



Angelo State University

David L. Hirschfeld Department of Engineering

Triaxial Compression Test (Specimen Data)

Client: ROSCOE IncProject #: 3341Project Title: Red ArroyoTest performed by: W. KitchTest Date: 3/24/2020 - 4/13/2020

Checked by: _____

Boring No.: NASample/Specimen No.: 4Sample Depth: NASoil Classification: SM Silty Sand Lab CompactedType of test: CuConfining Stress: 30 lb/in²Test no.: 4

Before test

After test

	Specimen	Trimmings	Specimen
Tare no.	<u>—</u>	<u>546</u>	<u>Tare #4</u>
Mass of tare	<u>—</u> g	<u>13.27</u> g	<u>531.88</u> g
Mass of Soil+Can (wet)	<u>1196.75</u> g	<u>44.57</u> g	<u>1733.26</u> g
Mass of Soil+Can (dry)	<u>1065.98</u> g	<u>41.32</u> g	<u>1597.86</u> g
Mass water (W_w)	W_{w0} g		W_{wf} g
Mass dry soil (W_s)			
Moisture Content (w)			

Initial Specimen Conditions

Sample Diameter		Sample Height		Sample Area	
Top	<u>2.886</u> in	1	<u>5.083</u> in	<u>6.542</u>	in ²
Middle	<u>2.884</u> in	2	<u>5.090</u> in	Sample Volume	
Bottom	<u>2.888</u> in	3	<u>5.109</u> in		in ³
Average	<u>2.886</u> in	Average	<u>5.097</u> in		

Sp gr of solids (G_s)		Void ratio (e)	
Volume of solids (V_s)	in ³	Saturation (S)	%
Piston height	<u>4.222</u> in	Dry unit weight (γ_d)	lb/ft ³

Specimen Conditions After Consolidation

Piston height	<u>4.160</u> in	Volume ($H_c \times A_c$)	in ³
Change in height (ΔH_o)	<u>0.062</u> in	Void Ratio $[(V_c - V_s)/V_s]$	
Height (H_c)	<u>5.085</u> in	Saturation	%
Volume change (ΔV_o)	in ³		
Area (A_c)	in ²		

Specimen Conditions After Test

Change in height (ΔH)	<u>0.64</u> in	Volume ($H_f \times A_f$)	in ³
Height (H_f)	in	Void Ratio $[(V_f - V_s)/V_s]$	
Volume change (ΔV_f)	in ³	Saturation	%
Area (A_f)	in ²		

Triaxial Test Consolidation

Client: **ROSCOE Inc**

Project #: 3341

Project Title: Red Arrow

Test performed by: W Kitey

Test Date: 3/21/2020 - 4/13/2020

Checked by: _____

Boring No. : NA Sample No. : 4

Sample Depth: 24

Soil Classification: SM Silty Sand Lab Compacted

Cell Pressure 80.0

Back Pressure 56.1

Confining Stress **29.9**

Initial Sample Height 5.097

Final Sample Height 5.035

[illegible]



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Triaxial Compression (Saturation)

Client: Res Roscoe IncProject #: 3341Project Title: Red ArroyoTest performed by: W. KitehTest Date: 3/21/2020 - 4/12/2020

Checked by: _____

Boring No.: NA Sample/Specimen No.: 4Sample Depth: NASoil Classification: SM Silty Sand, Lab Compaction

2020 Date	Clock (24 hr time)	Elapsed Time (min)	Cell Pressure (psi)	Applied Pore Pressure (psi)	Measured Pore Pressure (psi)	Specimen Burette (cc)	B-Value	Note
4/3			79.9	50.0	59.5	49.9		
	16:24:00	0	90.0	—	—	—		
		0:10		—	59.4	0.94		
		0:20		—	59.5	0.95		
		0:30		—	59.4	0.94		
		0:40		—	59.2	0.92		
		0:50		—	59.1	0.91		
		1:00		—	59.0	0.90		
			90.0	60.0	60.5	—		Valve open
4/4			90.0	59.9	60.5	60.5		
	16:36:00	0:00	100.0	—	—	—		
		:10		—	69.3	69.3	0.88	
		:20		—	69.4	69.4	0.89	
		:30		—	69.3		0.88	
		:40		—	69.2		0.87	
		:50		—	69.1		0.86	
		1:00		—	69.0		0.85	
		1:10		—	68.9		0.84	
		1:20		—	68.9		0.84	
		1:30		—	68.8		0.83	
		1:40		—	68.8		0.83	
		1:50		—	68.7		0.82	
		2:00		—	68.7		0.82	
				70.0			—	Valve open
4/11/202	Using Geotac						0.97	