

Project No. 241359
 Boring No. B-003-0-24
 Depth 25.5 - 27.5'

Slope from s vs σ' Graph= 0.5189

$$\phi = 27.4$$

	Shear Strength	Normal Stress
Trial 1	9.1	12.0
Trial 2	15.5	24.0
Trial 3	27.8	48.0

TRIAL 1

Initial Moisture Content

Mass of Container, gm	50.5
Initial mass Container + Soil, gm	263.8
Final Mass Container + Soil, gm	220.3
Mass of Soil, gm	169.8
Moisture Content, %	25.6

Initial Dry Unit Weight

Initial Height, in.	1.000
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1387.8
Mass of Soil, gm	165.1
Unit Weight, pcf	102.0

Final Moisture Content

Mass of Container, gm	51.5
Initial mass Container + Soil, gm	222.6
Final Mass Container + Soil, gm	183.2
Mass of Soil, gm	131.7
Moisture Content, %	29.9

Final Dry Unit Weight

Final Height, in.	0.973
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1393.8
Mass of Soil, gm	171.1
Unit Weight, pcf	105.0

TRIAL 2

Initial Moisture Content

Mass of Container, gm	50.5
Initial mass Container + Soil, gm	263.8
Final Mass Container + Soil, gm	220.3
Mass of Soil, gm	169.8
Moisture Content, %	25.6

Initial Dry Unit Weight

Initial Height, in.	1.000
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1387.6
Mass of Soil, gm	164.9
Unit Weight, pcf	101.9

Final Moisture Content

Mass of Container, gm	50.4
Initial mass Container + Soil, gm	221
Final Mass Container + Soil, gm	182.4
Mass of Soil, gm	132
Moisture Content, %	29.2

Final Dry Unit Weight

Final Height, in.	0.952
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1393.3
Mass of Soil, gm	170.6
Unit Weight, pcf	107.6

TRIAL 3

Initial Moisture Content

Mass of Container, gm	50.5
Initial mass Container + Soil, gm	263.8
Final Mass Container + Soil, gm	220.3
Mass of Soil, gm	169.8
Moisture Content, %	25.6

Initial Dry Unit Weight

Initial Height, in.	1.000
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1388.0
Mass of Soil, gm	165.3
Unit Weight, pcf	102.1

Final Moisture Content

Mass of Container, gm	50.8
Initial mass Container + Soil, gm	221.5
Final Mass Container + Soil, gm	183.3
Mass of Soil, gm	132.5
Moisture Content, %	28.8

Final Dry Unit Weight

Final Height, in.	0.933
Mass Shear Box, gm	1222.7
Shear Box + Soil, gm	1393.4
Mass of Soil, gm	170.7
Unit Weight, pcf	110.3