UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 501
Soil Boring: 09-500B
Sample No. OST-7
Soil Type: CLAYEY SILT, LITTLE F-M SAND, GRAY
USCS: CL-ML
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

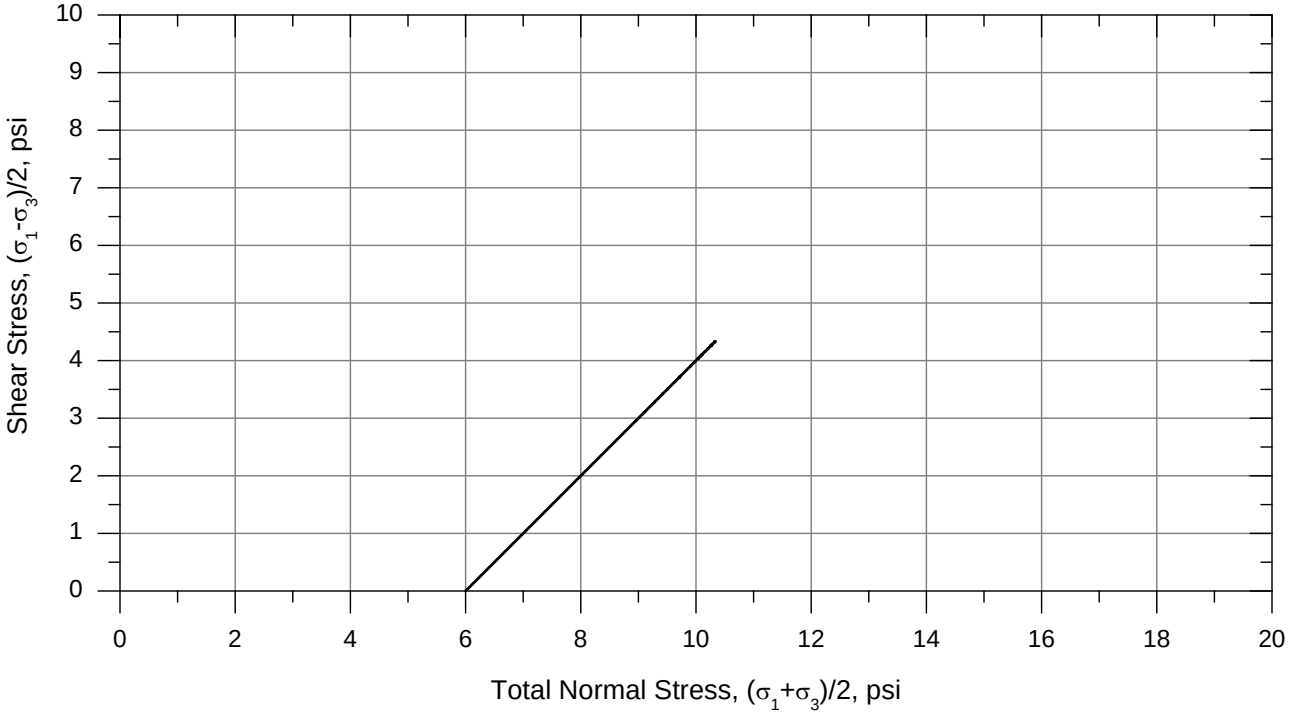
SATURATION	B (Skempton) value:	0.97
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.021
	Max. Mobilized Friction Angle, deg:	26.8
	Max. Deviator Stress, psi:	8.7

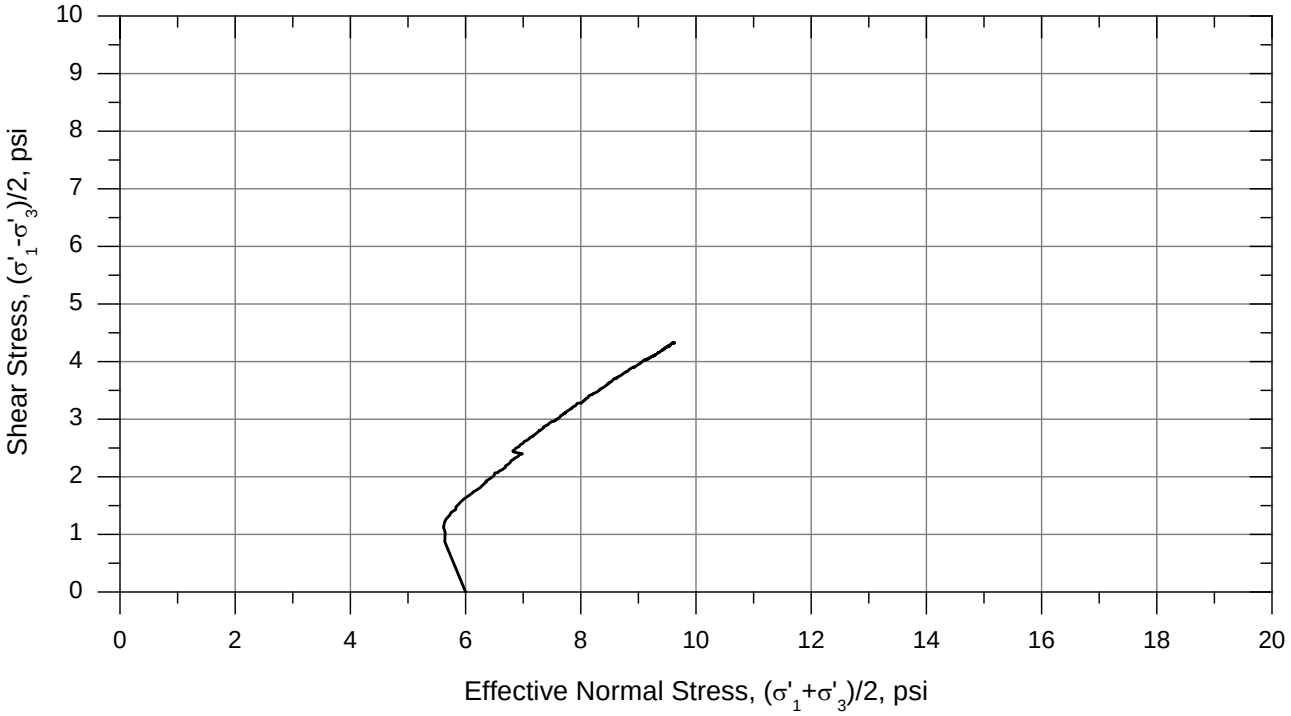
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	148.4	148.2	147.8	147.8	114.4	114.1	113.6
Diameter, mm:	72.0	71.1	70.9	70.9	78.9	79.0	79.1
Axial Strain, %:		0.0	0.3	0.0	22.5	22.8	23.1
Volumetric Strain, %:		0.0	0.8	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	8.7	8.7	8.7
Vertical Effective Stress, psi:		2.0	6.0	6.0	13.9	13.9	14.0
Horizontal Effective Stress, psi:		2.0	6.0	6.0	5.3	5.3	5.3
Void Ratio:		0.56	0.55	0.55	0.55	0.55	0.55
Water Content, %:		20.9	20.4	20.4	20.4	20.4	20.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		130.2	130.8	130.8	130.8	130.8	130.8
Dry Unit Weight, pcf:		107.8	108.6	108.6	108.6	108.6	108.6

TRIAXIAL TEST RESULTS

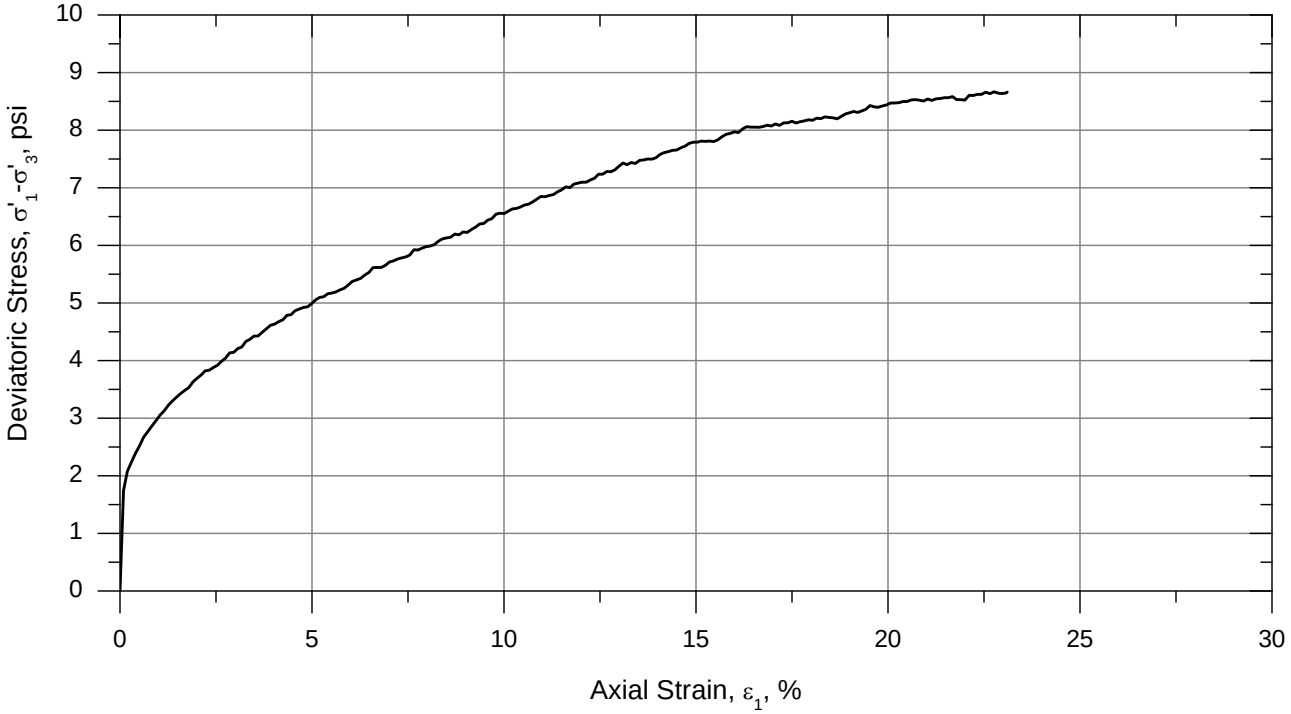
BORING ID: 09-500B
TEST ID: 501

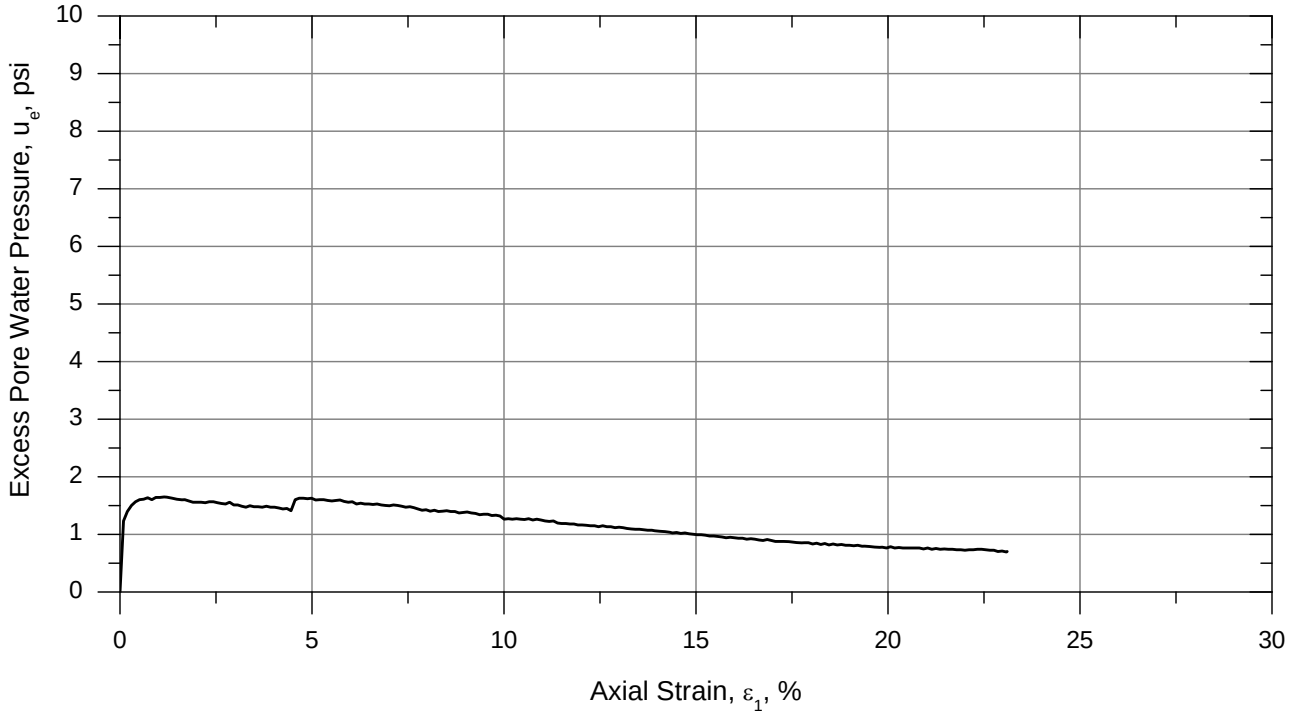




TRIAXIAL TEST RESULTS

BORING ID: 09-500B
TEST ID: 501





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	502
Soil Boring:	09-303B
Sample No.	OST-11
Soil Type:	SILTY CLAY, LITTLE F-M SAND BROWN AND GRAY
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

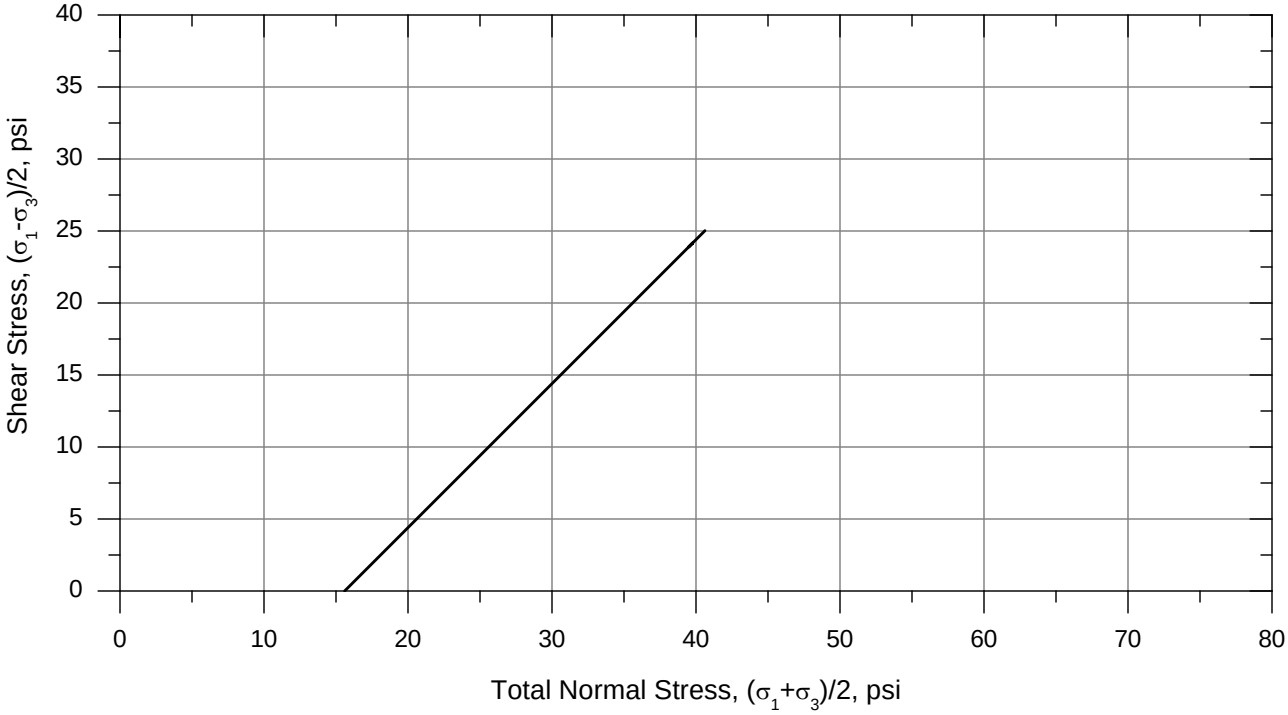
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.026
	Max. Mobilized Friction Angle, deg:	34.8
	Max. Deviator Stress, psi:	50.0

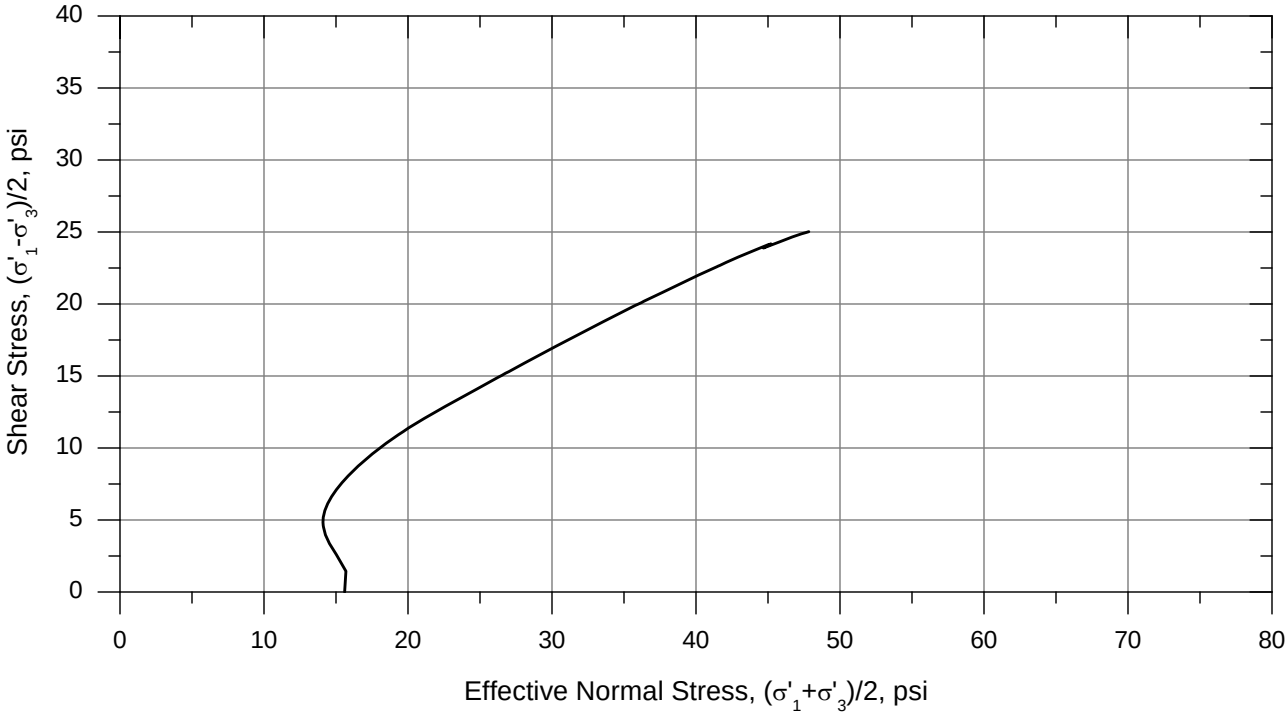
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.7	148.9	148.4	148.4	143.9	108.4	108.4
Diameter, mm:	72.3	72.7	72.5	72.5	73.6	82.2	82.2
Axial Strain, %:		0.0	0.3	0.0	3.0	26.9	26.9
Volumetric Strain, %:		0.0	1.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	25.2	50.0	50.0
Vertical Effective Stress, psi:		2.0	15.6	15.6	34.7	72.9	72.9
Horizontal Effective Stress, psi:		2.0	15.6	15.6	9.5	22.8	22.8
Void Ratio:		0.60	0.59	0.59	0.59	0.59	0.59
Water Content, %:		22.3	21.7	21.7	21.7	21.7	21.7
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		128.6	129.3	129.3	129.3	129.3	129.3
Dry Unit Weight, pcf:		105.1	106.2	106.2	106.2	106.2	106.2

TRIAXIAL TEST RESULTS

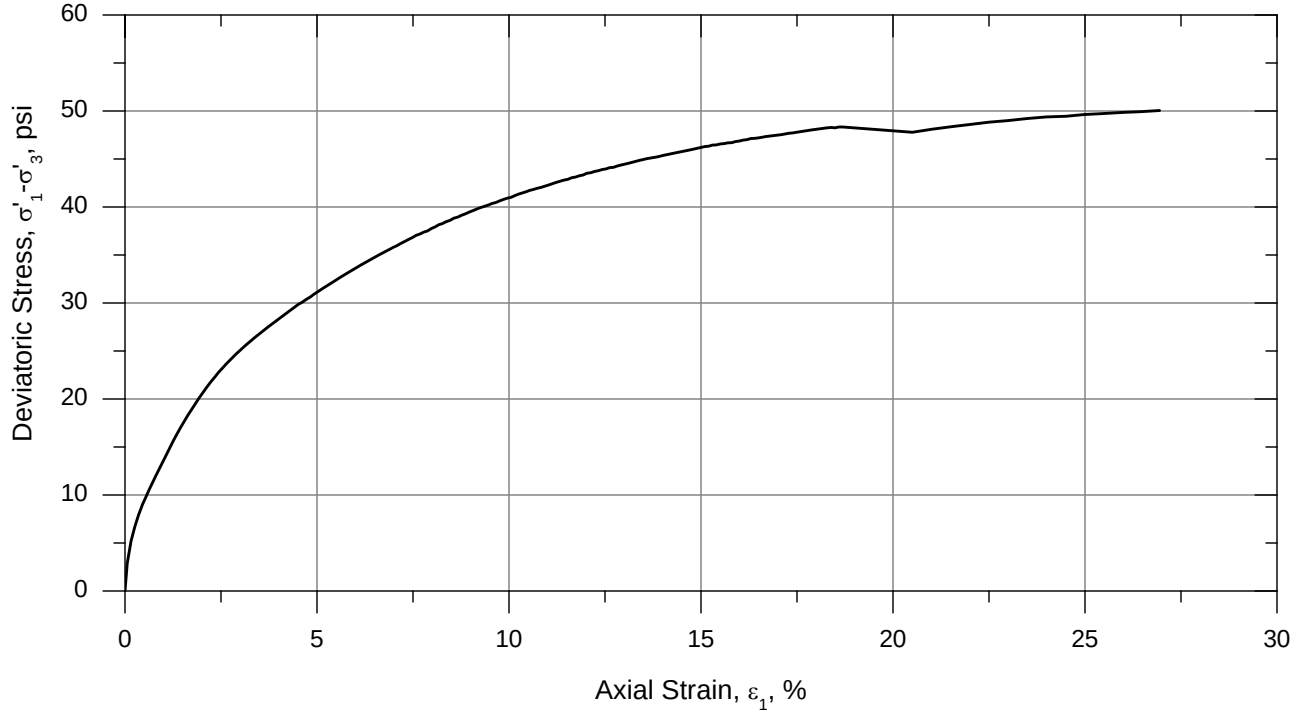
BORING ID: 09-303B
TEST ID: 502

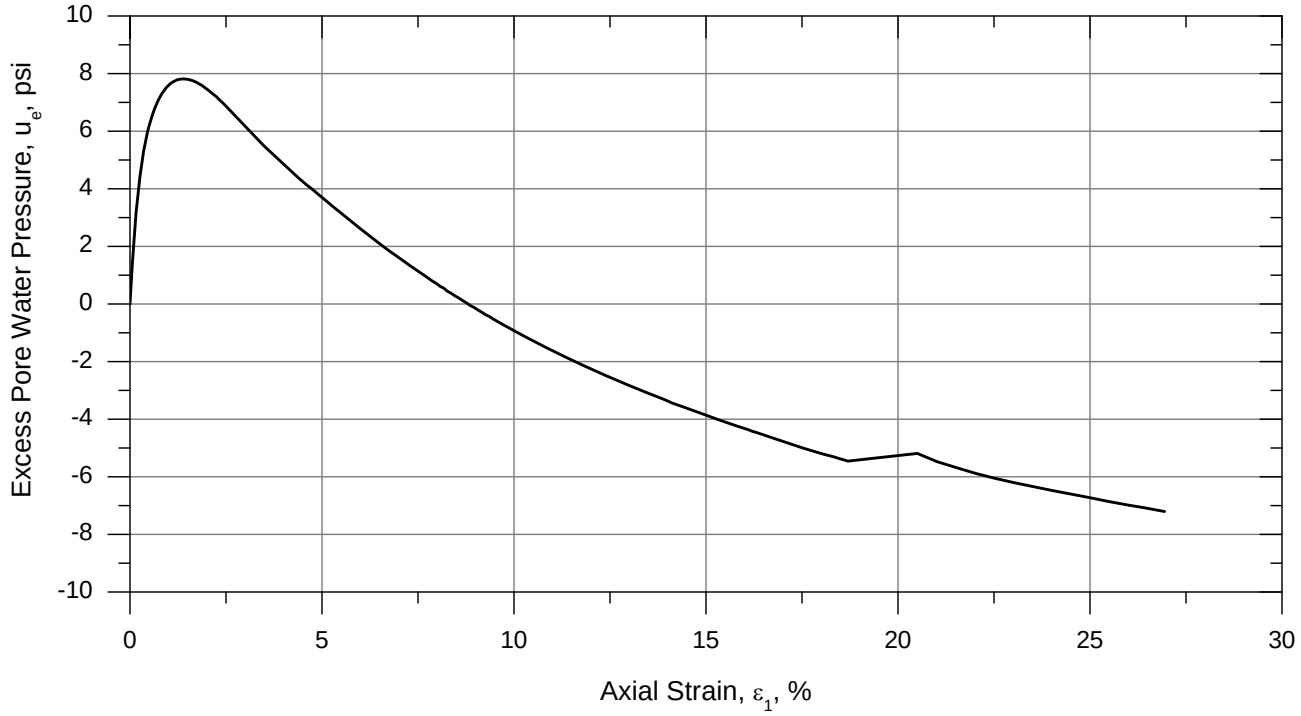




TRIAXIAL TEST RESULTS

BORING ID: 09-303B
TEST ID: 502





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	503
Soil Boring:	09-600B
Sample No.	OST-4
Soil Type:	CLAYEY SILT, LITTLE F-M SAND - BROWN AND GRAY
USCS:	CL-ML
Specific Gravity	2.627
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

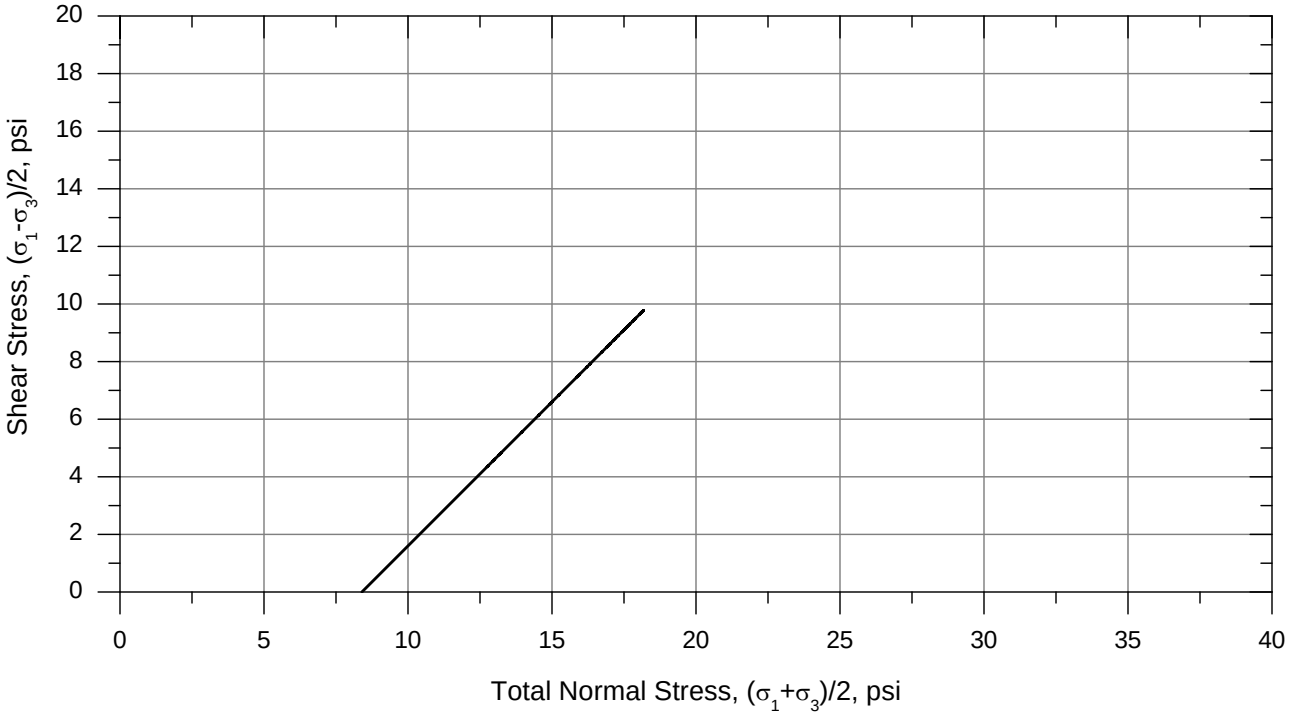
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.021
	Max. Mobilized Friction Angle, deg:	28.8
	Max. Deviator Stress, psi:	19.6

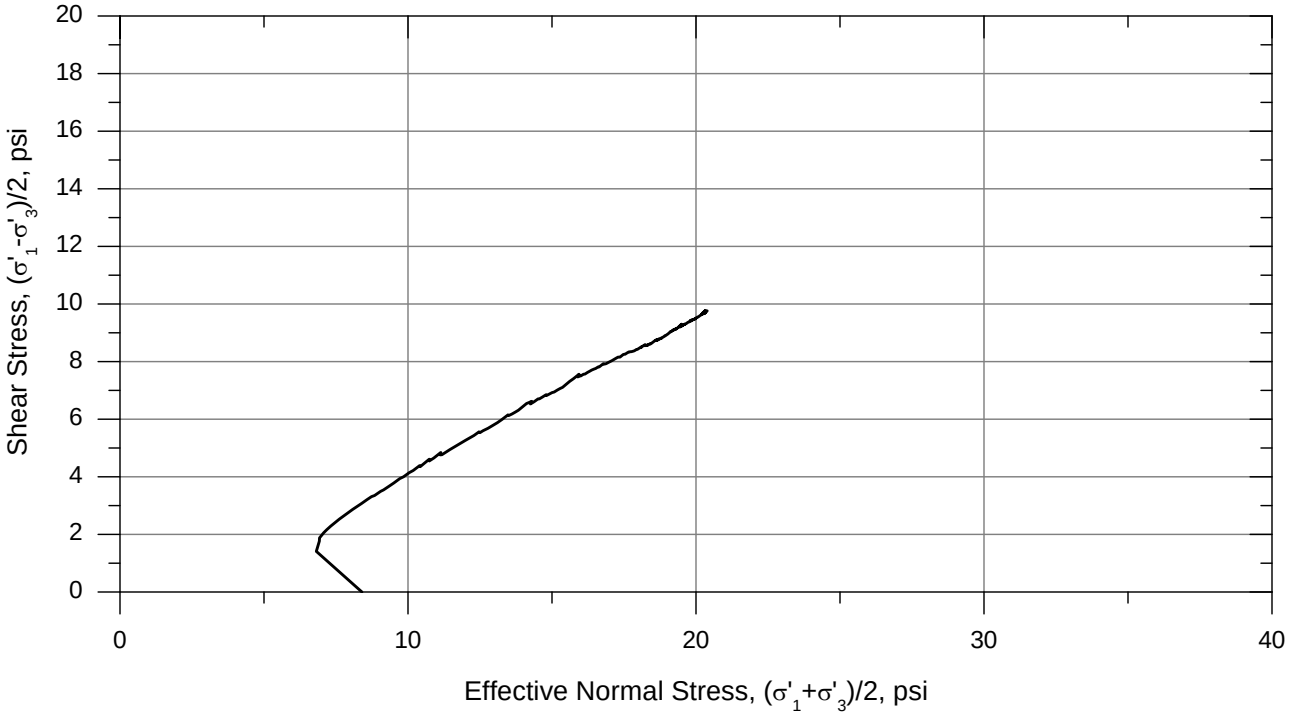
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	145.0	141.5	141.2	141.2	106.7	106.7	102.2
Diameter, mm:	72.1	73.1	72.9	72.9	81.9	81.9	83.0
Axial Strain, %:		0.0	0.2	0.0	24.5	24.5	27.7
Volumetric Strain, %:		0.0	0.6	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	19.6	19.6	19.5
Vertical Effective Stress, psi:		2.0	8.4	8.4	30.1	30.1	30.2
Horizontal Effective Stress, psi:		2.0	8.4	8.4	10.6	10.6	10.6
Void Ratio:		0.56	0.55	0.55	0.55	0.55	0.55
Water Content, %:		21.3	21.0	21.0	21.0	21.0	21.0
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		127.5	127.9	127.9	127.9	127.9	127.9
Dry Unit Weight, pcf:		105.0	105.7	105.7	105.7	105.7	105.7

TRIAXIAL TEST RESULTS

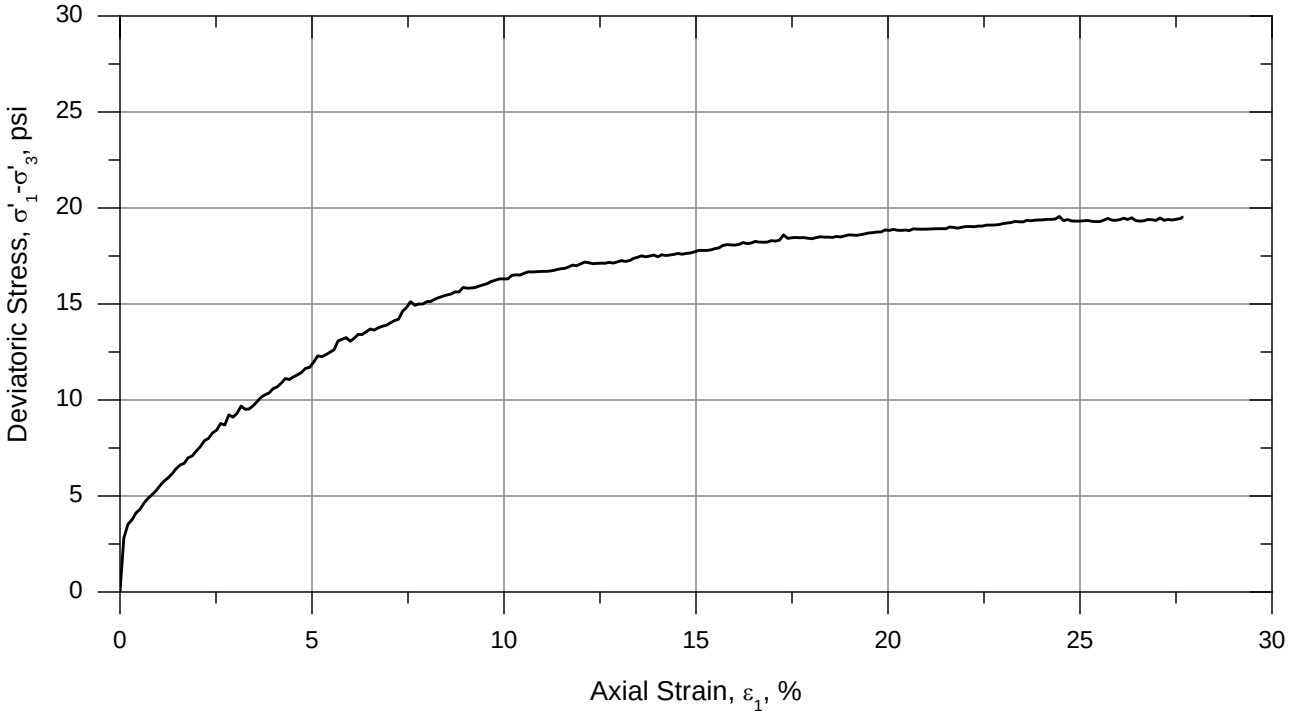
BORING ID: 09-600B
TEST ID: 503

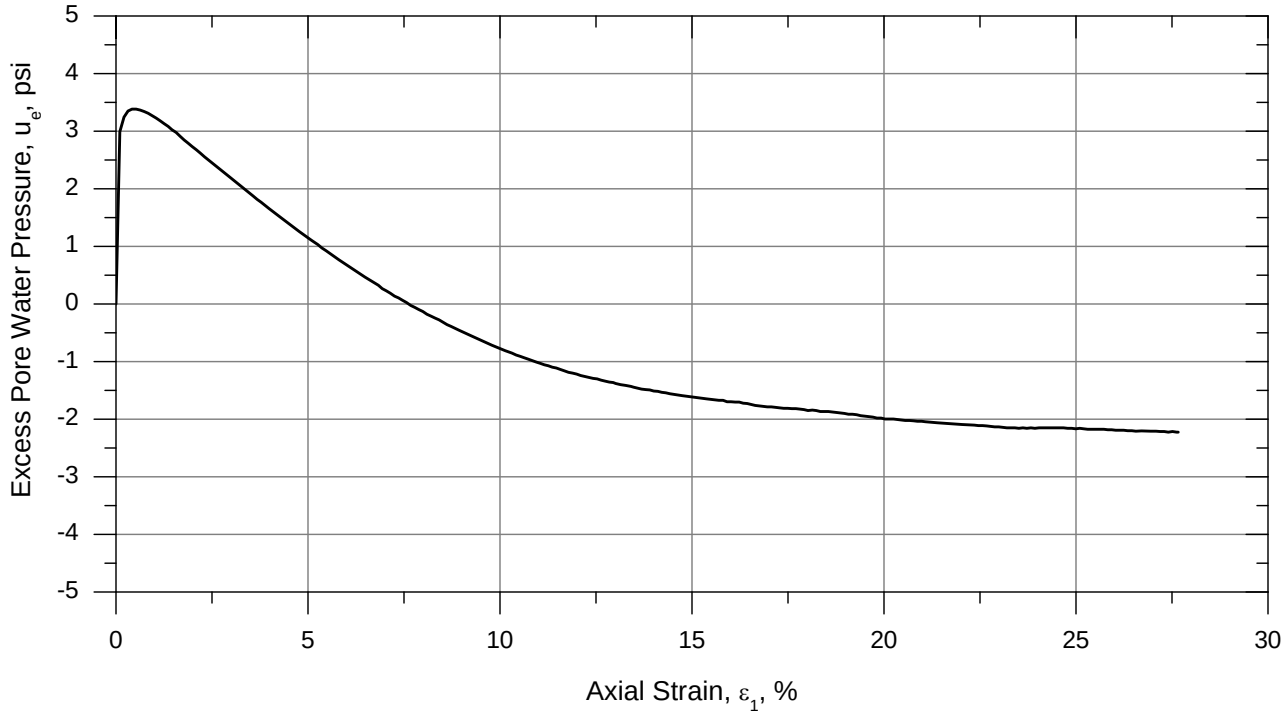




TRIAXIAL TEST RESULTS

BORING ID: 09-600B
TEST ID: 503





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	504
Soil Boring:	09-210B
Sample No.	OST-3
Soil Type:	CLAYEY SILT, LITTLE FINE SAND, BROWN
USCS:	CL-ML
Specific Gravity	2.72
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

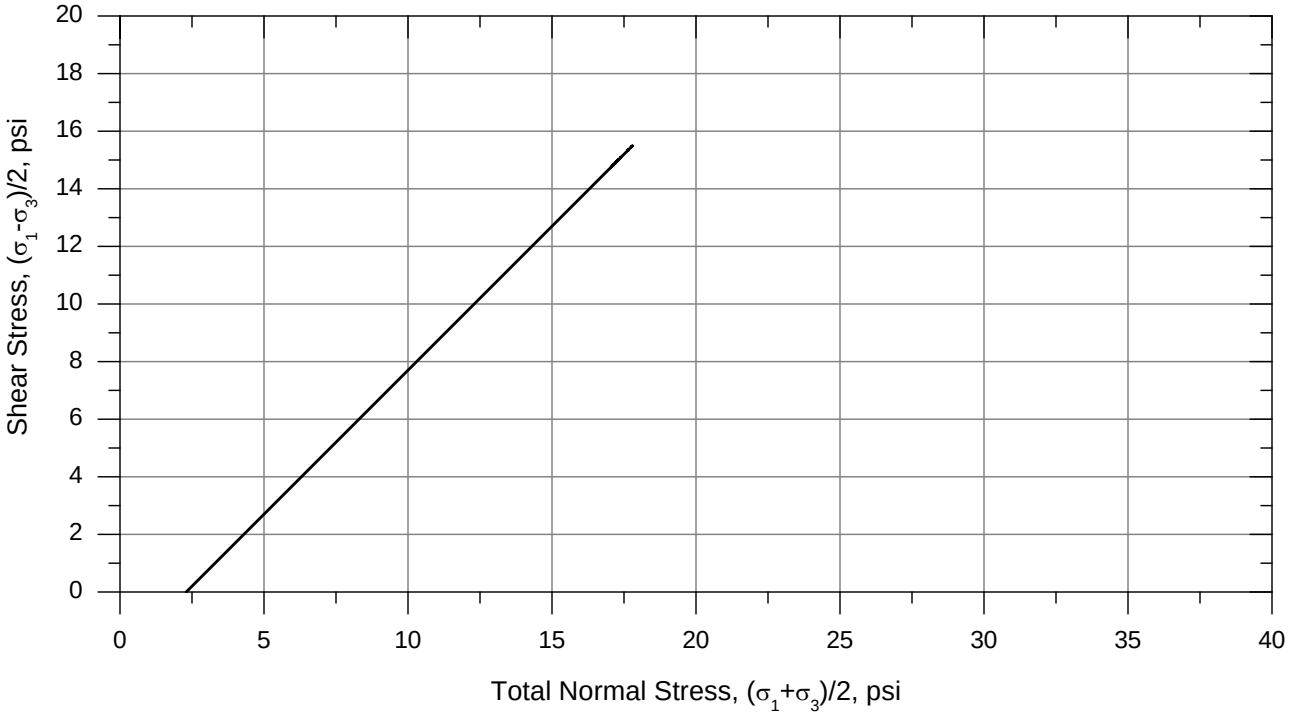
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.039
	Max. Mobilized Friction Angle, deg:	35.7
	Max. Deviator Stress, psi:	31.0

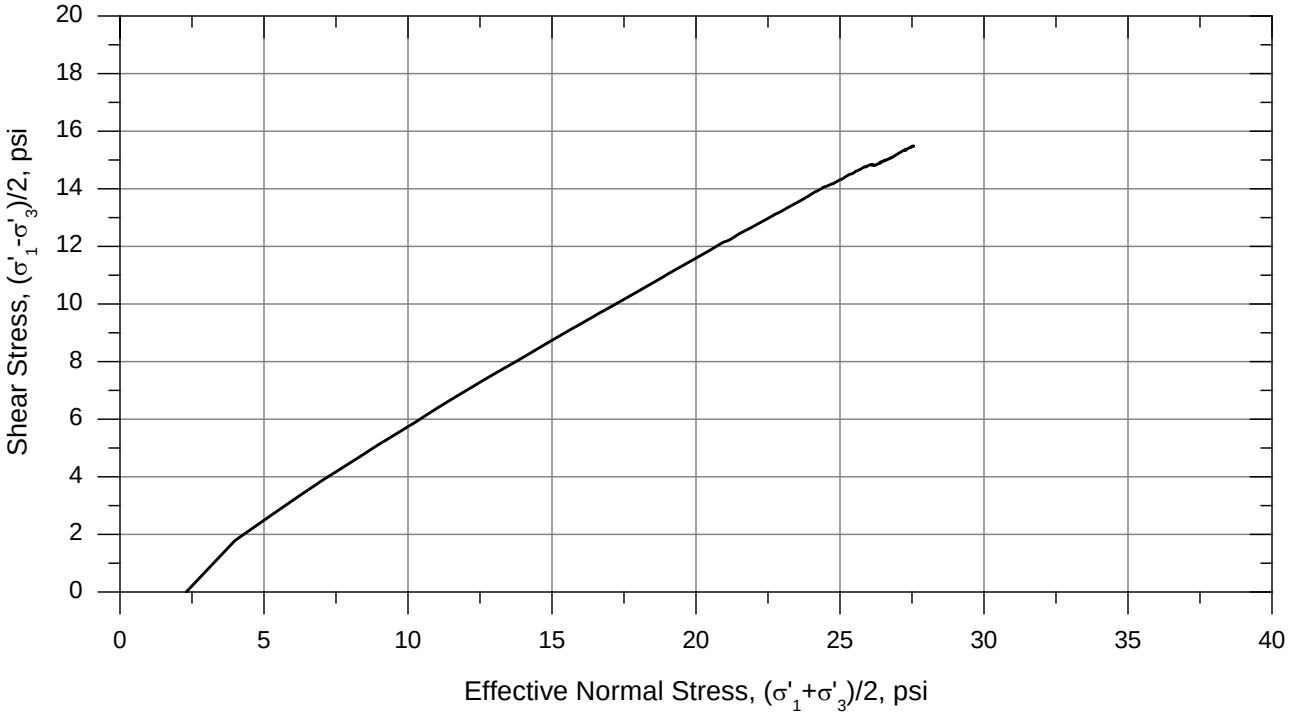
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	156.8	156.2	156.2	156.2	152.4	127.6	127.2
Diameter, mm:	71.9	71.8	71.7	71.7	72.6	78.3	78.4
Axial Strain, %:		0.0	0.0	0.0	2.4	18.3	18.5
Volumetric Strain, %:		0.0	0.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	18.1	31.0	31.0
Vertical Effective Stress, psi:		2.0	2.3	2.3	24.6	43.0	43.0
Horizontal Effective Stress, psi:		2.0	2.3	2.3	6.5	12.1	12.1
Void Ratio:		0.56	0.56	0.56	0.56	0.56	0.56
Water Content, %:		20.5	20.5	20.5	20.5	20.5	20.5
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		131.3	131.3	131.3	131.3	131.3	131.3
Dry Unit Weight, pcf:		108.9	109.0	109.0	109.0	109.0	109.0

TRIAXIAL TEST RESULTS

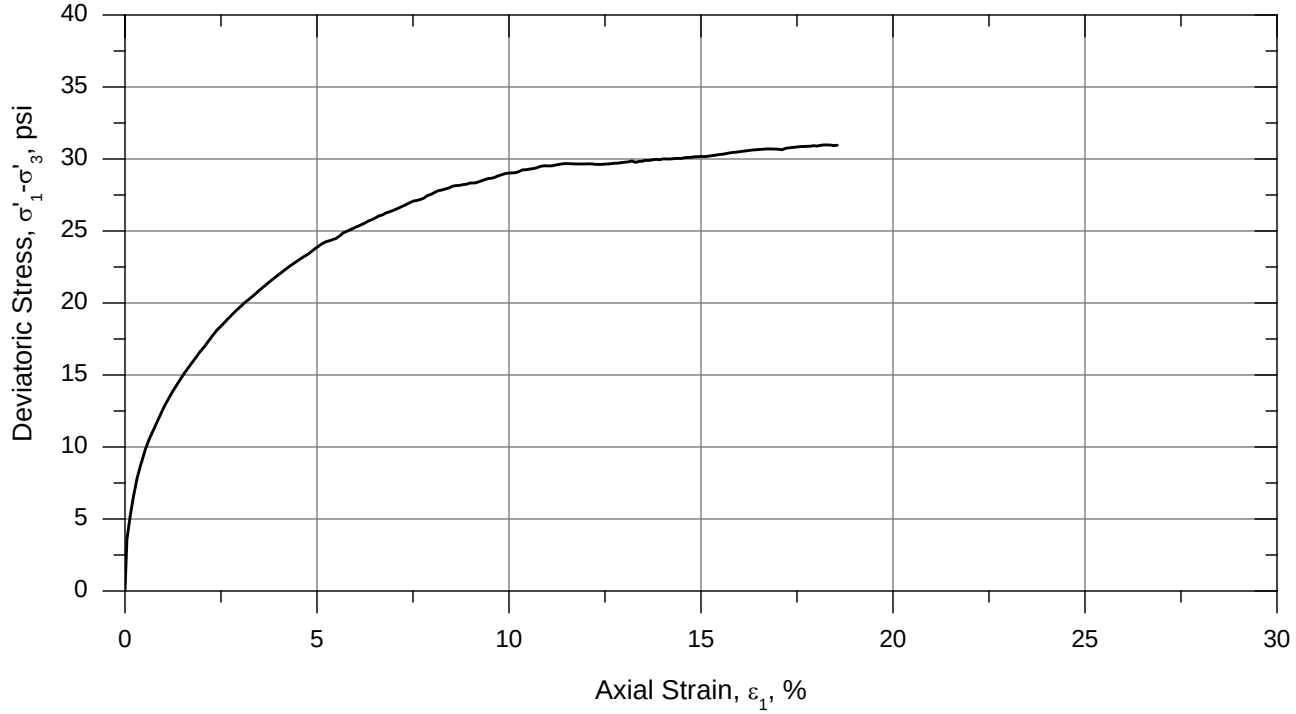
BORING ID: 09-210B
TEST ID: 504

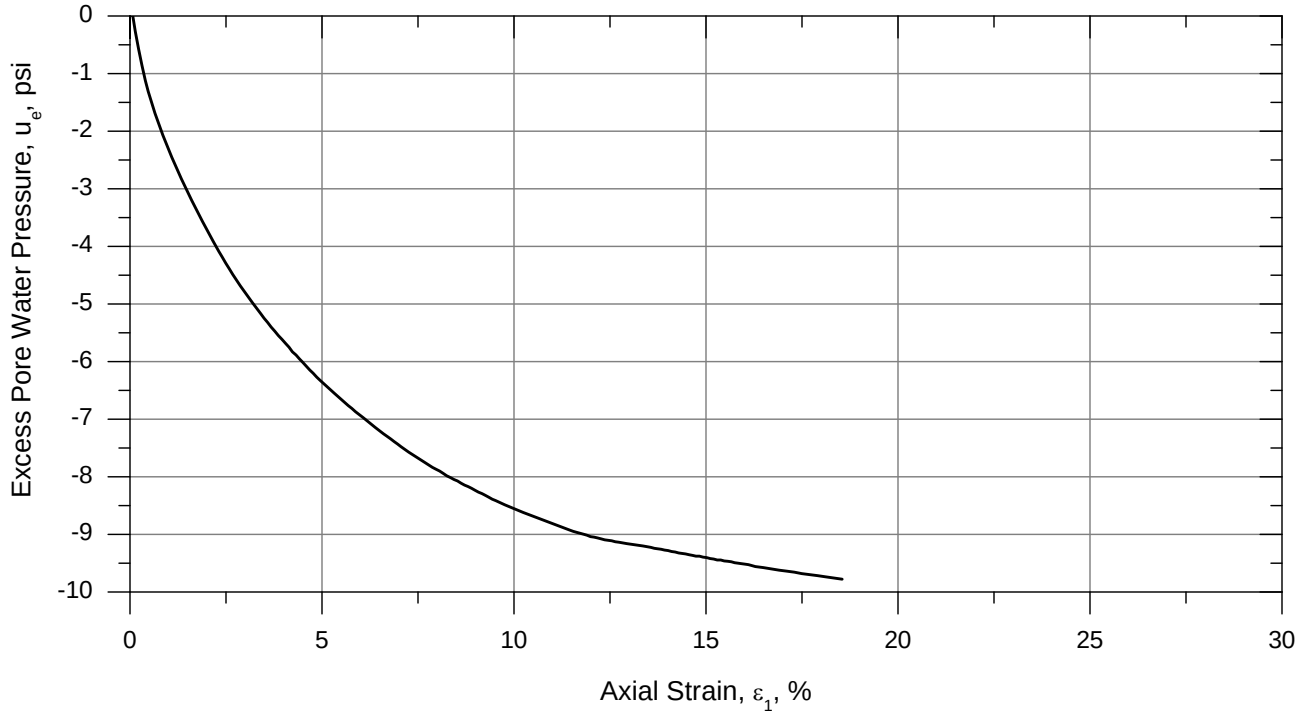




TRIAXIAL TEST RESULTS

BORING ID: 09-210B
TEST ID: 504





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	505
Soil Boring:	09-604B
Sample No.	OST-9
Soil Type:	SILTY CLAY, LITTLE F-M SAND, GRAY
USCS:	CL
Specific Gravity	2.655
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

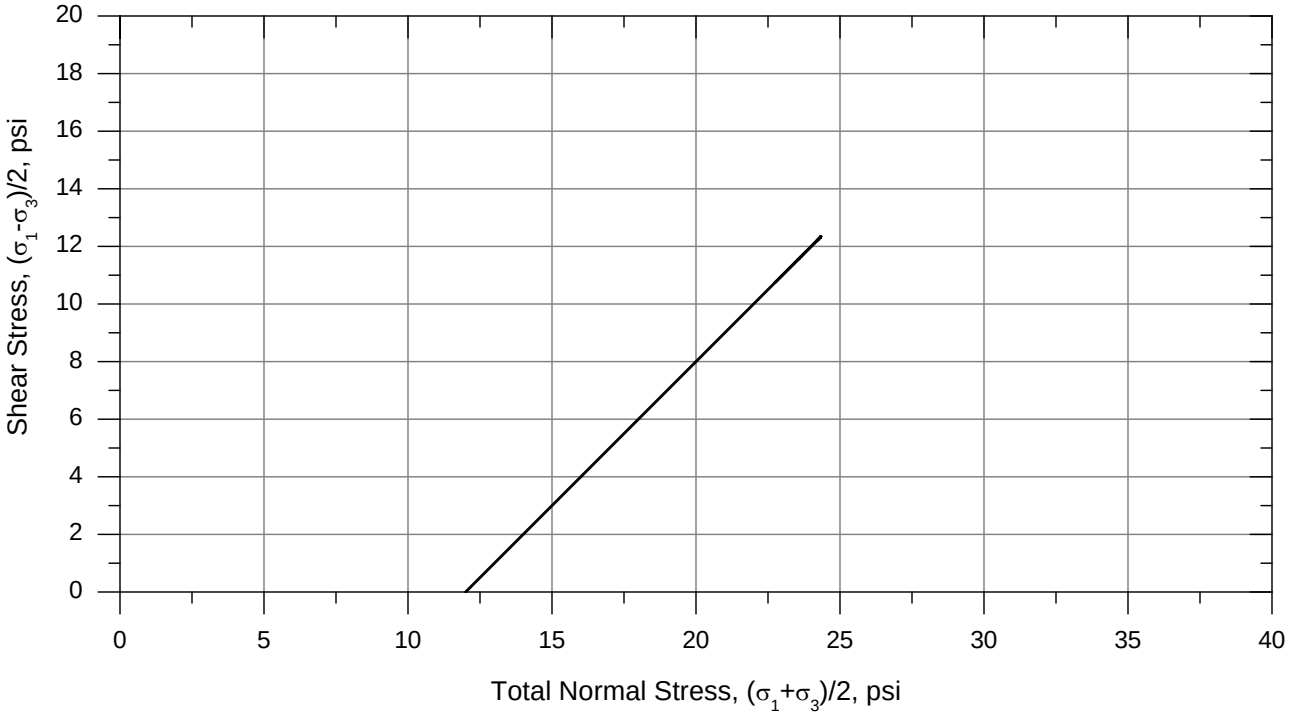
SATURATION	B (Skempton) value:	0.97
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.067
	Max. Mobilized Friction Angle, deg:	35.0
	Max. Deviator Stress, psi:	24.7

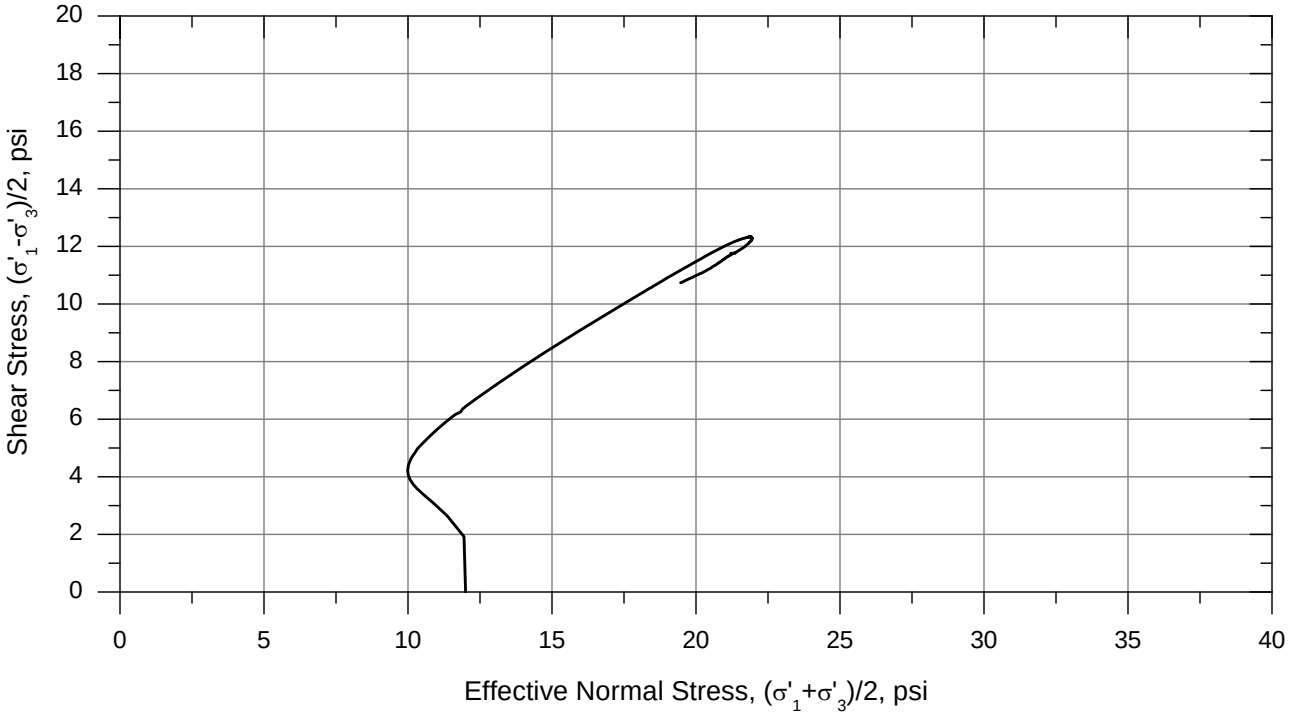
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.5	149.5	149.2	149.2	134.3	123.2	105.8
Diameter, mm:	71.2	70.5	70.4	70.4	73.9	76.5	80.6
Axial Strain, %:		0.0	0.2	0.0	9.9	17.4	29.1
Volumetric Strain, %:		0.0	0.7	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	22.0	24.7	21.5
Vertical Effective Stress, psi:		2.5	12.0	12.0	30.2	34.2	30.2
Horizontal Effective Stress, psi:		2.5	12.0	12.0	8.2	9.5	8.7
Void Ratio:		0.66	0.65	0.65	0.65	0.65	0.65
Water Content, %:		25.0	24.5	24.5	24.5	24.5	24.5
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		124.5	125.0	125.0	125.0	125.0	125.0
Dry Unit Weight, pcf:		99.7	100.4	100.4	100.4	100.4	100.4

TRIAXIAL TEST RESULTS

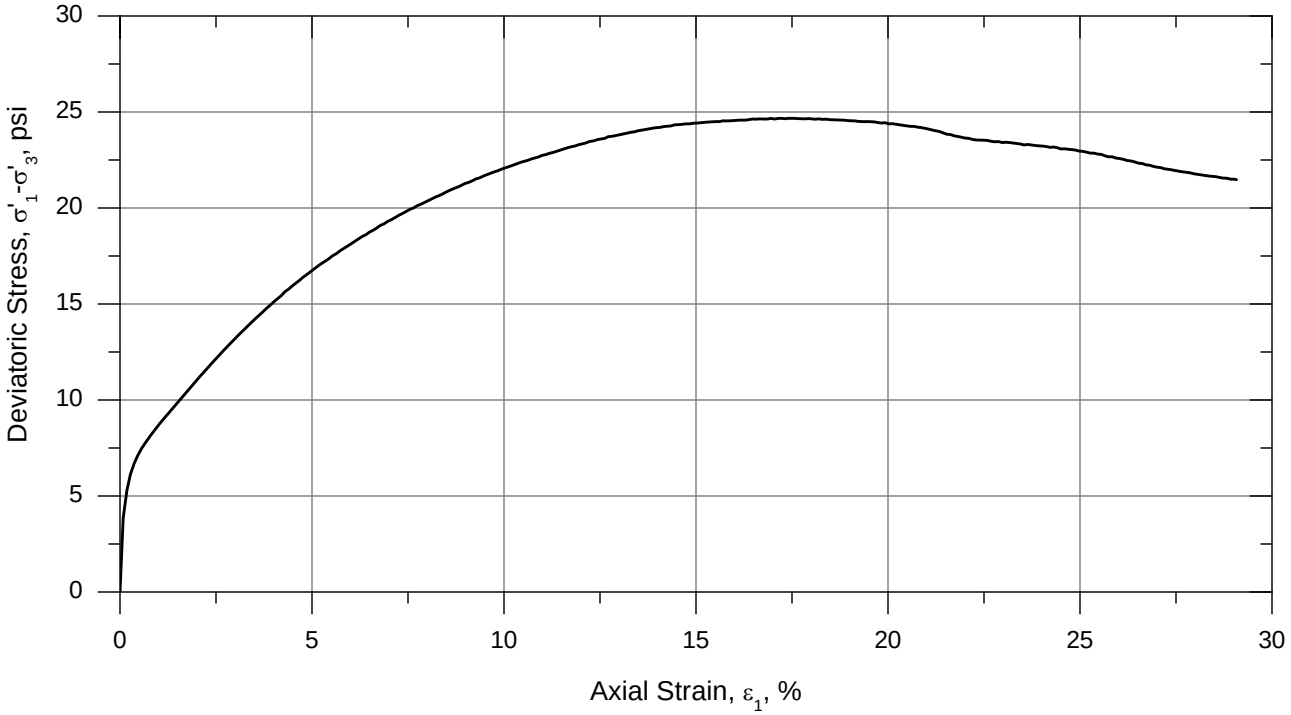
BORING ID: 09-604B
TEST ID: 505

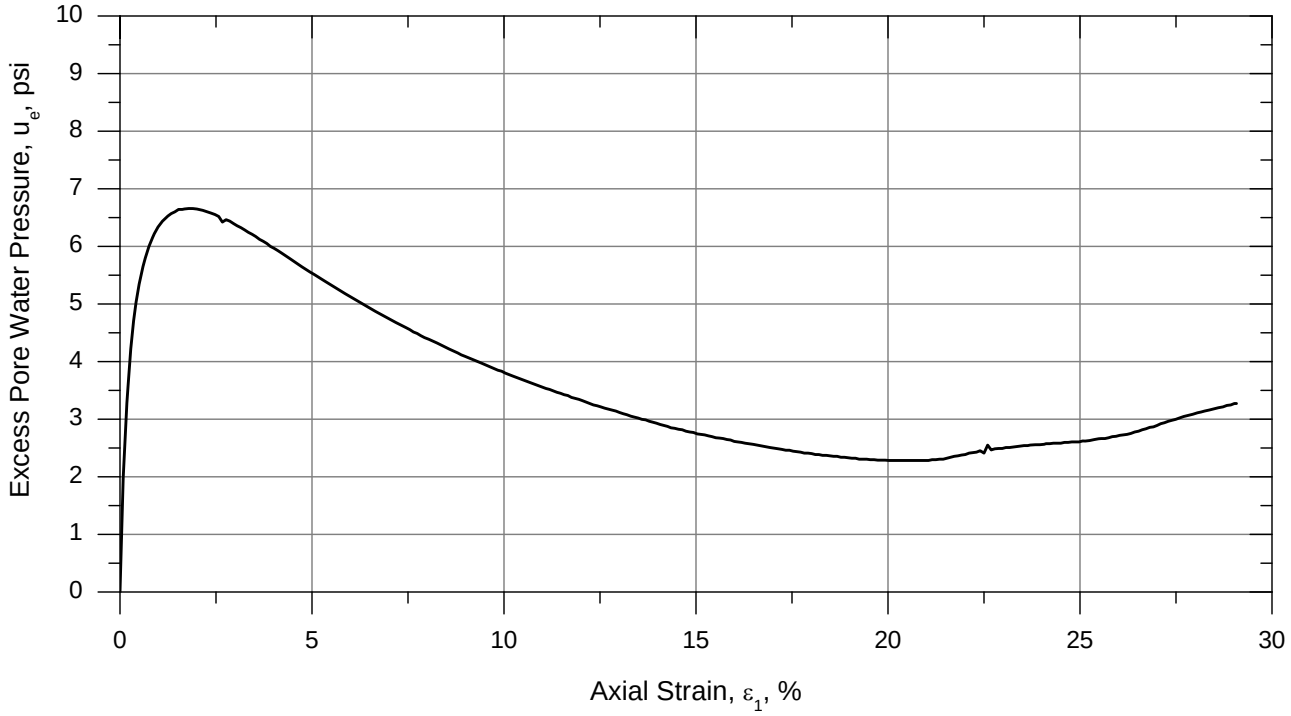




TRIAXIAL TEST RESULTS

BORING ID: 09-604B
TEST ID: 505





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	506
Soil Boring:	09-404B
Sample No.	OST-5
Soil Type:	CLAYEY SILT, SOME F-C SAND, GRAY
USCS:	CL-ML
Specific Gravity	2.667
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

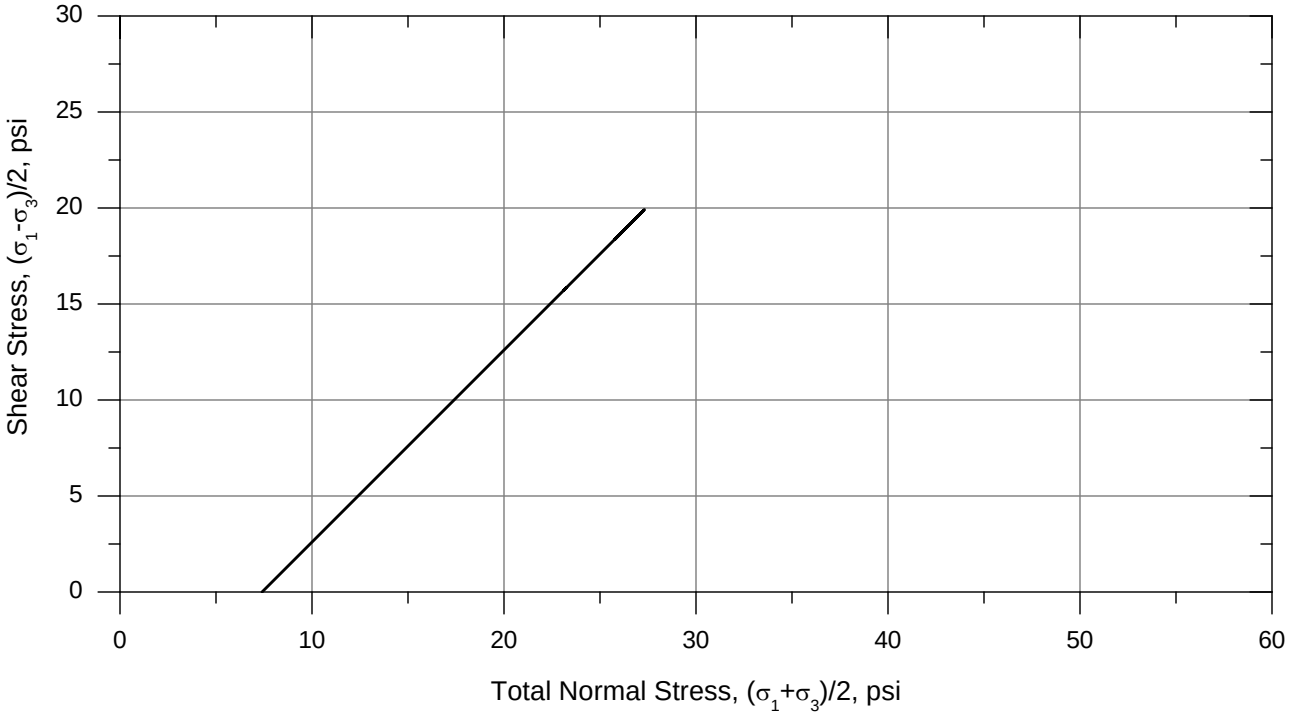
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.067
	Max. Mobilized Friction Angle, deg:	34.9
	Max. Deviator Stress, psi:	39.8

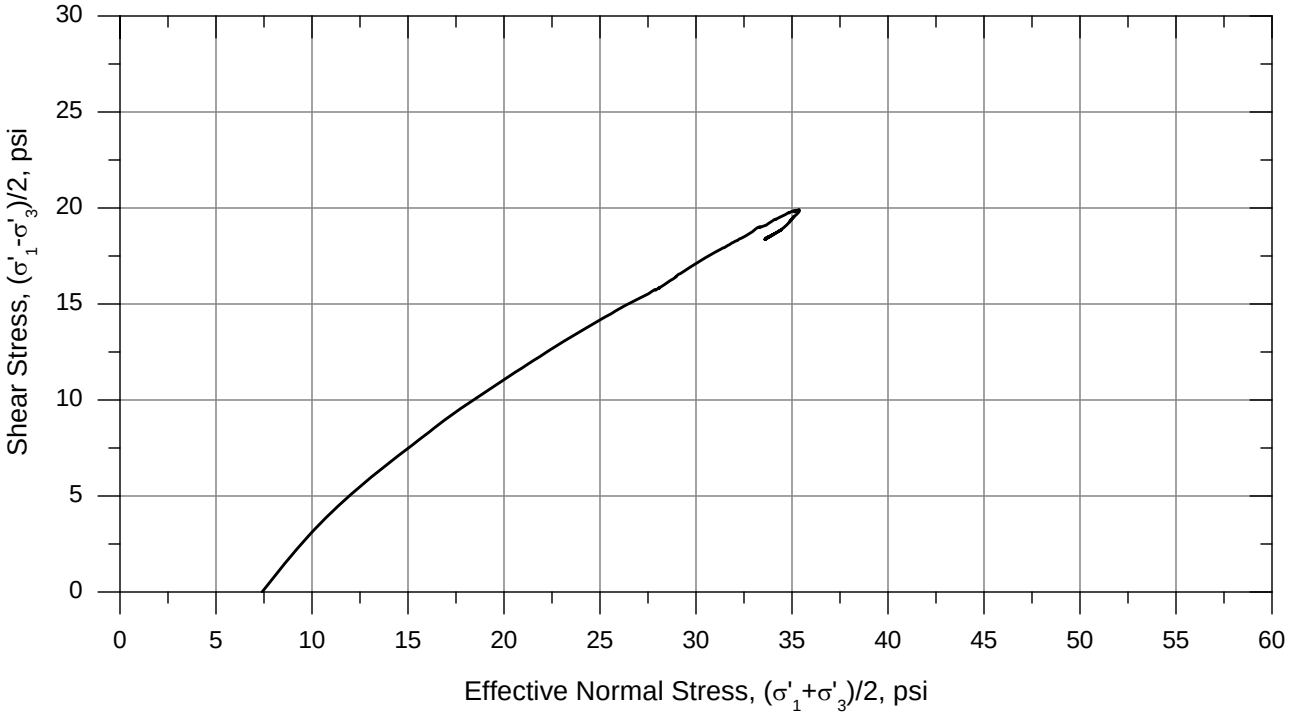
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	147.0	147.2	146.8	146.8	129.7	123.2	102.6
Diameter, mm:	72.4	71.9	71.7	71.7	75.9	77.5	82.5
Axial Strain, %:		0.0	0.3	0.0	11.6	16.0	30.1
Volumetric Strain, %:		0.0	0.8	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	38.0	39.8	37.7
Vertical Effective Stress, psi:		2.5	7.4	7.4	52.2	55.3	53.3
Horizontal Effective Stress, psi:		2.5	7.4	7.4	14.2	15.4	15.6
Void Ratio:		0.56	0.55	0.55	0.55	0.55	0.55
Water Content, %:		21.0	20.6	20.6	20.6	20.6	20.6
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		129.0	129.6	129.6	129.6	129.6	129.6
Dry Unit Weight, pcf:		106.6	107.5	107.5	107.5	107.5	107.5

TRIAXIAL TEST RESULTS

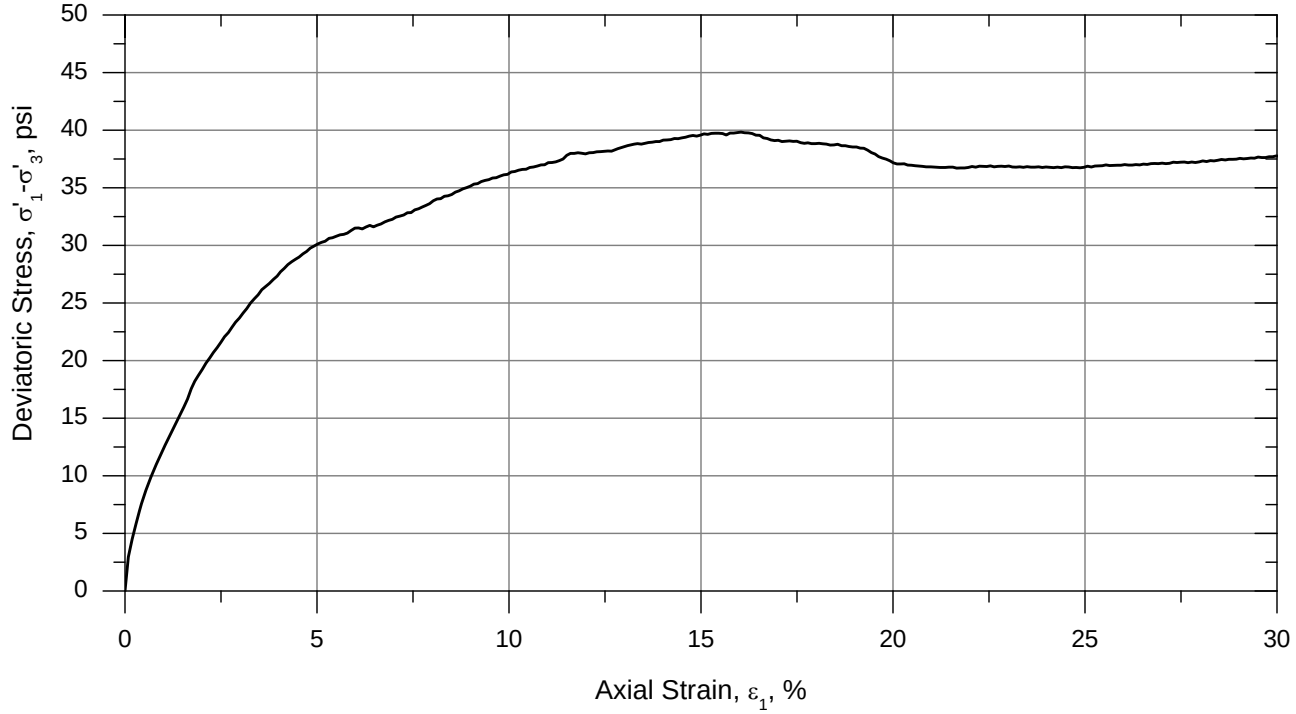
BORING ID: 09-404B
TEST ID: 506

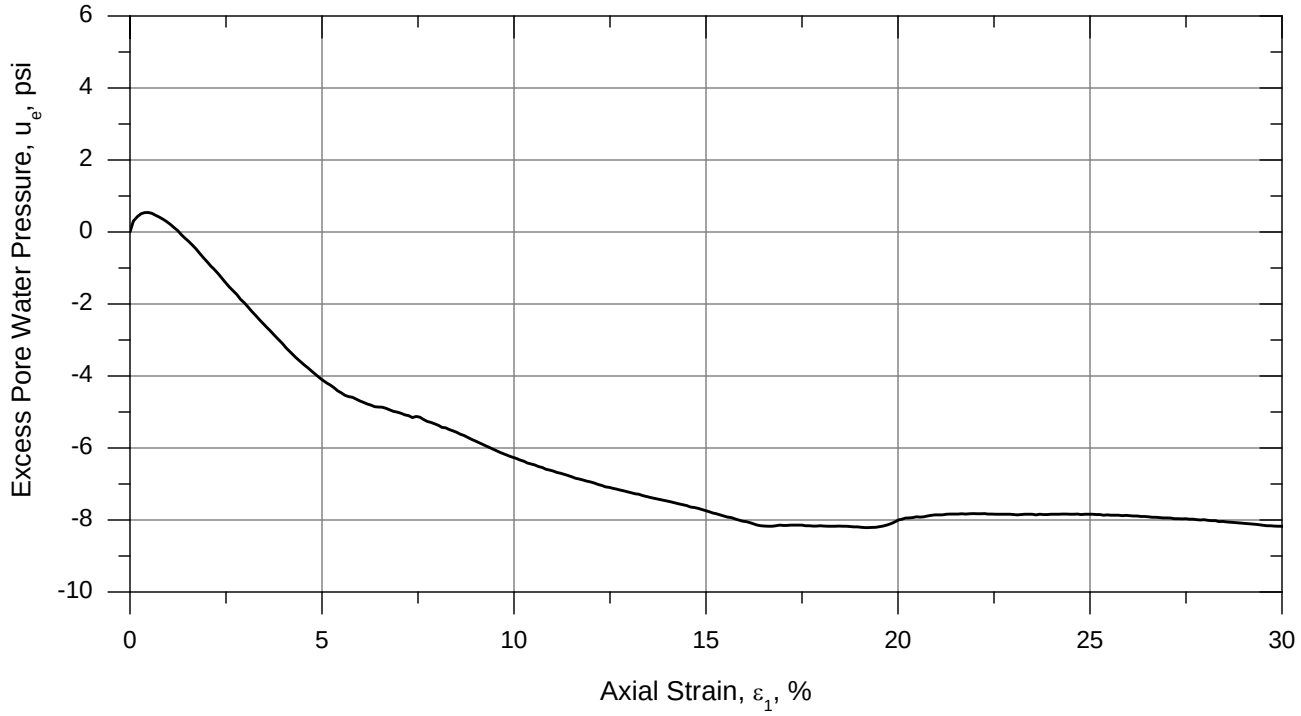




TRIAXIAL TEST RESULTS

BORING ID: 09-404B
TEST ID: 506





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 507
Soil Boring: 09-404B
Sample No. OST-4
Soil Type: SILTY CLAY, SOME F-C SAND, GRAY
USCS: CL
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

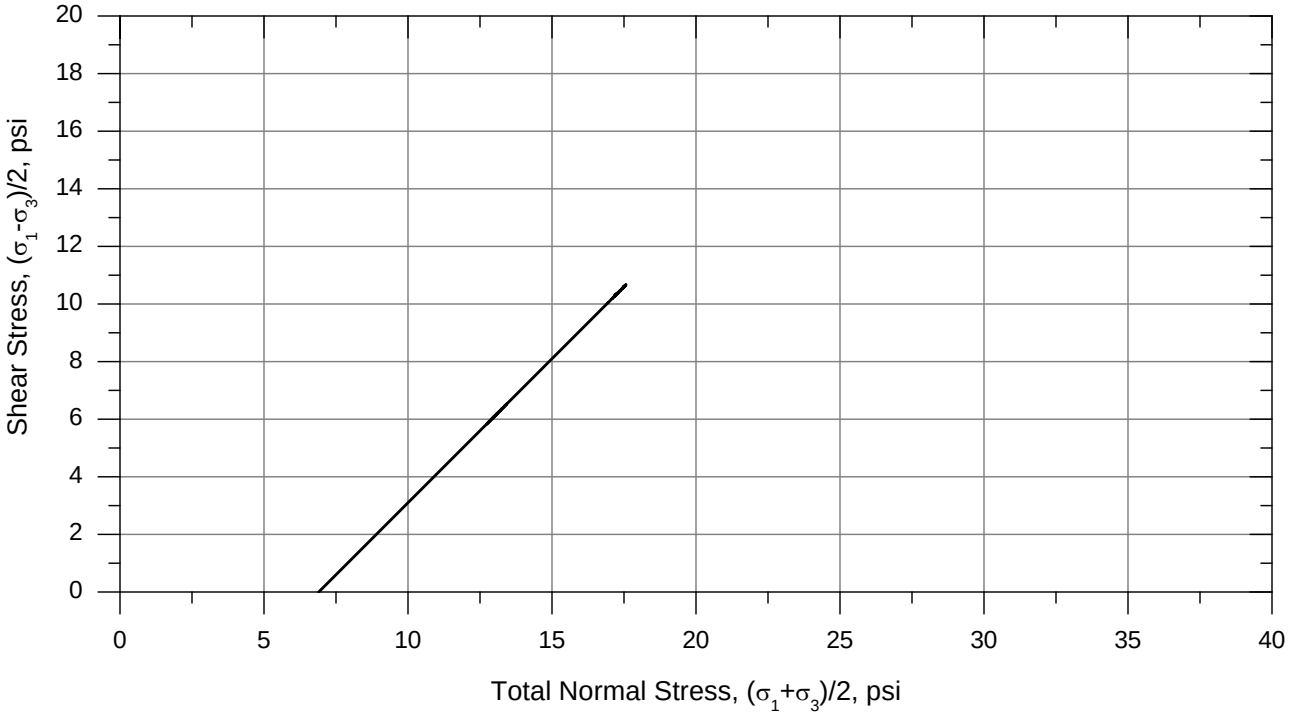
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.071
	Max. Mobilized Friction Angle, deg:	32.9
	Max. Deviator Stress, psi:	21.3

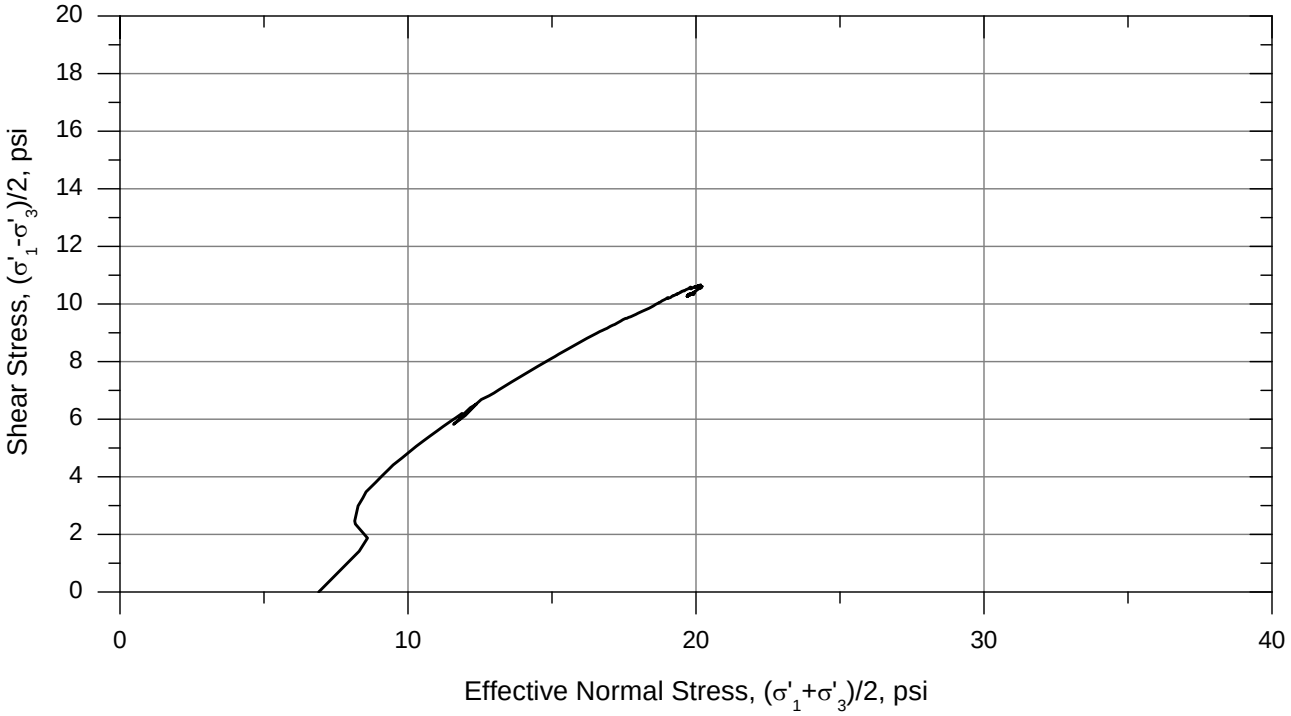
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	148.2	147.9	147.4	147.4	140.1	123.6	103.1
Diameter, mm:	71.9	71.8	71.5	71.5	73.3	77.3	82.3
Axial Strain, %:		0.0	0.3	0.0	5.0	16.2	30.1
Volumetric Strain, %:		0.0	1.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	17.4	21.3	20.7
Vertical Effective Stress, psi:		2.5	6.9	6.9	24.8	30.8	30.3
Horizontal Effective Stress, psi:		2.5	6.9	6.9	7.3	9.5	9.6
Void Ratio:		0.63	0.61	0.61	0.61	0.61	0.61
Water Content, %:		23.2	22.6	22.6	22.6	22.6	22.6
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		127.6	128.2	128.2	128.2	128.2	128.2
Dry Unit Weight, pcf:		103.5	104.6	104.6	104.6	104.6	104.6

TRIAXIAL TEST RESULTS

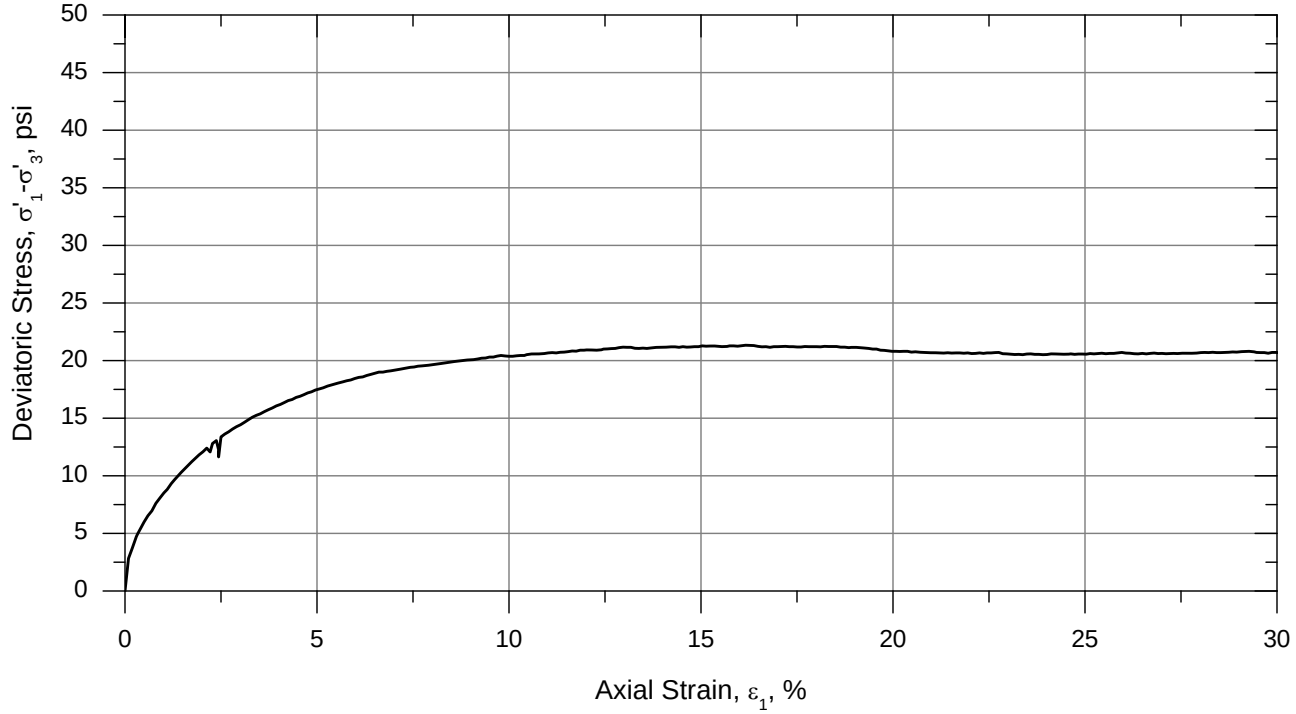
BORING ID: 09-404B
TEST ID: 507

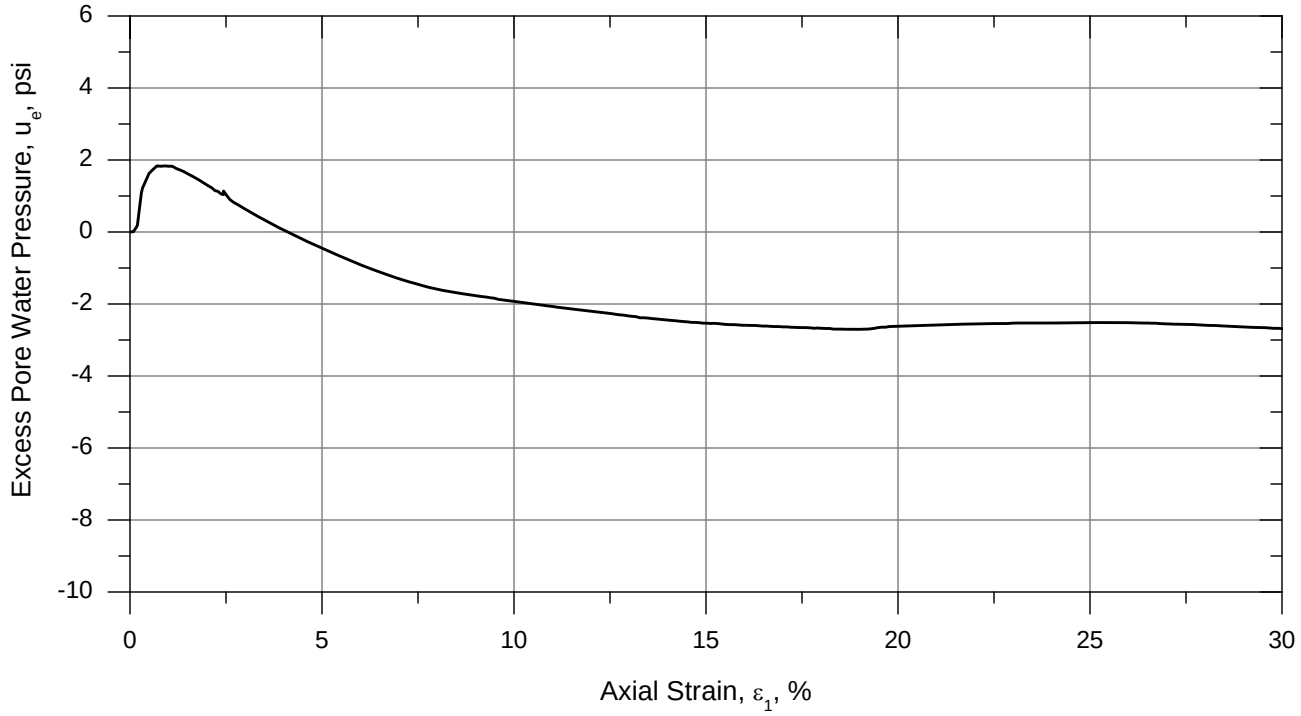




TRIAXIAL TEST RESULTS

BORING ID: 09-404B
TEST ID: 507





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 508
Soil Boring: 09-605B
Sample No. OST-11
Soil Type: CLAYEY SILT, LITTLE F-M SAND, BROWN AND GRAY
USCS: ML
Specific Gravity 2.75
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

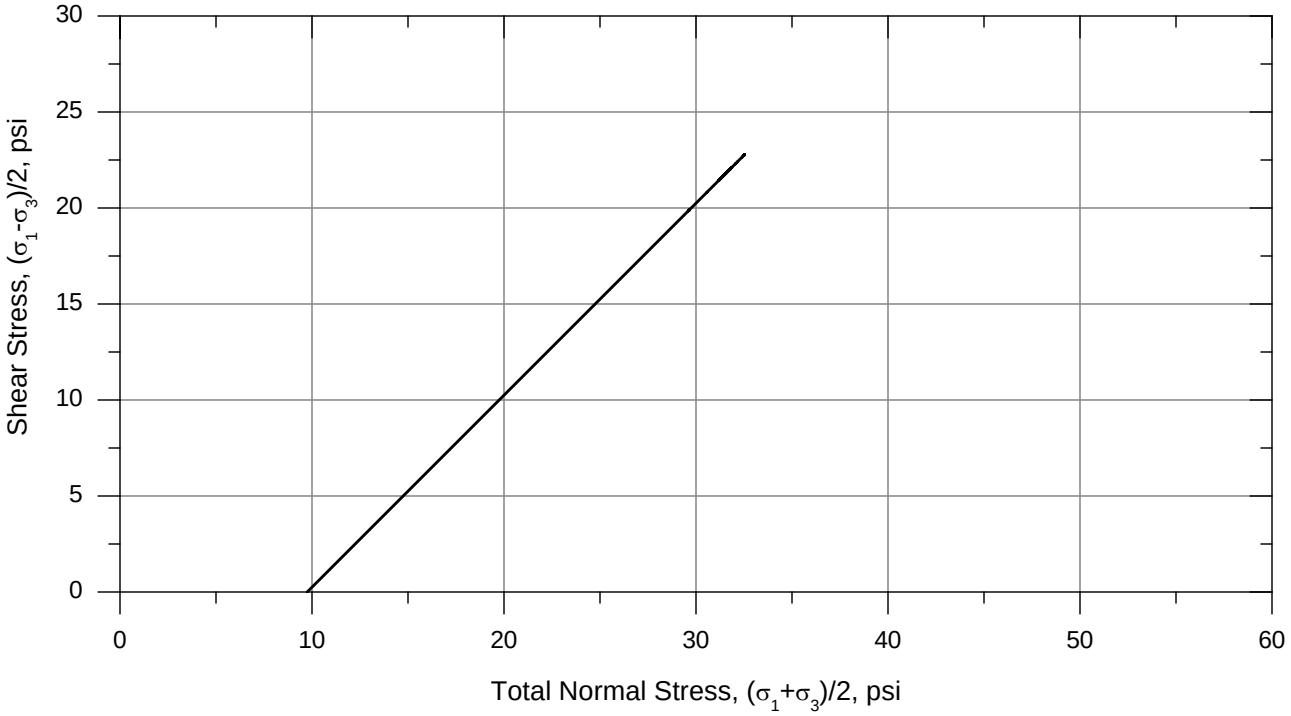
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.073
	Max. Mobilized Friction Angle, deg:	33.5
	Max. Deviator Stress, psi:	45.6

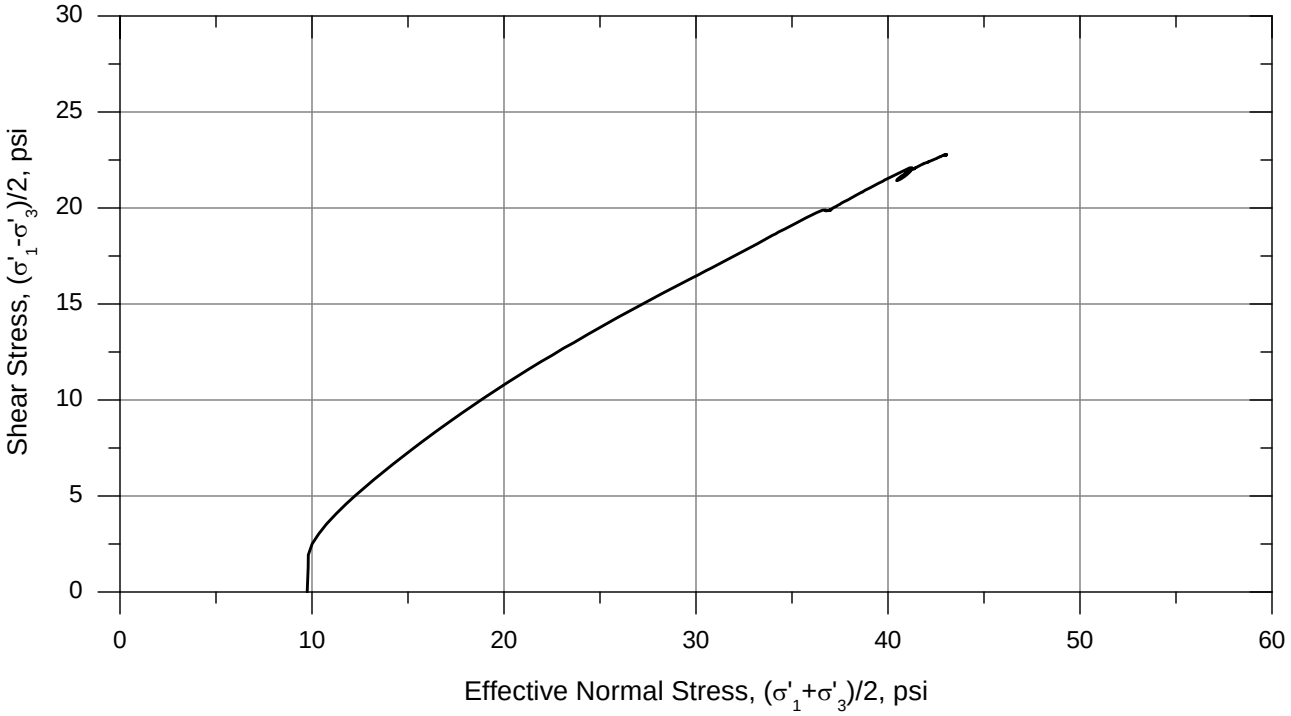
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	144.4	144.8	144.4	144.4	139.8	101.4	101.1
Diameter, mm:	71.7	71.4	71.2	71.2	72.3	81.8	81.9
Axial Strain, %:		0.0	0.3	0.0	3.2	29.8	30.0
Volumetric Strain, %:		0.0	0.8	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	29.1	45.6	45.5
Vertical Effective Stress, psi:		2.5	9.8	9.8	40.9	65.8	65.8
Horizontal Effective Stress, psi:		2.5	9.8	9.8	11.8	20.3	20.3
Void Ratio:		0.57	0.55	0.55	0.55	0.55	0.55
Water Content, %:		20.7	20.2	20.2	20.2	20.2	20.2
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		132.0	132.6	132.6	132.6	132.6	132.6
Dry Unit Weight, pcf:		109.4	110.4	110.4	110.4	110.4	110.4

TRIAXIAL TEST RESULTS

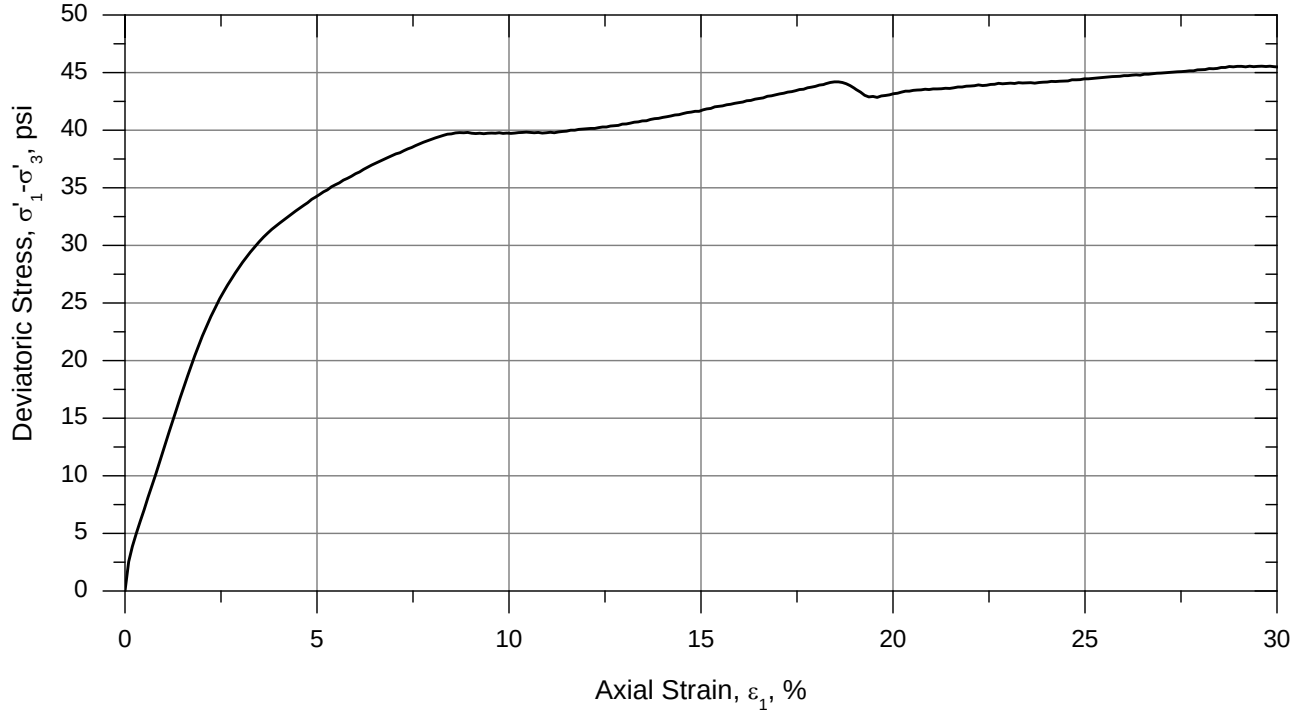
BORING ID: 09-605B
TEST ID: 508

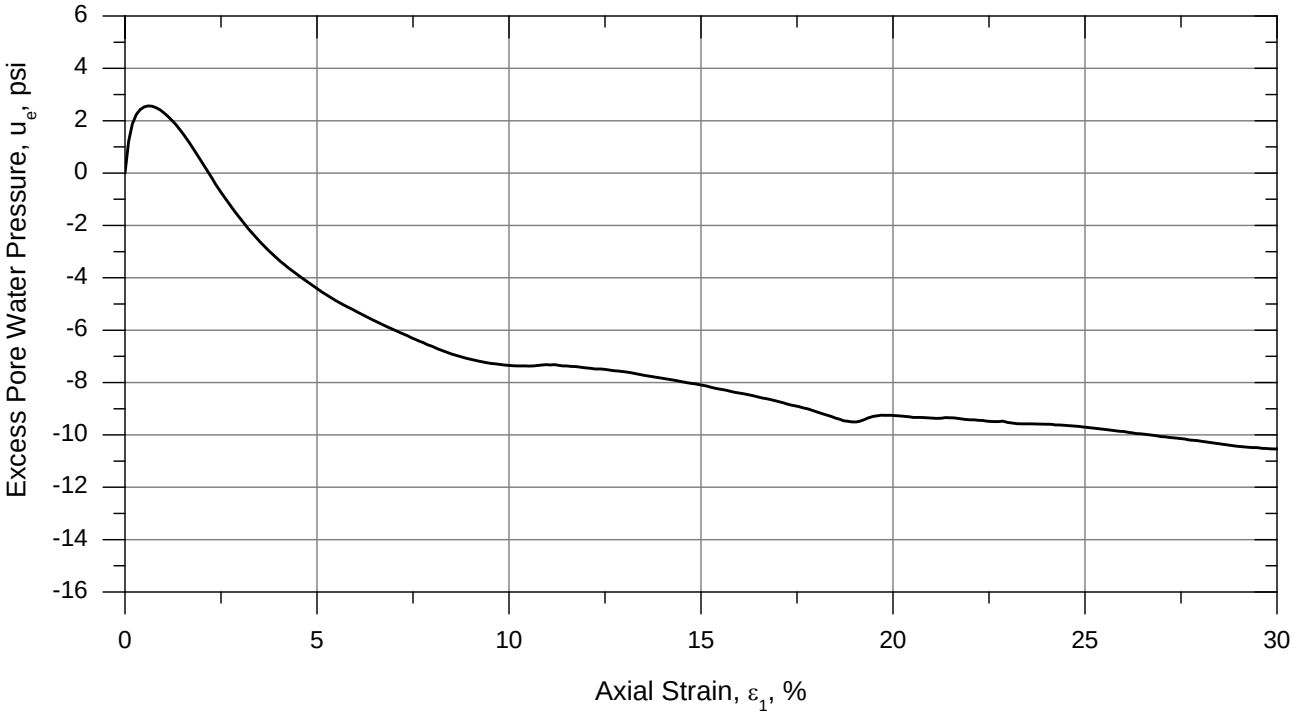




TRIAXIAL TEST RESULTS

BORING ID: 09-605B
TEST ID: 508





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	509
Soil Boring:	09-103B
Sample No.	OST-4
Soil Type:	CLAYEY SILT, SOME F-M SAND, LIGHT BROWN
USCS:	CL-ML
Specific Gravity	2.69
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

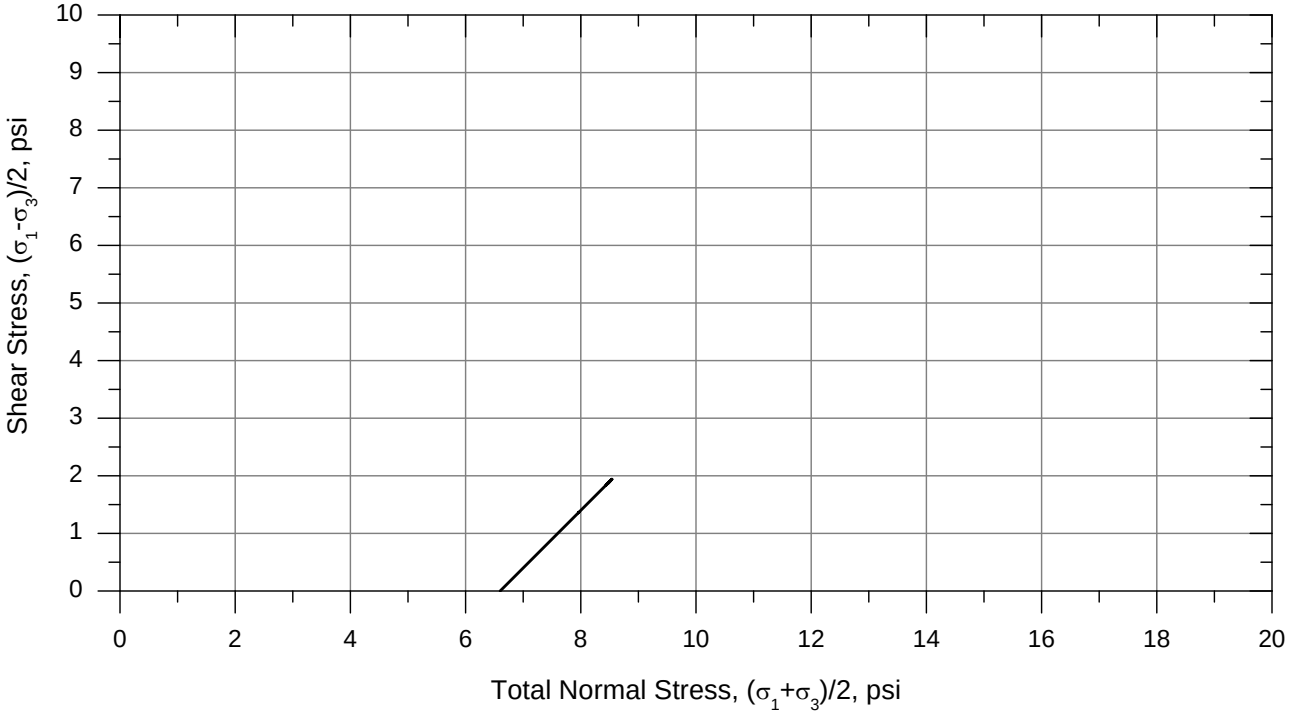
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.070
	Max. Mobilized Friction Angle, deg:	12.1
	Max. Deviator Stress, psi:	3.9

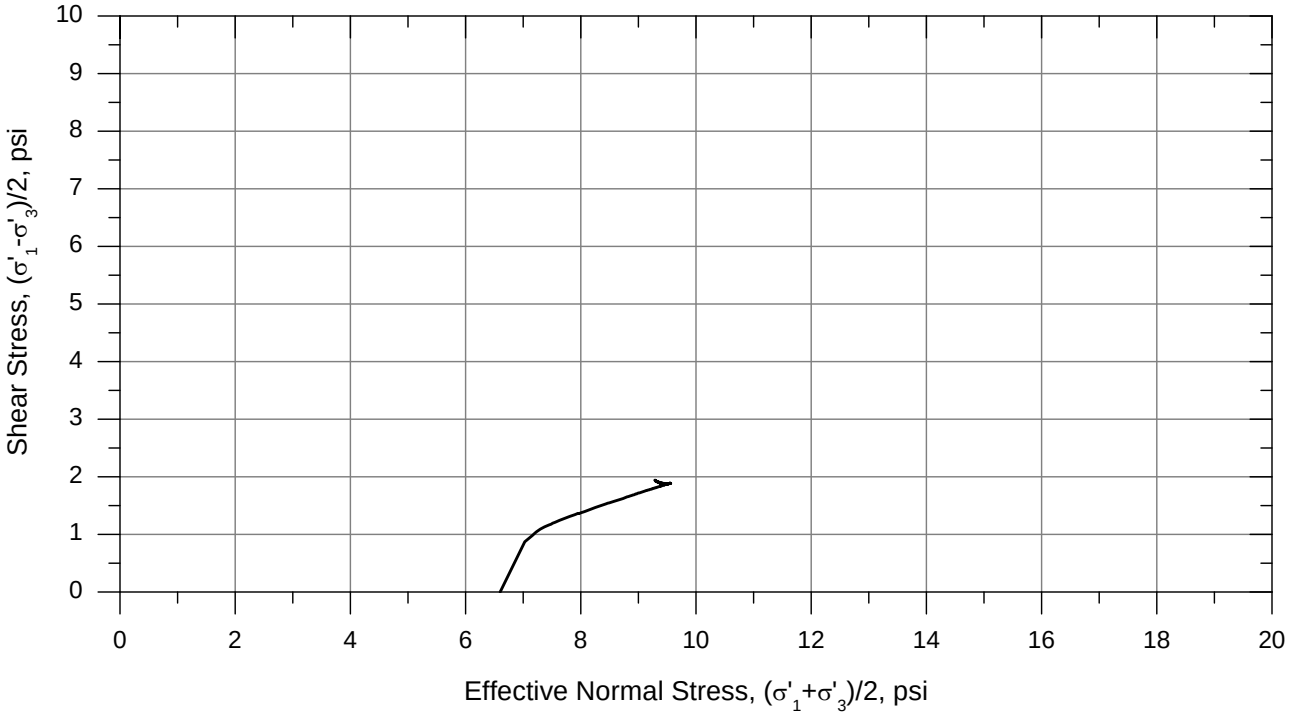
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	153.4	143.4	142.7	142.7	105.5	105.5	105.4
Diameter, mm:	73.4	75.9	75.6	75.6	85.4	85.4	85.4
Axial Strain, %:		0.0	0.5	0.0	26.1	26.1	26.1
Volumetric Strain, %:		0.0	1.5	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	3.9	3.9	3.9
Vertical Effective Stress, psi:		2.5	6.6	6.6	11.2	11.2	11.2
Horizontal Effective Stress, psi:		2.5	6.6	6.6	7.3	7.3	7.3
Void Ratio:		0.61	0.59	0.59	0.59	0.59	0.59
Water Content, %:		22.8	21.9	21.9	21.9	21.9	21.9
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		127.7	128.7	128.7	128.7	128.7	128.7
Dry Unit Weight, pcf:		104.0	105.6	105.6	105.6	105.6	105.6

TRIAXIAL TEST RESULTS

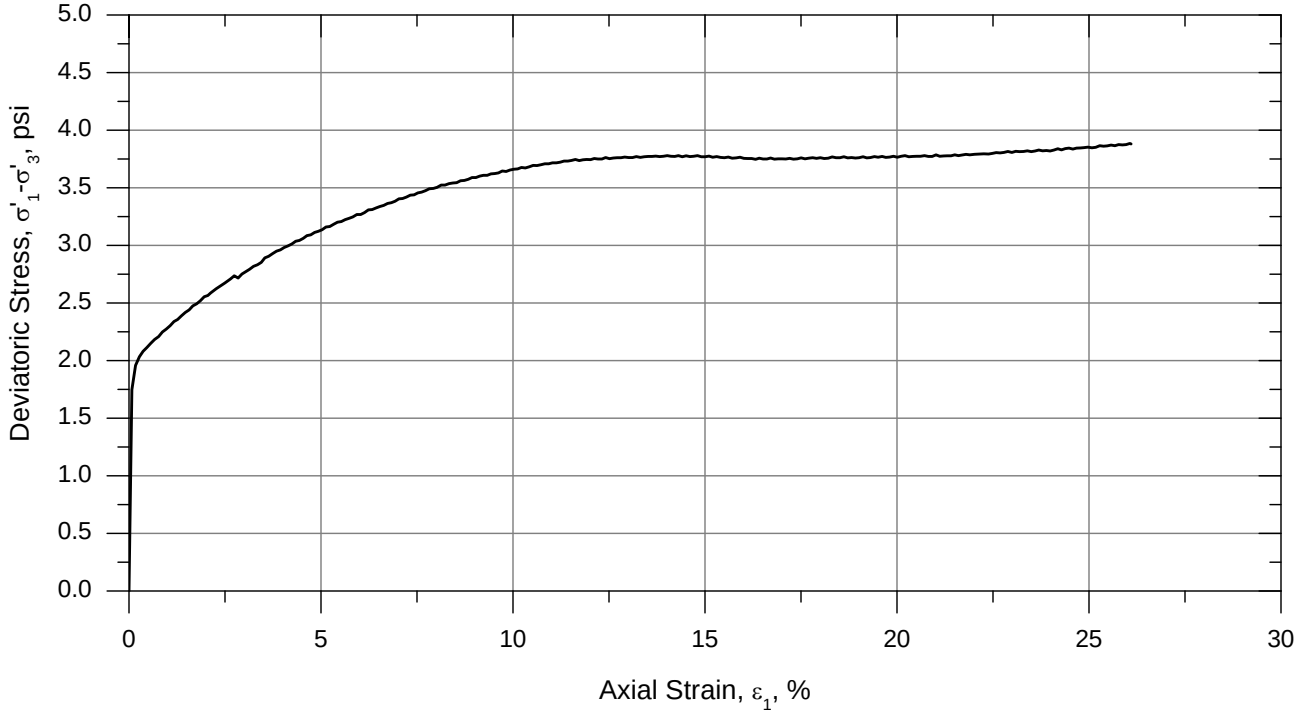
BORING ID: 09-103B
TEST ID: 509

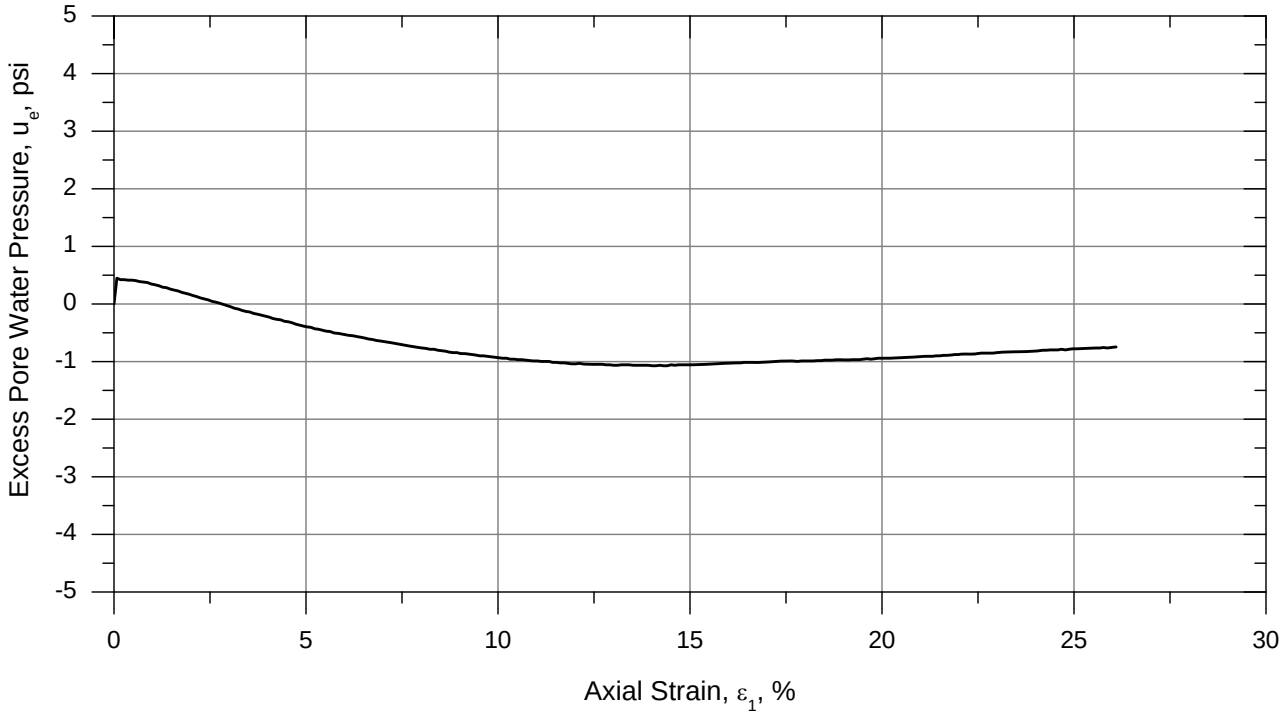




TRIAXIAL TEST RESULTS

BORING ID: 09-103B
TEST ID: 509





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	510
Soil Boring:	09-206B
Sample No.	OST-3
Soil Type:	SILTY CLAY, TRACE F-C SAND, BROWN
USCS:	CL
Specific Gravity	2.72
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

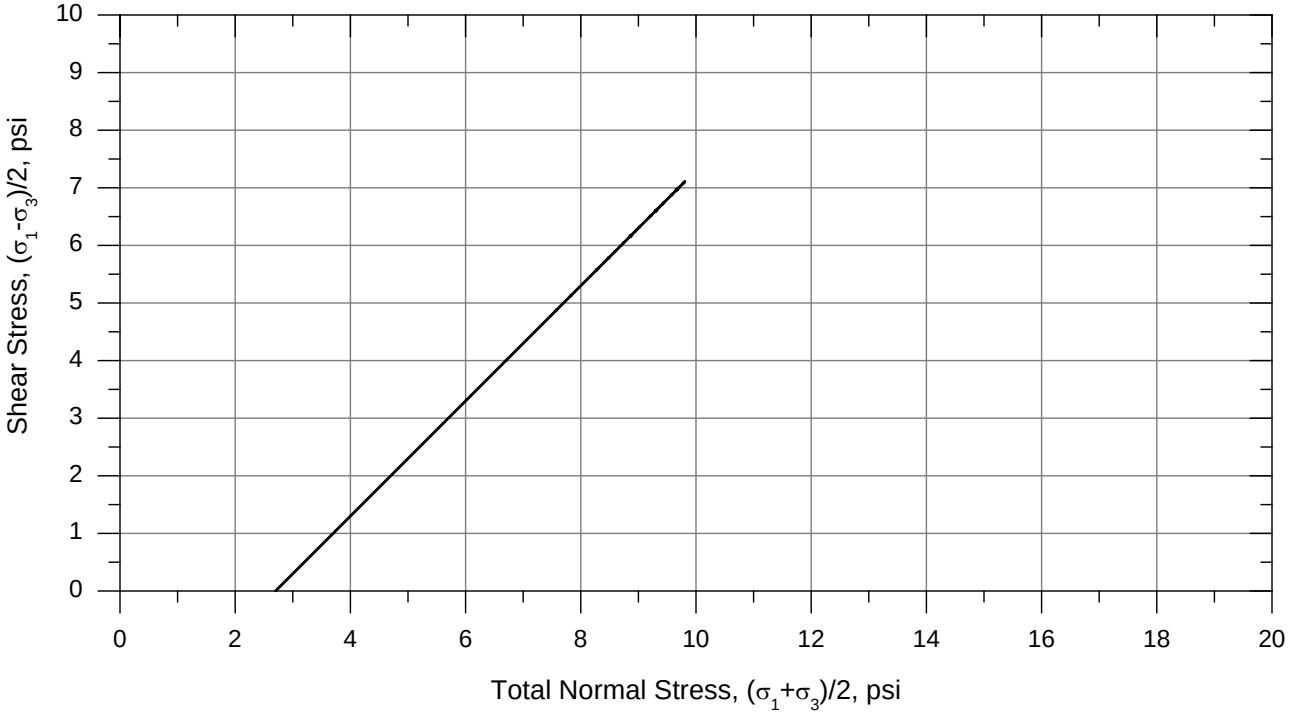
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.068
	Max. Mobilized Friction Angle, deg:	25.1
	Max. Deviator Stress, psi:	14.2

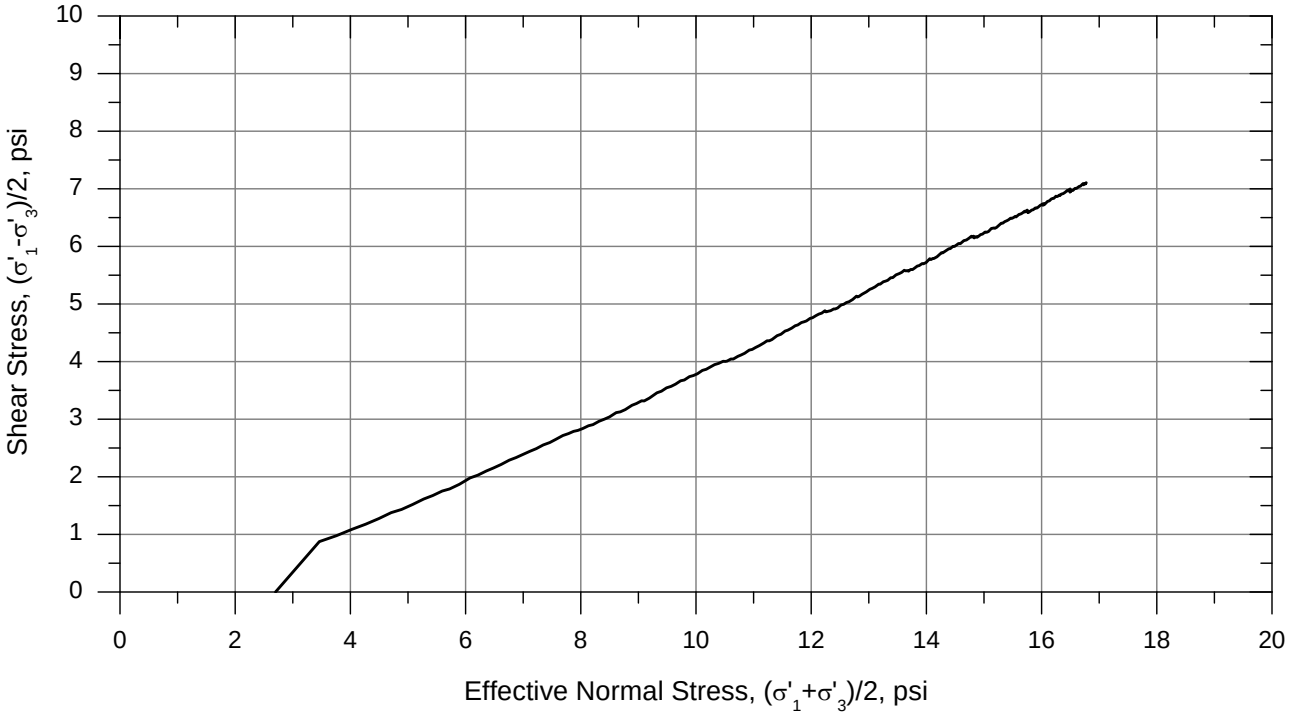
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	153.8	146.0	146.0	146.0	113.0	112.6	112.6
Diameter, mm:	71.7	73.7	73.7	73.7	82.0	82.2	82.2
Axial Strain, %:		0.0	0.0	0.0	22.6	22.9	22.9
Volumetric Strain, %:		0.0	0.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	14.2	14.2	14.2
Vertical Effective Stress, psi:		2.5	2.7	2.7	23.8	23.9	23.9
Horizontal Effective Stress, psi:		2.5	2.7	2.7	9.6	9.7	9.7
Void Ratio:		0.60	0.60	0.60	0.60	0.60	0.60
Water Content, %:		22.0	22.0	22.0	22.0	22.0	22.0
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		129.5	129.5	129.5	129.5	129.5	129.5
Dry Unit Weight, pcf:		106.1	106.1	106.1	106.1	106.1	106.1

TRIAXIAL TEST RESULTS

BORING ID: 09-206B
TEST ID: 510





TRIAXIAL TEST RESULTS

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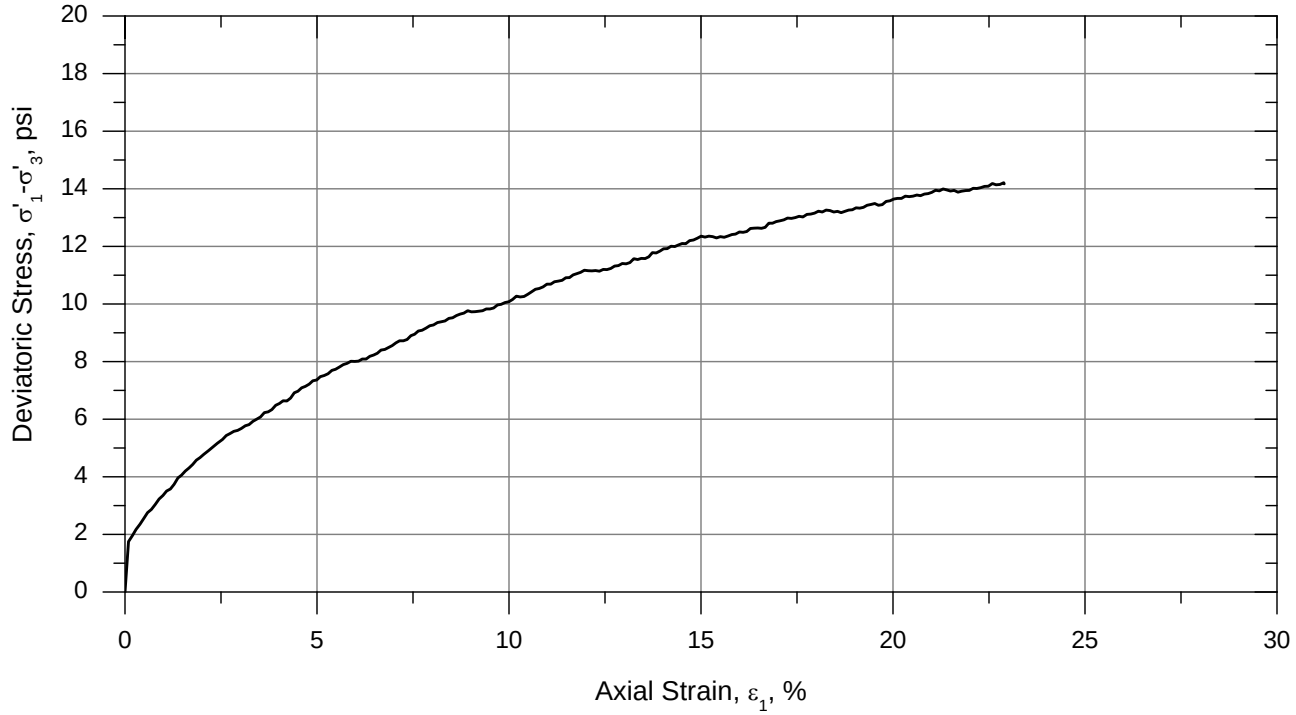
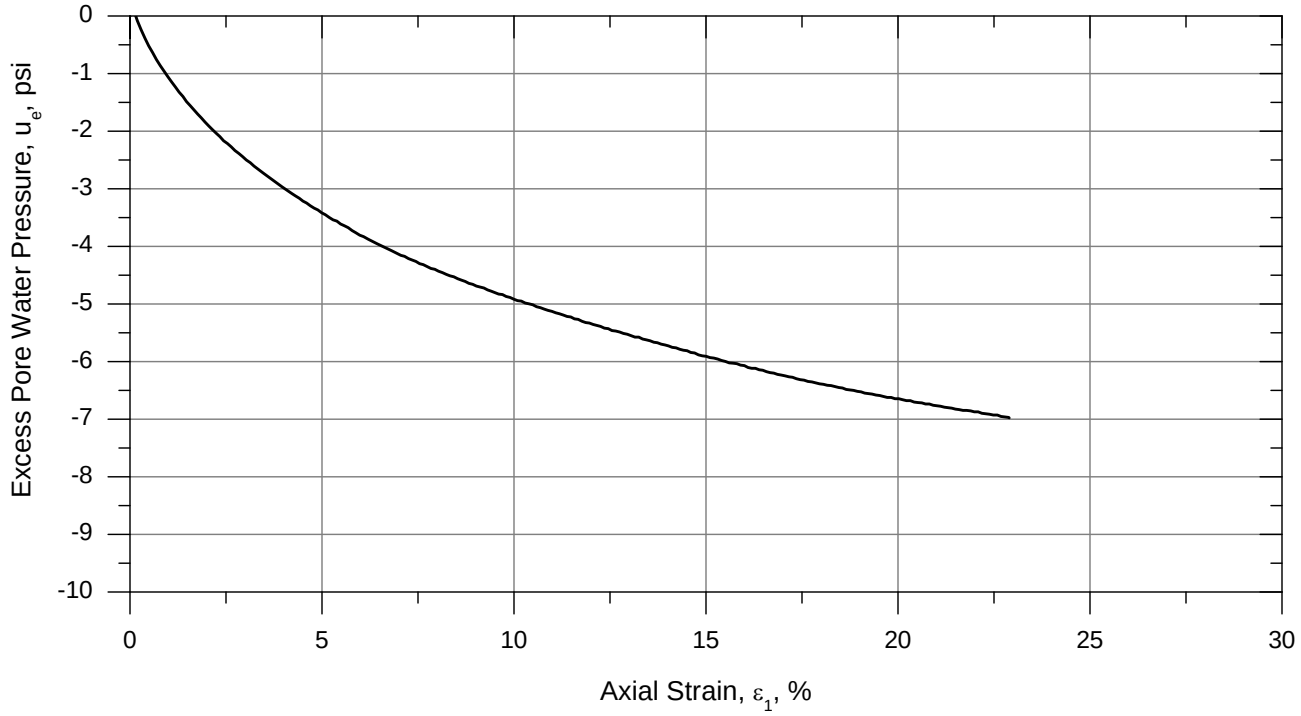
TEST ID: 510





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	511
Soil Boring:	09-203B
Sample No.	OST-6
Soil Type:	SILTY CLAY, LITTLE F-M SAND, BROWN
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

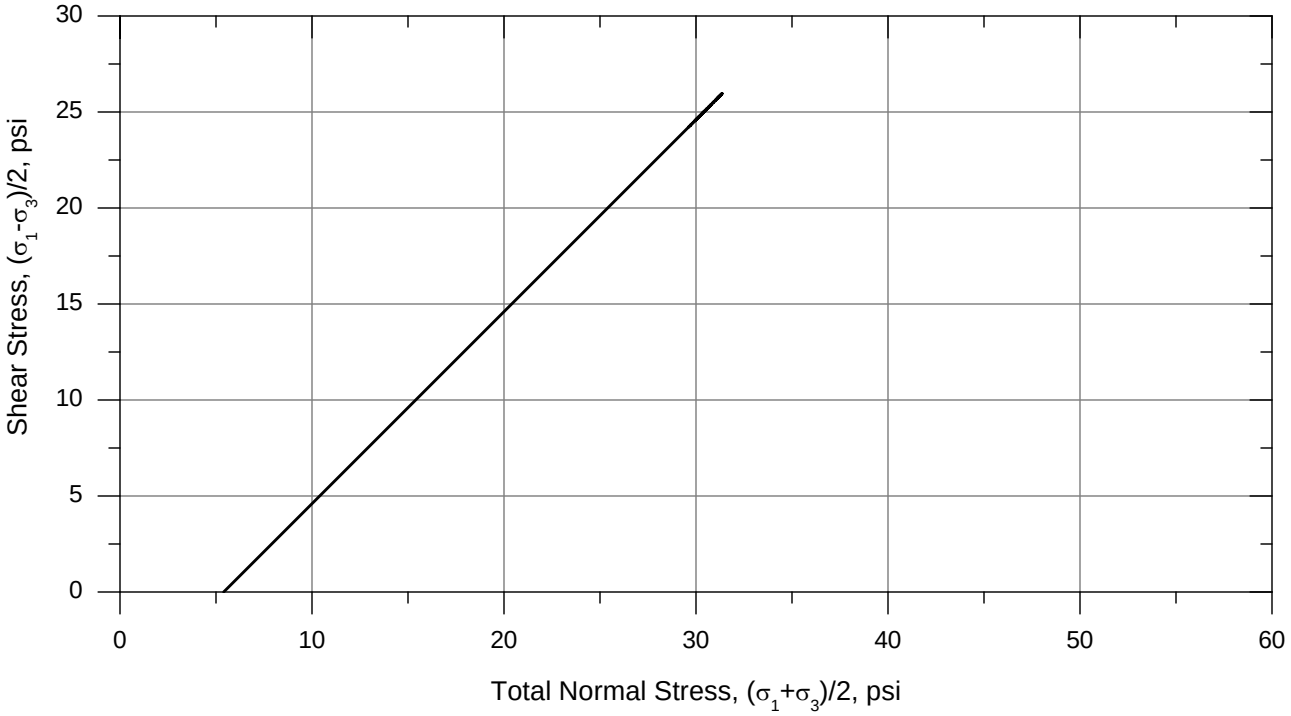
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.067
	Max. Mobilized Friction Angle, deg:	36.3
	Max. Deviator Stress, psi:	51.9

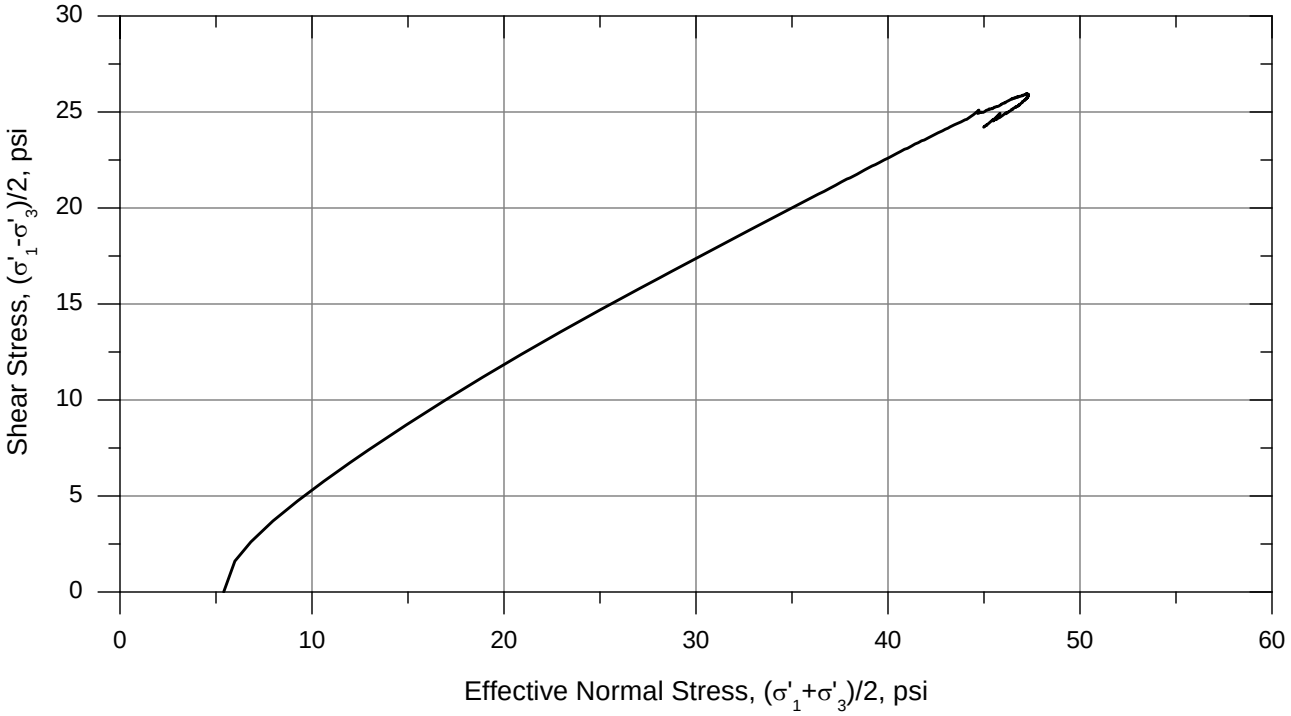
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	147.7	147.5	147.4	147.4	145.6	126.9	107.7
Diameter, mm:	72.5	72.0	72.0	72.0	72.4	77.0	81.7
Axial Strain, %:		0.0	0.1	0.0	1.2	13.9	26.9
Volumetric Strain, %:		0.0	0.3	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	24.1	51.9	48.4
Vertical Effective Stress, psi:		2.5	5.4	5.4	32.4	73.2	69.2
Horizontal Effective Stress, psi:		2.5	5.4	5.4	8.3	21.2	20.8
Void Ratio:		0.50	0.50	0.50	0.50	0.50	0.50
Water Content, %:		18.5	18.4	18.4	18.4	18.4	18.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		133.1	133.3	133.3	133.3	133.3	133.3
Dry Unit Weight, pcf:		112.3	112.6	112.6	112.6	112.6	112.6

TRIAXIAL TEST RESULTS

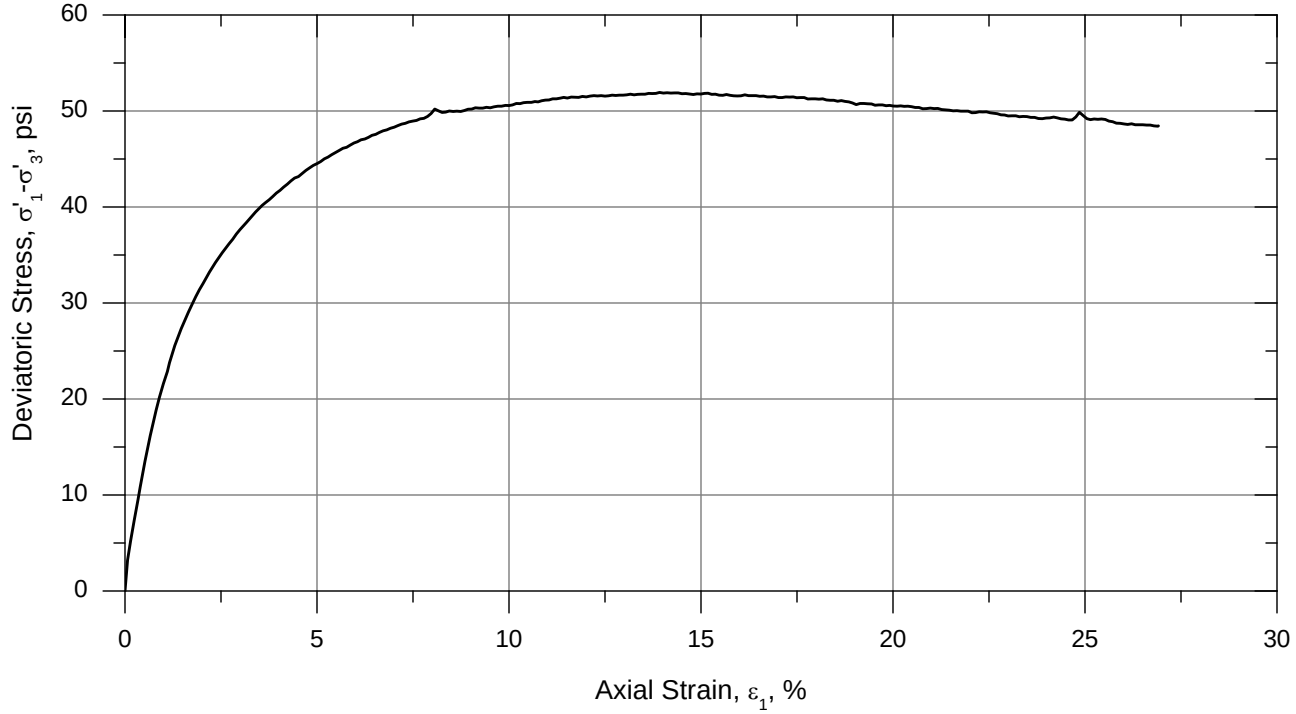
BORING ID: 09-203B
TEST ID: 511

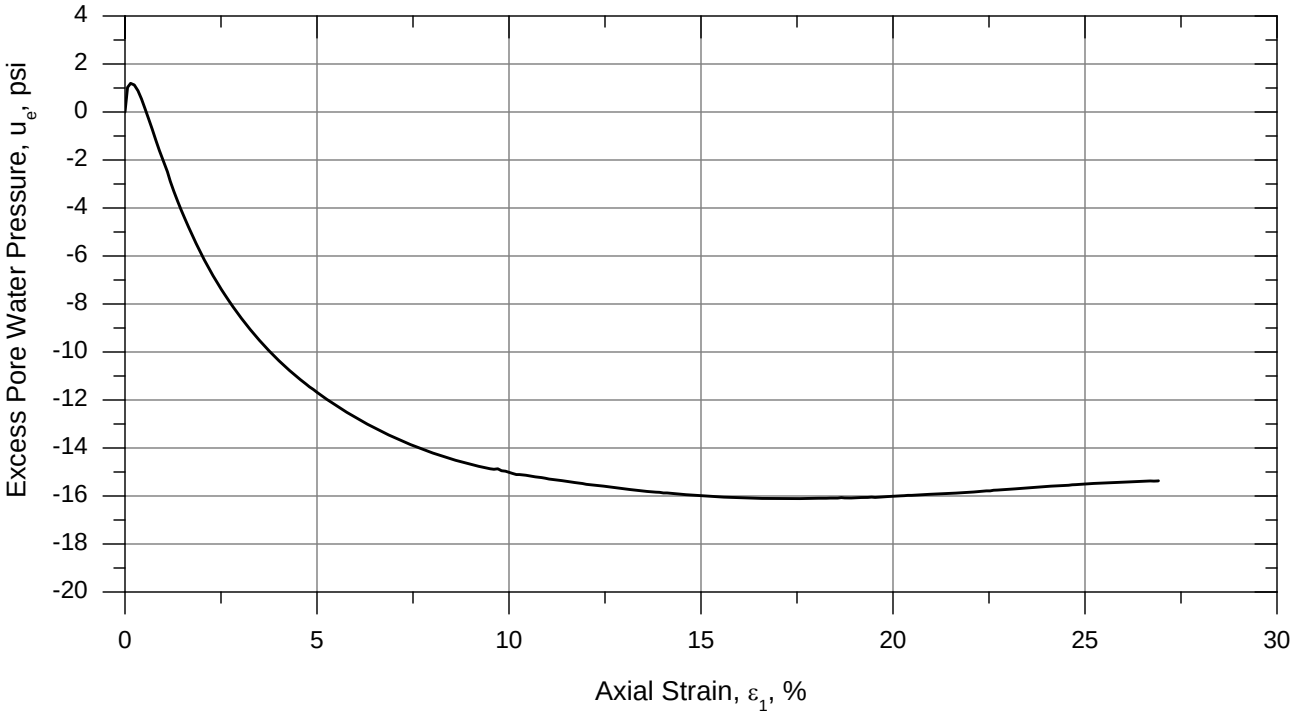




TRIAXIAL TEST RESULTS

BORING ID: 09-203B
TEST ID: 511





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	512
Soil Boring:	09-205B
Sample No.	OST-2
Soil Type:	SILTY CLAY, TRACE FINE SAND, BROWN
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

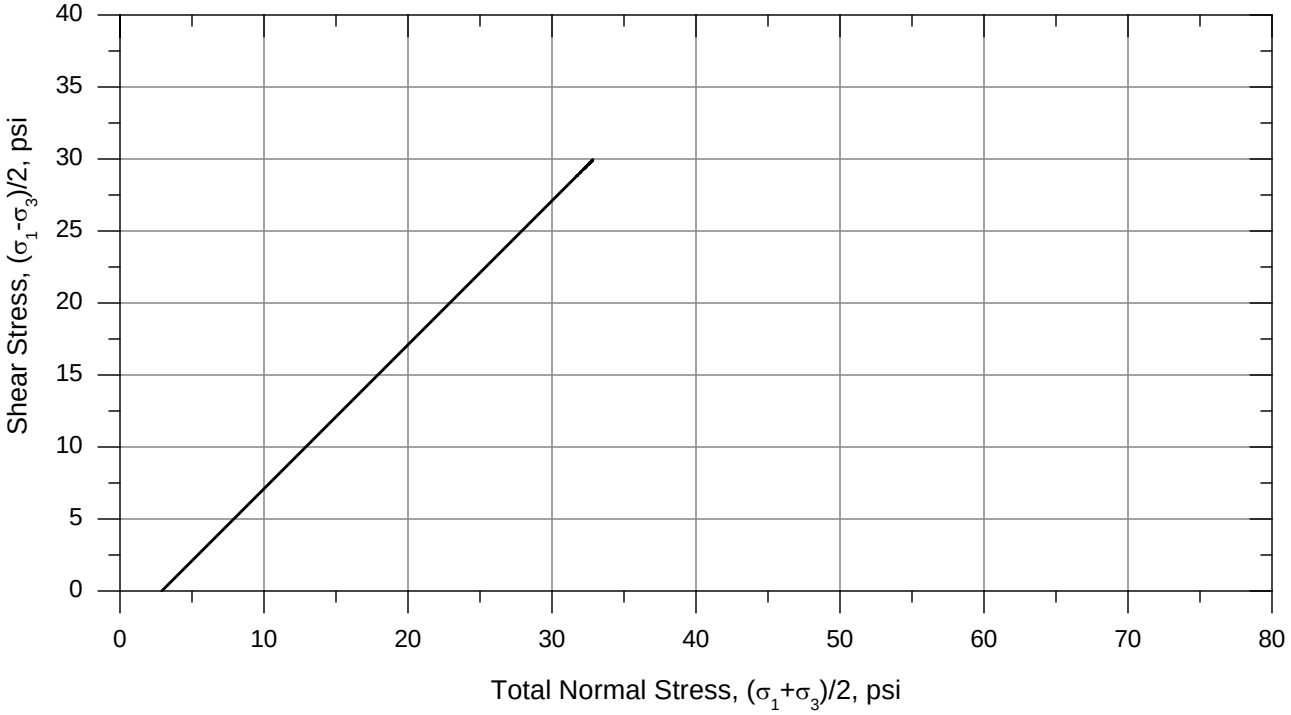
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.070
	Max. Mobilized Friction Angle, deg:	40.2
	Max. Deviator Stress, psi:	59.9

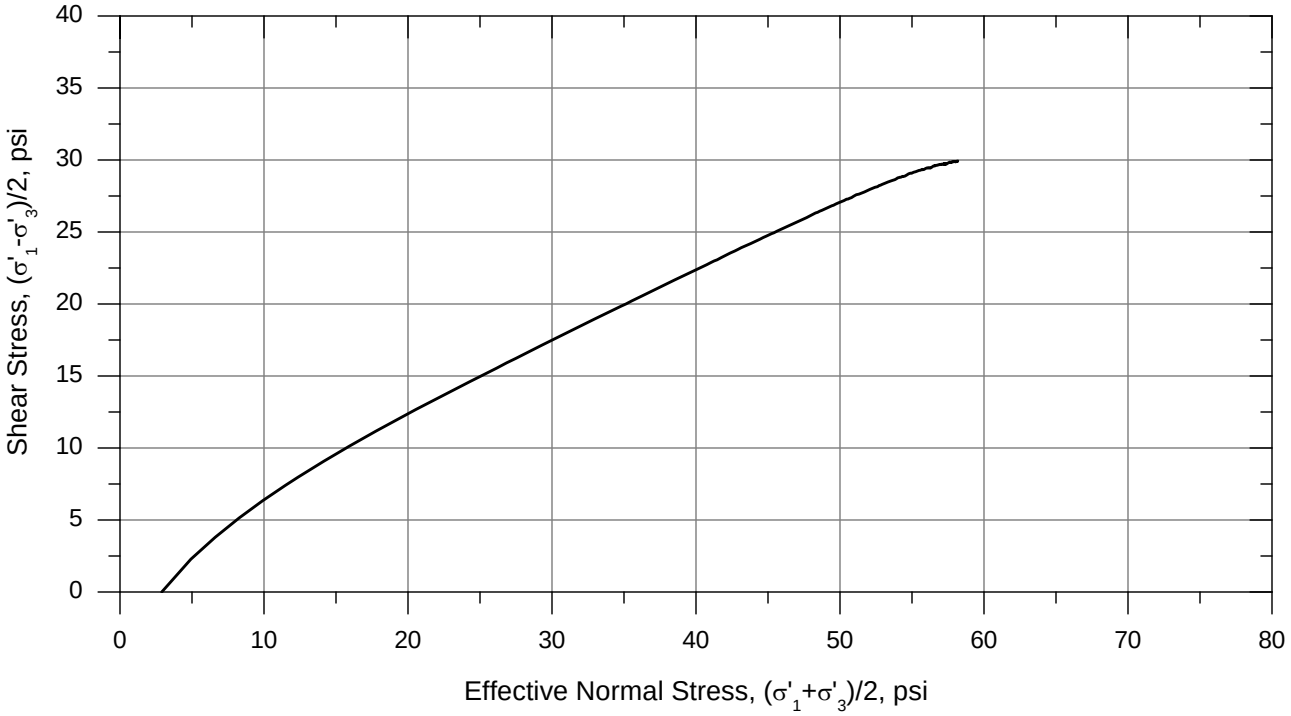
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.8	149.7	149.7	149.7	149.0	113.3	113.2
Diameter, mm:	71.4	70.8	70.8	70.8	70.9	79.4	79.4
Axial Strain, %:		0.0	0.0	0.0	0.5	24.3	24.4
Volumetric Strain, %:		0.0	0.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	14.8	59.9	59.8
Vertical Effective Stress, psi:		2.5	2.9	2.9	18.9	88.1	88.1
Horizontal Effective Stress, psi:		2.5	2.9	2.9	4.1	28.2	28.3
Void Ratio:		0.55	0.55	0.55	0.55	0.55	0.55
Water Content, %:		20.3	20.3	20.3	20.3	20.3	20.3
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		131.0	131.0	131.0	131.0	131.0	131.0
Dry Unit Weight, pcf:		108.9	108.9	108.9	108.9	108.9	108.9

TRIAXIAL TEST RESULTS

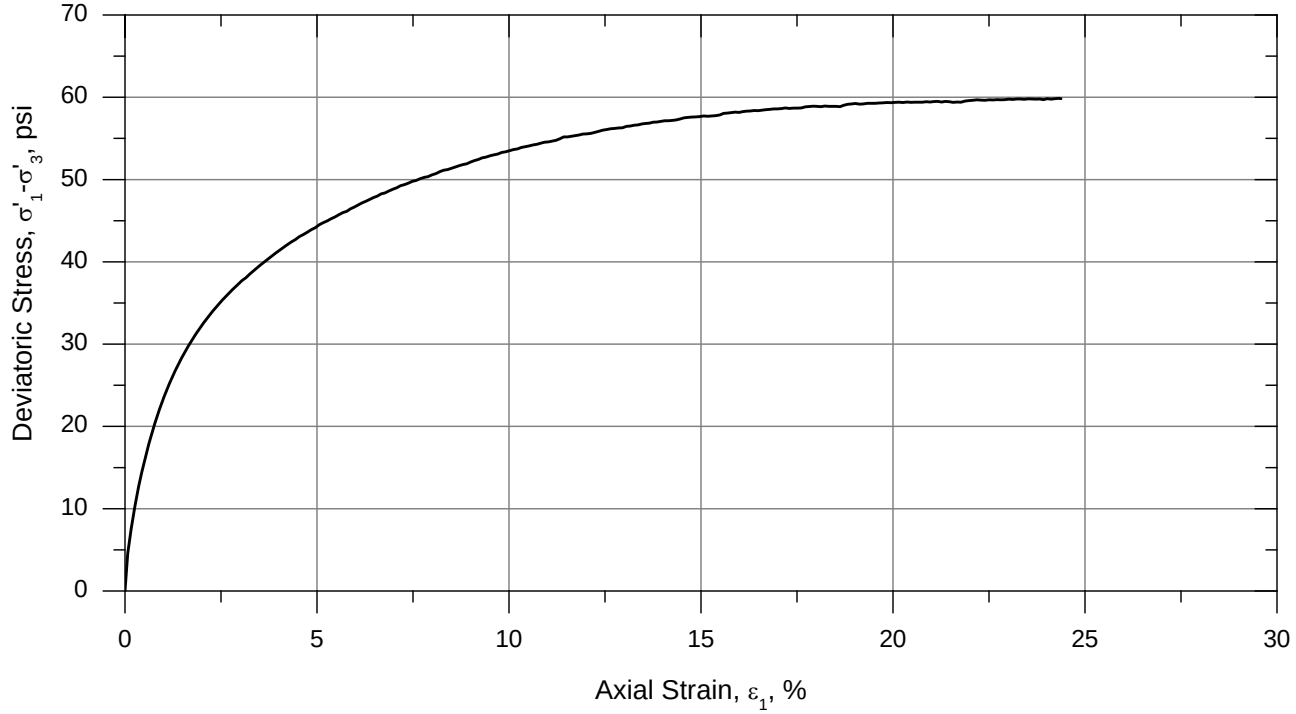
BORING ID: 09-205B
TEST ID: 512

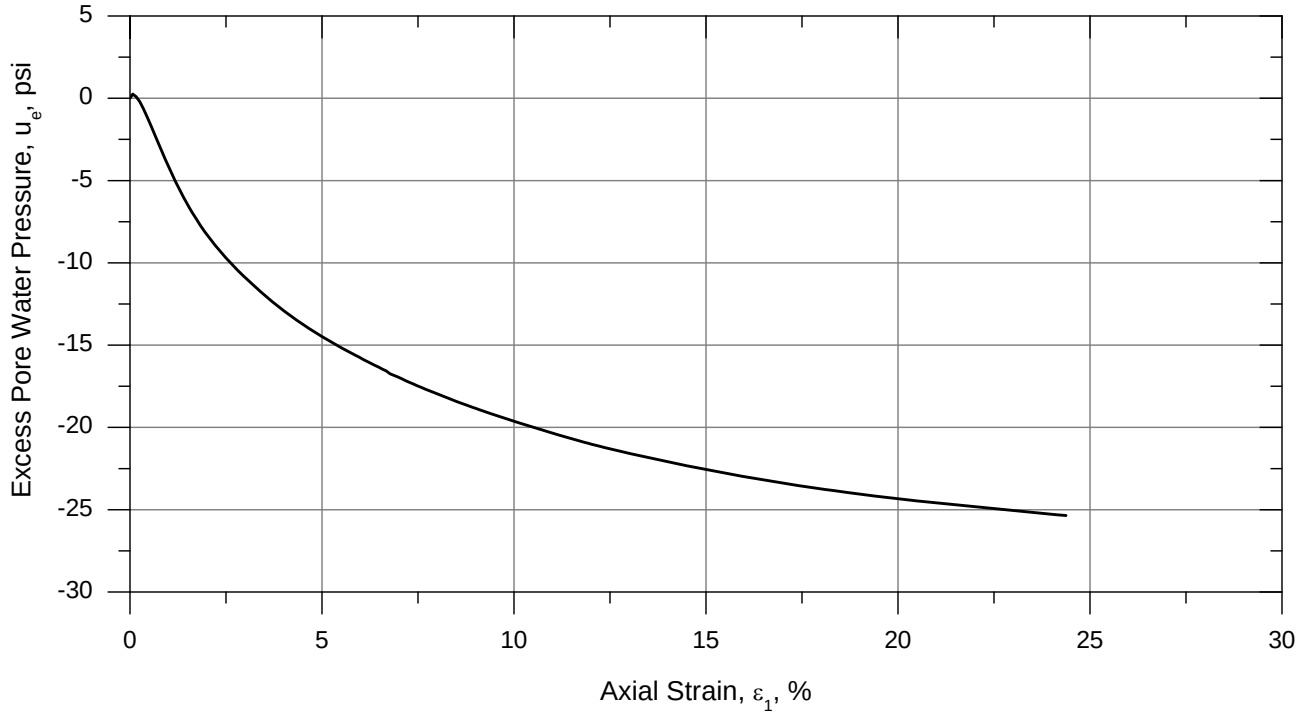




TRIAXIAL TEST RESULTS

BORING ID: 09-205B
TEST ID: 512





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	513
Soil Boring:	09-206B
Sample No.	OST-4
Soil Type:	SILTY CLAY, TRACE FINE SAND, BROWN
USCS:	CL
Specific Gravity	2.72
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

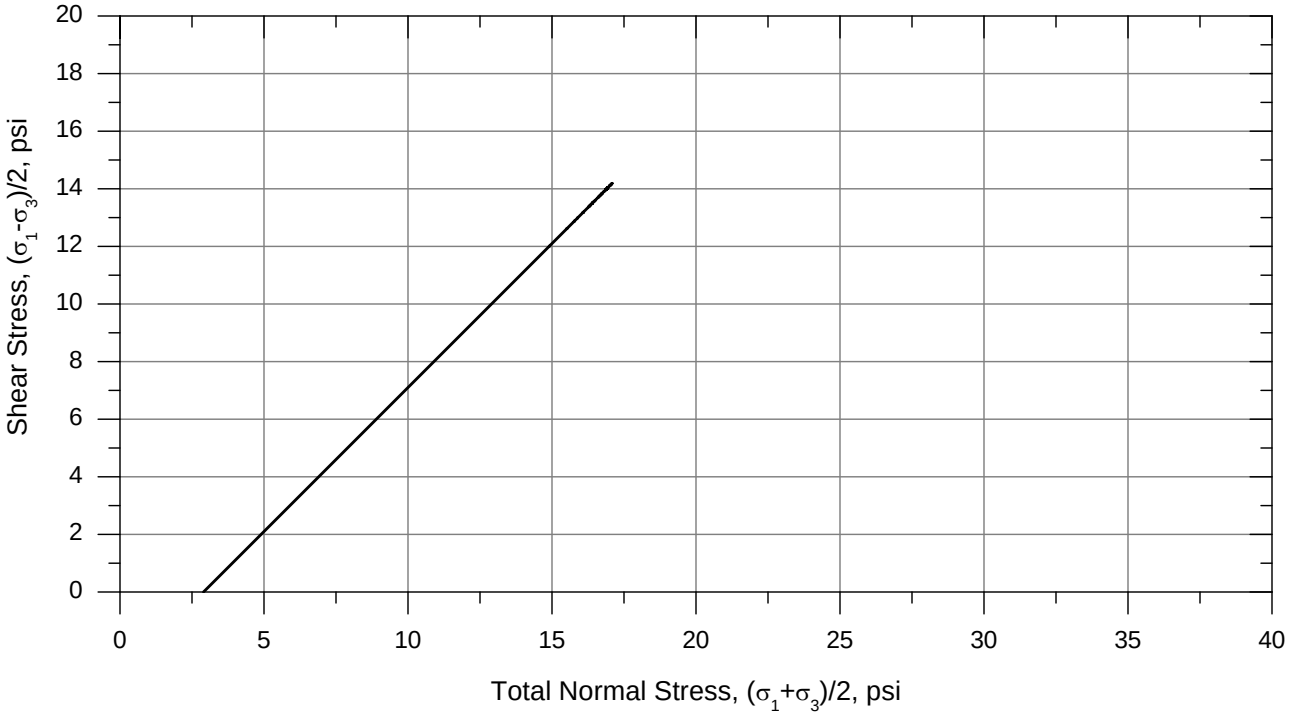
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.021
	Max. Mobilized Friction Angle, deg:	48.1
	Max. Deviator Stress, psi:	28.4

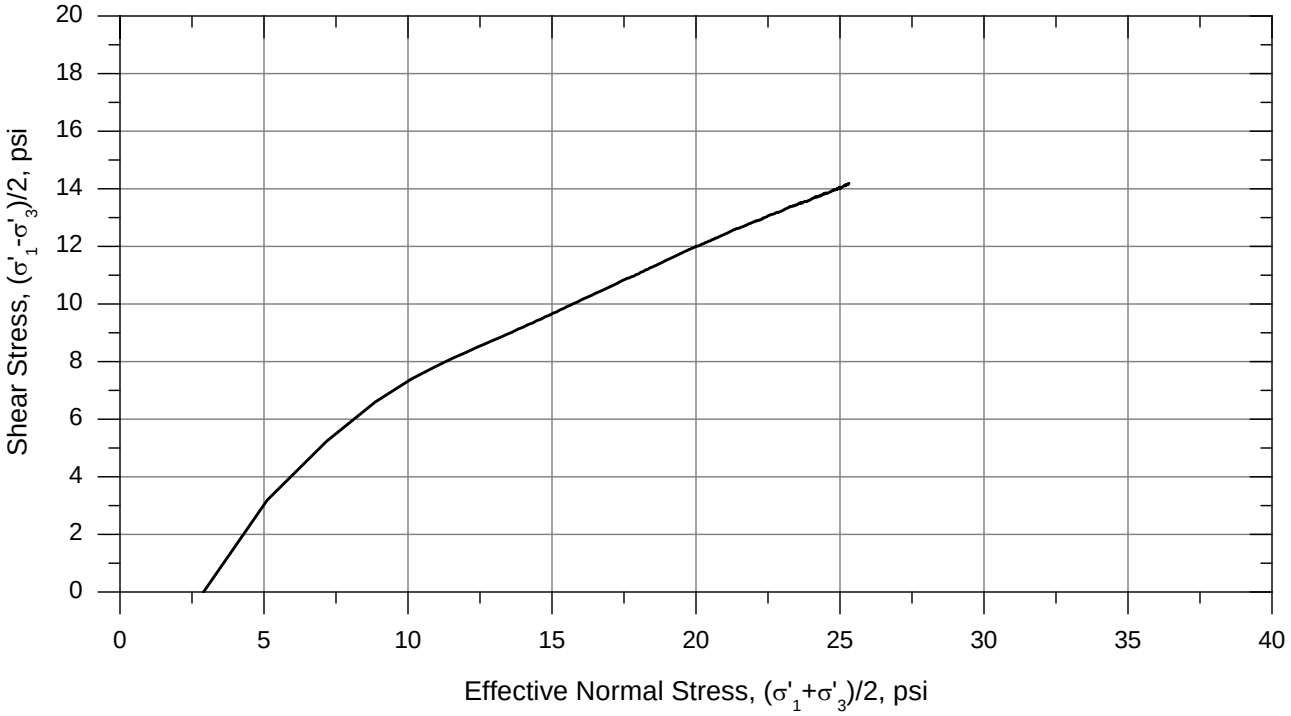
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	149.0	140.0	140.0	140.0	139.6	102.7	102.4
Diameter, mm:	72.0	74.4	74.4	74.4	74.5	84.3	84.4
Axial Strain, %:		0.0	0.0	0.0	0.3	26.7	26.8
Volumetric Strain, %:		0.0	0.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	13.2	28.4	28.3
Vertical Effective Stress, psi:		2.5	2.9	2.9	15.5	39.5	39.4
Horizontal Effective Stress, psi:		2.5	2.9	2.9	2.3	11.1	11.1
Void Ratio:		0.66	0.66	0.66	0.66	0.66	0.66
Water Content, %:		24.3	24.2	24.2	24.2	24.2	24.2
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		127.1	127.1	127.1	127.1	127.1	127.1
Dry Unit Weight, pcf:		102.3	102.3	102.3	102.3	102.3	102.3

TRIAXIAL TEST RESULTS

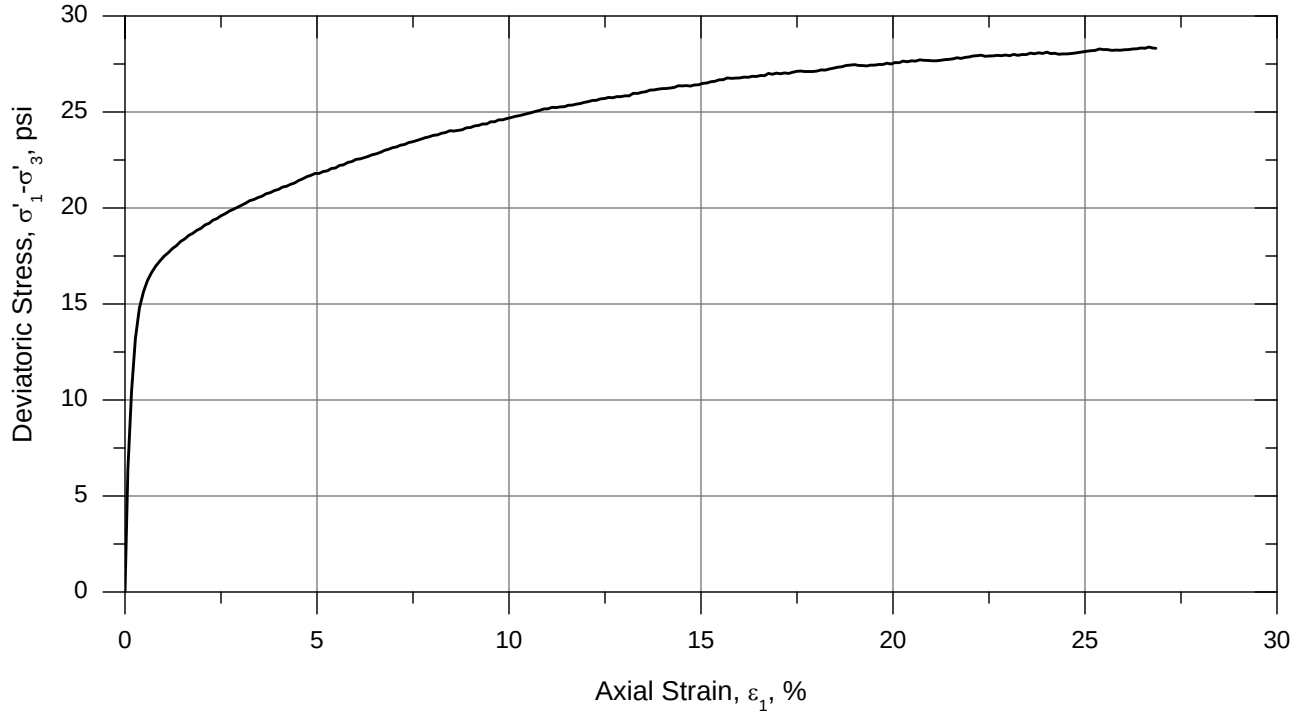
BORING ID: 09-206B
TEST ID: 513

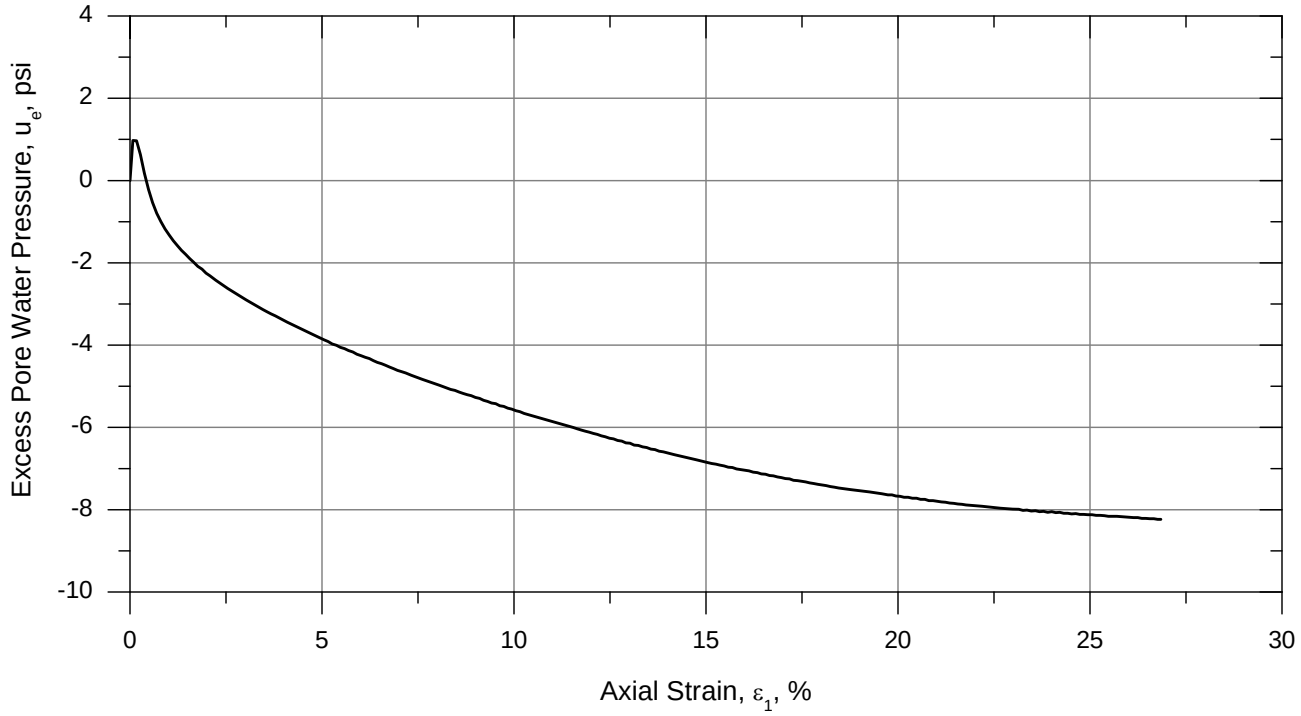




TRIAXIAL TEST RESULTS

BORING ID: 09-206B
TEST ID: 513





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	514
Soil Boring:	09-207B
Sample No.	OST-4
Soil Type:	SILTY CLAY, TRACE FINE SAND, BROWNISH GRAY
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

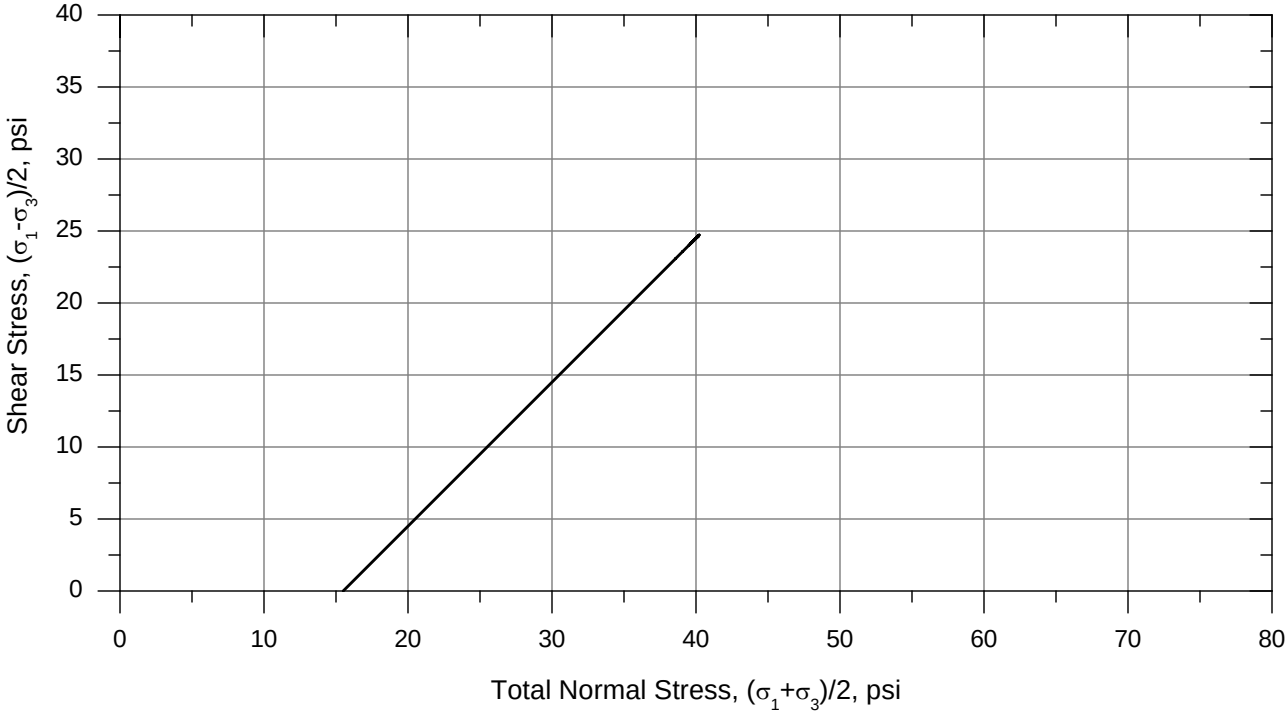
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.022
	Max. Mobilized Friction Angle, deg:	34.4
	Max. Deviator Stress, psi:	49.4

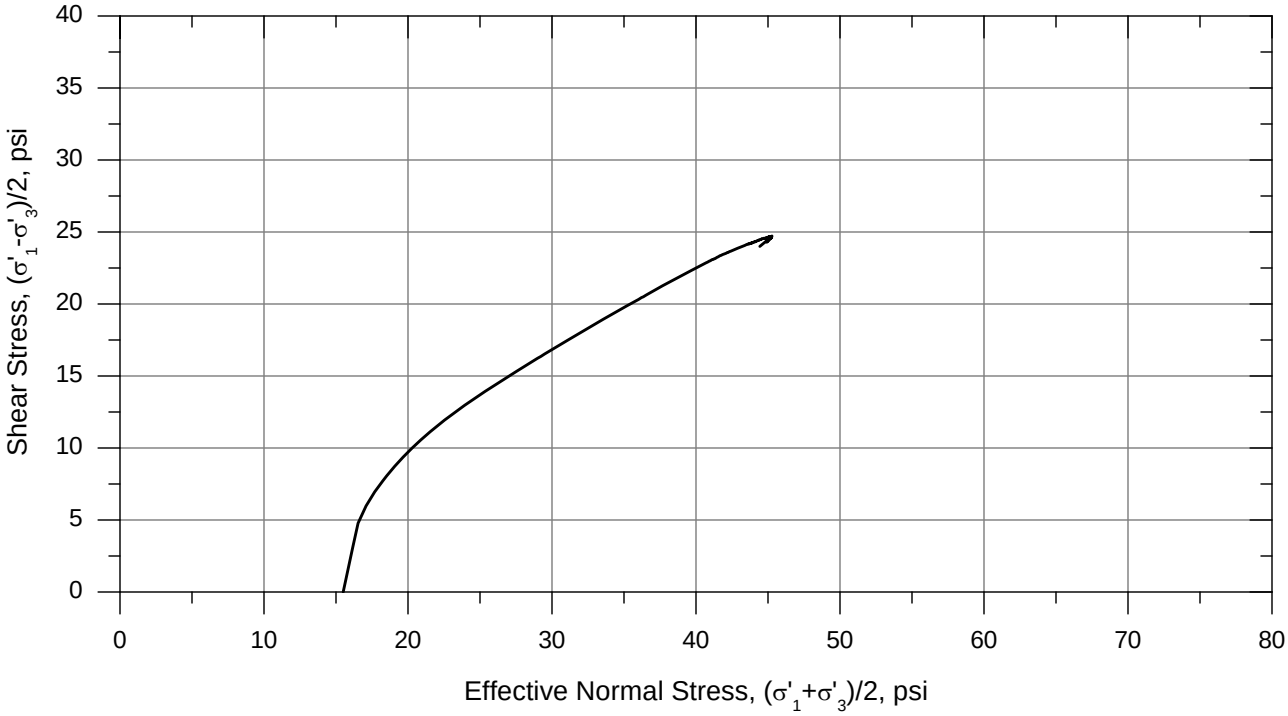
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	142.9	142.8	142.6	142.6	132.6	105.5	105.4
Diameter, mm:	71.8	71.5	71.4	71.4	73.9	80.7	80.7
Axial Strain, %:		0.0	0.2	0.0	7.0	26.0	26.1
Volumetric Strain, %:		0.0	0.5	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	39.4	49.4	48.0
Vertical Effective Stress, psi:		2.5	15.5	15.5	54.6	70.0	68.4
Horizontal Effective Stress, psi:		2.5	15.5	15.5	15.2	20.6	20.4
Void Ratio:		0.59	0.58	0.58	0.58	0.58	0.58
Water Content, %:		21.7	21.4	21.4	21.4	21.4	21.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		129.3	129.7	129.7	129.7	129.7	129.7
Dry Unit Weight, pcf:		106.2	106.8	106.8	106.8	106.8	106.8

TRIAXIAL TEST RESULTS

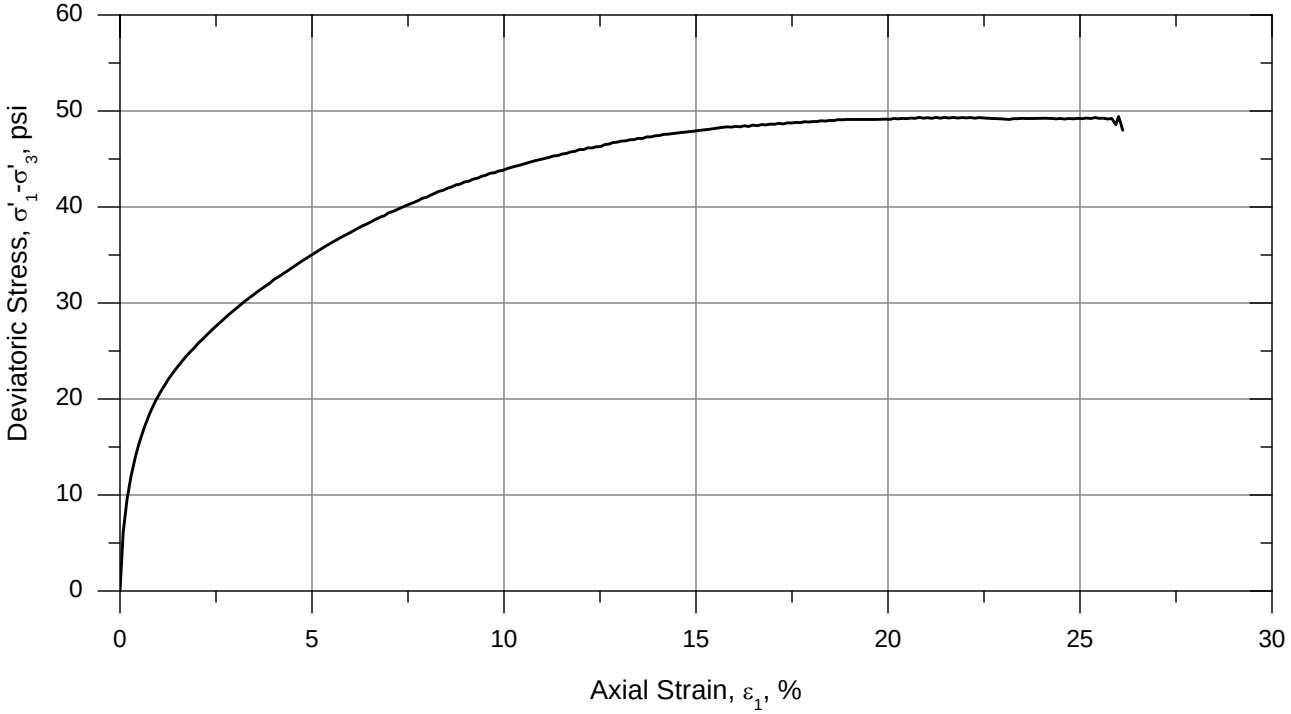
BORING ID: 09-207B
TEST ID: 514

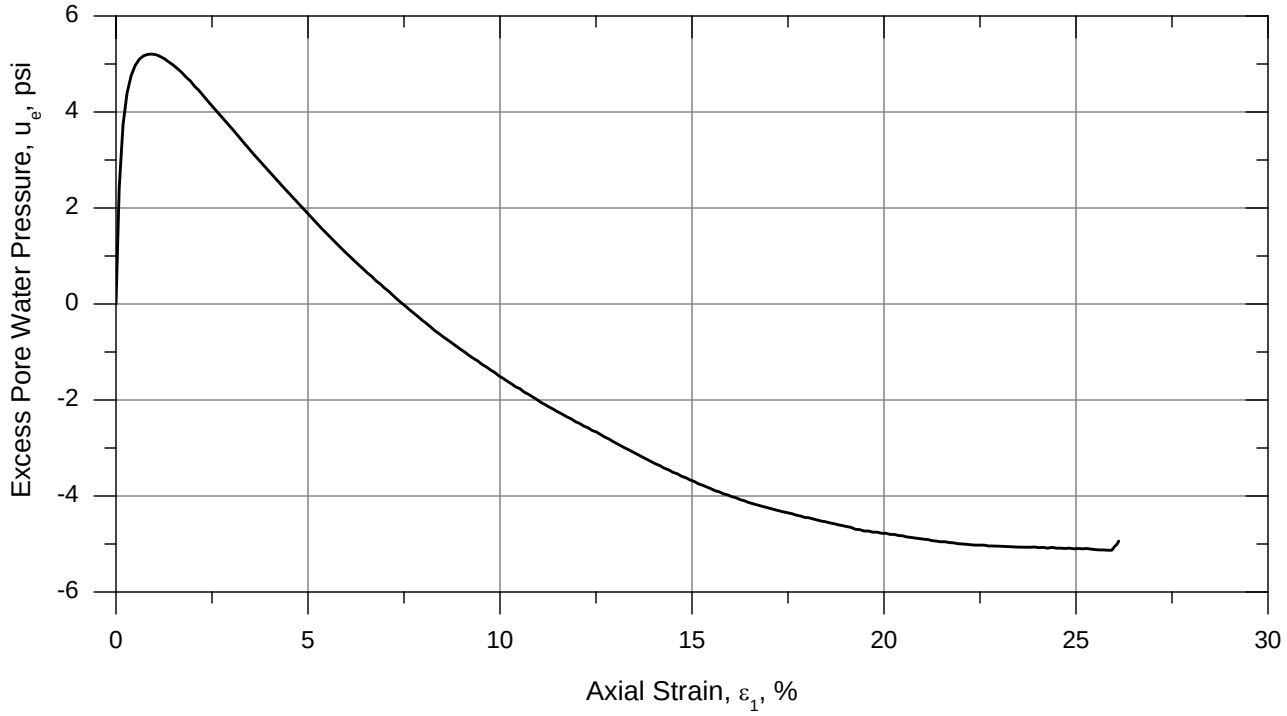




TRIAXIAL TEST RESULTS

BORING ID: 09-207B
TEST ID: 514





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	515
Soil Boring:	09-207B
Sample No.	OST-5
Soil Type:	SILTY CLAY, TRACE F-C SAND, GRAYISH BROWN
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

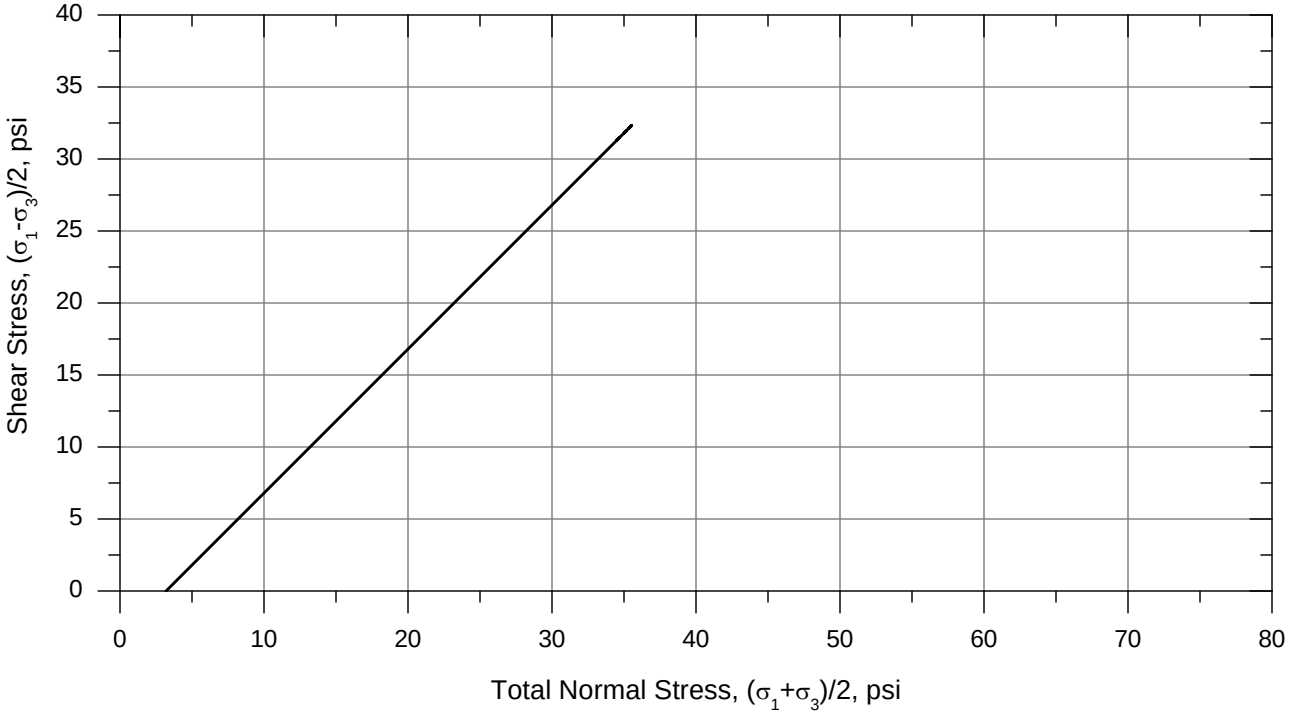
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.019
	Max. Mobilized Friction Angle, deg:	36.8
	Max. Deviator Stress, psi:	64.7

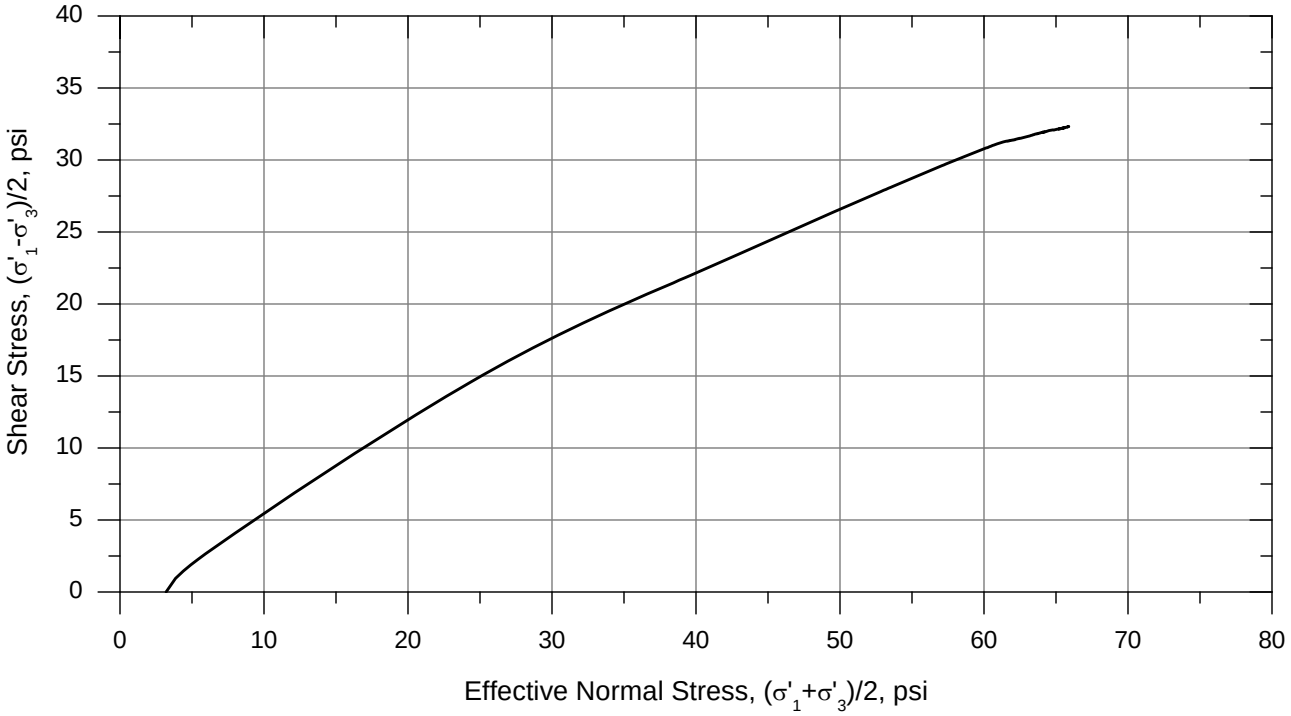
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	154.9	155.0	154.8	154.8	150.8	116.4	116.4
Diameter, mm:	71.9	71.7	71.6	71.6	72.6	80.5	80.5
Axial Strain, %:		0.0	0.1	0.0	2.6	24.8	24.8
Volumetric Strain, %:		0.0	0.3	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	27.2	64.7	64.6
Vertical Effective Stress, psi:		2.5	3.2	3.2	36.3	98.2	98.2
Horizontal Effective Stress, psi:		2.5	3.2	3.2	9.1	33.6	33.6
Void Ratio:		0.51	0.50	0.50	0.50	0.50	0.50
Water Content, %:		18.8	18.7	18.7	18.7	18.7	18.7
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		132.7	132.9	132.9	132.9	132.9	132.9
Dry Unit Weight, pcf:		111.7	112.0	112.0	112.0	112.0	112.0

TRIAXIAL TEST RESULTS

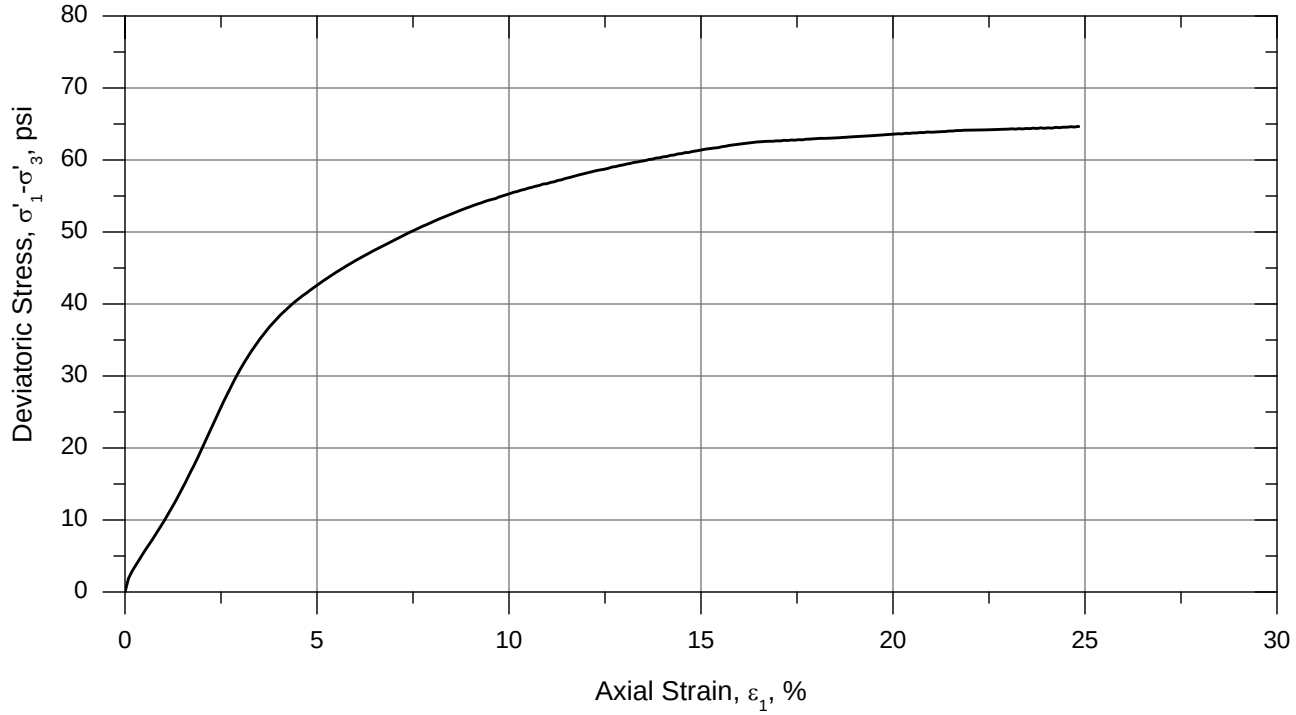
BORING ID: 09-207B
TEST ID: 515

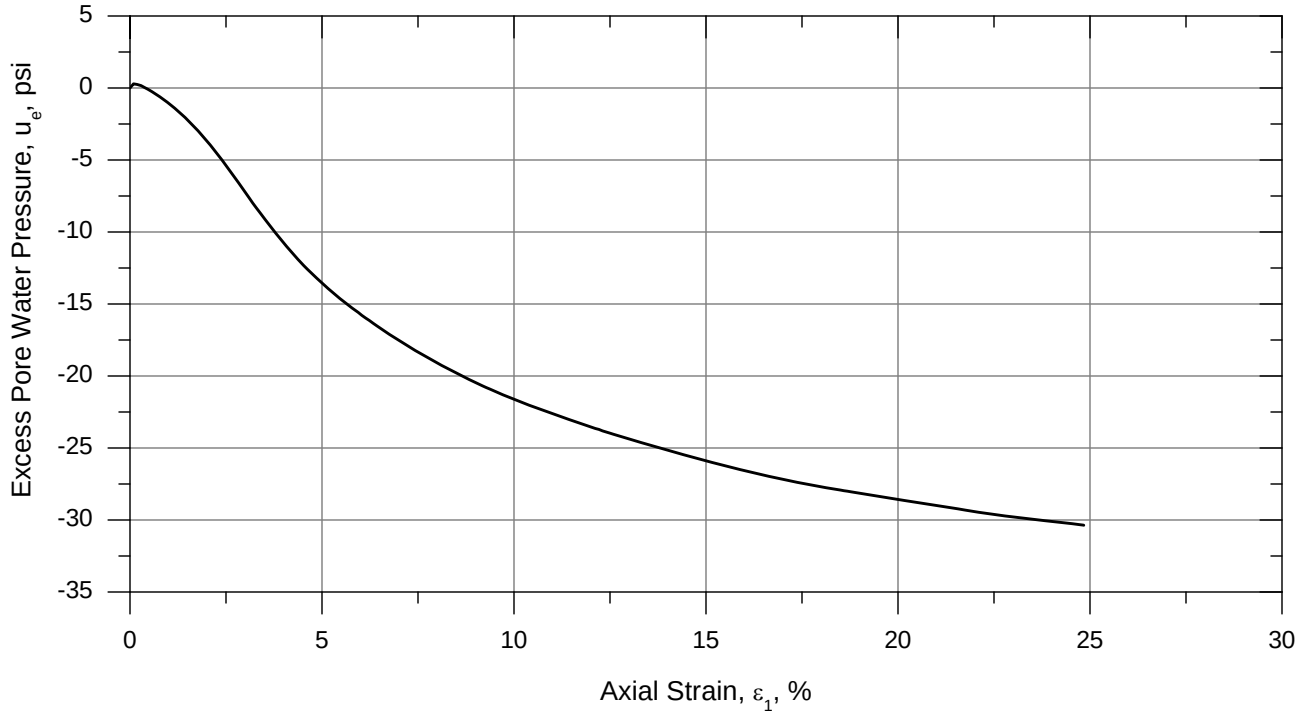




TRIAXIAL TEST RESULTS

BORING ID: 09-207B
TEST ID: 515





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 516
Soil Boring: 09-404B
Sample No. OST-3
Soil Type: CLAYEY SILT, LITTLE FINE SAND, GRAY
USCS: CL-ML
Specific Gravity 2.72
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

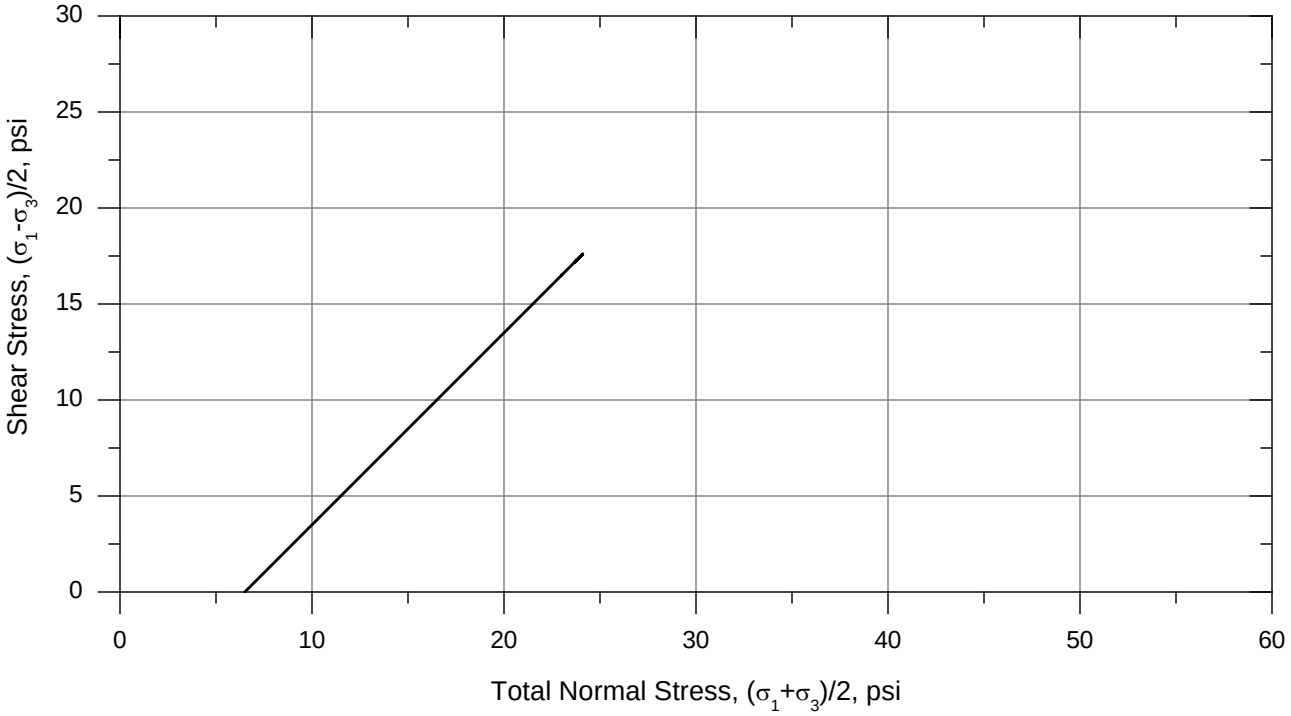
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.019
	Max. Mobilized Friction Angle, deg:	35.8
	Max. Deviator Stress, psi:	35.2

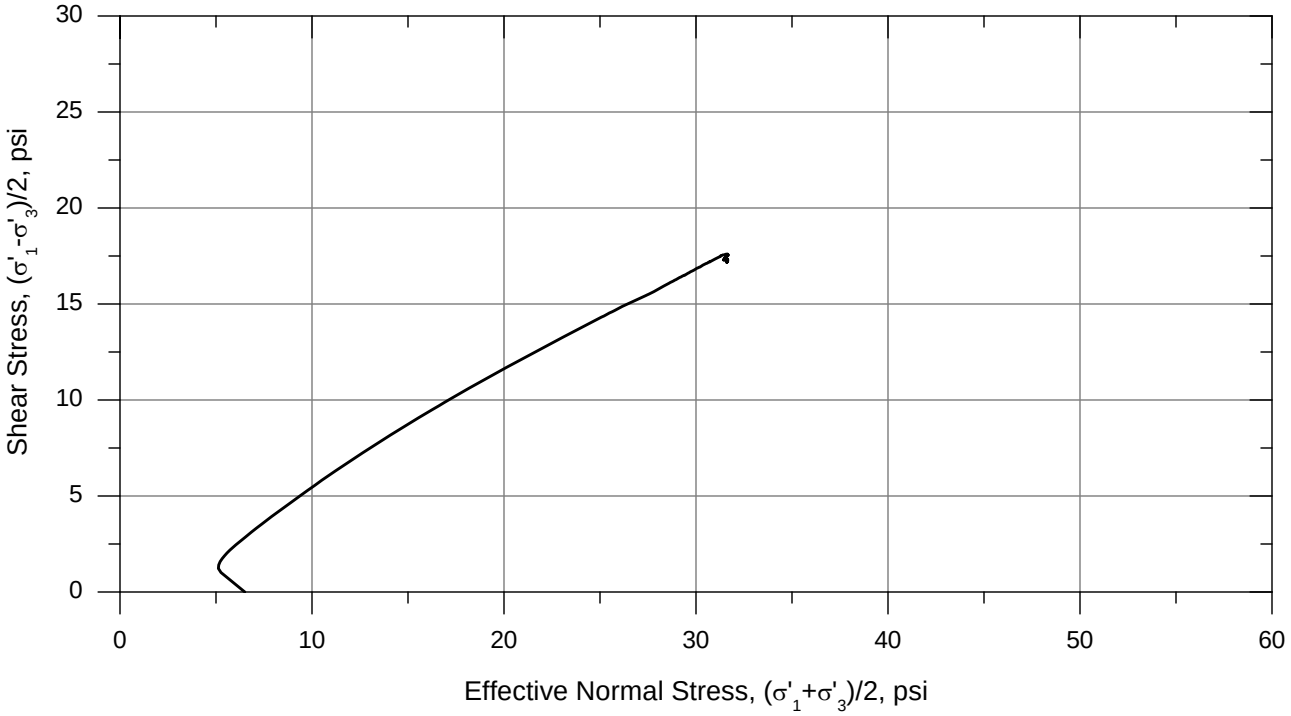
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	157.7	156.2	156.0	156.0	150.3	128.1	111.9
Diameter, mm:	71.1	71.4	71.3	71.3	72.6	77.7	81.4
Axial Strain, %:		0.0	0.1	0.0	3.6	17.9	28.2
Volumetric Strain, %:		0.0	0.4	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	18.7	35.2	34.3
Vertical Effective Stress, psi:		2.5	6.5	6.5	25.3	49.2	48.8
Horizontal Effective Stress, psi:		2.5	6.5	6.5	6.6	14.0	14.4
Void Ratio:		0.57	0.56	0.56	0.56	0.56	0.56
Water Content, %:		20.8	20.6	20.6	20.6	20.6	20.6
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		130.9	131.2	131.2	131.2	131.2	131.2
Dry Unit Weight, pcf:		108.4	108.8	108.8	108.8	108.8	108.8

TRIAXIAL TEST RESULTS

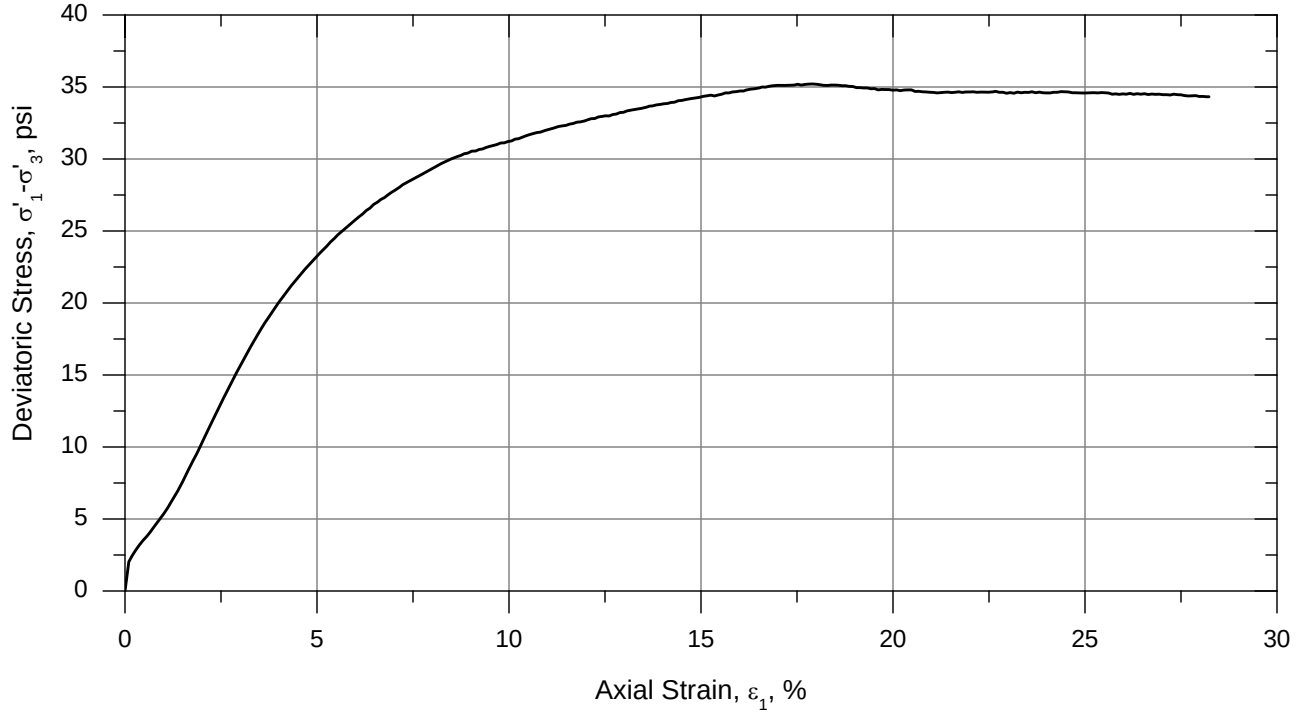
BORING ID: 09-404B
TEST ID: 516

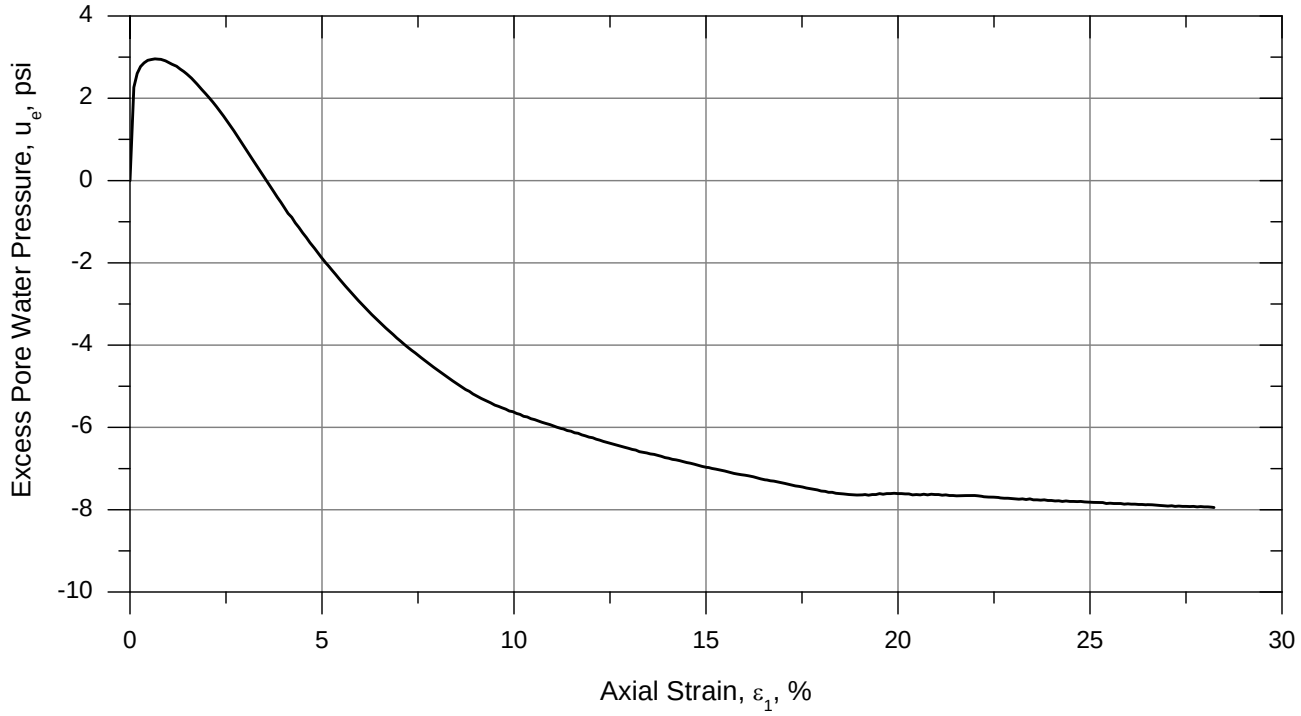




TRIAXIAL TEST RESULTS

BORING ID: 09-404B
TEST ID: 516





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 517
Soil Boring: 09-500B
Sample No. OST-6
Soil Type: SILTY CLAY, LITTLE F-M SAND, GRAY
USCS: CL
Specific Gravity 2.72
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

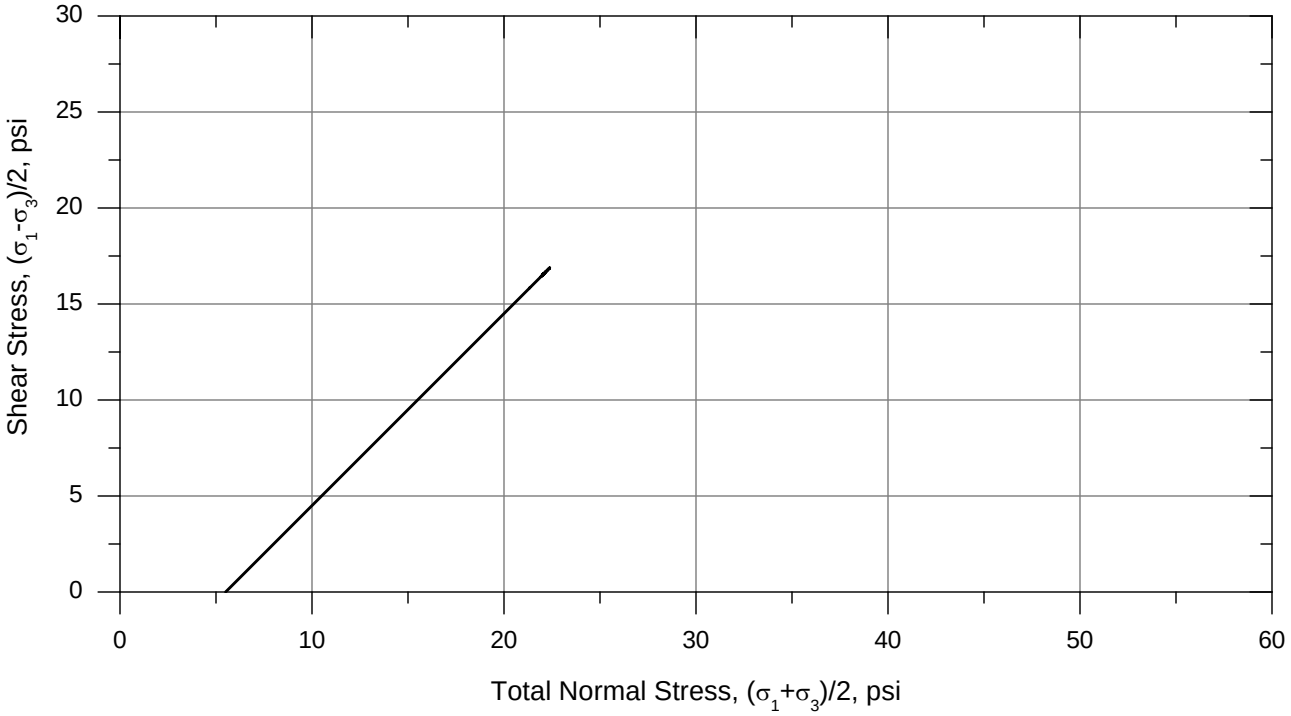
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.019
	Max. Mobilized Friction Angle, deg:	38.0
	Max. Deviator Stress, psi:	33.8

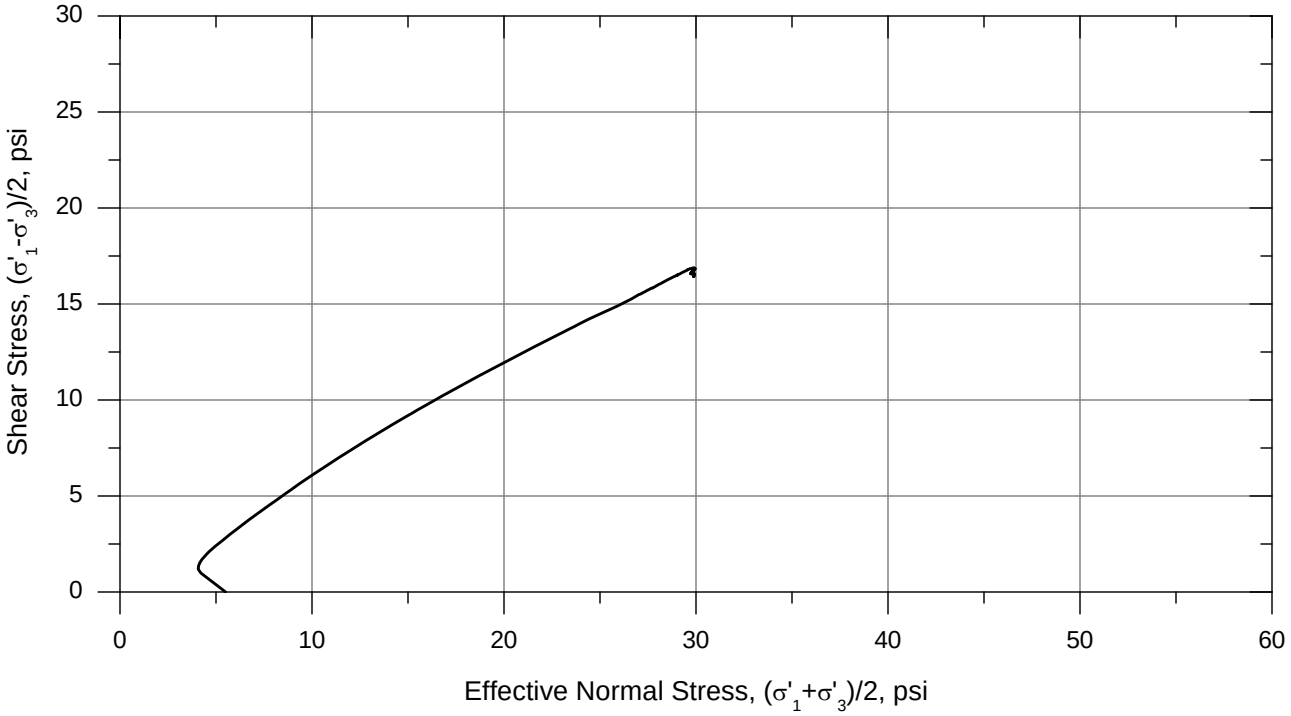
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	154.5	152.5	152.1	152.1	147.1	124.1	108.0
Diameter, mm:	72.8	72.9	72.7	72.7	73.9	79.4	83.2
Axial Strain, %:		0.0	0.3	0.0	3.3	18.4	29.0
Volumetric Strain, %:		0.0	0.8	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	15.9	33.8	32.8
Vertical Effective Stress, psi:		2.5	5.5	5.5	20.9	46.8	46.3
Horizontal Effective Stress, psi:		2.5	5.5	5.5	5.0	13.0	13.4
Void Ratio:		0.48	0.47	0.47	0.47	0.47	0.47
Water Content, %:		17.6	17.2	17.2	17.2	17.2	17.2
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		134.9	135.5	135.5	135.5	135.5	135.5
Dry Unit Weight, pcf:		114.7	115.6	115.6	115.6	115.6	115.6

TRIAXIAL TEST RESULTS

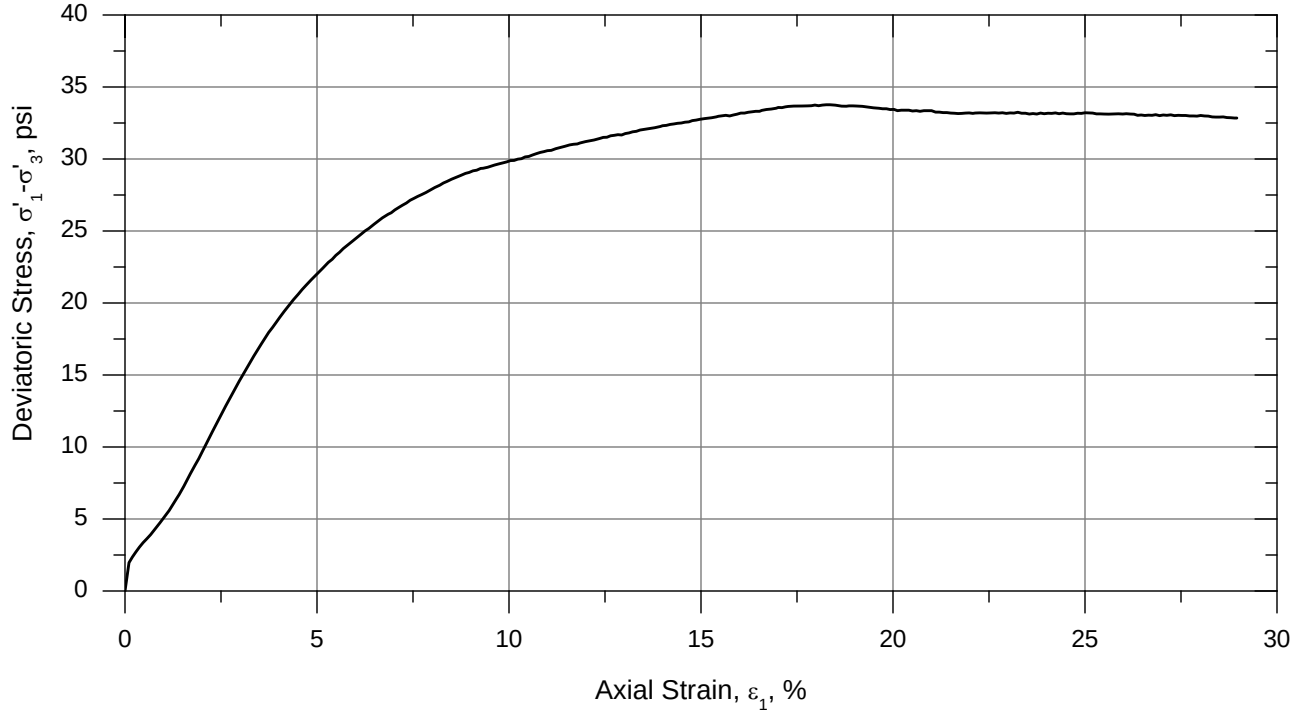
BORING ID: 09-500B
TEST ID: 517

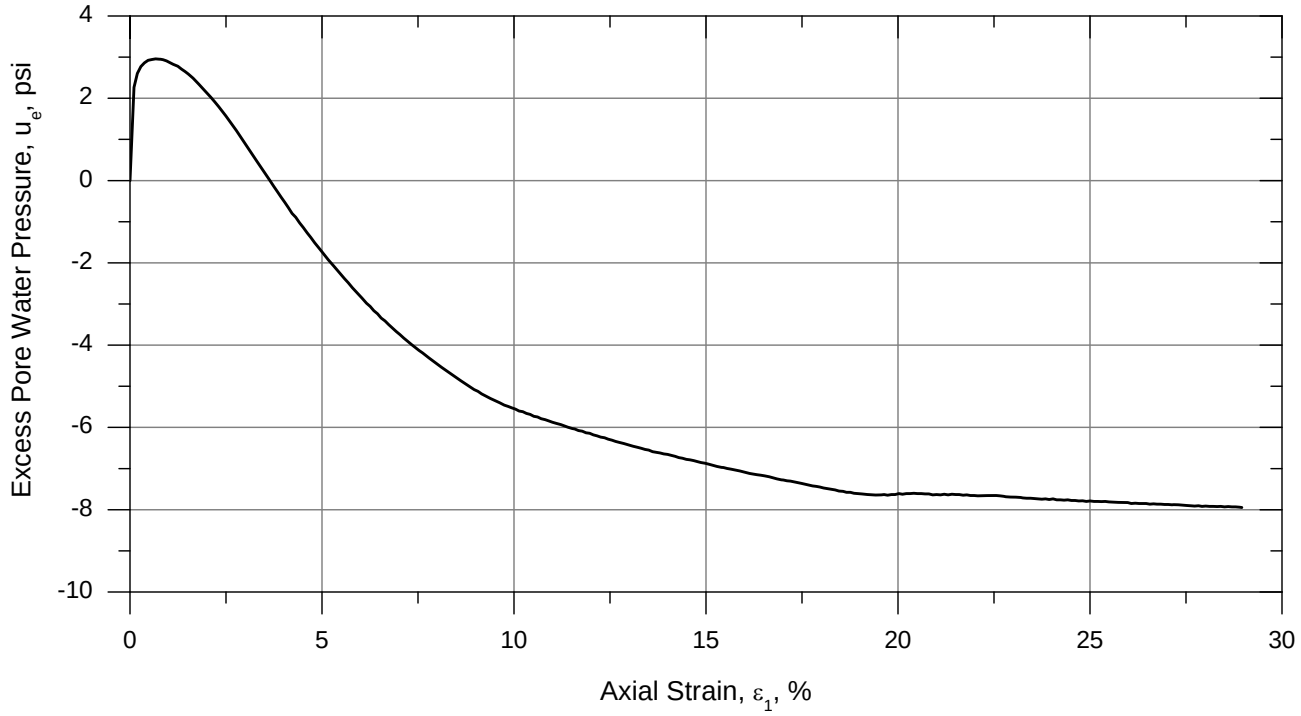




TRIAXIAL TEST RESULTS

BORING ID: 09-500B
TEST ID: 517





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	518
Soil Boring:	09-500B
Sample No.	OST-7
Soil Type:	CLAYEY SILT, LITTLE F-M SAND, GRAY
USCS:	CL-ML
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

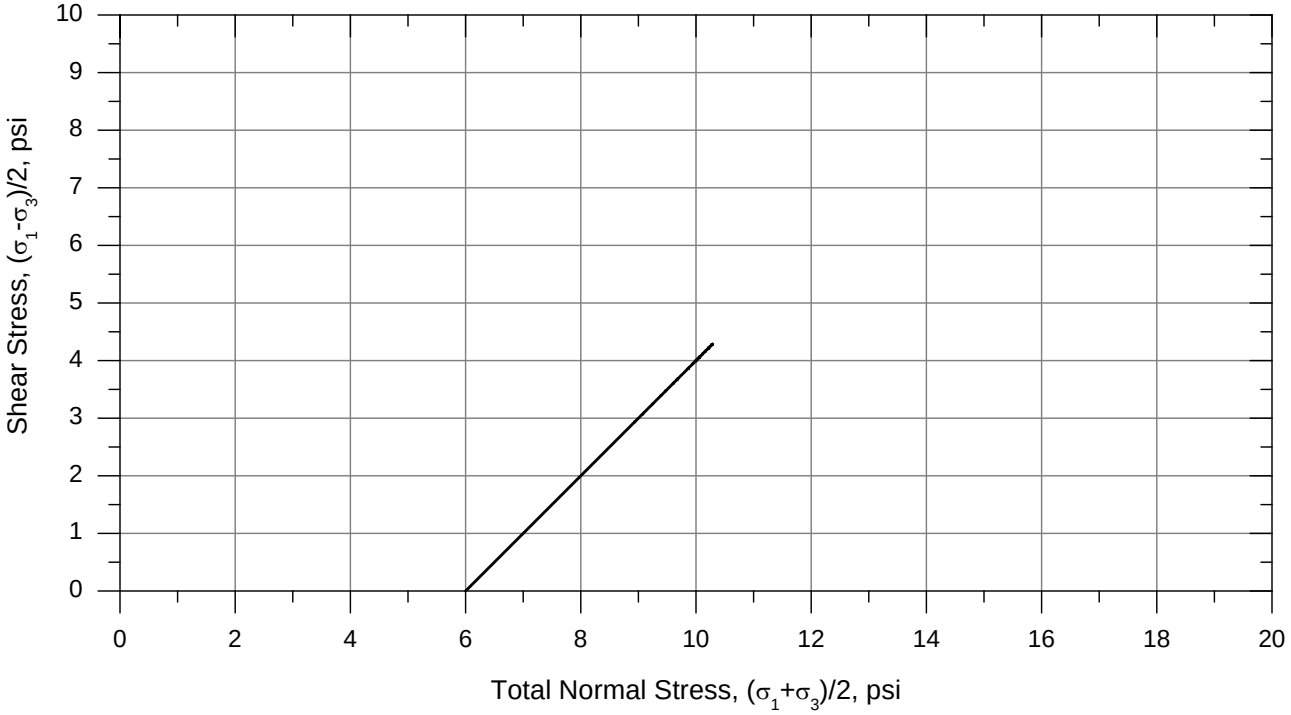
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.022
	Max. Mobilized Friction Angle, deg:	26.6
	Max. Deviator Stress, psi:	8.6

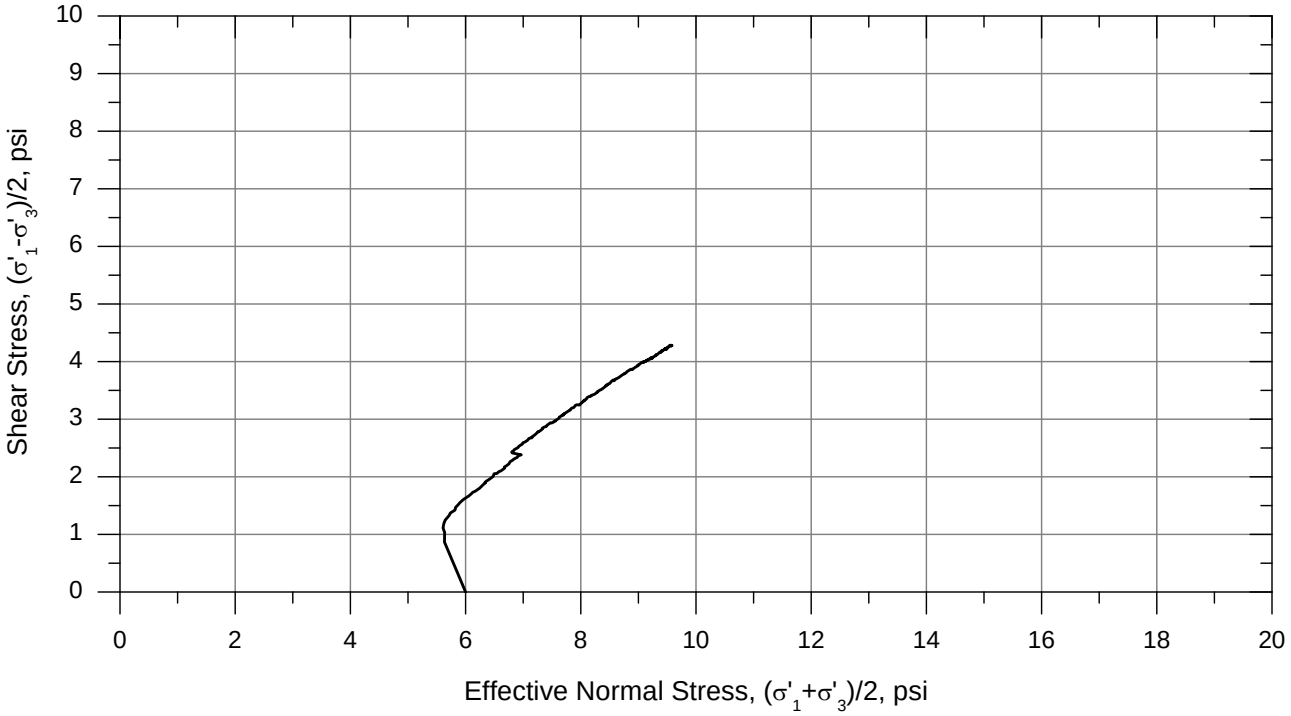
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	144.8	145.2	144.8	144.8	111.5	111.1	110.6
Diameter, mm:	72.1	71.4	71.2	71.2	79.4	79.4	79.6
Axial Strain, %:		0.0	0.3	0.0	23.0	23.2	23.6
Volumetric Strain, %:		0.0	1.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	8.6	8.6	8.6
Vertical Effective Stress, psi:		2.5	6.0	6.0	13.8	13.8	13.9
Horizontal Effective Stress, psi:		2.5	6.0	6.0	5.3	5.3	5.3
Void Ratio:		0.52	0.51	0.51	0.51	0.51	0.51
Water Content, %:		19.4	18.8	18.8	18.8	18.8	18.8
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		132.0	132.7	132.7	132.7	132.7	132.7
Dry Unit Weight, pcf:		110.6	111.7	111.7	111.7	111.7	111.7

TRIAXIAL TEST RESULTS

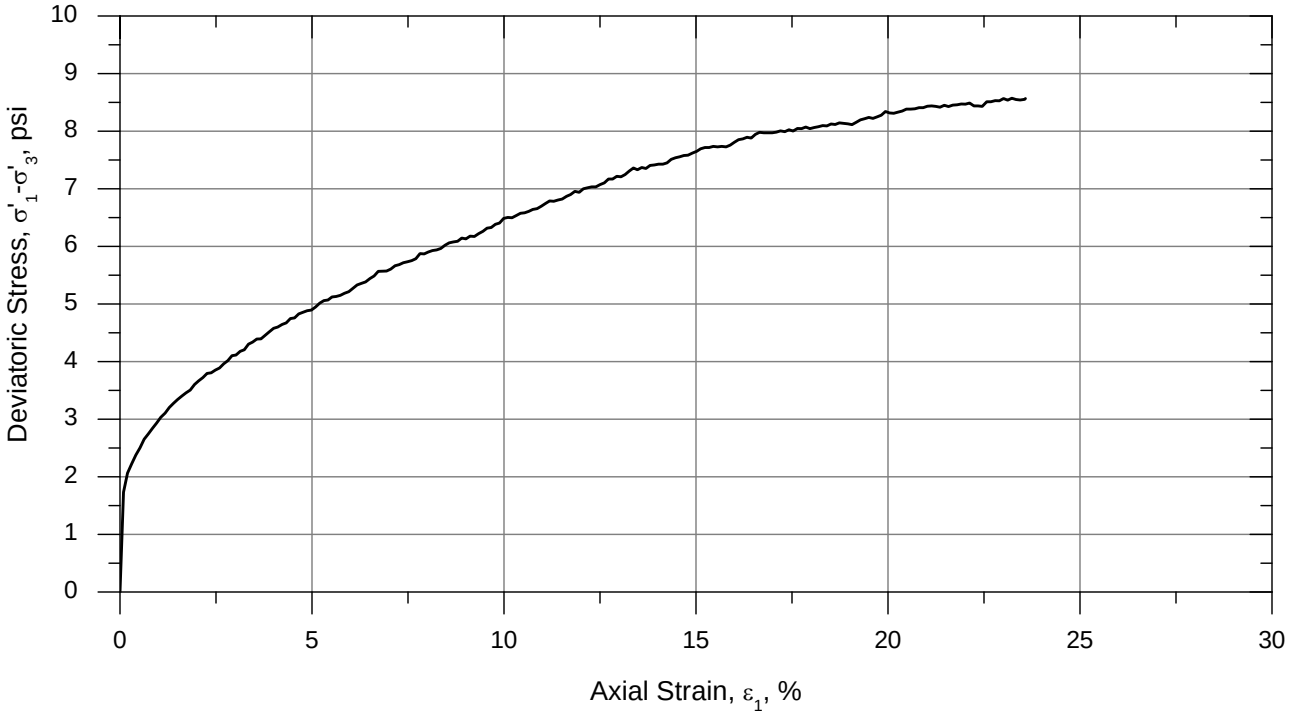
BORING ID: 09-500B
TEST ID: 518

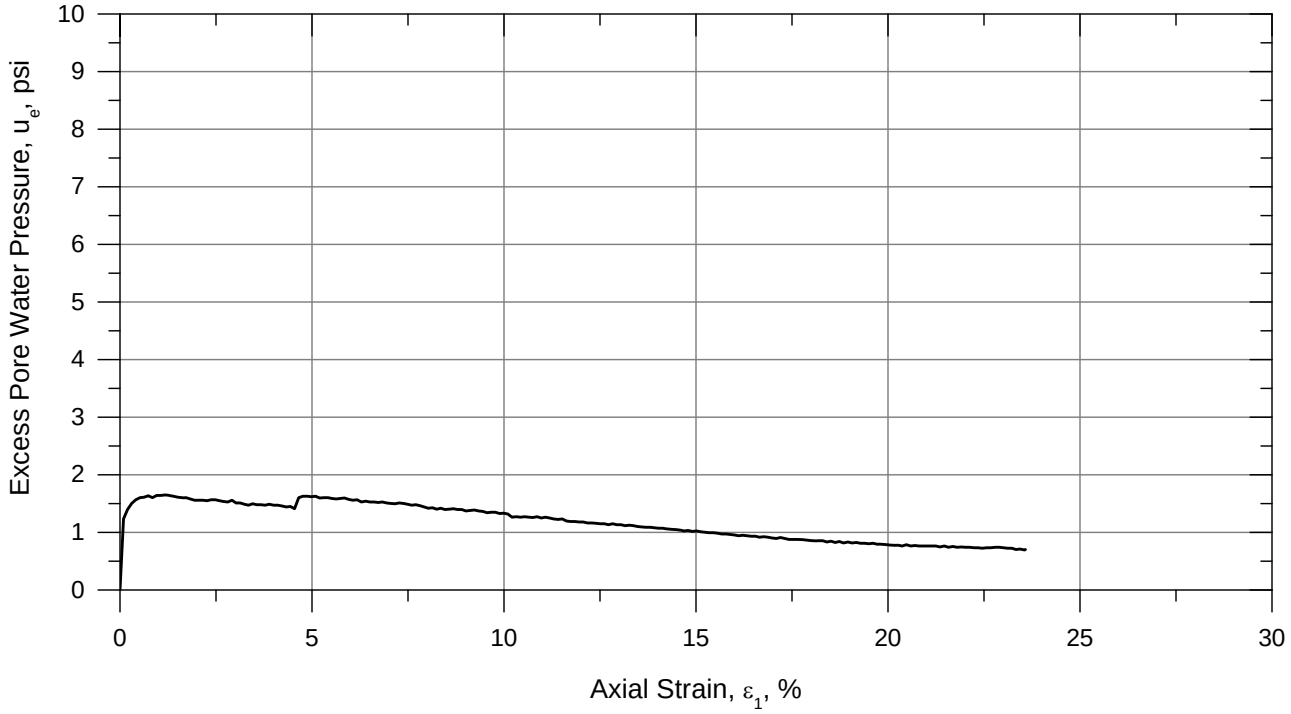




TRIAXIAL TEST RESULTS

BORING ID: 09-500B
TEST ID: 518





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 519
Soil Boring: 09-102B
Sample No. OST-4
Soil Type: SILTY CLAY, SOME F-C SAND, TRACE GRAVEL, GRAY
USCS: CL
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

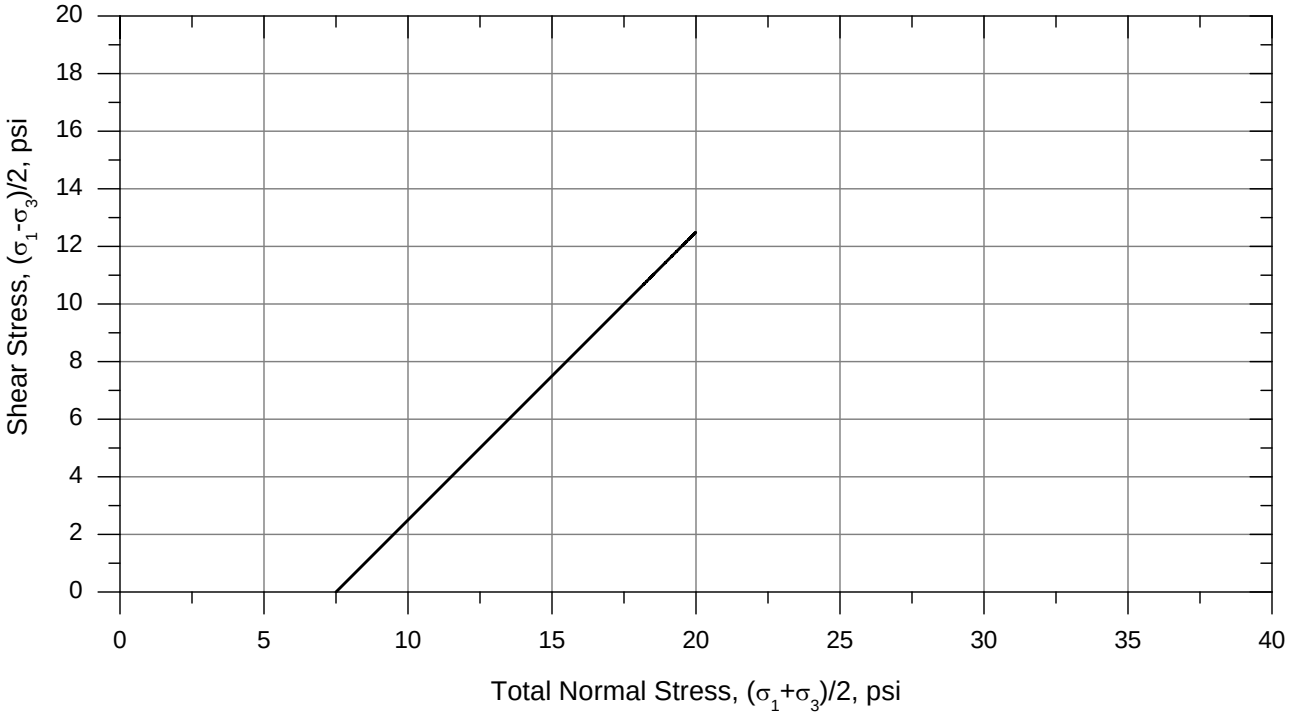
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.068
	Max. Mobilized Friction Angle, deg:	29.5
	Max. Deviator Stress, psi:	25.0

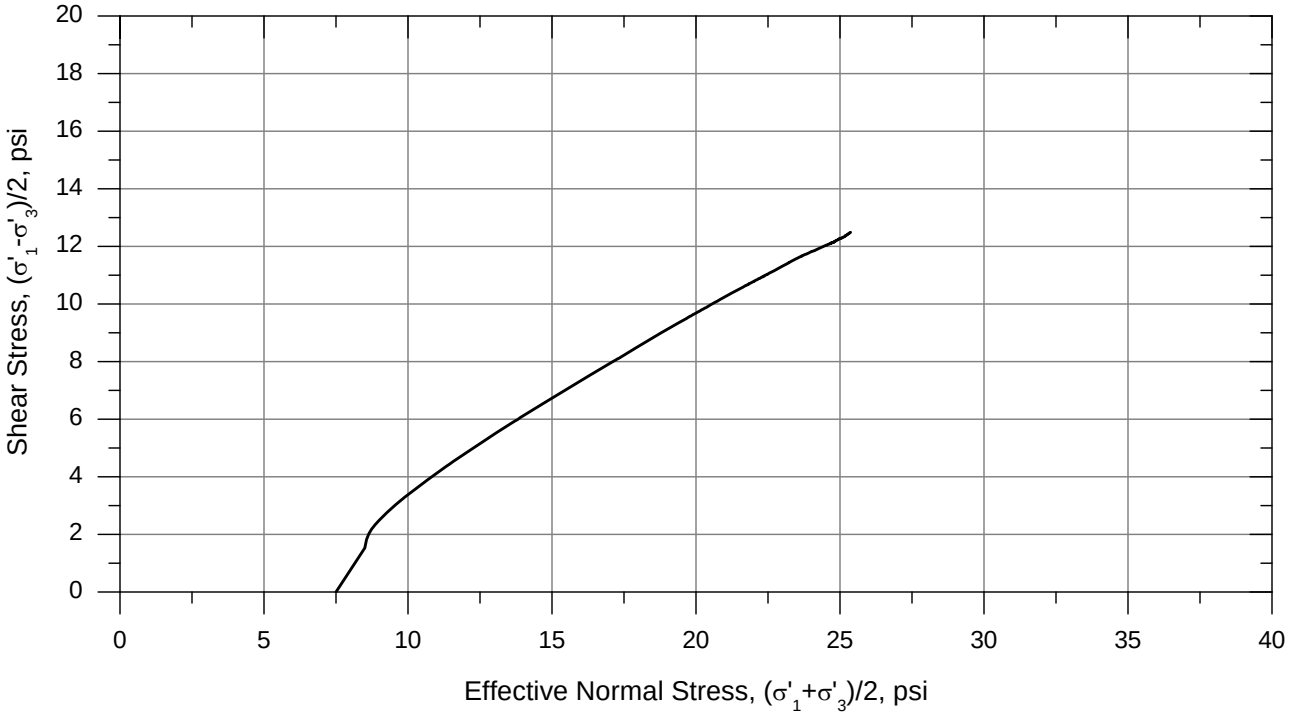
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	147.8	145.1	144.8	144.8	113.1	104.4	104.4
Diameter, mm:	71.5	72.2	72.1	72.1	80.0	82.1	82.1
Axial Strain, %:		0.0	0.2	0.0	21.9	27.9	27.9
Volumetric Strain, %:		0.0	0.6	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	23.3	25.0	25.0
Vertical Effective Stress, psi:		2.0	7.5	7.5	35.2	37.9	37.9
Horizontal Effective Stress, psi:		2.0	7.5	7.5	12.0	12.9	12.9
Void Ratio:		0.68	0.67	0.67	0.67	0.67	0.67
Water Content, %:		25.1	24.7	24.7	24.7	24.7	24.7
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		125.6	126.0	126.0	126.0	126.0	126.0
Dry Unit Weight, pcf:		100.4	101.0	101.0	101.0	101.0	101.0

TRIAXIAL TEST RESULTS

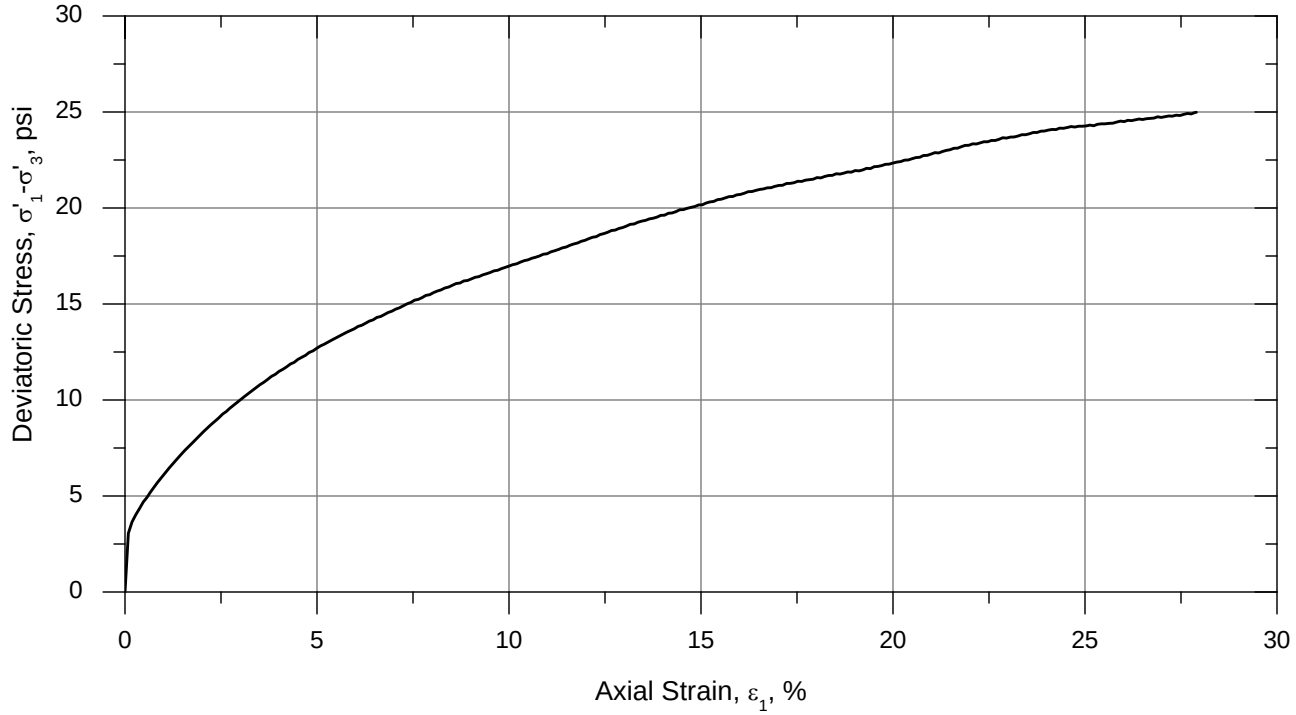
BORING ID: 09-102B
TEST ID: 519

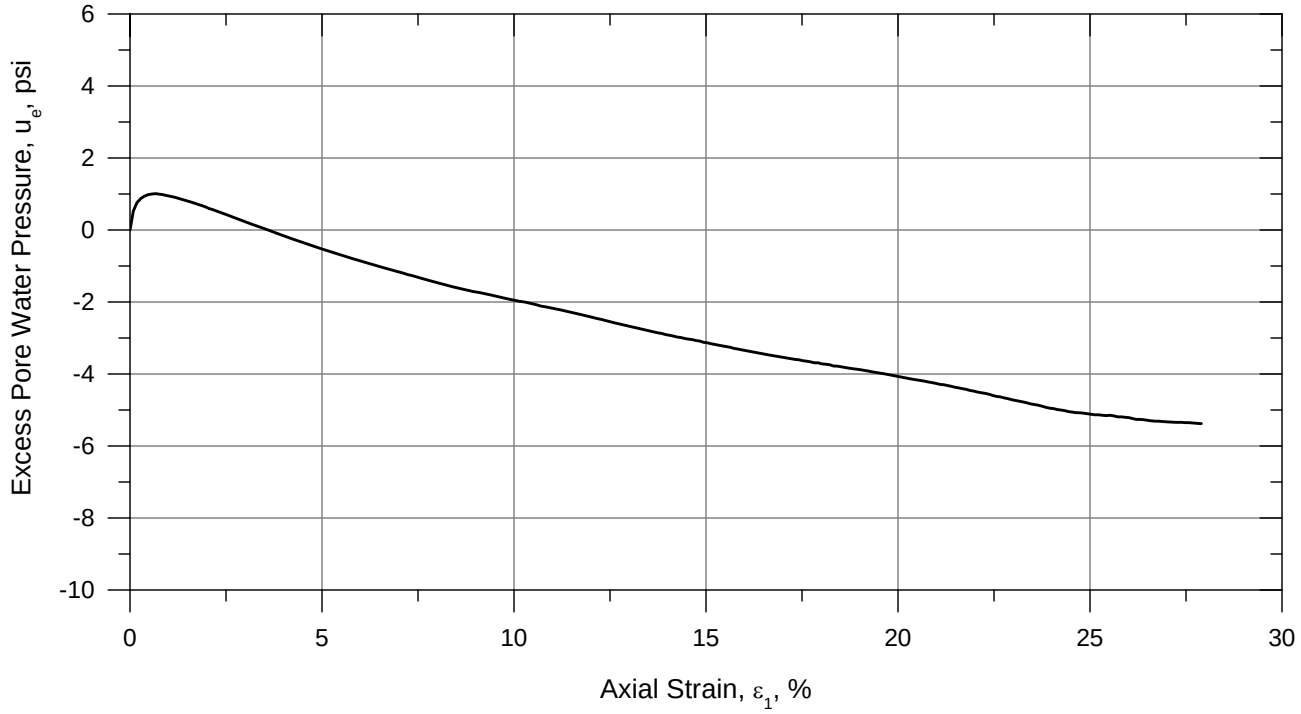




TRIAXIAL TEST RESULTS

BORING ID: 09-102B
TEST ID: 519





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	520
Soil Boring:	09-103B
Sample No.	OST-5
Soil Type:	CLAYEY SILT, SOME F-M SAND, BROWN
USCS:	CL-ML
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

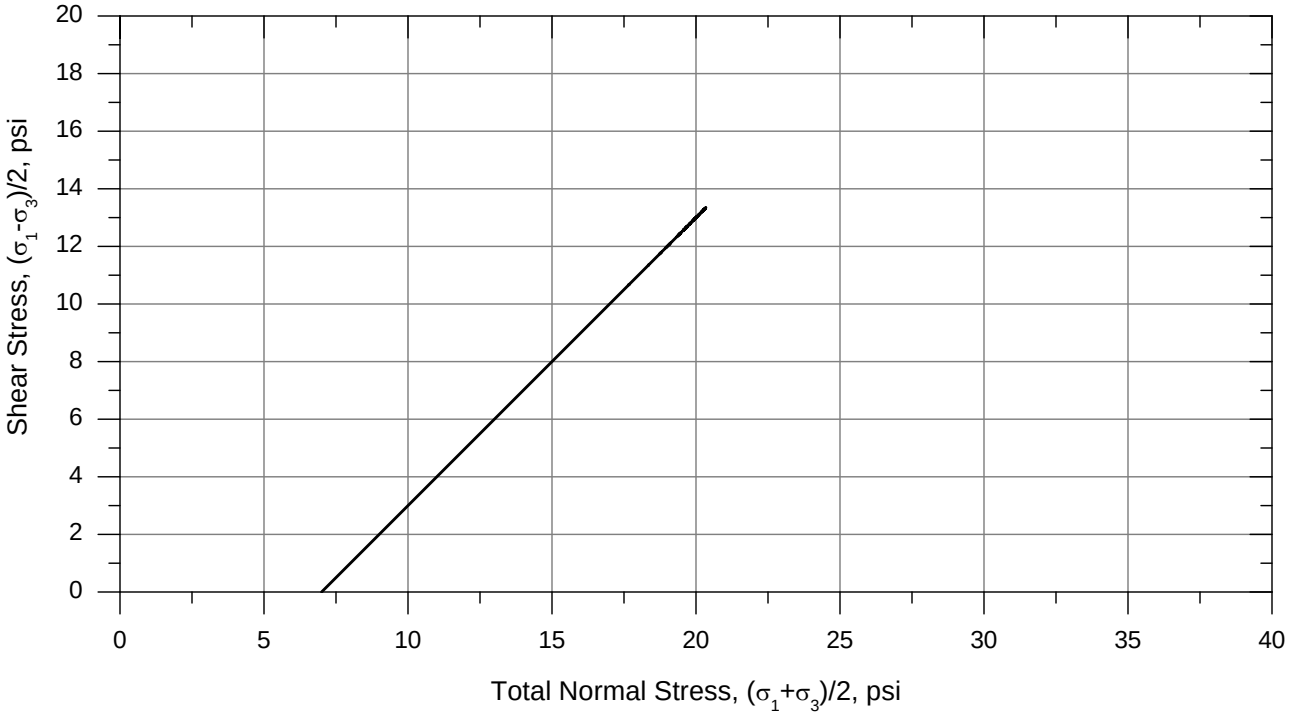
SATURATION	B (Skempton) value:	0.95
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.069
	Max. Mobilized Friction Angle, deg:	33.5
	Max. Deviator Stress, psi:	26.7

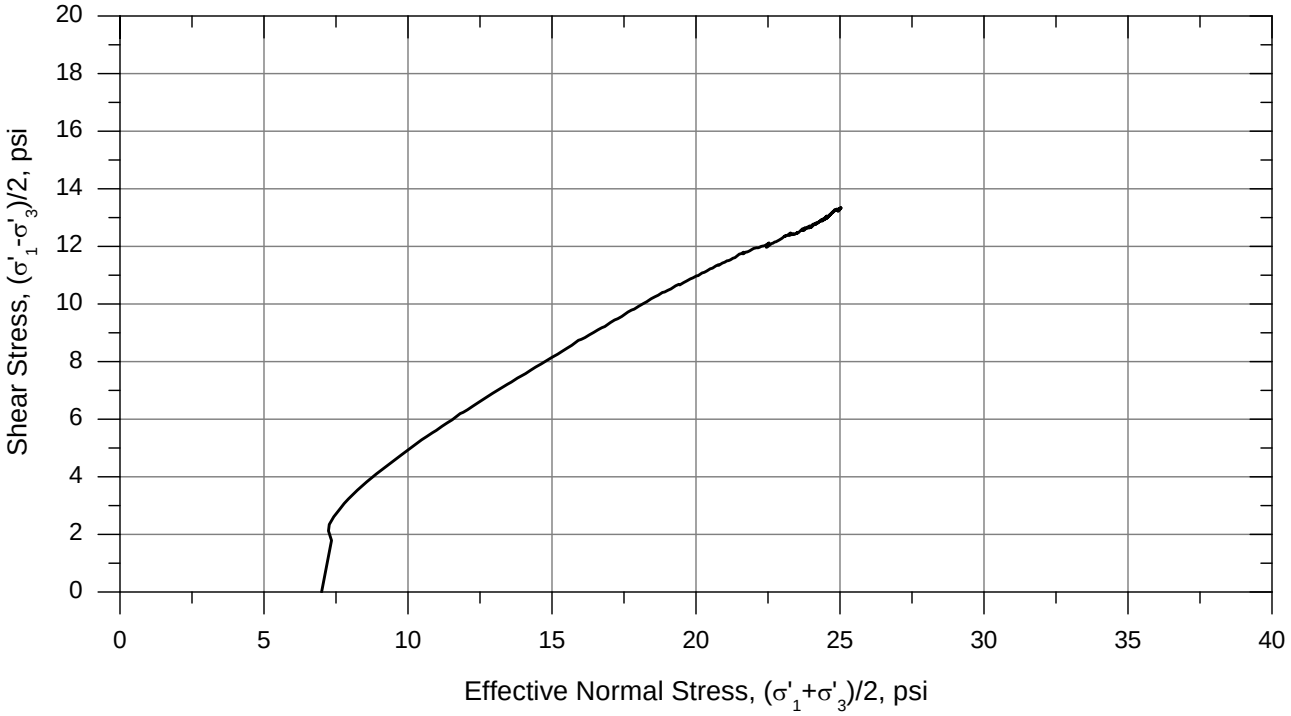
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	145.4	144.4	143.9	143.9	133.4	106.2	104.2
Diameter, mm:	72.4	73.0	72.7	72.7	75.4	82.2	82.8
Axial Strain, %:		0.0	0.4	0.0	7.3	26.2	27.6
Volumetric Strain, %:		0.0	1.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	20.8	26.7	26.7
Vertical Effective Stress, psi:		2.5	7.0	7.0	29.2	38.4	38.4
Horizontal Effective Stress, psi:		2.5	7.0	7.0	8.4	11.7	11.7
Void Ratio:		0.65	0.63	0.63	0.63	0.63	0.63
Water Content, %:		24.0	23.4	23.4	23.4	23.4	23.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		126.7	127.4	127.4	127.4	127.4	127.4
Dry Unit Weight, pcf:		102.2	103.3	103.3	103.3	103.3	103.3

TRIAXIAL TEST RESULTS

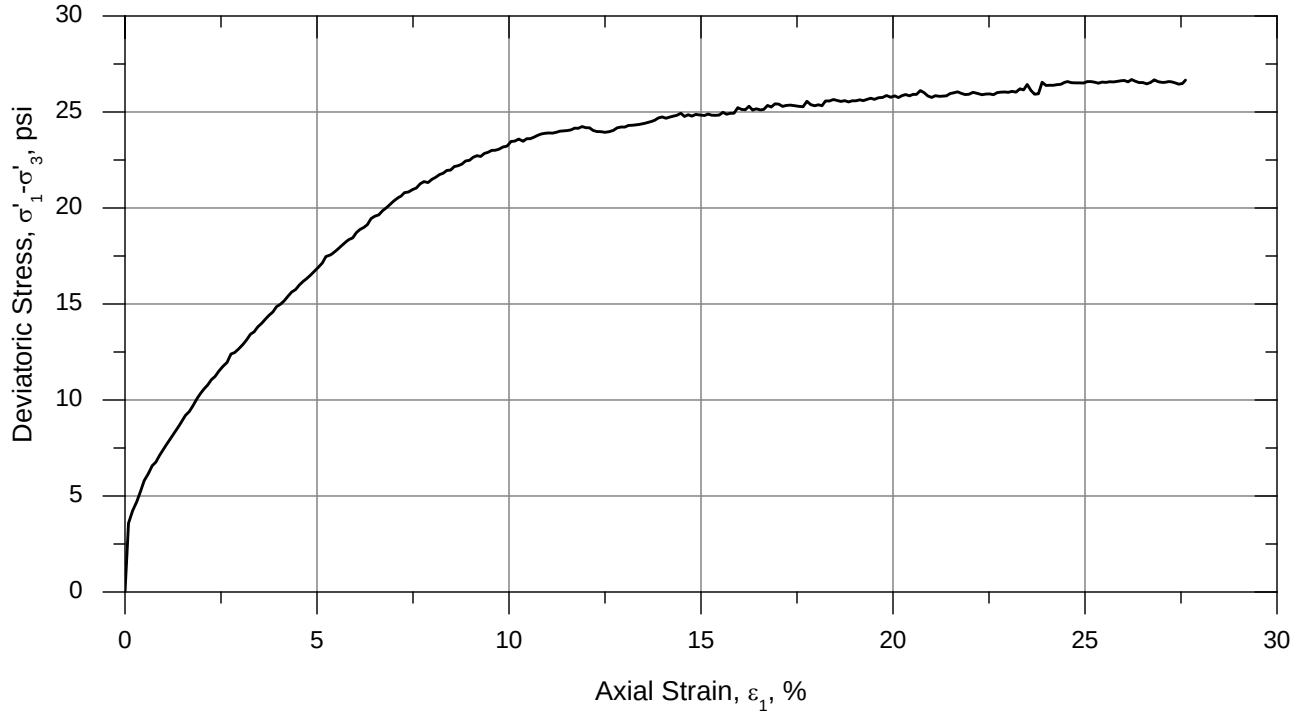
BORING ID: 09-103B
TEST ID: 520

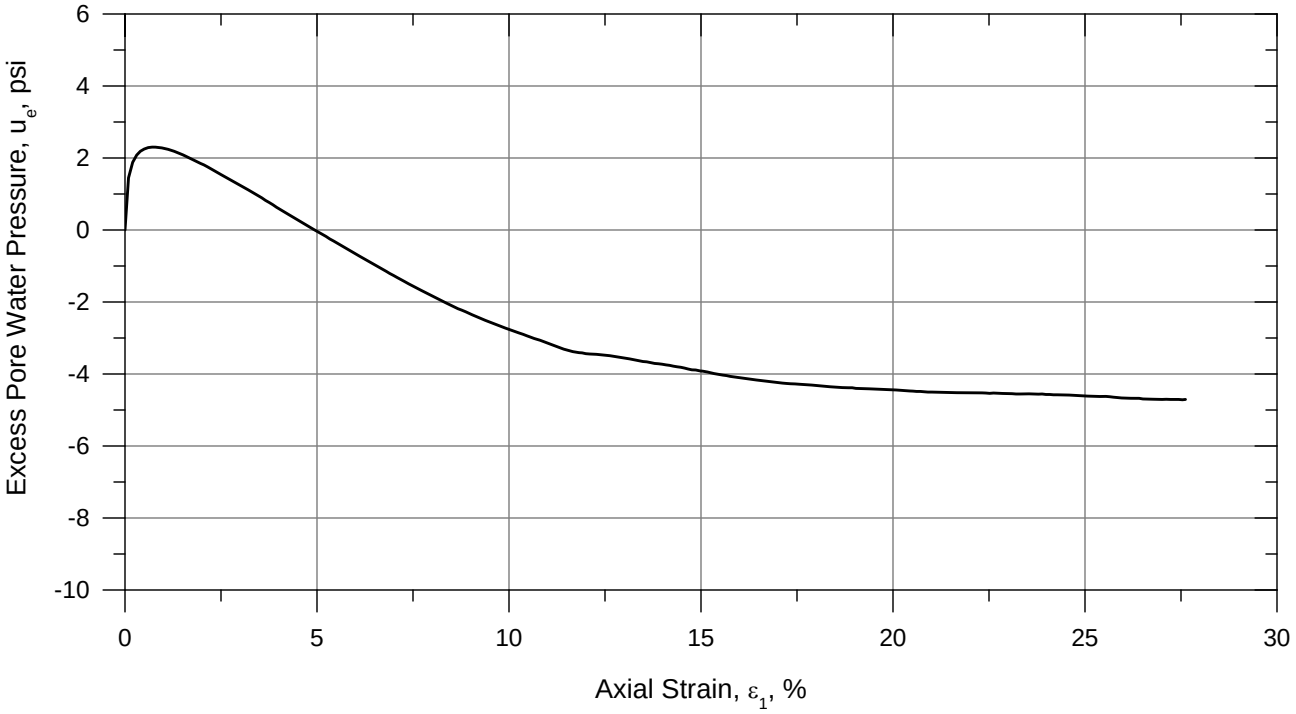




TRIAXIAL TEST RESULTS

BORING ID: 09-103B
TEST ID: 520





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	521
Soil Boring:	09-105B
Sample No.	OST-2
Soil Type:	SILTY CLAY, SOME F SAND, BROWN
USCS:	CL
Specific Gravity	2.67
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

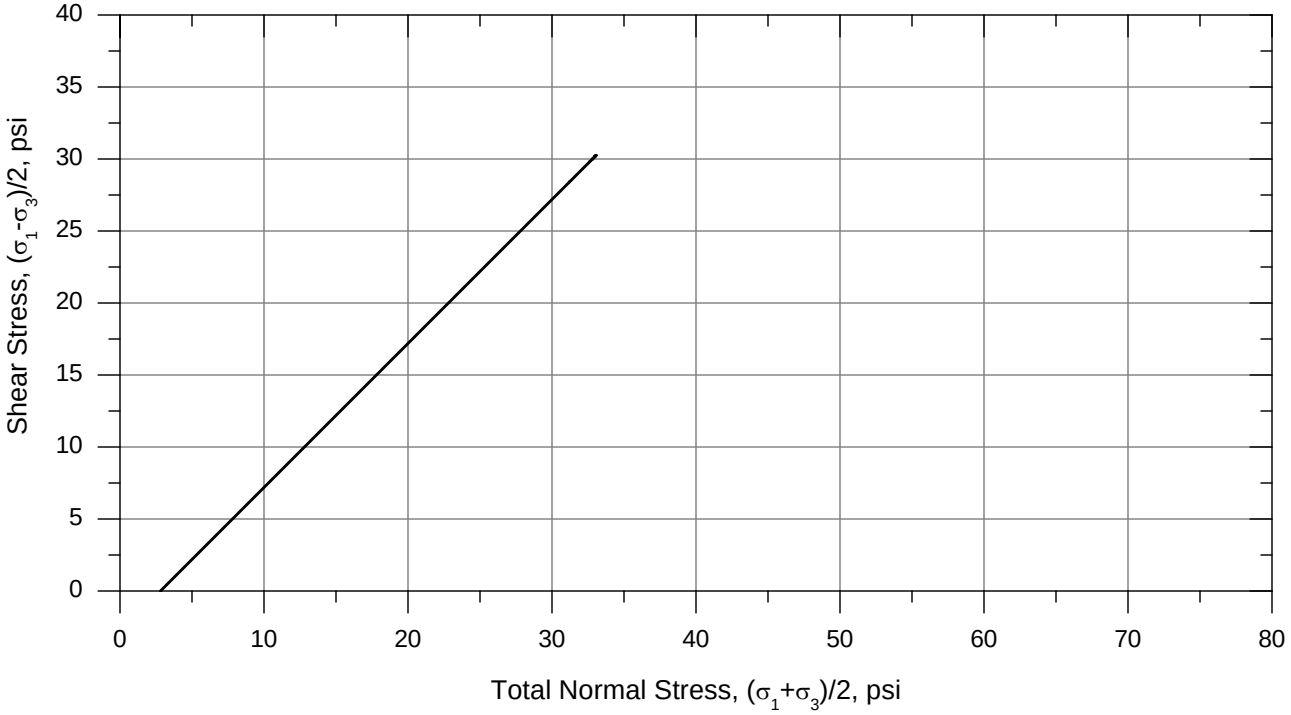
SATURATION	B (Skempton) value:	1.00
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.068
	Max. Mobilized Friction Angle, deg:	36.6
	Max. Deviator Stress, psi:	60.5

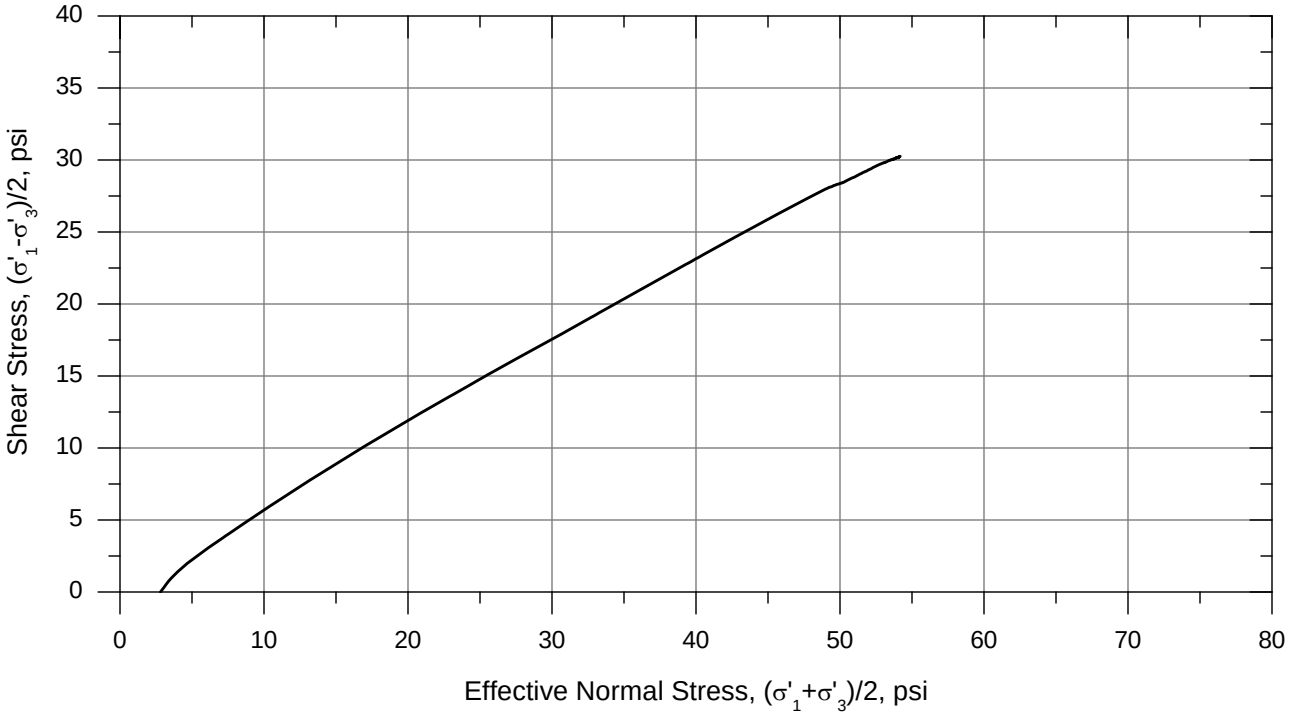
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	146.5	146.5	146.4	146.4	140.1	110.0	109.8
Diameter, mm:	72.1	72.0	72.0	72.0	73.6	81.0	81.0
Axial Strain, %:		0.0	0.0	0.0	4.3	24.9	25.0
Volumetric Strain, %:		0.0	0.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	22.5	60.5	60.5
Vertical Effective Stress, psi:		2.5	2.8	2.8	30.2	84.4	84.4
Horizontal Effective Stress, psi:		2.5	2.8	2.8	7.6	23.9	23.9
Void Ratio:		0.54	0.53	0.53	0.53	0.53	0.53
Water Content, %:		20.0	20.0	20.0	20.0	20.0	20.0
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		130.3	130.3	130.3	130.3	130.3	130.3
Dry Unit Weight, pcf:		108.5	108.6	108.6	108.6	108.6	108.6

TRIAXIAL TEST RESULTS

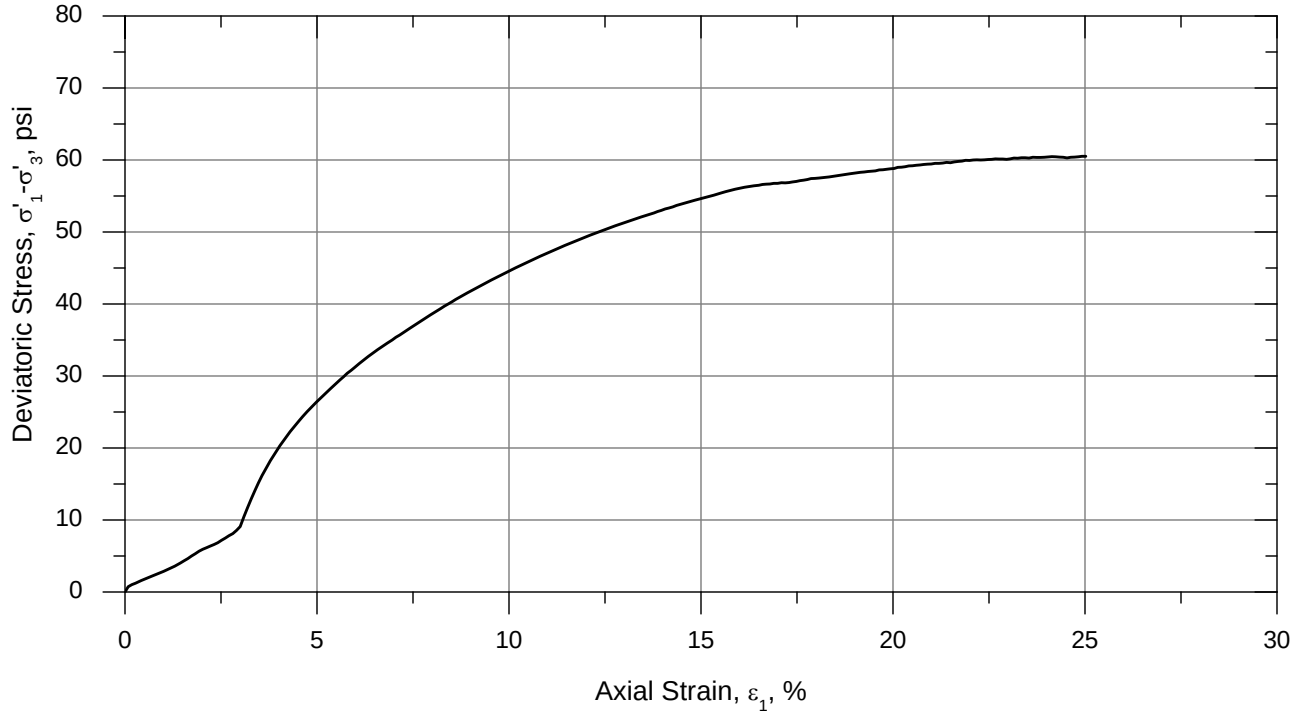
BORING ID: 09-105B
TEST ID: 521

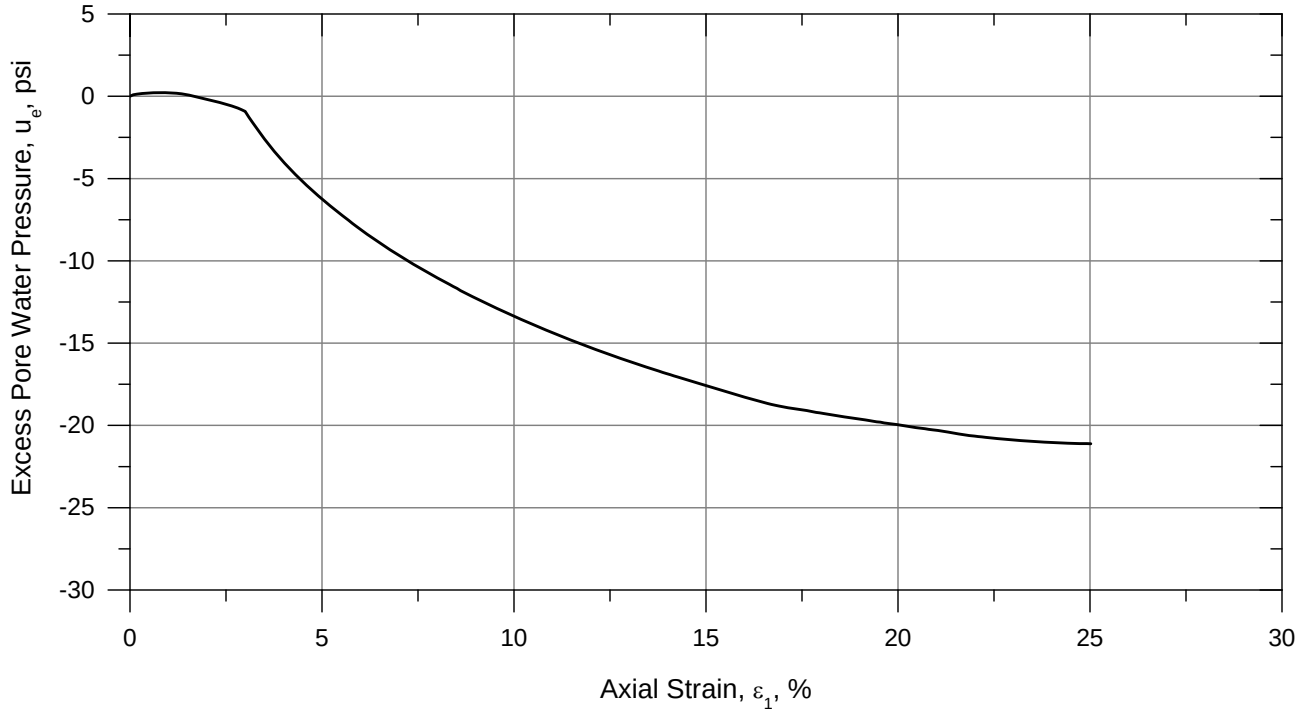




TRIAXIAL TEST RESULTS

BORING ID: 09-105B
TEST ID: 521





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	522
Soil Boring:	09-108B
Sample No.	OST-3
Soil Type:	SILTY CLAY, LITTLE F-C SAND, BROWN
USCS:	CL
Specific Gravity	2.72
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

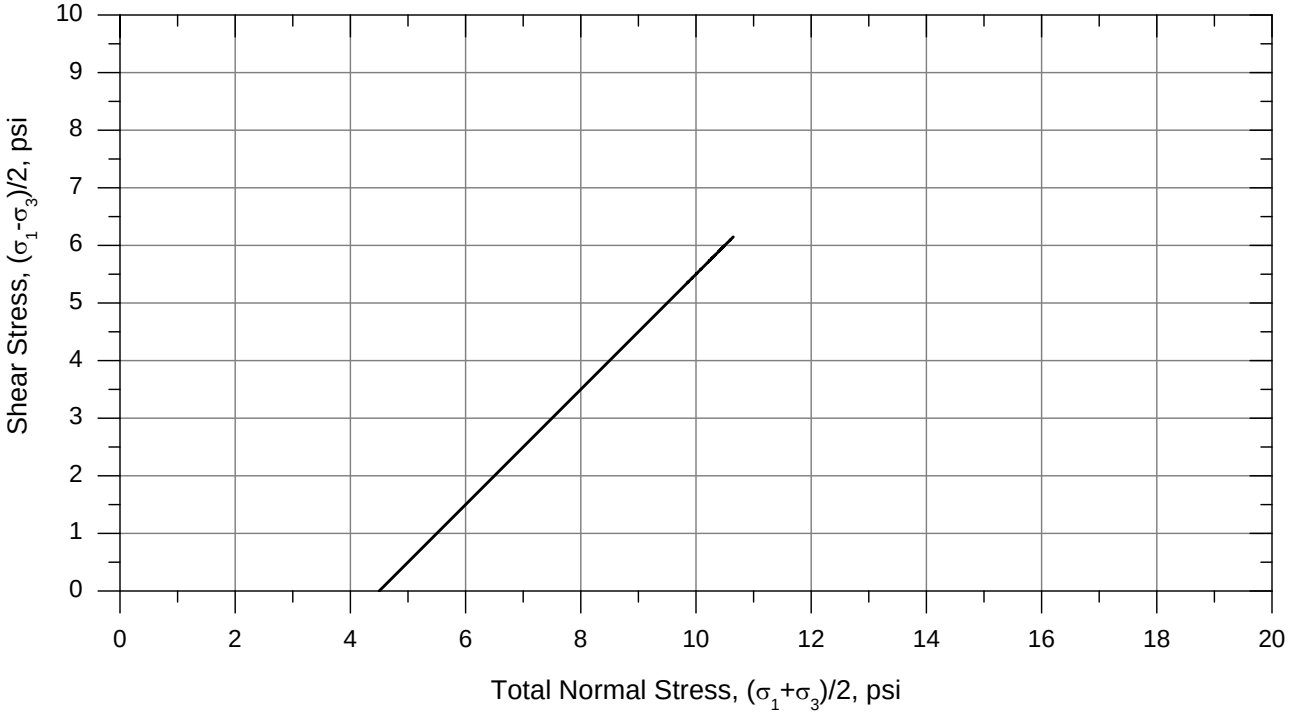
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.028
	Max. Mobilized Friction Angle, deg:	34.0
	Max. Deviator Stress, psi:	12.3

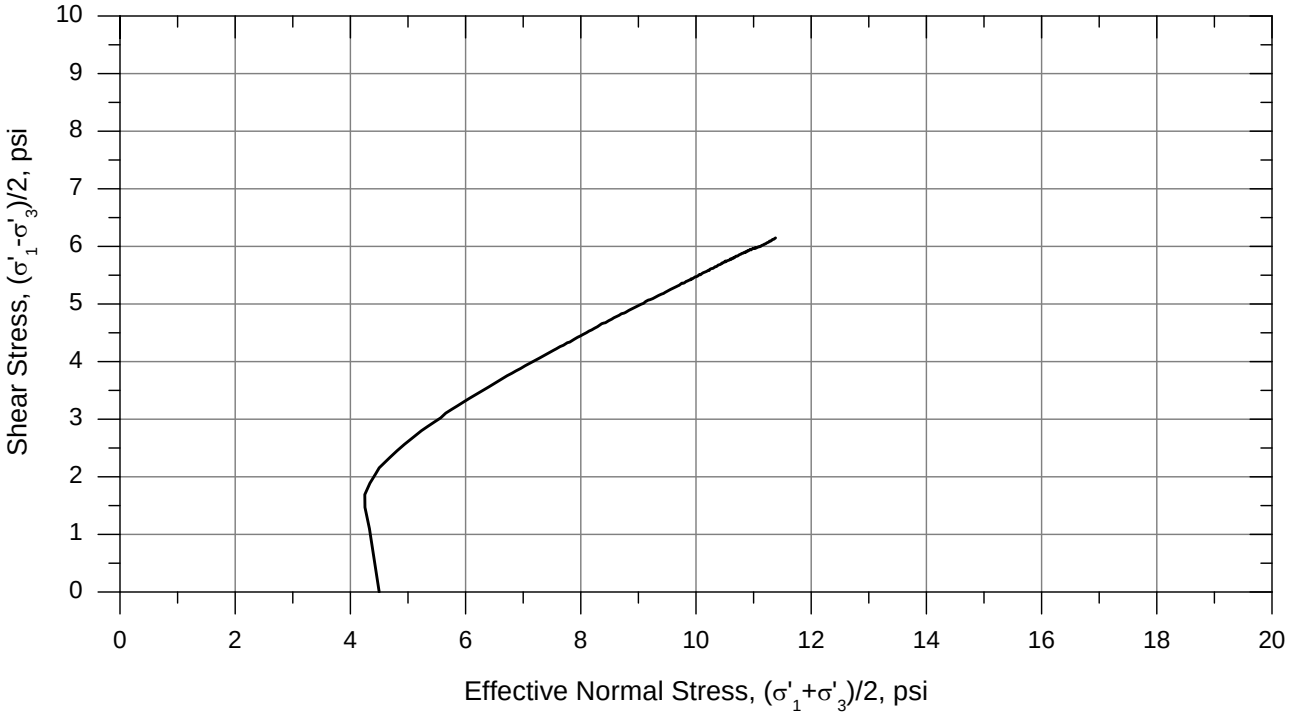
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	156.7	155.7	155.6	155.6	149.9	111.2	111.2
Diameter, mm:	71.7	75.0	75.0	75.0	76.3	85.7	85.7
Axial Strain, %:		0.0	0.1	0.0	3.7	28.5	28.5
Volumetric Strain, %:		0.0	0.2	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	7.5	12.3	12.3
Vertical Effective Stress, psi:		2.0	4.5	4.5	10.5	17.5	17.5
Horizontal Effective Stress, psi:		2.0	4.5	4.5	3.0	5.2	5.2
Void Ratio:		0.64	0.63	0.63	0.63	0.63	0.63
Water Content, %:		23.4	23.3	23.3	23.3	23.3	23.3
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		128.0	128.1	128.1	128.1	128.1	128.1
Dry Unit Weight, pcf:		103.7	103.8	103.8	103.8	103.8	103.8

TRIAXIAL TEST RESULTS

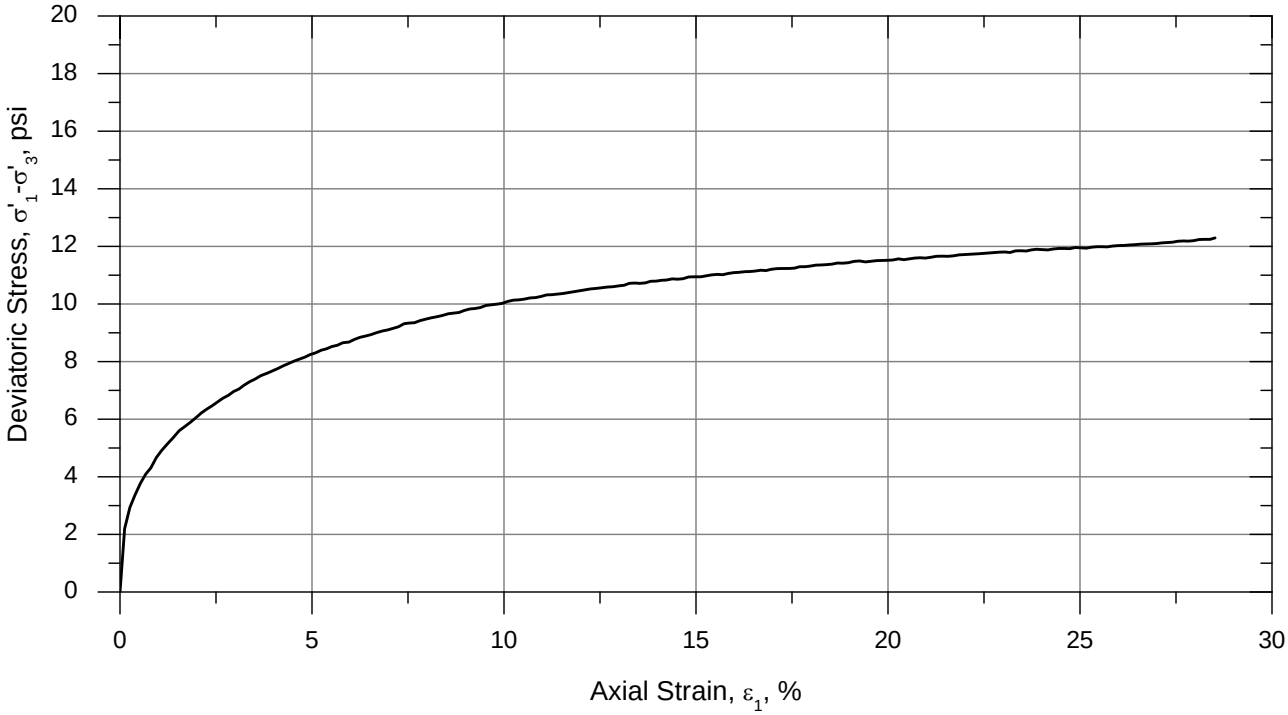
BORING ID: 09-108B
TEST ID: 522

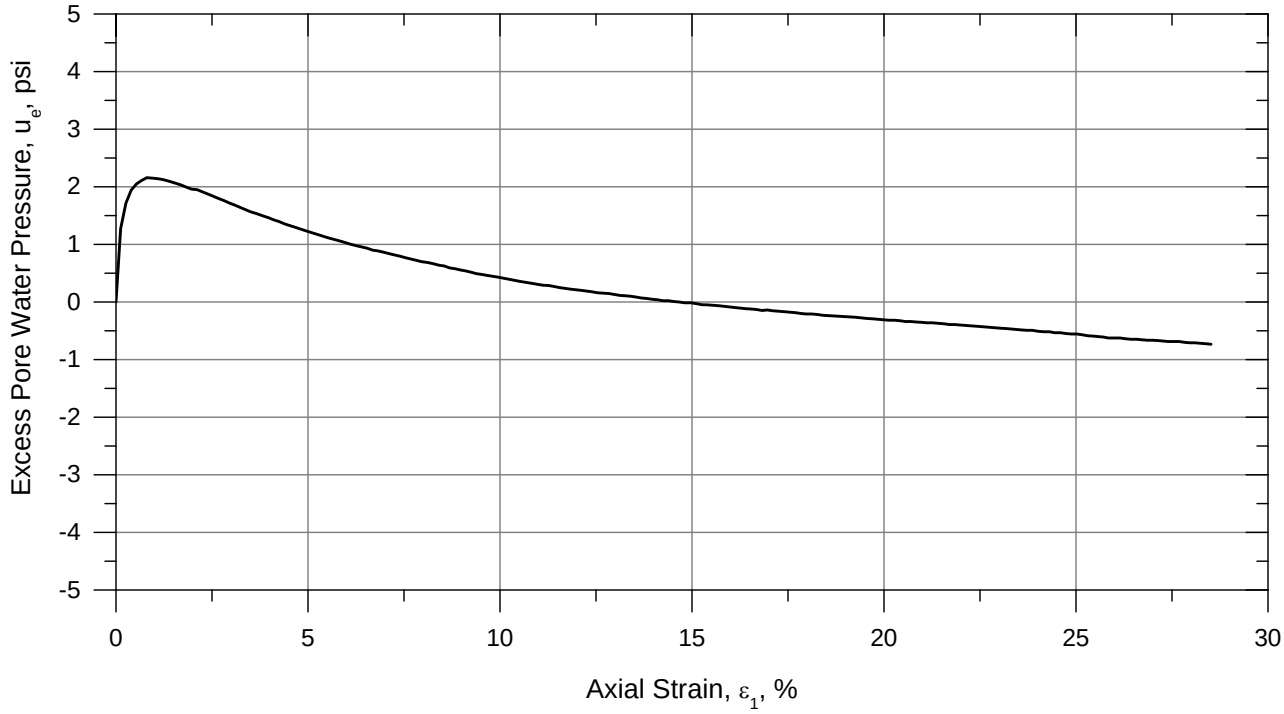




TRIAXIAL TEST RESULTS

BORING ID: 09-108B
TEST ID: 522





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	523
Soil Boring:	09-109B
Sample No.	OST-4
Soil Type:	SILTY CLAY, LITTLE F-C SAND, BROWN
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

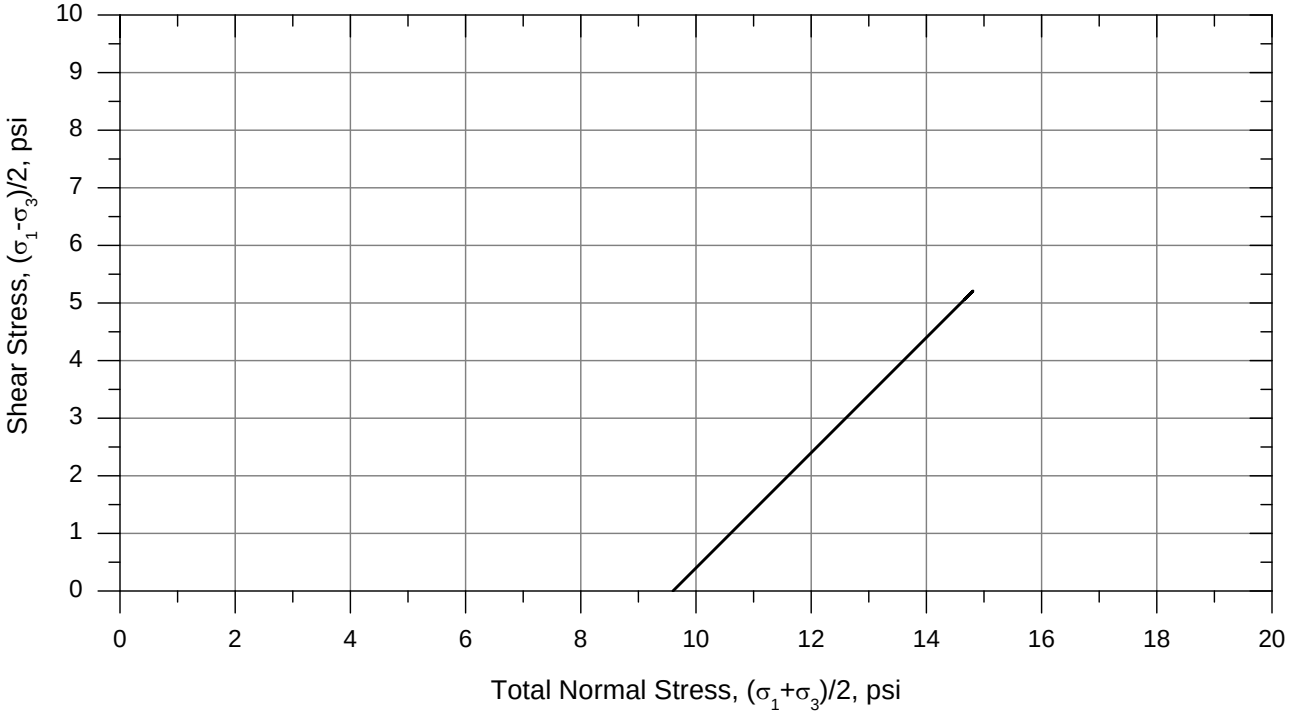
SATURATION	B (Skempton) value:	0.96
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.065
	Max. Mobilized Friction Angle, deg:	34.1
	Max. Deviator Stress, psi:	10.4

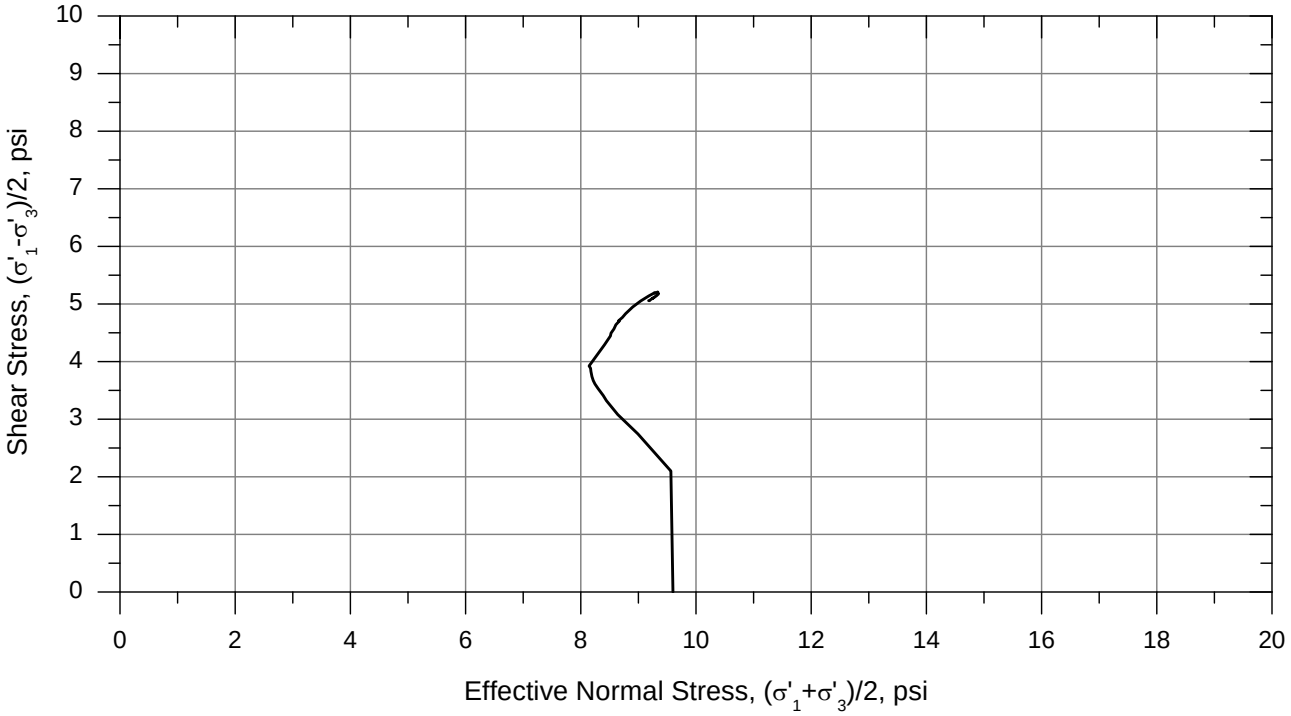
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.5	150.9	150.3	150.3	137.4	131.9	115.7
Diameter, mm:	71.8	71.4	71.1	71.1	74.2	75.5	79.3
Axial Strain, %:		0.0	0.4	0.0	8.6	12.3	23.1
Volumetric Strain, %:		0.0	1.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	10.3	10.4	10.1
Vertical Effective Stress, psi:		2.5	9.6	9.6	14.4	14.5	14.2
Horizontal Effective Stress, psi:		2.5	9.6	9.6	4.0	4.1	4.1
Void Ratio:		0.53	0.51	0.51	0.51	0.51	0.51
Water Content, %:		19.7	19.1	19.1	19.1	19.1	19.1
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		131.7	132.4	132.4	132.4	132.4	132.4
Dry Unit Weight, pcf:		110.0	111.2	111.2	111.2	111.2	111.2

TRIAXIAL TEST RESULTS

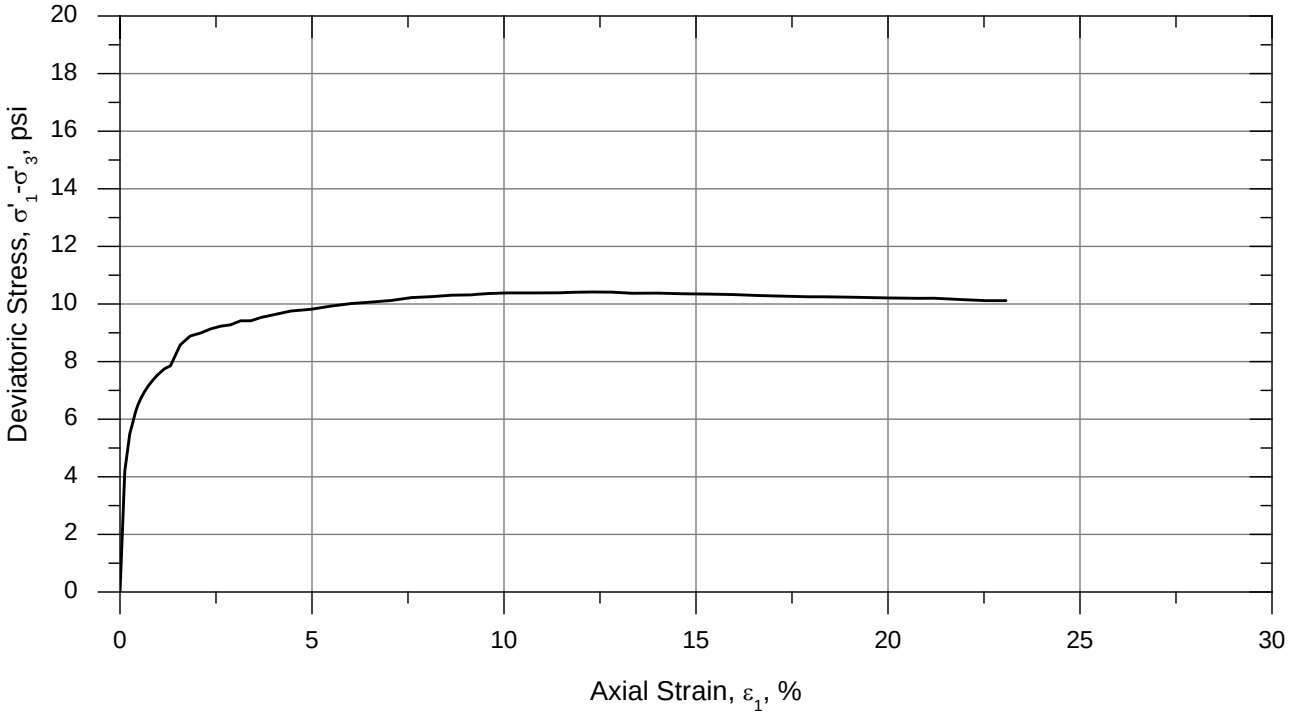
BORING ID: 09-109B
TEST ID: 523

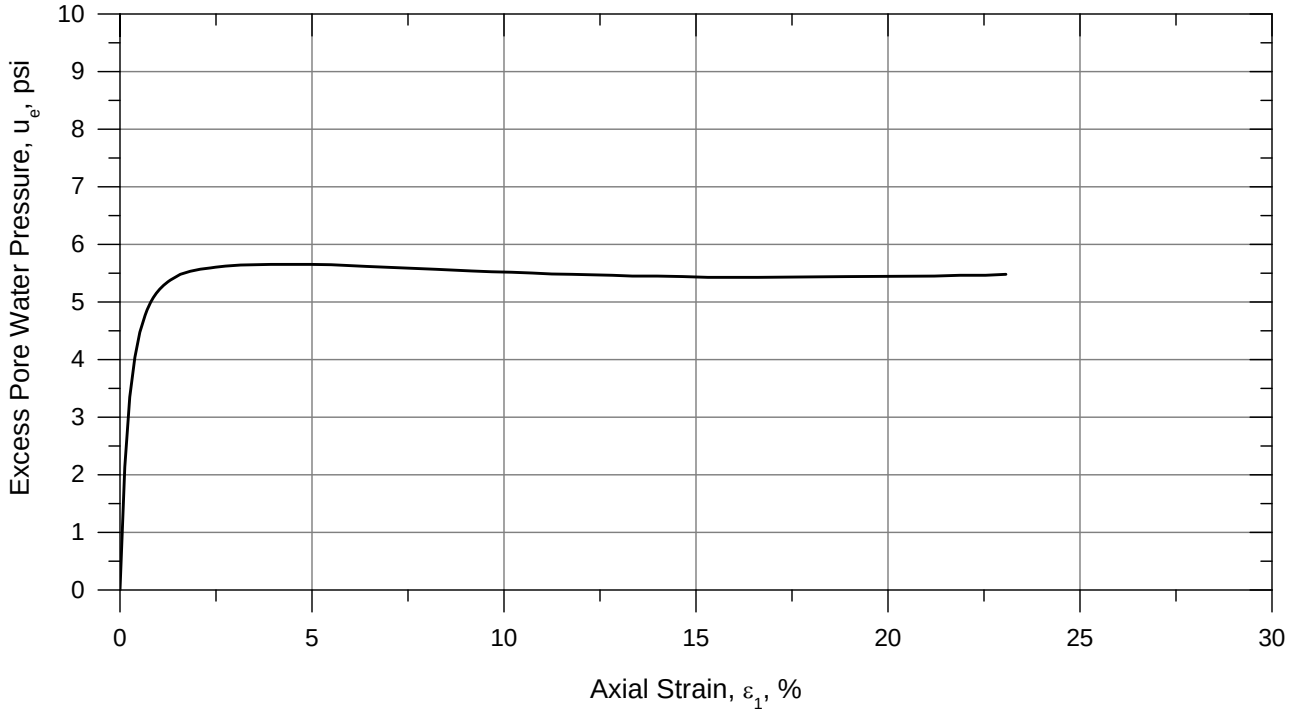




TRIAXIAL TEST RESULTS

BORING ID: 09-109B
TEST ID: 523





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 524
Soil Boring: 09-109B
Sample No. OST-5
Soil Type: CLAYEY SILT, SOME F-C SAND, BROWN AND GRAY
USCS: CL-ML
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

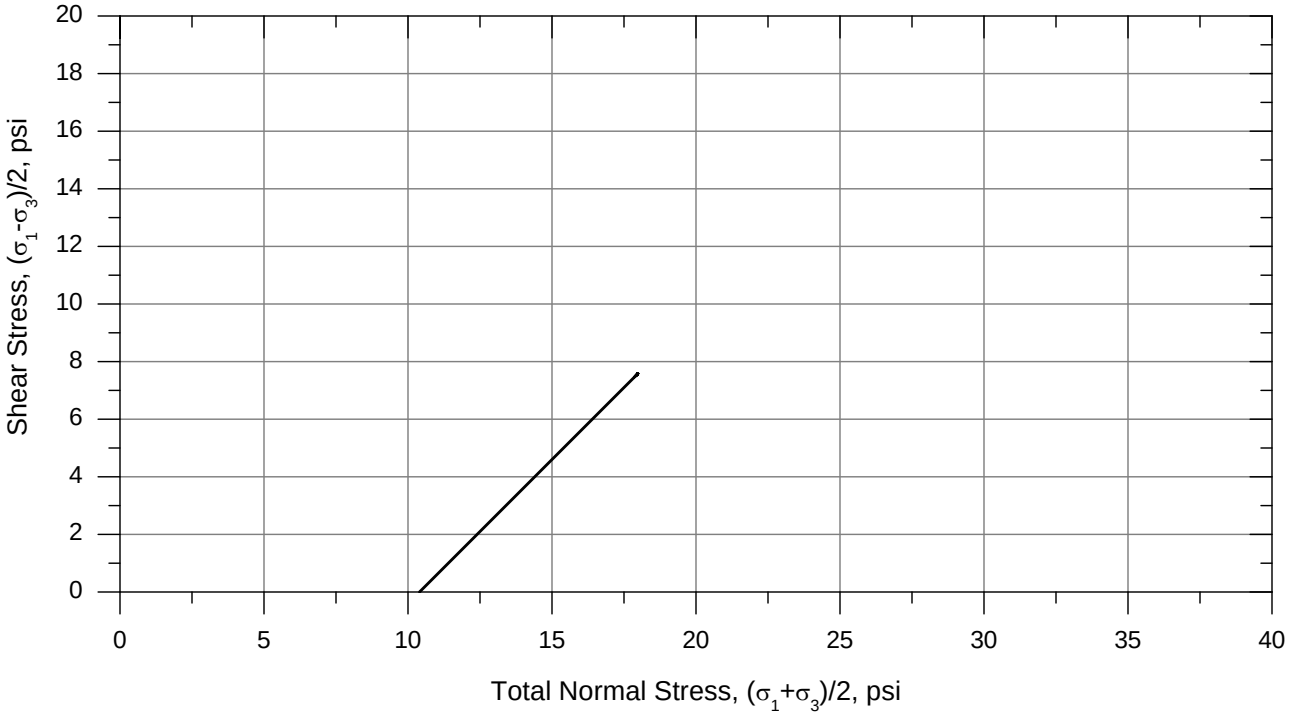
SATURATION	B (Skempton) value:	1.00
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.030
	Max. Mobilized Friction Angle, deg:	32.4
	Max. Deviator Stress, psi:	15.2

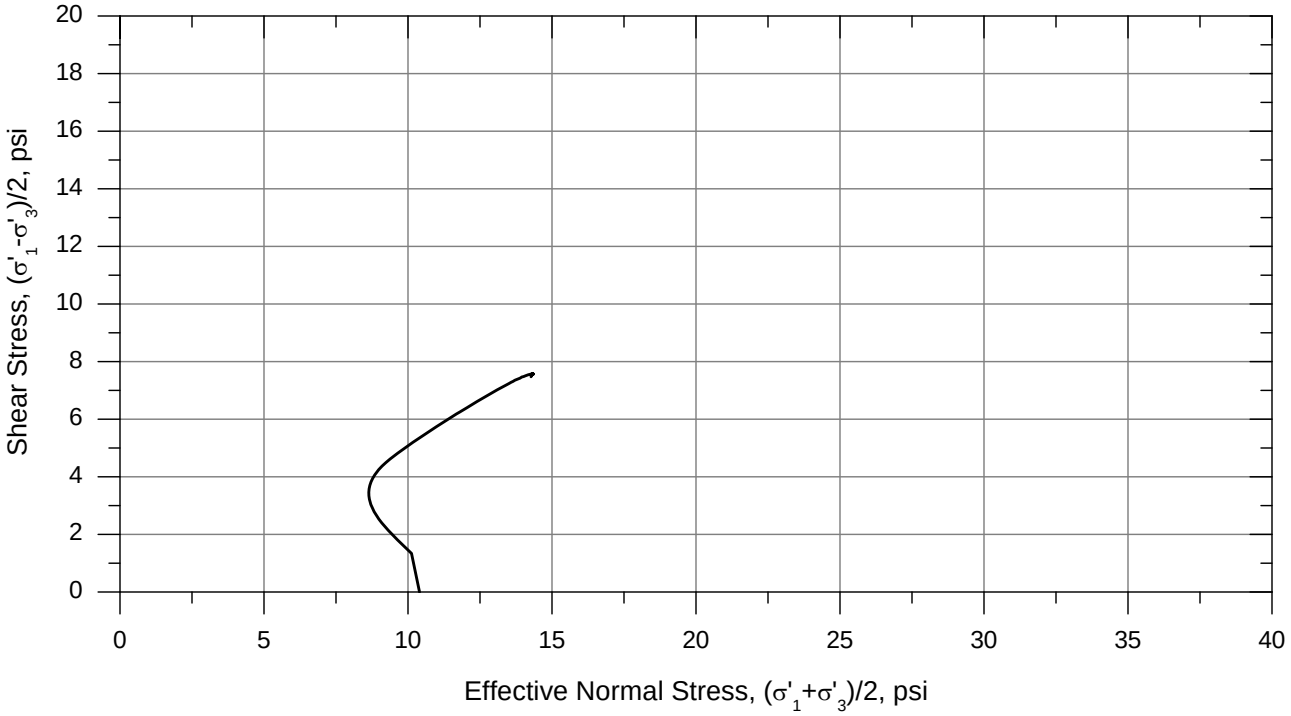
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	149.5	148.9	147.9	147.9	128.5	117.7	109.8
Diameter, mm:	72.1	72.3	71.8	71.8	76.5	79.1	81.0
Axial Strain, %:		0.0	0.7	0.0	13.1	20.4	25.7
Volumetric Strain, %:		0.0	2.0	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	14.6	15.2	14.9
Vertical Effective Stress, psi:		2.5	10.4	10.4	20.9	21.9	21.7
Horizontal Effective Stress, psi:		2.5	10.4	10.4	6.3	6.8	6.8
Void Ratio:		0.57	0.53	0.53	0.53	0.53	0.53
Water Content, %:		21.0	19.8	19.8	19.8	19.8	19.8
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		130.1	131.5	131.5	131.5	131.5	131.5
Dry Unit Weight, pcf:		107.5	109.8	109.8	109.8	109.8	109.8

TRIAXIAL TEST RESULTS

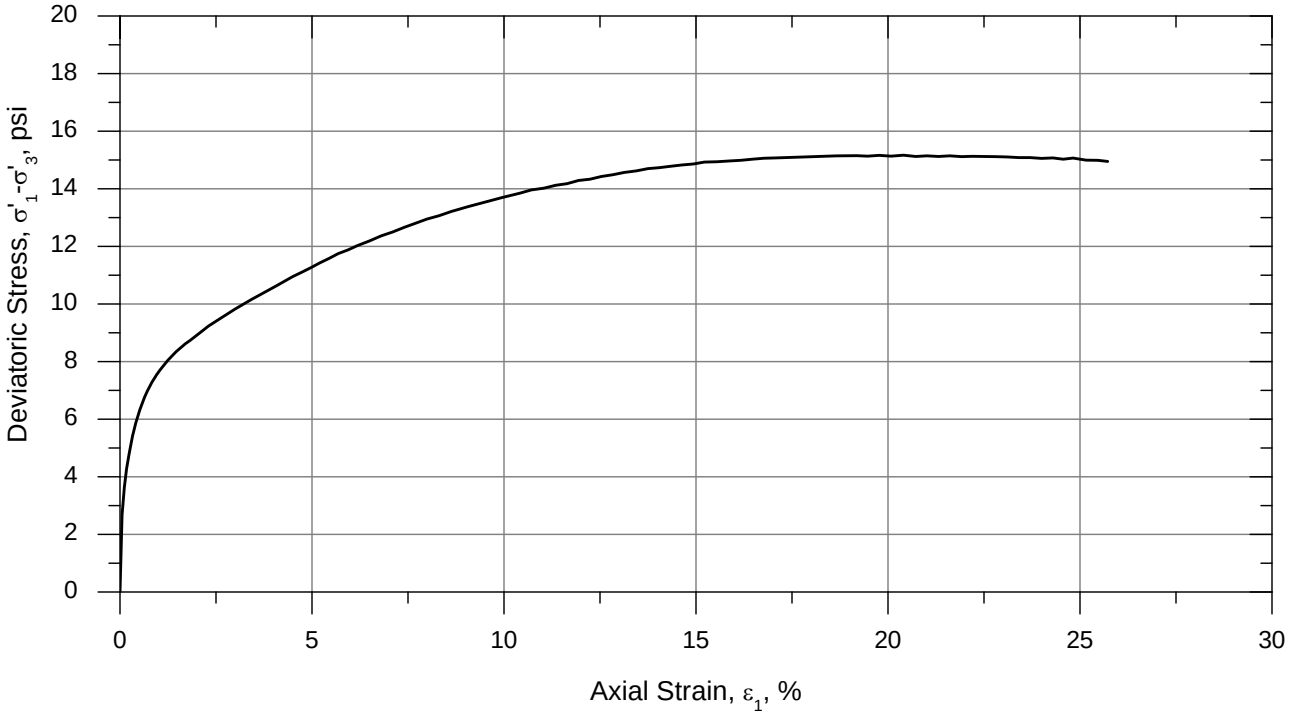
BORING ID: 09-109B
TEST ID: 524

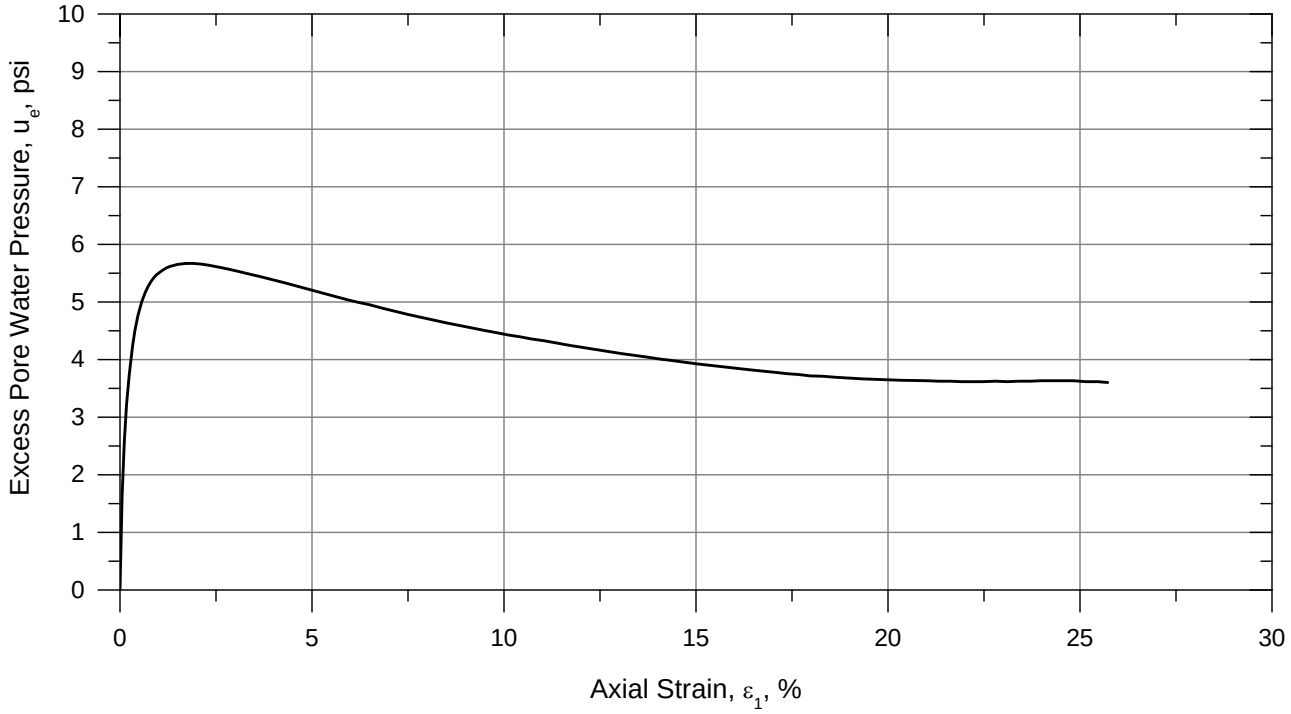




TRIAXIAL TEST RESULTS

BORING ID: 09-109B
TEST ID: 524





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 525
Soil Boring: 09-109B
Sample No. OST-6
Soil Type: SILTY F-M SAND, TRACE CLAY, LIGHT BROWN
USCS: SM
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

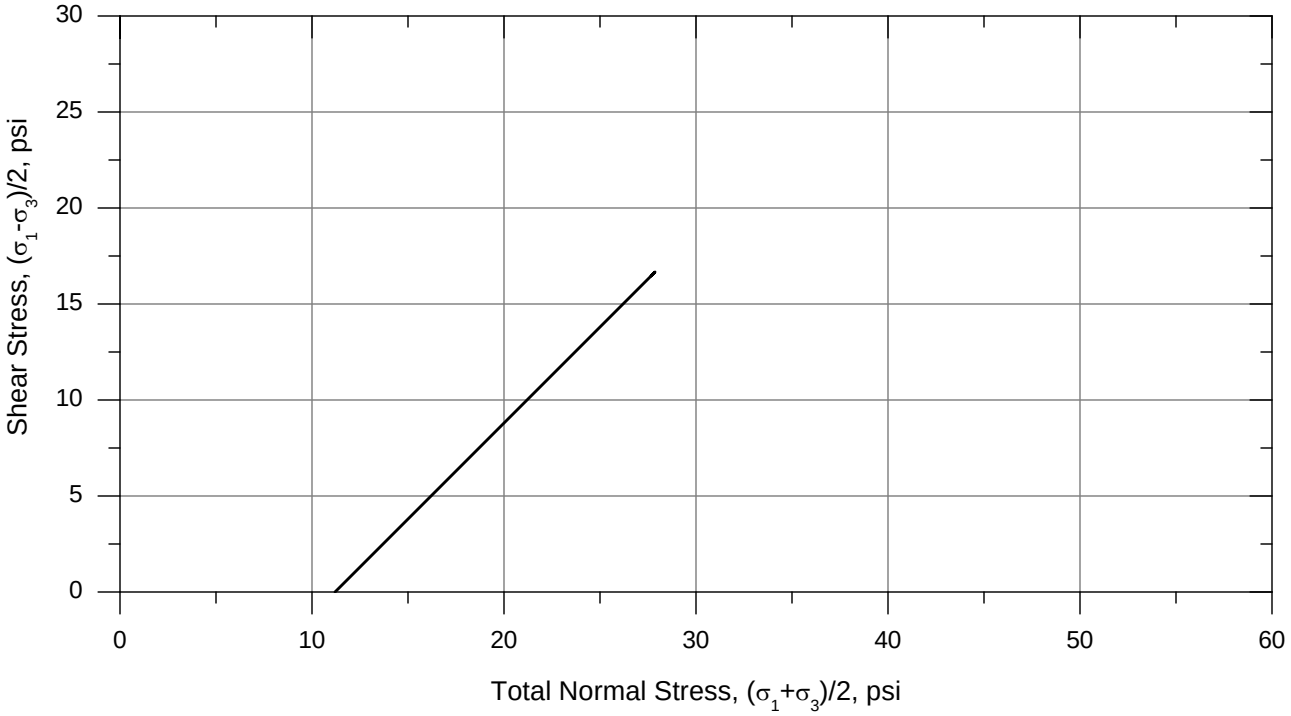
SATURATION	B (Skempton) value:	1.00
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.065
	Max. Mobilized Friction Angle, deg:	34.3
	Max. Deviator Stress, psi:	33.3

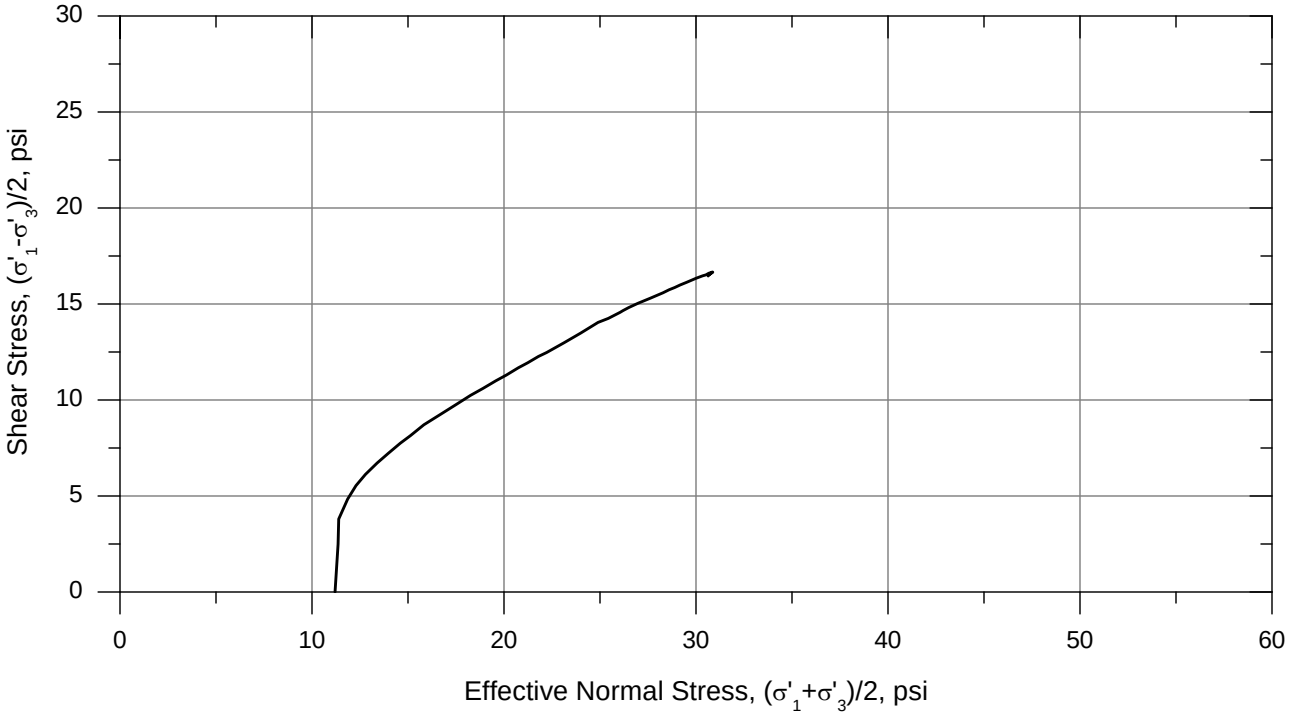
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	151.2	151.1	150.9	150.9	142.6	120.9	117.4
Diameter, mm:	72.3	72.7	72.6	72.6	74.5	79.8	80.6
Axial Strain, %:		0.0	0.2	0.0	5.4	19.9	22.2
Volumetric Strain, %:		0.0	0.5	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	28.1	33.3	32.9
Vertical Effective Stress, psi:		2.5	11.2	11.2	38.9	47.5	47.1
Horizontal Effective Stress, psi:		2.5	11.2	11.2	10.9	14.2	14.2
Void Ratio:		0.61	0.60	0.60	0.60	0.60	0.60
Water Content, %:		22.7	22.4	22.4	22.4	22.4	22.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		128.2	128.5	128.5	128.5	128.5	128.5
Dry Unit Weight, pcf:		104.5	105.1	105.1	105.1	105.1	105.1

TRIAXIAL TEST RESULTS

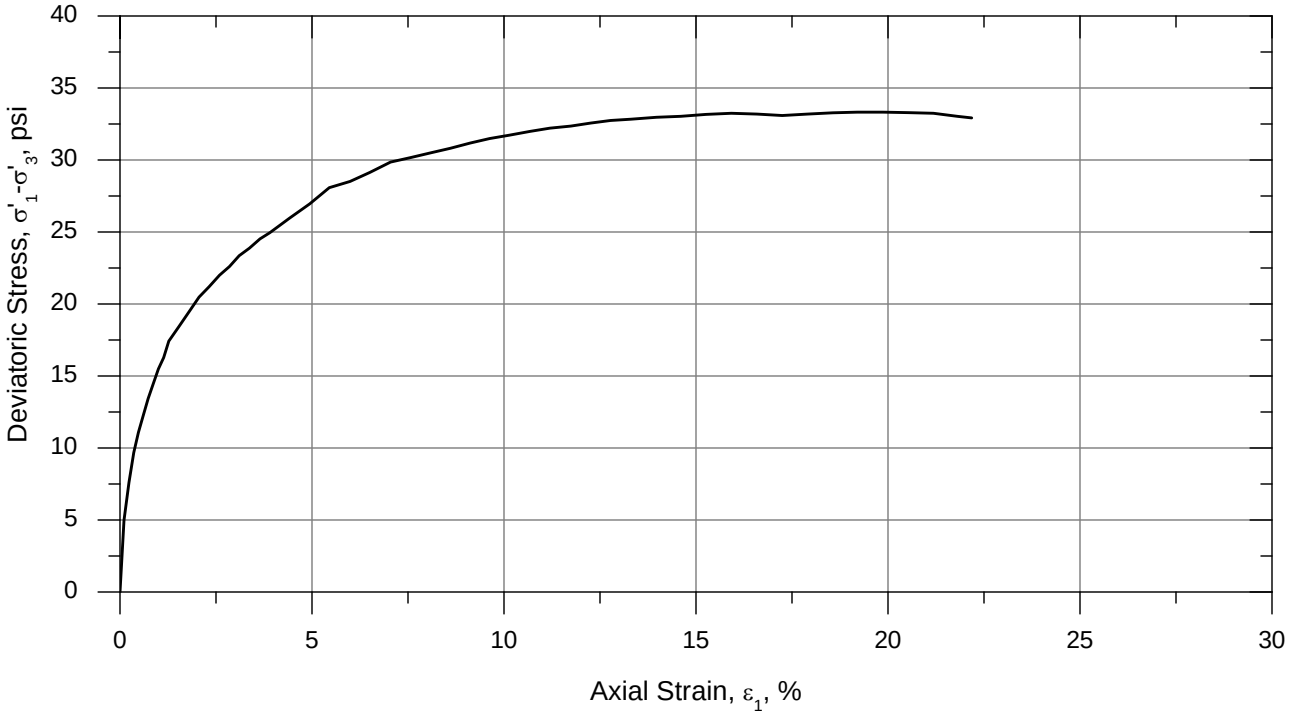
BORING ID: 09-109B
TEST ID: 525

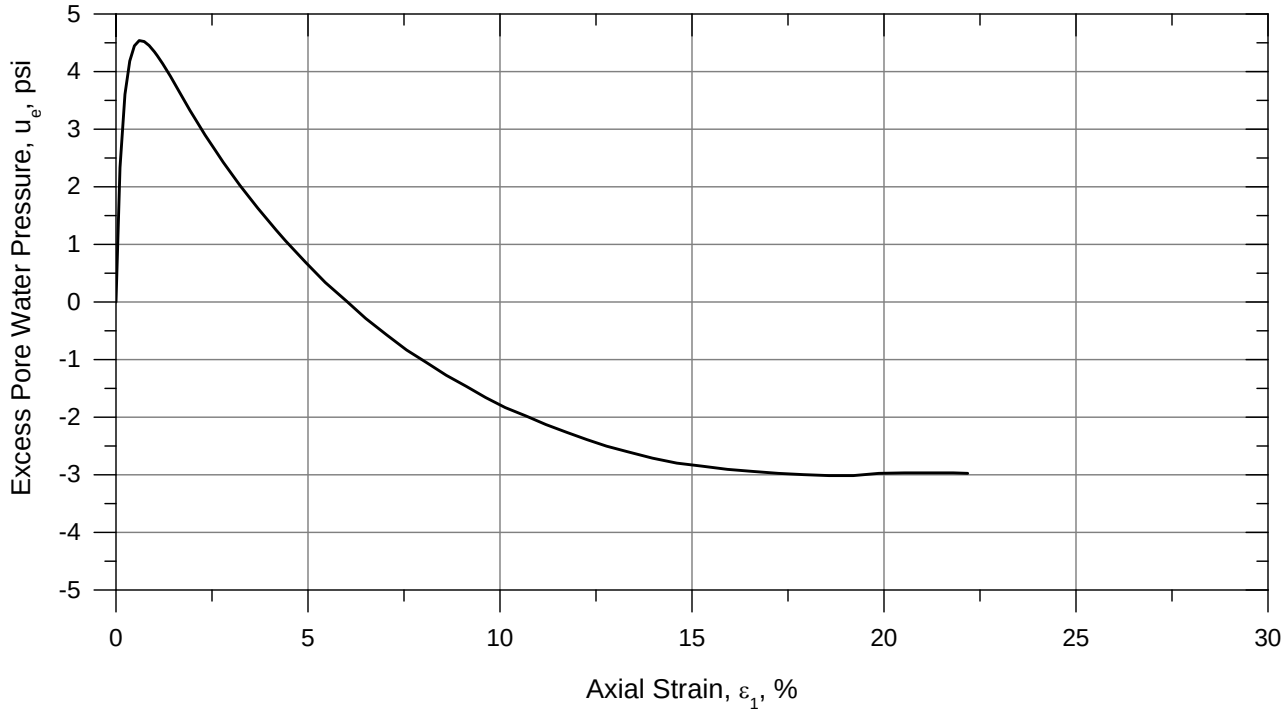




TRIAXIAL TEST RESULTS

BORING ID: 09-109B
TEST ID: 525





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	526
Soil Boring:	09-201B
Sample No.	OST-3
Soil Type:	SILTY CLAY, TRACE F-M SAND, GRAY
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

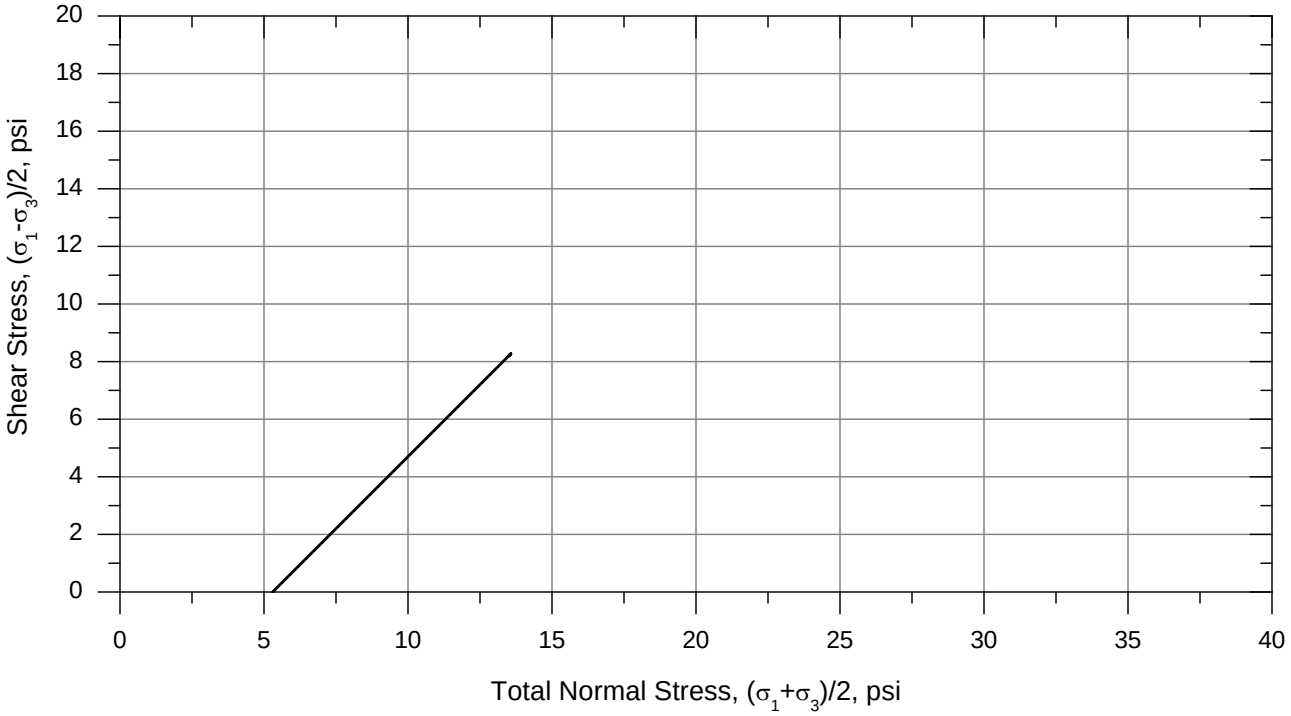
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.064
	Max. Mobilized Friction Angle, deg:	28.5
	Max. Deviator Stress, psi:	16.5

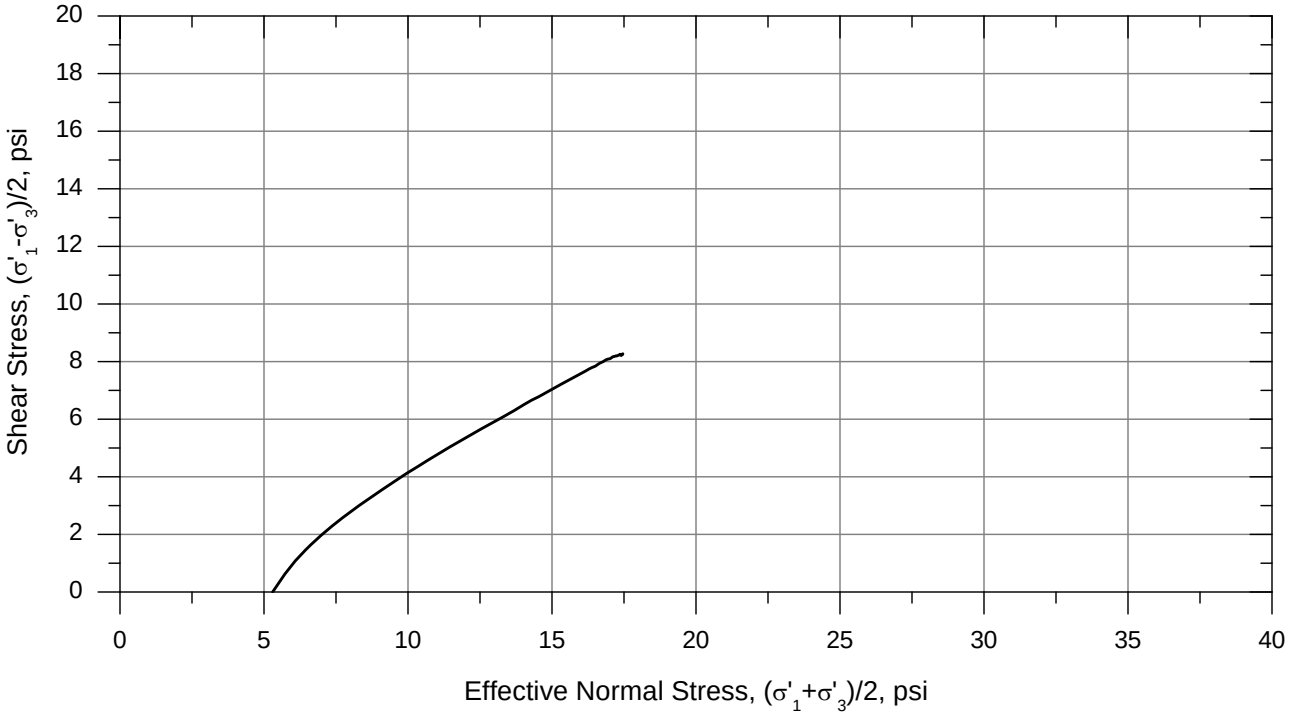
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	154.8	154.1	153.9	153.9	129.9	117.1	115.5
Diameter, mm:	72.1	71.6	71.5	71.5	77.1	80.1	80.5
Axial Strain, %:		0.0	0.1	0.0	15.6	23.9	25.0
Volumetric Strain, %:		0.0	0.4	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	16.1	16.5	16.5
Vertical Effective Stress, psi:		2.0	5.3	5.3	24.9	25.7	25.7
Horizontal Effective Stress, psi:		2.0	5.3	5.3	8.8	9.2	9.2
Void Ratio:		0.69	0.68	0.68	0.68	0.68	0.68
Water Content, %:		25.4	25.1	25.1	25.1	25.1	25.1
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		125.3	125.6	125.6	125.6	125.6	125.6
Dry Unit Weight, pcf:		99.9	100.4	100.4	100.4	100.4	100.4

TRIAXIAL TEST RESULTS

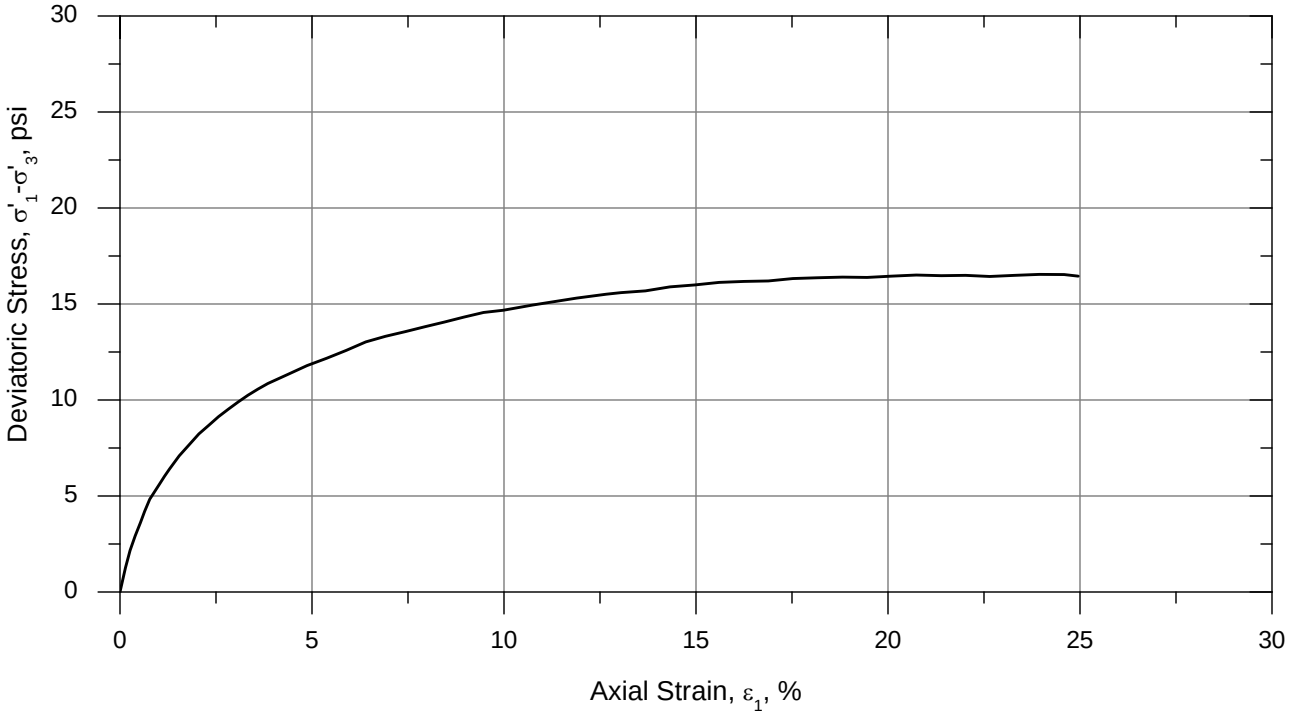
BORING ID: 09-201B
TEST ID: 526

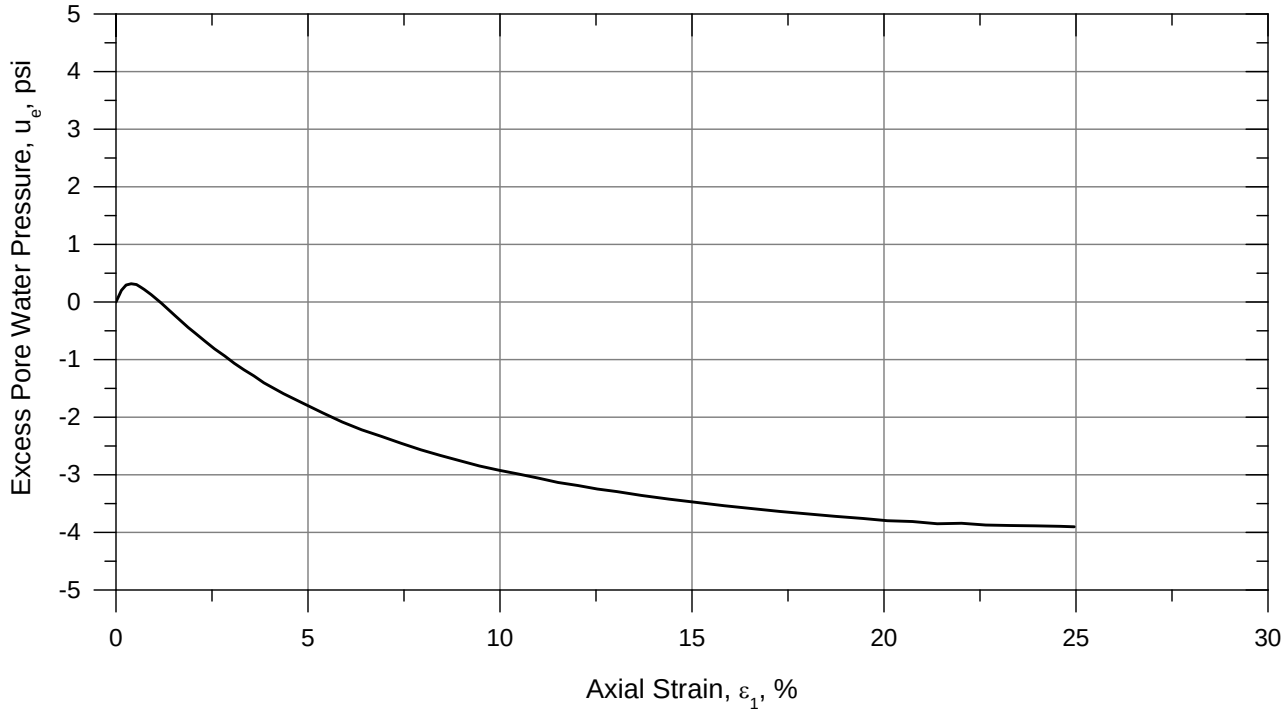




TRIAXIAL TEST RESULTS

BORING ID: 09-201B
TEST ID: 526





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	527
Soil Boring:	09-202B
Sample No.	OST-3
Soil Type:	CLAYEY SILTY, SOME F-M SAND, BROWNISH GRAY
USCS:	CL-ML
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

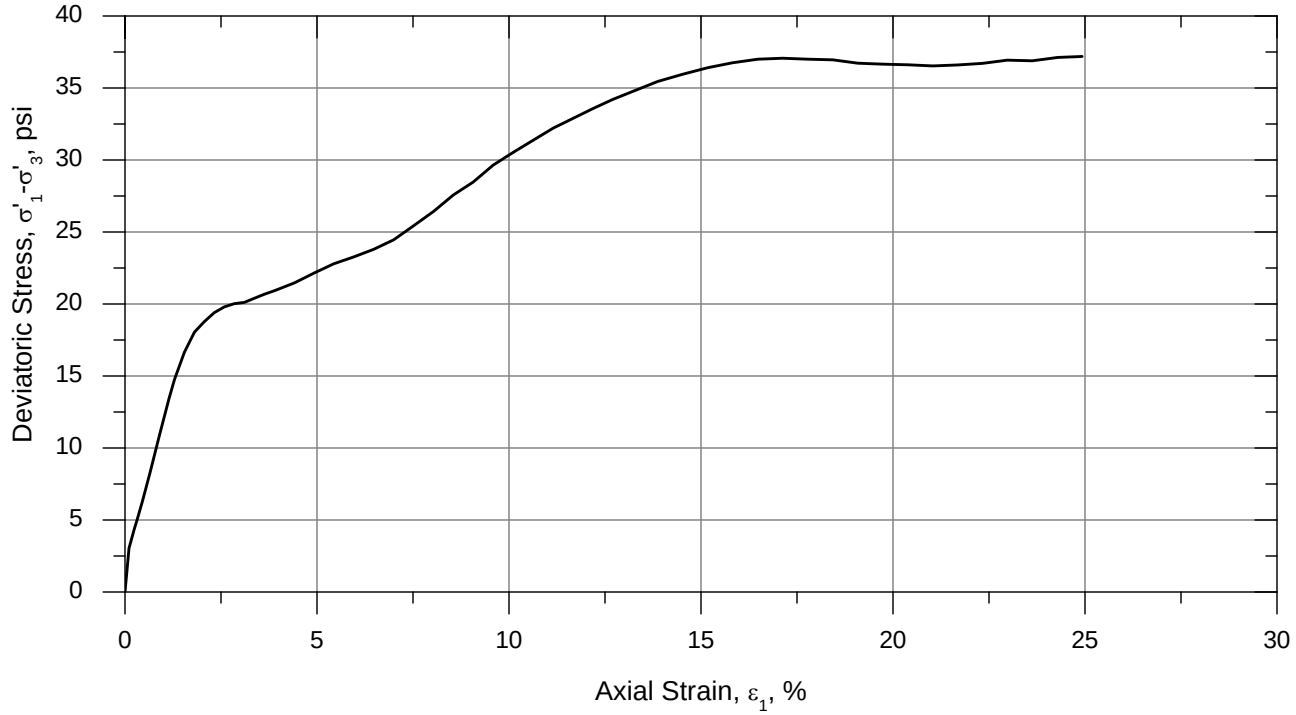
SATURATION	B (Skempton) value:	0.95
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.065
	Max. Mobilized Friction Angle, deg:	38.0
	Max. Deviator Stress, psi:	37.2

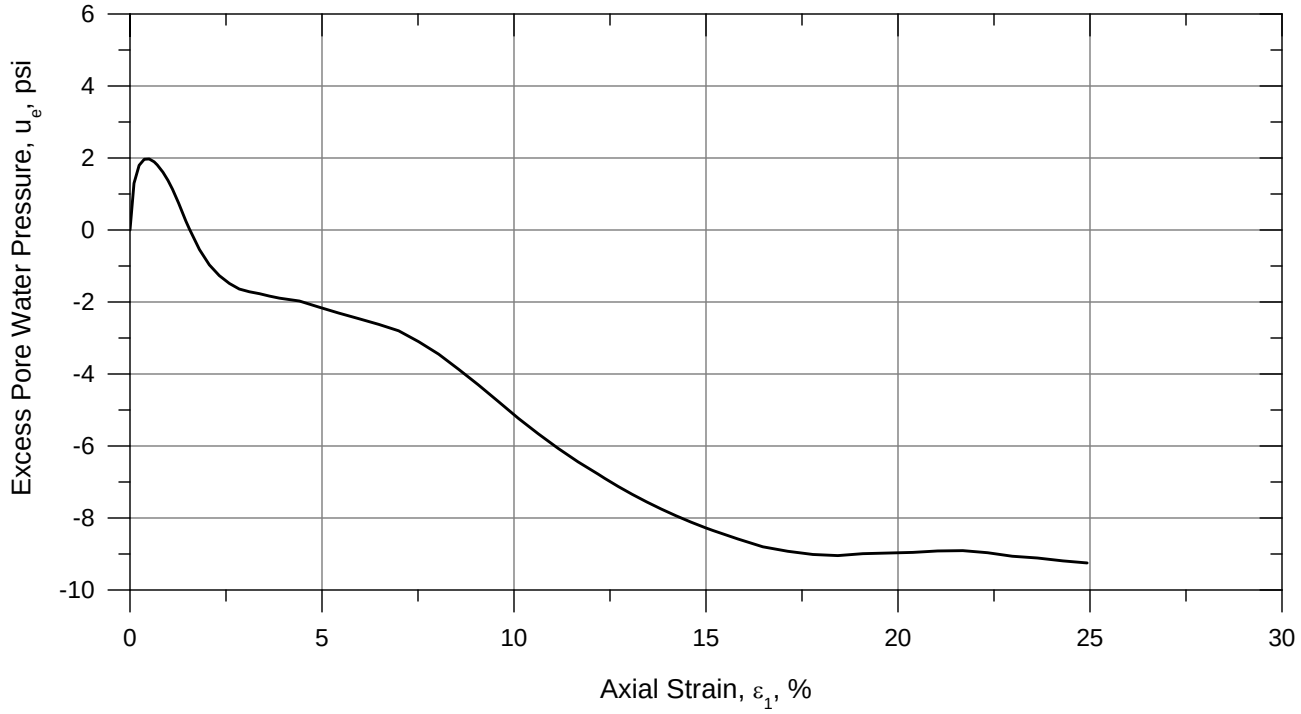
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	152.6	152.1	152.0	152.0	150.1	114.1	114.1
Diameter, mm:	72.1	72.2	72.2	72.2	72.6	81.1	81.1
Axial Strain, %:		0.0	0.1	0.0	1.3	24.9	24.9
Volumetric Strain, %:		0.0	0.2	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	14.7	37.2	37.2
Vertical Effective Stress, psi:		2.0	5.3	5.3	19.4	51.7	51.7
Horizontal Effective Stress, psi:		2.0	5.3	5.3	4.6	14.5	14.5
Void Ratio:		0.51	0.51	0.51	0.51	0.51	0.51
Water Content, %:		18.9	18.8	18.8	18.8	18.8	18.8
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		132.7	132.8	132.8	132.8	132.8	132.8
Dry Unit Weight, pcf:		111.6	111.8	111.8	111.8	111.8	111.8

TRIAXIAL TEST RESULTS

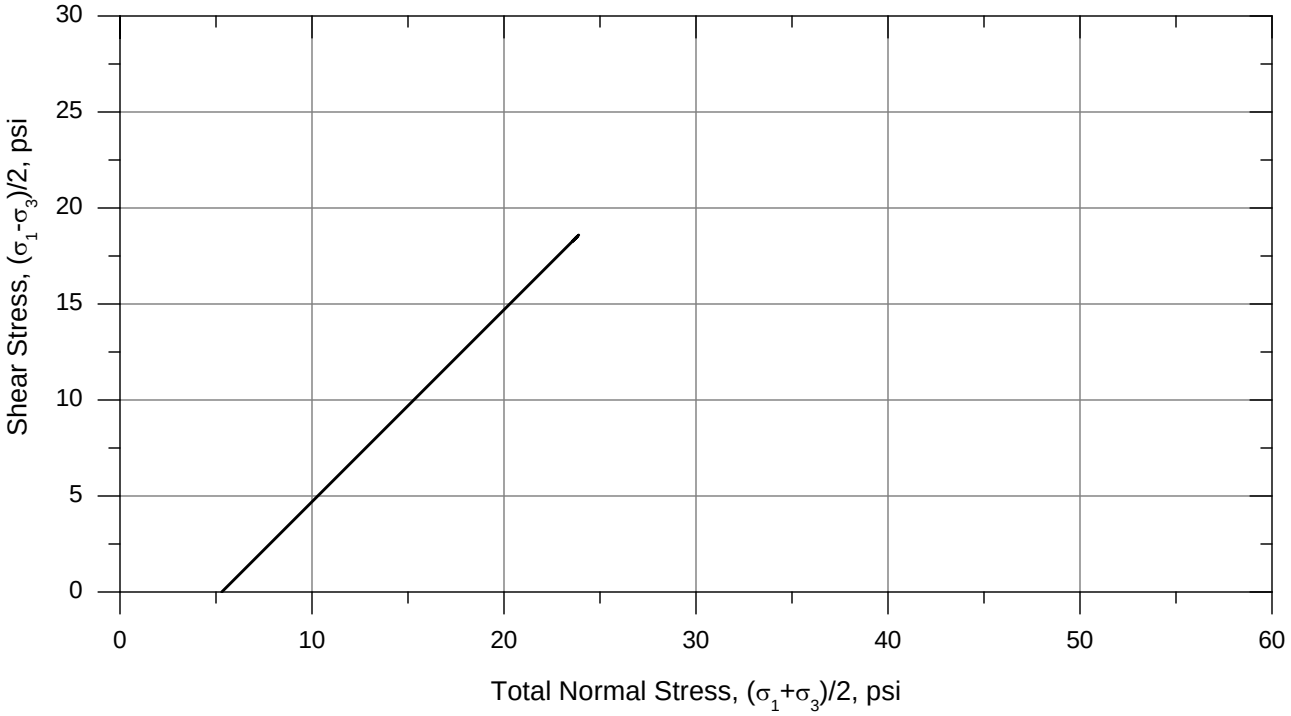
BORING ID: 09-202B
TEST ID: 527

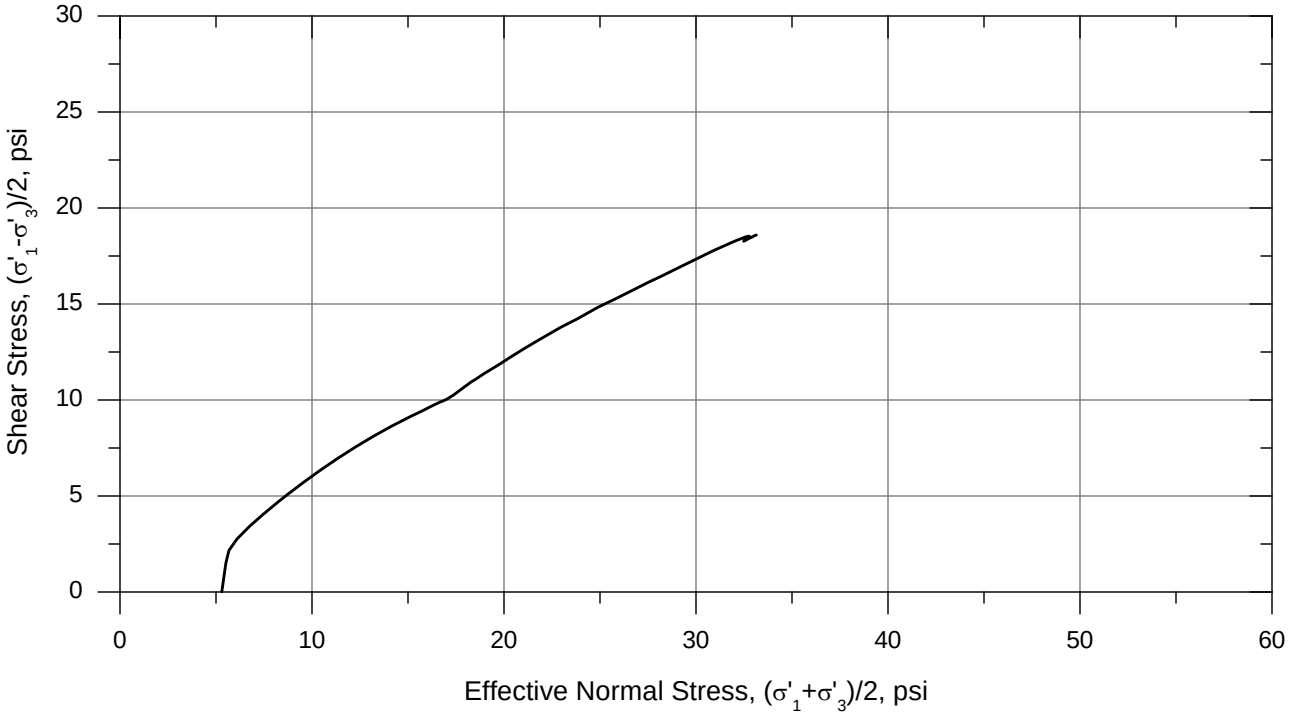




TRIAXIAL TEST RESULTS

BORING ID: 09-202B
TEST ID: 527





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	528
Soil Boring:	09-203B2
Sample No.	OST-3
Soil Type:	CLAYEY SILT, LITTLE F-M SAND, BROWN
USCS:	CL-ML
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

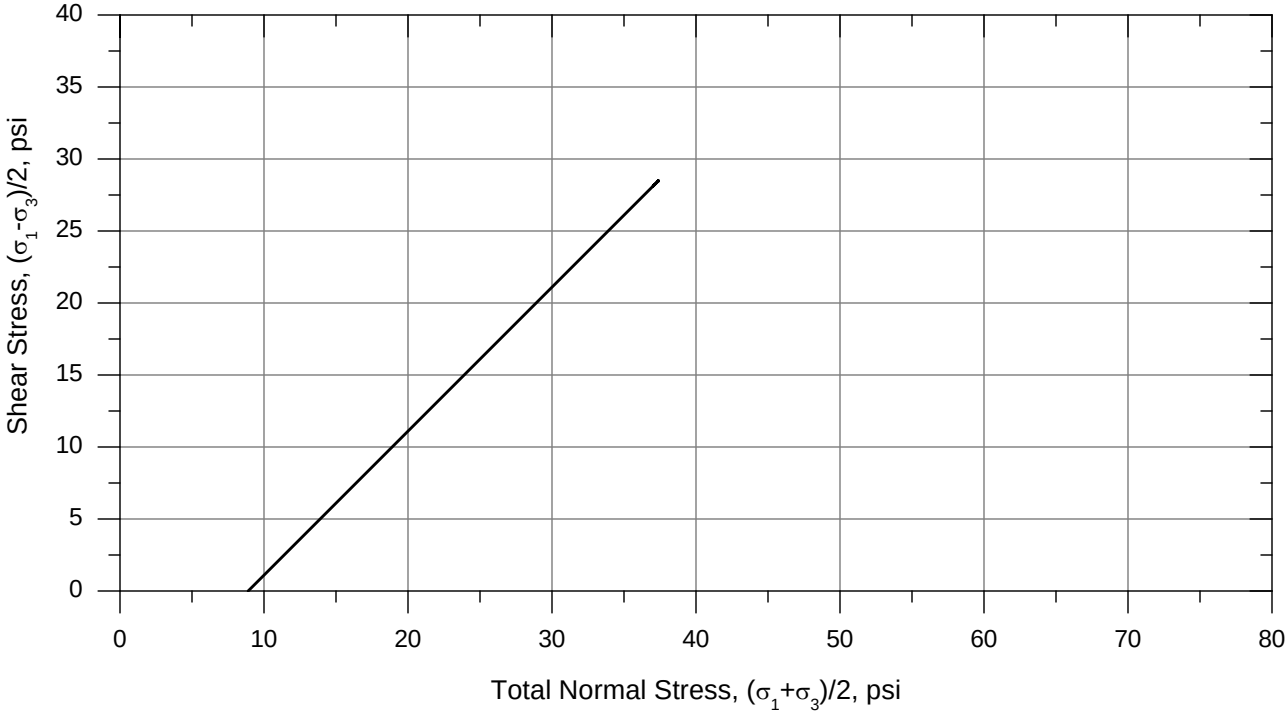
SATURATION	B (Skempton) value:	0.95
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.030
	Max. Mobilized Friction Angle, deg:	36.5
	Max. Deviator Stress, psi:	57.0

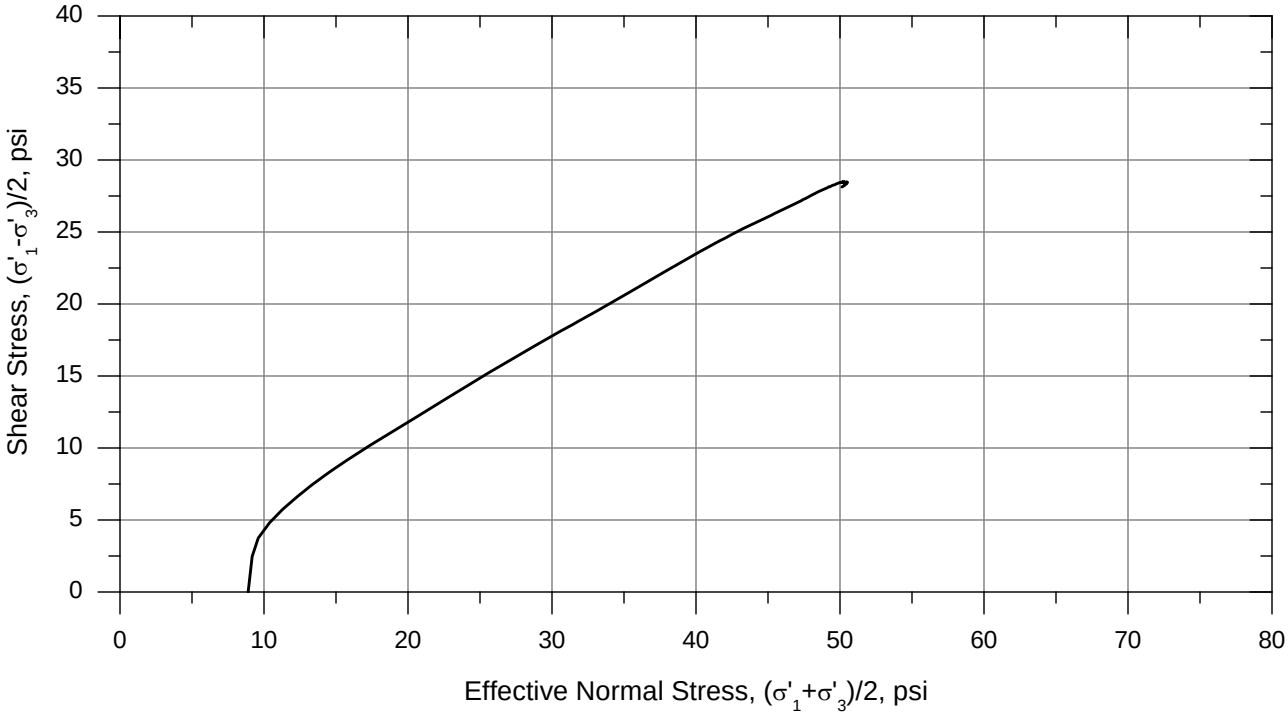
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	149.8	147.3	147.2	147.2	142.2	117.0	109.2
Diameter, mm:	72.2	72.2	72.2	72.2	73.4	79.6	81.5
Axial Strain, %:		0.0	0.1	0.0	3.4	20.5	25.8
Volumetric Strain, %:		0.0	0.3	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	29.8	57.0	56.2
Vertical Effective Stress, psi:		2.5	8.9	8.9	40.0	78.8	78.3
Horizontal Effective Stress, psi:		2.5	8.9	8.9	10.2	21.8	22.0
Void Ratio:		0.47	0.47	0.47	0.47	0.47	0.47
Water Content, %:		17.5	17.4	17.4	17.4	17.4	17.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		134.4	134.6	134.6	134.6	134.6	134.6
Dry Unit Weight, pcf:		114.4	114.7	114.7	114.7	114.7	114.7

TRIAXIAL TEST RESULTS

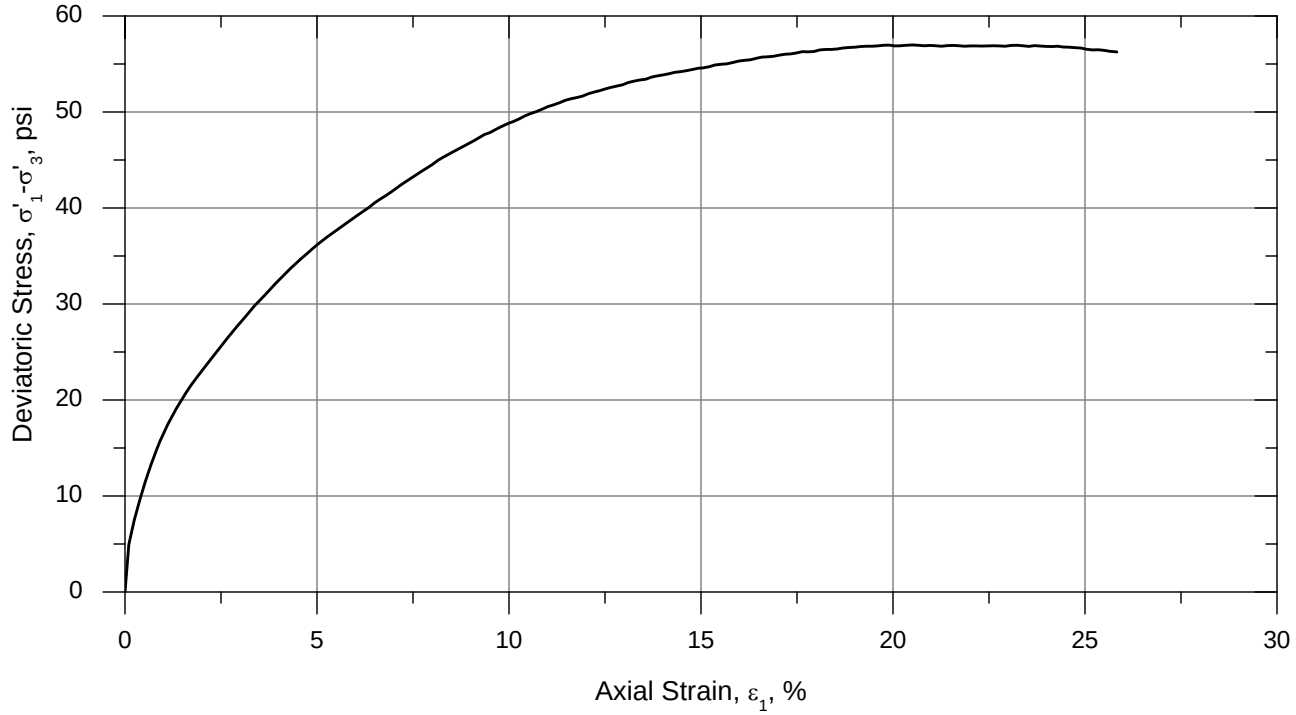
BORING ID: 09-203B2
TEST ID: 528

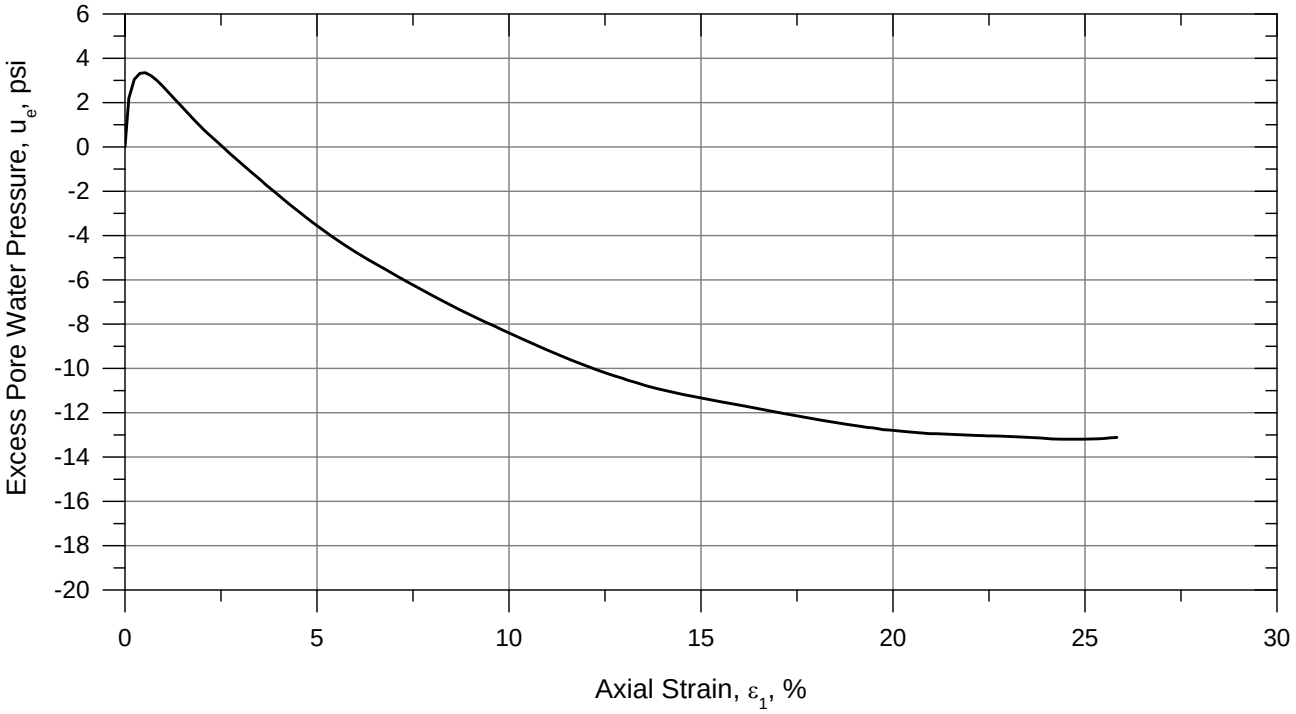




TRIAXIAL TEST RESULTS

BORING ID: 09-203B2
TEST ID: 528





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	529
Soil Boring:	09-203B
Sample No.	OST-5
Soil Type:	CLAYEY SILT, LITTLE F-M SAND, REDDISH BROWN
USCS:	CL-ML
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

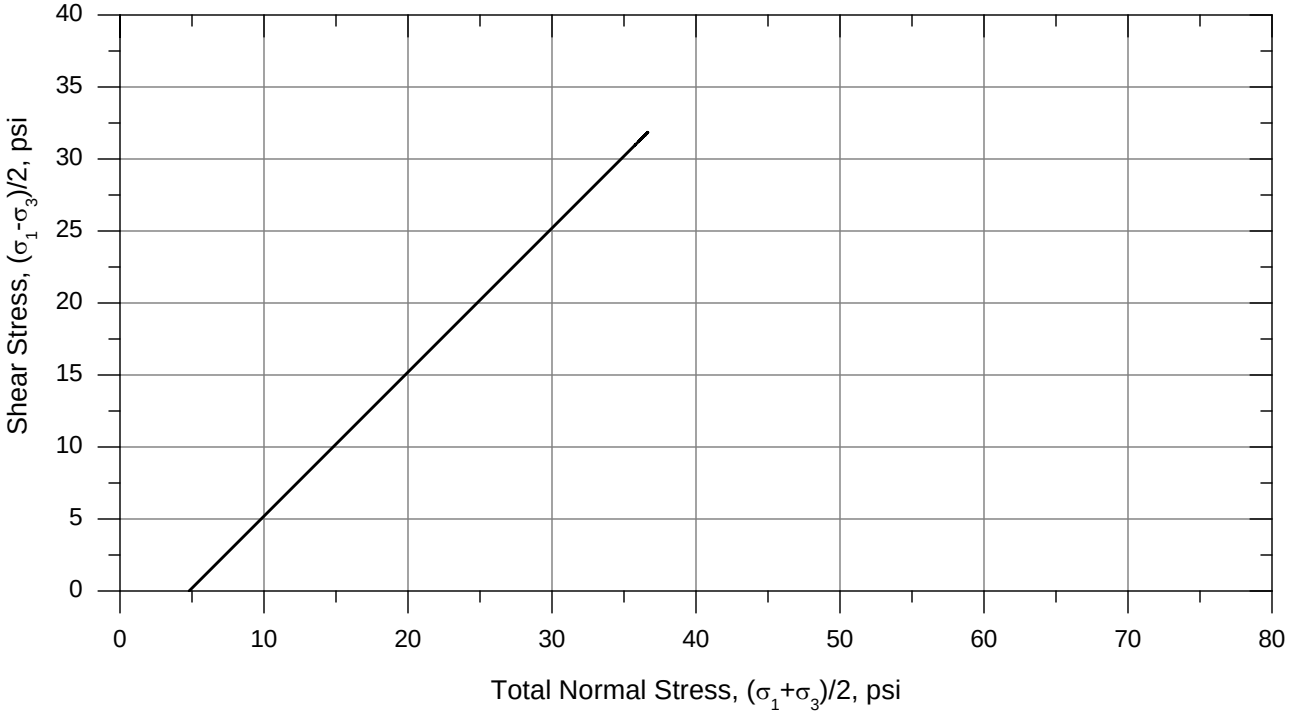
SATURATION	B (Skempton) value:	1.00
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.069
	Max. Mobilized Friction Angle, deg:	42.1
	Max. Deviator Stress, psi:	63.7

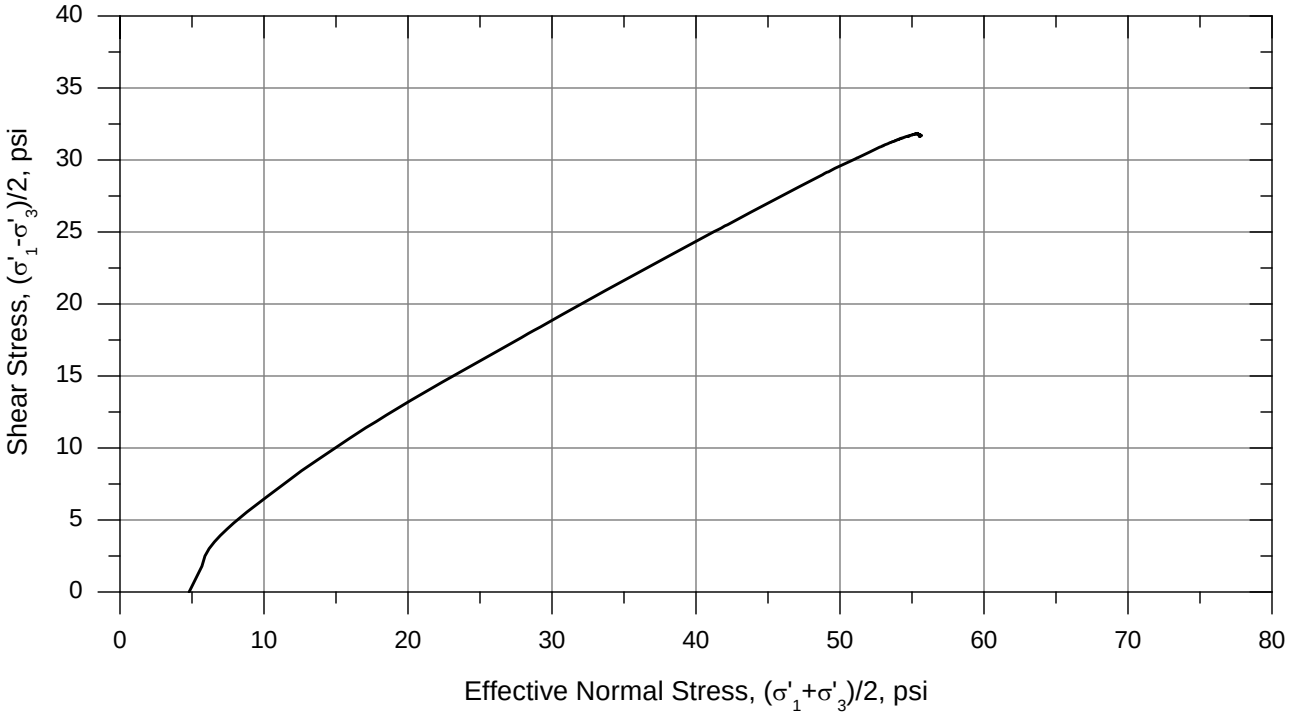
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	142.3	142.3	142.2	142.2	139.9	112.8	106.3
Diameter, mm:	72.0	72.2	72.1	72.1	72.7	79.6	81.2
Axial Strain, %:		0.0	0.1	0.0	1.6	20.7	25.3
Volumetric Strain, %:		0.0	0.2	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	20.0	63.7	63.4
Vertical Effective Stress, psi:		2.5	4.8	4.8	24.9	87.2	87.3
Horizontal Effective Stress, psi:		2.5	4.8	4.8	4.9	23.5	23.9
Void Ratio:		0.42	0.42	0.42	0.42	0.42	0.42
Water Content, %:		15.6	15.5	15.5	15.5	15.5	15.5
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		137.0	137.2	137.2	137.2	137.2	137.2
Dry Unit Weight, pcf:		118.5	118.8	118.8	118.8	118.8	118.8

TRIAXIAL TEST RESULTS

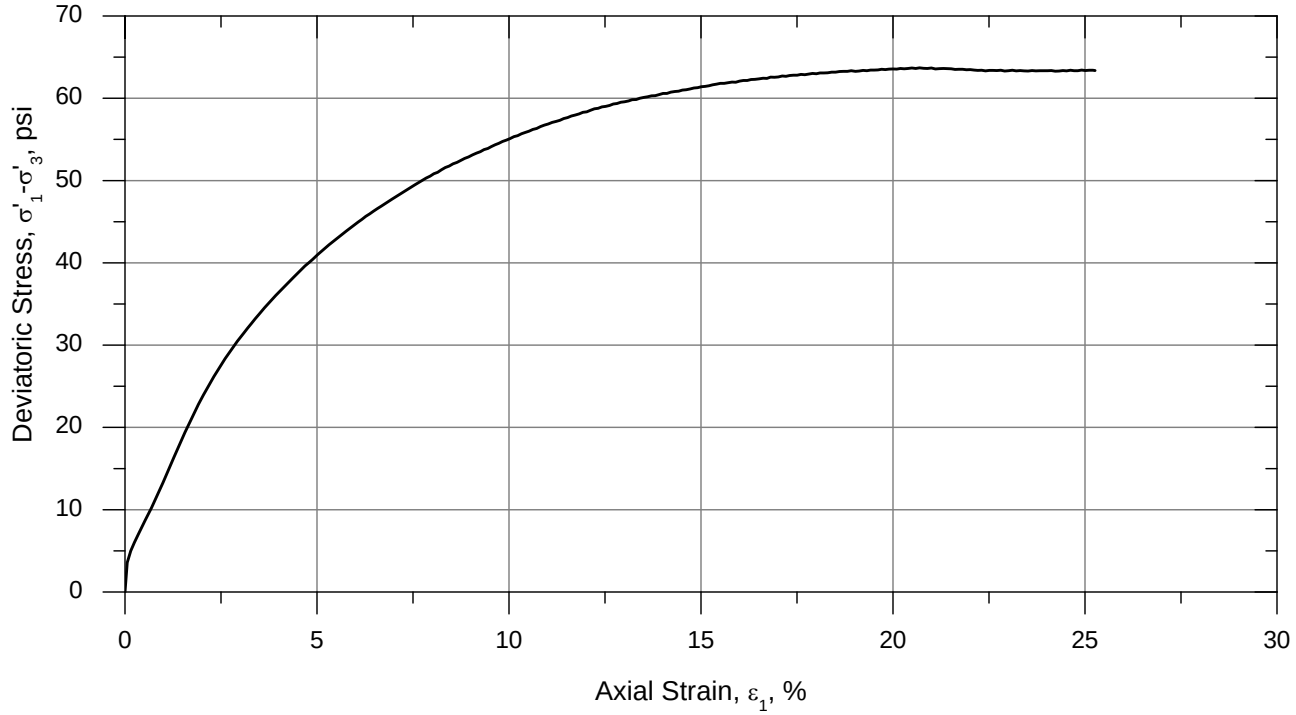
BORING ID: 09-203B
TEST ID: 529

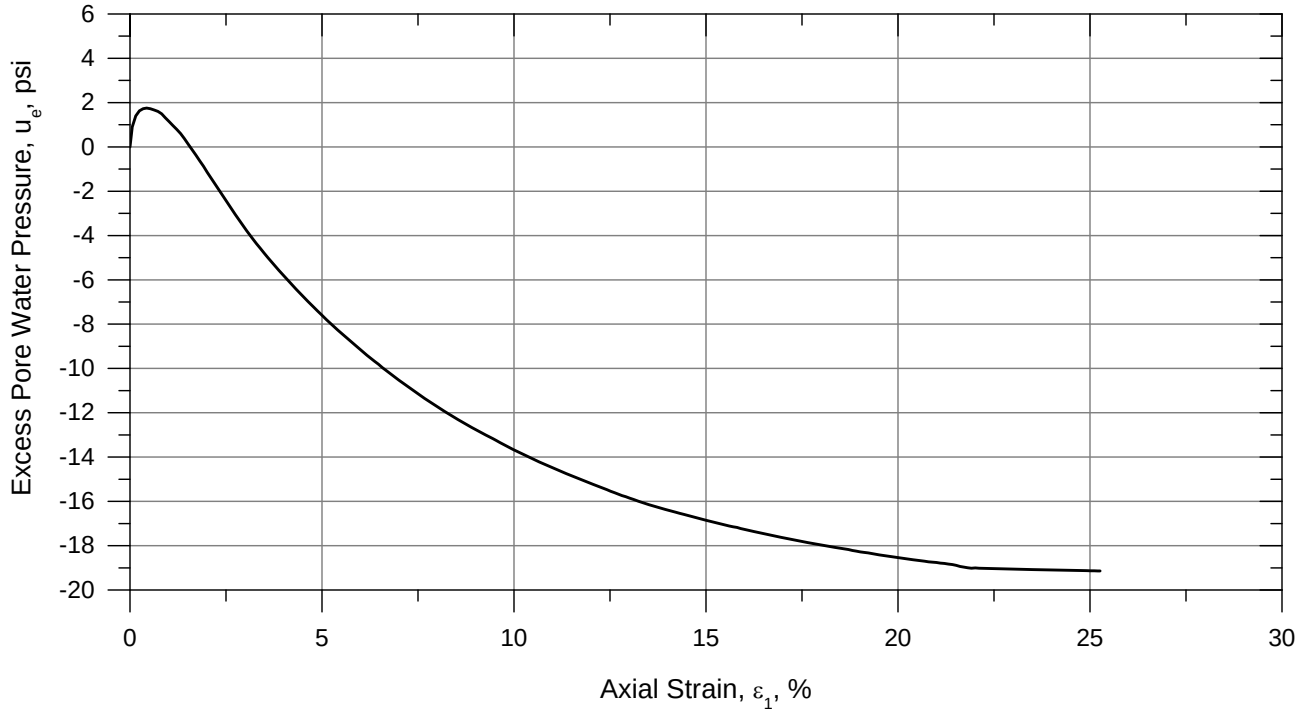




TRIAXIAL TEST RESULTS

BORING ID: 09-203B
TEST ID: 529





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Dam RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	530
Soil Boring:	09-204B
Sample No.	OST-5
Soil Type:	SILTY CLAY, TRACE F-C SAND, LIGHT BROWN
USCS:	CL-ML
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

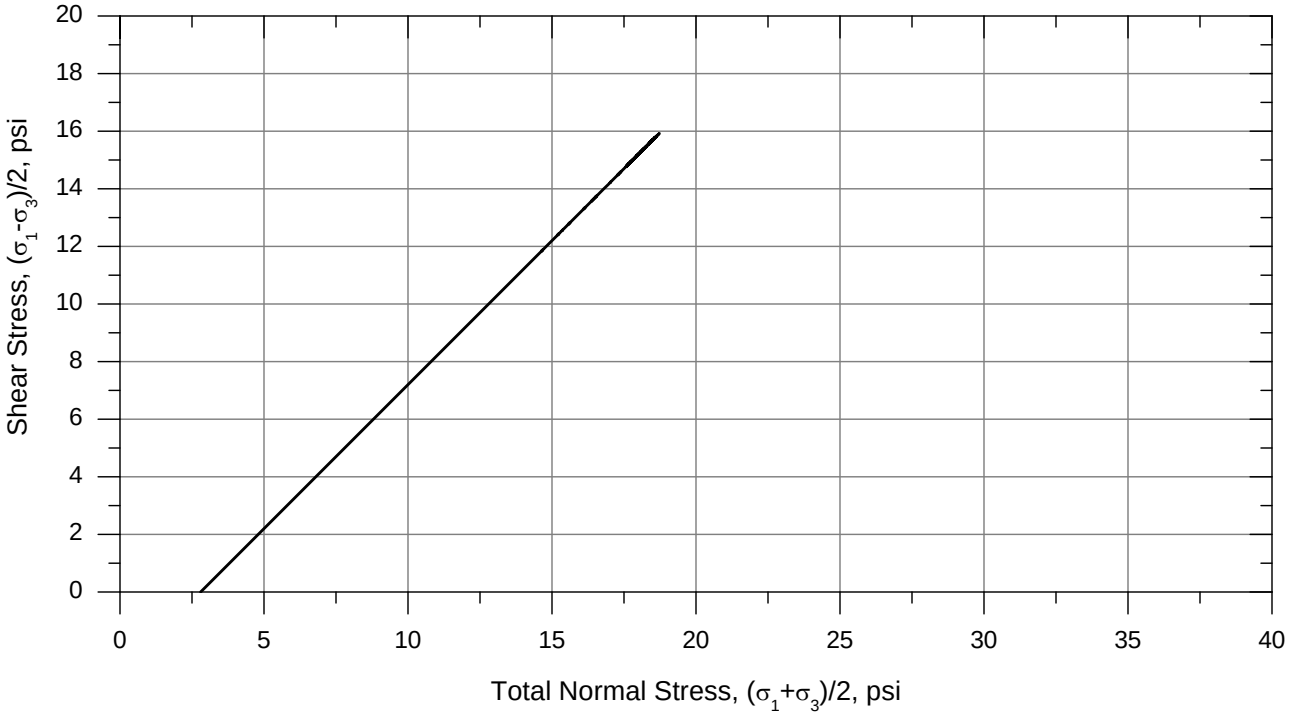
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.063
	Max. Mobilized Friction Angle, deg:	36.9
	Max. Deviator Stress, psi:	31.8

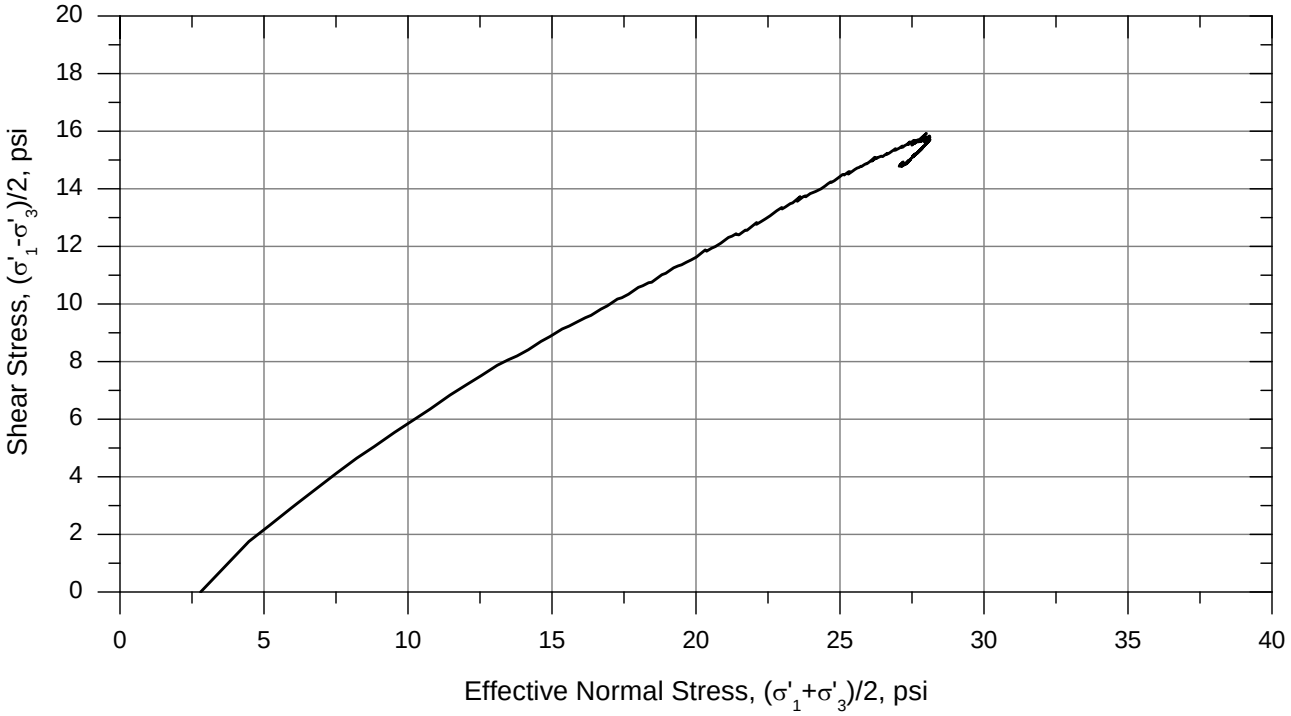
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.3	150.1	150.1	150.1	148.1	130.5	105.5
Diameter, mm:	72.5	72.6	72.5	72.5	73.0	77.3	83.3
Axial Strain, %:		0.0	0.0	0.0	1.3	13.0	29.7
Volumetric Strain, %:		0.0	0.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	15.7	31.8	29.7
Vertical Effective Stress, psi:		2.5	2.8	2.8	21.0	43.9	41.9
Horizontal Effective Stress, psi:		2.5	2.8	2.8	5.2	12.1	12.3
Void Ratio:		0.58	0.58	0.58	0.58	0.58	0.58
Water Content, %:		21.4	21.4	21.4	21.4	21.4	21.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		129.6	129.6	129.6	129.6	129.6	129.6
Dry Unit Weight, pcf:		106.7	106.8	106.8	106.8	106.8	106.8

TRIAXIAL TEST RESULTS

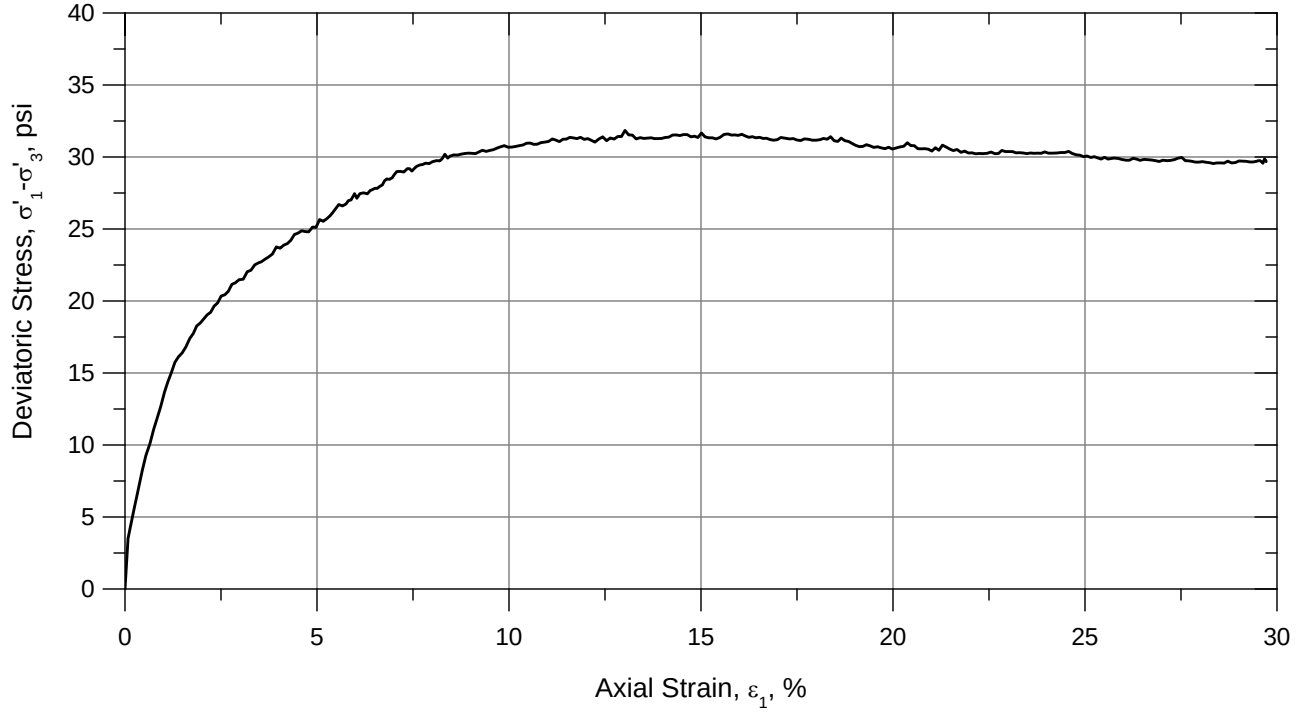
BORING ID: 09-204B
TEST ID: 530

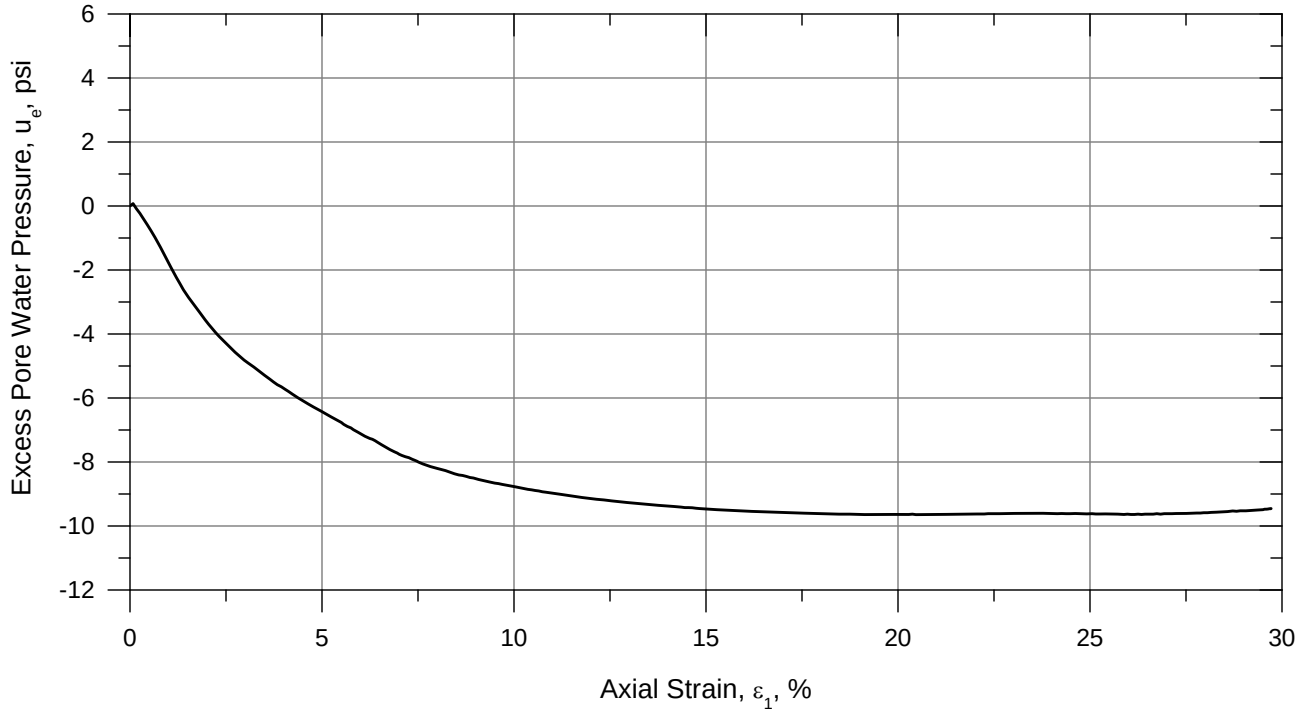




TRIAXIAL TEST RESULTS

BORING ID: 09-204B
TEST ID: 530





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 531
Soil Boring: 09-204B
Sample No. OST-6
Soil Type: SILTY CLAY, TRACE F-C SAND, LIGHT BROWN
USCS: CL
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

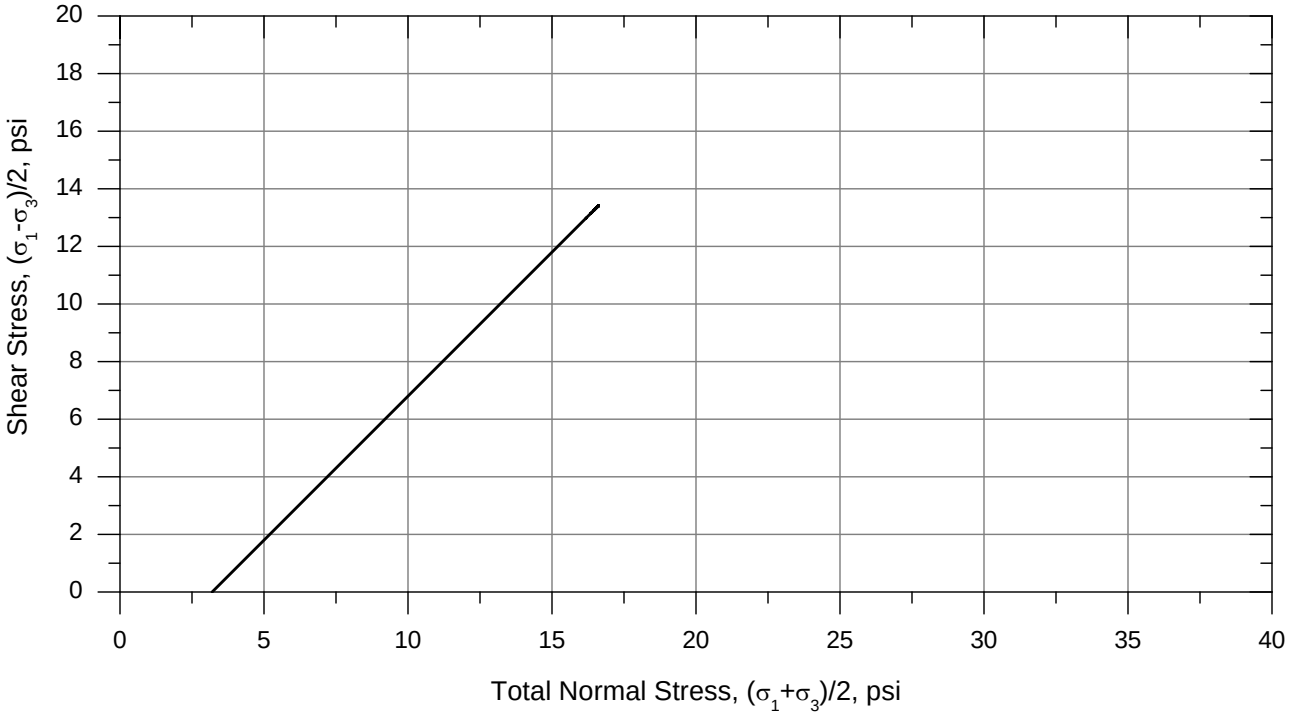
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.066
	Max. Mobilized Friction Angle, deg:	38.0
	Max. Deviator Stress, psi:	26.8

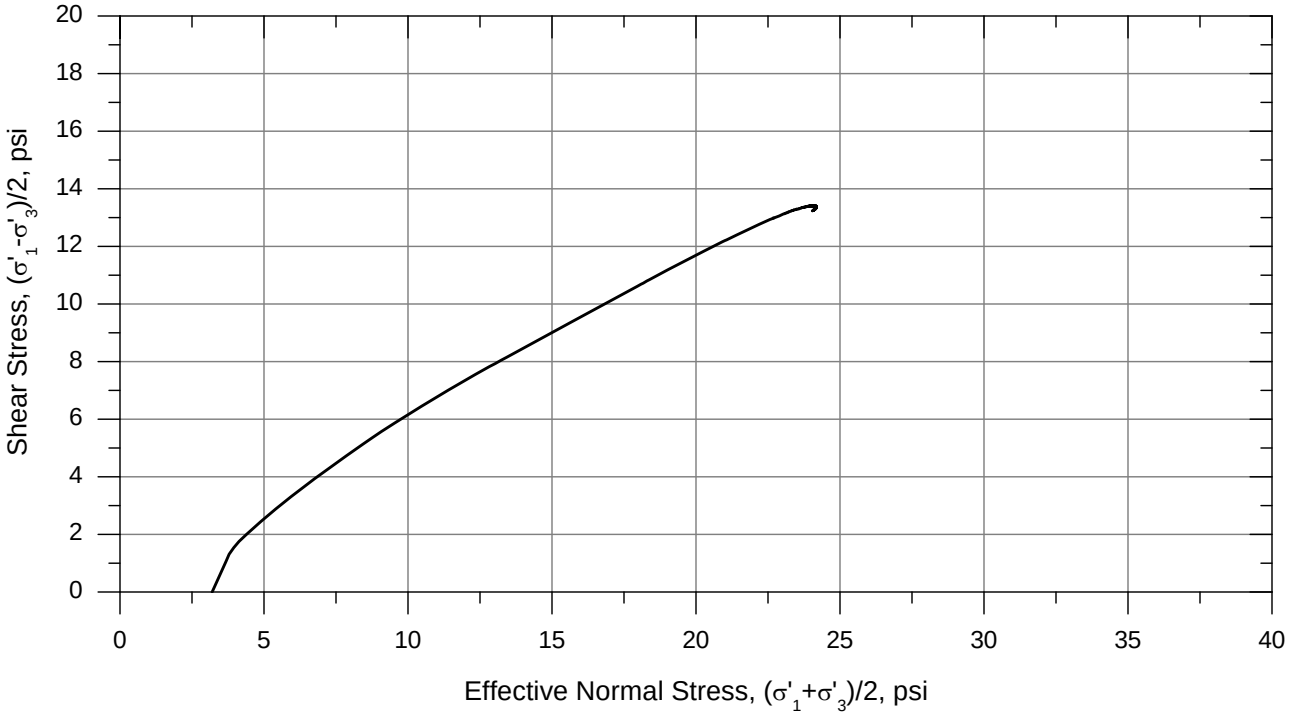
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.7	150.2	150.1	150.1	146.6	120.3	105.0
Diameter, mm:	72.6	72.0	72.0	72.0	72.8	79.1	82.8
Axial Strain, %:		0.0	0.0	0.0	2.4	19.9	30.0
Volumetric Strain, %:		0.0	0.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	13.1	26.8	26.5
Vertical Effective Stress, psi:		2.5	3.2	3.2	17.1	37.4	37.3
Horizontal Effective Stress, psi:		2.5	3.2	3.2	4.1	10.6	10.8
Void Ratio:		0.55	0.55	0.55	0.55	0.55	0.55
Water Content, %:		20.5	20.4	20.4	20.4	20.4	20.4
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		130.7	130.8	130.8	130.8	130.8	130.8
Dry Unit Weight, pcf:		108.5	108.6	108.6	108.6	108.6	108.6

TRIAXIAL TEST RESULTS

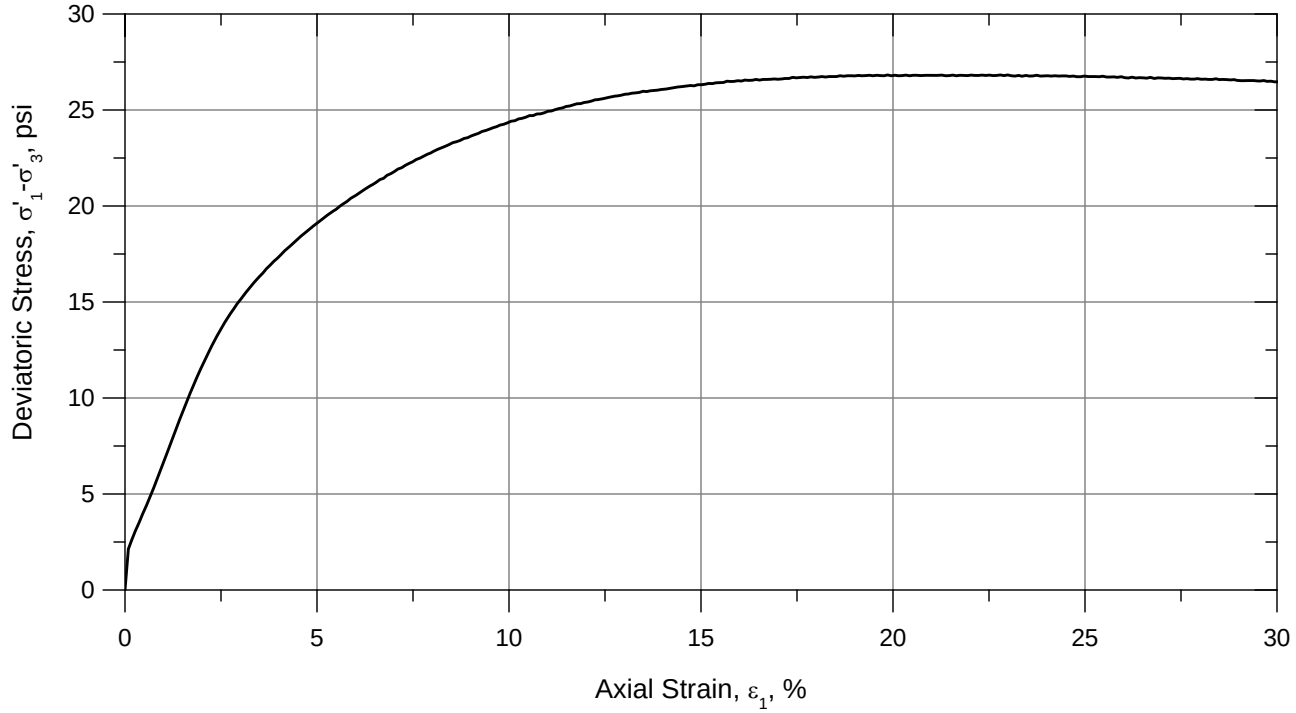
BORING ID: 09-204B
TEST ID: 531

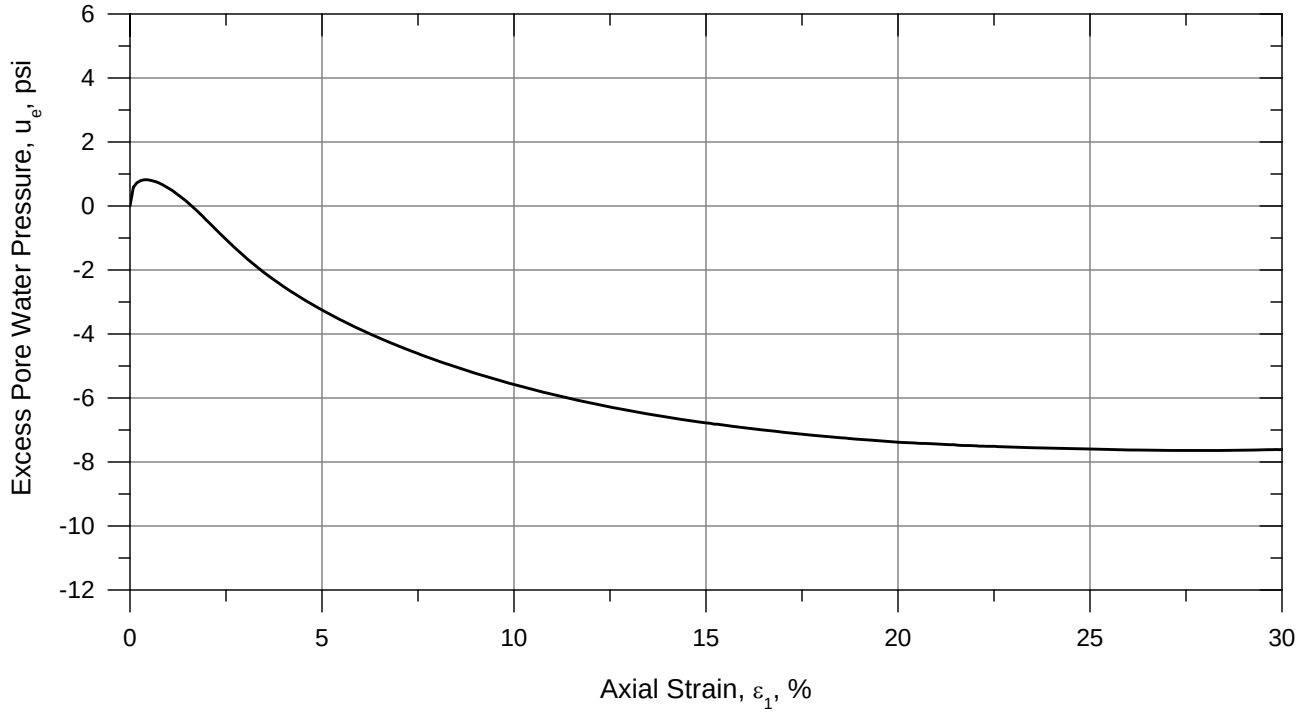




TRIAXIAL TEST RESULTS

BORING ID: 09-204B
TEST ID: 531





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 532
Soil Boring: 09-205B
Sample No. OST-3
Soil Type: CLAYEY SILT, TRACE FINE SAND, LIGHT BROWN
USCS: CL-ML
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

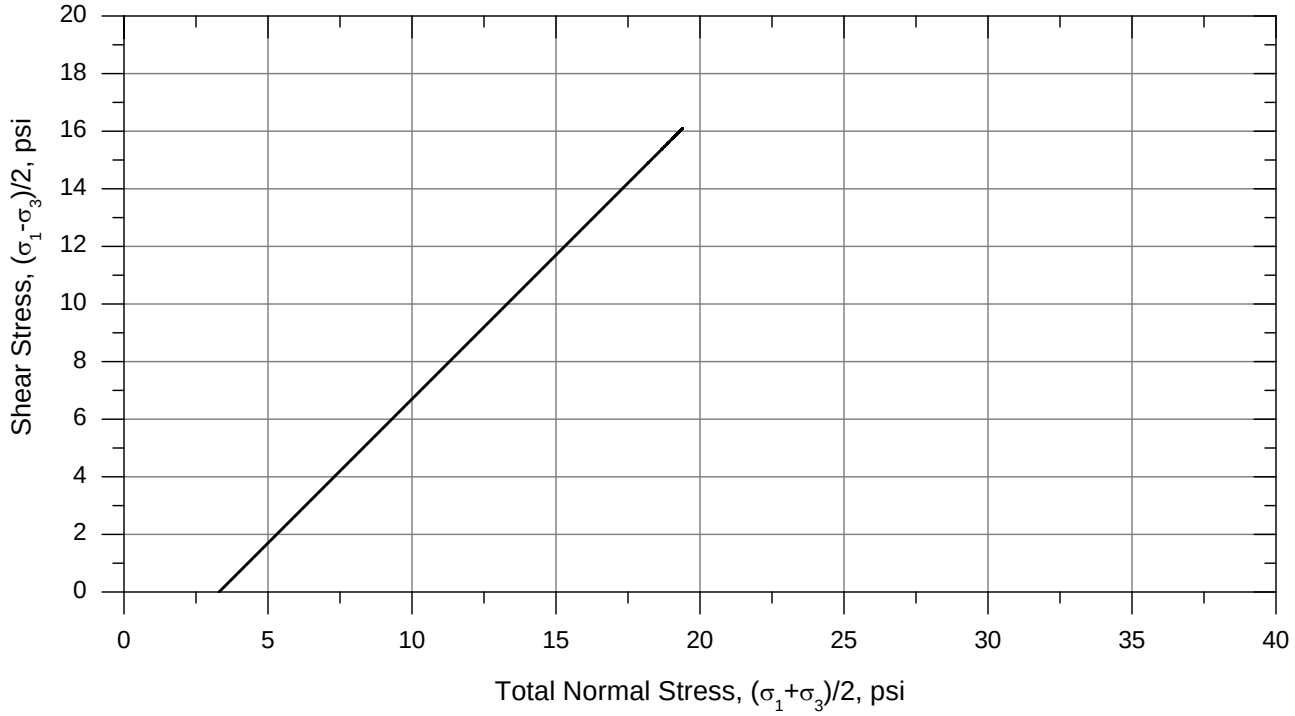
SATURATION	B (Skempton) value:	0.99
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.065
	Max. Mobilized Friction Angle, deg:	41.9
	Max. Deviator Stress, psi:	32.2

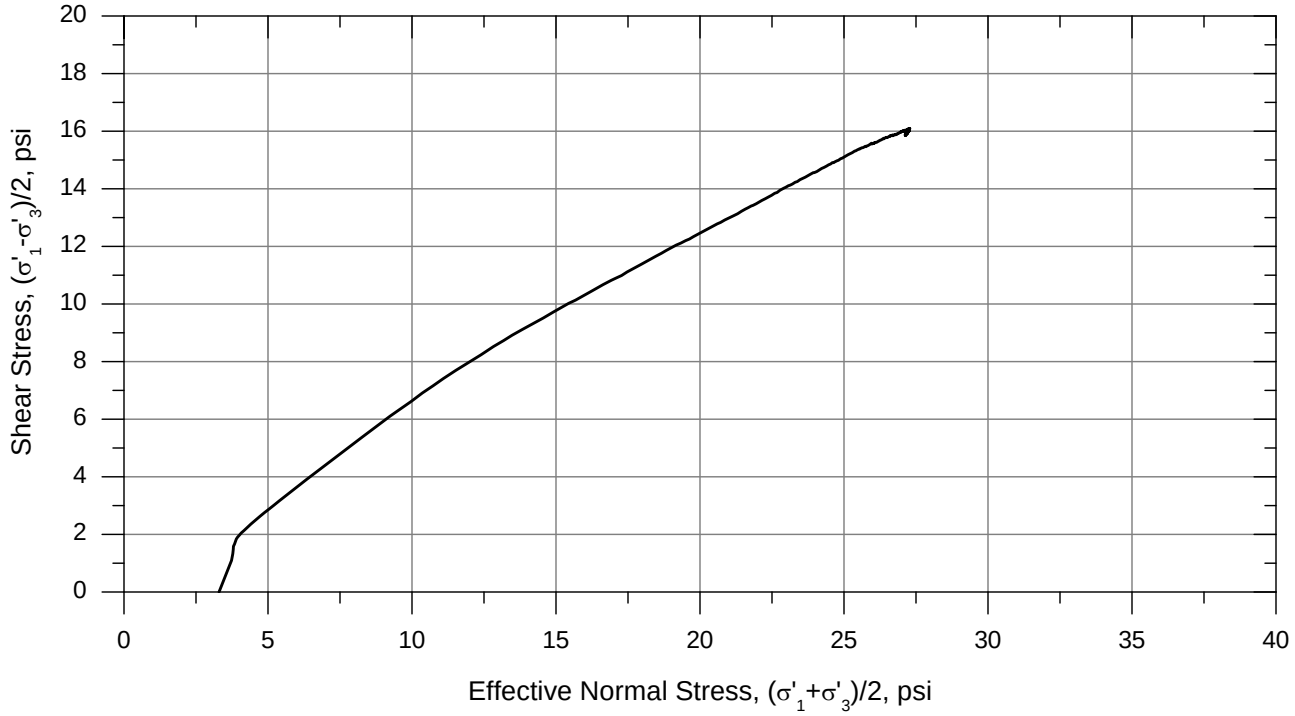
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	151.5	150.8	150.8	150.8	145.3	117.3	105.5
Diameter, mm:	71.1	70.5	70.5	70.5	71.8	78.3	81.1
Axial Strain, %:		0.0	0.0	0.0	3.6	22.2	30.0
Volumetric Strain, %:		0.0	0.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	14.8	32.2	31.8
Vertical Effective Stress, psi:		2.5	3.3	3.3	18.5	43.4	43.0
Horizontal Effective Stress, psi:		2.5	3.3	3.3	3.7	11.2	11.3
Void Ratio:		0.51	0.51	0.51	0.51	0.51	0.51
Water Content, %:		18.9	18.9	18.9	18.9	18.9	18.9
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		132.6	132.7	132.7	132.7	132.7	132.7
Dry Unit Weight, pcf:		111.5	111.6	111.6	111.6	111.6	111.6

TRIAXIAL TEST RESULTS

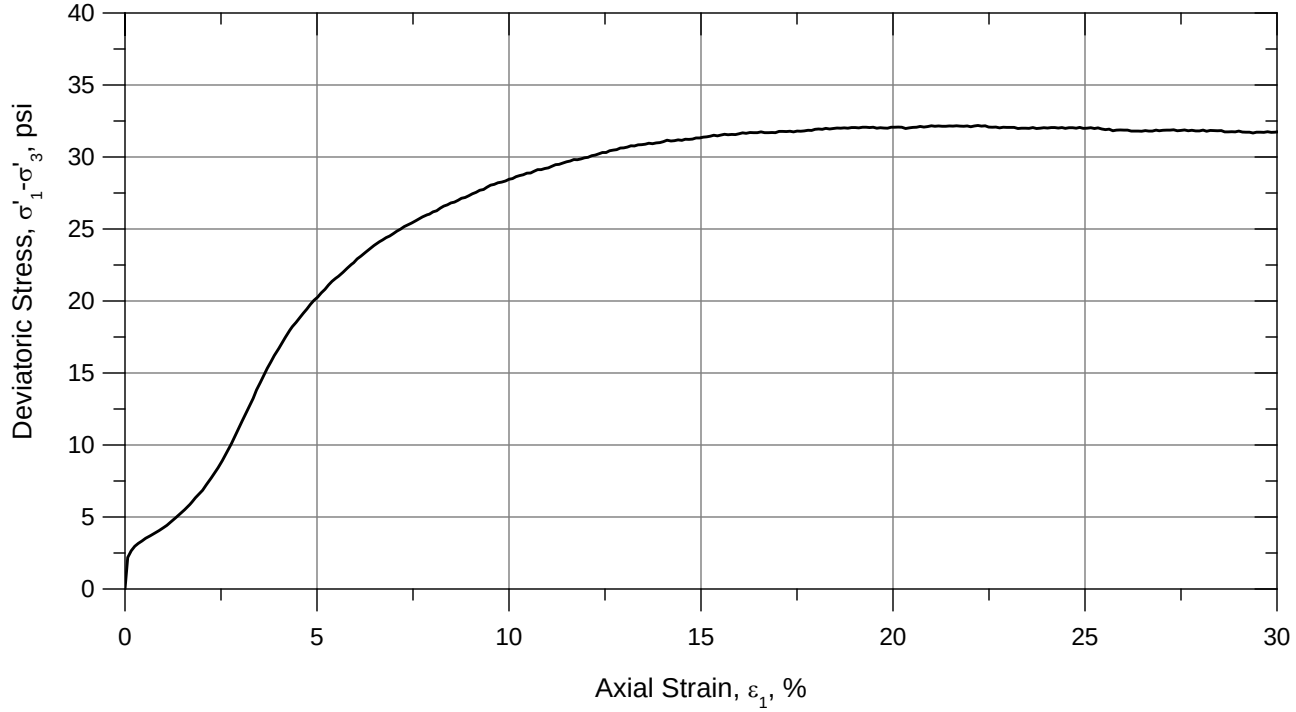
BORING ID: 09-205B
TEST ID: 532

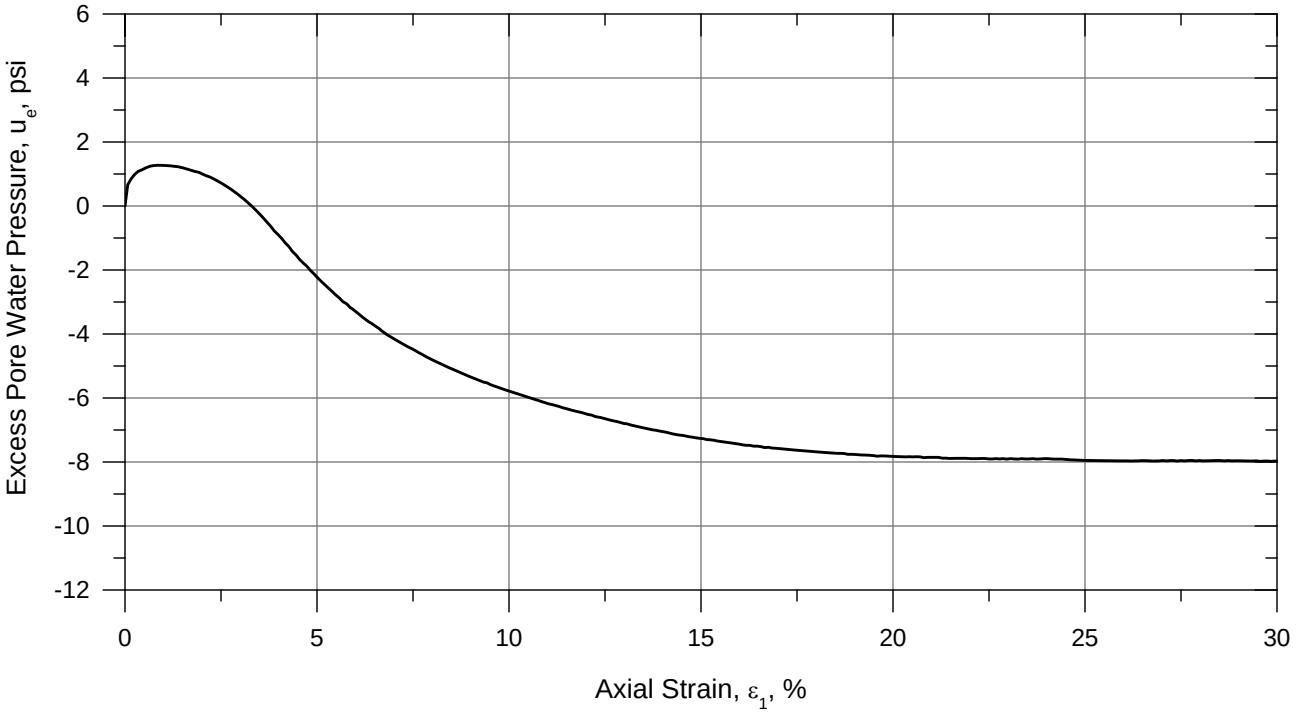




TRIAXIAL TEST RESULTS

BORING ID: 09-205B
TEST ID: 532





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 533
Soil Boring: 09-301B
Sample No. OST-7
Soil Type: SILTY CLAY, LITTLE F-M SAND, GRAYISH BROWN
USCS: CL
Specific Gravity 2.68
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

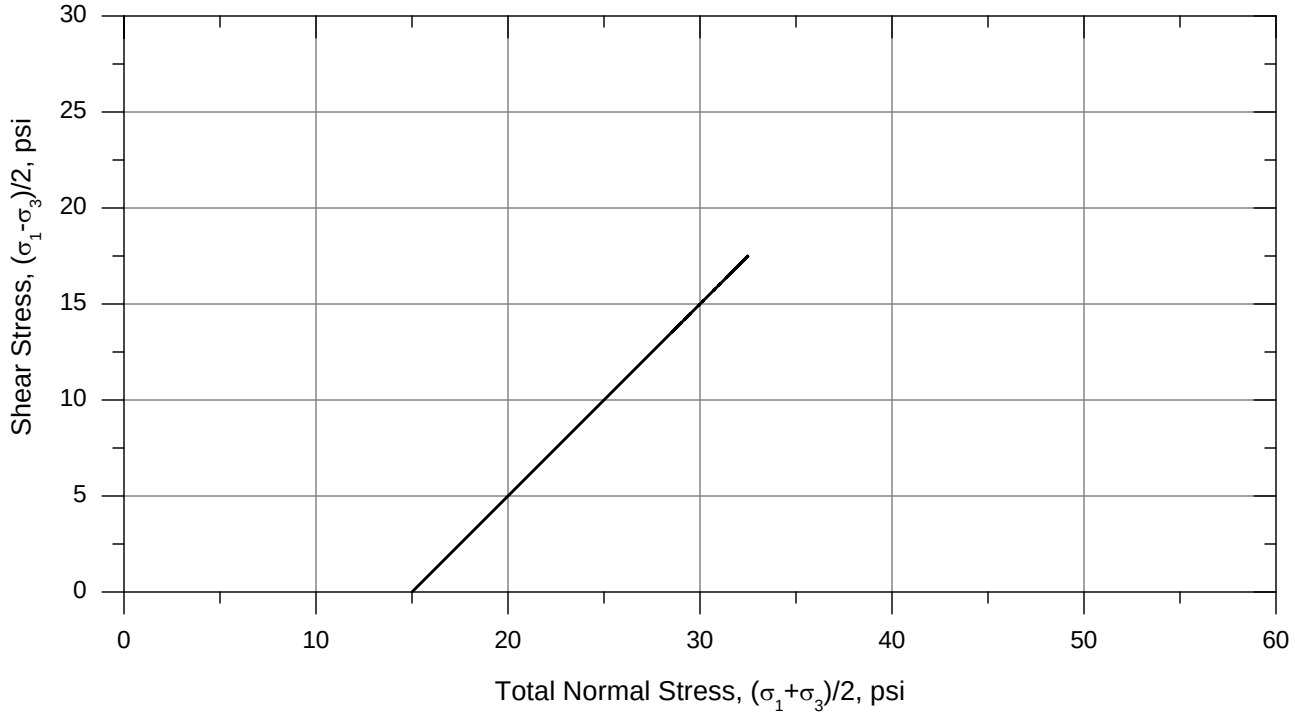
SATURATION	B (Skempton) value:	0.95
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.067
	Max. Mobilized Friction Angle, deg:	30.1
	Max. Deviator Stress, psi:	35.0

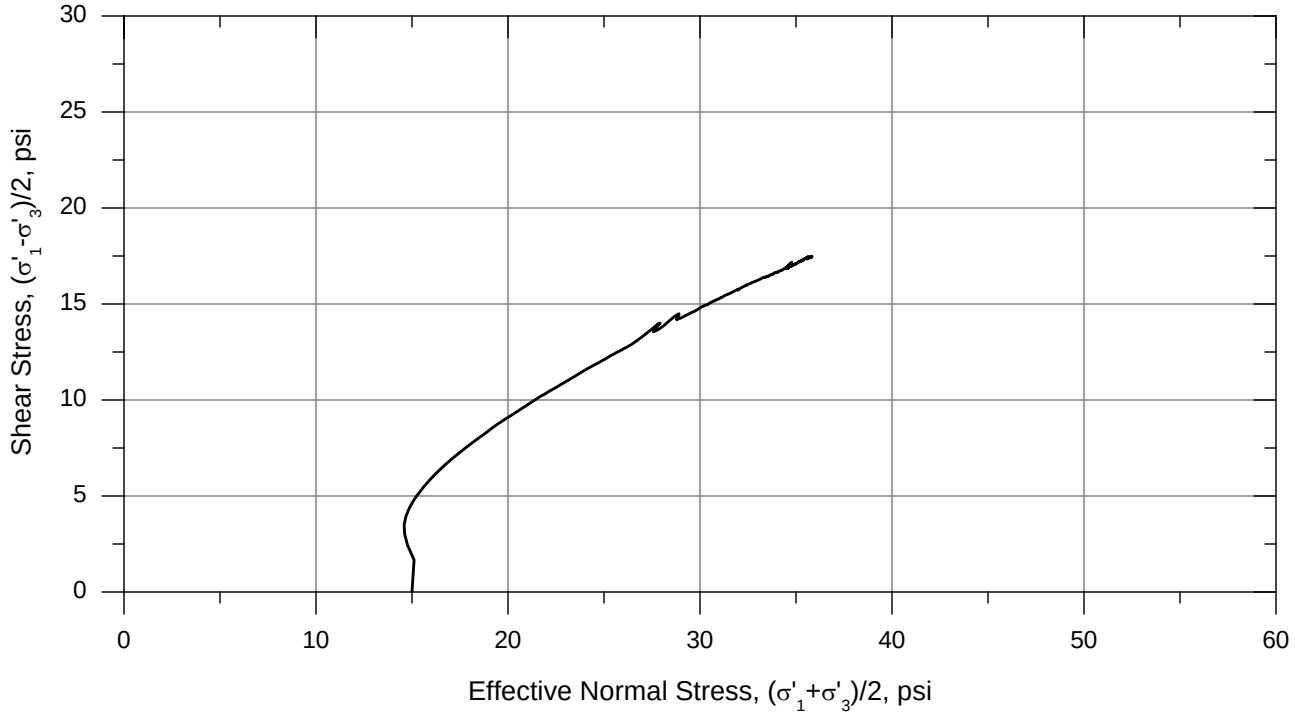
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	147.6	147.9	147.2	147.2	137.9	108.5	106.6
Diameter, mm:	72.5	72.7	72.4	72.4	74.7	81.9	82.4
Axial Strain, %:		0.0	0.4	0.0	6.4	26.3	27.6
Volumetric Strain, %:		0.0	1.3	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	27.9	35.0	34.9
Vertical Effective Stress, psi:		2.5	15.0	15.0	41.8	53.3	53.2
Horizontal Effective Stress, psi:		2.5	15.0	15.0	13.9	18.3	18.4
Void Ratio:		0.52	0.50	0.50	0.50	0.50	0.50
Water Content, %:		19.2	18.5	18.5	18.5	18.5	18.5
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		131.6	132.5	132.5	132.5	132.5	132.5
Dry Unit Weight, pcf:		110.3	111.8	111.8	111.8	111.8	111.8

TRIAXIAL TEST RESULTS

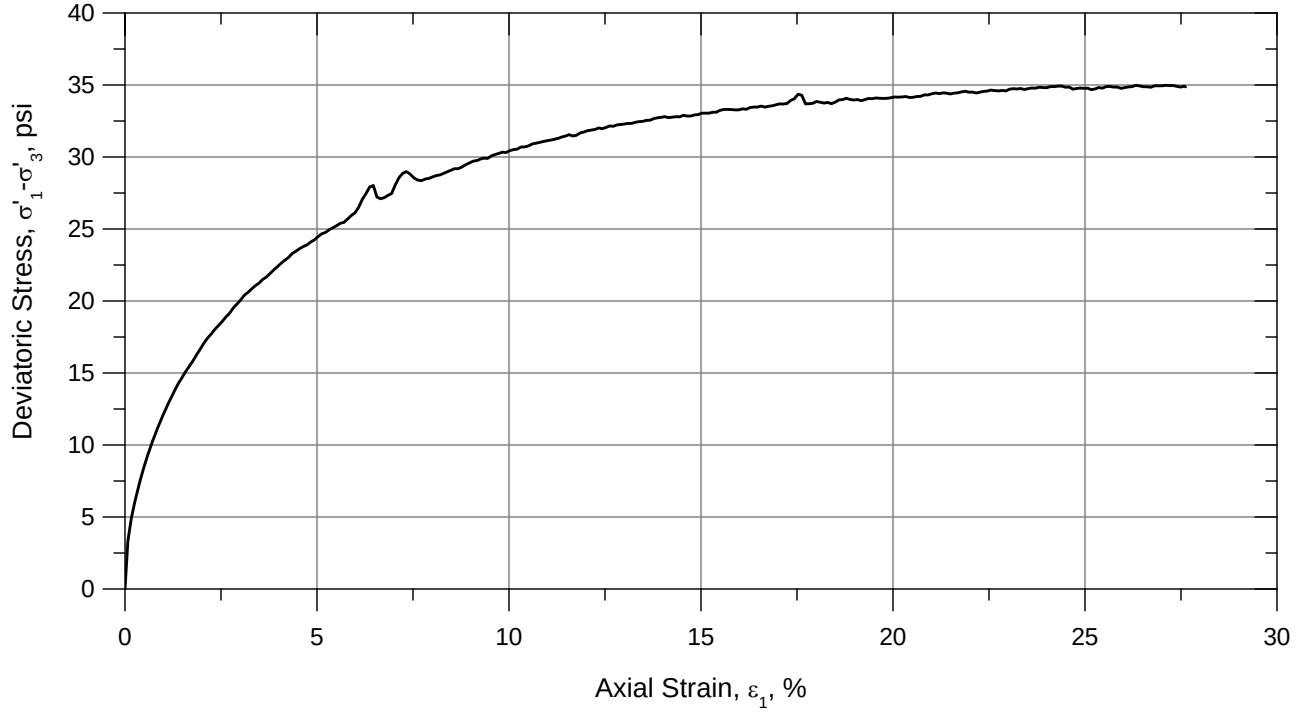
BORING ID: 09-301B
TEST ID: 533

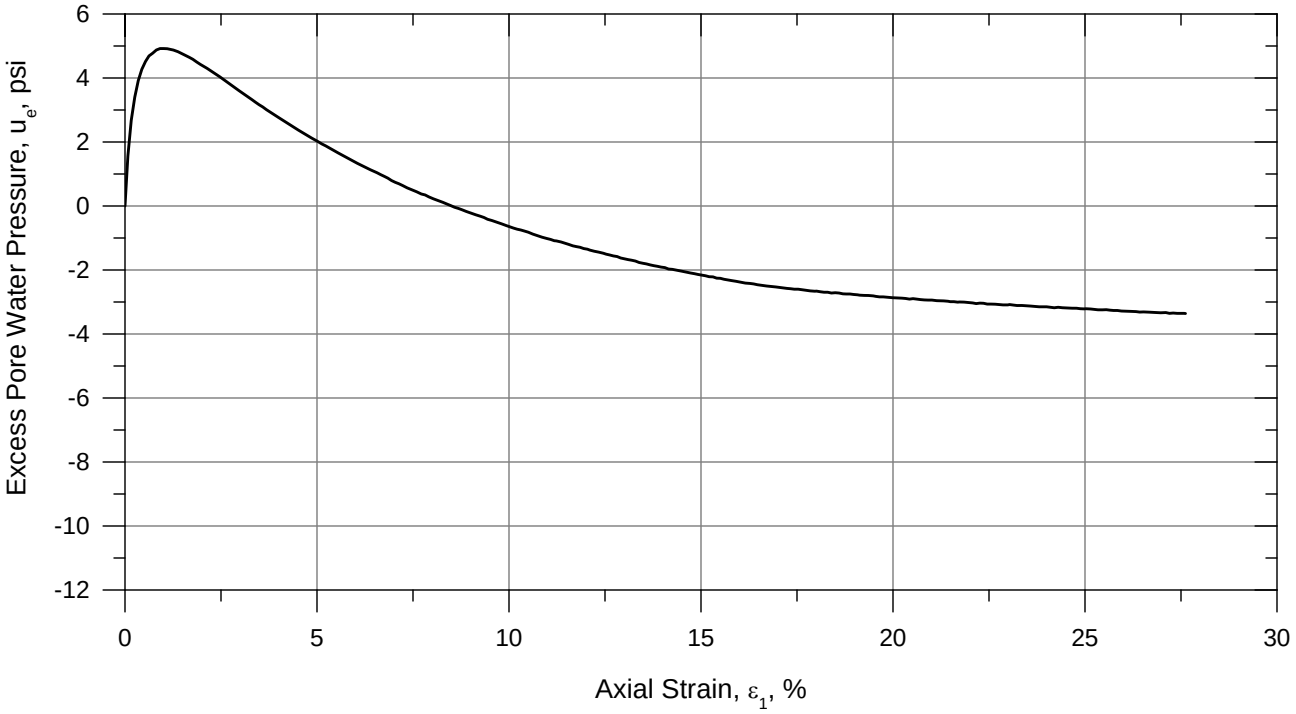




TRIAXIAL TEST RESULTS

BORING ID: 09-301B
TEST ID: 533





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	534
Soil Boring:	09-301B
Sample No.	OST-8
Soil Type:	CLAYEY SILT, SOME F-M SAND, BROWN
USCS:	CL-ML
Specific Gravity	2.69
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

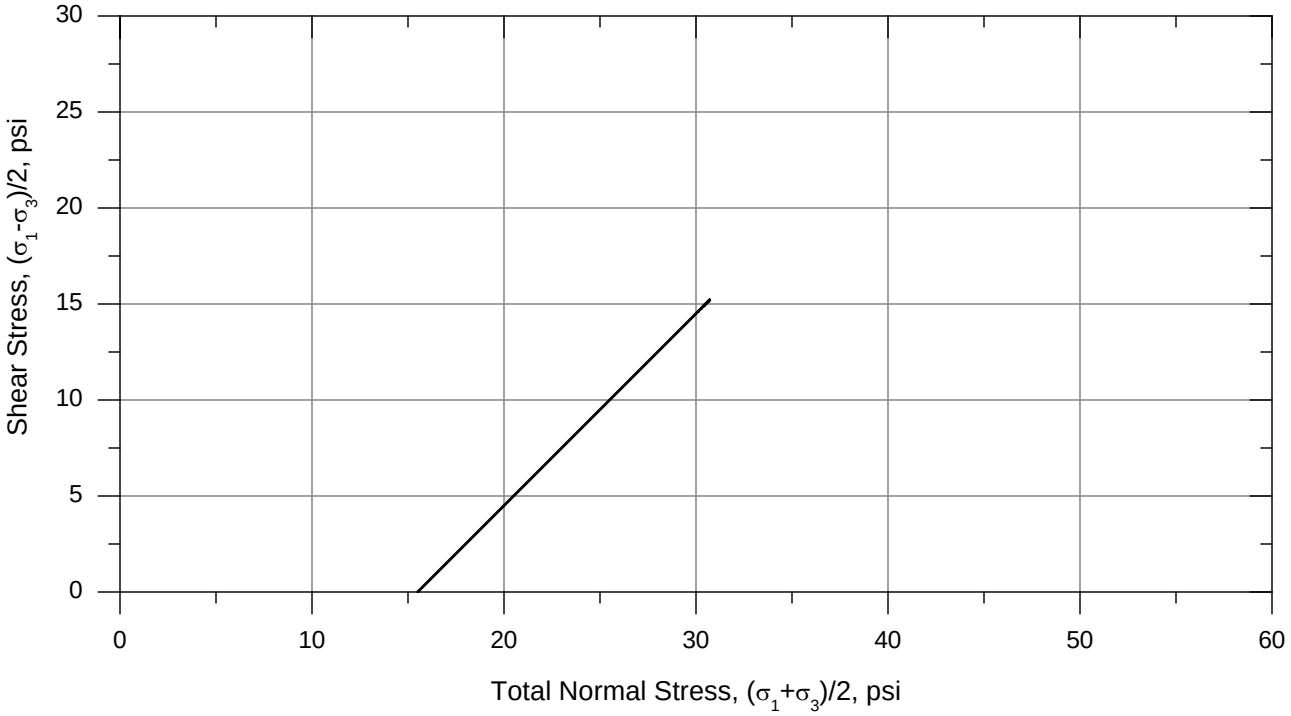
SATURATION	B (Skempton) value:	0.97
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.065
	Max. Mobilized Friction Angle, deg:	29.6
	Max. Deviator Stress, psi:	30.4

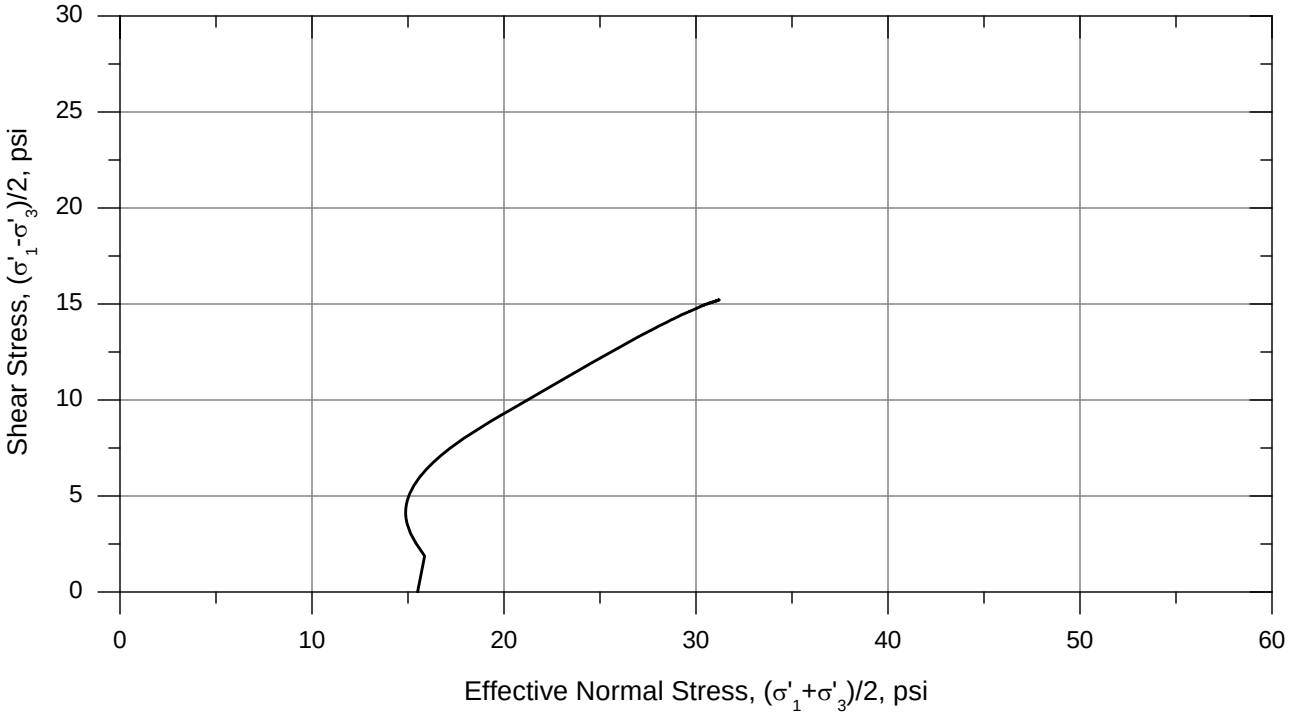
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	153.4	151.6	151.5	151.5	130.4	114.7	114.7
Diameter, mm:	71.8	72.4	72.3	72.3	77.4	81.1	81.1
Axial Strain, %:		0.0	0.0	0.0	14.0	24.3	24.3
Volumetric Strain, %:		0.0	0.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	28.4	30.4	30.4
Vertical Effective Stress, psi:		2.5	15.5	15.5	42.9	46.4	46.4
Horizontal Effective Stress, psi:		2.5	15.5	15.5	14.5	16.0	16.0
Void Ratio:		0.59	0.59	0.59	0.59	0.59	0.59
Water Content, %:		21.9	21.9	21.9	21.9	21.9	21.9
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		128.7	128.8	128.8	128.8	128.8	128.8
Dry Unit Weight, pcf:		105.6	105.7	105.7	105.7	105.7	105.7

TRIAXIAL TEST RESULTS

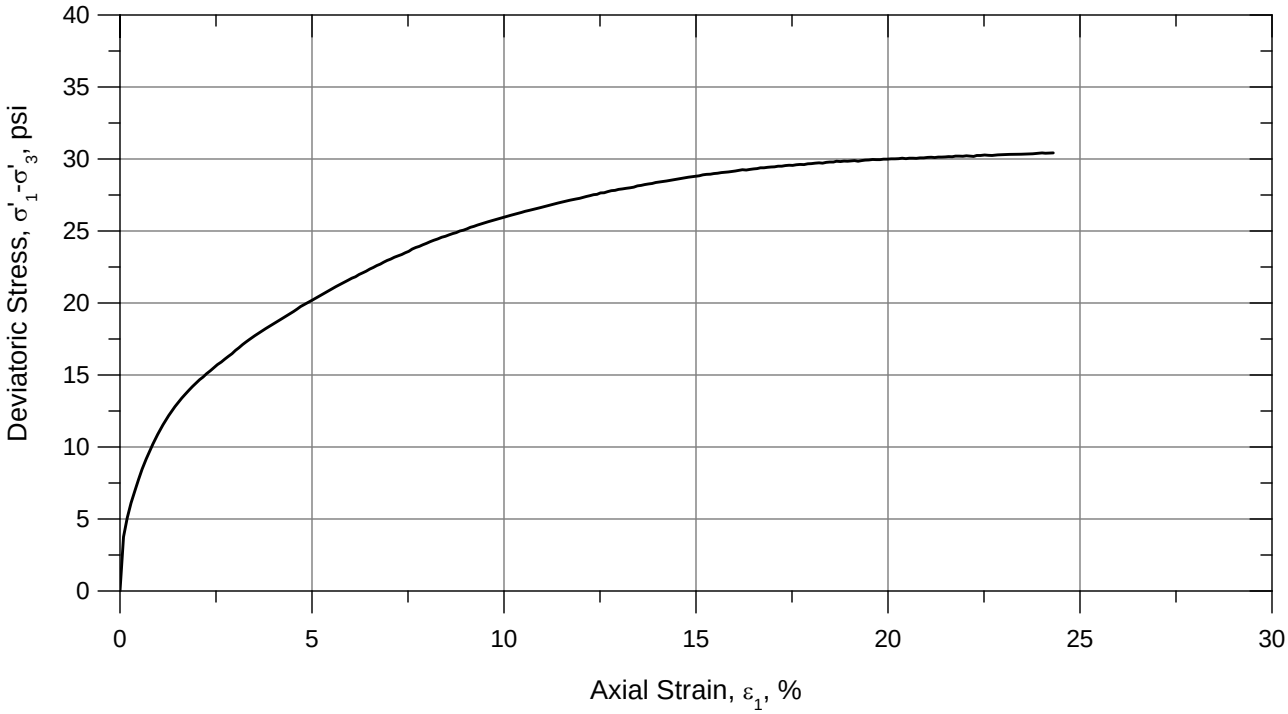
BORING ID: 09-301B
TEST ID: 534

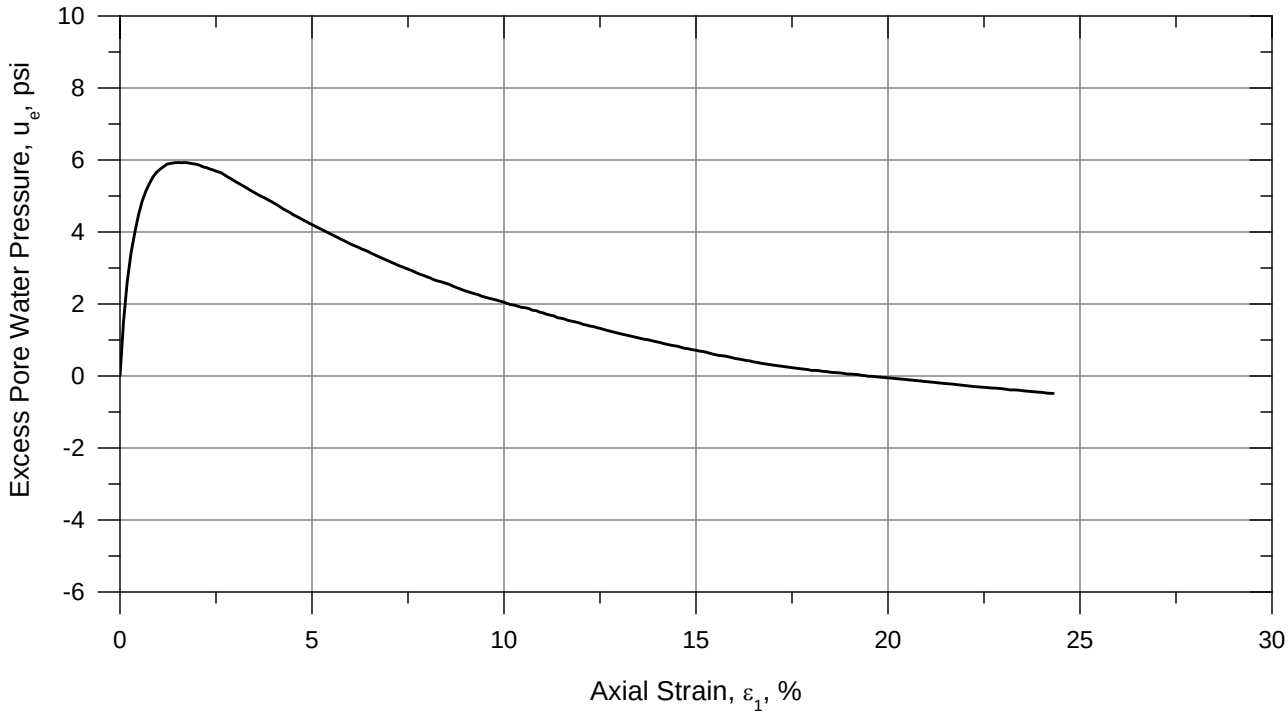




TRIAXIAL TEST RESULTS

BORING ID: 09-301B
TEST ID: 534





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	536
Soil Boring:	09-303B
Sample No.	OST-12
Soil Type:	SANDY SILT, LITTLE CLAY, GRAY
USCS:	ML
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

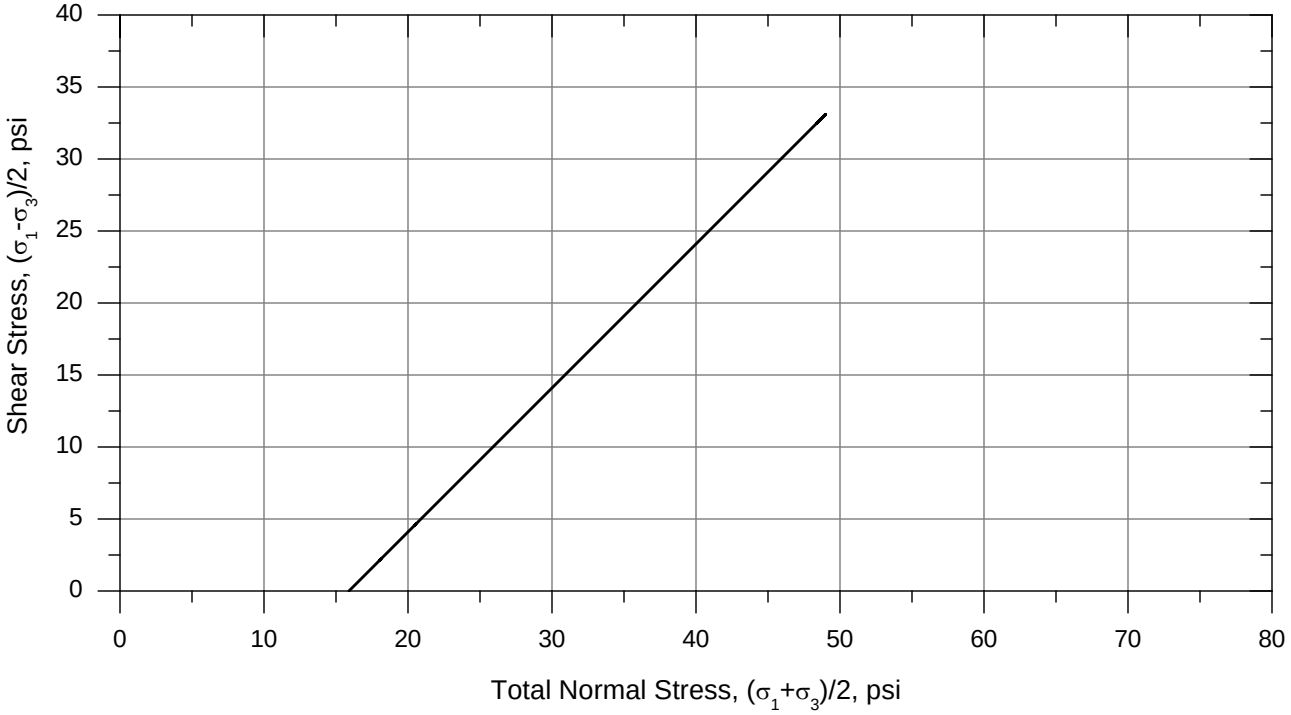
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.028
	Max. Mobilized Friction Angle, deg:	37.3
	Max. Deviator Stress, psi:	66.2

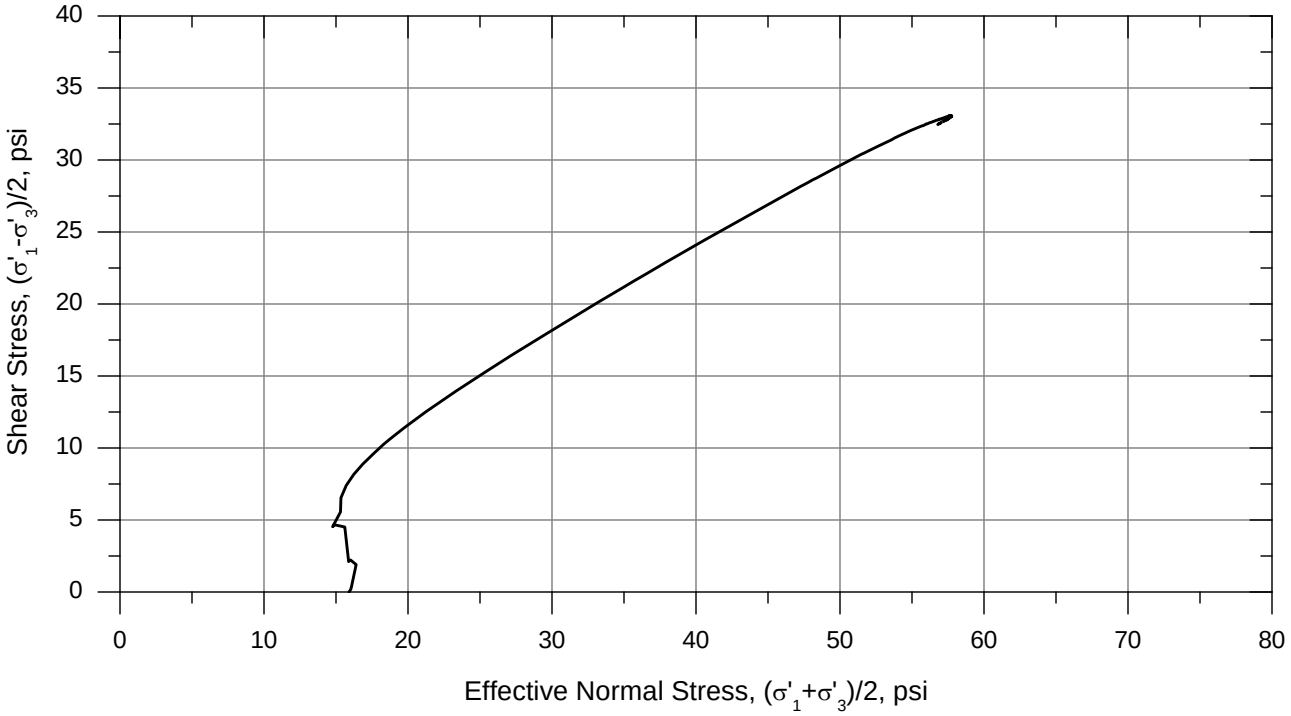
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	152.9	152.9	152.3	152.3	145.3	118.6	107.6
Diameter, mm:	73.7	70.9	70.6	70.6	72.2	78.4	81.0
Axial Strain, %:		0.0	0.4	0.0	4.6	22.1	29.4
Volumetric Strain, %:		0.0	1.3	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	38.4	66.2	64.9
Vertical Effective Stress, psi:		2.0	15.9	15.9	50.8	90.8	89.3
Horizontal Effective Stress, psi:		2.0	15.9	15.9	12.5	24.6	24.3
Void Ratio:		0.55	0.53	0.53	0.53	0.53	0.53
Water Content, %:		20.5	19.7	19.7	19.7	19.7	19.7
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		130.7	131.6	131.6	131.6	131.6	131.6
Dry Unit Weight, pcf:		108.5	109.9	109.9	109.9	109.9	109.9

TRIAXIAL TEST RESULTS

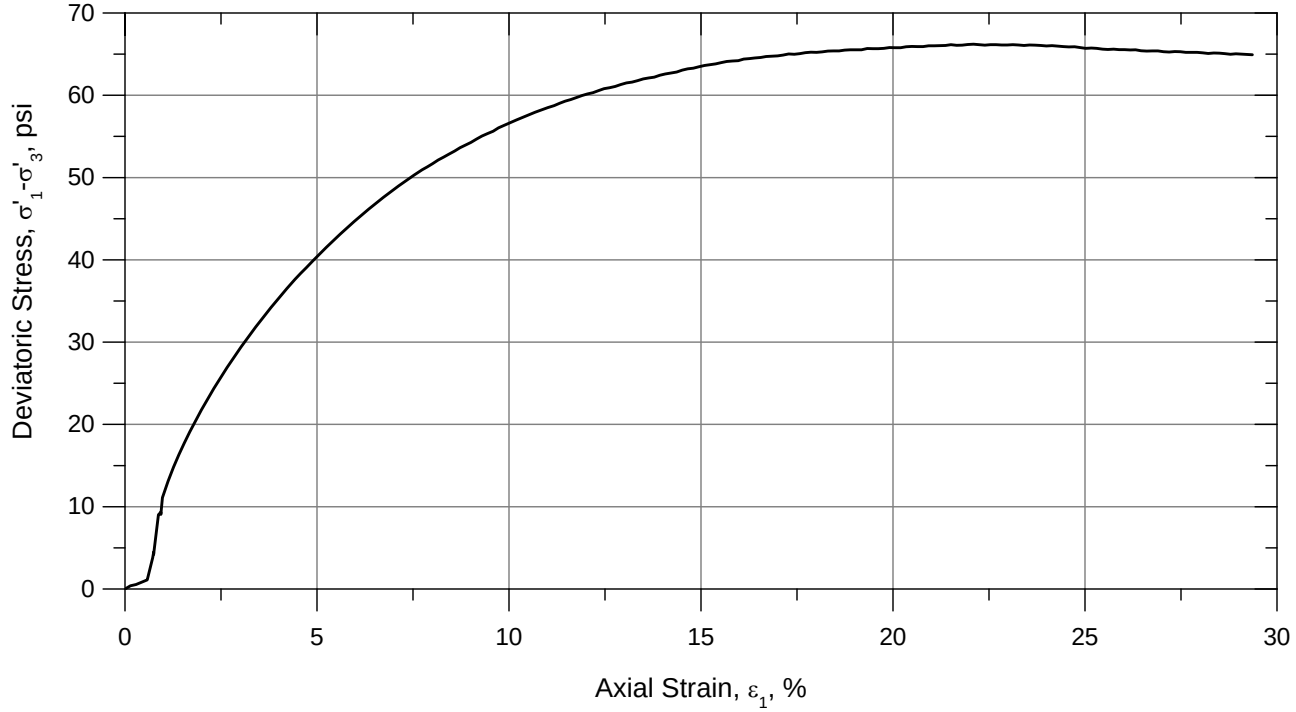
BORING ID: 09-303B
TEST ID: 536

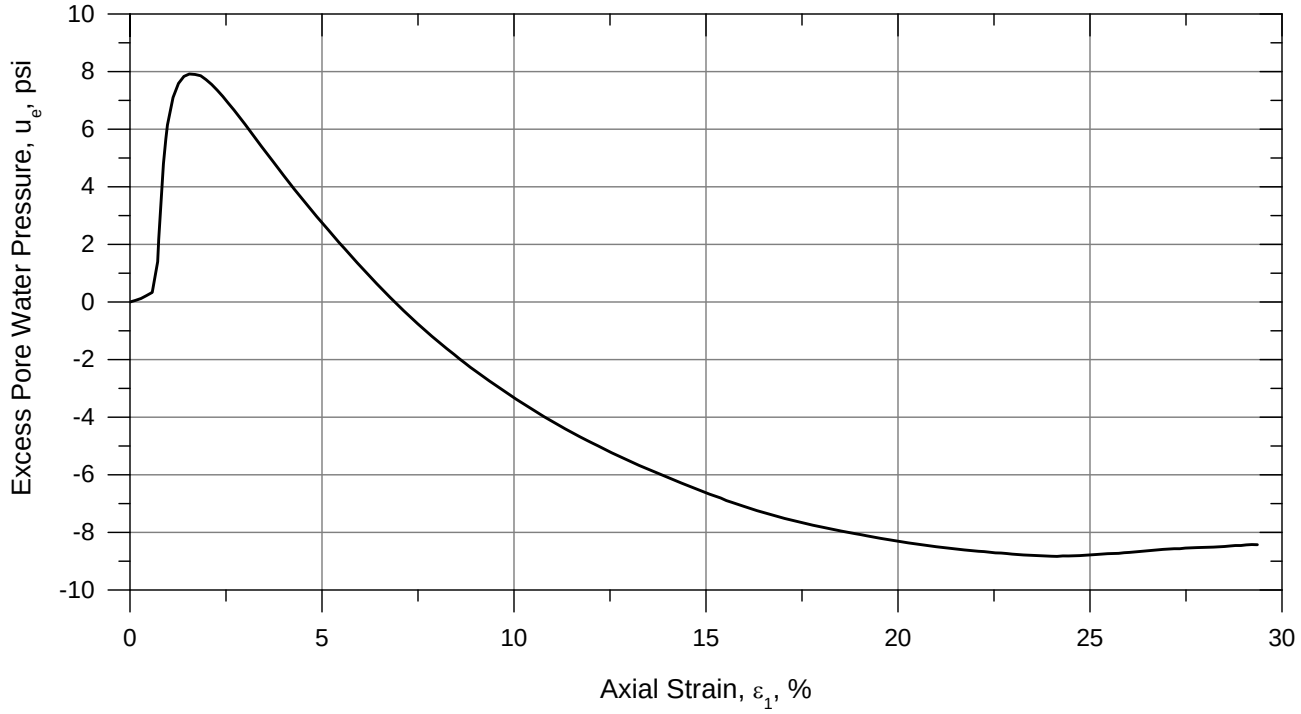




TRIAXIAL TEST RESULTS

BORING ID: 09-303B
TEST ID: 536





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	538
Soil Boring:	09-402B
Sample No.	OST-5
Soil Type:	SILTY CLAY, SOME F-M SAND, GRAY
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

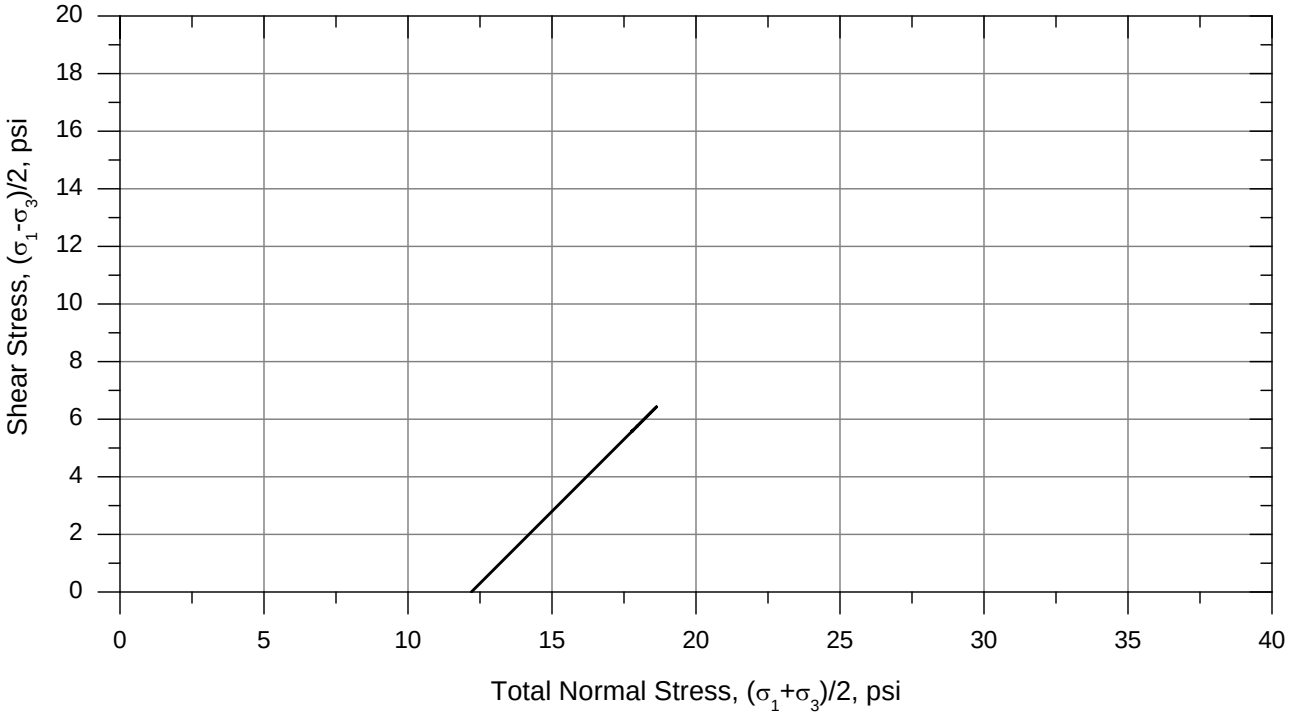
SATURATION	B (Skempton) value:	1.00
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.031
	Max. Mobilized Friction Angle, deg:	34.6
	Max. Deviator Stress, psi:	12.9

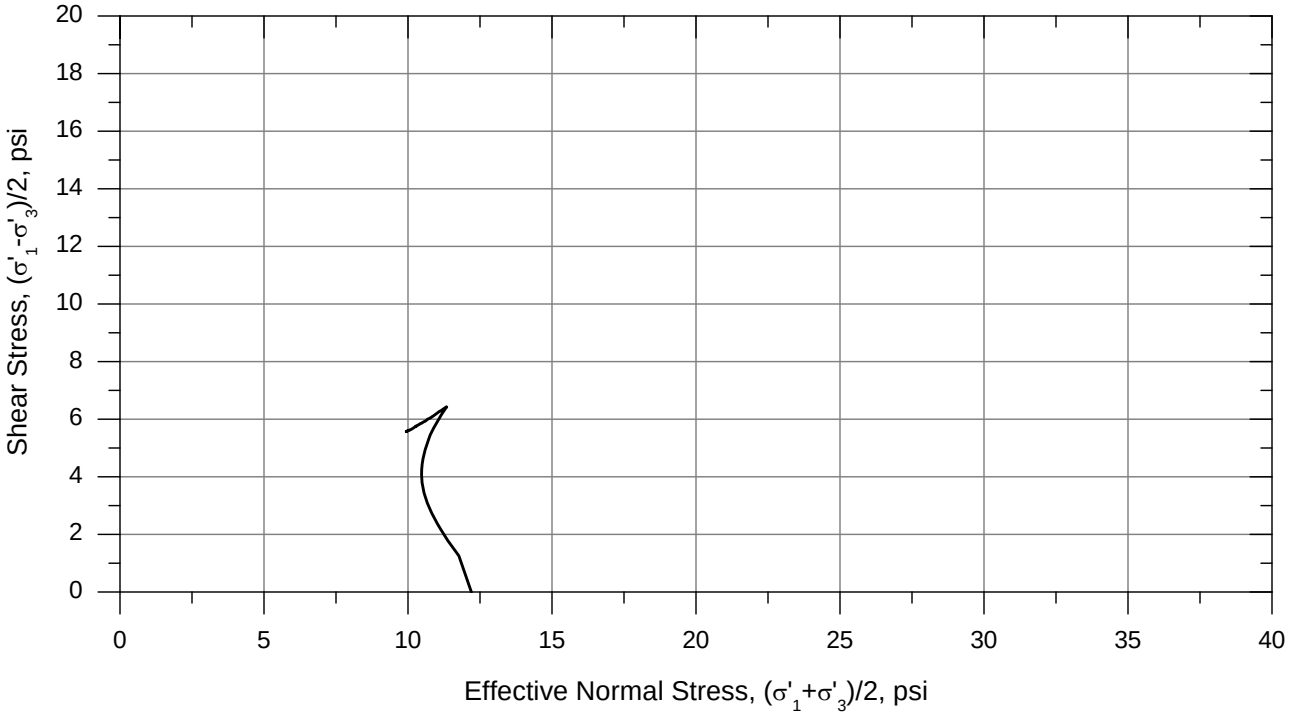
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	144.7	145.5	144.5	144.5	136.2	137.6	107.3
Diameter, mm:	71.8	71.2	70.7	70.7	72.7	72.4	79.8
Axial Strain, %:		0.0	0.7	0.0	5.8	4.8	25.8
Volumetric Strain, %:		0.0	2.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	12.8	12.9	11.1
Vertical Effective Stress, psi:		2.5	12.2	12.2	17.7	17.8	15.5
Horizontal Effective Stress, psi:		2.5	12.2	12.2	4.9	4.9	4.4
Void Ratio:		0.76	0.72	0.72	0.72	0.72	0.72
Water Content, %:		28.0	26.6	26.6	26.6	26.6	26.6
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		122.8	124.1	124.1	124.1	124.1	124.1
Dry Unit Weight, pcf:		96.0	98.0	98.0	98.0	98.0	98.0

TRIAXIAL TEST RESULTS

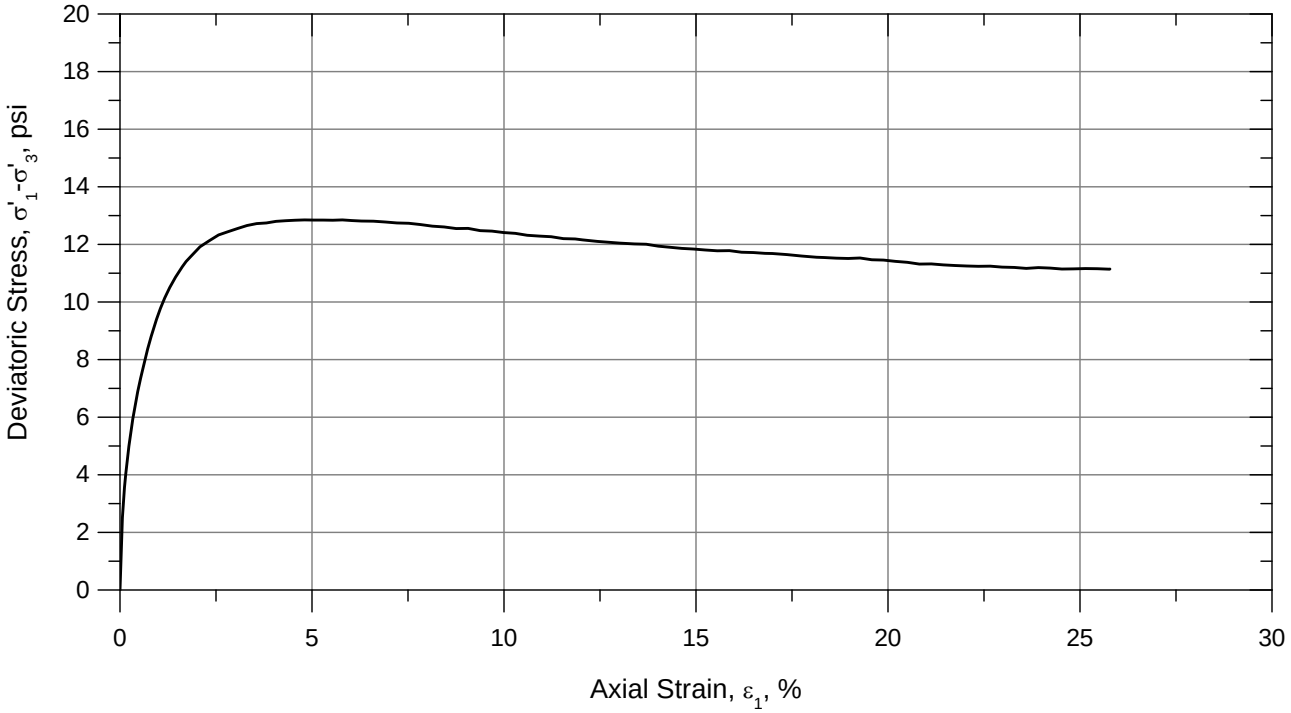
BORING ID: 09-402B
TEST ID: 538

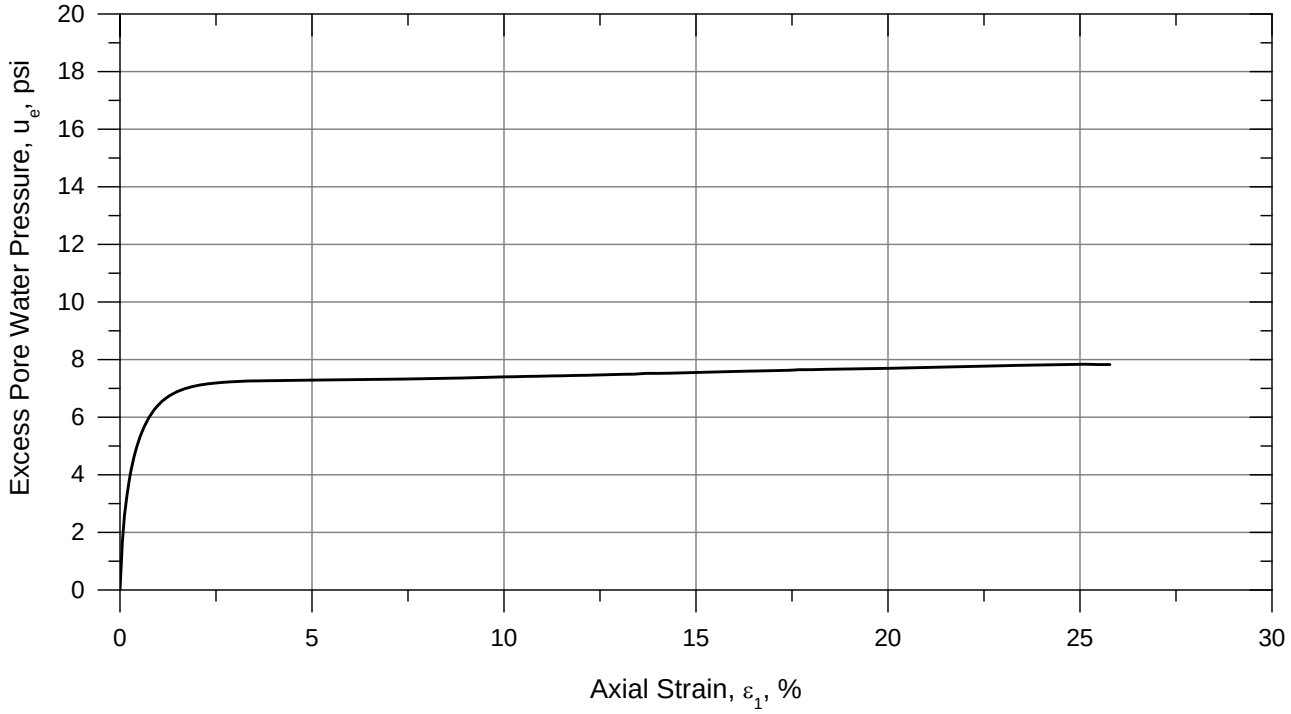




TRIAXIAL TEST RESULTS

BORING ID: 09-402B
TEST ID: 538





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	539
Soil Boring:	09-402B
Sample No.	OST-7
Soil Type:	SILTY F-M SAND, TRACE CLAY, GRAY
USCS:	CM
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

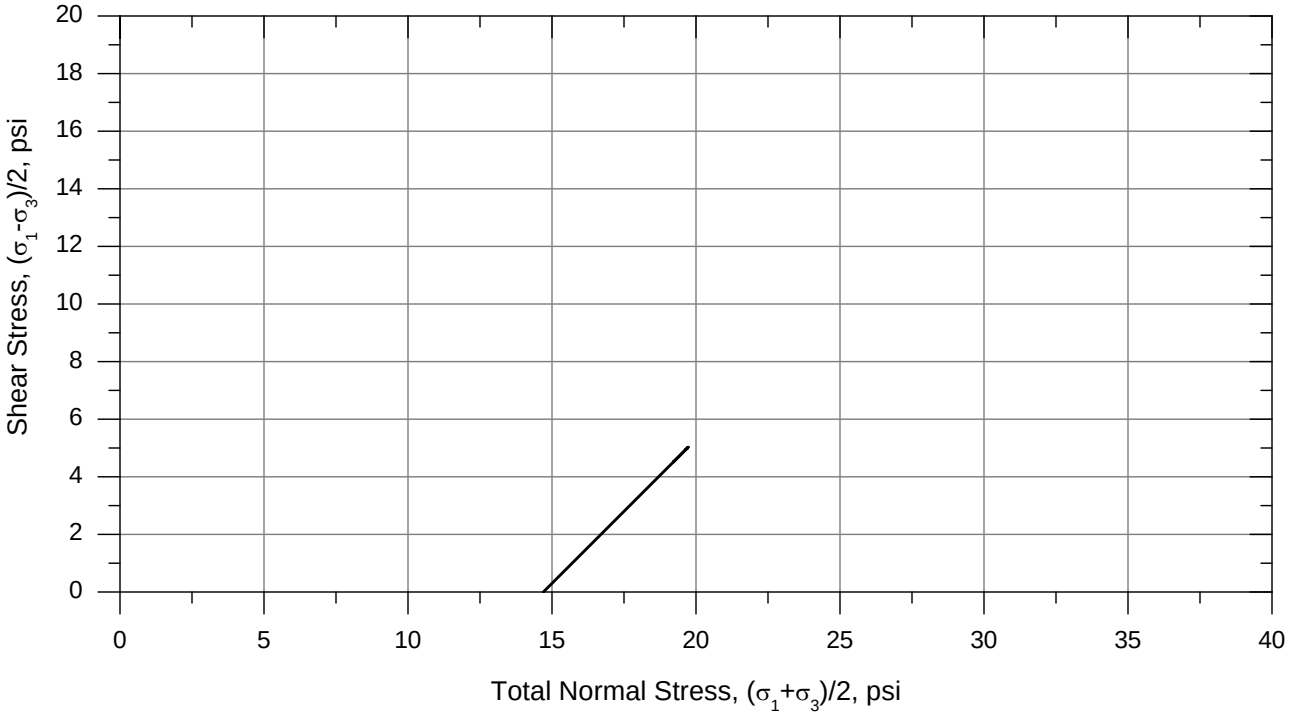
SATURATION	B (Skempton) value:	0.96
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.098
	Max. Mobilized Friction Angle, deg:	31.5
	Max. Deviator Stress, psi:	10.1

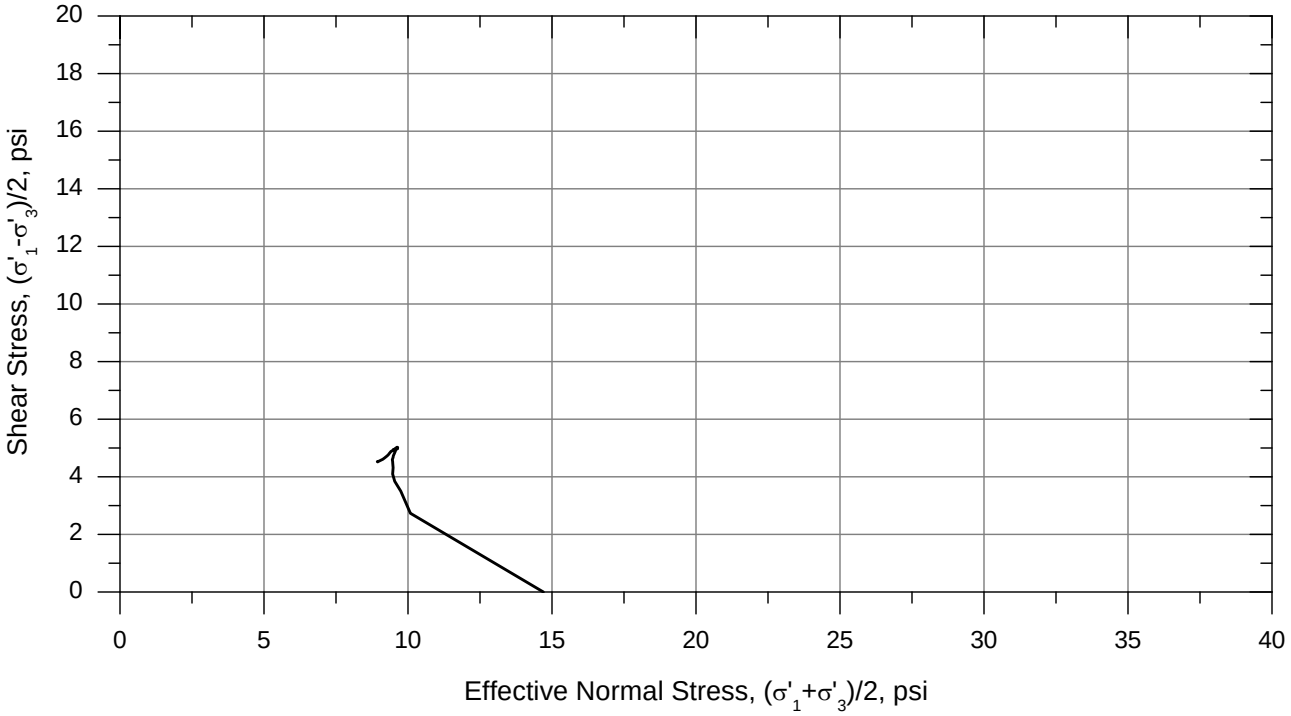
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.5	150.5	150.3	150.3	140.2	140.2	114.1
Diameter, mm:	71.3	71.5	71.4	71.4	73.8	73.8	80.0
Axial Strain, %:		0.0	0.1	0.0	6.7	6.7	24.1
Volumetric Strain, %:		0.0	0.4	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	10.1	10.1	9.1
Vertical Effective Stress, psi:		2.5	14.7	14.7	14.7	14.7	13.5
Horizontal Effective Stress, psi:		2.5	14.7	14.7	4.6	4.6	4.4
Void Ratio:		0.56	0.55	0.55	0.55	0.55	0.55
Water Content, %:		20.6	20.3	20.3	20.3	20.3	20.3
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		130.6	130.9	130.9	130.9	130.9	130.9
Dry Unit Weight, pcf:		108.3	108.8	108.8	108.8	108.8	108.8

TRIAXIAL TEST RESULTS

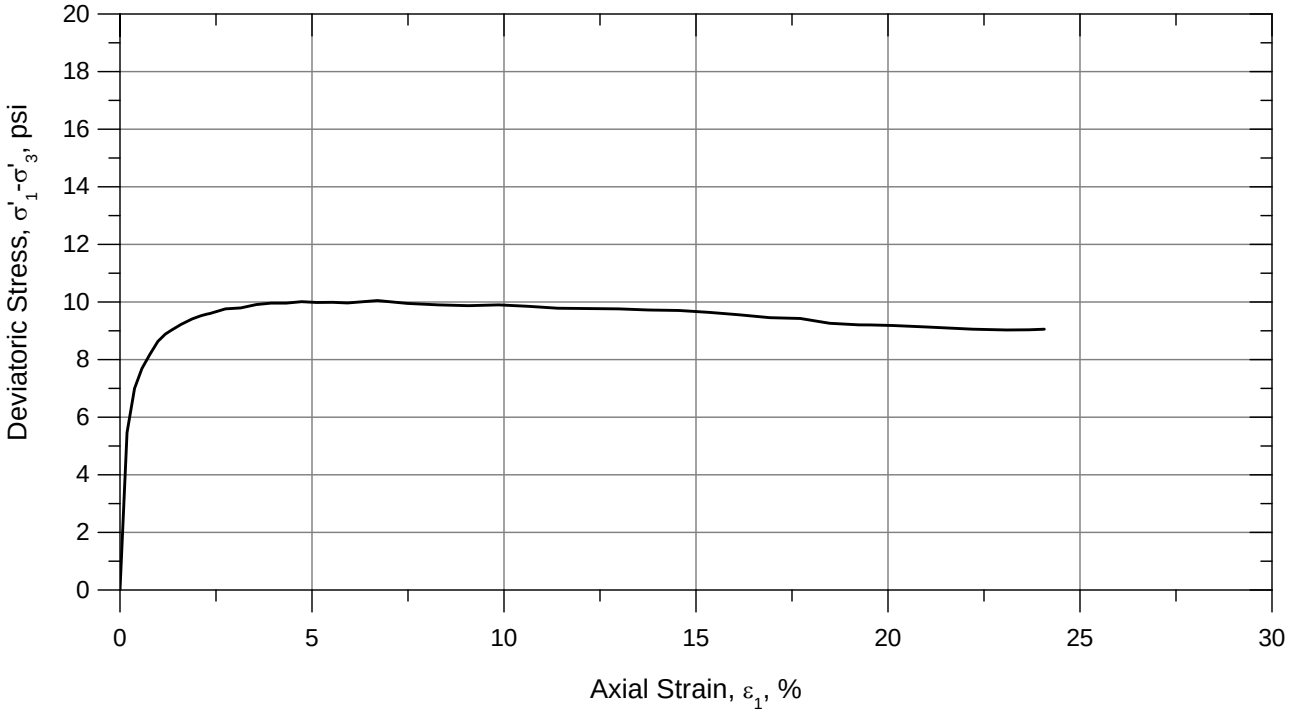
BORING ID: 09-402B
TEST ID: 539

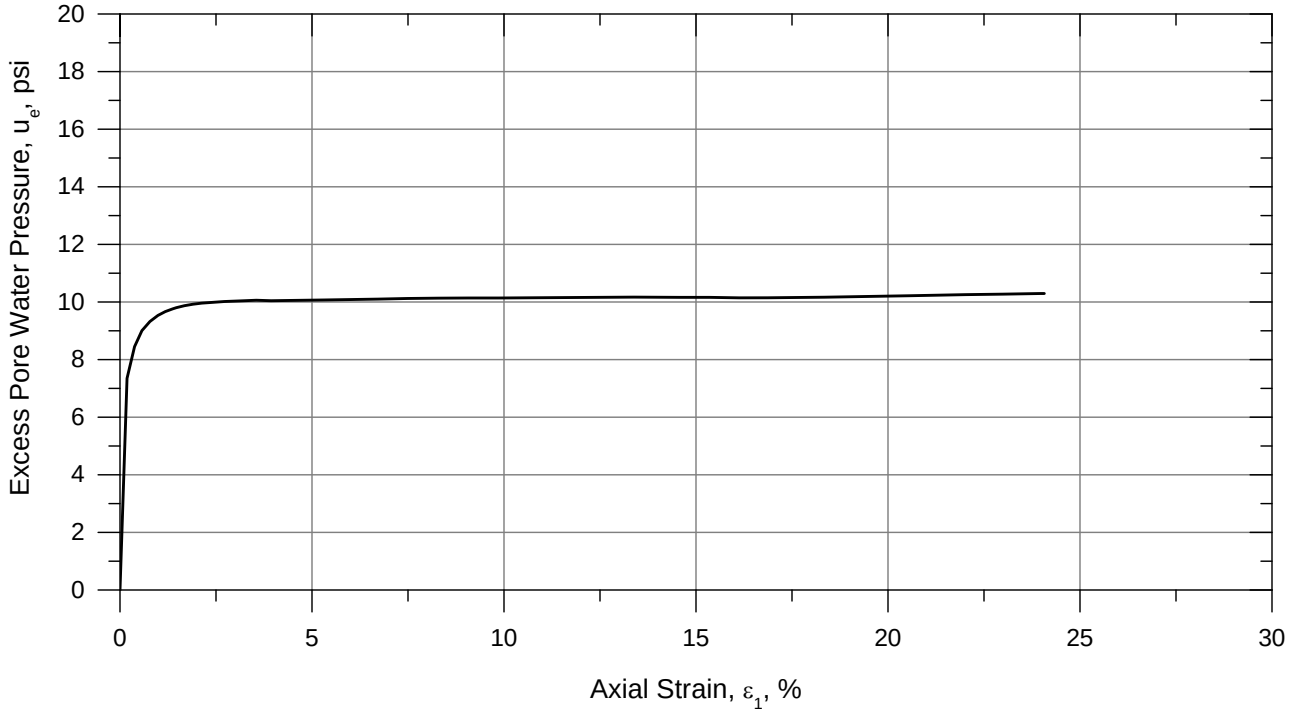




TRIAXIAL TEST RESULTS

BORING ID: 09-402B
TEST ID: 539





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	540
Soil Boring:	09-402B
Sample No.	OST-9
Soil Type:	SILTY F-M SAND, TRACE CLAY, GRAY
USCS:	CM
Specific Gravity	2.68
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

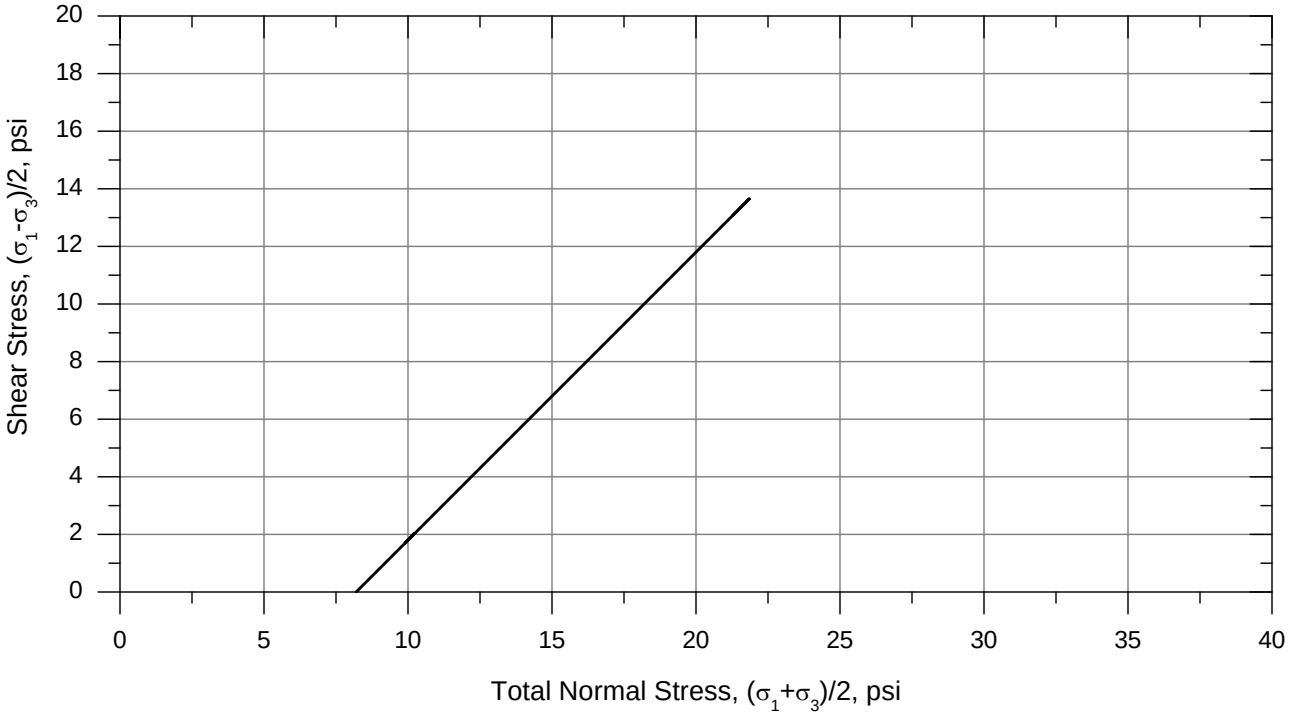
SATURATION	B (Skempton) value:	0.98
	Back Pressure, psi:	70.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.068
	Max. Mobilized Friction Angle, deg:	35.8
	Max. Deviator Stress, psi:	27.3

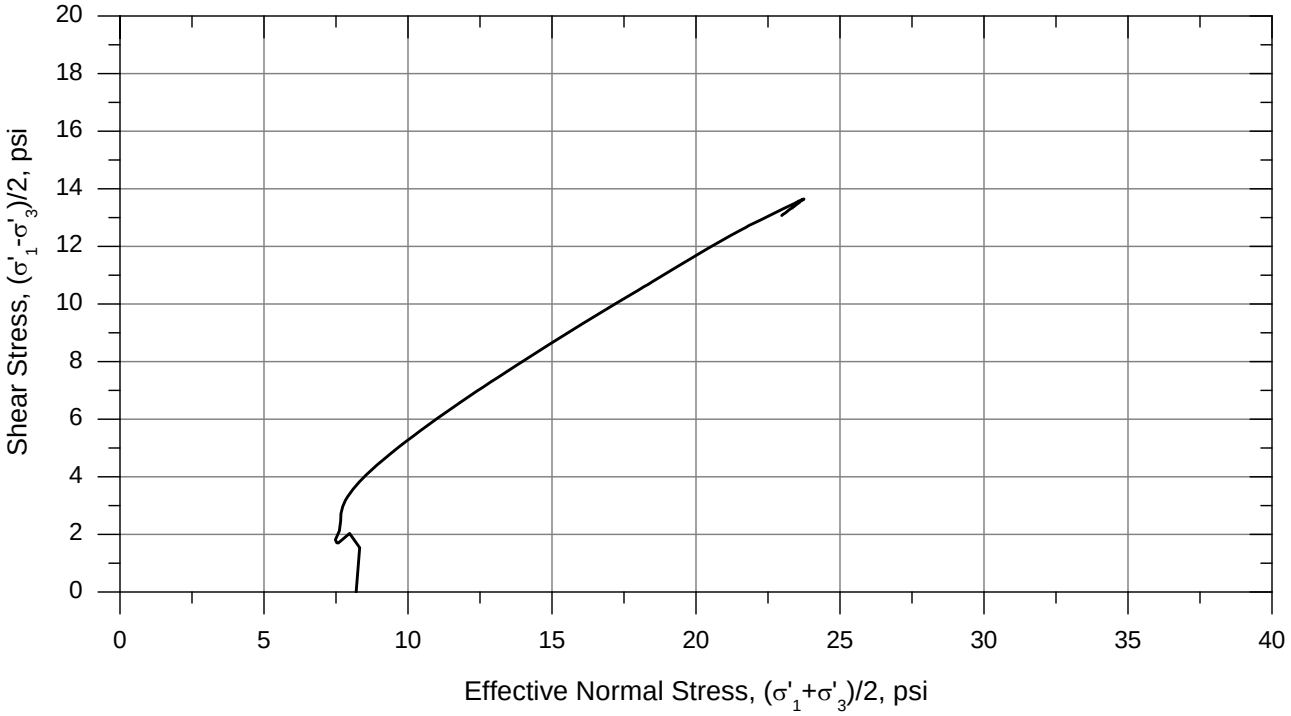
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	144.7	145.5	144.4	144.4	134.3	127.7	124.3
Diameter, mm:	72.3	73.6	73.1	73.1	75.6	77.3	78.2
Axial Strain, %:		0.0	0.7	0.0	7.0	11.6	14.0
Volumetric Strain, %:		0.0	2.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.0	0.0	23.6	27.3	26.1
Vertical Effective Stress, psi:		2.5	8.2	8.2	32.1	37.4	36.0
Horizontal Effective Stress, psi:		2.5	8.2	8.2	8.4	10.1	9.9
Void Ratio:		0.62	0.59	0.59	0.59	0.59	0.59
Water Content, %:		23.2	22.0	22.0	22.0	22.0	22.0
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		127.0	128.4	128.4	128.4	128.4	128.4
Dry Unit Weight, pcf:		103.1	105.3	105.3	105.3	105.3	105.3

TRIAXIAL TEST RESULTS

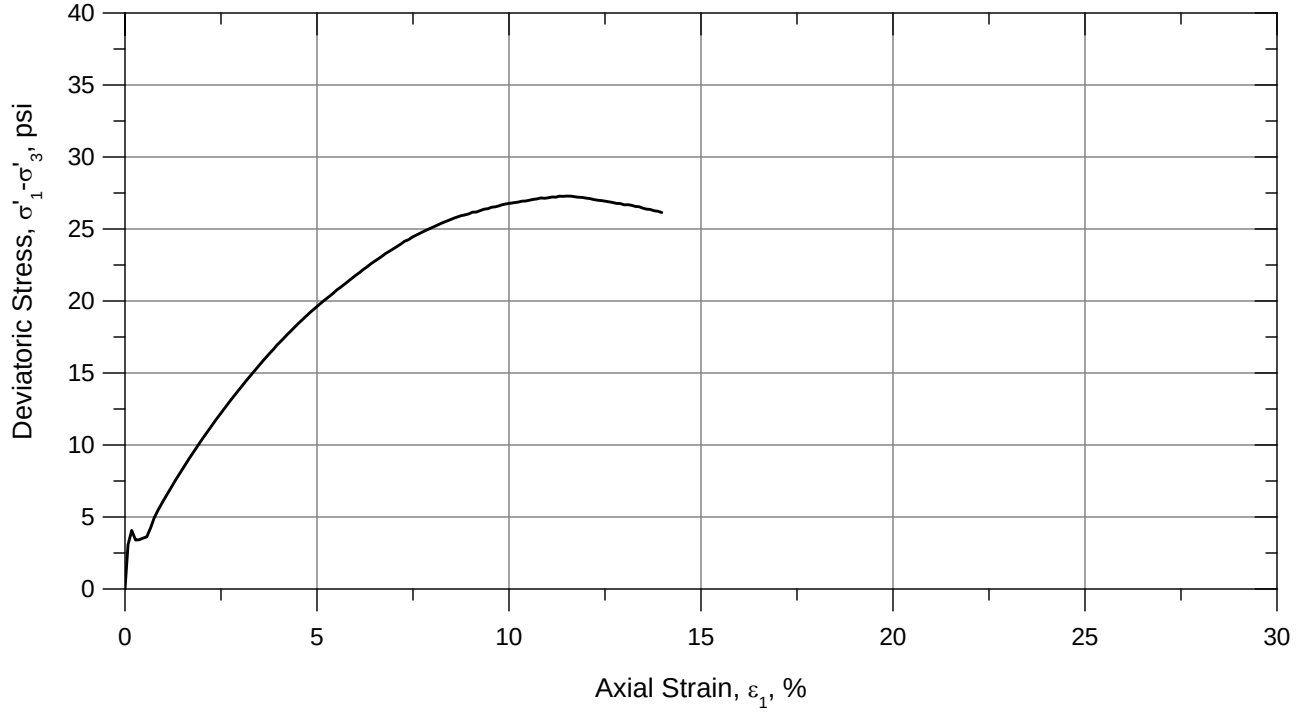
BORING ID: 09-402B
TEST ID: 540

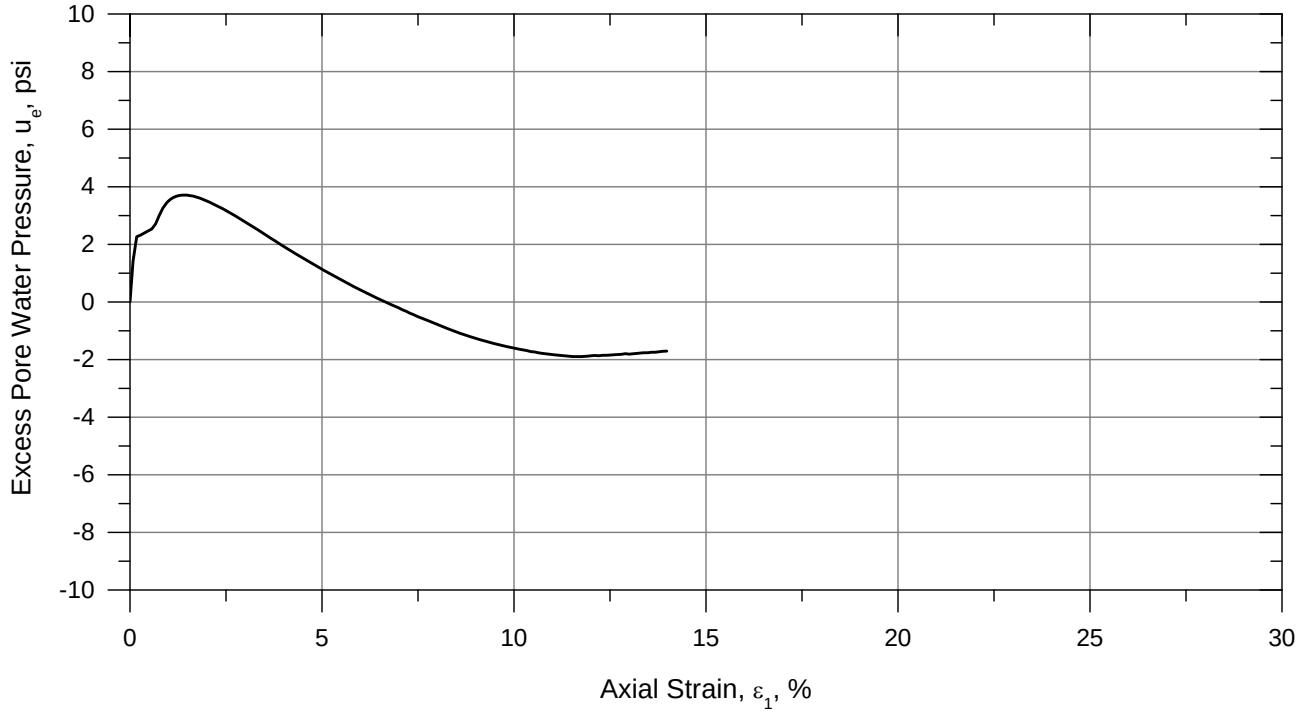




TRIAXIAL TEST RESULTS

BORING ID: 09-402B
TEST ID: 540





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name:	TVA Kingston Fossil Plant RC Analysis
Project No.:	60095742
Client:	Tennessee Valley Authority
Location:	Kingston, TN

Test ID:	541
Soil Boring:	09-201B
Sample No.	OST-3
Soil Type:	SILTY CLAY, TRACE F-M SAND, GRAY
USCS:	CL
Specific Gravity	2.7
Sample Type:	3" OST
Preparation:	TRIMMED
Type of Test:	CIU-TXC

STAGE

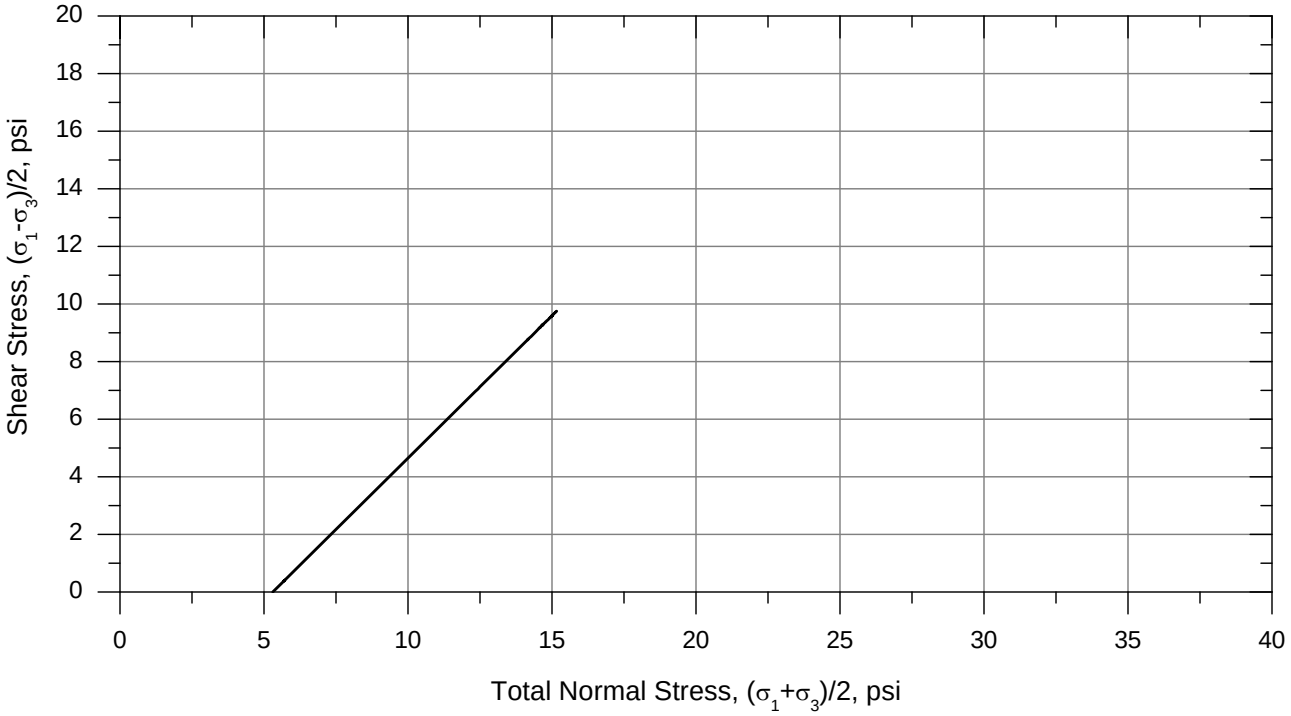
SATURATION	B (Skempton) value:	0.95
	Back Pressure, psi:	97.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.060
	Max. Mobilized Friction Angle, deg:	43.0
	Max. Deviator Stress, psi:	19.5

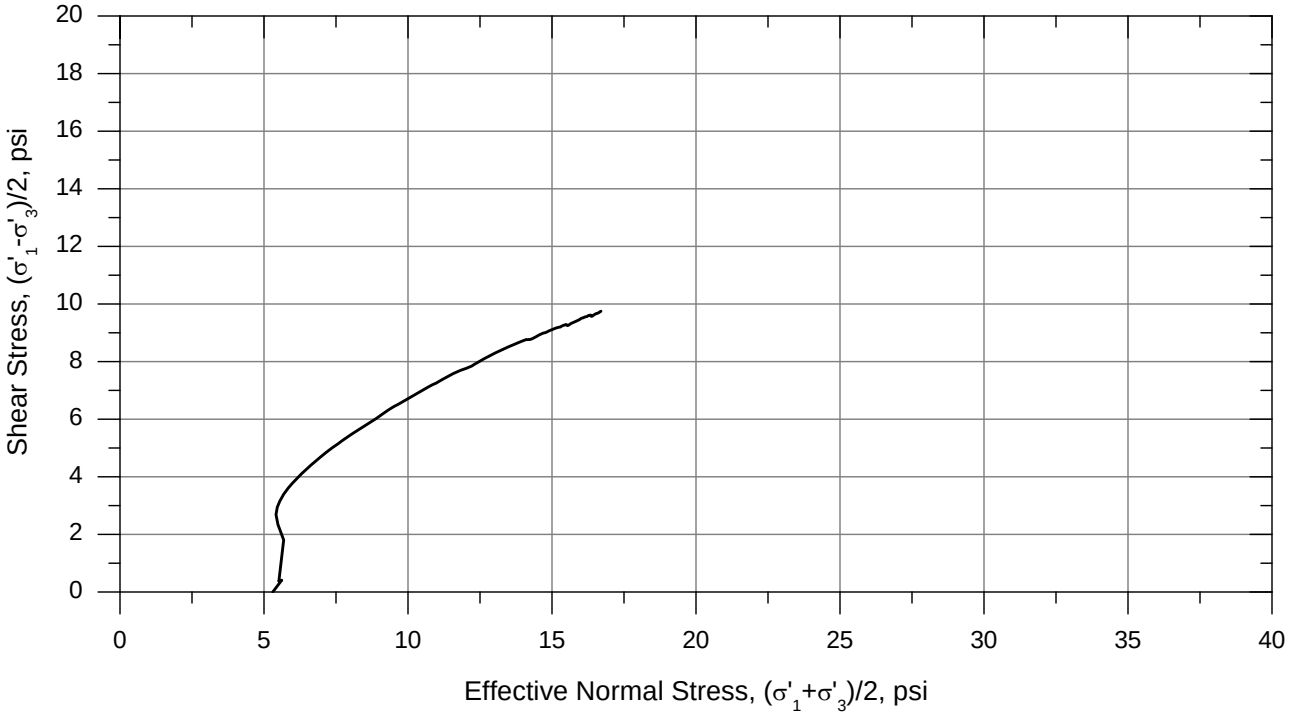
RESULTS

		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	138.2	138.1	138.1	138.1	133.7	110.5	110.5
Diameter, mm:	72.9	72.5	72.1	72.1	73.2	79.3	79.3
Axial Strain, %:		0.0	0.0	0.0	3.2	20.0	20.0
Volumetric Strain, %:		0.0	1.1	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.1	0.0	10.8	19.5	19.5
Vertical Effective Stress, psi:		2.0	5.4	5.3	13.3	26.4	26.4
Horizontal Effective Stress, psi:		2.0	5.3	5.3	2.5	7.0	7.0
Void Ratio:		0.61	0.59	0.59	0.59	0.59	0.59
Water Content, %:		22.6	21.9	21.9	21.9	21.9	21.9
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		128.3	129.1	129.1	129.1	129.1	129.1
Dry Unit Weight, pcf:		104.7	105.9	105.9	105.9	105.9	105.9

TRIAXIAL TEST RESULTS

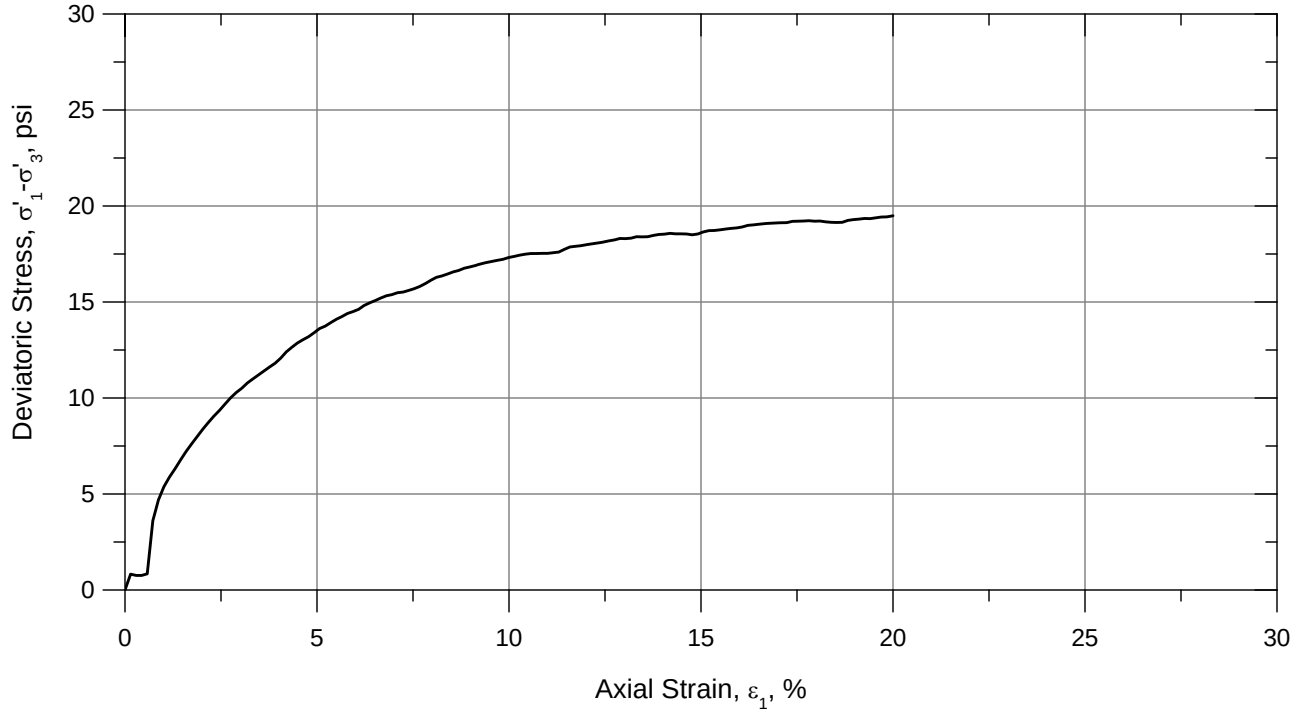
BORING ID: 09-201B
TEST ID: 541

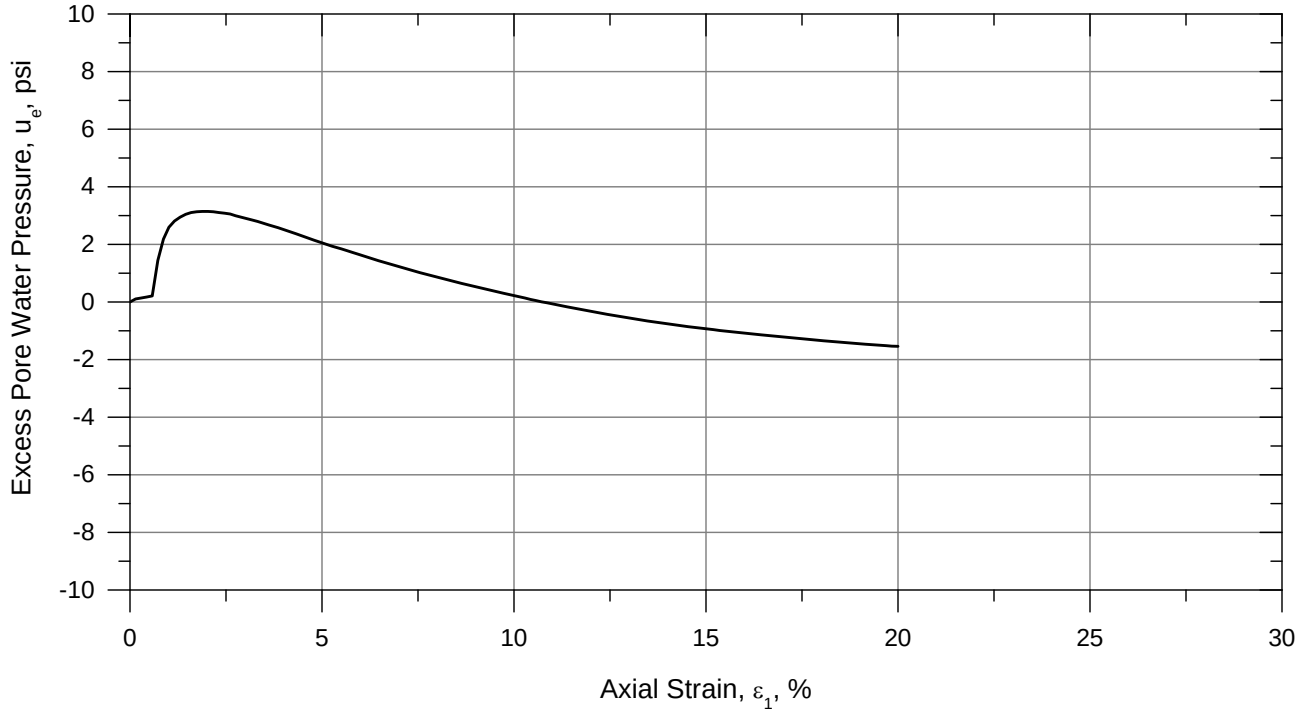




TRIAXIAL TEST RESULTS

BORING ID: 09-201B
TEST ID: 541





UNDRAINED TRIAXIAL COMPRESSION TEST RESULTS

AECOM

Project Name: TVA Kingston Fossil Plant RC Analysis
Project No.: 60095742
Client: Tennessee Valley Authority
Location: Kingston, TN

Test ID: 542
Soil Boring: 09-402B
Sample No. OST-6
Soil Type: CLAYEY SILT, SOME FINE SAND, GRAY
USCS: CL-ML
Specific Gravity 2.7
Sample Type: 3" OST
Preparation: TRIMMED
Type of Test: CIU-TXC

STAGE

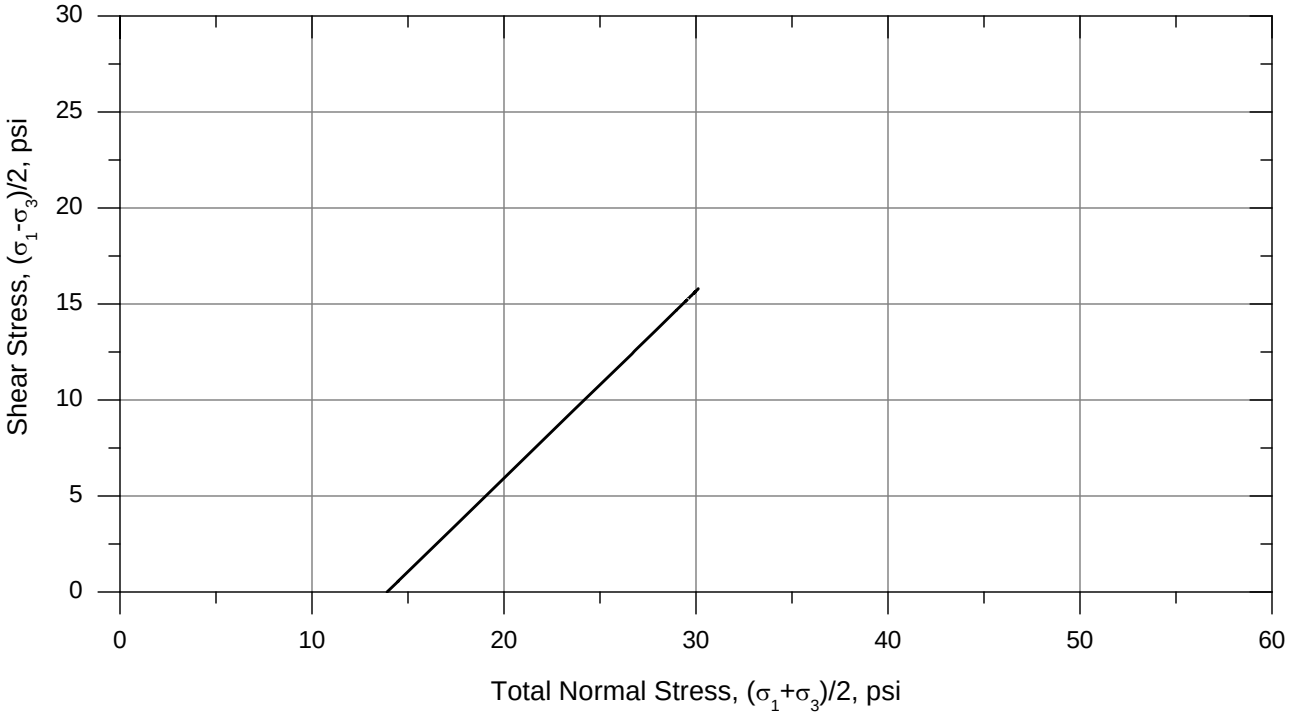
SATURATION	B (Skempton) value:	0.95
	Back Pressure, psi:	102.0
CONSOLIDATION	Type:	Isotropic
SHEAR	Type:	CIU-TXC
	Strain rate, %/min:	0.073
	Max. Mobilized Friction Angle, deg:	36.3
	Max. Deviator Stress, psi:	31.6

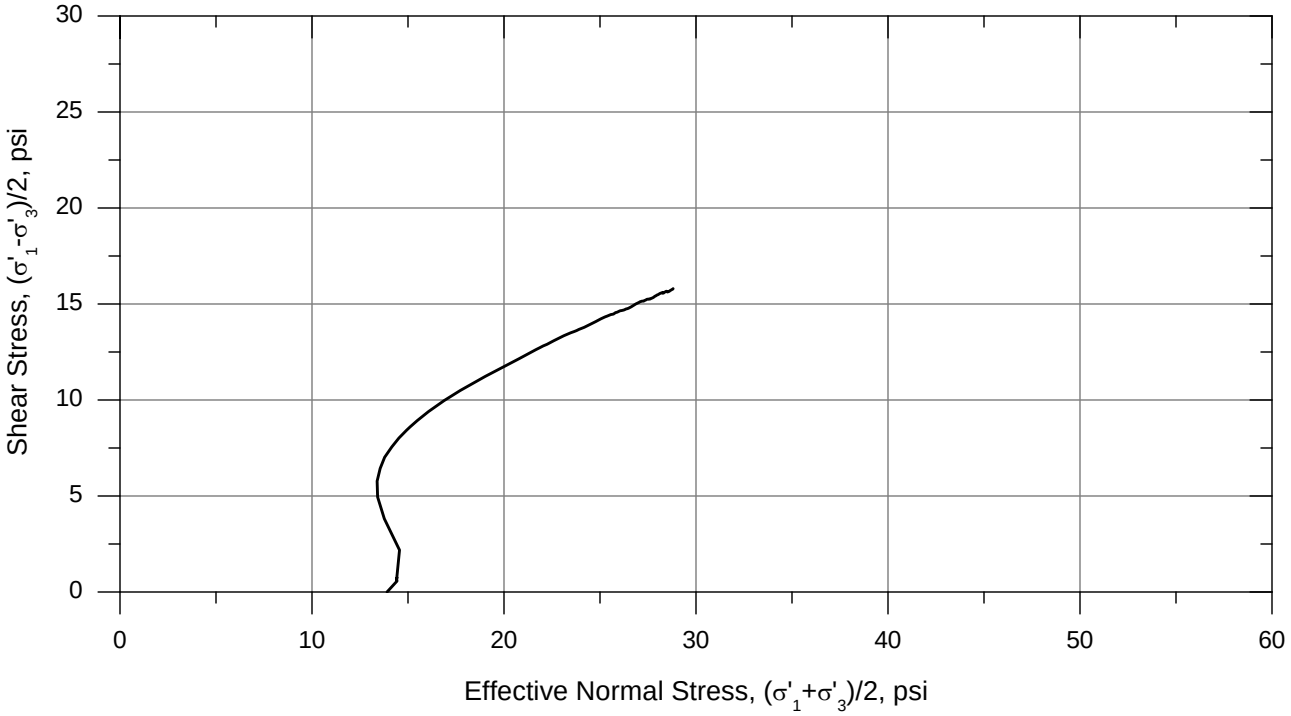
RESULTS

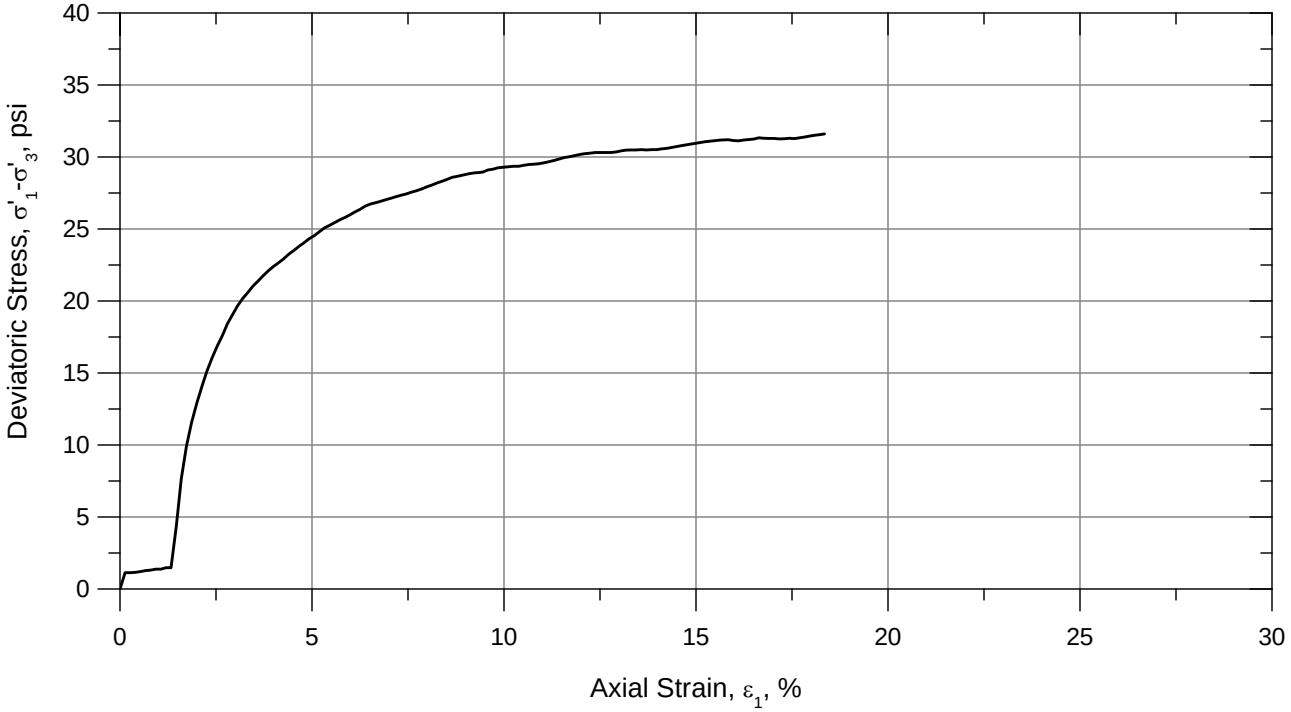
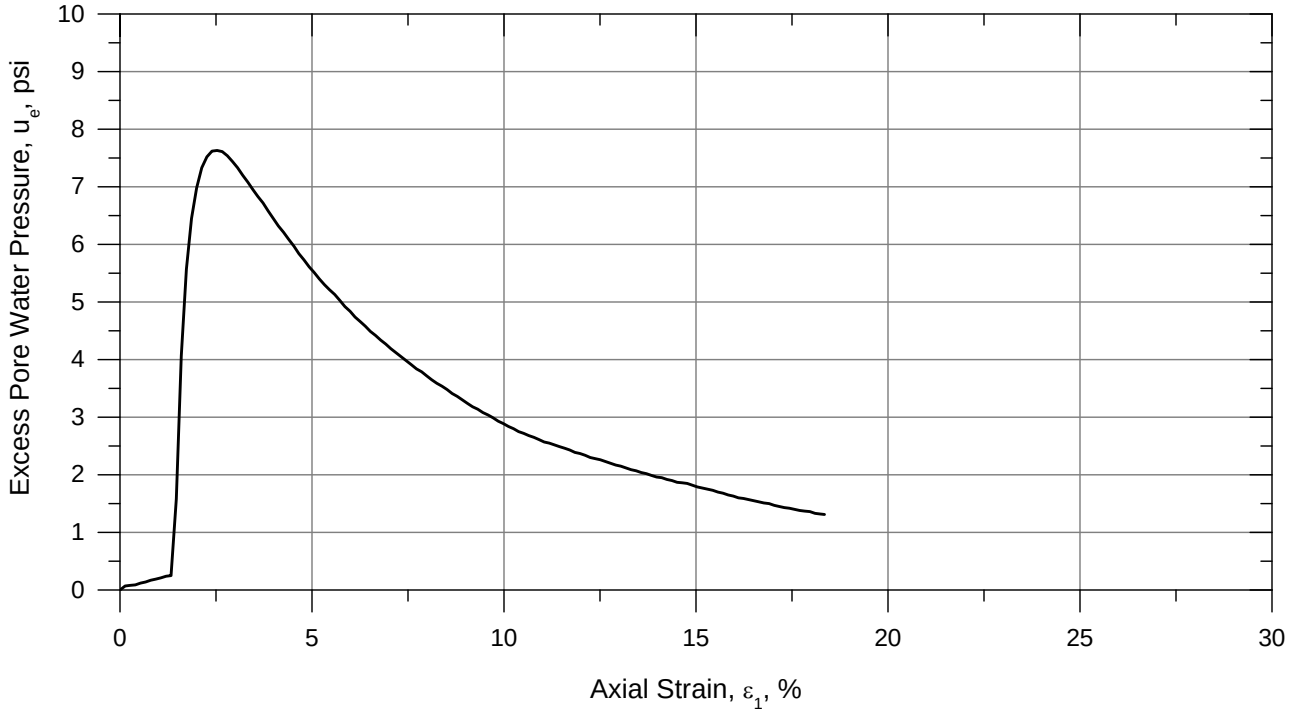
		CONSOLIDATION		SHEAR			
	INITIAL	INITIAL	FINAL	INITIAL	AT MAX STRESS RATIO	AT MAX DEVIATOR STRESS	FINAL
Height, mm:	150.7	150.2	150.3	150.3	145.3	122.7	122.7
Diameter, mm:	72.2	72.1	71.6	71.6	72.8	78.2	78.2
Axial Strain, %:		0.0	0.0	0.0	3.3	18.3	18.3
Volumetric Strain, %:		0.0	1.4	0.0	0.0	0.0	0.0
Deviator Stress, psi:		0.0	0.3	0.0	20.6	31.6	31.6
Vertical Effective Stress, psi:		2.0	14.2	13.9	27.7	44.6	44.6
Horizontal Effective Stress, psi:		2.0	13.9	13.9	7.1	13.0	13.0
Void Ratio:		0.58	0.56	0.56	0.56	0.56	0.56
Water Content, %:		21.6	20.8	20.8	20.8	20.8	20.8
Saturation, %:		100	100	100	100	100	100
Unit Weight, pcf:		129.4	130.3	130.3	130.3	130.3	130.3
Dry Unit Weight, pcf:		106.4	107.9	107.9	107.9	107.9	107.9

TRIAXIAL TEST RESULTS

BORING ID: 09-402B
TEST ID: 542





TRIAXIAL TEST RESULTS

BORING ID: 09-402B
TEST ID: 542