ASTM D 2166 Unconfined Compressive Strength



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May 15, 1999.

G.M. Boston Company 412 Fullerton Newport Beach, CA 92663

Attention:

Craig Hoad

Subject:

Report/Laboratory Testing Results

Project Name:

Petaluma / Paul Paddock

Project No.:

N/A

TERATEST No.: 997026-001

Dear Mr. Hoad:

Enclosed please find laboratory testing results for the soil sample containing PX-300 soil stabilizer from the Petaluma / Paul Paddock project. The analysis performed on the sample from the above project was conducted in essential accordance with the standard testing procedure listed below.

TYPE OF TEST

TEST PROCEDURE

Unconfined Compressive Strength

ASTM D 2166

of Cohesive Soil

Test results are presented in the attached Data Sheets.

ASTM: American Society for Testing and Materials, Annual Book of ASTM Standards, Section 4 Construction, Volume 04.08 & 4.09 Soil and Rock (I & II), 1998.

Thank you for selecting Teratest Labs, Inc. to provide laboratory testing services to G.M. Boston Company. Please feel free to contact us if you should have any questions concerning these results.

Very truly yours,

TERATEST LABS, INC. Laboratory Testing Services

Lester Fruth, Ph.D.

Manager, Geotechnical Laboratory

Lester Fruth

Enclosures



UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL

(ASTM D 2166)

Project Name:

Petaluma / Paul Paddock

Tested by:

<u>RA</u>

Date: 05/12/99

Project No:

N/A

Checked by:

XF

Date: 05/13/99

Boring No.:

N/A

Depth (ft.):

N/A

Sample No.:

Petaluma

Sample Type: Remold / Stabilized

Sample Description:

Black, very hard soil, stabilized with PX-300 soil stabilizer

| Sample Wt. + Tube Wt. (gm) | | | | | | <u>239.67</u> |
|----------------------------|-------|-------|--------------|--------------|--------|---------------|
| Tube Wt. | (gm) | | | | | 0.00 |
| Sample Wt. | (gm) | | | | | <u>239.67</u> |
| Diameter (in) | | 2.028 | 2.027 | 2.029 | Avg. = | <u>2.028</u> |
| Height (in) | | 2.320 | <u>2.314</u> | <u>2.318</u> | Avg. = | <u>2.317</u> |
| Height : Diameter | 1.143 | | | | | |

| Area (in²) | 3.230 |
|-----------------------------|---------------|
| Moisture Content (%) | <u>1.3</u> |
| Wt. Wet Sample + Cont. (gm) | <u>313.17</u> |
| Wt. Dry Sample + Cont. (gm) | <u>310.23</u> |
| Wt. Container (gms) | <u>77.13</u> |
| Density and Saturation | |
| Specific Gravity (assumed) | <u>2.70</u> |
| Wet Density (pcf) | <u>122.0</u> |
| Dry Density (pcf) | <u>120.5</u> |
| Void Ratio | <u>0.399</u> |
| Total Porosity | <u>0.285</u> |
| Pore Volume (cc.) | <u>35.0</u> |
| % Saturation | 9 |

Failure Description:

See Attached Photo

UNCONFINED STRESS ANALYSIS

Rate of Deformation (in/min)=

800.0

Failure Criterian:

Condition at which maximum stress occurs

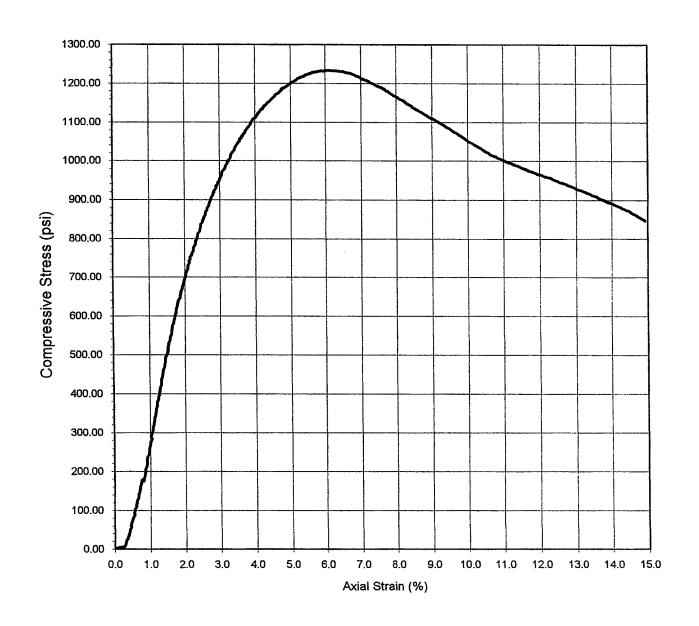
At Failure

Max. Unconfined Compressive Stress (psi) =

Axial Strain (%) =

1233.68

6.08



| Boring | Sample | Depth | Unconfined | Strain at | Moisture | Dry | Average | Average | Degree of | Deformation | Height / |
|--------|----------|-------|------------------------|-----------|----------|----------------|----------------|----------------|------------|-------------------|----------|
| No. | No. | (ft.) | Compressive | | Content | Density | Diameter | Height | Saturation | Rate | Diameter |
| N/A | Petaluma | N/A | Strength (psi) 1233.68 | 6.08 | 1.3 | (pcf) 120.5 | (in.) 2.028 | (in.) 2.317 | (%) 9 | (in/min) 0.008 | 1.14 |

Sample Description:

Black, very hard soil,

stabilized with PX-300 soil stabilizer.



Project No:

N/A

Petaluma / Paul Paddock

UNCONFINED COMPRESSIVE STRENGTH of COHESIVE SOIL ASTM D 2166

05-99