft: 10

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 217.72

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.80	2.000	-1.00	99.6	0.4	
20	2.08	0.850	0.23	99.0	1.0	
40	3.34	0.425	1.23	98.5	1.5	
70	13.45	0.212	2.24	93.8	6.2	
100	90.27	0.150	2.74	58.5	41.5	
200	158.34	0.075	3.74	27.3	72.7	
PAN	217.38			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.854
16	2.354
25	2.474
50	2.935
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.082
60	0.153
85	0.197
90	0.206

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 11 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,ORGANICS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 279.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.44	2.000	-1.00	99.5	0.5	
20	3.79	0.850	0.23	98.6	1.4	
40	4.98	0.425	1.23	98.2	1.8	
70	10.13	0.212	2.24	96.4	3.6	
100	51.55	0.150	2.74	81.5	18.5	
200	236.77	0.075	3.74	15.2	84.8	
PAN	278.64			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.275
16	2.635
25	2.804
50	3.108
75	3.524
84	3.718
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.093
60	0.127
85	0.165
90	0.186

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 11 SAMPLE NO: 2 PENETRATION, ft: 2
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 212.62

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.19	2.000	-1.00	99.9	0.1	
20	0.99	0.850	0.23	99.5	0.5	
40	1.90	0.425	1.23	99.1	0.9	
70	13.59	0.212	2.24	93.6	6.4	
100	45.31	0.150	2.74	78.7	21.3	
200	149.68	0.075	3.74	29.6	70.4	
PAN	212.27			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.854
16	2.530
25	2.788
50	3.214
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.076
60	0.123
85	0.177
90	0.198

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 12 SAMPLE NO: 1 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 236.96

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	2.29	2.000	-1.00	99.0	1.0	
20	3.25	0.850	0.23	98.6	1.4	
40	4.14	0.425	1.23	98.3	1.7	
70	29.70	0.212	2.24	87.5	12.5	
100	114.44	0.150	2.74	51.7	48.3	
200	185.97	0.075	3.74	21.5	78.5	
PAN	236.48			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.430
16	2.277
25	2.386
50	2.775
75	3.568
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.097
60	0.165
85	0.208
90	0.272

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 13 SAMPLE NO: 3 PENETRATION, ft: 6
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 254.46

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.57	2.000	-1.00	99.8	0.2	
20	1.34	0.850	0.23	99.5	0.5	
40	2.80	0.425	1.23	98.9	1.1	
70	6.32	0.212	2.24	97.5	2.5	
100	93.25	0.150	2.74	63.4	36.6	
200	184.94	0.075	3.74	27.3	72.7	
PAN	254.10			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.267
16	2.407
25	2.538
50	3.015
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.081
60	0.144
85	0.190
90	0.199

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 14A SAMPLE NO: 2 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGS, CLAY POCKETS & MICA

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 177.51

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.04	2.000	-1.00	100.0	0.0	
20	0.51	0.850	0.23	99.7	0.3	
40	0.93	0.425	1.23	99.5	0.5	
70	5.50	0.212	2.24	96.9	3.1	
100	48.05	0.150	2.74	72.9	27.1	
200	92.93	0.075	3.74	47.6	52.4	
PAN	177.18			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.270
16	2.476
25	2.683
50	3.599
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.113
85	0.182
90	0.195

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 14A SAMPLE NO: 5 PENETRATION, ft: 11
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 282.05

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.73	4.750	-2.25	99.7	0.3	
10	3.54	2.000	-1.00	98.7	1.3	
20	5.20	0.850	0.23	98.2	1.8	
40	6.34	0.425	1.23	97.8	2.2	
70	53.21	0.212	2.24	81.1	18.9	
100	171.16	0.150	2.74	39.3	60.7	
200	255.12	0.075	3.74	9.5	90.5	
PAN	281.74			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.336
16	1.960
25	2.297
50	2.585
75	3.114
84	3.436
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.076
15	0.090
30	0.128
60	0.182
85	0.272
90	0.338

POORLY GRADED Cu= 2.384
Cc= 1.180

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 14A SAMPLE NO: 6 PENETRATION, ft: 13.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 167.93

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.60	2.000	-1.00	99.6	0.4	
20	2.21	0.850	0.23	98.7	1.3	
40	3.15	0.425	1.23	98.1	1.9	
70	12.72	0.212	2.24	92.4	7.6	
100	56.75	0.150	2.74	66.2	33.8	
200	93.59	0.075	3.74	44.3	55.7	
PAN	167.55			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.638
16	2.373
25	2.541
50	3.383
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.130
85	0.195
90	0.207

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 148 SAMPLE NO: 1 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 252.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	5.79	4.750	-2.25	97.7	2.3	
10	9.76	2.000	-1.00	96.1	3.9	
20	11.89	0.850	0.23	95.3	4.7	
40	12.96	0.425	1.23	94.9	5.1	
70	27.78	0.212	2.24	89.0	11.0	
100	111.19	0.150	2.74	56.0	44.0	
200	166.99	0.075	3.74	33.9	66.1	
PAN	252.49			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.726
16	2.299
25	2.421
50	2.933
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.158
85	0.205
90	0.256

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 14B SAMPLE NO: 2 PENETRATION, ft: 3.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 273.02

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	4.75	4.750	-2.25	98.3	1.7	
10	5.75	2.000	-1.00	97.9	2.1	
20	6.72	0.850	0.23	97.5	2.5	
40	7.47	0.425	1.23	97.3	2.7	
70	53.89	0.212	2.24	80.3	19.7	
100	152.63	0.150	2.74	44.1	55.9	
200	245.87	0.075	3.74	9.9	90.1	
PAN	272.73			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.315
16	1.896
25	2.297
50	2.637
75	3.189
84	3.486
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.075
15	0.087
30	0.121
60	0.178
85	0.283
90	0.346

POORLY GRADED Cu= 2.374 Cc= 1.085

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 14B SAMPLE NO: 3 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.58

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.07	2.000	-1.00	100.0	0.0	
20	0.39	0.850	0.23	99.8	0.2	
40	0.71	0.425	1.23	99.6	0.4	
70	3.13	0.212	2.24	98.4	1.6	
100	44.14	0.150	2.74	77.9	22.1	
200	177.24	0.075	3.74	11.2	88.8	
PAN	199.40			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.306
16	2.562
25	2.766
50	3.056
75	3.448
84	3.628
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.080
30	0.097
60	0.131
85	0.172
90	0.188

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 14B SAMPLE NO: 4 PENETRATION, ft: 7.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 209.43

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.27	2.000	-1.00	99.9	0.1	
20	1.50	0.850	0.23	99.3	0.7	
40	2.45	0.425	1.23	98.8	1.2	
70	19.08	0.212	2.24	90.9	9.1	
100	58.83	0.150	2.74	71.9	28.1	
200	164.08	0.075	3.74	21.7	78.3	
PAN	209.12			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.577
16	2.392
25	2.637
50	3.072
75	3.636
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.088
60	0.133
85	0.194
90	0.209

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 16 SAMPLE NO: 3 PENETRATION, ft: 3.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 289.67

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	9.57	4.750	-2.25	96.7	3.3	
10	13.37	2.000	-1.00	95.4	4.6	
20	16.70	0.850	0.23	94.2	5.8	
40	19.21	0.425	1.23	93.4	6.6	
70	60.95	0.212	2.24	79.0	21.0	
100	176.21	0.150	2.74	39.2	60.8	
200	229.26	0.075	3.74	20.9	79.1	
PAN	288.94			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-0.878
16	1.742
25	2.278
50	2.575
75	3.424
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.114
60	0.184
85	0.314
90	0.384

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 18 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,ORGANICS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 210.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.55	2.000	-1.00	99.7	0.3	
20	1.80	0.850	0.23	99.1	0.9	
40	3.00	0.425	1.23	98.6	1.4	
70	7.67	0.212	2.24	96.4	3.6	
100	99.42	0.150	2.74	52.8	47.2	
200	184.10	0.075	3.74	12.6	87.4	
PAN	210.70			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.250
16	2.356
25	2.452
50	2.784
75	3.328
84	3.610
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.080
30	0.109
60	0.161
85	0.197
90	0.203

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 18 SAMPLE NO: 2 PENETRATION, ft: 2.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 185.02

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.04	2.000	-1.00	100.0	0.0	
20	0.50	0.850	0.23	99.7	0.3	
40	0.92	0.425	1.23	99.5	0.5	
70	5.78	0.212	2.24	96.9	3.1	
100	56.16	0.150	2.74	69.6	30.4	
200	147.27	0.075	3.74	20.4	79.6	
PAN	184.73			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.265
16	2.444
25	2.618
50	3.040
75	3.598
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.091
60	0.136
85	0.186
90	0.197

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 18 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 281.79

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.65	4.750	-2.25	99.8	0.2	
10	0.90	2.000	-1.00	99.7	0.3	
20	1.70	0.850	0.23	99.4	0.6	
40	2.58	0.425	1.23	99.1	0.9	
70	27.17	0.212	2.24	90.4	9.6	
100	107.16	0.150	2.74	62.0	38.0	
200	175.86	0.075	3.74	37.6	62.4	
PAN	281.39			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.565
16	2.330
25	2.477
50	3.123
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.144
85	0.201
90	0.211

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 18 SAMPLE NO: 4 PENETRATION, ft: 7.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 191.33

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.24	4.750	-2.25	99.9	0.1	
10	0.60	2.000	-1.00	99.7	0.3	
20	0.87	0.850	0.23	99.5	0.5	
40	1.46	0.425	1.23	99.2	0.8	
70	7.24	0.212	2.24	96.2	3.8	
100	88.93	0.150	2.74	53.5	46.5	
200	136.09	0.075	3.74	28.9	71.1	
PAN	190.83			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.249
16	2.357
25	2.456
50	2.836
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.079
60	0.160
85	0.197
90	0.204

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 19 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 190.03

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.66	2.000	-1.00	99.1	0.9	
20	2.98	0.850	0.23	98.4	1.6	
40	4.07	0.425	1.23	97.9	2.1	
70	9.52	0.212	2.24	95.0	5.0	
100	45.19	0.150	2.74	76.2	23.8	
200	154.93	0.075	3.74	18.5	81.5	
PAN	189.69			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.232
16	2.500
25	2.751
50	3.089
75	3.571
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.091
60	0.130
85	0.180
90	0.196

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 19 SAMPLE NO: 2 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS & MICA

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 160.96

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.08	2.000	-1.00	100.0	0.0	
20	0.61	0.850	0.23	99.6	0.4	
40	1.20	0.425	1.23	99.3	0.7	
70	2.93	0.212	2.24	98.2	1.8	
100	10.31	0.150	2.74	93.6	6.4	
200	87.98	0.075	3.74	45.3	54.7	
PAN	160.54			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.557
16	2.877
25	3.028
50	3.594
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.099
85	0.138
90	0.145

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 22 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 203.69

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.55	2.000	-1.00	99.7	0.3	
20	2.71	0.850	0.23	98.7	1.3	
40	4.05	0.425	1.23	98.0	2.0	
70	7.28	0.212	2.24	96.4	3.6	
100	71.46	0.150	2.74	64.9	35.1	
200	174.87	0.075	3.74	14.1	85.9	
PAN	203.56			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.256
16	2.407
25	2.549
50	2.951
75	3.440
84	3.681
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.076
30	0.100
60	0.143
85	0.191
90	0.200

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 23 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 227.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.76	2.000	-1.00	99.7	0.3	
20	2.76	0.850	0.23	98.8	1.2	
40	3.72	0.425	1.23	98.4	1.6	
70	4.85	0.212	2.24	97.9	2.1	
100	18.79	0.150	2.74	91.7	8.3	
200	170.50	0.075	3.74	24.9	75.1	
PAN	226.88			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.441
16	2.816
25	2.917
50	3.256
75	3.735
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.081
60	0.116
85	0.143
90	0.148

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 23 SAMPLE NO: 2 PENETRATION, ft: 2
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 188.33

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.17	2.000	-1.00	99.9	0.1	
20	0.85	0.850	0.23	99.5	0.5	
40	1.47	0.425	1.23	99.2	0.8	
70	3.48	0.212	2.24	98.2	1.8	
100	40.47	0.150	2.74	78.5	21.5	
200	117.54	0.075	3.74	37.6	62.4	
PAN	187.83			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.303
16	2.571
25	2.795
50	3.334
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.118
85	0.171
90	0.187

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 23 SAMPLE NO: 4 PENETRATION, ft: 7

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 171.88

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.64	2.000	-1.00	99.6	0.4	
20	2.72	0.850	0.23	98.4	1.6	
40	4.19	0.425	1.23	97.6	2.4	
70	7.77	0.212	2.24	95.5	4.5	
100	37.85	0.150	2.74	78.0	22.0	
200	116.28	0.075	3.74	32.3	67.7	
PAN	171.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.249
16	2.537
25	2.781
50	3.244
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.122
85	0.176
90	0.194

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 24 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL: OLIVE GRAY & DARK GRAY SILTY FINE SAND W/MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 209.42

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.21	0.850	0.23	99.9	0.1	
40	0.31	0.425	1.23	99.9	0.1	
70	1.00	0.212	2.24	99.5	0.5	
100	38.11	0.150	2.74	81.8	18.2	
200	181.22	0.075	3.74	13.5	86.5	
PAN	209.19			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.344
16	2.660
25	2.805
50	3.099
75	3.497
84	3.680
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.077
30	0.094
60	0.127
85	0.162
90	0.180

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 24 SAMPLE NO: 4 PENETRATION, ft: 7

MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 165.87

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	1.06	0.212	2.24	99.4	0.6	
100	23.78	0.150	2.74	85.7	14.3	
200	133.73	0.075	3.74	19.4	80.6	
PAN	165.47			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.372
16	2.754
25	2.849
50	3.168
75	3.610
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.088
60	0.122
85	0.149
90	0.171

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 24 SAMPLE NO: 6 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS,ORGANICS & MICA
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 138.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	3.28	0.212	2.24	97.6	2.4	
100	17.96	0.150	2.74	87.1	12.9	
200	69.99	0.075	3.74	49.6	50.4	
PAN	138.28			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.341
16	2.792
25	2.974
50	3.718
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.097
85	0.146
90	0.168

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 25 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 197.50

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.55	2.000	-1.00	99.2	0.8	
20	4.13	0.850	0.23	97.9	2.1	
40	5.56	0.425	1.23	97.2	2.8	
70	7.13	0.212	2.24	96.4	3.6	
100	64.34	0.150	2.74	67.4	32.6	
200	151.42	0.075	3.74	23.3	76.7	
PAN	197.28			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.257
16	2.422
25	2.581
50	3.036
75	3.679
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.087
60	0.138
85	0.189
90	0.199

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 25 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 185.25

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.25	2.000	-1.00	99.9	0.1	
20	1.37	0.850	0.23	99.3	0.7	
40	2.37	0.425	1.23	98.7	1.3	
70	3.87	0.212	2.24	97.9	2.1	
100	11.46	0.150	2.74	93.8	6.2	
200	104.17	0.075	3.74	43.8	56.2	
PAN	185.20			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.566
16	2.875
25	3.020
50	3.555
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.101
85	0.138
90	0.145

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 27 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 209.04

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.43	2.000	-1.00	99.8	0.2	
20	3.90	0.850	0.23	98.1	1.9	
40	5.91	0.425	1.23	97.2	2.8	
70	7.58	0.212	2.24	96.4	3.6	
100	52.27	0.150	2.74	75.0	25.0	
200	140.67	0.075	3.74	32.7	67.3	
PAN	208.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.263
16	2.497
25	2.737
50	3.221
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.125
85	0.180
90	0.194

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 28 SAMPLE NO: 3 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 213.14

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.18	4.750	-2.25	99.9	0.1	
10	5.80	2.000	-1.00	97.3	2.7	
20	15.09	0.850	0.23	92.9	7.1	
40	18.12	0.425	1.23	91.5	8.5	
70	20.69	0.212	2.24	90.3	9.7	
100	30.10	0.150	2.74	85.9	14.1	
200	143.49	0.075	3.74	32.7	67.3	
PAN	213.14			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-0.775
16	2.761
25	2.882
50	3.309
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.115
85	0.149
90	0.208

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 28 SAMPLE NO: 4 PENETRATION, ft: 6
MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.98

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.04	2.000	-1.00	100.0	0.0	
20	0.62	0.850	0.23	99.7	0.3	
40	1.26	0.425	1.23	99.4	0.6	
70	4.88	0.212	2.24	97.6	2.4	
100	56.53	0.150	2.74	71.7	28.3	
200	111.43	0.075	3.74	44.3	55.7	
PAN	199.47			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.278
16	2.469
25	2.659
50	3.446
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.120
85	0.183
90	0.195

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 31 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: DARK GRAY SILTY FINE SAND W/MICA

TESTED BY: DC DATE:11-22-87

CHECKED BY: DC DATE:11-22-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 200.87

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.12	2.000	-1.00	99.9	0.1	
20	1.23	0.850	0.23	99.4	0.6	
40	2.36	0.425	1.23	98.8	1.2	
70	7.71	0.212	2.24	96.2	3.8	
100	89.78	0.150	2.74	55.3	44.7	
200	160.89	0.075	3.74	19.9	80.1	
PAN	200.35			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.249
16	2.363
25	2.466
50	2.841
75	3.529
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.098
60	0.158
85	0.196
90	0.203

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 31 SAMPLE NO: 2 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 191.88

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.12	4.750	-2.25	99.9	0.1	
10	0.46	2.000	-1.00	99.8	0.2	
20	0.69	0.850	0.23	99.6	0.4	
40	0.96	0.425	1.23	99.5	0.5	
70	6.75	0.212	2.24	96.5	3.5	
100	108.10	0.150	2.74	43.7	56.3	
200	179.37	0.075	3.74	6.5	93.5	
PAN	191.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.249
16	2.336
25	2.412
50	2.663
75	3.134
84	3.390
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.093
30	0.124
60	0.170
85	0.199
90	0.205

POORLY GRADED Cu= 2.060 Cc= 1.092

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 31 SAMPLE NO: 4 PENETRATION, ft: 9.5
MATERIAL: OLIVE GRAY,DARK GRAY SANDY SILT W/CLAY POCKETS & MICA
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 123.91

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.51	0.425	1.23	99.6	0.4	
70	1.25	0.212	2.24	99.0	1.0	
100	5.92	0.150	2.74	95.2	4.8	
200	55.57	0.075	3.74	55.2	44.8	
PAN	123.73			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.741
16	2.940
25	3.136
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.085
85	0.132
90	0.141

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC.; WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 34 SAMPLE NO: 2 PENETRATION, ft: 2.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 197.95

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.30	2.000	-1.00	99.8	0.2	
20	1.19	0.850	0.23	99.4	0.6	
40	1.90	0.425	1.23	99.0	1.0	
70	5.93	0.212	2.24	97.0	3.0	
100	97.57	0.150	2.74	50.7	49.3	
200	161.11	0.075	3.74	18.6	81.4	
PAN	197.67			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.255
16	2.355
25	2.445
50	2.752
75	3.458
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.103
60	0.163
85	0.197
90	0.203

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 34 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 225.24

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.26	4.750	-2.25	99.9	0.1	
10	0.95	2.000	-1.00	99.6	0.4	
20	1.76	0.850	0.23	99.2	0.8	
40	2.71	0.425	1.23	98.8	1.2	
70	7.83	0.212	2.24	96.5	3.5	
100	61.83	0.150	2.74	72.5	27.5	
200	151.68	0.075	3.74	32.7	67.3	
PAN	224.94			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.263
16	2.468
25	2.673
50	3.195
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.128
85	0.183
90	0.196

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 35 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 245.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.51	2.000	-1.00	99.4	0.6	
20	3.14	0.850	0.23	98.7	1.3	
40	4.57	0.425	1.23	98.1	1.9	
70	9.36	0.212	2.24	96.2	3.8	
100	86.62	0.150	2.74	64.8	35.2	
200	189.03	0.075	3.74	23.1	76.9	
PAN	245.70			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.253
16	2.404
25	2.546
50	3.001
75	3.666
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.088
60	0.142
85	0.191
90	0.200

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 35 SAMPLE NO: 2 PENETRATION, ft: 2.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 145.51

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.11	2.000	-1.00	99.2	0.8	
20	8.13	0.850	0.23	94.4	5.6	
40	11.49	0.425	1.23	92.1	7.9	
70	13.31	0.212	2.24	90.9	9.1	
100	30.29	0.150	2.74	79.2	20.8	
200	101.88	0.075	3.74	30.0	70.0	
PAN	145.27			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-0.339
16	2.501
25	2.795
50	3.223
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.075
60	0.122
85	0.182
90	0.208

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 35 SAMPLE NO: 3 PENETRATION, ft: 4.5

MATERIAL: OLIVE GRAY,GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-22-87

CHECKED BY: DC DATE:11-22-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 263.45

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.40	4.750	-2.25	99.8	0.2	
10	1.30	2.000	-1.00	99.5	0.5	
20	5.40	0.850	0.23	98.0	2.0	
40	8.46	0.425	1.23	96.8	3.2	
70	37.94	0.212	2.24	85.6	14.4	
100	144.91	0.150	2.74	45.0	55.0	
200	208.39	0.075	3.74	20.9	79.1	
PAN	262.88			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.332
16	2.253
25	2.346
50	2.661
75	3.495
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.105
60	0.174
85	0.211
90	0.309

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 36 SAMPLE NO: 1 PENETRATION, ft: 2.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 233.50

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.23	4.750	-2.25	99.9	0.1	
10	1.54	2.000	-1.00	99.3	0.7	
20	9.50	0.850	0.23	95.9	4.1	
40	12.97	0.425	1.23	94.4	5.6	
70	22.95	0.212	2.24	90.2	9.8	
100	111.21	0.150	2.74	52.4	47.6	
200	196.36	0.075	3.74	15.9	84.1	
PAN	233.15			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.656
16	2.304
25	2.410
50	2.781
75	3.397
84	3.733
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.106
60	0.163
85	0.204
90	0.212

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 36 SAMPLE NO: 2 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY

TESTED BY: DC DATE:11-22-87

CHECKED BY: DC DATE:11-22-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 203.31

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.38	2.000	-1.00	99.8	0.2	
20	1.85	0.850	0.23	99.1	0.9	
40	2.82	0.425	1.23	98.6	1.4	
70	9.29	0.212	2.24	95.4	4.6	
100	105.40	0.150	2.74	48.2	51.8	
200	169.74	0.075	3.74	16.5	83.5	
PAN	202.65			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.241
16	2.338
25	2.424
50	2.712
75	3.375
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.109
60	0.166
85	0.199
90	0.205

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 36 SAMPLE NO: 3 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 250.67

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.91	4.750	-2.25	99.6	0.4	
10	3.04	2.000	-1.00	98.8	1.2	
20	7.21	0.850	0.23	97.1	2.9	
40	11.15	0.425	1.23	95.6	4.4	
70	20.80	0.212	2.24	91.7	8.3	
100	74.64	0.150	2.74	70.2	29.8	
200	190.97	0.075	3.74	23.8	76.2	
PAN	250.02			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.321
16	2.390
25	2.603
50	3.072
75	3.697
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.086
60	0.135
85	0.194
90	0.207

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 41 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 299.36

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.01	4.750	-2.25	100.0	0.0	
10	0.38	2.000	-1.00	99.9	0.1	
20	1.76	0.850	0.23	99.4	0.6	
40	3.09	0.425	1.23	99.0	1.0	
70	15.60	0.212	2.24	94.8	5.2	
100	117.49	0.150	2.74	60.8	39.2	
200	244.95	0.075	3.74	18.2	81.8	
PAN	298.75			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.148
16	2.371
25	2.498
50	2.919
75	3.508
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.097
60	0.149
85	0.195
90	0.204

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 41 SAMPLE NO: 3 PENETRATION, ft: 3.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 225.15

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.83	2.000	-1.00	99.6	0.4	
20	3.84	0.850	0.23	98.3	1.7	
40	6.52	0.425	1.23	97.1	2.9	
70	11.71	0.212	2.24	94.8	5.2	
100	77.76	0.150	2.74	65.5	34.5	
200	158.34	0.075	3.74	29.7	70.3	
PAN	224.02			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.087
16	2.394
25	2.547
50	3.069
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.076
60	0.139
85	0.192
90	0.202

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 42 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-22-87

CHECKED BY: DC DATE:11-22-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 242.86

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.09	4.750	-2.25	100.0	0.0	
10	0.50	2.000	-1.00	99.8	0.2	
20	2.04	0.850	0.23	99.2	0.8	
40	3.10	0.425	1.23	98.7	1.3	
70	15.79	0.212	2.24	93.5	6.5	
100	122.44	0.150	2.74	49.6	50.4	
200	203.76	0.075	3.74	16.1	83.9	
PAN	242.44			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.813
16	2.327
25	2.419
50	2.731
75	3.377
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.108
60	0.166
85	0.201
90	0.207

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 42 SAMPLE NO: 3 PENETRATION, ft: 4

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 216.99

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	2.82	4.750	-2.25	98.7	1.3	
10	4.30	2.000	-1.00	98.0	2.0	
20	7.59	0.850	0.23	96.5	3.5	
40	10.06	0.425	1.23	95.4	4.6	
70	15.94	0.212	2.24	92.7	7.3	
100	61.24	0.150	2.74	71.8	28.2	
200	168.54	0.075	3.74	22.3	77.7	
PAN	216.55			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.316
16	2.416
25	2.642
50	3.076
75	3.655
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.088
60	0.133
85	0.190
90	0.205

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 43B SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 240.43

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.55	2.000	-1.00	99.8	0.2	
20	1.48	0.850	0.23	99.4	0.6	
40	2.89	0.425	1.23	98.8	1.2	
70	7.05	0.212	2.24	97.1	2.9	
100	98.47	0.150	2.74	59.0	41.0	
200	193.32	0.075	3.74	19.6	80.4	
PAN	240.02			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.259
16	2.383
25	2.497
50	2.901
75	3.538
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.096
60	0.152
85	0.193
90	0.201

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 43 B SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 242.77

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.76	4.750	-2.25	99.7	0.3	
10	1.27	2.000	-1.00	99.5	0.5	
20	2.29	0.850	0.23	99.1	0.9	
40	2.77	0.425	1.23	98.9	1.1	
70	8.87	0.212	2.24	96.3	3.7	
100	62.60	0.150	2.74	74.2	25.8	
200	186.05	0.075	3.74	23.4	76.6	
PAN	242.25			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.262
16	2.486
25	2.714
50	3.109
75	3.687
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.086
60	0.130
85	0.181
90	0.195

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 44 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/MICA
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.48

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.58	2.000	-1.00	99.7	0.3	
20	1.80	0.850	0.23	99.1	0.9	
40	2.26	0.425	1.23	98.9	1.1	
70	4.84	0.212	2.24	97.6	2.4	
100	92.36	0.150	2.74	53.7	46.3	
200	172.69	0.075	3.74	13.4	86.6	
PAN	199.09			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.261
16	2.368
25	2.464
50	2.800
75	3.352
84	3.640
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.078
30	0.107
60	0.159
85	0.195
90	0.202

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 44 SAMPLE NO: 3 PENETRATION, ft: 3.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 152.66

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.09	4.750	-2.25	99.9	0.1	
10	0.73	2.000	-1.00	99.5	0.5	
20	2.65	0.850	0.23	98.3	1.7	
40	3.63	0.425	1.23	97.6	2.4	
70	5.67	0.212	2.24	96.3	3.7	
100	22.94	0.150	2.74	85.0	15.0	
200	89.59	0.075	3.74	41.3	58.7	
PAN	152.35			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.284
16	2.752
25	2.900
50	3.458
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.109
85	0.150
90	0.179

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 44 SAMPLE NO: 4 PENETRATION, ft: 6.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 230.63

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.75	4.750	-2.25	99.7	0.3	
10	1.25	2.000	-1.00	99.5	0.5	
20	2.01	0.850	0.23	99.1	0.9	
40	3.12	0.425	1.23	98.6	1.4	
70	14.34	0.212	2.24	93.8	6.2	
100	103.88	0.150	2.74	55.0	45.0	
200	169.15	0.075	3.74	26.7	73.3	
PAN	230.27			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.858
16	2.342
25	2.449
50	2.860
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.085
60	0.159
85	0.199
90	0.206

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 45 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 190.21

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.09	4.750	-2.25	100.0	0.0	
10	0.51	2.000	-1.00	99.7	0.3	
20	1.27	0.850	0.23	99.3	0.7	
40	1.80	0.425	1.23	99.1	0.9	
70	6.10	0.212	2.24	96.8	3.2	
100	94.32	0.150	2.74	50.4	49.6	
200	169.55	0.075	3.74	10.9	89.1	
PAN	189.99			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.253
16	2.353
25	2.442
50	2.744
75	3.275
84	3.548
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.083
30	0.113
60	0.164
85	0.197
90	0.203

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 45 SAMPLE NO: 3 PENETRATION, ft: 4

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 249.40

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.08	4.750	-2.25	100.0	0.0	
10	0.92	2.000	-1.00	99.6	0.4	
20	3.92	0.850	0.23	98.4	1.6	
40	6.55	0.425	1.23	97.4	2.6	
70	10.41	0.212	2.24	95.8	4.2	
100	61.90	0.150	2.74	75.2	24.8	
200	162.44	0.075	3.74	34.9	65.1	
PAN	249.05			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.254
16	2.493
25	2.740
50	3.256
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.123
85	0.181
90	0.195

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 46 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 180.89

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.20	2.000	-1.00	99.9	0.1	
20	0.73	0.850	0.23	99.6	0.4	
40	1.29	0.425	1.23	99.3	0.7	
70	16.69	0.212	2.24	90.8	9.2	
100	89.67	0.150	2.74	50.4	49.6	
200	153.16	0.075	3.74	15.3	84.7	
PAN	180.52			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.596
16	2.306
25	2.405
50	2.745
75	3.366
84	3.707
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.108
60	0.166
85	0.204
90	0.211

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 46 SAMPLE NO: 2 PENETRATION, ft: 2

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 237.84

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.51	2.000	-1.00	99.8	0.2	
20	1.03	0.850	0.23	99.6	0.4	
40	1.74	0.425	1.23	99.3	0.7	
70	9.87	0.212	2.24	95.9	4.1	
100	105.00	0.150	2.74	55.9	44.1	
200	201.91	0.075	3.74	15.1	84.9	
PAN	237.50			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.246
16	2.362
25	2.468
50	2.837
75	3.405
84	3.703
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.104
60	0.157
85	0.196
90	0.203

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 46 SAMPLE NO: 3 PENETRATION, ft: 5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 149.82

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.85	4.750	-2.25	99.4	0.6	
10	1.62	2.000	-1.00	98.9	1.1	
20	3.23	0.850	0.23	97.8	2.2	
40	4.52	0.425	1.23	97.0	3.0	
70	9.43	0.212	2.24	93.7	6.3	
100	10.78	0.150	2.74	92.8	7.2	
200	96.56	0.075	3.74	35.5	64.5	
PAN	149.69			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.695
16	2.844
25	2.965
50	3.393
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.109
85	0.141
90	0.147

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 49 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY,OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 227.07

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.06	4.750	-2.25	100.0	0.0	
10	0.20	2.000	-1.00	99.9	0.1	
20	0.62	0.850	0.23	99.7	0.3	
40	1.32	0.425	1.23	99.4	0.6	
70	28.59	0.212	2.24	87.4	12.6	
100	130.48	0.150	2.74	42.5	57.5	
200	211.89	0.075	3.74	6.7	93.3	
PAN	226.80			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.481
16	2.268
25	2.353
50	2.635
75	3.121
84	3.384
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.094
30	0.125
60	0.175
85	0.209
90	0.268

POORLY GRADED Cu= 2.123 Cc= 1.085

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 49 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGS & ORGANICS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 216.86

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.70	2.000	-1.00	99.7	0.3	
20	1.91	0.850	0.23	99.1	0.9	
40	3.37	0.425	1.23	98.4	1.6	
70	74.66	0.212	2.24	65.6	34.4	
100	87.30	0.150	2.74	59.7	40.3	
200	183.31	0.075	3.74	15.5	84.5	
PAN	216.70			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.297
16	1.540
25	1.814
50	2.894
75	3.438
84	3.718
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.101
60	0.153
85	0.350
90	0.379

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 49 SAMPLE NO: 3 PENETRATION, ft: 5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 165.30

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.32	2.000	-1.00	99.8	0.2	
20	3.39	0.850	0.23	97.9	2.1	
40	5.79	0.425	1.23	96.5	3.5	
70	8.51	0.212	2.24	94.9	5.1	
100	22.73	0.150	2.74	86.2	13.8	
200	93.33	0.075	3.74	43.5	56.5	
PAN	164.84			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.083
16	2.772
25	2.927
50	3.519
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.105
85	0.148
90	0.178

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 50 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 218.08

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.77	0.850	0.23	99.6	0.4	
40	1.39	0.425	1.23	99.4	0.6	
70	11.87	0.212	2.24	94.6	5.4	
100	111.53	0.150	2.74	48.9	51.1	
200	186.79	0.075	3.74	14.3	85.7	
PAN	217.74			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.079
16	2.333
25	2.422
50	2.721
75	3.328
84	3.664
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.077
30	0.111
60	0.166
85	0.200
90	0.206

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 50 SAMPLE NO: 2 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 260.00

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.79	2.000	-1.00	99.7	0.3	
20	1.65	0.850	0.23	99.4	0.6	
40	2.48	0.425	1.23	99.0	1.0	
70	18.37	0.212	2.24	92.9	7.1	
100	129.50	0.150	2.74	50.2	49.8	
200	222.29	0.075	3.74	14.5	85.5	
PAN	259.52			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.755
16	2.324
25	2.418
50	2.741
75	3.345
84	3.673
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.076
30	0.109
60	0.165
85	0.201
90	0.208

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 52 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 264.40

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.45	2.000	-1.00	99.5	0.5	
20	5.01	0.850	0.23	98.1	1.9	
40	6.04	0.425	1.23	97.7	2.3	
70	14.82	0.212	2.24	94.4	5.6	
100	110.04	0.150	2.74	58.4	41.6	
200	218.34	0.075	3.74	17.4	82.6	
PAN	264.04			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.947
16	2.358
25	2.476
50	2.882
75	3.476
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.099
60	0.153
85	0.197
90	0.205

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 52 SAMPLE NO: 2 PENETRATION, ft: 2.5

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-22-87

CHECKED BY: DC DATE:11-22-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 201.96

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.06	2.000	-1.00	100.0	0.0	
20	0.69	0.850	0.23	99.7	0.3	
40	1.72	0.425	1.23	99.1	0.9	
70	7.11	0.212	2.24	96.5	3.5	
100	64.65	0.150	2.74	68.0	32.0	
200	141.30	0.075	3.74	30.0	70.0	
PAN	201.67			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.258
16	2.427
25	2.590
50	3.107
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.135
85	0.188
90	0.199

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 53 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 204.68

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.22	0.850	0.23	99.9	0.1	
40	0.67	0.425	1.23	99.7	0.3	
70	3.12	0.212	2.24	98.5	1.5	
100	50.45	0.150	2.74	75.4	24.6	
200	179.14	0.075	3.74	12.5	87.5	
PAN	204.20			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.299
16	2.521
25	2.741
50	3.043
75	3.458
84	3.652
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.078
30	0.097
60	0.133
85	0.177
90	0.190

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 55 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS, & MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 188.90

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.35	2.000	-1.00	99.8	0.2	
20	0.94	0.850	0.23	99.5	0.5	
40	1.97	0.425	1.23	99.0	1.0	
70	21.52	0.212	2.24	88.6	11.4	
100	69.61	0.150	2.74	63.1	36.9	
200	159.42	0.075	3.74	15.6	84.4	
PAN	188.45			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.493
16	2.312
25	2.474
50	2.938
75	3.460
84	3.724
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.099
60	0.145
85	0.204
90	0.247

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 57 SAMPLE NO: 2 PENETRATION, ft: 1.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 251.64

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.18	2.000	-1.00	99.9	0.1	
20	1.47	0.850	0.23	99.4	0.6	
40	2.89	0.425	1.23	98.9	1.1	
70	6.81	0.212	2.24	97.3	2.7	
100	92.06	0.150	2.74	63.4	36.6	
200	211.78	0.075	3.74	15.8	84.2	
PAN	251.19			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.265
16	2.406
25	2.538
50	2.942
75	3.466
84	3.732
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.099
60	0.145
85	0.191
90	0.199

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 61 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 214.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.60	4.750	-2.25	99.7	0.3	
10	1.36	2.000	-1.00	99.4	0.6	
20	3.23	0.850	0.23	98.5	1.5	
40	5.31	0.425	1.23	97.5	2.5	
70	21.82	0.212	2.24	89.8	10.2	
100	109.54	0.150	2.74	48.8	51.2	
200	187.85	0.075	3.74	12.3	87.7	
PAN	213.63			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.449
16	2.295
25	2.391
50	2.719
75	3.285
84	3.586
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.081
30	0.113
60	0.168
85	0.205
90	0.219

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 61 SAMPLE NO: 2 PENETRATION, ft: 2.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/MICA
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 247.60

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.26	0.850	0.23	99.9	0.1	
40	0.51	0.425	1.23	99.8	0.2	
70	19.09	0.212	2.24	92.3	7.7	
100	159.93	0.150	2.74	35.4	64.6	
200	231.08	0.075	3.74	6.7	93.3	
PAN	246.97			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.730
16	2.297
25	2.365
50	2.584
75	3.008
84	3.311
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.098
30	0.137
60	0.178
85	0.205
90	0.210

POORLY GRADED Cu= 2.108
Cc= 1.247

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 63 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 228.40

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.18	2.000	-1.00	99.5	0.5	
20	1.77	0.850	0.23	99.2	0.8	
40	3.15	0.425	1.23	98.6	1.4	
70	18.89	0.212	2.24	91.7	8.3	
100	88.17	0.150	2.74	61.4	38.6	
200	204.69	0.075	3.74	10.4	89.6	
PAN	228.18			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.617
16	2.344
25	2.483
50	2.896
75	3.353
84	3.575
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.082
30	0.105
60	0.148
85	0.199
90	0.209

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 64 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 196.16

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.26	4.750	-2.25	99.9	0.1	
10	1.49	2.000	-1.00	99.2	0.8	
20	1.85	0.850	0.23	99.1	0.9	
40	2.21	0.425	1.23	98.9	1.1	
70	8.99	0.212	2.24	95.4	4.6	
100	84.96	0.150	2.74	56.7	43.3	
200	161.08	0.075	3.74	17.9	82.1	
PAN	196.01			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.242
16	2.361
25	2.471
50	2.858
75	3.478
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.100
60	0.156
85	0.196
90	0.204

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 65 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 223.49

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.08	4.750	-2.25	100.0	0.0	
10	0.15	2.000	-1.00	99.9	0.1	
20	0.84	0.850	0.23	99.6	0.4	
40	1.59	0.425	1.23	99.3	0.7	
70	13.20	0.212	2.24	94.1	5.9	
100	73.44	0.150	2.74	67.1	32.9	
200	184.75	0.075	3.74	17.3	82.7	
PAN	223.17			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.957
16	2.397
25	2.565
50	2.993
75	3.516
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.095
60	0.140
85	0.192
90	0.203

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 65 SAMPLE NO: 2 PENETRATION, ft: 1.5
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 268.43

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.39	2.000	-1.00	99.9	0.1	
20	1.19	0.850	0.23	99.6	0.4	
40	3.87	0.425	1.23	98.6	1.4	
70	22.09	0.212	2.24	91.8	8.2	
100	129.68	0.150	2.74	51.7	48.3	
200	223.48	0.075	3.74	16.7	83.3	
PAN	266.82			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.616
16	2.317
25	2.418
50	2.769
75	3.412
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.105
60	0.164
85	0.202
90	0.209

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 66 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 262.58

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.02	4.750	-2.25	100.0	0.0	
10	0.55	2.000	-1.00	99.8	0.2	
20	1.65	0.850	0.23	99.4	0.6	
40	3.01	0.425	1.23	98.9	1.1	
70	32.26	0.212	2.24	87.7	12.3	
100	129.56	0.150	2.74	50.7	49.3	
200	249.72	0.075	3.74	4.9	95.1	
PAN	262.28			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.464
16	2.278
25	2.383
50	2.747
75	3.190
84	3.405
95	3.733

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.093
30	0.118
60	0.166
85	0.208
90	0.265

POORLY GRADED Cu= 1.981 Cc= 0.991

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 68 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL: DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-10-87

CHECKED BY: DC DATE:11-10-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 241.85

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	5.14	4.750	-2.25	97.9	2.1	
10	5.56	2.000	-1.00	97.7	2.3	
20	6.42	0.850	0.23	97.3	2.7	
40	7.39	0.425	1.23	96.9	3.1	
70	30.30	0.212	2.24	87.5	12.5	
100	112.34	0.150	2.74	53.5	46.5	
200	220.84	0.075	3.74	8.7	91.3	
PAN	241.56			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.362
16	2.279
25	2.394
50	2.791
75	3.268
84	3.504
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.086
30	0.112
60	0.162
85	0.208
90	0.280

POORLY GRADED Cu= 2.100 Cc= 1.002

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-29-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 68 SAMPLE NO: 2 PENETRATION, ft: 2
MATERIAL: DARK GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 234.67

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	2.43	4.750	-2.25	99.0	1.0	
10	3.05	2.000	-1.00	98.7	1.3	
20	4.30	0.850	0.23	98.2	1.8	
40	6.82	0.425	1.23	97.1	2.9	
70	20.47	0.212	2.24	91.3	8.7	
100	133.84	0.150	2.74	43.0	57.0	
200	208.68	0.075	3.74	11.1	88.9	
PAN	234.38			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.475
16	2.299
25	2.380
50	2.648
75	3.193
84	3.515
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.085
30	0.121
60	0.173
85	0.204
90	0.210

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 68 SAMPLE NO: 3 PENETRATION, ft: 3
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 204.14

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	1.45	0.850	0.23	99.3	0.7	
40	2.83	0.425	1.23	98.6	1.4	
70	4.71	0.212	2.24	97.7	2.3	
100	46.32	0.150	2.74	77.3	22.7	
200	114.10	0.075	3.74	44.1	55.9	
PAN	203.84			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.291
16	2.545
25	2.784
50	3.485
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.113
85	0.174
90	0.190

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 69 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 201.48

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.42	2.000	-1.00	99.8	0.2	
20	1.18	0.850	0.23	99.4	0.6	
40	2.41	0.425	1.23	98.8	1.2	
70	5.32	0.212	2.24	97.4	2.6	
100	32.24	0.150	2.74	84.0	16.0	
200	156.99	0.075	3.74	22.1	77.9	
PAN	201.00			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.310
16	2.737
25	2.838
50	3.179
75	3.665
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.085
60	0.122
85	0.155
90	0.179

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 71 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 217.38

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.43	2.000	-1.00	99.8	0.2	
20	1.69	0.850	0.23	99.2	0.8	
40	3.66	0.425	1.23	98.3	1.7	
70	19.42	0.212	2.24	91.1	8.9	
100	72.95	0.150	2.74	66.4	33.6	
200	169.33	0.075	3.74	22.1	77.9	
PAN	216.94			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.555
16	2.358
25	2.535
50	3.015
75	3.638
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.089
60	0.140
85	0.198
90	0.209

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 73 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.33

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.26	4.750	-2.25	99.9	0.1	
10	1.11	2.000	-1.00	99.4	0.6	
20	2.18	0.850	0.23	98.9	1.1	
40	3.35	0.425	1.23	98.3	1.7	
70	31.51	0.212	2.24	84.2	15.8	
100	96.09	0.150	2.74	51.8	48.2	
200	182.58	0.075	3.74	8.4	91.6	
PAN	199.01			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.383
16	2.240
25	2.356
50	2.765
75	3.248
84	3.488
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.087
30	0.114
60	0.167
85	0.227
90	0.312

POORLY GRADED Cu= 2.135 Cc= 0.999

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 78 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 174.35

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.17	4.750	-2.25	99.9	0.1	
10	0.23	2.000	-1.00	99.9	0.1	
20	1.01	0.850	0.23	99.4	0.6	
40	1.84	0.425	1.23	98.9	1.1	
70	7.38	0.212	2.24	95.8	4.2	
100	39.58	0.150	2.74	77.3	22.7	
200	141.29	0.075	3.74	19.0	81.0	
PAN	174.08			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.254
16	2.527
25	2.763
50	3.101
75	3.584
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.090
60	0.129
85	0.177
90	0.194

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 80 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 299.58

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.15	2.000	-1.00	99.9	0.1	
20	0.53	0.850	0.23	99.8	0.2	
40	1.12	0.425	1.23	99.6	0.4	
70	63.95	0.212	2.24	78.7	21.3	
100	202.43	0.150	2.74	32.4	67.6	
200	282.61	0.075	3.74	5.7	94.3	
PAN	299.37			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.373
16	1.852
25	2.269
50	2.518
75	2.938
84	3.244
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.103
30	0.144
60	0.188
85	0.288
90	0.340

POORLY GRADED Cu= 2.135 Cc= 1.247

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 80 SAMPLE NO: 2 PENETRATION, ft: 1.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 270.93

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.59	4.750	-2.25	99.8	0.2	
10	1.25	2.000	-1.00	99.5	0.5	
20	2.18	0.850	0.23	99.2	0.8	
40	3.17	0.425	1.23	98.8	1.2	
70	62.49	0.212	2.24	76.9	23.1	
100	174.42	0.150	2.74	35.6	64.4	
200	262.56	0.075	3.74	3.1	96.9	
PAN	270.67			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.342
16	1.772
25	2.256
50	2.535
75	2.978
84	3.233
95	3.648

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.092
15	0.104
30	0.138
60	0.188
85	0.303
90	0.351

POORLY GRADED Cu= 2.038 Cc= 1.101

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 84 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-22-87

CHECKED BY: DC DATE:11-22-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 271.06

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.06	4.750	-2.25	99.6	0.4	
10	2.86	2.000	-1.00	98.9	1.1	
20	5.71	0.850	0.23	97.9	2.1	
40	8.47	0.425	1.23	96.9	3.1	
70	99.86	0.212	2.24	63.2	36.8	
100	206.44	0.150	2.74	23.8	76.2	
200	260.25	0.075	3.74	4.0	96.0	
PAN	270.70			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.267
16	1.492
25	1.741
50	2.379
75	2.718
84	3.036
95	3.659

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.099
15	0.118
30	0.160
60	0.207
85	0.361
90	0.389

POORLY GRADED Cu= 2.092 Cc= 1.251

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 85 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 141.17

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.83	2.000	-1.00	99.4	0.6	
20	2.92	0.850	0.23	97.9	2.1	
40	6.01	0.425	1.23	95.7	4.3	
70	12.13	0.212	2.24	91.4	8.6	
100	34.36	0.150	2.74	75.7	24.3	
200	99.81	0.075	3.74	29.3	70.7	
PAN	141.00			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.340
16	2.443
25	2.746
50	3.183
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.076
60	0.126
85	0.188
90	0.207

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 90 SAMPLE NO: 1 PENETRATION, ft: 0.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 275.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.50	4.750	-2.25	99.8	0.2	
10	1.16	2.000	-1.00	99.6	0.4	
20	2.07	0.850	0.23	99.2	0.8	
40	3.06	0.425	1.23	98.9	1.1	
70	30.64	0.212	2.24	88.9	11.1	
100	113.20	0.150	2.74	58.9	41.1	
200	223.22	0.075	3.74	19.0	81.0	
PAN	274.91			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.498
16	2.304
25	2.439
50	2.896
75	3.521
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.097
60	0.152
85	0.204
90	0.242

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 90 SAMPLE NO: 8 PENETRATION, ft: 16.5
MATERIAL: OLIVE GRAY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 147.92

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.02	4.750	-2.25	100.0	0.0	
10	0.10	2.000	-1.00	99.9	0.1	
20	0.52	0.850	0.23	99.6	0.4	
40	0.84	0.425	1.23	99.4	0.6	
70	1.34	0.212	2.24	99.1	0.9	
100	14.33	0.150	2.74	90.3	9.7	
200	136.06	0.075	3.74	8.0	92.0	
PAN	147.83			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.441
16	2.789
25	2.868
50	3.122
75	3.449
84	3.593
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.082
30	0.096
60	0.124
85	0.146
90	0.150

POORLY GRADED Cu= 1.609 Cc= 0.974

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 94 SAMPLE NO: 3 PENETRATION, ft: 3.5
MATERIAL: DARK GRAY SILTY FINE SAND W/CLAY POCKETS,SHELL FRAGMENTS,ORGANIC
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 206.66

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.83	4.750	-2.25	99.6	0.4	
10	7.22	2.000	-1.00	96.5	3.5	
20	10.95	0.850	0.23	94.7	5.3	
40	13.23	0.425	1.23	93.6	6.4	
70	21.81	0.212	2.24	89.4	10.6	
100	75.81	0.150	2.74	63.3	36.7	
200	176.45	0.075	3.74	14.6	85.4	
PAN	206.42			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-0.434
16	2.323
25	2.483
50	2.935
75	3.440
84	3.693
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.076
30	0.100
60	0.145
85	0.202
90	0.247

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 10-30-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 98 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 162.22

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.12	4.750	-2.25	99.9	0.1	
10	0.60	2.000	-1.00	99.6	0.4	
20	1.67	0.850	0.23	99.0	1.0	
40	3.07	0.425	1.23	98.1	1.9	
70	6.44	0.212	2.24	96.0	4.0	
100	31.37	0.150	2.74	80.7	19.3	
200	118.71	0.075	3.74	26.8	73.2	
PAN	162.10			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.265
16	2.606
25	2.809
50	3.199
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.080
60	0.123
85	0.168
90	0.189

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 99A SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,ORGANICS, & MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 180.48

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.07	4.750	-2.25	100.0	0.0	
10	0.30	2.000	-1.00	99.8	0.2	
20	0.88	0.850	0.23	99.5	0.5	
40	1.64	0.425	1.23	99.1	0.9	
70	8.69	0.212	2.24	95.2	4.8	
100	49.67	0.150	2.74	72.5	27.5	
200	157.41	0.075	3.74	12.8	87.2	
PAN	180.29			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.241
16	2.454
25	2.668
50	3.020
75	3.451
84	3.655
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.078
30	0.098
60	0.135
85	0.185
90	0.199

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 100 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,MICA & CLAY
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 183.62

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.08	4.750	-2.25	100.0	0.0	
10	1.79	2.000	-1.00	99.0	1.0	
20	7.99	0.850	0.23	95.6	4.4	
40	11.38	0.425	1.23	93.8	6.2	
70	15.26	0.212	2.24	91.7	8.3	
100	61.48	0.150	2.74	66.5	33.5	
200	133.74	0.075	3.74	27.2	72.8	
PAN	183.24			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.430
16	2.366
25	2.540
50	3.058
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.081
60	0.138
85	0.196
90	0.208

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 163 SAMPLE NO: 1 PENETRATION, ft: 2
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 105.03

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.07	2.000	-1.00	99.9	0.1	
20	0.24	0.850	0.23	99.8	0.2	
40	0.32	0.425	1.23	99.7	0.3	
70	3.20	0.212	2.24	97.0	3.0	
100	47.48	0.150	2.74	54.8	45.2	
200	92.95	0.075	3.74	11.5	88.5	
PAN	104.85			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.256
16	2.367
25	2.467
50	2.813
75	3.325
84	3.583
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.082
30	0.109
60	0.158
85	0.195
90	0.202

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 164 SAMPLE NO: 2 PENETRATION, ft: 8
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/CLAY POCKETS & MICA
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 135.85

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.06	0.425	1.23	100.0	0.0	
70	3.10	0.212	2.24	97.7	2.3	
100	16.57	0.150	2.74	87.8	12.2	
200	79.47	0.075	3.74	41.5	58.5	
PAN	135.25			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.352
16	2.793
25	2.938
50	3.478
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.107
85	0.146
90	0.165

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 164 SAMPLE NO: 4 PENETRATION, ft: 14.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 83.58

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.04	4.750	-2.25	100.0	0.0	
10	0.96	2.000	-1.00	98.9	1.1	
20	1.81	0.850	0.23	97.8	2.2	
40	2.22	0.425	1.23	97.3	2.7	
70	3.57	0.212	2.24	95.7	4.3	
100	26.73	0.150	2.74	68.0	32.0	
200	78.85	0.075	3.74	5.7	94.3	
PAN	83.26			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.248
16	2.420
25	2.587
50	2.948
75	3.327
84	3.500
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.081
15	0.087
30	0.106
60	0.141
85	0.189
90	0.200

POORLY GRADED Cu= 1.749 Cc= 0.984

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 166 SAMPLE NO: 2 PENETRATION, ft: 4

MATERIAL: OLIVE GRAY FINE SAND

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 197.40

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.16	0.850	0.23	99.9	0.1	
40	0.35	0.425	1.23	99.8	0.2	
70	3.43	0.212	2.24	98.3	1.7	
100	103.61	0.150	2.74	47.5	52.5	
200	185.87	0.075	3.74	5.8	94.2	
PAN	197.22			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.263
16	2.355
25	2.437
50	2.706
75	3.170
84	3.403
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.093
30	0.120
60	0.166
85	0.197
90	0.202

POORLY GRADED Cu= 1.999 Cc= 1.044

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 167 SAMPLE NO: 2 PENETRATION, ft: 2.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 169.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.85	2.000	-1.00	99.5	0.5	
20	1.12	0.850	0.23	99.3	0.7	
40	1.44	0.425	1.23	99.1	0.9	
70	6.52	0.212	2.24	96.1	3.9	
100	60.80	0.150	2.74	64.1	35.9	
200	146.25	0.075	3.74	13.5	86.5	
PAN	168.81			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.252
16	2.399
25	2.538
50	2.939
75	3.423
84	3.662
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.077
30	0.101
60	0.144
85	0.191
90	0.201

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 168 SAMPLE NO: 2 PENETRATION, ft: 3.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS, & MICA
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 167.81

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.62	2.000	-1.00	99.6	0.4	
20	0.74	0.850	0.23	99.6	0.4	
40	0.78	0.425	1.23	99.5	0.5	
70	7.33	0.212	2.24	95.6	4.4	
100	94.56	0.150	2.74	43.7	56.3	
200	152.93	0.075	3.74	8.9	91.1	
PAN	167.45			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.243
16	2.330
25	2.408
50	2.661
75	3.166
84	3.451
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.089
30	0.122
60	0.170
85	0.200
90	0.206

POORLY GRADED Cu= 2.195 Cc= 1.126

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 168 SAMPLE NO: 3 PENETRATION, ft: 7
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 195.92

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.83	4.750	-2.25	99.6	0.4	
10	2.50	2.000	-1.00	98.7	1.3	
20	5.69	0.850	0.23	97.1	2.9	
40	7.26	0.425	1.23	96.3	3.7	
70	9.65	0.212	2.24	95.1	4.9	
100	70.66	0.150	2.74	63.9	36.1	
200	154.66	0.075	3.74	21.1	78.9	
PAN	195.58			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.239
16	2.389
25	2.531
50	2.977
75	3.600
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.092
60	0.144
85	0.193
90	0.202

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-10-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 168 SAMPLE NO: 4 PENETRATION, ft: 9
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-10-87
CHECKED BY: DC DATE:11-10-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 237.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.13	2.000	-1.00	99.9	0.1	
20	0.65	0.850	0.23	99.7	0.3	
40	0.96	0.425	1.23	99.6	0.4	
70	3.48	0.212	2.24	98.5	1.5	
100	58.30	0.150	2.74	75.5	24.5	
200	207.28	0.075	3.74	12.7	87.3	
PAN	237.16			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.300
16	2.523
25	2.742
50	3.046
75	3.463
84	3.658
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.078
30	0.097
60	0.133
85	0.177
90	0.190

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 168 SAMPLE NO: 5 PENETRATION, ft: 12.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 205.27

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.01	4.750	-2.25	100.0	0.0	
10	0.63	2.000	-1.00	99.7	0.3	
20	1.95	0.850	0.23	99.1	0.9	
40	2.50	0.425	1.23	98.8	1.2	
70	6.43	0.212	2.24	96.9	3.1	
100	69.13	0.150	2.74	66.3	33.7	
200	200.66	0.075	3.74	2.2	97.8	
PAN	205.01			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.262
16	2.419
25	2.569
50	2.920
75	3.277
84	3.439
95	3.671

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.091
30	0.109
60	0.143
85	0.189
90	0.199

POORLY GRADED Cu= 1.688 Cc= 0.980

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 170 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 220.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.22	4.750	-2.25	99.9	0.1	
10	2.06	2.000	-1.00	99.1	0.9	
20	5.45	0.850	0.23	97.5	2.5	
40	6.26	0.425	1.23	97.2	2.8	
70	12.58	0.212	2.24	94.3	5.7	
100	153.46	0.150	2.74	30.4	69.6	
200	218.83	0.075	3.74	0.8	99.2	
PAN	220.38			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.864
16	2.303
25	2.365
50	2.557
75	2.866
84	3.119
95	3.532

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.100
15	0.113
30	0.149
60	0.180
85	0.204
90	0.208

POORLY GRADED Cu= 1.803 Cc= 1.238

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 171 SAMPLE NO: 2 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 197.01

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.47	0.850	0.23	99.8	0.2	
40	0.67	0.425	1.23	99.7	0.3	
70	2.98	0.212	2.24	98.5	1.5	
100	50.69	0.150	2.74	74.3	25.7	
200	165.34	0.075	3.74	16.1	83.9	
PAN	196.73			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.296
16	2.506
25	2.718
50	3.056
75	3.517
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.094
60	0.133
85	0.179
90	0.191

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 171 SAMPLE NO: 4 PENETRATION, ft: 12

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 178.63

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.16	2.000	-1.00	99.9	0.1	
20	0.51	0.850	0.23	99.7	0.3	
40	0.72	0.425	1.23	99.6	0.4	
70	1.32	0.212	2.24	99.3	0.7	
100	63.72	0.150	2.74	64.3	35.7	
200	173.22	0.075	3.74	3.0	97.0	
PAN	178.32			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.287
16	2.427
25	2.557
50	2.904
75	3.274
84	3.442
95	3.687

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.091
30	0.110
60	0.145
85	0.188
90	0.196

POORLY GRADED Cu= 1.723 Cc= 0.983

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 172 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 163.15

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.12	4.750	-2.25	99.9	0.1	
10	0.50	2.000	-1.00	99.7	0.3	
20	1.19	0.850	0.23	99.3	0.7	
40	1.77	0.425	1.23	98.9	1.1	
70	7.42	0.212	2.24	95.5	4.5	
100	65.59	0.150	2.74	59.8	40.2	
200	157.11	0.075	3.74	3.7	96.3	
PAN	162.85			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.243
16	2.373
25	2.494
50	2.859
75	3.251
84	3.433
95	3.701

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.091
30	0.112
60	0.150
85	0.195
90	0.203

POORLY GRADED Cu= 1.788 Cc= 0.988

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 174 SAMPLE NO: 1 PENETRATION, ft: 1.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.42

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.43	2.000	-1.00	99.8	0.2	
20	0.61	0.850	0.23	99.7	0.3	
40	0.81	0.425	1.23	99.6	0.4	
70	7.37	0.212	2.24	96.3	3.7	
100	98.46	0.150	2.74	50.6	49.4	
200	185.30	0.075	3.74	7.1	92.9	
PAN	199.16			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.249
16	2.350
25	2.441
50	2.747
75	3.218
84	3.451
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.090
30	0.116
60	0.163
85	0.197
90	0.204

POORLY GRADED Cu= 2.032 Cc= 1.025

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 1758 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 251.12

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.50	4.750	-2.25	99.4	0.6	
10	16.49	2.000	-1.00	93.4	6.6	
20	35.53	0.850	0.23	85.9	14.1	
40	39.53	0.425	1.23	84.3	15.7	
70	53.41	0.212	2.24	78.7	21.3	
100	166.53	0.150	2.74	33.7	66.3	
200	241.51	0.075	3.74	3.8	96.2	
PAN	250.68			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-2.060
16	1.262
25	2.271
50	2.527
75	2.949
84	3.222
95	3.677

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.092
15	0.105
30	0.141
60	0.187
85	0.674
90	1.763

POORLY GRADED Cu= 2.044 Cc= 1.166

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 176 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 211.76

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	3.23	4.750	-2.25	98.5	1.5	
10	6.57	2.000	-1.00	96.9	3.1	
20	9.82	0.850	0.23	95.4	4.6	
40	11.09	0.425	1.23	94.8	5.2	
70	19.87	0.212	2.24	90.6	9.4	
100	148.93	0.150	2.74	29.7	70.3	
200	206.03	0.075	3.74	2.7	97.3	
PAN	211.37			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.634
16	2.282
25	2.344
50	2.542
75	2.858
84	3.138
95	3.610

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.097
15	0.111
30	0.150
60	0.182
85	0.207
90	0.211

POORLY GRADED Cu= 1.884 Cc= 1.286

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 177 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 206.94

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.57	2.000	-1.00	99.7	0.3	
20	0.79	0.850	0.23	99.6	0.4	
40	0.95	0.425	1.23	99.5	0.5	
70	3.32	0.212	2.24	98.4	1.6	
100	119.59	0.150	2.74	42.2	57.8	
200	202.61	0.075	3.74	2.1	97.9	
PAN	206.69			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.262
16	2.344
25	2.417
50	2.652
75	3.066
84	3.286
95	3.628

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.091
15	0.101
30	0.129
60	0.171
85	0.198
90	0.203

POORLY GRADED Cu= 1.878 Cc= 1.066

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 177 SAMPLE NO: 3 PENETRATION, ft: 6
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 198.83

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	2.12	0.212	2.24	98.9	1.1	
100	96.97	0.150	2.74	51.2	48.8	
200	185.54	0.075	3.74	6.7	93.3	
PAN	198.34			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.271
16	2.369
25	2.458
50	2.755
75	3.219
84	3.445
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.081
15	0.090
30	0.116
60	0.162
85	0.195
90	0.201

POORLY GRADED Cu= 2.000 Cc= 1.022

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 177 SAMPLE NO: 4 PENETRATION, ft: 9

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 158.76

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.09	2.000	-1.00	99.9	0.1	
20	0.54	0.850	0.23	99.7	0.3	
40	1.05	0.425	1.23	99.3	0.7	
70	3.21	0.212	2.24	98.0	2.0	
100	42.53	0.150	2.74	73.2	26.8	
200	151.09	0.075	3.74	4.8	95.2	
PAN	158.39			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.286
16	2.489
25	2.692
50	2.989
75	3.344
84	3.504
95	3.733

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.081
15	0.087
30	0.104
60	0.136
85	0.181
90	0.193

POORLY GRADED Cu= 1.682 Cc= 0.979

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 178 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 209.69

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.07	4.750	-2.25	100.0	0.0	
10	0.15	2.000	-1.00	99.9	0.1	
20	0.27	0.850	0.23	99.9	0.1	
40	0.49	0.425	1.23	99.8	0.2	
70	3.84	0.212	2.24	98.2	1.8	
100	88.94	0.150	2.74	57.6	42.4	
200	203.05	0.075	3.74	3.2	96.8	
PAN	209.27			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.269
16	2.386
25	2.493
50	2.834
75	3.229
84	3.413
95	3.685

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.092
30	0.114
60	0.154
85	0.193
90	0.200

POORLY GRADED Cu= 1.808 Cc= 0.984

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 179 SAMPLE NO: 1 PENETRATION, ft: 2.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 174.94

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.28	2.000	-1.00	99.8	0.2	
20	0.55	0.850	0.23	99.7	0.3	
40	0.81	0.425	1.23	99.5	0.5	
70	4.36	0.212	2.24	97.5	2.5	
100	79.70	0.150	2.74	54.4	45.6	
200	172.67	0.075	3.74	1.3	98.7	
PAN	174.73			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.261
16	2.370
25	2.468
50	2.794
75	3.184
84	3.365
95	3.632

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.096
30	0.117
60	0.159
85	0.195
90	0.202

POORLY GRADED Cu= 1.797 Cc= 0.981

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 179 SAMPLE NO: 3 PENETRATION, ft: 6.5

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 203.10

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.03	4.750	-2.25	100.0	0.0	
10	0.29	2.000	-1.00	99.9	0.1	
20	1.12	0.850	0.23	99.4	0.6	
40	1.72	0.425	1.23	99.2	0.8	
70	5.73	0.212	2.24	97.2	2.8	
100	67.97	0.150	2.74	66.5	33.5	
200	195.96	0.075	3.74	3.5	96.5	
PAN	202.59			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.266
16	2.423
25	2.573
50	2.926
75	3.293
84	3.459
95	3.700

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.090
30	0.108
60	0.143
85	0.188
90	0.198

POORLY GRADED Cu= 1.713 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 180 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 157.17

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	2.63	4.750	-2.25	98.3	1.7	
10	10.62	2.000	-1.00	93.2	6.8	
20	19.18	0.850	0.23	87.8	12.2	
40	21.80	0.425	1.23	86.1	13.9	
70	29.31	0.212	2.24	81.4	18.6	
100	89.21	0.150	2.74	43.2	56.8	
200	150.36	0.075	3.74	4.3	95.7	
PAN	157.13			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-2.101
16	1.545
25	2.306
50	2.629
75	3.102
84	3.338
95	3.710

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.097
30	0.126
60	0.178
85	0.383
90	1.650

POORLY GRADED Cu= 2.056 Cc= 1.024

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 180 SAMPLE NO: 6 PENETRATION, ft: 19.5
MATERIAL: OLIVE GRAY,GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS,MICA
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 197.41

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.47	2.000	-1.00	99.8	0.2	
20	2.18	0.850	0.23	98.9	1.1	
40	3.95	0.425	1.23	98.0	2.0	
70	5.13	0.212	2.24	97.4	2.6	
100	6.06	0.150	2.74	96.9	3.1	
200	133.76	0.075	3.74	32.2	67.8	
PAN	197.03			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.757
16	2.878
25	2.989
50	3.367
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.109
85	0.137
90	0.143

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 181 SAMPLE NO: 4 PENETRATION, ft: 9

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 138.25

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.11	4.750	-2.25	99.9	0.1	
10	0.66	2.000	-1.00	99.5	0.5	
20	1.27	0.850	0.23	99.1	0.9	
40	2.15	0.425	1.23	98.4	1.6	
70	4.48	0.212	2.24	96.8	3.2	
100	50.07	0.150	2.74	63.8	36.2	
200	127.98	0.075	3.74	7.4	92.6	
PAN	138.26			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.259
16	2.403
25	2.539
50	2.912
75	3.325
84	3.518
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.086
30	0.107
60	0.145
85	0.191
90	0.200

POORLY GRADED Cu= 1.846 Cc= 0.993

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 182 SAMPLE NO: 2 PENETRATION, ft: 4
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 245.00

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.20	2.000	-1.00	99.9	0.1	
20	0.51	0.850	0.23	99.8	0.2	
40	0.75	0.425	1.23	99.7	0.3	
70	2.86	0.212	2.24	98.8	1.2	
100	50.56	0.150	2.74	79.4	20.6	
200	225.19	0.075	3.74	8.1	91.9	
PAN	244.83			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.319
16	2.594
25	2.778
50	3.051
75	3.411
84	3.574
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.083
30	0.099
60	0.131
85	0.169
90	0.185

POORLY GRADED Cu= 1.695 Cc= 0.979

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 182 SAMPLE NO: 3 PENETRATION, ft: 6.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 254.72

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.47	4.750	-2.25	99.8	0.2	
10	1.21	2.000	-1.00	99.5	0.5	
20	1.62	0.850	0.23	99.4	0.6	
40	2.07	0.425	1.23	99.2	0.8	
70	10.45	0.212	2.24	95.9	4.1	
100	124.86	0.150	2.74	51.0	49.0	
200	249.09	0.075	3.74	2.2	97.8	
PAN	254.42			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.246
16	2.348
25	2.440
50	2.750
75	3.163
84	3.358
95	3.650

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.096
30	0.119
60	0.163
85	0.198
90	0.204

POORLY GRADED Cu= 1.857 Cc= 0.993

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 182 SAMPLE NO: 4 PENETRATION, ft: 9

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 252.39

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.25	4.750	-2.25	99.9	0.1	
10	0.39	2.000	-1.00	99.8	0.2	
20	0.86	0.850	0.23	99.7	0.3	
40	1.29	0.425	1.23	99.5	0.5	
70	9.72	0.212	2.24	96.1	3.9	
100	136.28	0.150	2.74	46.0	54.0	
200	248.61	0.075	3.74	1.5	98.5	
PAN	252.13			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.247
16	2.338
25	2.419
50	2.687
75	3.105
84	3.309
95	3.619

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.090
15	0.099
30	0.124
60	0.168
85	0.199
90	0.205

POORLY GRADED Cu= 1.862 Cc= 1.020

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 183 SAMPLE NO: 1 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 276.50

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.25	2.000	-1.00	99.9	0.1	
20	1.61	0.850	0.23	99.4	0.6	
40	3.16	0.425	1.23	98.9	1.1	
70	33.22	0.212	2.24	88.0	12.0	
100	172.34	0.150	2.74	37.7	62.3	
200	269.60	0.075	3.74	2.5	97.5	
PAN	276.21			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.471
16	2.270
25	2.345
50	2.590
75	3.006
84	3.247
95	3.630

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.092
15	0.103
30	0.135
60	0.179
85	0.209
90	0.260

POORLY GRADED Cu= 1.939 Cc= 1.103

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 183 SAMPLE NO: 2 PENETRATION, ft: 6.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 217.59

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.16	0.425	1.23	99.9	0.1	
70	1.84	0.212	2.24	99.2	0.8	
100	118.34	0.150	2.74	45.6	54.4	
200	208.07	0.075	3.74	4.4	95.6	
PAN	217.56			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.269
16	2.356
25	2.433
50	2.686
75	3.131
84	3.359
95	3.713

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.096
30	0.123
60	0.168
85	0.196
90	0.202

POORLY GRADED Cu= 1.948 Cc= 1.051

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 183 SAMPLE NO: 4 PENETRATION, ft: 13
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 226.39

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.34	0.850	0.23	99.8	0.2	
40	0.68	0.425	1.23	99.7	0.3	
70	22.94	0.212	2.24	89.9	10.1	
100	174.92	0.150	2.74	22.7	77.3	
200	223.58	0.075	3.74	1.2	98.8	
PAN	226.16			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.573
16	2.273
25	2.329
50	2.504
75	2.716
84	2.967
95	3.489

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.107
15	0.124
30	0.157
60	0.186
85	0.208
90	0.216

POORLY GRADED Cu= 1.731
Cc= 1.243

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 183 SAMPLE NO: 5 PENETRATION, ft: 18

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 196.6i

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.20	2.000	-1.00	99.9	0.1	
20	0.66	0.850	0.23	99.7	0.3	
40	1.19	0.425	1.23	99.4	0.6	
70	13.73	0.212	2.24	93.0	7.0	
100	109.68	0.150	2.74	44.2	55.8	
200	195.66	0.075	3.74	0.5	99.5	
PAN	196.56			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.786
16	2.313
25	2.395
50	2.664
75	3.075
84	3.278
95	3.584

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.092
15	0.101
30	0.127
60	0.171
85	0.202
90	0.208

POORLY GRADED Cu= 1.850 Cc= 1.020

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 184 SAMPLE NO: 4 PENETRATION, ft: 15
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 246.00

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.01	2.000	-1.00	100.0	0.0	
20	0.60	0.850	0.23	99.8	0.2	
40	2.00	0.425	1.23	99.2	0.8	
70	37.09	0.212	2.24	84.9	15.1	
100	196.81	0.150	2.74	20.0	80.0	
200	245.44	0.075	3.74	0.2	99.8	
PAN	245.93			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.425
16	2.243
25	2.300
50	2.476
75	2.689
84	2.880
95	3.406

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.114
15	0.132
30	0.160
60	0.189
85	0.213
90	0.300

POORLY GRADED Cu= 1.664 Cc= 1.192

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 184 SAMPLE NO: 5 PENETRATION, ft: 18

MATERIAL: OLIVE GRAY FINE SAND

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 292.39

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.08	0.425	1.23	100.0	0.0	
70	23.21	0.212	2.24	92.1	7.9	
100	231.51	0.150	2.74	20.8	79.2	
200	291.52	0.075	3.74	0.3	99.7	
PAN	292.16			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.719
16	2.283
25	2.337
50	2.502
75	2.700
84	2.905
95	3.421

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.112
15	0.130
30	0.159
60	0.185
85	0.206
90	0.210

POORLY GRADED Cu= 1.652 Cc= 1.210

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 185 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-19-87
CHECKED BY: DC DATE:11-19-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 241.23

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.69	2.000	-1.00	99.7	0.3	
20	3.27	0.850	0.23	98.6	1.4	
40	5.15	0.425	1.23	97.9	2.1	
70	9.11	0.212	2.24	96.2	3.8	
100	95.05	0.150	2.74	60.6	39.4	
200	219.81	0.075	3.74	8.9	91.1	
PAN	240.98			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.251
16	2.383
25	2.505
50	2.882
75	3.325
84	3.537
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.085
30	0.107
60	0.149
85	0.193
90	0.202

POORLY GRADED Cu= 1.944 Cc= 1.003

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 186 SAMPLE NO: 4 PENETRATION, ft: 9.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 213.47

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.23	4.750	-2.25	99.9	0.1	
10	0.64	2.000	-1.00	99.7	0.3	
20	1.17	0.850	0.23	99.5	0.5	
40	1.82	0.425	1.23	99.1	0.9	
70	7.07	0.212	2.24	96.7	3.3	
100	77.34	0.150	2.74	63.8	36.2	
200	207.87	0.075	3.74	2.6	97.4	
PAN	213.34			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.258
16	2.402
25	2.538
50	2.897
75	3.266
84	3.434
95	3.677

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.091
30	0.110
60	0.146
85	0.191
90	0.200

POORLY GRADED Cu= 1.719 Cc= 0.983

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 186 SAMPLE NO: 5 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 206.07

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.73	2.000	-1.00	99.6	0.4	
20	1.11	0.850	0.23	99.5	0.5	
40	1.46	0.425	1.23	99.3	0.7	
70	4.72	0.212	2.24	97.7	2.3	
100	86.30	0.150	2.74	58.1	41.9	
200	202.35	0.075	3.74	1.8	98.2	
PAN	205.98			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.265
16	2.384
25	2.494
50	2.837
75	3.218
84	3.394
95	3.651

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.094
30	0.114
60	0.153
85	0.193
90	0.201

POORLY GRADED Cu= 1.765 Cc= 0.981

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 187 SAMPLE NO: 2 PENETRATION, ft: 8
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 245.81

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.20	4.750	-2.25	99.5	0.5	
10	1.47	2.000	-1.00	99.4	0.6	
20	2.28	0.850	0.23	99.1	0.9	
40	2.87	0.425	1.23	98.8	1.2	
70	5.24	0.212	2.24	97.9	2.1	
100	93.30	0.150	2.74	62.0	38.0	
200	232.63	0.075	3.74	5.4	94.6	
PAN	245.48			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.270
16	2.403
25	2.527
50	2.888
75	3.287
84	3.472
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.082
15	0.089
30	0.109
60	0.148
85	0.191
90	0.199

POORLY GRADED Cu= 1.807 Cc= 0.990

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 189 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 232.89

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	7.28	4.750	-2.25	96.9	3.1	
10	9.57	2.000	-1.00	95.9	4.1	
20	13.15	0.850	0.23	94.4	5.6	
40	15.85	0.425	1.23	93.2	6.8	
70	22.33	0.212	2.24	90.4	9.6	
100	121.69	0.150	2.74	47.7	52.3	
200	220.23	0.075	3.74	5.4	94.6	
PAN	232.49			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-0.735
16	2.299
25	2.391
50	2.704
75	3.168
84	3.396
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.093
30	0.120
60	0.169
85	0.205
90	0.211

POORLY GRADED Cu= 2.015 Cc= 1.021

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 189 SAMPLE NO: 2 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 259.80

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.19	4.750	-2.25	99.9	0.1	
10	1.10	2.000	-1.00	99.6	0.4	
20	2.88	0.850	0.23	98.9	1.1	
40	4.26	0.425	1.23	98.4	1.6	
70	39.85	0.212	2.24	84.7	15.3	
100	144.11	0.150	2.74	44.5	55.5	
200	251.64	0.075	3.74	3.1	96.9	
PAN	259.57			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.390
16	2.244
25	2.337
50	2.653
75	3.105
84	3.326
95	3.668

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.098
30	0.125
60	0.175
85	0.219
90	0.308

POORLY GRADED Cu= 1.980 Cc= 1.013

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 189 SAMPLE NO: 3 PENETRATION, ft: 9.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 190.07

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.12	4.750	-2.25	99.9	0.1	
10	0.81	2.000	-1.00	99.6	0.4	
20	2.34	0.850	0.23	98.8	1.2	
40	2.86	0.425	1.23	98.5	1.5	
70	9.67	0.212	2.24	94.9	5.1	
100	71.35	0.150	2.74	62.5	37.5	
200	186.59	0.075	3.74	1.8	98.2	
PAN	189.97			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.193
16	2.380
25	2.514
50	2.882
75	3.249
84	3.415
95	3.657

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.092
30	0.111
60	0.147
85	0.194
90	0.203

POORLY GRADED Cu= 1.714 Cc= 0.983

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 189 SAMPLE NO: 4 PENETRATION, ft: 14.5

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 226.46

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.12	4.750	-2.25	99.9	0.1	
10	0.60	2.000	-1.00	99.7	0.3	
20	1.40	0.850	0.23	99.4	0.6	
40	1.81	0.425	1.23	99.2	0.8	
70	2.68	0.212	2.24	98.8	1.2	
100	41.65	0.150	2.74	81.6	18.4	
200	216.97	0.075	3.74	4.2	95.8	
PAN	226.21			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.329
16	2.651
25	2.795
50	3.048
75	3.374
84	3.518
95	3.721

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.081
15	0.086
30	0.101
60	0.130
85	0.163
90	0.181

POORLY GRADED Cu= 1.607 Cc= 0.974

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 190 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 259.76

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.79	4.750	-2.25	99.7	0.3	
10	1.82	2.000	-1.00	99.3	0.7	
20	3.52	0.850	0.23	98.6	1.4	
40	4.58	0.425	1.23	98.2	1.8	
70	8.42	0.212	2.24	96.8	3.2	
100	175.20	0.150	2.74	32.6	67.4	
200	257.04	0.075	3.74	1.0	99.0	
PAN	259.56			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.249
16	2.319
25	2.381
50	2.576
75	2.909
84	3.156
95	3.554

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.098
15	0.110
30	0.144
60	0.178
85	0.201
90	0.206

POORLY GRADED Cu= 1.818 Cc= 1.202

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 191 SAMPLE NO: 2 PENETRATION, ft: 3.5

MATERIAL: OLIVE GRAY FINE SAND

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 181.94

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.07	0.425	1.23	100.0	0.0	
70	3.13	0.212	2.24	98.3	1.7	
100	80.26	0.150	2.74	55.9	44.1	
200	165.82	0.075	3.74	8.9	91.1	
PAN	181.65			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.269
16	2.380
25	2.482
50	2.823
75	3.290
84	3.519
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.086
30	0.110
60	0.156
85	0.194
90	0.201

POORLY GRADED Cu= 2.032 Cc= 1.011

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 191 SAMPLE NO: 3 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 250.66

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.20	4.750	-2.25	99.5	0.5	
10	3.17	2.000	-1.00	98.7	1.3	
20	7.14	0.850	0.23	97.2	2.8	
40	9.98	0.425	1.23	96.0	4.0	
70	43.58	0.212	2.24	82.6	17.4	
100	186.53	0.150	2.74	25.6	74.4	
200	244.18	0.075	3.74	2.6	97.4	
PAN	250.39			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.279
16	2.062
25	2.292
50	2.493
75	2.754
84	3.055
95	3.582

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.101
15	0.117
30	0.155
60	0.188
85	0.258
90	0.342

POORLY GRADED Cu= 1.873 Cc= 1.269

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 191 SAMPLE NO: 4 PENETRATION, ft: 9

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 244.79

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.31	2.000	-1.00	99.9	0.1	
20	1.04	0.850	0.23	99.6	0.4	
40	1.57	0.425	1.23	99.4	0.6	
70	5.45	0.212	2.24	97.8	2.2	
100	84.99	0.150	2.74	65.3	34.7	
200	241.39	0.075	3.74	1.4	98.6	
PAN	244.46			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.272
16	2.421
25	2.561
50	2.908
75	3.262
84	3.422
95	3.651

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.092
30	0.110
60	0.144
85	0.189
90	0.198

POORLY GRADED Cu= 1.680 Cc= 0.980

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-1-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 191 SAMPLE NO: 5 PENETRATION, ft: 12.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 194.46

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.33	4.750	-2.25	99.8	0.2	
10	2.06	2.000	-1.00	98.9	1.1	
20	4.12	0.850	0.23	97.9	2.1	
40	4.72	0.425	1.23	97.6	2.4	
70	9.95	0.212	2.24	94.9	5.1	
100	70.37	0.150	2.74	63.8	36.2	
200	190.24	0.075	3.74	2.2	97.8	
PAN	194.25			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.160
16	2.386
25	2.528
50	2.997
75	3.261
84	3.427
95	3.667

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.092
30	0.110
60	0.146
85	0.193
90	0.203

POORLY GRADED Cu= 1.709 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 192 SAMPLE NO: 3 PENETRATION, ft: 7

MATERIAL: GRAY SILTY FINE SAND W/CLAY POCKETS,ORGANICS,MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 225.40

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.12	2.000	-1.00	99.9	0.1	
20	0.26	0.850	0.23	99.9	0.1	
40	0.37	0.425	1.23	99.8	0.2	
70	1.03	0.212	2.24	99.5	0.5	
100	23.63	0.150	2.74	89.5	10.5	
200	157.60	0.075	3.74	30.1	69.9	
PAN	225.10			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.434
16	2.800
25	2.912
50	3.299
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.114
85	0.145
90	0.153

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 192 SAMPLE NO: 5 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY FINE SAND W/MANY SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 240.84

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	4.25	4.750	-2.25	98.2	1.8	
10	12.57	2.000	-1.00	94.8	5.2	
20	22.33	0.850	0.23	90.7	9.3	
40	27.89	0.425	1.23	88.4	11.6	
70	89.10	0.212	2.24	63.0	37.0	
100	218.64	0.150	2.74	9.2	90.8	
200	237.59	0.075	3.74	1.3	98.7	
PAN	240.57			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-1.833
16	1.341
25	1.619
50	2.338
75	2.564
84	2.659
95	3.166

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.151
15	0.157
30	0.175
60	0.209
85	0.402
90	0.755

POORLY GRADED Cu= 1.383 Cc= 0.972

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 192 SAMPLE NO: 6 PENETRATION, ft: 13

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 228.29

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.29	2.000	-1.00	99.9	0.1	
20	0.90	0.850	0.23	99.6	0.4	
40	1.57	0.425	1.23	99.3	0.7	
70	11.85	0.212	2.24	94.8	5.2	
100	101.13	0.150	2.74	55.7	44.3	
200	225.20	0.075	3.74	1.4	98.6	
PAN	228.21			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.162
16	2.353
25	2.460
50	2.809
75	3.195
84	3.373
95	3.636

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.095
30	0.116
60	0.157
85	0.197
90	0.205

POORLY GRADED Cu= 1.790 Cc= 0.976

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 193 SAMPLE NO: 2 PENETRATION, ft: 5.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,ORGANICS,MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 218.96

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.14	2.000	-1.00	99.9	0.1	
20	0.42	0.850	0.23	99.8	0.2	
40	0.96	0.425	1.23	99.6	0.4	
70	5.21	0.212	2.24	97.6	2.4	
100	63.20	0.150	2.74	71.1	28.9	
200	206.51	0.075	3.74	5.7	94.3	
PAN	218.65			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.278
16	2.464
25	2.647
50	2.975
75	3.344
84	3.511
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.086
30	0.104
60	0.138
85	0.184
90	0.195

POORLY GRADED Cu= 1.719 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 193 SAMPLE NO: 4 PENETRATION, ft: 10.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 276.00

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.37	4.750	-2.25	99.9	0.1	
10	1.39	2.000	-1.00	99.5	0.5	
20	3.73	0.850	0.23	98.6	1.4	
40	5.52	0.425	1.23	98.0	2.0	
70	17.14	0.212	2.24	93.8	6.2	
100	161.75	0.150	2.74	41.4	58.6	
200	270.63	0.075	3.74	1.9	98.1	
PAN	275.64			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.813
16	2.314
25	2.390
50	2.637
75	3.054
84	3.276
95	3.621

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.091
15	0.101
30	0.130
60	0.173
85	0.202
90	0.208

POORLY GRADED Cu= 1.893 Cc= 1.063

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 193 SAMPLE NO: 5 PENETRATION, ft: 13

MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 293.92

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.05	4.750	-2.25	100.0	0.0	
10	0.29	2.000	-1.00	99.9	0.1	
20	0.73	0.850	0.23	99.8	0.2	
40	1.41	0.425	1.23	99.5	0.5	
70	14.56	0.212	2.24	95.0	5.0	
100	142.63	0.150	2.74	51.5	48.5	
200	290.79	0.075	3.74	1.1	98.9	
PAN	293.81			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.238
16	2.343
25	2.438
50	2.757
75	3.155
84	3.342
95	3.620

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.097
30	0.120
60	0.163
85	0.198
90	0.205

POORLY GRADED Cu= 1.824 Cc= 0.984

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 194 SAMPLE NO: 2 PENETRATION, ft: 3.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 233.15

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.68	2.000	-1.00	99.7	0.3	
20	3.38	0.850	0.23	98.6	1.4	
40	4.52	0.425	1.23	98.1	1.9	
70	9.24	0.212	2.24	96.0	4.0	
100	93.67	0.150	2.74	59.8	40.2	
200	192.00	0.075	3.74	17.6	82.4	
PAN	232.49			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.249
16	2.378
25	2.498
50	2.903
75	3.489
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.098
60	0.150
85	0.194
90	0.202

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 194 SAMPLE NO: 4 PENETRATION, ft: 10
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 246.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.63	2.000	-1.00	99.7	0.3	
20	2.72	0.850	0.23	98.9	1.1	
40	4.42	0.425	1.23	98.2	1.8	
70	15.30	0.212	2.24	93.8	6.2	
100	101.52	0.150	2.74	58.8	41.2	
200	237.43	0.075	3.74	3.7	96.3	
PAN	246.31			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.830
16	2.355
25	2.476
50	2.849
75	3.245
84	3.429
95	3.701

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.091
30	0.112
60	0.152
85	0.197
90	0.206

POORLY GRADED Cu= 1.807 Cc= 0.985

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 195 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 215.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.35	4.750	-2.25	99.8	0.2	
10	0.82	2.000	-1.00	99.6	0.4	
20	1.84	0.850	0.23	99.1	0.9	
40	2.54	0.425	1.23	98.8	1.2	
70	5.33	0.212	2.24	97.5	2.5	
100	116.49	0.150	2.74	45.9	54.1	
200	212.74	0.075	3.74	1.1	98.9	
PAN	214.95			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.257
16	2.347
25	2.426
50	2.687
75	3.100
84	3.302
95	3.607

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.091
15	0.100
30	0.125
60	0.168
85	0.198
90	0.204

POORLY GRADED Cu= 1.845 Cc= 1.021

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 195 SAMPLE NO: 2 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 261.19

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.13	4.750	-2.25	100.0	0.0	
10	0.81	2.000	-1.00	99.7	0.3	
20	3.03	0.850	0.23	98.8	1.2	
40	3.79	0.425	1.23	98.5	1.5	
70	9.90	0.212	2.24	96.2	3.8	
100	158.46	0.150	2.74	39.3	60.7	
200	257.02	0.075	3.74	1.6	98.4	
PAN	261.05			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.246
16	2.326
25	2.397
50	2.623
75	3.023
84	3.249
95	3.603

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.093
15	0.103
30	0.133
60	0.174
85	0.200
90	0.206

POORLY GRADED Cu= 1.869 Cc= 1.091

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 196 SAMPLE NO: 2 PENETRATION, ft: 2

MATERIAL: GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 240.28

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.05	2.000	-1.00	100.0	0.0	
20	0.23	0.850	0.23	99.9	0.1	
40	0.47	0.425	1.23	99.8	0.2	
70	6.52	0.212	2.24	97.3	2.7	
100	132.67	0.150	2.74	44.8	55.2	
200	230.51	0.075	3.74	4.1	95.9	
PAN	239.98			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.255
16	2.343
25	2.421
50	2.675
75	3.118
84	3.346
95	3.701

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.096
30	0.124
60	0.169
85	0.198
90	0.204

POORLY GRADED

Cu= 1.946

Cc= 1.053

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 196 SAMPLE NO: 4 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY FINE SAND W/MICA
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 276.00

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.20	0.425	1.23	99.9	0.1	
70	1.11	0.212	2.24	99.6	0.4	
100	46.99	0.150	2.74	83.0	17.0	
200	262.95	0.075	3.74	4.7	95.3	
PAN	275.80			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.353
16	2.698
25	2.807
50	3.059
75	3.385
84	3.529
95	3.732

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.086
30	0.101
60	0.129
85	0.158
90	0.177

POORLY GRADED Cu= 1.606 Cc= 0.974

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 196 SAMPLE NO: 5 PENETRATION, ft: 10.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.52

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.28	2.000	-1.00	99.9	0.1	
20	1.09	0.850	0.23	99.5	0.5	
40	1.79	0.425	1.23	99.1	0.9	
70	7.05	0.212	2.24	96.5	3.5	
100	123.87	0.150	2.74	37.9	62.1	
200	195.43	0.075	3.74	2.0	98.0	
PAN	199.30			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.248
16	2.325
25	2.394
50	2.612
75	3.006
84	3.242
95	3.614

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.093
15	0.104
30	0.135
60	0.174
85	0.201
90	0.206

POORLY GRADED Cu= 1.880 Cc= 1.118

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 196 SAMPLE NO: 6 PENETRATION, ft: 13.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS & MICA

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 190.47

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.38	2.000	-1.00	99.8	0.2	
20	3.72	0.850	0.23	98.0	2.0	
40	6.29	0.425	1.23	96.7	3.3	
70	8.57	0.212	2.24	95.5	4.5	
100	55.64	0.150	2.74	70.8	29.2	
200	165.48	0.075	3.74	13.1	86.9	
PAN	190.08			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.246
16	2.440
25	2.633
50	3.007
75	3.449
84	3.661
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.078
30	0.098
60	0.137
85	0.187
90	0.199

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 197 SAMPLE NO: 2 PENETRATION, ft: 2
MATERIAL: GRAY FINE SAND W/MICA
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 218.68

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	2.14	0.850	0.23	99.0	1.0	
40	2.27	0.425	1.23	99.0	1.0	
70	3.33	0.212	2.24	98.5	1.5	
100	105.54	0.150	2.74	51.7	48.3	
200	210.23	0.075	3.74	3.9	96.1	
PAN	218.39			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.268
16	2.368
25	2.458
50	2.761
75	3.188
84	3.392
95	3.700

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.094
30	0.118
60	0.162
85	0.195
90	0.201

POORLY GRADED Cu= 1.893 Cc= 1.001

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 197 SAMPLE NO: 4 PENETRATION, ft: 10.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 272.80

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.60	4.750	-2.25	99.8	0.2	
10	1.99	2.000	-1.00	99.3	0.7	
20	5.36	0.850	0.23	98.0	2.0	
40	7.82	0.425	1.23	97.1	2.9	
70	34.55	0.212	2.24	87.3	12.7	
100	200.60	0.150	2.74	26.5	73.5	
200	269.43	0.075	3.74	1.2	98.8	
PAN	272.50			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.371
16	2.260
25	2.321
50	2.514
75	2.776
84	3.054
95	3.522

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.103
15	0.118
30	0.154
60	0.185
85	0.210
90	0.281

POORLY GRADED Cu= 1.806 Cc= 1.246

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 197 SAMPLE NO: 5 PENETRATION, ft: 13

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGS,CLAY PKT,MICA

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.31

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.32	2.000	-1.00	99.8	0.2	
20	1.71	0.850	0.23	99.1	0.9	
40	2.89	0.425	1.23	98.5	1.5	
70	5.87	0.212	2.24	97.1	2.9	
100	66.80	0.150	2.74	66.5	33.5	
200	176.12	0.075	3.74	11.6	88.4	
PAN	199.07			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.265
16	2.422
25	2.572
50	2.957
75	3.403
84	3.618
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.080
30	0.102
60	0.142
85	0.189
90	0.198

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 199 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 254.41

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.21	4.750	-2.25	99.9	0.1	
10	2.27	2.000	-1.00	99.1	0.9	
20	5.14	0.850	0.23	98.0	2.0	
40	7.16	0.425	1.23	97.2	2.8	
70	14.25	0.212	2.24	94.4	5.6	
100	93.95	0.150	2.74	63.1	36.9	
200	252.77	0.075	3.74	0.6	99.4	
PAN	254.25			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.902
16	2.378
25	2.517
50	2.885
75	3.240
84	3.401
95	3.632

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.093
30	0.112
60	0.147
85	0.194
90	0.204

POORLY GRADED Cu= 1.683 Cc= 0.980

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 199 SAMPLE NO: 4 PENETRATION, ft: 10.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 226.49

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.39	4.750	-2.25	99.8	0.2	
10	1.95	2.000	-1.00	99.1	0.9	
20	4.25	0.850	0.23	98.1	1.9	
40	5.61	0.425	1.23	97.5	2.5	
70	19.14	0.212	2.24	91.5	8.5	
100	117.28	0.150	2.74	48.2	51.8	
200	223.24	0.075	3.74	1.4	98.6	
PAN	226.32			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.526
16	2.309
25	2.401
50	2.711
75	3.128
84	3.325
95	3.622

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.090
15	0.098
30	0.122
60	0.168
85	0.203
90	0.210

POORLY GRADED Cu= 1.869 Cc= 0.994

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 199 SAMPLE NO: 5 PENETRATION, ft: 14
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-11-87
CHECKED BY: DC DATE:11-11-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 155.22

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.16	2.000	-1.00	99.9	0.1	
20	1.63	0.850	0.23	98.9	1.1	
40	2.84	0.425	1.23	98.2	1.8	
70	5.25	0.212	2.24	96.6	3.4	
100	75.97	0.150	2.74	51.1	48.9	
200	141.84	0.075	3.74	8.6	91.4	
PAN	154.83			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.252
16	2.353
25	2.445
50	2.754
75	3.245
84	3.490
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.087
30	0.114
60	0.163
85	0.197
90	0.204

POORLY GRADED Cu= 2.098 Cc= 1.035

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 199 SAMPLE NO: 6 PENETRATION, ft: 16
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 223.22

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.03	2.000	-1.00	100.0	0.0	
20	0.40	0.850	0.23	99.8	0.2	
40	0.77	0.425	1.23	99.7	0.3	
70	2.12	0.212	2.24	99.1	0.9	
100	77.97	0.150	2.74	65.1	34.9	
200	212.61	0.075	3.74	4.8	95.2	
PAN	222.97			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.286
16	2.430
25	2.564
50	2.917
75	3.298
84	3.474
95	3.731

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.082
15	0.089
30	0.108
60	0.144
85	0.187
90	0.196

POORLY GRADED Cu= 1.757 Cc= 0.986

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 200 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 213.60

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.59	4.750	-2.25	99.3	0.7	
10	3.07	2.000	-1.00	98.6	1.4	
20	6.39	0.850	0.23	97.0	3.0	
40	8.46	0.425	1.23	96.0	4.0	
70	12.53	0.212	2.24	94.1	5.9	
100	54.95	0.150	2.74	74.3	25.7	
200	208.63	0.075	3.74	2.3	97.7	
PAN	213.50			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.636
16	2.462
25	2.714
50	2.987
75	3.321
84	3.469
95	3.680

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.089
30	0.105
60	0.136
85	0.185
90	0.200

POORLY GRADED Cu= 1.627 Cc= 0.976

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 200 SAMPLE NO: 3 PENETRATION, ft: 9

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 232.36

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.36	2.000	-1.00	99.8	0.2	
20	1.47	0.850	0.23	99.4	0.6	
40	2.21	0.425	1.23	99.0	1.0	
70	11.28	0.212	2.24	95.1	4.9	
100	101.19	0.150	2.74	56.5	43.5	
200	230.60	0.075	3.74	0.8	99.2	
PAN	232.21			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.239
16	2.358
25	2.467
50	2.817
75	3.194
84	3.368
95	3.623

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.095
30	0.116
60	0.156
85	0.197
90	0.204

POORLY GRADED Cu= 1.766 Cc= 0.975

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 200 SAMPLE NO: 4 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 216.42

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.92	2.000	-1.00	99.6	0.4	
20	4.64	0.850	0.23	97.9	2.1	
40	6.33	0.425	1.23	97.1	2.9	
70	9.95	0.212	2.24	95.4	4.6	
100	106.11	0.150	2.74	51.0	49.0	
200	192.24	0.075	3.74	11.2	88.8	
PAN	216.02			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.241
16	2.344
25	2.437
50	2.753
75	3.286
84	3.559
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.083
30	0.112
60	0.163
85	0.198
90	0.205

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 200 SAMPLE NO: 5 PENETRATION, ft: 15

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 220.19

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.04	2.000	-1.00	100.0	0.0	
20	0.18	0.850	0.23	99.9	0.1	
40	0.44	0.425	1.23	99.8	0.2	
70	2.73	0.212	2.24	98.8	1.2	
100	98.49	0.150	2.74	55.3	44.7	
200	209.86	0.075	3.74	4.7	95.3	
PAN	219.53			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.272
16	2.381
25	2.480
50	2.808
75	3.229
84	3.428
95	3.727

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.091
30	0.114
60	0.157
85	0.193
90	0.200

POORLY GRADED Cu= 1.882 Cc= 0.993

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 201 SAMPLE NO: 2 PENETRATION, ft: 4
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 264.79

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.12	4.750	-2.25	99.6	0.4	
10	3.91	2.000	-1.00	98.5	1.5	
20	11.99	0.850	0.23	95.5	4.5	
40	16.11	0.425	1.23	93.9	6.1	
70	25.49	0.212	2.24	90.4	9.6	
100	100.83	0.150	2.74	61.9	38.1	
200	257.46	0.075	3.74	2.8	97.2	
PAN	264.44			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.398
16	2.330
25	2.477
50	2.879
75	3.255
84	3.428
95	3.679

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.092
30	0.111
60	0.148
85	0.201
90	0.211

POORLY GRADED Cu= 1.740 Cc= 0.985

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 201 SAMPLE NO: 3 PENETRATION, ft: 7.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 252.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.52	2.000	-1.00	99.8	0.2	
20	1.09	0.850	0.23	99.6	0.4	
40	1.50	0.425	1.23	99.4	0.6	
70	3.43	0.212	2.24	98.6	1.4	
100	50.47	0.150	2.74	80.0	20.0	
200	249.61	0.075	3.74	1.2	98.8	
PAN	252.04			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.318
16	2.608
25	2.780
50	3.024
75	3.336
84	3.472
95	3.663

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.089
30	0.104
60	0.132
85	0.167
90	0.184

POORLY GRADED Cu= 1.572 Cc= 0.973

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 201 SAMPLE NO: 4 PENETRATION, ft: 12.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 243.21

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.11	4.750	-2.25	100.0	0.0	
10	0.17	2.000	-1.00	99.9	0.1	
20	0.32	0.850	0.23	99.9	0.1	
40	0.53	0.425	1.23	99.8	0.2	
70	2.31	0.212	2.24	99.1	0.9	
100	127.77	0.150	2.74	47.5	52.5	
200	237.97	0.075	3.74	2.2	97.8	
PAN	243.12			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.269
16	2.360
25	2.441
50	2.706
75	3.127
84	3.332
95	3.642

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.098
30	0.123
60	0.166
85	0.196
90	0.202

POORLY GRADED Cu= 1.865 Cc= 1.019

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-11-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 201 SAMPLE NO: 5 PENETRATION, ft: 16

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-11-87

CHECKED BY: DC DATE:11-11-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 182.71

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.59	4.750	-2.25	99.7	0.3	
10	0.80	2.000	-1.00	99.6	0.4	
20	2.62	0.850	0.23	98.6	1.4	
40	4.32	0.425	1.23	97.6	2.4	
70	6.99	0.212	2.24	96.2	3.8	
100	73.61	0.150	2.74	59.7	40.3	
200	160.65	0.075	3.74	12.1	87.9	
PAN	182.38			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.251
16	2.379
25	2.498
50	2.881
75	3.371
84	3.614
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.080
30	0.105
60	0.151
85	0.194
90	0.202

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 202 SAMPLE NO: 5 PENETRATION, ft: 12

MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 201.37

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.06	4.750	-2.25	100.0	0.0	
10	1.08	2.000	-1.00	99.5	0.5	
20	2.95	0.850	0.23	98.5	1.5	
40	4.64	0.425	1.23	97.7	2.3	
70	24.42	0.212	2.24	87.9	12.1	
100	121.01	0.150	2.74	39.9	60.1	
200	199.73	0.075	3.74	0.8	99.2	
PAN	201.25			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.411
16	2.270
25	2.350
50	2.610
75	3.024
84	3.242
95	3.579

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.104
30	0.132
60	0.177
85	0.209
90	0.268

POORLY GRADED Cu= 1.887 Cc= 1.052

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 203 SAMPLE NO: 1 PENETRATION, ft: 1.5
MATERIAL: OLIVE GRAY SANDY SILT W/MICA
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.27

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	0.49	0.212	2.24	99.8	0.2	
100	2.50	0.150	2.74	98.7	1.3	
200	53.17	0.075	3.74	73.3	26.7	
PAN	198.50			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.839
16	3.210
25	3.637
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	#N/A
85	0.111
90	0.126

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 203 SAMPLE NO: 2 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY SILTY FINE SAND
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 242.47

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.05	0.850	0.23	100.0	0.0	
40	0.30	0.425	1.23	99.9	0.1	
70	16.83	0.212	2.24	93.1	6.9	
100	111.99	0.150	2.74	53.8	46.2	
200	196.63	0.075	3.74	18.9	81.1	
PAN	241.93			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.816
16	2.333
25	2.438
50	2.812
75	3.489
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.100
60	0.160
85	0.200
90	0.207

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 203 SAMPLE NO: 3 PENETRATION, ft: 6.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/MICA
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 234.48

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.25	0.850	0.23	99.9	0.1	
40	0.34	0.425	1.23	99.9	0.1	
70	3.90	0.212	2.24	98.3	1.7	
100	50.91	0.150	2.74	78.3	21.7	
200	165.48	0.075	3.74	29.4	70.6	
PAN	233.89			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.306
16	2.568
25	2.782
50	3.209
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.076
60	0.123
85	0.172
90	0.187

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 203 SAMPLE NO: 4 PENETRATION, ft: 9.5
MATERIAL: OLIVE GRAY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 193.60

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.08	0.850	0.23	100.0	0.0	
40	0.18	0.425	1.23	99.9	0.1	
70	2.58	0.212	2.24	98.7	1.3	
100	97.72	0.150	2.74	49.5	50.5	
200	171.83	0.075	3.74	11.2	88.8	
PAN	193.09			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.268
16	2.363
25	2.448
50	2.731
75	3.273
84	3.556
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.083
30	0.113
60	0.164
85	0.196
90	0.202

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 203 SAMPLE NO: 5 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY,GRAY FINE SAND
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 238.01

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.09	0.425	1.23	100.0	0.0	
70	13.49	0.212	2.24	94.3	5.7	
100	84.76	0.150	2.74	64.4	35.6	
200	211.39	0.075	3.74	11.2	88.8	
PAN	237.60			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.038
16	2.384
25	2.531
50	2.933
75	3.385
84	3.602
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.081
30	0.103
60	0.144
85	0.194
90	0.204

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 203 SAMPLE NO: 6 PENETRATION, ft: 14.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 281.26

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.39	0.850	0.23	99.9	0.1	
40	0.89	0.425	1.23	99.7	0.3	
70	88.91	0.212	2.24	68.4	31.6	
100	230.99	0.150	2.74	17.9	82.1	
200	268.71	0.075	3.74	4.5	95.5	
PAN	280.77			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.325
16	1.594
25	1.908
50	2.393
75	2.650
84	2.834
95	3.675

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.108
15	0.135
30	0.166
60	0.202
85	0.338
90	0.370

POORLY GRADED Cu= 1.881
Cc= 1.262

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 203 SAMPLE NO: 7 PENETRATION, ft: 16.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 245.35

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.33	2.000	-1.00	99.9	0.1	
20	0.77	0.850	0.23	99.7	0.3	
40	1.68	0.425	1.23	99.3	0.7	
70	74.60	0.212	2.24	69.6	30.4	
100	216.42	0.150	2.74	11.8	88.2	
200	241.46	0.075	3.74	1.6	98.4	
PAN	245.15			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.323
16	1.607
25	1.947
50	2.381
75	2.600
84	2.691
95	3.300

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.138
15	0.154
30	0.171
60	0.202
85	0.335
90	0.369

POORLY GRADED Cu= 1.469 Cc= 1.043

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 203 SAMPLE NO: 8 PENETRATION, ft: 19.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 182.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.85	2.000	-1.00	99.5	0.5	
20	3.79	0.850	0.23	97.9	2.1	
40	5.82	0.425	1.23	96.8	3.2	
70	10.63	0.212	2.24	94.2	5.8	
100	87.32	0.150	2.74	52.2	47.8	
200	173.86	0.075	3.74	4.8	95.2	
PAN	182.34			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.785
16	2.338
25	2.436
50	2.768
75	3.203
84	3.412
95	3.730

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.092
30	0.116
60	0.162
85	0.199
90	0.206

POORLY GRADED Cu= 1.934 Cc= 0.997

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 204 SAMPLE NO: 2 PENETRATION, ft: 2.5
MATERIAL: GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 241.18

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.41	4.750	-2.25	99.8	0.2	
10	0.75	2.000	-1.00	99.7	0.3	
20	1.41	0.850	0.23	99.4	0.6	
40	3.01	0.425	1.23	98.8	1.2	
70	55.28	0.212	2.24	77.1	22.9	
100	171.88	0.150	2.74	28.7	71.3	
200	228.63	0.075	3.74	5.2	94.8	
PAN	240.85			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.341
16	1.776
25	2.255
50	2.487
75	2.848
84	3.171
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.091
15	0.108
30	0.152
60	0.191
85	0.302
90	0.351

POORLY GRADED Cu= 2.091 Cc= 1.319

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 204 SAMPLE NO: 3 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 222.22

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	2.02	4.750	-2.25	99.1	0.9	
10	2.57	2.000	-1.00	98.8	1.2	
20	3.49	0.850	0.23	98.4	1.6	
40	4.35	0.425	1.23	98.0	2.0	
70	15.86	0.212	2.24	92.9	7.1	
100	122.05	0.150	2.74	45.1	54.9	
200	222.10	0.075	3.74	0.1	99.9	
PAN	193.09			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.677
16	2.314
25	2.397
50	2.673
75	3.081
84	3.278
95	3.575

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.093
15	0.101
30	0.126
60	0.170
85	0.202
90	0.209

POORLY GRADED Cu= 1.837 Cc= 1.010

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 204 SAMPLE NO: 4 PENETRATION, ft: 7.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 232.98

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.29	2.000	-1.00	99.9	0.1	
20	0.90	0.850	0.23	99.6	0.4	
40	1.27	0.425	1.23	99.5	0.5	
70	5.92	0.212	2.24	97.5	2.5	
100	65.22	0.150	2.74	72.0	28.0	
200	229.72	0.075	3.74	1.4	98.6	
PAN	232.81			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.277
16	2.471
25	2.664
50	2.966
75	3.300
84	3.448
95	3.659

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.090
30	0.107
60	0.138
85	0.183
90	0.195

POORLY GRADED Cu= 1.628 Cc= 0.976

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 204 SAMPLE NO: 5 PENETRATION, ft: 10.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 197.91

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.53	4.750	-2.25	99.7	0.3	
10	0.74	2.000	-1.00	99.6	0.4	
20	1.63	0.850	0.23	99.2	0.8	
40	2.35	0.425	1.23	98.8	1.2	
70	6.66	0.212	2.24	96.6	3.4	
100	94.68	0.150	2.74	52.2	47.8	
200	159.88	0.075	3.74	19.2	80.8	
PAN	197.57			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.252
16	2.356
25	2.451
50	2.781
75	3.488
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.101
60	0.162
85	0.197
90	0.203

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 205 SAMPLE NO: 3 PENETRATION, ft: 9

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 214.62

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.17	4.750	-2.25	99.9	0.1	
10	4.72	2.000	-1.00	97.8	2.2	
20	6.50	0.850	0.23	97.0	3.0	
40	7.65	0.425	1.23	96.4	3.6	
70	17.62	0.212	2.24	91.8	8.2	
100	109.85	0.150	2.74	48.8	51.2	
200	207.80	0.075	3.74	3.2	96.8	
PAN	214.31			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.436
16	2.312
25	2.405
50	2.719
75	3.152
84	3.360
95	3.676

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.096
30	0.121
60	0.167
85	0.203
90	0.210

POORLY GRADED Cu= 1.918 Cc= 1.001

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 205 SAMPLE NO: 4 PENETRATION, ft: 12.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 207.02

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.08	2.000	-1.00	100.0	0.0	
20	0.14	0.850	0.23	99.9	0.1	
40	0.35	0.425	1.23	99.8	0.2	
70	16.17	0.212	2.24	92.2	7.8	
100	143.43	0.150	2.74	30.7	69.3	
200	204.71	0.075	3.74	1.1	98.9	
PAN	206.69			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.723
16	2.292
25	2.354
50	2.553
75	2.873
84	3.129
95	3.546

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.099
15	0.112
30	0.148
60	0.181
85	0.205
90	0.210

POORLY GRADED Cu= 1.826 Cc= 1.232

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 206 SAMPLE NO: 2 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-2-87

CHECKED BY: DC DATE:11-2-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 182.84

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	5.54	4.750	-2.25	97.0	3.0	
10	11.15	2.000	-1.00	93.9	6.1	
20	20.08	0.850	0.23	89.0	11.0	
40	21.53	0.425	1.23	88.2	11.8	
70	27.29	0.212	2.24	85.1	14.9	
100	95.85	0.150	2.74	47.6	52.4	
200	180.68	0.075	3.74	1.2	98.8	
PAN	182.75			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-2.106
16	2.249
25	2.350
50	2.696
75	3.119
84	3.316
95	3.614

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.090
15	0.099
30	0.123
60	0.172
85	0.212
90	1.411

POORLY GRADED Cu= 1.900 Cc= 0.978

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 206 SAMPLE NO: 3 PENETRATION, ft: 8
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 256.30

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.25	4.750	-2.25	99.5	0.5	
10	3.54	2.000	-1.00	98.6	1.4	
20	7.95	0.850	0.23	96.9	3.1	
40	10.25	0.425	1.23	96.0	4.0	
70	23.63	0.212	2.24	90.8	9.2	
100	153.11	0.150	2.74	40.3	59.7	
200	254.54	0.075	3.74	0.7	99.3	
PAN	256.18			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.353
16	2.292
25	2.369
50	2.620
75	3.028
84	3.244
95	3.576

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.104
30	0.132
60	0.175
85	0.205
90	0.211

POORLY GRADED Cu= 1.868 Cc= 1.055

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 206 SAMPLE NO: 4 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 235.31

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.05	4.750	-2.25	100.0	0.0	
10	0.17	2.000	-1.00	99.9	0.1	
20	0.68	0.850	0.23	99.7	0.3	
40	1.15	0.425	1.23	99.5	0.5	
70	12.70	0.212	2.24	94.6	5.4	
100	105.46	0.150	2.74	55.2	44.8	
200	231.61	0.075	3.74	1.6	98.4	
PAN	235.20			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.097
16	2.350
25	2.456
50	2.803
75	3.193
84	3.373
95	3.640

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.095
30	0.116
60	0.158
85	0.198
90	0.205

POORLY GRADED Cu= 1.803 Cc= 0.977

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 206 SAMPLE NO: 5 PENETRATION, ft: 15.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 231.45

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	2.09	2.000	-1.00	99.1	0.9	
20	3.34	0.850	0.23	98.6	1.4	
40	4.20	0.425	1.23	98.2	1.8	
70	8.17	0.212	2.24	96.5	3.5	
100	77.56	0.150	2.74	66.5	33.5	
200	221.78	0.075	3.74	4.2	95.8	
PAN	232.33			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.257
16	2.417
25	2.569
50	2.928
75	3.300
84	3.470
95	3.716

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.089
30	0.108
60	0.143
85	0.189
90	0.199

POORLY GRADED Cu= 1.729 Cc= 0.983

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 207 SAMPLE NO: 2 PENETRATION, ft: 7
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 219.02

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.28	2.000	-1.00	99.9	0.1	
20	2.09	0.850	0.23	99.0	1.0	
40	3.44	0.425	1.23	98.4	1.6	
70	4.85	0.212	2.24	97.8	2.2	
100	64.63	0.150	2.74	70.5	29.5	
200	200.52	0.075	3.74	8.4	91.6	
PAN	218.87			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.279
16	2.460
25	2.636
50	2.981
75	3.376
84	3.559
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.084
30	0.103
60	0.138
85	0.184
90	0.195

POORLY GRADED Cu= 1.794 Cc= 0.988

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 207 SAMPLE NO: 3 PENETRATION, ft: 10
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 240.42

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.78	2.000	-1.00	99.7	0.3	
20	1.28	0.850	0.23	99.5	0.5	
40	1.87	0.425	1.23	99.2	0.8	
70	15.59	0.212	2.24	93.5	6.5	
100	167.45	0.150	2.74	30.4	69.6	
200	218.28	0.075	3.74	9.2	90.8	
PAN	240.00			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.846
16	2.299
25	2.360
50	2.554
75	2.919
84	3.314
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.097
30	0.149
60	0.180
85	0.204
90	0.209

POORLY GRADED Cu= 2.309 Cc= 1.575

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-2-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 207 SAMPLE NO: 4 PENETRATION, ft: 12.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-2-87
CHECKED BY: DC DATE:11-2-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 207.48

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	2.84	0.850	0.23	98.6	1.4	
40	3.25	0.425	1.23	98.4	1.6	
70	11.85	0.212	2.24	94.3	5.7	
100	107.87	0.150	2.74	48.0	52.0	
200	192.12	0.075	3.74	7.4	92.6	
PAN	207.26			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.961
16	2.329
25	2.417
50	2.710
75	3.196
84	3.442
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.090
30	0.118
60	0.167
85	0.200
90	0.207

POORLY GRADED Cu= 2.081 Cc= 1.046

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 208 SAMPLE NO: 3 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 198.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.06	4.750	-2.25	100.0	0.0	
10	0.84	2.000	-1.00	99.6	0.4	
20	2.73	0.850	0.23	98.6	1.4	
40	3.63	0.425	1.23	98.2	1.8	
70	6.72	0.212	2.24	96.6	3.4	
100	111.58	0.150	2.74	43.9	56.1	
200	192.14	0.075	3.74	3.3	96.7	
PAN	198.51			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.250
16	2.337
25	2.414
50	2.665
75	3.099
84	3.324
95	3.673

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.098
30	0.126
60	0.170
85	0.199
90	0.205

POORLY GRADED Cu= 1.925
Cc= 1.055

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

BORING NO: 208 SAMPLE NO: 4 PENETRATION, ft: 7

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.02

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.07	4.750	-2.25	100.0	0.0	
10	0.54	2.000	-1.00	99.7	0.3	
20	1.58	0.850	0.23	99.2	0.8	
40	2.48	0.425	1.23	98.8	1.2	
70	5.70	0.212	2.24	97.1	2.9	
100	50.33	0.150	2.74	74.7	25.3	
200	197.54	0.075	3.74	0.7	99.3	
PAN	198.99			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.276
16	2.500
25	2.729
50	2.984
75	3.307
84	3.449
95	3.650

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.090
30	0.106
60	0.136
85	0.180
90	0.193

POORLY GRADED Cu= 1.599 Cc= 0.974

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 208 SAMPLE NO: 5 PENETRATION, ft: 9
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 230.27

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.37	4.750	-2.25	99.8	0.2	
10	1.67	2.000	-1.00	99.3	0.7	
20	4.67	0.850	0.23	98.0	2.0	
40	6.34	0.425	1.23	97.2	2.8	
70	22.68	0.212	2.24	90.2	9.8	
100	122.95	0.150	2.74	46.6	53.4	
200	226.06	0.075	3.74	1.8	98.2	
PAN	230.16			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.442
16	2.295
25	2.385
50	2.688
75	3.115
84	3.320
95	3.630

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.090
15	0.098
30	0.124
60	0.170
85	0.205
90	0.212

POORLY GRADED Cu= 1.896
Cc= 1.003

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

BORING NO: 208 SAMPLE NO: 6 PENETRATION, ft: 12

MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 151.36

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.12	2.000	-1.00	99.9	0.1	
20	0.95	0.850	0.23	99.4	0.6	
40	1.55	0.425	1.23	99.0	1.0	
70	3.74	0.212	2.24	97.5	2.5	
100	73.52	0.150	2.74	51.4	48.6	
200	148.48	0.075	3.74	1.9	98.1	
PAN	151.12			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.260
16	2.361
25	2.452
50	2.756
75	3.164
84	3.356
95	3.642

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.096
30	0.119
60	0.162
85	0.196
90	0.202

POORLY GRADED Cu= 1.840 Cc= 0.992

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 208 SAMPLE NO: 7 PENETRATION, ft: 14
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 176.37

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.65	0.850	0.23	99.6	0.4	
40	1.78	0.425	1.23	99.0	1.0	
70	6.35	0.212	2.24	96.4	3.6	
100	69.47	0.150	2.74	60.6	39.4	
200	148.52	0.075	3.74	15.8	84.2	
PAN	175.87			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.253
16	2.385
25	2.506
50	2.906
75	3.450
84	3.730
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.100
60	0.149
85	0.193
90	0.202

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 208 SAMPLE NO: 8 PENETRATION, ft: 17
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 126.33

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.05	2.000	-1.00	100.0	0.0	
20	0.08	0.850	0.23	99.9	0.1	
40	0.17	0.425	1.23	99.9	0.1	
70	1.25	0.212	2.24	99.0	1.0	
100	27.70	0.150	2.74	78.1	21.9	
200	117.39	0.075	3.74	7.1	92.9	
PAN	126.01			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.316
16	2.569
25	2.766
50	3.037
75	3.393
84	3.554
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.084
30	0.101
60	0.132
85	0.172
90	0.186

POORLY GRADED Cu= 1.686 Cc= 0.979

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
BORING NO: 209 SAMPLE NO: 2 PENETRATION, ft: 6
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 237.62

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.50	4.750	-2.25	99.4	0.6	
10	5.89	2.000	-1.00	97.5	2.5	
20	13.03	0.850	0.23	94.5	5.5	
40	16.98	0.425	1.23	92.9	7.1	
70	36.80	0.212	2.24	84.5	15.5	
100	120.30	0.150	2.74	49.4	50.6	
200	233.16	0.075	3.74	1.9	98.1	
PAN	237.22			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-0.426
16	2.244
25	2.351
50	2.726
75	3.144
84	3.341
95	3.638

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.097
30	0.121
60	0.170
85	0.228
90	0.363

POORLY GRADED Cu= 1.911 Cc= 0.971

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 209 SAMPLE NO: 3 PENETRATION, ft: 11
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 235.67

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.13	4.750	-2.25	99.5	0.5	
10	2.79	2.000	-1.00	98.8	1.2	
20	5.30	0.850	0.23	97.8	2.2	
40	7.11	0.425	1.23	97.0	3.0	
70	21.28	0.212	2.24	91.0	9.0	
100	114.36	0.150	2.74	51.5	48.5	
200	232.74	0.075	3.74	1.2	98.8	
PAN	235.54			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.452
16	2.310
25	2.411
50	2.757
75	3.157
84	3.345
95	3.625

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.097
30	0.120
60	0.164
85	0.203
90	0.211

POORLY GRADED Cu= 1.844 Cc= 0.977

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

BORING NO: 209 SAMPLE NO: 4 PENETRATION, ft: 16

MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 247.66

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	1.14	2.000	-1.00	99.5	0.5	
20	3.23	0.850	0.23	98.7	1.3	
40	4.69	0.425	1.23	98.1	1.9	
70	6.73	0.212	2.24	97.3	2.7	
100	123.33	0.150	2.74	50.2	49.8	
200	232.91	0.075	3.74	6.0	94.0	
PAN	247.35			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.257
16	2.356
25	2.444
50	2.740
75	3.199
84	3.424
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.082
15	0.091
30	0.117
60	0.164
85	0.197
90	0.203

POORLY GRADED Cu= 1.986 Cc= 1.021

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

BORING NO: 210 SAMPLE NO: 5 PENETRATION, ft: 10

MATERIAL: OLIVE GRAY,GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 208.67

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	1.72	0.425	1.23	99.2	0.8	
70	2.27	0.212	2.24	98.9	1.1	
100	2.91	0.150	2.74	98.6	1.4	
200	158.58	0.075	3.74	24.0	76.0	
PAN	208.55			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.769
16	2.875
25	2.970
50	3.284
75	3.716
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.082
60	0.113
85	0.137
90	0.142

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 211 SAMPLE NO: 2 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY,GRAY SILT W/MICA
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 189.39

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	0.17	0.212	2.24	99.9	0.1	
100	0.94	0.150	2.74	99.5	0.5	
200	15.84	0.075	3.74	91.6	8.4	
PAN	188.96			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	3.202
16	#N/A
25	#N/A
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	#N/A
85	#N/A
90	#N/A

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 211 SAMPLE NO: 3 PENETRATION, ft: 6.5
MATERIAL: OLIVE GRAY,GRAY SANDY SILT W/MICA
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 193.24

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	0.14	0.212	2.24	99.9	0.1	
100	0.71	0.150	2.74	99.6	0.4	
200	34.07	0.075	3.74	82.4	17.6	
PAN	192.98			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.931
16	3.597
25	#N/A
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	#N/A
85	0.087
90	0.110

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 211 SAMPLE NO: 5 PENETRATION, ft: 11.5

MATERIAL: OLIVE GRAY,GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 250.63

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	4.50	0.850	0.23	98.2	1.8	
40	19.10	0.425	1.23	92.4	7.6	
70	149.46	0.212	2.24	40.4	59.6	
100	176.52	0.150	2.74	29.6	70.4	
200	215.15	0.075	3.74	14.2	85.8	
PAN	250.02			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.584
16	1.333
25	1.455
50	1.943
75	2.954
84	3.562
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.079
30	0.153
60	0.305
85	0.400
90	0.417

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 211 SAMPLE NO: 6 PENETRATION, ft: 14.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 246.62

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.13	4.750	-2.25	99.5	0.5	
10	2.18	2.000	-1.00	99.1	0.9	
20	3.36	0.850	0.23	98.6	1.4	
40	4.56	0.425	1.23	98.2	1.8	
70	49.27	0.212	2.24	80.0	20.0	
100	170.42	0.150	2.74	30.9	69.1	
200	238.38	0.075	3.74	3.3	96.7	
PAN	246.41			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.341
16	1.897
25	2.279
50	2.513
75	2.889
84	3.170
95	3.646

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.108
30	0.148
60	0.188
85	0.282
90	0.342

POORLY GRADED Cu= 1.990
Cc= 1.232

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 211 SAMPLE NO: 7 PENETRATION, ft: 16.5

MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 253.23

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.20	4.750	-2.25	99.9	0.1	
10	0.26	2.000	-1.00	99.9	0.1	
20	0.38	0.850	0.23	99.8	0.2	
40	0.64	0.425	1.23	99.7	0.3	
70	42.62	0.212	2.24	83.2	16.8	
100	235.13	0.150	2.74	7.1	92.9	
200	250.95	0.075	3.74	0.9	99.1	
PAN	253.00			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.419
16	2.148
25	2.281
50	2.426
75	2.596
84	2.665
95	2.993

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.152
15	0.157
30	0.170
60	0.194
85	0.241
90	0.313

POORLY GRADED Cu= 1.272 Cc= 0.972

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 211 SAMPLE NO: 8 PENETRATION, ft: 19.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 186.44

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	3.54	0.425	1.23	98.1	1.9	
70	7.31	0.212	2.24	96.1	3.9	
100	93.92	0.150	2.74	49.6	50.4	
200	175.49	0.075	3.74	5.9	94.1	
PAN	186.11			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.247
16	2.346
25	2.435
50	2.732
75	3.192
84	3.418
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.092
30	0.118
60	0.165
85	0.198
90	0.204

POORLY GRADED Cu= 1.992
Cc= 1.022

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 212 SAMPLE NO: 2 PENETRATION, ft: 5

MATERIAL: OLIVE GRAY,DARK GRAY SANDY SILT W/MICA

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 205.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	0.15	0.212	2.24	99.9	0.1	
100	0.77	0.150	2.74	99.6	0.4	
200	46.37	0.075	3.74	77.5	22.5	
PAN	205.54			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.885
16	3.344
25	#N/A
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	#N/A
85	0.102
90	0.119

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 212 SAMPLE NO: 6 PENETRATION, ft: 16

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,MICA,ORGANICS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 217.91

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.17	2.000	-1.00	99.9	0.1	
20	0.53	0.850	0.23	99.8	0.2	
40	1.14	0.425	1.23	99.5	0.5	
70	16.40	0.212	2.24	92.5	7.5	
100	163.18	0.150	2.74	25.1	74.9	
200	211.92	0.075	3.74	2.7	97.3	
PAN	217.35			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.731
16	2.289
25	2.346
50	2.523
75	2.740
84	3.047
95	3.588

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.101
15	0.118
30	0.155
60	0.183
85	0.206
90	0.210

POORLY GRADED

Cu= 1.818

Cc= 1.298

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 213 SAMPLE NO: 2 PENETRATION, ft: 3

MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS & MICA

TESTED BY: DC DATE:11-12-87

CHECKED BY: DC DATE:11-12-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 236.36

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	2.21	0.212	2.24	99.1	0.9	
100	27.99	0.150	2.74	88.2	11.8	
200	189.77	0.075	3.74	19.7	80.3	
PAN	236.07			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.397
16	2.778
25	2.872
50	3.187
75	3.621
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.087
60	0.121
85	0.147
90	0.161

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 213 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 276.03

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.45	4.750	-2.25	99.8	0.2	
10	0.83	2.000	-1.00	99.7	0.3	
20	1.87	0.850	0.23	99.3	0.7	
40	2.72	0.425	1.23	99.0	1.0	
70	5.41	0.212	2.24	98.0	2.0	
100	108.73	0.150	2.74	60.6	39.4	
200	269.40	0.075	3.74	2.4	97.6	
PAN	275.91			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.270
16	2.398
25	2.515
50	2.865
75	3.242
84	3.416
95	3.669

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.092
30	0.112
60	0.149
85	0.191
90	0.199

POORLY GRADED Cu= 1.745 Cc= 0.985

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 213 SAMPLE NO: 7 PENETRATION, ft: 15.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 243.11

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.30	2.000	-1.00	99.9	0.1	
20	0.75	0.850	0.23	99.7	0.3	
40	1.15	0.425	1.23	99.5	0.5	
70	3.97	0.212	2.24	98.4	1.6	
100	94.69	0.150	2.74	61.1	38.9	
200	231.05	0.075	3.74	5.0	95.0	
PAN	242.86			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.274
16	2.402
25	2.521
50	2.876
75	3.275
84	3.461
95	3.736

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.082
15	0.089
30	0.110
60	0.149
85	0.191
90	0.199

POORLY GRADED Cu= 1.807 Cc= 0.990

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 215 SAMPLE NO: 5 PENETRATION, ft: 10

MATERIAL: OLIVE GRAY SILTY FINE SAND W/MICA

TESTED BY: DC DATE:11-19-87

CHECKED BY: DC DATE:11-19-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.79

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.06	0.850	0.23	100.0	0.0	
40	0.23	0.425	1.23	99.9	0.1	
70	0.51	0.212	2.24	99.7	0.3	
100	2.08	0.150	2.74	99.0	1.0	
200	118.01	0.075	3.74	40.9	59.1	
PAN	199.55			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.783
16	2.923
25	3.052
50	3.513
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.101
85	0.133
90	0.139

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 215 SAMPLE NO: 8 PENETRATION, ft: 17.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 280.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.23	2.000	-1.00	99.9	0.1	
20	1.33	0.850	0.23	99.5	0.5	
40	3.52	0.425	1.23	98.7	1.3	
70	206.76	0.212	2.24	26.3	73.7	
100	260.52	0.150	2.74	7.2	92.8	
200	269.20	0.075	3.74	4.1	95.9	
PAN	280.12			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.265
16	1.361
25	1.450
50	1.768
75	2.265
84	2.476
95	3.056

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.160
15	0.176
30	0.226
60	0.324
85	0.392
90	0.404

POORLY GRADED Cu= 2.028 Cc= 0.984

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 216 SAMPLE NO: 5 PENETRATION, ft: 10.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 107.93

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	4.99	0.212	2.24	95.4	4.6	
100	59.21	0.150	2.74	45.1	54.9	
200	95.10	0.075	3.74	11.9	88.1	
PAN	107.64			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.241
16	2.331
25	2.412
50	2.677
75	3.236
84	3.556
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.083
30	0.117
60	0.169
85	0.200
90	0.206

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 216 SAMPLE NO: 7 PENETRATION, ft: 15.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS & MICA
TESTED BY: DC DATE:11-19-87
CHECKED BY: DC DATE:11-19-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 206.59

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.35	2.000	-1.00	99.8	0.2	
20	2.81	0.850	0.23	98.6	1.4	
40	4.88	0.425	1.23	97.6	2.4	
70	6.19	0.212	2.24	97.0	3.0	
100	25.33	0.150	2.74	87.7	12.3	
200	173.63	0.075	3.74	16.0	84.0	
PAN	206.26			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.327
16	2.772
25	2.861
50	3.156
75	3.553
84	3.736
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.091
60	0.123
85	0.147
90	0.166

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 218 SAMPLE NO: 2 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 230.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.35	2.000	-1.00	99.8	0.2	
20	0.82	0.850	0.23	99.6	0.4	
40	1.25	0.425	1.23	99.5	0.5	
70	2.44	0.212	2.24	98.9	1.1	
100	145.47	0.150	2.74	37.0	63.0	
200	226.79	0.075	3.74	1.7	98.3	
PAN	230.58			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.263
16	2.338
25	2.403
50	2.610
75	2.989
84	3.225
95	3.598

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.105
30	0.136
60	0.174
85	0.199
90	0.204

POORLY GRADED Cu= 1.855 Cc= 1.135

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 218 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL: DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-12-87

CHECKED BY: DC DATE:11-12-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 228.79

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.21	2.000	-1.00	99.9	0.1	
20	1.31	0.850	0.23	99.4	0.6	
40	2.72	0.425	1.23	98.8	1.2	
70	8.87	0.212	2.24	96.1	3.9	
100	133.08	0.150	2.74	41.8	58.2	
200	215.18	0.075	3.74	5.9	94.1	
PAN	228.48			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.246
16	2.330
25	2.404
50	2.645
75	3.103
84	3.361
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.095
30	0.127
60	0.172
85	0.200
90	0.205

POORLY GRADED Cu= 2.041 Cc= 1.110

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 219 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL: DARK GRAY FINE SAND

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 242.93

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.04	0.425	1.23	100.0	0.0	
70	1.88	0.212	2.24	99.2	0.8	
100	130.70	0.150	2.74	46.2	53.8	
200	227.83	0.075	3.74	6.2	93.8	
PAN	242.57			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.270
16	2.358
25	2.436
50	2.692
75	3.160
84	3.402
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.093
30	0.121
60	0.167
85	0.196
90	0.202

POORLY GRADED Cu= 2.020 Cc= 1.063

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 219 SAMPLE NO: 5 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 223.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.03	4.750	-2.25	100.0	0.0	
10	1.21	2.000	-1.00	99.5	0.5	
20	4.76	0.850	0.23	97.9	2.1	
40	7.89	0.425	1.23	96.5	3.5	
70	34.83	0.212	2.24	84.4	15.6	
100	133.70	0.150	2.74	40.2	59.8	
200	218.69	0.075	3.74	2.3	97.7	
PAN	223.37			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.308
16	2.242
25	2.326
50	2.604
75	3.042
84	3.270
95	3.628

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.091
15	0.102
30	0.131
60	0.179
85	0.225
90	0.323

POORLY GRADED Cu= 1.957 Cc= 1.051

McCLELLAND ENGINEERS, INC.; WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 219 SAMPLE NO: 6 PENETRATION, ft: 14

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,MICA & CLAY POCKETS

TESTED BY: DC DATE:11-12-87

CHECKED BY: DC DATE:11-12-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 125.37

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.08	2.000	-1.00	99.9	0.1	
20	0.32	0.850	0.23	99.7	0.3	
40	0.39	0.425	1.23	99.7	0.3	
70	5.65	0.212	2.24	95.5	4.5	
100	50.82	0.150	2.74	59.5	40.5	
200	119.86	0.075	3.74	4.4	95.6	
PAN	125.19			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.243
16	2.372
25	2.491
50	2.857
75	3.257
84	3.444
95	3.720

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.090
30	0.111
60	0.151
85	0.195
90	0.203

POORLY GRADED

Cu= 1.814

Cc= 0.989

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 220 SAMPLE NO: 6 PENETRATION, ft: 12.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 157.63

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	6.12	0.850	0.23	96.1	3.9	
40	8.39	0.425	1.23	94.7	5.3	
70	12.82	0.212	2.24	91.9	8.1	
100	81.16	0.150	2.74	48.5	51.5	
200	142.57	0.075	3.74	9.6	90.4	
PAN	156.89			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.830
16	2.312
25	2.404
50	2.715
75	3.234
84	3.501
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.076
15	0.086
30	0.116
60	0.167
85	0.203
90	0.210

POORLY GRADED Cu= 2.203 Cc= 1.059

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 220 SAMPLE NO: 7 PENETRATION, ft: 15
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 243.33

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.63	2.000	-1.00	99.7	0.3	
20	3.64	0.850	0.23	98.5	1.5	
40	5.83	0.425	1.23	97.6	2.4	
70	7.44	0.212	2.24	96.9	3.1	
100	29.69	0.150	2.74	87.8	12.2	
200	219.76	0.075	3.74	9.7	90.3	
PAN	242.99			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.325
16	2.770
25	2.851
50	3.116
75	3.462
84	3.616
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.075
15	0.081
30	0.096
60	0.125
85	0.148
90	0.166

POORLY GRADED Cu= 1.656 Cc= 0.976

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 221 SAMPLE NO: 2 PENETRATION, ft: 7.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 212.60

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.05	4.750	-2.25	100.0	0.0	
10	0.45	2.000	-1.00	99.8	0.2	
20	1.43	0.850	0.23	99.3	0.7	
40	6.15	0.425	1.23	97.1	2.9	
70	44.96	0.212	2.24	78.9	21.1	
100	86.24	0.150	2.74	59.4	40.6	
200	149.49	0.075	3.74	29.7	70.3	
PAN	212.12			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.304
16	1.819
25	2.319
50	2.970
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.076
60	0.152
85	0.296
90	0.354

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 221 SAMPLE NO: 3 PENETRATION, ft: 12.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 220.91

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.30	4.750	-2.25	99.9	0.1	
10	2.10	2.000	-1.00	99.0	1.0	
20	3.42	0.850	0.23	98.5	1.5	
40	4.40	0.425	1.23	98.0	2.0	
70	84.96	0.212	2.24	61.5	38.5	
100	194.86	0.150	2.74	11.8	88.2	
200	216.51	0.075	3.74	2.0	98.0	
PAN	220.74			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.283
16	1.494
25	1.722
50	2.334
75	2.579
84	2.684
95	3.330

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.137
15	0.154
30	0.174
60	0.210
85	0.360
90	0.386

POORLY GRADED Cu= 1.532
Cc= 1.046

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 221 SAMPLE NO: 4 PENETRATION, ft: 15.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 257.68

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.09	4.750	-2.25	100.0	0.0	
10	0.59	2.000	-1.00	99.8	0.2	
20	1.85	0.850	0.23	99.3	0.7	
40	3.09	0.425	1.23	98.8	1.2	
70	30.45	0.212	2.24	88.2	11.8	
100	156.80	0.150	2.74	39.1	60.9	
200	252.86	0.075	3.74	1.9	98.1	
PAN	257.38			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.473
16	2.272
25	2.350
50	2.604
75	3.023
84	3.252
95	3.611

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.092
15	0.103
30	0.133
60	0.177
85	0.208
90	0.257

POORLY GRADED

Cu= 1.919

Cc= 1.074

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 222 SAMPLE NO: 3 PENETRATION, ft: 4
MATERIAL: DARK GRAY SILTY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 177.82

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.21	0.850	0.23	99.9	0.1	
40	0.71	0.425	1.23	99.6	0.4	
70	4.11	0.212	2.24	97.7	2.3	
100	92.40	0.150	2.74	48.0	52.0	
200	154.42	0.075	3.74	13.2	86.8	
PAN	177.32			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.259
16	2.353
25	2.436
50	2.712
75	3.294
84	3.615
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.079
30	0.113
60	0.166
85	0.197
90	0.203

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 222 SAMPLE NO: 4 PENETRATION, ft: 7
MATERIAL: GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 254.72

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.08	2.000	-1.00	100.0	0.0	
20	0.46	0.850	0.23	99.8	0.2	
40	0.75	0.425	1.23	99.7	0.3	
70	3.21	0.212	2.24	98.7	1.3	
100	129.33	0.150	2.74	49.2	50.8	
200	238.72	0.075	3.74	6.3	93.7	
PAN	254.41			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.268
16	2.363
25	2.447
50	2.727
75	3.194
84	3.424
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.082
15	0.091
30	0.118
60	0.164
85	0.196
90	0.202

POORLY GRADED Cu= 2.002 Cc= 1.034

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 222 SAMPLE NO: 5 PENETRATION, ft: 9
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 176.30

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.09	2.000	-1.00	99.9	0.1	
20	1.01	0.850	0.23	99.4	0.6	
40	2.30	0.425	1.23	98.7	1.3	
70	4.55	0.212	2.24	97.4	2.6	
100	34.47	0.150	2.74	80.4	19.6	
200	126.41	0.075	3.74	28.3	71.7	
PAN	176.08			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.296
16	2.611
25	2.809
50	3.214
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.078
60	0.122
85	0.168
90	0.186

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 222 SAMPLE NO: 6 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-12-87
CHECKED BY: DC DATE:11-12-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 219.00

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	3.39	0.850	0.23	98.5	1.5	
40	5.53	0.425	1.23	97.5	2.5	
70	20.29	0.212	2.24	90.7	9.3	
100	144.58	0.150	2.74	34.0	66.0	
200	200.11	0.075	3.74	8.6	91.4	
PAN	218.61			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.481
16	2.286
25	2.353
50	2.570
75	3.001
84	3.348
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.095
30	0.139
60	0.180
85	0.206
90	0.211

POORLY GRADED Cu= 2.261 Cc= 1.356

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 222 SAMPLE NO: 7 PENETRATION, ft: 14

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 254.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.05	4.750	-2.25	100.0	0.0	
10	0.57	2.000	-1.00	99.8	0.2	
20	1.90	0.850	0.23	99.3	0.7	
40	3.21	0.425	1.23	98.7	1.3	
70	15.11	0.212	2.24	94.1	5.9	
100	122.77	0.150	2.74	51.8	48.2	
200	251.82	0.075	3.74	1.1	98.9	
PAN	254.39			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.922
16	2.336
25	2.433
50	2.760
75	3.158
84	3.344
95	3.621

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.097
30	0.119
60	0.163
85	0.199
90	0.206

POORLY GRADED Cu= 1.825 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 223 SAMPLE NO: 6 PENETRATION, ft: 13
MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 274.83

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.04	4.750	-2.25	100.0	0.0	
10	0.50	2.000	-1.00	99.8	0.2	
20	1.36	0.850	0.23	99.5	0.5	
40	2.36	0.425	1.23	99.1	0.9	
70	27.39	0.212	2.24	90.0	10.0	
100	152.48	0.150	2.74	44.5	55.5	
200	271.03	0.075	3.74	1.4	98.6	
PAN	274.68			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.553
16	2.291
25	2.377
50	2.662
75	3.087
84	3.295
95	3.612

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.091
15	0.100
30	0.126
60	0.172
85	0.206
90	0.212

POORLY GRADED Cu= 1.890
Cc= 1.016

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 223 SAMPLE NO: 7 PENETRATION, ft: 16
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 238.39

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.02	2.000	-1.00	100.0	0.0	
20	0.40	0.850	0.23	99.8	0.2	
40	0.66	0.425	1.23	99.7	0.3	
70	6.89	0.212	2.24	97.1	2.9	
100	108.54	0.150	2.74	54.5	45.5	
200	231.02	0.075	3.74	3.1	96.9	
PAN	238.35			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.258
16	2.367
25	2.466
50	2.796
75	3.203
84	3.394
95	3.680

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.094
30	0.116
60	0.159
85	0.195
90	0.202

POORLY GRADED Cu= 1.846 Cc= 0.986

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 224 SAMPLE NO: 2 PENETRATION, ft: 3.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/MICA

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 236.47

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.03	0.850	0.23	100.0	0.0	
40	0.17	0.425	1.23	99.9	0.1	
70	8.80	0.212	2.24	96.3	3.7	
100	85.61	0.150	2.74	63.8	36.2	
200	193.72	0.075	3.74	18.1	81.9	
PAN	236.17			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.253
16	2.399
25	2.536
50	2.958
75	3.519
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.096
60	0.144
85	0.191
90	0.201

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 224 SAMPLE NO: 3 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 260.16

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.04	0.850	0.23	100.0	0.0	
40	0.16	0.425	1.23	99.9	0.1	
70	13.22	0.212	2.24	94.9	5.1	
100	117.67	0.150	2.74	54.8	45.2	
200	253.69	0.075	3.74	2.5	97.5	
PAN	259.99			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.208
16	2.351
25	2.455
50	2.799
75	3.199
84	3.386
95	3.664

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.094
30	0.116
60	0.159
85	0.197
90	0.205

POORLY GRADED Cu= 1.831 Cc= 0.981

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 224 SAMPLE NO: 4 PENETRATION, ft: 8.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 221.35

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.04	4.750	-2.25	100.0	0.0	
10	1.80	2.000	-1.00	99.2	0.8	
20	5.94	0.850	0.23	97.3	2.7	
40	8.69	0.425	1.23	96.1	3.9	
70	16.71	0.212	2.24	92.5	7.5	
100	104.84	0.150	2.74	52.6	47.4	
200	213.33	0.075	3.74	3.6	96.4	
PAN	221.12			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.427
16	2.325
25	2.427
50	2.773
75	3.193
84	3.393
95	3.694

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.094
30	0.117
60	0.162
85	0.201
90	0.208

POORLY GRADED Cu= 1.896 Cc= 0.986

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 224 SAMPLE NO: 6 PENETRATION, ft: 13.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 294.15

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.44	4.750	-2.25	99.9	0.1	
10	1.11	2.000	-1.00	99.6	0.4	
20	2.28	0.850	0.23	99.2	0.8	
40	3.64	0.425	1.23	98.8	1.2	
70	36.10	0.212	2.24	87.7	12.3	
100	203.19	0.150	2.74	30.9	69.1	
200	290.72	0.075	3.74	1.2	98.8	
PAN	294.00			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.460
16	2.264
25	2.330
50	2.541
75	2.878
84	3.133
95	3.549

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.099
15	0.111
30	0.148
60	0.183
85	0.209
90	0.265

POORLY GRADED Cu= 1.853
Cc= 1.212

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 224 SAMPLE NO: 7 PENETRATION, ft: 15.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 209.24

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.19	2.000	-1.00	99.9	0.1	
20	0.84	0.850	0.23	99.6	0.4	
40	1.43	0.425	1.23	99.3	0.7	
70	10.51	0.212	2.24	95.0	5.0	
100	103.24	0.150	2.74	50.7	49.3	
200	201.51	0.075	3.74	3.7	96.3	
PAN	208.92			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.228
16	2.340
25	2.433
50	2.746
75	3.176
84	3.382
95	3.694

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.094
30	0.119
60	0.164
85	0.199
90	0.205

POORLY GRADED Cu= 1.908
Cc= 1.000

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328
CORE NO: 226 SAMPLE NO: 2 PENETRATION, ft: 4
MATERIAL: OLIVE GRAY FINE SAND W/MICA
TESTED BY: DC DATE:11-3-87
CHECKED BY: DC DATE:11-3-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 217.30

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.02	0.850	0.23	100.0	0.0	
40	0.07	0.425	1.23	100.0	0.0	
70	0.18	0.212	2.24	99.9	0.1	
100	14.89	0.150	2.74	93.1	6.9	
200	192.51	0.075	3.74	11.4	88.6	
PAN	217.16			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.575
16	2.814
25	2.895
50	3.158
75	3.500
84	3.652
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.079
30	0.093
60	0.121
85	0.143
90	0.147

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 226 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 270.38

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.32	4.750	-2.25	99.9	0.1	
10	0.50	2.000	-1.00	99.8	0.2	
20	1.40	0.850	0.23	99.5	0.5	
40	2.42	0.425	1.23	99.1	0.9	
70	5.92	0.212	2.24	97.8	2.2	
100	145.98	0.150	2.74	46.0	54.0	
200	256.50	0.075	3.74	5.1	94.9	
PAN	270.00			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.259
16	2.349
25	2.428
50	2.689
75	3.145
84	3.377
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.085
15	0.094
30	0.122
60	0.168
85	0.197
90	0.203

POORLY GRADED Cu= 1.981 Cc= 1.052

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 226 SAMPLE NO: 5 PENETRATION, ft: 10.5

MATERIAL: OLIVE GRAY FINE SAND

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 221.27

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.07	4.750	-2.25	100.0	0.0	
10	0.13	2.000	-1.00	99.9	0.1	
20	0.31	0.850	0.23	99.9	0.1	
40	0.65	0.425	1.23	99.7	0.3	
70	12.30	0.212	2.24	94.4	5.6	
100	146.51	0.150	2.74	33.8	66.2	
200	217.33	0.075	3.74	1.8	98.2	
PAN	221.02			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.057
16	2.308
25	2.373
50	2.578
75	2.936
84	3.185
95	3.588

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.096
15	0.108
30	0.142
60	0.178
85	0.203
90	0.208

POORLY GRADED Cu= 1.862 Cc= 1.183

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-3-87 JOB NAME: ISLE DERNIERS JOB NO: 1087-1328

CORE NO: 226 SAMPLE NO: 7 PENETRATION, ft: 15.5

MATERIAL: OLIVE GRAY SILTY FINE SAND

TESTED BY: DC DATE:11-3-87

CHECKED BY: DC DATE:11-3-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 238.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.06	0.425	1.23	100.0	0.0	
70	0.15	0.212	2.24	99.9	0.1	
100	11.50	0.150	2.74	95.2	4.8	
200	189.52	0.075	3.74	20.6	79.4	
PAN	238.55			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.739
16	2.841
25	2.933
50	3.236
75	3.647
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.085
60	0.116
85	0.141
90	0.145

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 226 SAMPLE NO: 8 PENETRATION, ft: 18
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 237.29

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.18	4.750	-2.25	99.9	0.1	
10	1.03	2.000	-1.00	99.6	0.4	
20	3.03	0.850	0.23	98.7	1.3	
40	4.27	0.425	1.23	98.2	1.8	
70	15.99	0.212	2.24	93.3	6.7	
100	115.00	0.150	2.74	51.5	48.5	
200	230.97	0.075	3.74	2.7	97.3	
PAN	237.07			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.740
16	2.329
25	2.427
50	2.758
75	3.173
84	3.369
95	3.664

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.095
30	0.119
60	0.163
85	0.200
90	0.207

POORLY GRADED Cu= 1.875 Cc= 0.988

McCLELLAND ENGINEERS, INC.; WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 227 SAMPLE NO: 3 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-19-87
CHECKED BY: DC DATE:11-19-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 195.62

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.10	0.425	1.23	99.9	0.1	
70	11.48	0.212	2.24	94.1	5.9	
100	98.61	0.150	2.74	49.6	50.4	
200	168.81	0.075	3.74	13.7	86.3	
PAN	194.79			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.993
16	2.332
25	2.423
50	2.731
75	3.321
84	3.640
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.078
30	0.111
60	0.165
85	0.200
90	0.207

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 227 SAMPLE NO: 4 PENETRATION, ft: 7
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 224.70

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.70	4.750	-2.25	99.7	0.3	
10	1.01	2.000	-1.00	99.6	0.4	
20	1.81	0.850	0.23	99.2	0.8	
40	2.57	0.425	1.23	98.9	1.1	
70	15.21	0.212	2.24	93.2	6.8	
100	156.60	0.150	2.74	30.3	69.7	
200	218.81	0.075	3.74	2.6	97.4	
PAN	224.45			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.782
16	2.297
25	2.359
50	2.553
75	2.872
84	3.147
95	3.609

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.096
15	0.110
30	0.149
60	0.180
85	0.204
90	0.209

POORLY GRADED Cu= 1.873 Cc= 1.282

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 227 SAMPLE NO: 6 PENETRATION, ft: 12

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 188.06

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.64	4.750	-2.25	99.7	0.3	
10	2.29	2.000	-1.00	98.8	1.2	
20	7.39	0.850	0.23	96.1	3.9	
40	10.97	0.425	1.23	94.2	5.8	
70	15.43	0.212	2.24	91.8	8.2	
100	70.79	0.150	2.74	62.4	37.6	
200	154.03	0.075	3.74	18.1	81.9	
PAN	187.95			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.595
16	2.348
25	2.492
50	2.940
75	3.513
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.096
60	0.146
85	0.198
90	0.208

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 227 SAMPLE NO: 7 PENETRATION, ft: 14.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 261.47

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.13	2.000	-1.00	100.0	0.0	
20	0.48	0.850	0.23	99.8	0.2	
40	0.94	0.425	1.23	99.6	0.4	
70	22.41	0.212	2.24	91.4	8.6	
100	173.14	0.150	2.74	33.8	66.2	
200	258.50	0.075	3.74	1.1	98.9	
PAN	261.39			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.655
16	2.290
25	2.357
50	2.570
75	2.932
84	3.174
95	3.563

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.097
15	0.108
30	0.142
60	0.179
85	0.206
90	0.211

POORLY GRADED Cu= 1.855 Cc= 1.162

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 227 SAMPLE NO: 8 PENETRATION, ft: 17
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 143.47

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	1.77	0.850	0.23	98.8	1.2	
40	2.48	0.425	1.23	98.3	1.7	
70	3.47	0.212	2.24	97.6	2.4	
100	37.63	0.150	2.74	73.8	26.2	
200	123.47	0.075	3.74	13.9	86.1	
PAN	143.15			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.281
16	2.492
25	2.704
50	3.038
75	3.476
84	3.684
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.076
30	0.096
60	0.134
85	0.180
90	0.193

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 228 SAMPLE NO: 4 PENETRATION, ft: 9
MATERIAL: GRAY,DARK GRAY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 160.85

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.50	2.000	-1.00	99.7	0.3	
20	2.05	0.850	0.23	98.7	1.3	
40	3.16	0.425	1.23	98.0	2.0	
70	5.42	0.212	2.24	96.6	3.4	
100	54.26	0.150	2.74	66.3	33.7	
200	149.30	0.075	3.74	7.2	92.8	
PAN	160.60			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.259
16	2.417
25	2.567
50	2.937
75	3.336
84	3.522
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.086
30	0.106
60	0.143
85	0.189
90	0.199

POORLY GRADED Cu= 1.808 Cc= 0.990

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 228 SAMPLE NO: 5 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 272.93

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.17	4.750	-2.25	99.9	0.1	
10	0.57	2.000	-1.00	99.8	0.2	
20	2.08	0.850	0.23	99.2	0.8	
40	4.20	0.425	1.23	98.5	1.5	
70	43.98	0.212	2.24	83.9	16.1	
100	164.10	0.150	2.74	39.9	60.1	
200	269.83	0.075	3.74	1.1	98.9	
PAN	272.83			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.384
16	2.223
25	2.321
50	2.599
75	3.027
84	3.247
95	3.589

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.093
15	0.103
30	0.132
60	0.179
85	0.233
90	0.314

POORLY GRADED Cu= 1.923 Cc= 1.041

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 228 SAMPLE NO: 6 PENETRATION, ft: 14
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 238.97

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.37	4.750	-2.25	99.8	0.2	
10	0.66	2.000	-1.00	99.7	0.3	
20	1.47	0.850	0.23	99.4	0.6	
40	2.48	0.425	1.23	99.0	1.0	
70	18.72	0.212	2.24	92.2	7.8	
100	157.57	0.150	2.74	34.1	65.9	
200	234.53	0.075	3.74	1.9	98.1	
PAN	238.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.672
16	2.295
25	2.362
50	2.574
75	2.942
84	3.190
95	3.592

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.095
15	0.107
30	0.141
60	0.179
85	0.205
90	0.210

POORLY GRADED Cu= 1.878 Cc= 1.172

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 229 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS,ORGANICS,MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 203.91

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.38	2.000	-1.00	99.8	0.2	
20	1.17	0.850	0.23	99.4	0.6	
40	1.90	0.425	1.23	99.1	0.9	
70	3.98	0.212	2.24	98.0	2.0	
100	22.06	0.150	2.74	89.2	10.8	
200	139.64	0.075	3.74	31.5	68.5	
PAN	203.59			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.383
16	2.798
25	2.914
50	3.315
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.114
85	0.145
90	0.156

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 229 SAMPLE NO: 3 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 215.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.47	0.850	0.23	99.8	0.2	
40	0.71	0.425	1.23	99.7	0.3	
70	6.32	0.212	2.24	97.1	2.9	
100	104.66	0.150	2.74	51.4	48.6	
200	195.94	0.075	3.74	8.9	91.1	
PAN	214.81			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.256
16	2.357
25	2.449
50	2.758
75	3.252
84	3.499
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.087
30	0.114
60	0.162
85	0.196
90	0.203

POORLY GRADED Cu= 2.107 Cc= 1.036

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 229 SAMPLE NO: 4 PENETRATION, ft: 8.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 216.94

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.02	2.000	-1.00	100.0	0.0	
20	0.18	0.850	0.23	99.9	0.1	
40	0.46	0.425	1.23	99.8	0.2	
70	4.52	0.212	2.24	97.9	2.1	
100	114.72	0.150	2.74	47.1	52.9	
200	210.70	0.075	3.74	2.9	97.1	
PAN	216.70			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.261
16	2.352
25	2.433
50	2.701
75	3.131
84	3.342
95	3.664

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.097
30	0.122
60	0.167
85	0.197
90	0.203

POORLY GRADED Cu= 1.893 Cc= 1.024

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 229 SAMPLE NO: 5 PENETRATION, ft: 10.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 297.09

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.42	4.750	-2.25	99.9	0.1	
10	2.33	2.000	-1.00	99.2	0.8	
20	8.24	0.850	0.23	97.2	2.8	
40	11.64	0.425	1.23	96.1	3.9	
70	23.90	0.212	2.24	92.0	8.0	
100	198.77	0.150	2.74	33.1	66.9	
200	282.05	0.075	3.74	5.1	94.9	
PAN	296.59			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.402
16	2.293
25	2.358
50	2.567
75	2.947
84	3.240
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.103
30	0.142
60	0.179
85	0.205
90	0.210

POORLY GRADED Cu= 2.012 Cc= 1.266

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 229 SAMPLE NO: 6 PENETRATION, ft: 13.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 245.26

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.10	0.850	0.23	100.0	0.0	
40	0.28	0.425	1.23	99.9	0.1	
70	7.60	0.212	2.24	96.9	3.1	
100	106.85	0.150	2.74	56.4	43.6	
200	239.60	0.075	3.74	2.3	97.7	
PAN	245.04			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.257
16	2.372
25	2.478
50	2.819
75	3.210
84	3.392
95	3.661

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.094
30	0.115
60	0.156
85	0.195
90	0.202

POORLY GRADED Cu= 1.802 Cc= 0.981

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 229 SAMPLE NO: 7 PENETRATION, ft: 15.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 275.78

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.09	2.000	-1.00	100.0	0.0	
20	0.31	0.850	0.23	99.9	0.1	
40	0.51	0.425	1.23	99.8	0.2	
70	15.20	0.212	2.24	94.5	5.5	
100	167.42	0.150	2.74	39.3	60.7	
200	271.63	0.075	3.74	1.5	98.5	
PAN	275.60			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.073
16	2.316
25	2.388
50	2.619
75	3.022
84	3.247
95	3.599

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.093
15	0.103
30	0.133
60	0.174
85	0.202
90	0.207

POORLY GRADED Cu= 1.874
Cc= 1.086

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 229 SAMPLE NO: 8 PENETRATION, ft: 18.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 202.38

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	3.26	0.850	0.23	98.4	1.6	
40	4.72	0.425	1.23	97.7	2.3	
70	7.39	0.212	2.24	96.3	3.7	
100	44.96	0.150	2.74	77.8	22.2	
200	182.46	0.075	3.74	9.8	90.2	
PAN	202.15			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.267
16	2.542
25	2.764
50	3.048
75	3.428
84	3.602
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.075
15	0.081
30	0.099
60	0.132
85	0.175
90	0.192

POORLY GRADED Cu= 1.750 Cc= 0.983

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 230 SAMPLE NO: 4 PENETRATION, ft: 7

MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS,ORGANICS,MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 200.17

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.50	2.000	-1.00	99.8	0.2	
20	1.33	0.850	0.23	99.3	0.7	
40	2.86	0.425	1.23	98.6	1.4	
70	7.66	0.212	2.24	96.2	3.8	
100	23.98	0.150	2.74	88.0	12.0	
200	172.69	0.075	3.74	13.7	86.3	
PAN	199.90			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.296
16	2.773
25	2.860
50	3.143
75	3.519
84	3.690
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.076
30	0.093
60	0.123
85	0.147
90	0.166

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 230 SAMPLE NO: 5 PENETRATION, ft: 9.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,ORGANICS & MICA
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 212.50

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.24	4.750	-2.25	99.9	0.1	
10	1.06	2.000	-1.00	99.5	0.5	
20	1.82	0.850	0.23	99.1	0.9	
40	3.03	0.425	1.23	98.6	1.4	
70	15.92	0.212	2.24	92.5	7.5	
100	83.62	0.150	2.74	60.6	39.4	
200	196.37	0.075	3.74	7.6	92.4	
PAN	212.39			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.679
16	2.349
25	2.482
50	2.879
75	3.307
84	3.510
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.086
30	0.108
60	0.149
85	0.198
90	0.207

POORLY GRADED Cu= 1.895 Cc= 0.999

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 230 SAMPLE NO: 6 PENETRATION, ft: 12.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 243.36

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.54	4.750	-2.25	99.8	0.2	
10	1.05	2.000	-1.00	99.6	0.4	
20	2.56	0.850	0.23	98.9	1.1	
40	4.11	0.425	1.23	98.3	1.7	
70	14.53	0.212	2.24	94.0	6.0	
100	137.70	0.150	2.74	43.4	56.6	
200	240.89	0.075	3.74	1.0	99.0	
PAN	243.24			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.888
16	2.319
25	2.398
50	2.657
75	3.071
84	3.279
95	3.597

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.092
15	0.101
30	0.128
60	0.171
85	0.202
90	0.207

POORLY GRADED Cu= 1.862 Cc= 1.034

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 230 SAMPLE NO: 7 PENETRATION, ft: 14.5
MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 244.52

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.65	4.750	-2.25	99.7	0.3	
10	1.94	2.000	-1.00	99.2	0.8	
20	5.23	0.850	0.23	97.9	2.1	
40	8.57	0.425	1.23	96.5	3.5	
70	45.50	0.212	2.24	81.4	18.6	
100	179.80	0.150	2.74	26.5	73.5	
200	241.78	0.075	3.74	1.1	98.9	
PAN	244.28			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.293
16	1.960
25	2.285
50	2.493
75	2.776
84	3.052
95	3.517

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.103
15	0.118
30	0.154
60	0.189
85	0.273
90	0.346

POORLY GRADED Cu= 1.838 Cc= 1.226

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 230 SAMPLE NO: 8 PENETRATION, ft: 17.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 225.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.54	4.750	-2.25	99.8	0.2	
10	0.86	2.000	-1.00	99.6	0.4	
20	1.28	0.850	0.23	99.4	0.6	
40	1.78	0.425	1.23	99.2	0.8	
70	3.41	0.212	2.24	98.5	1.5	
100	69.95	0.150	2.74	68.9	31.1	
200	214.99	0.075	3.74	4.5	95.5	
PAN	225.06			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.285
16	2.452
25	2.613
50	2.951
75	3.318
84	3.484
95	3.725

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.082
15	0.088
30	0.106
60	0.140
85	0.185
90	0.195

POORLY GRADED Cu= 1.713 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 231 SAMPLE NO: 5 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-22-87
CHECKED BY: DC DATE:11-22-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 289.77

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.11	4.750	-2.25	100.0	0.0	
10	0.88	2.000	-1.00	99.7	0.3	
20	2.78	0.850	0.23	99.0	1.0	
40	5.53	0.425	1.23	98.1	1.9	
70	89.18	0.212	2.24	69.2	30.8	
100	230.24	0.150	2.74	20.5	79.5	
200	287.11	0.075	3.74	0.9	99.1	
PAN	289.73			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.298
16	1.583
25	1.923
50	2.407
75	2.680
84	2.902
95	3.447

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.111
15	0.130
30	0.163
60	0.201
85	0.341
90	0.375

POORLY GRADED Cu= 1.805
Cc= 1.184

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 231 SAMPLE NO: 6 PENETRATION, ft: 14

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 216.19

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.72	4.750	-2.25	99.2	0.8	
10	2.73	2.000	-1.00	98.7	1.3	
20	4.38	0.850	0.23	98.0	2.0	
40	5.45	0.425	1.23	97.5	2.5	
70	12.10	0.212	2.24	94.4	5.6	
100	117.79	0.150	2.74	45.5	54.5	
200	210.86	0.075	3.74	2.5	97.5	
PAN	215.96			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.931
16	2.325
25	2.408
50	2.680
75	3.109
84	3.322
95	3.648

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.098
30	0.124
60	0.169
85	0.201
90	0.207

POORLY GRADED Cu= 1.900 Cc= 1.026

McCLELLAND ENGINEERS, INC.; WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-20-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 231 SAMPLE NO: 7 PENETRATION, ft: 17

MATERIAL: OLIVE GRAY FINE SAND W/CLAY POCKETS

TESTED BY: DC DATE:11-22-87

CHECKED BY: DC DATE:11-22-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 197.24

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	3.29	0.425	1.23	98.3	1.7	
70	5.09	0.212	2.24	97.4	2.6	
100	98.80	0.150	2.74	49.9	50.1	
200	178.31	0.075	3.74	9.6	90.4	
PAN	196.81			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.258
16	2.356
25	2.443
50	2.736
75	3.249
84	3.509
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.076
15	0.086
30	0.115
60	0.164
85	0.197
90	0.203

POORLY GRADED Cu= 2.162 Cc= 1.056

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 232 SAMPLE NO: 5 PENETRATION, ft: 12

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 300.55

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.09	4.750	-2.25	100.0	0.0	
10	0.65	2.000	-1.00	99.8	0.2	
20	1.95	0.850	0.23	99.4	0.6	
40	4.02	0.425	1.23	98.7	1.3	
70	50.20	0.212	2.24	83.3	16.7	
100	205.33	0.150	2.74	31.7	68.3	
200	297.05	0.075	3.74	1.2	98.8	
PAN	300.14			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.385
16	2.156
25	2.303
50	2.531
75	2.893
84	3.145
95	3.554

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.098
15	0.111
30	0.146
60	0.185
85	0.241
90	0.318

POORLY GRADED Cu= 1.887 Cc= 1.177

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 232 SAMPLE NO: 6 PENETRATION, ft: 14
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 154.00

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.05	0.850	0.23	100.0	0.0	
40	0.23	0.425	1.23	99.9	0.1	
70	6.58	0.212	2.24	95.7	4.3	
100	75.34	0.150	2.74	51.1	48.9	
200	146.11	0.075	3.74	5.1	94.9	
PAN	153.76			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.244
16	2.347
25	2.440
50	2.753
75	3.197
84	3.412
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.092
30	0.117
60	0.163
85	0.198
90	0.205

POORLY GRADED Cu= 1.951 Cc= 1.007

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 232 SAMPLE NO: 7 PENETRATION, ft: 17

MATERIAL: GRAY SANDY SILT W/CLAY POCKETS & MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 184.11

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.08	2.000	-1.00	100.0	0.0	
20	0.50	0.850	0.23	99.7	0.3	
40	0.70	0.425	1.23	99.6	0.4	
70	1.27	0.212	2.24	99.3	0.7	
100	19.64	0.150	2.74	89.3	10.7	
200	85.88	0.075	3.74	53.4	46.6	
PAN	183.80			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.424
16	2.840
25	3.039
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.090
85	0.142
90	0.154

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 233 SAMPLE NO: 2 PENETRATION, ft: 1.5
MATERIAL: OLIVE GRAY,GRAY SILTY FINE SAND W/ORGANICS & MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 175.72

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.15	0.850	0.23	99.9	0.1	
40	0.86	0.425	1.23	99.5	0.5	
70	3.42	0.212	2.24	98.1	1.9	
100	16.71	0.150	2.74	90.5	9.5	
200	126.45	0.075	3.74	28.0	72.0	
PAN	175.52			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.411
16	2.808
25	2.915
50	3.281
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.078
60	0.115
85	0.144
90	0.149

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 233 SAMPLE NO: 3 PENETRATION, ft: 6
MATERIAL: OLIVE GRAY SILTY FINE SAND W/ORGANICS & MICA
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 192.91

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.07	0.850	0.23	100.0	0.0	
40	0.35	0.425	1.23	99.8	0.2	
70	4.45	0.212	2.24	97.7	2.3	
100	12.71	0.150	2.74	93.4	6.6	
200	145.69	0.075	3.74	24.5	75.5	
PAN	192.59			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.522
16	2.831
25	2.930
50	3.261
75	3.725
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.082
60	0.115
85	0.142
90	0.147

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 233 SAMPLE NO: 4 PENETRATION, ft: 9
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS,MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 212.77

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.39	4.750	-2.25	99.8	0.2	
10	0.57	2.000	-1.00	99.7	0.3	
20	1.35	0.850	0.23	99.4	0.6	
40	1.95	0.425	1.23	99.1	0.9	
70	4.08	0.212	2.24	98.1	1.9	
100	88.46	0.150	2.74	58.4	41.6	
200	199.57	0.075	3.74	6.2	93.8	
PAN	212.55			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.269
16	2.388
25	2.498
50	2.850
75	3.272
84	3.472
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.081
15	0.089
30	0.111
60	0.153
85	0.193
90	0.200

POORLY GRADED Cu= 1.887 Cc= 0.994

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 233 SAMPLE NO: 6 PENETRATION, ft: 14

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 208.11

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.37	4.750	-2.25	99.8	0.2	
10	0.76	2.000	-1.00	99.6	0.4	
20	1.61	0.850	0.23	99.2	0.8	
40	2.73	0.425	1.23	98.7	1.3	
70	20.48	0.212	2.24	90.2	9.8	
100	138.12	0.150	2.74	33.6	66.4	
200	204.72	0.075	3.74	1.6	98.4	
PAN	207.87			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.534
16	2.282
25	2.349
50	2.566
75	2.932
84	3.181
95	3.581

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.096
15	0.108
30	0.142
60	0.180
85	0.207
90	0.212

POORLY GRADED Cu= 1.877 Cc= 1.170

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 233 SAMPLE NO: 7 PENETRATION, ft: 16
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 308.49

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.43	4.750	-2.25	99.5	0.5	
10	2.74	2.000	-1.00	99.1	0.9	
20	4.98	0.850	0.23	98.4	1.6	
40	6.48	0.425	1.23	97.9	2.1	
70	32.74	0.212	2.24	89.4	10.6	
100	216.64	0.150	2.74	29.8	70.2	
200	306.92	0.075	3.74	0.5	99.5	
PAN	308.43			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.460
16	2.274
25	2.338
50	2.539
75	2.851
84	3.104
95	3.516

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.101
15	0.114
30	0.150
60	0.183
85	0.208
90	0.231

POORLY GRADED Cu= 1.811
Cc= 1.227

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 233 SAMPLE NO: 8 PENETRATION, ft: 19
MATERIAL: OLIVE GRAY FINE SAND
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 215.85

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.18	0.425	1.23	99.9	0.1	
70	1.74	0.212	2.24	99.2	0.8	
100	126.58	0.150	2.74	41.4	58.6	
200	208.99	0.075	3.74	3.2	96.8	
PAN	215.63			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.267
16	2.347
25	2.418
50	2.645
75	3.066
84	3.298
95	3.664

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.100
30	0.129
60	0.171
85	0.198
90	0.203

POORLY GRADED Cu= 1.913 Cc= 1.089

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 234 SAMPLE NO: 4 PENETRATION, ft: 13
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 229.40

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.35	0.850	0.23	99.8	0.2	
40	0.89	0.425	1.23	99.6	0.4	
70	22.39	0.212	2.24	90.2	9.8	
100	150.73	0.150	2.74	34.3	65.7	
200	226.07	0.075	3.74	1.5	98.5	
PAN	229.32			#N/A	#N/A	

| PARAMETERS |

COASTAL		GEOTECHNICAL	
D PERCENTILE COARSER	SIZE, PHI UNITS	D PERCENTILE FINER	SIZE, mm
5	1.586	10	0.096
16	2.283	15	0.108
25	2.351	30	0.141
50	2.571	60	0.180
75	2.943	85	0.207
84	3.187	90	0.212
95	3.578		
		POORLY GRADED	Cu= 1.875 Cc= 1.154

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 234 SAMPLE NO: 5 PENETRATION, ft: 18
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-19-87
CHECKED BY: DC DATE:11-19-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 250.71

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.23	4.750	-2.25	99.9	0.1	
10	0.82	2.000	-1.00	99.7	0.3	
20	2.13	0.850	0.23	99.2	0.8	
40	2.95	0.425	1.23	98.8	1.2	
70	4.22	0.212	2.24	98.3	1.7	
100	147.54	0.150	2.74	41.2	58.8	
200	238.56	0.075	3.74	4.8	95.2	
PAN	250.38			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.261
16	2.342
25	2.413
50	2.642
75	3.080
84	3.330
95	3.730

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.086
15	0.097
30	0.128
60	0.171
85	0.198
90	0.204

POORLY GRADED Cu= 1.983
Cc= 1.111

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 236 SAMPLE NO: 4 PENETRATION, ft: ~~14~~ 9.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 234.32

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.47	2.000	-1.00	99.8	0.2	
20	1.47	0.850	0.23	99.4	0.6	
40	2.58	0.425	1.23	98.9	1.1	
70	34.28	0.212	2.24	85.4	14.6	
100	154.10	0.150	2.74	34.2	65.8	
200	228.66	0.075	3.74	2.4	97.6	
PAN	234.10			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.421
16	2.248
25	2.321
50	2.556
75	2.949
84	3.203
95	3.615

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.106
30	0.141
60	0.182
85	0.212
90	0.297

POORLY GRADED Cu= 1.938 Cc= 1.154

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 236 SAMPLE NO: 5 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 220.53

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.24	4.750	-2.25	99.9	0.1	
10	0.46	2.000	-1.00	99.8	0.2	
20	1.28	0.850	0.23	99.4	0.6	
40	1.73	0.425	1.23	99.2	0.8	
70	11.55	0.212	2.24	94.8	5.2	
100	70.13	0.150	2.74	68.2	31.8	
200	208.35	0.075	3.74	5.5	94.5	
PAN	220.29			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.143
16	2.412
25	2.584
50	2.949
75	3.326
84	3.499
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.081
15	0.087
30	0.106
60	0.141
85	0.190
90	0.202

POORLY GRADED Cu= 1.744 Cc= 0.984

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 236 SAMPLE NO: 6 PENETRATION, ft: 14
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 254.76

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.12	4.750	-2.25	100.0	0.0	
10	0.34	2.000	-1.00	99.9	0.1	
20	0.91	0.850	0.23	99.6	0.4	
40	1.76	0.425	1.23	99.3	0.7	
70	41.27	0.212	2.24	83.8	16.2	
100	195.83	0.150	2.74	23.1	76.9	
200	251.12	0.075	3.74	1.4	98.6	
PAN	254.44			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.413
16	2.214
25	2.297
50	2.486
75	2.717
84	2.980
95	3.502

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.106
15	0.123
30	0.157
60	0.189
85	0.233
90	0.310

POORLY GRADED Cu= 1.777
Cc= 1.238

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 236 SAMPLE NO: 7 PENETRATION, ft: 16.5
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 234.45

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.03	2.000	-1.00	100.0	0.0	
20	0.16	0.850	0.23	99.9	0.1	
40	0.43	0.425	1.23	99.8	0.2	
70	1.17	0.212	2.24	99.5	0.5	
100	38.32	0.150	2.74	83.7	16.3	
200	206.78	0.075	3.74	11.8	88.2	
PAN	234.37			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.356
16	2.723
25	2.820
50	3.102
75	3.477
84	3.648
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.079
30	0.095
60	0.127
85	0.156
90	0.176

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC.; WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 239A SAMPLE NO: 3 PENETRATION, ft: 8.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-19-87

CHECKED BY: DC DATE:11-19-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 265.18

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.08	4.750	-2.25	100.0	0.0	
10	0.26	2.000	-1.00	99.9	0.1	
20	1.24	0.850	0.23	99.5	0.5	
40	2.59	0.425	1.23	99.0	1.0	
70	87.93	0.212	2.24	66.8	33.2	
100	202.50	0.150	2.74	23.6	76.4	
200	260.31	0.075	3.74	1.8	98.2	
PAN	265.06			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.310
16	1.564
25	1.854
50	2.405
75	2.717
84	2.998
95	3.527

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.105
15	0.122
30	0.160
60	0.203
85	0.345
90	0.375

POORLY GRADED Cu= 1.938 Cc= 1.202

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 239A SAMPLE NO: 4 PENETRATION, ft: 13

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 261.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.25	2.000	-1.00	99.9	0.1	
20	1.12	0.850	0.23	99.6	0.4	
40	2.03	0.425	1.23	99.2	0.8	
70	38.29	0.212	2.24	85.4	14.6	
100	152.58	0.150	2.74	41.7	58.3	
200	258.35	0.075	3.74	1.2	98.8	
PAN	261.51			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.433
16	2.250
25	2.336
50	2.621
75	3.052
84	3.267
95	3.599

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.092
15	0.102
30	0.130
60	0.177
85	0.212
90	0.295

POORLY GRADED Cu= 1.917 Cc= 1.027

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 239A SAMPLE NO: 5 PENETRATION, ft: 16.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 282.72

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.04	4.750	-2.25	100.0	0.0	
10	0.24	2.000	-1.00	99.9	0.1	
20	0.67	0.850	0.23	99.8	0.2	
40	1.20	0.425	1.23	99.6	0.4	
70	18.91	0.212	2.24	93.3	6.7	
100	187.64	0.150	2.74	33.6	66.4	
200	276.05	0.075	3.74	2.4	97.6	
PAN	282.56			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.834
16	2.301
25	2.367
50	2.574
75	2.937
84	3.193
95	3.611

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.095
15	0.107
30	0.142
60	0.178
85	0.204
90	0.209

POORLY GRADED Cu= 1.888
Cc= 1.194

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 2398 SAMPLE NO: 5 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 353.12

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.87	4.750	-2.25	99.8	0.2	
10	1.12	2.000	-1.00	99.7	0.3	
20	1.82	0.850	0.23	99.5	0.5	
40	2.75	0.425	1.23	99.2	0.8	
70	74.21	0.212	2.24	79.0	21.0	
100	240.67	0.150	2.74	31.8	68.2	
200	345.77	0.075	3.74	2.1	97.9	
PAN	352.76			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.364
16	1.861
25	2.272
50	2.515
75	2.901
84	3.162
95	3.592

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.096
15	0.109
30	0.146
60	0.188
85	0.287
90	0.341

POORLY GRADED Cu= 1.954 Cc= 1.173

McCLELLAND ENGINEERS, INC.; WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 239 B SAMPLE NO: 6 PENETRATION, ft: 14

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 245.63

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.40	4.750	-2.25	99.8	0.2	
10	0.52	2.000	-1.00	99.8	0.2	
20	0.78	0.850	0.23	99.7	0.3	
40	1.00	0.425	1.23	99.6	0.4	
70	3.22	0.212	2.24	98.7	1.3	
100	100.32	0.150	2.74	59.2	40.8	
200	227.33	0.075	3.74	7.5	92.5	
PAN	245.49			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.275
16	2.396
25	2.507
50	2.861
75	3.294
84	3.501
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.087
30	0.109
60	0.151
85	0.192
90	0.199

POORLY GRADED Cu= 1.916 Cc= 0.999

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 239B SAMPLE NO: 8 PENETRATION, ft: 19.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS & MICA
TESTED BY: DC DATE:11-19-87
CHECKED BY: DC DATE:11-19-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 150.34

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.01	4.750	-2.25	100.0	0.0	
10	0.11	2.000	-1.00	99.9	0.1	
20	0.70	0.850	0.23	99.5	0.5	
40	1.09	0.425	1.23	99.3	0.7	
70	5.19	0.212	2.24	96.5	3.5	
100	56.28	0.150	2.74	62.6	37.4	
200	139.03	0.075	3.74	7.5	92.5	
PAN	150.20			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.256
16	2.395
25	2.525
50	2.900
75	3.318
84	3.516
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.086
30	0.107
60	0.147
85	0.192
90	0.201

POORLY GRADED Cu= 1.866 Cc= 0.993

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 240 SAMPLE NO: 4 PENETRATION, ft: 13
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 218.50

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.37	0.850	0.23	99.8	0.2	
40	0.82	0.425	1.23	99.6	0.4	
70	6.60	0.212	2.24	97.0	3.0	
100	62.26	0.150	2.74	71.5	28.5	
200	205.60	0.075	3.74	5.9	94.1	
PAN	218.42			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.269
16	2.462
25	2.652
50	2.979
75	3.348
84	3.516
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.086
30	0.104
60	0.138
85	0.184
90	0.196

POORLY GRADED Cu= 1.720 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 240 SAMPLE NO: 5 PENETRATION, ft: 15.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS & MICA

TESTED BY: DC DATE:11-13-87

CHECKED BY: DC DATE:11-13-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 183.80

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.13	2.000	-1.00	99.9	0.1	
20	0.69	0.850	0.23	99.6	0.4	
40	1.43	0.425	1.23	99.2	0.8	
70	5.58	0.212	2.24	97.0	3.0	
100	88.00	0.150	2.74	52.1	47.9	
200	171.06	0.075	3.74	6.9	93.1	
PAN	183.48			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.255
16	2.359
25	2.452
50	2.769
75	3.230
84	3.456
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.081
15	0.089
30	0.115
60	0.162
85	0.196
90	0.203

POORLY GRADED Cu= 2.006 Cc= 1.015

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-4-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 241 SAMPLE NO: 5 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 258.84

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.72	2.000	-1.00	99.7	0.3	
20	2.76	0.850	0.23	98.9	1.1	
40	5.05	0.425	1.23	98.0	2.0	
70	46.22	0.212	2.24	82.1	17.9	
100	152.92	0.150	2.74	40.9	59.1	
200	242.15	0.075	3.74	6.4	93.6	
PAN	258.51			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.353
16	2.041
25	2.308
50	2.604
75	3.096
84	3.364
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.095
30	0.128
60	0.180
85	0.259
90	0.330

POORLY GRADED Cu= 2.157 Cc= 1.087

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 241 SAMPLE NO: 6 PENETRATION, ft: 14
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 273.63

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.35	4.750	-2.25	99.5	0.5	
10	2.55	2.000	-1.00	99.1	0.9	
20	4.41	0.850	0.23	98.4	1.6	
40	6.71	0.425	1.23	97.5	2.5	
70	59.40	0.212	2.24	78.3	21.7	
100	190.37	0.150	2.74	30.4	69.6	
200	270.85	0.075	3.74	1.0	99.0	
PAN	273.46			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.314
16	1.802
25	2.265
50	2.503
75	2.867
84	3.123
95	3.540

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.099
15	0.112
30	0.149
60	0.189
85	0.299
90	0.353

POORLY GRADED Cu= 1.906 Cc= 1.181

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 241 SAMPLE NO: 7 PENETRATION, ft: 16.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 227.58

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.30	4.750	-2.25	99.9	0.1	
10	0.62	2.000	-1.00	99.7	0.3	
20	1.09	0.850	0.23	99.5	0.5	
40	1.60	0.425	1.23	99.3	0.7	
70	29.96	0.212	2.24	86.8	13.2	
100	126.09	0.150	2.74	44.6	55.4	
200	220.23	0.075	3.74	3.2	96.8	
PAN	227.41			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.463
16	2.265
25	2.355
50	2.658
75	3.107
84	3.328
95	3.671

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.098
30	0.125
60	0.174
85	0.209
90	0.277

POORLY GRADED Cu= 1.969 Cc= 1.020

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 242 SAMPLE NO: 3 PENETRATION, ft: 6

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 263.12

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.64	2.000	-1.00	99.8	0.2	
20	1.71	0.850	0.23	99.4	0.6	
40	2.81	0.425	1.23	98.9	1.1	
70	47.77	0.212	2.24	81.8	18.2	
100	183.72	0.150	2.74	30.2	69.8	
200	253.42	0.075	3.74	3.7	96.3	
PAN	262.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.379
16	2.027
25	2.291
50	2.516
75	2.875
84	3.165
95	3.661

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.109
30	0.150
60	0.187
85	0.260
90	0.327

POORLY GRADED Cu= 1.986 Cc= 1.272

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 242 SAMPLE NO: 4 PENETRATION, ft: 10
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 239.53

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.14	2.000	-1.00	99.9	0.1	
20	0.52	0.850	0.23	99.8	0.2	
40	0.90	0.425	1.23	99.6	0.4	
70	28.25	0.212	2.24	88.2	11.8	
100	151.07	0.150	2.74	36.9	63.1	
200	230.36	0.075	3.74	3.8	96.2	
PAN	239.24			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.511
16	2.271
25	2.345
50	2.585
75	3.007
84	3.264
95	3.682

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.090
15	0.102
30	0.135
60	0.179
85	0.208
90	0.253

POORLY GRADED Cu= 1.989
Cc= 1.137

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 243A SAMPLE NO: 2 PENETRATION, ft: 3.5
MATERIAL: OLIVE GRAY SANDY SILT W/MICA
TESTED BY: DC DATE:11-19-87
CHECKED BY: DC DATE:11-19-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 217.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	0.07	0.212	2.24	100.0	0.0	
100	0.58	0.150	2.74	99.7	0.3	
200	54.48	0.075	3.74	75.0	25.0	
PAN	217.13			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.872
16	3.267
25	3.735
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	#N/A
85	0.107
90	0.122

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC.; WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-19-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 243A SAMPLE NO: 3 PENETRATION, ft: 10
MATERIAL: OLIVE GRAY SILTY FINE SAND W/MICA & ORGANICS
TESTED BY: DC DATE:11-19-87
CHECKED BY: DC DATE:11-19-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 251.12

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.03	2.000	-1.00	100.0	0.0	
20	0.05	0.850	0.23	100.0	0.0	
40	0.13	0.425	1.23	99.9	0.1	
70	0.92	0.212	2.24	99.6	0.4	
100	92.46	0.150	2.74	63.2	36.8	
200	202.74	0.075	3.74	19.3	80.7	
PAN	250.92			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.289
16	2.423
25	2.547
50	2.957
75	3.547
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.095
60	0.145
85	0.188
90	0.196

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE — PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 243A SAMPLE NO: 4 PENETRATION, ft: 15

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 230.56

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.23	2.000	-1.00	99.9	0.1	
20	1.86	0.850	0.23	99.2	0.8	
40	3.20	0.425	1.23	98.6	1.4	
70	69.72	0.212	2.24	69.8	30.2	
100	203.15	0.150	2.74	11.9	88.1	
200	225.41	0.075	3.74	2.2	97.8	
PAN	230.25			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.310
16	1.599
25	1.948
50	2.382
75	2.601
84	2.692
95	3.353

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.136
15	0.154
30	0.170
60	0.202
85	0.337
90	0.372

POORLY GRADED Cu= 1.483 Cc= 1.053

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 243B SAMPLE NO: 3 PENETRATION, ft: 7
MATERIAL: GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 226.94

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.03	2.000	-1.00	100.0	0.0	
20	0.15	0.850	0.23	99.9	0.1	
40	0.57	0.425	1.23	99.7	0.3	
70	27.16	0.212	2.24	88.0	12.0	
100	147.93	0.150	2.74	34.8	65.2	
200	221.61	0.075	3.74	2.3	97.7	
PAN	226.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.511
16	2.268
25	2.339
50	2.568
75	2.958
84	3.209
95	3.615

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.106
30	0.140
60	0.180
85	0.209
90	0.256

POORLY GRADED Cu= 1.922 Cc= 1.151

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 243B SAMPLE NO: 4 PENETRATION, ft: 9
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 216.68

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	1.75	4.750	-2.25	99.2	0.8	
10	1.93	2.000	-1.00	99.1	0.9	
20	2.40	0.850	0.23	98.9	1.1	
40	3.23	0.425	1.23	98.5	1.5	
70	43.68	0.212	2.24	79.8	20.2	
100	142.54	0.150	2.74	34.2	65.8	
200	213.07	0.075	3.74	1.7	98.3	
PAN	216.50			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.351
16	1.893
25	2.281
50	2.536
75	2.943
84	3.189
95	3.585

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.095
15	0.107
30	0.141
60	0.186
85	0.282
90	0.341

POORLY GRADED Cu= 1.949 Cc= 1.119

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-6-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 243B SAMPLE NO: 5 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 226.19

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.31	2.000	-1.00	99.9	0.1	
20	1.13	0.850	0.23	99.5	0.5	
40	2.37	0.425	1.23	99.0	1.0	
70	27.49	0.212	2.24	87.8	12.2	
100	118.87	0.150	2.74	47.4	52.6	
200	220.15	0.075	3.74	2.7	97.3	
PAN	225.85			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.472
16	2.276
25	2.372
50	2.697
75	3.133
84	3.341
95	3.658

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.088
15	0.097
30	0.122
60	0.170
85	0.208
90	0.262

POORLY GRADED Cu= 1.930 Cc= 0.996

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 244 SAMPLE NO: 4 PENETRATION, ft: 7
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 228.43

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.27	0.850	0.23	99.9	0.1	
40	0.84	0.425	1.23	99.6	0.4	
70	16.20	0.212	2.24	92.9	7.1	
100	105.99	0.150	2.74	53.6	46.4	
200	223.14	0.075	3.74	2.3	97.7	
PAN	227.92			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.786
16	2.331
25	2.436
50	2.785
75	3.187
84	3.376
95	3.657

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.095
30	0.117
60	0.161
85	0.200
90	0.208

POORLY GRADED Cu= 1.845 Cc= 0.979

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 244 SAMPLE NO: 5 PENETRATION, ft: 9.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 220.95

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.31	2.000	-1.00	99.9	0.1	
20	1.05	0.850	0.23	99.5	0.5	
40	2.66	0.425	1.23	98.8	1.2	
70	57.89	0.212	2.24	73.8	26.2	
100	165.52	0.150	2.74	25.1	74.9	
200	218.49	0.075	3.74	1.1	98.9	
PAN	220.81			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.327
16	1.681
25	2.152
50	2.452
75	2.739
84	3.022
95	3.505

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.104
15	0.120
30	0.157
60	0.195
85	0.320
90	0.361

POORLY GRADED Cu= 1.872 Cc= 1.205

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 244 SAMPLE NO: 6 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 126.30

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	1.07	0.850	0.23	99.2	0.8	
40	1.75	0.425	1.23	98.6	1.4	
70	5.12	0.212	2.24	95.9	4.1	
100	32.61	0.150	2.74	74.2	25.8	
200	110.04	0.075	3.74	12.9	87.1	
PAN	126.02			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.255
16	2.481
25	2.713
50	3.036
75	3.460
84	3.659
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.078
30	0.097
60	0.134
85	0.182
90	0.196

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 244 SAMPLE NO: 7 PENETRATION, ft: 14.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 170.55

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.30	2.000	-1.00	99.8	0.2	
20	0.95	0.850	0.23	99.4	0.6	
40	1.33	0.425	1.23	99.2	0.8	
70	6.65	0.212	2.24	96.1	3.9	
100	64.09	0.150	2.74	62.4	37.6	
200	162.90	0.075	3.74	4.5	95.5	
PAN	170.36			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.251
16	2.390
25	2.521
50	2.889
75	3.278
84	3.458
95	3.723

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.083
15	0.090
30	0.110
60	0.147
85	0.193
90	0.201

POORLY GRADED Cu= 1.778 Cc= 0.988

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 245 SAMPLE NO: 3 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 235.61

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.34	0.850	0.23	99.9	0.1	
40	0.95	0.425	1.23	99.6	0.4	
70	33.71	0.212	2.24	85.7	14.3	
100	173.59	0.150	2.74	26.3	73.7	
200	233.54	0.075	3.74	0.9	99.1	
PAN	235.43			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.452
16	2.249
25	2.311
50	2.508
75	2.772
84	3.046
95	3.505

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.103
15	0.118
30	0.154
60	0.186
85	0.211
90	0.290

POORLY GRADED Cu= 1.801 Cc= 1.233

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 245 SAMPLE NO: 4 PENETRATION, ft: 7.5
MATERIAL: BROWN,OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 236.70

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.52	4.750	-2.25	99.8	0.2	
10	0.92	2.000	-1.00	99.6	0.4	
20	2.12	0.850	0.23	99.1	0.9	
40	3.64	0.425	1.23	98.5	1.5	
70	24.53	0.212	2.24	89.6	10.4	
100	153.77	0.150	2.74	35.0	65.0	
200	233.30	0.075	3.74	1.4	98.6	
PAN	236.35			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.501
16	2.279
25	2.349
50	2.574
75	2.955
84	3.196
95	3.580

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.095
15	0.107
30	0.140
60	0.179
85	0.207
90	0.223

POORLY GRADED Cu= 1.881 Cc= 1.138

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 245 SAMPLE NO: 7 PENETRATION, ft: 15.5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 236.88

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.49	0.850	0.23	99.8	0.2	
40	1.13	0.425	1.23	99.5	0.5	
70	2.04	0.212	2.24	99.1	0.9	
100	15.75	0.150	2.74	93.4	6.6	
200	199.20	0.075	3.74	15.9	84.1	
PAN	236.56			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.568
16	2.820
25	2.907
50	3.189
75	3.565
84	3.735
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.090
60	0.119
85	0.143
90	0.147

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 246 SAMPLE NO: 2 PENETRATION, ft: 7.5

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 209.93

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.27	2.000	-1.00	99.9	0.1	
20	1.97	0.850	0.23	99.1	0.9	
40	4.60	0.425	1.23	97.8	2.2	
70	34.68	0.212	2.24	83.5	16.5	
100	106.45	0.150	2.74	49.3	50.7	
200	189.95	0.075	3.74	9.5	90.5	
PAN	209.55			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.356
16	2.172
25	2.341
50	2.724
75	3.241
84	3.504
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.076
15	0.086
30	0.115
60	0.170
85	0.240
90	0.322

POORLY GRADED Cu= 2.242 Cc= 1.026

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 246 SAMPLE NO: 5 PENETRATION, ft: 14

MATERIAL: DARK GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 247.64

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.06	2.000	-1.00	100.0	0.0	
20	0.74	0.850	0.23	99.7	0.3	
40	1.08	0.425	1.23	99.6	0.4	
70	1.75	0.212	2.24	99.3	0.7	
100	65.27	0.150	2.74	73.6	26.4	
200	230.56	0.075	3.74	6.9	93.1	
PAN	247.44			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.306
16	2.505
25	2.704
50	3.001
75	3.371
84	3.539
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.085
30	0.102
60	0.136
85	0.179
90	0.191

POORLY GRADED Cu= 1.722 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 247 SAMPLE NO: 1 PENETRATION, ft: 1

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 168.86

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.33	4.750	-2.25	99.8	0.2	
10	2.20	2.000	-1.00	98.7	1.3	
20	6.10	0.850	0.23	96.4	3.6	
40	8.34	0.425	1.23	95.1	4.9	
70	20.54	0.212	2.24	87.8	12.2	
100	70.45	0.150	2.74	58.3	41.7	
200	156.85	0.075	3.74	7.1	92.9	
PAN	168.66			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.239
16	2.290
25	2.425
50	2.850
75	3.283
84	3.490
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.087
30	0.110
60	0.154
85	0.206
90	0.287

POORLY GRADED Cu= 1.933 Cc= 0.991

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 247 SAMPLE NO: 5 PENETRATION, ft: 9.5

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 193.95

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.34	2.000	-1.00	99.8	0.2	
20	4.18	0.850	0.23	97.8	2.2	
40	6.98	0.425	1.23	96.4	3.6	
70	19.18	0.212	2.24	90.1	9.9	
100	97.25	0.150	2.74	49.9	50.1	
200	156.20	0.075	3.74	19.5	80.5	
PAN	193.61			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.374
16	2.299
25	2.398
50	2.735
75	3.479
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.102
60	0.166
85	0.205
90	0.212

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-12-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 247 SAMPLE NO: 6 PENETRATION, ft: 12
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-13-87
CHECKED BY: DC DATE:11-13-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 221.40

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.08	2.000	-1.00	100.0	0.0	
20	0.62	0.850	0.23	99.7	0.3	
40	1.36	0.425	1.23	99.4	0.6	
70	28.52	0.212	2.24	87.1	12.9	
100	110.69	0.150	2.74	50.0	50.0	
200	215.22	0.075	3.74	2.8	97.2	
PAN	221.17			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.473
16	2.271
25	2.375
50	2.737
75	3.160
84	3.361
95	3.665

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.096
30	0.120
60	0.168
85	0.209
90	0.272

POORLY GRADED Cu= 1.919 Cc= 0.981

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 247 SAMPLE NO: 7 PENETRATION, ft: 14.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 206.38

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.36	4.750	-2.25	99.8	0.2	
10	1.48	2.000	-1.00	99.3	0.7	
20	3.40	0.850	0.23	98.4	1.6	
40	5.84	0.425	1.23	97.2	2.8	
70	34.28	0.212	2.24	83.4	16.6	
100	105.38	0.150	2.74	48.9	51.1	
200	202.43	0.075	3.74	1.9	98.1	
PAN	206.23			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.330
16	2.158
25	2.339
50	2.717
75	3.140
84	3.339
95	3.638

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.089
15	0.097
30	0.121
60	0.171
85	0.243
90	0.327

POORLY GRADED Cu= 1.923 Cc= 0.970

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 247 SAMPLE NO: 8 PENETRATION, ft: 17
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 120.91

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.85	2.000	-1.00	99.3	0.7	
20	4.37	0.850	0.23	96.4	3.6	
40	6.83	0.425	1.23	94.4	5.6	
70	10.62	0.212	2.24	91.2	8.8	
100	38.20	0.150	2.74	68.4	31.6	
200	106.79	0.075	3.74	11.7	88.3	
PAN	120.64			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	0.714
16	2.371
25	2.566
50	2.976
75	3.414
84	3.623
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.080
30	0.101
60	0.140
85	0.196
90	0.209

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 248 SAMPLE NO: 2 PENETRATION, ft: 5.5
MATERIAL: OLIVE GRAY,GRAY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 221.35

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.05	2.000	-1.00	100.0	0.0	
20	3.89	0.850	0.23	98.2	1.8	
40	6.99	0.425	1.23	96.8	3.2	
70	32.45	0.212	2.24	85.3	14.7	
100	132.54	0.150	2.74	40.1	59.9	
200	205.82	0.075	3.74	7.0	93.0	
PAN	220.79			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.332
16	2.250
25	2.332
50	2.605
75	3.091
84	3.371
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.082
15	0.094
30	0.128
60	0.178
85	0.212
90	0.311

POORLY GRADED Cu= 2.167 Cc= 1.123

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 248 SAMPLE NO: 3 PENETRATION, ft: 9

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 199.12

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.28	2.000	-1.00	99.9	0.1	
20	2.02	0.850	0.23	99.0	1.0	
40	3.95	0.425	1.23	98.0	2.0	
70	22.49	0.212	2.24	88.7	11.3	
100	75.79	0.150	2.74	61.9	38.1	
200	183.98	0.075	3.74	7.6	92.4	
PAN	198.87			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.447
16	2.310
25	2.463
50	2.893
75	3.315
84	3.515
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.079
15	0.086
30	0.107
60	0.148
85	0.204
90	0.249

POORLY GRADED Cu= 1.877 Cc= 0.997

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 248 SAMPLE NO: 4 PENETRATION, ft: 14

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 192.92

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.46	4.750	-2.25	99.8	0.2	
10	1.48	2.000	-1.00	99.2	0.8	
20	2.07	0.850	0.23	98.9	1.1	
40	2.85	0.425	1.23	98.5	1.5	
70	5.35	0.212	2.24	97.2	2.8	
100	43.57	0.150	2.74	77.4	22.6	
200	182.35	0.075	3.74	5.5	94.5	
PAN	192.73			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.283
16	2.543
25	2.759
50	3.024
75	3.371
84	3.526
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.086
30	0.102
60	0.133
85	0.175
90	0.190

POORLY GRADED Cu= 1.660 Cc= 0.977

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 249 SAMPLE NO: 3 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 211.42

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	2.57	0.850	0.23	98.8	1.2	
40	4.44	0.425	1.23	97.9	2.1	
70	6.38	0.212	2.24	97.0	3.0	
100	118.54	0.150	2.74	43.9	56.1	
200	172.10	0.075	3.74	18.6	81.4	
PAN	210.86			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.253
16	2.339
25	2.416
50	2.666
75	3.393
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.110
60	0.170
85	0.199
90	0.204

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 249 SAMPLE NO: 4 PENETRATION, ft: 7.5
MATERIAL: DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS,MICA
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 190.22

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.76	2.000	-1.00	99.6	0.4	
20	3.79	0.850	0.23	98.0	2.0	
40	6.19	0.425	1.23	96.7	3.3	
70	9.11	0.212	2.24	95.2	4.8	
100	17.82	0.150	2.74	90.6	9.4	
200	143.09	0.075	3.74	24.8	75.2	
PAN	189.70			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.256
16	2.806
25	2.907
50	3.248
75	3.732
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.081
60	0.117
85	0.144
90	0.149

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 250 SAMPLE NO: 3 PENETRATION, ft: 4.5
MATERIAL: OLIVE GRAY SILTY FINE TO MEDIUM SAND W/SHELL FRAGS,CLAY PKTS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 143.45

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.81	4.750	-2.25	99.4	0.6	
10	5.84	2.000	-1.00	95.9	4.1	
20	22.66	0.850	0.23	84.2	15.8	
40	30.59	0.425	1.23	78.7	21.3	
70	34.74	0.212	2.24	75.8	24.2	
100	71.71	0.150	2.74	50.0	50.0	
200	117.48	0.075	3.74	18.1	81.9	
PAN	143.30			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	-0.976
16	0.252
25	2.250
50	2.737
75	3.437
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.104
60	0.175
85	1.127
90	1.724

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 250 SAMPLE NO: 4 PENETRATION, ft: 7.5

MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 166.22

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.49	0.425	1.23	99.7	0.3	
70	1.50	0.212	2.24	99.1	0.9	
100	25.54	0.150	2.74	84.6	15.4	
200	125.44	0.075	3.74	24.5	75.5	
PAN	165.71			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.356
16	2.744
25	2.849
50	3.206
75	3.725
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.082
60	0.121
85	0.152
90	0.174

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 250 SAMPLE NO: 5 PENETRATION, ft: 9.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 221.64

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.61	4.750	-2.25	99.7	0.3	
10	0.63	2.000	-1.00	99.7	0.3	
20	0.93	0.850	0.23	99.6	0.4	
40	1.21	0.425	1.23	99.5	0.5	
70	7.09	0.212	2.24	96.8	3.2	
100	122.98	0.150	2.74	44.5	55.5	
200	212.20	0.075	3.74	4.3	95.7	
PAN	221.51			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.252
16	2.339
25	2.417
50	2.672
75	3.117
84	3.347
95	3.708

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.096
30	0.124
60	0.169
85	0.199
90	0.204

POORLY GRADED Cu= 1.957 Cc= 1.057

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.M

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 250 SAMPLE NO: 6 PENETRATION, ft: 12

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 208.39

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.23	4.750	-2.25	99.9	0.1	
10	0.30	2.000	-1.00	99.9	0.1	
20	0.64	0.850	0.23	99.7	0.3	
40	1.26	0.425	1.23	99.4	0.6	
70	14.65	0.212	2.24	93.0	7.0	
100	135.59	0.150	2.74	34.9	65.1	
200	205.81	0.075	3.74	1.2	98.8	
PAN	208.19			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.780
16	2.301
25	2.368
50	2.582
75	2.952
84	3.192
95	3.573

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.096
15	0.107
30	0.140
60	0.178
85	0.204
90	0.209

POORLY GRADED Cu= 1.857 Cc= 1.147

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 251 SAMPLE NO: 2 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 154.13

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.19	2.000	-1.00	99.9	0.1	
20	0.83	0.850	0.23	99.5	0.5	
40	1.52	0.425	1.23	99.0	1.0	
70	3.57	0.212	2.24	97.7	2.3	
100	44.46	0.150	2.74	71.2	28.8	
200	137.67	0.075	3.74	10.7	89.3	
PAN	153.90			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.278
16	2.465
25	2.648
50	2.998
75	3.412
84	3.606
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.081
30	0.100
60	0.137
85	0.183
90	0.195

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 253 SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY,DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 196.42

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.27	2.000	-1.00	99.9	0.1	
20	1.03	0.850	0.23	99.5	0.5	
40	1.72	0.425	1.23	99.1	0.9	
70	4.64	0.212	2.24	97.6	2.4	
100	62.90	0.150	2.74	68.0	32.0	
200	159.03	0.075	3.74	19.0	81.0	
PAN	196.04			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.273
16	2.438
25	2.595
50	3.012
75	3.559
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.093
60	0.139
85	0.187
90	0.197

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 254 SAMPLE NO: 2 PENETRATION, ft: 8.5
MATERIAL: OLIVE GRAY,GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 164.43

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.27	4.750	-2.25	99.8	0.2	
10	0.46	2.000	-1.00	99.7	0.3	
20	1.99	0.850	0.23	98.8	1.2	
40	3.64	0.425	1.23	97.8	2.2	
70	6.51	0.212	2.24	96.0	4.0	
100	48.09	0.150	2.74	70.8	29.2	
200	112.07	0.075	3.74	31.8	68.2	
PAN	164.05			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.254
16	2.446
25	2.634
50	3.163
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.131
85	0.186
90	0.198

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 255 SAMPLE NO: 1 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY SILTY FINE SAND W/SHELL FRAGMENTS & CLAY POCKETS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 139.32

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.24	0.850	0.23	99.8	0.2	
40	6.77	0.425	1.23	95.1	4.9	
70	8.50	0.212	2.24	93.9	6.1	
100	57.08	0.150	2.74	59.0	41.0	
200	113.73	0.075	3.74	18.4	81.6	
PAN	138.98			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.302
16	2.356
25	2.478
50	2.895
75	3.504
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.098
60	0.152
85	0.197
90	0.205

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 256 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS,CLAY POCKETS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 171.14

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.67	0.850	0.23	99.6	0.4	
40	0.94	0.425	1.23	99.5	0.5	
70	2.10	0.212	2.24	98.8	1.2	
100	10.87	0.150	2.74	93.6	6.4	
200	157.20	0.075	3.74	8.1	91.9	
PAN	170.92			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.580
16	2.814
25	2.892
50	3.141
75	3.460
84	3.600
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.077
15	0.082
30	0.095
60	0.122
85	0.143
90	0.147

POORLY GRADED Cu= 1.589 Cc= 0.972

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: 257 SAMPLE NO: 2 PENETRATION, ft: 5

MATERIAL: OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS & MICA

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 206.12

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.00	0.850	0.23	100.0	0.0	
40	0.00	0.425	1.23	100.0	0.0	
70	0.84	0.212	2.24	99.6	0.4	
100	14.55	0.150	2.74	92.9	7.1	
200	148.88	0.075	3.74	27.8	72.2	
PAN	205.55			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.555
16	2.832
25	2.937
50	3.292
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.078
60	0.114
85	0.142
90	0.147

Cu= #N/A

Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 257 SAMPLE NO: 3 PENETRATION, ft: 10
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 220.78

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.54	2.000	-1.00	99.8	0.2	
20	2.62	0.850	0.23	98.8	1.2	
40	3.86	0.425	1.23	98.3	1.7	
70	7.48	0.212	2.24	96.6	3.4	
100	85.13	0.150	2.74	61.4	38.6	
200	212.75	0.075	3.74	3.6	96.4	
PAN	220.62			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.256
16	2.390
25	2.515
50	2.877
75	3.262
84	3.440
95	3.700

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.091
30	0.111
60	0.148
85	0.192
90	0.201

POORLY GRADED Cu= 1.767 Cc= 0.987

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 257 SAMPLE NO: 4 PENETRATION, ft: 13.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 226.34

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.02	4.750	-2.25	100.0	0.0	
10	0.72	2.000	-1.00	99.7	0.3	
20	3.30	0.850	0.23	98.5	1.5	
40	4.93	0.425	1.23	97.8	2.2	
70	9.94	0.212	2.24	95.6	4.4	
100	121.85	0.150	2.74	46.2	53.8	
200	209.51	0.075	3.74	7.4	92.6	
PAN	226.06			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.243
16	2.335
25	2.417
50	2.688
75	3.176
84	3.431
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.080
15	0.091
30	0.120
60	0.168
85	0.199
90	0.205

POORLY GRADED Cu= 2.093 Cc= 1.069

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: 257 SAMPLE NO: 5 PENETRATION, ft: 16.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 205.57

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.25	4.750	-2.25	99.9	0.1	
10	0.67	2.000	-1.00	99.7	0.3	
20	1.31	0.850	0.23	99.4	0.6	
40	2.23	0.425	1.23	98.9	1.1	
70	5.31	0.212	2.24	97.4	2.6	
100	72.64	0.150	2.74	64.7	35.3	
200	198.68	0.075	3.74	3.4	96.6	
PAN	205.39			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.267
16	2.414
25	2.552
50	2.908
75	3.280
84	3.449
95	3.695

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.090
30	0.109
60	0.145
85	0.190
90	0.199

POORLY GRADED Cu= 1.727 Cc= 0.983

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: A SAMPLE NO: 2 PENETRATION, ft: 5
MATERIAL: OLIVE GRAY,GRAY SANDY SILT W/SHELL FRAGS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 227.24

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.62	2.000	-1.00	99.7	0.3	
20	2.72	0.850	0.23	98.8	1.2	
40	4.30	0.425	1.23	98.1	1.9	
70	6.32	0.212	2.24	97.2	2.8	
100	44.75	0.150	2.74	80.3	19.7	
200	106.32	0.075	3.74	53.2	46.8	
PAN	226.95			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.291
16	2.605
25	2.875
50	#N/A
75	#N/A
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	#N/A
60	0.095
85	0.168
90	0.187

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: B SAMPLE NO: 1 PENETRATION, ft: 1
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 263.59

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.67	2.000	-1.00	99.7	0.3	
20	2.07	0.850	0.23	99.2	0.8	
40	3.59	0.425	1.23	98.6	1.4	
70	10.62	0.212	2.24	96.0	4.0	
100	184.35	0.150	2.74	30.1	69.9	
200	261.57	0.075	3.74	0.8	99.2	
PAN	263.42			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.244
16	2.312
25	2.372
50	2.559
75	2.858
84	3.113
95	3.528

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.100
15	0.113
30	0.150
60	0.179
85	0.202
90	0.207

POORLY GRADED Cu= 1.791 Cc= 1.252

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: C SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS

TESTED BY: DC DATE:11-6-87

CHECKED BY: DC DATE:11-6-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 221.69

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.47	2.000	-1.00	99.8	0.2	
20	2.19	0.850	0.23	99.0	1.0	
40	3.37	0.425	1.23	98.5	1.5	
70	9.27	0.212	2.24	95.8	4.2	
100	110.36	0.150	2.74	50.2	49.8	
200	210.19	0.075	3.74	5.2	94.8	
PAN	221.44			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.245
16	2.345
25	2.436
50	2.740
75	3.190
84	3.408
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.092
30	0.118
60	0.164
85	0.198
90	0.205

POORLY GRADED Cu= 1.961 Cc= 1.013

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: C SAMPLE NO: 4 PENETRATION, ft: 11.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS & MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 269.11

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.21	2.000	-1.00	99.9	0.1	
20	0.79	0.850	0.23	99.7	0.3	
40	1.52	0.425	1.23	99.4	0.6	
70	3.07	0.212	2.24	98.9	1.1	
100	111.12	0.150	2.74	58.7	41.3	
200	265.26	0.075	3.74	1.4	98.6	
PAN	268.99			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.276
16	2.395
25	2.504
50	2.843
75	3.218
84	3.391
95	3.643

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.087
15	0.094
30	0.114
60	0.152
85	0.192
90	0.199

POORLY GRADED Cu= 1.747 Cc= 0.981

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: E SAMPLE NO: 2 PENETRATION, ft: 3.5
MATERIAL: OLIVE GRAY FINE SAND W/MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 224.05

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.03	0.850	0.23	100.0	0.0	
40	0.25	0.425	1.23	99.9	0.1	
70	5.09	0.212	2.24	97.7	2.3	
100	77.60	0.150	2.74	65.4	34.6	
200	217.87	0.075	3.74	2.8	97.2	
PAN	223.81			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.272
16	2.421
25	2.561
50	2.913
75	3.277
84	3.443
95	3.682

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.084
15	0.091
30	0.109
60	0.144
85	0.189
90	0.198

POORLY GRADED Cu= 1.707 Cc= 0.982

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: E SAMPLE NO: 6 PENETRATION, ft: 13.5
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 217.89

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.34	2.000	-1.00	99.8	0.2	
20	0.75	0.850	0.23	99.7	0.3	
40	1.54	0.425	1.23	99.3	0.7	
70	13.25	0.212	2.24	93.9	6.1	
100	137.69	0.150	2.74	36.8	63.2	
200	214.64	0.075	3.74	1.5	98.5	
PAN	217.69			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.921
16	2.309
25	2.378
50	2.598
75	2.985
84	3.219
95	3.590

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.094
15	0.105
30	0.137
60	0.176
85	0.203
90	0.208

POORLY GRADED Cu= 1.869 Cc= 1.121

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: F SAMPLE NO: 1 PENETRATION, ft: 3
MATERIAL: OLIVE GRAY SILTY FINE SAND W/MICA
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 243.74

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	0.04	0.850	0.23	100.0	0.0	
40	0.14	0.425	1.23	99.9	0.1	
70	0.49	0.212	2.24	99.8	0.2	
100	13.30	0.150	2.74	94.5	5.5	
200	192.41	0.075	3.74	21.1	78.9	
PAN	243.56			#N/A	#N/A	

| PARAMETERS |

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.683
16	2.836
25	2.929
50	3.236
75	3.655
84	#N/A
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	#N/A
30	0.085
60	0.116
85	0.141
90	0.146

Cu= #N/A
Cc= #N/A

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: F SAMPLE NO: 3 PENETRATION, ft: 9
MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGMENTS,CLAY PKTS
TESTED BY: DC DATE:11-14-87
CHECKED BY: DC DATE:11-14-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 213.45

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.27	2.000	-1.00	99.9	0.1	
20	1.93	0.850	0.23	99.1	0.9	
40	3.00	0.425	1.23	98.6	1.4	
70	6.44	0.212	2.24	97.0	3.0	
100	65.06	0.150	2.74	69.5	30.5	
200	196.21	0.075	3.74	8.1	91.9	
PAN	213.07			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.267
16	2.444
25	2.616
50	2.971
75	3.366
84	3.549
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.078
15	0.084
30	0.103
60	0.139
85	0.186
90	0.197

POORLY GRADED Cu= 1.795 Cc= 0.988

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP
GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-5-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328
CORE NO: F SAMPLE NO: 4 PENETRATION, ft: 13
MATERIAL: OLIVE GRAY FINE SAND W/SHELL FRAGMENTS
TESTED BY: DC DATE:11-6-87
CHECKED BY: DC DATE:11-6-87
DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 246.23

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.34	4.750	-2.25	99.9	0.1	
10	0.95	2.000	-1.00	99.6	0.4	
20	3.15	0.850	0.23	98.7	1.3	
40	5.05	0.425	1.23	97.9	2.1	
70	29.16	0.212	2.24	88.2	11.8	
100	164.11	0.150	2.74	33.4	66.6	
200	240.50	0.075	3.74	2.3	97.7	
PAN	245.98			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	1.430
16	2.268
25	2.337
50	2.558
75	2.932
84	3.189
95	3.608

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	0.095
15	0.107
30	0.142
60	0.181
85	0.209
90	0.261

POORLY GRADED Cu= 1.912 Cc= 1.182

McCLELLAND ENGINEERS, INC., WESTLAKE OFFICE PROGRAM NAME: GSMECH.MP

GRAIN SIZE ANALYSIS--MECHANICAL METHOD

TEST DATE: 11-14-87 JOB NAME: ISLES DERNIERS JOB NO: 1087-1328

CORE NO: F SAMPLE NO: 5 PENETRATION, ft: 18

MATERIAL: OLIVE GRAY,DARK GRAY FINE SAND W/SHELL FRAGS,CLAY PKTS & MICA

TESTED BY: DC DATE:11-14-87

CHECKED BY: DC DATE:11-14-87

DRY MASS OF SOIL BEFORE TEST (TOTAL SAMPLE), gms: 186.88

SIEVE SIZE OR NO.	CUM WT RETAINED, gms	DIAMETER, mm	DIAMETER, PHI UNITS	PERCENT FINER	PERCENT COARSER	COMMENTS
4	0.00	4.750	-2.25	100.0	0.0	
10	0.00	2.000	-1.00	100.0	0.0	
20	3.15	0.850	0.23	98.3	1.7	
40	4.54	0.425	1.23	97.6	2.4	
70	6.88	0.212	2.24	96.3	3.7	
100	42.41	0.150	2.74	77.3	22.7	
200	165.53	0.075	3.74	11.4	88.6	
PAN	186.59			#N/A	#N/A	

PARAMETERS

COASTAL

D PERCENTILE COARSER	SIZE, PHI UNITS
5	2.266
16	2.532
25	2.760
50	3.053
75	3.449
84	3.632
95	#N/A

GEOTECHNICAL

D PERCENTILE FINER	SIZE, mm
10	#N/A
15	0.079
30	0.097
60	0.132
85	0.176
90	0.192

Cu= #N/A

Cc= #N/A