GEOTECHNICAL INVESTIGATION ON-SITE DISPOSAL FACILITY

SOIL INVESTIGATION DATA REPORT

VOLUME 4

Operable Unit 2
Project Order 140

August 18, 1995

for
PARSONS, Environmental Remedial Action Project
Fernald Environmental Management Project
Fernald, Ohio

by
Science Applications International Corporation
14062 Denver West Parkway, Suite 200
Golden, Colorado 80401
(303) 279-7242

Under Subcontract No. 7663S0018 to PARSONS

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Table of Contents - Laboratory Results

Volume 1

Index to Test Results A-9

Specific Gravity
Boring No. G2-124 2
Boring No. G2-126 2
Boring No. G2-127 8
Boring No. G2-128 5
Boring No. G2-129 5
Boring No. G2-130 4
Boring No. G2-131 11
Boring No. G2-132 7
Boring No. G2-133 8
Boring No. G2-SB-1 9
Boring No. G2-SB-2 11
Boring No. G2-SB-3 3
Boring No. G2-SB-4 9
Boring No. G2-SB-5 9
Boring No. G2-SB-6 3
Boring No. G2-SB-7 3
Boring No. G2-SB-8 3
Boring No. G2-SB-10 3
Boring No. G2-SB-11 9
Boring No. G2-SB-12 3
Boring No. G2-SB-2,3,4,6 2
Boring No. G2-SB-8,9,10,11 2

Moisture Content (D2216)
Boring No. G2-120 19
Boring No. G2-121 19
Boring No. G2-122 19
Boring No. G2-123 19
Boring No. G2-124 13
Boring No. G2-125 20
Boring No. G2-126 17
Boring No. G2-127 23
Boring No. G2-128 22
Boring No. G2-129 22
Boring No. G2-130 17
Boring No. G2-131 15
Boring No. G2-132 19
Boring No. G2-133 23
Boring No. G2-134 22
Boring No. G2-SB-1 18
Boring No. G2-SB-2 18

Table of Contents - Laboratory Results

Boring No. G2-SB-3 18
Boring No. G2-SB-4 18
Boring No. G2-SB-5 16
Boring No. G2-SB-6 18
Boring No. G2-SB-7 16
Boring No. G2-SB-8 18
Boring No. G2-SB-9 20
Boring No. G2-SB-10 16
Boring No. G2-SB-11 16
Boring No. G2-SB-12 18
Boring No. G2-SB-13 20
Boring No. G2-SB-14 20
Boring No. G2-SB-16 14
Boring No. G2-SB-17 14
Boring No. G2-SB-2,3,4,6 18
Boring No. G2-SB-8,9,10,11 16

Moisture Content - Microwave (D4643)

Boring No. G2-120 27
Boring No. G2-121 27
Boring No. G2-122 27
Boring No. G2-123 26
Boring No. G2-125 27
Boring No. G2-126 28
Boring No. G2-129 27
Boring No. G2-130 26
Boring No. G2-131 26
Boring No. G2-132 26
Boring No. G2-SB-16 26
Boring No. G2-SB-17 26

Moisture and Density

Boring No. G2-122 30
Boring No. G2-125 30
Boring No. G2-126 30
Boring No. G2-128 30
Boring No. G2-129 30
Boring No. G2-130 30
Boring No. G2-133 30

Organic Matter Content (with pertinent moisture content analyses on pages 33A, 33B, 35A, 35B, 36A, 38A, 38B)

Boring No. G2-SB-1 34
Boring No. G2-SB-2 37
Boring No. G2-SB-3 34

Table of Contents - Laboratory Results

Boring No. G2-SB-4 37
Boring No. G2-SB-5 36
Boring No. G2-SB-6 34
Boring No. G2-SB-7 34
Boring No. G2-SB-8 36
Boring No. G2-SB-9 32
Boring No. G2-SB-10 34
Boring No. G2-SB-11 39
Boring No. G2-SB-12 34
Boring No. G2-SB-13 32
Boring No. G2-SB-14 32

Atterberg Limits

Boring No. G2-120 41
Boring No. G2-121 44
Boring No. G2-122 53
Boring No. G2-123 62
Boring No. G2-124 71
Boring No. G2-125 77
Boring No. G2-126 89
Boring No. G2-127 104
Boring No. G2-128 113
Boring No. G2-129 125
Boring No. G2-130 134
Boring No. G2-131 149
Boring No. G2-132 164
Boring No. G2-133 176
Boring No. G2-134 191
Boring No. G2-SB-1 194
Boring No. G2-SB-2 197
Boring No. G2-SB-3 200
Boring No. G2-SB-4 203
Boring No. G2-SB-5 206
Boring No. G2-SB-6 209
Boring No. G2-SB-7 212
Boring No. G2-SB-8 215
Boring No. G2-SB-9 218
Boring No. G2-SB-10 221
Boring No. G2-SB-11 224
Boring No. G2-SB-12 227
Boring No. G2-SB-13 230
Boring No. G2-SB-14 233

Table of Contents - Laboratory Results

Volume 2

Hydrometer Analyses with Mechanical Grain Size Analysis

Boring No. G2-120 237
Boring No. G2-121 240
Boring No. G2-122 249
Boring No. G2-123 258
Boring No. G2-124 267
Boring No. G2-125 303
Boring No. G2-126 315
Boring No. G2-127 357
Boring No. G2-128 366
Boring No. G2-129 378
Boring No. G2-130 387
Boring No. G2-131 423
Boring No. G2-132 450
Boring No. G2-133 462
Boring No. G2-134 477
Boring No. G2-SB-1 480
Boring No. G2-SB-2 483
Boring No. G2-SB-3 486
Boring No. G2-SB-4 489
Boring No. G2-SB-5 492
Boring No. G2-SB-6 495
Boring No. G2-SB-7 498
Boring No. G2-SB-8 501
Boring No. G2-SB-9 504
Boring No. G2-SB-10 507
Boring No. G2-SB-11 510
Boring No. G2-SB-12 513
Boring No. G2-SB-13 516
Boring No. G2-SB-14 519

Table of Contents - Laboratory Results

Volume 3

Consolidation Test - Natural Moisture
Boring No. G2-122 523
Boring No. G2-124 533
Boring No. G2-126 543
Boring No. G2-127 563
Boring No. G2-128 573
Boring No. G2-130 583
Boring No. G2-131 593
Boring No. G2-133 623

Consolidation Test - Saturated
Boring No. G2-126 634
Boring No. G2-127 644
Boring No. G2-131 654
Boring No. G2-133 674

Consolidation Test - Remolded to 95% MDD
Boring No. G2-124 685
Boring No. G2-126 695
Boring No. G2-130 705
Boring No. G2-SB-4 715
Boring No. G2-SB-7 725

Consolidation Test - Remolded to 85% MDD
Boring No. G2-120 736
Boring No. G2-124 746
Boring No. G2-126 756
Boring No. G2-128 766
Boring No. G2-130 776
Boring No. G2-SB-1 786
Boring No. G2-SB-4 796
Boring No. G2-SB-7 806
Boring No. G2-SB-11 816
Boring No. G2-SB-2,3,4,6,Top Soil 826
Boring No. G2-SB-8,9,10,11 836

Volume 4

Triaxial Shear Test - TX/UU, Saturated
Boring No. G2-127 847
Boring No. G2-128 851
Boring No. G2-129 855
Boring No. G2-130 859
Boring No. G2-131 867
Boring No. G2-132 879

Table of Contents - Laboratory Results

Boring No. G2-133 887
Boring No. G2-134 891

Triaxial Shear Test - TX/UU, Field Moisture
Boring No. G2-122 896
Boring No. G2-124 899
Boring No. G2-125 902
Boring No. G2-126 908

Triaxial Shear Test - TX/UU, Saturated, Remolded to 95% MDD
Boring No. G2-122 912
Boring No. G2-127 916
Boring No. G2-131 920
Boring No. G2-132 924
Boring No. G2-134 928

Triaxial Shear Test - TX/UU, Saturated, Remolded to 85% MDD
Boring No. G2-122 933
Boring No. G2-127 937
Boring No. G2-134 941

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp, 3 Points
Boring No. G2-127 946
Boring No. G2-129 961
Boring No. G2-130 976
Boring No. G2-132 1006
Boring No. G2-133 1021

Volume 5

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Staged 3 Points
Boring No. G2-121 1037
Boring No. G2-122 1052
Boring No. G2-123 1067
Boring No. G2-124 1097
Boring No. G2-125 1112
Boring No. G2-126 1127

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 95% MDD 3 Points
Boring No. G2-128 1143

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 95% MDD Staged - 3 Points
Boring No. G2-125 1159
Boring No. G2-126 1174
Boring No. G2-130 1189

Table of Contents - Laboratory Results

Boring No. G2-132 1204

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 85% MDD 3 Points
Boring No. G2-122 1220

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 85% MDD Staged - 3 Points
Boring No. G2-133 1236

Triaxial, Back Pressure Permeability - TX/PBP
Boring No. G2-121 1252
Boring No. G2-123 1260
Boring No. G2-126 1264
Boring No. G2-127 1268
Boring No. G2-132 1272
Boring No. G2-133 1276

Volume 6

Triaxial, Back Pressure Permeability - TX/PBP Remolded to 95% MDD
Boring No. G2-SB-1 1285
Boring No. G2-SB-2 1289
Boring No. G2-SB-3 1293
Boring No. G2-SB-4 1297
Boring No. G2-SB-5 1301
Boring No. G2-SB-6 1305
Boring No. G2-SB-7 1309
Boring No. G2-SB-8 1313
Boring No. G2-SB-9 1317
Boring No. G2-SB-10 1321
Boring No. G2-SB-11 1325
Boring No. G2-SB-12 1329
Boring No. G2-SB-13 1333
Boring No. G2-SB-14 1337

Proctor Compaction - Standard
Boring No. G2-SB-1 1342
Boring No. G2-SB-2 1344
Boring No. G2-SB-3 1346
Boring No. G2-SB-4 1348
Boring No. G2-SB-5 1350
Boring No. G2-SB-6 1352
Boring No. G2-SB-7 1354
Boring No. G2-SB-8 1356
Boring No. G2-SB-9 1358
Boring No. G2-SB-10 1360

Table of Contents - Laboratory Results

Boring No. G2-SB-11 1362
Boring No. G2-SB-12 1364
Boring No. G2-SB-13 1366
Boring No. G2-SB-14 1368
Boring No. G2-SB-15 1371
Boring No. G2-SB-16 1373
Boring No. G2-SB-17 1375
Boring No. G2-SB-2,3,4,6 1377
Boring No. G2-SB-8,9,10,11 1379

Shelby Tube Descriptive Logs
Boring No. G2-SB-120 1382
Boring No. G2-SB-121 1383
Boring No. G2-SB-122 1385
Boring No. G2-SB-123 1388
Boring No. G2-SB-124 1391
Boring No. G2-SB-125 1393
Boring No. G2-SB-126 1397
Boring No. G2-SB-127 1402
Boring No. G2-SB-128 1405
Boring No. G2-SB-129 1409
Boring No. G2-SB-130 1412
Boring No. G2-SB-131 1417
Boring No. G2-SB-132 1421
Boring No. G2-SB-133 1425
Boring No. G2-SB-134 1430

California Bearing Ratio
Boring No. G2-SB-15 1432
Boring No. G2-SB-16 1439
Boring No. G2-SB-17 1443

Large Scale Interface Direct Shear Tests
Report of a Three-Test Series Using Selected Georynthetics and Soils from FEMP 1450

Aggregate Tests
Report of Four Types of TestsPreformed on Aggregates and Riprap 1468

Chemical Analysis
Report of Chloride and Sulfate Analysis of FEMP Soils 1475

INDEX TO TEST RESULTS

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (D854)	G2-124	10-12	405004	1	2
	"	50-51.5	405016	1	11
	G2-126	7.5-9.5	404768	1	8
	"	15-17	404773	1	2
	"	25-27	404778	1	8
	"	35-37	404783	1	11
	"	40-41.5	404785	1	10
	"	45-46.5	404786	1	6
	"	50-51.5	404787	1	10
	"	55-56.5	404788	1	4
	"	60-61.5	404789	1	6
	"	65-66.5	404790	1	4
	"	70-71.5	404791	1	6
	"	75-76.5	404792	1	6
	"	80-81.5	404793	1	10
	G2-127	7.5-9.5	404751	1	11
	"	15-17	404756	1	8
	G2-128	12.5-14.5	405046	1	5
	"	17.5-19.5	405049	1	5
	G2-129	5-7.5	404729	1	5
	"	10-12.5	404732	1	5
	"	24-26.5	404740	1	5
	G2-130	5-7	405075	1	7
	"	10-12	405077	1	10
	"	15-17	405080	1	10
	"	20-22	405083	1	10
	"	30-32	405088	1	7
	"	40-41.5	405091	1	6

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (cont.)	G2-130 cont.	45-46.5	405092	1	6
	"	55-56.5	405094	1	4
	"	65-66.5	405096	1	4
	"	70-71.5	405097	1	10
	"	75-76.5	405098	1	4
	"	80-81.5	405099	1	4
	G2-131	7.5-9.5	404704	1	11
	"	17.5-19.5	404709	1	11
	"	27.5-29.5	404713	1	11
	"	45-47	404719	1	11
	G2-132	5-7	405102	1	7
	"	10-12	405105	1	7
	"	15-17	405108	1	7
	"	20-22	405111	1	7
	G2-133	7.5-9.5	405055	1	8
	"	15-17	405059	1	8
	"	17.5-19.5	405061	1	8
	"	25-27	405065	1	8
	G2-SB-1	1.5-5	404608	1	9
	G2-SB-2	1.5-5	404603	1	11
	G2-SB-3	1.5-5	404591	1	3
	G2-SB-4	1.5-5	404615	1	9
	G2-SB-5	1.5-5	404627	1	9
	G2-SB-6	1.5-5	404595	1	3
	G2-SB-7	1.5-5	404632	1	3
	G2-SB-8	1.5-5	404621	1	3
	G2-SB-10	1.5-5	404637	1	3
	G2-SB-11	1.5-5	404642	1	9
	G2-SB-12	1.5-4.2	404599	1	3

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (cont.)	G2-SB-2,3,4,6	0-1.5	404617	1	2
	G2-SB-8,9,10,11	0-1.5	404644	1	2
Moisture Content (D2216)	G2-120	5-7	405124	1	19
	G2-121	12.5-14.5	404814	1	19
	"	17.5-19.5	404817	1	19
	G2-122	5-7	404821	1	24
	"	10-12	404824	1	19
	"	15-17	404827	1	19
	G2-123	12.5-14.5	404800	1	19
	G2-124	25-26.5	405011	1	13
	"	30-31.5	405012	1	13
	"	35-36.5	405013	1	13
	"	40-41.5	405014	1	13
	"	45-46.5	405015	1	13
	"	50-51.5	405016	1	13
	"	55-56.5	405017	1	13
	"	60-61.5	405018	1	13
	"	65-66.5	405019	1	15
	"	70-71.5	405020	1	15
	"	80-82	405021	1	15
	G2-125	2.5-4.5	405023	1	20
	"	7.5-9.5	405026	1	20
	"	17.5-19.5	405033	1	20
	G2-126	12.5-14.5	404771	1	23
	"	25-27	404778	1	22
	"	25-27	404778	1	24
	"	35-37	404783	1	24
	"	40-41.5	404785	1	21
	"	45-46.5	404786	1	21

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content (cont.)	G2-126 con.t	50-51.5	404787	1	21
	"	55-56.5	404788	1	21
	"	60-61.5	404789	1	21
	"	65-66.5	404790	1	21
	"	70-71.5	404791	1	21
	"	75-76.5	404792	1	21
	"	80-81.5	404793	1	17
	G2-127	28-30	404763	1	23
	G2-128	2.5-4.5	405040	1	22
	"	17.5-19.5	405049	1	22
	G2-129	5-7.5	404729	1	22
	"	10-12.5	404732	1	22
	"	10-12.5	404732	1	24
	G2-130	5-7	405075	1	23
	"	20-22	405083	1	23
	"	40-41.5	405091	1	17
	"	45-46.5	405092	1	17
	"	55-56.5	405094	1	17
	"	65-66.5	405096	1	17
	"	70-71.5	405097	1	17
	"	75-76.5	405098	1	17
	"	80-81.5	405099	1	17
	G2-131	7.5-9.5	404704	1	20
	"	45-47	404719	1	24
	"	60-61.5	404723	1	15
	"	65-66.5	404724	1	15
	"	70-71.5	404725	1	15
	"	75-76.5	404726	1	15
	"	81-82.3	404727	1	15

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content (cont.)	G2-132	5-7	405102	1	22
	"	10-12	405105	1	19
	"	20-22	405111	1	19
	"	20-22	405111	1	24
	G2-133	2.5-4.5	405053	1	23
	"	15-17	405059	1	23
	"	17.5-19.5	405061	1	23
	"	25-27	405065	1	23
	G2-134	12-14	405140	1	22
	G2-SB-1	1.5-5	404608	1	18
	G2-SB-2	1.5-5	404603	1	18
	G2-SB-3	1.5-5	404591	1	18
	G2-SB-4	1.5-5	404615	1	18
	G2-SB-5	1.5-5	404627	1	16
	G2-SB-6	1.5-5	404595	1	18
	G2-SB-7	1.5-5	404632	1	16
	G2-SB-8	1.5-5	404621	1	18
	G2-SB-9	1.5-5	404587	1	20
	G2-SB-10	1.5-5	404637	1	16
	G2-SB-11	1.5-5	404642	1	16
	G2-SB-12	1.5-4.2	404599	1	18
	G2-SB-13	1.5-5	404583	1	20
	G2-SB-14	1.5-5	404578	1	20
	G2-SB-16	1-2	404650	1	14
	"	1-2	404650	1	14
	G2-SB-17	1-2	405366	1	14
	"	1-2	405366	1	14
	G2-SB-2,3,4,6	0-1.5	404617	1	18
	G2-SB-8,9,10,11	0-1.5	404644	1	16

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content-Microwave (D4643)	G2-120	5-7	405124	1	27
	G2-121	12.5-14.5	404814	1	27
	G2-122	5-7	404821	1	28
	"	10-12	404824	1	27
	G2-123	12.5-14.5	404800	1	26
	G2-125	2.5-4.5	405023	1	27
	G2-126	25-27	404778	1	28
	"	35-37	404783	1	28
	G2-129	5-7.5	404729	1	27
	"	10-12.5	404732	1	28
	G2-130	5-7	405075	1	26
	G2-131	7.5-9.5	404704	1	26
	"	7.5-9.5	404704	1	27
	"	45-47	404719	1	28
	G2-132	5-7	405102	1	27
	"	10-12	405105	1	26
	"	20-22	405111	1	28
	G2-SB-16	1-2	404650	1	26
	"	1-2	404650	1	26
	G2-SB-17	1-2	405366	1	26
	"	1-2	405366	1	26
Moisture and Density (D2216 and D2937)	G2-122	15-17	404827	1	30
	G2-125	2.5-4.5	405023	1	30
	G2-126	12.5-14.5	404771	1	30
	G2-128	7.5-9.5	405043	1	30
	"	17.5-19.5	405049	1	30
	G2-129	10-12.5	404732	1	30
	G2-130	20-22	405083	1	30

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture and Density (cont.)	G2-133	2.5-4.5	405053	1	30
Organic Matter Content (D2974) (with pertinent moisture content analyses on pages 33A, 33B, 35A, 35B, 36A, 38A, 38B)	G2-SB-1	0-0.5	404605	1	37
	"	0.5-1	404606	1	34
	"	1-1.5	404607	1	38
	G2-SB-2	0-0.5	404600	1	38
	"	0.5-1	404601	1	37
	"	1-1.5	404602	1	38
	G2-SB-3	0-0.5	404588	1	37
	"	0.5-1	404589	1	34
	"	1-1.5	404590	1	35
	G2-SB-4	0-0.5	404612	1	38
	"	0.5-1	404613	1	38
	"	1-1.5	404614	1	37
	G2-SB-5	0-0.5	404624	1	37
	"	0.5-1	404625	1	37
	"	1-1.5	404626	1	36
	G2-SB-6	0-0.5	404592	1	35
	"	0.5-1	404593	1	34
	"	1-1.5	404594	1	34
	G2-SB-7	0-0.5	404629	1	34
	"	0.5-1	404630	1	35
	"	1-1.5	404631	1	36
	G2-SB-8	0-0.5	404618	1	37
	"	0.5-1	404619	1	37
	"	1-1.5	404620	1	36
	G2-SB-9	0-0.5	404584	1	32
	"	0.5-1	404585	1	32
	"	1-1.5	404586	1	32
	G2-SB-10	0-0.5	404634	1	35

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Organic Matter Content (cont.)	G2-SB-10	0.5-1	404635	1	34
	"	1-1.5	404636	1	34
	G2-SB-11	0-0.5	404639	1	39
	"	0.5-1	404640	1	39
	"	1-1.5	404641	1	39
	G2-SB-12	0-0.5	404596	1	35
	"	0.5-1	404597	1	38
	"	1-1.5	404598	1	34
	G2-SB-13	0-0.5	404580	1	32
	"	0.5-1	404581	1	32
	"	1-1.5	404582	1	32
	G2-SB-14	0-0.5	404575	1	33
	"	0.5-1	404576	1	32
	"	1-1.5	404577	1	32
Atterberg Limits (D4318)	G2-120	5-7	405124	1	41
	G2-121	10-11.7	404812	1	44
	"	12.5-14.5	404814	1	47
	"	17.5-19.5	404817	1	50
	G2-122	5-7	404821	1	53
	"	10-12	404824	1	56
	"	15-17	404827	1	59
	G2-123	7.5-9.5	404797	1	67
	"	12.5-14.5	404800	1	65
	"	20-21.2	404804	1	68
	G2-124	5-7	405002	1	71
	"	10-12	405004	1	74
	G2-125	2.5-4.5	405023	1	77
	"	7.5-9.5	405026	1	80
	"	12.5-14.5	405029	1	83

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Atterberg Limits (cont.)	G2-125	17.5-19.5	405033	1	86
	G2-126	7.5-9.5	404768	1	89
	"	12.5-14.5	404771	1	92
	"	15-17	404773	1	95
	"	25-27	404778	1	98
	"	35-37	404783	1	101
	G2-127	7.5-9.5	404751	1	104
	"	15-17	404756	1	107
	"	28-30	404763	1	110
	G2-128	2.5-4.5	405040	1	113
	"	7.5-9.5	405043	1	116
	"	12.5-14.5	405046	1	119
	"	17.5-19.5	405049	1	122
	G2-129	5-7.5	404729	1	125
	"	10-12.5	404732	1	128
	"	24-26.5	404740	1	131
	G2-130	5-7	405075	1	134
	"	10-12	405077	1	137
	"	15-17	405080	1	140
	"	20-22	405083	1	143
	"	30-32	405088	1	146
	G2-131	7.5-9.5	404704	1	149
	"	17.5-19.5	404709	1	152
	"	27.5-29.5	404713	1	155
	"	45-47	404719	1	158
	"	60-61.5	404723	1	161
	G2-132	5-7	405102	1	164
	"	10-12	405105	1	167
	"	15-17	405108	1	170

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Atterberg Limits (cont.)	G2-132	20-22	405111	1	173
	G2-133	2.5-4.5	405053	1	176
	"	7.5-9.5	405055	1	179
	"	15-17	405059	1	182
	"	17.5-19.5	405061	1	185
	"	25-27	405065	1	188
	G2-134	12-14	405140	1	191
	G2-SB-1	1.5-5	404608	1	194
	G2-SB-2	1.5-5	404603	1	197
	G2-SB-3	1.5-5	404591	1	200
	G2-SB-4	1.5-5	404615	1	203
	G2-SB-5	1.5-5	404627	1	206
	G2-SB-6	1.5-5	404595	1	209
	G2-SB-7	1.5-5	404632	1	212
	G2-SB-8	1.5-5	404621	1	215
	G2-SB-9	1.5-5	404587	1	218
	G2-SB-10	1.5-5	404637	1	221
	G2-SB-11	1.5-5	404642	1	224
	G2-SB-12	1.5-4.2	404599	1	227
	G2-SB-13	1.5-5	404583	1	230
	G2-SB-14	1.5-5	404578	1	233
Hydrometer Analysis with Mechanical Grain Size Analysis (D422)	G2-120	5-7	405124	2	237
	G2-121	10-11.7	404812	2	240
	"	12.5-14.5	404814	2	243
	"	17.5-19.5	404817	2	246
	G2-122	5-7	404821	2	249
	"	10-12	404824	2	252
	"	15-17	404827	2	255

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	G2-123	7.5-9.5	404797	2	258
	"	12.5-14.5	404800	2	261
	"	20-21.2	404804	2	264
	G2-124	5-7	405002	2	267
	"	10-12	405004	2	270
	"	25-26.5	405011	2	273
	"	30-31.5	405012	2	276
	"	35-36.5	405013	2	279
	"	40-41.5	405014	2	282
	"	45-46.5	405015	2	285
	"	50-51.5	405016	2	288
	"	55-56.5	405017	2	291
	"	60-61.5	405018	2	294
	"	65-66.5	405019	2	297
	"	70-71.5	405020	2	300
	G2-125	2.5-4.5	405023	2	303
	"	7.5-9.5	405026	2	306
	"	12.5-14.5	405029	2	309
	"	17.5-19.5	405033	2	312
	G2-126	7.5-9.5	404768	2	315
	"	12.5-14.5	404771	2	318
	"	15-17	404773	2	321
	"	25-27	404778	2	324
	"	35-37	404783	2	327
	"	40-41.5	404785	2	330
	"	45-46.5	404786	2	333
	"	50-51.5	404787	2	336
	"	55-56.5	404788	2	339

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	"	60-61.5	404789	2	342
	"	65-66.5	404790	2	345
	"	70-71.5	404791	2	348
	"	75-76.5	404792	2	351
	"	80-81.5	404793	2	354
	G2-127	7.5-9.5	404751	2	357
	"	15-17	404756	2	360
	"	28-30	404763	2	363
	G2-128	2.5-4.5	405040	2	366
	"	7.5-9.5	405043	2	369
	"	12.5-14.5	405046	2	372
	"	17.5-19.5	405049	2	375
	G2-129	5-7.5	404729	2	378
	"	10-12.5	404732	2	381
	"	24-26.5	404740	2	384
	G2-130	5-7	405075	2	387
	"	10-12	405077	2	390
	"	15-17	405080	2	393
	"	20-22	405083	2	396
	"	30-32	405088	2	399
	"	40-41.5	405091	2	402
	"	45-46.5	405092	2	405
	"	55-56.5	405094	2	408
	"	65-66.5	405096	2	411
	"	70-71.5	405097	2	414
	"	75-76.5	405098	2	417
	"	80-81.5	405099	2	420
	G2-131	7.5-9.5	404704	2	423

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analyses (cont.)	"	17.5-19.5	404709	2	426
	"	27.5-29.5	404713	2	429
	"	45-47	404719	2	432
	"	60-61.5	404723	2	435
	"	65-66.5	404724	2	438
	"	70-71.5	404725	2	441
	"	75-76.5	404726	2	444
	"	81-82.3	404727	2	447
	G2-132	5-7	405102	2	450
	"	10-12	405105	2	453
	"	15-17	405108	2	456
	"	20-22	405111	2	459
	G2-133	2.5-4.5	405053	2	462
	"	7.5-9.5	405055	2	465
	"	15-17	405059	2	468
	"	17.5-19.5	405061	2	471
	"	25-27	405065	2	474
	G2-134	12-14	405140	2	477
	G2-SB-1	1.5-5	404608	2	480
	G2-SB-2	1.5-5	404603	2	483
	G2-SB-3	1.5-5	404591	2	486
	G2-SB-4	1.5-5	404615	2	489
	G2-SB-5	1.5-5	404627	2	492
	G2-SB-6	1.5-5	404595	2	495
	G2-SB-7	1.5-5	404632	2	498
	G2-SB-8	1.5-5	404621	2	501
	G2-SB-9	1.5-5	404587	2	504
	G2-SB-10	1.5-5	404637	2	507

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	G2-SB-11	1.5-5	404642	2	510
	G2-SB-12	1.5-4.2	404599	2	513
	G2-SB-13	1.5-5	404583	2	516
	G2-SB-14	1.5-5	404578	2	519
Consolidation Test - Natural Moisture (D2435)	G2-122	5-7	404821	3	523
	G2-124	10-12	405004	3	533
	G2-126	15-17	404773	3	543
	"	35-37	404783	3	553
	G2-127	7.5-9.5	404751	3	563
	G2-128	12.5-14.5	405046	3	573
	G2-130	15-17	405080	3	583
	G2-131	17.5-19.5	404709	3	593
	"	27.5-29.5	404713	3	603
	"	45-47	404719	3	613
	G2-133	7.5-9.5	405055	3	623
Consolidation Test - Saturated (D2435)	G2-126	35-37	404783	3	634
	G2-127	7.5-9.5	404751	3	644
	G2-131	17.5-19.5	404709	3	654
	"	45-47	404719	3	664
	G2-133	7.5-9.5	405055	3	674
Consolidation Test - Remolded to 95% MDD (D2435)	G2-124	10-12	405004	3	685
	G2-126	15-17	404773	3	695
	G2-130	15-17	405080	3	705
	G2-SB-4	1.5-5	404615	3	715
	G2-SB-7	1.5-5	404632	3	725
Consolidation Test - Remolded to 85% MDD (D2435)	G2-120	5-7	405124	3	736

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Consolidation Test - Remolded to 85% MDD (cont.)	G2-124	10-12	405004	3	746
	G2-126	15-17	404773	3	756
	G2-128	12.5-14.5	405046	3	766
	G2-130	15-17	405080	3	776
	G2-SB-1	1.5-5	404608	3	786
	G2-SB-4	1.5-5	404615	3	796
	G2-SB-7	1.5-5	404632	3	806
	G2-SB-11	1.5-5	404642	3	816
	G2-SB-2,3,4,6 Top Soil	0-1.5	404617	3	826
	G2-SB-8,9,10,11	0-1.5	404644	3	836
Triaxial Shear Test - TX/UU Saturated (D2850)	G2-127	7.5-9.5	404751	4	847
	G2-128	2.5-4.5	405040	4	851
	G2-129	5-7.5	404729	4	855
	G2-130	5-7	404075	4	859
	"	15-17	405080	4	863
	G2-131	7.5-9.5	404704	4	867
	"	27.5-29.5	404713	4	871
	"	45-47	404719	4	875
	G2-132	5-7	405102	4	879
	"	10-12	405105	4	883
	G2-133	7.5-9.5	405055	4	887
	G2-134	12-14	405140	4	891
Triaxial Shear Test - TX/UU Field Moisture (D2850)	G2-122	10-12	404824	4	896
	G2-124	5-7	405002	4	899
	G2-125	7.5-9.5	405026	4	902
	"	17.5-19.5	405033	4	905

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Triaxial Shear Test - TX/UU Field Moisture (cont.)	G2-126	15-17	404773	4	908
Triaxial Shear Test - TX/UU Saturated, Remolded to 95% MDD (D2850)	G2-122	10-12	404824	4	912
	G2-127	7.5-9.5	404751	4	916
	G2-131	7.5-9.5	404704	4	920
	G2-132	10-12	405105	4	924
	G2-134	12-14	405140	4	928
Triaxial Shear Test - TX/UU Saturated, Remolded to 85% MDD (D2850)	G2-122	10-12	404824	4	933
	G2-127	7.5-9.5	404751	4	937
	G2-134	12-14	405140	4	941
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp, 3 points (D4767)	G2-127	15-17	404756A	4	946
	"	15-17	404756B	4	951
	"	15-17	404756C	4	956
	G2-129	24-26.5	404740A	4	961
	"	24-26.5	404740B	4	966
	"	24-26.5	404740C	4	971
	G2-130	10-12	405077A	4	976
	"	"	405077B	4	981
	"	"	405077C	4	986
	"	30-32	405088A	4	991
	"	"	405088B	4	996
	"	"	405088C	4	1001
	G2-132	15-17	405108A	4	1006
	"	"	405108B	4	1011
	"	"	405108C	4	1016

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-133	15-17	405059A	4	1021
	"	"	405059B	4	1026
	"	"	405059C	4	1031
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged-3 Points (D4767)	G2-121	10-11.7	404812-1	5	1037
	"	"	404812-2	5	1042
	"	"	404812-3	5	1047
	G2-122	5-7	404821-1	5	1052
	"	"	404821-2	5	1057
	"	"	404821-3	5	1062
	G2-123	7.5-9.5	404797-1	5	1067
	"	"	404797-2	5	1072
	"	"	404797-3	5	1077
	"	20-21.2	404804-1	5	1082
	"	"	404804-2	5	1087
	"	"	404804-3	5	1092
	G2-124	10-12	405004-1	5	1097
	"	"	405004-2	5	1102
	"	"	405004-3	5	1107
	G2-125	12.5-14.5	405029-1	5	1112
	"	"	405029-2	5	1117
	"	"	405029-3	5	1122
	G2-126	7.5-9.5	404768-1	5	1127
	"	"	404768-2	5	1132
	"	"	404768-3	5	1137
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Remolded to 95% MDD, 3 Points (D4767)	G2-128	7.5-9.5	405043A	5	1143

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	"	405043B	5	1148
	"	"	405043C	5	1153
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged - 3 Points (D4767)	G2-125	2.5-4.5	405023-1	5	1159
	"	"	405023-2	5	1164
	"	"	405023-3	5	1169
	G2-126	12.5-14.5	404771-1	5	1174
	"	"	404771-2	5	1179
	"	"	404771-3	5	1184
	G2-130	20-22	405083-1	5	1189
	"	"	405083-2	5	1194
	"	"	405083-3	5	1199
	G2-132	5-7	405102-1	5	1204
	"	"	405102-2	5	1209
	"	"	405102-3	5	1214
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Remolded to 85% MDD-3 Points (D4767)	G2-122	15-17	404827A	5	1220
	"	"	404827B	5	1225
	"	"	404827C	5	1230
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged - 3 Points (D4767)	G2-133	2.5-4.5	405053-1	5	1236
	"	"	405053-2	5	1241
	"	"	405053-3	5	1246
Triaxial, Back Pressure Permeability TX/PBP (D5084)	G2-121	12.5-14.5	404814	5	1252
	"	17.5-19.5	404817	5	1256
	G2-123	12.5-14.5	404800	5	1260

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-126	25-27	404778	5	1264
	G2-127	28-30	404763-B	5	1268
	G2-132	20-22	405111	5	1272
	G2-133	17.5-19.5	405061	5	1276
	"	25-27	405065	5	1280
Triaxial, Back Pressure Permeability TX/PBP Remolded to 95% MDD (D5084)	G2-SB-1	1.5-5	404608	6	1285
	G2-SB-2	"	404603	6	1289
	G2-SB-3	"	404591	6	1293
	G2-SB-4	"	404615	6	1297
	G2-SB-5	"	404627	6	1301
	G2-SB-6	"	404595	6	1305
	G2-SB-7	"	404632	6	1309
	G2-SB-8	"	404621	6	1313
	G2-SB-9	"	404587	6	1317
	G2-SB-10	"	404637	6	1321
	G2-SB-11	"	404642	6	1325
	G2-SB-12	1.5-4.2	404599	6	1329
	G2-SB-13	1.5-5	404583	6	1333
	G2-SB-14	"	404578	6	1337
Proctor Compaction - Standard (D698)	G2-SB-1	1.5-5	404608	6	1342
	G2-SB-2	"	404603	6	1344
	G2-SB-3	"	404591	6	1346
	G2-SB-4	"	404615	6	1348
	G2-SB-5	"	404627	6	1350
	G2-SB-6	"	404595	6	1352
	G2-SB-7	"	404632	6	1354
	G2-SB-8	"	404621	6	1356

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-SB-9	"	404587	6	1358
	G2-SB-10	"	404637	6	1360
	G2-SB-11	"	404642	6	1362
	G2-SB-12	1.5-4.2	404599	6	1364
	G2-SB-13	1.5-5	404583	6	1366
	G2-SB-14	"	404578	6	1368
	G2-SB-15	1-2	404649	6	1371
	G2-SB-16	"	404650	6	1373
	G2-SB-17	"	405366	6	1375
	G2-SB-2,3,4,6	0-1.5	404617	6	1377
	G2-SB-8,9,10,11	0-1.5	404644	6	1379
Shelby Tube Descriptive Logs (Visual Classification Only)	G2-120	5-7	405124	6	1382
	G2-121	10-11.7	404812	6	1383
	"	17.5-19.5	404817	6	1384
	G2-122	5-7	404821	6	1385
	"	10-12	404824	6	1386
	"	15-17	404827	6	1387
	G2-123	7.5-9.5	404797	6	1388
	"	12.5-14.5	404800	6	1389
	"	20-21	404804	6	1390
	G2-124	5-7	405002	6	1391
	"	10-12	405004	6	1392
	G2-125	2.5-4.5	405023	6	1393
	"	7.5-9.5	405026	6	1394
	"	12.5-14.5	405029	6	1395
	"	17.5-19.5	405033	6	1396
	G2-126	7.5-9.5	404768	6	1397

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	12.5-14.5	404771	6	1398
	"	15-17	404773	6	1399
	"	25-27	404778	6	1400
	"	35-37	404783	6	1401
	G2-127	7.5-9.5	404751	6	1402
	"	15-17	404756	6	1403
	"	28-30	404763	6	1404
	G2-128	2.5-4.5	405040	6	1405
	"	7.5-9.5	405043	6	1406
	"	12.5-14.5	405046	6	1407
	"	17.5-19.5	405049	6	1408
	G2-129	5-7.5	404729	6	1409
	"	10-12.5	404732	6	1410
	"	24-26.5	404740	6	1411
	G2-130	5-7	405075	6	1412
	"	10-12	405077	6	1413
	"	15-17	405080	6	1414
	"	20-22	405083	6	1415
	"	30-32	405088	6	1416
	G2-131	7.5-9.5	404704	6	1417
	"	17.5-19.5	404709	6	1418
	"	27.5-29.5	404713	6	1419
	"	45-47	404719	6	1420
	G2-132	5-7	405102	6	1421
	"	10-12	405105	6	1422
	"	15-17	405108	6	1423
	"	20-22	405111	6	1424
	G2-133	2.5-4.5	405053	6	1425
	"	7.5-9.5	405055	6	1426

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	15-17	405059	6	1427
	"	17.5-19.5	405061	6	1428
	"	25-27	405065	6	1429
	G2-134	12-14	405140	6	1430
California Bearing Ratio (D1883)	G2-SB-15	1-2	404649	6	1432
	"	1-2	404649	6	1436
	G2-SB-16	1-2	404650	6	1439
	G2-SB-17	1-2	405366	6	1443
	"	"	405366	6	1447
Large Scale Interface Direct Shear Test Report of a Three-Test Series using selected geosynthetics and Soils from FEMP					1450
Aggregate Tests Specific Gravity and Absorbtion of Coarse Aggregate (C127-88)			405377	6	1470
			405379	6	1470
			405381	6	1470
			405382	6	1470
			405383	6	1470
Soundness of Aggregates (C88-90)			405384	6	1470
			405385	6	1470
			405386	6	1470
Resistance R-Value and Expansion Pressure of Compacted Soils (D2844-89)			404645	6	1470
			404646	6	1470
			404647	6	1470
			404648	6	1470
Soundness of Riprap (D5240-92)			405378	6	1470
			405380	6	1470

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Chemical Analysis - Chloride and Sulfate	G2-SB-1	4.5-5	404609	6	1476
	G2-SB-2	4.5-5	404604	6	1476
	G2-SB-4	4.5-5	404616	6	1476
	G2-SB-5	4.5-5	404628	6	1476
	G2-SB-7	4.5-5	404633	6	1476
	G2-SB-8	4.5-5	404622	6	1476
	G2-SB-10	4.5-5	404638	6	1477
	G2-SB-11	4.5-5	404643	6	1477

TRIAXIAL SHEAR TEST - TX/UU
Saturated
ASTM D 2850

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	986.9	1004.8
Wt. Wet Soil & Pan	(g)	995.5	1013.4
Wt. Dry Soil & Pan	(g)	891.4	891.4
Wt. Lost Moisture	(g)	104.1	122.0
Wt. of Pan Only	(g)	8.6	8.6
Wt. of Dry Soil	(g)	882.8	882.8
Moisture Content %		11.8	13.8
Wet Density PCF		141.8	144.4
Dry Density PCF		126.9	126.9

Init. Diameter	(in)	2.388
Init. Area	(sq in)	4.479
Init. Height	(in)	5.918
Volume (cu ft)		0.01534

Notes & Comments:

SAIC/PARSONS PO140
2059-13 D
FERNALD

G2-127
404751 @ 7.5-9.5'
TX/UU σ_3 1368 PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: [illegible] Date: 7-14-95
Filename: SAU0751

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.4	13.1				
50.0	48.0	12.7	14.9	38.9	47.1	8.2	0.82
60.0	58.0	15.0		48.8	57.5	8.7	0.87
70.0	68.0	17.8	19.6	58.5	67.7	9.2	0.92
80.0	78.0	20.7	22.4	68.5	77.9	9.4	0.94
90.0		23.4	23.7	78.4	87.9	9.5	0.95

Initial Height	(in)	5.918
Init. Vol.	(CC)	434.423
Initial Area	(sq in)	4.479

Data Entered By: CAL Date: 7-13-95
Data Checked By: VG Date: 7-14-95
Filename:SAU0751

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

Init. Ht.	(in)	5.918
Init. Area	(sq in)	4.479
Strain Rate	(in/min)	0.060

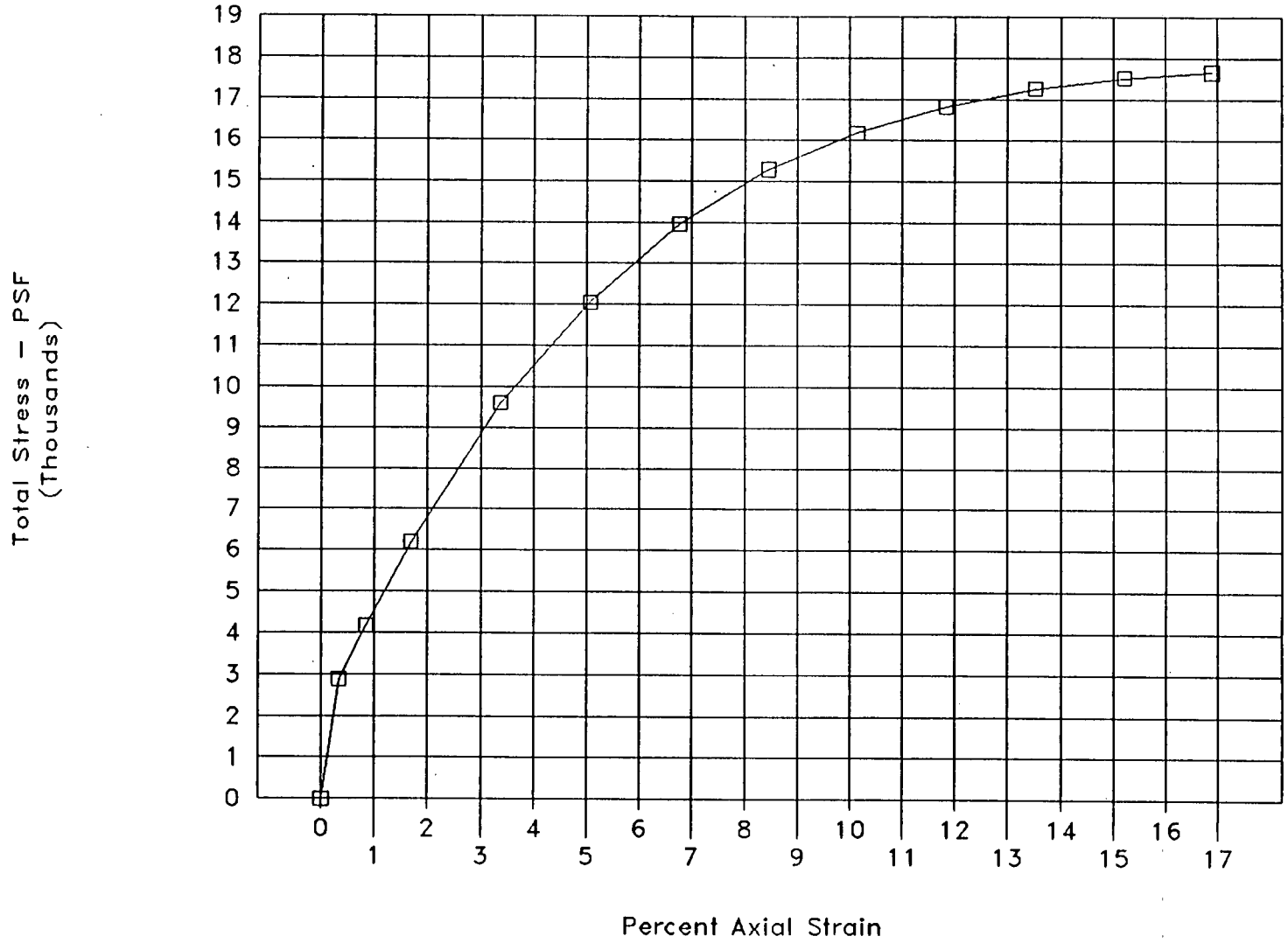
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.479	0	1368	0	0.00
47.5	1527	0.02	0.34	4.494	1522	1368	2890	2.11
87.5	2813	0.05	0.84	4.517	2790	1368	4158	3.04
152.5	4903	0.10	1.69	4.556	4820	1368	6188	4.52
265.0	8520	0.20	3.38	4.635	8232	1368	9600	7.02
350.0	11253	0.30	5.07	4.718	10683	1368	12051	8.81
420.0	13504	0.40	6.76	4.803	12591	1368	13959	10.20
472.5	15192	0.50	8.45	4.892	13908	1368	15276	11.17
512.5	16478	0.60	10.14	4.984	14807	1368	16175	11.82
545.0	17523	0.70	11.83	5.080	15450	1368	16818	12.29
571.5	18375	0.80	13.52	5.179	15891	1368	17259	12.62
592.5	19050	0.90	15.21	5.282	16153	1368	17521	12.81
610.0	19613	1.00	16.90	5.389	16298	1368	17666	12.91

Data Entered CAL Date: 7-13-95
Data Checked By: [illegible] Date: 7-19-95
FilenamSAU0751

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-127,404751 ,7.5-9.5'



TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405040	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	648	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	997.7	1016.6
Wt. Wet Soil & Pan	(g)	1005.9	1024.9
Wt. Dry Soil & Pan	(g)	889.7	889.7
Wt. Lost Moisture	(g)	116.3	135.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	881.4	881.4
Moisture Content %		13.2	15.3
Wet Density PCF		140.4	143.1
Dry Density PCF		124.1	124.1

Init. Diameter	(in)	2.397
Init. Area	(sq in)	4.513
Init. Height	(in)	5.998
Volume (cu ft)		0.01566

Notes & Comments:

SAIC/PARSONS PO 140
G2-128 #405040 @ 2.5-4.5'
TX/UU SATURATED σ_3 = 648 PSF

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0040

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405040	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	648	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.4	10.5				
50.0	48.0	12.6	13.6	38.6	44.5	5.9	0.59
60.0	58.0	10.5	11.4	48.8	56.2	7.4	0.74
70.0	68.0	9.9	10.6	58.5	67.2	8.7	0.87
80.0	78.0	10.0	10.7	69.0	77.8	8.8	0.88
90.0	88.0	10.4	11.1	79.4	88.7	9.3	0.93
100.0		11.2		88.4	97.9	9.5	0.95

Initial Height	(in)	5.998
Init. Vol.	(CC)	443.620
Initial Area	(sq in)	4.513

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename:SAU0040

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405040	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	648	AT FIELD MOIST.	No

Init. Ht. (in) 5.998
Init. Area (sq in) 4.513
Strain Rate (in/min) 0.060

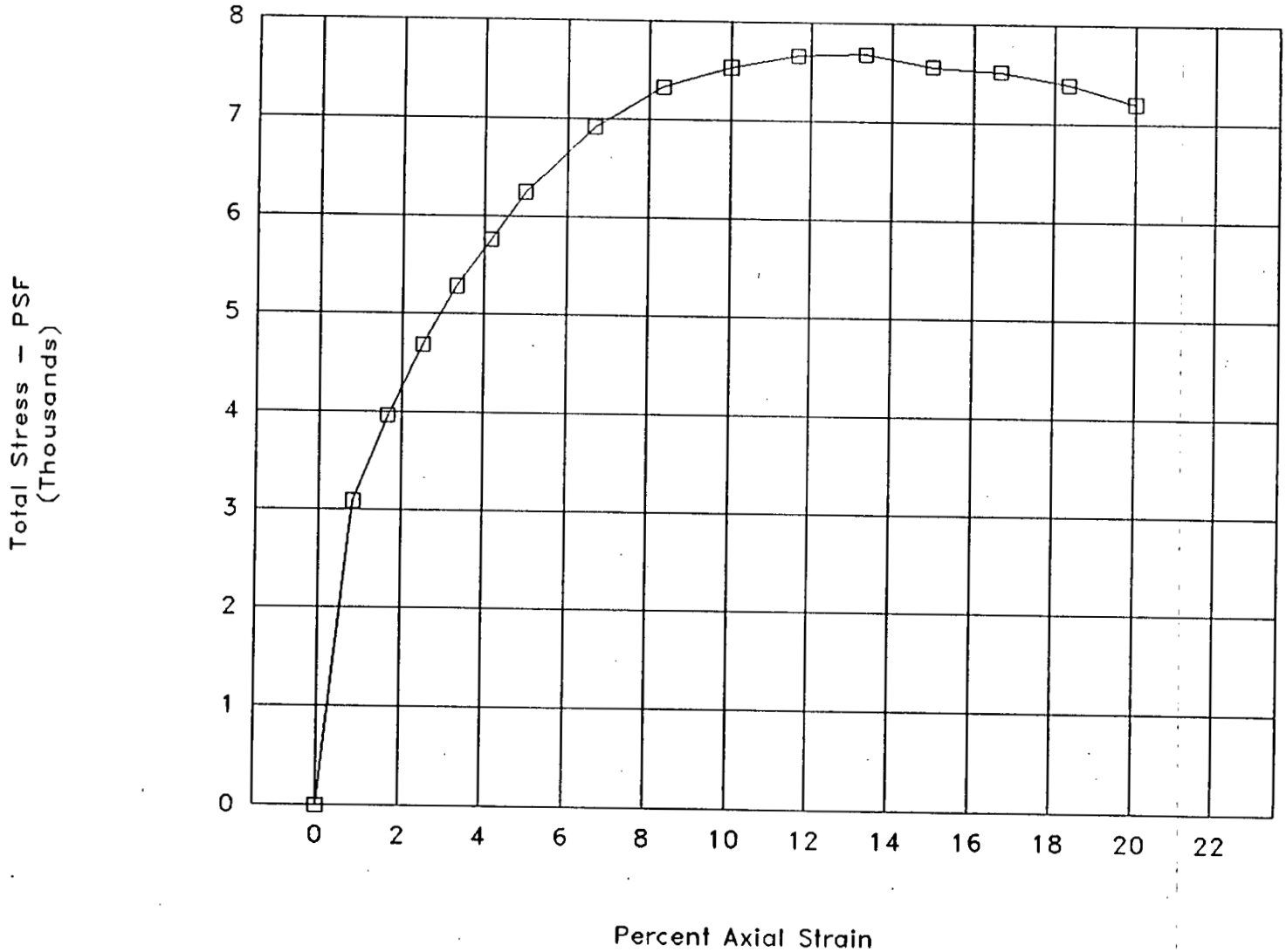
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.513	0	648	0	0.00
77.0	2457	0.05	0.83	4.551	2437	648	3085	4.76
105.5	3367	0.10	1.67	4.589	3310	648	3958	6.11
129.5	4132	0.15	2.50	4.628	4029	648	4677	7.22
150.0	4787	0.20	3.33	4.668	4627	648	5275	8.14
167.0	5329	0.25	4.17	4.709	5107	648	5755	8.88
184.5	5888	0.30	5.00	4.750	5593	648	6241	9.63
210.5	6717	0.40	6.67	4.835	6269	648	6917	10.67
228.5	7292	0.50	8.34	4.923	6684	648	7332	11.31
240.0	7659	0.60	10.00	5.014	6892	648	7540	11.64
249.0	7946	0.70	11.67	5.109	7018	648	7666	11.83
254.5	8121	0.80	13.34	5.207	7038	648	7686	11.86
255.0	8137	0.90	15.01	5.309	6916	648	7564	11.67
258.5	8249	1.00	16.67	5.415	6874	648	7522	11.61
259.0	8265	1.10	18.34	5.526	6749	648	7397	11.42
257.0	8201	1.20	20.01	5.641	6560	648	7208	11.12

Data Entered NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
FilenamSAU0040

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-128,405040 ,2.5-4.5'



TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

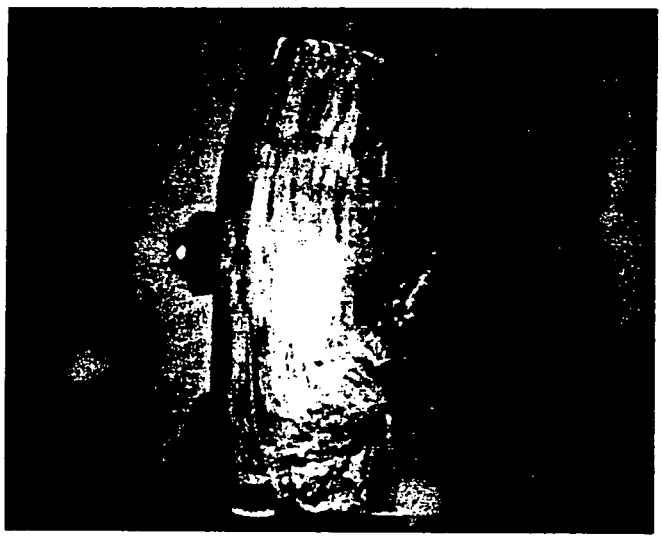
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-18-95 MG
DEPTH	5.0-7.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404729	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	11
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1080	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	949.0	959.1
Wt. Wet Soil & Pan	(g)	957.3	967.3
Wt. Dry Soil & Pan	(g)	807.7	807.7
Wt. Lost Moisture	(g)	149.6	159.7
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	799.4	799.4
Moisture Content %		18.7	20.0
Wet Density PCF		133.0	134.4
Dry Density PCF		112.1	112.1

Init. Diameter	(in)	2.406
Init. Area	(sq in)	4.547
Init. Height	(in)	5.977
Volume (cu ft)		0.01573

Notes & Comments:



SAIC/PARSONS PO 140 2059-13 B
G2-129 5.0-7.5' 404729
saturated UU σ_3 1080 PSF

Data Entered By: NAA Date: 7-11-95
Data Checked By: CAL Date: 7-13-95
Filename: SAT0729

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-18-95 MG
DEPTH	5.0-7.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404729	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	11
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1080	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.4	13.8				
50.0	48.0	7.9	10.0	38.8	47.9	9.1	0.91
60.0		9.9	10.0	48.8	58.3	9.5	0.95

Initial Height	(in)	5.977
Init. Vol.	(CC)	445.393
Initial Area	(sq in)	4.547

Data Entered By: NAA Date: 7-11-95
Data Checked By: CAL Date: 7-13-95
Filename: SAT0729

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B

BORING NO.	G2-129	SAMPLED	4-18-95 MG
DEPTH	5.0-7.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404729	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	11
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1080	AT FIELD MOIST.	No

Init. Ht.	(in)	5.977
Init. Area	(sq in)	4.547
Strain Rate	(in/min)	0.060

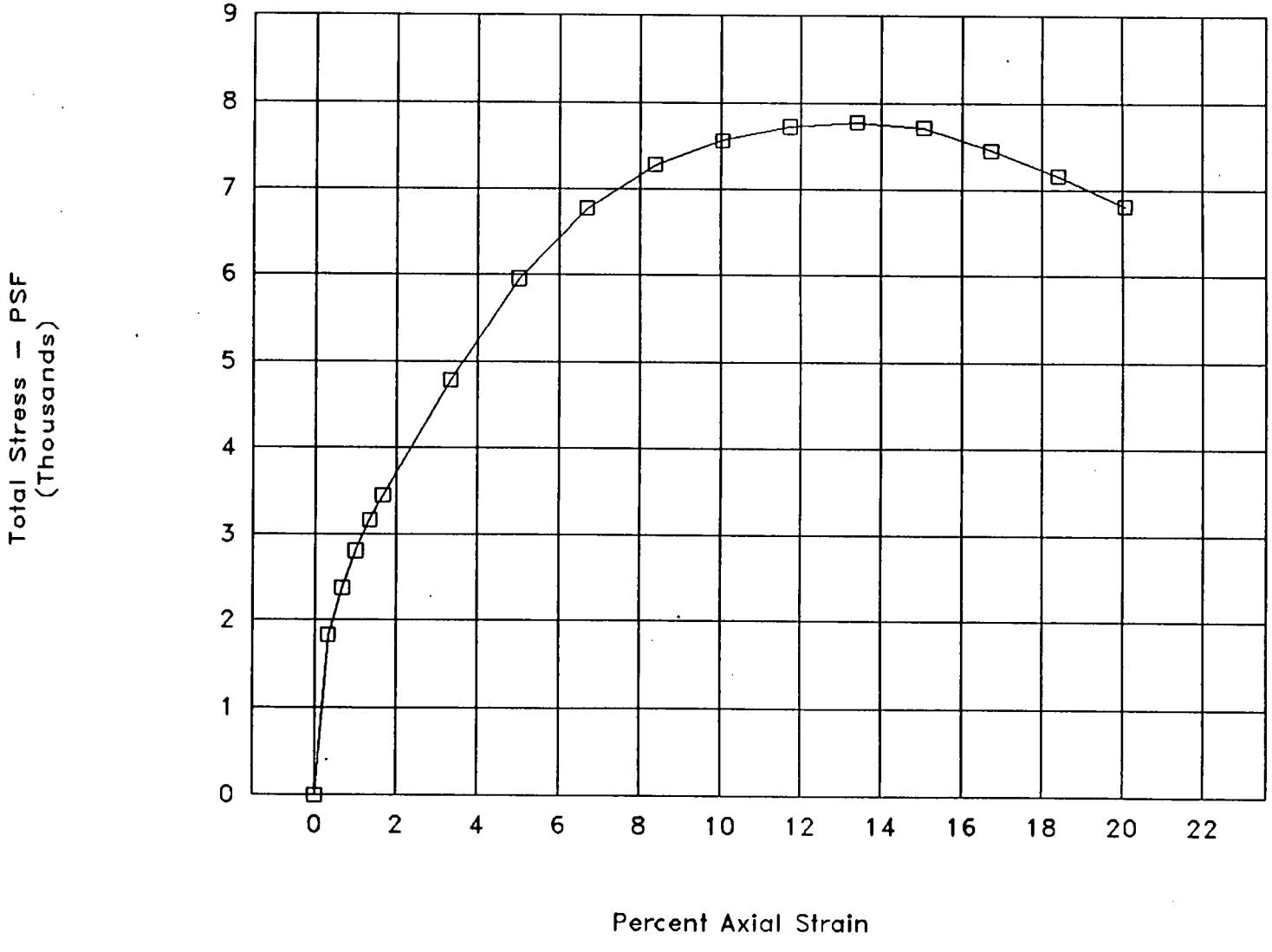
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.547	0	1080	0	0.00
23.5	744	0.02	0.33	4.562	742	1080	1822	1.69
41.0	1299	0.04	0.67	4.577	1290	1080	2370	2.19
55.0	1742	0.06	1.00	4.593	1724	1080	2804	2.60
66.5	2106	0.08	1.34	4.608	2078	1080	3158	2.92
76.0	2407	0.10	1.67	4.624	2367	1080	3447	3.19
121.0	3832	0.20	3.35	4.704	3704	1080	4784	4.43
162.0	5131	0.30	5.02	4.787	4873	1080	5953	5.51
192.5	6097	0.40	6.69	4.873	5689	1080	6769	6.27
213.5	6762	0.50	8.37	4.962	6196	1080	7276	6.74
227.5	7205	0.60	10.04	5.054	6482	1080	7562	7.00
237.5	7522	0.70	11.71	5.150	6641	1080	7721	7.15
244.0	7728	0.80	13.38	5.249	6694	1080	7774	7.20
246.5	7807	0.90	15.06	5.353	6632	1080	7712	7.14
241.5	7649	1.00	16.73	5.460	6369	1080	7449	6.90
235.0	7443	1.10	18.40	5.572	6073	1080	7153	6.62
226.0	7158	1.20	20.08	5.689	5721	1080	6801	6.30

Data Entered NAA Date: 7-11-95
Data Checked By: CAL Date: 7-13-95
FilenamSAT0729

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-129,404729,5.0-7.5'



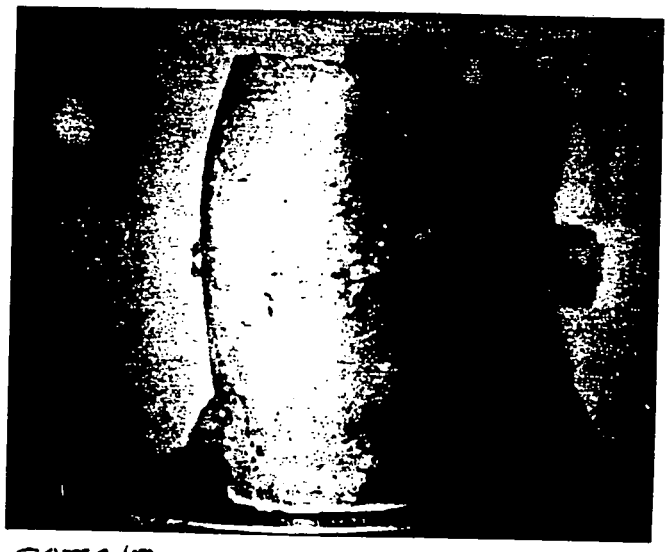
TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	5.0-7.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405075	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1031.6	1031.5
Wt. Wet Soil & Pan	(g)	1040.0	1040.0
Wt. Dry Soil & Pan	(g)	926.2	926.2
Wt. Lost Moisture	(g)	113.8	113.7
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	917.8	917.8
Moisture Content %		12.4	12.4
Wet Density PCF		144.8	144.8
Dry Density PCF		128.8	128.8

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.990
Volume (cu ft)		0.01571

Notes & Comments:



SAIC/PARSONS PO140
G2-130 # 405075 @ 5.0-7.0'
TX/UU SATURATED σ_3 = 1008 PSF

Data Entered By: NAA Date: 7-17-95
Data Checked By: MGJ Date: 7-18-95
Filename: SAU0075

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	5.0-7.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405075	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.0	11.3				
50.0	48.0	15.2	16.1	39.2	48.6	9.4	0.94
60.0		16.5	16.6	48.7	58.4	9.7	0.97

Initial Height	(in)	5.990
Init. Vol.	(CC)	444.879
Initial Area	(sq in)	4.531

Data Entered By: NAA Date: 7-17-95
Data Checked By: MGJ Date: 7-18-95
Filename: SAU0075

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	5.0-7.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405075	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

Init. Ht. (in) 5.990
Init. Area (sq in) 4.531
Strain Rate (in/min) 0.060

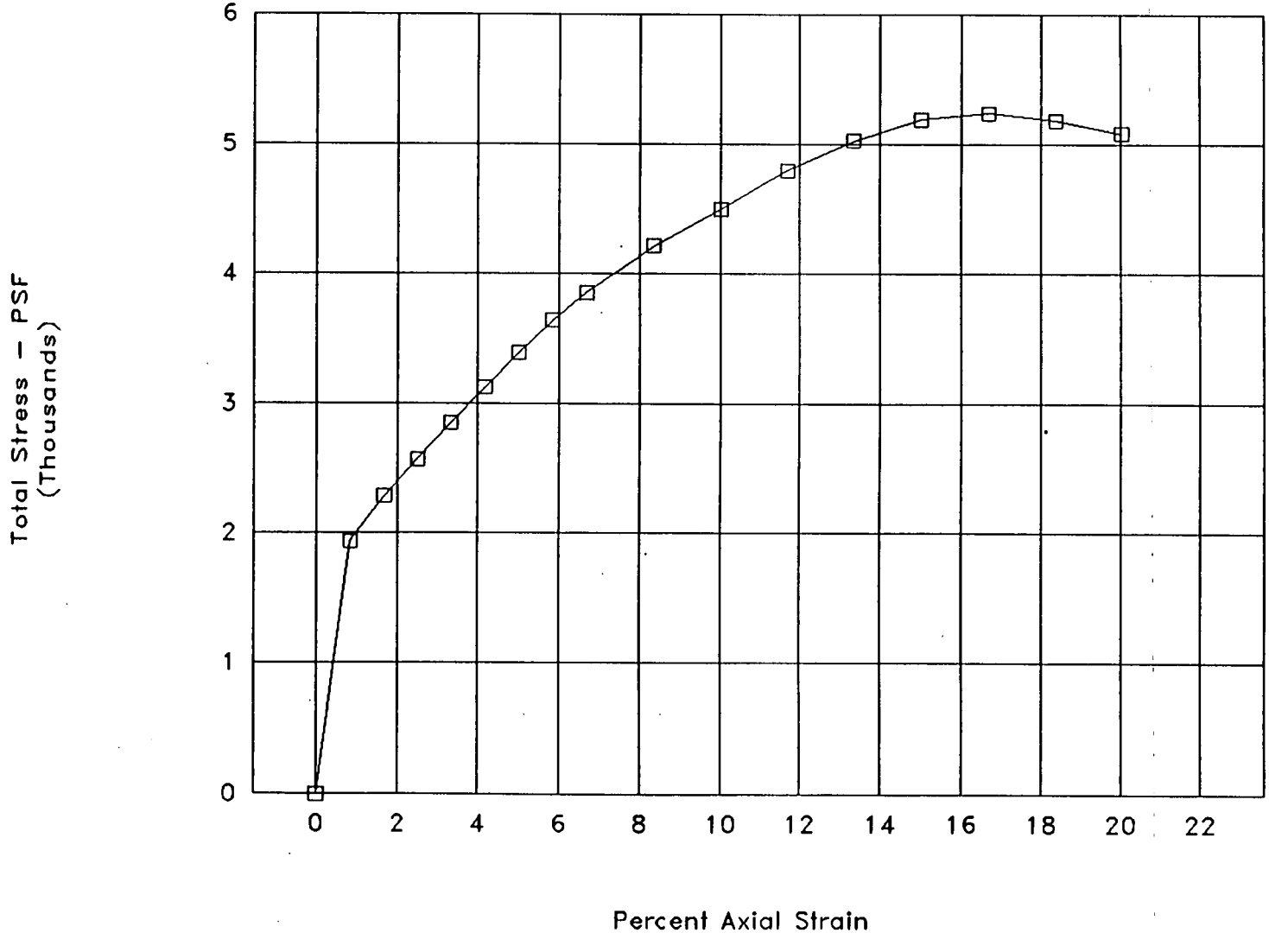
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.531	0	1008	0	0.00
29.5	937	0.05	0.83	4.570	930	1008	1938	1.92
41.0	1303	0.10	1.67	4.608	1281	1008	2289	2.27
50.5	1605	0.15	2.50	4.648	1565	1008	2573	2.55
60.0	1907	0.20	3.34	4.688	1843	1008	2851	2.83
69.5	2209	0.25	4.17	4.729	2116	1008	3124	3.10
79.0	2510	0.30	5.01	4.770	2385	1008	3393	3.37
88.0	2796	0.35	5.84	4.813	2633	1008	3641	3.61
96.0	3051	0.40	6.68	4.856	2847	1008	3855	3.82
110.0	3496	0.50	8.35	4.944	3204	1008	4212	4.18
122.0	3877	0.60	10.02	5.036	3489	1008	4497	4.46
135.0	4290	0.70	11.69	5.131	3789	1008	4797	4.76
146.0	4640	0.80	13.36	5.230	4020	1008	5028	4.99
155.0	4926	0.90	15.03	5.333	4186	1008	5194	5.15
160.0	5084	1.00	16.69	5.440	4236	1008	5244	5.20
161.0	5116	1.10	18.36	5.551	4177	1008	5185	5.14
160.5	5100	1.20	20.03	5.667	4079	1008	5087	5.05

Data Entered NAA Date: 7-17-95
Data Checked By: MGJ Date: 7-18-95
FilenamSAU0075

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-130,405075,5.0-7.0'



TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

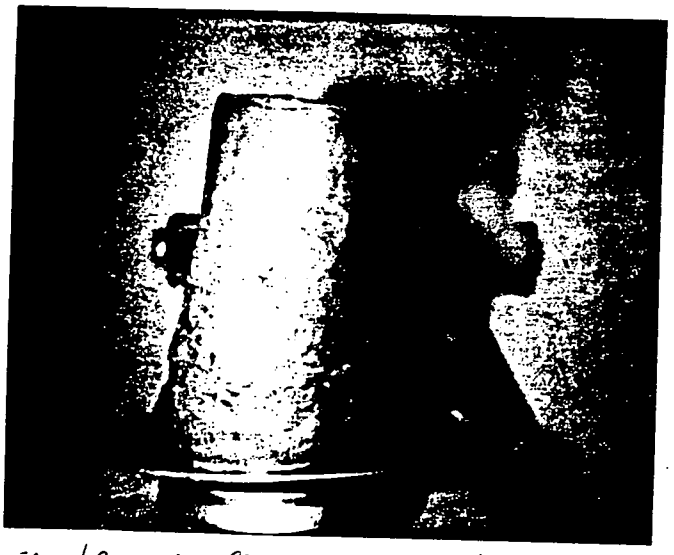
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-26-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405080	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2448	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1040.9	1037.1
Wt. Wet Soil & Pan	(g)	1049.2	1045.5
Wt. Dry Soil & Pan	(g)	946.4	946.4
Wt. Lost Moisture	(g)	102.8	99.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	938.1	938.1
Moisture Content %		11.0	10.6
Wet Density PCF		146.1	145.6
Dry Density PCF		131.7	131.7

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	5.973
Volume (cu ft)		0.01570

Notes & Comments:



SAIC/PARSONS PO 140 Fernald 2059-13H
G2-130 405080 15-17'
Saturated TX/UU σ_3 2448 PSF

Data Entered By: NAA Date: 7-11-95
Data Checked By: CBL Date: 7-13-95
Filename: SAT0080

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-26-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405080	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2448	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.9	13.6				
50.0	48.0	13.8	15.0	36.4	45.7	9.3	0.93
60.0		15.4	15.6	46.7	56.4	9.7	0.97

Initial Height	(in)	5.973
Init. Vol.	(CC)	444.725
Initial Area	(sq in)	4.543

Data Entered By: NAA Date: 7-11-95
Data Checked By: Cal Date: 7-13-95
Filename:SAT0080

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H

BORING NO.	G2-130	SAMPLED	4-26-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405080	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2448	AT FIELD MOIST.	No

Init. Ht. (in) 5.973
Init. Area (sq in) 4.543
Strain Rate (in/min) 0.060

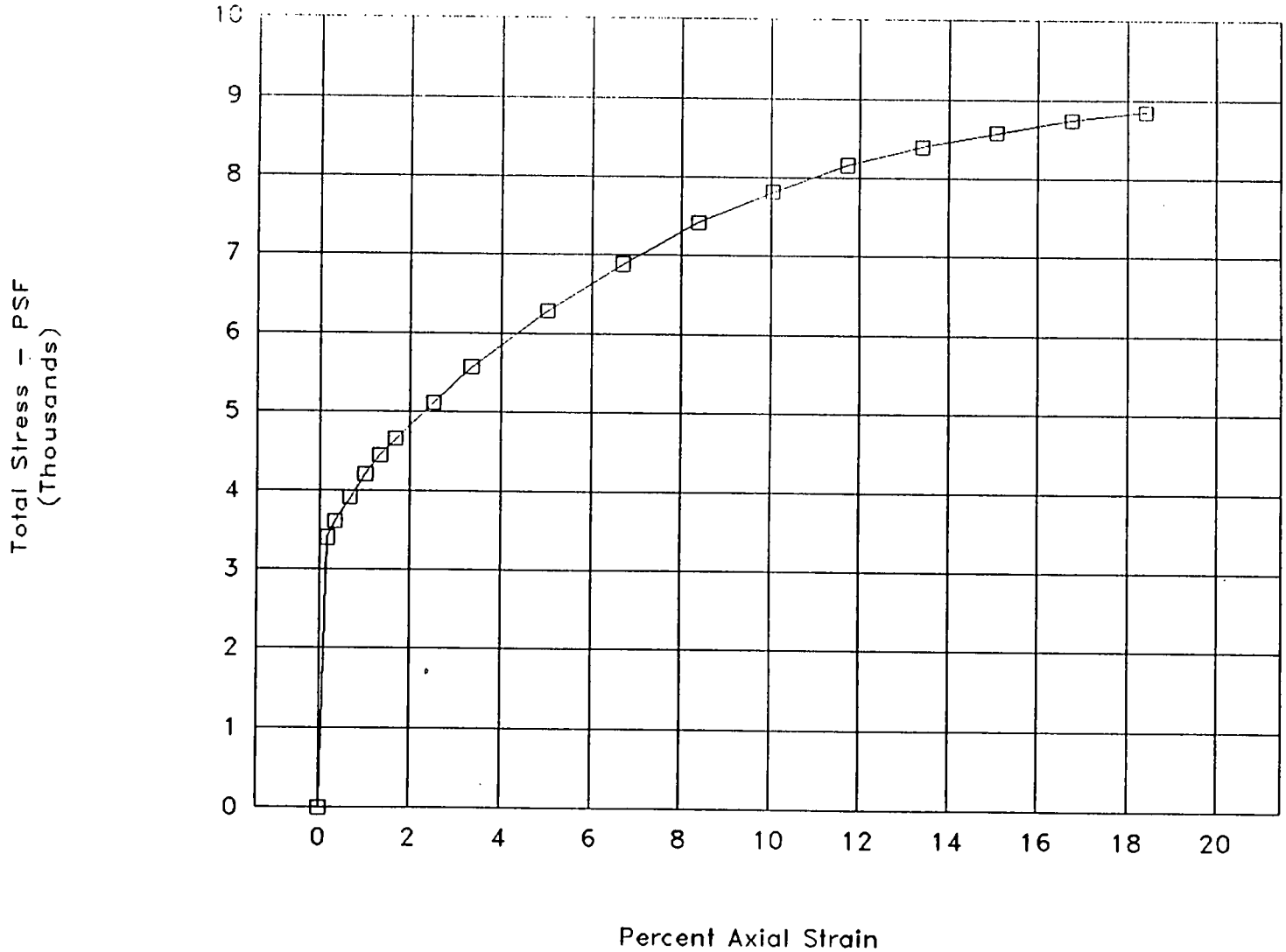
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.543	0	2448	0	0.00
30.0	951	0.01	0.17	4.550	949	2448	3397	1.39
36.5	1157	0.02	0.33	4.558	1153	2448	3601	1.47
46.5	1474	0.04	0.67	4.573	1464	2448	3912	1.60
56.0	1775	0.06	1.00	4.589	1757	2448	4205	1.72
64.0	2029	0.08	1.34	4.604	2002	2448	4450	1.82
71.0	2251	0.10	1.67	4.620	2213	2448	4661	1.90
86.5	2742	0.15	2.51	4.660	2673	2448	5121	2.09
102.0	3233	0.20	3.35	4.700	3125	2448	5573	2.28
127.5	4042	0.30	5.02	4.783	3839	2448	6287	2.57
150.0	4755	0.40	6.70	4.869	4436	2448	6884	2.81
171.0	5420	0.50	8.37	4.958	4967	2448	7415	3.03
188.0	5959	0.60	10.05	5.050	5361	2448	7809	3.19
204.0	6467	0.70	11.72	5.146	5709	2448	8157	3.33
216.5	6863	0.80	13.39	5.245	5944	2448	8392	3.43
227.5	7211	0.90	15.07	5.349	6125	2448	8573	3.50
238.5	7560	1.00	16.74	5.456	6294	2448	8742	3.57
247.5	7845	1.10	18.42	5.568	6401	2448	8849	3.61
255.0	8083	1.20	20.09	5.685	6459	2448	8907	3.64

Data Entered NAA Date: 7-11-95
Data Checked By: Cal Date: 7-13-95
FilenamSAT0080

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-130.405080 ,15.0-17.0'

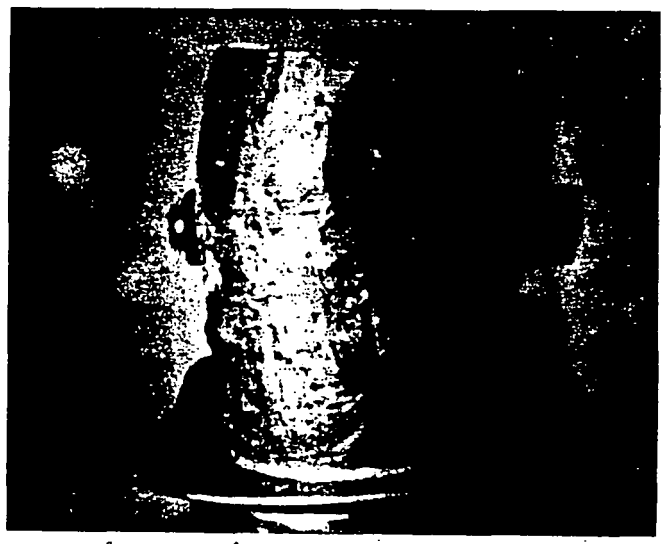


TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-12-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	404704	TEST FINISHED	7-5-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1024.3	1029.7
Wt. Wet Soil & Pan	(g)	1032.6	1038.0
Wt. Dry Soil & Pan	(g)	923.4	923.4
Wt. Lost Moisture	(g)	109.2	114.7
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	915.1	915.1
Moisture Content %		11.9	12.5
Wet Density PCF		144.4	145.2
Dry Density PCF		129.0	129.0

Init. Diameter	(in)	2.394
Init. Area	(sq in)	4.501
Init. Height	(in)	6.004
Volume (cu ft)		0.01564



SAIC/Parsons PO 140
G2-131 @ 7.5-9.5'
404704
Fernald

2059-13A
TX/UU
1368 PSF

Notes & Comments:

Data Entered By: NAA Date: 7-7-95
Data Checked By: CW Date: 7-11-95
Filename: SAU0704

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13A

BORING NO.	G2-131	SAMPLED	4-12-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	404704	TEST FINISHED	7-5-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.3	7.4				
50.0	48.0	2.5	3.3	38.3	45.9	7.6	0.76
60.0	58.0	1.5	2.2	47.3	55.6	8.3	0.83
70.0	68.0	1.6	2.3	58.6	68.0	9.4	0.94
80.0		2.0	2.1	68.6	78.1	9.5	0.95

Initial Height	(in)	6.004
Init. Vol.	(CC)	442.953
Initial Area	(sq in)	4.501

Data Entered By: NAA Date: 7-7-95
Data Checked By: CW Date: 7-11-95
Filename: SAU0704

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-12-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	404704	TEST FINISHED	7-5-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

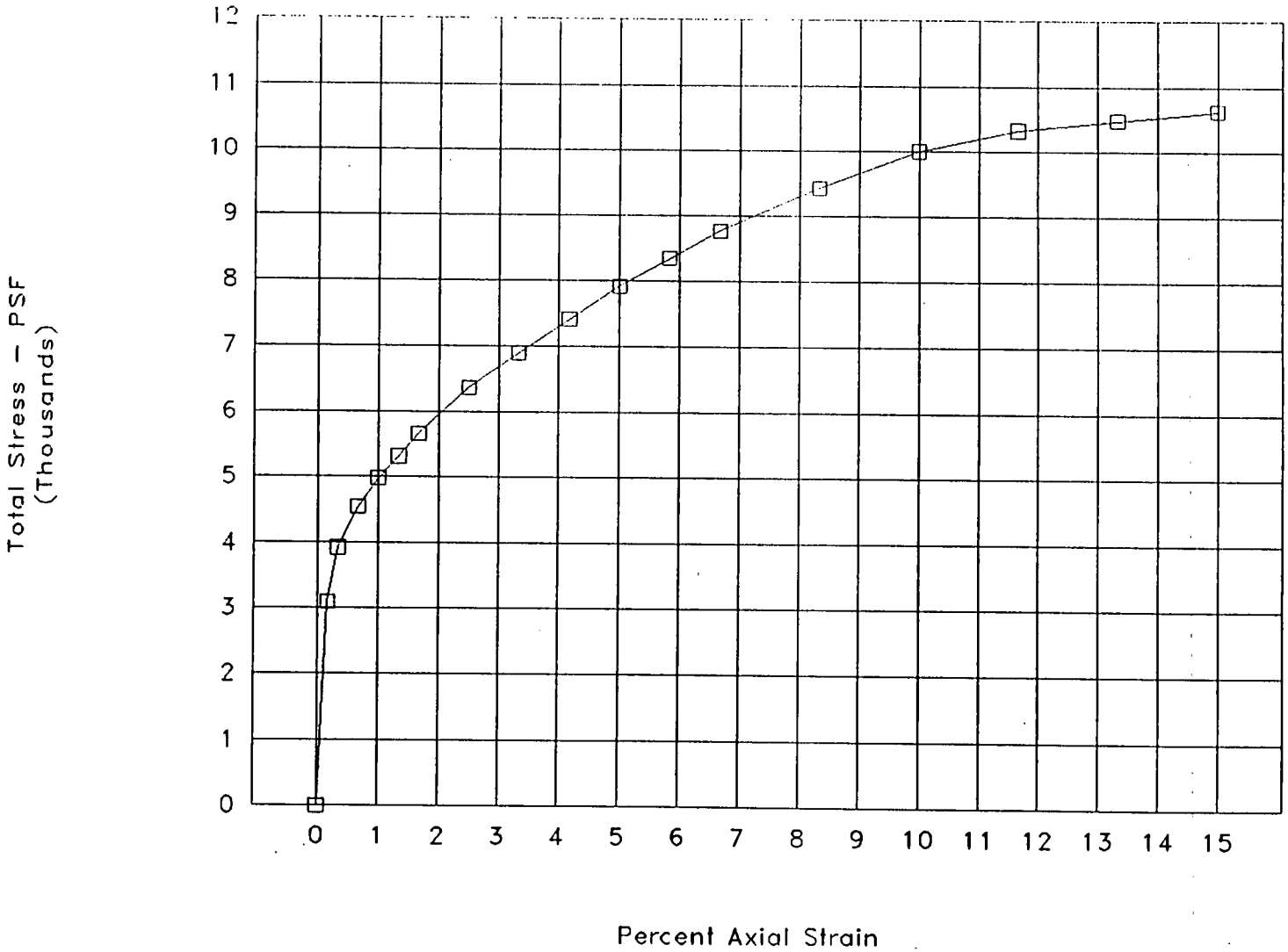
Init. Ht. (in) 6.004
Init. Area (sq in) 4.501
Strain Rate (in/min) 0.060

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.501	0	1368	0	0.00
54.0	1728	0.01	0.17	4.509	1725	1368	3093	2.26
80.0	2559	0.02	0.33	4.516	2551	1368	3919	2.86
100.0	3199	0.04	0.67	4.531	3178	1368	4546	3.32
114.0	3647	0.06	1.00	4.547	3610	1368	4978	3.64
125.0	3999	0.08	1.33	4.562	3946	1368	5314	3.88
136.5	4367	0.10	1.67	4.578	4294	1368	5662	4.14
160.0	5119	0.15	2.50	4.617	4991	1368	6359	4.65
178.5	5710	0.20	3.33	4.656	5520	1368	6888	5.04
197.0	6302	0.25	4.16	4.697	6040	1368	7408	5.42
215.5	6894	0.30	5.00	4.738	6550	1368	7918	5.79
231.5	7406	0.35	5.83	4.780	6974	1368	8342	6.10
248.0	7934	0.40	6.66	4.823	7405	1368	8773	6.41
275.0	8797	0.50	8.33	4.910	8065	1368	9433	6.90
300.0	9597	0.60	9.99	5.001	8638	1368	10006	7.31
317.0	10141	0.70	11.66	5.095	8959	1368	10327	7.55
328.5	10509	0.80	13.32	5.193	9109	1368	10477	7.66
340.5	10893	0.90	14.99	5.295	9260	1368	10628	7.77
350.5	11213	1.00	16.66	5.401	9345	1368	10713	7.83
360.0	11517	1.10	18.32	5.511	9407	1368	10775	7.88
365.0	11677	1.20	19.99	5.626	9343	1368	10711	7.83

Data Entered NAA Date: 7-7-95
Data Checked By: CW Date: 7-11-95
FilenamSAU0704 ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-131, 404704, 7.5-9.5'



TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	27.5-29.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404713	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	21S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	4248	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1028.8	1028.4
Wt. Wet Soil & Pan	(g)	1037.2	1036.8
Wt. Dry Soil & Pan	(g)	926.7	926.7
Wt. Lost Moisture	(g)	110.5	110.1
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	918.4	918.4
Moisture Content %		12.0	12.0
Wet Density PCF		144.4	144.3
Dry Density PCF		128.9	128.9

Init. Diameter	(in)	2.407
Init. Area	(sq in)	4.550
Init. Height	(in)	5.966
Volume (cu ft)		0.01571

Notes & Comments:

SAIC/PARSONS PO140
G2- #404713 @ 27.5-29.5'
TX/UU SATURATED σ_3 = 4248 PSF

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0713

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	27.5-29.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404713	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	21S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	4248	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.4	7.1				
50.0	48.0	5.0	5.8	38.7	47.0	8.3	0.83
60.0	58.0	5.4	6.2	48.7	58.1	9.4	0.94
70.0		6.3	6.3	58.3	67.8	9.5	0.95

Initial Height	(in)	5.966
Init. Vol.	(CC)	444.943
Initial Area	(sq in)	4.550

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0713

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	27.5-29.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404713	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	21S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	4248	AT FIELD MOIST.	No

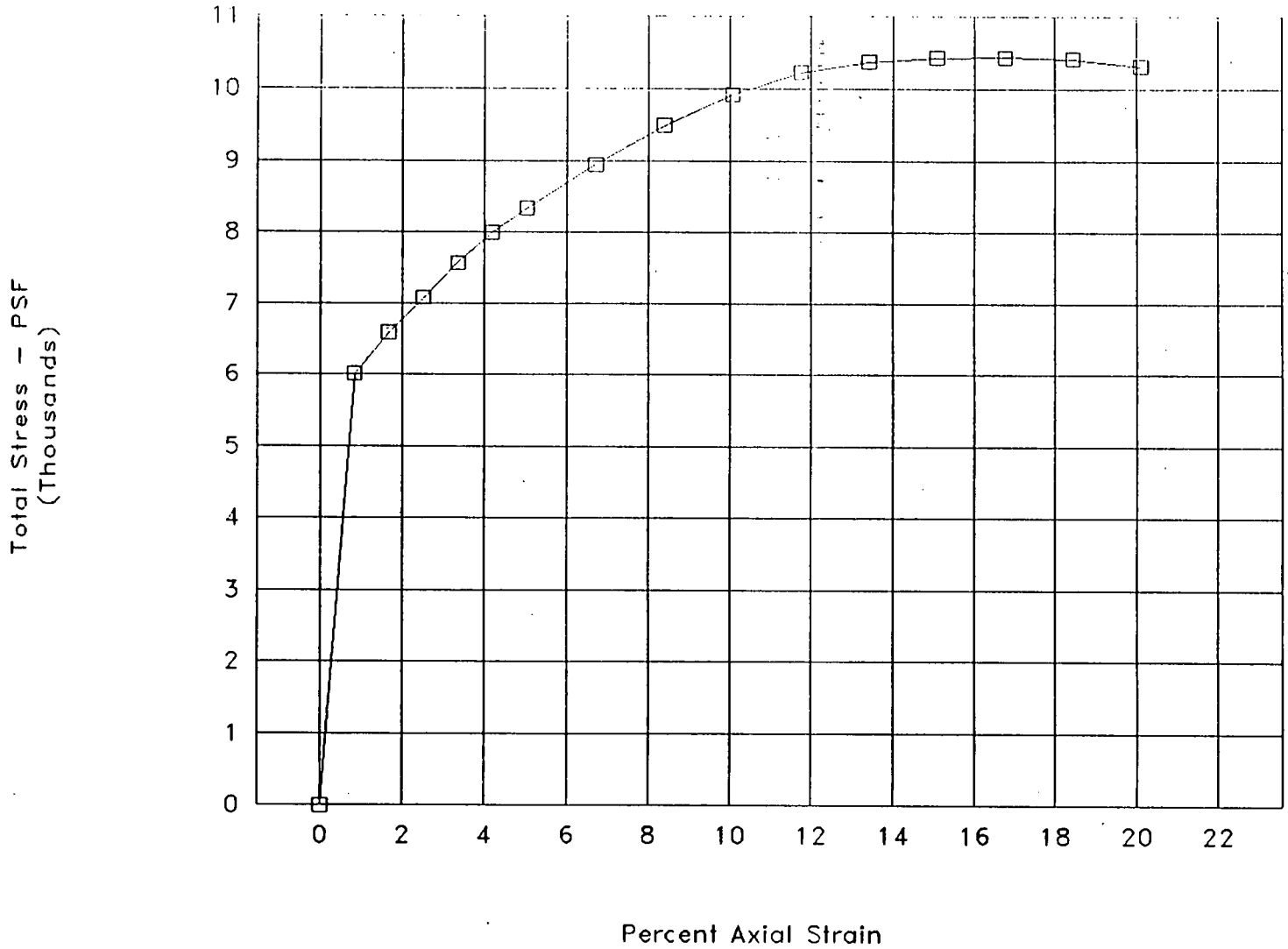
Init. Ht. (in) 5.966
Init. Area (sq in) 4.550
Strain Rate (in/min) 0.060

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.550	0	4248	0	0.00
56.0	1772	0.05	0.84	4.589	1757	4248	6005	1.41
75.0	2373	0.10	1.68	4.628	2334	4248	6582	1.55
91.5	2896	0.15	2.51	4.668	2823	4248	7071	1.66
108.5	3434	0.20	3.35	4.708	3318	4248	7566	1.78
123.5	3908	0.25	4.19	4.749	3745	4248	7993	1.88
136.0	4304	0.30	5.03	4.791	4087	4248	8335	1.96
159.0	5032	0.40	6.70	4.877	4694	4248	8942	2.11
180.5	5712	0.50	8.38	4.967	5233	4248	9481	2.23
199.0	6298	0.60	10.06	5.059	5664	4248	9912	2.33
214.0	6772	0.70	11.73	5.155	5978	4248	10226	2.41
223.5	7073	0.80	13.41	5.255	6124	4248	10372	2.44
230.0	7279	0.90	15.09	5.359	6181	4248	10429	2.45
235.0	7437	1.00	16.76	5.467	6190	4248	10438	2.46
239.0	7563	1.10	18.44	5.579	6169	4248	10417	2.45
240.0	7595	1.20	20.11	5.696	6067	4248	10315	2.43

Data Entered NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
FilenamSAU0713 ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-131.404713 .27.5-29.5'



874

000971

474

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

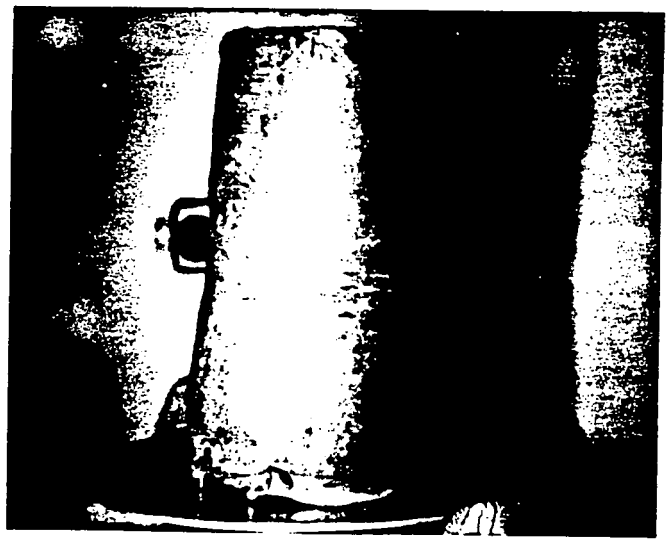
JOB NO. 2059-13A

BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	45.0-47.0'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404719	TEST FINISHED	7-11-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	18S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	6768	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	967.8	975.8
Wt. Wet Soil & Pan	(g)	976.1	984.1
Wt. Dry Soil & Pan	(g)	821.9	821.9
Wt. Lost Moisture	(g)	154.2	162.2
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	813.6	813.6
Moisture Content %		19.0	19.9
Wet Density PCF		135.1	136.2
Dry Density PCF		113.6	113.6

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.033
Volume (cu ft)		0.01579

Notes & Comments:



SAIC/PARSONS PO 140
FERNALD
2059-13A

G2-131
404719 @ 45-47'
TX/UU σ_3 6768 PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: [illegible] Date: 7-31-95
Filename: SAU0719

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13A

BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	45.0-47.0'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404719	TEST FINISHED	7-11-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	18S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	6768	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.9	7.9				
50.0	48.0	2.3	3.1	38.9	47.5	8.6	0.86
60.0	58.0	0.5	1.2	48.4	57.4	9.0	0.90
70.0	68.0	-0.3	0.4	58.3	67.6	9.3	0.93
80.0	78.0	0.0	0.5	67.5	76.6	9.1	0.91
90.0	88.0	0.1	0.9	77.6	86.8	9.2	0.92
100.0		0.6	0.6	88.3	97.8	9.5	0.95

Initial Height	(in)	6.033
Init. Vol.	(CC)	447.327
Initial Area	(sq in)	4.524

Data Entered By: CAL Date: 7-13-95
Data Checked By: RM Date: 7-31-95
Filename:SAU0719

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	45.0-47.0'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404719	TEST FINISHED	7-11-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	18S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	6768	AT FIELD MOIST.	No

Init. Ht. (in) 6.033
Init. Area (sq in) 4.524
Strain Rate (in/min) 0.060

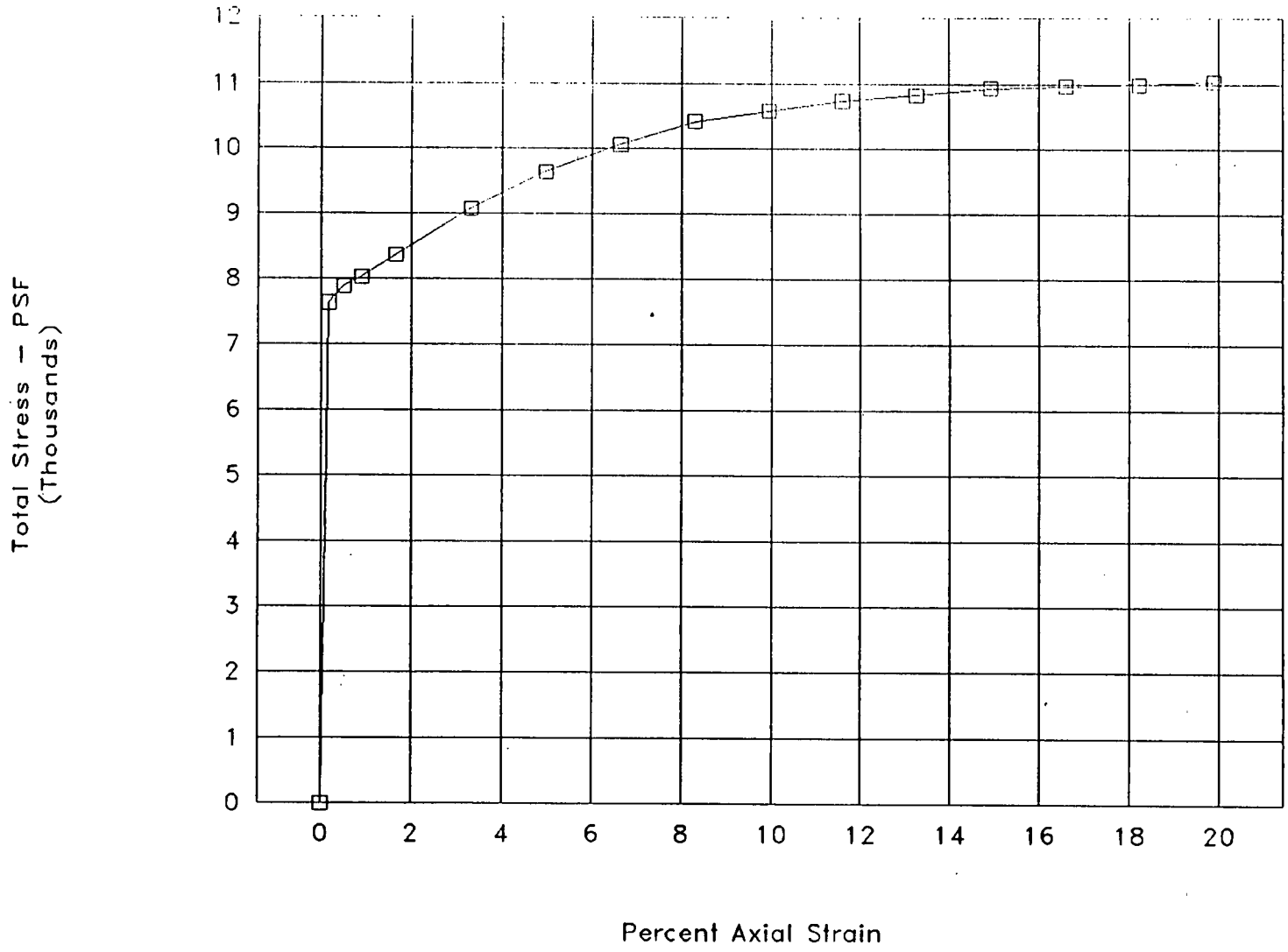
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.524	0	6768	0	0.00
27.0	859	0.01	0.17	4.531	858	6768	7626	1.13
35.0	1114	0.03	0.50	4.547	1109	6768	7877	1.16
40.0	1273	0.05	0.90	4.565	1262	6768	8030	1.19
51.0	1623	0.10	1.66	4.600	1596	6768	8364	1.24
75.0	2387	0.20	3.32	4.679	2308	6768	9076	1.34
95.0	3024	0.30	4.97	4.761	2874	6768	9642	1.42
111.0	3533	0.40	6.63	4.845	3299	6768	10067	1.49
125.0	3979	0.50	8.29	4.933	3649	6768	10417	1.54
133.0	4234	0.60	9.95	5.023	3812	6768	10580	1.56
141.0	4488	0.70	11.60	5.118	3967	6768	10735	1.59
147.0	4679	0.80	13.26	5.215	4059	6768	10827	1.60
154.0	4902	0.90	14.92	5.317	4171	6768	10939	1.62
158.0	5029	1.00	16.58	5.423	4196	6768	10964	1.62
162.0	5157	1.10	18.23	5.533	4216	6768	10984	1.62
167.0	5316	1.20	19.89	5.647	4258	6768	11026	1.63

Data Entered CAL Date: 7-13-95
Data Checked By: NA Date: 7-31-95
FilenamSAU0719

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-131,404719 ,45.0-47.0'



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TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

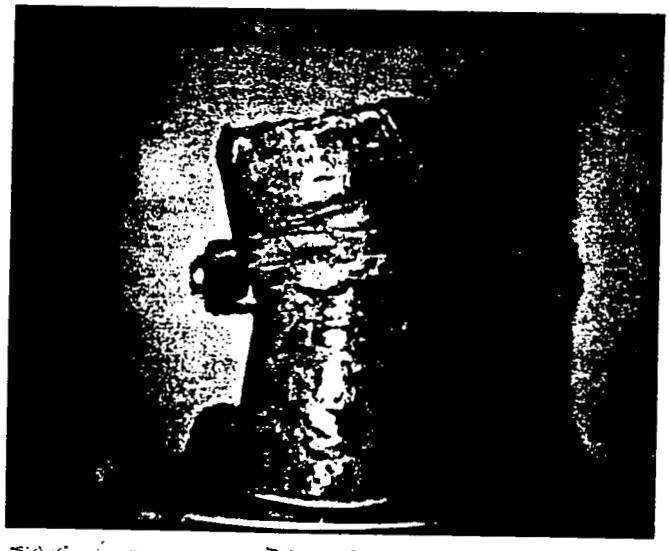
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5.0-7.0'	TEST STARTED	6-12-95 CAL
SAMPLE NO.	405102	TEST FINISHED	6-13-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	Cell# 16S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	842.9	842.0
Wt. Wet Soil & Pan	(g)	851.2	850.3
Wt. Dry Soil & Pan	(g)	655.5	655.5
Wt. Lost Moisture	(g)	195.7	194.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	647.2	647.2
Moisture Content %		30.2	30.1
Wet Density PCF		118.9	118.7
Dry Density PCF		91.3	91.3

Init. Diameter	(in)	2.415
Init. Area	(sq in)	4.581
Init. Height	(in)	5.898
Vol. Bef. Consol.	(cu ft)	0.01563
Vol. After Consol.	(cu ft)	0.01563

Notes & Comments:



SAIC/Parsons PO 140 2059-13H
G2-132 # 405102 @ 5-7'
TX/UU Saturated σ_3 1008 psf

Data Entered By: NAA Date: 6-19-95
Data Checked By: cal Date: 6-23-95
Filename: SAU05102

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5.0-7.0'	TEST STARTED	6-12-95 CAL
SAMPLE NO.	405102	TEST FINISHED	6-13-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	Cell# 16S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.5	11.8				
50.0		14.5	14.7	38.2	48.0	9.8	0.98

Initial Height	(in)	5.898	Init. Vol.	(CC)	442.80
Height Change	(in)	0.000	Vol. Change	(CC)	0.00
Ht. After Cons.	(in)	5.898	Cell Exp.	(CC)	0.00
Initial Area	(sq in)	4.581	Net Change	(CC)	0.00
Area After Cons.	(sq in)	4.581	Cons. Vol.	(CC)	442.80

Data Entered By: NAA Date: 6-19-95
Data Checked By: Cal Date: 6-23-95
Filename:SAU05102

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5.0-7.0'	TEST STARTED	6-12-95 CAL
SAMPLE NO.	405102	TEST FINISHED	6-13-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	Cell# 16S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

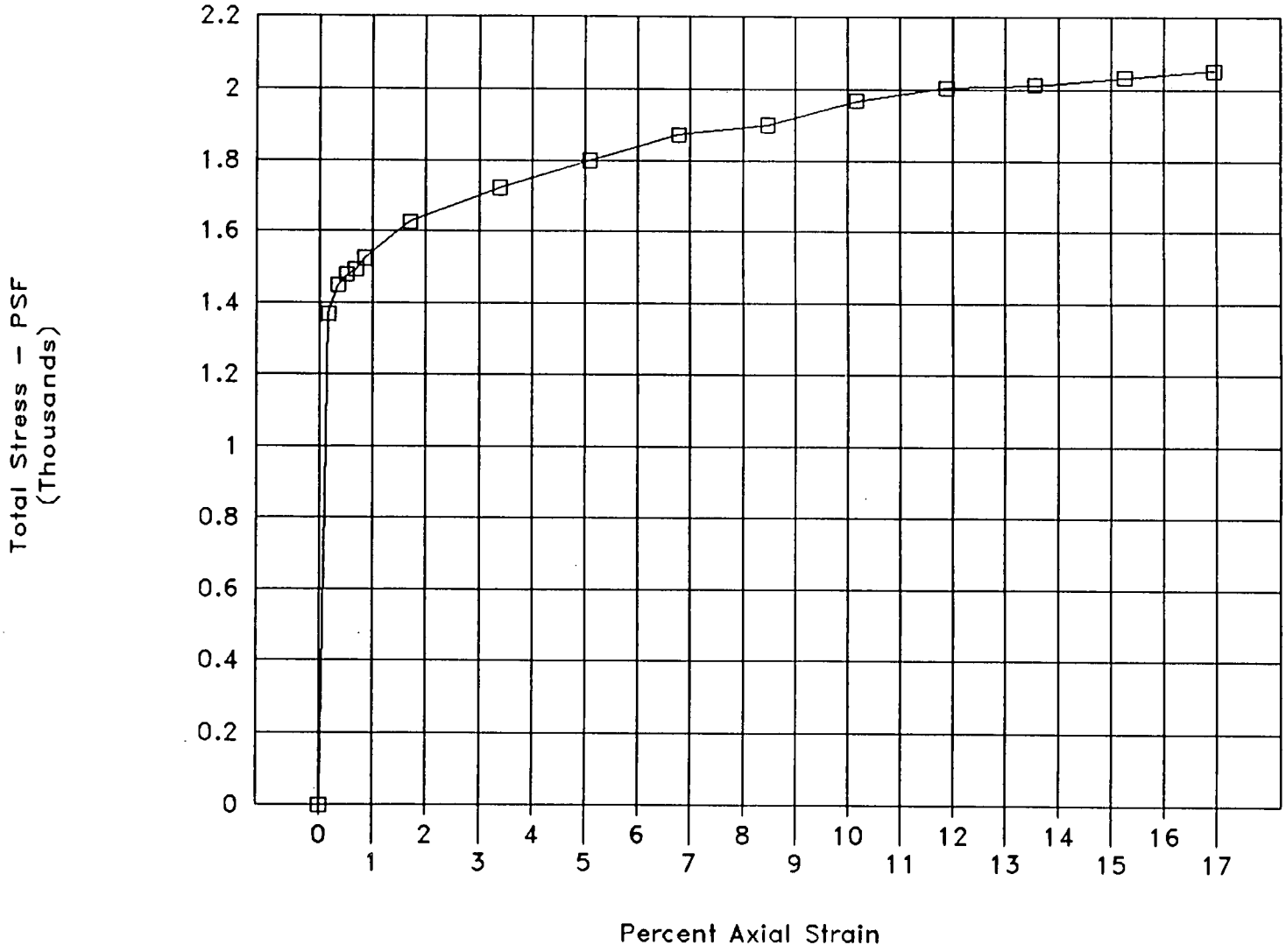
Init. Ht.	(in)	5.898	Init. Area	(sq in)	4.581
Consol. Ht.	(in)	5.898	Consol. Area	(sq in)	4.581
Back Pres.	PSI	0.0	Strain Rate	(in/min)	0.000

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.581	0	0.00	0.0	1008	0	0.00
11.5	362	0.01	0.17	4.588	361	0.00	0.0	1008	1369	1.36
14.0	440	0.02	0.34	4.596	439	0.00	0.0	1008	1447	1.44
15.0	472	0.03	0.51	4.604	469	0.00	0.0	1008	1477	1.47
15.5	487	0.04	0.68	4.612	484	0.00	0.0	1008	1492	1.48
16.5	519	0.05	0.85	4.620	514	0.00	0.0	1008	1522	1.51
20.0	629	0.10	1.70	4.660	618	0.00	0.0	1008	1626	1.61
23.5	739	0.20	3.39	4.741	714	0.00	0.0	1008	1722	1.71
26.5	833	0.30	5.09	4.826	791	0.00	0.0	1008	1799	1.78
29.5	927	0.40	6.78	4.914	864	0.00	0.0	1008	1872	1.86
31.0	975	0.50	8.48	5.005	892	0.00	0.0	1008	1900	1.88
34.0	1069	0.60	10.17	5.099	960	0.00	0.0	1008	1968	1.95
36.0	1132	0.70	11.87	5.197	997	0.00	0.0	1008	2005	1.99
37.0	1163	0.80	13.56	5.299	1005	0.00	0.0	1008	2013	2.00
38.5	1210	0.90	15.26	5.405	1026	0.00	0.0	1008	2034	2.02
40.0	1257	1.00	16.95	5.516	1044	0.00	0.0	1008	2052	2.04

Data Entered NAA Date: 6-19-95
Data Checked By: cal Date: 6-23-95
FilenamSAU05102 ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Field Moisture

G2-132, 405102, 5.0-7.0'



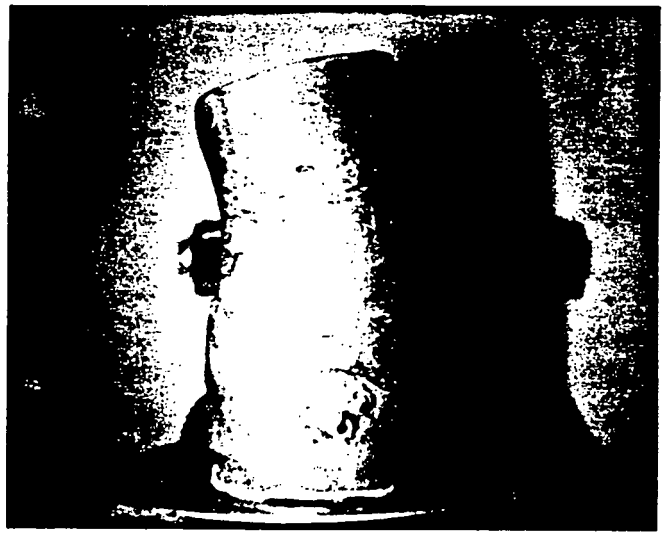
TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	17S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1006.9	1000.1
Wt. Wet Soil & Pan	(g)	1015.1	1008.4
Wt. Dry Soil & Pan	(g)	889.6	889.6
Wt. Lost Moisture	(g)	125.5	118.7
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	881.4	881.4
Moisture Content %		14.2	13.5
Wet Density PCF		140.7	139.8
Dry Density PCF		123.2	123.2

Init. Diameter	(in)	2.403
Init. Area	(sq in)	4.535
Init. Height	(in)	6.010
Volume (cu ft)		0.01577

Notes & Comments:



SAIC/PARSONS PO140
G2-132 # 405105 @ 10-12'
TX/UU SATURATED σ_3 = 1728 PSF

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0105

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	17S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.3	7.9				
50.0	48.0	6.8	7.8	38.9	48.2	9.3	0.93
60.0	58.0	7.8	8.6	48.9	58.2	9.3	0.93
70.0		8.8	8.8	58.6	68.1	9.5	0.95

Initial Height	(in)	6.010
Init. Vol.	(CC)	446.736
Initial Area	(sq in)	4.535

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0105

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	17S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

Init. Ht.	(in)	6.010
Init. Area	(sq in)	4.535
Strain Rate	(in/min)	0.060

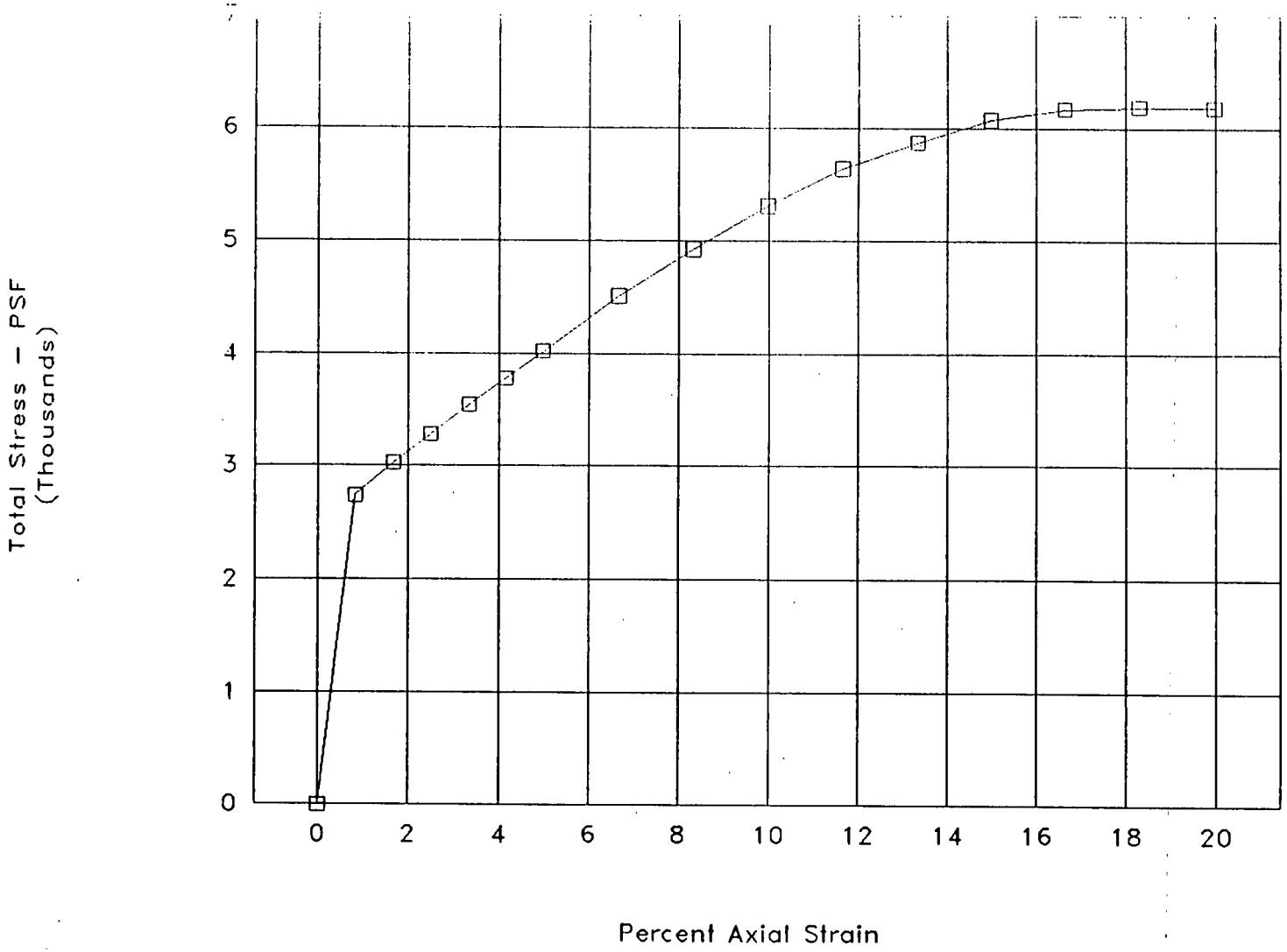
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.535	0	1728	0	0.00
32.0	1016	0.05	0.83	4.573	1008	1728	2736	1.58
41.5	1318	0.10	1.66	4.612	1296	1728	3024	1.75
50.0	1588	0.15	2.50	4.651	1548	1728	3276	1.90
59.0	1873	0.20	3.33	4.691	1811	1728	3539	2.05
67.5	2143	0.25	4.16	4.732	2054	1728	3782	2.19
76.0	2413	0.30	4.99	4.773	2293	1728	4021	2.33
94.0	2985	0.40	6.66	4.859	2786	1728	4514	2.61
110.0	3493	0.50	8.32	4.947	3202	1728	4930	2.85
125.5	3985	0.60	9.98	5.038	3587	1728	5315	3.08
139.5	4429	0.70	11.65	5.133	3913	1728	5641	3.26
150.5	4779	0.80	13.31	5.232	4143	1728	5871	3.40
161.0	5112	0.90	14.98	5.334	4346	1728	6074	3.52
168.0	5334	1.00	16.64	5.440	4447	1728	6175	3.57
172.0	5461	1.10	18.30	5.551	4462	1728	6190	3.58
175.5	5572	1.20	19.97	5.667	4460	1728	6188	3.58

Data Entered NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
FilenamSAU0105

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

S2-132.405105 ,10.0-12.0'



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TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405055	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1017.3	1015.5
Wt. Wet Soil & Pan	(g)	1025.6	1023.7
Wt. Dry Soil & Pan	(g)	910.8	910.8
Wt. Lost Moisture	(g)	114.7	112.9
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	902.6	902.6
Moisture Content %		12.7	12.5
Wet Density PCF		143.0	142.7
Dry Density PCF		126.9	126.9

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.981
Volume (cu ft)		0.01568

Notes & Comments:

SAIC/PARSONS PO 140
FERNALD
2059-13D

G2-133
405055 A
7.5-9.5'
TX/UU σ_3 1368PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: VA Date: 7-31-95
Filename: SAU0055

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405055	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.3	13.4				
50.0	48.0	16.8	18.0	37.0	44.3	7.3	0.73
60.0	58.0	20.8	21.8	47.0	55.0	8.0	0.80
70.0	68.0	23.1	24.0	56.9	66.1	9.2	0.92
80.0		24.8	24.8	66.8	76.3	9.5	0.95

Initial Height	(in)	5.981
Init. Vol.	(CC)	444.210
Initial Area	(sq in)	4.531

Data Entered By: CAL Date: 7-13-95
Data Checked By: VG Date: 7-31-95
Filename: SAU0055

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405055	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

Init. Ht.	(in)	5.981
Init. Area	(sq in)	4.531
Strain Rate	(in/min)	0.060

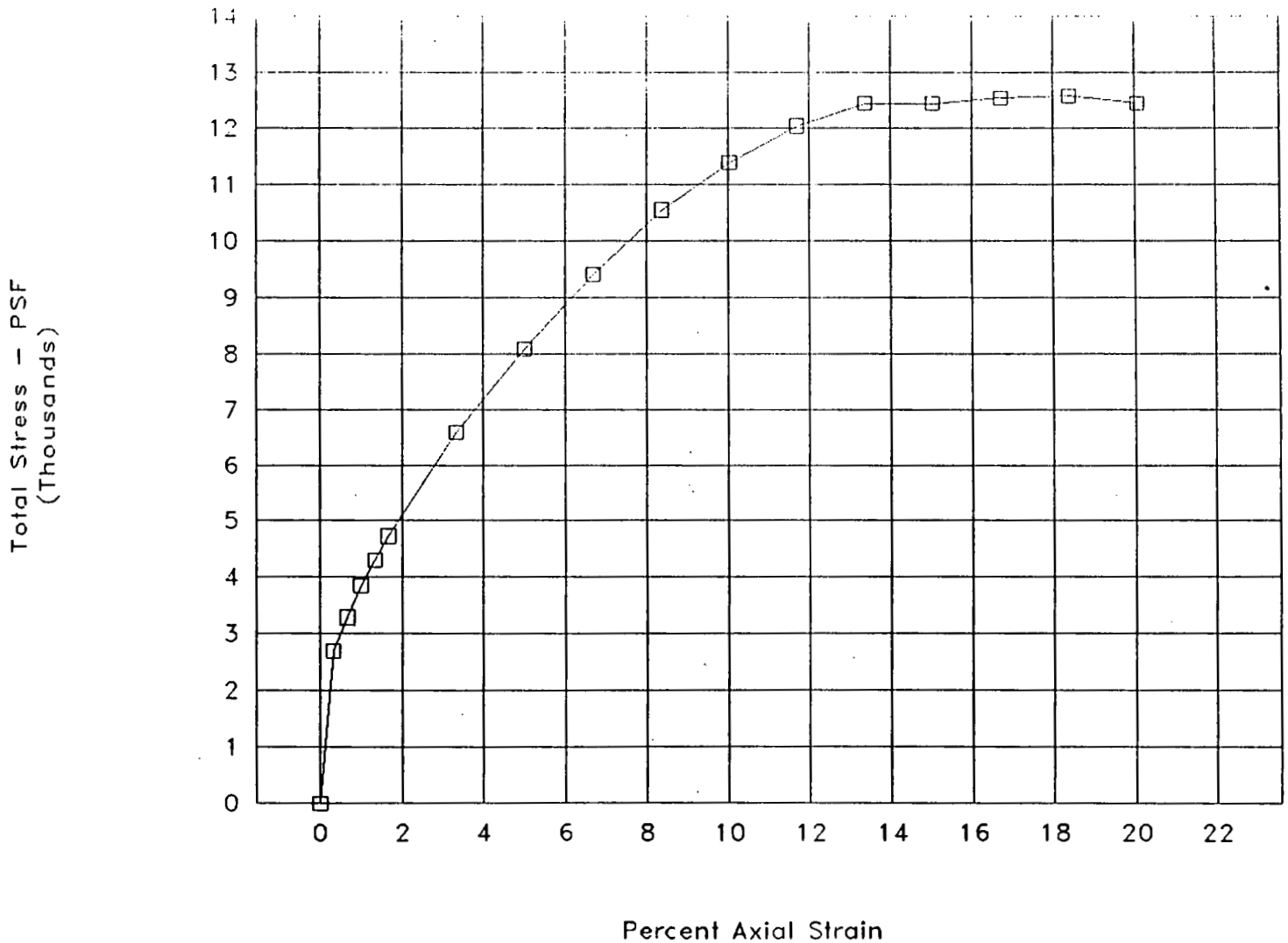
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.531	0	1368	0	0.00
42.0	1335	0.02	0.33	4.547	1330	1368	2698	1.97
61.0	1938	0.04	0.67	4.562	1925	1368	3293	2.41
78.5	2495	0.06	1.00	4.577	2470	1368	3838	2.81
93.5	2971	0.08	1.34	4.593	2932	1368	4300	3.14
107.5	3416	0.10	1.67	4.608	3359	1368	4727	3.46
170.0	5402	0.20	3.34	4.688	5222	1368	6590	4.82
222.5	7071	0.30	5.02	4.771	6716	1368	8084	5.91
271.0	8612	0.40	6.69	4.856	8036	1368	9404	6.87
315.0	10010	0.50	8.36	4.945	9173	1368	10541	7.71
350.0	11122	0.60	10.03	5.037	10007	1368	11375	8.31
380.0	12076	0.70	11.70	5.132	10662	1368	12030	8.79
402.0	12775	0.80	13.38	5.231	11066	1368	12434	9.09
410.0	13029	0.90	15.05	5.334	11068	1368	12436	9.09
422.0	13410	1.00	16.72	5.441	11168	1368	12536	9.16
432.0	13728	1.10	18.39	5.553	11203	1368	12571	9.19
436.0	13855	1.20	20.06	5.669	11075	1368	12443	9.10

Data Entered CAL Date: 7-13-95
Data Checked By: NG Date: 7-31-95
FilenamSAU0055

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

B2-133,405055 ,7.5-9.5'



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TRIAXIAL COMPRESSION TEST DATA

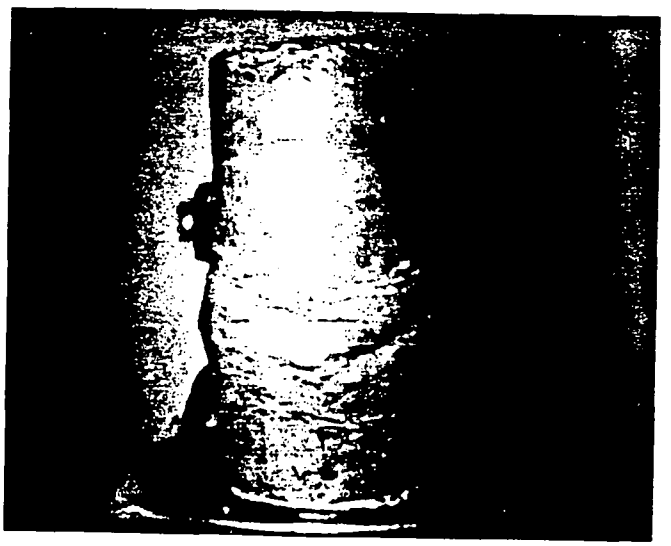
CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-2-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1025.5	1020.9
Wt. Wet Soil & Pan	(g)	1033.8	1029.2
Wt. Dry Soil & Pan	(g)	919.3	919.3
Wt. Lost Moisture	(g)	114.5	109.9
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	911.0	911.0
Moisture Content %		12.6	12.1
Wet Density PCF		143.7	143.0
Dry Density PCF		127.6	127.6

Init. Diameter	(in)	2.407
Init. Area	(sq in)	4.550
Init. Height	(in)	5.976
Volume	(cu ft)	0.01574

Notes & Comments:



SAIC/PARSONS PO 140 FERNALD
2059-13G 12-14' 405140
Saturated UU σ_3 2016 PSF

Data Entered By: NAA Date: 7-11-95
Data Checked By: Cal Date: 7-13-95
Filename: SAT0140A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-2-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.8	10.1				
50.0	48.0	10.8	11.9	37.5	45.3	7.8	0.78
60.0	58.0	12.2	12.6	47.4	56.3	8.9	0.89
70.0	68.0	13.4	14.3	57.3	66.6	9.3	0.93
80.0		14.6	14.6	67.4	76.9	9.5	0.95

Initial Height	(in)	5.976
Init. Vol.	(CC)	445.689
Initial Area	(sq in)	4.550

Data Entered By: NAA Date: 7-11-95
Data Checked By: Cal Date: 7-13-95
Filename: SAT0140A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-2-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

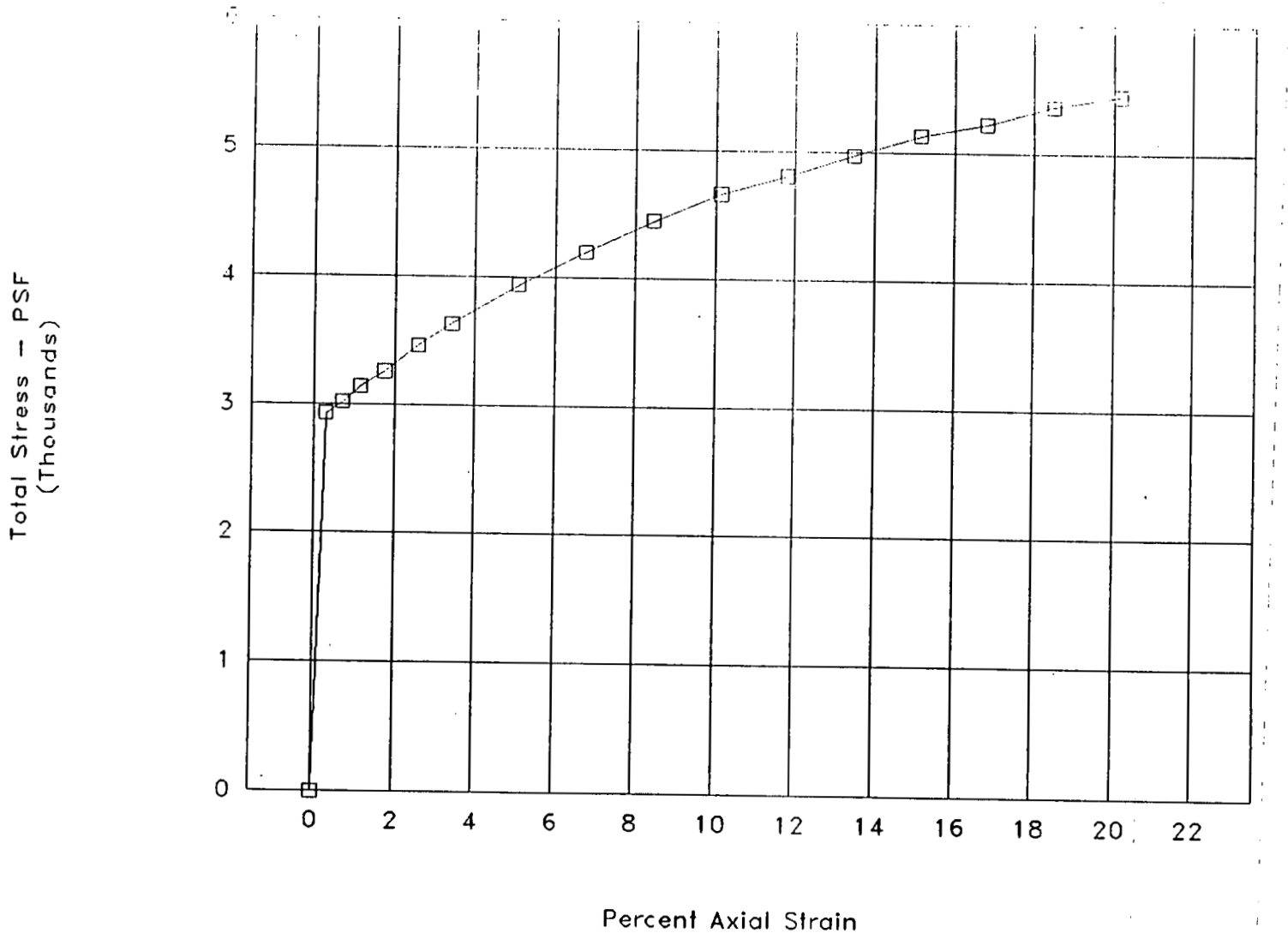
Init. Ht. (in) 5.976
Init. Area (sq in) 4.550
Strain Rate (in/min) 0.060

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.550	0	2016	0	0.00
29.0	918	0.02	0.30	4.564	915	2016	2931	1.45
32.0	1013	0.04	0.72	4.583	1005	2016	3021	1.50
36.0	1139	0.07	1.14	4.603	1126	2016	3142	1.56
40.0	1266	0.11	1.76	4.632	1244	2016	3260	1.62
47.0	1487	0.16	2.59	4.671	1449	2016	3465	1.72
53.0	1677	0.21	3.43	4.712	1620	2016	3636	1.80
64.0	2025	0.31	5.10	4.795	1922	2016	3938	1.95
74.0	2342	0.41	6.78	4.881	2183	2016	4199	2.08
84.0	2658	0.51	8.45	4.970	2434	2016	4450	2.21
93.0	2943	0.61	10.12	5.063	2645	2016	4661	2.31
100.0	3165	0.71	11.80	5.159	2791	2016	4807	2.38
108.0	3418	0.81	13.47	5.259	2957	2016	4973	2.47
116.0	3671	0.91	15.14	5.362	3115	2016	5131	2.55
122.0	3861	1.01	16.82	5.470	3212	2016	5228	2.59
130.0	4114	1.11	18.49	5.583	3353	2016	5369	2.66
136.0	4304	1.21	20.16	5.700	3436	2016	5452	2.70

Data Entered NAA Date: 7-11-95
Data Checked By: Cal Date: 7-13-95
FilenamSAT0140A ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-134, 405140, 12.0-14.0'



TRIAXIAL SHEAR TEST - TX/UU
Field Moisture
ASTM D 2850

TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

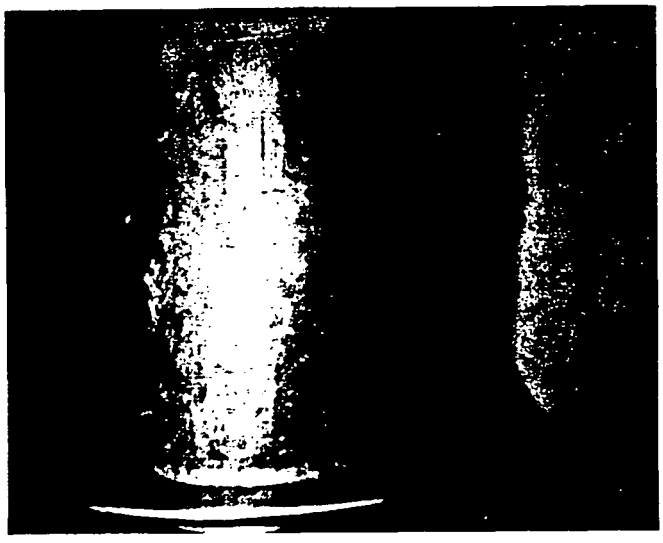
CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10-12'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	404824	TEST FINISHED	5-25-95
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1728	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	995.5
Wt. Wet Soil & Pan	(g)	1011.2
Wt. Dry Soil & Pan	(g)	893.0
Wt. Lost Moisture	(g)	118.2
Wt. of Pan Only	(g)	15.7
Wt. of Dry Soil	(g)	877.3
Moisture Content %		13.5
Wet Density PCF		141.4
Dry Density PCF		124.6

Init. Diameter	(in)	2.398
Init. Area	(sq in)	4.516
Init. Height	(in)	5.938
Volume cu Ft.		0.01552



Notes & Comments:

Data entered by: 5-30-95 Date: NAA
Data checked by: [illegible] Date: 6-01-95
FileName:SAU0824

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10-12'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	404824	TEST FINISHED	5-25-95
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1728	AT FIELD MOIST.	Yes

Init. Ht. (in) 5.938

Init. Area (sq in) 4.516

Strain Rate (in/min) 0.060

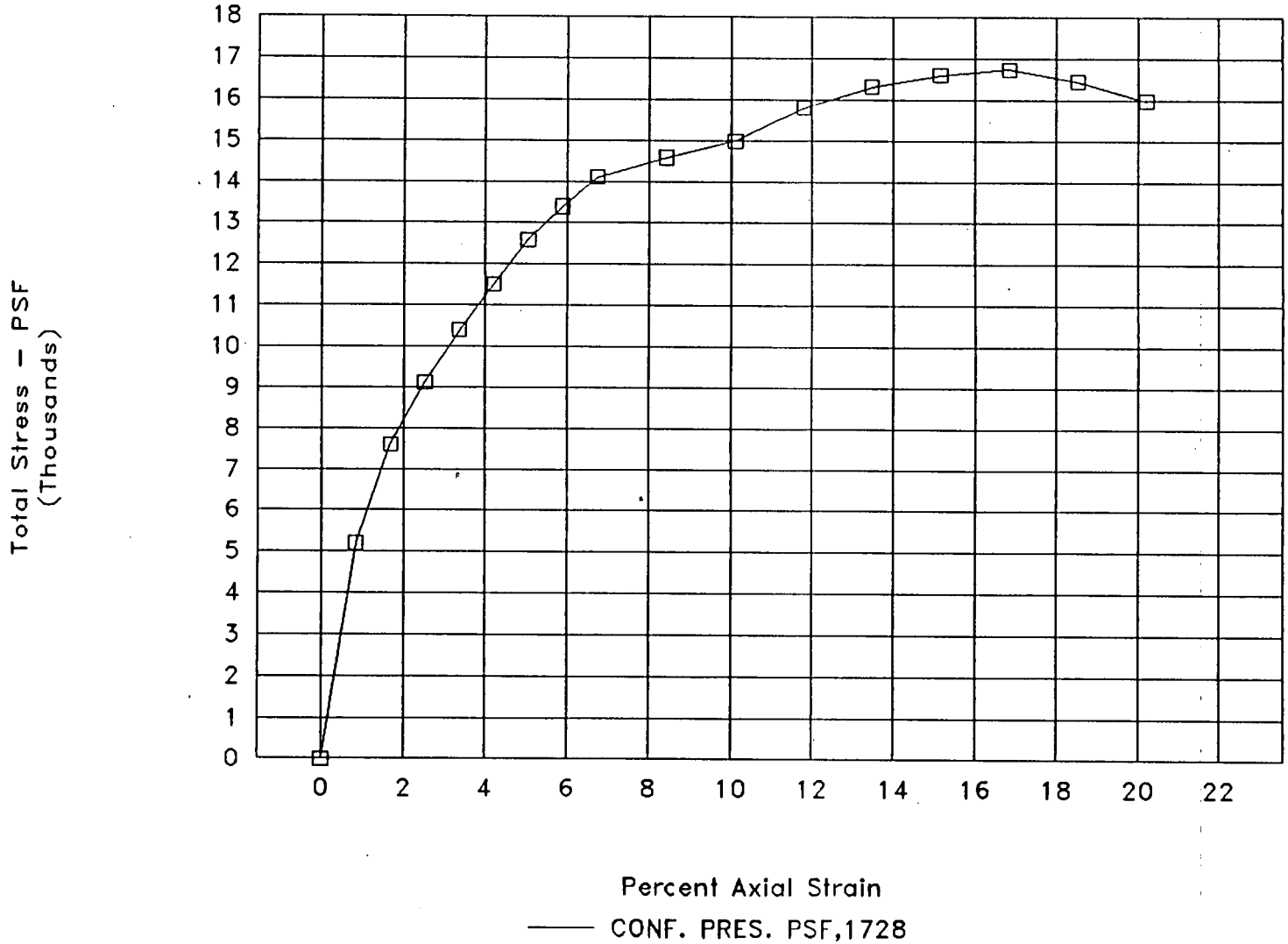
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.516	0	0.00	0.0	1728	0	0.00
110.0	3507	0.05	0.84	4.555	3478	0.00	0.0	1728	5206	3.01
187.5	5978	0.10	1.68	4.594	5878	0.00	0.0	1728	7606	4.40
237.5	7572	0.15	2.53	4.633	7381	0.00	0.0	1728	9109	5.27
281.3	8969	0.20	3.37	4.674	8667	0.00	0.0	1728	10395	6.02
320.0	10203	0.25	4.21	4.715	9773	0.00	0.0	1728	11501	6.66
358.8	11440	0.30	5.05	4.757	10862	0.00	0.0	1728	12590	7.29
388.8	12397	0.35	5.89	4.799	11666	0.00	0.0	1728	13394	7.75
416.3	13273	0.40	6.74	4.843	12379	0.00	0.0	1728	14107	8.16
440.0	14029	0.45	7.58	4.887	12966	0.00	0.0	1728	14694	8.50
462.5	14746	0.50	8.42	4.932	13505	0.00	0.0	1728	15233	8.82
500.0	15942	0.60	10.10	5.024	14331	0.00	0.0	1728	16059	9.29
528.8	16860	0.70	11.79	5.120	14873	0.00	0.0	1728	16601	9.61
550.0	17536	0.80	13.47	5.220	15174	0.00	0.0	1728	16902	9.78
566.3	18056	0.90	15.16	5.323	15319	0.00	0.0	1728	17047	9.87
566.3	18056	1.00	16.84	5.431	15015	0.00	0.0	1728	16743	9.69
560.0	17855	1.10	18.52	5.543	14547	0.00	0.0	1728	16275	9.42
526.3	16781	1.20	20.21	5.660	13389	0.00	0.0	1728	15117	8.75

Data entered 5-30-95Date: NAA
Data checked by: ol Date: 6-01-95
FileNamSAU0824

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Field Moisture

G2-122,10.0-12.0',404824



868

000995

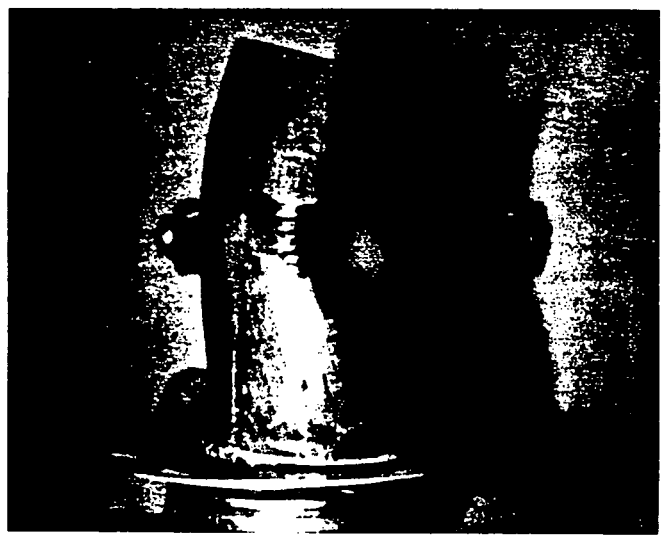
474

TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	5.0-7.0'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405002	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1008	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	898.1
Wt. Wet Soil & Pan	(g)	913.5
Wt. Dry Soil & Pan	(g)	753.7
Wt. Lost Moisture	(g)	159.9
Wt. of Pan Only	(g)	15.5
Wt. of Dry Soil	(g)	738.2
Moisture Content %		21.7
Wet Density PCF		127.8
Dry Density PCF		105.1

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	5.897
Volume cu Ft.		0.01549



Notes & Comments:

Data entered by: NAA Date: 5-30-95
Data checked by: CAL Date: 5-31-95
FileName: SAU0002

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	5.0-7.0'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405002	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1008	AT FIELD MOIST.	Yes

Init. Ht. (in) 5.897

Init. Area (sq in) 4.539

Strain Rate (in/min) 0.060

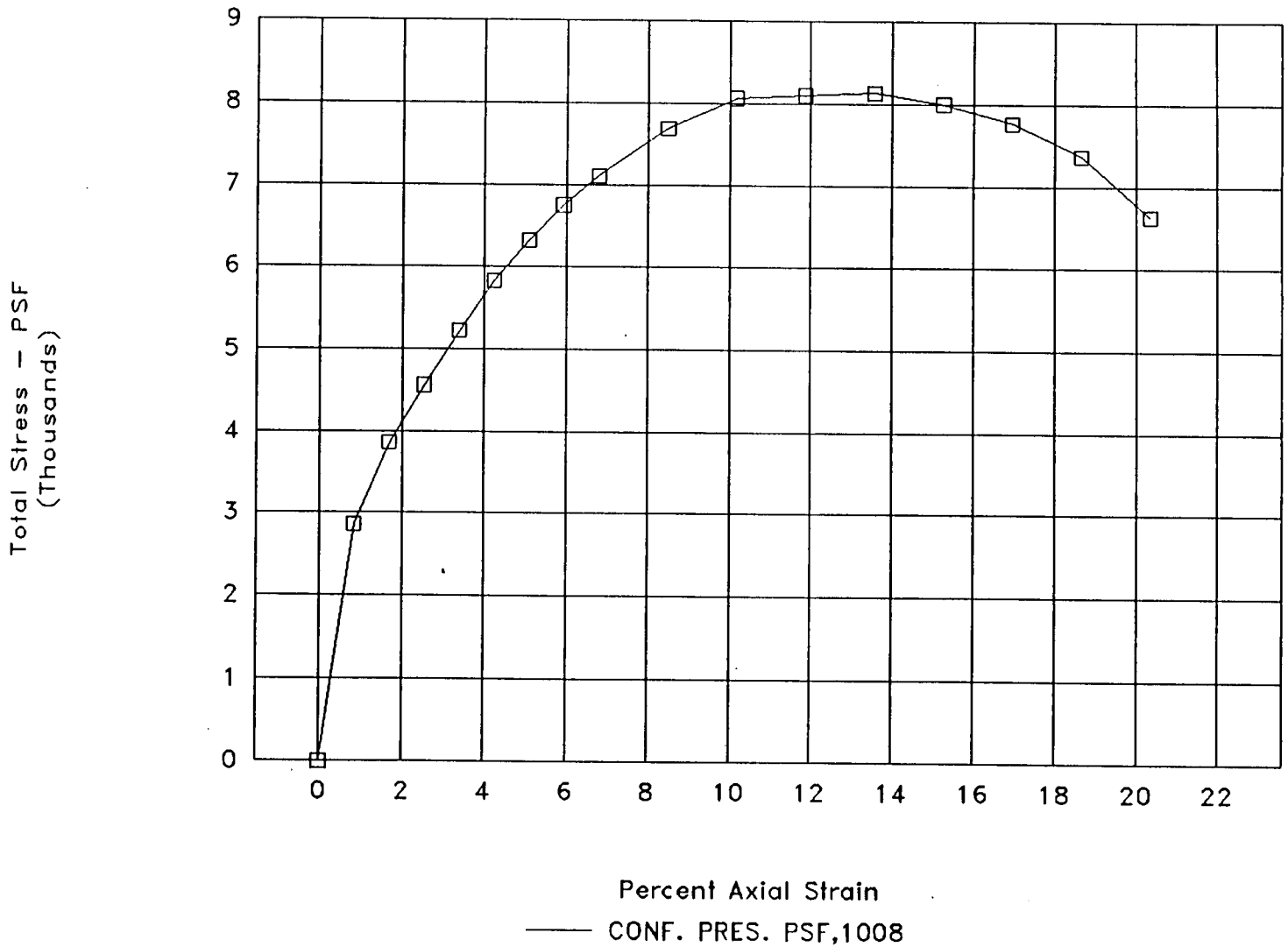
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.539	0	0.00	0.0	1008	0	0.00
58.8	1865	0.05	0.85	4.578	1850	0.00	0.0	1008	2858	2.83
91.3	2897	0.10	1.70	4.617	2847	0.00	0.0	1008	3855	3.82
115.0	3648	0.15	2.54	4.657	3556	0.00	0.0	1008	4564	4.53
137.5	4362	0.20	3.39	4.698	4214	0.00	0.0	1008	5222	5.18
158.8	5038	0.25	4.24	4.740	4824	0.00	0.0	1008	5832	5.79
176.3	5593	0.30	5.09	4.782	5309	0.00	0.0	1008	6317	6.27
192.5	6107	0.35	5.94	4.825	5745	0.00	0.0	1008	6753	6.70
206.3	6545	0.40	6.78	4.869	6101	0.00	0.0	1008	7109	7.05
230.0	7297	0.50	8.48	4.959	6678	0.00	0.0	1008	7686	7.63
247.5	7852	0.60	10.17	5.053	7053	0.00	0.0	1008	8061	8.00
253.8	8052	0.70	11.87	5.150	7096	0.00	0.0	1008	8104	8.04
260.0	8249	0.80	13.57	5.251	7130	0.00	0.0	1008	8138	8.07
260.0	8249	0.90	15.26	5.356	6990	0.00	0.0	1008	7998	7.93
256.3	8131	1.00	16.96	5.466	6752	0.00	0.0	1008	7760	7.70
246.3	7814	1.10	18.65	5.580	6356	0.00	0.0	1008	7364	7.31
222.5	7059	1.20	20.35	5.699	5622	0.00	0.0	1008	6630	6.58

Data entered NAA Date: 5-30-95
Data checked by: [illegible] Date: 5-31-95
FileNamSAU0002

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Field Moisture

G2-124,5.0-7.0',405002



TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

474

CLIENT SAIC/Parsons PO 140

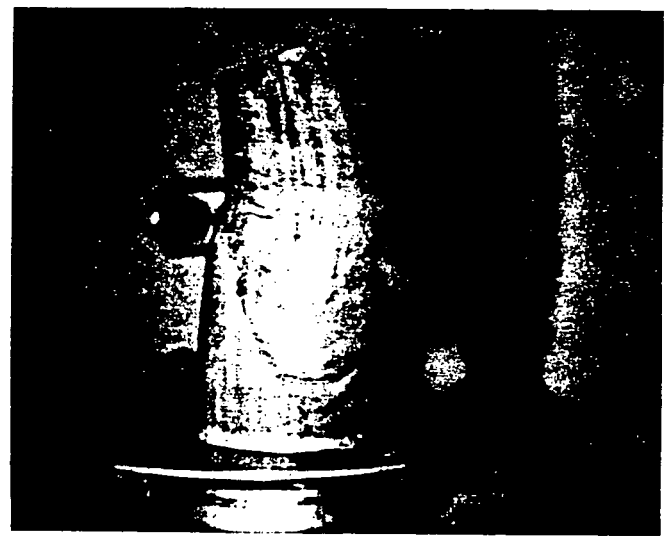
JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95
DEPTH	7.5-9.5'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405026	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1368	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	1011.4
Wt. Wet Soil & Pan	(g)	1026.8
Wt. Dry Soil & Pan	(g)	902.4
Wt. Lost Moisture	(g)	124.4
Wt. of Pan Only	(g)	15.4
Wt. of Dry Soil	(g)	887.0
Moisture Content %		14.0
Wet Density PCF		141.0
Dry Density PCF		123.7

Init. Diameter	(in)	2.408
Init. Area	(sq in)	4.554
Init. Height	(in)	6.000
Volume cu Ft.		0.01581

Notes & Comments:



Data entered by: NAA Date: 5-30-95
Data checked by: SR Date: 5-30-95
FileName: SAU0026

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95
DEPTH	7.5-9.5'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405026	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1368	AT FIELD MOIST.	Yes

Init. Ht. (in) 6.000

Init. Area (sq in) 4.554

Strain Rate (in/min) 0.060

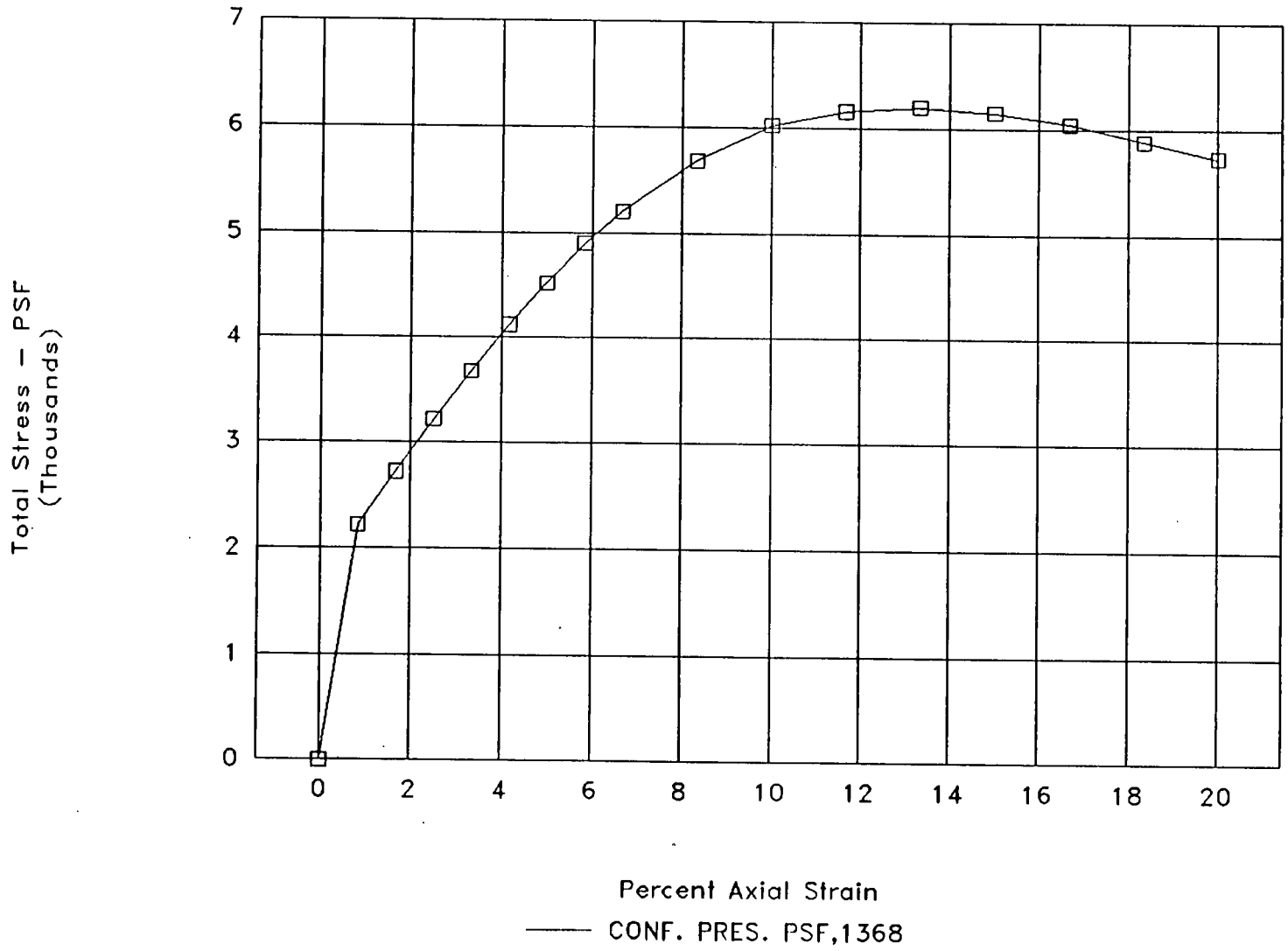
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.554	0	0.00	0.0	1368	0	0.00
27.0	854	0.05	0.83	4.592	847	0.00	0.0	1368	2215	1.62
43.5	1375	0.10	1.67	4.631	1353	0.00	0.0	1368	2721	1.99
60.0	1897	0.15	2.50	4.671	1850	0.00	0.0	1368	3218	2.35
75.5	2387	0.20	3.33	4.711	2308	0.00	0.0	1368	3676	2.69
91.0	2877	0.25	4.17	4.752	2758	0.00	0.0	1368	4126	3.02
105.0	3320	0.30	5.00	4.794	3154	0.00	0.0	1368	4522	3.31
118.5	3747	0.35	5.83	4.836	3528	0.00	0.0	1368	4896	3.58
130.0	4111	0.40	6.67	4.879	3837	0.00	0.0	1368	5205	3.80
149.0	4711	0.50	8.33	4.968	4319	0.00	0.0	1368	5687	4.16
163.5	5170	0.60	10.00	5.060	4653	0.00	0.0	1368	6021	4.40
171.5	5423	0.70	11.67	5.156	4790	0.00	0.0	1368	6158	4.50
176.5	5581	0.80	13.33	5.255	4837	0.00	0.0	1368	6205	4.54
178.0	5628	0.90	15.00	5.358	4784	0.00	0.0	1368	6152	4.50
177.5	5613	1.00	16.67	5.465	4677	0.00	0.0	1368	6045	4.42
175.0	5533	1.10	18.33	5.576	4519	0.00	0.0	1368	5887	4.30
172.5	5454	1.20	20.00	5.693	4364	0.00	0.0	1368	5732	4.19

Data entered NAA Date: 5-30-95
Data checked by: SR Date: 5-30-95
FileNamSAU0026

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Field Moisture

G2-125,7.5-9.5',405026



TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

474

CLIENT SAIC/Parsons PO 140

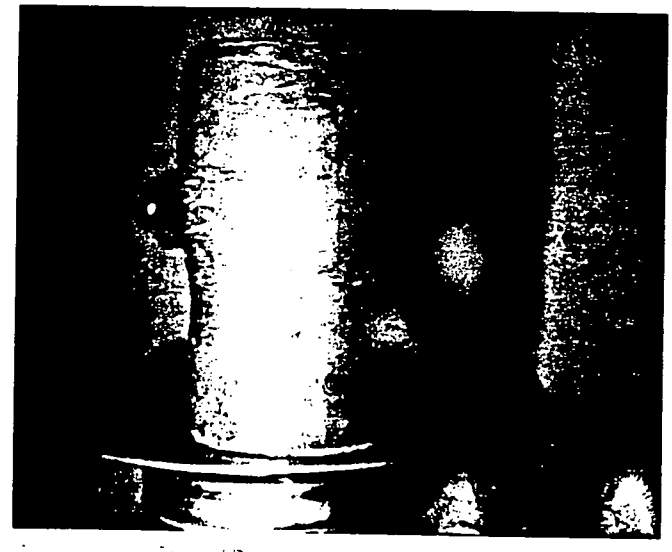
JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95
DEPTH	17.5-19.5'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405033	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	2808	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	1032.1
Wt. Wet Soil & Pan	(g)	1047.3
Wt. Dry Soil & Pan	(g)	930.9
Wt. Lost Moisture	(g)	116.4
Wt. of Pan Only	(g)	15.2
Wt. of Dry Soil	(g)	915.7
Moisture Content %		12.7
Wet Density PCF		145.0
Dry Density PCF		128.7

Init. Diameter	(in)	2.415
Init. Area	(sq in)	4.581
Init. Height	(in)	5.918
Volume cu Ft.		0.01569

Notes & Comments:



Data entered by: NAA Date: 5-30-95
Data checked by: SR Date: 5-30-95
FileName:SAU0033

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95
DEPTH	17.5-19.5'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405033	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	2808	AT FIELD MOIST.	Yes

Init. Ht. (in) 5.918

Init. Area (sq in) 4.581

Strain Rate (in/min) 0.060

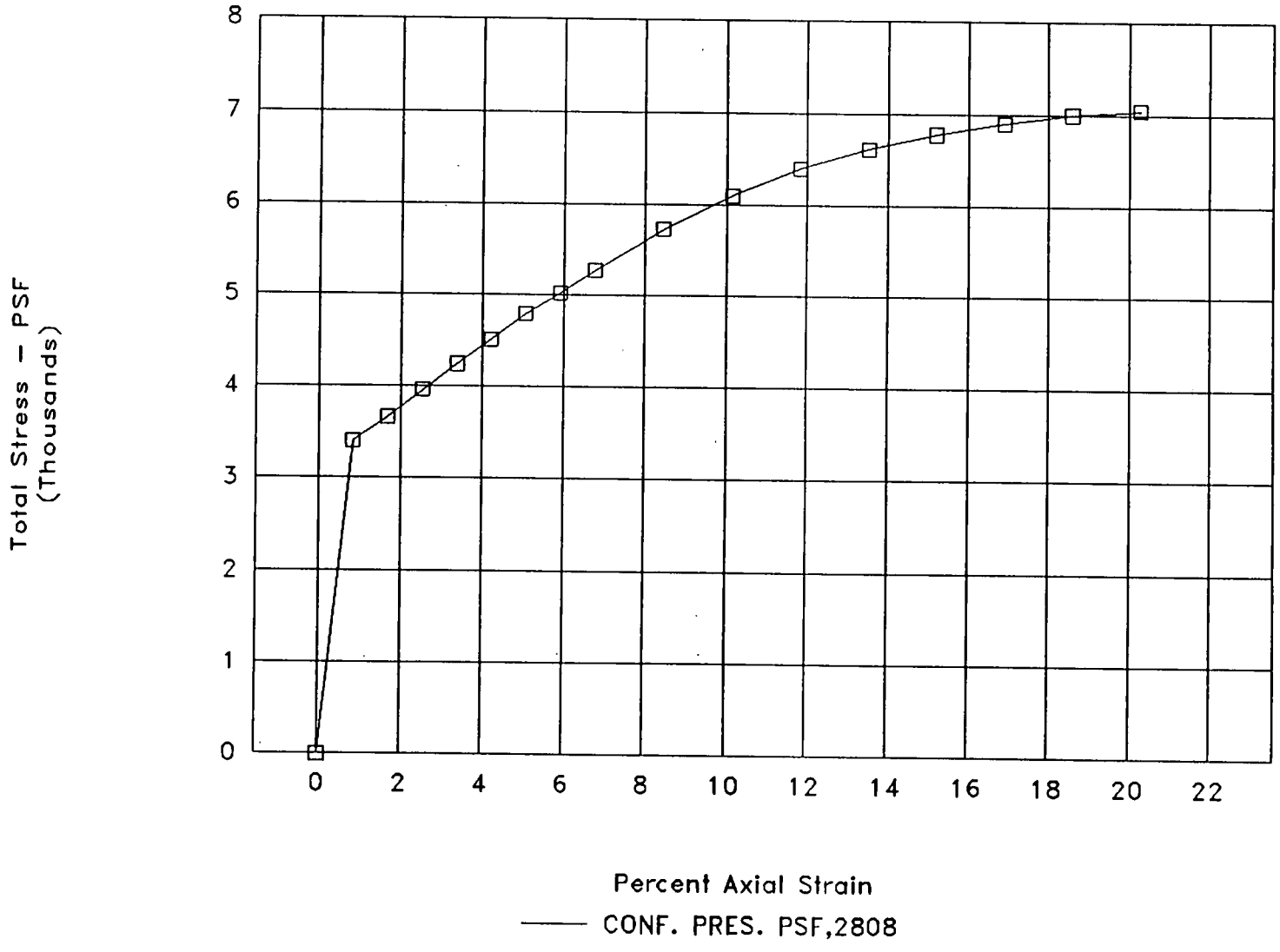
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.581	0	0.00	0.0	2808	0	0.00
19.0	597	0.05	0.84	4.620	592	0.00	0.0	2808	3400	1.21
27.5	865	0.10	1.69	4.659	850	0.00	0.0	2808	3658	1.30
37.5	1179	0.15	2.53	4.700	1149	0.00	0.0	2808	3957	1.41
47.0	1478	0.20	3.38	4.741	1428	0.00	0.0	2808	4236	1.51
56.5	1776	0.25	4.22	4.783	1701	0.00	0.0	2808	4509	1.61
66.5	2091	0.30	5.07	4.825	1985	0.00	0.0	2808	4793	1.71
75.0	2358	0.35	5.91	4.869	2218	0.00	0.0	2808	5026	1.79
84.0	2641	0.40	6.76	4.913	2462	0.00	0.0	2808	5270	1.88
101.5	3191	0.50	8.45	5.003	2921	0.00	0.0	2808	5729	2.04
116.5	3662	0.60	10.14	5.097	3291	0.00	0.0	2808	6099	2.17
129.5	4071	0.70	11.83	5.195	3590	0.00	0.0	2808	6398	2.28
140.0	4401	0.80	13.52	5.297	3806	0.00	0.0	2808	6614	2.36
149.0	4684	0.90	15.21	5.402	3972	0.00	0.0	2808	6780	2.41
156.5	4920	1.00	16.90	5.512	4089	0.00	0.0	2808	6897	2.46
163.5	5140	1.10	18.59	5.626	4185	0.00	0.0	2808	6993	2.49
169.0	5313	1.20	20.28	5.746	4236	0.00	0.0	2808	7044	2.51

Data entered NAA Date: 5-30-95
Data checked by: SL Date: 5-30-95
FileNamSAU0033

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Field Moisture

G2-125,17.5-19.5',405033



TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

CLIENT SAIC/Parsons PO 140

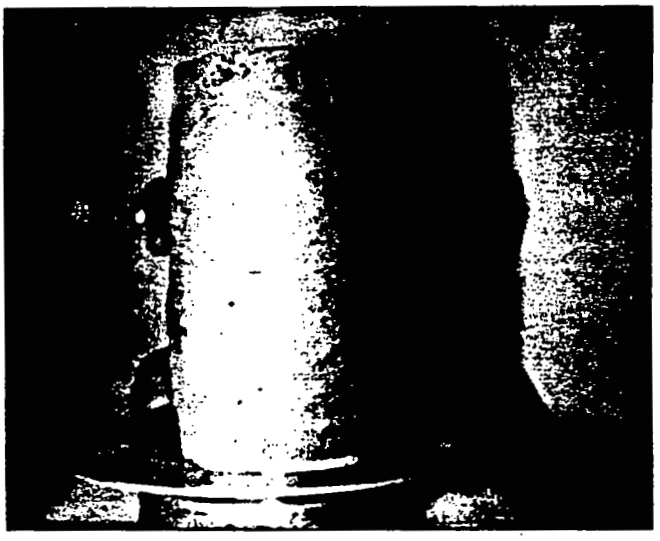
JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95
DEPTH	15.0-17.0'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	404773	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	2448	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	1034.1
Wt. Wet Soil & Pan	(g)	1049.3
Wt. Dry Soil & Pan	(g)	931.5
Wt. Lost Moisture	(g)	117.8
Wt. of Pan Only	(g)	15.3
Wt. of Dry Soil	(g)	916.2
Moisture Content %		12.9
Wet Density PCF		143.7
Dry Density PCF		127.3

Init. Diameter	(in)	2.412
Init. Area	(sq in)	4.569
Init. Height	(in)	5.999
Volume cu Ft.		0.01586

Notes & Comments:



Data entered by: NAA Date: 5-30-95
Data checked by: cal Date: 5-30-95
FileName:SAU0773

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95
DEPTH	15.0-17.0'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	404773	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	2448	AT FIELD MOIST.	Yes

Init. Ht. (in) 5.999

Init. Area (sq in) 4.569

Strain Rate (in/min) 0.060

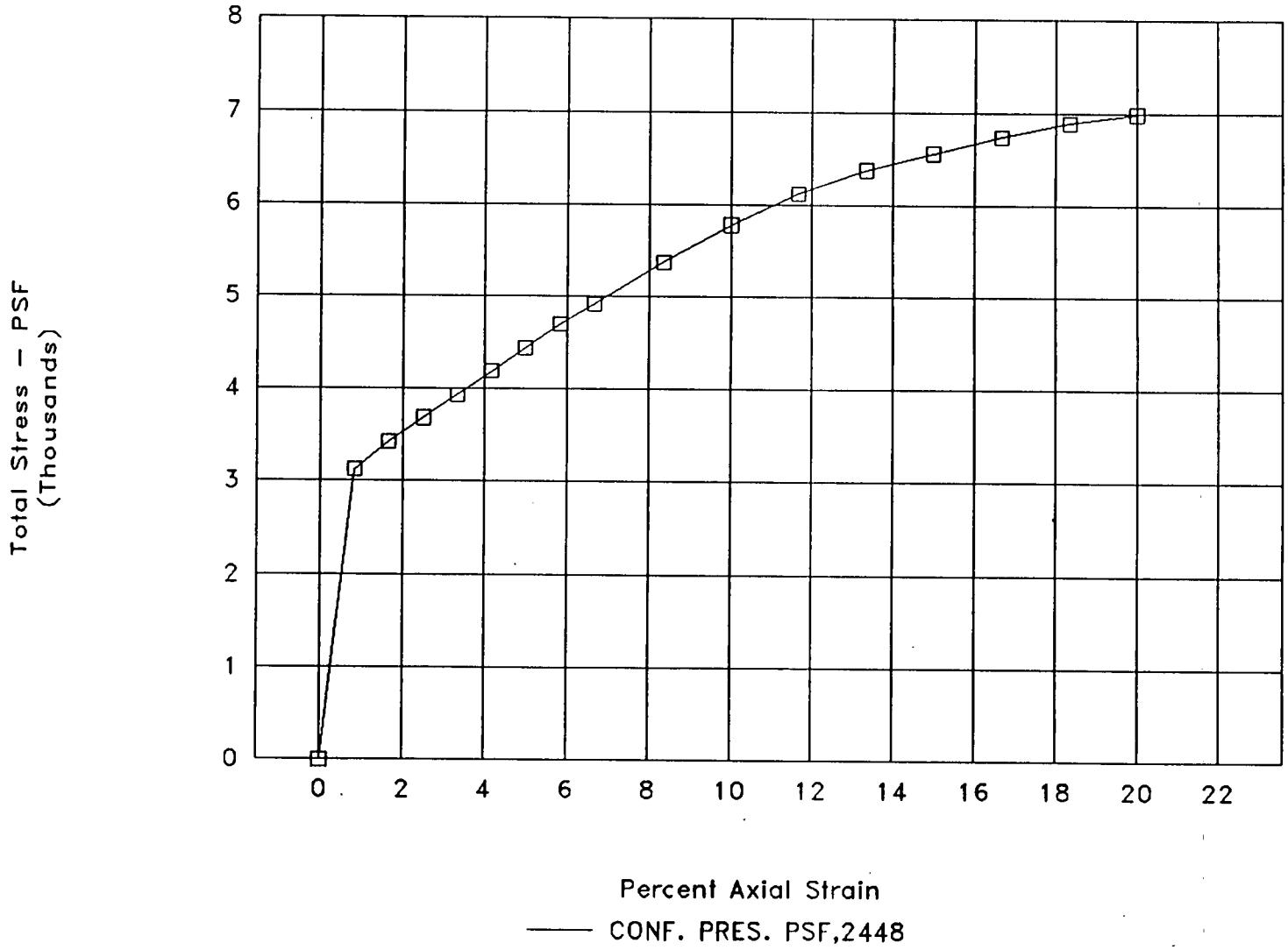
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.569	0	0.00	0.0	2448	0	0.00
21.5	678	0.05	0.83	4.608	672	0.00	0.0	2448	3120	1.27
31.5	993	0.10	1.67	4.647	976	0.00	0.0	2448	3424	1.40
40.0	1261	0.15	2.50	4.686	1229	0.00	0.0	2448	3677	1.50
48.5	1528	0.20	3.33	4.727	1478	0.00	0.0	2448	3926	1.60
57.5	1812	0.25	4.17	4.768	1737	0.00	0.0	2448	4185	1.71
66.5	2096	0.30	5.00	4.810	1991	0.00	0.0	2448	4439	1.81
76.0	2395	0.35	5.83	4.852	2255	0.00	0.0	2448	4703	1.92
84.0	2647	0.40	6.67	4.896	2471	0.00	0.0	2448	4919	2.01
101.5	3199	0.50	8.33	4.985	2932	0.00	0.0	2448	5380	2.20
117.5	3703	0.60	10.00	5.077	3333	0.00	0.0	2448	5781	2.36
132.0	4160	0.70	11.67	5.173	3675	0.00	0.0	2448	6123	2.50
144.0	4538	0.80	13.34	5.272	3933	0.00	0.0	2448	6381	2.61
153.5	4838	0.90	15.00	5.376	4112	0.00	0.0	2448	6560	2.68
163.5	5153	1.00	16.67	5.483	4294	0.00	0.0	2448	6742	2.75
172.5	5436	1.10	18.34	5.595	4440	0.00	0.0	2448	6888	2.81
180.0	5673	1.20	20.00	5.712	4538	0.00	0.0	2448	6986	2.85

Data entered NAA Date: 5-30-95
Data checked by: cal Date: 5-30-95
FileNamSAU0773

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Field Moisture

G2-126,15.0-17.0',404773



TRIAXIAL SHEAR TEST - TX/UU
Saturated
Remolded to 95% MDD
ASTM D 2850

TRIAXIAL COMPRESSION TEST DATA

474

CLIENT SAIC/Parsons PO 140

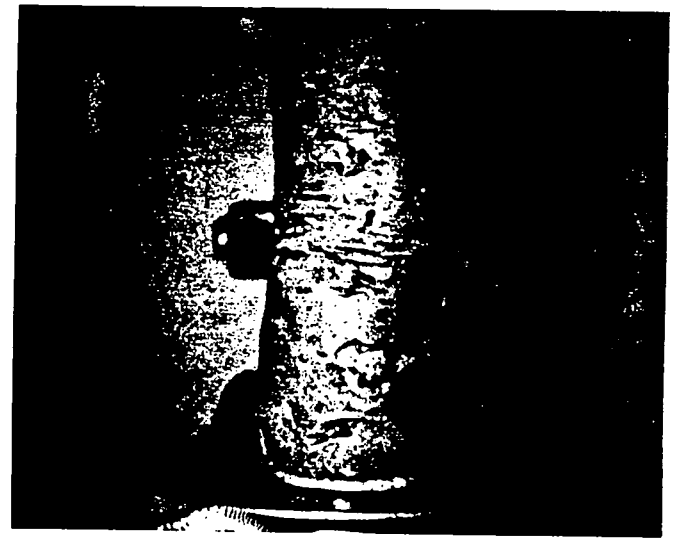
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404824	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	10S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	973.5	974.9
Wt. Wet Soil & Pan	(g)	981.8	983.3
Wt. Dry Soil & Pan	(g)	855.3	855.3
Wt. Lost Moisture	(g)	126.6	128.1
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	846.9	846.9
Moisture Content %		14.9	15.1
Wet Density PCF		136.3	136.5
Dry Density PCF		118.5	118.5

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	5.996
Volume (cu ft)		0.01575

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140
Fernald

2059-13 G
G2-122
404824 @ 10-12'
TX/UU r95 σ_3 1728 PSF

Data Entered By: NAA Date: 8-8-95
Data Checked By: CJ Date: 8-12-95
Filename: SAU0824X

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404824	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	10S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.1	20.6				
50.0	48.0	22.9	24.7	38.6	47.9	9.3	0.93
60.0		25.0	25.2	48.4	57.9	9.5	0.95

Initial Height	(in)	5.996
Init. Vol.	(CC)	446.066
Initial Area	(sq in)	4.539

Data Entered By: NAA Date: 8-8-95
Data Checked By: CJ Date: 8-12-95
Filename:SAU0824X

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404824	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	10S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

Init. Ht. (in) 5.996
Init. Area (sq in) 4.539
Strain Rate (in/min) 0.060

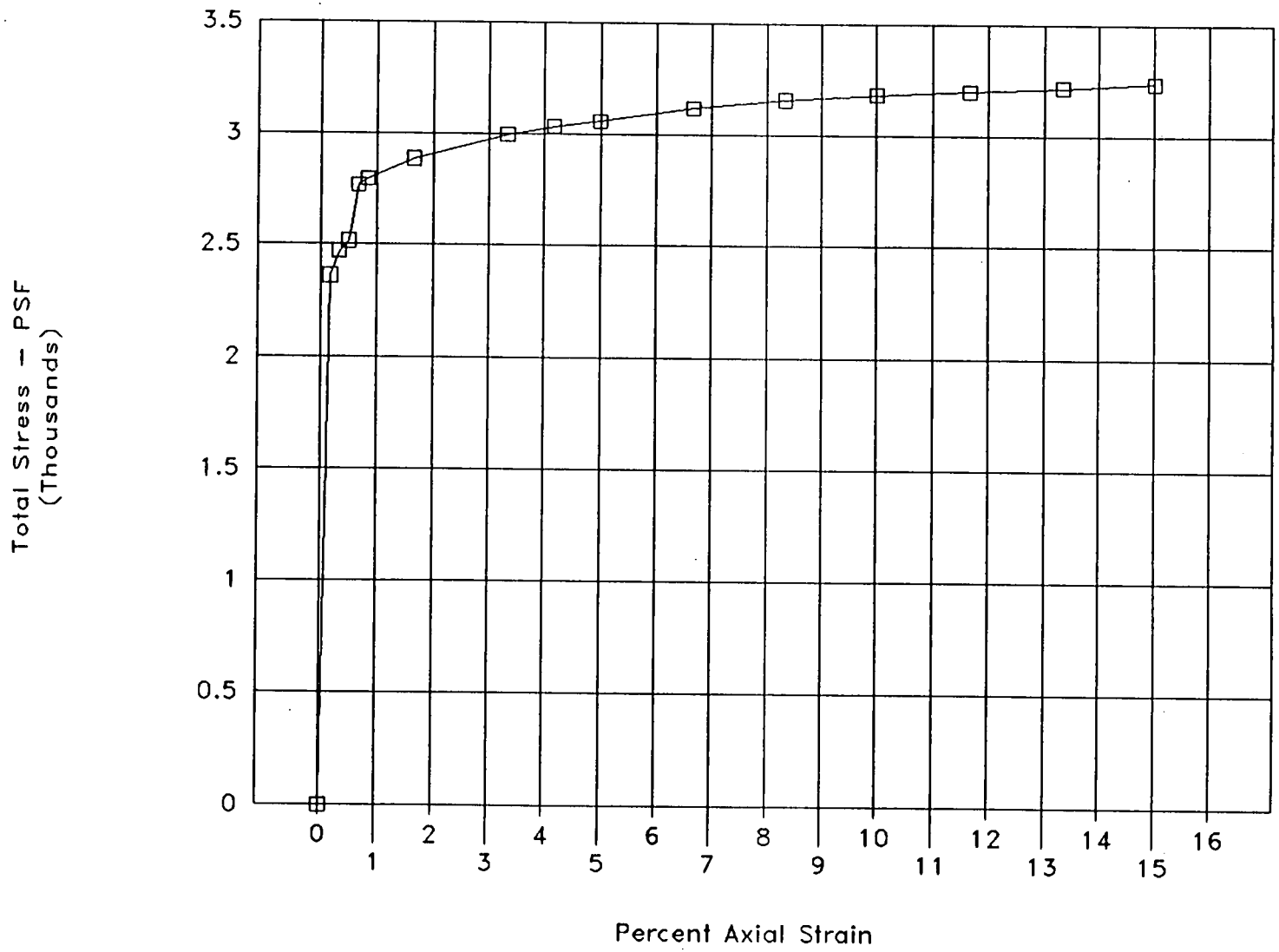
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.539	0	1728	0	0.00
20.0	635	0.01	0.17	4.547	633	1728	2361	1.37
23.5	746	0.02	0.33	4.554	743	1728	2471	1.43
25.0	793	0.03	0.50	4.562	789	1728	2517	1.46
33.0	1047	0.04	0.67	4.569	1040	1728	2768	1.60
34.0	1079	0.05	0.83	4.577	1070	1728	2798	1.62
37.2	1180	0.10	1.67	4.616	1160	1728	2888	1.67
41.4	1313	0.20	3.34	4.696	1270	1728	2998	1.73
43.0	1364	0.25	4.17	4.736	1307	1728	3035	1.76
44.2	1402	0.30	5.00	4.778	1332	1728	3060	1.77
47.0	1491	0.40	6.67	4.863	1392	1728	3120	1.81
49.2	1561	0.50	8.34	4.952	1431	1728	3159	1.83
51.0	1618	0.60	10.01	5.044	1456	1728	3184	1.84
52.6	1669	0.70	11.67	5.139	1474	1728	3202	1.85
54.2	1720	0.80	13.34	5.238	1490	1728	3218	1.86
56.0	1777	0.90	15.01	5.341	1510	1728	3238	1.87

Data Entered NAA Date: 8-8-95
Data Checked By: G) Date: 8-12-95
FilenamSAU0824X

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-122,404824,10.0-12.0'



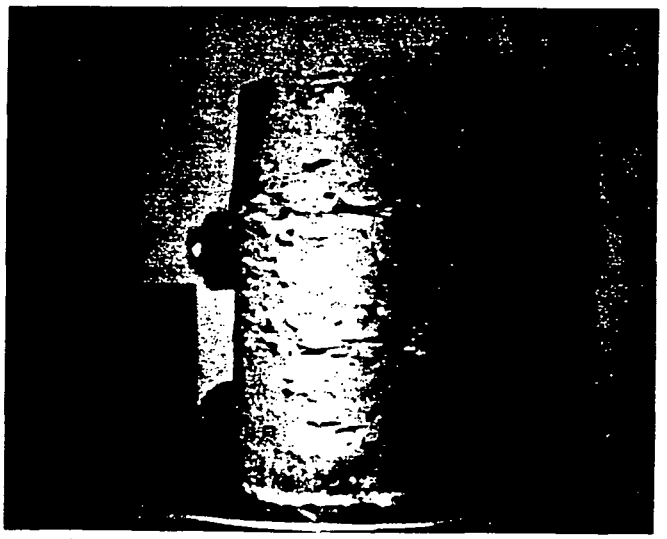
TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	973.3	978.0
Wt. Wet Soil & Pan	(g)	981.9	986.5
Wt. Dry Soil & Pan	(g)	848.5	848.5
Wt. Lost Moisture	(g)	133.4	138.0
Wt. of Pan Only	(g)	8.6	8.6
Wt. of Dry Soil	(g)	839.9	839.9
Moisture Content %		15.9	16.4
Wet Density PCF		135.9	136.5
Dry Density PCF		117.3	117.3

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.031
Volume (cu ft)		0.01579

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140 2059-13D
G2-127 404751 @ 7.5-9.5'
TX UU R95 σ_3 1368 PSF

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename: SAU0751C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.2	15.5				
50.0	48.0	16.9	17.7	38.4	45.4	7.0	0.70
60.0	58.0	17.9	18.6	48.4	57.4	9.0	0.90
70.0		21.5	22.6	58.5	68.1	9.6	0.96

Initial Height	(in)	6.031
Init. Vol.	(CC)	447.178
Initial Area	(sq in)	4.524

Data Entered By: NAA Date: 7-21-95
Data Checked By: cal Date: 7-25-95
Filename:SAU0751C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

Init. Ht.	(in)	6.031
Init. Area	(sq in)	4.524
Strain Rate	(in/min)	0.060

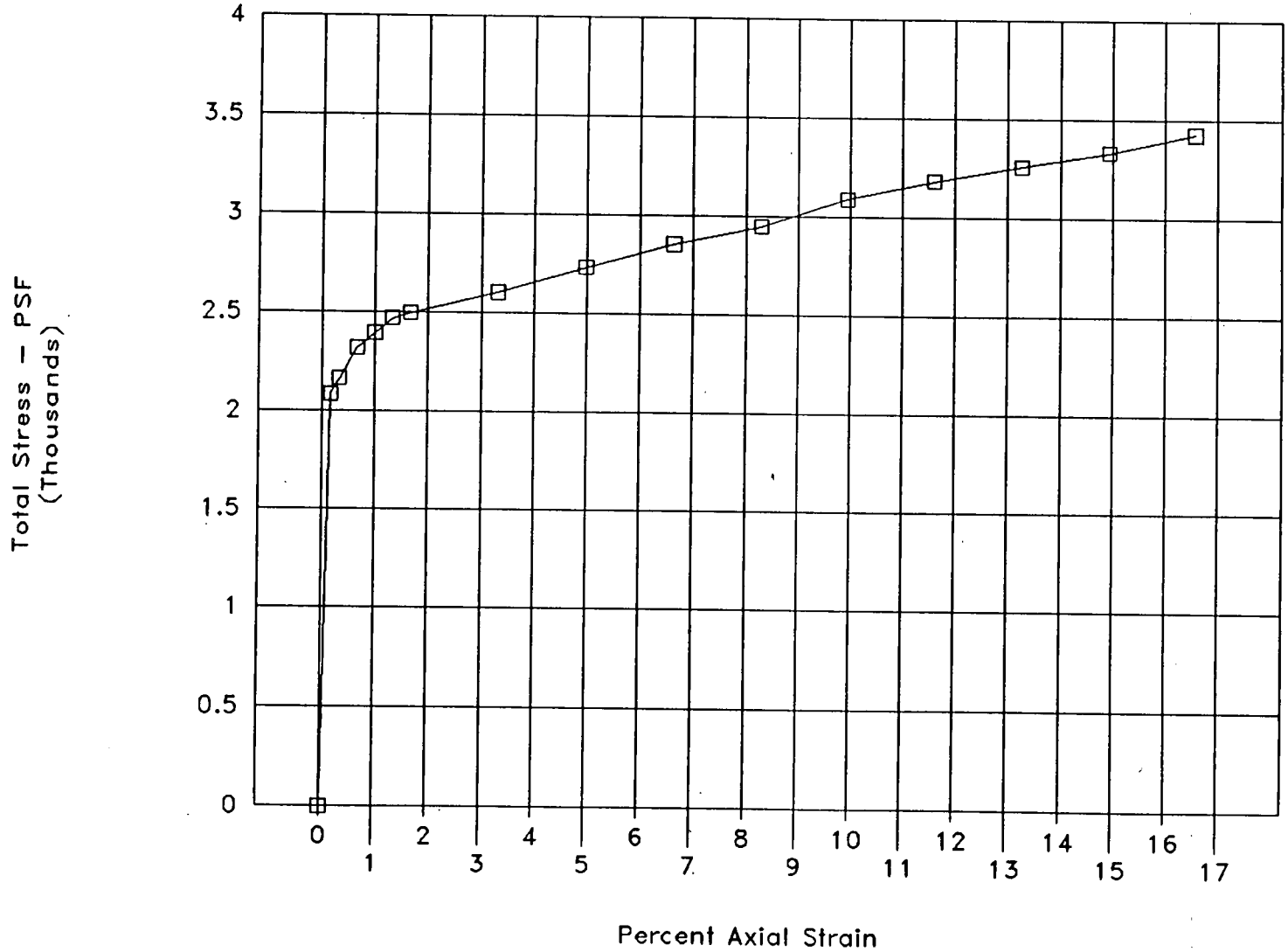
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.524	0	1368	0	0.00
22.5	716	0.01	0.17	4.531	715	1368	2083	1.52
25.0	796	0.02	0.33	4.539	793	1368	2161	1.58
30.0	955	0.04	0.66	4.554	949	1368	2317	1.69
32.5	1035	0.06	0.99	4.569	1024	1368	2392	1.75
35.0	1114	0.08	1.33	4.585	1099	1368	2467	1.80
36.0	1146	0.10	1.66	4.600	1127	1368	2495	1.82
40.0	1273	0.20	3.32	4.679	1231	1368	2599	1.90
45.0	1432	0.30	4.97	4.761	1361	1368	2729	1.99
50.0	1592	0.40	6.63	4.845	1486	1368	2854	2.09
54.0	1719	0.50	8.29	4.933	1576	1368	2944	2.15
60.0	1910	0.60	9.95	5.024	1720	1368	3088	2.26
64.5	2053	0.70	11.61	5.118	1815	1368	3183	2.33
68.5	2180	0.80	13.26	5.216	1891	1368	3259	2.38
72.5	2308	0.90	14.92	5.317	1963	1368	3331	2.44
77.5	2467	1.00	16.58	5.423	2058	1368	3426	2.50

Data Entered NAA Date: 7-21-95
Data Checked By: cal Date: 7-25-95
FilenamSAU0751C

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-127,404751,7.5-9.5'



TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13A

BORING NO.	G2-131	SAMPLED	4-12-95 MC
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404704	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	969.0	966.5
Wt. Wet Soil & Pan	(g)	977.3	974.7
Wt. Dry Soil & Pan	(g)	838.1	838.1
Wt. Lost Moisture	(g)	139.1	136.6
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	829.9	829.9
Moisture Content %		16.8	16.5
Wet Density PCF		136.9	136.5
Dry Density PCF		117.2	117.2

Init. Diameter	(in)	2.397
Init. Area	(sq in)	4.513
Init. Height	(in)	5.977
Volume (cu ft)		0.01561

Notes & Comments: Remolded to 95% MDD

SAIC/PARSONS PO140
G2-131 #404704 @ 7.5-9.5'
TX/UU SATURATED $\bar{\sigma}_3$ = 1368PSF

Data Entered By: NAA Date: 8-10-95
Data Checked By: SC Date: 8-12-95
Filename: SAU04704

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-12-95 MC
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404704	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.1	20.8				
50.0		25.0	25.4	38.0	47.9	9.9	0.99

Initial Height	(in)	5.977
Init. Vol.	(CC)	442.067
Initial Area	(sq in)	4.513

Data Entered By: NAA Date: 8-10-95
Data Checked By: SL Date: 8-12-95
Filename: SAU04704

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-12-95 MC
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404704	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

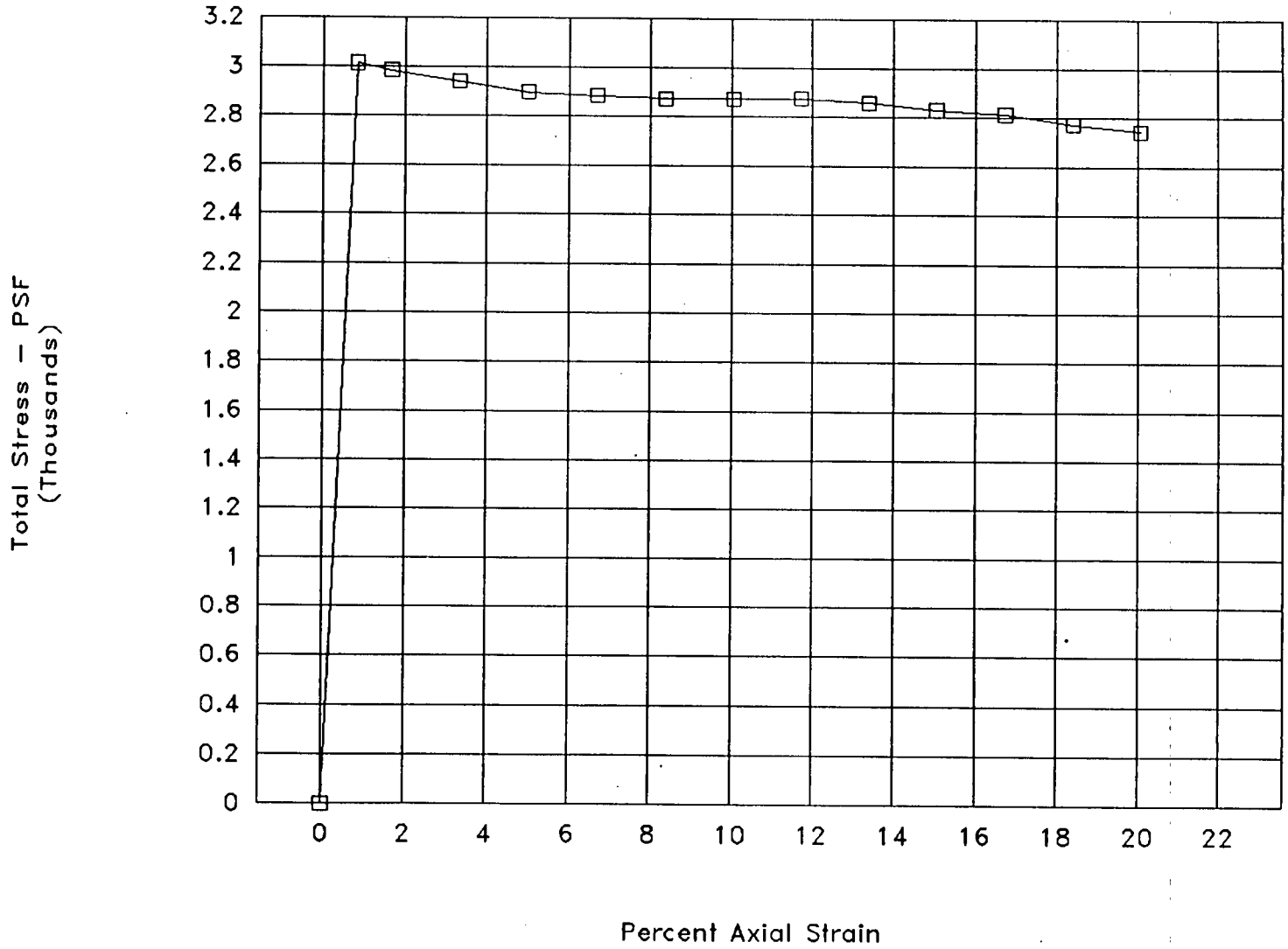
Init. Ht. (in) 5.977
Init. Area (sq in) 4.513
Strain Rate (in/min) 0.060

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.513	0	1368	0	0.00
52.0	1659	0.05	0.84	4.551	1645	1368	3013	2.20
51.5	1643	0.10	1.67	4.589	1616	1368	2984	2.18
51.0	1627	0.20	3.35	4.669	1573	1368	2941	2.15
50.5	1611	0.30	5.02	4.751	1531	1368	2899	2.12
51.0	1627	0.40	6.69	4.836	1519	1368	2887	2.11
51.5	1643	0.50	8.37	4.925	1506	1368	2874	2.10
52.5	1675	0.60	10.04	5.016	1507	1368	2875	2.10
53.5	1707	0.70	11.71	5.111	1507	1368	2875	2.10
54.0	1723	0.80	13.38	5.210	1493	1368	2861	2.09
54.0	1723	0.90	15.06	5.313	1464	1368	2832	2.07
54.5	1739	1.00	16.73	5.419	1448	1368	2816	2.06
54.0	1723	1.10	18.40	5.530	1406	1368	2774	2.03
54.0	1723	1.20	20.08	5.646	1377	1368	2745	2.01

Data Entered NAA Date: 8-10-95
Data Checked By: SL Date: 8-12-95
FilenamSAU04704 ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-131,404704,7.5-9.5'



TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	11S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	977.0	981.0
Wt. Wet Soil & Pan	(g)	985.2	989.3
Wt. Dry Soil & Pan	(g)	863.2	863.2
Wt. Lost Moisture	(g)	122.0	126.1
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	855.0	855.0
Moisture Content %		14.3	14.7
Wet Density PCF		136.8	137.4
Dry Density PCF		119.7	119.7

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	6.004
Volume (cu ft)		0.01574

Notes & Comments: Remolded to 95% MDD

SAIC/PARSONS PO140
G2-132 #405105 @ 10-12'
TX/UU SATURATED $_{R\ 95}\sqrt{3}$ = 1728 PSF

Data Entered By: NAA Date: 8-10-95
Data Checked By: SL Date: 8-12-95
Filename: SAU05105

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	11S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.3	21.7				
50.0	48.0	22.4	24.3	38.4	46.9	8.5	0.85
60.0	58.0	24.4	26.2	48.4	57.3	8.9	0.89
70.0		26.2	26.5	57.8	67.3	9.5	0.95

Initial Height	(in)	6.004
Init. Vol.	(CC)	445.919
Initial Area	(sq in)	4.531

Data Entered By: NAA Date: 8-10-95
Data Checked By: SL Date: 8-12-95
Filename: SAU05105

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	11S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

Init. Ht.	(in)	6.004
Init. Area	(sq in)	4.531
Strain Rate	(in/min)	0.060

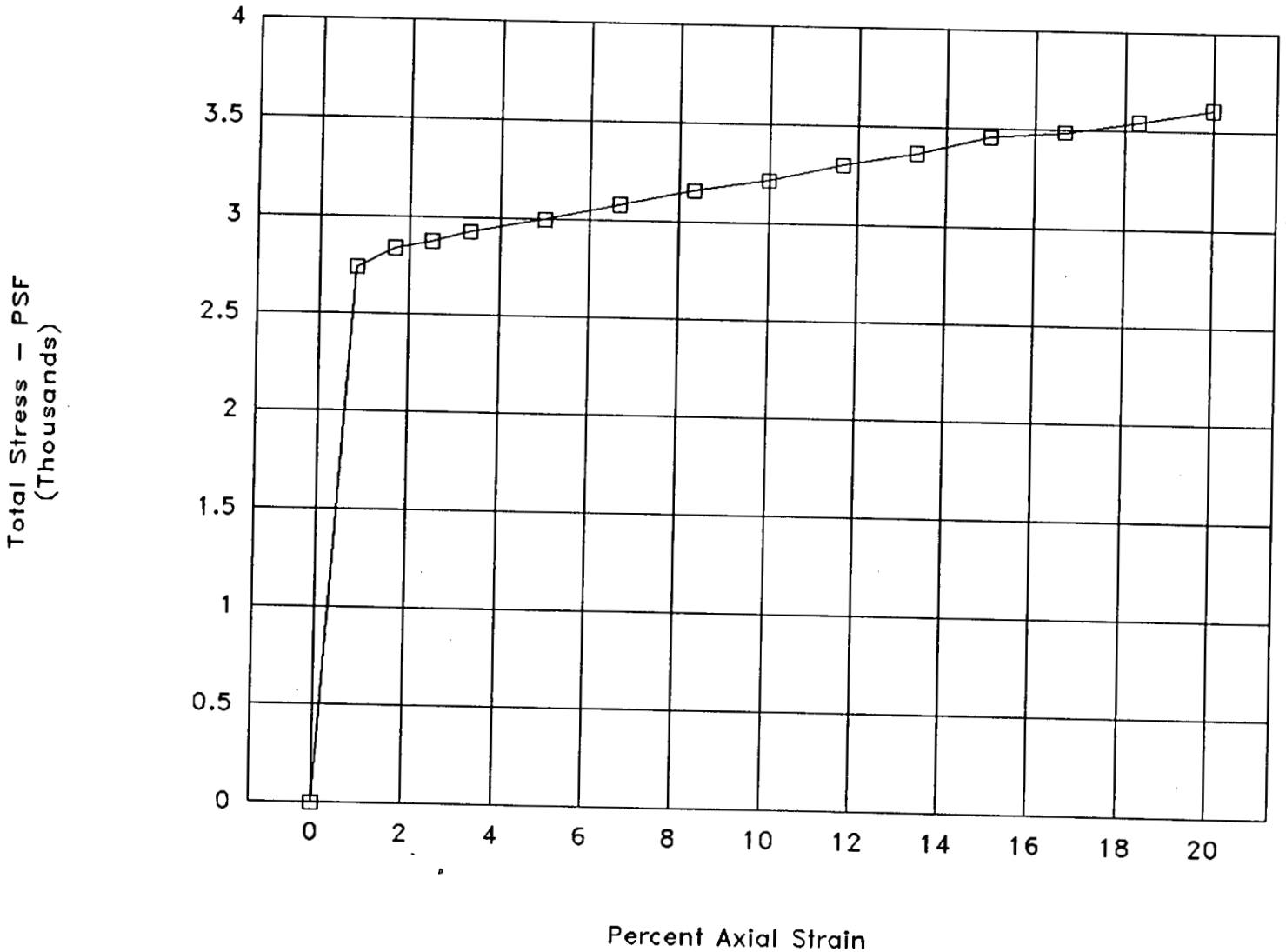
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.531	0	1728	0	0.00
32.0	1017	0.05	0.83	4.569	1008	1728	2736	1.58
35.5	1128	0.10	1.67	4.608	1109	1728	2837	1.64
37.0	1176	0.15	2.50	4.648	1146	1728	2874	1.66
39.0	1239	0.20	3.33	4.688	1198	1728	2926	1.69
42.0	1335	0.30	5.00	4.770	1268	1728	2996	1.73
45.5	1446	0.40	6.66	4.855	1350	1728	3078	1.78
49.0	1557	0.50	8.33	4.943	1427	1728	3155	1.83
52.0	1652	0.60	9.99	5.035	1487	1728	3215	1.86
56.0	1780	0.70	11.66	5.129	1572	1728	3300	1.91
59.5	1891	0.80	13.32	5.228	1639	1728	3367	1.95
64.0	2034	0.90	14.99	5.330	1729	1728	3457	2.00
66.5	2113	1.00	16.66	5.437	1761	1728	3489	2.02
70.0	2224	1.10	18.32	5.548	1817	1728	3545	2.05
74.0	2352	1.20	19.99	5.663	1882	1728	3610	2.09

Data Entered NAA Date: 8-10-95
Data Checked By: SR Date: 8-12-95
FilenamSAU05105

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-132,405105,10.0-12.0'



TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

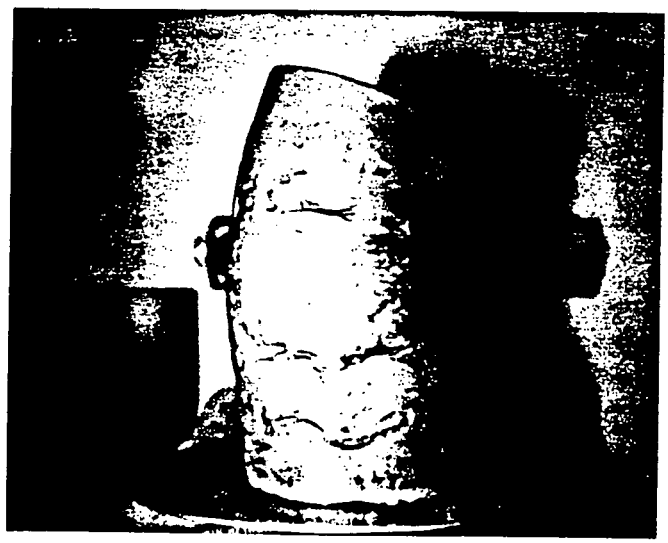
JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	405140	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1N
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	977.5	978.2
Wt. Wet Soil & Pan	(g)	985.8	986.5
Wt. Dry Soil & Pan	(g)	861.7	861.7
Wt. Lost Moisture	(g)	124.1	124.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	853.4	853.4
Moisture Content %		14.5	14.6
Wet Density PCF		136.8	136.9
Dry Density PCF		119.5	119.5

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.016
Volume (cu ft)		0.01575

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140 2059-13G
G2-134 12-14' 405140
TX/UU r 95 σ_3 2016 PSF

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename: SAU05140

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	405140	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1N
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.7	19.3				
50.0	48.0	19.2	20.0	38.7	46.5	7.8	0.78
60.0	58.0	19.4	20.1	48.2	57.1	8.9	0.89
70.0		20.1	20.1	58.2	67.7	9.5	0.95

Initial Height	(in)	6.016
Init. Vol.	(CC)	446.066
Initial Area	(sq in)	4.524

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename:SAU05140

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	405140	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1N
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

Init. Ht.	(in)	6.016
Init. Area	(sq in)	4.524
Strain Rate	(in/min)	0.060

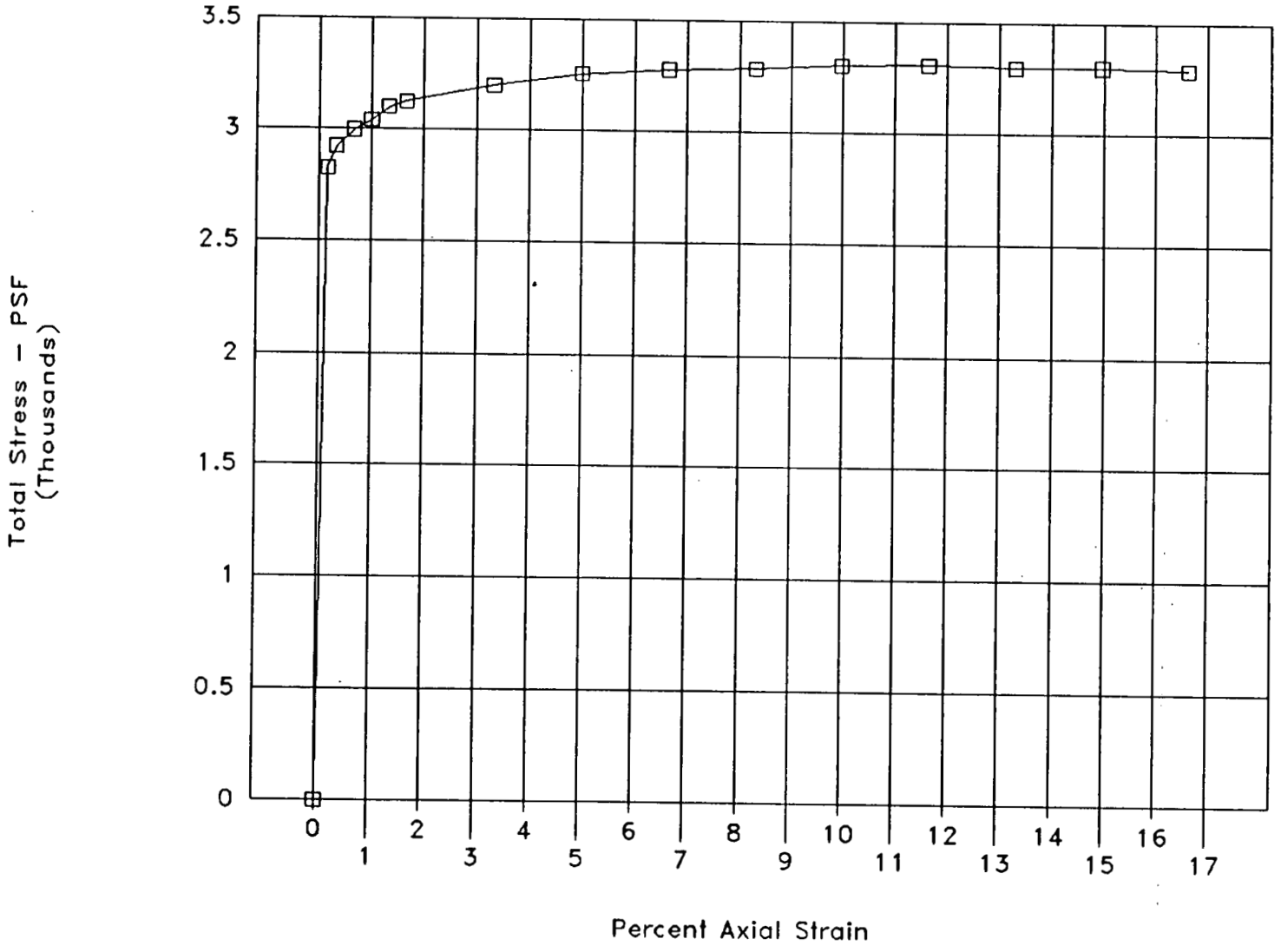
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.524	0	2016	0	0.00
25.5	812	0.01	0.17	4.531	810	2016	2826	1.40
28.5	907	0.02	0.33	4.539	904	2016	2920	1.45
31.0	987	0.04	0.66	4.554	980	2016	2996	1.49
32.5	1035	0.06	1.00	4.569	1024	2016	3040	1.51
34.5	1098	0.08	1.33	4.585	1084	2016	3100	1.54
35.5	1130	0.10	1.66	4.600	1111	2016	3127	1.55
38.5	1225	0.20	3.32	4.679	1185	2016	3201	1.59
41.0	1305	0.30	4.99	4.761	1240	2016	3256	1.62
42.5	1353	0.40	6.65	4.846	1263	2016	3279	1.63
43.5	1385	0.50	8.31	4.934	1270	2016	3286	1.63
45.0	1432	0.60	9.97	5.025	1290	2016	3306	1.64
46.0	1464	0.70	11.64	5.120	1294	2016	3310	1.64
46.5	1480	0.80	13.30	5.218	1283	2016	3299	1.64
47.5	1512	0.90	14.96	5.320	1286	2016	3302	1.64
48.0	1528	1.00	16.62	5.426	1274	2016	3290	1.63

Data Entered NAA Date: 7-21-95
Data Checked By: cal Date: 7-25-95
FilenamSAU05140

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-134,405140,12.0-14.0'



TRIAXIAL SHEAR TEST - TX/UU
Saturated
Remolded to 85% MDD
ASTM D 2850

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

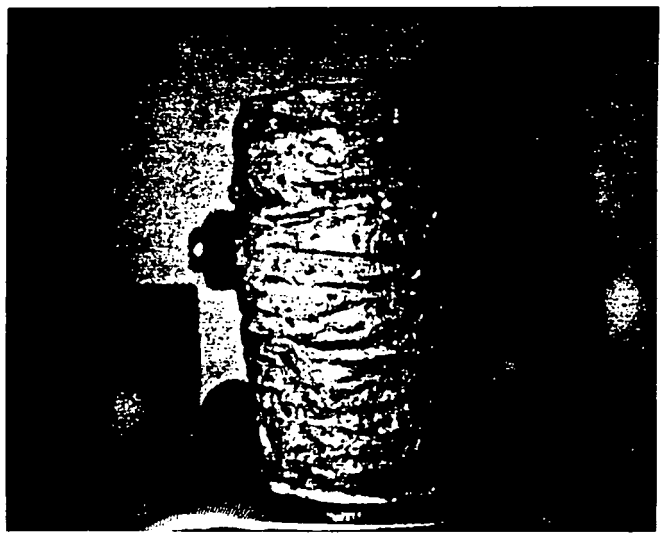
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404824	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	843.4	884.9
Wt. Wet Soil & Pan	(g)	851.8	893.3
Wt. Dry Soil & Pan	(g)	763.6	763.6
Wt. Lost Moisture	(g)	88.2	129.8
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	755.2	755.2
Moisture Content %		11.7	17.2
Wet Density PCF		117.7	123.5
Dry Density PCF		105.4	105.4

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.016
Volume (cu ft)		0.01580

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO 140 2059-13G
G2-12.2 404824 10-12'
TX/UU R85

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename: SAU04824

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404824	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	5.2	0.0				
50.0	48.0	2.7	5.1	37.3	46.4	9.1	0.91
60.0	58.0	5.6	6.7	47.2	56.5	9.3	0.93
70.0		7.0		56.9	66.4	9.5	0.95

Initial Height	(in)	6.016
Init. Vol.	(CC)	447.554
Initial Area	(sq in)	4.539

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename:SAU04824

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404824	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

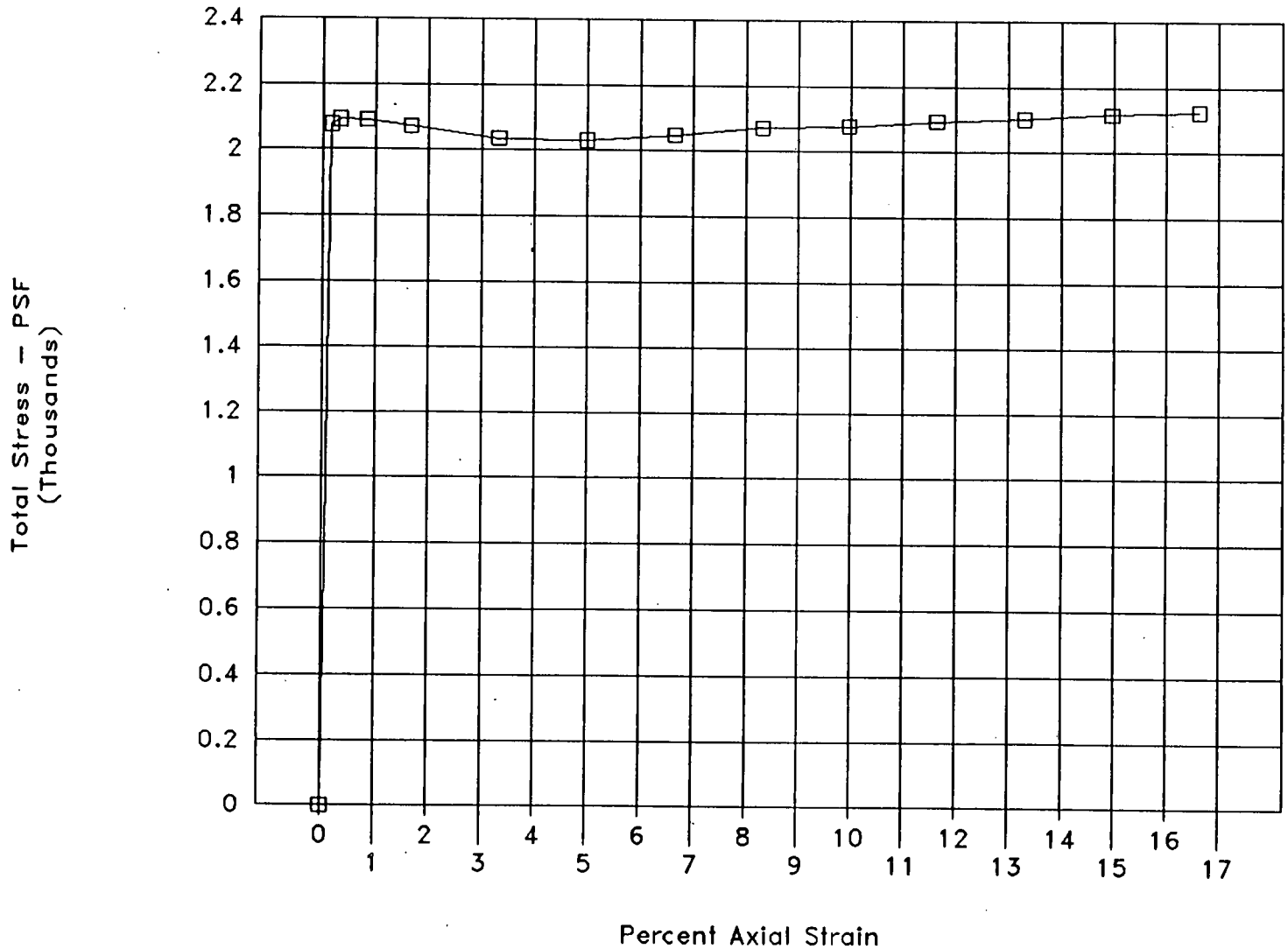
Init. Ht.	(in)	6.016
Init. Area	(sq in)	4.539
Strain Rate	(in/min)	0.060

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.539	0	1728	0	0.00
11.0	349	0.01	0.17	4.547	348	1728	2076	1.20
11.5	365	0.02	0.33	4.554	364	1728	2092	1.21
11.5	365	0.05	0.83	4.577	362	1728	2090	1.21
11.0	349	0.10	1.66	4.616	343	1728	2071	1.20
10.0	317	0.20	3.32	4.695	307	1728	2035	1.18
10.0	317	0.30	4.99	4.777	301	1728	2029	1.17
10.8	343	0.40	6.65	4.862	320	1728	2048	1.19
11.8	374	0.50	8.31	4.950	343	1728	2071	1.20
12.2	387	0.60	9.97	5.042	348	1728	2076	1.20
13.0	412	0.70	11.64	5.137	364	1728	2092	1.21
13.6	431	0.80	13.30	5.235	374	1728	2102	1.22
14.4	457	0.90	14.96	5.337	388	1728	2116	1.22
15.0	476	1.00	16.62	5.444	397	1728	2125	1.23

Data Entered NAA Date: 7-21-95
Data Checked By: cal Date: 7-25-95
FilenamSAU04824 ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-122,404824;10:0-12.0'



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474

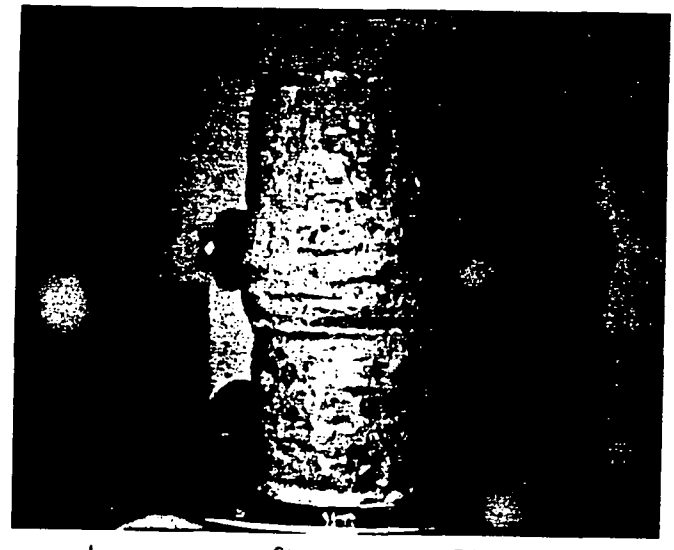
TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	
DEPTH	7.5-9.5'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	842.6	894.4
Wt. Wet Soil & Pan	(g)	850.8	902.7
Wt. Dry Soil & Pan	(g)	757.1	757.1
Wt. Lost Moisture	(g)	93.7	145.5
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	748.9	748.9
Moisture Content %		12.5	19.4
Wet Density PCF		117.2	124.4
Dry Density PCF		104.1	104.1

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.036
Volume (cu ft)		0.01585

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO 140 2059-13D
G2-127 404751 7.5-9.5'
TX/UU R85 C_3 1368 PSF

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename: SAU0751B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	
DEPTH	7.5-9.5'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	4.8	41.8				
50.0	48.0	44.3	46.8	37.6	46.8	9.2	0.92
60.0	58.0	47.0	48.6	47.7	56.8	9.1	0.91
70.0	68.0	48.6	50.0	57.7	66.9	9.2	0.92
80.0	78.0	50.0	51.0	67.8	77.1	9.3	0.93
90.0		51.2	51.6	77.7	87.3	9.6	0.96

Initial Height	(in)	6.036
Init. Vol. (CC)		449.042
Initial Area	(sq in)	4.539

Data Entered By: NAA Date: 7-21-95
Data Checked By: cal Date: 7-25-95
Filename:SAU0751

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D

BORING NO.	G2-127	SAMPLED	
DEPTH	7.5-9.5'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

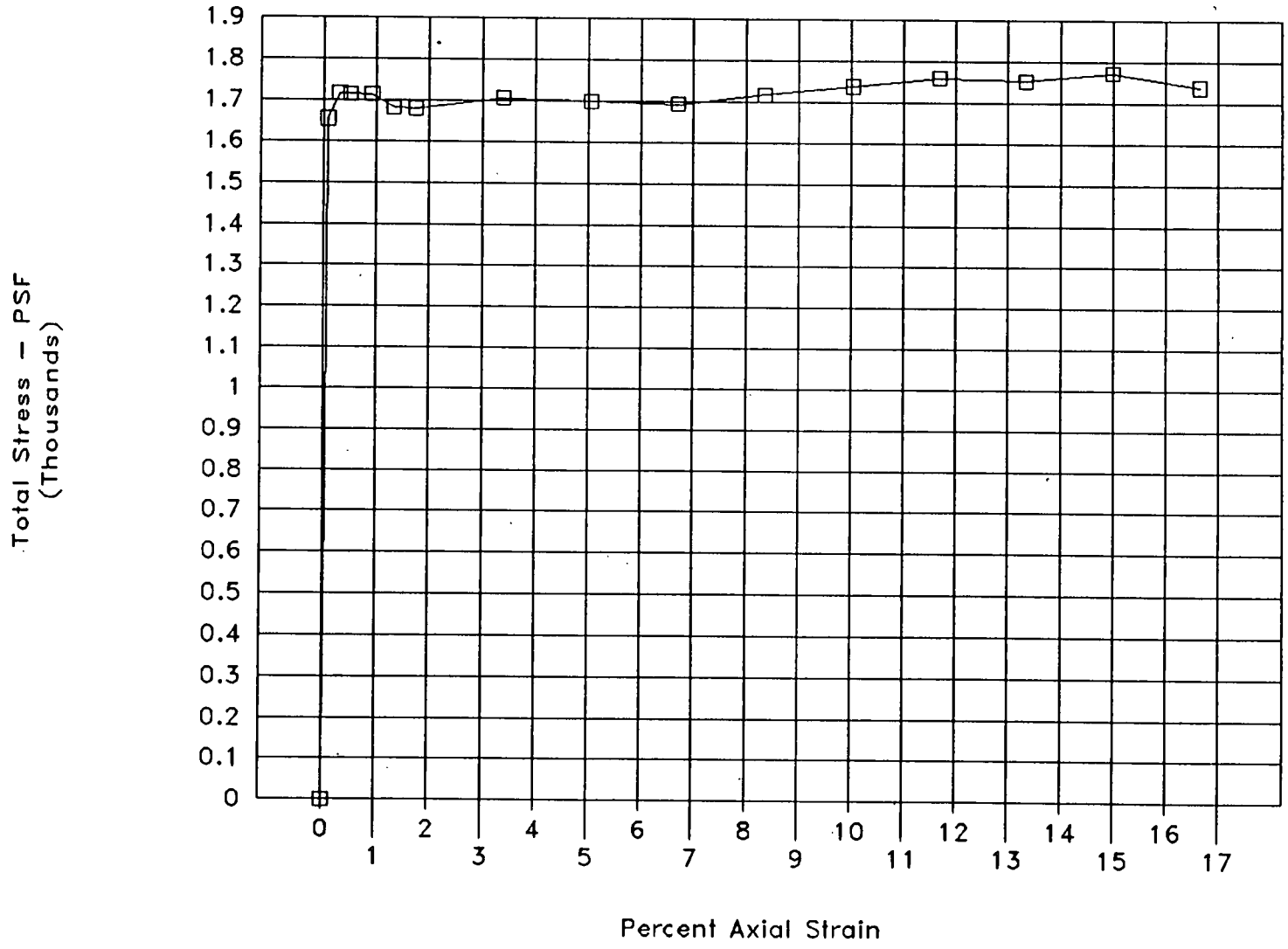
Init. Ht.	(in)	6.036
Init. Area	(sq in)	4.539
Strain Rate	(in/min)	0.060

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.539	0	1368	0	0.00
9.0	286	0.01	0.08	4.543	285	1368	1653	1.21
11.0	349	0.02	0.30	4.553	348	1368	1716	1.25
11.0	349	0.03	0.50	4.562	347	1368	1715	1.25
11.0	349	0.06	0.91	4.581	346	1368	1714	1.25
10.0	317	0.08	1.33	4.600	313	1368	1681	1.23
10.0	317	0.11	1.74	4.619	312	1368	1680	1.23
11.0	349	0.21	3.40	4.699	337	1368	1705	1.25
11.0	349	0.31	5.05	4.781	331	1368	1699	1.24
11.0	349	0.41	6.71	4.865	326	1368	1694	1.24
12.0	381	0.51	8.37	4.953	349	1368	1717	1.26
13.0	412	0.61	10.02	5.045	371	1368	1739	1.27
14.0	444	0.71	11.68	5.139	392	1368	1760	1.29
14.0	444	0.81	13.34	5.237	385	1368	1753	1.28
15.0	476	0.91	14.99	5.340	405	1368	1773	1.30
14.0	444	1.01	16.65	5.446	370	1368	1738	1.27

Data Entered NAA Date: 7-21-95
Data Checked By: cal Date: 7-25-95
FilenamSAU0751 ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-127,404751,7.5-9.5'



940

001037

474

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

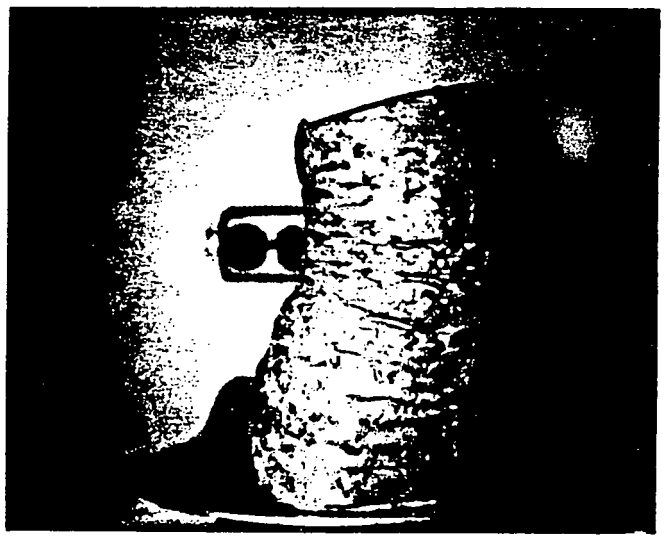
JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12-14'	TEST STARTED	7-9-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	842.6	885.6
Wt. Wet Soil & Pan (g)	851.1	894.1
Wt. Dry Soil & Pan (g)	768.4	768.4
Wt. Lost Moisture (g)	82.7	125.8
Wt. of Pan Only (g)	8.5	8.5
Wt. of Dry Soil (g)	759.9	759.9
Moisture Content %	10.9	16.5
Wet Density PCF	117.3	123.3
Dry Density PCF	105.8	105.8

Init. Diameter	(in)	2.406
Init. Area	(sq in)	4.547
Init. Height	(in)	6.017
Volume (cu ft)		0.01583

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO140
2059-13 G
FERNALD

G2-134
12-14'
405140
TX UU R85 σ_3 2016 PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: NA Date: 7-14-95
Filename: SAU0140

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12-14'	TEST STARTED	7-9-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	8.8	35.0				
50.0		40.9	41.6	38.4	48.1	9.7	0.97

Initial Height	(in)	6.017
Init. Vol.	(CC)	448.374
Initial Area	(sq in)	4.547

Data Entered By: CAL Date: 7-13-95
Data Checked By: Va Date: 7-14-95
Filename:SAU0140

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12-14'	TEST STARTED	7-9-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

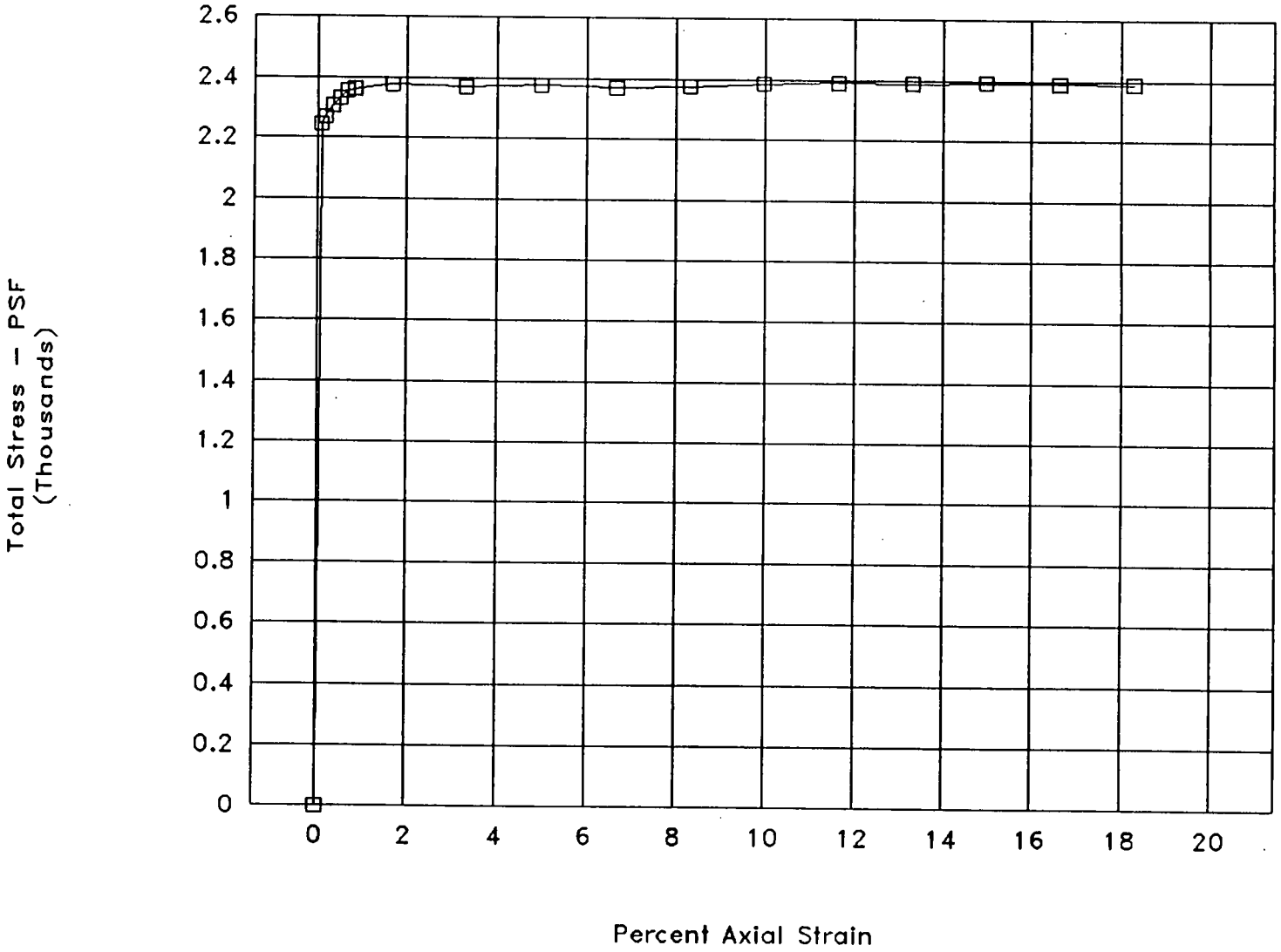
Init. Ht. (in) 6.017
Init. Area (sq in) 4.547
Strain Rate (in/min) 0.060

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.547	0	2016	0	0.00
7.2	228	0.01	0.08	4.550	228	2016	2244	1.11
8.0	253	0.01	0.17	4.554	253	2016	2269	1.13
9.2	291	0.02	0.33	4.562	290	2016	2306	1.14
10.0	317	0.03	0.50	4.569	315	2016	2331	1.16
10.8	342	0.04	0.66	4.577	340	2016	2356	1.17
11.0	348	0.05	0.83	4.585	346	2016	2362	1.17
11.6	367	0.10	1.66	4.623	361	2016	2377	1.18
11.6	367	0.20	3.32	4.703	355	2016	2371	1.18
12.0	380	0.30	4.99	4.785	361	2016	2377	1.18
12.0	380	0.40	6.65	4.870	355	2016	2371	1.18
12.4	393	0.50	8.31	4.959	360	2016	2376	1.18
13.0	412	0.60	9.97	5.050	371	2016	2387	1.18
13.4	424	0.70	11.63	5.145	375	2016	2391	1.19
13.6	431	0.80	13.30	5.244	373	2016	2389	1.19
14.0	443	0.90	14.96	5.346	377	2016	2393	1.19
14.2	450	1.00	16.62	5.453	375	2016	2391	1.19
14.4	456	1.10	18.28	5.564	373	2016	2389	1.18
14.6	462	1.20	19.94	5.679	370	2016	2386	1.18

Data Entered By: CAL Date: 7-13-95
Data Checked By: NU Date: 7-14-95
FilenamSAU0140 ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/UU Saturated

G2-134,405140,12-14'



TRIAXIAL SHEAR, CONSOLIDATED, UNDRAINED WITH PORE PRESSURE MEASUREMENTS

3 Points
TX/CUpp
ASTM D 4767

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

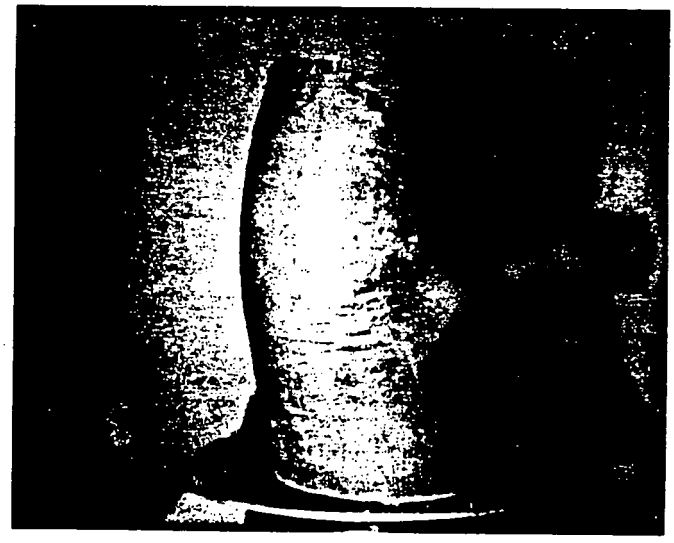
JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404756 A	TEST FINISHED	6-8-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1031.0	1026.9
Wt. Wet Soil & Pan	(g)	1039.3	1035.1
Wt. Dry Soil & Pan	(g)	925.3	925.3
Wt. Lost Moisture	(g)	114.0	109.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	917.0	917.0
Moisture Content %		12.4	12.0
Wet Density PCF		144.7	147.4
Dry Density PCF		128.7	131.7

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.992
Vol. Bef. Consol.	(cu ft)	0.01571
Vol. After Consol.	(cu ft)	0.01535

Notes & Comments:



Data entry by: NAA Date: 6-9-95
Data checked by: cal Date: 6-20-95
FileName:SAT0756

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404756 A	TEST FINISHED	6-8-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.7	8.5				
50.0		9.8	9.8	37.7	47.3	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.80	0.00
0.25	0.5	11.90	-2.10
0.5	0.7	12.30	-2.50
1	1.0	12.75	-2.95
2	1.4	13.23	-3.42
4	2.0	13.90	-4.10
9	3.0	14.90	-5.10
16	4.0	15.78	-5.98
30	5.5	16.90	-7.10
60	7.7	17.95	-8.15
120	11.0	18.55	-8.75
240	15.5	18.83	-9.02
360	19.0	18.90	-9.10

Initial Height	(in)	5.992	Init. Vol.	(CC)	445.03
Height Change	(in)	0.040	Vol. Change	(CC)	17.00
Ht. After Cons.	(in)	5.952	Cell Exp.	(CC)	6.80
Initial Area	(sq in)	4.531	Net Change	(CC)	10.20
Area After Cons.	(sq in)	4.457	Cons. Vol.	(CC)	434.83

Data entry by: NAA Date: 6-9-95
Data checked by: [illegible] Date: 6-20-95
FileName:SAT0756

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404756 A	TEST FINISHED	6-8-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

Init. Ht. (in)	5.992	Init. Area (sq in)	4.531
Consol. Ht. (in)	5.952	Consol. Area (sq in)	4.457
Back Pres. PSI	37.0	Strain Rate (in/min)	0.003

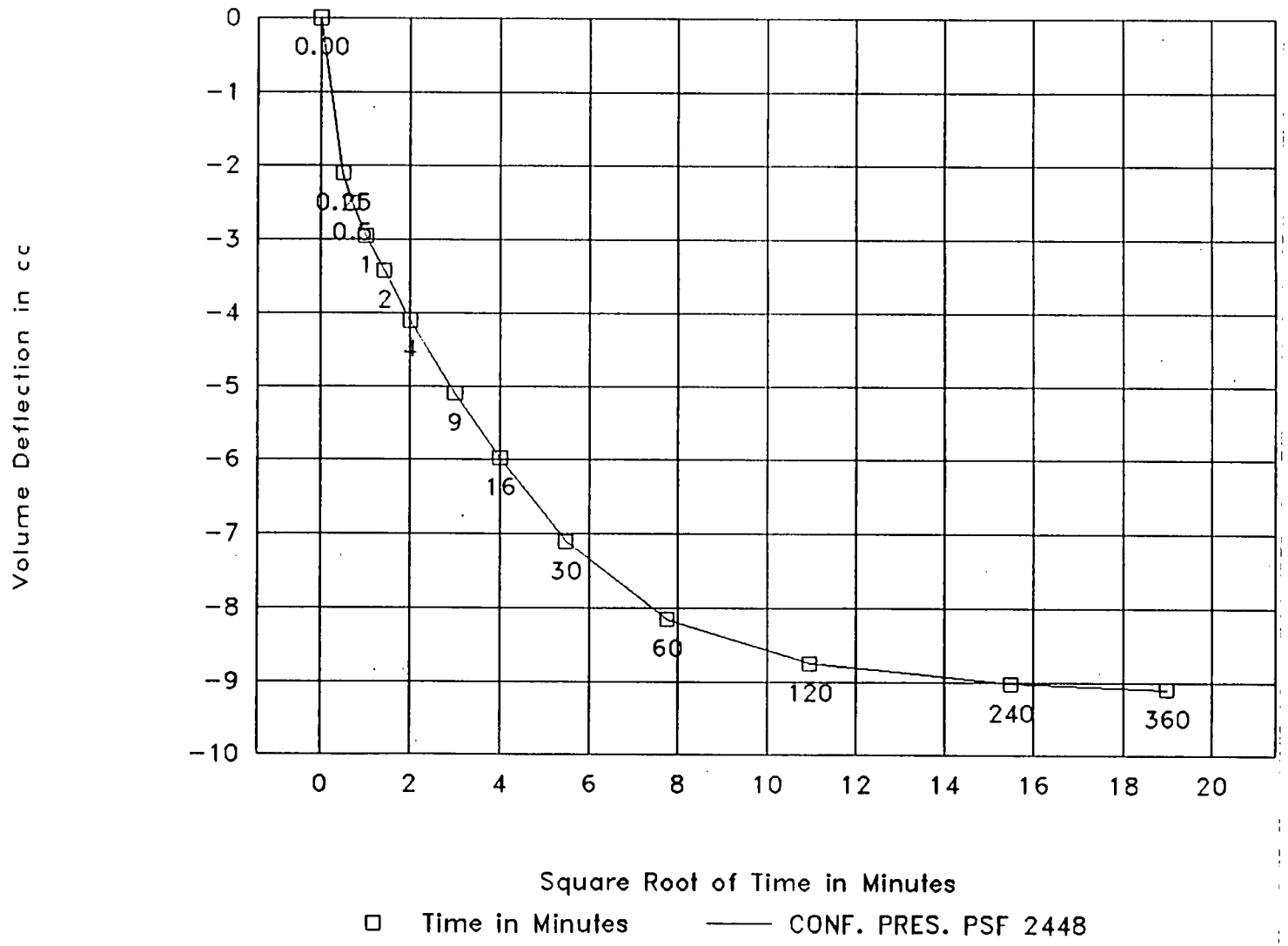
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.457	0	37.0	0	2448	2448	1.00
63.0	2035	0.01	0.17	4.465	2032	39.9	418	2030	4062	2.00
72.0	2326	0.02	0.34	4.472	2318	41.0	576	1872	4190	2.24
78.0	2520	0.03	0.50	4.480	2507	41.9	706	1742	4250	2.44
84.5	2730	0.04	0.67	4.487	2712	42.7	821	1627	4339	2.67
90.0	2908	0.05	0.84	4.495	2883	43.4	922	1526	4410	2.89
112.0	3618	0.10	1.68	4.534	3558	44.6	1094	1354	4911	3.63
130.0	4200	0.15	2.52	4.573	4094	44.2	1037	1411	5505	3.90
143.5	4636	0.20	3.36	4.612	4480	43.8	979	1469	5949	4.05
155.0	5007	0.25	4.20	4.653	4797	43.2	893	1555	6352	4.08
165.0	5331	0.30	5.04	4.694	5062	42.4	778	1670	6732	4.03
174.0	5621	0.35	5.88	4.736	5291	41.5	648	1800	7091	3.94
182.5	5896	0.40	6.72	4.778	5500	41.0	576	1872	7372	3.94
188.5	6090	0.45	7.56	4.822	5629	40.4	490	1958	7588	3.87
195.0	6300	0.50	8.40	4.866	5771	39.8	403	2045	7815	3.82
206.0	6655	0.60	10.08	4.957	5984	38.6	230	2218	8202	3.70
214.0	6914	0.70	11.76	5.051	6100	37.6	86	2362	8462	3.58
220.0	7107	0.80	13.44	5.149	6152	36.9	-14	2462	8614	3.50
225.0	7269	0.90	15.12	5.251	6170	36.3	-101	2549	8719	3.42
226.0	7301	1.00	16.80	5.357	6075	35.8	-180	2628	8703	3.31
226.5	7317	1.10	18.48	5.468	5965	35.4	-230	2678	8643	3.23
226.0	7301	1.20	20.16	5.583	5829	35.1	-274	2722	8551	3.14

Data entry by: NAA Date: 6-9-95
Data checked by: [illegible] Date: 6-20-95
FileName:SAT0756

ADVANCED TERRA TESTING, INC.

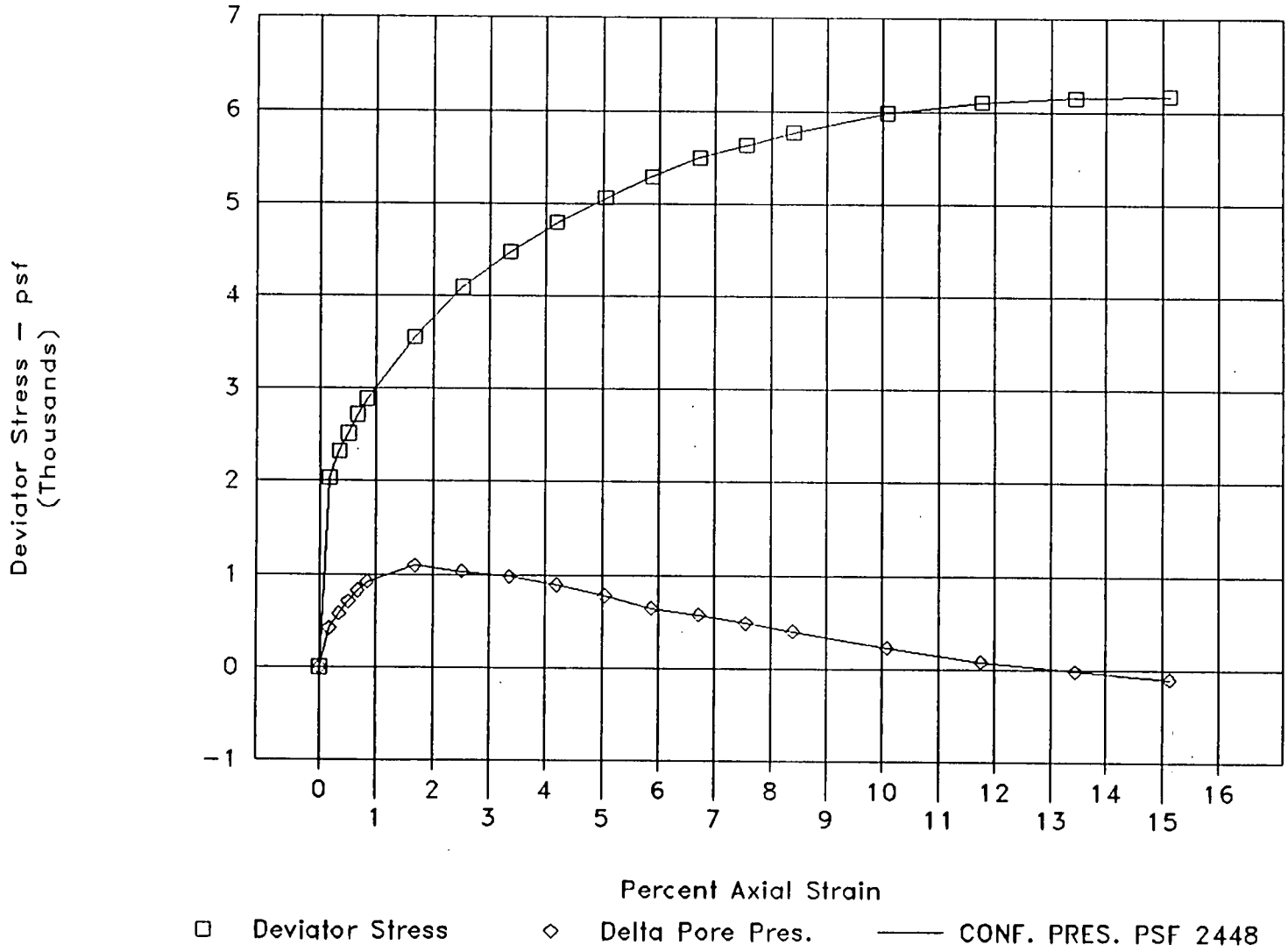
CONSOLIDATION DATA

G2-127, 15.0-17.0', 404756 A



TRIAXIAL TEST - TX/CUpp

G2-127, 15.0-17.0', 404756 A



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

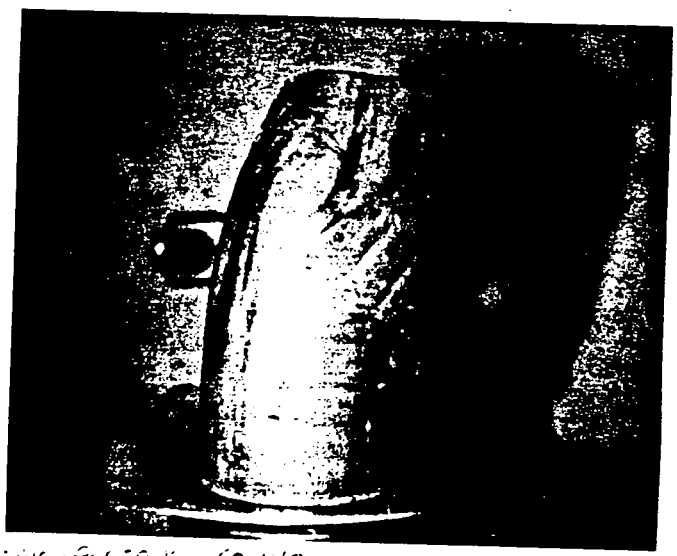
CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404756 B	TEST FINISHED	6-7-95 DCW
SOIL DESCR.	4-21-95 MG	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1019.9	1015.8
Wt. Wet Soil & Pan	(g)	1028.4	1024.3
Wt. Dry Soil & Pan	(g)	913.6	913.6
Wt. Lost Moisture	(g)	114.8	110.7
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	905.1	905.1
Moisture Content %		12.7	12.2
Wet Density PCF		143.6	148.1
Dry Density PCF		127.4	132.0

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	5.982
Vol. Bef. Consol.	(cu ft)	0.01566
Vol. After Consol.	(cu ft)	0.01512

Notes & Comments:



Data entry by: CAL Date: 6-09-95
Data checked by: SR Date: 6-14-95
FileName: SAT0756B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404756 B	TEST FINISHED	6-7-95 DCW
SOIL DESCR.	4-21-95 MG	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.1	8.4				
50.0	48.0	8.8	9.4	37.6	47.0	9.4	0.94
60.0		9.6	9.6	48.3	58.0	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.60	0.00
0.25	0.5	13.85	-4.25
0.5	0.7	14.60	-5.00
1	1.0	15.65	-6.05
2	1.4	17.00	-7.40
4	2.0	18.70	-9.10
9	3.0	20.80	-11.20
16	4.0	22.30	-12.70
30	5.5	23.55	-13.95
60	7.7	24.25	-14.65
120	11.0	24.60	-15.00
240	15.5	24.80	-15.20
360	19.0	24.83	-15.23

Initial Height	(in)	5.982	Init. Vol.	(CC)	443.55
Height Change	(in)	0.053	Vol. Change	(CC)	23.35
Ht. After Cons.	(in)	5.929	Cell Exp.	(CC)	7.94
Initial Area	(sq in)	4.524	Net Change	(CC)	15.41
Area After Cons.	(sq in)	4.406	Cons. Vol.	(CC)	428.13

Data entry by: CAL Date: 6-09-95
Data checked by: SR Date: 6-14-95
FileName: SAT0756B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404756 B	TEST FINISHED	6-7-95 DCW
SOIL DESCR.	4-21-95 MG	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

Init. Ht.	(in)	5.982	Init. Area	(sq in)	4.524
Consol. Ht.	(in)	5.929	Consol. Area	(sq in)	4.406
Back Pres.	PSI	47.5	Strain Rate	(in/min)	0.004

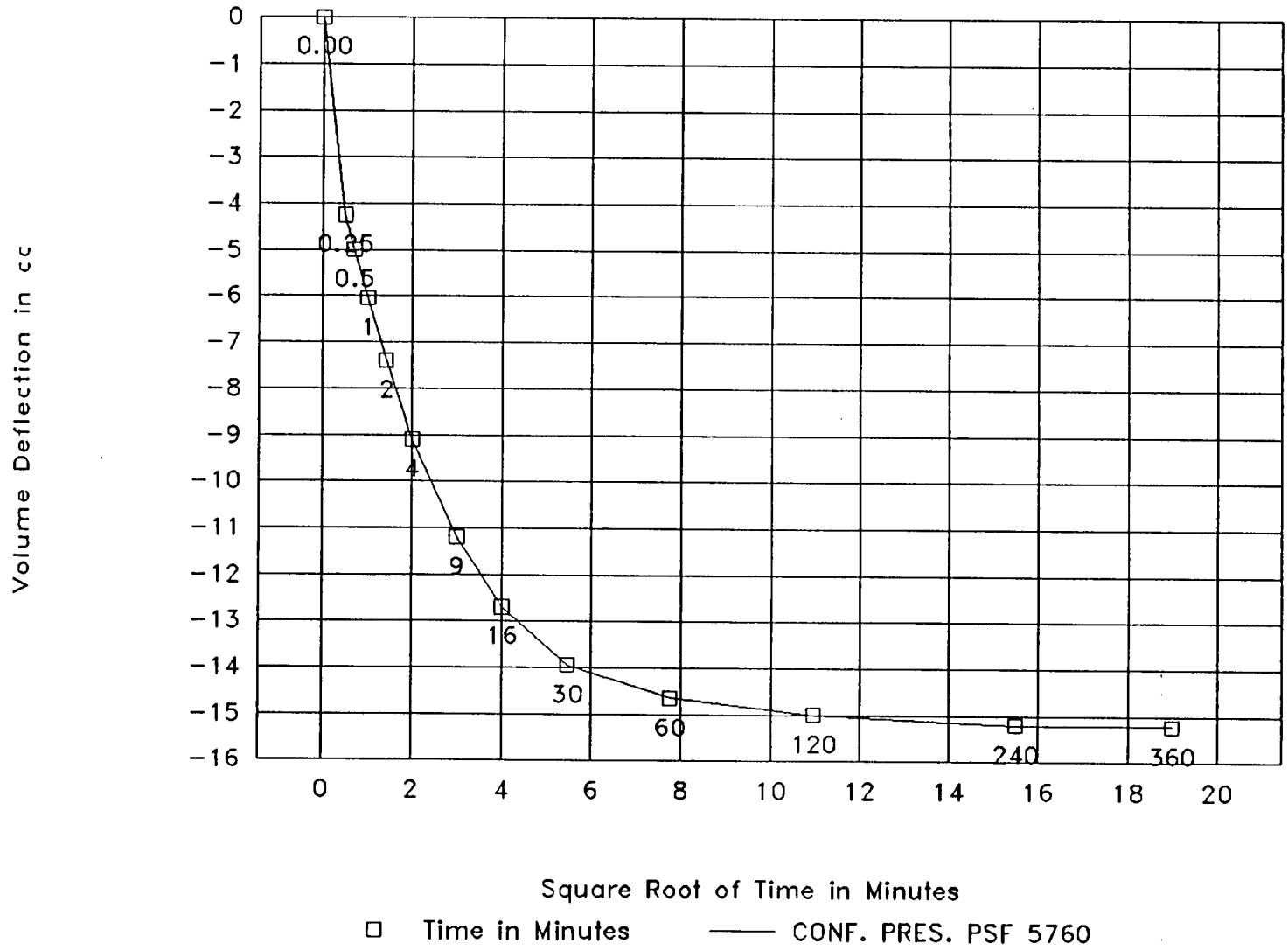
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.406	0	47.5	0	5760	5760	1.00
100.0	3268	0.01	0.17	4.413	3263	55.7	1181	4579	7842	1.71
115.0	3759	0.02	0.34	4.421	3746	60.7	1901	3859	7605	1.97
144.0	4707	0.05	0.84	4.443	4667	66.5	2736	3024	7691	2.54
175.0	5720	0.10	1.69	4.481	5623	68.9	3082	2678	8302	3.10
199.0	6504	0.15	2.53	4.520	6340	69.3	3139	2621	8961	3.42
220.0	7191	0.20	3.37	4.560	6948	69.5	3168	2592	9540	3.68
242.5	7926	0.25	4.22	4.600	7592	69.4	3154	2606	10198	3.91
261.0	8531	0.30	5.06	4.641	8099	68.0	2952	2808	10907	3.88
281.0	9184	0.35	5.90	4.682	8642	66.1	2678	3082	11724	3.80
305.0	9969	0.40	6.75	4.724	9296	64.4	2434	3326	12623	3.79
345.0	11276	0.50	8.43	4.811	10325	61.5	2016	3744	14069	3.76
368.0	12028	0.60	10.12	4.902	10811	59.0	1656	4104	14915	3.63
381.0	12453	0.70	11.81	4.996	10983	57.5	1440	4320	15303	3.54
388.0	12682	0.80	13.49	5.093	10971	56.5	1296	4464	15435	3.46
392.0	12812	0.90	15.18	5.194	10868	55.9	1210	4550	15418	3.39
392.0	12812	1.00	16.87	5.300	10651	55.6	1166	4594	15245	3.32
392.0	12812	1.10	18.55	5.409	10435	55.4	1138	4622	15058	3.26
392.0	12812	1.20	20.24	5.524	10219	55.4	1138	4622	14842	3.21

Data entry by: CAL Date: 6-09-95
Data checked by: SR Date: 6-14-95
FileName: SAT0756B

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-127, 15.0-17.0', 404756 B



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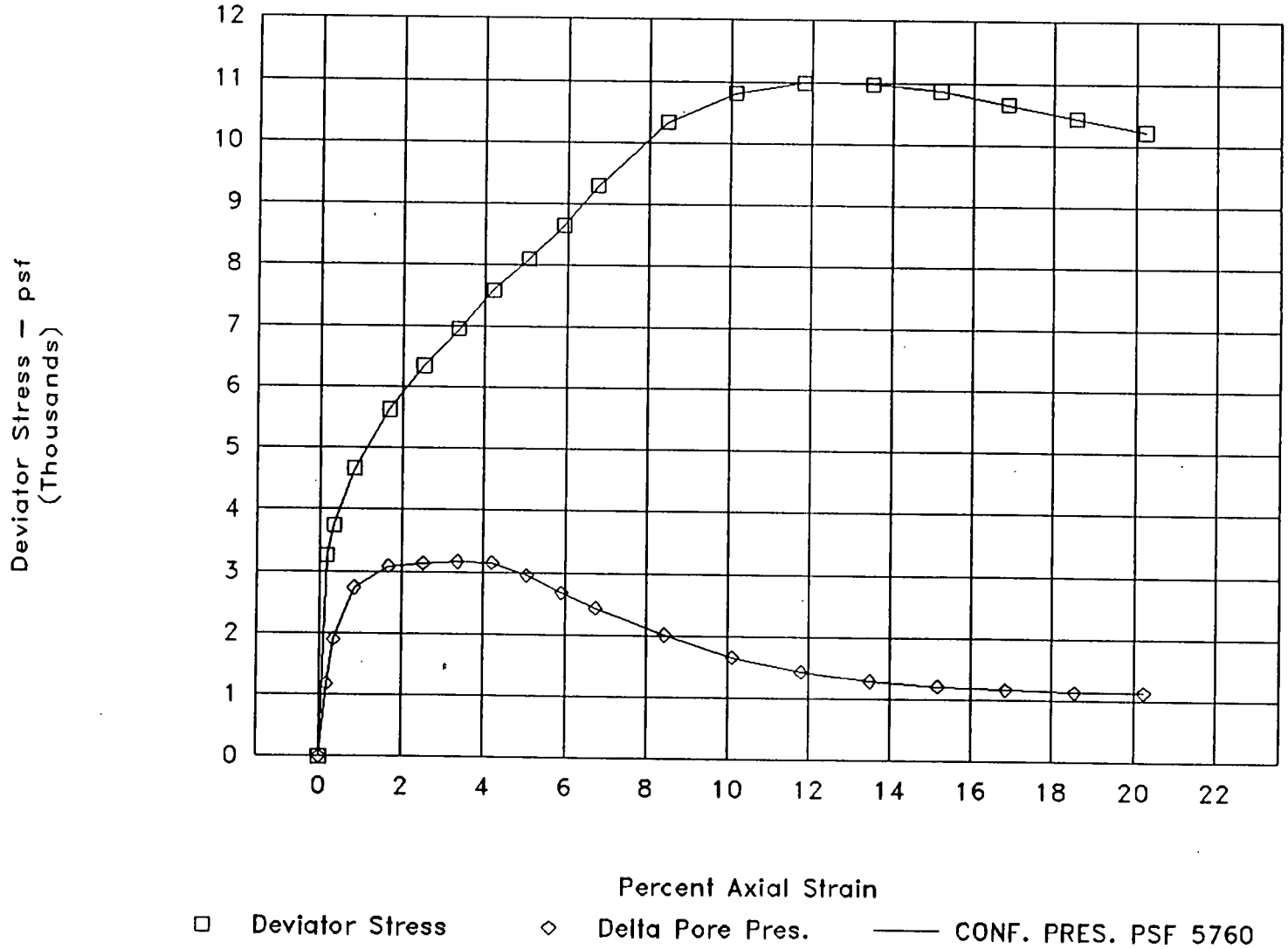
001051

474

TRIAXIAL TEST - TX/CUpp

G2-127, 15.0-17.0', 404756 B



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404756 C	TEST FINISHED	6-18-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1000.3	1000.4
Wt. Wet Soil & Pan	(g)	1008.7	1008.9
Wt. Dry Soil & Pan	(g)	909.9	909.9
Wt. Lost Moisture	(g)	98.8	99.0
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	901.5	901.5
Moisture Content %		11.0	11.0
Wet Density PCF		142.7	148.3
Dry Density PCF		128.6	133.6

Init. Diameter	(in)	2.389
Init. Area	(sq in)	4.483
Init. Height	(in)	5.959
Vol. Bef. Consol.	(cu ft)	0.01546
Vol. After Consol.	(cu ft)	0.01487

Notes & Comments:

SAIC/PARSONS PO140
G2-127 #404756C @ 15-17'
CH
σ_3 = 11520 PSF

Data entry by: NAA Date: 6-26-95
Data checked by: cal Date: 6-29-95
FileName: SAT0756C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404756 C	TEST FINISHED	6-18-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.0	8.5				
50.0		7.1		38.7	48.3	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	7.20	0.00
0.25	0.5	15.80	-8.60
0.5	0.7	16.85	-9.65
1	1.0	18.00	-10.80
2	1.4	19.40	-12.20
4	2.0	21.10	-13.90
9	3.0	23.60	-16.40
16	4.0	25.30	-18.10
30	5.5	27.10	-19.90
60	7.7	28.40	-21.20
120	11.0	29.00	-21.80
240	15.5	29.40	-22.20
360	19.0	29.50	-22.30

Initial Height	(in)	5.959	Init. Vol.	(CC)	437.80
Height Change	(in)	0.049	Vol. Change	(CC)	28.80
Ht. After Cons.	(in)	5.910	Cell Exp.	(CC)	12.19
Initial Area	(sq in)	4.483	Net Change	(CC)	16.61
Area After Cons.	(sq in)	4.348	Cons. Vol.	(CC)	421.18

Data entry by: NAA Date: 6-26-95
Data checked by: cal Date: 6-29-95
FileName:SAT0756C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404756 C	TEST FINISHED	6-18-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

Init. Ht.	(in)	5.959	Init. Area	(sq in) 4.483
Consol. Ht.	(in)	5.910	Consol. Area	(sq in) 4.348
Back Pres.	PSI	37.8	Strain Rate	(in/min) 0.003

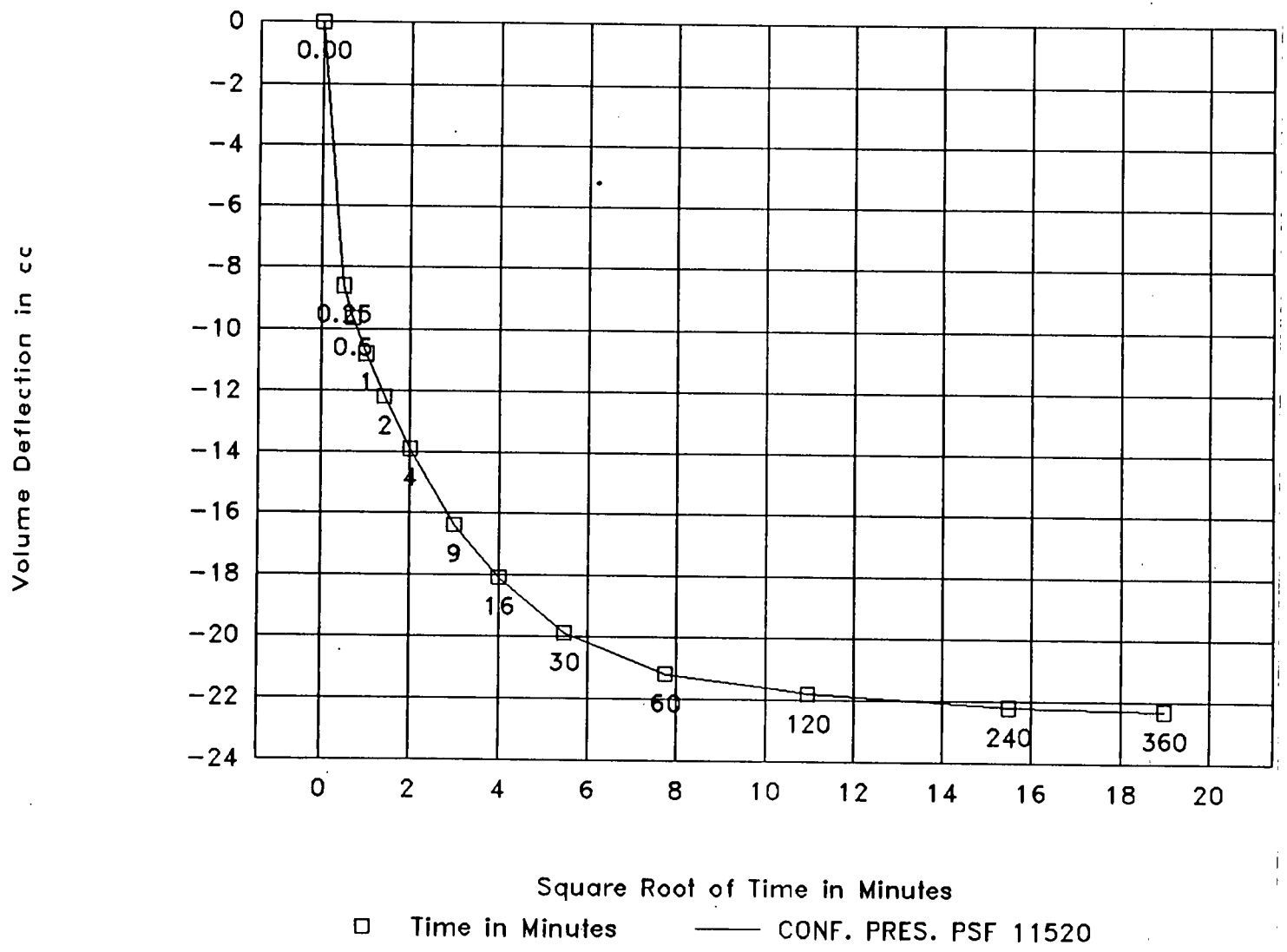
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.348	0	37.8	0	11520	11520	1.00
225.0	7451	0.05	0.85	4.385	7388	67.3	4248	7272	14660	2.02
272.0	9008	0.10	1.69	4.423	8856	79.2	5962	5558	14414	2.59
308.0	10200	0.15	2.54	4.461	9941	82.6	6451	5069	15010	2.96
320.0	10598	0.17	2.88	4.477	10293	83.2	6538	4982	15275	3.07
332.0	10995	0.19	3.21	4.493	10642	83.4	6566	4954	15595	3.15
340.0	11260	0.21	3.55	4.508	10860	83.3	6552	4968	15828	3.19
349.0	11558	0.23	3.89	4.524	11108	83.0	6509	5011	16119	3.22
357.0	11823	0.25	4.23	4.540	11323	82.5	6437	5083	16406	3.23
375.0	12419	0.30	5.08	4.581	11789	81.4	6278	5242	17030	3.25
408.0	13512	0.40	6.77	4.664	12597	78.6	5875	5645	18242	3.23
433.0	14340	0.50	8.46	4.750	13127	75.8	5472	6048	19175	3.17
449.0	14870	0.60	10.15	4.839	13360	73.5	5141	6379	19739	3.09
455.0	15068	0.70	11.84	4.932	13284	71.5	4853	6667	19951	2.99
457.0	15135	0.80	13.54	5.029	13086	70.3	4680	6840	19926	2.91
456.0	15102	0.90	15.23	5.129	12802	69.6	4579	6941	19743	2.84
452.0	14969	1.00	16.92	5.234	12436	69.1	4507	7013	19449	2.77
447.0	14803	1.10	18.61	5.343	12048	68.8	4464	7056	19104	2.71
441.0	14605	1.20	20.30	5.456	11639	68.6	4435	7085	18724	2.64

Data entry by: NAA Date: 6-26-95
Data checked by: cal Date: 6-29-95
FileName: SAT0756C

ADVANCED TERRA TESTING, INC.

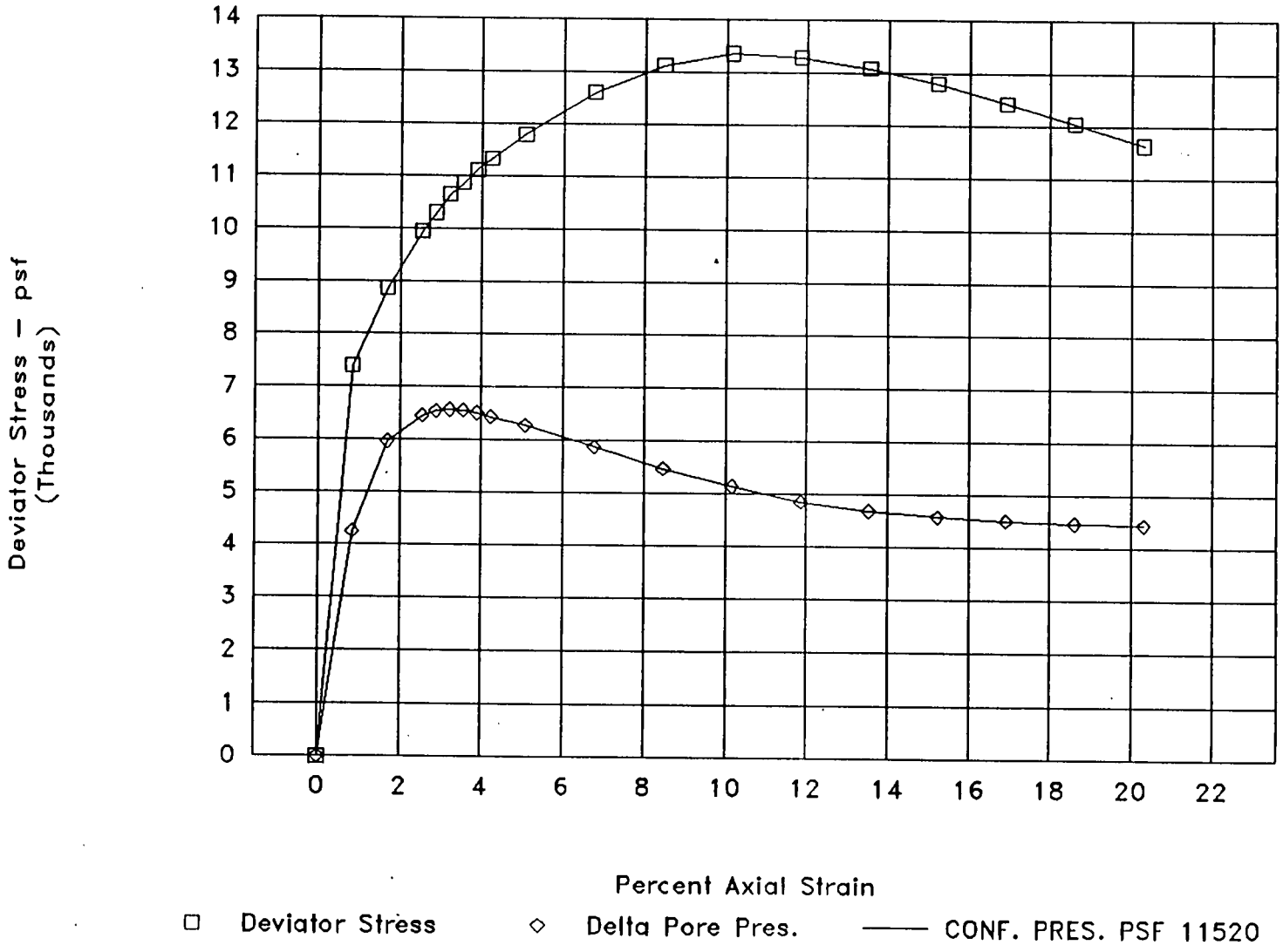
CONSOLIDATION DATA

G2-127, 15.0-17.0', 404756 C



TRIAXIAL TEST - TX/CUpp

G2-127, 15.0-17.0', 404756 C



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

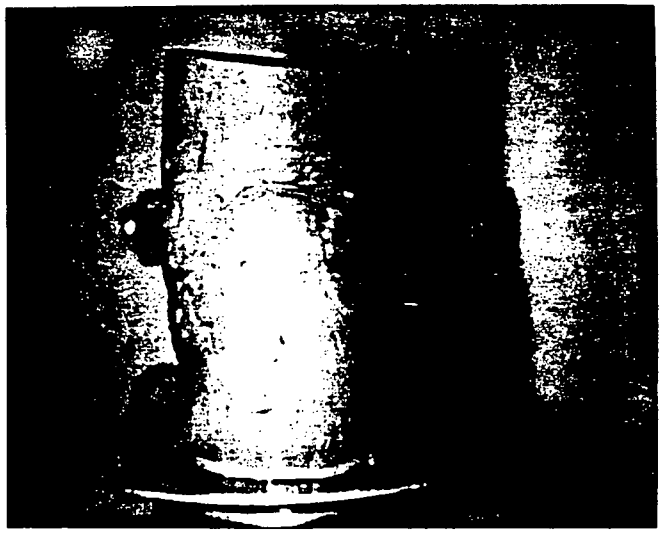
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404740 A	TEST FINISHED	6-05-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	3816		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1025.5	1015.0
Wt. Wet Soil & Pan	(g)	1033.8	1023.3
Wt. Dry Soil & Pan	(g)	916.8	916.8
Wt. Lost Moisture	(g)	117.0	106.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	908.6	908.6
Moisture Content %		12.9	11.7
Wet Density PCF		144.7	148.8
Dry Density PCF		128.2	133.2

Init. Diameter	(in)	2.399
Init. Area	(sq in)	4.520
Init. Height	(in)	5.973
Vol. Bef. Consol.	(cu ft)	0.01562
Vol. After Consol.	(cu ft)	0.01504

Notes & Comments:



Data entry by: CAL Date: 6-06-95
Data checked by: SR Date: 6-6-95
FileName:SAT0740A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404740 A	TEST FINISHED	6-05-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	3816		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.4	11.4				
50.0		12.4	12.6	37.9	47.6	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	12.60	0.00
0.25	0.5	16.30	-3.70
0.5	0.7	16.95	-4.35
1	1.0	17.78	-5.17
2	1.4	18.80	-6.20
4	2.0	20.18	-7.58
9	3.0	22.05	-9.45
16	4.0	23.50	-10.90
30	5.5	25.10	-12.50
60	7.7	26.45	-13.85
120	11.0	27.10	-14.50
240	15.5	27.38	-14.78
360	19.0	27.48	-14.88

Initial Height	(in)	5.973	Init. Vol.	(CC)	442.51
Height Change	(in)	0.032	Vol. Change	(CC)	24.60
Ht. After Cons.	(in)	5.941	Cell Exp.	(CC)	8.12
Initial Area	(sq in)	4.520	Net Change	(CC)	16.48
Area After Cons.	(sq in)	4.375	Cons. Vol.	(CC)	426.03

Data entry by: CAL Date: 6-06-95
Data checked by: SR Date: 6-6-95
FileName:SAT0740A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404740 A	TEST FINISHED	6-05-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	3816		

Init. Ht.	(in)	5.973	Init. Area	(sq in)	4.520
Consol. Ht.	(in)	5.941	Consol. Area	(sq in)	4.375
Back Pres.	PSI	38.6	Strain Rate	(in/min)	0.002

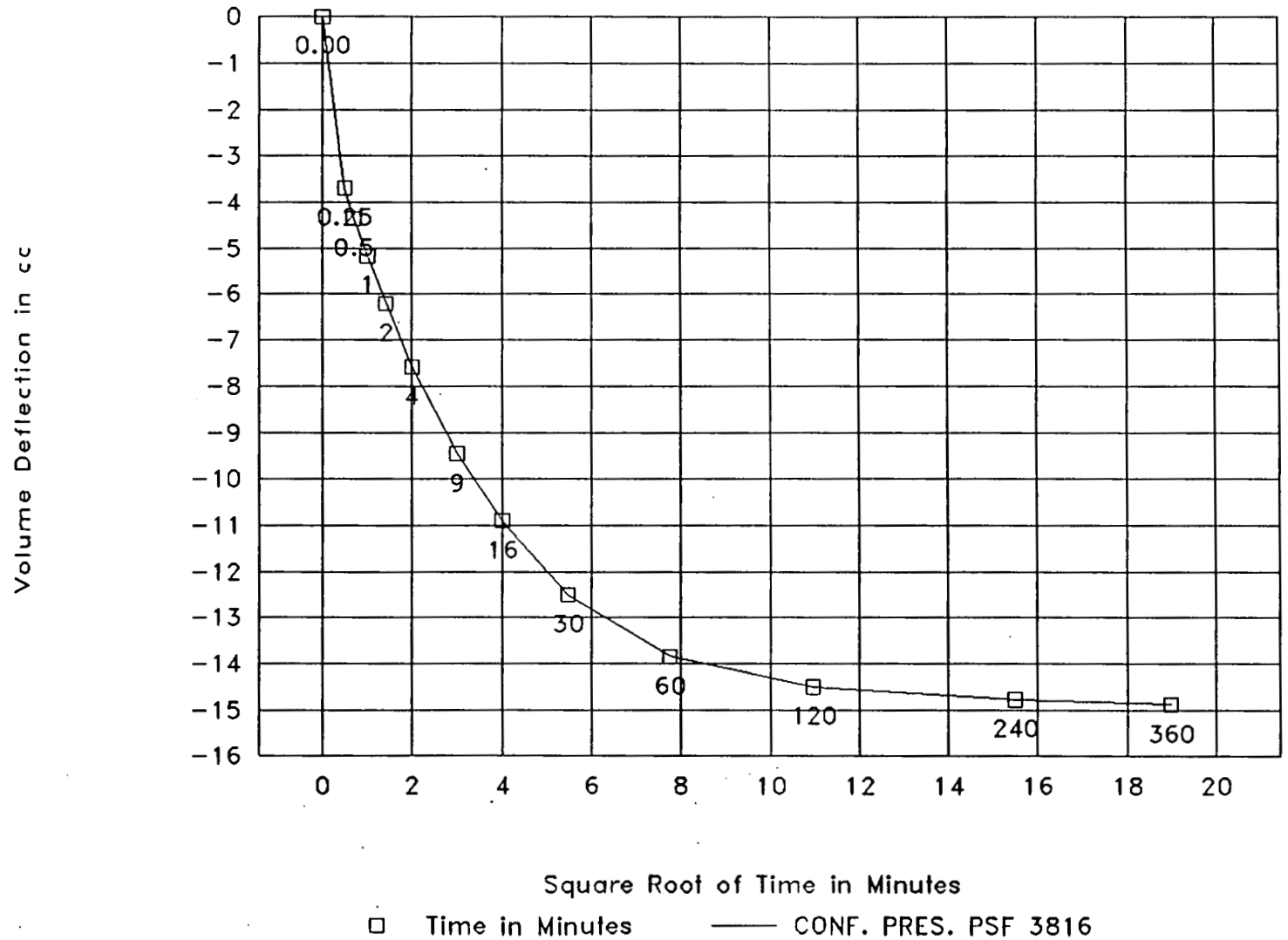
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.375	0	38.6	0	3816	3816	1.00
80.0	2633	0.02	0.34	4.390	2624	45.0	922	2894	5519	1.91
96.0	3160	0.04	0.67	4.405	3138	48.6	1440	2376	5514	2.32
106.0	3489	0.06	1.01	4.420	3454	49.8	1613	2203	5657	2.57
114.0	3752	0.08	1.35	4.435	3702	50.5	1714	2102	5804	2.76
120.0	3950	0.10	1.68	4.450	3883	50.9	1771	2045	5928	2.90
134.0	4410	0.15	2.52	4.489	4299	51.0	1786	2030	6329	3.12
144.0	4739	0.20	3.37	4.528	4580	50.8	1757	2059	6639	3.22
153.0	5036	0.25	4.21	4.567	4824	50.2	1670	2146	6969	3.25
162.0	5332	0.30	5.05	4.608	5063	49.8	1613	2203	7266	3.30
170.0	5595	0.35	5.89	4.649	5266	49.2	1526	2290	7555	3.30
176.0	5793	0.40	6.73	4.691	5403	48.6	1440	2376	7779	3.27
183.0	6023	0.45	7.57	4.734	5567	48.0	1354	2462	8029	3.26
188.0	6188	0.50	8.42	4.777	5667	47.6	1296	2520	8187	3.25
198.0	6517	0.60	10.10	4.867	5859	47.0	1210	2606	8465	3.25
205.0	6747	0.70	11.78	4.960	5952	46.2	1094	2722	8674	3.19
209.0	6879	0.80	13.47	5.056	5952	45.9	1051	2765	8717	3.15
212.0	6977	0.90	15.15	5.156	5920	45.4	979	2837	8757	3.09
216.0	7109	1.00	16.83	5.261	5913	45.2	950	2866	8778	3.06
218.0	7175	1.10	18.52	5.369	5846	44.9	907	2909	8755	3.01
215.0	7076	1.20	20.20	5.483	5647	44.7	878	2938	8585	2.92

Data entry by: CAL Date: 6-06-95
Data checked by: SR Date: 6-6-95
FileName:SAT0740A

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-129, 24.0-26.5', 404740 A



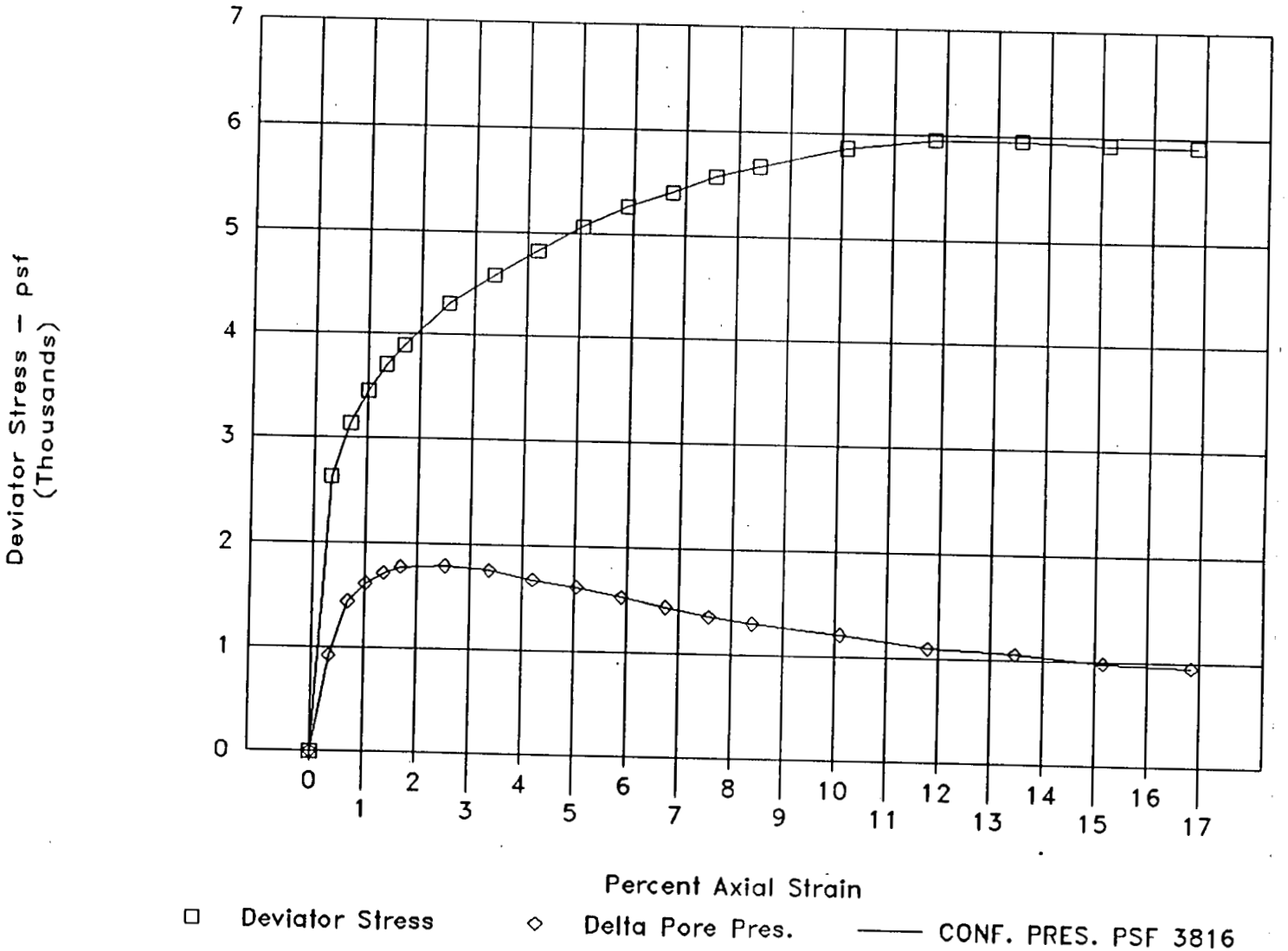
964

001061

474

TRIAXIAL TEST - TX/CUpp

G2-129, 24.0-26.5', 404740 A



965

001062

474

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

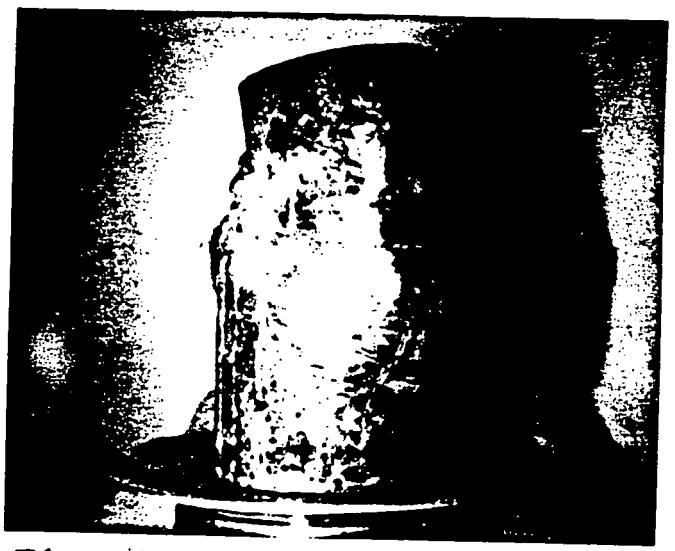
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404740 B	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	993.4	991.5
Wt. Wet Soil & Pan	(g)	1001.8	999.9
Wt. Dry Soil & Pan	(g)	890.3	890.3
Wt. Lost Moisture	(g)	111.5	109.6
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	881.9	881.9
Moisture Content %		12.6	12.4
Wet Density PCF		141.7	146.5
Dry Density PCF		125.8	130.3

Init. Diameter	(in)	2.385
Init. Area	(sq in)	4.468
Init. Height	(in)	5.979
Vol. Bef. Consol.	(cu ft)	0.01546
Vol. After Consol.	(cu ft)	0.01492

Notes & Comments:



SAIC/PARSONS PO140
G2-129 #404740B @ 24-26.5'
TX/CUpp σ_3 = 5760PSF

Data entry by: NAA Date: 7-14-95
Data checked by: CAL Date: 7-14-95
FileName:SAT0740B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404740 B	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.4	7.2				
50.0	48.0	6.8	7.6	38.6	47.9	9.3	0.93
60.0		7.7	7.7	48.5	58.0	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	7.90	0.00
0.25	0.5	13.70	-5.80
0.5	0.7	14.50	-6.60
1	1.0	15.50	-7.60
2	1.4	16.65	-8.75
4	2.0	18.00	-10.10
9	3.0	19.85	-11.95
16	4.0	21.18	-13.28
30	5.5	22.40	-14.50
69	8.3	23.30	-15.40
120	11.0	23.60	-15.70
240	15.5	23.80	-15.90
360	19.0	23.90	-16.00

Initial Height	(in)	5.979	Init. Vol.	(CC)	437.80
Height Change	(in)	0.030	Vol. Change	(CC)	23.70
Ht. After Cons.	(in)	5.949	Cell Exp.	(CC)	8.39
Initial Area	(sq in)	4.468	Net Change	(CC)	15.31
Area After Cons.	(sq in)	4.333	Cons. Vol.	(CC)	422.49

Data entry by: NAA Date: 7-14-95
Data checked by: cal Date: 7-14-95
FileName:SAT0740B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404740 B	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

Init. Ht.	(in)	5.979	Init. Area	(sq in) 4.468
Consol. Ht.	(in)	5.949	Consol. Area	(sq in) 4.333
Back Pres.	PSI	47.1	Strain Rate	(in/min) 0.005

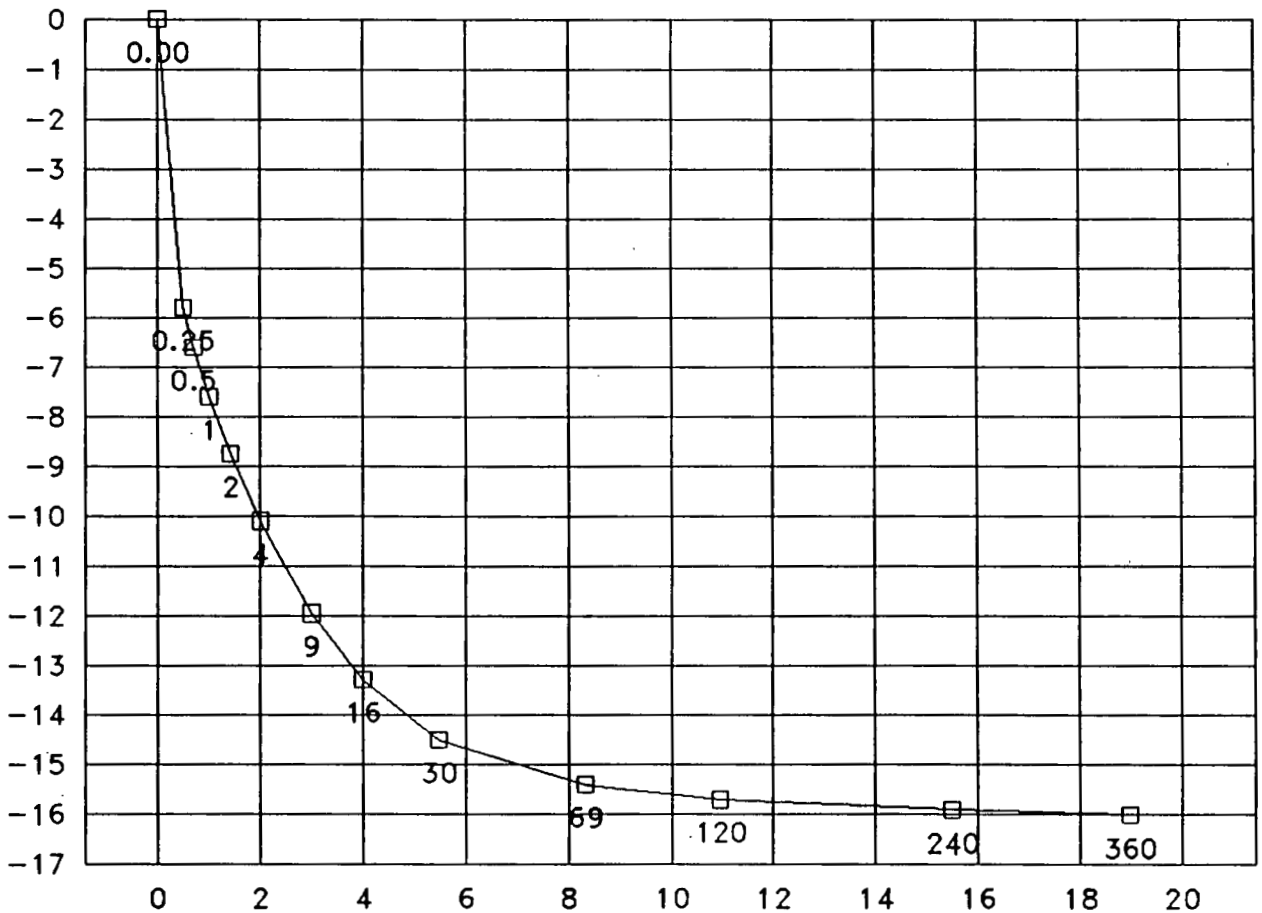
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.333	0	47.1	0	5760	5760	1.00
138.0	4586	0.05	0.84	4.370	4548	65.5	2650	3110	7658	2.46
156.0	5184	0.10	1.68	4.407	5097	69.3	3197	2563	7660	2.99
169.0	5616	0.15	2.52	4.445	5475	70.9	3427	2333	7808	3.35
182.0	6048	0.20	3.36	4.484	5845	71.6	3528	2232	8077	3.62
197.0	6547	0.25	4.20	4.523	6272	71.4	3499	2261	8533	3.77
210.0	6979	0.30	5.04	4.563	6627	70.2	3326	2434	9061	3.72
223.0	7411	0.35	5.88	4.604	6975	68.8	3125	2635	9610	3.65
235.0	7810	0.40	6.72	4.645	7285	67.9	2995	2765	10049	3.63
248.0	8242	0.45	7.56	4.688	7618	67.0	2866	2894	10513	3.63
257.0	8541	0.50	8.40	4.731	7823	66.2	2750	3010	10833	3.60
270.0	8973	0.60	10.09	4.819	8068	64.9	2563	3197	11265	3.52
280.0	9305	0.70	11.77	4.911	8210	64.0	2434	3326	11537	3.47
287.0	9538	0.80	13.45	5.006	8255	63.3	2333	3427	11682	3.41
290.0	9638	0.90	15.13	5.105	8180	62.7	2246	3514	11693	3.33
291.0	9671	1.00	16.81	5.209	8045	62.3	2189	3571	11616	3.25
293.0	9737	1.10	18.49	5.316	7937	61.9	2131	3629	11566	3.19
297.0	9870	1.20	20.17	5.428	7879	61.6	2088	3672	11551	3.15

Data entry by: NAA Date: 7-14-95
Data checked by: Cal Date: 7-14-95
FileName:SAT0740B

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-129, 24.0-26.5', 404740 B

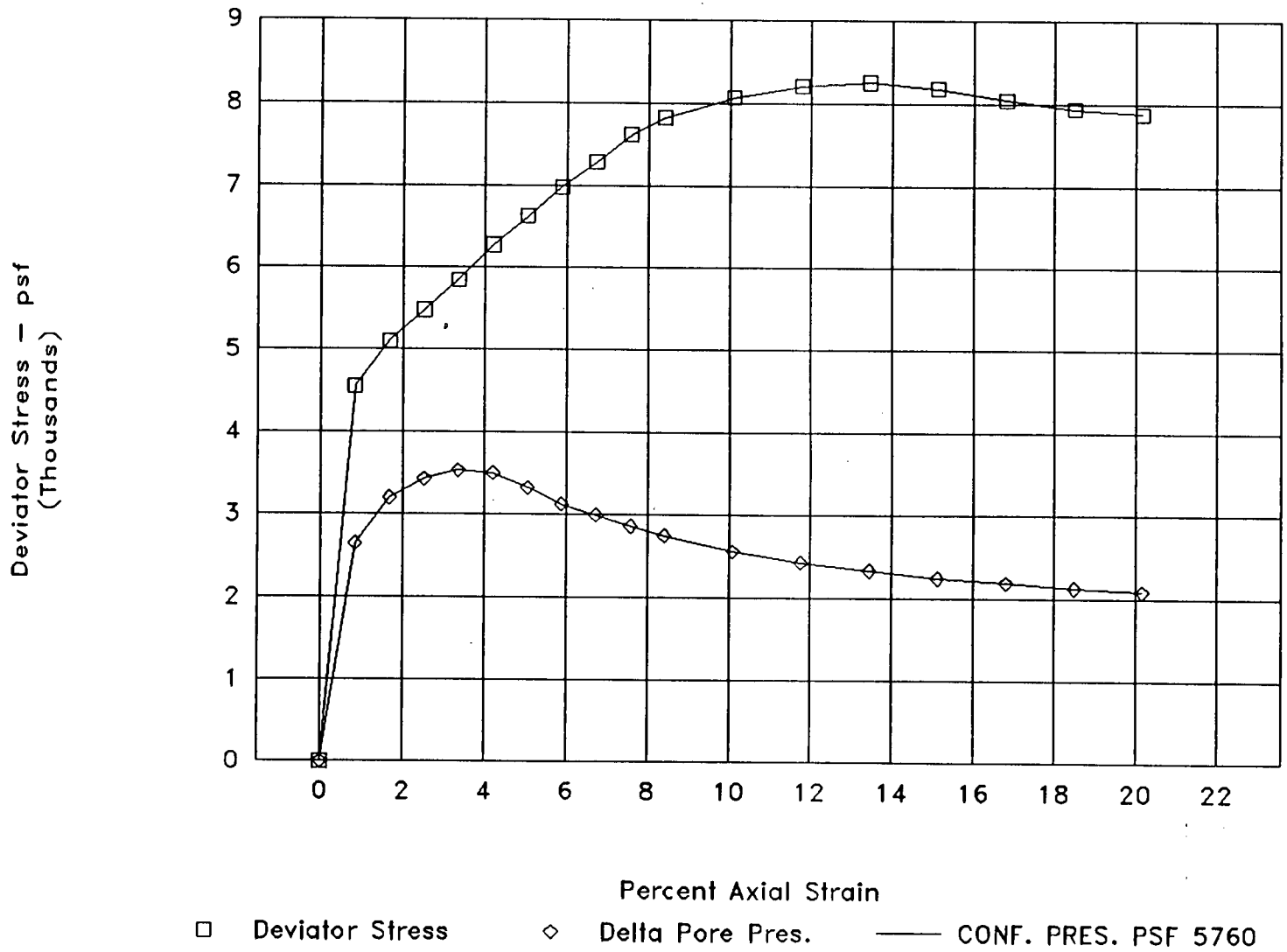


Square Root of Time in Minutes

□ Time in Minutes —— CONF. PRES. PSF 5760

TRIAXIAL TEST - TX/CUpp

G2-129, 24.0-26.5', 404740 B



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

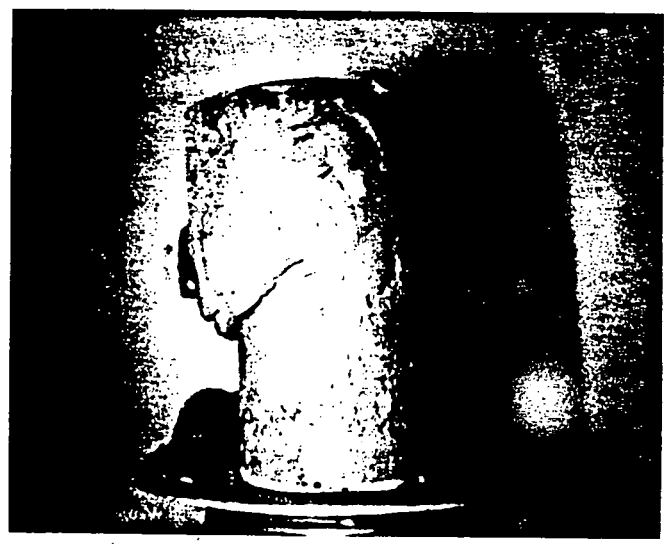
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	404740 C	TEST FINISHED	6-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	992.5	989.1
Wt. Wet Soil & Pan	(g)	1000.9	997.5
Wt. Dry Soil & Pan	(g)	906.1	906.1
Wt. Lost Moisture	(g)	94.8	91.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	897.7	897.7
Moisture Content %		10.6	10.2
Wet Density PCF		144.1	150.6
Dry Density PCF		130.3	136.7

Init. Diameter	(in)	2.394
Init. Area	(sq in)	4.501
Init. Height	(in)	5.829
Vol. Bef. Consol.	(cu ft)	0.01518
Vol. After Consol.	(cu ft)	0.01448

Notes & Comments:



SAIC/PARSONS PO140
G2-129 #404740C @ 24-26.5'
TX/CUpp σ_3 = 11520PSF

Data entry by: NAA Date: 6-23-95
Data checked by: Cal Date: 6-29-95
FileName:SAT0740C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	404740 C	TEST FINISHED	6-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.6	10.3				
50.0	48.0	9.4	10.4	38.7	47.7	9.0	0.90
60.0	58.0	10.7	11.4	48.6	57.8	9.2	0.92
70.0		11.8	11.8	58.5	68.0	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	11.80	0.00
0.25	0.5	23.80	-12.00
0.5	0.7	25.00	-13.20
1	1.0	26.30	-14.50
2	1.4	27.70	-15.90
4	2.0	29.30	-17.50
9	3.0	31.40	-19.60
16	4.0	32.80	-21.00
30	5.5	34.00	-22.20
74	8.6	34.80	-23.00
120	11.0	35.08	-23.28
240	15.5	35.30	-23.50
360	19.0	35.50	-23.70

Initial Height	(in)	5.829	Init. Vol.	(CC)	430.04
Height Change	(in)	0.088	Vol. Change	(CC)	34.35
Ht. After Cons.	(in)	5.741	Cell Exp.	(CC)	14.37
Initial Area	(sq in)	4.501	Net Change	(CC)	19.98
Area After Cons.	(sq in)	4.358	Cons. Vol.	(CC)	410.07

Data entry by: NAA Date: 6-23-95
Data checked by: Cal Date: 6-29-95
FileName:SAT0740C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	404740 C	TEST FINISHED	6-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

Init. Ht.	(in)	5.829	Init. Area	(sq in)	4.501
Consol. Ht.	(in)	5.741	Consol. Area	(sq in)	4.358
Back Pres.	PSI	57.5	Strain Rate	(in/min)	0.006

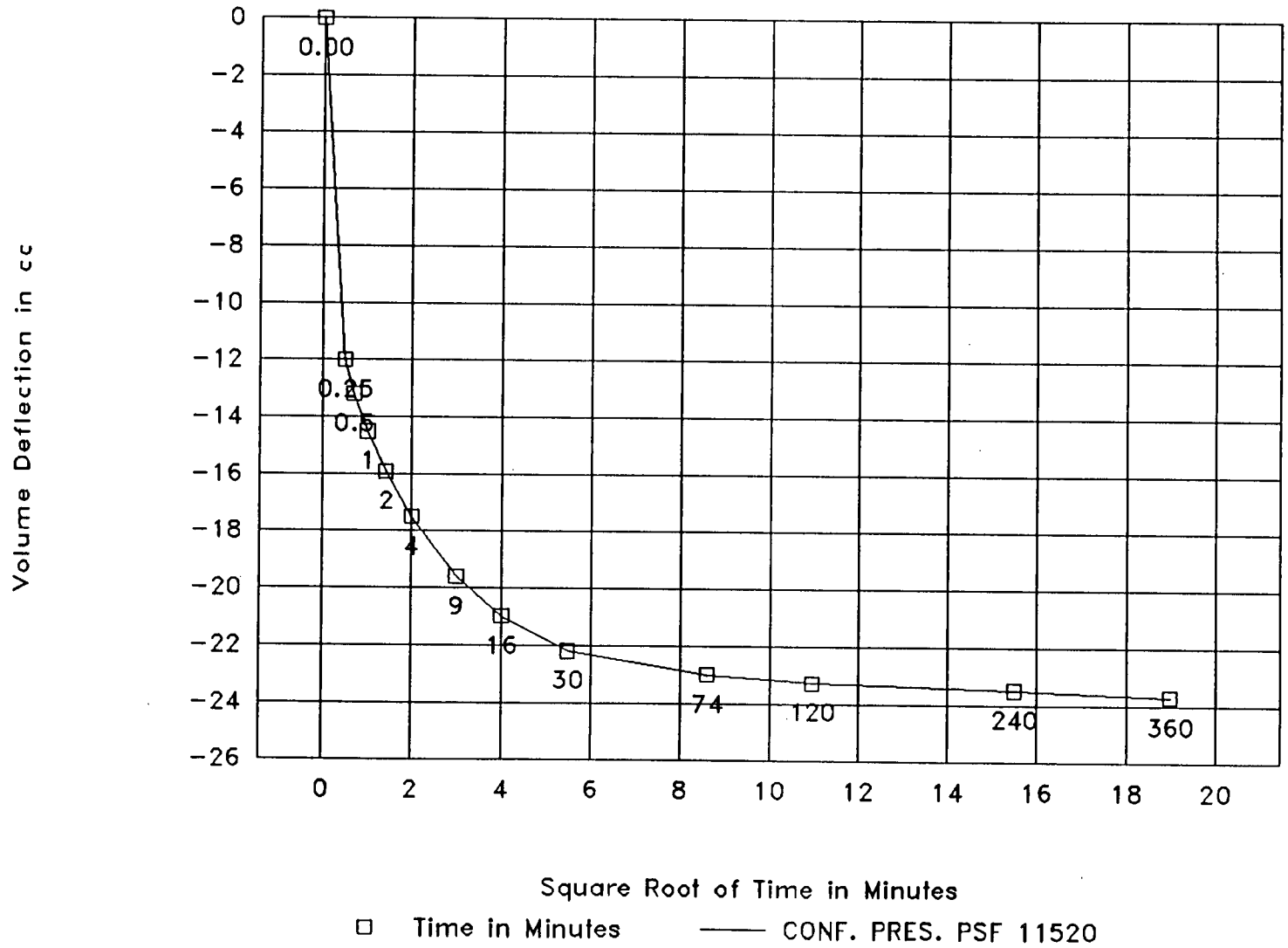
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.358	0	57.5	0	11520	11520	1.00
263.0	8690	0.05	0.87	4.396	8615	96.8	5659	5861	14475	2.47
280.0	9252	0.07	1.22	4.412	9139	101.0	6264	5256	14395	2.74
293.0	9681	0.09	1.57	4.427	9530	102.8	6523	4997	14527	2.91
307.0	10144	0.11	1.92	4.443	9950	103.7	6653	4867	14817	3.04
318.0	10508	0.13	2.26	4.459	10270	104.1	6710	4810	15079	3.14
328.0	10838	0.15	2.61	4.475	10555	104.1	6710	4810	15364	3.19
352.0	11631	0.20	3.48	4.515	11226	103.5	6624	4896	16122	3.29
373.0	12325	0.25	4.35	4.556	11788	102.7	6509	5011	16799	3.35
391.0	12920	0.30	5.23	4.598	12245	101.7	6365	5155	17400	3.38
408.0	13481	0.35	6.10	4.641	12660	100.7	6221	5299	17959	3.39
422.0	13944	0.40	6.97	4.684	12972	99.8	6091	5429	18401	3.39
447.0	14770	0.50	8.71	4.774	13484	98.3	5875	5645	19128	3.39
467.0	15431	0.60	10.45	4.867	13818	97.1	5702	5818	19636	3.38
480.0	15860	0.70	12.19	4.963	13927	96.0	5544	5976	19903	3.33
487.0	16092	0.80	13.93	5.064	13849	95.2	5429	6091	19941	3.27
491.0	16224	0.90	15.68	5.168	13681	94.6	5342	6178	19858	3.21
497.0	16422	1.00	17.42	5.277	13562	94.0	5256	6264	19826	3.17
502.0	16587	1.10	19.16	5.391	13409	93.7	5213	6307	19716	3.13

Data entry by: NAA Date: 6-23-95
Data checked by: Cal Date: 6-29-95
FileName:SAT0740C

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-129, 24.0-26.5', 404740C



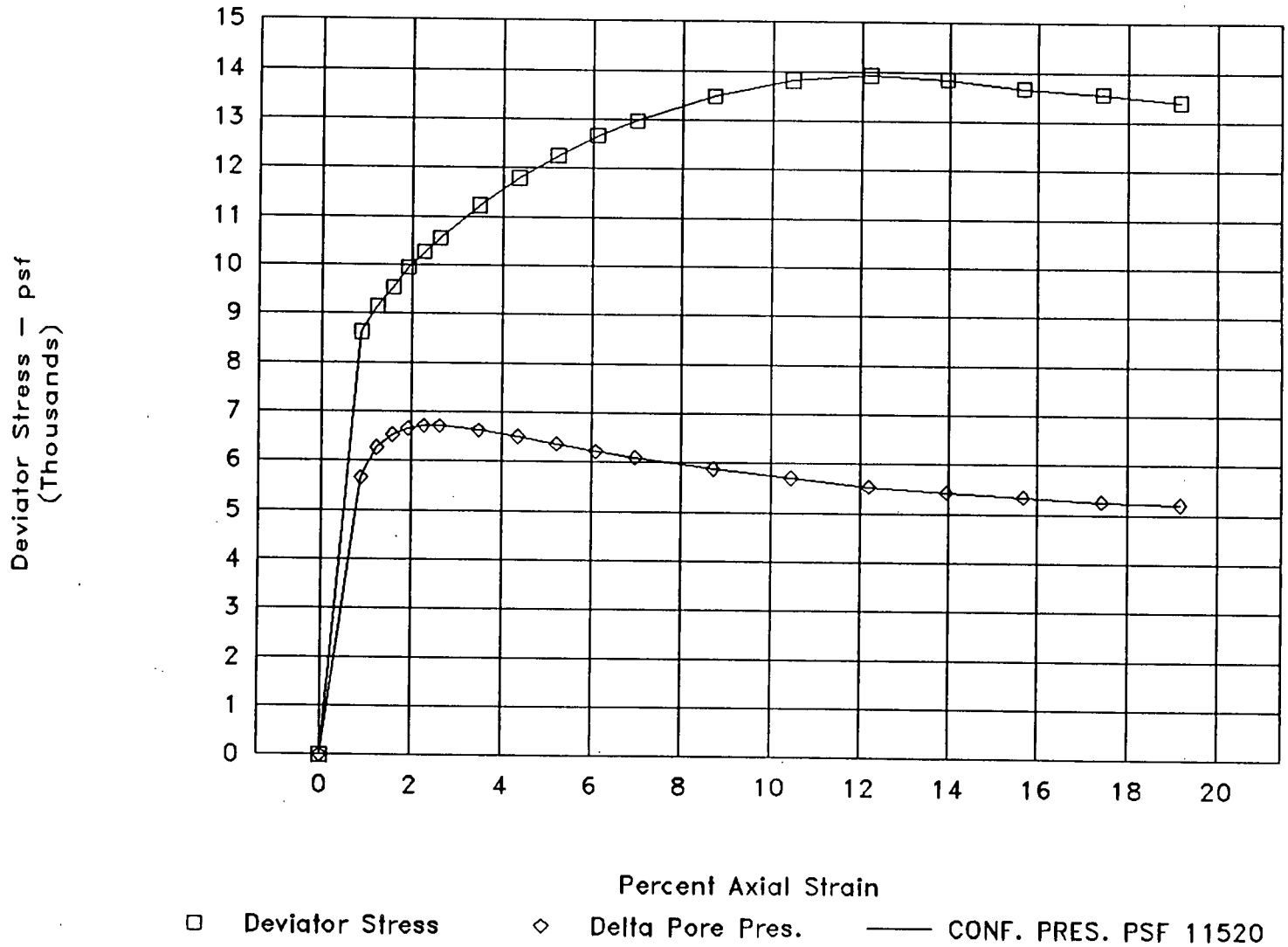
974

001071

4274

TRIAXIAL TEST - TX/CUpp

G2-129, 24.0-26.5', 404740C



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001072

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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

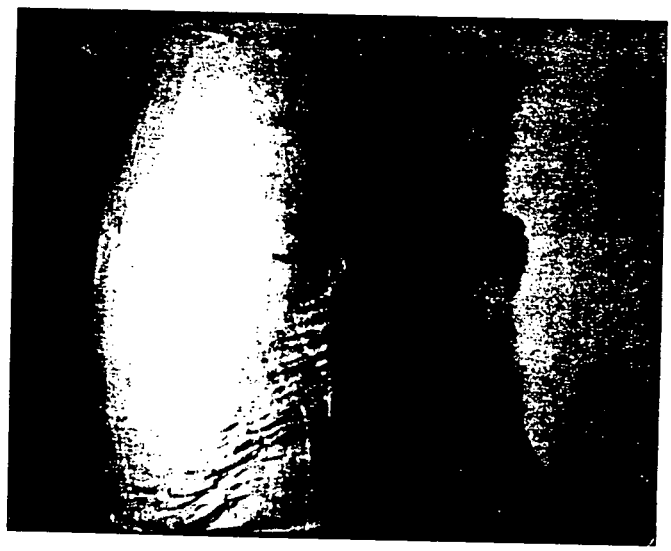
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 A	TEST FINISHED	7-5-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1004.2	996.2
Wt. Wet Soil & Pan	(g)	1012.5	1004.4
Wt. Dry Soil & Pan	(g)	889.0	889.0
Wt. Lost Moisture	(g)	123.5	115.4
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	880.8	880.8
Moisture Content %		14.0	13.1
Wet Density PCF		144.9	149.0
Dry Density PCF		127.1	131.8

Init. Diameter	(in)	2.399
Init. Area	(sq in)	4.520
Init. Height	(in)	5.842
Vol. Bef. Consol.	(cu ft)	0.01528
Vol. After Consol.	(cu ft)	0.01473

Notes & Comments:



SAIC/PARSONS PO 140 2059-13H
G2-130 405077A 10-12'
TX/CUpp σ_3 1728 psf

Data entry by: NAA Date: 7-11-95
Data checked by: MGJ Date: 7-11-95
FileName: SAT0077A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 A	TEST FINISHED	7-5-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.2	10.8				
50.0		12.4	12.5	37.9	47.8	9.9	0.99

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	12.50	0.00
0.25	0.5	14.15	-1.65
0.5	0.7	14.40	-1.90
1	1.0	14.80	-2.30
2	1.4	15.30	-2.80
4	2.0	15.90	-3.40
9	3.0	17.00	-4.50
16	4.0	17.88	-5.38
30	5.5	19.00	-6.50
60	7.7	20.20	-7.70
120	11.0	21.00	-8.50
240	15.5	21.40	-8.90
360	19.0	21.55	-9.05

Initial Height	(in)	5.842	Init. Vol.	(CC)	432.80
Height Change	(in)	0.026	Vol. Change	(CC)	22.20
Ht. After Cons.	(in)	5.816	Cell Exp.	(CC)	6.72
Initial Area	(sq in)	4.520	Net Change	(CC)	15.48
Area After Cons.	(sq in)	4.378	Cons. Vol.	(CC)	417.32

Data entry by: NAA Date: 7-11-95
Data checked by: MGJ Date: 7-11-95
FileName:SAT0077A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 A	TEST FINISHED	7-5-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

Init. Ht.	(in)	5.842	Init. Area	(sq in)	4.520
Consol. Ht.	(in)	5.816	Consol. Area	(sq in)	4.378
Back Pres.	PSI	37.6	Strain Rate	(in/min)	0.002

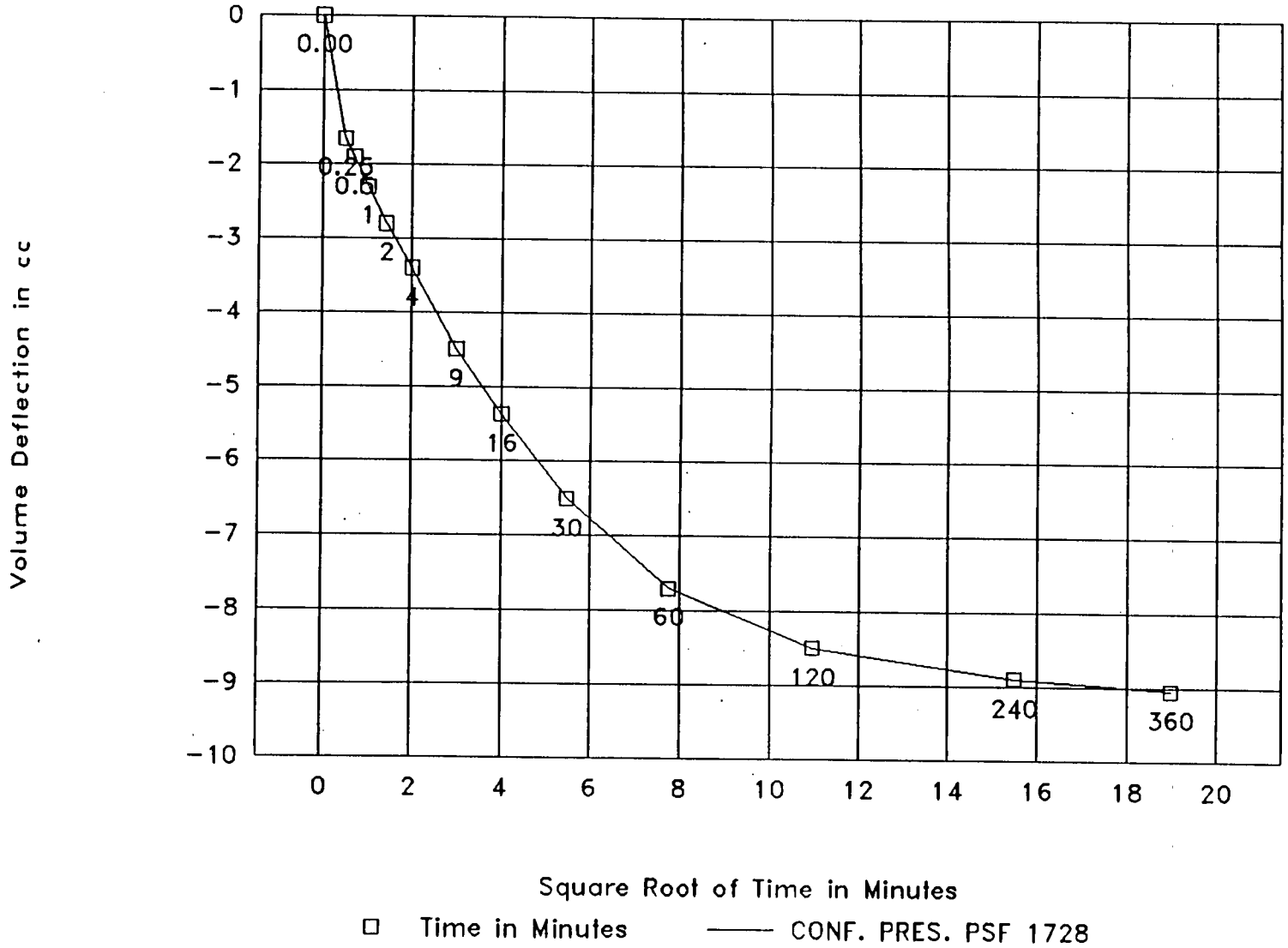
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.378	0	37.6	0	1728	1728	1.00
30.0	987	0.01	0.17	4.385	985	40.2	374	1354	2339	1.73
36.0	1184	0.02	0.34	4.393	1180	41.4	547	1181	2361	2.00
39.0	1283	0.03	0.52	4.401	1276	42.0	634	1094	2371	2.17
43.5	1431	0.05	0.86	4.416	1419	42.6	720	1008	2427	2.41
49.0	1612	0.08	1.38	4.439	1590	42.9	763	965	2554	2.65
52.0	1710	0.10	1.72	4.454	1681	42.9	763	965	2646	2.74
59.0	1941	0.15	2.58	4.494	1891	42.8	749	979	2870	2.93
65.0	2138	0.20	3.44	4.534	2064	42.6	720	1008	3072	3.05
71.0	2335	0.25	4.30	4.575	2235	42.2	662	1066	3301	3.10
75.5	2483	0.30	5.16	4.616	2355	41.8	605	1123	3478	3.10
83.5	2747	0.40	6.88	4.701	2558	40.9	475	1253	3810	3.04
90.5	2977	0.50	8.60	4.790	2721	40.3	389	1339	4060	3.03
96.0	3158	0.60	10.32	4.881	2832	39.9	331	1397	4229	3.03
100.5	3306	0.70	12.04	4.977	2908	39.5	274	1454	4362	3.00
104.0	3421	0.80	13.76	5.076	2950	39.1	216	1512	4462	2.95
107.0	3519	0.90	15.47	5.179	2975	38.9	187	1541	4516	2.93
108.5	3569	1.00	17.19	5.287	2955	38.7	158	1570	4525	2.88
109.0	3585	1.10	18.91	5.399	2907	38.7	158	1570	4477	2.85
108.5	3569	1.20	20.63	5.516	2832	39.1	216	1512	4344	2.87

Data entry by: NAA Date: 7-11-95
Data checked by: MGJ Date: 7-11-95
FileName:SAT0077A

ADVANCED TERRA TESTING, INC.

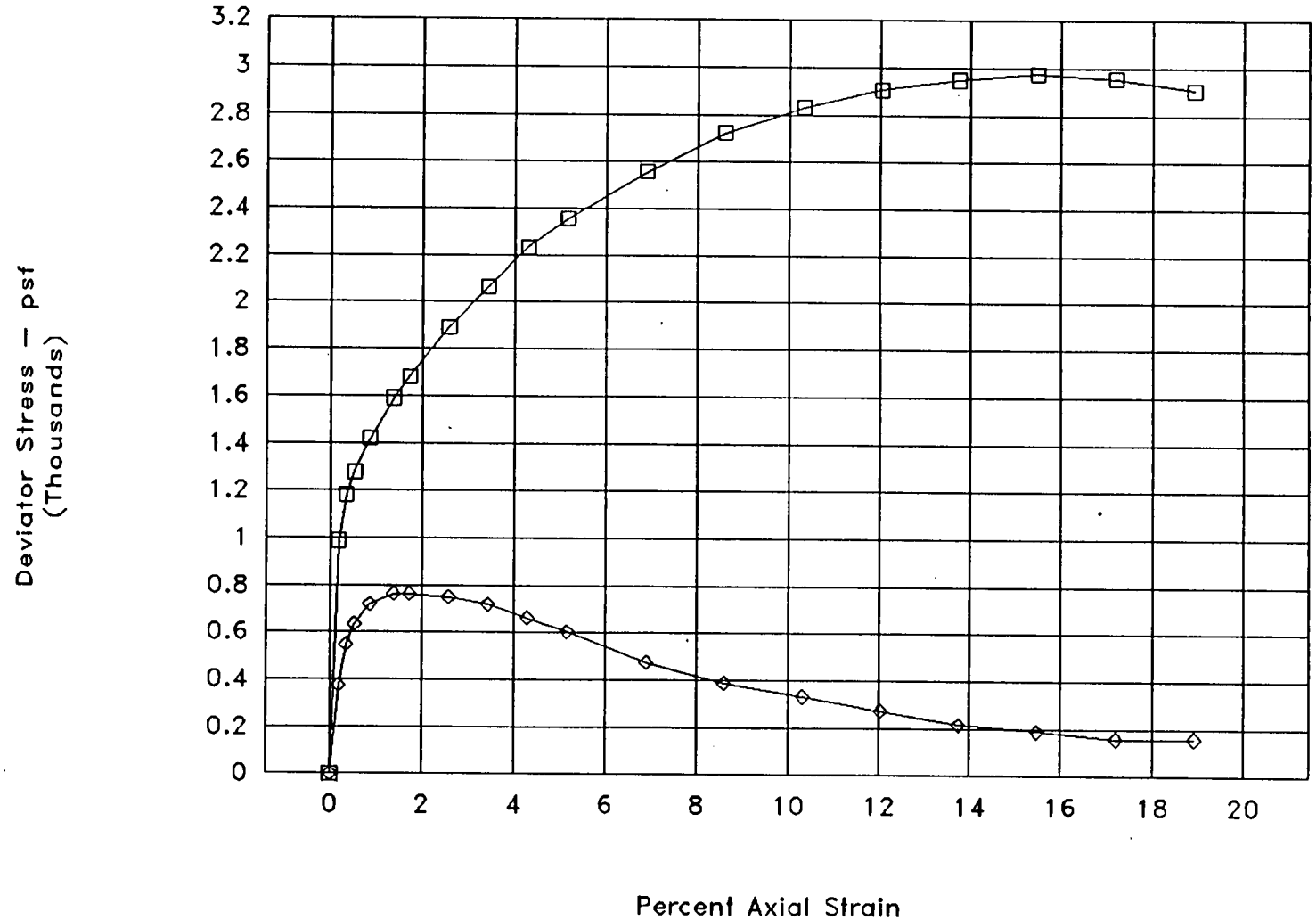
CONSOLIDATION DATA

G2-130, 10.0-12.0', 405077 A



TRIAXIAL TEST - TX/CUpp

G2-130, 10.0-12.0', 405077 A



□ Deviator Stress ◇ Delta Pore Pres. —— CONF. PRES. PSF 1728

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

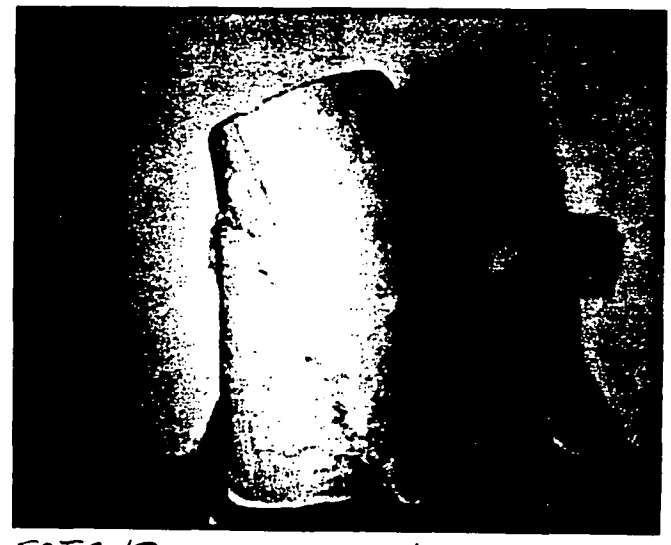
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 B	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	933.3	922.6
Wt. Wet Soil & Pan	(g)	941.6	931.0
Wt. Dry Soil & Pan	(g)	791.0	791.0
Wt. Lost Moisture	(g)	150.6	140.0
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	782.7	782.7
Moisture Content %		19.2	17.9
Wet Density PCF		134.8	139.8
Dry Density PCF		113.0	118.6

Init. Diameter	(in)	2.394
Init. Area	(sq in)	4.501
Init. Height	(in)	5.861
Vol. Bef. Consol.	(cu ft)	0.01527
Vol. After Consol.	(cu ft)	0.01455

Notes & Comments:



SAIC/PARSONS PO140
G2-130 #405077B @ 10.0-12.0'
TX/CUPP $\bar{\sigma}_3$ = 4320 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SL Date: 7-14-95
FileName: SAT0077B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 B	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

Init. Ht.	(in)	5.861	Init. Area	(sq in)	4.501
Consol. Ht.	(in)	5.780	Consol. Area	(sq in)	4.350
Back Pres.	PSI	37.1	Strain Rate	(in/min)	0.003

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.350	0	37.1	0	4320	4320	1.00
76.0	2516	0.05	0.87	4.388	2494	47.9	1555	2765	5259	1.90
91.0	3012	0.10	1.73	4.427	2960	50.9	1987	2333	5293	2.27
104.0	3443	0.15	2.60	4.466	3353	51.8	2117	2203	5557	2.52
115.0	3807	0.20	3.46	4.506	3675	52.0	2146	2174	5849	2.69
126.0	4171	0.25	4.33	4.547	3990	51.9	2131	2189	6179	2.82
136.0	4502	0.30	5.19	4.588	4268	51.5	2074	2246	6515	2.90
145.5	4816	0.35	6.06	4.631	4525	51.0	2002	2318	6843	2.95
155.0	5131	0.40	6.92	4.674	4776	50.3	1901	2419	7195	2.97
164.0	5429	0.45	7.79	4.717	5006	49.4	1771	2549	7555	2.96
171.5	5677	0.50	8.65	4.762	5186	48.4	1627	2693	7879	2.93
185.5	6140	0.60	10.38	4.854	5503	46.9	1411	2909	8412	2.89
196.0	6488	0.70	12.11	4.950	5702	46.0	1282	3038	8741	2.88
202.0	6687	0.80	13.84	5.049	5761	45.4	1195	3125	8886	2.84
206.5	6836	0.90	15.57	5.152	5771	44.9	1123	3197	8968	2.81
210.0	6951	1.00	17.30	5.260	5749	44.5	1066	3254	9003	2.77
211.5	7001	1.10	19.03	5.373	5669	44.2	1022	3298	8966	2.72
214.0	7084	1.20	20.76	5.490	5613	43.9	979	3341	8954	2.68

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0077B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 B	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.3					
50.0		9.5	9.6	38.6	48.4	9.8	0.98

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.60	0.00
0.25	0.5	14.15	-4.55
0.5	0.7	14.90	-5.30
1	1.0	15.80	-6.20
2	1.4	16.95	-7.35
4	2.0	18.50	-8.90
9	3.0	20.90	-11.30
16	4.0	22.85	-13.25
30	5.5	25.10	-15.50
60	7.7	27.10	-17.50
120	11.0	28.15	-18.55
240	15.5	28.60	-19.00
360	19.0	28.80	-19.20

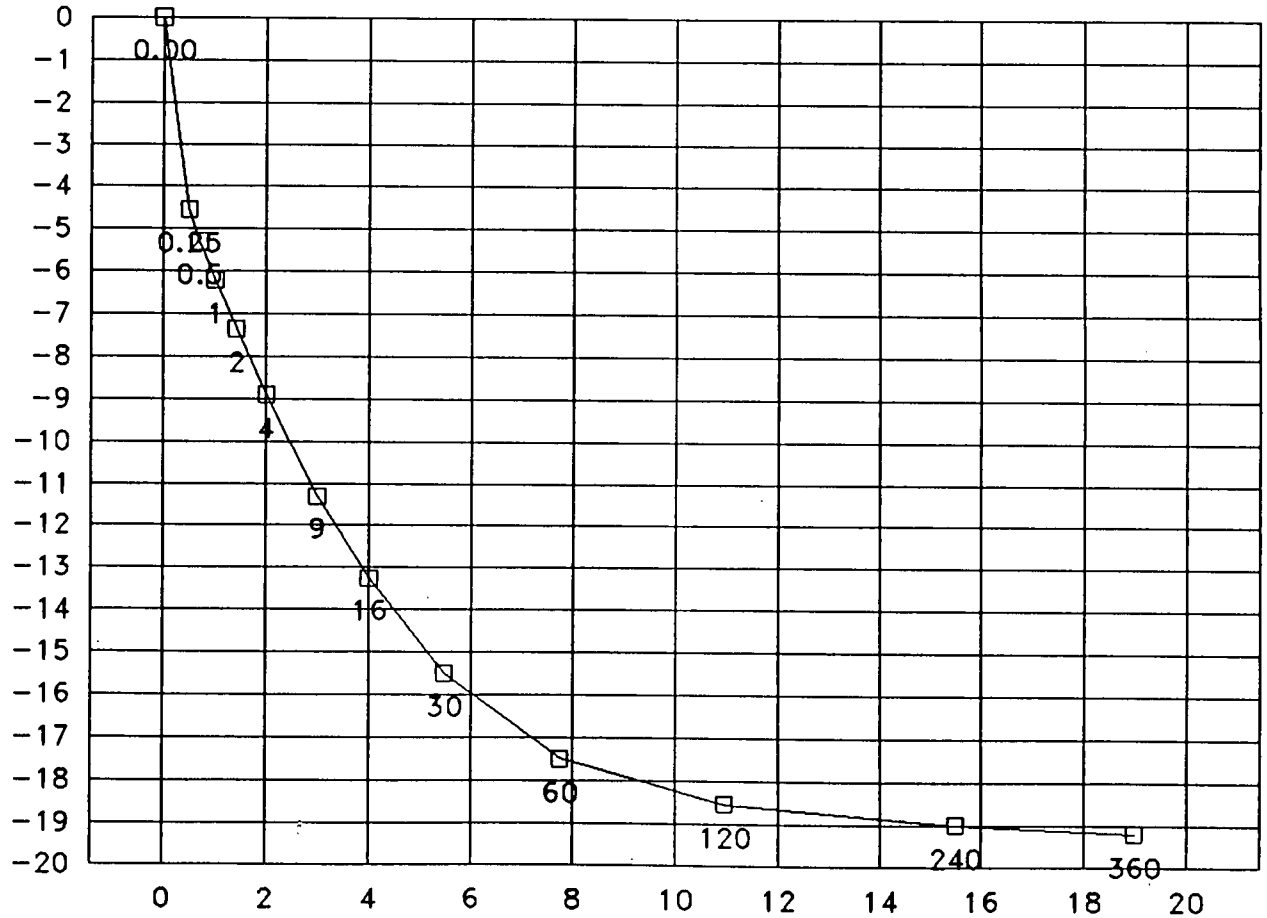
Initial Height	(in)	5.861	Init. Vol.	(CC)	432.40
Height Change	(in)	0.081	Vol. Change	(CC)	27.95
Ht. After Cons.	(in)	5.780	Cell Exp.	(CC)	7.65
Initial Area	(sq in)	4.501	Net Change	(CC)	20.30
Area After Cons.	(sq in)	4.350	Cons. Vol.	(CC)	412.11

Data entry by: NAA Date: 7-13-95
Data checked by: SE Date: 7-14-95
FileName:SAT0077B

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-130, 10.0-12.0', 405077 B



□ Time in Minutes —— CONF. PRES. PSF 4320

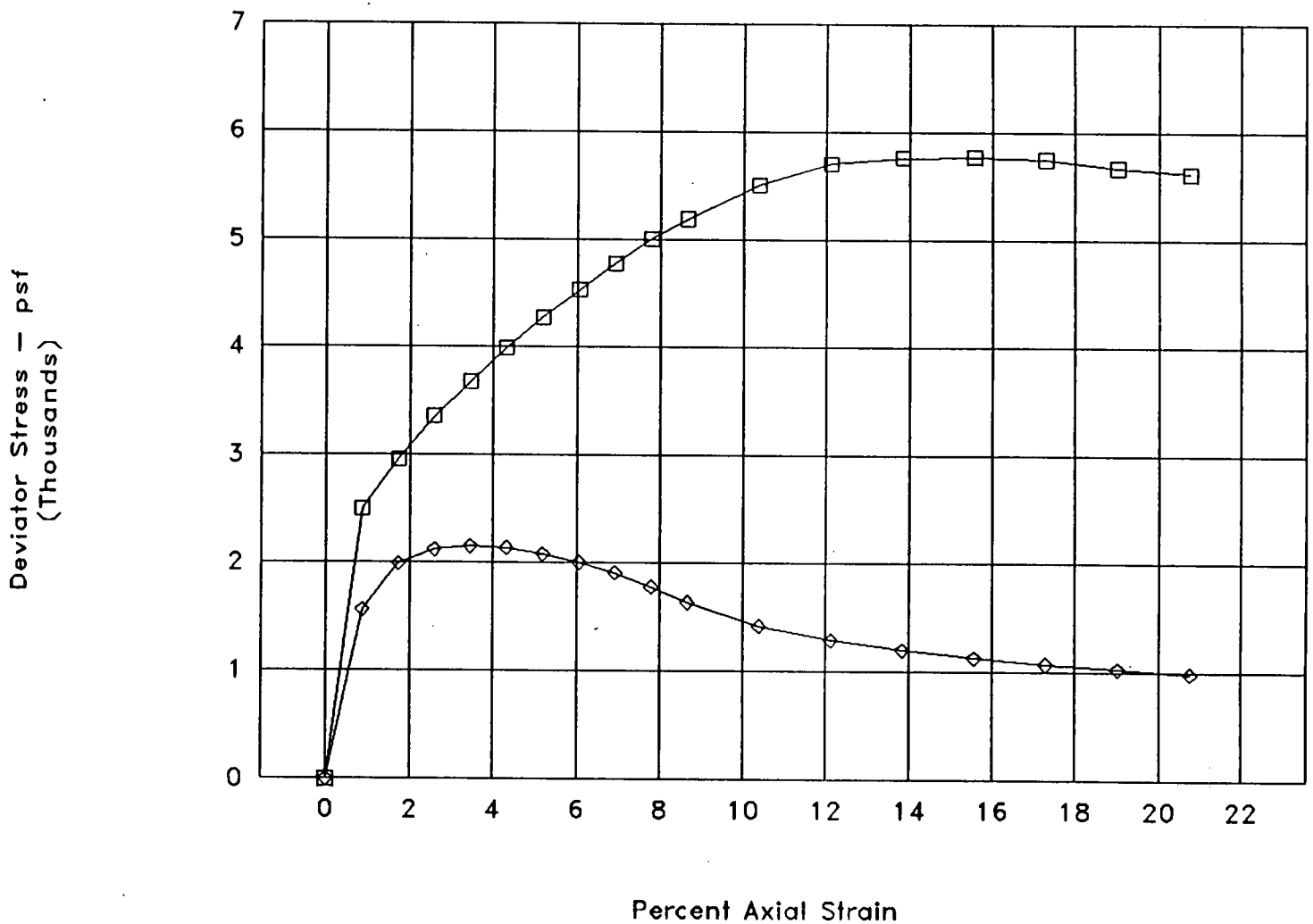
984

001081

474

TRIAXIAL TEST - TX/CUpp

G2-130, 10.0-12.0', 405077 B



□ Deviator Stress ◇ Delta Pore Pres. —— CONF. PRES. PSF 4320

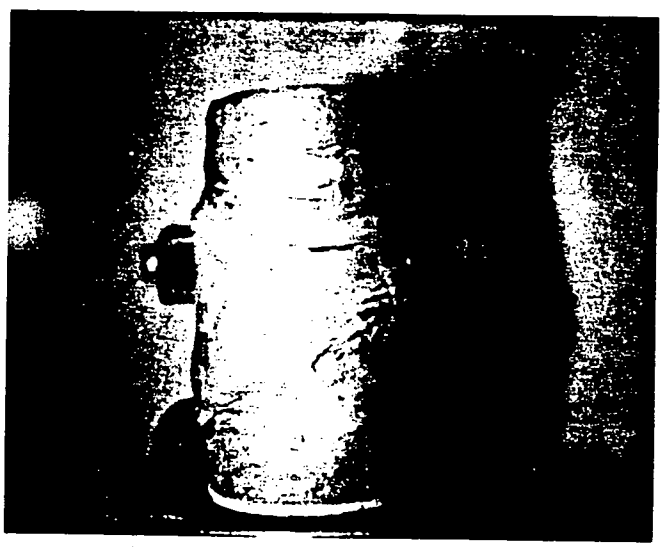
TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-30-95 DCW
SAMPLE NO.	405077 C	TEST FINISHED	7-2-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1022.2	1016.1
Wt. Wet Soil & Pan	(g)	1030.5	1024.4
Wt. Dry Soil & Pan	(g)	933.0	933.0
Wt. Lost Moisture	(g)	97.5	91.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	924.7	924.7
Moisture Content %		10.5	9.9
Wet Density PCF		146.9	151.4
Dry Density PCF		132.9	137.8

Init. Diameter	(in)	2.387
Init. Area	(sq in)	4.475
Init. Height	(in)	5.924
Vol. Bef. Consol.	(cu ft)	0.01534
Vol. After Consol.	(cu ft)	0.01479

Notes & Comments:



SAIC/PARSONS PO140
G2-130 # 405077C @ 10.0-12.0'
TX/CUPP σ_3 = 10080 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0077C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-30-95 DCW
SAMPLE NO.	405077 C	TEST FINISHED	7-2-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.5	8.9				
50.0		9.1	9.1	37.6	47.3	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.20	0.00
0.25	0.5	16.40	-7.20
0.5	0.7	17.15	-7.95
1	1.0	18.05	-8.85
2	1.4	19.20	-10.00
4	2.0	20.60	-11.40
9	3.0	22.70	-13.50
16	4.0	24.40	-15.20
30	5.5	25.90	-16.70
60	7.7	27.00	-17.80
120	11.0	27.55	-18.35
240	15.5	27.90	-18.70
360	19.0	28.00	-18.80

Initial Height	(in)	5.924	Init. Vol.	(CC)	434.50
Height Change	(in)	0.085	Vol. Change	(CC)	25.00
Ht. After Cons.	(in)	5.839	Cell Exp.	(CC)	9.50
Initial Area	(sq in)	4.475	Net Change	(CC)	15.50
Area After Cons.	(sq in)	4.378	Cons. Vol.	(CC)	419.00

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0077C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-30-95 DCW
SAMPLE NO.	405077 C	TEST FINISHED	7-2-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

Init. Ht. (in)	5.924	Init. Area (sq in)	4.475
Consol. Ht. (in)	5.839	Consol. Area (sq in)	4.378
Back Pres. PSI	37.4	Strain Rate (in/min)	0.003

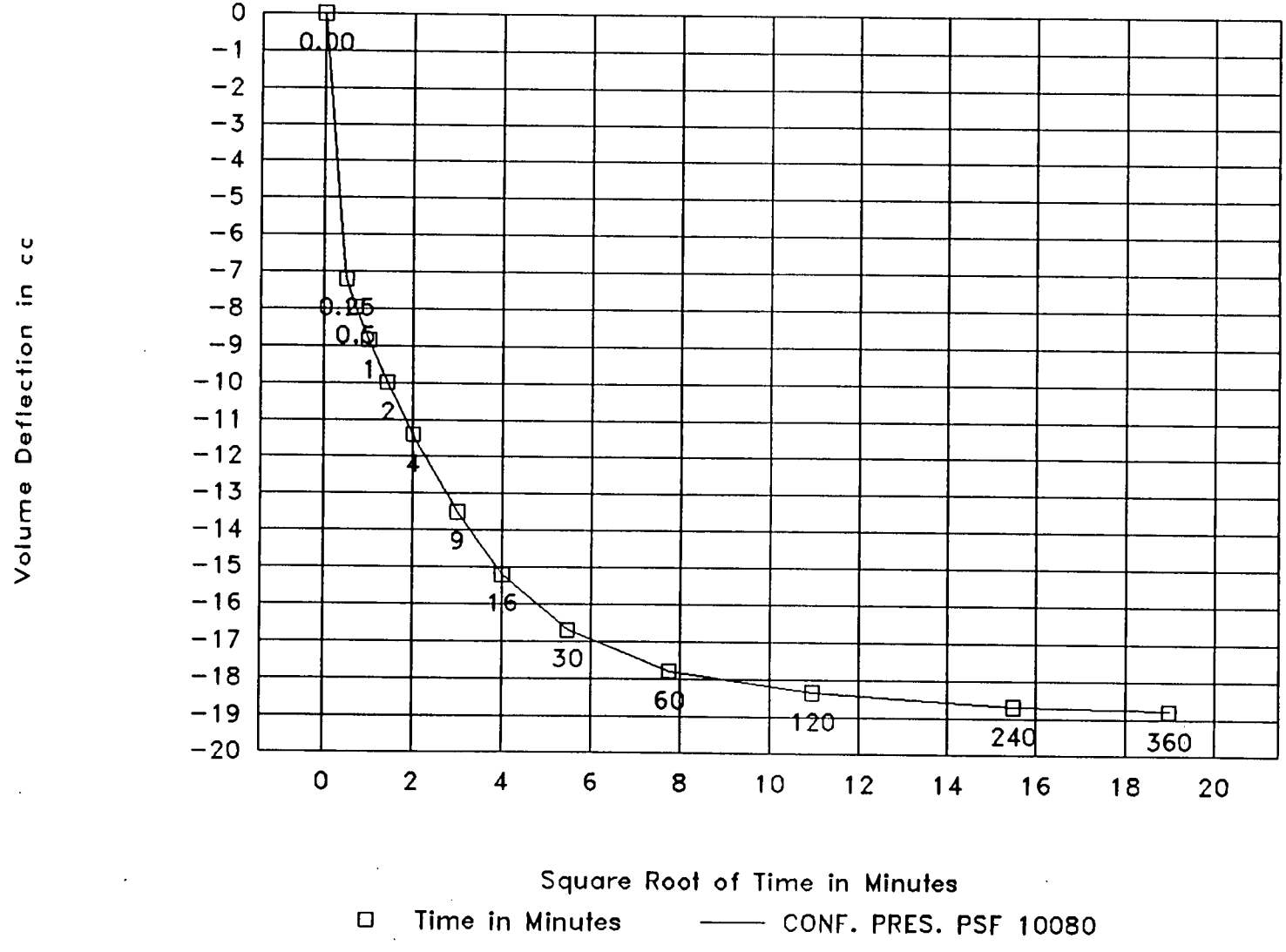
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.378	0	37.4	0	10080	10080	1.00
219.0	7203	0.05	0.86	4.416	7141	67.7	4363	5717	12858	2.25
260.0	8552	0.10	1.71	4.454	8405	76.9	5688	4392	12797	2.91
290.0	9538	0.15	2.57	4.494	9293	78.9	5976	4104	13397	3.26
319.0	10492	0.20	3.43	4.533	10133	79.2	6019	4061	14193	3.50
345.0	11347	0.25	4.28	4.574	10861	78.4	5904	4176	15037	3.60
370.0	12169	0.30	5.14	4.615	11544	76.9	5688	4392	15936	3.63
393.0	12926	0.35	5.99	4.657	12151	75.2	5443	4637	16788	3.62
415.0	13650	0.40	6.85	4.700	12714	73.8	5242	4838	17553	3.63
437.0	14373	0.45	7.71	4.744	13265	72.6	5069	5011	18277	3.65
457.0	15031	0.50	8.56	4.788	13744	71.2	4867	5213	18957	3.64
497.0	16347	0.60	10.28	4.880	14667	68.9	4536	5544	20211	3.65
530.0	17432	0.70	11.99	4.975	15342	66.9	4248	5832	21174	3.63
558.0	18353	0.80	13.70	5.073	15838	65.2	4003	6077	21915	3.61
584.0	19208	0.90	15.41	5.176	16247	63.9	3816	6264	22511	3.59
611.0	20096	1.00	17.13	5.283	16654	62.4	3600	6480	23134	3.57
638.0	20984	1.10	18.84	5.394	17031	61.0	3398	6682	23713	3.55
663.0	21806	1.20	20.55	5.511	17325	59.7	3211	6869	24194	3.52

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0077C

ADVANCED TERRA TESTING, INC.

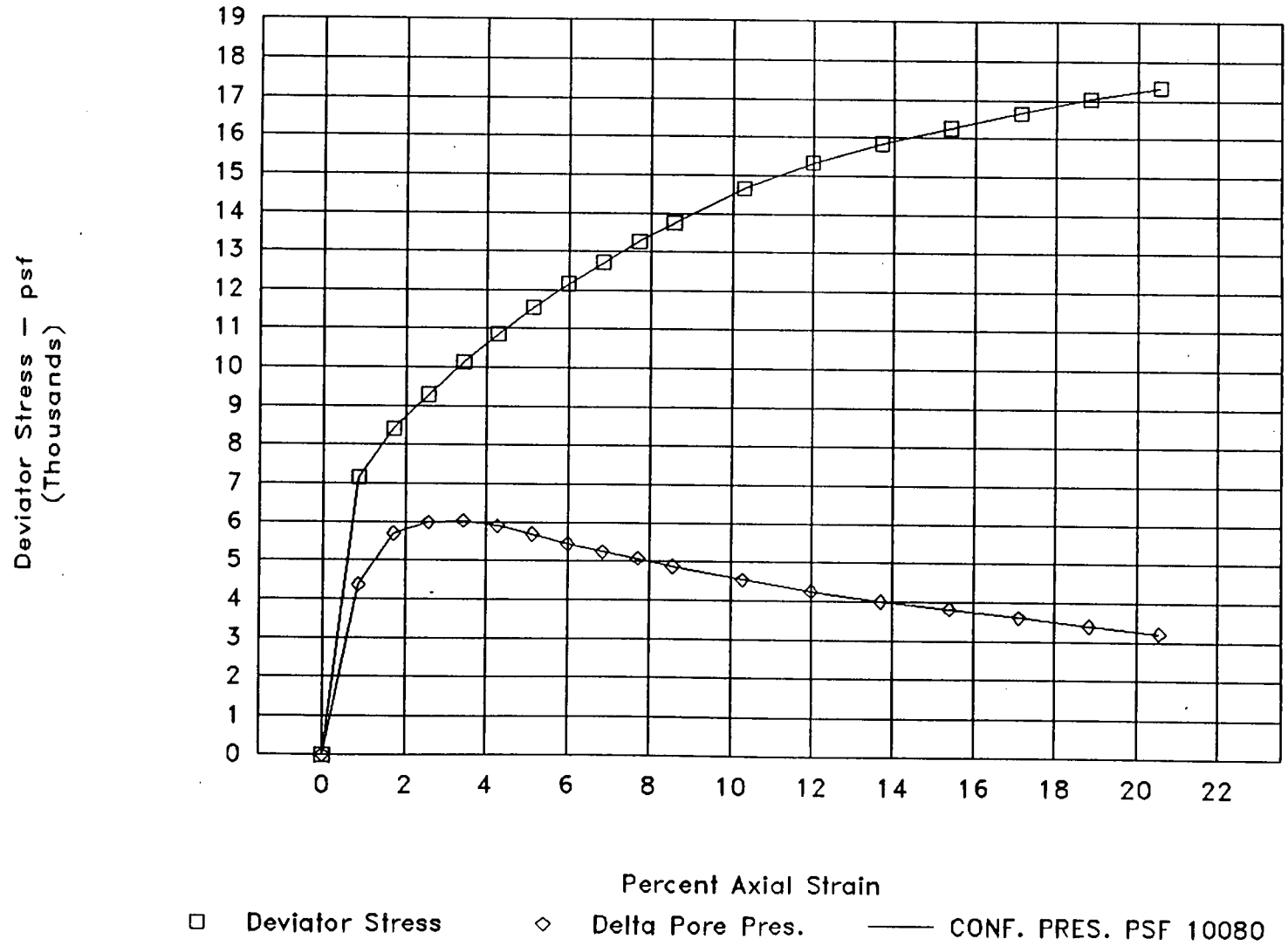
CONSOLIDATION DATA

G2-130, 10.0-12.0', 405077 C



TRIAXIAL TEST - TX/CUpp

G2-130, 10.0-12.0', 405077 C



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

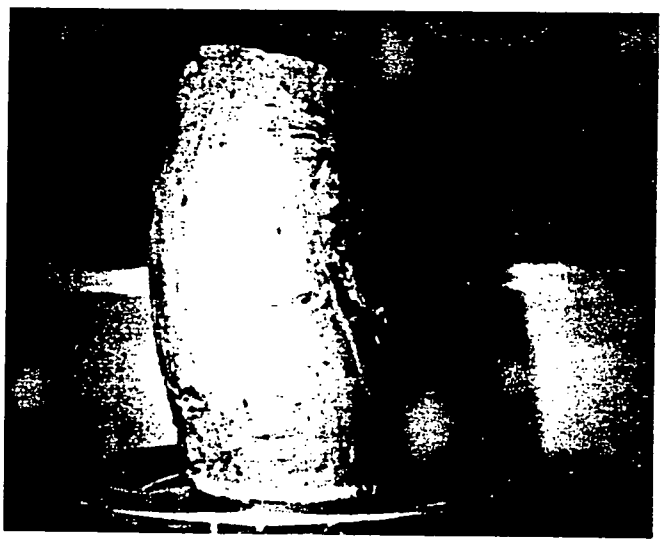
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-11-95 DCW
SAMPLE NO.	405088 A	TEST FINISHED	6-14-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4608		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1035.7	1033.9
Wt. Wet Soil & Pan	(g)	1044.2	1042.5
Wt. Dry Soil & Pan	(g)	940.2	940.2
Wt. Lost Moisture	(g)	104.0	102.3
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	931.7	931.7
Moisture Content %		11.2	11.0
Wet Density PCF		146.0	149.9
Dry Density PCF		131.3	135.1

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	5.973
Vol. Bef. Consol.	(cu ft)	0.01564
Vol. After Consol.	(cu ft)	0.01521

Notes & Comments:



SAIC/Parsons PO 140 2059-13H
G2-130 405088 A 30-32'
CU 03 4608 PSF

Data entry by: NAA Date: 6-19-95
Data checked by: Cal Date: 6-22-95
FileName:SAT0088A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-11-95 DCW
SAMPLE NO.	405088 A	TEST FINISHED	6-14-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4608		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.6	8.7				
50.0		11.0	11.1	38.7	48.2	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	11.00	0.00
0.25	0.5	15.05	-4.05
0.5	0.7	15.60	-4.60
1	1.0	16.30	-5.30
2	1.4	17.00	-6.00
4	2.0	17.90	-6.90
9	3.0	19.10	-8.10
16	4.0	20.10	-9.10
30	5.5	21.25	-10.25
60	7.7	22.15	-11.15
120	11.0	22.60	-11.60
240	15.5	22.80	-11.80
368	19.2	22.95	-11.95

Initial Height	(in)	5.973	Init. Vol.	(CC)	442.88
Height Change	(in)	0.040	Vol. Change	(CC)	20.80
Ht. After Cons.	(in)	5.933	Cell Exp.	(CC)	8.60
Initial Area	(sq in)	4.524	Net Change	(CC)	12.20
Area After Cons.	(sq in)	4.429	Cons. Vol.	(CC)	430.67

Data entry by: NAA Date: 6-19-95
Data checked by: Cal Date: 6-22-95
FileName:SAT0088A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-11-95 DCW
SAMPLE NO.	405088 A	TEST FINISHED	6-14-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4608		

Init. Ht.	(in)	5.973	Init. Area	(sq in)	4.524
Consol. Ht.	(in)	5.933	Consol. Area	(sq in)	4.429
Back Pres.	PSI	37.6	Strain Rate	(in/min)	0.004

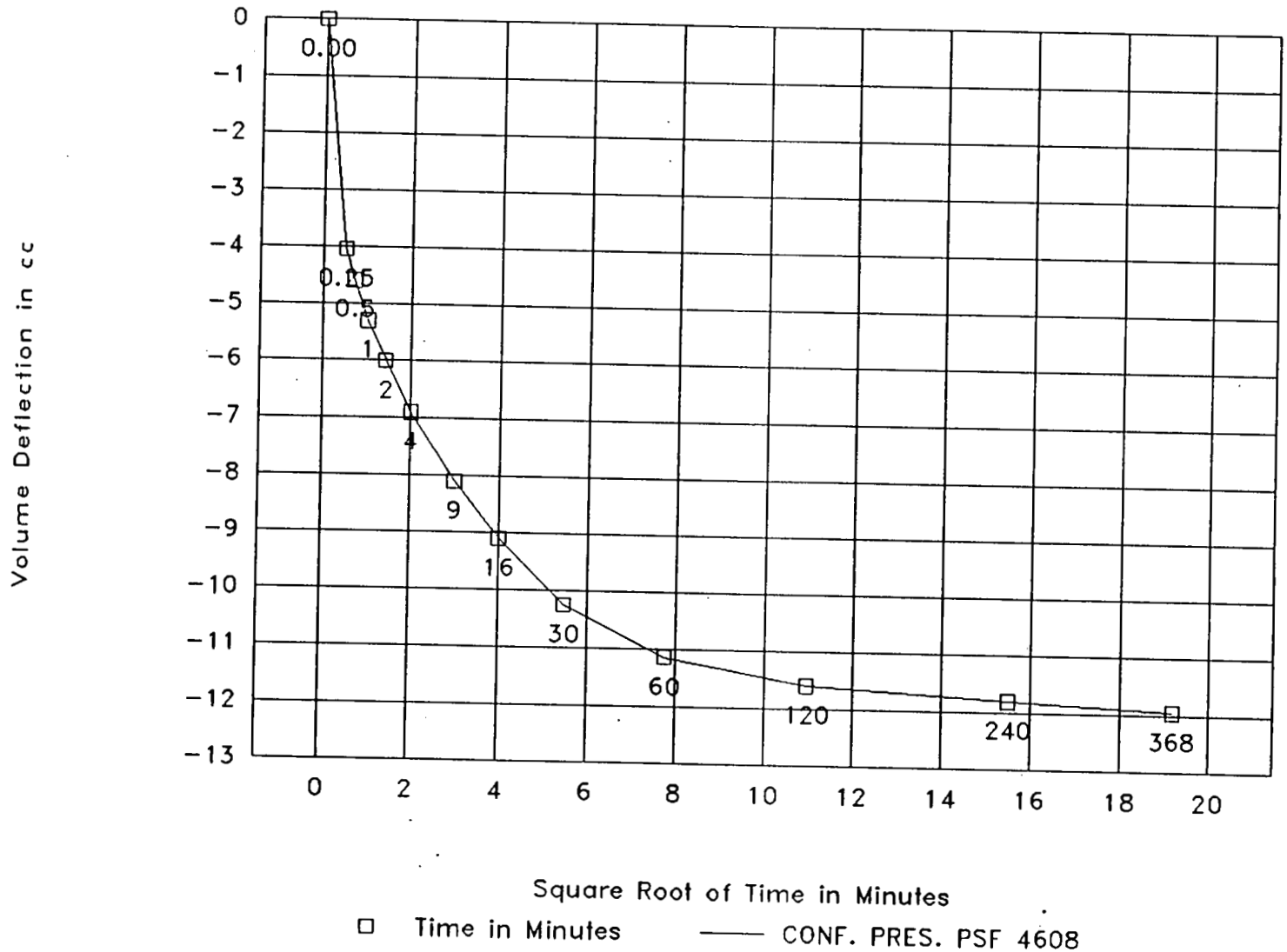
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.429	0	37.6	0	4608	4608	1.00
102.0	3316	0.02	0.34	4.444	3305	47.1	1368	3240	6545	2.02
127.0	4129	0.04	0.67	4.459	4101	50.5	1858	2750	6852	2.49
145.0	4714	0.06	1.01	4.474	4667	52.2	2102	2506	7172	2.86
160.0	5202	0.08	1.35	4.489	5132	53.0	2218	2390	7522	3.15
172.0	5592	0.10	1.69	4.505	5498	53.5	2290	2318	7817	3.37
201.0	6535	0.15	2.53	4.544	6370	52.7	2174	2434	8804	3.62
226.0	7348	0.20	3.37	4.583	7100	51.2	1958	2650	9750	3.68
246.0	7998	0.25	4.21	4.624	7661	49.7	1742	2866	10527	3.67
264.0	8584	0.30	5.06	4.665	8150	48.3	1541	3067	11217	3.66
280.0	9104	0.35	5.90	4.707	8567	47.3	1397	3211	11778	3.67
293.0	9527	0.40	6.74	4.749	8884	46.5	1282	3326	12211	3.67
314.0	10209	0.50	8.43	4.836	9349	45.3	1109	3499	12848	3.67
333.0	10827	0.60	10.11	4.927	9732	44.2	950	3658	13390	3.66
351.0	11412	0.70	11.80	5.021	10066	43.0	778	3830	13896	3.63
368.0	11965	0.80	13.48	5.119	10352	41.5	562	4046	14398	3.56
382.0	12420	0.90	15.17	5.221	10536	39.4	259	4349	14885	3.42
394.0	12810	1.00	16.85	5.327	10651	37.2	-58	4666	15317	3.28
403.0	13103	1.10	18.54	5.437	10674	36.2	-202	4810	15483	3.22
410.0	13331	1.20	20.23	5.552	10634	35.3	-331	4939	15574	3.15

Data entry by: NAA Date: 6-19-95
Data checked by: Cal Date: 6-22-95
FileName: SAT0088A

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-130, 30.0-32.0', 405088 A



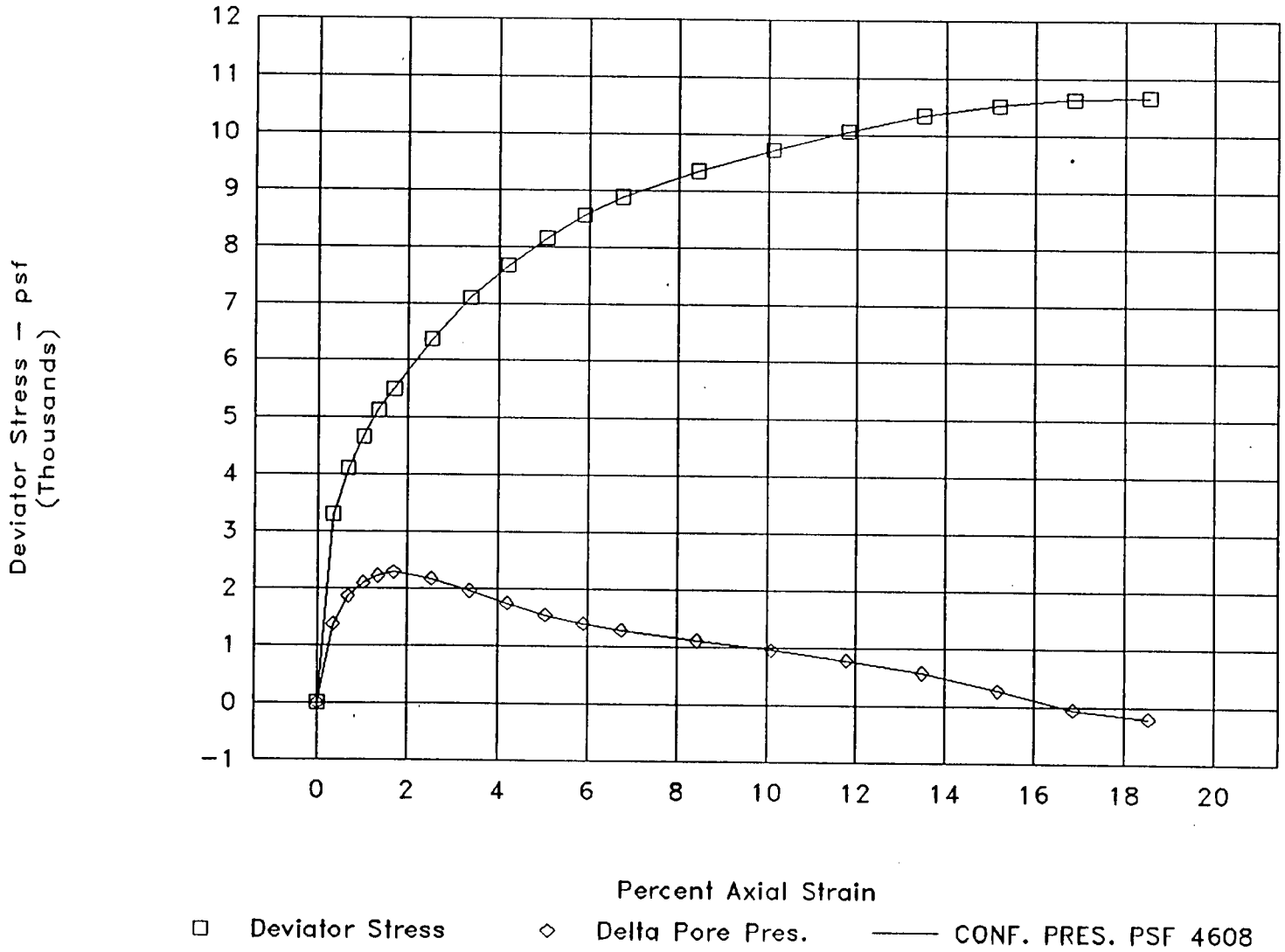
994

001091

474

TRIAXIAL TEST - TX/CUpp

G2-130, 30.0-32.0', 405088 A



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	405088 B	TEST FINISHED	6-21-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1030.2	1027.2
Wt. Wet Soil & Pan	(g)	1038.6	1035.6
Wt. Dry Soil & Pan	(g)	936.0	936.0
Wt. Lost Moisture	(g)	102.7	99.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	927.5	927.5
Moisture Content %		11.1	10.7
Wet Density PCF		146.8	149.4
Dry Density PCF		132.2	134.9

Init. Diameter	(in)	2.388
Init. Area	(sq in)	4.479
Init. Height	(in)	5.969
Vol. Bef. Consol.	(cu ft)	0.01547
Vol. After Consol.	(cu ft)	0.01516

Notes & Comments:

SAIC/PARSONS PO 140 FERNALD
2059-13 H, G2-130 #405088B 30-32'
TX/CU σ_3 5760 PSF

Data entry by: CAL Date: 6-23-95
Data checked by: SR Date: 6-27-95
FileName: SAT0088B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	405088 B	TEST FINISHED	6-21-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.9	8.3				
50.0		6.5	6.5	38.0	47.6	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	7.60	0.00
0.25	0.5	12.60	-5.00
0.5	0.7	13.20	-5.60
1	1.0	13.85	-6.25
2	1.4	14.60	-7.00
4	2.0	15.55	-7.95
9	3.0	16.95	-9.35
16	4.0	18.00	-10.40
30	5.5	19.28	-11.67
65	8.1	20.40	-12.80
120	11.0	20.90	-13.30
240	15.5	21.23	-13.63
360	19.0	21.40	-13.80

Initial Height	(in)	5.969	Init. Vol.	(CC)	438.17
Height Change	(in)	0.025	Vol. Change	(CC)	21.60
Ht. After Cons.	(in)	5.944	Cell Exp.	(CC)	12.67
Initial Area	(sq in)	4.479	Net Change	(CC)	8.93
Area After Cons.	(sq in)	4.406	Cons. Vol.	(CC)	429.23

Data entry by: CAL Date: 6-23-95
Data checked by: SR Date: 6-27-95
FileName: SAT0088B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	405088 B	TEST FINISHED	6-21-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

Init. Ht.	(in)	5.969	Init. Area	(sq in)	4.479
Consol. Ht.	(in)	5.944	Consol. Area	(sq in)	4.406
Back Pres.	PSI	37.8	Strain Rate	(in/min)	0.003

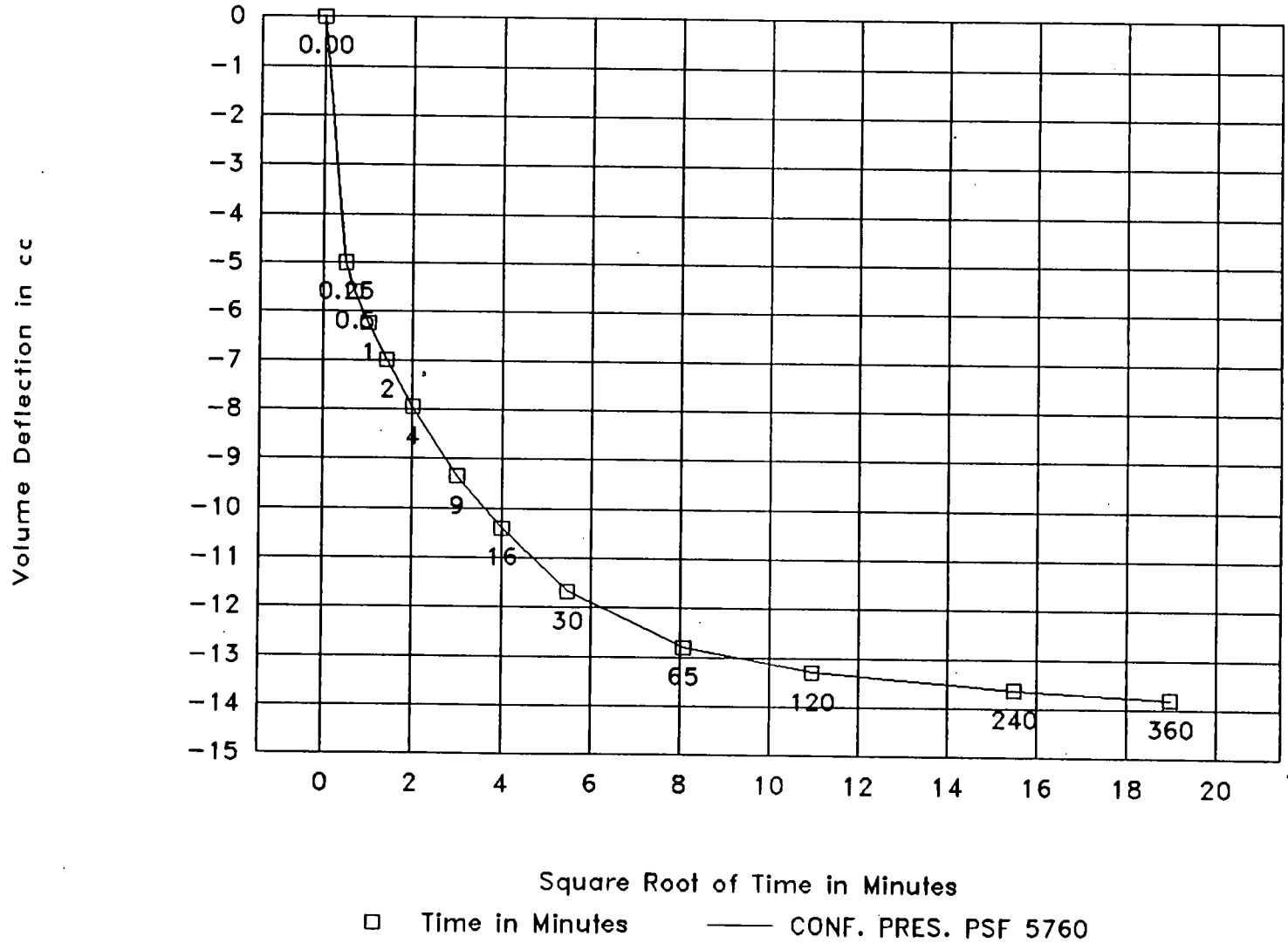
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.406	0	37.8	0	5760	5760	1.00
110.0	3595	0.02	0.34	4.421	3583	48.3	1512	4248	7831	1.84
136.0	4445	0.04	0.67	4.436	4415	52.9	2174	3586	8001	2.23
152.0	4968	0.06	1.01	4.451	4918	55.6	2563	3197	8115	2.54
168.0	5491	0.08	1.35	4.466	5417	57.0	2765	2995	8412	2.81
182.0	5948	0.10	1.68	4.481	5848	57.4	2822	2938	8786	2.99
210.0	6863	0.15	2.52	4.520	6690	57.2	2794	2966	9657	3.26
232.0	7583	0.20	3.36	4.559	7327	56.0	2621	3139	10467	3.33
252.0	8236	0.25	4.21	4.599	7890	54.5	2405	3355	11245	3.35
270.0	8824	0.30	5.05	4.640	8379	52.8	2160	3600	11979	3.33
284.0	9282	0.35	5.89	4.682	8735	51.3	1944	3816	12551	3.29
296.0	9674	0.40	6.73	4.724	9023	50.0	1757	4003	13026	3.25
318.0	10393	0.50	8.41	4.811	9519	47.5	1397	4363	13882	3.18
333.0	10884	0.60	10.09	4.901	9785	45.7	1138	4622	14407	3.12
346.0	11308	0.70	11.78	4.994	9977	44.2	922	4838	14815	3.06
357.0	11668	0.80	13.46	5.091	10098	43.3	792	4968	15066	3.03
367.0	11995	0.90	15.14	5.192	10179	43.2	778	4982	15161	3.04
373.0	12191	1.00	16.82	5.297	10140	42.7	706	5054	15194	3.01
378.0	12354	1.10	18.51	5.406	10068	42.5	677	5083	15151	2.98
376.0	12289	1.20	20.19	5.520	9808	41.9	590	5170	14978	2.90

Data entry by: CAL Date: 6-23-95
Data checked by: SR Date: 6-27-95
FileName: SAT0088B

ADVANCED TERRA TESTING, INC.

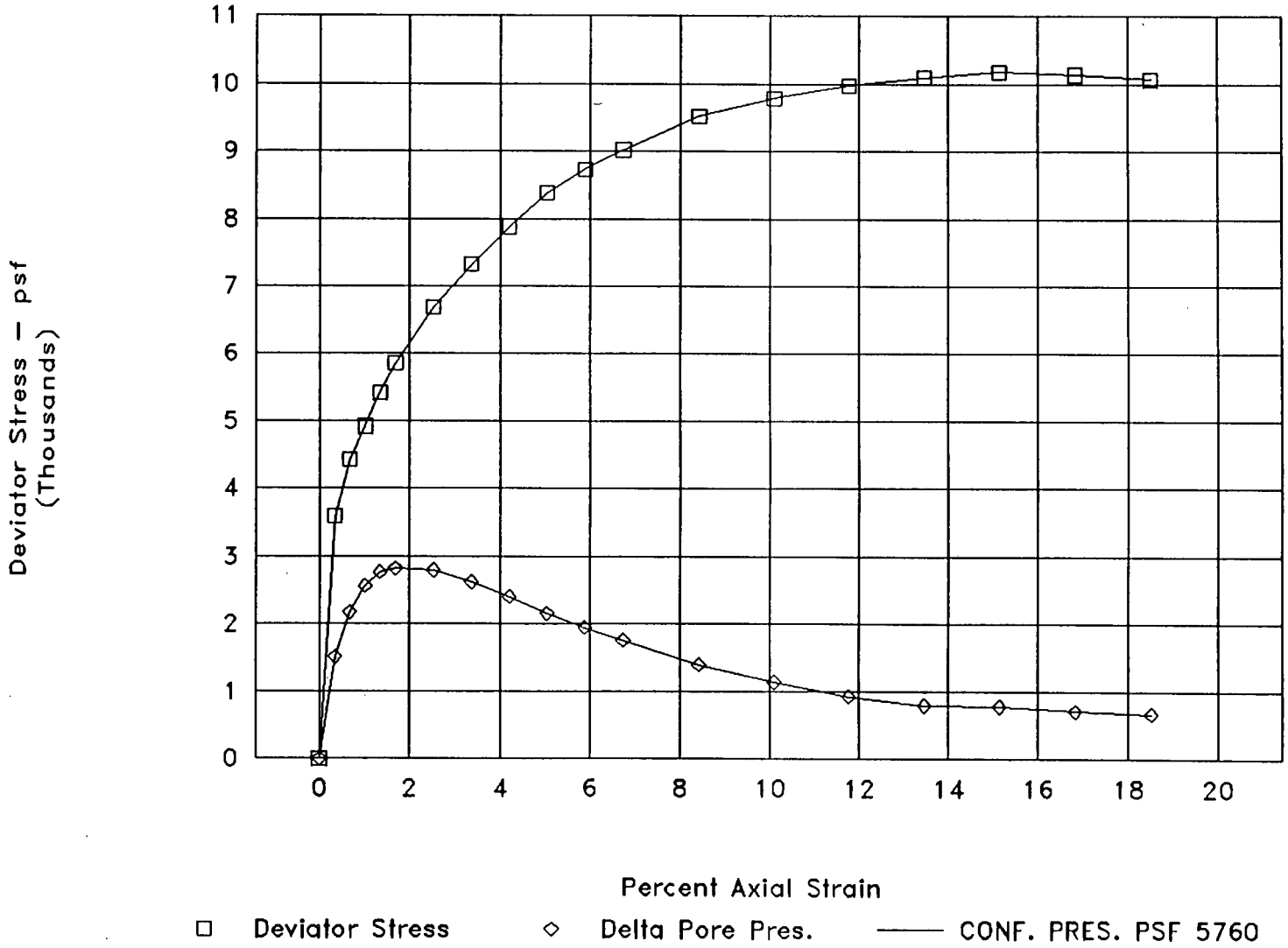
CONSOLIDATION DATA

G2-130, 30-32', 405088 B



TRIAXIAL TEST - TX/CUpp

G2-130, 30-32', 405088 B



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0010097

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405088 C	TEST FINISHED	6-23-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	2N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1023.7	1018.1
Wt. Wet Soil & Pan	(g)	1032.0	1026.4
Wt. Dry Soil & Pan	(g)	924.6	924.6
Wt. Lost Moisture	(g)	107.4	101.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	916.3	916.3
Moisture Content %		11.7	11.1
Wet Density PCF		144.7	149.3
Dry Density PCF		129.5	134.4

Init. Diameter	(in)	2.390
Init. Area	(sq in)	4.486
Init. Height	(in)	6.009
Vol. Bef. Consol.	(cu ft)	0.01560
Vol. After Consol.	(cu ft)	0.01503

Notes & Comments:

SAIC/PARSONS PO140
G2-130 #405088C @ 30-32'
TX/CUPP σ_3 = 11520PSF

Data entry by: NAA Date: 7-14-95
Data checked by: cal Date: 7-15-95
FileName:SAT0088C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405088 C	TEST FINISHED	6-23-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	2N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	4.2	13.7				
50.0	48.0	12.7	13.6	39.4	48.7	9.3	0.93
60.0		13.6	13.7	49.3	58.9	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	13.70	0.00
0.25	0.5	21.60	-7.90
0.5	0.7	22.30	-8.60
1	1.0	23.30	-9.60
2	1.4	24.45	-10.75
4	2.0	25.90	-12.20
9	3.0	28.10	-14.40
18	4.2	30.50	-16.80
30	5.5	32.40	-18.70
60	7.7	34.50	-20.80
120	11.0	36.15	-22.45
240	15.5	36.80	-23.10
360	19.0	36.90	-23.20

Initial Height	(in)	6.009	Init. Vol.	(CC)	441.84
Height Change	(in)	0.072	Vol. Change	(CC)	34.30
Ht. After Cons.	(in)	5.937	Cell Exp.	(CC)	18.15
Initial Area	(sq in)	4.486	Net Change	(CC)	16.15
Area After Cons.	(sq in)	4.375	Cons. Vol.	(CC)	425.69

Data entry by: NAA Date: 7-14-95
Data checked by: cal Date: 7-15-95
FileName:SAT0088C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405088 C	TEST FINISHED	6-23-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	2N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

Init. Ht.	(in)	6.009	Init. Area	(sq in)	4.486
Consol. Ht.	(in)	5.937	Consol. Area	(sq in)	4.375
Back Pres.	PSI	48.6	Strain Rate	(in/min)	0.002

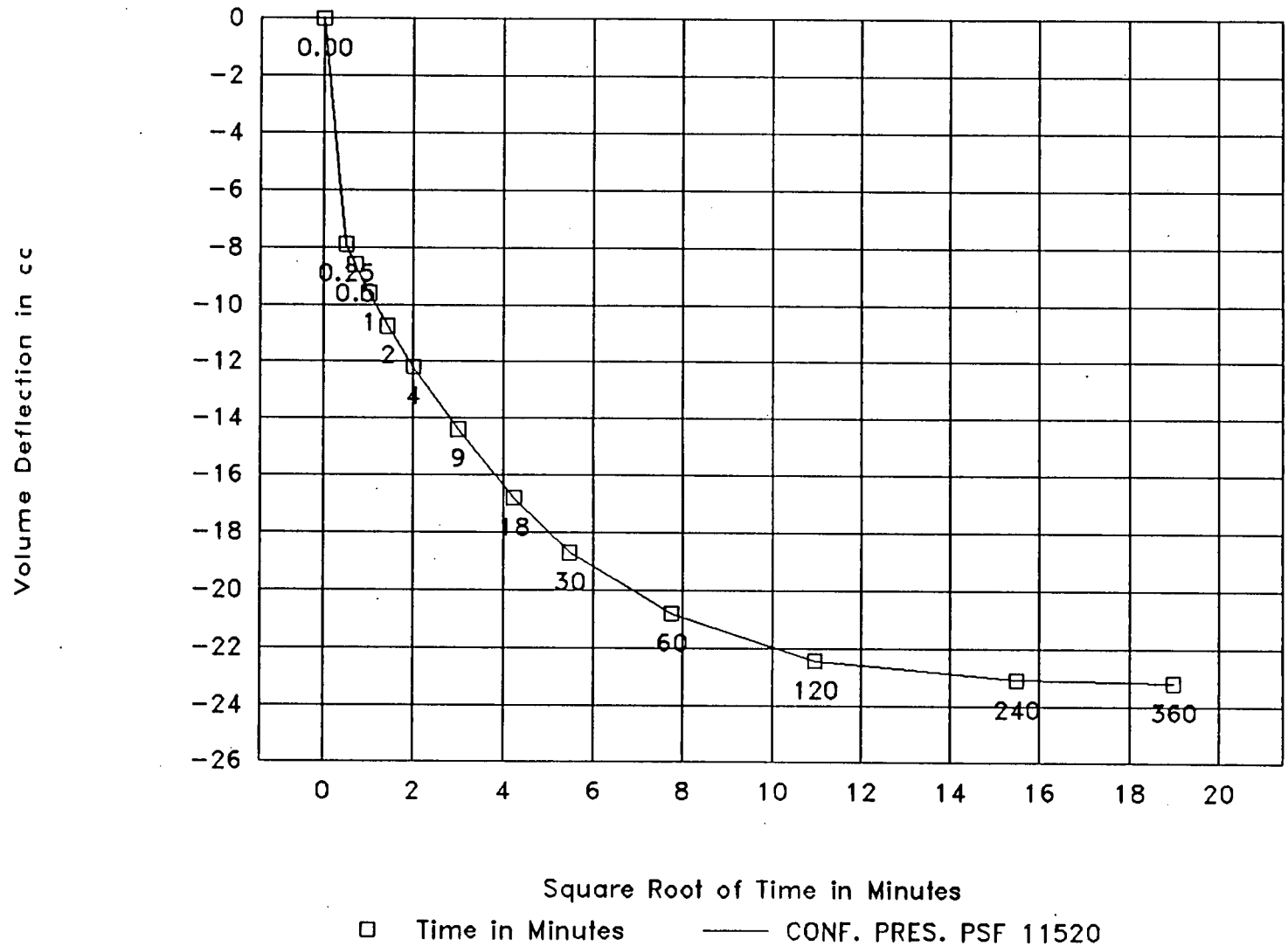
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.375	0	48.6	0	11520	11520	1.00
198.8	6544	0.05	0.84	4.412	6489	72.5	3442	8078	14567	1.80
275.0	9052	0.10	1.68	4.450	8900	87.6	5616	5904	14804	2.51
325.0	10698	0.15	2.53	4.488	10428	91.1	6120	5400	15828	2.93
362.5	11932	0.20	3.37	4.527	11530	91.4	6163	5357	16887	3.15
396.3	13045	0.25	4.21	4.567	12496	90.5	6034	5486	17982	3.28
425.0	13990	0.30	5.05	4.608	13283	89.0	5818	5702	18985	3.33
452.5	14895	0.35	5.90	4.649	14017	87.5	5602	5918	19935	3.37
477.5	15718	0.40	6.74	4.691	14659	85.9	5371	6149	20807	3.38
503.8	16583	0.45	7.58	4.733	15326	84.3	5141	6379	21706	3.40
527.5	17363	0.50	8.42	4.777	15901	82.8	4925	6595	22496	3.41
566.3	18641	0.60	10.11	4.867	16757	79.9	4507	7013	23770	3.39
596.3	19628	0.70	11.79	4.959	17314	77.3	4133	7387	24701	3.34
618.8	20369	0.80	13.47	5.056	17624	74.8	3773	7747	25371	3.27
635.0	20902	0.90	15.16	5.156	17733	72.7	3470	8050	25783	3.20
643.8	21192	1.00	16.84	5.261	17622	71.1	3240	8280	25902	3.13
651.5	21445	1.10	18.53	5.370	17472	69.9	3067	8453	25925	3.07
660.0	21725	1.20	20.21	5.483	17334	68.9	2923	8597	25931	3.02

Data entry by: NAA Date: 7-14-95
Data checked by: cal Date: 7-15-95
FileName:SAT0088C

ADVANCED TERRA TESTING, INC.

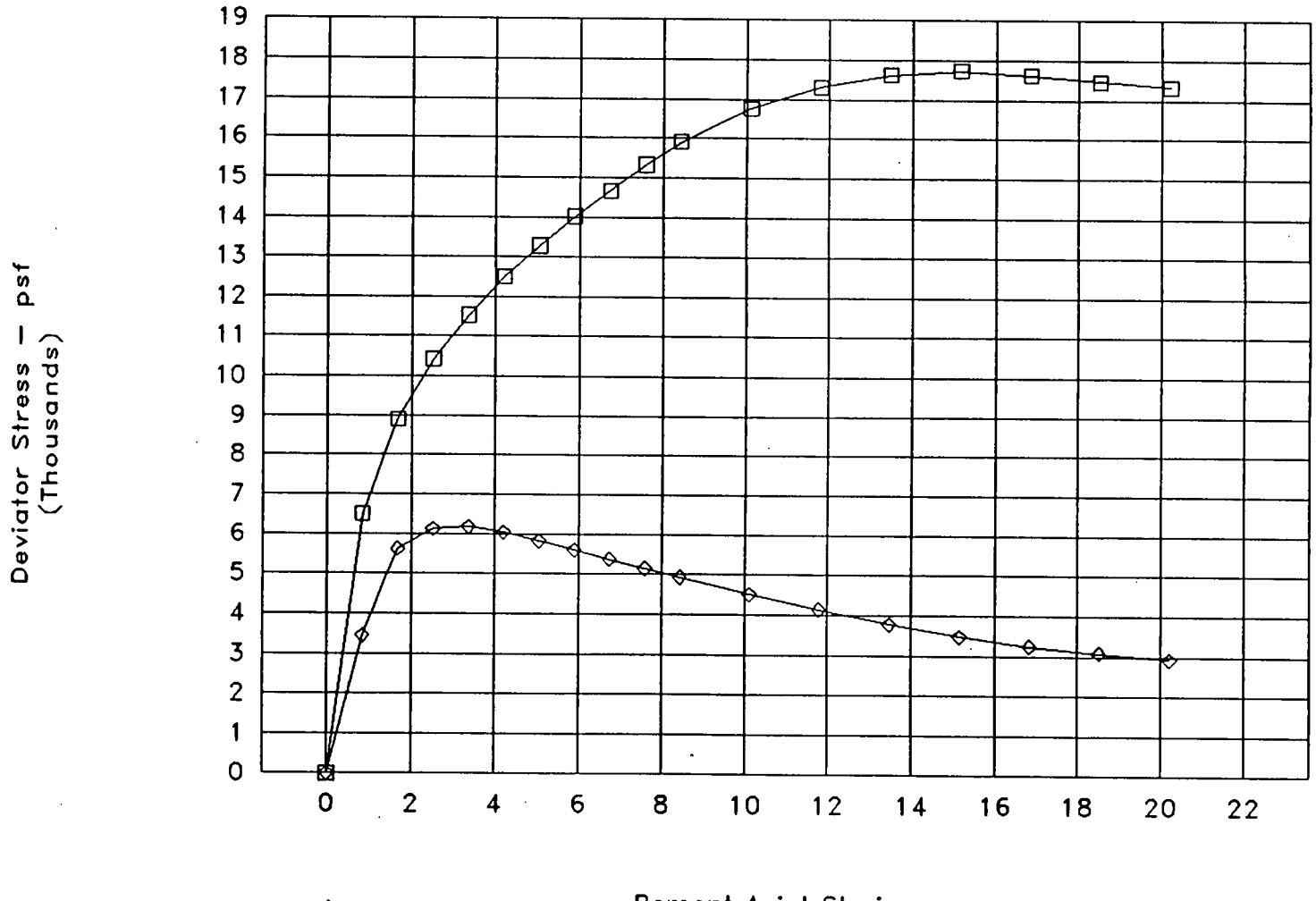
CONSOLIDATION DATA

G2-130, 30.0-32.0', 405088 C



TRIAXIAL TEST - TX/CUpp

G2-130, 30.0-32.0', 405088 C



□ Deviator Stress ◇ Delta Pore Pres. —— CONF. PRES. PSF 11520

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

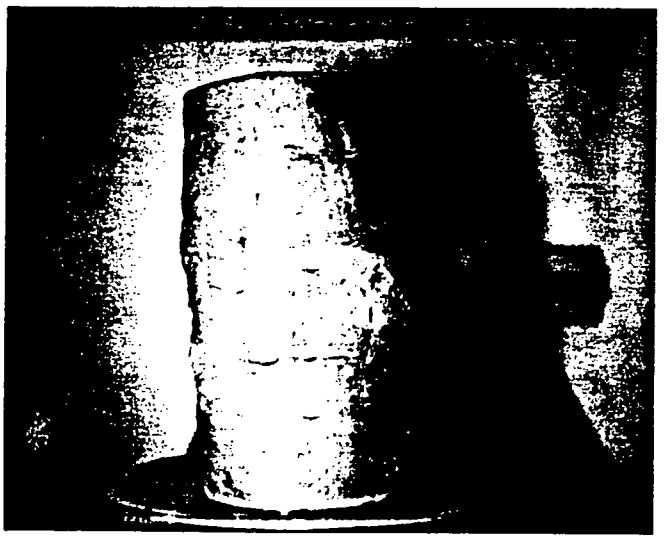
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 A	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1030.0	1028.5
Wt. Wet Soil & Pan	(g)	1038.3	1036.9
Wt. Dry Soil & Pan	(g)	928.9	928.9
Wt. Lost Moisture	(g)	109.4	107.9
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	920.6	920.6
Moisture Content %		11.9	11.7
Wet Density PCF		145.8	147.9
Dry Density PCF		130.3	132.3

Init. Diameter	(in)	2.392
Init. Area	(sq in)	4.494
Init. Height	(in)	5.990
Vol. Bef. Consol.	(cu ft)	0.01558
Vol. After Consol.	(cu ft)	0.01534

Notes & Comments:



SAIC/PARSONS PO140
G2-132 # 405108A @ 15.0-17.0'
TX/CUpp σ_3 = 2448 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0108A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 A	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.6	8.0				
50.0	48.0	8.5	9.1	38.5	47.5	9.0	0.90
60.0	58.0	9.1	9.7	48.6	57.9	9.3	0.93
70.0		9.8	9.8	58.4	68.1	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.80	0.00
0.25	0.5	11.75	-1.95
0.5	0.7	12.10	-2.30
1	1.0	12.55	-2.75
2	1.4	13.05	-3.25
4	2.0	13.70	-3.90
9	3.0	14.60	-4.80
16	4.0	15.30	-5.50
30	5.5	15.90	-6.10
60	7.7	16.40	-6.60
120	11.0	16.60	-6.80
240	15.5	16.80	-7.00
360	19.0	16.90	-7.10

Initial Height	(in)	5.990	Init. Vol.	(CC)	441.18
Height Change	(in)	0.044	Vol. Change	(CC)	15.05
Ht. After Cons.	(in)	5.946	Cell Exp.	(CC)	8.20
Initial Area	(sq in)	4.494	Net Change	(CC)	6.85
Area After Cons.	(sq in)	4.457	Cons. Vol.	(CC)	434.33

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0108A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 A	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

Init. Ht.	(in)	5.990	Init. Area	(sq in)	4.494
Consol. Ht.	(in)	5.946	Consol. Area	(sq in)	4.457
Back Pres.	PSI	57.4	Strain Rate	(in/min)	0.004

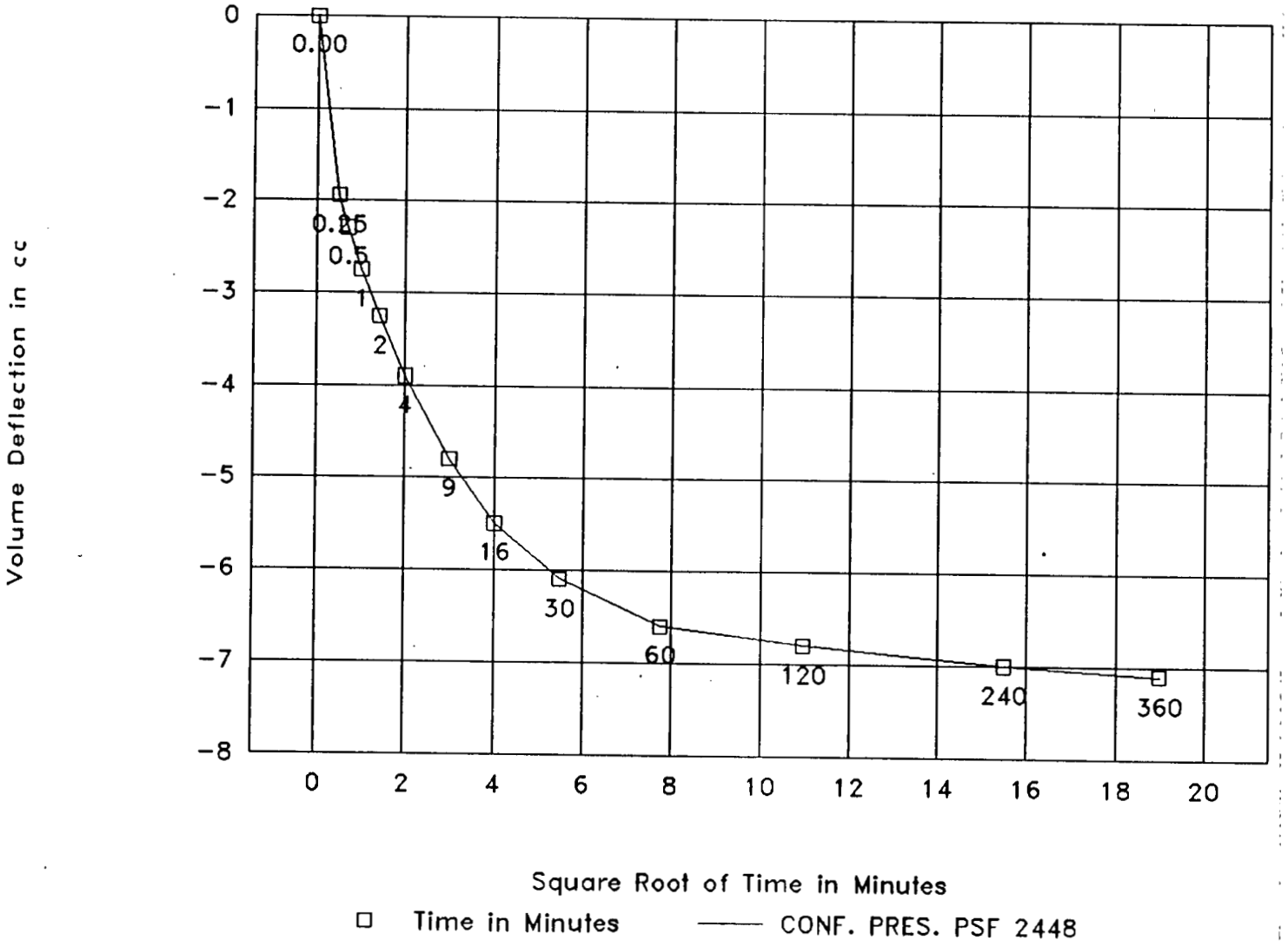
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.457	0	57.4	0	2448	2448	1.00
91.0	2940	0.05	0.84	4.495	2916	65.6	1181	1267	4183	3.30
99.0	3199	0.07	1.18	4.510	3161	66.4	1296	1152	4313	3.74
106.0	3425	0.09	1.51	4.525	3373	66.8	1354	1094	4467	4.08
113.5	3667	0.11	1.85	4.541	3599	66.9	1368	1080	4679	4.33
120.5	3893	0.13	2.19	4.556	3808	66.8	1354	1094	4903	4.48
127.5	4120	0.15	2.52	4.572	4016	66.7	1339	1109	5124	4.62
144.0	4653	0.20	3.36	4.612	4496	65.6	1181	1267	5763	4.55
159.5	5154	0.25	4.20	4.652	4937	64.5	1022	1426	6362	4.46
174.5	5638	0.30	5.05	4.694	5354	63.6	893	1555	6909	4.44
189.0	6107	0.35	5.89	4.736	5747	62.6	749	1699	7446	4.38
201.0	6494	0.40	6.73	4.778	6058	61.8	634	1814	7872	4.34
225.5	7286	0.50	8.41	4.866	6673	60.1	389	2059	8733	4.24
247.5	7997	0.60	10.09	4.957	7190	58.5	158	2290	9479	4.14
266.5	8611	0.70	11.77	5.051	7597	57.0	-58	2506	10103	4.03
284.0	9176	0.80	13.45	5.150	7942	55.8	-230	2678	10620	3.97
299.0	9661	0.90	15.14	5.252	8199	54.8	-374	2822	11021	3.90
313.0	10113	1.00	16.82	5.358	8412	53.9	-504	2952	11364	3.85
326.0	10533	1.10	18.50	5.468	8585	53.1	-619	3067	11652	3.80
339.0	10953	1.20	20.18	5.584	8743	52.4	-720	3168	11911	3.76

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0108A

ADVANCED TERRA TESTING, INC.

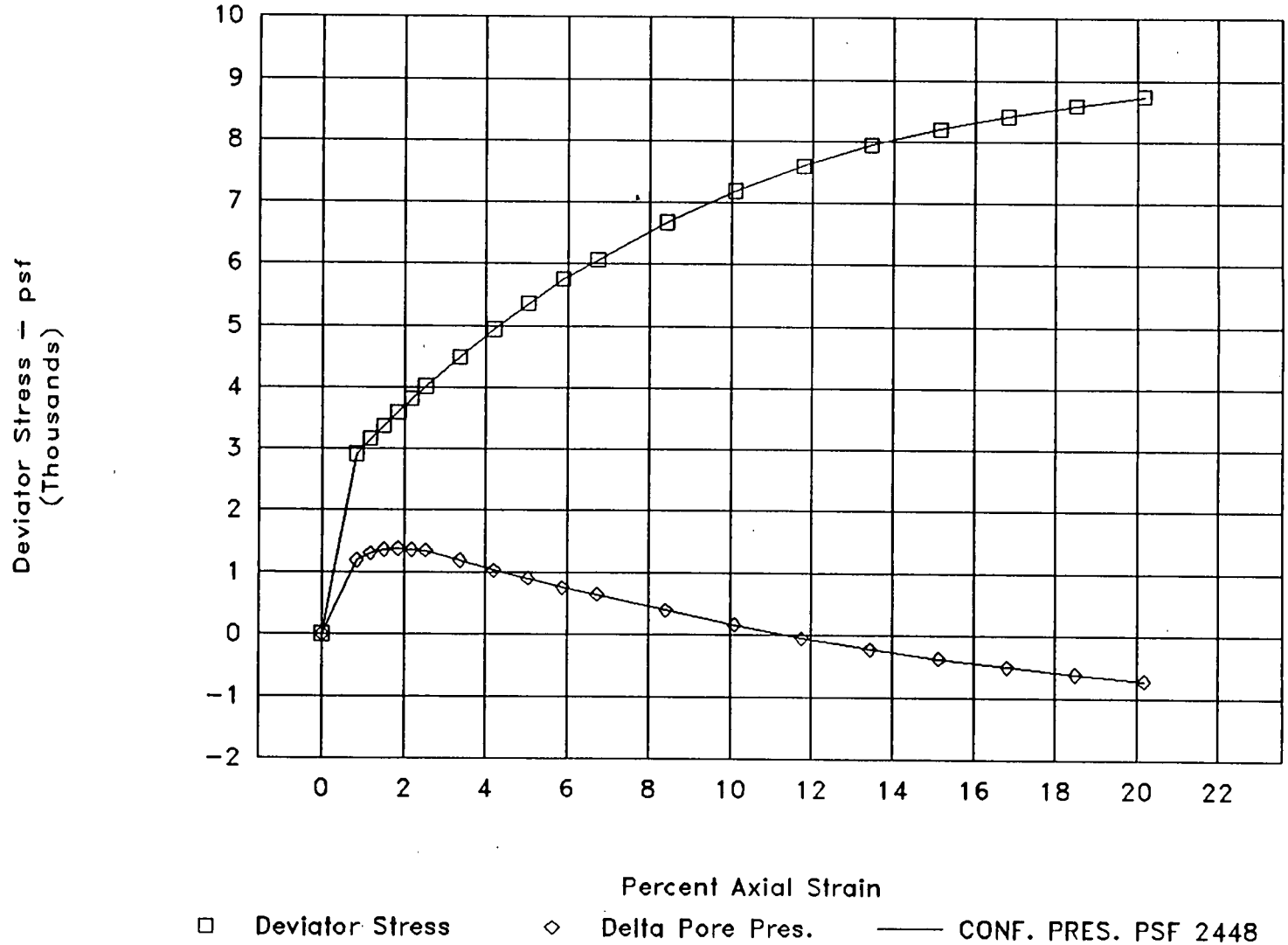
CONSOLIDATION DATA

G2-132, 15.0-17.0', 405108 A



TRIAXIAL TEST - TX/CUpp

G2-132, 15.0-17.0', 405108 A



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001107

474

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 B	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1016.1	1010.8
Wt. Wet Soil & Pan	(g)	1024.5	1019.2
Wt. Dry Soil & Pan	(g)	912.7	912.7
Wt. Lost Moisture	(g)	111.8	106.5
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	904.3	904.3
Moisture Content %		12.4	11.8
Wet Density PCF		145.3	150.3
Dry Density PCF		129.3	134.4

Init. Diameter	(in)	2.388
Init. Area	(sq in)	4.479
Init. Height	(in)	5.947
Vol. Bef. Consol.	(cu ft)	0.01541
Vol. After Consol.	(cu ft)	0.01483

Notes & Comments:

SAIC/PARSONS PO 140
CU σ_3 5760 PSF

2059-13 H
G2-132
15.0-17.0'
405108 B

Data entry by: NAA Date: 6-28-95
Data checked by: cal Date: 6-29-95
FileName: SAT05108

ADVANCED TERRA TESTING, INC.

1011

001108

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 B	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.7	8.8				
50.0		10.0	10.0	38.6	48.2	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	10.00	0.00
0.25	0.5	16.00	-6.00
0.5	0.7	16.60	-6.60
1	1.0	17.35	-7.35
2	1.4	18.25	-8.25
4	2.0	19.40	-9.40
9	3.0	21.10	-11.10
16	4.0	22.50	-12.50
30	5.5	23.90	-13.90
60	7.7	24.95	-14.95
120	11.0	25.50	-15.50
240	15.5	25.85	-15.85
360	19.0	26.00	-16.00

Initial Height	(in)	5.947	Init. Vol.	(CC)	436.55
Height Change	(in)	0.034	Vol. Change	(CC)	26.00
Ht. After Cons.	(in)	5.913	Cell Exp.	(CC)	9.41
Initial Area	(sq in)	4.479	Net Change	(CC)	16.59
Area After Cons.	(sq in)	4.333	Cons. Vol.	(CC)	419.96

Data entry by: NAA Date: 6-28-95
Data checked by: cal Date: 6-29-95
FileName:SAT05108

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 B	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

Init. Ht.	(in)	5.947	Init. Area	(sq in)	4.479
Consol. Ht.	(in)	5.913	Consol. Area	(sq in)	4.333
Back Pres.	PSI	37.3	Strain Rate	(in/min)	0.003

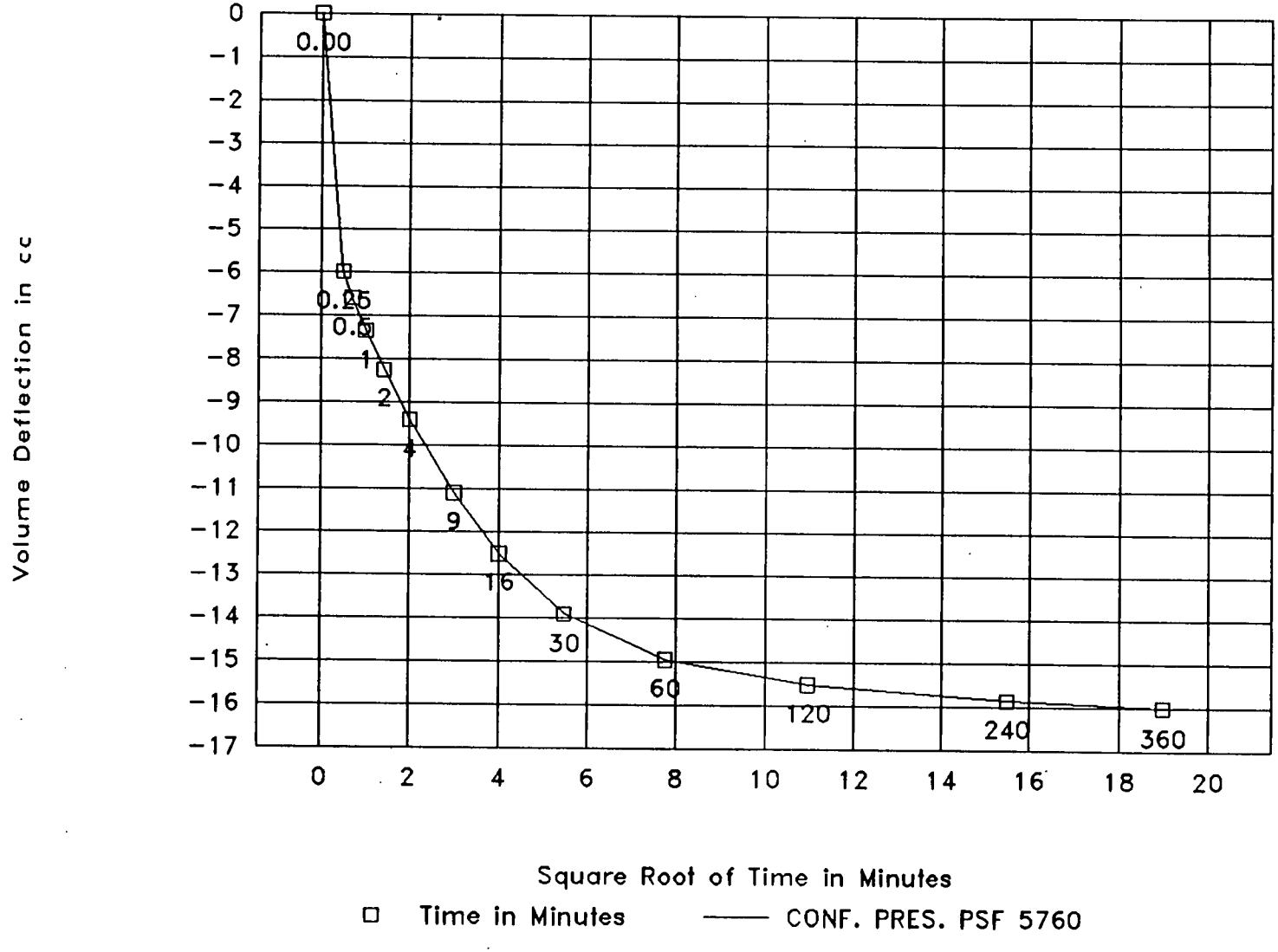
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.333	0	37.3	0	5760	5760	1.00
92.5	3074	0.01	0.17	4.341	3069	48.1	1555	4205	7273	1.73
105.5	3506	0.02	0.34	4.348	3494	51.8	2088	3672	7166	1.95
115.5	3838	0.03	0.51	4.355	3819	54.0	2405	3355	7174	2.14
122.0	4054	0.04	0.68	4.363	4027	55.6	2635	3125	7152	2.29
127.5	4237	0.05	0.85	4.370	4201	56.7	2794	2966	7167	2.42
136.5	4536	0.07	1.18	4.385	4482	58.2	3010	2750	7233	2.63
146.0	4852	0.09	1.52	4.400	4778	58.9	3110	2650	7427	2.80
155.0	5151	0.11	1.86	4.415	5055	59.3	3168	2592	7647	2.95
170.0	5649	0.15	2.54	4.446	5506	59.5	3197	2563	8069	3.15
186.0	6181	0.20	3.38	4.485	5972	58.9	3110	2650	8621	3.25
216.0	7178	0.30	5.07	4.565	6814	57.0	2837	2923	9737	3.33
243.0	8075	0.40	6.76	4.648	7529	54.8	2520	3240	10769	3.32
265.0	8806	0.50	8.46	4.734	8062	52.5	2189	3571	11633	3.26
279.0	9271	0.60	10.15	4.823	8331	50.6	1915	3845	12175	3.17
290.0	9637	0.70	11.84	4.915	8496	49.4	1742	4018	12514	3.11
299.5	9953	0.80	13.53	5.011	8606	48.7	1642	4118	12724	3.09
304.5	10119	0.90	15.22	5.111	8579	47.9	1526	4234	12812	3.03
305.0	10135	1.00	16.91	5.215	8421	47.7	1498	4262	12684	2.98
303.5	10086	1.10	18.60	5.324	8209	47.4	1454	4306	12515	2.91
300.5	9986	1.20	20.29	5.437	7959	47.1	1411	4349	12308	2.83

Data entry by: NAA Date: 6-28-95
Data checked by: cal Date: 6-29-95
FileName: SAT05108

ADVANCED TERRA TESTING, INC.

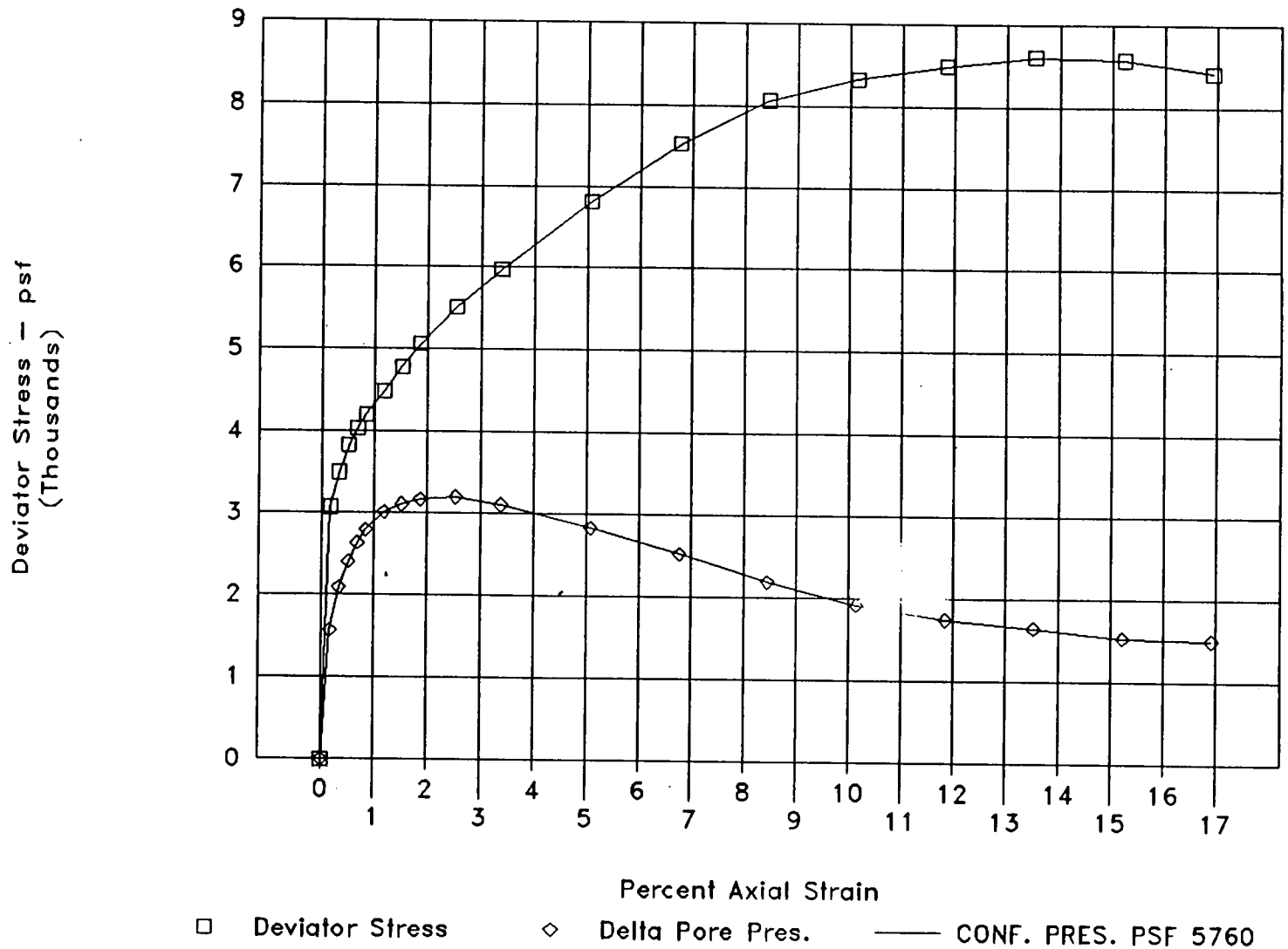
CONSOLIDATION DATA

G2-132, 15.0-17.0', 405108B



TRIAXIAL TEST - TX/CUpp

G2-132, 15.0-17.0', 405108B



1015

001112

474

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

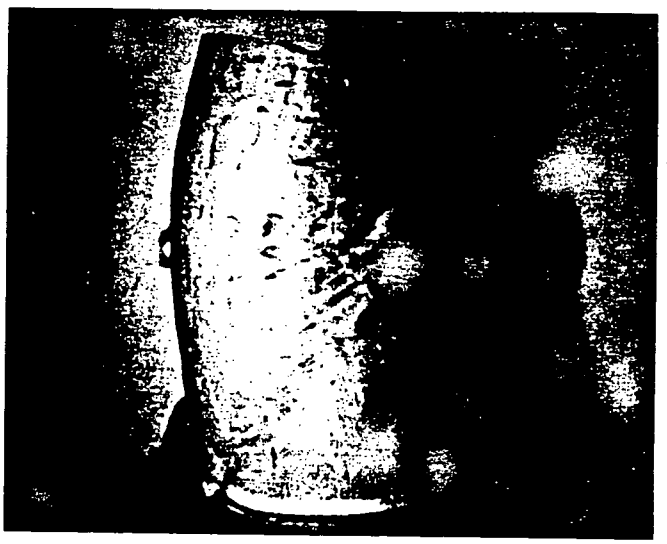
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405108 C	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1007.0	1006.2
Wt. Wet Soil & Pan	(g)	1015.3	1014.5
Wt. Dry Soil & Pan	(g)	909.5	909.5
Wt. Lost Moisture	(g)	105.8	105.0
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	901.2	901.2
Moisture Content %		11.7	11.7
Wet Density PCF		145.2	152.0
Dry Density PCF		130.0	136.1

Init. Diameter	(in)	2.376
Init. Area	(sq in)	4.434
Init. Height	(in)	5.957
Vol. Bef. Consol.	(cu ft)	0.01529
Vol. After Consol.	(cu ft)	0.01459

Notes & Comments:



SAIC/PARSONS PO140
G2-132 #405108C @ 15.0-17.0'
TX/CUpp σ_3 = 11520PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0108C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405108 C	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.1	8.3				
50.0		10.9	11.0	38.8	48.4	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	11.00	0.00
0.25	0.5	20.40	-9.40
0.5	0.7	21.30	-10.30
1	1.0	22.40	-11.40
2	1.4	23.70	-12.70
4	2.0	25.30	-14.30
9	3.0	27.60	-16.60
16	4.0	29.50	-18.50
30	5.5	31.30	-20.30
60	7.7	32.85	-21.85
120	11.0	33.70	-22.70
240	15.5	34.20	-23.20
360	19.0	34.45	-23.45

Initial Height	(in)	5.957	Init. Vol.	(CC)	432.90
Height Change	(in)	0.092	Vol. Change	(CC)	34.90
Ht. After Cons.	(in)	5.865	Cell Exp.	(CC)	15.31
Initial Area	(sq in)	4.434	Net Change	(CC)	19.60
Area After Cons.	(sq in)	4.300	Cons. Vol.	(CC)	413.31

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0108C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405108 C	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

Init. Ht.	(in)	5.957	Init. Area	(sq in)	4.434
Consol. Ht.	(in)	5.865	Consol. Area	(sq in)	4.300
Back Pres.	PSI	37.8	Strain Rate	(in/min)	0.004

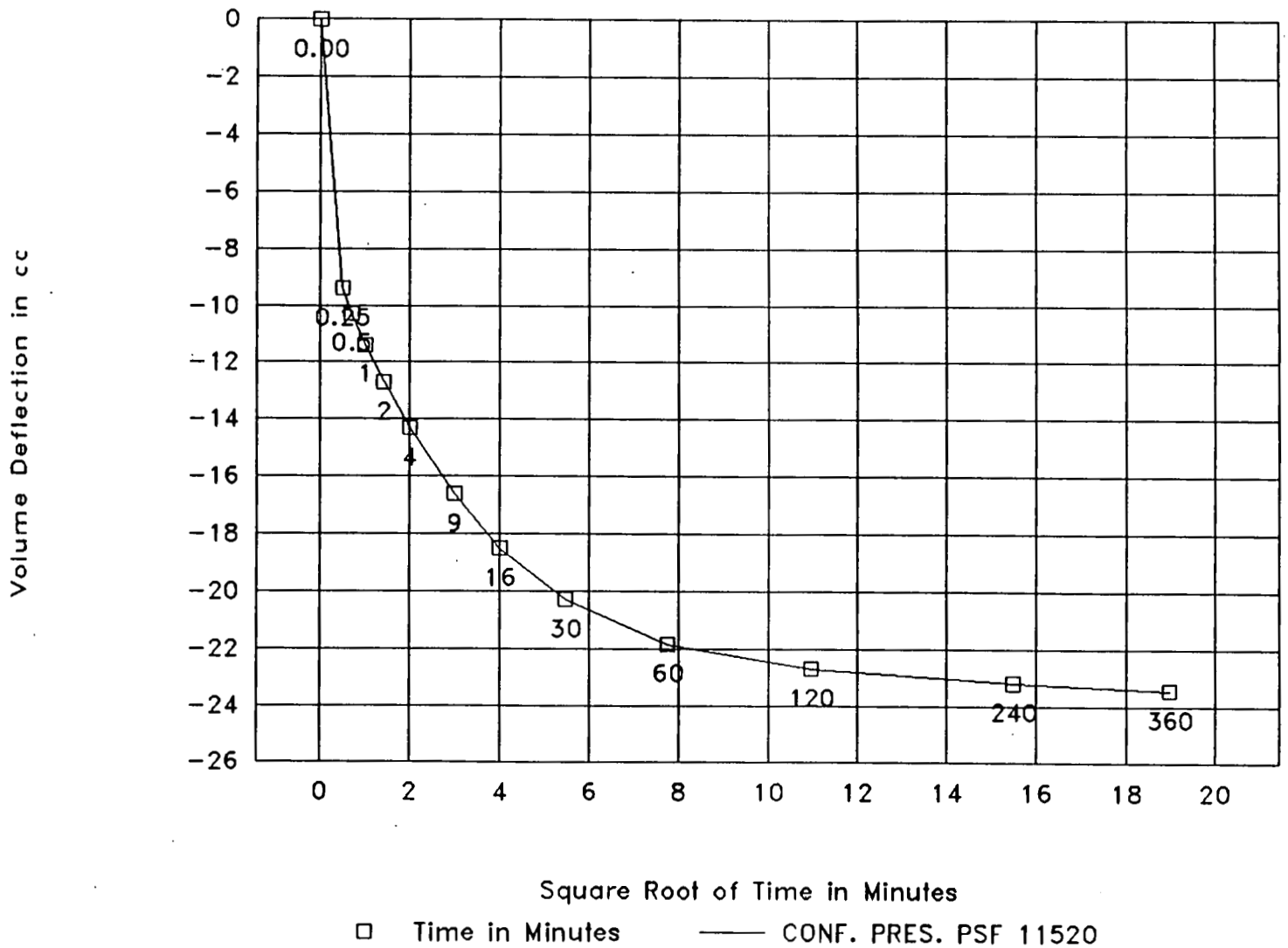
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.300	0	37.8	0	11520	11520	1.00
234.0	7837	0.05	0.85	4.337	7770	71.7	4882	6638	14409	2.17
269.0	9009	0.10	1.71	4.374	8856	80.7	6178	5342	14198	2.66
295.0	9880	0.15	2.56	4.412	9627	83.6	6595	4925	14552	2.95
317.0	10617	0.20	3.41	4.451	10255	84.5	6725	4795	15050	3.14
337.0	11287	0.25	4.26	4.491	10806	84.0	6653	4867	15673	3.22
353.0	11823	0.30	5.12	4.531	11218	82.9	6494	5026	16243	3.23
372.0	12459	0.35	5.97	4.572	11715	81.9	6350	5170	16885	3.27
391.0	13095	0.40	6.82	4.614	12202	80.8	6192	5328	17530	3.29
409.0	13698	0.45	7.67	4.657	12647	79.7	6034	5486	18133	3.31
427.0	14301	0.50	8.53	4.700	13082	78.7	5890	5630	18712	3.32
452.0	15138	0.60	10.23	4.790	13590	76.5	5573	5947	19537	3.29
470.0	15741	0.70	11.94	4.882	13862	74.4	5270	6250	20112	3.22
480.0	16076	0.80	13.64	4.979	13883	73.0	5069	6451	20334	3.15
485.0	16243	0.90	15.35	5.079	13751	71.9	4910	6610	20360	3.08
486.0	16277	1.00	17.05	5.183	13502	71.0	4781	6739	20241	3.00
483.0	16176	1.10	18.76	5.292	13143	70.4	4694	6826	19968	2.93
480.0	16076	1.20	20.46	5.406	12787	69.8	4608	6912	19699	2.85

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0108C

ADVANCED TERRA TESTING, INC.

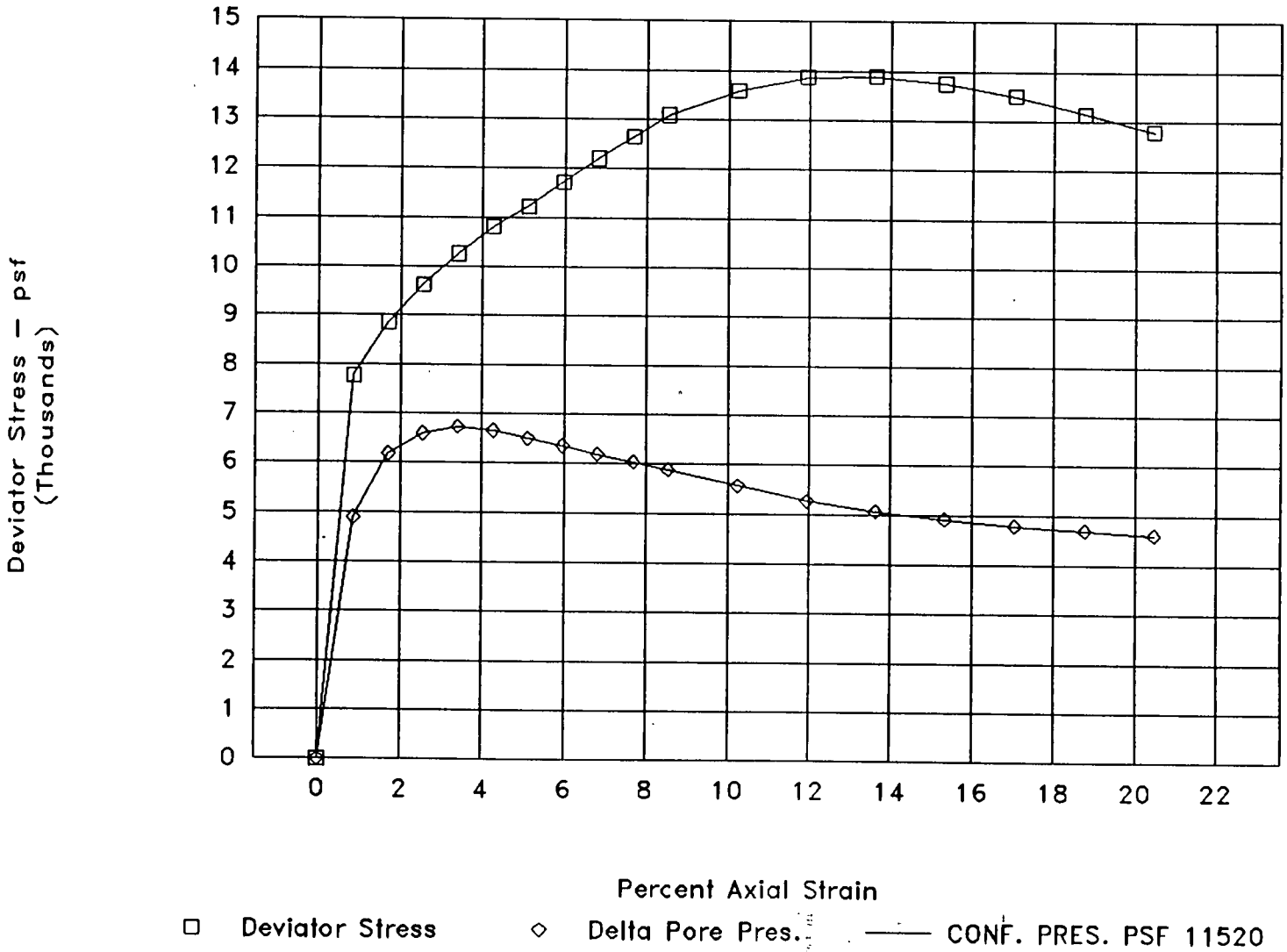
CONSOLIDATION DATA

G2-132, 15.0-17.0', 405108 C



TRIAXIAL TEST - TX/CUpp

G2-132, 15.0-17.0', 405108 C



1020

001117

474

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

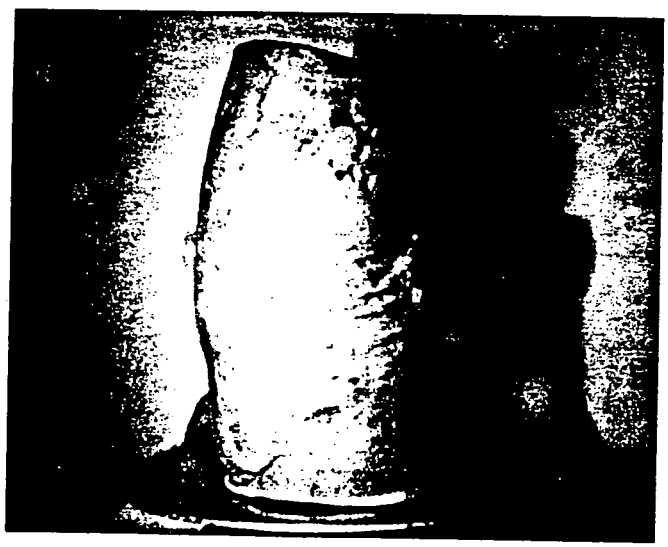
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 A	TEST FINISHED	6-28-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1046.6	1042.0
Wt. Wet Soil & Pan	(g)	1054.9	1050.3
Wt. Dry Soil & Pan	(g)	954.1	954.1
Wt. Lost Moisture	(g)	100.7	96.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	945.8	945.8
Moisture Content %		10.7	10.2
Wet Density PCF		146.5	150.4
Dry Density PCF		132.4	136.6

Init. Diameter	(in)	2.409
Init. Area	(sq in)	4.558
Init. Height	(in)	5.971
Vol. Bef. Consol.	(cu ft)	0.01575
Vol. After Consol.	(cu ft)	0.01527

Notes & Comments:



SAIC/PARSONS PO140
G2-133 #405059A @ 15.0-17.0'
TX/CUpp σ_3 = 2448 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0059A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 A	TEST FINISHED	6-28-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.1	11.4				
50.0		12.6	12.8	38.9	48.5	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	12.80	0.00
0.25	0.5	15.35	-2.55
0.5	0.7	15.75	-2.95
1	1.0	16.20	-3.40
2	1.4	16.80	-4.00
4	2.0	17.50	-4.70
9	3.0	18.60	-5.80
16	4.0	19.50	-6.70
30	5.5	20.55	-7.75
60	7.7	21.45	-8.65
120	11.0	21.90	-9.10
240	15.5	22.10	-9.30
360	19.0	22.20	-9.40

Initial Height	(in)	5.971	Init. Vol.	(CC)	446.06
Height Change	(in)	0.029	Vol. Change	(CC)	20.80
Ht. After Cons.	(in)	5.942	Cell Exp.	(CC)	7.19
Initial Area	(sq in)	4.558	Net Change	(CC)	13.61
Area After Cons.	(sq in)	4.440	Cons. Vol.	(CC)	432.44

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0059A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 A	TEST FINISHED	6-28-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

Init. Ht.	(in)	5.971	Init. Area	(sq in)	4.558
Consol. Ht.	(in)	5.942	Consol. Area	(sq in)	4.440
Back Pres.	PSI	37.2	Strain Rate	(in/min)	0.003

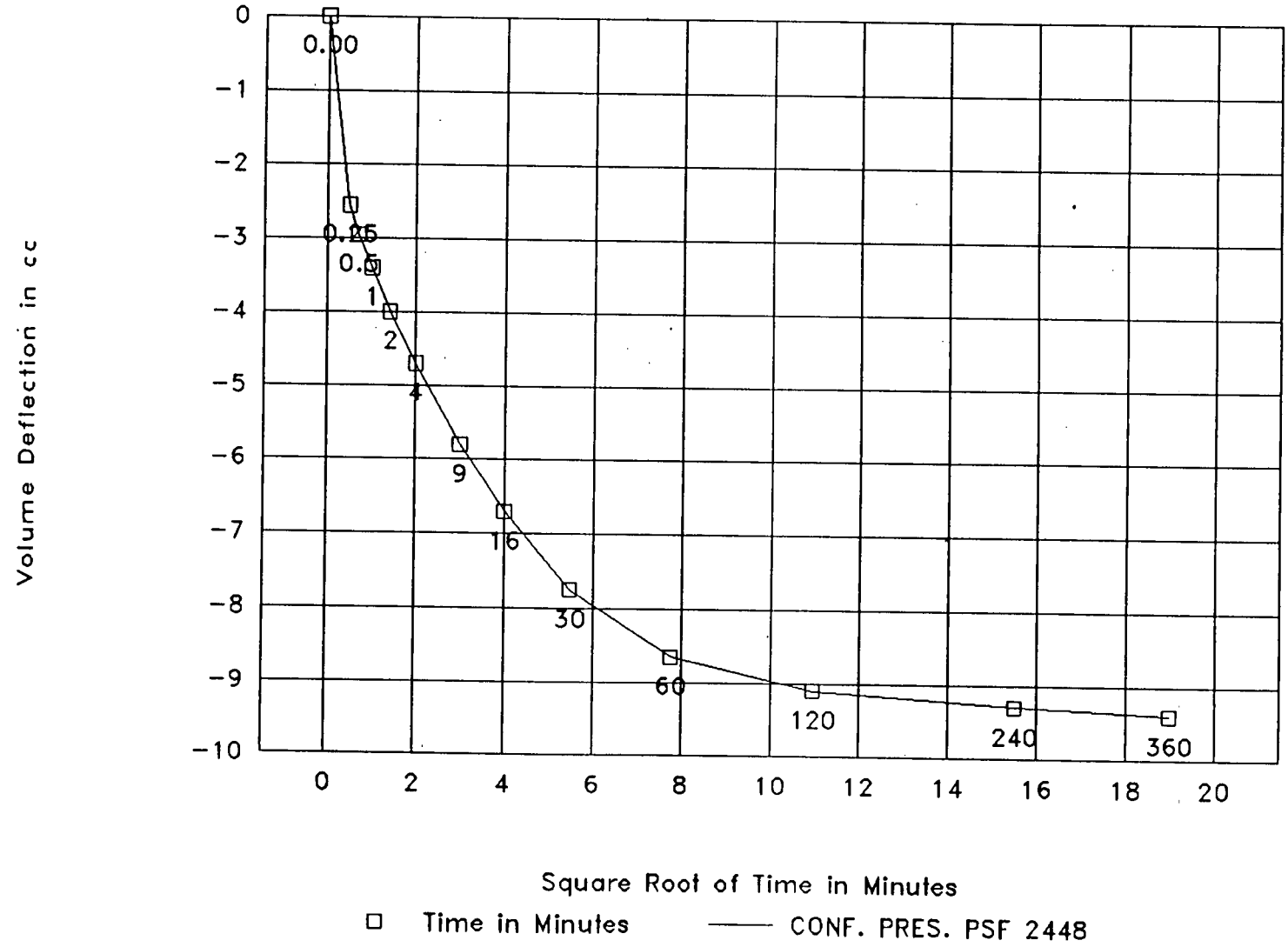
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.440	0	37.2	0	2448	2448	1.00
78.5	2546	0.05	0.84	4.478	2524	45.3	1166	1282	3806	2.97
97.5	3162	0.10	1.68	4.516	3109	46.1	1282	1166	4275	3.67
113.5	3681	0.15	2.52	4.555	3588	45.8	1238	1210	4797	3.97
126.5	4102	0.20	3.37	4.595	3964	44.7	1080	1368	5332	3.90
139.5	4524	0.25	4.21	4.635	4334	43.8	950	1498	5831	3.89
151.0	4897	0.30	5.05	4.676	4650	42.8	806	1642	6291	3.83
161.5	5237	0.35	5.89	4.718	4929	42.0	691	1757	6686	3.81
171.0	5546	0.40	6.73	4.761	5172	41.2	576	1872	7044	3.76
178.5	5789	0.45	7.57	4.804	5350	40.4	461	1987	7338	3.69
185.5	6016	0.50	8.41	4.848	5510	39.6	346	2102	7612	3.62
199.0	6454	0.60	10.10	4.939	5802	38.1	130	2318	8120	3.50
213.5	6924	0.70	11.78	5.033	6108	37.1	-14	2462	8571	3.48
225.5	7313	0.80	13.46	5.131	6328	36.3	-130	2578	8906	3.46
236.0	7653	0.90	15.15	5.233	6494	35.7	-216	2664	9158	3.44
244.0	7913	1.00	16.83	5.339	6581	35.2	-288	2736	9317	3.41
249.5	8091	1.10	18.51	5.449	6593	34.8	-346	2794	9387	3.36

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0059A

ADVANCED TERRA TESTING, INC.

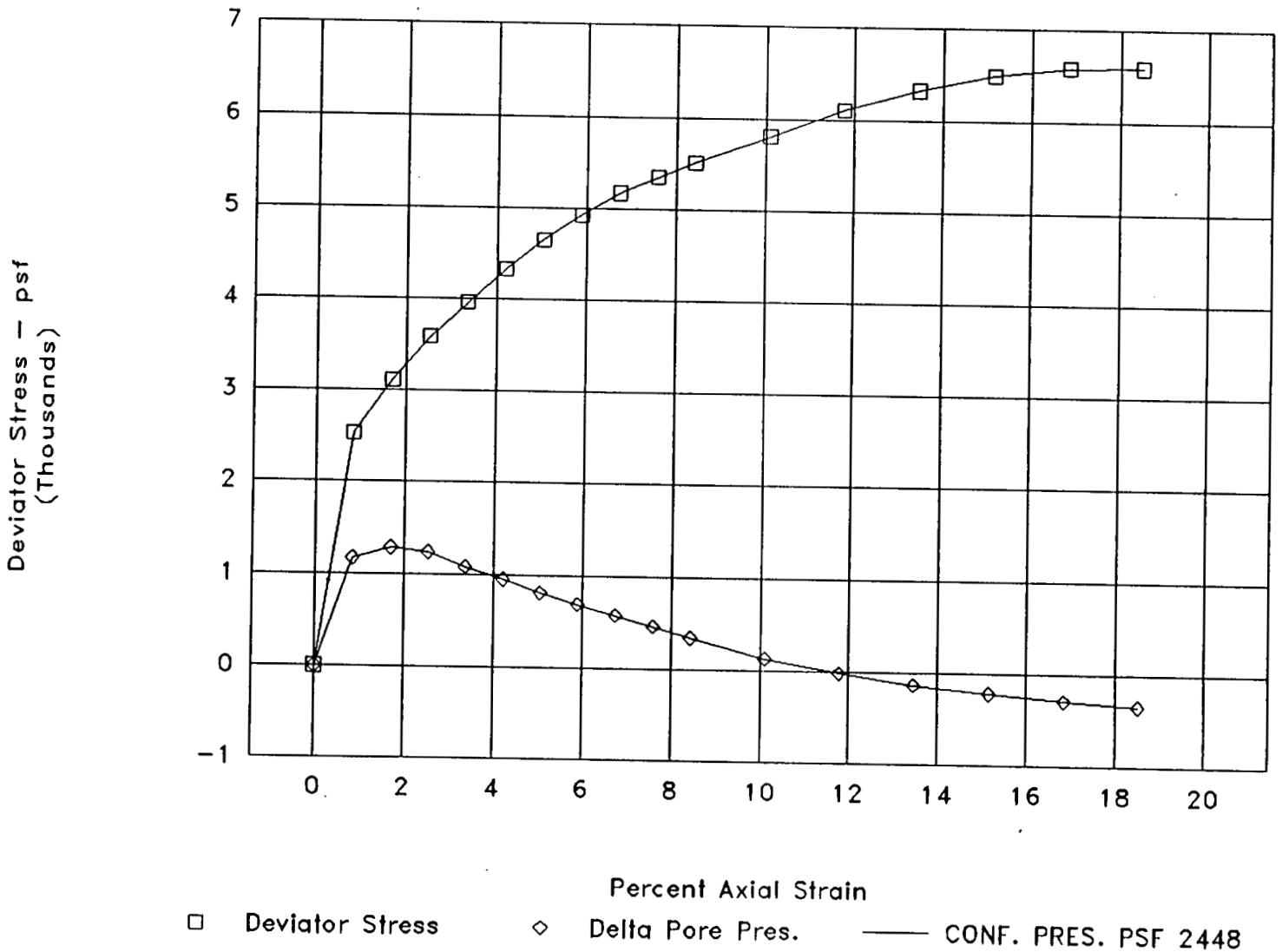
CONSOLIDATION DATA

G2-133, 15.0-17.0', 405059 A



TRIAXIAL TEST - TX/CUpp

G2-133, 15.0-17.0', 405059 A



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

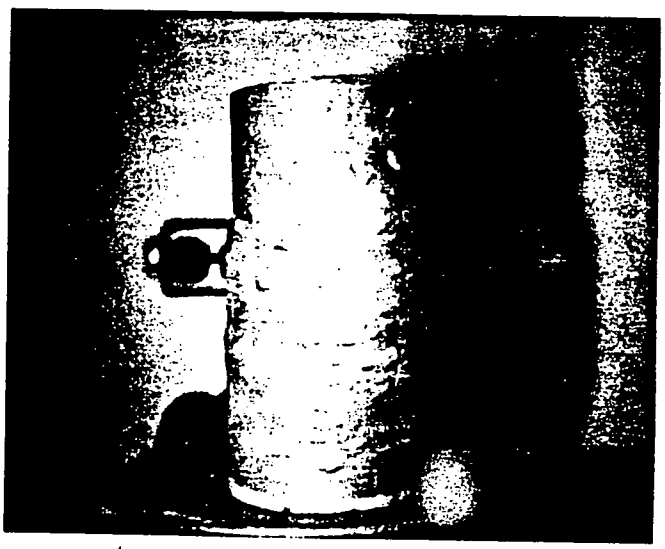
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 B	TEST FINISHED	6-29-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1042.8	1036.2
Wt. Wet Soil & Pan	(g)	1051.5	1045.0
Wt. Dry Soil & Pan	(g)	945.9	945.9
Wt. Lost Moisture	(g)	105.6	99.1
Wt. of Pan Only	(g)	8.7	8.7
Wt. of Dry Soil	(g)	937.1	937.1
Moisture Content %		11.3	10.6
Wet Density PCF		146.8	151.6
Dry Density PCF		131.9	137.1

Init. Diameter	(in)	2.395
Init. Area	(sq in)	4.505
Init. Height	(in)	6.008
Vol. Bef. Consol.	(cu ft)	0.01566
Vol. After Consol.	(cu ft)	0.01507

Notes & Comments:



SAIC/PARSONS PO140
G2-133 # 405059 @ 15.0-17.0'
TX/CUpp σ_3 = [illegible] PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0059

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 B	TEST FINISHED	6-29-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.7	7.9				
50.0		9.4	9.4	38.3	48.1	9.8	0.98

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.40	0.00
0.25	0.5	14.25	-4.85
0.5	0.7	14.85	-5.45
1	1.0	15.60	-6.20
2	1.4	16.55	-7.15
4	2.0	17.80	-8.40
9	3.0	19.80	-10.40
16	4.0	21.45	-12.05
30	5.5	23.15	-13.75
60	7.7	24.35	-14.95
120	11.0	24.85	-15.45
240	15.5	25.10	-15.70
360	19.0	25.20	-15.80

Initial Height	(in)	6.008	Init. Vol.	(CC)	443.62
Height Change	(in)	0.062	Vol. Change	(CC)	24.10
Ht. After Cons.	(in)	5.946	Cell Exp.	(CC)	7.16
Initial Area	(sq in)	4.505	Net Change	(CC)	16.94
Area After Cons.	(sq in)	4.378	Cons. Vol.	(CC)	426.68

Data entry by: NAA Date: 7-13-95
Data checked by: SE Date: 7-14-95
FileName:SAT0059

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 B	TEST FINISHED	6-29-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

Init. Ht.	(in)	6.008	Init. Area	(sq in)	4.505
Consol. Ht.	(in)	5.946	Consol. Area	(sq in)	4.378
Back Pres.	PSI	37.1	Strain Rate	(in/min)	0.002

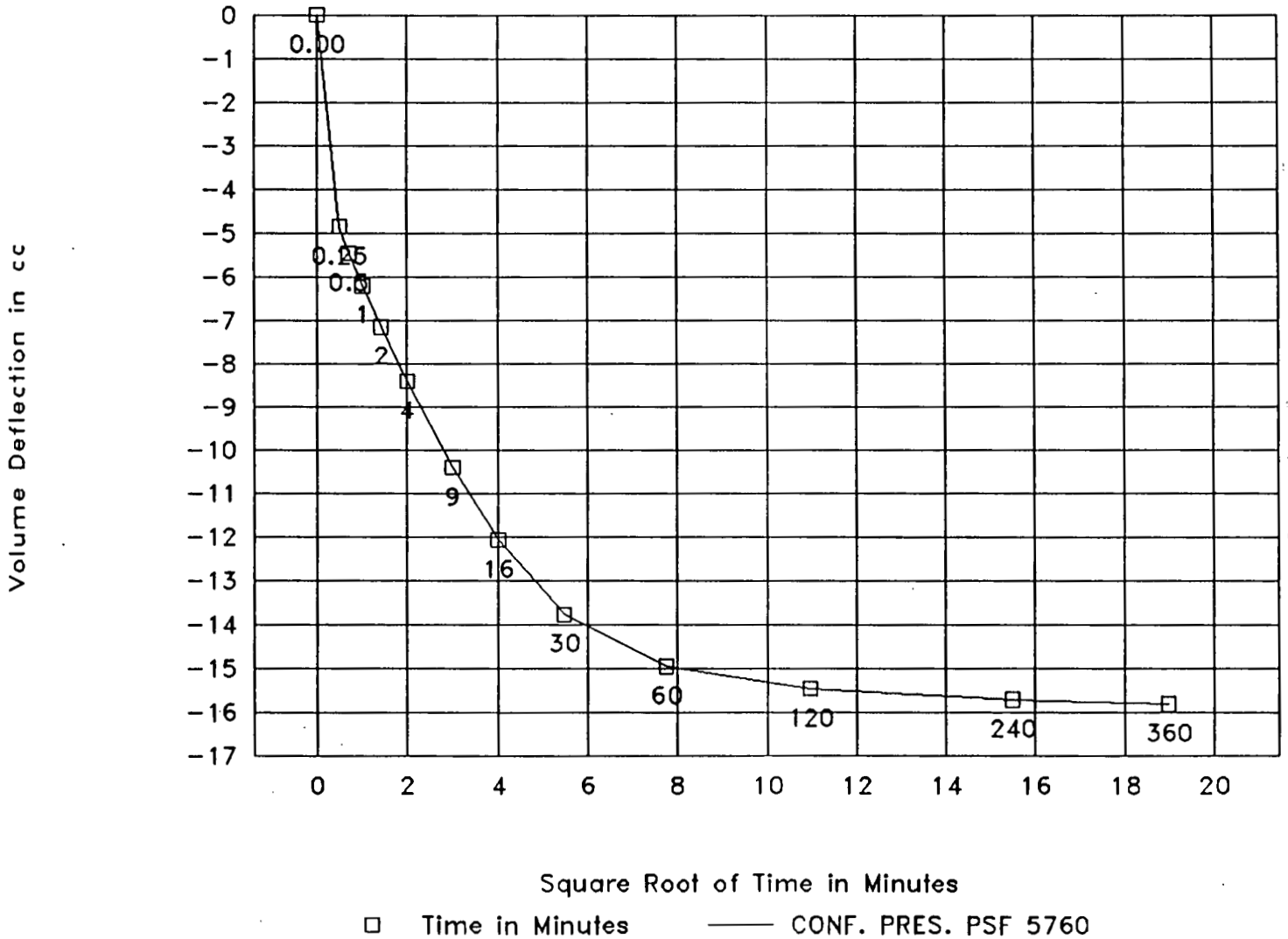
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.378	0	37.1	0	5760	5760	1.00
141.5	4654	0.05	0.84	4.415	4615	54.6	2520	3240	7855	2.42
176.5	5805	0.10	1.68	4.453	5708	58.9	3139	2621	8328	3.18
199.5	6562	0.15	2.52	4.491	6396	60.4	3355	2405	8801	3.66
218.0	7170	0.20	3.36	4.531	6929	60.4	3355	2405	9334	3.88
234.5	7713	0.25	4.20	4.570	7389	58.6	3096	2664	10053	3.77
249.5	8206	0.30	5.05	4.611	7792	56.8	2837	2923	10715	3.67
272.5	8963	0.35	5.89	4.652	8435	55.0	2578	3182	11617	3.65
290.5	9555	0.40	6.73	4.694	8912	53.6	2376	3384	12296	3.63
307.5	10114	0.45	7.57	4.737	9348	52.4	2203	3557	12905	3.63
324.5	10673	0.50	8.41	4.780	9775	51.2	2030	3730	13505	3.62
350.5	11528	0.60	10.09	4.870	10365	49.2	1742	4018	14382	3.58
375.5	12350	0.70	11.77	4.962	10896	47.4	1483	4277	15173	3.55
395.5	13008	0.80	13.45	5.059	11258	45.9	1267	4493	15751	3.51
415.5	13666	0.90	15.14	5.159	11597	44.7	1094	4666	16263	3.49
434.5	14291	1.00	16.82	5.263	11887	43.7	950	4810	16697	3.47
449.5	14784	1.10	18.50	5.372	12049	42.8	821	4939	16988	3.44
466.5	15343	1.20	20.18	5.485	12247	42.0	706	5054	17301	3.42

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0059

ADVANCED TERRA TESTING, INC.

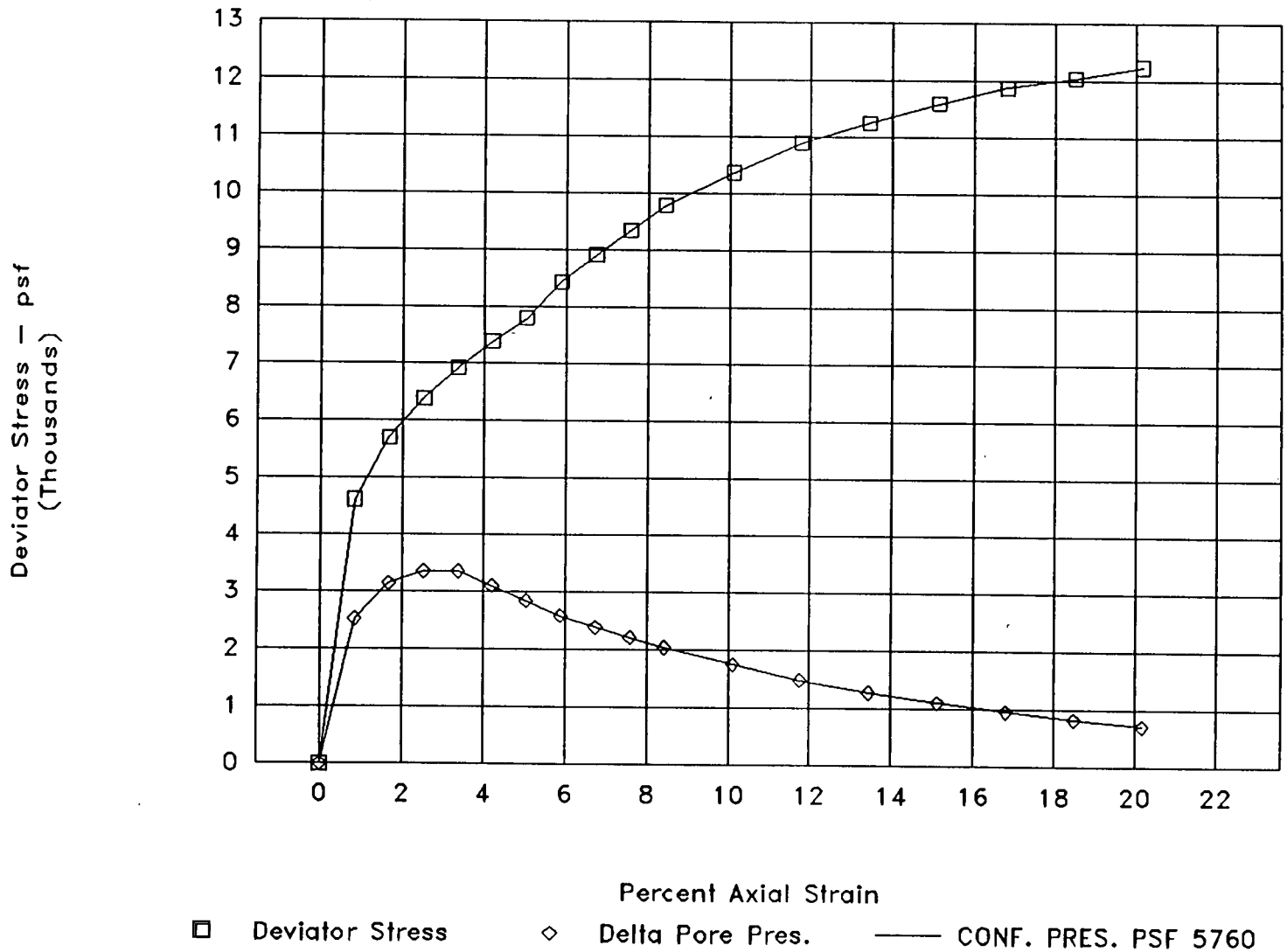
CONSOLIDATION DATA

G2-133, 15.0-17.0', 405059 B



TRIAXIAL TEST - TX/CUpp

G2-133, 15.0-17.0', 405059 B



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

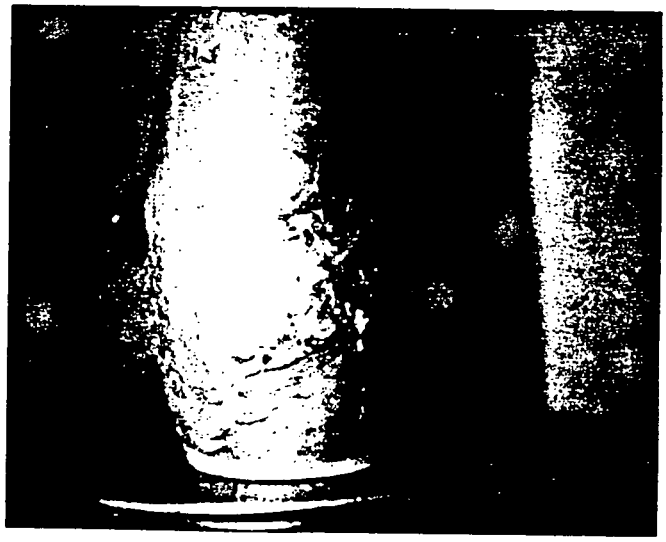
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405059 C	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1033.8	1038.3
Wt. Wet Soil & Pan	(g)	1042.4	1046.8
Wt. Dry Soil & Pan	(g)	957.0	957.0
Wt. Lost Moisture	(g)	85.4	89.8
Wt. of Pan Only	(g)	8.6	8.6
Wt. of Dry Soil	(g)	948.5	948.5
Moisture Content %		9.0	9.5
Wet Density PCF		149.3	153.8
Dry Density PCF		137.0	140.5

Init. Diameter	(in)	2.376
Init. Area	(sq in)	4.434
Init. Height	(in)	5.948
Vol. Bef. Consol.	(cu ft)	0.01526
Vol. After Consol.	(cu ft)	0.01488

Notes & Comments:



SAIC/PARSONS PO 140 Fernald
2059-13D G2-133 15-17 405059 C
TX/CUpp σ_3 80 psi

Data entry by: NAA Date: 7-11-95
Data checked by: MGJ Date: 7-11-95
FileName: SAT0059C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405059 C	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.1	4.4				
50.0	48.0	4.6	5.2	37.6	47.0	9.4	0.94
60.0		5.3	5.4	48.6	58.4	9.8	0.98

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	5.40	0.00
0.25	0.5	13.40	-8.00
0.5	0.7	14.20	-8.80
1	1.0	15.05	-9.65
2	1.4	16.10	-10.70
4	2.0	17.30	-11.90
9	3.0	19.10	-13.70
16	4.0	20.15	-14.75
30	5.5	20.80	-15.40
60	7.7	21.10	-15.70
120	11.0	21.23	-15.83
240	15.5	21.35	-15.95
360	19.0	21.38	-15.98

Initial Height	(in)	5.948	Init. Vol.	(CC)	432.25
Height Change	(in)	0.034	Vol. Change	(CC)	21.95
Ht. After Cons.	(in)	5.914	Cell Exp.	(CC)	11.15
Initial Area	(sq in)	4.434	Net Change	(CC)	10.80
Area After Cons.	(sq in)	4.348	Cons. Vol.	(CC)	421.45

Data entry by: NAA Date: 7-11-95
Data checked by: MGS Date: 7-11-95
FileName:SAT0059C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405059 C	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

Init. Ht.	(in)	5.948	Init. Area	(sq in)	4.434
Consol. Ht.	(in)	5.914	Consol. Area	(sq in)	4.348
Back Pres.	PSI	47.5	Strain Rate	(in/min)	0.005

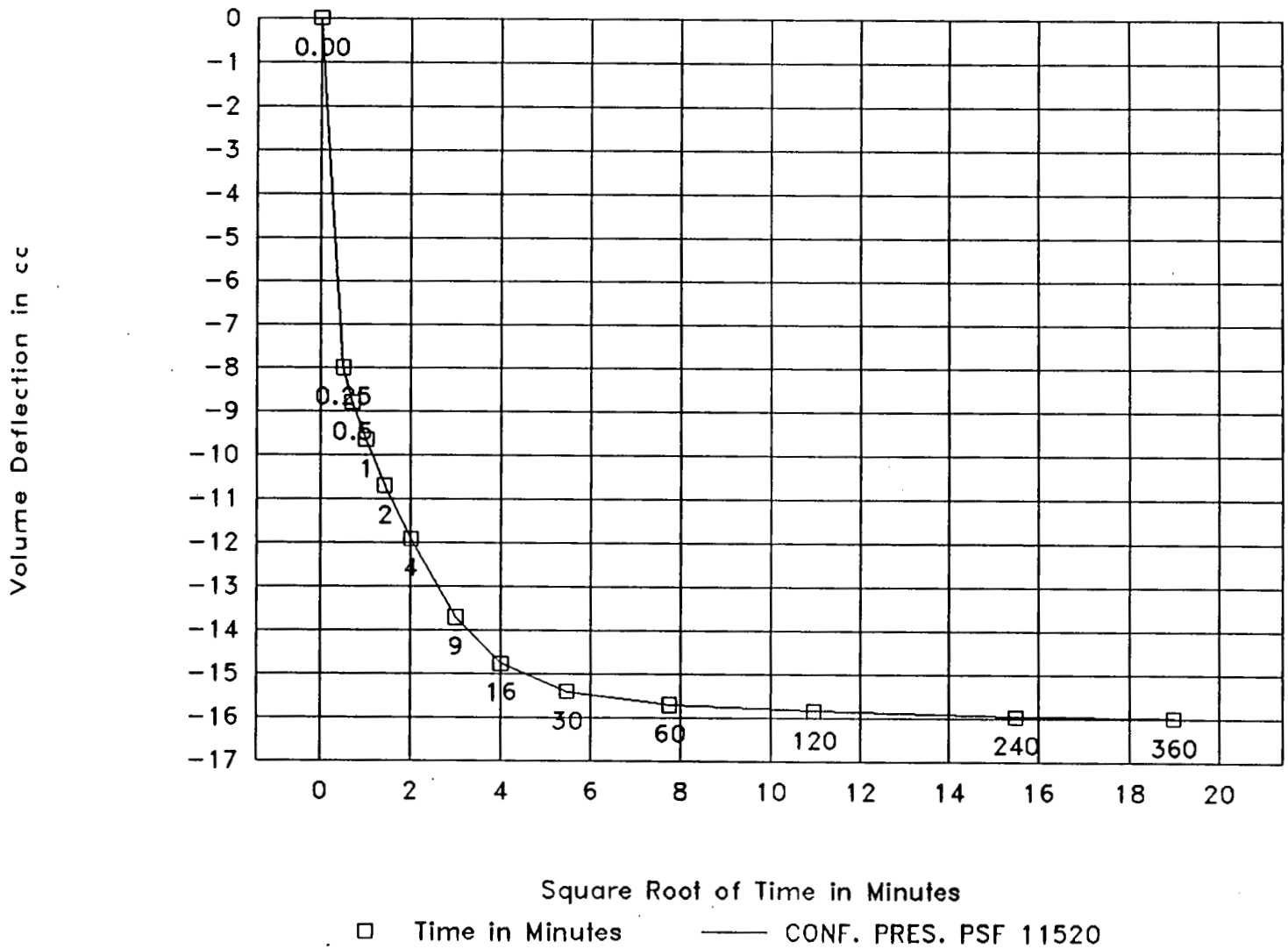
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.348	0	47.5	0	11520	11520	1.00
145.0	4802	0.02	0.34	4.363	4786	61.5	2016	9504	14290	1.50
218.0	7220	0.04	0.68	4.378	7171	74.0	3816	7704	14875	1.93
264.0	8743	0.06	1.01	4.392	8655	82.6	5054	6466	15120	2.34
294.0	9737	0.08	1.35	4.408	9605	87.8	5803	5717	15322	2.68
320.0	10598	0.10	1.69	4.423	10419	90.1	6134	5386	15805	2.93
369.0	12221	0.15	2.54	4.461	11911	91.7	6365	5155	17066	3.31
409.0	13546	0.20	3.38	4.500	13088	90.7	6221	5299	18387	3.47
445.0	14738	0.25	4.23	4.540	14115	88.9	5962	5558	19673	3.54
480.0	15897	0.30	5.07	4.580	15091	87.3	5731	5789	20880	3.61
545.0	18050	0.40	6.76	4.663	16829	83.0	5112	6408	23237	3.63
596.0	19739	0.50	8.45	4.749	18070	79.1	4550	6970	25040	3.59
634.0	20998	0.60	10.15	4.839	18867	76.0	4104	7416	26283	3.54
667.0	22091	0.70	11.84	4.932	19476	73.5	3744	7776	27252	3.50
690.0	22852	0.80	13.53	5.028	19761	71.6	3470	8050	27811	3.45
708.0	23448	0.90	15.22	5.128	19880	70.0	3240	8280	28160	3.40
716.0	23713	1.00	16.91	5.233	19704	68.8	3067	8453	28156	3.33
713.0	23614	1.10	18.60	5.341	19222	67.7	2909	8611	27833	3.23
710.0	23515	1.20	20.29	5.455	18743	67.2	2837	8683	27427	3.16

Data entry by: NAA Date: 7-11-95
Data checked by: MGJ Date: 7-11-95
FileName:SAT0059C

ADVANCED TERRA TESTING, INC.

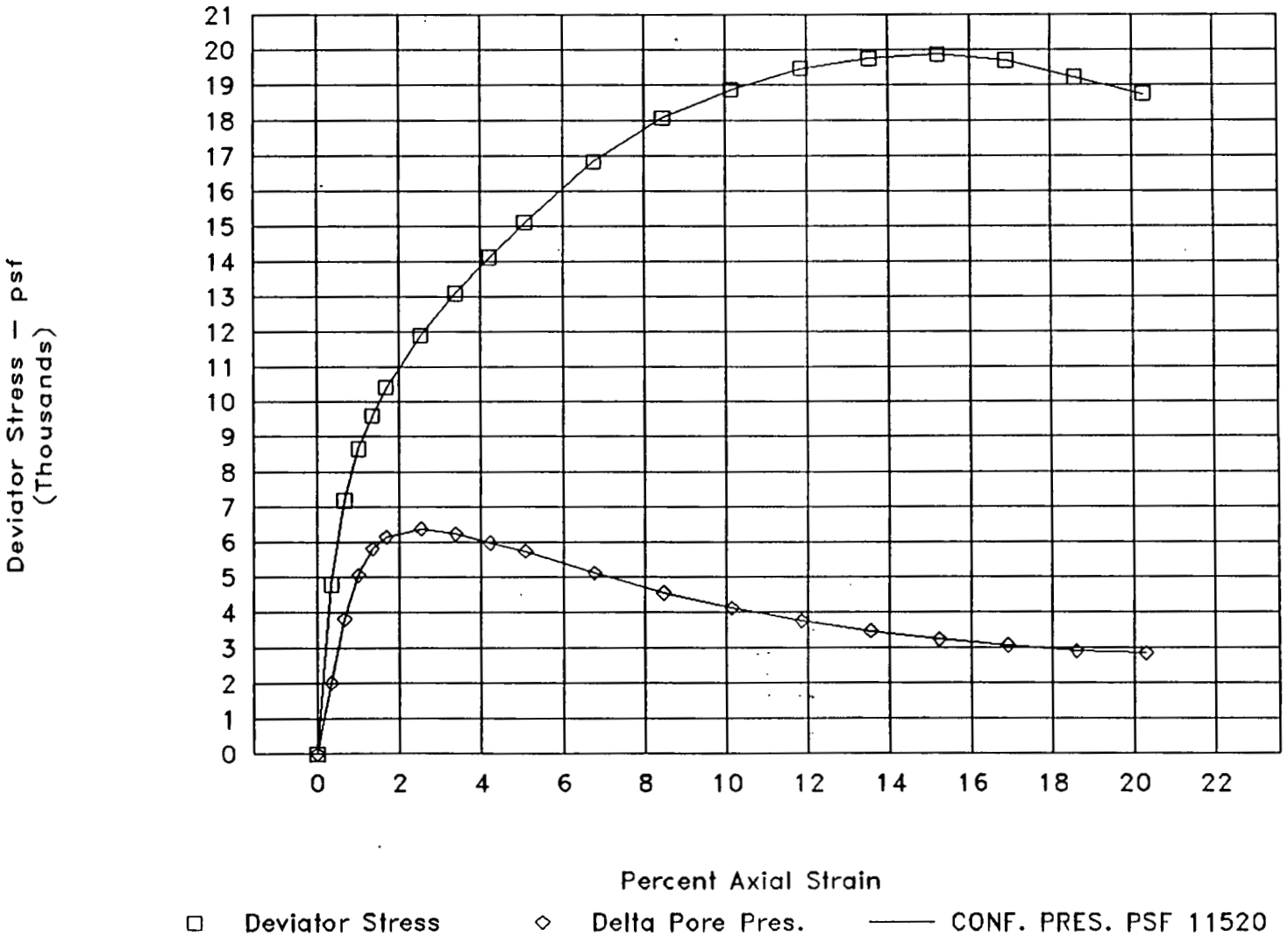
CONSOLIDATION DATA

G2-133, 15.0-17.0', 405059 C



TRIAXIAL TEST - TX/CUpp

G2-133, 15.0-17.0', 405059 C



GEOTECHNICAL INVESTIGATION ON-SITE DISPOSAL FACILITY

SOIL INVESTIGATION DATA REPORT

VOLUME 5

Operable Unit 2
Project Order 140

August 18, 1995

for
PARSONS, Environmental Remedial Action Project
Fernald Environmental Management Project
Fernald, Ohio

by
Science Applications International Corporation
14062 Denver West Parkway, Suite 200
Golden, Colorado 80401
(303) 279-7242

Under Subcontract No. 7663S0018 to PARSONS

GEOTECHNICAL INVESTIGATION ON-SITE DISPOSAL FACILITY

SOIL INVESTIGATION DATA REPORT

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14062 Denver West Parkway, Suite 200
Golden, Colorado 80401
(303) 279-7242

Under Subcontract No. 7663S0018 to PARSONS

TRIAXIAL SHEAR, CONSOLIDATED, UNDRAINED WITH PORE PRESSURE MEASUREMENTS

Staged - 3 Points
TX/CUpp
ASTM D 4767

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 1	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	986.9	994.4
Wt. Wet Soil & Pan	(g)	995.2	1002.6
Wt. Dry Soil & Pan	(g)	896.5	896.5
Wt. Lost Moisture	(g)	98.7	106.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	888.2	888.2
Moisture Content %		11.1	12.0
Wet Density PCF		144.7	146.1
Dry Density PCF		130.2	130.5

Init. Diameter	(in)	2.374
Init. Area	(sq in)	4.426
Init. Height	(in)	5.869
Vol. Bef. Consol.	(cu ft)	0.01503
Vol. After Consol.	(cu ft)	0.01501

Notes & Comments:

SAIC/PARSONS PO140
G2-12. # 404812 @ 10-12
STAGED TRIAXIAL

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08121

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 1	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.7	12.8				
50.0	48.0	10.8	11.6	38.1	47.4	9.3	0.93
60.0	58.0	11.9	12.7	48.3	57.6	9.3	0.93
70.0		13.0	13.2	57.7	67.2	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	13.10	0.00
0.25	0.5	14.40	-1.30
0.5	0.7	14.65	-1.55
1	1.0	15.00	-1.90
2	1.4	15.40	-2.30
4	2.0	15.80	-2.70
9	3.0	16.50	-3.40
16	4.0	17.00	-3.90
30	5.5	17.80	-4.70
60	7.7	18.60	-5.50
120	11.0	19.20	-6.10
240	15.5	19.50	-6.40
360	19.0	19.40	-6.30

Initial Height	(in)	5.869	Init. Vol.	(CC)	425.79
Height Change	(in)	0.010	Vol. Change	(CC)	15.90
Ht. After Cons.	(in)	5.859	Cell Exp.	(CC)	15.17
Initial Area	(sq in)	4.426	Net Change	(CC)	0.73
Area After Cons.	(sq in)	4.426	Cons. Vol.	(CC)	425.05

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08121 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 1	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

Init. Ht.	(in)	5.869	Init. Area	(sq in)	4.426
Consol. Ht.	(in)	5.859	Consol. Area	(sq in)	4.426
Back Pres.	PSI	58.3	Strain Rate	(in/min)	0.003

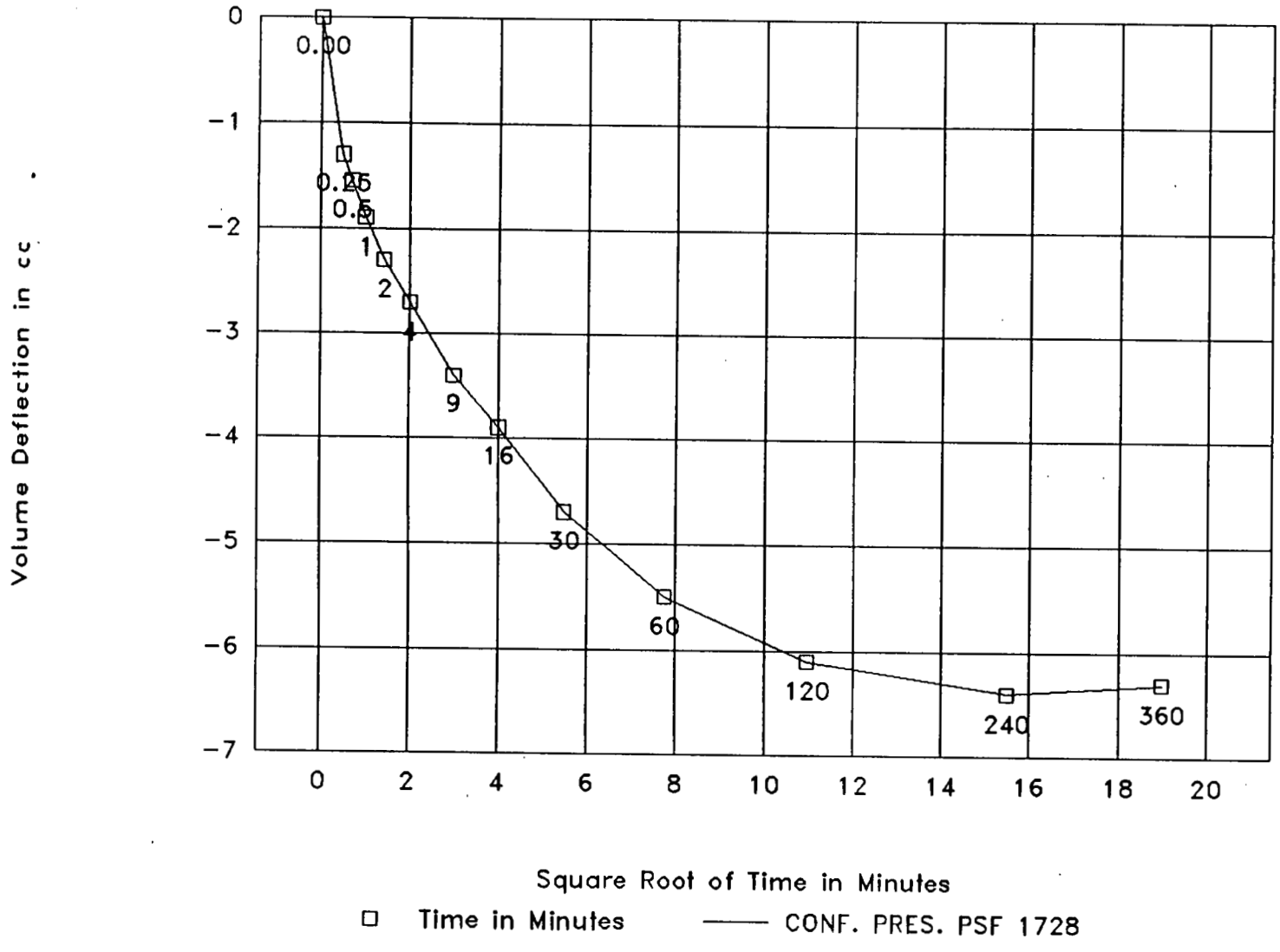
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.426	0	58.3	0	1728	1728	1.00
46.0	1497	0.01	0.17	4.434	1494	60.1	259	1469	2963	2.02
65.0	2115	0.02	0.34	4.441	2107	61.5	461	1267	3375	2.66
79.0	2570	0.03	0.51	4.449	2557	62.1	547	1181	3738	3.17
90.0	2928	0.04	0.68	4.457	2908	62.6	619	1109	4017	3.62
99.0	3221	0.05	0.85	4.464	3193	62.7	634	1094	4288	3.92
106.0	3448	0.06	1.02	4.472	3413	62.6	619	1109	4522	4.08
113.5	3692	0.07	1.19	4.480	3648	62.4	590	1138	4786	4.21
119.5	3888	0.08	1.37	4.488	3835	62.2	562	1166	5001	4.29
126.0	4099	0.09	1.54	4.495	4036	61.9	518	1210	5246	4.34
132.5	4311	0.10	1.71	4.503	4237	61.6	475	1253	5490	4.38
138.5	4506	0.11	1.88	4.511	4421	61.3	432	1296	5717	4.41
143.0	4652	0.12	2.05	4.519	4557	60.9	374	1354	5910	4.37
148.0	4815	0.13	2.22	4.527	4708	60.6	331	1397	6105	4.37
152.0	4945	0.14	2.39	4.535	4827	60.2	274	1454	6281	4.32
156.5	5091	0.15	2.56	4.543	4961	59.9	230	1498	6459	4.31
166.5	5417	0.18	2.99	4.563	5255	58.9	86	1642	6897	4.20
176.0	5726	0.20	3.41	4.583	5530	57.8	-72	1800	7330	4.07

Data entry by: NAA Date: 6-26-95
Data checked by:_____Date:_____
FileName:SAT08121

ADVANCED TERRA TESTING, INC.

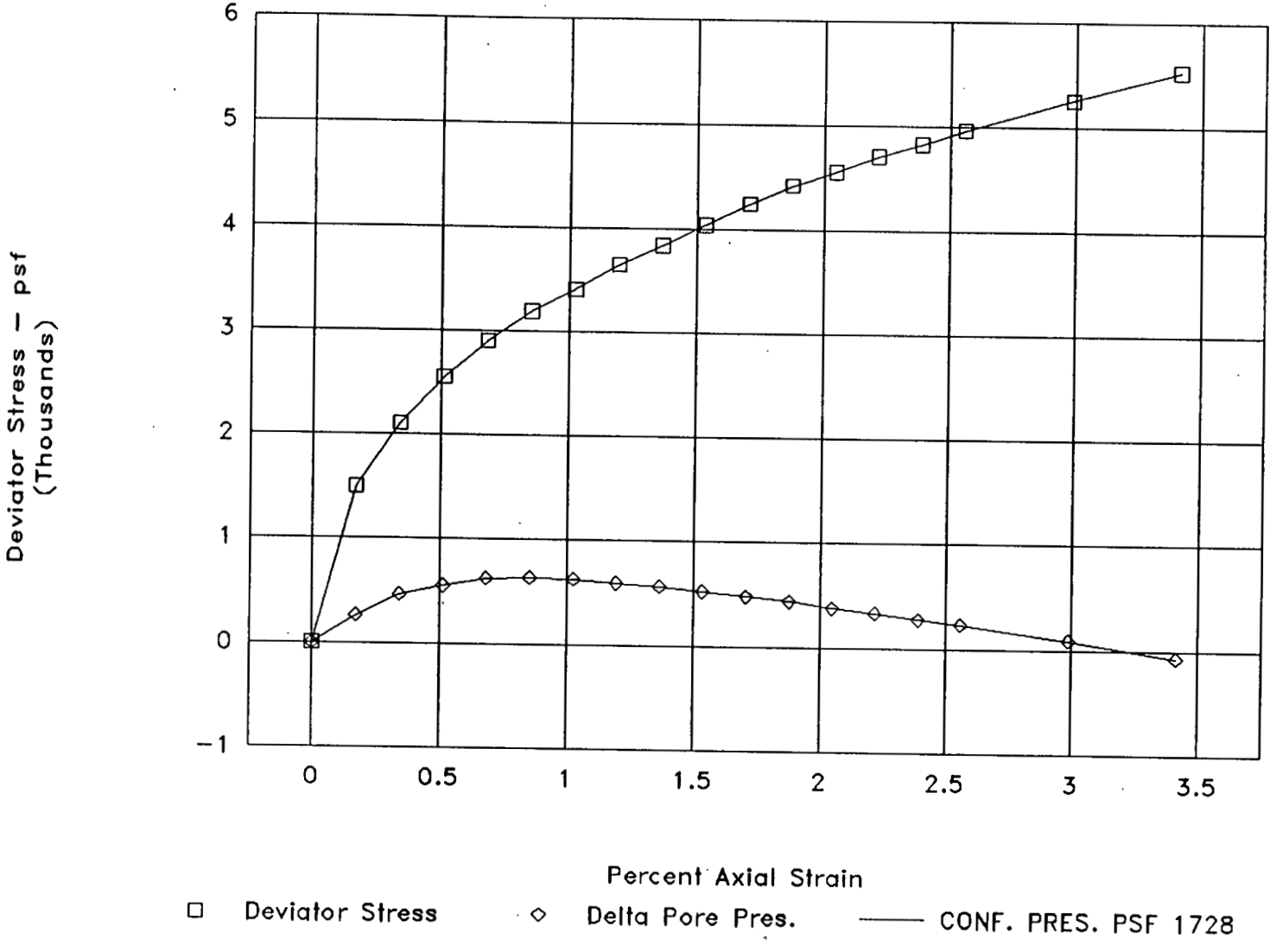
CONSOLIDATION DATA

G2-121, 10.0-11.7', 404812 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-121, 10.0-11.7', 404812 Stage 1



1041

001140

474

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 2	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	986.9	994.4
Wt. Wet Soil & Pan	(g)	995.2	1002.6
Wt. Dry Soil & Pan	(g)	896.5	896.5
Wt. Lost Moisture	(g)	98.7	106.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	888.2	888.2
Moisture Content %		11.1	12.0
Wet Density PCF		145.0	147.6
Dry Density PCF		130.5	131.8

Init. Diameter	(in)	2.416
Init. Area	(sq in)	4.583
Init. Height	(in)	5.659
Vol. Bef. Consol.	(cu ft)	0.01501
Vol. After Consol.	(cu ft)	0.01486

Notes & Comments:

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08122

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 2	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.7	12.8				
50.0	48.0	10.8	11.6	38.1	47.4	9.3	0.93
60.0	58.0	11.9	12.7	48.3	57.6	9.3	0.93
70.0		13.0	13.2	57.7	67.2	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	20.00	0.00
0.25	0.5	21.30	-1.30
0.5	0.7	21.38	-1.38
1	1.0	21.55	-1.55
2	1.4	21.80	-1.80
4	2.0	22.08	-2.07
9	3.0	22.60	-2.60
16	4.0	23.08	-3.07
30	5.5	23.68	-3.68
60	7.7	24.30	-4.30
120	11.0	24.70	-4.70
240	15.5	24.90	-4.90
360	19.0	24.90	-4.90

Initial Height	(in)	5.659	Init. Vol.	(CC)	425.07
Height Change	(in)	0.061	Vol. Change	(CC)	5.70
Ht. After Cons.	(in)	5.598	Cell Exp.	(CC)	1.40
Initial Area	(sq in)	4.583	Net Change	(CC)	4.30
Area After Cons.	(sq in)	4.586	Cons. Vol.	(CC)	420.77

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08122

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 2	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

Init. Ht.	(in)	5.659	Init. Area	(sq in)	4.583
Consol. Ht.	(in)	5.598	Consol. Area	(sq in)	4.586
Back Pres.	PSI	58.3	Strain Rate	(in/min)	0.002

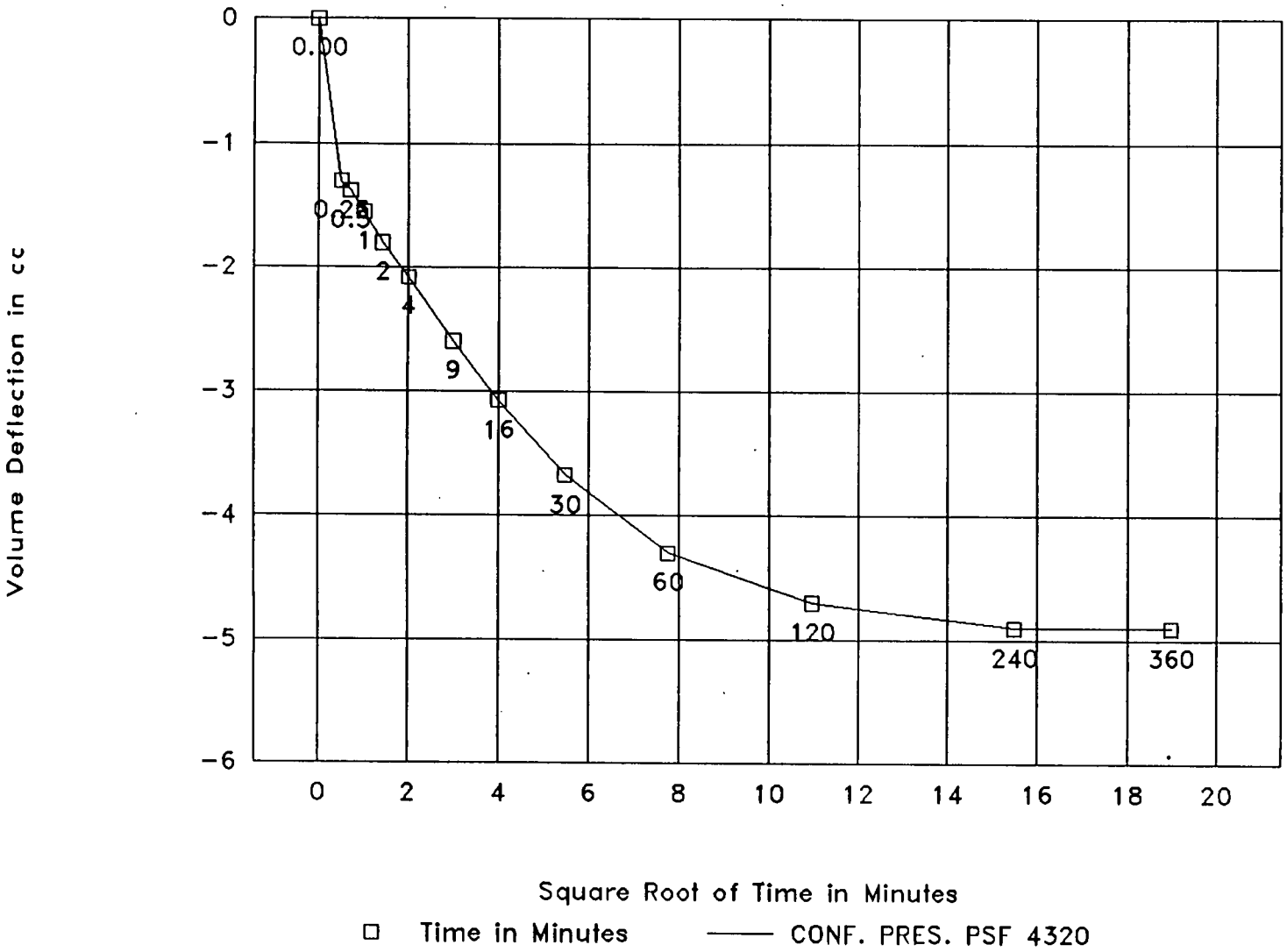
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.586	0	58.3	0	4320	4320	1.00
77.0	2418	0.01	0.18	4.594	2413	63.0	677	3643	6057	1.66
119.0	3737	0.02	0.36	4.602	3723	66.0	1109	3211	6934	2.16
148.0	4647	0.03	0.54	4.611	4622	67.4	1310	3010	7632	2.54
173.0	5432	0.04	0.71	4.619	5393	68.0	1397	2923	8317	2.85
197.0	6186	0.05	0.89	4.627	6131	67.7	1354	2966	9097	3.07
215.0	6751	0.06	1.07	4.636	6679	67.4	1310	3010	9688	3.22
231.0	7253	0.07	1.25	4.644	7163	67.2	1282	3038	10201	3.36
243.0	7630	0.08	1.43	4.652	7521	66.8	1224	3096	10617	3.43
252.0	7913	0.09	1.61	4.661	7786	66.4	1166	3154	10939	3.47
261.0	8195	0.10	1.79	4.669	8049	66.0	1109	3211	11260	3.51
268.0	8415	0.11	1.96	4.678	8250	65.6	1051	3269	11519	3.52
274.0	8604	0.12	2.14	4.686	8419	65.2	994	3326	11746	3.53
279.0	8761	0.13	2.32	4.695	8557	64.7	922	3398	11956	3.52
284.0	8918	0.14	2.50	4.704	8695	64.2	850	3470	12165	3.51
289.0	9075	0.15	2.68	4.712	8831	63.8	792	3528	12359	3.50
301.0	9451	0.18	3.13	4.734	9156	62.6	619	3701	12857	3.47
309.0	9703	0.20	3.57	4.756	9356	61.8	504	3816	13172	3.45

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08122

ADVANCED TERRA TESTING, INC.

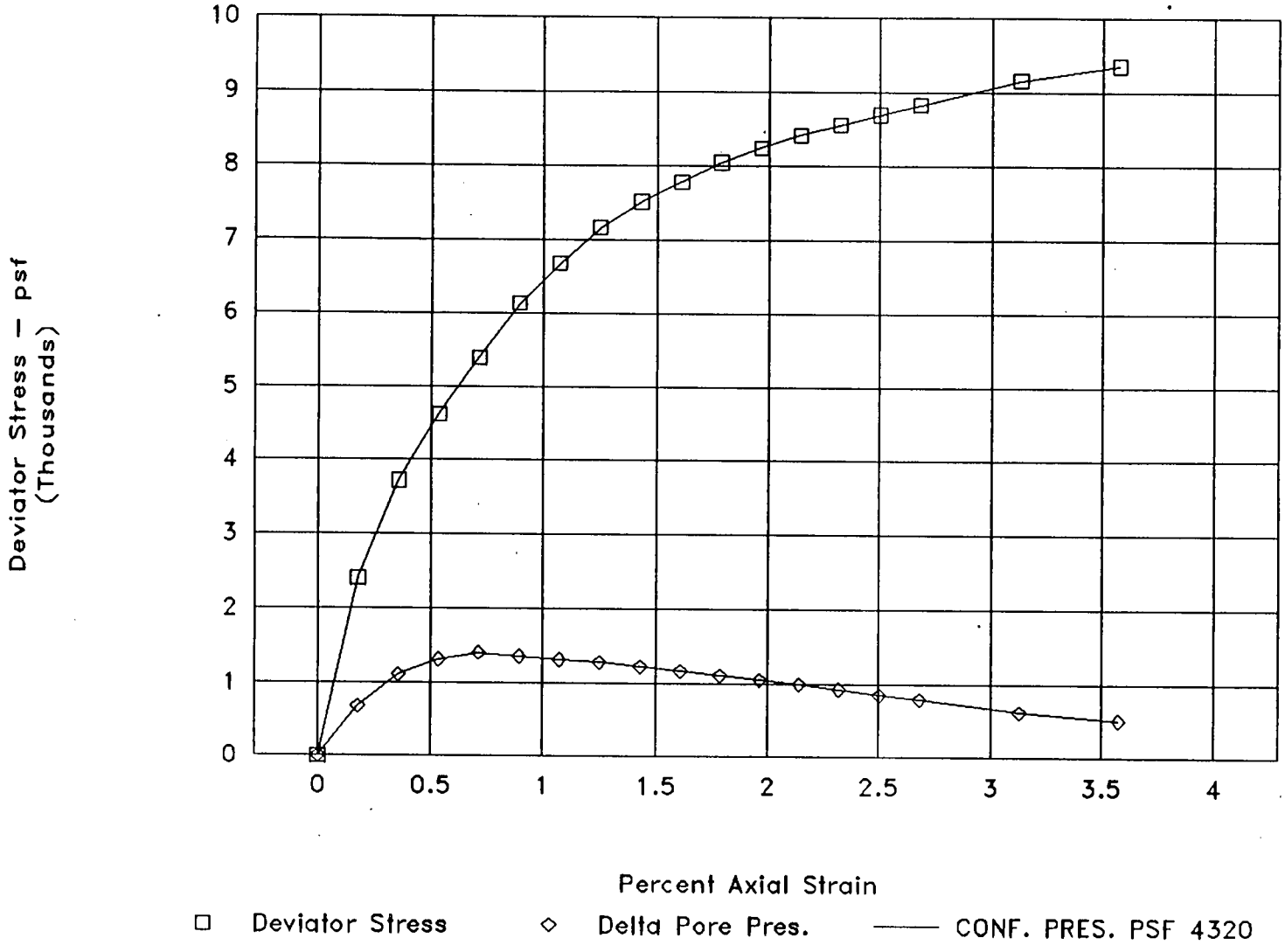
CONSOLIDATION DATA

G2-121, 10.0-11.7', 404812 Stage 2



TRIAXIAL TEST - TX/CUpp

G2-121, 10.0-11.7', 404812 Stage 2



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 3	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	986.9	994.4
Wt. Wet Soil & Pan	(g)	995.2	1002.6
Wt. Dry Soil & Pan	(g)	896.5	896.5
Wt. Lost Moisture	(g)	98.7	106.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	888.2	888.2
Moisture Content %		11.1	12.0
Wet Density PCF		146.4	149.1
Dry Density PCF		131.8	133.2

Init. Diameter	(in)	2.461
Init. Area	(sq in)	4.756
Init. Height	(in)	5.398
Vol. Bef. Consol.	(cu ft)	0.01486
Vol. After Consol.	(cu ft)	0.01470

Notes & Comments:

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08123

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 3	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

Init. Ht. (in)	5.398	Init. Area (sq in)	4.756
Consol. Ht. (in)	5.278	Consol. Area (sq in)	4.812
Back Pres. PSI	58.4	Strain Rate (in/min)	0.002

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.812	0	58.4	0	10080	10080	1.00
319.0	9545	0.05	0.95	4.858	9455	78.9	2952	7128	16583	2.33
388.0	11610	0.07	1.33	4.877	11456	80.9	3240	6840	18296	2.67
435.0	13017	0.09	1.71	4.896	12795	81.3	3298	6782	19577	2.89
463.0	13854	0.11	2.08	4.915	13566	81.1	3269	6811	20377	2.99
482.0	14423	0.13	2.46	4.934	14068	80.6	3197	6883	20951	3.04
499.0	14932	0.15	2.84	4.953	14507	79.8	3082	6998	21506	3.07
532.0	15919	0.20	3.79	5.002	15316	77.8	2794	7286	22602	3.10
557.0	16667	0.25	4.74	5.052	15878	76.1	2549	7531	23409	3.11
578.0	17295	0.30	5.68	5.102	16312	74.4	2304	7776	24088	3.10
610.0	18253	0.40	7.58	5.207	16870	71.4	1872	8208	25078	3.06
637.0	19061	0.50	9.47	5.316	17255	69.1	1541	8539	25794	3.02
652.0	19510	0.60	11.37	5.430	17292	67.1	1253	8827	26119	2.96
667.0	19959	0.70	13.26	5.548	17312	65.4	1008	9072	26384	2.91
671.0	20078	0.80	15.16	5.672	17035	63.9	792	9288	26323	2.83
672.0	20108	0.90	17.05	5.802	16679	62.8	634	9446	26126	2.77
671.0	20078	1.00	18.95	5.937	16274	61.9	504	9576	25850	2.70
669.0	20018	1.10	20.84	6.079	15846	61.2	403	9677	25523	2.64
667.0	19959	1.20	22.74	6.228	15421	60.7	331	9749	25170	2.58

Data entry by: NAA Date: 6-26-95
Data checked by:_____Date:_____
FileName:SAT08123

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 3	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.7	12.8				
50.0	48.0	10.8	11.6	38.1	47.4	9.3	0.93
60.0	58.0	11.9	12.7	48.3	57.6	9.3	0.93
70.0		13.0	13.2	57.7	67.2	9.5	0.95

CONSOLIDATION DATA

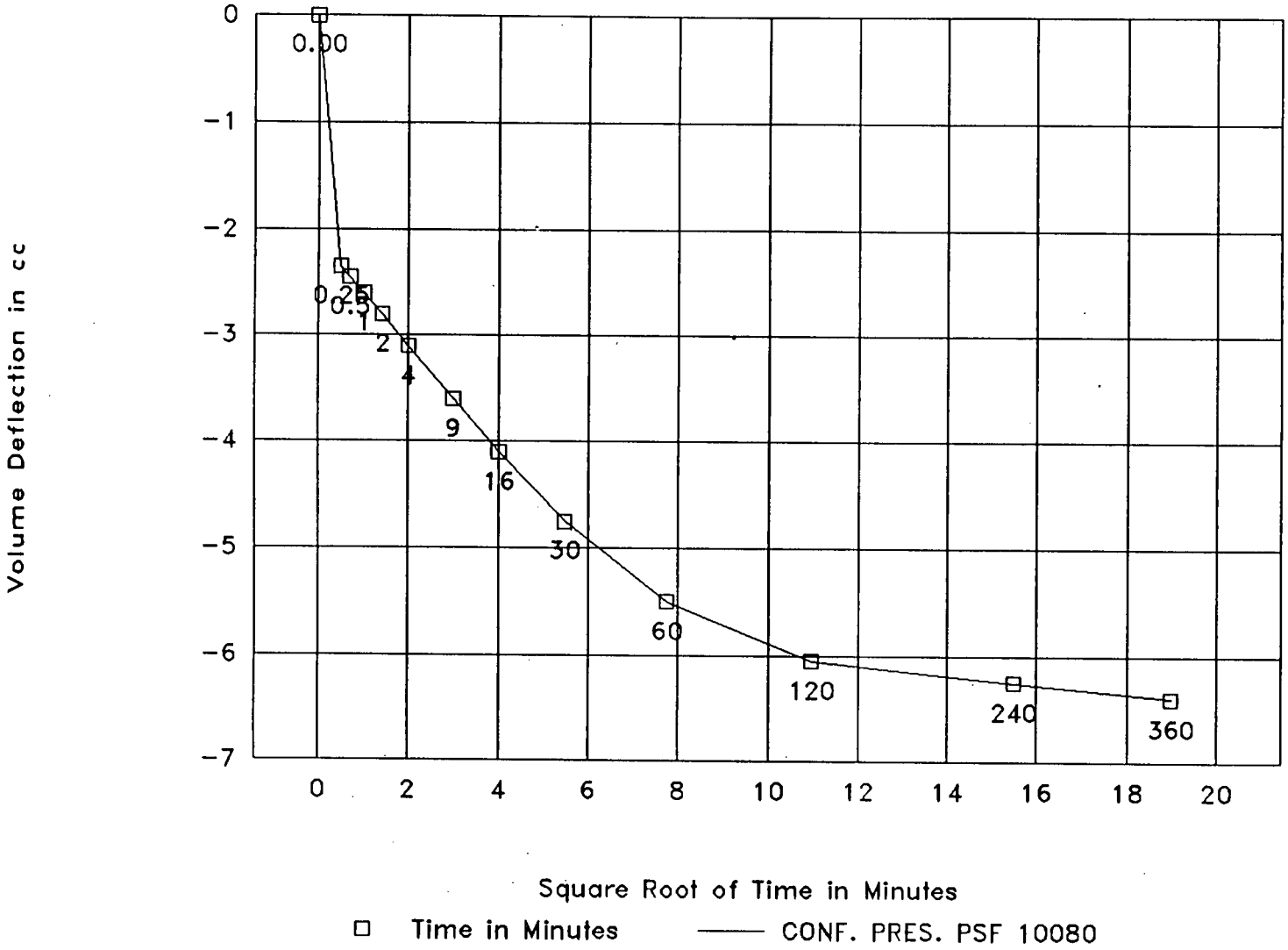
Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	27.60	0.00
0.25	0.5	29.95	-2.35
0.5	0.7	30.05	-2.45
1	1.0	30.20	-2.60
2	1.4	30.40	-2.80
4	2.0	30.70	-3.10
9	3.0	31.20	-3.60
16	4.0	31.70	-4.10
30	5.5	32.35	-4.75
60	7.7	33.10	-5.50
120	11.0	33.65	-6.05
240	15.5	33.85	-6.25
360	19.0	34.00	-6.40

Initial Height	(in)	5.398	Init. Vol.	(CC)	420.78
Height Change	(in)	0.120	Vol. Change	(CC)	7.60
Ht. After Cons.	(in)	5.278	Cell Exp.	(CC)	3.12
Initial Area	(sq in)	4.756	Net Change	(CC)	4.48
Area After Cons.	(sq in)	4.812	Cons. Vol.	(CC)	416.30

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08123 ADVANCED TERRA TESTING, INC.

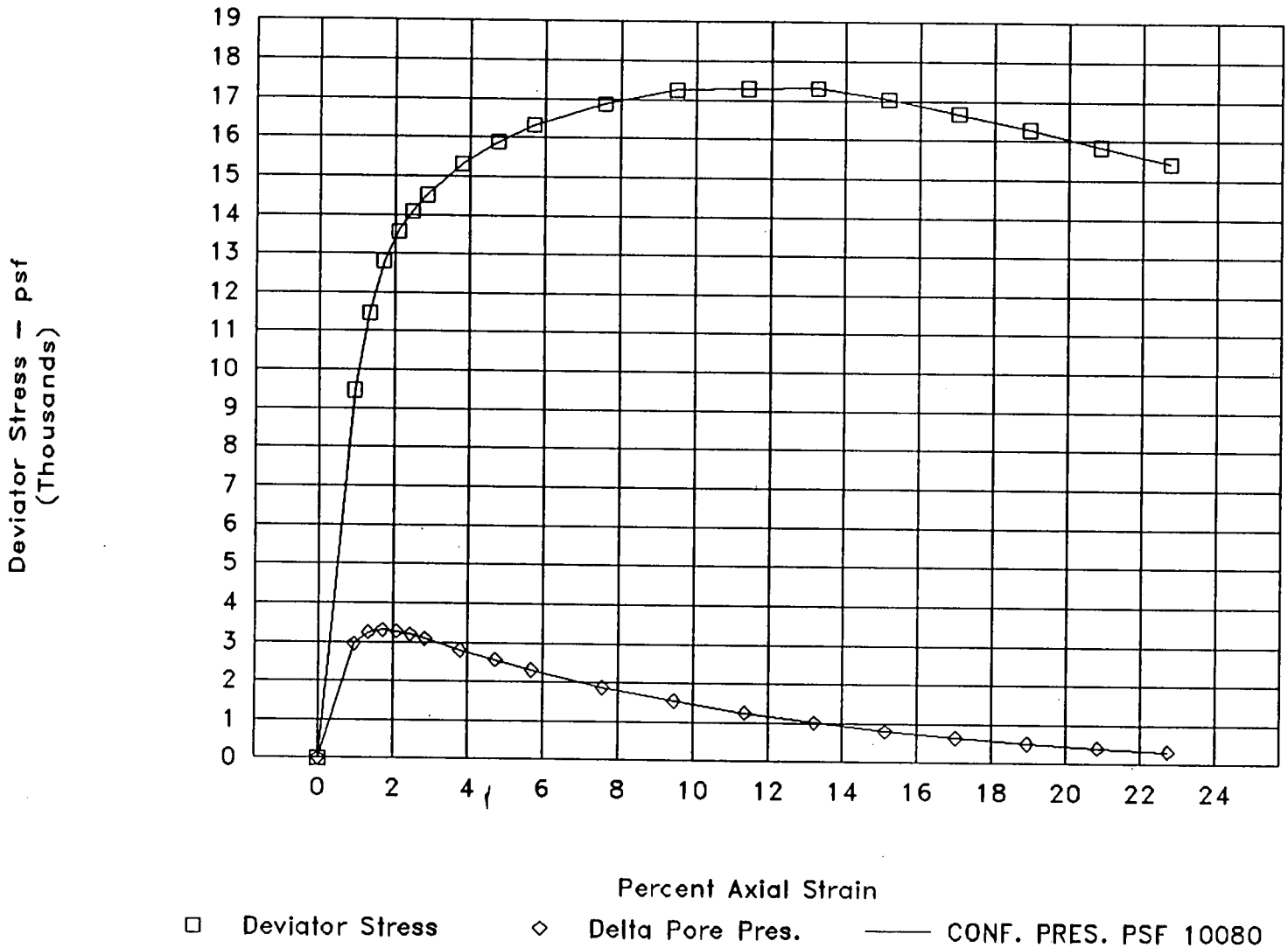
CONSOLIDATION DATA

G2-121, 10.0-11.7', 404812 Stage 3



TRIAXIAL TEST - TX/CUpp

G2-121, 10.0-11.7', 404812 Stage 3



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1008		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	968.3	967.9
Wt. Wet Soil & Pan	(g)	976.6	976.2
Wt. Dry Soil & Pan	(g)	847.1	847.1
Wt. Lost Moisture	(g)	129.5	129.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	838.8	838.8
Moisture Content %		15.4	15.4
Wet Density PCF		138.0	139.9
Dry Density PCF		119.5	121.2

Init. Diameter	(in)	2.403
Init. Area	(sq in)	4.535
Init. Height	(in)	5.894
Vol. Bef. Consol.	(cu ft)	0.01547
Vol. After Consol.	(cu ft)	0.01526

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 7-4-95
FileName:SAT021S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1008		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.0	10.5				
50.0	48.0	8.9	9.7	37.7	46.9	9.2	0.92
60.0		10.8	11.3	47.8	57.3	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	11.30	0.00
0.25	0.5	11.70	-0.40
0.5	0.7	11.80	-0.50
1	1.0	11.95	-0.65
2	1.4	12.10	-0.80
4	2.0	12.30	-1.00
9	3.0	12.80	-1.50
16	4.0	13.05	-1.75
30	5.5	13.35	-2.05
60	7.7	13.70	-2.40
120	11.0	13.80	-2.50
240	15.5	13.95	-2.65
360	19.0	14.10	-2.80

Initial Height	(in)	5.894	Init. Vol.	(CC)	438.11
Height Change	(in)	0.012	Vol. Change	(CC)	12.50
Ht. After Cons.	(in)	5.882	Cell Exp.	(CC)	6.45
Initial Area	(sq in)	4.535	Net Change	(CC)	6.05
Area After Cons.	(sq in)	4.482	Cons. Vol.	(CC)	432.07

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 7-4-95
FileName:SAT021S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1008		

Init. Ht. (in)	5.894	Init. Area (sq in)	4.535
Consol. Ht. (in)	5.882	Consol. Area (sq in)	4.482
Back Pres. PSI	47.5	Strain Rate (in/min)	0.002

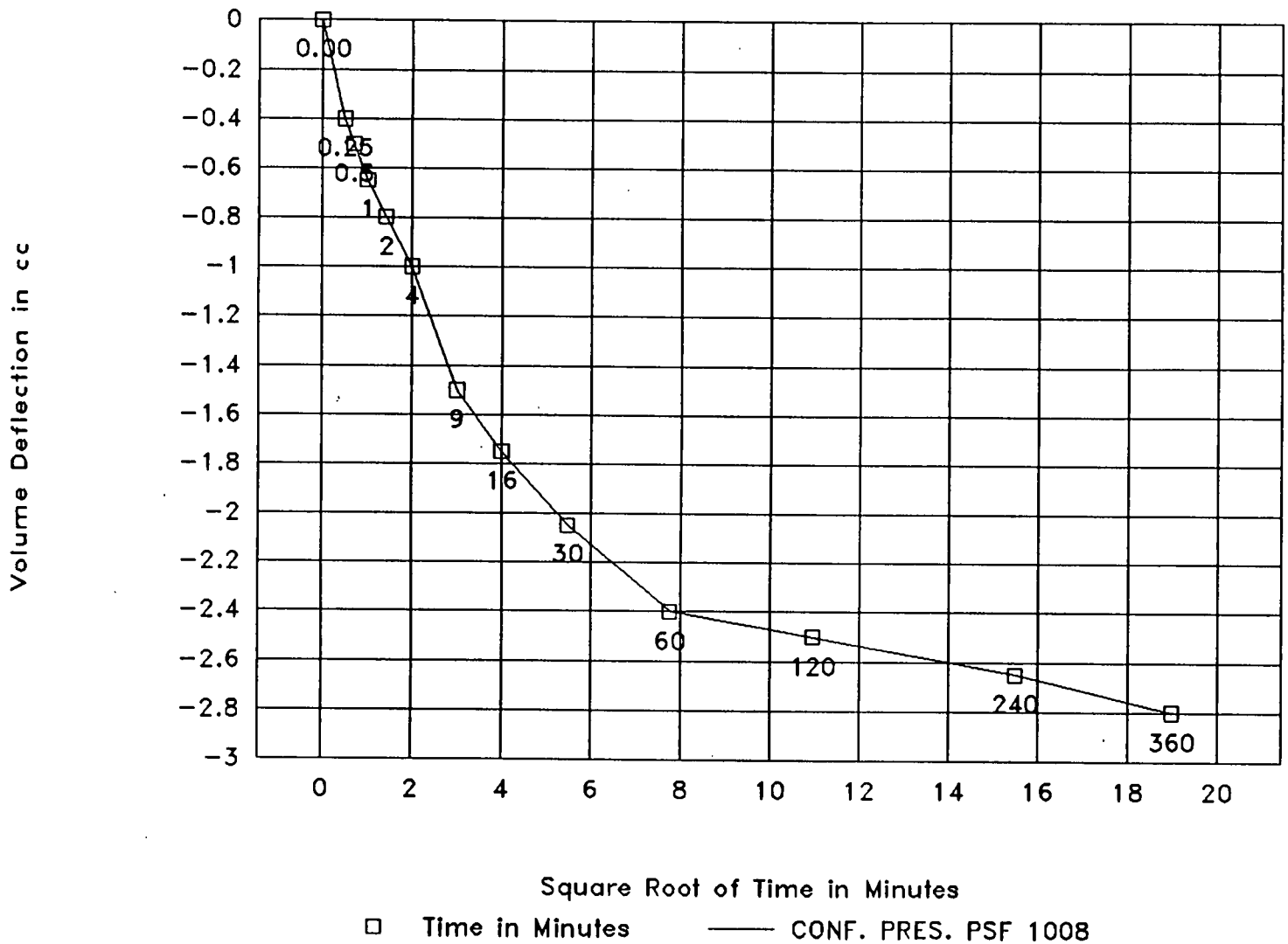
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.482	0	47.5	0	1008	1008	1.00
34.0	1092	0.01	0.17	4.489	1091	48.6	158	850	1940	2.28
39.0	1253	0.02	0.34	4.497	1249	49.0	216	792	2041	2.58
43.0	1382	0.03	0.51	4.505	1375	48.8	187	821	2195	2.67
47.5	1526	0.04	0.68	4.512	1516	48.9	202	806	2322	2.88
51.0	1639	0.05	0.85	4.520	1625	48.8	187	821	2446	2.98
55.0	1767	0.06	1.02	4.528	1749	48.8	187	821	2570	3.13
60.0	1928	0.07	1.19	4.536	1905	48.8	187	821	2726	3.32
63.0	2024	0.08	1.36	4.544	1997	48.6	158	850	2846	3.35
67.5	2169	0.09	1.53	4.551	2136	48.2	101	907	3043	3.35
71.5	2297	0.10	1.70	4.559	2258	48.1	86	922	3180	3.45
75.5	2426	0.11	1.87	4.567	2380	48.1	86	922	3302	3.58
79.0	2538	0.12	2.04	4.575	2487	48.1	86	922	3408	3.70

Data entry by: CAL Date: 6-20-95
Data checked by: CW Date: 7-4-95
FileName:SAT021S1

ADVANCED TERRA TESTING, INC.

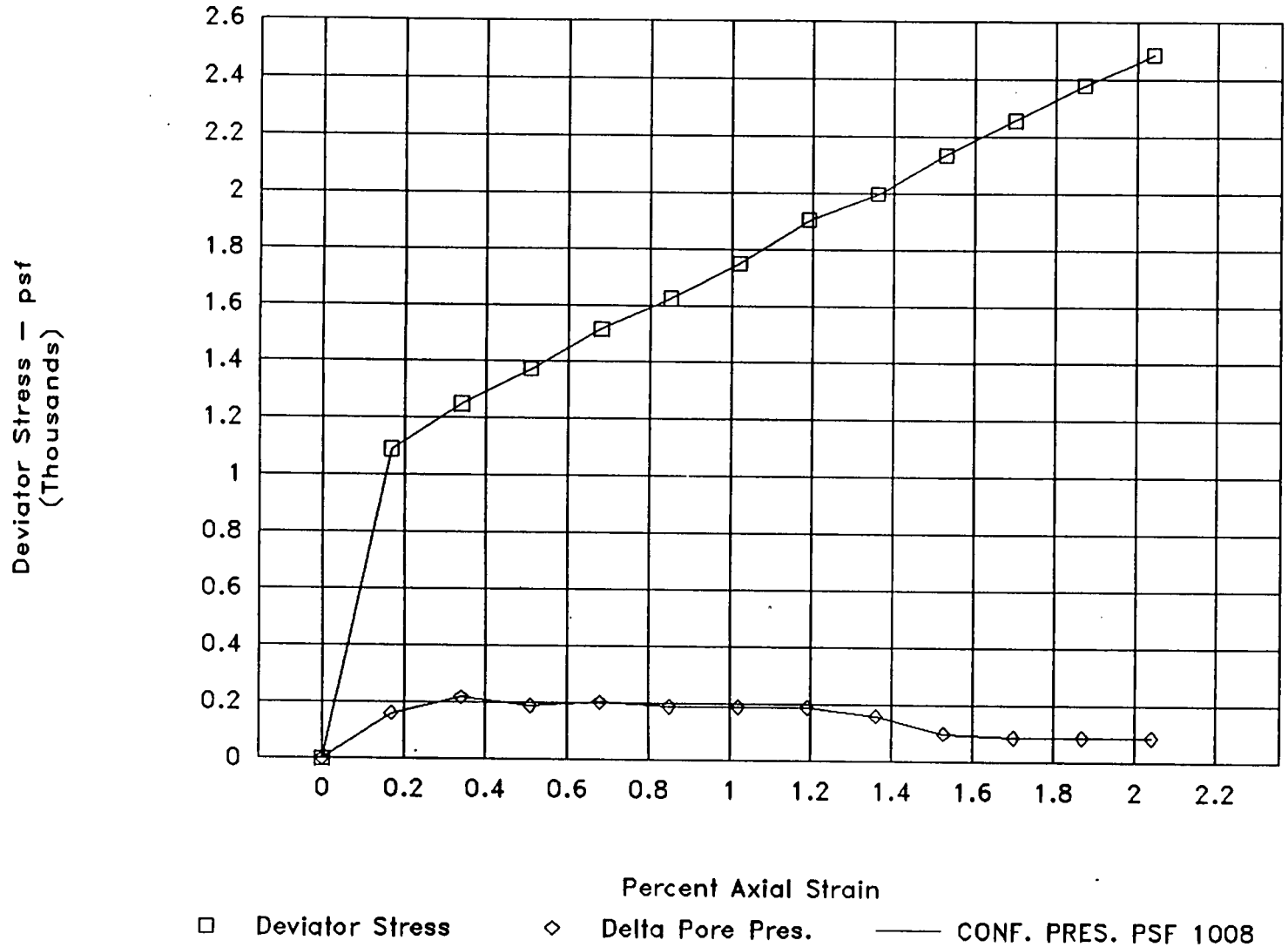
CONSOLIDATION DATA

G2-122, 5-7', 404821 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-122, 5-7', 404821 Stage 1



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	968.3	967.9
Wt. Wet Soil & Pan	(g)	976.6	976.2
Wt. Dry Soil & Pan	(g)	847.1	847.1
Wt. Lost Moisture	(g)	129.5	129.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	838.8	838.8
Moisture Content %		15.4	15.4
Wet Density PCF		139.9	142.3
Dry Density PCF		121.2	123.4

Init. Diameter	(in)	2.414
Init. Area	(sq in)	4.577
Init. Height	(in)	5.762
Vol. Bef. Consol.	(cu ft)	0.01526
Vol. After Consol.	(cu ft)	0.01499

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: G Date: 7-7-95
FileName:SAT021S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	15.60	0.00
0.25	0.5	17.80	-2.20
0.5	0.7	18.13	-2.53
1	1.0	18.55	-2.95
2	1.4	19.10	-3.50
4	2.0	19.50	-3.90
9	3.0	21.03	-5.42
16	4.0	22.00	-6.40
30	5.5	23.10	-7.50
60	7.7	23.85	-8.25
120	11.0	24.20	-8.60
240	15.5	24.38	-8.78
360	19.0	24.40	-8.80

Initial Height	(in)	5.762	Init. Vol.	(CC)	432.23
Height Change	(in)	0.020	Vol. Change	(CC)	9.80
Ht. After Cons.	(in)	5.742	Cell Exp.	(CC)	2.14
Initial Area	(sq in)	4.577	Net Change	(CC)	7.66
Area After Cons.	(sq in)	4.511	Cons. Vol.	(CC)	424.57

Data entry by: CAL Date: 6-20-95
Data checked by: CW Date: 7-4-95
FileName:SAT021S2 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

Init. Ht. (in)	5.762	Init. Area (sq in)	4.577
Consol. Ht. (in)	5.742	Consol. Area (sq in)	4.511
Back Pres. PSI	47.1	Strain Rate (in/min)	0.002

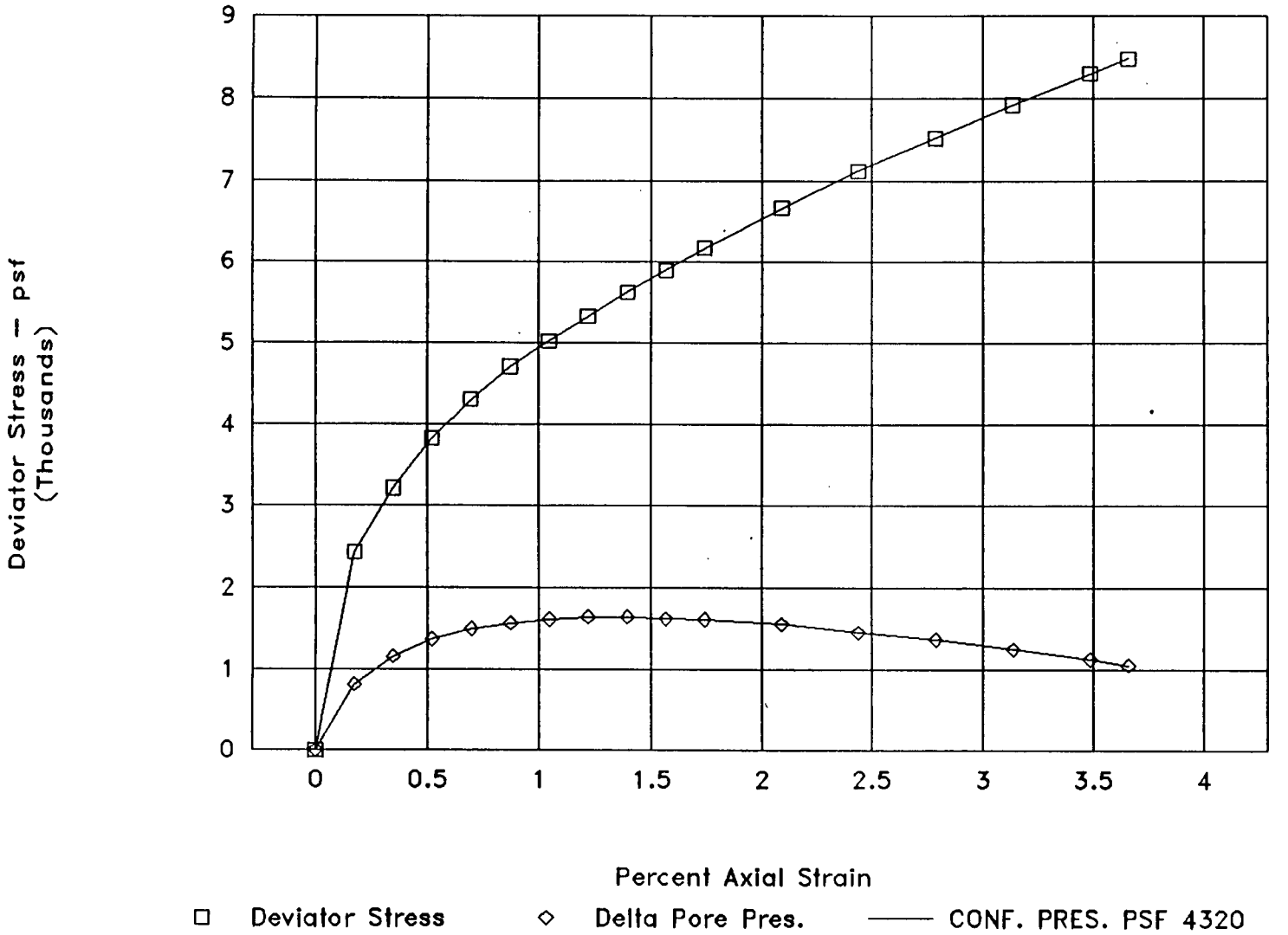
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.511	0	47.1	0	4320	4320	1.00
77.5	2474	0.01	0.17	4.519	2469	52.7	806	3514	5983	1.70
102.5	3272	0.02	0.35	4.527	3260	55.1	1152	3168	6428	2.03
122.0	3894	0.03	0.52	4.535	3874	56.6	1368	2952	6826	2.31
137.5	4389	0.04	0.70	4.543	4358	57.5	1498	2822	7181	2.54
151.0	4820	0.05	0.87	4.551	4778	58.0	1570	2750	7528	2.74
161.5	5155	0.06	1.04	4.559	5101	58.3	1613	2707	7808	2.88
171.5	5474	0.07	1.22	4.567	5407	58.5	1642	2678	8086	3.02
181.5	5793	0.08	1.39	4.575	5713	58.5	1642	2678	8391	3.13
190.5	6081	0.09	1.57	4.583	5985	58.4	1627	2693	8678	3.22
200.0	6384	0.10	1.74	4.591	6273	58.3	1613	2707	8980	3.32
216.5	6911	0.12	2.09	4.608	6766	57.9	1555	2765	9531	3.45
232.0	7405	0.14	2.44	4.624	7225	57.2	1454	2866	10090	3.52
246.0	7852	0.16	2.79	4.641	7633	56.6	1368	2952	10585	3.59
260.0	8299	0.18	3.13	4.657	8039	55.8	1253	3067	11106	3.62
273.5	8730	0.20	3.48	4.674	8426	54.9	1123	3197	11623	3.64
280.0	8937	0.21	3.66	4.683	8611	54.4	1051	3269	11879	3.63

Data entry by: CAL Date: 6-20-95
Data checked by: [illegible] Date: 7-4-95
FileName:SAT021S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL TEST - TX/CUpp

G2-122, 5-7', 404821 Stage 2



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	968.3	967.9
Wt. Wet Soil & Pan (g)	976.6	976.2
Wt. Dry Soil & Pan (g)	847.1	847.1
Wt. Lost Moisture (g)	129.5	129.1
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	838.8	838.8
Moisture Content %	15.4	15.4
Wet Density PCF	142.4	144.3
Dry Density PCF	123.3	125.0

Init. Diameter	(in)	2.442
Init. Area	(sq in)	4.684
Init. Height	(in)	5.532
Vol. Bef. Consol.	(cu ft)	0.01499
Vol. After Consol.	(cu ft)	0.01479

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: Al Date: 7-9-95
FileName:SAT021S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	27.70	0.00
0.25	0.5	31.00	-3.30
0.5	0.7	31.18	-3.48
1	1.0	31.40	-3.70
2	1.4	31.70	-4.00
4	2.0	32.20	-4.50
9	3.0	33.00	-5.30
16	4.0	33.70	-6.00
30	5.5	34.50	-6.80
60	7.7	35.20	-7.50
120	11.0	35.60	-7.90
240	15.5	35.90	-8.20
360	19.0	35.90	-8.20

Initial Height	(in)	5.532	Init. Vol.	(CC)	424.66
Height Change	(in)	0.007	Vol. Change	(CC)	9.55
Ht. After Cons.	(in)	5.525	Cell Exp.	(CC)	3.72
Initial Area	(sq in)	4.684	Net Change	(CC)	5.83
Area After Cons.	(sq in)	4.625	Cons. Vol.	(CC)	418.83

Data entry by: CAL Date: 6-20-95
Data checked by: CAL Date: 7-1-95
FileName:SAT021S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

Init. Ht. (in)	5.532	Init. Area (sq in)	4.684
Consol. Ht. (in)	5.525	Consol. Area (sq in)	4.625
Back Pres. PSI	47.6	Strain Rate (in/min)	0.002

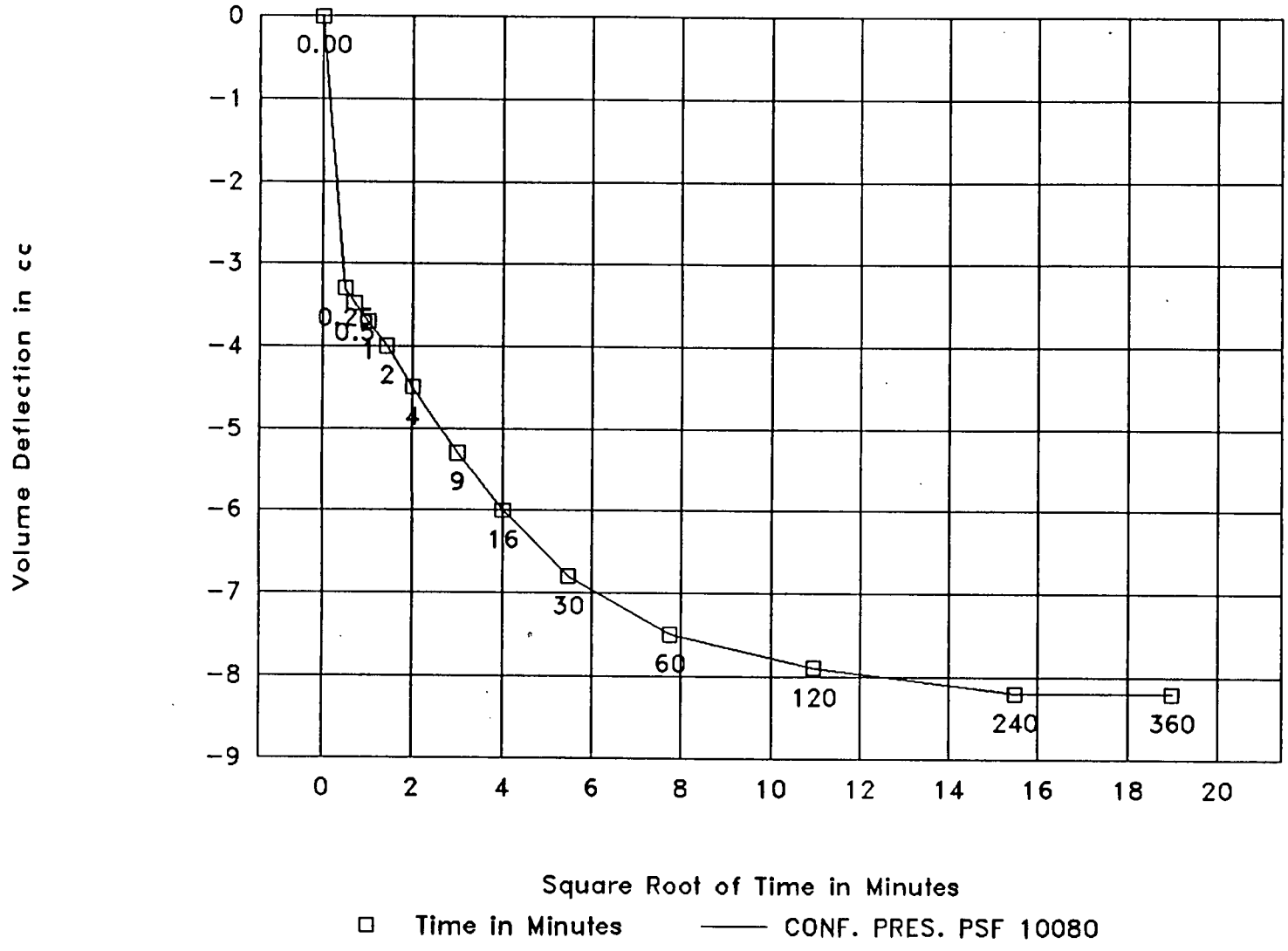
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.625	0	47.6	0	10080	10080	1.00
115.0	3580	0.02	0.36	4.642	3567	64.7	2462	7618	11185	1.47
160.0	4981	0.04	0.72	4.659	4945	68.9	3067	7013	11958	1.71
192.5	5993	0.06	1.09	4.676	5928	71.4	3427	6653	12581	1.89
215.0	6694	0.08	1.45	4.693	6597	71.8	3485	6595	13192	2.00
232.5	7239	0.10	1.81	4.710	7108	71.2	3398	6682	13789	2.06
262.5	8173	0.15	2.71	4.754	7951	68.8	3053	7027	14978	2.13
288.8	8992	0.20	3.62	4.799	8666	65.8	2621	7459	16125	2.16
307.5	9574	0.25	4.52	4.844	9141	62.8	2189	7891	17032	2.16
323.8	10081	0.30	5.43	4.891	9534	60.0	1786	8294	17828	2.15
340.0	10586	0.35	6.33	4.938	9915	57.3	1397	8683	18598	2.14
353.8	11015	0.40	7.24	4.986	10218	54.7	1022	9058	19275	2.13
380.0	11831	0.50	9.05	5.085	10760	50.2	374	9706	20466	2.11
402.5	12531	0.60	10.86	5.189	11171	46.2	-202	10282	21452	2.09
420.0	13076	0.70	12.67	5.296	11420	42.5	-734	10814	22234	2.06
427.5	13310	0.80	14.48	5.408	11383	39.2	-1210	11290	22672	2.01
431.3	13428	0.90	16.29	5.525	11241	37.2	-1498	11578	22818	1.97
430.0	13388	1.00	18.10	5.647	10965	36.1	-1656	11736	22701	1.93
426.3	13272	1.10	19.91	5.775	10630	35.5	-1742	11822	22452	1.90
421.3	13117	1.19	21.54	5.895	10292	35.1	-1800	11880	22172	1.87

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 7-4-95
FileName:SAT021S3

ADVANCED TERRA TESTING, INC.

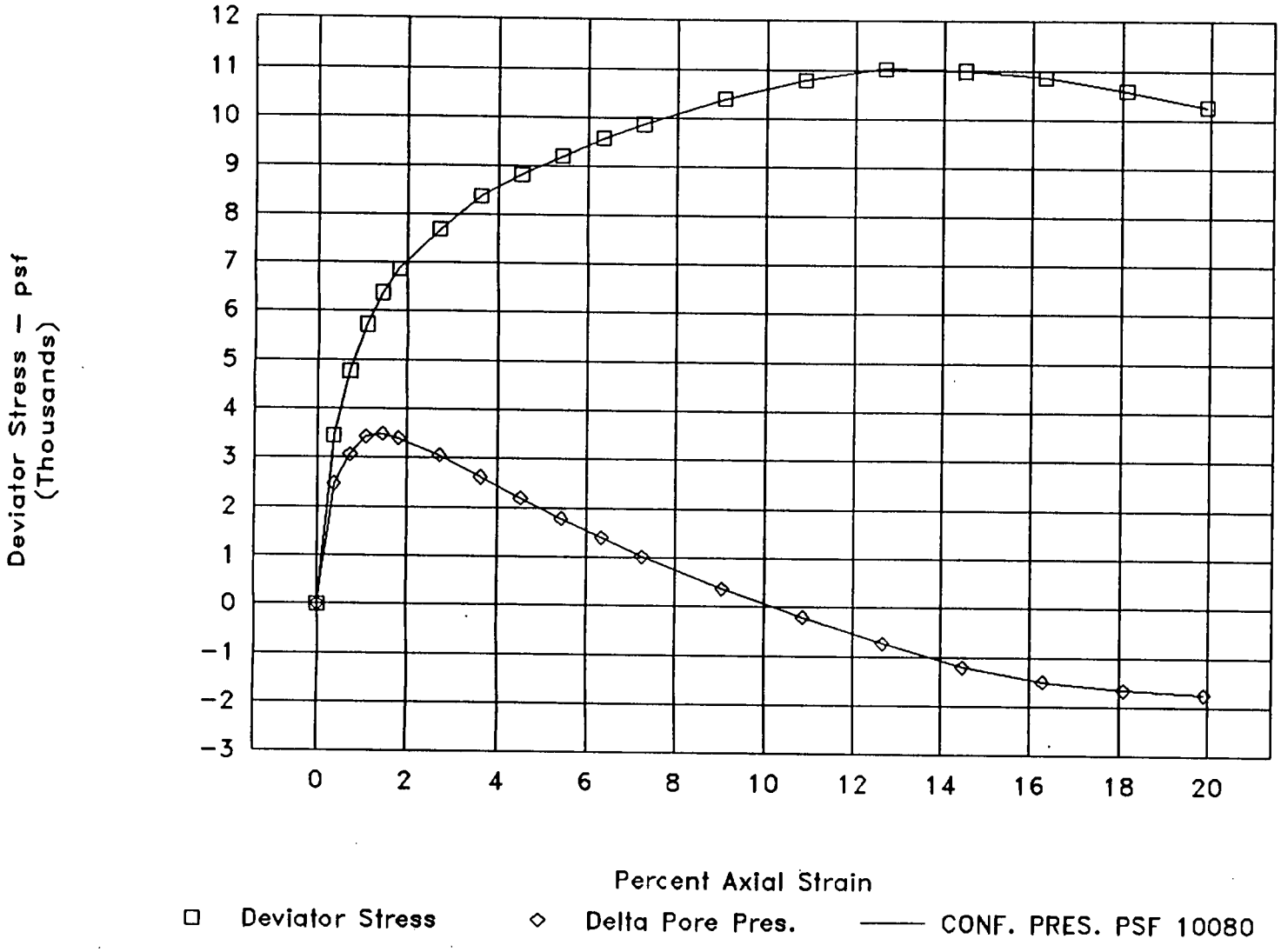
CONSOLIDATION DATA

G2-122, 5-7', 404821 Stage 3



TRIAXIAL TEST - TX/CUpp

G2-122, 5-7', 404821 Stage 3



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	990.6	984.7
Wt. Wet Soil & Pan	(g)	998.9	993.0
Wt. Dry Soil & Pan	(g)	880.5	880.5
Wt. Lost Moisture	(g)	118.4	112.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	872.2	872.2
Moisture Content %		13.6	12.9
Wet Density PCF		139.6	142.0
Dry Density PCF		122.9	125.8

Init. Diameter	(in)	2.431
Init. Area	(sq in)	4.642
Init. Height	(in)	5.825
Vol. Bef. Consol.	(cu ft)	0.01565
Vol. After Consol.	(cu ft)	0.01528

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: [illegible] Date: 7-1-95
FileName:SAT097S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.9	11.2				
50.0	48.0	12.2	13.2	37.9	47.2	9.3	0.93
60.0		15.2	15.3	47.9	57.6	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	15.30	0.00
0.25	0.5	16.60	-1.30
0.5	0.7	16.90	-1.60
1	1.0	17.20	-1.90
2	1.4	17.55	-2.25
4	2.0	17.90	-2.60
9	3.0	18.10	-2.80
16	4.0	18.25	-2.95
30	5.5	18.40	-3.10
60	7.7	18.60	-3.30
120	11.0	18.90	-3.60
240	15.5	19.20	-3.90
360	19.0	19.40	-4.10

Initial Height	(in)	5.825	Init. Vol.	(CC)	443.13
Height Change	(in)	0.004	Vol. Change	(CC)	17.70
Ht. After Cons.	(in)	5.821	Cell Exp.	(CC)	7.46
Initial Area	(sq in)	4.642	Net Change	(CC)	10.24
Area After Cons.	(sq in)	4.537	Cons. Vol.	(CC)	432.90

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 7-4-95
FileName:SAT097S1 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

Init. Ht.	(in)	5.825	Init. Area	(sq in)	4.642
Consol. Ht.	(in)	5.821	Consol. Area	(sq in)	4.537
Back Pres.	PSI	47.1	Strain Rate	(in/min)	0.009

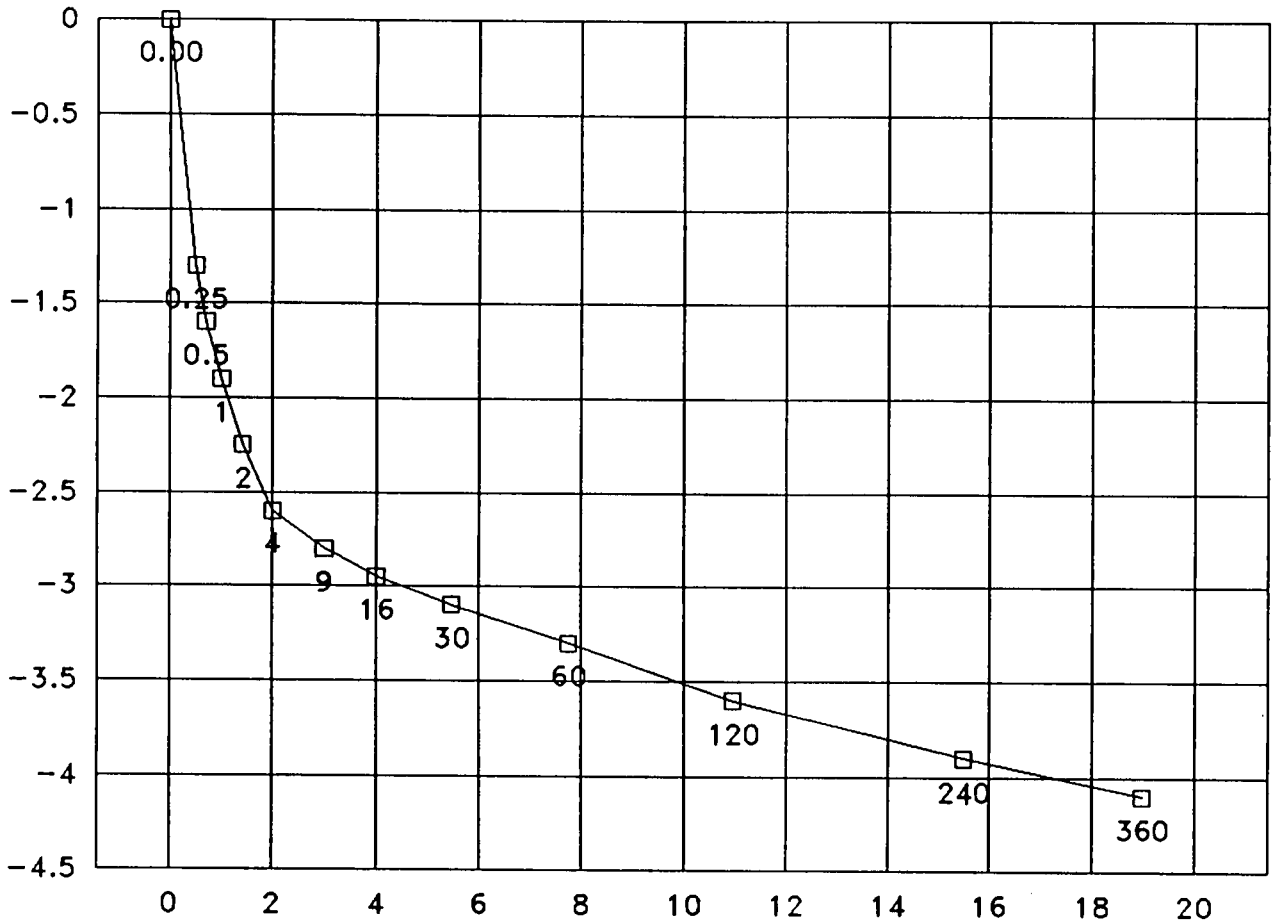
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.537	0	47.1	0	1368	1368	1.00
34.0	1079	0.01	0.17	4.545	1077	49.6	360	1008	2085	2.07
42.0	1333	0.02	0.34	4.553	1328	50.8	533	835	2164	2.59
48.0	1523	0.03	0.52	4.561	1515	51.2	590	778	2293	2.95
53.0	1682	0.04	0.69	4.569	1670	51.4	619	749	2419	3.23
57.0	1809	0.05	0.86	4.577	1793	51.5	634	734	2528	3.44
61.0	1936	0.06	1.03	4.585	1916	51.4	619	749	2665	3.56
69.0	2190	0.08	1.37	4.601	2160	51.2	590	778	2937	3.78
78.0	2475	0.10	1.72	4.617	2433	51.0	562	806	3239	4.02
84.0	2666	0.12	2.06	4.633	2611	50.4	475	893	3504	3.92
91.0	2888	0.14	2.41	4.649	2819	50.3	461	907	3726	4.11
94.0	2983	0.15	2.58	4.657	2906	49.9	403	965	3871	4.01

Data entry by: CAL Date: 6-20-95
Data checked by: [illegible] Date: 7-4-95
FileName:SAT097S1

ADVANCED TERRA TESTING, INC.

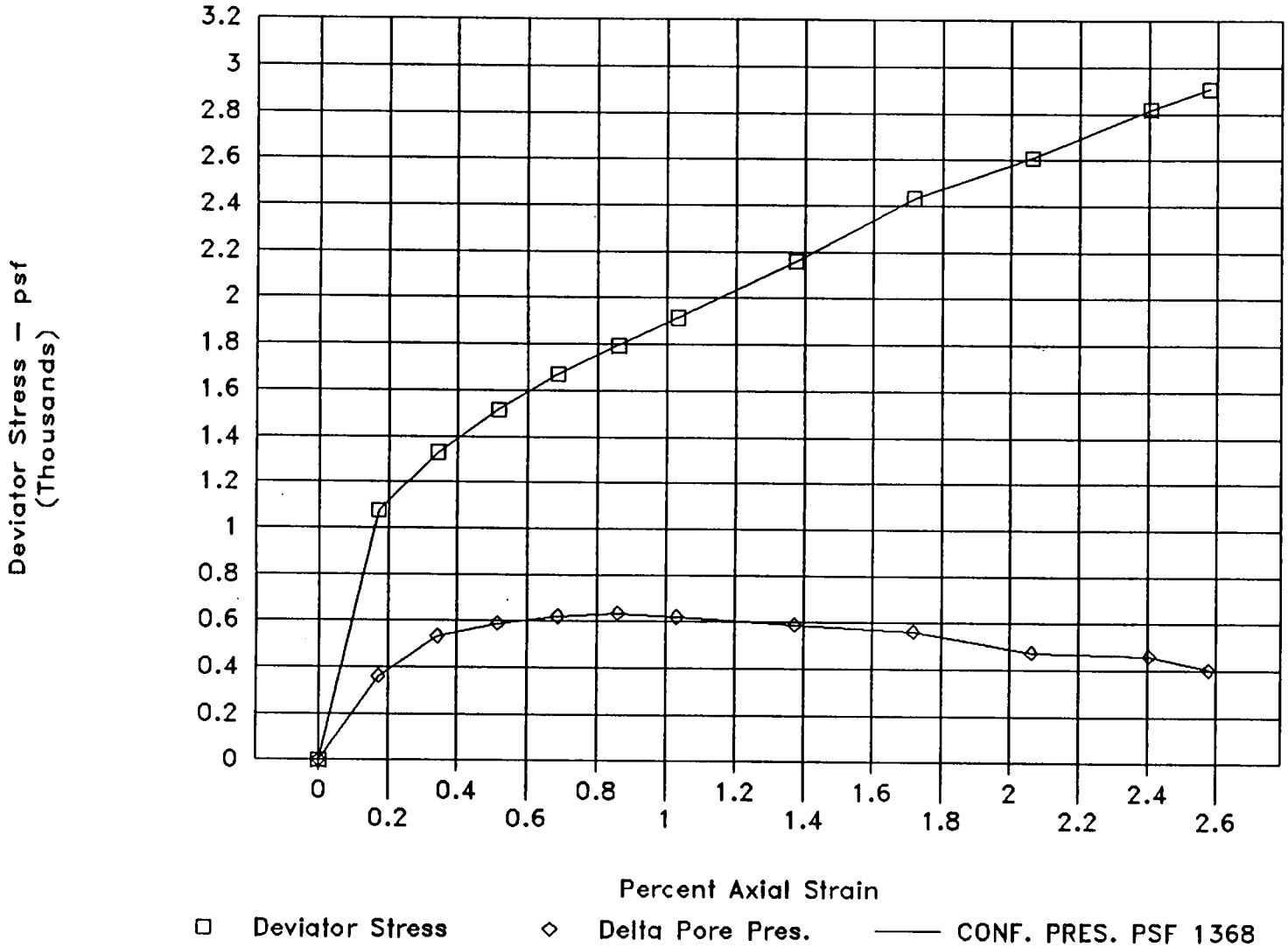
CONSOLIDATION DATA

G2-123, 7.5-9.5', 404797 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-123, 7.5-9.5', 404797 Stage 1



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	990.6	984.7
Wt. Wet Soil & Pan	(g)	998.9	993.0
Wt. Dry Soil & Pan	(g)	880.5	880.5
Wt. Lost Moisture	(g)	118.4	112.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	872.2	872.2
Moisture Content %		13.6	12.9
Wet Density PCF		142.9	144.2
Dry Density PCF		125.8	127.7

Init. Diameter	(in)	2.435
Init. Area	(sq in)	4.657
Init. Height	(in)	5.671
Vol. Bef. Consol.	(cu ft)	0.01528
Vol. After Consol.	(cu ft)	0.01505

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: GJ Date: 7-4-95
FileName:SAT097S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	22.80	0.00
0.25	0.5	25.10	-2.30
0.5	0.7	25.55	-2.75
1	1.0	26.15	-3.35
2	1.4	27.00	-4.20
4	2.0	27.42	-4.62
9	3.0	28.70	-5.90
16	4.0	29.10	-6.30
30	5.5	29.30	-6.50
60	7.7	29.50	-6.70
120	11.0	29.70	-6.90
240	15.5	29.90	-7.10
360	19.0	29.90	-7.10

Initial Height	(in)	5.671	Init. Vol.	(CC)	432.84
Height Change	(in)	0.013	Vol. Change	(CC)	8.45
Ht. After Cons.	(in)	5.658	Cell Exp.	(CC)	1.95
Initial Area	(sq in)	4.657	Net Change	(CC)	6.50
Area After Cons.	(sq in)	4.597	Cons. Vol.	(CC)	426.34

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 7-4-95
FileName:SAT097S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

Init. Ht. (in)	5.671	Init. Area (sq in)	4.657
Consol. Ht. (in)	5.658	Consol. Area (sq in)	4.597
Back Pres. PSI	47.1	Strain Rate (in/min)	0.005

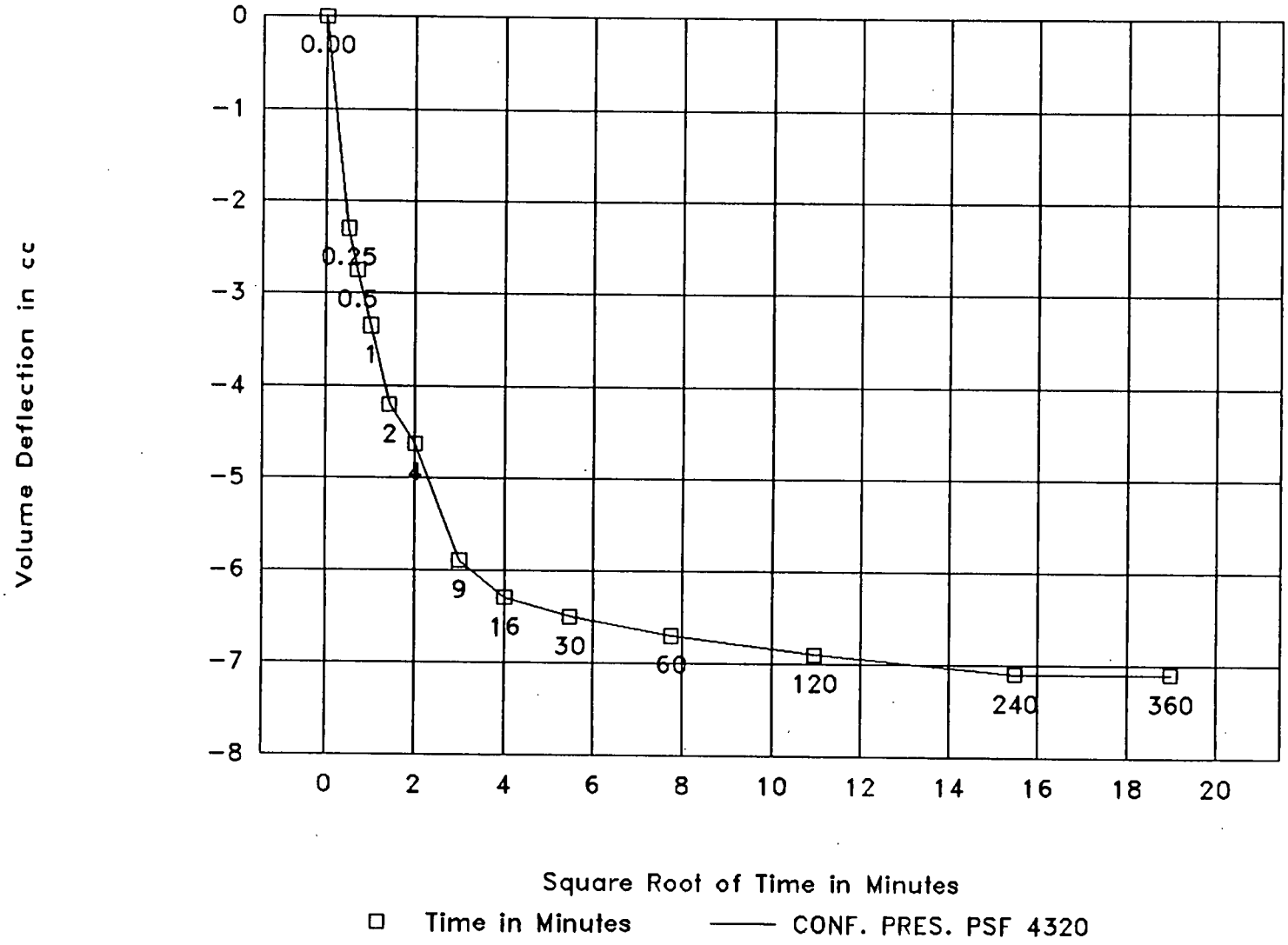
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.597	0	47.1	0	4320	4320	1.00
107.5	3367	0.01	0.18	4.606	3361	54.9	1123	3197	6558	2.05
140.0	4385	0.02	0.35	4.614	4370	57.7	1526	2794	7163	2.56
162.5	5090	0.03	0.53	4.622	5063	59.1	1728	2592	7655	2.95
177.5	5560	0.04	0.71	4.630	5520	59.7	1814	2506	8026	3.20
191.5	5998	0.05	0.88	4.638	5945	60.1	1872	2448	8393	3.43
203.5	6374	0.06	1.06	4.647	6306	60.2	1886	2434	8740	3.59
213.5	6687	0.07	1.24	4.655	6605	60.2	1886	2434	9038	3.71
221.5	6938	0.08	1.41	4.663	6840	60.0	1858	2462	9302	3.78
230.5	7220	0.09	1.59	4.672	7105	59.8	1829	2491	9596	3.85
238.5	7470	0.10	1.77	4.680	7338	59.4	1771	2549	9887	3.88
253.0	7925	0.12	2.12	4.697	7756	58.7	1670	2650	10406	3.93
267.5	8379	0.14	2.47	4.714	8171	58.0	1570	2750	10922	3.97
280.0	8770	0.16	2.83	4.731	8522	57.1	1440	2880	11402	3.96
293.0	9177	0.18	3.18	4.748	8885	56.2	1310	3010	11895	3.95
305.0	9553	0.20	3.53	4.766	9216	55.6	1224	3096	12312	3.98

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 7-1-95
FileName:SAT097S2

ADVANCED TERRA TESTING, INC.

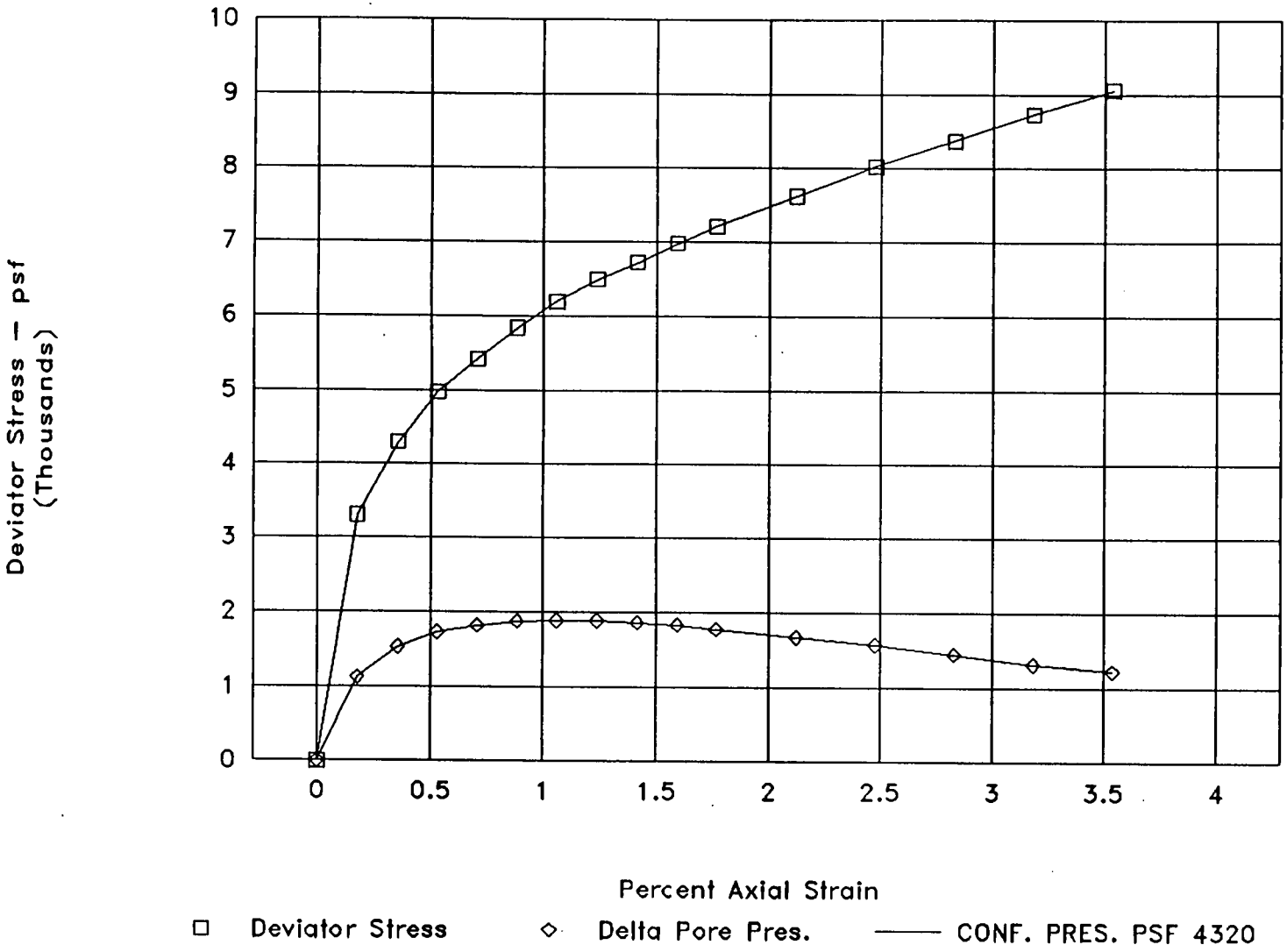
CONSOLIDATION DATA

G2-123, 7.5-9.5', 404797 Stage 2



TRIAXIAL TEST - TX/CUpp

G2-123, 7.5-9.5', 404797 Stage 2



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	990.6	984.7
Wt. Wet Soil & Pan	(g)	998.9	993.0
Wt. Dry Soil & Pan	(g)	880.5	880.5
Wt. Lost Moisture	(g)	118.4	112.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	872.2	872.2
Moisture Content %		13.6	12.9
Wet Density PCF		145.1	145.7
Dry Density PCF		127.8	129.0

Init. Diameter	(in)	2.463
Init. Area	(sq in)	4.765
Init. Height	(in)	5.458
Vol. Bef. Consol.	(cu ft)	0.01505
Vol. After Consol.	(cu ft)	0.01490

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: GJ Date: 7-9-95
FileName:SAT097S3 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	34.20	0.00
0.25	0.5	37.20	-3.00
0.5	0.7	37.50	-3.30
1	1.0	37.85	-3.65
2	1.4	38.30	-4.10
4	2.0	38.90	-4.70
9	3.0	39.60	-5.40
16	4.0	40.10	-5.90
30	5.5	40.50	-6.30
60	7.7	40.80	-6.60
120	11.0	41.00	-6.80
240	15.5	41.15	-6.95
360	19.0	41.20	-7.00

Initial Height	(in)	5.458	Init. Vol.	(CC)	426.22
Height Change	(in)	0.007	Vol. Change	(CC)	8.00
Ht. After Cons.	(in)	5.451	Cell Exp.	(CC)	3.80
Initial Area	(sq in)	4.765	Net Change	(CC)	4.20
Area After Cons.	(sq in)	4.724	Cons. Vol.	(CC)	422.02

Data entry by: CAL Date: 6-20-95
Data checked by: a Date: 7-4-95
FileName:SAT097S3 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

Init. Ht. (in)	5.458	Init. Area (sq in)	4.765
Consol. Ht. (in)	5.451	Consol. Area (sq in)	4.724
Back Pres. PSI	48.0	Strain Rate (in/min)	0.004

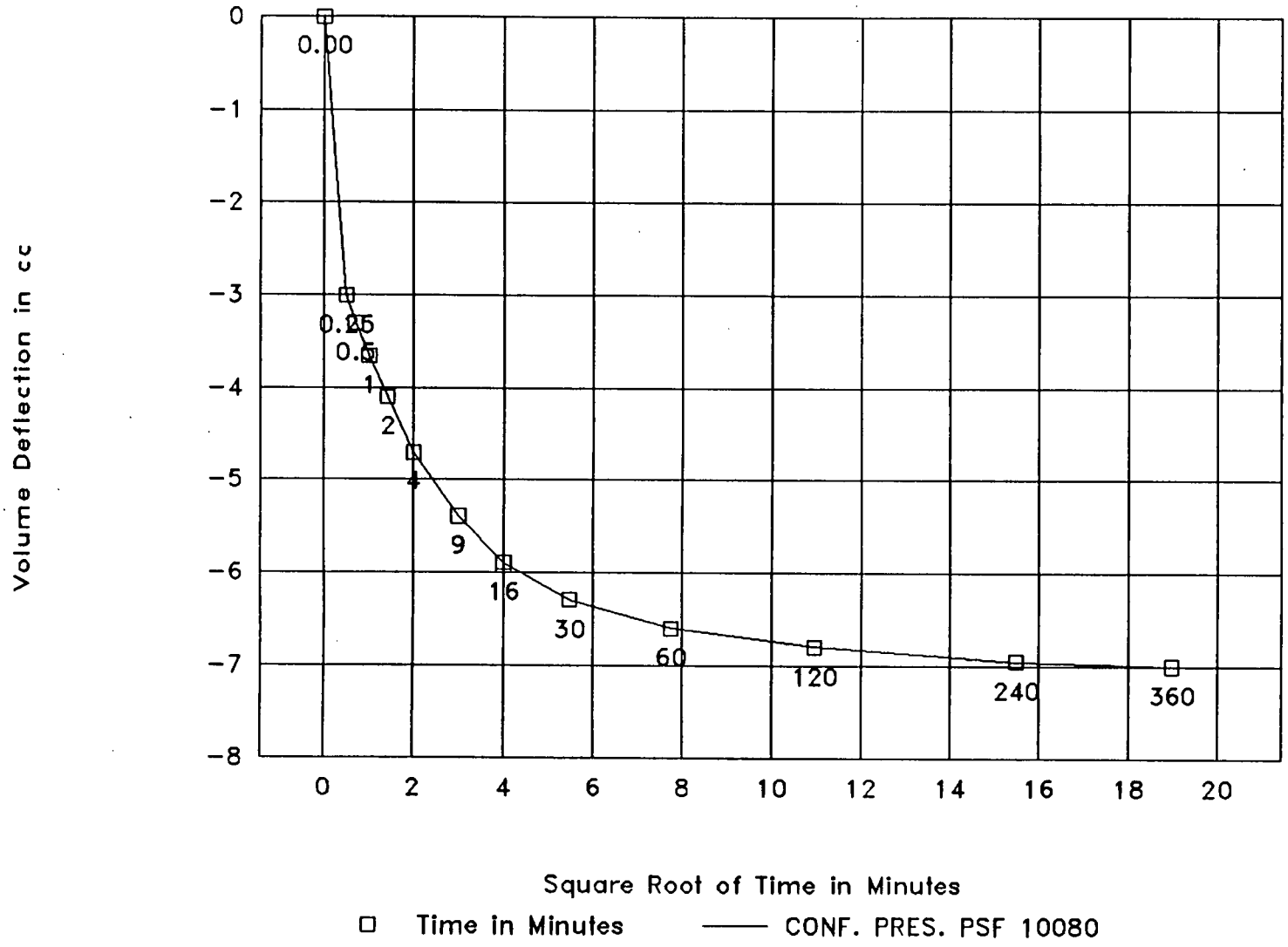
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.724	0	48.0	0	10080	10080	1.00
324.0	9877	0.02	0.37	4.741	9841	69.3	3067	7013	16854	2.40
428.0	13048	0.04	0.73	4.759	12952	75.8	4003	6077	19029	3.13
500.0	15243	0.06	1.10	4.776	15075	76.8	4147	5933	21008	3.54
544.0	16584	0.08	1.47	4.794	16340	76.9	4162	5918	22259	3.76
570.0	17376	0.10	1.83	4.812	17058	76.0	4032	6048	23106	3.82
633.0	19297	0.15	2.75	4.857	18766	73.3	3643	6437	25203	3.92
692.0	21096	0.20	3.67	4.904	20322	70.3	3211	6869	27190	3.96
745.0	22711	0.25	4.59	4.951	21670	67.3	2779	7301	28971	3.97
792.0	24144	0.30	5.50	4.999	22815	64.3	2347	7733	30548	3.95
831.0	25333	0.35	6.42	5.048	23706	61.3	1915	8165	31871	3.90
862.0	26278	0.40	7.34	5.098	24350	58.8	1555	8525	32875	3.86
957.5	29189	0.50	9.17	5.201	26512	55.5	1080	9000	35512	3.95
997.5	30409	0.60	11.01	5.308	27062	52.2	605	9475	36537	3.86
1015.0	30942	0.70	12.84	5.420	26969	49.5	216	9864	36833	3.73
1025.0	31247	0.80	14.68	5.536	26661	48.1	14	10066	36727	3.65
1027.5	31323	0.90	16.51	5.658	26152	47.8	-29	10109	36260	3.59
1020.0	31095	1.00	18.35	5.785	25390	48.0	0	10080	35470	3.52
1010.0	30790	1.10	20.18	5.918	24577	48.6	86	9994	34570	3.46
1002.5	30561	1.20	22.01	6.057	23833	49.5	216	9864	33697	3.42

Data entry by: CAL Date: 6-20-95
Data checked by: [illegible] Date: 7-4-95
FileName: SAT097S3

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-123, 7.5-9.5', 404797 Stage 3



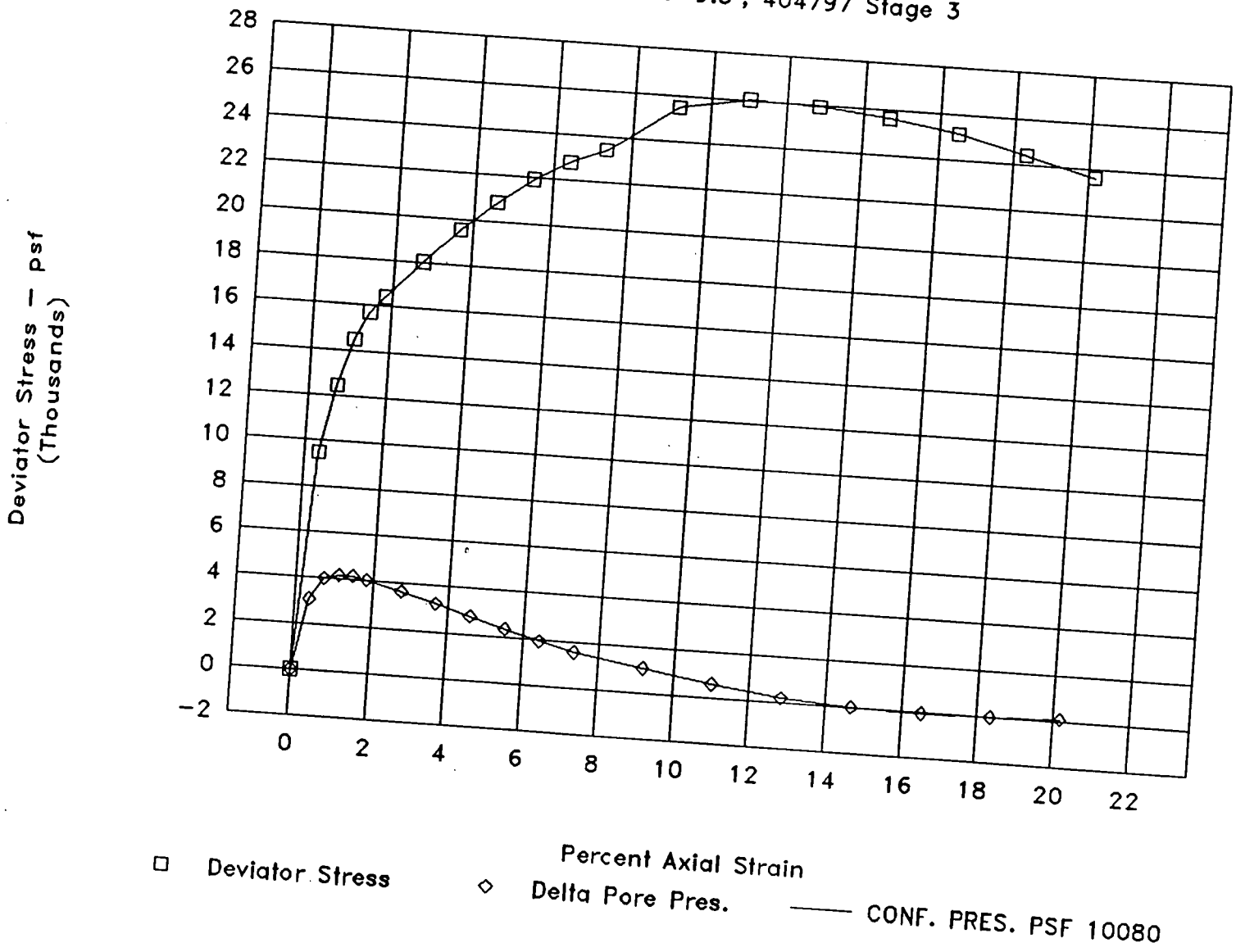
1080

001178

474

TRIAXIAL TEST - TX/CUpp

G2-123, 7.5-9.5', 404797 Stage 3



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 1	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	3024		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	4.0	16.2				
50.0		14.6	14.8	37.1	46.6	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	14.80	0.00
0.25	0.5	18.05	-3.25
0.5	0.7	18.50	-3.70
1	1.0	18.95	-4.15
2	1.4	19.50	-4.70
4	2.0	20.13	-5.32
9	3.0	21.18	-6.38
16	4.0	22.05	-7.25
30	5.5	23.10	-8.30
60	7.7	24.10	-9.30
120	11.0	24.60	-9.80
240	15.5	25.00	-10.20
360	19.0	25.10	-10.30

Initial Height	(in)	6.021	Init. Vol.	(CC)	441.98
Height Change	(in)	0.029	Vol. Change	(CC)	21.80
Ht. After Cons.	(in)	5.992	Cell Exp.	(CC)	18.58
Initial Area	(sq in)	4.479	Net Change	(CC)	3.22
Area After Cons.	(sq in)	4.468	Cons. Vol.	(CC)	438.77

Data entry by: CJW Date: 7-05-95
Data checked by: NG Date: 8-5-95
FileName:SAT004S1 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 1	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	3024		

Init. Ht.	(in)	6.021	Init. Area	(sq in)	4.479
Consol. Ht.	(in)	5.992	Consol. Area	(sq in)	4.468
Back Pres.	PSI	37.1	Strain Rate	(in/min)	0.003

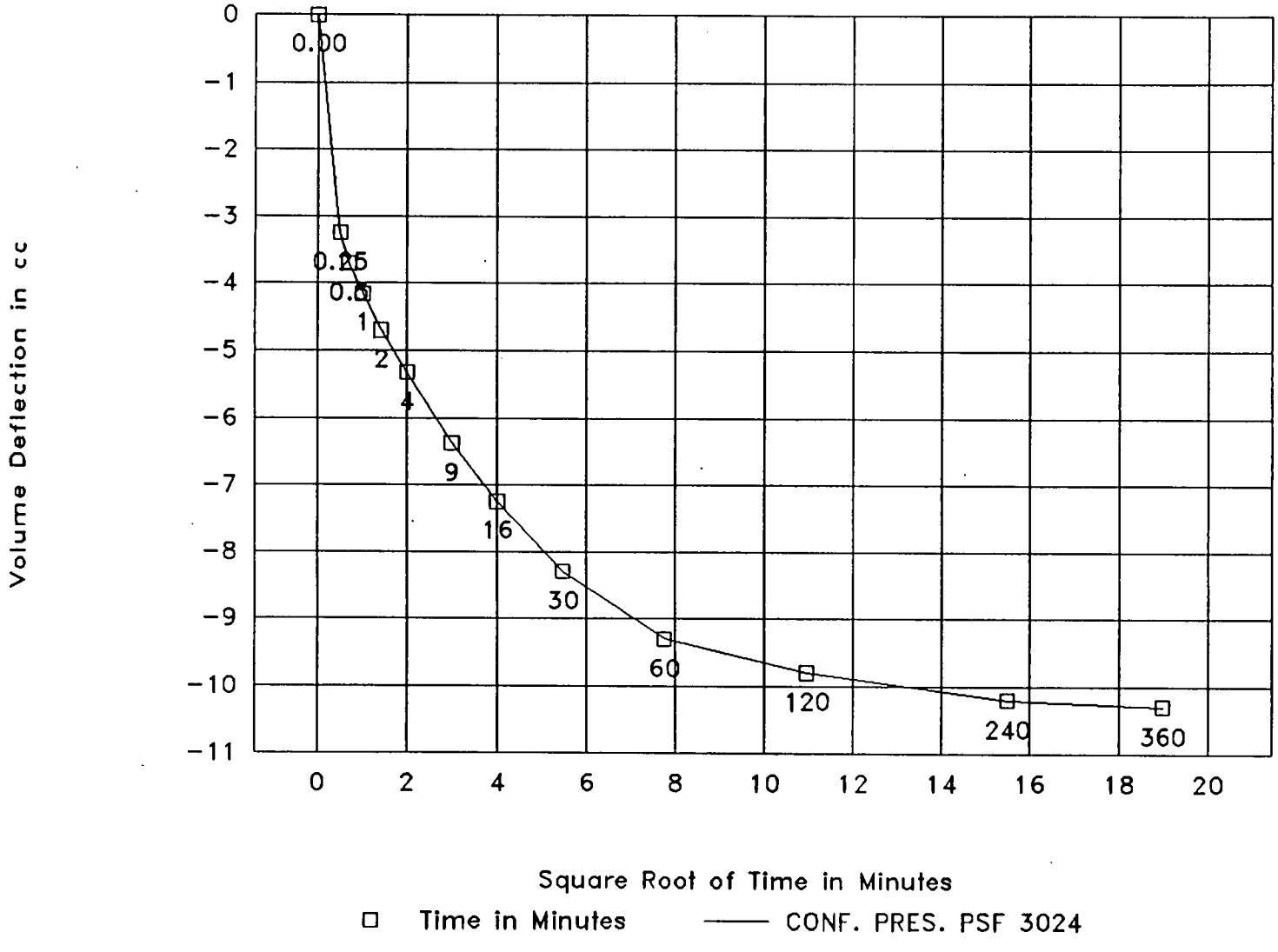
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.468	0	37.1	0	3024	3024	1.00
42.0	1354	0.01	0.17	4.475	1351	40.5	490	2534	3886	1.53
56.5	1821	0.02	0.33	4.483	1815	42.9	835	2189	4004	1.83
65.0	2095	0.03	0.50	4.490	2085	44.4	1051	1973	4057	2.06
71.0	2288	0.04	0.67	4.498	2273	45.4	1195	1829	4102	2.24
77.5	2498	0.05	0.83	4.505	2477	45.9	1267	1757	4234	2.41
82.5	2659	0.06	1.00	4.513	2632	46.3	1325	1699	4332	2.55
87.0	2804	0.07	1.17	4.521	2771	46.7	1382	1642	4413	2.69
90.5	2917	0.08	1.34	4.528	2878	46.9	1411	1613	4491	2.78
93.5	3014	0.09	1.50	4.536	2968	46.9	1411	1613	4581	2.84
97.0	3126	0.10	1.67	4.544	3074	47.0	1426	1598	4673	2.92
99.0	3191	0.11	1.84	4.551	3132	47.2	1454	1570	4702	3.00
102.0	3288	0.12	2.00	4.559	3222	47.2	1454	1570	4791	3.05
104.0	3352	0.13	2.17	4.567	3279	47.1	1440	1584	4863	3.07

Data entry by: CJW Date: 7-05-95
Data checked by: NA Date: 8-5-95
FileName:SAT004S1

ADVANCED TERRA TESTING, INC.

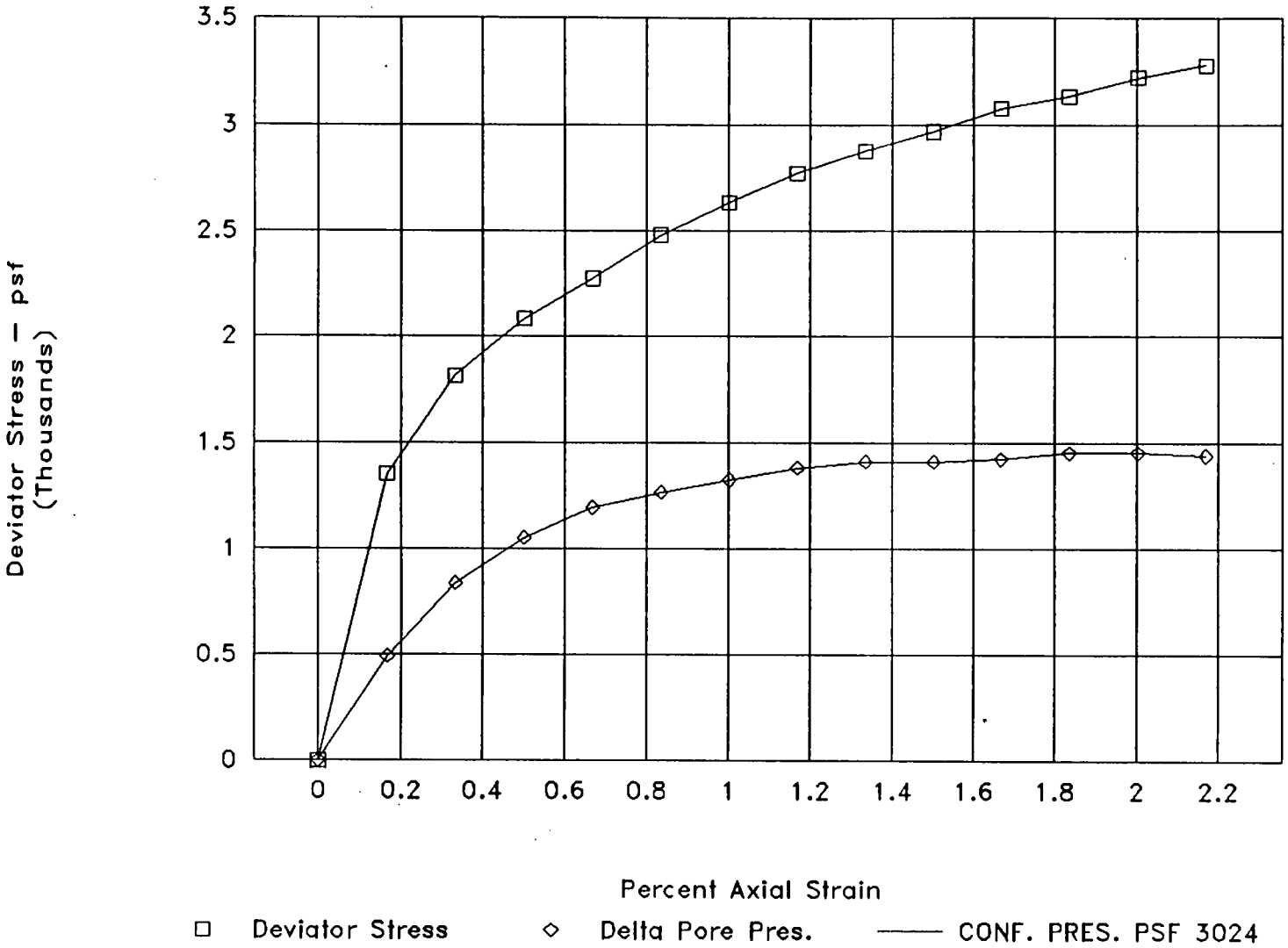
CONSOLIDATION DATA

G2-123, 20.0-21.2', 404804 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-123, 20.0-21.0', 404804 Stage 1



1086

001183

474

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 2	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1017.2	1012.4
Wt. Wet Soil & Pan	(g)	1025.5	1020.8
Wt. Dry Soil & Pan	(g)	911.1	911.1
Wt. Lost Moisture	(g)	114.4	109.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	902.7	902.7
Moisture Content %		12.7	12.2
Wet Density PCF		144.7	145.4
Dry Density PCF		128.5	129.7

Init. Diameter	(in)	2.411
Init. Area	(sq in)	4.567
Init. Height	(in)	5.862
Vol. Bef. Consol.	(cu ft)	0.01549
Vol. After Consol.	(cu ft)	0.01535

Notes & Comments:

Data entry by: CJW Date: 7-05-95
Data checked by: NA Date: 8-5-95
FileName:SAT004S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 2	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	3.90	0.00
0.25	0.5	5.55	-1.65
0.5	0.7	5.70	-1.80
1	1.0	5.80	-1.90
2	1.4	6.00	-2.10
4	2.0	6.30	-2.40
9	3.0	6.80	-2.90
16	4.0	7.25	-3.35
30	5.5	7.80	-3.90
60	7.7	8.35	-4.45
120	11.0	8.80	-4.90
240	15.5	8.90	-5.00
360	19.0	9.00	-5.10

Initial Height	(in)	5.862	Init. Vol.	(CC)	438.79
Height Change	(in)	0.008	Vol. Change	(CC)	7.10
Ht. After Cons.	(in)	5.854	Cell Exp.	(CC)	3.02
Initial Area	(sq in)	4.567	Net Change	(CC)	4.08
Area After Cons.	(sq in)	4.531	Cons. Vol.	(CC)	434.71

Data entry by: CJW Date: 7-05-95
Data checked by: [illegible] Date: 9-5-95
FileName:SAT004S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 2	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

Init. Ht.	(in)	5.862	Init. Area	(sq in) 4.567
Consol. Ht.	(in)	5.854	Consol. Area	(sq in) 4.531
Back Pres.	PSI	37.1	Strain Rate	(in/min) 0.001

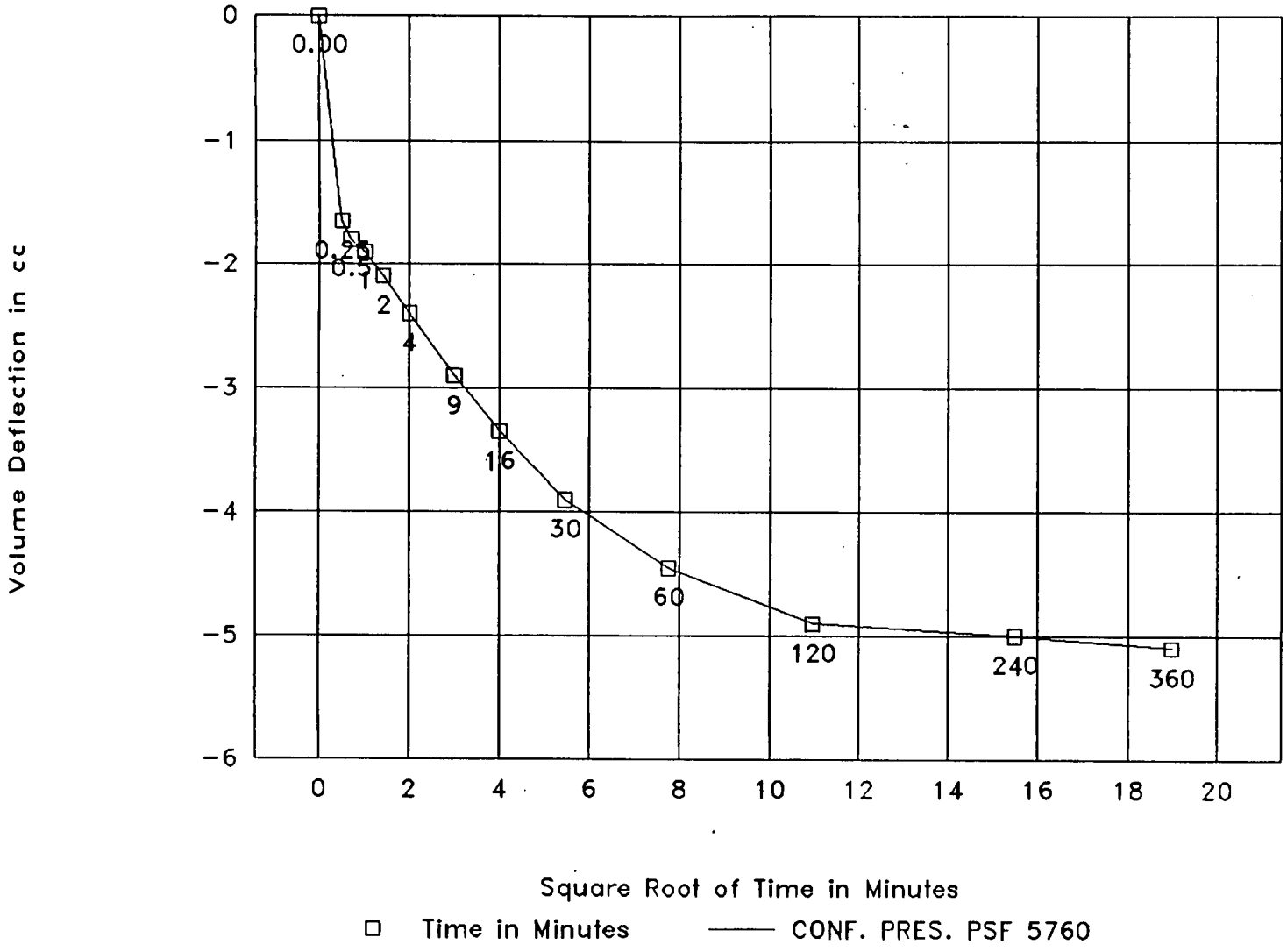
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.531	0	37.1	0	5760	5760	1.00
64.5	2050	0.01	0.17	4.538	2047	38.9	259	5501	7547	1.37
109.0	3464	0.02	0.34	4.546	3453	45.4	1195	4565	8017	1.76
136.5	4338	0.03	0.51	4.554	4316	49.2	1742	4018	8334	2.07
154.0	4895	0.04	0.68	4.562	4861	51.1	2016	3744	8605	2.30
166.5	5292	0.05	0.85	4.570	5247	52.3	2189	3571	8818	2.47
176.0	5594	0.06	1.02	4.578	5537	53.2	2318	3442	8978	2.61
184.0	5848	0.07	1.20	4.586	5778	53.8	2405	3355	9133	2.72
189.5	6023	0.08	1.37	4.593	5941	54.3	2477	3283	9224	2.81
194.5	6182	0.09	1.54	4.601	6087	54.5	2506	3254	9341	2.87
199.0	6325	0.10	1.71	4.609	6217	54.8	2549	3211	9428	2.94
203.5	6468	0.11	1.88	4.617	6346	54.9	2563	3197	9543	2.99
206.5	6563	0.12	2.05	4.626	6429	54.9	2563	3197	9625	3.01
210.0	6674	0.13	2.22	4.634	6526	54.9	2563	3197	9723	3.04
213.5	6786	0.14	2.39	4.642	6623	54.9	2563	3197	9820	3.07
216.0	6865	0.15	2.56	4.650	6689	54.9	2563	3197	9886	3.09
219.0	6961	0.16	2.73	4.658	6770	54.9	2563	3197	9967	3.12
221.5	7040	0.17	2.90	4.666	6836	54.6	2520	3240	10076	3.11

Data entry by: CJW Date: 7-05-95
Data checked by: NG Date: 8-5-95
FileName:SAT004S2

ADVANCED TERRA TESTING, INC.

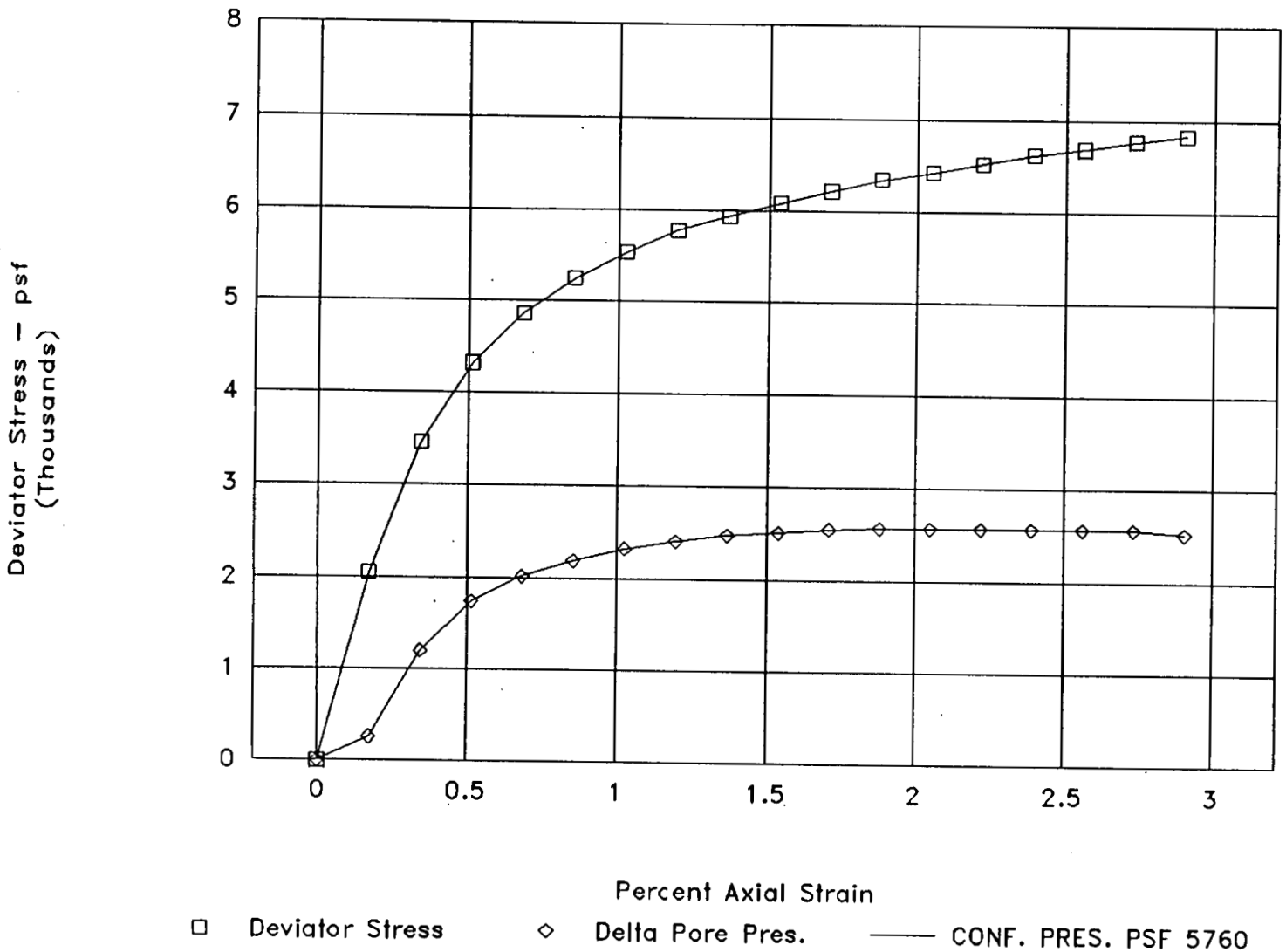
CONSOLIDATION DATA

G2-123, 20.0-21.2', 404804 Stage 2



TRIAXIAL TEST - TX/CUpp

G2-123, 20.0-21.2', 404804 Stage 2



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 3	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1017.2	1012.4
Wt. Wet Soil & Pan	(g)	1025.5	1020.8
Wt. Dry Soil & Pan	(g)	911.1	911.1
Wt. Lost Moisture	(g)	114.4	109.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	902.7	902.7
Moisture Content %		12.7	12.2
Wet Density PCF		146.1	148.3
Dry Density PCF		129.7	132.3

Init. Diameter	(in)	2.437
Init. Area	(sq in)	4.666
Init. Height	(in)	5.684
Vol. Bef. Consol.	(cu ft)	0.01535
Vol. After Consol.	(cu ft)	0.01505

Notes & Comments:

Data entry by: CJW Date: 7-05-95
Data checked by: Na Date: 8-5-95
FileName:SAT004S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 3	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	10.60	0.00
0.25	0.5	14.10	-3.50
0.5	0.7	14.30	-3.70
1	1.0	14.60	-4.00
2	1.4	14.75	-4.15
4	2.0	15.50	-4.90
9	3.0	16.40	-5.80
16	4.0	17.30	-6.70
30	5.5	18.45	-7.85
60	7.7	19.70	-9.10
120	11.0	20.50	-9.90
240	15.5	21.10	-10.50
360	19.0	21.30	-10.70

Initial Height	(in)	5.684	Init. Vol.	(CC)	434.69
Height Change	(in)	0.014	Vol. Change	(CC)	14.90
Ht. After Cons.	(in)	5.670	Cell Exp.	(CC)	6.36
Initial Area	(sq in)	4.666	Net Change	(CC)	8.54
Area After Cons.	(sq in)	4.586	Cons. Vol.	(CC)	426.15

Data entry by: CJW Date: 7-05-95
Data checked by: [illegible] Date: 8-5-95
FileName:SAT004S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 3	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

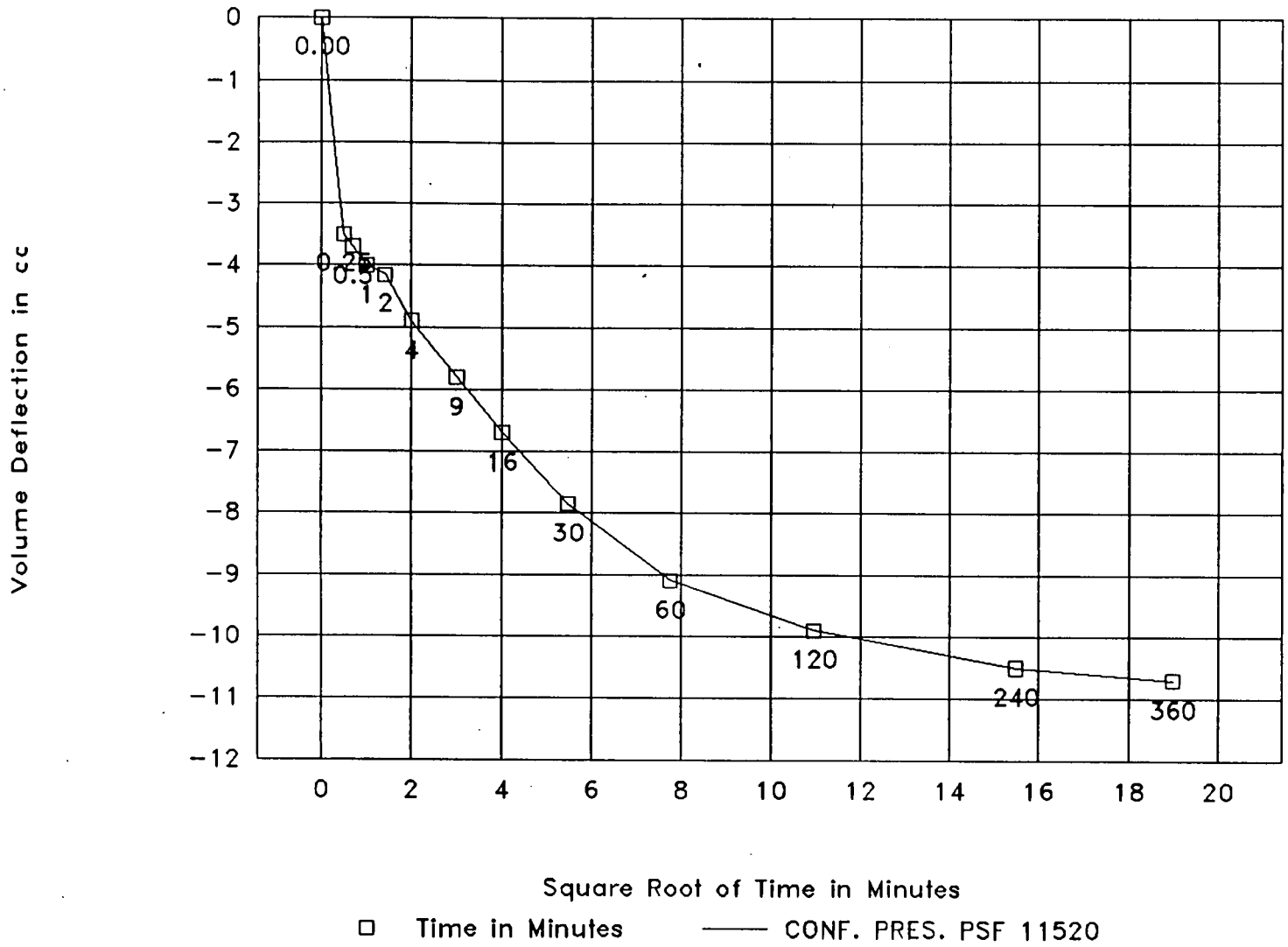
Init. Ht.	(in)	5.684	Init. Area	(sq in)	4.666
Consol. Ht.	(in)	5.670	Consol. Area	(sq in)	4.586
Back Pres.	PSI	36.9	Strain Rate	(in/min)	0.002

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.586	0	36.9	0	11520	11520	1.00
337.5	10598	0.05	0.88	4.626	10505	69.1	4637	6883	17388	2.53
403.8	12680	0.10	1.76	4.668	12457	73.9	5328	6192	18649	3.01
440.0	13817	0.15	2.65	4.710	13452	74.5	5414	6106	19557	3.20
465.0	14602	0.20	3.53	4.753	14087	74.2	5371	6149	20236	3.29
487.5	15309	0.25	4.41	4.797	14634	73.5	5270	6250	20883	3.34
500.0	15701	0.30	5.29	4.842	14871	72.5	5126	6394	21264	3.33
512.5	16094	0.35	6.17	4.887	15100	71.3	4954	6566	21667	3.30
527.5	16565	0.40	7.05	4.934	15396	70.2	4795	6725	22121	3.29
537.5	16879	0.45	7.94	4.981	15539	69.2	4651	6869	22408	3.26
550.0	17271	0.50	8.82	5.029	15748	68.1	4493	7027	22776	3.24
565.0	17742	0.60	10.58	5.128	15865	66.2	4219	7301	23166	3.17
572.5	17978	0.70	12.35	5.231	15758	64.8	4018	7502	23261	3.10
575.0	18056	0.80	14.11	5.339	15509	63.2	3787	7733	23242	3.01
572.5	17978	0.90	15.87	5.451	15124	62.2	3643	7877	23001	2.92
570.0	17899	1.00	17.64	5.568	14743	61.6	3557	7963	22706	2.85
567.5	17821	1.10	19.40	5.689	14364	61.0	3470	8050	22413	2.78

Data entry by: CJW Date: 7-05-95
Data checked by: [illegible] Date: 8-5-95
FileName:SAT004S3 ADVANCED TERRA TESTING, INC.

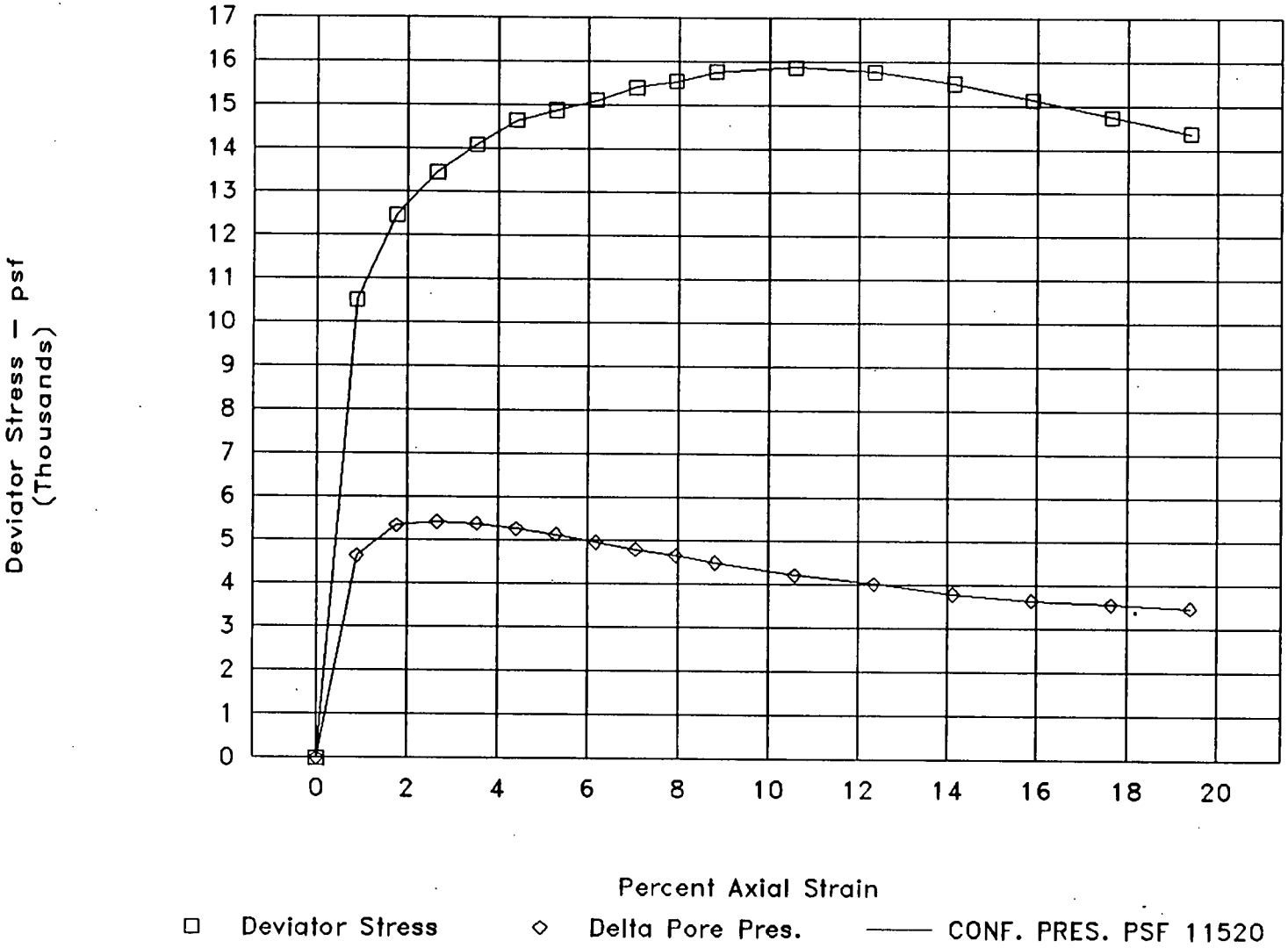
CONSOLIDATION DATA

G2-123, 20.0-21.2', 404804 Stage 3



TRIAXIAL TEST - TX/CUpp

G2-123, 20.0-21.2', 404804 Stage 3



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

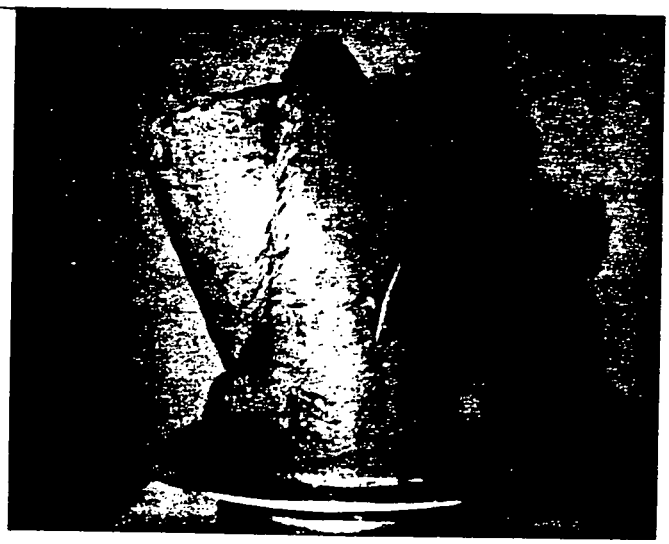
CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13A

BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	927.5	917.4
Wt. Wet Soil & Pan	(g)	935.8	925.7
Wt. Dry Soil & Pan	(g)	774.3	774.3
Wt. Lost Moisture	(g)	161.5	151.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	766.0	766.0
Moisture Content %		21.1	19.8
Wet Density PCF		131.0	130.9
Dry Density PCF		108.2	109.3

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.954
Vol. Bef. Consol.	(cu ft)	0.01561
Vol. After Consol.	(cu ft)	0.01545



Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT050S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13A

BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.0	8.7				
50.0	48.0	7.3	8.2	38.2	47.3	9.1	0.91
60.0	58.0	7.6	8.4	48.0	57.3	9.3	0.93
70.0	68.0	8.3	9.1	57.8	67.2	9.4	0.94
80.0		9.3	9.3	68.3	77.8	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.30	0.00
0.25	0.5	10.23	-0.92
0.5	0.7	10.28	-0.97
1	1.0	10.33	-1.02
2	1.4	10.40	-1.10
4	2.0	10.53	-1.22
9	3.0	10.70	-1.40
16	4.0	10.85	-1.55
30	5.5	11.08	-1.77
60	7.7	11.45	-2.15
120	11.0	11.98	-2.67
240	15.5	12.70	-3.40
360	19.0	13.20	-3.90

Initial Height	(in)	5.954	Init. Vol.	(CC)	442.21
Height Change	(in)	0.025	Vol. Change	(CC)	14.20
Ht. After Cons.	(in)	5.929	Cell Exp.	(CC)	9.54
Initial Area	(sq in)	4.531	Net Change	(CC)	4.66
Area After Cons.	(sq in)	4.503	Cons. Vol.	(CC)	437.54

Data entry by: CAL Date: 6-20-95
Data checked by: [illegible] Date: 8-14-95
FileName:SAT050S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

Init. Ht.	(in)	5.954	Init. Area	(sq in)	4.531
Consol. Ht.	(in)	5.929	Consol. Area	(sq in)	4.503
Back Pres.	PSI	66.8	Strain Rate	(in/min)	0.003

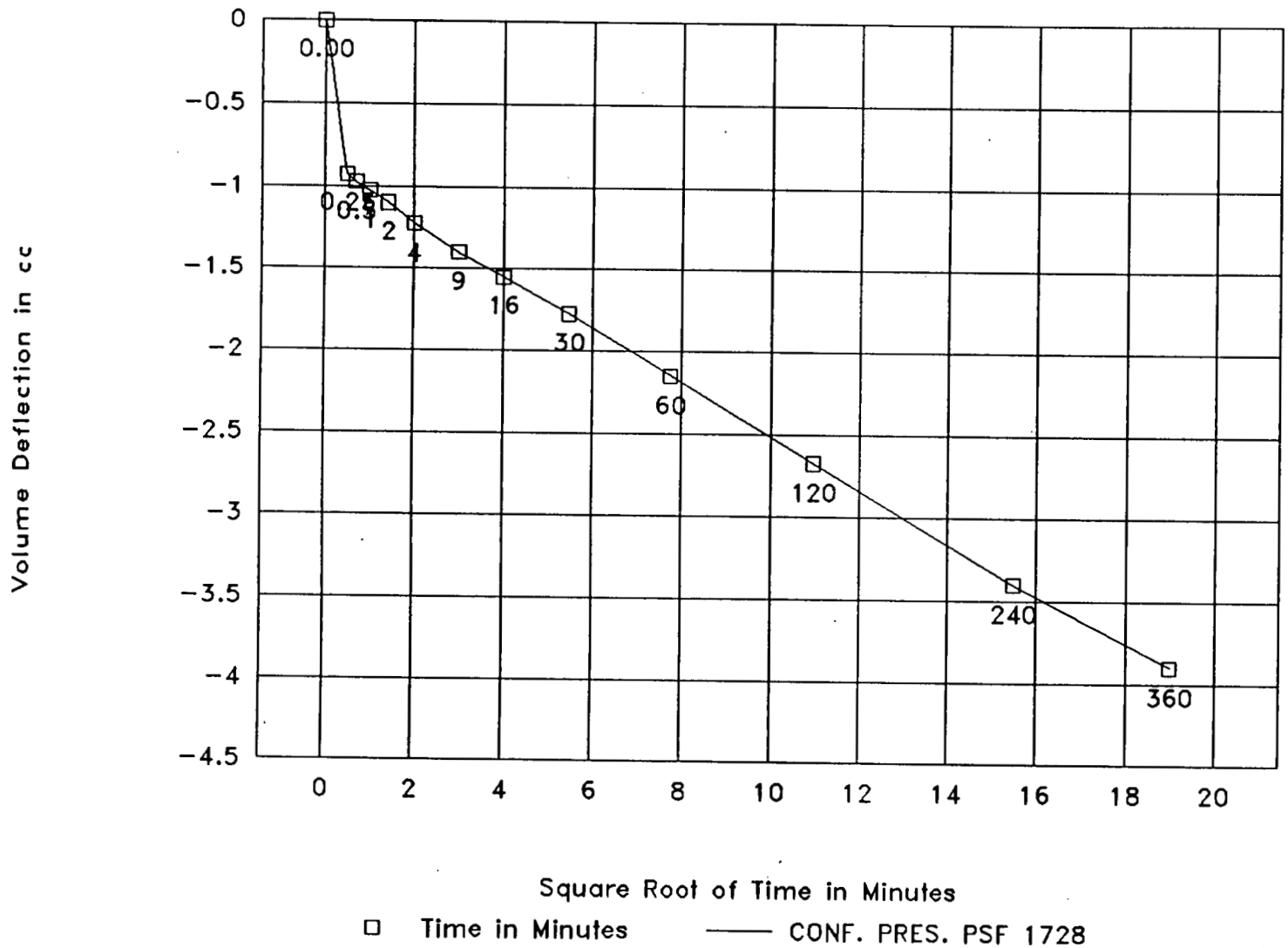
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.503	0	66.8	0	1728	1728	1.00
35.0	1119	0.01	0.17	4.510	1117	70.9	590	1138	2255	1.98
40.0	1279	0.02	0.34	4.518	1275	72.1	763	965	2240	2.32
47.5	1519	0.04	0.67	4.533	1509	73.2	922	806	2315	2.87
53.0	1695	0.06	1.01	4.549	1678	73.6	979	749	2427	3.24
58.0	1855	0.08	1.35	4.564	1830	74.2	1066	662	2492	3.76
63.0	2015	0.10	1.69	4.580	1981	74.3	1080	648	2629	4.06
67.5	2159	0.12	2.02	4.596	2115	74.5	1109	619	2734	4.42
72.0	2303	0.14	2.36	4.611	2248	74.8	1152	576	2824	4.90
76.0	2431	0.16	2.70	4.627	2365	74.6	1123	605	2970	4.91
80.5	2575	0.18	3.04	4.644	2496	74.4	1094	634	3130	4.94
84.0	2686	0.20	3.37	4.660	2596	74.2	1066	662	3258	4.92
90.0	2878	0.23	3.88	4.684	2767	73.8	1008	720	3487	4.84

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT050S1

ADVANCED TERRA TESTING, INC.

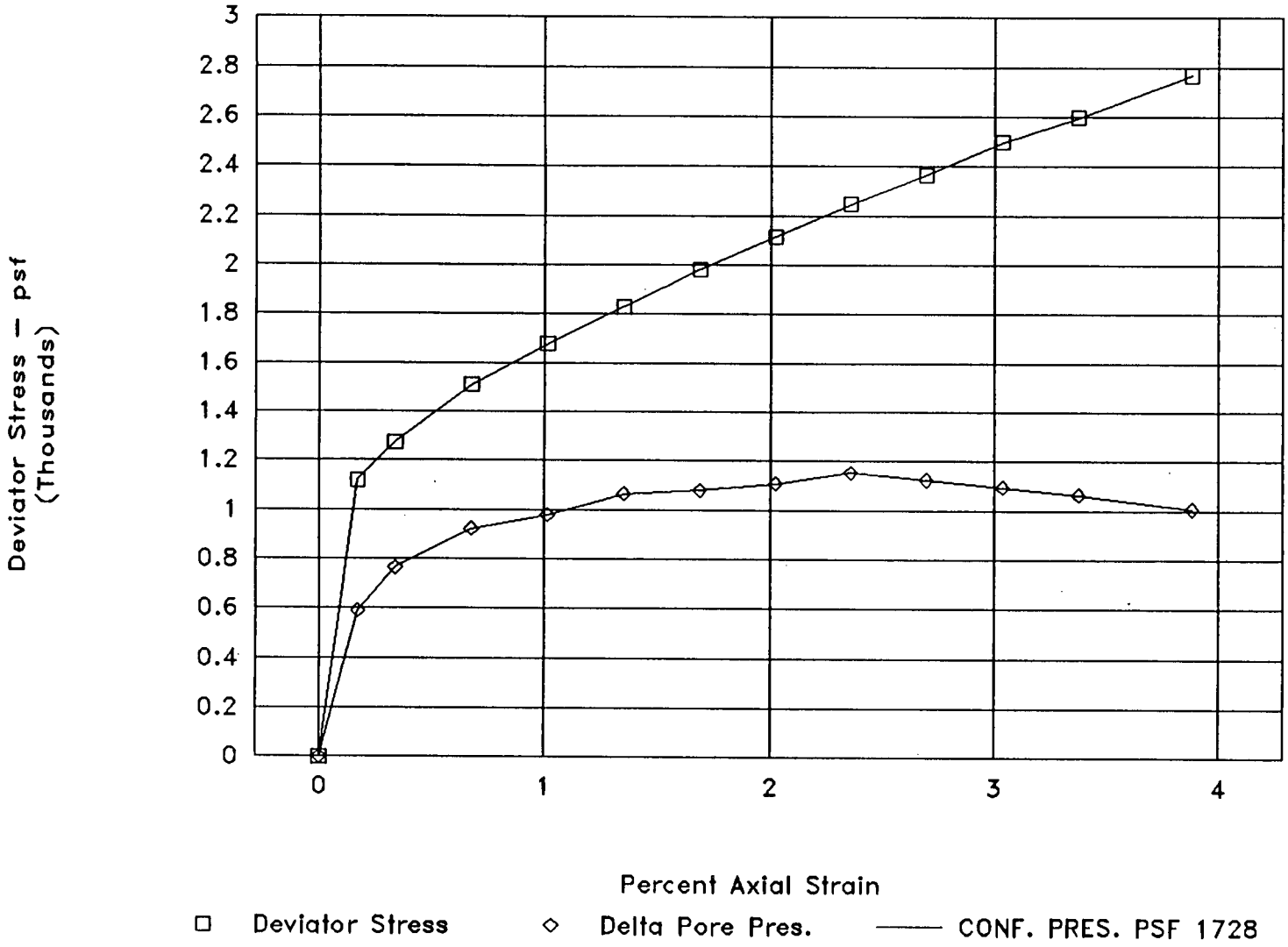
CONSOLIDATION DATA

G2-124, 10-12', 405004 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-124, 10-12', 405004 Stage 1



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13A

BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	927.5	917.4
Wt. Wet Soil & Pan	(g)	935.8	925.7
Wt. Dry Soil & Pan	(g)	774.3	774.3
Wt. Lost Moisture	(g)	161.5	151.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	766.0	766.0
Moisture Content %		21.1	19.8
Wet Density PCF		132.4	132.8
Dry Density PCF		109.3	110.8

Init. Diameter	(in)	2.442
Init. Area	(sq in)	4.684
Init. Height	(in)	5.699
Vol. Bef. Consol.	(cu ft)	0.01545
Vol. After Consol.	(cu ft)	0.01523

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT050S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13A

BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	17.40	0.00
0.25	0.5	18.75	-1.35
0.5	0.7	18.80	-1.40
1	1.0	18.88	-1.48
2	1.4	18.98	-1.58
4	2.0	19.10	-1.70
9	3.0	19.25	-1.85
16	4.0	19.45	-2.05
30	5.5	19.78	-2.38
60	7.7	20.20	-2.80
120	11.0	20.85	-3.45
240	15.5	21.70	-4.30
360	19.0	22.30	-4.90

Initial Height	(in)	5.699	Init. Vol.	(CC)	437.48
Height Change	(in)	0.055	Vol. Change	(CC)	7.70
Ht. After Cons.	(in)	5.644	Cell Exp.	(CC)	1.69
Initial Area	(sq in)	4.684	Net Change	(CC)	6.01
Area After Cons.	(sq in)	4.664	Cons. Vol.	(CC)	431.47

Data entry by: CAL Date: 6-20-95
Data checked by: CW Date: 8-14-95
FileName:SAT050S2 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

Init. Ht.	(in)	5.699	Init. Area	(sq in)	4.684
Consol. Ht.	(in)	5.644	Consol. Area	(sq in)	4.664
Back Pres.	PSI	67.4	Strain Rate	(in/min)	0.003

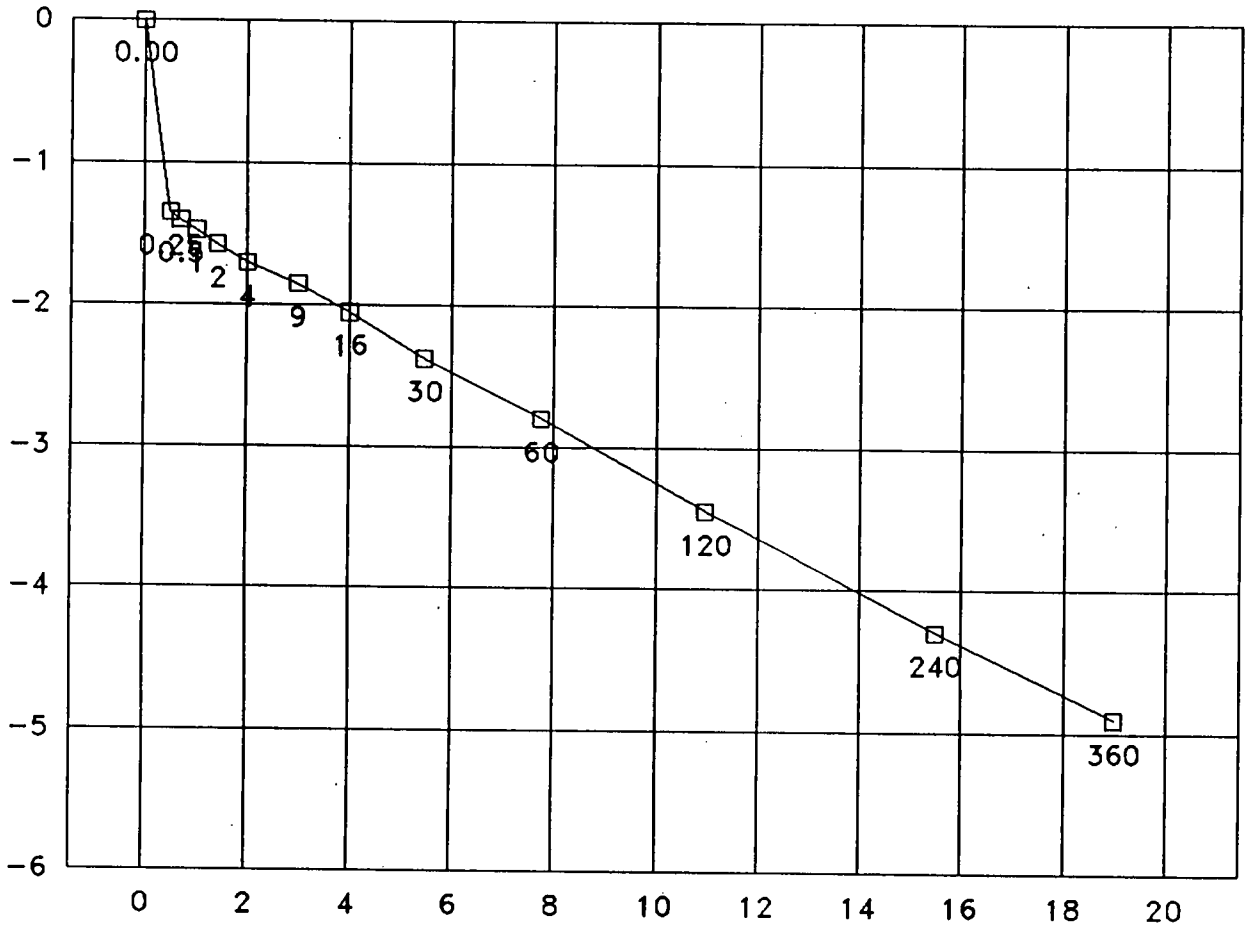
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.664	0	67.4	0	4320	4320	1.00
77.0	2377	0.02	0.35	4.681	2369	75.5	1166	3154	5522	1.75
102.5	3164	0.04	0.71	4.698	3142	79.1	1685	2635	5777	2.19
120.0	3705	0.06	1.06	4.714	3665	80.9	1944	2376	6041	2.54
132.5	4091	0.08	1.42	4.731	4033	81.7	2059	2261	6293	2.78
141.5	4368	0.10	1.77	4.748	4291	82.1	2117	2203	6494	2.95
150.0	4631	0.12	2.13	4.766	4532	82.3	2148	2172	6704	3.09
156.5	4832	0.14	2.48	4.783	4712	82.3	2146	2174	6886	3.17
163.0	5032	0.16	2.83	4.800	4890	81.9	2088	2232	7122	3.19

Data entry by: CAL Date: 6-20-95
Data checked by: CW Date: 8-14-95
FileName:SAT050S2

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

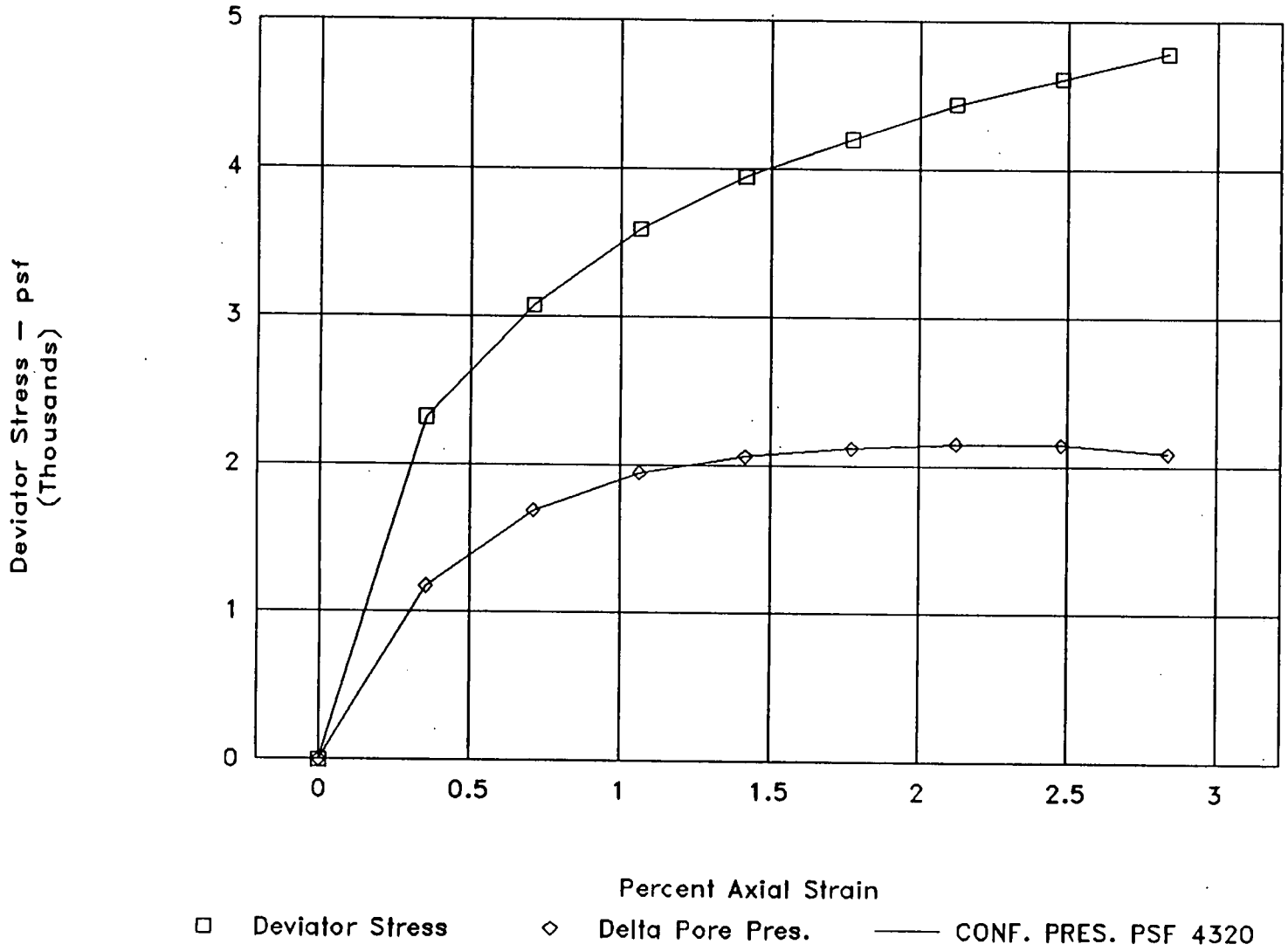
G2-124, 10-12', 405004 Stage 2



□ Time in Minutes —— CONF. PRES. PSF 4320

TRIAXIAL TEST - TX/CUpp

G2-124, 10-12', 405004 Stage 2



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13A

BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	927.5	917.4
Wt. Wet Soil & Pan	(g)	935.8	925.7
Wt. Dry Soil & Pan	(g)	774.3	774.3
Wt. Lost Moisture	(g)	161.5	151.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	766.0	766.0
Moisture Content %		21.1	19.8
Wet Density PCF		134.2	135.2
Dry Density PCF		110.9	112.9

Init. Diameter	(in)	2.472
Init. Area	(sq in)	4.799
Init. Height	(in)	5.484
Vol. Bef. Consol.	(cu ft)	0.01523
Vol. After Consol.	(cu ft)	0.01496

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT050S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13A

BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	27.70	0.00
0.25	0.5	30.60	-2.90
0.5	0.7	30.70	-3.00
1	1.0	30.80	-3.10
2	1.4	30.90	-3.20
4	2.0	31.10	-3.40
9	3.0	31.38	-3.68
16	4.0	31.65	-3.95
30	5.5	32.10	-4.40
60	7.7	32.70	-5.00
120	11.0	33.60	-5.90
240	15.5	34.95	-7.25
481	21.9	36.23	-8.53

Initial Height	(in)	5.484	Init. Vol.	(CC)	431.38
Height Change	(in)	0.023	Vol. Change	(CC)	11.45
Ht. After Cons.	(in)	5.461	Cell Exp.	(CC)	3.76
Initial Area	(sq in)	4.799	Net Change	(CC)	7.69
Area After Cons.	(sq in)	4.734	Cons. Vol.	(CC)	423.69

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT050S3 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

Init. Ht.	(in)	5.484	Init. Area	(sq in)	4.799
Consol. Ht.	(in)	5.461	Consol. Area	(sq in)	4.734
Back Pres.	PSI	67.5	Strain Rate	(in/min)	0.003

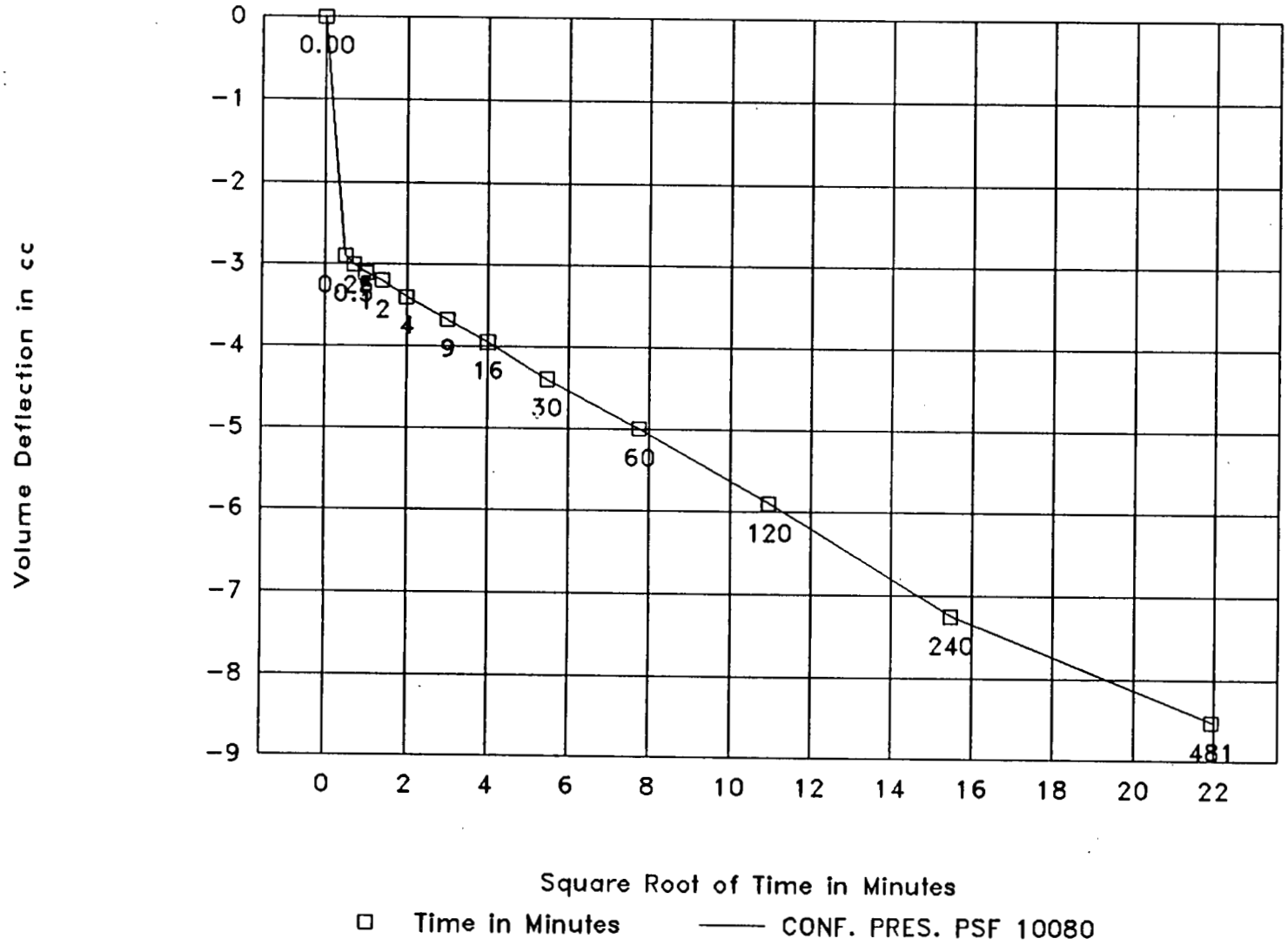
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.734	0	67.5	0	10080	10080	1.00
150.0	4563	0.02	0.37	4.751	4546	86.6	2750	7330	11876	1.62
200.0	6084	0.04	0.73	4.769	6039	96.3	4147	5933	11972	2.02
236.5	7194	0.06	1.10	4.786	7115	99.8	4651	5429	12544	2.31
262.5	7985	0.08	1.46	4.804	7868	102.1	4982	5098	12966	2.54
287.5	8746	0.10	1.83	4.822	8586	103.6	5198	4882	13467	2.76
310.0	9430	0.15	2.75	4.867	9171	104.7	5357	4723	13894	2.94
325.0	9887	0.20	3.66	4.914	9524	104.7	5357	4723	14248	3.02
337.5	10267	0.25	4.58	4.961	9797	103.8	5227	4853	14650	3.02
345.0	10495	0.30	5.49	5.009	9918	102.5	5040	5040	14958	2.97
353.8	10763	0.35	6.41	5.058	10073	101.0	4824	5256	15329	2.92
360.0	10951	0.40	7.32	5.108	10149	99.6	4622	5458	15607	2.86
362.5	11027	0.45	8.24	5.159	10119	98.1	4406	5674	15792	2.78
361.3	10989	0.50	9.16	5.211	9983	96.7	4205	5875	15858	2.70
351.3	10685	0.60	10.99	5.318	9511	94.2	3845	6235	15746	2.53
341.3	10381	0.70	12.82	5.430	9050	93.0	3672	6408	15458	2.41
333.8	10153	0.80	14.65	5.546	8665	92.4	3586	6494	15160	2.33
326.3	9925	0.90	16.48	5.668	8289	92.0	3528	6552	14841	2.27
326.3	9925	1.00	18.31	5.795	8107	91.9	3514	6566	14674	2.23
325.0	9887	1.10	20.14	5.928	7895	92.0	3528	6552	14447	2.20
316.3	9620	1.18	21.61	6.038	7542	91.5	3456	6624	14166	2.14

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT050S3

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-124, 10-12', 405004 Stage 3



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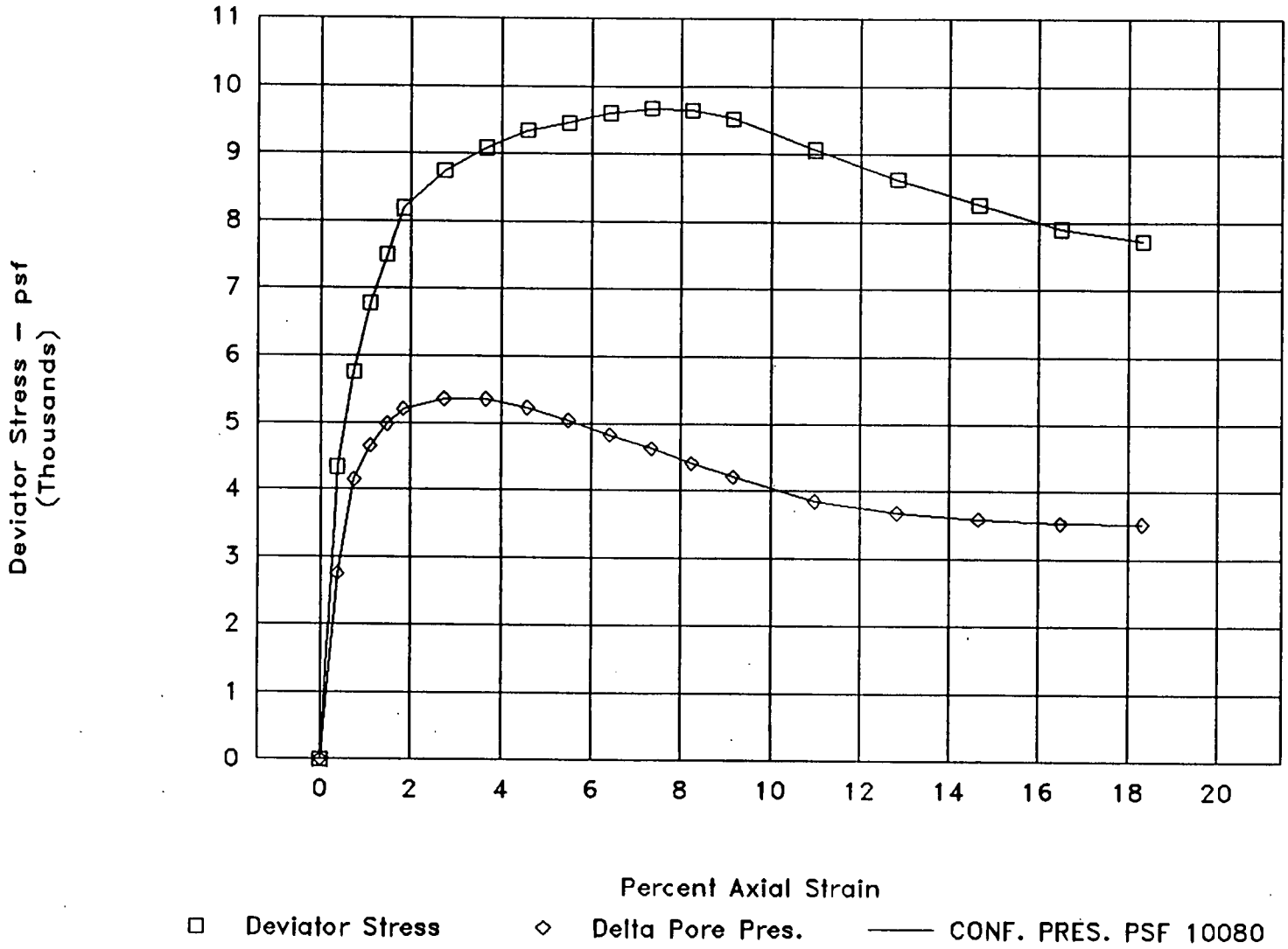
TRIAXIAL TEST - TX/CUpp

G2-124, 10-12', 405004 Stage 3



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 1	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1039.5	1028.2
Wt. Wet Soil & Pan	(g)	1047.7	1036.5
Wt. Dry Soil & Pan	(g)	954.3	954.3
Wt. Lost Moisture	(g)	93.4	82.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	946.0	946.0
Moisture Content %		9.9	8.7
Wet Density PCF		148.5	148.0
Dry Density PCF		135.2	136.2

Init. Diameter	(in)	2.393
Init. Area	(sq in)	4.498
Init. Height	(in)	5.928
Vol. Bef. Consol.	(cu ft)	0.01543
Vol. After Consol.	(cu ft)	0.01531

Notes & Comments:

Data entry by: CAL Date: 6-22-95
Data checked by: CW Date: 8-14-95
FileName:SAT029S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 1	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.1	14.6				
50.0		15.8	15.9	36.0	45.7	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	0.30	0.00
0.25	0.5	2.45	-2.15
0.5	0.7	2.80	-2.50
1	1.0	3.20	-2.90
2	1.4	3.70	-3.40
4	2.0	4.30	-4.00
9	3.0	5.20	-4.90
16	4.0	5.80	-5.50
30	5.5	6.33	-6.03
60	7.7	6.70	-6.40
120	11.0	7.00	-6.70
240	15.5	7.20	-6.90
360	19.0	7.20	-6.90

Initial Height	(in)	5.928	Init. Vol.	(CC)	436.98
Height Change	(in)	0.035	Vol. Change	(CC)	21.30
Ht. After Cons.	(in)	5.893	Cell Exp.	(CC)	17.96
Initial Area	(sq in)	4.498	Net Change	(CC)	3.34
Area After Cons.	(sq in)	4.490	Cons. Vol.	(CC)	433.64

Data entry by: CAL Date: 6-22-95
Data checked by: CW Date: 8-14-95
FileName:SAT029S1 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 1	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

Init. Ht.	(in)	5.928	Init. Area	(sq in)	4.498
Consol. Ht.	(in)	5.893	Consol. Area	(sq in)	4.490
Back Pres.	PSI	36.0	Strain Rate	(in/min)	0.003

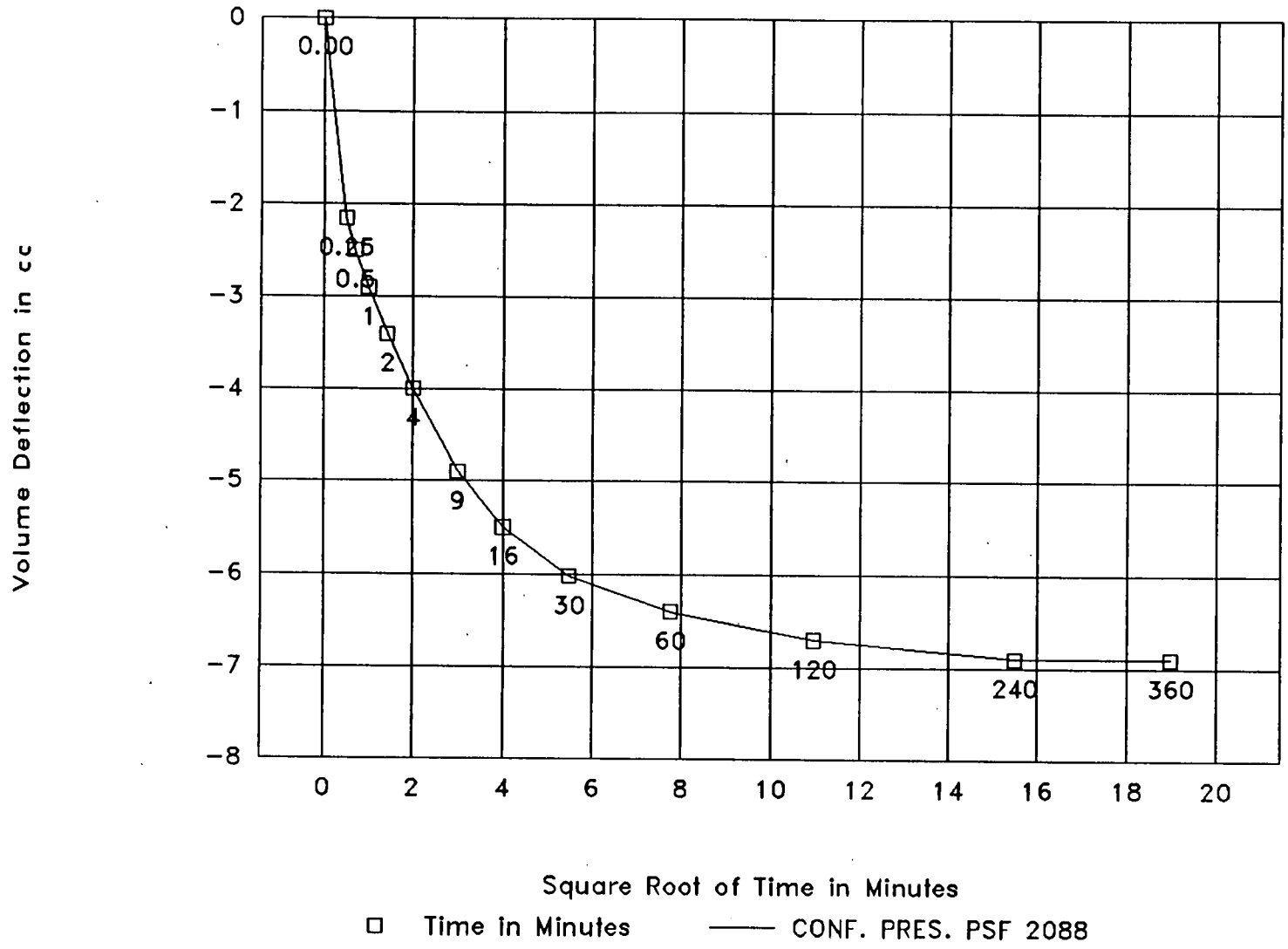
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.490	0	36.0	0	2088	2088	1.00
46.0	1475	0.01	0.17	4.497	1473	40.7	677	1411	2884	2.04
54.0	1732	0.02	0.34	4.505	1726	42.6	950	1138	2864	2.52
60.0	1924	0.03	0.51	4.513	1915	43.6	1094	994	2908	2.93
65.0	2085	0.04	0.68	4.520	2071	44.1	1166	922	2992	3.25
70.0	2245	0.05	0.85	4.528	2226	44.4	1210	878	3105	3.53
74.0	2373	0.06	1.02	4.536	2349	44.5	1224	864	3213	3.72
78.0	2502	0.07	1.19	4.544	2472	44.5	1224	864	3336	3.86
81.5	2614	0.08	1.36	4.551	2579	44.6	1238	850	3428	4.03
85.0	2726	0.09	1.53	4.559	2685	44.4	1210	878	3563	4.06

Data entry by: CAL Date: 6-22-95
Data checked by: CJ Date: 8-14-95
FileName:SAT029S1

ADVANCED TERRA TESTING, INC.

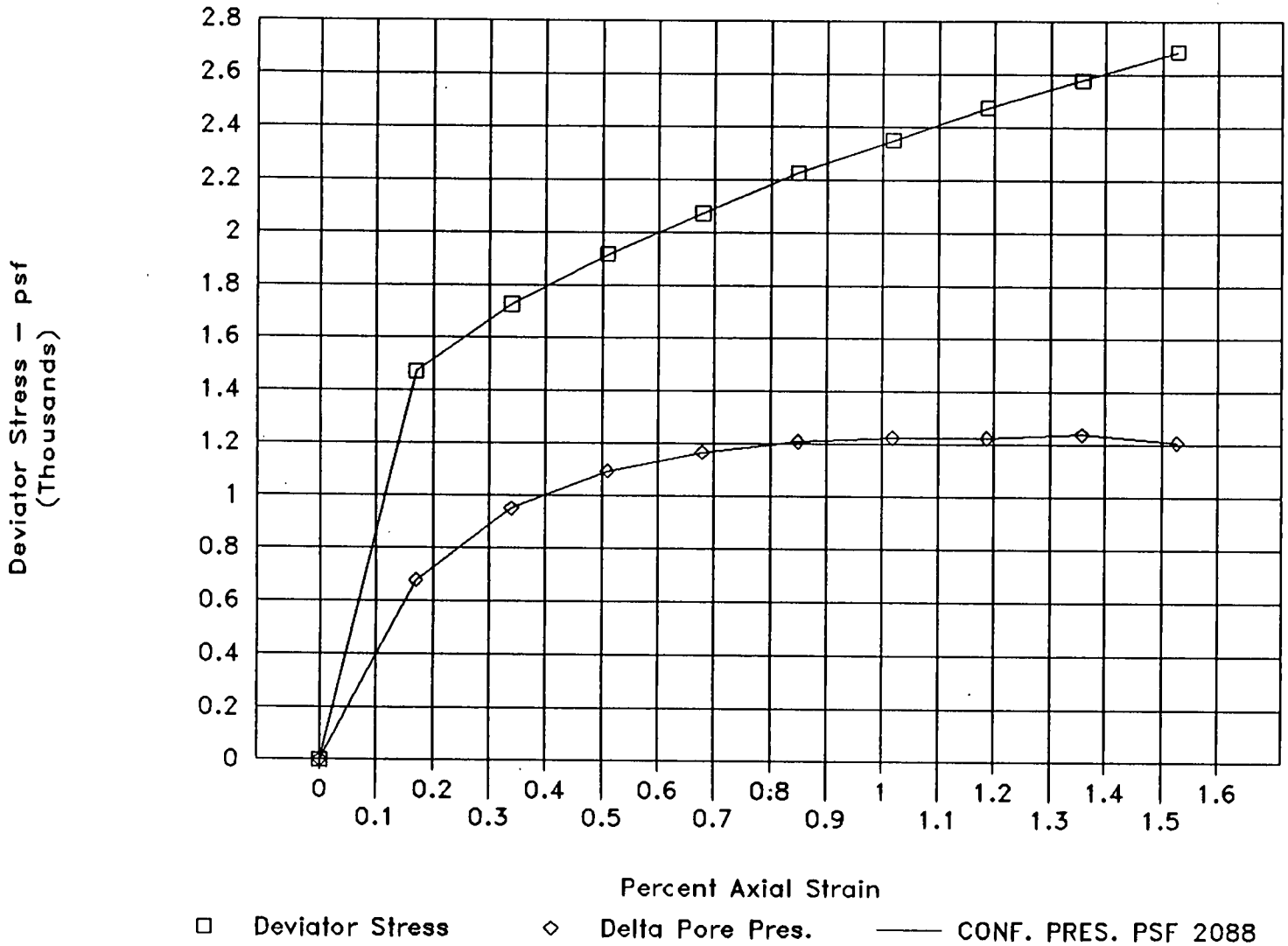
CONSOLIDATION DATA

G2-125, 12.5-14.5', 405029 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-125, 12.5-14.5', 405029 Stage 1



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 2	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	1039.5	1028.2
Wt. Wet Soil & Pan (g)	1047.7	1036.5
Wt. Dry Soil & Pan (g)	954.3	954.3
Wt. Lost Moisture (g)	93.4	82.2
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	946.0	946.0
Moisture Content %	9.9	8.7
Wet Density PCF	149.7	149.0
Dry Density PCF	136.3	137.1

Init. Diameter	(in)	2.409
Init. Area	(sq in)	4.558
Init. Height	(in)	5.803
Vol. Bef. Consol.	(cu ft)	0.01531
Vol. After Consol.	(cu ft)	0.01521

Notes & Comments:

Data entry by: CAL Date: 6-22-95
Data checked by: a Date: 8-14-95
FileName:SAT029S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 2	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	0.30	0.00
0.25	0.5	1.95	-1.65
0.5	0.7	2.10	-1.80
1	1.0	2.30	-2.00
2	1.4	2.55	-2.25
4	2.0	2.88	-2.58
9	3.0	3.30	-3.00
16	4.0	3.55	-3.25
30	5.5	3.80	-3.50
60	7.7	4.00	-3.70
120	11.0	4.15	-3.85
240	15.5	4.15	-3.85
360	19.0	4.20	-3.90

Initial Height	(in)	5.803	Init. Vol.	(CC)	433.51
Height Change	(in)	0.004	Vol. Change	(CC)	5.40
Ht. After Cons.	(in)	5.799	Cell Exp.	(CC)	2.71
Initial Area	(sq in)	4.558	Net Change	(CC)	2.69
Area After Cons.	(sq in)	4.533	Cons. Vol.	(CC)	430.82

Data entry by: CAL Date: 6-22-95
Data checked by: CJ Date: 8-14-95
FileName:SAT029S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 2	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

Init. Ht. (in)	5.803	Init. Area (sq in)	4.558
Consol. Ht. (in)	5.799	Consol. Area (sq in)	4.533
Back Pres. PSI	37.1	Strain Rate (in/min)	0.003

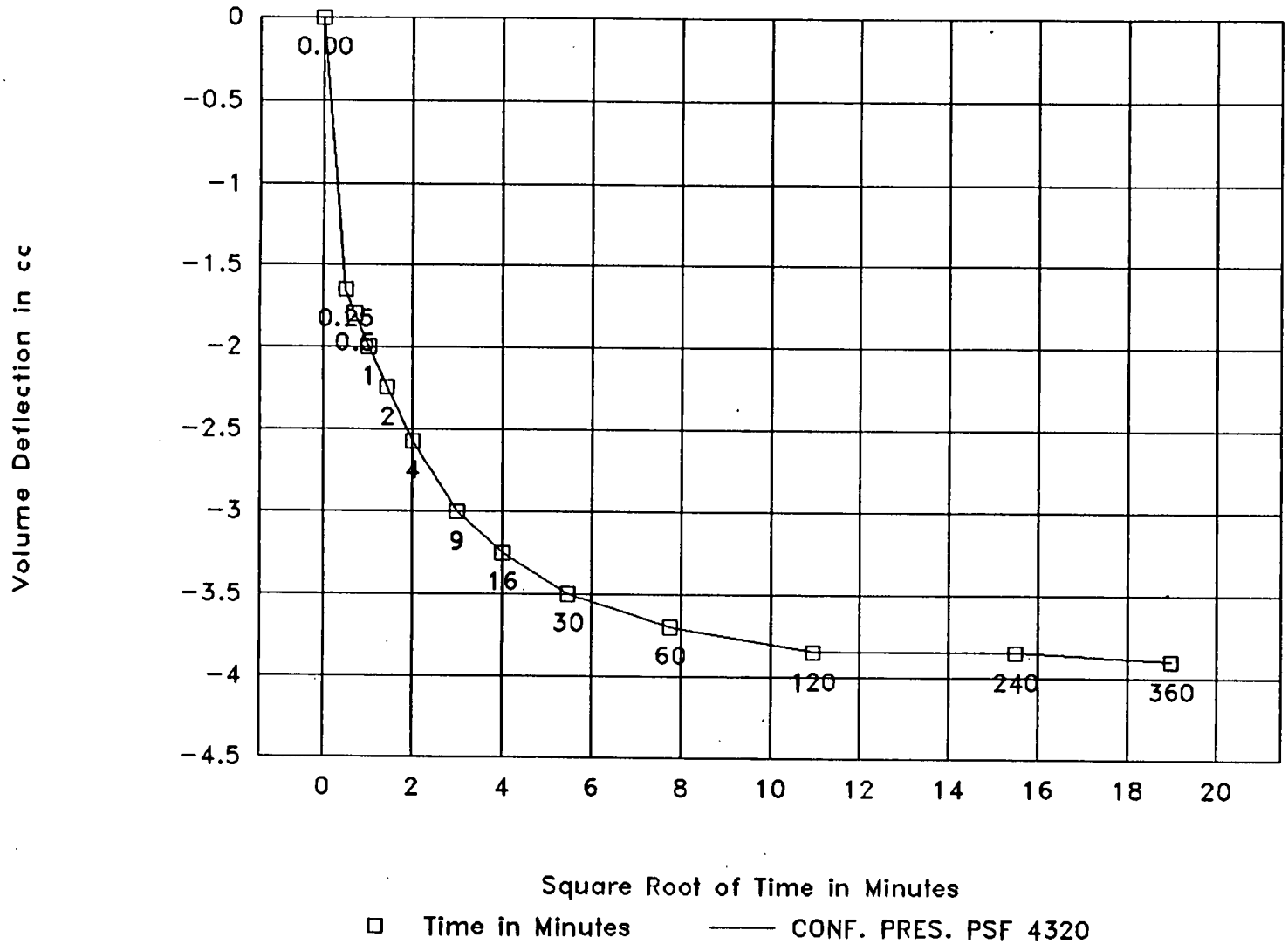
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.533	0	37.1	0	4320	4320	1.00
97.0	3082	0.01	0.17	4.541	3076	44.2	1022	3298	6374	1.93
137.5	4368	0.02	0.34	4.548	4353	47.8	1541	2779	7132	2.57
155.0	4924	0.03	0.52	4.556	4899	49.7	1814	2506	7404	2.96
167.5	5321	0.04	0.69	4.564	5285	50.7	1958	2362	7646	3.24
177.5	5639	0.05	0.86	4.572	5590	51.2	2030	2290	7880	3.44
185.0	5877	0.06	1.03	4.580	5816	51.4	2059	2261	8077	3.57
192.0	6100	0.07	1.21	4.588	6026	51.5	2074	2246	8272	3.68
198.0	6290	0.08	1.38	4.596	6203	51.4	2059	2261	8464	3.74
203.0	6449	0.09	1.55	4.604	6349	51.2	2030	2290	8639	3.77
208.0	6608	0.10	1.72	4.612	6494	51.0	2002	2318	8812	3.80

Data entry by: CAL Date: 6-22-95
Data checked by: CJ Date: 8-14-95
FileName: SAT029S2

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-125, 12.5-14.5', 405029 Stage 2



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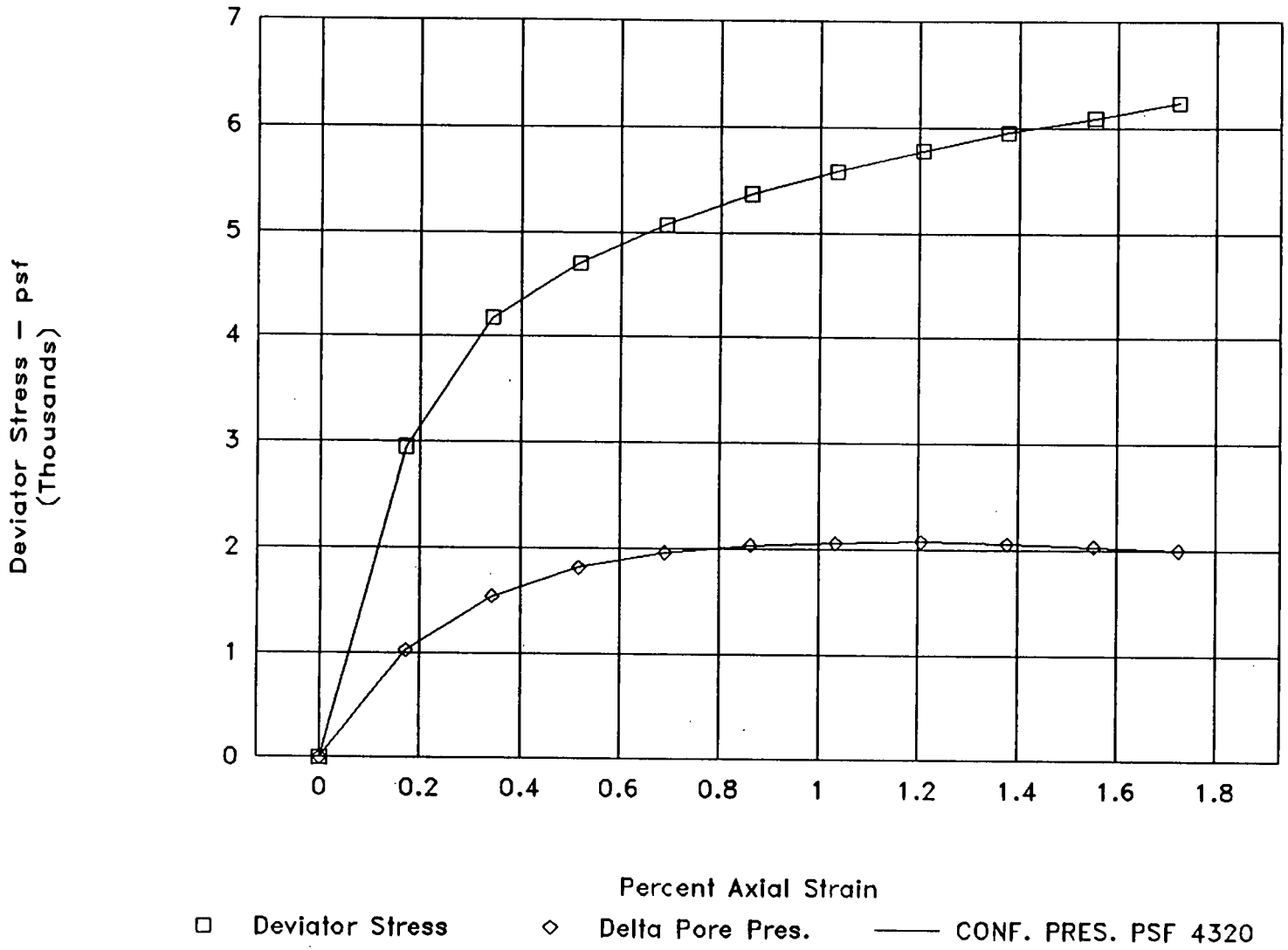
TRIAXIAL TEST - TX/CUpp

G2-125, 12.5-14.5', 405029 Stage 2



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 3	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1039.5	1028.2
Wt. Wet Soil & Pan	(g)	1047.7	1036.5
Wt. Dry Soil & Pan	(g)	954.3	954.3
Wt. Lost Moisture	(g)	93.4	82.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	946.0	946.0
Moisture Content %		9.9	8.7
Wet Density PCF		150.7	150.4
Dry Density PCF		137.1	138.3

Init. Diameter	(in)	2.423
Init. Area	(sq in)	4.611
Init. Height	(in)	5.699
Vol. Bef. Consol.	(cu ft)	0.01521
Vol. After Consol.	(cu ft)	0.01508

Notes & Comments:

Data entry by: CAL Date: 6-22-95
Data checked by: CJ Date: 8-14-95
FileName:SAT029S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 3	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	7.30	0.00
0.25	0.5	10.75	-3.45
0.5	0.7	10.95	-3.65
1	1.0	11.25	-3.95
2	1.4	11.63	-4.33
4	2.0	12.15	-4.85
9	3.0	12.80	-5.50
16	4.0	13.15	-5.85
30	5.5	13.50	-6.20
60	7.7	13.90	-6.60
120	11.0	14.20	-6.90
240	15.5	14.50	-7.20
360	19.0	14.70	-7.40

Initial Height	(in)	5.699	Init. Vol.	(CC)	430.70
Height Change	(in)	0.012	Vol. Change	(CC)	10.70
Ht. After Cons.	(in)	5.687	Cell Exp.	(CC)	7.00
Initial Area	(sq in)	4.611	Net Change	(CC)	3.70
Area After Cons.	(sq in)	4.581	Cons. Vol.	(CC)	427.00

Data entry by: CAL Date: 6-22-95
Data checked by: CL Date: 8-14-95
FileName:SAT029S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 3	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

Init. Ht.	(in)	5.699	Init. Area	(sq in)	4.611
Consol. Ht.	(in)	5.687	Consol. Area	(sq in)	4.581
Back Pres.	PSI	37.0	Strain Rate	(in/min)	0.003

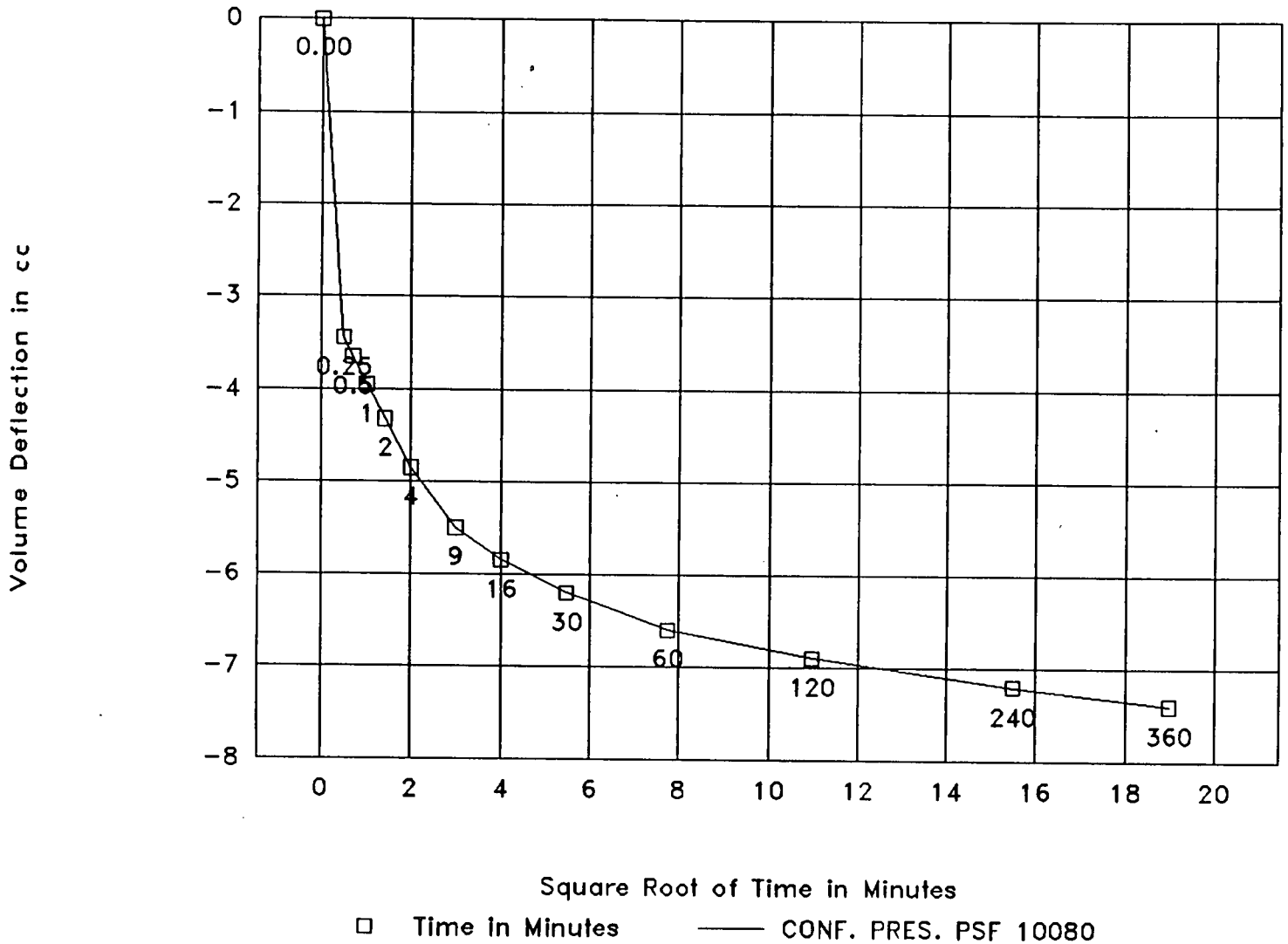
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.581	0	37.0	0	10080	10080	1.00
275.0	8644	0.02	0.35	4.597	8614	62.5	3672	6408	15022	2.34
362.0	11379	0.04	0.70	4.614	11299	69.2	4637	5443	16742	3.08
396.0	12448	0.06	1.06	4.630	12316	70.8	4867	5213	17529	3.36
422.0	13265	0.08	1.41	4.646	13078	70.8	4867	5213	18291	3.51
442.0	13894	0.10	1.76	4.663	13649	70.6	4838	5242	18891	3.60
483.0	15183	0.15	2.64	4.705	14782	68.7	4565	5515	20297	3.68
521.0	16377	0.20	3.52	4.748	15801	66.3	4219	5861	21662	3.70
555.0	17446	0.25	4.40	4.792	16679	64.2	3917	6163	22842	3.71
589.0	18515	0.30	5.28	4.836	17538	62.1	3614	6466	24003	3.71
622.0	19552	0.35	6.15	4.881	18349	60.4	3370	6710	25059	3.73
647.0	20338	0.40	7.03	4.928	18907	58.9	3154	6926	25834	3.73
682.0	21438	0.50	8.79	5.023	19553	56.1	2750	7330	26883	3.67
706.0	22192	0.60	10.55	5.121	19851	53.7	2405	7675	27526	3.59
721.0	22664	0.70	12.31	5.224	19874	52.3	2203	7877	27751	3.52
734.0	23072	0.80	14.07	5.331	19827	51.3	2059	8021	27848	3.47
742.0	23324	0.90	15.83	5.442	19633	50.5	1944	8136	27769	3.41
740.0	23261	1.00	17.58	5.558	19171	50.3	1915	8165	27336	3.35
734.0	23072	1.10	19.34	5.680	18610	50.0	1872	8208	26818	3.27
730.0	22947	1.15	20.22	5.742	18307	49.5	1800	8280	26587	3.21

Data entry by: CAL Date: 6-22-95
Data checked by: CJ Date: 8-14-95
FileName: SAT029S3

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-125, 12.5-14.5', 405029 Stage 3



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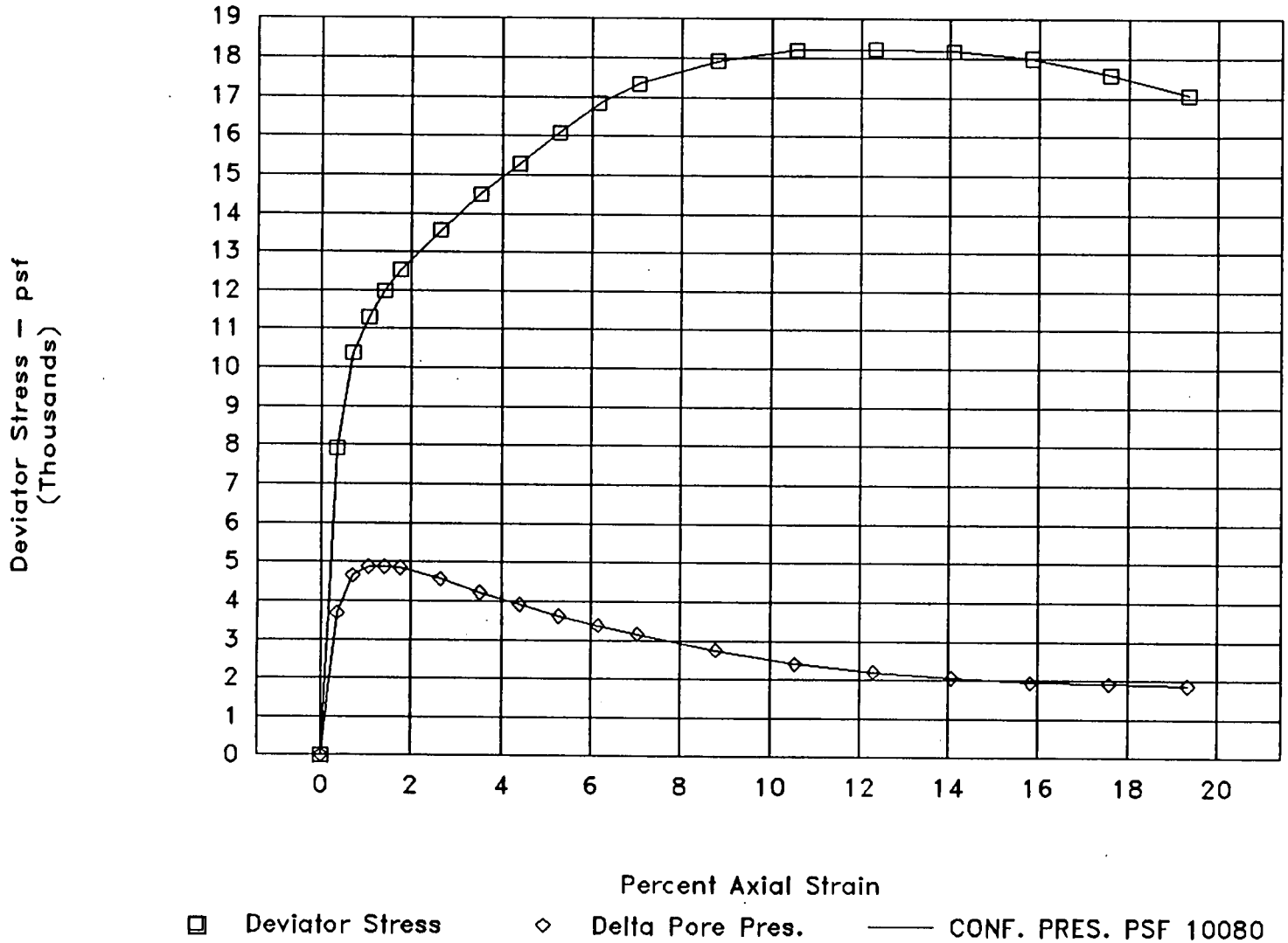
TRIAXIAL TEST - TX/CUpp

G2-125, 12.5-14.5', 405029 Stage 3



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

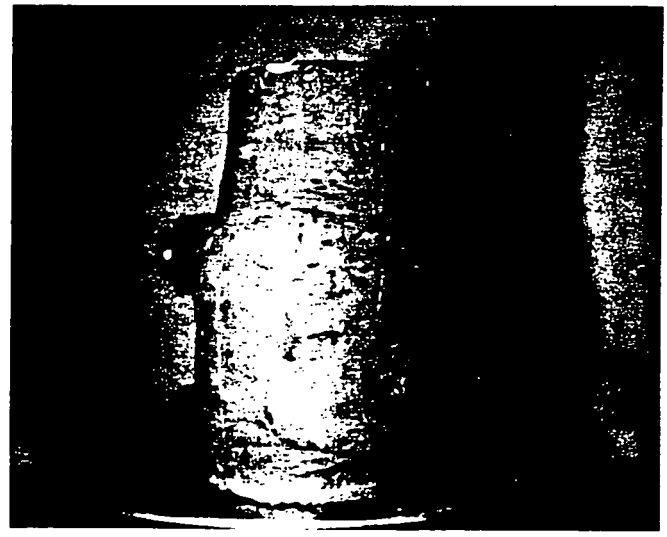
JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1004.7	994.0
Wt. Wet Soil & Pan	(g)	1013.0	1002.4
Wt. Dry Soil & Pan	(g)	893.7	893.7
Wt. Lost Moisture	(g)	119.4	108.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	885.3	885.3
Moisture Content %		13.5	12.3
Wet Density PCF		142.4	143.5
Dry Density PCF		125.5	127.8

Init. Diameter	(in)	2.395
Init. Area	(sq in)	4.505
Init. Height	(in)	5.964
Vol. Bef. Consol.	(cu ft)	0.01555
Vol. After Consol.	(cu ft)	0.01527

Notes & Comments:



SAIC/PARSONS PO 140 2059-13D
FERNALD Dwgd CAL
G2-126 404768 7.5-9.5'

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT068S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.8	12.1				
50.0		12.7	12.8	37.8	47.5	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	12.70	0.00
0.25	0.5	14.03	-1.33
0.5	0.7	14.30	-1.60
1	1.0	14.60	-1.90
2	1.4	15.00	-2.30
4	2.0	15.50	-2.80
9	3.0	16.10	-3.40
16	4.0	16.40	-3.70
30	5.5	16.60	-3.90
60	7.7	16.70	-4.00
120	11.0	16.85	-4.15
240	15.5	16.88	-4.18
360	19.0	16.88	-4.18

Initial Height	(in)	5.964	Init. Vol.	(CC)	440.37
Height Change	(in)	0.037	Vol. Change	(CC)	16.80
Ht. After Cons.	(in)	5.927	Cell Exp.	(CC)	8.96
Initial Area	(sq in)	4.505	Net Change	(CC)	7.84
Area After Cons.	(sq in)	4.452	Cons. Vol.	(CC)	432.53

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT068S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

Init. Ht. (in)	5.964	Init. Area (sq in)	4.505
Consol. Ht. (in)	5.927	Consol. Area (sq in)	4.452
Back Pres. PSI	36.8	Strain Rate (in/min)	0.004

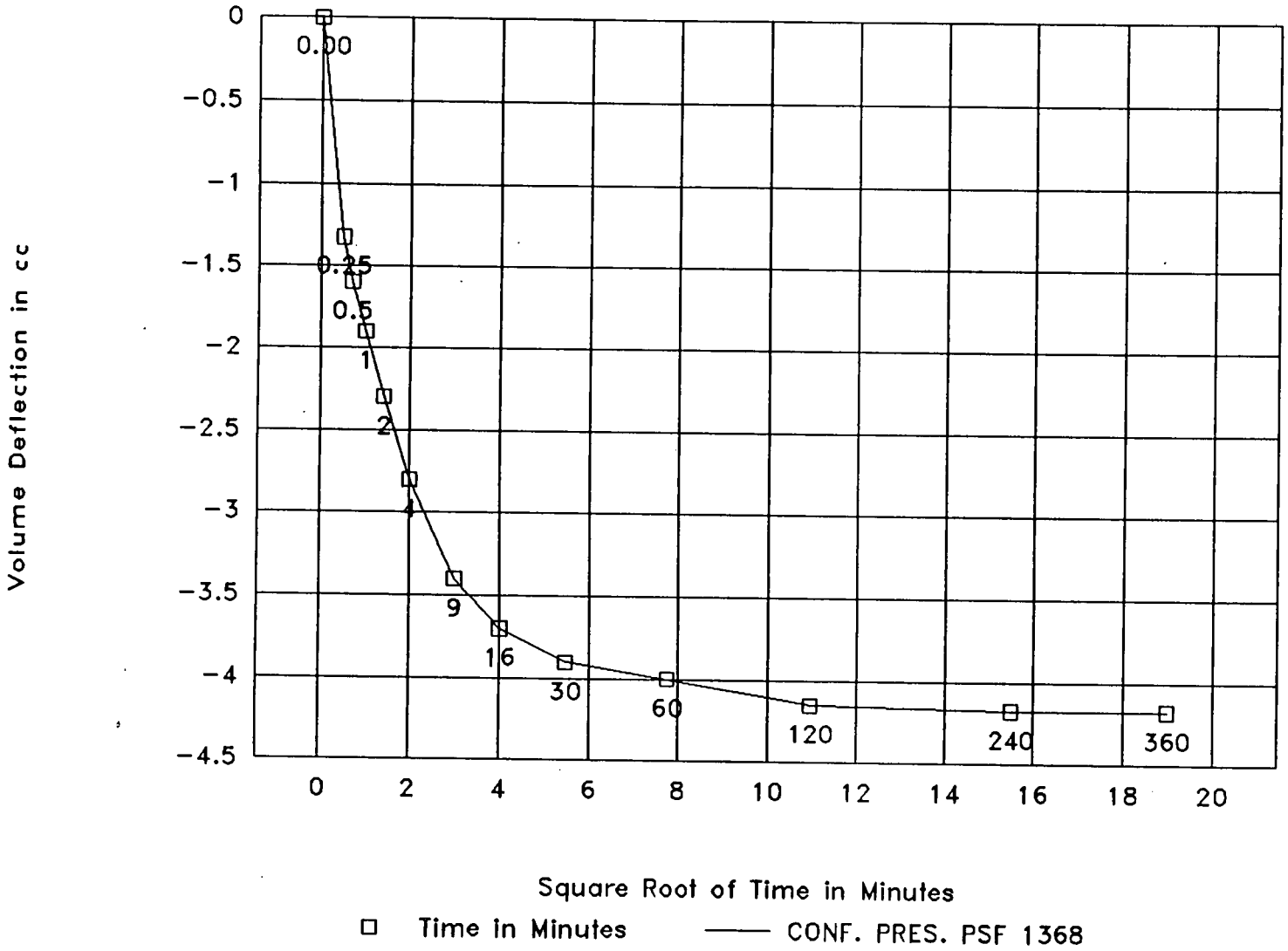
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.452	0	36.8	0	1368	1368	1.00
39.0	1261	0.01	0.17	4.460	1259	39.1	331	1037	2296	2.21
45.5	1472	0.02	0.34	4.468	1467	39.8	432	936	2403	2.57
52.5	1698	0.03	0.51	4.475	1689	40.0	461	907	2597	2.86
58.0	1876	0.04	0.67	4.483	1863	40.1	475	893	2756	3.09
64.0	2070	0.05	0.84	4.490	2052	40.2	490	878	2931	3.34
69.0	2232	0.06	1.01	4.498	2209	40.3	504	864	3073	3.56
73.0	2361	0.07	1.18	4.506	2333	40.4	518	850	3183	3.75
77.5	2506	0.08	1.35	4.513	2473	40.3	504	864	3337	3.86
81.5	2636	0.09	1.52	4.521	2596	40.2	490	878	3474	3.96
85.0	2749	0.10	1.69	4.529	2703	40.0	461	907	3610	3.98
89.0	2878	0.11	1.86	4.537	2825	39.8	432	936	3761	4.02
92.5	2992	0.12	2.02	4.544	2931	39.6	403	965	3896	4.04
96.0	3105	0.13	2.19	4.552	3037	39.4	374	994	4030	4.06
99.5	3218	0.14	2.36	4.560	3142	39.3	360	1008	4150	4.12
102.5	3315	0.15	2.53	4.568	3231	39.1	331	1037	4268	4.12
110.5	3574	0.18	2.95	4.588	3468	38.7	274	1094	4563	4.17
118.0	3816	0.20	3.37	4.608	3688	38.3	216	1152	4840	4.20

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT068S1

ADVANCED TERRA TESTING, INC.

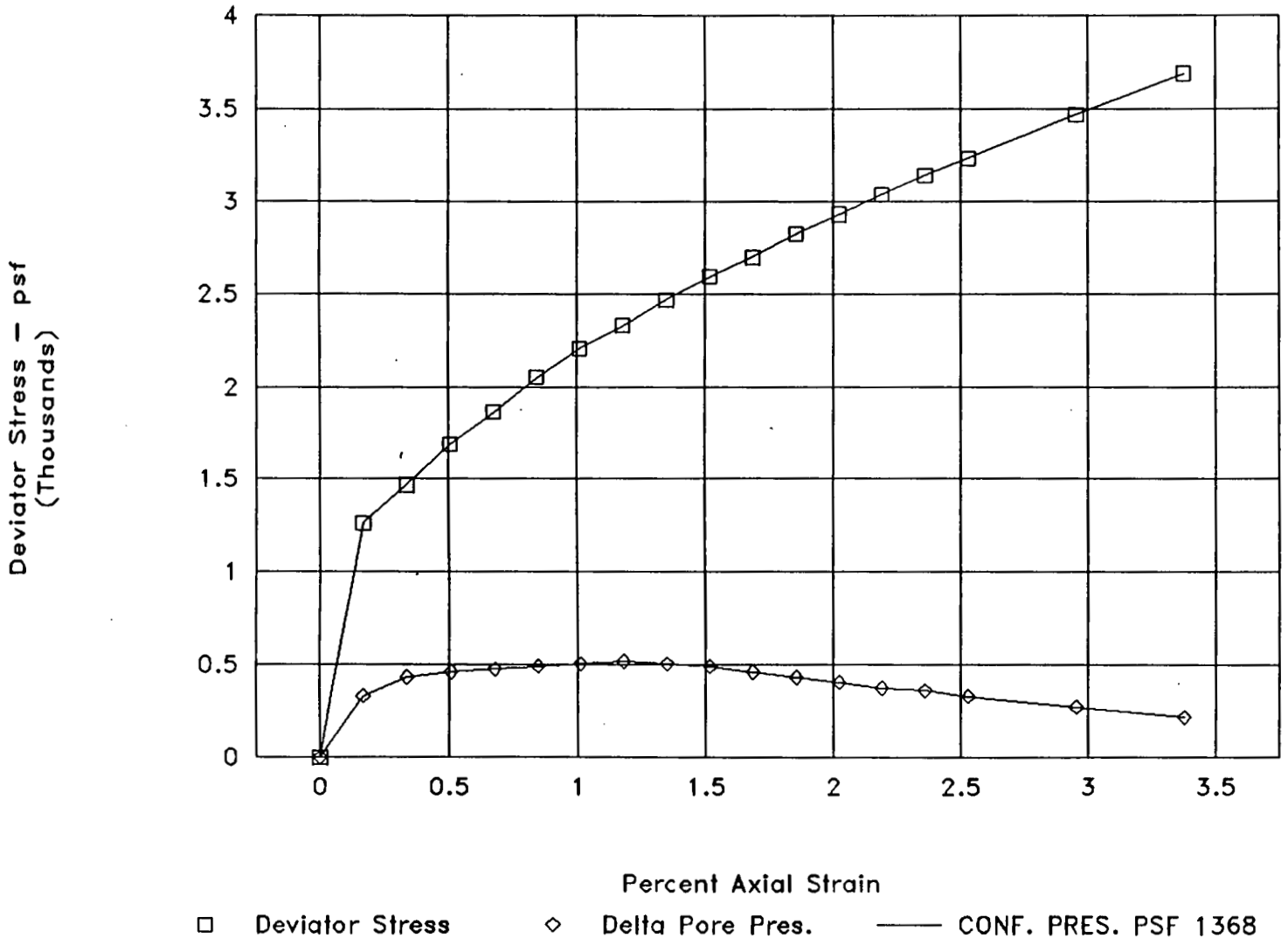
CONSOLIDATION DATA

G2-126, 7.5-9.5, 404768 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-126, 7.5-9.5, 404768 Stage 1



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1004.7	994.0
Wt. Wet Soil & Pan	(g)	1013.0	1002.4
Wt. Dry Soil & Pan	(g)	893.7	893.7
Wt. Lost Moisture	(g)	119.4	108.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	885.3	885.3
Moisture Content %		13.5	12.3
Wet Density PCF		145.0	145.3
Dry Density PCF		127.8	129.4

Init. Diameter	(in)	2.422
Init. Area	(sq in)	4.608
Init. Height	(in)	5.727
Vol. Bef. Consol.	(cu ft)	0.01527
Vol. After Consol.	(cu ft)	0.01509

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: G Date: 8-14-95
FileName:SAT068S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	19.30	0.00
0.25	0.5	21.00	-1.70
0.5	0.7	21.20	-1.90
1	1.0	21.40	-2.10
2	1.4	21.80	-2.50
4	2.0	22.28	-2.97
9	3.0	23.13	-3.82
16	4.0	23.88	-4.57
30	5.5	24.60	-5.30
60	7.7	25.20	-5.90
120	11.0	25.50	-6.20
240	15.5	25.70	-6.40
360	19.0	25.80	-6.50

Initial Height	(in)	5.727	Init. Vol.	(CC)	432.49
Height Change	(in)	0.001	Vol. Change	(CC)	7.10
Ht. After Cons.	(in)	5.726	Cell Exp.	(CC)	1.85
Initial Area	(sq in)	4.608	Net Change	(CC)	5.26
Area After Cons.	(sq in)	4.552	Cons. Vol.	(CC)	427.24

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT068S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 2	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

Init. Ht. (in)	5.727	Init. Area (sq in)	4.608
Consol. Ht. (in)	5.726	Consol. Area (sq in)	4.552
Back Pres. PSI	35.7	Strain Rate (in/min)	0.002

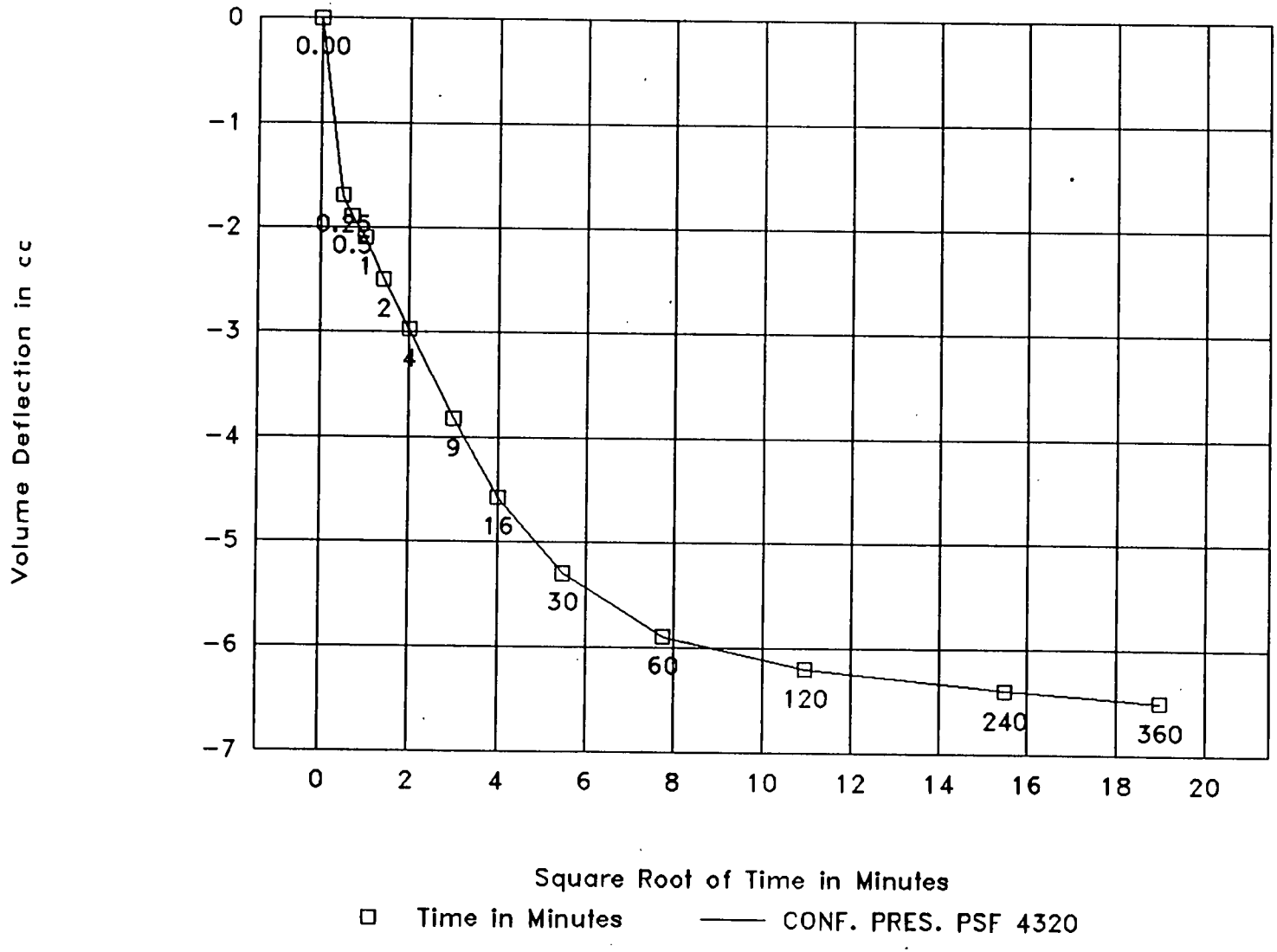
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.552	0	35.7	0	4320	4320	1.00
52.0	1645	0.01	0.09	4.556	1643	39.1	490	3830	5474	1.43
81.0	2562	0.01	0.17	4.560	2558	42.7	1008	3312	5870	1.77
117.0	3701	0.02	0.35	4.568	3688	45.9	1469	2851	6539	2.29
140.0	4428	0.03	0.52	4.576	4405	47.5	1699	2621	7026	2.68
158.0	4998	0.04	0.70	4.584	4963	48.3	1814	2506	7468	2.98
171.0	5409	0.05	0.87	4.593	5362	48.7	1872	2448	7810	3.19
183.0	5789	0.06	1.05	4.601	5728	48.8	1886	2434	8162	3.35
193.0	6105	0.07	1.22	4.609	6030	48.8	1886	2434	8464	3.48
201.0	6358	0.08	1.40	4.617	6269	48.6	1858	2462	8732	3.55
209.0	6611	0.09	1.57	4.625	6507	48.5	1843	2477	8984	3.63
216.0	6832	0.10	1.75	4.633	6713	48.3	1814	2506	9219	3.68

Data entry by: CAL Date: 6-20-95
Data checked by: CW Date: 8-14-95
FileName:SAT068S2

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-126, 7.5-9.5, 404768 Stage 2



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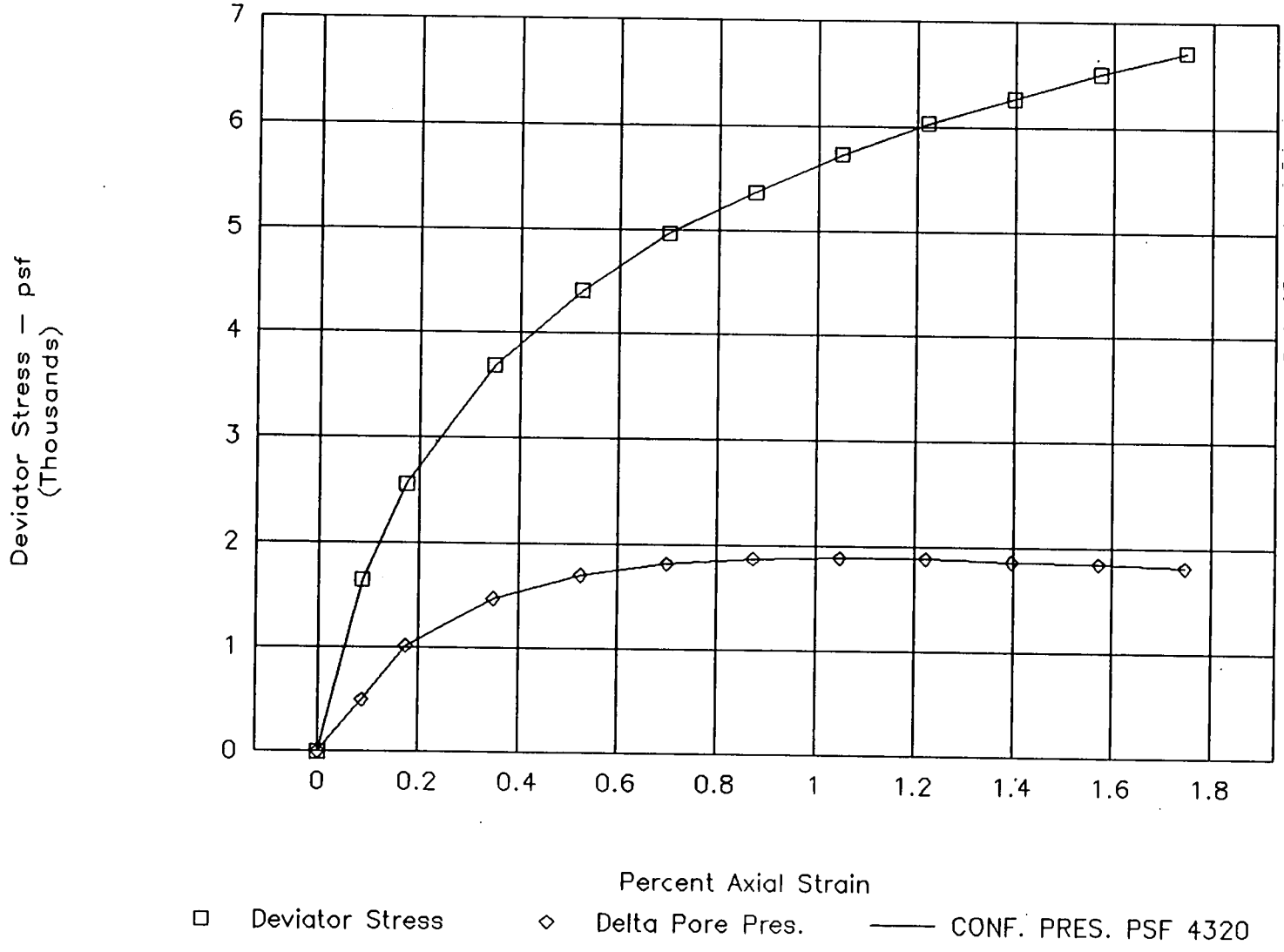
TRIAXIAL TEST - TX/CUpp

G2-126, 7.5-9.5, 404768 Stage 2



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1004.7	994.0
Wt. Wet Soil & Pan	(g)	1013.0	1002.4
Wt. Dry Soil & Pan	(g)	893.7	893.7
Wt. Lost Moisture	(g)	119.4	108.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	885.3	885.3
Moisture Content %		13.5	12.3
Wet Density PCF		146.8	147.0
Dry Density PCF		129.4	130.9

Init. Diameter	(in)	2.429
Init. Area	(sq in)	4.633
Init. Height	(in)	5.626
Vol. Bef. Consol.	(cu ft)	0.01508
Vol. After Consol.	(cu ft)	0.01491

Notes & Comments:

Data entry by: CAL Date: 6-20-95
Data checked by: W Date: 8-14-95
FileName:SAT068S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	28.30	0.00
0.25	0.5	31.20	-2.90
0.5	0.7	31.30	-3.00
1	1.0	31.50	-3.20
2	1.4	31.75	-3.45
4	2.0	32.15	-3.85
9	3.0	32.70	-4.40
16	4.0	33.30	-5.00
30	5.5	34.00	-5.70
60	7.7	34.70	-6.40
120	11.0	35.10	-6.80
240	15.5	35.40	-7.10
360	19.0	35.55	-7.25

Initial Height	(in)	5.626	Init. Vol.	(CC)	427.21
Height Change	(in)	0.004	Vol. Change	(CC)	8.60
Ht. After Cons.	(in)	5.622	Cell Exp.	(CC)	3.60
Initial Area	(sq in)	4.633	Net Change	(CC)	5.00
Area After Cons.	(sq in)	4.582	Cons. Vol.	(CC)	422.21

Data entry by: CAL Date: 6-20-95
Data checked by: Cr Date: 8-14-95
FileName:SAT068S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 3	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

Init. Ht. (in)	5.626	Init. Area (sq in)	4.633
Consol. Ht. (in)	5.622	Consol. Area (sq in)	4.582
Back Pres. PSI	37.9	Strain Rate (in/min)	0.002

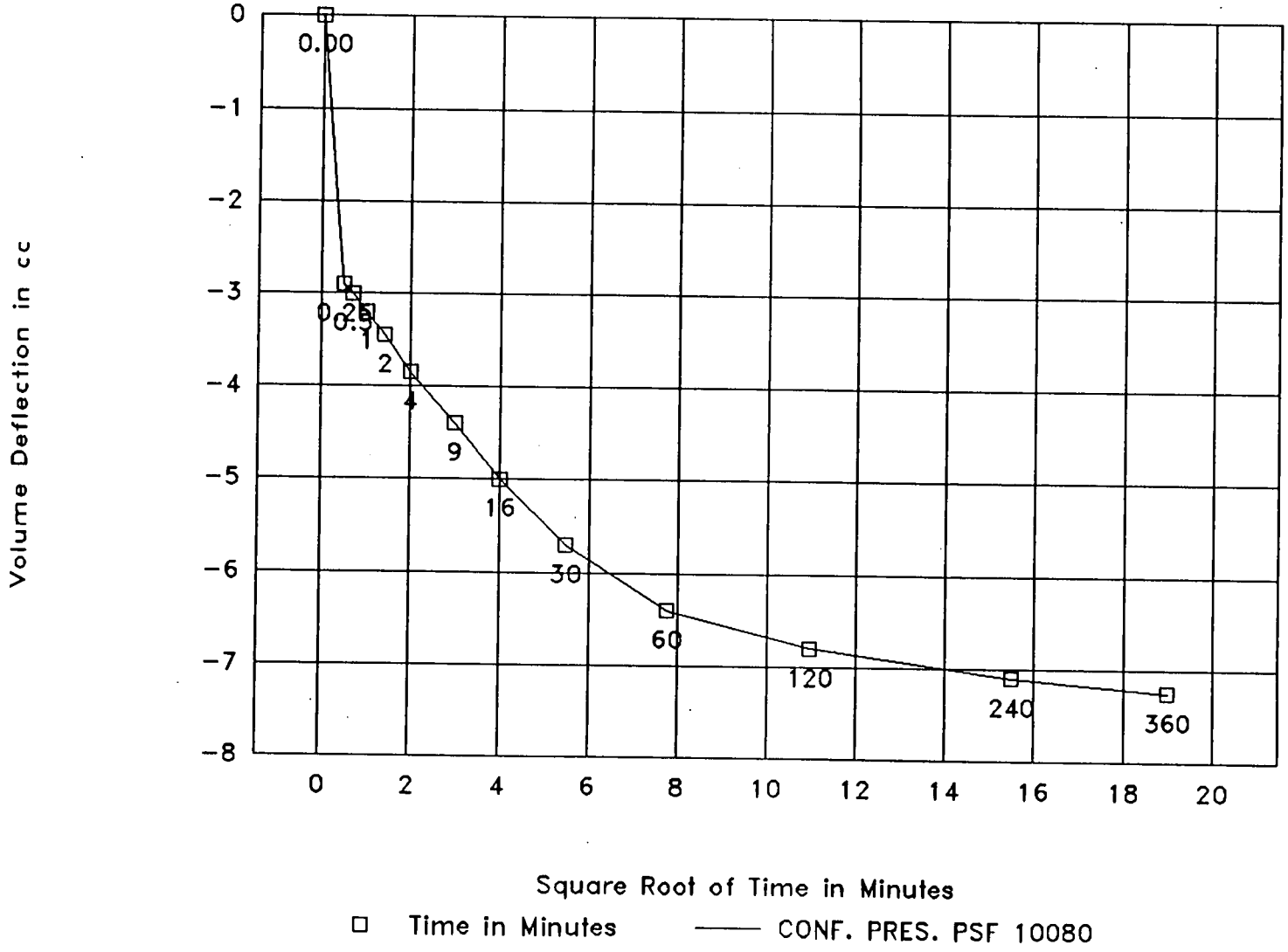
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.582	0	37.9	0	10080	10080	1.00
235.0	7385	0.02	0.36	4.598	7359	52.3	2074	8006	15365	1.92
324.0	10182	0.04	0.71	4.615	10110	63.3	3658	6422	16532	2.57
369.0	11597	0.06	1.07	4.631	11473	67.2	4219	5861	17334	2.96
397.0	12477	0.08	1.42	4.648	12299	68.7	4435	5645	17944	3.18
417.0	13105	0.10	1.78	4.665	12872	69.2	4507	5573	18445	3.31
452.0	14205	0.15	2.67	4.708	13826	69.1	4493	5587	19413	3.47
475.0	14928	0.20	3.56	4.751	14397	68.1	4349	5731	20128	3.51
495.0	15556	0.25	4.45	4.795	14865	66.9	4176	5904	20769	3.52
512.0	16091	0.30	5.34	4.840	15232	65.7	4003	6077	21309	3.51
529.0	16625	0.35	6.23	4.886	15590	64.6	3845	6235	21825	3.50
544.0	17096	0.40	7.11	4.933	15880	63.6	3701	6379	22259	3.49
571.0	17945	0.50	8.89	5.029	16349	61.9	3456	6624	22973	3.47
596.0	18731	0.60	10.67	5.129	16732	60.5	3254	6826	23557	3.45
620.0	19485	0.70	12.45	5.234	17059	59.4	3096	6984	24043	3.44
643.0	20208	0.80	14.23	5.342	17332	58.4	2952	7128	24460	3.43
663.0	20836	0.90	16.01	5.455	17501	57.5	2822	7258	24758	3.41
679.0	21339	1.00	17.79	5.573	17543	56.8	2722	7358	24902	3.38
690.0	21685	1.10	19.57	5.697	17442	56.1	2621	7459	24901	3.34
694.0	21810	1.14	20.28	5.747	17388	55.7	2563	7517	24905	3.31

Data entry by: CAL Date: 6-20-95
Data checked by: (a) Date: 8-14-95
FileName: SAT068S3

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-126, 7.5-9.5, 404768 Stage 3



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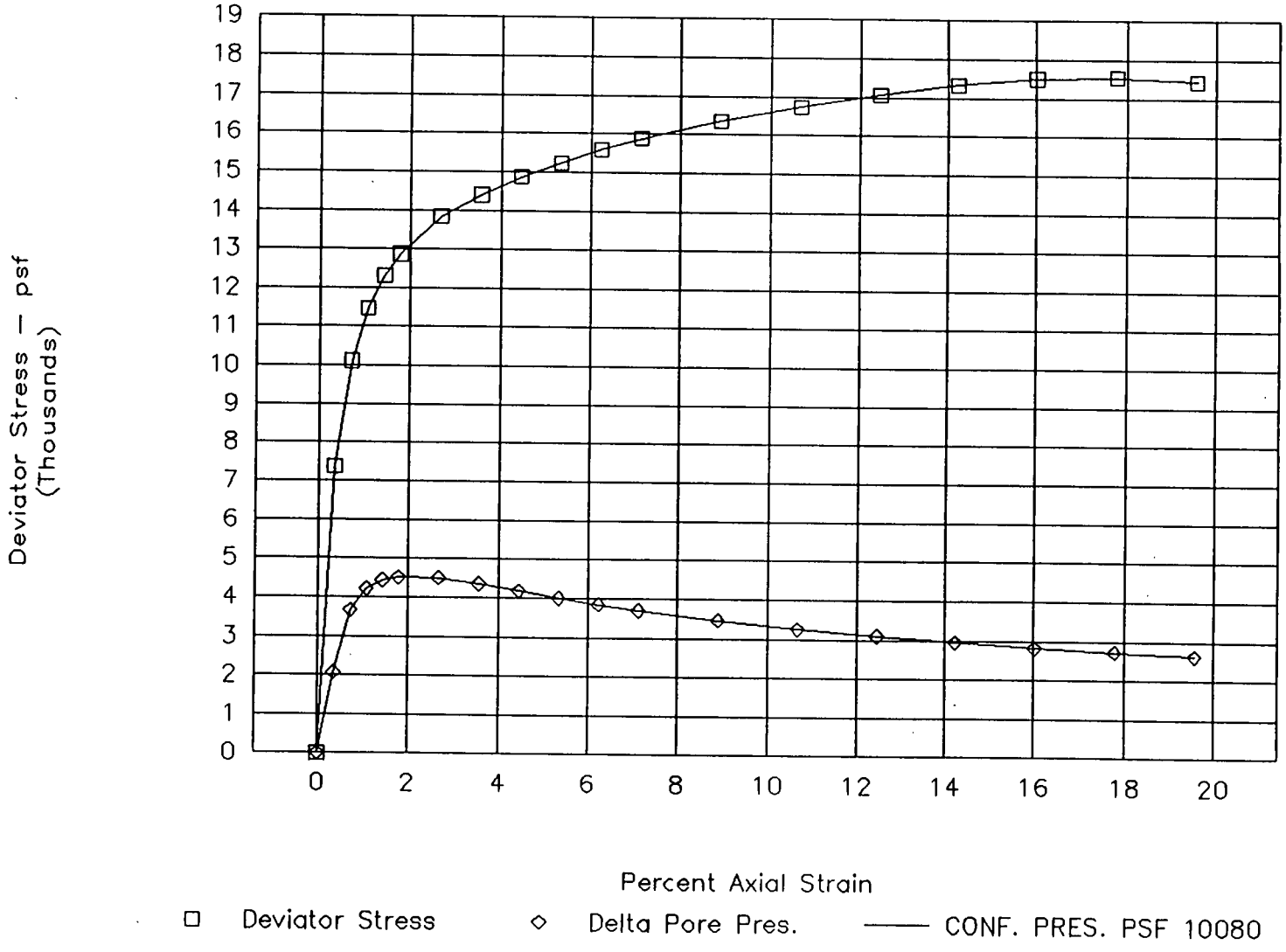
TRIAXIAL TEST - TX/CUpp

G2-126, 7.5-9.5, 404768 Stage 3



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001238

474

TRIAXIAL SHEAR, CONSOLIDATED, UNDRAINED WITH PORE PRESSURE MEASUREMENTS

Remolded to 95% MDD
3 Points
TX/CUpp
ASTM D 4767

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

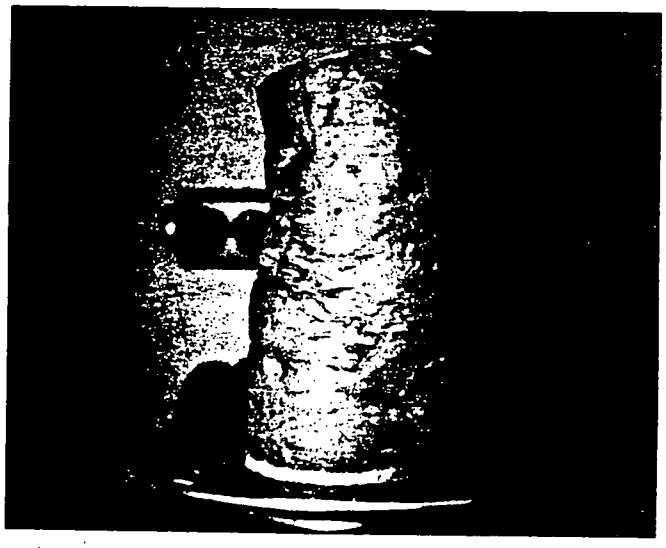
JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 A	TEST FINISHED	7-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	980.9	956.1
Wt. Wet Soil & Pan	(g)	989.2	964.4
Wt. Dry Soil & Pan	(g)	863.6	863.6
Wt. Lost Moisture	(g)	125.5	100.7
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	855.3	855.3
Moisture Content %		14.7	11.8
Wet Density PCF		137.1	149.4
Dry Density PCF		119.5	133.6

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01411

Notes & Comments: Remolded to 95% MDD



Data entry by: CJW Date: 7-29-95
Data checked by: Cal Date: 7-31-95
FileName:SAT0043A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 A	TEST FINISHED	7-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	6.6	21.8				
50.0		27.7	27.9	37.8	47.4	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.70	0.00
0.25	0.5	17.40	-7.70
0.5	0.7	18.65	-8.95
1	1.0	20.15	-10.45
2	1.4	22.10	-12.40
4	2.0	24.65	-14.95
9	3.0	28.60	-18.90
16	4.0	31.95	-22.25
30	5.5	36.10	-26.40
60	7.7	40.40	-30.70
120	11.0	42.90	-33.20
240	15.5	43.65	-33.95
360	19.0	43.85	-34.15

Initial Height	(in)	6.000	Init. Vol.	(CC)	446.74
Height Change	(in)	0.184	Vol. Change	(CC)	57.45
Ht. After Cons.	(in)	5.816	Cell Exp.	(CC)	10.36
Initial Area	(sq in)	4.543	Net Change	(CC)	47.09
Area After Cons.	(sq in)	4.192	Cons. Vol.	(CC)	399.65

Data entry by: CJW Date: 7-29-95
Data checked by: Cal Date: 7-31-95
FileName:SAT0043A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 A	TEST FINISHED	7-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht.	(in)	6.000	Init. Area	(sq in)	4.543
Consol. Ht.	(in)	5.816	Consol. Area	(sq in)	4.192
Back Pres.	PSI	38.6	Strain Rate	(in/min)	0.002

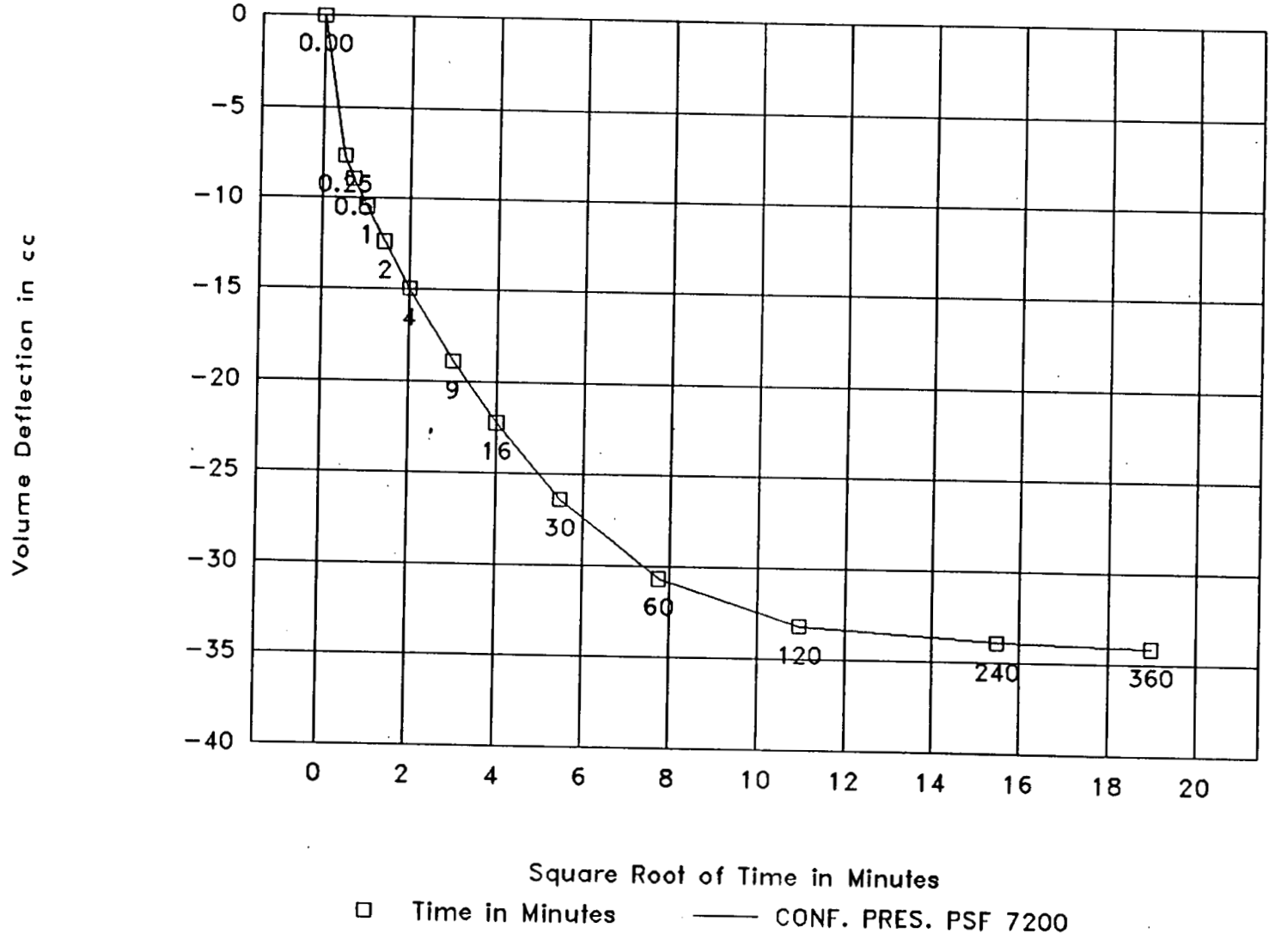
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.192	0	38.6	0	7200	7200	1.00
87.0	2988	0.01	0.17	4.200	2983	45.0	922	6278	9261	1.48
106.0	3641	0.02	0.34	4.207	3628	50.0	1642	5558	9187	1.65
127.0	4362	0.04	0.69	4.222	4332	58.5	2866	4334	8666	2.00
137.0	4706	0.06	1.03	4.236	4657	62.0	3370	3830	8487	2.22
146.0	5015	0.08	1.38	4.251	4946	64.3	3701	3499	8445	2.41
151.0	5186	0.10	1.72	4.266	5097	66.0	3946	3254	8352	2.57
164.0	5633	0.15	2.58	4.303	5488	68.2	4262	2938	8425	2.87
174.0	5976	0.20	3.44	4.342	5771	68.9	4363	2837	8608	3.03
183.0	6286	0.25	4.30	4.381	6015	69.3	4421	2779	8795	3.16
191.0	6560	0.30	5.16	4.421	6222	69.3	4421	2779	9001	3.24
198.0	6801	0.35	6.02	4.461	6391	69.2	4406	2794	9185	3.29
207.0	7110	0.40	6.88	4.502	6621	69.0	4378	2822	9443	3.35
220.0	7556	0.50	8.60	4.587	6907	68.3	4277	2923	9830	3.36
232.0	7969	0.60	10.32	4.675	7146	67.6	4176	3024	10170	3.36
241.0	8278	0.70	12.04	4.766	7281	67.3	4133	3067	10349	3.37
248.0	8518	0.80	13.76	4.861	7346	66.8	4061	3139	10486	3.34
254.0	8724	0.90	15.47	4.960	7374	66.4	4003	3197	10571	3.31
260.0	8930	1.00	17.19	5.063	7395	66.0	3946	3254	10649	3.27
263.0	9033	1.10	18.91	5.170	7325	65.6	3888	3312	10637	3.21
262.0	8999	1.20	20.63	5.282	7142	65.3	3845	3355	10497	3.13

Data entry by: CJW Date: 7-29-95
Data checked by: Cal Date: 7-31-95
FileName:SAT0043A

ADVANCED TERRA TESTING, INC.

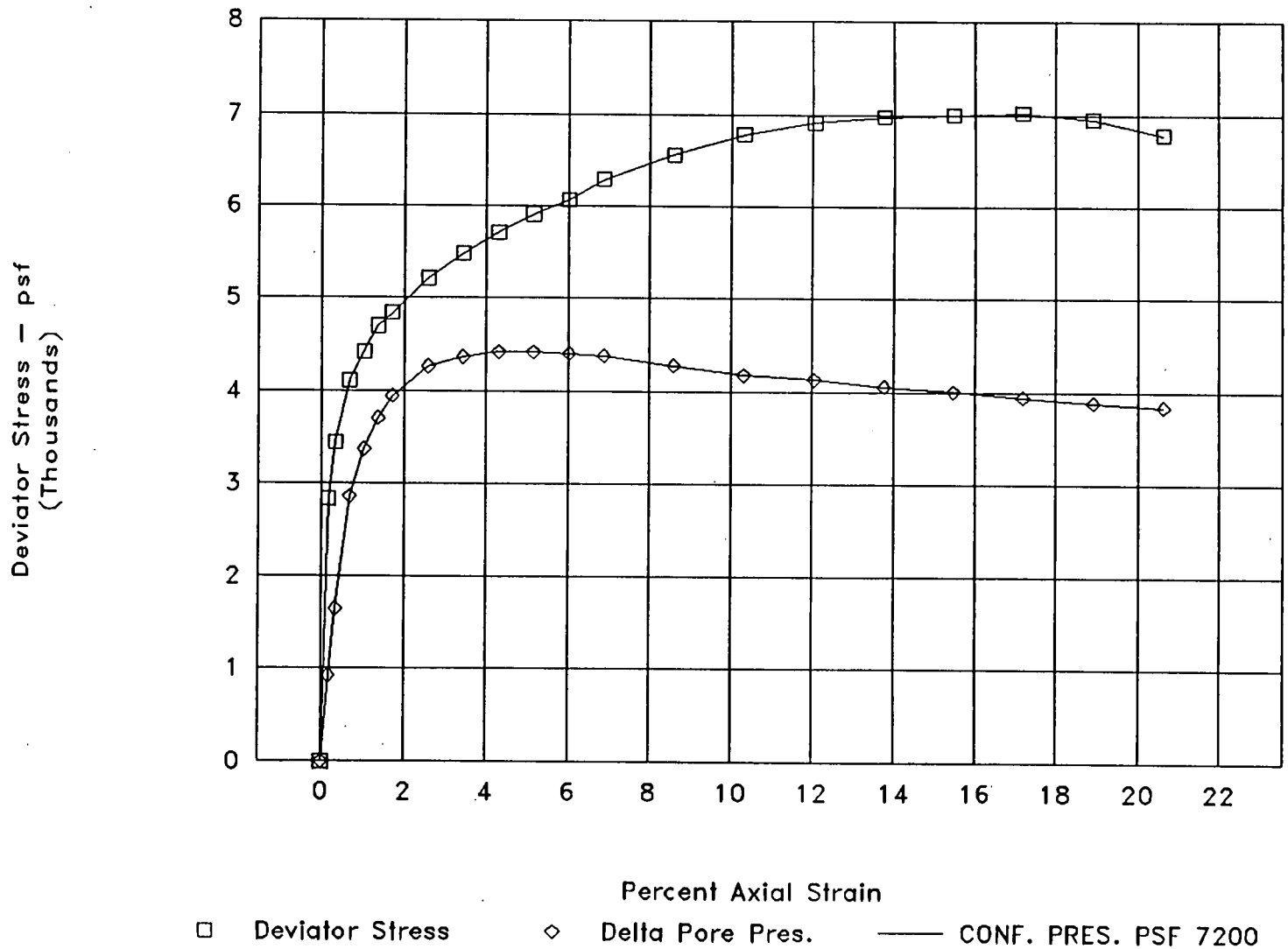
CONSOLIDATION DATA

G2-128, 7.5-9.5', 405043A



TRIAXIAL TEST - TX/CUpp

G2-128, 7.5-9.5', 405043A



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 B	TEST FINISHED	7-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	975.1	952.4
Wt. Wet Soil & Pan	(g)	983.4	960.8
Wt. Dry Soil & Pan	(g)	853.4	853.4
Wt. Lost Moisture	(g)	130.0	107.4
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	845.1	845.1
Moisture Content %		15.4	12.7
Wet Density PCF		136.3	144.3
Dry Density PCF		118.1	128.0

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01455

Notes & Comments: Remolded to 95% MDD

SAIC/Parsons PO 140 2059-13B
G2-128 # 405043 B 7.5-9.5'
TX/CU r95 σ3 3600 psf

Data entry by: CAL Date: 7-30-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT0043B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 B	TEST FINISHED	7-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC) Close	Burette Reading (CC) Open	Pore Pressure (PSI) Close	Pore Pressure (PSI) Open	Change	B
40.0	38.0	6.2	19.2				
50.0		22.2	22.3	37.5	47.1	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	22.30	0.00
0.25	0.5	26.00	-3.70
0.5	0.7	26.85	-4.55
1	1.0	27.90	-5.60
2	1.4	29.20	-6.90
4	2.0	30.90	-8.60
9	3.0	33.70	-11.40
16	4.0	36.15	-13.85
30	5.5	39.30	-17.00
60	7.7	42.80	-20.50
120	11.0	45.00	-22.70
240	15.5	45.70	-23.40
360	19.0	45.85	-23.55

Initial Height	(in)	6.000	Init. Vol.	(CC)	446.74
Height Change	(in)	0.143	Vol. Change	(CC)	40.60
Ht. After Cons.	(in)	5.857	Cell Exp.	(CC)	5.99
Initial Area	(sq in)	4.543	Net Change	(CC)	34.61
Area After Cons.	(sq in)	4.293	Cons. Vol.	(CC)	412.12

Data entry by: CAL Date: 7-30-95
Data checked by: AG Date: 7-31-95
FileName: SAT0043B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 B	TEST FINISHED	7-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

Init. Ht.	(in)	6.000	Init. Area	(sq in)	4.543
Consol. Ht.	(in)	5.857	Consol. Area	(sq in)	4.293
Back Pres.	PSI	38.0	Strain Rate	(in/min)	0.002

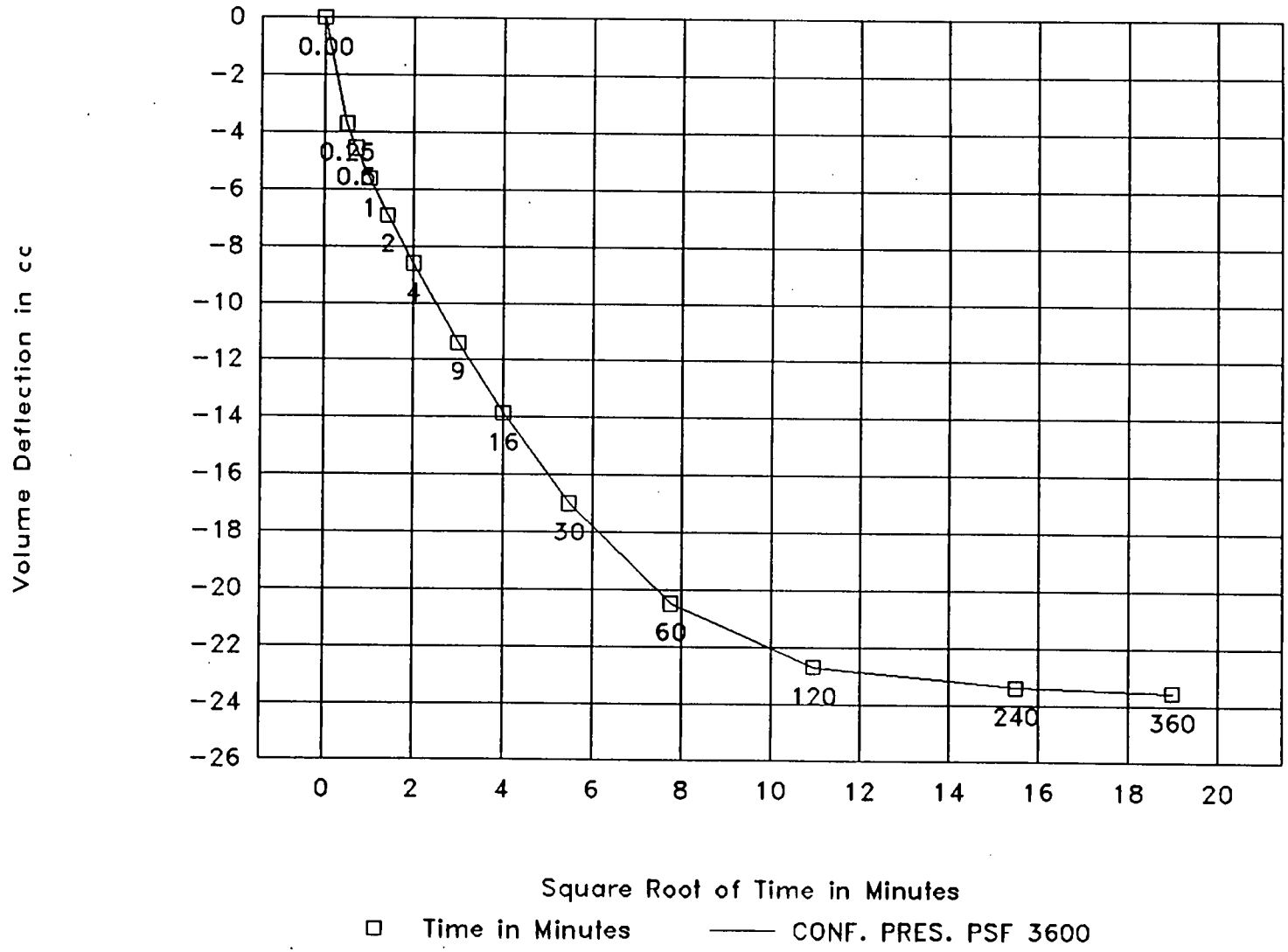
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.293	0	38.0	0	3600	3600	1.00
56.5	1895	0.02	0.34	4.308	1889	45.4	1066	2534	4423	1.75
67.0	2247	0.04	0.68	4.323	2232	48.3	1483	2117	4349	2.05
73.0	2449	0.06	1.02	4.338	2423	50.1	1742	1858	4281	2.30
77.5	2600	0.08	1.37	4.353	2564	51.3	1915	1685	4249	2.52
81.5	2734	0.10	1.71	4.368	2687	51.8	1987	1613	4300	2.67
89.0	2985	0.15	2.56	4.406	2909	52.5	2088	1512	4421	2.92
95.5	3203	0.20	3.41	4.445	3094	52.6	2102	1498	4591	3.07
101.0	3388	0.25	4.27	4.485	3243	52.6	2102	1498	4741	3.17
106.5	3572	0.30	5.12	4.525	3389	52.5	2088	1512	4901	3.24
112.0	3757	0.35	5.98	4.566	3532	52.4	2074	1526	5059	3.31
117.0	3924	0.40	6.83	4.608	3656	52.3	2059	1541	5197	3.37
122.0	4092	0.45	7.68	4.650	3778	52.2	2045	1555	5333	3.43
125.0	4193	0.50	8.54	4.694	3835	52.1	2030	1570	5404	3.44
130.0	4360	0.60	10.24	4.783	3914	51.7	1973	1627	5541	3.41
133.0	4461	0.70	11.95	4.876	3928	51.3	1915	1685	5613	3.33
136.0	4562	0.80	13.66	4.972	3939	50.8	1843	1757	5695	3.24
139.0	4662	0.90	15.37	5.073	3946	50.5	1800	1800	5746	3.19
142.5	4780	1.00	17.07	5.177	3964	50.3	1771	1829	5792	3.17
145.0	4864	1.10	18.78	5.286	3950	50.1	1742	1858	5808	3.13
148.0	4964	1.20	20.49	5.399	3947	50.0	1728	1872	5819	3.11

Data entry by: CAL Date: 7-30-95
Data checked by: DVA Date: 7-31-95
FileName:SAT0043B

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-128, 7.5-9.5', 405043 B



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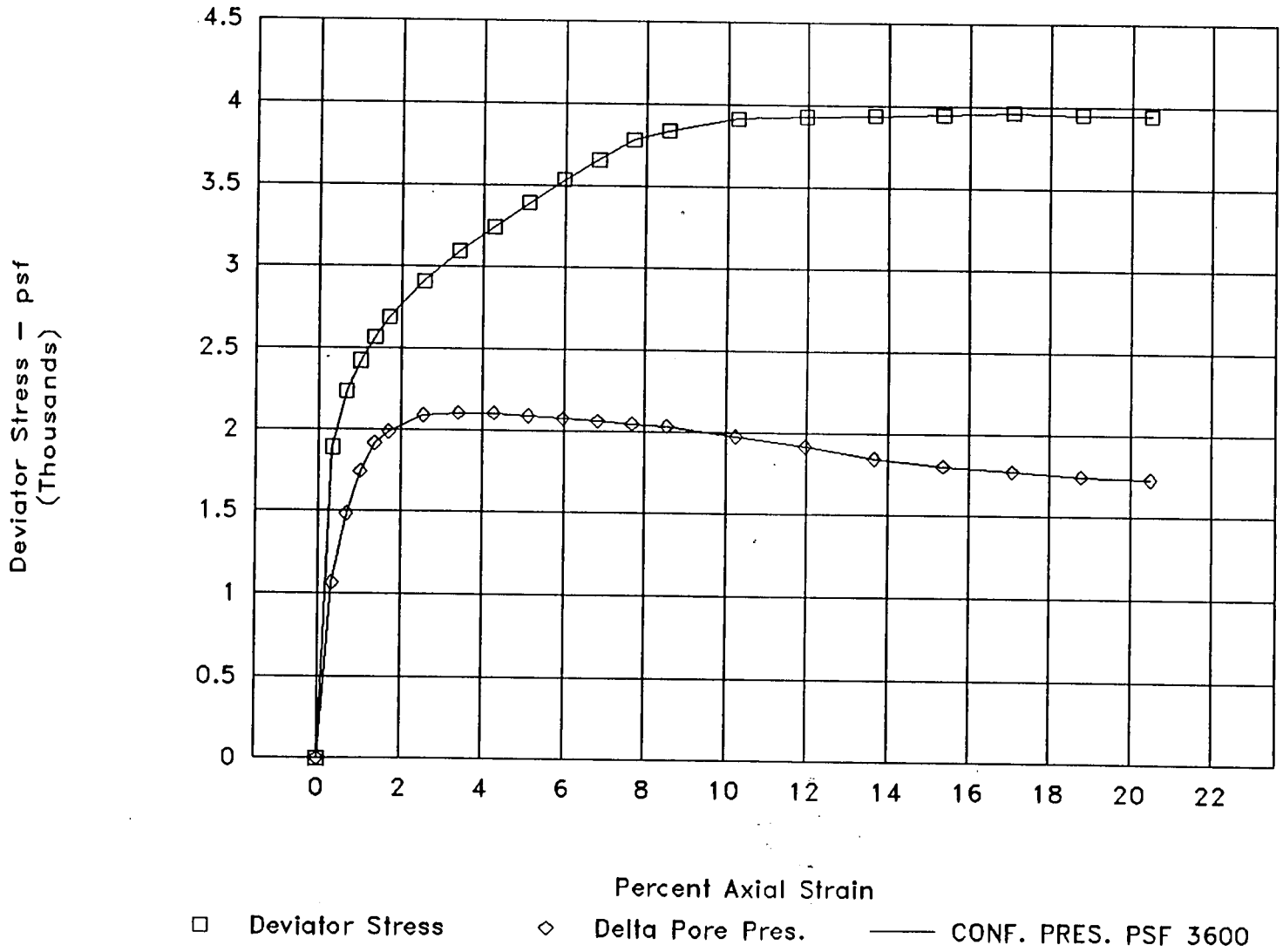
TRIAXIAL TEST - TX/CUpp

G2-128, 7.5-9.5', 405043 B



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

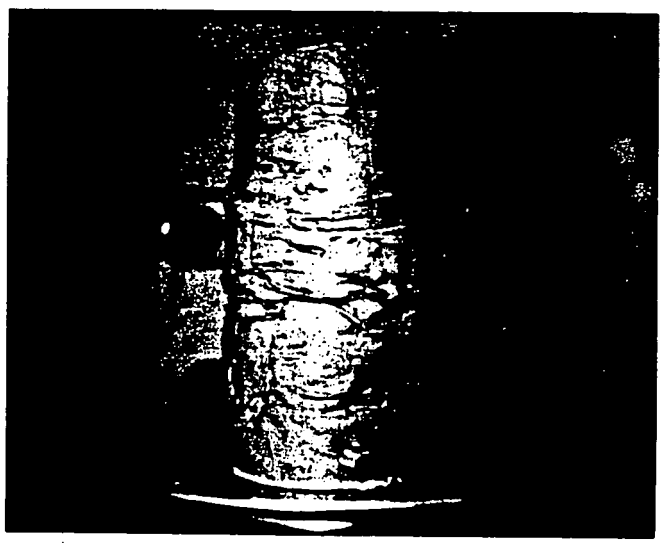
JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 C	TEST FINISHED	7-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	973.8	961.1
Wt. Wet Soil & Pan	(g)	982.1	969.4
Wt. Dry Soil & Pan	(g)	854.3	854.3
Wt. Lost Moisture	(g)	127.8	115.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	846.0	846.0
Moisture Content %		15.1	13.6
Wet Density PCF		136.1	144.0
Dry Density PCF		118.2	126.7

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01472

Notes & Comments: Remolded to 95% MDD



Data entry by: CAL Date: 7-30-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT0043C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 C	TEST FINISHED	7-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	7.4	21.4				
50.0		26.2	26.3	37.6	47.2	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	26.40	0.00
0.25	0.5	28.10	-1.70
0.5	0.7	28.55	-2.15
1	1.0	29.10	-2.70
2	1.4	29.75	-3.35
4	2.0	30.60	-4.20
9	3.0	31.90	-5.50
16	4.0	33.05	-6.65
30	5.5	34.50	-8.10
60	7.7	36.30	-9.90
120	11.0	37.70	-11.30
240	15.5	38.40	-12.00
360	19.0	38.70	-12.30

Initial Height	(in)	6.000	Init. Vol.	(CC)	446.74
Height Change	(in)	0.097	Vol. Change	(CC)	39.60
Ht. After Cons.	(in)	5.903	Cell Exp.	(CC)	9.67
Initial Area	(sq in)	4.543	Net Change	(CC)	29.93
Area After Cons.	(sq in)	4.308	Cons. Vol.	(CC)	416.80

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT0043C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 C	TEST FINISHED	7-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

Init. Ht.	(in)	6.000	Init. Area	(sq in) 4.543
Consol. Ht.	(in)	5.903	Consol. Area	(sq in) 4.308
Back Pres.	PSI	37.3	Strain Rate	(in/min) 0.002

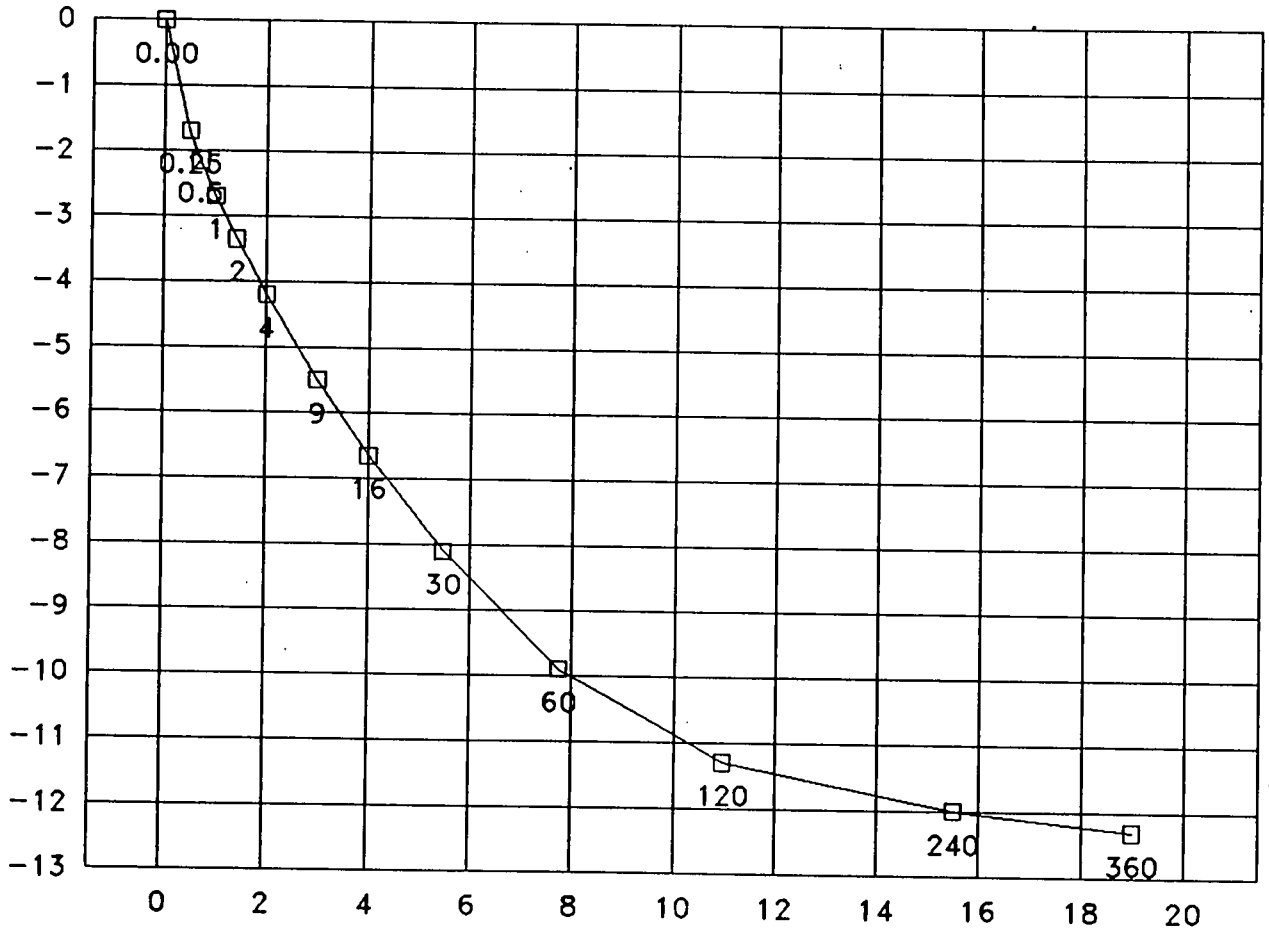
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.308	0	37.3	0	1440	1440	1.00
46.0	1538	0.05	0.85	4.345	1525	41.8	648	792	2317	2.92
50.0	1671	0.10	1.69	4.382	1643	42.8	785	655	2298	3.51
53.4	1785	0.15	2.54	4.420	1740	43.0	815	625	2365	3.78
56.4	1885	0.20	3.39	4.459	1821	42.9	806	634	2455	3.87
59.2	1979	0.25	4.24	4.499	1895	42.8	785	655	2550	3.89
62.0	2072	0.30	5.08	4.539	1967	42.6	766	674	2641	3.92
65.2	2179	0.35	5.93	4.580	2050	42.5	749	691	2741	3.97
67.0	2240	0.40	6.78	4.621	2088	42.4	739	701	2789	3.98
69.0	2306	0.45	7.62	4.664	2131	42.4	729	711	2842	4.00
71.0	2373	0.50	8.47	4.707	2172	42.3	720	720	2892	4.02
75.0	2507	0.60	10.16	4.795	2252	42.2	698	742	2994	4.04
79.2	2647	0.70	11.86	4.888	2333	42.0	677	763	3097	4.06
83.2	2781	0.80	13.55	4.983	2404	41.9	657	783	3187	4.07
86.4	2888	0.90	15.25	5.083	2448	41.7	634	806	3254	4.04
91.4	3055	1.00	16.94	5.187	2538	41.6	612	828	3366	4.06
94.8	3169	1.10	18.63	5.295	2578	41.5	608	832	3411	4.10
98.0	3276	1.20	20.33	5.407	2610	41.5	605	835	3445	4.12

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT0043C

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-128, 7.5-9.5', 405043 C



□ Time in Minutes —— CONF. PRES. PSF 1440

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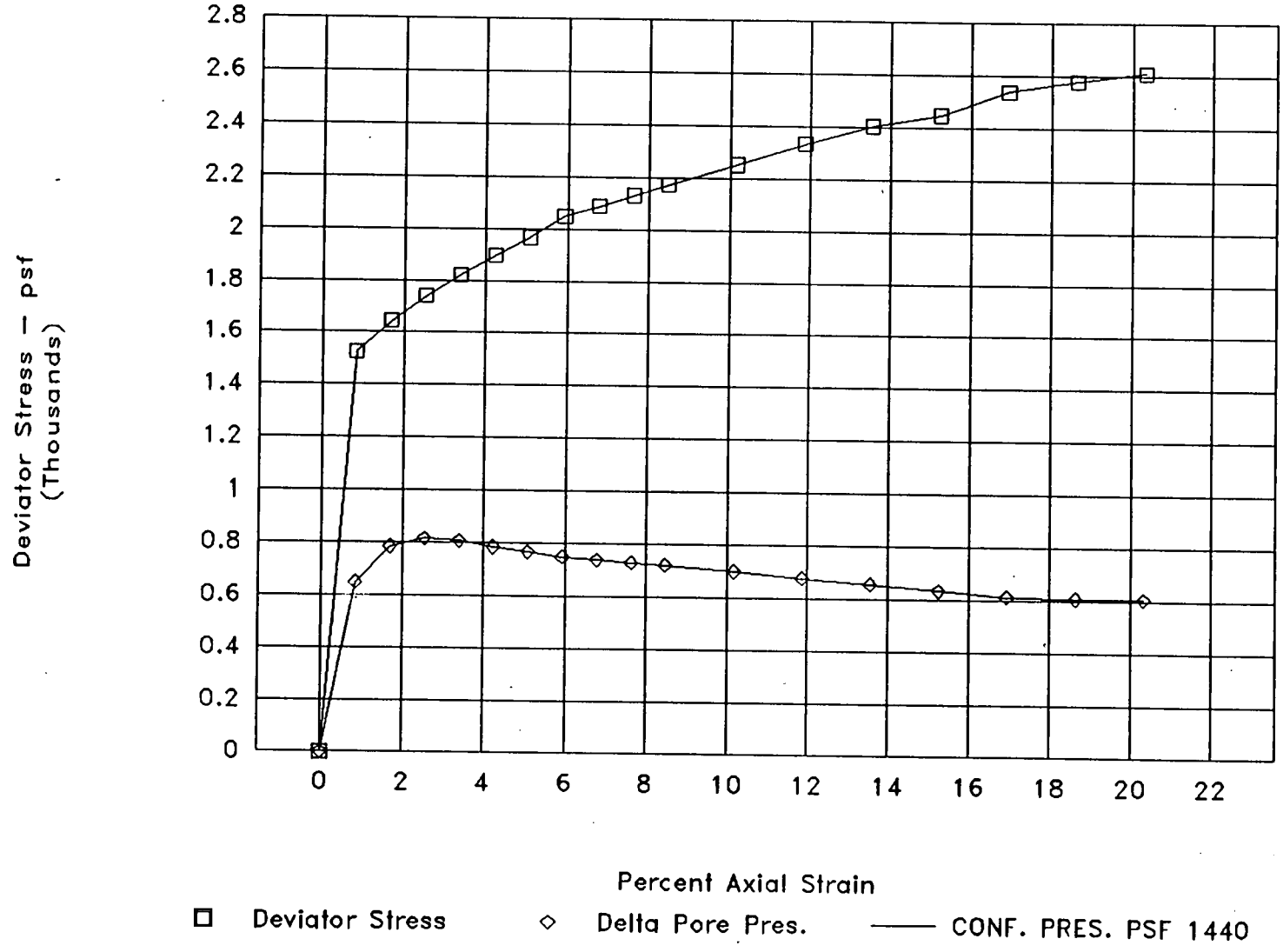
474

TRIAXIAL TEST - TX/CUpp

G2-128, 7.5-9.5', 405043 C



1157

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474

TRIAXIAL SHEAR, CONSOLIDATED, UNDRAINED WITH PORE PRESSURE MEASUREMENTS

Remolded to 95% MDD
Staged - 3 Points
TX/CUpp
ASTM D 4767

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

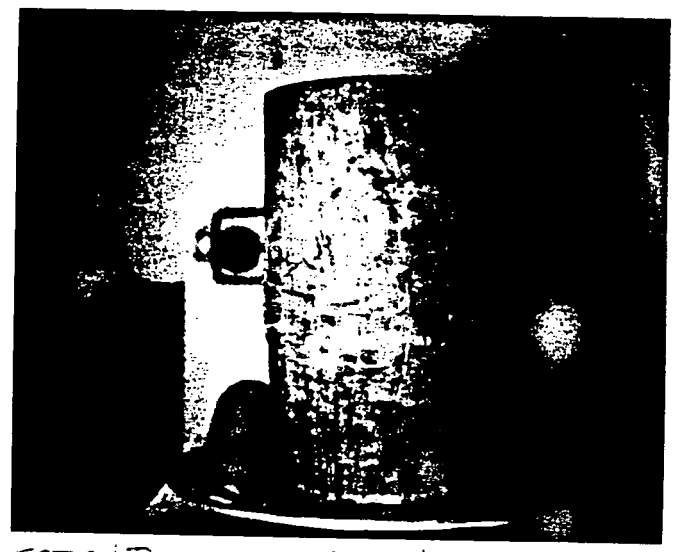
JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	942.7	953.6
Wt. Wet Soil & Pan	(g)	950.9	961.8
Wt. Dry Soil & Pan	(g)	805.9	805.9
Wt. Lost Moisture	(g)	145.0	155.9
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	797.7	797.7
Moisture Content %		18.2	19.5
Wet Density PCF		131.9	135.0
Dry Density PCF		111.6	112.9

Init. Diameter	(in)	2.403
Init. Area	(sq in)	4.535
Init. Height	(in)	6.004
Vol. Bef. Consol.	(cu ft)	0.01576
Vol. After Consol.	(cu ft)	0.01557

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140
G2-125 # 405023 @ 2.5-4.5'
TX/CUpp - STAGED

Data entry by: NAA Date: 7-31-95
Data checked by: [illegible] Date: 7-31-95
FileName: SAT00231

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.3	7.6				
50.0	48.0	6.8	7.4	38.8	47.8	9.0	0.90
60.0		7.6	7.6	47.8	57.4	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	7.60	0.00
0.25	0.5	9.00	-1.40
0.5	0.7	9.45	-1.85
1	1.0	10.05	-2.45
2	1.4	10.80	-3.20
4	2.0	11.43	-3.83
9	3.0	11.90	-4.30
16	4.0	12.05	-4.45
30	5.5	12.15	-4.55
60	7.7	12.25	-4.65
120	11.0	12.30	-4.70
240	15.5	12.38	-4.78
360	19.0	12.45	-4.85

Initial Height	(in)	6.004	Init. Vol.	(CC)	446.29
Height Change	(in)	0.024	Vol. Change	(CC)	11.60
Ht. After Cons.	(in)	5.980	Cell Exp.	(CC)	6.32
Initial Area	(sq in)	4.535	Net Change	(CC)	5.28
Area After Cons.	(sq in)	4.500	Cons. Vol.	(CC)	441.01

Data entry by: NAA Date: 7-31-95
Data checked by: W Date: 7-31-95
FileName:SAT00231

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

Init. Ht.	(in)	6.004	Init. Area	(sq in) 4.535
Consol. Ht.	(in)	5.980	Consol. Area	(sq in) 4.500
Back Pres.	PSI	46.9	Strain Rate	(in/min) 0.007

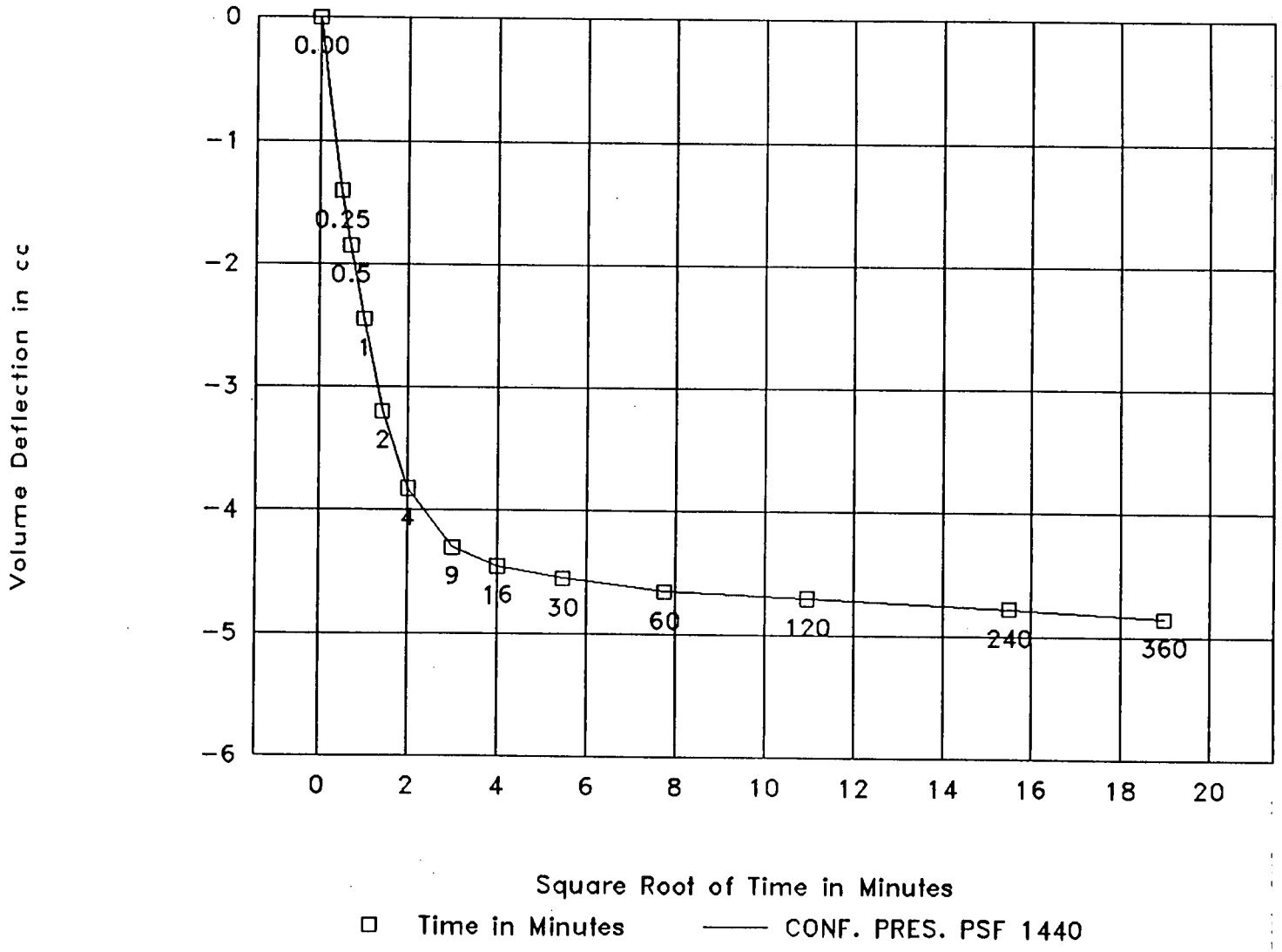
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.500	0	46.9	0	1440	1440	1.00
35.5	1136	0.01	0.17	4.507	1134	49.0	302	1138	2272	2.00
48.5	1552	0.02	0.33	4.515	1547	50.4	504	936	2483	2.65
56.0	1792	0.03	0.50	4.522	1783	50.9	576	864	2647	3.06
61.5	1968	0.04	0.67	4.530	1955	51.2	619	821	2776	3.38
68.0	2176	0.05	0.84	4.537	2158	51.2	619	821	2979	3.63
73.5	2352	0.06	1.00	4.545	2329	51.1	605	835	3164	3.79
78.5	2512	0.07	1.17	4.553	2483	50.8	562	878	3361	3.83
83.5	2672	0.08	1.34	4.561	2637	50.6	533	907	3544	3.91
88.5	2832	0.09	1.51	4.568	2790	50.4	504	936	3726	3.98
91.5	2928	0.10	1.67	4.576	2879	50.1	461	979	3859	3.94
102.0	3264	0.13	2.09	4.596	3196	49.4	360	1080	4276	3.96
111.0	3552	0.15	2.51	4.615	3463	48.7	259	1181	4644	3.93
119.0	3808	0.18	2.93	4.635	3697	48.0	158	1282	4979	3.88
126.0	4032	0.20	3.34	4.655	3898	47.2	43	1397	5294	3.79
134.0	4288	0.23	3.76	4.675	4127	46.5	-58	1498	5625	3.76

Data entry by: NAA Date: 7-31-95
Data checked by: AJ Date: 7-31-95
FileName:SAT00231

ADVANCED TERRA TESTING, INC.

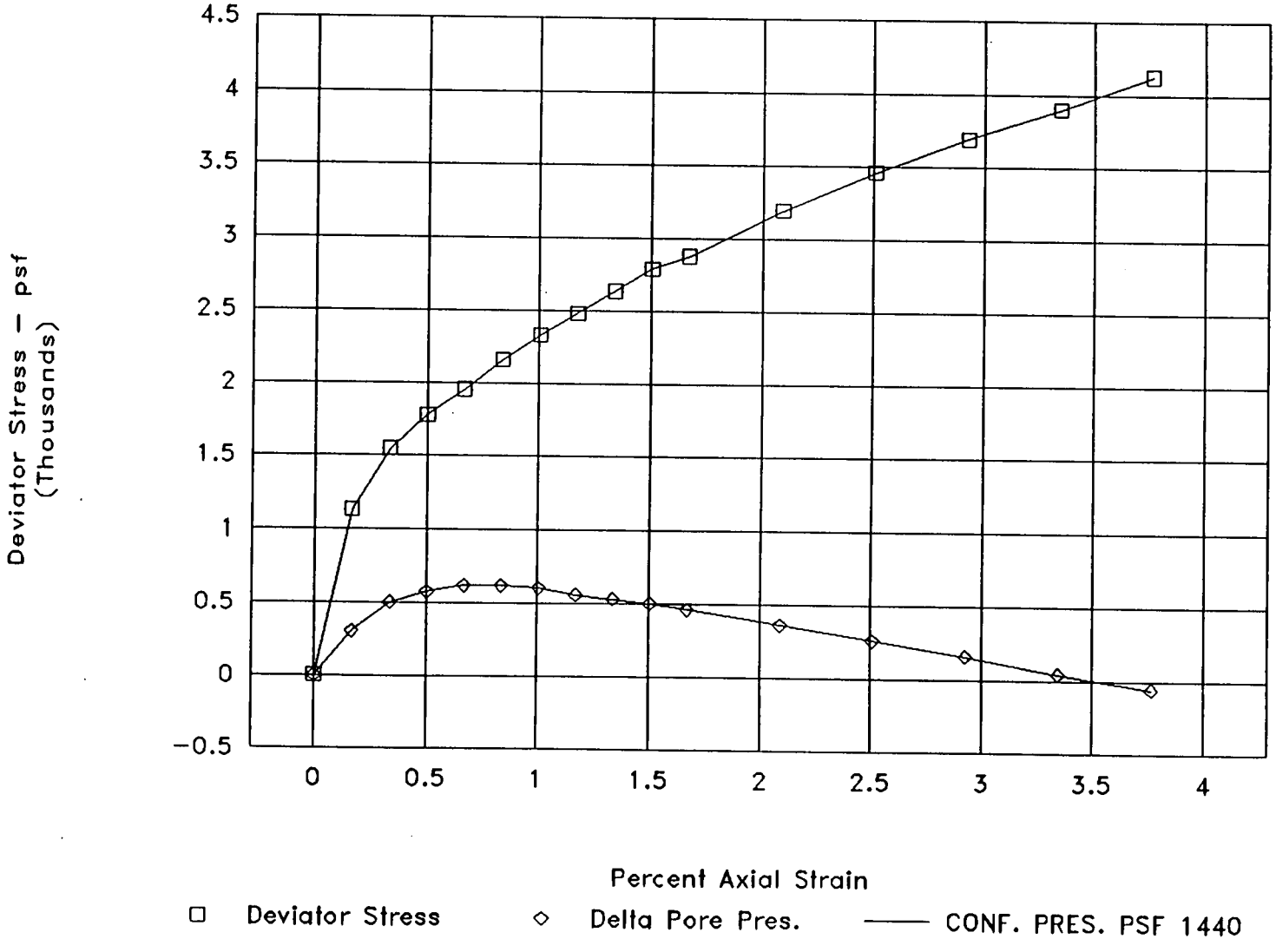
CONSOLIDATION DATA

G2-125, 2.5-4.5', 405023 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-125, 2.5-4.5', 405023 Stage 1



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 2	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	942.7	953.6
Wt. Wet Soil & Pan	(g)	950.9	961.8
Wt. Dry Soil & Pan	(g)	805.9	805.9
Wt. Lost Moisture	(g)	145.0	155.9
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	797.7	797.7
Moisture Content %		18.2	19.5
Wet Density PCF		133.5	136.6
Dry Density PCF		112.9	114.2

Init. Diameter	(in)	2.440
Init. Area	(sq in)	4.675
Init. Height	(in)	5.755
Vol. Bef. Consol.	(cu ft)	0.01557
Vol. After Consol.	(cu ft)	0.01540

Notes & Comments: Remolded to 95% MDD

Data entry by: NAA Date: 7-31-95
Data checked by:_____ Date:_____
FileName:SAT00232

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 2	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	14.00	0.00
0.25	0.5	15.45	-1.45
0.5	0.7	15.75	-1.75
1	1.0	16.15	-2.15
2	1.4	16.75	-2.75
4	2.0	17.50	-3.50
9	3.0	18.35	-4.35
16	4.0	18.80	-4.80
30	5.5	19.13	-5.13
60	7.7	19.35	-5.35
120	11.0	19.50	-5.50
240	15.5	19.55	-5.55
360	19.0	19.60	-5.60

Initial Height	(in)	5.755	Init. Vol.	(CC)	440.98
Height Change	(in)	0.008	Vol. Change	(CC)	6.00
Ht. After Cons.	(in)	5.747	Cell Exp.	(CC)	1.04
Initial Area	(sq in)	4.675	Net Change	(CC)	4.97
Area After Cons.	(sq in)	4.629	Cons. Vol.	(CC)	436.02

Data entry by: NAA Date: 7-31-95
Data checked by:_____ Date:_____
FileName:SAT00232

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 2	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

Init. Ht. (in)	5.755	Init. Area (sq in)	4.675
Consol. Ht. (in)	5.747	Consol. Area (sq in)	4.629
Back Pres. PSI	47.1	Strain Rate (in/min)	0.004

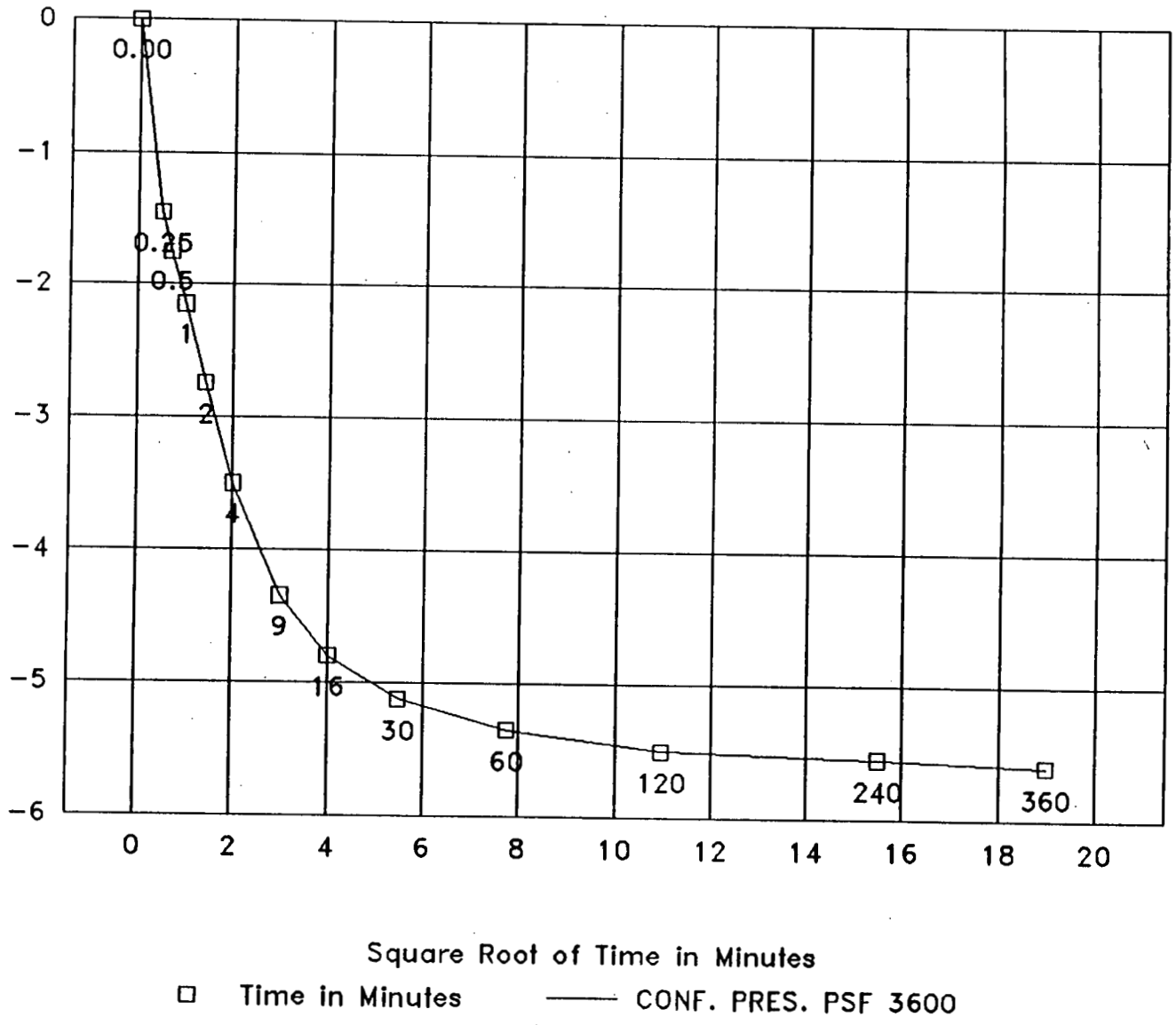
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.629	0	47.1	0	3600	3600	1.00
116.0	3609	0.03	0.44	4.649	3593	54.6	1080	2520	6113	2.43
134.0	4169	0.04	0.61	4.657	4143	55.1	1152	2448	6591	2.69
147.5	4588	0.05	0.78	4.666	4553	55.3	1181	2419	6972	2.88
160.0	4977	0.06	0.96	4.674	4930	55.3	1181	2419	7349	3.04
172.0	5351	0.07	1.13	4.682	5290	55.1	1152	2448	7738	3.16
182.0	5662	0.08	1.31	4.690	5588	54.8	1109	2491	8079	3.24
201.0	6253	0.10	1.74	4.711	6144	54.0	994	2606	8750	3.36
215.0	6688	0.13	2.18	4.732	6543	53.2	878	2722	9264	3.40
226.0	7030	0.15	2.61	4.753	6847	52.4	763	2837	9684	3.41
236.0	7342	0.18	3.05	4.774	7118	51.7	662	2938	10056	3.42
245.0	7622	0.20	3.48	4.796	7356	51.0	562	3038	10395	3.42
252.0	7839	0.23	3.92	4.818	7532	50.3	461	3139	10672	3.40
259.5	8073	0.25	4.35	4.840	7721	49.6	360	3240	10961	3.38

Data entry by: NAA Date: 7-31-95
Data checked by: a) Date: 8-15-95
FileName:SAT00232

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-125, 2.5-4.5', 405023 Stage 2



Revised as of 8/21/95

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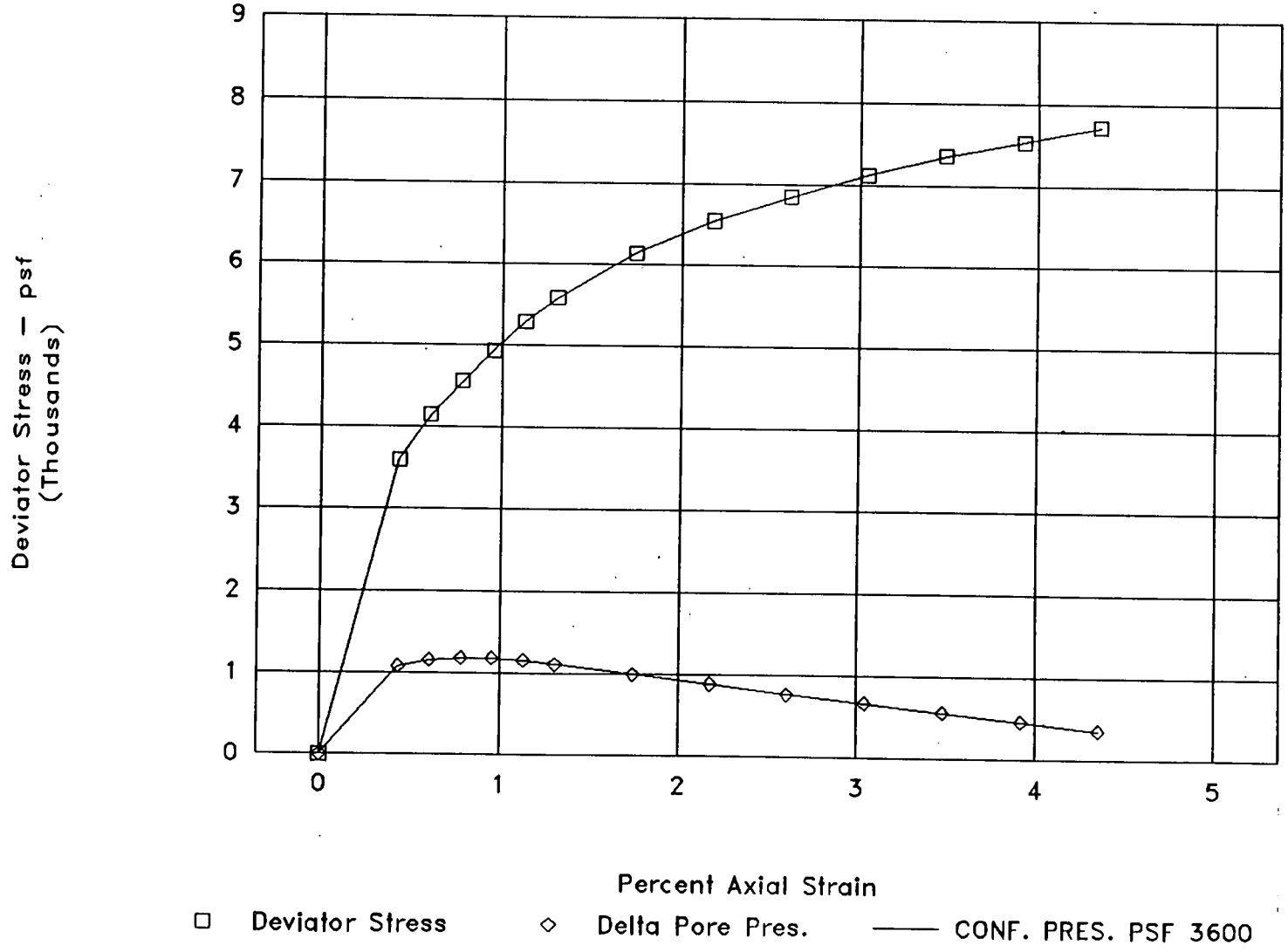
TRIAXIAL TEST - TX/CUpp

G2-125, 2.5-4.5', 405023 Stage 2



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 3	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	942.7	953.6
Wt. Wet Soil & Pan	(g)	950.9	961.8
Wt. Dry Soil & Pan	(g)	805.9	805.9
Wt. Lost Moisture	(g)	145.0	155.9
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	797.7	797.7
Moisture Content %		18.2	19.5
Wet Density PCF		135.0	138.2
Dry Density PCF		114.2	115.6

Init. Diameter	(in)	2.482
Init. Area	(sq in)	4.840
Init. Height	(in)	5.497
Vol. Bef. Consol.	(cu ft)	0.01540
Vol. After Consol.	(cu ft)	0.01521

Notes & Comments: Remolded to 95% MDD

Data entry by: NAA Date: 7-31-95
Data checked by: GJ Date: 7-31-95
FileName:SAT00233

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 3	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	22.40	0.00
0.25	0.5	24.50	-2.10
0.5	0.7	24.70	-2.30
1	1.0	25.00	-2.60
2	1.4	25.40	-3.00
4	2.0	25.95	-3.55
9	3.0	26.75	-4.35
16	4.0	27.30	-4.90
30	5.5	27.70	-5.30
60	7.7	28.05	-5.65
120	11.0	28.30	-5.90
240	15.5	28.50	-6.10
360	19.0	28.60	-6.20

Initial Height	(in)	5.497	Init. Vol.	(CC)	436.05
Height Change	(in)	0.029	Vol. Change	(CC)	7.00
Ht. After Cons.	(in)	5.468	Cell Exp.	(CC)	1.73
Initial Area	(sq in)	4.840	Net Change	(CC)	5.28
Area After Cons.	(sq in)	4.807	Cons. Vol.	(CC)	430.78

Data entry by: NAA Date: 7-31-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT00233

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13B
BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 3	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht.	(in)	5.497	Init. Area	(sq in)	4.840
Consol. Ht.	(in)	5.468	Consol. Area	(sq in)	4.807
Back Pres.	PSI	47.1	Strain Rate	(in/min)	0.003

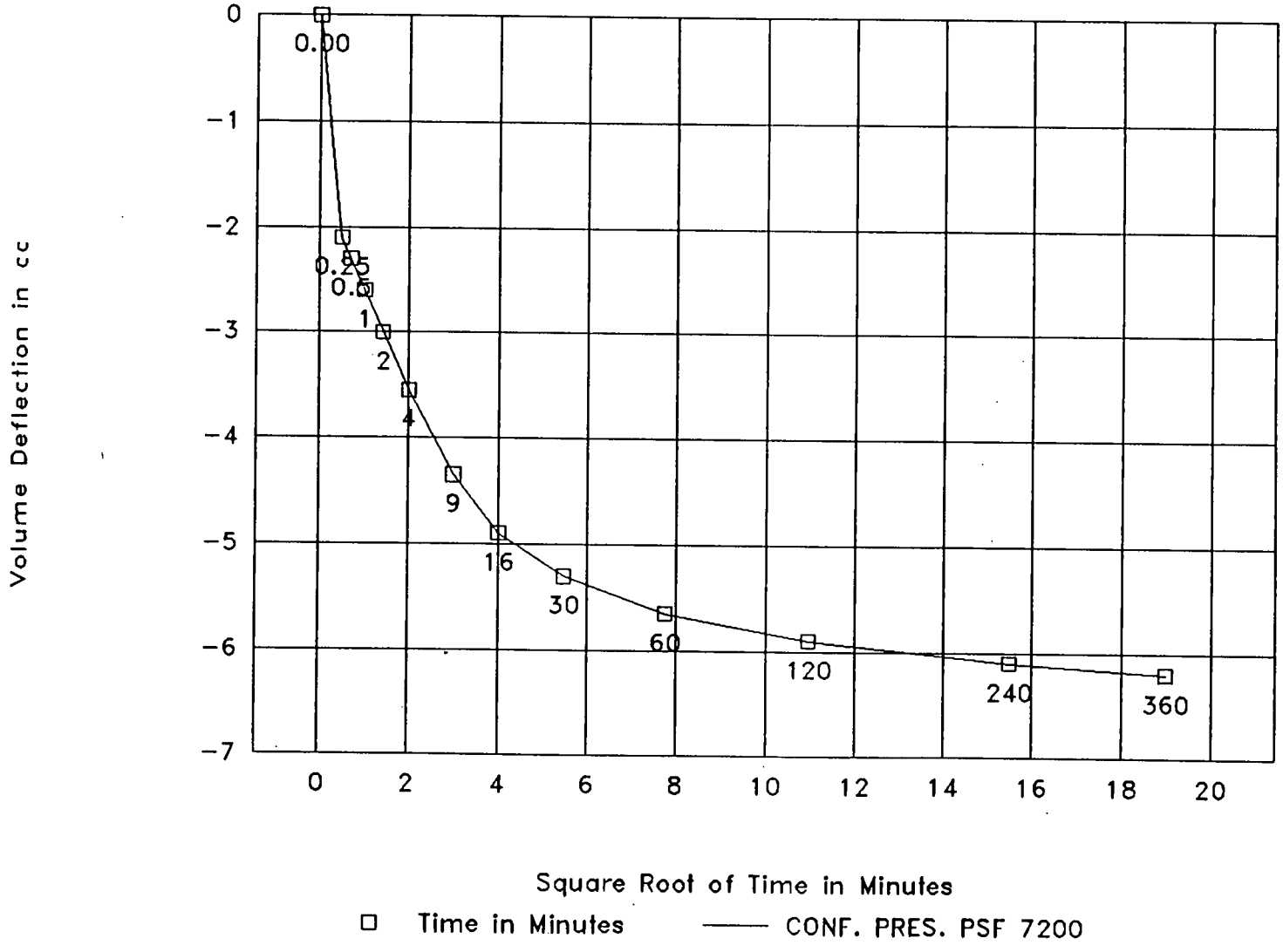
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.807	0	47.1	0	7200	7200	1.00
187.5	5617	0.02	0.37	4.824	5597	59.9	1843	5357	10953	2.04
249.5	7475	0.04	0.73	4.842	7420	62.7	2246	4954	12374	2.50
296.0	8868	0.06	1.10	4.860	8770	63.2	2318	4882	13652	2.80
331.0	9916	0.08	1.46	4.878	9771	62.8	2261	4939	14710	2.98
356.0	10665	0.10	1.83	4.896	10470	62.0	2146	5054	15525	3.07
394.0	11804	0.15	2.74	4.942	11480	60.1	1872	5328	16808	3.15
420.5	12597	0.20	3.66	4.989	12137	58.4	1627	5573	17710	3.18
439.5	13167	0.25	4.57	5.037	12565	56.7	1382	5818	18382	3.16
457.5	13706	0.30	5.49	5.086	12954	55.1	1152	6048	19002	3.14
474.5	14215	0.35	6.40	5.135	13305	53.7	950	6250	19555	3.13
486.5	14575	0.40	7.32	5.186	13509	52.5	778	6422	19931	3.10
514.5	15414	0.50	9.14	5.290	14004	50.2	446	6754	20758	3.07
539.5	16163	0.60	10.97	5.399	14389	48.2	158	7042	21431	3.04
564.5	16911	0.70	12.80	5.512	14747	46.4	-101	7301	22047	3.02
583.5	17481	0.80	14.63	5.630	14923	44.9	-317	7517	22440	2.99
600.5	17990	0.90	16.46	5.754	15029	43.6	-504	7704	22733	2.95
614.5	18409	1.00	18.29	5.882	15043	42.4	-677	7877	22919	2.91
629.5	18859	1.10	20.12	6.017	15065	41.4	-821	8021	23086	2.88
637.5	19098	1.20	21.95	6.158	14907	40.6	-936	8136	23043	2.83

Data entry by: NAA Date: 7-31-95
Data checked by: CJ Date: 7-31-95
FileName:SAT00233

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-125, 2.5-4.5', 405023 Stage 3



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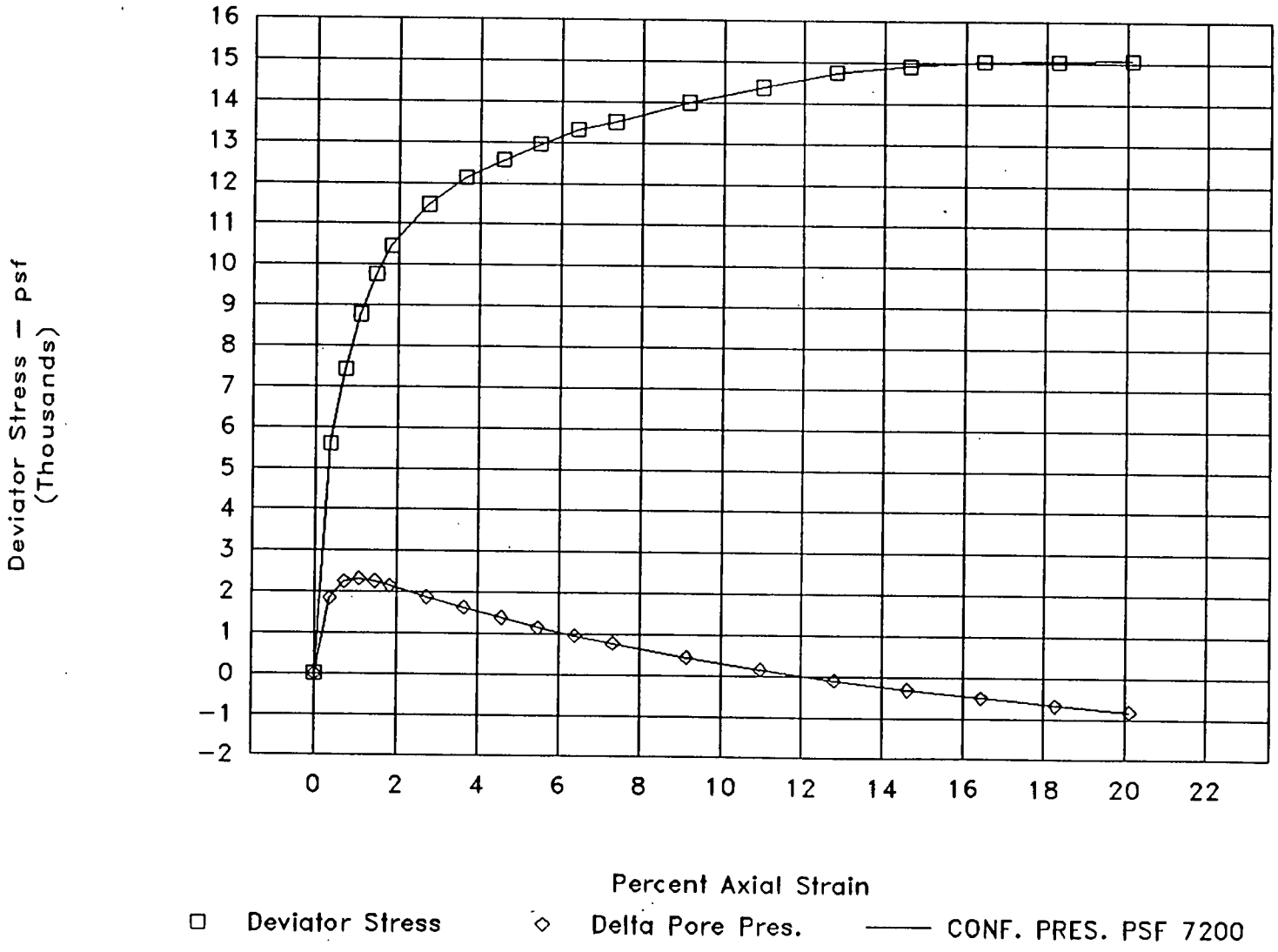
TRIAXIAL TEST - TX/CUpp

G2-125, 2.5-4.5', 405023 Stage 3



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

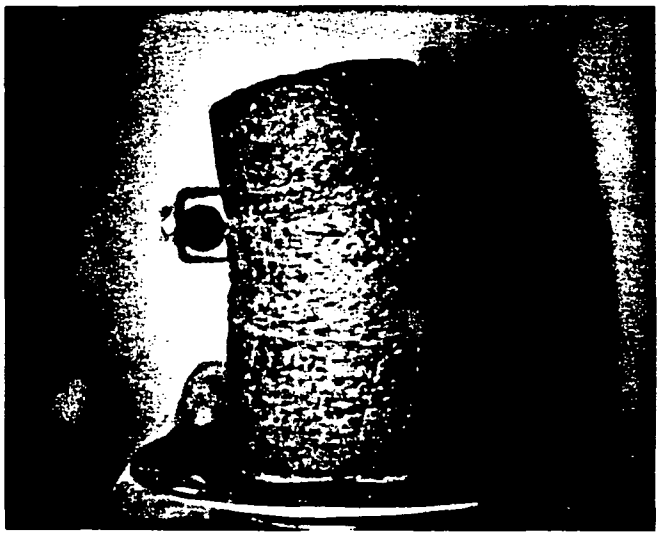
JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 1	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	972.7	940.6
Wt. Wet Soil & Pan	(g)	981.0	949.0
Wt. Dry Soil & Pan	(g)	853.5	853.5
Wt. Lost Moisture	(g)	127.6	95.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	845.1	845.1
Moisture Content %		15.1	11.3
Wet Density PCF		135.9	137.1
Dry Density PCF		118.1	123.2

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01512

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140
G2-133 #405053 @ 2.5-4.5'
STAGED TX/CUPP

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: NA Date: 7-31-95
FileName: SAT07711

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 1	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.7	20.0				
50.0		20.6	20.6	37.5	47.3	9.8	0.98

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	20.60	0.00
0.25	0.5	22.20	-1.60
0.5	0.7	22.50	-1.90
1	1.0	22.90	-2.30
2	1.4	23.50	-2.90
4	2.0	24.25	-3.65
9	3.0	25.50	-4.90
16	4.0	26.45	-5.85
30	5.5	27.80	-7.20
60	7.7	29.15	-8.55
120	11.0	30.20	-9.60
240	15.5	30.75	-10.15
360	19.0	30.85	-10.25

Initial Height	(in)	6.000	Init. Vol.	(CC)	446.74
Height Change	(in)	0.080	Vol. Change	(CC)	27.50
Ht. After Cons.	(in)	5.920	Cell Exp.	(CC)	9.00
Initial Area	(sq in)	4.543	Net Change	(CC)	18.50
Area After Cons.	(sq in)	4.414	Cons. Vol.	(CC)	428.24

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: VA Date: 7-31-95
FileName:SAT07711

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 1	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

Init. Ht.	(in)	6.000	Init. Area	(sq in)	4.543
Consol. Ht.	(in)	5.920	Consol. Area	(sq in)	4.414
Back Pres.	PSI	37.9	Strain Rate	(in/min)	0.002

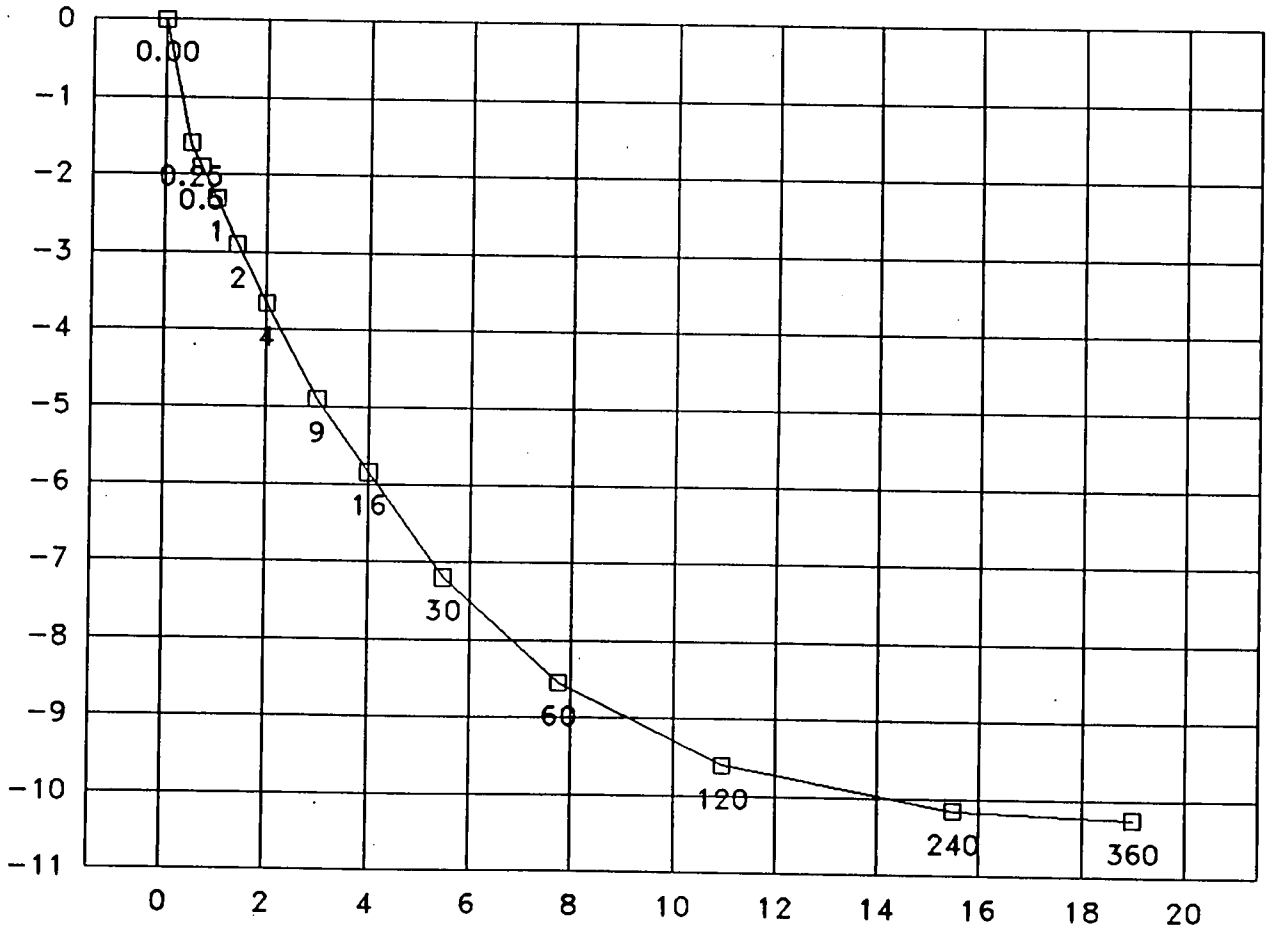
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.414	0	37.9	0	1440	1440	1.00
30.4	992	0.01	0.17	4.421	990	40.4	360	1080	2070	1.92
34.6	1129	0.02	0.34	4.428	1125	41.0	446	994	2119	2.13
36.0	1175	0.03	0.51	4.436	1169	41.5	518	922	2090	2.27
37.2	1214	0.04	0.68	4.444	1206	41.9	576	864	2070	2.40
38.0	1240	0.05	0.84	4.451	1229	42.2	619	821	2050	2.50
39.8	1299	0.08	1.27	4.470	1282	42.7	691	749	2031	2.71
41.4	1351	0.10	1.69	4.489	1328	42.9	720	720	2048	2.84
42.4	1383	0.13	2.11	4.509	1354	43.0	734	706	2060	2.92
43.6	1423	0.15	2.53	4.528	1386	43.1	749	691	2078	3.01
44.6	1455	0.18	2.96	4.548	1412	43.1	749	691	2103	3.04
45.6	1488	0.20	3.38	4.568	1438	43.1	749	691	2129	3.08
46.6	1520	0.23	3.80	4.588	1463	43.1	749	691	2154	3.12
47.6	1553	0.25	4.22	4.608	1487	43.1	749	691	2179	3.15

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: Na Date: 7-31-95
FileName: SAT07711

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-126, 12.5-14.5', 404771 Stage 1



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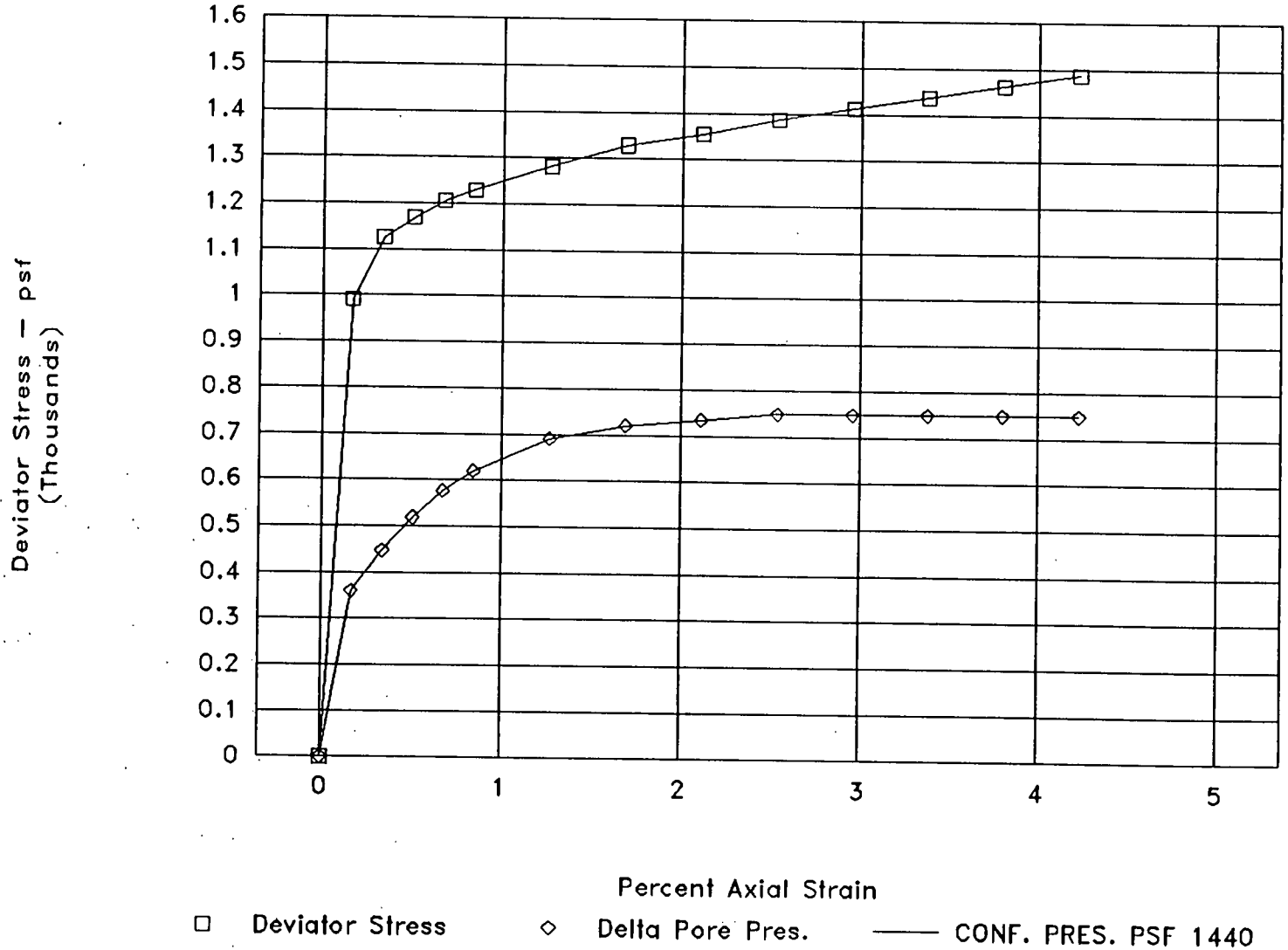
TRIAXIAL TEST - TX/CUpp

G2-126, 12.5-14.5', 404771 Stage 1



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 2	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	972.7	940.6
Wt. Wet Soil & Pan	(g)	981.0	949.0
Wt. Dry Soil & Pan	(g)	853.5	853.5
Wt. Lost Moisture	(g)	127.6	95.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	845.1	845.1
Moisture Content %		15.1	11.3
Wet Density PCF		141.8	139.5
Dry Density PCF		123.2	125.3

Init. Diameter	(in)	2.422
Init. Area	(sq in)	4.607
Init. Height	(in)	5.670
Vol. Bef. Consol.	(cu ft)	0.01512
Vol. After Consol.	(cu ft)	0.01487

Notes & Comments: Remolded to 95% MDD

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: NA Date: 7-31-95
FileName:SAT07712

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 2	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	10.10	0.00
0.25	0.5	11.38	-1.28
0.5	0.7	11.50	-1.40
1	1.0	11.65	-1.55
2	1.4	11.90	-1.80
4	2.0	12.33	-2.22
9	3.0	13.15	-3.05
16	4.0	13.95	-3.85
30	5.5	15.10	-5.00
60	7.7	16.45	-6.35
120	11.0	17.45	-7.35
240	15.5	17.85	-7.75
360	19.0	18.00	-7.90

Initial Height	(in)	5.670	Init. Vol.	(CC)	428.15
Height Change	(in)	0.010	Vol. Change	(CC)	8.40
Ht. After Cons.	(in)	5.660	Cell Exp.	(CC)	1.35
Initial Area	(sq in)	4.607	Net Change	(CC)	7.05
Area After Cons.	(sq in)	4.539	Cons. Vol.	(CC)	421.10

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: VU Date: 7-31-95
FileName:SAT07712 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 2	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

Init. Ht.	(in)	5.670	Init. Area	(sq in)	4.607
Consol. Ht.	(in)	5.660	Consol. Area	(sq in)	4.539
Back Pres.	PSI	37.5	Strain Rate	(in/min)	0.002

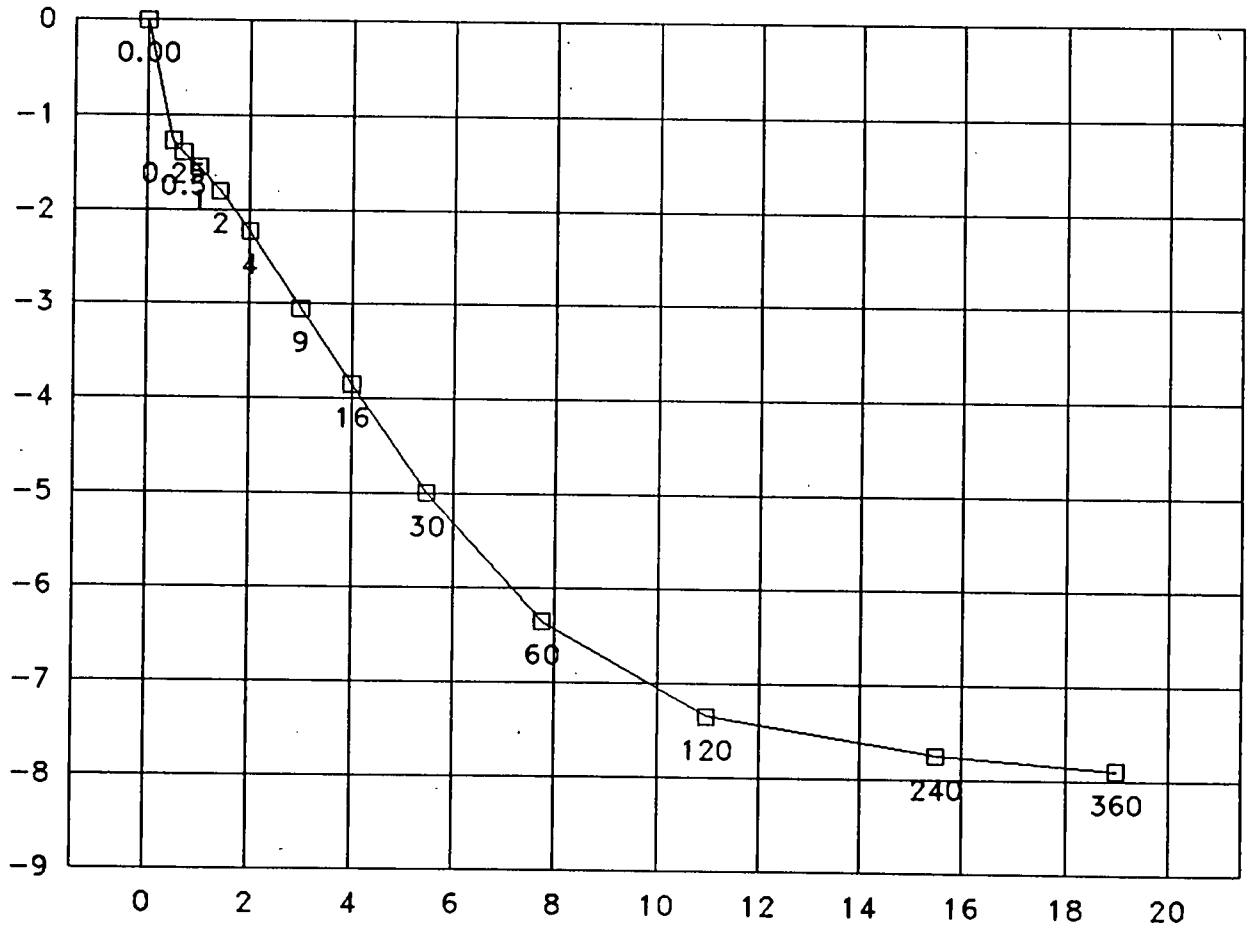
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.539	0	37.5	0	3600	3600	1.00
56.5	1792	0.01	0.18	4.547	1789	40.4	418	3182	4972	1.56
74.0	2347	0.02	0.35	4.555	2339	44.9	1066	2534	4874	1.92
83.5	2649	0.03	0.53	4.564	2635	46.9	1354	2246	4881	2.17
89.5	2839	0.04	0.71	4.572	2819	48.1	1526	2074	4893	2.36
94.5	2998	0.05	0.88	4.580	2971	49.0	1656	1944	4915	2.53
101.5	3220	0.08	1.33	4.600	3177	50.3	1843	1757	4934	2.81
106.5	3378	0.10	1.77	4.621	3319	51.0	1944	1656	4975	3.00
110.0	3489	0.13	2.21	4.642	3412	51.4	2002	1598	5011	3.13
113.5	3601	0.15	2.65	4.663	3505	51.7	2045	1555	5060	3.25
116.0	3680	0.18	3.09	4.684	3566	51.9	2074	1526	5092	3.34
118.5	3759	0.20	3.53	4.706	3626	51.9	2074	1526	5153	3.38
120.0	3807	0.23	3.98	4.727	3655	51.8	2059	1541	5196	3.37
121.0	3838	0.25	4.42	4.749	3669	51.6	2030	1570	5238	3.34

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: MA Date: 7-31-95
FileName:SAT07712

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-126, 12.5-14.5', 404771 Stage 2



Volume Deflection in cc

Square Root of Time in Minutes

□ Time in Minutes —— CONF. PRES. PSF 3600

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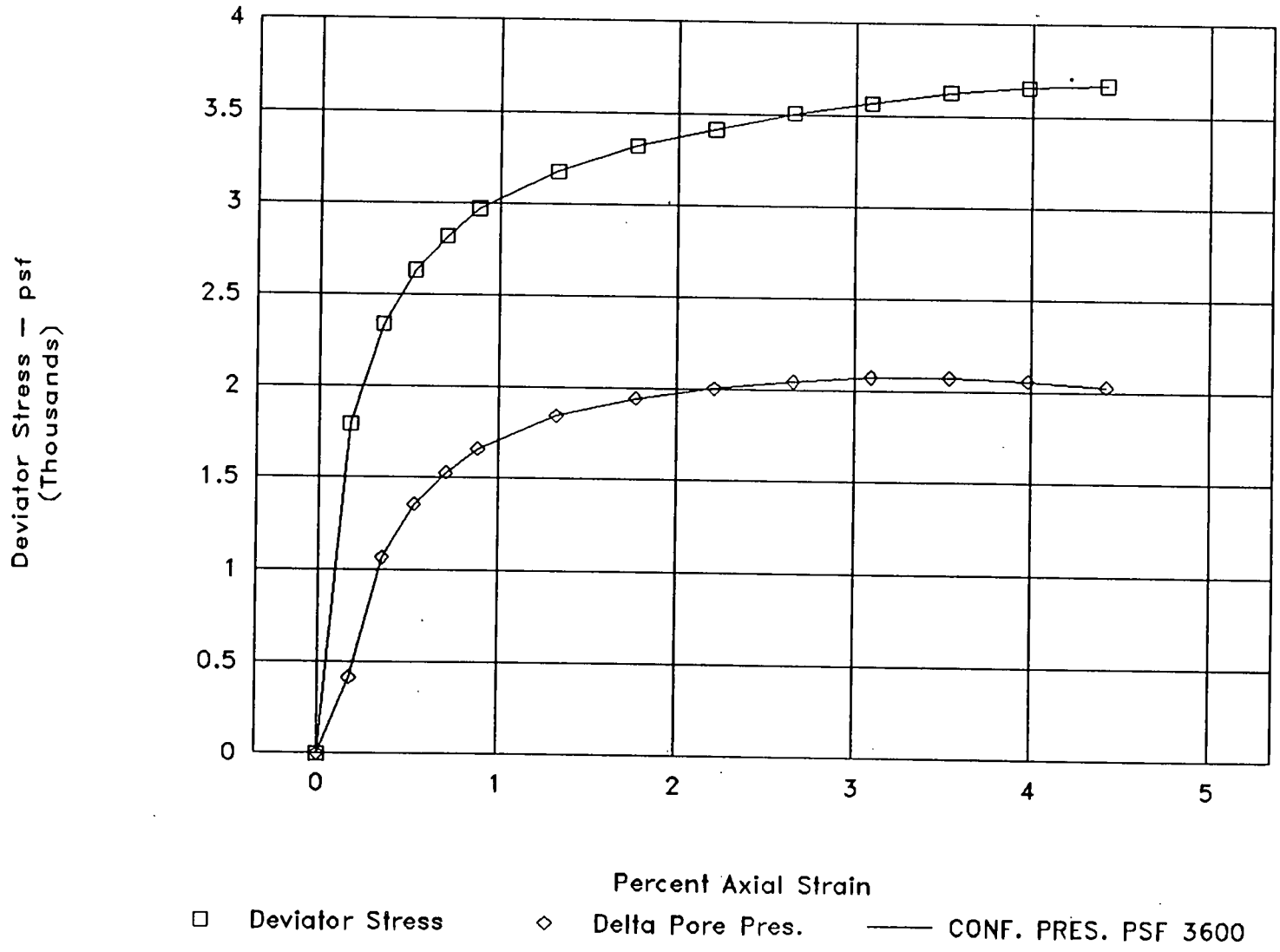
TRIAXIAL TEST - TX/CUpp

G2-126, 12.5-14.5', 404771 Stage 2



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 3	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	972.7	940.6
Wt. Wet Soil & Pan	(g)	981.0	949.0
Wt. Dry Soil & Pan	(g)	853.5	853.5
Wt. Lost Moisture	(g)	127.6	95.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	845.1	845.1
Moisture Content %		15.1	11.3
Wet Density PCF		144.2	141.3
Dry Density PCF		125.3	126.9

Init. Diameter	(in)	2.457
Init. Area	(sq in)	4.741
Init. Height	(in)	5.420
Vol. Bef. Consol.	(cu ft)	0.01487
Vol. After Consol.	(cu ft)	0.01468

Notes & Comments: Remolded to 95% MDD

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: [illegible] Date: 7-31-95
FileName:SAT07713

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 3	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	8.20	0.00
0.25	0.5	9.85	-1.65
0.5	0.7	9.98	-1.78
1	1.0	10.10	-1.90
2	1.4	10.30	-2.10
4	2.0	10.60	-2.40
9	3.0	11.10	-2.90
20	4.5	11.95	-3.75
30	5.5	12.48	-4.28
60	7.7	13.40	-5.20
120	11.0	14.05	-5.85
240	15.5	14.40	-6.20
360	19.0	14.50	-6.30

Initial Height	(in)	5.420	Init. Vol.	(CC)	421.19
Height Change	(in)	0.007	Vol. Change	(CC)	7.65
Ht. After Cons.	(in)	5.413	Cell Exp.	(CC)	2.25
Initial Area	(sq in)	4.741	Net Change	(CC)	5.40
Area After Cons.	(sq in)	4.687	Cons. Vol.	(CC)	415.79

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: NG Date: 7-31-95
FileName:SAT07713 ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 3	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht.	(in)	5.420	Init. Area	(sq in) 4.741
Consol. Ht.	(in)	5.413	Consol. Area	(sq in) 4.687
Back Pres.	PSI	37.1	Strain Rate	(in/min) 0.002

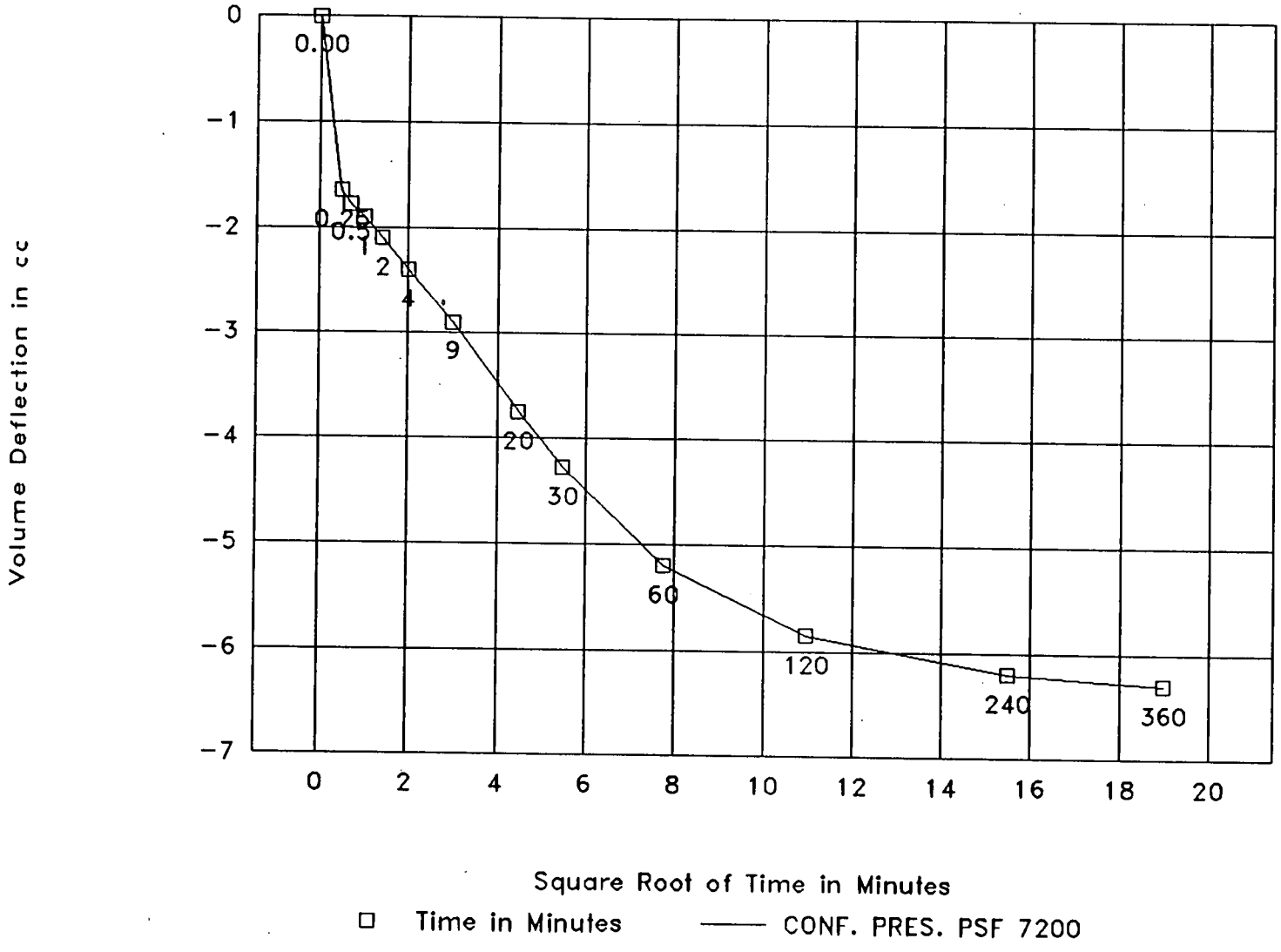
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.687	0	37.1	0	7200	7200	1.00
220.5	6775	0.05	0.92	4.730	6712	58.0	3010	4190	10903	2.60
251.5	7728	0.10	1.85	4.775	7585	61.9	3571	3629	11214	3.09
259.0	7958	0.12	2.22	4.793	7782	62.2	3614	3586	11367	3.17
263.5	8096	0.14	2.59	4.811	7887	62.3	3629	3571	11458	3.21
266.0	8173	0.16	2.96	4.829	7932	62.4	3643	3557	11488	3.23
269.0	8265	0.18	3.33	4.848	7990	62.4	3643	3557	11547	3.25
271.0	8327	0.20	3.69	4.866	8019	62.4	3643	3557	11576	3.25
276.5	8496	0.25	4.62	4.914	8103	62.2	3614	3586	11689	3.26
281.5	8649	0.30	5.54	4.962	8170	61.8	3557	3643	11813	3.24
284.5	8742	0.35	6.47	5.011	8176	61.5	3514	3686	11863	3.22
286.0	8788	0.40	7.39	5.061	8138	61.3	3485	3715	11853	3.19
287.0	8818	0.45	8.31	5.112	8085	61.1	3456	3744	11829	3.16
287.0	8818	0.50	9.24	5.164	8004	60.9	3427	3773	11777	3.12
285.5	8772	0.60	11.08	5.271	7800	60.8	3413	3787	11587	3.06
279.5	8588	0.70	12.93	5.383	7477	60.8	3413	3787	11265	2.97
271.5	8342	0.80	14.78	5.499	7109	60.8	3413	3787	10896	2.88
267.0	8204	0.90	16.63	5.621	6840	60.8	3413	3787	10627	2.81
265.0	8142	1.00	18.47	5.749	6638	60.8	3413	3787	10425	2.75

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: [illegible] Date: 7-31-95
FileName:SAT07713

ADVANCED TERRA TESTING, INC.

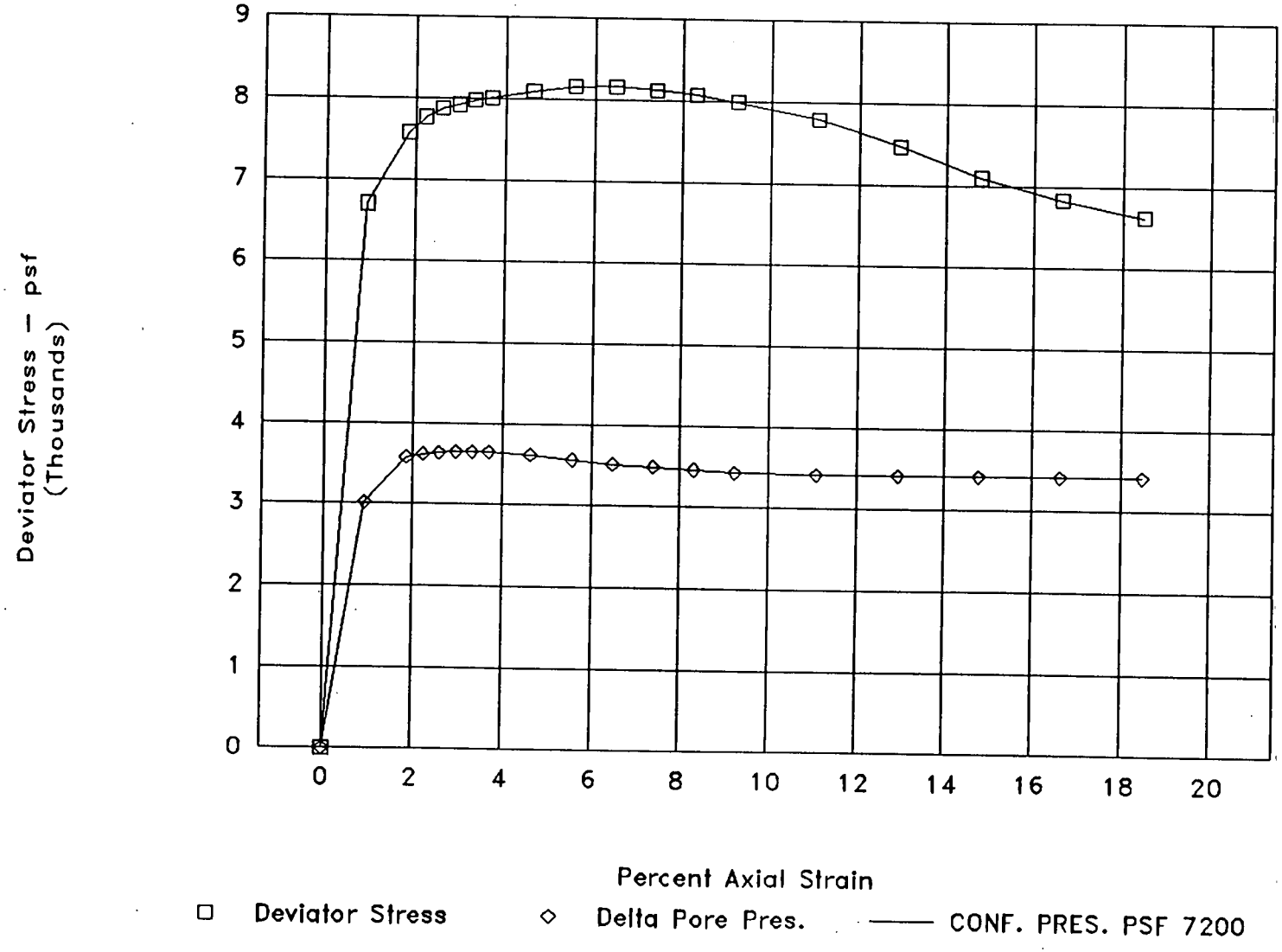
CONSOLIDATION DATA

G2-126, 12.5-14.5', 404771 Stage 3



TRIAXIAL TEST - TX/CUpp

G2-126, 12.5-14.5', 404771 Stage 3



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

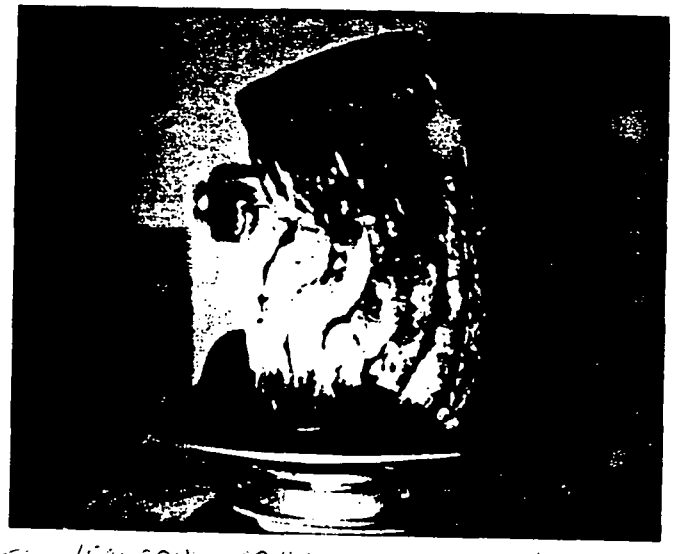
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 1	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	979.2	955.4
Wt. Wet Soil & Pan	(g)	987.4	963.7
Wt. Dry Soil & Pan	(g)	860.6	860.6
Wt. Lost Moisture	(g)	126.8	103.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	852.3	852.3
Moisture Content %		14.9	12.1
Wet Density PCF		137.1	137.4
Dry Density PCF		119.4	122.6

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.013
Vol. Bef. Consol.	(cu ft)	0.01574
Vol. After Consol.	(cu ft)	0.01533

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140 2059-13H
G2-130 405083 20-22'
Stage 1 TX/CUpp r95

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName: SAT083S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 1	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	7.6	21.8				
50.0		21.2	21.2	38.3	47.9	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	21.30	0.00
0.25	0.5	23.20	-1.90
0.5	0.7	23.80	-2.50
1	1.0	24.60	-3.30
2	1.4	25.50	-4.20
4	2.0	26.60	-5.30
9	3.0	28.00	-6.70
16	4.0	29.00	-7.70
30	5.5	29.70	-8.40
60	7.7	29.95	-8.65
120	11.0	30.10	-8.80
240	15.5	30.18	-8.88
360	19.0	30.20	-8.90

Initial Height	(in)	6.013	Init. Vol.	(CC)	445.84
Height Change	(in)	0.051	Vol. Change	(CC)	23.30
Ht. After Cons.	(in)	5.962	Cell Exp.	(CC)	11.67
Initial Area	(sq in)	4.524	Net Change	(CC)	11.63
Area After Cons.	(sq in)	4.444	Cons. Vol.	(CC)	434.21

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName: SAT083S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 1	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

Init. Ht.	(in)	6.013	Init. Area	(sq in)	4.524
Consol. Ht.	(in)	5.962	Consol. Area	(sq in)	4.444
Back Pres.	PSI	39.2	Strain Rate	(in/min)	0.003

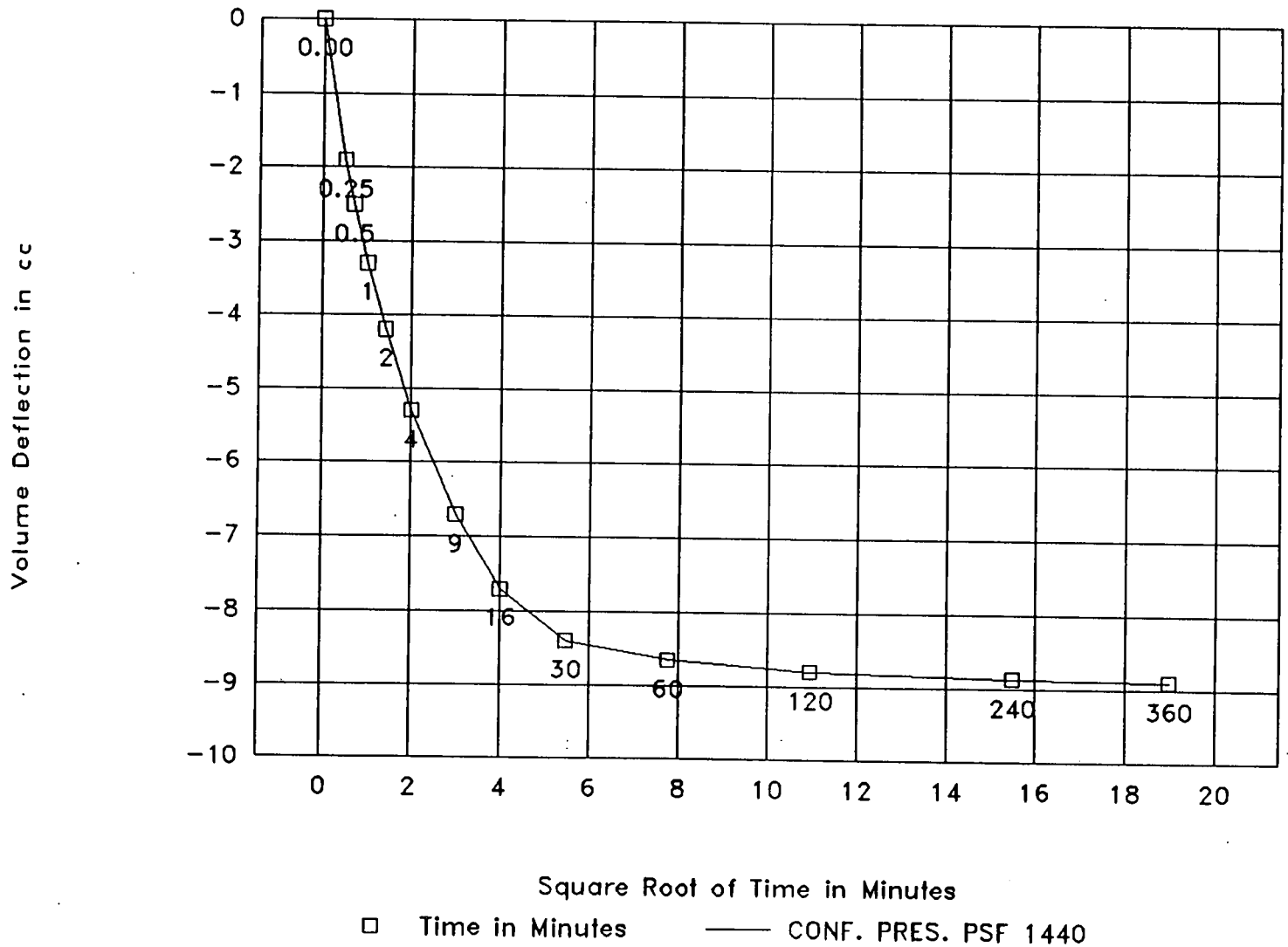
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.444	0	39.2	0	1440	1440	1.00
20.0	648	0.01	0.08	4.447	648	40.4	173	1267	1915	1.51
30.0	972	0.01	0.17	4.451	971	41.1	274	1166	2137	1.83
35.0	1134	0.02	0.34	4.459	1130	42.0	403	1037	2167	2.09
37.5	1215	0.03	0.50	4.466	1209	42.5	475	965	2174	2.25
40.0	1296	0.04	0.67	4.474	1288	42.9	533	907	2195	2.42
41.5	1345	0.05	0.84	4.481	1334	43.2	576	864	2198	2.54
43.0	1393	0.08	1.26	4.500	1376	43.6	634	806	2182	2.71
45.0	1458	0.10	1.68	4.519	1434	43.8	662	778	2211	2.84
46.5	1507	0.13	2.10	4.539	1475	43.9	677	763	2239	2.93
47.5	1539	0.15	2.52	4.558	1501	44.0	691	749	2249	3.00
48.8	1581	0.18	2.94	4.578	1535	44.0	691	749	2284	3.05
50.0	1620	0.20	3.35	4.598	1566	44.0	691	749	2315	3.09
52.5	1701	0.25	4.19	4.638	1630	43.9	677	763	2393	3.14
53.5	1734	0.28	4.61	4.658	1654	43.8	662	778	2431	3.13

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName: SAT083S1

ADVANCED TERRA TESTING, INC.

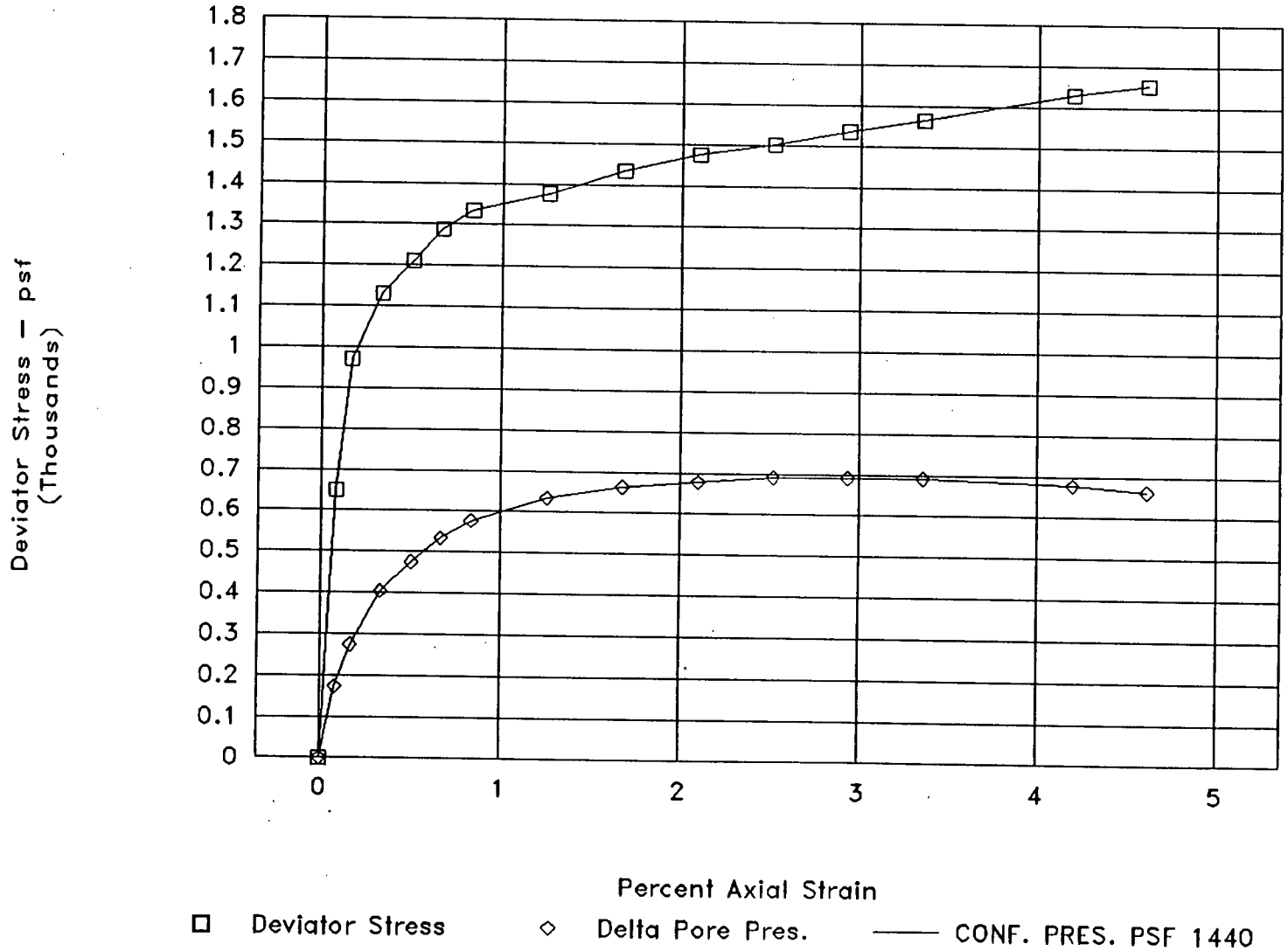
CONSOLIDATION DATA

G2-130, 20-22', 405083 Stage 1



TRIAXIAL TEST - TX/CUpp

G2-130, 20-22', 405083 Stage 1



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 2	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	979.2	955.4
Wt. Wet Soil & Pan	(g)	987.4	963.7
Wt. Dry Soil & Pan	(g)	860.6	860.6
Wt. Lost Moisture	(g)	126.8	103.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	852.3	852.3
Moisture Content %		14.9	12.1
Wet Density PCF		140.9	140.1
Dry Density PCF		122.6	125.0

Init. Diameter	(in)	2.436
Init. Area	(sq in)	4.661
Init. Height	(in)	5.682
Vol. Bef. Consol.	(cu ft)	0.01533
Vol. After Consol.	(cu ft)	0.01503

Notes & Comments: Remolded to 95% MDD

Data entry by: CAL Date: 7-30-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT083S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 2	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	1.40	0.00
0.25	0.5	1.80	-0.40
0.5	0.7	2.00	-0.60
1	1.0	2.30	-0.90
2	1.4	2.70	-1.30
4	2.0	3.30	-1.90
9	3.0	4.30	-2.90
16	4.0	5.20	-3.80
31	5.6	6.45	-5.05
60	7.7	7.65	-6.25
120	11.0	8.30	-6.90
240	15.5	8.60	-7.20
360	19.0	8.50	-7.10

Initial Height	(in)	5.682	Init. Vol.	(CC)	434.03
Height Change	(in)	0.000	Vol. Change	(CC)	9.50
Ht. After Cons.	(in)	5.682	Cell Exp.	(CC)	1.22
Initial Area	(sq in)	4.661	Net Change	(CC)	8.29
Area After Cons.	(sq in)	4.572	Cons. Vol.	(CC)	425.75

Data entry by: CAL Date: 7-30-95
Data checked by: AM Date: 7-31-95
FileName:SAT083S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 2	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

Init. Ht.	(in)	5.682	Init. Area	(sq in)	4.661
Consol. Ht.	(in)	5.682	Consol. Area	(sq in)	4.572
Back Pres.	PSI	38.4	Strain Rate	(in/min)	0.002

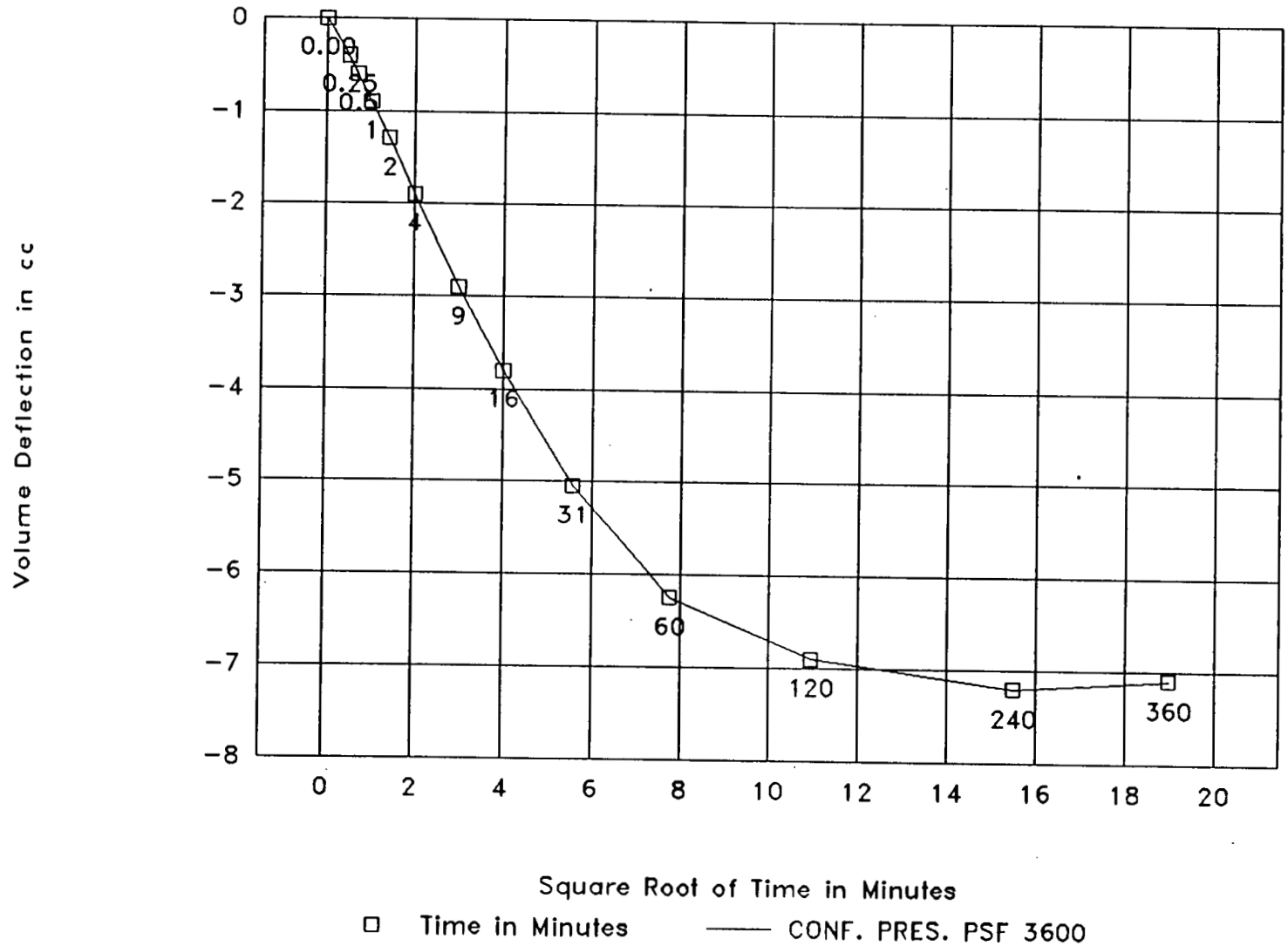
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.572	0	38.4	0	3600	3600	1.00
66.5	2095	0.01	0.09	4.576	2093	40.2	259	3341	5434	1.63
90.0	2835	0.02	0.35	4.588	2825	44.0	806	2794	5618	2.01
102.0	3213	0.03	0.53	4.596	3196	46.2	1123	2477	5673	2.29
115.0	3622	0.05	0.88	4.612	3590	48.7	1483	2117	5707	2.70
122.5	3859	0.07	1.23	4.629	3811	49.2	1555	2045	5856	2.86
127.5	4016	0.09	1.58	4.645	3952	50.2	1699	1901	5853	3.08
132.5	4174	0.12	2.11	4.670	4085	50.7	1771	1829	5914	3.23
136.0	4284	0.15	2.64	4.696	4171	50.8	1786	1814	5985	3.30
138.5	4363	0.18	3.17	4.721	4224	51.0	1814	1786	6010	3.37
140.5	4426	0.21	3.70	4.747	4262	51.1	1829	1771	6033	3.41
142.0	4473	0.24	4.22	4.773	4284	51.0	1814	1786	6069	3.40
145.0	4567	0.27	4.75	4.800	4350	50.9	1800	1800	6150	3.42

Data entry by: CAL Date: 7-30-95
Data checked by: NM Date: 7-31-95
FileName: SAT083S2

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-130, 20-22', 405083 Stage 2



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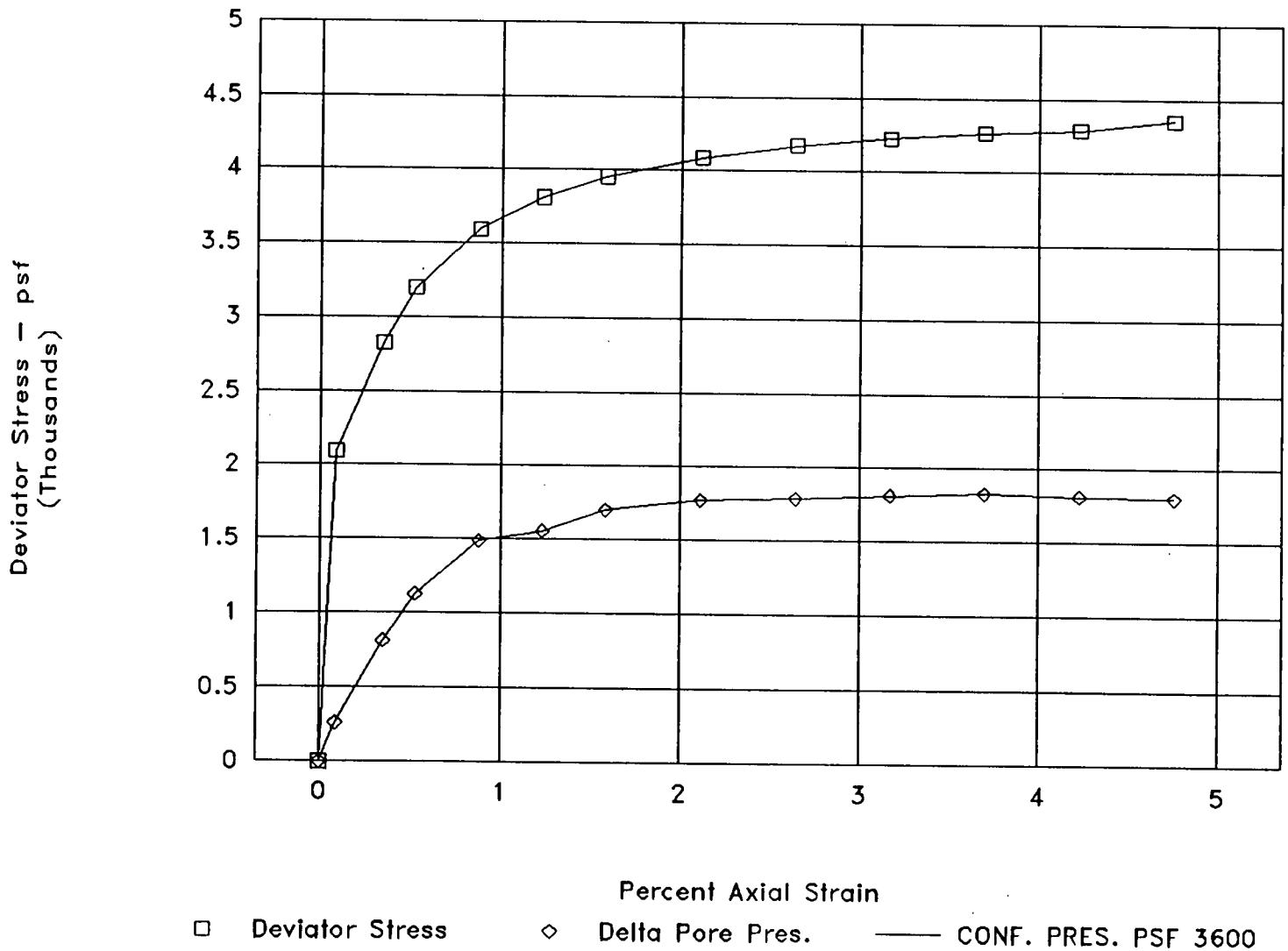
TRIAXIAL TEST - TX/CUpp

G2-130, 20-22', 405083 Stage 2



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 3	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	979.2	955.4
Wt. Wet Soil & Pan	(g)	987.4	963.7
Wt. Dry Soil & Pan	(g)	860.6	860.6
Wt. Lost Moisture	(g)	126.8	103.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	852.3	852.3
Moisture Content %		14.9	12.1
Wet Density PCF		143.6	141.9
Dry Density PCF		125.0	126.6

Init. Diameter	(in)	2.472
Init. Area	(sq in)	4.799
Init. Height	(in)	5.412
Vol. Bef. Consol.	(cu ft)	0.01503
Vol. After Consol.	(cu ft)	0.01484

Notes & Comments: Remolded to 95% MDD

Data entry by: CAL Date: 7-30-95
Data checked by: NM Date: 7-31-95
FileName:SAT083S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 3	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	13.40	0.00
0.25	0.5	15.05	-1.65
0.5	0.7	15.15	-1.75
1	1.0	15.30	-1.90
2	1.4	15.45	-2.05
4	2.0	15.70	-2.30
9	3.0	16.15	-2.75
16	4.0	16.65	-3.25
31	5.6	17.30	-3.90
60	7.7	18.15	-4.75
120	11.0	19.00	-5.60
240	15.5	19.50	-6.10
360	19.0	19.70	-6.30

Initial Height	(in)	5.412	Init. Vol.	(CC)	425.72
Height Change	(in)	-0.006	Vol. Change	(CC)	7.50
Ht. After Cons.	(in)	5.418	Cell Exp.	(CC)	2.03
Initial Area	(sq in)	4.799	Net Change	(CC)	5.48
Area After Cons.	(sq in)	4.732	Cons. Vol.	(CC)	420.24

Data entry by: CAL Date: 7-30-95
Data checked by: MG Date: 7-31-95
FileName:SAT083S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 3	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht.	(in)	5.412	Init. Area	(sq in)	4.799
Consol. Ht.	(in)	5.418	Consol. Area	(sq in)	4.732
Back Pres.	PSI	38.6	Strain Rate	(in/min)	0.002

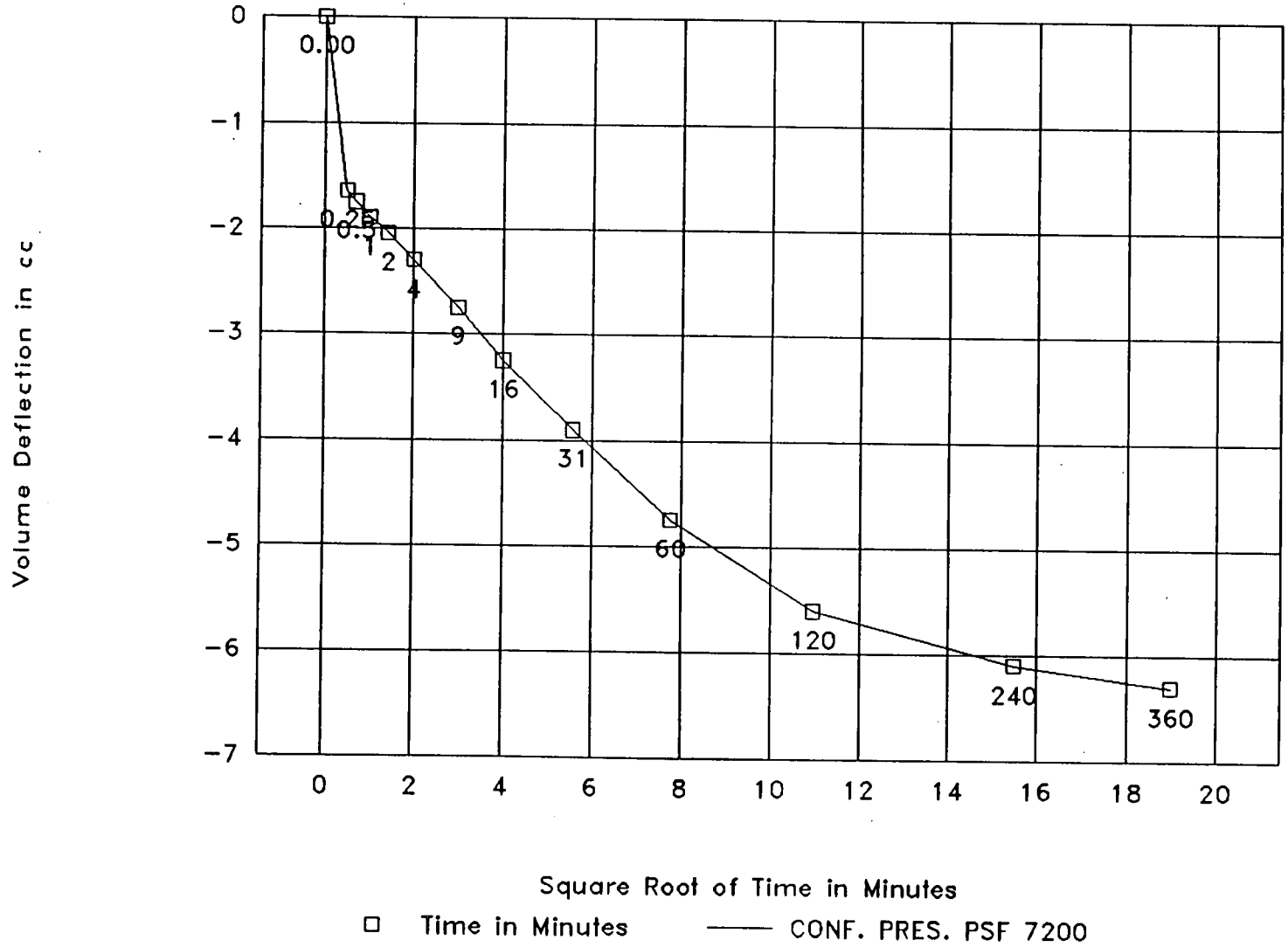
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.732	0	38.6	0	7200	7200	1.00
160.0	4869	0.02	0.37	4.750	4851	51.4	1843	5357	10207	1.91
210.0	6390	0.04	0.74	4.768	6343	58.1	2808	4392	10735	2.44
237.5	7227	0.06	1.11	4.785	7147	61.0	3226	3974	11121	2.80
257.0	7820	0.08	1.48	4.803	7705	62.4	3427	3773	11477	3.04
270.0	8216	0.10	1.85	4.821	8064	63.0	3514	3686	11750	3.19
284.0	8642	0.15	2.77	4.867	8402	63.2	3542	3658	12060	3.30
293.0	8916	0.20	3.69	4.914	8586	62.9	3499	3701	12287	3.32
298.0	9068	0.25	4.61	4.961	8649	62.3	3413	3787	12436	3.28
301.5	9174	0.30	5.54	5.010	8666	61.9	3355	3845	12511	3.25
304.0	9250	0.35	6.46	5.059	8653	61.6	3312	3888	12541	3.23
305.0	9281	0.40	7.38	5.110	8595	61.1	3240	3960	12555	3.17
305.0	9281	0.50	9.23	5.214	8424	60.6	3168	4032	12456	3.09
302.5	9205	0.60	11.07	5.322	8185	60.1	3096	4104	12289	2.99
297.5	9052	0.70	12.92	5.435	7883	59.9	3067	4133	12016	2.91
294.0	8946	0.80	14.77	5.552	7625	59.8	3053	4147	11772	2.84
288.5	8779	0.90	16.61	5.675	7320	59.7	3038	4162	11482	2.76
281.5	8566	1.00	18.46	5.804	6985	59.9	3067	4133	11117	2.69
276.5	8413	1.10	20.30	5.938	6705	60.0	3082	4118	10824	2.63
272.5	8292	1.20	22.15	6.079	6455	60.0	3082	4118	10574	2.57

Data entry by: CAL Date: 7-30-95
Data checked by: CM Date: 7-31-95
FileName:SAT083S3

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-130, 20-22', 405083 Stage 3



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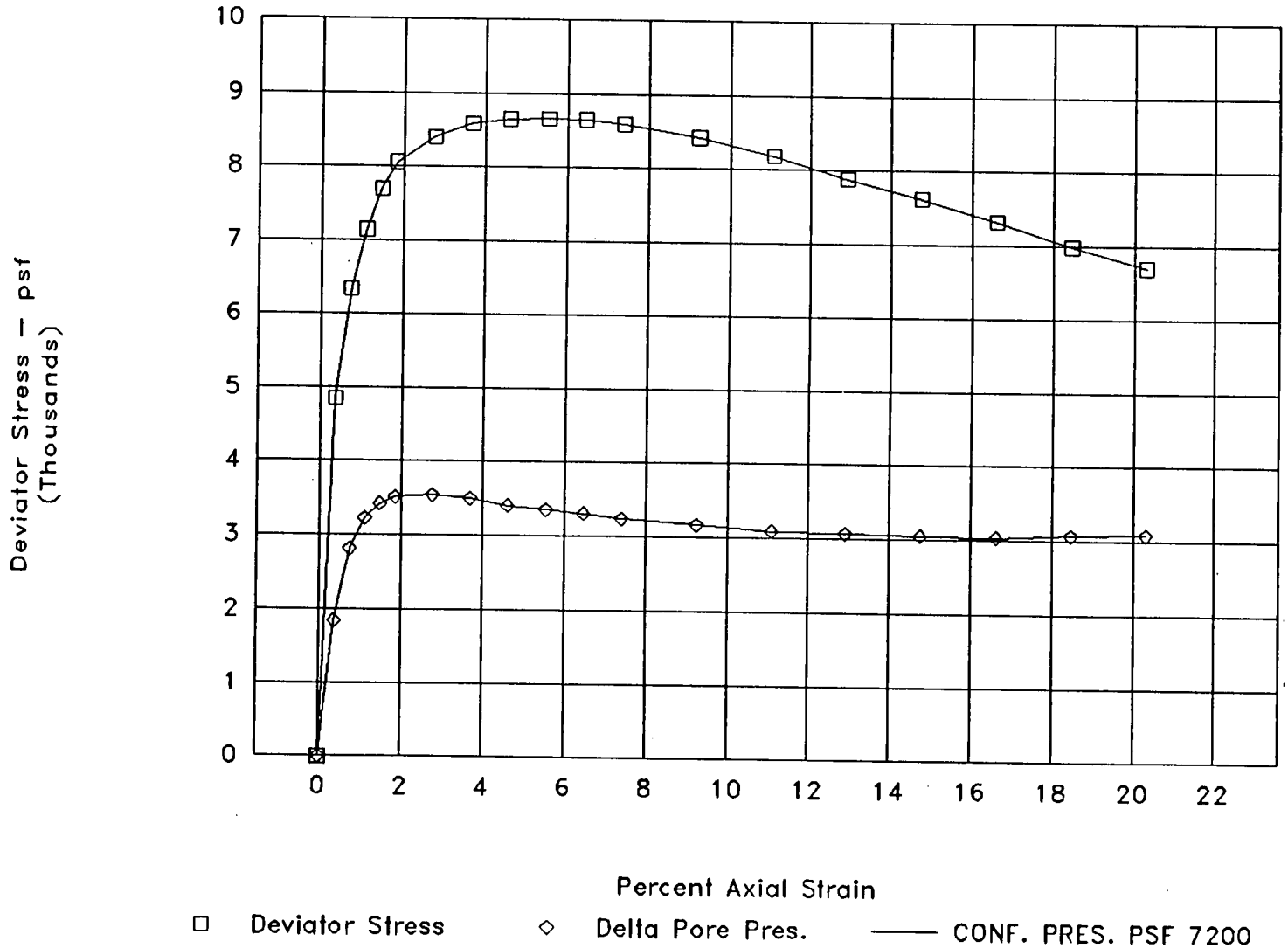
TRIAXIAL TEST - TX/CUpp

G2-130, 20-22', 405083 Stage 3



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

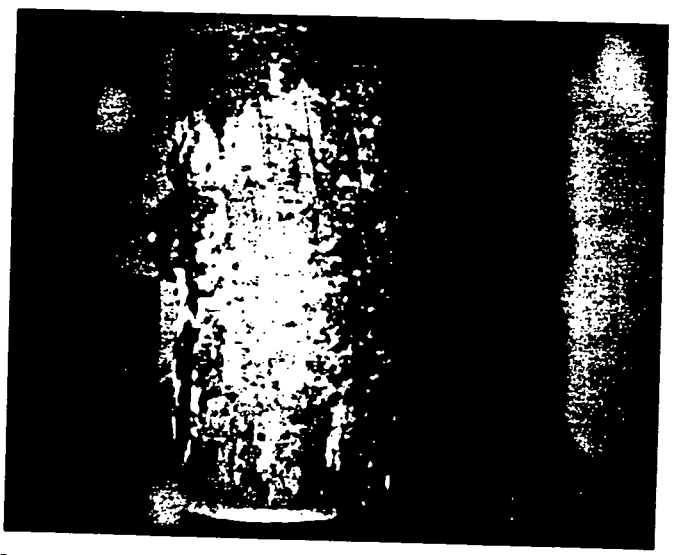
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 1	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	949.0	983.5
Wt. Wet Soil & Pan	(g)	957.2	991.7
Wt. Dry Soil & Pan	(g)	820.4	820.4
Wt. Lost Moisture	(g)	136.8	171.4
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	812.1	812.1
Moisture Content %		16.8	21.1
Wet Density PCF		132.2	141.4
Dry Density PCF		113.1	116.8

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.025
Vol. Bef. Consol.	(cu ft)	0.01583
Vol. After Consol.	(cu ft)	0.01533

Notes & Comments: Remolded to 95% MDD



Data entry by: CAL Date: 7-30-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT002S1

ADVANCED TERRA TESTING, INC.

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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 1	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.2	0.3				
50.0	48.0	-2.2	-0.6	36.8	45.4	8.6	0.86
60.0	58.0	2.0	3.0	46.4	55.5	9.1	0.91
70.0	68.0	5.5	6.6	56.6	66.0	9.4	0.94
80.0		9.7	9.8	66.6	76.1	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	0.10	0.00
0.25	0.5	1.40	-1.30
0.5	0.7	1.98	-1.88
1	1.0	2.20	-2.10
2	1.4	2.40	-2.30
4	2.0	2.90	-2.80
9	3.0	3.70	-3.60
16	4.0	4.40	-4.30
30	5.5	5.30	-5.20
60	7.7	6.20	-6.10
120	11.0	6.80	-6.70
240	15.5	7.50	-7.40
360	19.0	8.00	-7.90

Initial Height	(in)	6.025	Init. Vol.	(CC)	448.22
Height Change	(in)	0.000	Vol. Change	(CC)	36.50
Ht. After Cons.	(in)	6.025	Cell Exp.	(CC)	22.42
Initial Area	(sq in)	4.539	Net Change	(CC)	14.08
Area After Cons.	(sq in)	4.396	Cons. Vol.	(CC)	434.15

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName: SAT002S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 1	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

Init. Ht.	(in)	6.025	Init. Area (sq in)	4.539
Consol. Ht.	(in)	6.025	Consol. Area (sq in)	4.396
Back Pres.	PSI	66.6	Strain Rate (in/min)	0.004

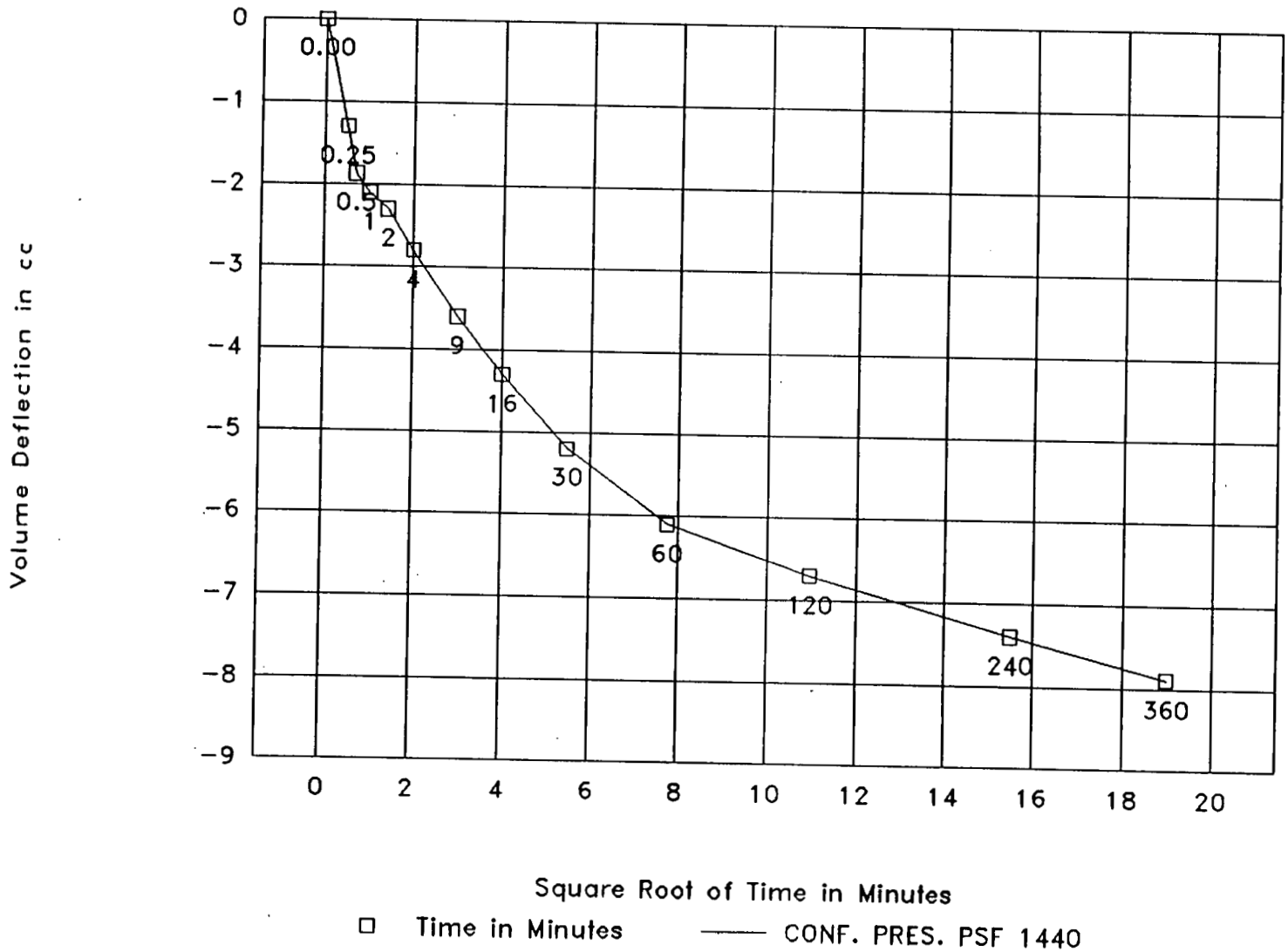
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.396	0	66.6	0	1440	1440	1.00
50.0	1638	0.01	0.08	4.400	1636	68.5	274	1166	2803	2.40
65.0	2129	0.01	0.17	4.404	2125	70.3	533	907	3033	3.34
80.0	2620	0.02	0.33	4.411	2612	71.1	648	792	3404	4.30
87.5	2866	0.03	0.50	4.418	2852	71.2	662	778	3629	4.67
92.5	3030	0.04	0.66	4.426	3010	71.2	662	778	3787	4.87
95.0	3112	0.05	0.83	4.433	3086	71.2	662	778	3863	4.97
100.0	3275	0.07	1.16	4.448	3237	70.9	619	821	4058	4.94
102.5	3357	0.09	1.49	4.463	3307	70.5	562	878	4186	4.76
105.0	3439	0.11	1.83	4.478	3376	70.1	504	936	4312	4.61
107.5	3521	0.13	2.16	4.493	3445	69.8	461	979	4424	4.52
110.0	3603	0.15	2.49	4.509	3513	69.5	418	1022	4536	4.44
112.5	3685	0.17	2.82	4.524	3581	69.3	389	1051	4632	4.41
115.0	3767	0.19	3.15	4.540	3648	69.1	360	1080	4728	4.38

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT002S1

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-132, 5-7', 405102 Stage 1



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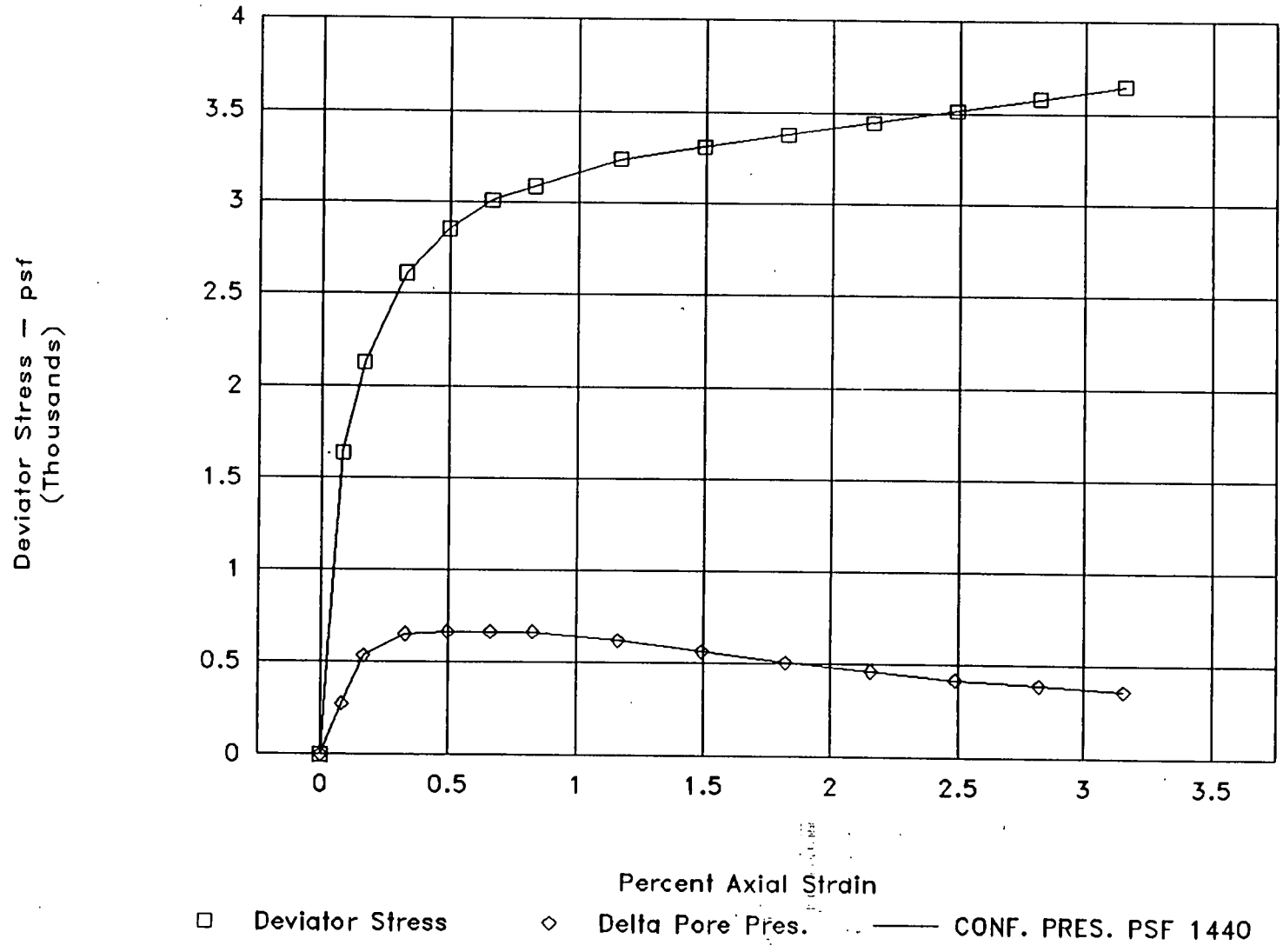
TRIAXIAL TEST - TX/CUpp

G2-132, 5-7', 405102 Stage 1



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 2	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	949.0	983.5
Wt. Wet Soil & Pan	(g)	957.3	991.8
Wt. Dry Soil & Pan	(g)	820.4	820.4
Wt. Lost Moisture	(g)	136.9	171.4
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	812.1	812.1
Moisture Content %		16.9	21.1
Wet Density PCF		136.5	147.5
Dry Density PCF		116.8	121.8

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	5.835
Vol. Bef. Consol.	(cu ft)	0.01533
Vol. After Consol.	(cu ft)	0.01470

Notes & Comments: Remolded to 95% MDD

Data entry by: CAL Date: 7-30-95
Data checked by: Na Date: 7-31-95
FileName:SAT002S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 2	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	2.60	0.00
0.25	0.5	4.20	-1.60
0.5	0.7	4.35	-1.75
1	1.0	4.60	-2.00
2	1.4	4.90	-2.30
4	2.0	5.33	-2.73
9	3.0	6.10	-3.50
16	4.0	6.85	-4.25
30	5.5	7.98	-5.38
60	7.7	9.50	-6.90
123	11.1	11.20	-8.60
240	15.5	12.55	-9.95
360	19.0	13.00	-10.40

Initial Height	(in)	5.835	Init. Vol.	(CC)	434.09
Height Change	(in)	0.002	Vol. Change	(CC)	20.50
Ht. After Cons.	(in)	5.833	Cell Exp.	(CC)	2.63
Initial Area	(sq in)	4.539	Net Change	(CC)	17.87
Area After Cons.	(sq in)	4.354	Cons. Vol.	(CC)	416.22

Data entry by: CAL Date: 7-30-95
Data checked by: AA Date: 7-31-95
FileName:SAT002S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 2	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht.	(in)	5.835	Init. Area	(sq in)	4.539
Consol. Ht.	(in)	5.833	Consol. Area	(sq in)	4.354
Back Pres.	PSI	66.6	Strain Rate	(in/min)	0.002

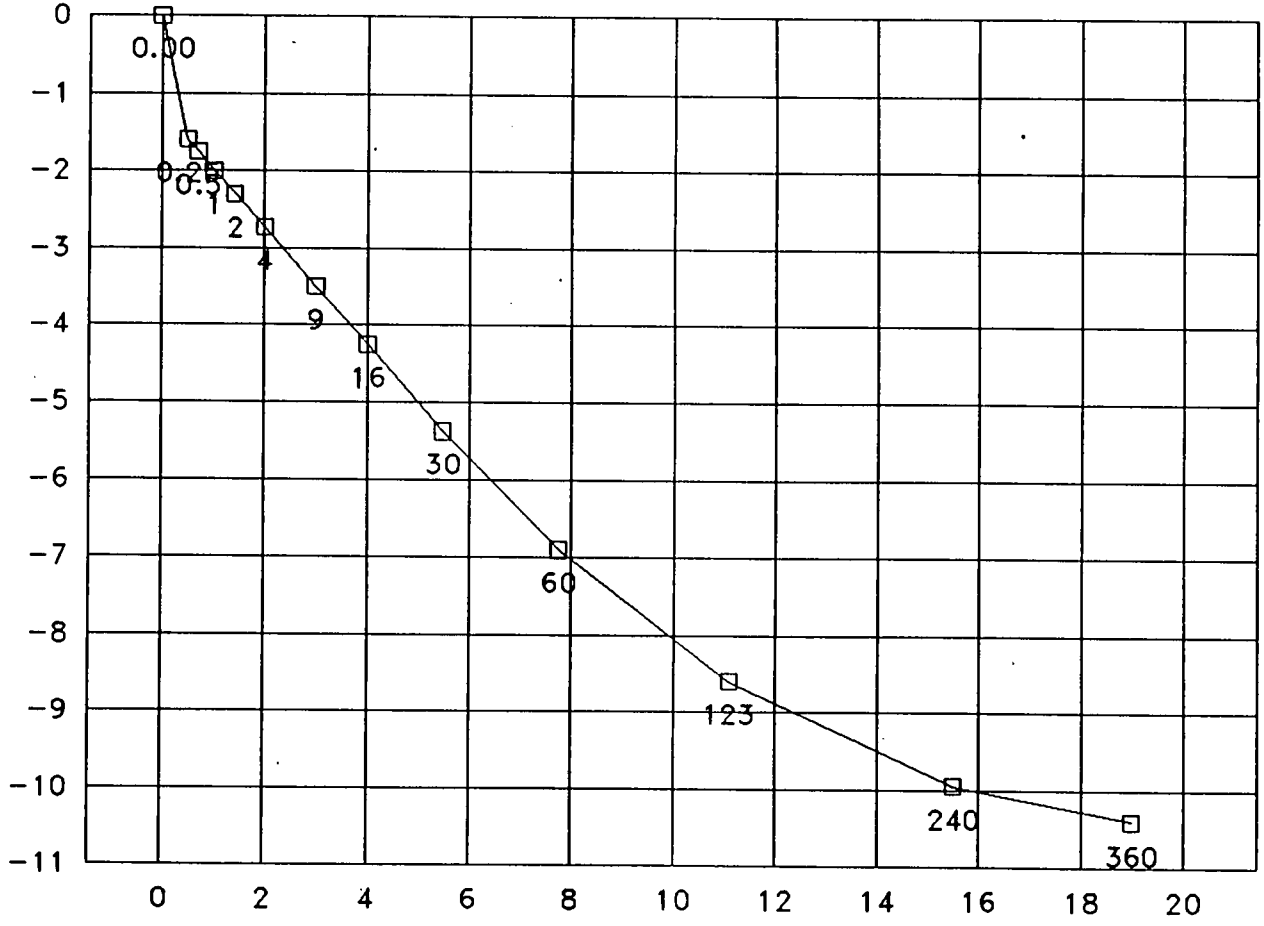
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.354	0	66.6	0	7200	7200	1.00
85.0	2811	0.01	0.17	4.361	2807	81.0	2074	5126	7933	1.55
110.0	3638	0.02	0.34	4.369	3626	85.0	2650	4550	8176	1.80
126.0	4168	0.03	0.51	4.376	4146	86.6	2880	4320	8466	1.96
140.0	4631	0.04	0.69	4.384	4599	87.0	2938	4262	8861	2.08
151.5	5011	0.05	0.86	4.391	4968	86.9	2923	4277	9245	2.16
161.0	5325	0.06	1.03	4.399	5270	86.2	2822	4378	9648	2.20
168.5	5573	0.07	1.20	4.407	5506	85.2	2678	4522	10028	2.22
175.0	5788	0.08	1.37	4.414	5709	84.2	2534	4666	10374	2.22
185.0	6119	0.10	1.71	4.430	6014	83.3	2405	4795	10809	2.25
191.5	6334	0.12	2.06	4.445	6204	82.5	2290	4910	11114	2.26
200.0	6615	0.15	2.57	4.469	6445	81.7	2174	5026	11471	2.28

Data entry by: CAL Date: 7-30-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT002S2

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-132, 5-7', 405102 Stage 2



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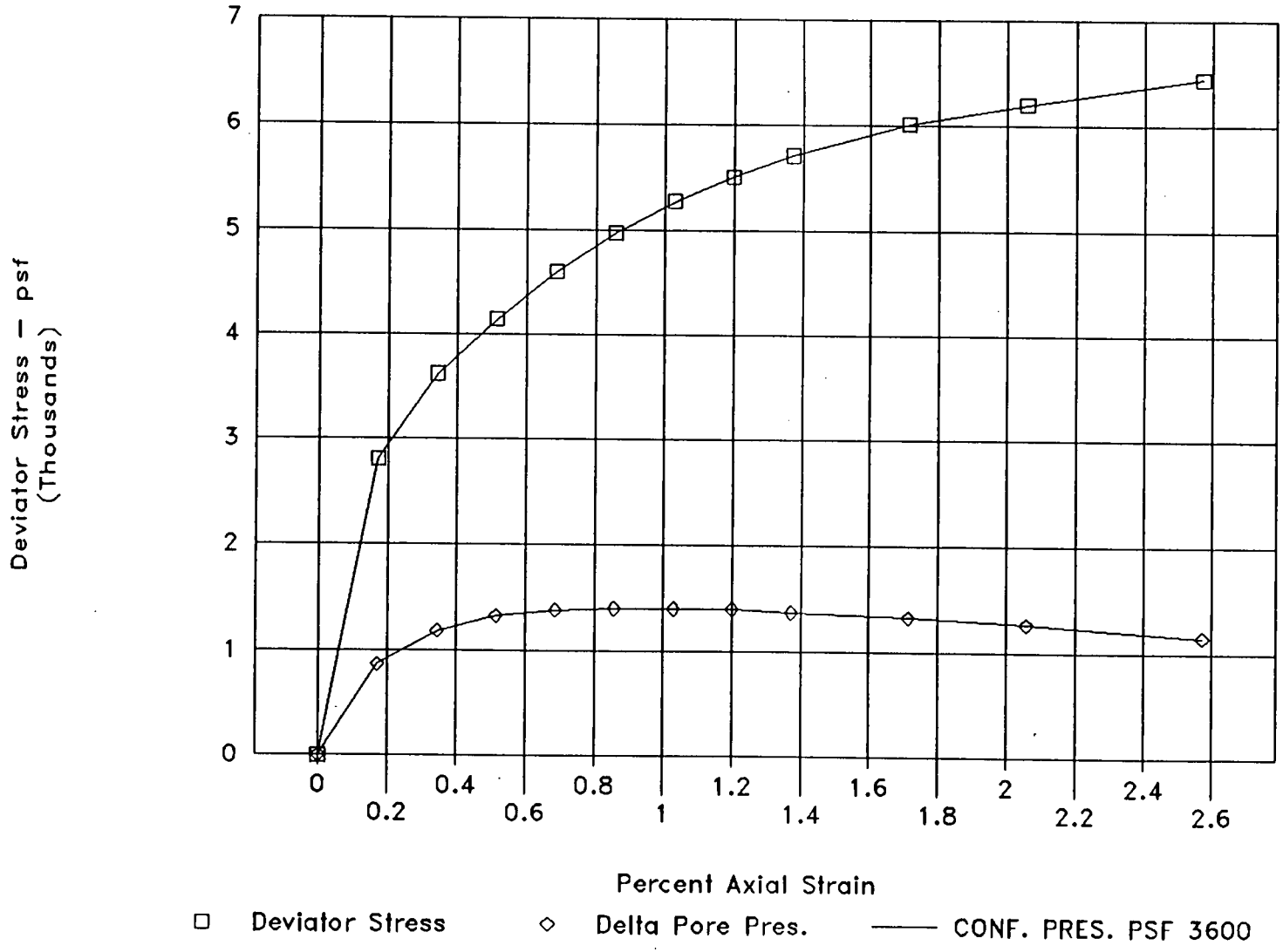
424

TRIAXIAL TEST - TX/CUpp

G2-132, 5-7', 405102 Stage 2



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424

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 3	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	949.0	983.5
Wt. Wet Soil & Pan	(g)	957.2	991.7
Wt. Dry Soil & Pan	(g)	820.4	820.4
Wt. Lost Moisture	(g)	136.8	171.4
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	812.1	812.1
Moisture Content %		16.8	21.1
Wet Density PCF		142.4	150.2
Dry Density PCF		121.9	124.0

Init. Diameter	(in)	2.385
Init. Area	(sq in)	4.468
Init. Height	(in)	5.683
Vol. Bef. Consol.	(cu ft)	0.01469
Vol. After Consol.	(cu ft)	0.01444

Notes & Comments: Remolded to 95% MDD

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT002S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 3	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	0.40	0.00
0.25	0.5	2.43	-2.03
0.5	0.7	2.53	-2.13
1	1.0	2.63	-2.23
2	1.4	2.80	-2.40
4	2.0	3.10	-2.70
9	3.0	3.50	-3.10
16	4.0	3.90	-3.50
30	5.5	4.55	-4.15
60	7.7	5.40	-5.00
120	11.0	6.65	-6.25
240	15.5	8.10	-7.70
360	19.0	8.98	-8.58

Initial Height	(in)	5.683	Init. Vol.	(CC)	416.12
Height Change	(in)	0.008	Vol. Change	(CC)	11.65
Ht. After Cons.	(in)	5.675	Cell Exp.	(CC)	4.38
Initial Area	(sq in)	4.468	Net Change	(CC)	7.28
Area After Cons.	(sq in)	4.396	Cons. Vol.	(CC)	408.85

Data entry by: CAL Date: 7-30-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT002S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 3	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht.	(in)	5.683	Init. Area	(sq in)	4.468
Consol. Ht.	(in)	5.675	Consol. Area	(sq in)	4.396
Back Pres.	PSI	66.7	Strain Rate	(in/min)	0.002

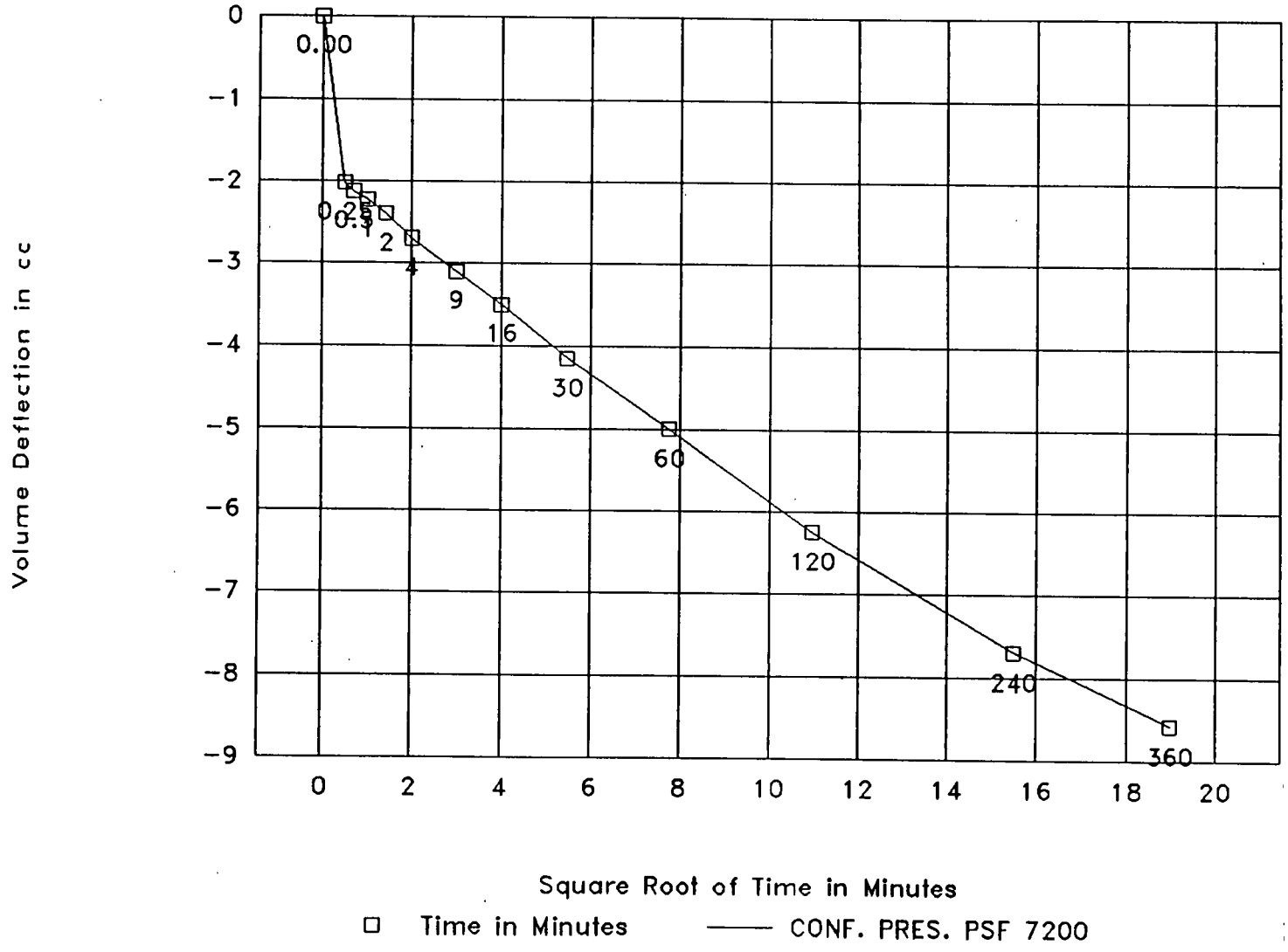
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.396	0	66.7	0	7200	7200	1.00
78.0	2555	0.02	0.35	4.411	2546	81.0	2059	5141	7687	1.50
102.5	3358	0.04	0.70	4.427	3334	85.0	2635	4565	7899	1.73
120.5	3948	0.06	1.06	4.443	3906	86.6	2866	4334	8240	1.90
132.5	4341	0.08	1.41	4.458	4280	87.0	2923	4277	8556	2.00
141.0	4619	0.10	1.76	4.474	4538	86.9	2909	4291	8829	2.06
152.5	4996	0.15	2.64	4.515	4864	86.2	2808	4392	9256	2.11
160.0	5242	0.20	3.52	4.556	5057	85.2	2664	4536	9593	2.11
166.0	5438	0.25	4.41	4.598	5199	84.2	2520	4680	9879	2.11
171.5	5618	0.30	5.29	4.641	5321	83.3	2390	4810	10131	2.11
176.5	5782	0.35	6.17	4.685	5426	82.5	2275	4925	10350	2.10
181.5	5946	0.40	7.05	4.729	5527	81.7	2160	5040	10567	2.10
190.0	6224	0.50	8.81	4.820	5676	80.3	1958	5242	10918	2.08
198.0	6486	0.60	10.57	4.915	5801	79.0	1771	5429	11229	2.07
205.0	6716	0.70	12.33	5.014	5887	77.7	1584	5616	11503	2.05
210.0	6880	0.80	14.10	5.117	5910	76.8	1454	5746	11655	2.03
214.5	7027	0.90	15.86	5.224	5913	75.2	1224	5976	11889	1.99
217.5	7125	1.00	17.62	5.336	5870	74.3	1094	6106	11975	1.96

Data entry by: CAL Date: 7-30-95
Data checked by: Na Date: 7-31-95
FileName: SAT002S3

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-132, 5-7', 405102 Stage 3



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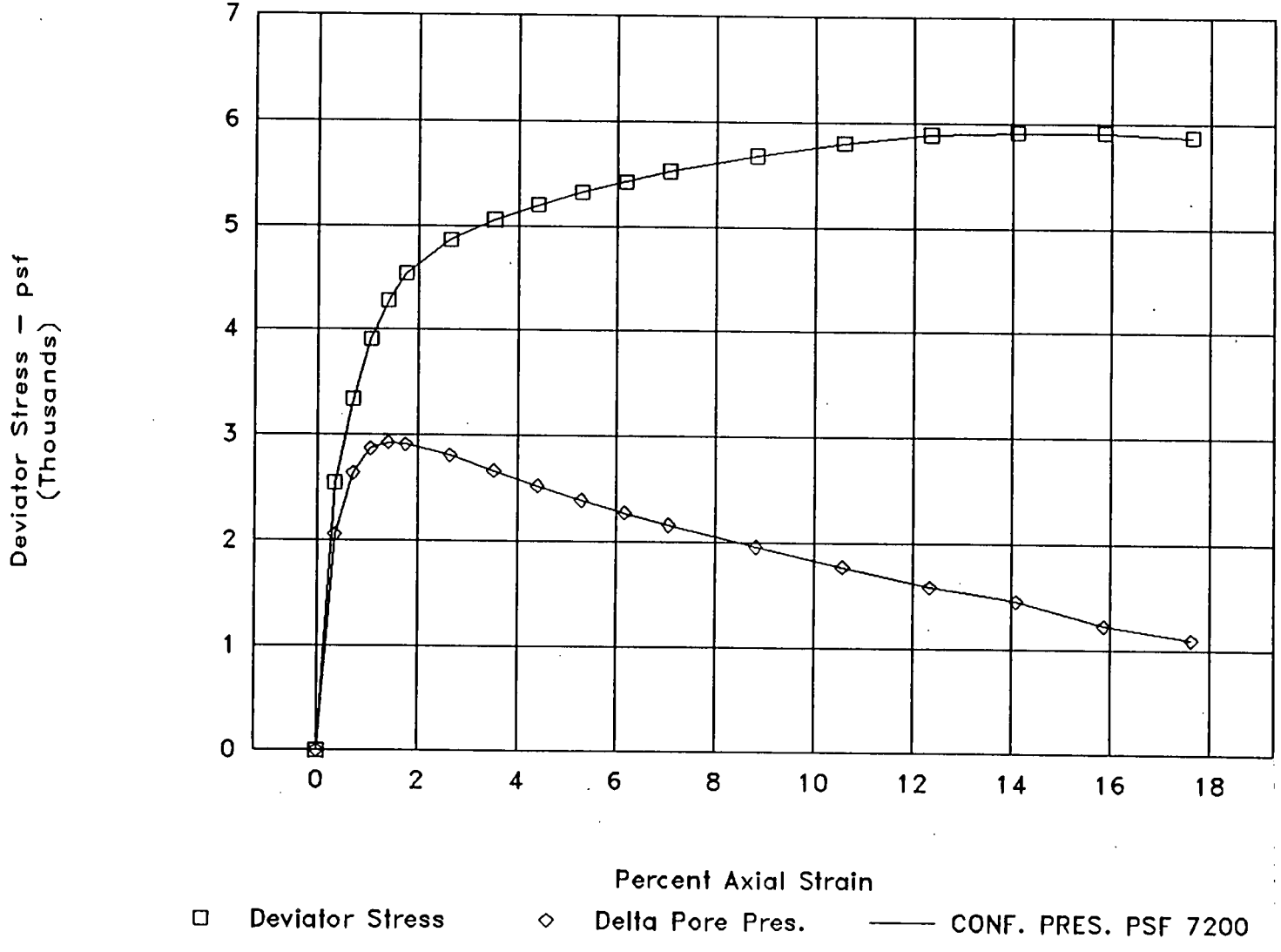
474

TRIAXIAL TEST - TX/CUpp

G2-132, 5-7', 405102 Stage 3



TRIAXIAL SHEAR, CONSOLIDATED, UNDRAINED WITH PORE PRESSURE MEASUREMENTS

Remolded to 85% MDD
3 Points
TX/CUpp
ASTM D 4767

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15-17'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	404827 A	TEST FINISHED	7-25-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	16S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	845.4	855.3
Wt. Wet Soil & Pan	(g)	853.7	863.5
Wt. Dry Soil & Pan	(g)	774.3	774.3
Wt. Lost Moisture	(g)	79.4	89.3
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	766.0	766.0
Moisture Content %		10.4	11.7
Wet Density PCF		118.5	151.9
Dry Density PCF		107.3	136.0

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01573
Vol. After Consol.	(cu ft)	0.01241

Notes & Comments: Remolded to 85% MDD

SAIC/Parsons PO 140 2059-13G
G2-122 # 404827A 15-17'
7/25/95 σ_3 7200 PSF

Data entry by: CAL Date: 7-26-95
Data checked by: NCL Date: 7-31-95
FileName:SAT0827A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15-17'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	404827 A	TEST FINISHED	7-25-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	16S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	14.8	47.8				
50.0	48.0	65.2	68.1	38.3	47.5	9.2	0.92
60.0	58.0	70.4	72.3	48.1	57.2	9.1	0.91
70.0	68.0	72.1	73.6	58.2	67.2	9.0	0.90
80.0	78.0	73.8	74.4	68.0	77.3	9.3	0.93
90.0		74.6	74.8	78.3	87.9	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	0.70	0.00
0.25	0.5	12.70	-12.00
0.5	0.7	15.50	-14.80
1	1.0	19.20	-18.50
2	1.4	23.40	-22.70
4	2.0	27.70	-27.00
9	3.0	32.60	-31.90
18	4.2	36.90	-36.20
30	5.5	40.05	-39.35
64	8.0	43.70	-43.00
120	11.0	45.30	-44.60
252	15.9	45.90	-45.20
447	21.1	46.20	-45.50

Initial Height	(in)	6.000	Init. Vol.	(CC)	445.62
Height Change	(in)	0.290	Vol. Change	(CC)	107.00
Ht. After Cons.	(in)	5.710	Cell Exp.	(CC)	12.95
Initial Area	(sq in)	4.531	Net Change	(CC)	94.05
Area After Cons.	(sq in)	3.757	Cons. Vol.	(CC)	351.57

Data entry by: CAL Date: 7-26-95
Data checked by: RA Date: 7-31-95
FileName:SAT0827A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15-17'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	404827 A	TEST FINISHED	7-25-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	16S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht.	(in)	6.000	Init. Area	(sq in)	4.531
Consol. Ht.	(in)	5.710	Consol. Area	(sq in)	3.757
Back Pres.	PSI	78.1	Strain Rate	(in/min)	0.003

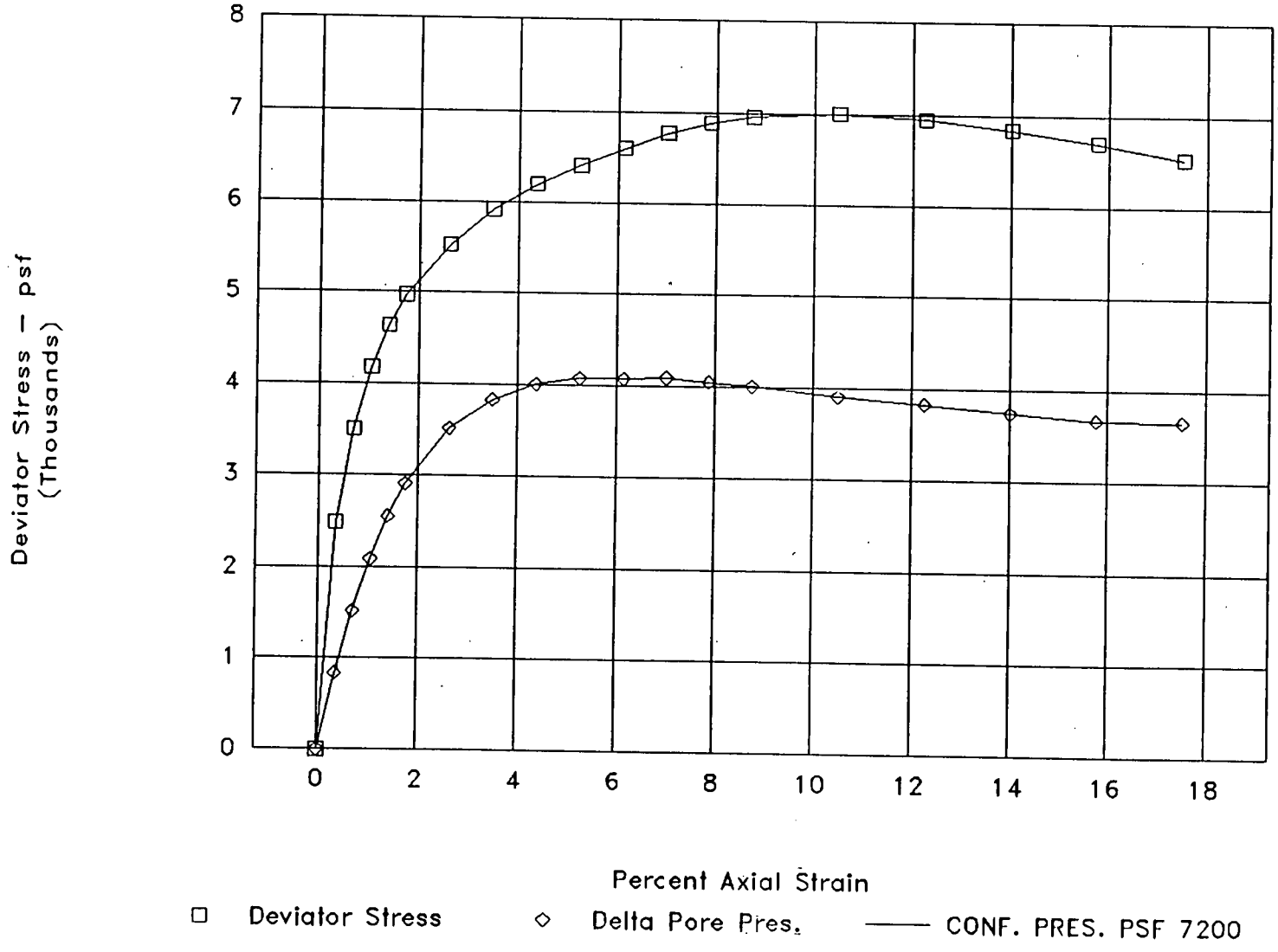
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	3.757	0	78.1	0	7200	7200	1.00
65.0	2492	0.02	0.35	3.770	2483	83.9	835	6365	8848	1.39
92.0	3527	0.04	0.70	3.783	3502	88.6	1512	5688	9190	1.62
110.0	4217	0.06	1.05	3.796	4172	92.6	2088	5112	9284	1.82
122.5	4696	0.08	1.40	3.810	4630	95.8	2549	4651	9281	2.00
132.0	5060	0.10	1.75	3.824	4971	98.3	2909	4291	9262	2.16
148.0	5673	0.15	2.63	3.858	5524	102.5	3514	3686	9211	2.50
160.0	6133	0.20	3.50	3.893	5918	104.7	3830	3370	9288	2.76
169.0	6478	0.25	4.38	3.929	6195	105.9	4003	3197	9391	2.94
176.5	6766	0.30	5.25	3.965	6410	106.4	4075	3125	9535	3.05
183.5	7034	0.35	6.13	4.002	6603	106.4	4075	3125	9728	3.11
190.0	7283	0.40	7.01	4.040	6773	106.5	4090	3110	9883	3.18
195.0	7475	0.45	7.88	4.078	6886	106.2	4046	3154	10039	3.18
199.0	7628	0.50	8.76	4.117	6960	105.9	4003	3197	10157	3.18
204.0	7820	0.60	10.51	4.198	6998	105.2	3902	3298	10296	3.12
206.5	7916	0.70	12.26	4.281	6945	104.7	3830	3370	10315	3.06
207.5	7954	0.80	14.01	4.369	6840	104.1	3744	3456	10296	2.98
207.5	7954	0.90	15.76	4.459	6700	103.6	3672	3528	10228	2.90
206.5	7916	1.00	17.51	4.554	6529	103.5	3658	3542	10072	2.84
204.0	7820	1.10	19.26	4.653	6313	103.2	3614	3586	9899	2.76
202.5	7762	1.20	21.02	4.756	6131	102.8	3557	3643	9774	2.68

Data entry by: CAL Date: 7-26-95
Data checked by: [illegible] Date: 7-31-95
FileName:SAT0827A

ADVANCED TERRA TESTING, INC.

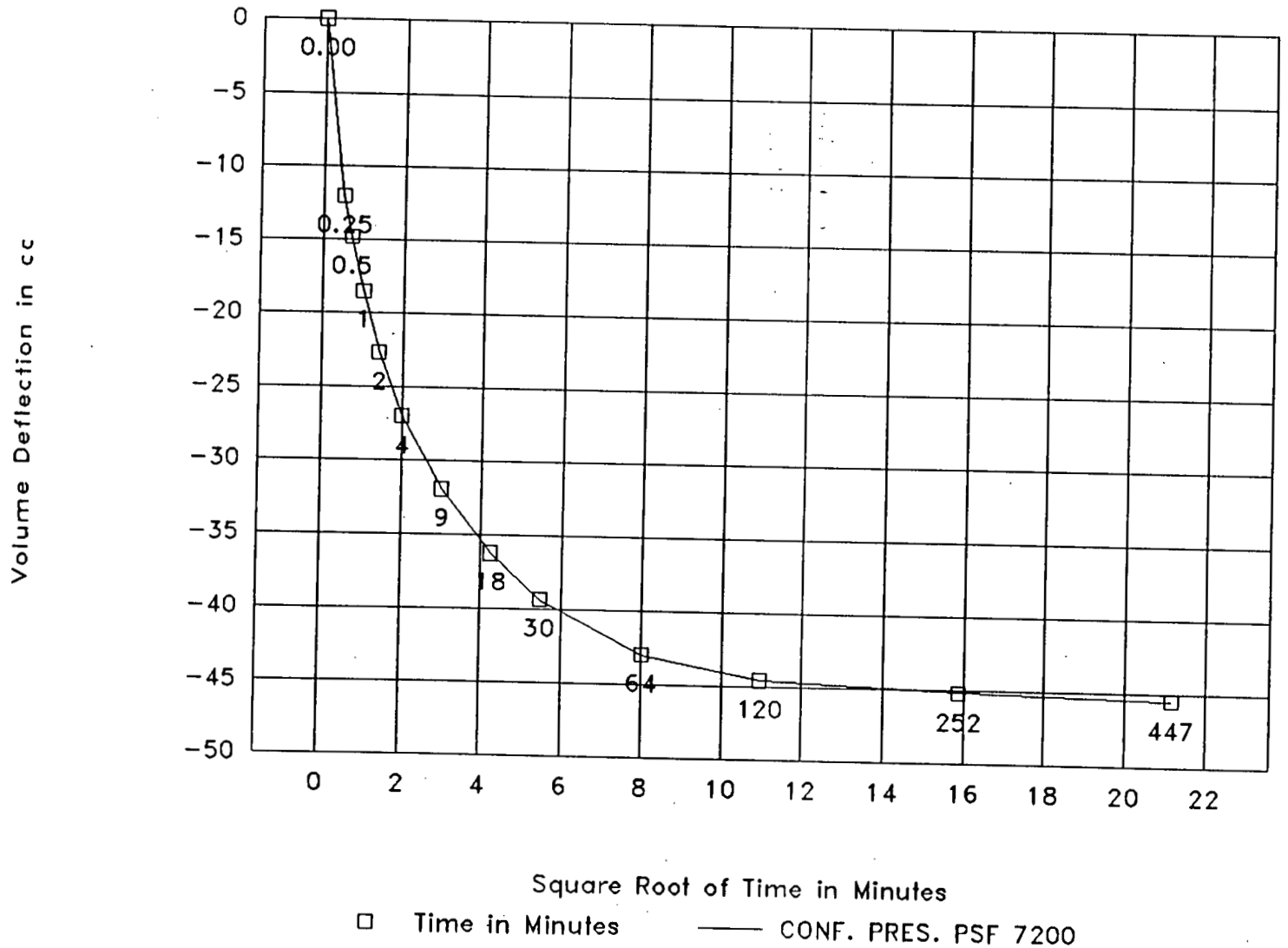
TRIAXIAL TEST - TX/CUpp

G2-122, 15-17', 404827A



CONSOLIDATION DATA

G2-122, 15-17', 404827A



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

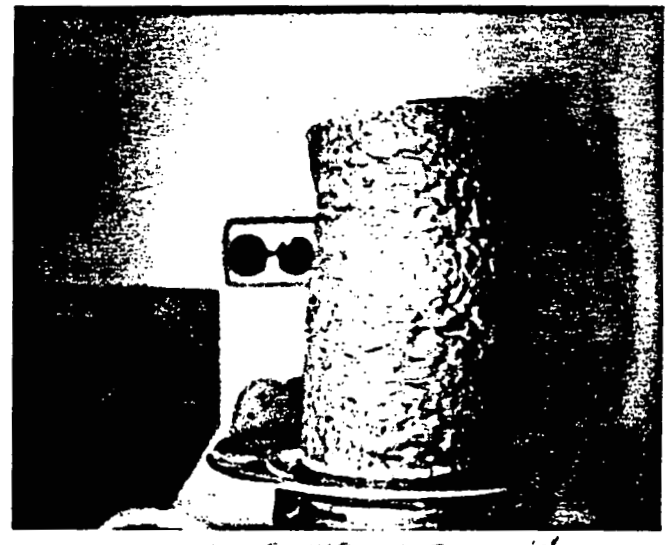
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15.0-17.0'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404827 B	TEST FINISHED	7-18-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	847.0	865.6
Wt. Wet Soil & Pan	(g)	855.5	874.2
Wt. Dry Soil & Pan	(g)	766.7	766.7
Wt. Lost Moisture	(g)	88.8	107.4
Wt. of Pan Only	(g)	8.6	8.6
Wt. of Dry Soil	(g)	758.2	758.2
Moisture Content %		11.7	14.2
Wet Density PCF		117.5	140.0
Dry Density PCF		105.2	122.6

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.050
Vol. Bef. Consol.	(cu ft)	0.01589
Vol. After Consol.	(cu ft)	0.01363

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO 140 Fernald
G2-122 404827 B 15-17'
TX/CU R85 σ_3 3600 PSF

Data entry by: NAA Date: 7-21-95
Data checked by:_____ Date:_____
FileName:SAT0827B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15.0-17.0'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404827 B	TEST FINISHED	7-18-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	5.3	33.1				
50.0	48.0	34.0	36.5	38.1	47.5	9.4	0.94
60.0		36.7		47.9	57.4	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	10.50	0.00
0.25	0.5	21.50	-11.00
0.5	0.7	24.50	-14.00
1	1.0	28.00	-17.50
2	1.4	31.50	-21.00
4	2.0	35.00	-24.50
9	3.0	39.05	-28.55
16	4.0	41.90	-31.40
30	5.5	44.85	-34.35
60	7.7	47.80	-37.30
120	11.0	49.85	-39.35
240	15.5	50.70	-40.20
360	19.0	50.90	-40.40

Initial Height	(in)	6.050	Init. Vol.	(CC)	450.08
Height Change	(in)	0.304	Vol. Change	(CC)	72.80
Ht. After Cons.	(in)	5.746	Cell Exp.	(CC)	8.88
Initial Area	(sq in)	4.539	Net Change	(CC)	63.92
Area After Cons.	(sq in)	4.100	Cons. Vol.	(CC)	386.16

Data entry by: NAA Date: 7-21-95
Data checked by: cal Date: 7-25-95
FileName:SAT0827B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15.0-17.0'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404827 B	TEST FINISHED	7-18-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

Init. Ht.	(in)	6.050	Init. Area	(sq in)	4.539
Consol. Ht.	(in)	5.746	Consol. Area	(sq in)	4.100
Back Pres.	PSI	48.2	Strain Rate	(in/min)	0.005

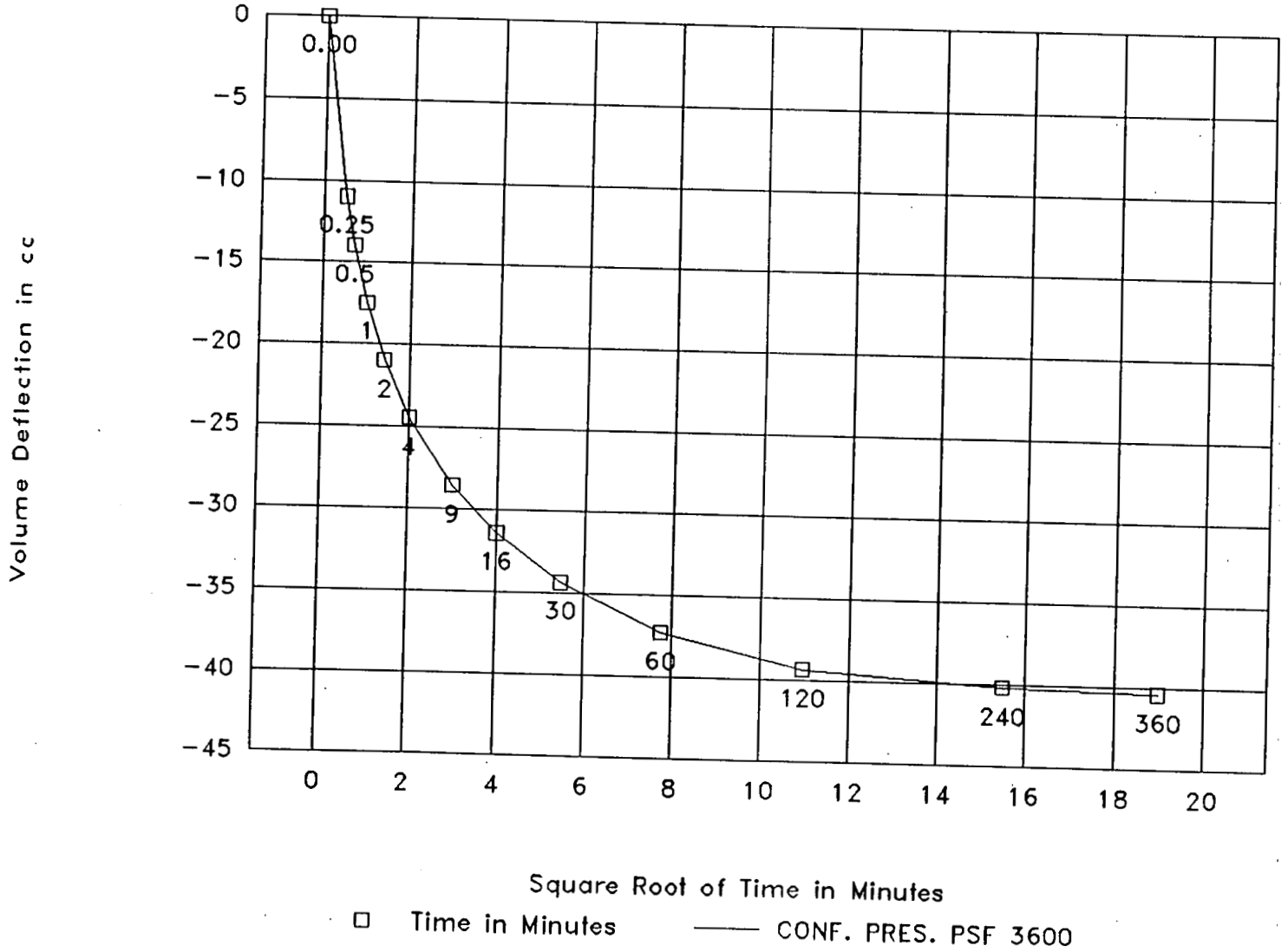
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.100	0	48.2	0	3600	3600	1.00
43.0	1510	0.02	0.35	4.115	1505	52.3	590	3010	4514	1.50
51.0	1791	0.04	0.70	4.129	1779	55.3	1022	2578	4356	1.69
55.5	1949	0.06	1.04	4.144	1929	56.6	1210	2390	4319	1.81
58.5	2054	0.08	1.39	4.158	2026	57.3	1310	2290	4315	1.88
61.0	2142	0.10	1.74	4.173	2105	57.9	1397	2203	4308	1.96
67.0	2353	0.15	2.61	4.210	2292	58.8	1526	2074	4365	2.11
72.5	2546	0.20	3.48	4.248	2457	59.4	1613	1987	4445	2.24
77.0	2704	0.25	4.35	4.287	2586	59.5	1627	1973	4559	2.31
80.0	2809	0.30	5.22	4.326	2663	59.6	1642	1958	4621	2.36
83.5	2932	0.35	6.09	4.366	2754	59.7	1656	1944	4698	2.42
87.0	3055	0.40	6.96	4.407	2843	59.5	1627	1973	4815	2.44
96.0	3371	0.50	8.70	4.491	3078	59.3	1598	2002	5080	2.54
104.0	3652	0.60	10.44	4.578	3271	59.0	1555	2045	5316	2.60
109.0	3828	0.70	12.18	4.669	3362	58.6	1498	2102	5464	2.60
116.0	4074	0.80	13.92	4.764	3507	58.3	1454	2146	5652	2.63
122.0	4284	0.90	15.66	4.862	3613	57.9	1397	2203	5817	2.64
125.5	4407	1.00	17.40	4.964	3640	57.5	1339	2261	5901	2.61
127.5	4478	1.10	19.14	5.071	3620	57.1	1282	2318	5939	2.56
130.0	4565	1.20	20.88	5.183	3612	57.1	1282	2318	5930	2.56

Data entry by: NAA Date: 7-21-95
Data checked by: cal Date: 7-25-95
FileName:SAT0827B

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-122, 15.0-17.0', 404827 B



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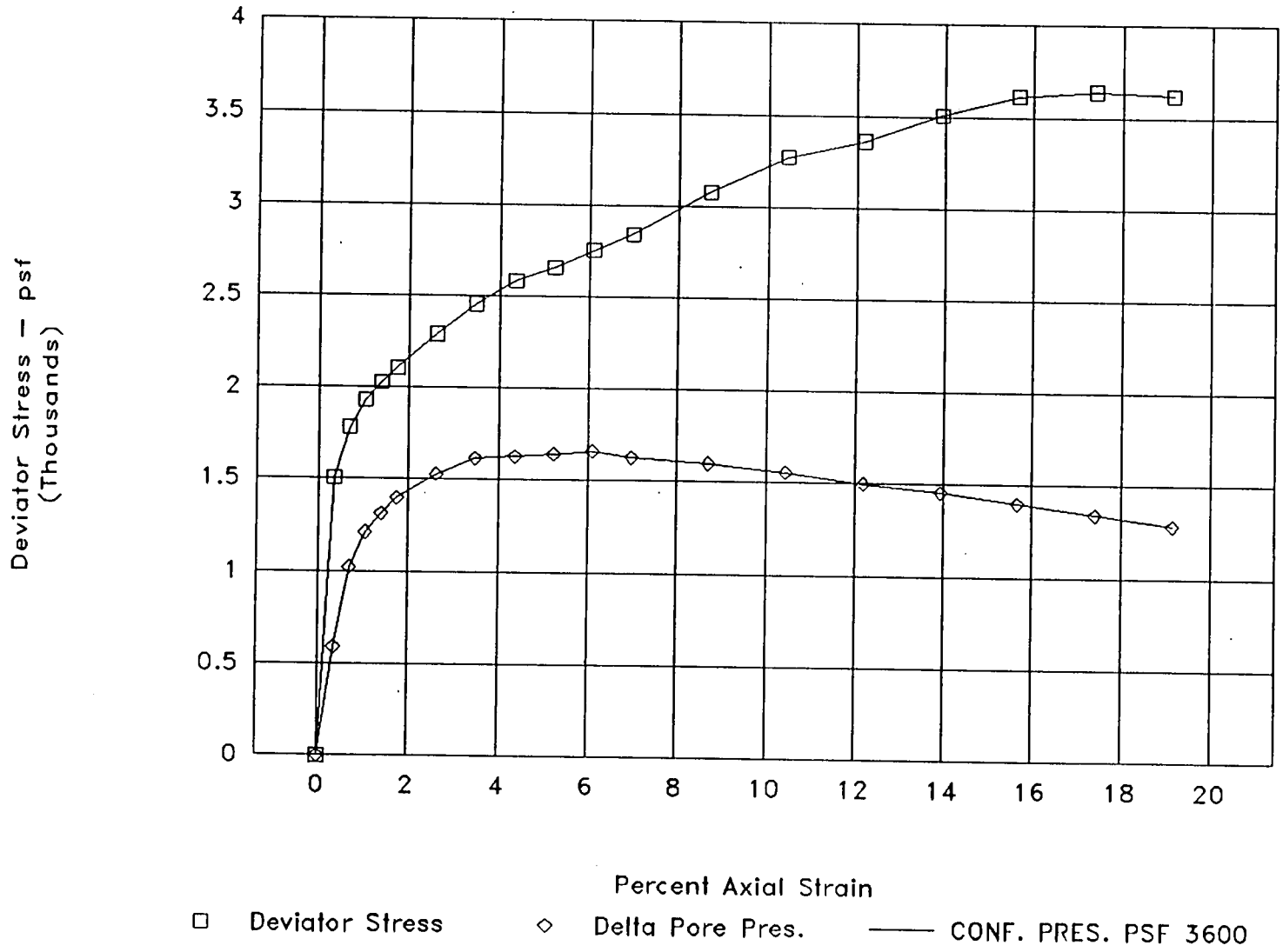
TRIAXIAL TEST - TX/CUpp

G2-122, 15.0-17.0', 404827 B



TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

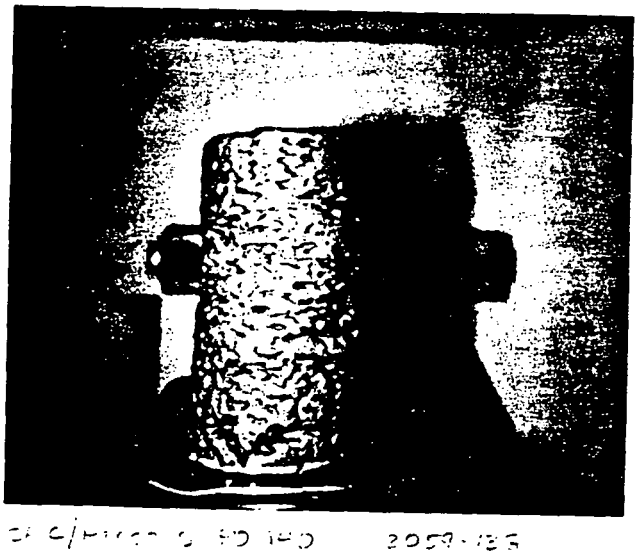
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15-17'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404827 C	TEST FINISHED	7-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	10S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	845.9	882.3
Wt. Wet Soil & Pan	(g)	854.3	890.7
Wt. Dry Soil & Pan	(g)	767.1	767.1
Wt. Lost Moisture	(g)	87.2	123.5
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	758.8	758.8
Moisture Content %		11.5	16.3
Wet Density PCF		118.0	137.7
Dry Density PCF		105.9	118.4

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.036
Vol. Bef. Consol.	(cu ft)	0.01580
Vol. After Consol.	(cu ft)	0.01412

Notes & Comments: Remolded to 85% MDD



Data entry by: CJW Date: 7-29-95
Data checked by: NK Date: 7-31-95
FileName:SAT0827C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15-17'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404827 C	TEST FINISHED	7-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	10S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	3.7	35.8				
50.0		37.4	38.3	38.1	47.6	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	0.00	0.00
0.25	0.5	5.30	-5.30
0.5	0.7	6.30	-6.30
1	1.0	7.40	-7.40
2	1.4	9.98	-9.98
4	2.0	11.30	-11.30
9	3.0	12.78	-12.78
16	4.0	13.70	-13.70
30	5.5	14.80	-14.80
60	7.7	16.20	-16.20
120	11.0	17.80	-17.80
240	15.5	19.68	-19.68
360	19.0	20.80	-20.80

Initial Height	(in)	6.036	Init. Vol.	(CC)	447.55
Height Change	(in)	0.211	Vol. Change	(CC)	60.50
Ht. After Cons.	(in)	5.825	Cell Exp.	(CC)	12.96
Initial Area	(sq in)	4.524	Net Change	(CC)	47.54
Area After Cons.	(sq in)	4.190	Cons. Vol.	(CC)	400.01

Data entry by: CJW Date: 7-29-95
Data checked by: NCA Date: 7-31-95
FileName:SAT0827C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15-17'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404827 C	TEST FINISHED	7-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	10S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

Init. Ht.	(in)	6.036	Init. Area	(sq in)	4.524
Consol. Ht.	(in)	5.825	Consol. Area	(sq in)	4.190
Back Pres.	PSI	38.4	Strain Rate	(in/min)	0.004

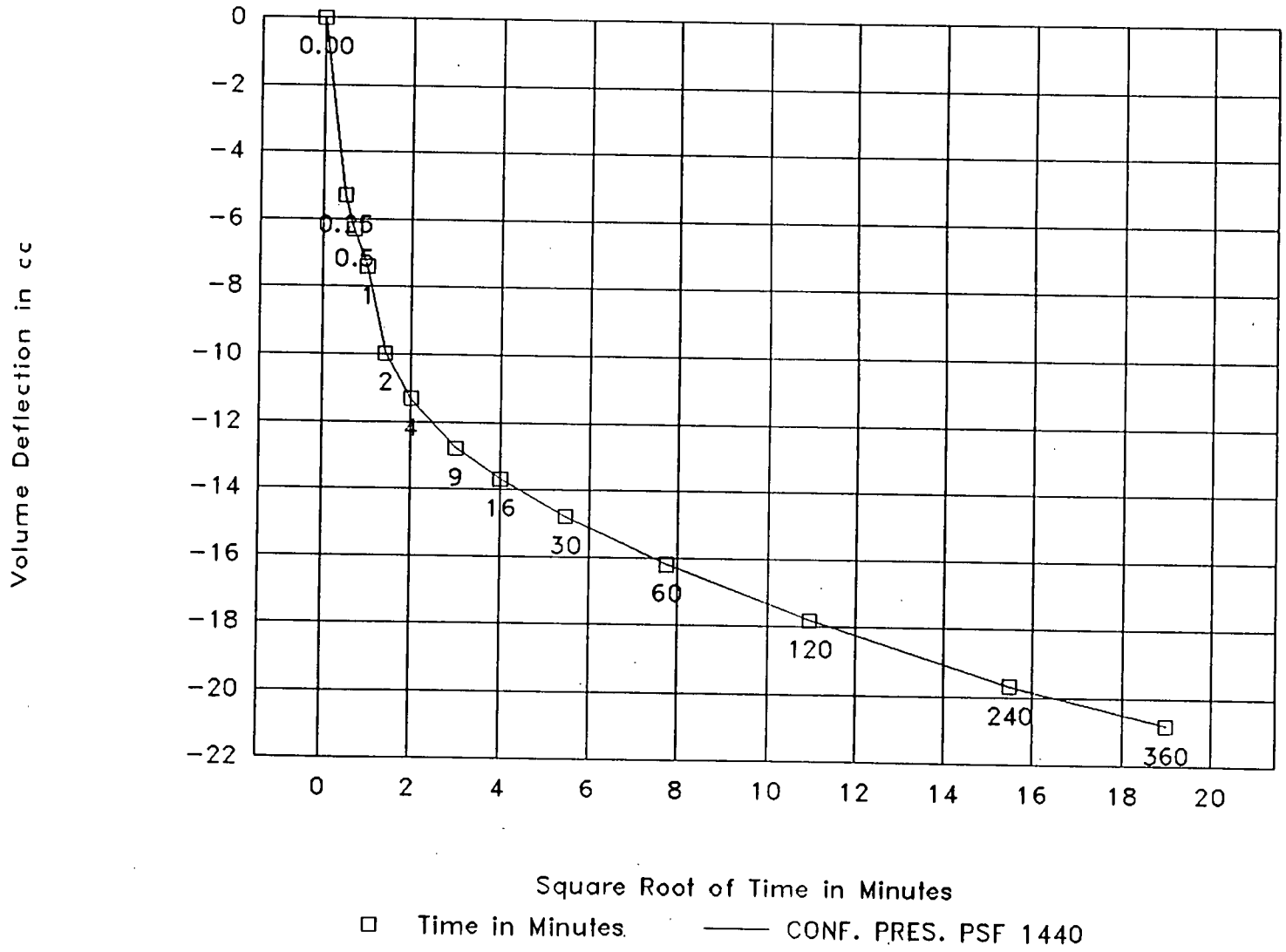
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.190	0	38.4	0	1440	1440	1.00
32.0	1100	0.01	0.17	4.197	1098	40.6	317	1123	2221	1.98
36.0	1237	0.02	0.34	4.204	1233	41.3	418	1022	2255	2.21
37.0	1272	0.04	0.69	4.219	1263	41.9	504	936	2199	2.35
37.5	1289	0.06	1.03	4.233	1276	42.3	562	878	2154	2.45
37.5	1289	0.08	1.37	4.248	1271	42.6	605	835	2106	2.52
37.0	1272	0.10	1.72	4.263	1250	42.9	648	792	2042	2.58
37.0	1272	0.20	3.43	4.339	1228	43.6	749	691	1919	2.78
38.0	1306	0.30	5.15	4.417	1239	43.9	792	648	1887	2.91
39.5	1358	0.40	6.87	4.499	1264	44.2	835	605	1869	3.09
41.5	1426	0.50	8.58	4.583	1304	44.6	893	547	1851	3.38
44.5	1529	0.60	10.30	4.671	1372	44.7	907	533	1905	3.57
46.5	1598	0.70	12.02	4.762	1406	44.7	907	533	1939	3.64
49.0	1684	0.80	13.73	4.857	1453	44.7	907	533	1986	3.73
52.0	1787	0.90	15.45	4.956	1511	44.6	893	547	2058	3.76
54.0	1856	1.00	17.17	5.058	1537	44.3	850	590	2128	3.60
56.5	1942	1.10	18.88	5.165	1575	44.2	835	605	2180	3.60
60.0	2062	1.20	20.60	5.277	1637	44.1	821	619	2257	3.64

Data entry by: CJW Date: 7-29-95
Data checked by: MU Date: 7-31-95
FileName:SAT0827C

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-122, 15-17', 404827 C



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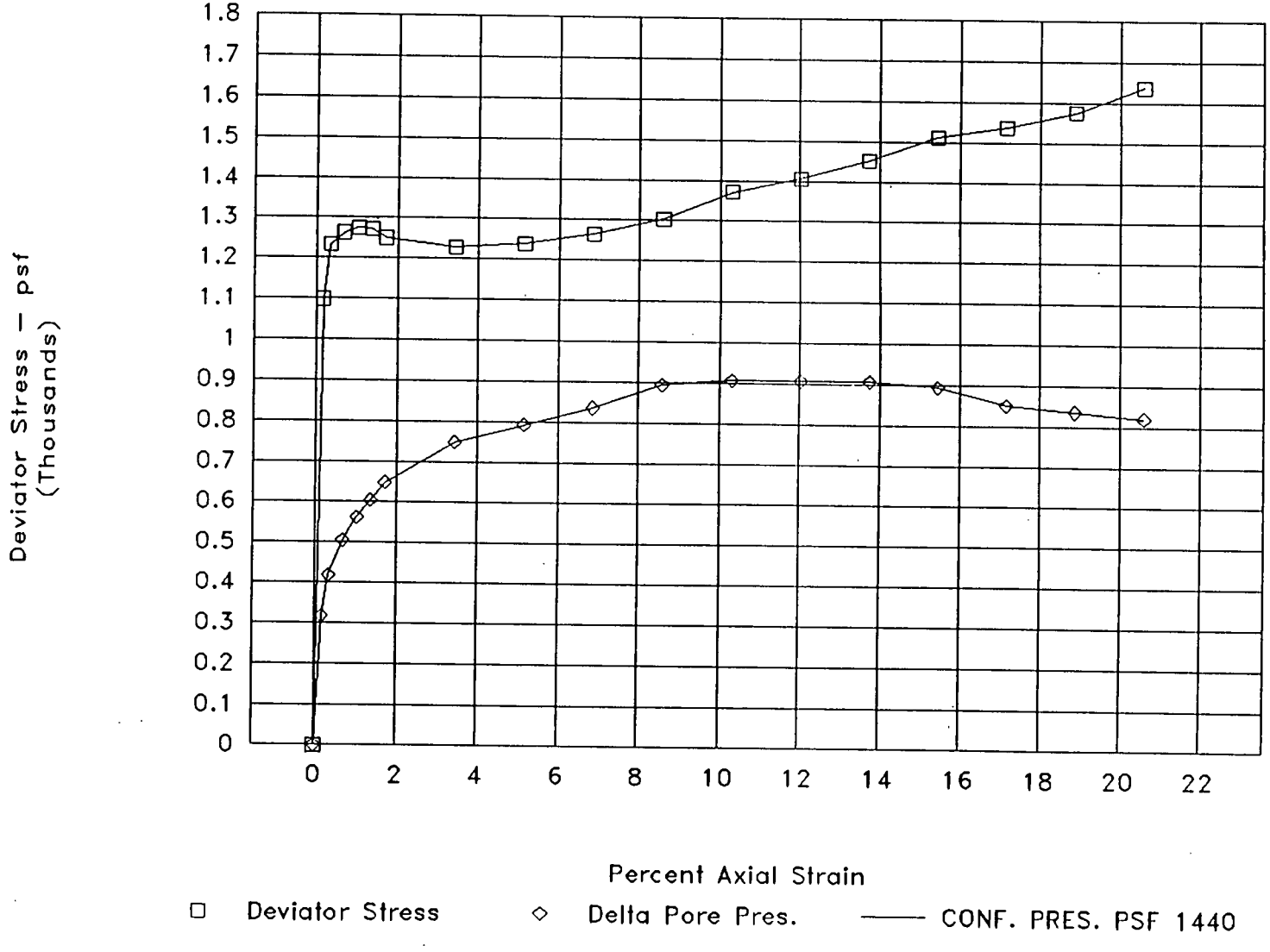
TRIAXIAL TEST - TX/CUpp

G2-122, 15-17', 404827 C



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474

TRIAXIAL SHEAR, CONSOLIDATED, UNDRAINED WITH PORE PRESSURE MEASUREMENTS

Remolded to 85% MDD
Staged - 3 Points
TX/CUpp
ASTM D 4767

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	820.0	868.1
Wt. Wet Soil & Pan	(g)	828.4	876.4
Wt. Dry Soil & Pan	(g)	716.7	716.7
Wt. Lost Moisture	(g)	111.7	159.8
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	708.3	708.3
Moisture Content %		15.8	22.6
Wet Density PCF		114.0	118.6
Dry Density PCF		98.5	96.7

Init. Diameter	(in)	2.407
Init. Area	(sq in)	4.550
Init. Height	(in)	6.020
Vol. Bef. Consol.	(cu ft)	0.01585
Vol. After Consol.	(cu ft)	0.01614

Notes & Comments:Remolded to 85% MDD

SAIC/PARSONS PO 140
G2-126 #404771 @ 12.5-14.5'
STAGED TX/CUpp

Data entry by: CAL Date: 7-30-95
Data checked by: N/A Date: 7-31-95
FileName:SAT053S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.2	-1.0				
50.0	48.0	-12.3	-10.2	39.1	46.6	7.5	0.75
60.0	58.0	-11.8	-11.3	48.6	56.6	8.0	0.80
70.0	68.0	-11.5	-10.9	58.6	67.2	8.6	0.86
80.0	78.0	-10.7	-10.2	67.5	76.4	8.9	0.89
90.0	88.0	-10.4	-9.7	78.4	87.7	9.3	0.93
100.0		-9.8	-9.9	88.0	97.7	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	9.80	0.00
0.25	0.5	13.20	-3.40
0.5	0.7	14.50	-4.70
1	1.0	16.00	-6.20
2	1.4	17.65	-7.85
4	2.0	19.00	-9.20
9	3.0	20.30	-10.50
16	4.0	20.98	-11.18
30	5.5	21.53	-11.72
60	7.7	21.90	-12.10
120	11.0	22.10	-12.30
240	15.5	22.30	-12.50
360	19.0	22.40	-12.60

Initial Height	(in)	6.020	Init. Vol.	(CC)	448.97
Height Change	(in)	0.028	Vol. Change	(CC)	1.60
Ht. After Cons.	(in)	5.992	Cell Exp.	(CC)	9.81
Initial Area	(sq in)	4.550	Net Change	(CC)	-8.21
Area After Cons.	(sq in)	4.655	Cons. Vol.	(CC)	457.18

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT053S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

Init. Ht. (in)	6.020	Init. Area (sq in)	4.550
Consol. Ht. (in)	5.992	Consol. Area (sq in)	4.655
Back Pres. PSI	86.8	Strain Rate (in/min)	0.006

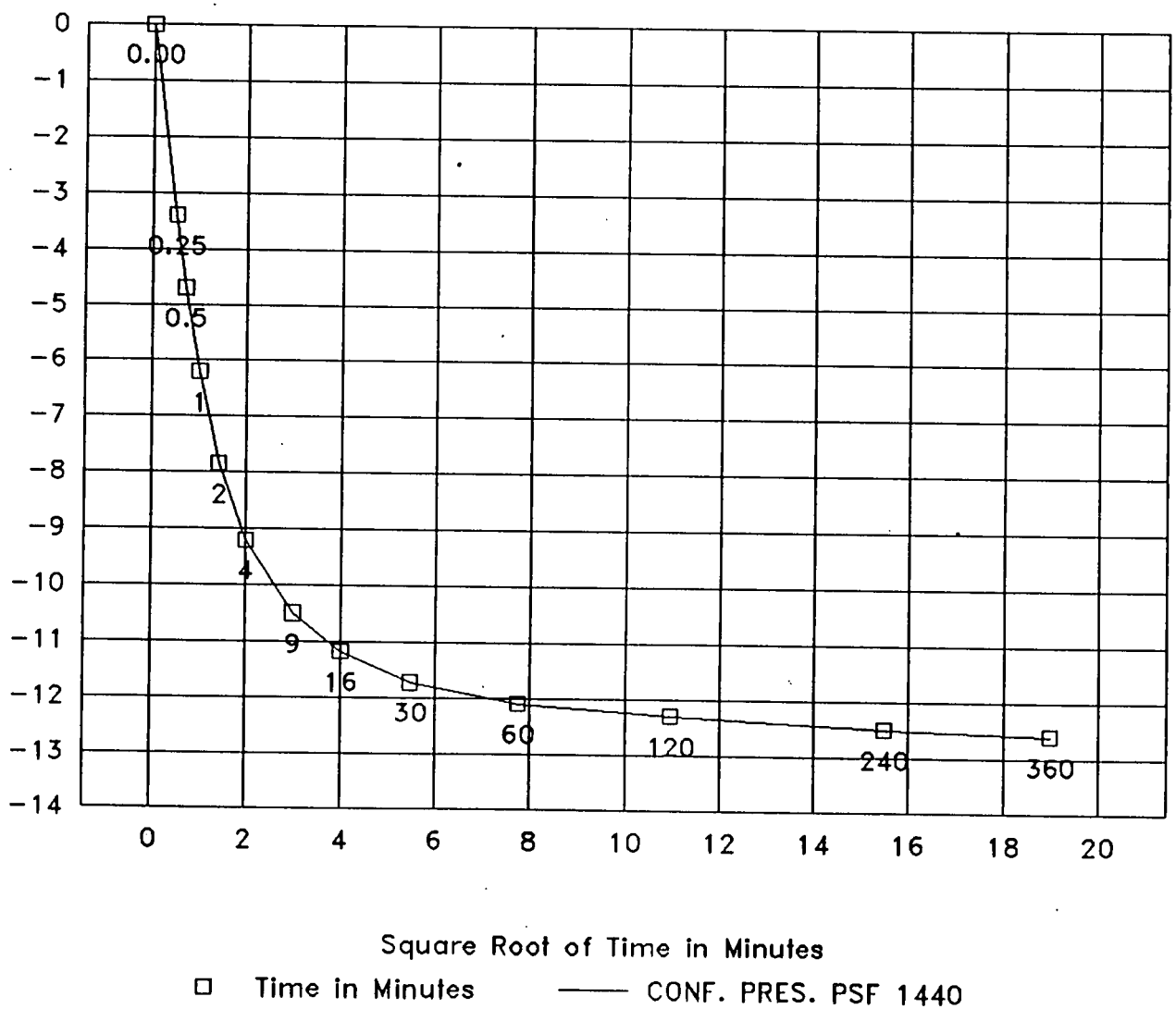
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.655	0	86.8	0	1440	1440	1.00
38.5	1191	0.01	0.08	4.659	1190	88.1	187	1253	2443	1.95
52.0	1609	0.01	0.17	4.663	1606	89.2	346	1094	2700	2.47
61.5	1902	0.02	0.25	4.667	1898	89.9	446	994	2891	2.91
61.5	1902	0.02	0.33	4.671	1896	90.3	504	936	2832	3.03
60.0	1856	0.03	0.42	4.675	1848	90.7	562	878	2727	3.10
62.0	1918	0.05	0.83	4.694	1902	92.0	749	691	2593	3.75
63.5	1964	0.08	1.25	4.714	1940	92.7	850	590	2530	4.29
64.7	2001	0.10	1.67	4.734	1968	93.1	907	533	2501	4.69
65.9	2038	0.13	2.09	4.754	1996	93.4	950	490	2486	5.08
66.5	2057	0.15	2.50	4.775	2006	93.5	965	475	2481	5.22
66.7	2063	0.18	2.92	4.795	2003	93.7	994	446	2449	5.49
66.9	2069	0.20	3.34	4.816	2000	93.8	1008	432	2432	5.63
67.1	2076	0.23	3.76	4.837	1998	94.0	1037	403	2401	5.95

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT053S1

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-133, 2.5-4.5', 405053 Stage 1



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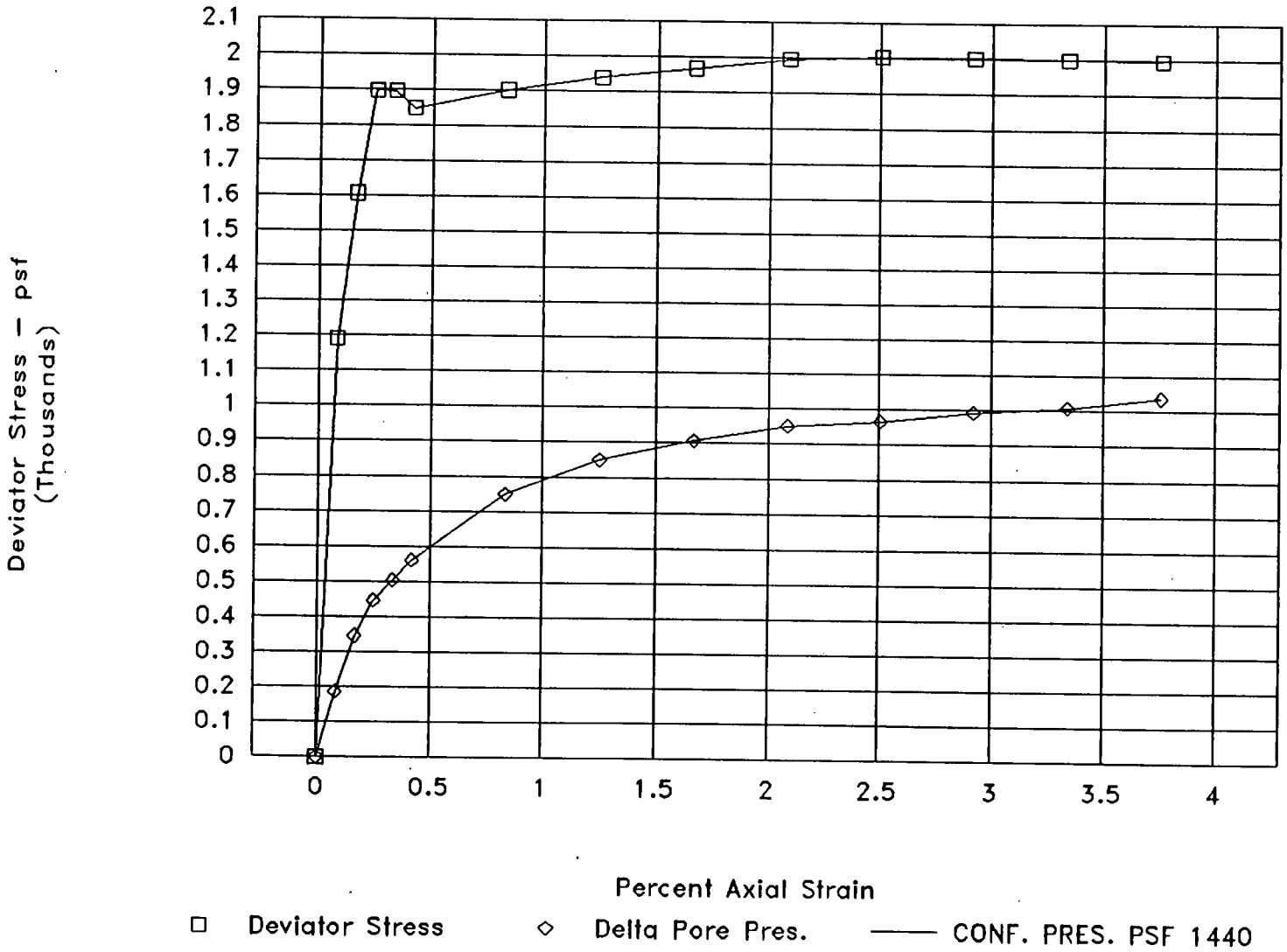
TRIAXIAL TEST - TX/CUpp

G2-133, 2.5-4.5', 405053 Stage 1



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TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 2	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	820.0	868.1
Wt. Wet Soil & Pan	(g)	828.4	876.4
Wt. Dry Soil & Pan	(g)	716.7	716.7
Wt. Lost Moisture	(g)	111.7	159.8
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	708.3	708.3
Moisture Content %		15.8	22.6
Wet Density PCF		112.0	123.4
Dry Density PCF		96.7	100.7

Init. Diameter	(in)	2.481
Init. Area	(sq in)	4.834
Init. Height	(in)	5.772
Vol. Bef. Consol.	(cu ft)	0.01615
Vol. After Consol.	(cu ft)	0.01550

Notes & Comments: Remolded to 85% MDD

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName: SAT053S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 2	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	31.20	0.00
0.25	0.5	33.60	-2.40
0.5	0.7	34.30	-3.10
1	1.0	35.30	-4.10
4	2.0	38.10	-6.90
9	3.0	40.70	-9.50
16	4.0	42.70	-11.50
30	5.5	44.90	-13.70
60	7.7	47.00	-15.80
120	11.0	48.50	-17.30
240	15.5	49.30	-18.10
360	19.0	49.65	-18.45

Initial Height	(in)	5.772	Init. Vol.	(CC)	457.35
Height Change	(in)	0.040	Vol. Change	(CC)	19.30
Ht. After Cons.	(in)	5.732	Cell Exp.	(CC)	1.05
Initial Area	(sq in)	4.834	Net Change	(CC)	18.25
Area After Cons.	(sq in)	4.674	Cons. Vol.	(CC)	439.10

Data entry by: CAL Date: 7-30-95
Data checked by: AA Date: 7-31-95
FileName:SAT053S2

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 2	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

Init. Ht.	(in)	5.772	Init. Area	(sq in)	4.834
Consol. Ht.	(in)	5.732	Consol. Area	(sq in)	4.674
Back Pres.	PSI	87.4	Strain Rate	(in/min)	0.002

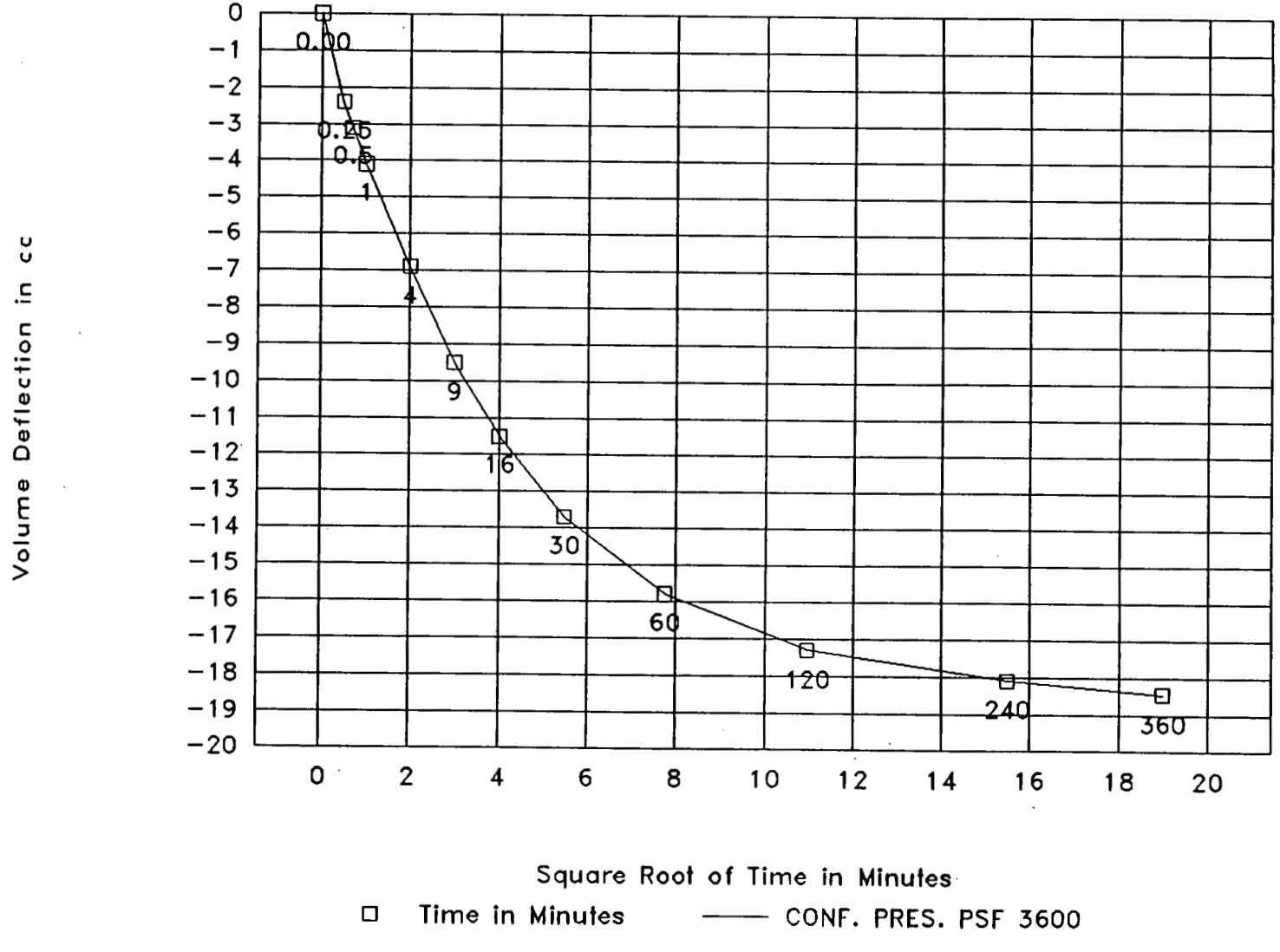
Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.674	0	87.4	0	3600	3600	1.00
62.5	1926	0.01	0.17	4.682	1922	91.5	590	3010	4932	1.64
73.5	2264	0.02	0.35	4.690	2257	93.5	878	2722	4978	1.83
79.5	2449	0.03	0.52	4.698	2437	95.0	1094	2506	4942	1.97
84.5	2603	0.04	0.70	4.707	2585	96.0	1238	2362	4947	2.09
88.5	2727	0.05	0.87	4.715	2703	96.8	1354	2246	4949	2.20
96.5	2973	0.08	1.31	4.736	2934	98.3	1570	2030	4965	2.45
103.5	3189	0.10	1.74	4.757	3133	99.3	1714	1886	5020	2.66
108.5	3343	0.13	2.18	4.778	3270	100.1	1829	1771	5041	2.85
111.5	3435	0.15	2.62	4.799	3345	100.6	1901	1699	5045	2.97
114.5	3528	0.18	3.05	4.821	3420	101.1	1973	1627	5047	3.10
117.5	3620	0.20	3.49	4.843	3494	101.4	2016	1584	5078	3.21
121.0	3728	0.23	3.93	4.865	3582	101.7	2059	1541	5122	3.32
124.0	3820	0.25	4.36	4.887	3654	101.9	2088	1512	5166	3.42

Data entry by: CAL Date: 7-30-95
Data checked by: NU Date: 7-31-95
FileName:SAT053S2

ADVANCED TERRA TESTING, INC.

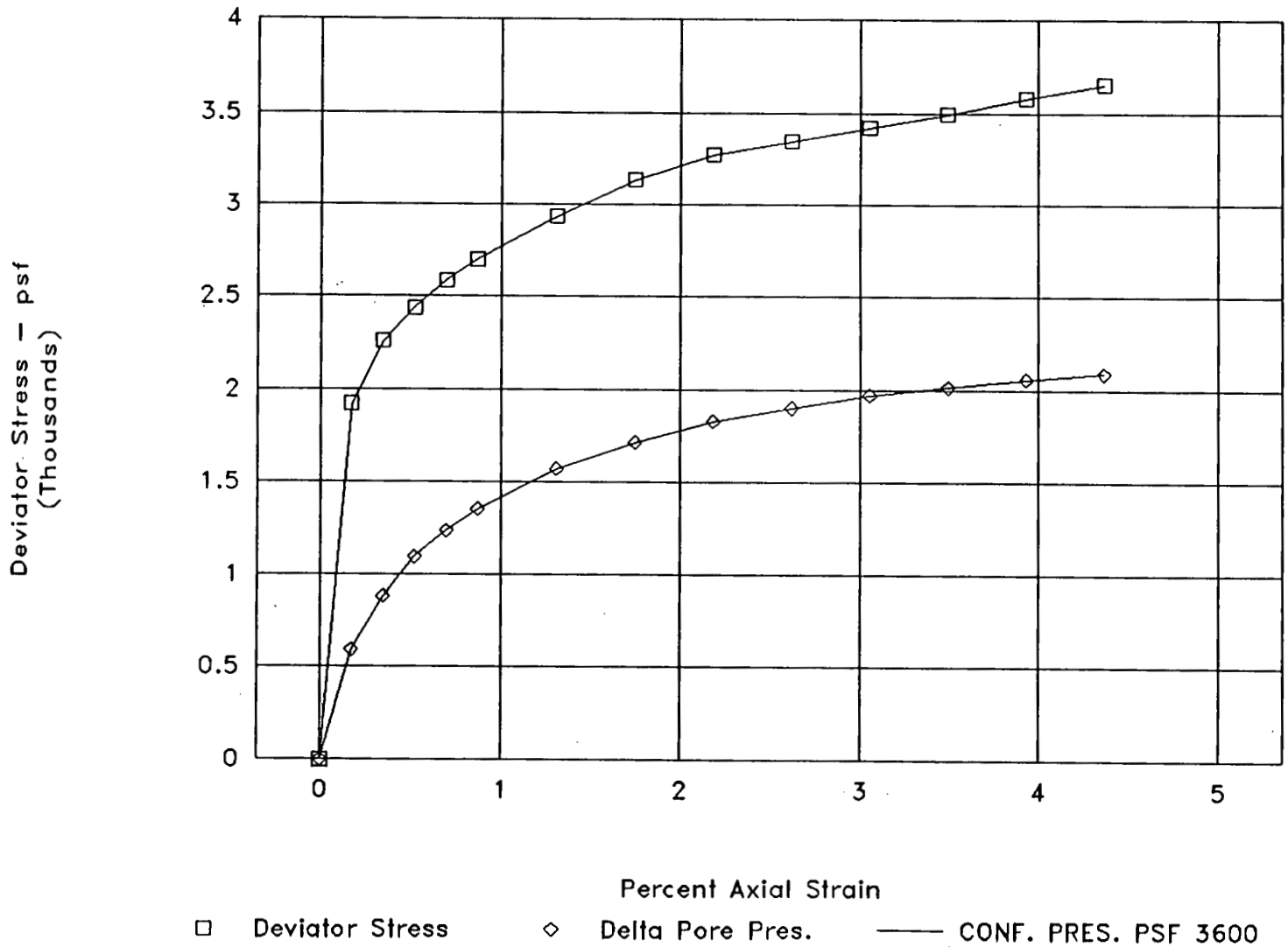
CONSOLIDATION DATA

G2-133, 2.5-4.5', 405053 Stage 2



TRIAXIAL TEST - TX/CUpp

G2-133, 2.5-4.5', 405053 Stage 2



ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 3	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	820.0	868.1
Wt. Wet Soil & Pan	(g)	828.4	876.4
Wt. Dry Soil & Pan	(g)	716.7	716.7
Wt. Lost Moisture	(g)	111.7	159.8
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	708.3	708.3
Moisture Content %		15.8	22.6
Wet Density PCF		116.6	126.6
Dry Density PCF		100.8	103.3

Init. Diameter	(in)	2.494
Init. Area	(sq in)	4.885
Init. Height	(in)	5.482
Vol. Bef. Consol.	(cu ft)	0.01550
Vol. After Consol.	(cu ft)	0.01511

Notes & Comments:Remolded to 85% MDD

Data entry by: CAL Date: 7-30-95
Data checked by: NU Date: 7-31-95
FileName:SAT053S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 3	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT TIME (Min)	Burette Reading (CC)	Vol. Defl. (CC)
0.00	0.0	3.60	0.00
0.25	0.5	4.50	-0.90
0.5	0.7	4.60	-1.00
1	1.0	4.85	-1.25
2	1.4	5.68	-2.07
4	2.0	5.68	-2.07
9	3.0	6.50	-2.90
16	4.0	7.48	-3.87
30	5.5	8.70	-5.10
60	7.7	10.45	-6.85
120	11.0	12.30	-8.70
240	15.5	13.85	-10.25
360	19.0	14.40	-10.80

Initial Height	(in)	5.482	Init. Vol.	(CC)	438.94
Height Change	(in)	0.022	Vol. Change	(CC)	12.60
Ht. After Cons.	(in)	5.460	Cell Exp.	(CC)	1.75
Initial Area	(sq in)	4.885	Net Change	(CC)	10.85
Area After Cons.	(sq in)	4.784	Cons. Vol.	(CC)	428.09

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT053S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 3	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

Init. Ht. (in)	5.482	Init. Area (sq in)	4.885
Consol. Ht. (in)	5.460	Consol. Area (sq in)	4.784
Back Pres. PSI	86.7	Strain Rate (in/min)	0.002

Axial Load Lbs.	Axial Load PSF	Delta Ht. In.	Axial % Strain	Area Final Sq In.	Dev. Stress PSF	Pore Pres. PSI	Delta Pres. PSF	Sigma 3 PSF	Sigma 1 PSF	Prin. Stress Ratio
0.0	0	0.00	0.00	4.784	0	86.7	0	7200	7200	1.00
173.0	5208	0.05	0.92	4.828	5160	106.6	2866	4334	9494	2.19
195.0	5870	0.10	1.83	4.873	5762	110.4	3413	3787	9550	2.52
208.0	6261	0.15	2.75	4.919	6089	112.5	3715	3485	9574	2.75
215.0	6472	0.20	3.66	4.966	6235	114.2	3960	3240	9475	2.92
221.0	6653	0.25	4.58	5.013	6348	115.6	4162	3038	9386	3.09
227.0	6833	0.30	5.49	5.062	6458	116.6	4306	2894	9352	3.23
232.0	6984	0.35	6.41	5.111	6536	117.1	4378	2822	9359	3.32
238.0	7164	0.40	7.33	5.162	6640	117.2	4392	2808	9448	3.36
244.0	7345	0.45	8.24	5.213	6740	117.1	4378	2822	9562	3.39
250.0	7526	0.50	9.16	5.266	6836	116.6	4306	2894	9731	3.36
257.0	7736	0.55	10.07	5.319	6957	115.9	4205	2995	9952	3.32
262.0	7887	0.60	10.99	5.374	7020	115.3	4118	3082	10102	3.28
273.0	8218	0.70	12.82	5.487	7164	114.2	3960	3240	10404	3.21
287.0	8639	0.80	14.65	5.605	7374	113.4	3845	3355	10729	3.20
293.0	8820	0.90	16.48	5.728	7366	112.6	3730	3470	10837	3.12
298.0	8971	1.00	18.32	5.856	7328	112.0	3643	3557	10884	3.06
300.0	9031	1.10	20.15	5.991	7211	111.4	3557	3643	10855	2.98
302.0	9091	1.20	21.98	6.131	7093	110.9	3485	3715	10808	2.91

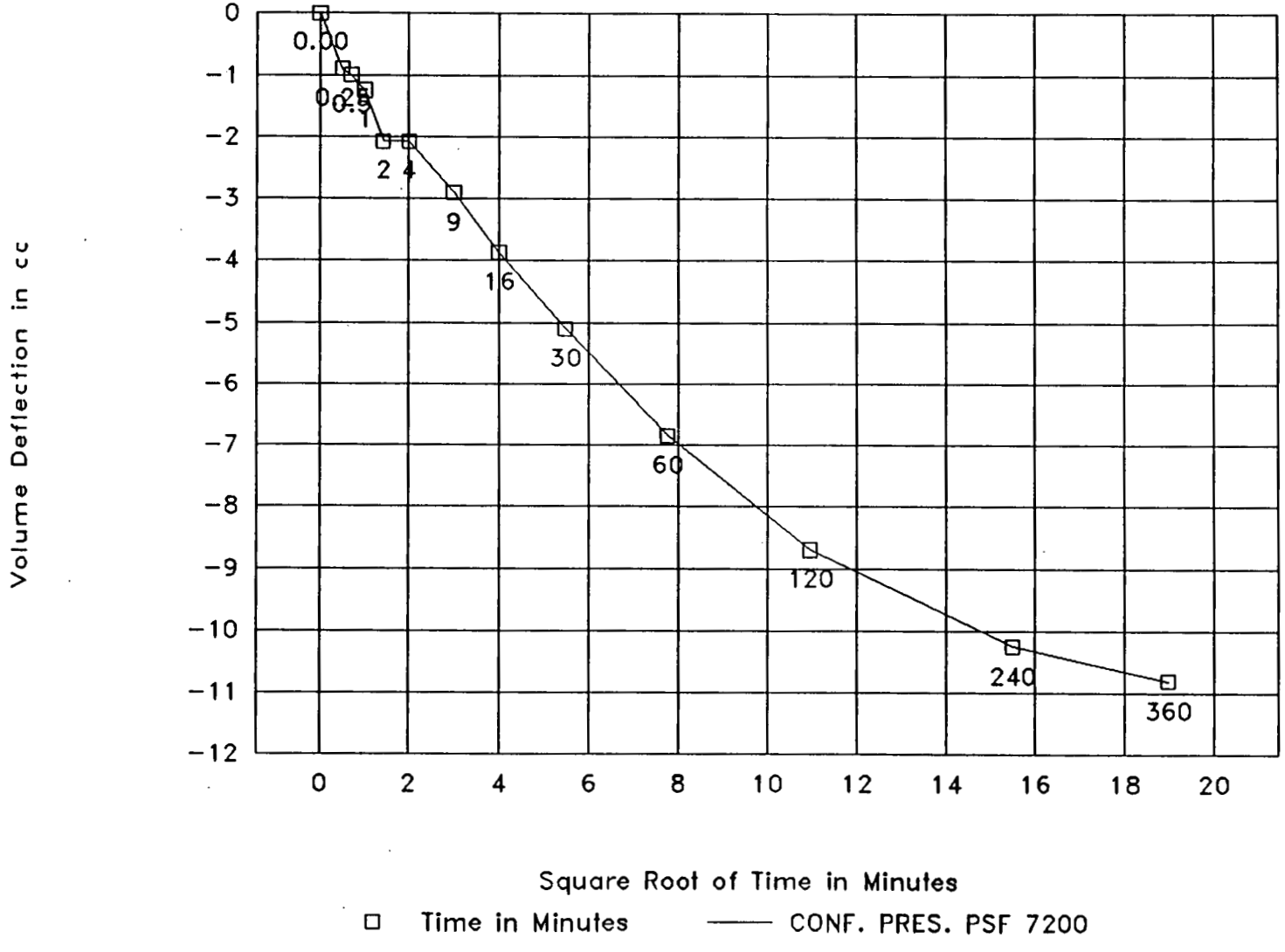
Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName:SAT053S3

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

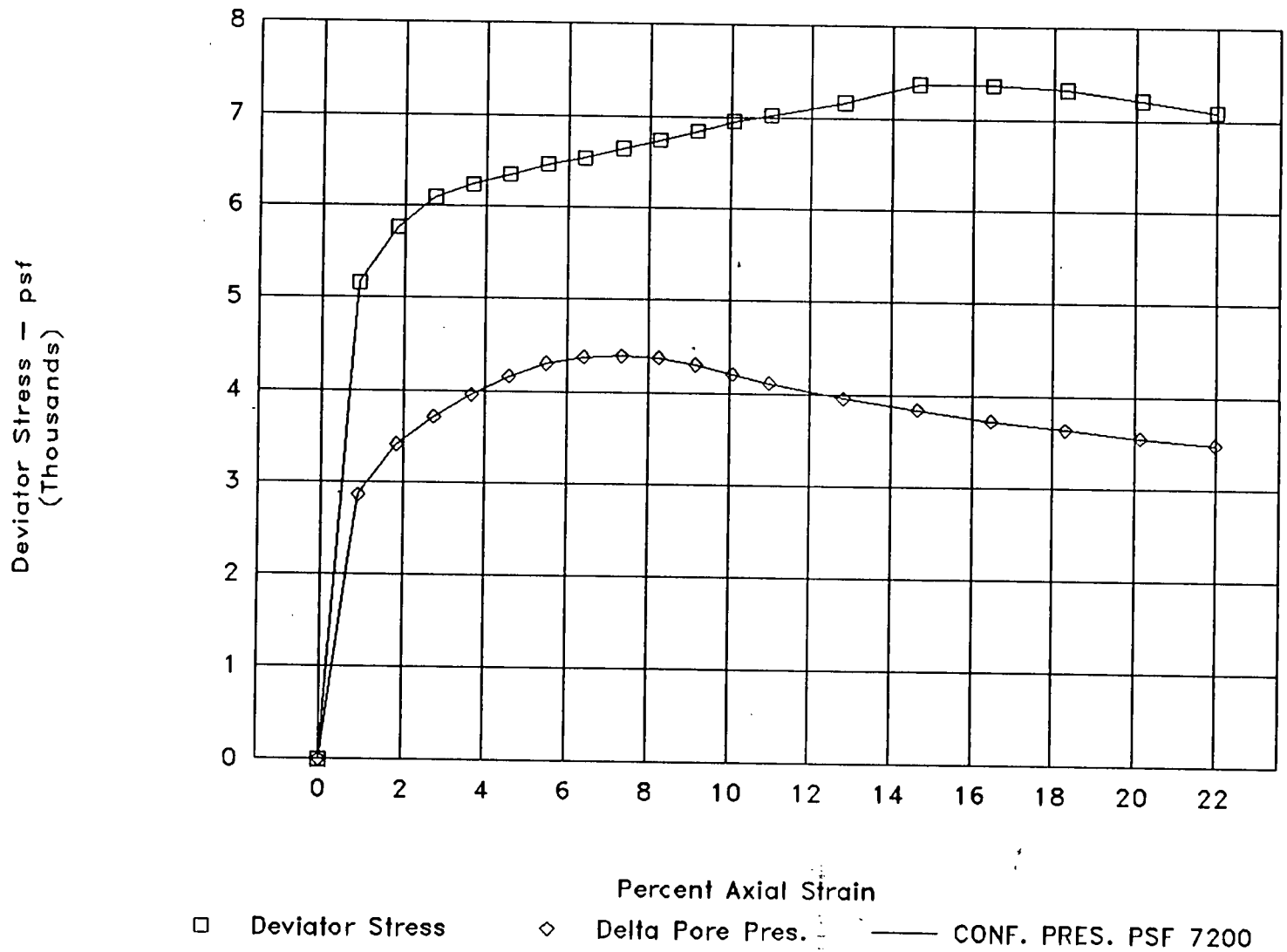
CONSOLIDATION DATA

G2-133, 2.5-4.5', 405053 Stage 3



TRIAXIAL TEST - TX/CUpp

G2-133, 2.5-4.5', 405053 Stage 3



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TRIAXIAL, BACK-PRESSURE PERMEABILITY, TX/PBP

ASTM D 5084

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	12.5-14.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404814	TEST FINISHED	6-9-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	11S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	520.1	522.1
Wt. Wet Soil & Pan	(g)	528.4	530.4
Wt. Dry Soil & Pan	(g)	476.6	476.6
Wt. Lost Moisture	(g)	51.7	53.7
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	468.4	468.4
Moisture Content %		11.0	11.5
Wet Density PCF		145.5	167.2
Dry Density PCF		131.1	150.0

Init. Diameter	(in)	2.397	(cm)	6.088
Init. Area	(sq in)	4.513	(sq cm)	29.115
Init. Height	(in)	3.017	(cm)	7.663
Vol. Bef. Consol.	(cu ft)	0.00788		
Vol. After Consol.	(cu ft)	0.00688		
Porosity %		27.55		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
949.0	56940	48.7	48.4	28.8	1.4E-08
1465.0	87900	48.4	48.1	29.2	9.0E-09
1441.0	86460	48.1	47.8	29.5	9.2E-09
1440.0	86400	47.8	47.6	29.8	7.7E-09
1440.0	86400	47.6	47.3	30.1	7.7E-09
1441.0	86460	47.3	47.1	30.3	7.7E-09
1442.0	86520	47.1	46.8	30.6	7.7E-09

Data entry by: NAA Date: 6-2-95
Checked by: cae Date: 6-14-95
FileName: SAP0814 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	12.5-14.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404814	TEST FINISHED	6-9-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	11S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.6	13.6				
50.0	48.0	15.6	17.7	37.9	45.3	7.4	0.74
60.0	58.0	20.2	22.1	48.0	56.7	8.7	0.87
70.0	68.0	23.1	24.9	58.2	67.2	9.0	0.90
80.0		26.6	26.7	68.4	77.9	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	26.80	0.00
0.25	0.50	29.10	-2.30
0.5	0.71	29.15	-2.35
1	1.00	29.20	-2.40
2	1.41	29.25	-2.45
4	2.00	29.38	-2.57
9	3.00	29.50	-2.70
16	4.00	29.68	-2.88
60	7.75	30.30	-3.50
120	10.95	30.90	-4.10
240	15.49	31.90	-5.10
360	18.97	32.80	-6.00

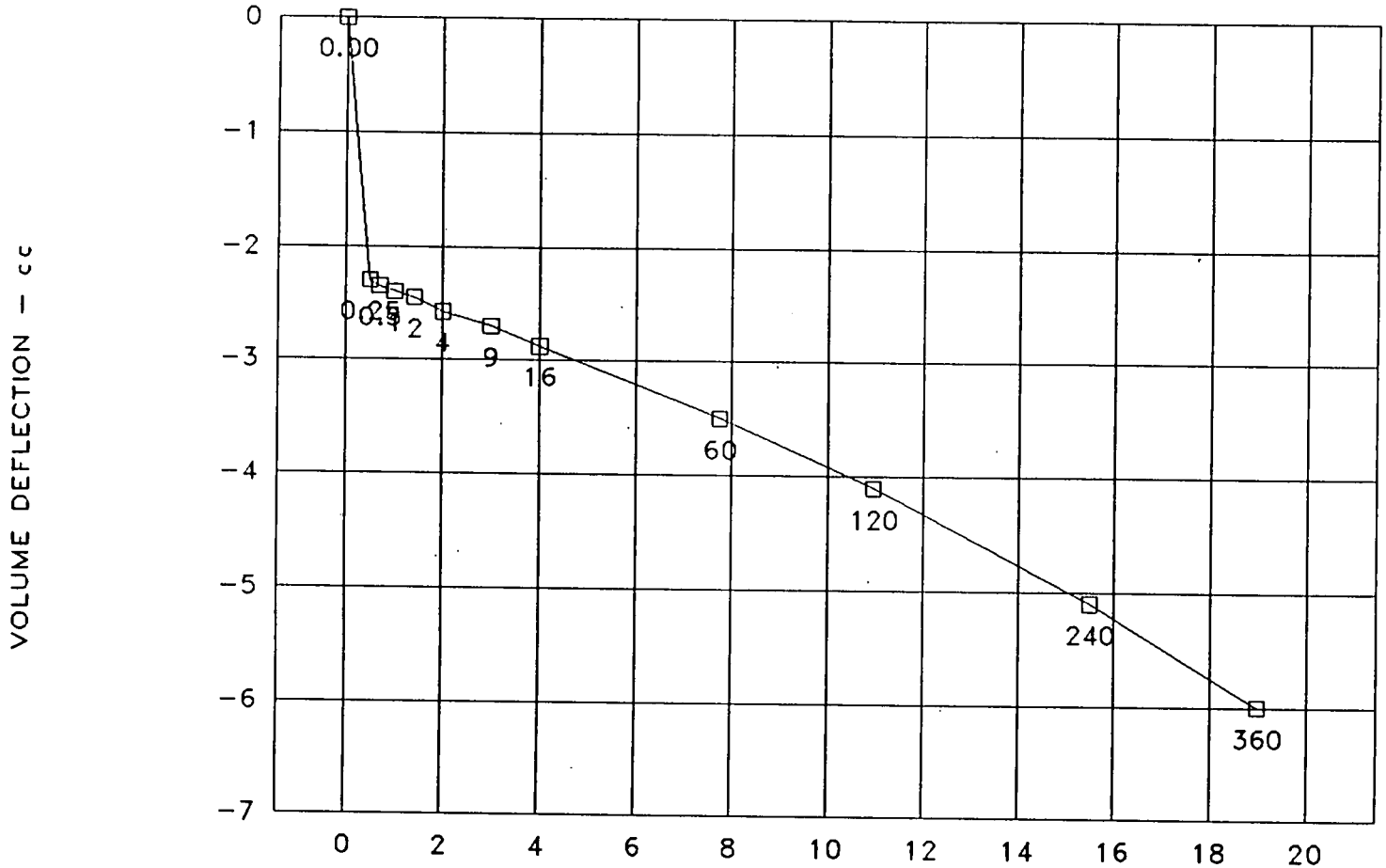
Initial Height	(in)	3.017	Init. Vol.	(CC)	223.14
Height Change	(in)	0.031	Vol. Change	(CC)	47.70
Ht. After Cons.	(in)	2.986	Cell Exp.	(CC)	19.53
Initial Area	(sq in)	4.513	Net Change	(CC)	28.17
Area After Cons.	(sq in)	3.984	Cons. Vol.	(CC)	194.97

Data entry by: NAA Date: 6-2-95
Checked by: cal Date: 6-14-95
FileName: SAP0814

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-121, 12.5-14.5', 404814



SAEC Hansons 80 140
6.2-12.1 @ 17.5-19.5
400817

7059-13R
Tr/Pop
7059 Rop

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	17.5-19.5'	TEST STARTED	5-28-95 DCW
SAMPLE NO.	404817	TEST FINISHED	6-17-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	10S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2808		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	523.0	522.0
Wt. Wet Soil & Pan	(g)	531.5	530.4
Wt. Dry Soil & Pan	(g)	479.1	479.1
Wt. Lost Moisture	(g)	52.4	51.3
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	470.6	470.6
Moisture Content %		11.1	10.9
Wet Density PCF		145.1	148.3
Dry Density PCF		130.6	133.7

Init. Diameter	(in)	2.400	(cm)	6.096
Init. Area	(sq in)	4.524	(sq cm)	29.188
Init. Height	(in)	3.035	(cm)	7.709
Vol. Bef. Consol.	(cu ft)	0.00795		
Vol. After Consol.	(cu ft)	0.00776		
Porosity %		23.36		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
940.0	56400	49.4	49.0	28.1	1.7E-08
1465.0	87900	49.0	48.7	28.5	8.1E-09
1442.0	86520	48.7	48.3	28.9	1.1E-08
1440.0	86400	48.3	48.0	29.3	8.3E-09
1440.0	86400	48.0	47.7	29.6	9.7E-09
1440.0	86400	47.7	47.3	30.0	9.7E-09
1442.0	86520	47.3	47.0	30.4	8.4E-09
1440.0	86400	47.0	46.6	30.7	1.1E-08
1441.0	86460	46.6	46.3	31.1	8.4E-09
1441.0	86460	46.3	46.0	31.4	8.4E-09
1440.0	86400	46.0	45.7	31.8	8.5E-09
1440.0	86400	45.7	45.4	32.1	9.9E-09
1441.0	86460	45.4	45.0	32.5	1.0E-08
1478.0	88680	45.0	44.7	32.9	8.3E-09
1416.0	84960	44.7	44.4	33.2	1.0E-08
1441.0	86460	44.4	44.0	33.6	1.0E-08

Data entry by: NAA Date: 6-2-95
Checked by: cal Date: 6-22-95
FileName: SAP0817 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	17.5-19.5'	TEST STARTED	5-28-95 DCW
SAMPLE NO.	404817	TEST FINISHED	6-17-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	10S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2808		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.3	11.8				
50.0	48.0	12.4	14.3	38.1	46.5	8.4	0.84
60.0	58.0	14.8	16.6	48.1	56.9	8.8	0.88
70.0	68.0	16.6	18.3	58.3	67.3	9.0	0.90
80.0		18.6	18.7	68.2	77.7	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	18.70	0.00
0.25	0.50	21.80	-3.10
0.5	0.71	21.90	-3.20
1	1.00	22.00	-3.30
2	1.41	22.08	-3.38
4	2.00	22.15	-3.45
9	3.00	22.33	-3.63
16	4.00	22.50	-3.80
30	5.48	22.78	-4.07
65	8.06	23.20	-4.50
120	10.95	23.68	-4.98
240	15.49	24.10	-5.40
360	18.97	24.30	-5.60

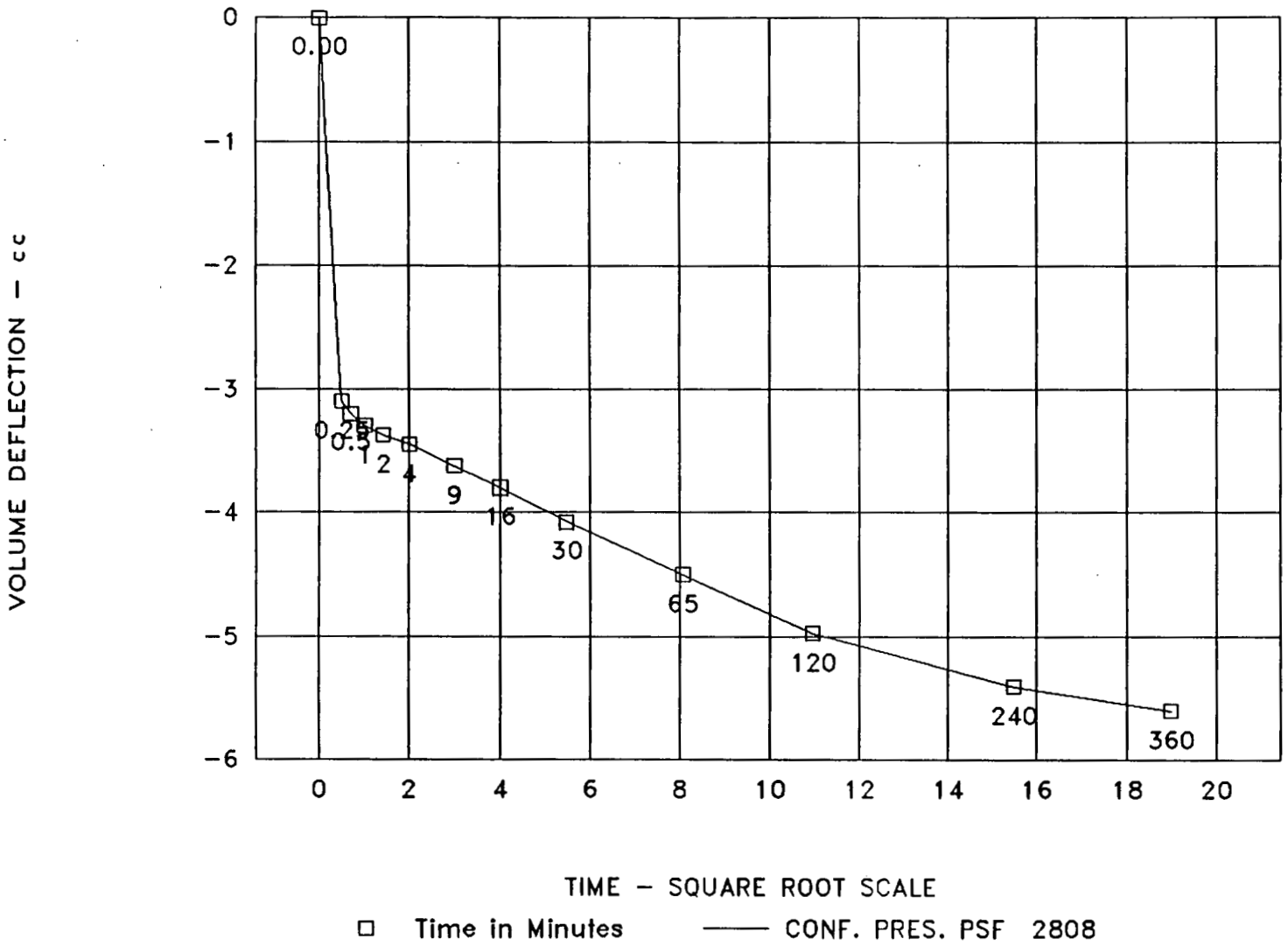
Initial Height	(in)	3.035	Init. Vol.	(CC)	225.03
Height Change	(in)	0.024	Vol. Change	(CC)	25.80
Ht. After Cons.	(in)	3.011	Cell Exp.	(CC)	20.54
Initial Area	(sq in)	4.524	Net Change	(CC)	5.26
Area After Cons.	(sq in)	4.453	Cons. Vol.	(CC)	219.77

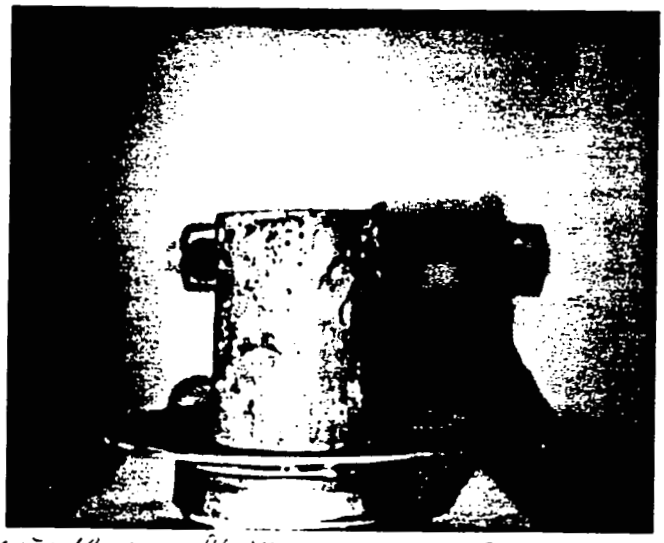
Data entry by: NAA Date: 6-2-95
Checked by: cwl Date: 6-22-95
FileName: SAP0817

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-121, 17.5-19.5', 404817





LAIC Horizons PO 140 2099-130
63-173 Tx/Pbp
204800 2000 PSI
13.5-10.5'

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	12.5-14.5'	TEST STARTED	5-26-95 CAL
SAMPLE NO.	404800	TEST FINISHED	6-12-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	503.7	514.6
Wt. Wet Soil & Pan	(g)	511.9	522.9
Wt. Dry Soil & Pan	(g)	463.1	463.1
Wt. Lost Moisture	(g)	48.9	59.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	454.8	454.8
Moisture Content %		10.7	13.2
Wet Density PCF		141.5	146.3
Dry Density PCF		127.7	129.2

Init. Diameter	(in)	2.389	(cm)	6.068
Init. Area	(sq in)	4.483	(sq cm)	28.921
Init. Height	(in)	3.026	(cm)	7.686
Vol. Bef. Consol.	(cu ft)	0.00785		
Vol. After Consol.	(cu ft)	0.00776		
Porosity %		27.24		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1489.0	89340	49.8	47.8	17.7	4.9E-08
1478.0	88680	47.8	46.0	19.8	4.6E-08
1440.0	86400	46.0	44.3	21.7	4.3E-08
1440.0	86400	44.3	42.7	23.4	4.2E-08
1440.0	86400	42.7	41.1	25.2	4.3E-08
1440.0	86400	41.1	39.6	26.9	4.1E-08
1440.0	86400	39.6	38.3	28.4	3.7E-08
1440.0	86400	38.3	36.9	29.9	3.8E-08
1440.0	86400	36.9	35.6	31.3	3.7E-08
1472.0	88320	35.6	34.4	32.7	3.5E-08
1440.0	86400	34.4	33.2	34.1	3.5E-08
1440.0	86400	33.2	32.0	35.3	3.4E-08
1440.0	86400	32.0	30.8	36.6	3.6E-08

Data entry by: NAA Date: 6-2-95
Checked by: SR Date: 6-15-95
FileName: SAP0800 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13D

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	12.5-14.5'	TEST STARTED	5-26-95 CAL
SAMPLE NO.	404800	TEST FINISHED	6-12-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.2	7.0				
50.0	48.0	5.4	6.1	38.2	47.2	9.0	0.90
60.0	58.0	6.3	6.9	48.2	57.4	9.2	0.92
70.0		6.9	7.0	58.4	68.0	9.6	0.96

CONSOLIDATION DATA

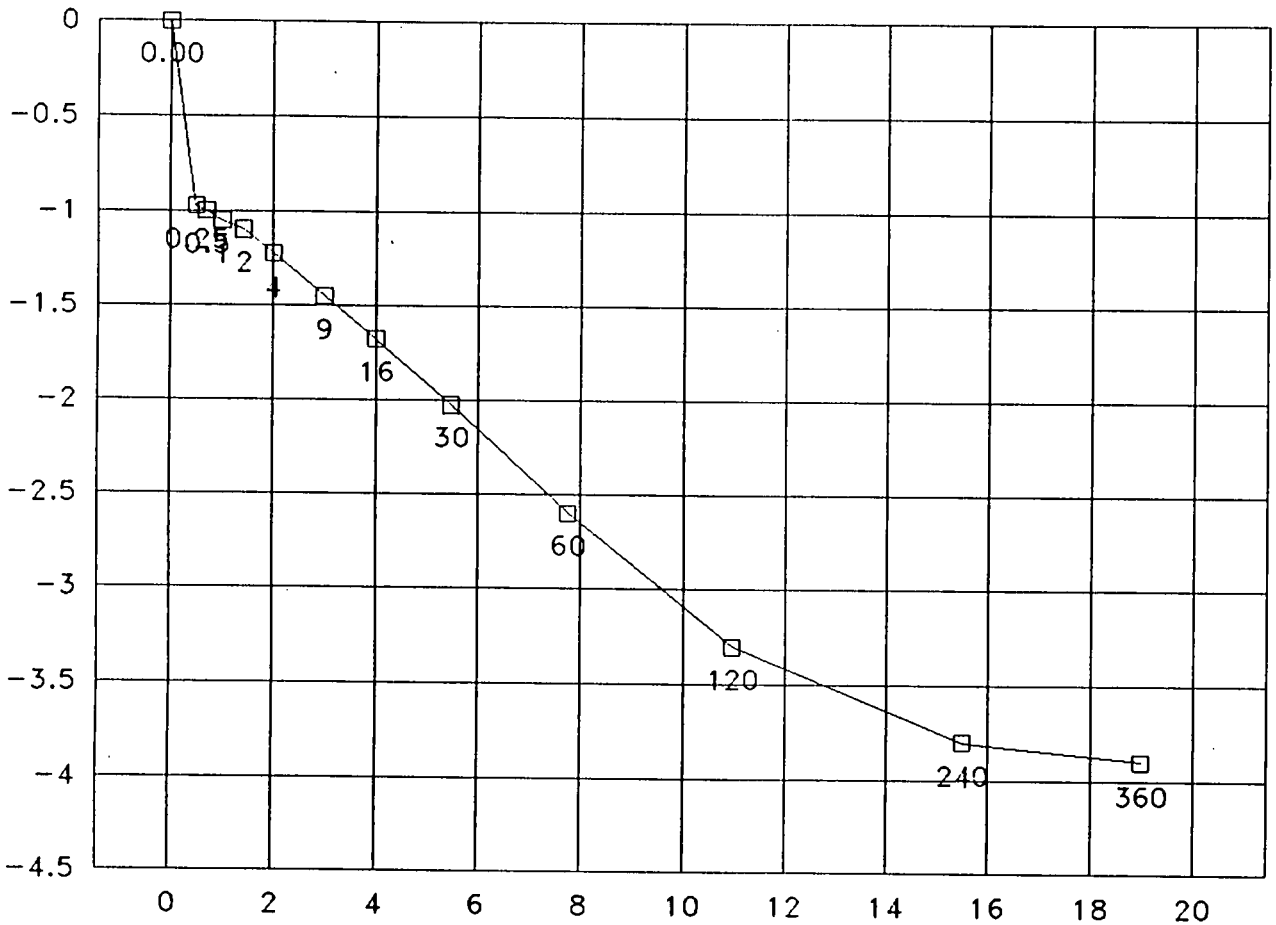
Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	7.00	0.00
0.25	0.50	7.98	-0.97
0.5	0.71	8.00	-1.00
1	1.00	8.05	-1.05
2	1.41	8.10	-1.10
4	2.00	8.23	-1.22
9	3.00	8.45	-1.45
16	4.00	8.68	-1.68
30	5.48	9.03	-2.03
60	7.75	9.60	-2.60
120	10.95	10.30	-3.30
240	15.49	10.80	-3.80
360	18.97	10.90	-3.90

Initial Height	(in)	3.026	Init. Vol.	(CC)	222.32
Height Change	(in)	0.008	Vol. Change	(CC)	10.00
Ht. After Cons.	(in)	3.018	Cell Exp.	(CC)	7.39
Initial Area	(sq in)	4.483	Net Change	(CC)	2.61
Area After Cons.	(sq in)	4.442	Cons. Vol.	(CC)	219.70

Data entry by: NAA Date: 6-2-95
Checked by: SR Date: 6-15-95
FileName: SAP0800 ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-123, 12.5-14.5', 404800



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SAIC/PARSONS 2059-13D
GA-164 25-27
YOUNTS FERNALD
TX/PAP-3228 MAF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	25.0-27.0'	TEST STARTED	6-5-95 CAL
SAMPLE NO.	404778	TEST FINISHED	6-15-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	3888		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	511.5	512.9
Wt. Wet Soil & Pan	(g)	519.9	521.3
Wt. Dry Soil & Pan	(g)	461.2	461.2
Wt. Lost Moisture	(g)	58.7	60.1
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	452.8	452.8
Moisture Content %		13.0	13.3
Wet Density PCF		142.1	148.8
Dry Density PCF		125.8	131.3

Init. Diameter	(in)	2.385	(cm)	6.058
Init. Area	(sq in)	4.468	(sq cm)	28.824
Init. Height	(in)	3.070	(cm)	7.798
Vol. Bef. Consol.	(cu ft)	0.00794		
Vol. After Consol.	(cu ft)	0.00760		
Porosity %		27.92		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
2924.0	175440	49.6	48.7	21.2	1.2E-08
1408.0	84480	48.7	48.3	21.9	1.1E-08
1440.0	86400	48.3	47.9	22.4	1.2E-08
1443.0	86580	47.9	47.4	22.9	1.2E-08

Data entry by: NAA Date: 6-22-95
Checked by: Cal Date: 6-22-95
FileName: SAP0778 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	25.0-27.0'	TEST STARTED	6-5-95 CAL
SAMPLE NO.	404778	TEST FINISHED	6-15-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	3888		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.2	9.3				
50.0	48.0	10.9	11.7	38.5	47.4	8.9	0.89
60.0		12.5	12.5	48.6	58.1	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	12.60	0.00
0.25	0.50	14.60	-2.00
0.5	0.71	14.68	-2.08
1	1.00	14.78	-2.18
2	1.41	14.90	-2.30
4	2.00	15.10	-2.50
9	3.00	15.40	-2.80
16	4.00	15.70	-3.10
30	5.48	16.10	-3.50
60	7.75	16.80	-4.20
120	10.95	17.85	-5.25
240	15.49	19.18	-6.58
475	21.79	19.83	-7.23

Initial Height	(in)	3.070	Init. Vol.	(CC)	224.79
Height Change	(in)	0.013	Vol. Change	(CC)	22.00
Ht. After Cons.	(in)	3.057	Cell Exp.	(CC)	12.47
Initial Area	(sq in)	4.468	Net Change	(CC)	9.53
Area After Cons.	(sq in)	4.296	Cons. Vol.	(CC)	215.26

Data entry by: NAA Date: 6-22-95

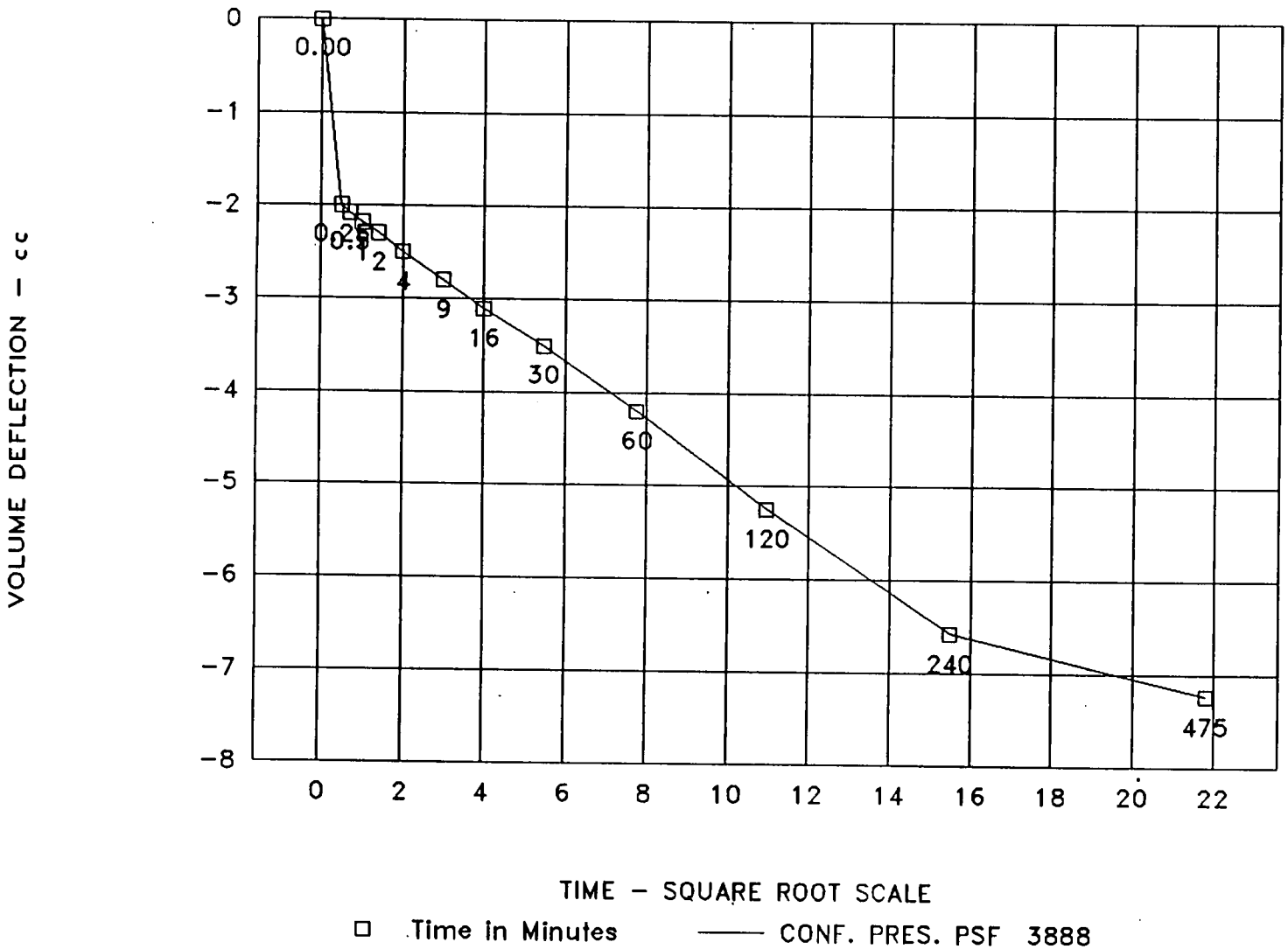
Checked by: cal Date: 6-22-95

FileName: SAP0778

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-126, 25.0-27.0', 404778



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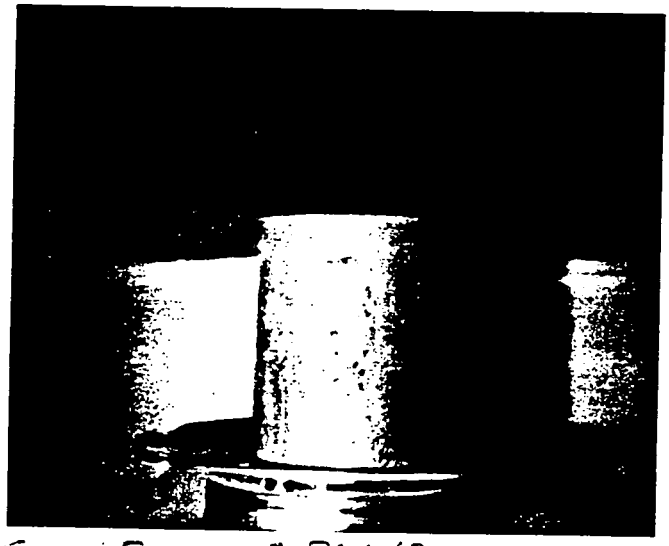


SAIC/PARSONS P0140 2059-130
GD-127 28-30 D
40470B-18
FERRULE TV1250-4320 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD

ASTM D 5084

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	28.0-30.0'	TEST STARTED	6-5-95 CAL
SAMPLE NO.	404763-B	TEST FINISHED	6-15-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	509.2	505.2
Wt. Wet Soil & Pan	(g)	517.5	513.5
Wt. Dry Soil & Pan	(g)	458.0	458.0
Wt. Lost Moisture	(g)	59.5	55.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	449.7	449.7
Moisture Content %		13.2	12.3
Wet Density PCF		142.1	146.6
Dry Density PCF		125.5	130.5

Init. Diameter	(in)	2.407	(cm)	6.114
Init. Area	(sq in)	4.550	(sq cm)	29.359
Init. Height	(in)	2.999	(cm)	7.617
Vol. Bef. Consol.	(cu ft)	0.00790		
Vol. After Consol.	(cu ft)	0.00760		
Porosity %		25.77		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1284.0	77040	49.5	49.0	11.7	1.3E-08
1440.0	86400	49.0	48.6	12.2	9.4E-09
1472.0	88320	48.6	48.2	12.7	1.0E-08
1440.0	86400	48.2	47.8	13.1	8.3E-09
1440.0	86400	47.8	47.4	13.5	9.5E-09
1440.0	86400	47.4	47.0	14.0	9.5E-09
1443.0	86580	47.0	46.6	14.4	9.6E-09

Data entry by: NAA Date: 6-8-95
Checked by: cal Date: 6-22-95
FileName: SAP0763B

ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	28.0-30.0'	TEST STARTED	6-5-95 CAL
SAMPLE NO.	404763-B	TEST FINISHED	6-15-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.9	7.8				
50.0		7.5	7.6	37.9	47.4	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	7.60	0.00
0.25	0.50	10.55	-2.95
0.5	0.71	10.60	-3.00
1	1.00	10.75	-3.15
2	1.41	10.90	-3.30
4	2.00	11.10	-3.50
9	3.00	11.45	-3.85
16	4.00	11.80	-4.20
30	5.48	12.20	-4.60
60	7.75	13.00	-5.40
120	10.95	13.95	-6.35
240	15.49	15.00	-7.40
360	18.97	15.60	-8.00

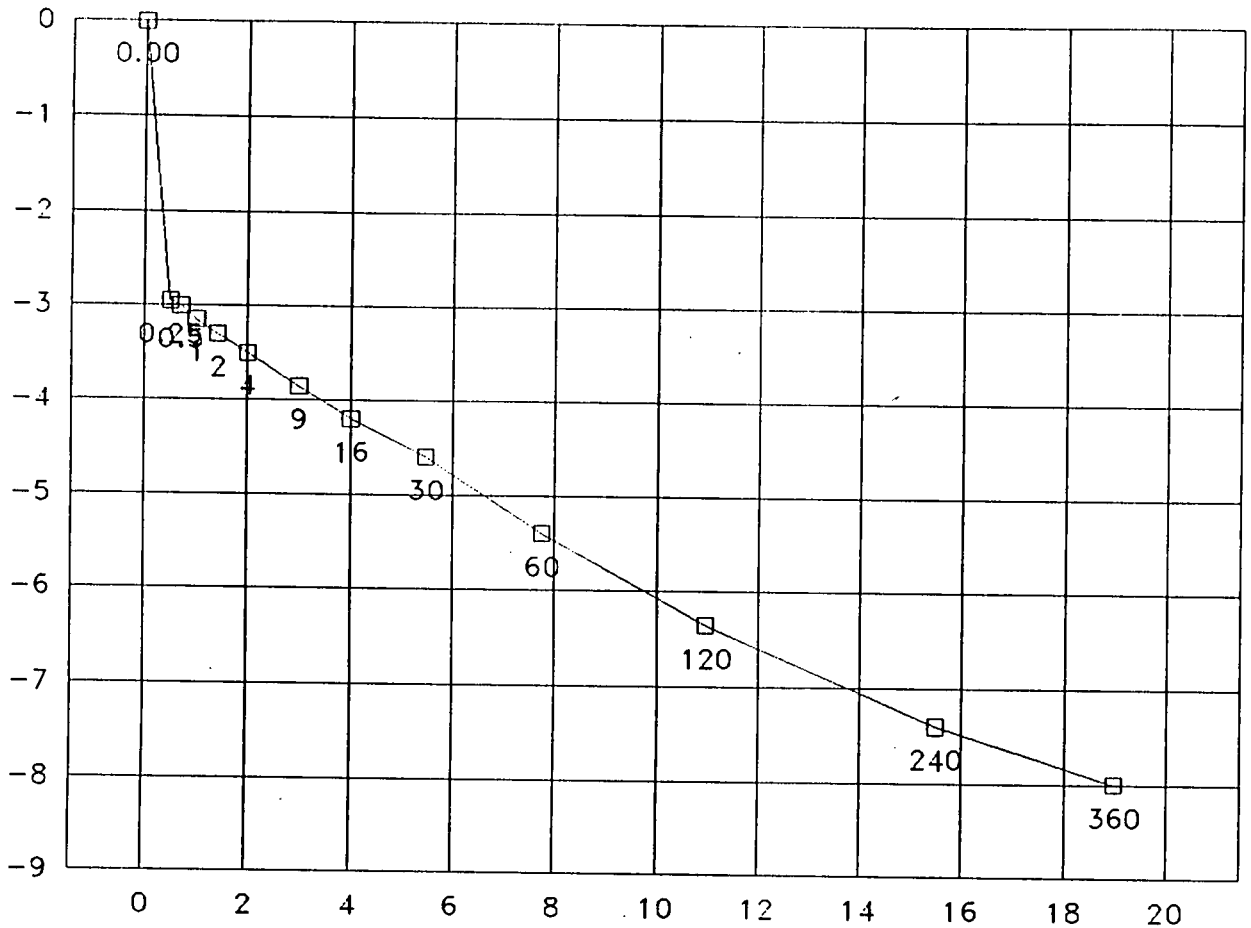
Initial Height	(in)	2.999	Init. Vol.	(CC)	223.66
Height Change	(in)	0.046	Vol. Change	(CC)	16.20
Ht. After Cons.	(in)	2.953	Cell Exp.	(CC)	7.75
Initial Area	(sq in)	4.550	Net Change	(CC)	8.45
Area After Cons.	(sq in)	4.447	Cons. Vol.	(CC)	215.21

Data entry by: NAA Date: 6-8-95
Checked by: cal Date: 6-22-95
FileName: SAP0763B

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-127, 28.0-30.0', 404763-B



□ Time in Minutes —— CONF. PRES. PSF 4320

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SNC/PASSONS PO HO Ferrod
3062-13H 32-133 405MA 80-66
T/Pop 63 3163 PSE

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD

ASTM D 5084

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	20.0-22.0'	TEST STARTED	6-12-95 CAL
SAMPLE NO.	405111	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	3N
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	3168		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	513.6	507.7
Wt. Wet Soil & Pan (g)	521.9	516.0
Wt. Dry Soil & Pan (g)	459.3	459.3
Wt. Lost Moisture (g)	62.6	56.7
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	451.0	451.0
Moisture Content %	13.9	12.6
Wet Density PCF	141.2	138.1
Dry Density PCF	124.0	122.7

Init. Diameter	(in)	2.405	(cm)	6.109
Init. Area	(sq in)	4.543	(sq cm)	29.310
Init. Height	(in)	3.051	(cm)	7.750
Vol. Bef. Consol.	(cu ft)	0.00802		
Vol. After Consol.	(cu ft)	0.00810		
Porosity %		24.71		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1358.0	81480	49.7	48.7	7.4	2.2E-08
1442.0	86520	48.7	47.6	8.6	2.4E-08
1440.0	86400	47.6	46.5	9.8	2.5E-08
1440.0	86400	46.5	45.5	10.9	2.3E-08
1440.0	86400	45.5	44.3	12.1	2.7E-08
1469.0	88140	44.3	43.2	13.4	2.5E-08

Data entry by: NAA Date: 6-22-95
Checked by: CJ Date: 8-14-95
FileName: SAP05111

ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	20.0-22.0'	TEST STARTED	6-12-95 CAL
SAMPLE NO.	405111	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	3N
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	3168		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.9	8.9				
50.0		9.4	9.5	38.1	47.8	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	9.50	0.00
0.25	0.50	11.30	-1.80
0.5	0.71	11.40	-1.90
1	1.00	11.50	-2.00
2	1.41	11.70	-2.20
4	2.00	12.00	-2.50
9	3.00	12.40	-2.90
16	4.00	12.80	-3.30
30	5.48	13.50	-4.00
60	7.75	14.48	-4.98
120	10.95	15.40	-5.90
240	15.49	15.90	-6.40
360	18.97	16.05	-6.55

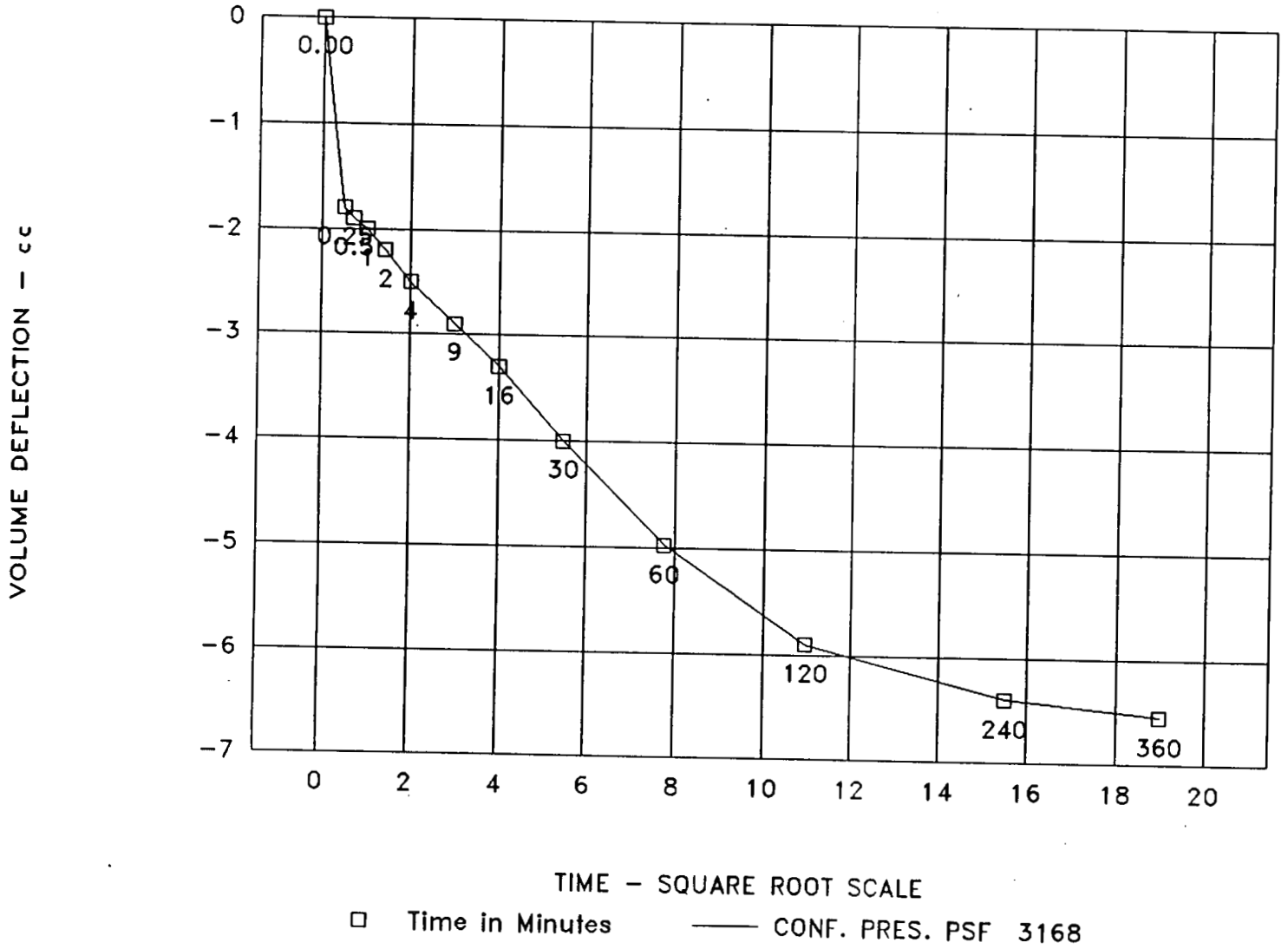
Initial Height	(in)	3.051	Init. Vol.	(CC)	227.16
Height Change	(in)	0.042	Vol. Change	(CC)	15.00
Ht. After Cons.	(in)	3.009	Cell Exp.	(CC)	17.37
Initial Area	(sq in)	4.543	Net Change	(CC)	-2.37
Area After Cons.	(sq in)	4.654	Cons. Vol.	(CC)	229.53

Data entry by: NAA Date: 6-22-95
Checked by: CW Date: 8-14-95
FileName: SAP05111

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-132, 20.0-22.0', 405111



SAIC/Parsons FC140
Fernald
B-2-132 @ 17.5-19.5'
405061

2059-130
Tx/Pbp
4800 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD

ASTM D 5084

CLIENT SAIC/Parsons PO140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	17.5-19.5'	TEST STARTED	6-09-95 DCW
SAMPLE NO.	405061	TEST FINISHED	6-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	12S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2808		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	521.4	516.3
Wt. Wet Soil & Pan	(g)	529.8	524.7
Wt. Dry Soil & Pan	(g)	468.5	468.5
Wt. Lost Moisture	(g)	61.3	56.1
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	460.2	460.2
Moisture Content %		13.3	12.2
Wet Density PCF		143.0	149.1
Dry Density PCF		126.2	132.9

Init. Diameter	(in)	2.397	(cm)	6.088
Init. Area	(sq in)	4.513	(sq cm)	29.115
Init. Height	(in)	3.078	(cm)	7.818
Vol. Bef. Consol.	(cu ft)	0.00804		
Vol. After Consol.	(cu ft)	0.00763		
Porosity %		25.97		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1347.0	80820	49.3	48.7	28.3	1.8E-08
1441.0	86460	48.7	48.1	29.0	1.7E-08
1440.0	86400	48.1	47.5	29.6	1.7E-08
1440.0	86400	47.5	46.9	30.3	1.7E-08

Data entry by: NAA Date: 6-20-95
Checked by: CJ Date: 8-14-95
FileName: SAP05061

ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	17.5-19.5'	TEST STARTED	6-09-95 DCW
SAMPLE NO.	405061	TEST FINISHED	6-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	12S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	2808		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.9	12.0				
50.0	48.0	16.4	18.4	38.3	46.9	8.6	0.86
60.0	58.0	18.8	20.7	48.4	56.9	8.5	0.85
70.0	68.0	20.2	22.0	58.8	67.5	8.7	0.87
80.0	78.0	22.2	24.0	68.7	77.9	9.2	0.92
90.0		24.0	24.1	78.5	88.1	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	24.10	0.00
0.25	0.50	27.20	-3.10
0.5	0.71	27.30	-3.20
1	1.00	27.40	-3.30
2	1.41	27.52	-3.42
4	2.00	27.70	-3.60
9	3.00	28.00	-3.90
16	4.00	28.35	-4.25
30	5.48	28.80	-4.70
60	7.75	29.50	-5.40
120	10.95	30.50	-6.40
240	15.49	31.50	-7.40
360	18.97	32.00	-7.90

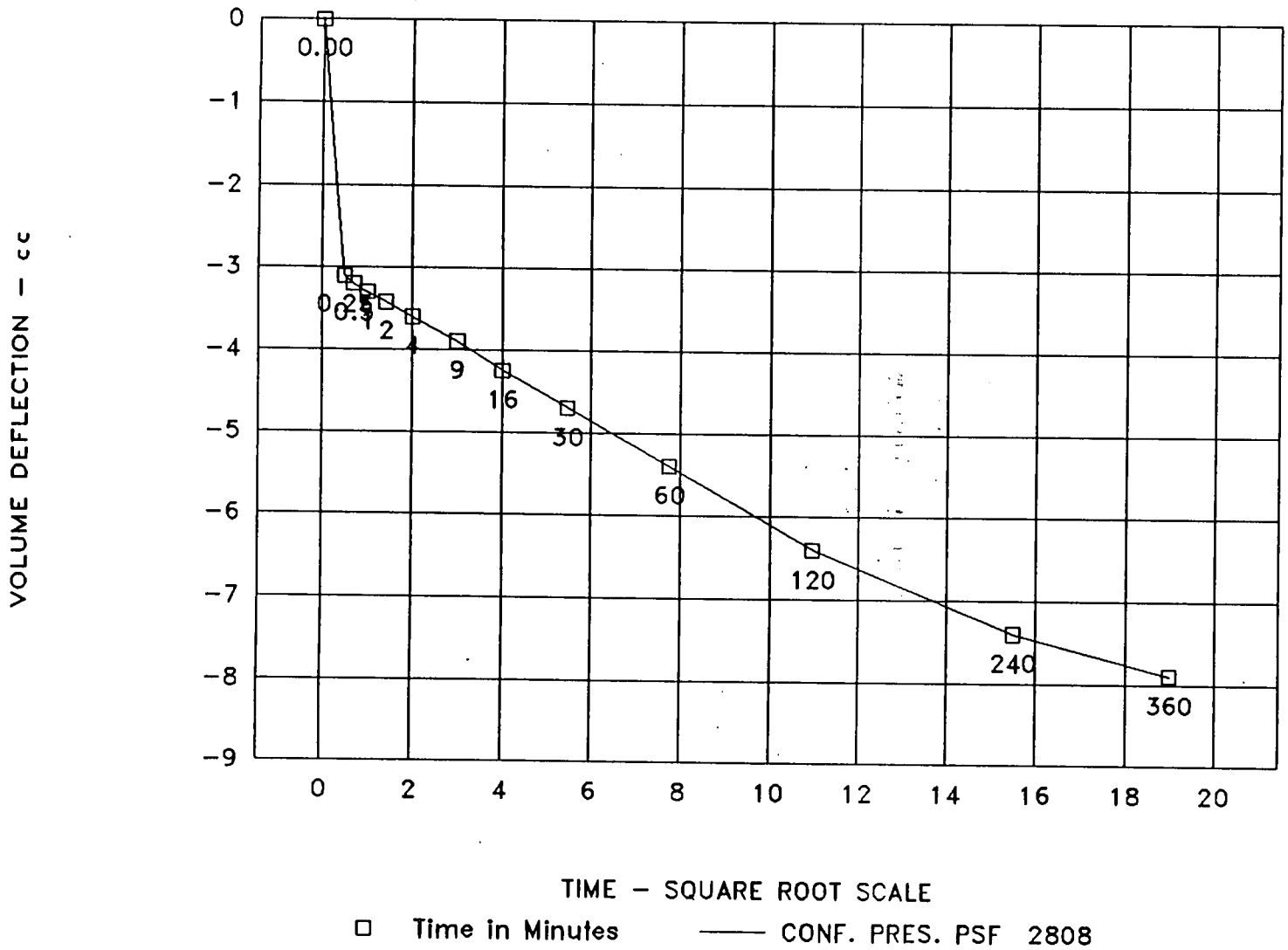
Initial Height	(in)	3.078	Init. Vol.	(CC)	227.65
Height Change	(in)	0.029	Vol. Change	(CC)	33.10
Ht. After Cons.	(in)	3.049	Cell Exp.	(CC)	21.63
Initial Area	(sq in)	4.513	Net Change	(CC)	11.47
Area After Cons.	(sq in)	4.326	Cons. Vol.	(CC)	216.18

Data entry by: NAA Date: 6-20-95
Checked by: CJ Date: 8-14-95
FileName: SAP05061

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-133, 17.5-19.5', 405061



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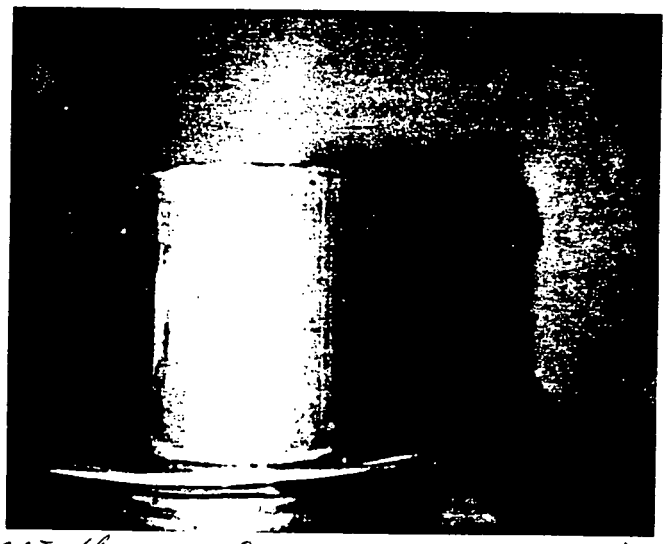


SPECIMENS POLYO
Female
62-133 @ 25.0-27.0
405 OZ

2059-180
TxAPéP
2000 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-24-95 MM
DEPTH	25-27'	TEST STARTED	6-09-95 DCW
SAMPLE NO.	405065	TEST FINISHED	6-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	11S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	3888		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	513.0	503.2
Wt. Wet Soil & Pan	(g)	521.3	511.5
Wt. Dry Soil & Pan	(g)	456.7	456.7
Wt. Lost Moisture	(g)	64.6	54.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	448.4	448.4
Moisture Content %		14.4	12.2
Wet Density PCF		141.5	146.5
Dry Density PCF		123.7	130.5

Init. Diameter	(in)	2.405	(cm)	6.109
Init. Area	(sq in)	4.543	(sq cm)	29.310
Init. Height	(in)	3.040	(cm)	7.722
Vol. Bef. Consol.	(cu ft)	0.00799		
Vol. After Consol.	(cu ft)	0.00757		
Porosity %		25.54		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1348.0	80880	48.6	48.1	29.0	1.5E-08
1440.0	86400	48.1	47.6	29.6	1.4E-08
1440.0	86400	47.6	47.1	30.1	1.4E-08
1478.0	88680	47.1	46.5	30.7	1.7E-08
1417.0	85020	46.5	46.1	31.3	1.2E-08
1441.0	86460	46.1	45.7	31.7	1.3E-08
1440.0	86400	45.7	45.2	32.2	1.3E-08
1440.0	86400	45.2	44.8	32.7	1.2E-08

Data entry by: NAA Date: 6-20-95
Checked by: CJ Date: 8-14-95
FileName: SAP05065

ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13D
BORING NO.	G2-133	SAMPLED	4-24-95 MM
DEPTH	25-27'	TEST STARTED	6-09-95 DCW
SAMPLE NO.	405065	TEST FINISHED	6-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	11S
TEST TYPE	TX/Pbp	SATURATED TEST	Yes
CONF. PRES. PSF	3888		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.6	12.5				
50.0		15.8	15.9	38.4	48.2	9.8	0.98

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	16.20	0.00
0.25	0.50	20.80	-4.60
0.5	0.71	20.93	-4.73
1	1.00	21.10	-4.90
2	1.41	21.30	-5.10
4	2.00	21.60	-5.40
9	3.00	22.08	-5.88
16	4.00	22.60	-6.40
30	5.48	23.30	-7.10
60	7.75	24.50	-8.30
120	10.95	26.10	-9.90
240	15.49	27.65	-11.45
360	18.97	28.25	-12.05

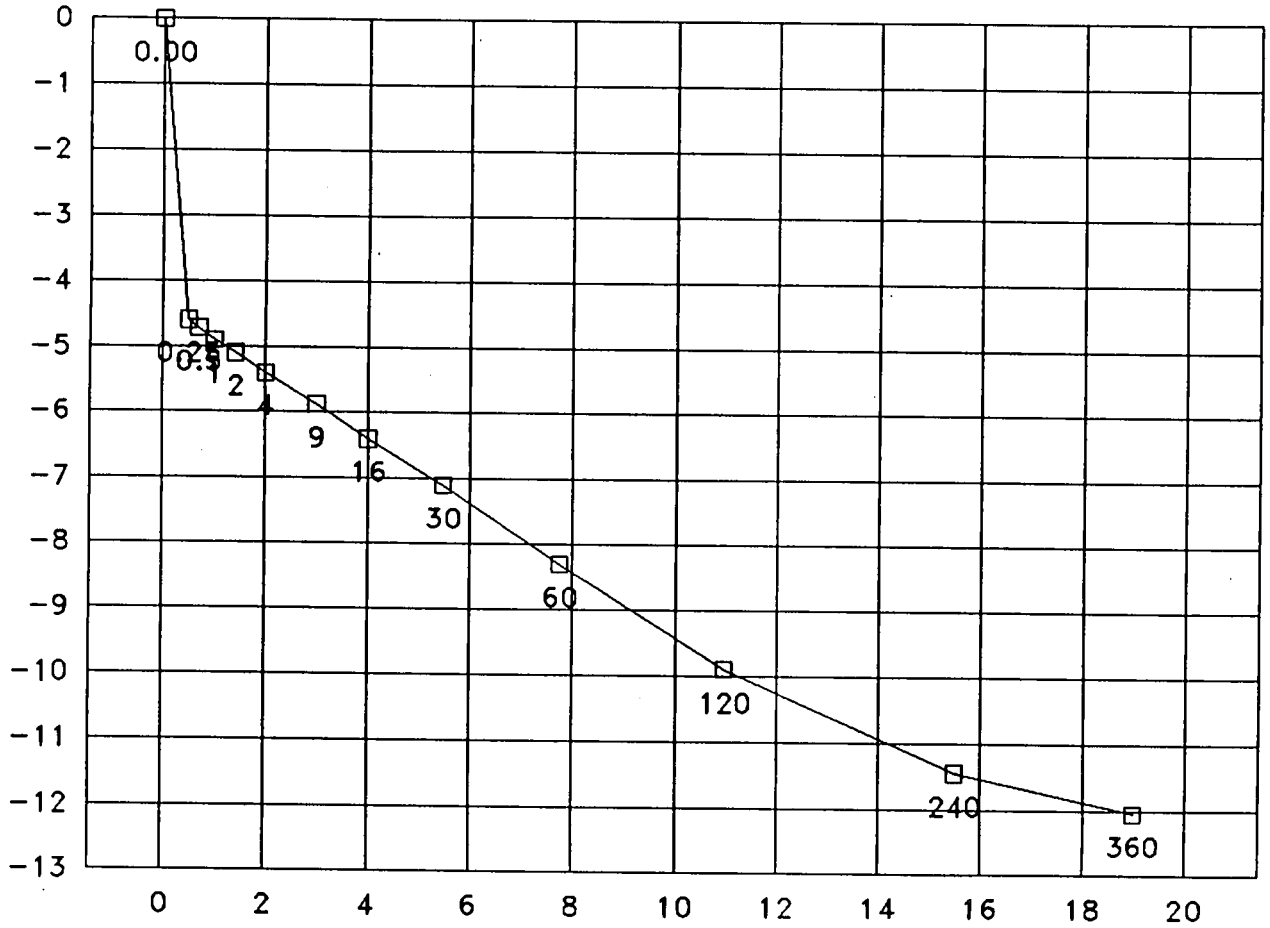
Initial Height	(in)	3.040	Init. Vol.	(CC)	226.35
Height Change	(in)	0.049	Vol. Change	(CC)	28.10
Ht. After Cons.	(in)	2.991	Cell Exp.	(CC)	16.22
Initial Area	(sq in)	4.543	Net Change	(CC)	11.88
Area After Cons.	(sq in)	4.375	Cons. Vol.	(CC)	214.47

Data entry by: NAA Date: 6-20-95
Checked by: CJ Date: 8-14-95
FileName: SAP05065

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-133, 25-27', 405065



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GEOTECHNICAL INVESTIGATION ON-SITE DISPOSAL FACILITY

SOIL INVESTIGATION DATA REPORT

VOLUME 6

Operable Unit 2
Project Order 140

August 18, 1995

for
PARSONS, Environmental Remedial Action Project
Fernald Environmental Management Project
Fernald, Ohio

by
Science Applications International Corporation
14062 Denver West Parkway, Suite 200
Golden, Colorado 80401
(303) 279-7242

Under Subcontract No. 7663S0018 to PARSONS

GEOTECHNICAL INVESTIGATION ON-SITE DISPOSAL FACILITY

SOIL INVESTIGATION DATA REPORT

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Table of Contents - Laboratory Results

Volume 1

Index to Test Results A-9

Specific Gravity
Boring No. G2-124 2
Boring No. G2-126 2
Boring No. G2-127 8
Boring No. G2-128 5
Boring No. G2-129 5
Boring No. G2-130 4
Boring No. G2-131 11
Boring No. G2-132 7
Boring No. G2-133 8
Boring No. G2-SB-1 9
Boring No. G2-SB-2 11
Boring No. G2-SB-3 3
Boring No. G2-SB-4 9
Boring No. G2-SB-5 9
Boring No. G2-SB-6 3
Boring No. G2-SB-7 3
Boring No. G2-SB-8 3
Boring No. G2-SB-10 3
Boring No. G2-SB-11 9
Boring No. G2-SB-12 3
Boring No. G2-SB-2,3,4,6 2
Boring No. G2-SB-8,9,10,11 2

Moisture Content (D2216)
Boring No. G2-120 19
Boring No. G2-121 19
Boring No. G2-122 19
Boring No. G2-123 19
Boring No. G2-124 13
Boring No. G2-125 20
Boring No. G2-126 17
Boring No. G2-127 23
Boring No. G2-128 22
Boring No. G2-129 22
Boring No. G2-130 17
Boring No. G2-131 15
Boring No. G2-132 19
Boring No. G2-133 23
Boring No. G2-134 22
Boring No. G2-SB-1 18
Boring No. G2-SB-2 18

Table of Contents - Laboratory Results

Boring No. G2-SB-3 18
Boring No. G2-SB-4 18
Boring No. G2-SB-5 16
Boring No. G2-SB-6 18
Boring No. G2-SB-7 16
Boring No. G2-SB-8 18
Boring No. G2-SB-9 20
Boring No. G2-SB-10 16
Boring No. G2-SB-11 16
Boring No. G2-SB-12 18
Boring No. G2-SB-13 20
Boring No. G2-SB-14 20
Boring No. G2-SB-16 14
Boring No. G2-SB-17 14
Boring No. G2-SB-2,3,4,6 18
Boring No. G2-SB-8,9,10,11 16

Moisture Content - Microwave (D4643)

Boring No. G2-120 27
Boring No. G2-121 27
Boring No. G2-122 27
Boring No. G2-123 26
Boring No. G2-125 27
Boring No. G2-126 28
Boring No. G2-129 27
Boring No. G2-130 26
Boring No. G2-131 26
Boring No. G2-132 26
Boring No. G2-SB-16 26
Boring No. G2-SB-17 26

Moisture and Density

Boring No. G2-122 30
Boring No. G2-125 30
Boring No. G2-126 30
Boring No. G2-128 30
Boring No. G2-129 30
Boring No. G2-130 30
Boring No. G2-133 30

Organic Matter Content (with pertinent moisture content analyses on pages 33A, 33B, 35A, 35B, 36A, 38A, 38B)

Boring No. G2-SB-1 34
Boring No. G2-SB-2 37
Boring No. G2-SB-3 34

Table of Contents - Laboratory Results

Boring No. G2-SB-4 37
Boring No. G2-SB-5 36
Boring No. G2-SB-6 34
Boring No. G2-SB-7 34
Boring No. G2-SB-8 36
Boring No. G2-SB-9 32
Boring No. G2-SB-10 34
Boring No. G2-SB-11 39
Boring No. G2-SB-12 34
Boring No. G2-SB-13 32
Boring No. G2-SB-14 32

Atterberg Limits

Boring No. G2-120 41
Boring No. G2-121 44
Boring No. G2-122 53
Boring No. G2-123 62
Boring No. G2-124 71
Boring No. G2-125 77
Boring No. G2-126 89
Boring No. G2-127 104
Boring No. G2-128 113
Boring No. G2-129 125
Boring No. G2-130 134
Boring No. G2-131 149
Boring No. G2-132 164
Boring No. G2-133 176
Boring No. G2-134 191
Boring No. G2-SB-1 194
Boring No. G2-SB-2 197
Boring No. G2-SB-3 200
Boring No. G2-SB-4 203
Boring No. G2-SB-5 206
Boring No. G2-SB-6 209
Boring No. G2-SB-7 212
Boring No. G2-SB-8 215
Boring No. G2-SB-9 218
Boring No. G2-SB-10 221
Boring No. G2-SB-11 224
Boring No. G2-SB-12 227
Boring No. G2-SB-13 230
Boring No. G2-SB-14 233

Table of Contents - Laboratory Results

Volume 2

Hydrometer Analyses with Mechanical Grain Size Analysis

Boring No. G2-120 237
Boring No. G2-121 240
Boring No. G2-122 249
Boring No. G2-123 258
Boring No. G2-124 267
Boring No. G2-125 303
Boring No. G2-126 315
Boring No. G2-127 357
Boring No. G2-128 366
Boring No. G2-129 378
Boring No. G2-130 387
Boring No. G2-131 423
Boring No. G2-132 450
Boring No. G2-133 462
Boring No. G2-134 477
Boring No. G2-SB-1 480
Boring No. G2-SB-2 483
Boring No. G2-SB-3 486
Boring No. G2-SB-4 489
Boring No. G2-SB-5 492
Boring No. G2-SB-6 495
Boring No. G2-SB-7 498
Boring No. G2-SB-8 501
Boring No. G2-SB-9 504
Boring No. G2-SB-10 507
Boring No. G2-SB-11 510
Boring No. G2-SB-12 513
Boring No. G2-SB-13 516
Boring No. G2-SB-14 519

Table of Contents - Laboratory Results

Volume 3

Consolidation Test - Natural Moisture
Boring No. G2-122 523
Boring No. G2-124 533
Boring No. G2-126 543
Boring No. G2-127 563
Boring No. G2-128 573
Boring No. G2-130 583
Boring No. G2-131 593
Boring No. G2-133 623

Consolidation Test - Saturated
Boring No. G2-126 634
Boring No. G2-127 644
Boring No. G2-131 654
Boring No. G2-133 674

Consolidation Test - Remolded to 95% MDD
Boring No. G2-124 685
Boring No. G2-126 695
Boring No. G2-130 705
Boring No. G2-SB-4 715
Boring No. G2-SB-7 725

Consolidation Test - Remolded to 85% MDD
Boring No. G2-120 736
Boring No. G2-124 746
Boring No. G2-126 756
Boring No. G2-128 766
Boring No. G2-130 776
Boring No. G2-SB-1 786
Boring No. G2-SB-4 796
Boring No. G2-SB-7 806
Boring No. G2-SB-11 816
Boring No. G2-SB-2,3,4,6,Top Soil 826
Boring No. G2-SB-8,9,10,11 836

Volume 4

Triaxial Shear Test - TX/UU, Saturated
Boring No. G2-127 847
Boring No. G2-128 851
Boring No. G2-129 855
Boring No. G2-130 859
Boring No. G2-131 867
Boring No. G2-132 879

Table of Contents - Laboratory Results

Boring No. G2-133 887
Boring No. G2-134 891

Triaxial Shear Test - TX/UU, Field Moisture
Boring No. G2-122 896
Boring No. G2-124 899
Boring No. G2-125 902
Boring No. G2-126 908

Triaxial Shear Test - TX/UU, Saturated, Remolded to 95% MDD
Boring No. G2-122 912
Boring No. G2-127 916
Boring No. G2-131 920
Boring No. G2-132 924
Boring No. G2-134 928

Triaxial Shear Test - TX/UU, Saturated, Remolded to 85% MDD
Boring No. G2-122 933
Boring No. G2-127 937
Boring No. G2-134 941

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp, 3 Points
Boring No. G2-127 946
Boring No. G2-129 961
Boring No. G2-130 976
Boring No. G2-132 1006
Boring No. G2-133 1021

Volume 5

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Staged 3 Points
Boring No. G2-121 1037
Boring No. G2-122 1052
Boring No. G2-123 1067
Boring No. G2-124 1097
Boring No. G2-125 1112
Boring No. G2-126 1127

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 95% MDD 3 Points
Boring No. G2-128 1143

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 95% MDD Staged - 3 Points
Boring No. G2-125 1159
Boring No. G2-126 1174
Boring No. G2-130 1189

Table of Contents - Laboratory Results

Boring No. G2-132 1204

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 85% MDD 3 Points
Boring No. G2-122 1220

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 85% MDD Staged - 3 Points
Boring No. G2-133 1236

Triaxial, Back Pressure Permeability - TX/PBP
Boring No. G2-121 1252
Boring No. G2-123 1260
Boring No. G2-126 1264
Boring No. G2-127 1268
Boring No. G2-132 1272
Boring No. G2-133 1276

Volume 6

Triaxial, Back Pressure Permeability - TX/PBP Remolded to 95% MDD
Boring No. G2-SB-1 1285
Boring No. G2-SB-2 1289
Boring No. G2-SB-3 1293
Boring No. G2-SB-4 1297
Boring No. G2-SB-5 1301
Boring No. G2-SB-6 1305
Boring No. G2-SB-7 1309
Boring No. G2-SB-8 1313
Boring No. G2-SB-9 1317
Boring No. G2-SB-10 1321
Boring No. G2-SB-11 1325
Boring No. G2-SB-12 1329
Boring No. G2-SB-13 1333
Boring No. G2-SB-14 1337

Proctor Compaction - Standard
Boring No. G2-SB-1 1342
Boring No. G2-SB-2 1344
Boring No. G2-SB-3 1346
Boring No. G2-SB-4 1348
Boring No. G2-SB-5 1350
Boring No. G2-SB-6 1352
Boring No. G2-SB-7 1354
Boring No. G2-SB-8 1356
Boring No. G2-SB-9 1358
Boring No. G2-SB-10 1360

Table of Contents - Laboratory Results

Boring No. G2-SB-11 1362
Boring No. G2-SB-12 1364
Boring No. G2-SB-13 1366
Boring No. G2-SB-14 1368
Boring No. G2-SB-15 1371
Boring No. G2-SB-16 1373
Boring No. G2-SB-17 1375
Boring No. G2-SB-2,3,4,6 1377
Boring No. G2-SB-8,9,10,11 1379

Shelby Tube Descriptive Logs
Boring No. G2-SB-120 1382
Boring No. G2-SB-121 1383
Boring No. G2-SB-122 1385
Boring No. G2-SB-123 1388
Boring No. G2-SB-124 1391
Boring No. G2-SB-125 1393
Boring No. G2-SB-126 1397
Boring No. G2-SB-127 1402
Boring No. G2-SB-128 1405
Boring No. G2-SB-129 1409
Boring No. G2-SB-130 1412
Boring No. G2-SB-131 1417
Boring No. G2-SB-132 1421
Boring No. G2-SB-133 1425
Boring No. G2-SB-134 1430

California Bearing Ratio
Boring No. G2-SB-15 1432
Boring No. G2-SB-16 1439
Boring No. G2-SB-17 1443

Large Scale Interface Direct Shear Tests
Report of a Three-Test Series Using Selected Georynthetics and Soils from FEMP 1450

Aggregate Tests
Report of Four Types of TestsPreformed on Aggregates and Riprap 1468

Chemical Analysis
Report of Chloride and Sulfate Analysis of FEMP Soils 1475

INDEX TO TEST RESULTS

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (D854)	G2-124	10-12	405004	1	2
	"	50-51.5	405016	1	11
	G2-126	7.5-9.5	404768	1	8
	"	15-17	404773	1	2
	"	25-27	404778	1	8
	"	35-37	404783	1	11
	"	40-41.5	404785	1	10
	"	45-46.5	404786	1	6
	"	50-51.5	404787	1	10
	"	55-56.5	404788	1	4
	"	60-61.5	404789	1	6
	"	65-66.5	404790	1	4
	"	70-71.5	404791	1	6
	"	75-76.5	404792	1	6
	"	80-81.5	404793	1	10
	G2-127	7.5-9.5	404751	1	11
	"	15-17	404756	1	8
	G2-128	12.5-14.5	405046	1	5
	"	17.5-19.5	405049	1	5
	G2-129	5-7.5	404729	1	5
	"	10-12.5	404732	1	5
	"	24-26.5	404740	1	5
	G2-130	5-7	405075	1	7
	"	10-12	405077	1	10
	"	15-17	405080	1	10
	"	20-22	405083	1	10
	"	30-32	405088	1	7
	"	40-41.5	405091	1	6

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (cont.)	G2-130 cont.	45-46.5	405092	1	6
	"	55-56.5	405094	1	4
	"	65-66.5	405096	1	4
	"	70-71.5	405097	1	10
	"	75-76.5	405098	1	4
	"	80-81.5	405099	1	4
	G2-131	7.5-9.5	404704	1	11
	"	17.5-19.5	404709	1	11
	"	27.5-29.5	404713	1	11
	"	45-47	404719	1	11
	G2-132	5-7	405102	1	7
	"	10-12	405105	1	7
	"	15-17	405108	1	7
	"	20-22	405111	1	7
	G2-133	7.5-9.5	405055	1	8
	"	15-17	405059	1	8
	"	17.5-19.5	405061	1	8
	"	25-27	405065	1	8
	G2-SB-1	1.5-5	404608	1	9
	G2-SB-2	1.5-5	404603	1	11
	G2-SB-3	1.5-5	404591	1	3
	G2-SB-4	1.5-5	404615	1	9
	G2-SB-5	1.5-5	404627	1	9
	G2-SB-6	1.5-5	404595	1	3
	G2-SB-7	1.5-5	404632	1	3
	G2-SB-8	1.5-5	404621	1	3
	G2-SB-10	1.5-5	404637	1	3
	G2-SB-11	1.5-5	404642	1	9
	G2-SB-12	1.5-4.2	404599	1	3

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (cont.)	G2-SB-2,3,4,6	0-1.5	404617	1	2
	G2-SB-8,9,10,11	0-1.5	404644	1	2
Moisture Content (D2216)	G2-120	5-7	405124	1	19
	G2-121	12.5-14.5	404814	1	19
	"	17.5-19.5	404817	1	19
	G2-122	5-7	404821	1	24
	"	10-12	404824	1	19
	"	15-17	404827	1	19
	G2-123	12.5-14.5	404800	1	19
	G2-124	25-26.5	405011	1	13
	"	30-31.5	405012	1	13
	"	35-36.5	405013	1	13
	"	40-41.5	405014	1	13
	"	45-46.5	405015	1	13
	"	50-51.5	405016	1	13
	"	55-56.5	405017	1	13
	"	60-61.5	405018	1	13
	"	65-66.5	405019	1	15
	"	70-71.5	405020	1	15
	"	80-82	405021	1	15
	G2-125	2.5-4.5	405023	1	20
	"	7.5-9.5	405026	1	20
	"	17.5-19.5	405033	1	20
	G2-126	12.5-14.5	404771	1	23
	"	25-27	404778	1	22
	"	25-27	404778	1	24
	"	35-37	404783	1	24
	"	40-41.5	404785	1	21
	"	45-46.5	404786	1	21

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content (cont.)	G2-126 con.t	50-51.5	404787	1	21
	"	55-56.5	404788	1	21
	"	60-61.5	404789	1	21
	"	65-66.5	404790	1	21
	"	70-71.5	404791	1	21
	"	75-76.5	404792	1	21
	"	80-81.5	404793	1	17
	G2-127	28-30	404763	1	23
	G2-128	2.5-4.5	405040	1	22
	"	17.5-19.5	405049	1	22
	G2-129	5-7.5	404729	1	22
	"	10-12.5	404732	1	22
	"	10-12.5	404732	1	24
	G2-130	5-7	405075	1	23
	"	20-22	405083	1	23
	"	40-41.5	405091	1	17
	"	45-46.5	405092	1	17
	"	55-56.5	405094	1	17
	"	65-66.5	405096	1	17
	"	70-71.5	405097	1	17
	"	75-76.5	405098	1	17
	"	80-81.5	405099	1	17
	G2-131	7.5-9.5	404704	1	20
	"	45-47	404719	1	24
	"	60-61.5	404723	1	15
	"	65-66.5	404724	1	15
	"	70-71.5	404725	1	15
	"	75-76.5	404726	1	15
	"	81-82.3	404727	1	15

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content (cont.)	G2-132	5-7	405102	1	22
	"	10-12	405105	1	19
	"	20-22	405111	1	19
	"	20-22	405111	1	24
	G2-133	2.5-4.5	405053	1	23
	"	15-17	405059	1	23
	"	17.5-19.5	405061	1	23
	"	25-27	405065	1	23
	G2-134	12-14	405140	1	22
	G2-SB-1	1.5-5	404608	1	18
	G2-SB-2	1.5-5	404603	1	18
	G2-SB-3	1.5-5	404591	1	18
	G2-SB-4	1.5-5	404615	1	18
	G2-SB-5	1.5-5	404627	1	16
	G2-SB-6	1.5-5	404595	1	18
	G2-SB-7	1.5-5	404632	1	16
	G2-SB-8	1.5-5	404621	1	18
	G2-SB-9	1.5-5	404587	1	20
	G2-SB-10	1.5-5	404637	1	16
	G2-SB-11	1.5-5	404642	1	16
	G2-SB-12	1.5-4.2	404599	1	18
	G2-SB-13	1.5-5	404583	1	20
	G2-SB-14	1.5-5	404578	1	20
	G2-SB-16	1-2	404650	1	14
	"	1-2	404650	1	14
	G2-SB-17	1-2	405366	1	14
	"	1-2	405366	1	14
	G2-SB-2,3,4,6	0-1.5	404617	1	18
	G2-SB-8,9,10,11	0-1.5	404644	1	16

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content-Microwave (D4643)	G2-120	5-7	405124	1	27
	G2-121	12.5-14.5	404814	1	27
	G2-122	5-7	404821	1	28
	"	10-12	404824	1	27
	G2-123	12.5-14.5	404800	1	26
	G2-125	2.5-4.5	405023	1	27
	G2-126	25-27	404778	1	28
	"	35-37	404783	1	28
	G2-129	5-7.5	404729	1	27
	"	10-12.5	404732	1	28
	G2-130	5-7	405075	1	26
	G2-131	7.5-9.5	404704	1	26
	"	7.5-9.5	404704	1	27
	"	45-47	404719	1	28
	G2-132	5-7	405102	1	27
	"	10-12	405105	1	26
	"	20-22	405111	1	28
	G2-SB-16	1-2	404650	1	26
	"	1-2	404650	1	26
	G2-SB-17	1-2	405366	1	26
	"	1-2	405366	1	26
Moisture and Density (D2216 and D2937)	G2-122	15-17	404827	1	30
	G2-125	2.5-4.5	405023	1	30
	G2-126	12.5-14.5	404771	1	30
	G2-128	7.5-9.5	405043	1	30
	"	17.5-19.5	405049	1	30
	G2-129	10-12.5	404732	1	30
	G2-130	20-22	405083	1	30

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture and Density (cont.)	G2-133	2.5-4.5	405053	1	30
Organic Matter Content (D2974) (with pertinent moisture content analyses on pages 33A, 33B, 35A, 35B, 36A, 38A, 38B)	G2-SB-1	0-0.5	404605	1	37
	"	0.5-1	404606	1	34
	"	1-1.5	404607	1	38
	G2-SB-2	0-0.5	404600	1	38
	"	0.5-1	404601	1	37
	"	1-1.5	404602	1	38
	G2-SB-3	0-0.5	404588	1	37
	"	0.5-1	404589	1	34
	"	1-1.5	404590	1	35
	G2-SB-4	0-0.5	404612	1	38
	"	0.5-1	404613	1	38
	"	1-1.5	404614	1	37
	G2-SB-5	0-0.5	404624	1	37
	"	0.5-1	404625	1	37
	"	1-1.5	404626	1	36
	G2-SB-6	0-0.5	404592	1	35
	"	0.5-1	404593	1	34
	"	1-1.5	404594	1	34
	G2-SB-7	0-0.5	404629	1	34
	"	0.5-1	404630	1	35
	"	1-1.5	404631	1	36
	G2-SB-8	0-0.5	404618	1	37
	"	0.5-1	404619	1	37
	"	1-1.5	404620	1	36
	G2-SB-9	0-0.5	404584	1	32
	"	0.5-1	404585	1	32
	"	1-1.5	404586	1	32
	G2-SB-10	0-0.5	404634	1	35

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Organic Matter Content (cont.)	G2-SB-10	0.5-1	404635	1	34
	"	1-1.5	404636	1	34
	G2-SB-11	0-0.5	404639	1	39
	"	0.5-1	404640	1	39
	"	1-1.5	404641	1	39
	G2-SB-12	0-0.5	404596	1	35
	"	0.5-1	404597	1	38
	"	1-1.5	404598	1	34
	G2-SB-13	0-0.5	404580	1	32
	"	0.5-1	404581	1	32
	"	1-1.5	404582	1	32
	G2-SB-14	0-0.5	404575	1	33
	"	0.5-1	404576	1	32
	"	1-1.5	404577	1	32
Atterberg Limits (D4318)	G2-120	5-7	405124	1	41
	G2-121	10-11.7	404812	1	44
	"	12.5-14.5	404814	1	47
	"	17.5-19.5	404817	1	50
	G2-122	5-7	404821	1	53
	"	10-12	404824	1	56
	"	15-17	404827	1	59
	G2-123	7.5-9.5	404797	1	67
	"	12.5-14.5	404800	1	65
	"	20-21.2	404804	1	68
	G2-124	5-7	405002	1	71
	"	10-12	405004	1	74
	G2-125	2.5-4.5	405023	1	77
	"	7.5-9.5	405026	1	80
	"	12.5-14.5	405029	1	83

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Atterberg Limits (cont.)	G2-125	17.5-19.5	405033	1	86
	G2-126	7.5-9.5	404768	1	89
	"	12.5-14.5	404771	1	92
	"	15-17	404773	1	95
	"	25-27	404778	1	98
	"	35-37	404783	1	101
	G2-127	7.5-9.5	404751	1	104
	"	15-17	404756	1	107
	"	28-30	404763	1	110
	G2-128	2.5-4.5	405040	1	113
	"	7.5-9.5	405043	1	116
	"	12.5-14.5	405046	1	119
	"	17.5-19.5	405049	1	122
	G2-129	5-7.5	404729	1	125
	"	10-12.5	404732	1	128
	"	24-26.5	404740	1	131
	G2-130	5-7	405075	1	134
	"	10-12	405077	1	137
	"	15-17	405080	1	140
	"	20-22	405083	1	143
	"	30-32	405088	1	146
	G2-131	7.5-9.5	404704	1	149
	"	17.5-19.5	404709	1	152
	"	27.5-29.5	404713	1	155
	"	45-47	404719	1	158
	"	60-61.5	404723	1	161
	G2-132	5-7	405102	1	164
	"	10-12	405105	1	167
	"	15-17	405108	1	170

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Atterberg Limits (cont.)	G2-132	20-22	405111	1	173
	G2-133	2.5-4.5	405053	1	176
	"	7.5-9.5	405055	1	179
	"	15-17	405059	1	182
	"	17.5-19.5	405061	1	185
	"	25-27	405065	1	188
	G2-134	12-14	405140	1	191
	G2-SB-1	1.5-5	404608	1	194
	G2-SB-2	1.5-5	404603	1	197
	G2-SB-3	1.5-5	404591	1	200
	G2-SB-4	1.5-5	404615	1	203
	G2-SB-5	1.5-5	404627	1	206
	G2-SB-6	1.5-5	404595	1	209
	G2-SB-7	1.5-5	404632	1	212
	G2-SB-8	1.5-5	404621	1	215
	G2-SB-9	1.5-5	404587	1	218
	G2-SB-10	1.5-5	404637	1	221
	G2-SB-11	1.5-5	404642	1	224
	G2-SB-12	1.5-4.2	404599	1	227
	G2-SB-13	1.5-5	404583	1	230
	G2-SB-14	1.5-5	404578	1	233
Hydrometer Analysis with Mechanical Grain Size Analysis (D422)	G2-120	5-7	405124	2	237
	G2-121	10-11.7	404812	2	240
	"	12.5-14.5	404814	2	243
	"	17.5-19.5	404817	2	246
	G2-122	5-7	404821	2	249
	"	10-12	404824	2	252
	"	15-17	404827	2	255

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	G2-123	7.5-9.5	404797	2	258
	"	12.5-14.5	404800	2	261
	"	20-21.2	404804	2	264
	G2-124	5-7	405002	2	267
	"	10-12	405004	2	270
	"	25-26.5	405011	2	273
	"	30-31.5	405012	2	276
	"	35-36.5	405013	2	279
	"	40-41.5	405014	2	282
	"	45-46.5	405015	2	285
	"	50-51.5	405016	2	288
	"	55-56.5	405017	2	291
	"	60-61.5	405018	2	294
	"	65-66.5	405019	2	297
	"	70-71.5	405020	2	300
	G2-125	2.5-4.5	405023	2	303
	"	7.5-9.5	405026	2	306
	"	12.5-14.5	405029	2	309
	"	17.5-19.5	405033	2	312
	G2-126	7.5-9.5	404768	2	315
	"	12.5-14.5	404771	2	318
	"	15-17	404773	2	321
	"	25-27	404778	2	324
	"	35-37	404783	2	327
	"	40-41.5	404785	2	330
	"	45-46.5	404786	2	333
	"	50-51.5	404787	2	336
	"	55-56.5	404788	2	339

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	"	60-61.5	404789	2	342
	"	65-66.5	404790	2	345
	"	70-71.5	404791	2	348
	"	75-76.5	404792	2	351
	"	80-81.5	404793	2	354
	G2-127	7.5-9.5	404751	2	357
	"	15-17	404756	2	360
	"	28-30	404763	2	363
	G2-128	2.5-4.5	405040	2	366
	"	7.5-9.5	405043	2	369
	"	12.5-14.5	405046	2	372
	"	17.5-19.5	405049	2	375
	G2-129	5-7.5	404729	2	378
	"	10-12.5	404732	2	381
	"	24-26.5	404740	2	384
	G2-130	5-7	405075	2	387
	"	10-12	405077	2	390
	"	15-17	405080	2	393
	"	20-22	405083	2	396
	"	30-32	405088	2	399
	"	40-41.5	405091	2	402
	"	45-46.5	405092	2	405
	"	55-56.5	405094	2	408
	"	65-66.5	405096	2	411
	"	70-71.5	405097	2	414
	"	75-76.5	405098	2	417
	"	80-81.5	405099	2	420
	G2-131	7.5-9.5	404704	2	423

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analyses (cont.)	"	17.5-19.5	404709	2	426
	"	27.5-29.5	404713	2	429
	"	45-47	404719	2	432
	"	60-61.5	404723	2	435
	"	65-66.5	404724	2	438
	"	70-71.5	404725	2	441
	"	75-76.5	404726	2	444
	"	81-82.3	404727	2	447
	G2-132	5-7	405102	2	450
	"	10-12	405105	2	453
	"	15-17	405108	2	456
	"	20-22	405111	2	459
	G2-133	2.5-4.5	405053	2	462
	"	7.5-9.5	405055	2	465
	"	15-17	405059	2	468
	"	17.5-19.5	405061	2	471
	"	25-27	405065	2	474
	G2-134	12-14	405140	2	477
	G2-SB-1	1.5-5	404608	2	480
	G2-SB-2	1.5-5	404603	2	483
	G2-SB-3	1.5-5	404591	2	486
	G2-SB-4	1.5-5	404615	2	489
	G2-SB-5	1.5-5	404627	2	492
	G2-SB-6	1.5-5	404595	2	495
	G2-SB-7	1.5-5	404632	2	498
	G2-SB-8	1.5-5	404621	2	501
	G2-SB-9	1.5-5	404587	2	504
	G2-SB-10	1.5-5	404637	2	507

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	G2-SB-11	1.5-5	404642	2	510
	G2-SB-12	1.5-4.2	404599	2	513
	G2-SB-13	1.5-5	404583	2	516
	G2-SB-14	1.5-5	404578	2	519
Consolidation Test - Natural Moisture (D2435)	G2-122	5-7	404821	3	523
	G2-124	10-12	405004	3	533
	G2-126	15-17	404773	3	543
	"	35-37	404783	3	553
	G2-127	7.5-9.5	404751	3	563
	G2-128	12.5-14.5	405046	3	573
	G2-130	15-17	405080	3	583
	G2-131	17.5-19.5	404709	3	593
	"	27.5-29.5	404713	3	603
	"	45-47	404719	3	613
	G2-133	7.5-9.5	405055	3	623
Consolidation Test - Saturated (D2435)	G2-126	35-37	404783	3	634
	G2-127	7.5-9.5	404751	3	644
	G2-131	17.5-19.5	404709	3	654
	"	45-47	404719	3	664
	G2-133	7.5-9.5	405055	3	674
Consolidation Test - Remolded to 95% MDD (D2435)	G2-124	10-12	405004	3	685
	G2-126	15-17	404773	3	695
	G2-130	15-17	405080	3	705
	G2-SB-4	1.5-5	404615	3	715
	G2-SB-7	1.5-5	404632	3	725
Consolidation Test - Remolded to 85% MDD (D2435)	G2-120	5-7	405124	3	736

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Consolidation Test - Remolded to 85% MDD (cont.)	G2-124	10-12	405004	3	746
	G2-126	15-17	404773	3	756
	G2-128	12.5-14.5	405046	3	766
	G2-130	15-17	405080	3	776
	G2-SB-1	1.5-5	404608	3	786
	G2-SB-4	1.5-5	404615	3	796
	G2-SB-7	1.5-5	404632	3	806
	G2-SB-11	1.5-5	404642	3	816
	G2-SB-2,3,4,6 Top Soil	0-1.5	404617	3	826
	G2-SB-8,9,10,11	0-1.5	404644	3	836
Triaxial Shear Test - TX/UU Saturated (D2850)	G2-127	7.5-9.5	404751	4	847
	G2-128	2.5-4.5	405040	4	851
	G2-129	5-7.5	404729	4	855
	G2-130	5-7	404075	4	859
	"	15-17	405080	4	863
	G2-131	7.5-9.5	404704	4	867
	"	27.5-29.5	404713	4	871
	"	45-47	404719	4	875
	G2-132	5-7	405102	4	879
	"	10-12	405105	4	883
	G2-133	7.5-9.5	405055	4	887
	G2-134	12-14	405140	4	891
Triaxial Shear Test - TX/UU Field Moisture (D2850)	G2-122	10-12	404824	4	896
	G2-124	5-7	405002	4	899
	G2-125	7.5-9.5	405026	4	902
	"	17.5-19.5	405033	4	905

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Triaxial Shear Test - TX/UU Field Moisture (cont.)	G2-126	15-17	404773	4	908
Triaxial Shear Test - TX/UU Saturated, Remolded to 95% MDD (D2850)	G2-122	10-12	404824	4	912
	G2-127	7.5-9.5	404751	4	916
	G2-131	7.5-9.5	404704	4	920
	G2-132	10-12	405105	4	924
	G2-134	12-14	405140	4	928
Triaxial Shear Test - TX/UU Saturated, Remolded to 85% MDD (D2850)	G2-122	10-12	404824	4	933
	G2-127	7.5-9.5	404751	4	937
	G2-134	12-14	405140	4	941
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp, 3 points (D4767)	G2-127	15-17	404756A	4	946
	"	15-17	404756B	4	951
	"	15-17	404756C	4	956
	G2-129	24-26.5	404740A	4	961
	"	24-26.5	404740B	4	966
	"	24-26.5	404740C	4	971
	G2-130	10-12	405077A	4	976
	"	"	405077B	4	981
	"	"	405077C	4	986
	"	30-32	405088A	4	991
	"	"	405088B	4	996
	"	"	405088C	4	1001
	G2-132	15-17	405108A	4	1006
	"	"	405108B	4	1011
	"	"	405108C	4	1016

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-133	15-17	405059A	4	1021
	"	"	405059B	4	1026
	"	"	405059C	4	1031
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged-3 Points (D4767)	G2-121	10-11.7	404812-1	5	1037
	"	"	404812-2	5	1042
	"	"	404812-3	5	1047
	G2-122	5-7	404821-1	5	1052
	"	"	404821-2	5	1057
	"	"	404821-3	5	1062
	G2-123	7.5-9.5	404797-1	5	1067
	"	"	404797-2	5	1072
	"	"	404797-3	5	1077
	"	20-21.2	404804-1	5	1082
	"	"	404804-2	5	1087
	"	"	404804-3	5	1092
	G2-124	10-12	405004-1	5	1097
	"	"	405004-2	5	1102
	"	"	405004-3	5	1107
	G2-125	12.5-14.5	405029-1	5	1112
	"	"	405029-2	5	1117
	"	"	405029-3	5	1122
	G2-126	7.5-9.5	404768-1	5	1127
	"	"	404768-2	5	1132
	"	"	404768-3	5	1137
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Remolded to 95% MDD, 3 Points (D4767)	G2-128	7.5-9.5	405043A	5	1143

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	"	405043B	5	1148
	"	"	405043C	5	1153
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged - 3 Points (D4767)	G2-125	2.5-4.5	405023-1	5	1159
	"	"	405023-2	5	1164
	"	"	405023-3	5	1169
	G2-126	12.5-14.5	404771-1	5	1174
	"	"	404771-2	5	1179
	"	"	404771-3	5	1184
	G2-130	20-22	405083-1	5	1189
	"	"	405083-2	5	1194
	"	"	405083-3	5	1199
	G2-132	5-7	405102-1	5	1204
	"	"	405102-2	5	1209
	"	"	405102-3	5	1214
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Remolded to 85% MDD-3 Points (D4767)	G2-122	15-17	404827A	5	1220
	"	"	404827B	5	1225
	"	"	404827C	5	1230
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged - 3 Points (D4767)	G2-133	2.5-4.5	405053-1	5	1236
	"	"	405053-2	5	1241
	"	"	405053-3	5	1246
Triaxial, Back Pressure Permeability TX/PBP (D5084)	G2-121	12.5-14.5	404814	5	1252
	"	17.5-19.5	404817	5	1256
	G2-123	12.5-14.5	404800	5	1260

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-126	25-27	404778	5	1264
	G2-127	28-30	404763-B	5	1268
	G2-132	20-22	405111	5	1272
	G2-133	17.5-19.5	405061	5	1276
	"	25-27	405065	5	1280
Triaxial, Back Pressure Permeability TX/PBP Remolded to 95% MDD (D5084)	G2-SB-1	1.5-5	404608	6	1285
	G2-SB-2	"	404603	6	1289
	G2-SB-3	"	404591	6	1293
	G2-SB-4	"	404615	6	1297
	G2-SB-5	"	404627	6	1301
	G2-SB-6	"	404595	6	1305
	G2-SB-7	"	404632	6	1309
	G2-SB-8	"	404621	6	1313
	G2-SB-9	"	404587	6	1317
	G2-SB-10	"	404637	6	1321
	G2-SB-11	"	404642	6	1325
	G2-SB-12	1.5-4.2	404599	6	1329
	G2-SB-13	1.5-5	404583	6	1333
	G2-SB-14	"	404578	6	1337
Proctor Compaction - Standard (D698)	G2-SB-1	1.5-5	404608	6	1342
	G2-SB-2	"	404603	6	1344
	G2-SB-3	"	404591	6	1346
	G2-SB-4	"	404615	6	1348
	G2-SB-5	"	404627	6	1350
	G2-SB-6	"	404595	6	1352
	G2-SB-7	"	404632	6	1354
	G2-SB-8	"	404621	6	1356

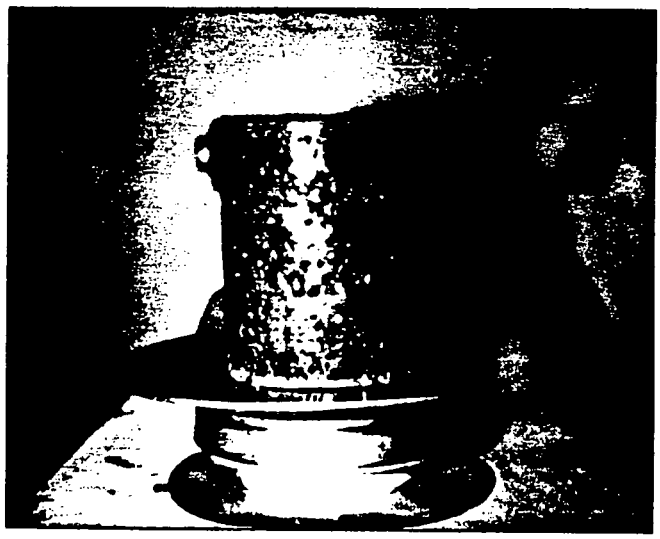
Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-SB-9	"	404587	6	1358
	G2-SB-10	"	404637	6	1360
	G2-SB-11	"	404642	6	1362
	G2-SB-12	1.5-4.2	404599	6	1364
	G2-SB-13	1.5-5	404583	6	1366
	G2-SB-14	"	404578	6	1368
	G2-SB-15	1-2	404649	6	1371
	G2-SB-16	"	404650	6	1373
	G2-SB-17	"	405366	6	1375
	G2-SB-2,3,4,6	0-1.5	404617	6	1377
	G2-SB-8,9,10,11	0-1.5	404644	6	1379
Shelby Tube Descriptive Logs (Visual Classification Only)	G2-120	5-7	405124	6	1382
	G2-121	10-11.7	404812	6	1383
	"	17.5-19.5	404817	6	1384
	G2-122	5-7	404821	6	1385
	"	10-12	404824	6	1386
	"	15-17	404827	6	1387
	G2-123	7.5-9.5	404797	6	1388
	"	12.5-14.5	404800	6	1389
	"	20-21	404804	6	1390
	G2-124	5-7	405002	6	1391
	"	10-12	405004	6	1392
	G2-125	2.5-4.5	405023	6	1393
	"	7.5-9.5	405026	6	1394
	"	12.5-14.5	405029	6	1395
	"	17.5-19.5	405033	6	1396
	G2-126	7.5-9.5	404768	6	1397

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	12.5-14.5	404771	6	1398
	"	15-17	404773	6	1399
	"	25-27	404778	6	1400
	"	35-37	404783	6	1401
	G2-127	7.5-9.5	404751	6	1402
	"	15-17	404756	6	1403
	"	28-30	404763	6	1404
	G2-128	2.5-4.5	405040	6	1405
	"	7.5-9.5	405043	6	1406
	"	12.5-14.5	405046	6	1407
	"	17.5-19.5	405049	6	1408
	G2-129	5-7.5	404729	6	1409
	"	10-12.5	404732	6	1410
	"	24-26.5	404740	6	1411
	G2-130	5-7	405075	6	1412
	"	10-12	405077	6	1413
	"	15-17	405080	6	1414
	"	20-22	405083	6	1415
	"	30-32	405088	6	1416
	G2-131	7.5-9.5	404704	6	1417
	"	17.5-19.5	404709	6	1418
	"	27.5-29.5	404713	6	1419
	"	45-47	404719	6	1420
	G2-132	5-7	405102	6	1421
	"	10-12	405105	6	1422
	"	15-17	405108	6	1423
	"	20-22	405111	6	1424
	G2-133	2.5-4.5	405053	6	1425
	"	7.5-9.5	405055	6	1426

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	15-17	405059	6	1427
	"	17.5-19.5	405061	6	1428
	"	25-27	405065	6	1429
	G2-134	12-14	405140	6	1430
California Bearing Ratio (D1883)	G2-SB-15	1-2	404649	6	1432
	"	1-2	404649	6	1436
	G2-SB-16	1-2	404650	6	1439
	G2-SB-17	1-2	405366	6	1443
	"	"	405366	6	1447
Large Scale Interface Direct Shear Test Report of a Three-Test Series using selected geosynthetics and Soils from FEMP					1450
Aggregate Tests Specific Gravity and Absorbtion of Coarse Aggregate (C127-88)			405377	6	1470
			405379	6	1470
			405381	6	1470
			405382	6	1470
			405383	6	1470
Soundness of Aggregates (C88-90)			405384	6	1470
			405385	6	1470
			405386	6	1470
Resistance R-Value and Expansion Pressure of Compacted Soils (D2844-89)			404645	6	1470
			404646	6	1470
			404647	6	1470
			404648	6	1470
Soundness of Riprap (D5240-92)			405378	6	1470
			405380	6	1470

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Chemical Analysis - Chloride and Sulfate	G2-SB-1	4.5-5	404609	6	1476
	G2-SB-2	4.5-5	404604	6	1476
	G2-SB-4	4.5-5	404616	6	1476
	G2-SB-5	4.5-5	404628	6	1476
	G2-SB-7	4.5-5	404633	6	1476
	G2-SB-8	4.5-5	404622	6	1476
	G2-SB-10	4.5-5	404638	6	1477
	G2-SB-11	4.5-5	404643	6	1477

TRIAXIAL, BACK-PRESSURE PERMEABILITY
TX/PBP
Remolded to 95% MDD
ASTM D 5084



SAIC/PARSONS PO 140 2059-13I
GR-SB-1 @ 1.5-5.0' TX/Pbp
A04603 TERMINATED 576 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-1	SAMPLED	4-24-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-20-95 CAL
SAMPLE NO.	404608	TEST FINISHED	7-4-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	432.4	451.2
Wt. Wet Soil & Pan	(g)	440.8	459.6
Wt. Dry Soil & Pan	(g)	364.7	364.7
Wt. Lost Moisture	(g)	76.0	94.9
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	356.4	356.4
Moisture Content %		21.3	26.6
Wet Density PCF		121.4	122.1
Dry Density PCF		100.0	96.4

Init. Diameter	(in)	2.400	(cm)	6.096
Init. Area	(sq in)	4.524	(sq cm)	29.188
Init. Height	(in)	3.000	(cm)	7.620
Vol. Bef. Consol.	(cu ft)	0.00785		
Vol. After Consol.	(cu ft)	0.00815		
Porosity %		41.09		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
698.0	41880	24.3	3.5	38.5	1.2E-06
615.0	36900	24.4	5.2	37.2	1.3E-06
646.0	38760	24.3	6.2	36.6	1.1E-06
780.0	46800	24.4	4.9	37.4	1.0E-06
590.0	35400	24.6	12.0	32.2	8.2E-07
947.0	56820	24.3	9.5	34.2	6.1E-07
1432.0	85920	24.2	6.6	36.4	4.9E-07
1436.0	86160	24.4	8.3	35.0	4.4E-07
1424.0	85440	24.4	10.3	33.6	3.9E-07
1259.0	75540	24.3	11.5	32.8	3.9E-07
1470.0	88200	24.2	8.8	34.8	4.1E-07
1431.0	85860	24.3	9.5	34.2	4.1E-07
1473.0	88380	24.1	8.7	34.9	4.1E-07

Data entry by: NAA Date: 7-5-95
Checked by: CW Date: 8-14-95
FileName: SAPO4608 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13I
BORING NO.	G2-SB-1	SAMPLED	4-24-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-20-95 CAL
SAMPLE NO.	404608	TEST FINISHED	7-4-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.2	12.4				
50.0	48.0	8.9	9.9	36.3	44.7	8.4	0.84
60.0	58.0	10.0	10.9	46.4	55.4	9.0	0.90
70.0		11.0	11.0	56.2	65.7	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	11.00	0.00
0.25	0.50	11.30	-0.30
0.5	0.71	11.33	-0.32
1	1.00	11.38	-0.38
2	1.41	11.40	-0.40
4	2.00	11.43	-0.43
9	3.00	11.45	-0.45
16	4.00	11.48	-0.47
30	5.48	11.50	-0.50
60	7.75	11.40	-0.40
120	10.95	11.43	-0.43
240	15.49	11.40	-0.40
360	18.97	11.40	-0.40

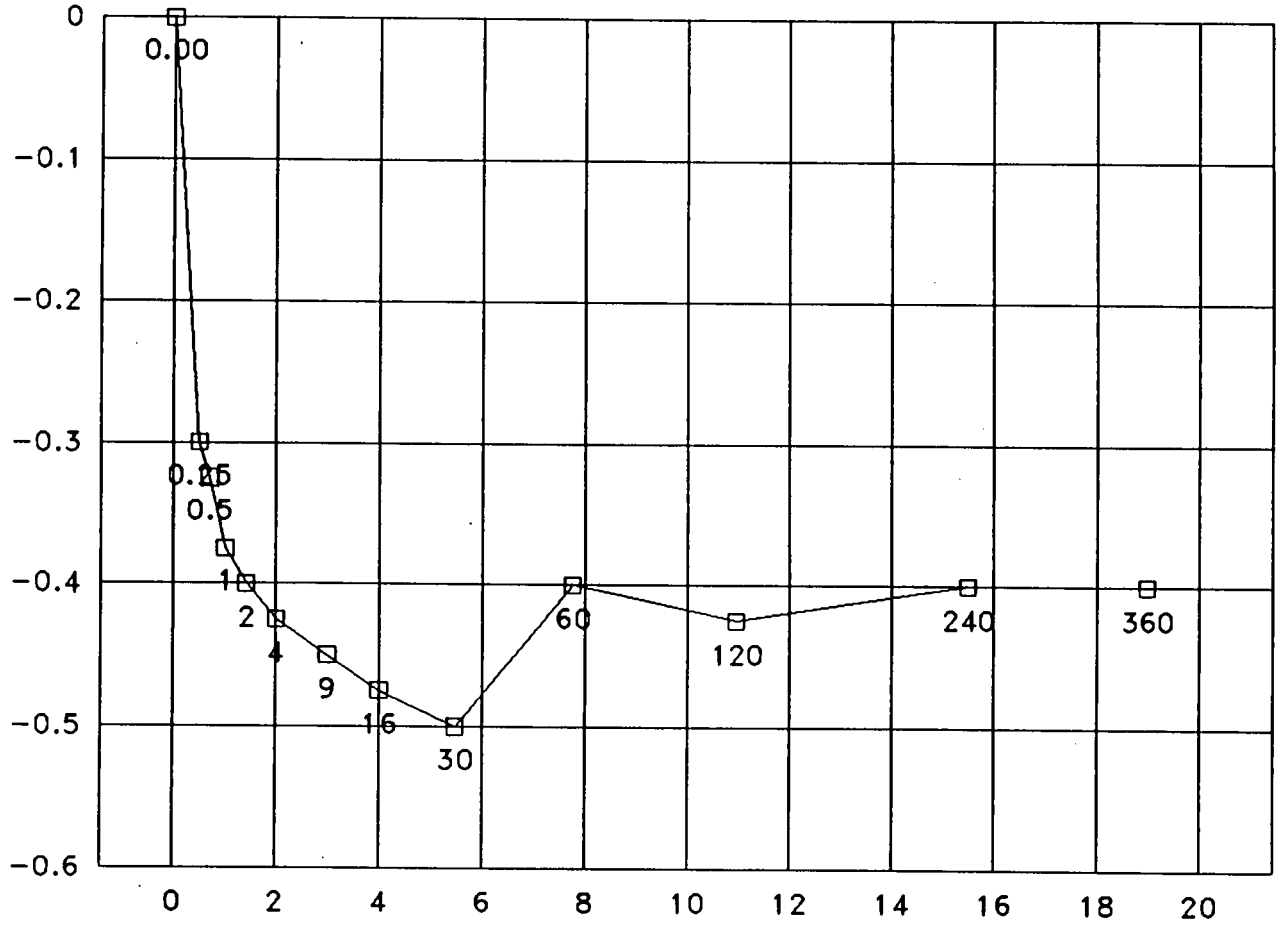
Initial Height	(in)	3.000	Init. Vol.	(CC)	222.44
Height Change	(in)	0.007	Vol. Change	(CC)	11.40
Ht. After Cons.	(in)	2.993	Cell Exp.	(CC)	19.80
Initial Area	(sq in)	4.524	Net Change	(CC)	-8.40
Area After Cons.	(sq in)	4.706	Cons. Vol.	(CC)	230.84

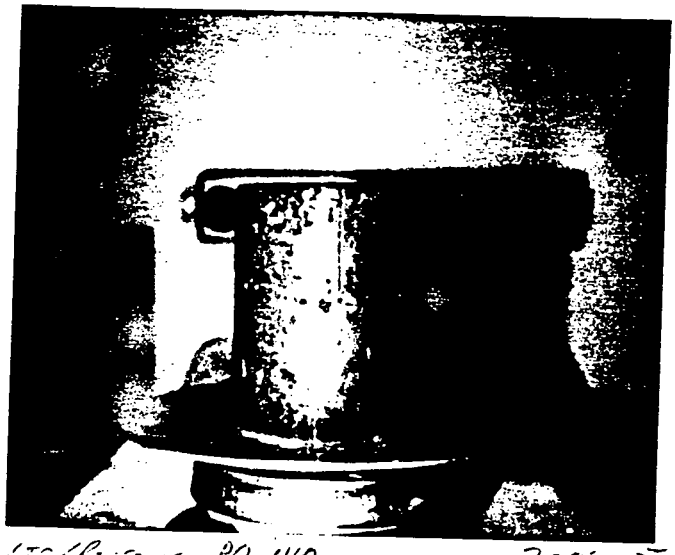
Data entry by: NAA Date: 7-5-95
Checked by: CJ Date: 8-14-95
FileName: SAPO4608

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-1, 1.5-5.0', 404608





SAIC/Parsons PO 140 2054-13I
G2-SB-2 @ 1.5-5.0' Tx/Top [illegible]
40860P 570 PSF
Formal6

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-2	SAMPLED	4-24-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-27-95 CAL
SAMPLE NO.	404603	TEST FINISHED	7-16-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

Note: Remolded to 95% MDD

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	441.4	454.0
Wt. Wet Soil & Pan (g)	449.8	462.4
Wt. Dry Soil & Pan (g)	373.7	373.7
Wt. Lost Moisture (g)	76.0	88.7
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	365.4	365.4
Moisture Content %	20.8	24.3
Wet Density PCF	123.8	128.6
Dry Density PCF	102.5	103.5

Init. Diameter	(in)	2.398	(cm)	6.091
Init. Area	(sq in)	4.516	(sq cm)	29.140
Init. Height	(in)	3.007	(cm)	7.638
Vol. Bef. Consol.	(cu ft)	0.00786		
Vol. After Consol.	(cu ft)	0.00778		
Porosity %		40.21		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1311.0	78660	48.1	13.6	40.8	1.2E-06
1410.0	84600	48.3	25.1	34.6	6.8E-07
1399.0	83940	49.6	30.8	30.8	5.4E-07
1450.0	87000	30.8	18.2	47.6	4.1E-07
1417.0	85020	49.5	35.5	28.4	3.9E-07
1449.0	86940	35.5	24.3	41.9	3.4E-07
1438.0	86280	24.3	15.8	52.4	2.9E-07
1440.0	86400	15.8	8.8	60.7	2.7E-07
1462.0	87720	8.8	2.8	67.7	2.4E-07
1416.0	84960	48.8	38.0	27.4	2.9E-07
1440.0	86400	38.0	28.8	38.1	2.7E-07
1766.0	105960	28.8	19.2	48.2	2.6E-07
1139.0	68340	19.2	13.7	56.2	2.5E-07

Data entry by: NAA Date: 7-17-95
Checked by: CW Date: 8-14-95
FileName: SAP04603 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13I
BORING NO.	G2-SB-2	SAMPLED	4-24-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-27-95 CAL
SAMPLE NO.	404603	TEST FINISHED	7-16-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.8	8.5				
50.0	48.0	7.3		39.0	47.3	8.3	0.83
60.0	58.0	8.6	9.3	48.9	58.0	9.1	0.91
70.0		9.7	9.7	57.6	67.2	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	9.70	0.00
0.25	0.50	10.08	-0.38
0.5	0.71	10.10	-0.40
1	1.00	10.15	-0.45
2	1.41	10.18	-0.48
4	2.00	10.20	-0.50
9	3.00	10.23	-0.53
16	4.00	10.23	-0.53
30	5.48	10.23	-0.53
60	7.75	10.23	-0.53
120	10.95	10.18	-0.48
240	15.49	10.13	-0.43
360	18.97	10.13	-0.43

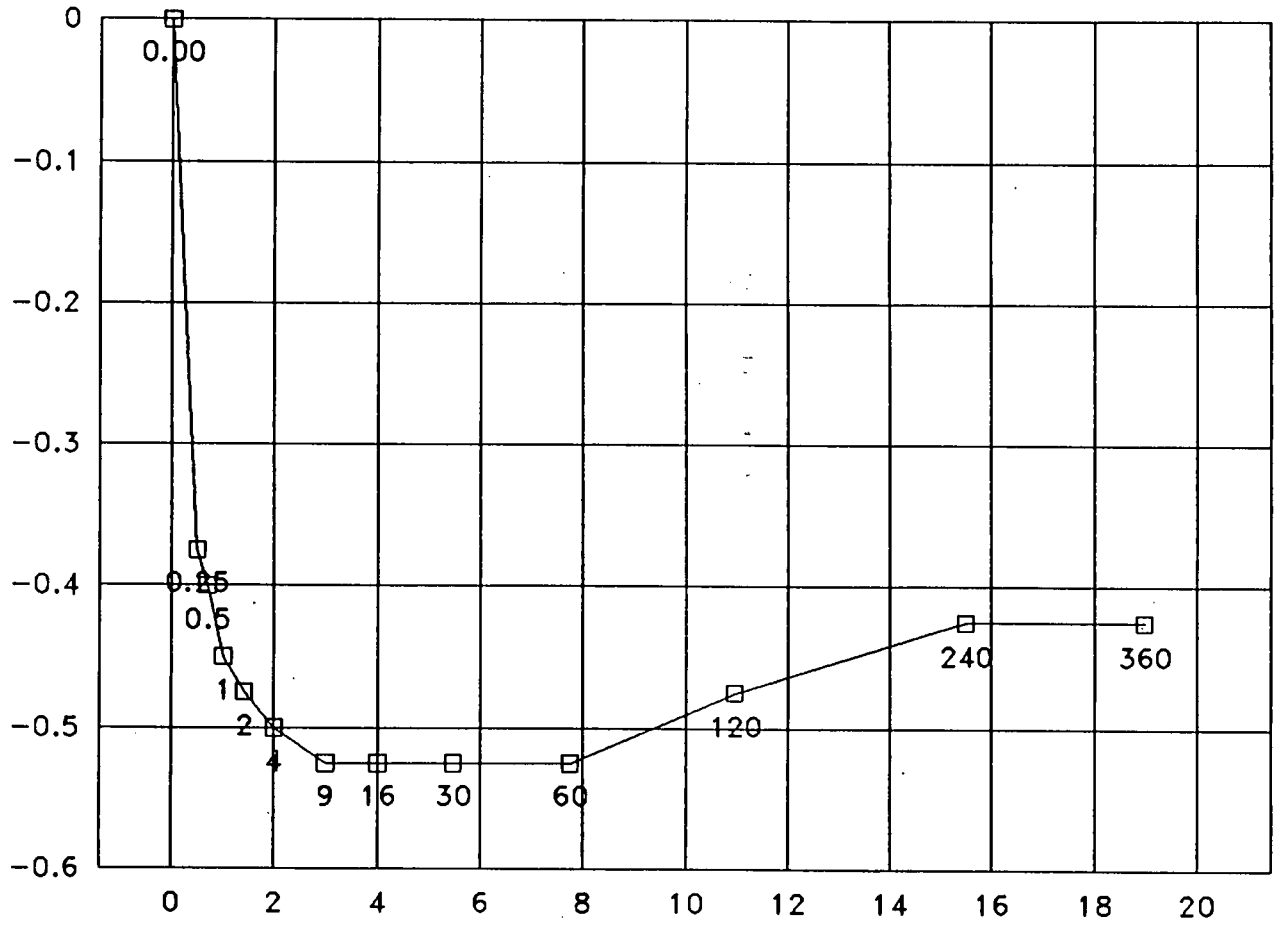
Initial Height	(in)	3.007	Init. Vol.	(CC)	222.59
Height Change	(in)	0.014	Vol. Change	(CC)	9.30
Ht. After Cons.	(in)	2.993	Cell Exp.	(CC)	7.20
Initial Area	(sq in)	4.516	Net Change	(CC)	2.10
Area After Cons.	(sq in)	4.495	Cons. Vol.	(CC)	220.48

Data entry by: NAA Date: 7-17-95
Checked by: CW Date: 8-14-95
FileName: SAP04603

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-2, 1.5-5.0', 404603



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SAIC/Parsons PO 190 2059-12I
62-1B-3 @ 1.5-5.0' Tx/Pbp ~45%
Fernald 576 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-3	SAMPLED	4-12-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-27-95 CAL
SAMPLE NO.	404591	TEST FINISHED	7-16-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

Note: Remolded to 95% MDD

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	437.7	449.9
Wt. Wet Soil & Pan (g)	446.0	458.2
Wt. Dry Soil & Pan (g)	368.7	368.7
Wt. Lost Moisture (g)	77.3	89.4
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	360.5	360.5
Moisture Content %	21.4	24.8
Wet Density PCF	122.7	133.8
Dry Density PCF	101.0	107.2

Init. Diameter	(in)	2.402	(cm)	6.101
Init. Area	(sq in)	4.531	(sq cm)	29.237
Init. Height	(in)	3.000	(cm)	7.620
Vol. Bef. Consol.	(cu ft)	0.00787		
Vol. After Consol.	(cu ft)	0.00742		
Porosity %		42.59		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1274.0	76440	49.6	38.2	23.0	3.5E-07
1448.0	86880	38.2	28.2	34.7	3.0E-07
1443.0	86580	28.2	22.2	43.4	2.0E-07
1450.0	87000	22.2	17.3	49.3	1.7E-07
1428.0	85680	17.3	13.8	53.9	1.3E-07
1446.0	86760	13.8	10.3	57.7	1.4E-07
1439.0	86340	10.3	8.1	60.8	8.6E-08
1440.0	86400	8.1	5.8	63.3	9.4E-08
1463.0	87780	5.8	3.6	65.7	9.2E-08
1416.0	84960	49.2	44.6	19.7	1.2E-07
1440.0	86400	44.6	40.4	24.5	1.1E-07
1765.0	105900	40.4	35.7	29.4	1.1E-07
1139.0	68340	35.7	32.8	33.5	1.1E-07

Data entry by: NAA Date: 7-17-95
Checked by: CJ Date: 8-14-95
FileName: SAP04591 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13I
BORING NO.	G2-SB-3	SAMPLED	4-12-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-27-95 CAL
SAMPLE NO.	404591	TEST FINISHED	7-16-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.3	11.1				
50.0	48.0	18.5	19.3	38.8	47.8	9.0	0.90
60.0	58.0	19.9	20.5	48.8	58.1	9.3	0.93
70.0		20.9	20.9	57.8	67.6	9.8	0.98

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	20.90	0.00
0.25	0.50	21.20	-0.30
0.5	0.71	21.23	-0.33
1	1.00	21.28	-0.38
2	1.41	21.30	-0.40
4	2.00	21.40	-0.50
9	3.00	21.45	-0.55
16	4.00	21.50	-0.60
30	5.48	21.53	-0.63
60	7.75	21.53	-0.63
120	10.95	21.53	-0.63
240	15.49	21.53	-0.63
360	18.97	21.53	-0.63

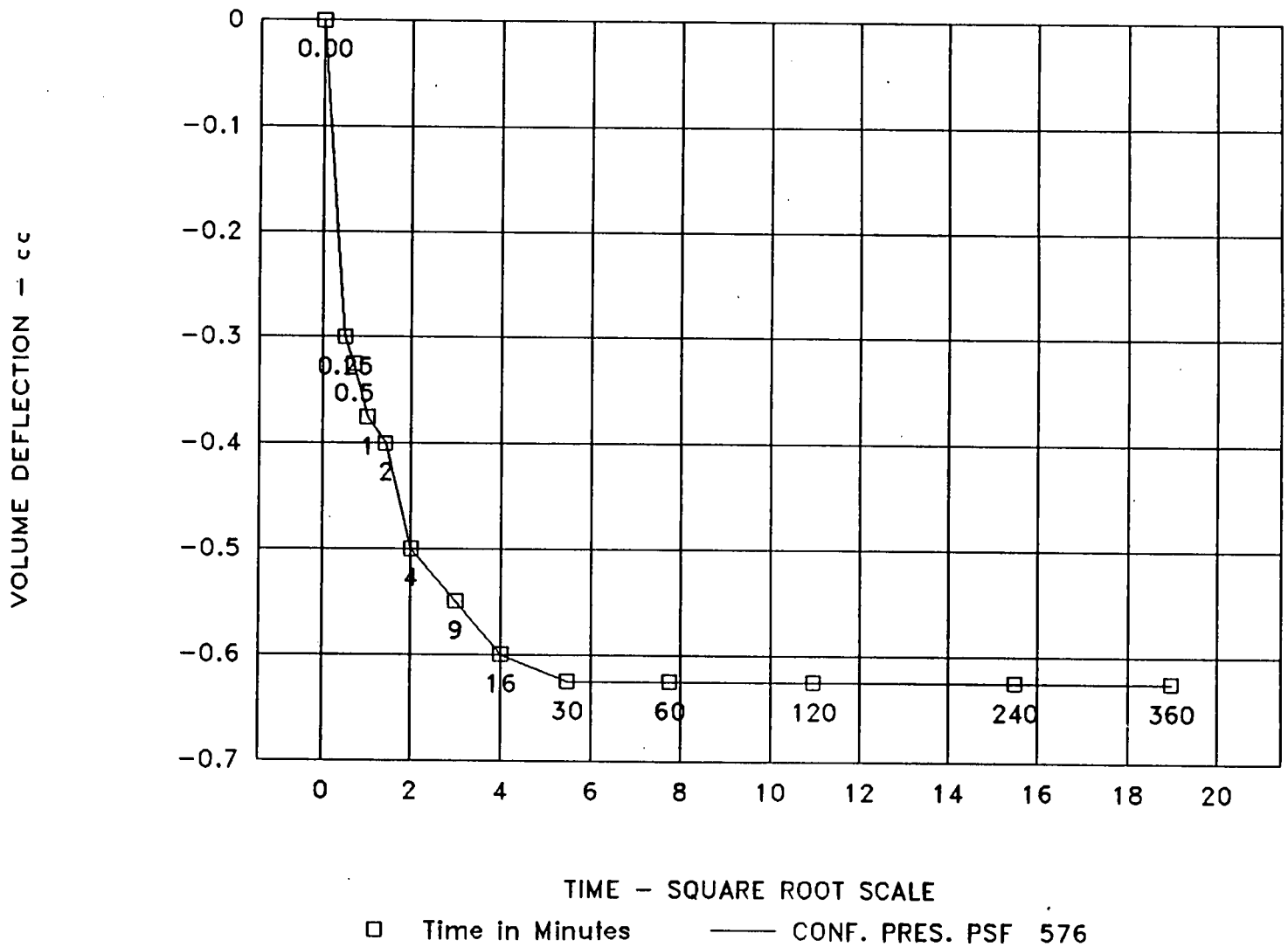
Initial Height	(in)	3.000	Init. Vol.	(CC)	222.81
Height Change	(in)	0.011	Vol. Change	(CC)	20.80
Ht. After Cons.	(in)	2.989	Cell Exp.	(CC)	8.01
Initial Area	(sq in)	4.531	Net Change	(CC)	12.79
Area After Cons.	(sq in)	4.287	Cons. Vol.	(CC)	210.02

Data entry by: NAA Date: 7-17-95
Checked by: CW Date: 8-14-95
FileName: SAP04591

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-3, 1.5-5.0', 404591



1296

001124

474

SAIC/PARSONS PO 140
G2-SB-4 @ 1.5-50'
AS4615 FERNALD

2059-13I
TX/Pbp
576 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO140 JOB NO. 2059-13I

BORING NO.	G2-SB-4	SAMPLED	4-25-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-25-95 DCW
SAMPLE NO.	404615	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	442.5	456.6
Wt. Wet Soil & Pan	(g)	451.0	465.1
Wt. Dry Soil & Pan	(g)	373.8	373.8
Wt. Lost Moisture	(g)	77.2	91.3
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	365.3	365.3
Moisture Content %		21.1	25.0
Wet Density PCF		124.0	129.6
Dry Density PCF		102.4	103.7

Init. Diameter	(in)	2.404	(cm)	6.106
Init. Area	(sq in)	4.539	(sq cm)	29.286
Init. Height	(in)	2.995	(cm)	7.607
Vol. Bef. Consol.	(cu ft)	0.00787		
Vol. After Consol.	(cu ft)	0.00777		
Porosity %		41.50		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
93.0	5580	24.3	15.0	30.3	4.0E-06
240.0	14400	24.4	4.7	37.6	3.5E-06
240.0	14400	24.3	4.3	37.9	3.5E-06
214.0	12840	24.3	7.2	35.9	3.3E-06
205.0	12300	24.3	7.4	35.7	3.4E-06
208.0	12480	24.7	7.5	35.4	3.4E-06

Data entry by: NAA Date: 7-5-95
Checked by: [illegible] Date: 8-19-95
FileName: SAP04615 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO140

JOB NO. 2059-13I

BORING NO.	G2-SB-4	SAMPLED	4-25-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-25-95 DCW
SAMPLE NO.	404615	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.9	12.5				
50.0	48.0	14.1	14.4	37.8	46.8	9.0	0.90
60.0	58.0	16.8	17.8	47.4	56.8	9.4	0.94
70.0		19.2	19.3	56.8	66.4	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	10.20	0.00
0.25	0.50	10.63	-0.43
0.5	0.71	10.70	-0.50
1	1.00	10.80	-0.60
2	1.41	10.88	-0.68
4	2.00	10.90	-0.70
9	3.00	10.95	-0.75
16	4.00	10.98	-0.78
30	5.48	10.90	-0.70
60	7.75	10.93	-0.73
120	10.95	10.95	-0.75
240	15.49	11.03	-0.83
360	18.97	11.03	-0.83

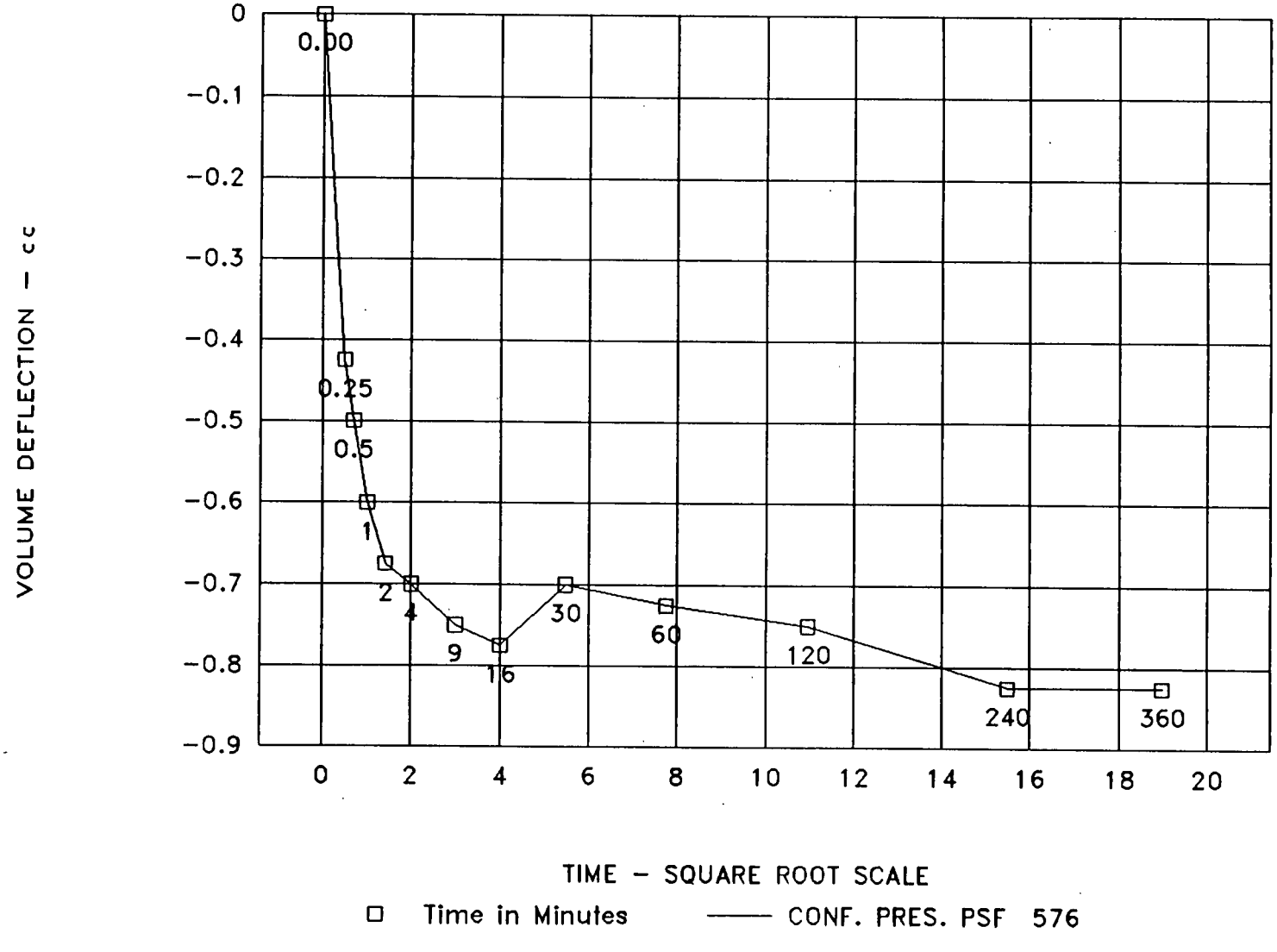
Initial Height	(in)	2.995	Init. Vol.	(CC)	222.81
Height Change	(in)	0.003	Vol. Change	(CC)	22.10
Ht. After Cons.	(in)	2.992	Cell Exp.	(CC)	19.22
Initial Area	(sq in)	4.539	Net Change	(CC)	2.88
Area After Cons.	(sq in)	4.485	Cons. Vol.	(CC)	219.93

Data entry by: NAA Date: 7-5-95
Checked by: CJ Date: 8-14-95
FileName: SAP04615

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-4, 1.5-5.0', 404615



1300

001428

474

SAIC/Parsons PO 140
62-SB-5 @ 1-5-5.01
[illegible]
Ferrold

2059-13I
Twilbp 195%
576 PSI

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-5	SAMPLED	4-26-95 JC, BN
DEPTH	1.5-5.0'	TEST STARTED	6-24-95 DCW
SAMPLE NO.	404627	TEST FINISHED	7-10-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	2N
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

Note: Remolded to 95% MDD

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	442.8	453.5
Wt. Wet Soil & Pan	(g)	451.3	462.0
Wt. Dry Soil & Pan	(g)	371.0	371.0
Wt. Lost Moisture	(g)	80.3	91.0
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	362.6	362.6
Moisture Content %		22.1	25.1
Wet Density PCF		123.6	125.1
Dry Density PCF		101.2	100.0

Init. Diameter	(in)	2.405	(cm)	6.109
Init. Area	(sq in)	4.543	(sq cm)	29.310
Init. Height	(in)	3.004	(cm)	7.630
Vol. Bef. Consol.	(cu ft)	0.00790		
Vol. After Consol.	(cu ft)	0.00799		
Porosity %		40.20		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1351.0	81060	49.9	46.2	8.7	8.8E-08
1444.0	86640	46.2	43.2	12.3	7.0E-08
1438.0	86280	43.2	40.4	15.5	6.5E-08
1436.0	86160	40.4	37.9	18.4	6.1E-08
1451.0	87060	37.9	35.5	21.0	5.9E-08
1448.0	86880	35.5	33.2	23.6	5.9E-08
1414.0	84840	33.2	31.1	26.1	5.5E-08
1462.0	87720	31.1	29.0	28.3	5.3E-08
1439.0	86340	29.0	27.0	30.5	5.4E-08

Data entry by: NAA Date: 7-11-95
Checked by: CJ Date: 8-14-95
FileName: SAP0627 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13I
BORING NO.	G2-SB-5	SAMPLED	4-26-95 JC, BN
DEPTH	1.5-5.0'	TEST STARTED	6-24-95 DCW
SAMPLE NO.	404627	TEST FINISHED	7-10-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	2N
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.0	11.4				
50.0	48.0	7.7	8.8	39.3	48.0	8.7	0.87
60.0	58.0	9.1	9.9	48.2	57.2	9.0	0.90
70.0		9.9	9.9	58.1	67.6	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	9.90	0.00
0.25	0.50	10.10	-0.20
0.5	0.71	10.15	-0.25
1	1.00	10.20	-0.30
2	1.41	10.23	-0.32
4	2.00	10.28	-0.38
9	3.00	10.30	-0.40
16	4.00	10.33	-0.42
30	5.48	10.35	-0.45
60	7.75	10.38	-0.47
120	10.95	10.48	-0.57
240	15.49	10.48	-0.57
360	18.97	10.50	-0.60

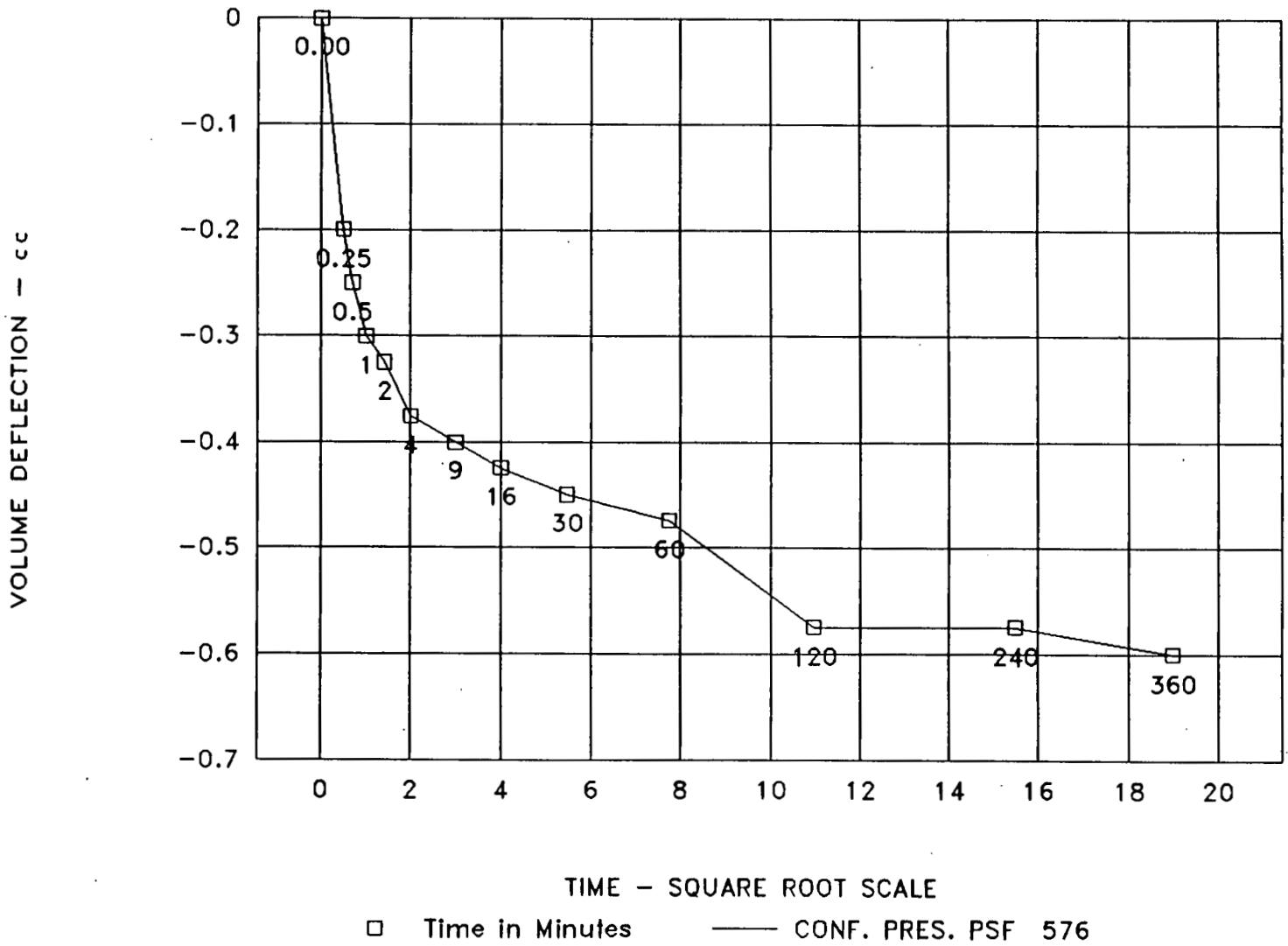
Initial Height	(in)	3.004	Init. Vol.	(CC)	223.67
Height Change	(in)	0.012	Vol. Change	(CC)	10.20
Ht. After Cons.	(in)	2.992	Cell Exp.	(CC)	12.88
Initial Area	(sq in)	4.543	Net Change	(CC)	-2.68
Area After Cons.	(sq in)	4.616	Cons. Vol.	(CC)	226.35

Data entry by: NAA Date: 7-11-95
Checked by: CW Date: 8-19-95
FileName: SAP0627

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-5, 1.5-5.0', 404627



1304

001432

474

SAIC/Parsons PO 140
02-SB-6 @ 1.5-5.0'
404545
Fernald

2059-13I
Tx/Pop r 95%
576 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13I

BORING NO.	G2-SB-6	SAMPLED	4-21-94 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-23-95 DCW
SAMPLE NO.	404595	TEST FINISHED	7-10-95
SOIL DESCR.	Fernald	CELL NUMBER	4P
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

Note: Remolded to 95% MDD

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	437.5	446.6
Wt. Wet Soil & Pan (g)	445.9	455.1
Wt. Dry Soil & Pan (g)	369.3	369.3
Wt. Lost Moisture (g)	76.6	85.8
Wt. of Pan Only (g)	8.5	8.5
Wt. of Dry Soil (g)	360.9	360.9
Moisture Content %	21.2	23.8
Wet Density PCF	122.4	129.6
Dry Density PCF	101.0	104.7

Init. Diameter	(in)	2.402	(cm)	6.101
Init. Area	(sq in)	4.531	(sq cm)	29.237
Init. Height	(in)	3.004	(cm)	7.630
Vol. Bef. Consol.	(cu ft)	0.00788		
Vol. After Consol.	(cu ft)	0.00760		
Porosity %		39.86		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1327.0	79620	49.7	21.7	26.5	8.2E-07
1414.0	84840	49.8	26.3	23.9	6.3E-07
1440.0	86400	26.3	10.0	45.6	5.3E-07
1419.0	85140	49.7	27.9	23.1	5.8E-07
1454.0	87240	27.9	11.0	44.2	5.3E-07
1432.0	85920	49.9	30.0	21.9	5.2E-07
1450.0	87000	30.0	15.6	40.5	4.4E-07
1422.0	85320	49.5	31.1	21.5	4.8E-07
1442.0	86520	31.1	17.3	39.0	4.2E-07
1380.0	82800	49.6	33.5	20.1	4.3E-07

Data entry by: NAA Date: 7-11-95
Checked by: CW Date: 8-14-95
FileName: SAP0595

ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-6	SAMPLED	4-21-94 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-23-95 DCW
SAMPLE NO.	404595	TEST FINISHED	7-10-95
SOIL DESCR.	Fernald	CELL NUMBER	4P
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.7	7.3				
50.0	48.0	10.6	11.2	38.5	46.5	8.0	0.80
60.0	58.0	12.5	13.2	48.8	57.7	8.9	0.89
70.0	68.0	13.3	13.9	58.5	67.7	9.2	0.92
80.0		14.0	14.1	68.6	78.4	9.8	0.98

CONSOLIDATION DATA

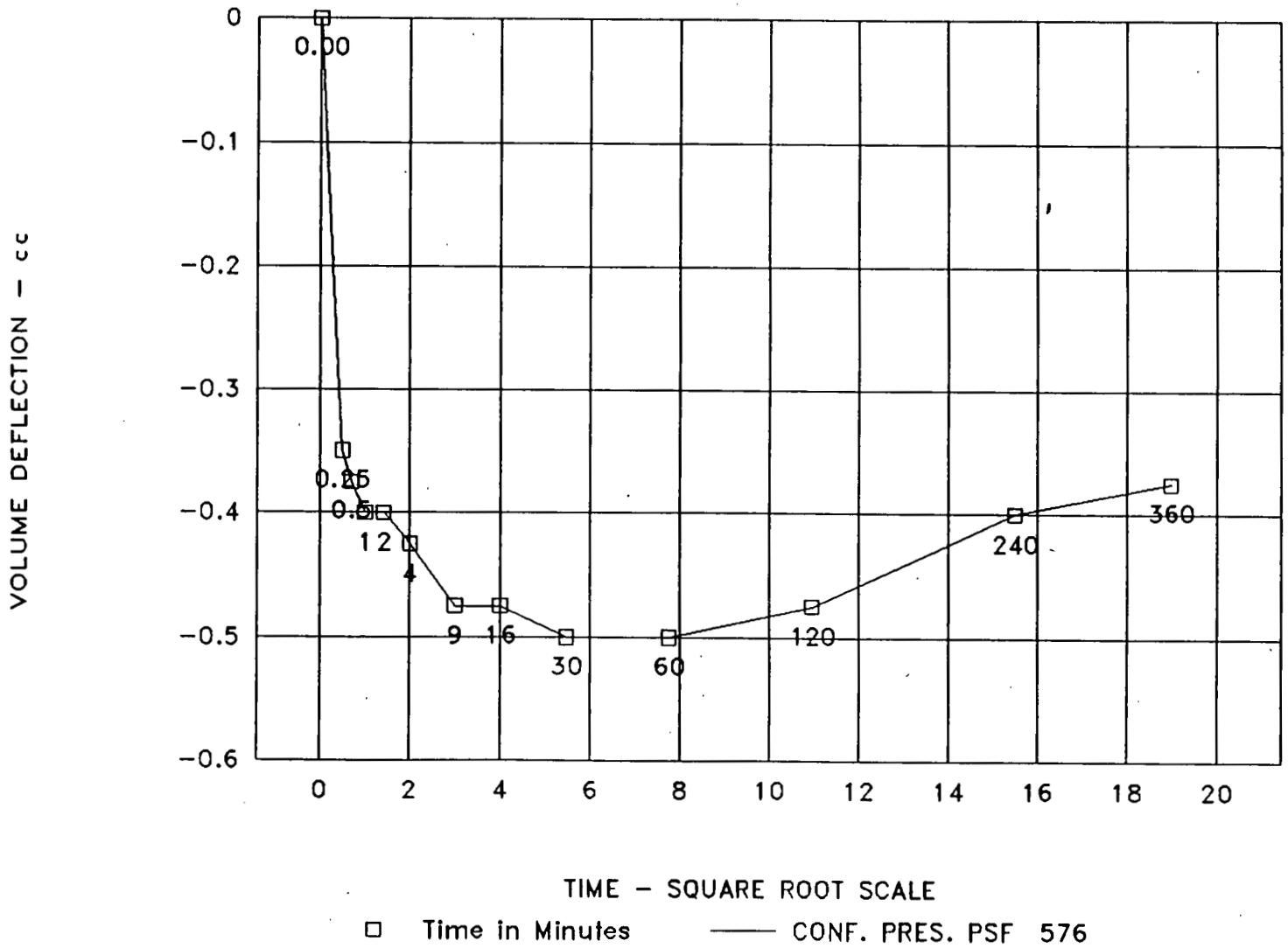
Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	14.10	0.00
0.25	0.50	14.45	-0.35
0.5	0.71	14.48	-0.38
1	1.00	14.50	-0.40
2	1.41	14.50	-0.40
4	2.00	14.53	-0.43
9	3.00	14.58	-0.47
16	4.00	14.58	-0.47
30	5.48	14.60	-0.50
60	7.75	14.60	-0.50
120	10.95	14.58	-0.47
240	15.49	14.50	-0.40
360	18.97	14.48	-0.38

Initial Height	(in)	3.004	Init. Vol.	(CC)	223.11
Height Change	(in)	0.031	Vol. Change	(CC)	15.20
Ht. After Cons.	(in)	2.973	Cell Exp.	(CC)	7.27
Initial Area	(sq in)	4.531	Net Change	(CC)	7.93
Area After Cons.	(sq in)	4.416	Cons. Vol.	(CC)	215.18

Data entry by: NAA Date: 7-11-95
Checked by: [illegible] Date: 8-14-95
FileName: SAP0595 ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-6, 1.5-5.0', 404595



1308

001436

474

SAIC/Fo-Sons PO 1110
67-SU-7 @ 1.5-5.0'
110-1032
Female

2059-13I
Tx/Top 145%
576 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO140 JOB NO. 2059-13I

BORING NO.	G2-SB-7	SAMPLED	4-26-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-23-95 DCW
SAMPLE NO.	404632	TEST FINISHED	7-10-95
SOIL DESCR.	Fernald	CELL NUMBER	1P
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

Note: Remolded to 95% MDD

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	455.8	459.0
Wt. Wet Soil & Pan	(g)	464.2	467.4
Wt. Dry Soil & Pan	(g)	381.1	381.1
Wt. Lost Moisture	(g)	83.1	86.3
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	372.7	372.7
Moisture Content %		22.3	23.2
Wet Density PCF		127.7	129.4
Dry Density PCF		104.4	105.1

Init. Diameter	(in)	2.400	(cm)	6.096
Init. Area	(sq in)	4.524	(sq cm)	29.188
Init. Height	(in)	3.007	(cm)	7.638
Vol. Bef. Consol.	(cu ft)	0.00787		
Vol. After Consol.	(cu ft)	0.00782		
Porosity %		38.98		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1385.0	83100	49.6	49.1	11.6	1.3E-08
1441.0	86460	49.1	48.4	12.3	1.5E-08
1437.0	86220	48.4	47.8	13.0	1.4E-08
1459.0	87540	47.8	47.3	13.6	1.2E-08
1432.0	85920	47.3	46.7	14.2	1.6E-08
1449.0	86940	46.7	46.1	14.9	1.3E-08
1437.0	86220	46.1	45.5	15.5	1.4E-08
1438.0	86280	45.5	45.0	16.1	1.2E-08
1440.0	86400	45.0	44.5	16.6	1.3E-08
1437.0	86220	44.5	44.0	17.2	1.2E-08

Data entry by: NAA Date: 7-11-95
Checked by: CD Date: 8-14-95
FileName: SAP0632 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO140

JOB NO. 2059-13I

BORING NO.	G2-SB-7	SAMPLED	4-26-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-23-95 DCW
SAMPLE NO.	404632	TEST FINISHED	7-10-95
SOIL DESCR.	Fernald	CELL NUMBER	1P
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.7	9.4				
50.0	48.0	8.3	9.5	38.6	45.8	7.2	0.72
60.0	58.0	9.4	10.7	48.7	56.6	7.9	0.79
70.0	68.0	10.6	11.7	58.5	67.3	8.8	0.88
80.0	78.0	11.9	13.0	68.7	77.9	9.2	0.92
90.0		13.1	13.2	78.6	88.3	9.7	0.97

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	13.20	0.00
0.25	0.50	13.48	-0.28
0.5	0.71	13.50	-0.30
1	1.00	13.50	-0.30
2	1.41	13.50	-0.30
4	2.00	13.50	-0.30
9	3.00	13.53	-0.33
16	4.00	13.55	-0.35
30	5.48	13.58	-0.38
60	7.75	13.60	-0.40
120	10.95	13.68	-0.48
240	15.49	13.80	-0.60
360	18.97	13.80	-0.60

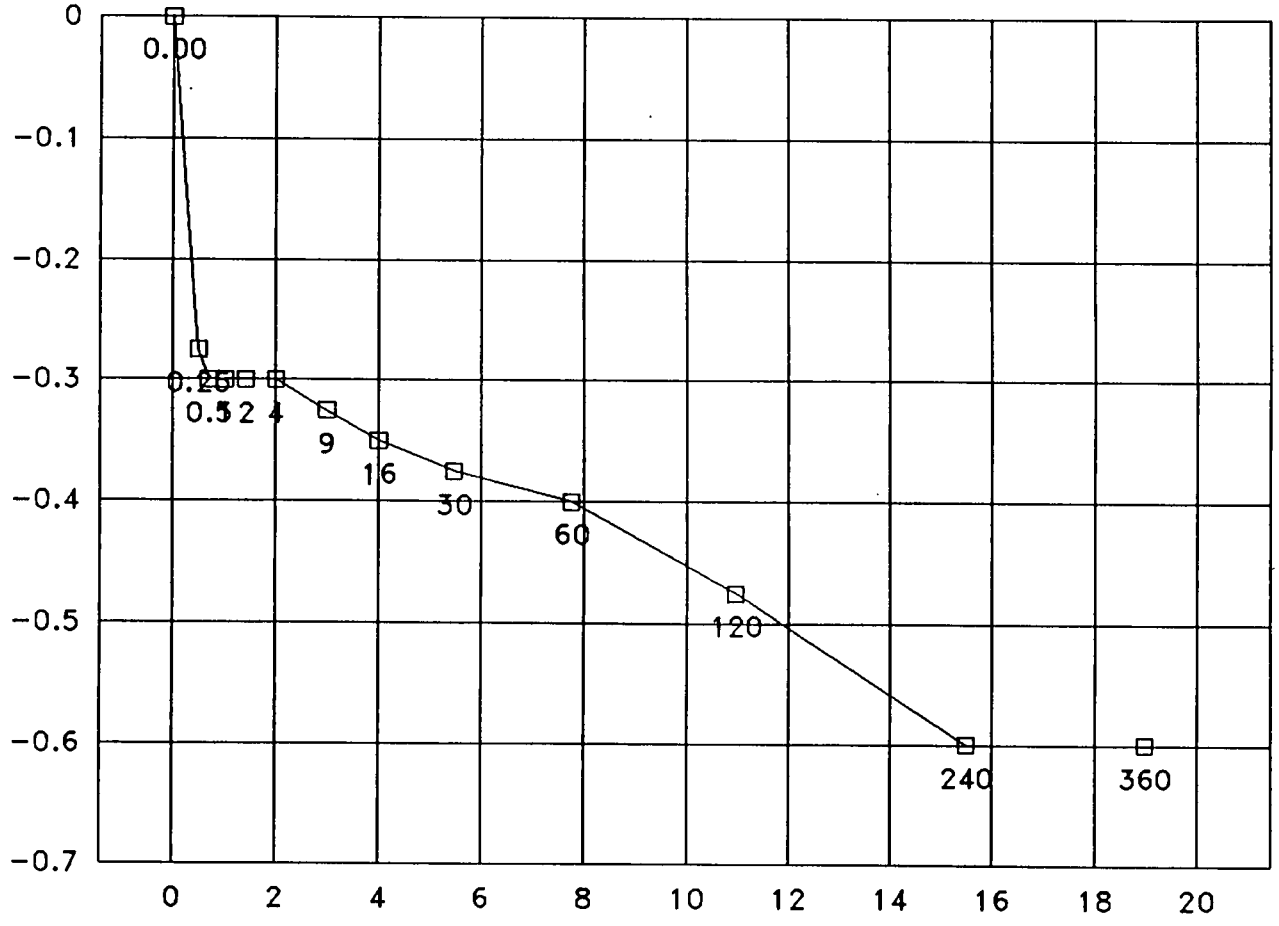
Initial Height	(in)	3.007	Init. Vol.	(CC)	222.96
Height Change	(in)	0.018	Vol. Change	(CC)	14.50
Ht. After Cons.	(in)	2.989	Cell Exp.	(CC)	12.96
Initial Area	(sq in)	4.524	Net Change	(CC)	1.54
Area After Cons.	(sq in)	4.520	Cons. Vol.	(CC)	221.42

Data entry by: NAA Date: 7-11-95
Checked by: CS Date: 8-14-95
FileName: SAP0632

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-7, 1.5-5.0', 404632



□ Time in Minutes —— CONF. PRES. PSF 576

1312

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474

SAIC/Parsons PO 140 7059-12I
62-SB-2 @ 1.5-3.0' Ty/PbP
Homes Parcel 576 psf

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-8	SAMPLED	4-25-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404621	TEST FINISHED	6-28-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	452.0	458.7
Wt. Wet Soil & Pan (g)	460.3	466.9
Wt. Dry Soil & Pan (g)	380.9	380.9
Wt. Lost Moisture (g)	79.4	86.0
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	372.7	372.7
Moisture Content %	21.3	23.1
Wet Density PCF	126.6	127.5
Dry Density PCF	104.4	103.6

Init. Diameter	(in)	2.401	(cm)	6.099
Init. Area	(sq in)	4.528	(sq cm)	29.212
Init. Height	(in)	3.003	(cm)	7.628
Vol. Bef. Consol.	(cu ft)	0.00787		
Vol. After Consol.	(cu ft)	0.00793		
Porosity %		38.29		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1039.0	62340	49.3	48.1	12.3	3.8E-08
1440.0	86400	48.1	46.8	13.7	3.0E-08
1440.0	86400	46.8	45.6	15.1	2.9E-08
1390.0	83400	45.6	44.4	16.4	2.8E-08
1440.0	86400	44.4	43.3	17.6	2.6E-08
1434.0	86040	43.3	42.2	18.8	2.6E-08

Data entry by: NAA Date: 6-30-95
Checked by: CW Date: 8-14-95
FileName: SAP04621 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-8	SAMPLED	4-25-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404621	TEST FINISHED	6-28-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.6	11.0				
50.0	48.0	8.1	9.0	37.5	46.4	8.9	0.89
60.0	58.0	8.4	9.1	48.6	58.0	9.4	0.94
70.0		9.2	9.2	58.4	68.1	9.7	0.97

CONSOLIDATION DATA

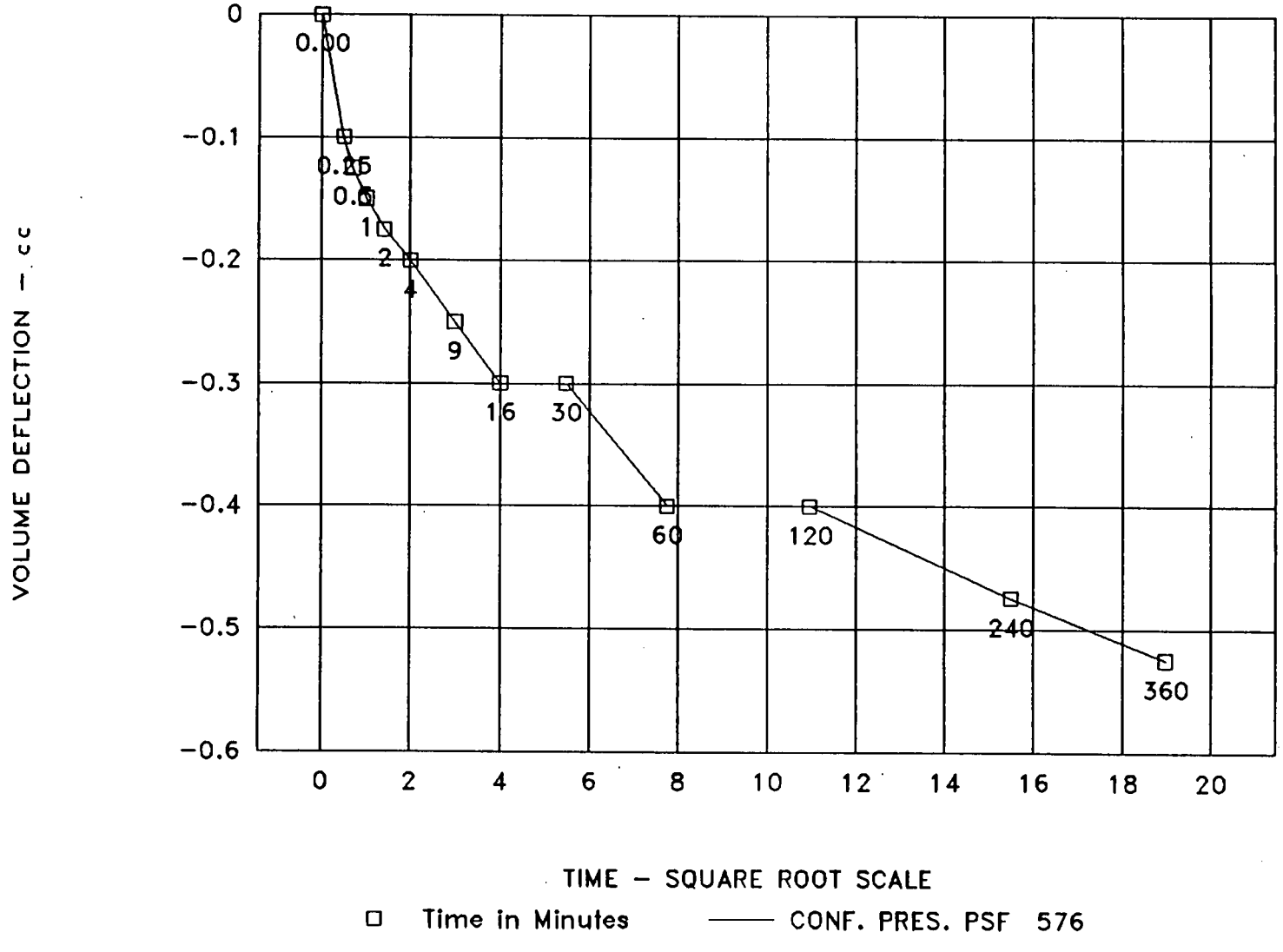
Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	9.20	0.00
0.25	0.50	9.30	-0.10
0.5	0.71	9.33	-0.13
1	1.00	9.35	-0.15
2	1.41	9.38	-0.18
4	2.00	9.40	-0.20
9	3.00	9.45	-0.25
16	4.00	9.50	-0.30
30	5.48	9.50	-0.30
60	7.75	9.60	-0.40
120	10.95	9.60	-0.40
240	15.49	9.68	-0.48
360	18.97	9.73	-0.53

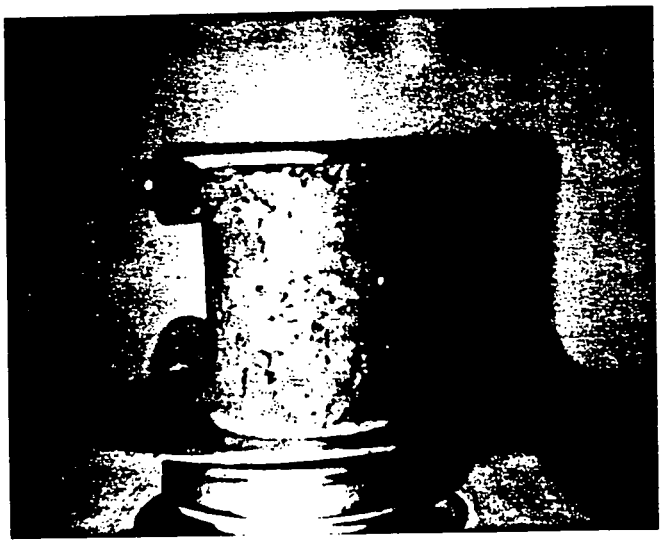
Initial Height	(in)	3.003	Init. Vol.	(CC)	222.85
Height Change	(in)	0.038	Vol. Change	(CC)	8.60
Ht. After Cons.	(in)	2.965	Cell Exp.	(CC)	10.35
Initial Area	(sq in)	4.528	Net Change	(CC)	-1.75
Area After Cons.	(sq in)	4.622	Cons. Vol.	(CC)	224.60

Data entry by: NAA Date: 6-30-95
Checked by: CJ Date: 8-14-95
FileName: SAP04621 ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-8, 1.5-5.0', 404621





PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13C

BORING NO.	G2-SB-9	SAMPLED	4-20-95 JWL,WAN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404587	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	2P
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	447.7	453.6
Wt. Wet Soil & Pan (g)	456.0	461.9
Wt. Dry Soil & Pan (g)	371.6	371.6
Wt. Lost Moisture (g)	84.4	90.3
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	363.3	363.3
Moisture Content %	23.2	24.8
Wet Density PCF	124.7	130.3
Dry Density PCF	101.2	104.3

Init. Diameter	(in)	2.400	(cm)	6.096
Init. Area	(sq in)	4.524	(sq cm)	29.188
Init. Height	(in)	3.024	(cm)	7.681
Vol. Bef. Consol.	(cu ft)	0.00792		
Vol. After Consol.	(cu ft)	0.00768		
Porosity %		41.52		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1063.0	63780	49.7	49.0	11.6	2.5E-08
1434.0	86040	49.0	48.0	12.6	2.3E-08
1390.0	83400	48.0	47.1	13.6	2.3E-08
1440.0	86400	47.1	46.1	14.6	2.5E-08

Data entry by: NAA Date: 6-28-95
Checked by: CJ Date: 8-14-95
FileName: SAP04587 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13C

BORING NO.	G2-SB-9	SAMPLED	4-20-95 JWL,WAN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404587	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	2P
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.1	13.8				
50.0	48.0	14.4	16.0	38.9	47.7	8.8	0.88
60.0	58.0	16.6	17.8	48.8	58.1	9.3	0.93
70.0		18.1	19.3	58.9	68.3	9.4	0.94
80.0		19.7	19.7	68.5	78.0	9.5	0.95

CONSOLIDATION DATA

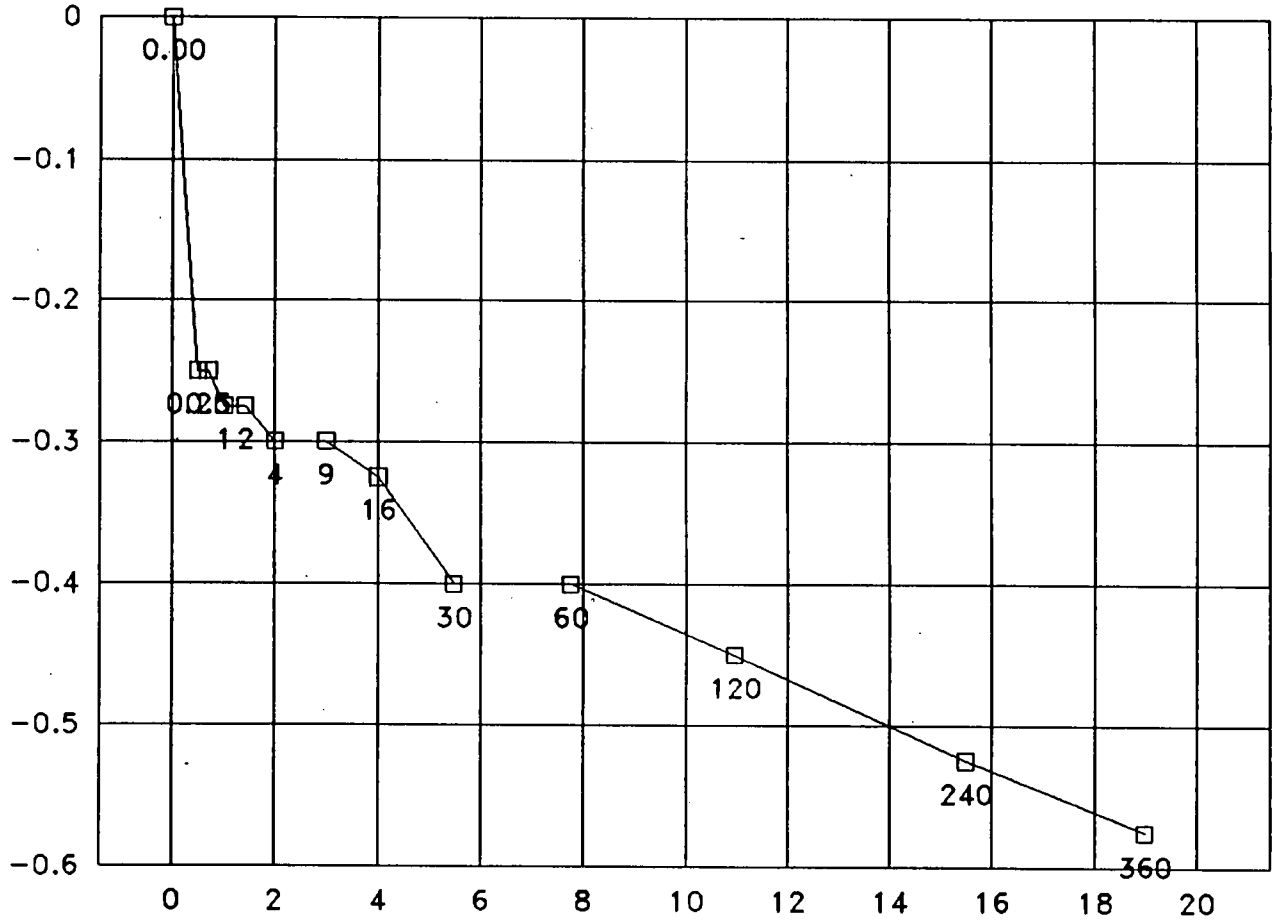
Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	19.80	0.00
0.25	0.50	20.05	-0.25
0.5	0.71	20.05	-0.25
1	1.00	20.08	-0.27
2	1.41	20.08	-0.27
4	2.00	20.10	-0.30
9	3.00	20.10	-0.30
16	4.00	20.13	-0.32
30	5.48	20.20	-0.40
60	7.75	20.20	-0.40
120	10.95	20.25	-0.45
240	15.49	20.33	-0.52
360	18.97	20.38	-0.57

Initial Height	(in)	3.024	Init. Vol.	(CC)	224.22
Height Change	(in)	0.005	Vol. Change	(CC)	20.00
Ht. After Cons.	(in)	3.019	Cell Exp.	(CC)	13.20
Initial Area	(sq in)	4.524	Net Change	(CC)	6.80
Area After Cons.	(sq in)	4.394	Cons. Vol.	(CC)	217.41

Data entry by: NAA Date: 6-28-95
Checked by: CJ Date: 8-14-95
FileName: SAP04587 ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-9, 1.5-5.0', 404587



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SAIC/PARSONS PO 140, 2059-13I
G2-SB-10 @ 1.5-5.0' TX/Pbp
404637 FERNALD 576 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-10	SAMPLED	4-26-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404637	TEST FINISHED	7-4-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	12S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	452.1	467.2
Wt. Wet Soil & Pan	(g)	460.4	475.5
Wt. Dry Soil & Pan	(g)	385.3	385.3
Wt. Lost Moisture	(g)	75.1	90.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	377.0	377.0
Moisture Content %		19.9	23.9
Wet Density PCF		126.8	129.6
Dry Density PCF		105.7	104.6

Init. Diameter	(in)	2.401	(cm)	6.099
Init. Area	(sq in)	4.528	(sq cm)	29.212
Init. Height	(in)	3.000	(cm)	7.620
Vol. Bef. Consol.	(cu ft)	0.00786		
Vol. After Consol.	(cu ft)	0.00795		
Porosity %		40.06		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1069.0	64140	49.2	45.9	29.9	1.2E-07
1440.0	86400	45.9	42.6	33.5	9.2E-08
1390.0	83400	42.6	39.7	36.9	8.6E-08
1443.0	86580	39.7	37.0	39.9	8.0E-08
1432.0	85920	37.0	34.6	42.7	7.3E-08
1441.0	86460	34.6	32.4	45.2	6.9E-08
1441.0	86460	32.4	30.2	47.6	7.0E-08
1443.0	86580	30.2	28.4	49.8	5.9E-08
1440.0	86400	28.4	26.8	51.7	5.4E-08
1457.0	87420	26.8	25.2	53.4	5.4E-08
1430.0	85800	25.2	23.7	55.1	5.3E-08

Data entry by: NAA Date: 7-5-95
Checked by:_____ Date:_____
FileName: SAP04637 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13I

BORING NO.	G2-SB-10	SAMPLED	4-26-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404637	TEST FINISHED	7-4-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	12S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.9	13.4				
50.0	48.0	9.3	11.1	38.8	46.9	8.1	0.81
60.0	58.0	10.5	12.1	48.9	57.8	8.9	0.89
70.0		12.1	13.8	58.7	67.9	9.2	0.92
80.0		14.1	14.1	68.6	78.1	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	14.10	0.00
0.25	0.50	14.55	-0.45
0.5	0.71	14.60	-0.50
1	1.00	14.63	-0.53
2	1.41	14.68	-0.58
4	2.00	14.70	-0.60
9	3.00	14.73	-0.63
16	4.00	14.78	-0.68
30	5.48	14.80	-0.70
60	7.75	14.80	-0.70
120	10.95	14.83	-0.72
240	15.49	14.80	-0.70
360	18.97	14.80	-0.70

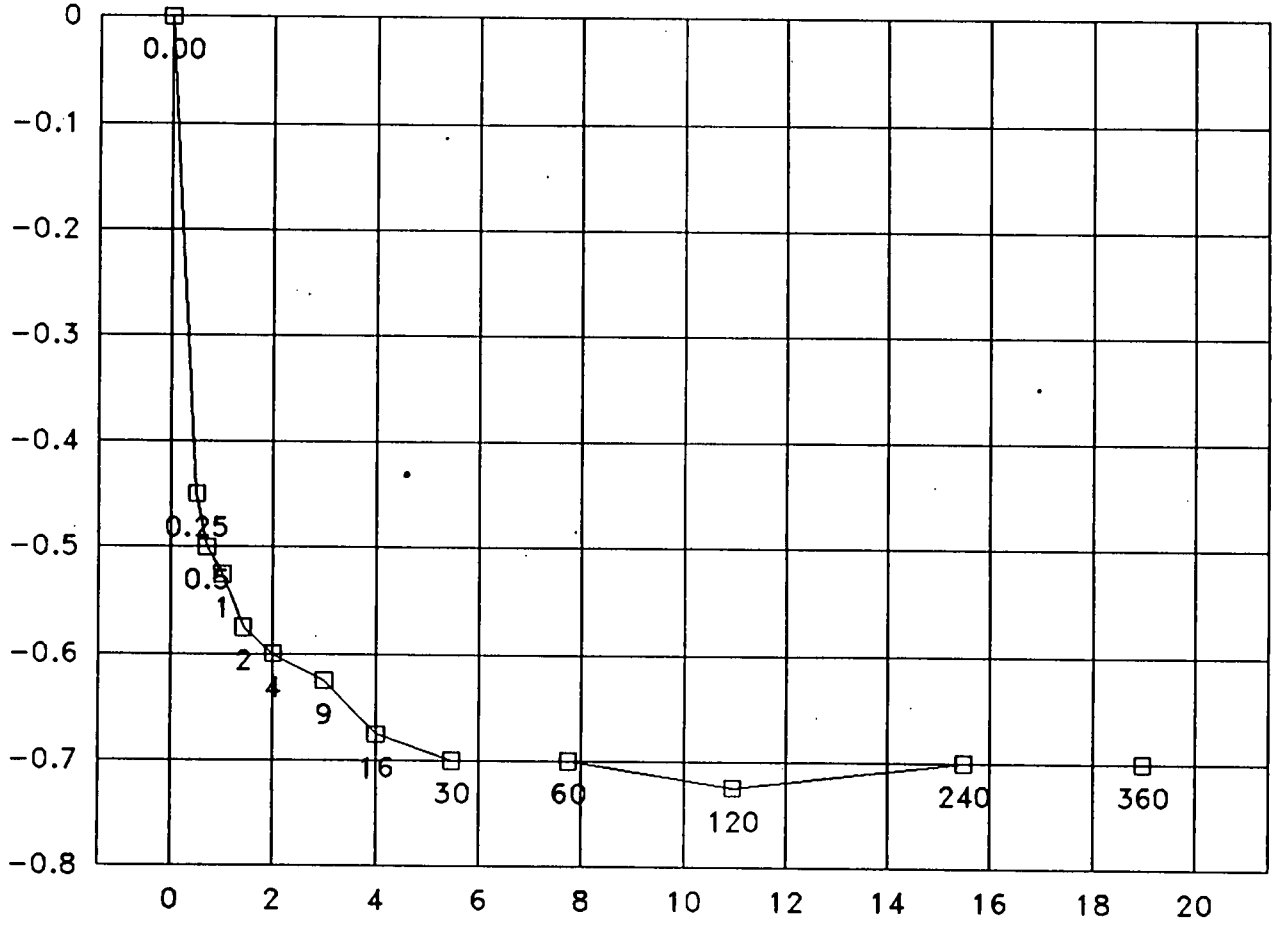
Initial Height	(in)	3.000	Init. Vol.	(CC)	222.63
Height Change	(in)	0.003	Vol. Change	(CC)	14.50
Ht. After Cons.	(in)	2.997	Cell Exp.	(CC)	16.93
Initial Area	(sq in)	4.528	Net Change	(CC)	-2.43
Area After Cons.	(sq in)	4.582	Cons. Vol.	(CC)	225.06

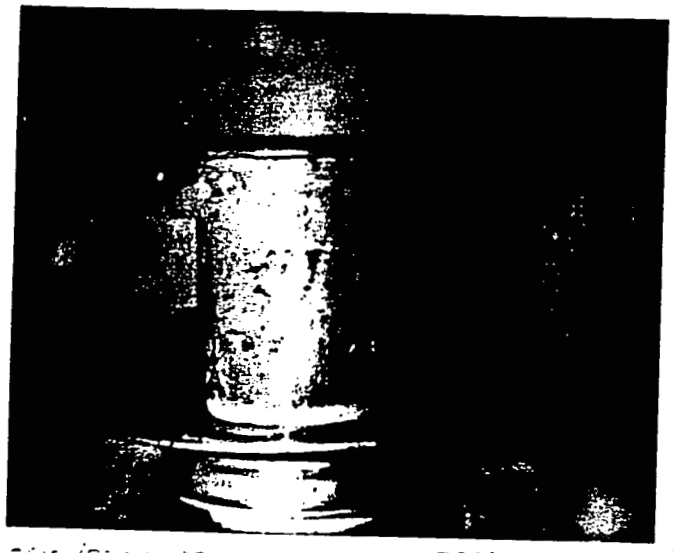
Data entry by: NAA Date: 7-5-95
Checked by:_____ Date:_____
FileName: SAP04637

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-10, 1.5-5.0', 404637





2059-13

5/6 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-11	SAMPLED	4-27-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404642	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	10S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	477.2	479.0
Wt. Wet Soil & Pan	(g)	485.6	487.4
Wt. Dry Soil & Pan	(g)	412.6	412.6
Wt. Lost Moisture	(g)	73.0	74.8
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	404.2	404.2
Moisture Content %		18.1	18.5
Wet Density PCF		132.9	137.6
Dry Density PCF		112.6	116.1

Init. Diameter	(in)	2.400	(cm)	6.096
Init. Area	(sq in)	4.524	(sq cm)	29.188
Init. Height	(in)	3.023	(cm)	7.678
Vol. Bef. Consol.	(cu ft)	0.00791		
Vol. After Consol.	(cu ft)	0.00767		
Porosity %		34.42		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1057.0	63420	49.2	47.7	28.9	5.6E-08
1440.0	86400	47.7	46.0	30.7	4.7E-08
1440.0	86400	46.0	44.4	32.5	4.5E-08
1390.0	83400	44.4	42.8	34.2	4.8E-08
1444.0	86640	42.8	41.2	36.0	4.7E-08

Data entry by: NAA Date: 6-28-95
Checked by: CW Date: 8-14-95
FileName: SAP04642 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-11	SAMPLED	4-27-95 JC,BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404642	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	10S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	2.0	16.2				
50.0	48.0	17.5	19.5	38.9	47.7	8.8	0.88
60.0	58.0	20.3	22.0	48.8	58.2	9.4	0.94
70.0		22.5	22.5	58.6	68.1	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	22.60	0.00
0.25	0.50	22.93	-0.32
0.5	0.71	22.95	-0.35
1	1.00	22.98	-0.38
2	1.41	23.00	-0.40
4	2.00	23.00	-0.40
9	3.00	23.08	-0.47
16	4.00	23.10	-0.50
30	5.48	23.13	-0.52
60	7.75	23.15	-0.55
120	10.95	23.18	-0.57
240	15.49	23.18	-0.57
360	18.97	23.23	-0.63

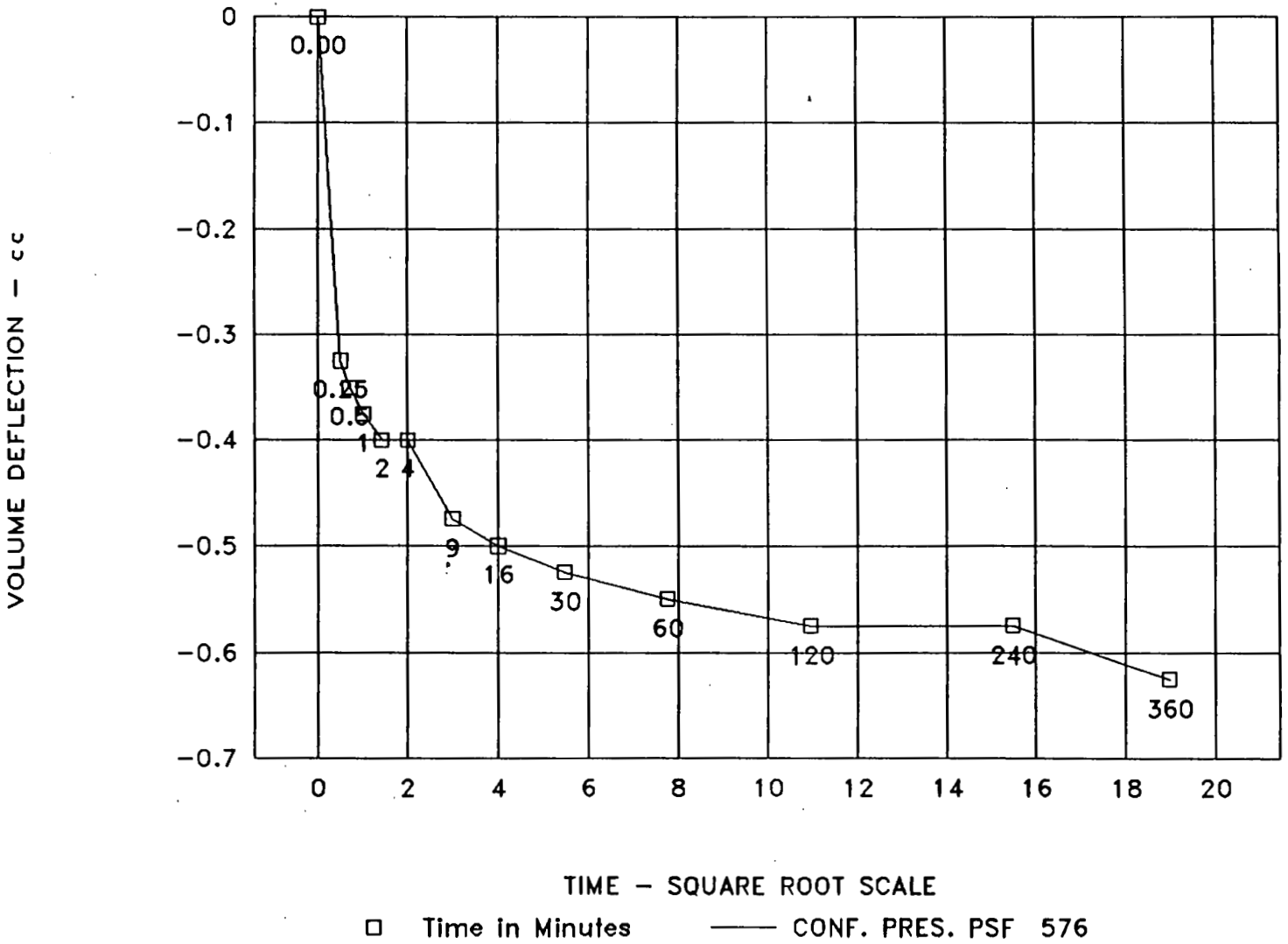
Initial Height	(in)	3.023	Init. Vol.	(CC)	224.15
Height Change	(in)	0.040	Vol. Change	(CC)	22.60
Ht. After Cons.	(in)	2.983	Cell Exp.	(CC)	15.77
Initial Area	(sq in)	4.524	Net Change	(CC)	6.83
Area After Cons.	(sq in)	4.445	Cons. Vol.	(CC)	217.31

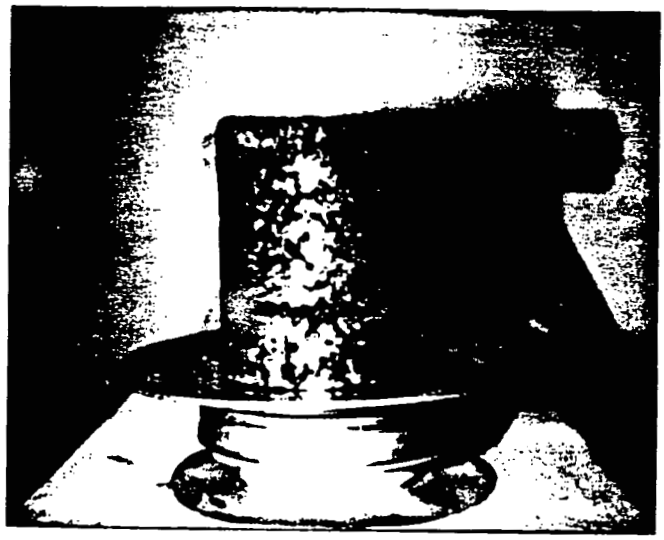
Data entry by: NAA . Date: 6-28-95
Checked by: CW Date: 8-14-95
FileName: SAP04642

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-11, 1.5-5.0', 404642





SAIC/PARSONS PO 140 2059-13I
G2-SB-12 @ 1.5-~~3.0'~~ 4.2 DMO TX/Pbp
404599 FERNALD 8/18/95 576 PSF

PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13I

BORING NO.	G2-SB-12	SAMPLED	4-21-95 JC,BN
DEPTH	1.5-4.2'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404599	TEST FINISHED	7-4-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	11S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	439.6	455.1
Wt. Wet Soil & Pan	(g)	447.9	463.3
Wt. Dry Soil & Pan	(g)	369.1	369.1
Wt. Lost Moisture	(g)	78.8	94.3
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	360.8	360.8
Moisture Content %		21.8	26.1
Wet Density PCF		123.5	126.5
Dry Density PCF		101.4	100.3

Init. Diameter	(in)	2.399	(cm)	6.093
Init. Area	(sq in)	4.520	(sq cm)	29.164
Init. Height	(in)	3.000	(cm)	7.620
Vol. Bef. Consol.	(cu ft)	0.00785		
Vol. After Consol.	(cu ft)	0.00793		
Porosity %		41.95		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1052.0	63120	48.8	45.5	30.4	1.2E-07
1440.0	86400	45.5	42.7	33.7	8.0E-08
1440.0	86400	42.7	40.3	36.5	6.7E-08
1390.0	83400	40.3	38.2	39.0	6.4E-08
1444.0	86640	38.2	36.2	41.2	6.0E-08
1432.0	85920	36.2	34.3	43.3	5.9E-08
1440.0	86400	34.3	32.5	45.3	5.6E-08
1443.0	86580	32.5	30.9	47.2	5.3E-08
1442.0	86520	30.9	29.3	49.0	5.0E-08
1440.0	86400	29.3	27.9	50.6	4.6E-08
1458.0	87480	27.9	26.5	52.1	4.7E-08
1439.0	86340	26.5	25.1	53.6	4.8E-08

Data entry by: NAA Date: 7-5-95
Checked by: CJ Date: 8-14-95
FileName: SAP04599 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13I

BORING NO.	G2-SB-12	SAMPLED	4-21-95 JC,BN
DEPTH	1.5-4.2'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404599	TEST FINISHED	7-4-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	11S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	0.7	10.9				
50.0	48.0	7.9	9.7	38.7	47.0	8.3	0.83
60.0		9.5	9.5	48.7	57.5	8.8	0.88

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	9.50	0.00
0.25	0.50	9.98	-0.47
0.5	0.71	10.00	-0.50
1	1.00	10.08	-0.57
2	1.41	10.10	-0.60
4	2.00	10.18	-0.68
9	3.00	10.20	-0.70
16	4.00	10.20	-0.70
30	5.48	10.20	-0.70
60	7.75	10.23	-0.72
120	10.95	10.15	-0.65
240	15.49	10.15	-0.65
360	18.97	10.23	-0.72

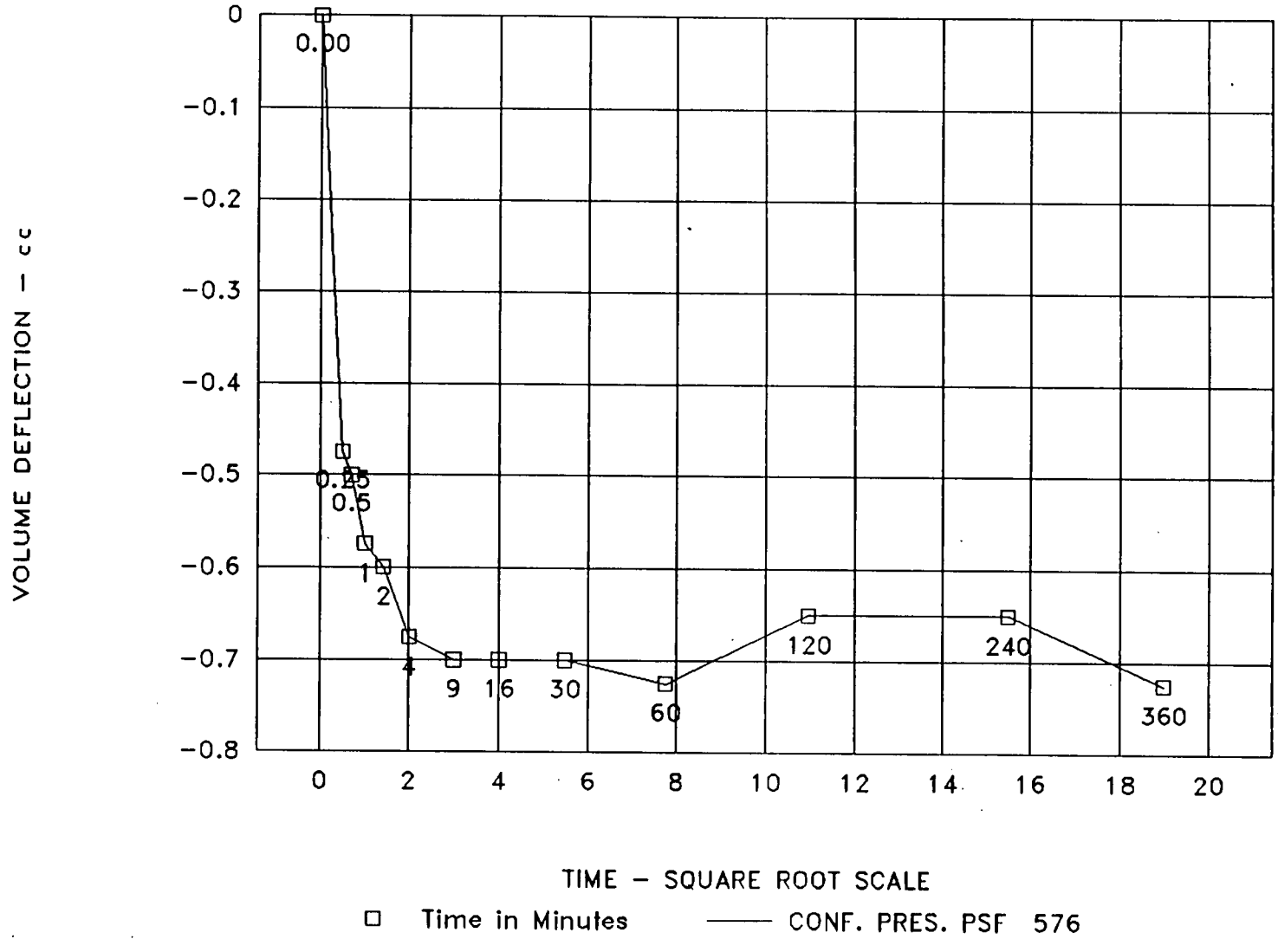
Initial Height	(in)	3.000	Init. Vol.	(CC)	222.25
Height Change	(in)	0.002	Vol. Change	(CC)	11.35
Ht. After Cons.	(in)	2.998	Cell Exp.	(CC)	13.76
Initial Area	(sq in)	4.520	Net Change	(CC)	-2.41
Area After Cons.	(sq in)	4.572	Cons. Vol.	(CC)	224.67

Data entry by: NAA Date: 7-5-95
Checked by: CJ Date: 8-14-95
FileName: SAP04599

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-12, 1.5-4.2' , 404599



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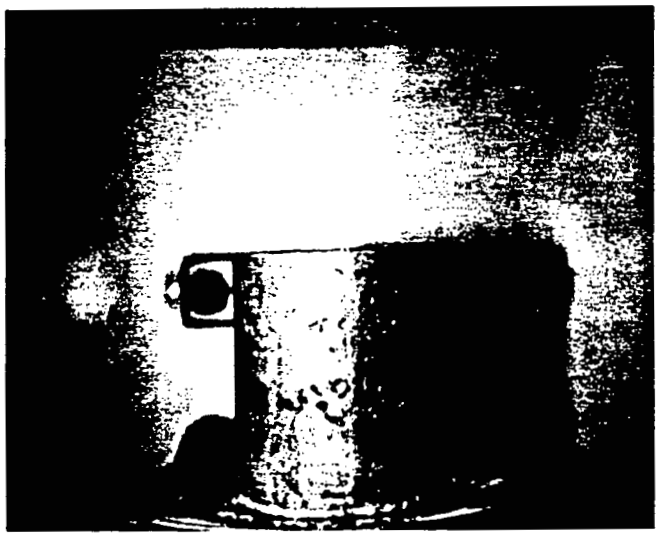


PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13C

BORING NO.	G2-SB-13	SAMPLED	4-20-95 JWL, WAN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404583	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	546		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	459.3	466.3
Wt. Wet Soil & Pan	(g)	467.5	474.5
Wt. Dry Soil & Pan	(g)	390.0	390.0
Wt. Lost Moisture	(g)	77.6	84.6
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	381.7	381.7
Moisture Content %		20.3	22.2
Wet Density PCF		128.3	133.1
Dry Density PCF		106.7	109.0

Init. Diameter	(in)	2.398	(cm)	6.091
Init. Area	(sq in)	4.516	(sq cm)	29.140
Init. Height	(in)	3.019	(cm)	7.668
Vol. Bef. Consol.	(cu ft)	0.00789		
Vol. After Consol.	(cu ft)	0.00772		
Porosity %		38.67		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1034.0	62040	49.5	48.7	17.3	2.8E-08
1440.0	86400	48.7	47.8	18.3	2.3E-08
1440.0	86400	47.8	46.8	19.3	2.5E-08
1320.0	79200	46.8	45.9	20.3	2.5E-08

Data entry by: NAA Date: 6-26-95
Checked by: W Date: 8-14-95
FileName: SAP0583 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13C

BORING NO.	G2-SB-13	SAMPLED	4-20-95 JWL, WAN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404583	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	546		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.8	12.1				
50.0	48.0	11.8	12.7	37.8	47.0	9.2	0.92
60.0		12.6	12.6	48.6	58.1	9.5	0.95

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	12.70	0.00
0.25	0.50	12.88	-0.18
0.5	0.71	12.88	-0.18
1	1.00	12.90	-0.20
2	1.41	12.90	-0.20
4	2.00	12.93	-0.23
9	3.00	12.95	-0.25
16	4.00	12.98	-0.28
30	5.48	12.98	-0.28
60	7.75	13.00	-0.30
120	10.95	13.03	-0.33
240	15.49	13.18	-0.48
360	18.97	13.28	-0.58

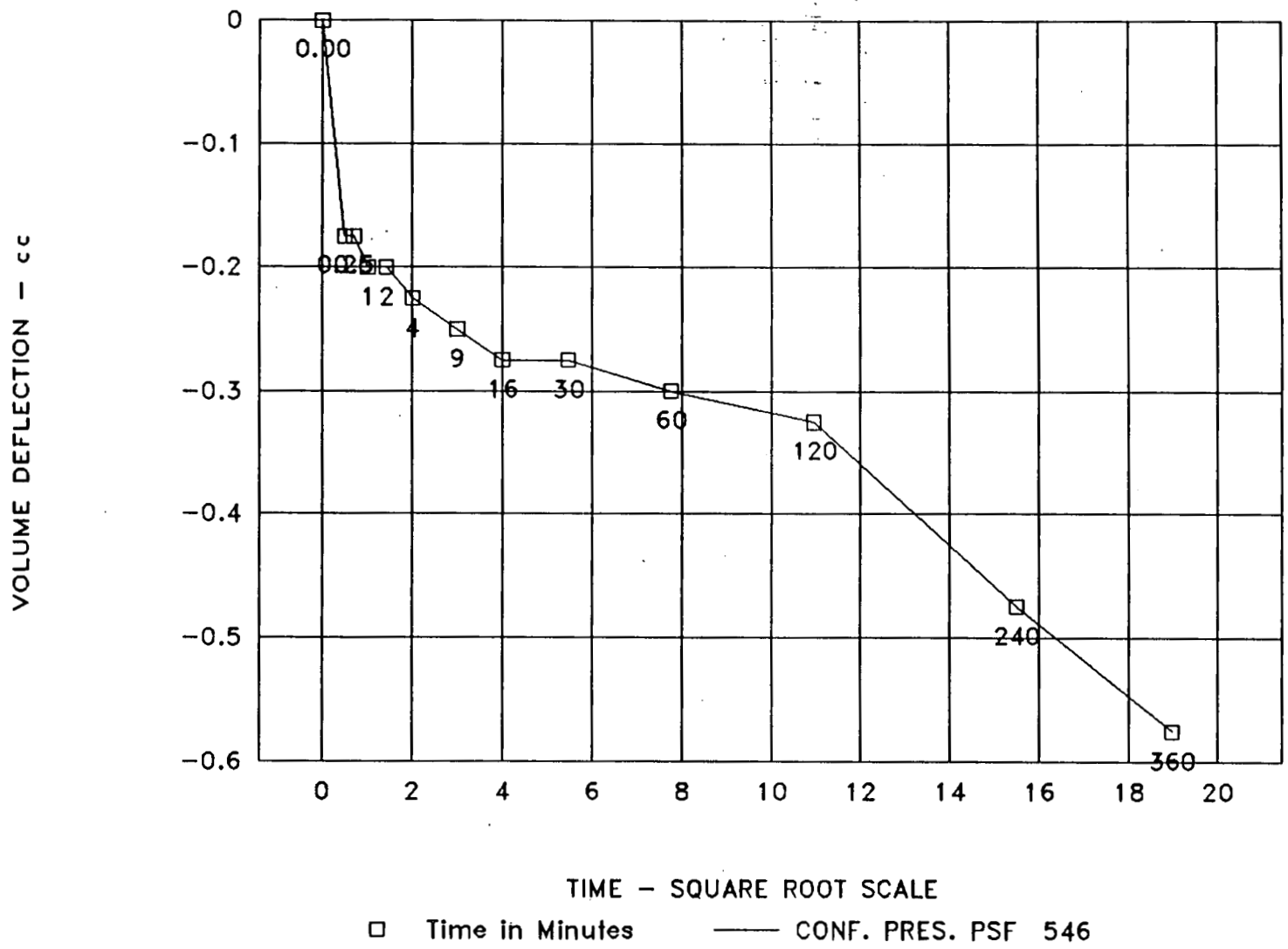
Initial Height	(in)	3.019	Init. Vol.	(CC)	223.48
Height Change	(in)	0.009	Vol. Change	(CC)	12.00
Ht. After Cons.	(in)	3.010	Cell Exp.	(CC)	7.25
Initial Area	(sq in)	4.516	Net Change	(CC)	4.75
Area After Cons.	(sq in)	4.433	Cons. Vol.	(CC)	218.72

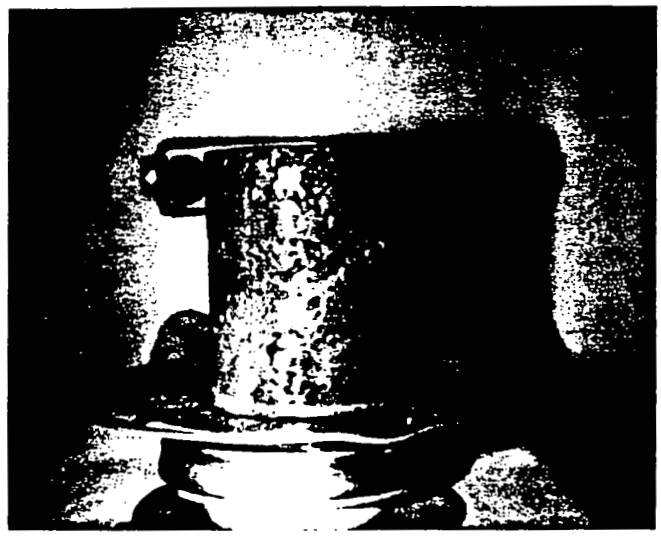
Data entry by: NAA Date: 6-26-95
Checked by: CW Date: 8-14-95
FileName: SAP0583

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-13, 1.5-5.0', 404583





PERMEABILITY TEST - BACK PRESSURE CONSTANT HEAD
ASTM D 5084

CLIENT SAIC/Parsons PO 140 JOB NO. 2059-13C

BORING NO.	G2-SB-14	SAMPLED	4-19-95 JC, BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404578	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	445.8	455.3
Wt. Wet Soil & Pan	(g)	454.1	463.6
Wt. Dry Soil & Pan	(g)	371.7	371.7
Wt. Lost Moisture	(g)	82.4	91.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	363.4	363.4
Moisture Content %		22.7	25.3
Wet Density PCF		124.2	129.1
Dry Density PCF		101.2	103.0

Init. Diameter	(in)	2.400	(cm)	6.096
Init. Area	(sq in)	4.524	(sq cm)	29.188
Init. Height	(in)	3.023	(cm)	7.678
Vol. Bef. Consol.	(cu ft)	0.00791		
Vol. After Consol.	(cu ft)	0.00778		
Porosity %		41.70		
Constant Head	(PSI)	2.00	(cm)	140.79

Time Min	Time Sec	Init. Burette CC	Final Burette CC	Head Corr. CM	Permeability k cm/sec
1028.0	61680	49.5	48.5	21.4	3.6E-08
1440.0	86400	48.5	47.4	22.5	2.9E-08
1440.0	86400	47.4	46.5	23.6	2.5E-08
1390.0	83400	46.5	45.5	24.6	2.6E-08
1444.0	86640	45.5	44.6	25.6	2.4E-08

Data entry by: CAL Date: 6-26-95
Checked by: CW Date: 8-14-95
FileName: SAP04578 ADVANCED TERRA TESTING, INC.

TRIAXAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13C

BORING NO.	G2-SB-14	SAMPLED	4-19-95 JC, BN
DEPTH	1.5-5.0'	TEST STARTED	6-19-95 CAL
SAMPLE NO.	404578	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/Pbp r95	SATURATED TEST	Yes
CONF. PRES. PSF	576		

SATURATION DATA

Cell Pres. (PSI)	Back Pres. (PSI)	Burette Reading (CC)		Pore Pressure (PSI)		Change	B
		Close	Open	Close	Open		
40.0	38.0	1.8	11.1				
50.0	48.0	9.2	10.3	37.8	45.9	8.1	0.81
60.0	58.0	10.1	11.0	48.5	57.7	9.2	0.92
70.0		11.2	11.3	58.6	68.2	9.6	0.96

CONSOLIDATION DATA

Elapsed Time (Min)	SQRT Time (Min)	Burette Reading (CC)	Volume Defl. (CC)
0.00	0.00	11.30	0.00
0.25	0.50	11.48	-0.17
0.5	0.71	11.50	-0.20
1	1.00	11.50	-0.20
2	1.41	11.53	-0.22
4	2.00	11.55	-0.25
9	3.00	11.58	-0.27
16	4.00	11.58	-0.27
30	5.48	11.65	-0.35
60	7.75	11.68	-0.38
120	10.95	11.78	-0.47
240	15.49	11.90	-0.60
360	18.97	12.03	-0.72

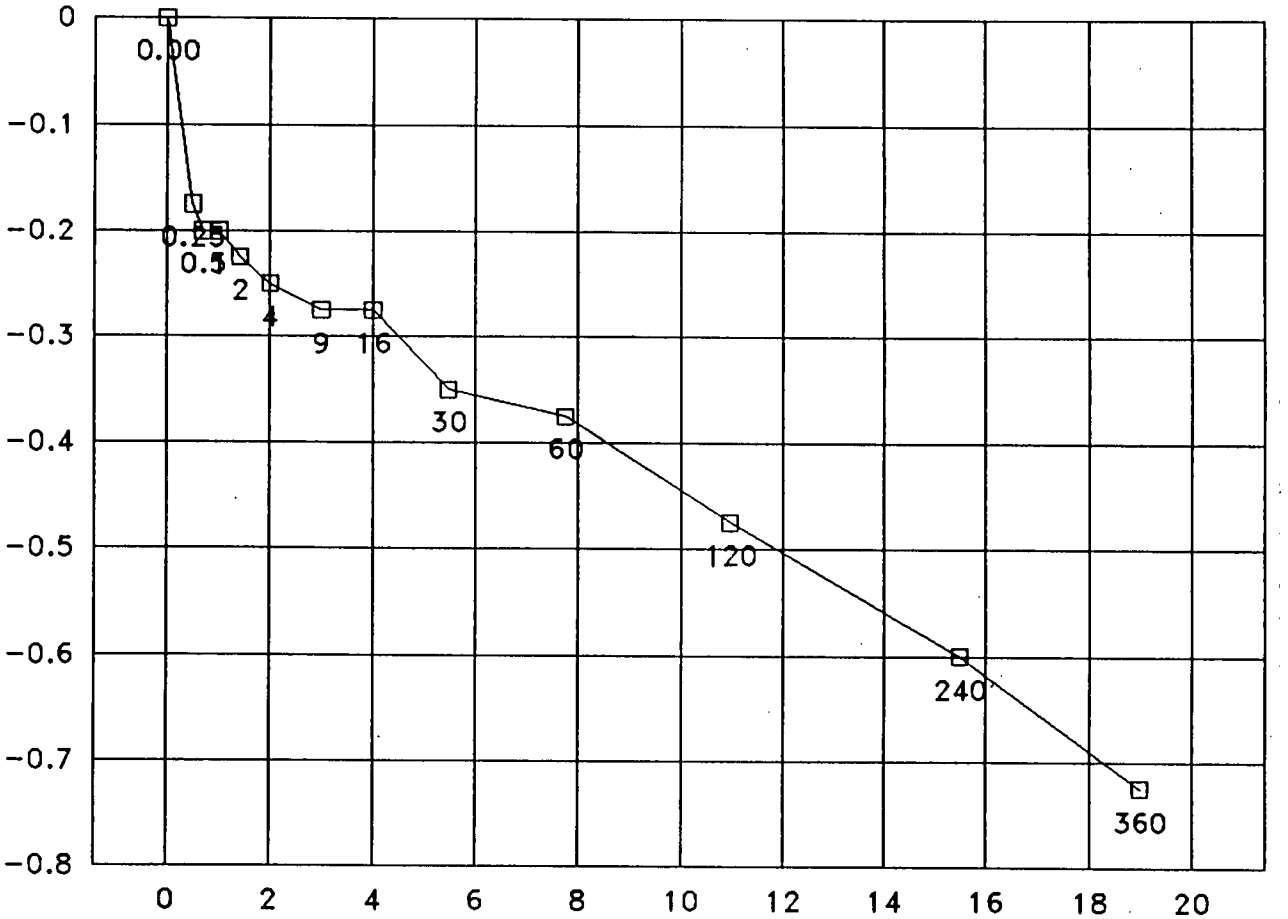
Initial Height	(in)	3.023	Init. Vol.	(CC)	224.15
Height Change	(in)	0.005	Vol. Change	(CC)	11.10
Ht. After Cons.	(in)	3.018	Cell Exp.	(CC)	7.20
Initial Area	(sq in)	4.524	Net Change	(CC)	3.90
Area After Cons.	(sq in)	4.452	Cons. Vol.	(CC)	220.24

Data entry by: CAL Date: 6-26-95
Checked by: [illegible] Date: 8-14-95
FileName: SAP04578

ADVANCED TERRA TESTING, INC.

CONSOLIDATION DATA

G2-SB-14, 1.5-5.0', 404578



VOLUME DEFLECTION - cc

TIME - SQUARE ROOT SCALE

□ Time in Minutes —— CONF. PRES. PSF 576

1340

001468

474

PROCTOR COMPACTION - STANDARD

ASTM D 698

SPL-45 - 1215
Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-131 Client SAIC / Parsons PO140 Location Fernald

Sampled 4-24-95 By JC, BN Tested 5-18-95 By R Checked 5-23-95 By [illegible]

SAMPLE DESCRIPTION	Soil B# 62-SB ~~01~~ -1 5-23-95			Sample No. 404608		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300	350	150
MOISTURE DETERMINATION	Dish number	D17	23A	F-6	637	D16
	Wt. of soil & dish g	452.86	473.10	440.65	467.04	475.04
	Dry wt. soil & dish g	395.42	403.92	370.65	384.36	424.76
	Net loss of moisture (B) g	57.44	69.18	70.00	82.68	50.28
	Wt. of dish only g	8.25	8.18	8.37	8.38	8.30
	Net wt. of dry soil (A) g	387.17	395.74	362.28	375.98	416.46
	Moisture, % of dry wt. (C)	14.8	17.5	19.3	22.0	12.1
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.18	14.47	14.49	14.51	14.06
	Wt. of mold only # lbs.	10.37	→	→	→	→
	Net wt. of wet soil (D) #	3.81	4.10	4.12	4.14	3.69
	Net wt. of dry soil (E) #	3.32	3.49	3.45	3.39	3.29
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	99.5	104.7	103.6	101.81	98.8
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

1342

957P.1(3) 1342

* Then add piston and seat with 5 blows.

4-24-95 JC, BW

Sample No. 404608 Depth 1.5-5' Elevation _____

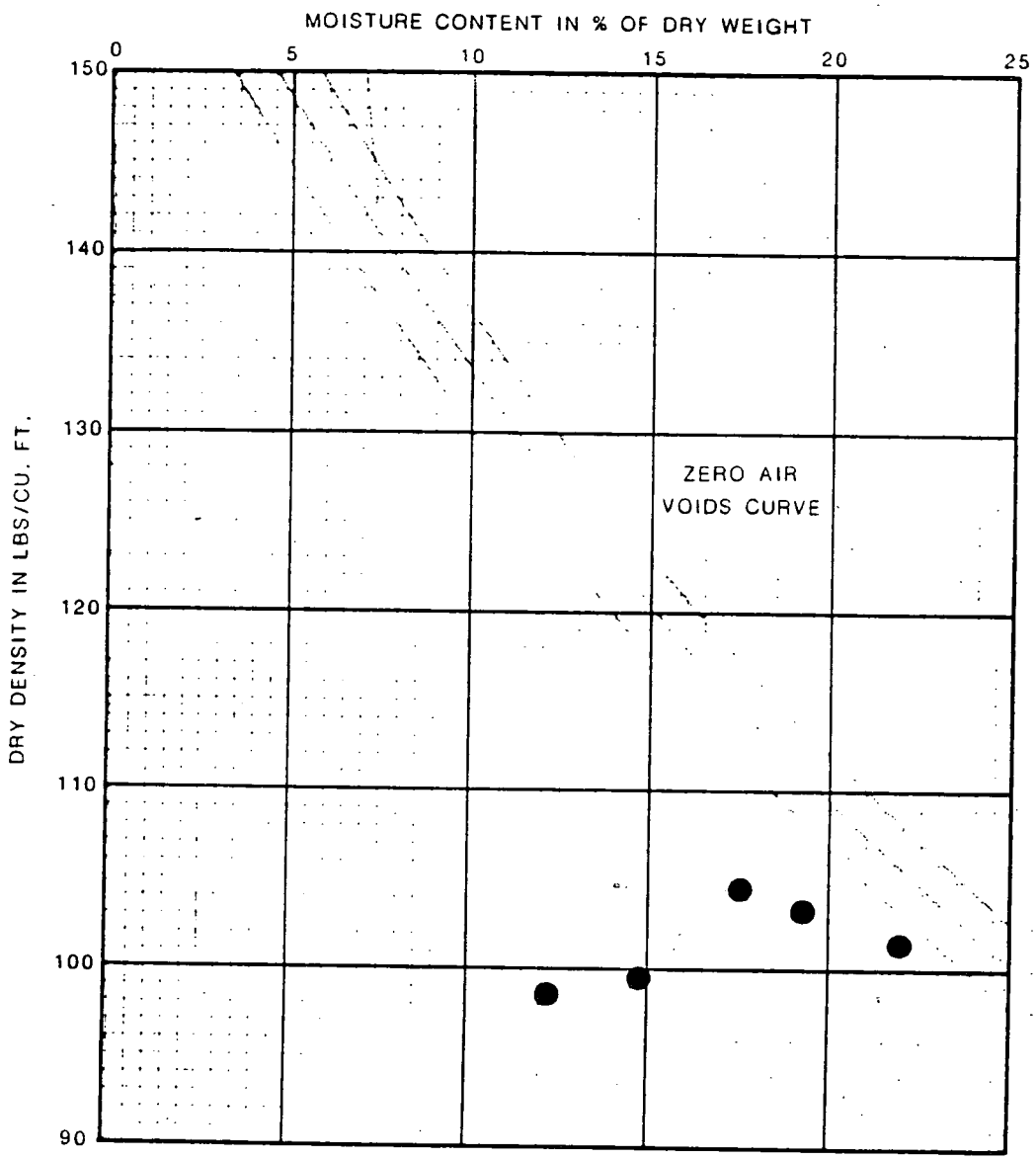
Soil Fernald

Location B# 62-SB-1

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC/Parsons Polyo 2059-RI

COMPACTION TEST DATA

1343

ADVANCED TERRA TESTING

OPL-US-1 [illegible]
Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

PAGE NO.____ OF____

ADVANCED TERRA TESTING inc

Job No. 2059-13I Client SAIC/Parsons Polyo Location Fernald

Sampled 4-24-95 By JC, BN Tested 5-23-95 By R Checked 6-1-95 By cal

SAMPLE DESCRIPTION	Soil B# 62-SB-2			Sample No. 404603		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300	350	400
MOISTURE DETERMINATION	Dish number	641	F-20	ABS-9	6-22	641
	Wt. of soil & dish g	465.94	382.13	408.83	441.63	472.75
	Dry wt. soil & dish g	418.33	336.86	353.71	374.83	389.53
	Net loss of moisture (B) g	47.61	45.27	55.12	66.80	83.22
	Wt. of dish only g	8.48	8.37	8.34	8.51	8.51
	Net wt. of dry soil (A) g	409.85	328.49	345.37	366.32	381.02
	Moisture, % of dry wt. (C)	11.6	13.8	16.0	18.2	21.8
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.09	14.23	14.50	14.57	14.55
	Wt. of mold only # lbs.	10.37	→			
	Net wt. of wet soil (D) #	3.72	3.86	4.13	4.20	4.18
	Net wt. of dry soil (E) #	~~3.40~~ 3.33 R 5-24-95	3.39	3.56	3.55	3.43
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	~~102~~ 100.0 R5-24-95	101.8	106.8	106.6	102.9
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

957P.1(3)

* Then add piston and seat with 5 blows.

4-24-95 JCB

Sample No. 404603 Depth 1.5-5' Elevation _____

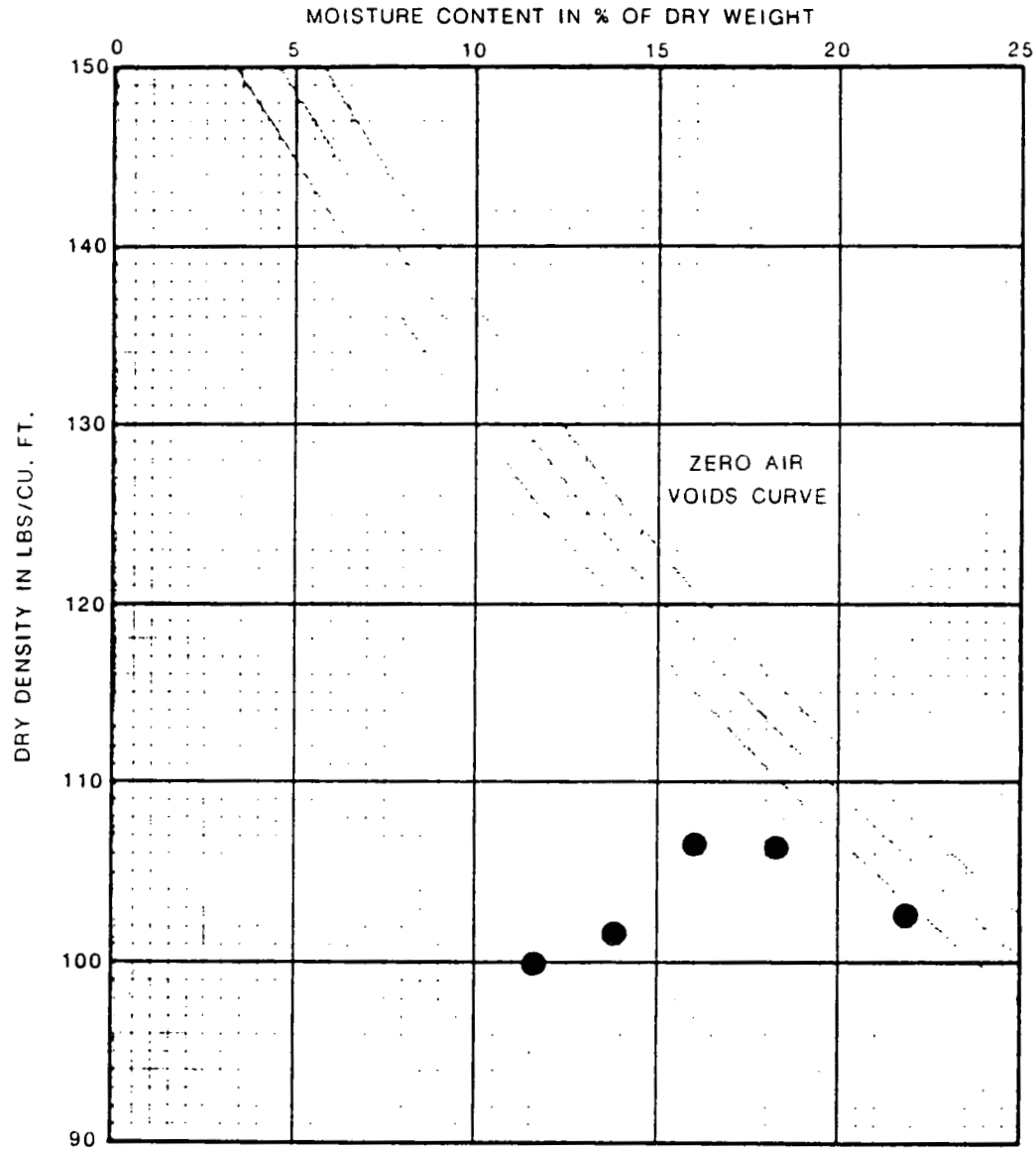
Soil Fernald

Location B# 62-SB-2

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC / Parsons PO140 2056-131

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold# 0275
Rammer# 0278

COMPACTION TEST DATA

PAGE NO.____ OF____

ADVANCED TERRA TESTING inc

Job No. 2059-13I Client: SAIC / Parsons Po140 Location Fernald

Sampled 4-12-95 By JC, BW Tested 5-25-95 By R Checked 5-26-95 By cal

SAMPLE DESCRIPTION	Soil B# GZ-SB-3			Sample No. 404591		
	Specific Gravity			Depth or Elevation ~~0.0-5~~ cal @ 1645 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300	~~DZ~~ 350 @ 5-15-95	400
MOISTURE DETERMINATION	Dish number	GZZ	K1	ABS-6	DZ	G41
	Wt. of soil & dish g	369.02	359.72	511.24	407.98	382.29
	Dry wt. soil & dish g	329.33	313.72	438.10	348.60	324.86
	Net loss of moisture (B) g	39.69	~~45.99~~ 46.00 cal 5-26-95	73.14	59.38	67.43
	Wt. of dish only g	8.52	8.32	8.36	8.21	8.49
	Net wt. of dry soil (A) g	320.81	305.40	429.74	340.39	316.37
	Moisture, % of dry wt. (C)	12.4	~~12~~ 15.1 5-26-95	17.0	17.4	21.3
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.13	14.35	14.53	14.58	14.51
	Wt. of mold only # lbs.	10.37 →				
	Net wt. of wet soil (D) #	3.76	3.98	4.16	4.21	4.14
	Net wt. of dry soil (E) #	3.35	3.46	3.56	3.58	3.41
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	100.4	103.8	106.6	107.5	102.4
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

957P.1(3)

* Then add piston and seat with 5 blows.

4-12-95 JC, BN

Sample No. 404591 Depth 1.5-2' Elevation _____

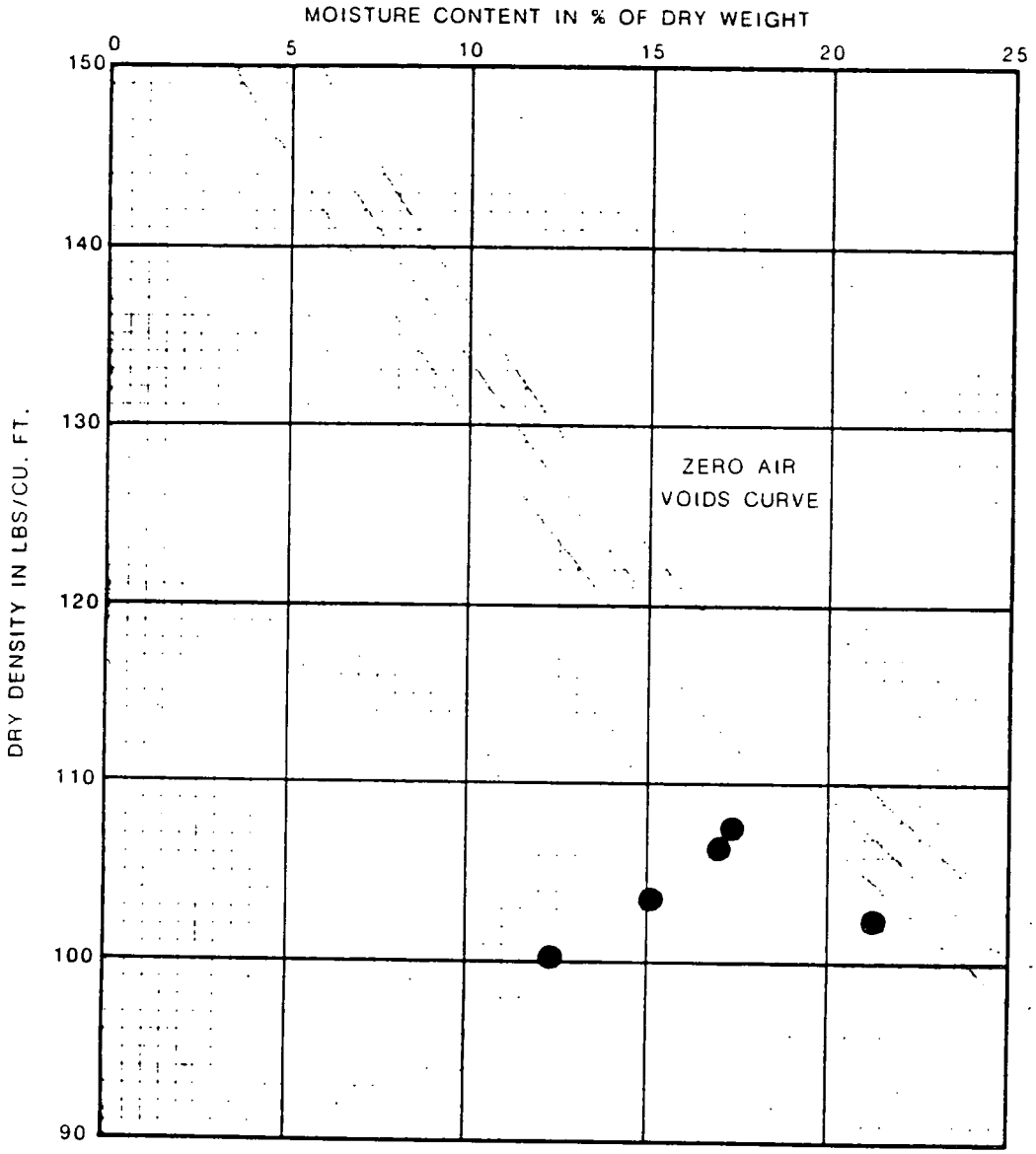
Soil Fernald

Location B# GZ-SB-3

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC/Parsons PO'40 2058-13I

COMPACTION TEST DATA

ADVANCED TERRA TESTING

SPL-95-1015
Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-13I Client SAIC / Parsons Paso Location Fernald

Sampled 4-25-95 By JC, BN Tested 5-18-95 By RV Checked 5-23-95 By [illegible]

SAMPLE DESCRIPTION	Soil B # G2-SB ~~07~~ 4			Sample No. 404615		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	400	200	250	300	350
MOISTURE DETERMINATION	Dish number	G-19	D2	93	E82	ABS2
	Wt. of soil & dish g	424.50	472.07	515.68	431.49	369.16
	Dry wt. soil & dish g	350.45	419.48	449.28	368.91	310.35
	Net loss of moisture (B) g	74.05	52.59	66.40	62.58	58.81
	Wt. of dish only g	8.36	8.20	8.23	8.35	8.34
	Net wt. of dry soil (A) g	342.09	411.28	441.05	360.56	302.01
	Moisture, % of dry wt. (C)	21.7	12.8	15.1	17.4	19.5
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.54	14.19	14.45	14.57	14.62
	Wt. of mold only # lbs.	10.37	→			
	Net wt. of wet soil (D) #	4.17	3.82	4.08	4.20	4.25
	Net wt. of dry soil (E) #	3.43	3.39	3.55	3.58	3.56
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	102.8	101.6	106.4	107.4	106.7
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

957P.1(3)

1348

* Then add piston and seat with 5 blows.

001476

4-28-95 JC/RV

Sample No. 404615 Depth 1.5-5' Elevation _____

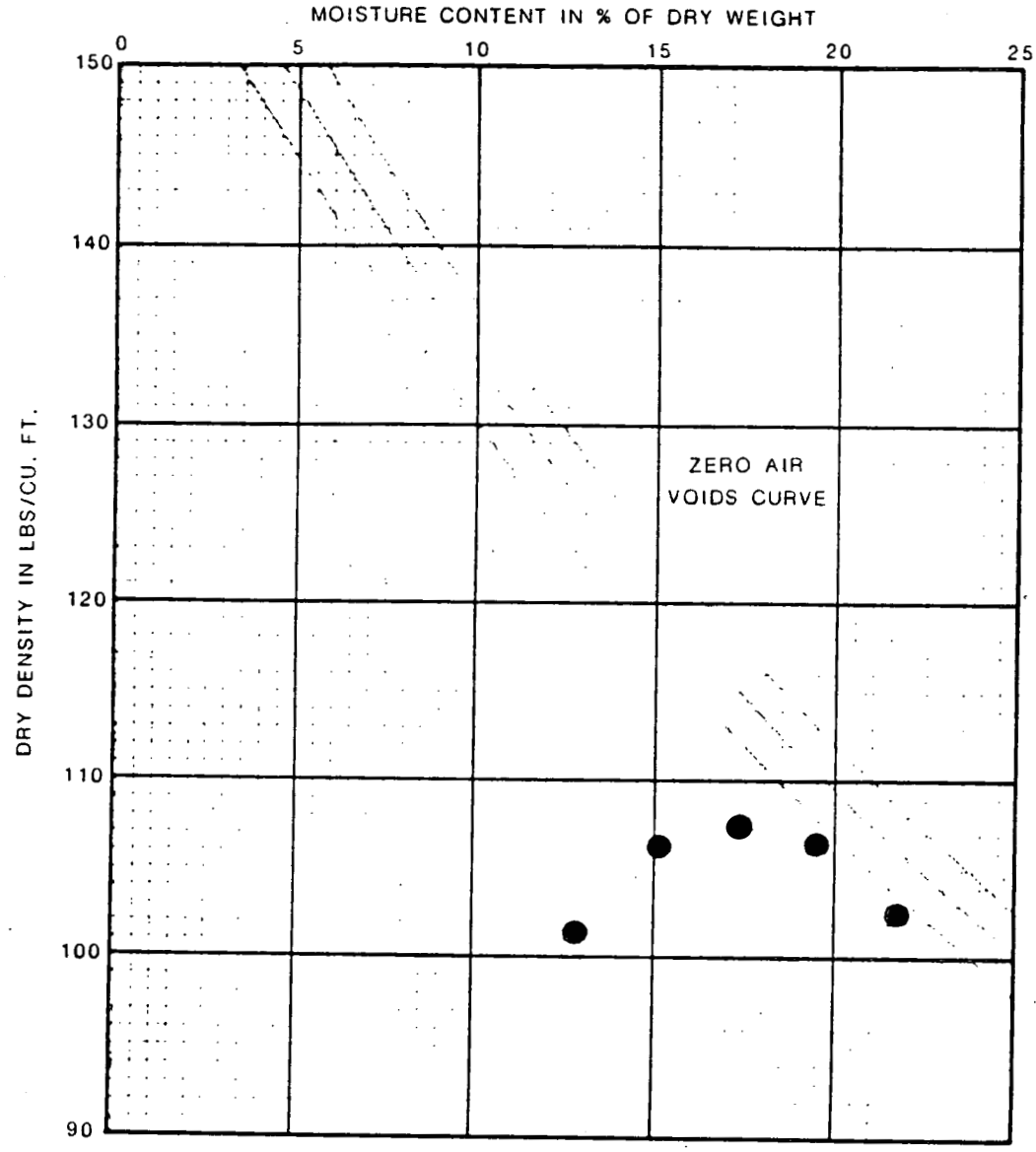
Soil Fernald

Location B# 62-58-4

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC/Parsons Po140 2064-RI

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold #0275
Rammer #0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-131 Client SAIC / Parsons Polyo Location Fernald

Sampled 4-26-95 By SC, BN Tested 5-23-95 By R Checked 5-24-95 By ce

SAMPLE DESCRIPTION	Soil B# 62-SB-5			Sample No. 404627		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300	350	400
MOISTURE DETERMINATION	Dish number	D2	643	K1	ABS-6	D17
	Wt. of soil & dish g	384.49	466.51	423.43	385.60	376.25
	Dry wt. soil & dish g	341.63	404.59	362.22	323.03	308.76
	Net loss of moisture (B) g	42.86	61.92	61.21	62.57	67.49
	Wt. of dish only g	8.20	8.52	8.32	8.37	8.26
	Net wt. of dry soil (A) g	333.43	396.07	353.90	314.66	300.50
	Moisture, % of dry wt. (C)	17.9	15.6	17.3	20.0	22.5
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.14	14.30	14.53	14.59	14.52
	Wt. of mold only # lbs.	10.37 →				
	Net wt. of wet soil (D) #	3.77	3.93	4.16	4.22	4.15
	Net wt. of dry soil (E) #	3.34	3.40	3.55	3.52	3.39
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	100.2	102.0	106.4	105.6	101.7
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

1350

* Then add piston and seat with 5 blows.

4-26-95 JC/RW

Sample No. 401627 Depth 1.5-5' Elevation _____

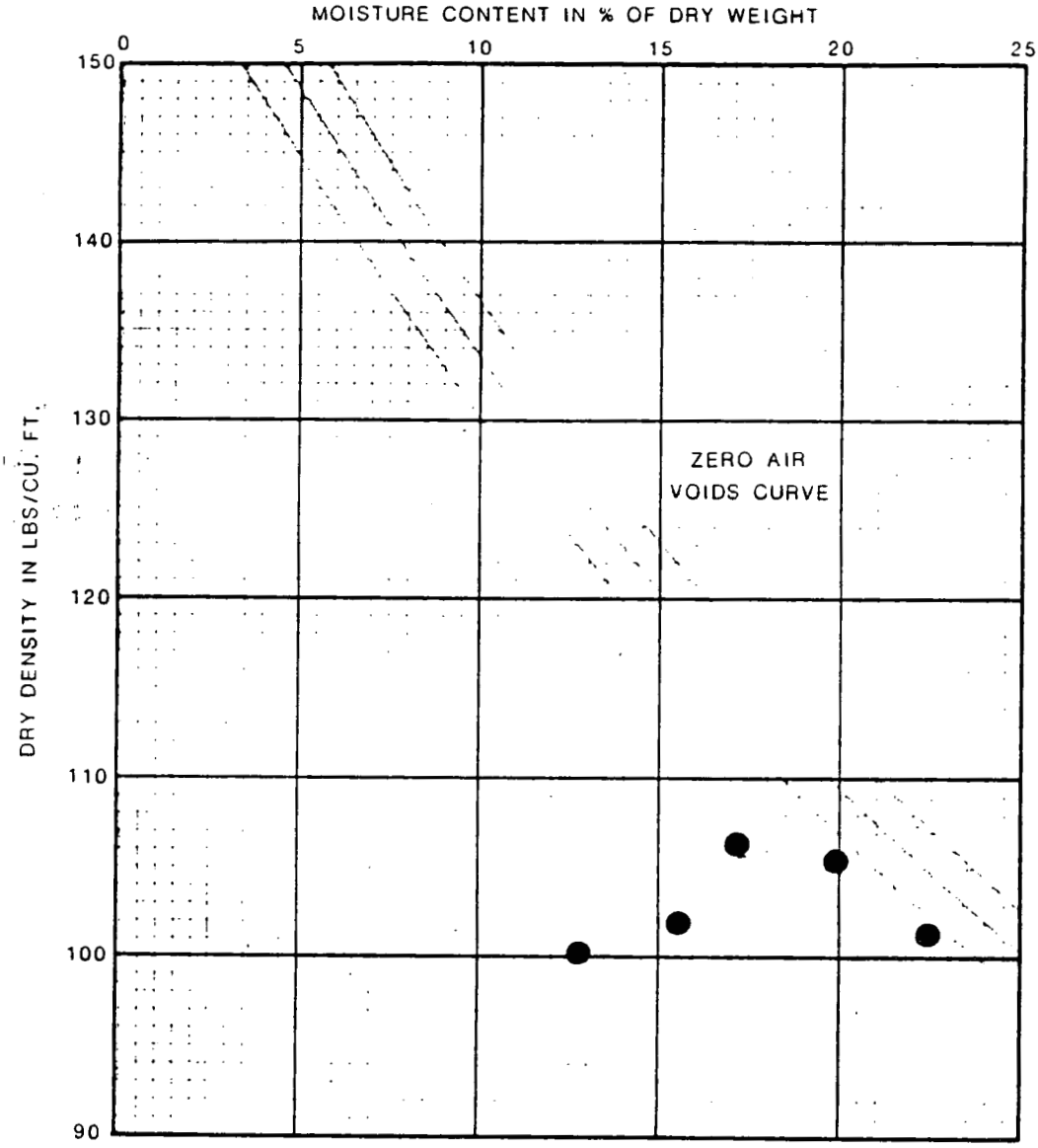
Soil Fernald

Location B# 62-SB-5

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC/Parsons Pollo 2089-12I

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold #0275
Rammer #0278

COMPACTION TEST DATA

PAGE NO.____ OF____

ADVANCED TERRA TESTING inc

Job No. 2059-131 Client SAIC/Parsons Polo Location Fernald

Sampled 4-21-95 By JC, BN Tested 5-31-95 By R Checked 6-1-95 By cw

SAMPLE DESCRIPTION	Soil BH 62-SB-6			Sample No. 404595		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	250	300	350	400	450
MOISTURE DETERMINATION	Dish number	M58	35	612	ABS1	AK-47
	Wt. of soil & dish g	458.87	353.18	474.34	423.68	411.82
	Dry wt. soil & dish g	405.16	305.88	402.02	351.53	336.84
	Net loss of moisture (B) g	53.71	47.30	72.32	72.15	74.98
	Wt. of dish only g	8.25	8.37	8.28	8.31	8.22
	Net wt. of dry soil (A) g	396.91	297.51	393.74	343.22	328.62
	Moisture, % of dry wt. (C)	13.5	15.9	18.4	21.0	22.8
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.31	14.45	14.54	14.51	14.38
	Wt. of mold only # lbs.	10.37	→	→	→	→
	Net wt. of wet soil (D) #	3.94	4.08	4.17	4.14	4.01
	Net wt. of dry soil (E) #	3.47	3.52	3.52	3.42	3.27
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	104.1	105.6	105.7	102.6	98.0
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

1352

257P.1(3)

* Then add piston and seat with 5 blows.

4-21-95 JC, BR

Sample No. 404595 Depth 1.5-5' Elevation _____

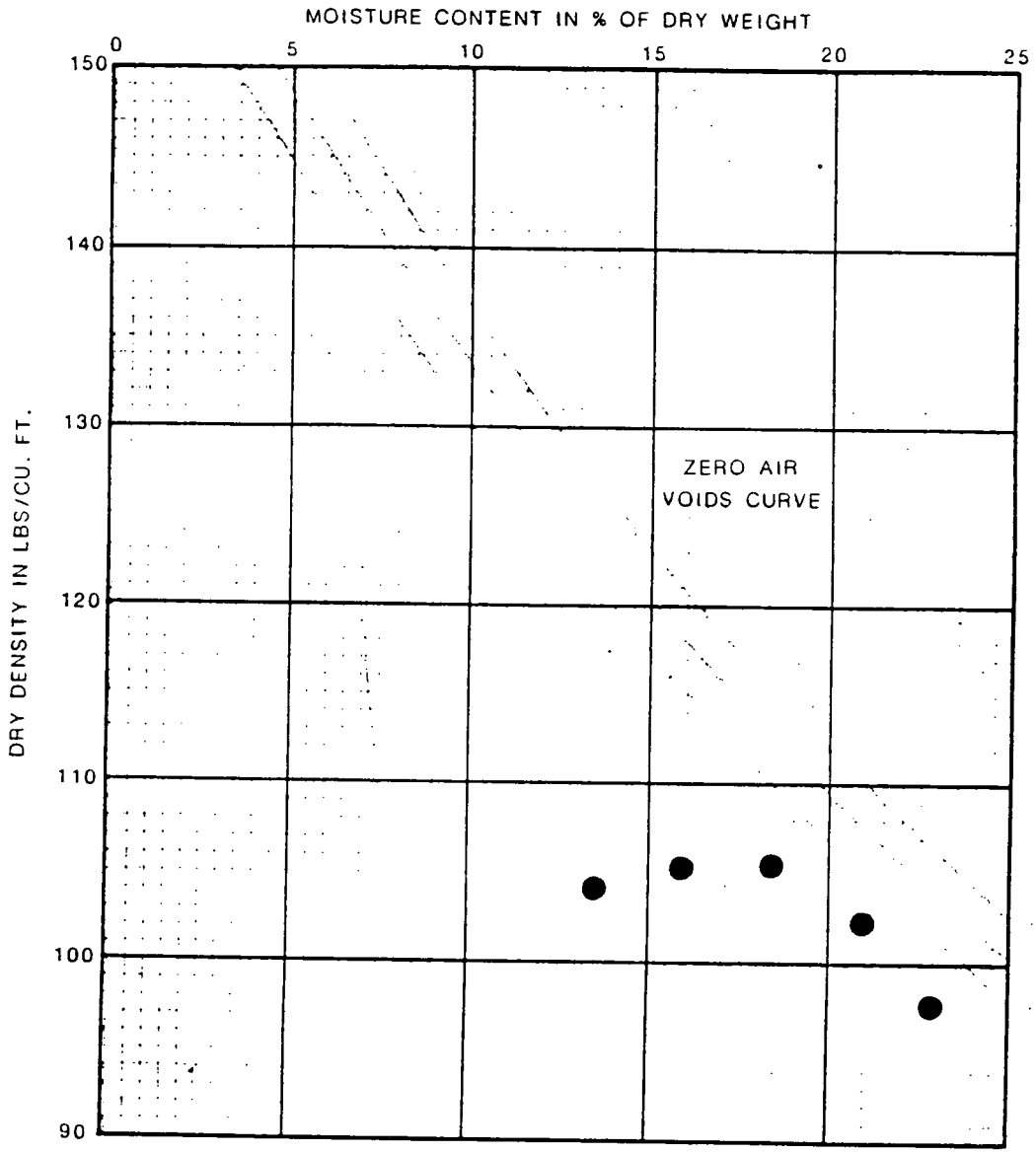
Soil Fernald

Location B# 62-SB-6

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC/Parsons Polk 2059-18I

COMPACTION TEST DATA

ADVANCED TERRA TESTING

SPL-95-1217
Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-132 Client SAIC / Parsons PO140 Location Fernald

Sampled 4-26-95 By SC, BN Tested 5-18-95 By BV Checked _____ By _____

SAMPLE DESCRIPTION	Soil B# 62-SB-~~07~~-7 Sample No. 404632					
	Specific Gravity _____ Depth or Elevation 1.5-5'					
	% Passing 3/4" _____ % Passing 1/4" _____					
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	350	150	200	250	300
MOISTURE DETERMINATION	Dish number	ZQ-47	4Ø	615	30	91
	Wt. of soil & dish g	460.54	393.86	446.08	379.58	407.78
	Dry wt. soil & dish g	375.12	346.84	384.44	321.55	339.75
	Net loss of moisture (B) g	85.42	47.02	61.64	58.03	68.03
	Wt. of dish only g	8.33	8.37	8.33	8.06	8.35
	Net wt. of dry soil (A) g	366.79	338.47	376.11	313.49	331.40
	Moisture, % of dry wt. (C)	23.3	13.9	16.4	18.5	20.5
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.49	14.37	14.56	14.69	14.63
	Wt. of mold only # lbs.	10.37 →				
	Net wt. of wet soil (D) #	4.12	4.00	4.19	4.32	4.26
	Net wt. of dry soil (E) #	3.34	3.51	3.60	3.65	3.53
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	~~100.25~~ 100.3 5-22-95	105.4	108.0	109.4	106.0
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

957P.1(3)

* Then add piston and seat with 5 blows.

4-26-88 JC, BN

Sample No. 404632 Depth 1.5-5' Elevation _____

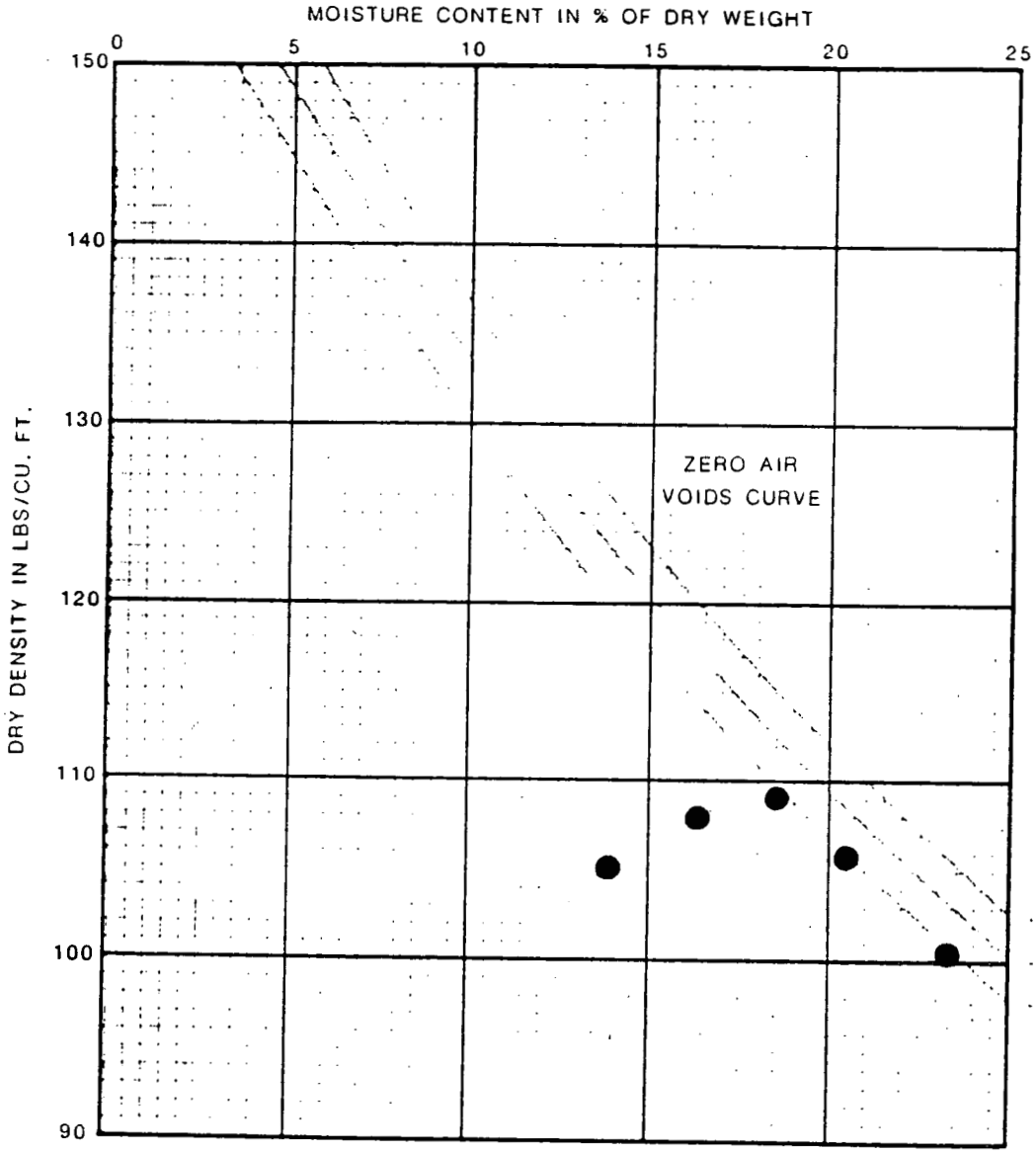
Soil Fernald

Location B# 62-SB-7

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC/Parsons P0140 2069-18 I

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-131 Client SAIC / Parsons P0140 Location Fernald

Sampled 4-25-95 By JC, BN Tested 5-31-95 By R Checked 6-1-95 By cal

SAMPLE DESCRIPTION	Soil B# 62-SB-8			Sample No. 404621		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	250	300	350	400	450
MOISTURE DETERMINATION	Dish number	622	D2	M52	67	G51
	Wt. of soil & dish g	471.05	362.88	453.32	474.58	403.41
	Dry wt. soil & dish g	414.25	314.87	383.84	393.24	329.37
	Net loss of moisture (B) g	56.80	48.01	69.48	81.34	74.04
	Wt. of dish only g	8.51	8.21	8.23	8.34	8.39
	Net wt. of dry soil (A) g	405.74	306.66	375.61	384.90	320.98
	Moisture, % of dry wt. (C)	14.0	15.7	18.5	21.1	23.1
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.29	14.53	14.66	14.56	14.45
	Wt. of mold only # lbs.	10.37	→			→
	Net wt. of wet soil (D) #	3.92	4.16	4.29	4.19	4.08
	Net wt. of dry soil (E) #	3.44	3.60	3.62	3.46	3.32
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	103.2	107.9	108.6	103.8	99.5
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

957P.1(3)

1956

* Then add piston and seat with 5 blows

4-25-95 JCIBV

Sample No. 404621 Depth 1.5-5' Elevation _____

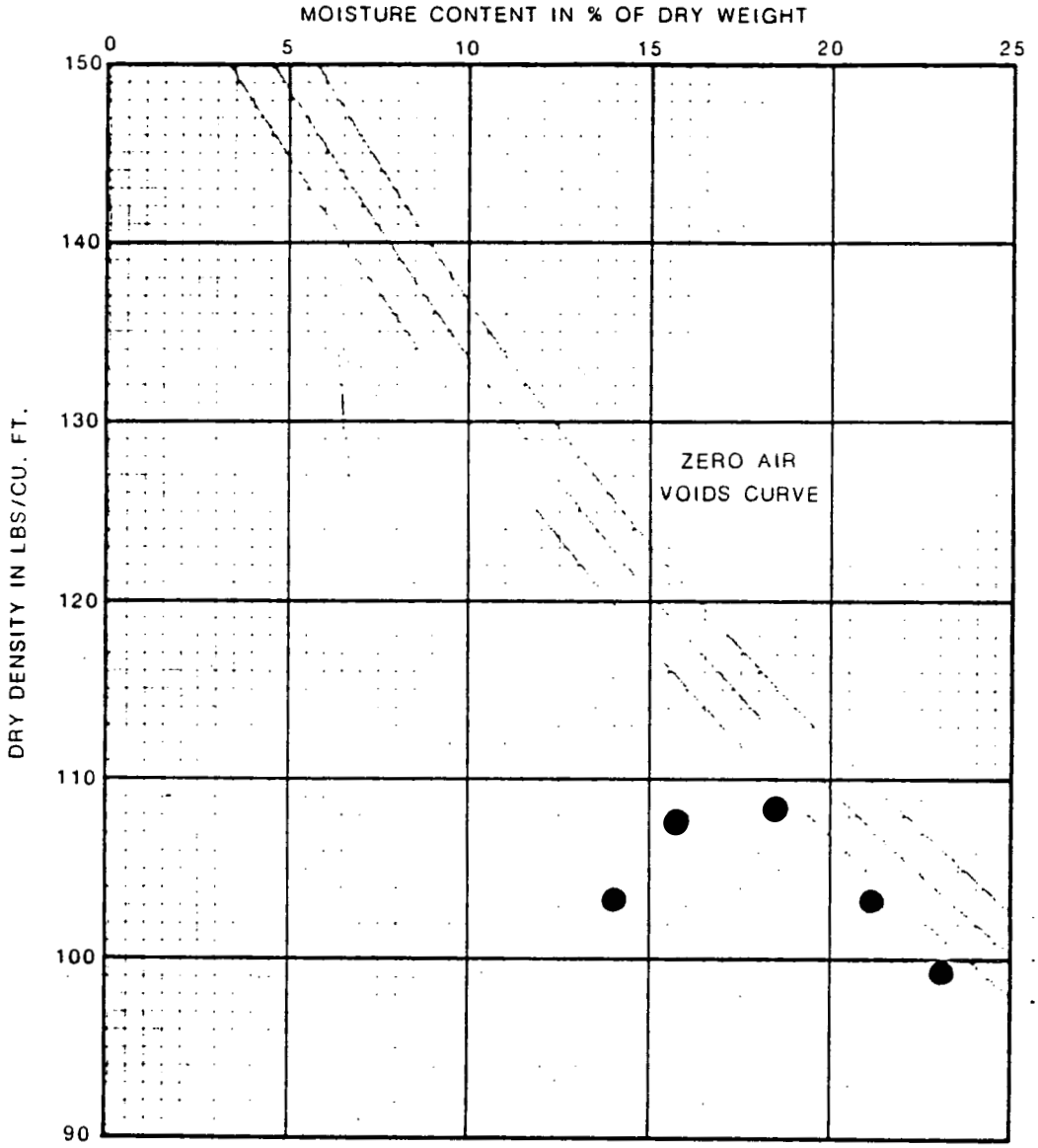
Soil Fernald

Location B# 62-SB-8

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC/Parsons P0140 2059-131

COMPACTION TEST DATA

ADVANCED TERRA TESTING

SDL-95-1158
Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

PAGE NO.___ OF___

ADVANCED TERRA TESTING, INC

Job No. 2059-13E Client SAIC / Parsons P0140 Location Fernald

Sampled 4-20-95 By JWL, WAW Tested 5-31-95 By N Checked 6-1-95 By CAR

SAMPLE DESCRIPTION	Soil B# 62-SB-9			Sample No. 404587		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	250	300	350	400	450
MOISTURE DETERMINATION	Dish number	K1	F-7	31	20-47	101
	Wt. of soil & dish g	383.68	452.50	484.05	458.28	415.10
	Dry wt. soil & dish g	~~335.04~~ 367.95	385.88	408.02	378.78	336.12
	Net loss of moisture (B) g	48.64	66.62	76.03	79.50	78.88
	Wt. of dish only g	8.33	8.23	8.48	8.30	8.27
	Net wt. of dry soil (A) g	326.71	377.60	399.54	370.48	327.85
	Moisture, % of dry wt. (C)	14.9	17.6	19.0	21.5	24.1
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.34	14.45	14.62	14.57	14.44
	Wt. of mold only # lbs.	10.37	→			
	Net wt. of wet soil (D) #	3.97	4.08	4.25	4.20	4.07
	Net wt. of dry soil (E) #	3.46	3.47	3.57	3.46	3.28
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	103.7	104.0	107.1	103.7	98.4
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

1358

CE7P.1(3)

* Then add piston and seat with 5 blows.

4-20-95 Jubyvan

Sample No. 404587 Depth 1.5-5' Elevation _____

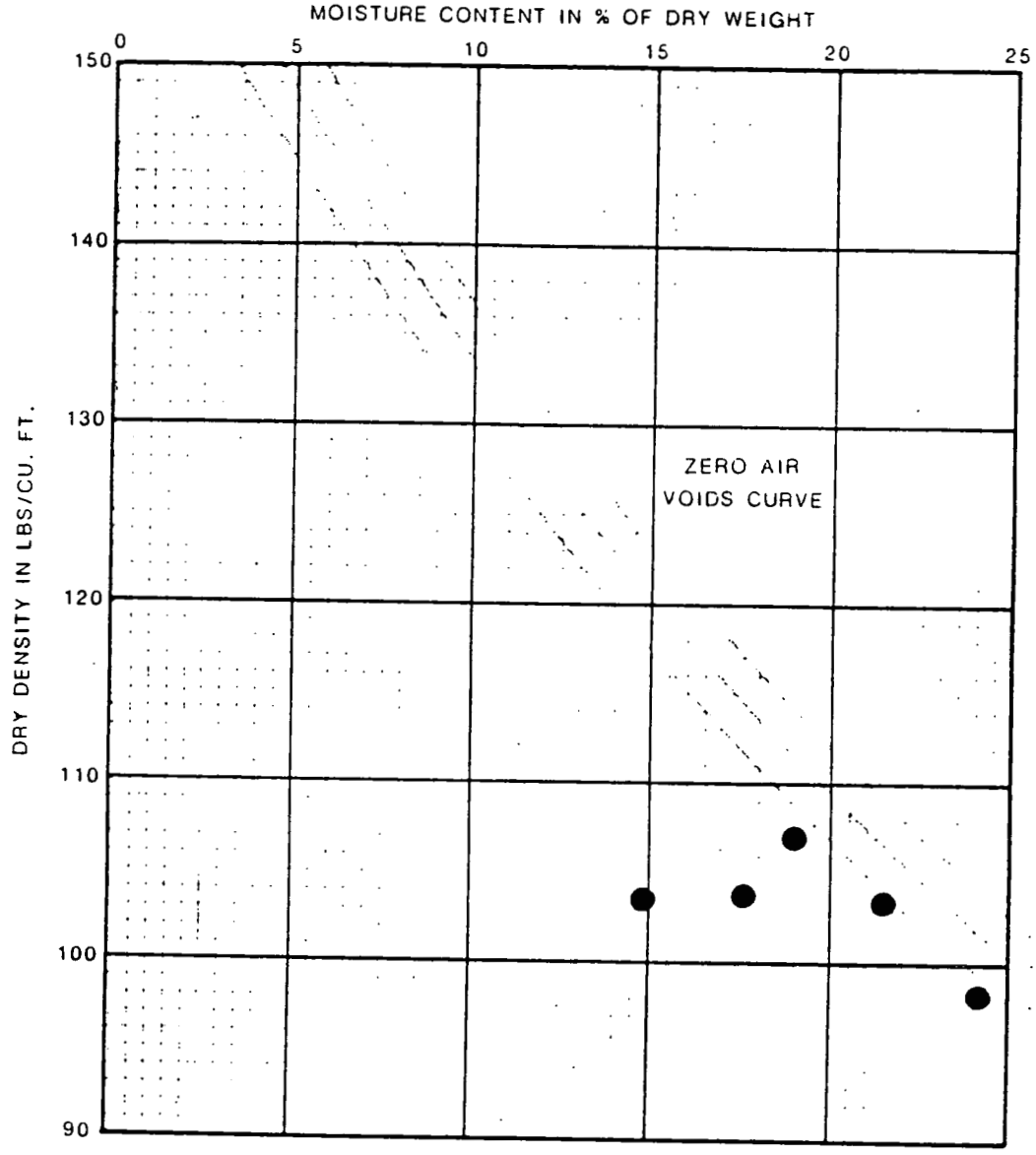
Soil Fernald

Location B# 62-SB-9

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC/Parsons PO140 2054-18c

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold# 0275
Remold #0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-131 Client SAIC/Parsons P0140 Location Fernald

Sampled 4-26-95 By JL, BW Tested 6-2-95 By TV Checked 6-6-95 By cae

SAMPLE DESCRIPTION	Soil B# 62-SB-10			Sample No. 404637		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☐ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300	350	400
MOISTURE DETERMINATION	Dish number	E85	6-15	L Ø	24	30
	Wt. of soil & dish g	391.40	417.44	424.95	428.11	416.38
	Dry wt. soil & dish g	348.43	364.64	365.45	359.75	344.65
	Net loss of moisture (B) g	42.97	52.80	59.5	68.36	71.73
	Wt. of dish only g	8.36	8.34	8.31	8.33	8.07
	Net wt. of dry soil (A) g	340.07	356.30	357.14	351.42	336.58
	Moisture, % of dry wt. (C)	12.6	14.8	16.7	19.5	21.3
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.28	14.38	14.63	14.64	14.54
	Wt. of mold only # lbs.	10.37	→			
	Net wt. of wet soil (D) #	3.91	4.01	4.26	4.27	4.17
	Net wt. of dry soil (E) #	3.47	3.49	3.65	3.57	3.44
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	104.1	104.8	109.5	107.2	103.1
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1360				

0877P.1(3)

* Then add piston and seat with 5 blows.

4-26-95 JC-IBV

Sample No. 404637 Depth 1.5-5' Elevation _____

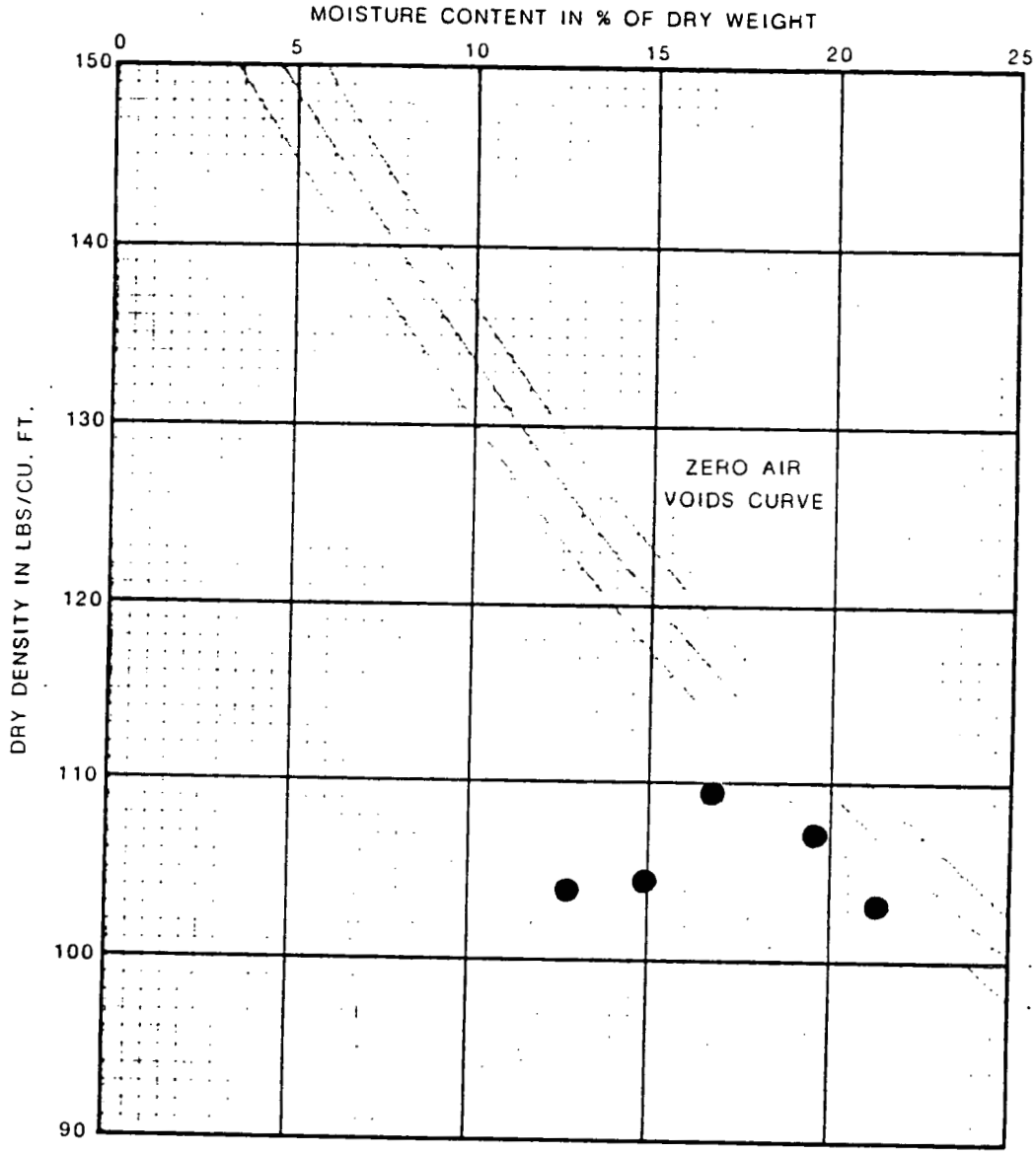
Soil Fernald

Location B# 62-SB-10

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC/Parsons P0140 2059-13I

COMPACTION TEST DATA

ADVANCED TERRA TESTING

SPL-13-1237
Mold #0275
Rammer #0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-13I Client SAIC / Parsons Po140 Location Fernald

Sampled 4-27-95 By JC, BN Tested 5-25-95 By R Checked 5-26-95 By cal

SAMPLE DESCRIPTION	Soil B# G2-SB-11			Sample No. 404642		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	400	200	250	300	350
MOISTURE DETERMINATION	Dish number	F12	G43	91	F-20	D17
	Wt. of soil & dish g	445.32	515.79	416.50	470.84	407.90
	Dry wt. soil & dish g	373.97	466.73	368.92	410.90	348.62
	Net loss of moisture (B) g	71.35	49.06	47.58	59.94	59.28
	Wt. of dish only g	8.29	8.49	8.37	8.34	8.25
	Net wt. of dry soil (A) g	365.68	458.24	360.55	402.56	340.37
	Moisture, % of dry wt. (C)	19.5	10.7	13.2	14.9	17.4
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.62	14.61	14.82	14.91	14.78
	Wt. of mold only # lbs.	10.37 →				
	Net wt. of wet soil (D) #	4.25	4.24	4.45	4.54	4.41
	Net wt. of dry soil (E) #	3.56	3.83	3.93	3.95	3.76
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	106.7	114.9	117.9	118.5	112.7
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1362				

SSTP.1(3)

* Then add piston and seat with 5 blows.

4-27-95 JC, BV

Sample No. 404642 Depth 1.5-5' Elevation _____

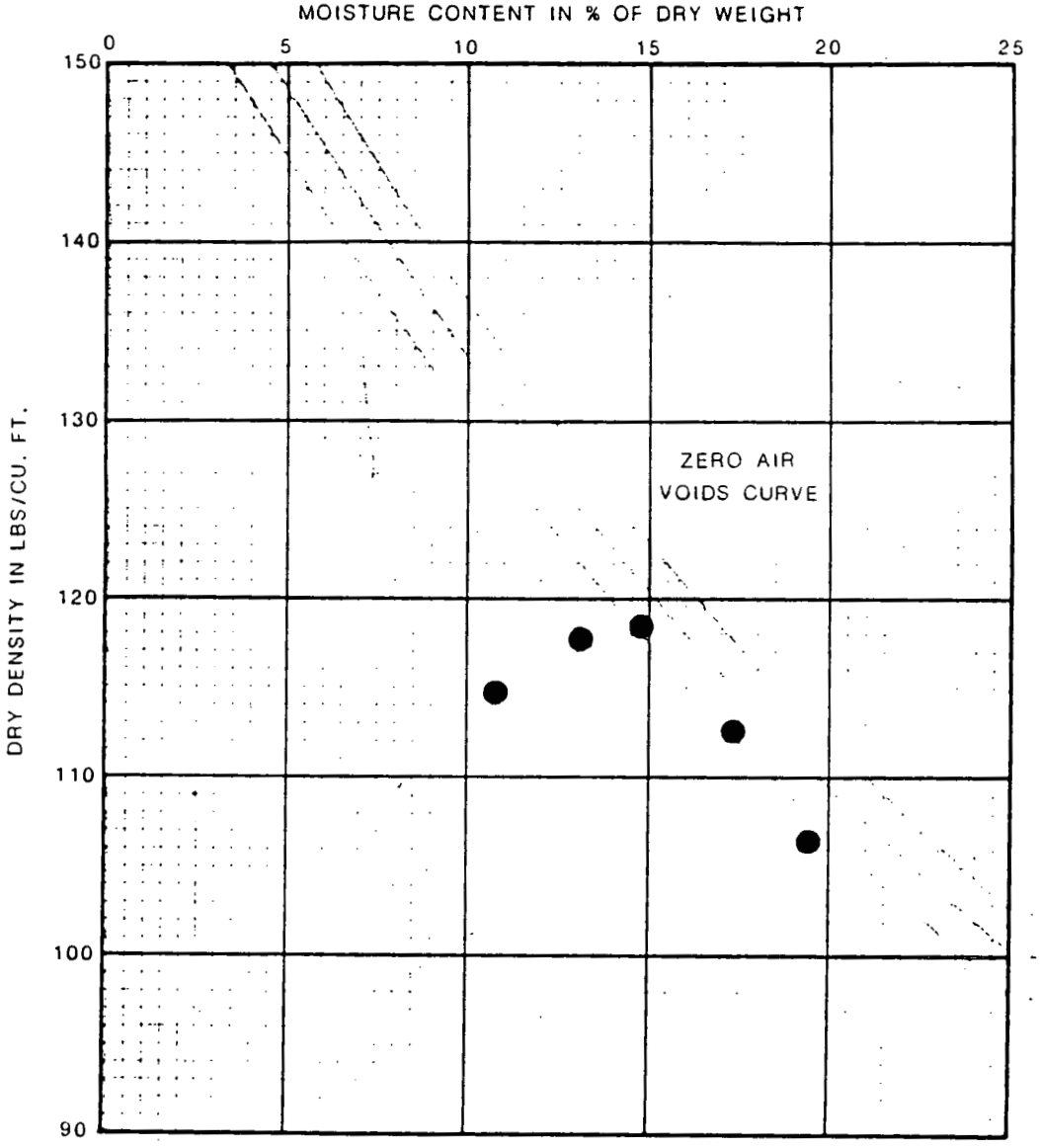
Soil Fernald

Location B# 62-SB-11

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC/Parsons Pol40 2089-181

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold #0275
Rammer #0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-13I Client SAIC/Parsons Polyo Location Fernald

Sampled 4-21-95 By 6-9-95 JGBN Tested 6-8-95 By [illegible] Checked 6-9-95 By WEB

SAMPLE DESCRIPTION	Soil B# 62-SB-12			Sample No. 404599		
	Specific Gravity			Depth or Elevation		
	% Passing 3/4"			% Passing 1/4" 15-4.2		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☐ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	250	300	350	400	450
MOISTURE DETERMINATION	Dish number	JUAN	93	E83	648	10H
	Wt. of soil & dish g	367.92	395.39	349.66	362.85	379.86
	Dry wt. soil & dish g	320.37	339.31	293.14	300.12	308.22
	Net loss of moisture (B) g	47.55	56.08	56.52	62.73	70.64
	Wt. of dish only g	8.25	8.23	8.34	8.71	8.78
	Net wt. of dry soil (A) g	312.12	331.08	284.80	291.41	300.44
	Moisture, % of dry wt. (C)	15.2	16.9	19.9	21.5	23.5
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.24	14.44	14.59	14.57	14.47
	Wt. of mold only # lbs.	10.37 →				
	Net wt. of wet soil (D) #	3.87	4.07	4.22	4.20	4.10
	Net wt. of dry soil (E) #	3.36	3.48	3.52	3.46	3.32
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	100.8	104.4	105.6	103.7	99.6
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1364				

957P.1(3)

* Then add piston and seat with 5 blows.

6-8-95 JC, 8N

Sample No. 404599 Depth ~~[illegible]~~ 1.5-4.2' Elevation _____

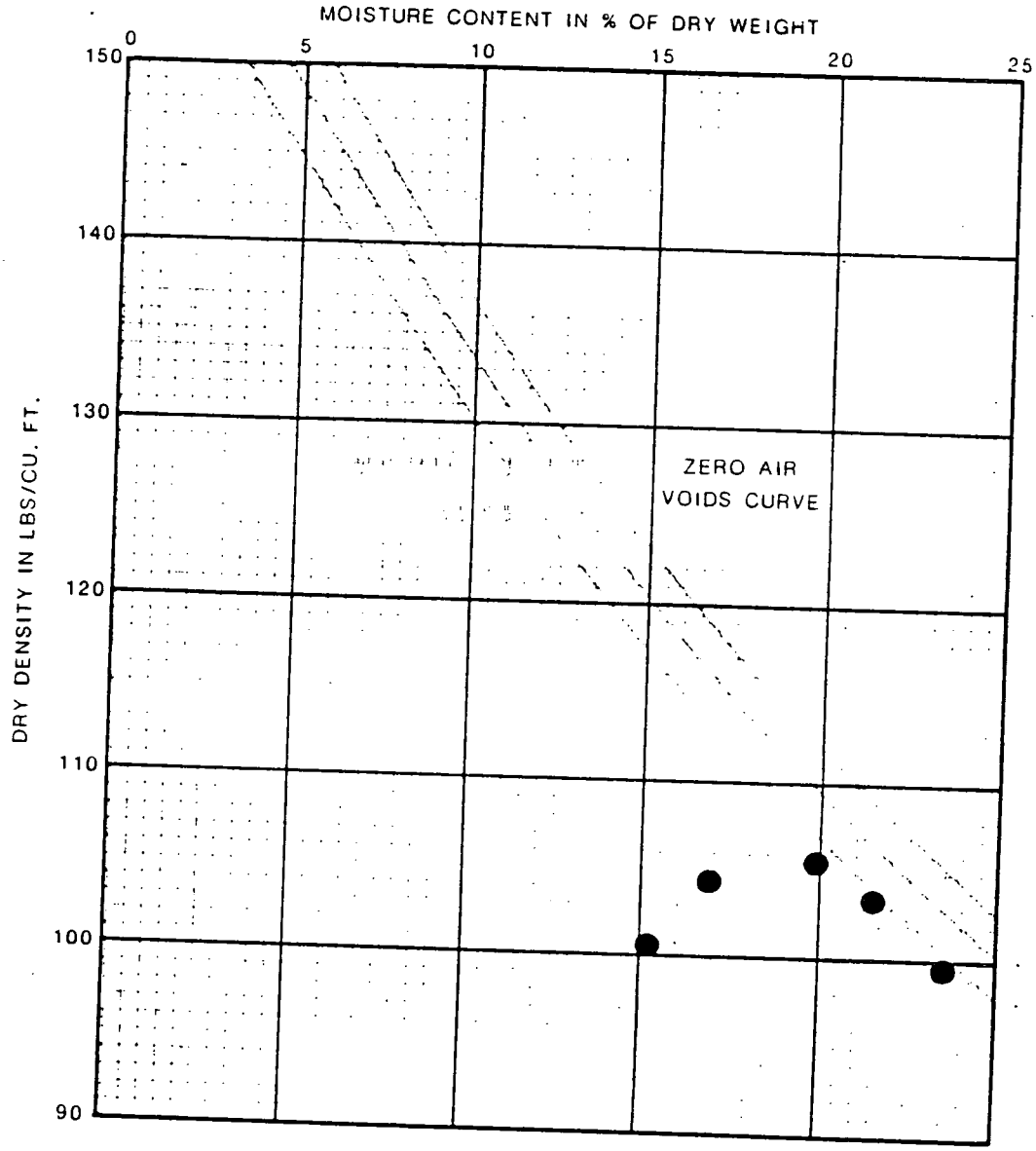
Soil Fernald NA 8-10-95

Location B# GZ-SB-12

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC Parsons P0140 2059-13 I

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold #0275
Rammer #0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2055-13 Client SAIC/Parsons Proj Location Fernald

Sampled 4-20-95 By SWC, WAW Tested 6-2-95 By RV Checked 6-06-95 By cal

SAMPLE DESCRIPTION	Soil B# G2-SB-13			Sample No. 404583		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300	350	400
MOISTURE DETERMINATION	Dish number	BØ	P08-2	LEO	M-16	D17
	Wt. of soil & dish g	423.27	420.36	392.83	423.62	452.78
	Dry wt. soil & dish g	379.16	368.73	339.50	358.75	375.92
	Net loss of moisture (B) g	44.11	51.63	53.3	64.87	76.86
	Wt. of dish only g	8.44	8.33	8.29	8.44	8.25
	Net wt. of dry soil (A) g	370.72	360.40	331.21	350.31	367.67
	Moisture, % of dry wt. (C)	11.9	14.3	16.1	18.5	20.9
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.25	14.52	14.69	14.69	~~14.25~~ 6-2-95 14.
	Wt. of mold only # lbs.	10.37				
	Net wt. of wet soil (D) #	3.88	4.15	4.32	4.32	4.20
	Net wt. of dry soil (E) #	3.47	3.63	3.72	3.65	3.47
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	104.0	108.9	111.6	109.4	104.2
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1366				

SKTP-1(3)

* Then add piston and seat with 5 blows.

4-20-95 SWC, WAW

Sample No. 404583 Depth 1.5-5' Elevation _____

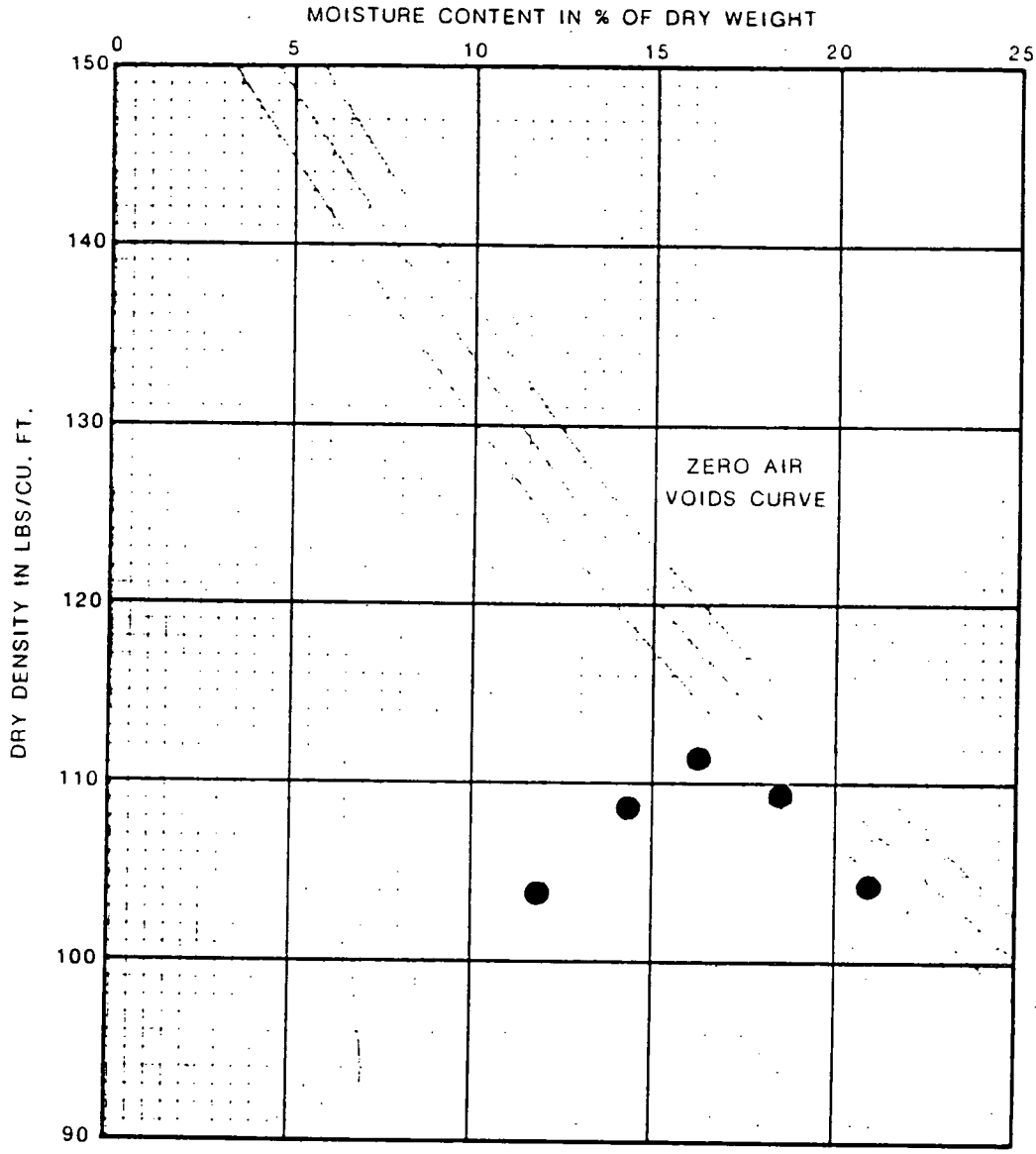
Soil Fernald

Location B# 62-SB-13

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC/Parsons P0140 2059-13C

COMPACTION TEST DATA

ADVANCED TERRA TESTING

S/L- 95-1158
Mold #0275
Rammer #0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-136 Client SAIC/Parsons PO140 Location Fernald

Sampled 4-19-95 By JC, BN Tested 6-7-95 By [illegible] Checked 6-14-95 By WEB

SAMPLE DESCRIPTION	Soil B# 62-SB-14				Sample No. 404578	
	Specific Gravity				Depth or Elevation 1.5-5'	
	% Passing 3/4"				% Passing 1/4"	
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	250	300	350	400	200
MOISTURE DETERMINATION	Dish number	K1	101	619	627	DII
	Wt. of soil & dish g	419.76	430.41	406.90	410.82	412.90
	Dry wt. soil & dish g	~~379.73~~ 380.04	~~383.18~~ 382.94	343.69	337.26	~~347.42~~ 367.92
	Net loss of moisture (B) g	40.03	47.23	63.21	73.56	45.43
	Wt. of dish only g	8.32	8.27	8.39	8.35	8.39
	Net wt. of dry soil (A) g	371.41	374.91	335.30	328.91	359.08
	Moisture, % of dry wt. (C)	10.8	12.6	18.9	22.4	12.8
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.28	14.54	14.61	14.54	14.28
	Wt. of mold only # lbs.	10.37	→			→
	Net wt. of wet soil (D) #	3.91	4.17	4.24	4.17	3.83
	Net wt. of dry soil (E) #	3.53	3.70	3.57	3.41	3.40
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	105.9	111.1	107.0	102.2	102.0
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in					

1368

* Then add piston and seat with 5 blows.

Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-136 Client SAIC / Parsons Po140 Location Fernald

Sampled 4-19-95 By R Tested 6-13-95 By R Checked 6-14-95 By WEB

SAMPLE DESCRIPTION	Soil B# 62-SB-14			Sample No. 404578		
	Specific Gravity			Depth or Elevation 1.5-5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300		
MOISTURE DETERMINATION	Dish number	F-20	K1	20A		
	Wt. of soil & dish g	506.39	421.90	545.68		
	Dry wt. soil & dish g	450.46	366.09	465.81		
	Net loss of moisture (B) g	55.93	55.81	79.87		
	Wt. of dish only g	8.28	8.32	7.76		
	Net wt. of dry soil (A) g	442.18	357.77	458.05		
	Moisture, % of dry wt. (C)	12.7	15.6	17.4		
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	13.98	14.29	14.52		
	Wt. of mold only # lbs.	10.37	10.37	10.37		
	Net wt. of wet soil (D) #	3.61	3.92	4.15		
	Net wt. of dry soil (E) #	3.20	3.39	3.53		
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	96.1	101.7	106.0		
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1369				

957P.1(3)

* Then add piston and seat with 5 blows.

6-13-95 A

Sample No. 404578 Depth 1.5-5' Elevation _____

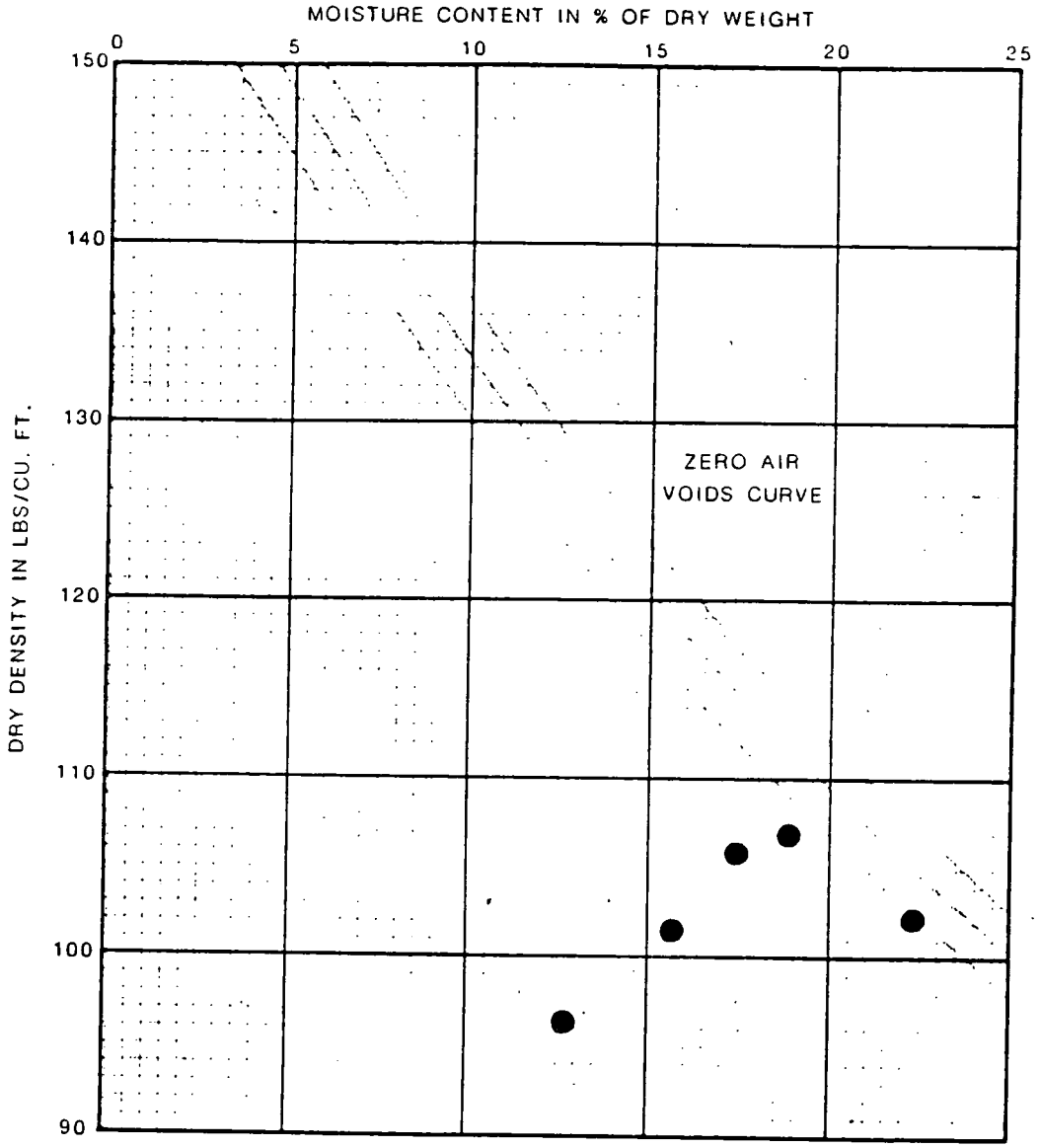
Soil Fernald

Location B# GZ-SB-14

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC / Parsons Po140 2059-13C

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold# [illegible]
Rammer# 0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-13M Client SAIC/Parsons PO140 Location ~~Fernald~~ N 6-30-95 62-SB-15

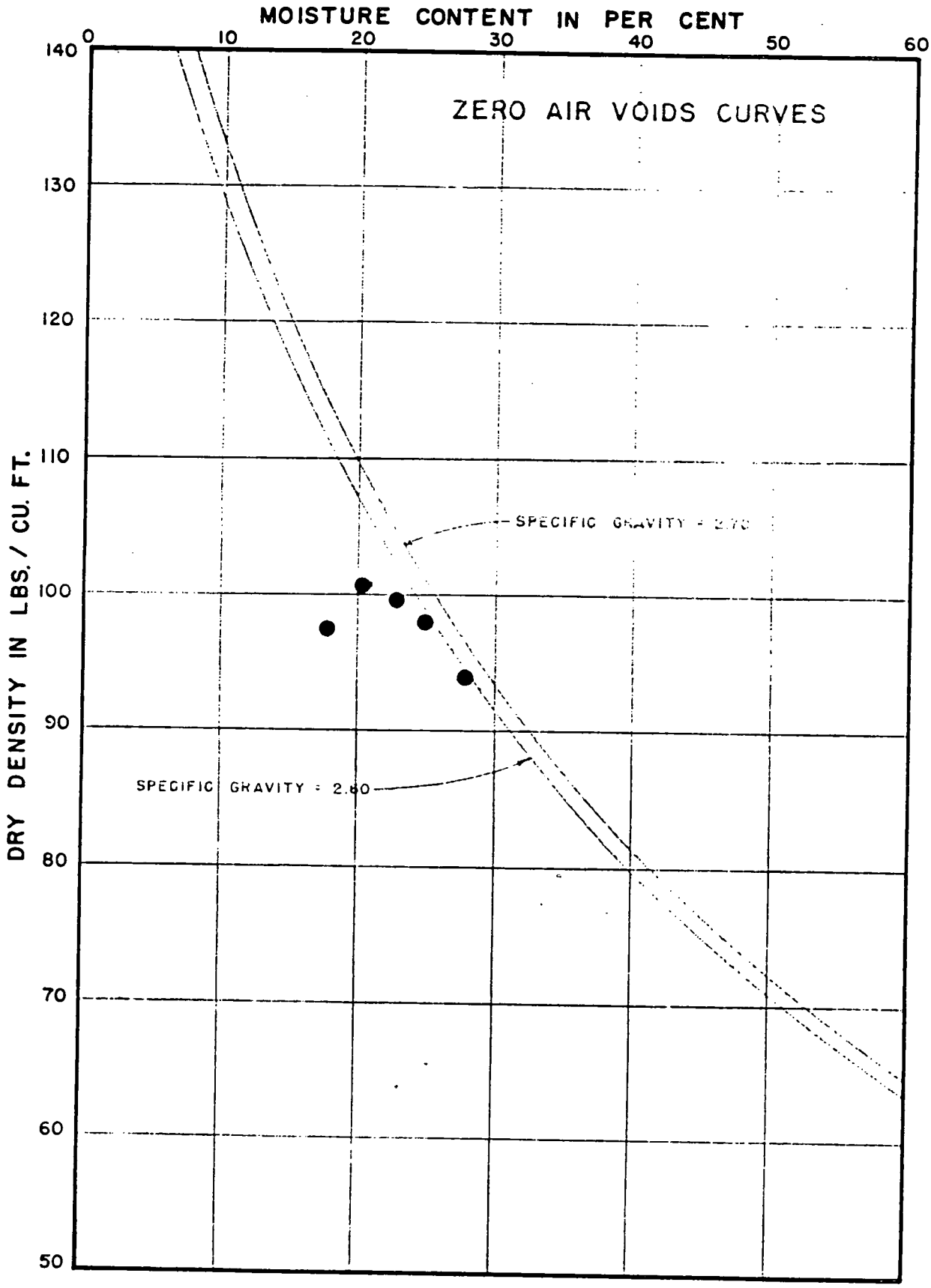
Sampled 5-12-95 By JC, BN Tested 6-30-95 By R Checked 7-3-95 By R

SAMPLE DESCRIPTION	Soil Fernald			Sample No. 404649		
	Specific Gravity			Depth or Elevation 1.0 - 2.0'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	200	250	300	350	150
MOISTURE DETERMINATION	Dish number	31H	6-39	23A	648	29
	Wt. of soil & dish g	487.38	387.64	508.72	365.58	492.19
	Dry wt. soil & dish g	407.19	317.05	408.53	287.55	418.98
	Net loss of moisture (B) g	80.19	70.59	100.19	78.03	73.21
	Wt. of dish only g	8.17	8.46	8.17	8.37	8.33
	Net wt. of dry soil (A) g	399.02	308.59	400.35	279.18	410.65
	Moisture, % of dry wt. (C)	20.1	22.9	25.0	27.9	17.8
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.40	14.45	14.46	14.38	14.20
	Wt. of mold only # lbs.	10.37	→			
	Net wt. of wet soil (D) #	4.03	4.08	4.09	4.01	3.83
	Net wt. of dry soil (E) #	3.36	3.32	3.27	3.13	3.25
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	100.7	99.6	98.1	94.0	97.5
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1371				

257P.1(3)

* Then add piston and seat with 5 blows.

FILE SAIC/PARSONS PO 140 2059-13 M
SUBJECT: MOISTURE - DENSITY DATA G2-SB-15
404649 @ 1.0-2.0' SHEET ___ OF ___



REVISIONS
BY ___ DATE ___ TO EO ___
BY ___ DATE ___ TO EO ___

BY CAL DATE 7-1-95
CHECKED BY R 7-3-95
COPY TO EO ___

ADVANCED TERRA TESTING

Mold# 0275
Rammer# 0278

COMPACTION TEST DATA

PAGE 4 NO. ___ OF ___

ADVANCED TERRA TESTING inc

Job No. 2059-133 Client SAIC / Parsons Proj Location 62-SB-16

Sampled 5-10-95 By JC, BN Tested 6-29-95 By N Checked 7-1-95 By cal

SAMPLE DESCRIPTION	Soil Fernald			Sample No. 404650		
	Specific Gravity			Depth or Elevation 1.0 - 2.0'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	450	250	300	350	400
MOISTURE DETERMINATION	Dish number	67	HL-1	35	641	4A
	Wt. of soil & dish g	387.82	438.72	415.77	503.37	463.95
	Dry wt. soil & dish g	310.48	379.87	351.55	417.67	378.60
	Net loss of moisture (B) g	77.34	58.85	64.22	85.70	85.35
	Wt. of dish only g	8.35	8.37	8.39	8.48	8.28
	Net wt. of dry soil (A) g	302.13	371.50	343.16	409.19	370.32
	Moisture, % of dry wt. (C)	25.6	15.8	18.7	20.9	23.1
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.39	14.28	14.44	14.56	14.54
	Wt. of mold only # lbs.	10.37	→			→
	Net wt. of wet soil (D) #	4.02	3.91	4.07	4.19	4.17
	Net wt. of dry soil (E) #	3.20	3.38	3.43	3.46	3.39
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	96.0	101.3	102.9	103.9	101.7
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1373				

TP-1(3)

* Then add piston and seat with 5 blows.

Permit
404680
62-58-16
1.0-2.0'

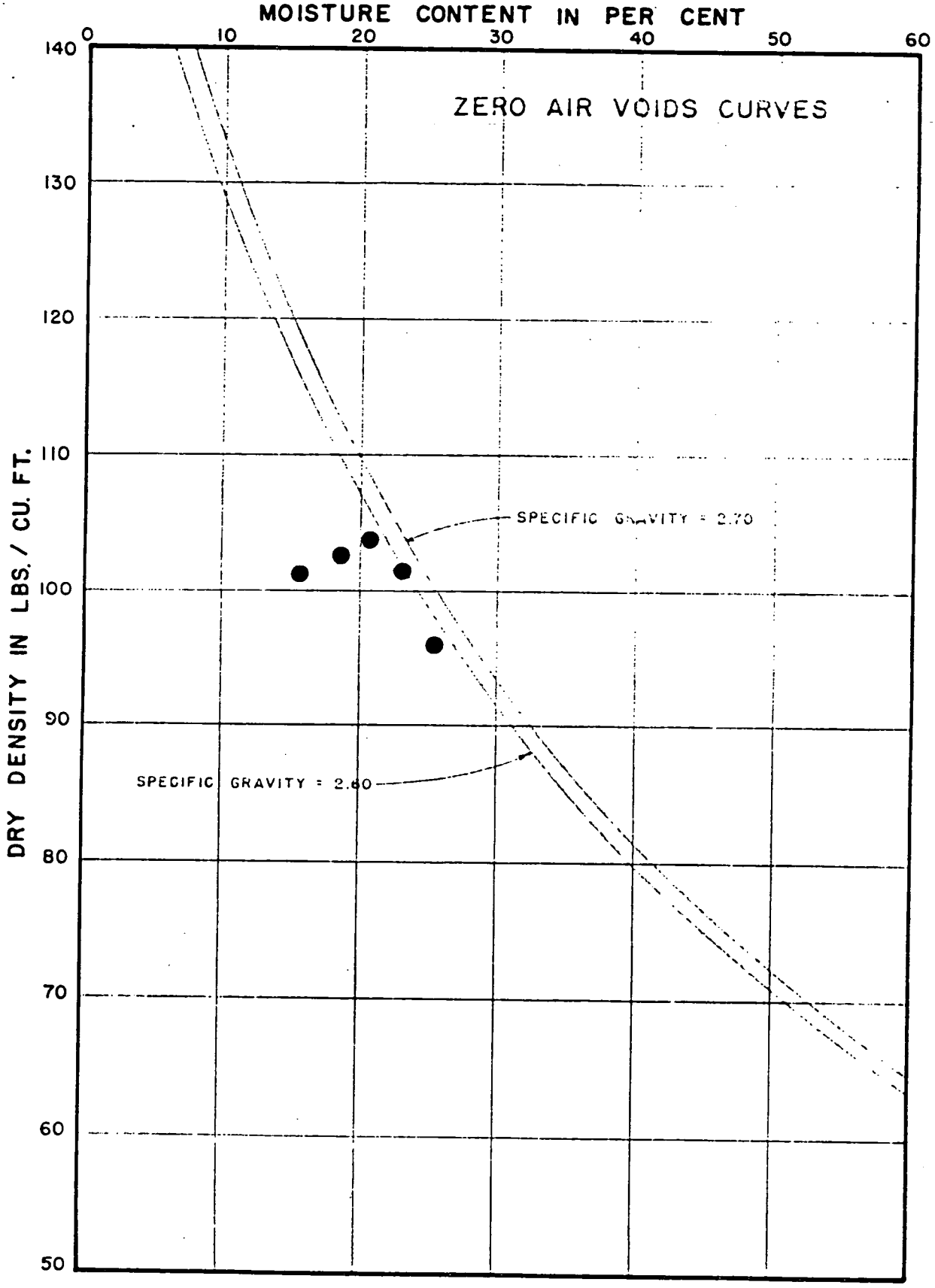
474

FILE DAIC/Parsons Polyo 2059-135

SUBJECT: MOISTURE - DENSITY DATA

SHEET ___ OF ___

REVISIONS
BY ___ DATE ___ TO EO ___
BY ___ DATE ___ TO EO ___



BY ___ DATE 6-30-95
CHECKED BY Cae 7-1-95
COPY TO EO ___

1374

ADVANCED TERRA TESTING

001502

Rammer# 0278

COMPACTION TEST DATA

PAGE NO.___ OF___

ADVANCED TERRA TESTING inc

Job No. 2059-135 Client SAIC/Parsons P0140 Location G2-SB-17

Sampled 5-10-95 By SC, BN Tested 6-29-95 By RV Checked 7-1-95 By ce

SAMPLE DESCRIPTION	Soil Fernald			Sample No. 405366		
	Specific Gravity			Depth or Elevation 1.0-2.0'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	100	150	200	250	300
MOISTURE DETERMINATION	Dish number	F-6	BØ	1P	626	6-20
	Wt. of soil & dish g	471.93	438.49	486.71	401.35	389.89
	Dry wt. soil & dish g	413.59	376.18	410.81	330.97	316.06
	Net loss of moisture (B) g	58.34	62.31	75.90	70.38	73.83
	Wt. of dish only g	8.37	8.44	8.31	8.37	8.34
	Net wt. of dry soil (A) g	405.22	367.74	402.5	322.60	307.72
	Moisture, % of dry wt. (C)	14.4	16.9	18.9	21.8	24.0
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.28	14.489	14.66	14.59	14.49
	Wt. of mold only # lbs.	10.57	→			
	Net wt. of wet soil (D) #	3.91	4.12	4.29	4.22	4.12
	Net wt. of dry soil (E) #	3.42	3.52	3.61	3.46	3.32
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	102.5	105.7	108.3	103.9	99.7
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1375				

957P.1(3)

* Then add piston and seat with 5 blows.

Sample No. 405366 Depth 10-20' Elevation _____

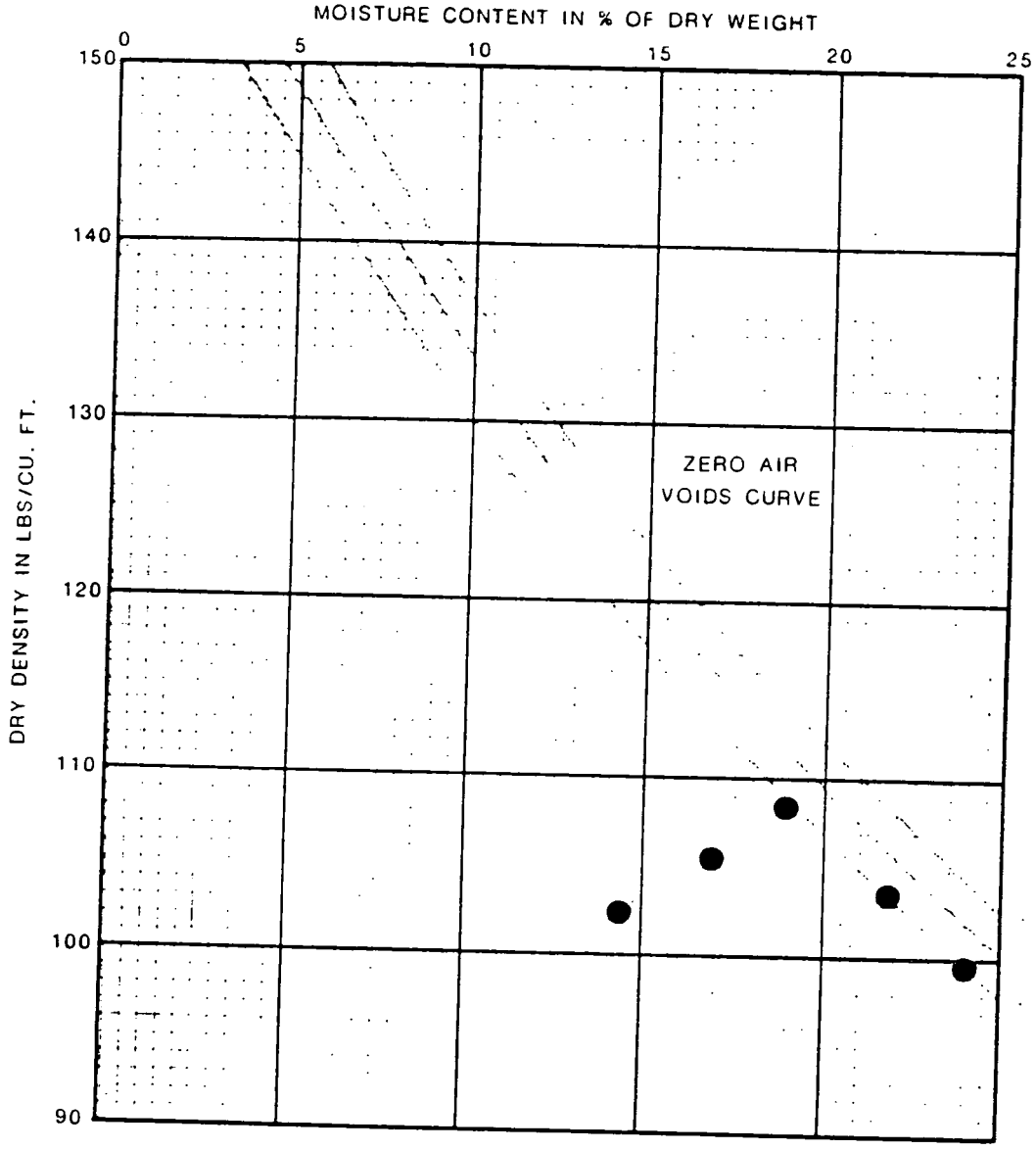
Soil Fernald

Location GZ-SB-17

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC/Parsons P0140 2059-123

COMPACTION TEST DATA

ADVANCED TERRA TESTING

Mold # 0275
Rammer # 0278

COMPACTION TEST DATA

ADVANCED TERRA TESTING inc

Job No. 2059-13E Client SAIC / Parsons P0140 Location Fernald

Sampled 4-25-95 By SC/BV Tested 6-2-95 By [illegible] Checked 6-7-95 By WEB

SAMPLE DESCRIPTION	Soil B# 62-SB- 2, 3, 4, 6			Sample No. 404617		
	Specific Gravity			Depth or Elevation 0-1.5'		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	250	300	350	400	450
MOISTURE DETERMINATION	Dish number	JOE	6-20	6-34	F-20	D16
	Wt. of soil & dish g	368.06	421.93	433.51	410.35	367.03
	Dry wt. soil & dish g	325.30	365.80	368.58	343.09	300.63
	Net loss of moisture (B) g	42.76	56.13	64.93	67.26	66.40
	Wt. of dish only g	8.44	8.33	8.20	8.29	8.32
	Net wt. of dry soil (A) g	316.86	357.47	360.38	334.80	292.31
	Moisture, % of dry wt. (C)	13.5	15.7	18.0	20.1	22.7
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.16	14.36	14.52	14.51	14.43
	Wt. of mold only # lbs.	10.37 →				
	Net wt. of wet soil (D) #	3.79	3.99	4.15	4.14	4.06
	Net wt. of dry soil (E) #	3.34	3.45	3.52	3.45	3.31
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	100.2	103.5	105.5	103.4	99.3
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1377				

087P.1(3)

* Then add piston and seat with 5 blows.

4-25-95 JC/BN

Sample No. 404617 Depth 0-1.5' Elevation _____

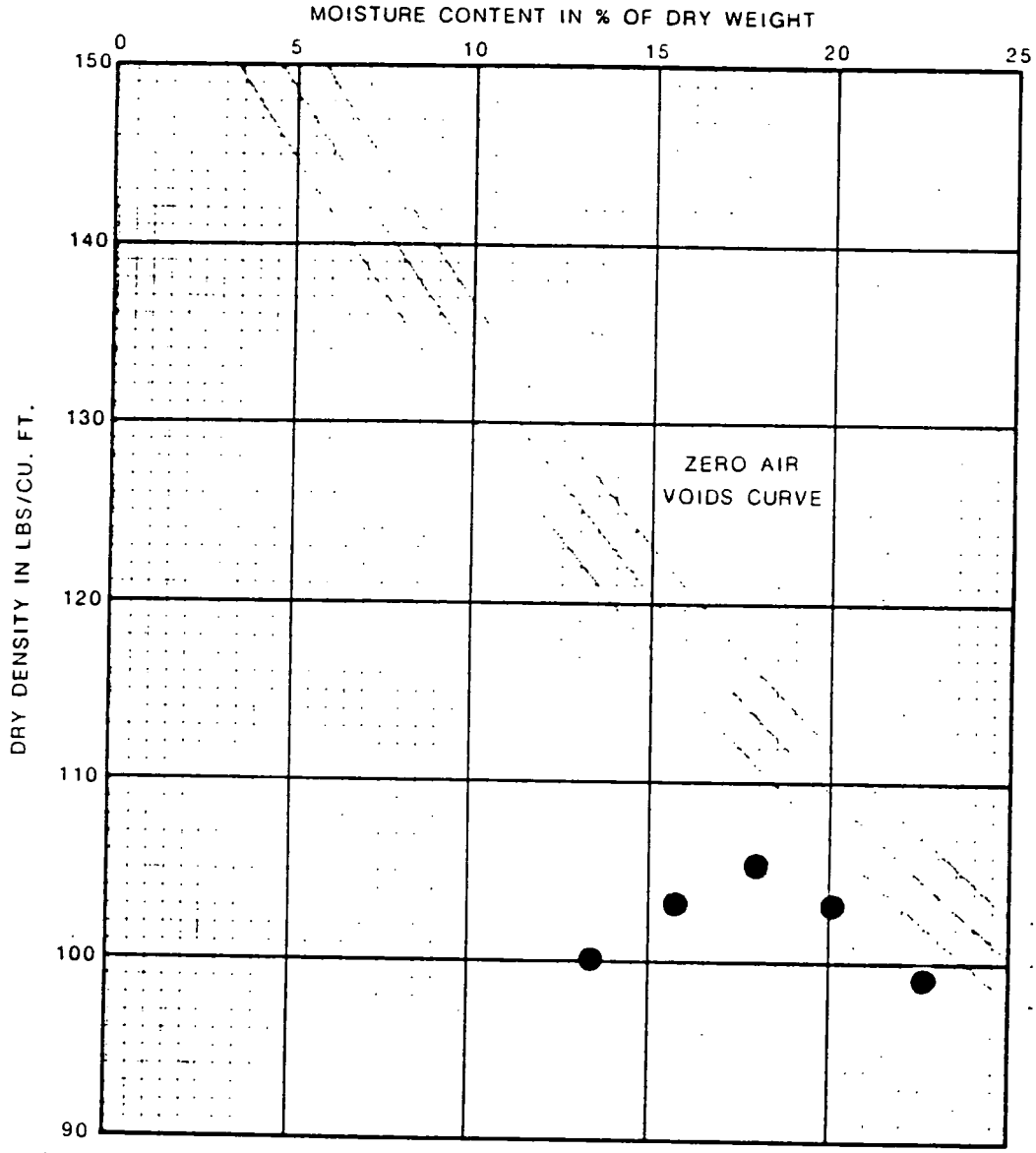
Soil Fernald

Location B# 62-SB-2, 3, 4, 6

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D698 Method A



File SAIC/Parsons Polab 2059-131

COMPACTION TEST DATA

ADVANCED TERRA TESTING

SPL-95-1259
mold #0295
Rammer # 0278

COMPACTION TEST DATA

PAGE NO.____ OF____

ADVANCED TERRA TESTING, inc

Job No. 2059-13I Client SAIC / Parsons PO140 Location Fernald

Sampled 4-27-95 By JC, BN Tested 6-7-95 By [illegible] Checked 6-9-95 By WEB

SAMPLE DESCRIPTION	Soil B# 62-SB-8, 9, 10, 11			Sample No. 404644		
	Specific Gravity			Depth or Elevation ~~1.5-3~~ 0-1.5' cal 6-16-95		
	% Passing 3/4"			% Passing 1/4"		
TEST SPECIFICATIONS ASTM D 698 METHOD A	Compaction method (F, G)	☐ Proctor	☒ Standard AASHO	☐ Modified AASHO	☐ Calif.	
	Cylinder - cu. ft.	1/20	1/30	1/30	Variable	
	Rammer - lbs.	5 1/2	5 1/2	10	10	
	Drop - inches	18	12	18	18	
	Layers	3	3	5	5	
	Blows per layer	25	25	25	20 *	
	Wt. of moisture added ml	250	300	350	400	450
MOISTURE DETERMINATION	Dish number	F-10	ABS-6	G-5	Z-1	SPUD
	Wt. of soil & dish g	399.11	481.70	477.14	446.21	407.35
	Dry wt. soil & dish g	350.39	412.34	402.01	366.45	330.89
	Net loss of moisture (B) g	48.72	69.36	75.13	79.76	76.46
	Wt. of dish only g	8.26	8.36	8.44	8.37	8.38
	Net wt. of dry soil (A) g	342.13	403.98	393.57	358.08	322.51
	Moisture, % of dry wt. (C)	14.2	17.2	19.1	22.3	23.7
DENSITY DETERMINATION	Wt. of soil & mold # lbs.	14.32	~~14.50~~ 14.45 by 6-7-95	14.55	14.54	14.45
	Wt. of mold only # lbs.	10.37	→			→
	Net wt. of wet soil (D) #	3.95	4.08	4.18	4.17	4.08
	Net wt. of dry soil (E) #	3.46	3.48	3.51	3.41	3.30
	Ht. of sample - Calif. (G)					
	Dry Density, lbs/cu ft (H)	103.7	104.5	105.3	102.3	98.9
PENETROMETER	Needle Size					
	Resistance Reading					
	Resistance, lbs/sq in	1379				

2057P.1(3)

* Then add piston and seat with 5 blows.

4-27-95 JCLON

Sample No. 404644 Depth 0-1.5' ~~[illegible]~~ cal 6-10-95 Elevation _____

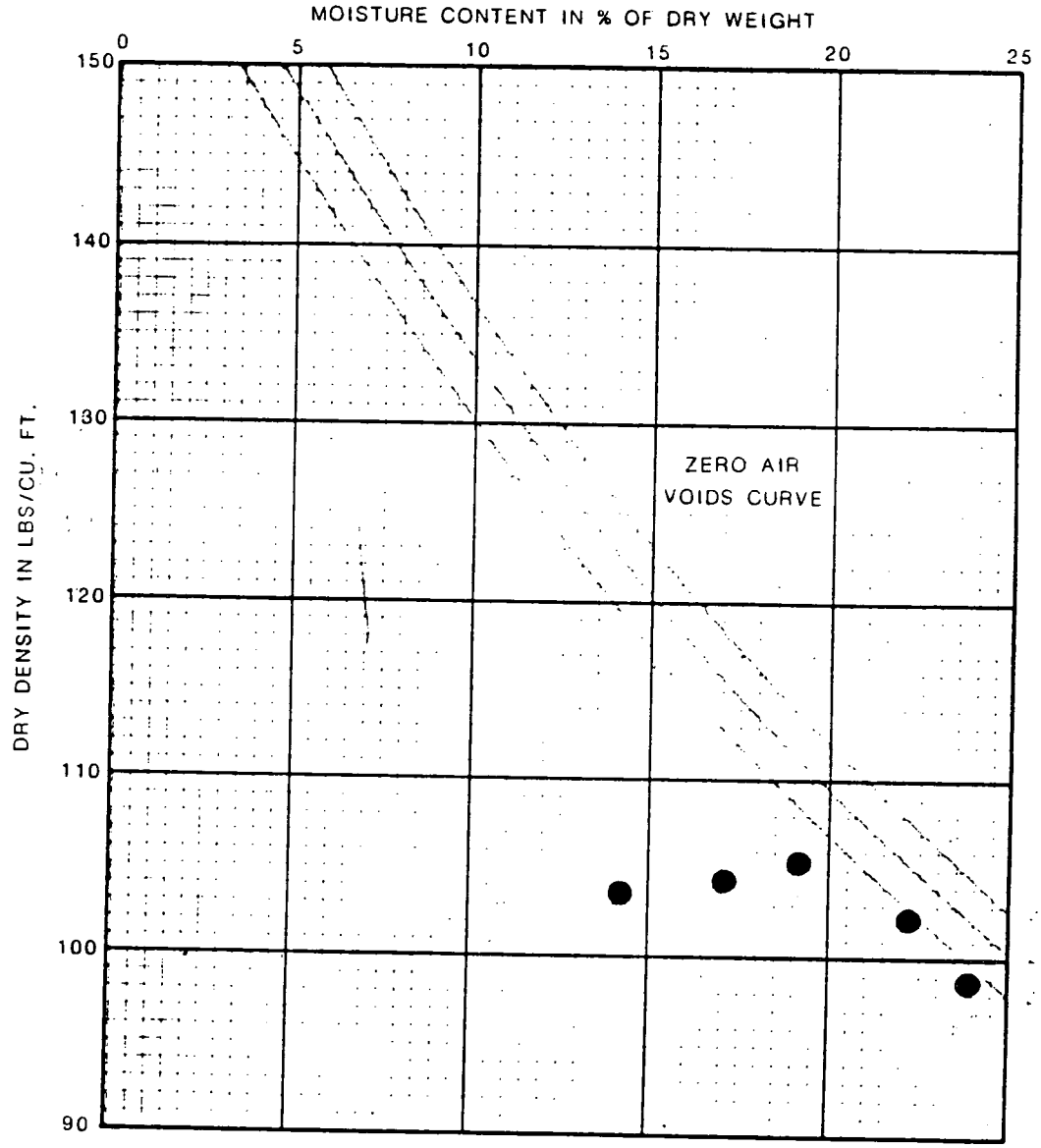
Soil Fernald

Location B# 62-SB-8,9,10,11

Optimum Moisture Content _____

Maximum Dry Density _____

Method of Compaction ASTM D 698 Method A



File SAIC/Parsons P0140 2059-131

COMPACTION TEST DATA

ADVANCED TERRA TESTING

SHELBY TUBE DESCRIPTIVE LOGS

Visual Classification Only

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
5.0'		Top of Sample
	Unused	
5.9'		Lean Clay with trace sand, light Olive Brown (2.5Y 5/4), very stiff and moist.
	Sample B (Consol. Remold)	
6.4'		Black Sand lense at 6.2'
	Sample A (Index Testing)	
7.0'	BOTTOM	

CUTTING EDGE CONDITION: Dented

ADDITIONAL COMMENTS: Sample condition good,

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons PO 140 BORING NO. G2-120

SAMPLE NO. 405124 DRAWN BY MGJ, DKM DATE 5-17-95

JOB NO. 2059-136 DEPTH 5.0-7.0' CHECKED BY VG DATE 8-14-95

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Shelby Tube Sample	
	Empty	
10.0'		Top of sample
	WAX	
10.2'	Sample E Disturbed	
10.7	Sample B Disturbed	
		Lean Clay, lt. Olive Brown (5Y 5/3) mottled with Greenish Gray Clay (10Y 6/1), moist, trace organics (reddish black)
11.2'	Sample A TX/CU pp (in situ) 3 point staged test	
11.7	WAX	
	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Poor sample, furrows filled with wax throughout majority of sample. TX/CU pp (in situ) 3 point staged test on Sample A.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. G2-121

SAMPLE NO. 404812 DRAWN BY MEJ DATE 5-17-95

JOB NO. 2059-136 DEPTH 10.0-11.7' CHECKED BY [illegible] DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET	DESCRIPTIONS
	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS

TOP

Empty

17.1' — Top of Sample

Unused

18.1' — Sample B TX/Pbp

18.5' — Silty Clay, Gray (5Y 5/1) w/some sand, trace gravel, low plastic, moist,

18.8' — Sample A Index Testing

sandy lenses interbedded in clay

19.1

19.5'

BOTTOM

CUTTING EDGE CONDITION: slightly bent

ADDITIONAL COMMENTS: Poor sample, voids filled with wax to 18.8'. Perm. (in situ) OK)

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons PO 140 BORING NO. G2-121

SAMPLE NO. 404817 DRAWN BY M&J, DKM DATE 5-17-95

JOB NO. 2059-136 DEPTH 17.5-19.5' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
5.0'		Top of sample
	unused portion of sample	
5.2'	sample C	
	Index Testing	
5.7'		
6.1'	samples consol. in situ, Nat. Moist.	lean Clay, H. Olive Brown to Gray (mottled 2.5Y 5/4 to 5Y 6/1) some sand, trace gravel, iron staining from fine sand, stiff, moist, trace organics
6.2'	sample A	
	TX/CUpp (in situ)	
	3pt. staged test	
6.8'	Index testing	
7.0'	BOTTOM	

CUTTING EDGE CONDITION: Slightly dented

ADDITIONAL COMMENTS: Sample fair condition. Sample A was taken for TX/CUpp (in situ) 3pt. Staged test.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-122

SAMPLE NO. 404821 DRAWN BY MGJ DPM DATE 5-17-95

JOB NO. 2059-13E DEPTH 5.0-7.0' CHECKED BY NG DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
10.0'		Top of Sample
	↑ unused ↓	
10.5	sample C TX/UU remolded 95% r.c.	
11.0'	sample B TX/UU remolded 85% r.c.	Silty Clay, light olive brown (2.5Y 5/4), with gravel, some sand, iron staining from sand, low plastic, moist, contains organics,
11.5'	sample A TX/UU in situ	— not saturated cut
12.0'	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample in fair to poor condition, voids in upper half of sample filled with wax. Samples A, B, and C were cut for TX/UU in situ and 2 TX/UU remolded. Voids throughout sample.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons PO140 BORING NO. G2-122

SAMPLE NO. 404824 DRAWN BY MGJ, DPM DATE 5-17-95

JOB NO. 2059-136 DEPTH 10.0-12.0' CHECKED BY [illegible] DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS (VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS)
	TOP	
	Empty	
		Clayey Silt w/some sand, olive brown (2.5Y 4/4)
	unused	Top of Sample
15.3	sample C TX/CUPP remold 85% r.c.	strat. change
15.8	sample B TX/CUPP remold 85% r.c.	Fat Clay, gray (5Y 5/1), some gravel, trace fine sand, stiff, moist, iron staining from fine sand.
16.3	sample A TX/CUPP remold 85% r.c.	
16.8		
17.0	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample condition was good. ~~Samples A, B, and C were cut for TX/CUPP envelope.~~ Sample A was cut for TX/CUPP 3-point staged test.

TUBE DESCRIPTIVE LOG | **ADVANCED TERRA TESTING, INC.**

CLIENT SAIC/Parsons PO 140 BORING NO. G2-122

SAMPLE NO. 404827 DRAWN BY MGS, DPM DATE 5-17-95

JOB NO. 2059-136 DEPTH 15.0-17.0' CHECKED BY [illegible] DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET

TOP

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

Empty

7.4'

Index Testing

7.7'

Top of Sample.

→ Disturbed.

Lean Clay with Sand and a trace of Gravel, H. Olive Brown (2.5Y, 5/4), stiff

Sample A

TX/CUpp (insitu)

3pt. staged test

9.2'

WAX

9.5'

BOTTOM

CUTTING EDGE CONDITION: slightly bent

ADDITIONAL COMMENTS: Not enough sample for TX/CUpp (insitu) envelope. Sample A was taken for TX/CUpp (insitu) staged test (3pt.)

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC-Parsons BORING NO. G2-123

SAMPLE NO. 404797 DRAWN BY MGJDKM DATE 5-17-95

JOB NO. 2059-136 DEPTH 7.5-9.5' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
12.5'	Unused	Top of Sample
13.7'	Index Testing	
14.0'	Sample A TX/Pbp in situ	Fat Clay, Olive gray - dark gray (5Y 4/2 - 5Y 4/1) trace of fine sand, stiff to very stiff, moist
14.5' 14.4'	wax	
	BOTTOM	

CUTTING EDGE CONDITION: very dented, flattened

ADDITIONAL COMMENTS: Sample in fair - poor condition, void down side of tube. Sample A was cut for Permiability (TX) in situ.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons PO 140 BORING NO. 62-~~130~~ 123 NP 8-14-95

SAMPLE NO. 404800 DRAWN BY MGJ DPM DATE 5-17-95

JOB NO. 2059-13D DEPTH 12.5-14.5' CHECKED BY Na DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
20.0	Index Testing	Top of Sample
20.2	Sample A Tx Cu w/pp insitu 3 pt. staged test	Silty Clay, Gray (5Y 5/1) some sand, trace gravel, iron staining from fine sand, stiff, moist.
20.8	Index Testing	
21.0	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample condition fair, but only 1' of sample was not enough for TX/Cupp envelope. Sample A was cut for TX/Cupp in situ testing, 3pt. staged test.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons PO140 BORING NO. G2-123

SAMPLE NO. 404804 DRAWN BY MGJ, DPM DATE 5-17-95

JOB NO. 2095-13D DEPTH 20.0-21.0' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
5.0		Top of Sample
	unused	
5.3	Sample A Triax UU insitu (saturated)	σ_3 = 5.3 psi
5.7		Clay w/some silt, Olive brown (2.5y 4/4), stiff, moist, some organic content
	index Testing	
6.2		
	empty	
7.0		
	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample in fair to good condition. Sample A for TX/UU insitu was cut.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons BORING NO. G2-124

SAMPLE NO. 405002 DRAWN BY MGJDKM DATE 5-17-95

JOB NO. 2059-13A DEPTH 5.0-7.0' CHECKED BY VG DATE 8-14-95

Shelby tube sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
10.0'		Top of sample
	unused portion of sample	
10.5'		
11.0'		Silty Clay, Olive Brown (2.5Y 4/4), some sand and carbonaceous gravel, iron staining from fine sand, medium plastic, moist.
	Sample B TX/CUPP (in situ) multi staged	
3 pt. 11.5'		
	Sample A 3 consol samples	
12.0'	wax	
	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample is poor, voids in lower 1/3 of sample filled with wax. Sample B was taken for TX/CUPP (in situ) 3 point staged test. Sample A was cut for 3 consols. Sample C was retained for remolded testing.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-124

SAMPLE NO. 405004 DRAWN BY MGJ, DPM DATE 5-17-95

JOB NO. 2059-13A DEPTH 10.0-12.0' CHECKED BY NA DATE 8-14-95

Shelby tube sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
2.6'	sample C TX/CUPP remold 95%	Top of sample
3.0'	sample B TX/CUPP remold 95%	
3.5'	sample A TX/CUPP (in situ) 3pt. staged test	Silty Clay, H. Olive Brown (2.5Y 5/6), trace fine sand, very stiff, moist, iron staining from fine sand.
4.1'	Empty	
4.5'	BOTTOM	

CUTTING EDGE CONDITION: Slightly dented

ADDITIONAL COMMENTS: Sample condition poor, 4" void at bottom of sample. Sample A was cut for TX/CUPP (in situ) 3pt. staged test.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-125

SAMPLE NO. 405023 DRAWN BY MGJ, DPM DATE 5-17-95

JOB NO. 2059-13B DEPTH 2.5-4.5' CHECKED BY Na DATE 9-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
7.5		Top of Sample
	un used portion of sample	Silty Clay w/ sand, light Olive brown (2.5Y 5/4), Some gravel, iron staining from sand, stiff, moist
8.4	Sample B TX/UU set. in situ	
8.9	Sample A TX/UU (in situ)	not saturated (cal)
9.4		
9.5	index Test.	
	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample was in good condition, Sample A was cut for TX/UU in situ.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons PO140 BORING NO. G2-125

SAMPLE NO. 405026 DRAWN BY MGJ, DPM DATE 5-17-95

JOB NO. 2059-133 DEPTH 7.5-9.5' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET	TOP	DESCRIPTIONS
12.6'	Empty — Top of Sample	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	→ Disturbed	
13.6'	Sample A TX/CUpp (in situ) 3pt. staged test	
14.2'	Index Testing	
14.5'	BOTTOM	

CUTTING EDGE CONDITION: slightly bent

ADDITIONAL COMMENTS: Sample fair condition. Sample A was taken for TX/CUpp (in situ) 3pt. staged test.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-125

SAMPLE NO. 405029 DRAWN BY MGT, DPM DATE 5-17-95

JOB NO. 2059-136 DEPTH 12.5-14.5' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
17.5'		Top of Sample
	Unused	
18.1	TX/UU in situ Sample B saturated	with some sand, trace gravel
18.6'	Sample A TX/UU insitu not saturated	Silty Clay, gray (5Y 5/1), low plastic, moist (coal)
19.2'	Index	
19.5'	BOTTOM	

CUTTING EDGE CONDITION: slightly bent

ADDITIONAL COMMENTS: Good sample, TX/UU (insitu) sample good

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC/Parsons PO140 BORING NO. G2-125

SAMPLE NO. 405033 DRAWN BY MGJ, DKM DATE 5-17-95

JOB NO. 2059-133 DEPTH 17.5-19.5' CHECKED BY VA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	Top of Sample
7.9'	wax	
	Sample C Disturbed - Index Testing	
8.4'		
	Sample B TX/CUpp (in situ) 3pt. staged test	Clay Silt, Olive Brown (2.5Y 4/4) with some sand and gravel, low plastic, moist
8.9'		
	Sample A Disturbed - Index Testing	
	wax	
9.4'	wax	
	BOTTOM	

CUTTING EDGE CONDITION: bent

ADDITIONAL COMMENTS: Sample condition poor. Sample B was taken for TX/CUpp (in situ) 3pt. staged test.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-126

SAMPLE NO. 404768 DRAWN BY MGJ, DPM DATE 5-24-95

JOB NO. 2059-13D DEPTH 7.5-9.5 CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET	TOP	DESCRIPTIONS
12.5	Empty	Top of Sample — VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
12.6'	Index Testing	
	Sample C TX/CUPP remold 95% o.c.	
13.2'	Sample B TX/CUPP remold 95% o.c.	
13.7'	Sample A TX/CUPP	Clay with some Sand and Gravel, Dark Gray (5Y 4/1), Medium Plasticity, Moist
14.2'	remold 95% o.c.	
14.5	Emty	
	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2126

SAMPLE NO. 404771 DRAWN BY MGJ, DPM DATE 5-24-95

JOB NO. 3059-13D DEPTH 12.5-14.5 CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

TOP

Empty

15.4' Top of Sample

sample C
Index Testing

sample B
consol. (in situ)
remold (consol) 86%
remold (consol) 75% n.c.

Clay with sand and gravel, Dark Gray (5Y 4/1), low plastic, stiff, moist.

sample A
TX/UU
(in situ)

16.9'
17.0'

Empty

BOTTOM

CUTTING EDGE CONDITION: Dented

ADDITIONAL COMMENTS: Sample condition fair.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-126

SAMPLE NO. 404773 DRAWN BY MGJ DATE 4-24-95

JOB NO. 2059-13D DEPTH 15.0-17.0' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
25.2'	Top of sample	
	Unused portion of sample	
26.2'	Sample B Perm. (TX) (in situ)	Clay with some sand and gravel to 2", Dark Gray (5Y 4/1) iron staining from sand, high plasticity, moist.
26.5'	Sample A Index Testing	
27.0'	BOTTOM	

CUTTING EDGE CONDITION: Bent

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-126

SAMPLE NO. 404778 DRAWN BY MGJ DATE 4-24-95

JOB NO. 2059-13D DEPTH 25.0-27.0' CHECKED BY Na DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
35.0		Top of sample
	Unused portion of sample	
36.9		
	sample D Index Testing	Clay, Gray (5Y 5/1) some sand and rock, high plasticity, moist, slight iron staining from fine sand.
36.4	sample C consol. (in situ) Not moist	
36.5	sample B consol. (in situ) Saturated	
36.6	sample A Index Testing wet	
36.9		
	BOTTOM	CUTTING EDGE CONDITION: bent

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-126

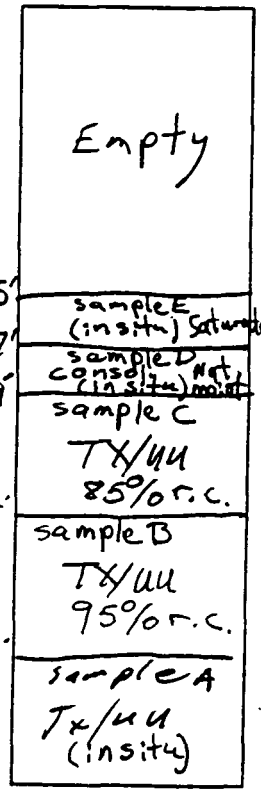
SAMPLE NO. 404783 DRAWN BY MGJ DPM DATE 5-24-95

JOB NO. 2059-13D DEPTH 35-37' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET

TOP 30' tube



BOTTOM

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

Olive Brown 2.5Y 4/4
stiff silty Clay - some organic staining - some Sand + Gravle - some ~~tar~~ voids
silty Clay

CUTTING EDGE CONDITION: Slightly Bent

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC / Parsons PO 140 BORING NO. G2-127

SAMPLE NO. 404751 DRAWN BY MK DATE 4-21-95

JOB NO. 2059-13D DEPTH 7.5-9.5 CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET	TOP	DESCRIPTIONS
	Empty	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
15.0'	sample D Index Testing	Top of Sample
15.5'	sample C TX/CUpp (in situ)	
16.0'	sample B TX/CUpp (in situ)	Silty Clay, Gray (5Y 5/1) some sand and gravel, iron staining from fine sand, medium plasticity, moist
16.5	sample A TX/CUpp (in situ)	
17.0'	BOTTOM	

CUTTING EDGE CONDITION: Slightly bent

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-127

SAMPLE NO. 404756 DRAWN BY MGJ DATE 5-24-95

JOB NO. 2059-13D DEPTH 15.0-17.0' CHECKED BY Na DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
28.0		Top of sample
	Unused portion of sample	
28.9		Clay with some rock fragments and a trace of sand, Dark Gray (5Y 4/1), low plastic, moist
	Sample B TX/Pbp (in situ)	
29.2		
	Sample A Index Testing	Silty Clay with some sand and rock fragments, Olive Gray (5Y 4/2), iron staining from fine sand, stiff, moist
29.9	Index Testing	
	BOTTOM	

CUTTING EDGE CONDITION: bent

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. 62-127

SAMPLE NO. 404763 DRAWN BY MGJ, JB DATE 5-25-95

JOB NO. 2059-13D DEPTH 28.0-30.0 CHECKED BY NA DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
2.5'		Top of Sample
	Unused portion of sample	
3.0'		
	sample D Index Testing	
3.5'		Silty Clay with some sand and rock fragments (subangular), lt. Olive Brown (2.5Y 5/4), iron staining, low plasticity, moist.
	sample C consol. (in situ)	
3.7'		
	sample B consol. (in situ) Not moist.	
3.9'		
	sample A TX UU (in situ)	
4.4'		
4.5'	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-128

SAMPLE NO. 405040 DRAWN BY MGJ, JB DATE 5-25-95

JOB NO. 205913B DEPTH 2.5-4.5' CHECKED BY [illegible] DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

TOP

Empty

Top of Sample

7.6 — Sample D Index Test: ng

8.0' — Sample C TX/CUpp remold 95% r.c.

8.5' — Sample B TX/CUpp 95% r.c. remold

9.0' — Sample A TX/CUpp remold 95% r.c.

9.5'

BOTTOM

Silty Clay with some rock fragments (subangular) and fine grained sand, H. Olive Brown (2.5Y 4/3), low plasticity, moist.

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. G2-128

SAMPLE NO. 405043 DRAWN BY MGJ, JB DATE 5-25-95

JOB NO. 2059-13B DEPTH 7.5-9.5' CHECKED BY Na DATE 9-14-95

Dennison Tube Sample

DEPTH IN FEET

TOP

Empty

13.5' Top of Sample

Index Testing

14.3 sample C
consol. (in situ)
14.4 Nat. Moist. sample A
consol.
14.5 remold 85% sample B

BOTTOM

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

Silty Clay with some rock fragment to 1" (subrounded) and sand, lt. olive Brown (2.5Y 5/3) medium plasticity, moist (very wet)

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons P0140 BORING NO. G2-128

SAMPLE NO. 405046 DRAWN BY MGJ, JB DATE 5-25-95

JOB NO. 2059-13B DEPTH ~~7.5-9.5~~ 12.5-14.5' MGJ CHECKED BY Na DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
17.7	Top of Sample	
	Unused portion of sample	
18.8'		Sandy lean clay, Gray (2.5Y 5/1), some Gravel to ½" (subrounded), v. stiff, moist (v. wet)
	Index Testing	
19.5	Sample A	
	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. G2-128

SAMPLE NO. 405049 DRAWN BY MEJ, JB DATE 5-25-95

JOB NO. 2059-13B DEPTH 17.5-19.5' CHECKED BY NA DATE 8-14-95

~~Dennison~~ Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	
5.2'	Empty	Top of sample. VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Unused portion of Sample	
6.5'	Sample B TX/UU (insitu) (saturated)	Silty Clay, Olive yellow (5Y 6/6), iron staining, v. stiff, moist
7.0'	Sample A TX/UU (in situ) Nat. Moisture	
7.5'	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Shelby Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons P0140 BORING NO. G2-129

SAMPLE NO. 404729 DRAWN BY MGJ DATE 5-25-95

JOB NO. 2059-13B DEPTH 5.0-7.5' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
10.5'	Unused portion of sample	Top of sample
11.8'	Sample A Index Testing	Sandy Clay with some Gravel 1/4-1/2" (subrounded), iron staining from fine sand, med. stiff, moist.
12.3	3" sample removed	
12.5'	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Shelby Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-129

SAMPLE NO. 404732 DRAWN BY MGJ DATE 5-25-95

JOB NO. 2059-13B DEPTH 10.0-12.5' CHECKED BY nd DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET	TOP	DESCRIPTIONS
	Empty	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Top of Sample	
	Index Testing	
24.7	Sample C TX/CUpp (in situ)	
25.2	Sample B TX/CUpp (in situ)	
25.8'	Sample A TXCUpp (in situ)	Fat Clay with sand and gravel to 1/2" (subrounded), Gray (5Y 5/1), stiff moist-wet.
26.3'		
26.5'	Index Testing	
	BOTTOM	

CUTTING EDGE CONDITION: bent

ADDITIONAL COMMENTS: Shelby Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-129

SAMPLE NO. 404740 DRAWN BY MGJ DATE 5-25-95

JOB NO. 2059-13B DEPTH ~~400-420'~~ 24.0-26.5' CHECKED BY VA DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET	TOP	DESCRIPTIONS
	Empty	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
5.0'		Top of Tube
5.2'	Empty	Top of sample
	Unused portion of sample	
6.0'		Lean Clay with some sand and a trace of gravel to 1" (rounded), Dark Gray (5Y 4/1), v. stiff, moist
	Sample B Index Testing	
6.5'		
	Sample A TX/UU (in situ)	
7.0'	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. ~~2059-13~~ G2-130

SAMPLE NO. 405075 DRAWN BY MGJ DATE 5-26-95

JOB NO. 2059-13H DEPTH 5.0-7.0' CHECKED BY VG DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET	TOP	DESCRIPTIONS
	Empty	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
10.0	sample D Index Testing	Top of Tube (Sample)
10.5	sample C TX/CUpp	
11.0	(in situ) sample B TX/CUpp	Clay, Dark Gray (5Y 4/1), high plasticity very stiff, moist – v. wet, contains rock fragments to 1" (angular).
11.5	(in situ) sample A TX/CUpp (in situ)	
12.0	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. G2-130

SAMPLE NO. 405077 DRAWN BY MGJ DATE 5-26-95

JOB NO. 2059-13H DEPTH 10-12' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

TOP

Empty

15.0' Top of Sample

Unused portion of sample

15.4'

Sample E
Index Testing

15.9'

Sample D
consol. remold 85% r.c.

16.1'

Sample C
consol. remold 95% r.c.

16.3'

Sample B Nat. Moist.
consol. (in situ)

16.5'

Sample A
TX/UU
(in situ)

17.0'

BOTTOM

Lean Clay with sand and gravel to 1/2" (angular-subrounded), Dark Gray (5Y 4/1)

CUTTING EDGE CONDITION: very dented

ADDITIONAL COMMENTS: Shelby Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-130

SAMPLE NO. 405080 DRAWN BY MGT DATE 5-26-95

JOB NO. 2059-13H DEPTH 15.0-17.0' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
20.0'		Top of sample
	unused portion of sample	
20.4'	sample C TX/CUpp remold 95% o.c.	
20.9'	sample B TX/CUpp remold 95% o.c.	Lean Clay with some Sand, Dark Gray (5Y 4/1), some Gravel to 1/2", stiff, moist.
21.4'	TX/CUpp remold 95% o.c.	
21.9'	sample A	
	BOTTOM	

CUTTING EDGE CONDITION: dented

ADDITIONAL COMMENTS: Shelby tube sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-130

SAMPLE NO. 405083 DRAWN BY MGJ DATE 5-26-95

JOB NO. 2059-13H DEPTH 20.0-22.0' CHECKED BY [illegible] DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
30.0'		Top of Sample
	Sample D Index Testing	
30.5'		
	Sample C TX/CUPP (in situ)	
31.0'		Lean Clay with some sand and gravel to 1", Dark Gray (5Y 4/1) medium plasticity, very stiff, moist
	Sample B TX/CUPP (in situ)	
31.5'		
	Sample A TX/CUPP (in situ)	
32.0'		
	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample. Samples A, B, and C were taken to produce the TX/CUPP (in situ) envelope.

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. G2-130

SAMPLE NO. 405088 DRAWN BY M&J DATE 5-30-95

JOB NO. 2059-134 DEPTH 30.0-32.0' CHECKED BY VA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
7.6'	Top of sample	
	unused portion of sample	
8.0'	sample C Index Testing	
8.5'	sample B TX/UU remold 95%	Sandy Lean Clay with some gravel to 3/4" (subrounded - subangular), yellowish Brown (10YR 5/6) trace iron staining from sand, moist
9.0'	sample A TX/UU (insitu) σ3 = 9.5psi	
9.5'	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-131

SAMPLE NO. 404704 DRAWN BY MGJ DATE 5-30-95

JOB NO. 2059-13A DEPTH 7.5-9.5' CHECKED BY Na DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
17.5'		Top of Sample
	Unused portion of sample	
18.6'	sample C Index Testing	Sandy Clay with Gravel to 1" (subrounded - subangular), Dark Greenish Gray (10Y 4/1), medium plasticity, moist.
19.1	Sample B consol. (in situ) Nat. Moist.	
19.3'	Sample A consol. (in situ) Saturated	
19.5'	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-131

SAMPLE NO. 404709 DRAWN BY MGJ DATE 5-30-95

JOB NO. 2059-13A DEPTH 17.5-19.5' CHECKED BY Nd DATE 8-14-95

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
27.5'		Top of Sample
	unused portion of sample	
28.1		
	Sample D Index Testing	
28.6		
	sample C consol (in situ) Nat. Moist.	Sandy Clay with Gravel to 2", Dark Greenish Gray (10Y 4/1), medium plasticity, moist.
28.8		
	Sample B consol (in situ) saturated	
29.0'		
	Sample A TX/UU in situ σ_3 = 29.5 psi	
29.5'	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-131

SAMPLE NO. 404713 DRAWN BY M&J DATE 05-30-95

JOB NO. 2059-13A DEPTH 27.5-29.5' CHECKED BY VG DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

TOP

Empty

45.0 — Top of Sample

unused portion of sample

45.6

sample D
Index Testing

46.1

sample C
Consol (in situ)
Saturated

46.3

sample B (in situ)
Consol
Not Moist

46.5

sample A
TX/UU (in situ)
Saturated
σ_3 = 46.5 psi

47.0

Sandy ~~brown~~ Clay with Gravel to 3/4" (subrounded to subangular) Dark Greenish Gray (10Y 4/1), moist. medium plasticity

BOTTOM

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-131

SAMPLE NO. 404719 DRAWN BY MGJ DATE 05-30-95

JOB NO. 2059-13A DEPTH 45.0-47.0' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
5.0		Top of Sample
	Sample D Index Testing	
5.3'		
	Sample C TX/CUpp remold 95% σ_3 = 30psi; 470psi	
5.8'		Lean Clay with sand and scattered gravel to 1/2", (subrounded) Dark Olive Brown (2.5Y 3/3) moist-wet.
	Sample B TX/CUpp remold 95% σ_3 = 6.3psi	
6.3'		
	Sample A TX/UU (in situ) saturated σ_3 = 6.8psi	
6.8'		
7.0'	wax	
	BOTTOM	CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-132

SAMPLE NO. 405102 DRAWN BY MGJ DATE 5-30-95

JOB NO. 2059-134 DEPTH 5.0-7.0' CHECKED BY NA DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
10.0'		Top of Tube (Sample
	Unused portion of sample	
10.5'	sample C Index Testing	
11.0'	sample B TX/UU remold 95% r.c. σ_3 = 11.5psi	Lean Clay with sand and scattered gravel to 3.5" (subrounded), Gray (5Y 5/1) to Olive Brown (2.5Y 5/4) at top .6' of sample, soft to firm, moist to wet.
11.5'	sample A TX/UU (in situ) saturated σ_3 = 12.0psi	
12.0'	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-132

SAMPLE NO. 405105 DRAWN BY MGJ DATE 5-30-95

JOB NO. 2059-13H DEPTH 10.0-12.0' CHECKED BY VG DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
15.0'	sample D Index Testing	Top of Sample
15.4'	sample C TX/CU (in situ) σ_3 = 80 psi	
15.9'	sample B TX/CU (in situ) σ_3 = 40 psi	Lean Clay with sand and trace gravel to 1" (subrounded), Gray (5Y 5/1), stiff, moist.
16.4'	sample A TX/CU (in situ) σ_3 = 16.4 psi	
16.9'	wax	
17.0'	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample condition good. Three samples were taken for TX/CU pp (in situ) envelope

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-132

SAMPLE NO. 405108 DRAWN BY MGJ DATE 05-31-95

JOB NO. 2059-13H DEPTH 15.0-17.0' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
20.0		Top of Sample
	Unused portion of sample	
21.25	sample B Index Testing	Lean Clay with trace sand and scattered gravel to 3/4" (subrounded), Gray (5Y5/1), stiff, moist
21.75	sample A Perm(TX): in situ σ_3 = 21.75 psi;	
22.0	BOTTOM	

CUTTING EDGE CONDITION: dented

ADDITIONAL COMMENTS: Shelby Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons P0140 BORING NO. G2-132

SAMPLE NO. 405111 DRAWN BY MGJ DATE 05-31-95

JOB NO. 2059-13H DEPTH 20.0-22.0' CHECKED BY NA DATE 8-14-95

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
2.8'	sampled	Top of Sample
	TX/CUPP 85% remold multi staged test trimmings for Index Testing	Silty Clay with some sand and scattered gravel to 1/4", Olive Gray (5Y 5/2), stiff, moist.
3.4'		Bottom of Sample
	Empty	
	BOTTOM	

CUTTING EDGE CONDITION: slightly dented

ADDITIONAL COMMENTS: Sample condition poor, majority of sample used to produce TX/CU pp 85% remolded multi staged test specimen

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. G2-133

SAMPLE NO. 405053 DRAWN BY MGJ DATE 05-31-95

JOB NO. 2059-13D DEPTH 2.5-4.5' CHECKED BY NA DATE 8-14-95

Shelby Tube Sample

DEPTH IN FEET

DESCRIPTIONS

VISUAL CLASSIFICATION ONLY!
NOT A RESULT OF LAB TESTS

TOP

Empty

7.5' — Top of Sample

Unused portion of sample

8.1'

sample D

Index Testing

Lean Clay with sand and scattered gravel to 1/2", Olive (5Y/5/4), stiff, moist.

8.6 sample C consol, insitu Not Moist

8.8'

sample B consol, insitu, Saturated

9.0'

sample A

TX/UU (insitu) saturated

9.5'

BOTTOM

CUTTING EDGE CONDITION: bent, bottom 1/2 of tube dented 1/4"

ADDITIONAL COMMENTS

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO 140 BORING NO. G2-133

SAMPLE NO. 405055 DRAWN BY 05-31-95 DATE MGT

JOB NO. 2059-13D DEPTH 7.5-9.5' CHECKED BY NA DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET	TOP	DESCRIPTIONS
	Empty	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
15.0	sampleD ~~TX/CUPP~~ ~~Ha~~ Index Testing	Top of Sample
15.5	sampleC TX/CUPP (insitu) σ_3= 80psi	
16.0	sampleB TX/CUPP σ_3= 40psi	Lean Clay with Sand and some gravel to 1" (subangular-subrounded), Dark Gray (5Y 4/1), stiff, moist.
16.5	sampleA TX/CUPP (insitu) σ_3= 16.5psi	
17.0	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons P0140 BORING NO. G2-133

SAMPLE NO. 405059 DRAWN BY M&J DATE 05-31-95

JOB NO. 2059-13D DEPTH 15.0-17.0' CHECKED BY Na DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
	Empty	
17.5'		Top of Sample
	Unused portion of sample	
18.7'	sample B	Lean Clay with some sand and scattered gravel to 1/2" (subangular) Dark Gray (5Y 4/1), stiff, moist
	Index Testing	
19.2'	Sample A Penn(TX); in situ σ_3 = 19.2 psi	
19.5'		
	BOTTOM	

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-133

SAMPLE NO. 405061 DRAWN BY MGJ DATE 05/31/95

JOB NO. 2059-13D DEPTH 17.5-19.5 CHECKED BY VA DATE 8-14-95

DEPTH IN FEET	DESCRIPTIONS
	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS

TOP

~~Empty~~

25.0 — Top of sample (Tube)

Unused portion of sample

Void

Lean Clay with sand and scattered gravel to 1", Gray (5Y 5/1) firm to stiff, moist to wet.

26.2 — Sample B

Index Test

26.7 — Sample A

TX/Pop in situ

σ_3 = 28 psi

27.0

BOTTOM

CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-133

SAMPLE NO. 405065 DRAWN BY MGJ DATE 5-31-95

JOB NO. 2059-13P DEPTH 25.0-27.0' CHECKED BY NG DATE 8-14-95

Dennison Tube Sample

DEPTH IN FEET		DESCRIPTIONS
	TOP	VISUAL CLASSIFICATION ONLY! NOT A RESULT OF LAB TESTS
12.0'		Top of sample (Tube)
	sample D Index Sample	
13.0'	sample C Tx/uu remold 88% r.c. saturated σ_3 = 12.5 psi	Lean Clay with some sand and scattered gravel to 8" (subangular to subrounded), Dark Gray (5Y 4/1), some iron staining from fine sand, stiff, moist.
13.5'	sample B Tx/uu remold 95% r.c. saturated σ_3 = 13.0 psi	
14.0'	sample A Tx/uu insitu saturated σ_3 = 13.5 psi	
	BOTTOM	CUTTING EDGE CONDITION: Good

ADDITIONAL COMMENTS: Dennison Tube Sample

TUBE DESCRIPTIVE LOG	ADVANCED TERRA TESTING, INC.

CLIENT SAIC, Parsons PO140 BORING NO. G2-134

SAMPLE NO. 405140 DRAWN BY M&J DATE 5-31-95

JOB NO. 2059-136 DEPTH 12.0-14.0' CHECKED BY NA DATE 8-14-95

CALIFORNIA BEARING RATIO

ASTM D 1883

BEARING RATIO TEST Data Sheet 22

Project SAIC/Parsons A 140 Job No. 2059-13 m

Location of Project Fernald Boring No. 02-SB-15 Sample No. 404649 1-2.0' 5-12-95 JC BW

Description of Soil γ_{max} 101 PCF, omc 21.4%

Tested By CM Date of Testing 7-7-95 tu

Compaction Energy: Hammer _____ N No. of Layers _____ Blows/layer _____

w at compaction 95 % Mold diam. 6.00 Ht. of Soil 4.584 Vol. .075

Wt. wet soil ① 8.52 ② 8.74 ③ 8.96 Wt. dry soil, W_s ① 7.17 ② 7.14 ③ 7.19 γ_{wet} 113.6 116.5 119.5 γ_{dry} 95.5 95.2 95.8

Swell Data

Starting time and date	Elapsed time	Mold no. 1 Surcharge 10 lbs Dial reading (× _____)	% = S/H (100)	Mold no. 2 Surcharge 10 lbs Dial reading (× _____)	% = S/H (100)	Mold no. 3 Surcharge 10 lbs Dial reading (× _____)	% = S/H (100)
7-7-95 1006	0 h	.636	0	.591	0	.745	0
7-7-95 1115	1 h 9 min	.713	1.7	.642	1.1	.763	.39
7-7-95 1206	2 h	.723	1.9	.646	1.2	.765	.44
7-7-95 1406	4 h	.738	2.2	.652	1.3	.768	.50
7-8-95 1006	24	.791	3.4	.672	1.8	.773	.61
7-10-95 1700		.791	3.4	.674	1.8	.773 ~~[illegible]~~	.61
7-11-95 1001		.798	3.5	1046 .679	1.9	1120 .778	.72

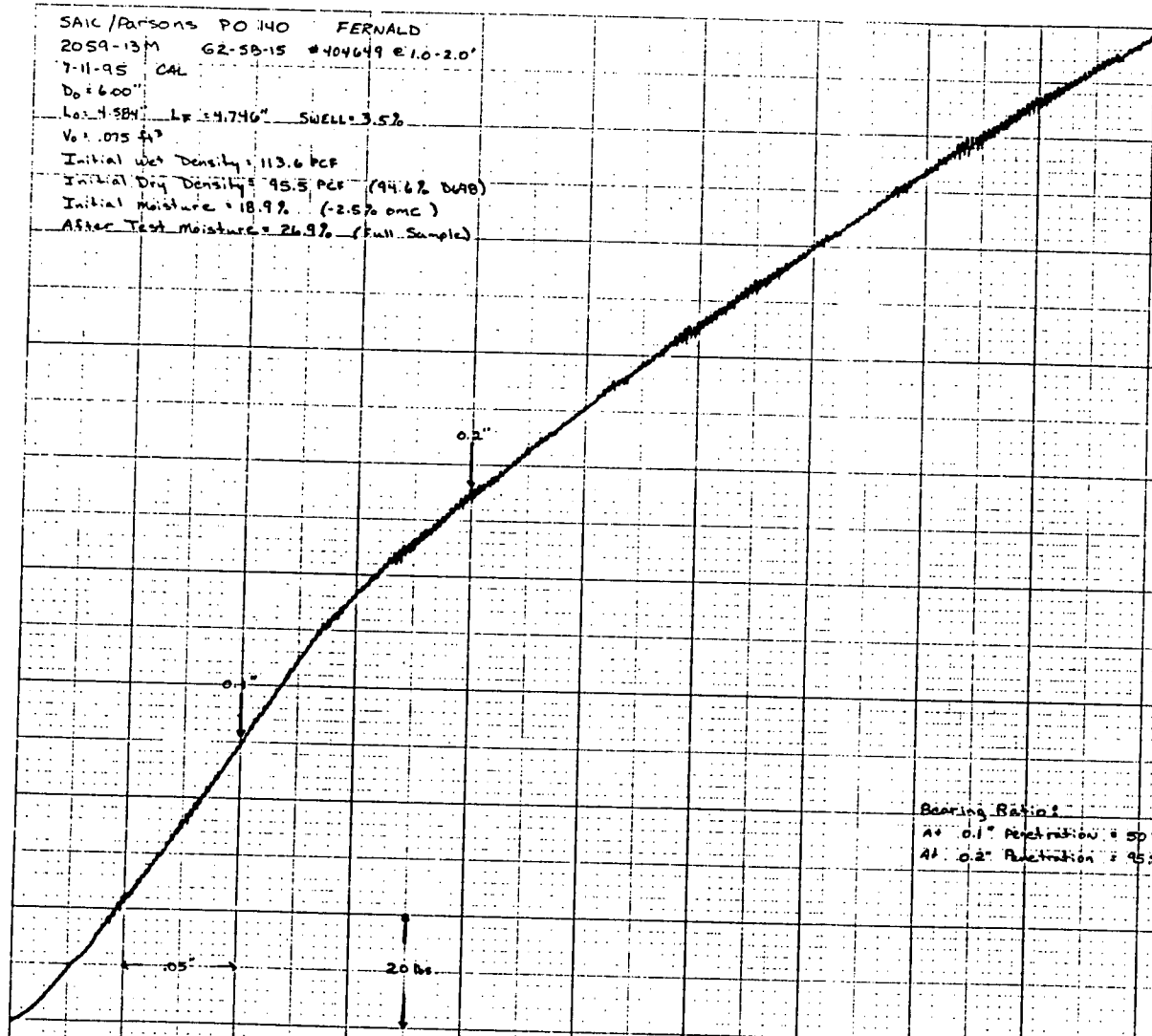
After Soaking

	-3% omc	omc	+3%
Mold no.	1	2	3
Surcharge, N	10 lbs.	10 lbs	10 lbs.
Initial wt. wet soil + mold + base plate	24.49 lbs.	24.61 lbs.	25.04 lbs.
Final wt. wet soil + mold + base plate	25.08 ~~[illegible]~~	24.92 lbs	25.16 lbs.
Wt. of mold + base plate	15.97 lbs.	15.87 lbs.	16.08 lbs.
Initial wt. of wet soil, W_s	8.52 lbs.	8.74 lbs	8.96 lbs.
Wt. of water absorbed, W_w	.59 lbs.	.31 lbs	.12 lbs
% water absorbed = W_w/W_s	8.2	4.3	1.7

Note: Insert units in column headings as necessary.

SAIC/Parsons PO 140 FERNALD
2059-13M G2-SB-15 #404649 @ 1.0-2.0'
7-11-95 CAL
D_o = 6.00"
L_o = 4.584" L_F = 4.746" SWELL = 3.5%
V_o = .075 ft³
Initial Wet Density = 113.6 PCF
Initial Dry Density = 95.5 PCF (94.6% DUAB)
Initial Moisture = 18.9% (-2.5% omc)
After Test Moisture = 26.9% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = 0.05"/min
Area of Loading Piston = 3.0 in²



Bearing Ratio:
At 0.1" Penetration = 50 lbs./3.0 in²/1000 psi × 100 = 1.7
At 0.2" Penetration = 95.5 lbs/3.0 in²/1500 psi × 100 = 2.1

Test by CAL Date 7-11-95
Checked by SR Date 7-13-95

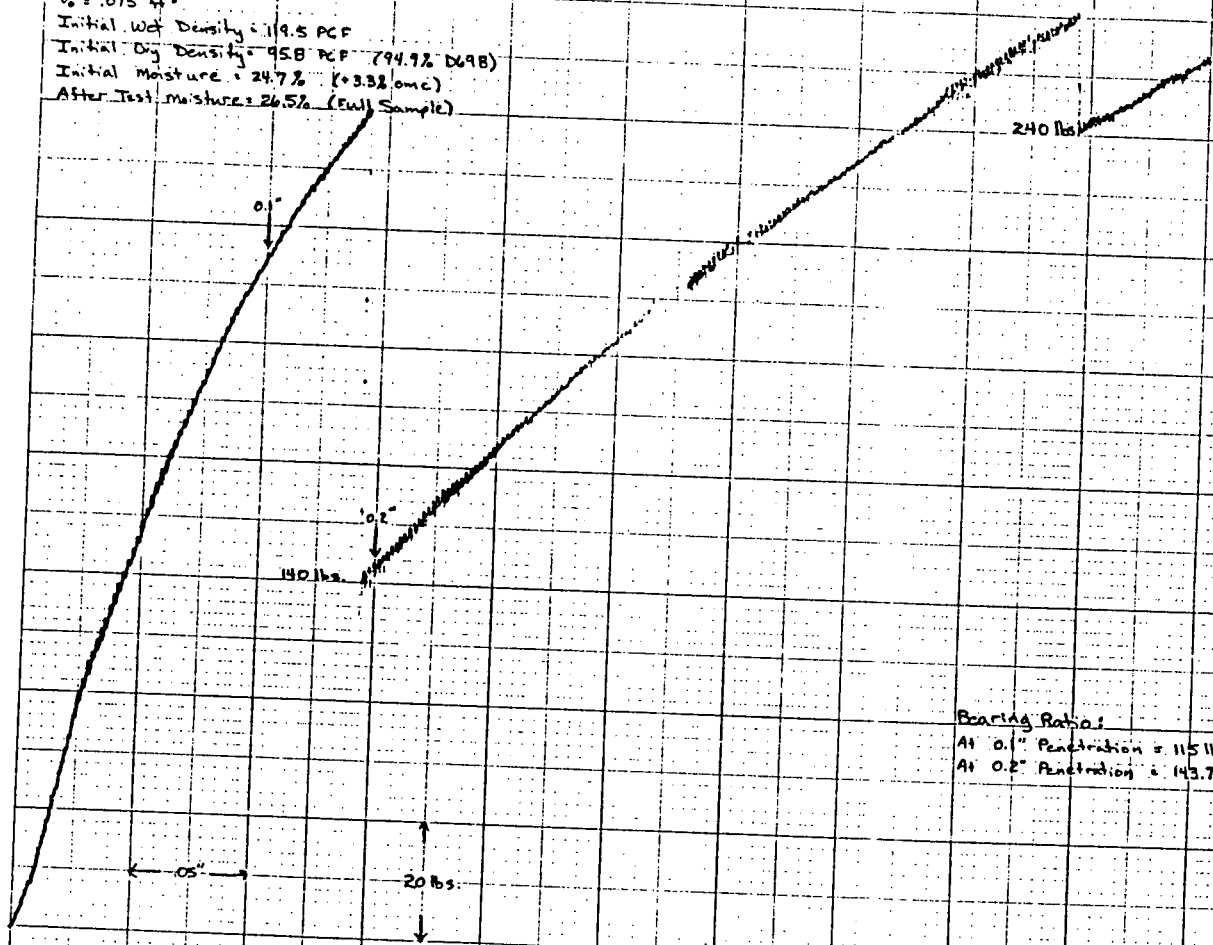
474

1433

001560

SAIC/PARSONS PD 140 FERNALD
2059-13M G2-SB-15 #404649 @ 1.0-2.0'
7-11-95 CAL
D_o = 6.00"
L_o = 4.584" L_f = 4.617 SWELL = 0.7%
V_o = .075 ft³
Initial Wet Density = 119.5 PCF
Initial Dry Density = 95.8 PCF (94.9% D698)
Initial Moisture = 24.7% (+3.3% omc)
After Test Moisture = 26.5% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = 0.05"/min.
Area of Loading Piston = 3.0 in²



Bearing Ratio:
At 0.1" Penetration = 115 lbs./3.0 in²/1000 psi × 100 = 3.8
At 0.2" Penetration = 143.75 lbs./3.0 in²/1500 psi × 100 = 3.2

Test by CAL Date 7-11-95
Checked by SC Date 7-13-95

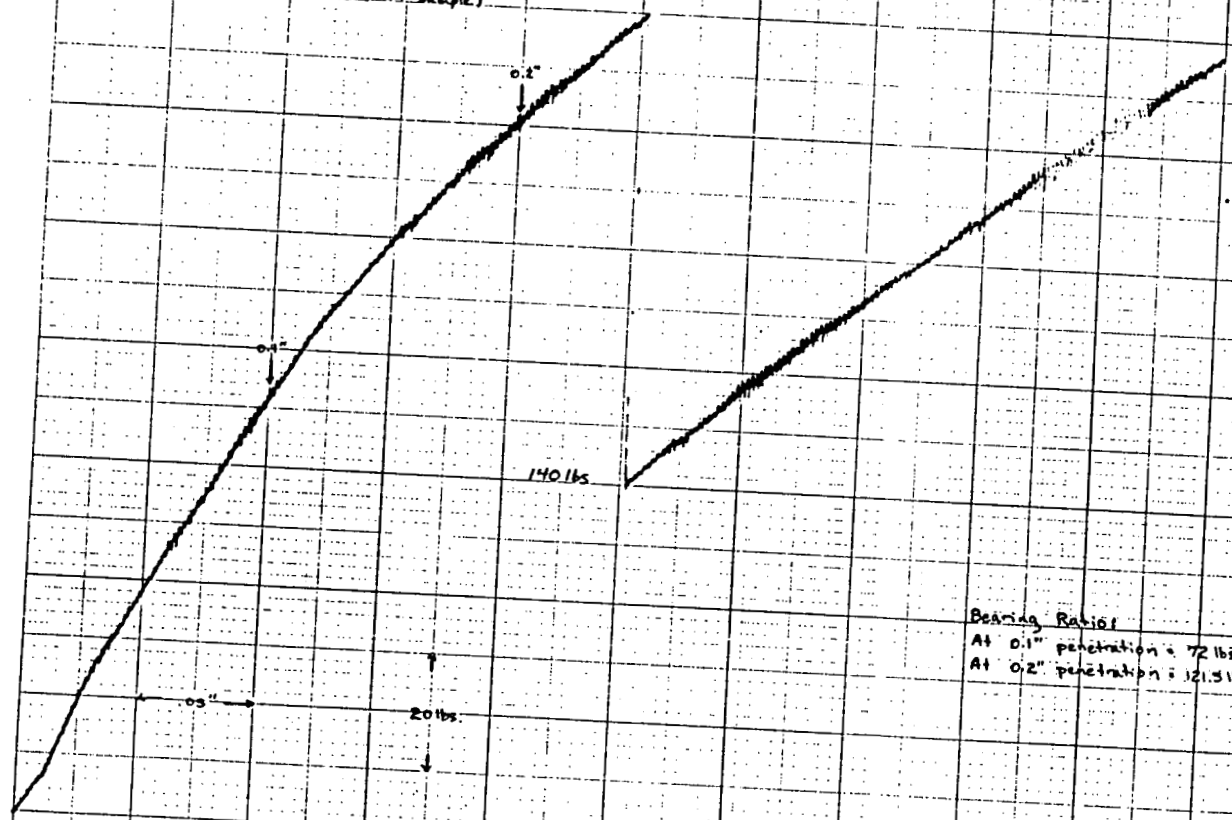
474

1434

001561

SAIC/FARSONS PO 140 FERNALD
2059-13M G2-SB-15 # 404649 @ 1.0-2.0'
7-11-95 CAL
D_o = 6.00"
L_o = 4.584" L_f = 4.672" SWELL = 1.9%
V_o = .075 ft³
Initial Wet Density = 116.5 PCF
Initial Dry Density = 95.2 PCF (94.3% D698)
Initial Moisture = 22.3% (+0.9% omc)
After Test Moisture = 26.2% (Entl Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
DISPLACEMENT RATE = 0.05"/MIN.
Area of Loading Piston = 3.0 in.²



Bearing Ratio:
At 0.1" penetration = 72 lbs./3.0 in²/1000 psi ×100 = 2.4
At 0.2" penetration = 121.5 lbs./3.0 in²/1500 psi ×100 = 2.7

Test by CAL Date 7-11-95
Checked by SL Date 7-13-95

424

1435

001562

CALIFORNIA BEARING RATIO TEST

Project SAIC / PARSONS PO 140		Job Number 2059-13 M
Location of Project Fernald	Boring No. G2-SB-15	Sample No. 404649
Description of Soil γ_{max} 101 PCF @ 21.4% ASTM D698 RERUN 1.0-2.0' 5-12-95 JC, BN		
Tested By cal/RN		Date of Testing 7-31-95

Compaction Energy: Hammer		N	No. of Layers		Blows/layer		
w at compaction	1) 18.5	Mold diam.	6.00"	Ht. of soil (H)	4.584"	Vol.	.075 ft³
	2) 21.9						
	3)						
Wt. wet soil, W_i	1) 8.53#	Wt. dry soil, W_s	1) 7.20#	γwet	1) 113.7pcf	γdry	1) 96.0pcf
	2) 8.74#		2) 7.17#		2) 116.5pcf		2) 95.6pcf
	3)		3)		3)		3)

Swell Data -3% omc

Starting time and date	Elapsed time	Mold No. 1 Surcharge 10# N		Mold No. 2 Surcharge 10# N		Mold No. ____ Surcharge ____ N	
		Dial reading (x____)	$\% = \frac{\Delta H}{H}(100)$	Dial reading (x____)	$\% = \frac{\Delta H}{H}(100)$	Dial reading (x____)	$\% = \frac{\Delta H}{H}(100)$
7-27-95 11:26	0h	.757	0	.593	0		
12:26	1h	.817	1.3	.627	0.7		
13:26	2h	.826	1.5	.630	0.8		
16:26	4h	.835	1.7	.633	0.9		
7-28-95 11:26		.887	2.8	.647	1.2		
7-31-95 8:30		.899	3.1 0926	.656	1.4		

After Soaking -3% omc

Mold No.	1	2	
Surcharge, N	10#	10#	
Initial wt. wet soil + mold + base plate	24.49	24.60	
Final wt. wet soil + mold + base plate	25.04	24.84	
Wt. of mold + base plate	15.96	15.86	
Initial wt. of wet soil, W_i	8.53	8.74	
Wt. of water absorbed, W_w	.55	.24	
% water abosrbed = W_w / W_s	7.6	3.3	1436

Tested by ____ Date ____
Checked by SR Date 8-1-95

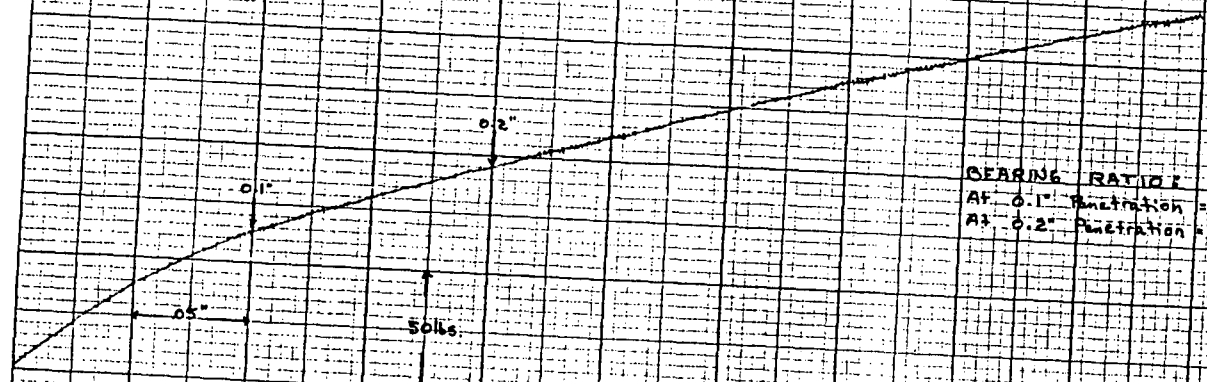
Note: Insert units in column headings as necessary.

Advanced Terra Testing, Inc.

SAIC/PARSONS PO 140 FERNALD
2059-13 M 62-SB-15 #404649 (RERUN)
D_o = 6.00"
L_o = 4.584" L_f = 4.726" SWELL = 3.1%
V_o = .075 ft³

Initial Wet Density = 113.7 PCF
Initial Dry Density = 96.0 PCF (95.0% D698)
Initial Moisture = 18.5% (-2.9% OMC)
After Test Moisture = 26.1% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = .05"/min.
Area of Loading Piston = 3.0 in²
MOLD 1 RERUN



BEARING RATIO:
At 0.1" Penetration = 62.5 lbs. / 3.0 in² / 1000 PSI x 100 = 2.08
At 0.2" Penetration = 95 lbs. / 3.0 in² / 1500 PSI x 100 = 2.11

Test by CR Date 2-21-95
Checked by SR Date 2-22-95

474

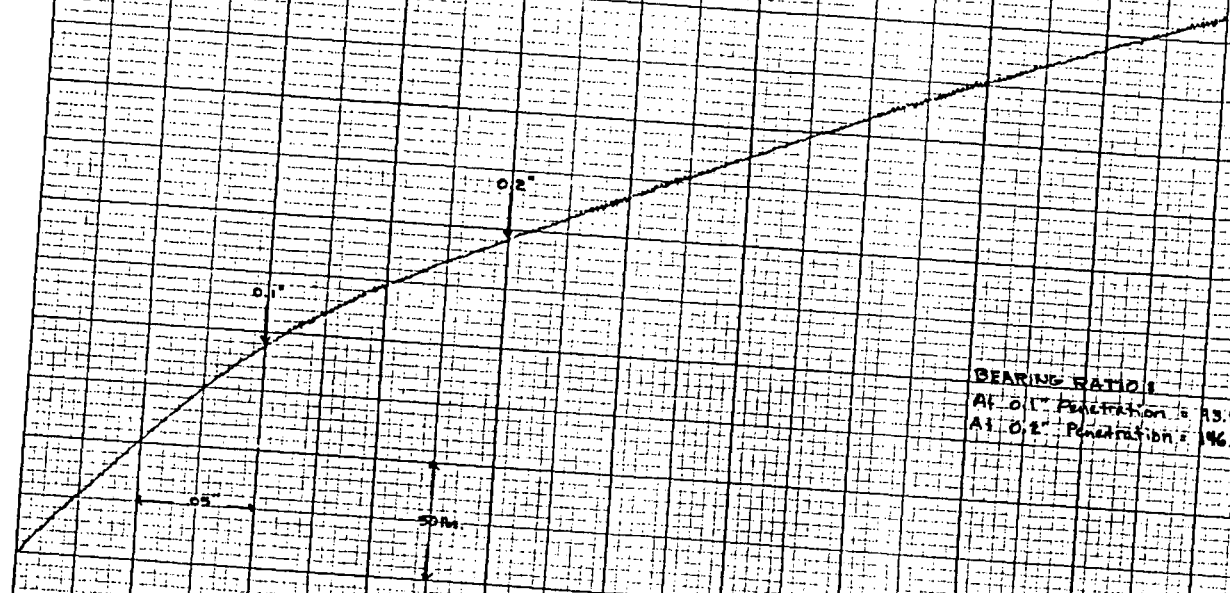
NO. XY 1101-SP5

1437

001564

SAIC/PARSONS PO 140 FERNALD
2059-13M 82-50-15 404649 1.0-2.0' (RERUN)
D_o = 6.00"
L_o = 4.584" L_F = 4.647 SWELL = 1.4%
V_o = 0.75 ft³
Initial Wet Density = 116.5 PCF
Initial Dry Density = 95.6 PCF (94.7% DGB)
Initial Moisture = 21.9 % (70.5% OMC)
After Test Moisture = 25.2 (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = .05"/min.
Area of Loading Piston = 3.0 in²
MOLD 2 RERUN



BEARING RATIO:
At 0.1" Penetration = 93.8 POUNDS/3.0 in²/1000 PSI x 100 = 3.13
At 0.2" Penetration = 146.25 POUNDS/3.0 in²/1500 PSI x 100 = 3.25

Tested by [illegible] Date 2-8-95
Checked by [illegible] Date 2-2-95

NO. XY 1101-SP5

CAN ONE, INC.

1438

001565

424

BEARING RATIO TEST Data Sheet 22

Project SAIC / Parsons PO 140 Job No. 2059-13 J

Location of Project Fernald Boring No. G2-SB-16 Sample No. 404650

Description of Soil γ max 103.9 PCF OMC 20.9%, 1.0-2.0' 5-10-95 JC, BN

Tested By CAL Date of Testing 7-24-95

Compaction Energy: Hammer _____ N No. of Layers _____ Blows/layer _____

w at compaction 1) 17.5 +3.48 omc 2) 20.9 omc 3) 24.5 +3.60 omc % Mold diam. 6.000 Ht. of Soil 4.584 Vol. .075

Wt. wet soil ① 8.73 # ② 8.95 # ③ 9.17 # Wt. dry soil, W_s 1) 7.43 # 2) 7.46 # 3) 7.57 # γ_{wet} 1) 116.4 pcf 2) 119.3 pcf 3) 122.3 pcf γ_{dry} 1) 99.1 pcf 95.4% D698 2) 98.7 pcf 95.0% D698 3) 98.2 pcf 94.5% D698

Swell Data

Starting time and date	Elapsed time	-3% Mold no. 1 Surcharge 10 N Dial reading (× 1)	% = S/H (100)	omc Mold no. 2 Surcharge 10 N Dial reading (× 1)	% = S/H (100)	+3% Mold no. 3 Surcharge 10 N Dial reading (× 1)	% = S/H (100)
7-20-95 1255	0 h	.612	0	.722	0	.524	0
1355	1 h	.654	0.9	.736	0.3	.525	0
1455	2 h	.660	1.0	.739	0.4	.526	0
1655	4 h	.665	1.2	.742	0.4	.528	0.1
7-21-95 1255	24	.689	1.7	.749	0.6	.533	0.2
7-24-95		1255 .709	2.1	1323 .757	0.8	1352 .539	0.3

After Soaking

	-3%	omc	+3%
Mold no.	1	2	3
Surcharge, N	10 #	10 #	10 #
Initial wt. wet soil + mold + base plate	24.70 #	24.82 #	25.25 #
Final wt. wet soil + mold + base plate	25.13 #	24.98 #	25.31 #
Wt. of mold + base plate	15.97 #	15.87 #	16.08 #
Initial wt. of wet soil, W_i	8.73 #	8.95 #	9.17 #
Wt. of water absorbed, W_w	.43	.16	.06
% water absorbed = W_w/W_s	5.8	2.2	0.8

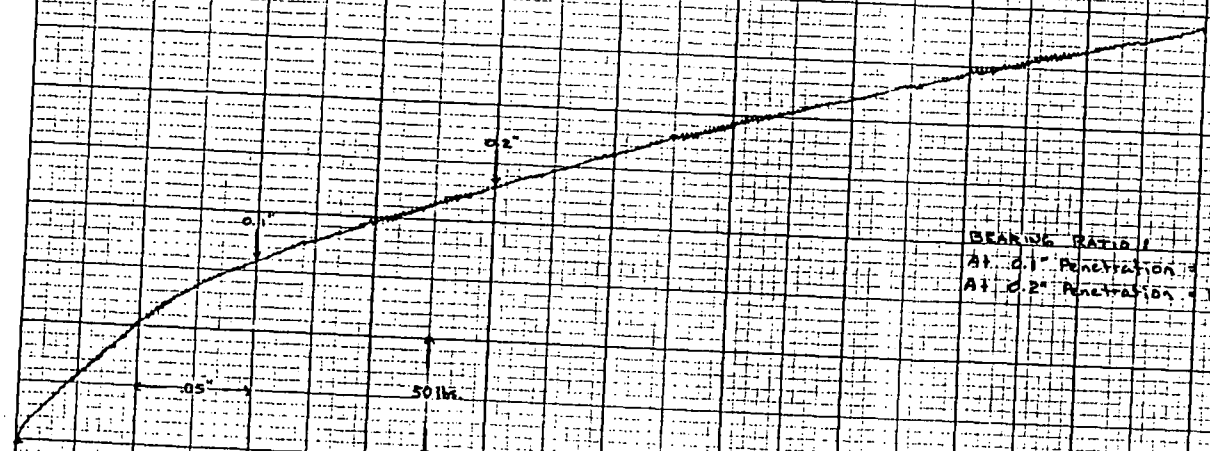
Note: Insert units in column headings as necessary.

Test by _____ Date _____

Checked by SL Date 7-31-95

SAIC/Parsons PO 140 FERNALD
2059-13 J GZ-SB-16 404650 1.0-2.0'
D_o = 6.00" L_o = 4.584" L_f = 4.681 SWELL = 2.1%
V_o = .075 ft³
Initial Wet Density = 116.4 PCF
Initial Dry Density = 99.1 PCF (95.4% D698)
Initial Moisture = 17.5% (-5.4% omc)
After Test Moisture = 23.8% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = .05 in/min
Area of Loading Piston = 3.0 in²
MOLD 1



BEARING RATIO:
At 0.1" Penetration = 80 lbs./3.0 in²/1000 PSI x 100 = 2.7
At 0.2" Penetration = 115 lbs./3.0 in²/1500 PSI x 100 = 2.6

Test by CAL Date 7-24-95
Checked by S.C. Date 7-31-95

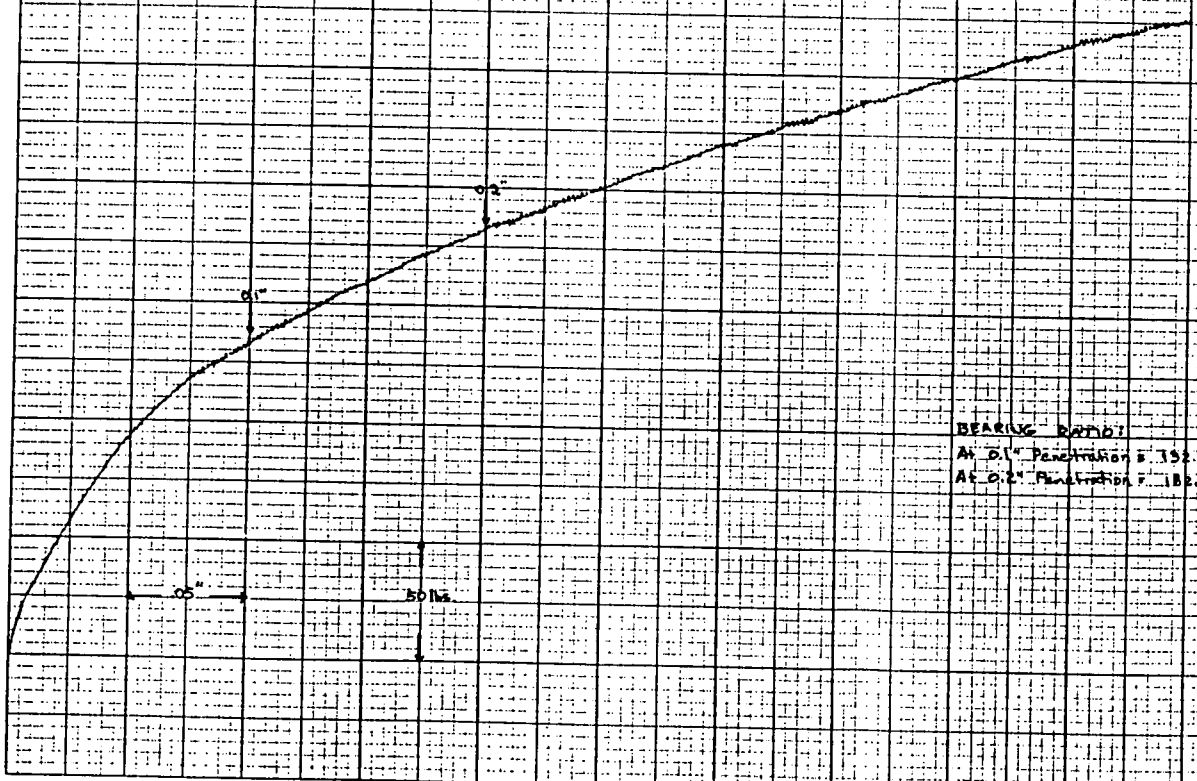
424

NO. XY 1101-SP5 1440 CAD ONE, INC

001567

SAIC/Parsons PO 140 | FERNALD
2059-13 J | GE-SB-16 | 1046650 | 1.0-2.0'
D_b = 6.00"
L_o: 4.584" | L_f = 4.619" | SWELL = 0.8%
V_o: 0.75 ft³
Initial Wet Density = 119.5 PCF
Initial Dry Density = 98.7 PCF (95.0% D698)
Initial Moisture = 20.9 % (OMC)
After Test Moisture = 23.0 % (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOILTEST LOAD FRAME
Displacement Rate = .05 in/min
Area of Loading Piston = 3.0 in²
MOLD 2



BEARING RATIO:
At 0.1" Penetration = 132.5 lbs. / 3.0 in² / 1000 PSI × 100 = 4.4
At 0.2" Penetration = 182.5 lbs. / 3.0 in² / 1500 PSI × 100 = 4.1

Test by CAL Date 7-24-95
Checked by SL Date 7-31-95

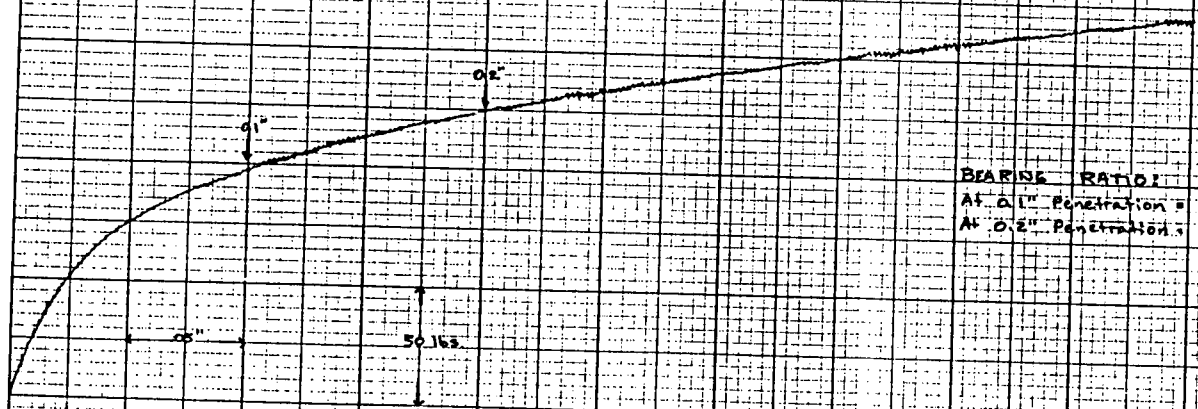
474

NO. XY 1101-SP5 1441 CAD ONE, INC.

001568

SAIC/PARSONS PO 140 Fernald
2059-15J GZ-SB-16 404650 1.0-2.0'
D_o = 6.00"
L_o = 4.584" L_f = 4.599 SWELL = 0.3%
V_o = .075 ft³
Initial Wet Density = 122.3 PCF
Initial Dry Density = 99.2 PCF (94.5% D698)
Initial Moisture = 24.5% (+3.6% OMC)
After Test Moisture = 24.7% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = .05 in/min
Area of Loading Piston = 3.0 in²
MOLD 3



BEARING RATIO:
At 0.1" Penetration = 97.5 lbs./3.0 in²/1000 psi x 100 = 3.3
At 0.2" Penetration = 125 lbs./3.0 in²/1500 psi x 100 = 2.8

Tested by CAL Date 7-31-95
Checked by SA Date 7-31-95

474

NO. XY 1101 SPS 1442 CAD LINE, INC.

001569

BEARING RATIO TEST Data Sheet 22

Project SAIC/PARSONS PD 140 Job No. 2059-13 J

Location of Project Fernald Boring No. G2-SB-17 1.0-2.0' Sample No. 405366 5-10-95 JC, BW

Description of Soil γ max 109.1 PCF omc 19.3%

Tested By CAL Date of Testing 7-17-95

Compaction Energy: Hammer _____ N No. of Layers _____ Blows/layer _____

w at compaction 1) 15.8 2) 18.8 3) 21.7 % Mold diam. 6.00 Ht. of Soil 4.584 Vol. .075

Wt. wet soil 1) 9.04 2) 9.28 3) 9.51 Wt. dry soil, W_s 1) 7.81 2) 7.81 3) 7.81 γ_{wet} 1) 120.5 2) 123.7 3) 126.8 γ_{dry} 104.1

Swell Data

Starting time and date	Elapsed time	Mold no. 1 Surcharge 10 # N		Mold no. 2 Surcharge 10 # N		Mold no. 3 Surcharge 10 # N	
		Dial reading (× 1)	$\% = \frac{S}{H}(100)$	Dial reading (× 1)	$\% = \frac{S}{H}(100)$	Dial reading (× 1)	$\% = \frac{S}{H}(100)$
7-13-95 1148	0 h	.653	0	.720	0	.683	0
1300	1 h	.715	1.4	.737	0.4	.681	0
1340	2 h	.721	1.5	.739	0.4	.682	0
1548	4 h	.730	1.7	.744	~~0.4~~ 0.5	.683	0
7-14-95 1148	24 h	.775	2.7	.755	0.8	.686	0.1
7-17-95 1143		.786	2.9	1257 .767	1.0	.699	0.3

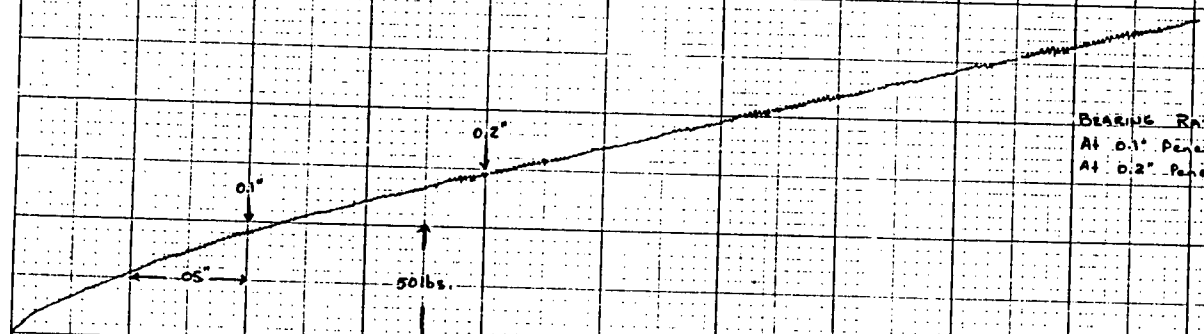
After Soaking

	-3%	omc	+3%
Mold no.	1	2	3
Surcharge, N	10 #	10 #	10 #
Initial wt. wet soil + mold + base plate	25.01 #	25.15 #	25.59 #
Final wt. wet soil + mold + base plate	25.46 #	25.31 #	25.65 #
Wt. of mold + base plate	15.97 #	15.87 #	16.08 #
Initial wt. of wet soil, W_s	9.04 #	9.28 #	9.51 #
Wt. of water absorbed, W_w	.45 #	.16 #	.06 #
% water absorbed = W_w/W_s	5.8	2.0	0.8

Note: Insert units in column headings as necessary.

SAIC/PARSONS PO 140 FERNALD
2059-13 J 62-SB-17 # 405366 @ 1.0-2.0'
7-17-95 CAL
D_o = 6.00"
L_o = 4.584" L_f = 4.717" SWELL = 2.9 %
V_o = .075 ft³
Initial Wet Density = 120.5 PCF
Initial Dry Density = 104.1 PCF (95.4% D698)
Initial moisture = 15.8 % (-3.5% omc)
After Test Moisture = 21.5 % (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = 0.05"/min.
Area of Loading Piston = 3.0 in²
MOLD 1



BEARING RATIO:
At 0.1" Penetration = 46 lbs./3.0 in²/1000 psi × 100 = 1.5
At 0.2" Penetration = 73 lbs./3.0 in²/1500 psi × 100 = 1.6

Test by CAL Date 7-17-95
Checked by SC Date 7-24-95

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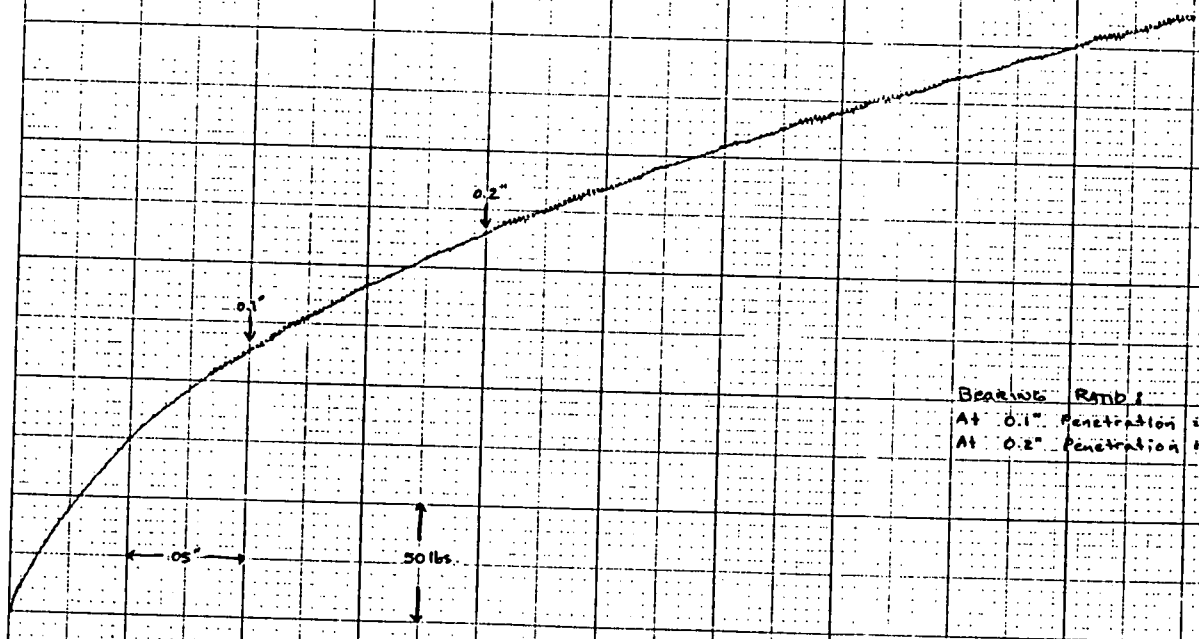
SAIC/PARSONS PO 140 FERNALD
2059-13 J G2-SB-17 #405366 @ 1.0-2.0'
1-17-95 CAL
D_o = 6.00"
L_o = 4.584" L_f = 4.631 SWELL = 1.0%
V_o = .075 ft³
Initial Wet Density = 123.7 PCF (95.4% D698)
Initial Dry Density = 104.7 PCF
Initial Moisture = 18.8% (-0.5% omc)
After Test Moisture = 20.8% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = 0.05"/min.
Area of Loading Piston = 3.0 in²
MOLD 2



BEARING RATIO:
At 0.1" Penetration = 112.5 lbs./3.0 in²/1000 PSI × 100 = 3.8
At 0.2" Penetration = 165.0 lbs./3.0 in²/1500 PSI × 100 = 3.7

Test by CAL Date 7-17-95
Checked by SR Date 7-24-95

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NO. XV 1101 SPC
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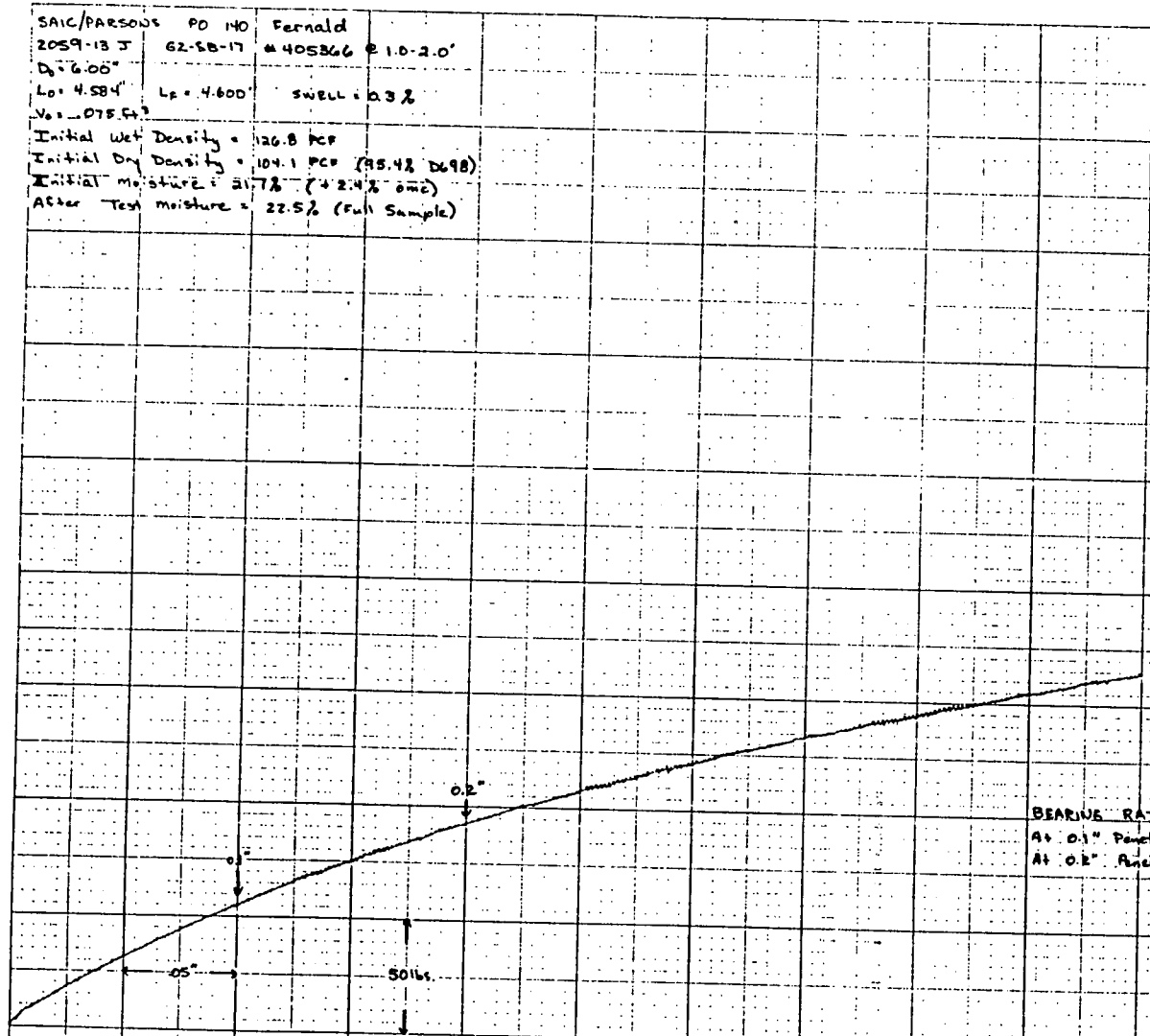
001572

SAIC/PARSONS PO 140 Fernald
2059-13 J 62-SB-17 #405866 @ 1.0-2.0'
D_o = 6.00"
L_o = 4.584" L_f = 4.600" SWELL = 0.3 %
V_o = .075 ft³
Initial Wet Density = 126.8 PCF
Initial Dry Density = 104.1 PCF (95.4% D698)
Initial moisture = 21.7% (+2.4% omc)
After Test moisture = 22.5% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
DISPLACEMENT RATE = .05"/min.
Area of Loading Piston = 3.0 in²
MOLD 3



BEARING RATIO:
At 0.1" Penetration = 55 lbs./3.0 in²/1000 PSI x 100 = 1.8
At 0.2" Penetration = 92 lbs./3.0 in²/1500 PSI x 100 = 2.0

Test by [illegible] Date 7-17-95
Checked by SG Date 7-24-95

CALIFORNIA BEARING RATIO TEST

Project SAIC/PARSONS PO 140		Job Number 2059-13 J
Location of Project Fernald	Boring No. 62-30-17 ~~405-30 cmc~~	Sample No. 405366
Description of Soil Rerun γ_{max} 109.1 @ 19.3%		5-10-95 JC, BN 1.0-2.0'
Tested By cmc		Date of Testing 8-4-95

Compaction Energy: Hammer		N	No. of Layers		Blows/layer		
w at compaction	1) 15.7	Mold diam.	6.000"	Ht. of soil (H)	4.584"	Vol.	.075 ft³
	2)						
	3) 21.7						
Wt. wet soil, W_i	1) 9.05#	Wt. dry soil, W_s	1) 7.82#	γwet PCF	1) 120.7	γdry	1) 104.3 95.6%
	2)		2)		2)		2)
	3) 9.51#		3) 7.81#		3) 126.8		3) 104.2 95.5%

Swell Data

Starting time and date	Elapsed time	Mold No. 1 (-3% omc) Surcharge ___ N		Mold No. ___ Surcharge ___ N		Mold No. 3 (+3% omc) Surcharge ___ N	
		Dial reading (x___)	$\% = \frac{\Delta H}{H}(100)$	Dial reading (x___)	$\% = \frac{\Delta H}{H}(100)$	Dial reading (x___)	$\% = \frac{\Delta H}{H}(100)$
7-31-95 11:30	0h	.503	0			.801	0
12:30	1h	.562	1.3			.810	0.2
13:48	2h 18min	.572	1.5			.815	0.3
1530	4h	.580	1.7			.817	0.3
8-1-95 1130	24	.613	2.4			.827	0.6
8-4-95 945		.646	3.1			1024 .841	0.9

After Soaking

	Rerun -3% omc		Rerun +3% omc
Mold No.	1		3
Surcharge, N	10 #		10 #
Initial wt. wet soil + mold + base plate	25.01 #		25.59
Final wt. wet soil + mold + base plate	25.44		25.66
Wt. of mold + base plate	15.96 #		16.08 #
Initial wt. of wet soil, W_i	9.05		9.51
Wt. of water absorbed, W_w	.43		.07
% water abosrbed = W_w / W_s	5.5	1447	0.9

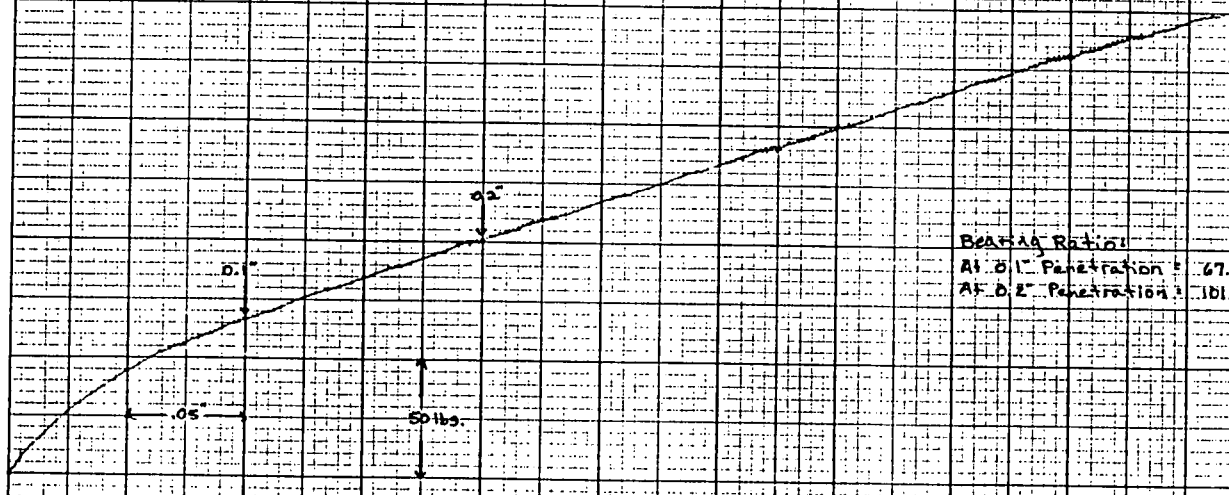
Note: Insert units in column headings as necessary.

Advanced Terra Testing, Inc.

Tested by ___ Date ___
Checked by SR Date 8-7-95

SAIC/PARSONS PO 40 FERNALD
2059-13 3 G2-SB-17 405366 @ 1.0-2.0'
D_o: 6.000"
L_o: 4.584" L_f: 4.727 SWELL: 3.1%
V_o: .075 ft³
Initial Wet Density: 120.7 PCF
Initial Dry Density: 104.3 PCF (95.6% D698)
Initial Moisture: 15.7% (-3.66 OMC)
After Test Moisture: 21.4% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate: 0.05"/min.
Area of Loading Piston: 3.0 in²
MOLD 1 - Rerun



Bearing Ratio:
At 0.1" Penetration: 67.5 lbs./3.0 in²/1000 PSI ×100 = 2.25
At 0.2" Penetration: 101.5 lbs./3.0 in²/1500 PSI ×100 = 2.25

Test by CAL Date 8-4-95
Checked by SE Date 8-29-95

NO. XY 1101-SPS 1448
CAD ONE, INC.
004575
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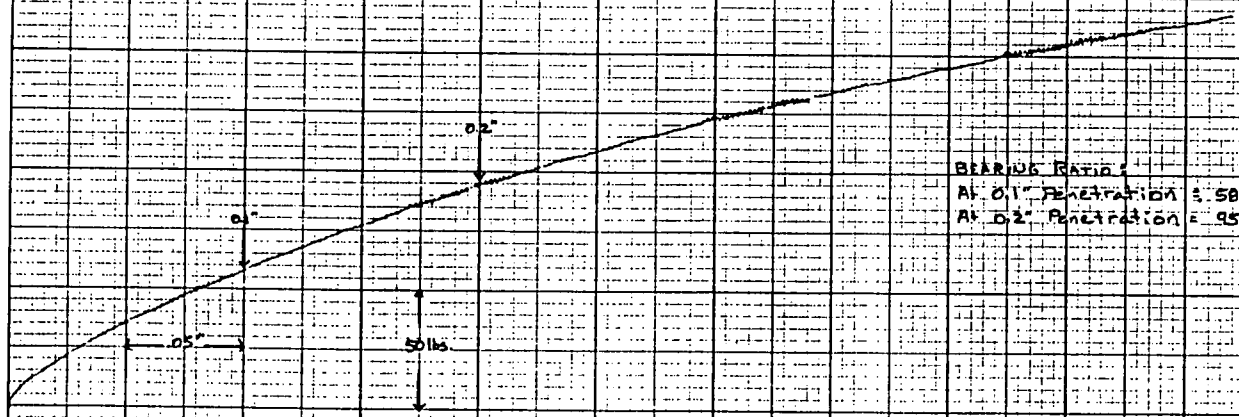
SAIC/PARSONS PO 140 FERNALD
2059-13 J G2-SB-17 #405366 @ 10-20'
D_0 = 6.000"
L_0 = 4.584" L_f = 4.624" SWELL = 0.9%
V_0 = .075 ft³
Initial Wet Density = 126.8 PCF
Initial Dry Density = 104.2 PCF (95.5% D698)
Initial Moisture = 21.7% (+2.4% OMC)
After Test Moisture = 22.7% (Full Sample)

CALIFORNIA BEARING RATIO TEST
SOIL TEST LOAD FRAME
Displacement Rate = 0.05"/min.
Area of Loading Piston = 3.0 in²
MOLD 3 Rerun



BEARING RATIO:
At 0.1" Penetration = 58.5 lbs./3.0 in²/1000 PSI x100 = 1.95
At 0.2" Penetration = 95.0 lbs./3.0 in²/1500 PSI x100 = 2.11

Test by [illegible] Date 2-4-95
Checked by SG Date 2-7-95

NO. XY 1101-SP5 1449

CHI ONT. INC.

001576

444

LARGE SCALE INTERFACE DIRECT SHEAR TEST

Select Geosynthetics
ASTM D 5321

FINAL REPORT
LARGE SCALE INTERFACE DIRECT SHEAR TESTING
SELECT GEOSYNTHETICS AND SOILS
PARSONS - ERA PROJECT NO. P.O. 140

Prepared for:

SCIENCE APPLICATIONS INTERNATIONAL CORP.
14142 Denver West Parkway, Suite 100
Golden, CO 80402

Prepared by:

ADVANCED TERRA TESTING, Inc.
833 Parfet Street, Unit A
Lakewood, CO 80215

Project No. PO 140

August 7, 1995

INTRODUCTION

This laboratory test program report is for the exclusive use of SAIC/Parsons ERA and consists of three large scale interface direct shear test series performed on select geosynthetic interfaces supplied to ATT by Parsons ERA. Each test series was run at three normal stress levels ranging from 360 to 1440 psf.

The large scale direct shear tests were run in accordance with ASTM D 5321 "Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction By the Direct Shear Method". The testing was carried out on ATT's large direct shear box which utilized a 12 in x 12 in (300 mm x 300 mm) upper (stationary) box and a 12 in x 16 in (300 mm x 400 mm) lower (traveling) box. Figure 1 presented at the end of this report illustrates the ATT shear box and some general test configurations for this series of tests.

GEOSYNTHETICS AND SOIL MATERIAL

Three geosynthetic materials were supplied by Parsons ERA for use in the test program:

* A 60 mil (1.5 mm) thick smooth high density polyethylene (HDPE) geomembrane manufactured by Gundle Lining Systems, Inc.
* A geosynthetic clay liner (GCL) manufactured by Gundle Lining Systems, Inc. and designated as Gundle Gundseal HD20.
* A 10 oz./yd^2 non-woven needle punched geotextile (GT) manufactured by Nicolon and designated as Nicolon S1000.

The soil material was a FEMP brown clay (CL) supplied to ATT by Parsons ERA in 11 sample numbers. As requested by Parsons ERA, the following sample numbers were combined into one compacted clay sample for DS Test Series A and B:

DS Test Series A - FEMP Sample Numbers 404608, 404591, 404627, 404632, 404587.

DS Test Series B - FEMP Sample Numbers 404603, 404615, 404595, 404621, 404637, 404583

All FEMP clay samples were compacted to 95% MDD and +2% OMC in the upper (stationary) box away from the direct shear machine.

TEST PROGRAM AND GENERAL PROCEDURES

The interface direct shear tests, as requested by Parsons ERA, were configured as shown in figure 1.

As requested by Parsons ERA, for all test series incorporating geosynthetics, flat plates were used as the supporting surface. Thus, normal loading does not simulate overburden deformation characteristics. Geosynthetics were fixed to either the top (stationary) or bottom (traveling) box.

For DS Test Series A, the Gundseal HD20 GCL was hydrated and consolidated under 360 psf for each point before applying desired normal load and shearing.

Fresh geosynthetics were used for each test point in all DS Test Series and all specimens were cut and prepared so that direction of shear was in the manufactured machine direction of the geosynthetics.

The ATT large scale direct shear box design includes a lower (traveling) box with a larger surface area than the upper (stationary) box, and thus all tests are performed using a constant effective sample area requiring no area correction when computing normal and shear stresses.

For all DS Test Series, fresh geosynthetics and soils were prepared for each normal stress condition and each specimen was sheared at a constant displacement rate immediately after application of the desired normal load. The shear constant displacement rate for the HDPE geomembrane to geotextile test series was 0.2 in/min (5mm/min) and the HDPE to Clay and Clay to GCL hydrated test series were run at 0.04 in/min (1 mm/min). Normal stress levels ranged from 360 to 1440 psf as directed by Parsons ERA in order to model required loading conditions.

<u>DS TEST SERIES A</u>

Type of Interface:	Geosynthetic Clay Liner (GCL) to Compacted Clay
Material on Top:	FEMP Brown Compacted Clay (CL), 95% Standard MDD, @ OMC +2% (FEMP Sample Nos. 404608, 404591, 404627, 404632, 404587)
Material on Bottom:	Geosynthetic Clay Liner (GCL) - Gundle Gundseal HD20
Manufacturer:	Gundle Lining System, Inc.
Number of Tests:	3 (points)
Normal Load:	360, 720, 1440 psf

Hydrating Conditions:	Free swell under 360 psf for 24 hours
Other Test Conditions:	Shear Rate - 0.04 in/min
	Consolidation for 2 hours under 360 psf for each point before shear

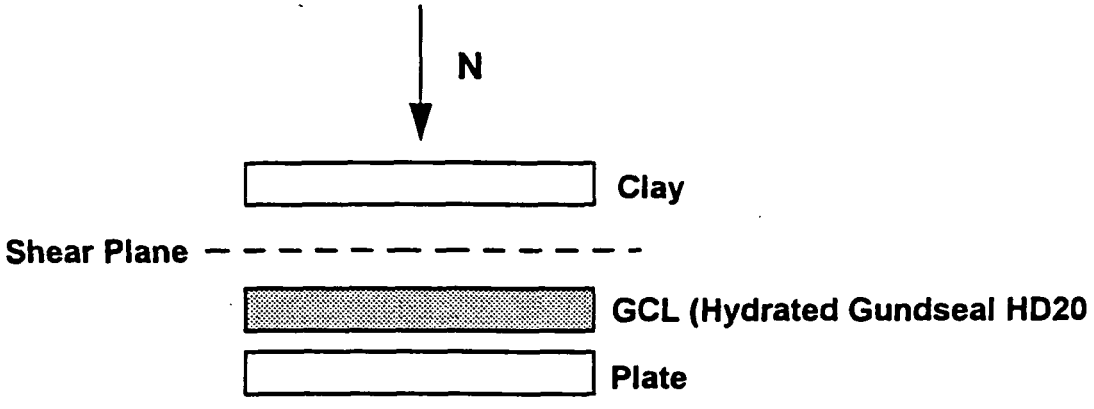
DS TEST SERIES B

Type of Interface:	HDPE Geomembrane to Compacted Clay
Material on Top:	FEMP Brown Compacted Clay (CL), 95% Standard MDD, @ OMC +2% (FEMP Sample Nos. 404603, 404615, 404595, 404621, 404637, 404583)
Material on Bottom:	HDPE Geomembrane, smooth - 60 mil thickness
Manufacturer:	Gundle Lining Systems, Inc.
Number of Tests:	3 (points)
Normal Load:	360, 720, 1440 psf
Other Test Conditions:	Shear Rate - 0.04 in/min

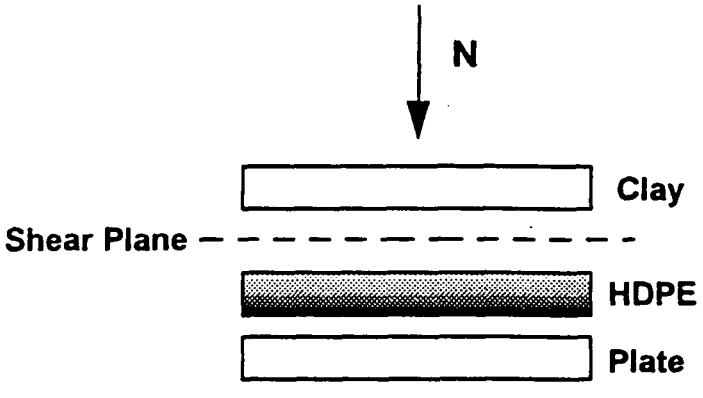
DS TEST SERIES C

Type of Interface:	Geotextile to HDPE Geomembrane
Material on Top:	Non-Woven Geotextile, 10 oz/yd^2
Material on Bottom:	HDPE Geomembrane, smooth - 60 mil thickness
Manufacturer:	Nicolon (Geotextile)
	Gundle (Geomembrane)
Number of Tests:	3 (points)
Normal Load:	360, 720, 1440 psf
Other Test Conditions:	Shear Rate - 0.2 in/min
	Saturated Interface

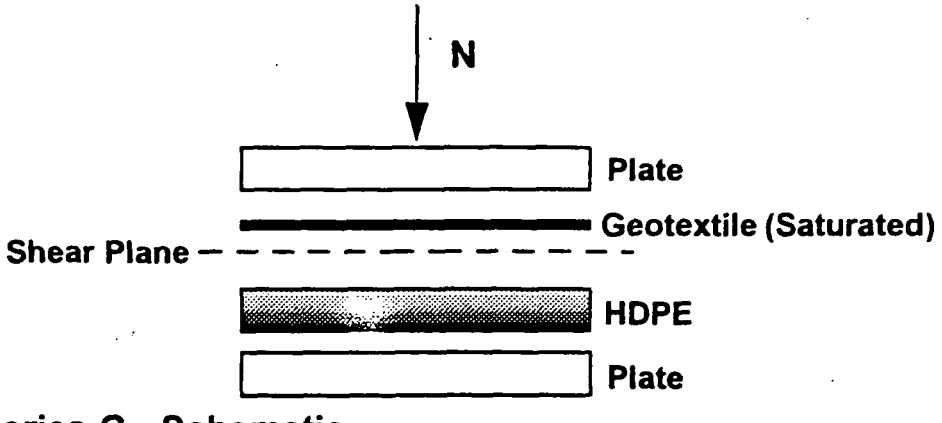
Figure 1
Large Scale Direct Shear Testing
ASTM D 5321
Test Schematic



DS Test Series A - Schematic



DS Test Series B - Schematic



DS Test Series C - Schematic

This page added 8/29/95.

TEST RESULTS - INTERFACE DIRECT SHEAR

The direct shear resistance of the three test series were evaluated for each applied normal stress. the actual test data are shown in Appendix A. The test data were plotted on a graph of shear force versus shear displacement. The peak value of shear force and the residual value of shear force were used to calculate peak and residual shear strengths for each DS test series. The total stress peak and residual shear strengths were plotted on a graph of shear stress versus corresponding normal stress. The total stress peak and residual interface friction angle is obtained by a best fit straight line drawn through three data points. The summary plots of shear stress versus applied normal stress are also presented in Appendix A. A summary of the interface friction angles and apparent adhesions are summarized in Table 1.

Table 1
Interface Direct Shear Test Results
SAIC/Parsons ERA
P.O. 140

Test Series Number	Normal Stress Range (PSF)	Peak Strength		Residual Strength	
		Friction Angle (δ)	Adhesion (PSF)	Friction Angle (δ)	Adhesion (PSF)
DS Series A	360-1440	5.4	0.5	5.4	0.5
DS Series B	360-1440	13.1	126	10.3	88
DS Series C	360-1440	10.1	8.0	8.4	7.5

Notes:
1) The adhesion value may not be "true adhesion" of the interface.
2) DS Series A contained a fully hydrated Gundseal HD20 GCL.
3) DS Series C was run with a saturated geotextile/HDPE Geomembrane interface.

Of particular note in DS Test Series A is the fact that the bentonite gel was fully exposed to the clay surface during shearing. Bentonite was observed to adhere to the surface of the clay immediately after shearing. This obviously contributed to a low Peak/Residual friction angle against the clay at these low normal loads and may actually reflect shear in the bentonite immediately below the interface.

This concludes our report for large scale interface direct shear testing performed on three interfaces as requested by SAIC/Parsons ERA. The results reported apply only to the materials tested and do not apply to other materials or test conditions.

INTERFACE DIRECT SHEAR TEST DATA

DIRECT SHEAR DATA TEST SERIES
12X12 inch Box
Geotextile vs. HDPE Test C

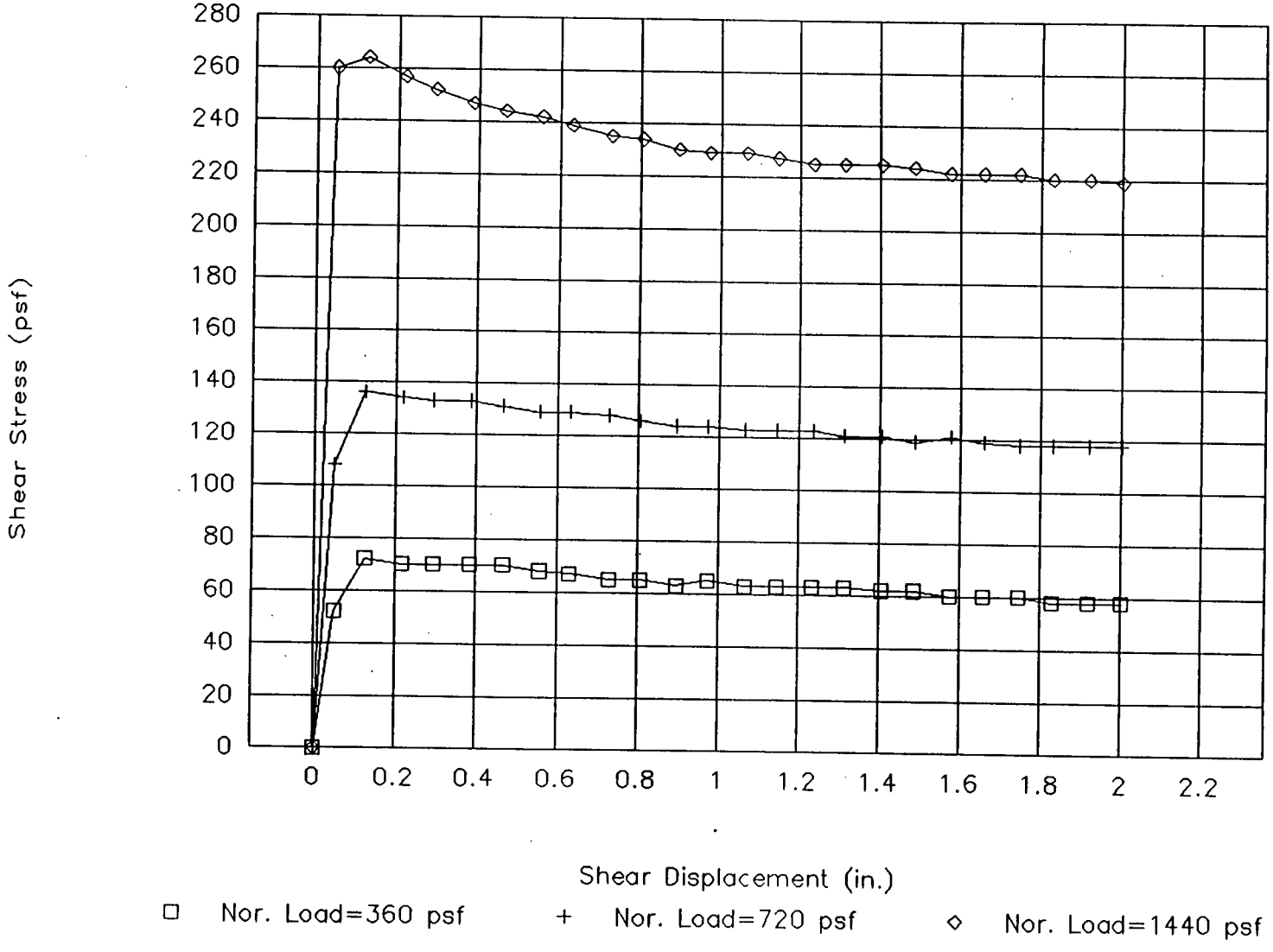
CLIENT: Saic/Parsons PO 140
PROJECT NO: 2059-13N
PROJECT: Fernald

Date: 8-8-95
Date Tested: 8-8-95

Displacement (inches)	Normal Force=360 psf Shear Stress (psf)	Normal Force=720 psf Shear Stress (psf)	Normal Force=1440 psf Shear Stress (psf)
0.001	0	0	0
0.05	52	108	260
0.126	72	136	264
0.218	70	134	257
0.295	70	133	252
0.386	70	133	247
0.467	70	131	244
0.556	68	129	242
0.63	67	129	239
0.727	65	128	235
0.805	65	126	234
0.896	63	124	230
0.973	65	124	229
1.065	63	123	229
1.145	63	123	227
1.234	63	123	225
1.313	63	121	225
1.406	62	121	225
1.486	62	119	224
1.577	60	121	222
1.659	60	119	222
1.747	60	118	222
1.83	58	118	220
1.92	58	118	220
2.002	58	118	219

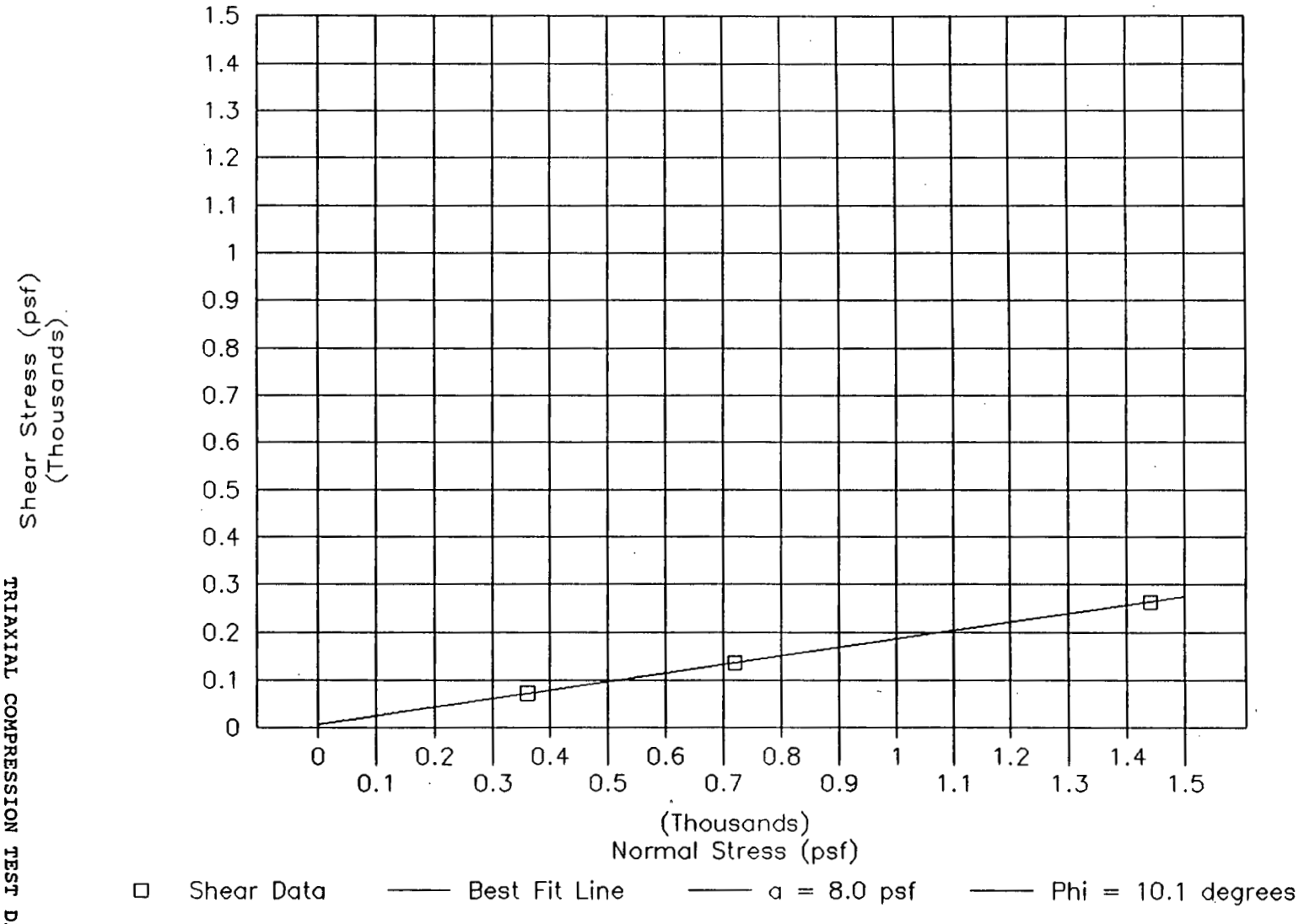
Shear Stress vs. Displacement

Geotextile vs. HDPE



Normal Stress vs. Peak Shear Stress

Geotextile vs. HDPE



TRIAXIAL COMPRESSION TEST DATA

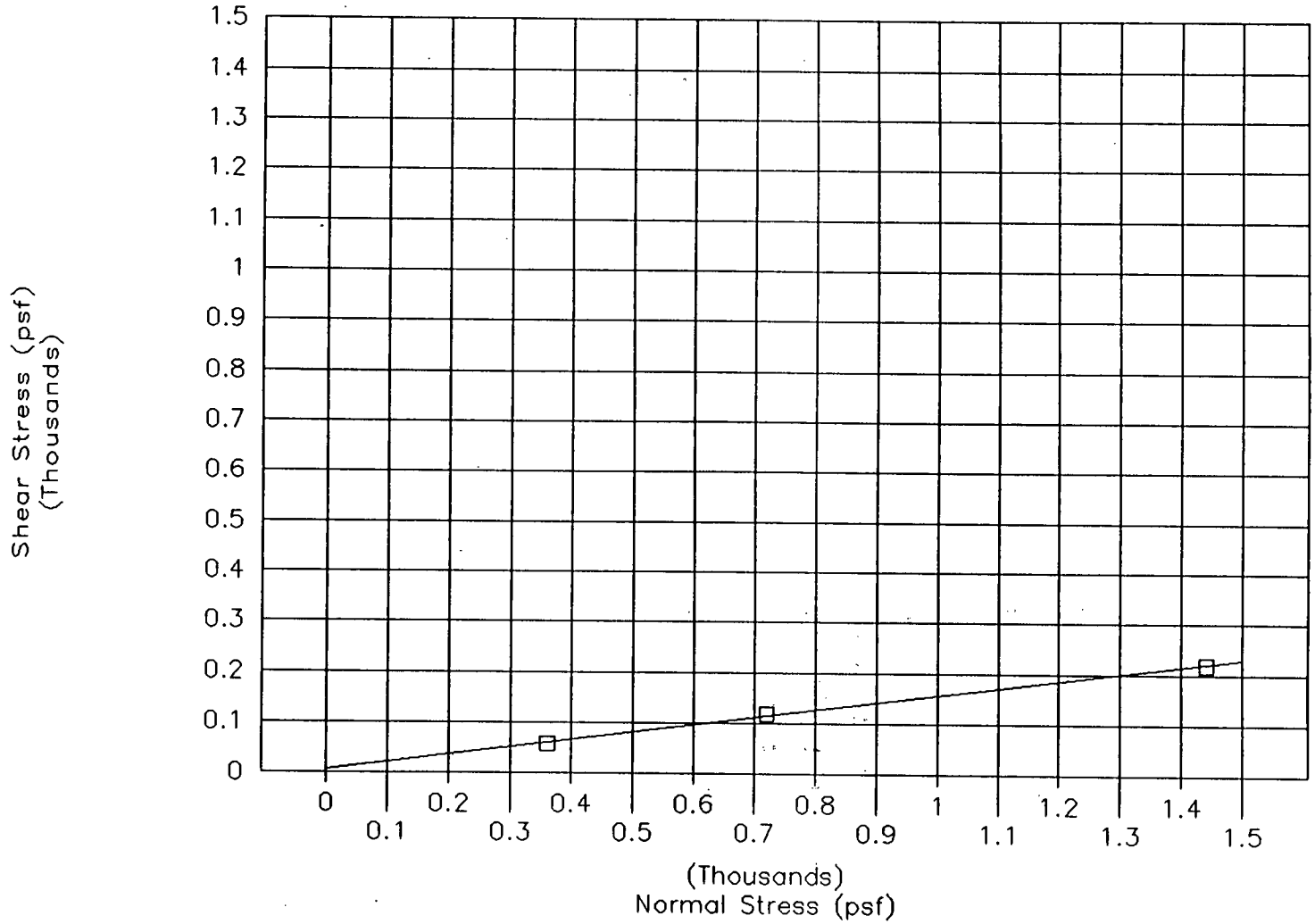
1459

001587

474

Normal Stress vs. Residual Shear Stress

Geotextile vs. HDPE



□ Shear Data —— Best Fit Line —— a = 7.5 psf —— Phi = 8.4 degrees

DIRECT SHEAR DATA TEST SERIES
12X12 inch Box
Clay vs. Hydrated GCL Test A

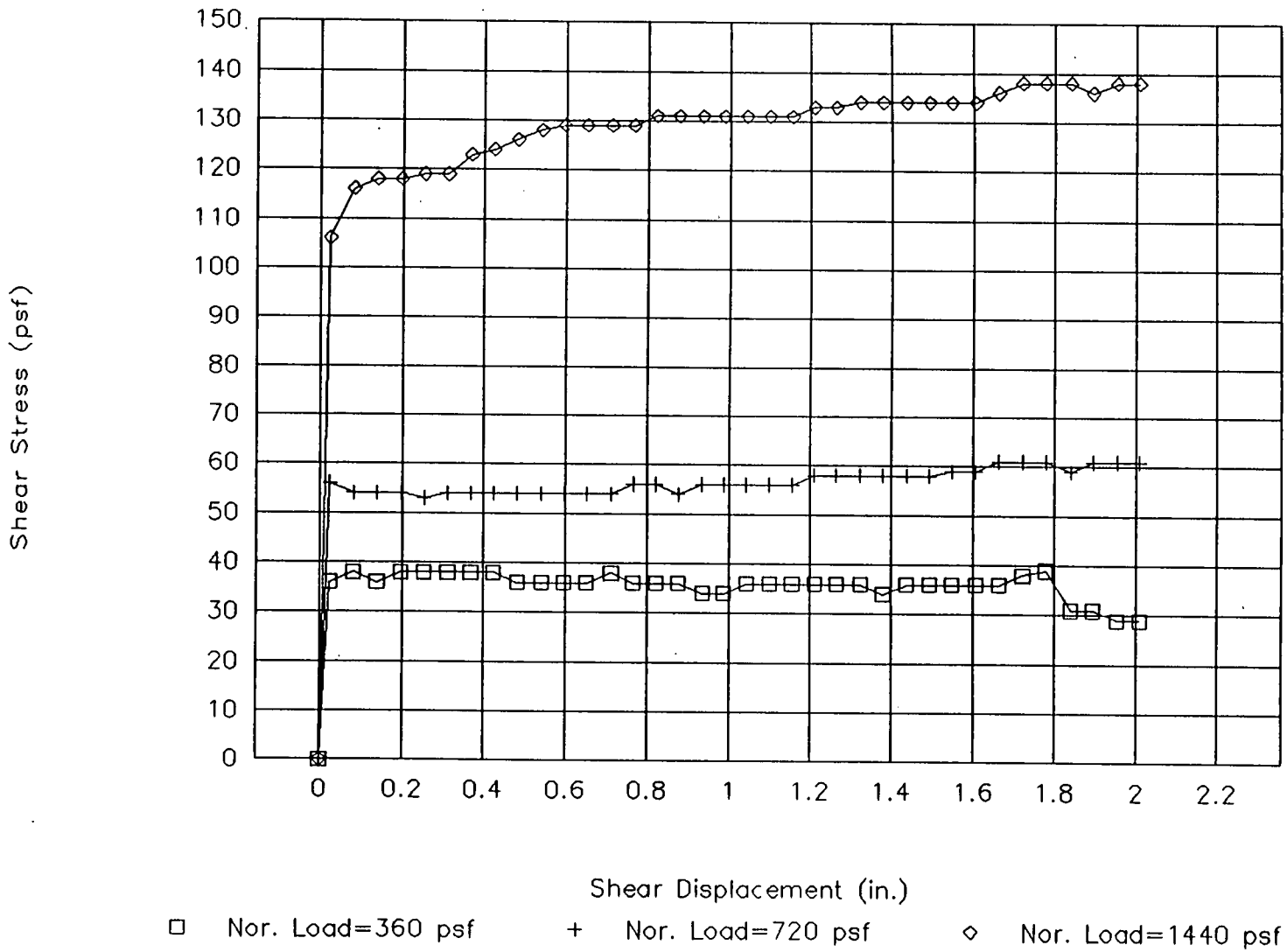
CLIENT: Saic/Parsons PO 140
PROJECT NO: 2059-13N
PROJECT: Fernald

Date: 8-7-95
Date Tested: 8-3-95

Displacement (inches)	Normal Force=360 psf Shear Stress (psf)	Normal Force=720 psf Shear Stress (psf)	Normal Force=1440 psf Shear Stress (psf)
0	0	0	0
0.024	36	56	106
0.082	38	54	116
0.139	36	54	118
0.198	38	54	118
0.254	38	53	119
0.312	38	54	119
0.369	38	54	123
0.425	38	54	124
0.483	36	54	126
0.542	36	54	128
0.597	36	54	129
0.651	36	54	129
0.711	38	54	129
0.765	36	56	129
0.821	36	56	131
0.875	36	54	131
0.934	34	56	131
0.987	34	56	131
1.042	36	56	131
1.099	36	56	131
1.155	36	56	131
1.21	36	58	133
1.265	36	58	133
1.324	36	58	134
1.379	34	58	134
1.438	36	58	134
1.493	36	58	134
1.549	36	59	134
1.607	36	59	134
1.664	36	61	136
1.722	38	61	138
1.778	39	61	138
1.84	31	59	138
1.894	31	61	136
1.953	29	61	138
2.009	29	61	138

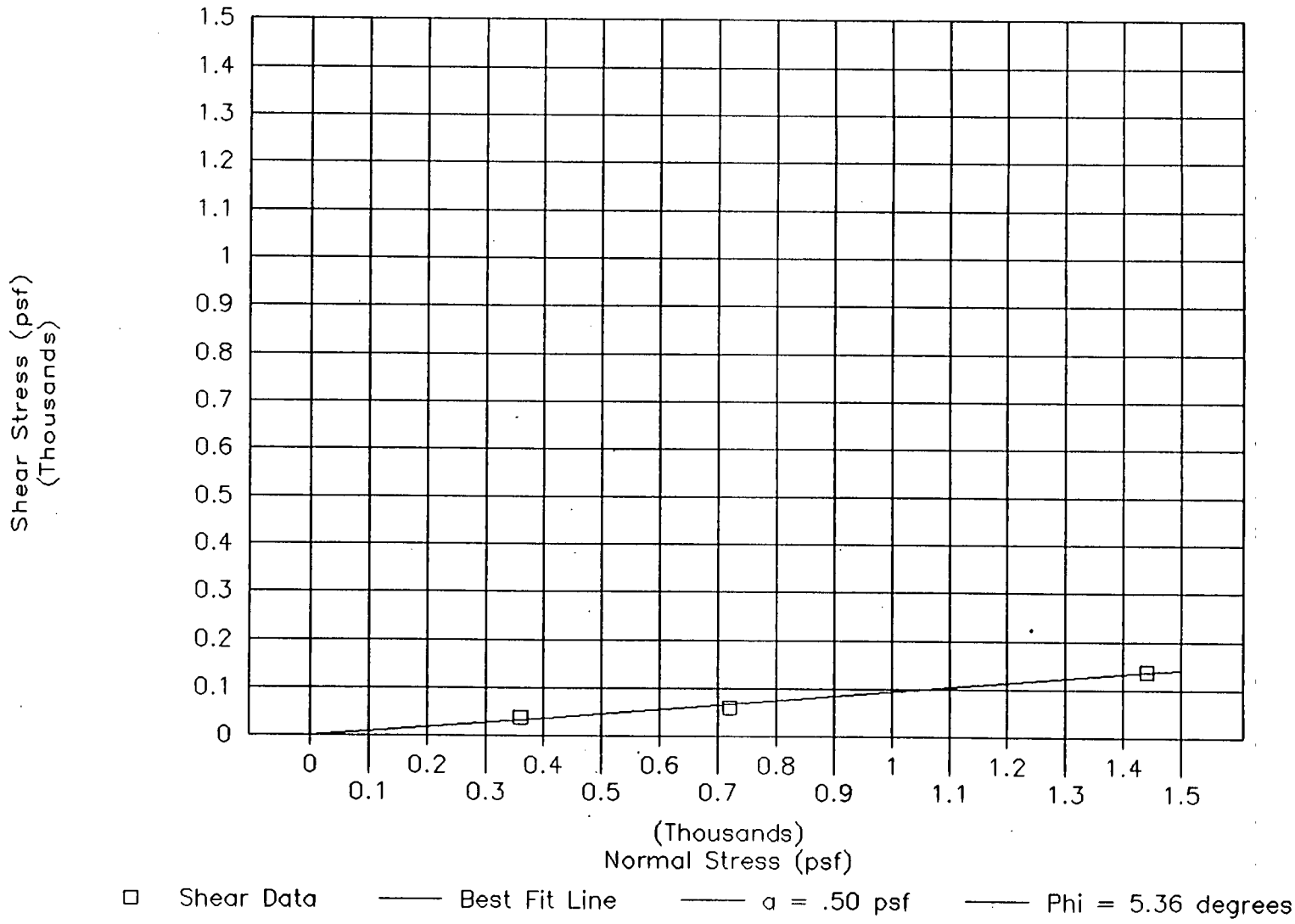
Shear Stress vs. Displacement

Clay vs. Hydrated GCL



Ultimate Shear Stress

Clay vs. Hydrated GCL



DIRECT SHEAR DATA TEST SERIES
12X12 inch Box
Clay vs. 60 mil HDPE Test B

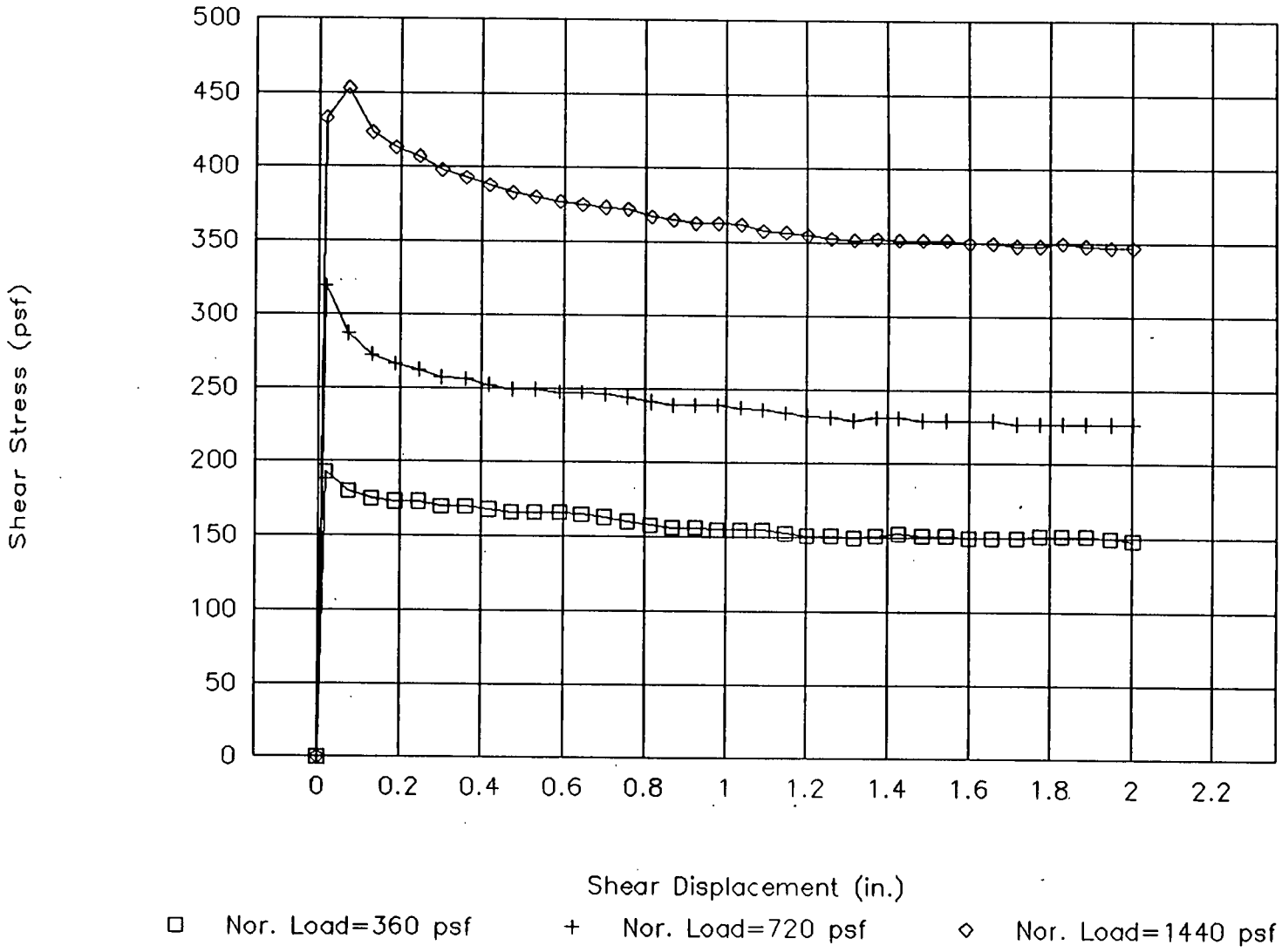
CLIENT: Saic/Parsons PO 140
PROJECT NO: 2059-13N
PROJECT: Fernald

Date: 8-2-95
Date Tested: 8-1-95

Displacement (inches)	Normal Force=360 psf Shear Stress (psf)	Normal Force=720 psf Shear Stress (psf)	Normal Force=1440 psf Shear Stress (psf)
0	0	0	0
0.017	193	319	433
0.073	180	287	453
0.131	175	272	423
0.188	173	266	413
0.247	173	262	407
0.302	170	257	398
0.361	170	256	393
0.418	168	252	388
0.474	166	249	383
0.53	166	249	380
0.591	166	247	377
0.644	165	247	375
0.7	163	246	373
0.756	160	244	372
0.814	158	241	367
0.868	156	239	365
0.924	156	239	363
0.979	155	239	363
1.036	155	237	362
1.09	155	236	358
1.147	153	234	357
1.201	151	232	355
1.259	151	231	353
1.316	150	229	352
1.37	151	231	353
1.426	153	231	352
1.485	151	229	352
1.545	151	229	352
1.6	150	229	350
1.657	150	229	350
1.717	150	227	348
1.774	151	227	348
1.83	151	227	350
1.888	151	227	348
1.948	150	227	347
2.003	148	227	347

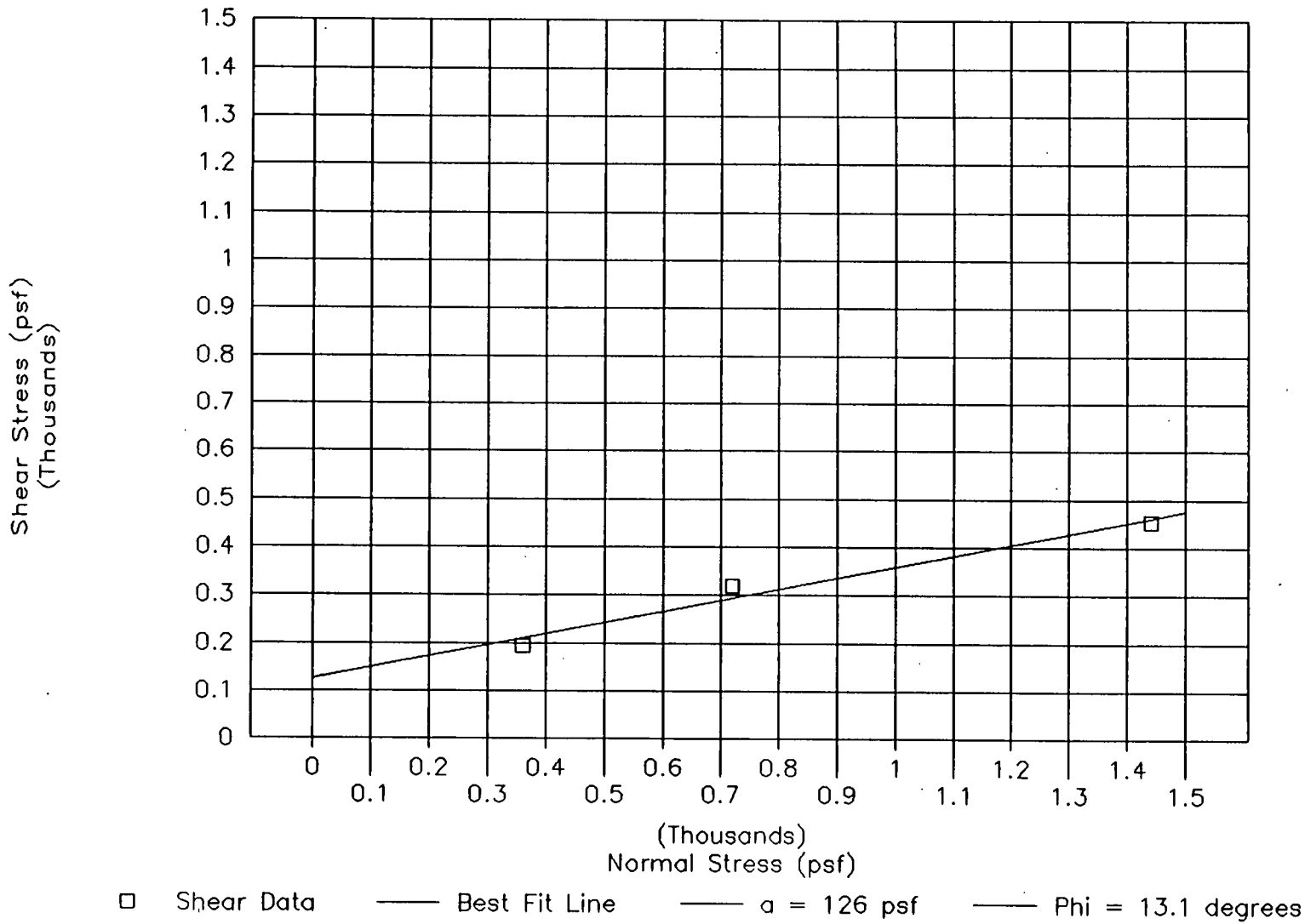
Shear Stress vs. Displacement

Clay vs. HDpe 60



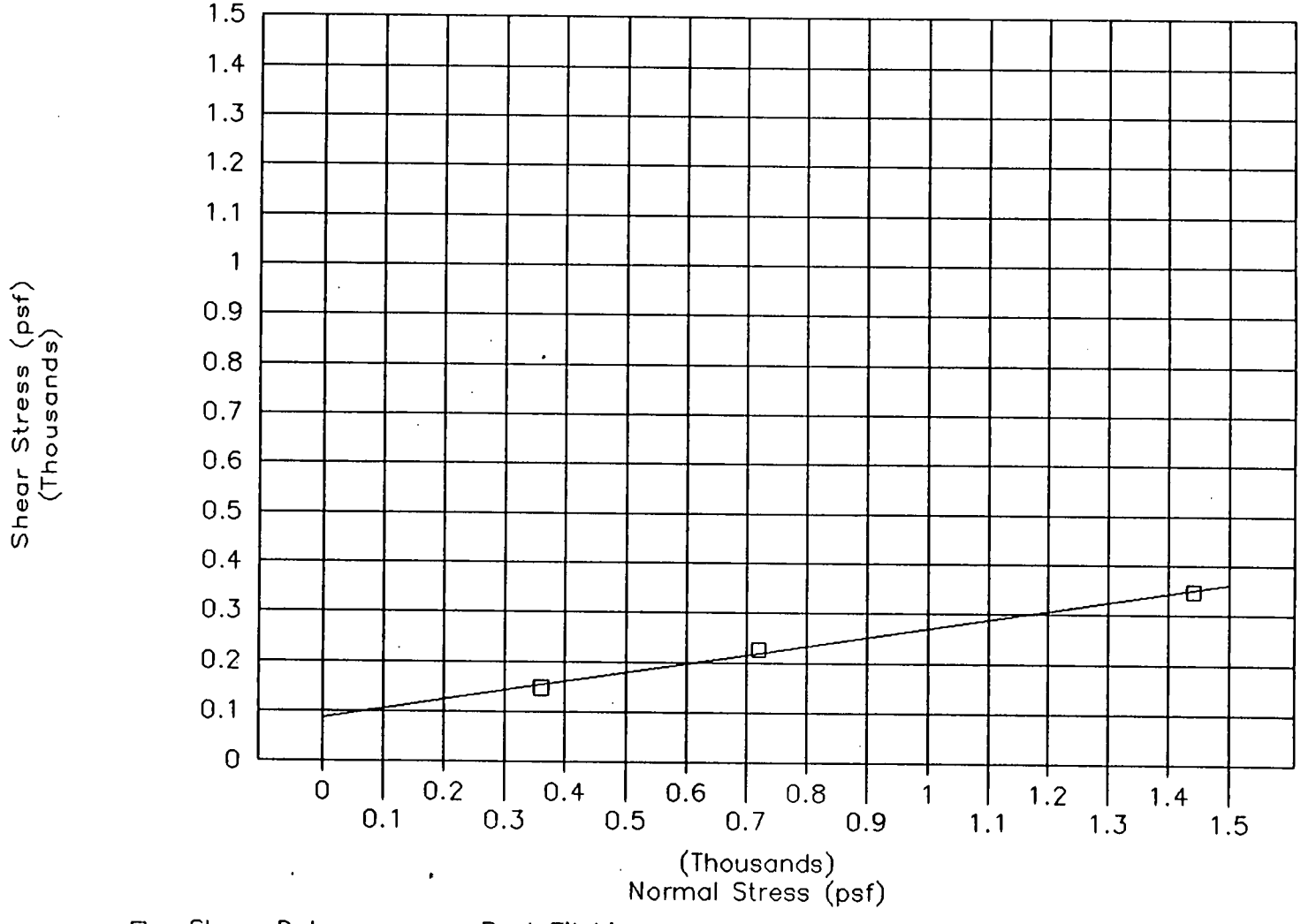
Normal Stress vs. Peak Shear Stress

Clay vs. 60 mil HDPE



Normal Stress vs. Residual Shear Stress

Clay vs. 60 mil HDPE



□ Shear Data —— Best Fit Line —— a = 88 psf —— Phi = 10.3 degrees

AGGREGATE TESTS

AGUIRRE ENGINEERS, INC.
Geotechnical • Geoenvironmental • Management

August 1, 1995

Science Applications International Corporation
14062 Denver West Parkway, Suite 200
Golden, CO 80401

Attention: Mr. Dermot Ross-Brown

Subject: Report of Laboratory Testing
Geotechnical Investigation, On-Site Disposal Facility
Fernald Environmental Management Project
SAIC Subcontract No. 14-960038-52
Our Project No. 25,041-01

Dear Mr. Ross-Brown:

Aguirre Engineers, Inc. (AEI) is providing Laboratory Testing Services for the subject project. Please find enclosed our laboratory Test Results for the samples submitted to our Laboratory.

Table One summarizes the Test Results for the required testing. Plates 1A through 1D indicate Test Results as required for the ASTM D2844-89 "Resistance R-Value and Expansion Pressure of Compacted Soils." If you have any questions on the contents of this letter, or require additional information, please contact this office.

Very truly yours,

AGUIRRE ENGINEERS, INC.

Johnny Levine
CMT Department Manager

Vukoslav E. Aguirre, P.E.
President

ALD:jhm

Enc: Table One
Plates 1A-1D

cc: 2 sent

13276 East Fremont Place • P.O. Box 3814 • Englewood, Colorado 80155-3814 • U.S.A • 303-799-8378 • FAX 303-799-8392

TABLE ONE

ASTM C127-88 "Specific Gravity and Absorption of Coarse Aggregate"

Sample	Average Bulk Specific Gravity	Average Absorption (%)
405377	2.70	0.7
405379	2.83	0.3
405381	2.68	1.0
405382	2.75	1.2
405383	2.67	1.1

ASTM C88-90 "Soundness of Aggregates by Use of Sodium Sulfate of Magnesium Sulfate"[A]

Sample	Fraction	Pre-Test Weight (g)	Post-Test Weight (g)	Observed Degradation	Weighted % Loss
405384	+3"	6931	6800	Splitting	0
	+2"	5066	4568	Splitting	3
				Total	3
405385	+3"	6933	6655	Splitting	1
	+2 1/2"	7052	6401	Splitting	2
	+1 1/2"	5010	4344	Splitting	1
				Total	4
405386	+2 1/2"	7010	6264	Splitting	4
	+1 1/2"	5036	4403	Splitting	1
				Total	5

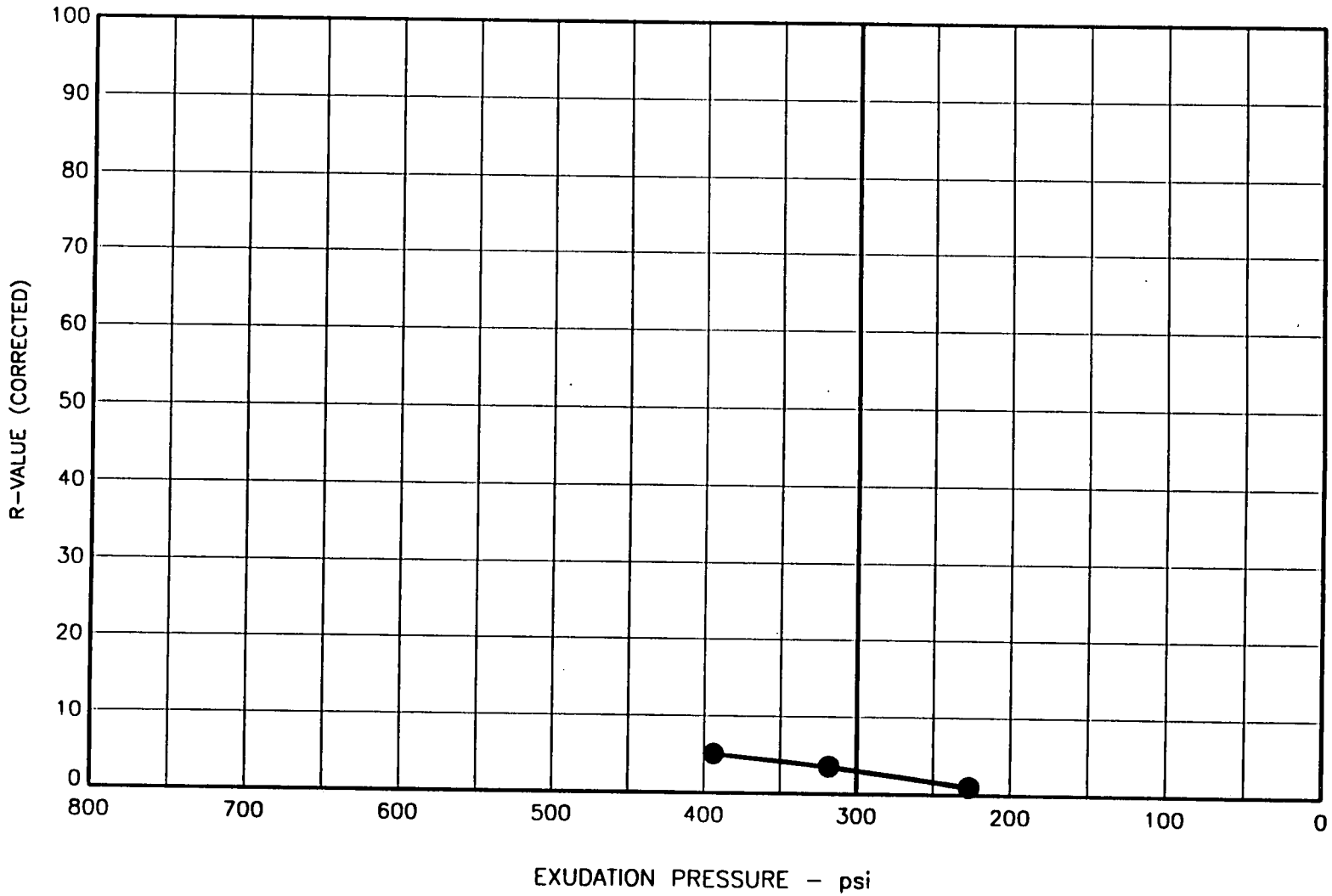
ASTM D2844-89 "Resistance R-Value and Expansion Pressure of Compacted Soils"

Sample	Corrected R- Value	Plate Number
404645	3	1A
404646	<5	1B
404647	<5	1C
404648	<5	1D

ASTM D5240-92 "Soundness of Riprap by Use of Sodium Sulfate or Magnesium Sulfate"[A]

Sample	Cumulative Pre-Test Weight (g)	Cumulative Post-Test Weight (g)	Average % Soundness Loss	Observed Degradation
405378	9898	9238	6.7	Flaking, Splitting, Crumbling
405380	11200	7521	32.8	Flaking, Splitting, Crumbling

A- Fresh Sodium Sulfate solution was used for these tests.



TEST No.	EXUDATION PRESSURE (psi)	EXPANSION PRESSURE (psi)	CORRECTED R-VALUE	DRY DENSITY (pcf)	MOISTURE CONTENT (%)
1	226.7	– –	1.0	107.7	18.6
2	318.2	1.33	3.5		
3	393.9	.33	5.0		

SOIL DESCRIPTION

Clay soil, light brown/sand
Sample No. 404645
R-Value at 300 psi = 3

AGUIRRE ENGINEERS, INC.

R-VALUE TEST
DESIGN VALUE

DRAWN BY: JOA
CHECKED BY: ALD
DATE: 8/1/95

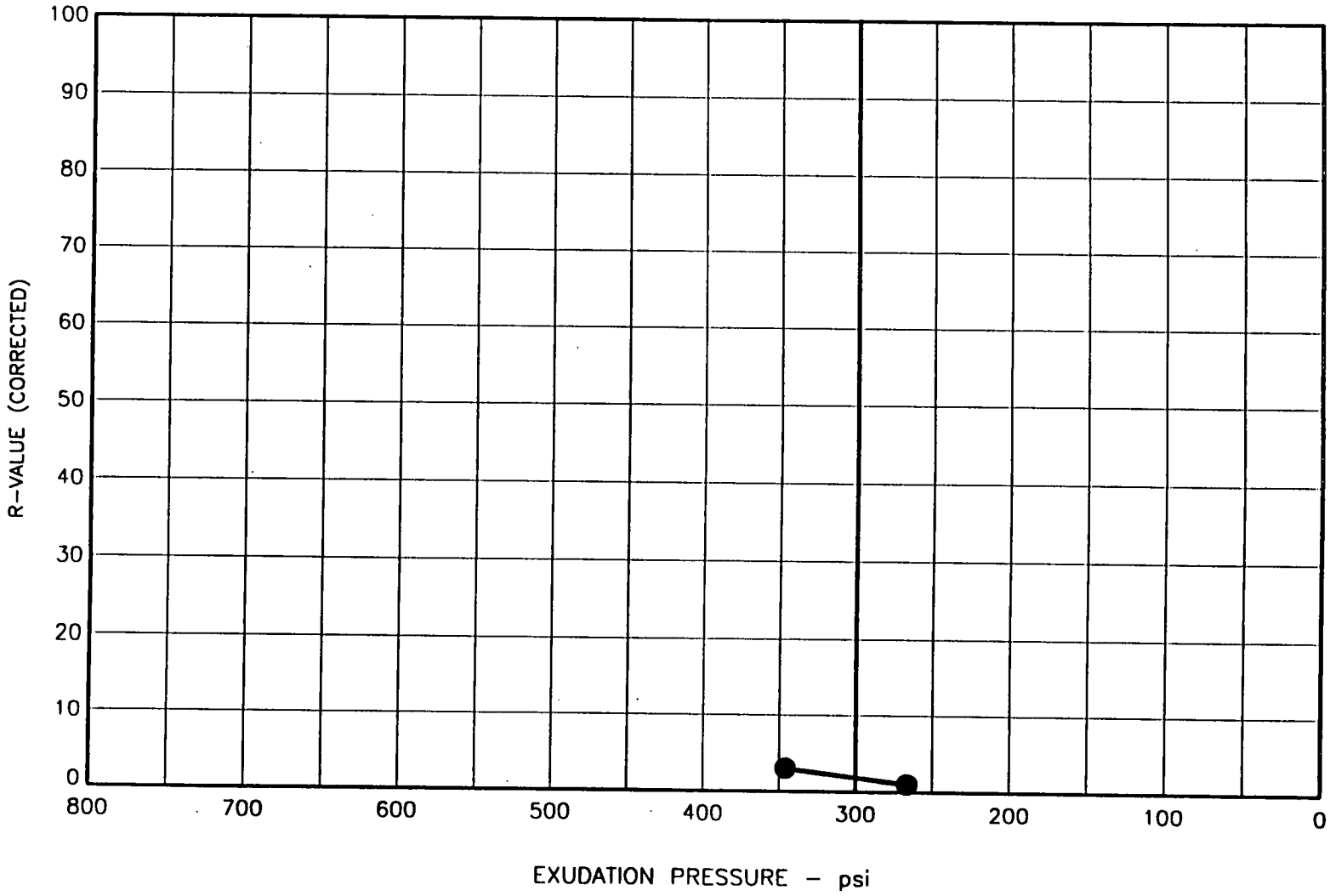
JOB NO. 25,041-01

PLATE 1A

1471

001539

474



TEST No.	EXUDATION PRESSURE (psi)	EXPANSION PRESSURE (psi)	CORRECTED R-VALUE	DRY DENSITY (pcf)	MOISTURE CONTENT (%)
1	266.5	– –	1.0	98.6	26.2
2	346.0	.879	3.0		
3	198.9	– –	– –		

SOIL DESCRIPTION

Clay soil, light brown
Sample No. 404646
R-Value at 300 psi < 5

AGUIRRE ENGINEERS, INC.

R-VALUE TEST
DESIGN VALUE

DRAWN BY: JOA
CHECKED BY: ALD
DATE: 8/1/95

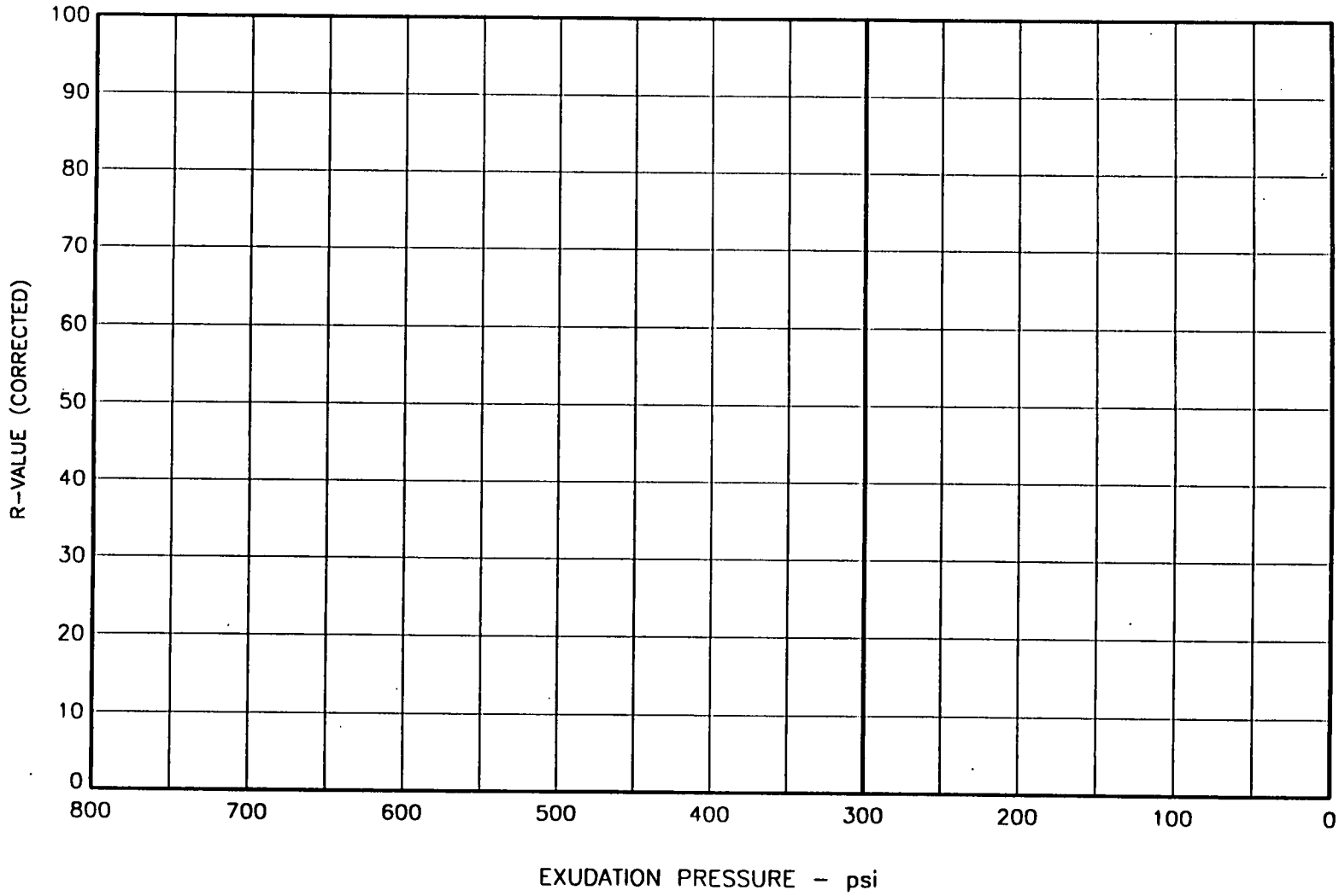
JOB NO. 25,041-01

PLATE 1B

1472

001600

424



TEST No.	EXUDATION PRESSURE (psi)	EXPANSION PRESSURE (psi)	CORRECTED R-VALUE	DRY DENSITY (pcf)	MOISTURE CONTENT (%)
1	286.4	– –	– –	98.3	25.6
2	346.1	1.24	– –		
3	238.7	– –	– –		

SOIL DESCRIPTION

Clay soil, brown with yellow
Sample No. 404647
R-Value at 300 psi < 5 ASTM

AGUIRRE ENGINEERS, INC.

R-VALUE TEST
DESIGN VALUE

DRAWN BY: JOA
CHECKED BY: ALD
DATE: 8/1/95

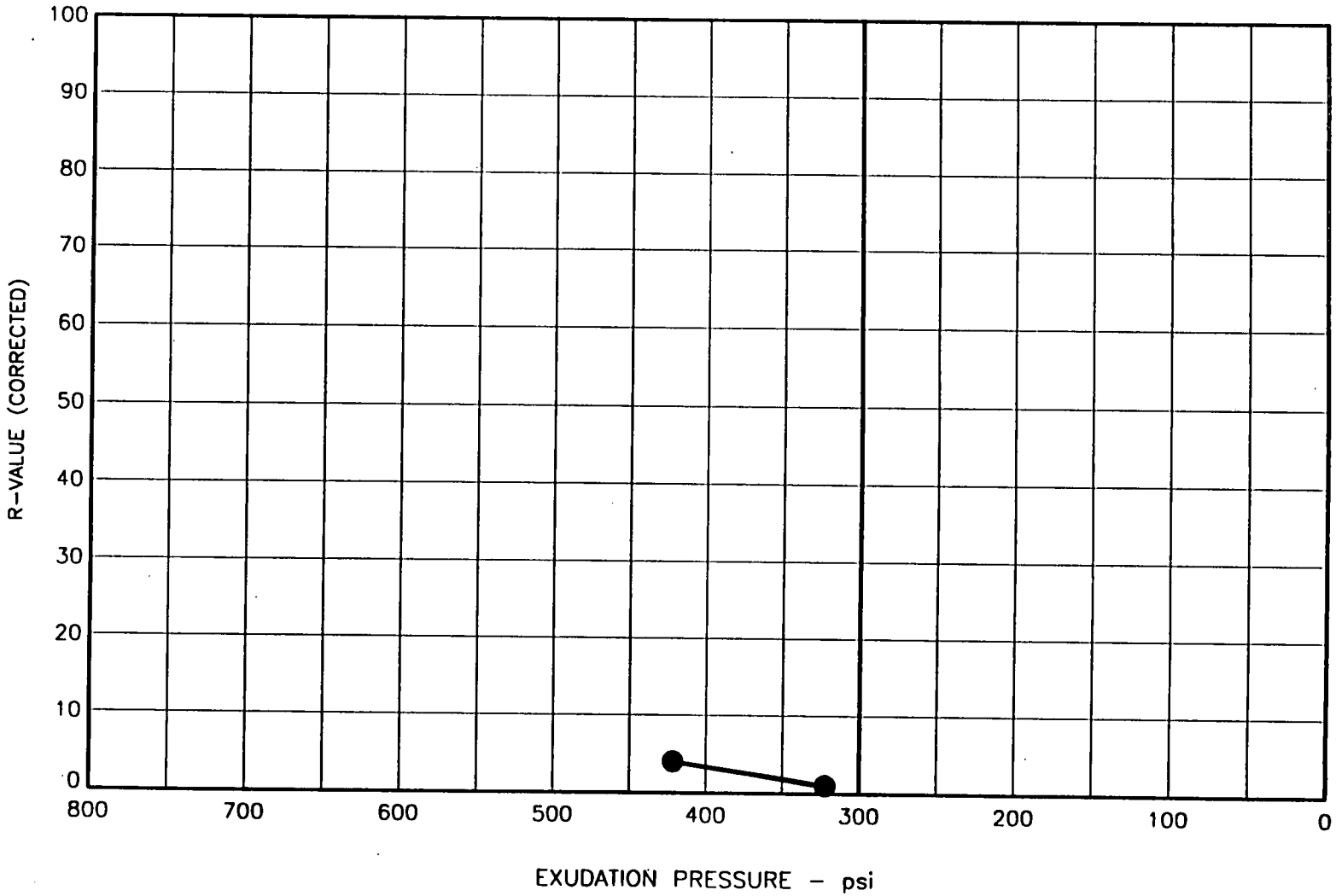
JOB NO. 25,041-01

PLATE 1C

1473

474

001601



TEST No.	EXUDATION PRESSURE (psi)	EXPANSION PRESSURE (psi)	CORRECTED R-VALUE	DRY DENSITY (pcf)	MOISTURE CONTENT (%)
1	322.3	.515	1.0	101.9	25.0
2	421.6	– –	4.0		
3	234.7	– –	– –		

SOIL DESCRIPTION

Clay soil, brown with yellow
Sample No. 404648
R-Value at 300 psi < 5

AGUIRRE ENGINEERS, INC.

R-VALUE TEST
DESIGN VALUE

DRAWN BY: JOA
CHECKED BY: ALD
DATE: 8/1/95

JOB NO. 25,041-01

PLATE 1D

1474

474

001602

CHEMICAL ANALYSIS

Accu-Labs® Research, Inc.

4663 Table Mountain Drive Golden, Colorado 80403-1650
(303) 277-9514 FAX (303) 277-9512

Date: 07/28/95
Page 1

REPORT OF ANALYSIS

Mr Dermot Ross-Brown
SAIC
14062 Denver West Pkwy
Building 52
Golden, CO 80401

Lab Job Number: 003099 SAI004
Date Samples Received: 05/15/95
Customer PO Number: SAIC12-P140-U21

ALR Designation:	95-A10306	95-A10307
Client Designation:	200149635	200149639
Sample Location:	404609	404604
Location II:	G2-SB-01	G2-SB-02
Date/Time Collected	04/24/95 15:35	04/24/95 12:01
Chloride (mg/kg Dry)	16	< 6
Sulfate (as SO4) (mg/kg Dry)	45	40

ALR Designation:	95-A10308	95-A10309
Client Designation:	200149643	200149647
Sample Location:	404616	404622
Location II:	G2-SB-04	G2-SB-08
Date/Time Collected	04/25/95 11:32	04/25/95 14:36
Chloride (mg/kg Dry)	16	24
Sulfate (as SO4) (mg/kg Dry)	66	45

ALR Designation:	95-A10310	95-A10311
Client Designation:	200149775	200149779
Sample Location:	404628	404633
Location II:	G2-SB-05	G2-SB-07
Date/Time Collected	04/26/95 10:19	04/26/95 12:10
Chloride (mg/kg Dry)	8	16
Sulfate (as SO4) (mg/kg Dry)	100	36

An Environmental Laboratory Specializing in:
Organic Chemistry • Metals Analysis • Inorganic Chemistry • Radiochemistry

Accu-Labs Research, Inc.

Date: 07/28/95
Page 2

REPORT OF ANALYSIS

Mr Dermot Ross-Brown
SAIC

Lab Job Number: 003099 SAI004
Date Samples Received: 05/15/95

ALR Designation:	95-A10312	95-A10313
Client Designation:	200149783	200152827
Sample Location:	404638	404643
Location II:	G2-SB-10	G2-SB-11
Date/Time Collected	04/26/95 15:00	04/27/95 11:10
Chloride (mg/kg Dry)	50	25
Sulfate (as SO4) (mg/kg Dry)	150	33

NOTES: When present, *** indicates that the analyte in question was not requested for that sample.

Scheduled sample disposal/return date: August 27, 1995.

for Susan J. Barker
Inorganic Chemistry Supervisor

Accu-Labs® Research, Inc.

F 8410 Rev. A

QA Report for Soil/RCRA Analysis

ALR ID: 003099

Parameter	Units	Prep Date	Analysis Date	Sample Dup #	Sample Result	Duplicate Result	RPD	Sample Spike #	Recovery		LCS w/in Control Limits?	Prep Blank Result (mg/L)
									% Spike	% CV		
Cl-	mg/kg	07/19/95	07/27/95	95-A10306	16	15	6	95-A10308	120	108	Y	<3
SO_4	mg/kg	07/26/95	07/27/95	95-A10313	33	35	6	95-A10312	95	100	Y	<10

Comments:

N/A = None Available; N/C = Non Calculable
N/S = Not Spiked

Approved: [illegible]

Date: 8-1-95

001505

1478

424

GEOTECHNICAL INVESTIGATION ON-SITE DISPOSAL FACILITY

SOIL INVESTIGATION DATA REPORT

VOLUME 7

Operable Unit 2
Project Order 140

August 18, 1995

for
PARSONS, Environmental Remedial Action Project
Fernald Environmental Management Project
Fernald, Ohio

by
Science Applications International Corporation
14062 Denver West Parkway, Suite 200
Golden, Colorado 80401
(303) 279-7242

Under Subcontract No. 7663S0018 to PARSONS

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Table of Contents - Laboratory Results

Volume 1

Index to Test Results A-9

Specific Gravity
Boring No. G2-124 2
Boring No. G2-126 2
Boring No. G2-127 8
Boring No. G2-128 5
Boring No. G2-129 5
Boring No. G2-130 4
Boring No. G2-131 11
Boring No. G2-132 7
Boring No. G2-133 8
Boring No. G2-SB-1 9
Boring No. G2-SB-2 11
Boring No. G2-SB-3 3
Boring No. G2-SB-4 9
Boring No. G2-SB-5 9
Boring No. G2-SB-6 3
Boring No. G2-SB-7 3
Boring No. G2-SB-8 3
Boring No. G2-SB-10 3
Boring No. G2-SB-11 9
Boring No. G2-SB-12 3
Boring No. G2-SB-2,3,4,6 2
Boring No. G2-SB-8,9,10,11 2

Moisture Content (D2216)
Boring No. G2-120 19
Boring No. G2-121 19
Boring No. G2-122 19
Boring No. G2-123 19
Boring No. G2-124 13
Boring No. G2-125 20
Boring No. G2-126 17
Boring No. G2-127 23
Boring No. G2-128 22
Boring No. G2-129 22
Boring No. G2-130 17
Boring No. G2-131 15
Boring No. G2-132 19
Boring No. G2-133 23
Boring No. G2-134 22
Boring No. G2-SB-1 18
Boring No. G2-SB-2 18

Table of Contents - Laboratory Results

Boring No. G2-SB-3 18
Boring No. G2-SB-4 18
Boring No. G2-SB-5 16
Boring No. G2-SB-6 18
Boring No. G2-SB-7 16
Boring No. G2-SB-8 18
Boring No. G2-SB-9 20
Boring No. G2-SB-10 16
Boring No. G2-SB-11 16
Boring No. G2-SB-12 18
Boring No. G2-SB-13 20
Boring No. G2-SB-14 20
Boring No. G2-SB-16 14
Boring No. G2-SB-17 14
Boring No. G2-SB-2,3,4,6 18
Boring No. G2-SB-8,9,10,11 16

Moisture Content - Microwave (D4643)

Boring No. G2-120 27
Boring No. G2-121 27
Boring No. G2-122 27
Boring No. G2-123 26
Boring No. G2-125 27
Boring No. G2-126 28
Boring No. G2-129 27
Boring No. G2-130 26
Boring No. G2-131 26
Boring No. G2-132 26
Boring No. G2-SB-16 26
Boring No. G2-SB-17 26

Moisture and Density

Boring No. G2-122 30
Boring No. G2-125 30
Boring No. G2-126 30
Boring No. G2-128 30
Boring No. G2-129 30
Boring No. G2-130 30
Boring No. G2-133 30

Organic Matter Content (with pertinent moisture content analyses on pages 33A, 33B, 35A, 35B, 36A, 38A, 38B)

Boring No. G2-SB-1 34
Boring No. G2-SB-2 37
Boring No. G2-SB-3 34

Table of Contents - Laboratory Results

Boring No. G2-SB-4 37
Boring No. G2-SB-5 36
Boring No. G2-SB-6 34
Boring No. G2-SB-7 34
Boring No. G2-SB-8 36
Boring No. G2-SB-9 32
Boring No. G2-SB-10 34
Boring No. G2-SB-11 39
Boring No. G2-SB-12 34
Boring No. G2-SB-13 32
Boring No. G2-SB-14 32

Atterberg Limits

Boring No. G2-120 41
Boring No. G2-121 44
Boring No. G2-122 53
Boring No. G2-123 62
Boring No. G2-124 71
Boring No. G2-125 77
Boring No. G2-126 89
Boring No. G2-127 104
Boring No. G2-128 113
Boring No. G2-129 125
Boring No. G2-130 134
Boring No. G2-131 149
Boring No. G2-132 164
Boring No. G2-133 176
Boring No. G2-134 191
Boring No. G2-SB-1 194
Boring No. G2-SB-2 197
Boring No. G2-SB-3 200
Boring No. G2-SB-4 203
Boring No. G2-SB-5 206
Boring No. G2-SB-6 209
Boring No. G2-SB-7 212
Boring No. G2-SB-8 215
Boring No. G2-SB-9 218
Boring No. G2-SB-10 221
Boring No. G2-SB-11 224
Boring No. G2-SB-12 227
Boring No. G2-SB-13 230
Boring No. G2-SB-14 233

Table of Contents - Laboratory Results

Volume 2

Hydrometer Analyses with Mechanical Grain Size Analysis

Boring No. G2-120 237
Boring No. G2-121 240
Boring No. G2-122 249
Boring No. G2-123 258
Boring No. G2-124 267
Boring No. G2-125 303
Boring No. G2-126 315
Boring No. G2-127 357
Boring No. G2-128 366
Boring No. G2-129 378
Boring No. G2-130 387
Boring No. G2-131 423
Boring No. G2-132 450
Boring No. G2-133 462
Boring No. G2-134 477
Boring No. G2-SB-1 480
Boring No. G2-SB-2 483
Boring No. G2-SB-3 486
Boring No. G2-SB-4 489
Boring No. G2-SB-5 492
Boring No. G2-SB-6 495
Boring No. G2-SB-7 498
Boring No. G2-SB-8 501
Boring No. G2-SB-9 504
Boring No. G2-SB-10 507
Boring No. G2-SB-11 510
Boring No. G2-SB-12 513
Boring No. G2-SB-13 516
Boring No. G2-SB-14 519

Table of Contents - Laboratory Results

Volume 3

Consolidation Test - Natural Moisture
Boring No. G2-122 523
Boring No. G2-124 533
Boring No. G2-126 543
Boring No. G2-127 563
Boring No. G2-128 573
Boring No. G2-130 583
Boring No. G2-131 593
Boring No. G2-133 623

Consolidation Test - Saturated
Boring No. G2-126 634
Boring No. G2-127 644
Boring No. G2-131 654
Boring No. G2-133 674

Consolidation Test - Remolded to 95% MDD
Boring No. G2-124 685
Boring No. G2-126 695
Boring No. G2-130 705
Boring No. G2-SB-4 715
Boring No. G2-SB-7 725

Consolidation Test - Remolded to 85% MDD
Boring No. G2-120 736
Boring No. G2-124 746
Boring No. G2-126 756
Boring No. G2-128 766
Boring No. G2-130 776
Boring No. G2-SB-1 786
Boring No. G2-SB-4 796
Boring No. G2-SB-7 806
Boring No. G2-SB-11 816
Boring No. G2-SB-2,3,4,6,Top Soil 826
Boring No. G2-SB-8,9,10,11 836

Volume 4

Triaxial Shear Test - TX/UU, Saturated
Boring No. G2-127 847
Boring No. G2-128 851
Boring No. G2-129 855
Boring No. G2-130 859
Boring No. G2-131 867
Boring No. G2-132 879

Table of Contents - Laboratory Results

Boring No. G2-133 887
Boring No. G2-134 891

Triaxial Shear Test - TX/UU, Field Moisture
Boring No. G2-122 896
Boring No. G2-124 899
Boring No. G2-125 902
Boring No. G2-126 908

Triaxial Shear Test - TX/UU, Saturated, Remolded to 95% MDD
Boring No. G2-122 912
Boring No. G2-127 916
Boring No. G2-131 920
Boring No. G2-132 924
Boring No. G2-134 928

Triaxial Shear Test - TX/UU, Saturated, Remolded to 85% MDD
Boring No. G2-122 933
Boring No. G2-127 937
Boring No. G2-134 941

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp, 3 Points
Boring No. G2-127 946
Boring No. G2-129 961
Boring No. G2-130 976
Boring No. G2-132 1006
Boring No. G2-133 1021

Volume 5

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Staged 3 Points
Boring No. G2-121 1037
Boring No. G2-122 1052
Boring No. G2-123 1067
Boring No. G2-124 1097
Boring No. G2-125 1112
Boring No. G2-126 1127

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 95% MDD 3 Points
Boring No. G2-128 1143

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 95% MDD Staged - 3 Points
Boring No. G2-125 1159
Boring No. G2-126 1174
Boring No. G2-130 1189

Table of Contents - Laboratory Results

Boring No. G2-132 1204

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 85% MDD 3 Points
Boring No. G2-122 1220

Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements - TX/CUpp Remolded to 85% MDD Staged - 3 Points
Boring No. G2-133 1236

Triaxial, Back Pressure Permeability - TX/PBP
Boring No. G2-121 1252
Boring No. G2-123 1260
Boring No. G2-126 1264
Boring No. G2-127 1268
Boring No. G2-132 1272
Boring No. G2-133 1276

Volume 6

Triaxial, Back Pressure Permeability - TX/PBP Remolded to 95% MDD
Boring No. G2-SB-1 1285
Boring No. G2-SB-2 1289
Boring No. G2-SB-3 1293
Boring No. G2-SB-4 1297
Boring No. G2-SB-5 1301
Boring No. G2-SB-6 1305
Boring No. G2-SB-7 1309
Boring No. G2-SB-8 1313
Boring No. G2-SB-9 1317
Boring No. G2-SB-10 1321
Boring No. G2-SB-11 1325
Boring No. G2-SB-12 1329
Boring No. G2-SB-13 1333
Boring No. G2-SB-14 1337

Proctor Compaction - Standard
Boring No. G2-SB-1 1342
Boring No. G2-SB-2 1344
Boring No. G2-SB-3 1346
Boring No. G2-SB-4 1348
Boring No. G2-SB-5 1350
Boring No. G2-SB-6 1352
Boring No. G2-SB-7 1354
Boring No. G2-SB-8 1356
Boring No. G2-SB-9 1358
Boring No. G2-SB-10 1360

Table of Contents - Laboratory Results

Boring No. G2-SB-11 1362
Boring No. G2-SB-12 1364
Boring No. G2-SB-13 1366
Boring No. G2-SB-14 1368
Boring No. G2-SB-15 1371
Boring No. G2-SB-16 1373
Boring No. G2-SB-17 1375
Boring No. G2-SB-2,3,4,6 1377
Boring No. G2-SB-8,9,10,11 1379

Shelby Tube Descriptive Logs
Boring No. G2-SB-120 1382
Boring No. G2-SB-121 1383
Boring No. G2-SB-122 1385
Boring No. G2-SB-123 1388
Boring No. G2-SB-124 1391
Boring No. G2-SB-125 1393
Boring No. G2-SB-126 1397
Boring No. G2-SB-127 1402
Boring No. G2-SB-128 1405
Boring No. G2-SB-129 1409
Boring No. G2-SB-130 1412
Boring No. G2-SB-131 1417
Boring No. G2-SB-132 1421
Boring No. G2-SB-133 1425
Boring No. G2-SB-134 1430

California Bearing Ratio
Boring No. G2-SB-15 1432
Boring No. G2-SB-16 1439
Boring No. G2-SB-17 1443

Large Scale Interface Direct Shear Tests
Report of a Three-Test Series Using Selected Georynthetics and Soils from FEMP 1450

Aggregate Tests
Report of Four Types of TestsPreformed on Aggregates and Riprap 1468

Chemical Analysis
Report of Chloride and Sulfate Analysis of FEMP Soils 1475

INDEX TO TEST RESULTS

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (D854)	G2-124	10-12	405004	1	2
	"	50-51.5	405016	1	11
	G2-126	7.5-9.5	404768	1	8
	"	15-17	404773	1	2
	"	25-27	404778	1	8
	"	35-37	404783	1	11
	"	40-41.5	404785	1	10
	"	45-46.5	404786	1	6
	"	50-51.5	404787	1	10
	"	55-56.5	404788	1	4
	"	60-61.5	404789	1	6
	"	65-66.5	404790	1	4
	"	70-71.5	404791	1	6
	"	75-76.5	404792	1	6
	"	80-81.5	404793	1	10
	G2-127	7.5-9.5	404751	1	11
	"	15-17	404756	1	8
	G2-128	12.5-14.5	405046	1	5
	"	17.5-19.5	405049	1	5
	G2-129	5-7.5	404729	1	5
	"	10-12.5	404732	1	5
	"	24-26.5	404740	1	5
	G2-130	5-7	405075	1	7
	"	10-12	405077	1	10
	"	15-17	405080	1	10
	"	20-22	405083	1	10
	"	30-32	405088	1	7
	"	40-41.5	405091	1	6

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (cont.)	G2-130 cont.	45-46.5	405092	1	6
	"	55-56.5	405094	1	4
	"	65-66.5	405096	1	4
	"	70-71.5	405097	1	10
	"	75-76.5	405098	1	4
	"	80-81.5	405099	1	4
	G2-131	7.5-9.5	404704	1	11
	"	17.5-19.5	404709	1	11
	"	27.5-29.5	404713	1	11
	"	45-47	404719	1	11
	G2-132	5-7	405102	1	7
	"	10-12	405105	1	7
	"	15-17	405108	1	7
	"	20-22	405111	1	7
	G2-133	7.5-9.5	405055	1	8
	"	15-17	405059	1	8
	"	17.5-19.5	405061	1	8
	"	25-27	405065	1	8
	G2-SB-1	1.5-5	404608	1	9
	G2-SB-2	1.5-5	404603	1	11
	G2-SB-3	1.5-5	404591	1	3
	G2-SB-4	1.5-5	404615	1	9
	G2-SB-5	1.5-5	404627	1	9
	G2-SB-6	1.5-5	404595	1	3
	G2-SB-7	1.5-5	404632	1	3
	G2-SB-8	1.5-5	404621	1	3
	G2-SB-10	1.5-5	404637	1	3
	G2-SB-11	1.5-5	404642	1	9
	G2-SB-12	1.5-4.2	404599	1	3

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Specific Gravity (cont.)	G2-SB-2,3,4,6	0-1.5	404617	1	2
	G2-SB-8,9,10,11	0-1.5	404644	1	2
Moisture Content (D2216)	G2-120	5-7	405124	1	19
	G2-121	12.5-14.5	404814	1	19
	"	17.5-19.5	404817	1	19
	G2-122	5-7	404821	1	24
	"	10-12	404824	1	19
	"	15-17	404827	1	19
	G2-123	12.5-14.5	404800	1	19
	G2-124	25-26.5	405011	1	13
	"	30-31.5	405012	1	13
	"	35-36.5	405013	1	13
	"	40-41.5	405014	1	13
	"	45-46.5	405015	1	13
	"	50-51.5	405016	1	13
	"	55-56.5	405017	1	13
	"	60-61.5	405018	1	13
	"	65-66.5	405019	1	15
	"	70-71.5	405020	1	15
	"	80-82	405021	1	15
	G2-125	2.5-4.5	405023	1	20
	"	7.5-9.5	405026	1	20
	"	17.5-19.5	405033	1	20
	G2-126	12.5-14.5	404771	1	23
	"	25-27	404778	1	22
	"	25-27	404778	1	24
	"	35-37	404783	1	24
	"	40-41.5	404785	1	21
	"	45-46.5	404786	1	21

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content (cont.)	G2-126 con.t	50-51.5	404787	1	21
	"	55-56.5	404788	1	21
	"	60-61.5	404789	1	21
	"	65-66.5	404790	1	21
	"	70-71.5	404791	1	21
	"	75-76.5	404792	1	21
	"	80-81.5	404793	1	17
	G2-127	28-30	404763	1	23
	G2-128	2.5-4.5	405040	1	22
	"	17.5-19.5	405049	1	22
	G2-129	5-7.5	404729	1	22
	"	10-12.5	404732	1	22
	"	10-12.5	404732	1	24
	G2-130	5-7	405075	1	23
	"	20-22	405083	1	23
	"	40-41.5	405091	1	17
	"	45-46.5	405092	1	17
	"	55-56.5	405094	1	17
	"	65-66.5	405096	1	17
	"	70-71.5	405097	1	17
	"	75-76.5	405098	1	17
	"	80-81.5	405099	1	17
	G2-131	7.5-9.5	404704	1	20
	"	45-47	404719	1	24
	"	60-61.5	404723	1	15
	"	65-66.5	404724	1	15
	"	70-71.5	404725	1	15
	"	75-76.5	404726	1	15
	"	81-82.3	404727	1	15

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content (cont.)	G2-132	5-7	405102	1	22
	"	10-12	405105	1	19
	"	20-22	405111	1	19
	"	20-22	405111	1	24
	G2-133	2.5-4.5	405053	1	23
	"	15-17	405059	1	23
	"	17.5-19.5	405061	1	23
	"	25-27	405065	1	23
	G2-134	12-14	405140	1	22
	G2-SB-1	1.5-5	404608	1	18
	G2-SB-2	1.5-5	404603	1	18
	G2-SB-3	1.5-5	404591	1	18
	G2-SB-4	1.5-5	404615	1	18
	G2-SB-5	1.5-5	404627	1	16
	G2-SB-6	1.5-5	404595	1	18
	G2-SB-7	1.5-5	404632	1	16
	G2-SB-8	1.5-5	404621	1	18
	G2-SB-9	1.5-5	404587	1	20
	G2-SB-10	1.5-5	404637	1	16
	G2-SB-11	1.5-5	404642	1	16
	G2-SB-12	1.5-4.2	404599	1	18
	G2-SB-13	1.5-5	404583	1	20
	G2-SB-14	1.5-5	404578	1	20
	G2-SB-16	1-2	404650	1	14
	"	1-2	404650	1	14
	G2-SB-17	1-2	405366	1	14
	"	1-2	405366	1	14
	G2-SB-2,3,4,6	0-1.5	404617	1	18
	G2-SB-8,9,10,11	0-1.5	404644	1	16

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture Content-Microwave (D4643)	G2-120	5-7	405124	1	27
	G2-121	12.5-14.5	404814	1	27
	G2-122	5-7	404821	1	28
	"	10-12	404824	1	27
	G2-123	12.5-14.5	404800	1	26
	G2-125	2.5-4.5	405023	1	27
	G2-126	25-27	404778	1	28
	"	35-37	404783	1	28
	G2-129	5-7.5	404729	1	27
	"	10-12.5	404732	1	28
	G2-130	5-7	405075	1	26
	G2-131	7.5-9.5	404704	1	26
	"	7.5-9.5	404704	1	27
	"	45-47	404719	1	28
	G2-132	5-7	405102	1	27
	"	10-12	405105	1	26
	"	20-22	405111	1	28
	G2-SB-16	1-2	404650	1	26
	"	1-2	404650	1	26
	G2-SB-17	1-2	405366	1	26
	"	1-2	405366	1	26
Moisture and Density (D2216 and D2937)	G2-122	15-17	404827	1	30
	G2-125	2.5-4.5	405023	1	30
	G2-126	12.5-14.5	404771	1	30
	G2-128	7.5-9.5	405043	1	30
	"	17.5-19.5	405049	1	30
	G2-129	10-12.5	404732	1	30
	G2-130	20-22	405083	1	30

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Moisture and Density (cont.)	G2-133	2.5-4.5	405053	1	30
Organic Matter Content (D2974) (with pertinent moisture content analyses on pages 33A, 33B, 35A, 35B, 36A, 38A, 38B)	G2-SB-1	0-0.5	404605	1	37
	"	0.5-1	404606	1	34
	"	1-1.5	404607	1	38
	G2-SB-2	0-0.5	404600	1	38
	"	0.5-1	404601	1	37
	"	1-1.5	404602	1	38
	G2-SB-3	0-0.5	404588	1	37
	"	0.5-1	404589	1	34
	"	1-1.5	404590	1	35
	G2-SB-4	0-0.5	404612	1	38
	"	0.5-1	404613	1	38
	"	1-1.5	404614	1	37
	G2-SB-5	0-0.5	404624	1	37
	"	0.5-1	404625	1	37
	"	1-1.5	404626	1	36
	G2-SB-6	0-0.5	404592	1	35
	"	0.5-1	404593	1	34
	"	1-1.5	404594	1	34
	G2-SB-7	0-0.5	404629	1	34
	"	0.5-1	404630	1	35
	"	1-1.5	404631	1	36
	G2-SB-8	0-0.5	404618	1	37
	"	0.5-1	404619	1	37
	"	1-1.5	404620	1	36
	G2-SB-9	0-0.5	404584	1	32
	"	0.5-1	404585	1	32
	"	1-1.5	404586	1	32
	G2-SB-10	0-0.5	404634	1	35

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Organic Matter Content (cont.)	G2-SB-10	0.5-1	404635	1	34
	"	1-1.5	404636	1	34
	G2-SB-11	0-0.5	404639	1	39
	"	0.5-1	404640	1	39
	"	1-1.5	404641	1	39
	G2-SB-12	0-0.5	404596	1	35
	"	0.5-1	404597	1	38
	"	1-1.5	404598	1	34
	G2-SB-13	0-0.5	404580	1	32
	"	0.5-1	404581	1	32
	"	1-1.5	404582	1	32
	G2-SB-14	0-0.5	404575	1	33
	"	0.5-1	404576	1	32
	"	1-1.5	404577	1	32
Atterberg Limits (D4318)	G2-120	5-7	405124	1	41
	G2-121	10-11.7	404812	1	44
	"	12.5-14.5	404814	1	47
	"	17.5-19.5	404817	1	50
	G2-122	5-7	404821	1	53
	"	10-12	404824	1	56
	"	15-17	404827	1	59
	G2-123	7.5-9.5	404797	1	67
	"	12.5-14.5	404800	1	65
	"	20-21.2	404804	1	68
	G2-124	5-7	405002	1	71
	"	10-12	405004	1	74
	G2-125	2.5-4.5	405023	1	77
	"	7.5-9.5	405026	1	80
	"	12.5-14.5	405029	1	83

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Atterberg Limits (cont.)	G2-125	17.5-19.5	405033	1	86
	G2-126	7.5-9.5	404768	1	89
	"	12.5-14.5	404771	1	92
	"	15-17	404773	1	95
	"	25-27	404778	1	98
	"	35-37	404783	1	101
	G2-127	7.5-9.5	404751	1	104
	"	15-17	404756	1	107
	"	28-30	404763	1	110
	G2-128	2.5-4.5	405040	1	113
	"	7.5-9.5	405043	1	116
	"	12.5-14.5	405046	1	119
	"	17.5-19.5	405049	1	122
	G2-129	5-7.5	404729	1	125
	"	10-12.5	404732	1	128
	"	24-26.5	404740	1	131
	G2-130	5-7	405075	1	134
	"	10-12	405077	1	137
	"	15-17	405080	1	140
	"	20-22	405083	1	143
	"	30-32	405088	1	146
	G2-131	7.5-9.5	404704	1	149
	"	17.5-19.5	404709	1	152
	"	27.5-29.5	404713	1	155
	"	45-47	404719	1	158
	"	60-61.5	404723	1	161
	G2-132	5-7	405102	1	164
	"	10-12	405105	1	167
	"	15-17	405108	1	170

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Atterberg Limits (cont.)	G2-132	20-22	405111	1	173
	G2-133	2.5-4.5	405053	1	176
	"	7.5-9.5	405055	1	179
	"	15-17	405059	1	182
	"	17.5-19.5	405061	1	185
	"	25-27	405065	1	188
	G2-134	12-14	405140	1	191
	G2-SB-1	1.5-5	404608	1	194
	G2-SB-2	1.5-5	404603	1	197
	G2-SB-3	1.5-5	404591	1	200
	G2-SB-4	1.5-5	404615	1	203
	G2-SB-5	1.5-5	404627	1	206
	G2-SB-6	1.5-5	404595	1	209
	G2-SB-7	1.5-5	404632	1	212
	G2-SB-8	1.5-5	404621	1	215
	G2-SB-9	1.5-5	404587	1	218
	G2-SB-10	1.5-5	404637	1	221
	G2-SB-11	1.5-5	404642	1	224
	G2-SB-12	1.5-4.2	404599	1	227
	G2-SB-13	1.5-5	404583	1	230
	G2-SB-14	1.5-5	404578	1	233
Hydrometer Analysis with Mechanical Grain Size Analysis (D422)	G2-120	5-7	405124	2	237
	G2-121	10-11.7	404812	2	240
	"	12.5-14.5	404814	2	243
	"	17.5-19.5	404817	2	246
	G2-122	5-7	404821	2	249
	"	10-12	404824	2	252
	"	15-17	404827	2	255

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	G2-123	7.5-9.5	404797	2	258
	"	12.5-14.5	404800	2	261
	"	20-21.2	404804	2	264
	G2-124	5-7	405002	2	267
	"	10-12	405004	2	270
	"	25-26.5	405011	2	273
	"	30-31.5	405012	2	276
	"	35-36.5	405013	2	279
	"	40-41.5	405014	2	282
	"	45-46.5	405015	2	285
	"	50-51.5	405016	2	288
	"	55-56.5	405017	2	291
	"	60-61.5	405018	2	294
	"	65-66.5	405019	2	297
	"	70-71.5	405020	2	300
	G2-125	2.5-4.5	405023	2	303
	"	7.5-9.5	405026	2	306
	"	12.5-14.5	405029	2	309
	"	17.5-19.5	405033	2	312
	G2-126	7.5-9.5	404768	2	315
	"	12.5-14.5	404771	2	318
	"	15-17	404773	2	321
	"	25-27	404778	2	324
	"	35-37	404783	2	327
	"	40-41.5	404785	2	330
	"	45-46.5	404786	2	333
	"	50-51.5	404787	2	336
	"	55-56.5	404788	2	339

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	"	60-61.5	404789	2	342
	"	65-66.5	404790	2	345
	"	70-71.5	404791	2	348
	"	75-76.5	404792	2	351
	"	80-81.5	404793	2	354
	G2-127	7.5-9.5	404751	2	357
	"	15-17	404756	2	360
	"	28-30	404763	2	363
	G2-128	2.5-4.5	405040	2	366
	"	7.5-9.5	405043	2	369
	"	12.5-14.5	405046	2	372
	"	17.5-19.5	405049	2	375
	G2-129	5-7.5	404729	2	378
	"	10-12.5	404732	2	381
	"	24-26.5	404740	2	384
	G2-130	5-7	405075	2	387
	"	10-12	405077	2	390
	"	15-17	405080	2	393
	"	20-22	405083	2	396
	"	30-32	405088	2	399
	"	40-41.5	405091	2	402
	"	45-46.5	405092	2	405
	"	55-56.5	405094	2	408
	"	65-66.5	405096	2	411
	"	70-71.5	405097	2	414
	"	75-76.5	405098	2	417
	"	80-81.5	405099	2	420
	G2-131	7.5-9.5	404704	2	423

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analyses (cont.)	"	17.5-19.5	404709	2	426
	"	27.5-29.5	404713	2	429
	"	45-47	404719	2	432
	"	60-61.5	404723	2	435
	"	65-66.5	404724	2	438
	"	70-71.5	404725	2	441
	"	75-76.5	404726	2	444
	"	81-82.3	404727	2	447
	G2-132	5-7	405102	2	450
	"	10-12	405105	2	453
	"	15-17	405108	2	456
	"	20-22	405111	2	459
	G2-133	2.5-4.5	405053	2	462
	"	7.5-9.5	405055	2	465
	"	15-17	405059	2	468
	"	17.5-19.5	405061	2	471
	"	25-27	405065	2	474
	G2-134	12-14	405140	2	477
	G2-SB-1	1.5-5	404608	2	480
	G2-SB-2	1.5-5	404603	2	483
	G2-SB-3	1.5-5	404591	2	486
	G2-SB-4	1.5-5	404615	2	489
	G2-SB-5	1.5-5	404627	2	492
	G2-SB-6	1.5-5	404595	2	495
	G2-SB-7	1.5-5	404632	2	498
	G2-SB-8	1.5-5	404621	2	501
	G2-SB-9	1.5-5	404587	2	504
	G2-SB-10	1.5-5	404637	2	507

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Hydrometer Analysis with Mechanical Grain Size Analysis (cont.)	G2-SB-11	1.5-5	404642	2	510
	G2-SB-12	1.5-4.2	404599	2	513
	G2-SB-13	1.5-5	404583	2	516
	G2-SB-14	1.5-5	404578	2	519
Consolidation Test - Natural Moisture (D2435)	G2-122	5-7	404821	3	523
	G2-124	10-12	405004	3	533
	G2-126	15-17	404773	3	543
	"	35-37	404783	3	553
	G2-127	7.5-9.5	404751	3	563
	G2-128	12.5-14.5	405046	3	573
	G2-130	15-17	405080	3	583
	G2-131	17.5-19.5	404709	3	593
	"	27.5-29.5	404713	3	603
	"	45-47	404719	3	613
	G2-133	7.5-9.5	405055	3	623
Consolidation Test - Saturated (D2435)	G2-126	35-37	404783	3	634
	G2-127	7.5-9.5	404751	3	644
	G2-131	17.5-19.5	404709	3	654
	"	45-47	404719	3	664
	G2-133	7.5-9.5	405055	3	674
Consolidation Test - Remolded to 95% MDD (D2435)	G2-124	10-12	405004	3	685
	G2-126	15-17	404773	3	695
	G2-130	15-17	405080	3	705
	G2-SB-4	1.5-5	404615	3	715
	G2-SB-7	1.5-5	404632	3	725
Consolidation Test - Remolded to 85% MDD (D2435)	G2-120	5-7	405124	3	736

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Consolidation Test - Remolded to 85% MDD (cont.)	G2-124	10-12	405004	3	746
	G2-126	15-17	404773	3	756
	G2-128	12.5-14.5	405046	3	766
	G2-130	15-17	405080	3	776
	G2-SB-1	1.5-5	404608	3	786
	G2-SB-4	1.5-5	404615	3	796
	G2-SB-7	1.5-5	404632	3	806
	G2-SB-11	1.5-5	404642	3	816
	G2-SB-2,3,4,6 Top Soil	0-1.5	404617	3	826
	G2-SB-8,9,10,11	0-1.5	404644	3	836
Triaxial Shear Test - TX/UU Saturated (D2850)	G2-127	7.5-9.5	404751	4	847
	G2-128	2.5-4.5	405040	4	851
	G2-129	5-7.5	404729	4	855
	G2-130	5-7	404075	4	859
	"	15-17	405080	4	863
	G2-131	7.5-9.5	404704	4	867
	"	27.5-29.5	404713	4	871
	"	45-47	404719	4	875
	G2-132	5-7	405102	4	879
	"	10-12	405105	4	883
	G2-133	7.5-9.5	405055	4	887
	G2-134	12-14	405140	4	891
Triaxial Shear Test - TX/UU Field Moisture (D2850)	G2-122	10-12	404824	4	896
	G2-124	5-7	405002	4	899
	G2-125	7.5-9.5	405026	4	902
	"	17.5-19.5	405033	4	905

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Triaxial Shear Test - TX/UU Field Moisture (cont.)	G2-126	15-17	404773	4	908
Triaxial Shear Test - TX/UU Saturated, Remolded to 95% MDD (D2850)	G2-122	10-12	404824	4	912
	G2-127	7.5-9.5	404751	4	916
	G2-131	7.5-9.5	404704	4	920
	G2-132	10-12	405105	4	924
	G2-134	12-14	405140	4	928
Triaxial Shear Test - TX/UU Saturated, Remolded to 85% MDD (D2850)	G2-122	10-12	404824	4	933
	G2-127	7.5-9.5	404751	4	937
	G2-134	12-14	405140	4	941
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp, 3 points (D4767)	G2-127	15-17	404756A	4	946
	"	15-17	404756B	4	951
	"	15-17	404756C	4	956
	G2-129	24-26.5	404740A	4	961
	"	24-26.5	404740B	4	966
	"	24-26.5	404740C	4	971
	G2-130	10-12	405077A	4	976
	"	"	405077B	4	981
	"	"	405077C	4	986
	"	30-32	405088A	4	991
	"	"	405088B	4	996
	"	"	405088C	4	1001
	G2-132	15-17	405108A	4	1006
	"	"	405108B	4	1011
	"	"	405108C	4	1016

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-133	15-17	405059A	4	1021
	"	"	405059B	4	1026
	"	"	405059C	4	1031
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged-3 Points (D4767)	G2-121	10-11.7	404812-1	5	1037
	"	"	404812-2	5	1042
	"	"	404812-3	5	1047
	G2-122	5-7	404821-1	5	1052
	"	"	404821-2	5	1057
	"	"	404821-3	5	1062
	G2-123	7.5-9.5	404797-1	5	1067
	"	"	404797-2	5	1072
	"	"	404797-3	5	1077
	"	20-21.2	404804-1	5	1082
	"	"	404804-2	5	1087
	"	"	404804-3	5	1092
	G2-124	10-12	405004-1	5	1097
	"	"	405004-2	5	1102
	"	"	405004-3	5	1107
	G2-125	12.5-14.5	405029-1	5	1112
	"	"	405029-2	5	1117
	"	"	405029-3	5	1122
	G2-126	7.5-9.5	404768-1	5	1127
	"	"	404768-2	5	1132
	"	"	404768-3	5	1137
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Remolded to 95% MDD, 3 Points (D4767)	G2-128	7.5-9.5	405043A	5	1143

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	"	405043B	5	1148
	"	"	405043C	5	1153
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged - 3 Points (D4767)	G2-125	2.5-4.5	405023-1	5	1159
	"	"	405023-2	5	1164
	"	"	405023-3	5	1169
	G2-126	12.5-14.5	404771-1	5	1174
	"	"	404771-2	5	1179
	"	"	404771-3	5	1184
	G2-130	20-22	405083-1	5	1189
	"	"	405083-2	5	1194
	"	"	405083-3	5	1199
	G2-132	5-7	405102-1	5	1204
	"	"	405102-2	5	1209
	"	"	405102-3	5	1214
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Remolded to 85% MDD-3 Points (D4767)	G2-122	15-17	404827A	5	1220
	"	"	404827B	5	1225
	"	"	404827C	5	1230
Triaxial Shear, Consolidated, Undrained with Pore Pressure Measurements-TX/CUpp Staged - 3 Points (D4767)	G2-133	2.5-4.5	405053-1	5	1236
	"	"	405053-2	5	1241
	"	"	405053-3	5	1246
Triaxial, Back Pressure Permeability TX/PBP (D5084)	G2-121	12.5-14.5	404814	5	1252
	"	17.5-19.5	404817	5	1256
	G2-123	12.5-14.5	404800	5	1260

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-126	25-27	404778	5	1264
	G2-127	28-30	404763-B	5	1268
	G2-132	20-22	405111	5	1272
	G2-133	17.5-19.5	405061	5	1276
	"	25-27	405065	5	1280
Triaxial, Back Pressure Permeability TX/PBP Remolded to 95% MDD (D5084)	G2-SB-1	1.5-5	404608	6	1285
	G2-SB-2	"	404603	6	1289
	G2-SB-3	"	404591	6	1293
	G2-SB-4	"	404615	6	1297
	G2-SB-5	"	404627	6	1301
	G2-SB-6	"	404595	6	1305
	G2-SB-7	"	404632	6	1309
	G2-SB-8	"	404621	6	1313
	G2-SB-9	"	404587	6	1317
	G2-SB-10	"	404637	6	1321
	G2-SB-11	"	404642	6	1325
	G2-SB-12	1.5-4.2	404599	6	1329
	G2-SB-13	1.5-5	404583	6	1333
	G2-SB-14	"	404578	6	1337
Proctor Compaction - Standard (D698)	G2-SB-1	1.5-5	404608	6	1342
	G2-SB-2	"	404603	6	1344
	G2-SB-3	"	404591	6	1346
	G2-SB-4	"	404615	6	1348
	G2-SB-5	"	404627	6	1350
	G2-SB-6	"	404595	6	1352
	G2-SB-7	"	404632	6	1354
	G2-SB-8	"	404621	6	1356

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	G2-SB-9	"	404587	6	1358
	G2-SB-10	"	404637	6	1360
	G2-SB-11	"	404642	6	1362
	G2-SB-12	1.5-4.2	404599	6	1364
	G2-SB-13	1.5-5	404583	6	1366
	G2-SB-14	"	404578	6	1368
	G2-SB-15	1-2	404649	6	1371
	G2-SB-16	"	404650	6	1373
	G2-SB-17	"	405366	6	1375
	G2-SB-2,3,4,6	0-1.5	404617	6	1377
	G2-SB-8,9,10,11	0-1.5	404644	6	1379
Shelby Tube Descriptive Logs (Visual Classification Only)	G2-120	5-7	405124	6	1382
	G2-121	10-11.7	404812	6	1383
	"	17.5-19.5	404817	6	1384
	G2-122	5-7	404821	6	1385
	"	10-12	404824	6	1386
	"	15-17	404827	6	1387
	G2-123	7.5-9.5	404797	6	1388
	"	12.5-14.5	404800	6	1389
	"	20-21	404804	6	1390
	G2-124	5-7	405002	6	1391
	"	10-12	405004	6	1392
	G2-125	2.5-4.5	405023	6	1393
	"	7.5-9.5	405026	6	1394
	"	12.5-14.5	405029	6	1395
	"	17.5-19.5	405033	6	1396
	G2-126	7.5-9.5	404768	6	1397

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	12.5-14.5	404771	6	1398
	"	15-17	404773	6	1399
	"	25-27	404778	6	1400
	"	35-37	404783	6	1401
	G2-127	7.5-9.5	404751	6	1402
	"	15-17	404756	6	1403
	"	28-30	404763	6	1404
	G2-128	2.5-4.5	405040	6	1405
	"	7.5-9.5	405043	6	1406
	"	12.5-14.5	405046	6	1407
	"	17.5-19.5	405049	6	1408
	G2-129	5-7.5	404729	6	1409
	"	10-12.5	404732	6	1410
	"	24-26.5	404740	6	1411
	G2-130	5-7	405075	6	1412
	"	10-12	405077	6	1413
	"	15-17	405080	6	1414
	"	20-22	405083	6	1415
	"	30-32	405088	6	1416
	G2-131	7.5-9.5	404704	6	1417
	"	17.5-19.5	404709	6	1418
	"	27.5-29.5	404713	6	1419
	"	45-47	404719	6	1420
	G2-132	5-7	405102	6	1421
	"	10-12	405105	6	1422
	"	15-17	405108	6	1423
	"	20-22	405111	6	1424
	G2-133	2.5-4.5	405053	6	1425
	"	7.5-9.5	405055	6	1426

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
	"	15-17	405059	6	1427
	"	17.5-19.5	405061	6	1428
	"	25-27	405065	6	1429
	G2-134	12-14	405140	6	1430
California Bearing Ratio (D1883)	G2-SB-15	1-2	404649	6	1432
	"	1-2	404649	6	1436
	G2-SB-16	1-2	404650	6	1439
	G2-SB-17	1-2	405366	6	1443
	"	"	405366	6	1447
Large Scale Interface Direct Shear Test Report of a Three-Test Series using selected geosynthetics and Soils from FEMP					1450
Aggregate Tests Specific Gravity and Absorbtion of Coarse Aggregate (C127-88)			405377	6	1470
			405379	6	1470
			405381	6	1470
			405382	6	1470
			405383	6	1470
Soundness of Aggregates (C88-90)			405384	6	1470
			405385	6	1470
			405386	6	1470
Resistance R-Value and Expansion Pressure of Compacted Soils (D2844-89)			404645	6	1470
			404646	6	1470
			404647	6	1470
			404648	6	1470
Soundness of Riprap (D5240-92)			405378	6	1470
			405380	6	1470

Test	Boring No.	Depth (ft)	Sample No.	Vol.	Page No.
Chemical Analysis - Chloride and Sulfate	G2-SB-1	4.5-5	404609	6	1476
	G2-SB-2	4.5-5	404604	6	1476
	G2-SB-4	4.5-5	404616	6	1476
	G2-SB-5	4.5-5	404628	6	1476
	G2-SB-7	4.5-5	404633	6	1476
	G2-SB-8	4.5-5	404622	6	1476
	G2-SB-10	4.5-5	404638	6	1477
	G2-SB-11	4.5-5	404643	6	1477

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

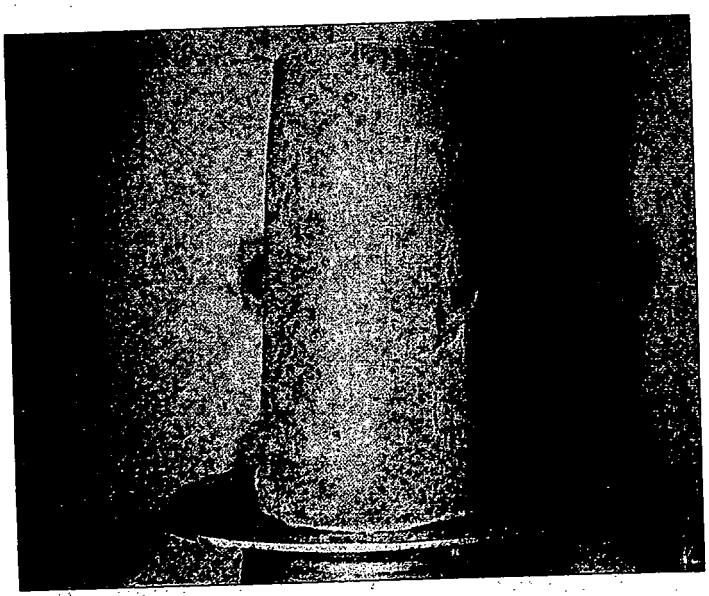
JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	986.9	1004.8
Wt. Wet Soil & Pan	(g)	995.5	1013.4
Wt. Dry Soil & Pan	(g)	891.4	891.4
Wt. Lost Moisture	(g)	104.1	122.0
Wt. of Pan Only	(g)	8.6	8.6
Wt. of Dry Soil	(g)	882.8	882.8
Moisture Content %		11.8	13.8
Wet Density PCF		141.8	144.4
Dry Density PCF		126.9	126.9

Init. Diameter	(in)	2.388
Init. Area	(sq in)	4.479
Init. Height	(in)	5.918
Volume (cu ft)		0.01534

Notes & Comments:



SAIC/PARSONS PO140
2059-13 D
FERNALD

G2-127
404751 @ 7.5-9.5'
TX/UU σ_3 1368 PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: NCL Date: 7-14-95
Filename: SAU0751

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

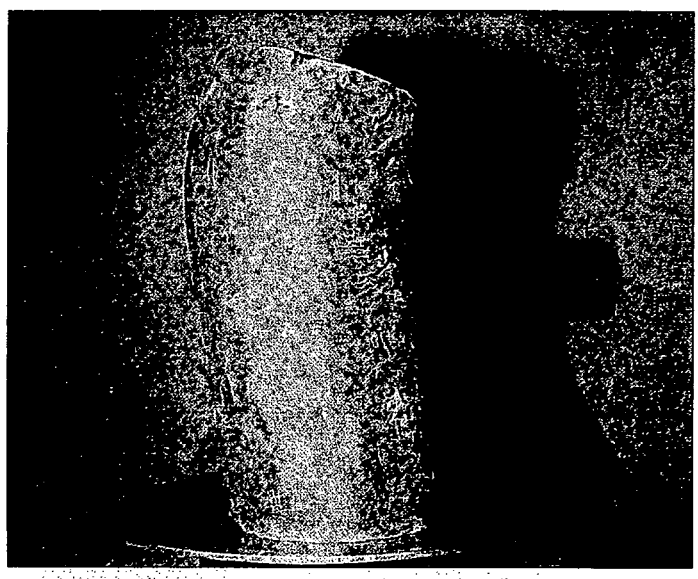
JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405040	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	648	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	997.7	1016.6
Wt. Wet Soil & Pan	(g)	1005.9	1024.9
Wt. Dry Soil & Pan	(g)	889.7	889.7
Wt. Lost Moisture	(g)	116.3	135.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	881.4	881.4
Moisture Content %		13.2	15.3
Wet Density PCF		140.4	143.1
Dry Density PCF		124.1	124.1

Init. Diameter	(in)	2.397
Init. Area	(sq in)	4.513
Init. Height	(in)	5.998
Volume (cu ft)		0.01566

Notes & Comments:



SAIC/PARSONS PO 140
G2-128 #405040, @ 2.5-4.5'
TX/UU SATURATED σ_3 = 648 PSF

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0040

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

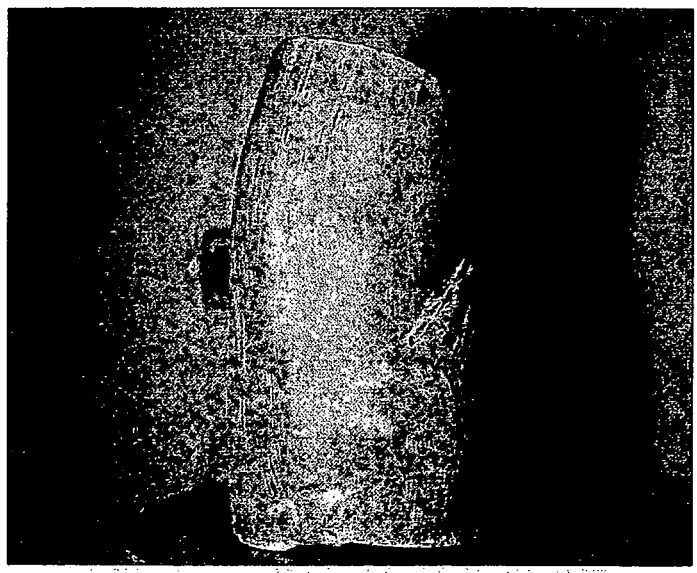
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-18-95 MG
DEPTH	5.0-7.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404729	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	11
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1080	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	949.0	959.1
Wt. Wet Soil & Pan	(g)	957.3	967.3
Wt. Dry Soil & Pan	(g)	807.7	807.7
Wt. Lost Moisture	(g)	149.6	159.7
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	799.4	799.4
Moisture Content %		18.7	20.0
Wet Density PCF		133.0	134.4
Dry Density PCF		112.1	112.1

Init. Diameter	(in)	2.406
Init. Area	(sq in)	4.547
Init. Height	(in)	5.977
Volume (cu ft)		0.01573

Notes & Comments:



SAIC/PARSONS PO 140 2059-13 B
G2-129 5.0-7.5' 404729
Saturated UU σ_3 1080 PSF

Data Entered By: NAA Date: 7-11-95
Data Checked By: CAL Date: 7-13-95
Filename: SAT0729

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

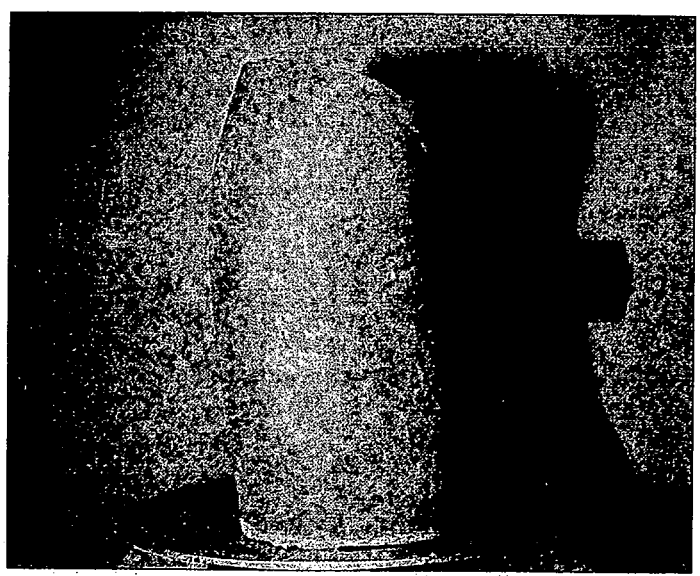
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	5.0-7.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405075	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1031.6	1031.5
Wt. Wet Soil & Pan	(g)	1040.0	1040.0
Wt. Dry Soil & Pan	(g)	926.2	926.2
Wt. Lost Moisture	(g)	113.8	113.7
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	917.8	917.8
Moisture Content %		12.4	12.4
Wet Density PCF		144.8	144.8
Dry Density PCF		128.8	128.8

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.990
Volume (cu ft)		0.01571

Notes & Comments:



SAIC/PARSONS PO140
G2-130 # 405075 @ 5.0-7.0'
TX/UU SATURATED σ_3 = 1008 PSF

Data Entered By: NAA Date: 7-17-95
Data Checked By: MGS Date: 7-18-95
Filename: SAU0075

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

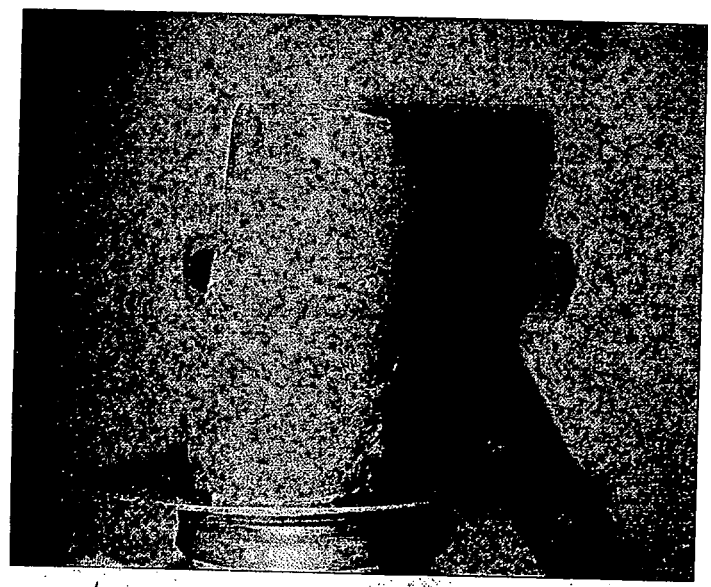
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-26-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405080	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2448	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1040.9	1037.1
Wt. Wet Soil & Pan	(g)	1049.2	1045.5
Wt. Dry Soil & Pan	(g)	946.4	946.4
Wt. Lost Moisture	(g)	102.8	99.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	938.1	938.1
Moisture Content %		11.0	10.6
Wet Density PCF		146.1	145.6
Dry Density PCF		131.7	131.7

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	5.973
Volume (cu ft)		0.01570

Notes & Comments:



SAIC/PARSONS PO 140 Fernald 2059-13H
G2-130 405080 15-17'
Saturated TX/uu σ_3 2448 PSF

Data Entered By: NAA Date: 7-11-95
Data Checked By: CAL Date: 7-13-95
Filename: SAT0080

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

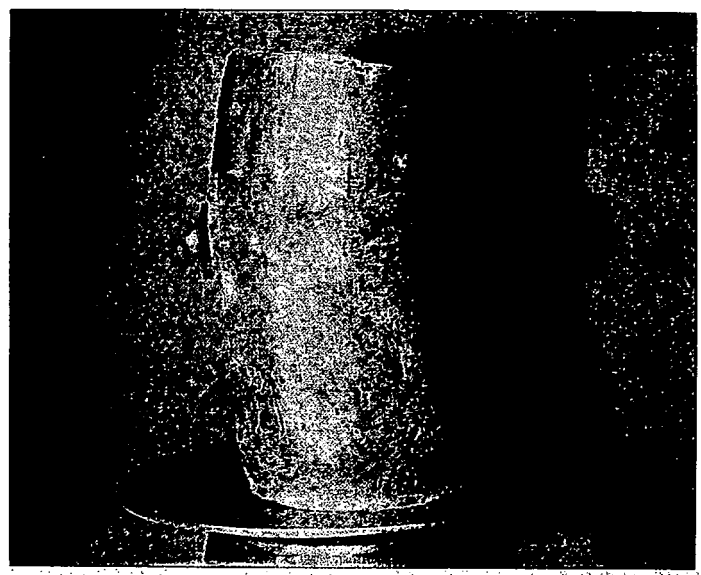
CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A

BORING NO.	G2-131	SAMPLED	4-12-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	404704	TEST FINISHED	7-5-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	1
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1024.3	1029.7
Wt. Wet Soil & Pan	(g)	1032.6	1038.0
Wt. Dry Soil & Pan	(g)	923.4	923.4
Wt. Lost Moisture	(g)	109.2	114.7
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	915.1	915.1
Moisture Content %		11.9	12.5
Wet Density PCF		144.4	145.2
Dry Density PCF		129.0	129.0

Init. Diameter	(in)	2.394
Init. Area	(sq in)	4.501
Init. Height	(in)	6.004
Volume (cu ft)		0.01564

Notes & Comments:



SAIC/Parsons PO 140 2059-13A
G2-131 @ 7.5-9.5' Tx/UU
404704 1368 PSF
Fernald

Data Entered By: NAA Date: 7-7-95
Data Checked By: CW Date: 7-11-95
Filename: SAU0704

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

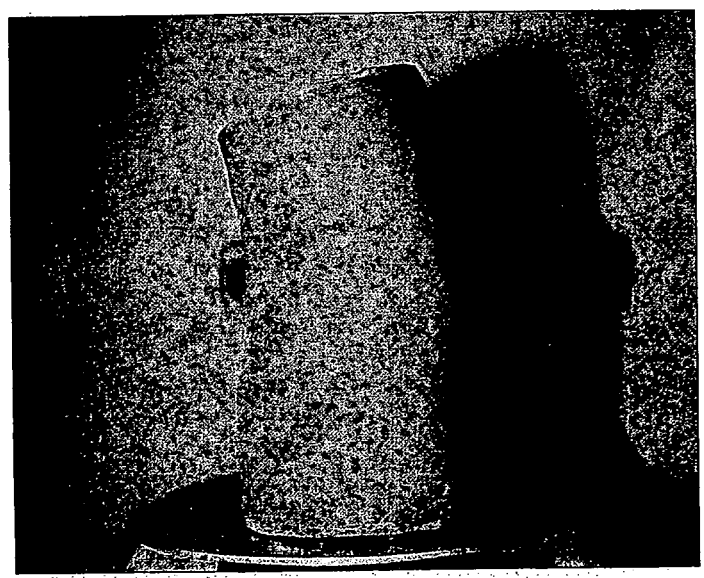
JOB NO. 2059-13A

BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	27.5-29.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	404713	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	21S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	4248	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1028.8	1028.4
Wt. Wet Soil & Pan	(g)	1037.2	1036.8
Wt. Dry Soil & Pan	(g)	926.7	926.7
Wt. Lost Moisture	(g)	110.5	110.1
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	918.4	918.4
Moisture Content %		12.0	12.0
Wet Density PCF		144.4	144.3
Dry Density PCF		128.9	128.9

Init. Diameter	(in)	2.407
Init. Area	(sq in)	4.550
Init. Height	(in)	5.966
Volume (cu ft)		0.01571

Notes & Comments:



SAIC/PARSONS PO140
G2- #404713 @ 27.5-29.5'
TX/UU SATURATED σ_3 = 4248 PSF

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0713

ADVANCED TERRA TESTING, INC.

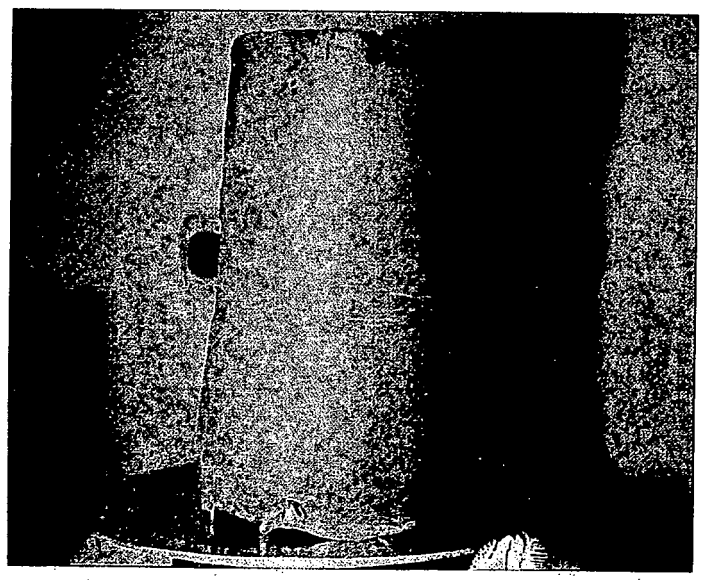
TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13A
BORING NO.	G2-131	SAMPLED	4-13-95 MG
DEPTH	45.0-47.0'	TEST STARTED	7-5-95 CAL
SAMPLE NO.	404719	TEST FINISHED	7-11-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	18S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	6768	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	967.8	975.8
Wt. Wet Soil & Pan	(g)	976.1	984.1
Wt. Dry Soil & Pan	(g)	821.9	821.9
Wt. Lost Moisture	(g)	154.2	162.2
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	813.6	813.6
Moisture Content %		19.0	19.9
Wet Density PCF		135.1	136.2
Dry Density PCF		113.6	113.6

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.033
Volume (cu ft)		0.01579

Notes & Comments:



SAIC/PARSONS PO 140
FERNALD
2059-13A

G2-131
404719 @ 45-47'
Tx/uu σ_3 6768 PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: NA Date: 7-31-95
Filename: SAU0719

ADVANCED TERRA TESTING, INC.

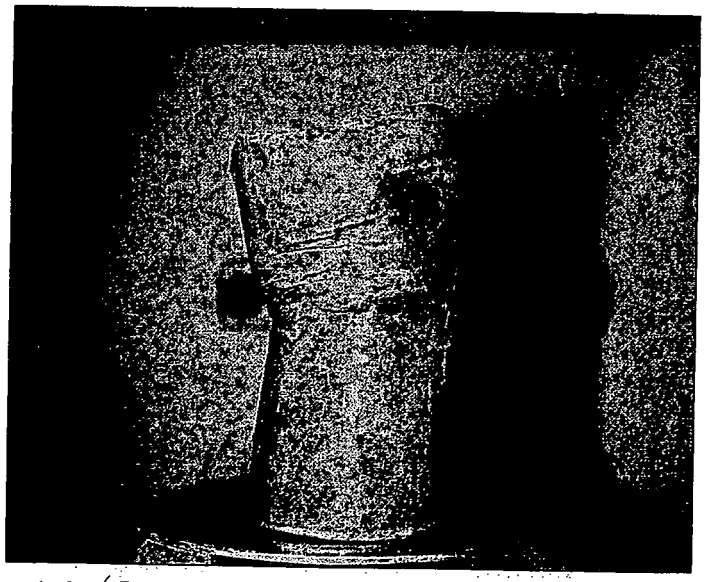
TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13H
BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5.0-7.0'	TEST STARTED	6-12-95 CAL
SAMPLE NO.	405102	TEST FINISHED	6-13-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	Cell# 16S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1008	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	842.9	842.0
Wt. Wet Soil & Pan	(g)	851.2	850.3
Wt. Dry Soil & Pan	(g)	655.5	655.5
Wt. Lost Moisture	(g)	195.7	194.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	647.2	647.2
Moisture Content %		30.2	30.1
Wet Density PCF		118.9	118.7
Dry Density PCF		91.3	91.3

Init. Diameter	(in)	2.415
Init. Area	(sq in)	4.581
Init. Height	(in)	5.898
Vol. Bef. Consol.	(cu ft)	0.01563
Vol. After Consol.	(cu ft)	0.01563

Notes & Comments:



SAIC/Parsons PO 140 2059-13H
G2-132 # 405102 @ 5-7'
TX/UU Saturated σ_3 1008 psf

Data Entered By: NAA Date: 6-19-95
Data Checked By: cal Date: 6-23-95
Filename: SAU05102

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

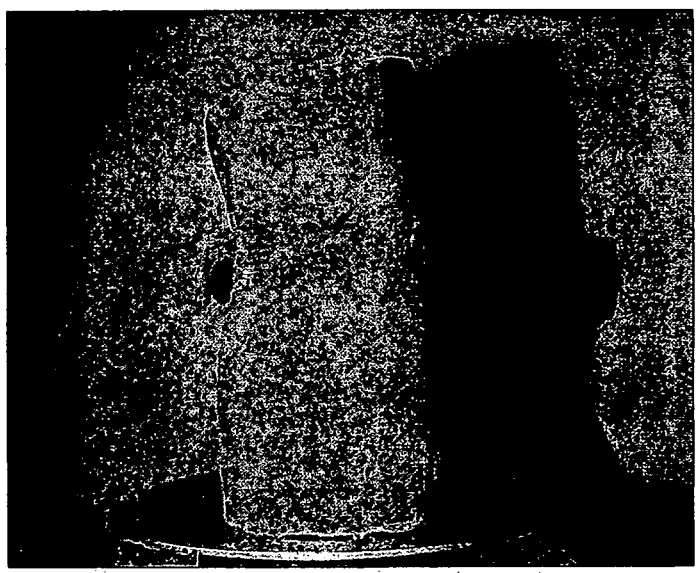
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-9-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	17S
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1006.9	1000.1
Wt. Wet Soil & Pan	(g)	1015.1	1008.4
Wt. Dry Soil & Pan	(g)	889.6	889.6
Wt. Lost Moisture	(g)	125.5	118.7
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	881.4	881.4
Moisture Content %		14.2	13.5
Wet Density PCF		140.7	139.8
Dry Density PCF		123.2	123.2

Init. Diameter	(in)	2.403
Init. Area	(sq in)	4.535
Init. Height	(in)	6.010
Volume (cu ft)		0.01577

Notes & Comments:



SAIC/PARSONS PO140
G2-132 # 405105 @ 10-12'
TX/UU SATURATED σ_3 = 1728 PSF

Data Entered By: NAA Date: 7-14-95
Data Checked By: SR Date: 7-14-95
Filename: SAU0105

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

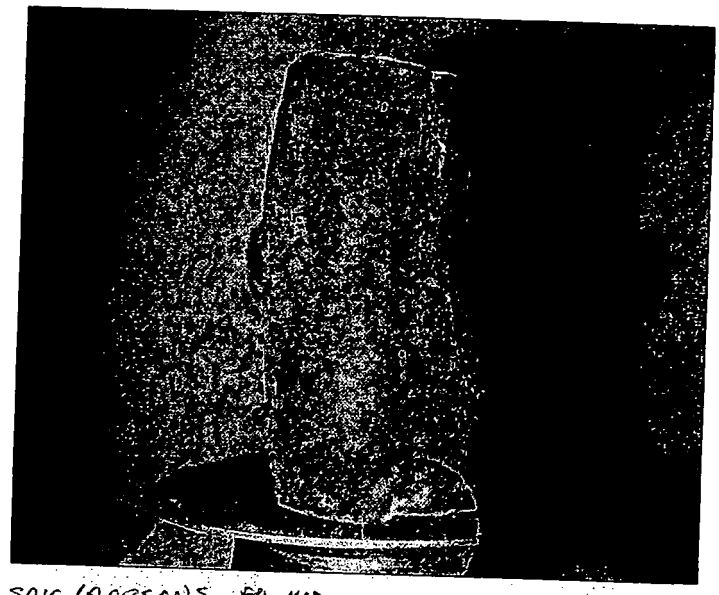
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-4-95 DCW
SAMPLE NO.	405055	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1017.3	1015.5
Wt. Wet Soil & Pan	(g)	1025.6	1023.7
Wt. Dry Soil & Pan	(g)	910.8	910.8
Wt. Lost Moisture	(g)	114.7	112.9
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	902.6	902.6
Moisture Content %		12.7	12.5
Wet Density PCF		143.0	142.7
Dry Density PCF		126.9	126.9

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.981
Volume (cu ft)		0.01568

Notes & Comments:



SAIC/PARSONS PO 140
FERNALD
2059-13D

G2-133
405055 A
7.5-9.5'
TX/UU σ_3 1368PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: VA Date: 7-31-95
Filename: SAU0055

ADVANCED TERRA TESTING, INC.

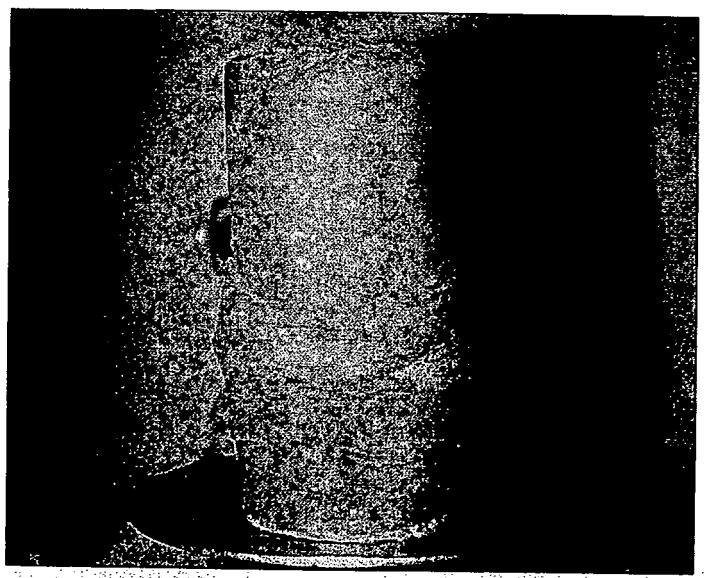
TRIAXIAL COMPRESSION TEST DATA

CLIENT	SAIC/Parsons PO 140	JOB NO.	2059-13G
BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-2-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1025.5	1020.9
Wt. Wet Soil & Pan	(g)	1033.8	1029.2
Wt. Dry Soil & Pan	(g)	919.3	919.3
Wt. Lost Moisture	(g)	114.5	109.9
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	911.0	911.0
Moisture Content %		12.6	12.1
Wet Density PCF		143.7	143.0
Dry Density PCF		127.6	127.6

Init. Diameter	(in)	2.407
Init. Area	(sq in)	4.550
Init. Height	(in)	5.976
Volume (cu ft)		0.01574

Notes & Comments:



SAIC/PARSONS PO 140 FERNALD
2059-13G 12-14' 405140
Saturated UU σ_3 2016 PSF

Data Entered By: NAA Date: 7-11-95
Data Checked By: Cal Date: 7-13-95
Filename: SAT0140A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

CLIENT SAIC/Parsons PO 140

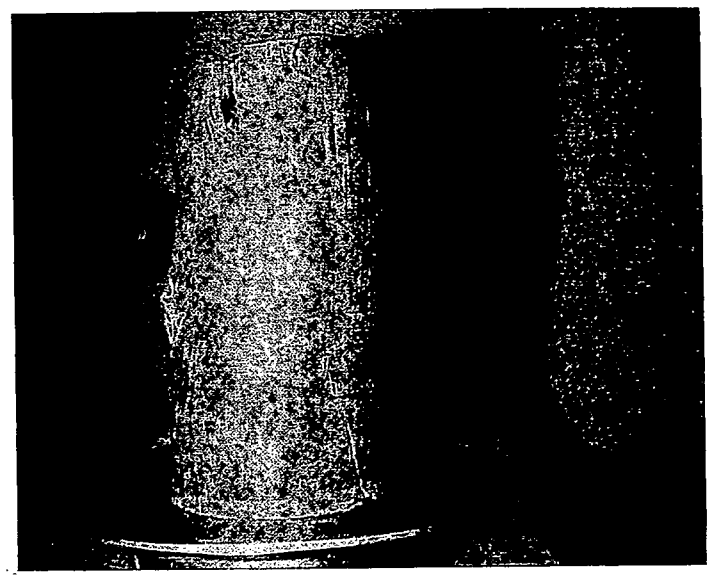
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10-12'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	404824	TEST FINISHED	5-25-95
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1728	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	995.5
Wt. Wet Soil & Pan	(g)	1011.2
Wt. Dry Soil & Pan	(g)	893.0
Wt. Lost Moisture	(g)	118.2
Wt. of Pan Only	(g)	15.7
Wt. of Dry Soil	(g)	877.3
Moisture Content %		13.5
Wet Density PCF		141.4
Dry Density PCF		124.6

Init. Diameter	(in)	2.398
Init. Area	(sq in)	4.516
Init. Height	(in)	5.938
Volume cu Ft.		0.01552

Notes & Comments:



Parsons PO 140
FERNALD
G2-122 #404824 @10-12'

TX/UU
σ_3 12 psi

Data entered by: 5-30-95 Date: NAA
Data checked by: [illegible] Date: 6-01-95
FileName:SAU0824

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13A

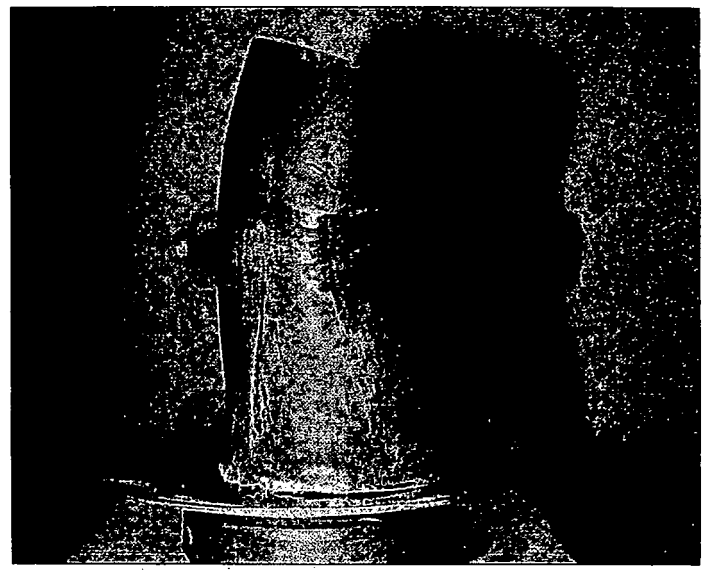
BORING NO.	G2-124
DEPTH	5.0-7.0'
SAMPLE NO.	405002
SOIL DESCR.	Fernald
TEST TYPE	TX/UU
CONF. PRES. PSF	1008

SAMPLED	4-12-95
TEST STARTED	5-25-95 CAL
TEST FINISHED	5-25-95 CAL
CELL NUMBER	
SATURATED TEST	No
AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	898.1
Wt. Wet Soil & Pan	(g)	913.5
Wt. Dry Soil & Pan	(g)	753.7
Wt. Lost Moisture	(g)	159.9
Wt. of Pan Only	(g)	15.5
Wt. of Dry Soil	(g)	738.2
Moisture Content %		21.7
Wet Density PCF		127.8
Dry Density PCF		105.1

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	5.897
Volume cu Ft.		0.01549

Notes & Comments:



Parsons PO 140 Fernald 2059-13A
G2-124 #405002 @ 5-7'
TX/UU σ_3 7 psi

Data entered by: NAA Date: 5-30-95
Data checked by: Cal Date: 5-31-95
FileName:SAU0002

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

CLIENT SAIC/Parsons PO 140

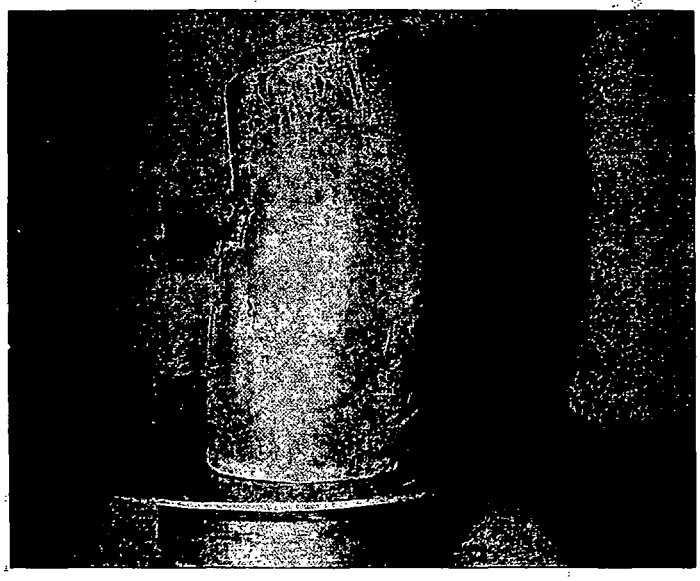
JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95
DEPTH	7.5-9.5'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405026	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	1368	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	1011.4
Wt. Wet Soil & Pan	(g)	1026.8
Wt. Dry Soil & Pan	(g)	902.4
Wt. Lost Moisture	(g)	124.4
Wt. of Pan Only	(g)	15.4
Wt. of Dry Soil	(g)	887.0
Moisture Content %		14.0
Wet Density PCF		141.0
Dry Density PCF		123.7

Init. Diameter	(in)	2.408
Init. Area	(sq in)	4.554
Init. Height	(in)	6.000
Volume cu Ft.		0.01581

Notes & Comments:



Parsons PO 140 Fernald 2059-13 B
G2-125 #405026 @ 7.5-9.5'
TX/UU σ_3 9.5 psi.

Data entered by: NAA Date: 5-30-95
Data checked by: SR Date: 5-30-95
FileName: SAU0026

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

CLIENT SAIC/Parsons PO 140

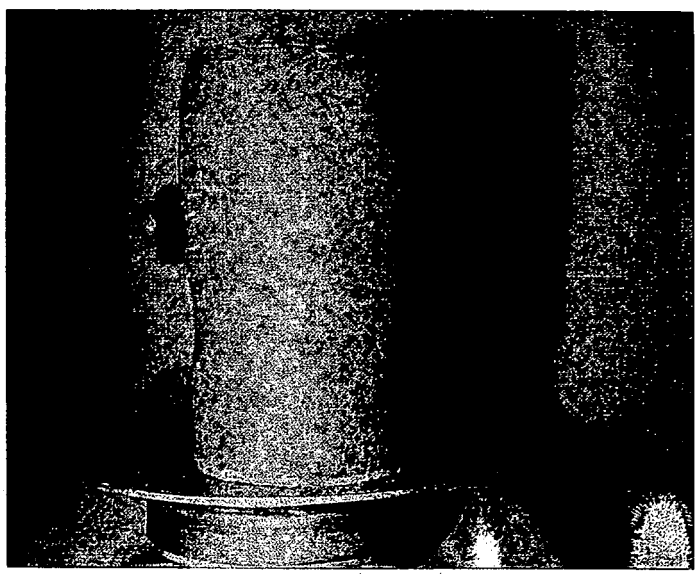
JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95
DEPTH	17.5-19.5'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	405033	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	2808	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	1032.1
Wt. Wet Soil & Pan	(g)	1047.3
Wt. Dry Soil & Pan	(g)	930.9
Wt. Lost Moisture	(g)	116.4
Wt. of Pan Only	(g)	15.2
Wt. of Dry Soil	(g)	915.7
Moisture Content %		12.7
Wet Density PCF		145.0
Dry Density PCF		128.7

Init. Diameter	(in)	2.415
Init. Area	(sq in)	4.581
Init. Height	(in)	5.918
Volume cu Ft.		0.01569

Notes & Comments:



Parsons PO 140 2059-13B
Fernald
G2-125 #405033 @ 17.5-19.5'
TX/UU σ3 19.5 psi

Data entered by: NAA Date: 5-30-95
Data checked by: SR Date: 5-30-95
FileName: SAU0033

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 2850

CLIENT SAIC/Parsons PO 140

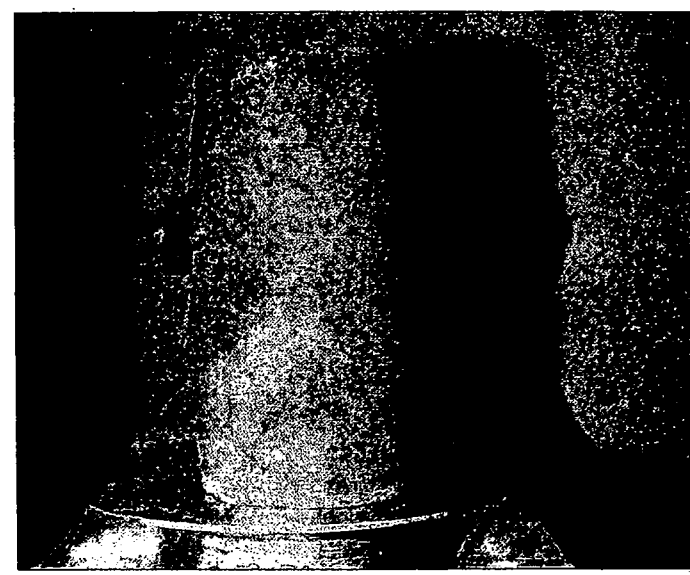
JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95
DEPTH	15.0-17.0'	TEST STARTED	5-25-95 CAL
SAMPLE NO.	404773	TEST FINISHED	5-25-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	
TEST TYPE	TX/UU	SATURATED TEST	No
CONF. PRES. PSF	2448	AT FIELD MOIST.	Yes

MOISTURE/DENSITY DATA		BEFORE TEST
Wt. Soil + Moisture	(g)	1034.1
Wt. Wet Soil & Pan	(g)	1049.3
Wt. Dry Soil & Pan	(g)	931.5
Wt. Lost Moisture	(g)	117.8
Wt. of Pan Only	(g)	15.3
Wt. of Dry Soil	(g)	916.2
Moisture Content %		12.9
Wet Density PCF		143.7
Dry Density PCF		127.3

Init. Diameter	(in)	2.412
Init. Area	(sq in)	4.569
Init. Height	(in)	5.999
Volume cu Ft.		0.01586

Notes & Comments:



Parsons PO 140 Fernald 2059-13D
G2-126 # 404773 @ 15-17'
TX/UU σ_3 17 psi

Data entered by: NAA Date: 5-30-95
Data checked by: cal Date: 5-30-95
FileName: SAU0773

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

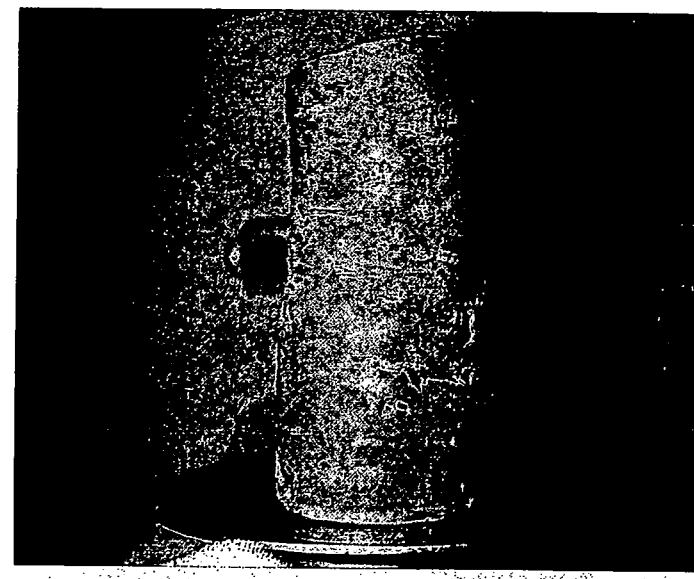
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404824	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	10S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	973.5	974.9
Wt. Wet Soil & Pan	(g)	981.8	983.3
Wt. Dry Soil & Pan	(g)	855.3	855.3
Wt. Lost Moisture	(g)	126.6	128.1
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	846.9	846.9
Moisture Content %		14.9	15.1
Wet Density PCF		136.3	136.5
Dry Density PCF		118.5	118.5

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	5.996
Volume (cu ft)		0.01575

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140
Fernald

2059-13 G
G2-122
404824 @ 10-12'
TX/UU RAS σ_3 1728 PSF

Data Entered By: NAA Date: 8-8-95
Data Checked By: CL Date: 8-12-95
Filename: SAU0824X

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	973.3	978.0
Wt. Wet Soil & Pan	(g)	981.9	986.5
Wt. Dry Soil & Pan	(g)	848.5	848.5
Wt. Lost Moisture	(g)	133.4	138.0
Wt. of Pan Only	(g)	8.6	8.6
Wt. of Dry Soil	(g)	839.9	839.9
Moisture Content %		15.9	16.4
Wet Density PCF		135.9	136.5
Dry Density PCF		117.3	117.3

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.031
Volume (cu ft)		0.01579

Notes & Comments: Remolded to 95% MDD

SAIC/PARSONS PO 140 2059-13D
G2-127 404751 @ 7.5-9.5'
TX UU R95 σ_3 1368 PSF

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename: SAU0751C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

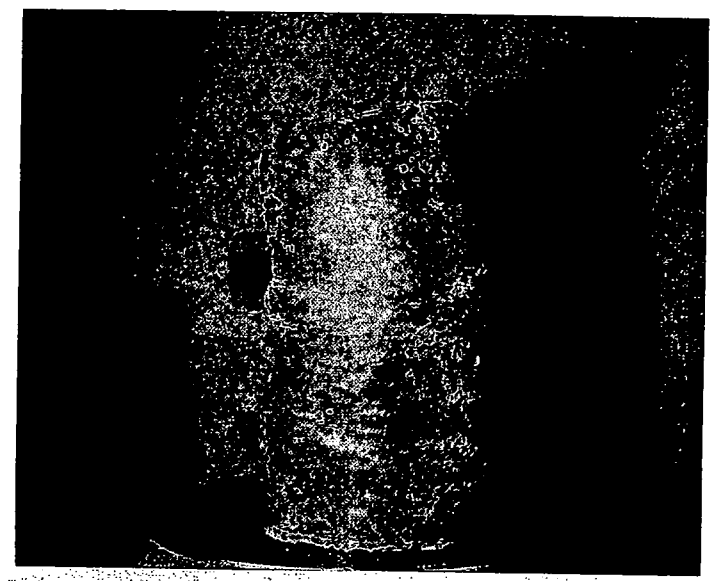
JOB NO. 2059-13A

BORING NO.	G2-131	SAMPLED	4-12-95 MC
DEPTH	7.5-9.5'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404704	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	12S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	969.0	966.5
Wt. Wet Soil & Pan	(g)	977.3	974.7
Wt. Dry Soil & Pan	(g)	838.1	838.1
Wt. Lost Moisture	(g)	139.1	136.6
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	829.9	829.9
Moisture Content %		16.8	16.5
Wet Density PCF		136.9	136.5
Dry Density PCF		117.2	117.2

Init. Diameter	(in)	2.397
Init. Area	(sq in)	4.513
Init. Height	(in)	5.977
Volume (cu ft)		0.01561

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO140
G2-131 #404704 @ 7.5'-9.5'
TX/UU SATURATED r95% $\bar{\sigma}_3$ = 1368PSF

Data Entered By: NAA Date: 8-10-95
Data Checked By: SC Date: 8-12-95
Filename: SAU04704

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

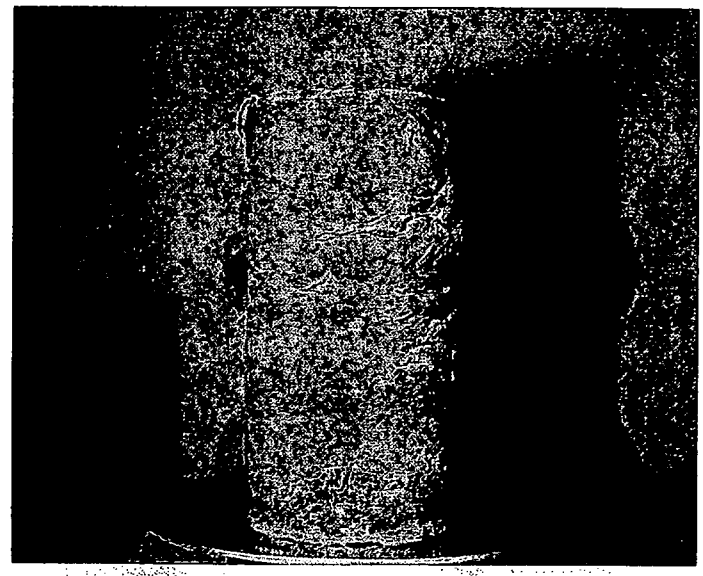
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	10.0-12.0'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405105	TEST FINISHED	7-16-95 DCW
SOIL DESCR.	Fernald	SETUP NO.	11S
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	977.0	981.0
Wt. Wet Soil & Pan	(g)	985.2	989.3
Wt. Dry Soil & Pan	(g)	863.2	863.2
Wt. Lost Moisture	(g)	122.0	126.1
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	855.0	855.0
Moisture Content %		14.3	14.7
Wet Density PCF		136.8	137.4
Dry Density PCF		119.7	119.7

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	6.004
Volume (cu ft)		0.01574

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO140
G2-132 #405105 @ 10-12'
TX/UU SATURATED $_{R\,95}$ $\sqrt{3}$ = 1728PSF

Data Entered By: NAA Date: 8-10-95
Data Checked By: SL Date: 8-12-95
Filename:SAU05105

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

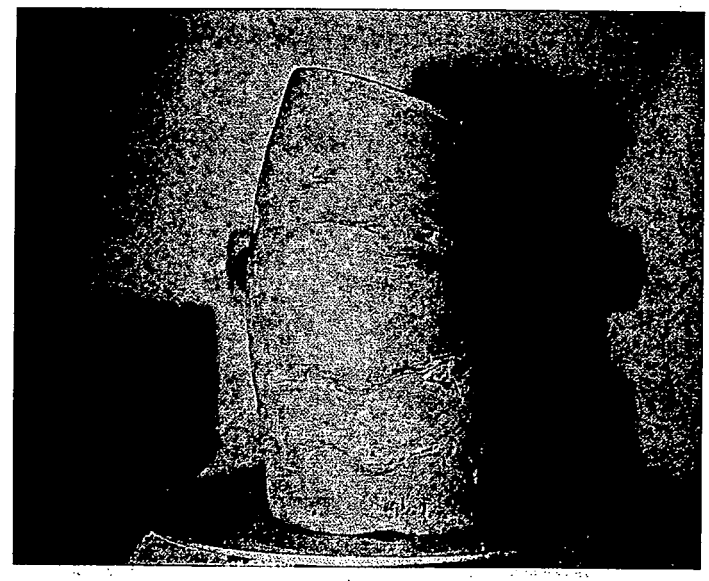
JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12.0-14.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	405140	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	1N
TEST TYPE	TX/UU r95	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	977.5	978.2
Wt. Wet Soil & Pan	(g)	985.8	986.5
Wt. Dry Soil & Pan	(g)	861.7	861.7
Wt. Lost Moisture	(g)	124.1	124.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	853.4	853.4
Moisture Content %		14.5	14.6
Wet Density PCF		136.8	136.9
Dry Density PCF		119.5	119.5

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.016
Volume (cu ft)		0.01575

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140 2059-13G
G2-134 12-14' 405140
TX/UU r 95 σ_3 2016 PSF

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename:SAU05140

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

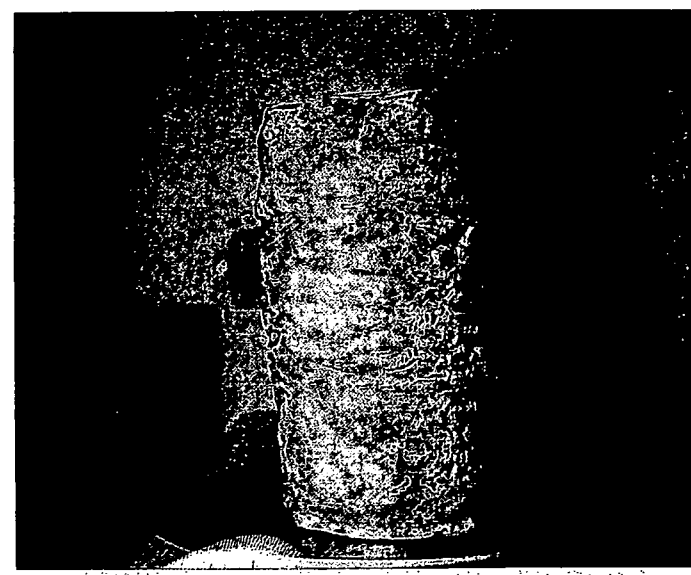
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	10.0-12.0'	TEST STARTED	7-10-95 CAL
SAMPLE NO.	404824	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	2
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1728	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	843.4	884.9
Wt. Wet Soil & Pan	(g)	851.8	893.3
Wt. Dry Soil & Pan	(g)	763.6	763.6
Wt. Lost Moisture	(g)	88.2	129.8
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	755.2	755.2
Moisture Content %		11.7	17.2
Wet Density PCF		117.7	123.5
Dry Density PCF		105.4	105.4

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.016
Volume (cu ft)		0.01580

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO 140 2059-13G
G2-122 404824 10-12'
TX/UU R85

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename: SAU04824

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

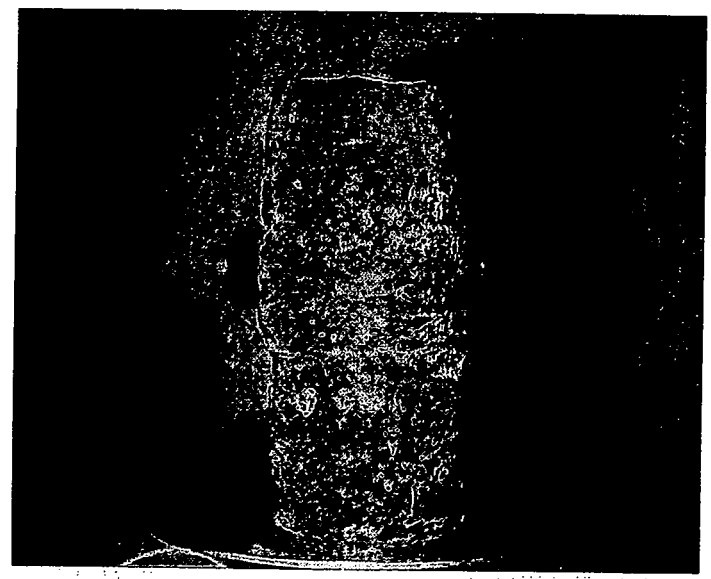
JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	
DEPTH	7.5-9.5'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	404751	TEST FINISHED	7-17-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	1368	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	842.6	894.4
Wt. Wet Soil & Pan	(g)	850.8	902.7
Wt. Dry Soil & Pan	(g)	757.1	757.1
Wt. Lost Moisture	(g)	93.7	145.5
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	748.9	748.9
Moisture Content %		12.5	19.4
Wet Density PCF		117.2	124.4
Dry Density PCF		104.1	104.1

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.036
Volume (cu ft)		0.01585

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO 140 2059-13D
G2-127 404751 7.5-9.5'
TX/UU R85 σ_3 1368 PSF

Data Entered By: NAA Date: 7-21-95
Data Checked By: Cal Date: 7-25-95
Filename:SAU0751B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA

CLIENT SAIC/Parsons PO 140

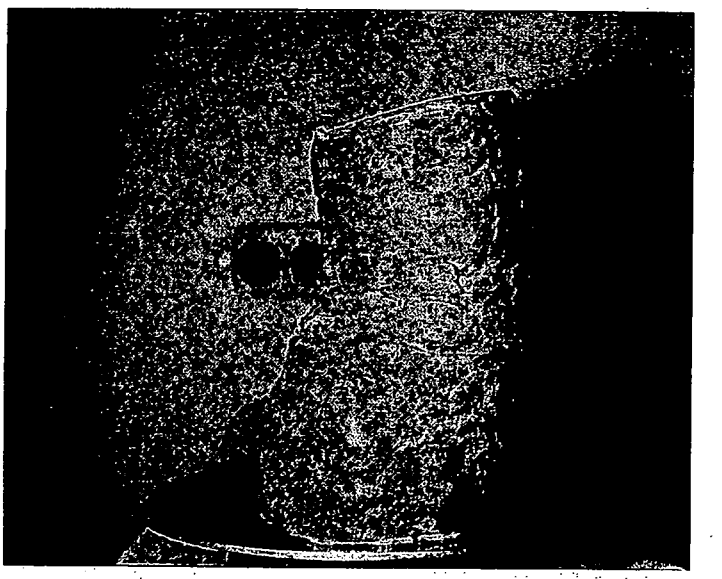
JOB NO. 2059-13G

BORING NO.	G2-134	SAMPLED	5-3-95 MM
DEPTH	12-14'	TEST STARTED	7-9-95 DCW
SAMPLE NO.	405140	TEST FINISHED	7-10-95 CAL
SOIL DESCR.	Fernald	SETUP NO.	3N
TEST TYPE	TX/UU r85	SATURATED TEST	Yes
CONF. PRES. PSF	2016	AT FIELD MOIST.	No

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	842.6	885.6
Wt. Wet Soil & Pan	(g)	851.1	894.1
Wt. Dry Soil & Pan	(g)	768.4	768.4
Wt. Lost Moisture	(g)	82.7	125.8
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	759.9	759.9
Moisture Content %		10.9	16.5
Wet Density PCF		117.3	123.3
Dry Density PCF		105.8	105.8

Init. Diameter	(in)	2.406
Init. Area	(sq in)	4.547
Init. Height	(in)	6.017
Volume (cu ft)		0.01583

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO140
2059-13 G
FERNALD

G2-134
12-14'
405140
TX/UU R85 σ_3 2016PSF

Data Entered By: CAL Date: 7-13-95
Data Checked By: [illegible] Date: 7-14-95
Filename: SAU0140

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404756 A	TEST FINISHED	6-8-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1031.0	1026.9
Wt. Wet Soil & Pan	(g)	1039.3	1035.1
Wt. Dry Soil & Pan	(g)	925.3	925.3
Wt. Lost Moisture	(g)	114.0	109.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	917.0	917.0
Moisture Content %		12.4	12.0
Wet Density PCF		144.7	147.4
Dry Density PCF		128.7	131.7

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.992
Vol. Bef. Consol.	(cu ft)	0.01571
Vol. After Consol.	(cu ft)	0.01535

Notes & Comments:

SAIC/PARSONS PO 140 2059-13D
G2-127 404756 A 15-17'
TXCU σ_3 2448 PSF

Data entry by: NAA Date: 6-9-95
Data checked by: cal Date: 6-20-95
FileName:SAT0756

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

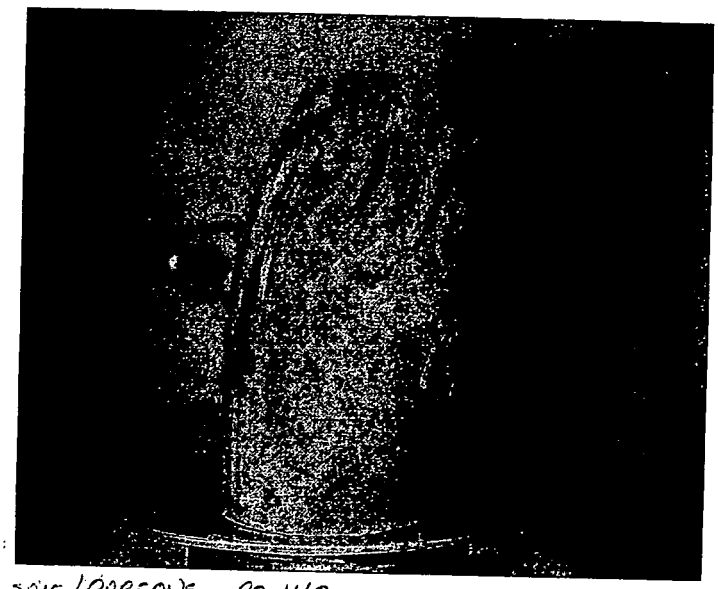
JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404756 B	TEST FINISHED	6-7-95 DCW
SOIL DESCR.	4-21-95 MG	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1019.9	1015.8
Wt. Wet Soil & Pan	(g)	1028.4	1024.3
Wt. Dry Soil & Pan	(g)	913.6	913.6
Wt. Lost Moisture	(g)	114.8	110.7
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	905.1	905.1
Moisture Content %		12.7	12.2
Wet Density PCF		143.6	148.1
Dry Density PCF		127.4	132.0

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	5.982
Vol. Bef. Consol.	(cu ft)	0.01566
Vol. After Consol.	(cu ft)	0.01512

Notes & Comments:



SAIC/PARSONS PO 140 2059-13D
FERNALD
G2-127 404756 B 15.0-17.0'
TX/CU σ_3 5760 PSF

Data entry by: CAL Date: 6-09-95
Data checked by: SR Date: 6-14-95
FileName: SAT0756B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

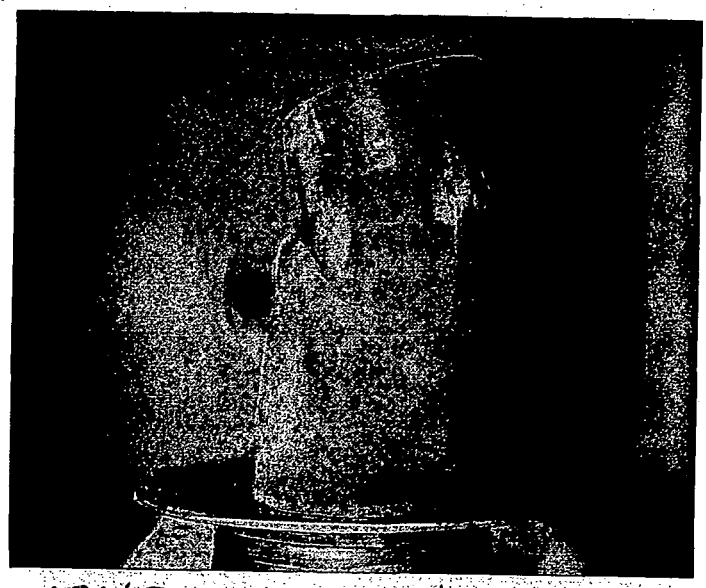
JOB NO. 2059-13D

BORING NO.	G2-127	SAMPLED	4-21-95 MG
DEPTH	15.0-17.0'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404756 C	TEST FINISHED	6-18-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1000.3	1000.4
Wt. Wet Soil & Pan	(g)	1008.7	1008.9
Wt. Dry Soil & Pan	(g)	909.9	909.9
Wt. Lost Moisture	(g)	98.8	99.0
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	901.5	901.5
Moisture Content %		11.0	11.0
Wet Density PCF		142.7	148.3
Dry Density PCF		128.6	133.6

Init. Diameter	(in)	2.389
Init. Area	(sq in)	4.483
Init. Height	(in)	5.959
Vol. Bef. Consol.	(cu ft)	0.01546
Vol. After Consol.	(cu ft)	0.01487

Notes & Comments:



SAIC/PARSONS PO140
G2-127 #404756C @ 15-17'
CH
σ_3 = 11520 PSF

Data entry by: NAA Date: 6-26-95
Data checked by: cal Date: 6-29-95
FileName: SAT0756C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

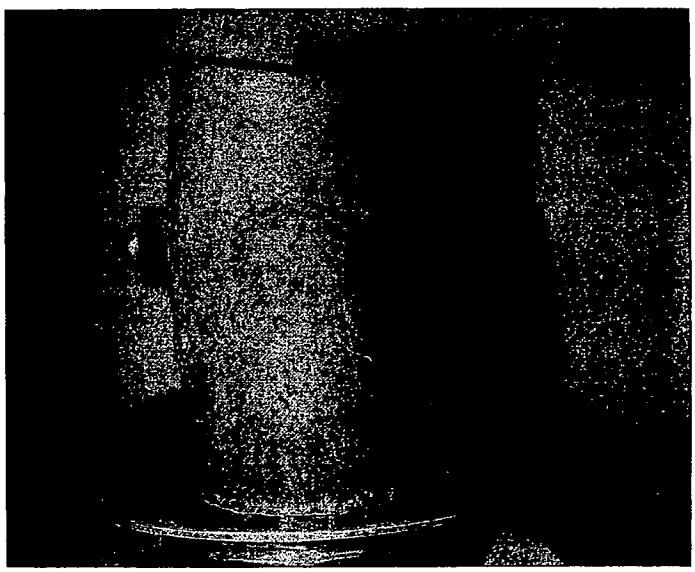
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404740 A	TEST FINISHED	6-05-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	16S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	3816		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1025.5	1015.0
Wt. Wet Soil & Pan	(g)	1033.8	1023.3
Wt. Dry Soil & Pan	(g)	916.8	916.8
Wt. Lost Moisture	(g)	117.0	106.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	908.6	908.6
Moisture Content %		12.9	11.7
Wet Density PCF		144.7	148.8
Dry Density PCF		128.2	133.2

Init. Diameter	(in)	2.399
Init. Area	(sq in)	4.520
Init. Height	(in)	5.973
Vol. Bef. Consol.	(cu ft)	0.01562
Vol. After Consol.	(cu ft)	0.01504

Notes & Comments:



SAIC/PARSONS PO 140 2059-13B
G2-129 #404740 A 24.0-26.5'
CU σ_3 3816 PSF

Data entry by: CAL Date: 6-06-95
Data checked by: SR Date: 6-6-95
FileName:SAT0740A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

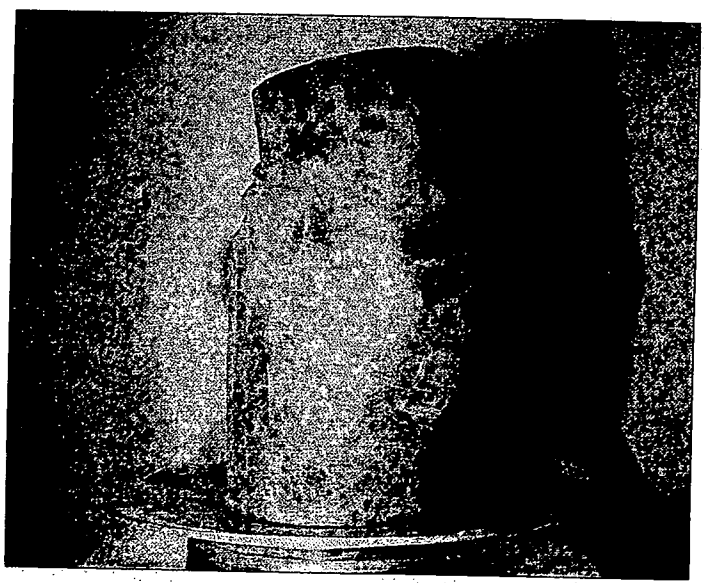
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-13-95 CAL
SAMPLE NO.	404740 B	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	993.4	991.5
Wt. Wet Soil & Pan	(g)	1001.8	999.9
Wt. Dry Soil & Pan	(g)	890.3	890.3
Wt. Lost Moisture	(g)	111.5	109.6
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	881.9	881.9
Moisture Content %		12.6	12.4
Wet Density PCF		141.7	146.5
Dry Density PCF		125.8	130.3

Init. Diameter	(in)	2.385
Init. Area	(sq in)	4.468
Init. Height	(in)	5.979
Vol. Bef. Consol.	(cu ft)	0.01546
Vol. After Consol.	(cu ft)	0.01492

Notes & Comments:



SAIC/PARSONS PO140
G2-129 #404740B @ 24-26.5'
TX/CUPP σ_3 = 5760PSF

Data entry by: NAA Date: 7-14-95
Data checked by: cal Date: 7-14-95
FileName:SAT0740B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

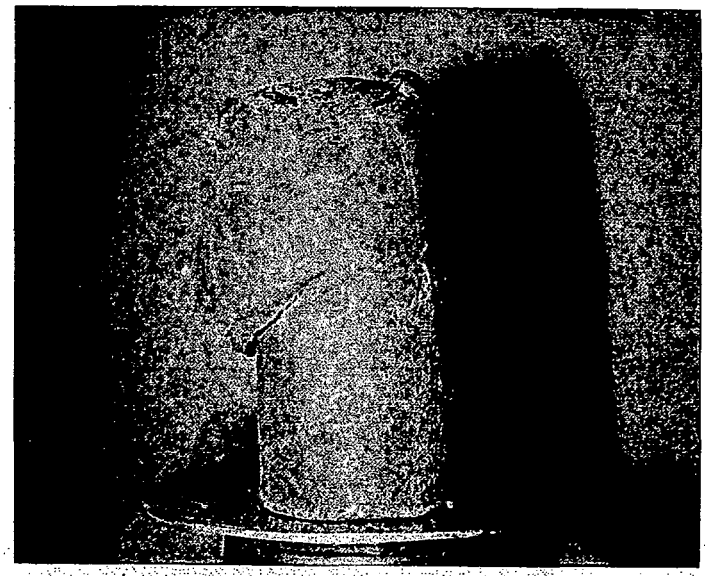
JOB NO. 2059-13B

BORING NO.	G2-129	SAMPLED	4-19-95 MG
DEPTH	24.0-26.5'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	404740 C	TEST FINISHED	6-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	992.5	989.1
Wt. Wet Soil & Pan	(g)	1000.9	997.5
Wt. Dry Soil & Pan	(g)	906.1	906.1
Wt. Lost Moisture	(g)	94.8	91.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	897.7	897.7
Moisture Content %		10.6	10.2
Wet Density PCF		144.1	150.6
Dry Density PCF		130.3	136.7

Init. Diameter	(in)	2.394
Init. Area	(sq in)	4.501
Init. Height	(in)	5.829
Vol. Bef. Consol.	(cu ft)	0.01518
Vol. After Consol.	(cu ft)	0.01448

Notes & Comments:



SAIC/PARSONS PO140
G2-129 #404740C @ 24-26.5'
TX/CUpp $\bar{\sigma}_3$ = 1152 PSF

Data entry by: NAA Date: 6-23-95
Data checked by: Cal Date: 6-29-95
FileName: SAT0740C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

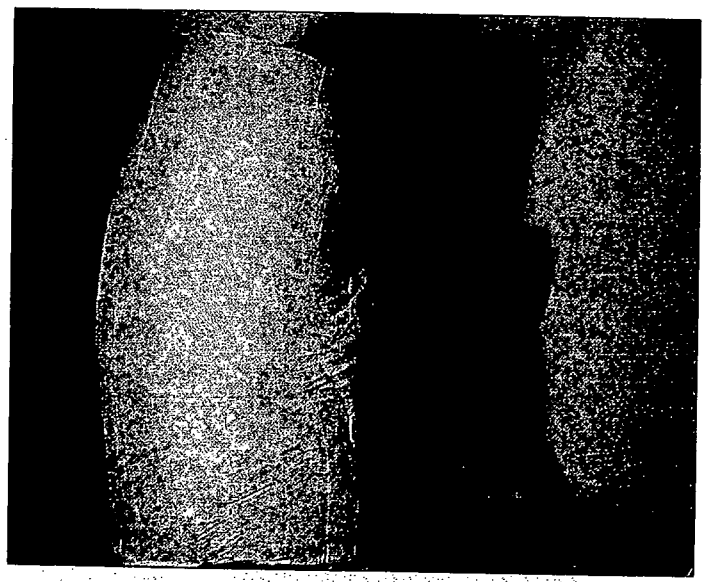
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 A	TEST FINISHED	7-5-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	1004.2	996.2
Wt. Wet Soil & Pan (g)	1012.5	1004.4
Wt. Dry Soil & Pan (g)	889.0	889.0
Wt. Lost Moisture (g)	123.5	115.4
Wt. of Pan Only (g)	8.3	8.3
Wt. of Dry Soil (g)	880.8	880.8
Moisture Content %	14.0	13.1
Wet Density PCF	144.9	149.0
Dry Density PCF	127.1	131.8

Init. Diameter	(in)	2.399
Init. Area	(sq in)	4.520
Init. Height	(in)	5.842
Vol. Bef. Consol.	(cu ft)	0.01528
Vol. After Consol.	(cu ft)	0.01473

Notes & Comments:



SAIC/PARSONS PO 140 2059-13H
G2-130 405077A 10-12'
TX/CUpp σ_3 1728 psf

Data entry by: NAA Date: 7-11-95
Data checked by: MGJ Date: 7-11-95
FileName:SAT0077A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

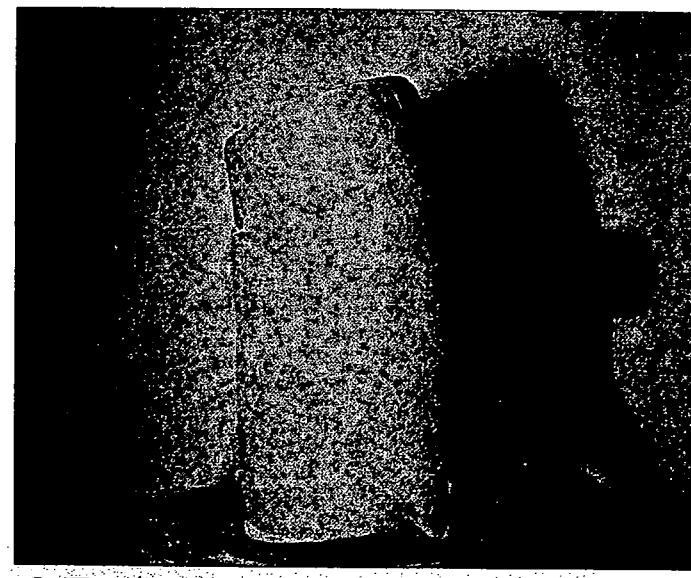
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405077 B	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	21S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4320		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	933.3	922.6
Wt. Wet Soil & Pan	(g)	941.6	931.0
Wt. Dry Soil & Pan	(g)	791.0	791.0
Wt. Lost Moisture	(g)	150.6	140.0
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	782.7	782.7
Moisture Content %		19.2	17.9
Wet Density PCF		134.8	139.8
Dry Density PCF		113.0	118.6

Init. Diameter	(in)	2.394
Init. Area	(sq in)	4.501
Init. Height	(in)	5.861
Vol. Bef. Consol.	(cu ft)	0.01527
Vol. After Consol.	(cu ft)	0.01455

Notes & Comments:



SAIC/PARSONS PO140
G2-130 #405077B @ 10.0-12.0'
TX/CUpp σ_3 = 4320 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName:SAT0077B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

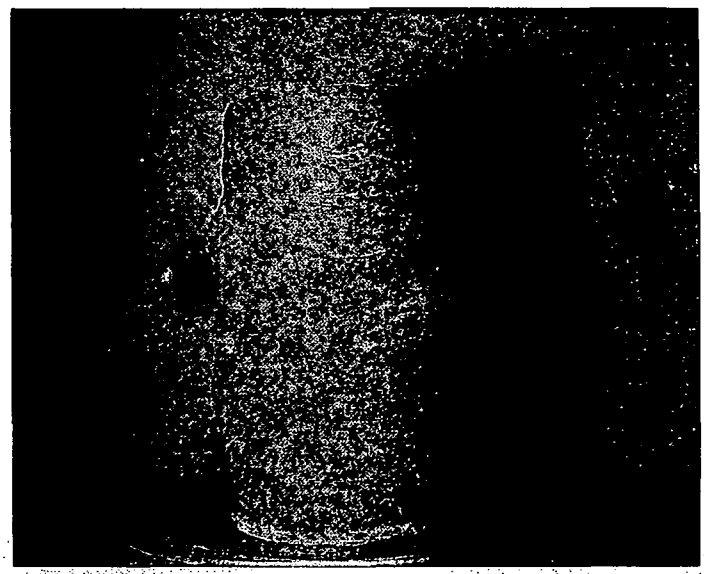
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	10.0-12.0'	TEST STARTED	6-30-95 DCW
SAMPLE NO.	405077 C	TEST FINISHED	7-2-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	10080		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1022.2	1016.1
Wt. Wet Soil & Pan	(g)	1030.5	1024.4
Wt. Dry Soil & Pan	(g)	933.0	933.0
Wt. Lost Moisture	(g)	97.5	91.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	924.7	924.7
Moisture Content %		10.5	9.9
Wet Density PCF		146.9	151.4
Dry Density PCF		132.9	137.8

Init. Diameter	(in)	2.387
Init. Area	(sq in)	4.475
Init. Height	(in)	5.924
Vol. Bef. Consol.	(cu ft)	0.01534
Vol. After Consol.	(cu ft)	0.01479

Notes & Comments:



SAIC/PARSONS PO140
G2-130 # 405077C @ 10.0-12.0'
TX/CUPP σ_3 = 10080 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0077C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

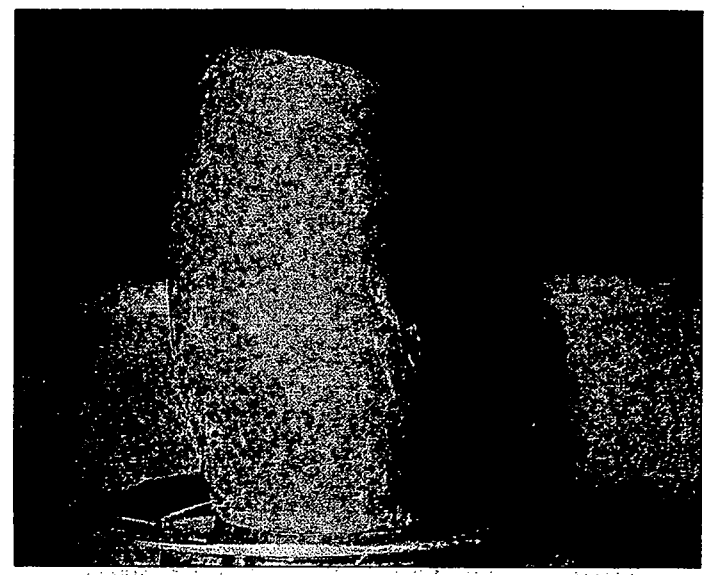
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-11-95 DCW
SAMPLE NO.	405088 A	TEST FINISHED	6-14-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	4608		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1035.7	1033.9
Wt. Wet Soil & Pan	(g)	1044.2	1042.5
Wt. Dry Soil & Pan	(g)	940.2	940.2
Wt. Lost Moisture	(g)	104.0	102.3
Wt. of Pan Only	(g)	8.5	8.5
Wt. of Dry Soil	(g)	931.7	931.7
Moisture Content %		11.2	11.0
Wet Density PCF		146.0	149.9
Dry Density PCF		131.3	135.1

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	5.973
Vol. Bef. Consol.	(cu ft)	0.01564
Vol. After Consol.	(cu ft)	0.01521

Notes & Comments:



SAIC/Parsons PO 140 2059-13H
G2-130 405088 A 30-32'
CU σ3 4608 PSF

Data entry by: NAA Date: 6-19-95
Data checked by: Cal Date: 6-22-95
FileName: SAT0088A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

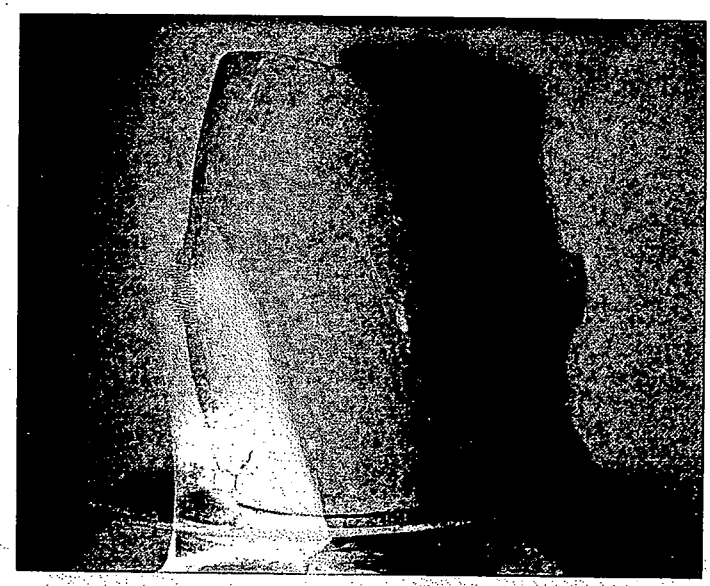
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-14-95 CAL
SAMPLE NO.	405088 B	TEST FINISHED	6-21-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1030.2	1027.2
Wt. Wet Soil & Pan	(g)	1038.6	1035.6
Wt. Dry Soil & Pan	(g)	936.0	936.0
Wt. Lost Moisture	(g)	102.7	99.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	927.5	927.5
Moisture Content %		11.1	10.7
Wet Density PCF		146.8	149.4
Dry Density PCF		132.2	134.9

Init. Diameter	(in)	2.388
Init. Area	(sq in)	4.479
Init. Height	(in)	5.969
Vol. Bef. Consol.	(cu ft)	0.01547
Vol. After Consol.	(cu ft)	0.01516

Notes & Comments:



SAIC/PARSONS PO 140 FERNALD
2059-13 H, G2-130 #405088B 30-32'
TX/CU σ_3 5760 PSF

Data entry by: CAL Date: 6-23-95
Data checked by: SR Date: 6-27-95
FileName:SAT0088B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

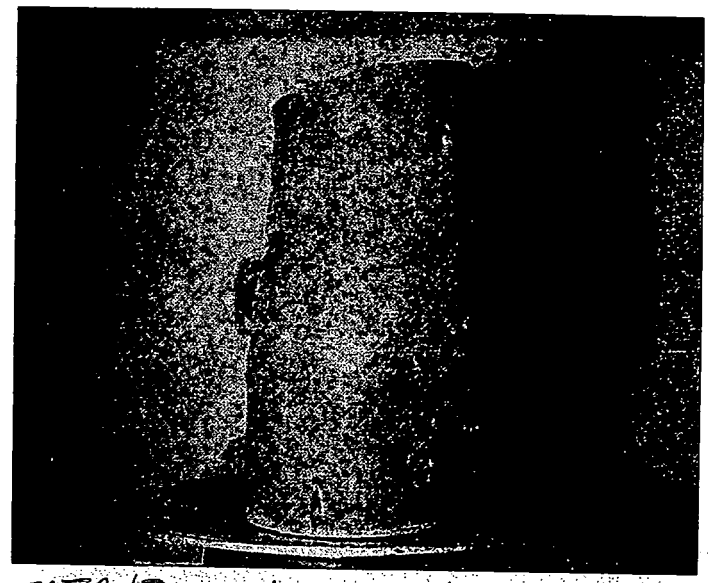
JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	30.0-32.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405088 C	TEST FINISHED	6-23-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	2N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1023.7	1018.1
Wt. Wet Soil & Pan	(g)	1032.0	1026.4
Wt. Dry Soil & Pan	(g)	924.6	924.6
Wt. Lost Moisture	(g)	107.4	101.8
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	916.3	916.3
Moisture Content %		11.7	11.1
Wet Density PCF		144.7	149.3
Dry Density PCF		129.5	134.4

Init. Diameter	(in)	2.390
Init. Area	(sq in)	4.486
Init. Height	(in)	6.009
Vol. Bef. Consol.	(cu ft)	0.01560
Vol. After Consol.	(cu ft)	0.01503

Notes & Comments:



SAIC/PARSONS PO140
G2-130 #405088C @ 30-32'
TX/CUPP σ_3 = 11520PSF

Data entry by: NAA Date: 7-14-95
Data checked by: cal Date: 7-15-95
FileName:SAT0088C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

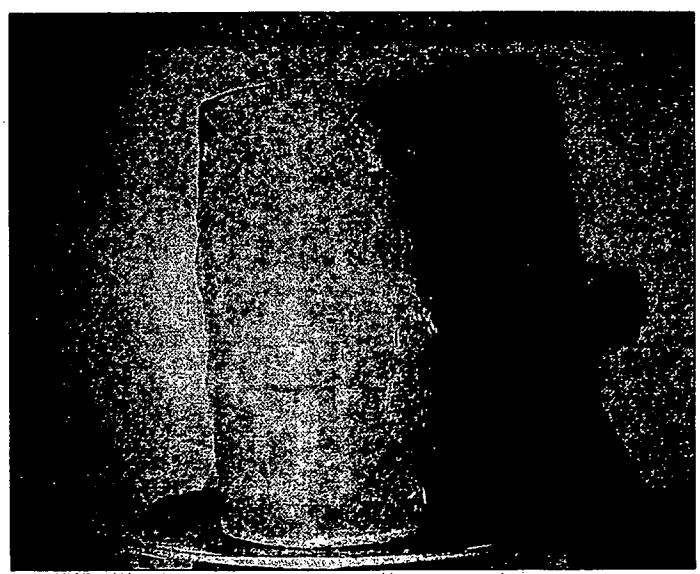
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 A	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	15S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1030.0	1028.5
Wt. Wet Soil & Pan	(g)	1038.3	1036.9
Wt. Dry Soil & Pan	(g)	928.9	928.9
Wt. Lost Moisture	(g)	109.4	107.9
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	920.6	920.6
Moisture Content %		11.9	11.7
Wet Density PCF		145.8	147.9
Dry Density PCF		130.3	132.3

Init. Diameter	(in)	2.392
Init. Area	(sq in)	4.494
Init. Height	(in)	5.990
Vol. Bef. Consol.	(cu ft)	0.01558
Vol. After Consol.	(cu ft)	0.01534

Notes & Comments:



SAIC/PARSONS PO140
G2-132 # 405108A @ 15.0-17.0'
TX/CUPP σ_3 = 2448 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0108A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

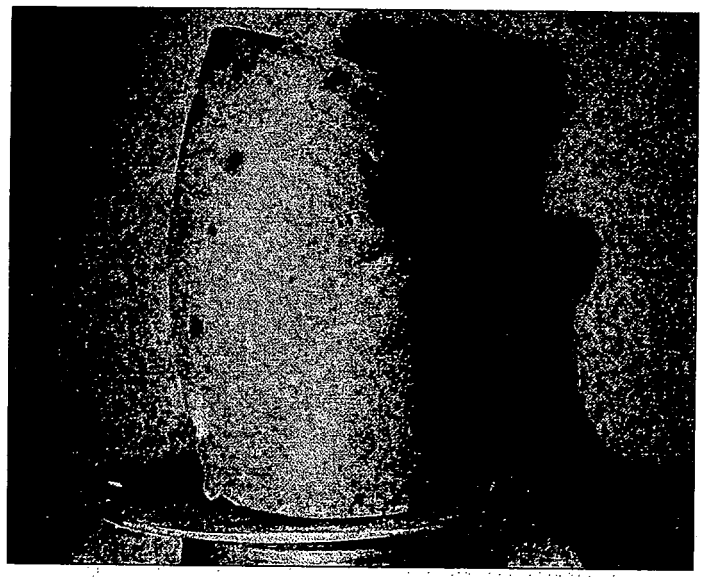
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405108 B	TEST FINISHED	6-27-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1016.1	1010.8
Wt. Wet Soil & Pan	(g)	1024.5	1019.2
Wt. Dry Soil & Pan	(g)	912.7	912.7
Wt. Lost Moisture	(g)	111.8	106.5
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	904.3	904.3
Moisture Content %		12.4	11.8
Wet Density PCF		145.3	150.3
Dry Density PCF		129.3	134.4

Init. Diameter	(in)	2.388
Init. Area	(sq in)	4.479
Init. Height	(in)	5.947
Vol. Bef. Consol.	(cu ft)	0.01541
Vol. After Consol.	(cu ft)	0.01483

Notes & Comments:



SAIC/PARSONS PO 140
CU σ_3 5760 PSF

2059-13 H
G2-132
15.0-17.0'
405108 B

Data entry by: NAA Date: 6-28-95
Data checked by: cal Date: 6-29-95
FileName: SAT05108

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

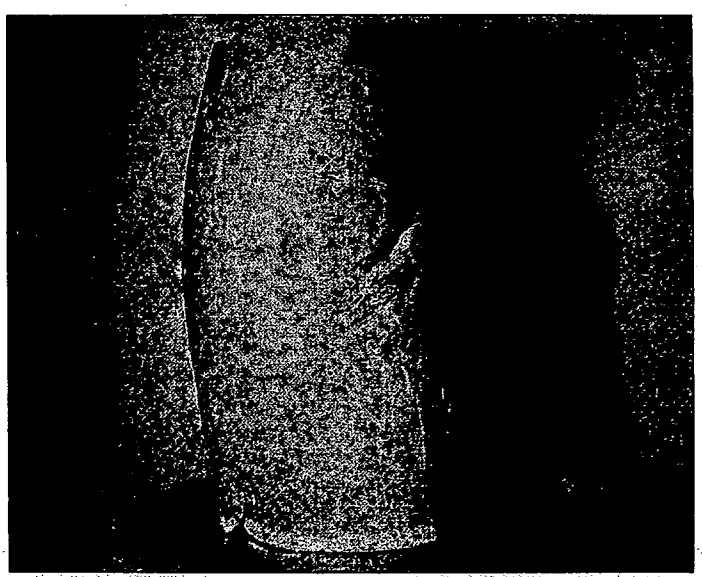
JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-29-95 DCW
SAMPLE NO.	405108 C	TEST FINISHED	7-4-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1007.0	1006.2
Wt. Wet Soil & Pan	(g)	1015.3	1014.5
Wt. Dry Soil & Pan	(g)	909.5	909.5
Wt. Lost Moisture	(g)	105.8	105.0
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	901.2	901.2
Moisture Content %		11.7	11.7
Wet Density PCF		145.2	152.0
Dry Density PCF		130.0	136.1

Init. Diameter	(in)	2.376
Init. Area	(sq in)	4.434
Init. Height	(in)	5.957
Vol. Bef. Consol.	(cu ft)	0.01529
Vol. After Consol.	(cu ft)	0.01459

Notes & Comments:



SAIC/PARSONS PO140
G2-132 #405108C @ 15.0-17.0'
TX/CUpp σ_3 = 11520PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0108C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

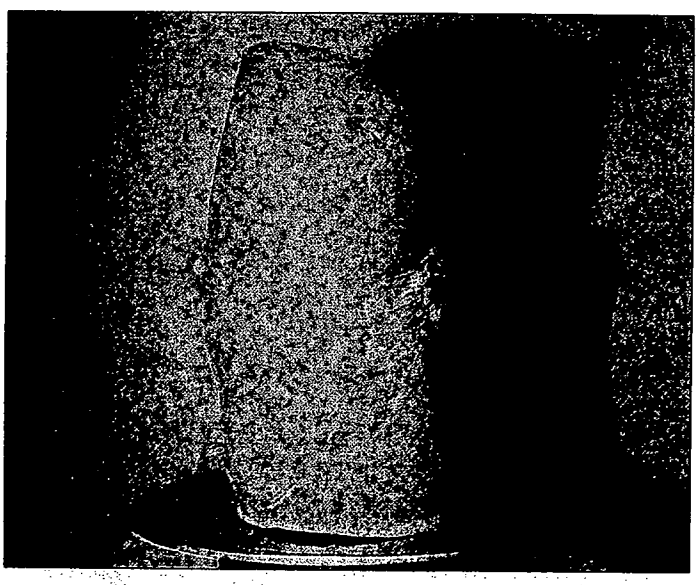
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 A	TEST FINISHED	6-28-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2448		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1046.6	1042.0
Wt. Wet Soil & Pan	(g)	1054.9	1050.3
Wt. Dry Soil & Pan	(g)	954.1	954.1
Wt. Lost Moisture	(g)	100.7	96.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	945.8	945.8
Moisture Content %		10.7	10.2
Wet Density PCF		146.5	150.4
Dry Density PCF		132.4	136.6

Init. Diameter	(in)	2.409
Init. Area	(sq in)	4.558
Init. Height	(in)	5.971
Vol. Bef. Consol.	(cu ft)	0.01575
Vol. After Consol.	(cu ft)	0.01527

Notes & Comments:



SAIC/PARSONS PO140
G2-133 #405059A @ 15.0-17.0'
TX/CUpp σ_3 = 2448 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0059A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

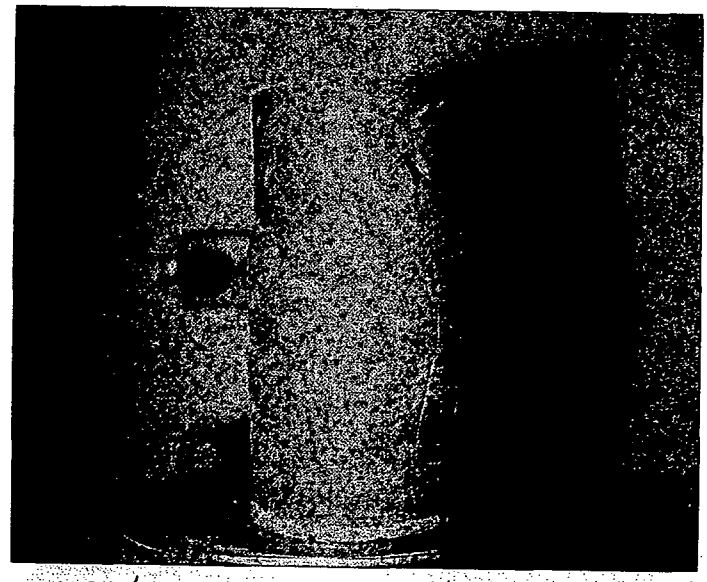
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	6-17-95 DCW
SAMPLE NO.	405059 B	TEST FINISHED	6-29-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	5760		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1042.8	1036.2
Wt. Wet Soil & Pan	(g)	1051.5	1045.0
Wt. Dry Soil & Pan	(g)	945.9	945.9
Wt. Lost Moisture	(g)	105.6	99.1
Wt. of Pan Only	(g)	8.7	8.7
Wt. of Dry Soil	(g)	937.1	937.1
Moisture Content %		11.3	10.6
Wet Density PCF		146.8	151.6
Dry Density PCF		131.9	137.1

Init. Diameter	(in)	2.395
Init. Area	(sq in)	4.505
Init. Height	(in)	6.008
Vol. Bef. Consol.	(cu ft)	0.01566
Vol. After Consol.	(cu ft)	0.01507

Notes & Comments:



SAIC/PARSONS PO140
G2-133 # 405059 @ 15.0-17.0'
TX/CUPP σ_3 = 5760 PSF

Data entry by: NAA Date: 7-13-95
Data checked by: SR Date: 7-14-95
FileName: SAT0059

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

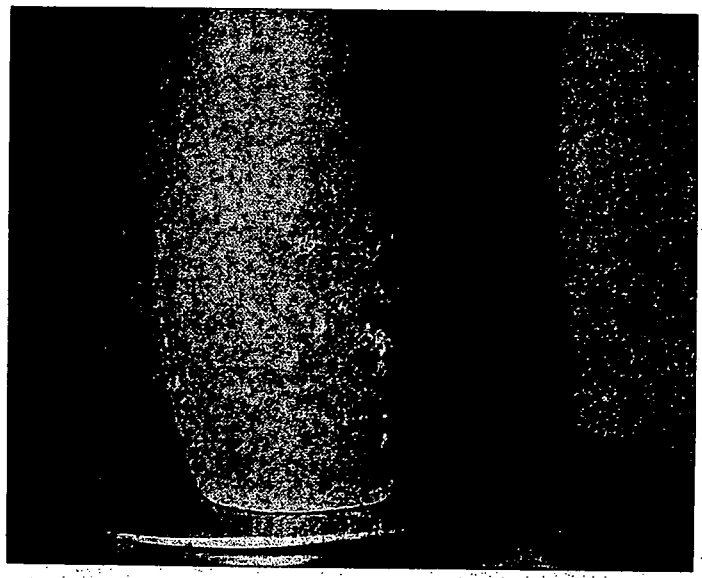
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	15.0-17.0'	TEST STARTED	7-1-95 DCW
SAMPLE NO.	405059 C	TEST FINISHED	7-6-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	11520		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1033.8	1038.3
Wt. Wet Soil & Pan	(g)	1042.4	1046.8
Wt. Dry Soil & Pan	(g)	957.0	957.0
Wt. Lost Moisture	(g)	85.4	89.8
Wt. of Pan Only	(g)	8.6	8.6
Wt. of Dry Soil	(g)	948.5	948.5
Moisture Content %		9.0	9.5
Wet Density PCF		149.3	153.8
Dry Density PCF		137.0	140.5

Init. Diameter	(in)	2.376
Init. Area	(sq in)	4.434
Init. Height	(in)	5.948
Vol. Bef. Consol.	(cu ft)	0.01526
Vol. After Consol.	(cu ft)	0.01488

Notes & Comments:



SAIC/PARSONS PO 140 Fernald
2059-13D G2-133 15-17 405059 C
TX/CUpp σ_3 80 psi

Data entry by: NAA Date: 7-11-95
Data checked by: MGJ Date: 7-11-95
FileName:SAT0059C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

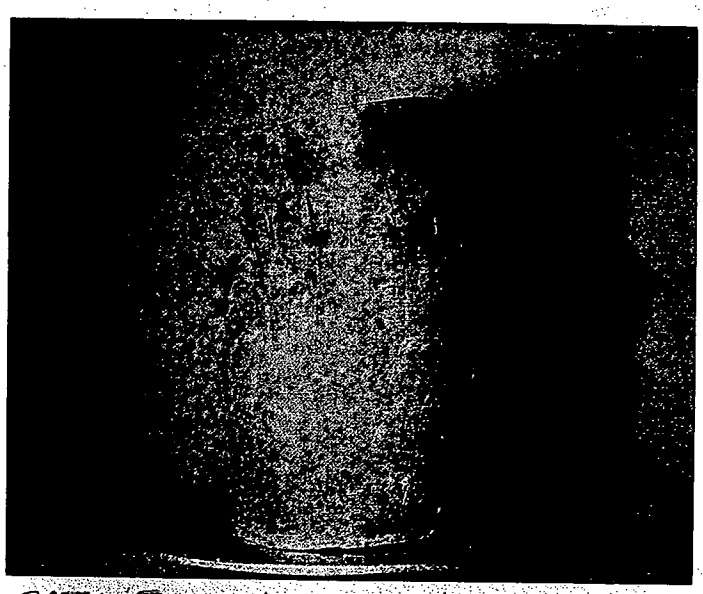
JOB NO. 2059-13G

BORING NO.	G2-121	SAMPLED	4-27-95
DEPTH	10.0-11.7'	TEST STARTED	6-3-95 DCW
SAMPLE NO.	404812 Stage 1	TEST FINISHED	6-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	1N
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	986.9	994.4
Wt. Wet Soil & Pan	(g)	995.2	1002.6
Wt. Dry Soil & Pan	(g)	896.5	896.5
Wt. Lost Moisture	(g)	98.7	106.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	888.2	888.2
Moisture Content %		11.1	12.0
Wet Density PCF		144.7	146.1
Dry Density PCF		130.2	130.5

Init. Diameter	(in)	2.374
Init. Area	(sq in)	4.426
Init. Height	(in)	5.869
Vol. Bef. Consol.	(cu ft)	0.01503
Vol. After Consol.	(cu ft)	0.01501

Notes & Comments:



SAIC/PARSONS PO140
G2-121 #404812 @ 10-12'
STAGED TX/CUPP

Data entry by: NAA Date: 6-26-95
Data checked by:_____ Date:_____
FileName:SAT08121

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

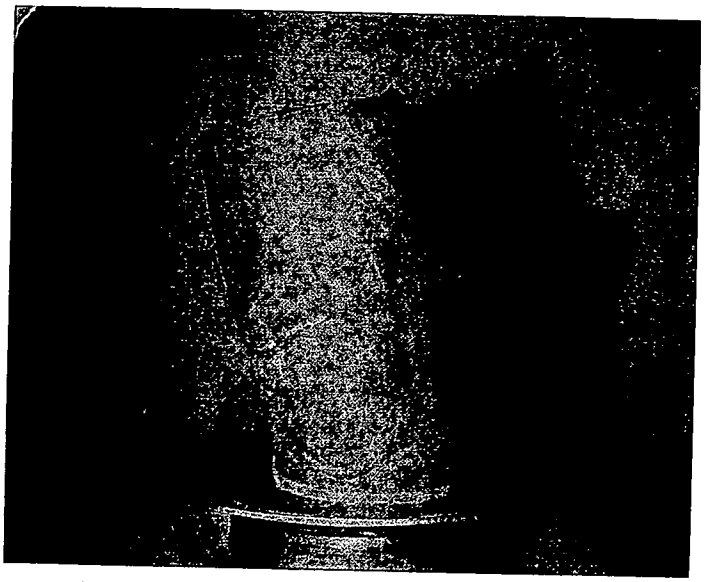
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-01-95
DEPTH	5-7'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404821 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	9S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1008		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	968.3	967.9
Wt. Wet Soil & Pan	(g)	976.6	976.2
Wt. Dry Soil & Pan	(g)	847.1	847.1
Wt. Lost Moisture	(g)	129.5	129.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	838.8	838.8
Moisture Content %		15.4	15.4
Wet Density PCF		138.0	139.9
Dry Density PCF		119.5	121.2

Init. Diameter	(in)	2.403
Init. Area	(sq in)	4.535
Init. Height	(in)	5.894
Vol. Bef. Consol.	(cu ft)	0.01547
Vol. After Consol.	(cu ft)	0.01526

Notes & Comments:



SAIC/PARSONS PO 140 2059-13G
G2-122 404821 5-7'
Tx/cu Staged 7.0-30.0-70.0 psi

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 7-1-95
FileName:SAT021S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

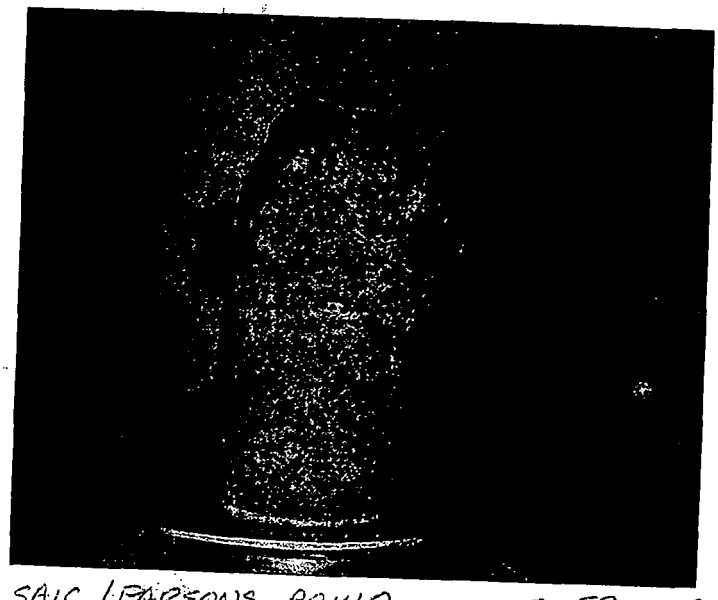
JOB NO. 2059-13G

BORING NO.	G2-123	SAMPLED	4-26-95
DEPTH	7.5-9.5'	TEST STARTED	5-29-95 DCW
SAMPLE NO.	404797 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	990.6	984.7
Wt. Wet Soil & Pan	(g)	998.9	993.0
Wt. Dry Soil & Pan	(g)	880.5	880.5
Wt. Lost Moisture	(g)	118.4	112.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	872.2	872.2
Moisture Content %		13.6	12.9
Wet Density PCF		139.6	142.0
Dry Density PCF		122.9	125.8

Init. Diameter	(in)	2.431
Init. Area	(sq in)	4.642
Init. Height	(in)	5.825
Vol. Bef. Consol.	(cu ft)	0.01565
Vol. After Consol.	(cu ft)	0.01528

Notes & Comments:



SAIC/PARSONS PO140 2059-13G
G2-123 404797 7.5-9.5'
STAGED CU. 9.5-30.0-70.0 psi

Data entry by: CAL Date: 6-20-95
Data checked by: [illegible] Date: 7-1-95
FileName:SAT097S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

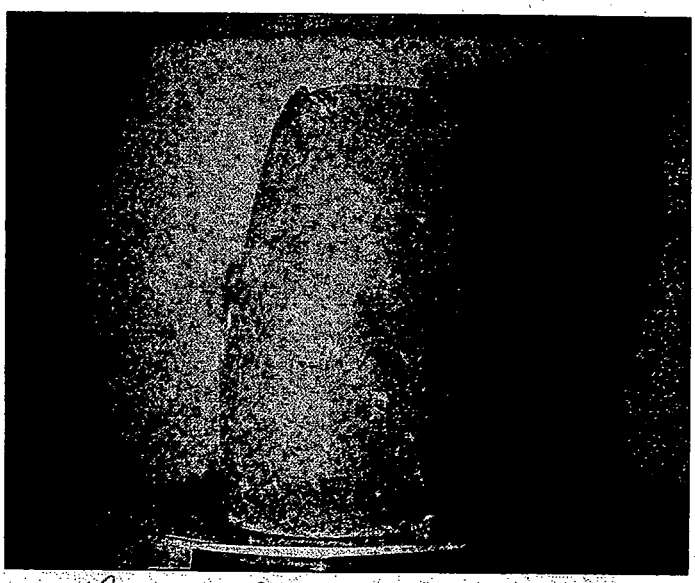
JOB NO. 2059-13D

BORING NO.	G2-123	SAMPLED	4-25-95
DEPTH	20.0-21.2'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	404804 Stage 1	TEST FINISHED	6-25-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	#2
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	3024		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1017.2	1012.4
Wt. Wet Soil & Pan	(g)	1025.5	1020.8
Wt. Dry Soil & Pan	(g)	911.1	911.1
Wt. Lost Moisture	(g)	114.4	109.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	902.7	902.7
Moisture Content %		12.7	12.2
Wet Density PCF		143.7	144.1
Dry Density PCF		127.5	128.5

Init. Diameter	(in)	2.388
Init. Area	(sq in)	4.479
Init. Height	(in)	6.021
Vol. Bef. Consol.	(cu ft)	0.01561
Vol. After Consol.	(cu ft)	0.01549

Notes & Comments:



SAIC/Parsons PO 140 2059-13D
G2-123 @ 20.0-21.0' TX/CUpp
404804 Fernald 3024, 5760, 11520 PSF

Data entry by: CJW Date: 7-05-95
Data checked by: NU Date: 8-5-95
FileName: SAT004S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13A

BORING NO.	G2-124	SAMPLED	4-12-95
DEPTH	10-12'	TEST STARTED	5-30-95 CAL
SAMPLE NO.	405004 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1728		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	927.5	917.4
Wt. Wet Soil & Pan	(g)	935.8	925.7
Wt. Dry Soil & Pan	(g)	774.3	774.3
Wt. Lost Moisture	(g)	161.5	151.4
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	766.0	766.0
Moisture Content %		21.1	19.8
Wet Density PCF		131.0	130.9
Dry Density PCF		108.2	109.3

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	5.954
Vol. Bef. Consol.	(cu ft)	0.01561
Vol. After Consol.	(cu ft)	0.01545

Notes & Comments:

SAIC/PARSONS PO140 2059-13A
G2-124 405004 10-12'
Staged TX/CUpp σ_3 12.0-30.0-70.0 psi

Data entry by: CAL Date: 6-20-95
Data checked by: CJ Date: 8-14-95
FileName:SAT050S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

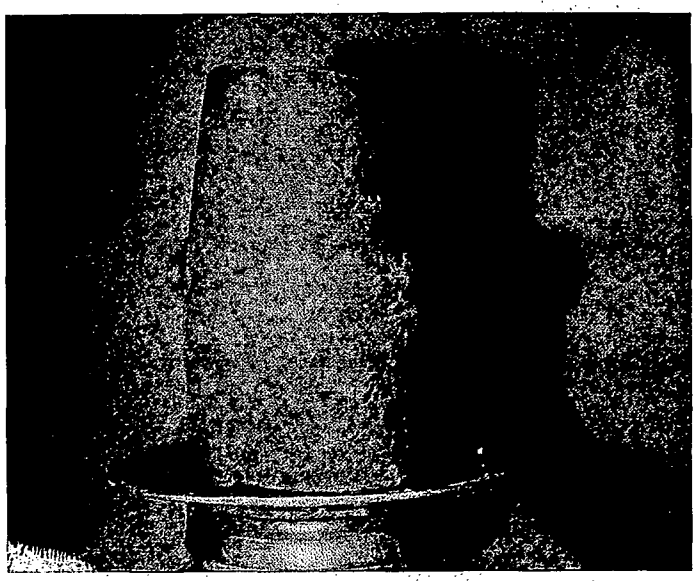
JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	12.5-14.5'	TEST STARTED	6-03-95 DCW
SAMPLE NO.	405029 Stage 1	TEST FINISHED	6-22-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	1
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	2088		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1039.5	1028.2
Wt. Wet Soil & Pan	(g)	1047.7	1036.5
Wt. Dry Soil & Pan	(g)	954.3	954.3
Wt. Lost Moisture	(g)	93.4	82.2
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	946.0	946.0
Moisture Content %		9.9	8.7
Wet Density PCF		148.5	148.0
Dry Density PCF		135.2	136.2

Init. Diameter	(in)	2.393
Init. Area	(sq in)	4.498
Init. Height	(in)	5.928
Vol. Bef. Consol.	(cu ft)	0.01543
Vol. After Consol.	(cu ft)	0.01531

Notes & Comments:



SAIC/PARSONS PO140 FERNALD
2059-13B G2-125 #405029 12.5-14.5'
Staged CU σ_3 2088-4320-10080 PSF

Data entry by: CAL Date: 6-22-95
Data checked by: CW Date: 8-14-95
FileName:SAT029S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

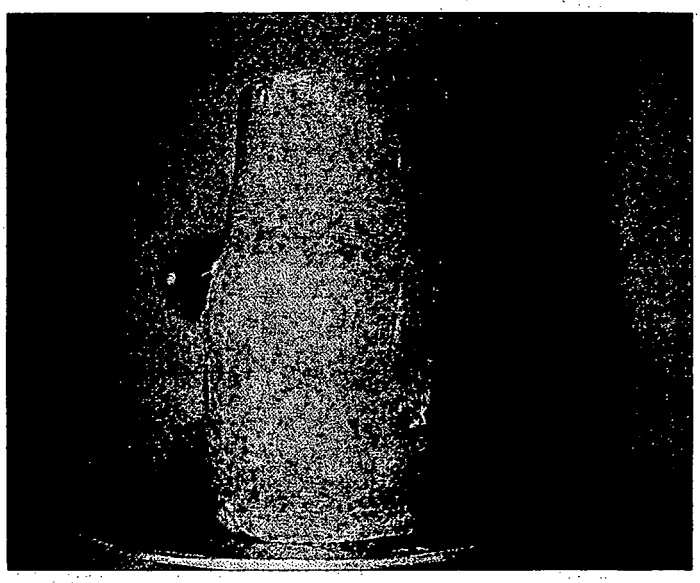
JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	7.5-9.5	TEST STARTED	6-05-95 CAL
SAMPLE NO.	404768 Stage 1	TEST FINISHED	6-20-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	20S
TEST TYPE	TX/CUpp	SATURATED TEST	Yes
CONF. PRES. PSF	1368		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	1004.7	994.0
Wt. Wet Soil & Pan	(g)	1013.0	1002.4
Wt. Dry Soil & Pan	(g)	893.7	893.7
Wt. Lost Moisture	(g)	119.4	108.7
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	885.3	885.3
Moisture Content %		13.5	12.3
Wet Density PCF		142.4	143.5
Dry Density PCF		125.5	127.8

Init. Diameter	(in)	2.395
Init. Area	(sq in)	4.505
Init. Height	(in)	5.964
Vol. Bef. Consol.	(cu ft)	0.01555
Vol. After Consol.	(cu ft)	0.01527

Notes & Comments:



SAIC/PARSONS PO 140 2059-13D
FERNALD Staged CU
G2-126 404768 7.5-9.5'

Data entry by: CAL Date: 6-20-95
Data checked by: CW Date: 8-14-95
FileName:SAT068S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

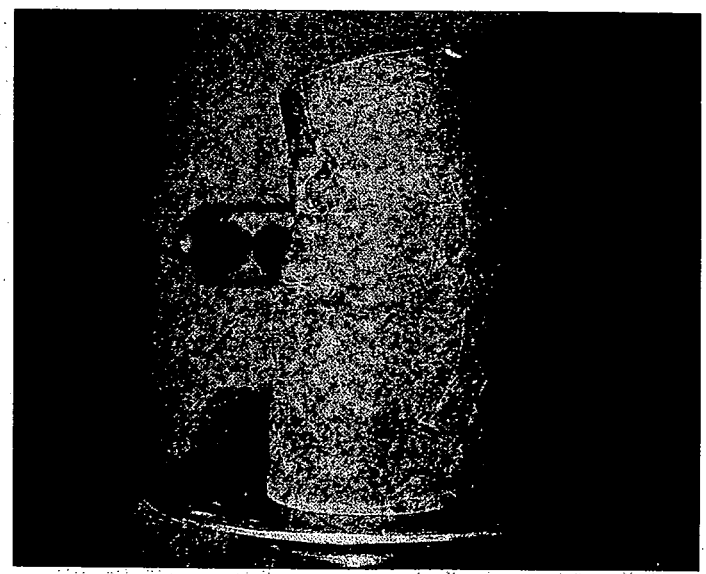
JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 A	TEST FINISHED	7-21-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	17S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	980.9	956.1
Wt. Wet Soil & Pan	(g)	989.2	964.4
Wt. Dry Soil & Pan	(g)	863.6	863.6
Wt. Lost Moisture	(g)	125.5	100.7
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	855.3	855.3
Moisture Content %		14.7	11.8
Wet Density PCF		137.1	149.4
Dry Density PCF		119.5	133.6

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01411

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140 2059-13B
G2-128 # 405043A @ 7.5-9.5'
TX/CU R95 σ_3 7200 PSF

Data entry by: CJW Date: 7-29-95
Data checked by: Cal Date: 7-31-95
FileName: SAT0043A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

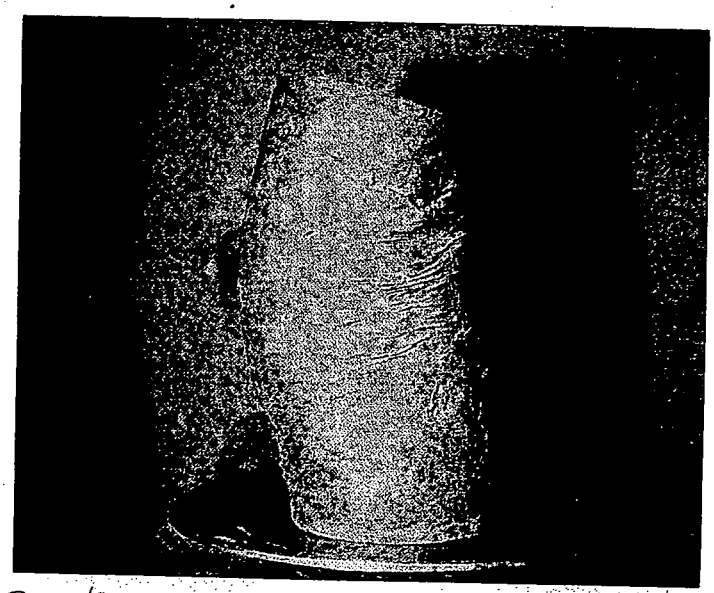
JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 B	TEST FINISHED	7-19-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	13S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	975.1	952.4
Wt. Wet Soil & Pan	(g)	983.4	960.8
Wt. Dry Soil & Pan	(g)	853.4	853.4
Wt. Lost Moisture	(g)	130.0	107.4
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	845.1	845.1
Moisture Content %		15.4	12.7
Wet Density PCF		136.3	144.3
Dry Density PCF		118.1	128.0

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01455

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140 2059-13B
G2-128 #405043 B @ 7.5-9.5'
TX/CU r95 σ_3 3600 PSF

Data entry by: CAL Date: 7-30-95
Data checked by: NM Date: 7-31-95
FileName:SAT0043B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13B

BORING NO.	G2-128	SAMPLED	4-18-95 MM
DEPTH	7.5-9.5'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	405043 C	TEST FINISHED	7-22-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	7S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	973.8	961.1
Wt. Wet Soil & Pan	(g)	982.1	969.4
Wt. Dry Soil & Pan	(g)	854.3	854.3
Wt. Lost Moisture	(g)	127.8	115.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	846.0	846.0
Moisture Content %		15.1	13.6
Wet Density PCF		136.1	144.0
Dry Density PCF		118.2	126.7

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01472

Notes & Comments: Remolded to 95% MDD

SAIC/PARSONS PO 140 2059-13B
G2-128 #405043C @ 7.5-9.5'
TX/CU R95 σ_3 1440 PSF

Data entry by: CAL Date: 7-30-95
Data checked by: AM Date: 7-31-95
FileName: SAT0043C

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

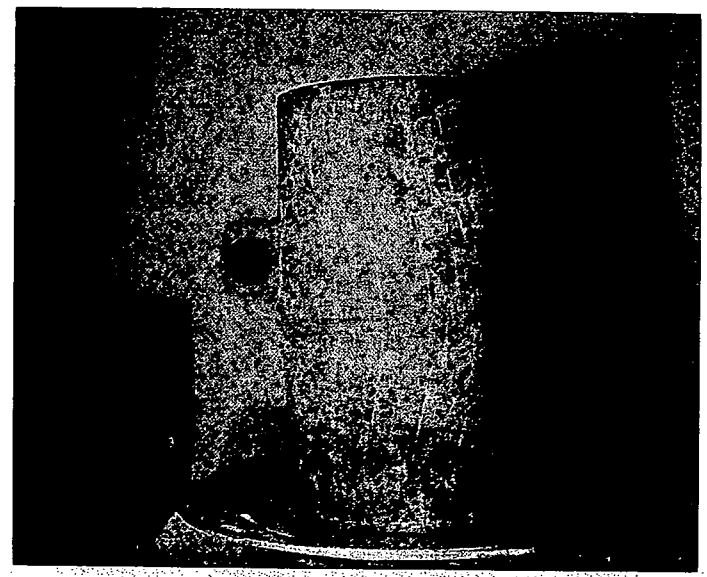
JOB NO. 2059-13B

BORING NO.	G2-125	SAMPLED	4-17-95 KP
DEPTH	2.5-4.5'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405023 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	Fernald	CELL NUMBER	14S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	942.7	953.6
Wt. Wet Soil & Pan	(g)	950.9	961.8
Wt. Dry Soil & Pan	(g)	805.9	805.9
Wt. Lost Moisture	(g)	145.0	155.9
Wt. of Pan Only	(g)	8.2	8.2
Wt. of Dry Soil	(g)	797.7	797.7
Moisture Content %		18.2	19.5
Wet Density PCF		131.9	135.0
Dry Density PCF		111.6	112.9

Init. Diameter	(in)	2.403
Init. Area	(sq in)	4.535
Init. Height	(in)	6.004
Vol. Bef. Consol.	(cu ft)	0.01576
Vol. After Consol.	(cu ft)	0.01557

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO 140
G2-125 #405023 @ 2.5-4.5'
TX/CUpp - STAGED

Data entry by: NAA Date: 7-31-95
Data checked by: AJ Date: 7-31-95
FileName:SAT00231

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

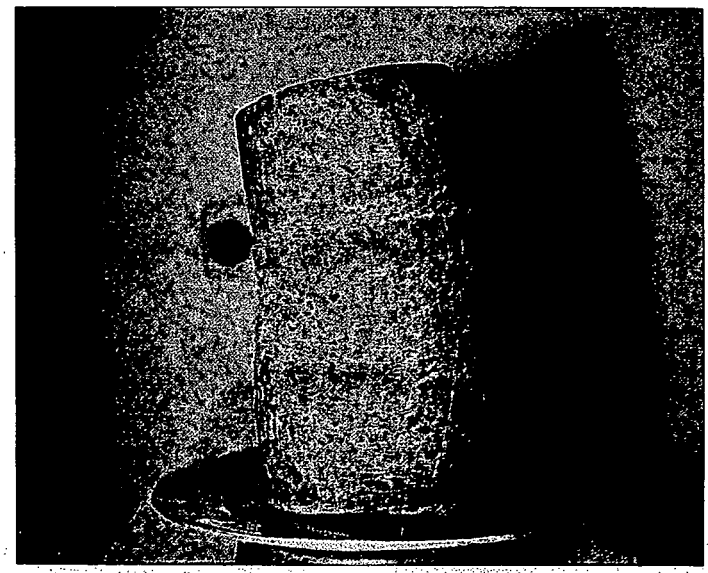
JOB NO. 2059-13D

BORING NO.	G2-126	SAMPLED	4-24-95 JM
DEPTH	12.5-14.5'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404771 Stage 1	TEST FINISHED	7-23-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	20S
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	972.7	940.6
Wt. Wet Soil & Pan	(g)	981.0	949.0
Wt. Dry Soil & Pan	(g)	853.5	853.5
Wt. Lost Moisture	(g)	127.6	95.5
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	845.1	845.1
Moisture Content %		15.1	11.3
Wet Density PCF		135.9	137.1
Dry Density PCF		118.1	123.2

Init. Diameter	(in)	2.405
Init. Area	(sq in)	4.543
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01577
Vol. After Consol.	(cu ft)	0.01512

Notes & Comments: Remolded to 95% MDD



SAIC/PARSONS PO140
G2-133 #405053@ 2.5-4.5'
STAGED TX/CUPP

Data entry by: CAL Date: 7-26-95 CAL
Data checked by: NA Date: 7-31-95
FileName:SAT07711

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-130	SAMPLED	4-25-95 MM
DEPTH	20-22'	TEST STARTED	7-8-95 DCW
SAMPLE NO.	405083 Stage 1	TEST FINISHED	7-28-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	2N
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	979.2	955.4
Wt. Wet Soil & Pan	(g)	987.4	963.7
Wt. Dry Soil & Pan	(g)	860.6	860.6
Wt. Lost Moisture	(g)	126.8	103.1
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	852.3	852.3
Moisture Content %		14.9	12.1
Wet Density PCF		137.1	137.4
Dry Density PCF		119.4	122.6

Init. Diameter	(in)	2.400
Init. Area	(sq in)	4.524
Init. Height	(in)	6.013
Vol. Bef. Consol.	(cu ft)	0.01574
Vol. After Consol.	(cu ft)	0.01533

Notes & Comments: Remolded to 95% MDD

SAIC/PARSONS PO140 2059-13H
G2-130 405083 20-22'
Staged TX/CU RP95

Data entry by: CAL Date: 7-30-95
Data checked by: NA Date: 7-31-95
FileName: SAT083S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

474

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13H

BORING NO.	G2-132	SAMPLED	4-27-95 MM
DEPTH	5-7'	TEST STARTED	7-7-95 DCW
SAMPLE NO.	405102 Stage 1	TEST FINISHED	7-26-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	1
TEST TYPE	TX/CUpp r95	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	949.0	983.5
Wt. Wet Soil & Pan	(g)	957.2	991.7
Wt. Dry Soil & Pan	(g)	820.4	820.4
Wt. Lost Moisture	(g)	136.8	171.4
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	812.1	812.1
Moisture Content %		16.8	21.1
Wet Density PCF		132.2	141.4
Dry Density PCF		113.1	116.8

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.025
Vol. Bef. Consol.	(cu ft)	0.01583
Vol. After Consol.	(cu ft)	0.01533

Notes & Comments: Remolded to 95% MDD

SAIC/PARSONS PO 140 2059-13 H
G2-132 #405102 @ 5-7'
Staged Tx/CU R95

Data entry by: CAL Date: 7-30-95
Data checked by: Dd Date: 7-31-95
FileName:SAT002S1

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15-17'	TEST STARTED	7-15-95 DCW
SAMPLE NO.	404827 A	TEST FINISHED	7-25-95 CAL
SOIL DESCR.	FERNALD	CELL NUMBER	16S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	7200		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	845.4	855.3
Wt. Wet Soil & Pan	(g)	853.7	863.5
Wt. Dry Soil & Pan	(g)	774.3	774.3
Wt. Lost Moisture	(g)	79.4	89.3
Wt. of Pan Only	(g)	8.3	8.3
Wt. of Dry Soil	(g)	766.0	766.0
Moisture Content %		10.4	11.7
Wet Density PCF		118.5	151.9
Dry Density PCF		107.3	136.0

Init. Diameter	(in)	2.402
Init. Area	(sq in)	4.531
Init. Height	(in)	6.000
Vol. Bef. Consol.	(cu ft)	0.01573
Vol. After Consol.	(cu ft)	0.01241

Notes & Comments: Remolded to 85% MDD

SAIC/PARSONS PO 140 2059-13G
G2-122 #404827A 15-17'
TX/CU r85 σ_3 7200 PSF

Data entry by: CAL Date: 7-26-95
Data checked by: NCL Date: 7-31-95
FileName:SAT0827A

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

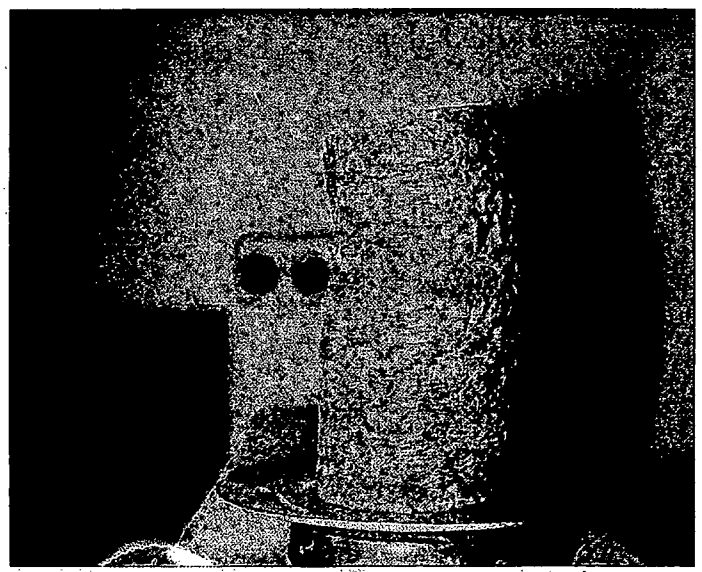
JOB NO. 2059-13G

BORING NO.	G2-122	SAMPLED	5-1-95
DEPTH	15.0-17.0'	TEST STARTED	7-11-95 CAL
SAMPLE NO.	404827 B	TEST FINISHED	7-18-95 CAL
SOIL DESCR.	Fernald	CELL NUMBER	18S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	3600		

MOISTURE/DENSITY DATA	BEFORE TEST	AFTER TEST
Wt. Soil + Moisture (g)	847.0	865.6
Wt. Wet Soil & Pan (g)	855.5	874.2
Wt. Dry Soil & Pan (g)	766.7	766.7
Wt. Lost Moisture (g)	88.8	107.4
Wt. of Pan Only (g)	8.6	8.6
Wt. of Dry Soil (g)	758.2	758.2
Moisture Content %	11.7	14.2
Wet Density PCF	117.5	140.0
Dry Density PCF	105.2	122.6

Init. Diameter	(in)	2.404
Init. Area	(sq in)	4.539
Init. Height	(in)	6.050
Vol. Bef. Consol.	(cu ft)	0.01589
Vol. After Consol.	(cu ft)	0.01363

Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO 140 Fernald
G2-122 404827 B 15-17'
TX/CU R85 σ_3 3600 PSF

Data entry by: NAA Date: 7-21-95
Data checked by:_____ Date:_____
FileName:SAT0827B

ADVANCED TERRA TESTING, INC.

TRIAXIAL COMPRESSION TEST DATA
ASTM D 4767

CLIENT SAIC/Parsons PO 140

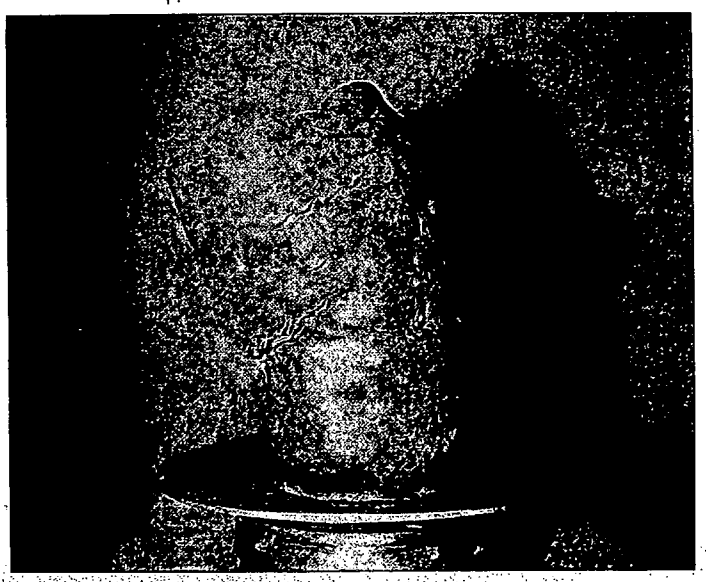
JOB NO. 2059-13D

BORING NO.	G2-133	SAMPLED	4-21-95 MM
DEPTH	2.5-4.5'	TEST STARTED	7-05-95 CAL
SAMPLE NO.	405053 Stage 1	TEST FINISHED	7-20-95 DCW
SOIL DESCR.	FERNALD	CELL NUMBER	15S
TEST TYPE	TX/CUpp r85	SATURATED TEST	Yes
CONF. PRES. PSF	1440		

MOISTURE/DENSITY DATA		BEFORE TEST	AFTER TEST
Wt. Soil + Moisture	(g)	820.0	868.1
Wt. Wet Soil & Pan	(g)	828.4	876.4
Wt. Dry Soil & Pan	(g)	716.7	716.7
Wt. Lost Moisture	(g)	111.7	159.8
Wt. of Pan Only	(g)	8.4	8.4
Wt. of Dry Soil	(g)	708.3	708.3
Moisture Content %		15.8	22.6
Wet Density PCF		114.0	118.6
Dry Density PCF		98.5	96.7

Init. Diameter	(in)	2.407
Init. Area	(sq in)	4.550
Init. Height	(in)	6.020
Vol. Bef. Consol.	(cu ft)	0.01585
Vol. After Consol.	(cu ft)	0.01614

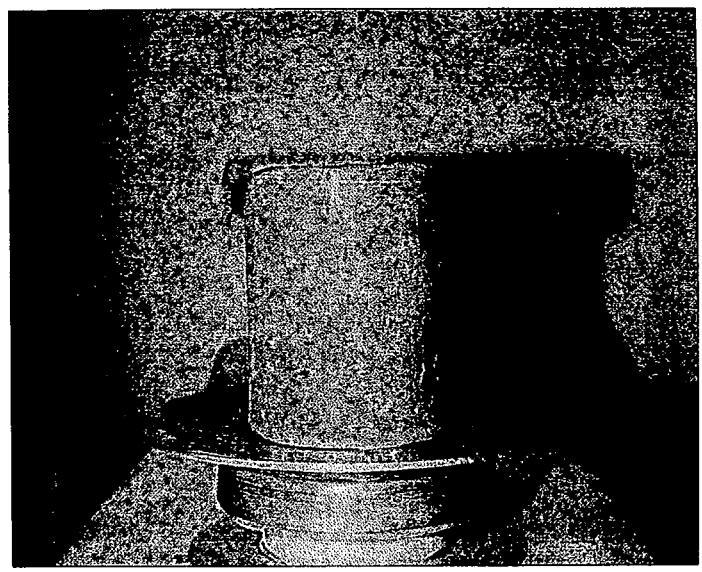
Notes & Comments: Remolded to 85% MDD



SAIC/PARSONS PO140
G2-126 #404771 @ 12.5-14.5'
STAGED TX/CUPP

Data entry by: CAL Date: 7-30-95
Data checked by: N/A Date: 7-31-95
FileName: SAT053S1

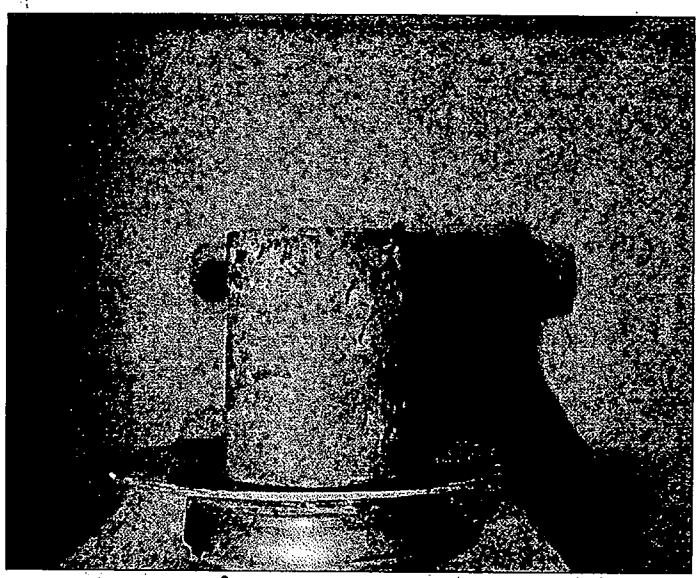
ADVANCED TERRA TESTING, INC.



SAIC/PARSONS PO 140 2059-136-
GZ-121 #404814 @ 12.5-14.5'
TX/Pbp σ_3 2088 PSF

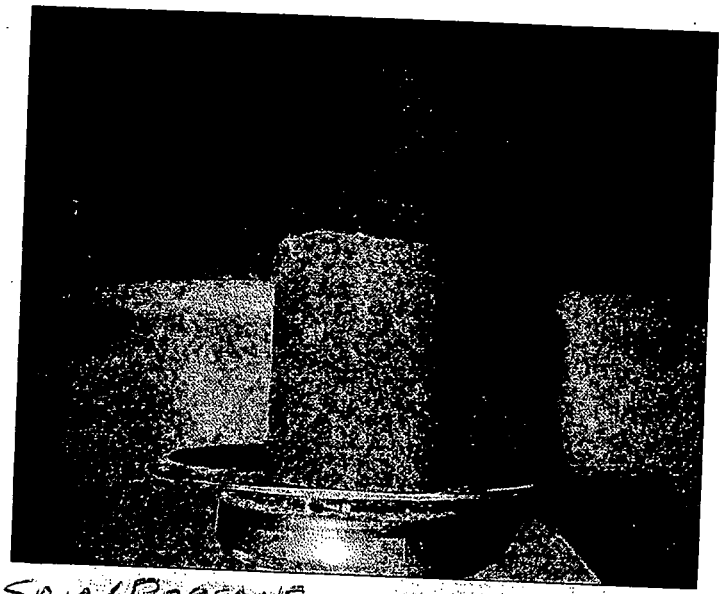
SAIC/Morisons PO 140
G 2-121 @ 17.5-19.5'
404817

2059-136
Tx/Pbp
2808 psf

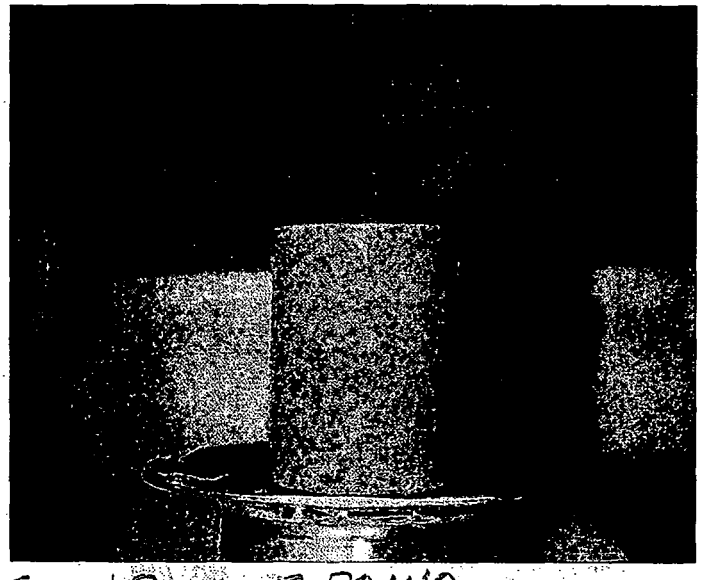


SAIC/Parsons PO 140
62-123
404800
12.5-14.5'

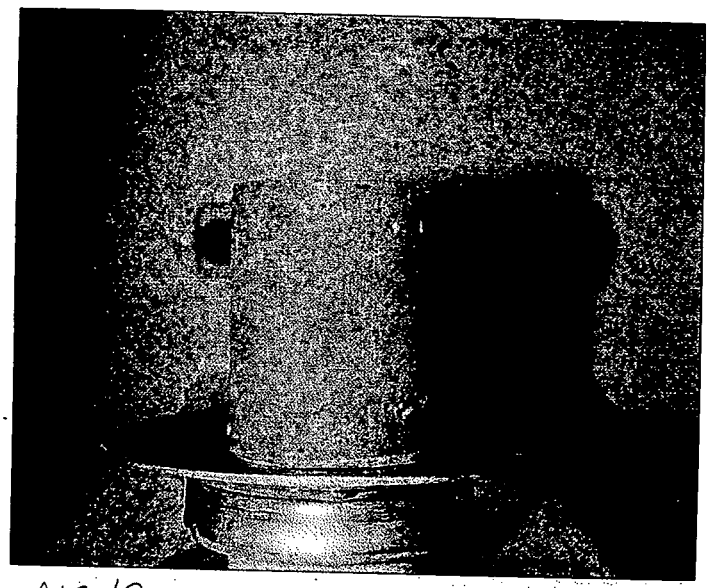
2059-13D
Tx/Pbp
2088 PSF



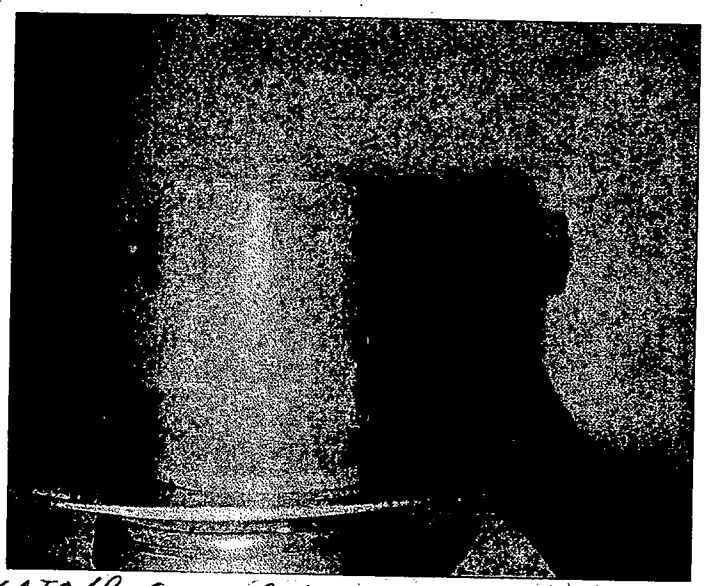
SAIC/PARSONS 2059-13D
G2-126 25-27D
704778 FERNALD
Tx/Pbp - 3888 psf



SAIC/PARSONS PO140 2059-13D
G2-127 28-30.0'
704763-B
FERNALD Tx/Pbp-4320 PSF

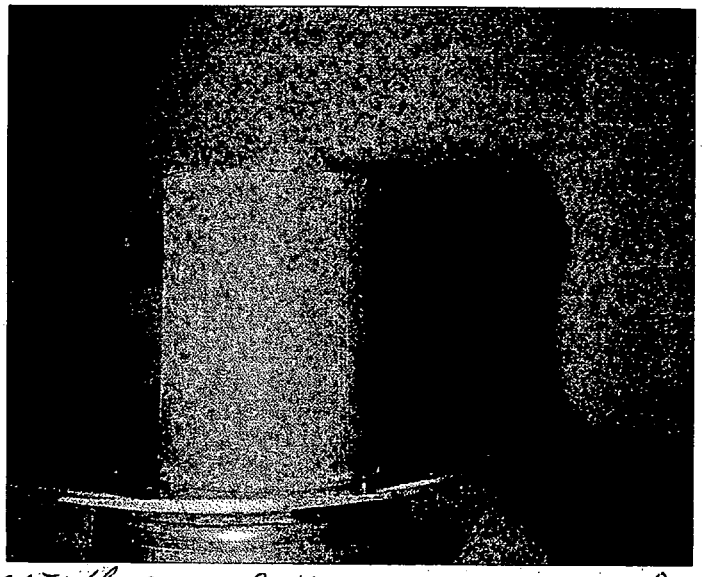


SAIC/PARSONS PO 140 Fernald
2059-13H G2-132 405111A 20-22'
TX/Pbp σ_3 3168 PSF



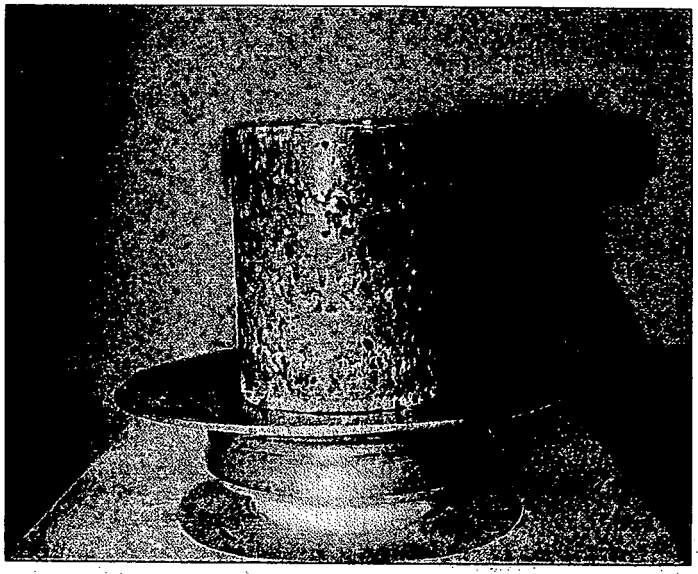
SAIC/Parsons PO140
Fernald
G 2-133 @ 17.5-19.5'
405061

2059-13D
Tx/Pbp
2808 psf

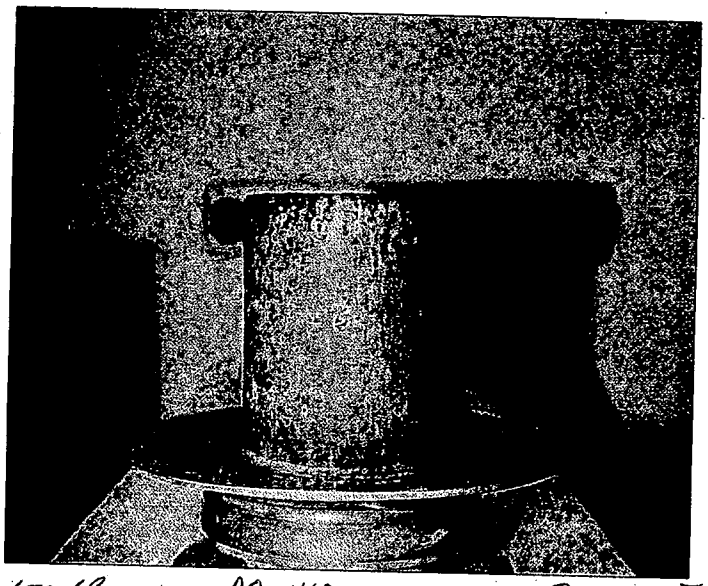


SAIC/Poisons PO140
Fernald
62-133 @ 25.0-27.0'
405065

2059-130
Tx/Pbp
3688 PSF

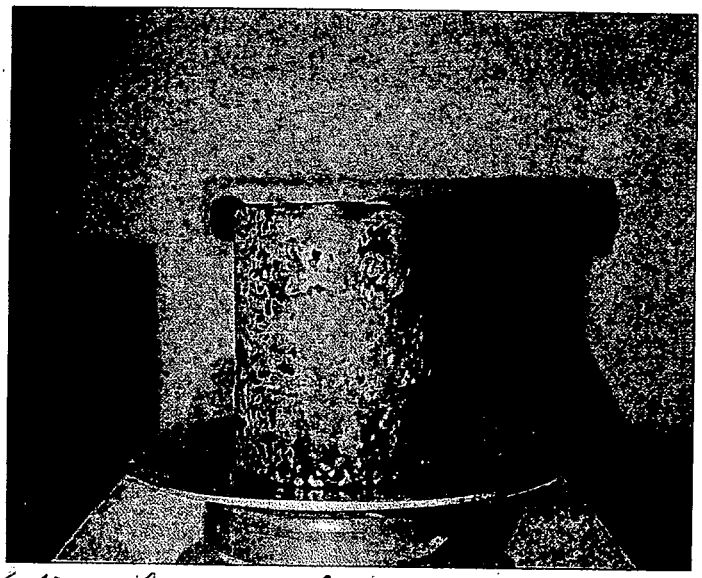


SAIC/PARSONS PO 140 2059-13I
G2-SB-1 @ 1.5-5.0' TX/PLP
404608 FERNALD 576 PSF

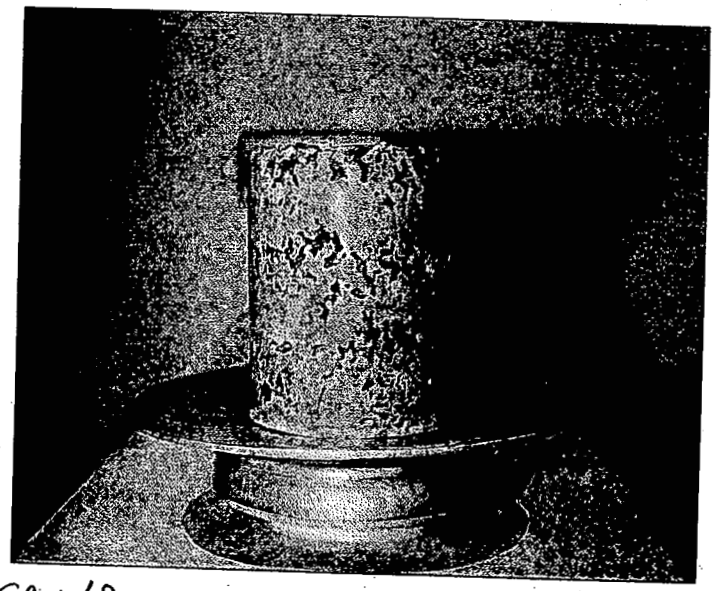


SAIC/Parsons PO 140
G2-SB-2 @ 1.5-5.0'
404603
Fornald

2054-13L
TX/Pbp r95%
576 PSF

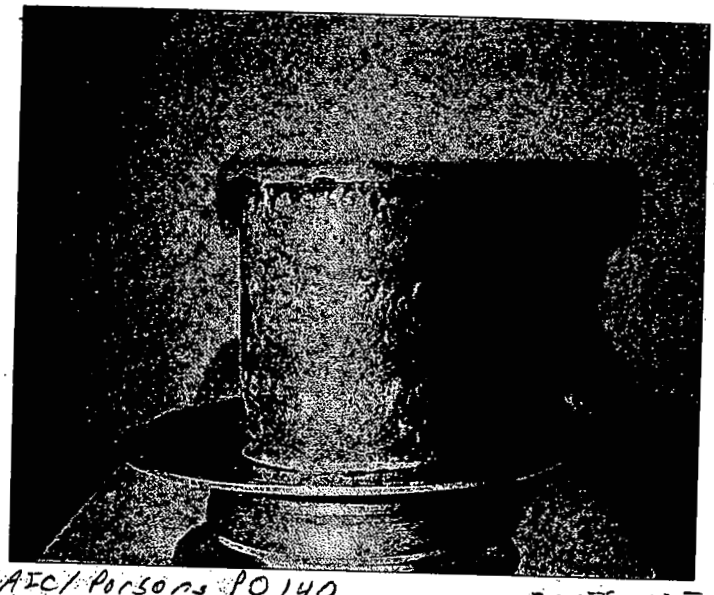


SAIC/Parsons PO 140 2059-13I
62-SB-3 @ 1.5-5.0' Tx/Pbp ~95%
404591 576 PSF
Fernald



SAIC/PARSONS PO 140
G2-SB-4 @ 1.5-5.0'
404615 FERNALD

2059-13I
TX/PDP
576 PSF

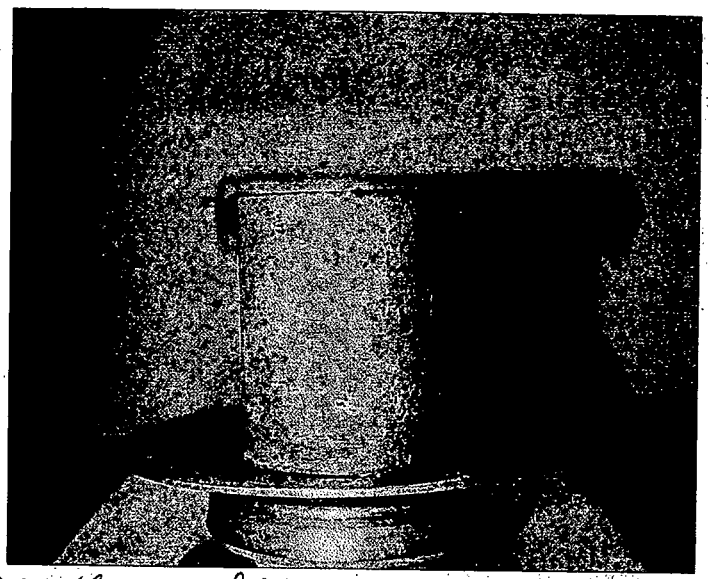


SAIC/Parsons PO 140
G2-SB-5 @ 1.5-5.01
404627
Fernald

2059-13I
Tx/Hbp r95%
576 PSI

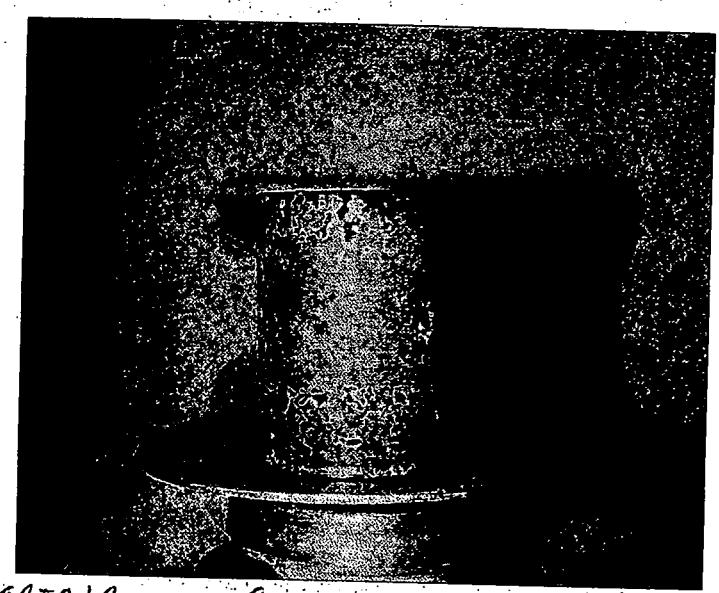
SAIC/Parsons PO 140
62-SB-6 @ 1.5-5.0'
404595
Fernald

2059-13I
Tx/Pbp r 45%
576 PSI



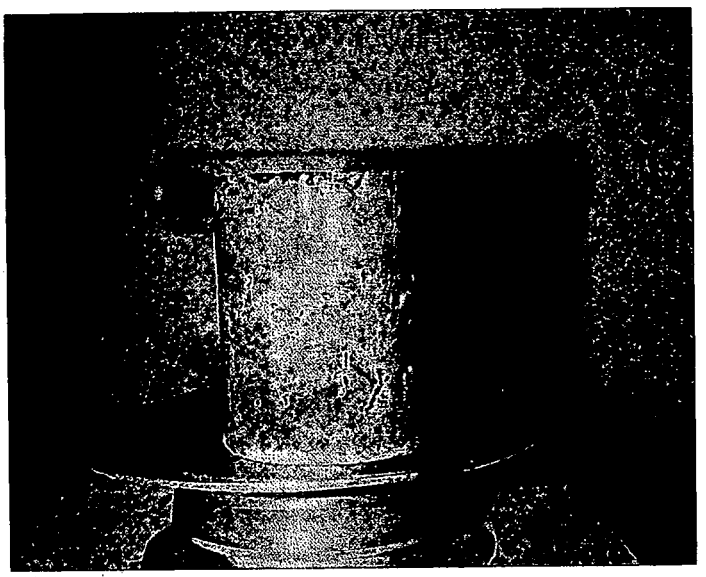
SAIC/Parsons PO 140
62-SB-7 @ 1.5-5.0'
404632
Fernald

2059-13I
Tx/Pbp r95%
576 PSF

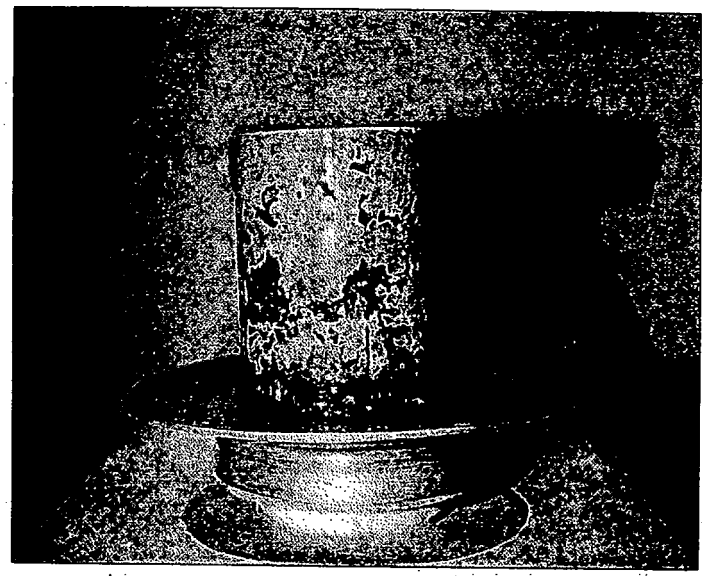


SAIC/Parsons PO 140
62-SB-8 @ 1.5-5.0'
404621 Fernald

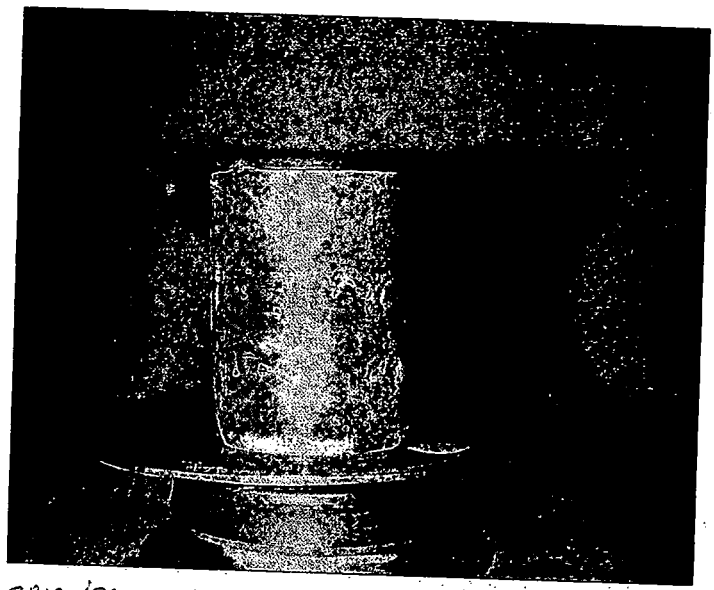
2059-13I
Tx/Pbp
576 psf



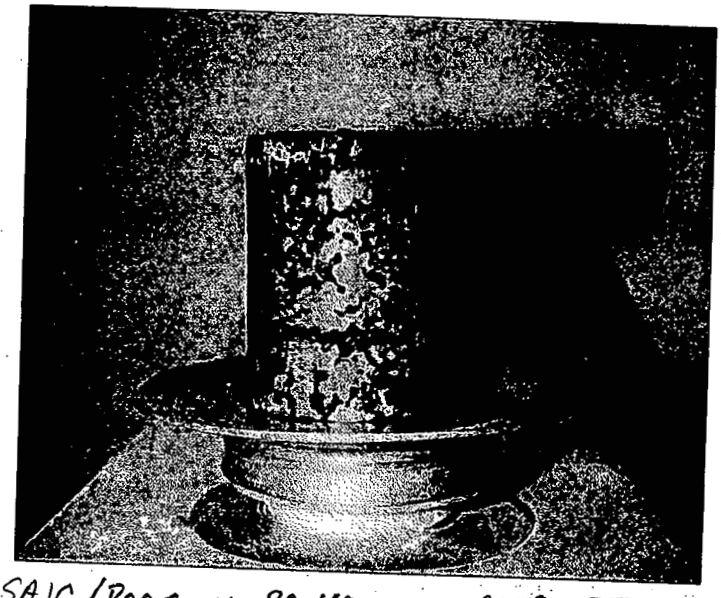
SAIC/PARSONS PO 140 2059-13C
G2-SB-9 404587 1.5-5.0'
TX/Pbp ≈ 95% σ_3 576PSF



SAIC/PARSONS PO 140 2059-13I
G2-SB-10 @ 1.5-5.0' TX/Pbp
404637 FERNALD 576 PSF

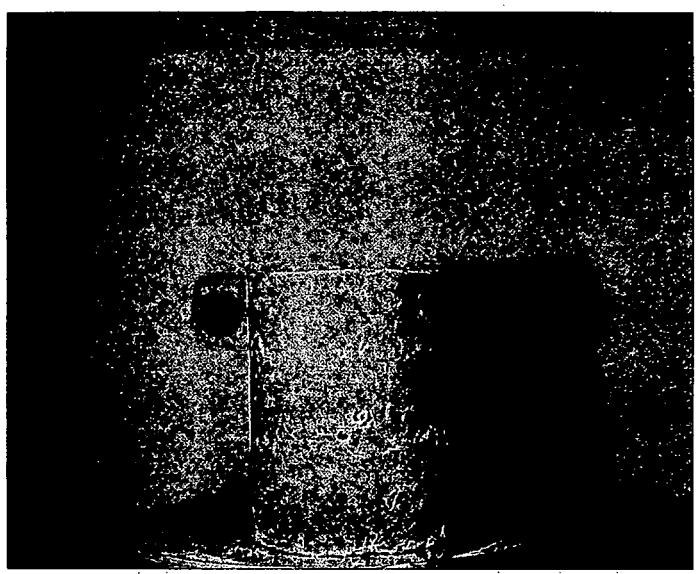


SAIC/PARSONS PO 140 2059-13 I
GZ-SB-11 1.5-5.0' 404642
TXP/o p r.c. 95% σ_3 576 PSF

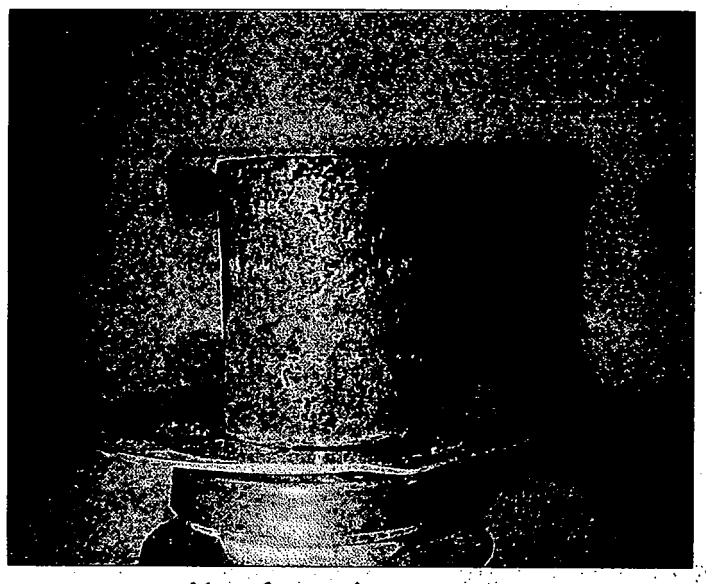


SAIC/PARSONS PO 140
G2-SB-12 @ 1.5-5.0'
404599 FERNALD

2059-13I
TX/Pbp
576 PSF



SAIC/PARSONS PO 140 2059-13.C
404583 62-SB-13 1.5-5.0'
TX/Pbp r.c. 95% TXPbp σ_3 546



SAIC/PARSONS PO 140 2059-13C
GZ-SB-14 1.5-5.0 404578
TX/Pbp r.c. 95% σ_3 576 psf