

Appendix E
Direct Shear Test Data



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-1-3
Depth: 0.00 - 1.50 ft
Sample No. 54F-128
Specimen No: 1

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/13/2003
Date Testing Completed: 5/14/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 7.5 lbf/in²
Actual Normal Stress Applied: 7.5 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 7.5 lbf/in²
Peak Shear Stress: 10.3 lbf/in²
Relative Lateral Displacement (Peak): 4.0 %
Post Peak Shear Stress: 8.9 lbf/in²
Relative Lateral Displacement (Post Peak): 6.8 %

Initial Test Specimen Dry Unit Weight: 87.9 lbf/ft³
Initial Test Specimen Water Content: 39.0 %
Final Test Specimen Water Content: 19.8 %

Raw Data File: Salton Sea\Pad1Sample3at7_5'psi.dat
Date Data File Created: 5/13/2003 13:59

Comments: Initial Test Specimen Height = 1.04 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-1-3
Depth: 0.00 - 1.50 ft
Sample No. 54F-128
Specimen No: 2

Specimen Type: Intact Compacted
Shear Surface: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 4/24/2003
Date Testing Completed: 4/25/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 15.0 lbf/in²
Actual Normal Stress Applied: 15.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 15.0 lbf/in²
Peak Shear Stress: 20.6 lbf/in²
Relative Lateral Displacement (Peak): 7.5 %
Post Peak Shear Stress: 19.8 lbf/in²
Relative Lateral Displacement (Post Peak): 8.5 %

Initial Test Specimen Dry Unit Weight: 83.6 lbf/ft³
Initial Test Specimen Water Content: 36.2 %
Final Test Specimen Water Content: 17.3 %

Raw Data File: Salton Sea\Pad1Sample3at15psi.dat
Date Data File Created: 4/24/2003 13:48

Comments: Initial Test Specimen Height = 1.27 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-1-3
Depth: 0.00 - 1.50 ft
Sample No. 54F-128
Specimen No: 3

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 4/24/2003
Date Testing Completed: 4/25/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 30.0 lbf/in²
Actual Normal Stress Applied: 30.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 30.0 lbf/in²
Peak Shear Stress: 33.9 lbf/in²
Relative Lateral Displacement (Peak): 5.9 %
Post Peak Shear Stress: 32.3 lbf/in²
Relative Lateral Displacement (Post Peak): 7.5 %

Initial Test Specimen Dry Unit Weight: 78.2 lbf/ft³
Initial Test Specimen Water Content: 37.7 %
Final Test Specimen Water Content: 18.8 %

Raw Data File: Salton Sea\Pad1Sample3at30psi.dat
Date Data File Created: 4/24/2003 14:12

Comments: Initial Test Specimen Height = 1.33 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-1-3
Depth: 0.00 - 1.50 ft
Sample No. 54F-128
Specimen No: 4

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 4/24/2003
Date Testing Completed: 4/25/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 60.0 lbf/in²
Actual Normal Stress Applied: 60.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 60.0 lbf/in²
Peak Shear Stress: 57.1 lbf/in²
Relative Lateral Displacement (Peak): 7.4 %
Post Peak Shear Stress: 56.4 lbf/in²
Relative Lateral Displacement (Post Peak): 8.4 %

Initial Test Specimen Dry Unit Weight: 82.4 lbf/ft³
Initial Test Specimen Water Content: 36.9 %
Final Test Specimen Water Content: 20.4 %

Raw Data File: Salton Sea\Pad1Sample3at60psi.dat
Date Data File Created: 4/24/2003 14:35

Comments: Initial Test Specimen Height = 1.35 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-7-7
Depth: 0.00 -1.25 ft
Sample No. 54F-132
Specimen No: 1

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/13/2003
Date Testing Completed: 5/14/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 7.5 lbf/in²
Actual Normal Stress Applied: 7.5 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 7.5 lbf/in²
Peak Shear Stress: 10.6 lbf/in²
Relative Lateral Displacement (Peak): 5.5 %
Post Peak Shear Stress: 9.9 lbf/in²
Relative Lateral Displacement (Post Peak): 7.6 %

Initial Test Specimen Dry Unit Weight: 113.4 lbf/ft³
Initial Test Specimen Water Content: 44.8 %
Final Test Specimen Water Content: 18.3 %

Raw Data File: Salton Sea\Pad7Sample7at7_5psi.dat
Date Data File Created: 5/13/2003 13:23

Comments: Initial Test Specimen Height = 1.04 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-7-7
Depth: 0.00 - 1.25 ft
Sample No. 54F-132
Test Specimen Interval: 2

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/5/2003
Date Testing Completed: 5/6/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 15.0 lbf/in²
Actual Normal Stress Applied: 15.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 15.0 lbf/in²
Peak Shear Stress: 15.0 lbf/in²
Relative Lateral Displacement (Peak): 4.0 %
Post Peak Shear Stress: 14.4 lbf/in²
Relative Lateral Displacement (Post Peak): 6.4 %

Initial Test Specimen Dry Unit Weight: 105.0 lbf/ft³
Initial Test Specimen Water Content: 43.3 %
Final Test Specimen Water Content: 15.8 %

Raw Data File: Salton Sea\Pad7Sample7at15psi.dat
Date Data File Created: 5/5/2003 14:02

Comments: Initial Test Specimen Height = 1.04 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-7-7
Depth: 0.00 - 1.25 ft
Sample No. 54F-132
Test Specimen Interval: 3

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/5/2003
Date Testing Completed: 5/6/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 30.0 lbf/in²
Actual Normal Stress Applied: 30.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 30.0 lbf/in²
Peak Shear Stress: 32.1 lbf/in²
Relative Lateral Displacement (Peak): 4.4 %
Post Peak Shear Stress: 31.3 lbf/in²
Relative Lateral Displacement (Post Peak): 6.2 %

Initial Test Specimen Dry Unit Weight: 111.9 lbf/ft³
Initial Test Specimen Water Content: 43.4 %
Final Test Specimen Water Content: 16.2 %

Raw Data File: Salton Sea\Pad7Sample7at30psi.dat
Date Data File Created: 5/5/2003 14:20

Comments: Initial Test Specimen Height = 1.05 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-7-7
Depth: 1.25 ft
Sample No. 54F-132
Test Specimen Interval: 4

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/5/2003
Date Testing Completed: 5/6/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 60.0 lbf/in²
Actual Normal Stress Applied: 60.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 60.0 lbf/in²
Peak Shear Stress: 50.4 lbf/in²
Relative Lateral Displacement (Peak): 5.5 %
Post Peak Shear Stress: 49.0 lbf/in²
Relative Lateral Displacement (Post Peak): 6.6 %

Initial Test Specimen Dry Unit Weight: 112.0 lbf/ft³
Initial Test Specimen Water Content: 45.6 %
Final Test Specimen Water Content: 16.0 %

Raw Data File: Salton Sea\Pad7Sample7at60psi.dat
Date Data File Created: 5/5/2003 14:55

Comments: Initial Test Specimen Height = 1.09 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-4-10
Depth: 0.00 - 1.00 ft
Sample No. 54F-135
Specimen No: 1

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 4/28/2003
Date Testing Completed: 4/29/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 7.5 lbf/in²
Actual Normal Stress Applied: 7.5 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 7.5 lbf/in²
Peak Shear Stress: 7.8 lbf/in²
Relative Lateral Displacement (Peak): 7.5 %
Post Peak Shear Stress: 7.3 lbf/in²
Relative Lateral Displacement (Post Peak): 8.9 %

Initial Test Specimen Dry Unit Weight: 80.4 lbf/ft³
Initial Test Specimen Water Content: 54.6 %
Final Test Specimen Water Content: 19.6 %

Raw Data File: Salton Sea\Pad4Sample10at7_5psi.dat
Date Data File Created: 4/28/2003 13:21

Comments: Initial Test Specimen Height = 1.33 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-4-10
Depth: 0.00 - 1.00 ft
Sample No. 54F-135
Specimen No: 2

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/1/2003
Date Testing Completed: 5/2/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 15 lbf/in²
Actual Normal Stress Applied: 15 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 15.0 lbf/in²
Peak Shear Stress: 19.3 lbf/in²
Relative Lateral Displacement (Peak): 5.9 %
Post Peak Shear Stress: 18.6 lbf/in²
Relative Lateral Displacement (Post Peak): 7.0 %

Initial Test Specimen Dry Unit Weight: 89.0 lbf/ft³
Initial Test Specimen Water Content: 59.3 %
Final Test Specimen Water Content: 19.8 %

Raw Data File: Salton Sea\Pad4Sample10at15psi'.dat
Date Data File Created: 5/1/2003 11:38

Comments: Initial Test Specimen Height = 1.09 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-4-10
Depth: 0.00 - 1.00 ft
Sample No. 54F-135
Specimen No: 3

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/1/2003
Date Testing Completed: 5/2/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 30 lbf/in²
Actual Normal Stress Applied: 30 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 30.0 lbf/in²
Peak Shear Stress: 28.3 lbf/in²
Relative Lateral Displacement (Peak): 7.1 %
Post Peak Shear Stress: 27.1 lbf/in²
Relative Lateral Displacement (Post Peak): 8.6 %

Initial Test Specimen Dry Unit Weight: 81.6 lbf/ft³
Initial Test Specimen Water Content: 60.8 %
Final Test Specimen Water Content: 20.8 %

Raw Data File: Salton Sea\Pad4Sample10at30psi.dat
Date Data File Created: 5/1/2003 9:01

Comments: Initial Test Specimen Height = 1.04 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-4-10
Depth: 0.00 - 1.00 ft
Sample No. 54F-135
Specimen No: 4

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 5/1/2003
Date Testing Completed: 5/2/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 7.5 lbf/in²
Actual Normal Stress Applied: 60 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 60.0 lbf/in²
Peak Shear Stress: 53.4 lbf/in²
Relative Lateral Displacement (Peak): 7.9 %
Post Peak Shear Stress: 53.0 lbf/in²
Relative Lateral Displacement (Post Peak): 8.6 %

Initial Test Specimen Dry Unit Weight: 83.6 lbf/ft³
Initial Test Specimen Water Content: 63.1 %
Final Test Specimen Water Content: 20.2 %

Raw Data File: Salton Sea\Pad4Sample10at60psi.dat
Date Data File Created: 5/1/2003 10:51

Comments: Initial Test Specimen Height = 1.05 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-5-11
Depth: 0.00 - 0.92 ft
Sample No. 54F-136
Specimen No: 1

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/20/2003
Date Testing Completed: 6/21/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 7.5 lbf/in²
Actual Normal Stress Applied: 7.5 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 7.5 lbf/in²
Peak Shear Stress: 12.5 lbf/in²
Relative Lateral Displacement (Peak): 5.6 %
Post Peak Shear Stress: 10.2 lbf/in²
Relative Lateral Displacement (Post Peak): 8.7 %

Initial Test Specimen Dry Unit Weight: 86.6 lbf/ft³
Initial Test Specimen Water Content: 19.5 %
Final Test Specimen Water Content: 20.7 %

Raw Data File: Salton Sea\Pad5Sample11at7_5psi.dat
Date Data File Created: 6/20/2003 9:45

Comments: Initial Test Specimen Height = 1.22 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-5-11
Depth: 0.00 - 0.92 ft
Sample No. 54F-136
Specimen No: 2

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/20/2002
Date Testing Completed: 6/21/2002

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 15.0 lbf/in²
Actual Normal Stress Applied: 15.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 15.0 lbf/in²
Peak Shear Stress: 20.3 lbf/in²
Relative Lateral Displacement (Peak): 6.5 %
Post Peak Shear Stress: 19.5 lbf/in²
Relative Lateral Displacement (Post Peak): 8.9 %

Initial Test Specimen Dry Unit Weight: 92.9 lbf/ft³
Initial Test Specimen Water Content: 15.9 %
Final Test Specimen Water Content: 18.4 %

Raw Data File: Salton Sea\Pad5Sample11at15psi.dat
Date Data File Created: 6/20/2003 10:26

Comments: Initial Test Specimen Height = 1.31 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-5-11
Depth: 0.00 - 0.92 ft
Sample No. 54F-136
Specimen No: 3

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/25/2003
Date Testing Completed: 6/26/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 30.0 lbf/in²
Actual Normal Stress Applied: 30.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 30.0 lbf/in²
Peak Shear Stress: 33.2 lbf/in²
Relative Lateral Displacement (Peak): 7.1 %
Post Peak Shear Stress: 28.6 lbf/in²
Relative Lateral Displacement (Post Peak): 10.6 %

Initial Test Specimen Dry Unit Weight: 94.4 lbf/ft³
Initial Test Specimen Water Content: 23.5 %
Final Test Specimen Water Content: 19.7 %

Raw Data File: Salton Sea\Pad5Sample11at30psi.dat
Date Data File Created: 6/25/2003 9:52

Comments: Initial Test Specimen Height = 1.14 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-5-11
Depth: 0.00 - 0.92 ft
Sample No. 54F-136
Specimen No: 4

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/25/2003
Date Testing Completed: 6/26/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 60.0 lbf/in²
Actual Normal Stress Applied: 60.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 60.0 lbf/in²
Peak Shear Stress: 58.6 lbf/in²
Relative Lateral Displacement (Peak): 7.2 %
Post Peak Shear Stress: 50.6 lbf/in²
Relative Lateral Displacement (Post Peak): 11.3 %

Initial Test Specimen Dry Unit Weight: 89.6 lbf/ft³
Initial Test Specimen Water Content: 17.6 %
Final Test Specimen Water Content: 17.9 %

Raw Data File: Salton Sea\Pad5Sample11at60psi.dat
Date Data File Created: 6/25/2003 10:16

Comments: Initial Test Specimen Height = 1.21 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: DH-5-11
Depth: 0.00 0.92 ft
Sample No. 54F-136
Specimen No: 5

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/25/2003
Date Testing Completed: 7/3/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 30 lbf/in²
Actual Normal Stress Applied: 30 lbf/in²
Desired Strain Rate: 0.000028 in/min
Actual Strain Rate as Tested: 0.000027 in/min

Test Results

Normal Stress: 30.0 lbf/in²
Peak Shear Stress: 34.41 lbf/in²
Relative Lateral Displacement (Peak): 3.3 %
Post Peak Shear Stress: 51.1 lbf/in²
Relative Lateral Displacement (Post Peak): 3.7 %

Initial Test Specimen Dry Unit Weight: 96.6 lbf/ft³
Initial Test Specimen Water Content: 16.1 %
Final Test Specimen Water Content: 20.5 %

Raw Data File: Salton Sea\Pad5Sample11at30psiat0_00002.dat
Date Data File Created: 6/25/2003 11:11

Comments: Initial Test Specimen Height = 1.17 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Sampling Location: Pad No. 6, Exc. No. 13
Depth: 0.00 - 1.50 ft
Sample No. 54F-138
Specimen No: 1

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/17/2003
Date Testing Completed: 6/18/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 7.5 lbf/in²
Actual Normal Stress Applied: 7.5 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 7.5 lbf/in²
Peak Shear Stress: 7.7 lbf/in²
Relative Lateral Displacement (Peak): 5.1 %
Post Peak Shear Stress: 6.9 lbf/in²
Relative Lateral Displacement (Post Peak): 8.3 %

Initial Test Specimen Dry Unit Weight: 105.7 lbf/ft³
Initial Test Specimen Water Content: 18.7 %
Final Test Specimen Water Content: 9.2 %

Raw Data File: Salton Sea\Pad6Sample13at7_5psi.dat
Date Data File Created: 6/17/2003 10:19

Comments: Initial Test Specimen Height = 1.20 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Drill Hole: Pad No. 6, Exc. No. 13
Depth: 0.00 - 1.50 ft
Sample No. 54F-138
Specimen No: 2

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/17/2003
Date Testing Completed: 6/18/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 15.0 lbf/in²
Actual Normal Stress Applied: 15.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 15.0 lbf/in²
Peak Shear Stress: 16.0 lbf/in²
Relative Lateral Displacement (Peak): 3.8 %
Post Peak Shear Stress: 13.4 lbf/in²
Relative Lateral Displacement (Post Peak): 7.7 %

Initial Test Specimen Dry Unit Weight: 99.5 lbf/ft³
Initial Test Specimen Water Content: 19.1 %
Final Test Specimen Water Content: 10.1 %

Raw Data File: Salton Sea\Pad6Sample13at15psi.dat
Date Data File Created: 6/17/2003 11:06

Comments: Initial Test Specimen Height = 1.15 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Sampling Location: Pad No. 6, Exc. No. 13
Depth: 0.00 - 1.50 ft
Sample No. 54F-138
Specimen No: 3

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/17/2003
Date Testing Completed: 6/18/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 30.0 lbf/in²
Actual Normal Stress Applied: 30.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 30.0 lbf/in²
Peak Shear Stress: 32.0 lbf/in²
Relative Lateral Displacement (Peak): 3.5 %
Post Peak Shear Stress: 14.6 lbf/in²
Relative Lateral Displacement (Post Peak): 7.0 %

Initial Test Specimen Dry Unit Weight: 105.9 lbf/ft³
Initial Test Specimen Water Content: 13.4 %
Final Test Specimen Water Content: 8.7 %

Raw Data File: Salton Sea\Pad6Sample13at30psi.dat
Date Data File Created: 6/17/2003 11:51

Comments: Initial Test Specimen Height = 1.17 in.



Direct Shear Test
US Bureau of Reclamation
Earth Sciences and Research Laboratory
Denver, Colorado



Project: Salton Sea
Feature: Salton Sea
Sampling Location: Pad No. 6 Exc. No. 13
Depth: 0.00 -1.50 ft
Sample No. 54F-138
Specimen No: 4

Specimen Type: Intact Compacted
Shear Surface Preparation: Intact Post Break Precut Shear Surface

Tested By: Z. Erdogan
Date Testing Started: 6/20/2003
Date Testing Completed: 6/21/2003

Specimen Dimension: 2X2 in
Specimen Area: 4.00 in²
Shear Surface Length: 2.00 in

Desired Normal Stress: 60.0 lbf/in²
Actual Normal Stress Applied: 60.0 lbf/in²
Desired Strain Rate: 0.005 in/min
Actual Strain Rate as Tested: 0.005 in/min

Test Results

Normal Stress: 60.0 lbf/in²
Peak Shear Stress: 51.3 lbf/in²
Relative Lateral Displacement (Peak): 5.1 %
Post Peak Shear Stress: 48.1 lbf/in²
Relative Lateral Displacement (Post Peak): 8.4 %

Initial Test Specimen Dry Unit Weight: 93.6 lbf/ft³
Initial Test Specimen Water Content: 24.4 %
Final Test Specimen Water Content: 10.7 %

Raw Data File: Salton Sea\Pad6Sample13at60psi.dat
Date Data File Created: 6/20/2003 8:28

Comments: Initial Test Specimen Height = 1.20 in.