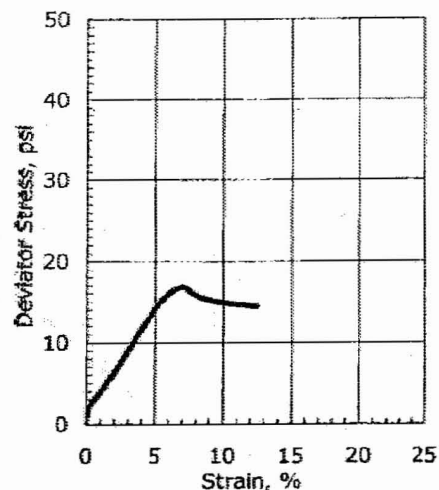
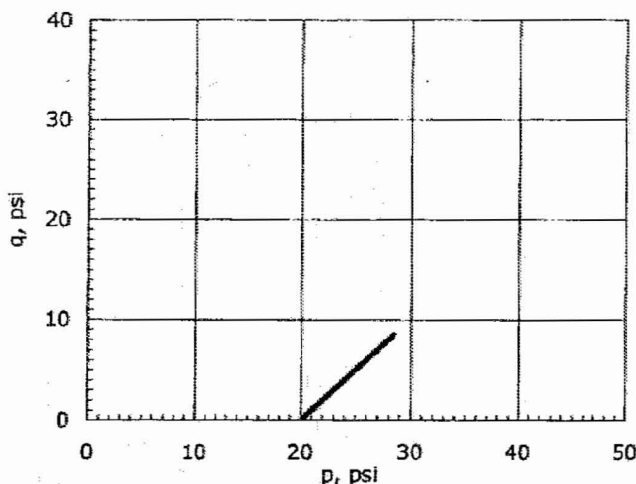


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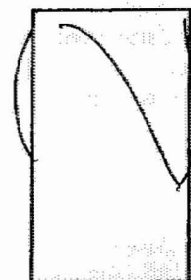
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|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 10/18/2006                                         |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-326                                              |
| Sample ID:          | S-10                                               |
| Depth, ft:          | 33.5-35.5                                          |
| Visual Description: | Moist, dark gray sandy clay                        |
| Test No.:           | UU24                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |                 |                                |      |
|-------------------------------|-----------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87            | Confining Stress, psi:         | 20   |
| Initial Height, in:           | 6               | Undrained Shear Strength, psi: | 8.4  |
| Height to Diameter Ratio:     | 2.09            | Maximum Deviator Stress, psi:  | 16.8 |
| Initial Mass, grams:          | 1189            | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 116.7           | Strain at Failure, %:          | 7.0  |
| Initial Moisture Content, %:  | 28.1            |                                |      |
| Initial Dry Density, pcf:     | 91.1            |                                |      |
| Initial Degree of Saturation: | 87.1            |                                |      |
| Initial Void Ratio:           | 0.89            |                                |      |
| Measured Specific Gravity:    | 2.76            |                                |      |
| Sample Type:                  | Tube            |                                |      |
| Liquid Limit:                 | 41              |                                |      |
| Plastic Limit:                | 16              |                                |      |
| Plasticity Index:             | 25              |                                |      |
| % Passing #200 sieve:         | 62              |                                |      |
| Soil Classification:          | Sandy Lean Clay |                                |      |
| Group Symbol:                 | CL              |                                |      |



Failure Sketch

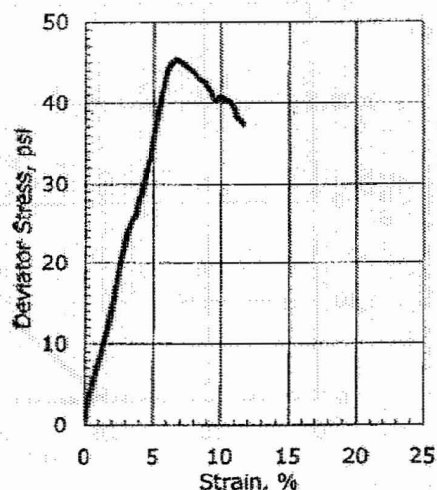
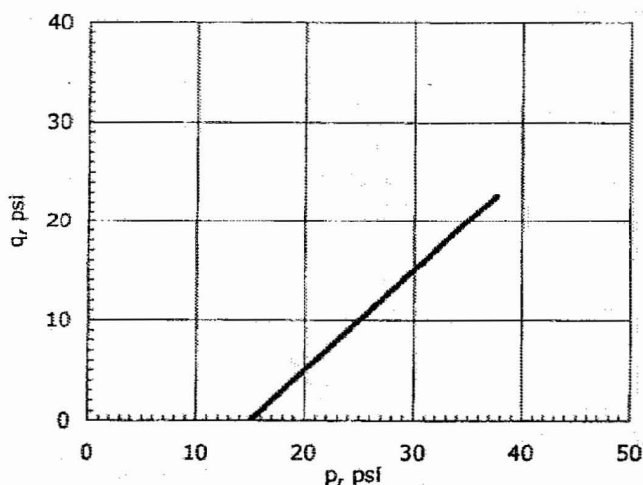
Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

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|                     |                                                                      |
|---------------------|----------------------------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                                           |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP                   |
| Project Location:   | Calvert County, MD                                                   |
| GTX #:              | 6880                                                                 |
| Test Date:          | 10/18/2006                                                           |
| Tested By:          | md                                                                   |
| Checked By:         | jdt                                                                  |
| Boring ID:          | B-331                                                                |
| Sample ID:          | S-7                                                                  |
| Depth, ft:          | 18.5-20.5                                                            |
| Visual Description: | Moist, mottled dark greenish gray, dusky red, and reddish brown clay |
| Test No.:           | UU25                                                                 |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |          |
|-------------------------------|----------|
| Initial Diameter, in:         | 2.87     |
| Initial Height, in:           | 6        |
| Height to Diameter Ratio:     | 2.09     |
| Initial Mass, grams:          | 1191     |
| Initial Bulk Density, pcf:    | 116.9    |
| Initial Moisture Content, %:  | 36.5     |
| Initial Dry Density, pcf:     | 85.6     |
| Initial Degree of Saturation: | 101.5    |
| Initial Void Ratio:           | 0.98     |
| Measured Specific Gravity:    | 2.71     |
| Sample Type:                  | Tube     |
| Liquid Limit:                 | 57       |
| Plastic Limit:                | 23       |
| Plasticity Index:             | 34       |
| % Passing #200 sieve:         | 97       |
| Soil Classification:          | Fat Clay |
| Group Symbol:                 | CH       |

|                                |      |
|--------------------------------|------|
| Confining Stress, psi:         | 15   |
| Undrained Shear Strength, psi: | 22.7 |
| Maximum Deviator Stress, psi:  | 45.4 |
| Strain Rate, %/min:            | 1    |
| Strain at Failure, %:          | 6.6  |



Failure Sketch

Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

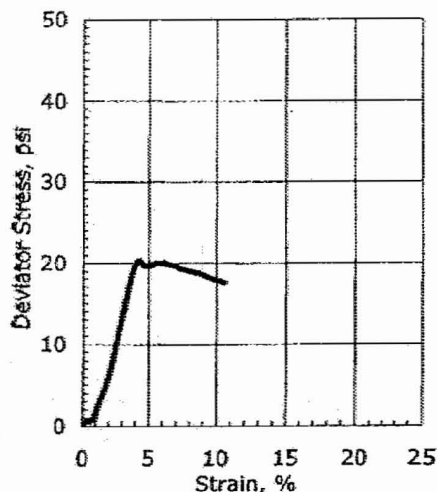
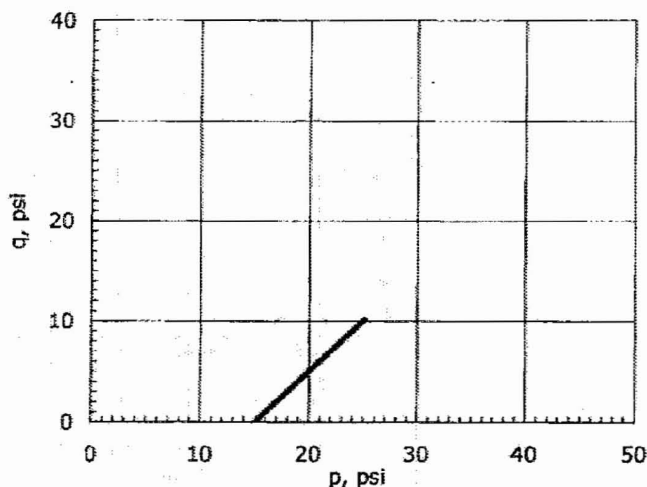


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|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/12/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-334                                              |
| Sample ID:          | S-8                                                |
| Depth, ft:          | 23-25                                              |
| Visual Description: | Moist, dark greenish gray clay with sand           |
| Test No.:           | UU2                                                |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |                    |                                |      |
|-------------------------------|--------------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87               | Confining Stress, psi:         | 15   |
| Initial Height, in:           | 6.1                | Undrained Shear Strength, psi: | 10.1 |
| Height to Diameter Ratio:     | 2.13               | Maximum Deviator Stress, psi:  | 20.3 |
| Initial Mass, grams:          | 1235               | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 119.2              | Strain at Failure, %:          | 4.2  |
| Initial Moisture Content, %:  | 31.2               |                                |      |
| Initial Dry Density, pcf:     | 90.9               |                                |      |
| Initial Degree of Saturation: | 98.7               |                                |      |
| Initial Void Ratio:           | 0.85               |                                |      |
| Measured Specific Gravity:    | 2.70               |                                |      |
| Sample Type:                  | Tube               |                                |      |
| Liquid Limit:                 | 51                 |                                |      |
| Plastic Limit:                | 16                 |                                |      |
| Plasticity Index:             | 35                 |                                |      |
| % Passing #200 sieve:         | 79                 |                                |      |
| Soil Classification:          | Fat Clay with sand |                                |      |
| Group Symbol:                 | CH                 |                                |      |



Failure Sketch

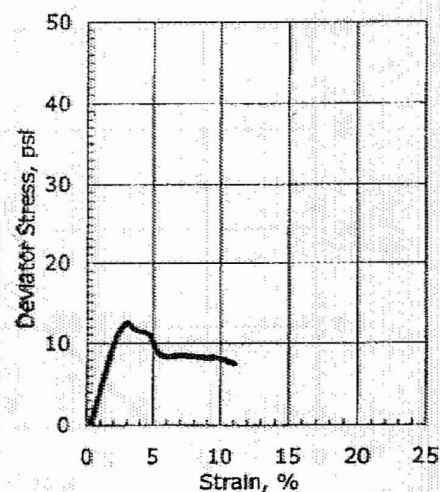
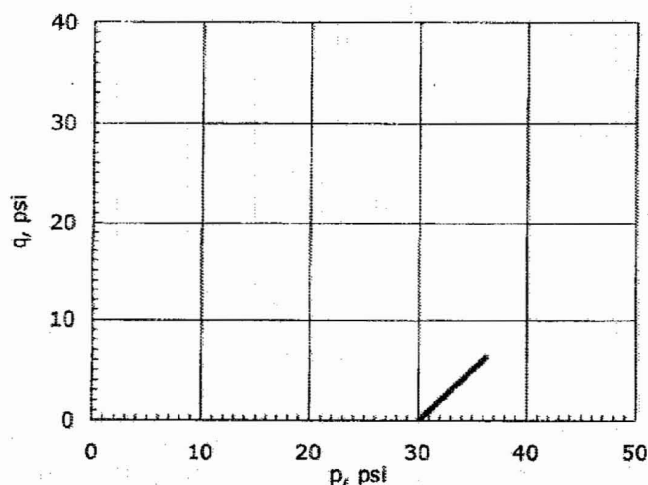
Notes: Moisture content obtained before shear from sample trimmings  
Moisture Content determined by ASTM D 2216  
Specific Gravity determined by ASTM D 854  
Percent passing #200 sieve determined by ASTM D 422

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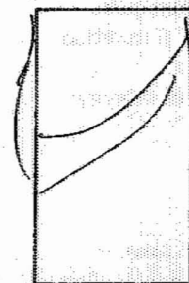
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|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/21/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-337                                              |
| Sample ID:          | S-14                                               |
| Depth, ft:          | 53.5-55.5                                          |
| Visual Description: | Moist, olive gray clayey sand                      |
| Test No.:           | UU22                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |             |                                |      |
|-------------------------------|-------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87        | Confining Stress, psi:         | 15   |
| Initial Height, in:           | 5.8         | Undrained Shear Strength, psi: | 6.2  |
| Height to Diameter Ratio:     | 2.02        | Maximum Deviator Stress, psi:  | 12.5 |
| Initial Mass, grams:          | 1246        | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 126.5       | Strain at Failure, %:          | 3.0  |
| Initial Moisture Content, %:  | 33.6        |                                |      |
| Initial Dry Density, pcf:     | 94.7        |                                |      |
| Initial Degree of Saturation: | 113.7       |                                |      |
| Initial Void Ratio:           | 0.81        |                                |      |
| Measured Specific Gravity:    | 2.75        |                                |      |
| Sample Type:                  | Tube        |                                |      |
| Liquid Limit:                 | 38          |                                |      |
| Plastic Limit:                | 19          |                                |      |
| Plasticity Index:             | 19          |                                |      |
| % Passing #200 sieve:         | 39          |                                |      |
| Soil Classification:          | Clayey Sand |                                |      |
| Group Symbol:                 | SC          |                                |      |



Failure Sketch

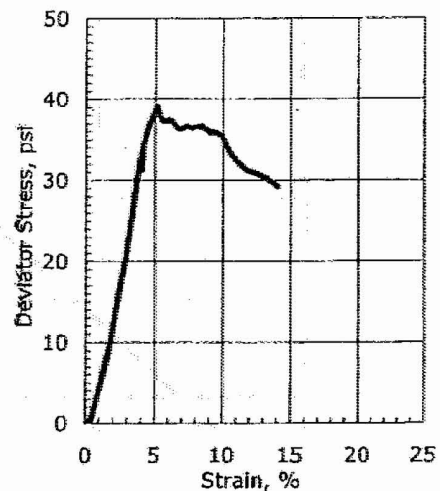
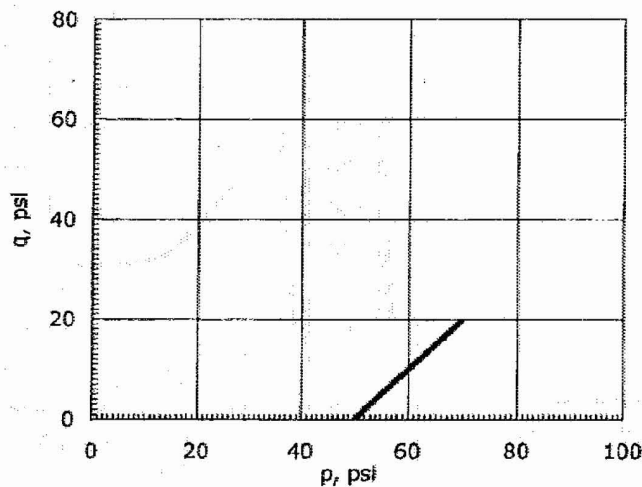
Notes: Moisture content obtained before shear from sample trimmings  
Moisture Content determined by ASTM D 2216  
Specific Gravity determined by ASTM D 854  
Percent passing #200 sieve determined by ASTM D 422

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|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/20/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | idt                                                |
| Boring ID:          | B-401                                              |
| Sample ID:          | S-23                                               |
| Depth, ft:          | 98.5-99.8                                          |
| Visual Description: | Molst, dark gray sandy silt                        |
| Test No.:           | UU15                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |                    |                                |      |
|-------------------------------|--------------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87               | Confining Stress, psi:         | 50   |
| Initial Height, in:           | 6                  | Undrained Shear Strength, psi: | 19.6 |
| Height to Diameter Ratio:     | 2.09               | Maximum Deviator Stress, psi:  | 39.1 |
| Initial Mass, grams:          | 1189               | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 116.7              | Strain at Failure, %:          | 5.1  |
| Initial Moisture Content, %:  | 54.5               |                                |      |
| Initial Dry Density, pcf:     | 75.5               |                                |      |
| Initial Degree of Saturation: | 119.2              |                                |      |
| Initial Void Ratio:           | 1.24               |                                |      |
| Measured Specific Gravity:    | 2.71               |                                |      |
| Sample Type:                  | Tube               |                                |      |
| Liquid Limit:                 | 78                 |                                |      |
| Plastic Limit:                | 48                 |                                |      |
| Plasticity Index:             | 30                 |                                |      |
| % Passing #200 sieve:         | 65                 |                                |      |
| Soil Classification:          | Sandy Elastic Silt |                                |      |
| Group Symbol:                 | MH                 |                                |      |



Failure Sketch

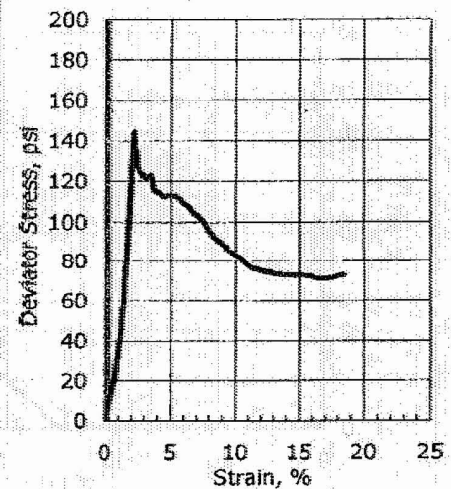
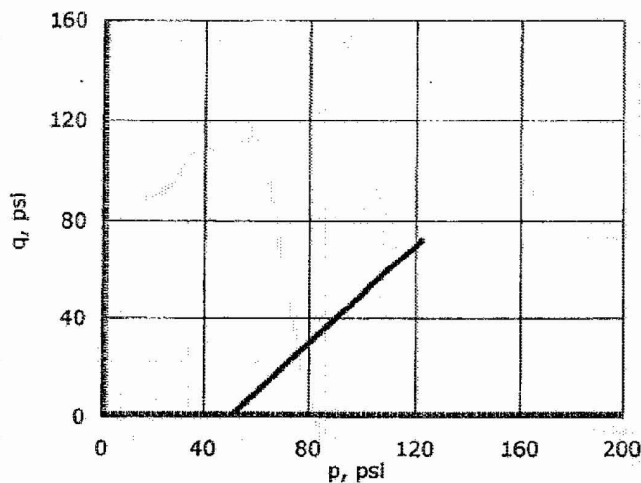
Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

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|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/20/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-401                                              |
| Sample ID:          | S-28                                               |
| Depth, ft:          | 123.5-124.8                                        |
| Visual Description: | Moist, dark olive gray silt with sand              |
| Test No.:           | UU17                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |                        |                                |       |
|-------------------------------|------------------------|--------------------------------|-------|
| Initial Diameter, in:         | 2.87                   | Confining Stress, psi:         | 50    |
| Initial Height, in:           | 6.10                   | Undrained Shear Strength, psi: | 72.3  |
| Height to Diameter Ratio:     | 2.13                   | Maximum Deviator Stress, psi:  | 144.6 |
| Initial Mass, grams:          | 1068                   | Strain Rate, %/min:            | 1     |
| Initial Bulk Density, pcf:    | 103.1                  | Strain at Failure, %:          | 2.2   |
| Initial Moisture Content, %:  | 56.8                   |                                |       |
| Initial Dry Density, pcf:     | 65.8                   |                                |       |
| Initial Degree of Saturation: | 99.1                   |                                |       |
| Initial Void Ratio:           | 1.52                   |                                |       |
| Measured Specific Gravity:    | 2.66                   |                                |       |
| Sample Type:                  | Tube                   |                                |       |
| Liquid Limit:                 | 85                     |                                |       |
| Plastic Limit:                | 54                     |                                |       |
| Plasticity Index:             | 31                     |                                |       |
| % Passing #200 sieve:         | 82                     |                                |       |
| Soil Classification:          | Elastic Silt with Sand |                                |       |
| Group Symbol:                 | MH                     |                                |       |



Notes: Moisture content obtained before shear from sample trimmings  
Moisture Content determined by ASTM D 2216  
Specific Gravity determined by ASTM D 854  
Percent passing #200 sieve determined by ASTM D 422

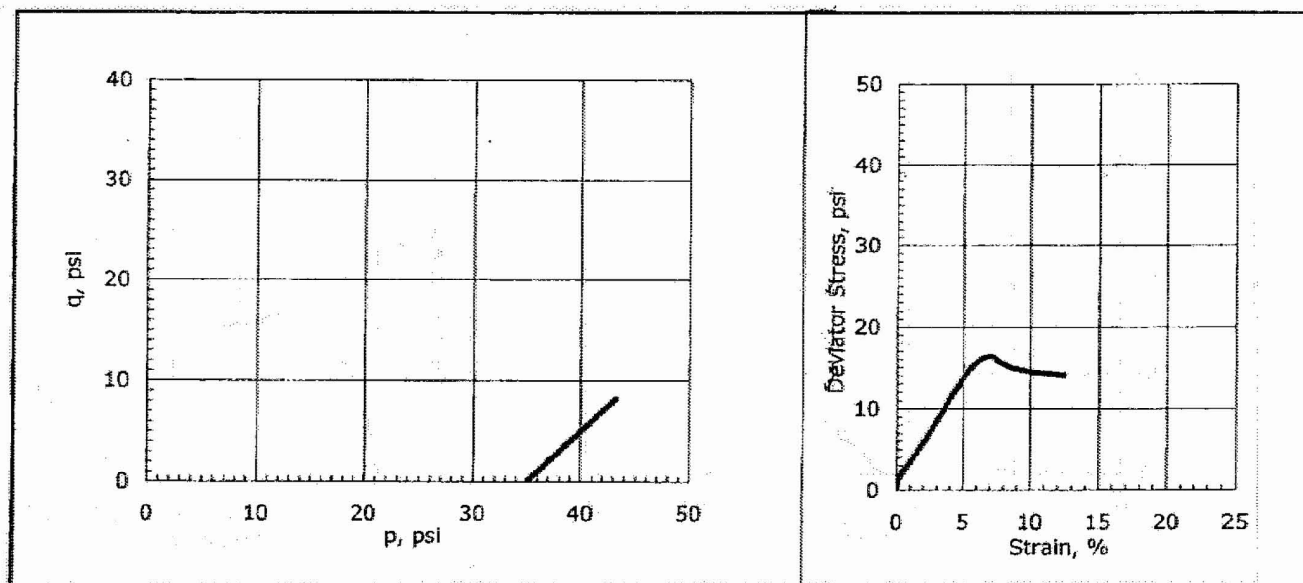


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|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/20/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-406                                              |
| Sample ID:          | S-16                                               |
| Depth, ft:          | 63.5-65.5                                          |
| Visual Description: | Moist, very dark gray organic clay with sand       |
| Test No.:           | UU24                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |                        |                                |      |
|-------------------------------|------------------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87                   | Confining Stress, psi:         | 35   |
| Initial Height, in:           | 6.00                   | Undrained Shear Strength, psi: | 8.2  |
| Height to Diameter Ratio:     | 2.09                   | Maximum Deviator Stress, psi:  | 16.4 |
| Initial Mass, grams:          | 1156                   | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 113.5                  | Strain at Failure, %:          | 7.0  |
| Initial Moisture Content, %:  | 39.1                   |                                |      |
| Initial Dry Density, pcf:     | 81.6                   |                                |      |
| Initial Degree of Saturation: | 97.7                   |                                |      |
| Initial Void Ratio:           | 1.10                   |                                |      |
| Measured Specific Gravity:    | 2.74                   |                                |      |
| Sample Type:                  | Tube                   |                                |      |
| Liquid Limit:                 | 63                     |                                |      |
| Plastic Limit:                | 19                     |                                |      |
| Plasticity Index:             | 44                     |                                |      |
| % Passing #200 sieve:         | 90                     |                                |      |
| Soil Classification:          | Organic Clay with Sand |                                |      |
| Group Symbol:                 | OH                     |                                |      |



Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

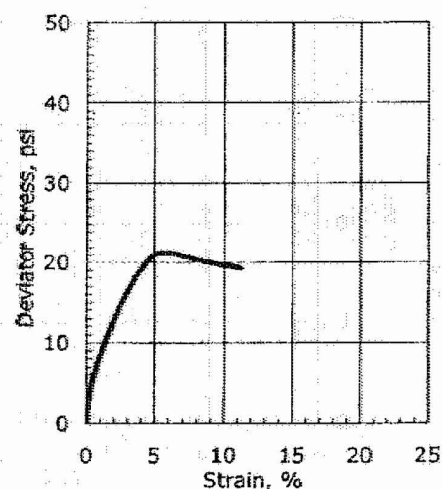
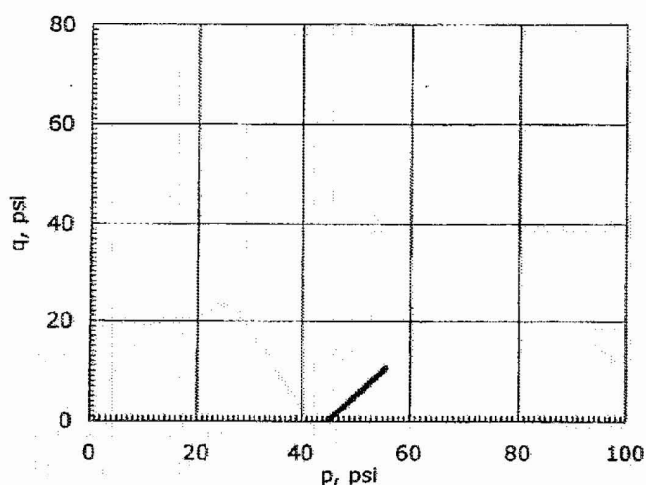


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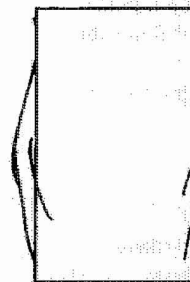
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|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/20/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-413                                              |
| Sample ID:          | S-17                                               |
| Depth, ft:          | 73-75                                              |
| Visual Description: | Moist, dark greenish gray clay                     |
| Test No.:           | UU23                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |          |                                |      |
|-------------------------------|----------|--------------------------------|------|
| Initial Diameter, in:         | 2.87     | Confining Stress, psi:         | 45   |
| Initial Height, in:           | 5.95     | Undrained Shear Strength, psi: | 10.6 |
| Height to Diameter Ratio:     | 2.07     | Maximum Deviator Stress, psi:  | 21.2 |
| Initial Mass, grams:          | 1191     | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 117.9    | Strain at Failure, %:          | 6.9  |
| Initial Moisture Content, %:  | 32.2     |                                |      |
| Initial Dry Density, pcf:     | 89.1     |                                |      |
| Initial Degree of Saturation: | 96.6     |                                |      |
| Initial Void Ratio:           | 0.91     |                                |      |
| Measured Specific Gravity:    | 2.73     |                                |      |
| Sample Type:                  | Tube     |                                |      |
| Liquid Limit:                 | 59       |                                |      |
| Plastic Limit:                | 16       |                                |      |
| Plasticity Index:             | 43       |                                |      |
| % Passing #200 sieve:         | 98       |                                |      |
| Soil Classification:          | Fat Clay |                                |      |
| Group Symbol:                 | CH       |                                |      |



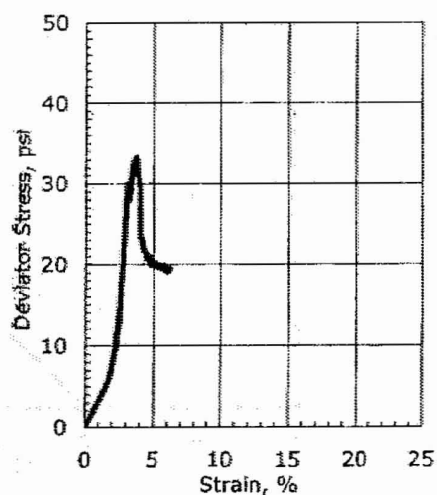
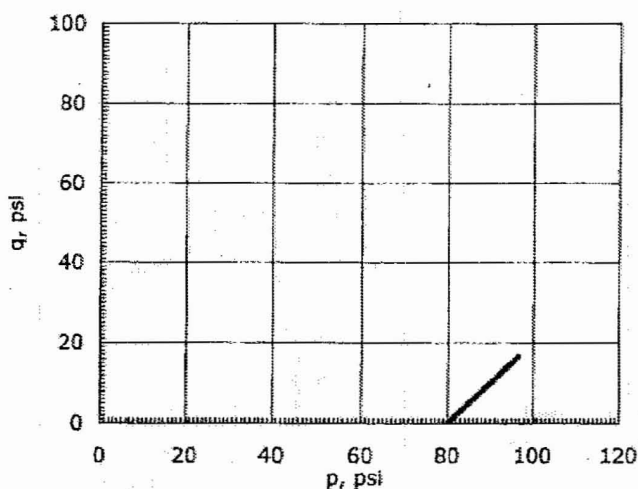
Notes: Moisture content obtained before shear from sample trimmings  
Moisture Content determined by ASTM D 2216  
Specific Gravity determined by ASTM D 854  
Percent passing #200 sieve determined by ASTM D 422

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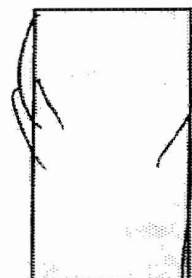
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|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/12/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-423                                              |
| Sample ID:          | S-35                                               |
| Depth, ft:          | 158.5-160.1                                        |
| Visual Description: | Moist, olive gray organic clay                     |
| Test No.:           | UU5                                                |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |              |                                |      |
|-------------------------------|--------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87         | Confining Stress, psi:         | 80   |
| Initial Height, in:           | 5.80         | Undrained Shear Strength, psi: | 16.6 |
| Height to Diameter Ratio:     | 2.02         | Maximum Deviator Stress, psi:  | 33.3 |
| Initial Mass, grams:          | 1063         | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 107.9        | Strain at Failure, %:          | 3.7  |
| Initial Moisture Content, %:  | 45.1         |                                |      |
| Initial Dry Density, pcf:     | 74.4         |                                |      |
| Initial Degree of Saturation: | 96.0         |                                |      |
| Initial Void Ratio:           | 1.27         |                                |      |
| Measured Specific Gravity:    | 2.71         |                                |      |
| Sample Type:                  | Tube         |                                |      |
| Liquid Limit:                 | 74           |                                |      |
| Plastic Limit:                | 18           |                                |      |
| Plasticity Index:             | 56           |                                |      |
| % Passing #200 sieve:         | 88           |                                |      |
| Soil Classification:          | Organic Clay |                                |      |
| Group Symbol:                 | OH           |                                |      |



Failure Sketch

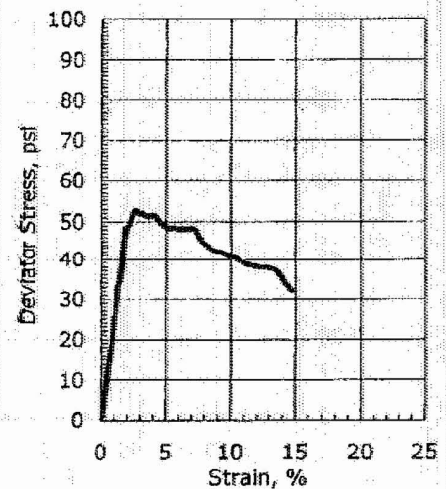
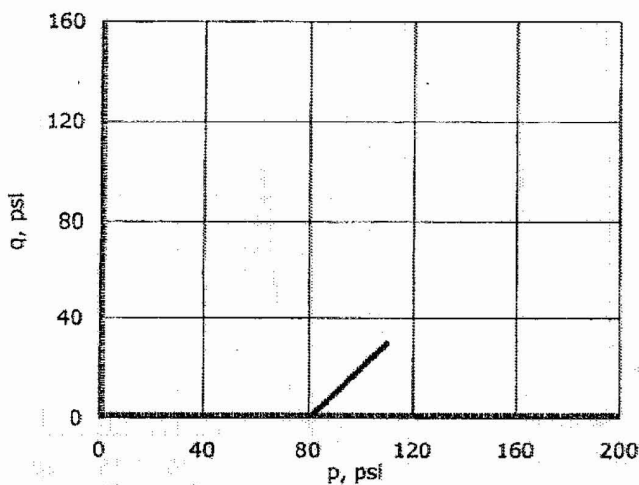
Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

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|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/21/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-423                                              |
| Sample ID:          | S-39                                               |
| Depth, ft:          | 178.5-179.8                                        |
| Visual Description: | Moist, <del>clay</del> silty sand                  |
| Test No.:           | UU20                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |            |                                |      |
|-------------------------------|------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87       | Confining Stress, psi:         | 80   |
| Initial Height, in:           | 6.15       | Undrained Shear Strength, psi: | 26.3 |
| Height to Diameter Ratio:     | 2.14       | Maximum Deviator Stress, psi:  | 52.6 |
| Initial Mass, grams:          | 1167       | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 111.7      | Strain at Failure, %:          | 2.6  |
| Initial Moisture Content, %:  | 41.7       |                                |      |
| Initial Dry Density, pcf:     | 78.9       |                                |      |
| Initial Degree of Saturation: | 101.0      |                                |      |
| Initial Void Ratio:           | 1.09       |                                |      |
| Measured Specific Gravity:    | 2.64       |                                |      |
| Sample Type:                  | Tube       |                                |      |
| Liquid Limit:                 | 64         |                                |      |
| Plastic Limit:                | 34         |                                |      |
| Plasticity Index:             | 30         |                                |      |
| % Passing #200 sieve:         | 46         |                                |      |
| Soil Classification:          | Silty Sand |                                |      |
| Group Symbol:                 | SM         |                                |      |



Failure Sketch

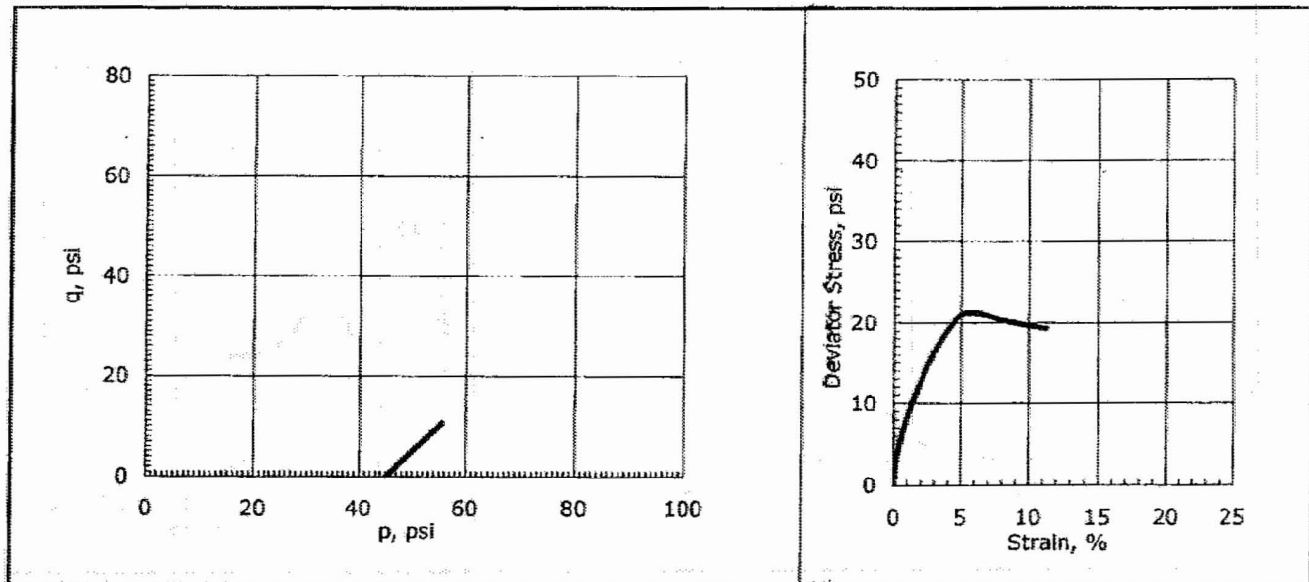
Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

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|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/29/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-427                                              |
| Sample ID:          | S-16                                               |
| Depth, ft:          | 63.5-65.5                                          |
| Visual Description: | Molst, black sandy organic clay                    |
| Test No.:           | UU23                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |                    |                                |      |
|-------------------------------|--------------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87               | Confining Stress, psi:         | 45   |
| Initial Height, in:           | 6.02               | Undrained Shear Strength, psi: | 10.6 |
| Height to Diameter Ratio:     | 2.10               | Maximum Deviator Stress, psi:  | 21.2 |
| Initial Mass, grams:          | 1187               | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 116.1              | Strain at Failure, %:          | 6.1  |
| Initial Moisture Content, %:  | 34.1               |                                |      |
| Initial Dry Density, pcf:     | 86.6               |                                |      |
| Initial Degree of Saturation: | 95.9               |                                |      |
| Initial Void Ratio:           | 0.97               |                                |      |
| Measured Specific Gravity:    | 2.74               |                                |      |
| Sample Type:                  | Tube               |                                |      |
| Liquid Limit:                 | 56                 |                                |      |
| Plastic Limit:                | 18                 |                                |      |
| Plasticity Index:             | 38                 |                                |      |
| % Passing #200 sieve:         | 61                 |                                |      |
| Soil Classification:          | Sandy Organic Clay |                                |      |
| Group Symbol:                 | OH                 |                                |      |



Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

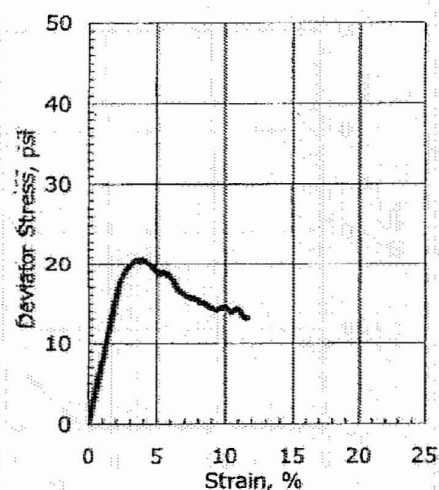
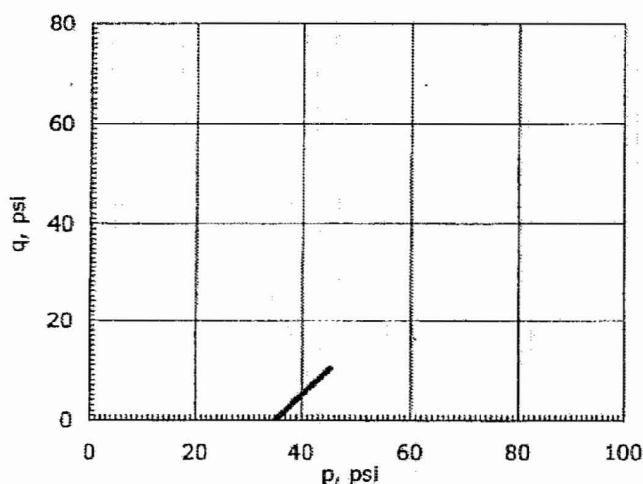


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|---------------------|--------------------------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP                 |
| Project Location:   | Calvert County, MD                                                 |
| GTX #:              | 6880                                                               |
| Test Date:          | 11/1/2006                                                          |
| Tested By:          | md                                                                 |
| Checked By:         | jdt                                                                |
| Boring ID:          | B-428                                                              |
| Sample ID:          | ---                                                                |
| Depth, ft:          | 60-62                                                              |
| Visual Description: | Moist, dark greenish gray <i>fat</i> organic clay <i>BB/4/6/07</i> |
| Test No.:           | UU26                                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



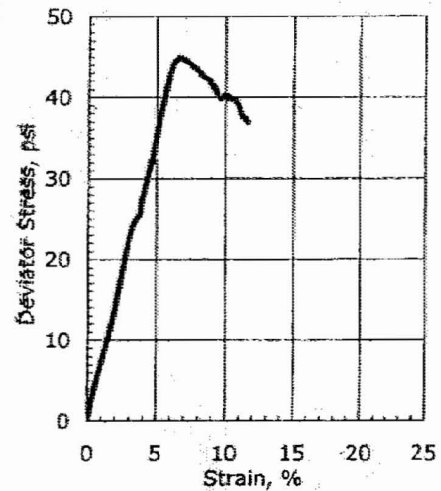
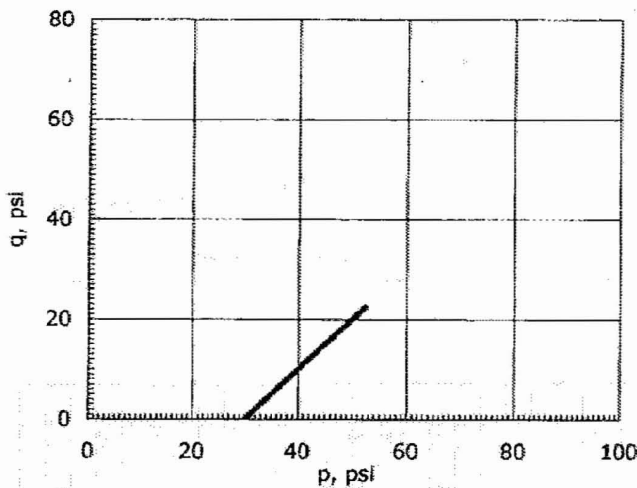
|                               |                                             |                                |      |
|-------------------------------|---------------------------------------------|--------------------------------|------|
| Initial Diameter, in:         | 2.86                                        | Confining Stress, psi:         | 35   |
| Initial Height, in:           | 6.10                                        | Undrained Shear Strength, psi: | 10.3 |
| Height to Diameter Ratio:     | 2.13                                        | Maximum Deviator Stress, psi:  | 20.6 |
| Initial Mass, grams:          | 1213                                        | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 117.9                                       | Strain at Failure, %:          | 3.8  |
| Initial Moisture Content, %:  | 34.2                                        |                                |      |
| Initial Dry Density, pcf:     | 87.8                                        |                                |      |
| Initial Degree of Saturation: | 97.6                                        |                                |      |
| Initial Void Ratio:           | 0.97                                        |                                |      |
| Measured Specific Gravity:    | 2.78                                        |                                |      |
| Sample Type:                  | Tube                                        |                                |      |
| Liquid Limit:                 | 61                                          |                                |      |
| Plastic Limit:                | 17                                          |                                |      |
| Plasticity Index:             | 44                                          |                                |      |
| % Passing #200 sieve:         | 93                                          |                                |      |
| Soil Classification:          | <i>Fat</i><br>Organic Clay <i>BB/4/6/07</i> |                                |      |
| Group Symbol:                 | CH-OH                                       |                                |      |



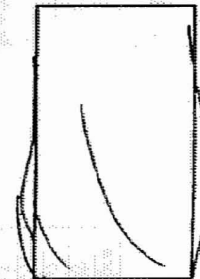
Notes: Moisture content obtained before shear from sample trimmings  
Moisture Content determined by ASTM D 2216  
Specific Gravity determined by ASTM D 854  
Percent passing #200 sieve determined by ASTM D 422

|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 10/19/2006                                         |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-433                                              |
| Sample ID:          | S-11                                               |
| Depth, ft:          | 38.5-40.5                                          |
| Visual Description: | Moist, very dark gray clay                         |
| Test No.:           | UU25                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |          |                                |      |
|-------------------------------|----------|--------------------------------|------|
| Initial Diameter, in:         | 2.87     | Confining Stress, psi:         | 30   |
| Initial Height, in:           | 6.05     | Undrained Shear Strength, psi: | 22.5 |
| Height to Diameter Ratio:     | 2.11     | Maximum Deviator Stress, psi:  | 44.9 |
| Initial Mass, grams:          | 1238     | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 120.5    | Strain at Failure, %:          | 6.7  |
| Initial Moisture Content, %:  | 30.8     |                                |      |
| Initial Dry Density, pcf:     | 92.1     |                                |      |
| Initial Degree of Saturation: | 97.3     |                                |      |
| Initial Void Ratio:           | 0.88     |                                |      |
| Measured Specific Gravity:    | 2.77     |                                |      |
| Sample Type:                  | Tube     |                                |      |
| Liquid Limit:                 | 61       |                                |      |
| Plastic Limit:                | 14       |                                |      |
| Plasticity Index:             | 47       |                                |      |
| % Passing #200 sieve:         | 91       |                                |      |
| Soil Classification:          | Fat Clay |                                |      |
| Group Symbol:                 | CH       |                                |      |



Failure Sketch

Notes: Moisture content obtained before shear from sample trimmings  
Moisture Content determined by ASTM D 2216  
Specific Gravity determined by ASTM D 854  
Percent passing #200 sieve determined by ASTM D 422



# Unconsolidated Undrained Triaxial Compression Test

Project: Calvert Cliffs Nuclear Power Plant

Location: Calvert County, MD

## ASTM D2850

Schnabel Contract: 06120048

Boring No.: B-434

Depth: 53.5-55.5ft.

Elevation: 51.7 to 49.7 ft

Confining Stress (psi): 35.0

Date: 11/27/2006

Reviewed by: CJS

| Specimen Conditions     |       |
|-------------------------|-------|
| Diameter (in)           | 2.890 |
| Height (in)             | 5.829 |
| Area (in <sup>2</sup> ) | 6.56  |
| Moisture (%)            | 35.5  |
| Weight (lbs)            | 2.57  |
| $\rho_{wet}$ (pcf)      | 118.3 |
| $\rho_{dry}$ (pcf)      | 85.8  |
| Void Ratio              | 1.06  |
| Saturation, %           | 95    |

| Shear Testing Conditions |      |
|--------------------------|------|
| Cell Pressure (psi)      | 35.0 |
| Rate of Strain (%/min)   | 1.0  |

Specimen Type: Tube Sample

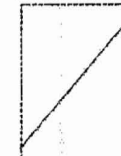
Axial Strain at Failure (%): 3.00  
Compressive Strength (psi): 50.7  
Major Principal Stress (psi): 85.7  
Minor Principal Stress (psi): 35.0

Soil Description: FAT CLAY (CH) trace sand - gray

Liquid Limit: 56  
Plasticity Index: 32  
% finer than No. 200: 94.9  
Specific Gravity: 2.84

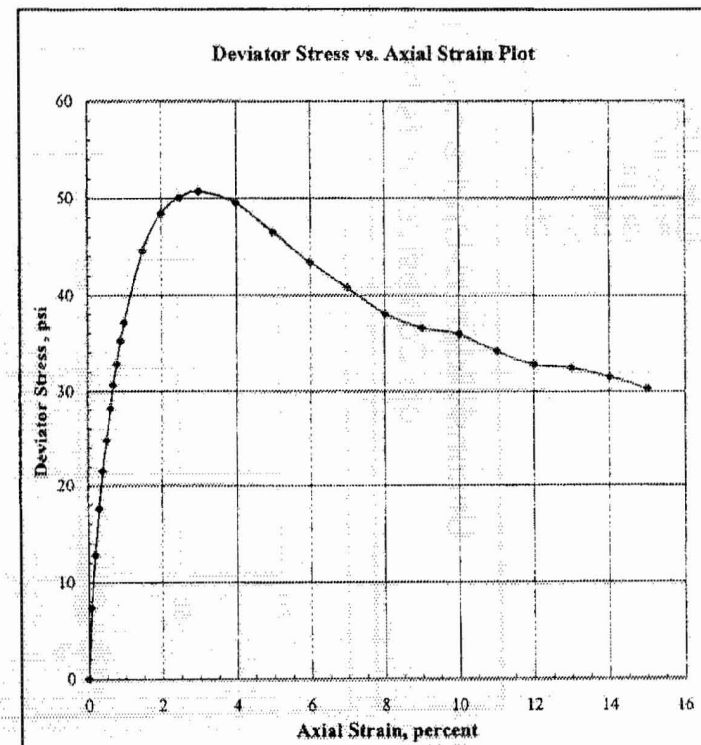
Remarks:

Failure Sketch



| Reading No. | Deviator Load (lbs) | Corrected Dev. Load <sup>1</sup> (lbs.) | Axial Displacement (in.) | Axial Strain (%) | Corrected Area <sup>2</sup> (in <sup>2</sup> ) | $\sigma_1$ (psi) | $\sigma_3$ (psi) | Deviator Stress (psi) |
|-------------|---------------------|-----------------------------------------|--------------------------|------------------|------------------------------------------------|------------------|------------------|-----------------------|
| Initial     | 0.0                 | 0.0                                     | 0.000                    | 0.00             | 6.56                                           | 35.0             | 35.0             | 0.0                   |
| 1           | 48.1                | 48.1                                    | 0.005                    | 0.09             | 6.57                                           | 42.3             | 35.0             | 7.3                   |
| 2           | 84.0                | 84.0                                    | 0.011                    | 0.19             | 6.57                                           | 47.8             | 35.0             | 12.8                  |
| 3           | 115.4               | 115.3                                   | 0.017                    | 0.29             | 6.58                                           | 52.5             | 35.0             | 17.5                  |
| 4           | 141.6               | 141.5                                   | 0.023                    | 0.39             | 6.59                                           | 56.5             | 35.0             | 21.5                  |
| 5           | 163.6               | 163.5                                   | 0.029                    | 0.50             | 6.60                                           | 59.8             | 35.0             | 24.8                  |
| 6           | 186.1               | 186.0                                   | 0.036                    | 0.62             | 6.60                                           | 63.2             | 35.0             | 28.2                  |
| 7           | 202.5               | 202.4                                   | 0.040                    | 0.69             | 6.61                                           | 65.6             | 35.0             | 30.6                  |
| 8           | 217.5               | 217.3                                   | 0.046                    | 0.79             | 6.61                                           | 67.9             | 35.0             | 32.9                  |
| 9           | 233.9               | 233.7                                   | 0.052                    | 0.89             | 6.62                                           | 70.3             | 35.0             | 35.3                  |
| 10          | 246.7               | 246.5                                   | 0.058                    | 1.00             | 6.63                                           | 72.2             | 35.0             | 37.2                  |
| 11          | 257.1               | 256.8                                   | 0.067                    | 1.49             | 6.66                                           | 79.5             | 35.0             | 44.5                  |
| 12          | 324.7               | 324.3                                   | 0.116                    | 1.99             | 6.70                                           | 83.4             | 35.0             | 48.4                  |
| 13          | 337.2               | 336.7                                   | 0.145                    | 2.49             | 6.73                                           | 85.0             | 35.0             | 50.0                  |
| 14          | 343.5               | 342.8                                   | 0.175                    | 3.00             | 6.77                                           | 85.7             | 35.0             | 50.7                  |
| 15          | 339.4               | 338.5                                   | 0.233                    | 4.00             | 6.84                                           | 84.5             | 35.0             | 49.5                  |
| 16          | 322.5               | 321.4                                   | 0.291                    | 4.99             | 6.91                                           | 81.5             | 35.0             | 46.5                  |
| 17          | 304.1               | 302.8                                   | 0.350                    | 6.00             | 6.98                                           | 78.4             | 35.0             | 43.4                  |
| 18          | 289.4               | 287.9                                   | 0.408                    | 7.00             | 7.06                                           | 75.8             | 35.0             | 40.8                  |
| 19          | 273.2               | 271.5                                   | 0.467                    | 8.01             | 7.13                                           | 73.1             | 35.0             | 38.1                  |
| 20          | 266.0               | 264.0                                   | 0.525                    | 9.01             | 7.21                                           | 71.6             | 35.0             | 36.6                  |
| 21          | 264.2               | 262.0                                   | 0.583                    | 10.00            | 7.29                                           | 70.9             | 35.0             | 35.9                  |
| 22          | 254.2               | 251.8                                   | 0.642                    | 11.01            | 7.37                                           | 69.1             | 35.0             | 34.1                  |
| 23          | 247.3               | 244.7                                   | 0.700                    | 12.01            | 7.46                                           | 67.8             | 35.0             | 32.8                  |
| 24          | 247.6               | 244.8                                   | 0.758                    | 13.00            | 7.54                                           | 67.4             | 35.0             | 32.4                  |
| 25          | 243.4               | 240.3                                   | 0.817                    | 14.02            | 7.63                                           | 66.5             | 35.0             | 31.5                  |
| 26          | 237.0               | 233.7                                   | 0.875                    | 15.01            | 7.72                                           | 65.3             | 35.0             | 30.3                  |

Notes: Deviator load corrected for membrane effects  
light Cylinder Correction Method

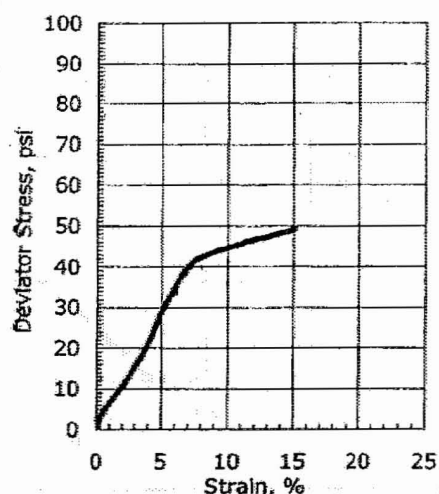
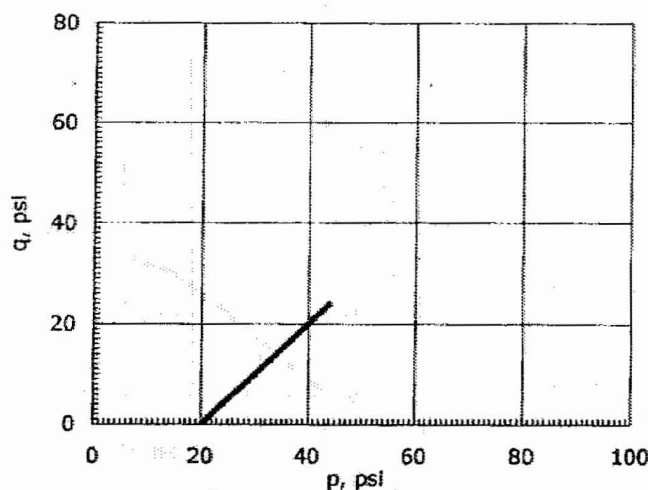


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|---------------------|-----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                          |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP  |
| Project Location:   | Calvert County, MD                                  |
| GTX #:              | 6880                                                |
| Test Date:          | 9/20/2005                                           |
| Tested By:          | md                                                  |
| Checked By:         | ldt                                                 |
| Boring ID:          | B-701                                               |
| Sample ID:          | S-12                                                |
| Depth, ft:          | 43.5-45.2                                           |
| Visual Description: | Moist, mottled olive gray and light gray sandy silt |
| Test No.:           | UU16                                                |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |                    |                                |      |
|-------------------------------|--------------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87               | Confining Stress, psi:         | 20   |
| Initial Height, in:           | 6.30               | Undrained Shear Strength, psi: | 24.6 |
| Height to Diameter Ratio:     | 2.20               | Maximum Deviator Stress, psi:  | 49.3 |
| Initial Mass, grams:          | 1240               | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 115.9              | Strain at Failure, %:          | 15.0 |
| Initial Moisture Content, %:  | 30.8               |                                |      |
| Initial Dry Density, pcf:     | 88.6               |                                |      |
| Initial Degree of Saturation: | 94.6               |                                |      |
| Initial Void Ratio:           | 0.86               |                                |      |
| Measured Specific Gravity:    | 2.64               |                                |      |
| Sample Type:                  | Tube               |                                |      |
| Liquid Limit:                 | 54                 |                                |      |
| Plastic Limit:                | 33                 |                                |      |
| Plasticity Index:             | 21                 |                                |      |
| % Passing #200 sieve:         | 64                 |                                |      |
| Soil Classification:          | Sandy Elastic Silt |                                |      |
| Group Symbol:                 | MH                 |                                |      |



Failure Sketch

Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422

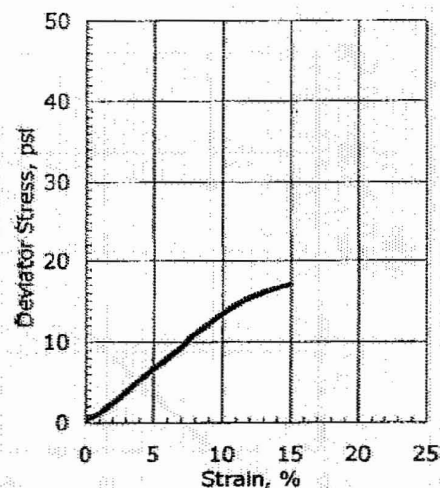
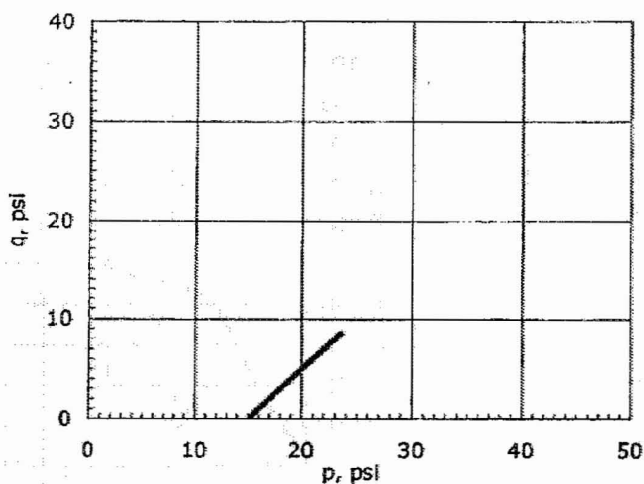


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|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/20/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-722                                              |
| Sample ID:          | UD-1                                               |
| Depth, ft:          | 33.5-35.5                                          |
| Visual Description: | Moist, brownish yellow silty sand                  |
| Test No.:           | UU9                                                |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |             |                                |      |
|-------------------------------|-------------|--------------------------------|------|
| Initial Diameter, in:         | 2.87        | Confining Stress, psi:         | 25   |
| Initial Height, in:           | 5.80        | Undrained Shear Strength, psi: | 8.5  |
| Height to Diameter Ratio:     | 2.02        | Maximum Deviator Stress, psi:  | 17.1 |
| Initial Mass, grams:          | 1178        | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 119.6       | Strain at Failure, %:          | 15.0 |
| Initial Moisture Content, %:  | 28.5        |                                |      |
| Initial Dry Density, pcf:     | 93.0        |                                |      |
| Initial Degree of Saturation: | 92.6        |                                |      |
| Initial Void Ratio:           | 0.85        |                                |      |
| Measured Specific Gravity:    | 2.76        |                                |      |
| Sample Type:                  | Tube        |                                |      |
| Liquid Limit:                 | ---         |                                |      |
| Plastic Limit:                | ---         |                                |      |
| Plasticity Index:             | Non-Plastic |                                |      |
| % Passing #200 sieve:         | 20          |                                |      |
| Soil Classification:          | Silty Sand  |                                |      |
| Group Symbol:                 | SM          |                                |      |



Failure Sketch

Notes: Moisture content obtained before shear from sample trimmings  
Moisture Content determined by ASTM D 2216  
Specific Gravity determined by ASTM D 854  
Percent passing #200 sieve determined by ASTM D 422

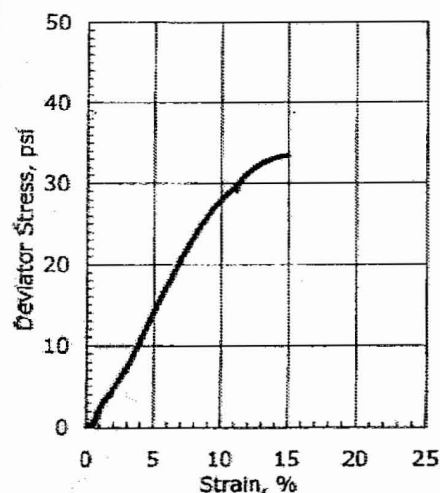
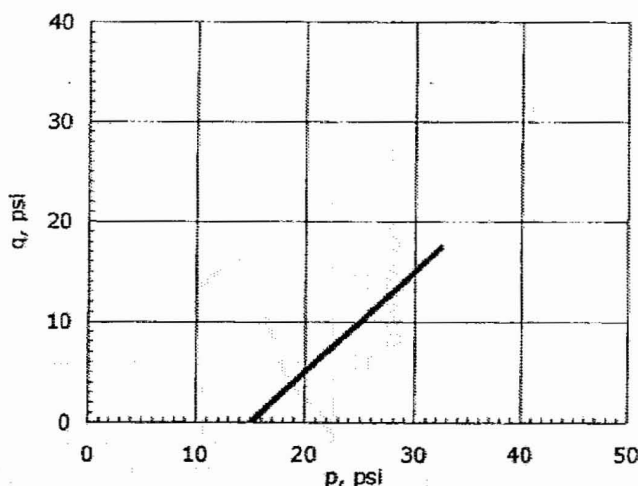


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|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/21/2006                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-723                                              |
| Sample ID:          | UD-2                                               |
| Depth, ft:          | 28.5-30.5                                          |
| Visual Description: | Moist, dark olive gray clay                        |
| Test No.:           | UU19                                               |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |          |                                |      |
|-------------------------------|----------|--------------------------------|------|
| Initial Diameter, in:         | 2.87     | Confining Stress, psi:         | 15   |
| Initial Height, in:           | 5.90     | Undrained Shear Strength, psi: | 16.7 |
| Height to Diameter Ratio:     | 2.06     | Maximum Deviator Stress, psi:  | 33.5 |
| Initial Mass, grams:          | 1198     | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 119.6    | Strain at Failure, %:          | 15.0 |
| Initial Moisture Content, %:  | 27.3     |                                |      |
| Initial Dry Density, pcf:     | 94.0     |                                |      |
| Initial Degree of Saturation: | 92.4     |                                |      |
| Initial Void Ratio:           | 0.80     |                                |      |
| Measured Specific Gravity:    | 2.71     |                                |      |
| Sample Type:                  | Tube     |                                |      |
| Liquid Limit:                 | 56       |                                |      |
| Plastic Limit:                | 15       |                                |      |
| Plasticity Index:             | 41       |                                |      |
| % Passing #200 sieve:         | 90       |                                |      |
| Soil Classification:          | Fat Clay |                                |      |
| Group Symbol:                 | CH       |                                |      |



Failure Sketch

Notes:

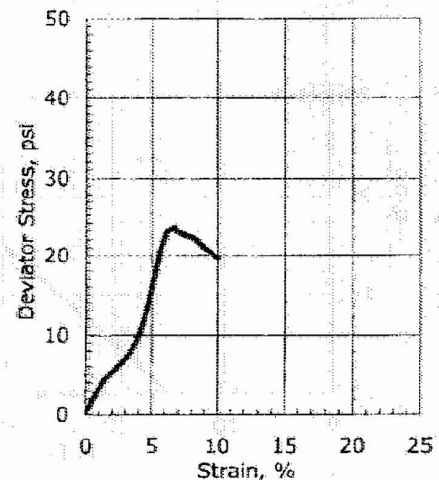
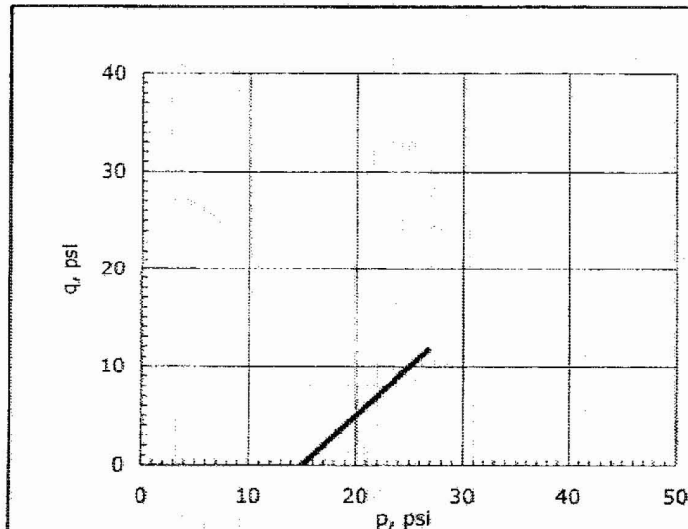
- Moisture content obtained before shear from sample trimmings
- Moisture Content determined by ASTM D 2216
- Specific Gravity determined by ASTM D 854
- Percent passing #200 sieve determined by ASTM D 422

# GeoTesting express

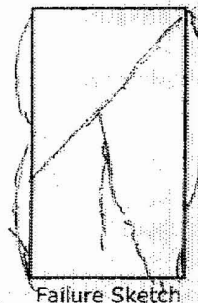
a subsidiary of Geocomp Corporation

|                     |                                                    |
|---------------------|----------------------------------------------------|
| Client:             | Schnabel Engineering, Inc.                         |
| Project Name:       | Subsurface Investigation Calvert Cliffs Nuclear PP |
| Project Location:   | Calvert County, MD                                 |
| GTX #:              | 6880                                               |
| Test Date:          | 9/19/2005                                          |
| Tested By:          | md                                                 |
| Checked By:         | jdt                                                |
| Boring ID:          | B-723                                              |
| Sample ID:          | UD-3                                               |
| Depth, ft:          | 38.5-40.5                                          |
| Visual Description: | Moist, greenish gray clay                          |
| Test No.:           | UU8                                                |

## Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils by ASTM D 2850-03a



|                               |          |                                |      |
|-------------------------------|----------|--------------------------------|------|
| Initial Diameter, in:         | 2.87     | Confining Stress, psi:         | 15   |
| Initial Height, in:           | 6.10     | Undrained Shear Strength, psi: | 11.7 |
| Height to Diameter Ratio:     | 2.13     | Maximum Deviator Stress, psi:  | 23.5 |
| Initial Mass, grams:          | 1160     | Strain Rate, %/min:            | 1    |
| Initial Bulk Density, pcf:    | 112.0    | Strain at Failure, %:          | 6.7  |
| Initial Moisture Content, %:  | 33.8     |                                |      |
| Initial Dry Density, pcf:     | 83.7     |                                |      |
| Initial Degree of Saturation: | 90.1     |                                |      |
| Initial Void Ratio:           | 1.01     |                                |      |
| Measured Specific Gravity     | 2.73     |                                |      |
| Sample Type:                  | Tube     |                                |      |
| Liquid Limit:                 | 64       |                                |      |
| Plastic Limit:                | 19       |                                |      |
| Plasticity Index:             | 45       |                                |      |
| % Passing #200 sieve:         | 85       |                                |      |
| Soil Classification:          | Fat Clay |                                |      |
| Group Symbol:                 | CH       |                                |      |



Notes: Moisture content obtained before shear from sample trimmings  
 Moisture Content determined by ASTM D 2216  
 Specific Gravity determined by ASTM D 854  
 Percent passing #200 sieve determined by ASTM D 422