Unconfined Compression Test

Test Data Sheet

Project: R-0623 NC 24/27 Troy Bypass
F&R Project No.: 66N-0209

Boring No.: Sta. 141+00_RT
Sample ID: RS - 1
Depth, ft.: 13.8' to 14.5'

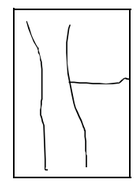
Specimen Description: Light gray, pink, and white, metavolcanic (felsic) tuff

Specimen Conditions	
Diameter (in.)	1.83
Height (in.)	3.67
Area (in^2)	2.62
Unit Wt. (pcf)	157.5

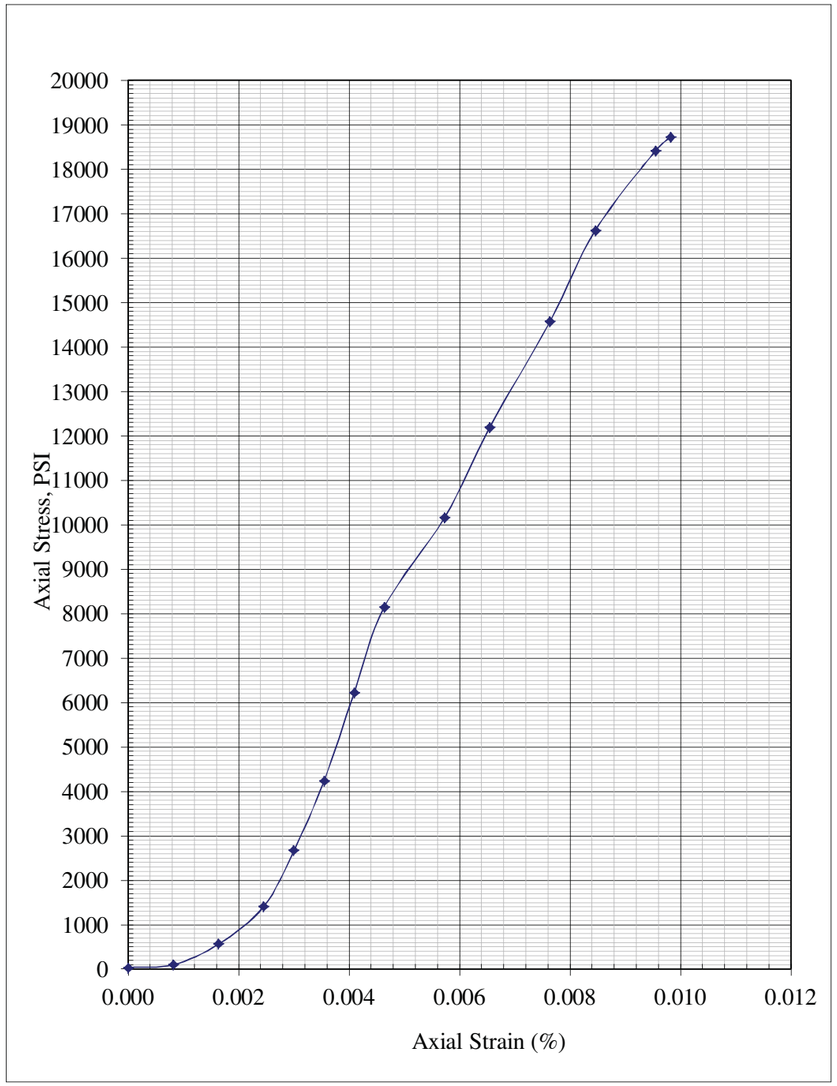
Shear Testing Conditions	
Loading Rate (%/min):	0.02 in/min.

Youngs Modulus (average): 3.39 x 10^5 ksf

Failure Sketch



Reading No.	Dial Guage Reading (in.)	Axial Load (lbs)	Total Axial Deformation (in.)	Axial Strain (%)	Corrected Area[1] (in^2)	Axial Stress (psi)	Axial Stress (Kpa)
1	0.000	83	0.000	0.0000	2.62	31.65	218.20
2	0.003	266	0.003	0.0008	2.62	101.42	699.29
3	0.006	1480	0.006	0.0016	2.62	564.30	3890.74
4	0.009	3700	0.009	0.0025	2.62	1410.75	9726.77
5	0.011	7000	0.011	0.0030	2.62	2668.97	18401.89
6	0.013	11110	0.013	0.0035	2.62	4236.01	29206.27
7	0.015	16300	0.015	0.0041	2.62	6214.81	42849.65
8	0.017	21380	0.017	0.0046	2.62	8151.66	56203.71
9	0.021	26650	0.021	0.0057	2.62	10160.86	70056.71
10	0.024	31980	0.024	0.0065	2.62	12192.94	84067.37
11	0.028	38220	0.028	0.0076	2.62	14571.89	100469.66
12	0.031	43600	0.031	0.0085	2.62	16622.95	114611.23
13	0.035	48300	0.035	0.0095	2.62	18414.67	126964.72
14	0.036	49117	0.036	0.0098	2.62	18726.10	129112.00



Notes: 1. Right Cylinder Correction Method