

## **Unconfined Compressive Strength of Cohesive Soil (ASTM D2166)**

(Project: WAS-77-9.58, Boring Location: B-005-0-23, ST-6, Depth: 13.9 - 14.4ft)

Tested Date: 8/7/2023

### **Specimen Properties**

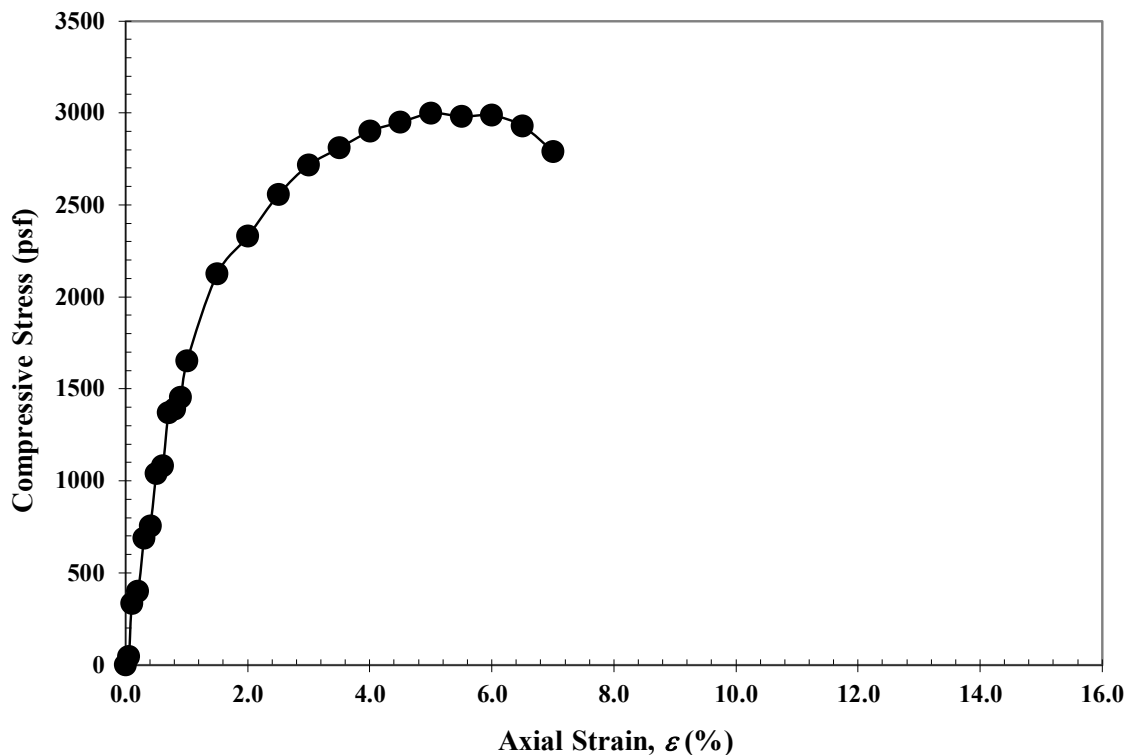
Average Dia., $D_{avg}$ (in):	2.87
Average Height, $H_{avg}$ (in):	5.74
Area, $A$ (in <sup>2</sup> ):	6.48
Volume, $V$ (in <sup>3</sup> ):	37.18
Wet Mass of Specimen (lb):	3.0
Moisture Content (%):	14.2
Dry Mass of Specimen (lb):	2.6
Wet Unit Weight, $\gamma$ (lb/ft <sup>3</sup> ):	138.3
Dry Unit Weight, $\gamma_d$ (lb/ft <sup>3</sup> ):	121.1

### **Final Specimen Figure**



### **Results**

Unconfined Compressive Strength (psf):	<b>2998</b>
Strain (%):	<b>5.0</b>



**Notes:** Stiff, red-brown, SILTY CLAY, little sand, trace gravel, damp.

### Unconfined Compressive Strength of Rock Core (ASTM D7012 Method C)

(Project: WAS-77-9.58, Boring Location: B-005-0-23, NQ2-1, Depth: 53.2 - 53.6ft)

Tested Date: 8/10/2023

#### Specimen Properties

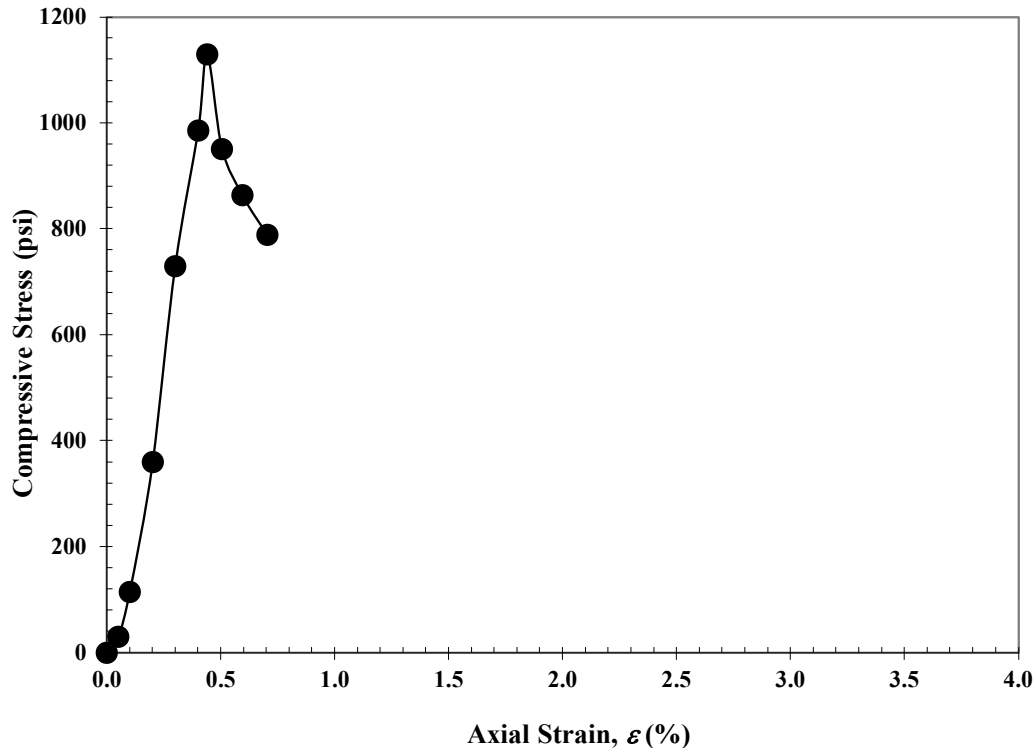
Average Dia., $D_{avg}$ (in):	1.99
Average Height, $H_{avg}$ (in):	4.55
Length to Diameter Ratio:	2.28
Area, $A$ (in <sup>2</sup> ):	3.11
Volume, $V$ (in <sup>3</sup> ):	14.15
Wet Mass of Specimen (lb):	1.3
Moisture Content (%):	5.0
Dry Mass of Specimen (lb):	1.2
Wet Unit Weight, $\gamma$ (lb/ft <sup>3</sup> ):	158.2
Dry Unit Weight, $\gamma_d$ (lb/ft <sup>3</sup> ):	150.8

#### Final Specimen Figure



#### Results

Unconfined Compressive Strength (psi):	<b>1129</b>	
Strain (%):	<b>0.4</b>	<b>8</b> (MPa)



**Notes:** Claystone, red-brown, moderately weathered, weak.