

Project No. 241359
 Boring No. B-002-0-24
 Depth 13.5 - 15.5'

Slope from s vs σ' Graph= 0.5722

$$\phi = 29.8$$

	Shear Strength	Normal Stress
Trial 1	4.1	6.0
Trial 2	7.9	12.0
Trial 3	14.5	24.0

TRIAL 1

Initial Moisture Content

Mass of Container, gm	50.9
Initial mass Container + Soil, gm	334.4
Final Mass Container + Soil, gm	296.0
Mass of Soil, gm	245.1
Moisture Content, %	15.7

Initial Dry Unit Weight

Initial Height, in.	1.000
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1384.1
Mass of Soil, gm	161.4
Unit Weight, pcf	108.3

Final Moisture Content

Mass of Container, gm	50.4
Initial mass Container + Soil, gm	217.2
Final Mass Container + Soil, gm	189.8
Mass of Soil, gm	139.4
Moisture Content, %	19.7

Final Dry Unit Weight

Final Height, in.	0.985
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1389.5
Mass of Soil, gm	166.8
Unit Weight, pcf	109.8

TRIAL 2

Initial Moisture Content

Mass of Container, gm	50.9
Initial mass Container + Soil, gm	334.4
Final Mass Container + Soil, gm	296.0
Mass of Soil, gm	245.1
Moisture Content, %	15.7

Initial Dry Unit Weight

Initial Height, in.	1.000
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1383.8
Mass of Soil, gm	161.1
Unit Weight, pcf	108.1

Final Moisture Content

Mass of Container, gm	50.2
Initial mass Container + Soil, gm	217.1
Final Mass Container + Soil, gm	190.6
Mass of Soil, gm	140.4
Moisture Content, %	18.9

Final Dry Unit Weight

Final Height, in.	0.968
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1389.6
Mass of Soil, gm	166.9
Unit Weight, pcf	112.5

TRIAL 3

Initial Moisture Content

Mass of Container, gm	50.9
Initial mass Container + Soil, gm	334.4
Final Mass Container + Soil, gm	296
Mass of Soil, gm	245.1
Moisture Content, %	15.7

Initial Dry Unit Weight

Initial Height, in.	1.000
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1384.3
Mass of Soil, gm	161.6
Unit Weight, pcf	108.4

Final Moisture Content

Mass of Container, gm	50.6
Initial mass Container + Soil, gm	217.4
Final Mass Container + Soil, gm	192.8
Mass of Soil, gm	142.2
Moisture Content, %	17.3

Final Dry Unit Weight

Final Height, in.	0.957
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1389.5
Mass of Soil, gm	166.8
Unit Weight, pcf	115.4