VOLUME IIc
GEOTECHNICAL DATA REPORT
LABORATORY DATA - 2
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

McClelland engineers

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Report

to

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

Houma, Louisiana

* * *

by

McCLELLAND ENGINEERS, INC.
Geoscience Consultants
Westlake, Louisiana

December 1987

McClelland engineers

Report No. 1087-1328
Volume IIc
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 - 2
Isles Dernieres Stabilization Project
State Project No. 750-55-01
Terrebonne Parish, Louisiana

Mr. Rogers, we are pleased to submit Volume IIc, 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 IIc presents the results of the hydrometer analyses and density tests performed on selected samples from the vibracores obtained from the proposed borrow areas. Volume IIb contains the results of the mechanical grain size analyses; Volume IIa presents the log of borings for the vibracores, 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(R14.29)
Copies Submitted: (6)

916 Sampson, Suite E, Westlake, Louisiana 70669, (318) 439-1731

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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 IIc, the Geotechnical Data Report - Laboratory Data - 2, 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 IIb. 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 hydrometer analyses. In addition, standard Proctor and maximum-minimum density results are included. Shear strength values are also shown on the Proctor curves as a function of moisture content and dry unit weight.

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 2 SAMPLE NO: 3 PENETRATION, ft: 7.0

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 6	CORRECTED MASS SOIL(g):	101.36
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	49.54
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	51.1
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-27-87	AMOUNT (g/liter):	40
STARTING TIME	: 0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	49	22	1.64	0.01332	0.054	49.96
1	38	22	1.64	0.01332	0.042	39.11
2	31	22	1.64	0.01332	0.032	32.20
4	27	22	1.64	0.01332	0.023	28.26
8	24	22	1.64	0.01332	0.017	25.30
13	23	22	1.64	0.01332	0.013	24.31
30	21	22	1.64	0.01332	0.009	22.34
60	19	22	1.64	0.01332	0.006	20.36
120	18	22	1.64	0.01332	0.004	19.38
240	17	22	1.64	0.01332	0.003	18.39
480	16	22	1.64	0.01332	0.002	17.40
1325	15	20	2.27	0.01365	0.001	17.03

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 2 SAMPLE NO: 4 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 9	CORRECTED MASS SOIL(g):	100.24
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	49.74
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	50.4
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-25-87	AMOUNT (g/liter):	40
STARTING TIME	: 0831	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	48	24	1.02	0.01301	0.053	48.90
1	42	24	1.02	0.01301	0.040	42.91
2	38	24	1.02	0.01301	0.029	38.92
4	35	24	1.02	0.01301	0.021	35.93
8	32	24	1.02	0.01301	0.015	32.94
15	30	24	1.02	0.01301	0.011	30.94
30	29	24	1.02	0.01301	0.008	29.94
60	26	24	1.02	0.01301	0.006	26.95
120	25	24	1.02	0.01301	0.004	25.95
322	23	24	1.02	0.01301	0.003	23.96
480	22	24	1.02	0.01301	0.002	22.96
2783	18	22	1.64	0.01332	0.001	19.59

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 4 SAMPLE NO: 1 PENETRATION, ft: 0.5

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

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	101.29
TARE NO :	8	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	55.63
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	45.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0826	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	43	24	1.02	0.01301	0.056	43.46
1	34	24	1.02	0.01301	0.043	34.57
2	28	24	1.02	0.01301	0.031	28.65
4	24	24	1.02	0.01301	0.023	24.70
8	21	24	1.02	0.01301	0.017	21.74
15	20	24	1.02	0.01301	0.012	20.75
30	18	24	1.02	0.01301	0.009	18.77
60	17	24	1.02	0.01301	0.006	17.79
120	16	24	1.02	0.01301	0.004	16.80
326	15	24	1.02	0.01301	0.003	15.81
480	14	24	1.02	0.01301	0.002	14.82
2787	12	22	1.64	0.01332	0.001	13.47

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 4 SAMPLE NO: 2 PENETRATION, ft: 3.5

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY, W/ORGANICS

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	3	CORRECTED MASS SOIL(g):	99.53
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	33.32
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	66.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	56	22	1.64	0.01332	0.050	57.91
1	45	22	1.64	0.01332	0.040	46.86
2	38	22	1.64	0.01332	0.030	39.83
4	32	22	1.64	0.01332	0.022	33.80
8	28	22	1.64	0.01332	0.016	29.78
13	26	22	1.64	0.01332	0.013	27.77
30	24	22	1.64	0.01332	0.009	25.76
60	22	22	1.64	0.01332	0.006	23.75
120	20	22	1.64	0.01332	0.004	21.74
240	19	22	1.64	0.01332	0.003	20.74
480	17	22	1.64	0.01332	0.002	18.73
1339	16	20	2.27	0.01365	0.001	18.35

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 4 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	6	CORRECTED MASS SOIL(g):	99.50
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	54.32
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	45.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	43	24	1.02	0.01301	0.056	44.24
1	34	24	1.02	0.01301	0.043	35.19
2	28	24	1.02	0.01301	0.031	29.16
4	25	24	1.02	0.01301	0.023	26.15
8	22	24	1.02	0.01301	0.016	23.13
13	20	24	1.02	0.01301	0.013	21.12
30	19	24	1.02	0.01301	0.009	20.12
60	17	24	1.02	0.01301	0.006	18.11
120	16	24	1.02	0.01301	0.004	17.10
334	14	24	1.02	0.01301	0.003	15.09
480	14	24	1.02	0.01301	0.002	15.09
2794	13	22	1.64	0.01332	0.001	14.71

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 5 SAMPLE NO: 5 PENETRATION, ft: 12.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/SAND POCKETS & SHELL FRAGMENTS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	10	CORRECTED MASS SOIL(g):	101.94
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	4.62
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	95.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0821	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	>60	23	1.33	0.01317		
1	>60	23	1.33	0.01317		
2	>60	23	1.33	0.01317		
4	>60	23	1.33	0.01317		
8	55	23	1.33	0.01317	0.013	55.26
15	50	23	1.33	0.01317	0.010	50.35
33	46	23	1.33	0.01317	0.007	46.43
60	43	23	1.33	0.01317	0.005	43.48
120	39	24	1.02	0.01301	0.004	39.25
240	37	24	1.02	0.01301	0.003	37.29
480	33	24	1.02	0.01301	0.002	33.37
1343	30	23	1.33	0.01317	0.001	30.73

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 6 SAMPLE NO: 6 PENETRATION, ft: 11.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/SAND POCKETS & MICA & ORGANICS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	9	CORRECTED MASS SOIL(g):	103.00
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	4.00
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	96.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	>60	23	1.33	0.01317		
1	>60	23	1.33	0.01317		
2	>60	23	1.33	0.01317		
4	57	23	1.33	0.01317	0.017	56.63
8	48	23	1.33	0.01317	0.013	47.89
15	43	23	1.33	0.01317	0.010	43.04
30	39	23	1.33	0.01317	0.008	39.15
60	35	23	1.33	0.01317	0.006	35.27
120	33	24	1.02	0.01301	0.004	33.02
240	31	24	1.02	0.01301	0.003	31.08
480	28	24	1.02	0.01301	0.002	28.17
1347	25	23	1.33	0.01317	0.001	25.56

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 9 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.72
TARE NO :	7	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	53.38
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0821	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	43	24	1.02	0.01301	0.056	43.70
1	31	24	1.02	0.01301	0.044	31.79
2	25	24	1.02	0.01301	0.032	25.83
4	22	24	1.02	0.01301	0.023	22.85
8	19	24	1.02	0.01301	0.017	19.87
13	18	24	1.02	0.01301	0.013	18.88
30	17	24	1.02	0.01301	0.009	17.89
60	16	24	1.02	0.01301	0.006	16.89
120	15	24	1.02	0.01301	0.004	15.90
330	14	24	1.02	0.01301	0.003	14.91
480	13	24	1.02	0.01301	0.002	13.92
2791	11	22	1.64	0.01332	0.001	12.55

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 9 SAMPLE NO: 4 PENETRATION, ft: 9.0

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

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	103.50
TARE NO :	8	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	46.00
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	55.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0811	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	52	23	1.33	0.01317	0.052	51.52
1	43	23	1.33	0.01317	0.040	42.83
2	35	23	1.33	0.01317	0.030	35.10
4	29	23	1.33	0.01317	0.022	29.30
8	26	23	1.33	0.01317	0.016	26.40
15	23	23	1.33	0.01317	0.012	23.51
30	21	23	1.33	0.01317	0.009	21.57
60	20	23	1.33	0.01317	0.006	20.61
120	19	24	1.02	0.01301	0.004	19.34
240	18	24	1.02	0.01301	0.003	18.37
480	16	24	1.02	0.01301	0.002	16.44
1351	15	23	1.33	0.01317	0.001	15.78

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 12 SAMPLE NO: 2 PENETRATION, ft: 6.5

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY, W/MICA

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	99.54
TARE NO :	7	% PASSING NO. 10 SIEVE:	
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	36.42
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	63.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0821	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	57	22	1.64	0.01312	0.049	58.32
1	47	22	1.64	0.01312	0.038	48.38
2	35	22	1.64	0.01312	0.030	36.44
4	28	22	1.64	0.01312	0.022	29.48
8	24	22	1.64	0.01312	0.016	25.50
15	22	22	1.64	0.01312	0.012	23.51
30	20	22	1.64	0.01312	0.009	21.52
60	18	22	1.64	0.01312	0.006	19.53
120	17	22	1.64	0.01312	0.004	18.54
240	16	22	1.64	0.01312	0.003	17.54
480	15	22	1.64	0.01312	0.002	16.55
1321	14	20	2.27	0.01344	0.001	16.18

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 13 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY CLAYEY SILT W/SAND POCKETS & ORGANICS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	7	CORRECTED MASS SOIL(g):	101.20
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	18.37
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	81.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0806	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	>60	23	1.33	0.01317		
1	>60	23	1.33	0.01317		
2	55	23	1.33	0.01317	0.025	55.66
4	47	23	1.33	0.01317	0.019	47.76
12	39	23	1.33	0.01317	0.012	39.85
17	37	23	1.33	0.01317	0.010	37.87
30	35	23	1.33	0.01317	0.008	35.90
60	32	23	1.33	0.01317	0.006	32.93
120	29	24	1.02	0.01301	0.004	29.66
240	28	24	1.02	0.01301	0.003	28.67
480	25	24	1.02	0.01301	0.002	25.71
1355	22	23	1.33	0.01317	0.001	23.05

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 14B SAMPLE NO: 1 PENETRATION, ft: 1.5

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

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.49
TARE NO :	12	% PASSING NO. 10 SIEVE:	
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	51.53
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	48.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0941	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	45	22	1.64	0.01332	0.056	46.41
1	34	22	1.64	0.01332	0.044	35.47
2	27	22	1.64	0.01332	0.032	28.50
4	23	22	1.64	0.01332	0.024	24.52
8	21	22	1.64	0.01332	0.017	22.53
15	19	22	1.64	0.01332	0.012	20.54
30	18	22	1.64	0.01332	0.009	19.54
60	17	22	1.64	0.01332	0.006	18.55
120	16	22	1.64	0.01332	0.005	17.55
240	15	22	1.64	0.01332	0.003	16.56
370	14	22	1.64	0.01332	0.003	15.56
1366	13	20	2.27	0.01365	0.001	15.19

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 14B SAMPLE NO: 7 PENETRATION, ft: 14.0

MATERIAL :OLIVE GRAY SILTY CLAY W/SAND POCKETS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 6	CORRECTED MASS SOIL(g):	88.58
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	20.62
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	76.7
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-21-87	AMOUNT (g/liter):	40
STARTING TIME	: 0801	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	>60	23	1.33	0.01317		
1	>60	23	1.33	0.01317		
2	>60	23	1.33	0.01317		
4	>60	23	1.33	0.01317		
8	>60	23	1.33	0.01317		
14	60	23	1.33	0.01317	0.009	69.23
30	56	23	1.33	0.01317	0.006	64.72
60	52	23	1.33	0.01317	0.005	60.20
120	48	24	1.02	0.01301	0.003	55.33
240	44	24	1.02	0.01301	0.003	50.82
480	40	24	1.02	0.01301	0.002	46.30
1359	34	23	1.33	0.01317	0.001	39.88

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 16 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/SHELL FRAGMENTS & ORGANICS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	99.36
TARE NO :	10	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	42.75
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	57.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0831	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	45	23	1.33	0.01317	0.056	46.63
1	34	23	1.33	0.01317	0.043	35.56
2	28	23	1.33	0.01317	0.032	29.52
4	22	23	1.33	0.01317	0.023	23.48
8	19	23	1.33	0.01317	0.017	20.46
15	17	23	1.33	0.01317	0.012	18.45
30	16	23	1.33	0.01317	0.009	17.44
60	15	23	1.33	0.01317	0.006	16.43
114	14	24	1.02	0.01301	0.005	15.11
240	13	24	1.02	0.01301	0.003	14.11
480	12	24	1.02	0.01301	0.002	13.10
1331	11	24	1.02	0.01301	0.001	12.09

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 16 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	13	CORRECTED MASS SOIL(g):	99.97
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	34.19
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	65.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0946	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	55	22	1.64	0.01312	0.050	56.09
1	40	22	1.64	0.01312	0.041	41.24
2	30	22	1.64	0.01312	0.031	31.33
4	25	22	1.64	0.01312	0.023	26.38
8	22	22	1.64	0.01312	0.017	23.41
15	20	22	1.64	0.01312	0.012	21.43
30	19	22	1.64	0.01312	0.009	20.44
60	18	22	1.64	0.01312	0.006	19.45
120	18	22	1.64	0.01312	0.004	19.45
240	17	22	1.64	0.01312	0.003	18.46
365	16	22	1.64	0.01312	0.003	17.47
1362	15	20	2.27	0.01344	0.001	17.10

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 19 SAMPLE NO: 3 PENETRATION, ft: 6.0

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

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 5	CORRECTED MASS SOIL(g):	100.61
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	47.07
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	53.2
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-21-87	AMOUNT (g/liter):	40
STARTING TIME	: 0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
1	45	23	1.33	0.01317	0.039	46.05
2	36	23	1.33	0.01317	0.030	37.10
4	30	23	1.33	0.01317	0.022	31.14
8	26	23	1.33	0.01317	0.016	27.16
13	24	23	1.33	0.01317	0.013	25.17
30	21	23	1.33	0.01317	0.009	22.19
60	20	23	1.33	0.01317	0.006	21.20
120	18	24	1.02	0.01301	0.004	18.90
240	18	24	1.02	0.01301	0.003	18.90
480	16	24	1.02	0.01301	0.002	16.91
1349	15	23	1.33	0.01317	0.001	16.23

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 20 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :DARK GRAY SANDY SILT, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	11	CORRECTED MASS SOIL(g):	98.19
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	40.61
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	58.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0936	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	47	22	1.64	0.01312	0.054	49.04
1	35	22	1.64	0.01312	0.043	36.94
2	25	22	1.64	0.01312	0.032	26.86
4	21	22	1.64	0.01312	0.024	22.83
8	18	22	1.64	0.01312	0.017	19.80
15	17	22	1.64	0.01312	0.012	18.79
30	16	22	1.64	0.01312	0.009	17.79
60	15	22	1.64	0.01312	0.006	16.78
120	14	22	1.64	0.01312	0.004	15.77
240	13	22	1.64	0.01312	0.003	14.76
374	12	22	1.64	0.01312	0.003	13.75
1371	11	20	2.27	0.01344	0.001	13.38

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 20 SAMPLE NO: 3 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY & SHELL FRAGMENTS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	4	CORRECTED MASS SOIL(g):	101.49
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	28.54
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	71.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	>60	23	1.33	0.01317		
1	53	23	1.33	0.01317	0.036	53.53
2	44	23	1.33	0.01317	0.028	44.66
4	38	23	1.33	0.01317	0.021	38.75
8	33	23	1.33	0.01317	0.015	33.82
13	30	23	1.33	0.01317	0.012	30.87
30	27	23	1.33	0.01317	0.008	27.91
60	25	23	1.33	0.01317	0.006	25.94
120	23	24	1.02	0.01301	0.004	23.66
240	22	24	1.02	0.01301	0.003	22.68
480	20	24	1.02	0.01301	0.002	20.71
1353	18	23	1.33	0.01317	0.001	19.04

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 20 SAMPLE NO: 4 PENETRATION, ft: 6.0

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

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	90.50
TARE NO :	6	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	39.64
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	56.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	45	21	1.95	0.01348	0.040	51.88
2	38	21	1.95	0.01348	0.030	44.15
4	33	21	1.95	0.01348	0.022	38.62
8	28	21	1.95	0.01348	0.016	33.10
13	26	21	1.95	0.01348	0.013	30.89
30	23	21	1.95	0.01348	0.009	27.57
60	21	21	1.95	0.01348	0.006	25.36
120	20	21	1.95	0.01348	0.004	24.26
240	18	21	1.95	0.01348	0.003	22.05
480	17	22	1.64	0.01332	0.002	20.60
1406	16	21	1.95	0.01348	0.001	19.84

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 21 SAMPLE NO: 3 PENETRATION, ft: 4.0

MATERIAL :OLIVE GRAY CLAYEY SILT, SLIGHTLY SANDY, W/ORGANICS

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	101.02
TARE NO :	4	% PASSING NO. 10 SIEVE:	
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	18.30
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	81.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0806	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	>60	22	1.64	0.01312		
1	56	22	1.64	0.01312	0.035	56.49
2	45	22	1.64	0.01312	0.028	45.71
4	35	22	1.64	0.01312	0.021	35.91
8	30	22	1.64	0.01312	0.016	31.01
13	28	22	1.64	0.01312	0.012	29.05
30	25	22	1.64	0.01312	0.008	26.11
60	23	22	1.64	0.01312	0.006	24.15
120	22	22	1.64	0.01312	0.004	23.17
240	20	22	1.64	0.01312	0.003	21.21
480	19	22	1.64	0.01312	0.002	20.23
1334	17	20	2.27	0.01344	0.001	18.88

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 21 SAMPLE NO: 4 PENETRATION, ft: 7.0

MATERIAL :OLIVE GRAY,DARK GRAY CLAYEY SILT W/SAND POCKETS & MICA

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	9	CORRECTED MASS SOIL(g):	85.20
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	16.95
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	80.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0831	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	60	21	1.95	0.01328	0.048	71.99
1	50	21	1.95	0.01328	0.038	60.37
2	40	21	1.95	0.01328	0.029	48.75
4	34	21	1.95	0.01328	0.022	41.78
8	30	21	1.95	0.01328	0.016	37.13
15	27	21	1.95	0.01328	0.012	33.64
30	25	21	1.95	0.01328	0.008	31.32
60	23	21	1.95	0.01328	0.006	28.99
120	22	21	1.95	0.01328	0.004	27.83
240	20	21	1.95	0.01328	0.003	25.51
480	18	22	1.64	0.01312	0.002	22.82
1392	16	21	1.95	0.01328	0.001	20.86

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 22 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	3	CORRECTED MASS SOIL(g):	101.62
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	55.63
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	45.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0746	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	43	23	1.33	0.01317	0.056	43.62
1	34	23	1.33	0.01317	0.043	34.76
2	28	23	1.33	0.01317	0.032	28.86
4	25	23	1.33	0.01317	0.023	25.91
8	23	23	1.33	0.01317	0.016	23.94
13	22	23	1.33	0.01317	0.013	22.96
30	20	23	1.33	0.01317	0.009	20.99
60	19	23	1.33	0.01317	0.006	20.00
120	18	24	1.02	0.01301	0.004	18.71
240	17	24	1.02	0.01301	0.003	17.73
480	15	24	1.02	0.01301	0.002	15.76
1357	14	23	1.33	0.01317	0.001	15.08

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 22 SAMPLE NO: 4 PENETRATION, ft: 6.5

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY, W/MICA

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	92.67
TARE NO :	11	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
DRY SOIL + TARE(g):		OVER NO. 200 SIEVE (g):	30.09
TARE(g) :		% PASSING NO.200 SIEVE:	67.5
CORRECTION FACTOR :			
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0936	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	56	21	1.95	0.01328	0.050	61.91
1	45	21	1.95	0.01328	0.040	50.16
2	33	21	1.95	0.01328	0.031	37.34
4	25	21	1.95	0.01328	0.023	28.79
8	22	21	1.95	0.01328	0.017	25.59
15	20	21	1.95	0.01328	0.012	23.45
30	18	21	1.95	0.01328	0.009	21.32
60	17	21	1.95	0.01328	0.006	20.25
120	16	21	1.95	0.01328	0.004	19.18
240	15	21	1.95	0.01328	0.003	18.11
404	14	22	1.64	0.01312	0.002	16.71
1372	14	21	1.95	0.01328	0.001	17.04

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 22 SAMPLE NO: 6 PENETRATION, ft: 11.5

MATERIAL :DARK GRAY SANDY SILT W/CLAY POCKETS & SHELL FRAGMENTS

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	15	CORRECTED MASS SOIL(g):	92.94
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	33.63
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	63.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0956	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
1	47	21	1.95	0.01328	0.039	52.15
2	40	21	1.95	0.01328	0.029	44.69
4	32	21	1.95	0.01328	0.022	36.17
8	28	21	1.95	0.01328	0.016	31.91
17	25	21	1.95	0.01328	0.011	28.71
30	23	21	1.95	0.01328	0.009	26.58
60	21	21	1.95	0.01328	0.006	24.45
120	19	21	1.95	0.01328	0.004	22.32
240	18	22	1.64	0.01312	0.003	20.92
386	17	22	1.64	0.01312	0.002	19.86
1354	16	21	1.95	0.01328	0.001	19.12

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

HYDROMETER ANALYSIS

TEST DATE :12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 23 SAMPLE NO: 3 PENETRATION, ft: 4.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY & SHELL FRAGMENTS

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 12	CORRECTED MASS SOIL(g):	90.13
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	30.13
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	66.6
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 12-2-87	AMOUNT (g/liter):	40
STARTING TIME	: 0941	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	58	22	1.64	0.01312	0.048	65.51
1	50	22	1.64	0.01312	0.037	56.72
2	43	22	1.64	0.01312	0.028	49.03
4	37	22	1.64	0.01312	0.021	42.44
8	32	22	1.64	0.01312	0.015	36.95
15	29	22	1.64	0.01312	0.011	33.66
30	26	22	1.64	0.01312	0.008	30.36
60	24	22	1.64	0.01312	0.006	28.16
120	22	22	1.64	0.01312	0.004	25.97
240	20	22	1.64	0.01312	0.003	23.77
399	19	22	1.64	0.01312	0.002	22.67
1367	18	21	1.95	0.01328	0.001	21.92

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 23 SAMPLE NO: 5 PENETRATION, ft: 9.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/SAND & SHELL FRAGMENTS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	2	CORRECTED MASS SOIL(g):	103.00
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	17.64
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	82.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0741	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5		23	1.33	0.01317		
1	55	23	1.33	0.01317	0.036	54.69
2	44	23	1.33	0.01317	0.028	44.01
4	34	23	1.33	0.01317	0.022	34.30
8	29	23	1.33	0.01317	0.016	29.44
13	27	23	1.33	0.01317	0.013	27.50
30	24	23	1.33	0.01317	0.008	24.59
60	22	23	1.33	0.01317	0.006	22.65
120	20	24	1.02	0.01301	0.004	20.40
240	19	24	1.02	0.01301	0.003	19.43
480	17	24	1.02	0.01301	0.002	17.49
1361	16	23	1.33	0.01317	0.001	16.82

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 28 SAMPLE NO: 1 PENETRATION, ft: 0.5

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

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	2	CORRECTED MASS SOIL(g):	99.89
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	58.95
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	41.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	39	22	1.64	0.01332	0.059	40.69
1	30	22	1.64	0.01332	0.045	31.68
2	25	22	1.64	0.01332	0.033	26.67
4	22	22	1.64	0.01332	0.024	23.67
8	20	22	1.64	0.01332	0.017	21.66
13	18	22	1.64	0.01332	0.013	19.66
30	17	22	1.64	0.01332	0.009	18.66
60	16	22	1.64	0.01332	0.006	17.66
120	15	22	1.64	0.01332	0.005	16.66
240	14	22	1.64	0.01332	0.003	15.66
480	13	22	1.64	0.01332	0.002	14.66
1343	12	20	2.27	0.01365	0.001	14.28

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 28 SAMPLE NO: 2 PENETRATION, ft: 1.5

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

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	99.68
TARE NO :	10	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	59.78
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	40.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0836	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	38	24	1.02	0.01301	0.058	39.14
1	30	24	1.02	0.01301	0.044	31.12
2	26	24	1.02	0.01301	0.032	27.10
4	22	24	1.02	0.01301	0.023	23.09
8	20	24	1.02	0.01301	0.017	21.08
15	19	24	1.02	0.01301	0.012	20.08
30	18	24	1.02	0.01301	0.009	19.08
60	17	24	1.02	0.01301	0.006	18.07
120	16	24	1.02	0.01301	0.004	17.07
317	15	24	1.02	0.01301	0.003	16.07
480	14	24	1.02	0.01301	0.002	15.06
2778	12	22	1.64	0.01332	0.001	13.68

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 29 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	5	CORRECTED MASS SOIL(g):	100.86
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	66.73
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	33.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0811	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	33	24	1.02	0.01301	0.061	33.73
1	23	24	1.02	0.01301	0.046	23.81
2	19	24	1.02	0.01301	0.033	19.84
4	16	24	1.02	0.01301	0.024	16.87
8	15	24	1.02	0.01301	0.017	15.88
13	15	24	1.02	0.01301	0.013	15.88
30	14	24	1.02	0.01301	0.009	14.89
60	13	24	1.02	0.01301	0.006	13.90
124	12	24	1.02	0.01301	0.004	12.90
240	11	24	1.02	0.01301	0.003	11.91
480	11	24	1.02	0.01301	0.002	11.91
2798	10	22	1.64	0.01332	0.001	11.54

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 29 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL :OLIVE GRAY SANDY SILT W/SHELL FRAGMENTS & MICA

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	2	CORRECTED MASS SOIL(g):	101.08
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	32.55
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	67.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0756	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01282	---	----
0.5	51	24	1.02	0.01282	0.051	50.95
1	32	24	1.02	0.01282	0.043	32.34
2	17	24	1.02	0.01282	0.033	17.64
4	15	24	1.02	0.01282	0.024	15.69
8	14	24	1.02	0.01282	0.017	14.71
13	13	24	1.02	0.01282	0.013	13.73
30	12	24	1.02	0.01282	0.009	12.75
60	12	24	1.02	0.01282	0.006	12.75
137	11	24	1.02	0.01282	0.004	11.77
240	10	24	1.02	0.01282	0.003	10.79
480	10	24	1.02	0.01282	0.002	10.79
2811	9	22	1.64	0.01312	0.001	10.42

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 30 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	101.15
TARE NO :	4	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	39.11
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	61.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0806	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	50	24	1.02	0.01301	0.052	50.44
1	35	24	1.02	0.01301	0.042	35.61
2	26	24	1.02	0.01301	0.032	26.71
4	22	24	1.02	0.01301	0.023	22.75
8	19	24	1.02	0.01301	0.017	19.79
13	17	24	1.02	0.01301	0.013	17.81
30	16	24	1.02	0.01301	0.009	16.82
60	15	24	1.02	0.01301	0.006	15.83
129	14	24	1.02	0.01301	0.004	14.84
240	13	24	1.02	0.01301	0.003	13.86
480	12	24	1.02	0.01301	0.002	12.87
2803	11	22	1.64	0.01332	0.001	12.50

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 30 SAMPLE NO: 6 PENETRATION, ft: 14.5

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

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	101.17
TARE NO :	3	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	52.04
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	48.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	44	24	1.02	0.01301	0.056	44.50
1	32	24	1.02	0.01301	0.043	32.63
2	22	24	1.02	0.01301	0.033	22.75
4	20	24	1.02	0.01301	0.023	20.77
8	18	24	1.02	0.01301	0.017	18.80
13	16	24	1.02	0.01301	0.013	16.82
30	15	24	1.02	0.01301	0.009	15.83
60	14	24	1.02	0.01301	0.006	14.84
133	13	24	1.02	0.01301	0.004	13.85
240	13	24	1.02	0.01301	0.003	13.85
480	12	24	1.02	0.01301	0.002	12.87
2807	11	22	1.64	0.01332	0.001	12.49

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 35 SAMPLE NO: 4 PENETRATION, ft: 7.5

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

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	1	CORRECTED MASS SOIL(g):	101.55
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	47.97
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	52.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
0.5	49	24	1.02	0.01301	0.053	49.25
1	38	24	1.02	0.01301	0.041	38.42
2	30	24	1.02	0.01301	0.031	30.54
4	25	24	1.02	0.01301	0.023	25.62
8	23	24	1.02	0.01301	0.016	23.65
13	21	24	1.02	0.01301	0.013	21.68
30	19	24	1.02	0.01301	0.009	19.71
60	18	24	1.02	0.01301	0.006	18.73
141	17	24	1.02	0.01301	0.004	17.74
240	16	24	1.02	0.01301	0.003	16.76
480	15	24	1.02	0.01301	0.002	15.77
2815	13	22	1.64	0.01332	0.001	14.42

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 41 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY CLAYEY SAND

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	8	CORRECTED MASS SOIL(g):	100.15
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	74.33
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	25.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0826	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	24	22	1.64	0.01332	0.047	25.60
2	22	22	1.64	0.01332	0.034	23.61
4	20	22	1.64	0.01332	0.024	21.61
8	19	22	1.64	0.01332	0.017	20.61
15	18	22	1.64	0.01332	0.013	19.61
30	17	22	1.64	0.01332	0.009	18.61
60	16	22	1.64	0.01332	0.006	17.61
120	16	22	1.64	0.01332	0.005	17.61
240	15	22	1.64	0.01332	0.003	16.62
480	14	22	1.64	0.01332	0.002	15.62
1317	13	20	2.27	0.01365	0.001	15.24

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 41 SAMPLE NO: 4 PENETRATION, ft: 6.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 5	CORRECTED MASS SOIL(g):	101.88
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	50.74
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	50.2
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-27-87	AMOUNT (g/liter):	40
STARTING TIME	: 0811	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	43	22	1.64	0.01332	0.040	43.82
2	36	22	1.64	0.01332	0.030	36.95
4	31	22	1.64	0.01332	0.022	32.04
8	27	22	1.64	0.01332	0.016	28.11
13	26	22	1.64	0.01332	0.013	27.13
30	23	22	1.64	0.01332	0.009	24.19
60	22	22	1.64	0.01332	0.006	23.20
120	21	22	1.64	0.01332	0.004	22.22
240	20	22	1.64	0.01332	0.003	21.24
480	18	22	1.64	0.01332	0.002	19.28
1330	17	20	2.27	0.01365	0.001	18.91

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 42 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY,DARK GRAY CLAYEY SAND, SLIGHTLY SILTY

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	9	CORRECTED MASS SOIL(g):	100.57
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	65.20
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	35.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0831	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	32	22	1.64	0.01332	0.044	33.45
2	29	22	1.64	0.01332	0.032	30.47
4	27	22	1.64	0.01332	0.023	28.48
8	25	22	1.64	0.01332	0.016	26.49
15	23	22	1.64	0.01332	0.012	24.50
30	22	22	1.64	0.01332	0.009	23.51
60	21	22	1.64	0.01332	0.006	22.51
120	20	22	1.64	0.01332	0.004	21.52
240	18	22	1.64	0.01332	0.003	19.53
480	17	22	1.64	0.01332	0.002	18.53
1312	15	20	2.27	0.01365	0.001	17.17

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 43A SAMPLE NO: 2 PENETRATION, ft: 8.0

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

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	9	CORRECTED MASS SOIL(g):	100.87
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	41.43
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	58.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0826	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	54	23	1.33	0.01317	0.051	54.85
1	44	23	1.33	0.01317	0.040	44.94
2	36	23	1.33	0.01317	0.030	37.01
4	30	23	1.33	0.01317	0.022	31.06
8	26	23	1.33	0.01317	0.016	27.09
15	24	23	1.33	0.01317	0.012	25.11
30	22	23	1.33	0.01317	0.009	23.13
60	20	23	1.33	0.01317	0.006	21.14
118	19	24	1.02	0.01301	0.004	19.84
240	18	24	1.02	0.01301	0.003	18.85
480	17	24	1.02	0.01301	0.002	17.86
1335	16	24	1.02	0.01301	0.001	16.87

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 44 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	1	CORRECTED MASS SOIL(g):	99.57
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	56.97
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	42.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	40	22	1.64	0.01332	0.059	41.82
1	32	22	1.64	0.01332	0.044	33.79
2	28	22	1.64	0.01332	0.032	29.77
4	26	22	1.64	0.01332	0.023	27.76
8	23	22	1.64	0.01332	0.017	24.75
13	22	22	1.64	0.01332	0.013	23.74
30	21	22	1.64	0.01332	0.009	22.74
60	19	22	1.64	0.01332	0.006	20.73
120	18	22	1.64	0.01332	0.004	19.73
240	17	22	1.64	0.01332	0.003	18.72
480	16	22	1.64	0.01332	0.002	17.72
1347	15	20	2.27	0.01365	0.001	17.34

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 45 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :OLIVE GRAY CLAYEY SAND W/SILT & SHELL FRAGMENTS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	1	CORRECTED MASS SOIL(g):	100.36
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	61.50
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	38.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0736	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
1	33	23	1.33	0.01317	0.043	34.20
2	29	23	1.33	0.01317	0.032	30.22
4	26	23	1.33	0.01317	0.023	27.23
8	24	23	1.33	0.01317	0.016	25.24
13	23	23	1.33	0.01317	0.013	24.24
30	21	23	1.33	0.01317	0.009	22.25
60	20	23	1.33	0.01317	0.006	21.25
120	18	24	1.02	0.01301	0.004	18.95
240	17	24	1.02	0.01301	0.003	17.95
480	15	24	1.02	0.01301	0.002	15.96
1365	14	23	1.33	0.01317	0.001	15.27

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 45 SAMPLE NO: 4 PENETRATION, ft: 7.0

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	91.26
TARE NO :	10	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	46.24
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	49.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0831	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	39	22	1.64	0.01332	0.042	44.53
2	33	22	1.64	0.01332	0.031	37.96
4	27	22	1.64	0.01332	0.023	31.38
8	24	22	1.64	0.01332	0.017	28.10
15	22	22	1.64	0.01332	0.012	25.90
30	20	22	1.64	0.01332	0.009	23.71
60	19	22	1.64	0.01332	0.006	22.62
120	18	22	1.64	0.01332	0.004	21.52
240	17	22	1.64	0.01332	0.003	20.43
480	15	22	1.64	0.01332	0.002	18.23
1313	15	21	1.95	0.01348	0.001	18.58

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 49 SAMPLE NO: 3 PENETRATION, ft: 5.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY POCKETS

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	1	CORRECTED MASS SOIL(g):	102.10
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	27.36
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	73.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0745	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	54	21	1.95	0.01328	0.036	54.25
2	44	21	1.95	0.01328	0.028	44.56
4	37	21	1.95	0.01328	0.021	37.77
8	32	21	1.95	0.01328	0.016	32.92
13	29	21	1.95	0.01328	0.012	30.01
30	26	21	1.95	0.01328	0.008	27.10
60	24	21	1.95	0.01328	0.006	25.17
120	22	21	1.95	0.01328	0.004	23.23
240	20	21	1.95	0.01328	0.003	21.29
480	18	23	1.33	0.01297	0.002	18.74
1344	16	23	1.33	0.01297	0.001	16.80

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 52 SAMPLE NO: 1 PENETRATION, ft: 0.5

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

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	102.77
TARE NO :	2	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	61.97
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	39.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0750	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	30	21	1.95	0.01348	0.046	31.09
2	24	21	1.95	0.01348	0.034	25.25
4	21	21	1.95	0.01348	0.024	22.33
8	19	21	1.95	0.01348	0.017	20.39
13	17	21	1.95	0.01348	0.014	18.44
30	16	21	1.95	0.01348	0.009	17.47
60	15	21	1.95	0.01348	0.006	16.50
120	14	21	1.95	0.01348	0.005	15.52
240	13	21	1.95	0.01348	0.003	14.55
480	12	23	1.33	0.01317	0.002	12.97
1340	11	23	1.33	0.01317	0.001	12.00

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 52 SAMPLE NO: 3 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY & SHELL FRAGMENTS

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	98.42
TARE NO :	11	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	28.86
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	70.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0936	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01282	---	----
0.5	59	24	1.02	0.01282	0.047	60.37
1	50	24	1.02	0.01282	0.036	51.32
2	42	24	1.02	0.01282	0.028	43.27
4	35	24	1.02	0.01282	0.021	36.23
8	31	24	1.02	0.01282	0.015	32.20
16.5	28	24	1.02	0.01282	0.011	29.19
30	25	24	1.02	0.01282	0.008	26.17
60	23	24	1.02	0.01282	0.006	24.16
120	21	24	1.02	0.01282	0.004	22.15
240	20	24	1.02	0.01282	0.003	21.14
452	19	24	1.02	0.01282	0.002	20.13
2830	16	22	1.64	0.01312	0.001	17.74

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 54 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	11	CORRECTED MASS SOIL(g):	91.16
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.15
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	46.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	921	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
0.5	39	20	2.27	0.01365	0.061	45.27
1	30	20	2.27	0.01365	0.046	35.39
2	23	20	2.27	0.01365	0.034	27.72
4	20	20	2.27	0.01365	0.025	24.42
8	18	20	2.27	0.01365	0.018	22.23
13	16	20	2.27	0.01365	0.014	20.04
30	15	20	2.27	0.01365	0.009	18.94
60	14	20	2.27	0.01365	0.007	17.84
120	13	20	2.27	0.01365	0.005	16.75
240	12	20	2.27	0.01365	0.003	15.65
432	11	21	1.95	0.01348	0.002	14.21
1391	10	22	1.64	0.01332	0.001	12.77

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

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

MATERIAL :DARK GRAY CLAYEY SAND, SLIGHTLY SILTY, W/SHELL FRAGMENTS

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.65
TARE NO :	3	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	72.28
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	28.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0755	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	23	21	1.95	0.01348	0.048	24.79
2	20	21	1.95	0.01348	0.034	21.81
4	19	21	1.95	0.01348	0.024	20.82
8	17	21	1.95	0.01348	0.018	18.83
13	16	21	1.95	0.01348	0.014	17.84
30	15	21	1.95	0.01348	0.009	16.84
60	14	21	1.95	0.01348	0.007	15.85
120	13	21	1.95	0.01348	0.005	14.86
240	12	21	1.95	0.01348	0.003	13.86
480	11	23	1.33	0.01317	0.002	12.25
1336	10	23	1.33	0.01317	0.001	11.25

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 56 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	10	CORRECTED MASS SOIL(g):	100.39
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	56.04
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	44.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0836	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	42	22	1.64	0.01332	0.058	43.47
1	31	22	1.64	0.01332	0.045	32.51
2	25	22	1.64	0.01332	0.033	26.54
4	20	22	1.64	0.01332	0.024	21.56
8	18	22	1.64	0.01332	0.017	19.56
15	17	22	1.64	0.01332	0.013	18.57
30	16	22	1.64	0.01332	0.009	17.57
60	15	22	1.64	0.01332	0.006	16.58
120	14	22	1.64	0.01332	0.005	15.58
240	13	22	1.64	0.01332	0.003	14.58
480	12	22	1.64	0.01332	0.002	13.59
1308	11	20	2.27	0.01365	0.001	13.21

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 57 SAMPLE NO: 1 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY & MICA

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	1	CORRECTED MASS SOIL(g):	93.84
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	26.20
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	72.1
HYDROMETER NO. :		DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0736	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01344	---	----
0.5	60	20	2.27	0.01344	0.048	65.69
1	49	20	2.27	0.01344	0.039	54.08
2	38	20	2.27	0.01344	0.030	42.48
4	30	20	2.27	0.01344	0.023	34.04
8	27	20	2.27	0.01344	0.016	30.87
13	25	20	2.27	0.01344	0.013	28.76
30	23	20	2.27	0.01344	0.009	26.65
60	21	20	2.27	0.01344	0.006	24.54
120	20	20	2.27	0.01344	0.004	23.49
240	18	20	2.27	0.01344	0.003	21.38
480	17	21	1.95	0.01328	0.002	20.00
1361	15	21	1.95	0.01328	0.001	17.89

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 57 SAMPLE NO: 3 PENETRATION, ft: 6.5

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY,W/SHELL FRAGMENTS & MICA

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	97.36
TARE NO :	12	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	38.26
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	60.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0926	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
0.5	53	20	2.27	0.01365	0.053	56.76
1	43	20	2.27	0.01365	0.041	46.49
2	32	20	2.27	0.01365	0.032	35.19
4	25	20	2.27	0.01365	0.024	28.00
8	21	20	2.27	0.01365	0.017	23.90
15	20	20	2.27	0.01365	0.013	22.87
30	18	20	2.27	0.01365	0.009	20.82
60	17	20	2.27	0.01365	0.006	19.79
120	16	20	2.27	0.01365	0.005	18.76
240	15	20	2.27	0.01365	0.003	17.73
428	14	21	1.95	0.01348	0.002	16.39
1386	12	22	1.64	0.01332	0.001	14.01

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 58 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY,DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.52
TARE NO :	15	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	53.04
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0941	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
0.5	45	20	2.27	0.01365	0.058	47.02
1	32	20	2.27	0.01365	0.045	34.09
2	25	20	2.27	0.01365	0.034	27.12
4	22	20	2.27	0.01365	0.024	24.14
8	20	20	2.27	0.01365	0.017	22.15
15	19	20	2.27	0.01365	0.013	21.16
30	17	20	2.27	0.01365	0.009	19.17
60	16	20	2.27	0.01365	0.007	18.17
120	15	20	2.27	0.01365	0.005	17.18
240	14	20	2.27	0.01365	0.003	16.18
415	13	21	1.95	0.01348	0.002	14.88
1374	12	22	1.64	0.01332	0.001	13.57

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 60 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	3	CORRECTED MASS SOIL(g):	101.42
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	48.77
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	51.9
HYDROMETER NO. :		DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0746	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
0.5	49	20	2.27	0.01365	0.056	50.55
1	38	20	2.27	0.01365	0.043	39.70
2	30	20	2.27	0.01365	0.033	31.81
4	25	20	2.27	0.01365	0.024	26.88
8	22	20	2.27	0.01365	0.017	23.93
13	21	20	2.27	0.01365	0.014	22.94
30	19	20	2.27	0.01365	0.009	20.97
60	18	20	2.27	0.01365	0.006	19.98
120	17	20	2.27	0.01365	0.005	19.00
240	16	20	2.27	0.01365	0.003	18.01
480	14	21	1.95	0.01348	0.002	15.73
1352	13	21	1.95	0.01348	0.001	14.74

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 61 SAMPLE NO: 3 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY & SHELL FRAGMENTS

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 2	CORRECTED MASS SOIL(g):	88.65
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	29.08
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	67.2
HYDROMETER NO.	:	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-28-87	AMOUNT (g/liter):	40
STARTING TIME	: 0741	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01344	---	----
0.5	56	20	2.27	0.01344	0.051	65.07
1	46	20	2.27	0.01344	0.040	53.90
2	36	20	2.27	0.01344	0.031	42.73
4	30	20	2.27	0.01344	0.023	36.03
8	26	20	2.27	0.01344	0.016	31.57
13	25	20	2.27	0.01344	0.013	30.45
30	23	20	2.27	0.01344	0.009	28.22
60	22	20	2.27	0.01344	0.006	27.10
120	20	20	2.27	0.01344	0.004	24.87
240	19	20	2.27	0.01344	0.003	23.75
480	17	21	1.95	0.01328	0.002	21.17
1357	16	21	1.95	0.01328	0.001	20.05

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 62 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 4	CORRECTED MASS SOIL(g):	101.98
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	74.94
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	26.5
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-28-87	AMOUNT (g/liter):	40
STARTING TIME	: 0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	22	20	2.27	0.01365	0.049	23.79
2	18	20	2.27	0.01365	0.035	19.87
4	16	20	2.27	0.01365	0.025	17.91
8	15	20	2.27	0.01365	0.018	16.93
13	15	20	2.27	0.01365	0.014	16.93
30	14	20	2.27	0.01365	0.009	15.95
60	13	20	2.27	0.01365	0.007	14.97
120	13	20	2.27	0.01365	0.005	14.97
240	12	20	2.27	0.01365	0.003	13.99
480	11	21	1.95	0.01348	0.002	12.70
1348	10	21	1.95	0.01348	0.001	11.72
1343	18	23	1.33	0.01317	0.001	18.95

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 62 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	8	CORRECTED MASS SOIL(g):	104.08
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.65
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	52.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0821	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	49	23	1.33	0.01317	0.054	48.36
1	38	23	1.33	0.01317	0.042	37.79
2	31	23	1.33	0.01317	0.031	31.06
4	25	23	1.33	0.01317	0.023	25.30
8	22	23	1.33	0.01317	0.017	22.41
15	20	23	1.33	0.01317	0.012	20.49
30	19	23	1.33	0.01317	0.009	19.53
60	17	23	1.33	0.01317	0.006	17.61
122	17	24	1.02	0.01301	0.004	17.31
240	15	24	1.02	0.01301	0.003	15.39
480	14	24	1.02	0.01301	0.002	14.43
1339	13	24	1.02	0.01301	0.001	13.47

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 63 SAMPLE NO: 2 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY, W/SHELL FRAGMENTS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	95.87
TARE NO :	15	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	24.97
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	74.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0951	SPECIFIC GRAVITY:	2.7

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01297	---	----
0.5	>60	23	1.33	0.01297		
1	47	23	1.33	0.01297	0.038	49.91
2	38	23	1.33	0.01297	0.029	40.61
4	30	23	1.33	0.01297	0.022	32.35
8	27	23	1.33	0.01297	0.016	29.25
15	25	23	1.33	0.01297	0.012	27.19
30	23	24	1.02	0.01282	0.008	24.80
60	21	24	1.02	0.01282	0.006	22.73
120	20	24	1.02	0.01282	0.004	21.70
240	18	24	1.02	0.01282	0.003	19.64
431	17	24	1.02	0.01282	0.002	18.60
1390	15	24	1.02	0.01282	0.001	16.54

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 64 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 4	CORRECTED MASS SOIL(g):	102.79
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	61.31
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	40.4
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-22-87	AMOUNT (g/liter):	40
STARTING TIME	: 0800	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	33	21	1.95	0.01348	0.045	34.00
2	27	21	1.95	0.01348	0.033	28.17
4	23	21	1.95	0.01348	0.024	24.28
8	20	21	1.95	0.01348	0.017	21.36
13	19	21	1.95	0.01348	0.014	20.38
30	18	21	1.95	0.01348	0.009	19.41
60	16	21	1.95	0.01348	0.006	17.47
120	15	21	1.95	0.01348	0.005	16.49
240	14	21	1.95	0.01348	0.003	15.52
480	13	23	1.33	0.01317	0.002	13.94
1332	12	23	1.33	0.01317	0.001	12.97

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 65 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	5	CORRECTED MASS SOIL(g):	104.11
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	65.93
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	36.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0805	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	28	21	1.95	0.01348	0.046	28.77
2	22	21	1.95	0.01348	0.034	23.01
4	19	21	1.95	0.01348	0.024	20.13
8	17	21	1.95	0.01348	0.018	18.20
13	16	21	1.95	0.01348	0.014	17.24
30	15	21	1.95	0.01348	0.009	16.28
60	13	21	1.95	0.01348	0.007	14.36
120	13	21	1.95	0.01348	0.005	14.36
240	12	21	1.95	0.01348	0.003	13.40
480	11	23	1.33	0.01317	0.002	11.84
1328	10	23	1.33	0.01317	0.001	10.88

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 65 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY,DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	6	CORRECTED MASS SOIL(g):	101.27
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	68.81
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	32.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0810	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	25	21	1.95	0.01348	0.047	26.62
2	20	21	1.95	0.01348	0.034	21.68
4	18	21	1.95	0.01348	0.025	19.70
8	16	21	1.95	0.01348	0.018	17.73
13	15	21	1.95	0.01348	0.014	16.74
30	14	21	1.95	0.01348	0.009	15.75
60	13	21	1.95	0.01348	0.007	14.77
120	13	21	1.95	0.01348	0.005	14.77
240	12	21	1.95	0.01348	0.003	13.78
480	11	23	1.33	0.01317	0.002	12.17
1347	10	23	1.33	0.01317	0.001	11.19

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 66 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/SHELL FRAGMENTS & ORGANICS

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	7	CORRECTED MASS SOIL(g):	93.58
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.49
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0806	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	33	20	2.27	0.01365	0.045	37.69
2	27	20	2.27	0.01365	0.033	31.27
4	23	20	2.27	0.01365	0.024	27.00
8	21	20	2.27	0.01365	0.017	24.86
13	19	20	2.27	0.01365	0.014	22.72
30	18	20	2.27	0.01365	0.009	21.66
60	17	20	2.27	0.01365	0.006	20.59
120	16	20	2.27	0.01365	0.005	19.52
240	15	20	2.27	0.01365	0.003	18.45
480	13	21	1.95	0.01348	0.002	15.98
1335	12	21	1.95	0.01348	0.001	14.91

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 66 SAMPLE NO: 3 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY,DARK GRAY CLAYEY SILT, SLIGHTLY SANDY, W/SHELL FRAGS

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	91.56
TARE NO :	1	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	20.99
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	77.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	60	21	1.95	0.01328	0.048	66.99
1	48	21	1.95	0.01328	0.038	54.01
2	38	21	1.95	0.01328	0.030	43.20
4	32	21	1.95	0.01328	0.022	36.71
8	28	21	1.95	0.01328	0.016	32.39
13	26	21	1.95	0.01328	0.013	30.22
30	24	21	1.95	0.01328	0.009	28.06
60	22	21	1.95	0.01328	0.006	25.90
120	20	21	1.95	0.01328	0.004	23.74
240	19	21	1.95	0.01328	0.003	22.66
480	17	22	1.64	0.01312	0.002	20.16
1427	15	21	1.95	0.01328	0.001	18.33

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 67 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/SHELL FRAGMENTS & ORGANICS

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	14	CORRECTED MASS SOIL(g):	98.50
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	56.39
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	42.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0936	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	34	20	2.27	0.01365	0.045	36.82
2	29	20	2.27	0.01365	0.033	31.74
4	26	20	2.27	0.01365	0.024	28.70
8	23	20	2.27	0.01365	0.017	25.65
15	21	20	2.27	0.01365	0.013	23.62
30	20	20	2.27	0.01365	0.009	22.60
60	18	20	2.27	0.01365	0.006	20.57
120	17	20	2.27	0.01365	0.005	19.56
240	16	20	2.27	0.01365	0.003	18.54
419	15	21	1.95	0.01348	0.002	17.21
1379	13	22	1.64	0.01332	0.001	14.86

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 68 SAMPLE NO: 3 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY,GRAY SANDY SILT W/CLAY

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	7	CORRECTED MASS SOIL(g):	102.51
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	35.67
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	65.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0815	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	52	21	1.95	0.01328	0.037	52.11
2	44	21	1.95	0.01328	0.028	44.38
4	37	21	1.95	0.01328	0.021	37.62
8	33	21	1.95	0.01328	0.016	33.76
13	31	21	1.95	0.01328	0.012	31.82
30	28	21	1.95	0.01328	0.008	28.93
60	26	21	1.95	0.01328	0.006	27.00
120	25	21	1.95	0.01328	0.004	26.03
240	23	21	1.95	0.01328	0.003	24.10
480	21	23	1.33	0.01297	0.002	21.56
1343	18	23	1.33	0.01297	0.001	18.67

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 69 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	8	CORRECTED MASS SOIL(g):	101.70
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	51.83
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	49.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0820	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
0.5	47	21	1.95	0.01348	0.056	48.13
1	35	21	1.95	0.01348	0.044	36.34
2	29	21	1.95	0.01348	0.032	30.44
4	25	21	1.95	0.01348	0.024	26.50
8	22	21	1.95	0.01348	0.017	23.55
15	20	21	1.95	0.01348	0.013	21.59
30	18	21	1.95	0.01348	0.009	19.62
60	17	21	1.95	0.01348	0.006	18.64
120	16	21	1.95	0.01348	0.005	17.65
240	15	21	1.95	0.01348	0.003	16.67
480	14	23	1.33	0.01317	0.002	15.07
1339	13	23	1.33	0.01317	0.001	14.09

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 71 SAMPLE NO: 1 PENETRATION, ft: 0.5

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

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	9	CORRECTED MASS SOIL(g):	102.74
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	64.26
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	37.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0825	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	29	21	1.95	0.01348	0.046	30.13
2	23	21	1.95	0.01348	0.034	24.29
4	20	21	1.95	0.01348	0.024	21.37
8	17	21	1.95	0.01348	0.018	18.45
15	16	21	1.95	0.01348	0.013	17.47
30	15	21	1.95	0.01348	0.009	16.50
60	14	21	1.95	0.01348	0.007	15.53
120	14	21	1.95	0.01348	0.005	15.53
240	12	21	1.95	0.01348	0.003	13.58
480	11	23	1.33	0.01317	0.002	12.00
1335	10	23	1.33	0.01317	0.001	11.03

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 75 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :OLIVE GRAY,DARK GRAY CLAYEY SAND, SLIGHTLY SILTY

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 6	CORRECTED MASS SOIL(g):	94.00
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	64.21
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	31.7
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-28-87	AMOUNT (g/liter):	40
STARTING TIME	: 0801	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	26	20	2.27	0.01365	0.047	30.07
2	23	20	2.27	0.01365	0.034	26.88
4	21	20	2.27	0.01365	0.025	24.75
8	19	20	2.27	0.01365	0.018	22.62
13	18	20	2.27	0.01365	0.014	21.56
30	17	20	2.27	0.01365	0.009	20.50
60	16	20	2.27	0.01365	0.007	19.43
120	15	20	2.27	0.01365	0.005	18.37
240	14	20	2.27	0.01365	0.003	17.30
480	13	21	1.95	0.01348	0.002	15.91
1339	11	21	1.95	0.01348	0.001	13.78

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

HYDROMETER ANALYSIS

TEST DATE :11-22-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 78 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-22-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	10	CORRECTED MASS SOIL(g):	104.22
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	62.26
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	40.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-22-87	AMOUNT (g/liter):	40
STARTING TIME :	0830	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	33	21	1.95	0.01348	0.045	33.54
2	28	21	1.95	0.01348	0.033	28.74
4	24	21	1.95	0.01348	0.024	24.90
8	21	21	1.95	0.01348	0.017	22.02
15	19	21	1.95	0.01348	0.013	20.10
30	18	21	1.95	0.01348	0.009	19.15
60	17	21	1.95	0.01348	0.006	18.19
120	16	21	1.95	0.01348	0.005	17.23
240	14	21	1.95	0.01348	0.003	15.31
480	13	23	1.33	0.01317	0.002	13.75
1331	11	23	1.33	0.01317	0.001	11.83

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 79 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	10	CORRECTED MASS SOIL(g):	98.85
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	69.34
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	29.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0821	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	26	20	2.27	0.01365	0.047	28.59
2	23	20	2.27	0.01365	0.034	25.56
4	20	20	2.27	0.01365	0.025	22.52
8	18	20	2.27	0.01365	0.018	20.50
15	17	20	2.27	0.01365	0.013	19.49
30	16	20	2.27	0.01365	0.009	18.48
60	15	20	2.27	0.01365	0.007	17.47
120	15	20	2.27	0.01365	0.005	17.47
240	14	20	2.27	0.01365	0.003	16.45
480	13	21	1.95	0.01348	0.002	15.13
1322	11	21	1.95	0.01348	0.001	13.10

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 79 SAMPLE NO: 2 PENETRATION, ft: 1.5

MATERIAL :DARK GRAY SILTY FINE SAND W/SHELL FRAGMENTS

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	5	CORRECTED MASS SOIL(g):	100.45
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	55.51
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	44.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	38	20	2.27	0.01365	0.043	40.09
2	31	20	2.27	0.01365	0.032	33.12
4	27	20	2.27	0.01365	0.024	29.13
8	24	20	2.27	0.01365	0.017	26.15
13	22	20	2.27	0.01365	0.013	24.16
30	21	20	2.27	0.01365	0.009	23.16
60	19	20	2.27	0.01365	0.006	21.17
120	18	20	2.27	0.01365	0.005	20.17
240	17	20	2.27	0.01365	0.003	19.18
480	15	21	1.95	0.01348	0.002	16.88
1344	13	21	1.95	0.01348	0.001	14.89

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 81 SAMPLE NO: 1 PENETRATION, ft: 0.5

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

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	9	CORRECTED MASS SOIL(g):	99.83
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	67.18
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	32.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	27	20	2.27	0.01365	0.047	29.32
2	25	20	2.27	0.01365	0.034	27.31
4	21	20	2.27	0.01365	0.025	23.31
8	19	20	2.27	0.01365	0.018	21.30
15	17	20	2.27	0.01365	0.013	19.30
30	16	20	2.27	0.01365	0.009	18.30
60	15	20	2.27	0.01365	0.007	17.30
120	14	20	2.27	0.01365	0.005	16.29
240	14	20	2.27	0.01365	0.003	16.29
480	13	21	1.95	0.01348	0.002	14.98
1326	11	21	1.95	0.01348	0.001	12.98

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 81 SAMPLE NO: 2 PENETRATION, ft: 3.0

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

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	3	CORRECTED MASS SOIL(g):	95.79
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	44.61
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	53.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	42	22	1.64	0.01332	0.041	45.56
2	36	22	1.64	0.01332	0.030	39.29
4	32	22	1.64	0.01332	0.022	35.12
8	28	22	1.64	0.01332	0.016	30.94
13	27	22	1.64	0.01332	0.013	29.90
30	24	22	1.64	0.01332	0.009	26.77
60	22	22	1.64	0.01332	0.006	24.68
120	21	22	1.64	0.01332	0.004	23.64
240	19	22	1.64	0.01332	0.003	21.55
480	18	22	1.64	0.01332	0.002	20.50
1343	16	21	1.95	0.01348	0.001	18.74

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 82 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 1	CORRECTED MASS SOIL(g):	97.54
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	43.08
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	55.8
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 12-1-87	AMOUNT (g/liter):	40
STARTING TIME	: 0746	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	41	22	1.64	0.01332	0.041	43.72
2	32	22	1.64	0.01332	0.031	34.49
4	27	22	1.64	0.01332	0.023	29.36
8	24	22	1.64	0.01332	0.017	26.29
13	22	22	1.64	0.01332	0.013	24.24
30	20	22	1.64	0.01332	0.009	22.19
60	18	22	1.64	0.01332	0.006	20.14
120	17	22	1.64	0.01332	0.004	19.11
240	15	22	1.64	0.01332	0.003	17.06
480	14	22	1.64	0.01332	0.002	16.04
1352	14	21	1.95	0.01348	0.001	16.36

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 83 SAMPLE NO: 1 PENETRATION, ft: 2.0

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

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	92.42
TARE NO :	8	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	60.24
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	34.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0811	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
1	27	20	2.27	0.01365	0.047	31.67
2	24	20	2.27	0.01365	0.034	28.42
4	21	20	2.27	0.01365	0.025	25.17
8	19	20	2.27	0.01365	0.018	23.01
15	18	20	2.27	0.01365	0.013	21.93
30	17	20	2.27	0.01365	0.009	20.85
60	16	20	2.27	0.01365	0.007	19.76
120	15	20	2.27	0.01365	0.005	18.68
240	14	20	2.27	0.01365	0.003	17.60
480	13	21	1.95	0.01348	0.002	16.18
1331	11	21	1.95	0.01348	0.001	14.02

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 85 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :DARK GRAY SILTY FINE SAND W/CLAY

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	1	CORRECTED MASS SOIL(g):	88.29
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	34.36
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	61.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0735	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
0.5	51	21	1.95	0.01348	0.054	59.98
1	44	21	1.95	0.01348	0.041	52.05
2	37	21	1.95	0.01348	0.030	44.12
4	31	21	1.95	0.01348	0.023	37.32
8	28	21	1.95	0.01348	0.016	33.93
13	26	21	1.95	0.01348	0.013	31.66
30	24	21	1.95	0.01348	0.009	29.40
60	23	21	1.95	0.01348	0.006	28.26
120	21	21	1.95	0.01348	0.004	26.00
240	20	21	1.95	0.01348	0.003	24.86
480	18	22	1.64	0.01332	0.002	22.25
1372	17	21	1.95	0.01348	0.001	21.47

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 87 SAMPLE NO: 1 PENETRATION, ft: 1.5

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

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	15	CORRECTED MASS SOIL(g):	96.73
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	61.78
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	36.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0946	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	28	22	1.64	0.01332	0.046	30.64
2	24	22	1.64	0.01332	0.033	26.51
4	21	22	1.64	0.01332	0.024	23.41
8	19	22	1.64	0.01332	0.017	21.34
15	17	22	1.64	0.01332	0.013	19.27
30	16	22	1.64	0.01332	0.009	18.24
60	15	22	1.64	0.01332	0.006	17.20
120	14	22	1.64	0.01332	0.005	16.17
240	13	22	1.64	0.01332	0.003	15.14
374	12	22	1.64	0.01332	0.003	14.10
1383	11	22	1.64	0.01332	0.001	13.07

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 87 SAMPLE NO: 2 PENETRATION, ft: 2.5

MATERIAL :OLIVE GRAY CLAYEY SILT, SLIGHTLY SANDY, W/SHELL FRAGMENTS,MICA

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	5	CORRECTED MASS SOIL(g):	80.86
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	24.14
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	70.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0811	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
1	49	21	1.95	0.01328	0.038	62.38
2	42	21	1.95	0.01328	0.029	53.81
4	38	21	1.95	0.01328	0.021	48.92
8	34	21	1.95	0.01328	0.015	44.02
13	31	21	1.95	0.01328	0.012	40.35
30	28	21	1.95	0.01328	0.008	36.67
60	25	21	1.95	0.01328	0.006	33.00
120	24	21	1.95	0.01328	0.004	31.78
240	22	21	1.95	0.01328	0.003	29.33
480	20	22	1.64	0.01312	0.002	26.50
1410	18	21	1.95	0.01328	0.001	24.43

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 88 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/MICA

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	12	CORRECTED MASS SOIL(g):	81.85
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	42.88
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0941	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	37	22	1.64	0.01332	0.060	47.21
1	30	22	1.64	0.01332	0.045	38.66
2	23	22	1.64	0.01332	0.033	30.10
4	19	22	1.64	0.01332	0.024	25.22
8	17	22	1.64	0.01332	0.017	22.77
15	16	22	1.64	0.01332	0.013	21.55
30	15	22	1.64	0.01332	0.009	20.33
60	14	22	1.64	0.01332	0.006	19.11
120	13	22	1.64	0.01332	0.005	17.89
240	12	23	1.33	0.01317	0.003	16.28
415	11	23	1.33	0.01317	0.002	15.06
1376	10	22	1.64	0.01332	0.001	14.22

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 88 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :OLIVE GRAY,DARK GRAY SANDY SILT W/CLAY

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	83.26
TARE NO :	8	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	29.60
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	64.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0826	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	51	21	1.95	0.01328	0.053	62.96
1	43	21	1.95	0.01328	0.040	53.45
2	38	21	1.95	0.01328	0.030	47.51
4	32	21	1.95	0.01328	0.022	40.37
8	29	21	1.95	0.01328	0.016	36.80
13	27	21	1.95	0.01328	0.013	34.43
30	24	21	1.95	0.01328	0.009	30.86
60	22	21	1.95	0.01328	0.006	28.48
120	21	21	1.95	0.01328	0.004	27.29
240	20	21	1.95	0.01328	0.003	26.10
480	18	22	1.64	0.01312	0.002	23.35
1397	16	21	1.95	0.01328	0.001	21.35

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 89 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	14	CORRECTED MASS SOIL(g):	101.87
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	62.91
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	38.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0946	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	31	22	1.64	0.01332	0.045	32.04
2	24	22	1.64	0.01332	0.033	25.17
4	21	22	1.64	0.01332	0.024	22.23
8	18	22	1.64	0.01332	0.017	19.28
15	16	22	1.64	0.01332	0.013	17.32
30	15	22	1.64	0.01332	0.009	16.34
60	14	22	1.64	0.01332	0.006	15.35
120	14	22	1.64	0.01332	0.005	15.35
240	13	22	1.64	0.01332	0.003	14.37
391	12	22	1.64	0.01332	0.003	13.39
1377	11	21	1.95	0.01348	0.001	12.72

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 90 SAMPLE NO: 1 PENETRATION, ft: 0.5

MATERIAL :DARK GRAY SILTY FINE SAND,SLIGHTLY CLAYEY,W/MICA

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	2	CORRECTED MASS SOIL(g):	101.04
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	60.17
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	40.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0740	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	32	21	1.95	0.01348	0.045	33.60
2	26	21	1.95	0.01348	0.033	27.67
4	23	21	1.95	0.01348	0.024	24.70
8	21	21	1.95	0.01348	0.017	22.72
13	20	21	1.95	0.01348	0.013	21.73
30	18	21	1.95	0.01348	0.009	19.75
60	17.5	21	1.95	0.01348	0.006	19.25
120	17	21	1.95	0.01348	0.005	18.76
240	16	21	1.95	0.01348	0.003	17.77
480	15	22	1.64	0.01332	0.002	16.47
1368	14	21	1.95	0.01348	0.001	15.79

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 90 SAMPLE NO: 3 PENETRATION, ft: 3.5

MATERIAL :DARK GRAY CLAYEY SAND, SLIGHTLY SILTY, W/SHELL FRAGMENTS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	6	CORRECTED MASS SOIL(g):	96.26
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	59.16
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	38.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0806	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	35	22	1.64	0.01332	0.043	38.06
2	31	22	1.64	0.01332	0.032	33.91
4	28	22	1.64	0.01332	0.023	30.79
8	26	22	1.64	0.01332	0.016	28.71
13	25	22	1.64	0.01332	0.013	27.68
30	23	22	1.64	0.01332	0.009	25.60
60	21	22	1.64	0.01332	0.006	23.52
120	19	22	1.64	0.01332	0.004	21.44
240	18	22	1.64	0.01332	0.003	20.40
480	17	22	1.64	0.01332	0.002	19.36
1341	15	22	1.64	0.01332	0.001	17.29

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 91 SAMPLE NO: 1 PENETRATION, ft: 0.5

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

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 11	CORRECTED MASS SOIL(g):	82.71
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	99.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	42.31
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	48.8
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-30-87	AMOUNT (g/liter):	40
STARTING TIME	: 0936	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	33	22	1.64	0.01332	0.044	41.88
2	27	22	1.64	0.01332	0.032	34.63
4	22	22	1.64	0.01332	0.024	28.58
8	20	22	1.64	0.01332	0.017	26.16
15	19	22	1.64	0.01332	0.012	24.96
30	18	22	1.64	0.01332	0.009	23.75
60	16	22	1.64	0.01332	0.006	21.33
120	15	22	1.64	0.01332	0.005	20.12
240	14	23	1.33	0.01317	0.003	18.53
419	13	23	1.33	0.01317	0.002	17.32
1381	12	22	1.64	0.01332	0.001	16.49

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 93 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/ORGANICS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	93.16
TARE NO :	15	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	40.08
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	57.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0951	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	51	22	1.64	0.01332	0.053	56.51
1	41	22	1.64	0.01332	0.041	45.77
2	34	22	1.64	0.01332	0.031	38.26
4	28	22	1.64	0.01332	0.023	31.82
8	24	22	1.64	0.01332	0.017	27.52
20	21	22	1.64	0.01332	0.011	24.30
30	20	22	1.64	0.01332	0.009	23.23
60	18	22	1.64	0.01332	0.006	21.08
120	17	22	1.64	0.01332	0.004	20.01
240	15	22	1.64	0.01332	0.003	17.86
387	14	22	1.64	0.01332	0.003	16.79
1372	13	21	1.95	0.01348	0.001	16.05

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 94 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :DARK GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	5	CORRECTED MASS SOIL(g):	99.63
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	56.43
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	43.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	36	22	1.64	0.01332	0.043	37.78
2	30	22	1.64	0.01332	0.032	31.76
4	25	22	1.64	0.01332	0.023	26.74
8	22	22	1.64	0.01332	0.017	23.73
13	20	22	1.64	0.01332	0.013	21.72
30	19	22	1.64	0.01332	0.009	20.72
60	17	22	1.64	0.01332	0.006	18.71
120	16	22	1.64	0.01332	0.005	17.71
240	15	22	1.64	0.01332	0.003	16.70
480	13	22	1.64	0.01332	0.002	14.69
1345	11	22	1.64	0.01332	0.001	12.69

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 94 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :DARK GRAY SANDY SILT, SLIGHTLY CLAYEY, W/ORGANICS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	14	CORRECTED MASS SOIL(g):	90.43
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	28.22
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	68.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0941	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	55	22	1.64	0.01312	0.050	62.01
1	44	22	1.64	0.01312	0.040	49.97
2	34	22	1.64	0.01312	0.030	39.02
4	27	22	1.64	0.01312	0.023	31.35
8	22	22	1.64	0.01312	0.017	25.88
15	20	22	1.64	0.01312	0.012	23.69
30	19	22	1.64	0.01312	0.009	22.60
60	17	22	1.64	0.01312	0.006	20.41
120	15	22	1.64	0.01312	0.004	18.22
240	14	22	1.64	0.01312	0.003	17.12
379	13	22	1.64	0.01312	0.003	16.03
1388	11	22	1.64	0.01312	0.001	13.84

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 96 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :DARK GRAY SILTY FINE SAND,SLIGHTLY CLAYEY,W/SHELL FRAGS,ORGANIC

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	13	CORRECTED MASS SOIL(g):	87.43
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.96
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	42.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0946	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	32	22	1.64	0.01332	0.044	38.48
2	28	22	1.64	0.01332	0.032	33.90
4	24	22	1.64	0.01332	0.023	29.33
8	21	22	1.64	0.01332	0.017	25.90
15	20	22	1.64	0.01332	0.012	24.75
30	19	22	1.64	0.01332	0.009	23.61
60	18	22	1.64	0.01332	0.006	22.46
120	16	22	1.64	0.01332	0.005	20.18
240	15	23	1.33	0.01317	0.003	18.68
410	14	23	1.33	0.01317	0.002	17.53
1372	13	22	1.64	0.01332	0.001	16.75

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 98 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :OLIVE GRAY,DARK GRAY SILTY FINE SAND,SLIGHTLY CLAYEY,W/ORGANICS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	11	CORRECTED MASS SOIL(g):	82.30
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	21.52
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	73.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0931	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	58	22	1.64	0.01312	0.048	71.74
1	49	22	1.64	0.01312	0.038	60.92
2	43	22	1.64	0.01312	0.028	53.70
4	38	22	1.64	0.01312	0.021	47.68
8	34	22	1.64	0.01312	0.015	42.87
15	31	22	1.64	0.01312	0.011	39.26
30	29	22	1.64	0.01312	0.008	36.86
60	26	22	1.64	0.01312	0.006	33.25
120	24	22	1.64	0.01312	0.004	30.84
240	22	22	1.64	0.01312	0.003	28.44
404	21	22	1.64	0.01312	0.002	27.23
1390	18	21	1.95	0.01328	0.001	24.00

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 99 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/SAND & SHELL FRAGMENTS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	11	CORRECTED MASS SOIL(g):	82.30
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	21.52
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	73.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0931	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	58	22	1.64	0.01312	0.048	71.74
1	49	22	1.64	0.01312	0.038	60.92
2	43	22	1.64	0.01312	0.028	53.70
4	38	22	1.64	0.01312	0.021	47.68
8	34	22	1.64	0.01312	0.015	42.87
15	31	22	1.64	0.01312	0.011	39.26
30	29	22	1.64	0.01312	0.008	36.86
60	26	22	1.64	0.01312	0.006	33.25
120	24	22	1.64	0.01312	0.004	30.84
240	22	22	1.64	0.01312	0.003	28.44
404	21	22	1.64	0.01312	0.002	27.23
1390	18	21	1.95	0.01328	0.001	24.00

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 100 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 4	CORRECTED MASS SOIL(g):	100.83
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	40.22
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	60.1
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-21-87	AMOUNT (g/liter):	40
STARTING TIME	: 0750	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
0.5	58	21	1.95	0.01348	0.050	59.46
1	50	21	1.95	0.01348	0.038	51.53
2	42	21	1.95	0.01348	0.029	43.59
4	37	21	1.95	0.01348	0.022	38.63
8	33	21	1.95	0.01348	0.016	34.67
13	30	21	1.95	0.01348	0.013	31.69
30	28	21	1.95	0.01348	0.008	29.71
60	26	21	1.95	0.01348	0.006	27.72
120	24	21	1.95	0.01348	0.004	25.74
240	23	21	1.95	0.01348	0.003	24.75
480	21	22	1.64	0.01332	0.002	22.45
1360	19	21	1.95	0.01348	0.001	20.78

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 142 SAMPLE NO: 5 PENETRATION, ft: 16.0

MATERIAL :OLIVE GRAY CLAYEY SILT

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 14	CORRECTED MASS SOIL(g):	102.58
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	6.66
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	93.5
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-24-87	AMOUNT (g/liter):	40
STARTING TIME	: 0946	SPECIFIC GRAVITY:	2.7

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01297	---	----
0.5	>60	23	1.33	0.01297		
1	>60	23	1.33	0.01297		
2	53	23	1.33	0.01297	0.025	52.43
4	42	23	1.33	0.01297	0.020	41.82
8	34	23	1.33	0.01297	0.015	34.10
15	29	23	1.33	0.01297	0.011	29.27
30	25	24	1.02	0.01282	0.008	25.11
60	23	24	1.02	0.01282	0.006	23.18
120	21	24	1.02	0.01282	0.004	21.25
240	20	24	1.02	0.01282	0.003	20.28
435	18	24	1.02	0.01282	0.002	18.35
1394	16	24	1.02	0.01282	0.001	16.42

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 162 SAMPLE NO: 2 PENETRATION, ft: 8.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/ SAND POCKETS & MICA

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 4	CORRECTED MASS SOIL(g):	79.97
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	11.56
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	85.5
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 12-2-87	AMOUNT (g/liter):	40
STARTING TIME	: 0806	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	56	21	1.95	0.01328	0.035	71.74
2	49	21	1.95	0.01328	0.027	63.08
4	44	21	1.95	0.01328	0.020	56.89
8	39	21	1.95	0.01328	0.015	50.70
13	36	21	1.95	0.01328	0.012	46.98
30	32	21	1.95	0.01328	0.008	42.03
60	29	21	1.95	0.01328	0.006	38.32
120	27	21	1.95	0.01328	0.004	35.84
240	25	21	1.95	0.01328	0.003	33.37
480	22	22	1.64	0.01312	0.002	29.27
1414	20	21	1.95	0.01328	0.001	27.18

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 164 SAMPLE NO: 2 PENETRATION, ft: 8.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY POCKETS & ORGANICS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 5	CORRECTED MASS SOIL(g):	103.12
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	27.03
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	73.8
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-21-87	AMOUNT (g/liter):	40
STARTING TIME	: 0755	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
0.5	>60	21	1.95	0.01348		
1	>60	21	1.95	0.01348		
2	57	21	1.95	0.01348	0.025	57.17
4	53	21	1.95	0.01348	0.019	53.29
8	48	21	1.95	0.01348	0.014	48.44
13	45	21	1.95	0.01348	0.011	45.53
30	40	21	1.95	0.01348	0.008	40.68
60	37	21	1.95	0.01348	0.006	37.77
120	34	21	1.95	0.01348	0.004	34.87
240	32	21	1.95	0.01348	0.003	32.93
480	29	22	1.64	0.01332	0.002	29.71
1356	26	21	1.95	0.01348	0.001	27.11

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 166 SAMPLE NO: 3 PENETRATION, ft: 8.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY POCKETS

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	3	CORRECTED MASS SOIL(g):	76.56
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	16.68
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	78.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
1	56	21	1.95	0.01328	0.035	74.94
2	52	21	1.95	0.01328	0.026	69.77
4	46	21	1.95	0.01328	0.020	62.01
8	41	21	1.95	0.01328	0.015	55.54
13	37	21	1.95	0.01328	0.012	50.37
30	32	21	1.95	0.01328	0.008	43.90
60	30	21	1.95	0.01328	0.006	41.32
120	27	21	1.95	0.01328	0.004	37.44
240	25	21	1.95	0.01328	0.003	34.85
480	22	22	1.64	0.01312	0.002	30.57
1419	20	21	1.95	0.01328	0.001	28.39

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 168 SAMPLE NO: 3 PENETRATION, ft: 7.0

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

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	6	CORRECTED MASS SOIL(g):	100.77
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	66.37
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	34.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0800	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	24	21	1.95	0.01348	0.047	25.75
2	18	21	1.95	0.01348	0.035	19.80
4	17	21	1.95	0.01348	0.025	18.81
8	17	21	1.95	0.01348	0.018	18.81
13	15	21	1.95	0.01348	0.014	16.82
30	14	21	1.95	0.01348	0.009	15.83
60	13	21	1.95	0.01348	0.007	14.84
120	12	21	1.95	0.01348	0.005	13.85
240	12	21	1.95	0.01348	0.003	13.85
480	11	22	1.64	0.01332	0.002	12.54
1368	11	21	1.95	0.01348	0.001	12.85

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 171 SAMPLE NO: 2 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY CLAYEY SAND, SLIGHTLY SILTY, W/SHELL FRAGMENTS

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	7	CORRECTED MASS SOIL(g):	103.51
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	80.94
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	21.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0805	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	22	21	1.95	0.01348	0.048	23.14
2	21	21	1.95	0.01348	0.034	22.17
4	19	21	1.95	0.01348	0.024	20.24
8	17	21	1.95	0.01348	0.018	18.31
13	16	21	1.95	0.01348	0.014	17.34
30	15	21	1.95	0.01348	0.009	16.38
60	14	21	1.95	0.01348	0.007	15.41
120	13	21	1.95	0.01348	0.005	14.45
240	12	21	1.95	0.01348	0.003	13.48
480	11	22	1.64	0.01332	0.002	12.21
1364	11	21	1.95	0.01348	0.001	12.51

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

HYDROMETER ANALYSIS

TEST DATE :12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 171 SAMPLE NO: 5 PENETRATION, ft: 14.0

MATERIAL :OLIVE GRAY,DARK GRAY CLAYEY SILT W/SAND POCKETS & MICA

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	2	CORRECTED MASS SOIL(g):	76.70
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	19.02
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	75.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0756	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
1	54	21	1.95	0.01328	0.036	72.22
2	50	21	1.95	0.01328	0.027	67.06
4	46	21	1.95	0.01328	0.020	61.90
8	42	21	1.95	0.01328	0.014	56.73
13	39	21	1.95	0.01328	0.012	52.86
30	34	21	1.95	0.01328	0.008	46.41
60	31	21	1.95	0.01328	0.006	42.53
120	29	21	1.95	0.01328	0.004	39.95
240	26	21	1.95	0.01328	0.003	36.08
480	23	22	1.64	0.01312	0.002	31.80
1423	21	21	1.95	0.01328	0.001	29.63

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 172 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/ORGANICS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	13	CORRECTED MASS SOIL(g):	80.98
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	34.58
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	57.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0941	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	42	22	1.64	0.01332	0.041	53.89
2	38	22	1.64	0.01332	0.030	48.95
4	34	22	1.64	0.01332	0.022	44.01
8	31	22	1.64	0.01332	0.016	40.31
15	29	22	1.64	0.01332	0.012	37.84
30	26	22	1.64	0.01332	0.008	34.13
60	24	22	1.64	0.01332	0.006	31.66
120	22	22	1.64	0.01332	0.004	29.19
240	20	22	1.64	0.01332	0.003	26.72
395	19	22	1.64	0.01332	0.002	25.49
1381	17	21	1.95	0.01348	0.001	23.40

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 175B SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY,DARK GRAY SANDY SILT W/CLAY POCKETS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	13	CORRECTED MASS SOIL(g):	100.99
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	33.59
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	66.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0941	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	>60	23	1.33	0.01317		
1	54	23	1.33	0.01317	0.036	54.79
2	46	23	1.33	0.01317	0.028	46.86
4	38	23	1.33	0.01317	0.021	38.94
8	33	23	1.33	0.01317	0.015	33.99
15	29	23	1.33	0.01317	0.012	30.03
30	25	24	1.02	0.01301	0.008	25.76
60	23	24	1.02	0.01301	0.006	23.78
120	21	24	1.02	0.01301	0.004	21.80
240	20	24	1.02	0.01301	0.003	20.81
439	18	24	1.02	0.01301	0.002	18.83
4398	16	24	1.02	0.01301	0.001	16.85

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 176 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY & ORGANICS

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 14	CORRECTED MASS SOIL(g):	80.65
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	32.56
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	59.6
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-30-87	AMOUNT (g/liter):	40
STARTING TIME	: 0951	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	41	22	1.64	0.01332	0.041	52.87
2	35	22	1.64	0.01332	0.031	45.43
4	31	22	1.64	0.01332	0.022	40.47
8	28	22	1.64	0.01332	0.016	36.75
15	26	22	1.64	0.01332	0.012	34.27
30	24	22	1.64	0.01332	0.009	31.79
60	22	22	1.64	0.01332	0.006	29.31
120	21	22	1.64	0.01332	0.004	28.07
240	20	23	1.33	0.01317	0.003	26.45
406	18	23	1.33	0.01317	0.002	23.97
1367	17	22	1.64	0.01332	0.001	23.11

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 179 SAMPLE NO: 4 PENETRATION, ft: 9.0

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

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 13	CORRECTED MASS SOIL(g):	87.96
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	38.22
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	56.5
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-29-87	AMOUNT (g/liter):	40
STARTING TIME	: 0936	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	46	22	1.64	0.01332	0.040	54.16
2	42	22	1.64	0.01332	0.029	49.61
4	38	22	1.64	0.01332	0.021	45.07
8	34	22	1.64	0.01332	0.015	40.52
15	31	22	1.64	0.01332	0.012	37.11
30	28	22	1.64	0.01332	0.008	33.70
60	25	22	1.64	0.01332	0.006	30.29
120	23	22	1.64	0.01332	0.004	28.01
240	21	22	1.64	0.01332	0.003	25.74
384	20	22	1.64	0.01332	0.002	24.60
1392	17	22	1.64	0.01332	0.001	21.19

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 180 SAMPLE NO: 6 PENETRATION, ft: 19.5

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

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	8	CORRECTED MASS SOIL(g):	103.25
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	41.78
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	59.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0810	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
0.5	52	21	1.95	0.01348	0.053	52.25
1	40	21	1.95	0.01348	0.042	40.63
2	33	21	1.95	0.01348	0.031	33.85
4	29	21	1.95	0.01348	0.023	29.98
8	27	21	1.95	0.01348	0.016	28.04
13	25	21	1.95	0.01348	0.013	26.10
30	23	21	1.95	0.01348	0.009	24.17
60	22	21	1.95	0.01348	0.006	23.20
120	21	21	1.95	0.01348	0.004	22.23
240	20	21	1.95	0.01348	0.003	21.26
480	18	22	1.64	0.01332	0.002	19.02
1360	18	21	1.95	0.01348	0.001	19.33

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 181 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	4	CORRECTED MASS SOIL(g):	101.31
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	58.92
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	41.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	37	22	1.64	0.01332	0.043	38.14
2	32	22	1.64	0.01332	0.031	33.21
4	28	22	1.64	0.01332	0.023	29.26
8	25	22	1.64	0.01332	0.016	26.30
13	24	22	1.64	0.01332	0.013	25.31
30	22	22	1.64	0.01332	0.009	23.33
60	20	22	1.64	0.01332	0.006	21.36
120	19	22	1.64	0.01332	0.004	20.37
240	17	22	1.64	0.01332	0.003	18.40
480	15	22	1.64	0.01332	0.002	16.43
1350	13	22	1.64	0.01332	0.001	14.45

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 181 SAMPLE NO: 3 PENETRATION, ft: 6.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/SAND POCKETS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	12	CORRECTED MASS SOIL(g):	100.86
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	27.25
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	73.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0936	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01297	---	----
0.5	>60	23	1.33	0.01297		
1	>60	23	1.33	0.01297		
2	>60	23	1.33	0.01297		
4	58	23	1.33	0.01297	0.017	58.23
8	53	23	1.33	0.01297	0.013	53.33
16	48	23	1.33	0.01297	0.009	48.42
30	44	24	1.02	0.01282	0.007	44.19
60	41	24	1.02	0.01282	0.005	41.24
120	38	24	1.02	0.01282	0.004	38.30
240	34	24	1.02	0.01282	0.003	34.37
443	32	24	1.02	0.01282	0.002	32.41
1402	27	24	1.02	0.01282	0.001	27.50

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 183 SAMPLE NO: 3 PENETRATION, ft: 8.0

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

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	10	CORRECTED MASS SOIL(g):	87.87
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.33
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	43.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0826	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	34	22	1.64	0.01332	0.031	40.56
4	31	22	1.64	0.01332	0.022	37.15
8	28	22	1.64	0.01332	0.016	33.73
15	25	22	1.64	0.01332	0.012	30.32
30	23	22	1.64	0.01332	0.009	28.04
60	21	22	1.64	0.01332	0.006	25.77
120	19	22	1.64	0.01332	0.004	23.49
240	17	22	1.64	0.01332	0.003	21.21
480	15	22	1.64	0.01332	0.002	18.94
1324	13	22	1.64	0.01332	0.001	16.66

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 184 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL :DARK GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 10	CORRECTED MASS SOIL(g):	100.58
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	68.59
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	31.8
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-30-87	AMOUNT (g/liter):	40
STARTING TIME	: 0836	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	28	22	1.64	0.01332	0.032	29.47
4	23	22	1.64	0.01332	0.024	24.50
8	20	22	1.64	0.01332	0.017	21.52
15	19	22	1.64	0.01332	0.012	20.52
30	17	22	1.64	0.01332	0.009	18.53
60	16	22	1.64	0.01332	0.006	17.54
120	15	22	1.64	0.01332	0.005	16.54
240	14	22	1.64	0.01332	0.003	15.55
480	13	23	1.33	0.01317	0.002	14.25
1314	12	22	1.64	0.01332	0.001	13.56

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 186 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY POCKETS & MICA

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	83.42
TARE NO :	15	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	23.67
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	71.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0956	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	55	22	1.64	0.01312	0.050	67.22
1	47	22	1.64	0.01312	0.038	57.73
2	40	22	1.64	0.01312	0.029	49.42
4	32	22	1.64	0.01312	0.022	39.92
8	27	22	1.64	0.01312	0.016	33.99
15	24	22	1.64	0.01312	0.012	30.43
30	21	22	1.64	0.01312	0.009	26.87
60	19	22	1.64	0.01312	0.006	24.50
120	18	22	1.64	0.01312	0.004	23.31
240	16	23	1.33	0.01297	0.003	20.56
401	15	23	1.33	0.01297	0.002	19.38
1363	14	22	1.64	0.01312	0.001	18.56

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

HYDROMETER ANALYSIS

TEST DATE :12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 191 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	10	CORRECTED MASS SOIL(g):	88.34
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	36.89
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	58.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0836	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	46	21	1.95	0.01348	0.040	54.28
2	43	21	1.95	0.01348	0.029	50.89
4	36	21	1.95	0.01348	0.022	42.96
8	33	21	1.95	0.01348	0.016	39.57
15	30	21	1.95	0.01348	0.012	36.17
30	28	21	1.95	0.01348	0.008	33.91
60	26	21	1.95	0.01348	0.006	31.64
120	24	21	1.95	0.01348	0.004	29.38
240	22	21	1.95	0.01348	0.003	27.11
480	20	22	1.64	0.01332	0.002	24.50
1388	17	21	1.95	0.01348	0.001	21.45

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 192 SAMPLE NO: 2 PENETRATION, ft: 4.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY & ORGANICS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	12	CORRECTED MASS SOIL(g):	77.17
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	17.01
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	78.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0936	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	53	22	1.64	0.01312	0.051	70.10
1	43	22	1.64	0.01312	0.040	57.27
2	34	22	1.64	0.01312	0.030	45.72
4	28	22	1.64	0.01312	0.022	38.03
8	23	22	1.64	0.01312	0.016	31.61
15	20	22	1.64	0.01312	0.012	27.76
35	18	22	1.64	0.01312	0.008	25.20
60	17	22	1.64	0.01312	0.006	23.91
120	16	22	1.64	0.01312	0.004	22.63
240	15	22	1.64	0.01312	0.003	21.35
400	14	22	1.64	0.01312	0.002	20.07
1385	13	21	1.95	0.01328	0.001	19.18

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 192 SAMPLE NO: 3 PENETRATION, ft: 7.0

MATERIAL :OLIVE GRAY SILTY FINE SAND

TESTED BY : DC DATE:11-21-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	9	CORRECTED MASS SOIL(g):	105.29
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	68.11
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	35.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-21-87	AMOUNT (g/liter):	40
STARTING TIME :	0815	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	26	21	1.95	0.01348	0.047	26.55
2	19	21	1.95	0.01348	0.035	19.90
4	16	21	1.95	0.01348	0.025	17.05
8	14	21	1.95	0.01348	0.018	15.15
15	13	21	1.95	0.01348	0.013	14.20
30	13	21	1.95	0.01348	0.009	14.20
60	12	21	1.95	0.01348	0.007	13.25
120	12	21	1.95	0.01348	0.005	13.25
240	11	21	1.95	0.01348	0.003	12.30
480	10	22	1.64	0.01332	0.002	11.06
1356	10	21	1.95	0.01348	0.001	11.35

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

HYDROMETER ANALYSIS

TEST DATE :11-21-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 194 SAMPLE NO: 2 PENETRATION, ft: 3.5

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

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	13	CORRECTED MASS SOIL(g):	88.57
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	29.30
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	66.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0946	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
0.5	57	21	1.95	0.01348	0.050	66.56
1	48	21	1.95	0.01348	0.039	56.40
2	42	21	1.95	0.01348	0.029	49.63
4	39	21	1.95	0.01348	0.021	46.24
8	36	21	1.95	0.01348	0.015	42.85
15	34	21	1.95	0.01348	0.011	40.59
30	32	21	1.95	0.01348	0.008	38.33
60	30	21	1.95	0.01348	0.006	36.08
120	28	21	1.95	0.01348	0.004	33.82
240	25	22	1.64	0.01332	0.003	30.08
395	24	22	1.64	0.01332	0.002	28.95
1363	21	21	1.95	0.01348	0.001	25.92

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 194 SAMPLE NO: 5 PENETRATION. ft: 15.0

MATERIAL :OLIVE GRAY SANDY SILT W/ CLAY, SHELL FRAGMENTS & MICA

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	13	CORRECTED MASS SOIL(g):	88.57
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	29.30
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	66.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0946	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	57	21	1.95	0.01328	0.050	65.90
1	48	21	1.95	0.01328	0.038	55.84
2	42	21	1.95	0.01328	0.029	49.13
4	39	21	1.95	0.01328	0.021	45.78
8	36	21	1.95	0.01328	0.015	42.42
15	34	21	1.95	0.01328	0.011	40.19
30	32	21	1.95	0.01328	0.008	37.95
60	30	21	1.95	0.01328	0.006	35.72
120	28	21	1.95	0.01328	0.004	33.48
240	25	22	1.64	0.01312	0.003	29.78
395	24	22	1.64	0.01312	0.002	28.66
1363	21	21	1.95	0.01328	0.001	25.66

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 196 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :DARK GRAY SILTY FINE SAND W/CLAY & ORGANICS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	12	CORRECTED MASS SOIL(g):	87.80
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	44.09
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	49.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0931	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	38	22	1.64	0.01332	0.042	45.15
2	33	22	1.64	0.01332	0.031	39.45
4	30	22	1.64	0.01332	0.022	36.04
8	27	22	1.64	0.01332	0.016	32.62
16.5	25	22	1.64	0.01332	0.011	30.34
30	23	22	1.64	0.01332	0.009	28.06
60	21	22	1.64	0.01332	0.006	25.79
120	19	22	1.64	0.01332	0.004	23.51
240	17	22	1.64	0.01332	0.003	21.23
389	16	22	1.64	0.01332	0.002	20.09
1396	14	22	1.64	0.01332	0.001	17.81

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 198 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY,DARK GRAY SILT W/CLAY POCKETS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 11	CORRECTED MASS SOIL(g):	100.24
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	2.29
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	97.7
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-24-87	AMOUNT (g/liter):	40
STARTING TIME	: 0931	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	>60	23	1.33	0.01317		
1	>60	23	1.33	0.01317		
2	50	23	1.33	0.01317	0.027	51.21
4	39	23	1.33	0.01317	0.021	40.23
8	31	23	1.33	0.01317	0.016	32.25
16	26	23	1.33	0.01317	0.011	27.26
30	22	24	1.02	0.01301	0.008	22.96
65	20	24	1.02	0.01301	0.006	20.97
120	18	24	1.02	0.01301	0.004	18.97
240	16	24	1.02	0.01301	0.003	16.97
447	15	24	1.02	0.01301	0.002	15.98
1406	13	24	1.02	0.01301	0.001	13.98

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 199 SAMPLE NO: 2 PENETRATION, ft: 2.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY POCKETS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	94.93
TARE NO :	3	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	29.29
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	69.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	60	22	1.64	0.01312	0.047	64.28
1	52	22	1.64	0.01312	0.037	55.94
2	42	22	1.64	0.01312	0.028	45.51
4	31	22	1.64	0.01312	0.022	34.04
8	25	22	1.64	0.01312	0.016	27.78
13	22	22	1.64	0.01312	0.013	24.65
30	19	22	1.64	0.01312	0.009	21.53
60	17	22	1.64	0.01312	0.006	19.44
120	16	22	1.64	0.01312	0.004	18.40
240	15	22	1.64	0.01312	0.003	17.35
480	14	22	1.64	0.01312	0.002	16.31
1354	13	22	1.64	0.01312	0.001	15.27

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 201 SAMPLE NO: 6 PENETRATION, ft: 19.0

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

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 8	CORRECTED MASS SOIL(g):	72.27
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	26.39
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	63.5
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 12-1-87	AMOUNT (g/liter):	40
STARTING TIME	: 0821	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
2	47	22	1.64	0.01312	0.027	66.63
4	45	22	1.64	0.01312	0.020	63.89
8	43	22	1.64	0.01312	0.014	61.15
13	40	22	1.64	0.01312	0.011	57.04
30	38	22	1.64	0.01312	0.008	54.30
60	35	22	1.64	0.01312	0.006	50.19
120	33	22	1.64	0.01312	0.004	47.45
240	30	22	1.64	0.01312	0.003	43.34
480	28	22	1.64	0.01312	0.002	40.60
1322	24	21	1.95	0.01328	0.001	35.55

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 202 SAMPLE NO: 6 PENETRATION, ft: 17.0

MATERIAL :OLIVE GRAY,DARK GRAY SILTY CLAY W/SAND POCKETS

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	81.02
TARE NO :	15	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	21.12
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	73.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0956	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	>60	22	1.64	0.01312		
1	>60	22	1.64	0.01312		
2	>60	22	1.64	0.01312		
4	60	22	1.64	0.01312		
9	56	22	1.64	0.01312	0.012	70.43
15	52	22	1.64	0.01312	0.009	65.54
30	48	22	1.64	0.01312	0.007	60.66
60	44	22	1.64	0.01312	0.005	55.77
120	40	22	1.64	0.01312	0.004	50.88
240	37	22	1.64	0.01312	0.003	47.22
357	34	22	1.64	0.01312	0.002	43.55
1354	28	20	2.27	0.01344	0.001	36.98

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

HYDROMETER ANALYSIS

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

BORING NO : 203 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY CLAYEY SILT W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 7	CORRECTED MASS SOIL(g):	100.54
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	2.15
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	97.9
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-20-87	AMOUNT (g/liter):	40
STARTING TIME	: 0804	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	>60	21	1.95	0.01328		
2	46	21	1.95	0.01328	0.028	47.22
4	33	21	1.95	0.01328	0.022	34.42
8	23	21	1.95	0.01328	0.017	24.57
15	19	21	1.95	0.01328	0.012	20.63
30	17	21	1.95	0.01328	0.009	18.66
60	16	21	1.95	0.01328	0.006	17.68
120	15	21	1.95	0.01328	0.005	16.69
236	14	21	1.95	0.01328	0.003	15.71
480	13	22	1.64	0.01312	0.002	14.42
1347	13	21	1.95	0.01328	0.001	14.72

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

HYDROMETER ANALYSIS

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

BORING NO : 203 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE

TARE NO : 2

WET SOIL + TARE(g):

DRY SOIL + TARE(g):

TARE(g) :

CORRECTION FACTOR :

HYDROMETER NO. : 25838

STARTING DATE : 11-20-87

STARTING TIME : 0739

AIR DRY MASS SOIL(g) :

CORRECTED MASS SOIL(g): 100.17

% PASSING NO. 10 SIEVE: 100.0

DRY MASS AFTER WASHING & SHAKING OVER NO. 200 SIEVE (g): 65.40

% PASSING NO.200 SIEVE: 34.7

DISPERSING AGENT: CALGON

AMOUNT (g/liter): 40

SPECIFIC GRAVITY: 2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	30	21	1.95	0.01348	0.046	31.90
2	24	21	1.95	0.01348	0.034	25.91
4	20	21	1.95	0.01348	0.024	21.92
8	16	21	1.95	0.01348	0.018	17.92
15	14	21	1.95	0.01348	0.013	15.93
30	13	21	1.95	0.01348	0.009	14.93
60	13	21	1.95	0.01348	0.007	14.93
120	11	21	1.95	0.01348	0.005	12.93
236	11	21	1.95	0.01348	0.003	12.93
480	10	22	1.64	0.01332	0.002	11.62
1347	10	21	1.95	0.01348	0.001	11.93

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

HYDROMETER ANALYSIS

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

BORING NO : 203 SAMPLE NO: 3 PENETRATION, ft: 6.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	3	CORRECTED MASS SOIL(g):	101.31
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	52.77
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-20-87	AMOUNT (g/liter):	40
STARTING TIME :	0744	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	38	21	1.95	0.01348	0.043	39.44
2	31	21	1.95	0.01348	0.032	32.53
4	25	21	1.95	0.01348	0.024	26.60
8	19	21	1.95	0.01348	0.017	20.68
15	15	21	1.95	0.01348	0.013	16.73
30	14	21	1.95	0.01348	0.009	15.75
60	13	21	1.95	0.01348	0.007	14.76
120	12	21	1.95	0.01348	0.005	13.77
232	12	21	1.95	0.01348	0.003	13.77
480	11	22	1.64	0.01332	0.002	12.48
1342	11	21	1.95	0.01348	0.001	12.79

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

HYDROMETER ANALYSIS

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

BORING NO : 204 SAMPLE NO: 5 PENETRATION, ft: 10.5

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

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 4	CORRECTED MASS SOIL(g):	101.06
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	78.98
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	21.8
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-20-87	AMOUNT (g/liter):	40
STARTING TIME	: 0749	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
2	23	21	1.95	0.01348	0.034	24.69
4	22	21	1.95	0.01348	0.024	23.70
8	19	21	1.95	0.01348	0.017	20.73
15	18	21	1.95	0.01348	0.013	19.74
30	17	21	1.95	0.01348	0.009	18.75
60	16	21	1.95	0.01348	0.006	17.76
120	15	21	1.95	0.01348	0.005	16.78
228	14	21	1.95	0.01348	0.003	15.79
480	13	22	1.64	0.01332	0.002	14.49
1337	12	21	1.95	0.01348	0.001	13.81

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 205 SAMPLE NO: 5 PENETRATION, ft: 15.5

MATERIAL :OLIVE GRAY,DARK GRAY CLAY W/SAND POCKETS

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	7	CORRECTED MASS SOIL(g):	74.33
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	29.88
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	59.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0821	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
2	48	21	1.95	0.01328	0.027	66.53
4	45	21	1.95	0.01328	0.020	62.54
8	44	21	1.95	0.01328	0.014	61.20
13	43	21	1.95	0.01328	0.011	59.87
30	42	21	1.95	0.01328	0.007	58.54
60	40	21	1.95	0.01328	0.005	55.88
120	37	21	1.95	0.01328	0.004	51.88
240	34	21	1.95	0.01328	0.003	47.89
480	31	22	1.64	0.01312	0.002	43.47
1401	27	21	1.95	0.01328	0.001	38.56

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

HYDROMETER ANALYSIS

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

BORING NO : 208 SAMPLE NO: 7 PENETRATION, ft: 14.0

MATERIAL :OLIVE GRAY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 5	CORRECTED MASS SOIL(g):	100.53
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	55.17
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	45.1
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-20-87	AMOUNT (g/liter):	40
STARTING TIME	: 0754	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
2	46	21	1.95	0.01348	0.028	47.70
4	44	21	1.95	0.01348	0.020	45.71
8	41	21	1.95	0.01348	0.015	42.73
15	38	21	1.95	0.01348	0.011	39.74
30	35	21	1.95	0.01348	0.008	36.76
60	33	21	1.95	0.01348	0.006	34.77
120	30	21	1.95	0.01348	0.004	31.78
224	28	21	1.95	0.01348	0.003	29.80
480	26	22	1.64	0.01332	0.002	27.49
1332	24	21	1.95	0.01348	0.001	25.82

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

HYDROMETER ANALYSIS

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

BORING NO : 210 SAMPLE NO: 5 PENETRATION, ft: 10.0

MATERIAL :OLIVE GRAY SILTY FINE SAND W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	6	CORRECTED MASS SOIL(g):	101.72
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	54.15
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	46.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-20-87	AMOUNT (g/liter):	40
STARTING TIME :	0759	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
0.5	40	21	1.95	0.01348	0.059	41.24
1	24	21	1.95	0.01348	0.047	25.51
2	17	21	1.95	0.01348	0.035	18.63
4	15	21	1.95	0.01348	0.025	16.67
8	13	21	1.95	0.01348	0.018	14.70
15	12	21	1.95	0.01348	0.013	13.72
30	12	21	1.95	0.01348	0.009	13.72
60	11	21	1.95	0.01348	0.007	12.73
120	11	21	1.95	0.01348	0.005	12.73
240	10	21	1.95	0.01348	0.003	11.75
480	10	22	1.64	0.01332	0.002	11.44
1352	9	21	1.95	0.01348	0.001	10.77

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 210 SAMPLE NO: 7 PENETRATION, ft: 15.0

MATERIAL :OLIVE GRAY SILTY CLAY W/SAND POCKETS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	9	CORRECTED MASS SOIL(g):	77.19
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	30.02
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	61.1
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0826	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
1	49	22	1.64	0.01312	0.038	64.95
2	49	22	1.64	0.01312	0.027	64.95
4	46	22	1.64	0.01312	0.019	61.10
8	43	22	1.64	0.01312	0.014	57.25
15	40	22	1.64	0.01312	0.011	53.41
30	37	22	1.64	0.01312	0.008	49.56
60	34	22	1.64	0.01312	0.006	45.71
120	32	22	1.64	0.01312	0.004	43.15
240	29	22	1.64	0.01312	0.003	39.30
480	26	22	1.64	0.01312	0.002	35.45
1318	23	21	1.95	0.01328	0.001	32.00

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

HYDROMETER ANALYSIS

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

BORING NO : 211 SAMPLE NO: 2 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY CLAYEY SILT W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	7	CORRECTED MASS SOIL(g):	100.54
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	2.15
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	97.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-20-87	AMOUNT (g/liter):	40
STARTING TIME :	0804	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	>60	21	1.95	0.01328		
2	46	21	1.95	0.01328	0.028	47.22
4	33	21	1.95	0.01328	0.022	34.42
8	23	21	1.95	0.01328	0.017	24.57
15	19	21	1.95	0.01328	0.012	20.63
30	17	21	1.95	0.01328	0.009	18.66
60	16	21	1.95	0.01328	0.006	17.68
120	15	21	1.95	0.01328	0.005	16.69
236	14	21	1.95	0.01328	0.003	15.71
480	13	22	1.64	0.01312	0.002	14.42
1347	13	21	1.95	0.01328	0.001	14.72

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

HYDROMETER ANALYSIS

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

BORING NO : 211 SAMPLE NO: 3 PENETRATION, ft: 6.5

MATERIAL :OLIVE GRAY CLAYEY SILT W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	8	CORRECTED MASS SOIL(g):	100.46
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	3.57
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	96.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-20-87	AMOUNT (g/liter):	40
STARTING TIME :	0809	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	58	21	1.95	0.01328	0.035	59.08
2	41	21	1.95	0.01328	0.029	42.33
4	30	21	1.95	0.01328	0.022	31.49
8	24	21	1.95	0.01328	0.017	25.58
15	22	21	1.95	0.01328	0.012	23.61
30	21	21	1.95	0.01328	0.009	22.62
60	19	21	1.95	0.01328	0.006	20.65
120	18	21	1.95	0.01328	0.004	19.66
232	17	21	1.95	0.01328	0.003	18.68
480	16	22	1.64	0.01312	0.002	17.38
1342	15	21	1.95	0.01328	0.001	16.71

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

HYDROMETER ANALYSIS

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

BORING NO : 212 SAMPLE NO: 2 PENETRATION, ft: 5.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	9	CORRECTED MASS SOIL(g):	101.89
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	7.26
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	92.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-20-87	AMOUNT (g/liter):	40
STARTING TIME :	0814	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	49	21	1.95	0.01328	0.038	49.51
2	32	21	1.95	0.01328	0.031	32.99
4	23	21	1.95	0.01328	0.023	24.25
8	18	21	1.95	0.01328	0.017	19.39
15	17	21	1.95	0.01328	0.013	18.42
30	16	21	1.95	0.01328	0.009	17.44
60	15	21	1.95	0.01328	0.006	16.47
120	15	21	1.95	0.01328	0.005	16.47
228	14	21	1.95	0.01328	0.003	15.50
480	13	22	1.64	0.01312	0.002	14.23
1337	12	21	1.95	0.01328	0.001	13.56

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

HYDROMETER ANALYSIS

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

BORING NO : 213 SAMPLE NO: 2 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY, W/MICA

TESTED BY : DC DATE:11-20-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	10	CORRECTED MASS SOIL(g):	101.66
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	57.03
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	43.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-20-87	AMOUNT (g/liter):	40
STARTING TIME :	0819	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01348	---	----
1	34	21	1.95	0.01348	0.044	35.37
2	29	21	1.95	0.01348	0.032	30.45
4	25	21	1.95	0.01348	0.024	26.51
8	22	21	1.95	0.01348	0.017	23.56
15	21	21	1.95	0.01348	0.013	22.58
30	19	21	1.95	0.01348	0.009	20.61
60	18	21	1.95	0.01348	0.006	19.63
120	17	21	1.95	0.01348	0.005	18.64
224	16	21	1.95	0.01348	0.003	17.66
480	15	22	1.64	0.01332	0.002	16.37
1332	14	21	1.95	0.01348	0.001	15.69

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

HYDROMETER ANALYSIS

TEST DATE :11-27-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 213 SAMPLE NO: 4 PENETRATION, ft: 8.5

MATERIAL :OLIVE GRAY,DARK GRAY SANDY CLAY W/SAND POCKETS

TESTED BY : DC DATE:11-27-87

CHECKED BY: DC DATE:11-29-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	14	CORRECTED MASS SOIL(g):	81.20
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	26.78
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	67.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-27-87	AMOUNT (g/liter):	40
STARTING TIME :	0951	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
2	55	22	1.64	0.01312	0.025	69.06
4	53	22	1.64	0.01312	0.018	66.62
8	51	22	1.64	0.01312	0.013	64.18
15	49	22	1.64	0.01312	0.010	61.74
30	46	22	1.64	0.01312	0.007	58.08
60	44	22	1.64	0.01312	0.005	55.65
120	41	22	1.64	0.01312	0.004	51.99
240	38	22	1.64	0.01312	0.003	48.33
361	36	22	1.64	0.01312	0.002	45.89
1358	31	20	2.27	0.01344	0.001	40.56

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 213 SAMPLE NO: 5 PENETRATION, ft: 10.5

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

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	8	CORRECTED MASS SOIL(g):	98.56
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	52.68
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	46.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	43	22	1.64	0.01332	0.040	45.29
2	38	22	1.64	0.01332	0.030	40.22
4	33	22	1.64	0.01332	0.022	35.15
8	29	22	1.64	0.01332	0.016	31.09
15	27	22	1.64	0.01332	0.012	29.06
30	24	22	1.64	0.01332	0.009	26.02
60	22	22	1.64	0.01332	0.006	23.99
120	21	22	1.64	0.01332	0.004	22.97
240	19	22	1.64	0.01332	0.003	20.94
480	18	22	1.64	0.01332	0.002	19.93
1332	16	22	1.64	0.01332	0.001	17.90

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 213 SAMPLE NO: 6 PENETRATION, ft: 13.5

MATERIAL :OLIVE GRAY SILTY CLAY W/SAND POCKETS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	6	CORRECTED MASS SOIL(g):	77.16
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	23.45
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	69.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0811	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
2	56	22	1.64	0.01312	0.025	73.96
4	53	22	1.64	0.01312	0.018	70.11
8	48	22	1.64	0.01312	0.013	63.69
13	45	22	1.64	0.01312	0.011	59.84
30	40	22	1.64	0.01312	0.007	53.43
60	36	22	1.64	0.01312	0.005	48.29
120	32	22	1.64	0.01312	0.004	43.16
240	29	22	1.64	0.01312	0.003	39.31
480	26	22	1.64	0.01312	0.002	35.46
1330	23	21	1.95	0.01328	0.001	32.02

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 214 SAMPLE NO: 3 PENETRATION, ft: 9.5

MATERIAL :OLIVE GRAY,DARK GRAY SANDY CLAY W/SILT POCKETS

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	15	CORRECTED MASS SOIL(g):	77.71
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	30.36
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	60.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0956	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01282	---	----
2	50	24	1.02	0.01282	0.026	64.99
4	47	24	1.02	0.01282	0.019	61.17
8	45	24	1.02	0.01282	0.014	58.62
15	43	24	1.02	0.01282	0.010	56.07
30	40	24	1.02	0.01282	0.007	52.25
60	38	24	1.02	0.01282	0.005	49.70
120	35	24	1.02	0.01282	0.004	45.88
240	33	24	1.02	0.01282	0.003	43.33
434	30	24	1.02	0.01282	0.002	39.51
2813	24	22	1.64	0.01312	0.001	32.67

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 215 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY, W/SHELL FRAGMENTS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	81.21
TARE NO :	7	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	25.85
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	68.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	50	22	1.64	0.01332	0.054	63.59
1	44	22	1.64	0.01332	0.040	56.20
2	39	22	1.64	0.01332	0.030	50.04
4	35	22	1.64	0.01332	0.022	45.12
8	30	22	1.64	0.01332	0.016	38.96
13	28	22	1.64	0.01332	0.013	36.50
30	25	22	1.64	0.01332	0.008	32.80
60	23	22	1.64	0.01332	0.006	30.34
120	20	22	1.64	0.01332	0.004	26.65
240	19	22	1.64	0.01332	0.003	25.42
480	16	22	1.64	0.01332	0.002	21.72
1325	14	21	1.95	0.01348	0.001	19.64

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 215 SAMPLE NO: 2 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY CLAYEY SAND, SLIGHTLY SILTY, W/SHELL FRAGMENTS

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	9	CORRECTED MASS SOIL(g):	99.04
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	67.32
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	32.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0831	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	28	22	1.64	0.01332	0.046	29.93
2	25	22	1.64	0.01332	0.033	26.90
4	22	22	1.64	0.01332	0.024	23.87
8	21	22	1.64	0.01332	0.017	22.86
15	20	22	1.64	0.01332	0.012	21.85
30	19	22	1.64	0.01332	0.009	20.84
60	18	22	1.64	0.01332	0.006	19.83
120	17	22	1.64	0.01332	0.004	18.82
240	15	22	1.64	0.01332	0.003	16.80
480	14	23	1.33	0.01317	0.002	15.48
1319	13	22	1.64	0.01332	0.001	14.78

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 216 SAMPLE NO: 3 PENETRATION, ft: 5.5

MATERIAL :OLIVE GRAY,DARK GRAY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 9	CORRECTED MASS SOIL(g):	97.90
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	63.97
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	34.7
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-29-87	AMOUNT (g/liter):	40
STARTING TIME	: 0821	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	30	22	1.64	0.01332	0.032	32.32
4	29	22	1.64	0.01332	0.023	31.30
8	27	22	1.64	0.01332	0.016	29.25
15	26	22	1.64	0.01332	0.012	28.23
30	25	22	1.64	0.01332	0.008	27.21
60	24	22	1.64	0.01332	0.006	26.19
120	23	22	1.64	0.01332	0.004	25.17
240	22	22	1.64	0.01332	0.003	24.15
480	20	22	1.64	0.01332	0.002	22.10
1328	18	22	1.64	0.01332	0.001	20.06

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 216 SAMPLE NO: 6 PENETRATION, ft: 13.0

MATERIAL :OLIVE GRAY CLAYEY FINE SAND, SLIGHTLY SILTY

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	1	CORRECTED MASS SOIL(g):	79.29
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	43.05
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	45.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	38	22	1.64	0.01332	0.042	49.99
2	37	22	1.64	0.01332	0.030	48.73
4	36	22	1.64	0.01332	0.021	47.47
8	35	22	1.64	0.01332	0.015	46.21
13	34	22	1.64	0.01332	0.012	44.95
30	32	22	1.64	0.01332	0.008	42.43
60	30	22	1.64	0.01332	0.006	39.90
120	27	22	1.64	0.01332	0.004	36.12
240	25	22	1.64	0.01332	0.003	33.60
480	23	23	1.33	0.01317	0.002	30.68
1354	20	22	1.64	0.01332	0.001	27.29

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 219 SAMPLE NO: 3 PENETRATION, ft: 6.5

MATERIAL :DARK GRAY CLAYEY SAND, SLIGHTLY SILTY, W/MICA

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	2	CORRECTED MASS SOIL(g):	78.47
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	36.53
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	53.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0746	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	38	22	1.64	0.01332	0.030	50.52
4	36	22	1.64	0.01332	0.021	47.97
8	33	22	1.64	0.01332	0.016	44.15
13	32	22	1.64	0.01332	0.012	42.87
30	30	22	1.64	0.01332	0.008	40.32
60	28	22	1.64	0.01332	0.006	37.77
120	26	22	1.64	0.01332	0.004	35.22
240	24	22	1.64	0.01332	0.003	32.68
480	22	22	1.64	0.01332	0.002	30.13
1358	19	22	1.64	0.01332	0.001	26.30

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 219 SAMPLE NO: 4 PENETRATION, ft: 9.5

MATERIAL :DARK GRAY CLAYEY SAND,SLIGHTLY SILTY, W/CLAY POCKETS

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	14	CORRECTED MASS SOIL(g):	85.56
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	41.64
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	51.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-25-87	AMOUNT (g/liter):	40
STARTING TIME :	0951	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
2	42	24	1.02	0.01301	0.028	50.28
4	38	24	1.02	0.01301	0.021	45.60
8	35	24	1.02	0.01301	0.015	42.09
15	32	24	1.02	0.01301	0.011	38.59
30	30	24	1.02	0.01301	0.008	36.25
60	27	24	1.02	0.01301	0.006	32.74
120	25	24	1.02	0.01301	0.004	30.41
240	23	24	1.02	0.01301	0.003	28.07
438	22	24	1.02	0.01301	0.002	26.90
2817	17	22	1.64	0.01332	0.001	21.79

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

HYDROMETER ANALYSIS

TEST DATE : 12-2-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 220 SAMPLE NO: 2 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY CLAYEY SILT W/MICA

TESTED BY : DC DATE:12-2-87

CHECKED BY: DC DATE:12-4-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	85.59
TARE NO :	14	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
DRY SOIL + TARE(g):		OVER NO. 200 SIEVE (g):	1.48
TARE(g) :		% PASSING NO.200 SIEVE:	98.3
CORRECTION FACTOR :			
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-2-87	AMOUNT (g/liter):	40
STARTING TIME :	0951	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		21	1.95	0.01328	---	----
0.5	>60	21	1.95	0.01328		
1	>60	21	1.95	0.01328		
2	56	21	1.95	0.01328	0.025	67.03
4	45	21	1.95	0.01328	0.020	54.31
8	34	21	1.95	0.01328	0.015	41.59
15	28	21	1.95	0.01328	0.012	34.65
30	23	21	1.95	0.01328	0.009	28.86
60	20	21	1.95	0.01328	0.006	25.39
120	19	21	1.95	0.01328	0.004	24.24
240	17	22	1.64	0.01312	0.003	21.56
390	16	22	1.64	0.01312	0.002	20.40
1358	15	21	1.95	0.01328	0.001	19.61

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 220 SAMPLE NO: 5 PENETRATION, ft: 10.0

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

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 12	CORRECTED MASS SOIL(g):	90.96
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	44.91
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	50.6
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-25-87	AMOUNT (g/liter):	40
STARTING TIME	: 0941	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01301	---	----
1	45	24	1.02	0.01301	0.039	50.59
2	42	24	1.02	0.01301	0.028	47.29
4	38	24	1.02	0.01301	0.021	42.89
8	35	24	1.02	0.01301	0.015	39.60
16.5	32	24	1.02	0.01301	0.011	36.30
30	30	24	1.02	0.01301	0.008	34.10
60	27	24	1.02	0.01301	0.006	30.80
120	25	24	1.02	0.01301	0.004	28.60
240	23	24	1.02	0.01301	0.003	26.40
447	22	24	1.02	0.01301	0.002	25.30
2826	17	22	1.64	0.01332	0.001	20.49

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 222 SAMPLE NO: 1 PENETRATION, ft: 1.0

MATERIAL :OLIVE GRAY CLAYEY SILT, SLIGHTLY SANDY, W/MICA

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	8	CORRECTED MASS SOIL(g):	77.29
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	9.77
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	87.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0826	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	58	22	1.64	0.01312	0.048	76.39
1	48	22	1.64	0.01312	0.038	63.58
3	31	22	1.64	0.01312	0.025	41.81
4	27	22	1.64	0.01312	0.023	36.69
8	22	22	1.64	0.01312	0.017	30.28
15	20	22	1.64	0.01312	0.012	27.72
30	18	22	1.64	0.01312	0.009	25.16
60	17	22	1.64	0.01312	0.006	23.88
120	16	22	1.64	0.01312	0.004	22.60
240	15	22	1.64	0.01312	0.003	21.31
480	13	23	1.33	0.01297	0.002	18.35
1323	13	22	1.64	0.01312	0.001	18.75

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 222 SAMPLE NO: 5 PENETRATION, ft: 9.0

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 10	CORRECTED MASS SOIL(g):	100.31
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	55.12
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	45.1
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-19-87	AMOUNT (g/liter):	40
STARTING TIME	: 0821	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	40	22	1.64	0.01332	0.041	41.51
2	32	22	1.64	0.01332	0.031	33.54
4	26	22	1.64	0.01332	0.023	27.56
8	22	22	1.64	0.01332	0.017	23.57
15	21	22	1.64	0.01332	0.012	22.57
30	20	22	1.64	0.01332	0.009	21.57
60	19	22	1.64	0.01332	0.006	20.58
120	18	22	1.64	0.01332	0.004	19.58
224	17	22	1.64	0.01332	0.003	18.58
459	17	23	1.33	0.01317	0.002	18.27
1336	16	20	2.27	0.01365	0.001	18.21

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

HYDROMETER ANALYSIS

TEST DATE :11-25-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 222 SAMPLE NO: 8 PENETRATION, ft: 17.0

MATERIAL :OLIVE GRAY,DARK GRAY SANDY CLAY W/SHELL FRAGS & SILT POCKETS

TESTED BY : DC DATE:11-25-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 13	CORRECTED MASS SOIL(g):	83.06
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	26.96
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	67.5
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-25-87	AMOUNT (g/liter):	40
STARTING TIME	: 0946	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		24	1.02	0.01282	---	----
1	57	24	1.02	0.01282	0.034	69.15
2	55	24	1.02	0.01282	0.024	66.77
4	52	24	1.02	0.01282	0.018	63.19
8	49	24	1.02	0.01282	0.013	59.61
15	47	24	1.02	0.01282	0.010	57.23
30	45	24	1.02	0.01282	0.007	54.85
60	42	24	1.02	0.01282	0.005	51.27
120	38	24	1.02	0.01282	0.004	46.50
240	35	24	1.02	0.01282	0.003	42.93
443	33	24	1.02	0.01282	0.002	40.54
2821	26	22	1.64	0.01312	0.001	32.95

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 223 SAMPLE NO: 4 PENETRATION, ft: 8.0

MATERIAL :OLIVE GRAY,DARK GRAY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	11	CORRECTED MASS SOIL(g):	99.50
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	74.81
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	24.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0926	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	22	22	1.64	0.01332	0.034	23.76
4	20	22	1.64	0.01332	0.024	21.75
8	19	22	1.64	0.01332	0.017	20.74
16.5	18	22	1.64	0.01332	0.012	19.74
30	17	22	1.64	0.01332	0.009	18.73
60	16	22	1.64	0.01332	0.006	17.73
120	15	22	1.64	0.01332	0.005	16.72
240	14	22	1.64	0.01332	0.003	15.72
394	13	22	1.64	0.01332	0.003	14.71
1400	12	22	1.64	0.01332	0.001	13.71

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 224 SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL :DARK GRAY CLAYEY SAND, SLIGHTLY SILTY, W/ORGANICS

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 5	CORRECTED MASS SOIL(g):	80.26
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	36.19
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	54.9
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-30-87	AMOUNT (g/liter):	40
STARTING TIME	: 0811	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	39	22	1.64	0.01332	0.042	50.64
2	34	22	1.64	0.01332	0.031	44.41
4	30	22	1.64	0.01332	0.022	39.42
8	28	22	1.64	0.01332	0.016	36.93
13	27	22	1.64	0.01332	0.013	35.68
30	24	22	1.64	0.01332	0.009	31.95
60	22	22	1.64	0.01332	0.006	29.46
120	21	22	1.64	0.01332	0.004	28.21
240	19	22	1.64	0.01332	0.003	25.72
480	17	23	1.33	0.01317	0.002	22.84
1336	15	22	1.64	0.01332	0.001	20.73

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 224 SAMPLE NO: 2 PENETRATION, ft: 3.5

MATERIAL :OLIVE GRAY FINE SAND

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 9	CORRECTED MASS SOIL(g):	102.37
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	78.93
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	22.9
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-19-87	AMOUNT (g/liter):	40
STARTING TIME	: 0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	19	22	1.64	0.01332	0.034	20.16
4	17	22	1.64	0.01332	0.024	18.21
8	13	22	1.64	0.01332	0.018	14.30
15	11	22	1.64	0.01332	0.013	12.35
30	10	22	1.64	0.01332	0.009	11.37
60	10	22	1.64	0.01332	0.007	11.37
120	9	22	1.64	0.01332	0.005	10.39
228	9	22	1.64	0.01332	0.003	10.39
463	8	23	1.33	0.01317	0.002	9.11
1343	7	20	2.27	0.01365	0.001	9.05

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 224 SAMPLE NO: 5 PENETRATION, ft: 10.5

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

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 2	CORRECTED MASS SOIL(g):	89.67
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	52.81
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	41.1
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 12-1-87	AMOUNT (g/liter):	40
STARTING TIME	: 0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	34	22	1.64	0.01332	0.031	39.75
4	30	22	1.64	0.01332	0.022	35.29
8	28	22	1.64	0.01332	0.016	33.06
13	26	22	1.64	0.01332	0.013	30.82
30	24	22	1.64	0.01332	0.009	28.59
60	22	22	1.64	0.01332	0.006	26.36
120	20	22	1.64	0.01332	0.004	24.13
240	19	22	1.64	0.01332	0.003	23.02
480	17	22	1.64	0.01332	0.002	20.79
1347	15	21	1.95	0.01348	0.001	18.91

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 224 SAMPLE NO: 8 PENETRATION, ft: 18.5

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	1	CORRECTED MASS SOIL(g):	89.28
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	30.76
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	65.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0746	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	53	23	1.33	0.01317	0.051	60.85
1	45	23	1.33	0.01317	0.039	51.89
2	42	23	1.33	0.01317	0.029	48.53
4	39	23	1.33	0.01317	0.021	45.17
8	38	23	1.33	0.01317	0.015	44.05
13	36	23	1.33	0.01317	0.012	41.81
30	33	23	1.33	0.01317	0.008	38.45
60	31	23	1.33	0.01317	0.006	36.21
135	29	24	1.02	0.01301	0.004	33.62
240	26	24	1.02	0.01301	0.003	30.26
480	24	24	1.02	0.01301	0.002	28.02
1351	21	24	1.02	0.01301	0.001	24.66

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 226 SAMPLE NO: 4 PENETRATION, ft: 8.5

MATERIAL :OLIVE GRAY,DARK GRAY SILTY CLAY W/SAND POCKETS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	4	CORRECTED MASS SOIL(g):	76.53
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	26.58
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	65.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
2	50	22	1.64	0.01312	0.026	66.80
4	47	22	1.64	0.01312	0.019	62.92
8	42	22	1.64	0.01312	0.014	56.45
13	39	22	1.64	0.01312	0.011	52.57
30	35	22	1.64	0.01312	0.008	47.40
60	32	22	1.64	0.01312	0.006	43.52
120	30	22	1.64	0.01312	0.004	40.93
240	27	22	1.64	0.01312	0.003	37.05
480	24	22	1.64	0.01312	0.002	33.17
1339	21	21	1.95	0.01328	0.001	29.69

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

HYDROMETER ANALYSIS

TEST DATE :11-28-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 226 SAMPLE NO: 6 PENETRATION, ft: 13.5

MATERIAL :OLIVE GRAY,DARK GRAY CLAYEY SAND, SLIGHTLY SILTY

TESTED BY : DC DATE:11-28-87

CHECKED BY: DC DATE:11-30-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	13	CORRECTED MASS SOIL(g):	90.08
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.81
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	44.7
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-28-87	AMOUNT (g/liter):	40
STARTING TIME :	0931	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		20	2.27	0.01365	---	----
2	35	20	2.27	0.01365	0.031	41.37
4	32	20	2.27	0.01365	0.023	38.04
8	30	20	2.27	0.01365	0.016	35.82
15	28	20	2.27	0.01365	0.012	33.60
30	26	20	2.27	0.01365	0.009	31.38
60	25	20	2.27	0.01365	0.006	30.27
120	24	20	2.27	0.01365	0.004	29.16
240	22	20	2.27	0.01365	0.003	26.94
423	20	21	1.95	0.01348	0.002	24.37
1383	18	22	1.64	0.01332	0.001	21.80

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 226 SAMPLE NO: 7 PENETRATION, ft: 15.5

MATERIAL :OLIVE GRAY SILTY FINE SAND

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	8	CORRECTED MASS SOIL(g):	100.77
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	64.57
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	35.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-19-87	AMOUNT (g/liter):	40
STARTING TIME :	0811	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	32	22	1.64	0.01332	0.063	33.38
1	18	22	1.64	0.01332	0.049	19.49
2	12	22	1.64	0.01332	0.036	13.54
4	10	22	1.64	0.01332	0.026	11.55
8	10	22	1.64	0.01332	0.018	11.55
15	9	22	1.64	0.01332	0.013	10.56
30	9	22	1.64	0.01332	0.009	10.56
60	9	22	1.64	0.01332	0.007	10.56
120	8	22	1.64	0.01332	0.005	9.57
232	8	22	1.64	0.01332	0.003	9.57
467	8	23	1.33	0.01317	0.002	9.26
1340	7	20	2.27	0.01365	0.001	9.19

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 227 SAMPLE NO: 5 PENETRATION, ft: 9.5

MATERIAL :OLIVE GRAY SILTY CLAY W/SAND POCKETS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	2	CORRECTED MASS SOIL(g):	78.38
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	24.83
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	68.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
2	54	23	1.33	0.01317	0.025	70.59
4	52	23	1.33	0.01317	0.018	68.04
8	49	23	1.33	0.01317	0.013	64.21
13	47	23	1.33	0.01317	0.011	61.66
30	43	23	1.33	0.01317	0.007	56.56
60	39	23	1.33	0.01317	0.005	51.45
131	36	24	1.02	0.01301	0.004	47.23
240	32	24	1.02	0.01301	0.003	42.12
480	30	24	1.02	0.01301	0.002	39.57
1347	26	24	1.02	0.01301	0.001	34.47

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 227 SAMPLE NO: 6 PENETRATION, ft: 12.0

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

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 7	CORRECTED MASS SOIL(g):	102.38
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	64.61
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	36.9
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-19-87	AMOUNT (g/liter):	40
STARTING TIME	: 0806	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	36	22	1.64	0.01332	0.043	36.77
2	30	22	1.64	0.01332	0.032	30.91
4	26	22	1.64	0.01332	0.023	27.00
8	22	22	1.64	0.01332	0.017	23.09
15	20	22	1.64	0.01332	0.012	21.14
30	19	22	1.64	0.01332	0.009	20.16
60	17	22	1.64	0.01332	0.006	18.21
120	16	22	1.64	0.01332	0.005	17.23
236	16	22	1.64	0.01332	0.003	17.23
471	15	23	1.33	0.01317	0.002	15.95
1344	14	20	2.27	0.01365	0.001	15.89

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 228 SAMPLE NO: 7 PENETRATION, ft: 17.0

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

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 3	CORRECTED MASS SOIL(g):	89.97
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	44.48
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	50.6
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-24-87	AMOUNT (g/liter):	40
STARTING TIME	: 0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
1	43	23	1.33	0.01317	0.040	49.27
2	41	23	1.33	0.01317	0.029	47.05
4	40	23	1.33	0.01317	0.021	45.94
8	39	23	1.33	0.01317	0.015	44.82
13	38	23	1.33	0.01317	0.012	43.71
30	36	23	1.33	0.01317	0.008	41.49
60	34	23	1.33	0.01317	0.006	39.27
127	32	24	1.02	0.01301	0.004	36.70
240	30	24	1.02	0.01301	0.003	34.47
480	28	24	1.02	0.01301	0.002	32.25
1343	25	24	1.02	0.01301	0.001	28.92

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 229 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	101.64
TARE NO :	6	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.16
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	51.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-19-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	47	22	1.64	0.01332	0.055	47.86
1	35	22	1.64	0.01332	0.043	36.05
2	25	22	1.64	0.01332	0.033	26.21
4	19	22	1.64	0.01332	0.024	20.31
8	17	22	1.64	0.01332	0.017	18.34
15	16	22	1.64	0.01332	0.013	17.36
30	15	22	1.64	0.01332	0.009	16.37
60	14	22	1.64	0.01332	0.006	15.39
120	13	22	1.64	0.01332	0.005	14.40
240	13	22	1.64	0.01332	0.003	14.40
475	12	23	1.33	0.01317	0.002	13.11
1348	11	20	2.27	0.01365	0.001	13.05

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 229 SAMPLE NO: 2 PENETRATION, ft: 3.5

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	4	CORRECTED MASS SOIL(g):	102.39
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	48.12
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	53.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
2	57	23	1.33	0.01317	0.025	56.97
4	56	23	1.33	0.01317	0.018	55.99
8	52	23	1.33	0.01317	0.013	52.08
13	49	23	1.33	0.01317	0.011	49.15
30	44	23	1.33	0.01317	0.007	44.27
60	40	23	1.33	0.01317	0.005	40.36
123	37	24	1.02	0.01301	0.004	37.13
240	34	24	1.02	0.01301	0.003	34.20
480	30	24	1.02	0.01301	0.002	30.29
1339	27	24	1.02	0.01301	0.001	27.36

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 232 SAMPLE NO: 7 PENETRATION, ft: 17.0

MATERIAL :OLIVE GRAY SILTY CLAY W/SAND POCKETS

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	5	CORRECTED MASS SOIL(g):	92.51
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	23.22
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	74.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-19-87	AMOUNT (g/liter):	40
STARTING TIME :	0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	>60	22	1.64	0.01332		
1	53	22	1.64	0.01332	0.037	59.06
2	48	22	1.64	0.01332	0.027	53.66
4	45	22	1.64	0.01332	0.020	50.42
8	42	22	1.64	0.01332	0.014	47.17
15	40	22	1.64	0.01332	0.011	45.01
30	37	22	1.64	0.01332	0.008	41.77
60	35	22	1.64	0.01332	0.006	39.61
120	33	22	1.64	0.01332	0.004	37.45
224	32	22	1.64	0.01332	0.003	36.36
464	29	23	1.33	0.01317	0.002	32.78
1324	27	20	2.27	0.01365	0.001	31.64

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 233 SAMPLE NO: 2 PENETRATION, ft: 1.5

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

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.58
TARE NO :	4	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	51.36
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	48.9
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-19-87	AMOUNT (g/liter):	40
STARTING TIME :	0751	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	43	22	1.64	0.01332	0.057	44.38
1	28	22	1.64	0.01332	0.046	29.47
2	19	22	1.64	0.01332	0.034	20.52
4	17	22	1.64	0.01332	0.024	18.53
8	15	22	1.64	0.01332	0.017	16.54
15	14	22	1.64	0.01332	0.013	15.55
30	13	22	1.64	0.01332	0.009	14.56
60	13	22	1.64	0.01332	0.006	14.56
120	12	22	1.64	0.01332	0.005	13.56
228	11	22	1.64	0.01332	0.003	12.57
468	11	23	1.33	0.01317	0.002	12.26
1328	10	20	2.27	0.01365	0.001	12.19

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 233 SAMPLE NO: 3 PENETRATION, ft: 6.0

MATERIAL :OLIVE GRAY SANDY SILT W/ORGANICS

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.71
TARE NO	: 3	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
DRY SOIL + TARE(g):		OVER NO. 200 SIEVE (g):	43.87
TARE(g)	:	% PASSING NO.200 SIEVE:	56.4
CORRECTION FACTOR :			
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-19-87	AMOUNT (g/liter):	40
STARTING TIME	: 0746	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	43	22	1.64	0.01332	0.057	44.33
1	23	22	1.64	0.01332	0.047	24.47
2	14	22	1.64	0.01332	0.035	15.53
4	12	22	1.64	0.01332	0.025	13.54
8	11	22	1.64	0.01332	0.018	12.55
15	11	22	1.64	0.01332	0.013	12.55
30	11	22	1.64	0.01332	0.009	12.55
60	10	22	1.64	0.01332	0.007	11.56
120	10	22	1.64	0.01332	0.005	11.56
232	10	22	1.64	0.01332	0.003	11.56
472	9	23	1.33	0.01317	0.002	10.26
1332	9	20	2.27	0.01365	0.001	11.19

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 233 SAMPLE NO: 5 PENETRATION, ft: 11.0

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

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 5	CORRECTED MASS SOIL(g):	101.71
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	72.84
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	28.4
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-24-87	AMOUNT (g/liter):	40
STARTING TIME	: 0806	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
1	33	23	1.33	0.01317	0.043	33.75
2	32	23	1.33	0.01317	0.031	32.77
4	32	23	1.33	0.01317	0.022	32.77
8	31	23	1.33	0.01317	0.016	31.78
13	30	23	1.33	0.01317	0.012	30.80
30	28	23	1.33	0.01317	0.008	28.84
60	26	23	1.33	0.01317	0.006	26.87
119	25	24	1.02	0.01301	0.004	25.58
240	23	24	1.02	0.01301	0.003	23.61
480	21	24	1.02	0.01301	0.002	21.65
1335	19	24	1.02	0.01301	0.001	19.68

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 237 SAMPLE NO: 4 PENETRATION, ft: 9.0

MATERIAL :OLIVE GRAY,DARK GRAY SILTY CLAY W/SAND POCKETS & ORGANICS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	1	CORRECTED MASS SOIL(g):	90.20
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	31.77
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	64.8
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0741	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
1	51	22	1.64	0.01312	0.037	57.78
2	45	22	1.64	0.01312	0.028	51.19
4	40	22	1.64	0.01312	0.020	45.70
8	37	22	1.64	0.01312	0.015	42.41
13	35	22	1.64	0.01312	0.012	40.22
30	32	22	1.64	0.01312	0.008	36.92
60	29	22	1.64	0.01312	0.006	33.63
120	27	22	1.64	0.01312	0.004	31.43
240	24	22	1.64	0.01312	0.003	28.14
480	22	22	1.64	0.01312	0.002	25.95
1362	19	22	1.64	0.01312	0.001	22.65

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

HYDROMETER ANALYSIS

TEST DATE :12-1-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 241 SAMPLE NO: 8 PENETRATION, ft: 19.0

MATERIAL :OLIVE GRAY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:12-1-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	97.59
TARE NO :	5	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	61.93
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	36.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	12-1-87	AMOUNT (g/liter):	40
STARTING TIME :	0806	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	36	22	1.64	0.01332	0.043	38.57
2	35	22	1.64	0.01332	0.031	37.55
4	35	22	1.64	0.01332	0.022	37.55
8	34	22	1.64	0.01332	0.015	36.52
13	33	22	1.64	0.01332	0.012	35.50
30	32	22	1.64	0.01332	0.008	34.47
60	30	22	1.64	0.01332	0.006	32.42
120	29	22	1.64	0.01332	0.004	31.40
240	27	22	1.64	0.01332	0.003	29.35
480	25	22	1.64	0.01332	0.002	27.30
1334	22	21	1.95	0.01348	0.001	24.54

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 245 SAMPLE NO: 2 PENETRATION, ft: 2.5

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

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 2	CORRECTED MASS SOIL(g):	81.20
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	41.34
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	49.1
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-30-87	AMOUNT (g/liter):	40
STARTING TIME	: 0756	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	37	22	1.64	0.01332	0.043	47.59
2	32	22	1.64	0.01332	0.031	41.43
4	30	22	1.64	0.01332	0.022	38.97
8	28	22	1.64	0.01332	0.016	36.50
13	26	22	1.64	0.01332	0.013	34.04
30	24	22	1.64	0.01332	0.009	31.58
60	22	22	1.64	0.01332	0.006	29.11
120	21	22	1.64	0.01332	0.004	27.88
240	19	22	1.64	0.01332	0.003	25.42
480	18	23	1.33	0.01317	0.002	23.80
1349	16	22	1.64	0.01332	0.001	21.72

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 245 SAMPLE NO: 7 PENETRATION, ft: 15.5

MATERIAL :OLIVE GRAY SILTY FINE SAND, SLIGHTLY CLAYEY

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 2	CORRECTED MASS SOIL(g):	100.90
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	64.25
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	36.3
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-19-87	AMOUNT (g/liter):	40
STARTING TIME	: 0741	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	26	22	1.64	0.01332	0.046	27.39
2	21	22	1.64	0.01332	0.034	22.44
4	20	22	1.64	0.01332	0.024	21.45
8	18	22	1.64	0.01332	0.017	19.47
13	17	22	1.64	0.01332	0.014	18.47
30	16	22	1.64	0.01332	0.009	17.48
60	15	22	1.64	0.01332	0.006	16.49
120	14	22	1.64	0.01332	0.005	15.50
236	13	22	1.64	0.01332	0.003	14.51
476	12	23	1.33	0.01317	0.002	13.21
1336	12	20	2.27	0.01365	0.001	14.14

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 247 SAMPLE NO: 4 PENETRATION, ft: 7.0

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

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 6	CORRECTED MASS SOIL(g):	100.41
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	68.46
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	31.8
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-24-87	AMOUNT (g/liter):	40
STARTING TIME	: 0811	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
1	33	23	1.33	0.01317	0.043	34.19
2	31	23	1.33	0.01317	0.031	32.20
4	30	23	1.33	0.01317	0.022	31.20
8	28	23	1.33	0.01317	0.016	29.21
13	26	23	1.33	0.01317	0.013	27.22
30	25	23	1.33	0.01317	0.008	26.22
60	23	23	1.33	0.01317	0.006	24.23
130	22	24	1.02	0.01301	0.004	22.92
240	20	24	1.02	0.01301	0.003	20.93
480	19	24	1.02	0.01301	0.002	19.93
1347	16	24	1.02	0.01301	0.001	16.95

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

HYDROMETER ANALYSIS

TEST DATE :11-19-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 247 SAMPLE NO: 5 PENETRATION, ft: 9.5

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

TESTED BY : DC DATE:11-19-87

CHECKED BY: DC DATE:11-27-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	1	CORRECTED MASS SOIL(g):	101.25
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	52.38
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	48.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-19-87	AMOUNT (g/liter):	40
STARTING TIME :	0736	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	45	22	1.64	0.01332	0.028	46.06
4	42	22	1.64	0.01332	0.020	43.10
8	39	22	1.64	0.01332	0.015	40.14
15	37	22	1.64	0.01332	0.011	38.16
30	35	22	1.64	0.01332	0.008	36.19
60	33	22	1.64	0.01332	0.006	34.21
120	31	22	1.64	0.01332	0.004	32.24
240	29	22	1.64	0.01332	0.003	30.26
480	27	23	1.33	0.01317	0.002	27.98
1340	25	20	2.27	0.01365	0.001	26.93

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 249 SAMPLE NO: 3 PENETRATION, ft: 4.5

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.03
TARE NO :	1	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	46.73
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	53.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-18-87	AMOUNT (g/liter):	40
STARTING TIME :	0640	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	48	22	1.64	0.01332	0.055	49.63
1	45	22	1.64	0.01332	0.040	46.63
2	42	22	1.64	0.01332	0.029	43.63
4	37	22	1.64	0.01332	0.021	38.63
8	35	22	1.64	0.01332	0.015	36.63
13	32	22	1.64	0.01332	0.012	33.63
30	30	22	1.64	0.01332	0.008	31.63
60	28	22	1.64	0.01332	0.006	29.63
120	27	22	1.64	0.01332	0.004	28.63
240	25	22	1.64	0.01332	0.003	26.63
480	23	22	1.64	0.01332	0.002	24.63
1396	21	22	1.64	0.01332	0.001	22.63

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 249 SAMPLE NO: 4 PENETRATION, ft: 7.5

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

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 2	CORRECTED MASS SOIL(g):	100.17
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	52.48
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.6
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-18-87	AMOUNT (g/liter):	40
STARTING TIME	: 0645	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	40	22	1.64	0.01332	0.059	41.57
1	32	22	1.64	0.01332	0.044	33.58
2	28	22	1.64	0.01332	0.032	29.59
4	25	22	1.64	0.01332	0.023	26.60
8	24	22	1.64	0.01332	0.017	25.60
13	22	22	1.64	0.01332	0.013	23.60
30	21	22	1.64	0.01332	0.009	22.60
60	20	22	1.64	0.01332	0.006	21.60
122	19	22	1.64	0.01332	0.004	20.61
240	18	22	1.64	0.01332	0.003	19.61
476	17	22	1.64	0.01332	0.002	18.61
1392	16	22	1.64	0.01332	0.001	17.61

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

HYDROMETER ANALYSIS

TEST DATE :11-29-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 249 SAMPLE NO: 5 PENETRATION, ft: 9.5

MATERIAL :DARK GRAY SANDY SILT W/CLAY & SHELL FRAGMENTS

TESTED BY : DC DATE:11-29-87

CHECKED BY: DC DATE:12-1-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	7	CORRECTED MASS SOIL(g):	83.85
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	29.90
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	64.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-29-87	AMOUNT (g/liter):	40
STARTING TIME :	0811	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
1	42	22	1.64	0.01312	0.040	51.53
2	37	22	1.64	0.01312	0.030	45.62
4	33	22	1.64	0.01312	0.022	40.90
8	30	22	1.64	0.01312	0.016	37.36
13	28	22	1.64	0.01312	0.012	35.00
30	26	22	1.64	0.01312	0.008	32.63
60	24	22	1.64	0.01312	0.006	30.27
120	22	22	1.64	0.01312	0.004	27.91
240	21	22	1.64	0.01312	0.003	26.73
480	19	22	1.64	0.01312	0.002	24.37
1336	17	22	1.64	0.01312	0.001	22.01

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 250 SAMPLE NO: 3 PENETRATION, ft: 4.5

MATERIAL :DARK GRAY CLAYEY SAND, SLIGHTLY SILTY, W/SHELL FRAGMENTS

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	3	CORRECTED MASS SOIL(g):	101.96
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	98.2
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	53.60
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-18-87	AMOUNT (g/liter):	40
STARTING TIME :	0650	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	46	22	1.64	0.01332	0.056	46.72
1	40	22	1.64	0.01332	0.041	40.84
2	39	22	1.64	0.01332	0.030	39.86
4	35	22	1.64	0.01332	0.022	35.94
8	34	22	1.64	0.01332	0.015	34.96
15	32	22	1.64	0.01332	0.011	32.99
30	30	22	1.64	0.01332	0.008	31.03
60	28	22	1.64	0.01332	0.006	29.07
120	26	22	1.64	0.01332	0.004	27.11
240	24	22	1.64	0.01332	0.003	25.15
472	23	22	1.64	0.01332	0.002	24.17
1388	21	22	1.64	0.01332	0.001	22.21

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 253 SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	100.11
TARE NO :	5	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	52.61
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	47.4
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-18-87	AMOUNT (g/liter):	40
STARTING TIME :	0700	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	40	22	1.64	0.01332	0.059	41.59
1	31	22	1.64	0.01332	0.045	32.60
2	26	22	1.64	0.01332	0.033	27.61
4	23	22	1.64	0.01332	0.024	24.61
8	21	22	1.64	0.01332	0.017	22.62
15	20	22	1.64	0.01332	0.012	21.62
30	19	22	1.64	0.01332	0.009	20.62
60	18	22	1.64	0.01332	0.006	19.62
120	17	22	1.64	0.01332	0.004	18.62
240	16	22	1.64	0.01332	0.003	17.62
464	15	22	1.64	0.01332	0.002	16.62
1380	14	22	1.64	0.01332	0.001	15.62

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 253 SAMPLE NO: 2 PENETRATION, ft: 5.0

MATERIAL :OLIVE GRAY SANDY SILT, SLIGHTLY CLAYEY, W/SHELL FRAGMENTS,MICA

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 4	CORRECTED MASS SOIL(g):	75.52
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	17.86
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	76.4
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-30-87	AMOUNT (g/liter):	40
STARTING TIME	: 0806	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5	48	22	1.64	0.01312	0.054	65.07
1	32	22	1.64	0.01312	0.044	44.10
2	21	22	1.64	0.01312	0.033	29.68
4	17	22	1.64	0.01312	0.024	24.44
8	15	22	1.64	0.01312	0.017	21.81
13	14	22	1.64	0.01312	0.014	20.50
35	13	22	1.64	0.01312	0.008	19.19
60	13	22	1.64	0.01312	0.006	19.19
120	12	22	1.64	0.01312	0.005	17.88
240	12	22	1.64	0.01312	0.003	17.88
480	11	23	1.33	0.01297	0.002	16.16
1341	10	22	1.64	0.01312	0.001	15.26

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 254 SAMPLE NO: 2 PENETRATION, ft: 8.5

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

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	6	CORRECTED MASS SOIL(g):	100.98
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	44.92
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	55.5
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-18-87	AMOUNT (g/liter):	40
STARTING TIME :	0705	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	50	22	1.64	0.01332	0.054	51.14
1	40	22	1.64	0.01332	0.041	41.24
2	31	22	1.64	0.01332	0.032	32.32
4	28	22	1.64	0.01332	0.023	29.35
8	26	22	1.64	0.01332	0.016	27.37
15	24	22	1.64	0.01332	0.012	25.39
30	22	22	1.64	0.01332	0.009	23.41
60	21	22	1.64	0.01332	0.006	22.42
120	20	22	1.64	0.01332	0.004	21.43
240	19	22	1.64	0.01332	0.003	20.44
480	17	22	1.64	0.01332	0.002	18.46
1402	16	22	1.64	0.01332	0.001	17.47

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 255 SAMPLE NO: 1 PENETRATION, ft: 3.0

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

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	7	CORRECTED MASS SOIL(g):	97.83
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	39.96
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	59.2
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-18-87	AMOUNT (g/liter):	40
STARTING TIME :	0710	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	55	22	1.64	0.01332	0.036	57.90
2	50	22	1.64	0.01332	0.027	52.79
4	46	22	1.64	0.01332	0.020	48.70
8	42	22	1.64	0.01332	0.014	44.61
15	39	22	1.64	0.01332	0.011	41.54
30	37	22	1.64	0.01332	0.008	39.50
60	34	22	1.64	0.01332	0.006	36.43
120	32	22	1.64	0.01332	0.004	34.39
240	30	22	1.64	0.01332	0.003	32.34
476	28	22	1.64	0.01332	0.002	30.30
1398	25	22	1.64	0.01332	0.001	27.23

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

HYDROMETER ANALYSIS

TEST DATE :11-24-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 255 SAMPLE NO: 2 PENETRATION, ft: 8.0

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-24-87

CHECKED BY: DC DATE:11-28-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	7	CORRECTED MASS SOIL(g):	81.49
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	29.37
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	64.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-24-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		23	1.33	0.01317	---	----
0.5	50	23	1.33	0.01317	0.053	62.99
1	45	23	1.33	0.01317	0.039	56.85
2	41	23	1.33	0.01317	0.029	51.94
4	36	23	1.33	0.01317	0.021	45.81
8	33	23	1.33	0.01317	0.015	42.13
15	31	23	1.33	0.01317	0.011	39.67
30	28	23	1.33	0.01317	0.008	35.99
60	25	23	1.33	0.01317	0.006	32.31
126	23	24	1.02	0.01301	0.004	29.47
240	21	24	1.02	0.01301	0.003	27.02
480	19	24	1.02	0.01301	0.002	24.56
1343	17	24	1.02	0.01301	0.001	22.11

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : 257 SAMPLE NO: 2 PENETRATION, ft: 5.0

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 8	CORRECTED MASS SOIL(g):	100.45
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	65.80
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	34.5
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-18-87	AMOUNT (g/liter):	40
STARTING TIME	: 0715	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	26	22	1.64	0.01332	0.046	27.52
2	24	22	1.64	0.01332	0.033	25.53
4	23	22	1.64	0.01332	0.024	24.53
8	21	22	1.64	0.01332	0.017	22.54
15	20	22	1.64	0.01332	0.012	21.54
30	19	22	1.64	0.01332	0.009	20.55
60	18	22	1.64	0.01332	0.006	19.55
121	17	22	1.64	0.01332	0.004	18.56
240	16	22	1.64	0.01332	0.003	17.56
472	15	22	1.64	0.01332	0.002	16.57
1394	14	22	1.64	0.01332	0.001	15.57

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : A SAMPLE NO: 1 PENETRATION, ft: 1.0

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

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	89.47
TARE NO :	6	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	37.55
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	58.0
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0816	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	47	22	1.64	0.01332	0.055	54.37
1	37	22	1.64	0.01332	0.043	43.19
2	31	22	1.64	0.01332	0.032	36.48
4	26	22	1.64	0.01332	0.023	30.89
8	23	22	1.64	0.01332	0.017	27.54
12	22	22	1.64	0.01332	0.014	26.42
30	20	22	1.64	0.01332	0.009	24.19
60	19	22	1.64	0.01332	0.006	23.07
120	17	22	1.64	0.01332	0.004	20.83
240	16	22	1.64	0.01332	0.003	19.72
480	14	23	1.33	0.01317	0.002	17.13
1332	13	22	1.64	0.01332	0.001	16.36

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : A SAMPLE NO: 2 PENETRATION, ft: 5.0

MATERIAL :OLIVE GRAY SANDY SILT W/CLAY POCKETS

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 9	CORRECTED MASS SOIL(g):	100.19
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	25.34
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	74.7
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-18-87	AMOUNT (g/liter):	40
STARTING TIME	: 0720	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R′	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
0.5	55	22	1.64	0.01332	0.051	56.53
1	43	22	1.64	0.01332	0.040	44.56
2	33	22	1.64	0.01332	0.031	34.57
4	28	22	1.64	0.01332	0.023	29.58
8	25	22	1.64	0.01332	0.016	26.59
15	23	22	1.64	0.01332	0.012	24.59
30	21	22	1.64	0.01332	0.009	22.60
60	20	22	1.64	0.01332	0.006	21.60
120	18	22	1.64	0.01332	0.004	19.60
240	17	22	1.64	0.01332	0.003	18.61
468	16	22	1.64	0.01332	0.002	17.61
1390	15	22	1.64	0.01332	0.001	16.61

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : D SAMPLE NO: 1 PENETRATION, ft: 1.5

MATERIAL :OLIVE GRAY CLAYEY SILT W/MICA

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
		CORRECTED MASS SOIL(g):	77.68
TARE NO :	3	% PASSING NO. 10 SIEVE:	100.0
WET SOIL + TARE(g):			
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	6.50
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	91.6
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0801	SPECIFIC GRAVITY:	2.70

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01312	---	----
0.5		22	1.64	0.01312		
1	53	22	1.64	0.01312	0.036	69.64
2	42	22	1.64	0.01312	0.028	55.62
4	30	22	1.64	0.01312	0.022	40.32
8	24	22	1.64	0.01312	0.016	32.68
13	21	22	1.64	0.01312	0.013	28.85
35	18	22	1.64	0.01312	0.008	25.03
60	16	22	1.64	0.01312	0.006	22.48
120	15	22	1.64	0.01312	0.004	21.21
240	14	22	1.64	0.01312	0.003	19.93
480	13	23	1.33	0.01297	0.002	18.26
1345	12	22	1.64	0.01312	0.001	17.38

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

HYDROMETER ANALYSIS

TEST DATE :11-30-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : E SAMPLE NO: 3 PENETRATION, ft: 6.0

MATERIAL :OLIVE GRAY SILTY FINE SAND W/CLAY POCKETS

TESTED BY : DC DATE:11-30-87

CHECKED BY: DC DATE:12-2-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO :	7	CORRECTED MASS SOIL(g):	91.36
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g) :		OVER NO. 200 SIEVE (g):	49.06
CORRECTION FACTOR :		% PASSING NO.200 SIEVE:	46.3
HYDROMETER NO. :	25838	DISPERSING AGENT:	CALGON
STARTING DATE :	11-30-87	AMOUNT (g/liter):	40
STARTING TIME :	0821	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
2	38	22	1.64	0.01332	0.030	43.39
4	34	22	1.64	0.01332	0.022	39.01
7	32	22	1.64	0.01332	0.017	36.82
13	30	22	1.64	0.01332	0.012	34.63
30	27	22	1.64	0.01332	0.008	31.35
60	25	22	1.64	0.01332	0.006	29.16
120	23	22	1.64	0.01332	0.004	26.97
240	22	22	1.64	0.01332	0.003	25.88
480	20	23	1.33	0.01317	0.002	23.35
1328	18	22	1.64	0.01332	0.001	21.50

****

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

HYDROMETER ANALYSIS

TEST DATE :11-18-87 JOB NAME :ISLES DERNIERS JOB NO: 1087-1328

BORING NO : F SAMPLE NO: 1 PENETRATION, ft: 3.0

MATERIAL :OLIVE GRAY SILTY FINE SAND

TESTED BY : DC DATE:11-18-87

CHECKED BY: DC DATE:12-3-87

HYGROSCOPIC MOISTURE		AIR DRY MASS SOIL(g) :	
TARE NO	: 10	CORRECTED MASS SOIL(g):	100.64
WET SOIL + TARE(g):		% PASSING NO. 10 SIEVE:	100.0
DRY SOIL + TARE(g):		DRY MASS AFTER WASHING & SHAKING	
TARE(g)	:	OVER NO. 200 SIEVE (g):	61.40
CORRECTION FACTOR	:	% PASSING NO.200 SIEVE:	39.0
HYDROMETER NO.	: 25838	DISPERSING AGENT:	CALGON
STARTING DATE	: 11-18-87	AMOUNT (g/liter):	40
STARTING TIME	: 0725	SPECIFIC GRAVITY:	2.65

ELAPSED TIME, T (MIN.)	HYDROMETER READING, R'	TEMP. (DEG, C)	CORRECT-ION(TEMP & MEN.)	K	D (mm)	% FINER TOTAL SPECIMEN
0		22	1.64	0.01332	---	----
1	24	22	1.64	0.01332	0.047	25.48
2	17	22	1.64	0.01332	0.035	18.52
4	14	22	1.64	0.01332	0.025	15.54
8	12	22	1.64	0.01332	0.018	13.55
15	11	22	1.64	0.01332	0.013	12.56
30	11	22	1.64	0.01332	0.009	12.56
63	10	22	1.64	0.01332	0.006	11.57
120	10	22	1.64	0.01332	0.005	11.57
240	9	22	1.64	0.01332	0.003	10.57
464	9	22	1.64	0.01332	0.002	10.57
1386	9	22	1.64	0.01332	0.001	10.57

Form CG-1000.8 (11/85)

Sample No. : 1087-1328--CL-1

Test Method : ASTM D 698

Material : Olive gray clay

Test Date : December 11, 1987

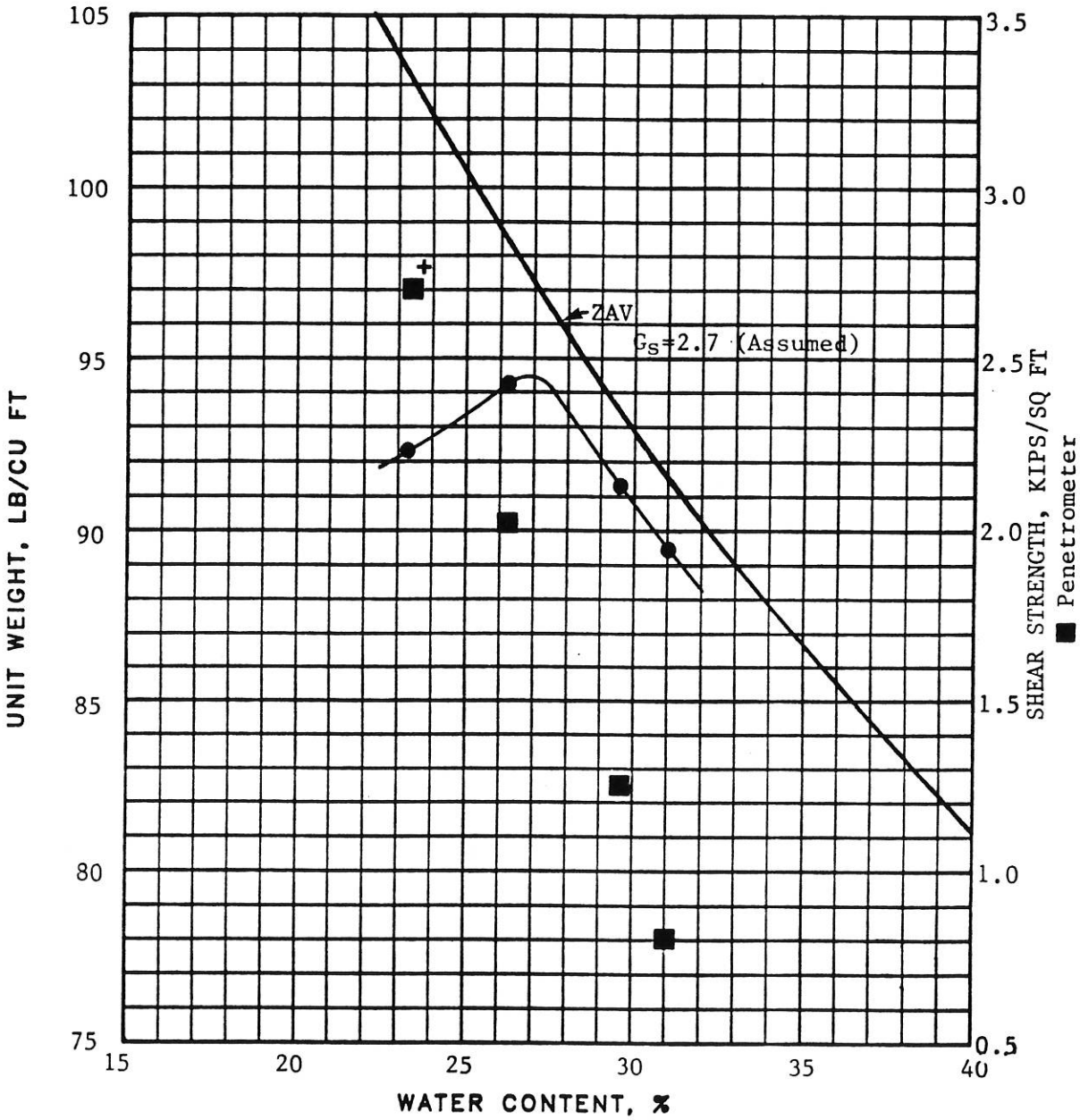
Optimum Water Content : 27.0 %

Max Unit Dry Weight : 94.4 lb/cu ft

Liquid Limit : 64

Plastic Limit : 25

Material Source : Vibracores 1 thru 51



COMPACTION TEST RESULTS

McCLELLAND ENGINEERS

Form CG-1000.8 (11/85)

Sample No. : 1087-1328--CL-2

Test Method : ASTM D 698

Material : Olive gray clay

Test Date : December 11, 1987

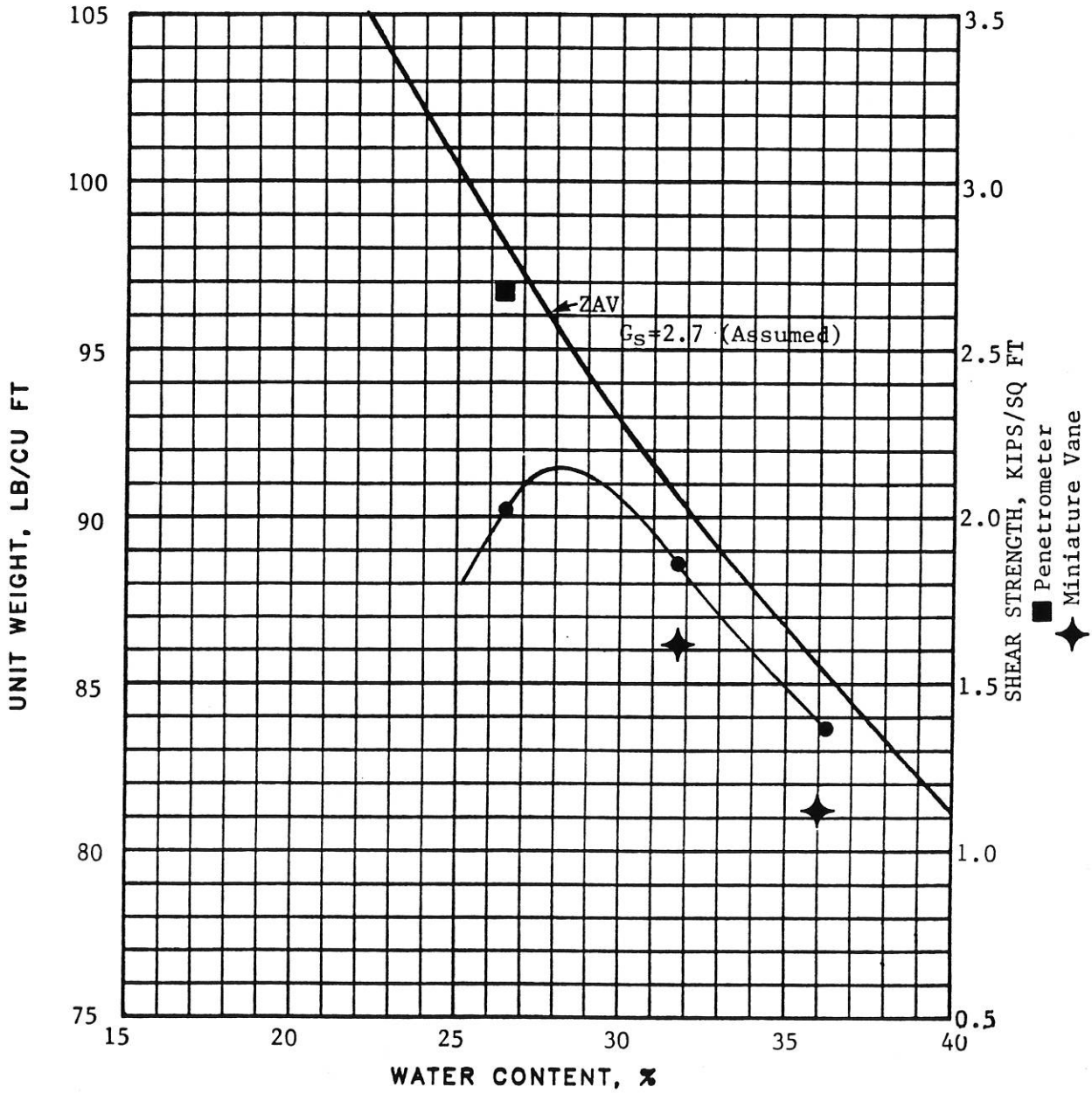
Optimum Water Content : 28.0 %

Max Unit Dry Weight : 91.4 lb/cu ft

Liquid Limit : 65

Plastic Limit : 26

Material Source : Vibracores 58 thru 153



COMPACTION TEST RESULTS

McCLELLAND ENGINEERS

Form CG-1000.5 (11/85)

Sample No. : 1087-1328--CL-3

Test Method : ASTM D 698

Material : Olive gray clay

Test Date : December 21, 1987

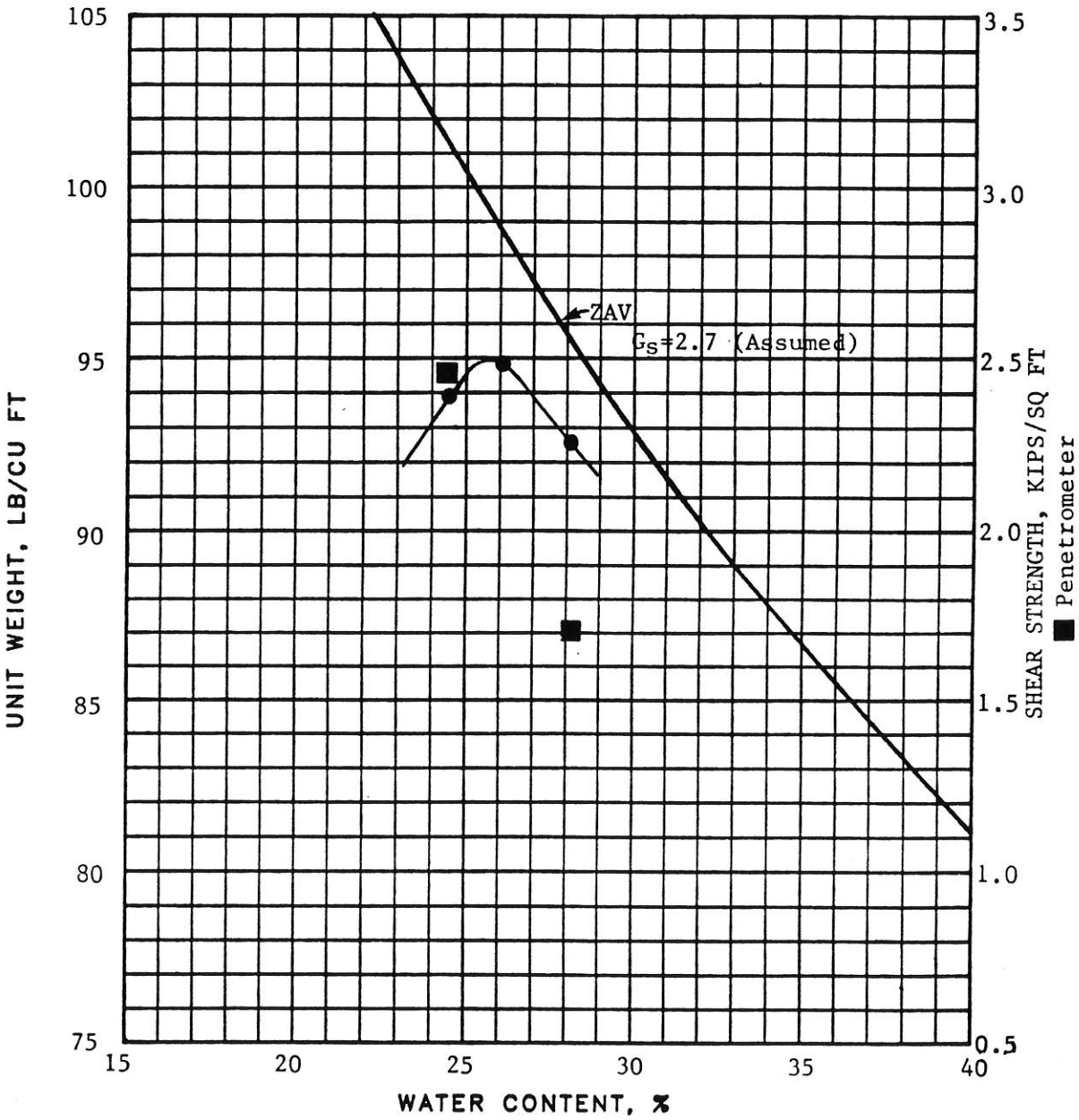
Optimum Water Content : 25.5 %

Max Unit Dry Weight : 95.0 lb/cu ft

Liquid Limit : 62

Plastic Limit : 27

Material Source : Vibracores 154 thru 210



COMPACTION TEST RESULTS

McCLELLAND ENGINEERS

Form CG-1000.8 (11/85)

Sample No. : 1087-1328--CL-4

Test Method : ASTM D 698

Material : Olive gray clay

Test Date : December 22, 1987

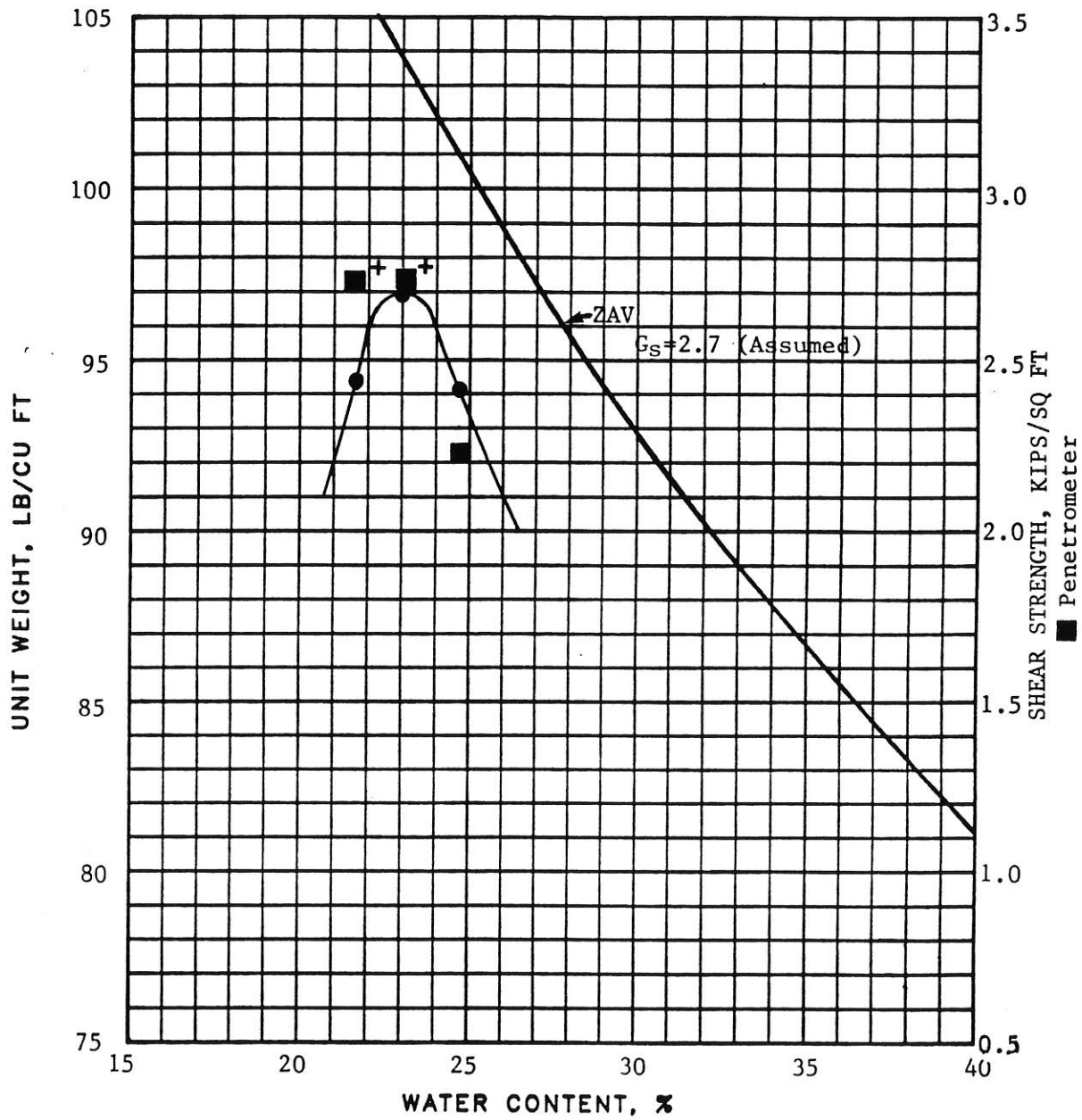
Optimum Water Content : 23.0%

Max Unit Dry Weight : 97.0 lb/cu ft

Liquid Limit : 64

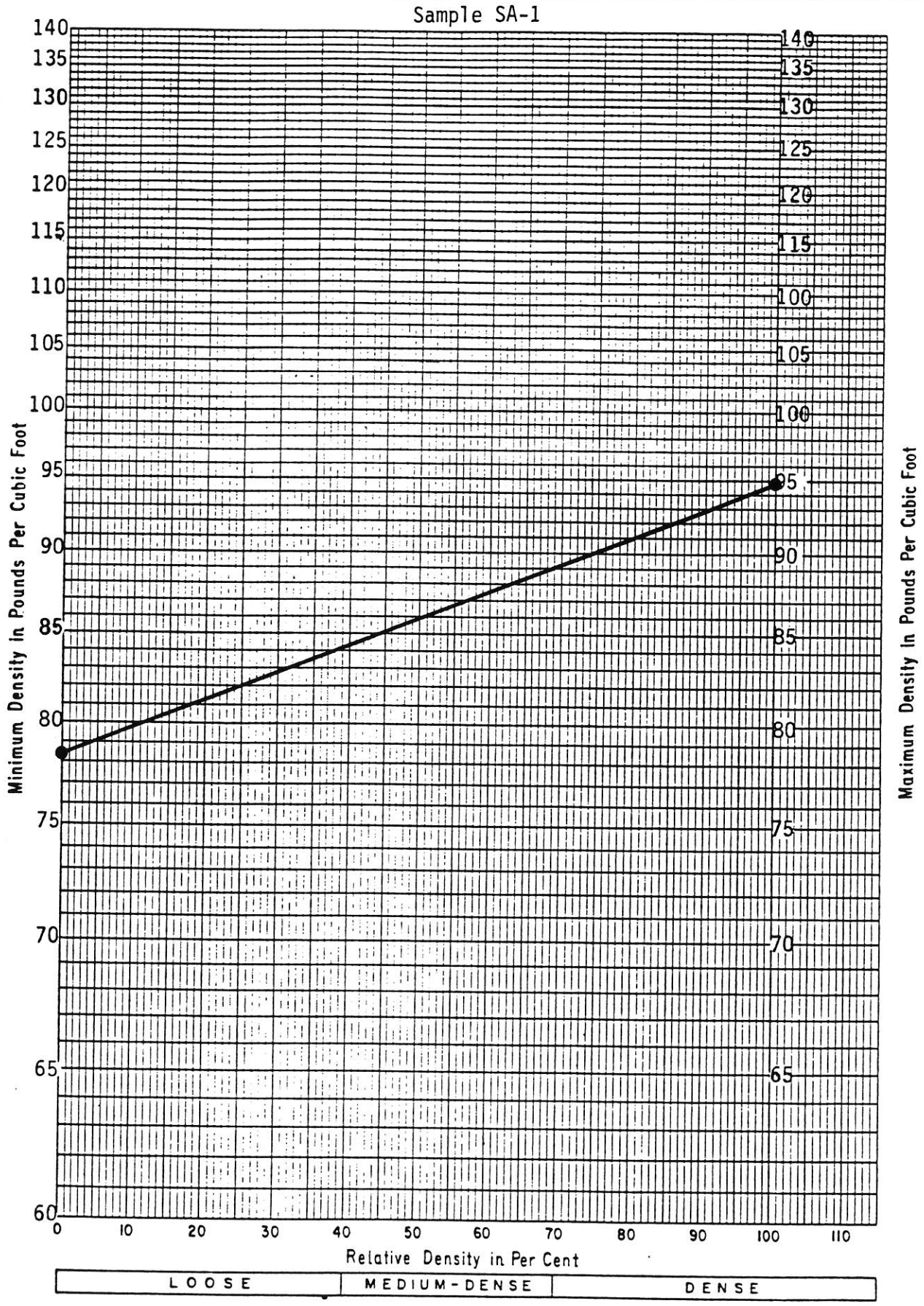
Plastic Limit : 26

Material Source : Vibracores 212 thru 250



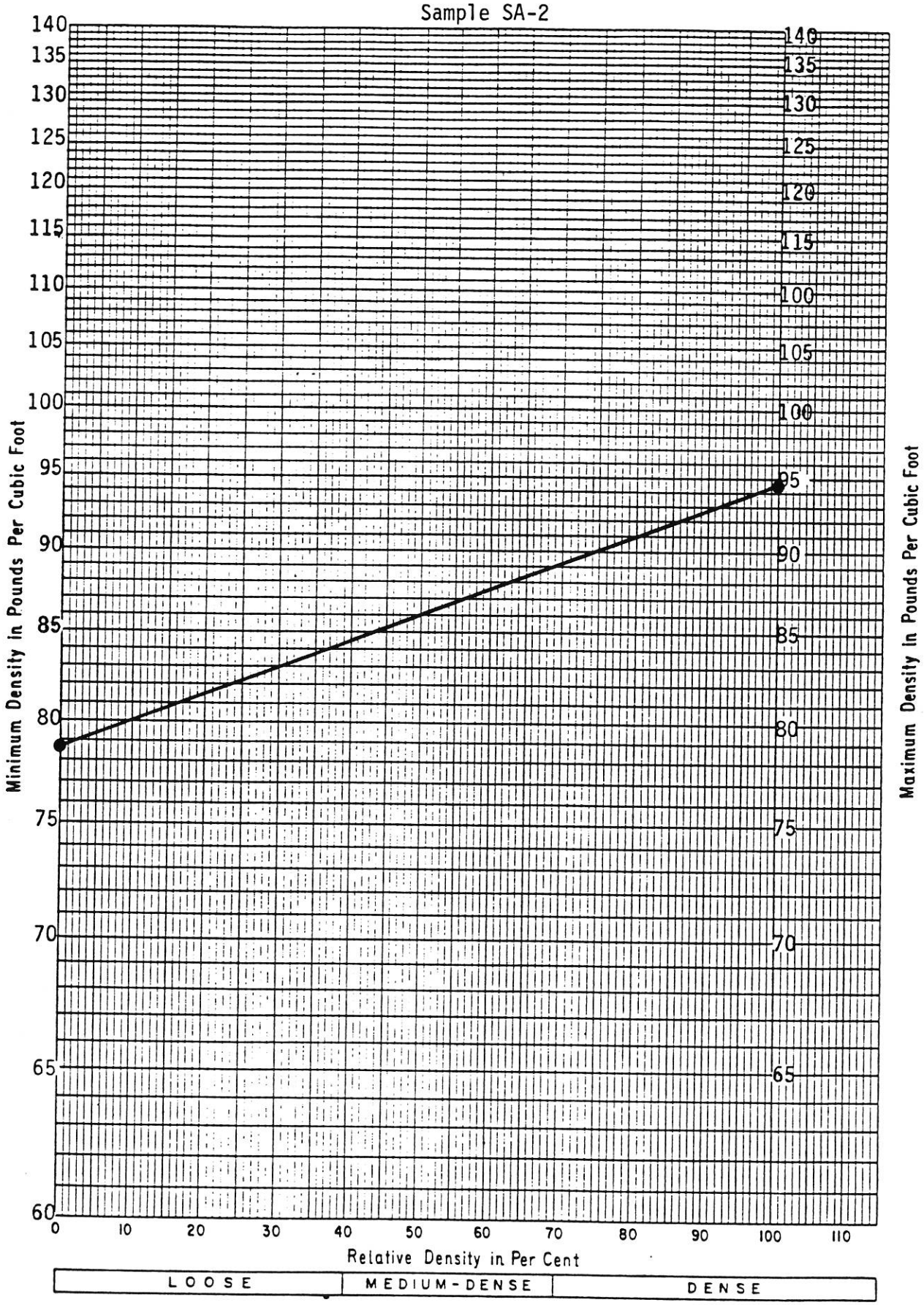
COMPACTION TEST RESULTS

McCLELLAND ENGINEERS



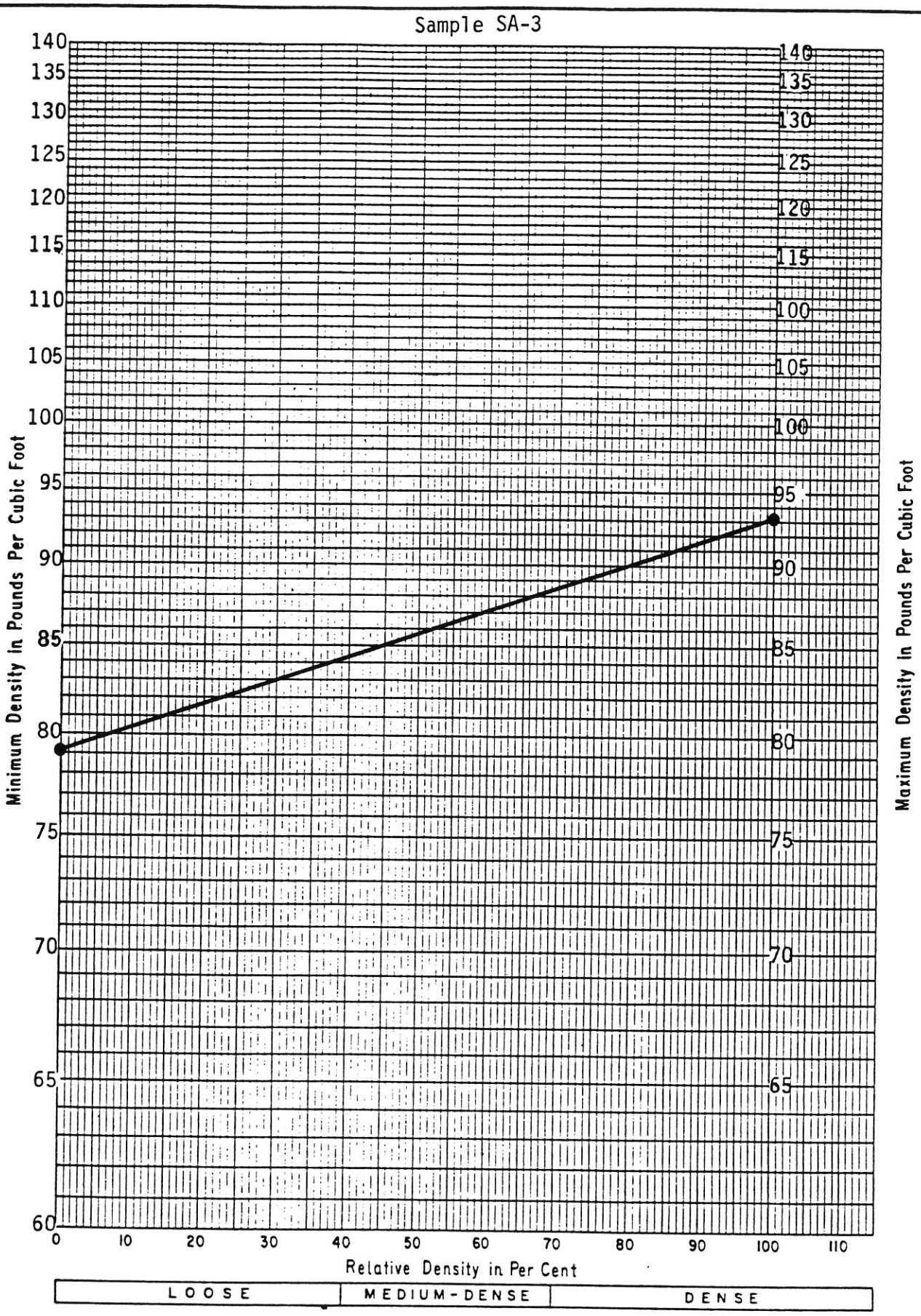
RELATIVE DENSITY CALCULATION CHART

Composite Borrow Area Granular Material



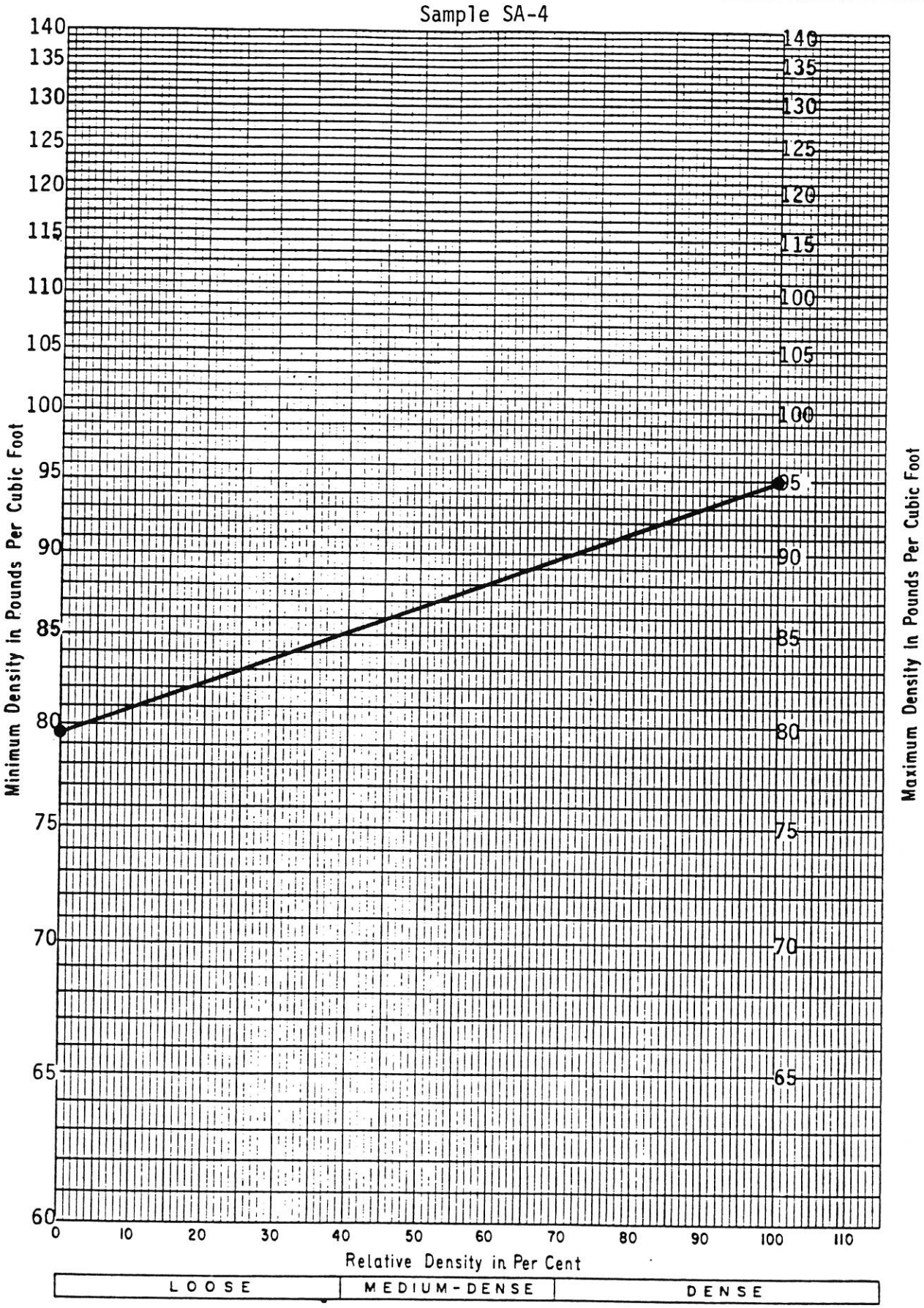
RELATIVE DENSITY CALCULATION CHART

Composite Borrow Area Granular Material



RELATIVE DENSITY CALCULATION CHART

Composite Borrow Area Granular Material



RELATIVE DENSITY CALCULATION CHART

Composite Borrow Area Granular Material