

Sample No.	1	2	3
Initial			
Water Content,	28.2	24.9	34.2
Dry Density, pcf	95.1	93.5	88.9
Saturation,	94.1	80.1	99.2
Void Ratio	0.8379	0.8701	0.9659
Diameter, in.	2.81	2.85	2.81
Height, in.	5.88	6.05	6.07
At Test			
Water Content,	27.9	29.1	32.5
Dry Density, pcf	98.1	96.3	91.6
Saturation,	100.0	100.0	100.0
Void Ratio	0.7811	0.8149	0.9090
Diameter, in.	2.78	2.82	2.79
Height, in.	5.82	5.99	6.01
Strain rate, in./min.	0.02		0.02
Back Pressure, ksf	4.3	4.3	4.3
Cell Pressure, ksf	6.5	8.6	13.0
Fail. Stress, ksf	3.3	5.6	3.3
Ult. Stress, ksf			
σ_1 Failure, ksf	5.4	9.9	12.0
σ_3 Failure, ksf	2.2	4.3	8.6

Type of Test:
Unconsolidated Undrained

Sample Type: undisturbed

Description:

Assumed Specific Gravity= 2.8

Remarks:
DRAFT REPORT

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-21A

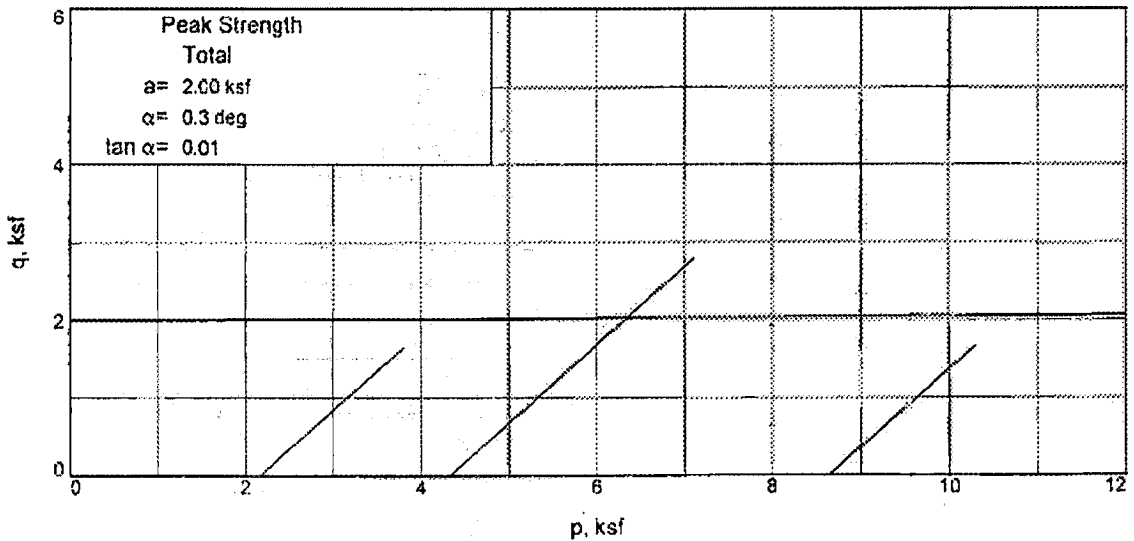
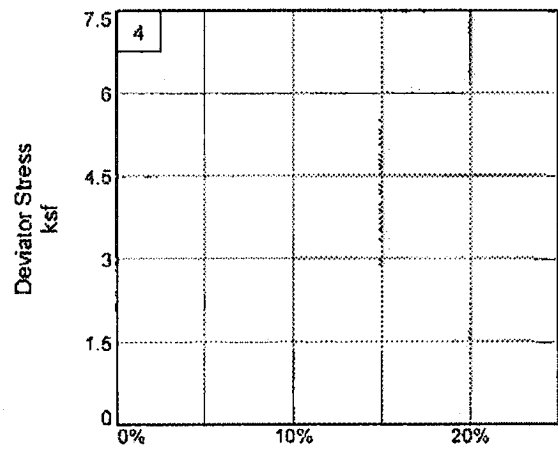
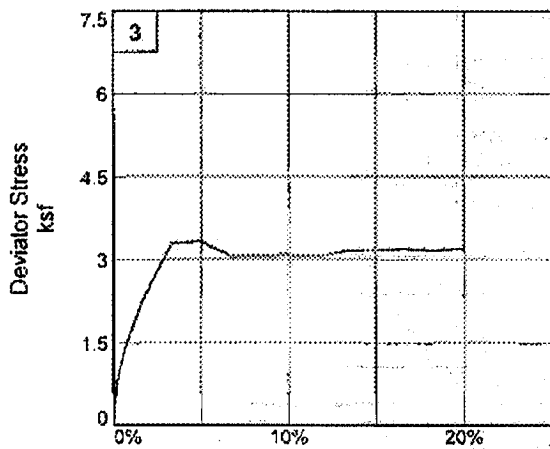
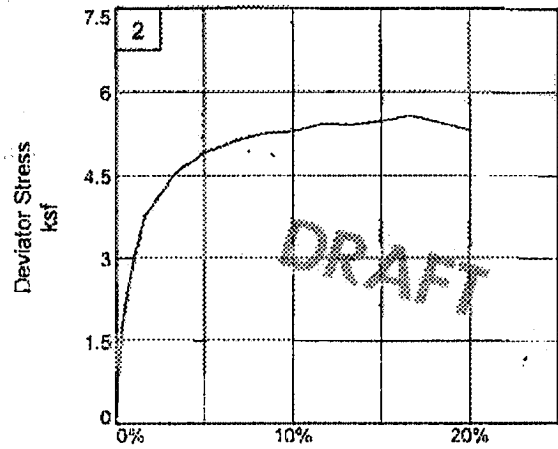
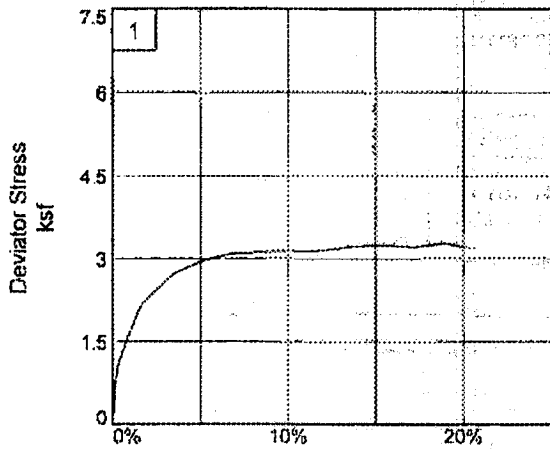
Sample Number: UD-1, 2 & 3 (UU) **Depth:** 15'-23'

Proj. No.: 3043051021 **Date:**

TRIAxIAL SHEAR TEST REPORT

MACTEC, INC.

Figure _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-21A

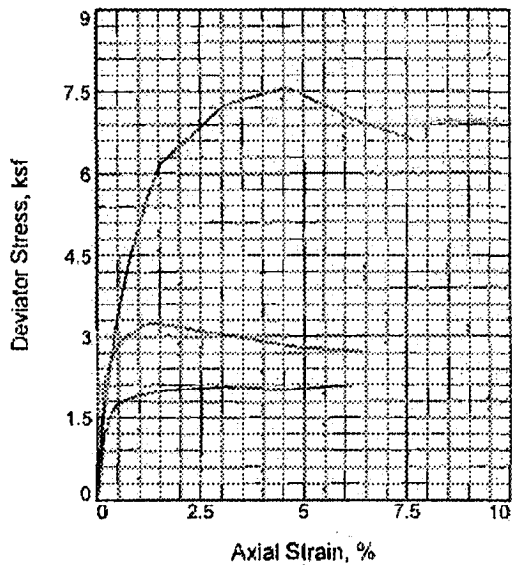
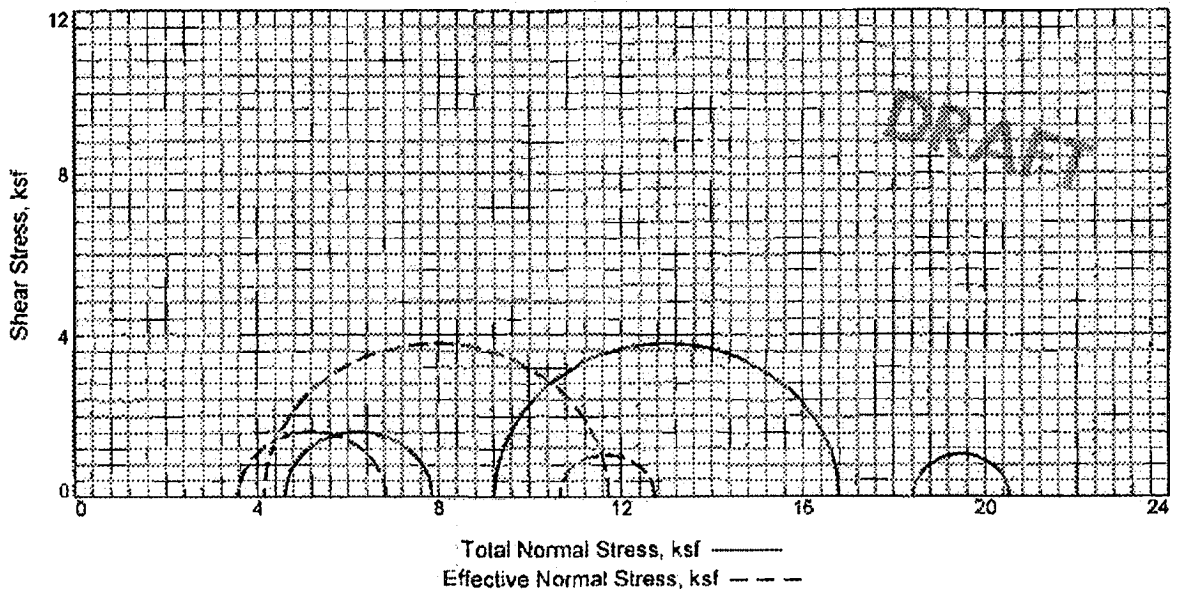
Depth: 15'-23'

Sample Number: UD-1, 2 & 3 (UU)

Project No.: 3043051021

Figure _____

MACTEC, INC.



Sample No.		1	2	3
Initial	Water Content,	35.7	26.0	40.3
	Dry Density, pcf	84.6	89.5	78.3
	Saturation,	95.5	77.9	93.1
	Void Ratio	1.0284	0.9192	1.1912
	Diameter, in.	2.81	2.84	2.82
Height, in.		6.14	6.31	6.14
At Test	Water Content,	40.4	40.5	57.7
	Dry Density, pcf	81.3	81.2	66.4
	Saturation,	100.0	100.0	100.0
	Void Ratio	1.1114	1.1150	1.5862
	Diameter, in.	2.85	2.93	2.98
Height, in.		6.23	6.52	6.49
Strain rate, in./min.		0.02	0.02	0.02
Back Pressure, ksf		2.9	2.9	2.9
Cell Pressure, ksf		7.5	12.1	21.3
Fail. Stress, ksf		3.2	7.6	2.1
Total Pore Pr., ksf		3.9	7.9	10.7
Ult. Stress, ksf				
Total Pore Pr., ksf				
$\bar{\sigma}_1$	Failure, ksf	6.8	11.7	12.7
$\bar{\sigma}_3$	Failure, ksf	3.6	4.1	10.6

Type of Test:
 CU with Pore Pressures
Sample Type: undisturbed
Description: CU

Specific Gravity= 2.75

Remarks:

Figure _____

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-44

Sample Number: UD-4,3,and 5

Depth: 19'-28.5'

Proj. No.: 3043051021

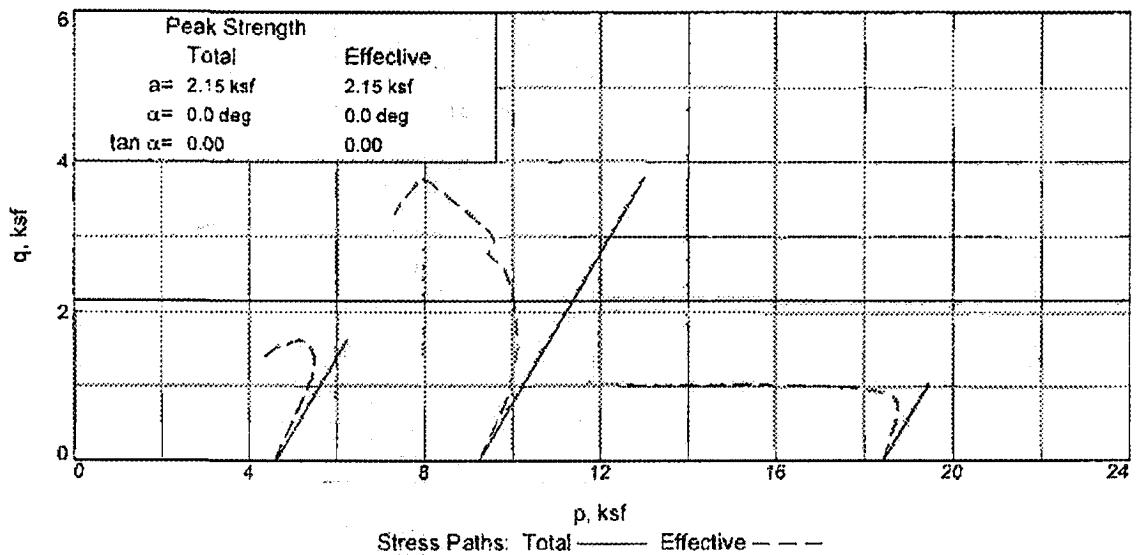
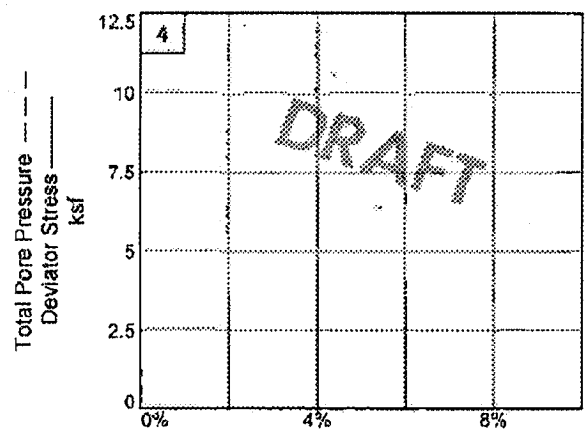
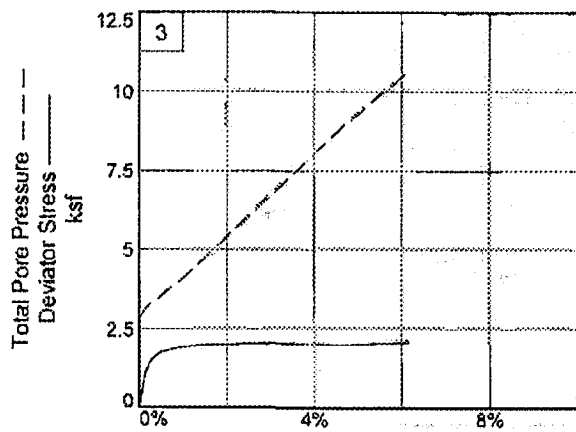
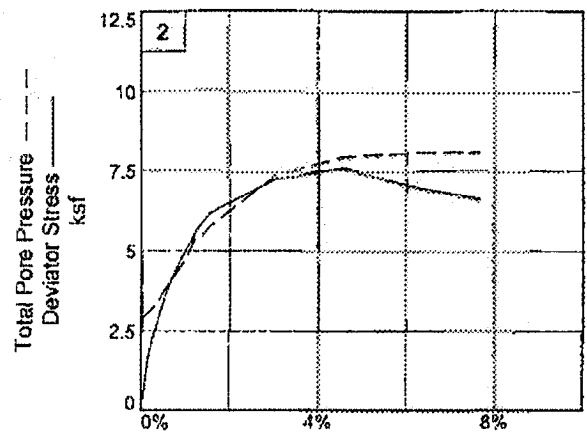
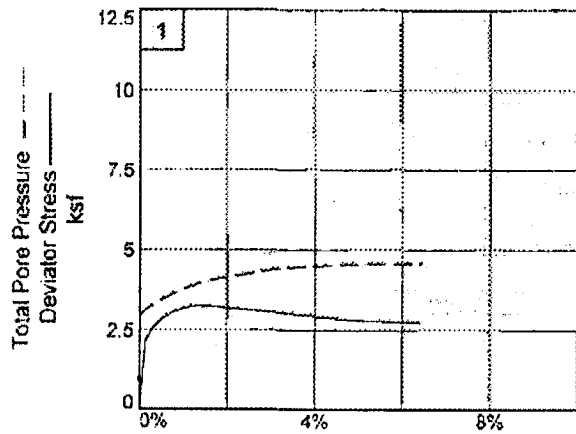
Date:

TRIAXIAL SHEAR TEST REPORT

MACTEC, INC.

Tested By: Alexander _____

Checked By: Hamlett _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-44

Depth: 19'-28.5'

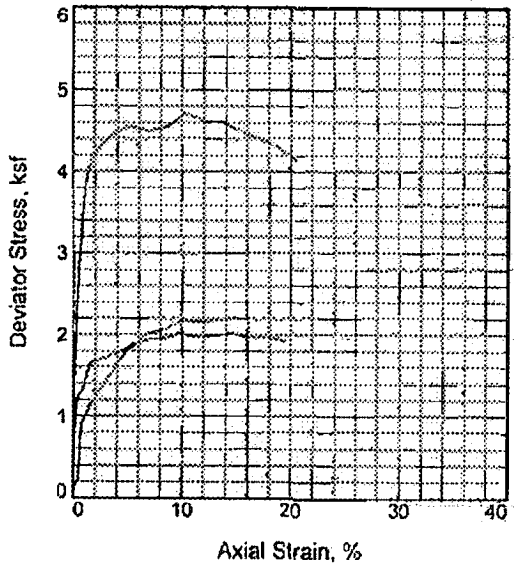
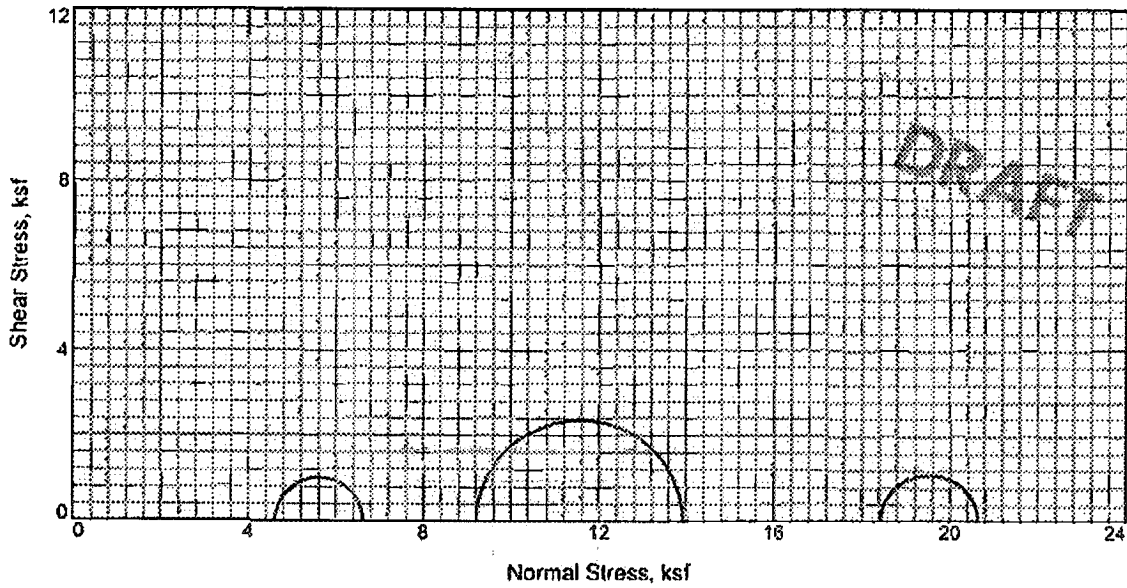
Sample Number: UD-4.3, and 5

Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander _____ Checked By: Hamlett _____



Sample No.	1	2	3	
Initial	Water Content,	42.2	23.4	39.4
	Dry Density, pcf	80.1	89.9	79.6
	Saturation,	100.0	69.5	92.3
	Void Ratio	1.1819	0.9433	1.1947
	Diameter, in.	2.83	2.98	2.82
Height, in.	6.15	5.84	6.01	
At Test	Water Content,	42.2	33.7	42.7
	Dry Density, pcf	80.1	89.9	79.6
	Saturation,	100.0	100.0	100.0
	Void Ratio	1.1819	0.9433	1.1947
	Diameter, in.	2.83	2.98	2.82
Height, in.	6.15	5.84	6.01	
Strain rate, in./min.	0.02	0.02	0.02	
Back Pressure, ksf	2.9	2.9	2.9	
Cell Pressure, ksf	7.5	12.1	21.3	
Fail. Stress, ksf	2.0	4.7	2.2	
Ult. Stress, ksf				
σ_1 Failure, ksf	6.6	13.9	20.6	
σ_3 Failure, ksf	4.6	9.2	18.4	

Type of Test:
Unconsolidated Undrained

Sample Type: undisturbed

Description: UU

Specific Gravity= 2.80

Remarks:

Figure _____

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-44

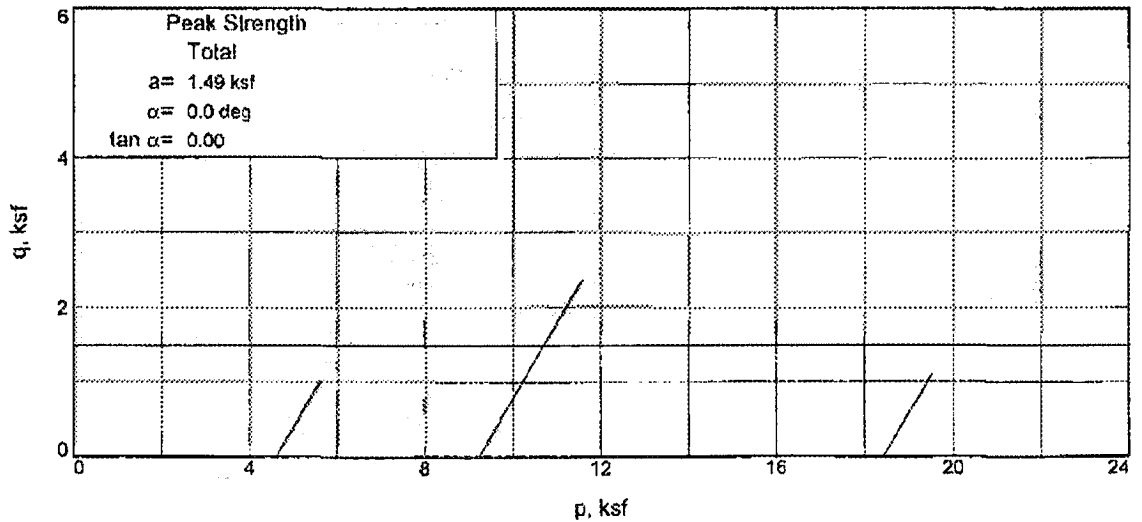
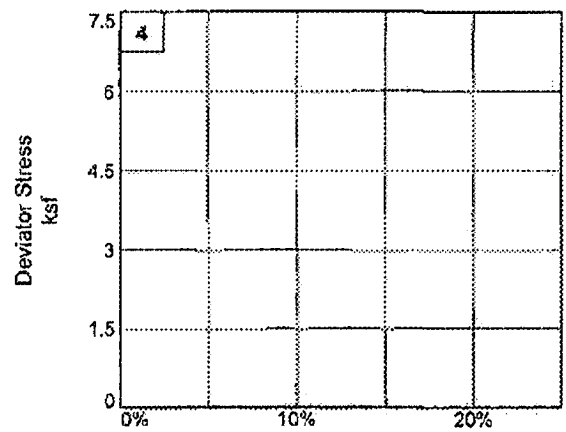
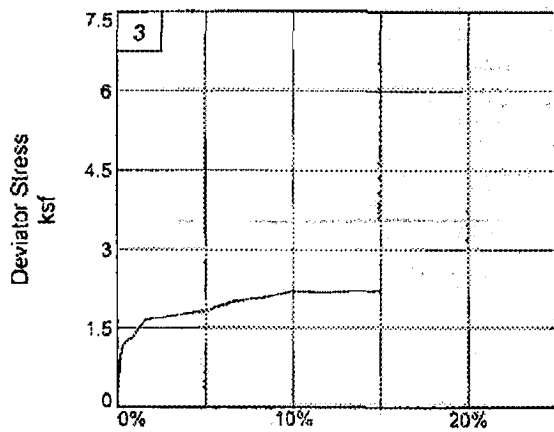
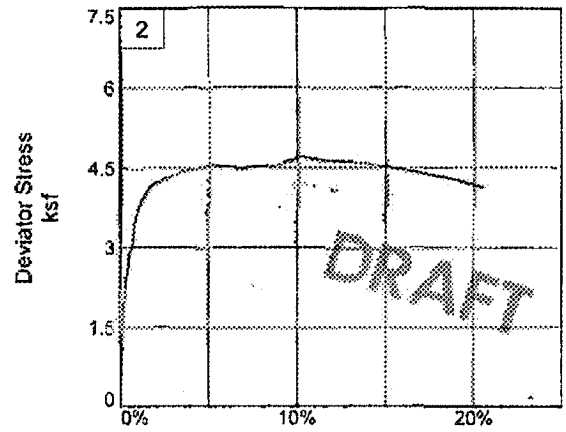
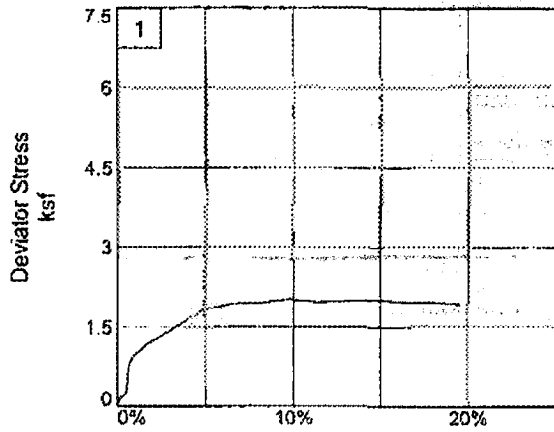
Sample Number: UD-4,3,and 5 **Depth:** 19'-28.5'

Proj. No.: 3043051021 **Date:**

TRIAxIAL SHEAR TEST REPORT

MACTEC, INC.

Tested By: Alexander **Checked By:** Hamlett



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-44

Depth: 19'-28.5'

Sample Number: UD-4,3,and 5

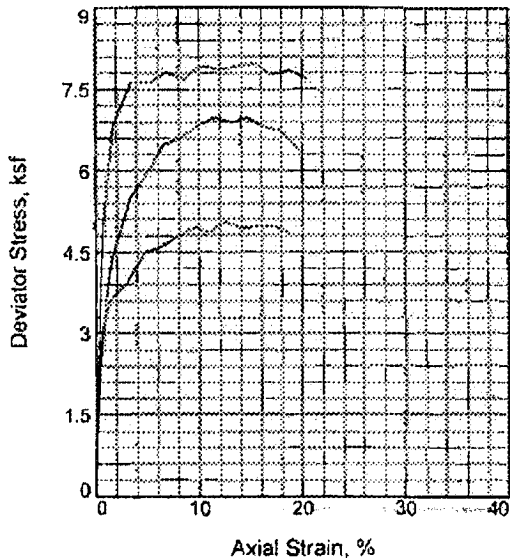
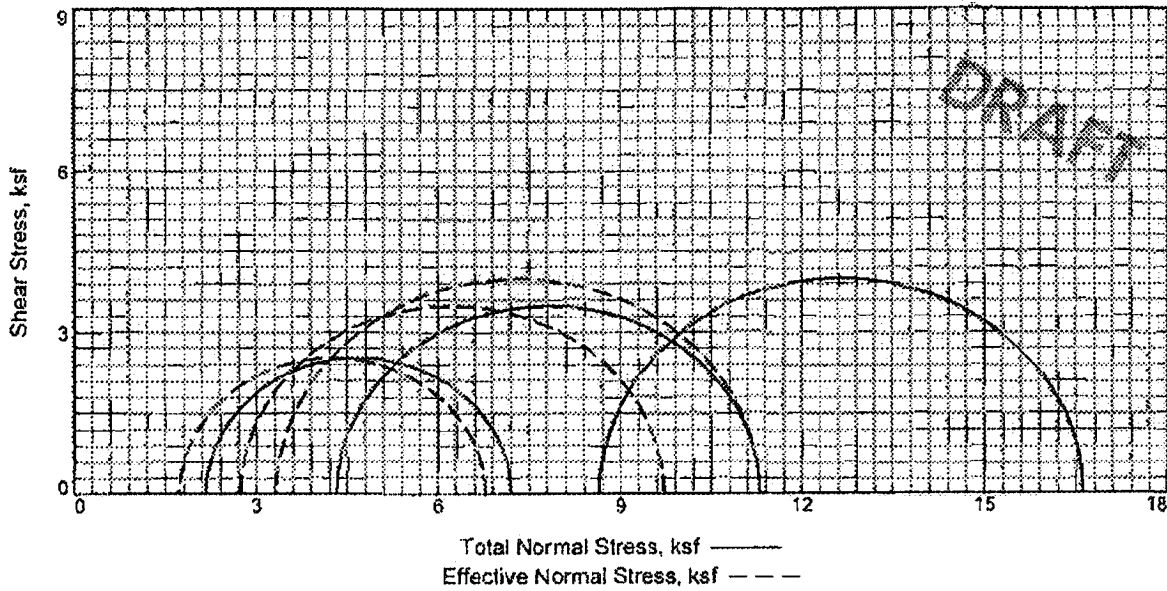
Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander _____

Checked By: Hamlett _____



Sample No.		1	2	3
Initial	Water Content,	35.4	27.6	27.2
	Dry Density, pcf	84.0	96.1	93.1
	Saturation,	93.1	96.6	88.7
	Void Ratio	1.0446	0.7869	0.8436
	Diameter, in.	2.82	2.79	2.84
	Height, in.	5.99	5.90	5.66
At Test	Water Content,	53.6	35.2	37.8
	Dry Density, pcf	69.4	87.3	84.2
	Saturation,	100.0	100.0	100.0
	Void Ratio	1.4739	0.9670	1.0386
	Diameter, in.	3.00	2.88	2.94
	Height, in.	6.39	6.10	5.85
Strain rate, in./min.		0.02	0.02	0.02
Back Pressure, ksf		5.8	5.8	5.8
Cell Pressure		7.9	10.1	14.4
Fail. Stress, ksf		5.0	7.0	8.0
Total Pore Pr., ksf		6.2	7.3	11.1
Ult. Stress, ksf				
Total Pore Pr., ksf				
σ_1 Failure, ksf		6.8	9.7	11.3
σ_3 Failure, ksf		1.7	2.7	3.3

Type of Test:
CU with Pore Pressures
Sample Type: undisturbed
Description: CU

Specific Gravity= 2.75
Remarks:

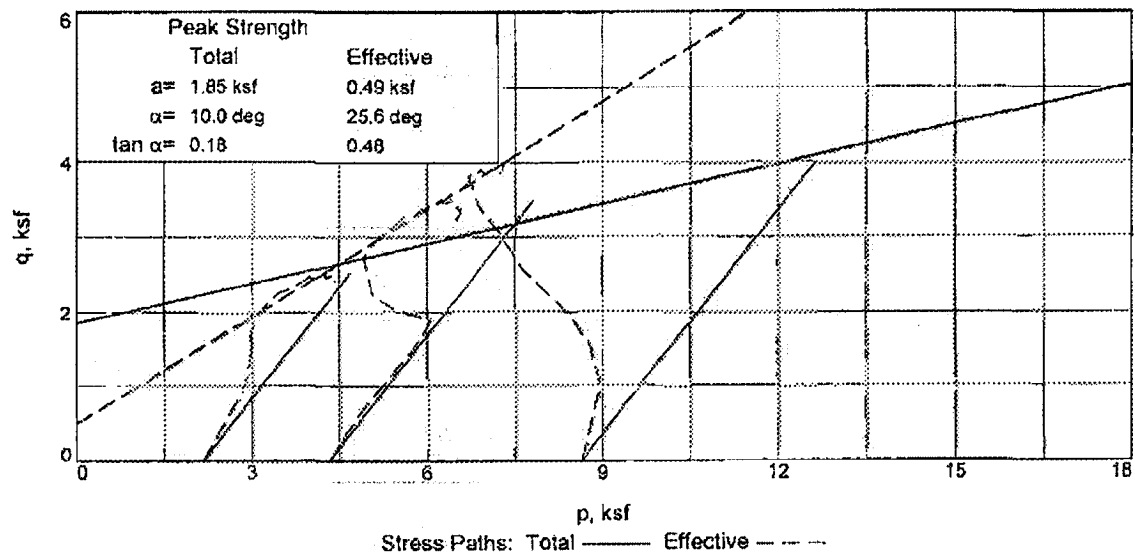
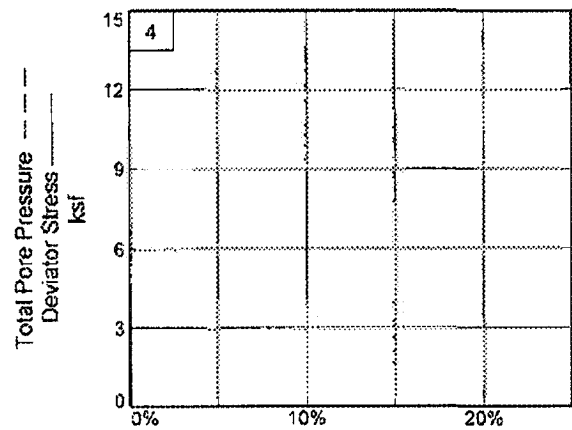
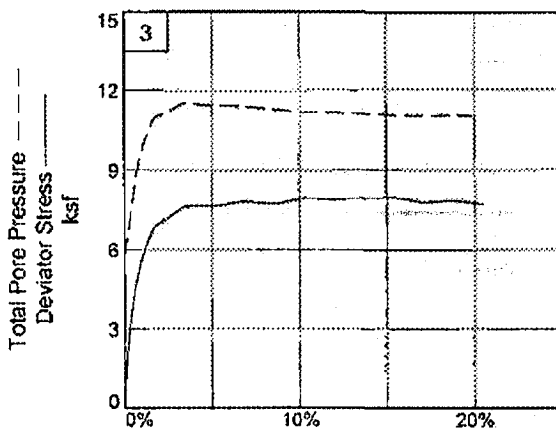
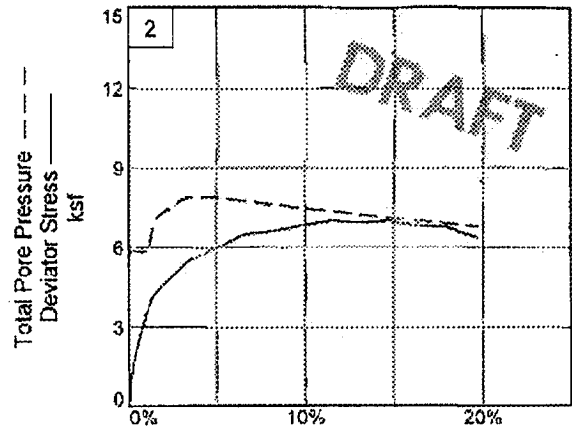
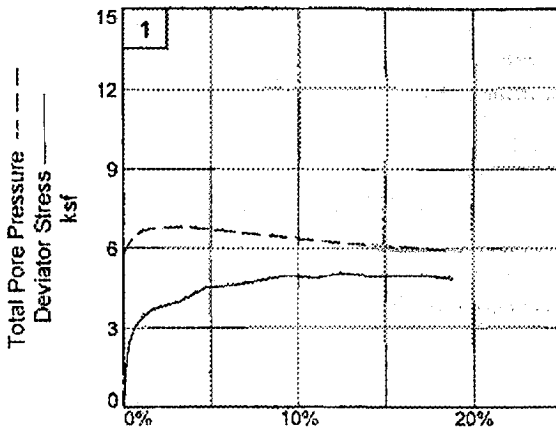
Client: TVA
Project: TVA Kingston - Proposed Gypsum Stack
Location: NB-47A
Sample Number: UD-1,2,and 3 **Depth:** 9'-17'
Proj. No.: 3043051021 **Date:**

TRIAXIAL SHEAR TEST REPORT

MACTEC, INC.

Figure _____

Tested By: Alexander **Checked By:** Hamlett



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-47A

Depth: 9'-17'

Sample Number: UD-1,2, and 3

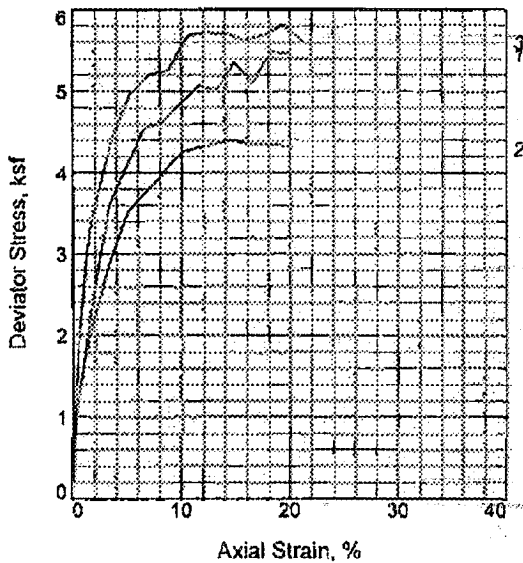
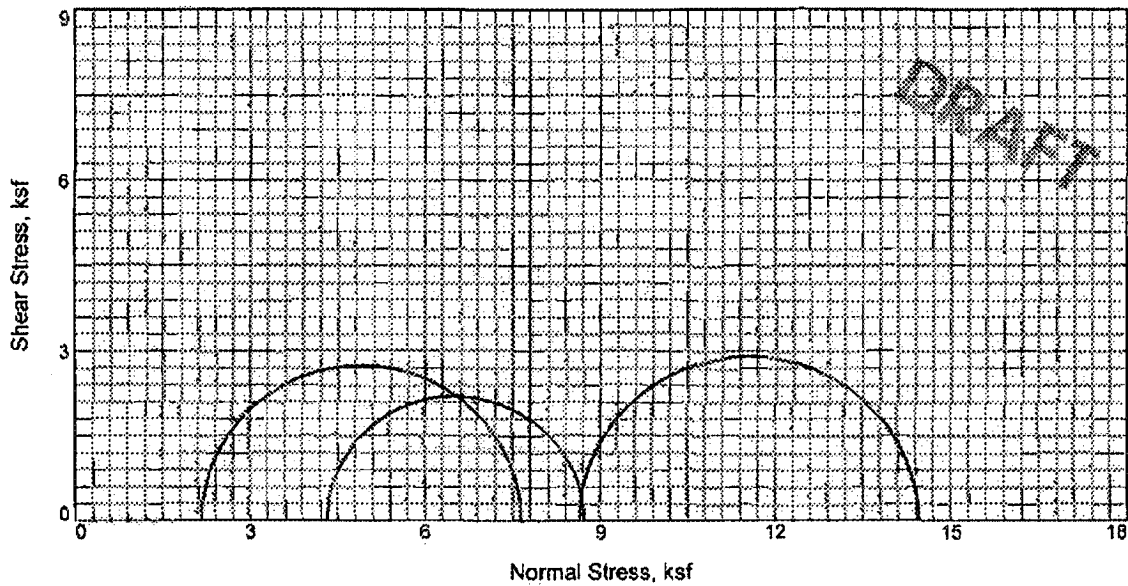
Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander

Checked By: Hamlett



Sample No.		1	2	3
Initial	Water Content,	25.4	25.6	20.5
	Dry Density, pcf	97.3	99.4	100.9
	Saturation,	91.4	96.8	80.5
	Void Ratio	0.7638	0.7268	0.7016
	Diameter, in.	2.88	2.83	2.79
At Test	Height, in.	6.05	5.93	5.67
	Water Content,	27.8	26.4	25.5
	Dry Density, pcf	97.3	99.4	100.9
	Saturation,	100.0	100.0	100.0
	Void Ratio	0.7638	0.7268	0.7016
	Diameter, in.	2.88	2.83	2.79
	Height, in.	6.05	5.93	5.67
	Strain rate, in./min.	0.02	0.02	0.02
	Back Pressure, ksf	5.8	5.8	5.8
	Cell Pressure, ksf	7.9	10.1	14.4
	Fail. Stress, ksf	5.5	4.4	5.8
	Ult. Stress, ksf			
	σ_1 Failure, ksf	7.6	8.7	14.4
	σ_3 Failure, ksf	2.2	4.3	8.6

Type of Test:
Unconsolidated Undrained
Sample Type: undisturbed
Description: UU

Specific Gravity= 2.75
Remarks:

Figure _____

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-47A

Sample Number: UD-1,2,and 3

Depth: 9'-17'

Proj. No.: 3043051021

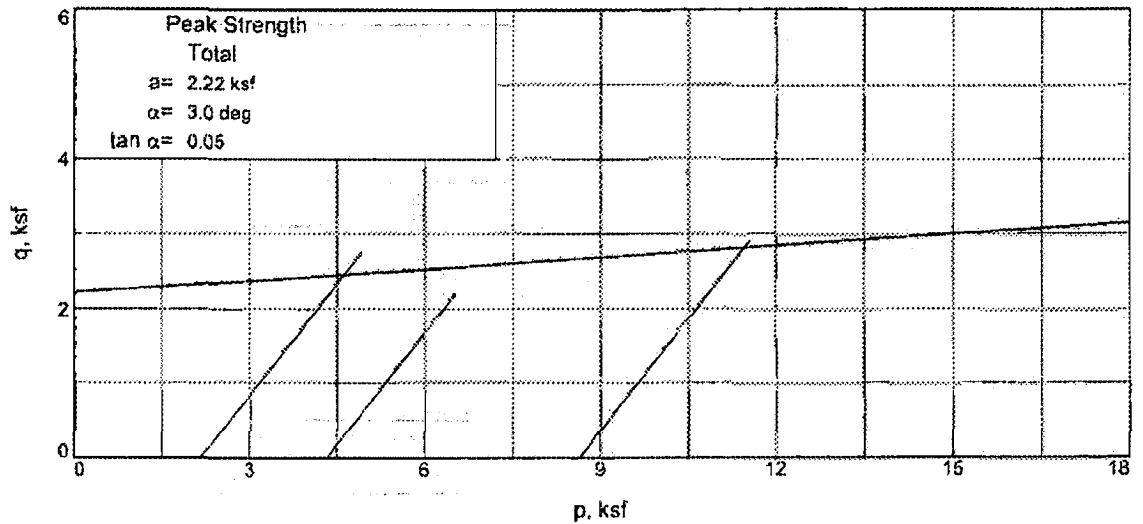
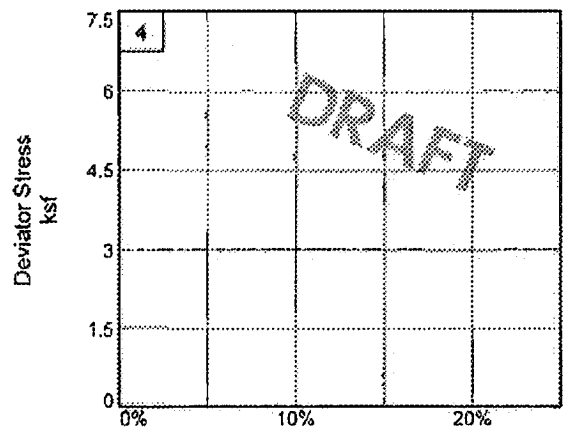
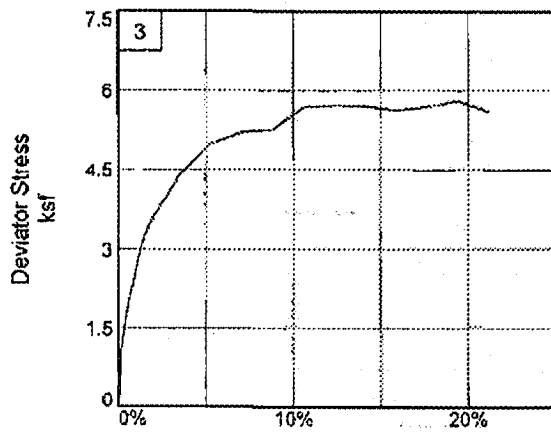
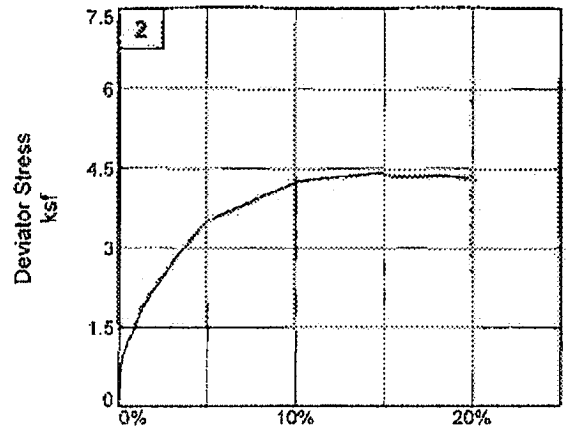
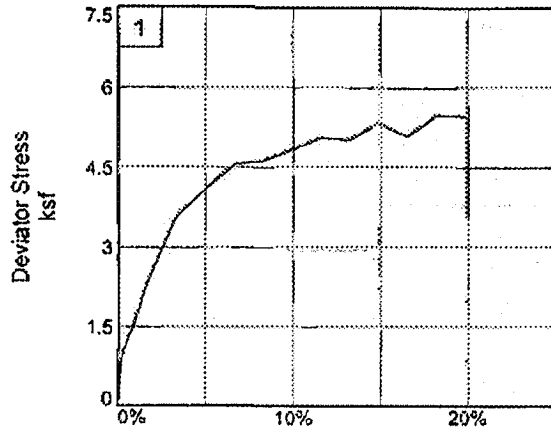
Date:

TRIAxIAL SHEAR TEST REPORT

MACTEC, INC.

Tested By: Alexander _____

Checked By: Hamlett _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-47A

Depth: 9'-17'

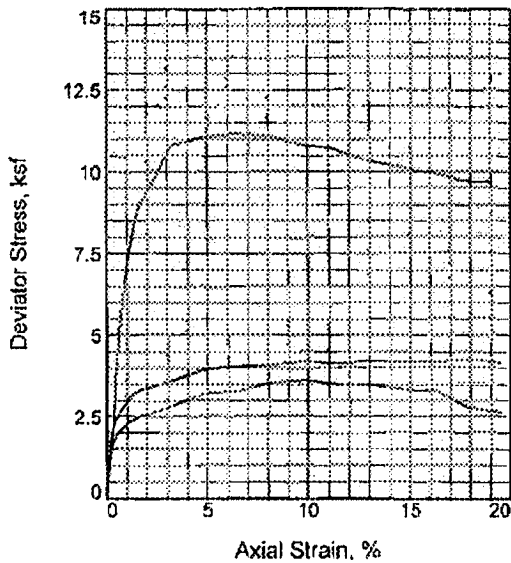
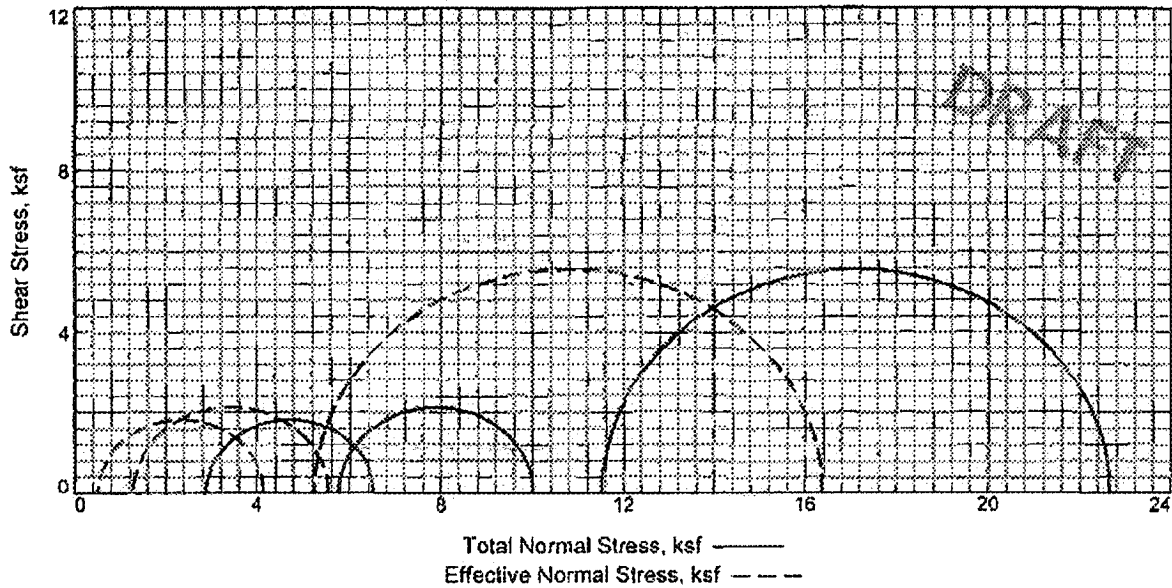
Sample Number: UD-1,2,and 3

Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander Checked By: Hamlett



Sample No.	1	2	3	
Initial	Water Content,	34.3	30.5	30.5
	Dry Density, pcf	83.5	87.6	85.3
	Saturation,	89.3	87.3	83.0
	Void Ratio	1.0551	0.9599	1.0117
	Diameter, in.	2.82	2.82	2.82
At Test	Height, in.	6.01	6.03	6.12
	Water Content,	43.0	39.7	42.8
	Dry Density, pcf	78.7	82.0	78.9
	Saturation,	100.0	100.0	100.0
Strain rate, in./min.	Void Ratio	1.1819	1.0926	1.1762
	Diameter, in.	2.88	2.89	2.89
	Height, in.	6.13	6.16	6.29
	Back Pressure, ksf	2.9	2.9	2.9
	Cell Pressure, ksf	5.8	8.6	14.4
	Fail. Stress, ksf	3.6	4.3	11.1
	Total Pore Pr., ksf	5.2	7.4	9.2
	Ult. Stress, ksf			
	Total Pore Pr., ksf			
	$\bar{\sigma}_1$ Failure, ksf	4.1	5.5	16.4
$\bar{\sigma}_3$ Failure, ksf	0.5	1.3	5.2	

Type of Test:
CU with Pore Pressures
Sample Type: undisturbed
Description: CU

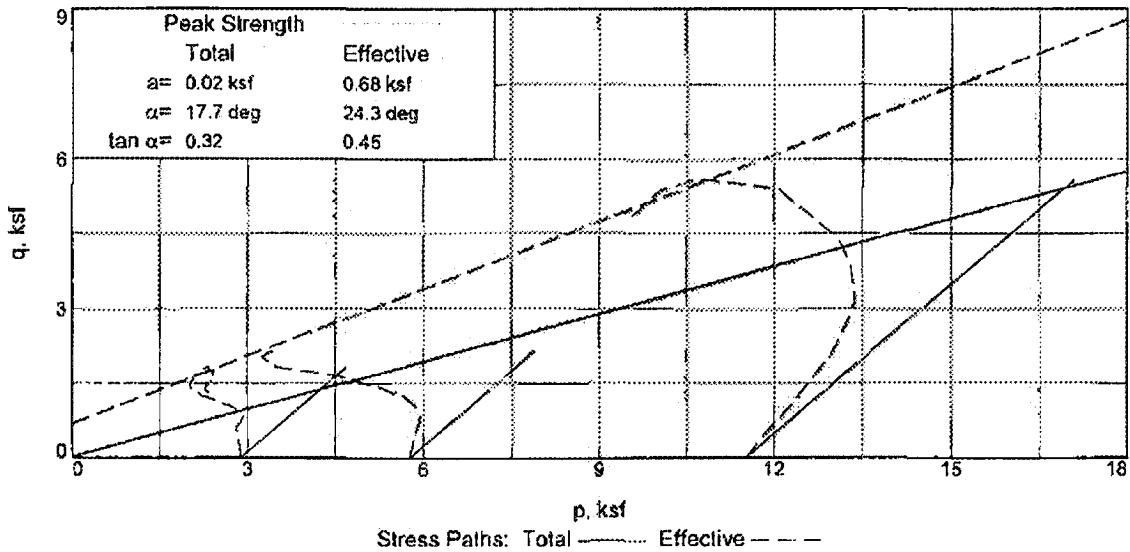
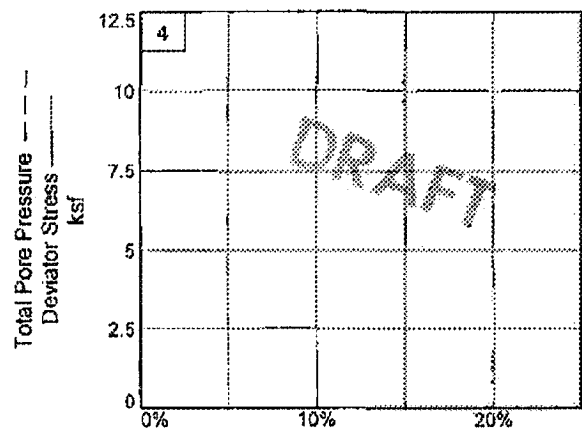
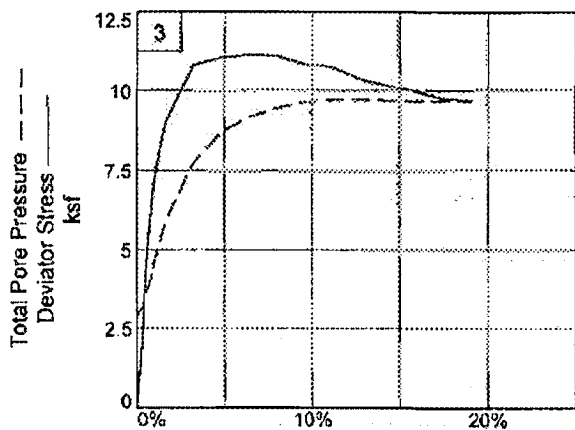
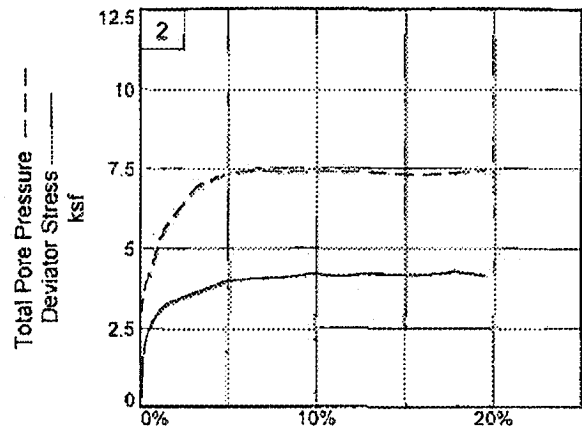
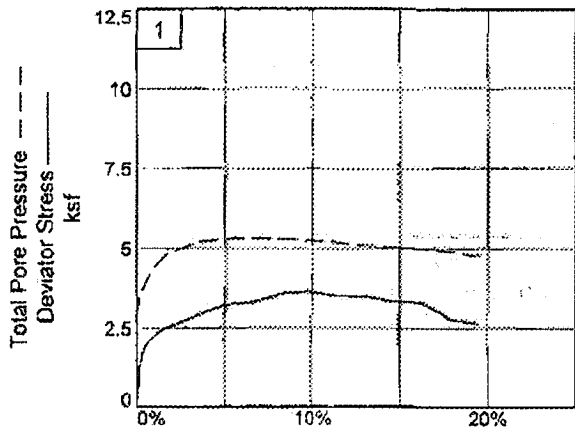
Specific Gravity= 2.75
Remarks:

Figure _____

Client: TVA
Project: TVA Kingston - Proposed Gypsum Stack
Location: NB-47A
Sample Number: UD-4,5,and 6 **Depth:** 18'-27'
Proj. No.: 3043051021 **Date:**

TRIAXIAL SHEAR TEST REPORT
MACTEC, INC.

Tested By: Alexander _____ **Checked By:** Hamlett _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-47A

Depth: 18'-27'

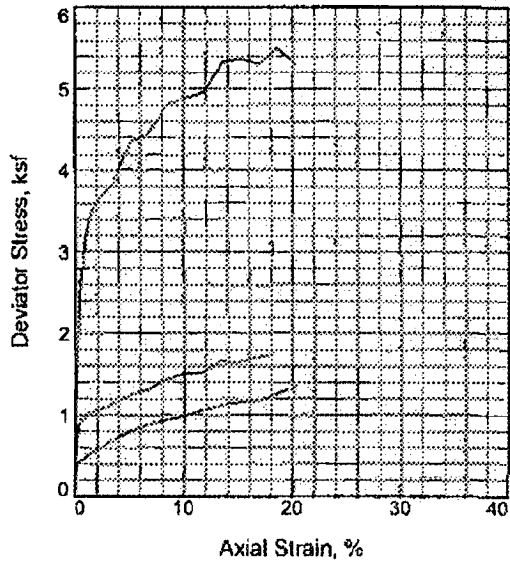
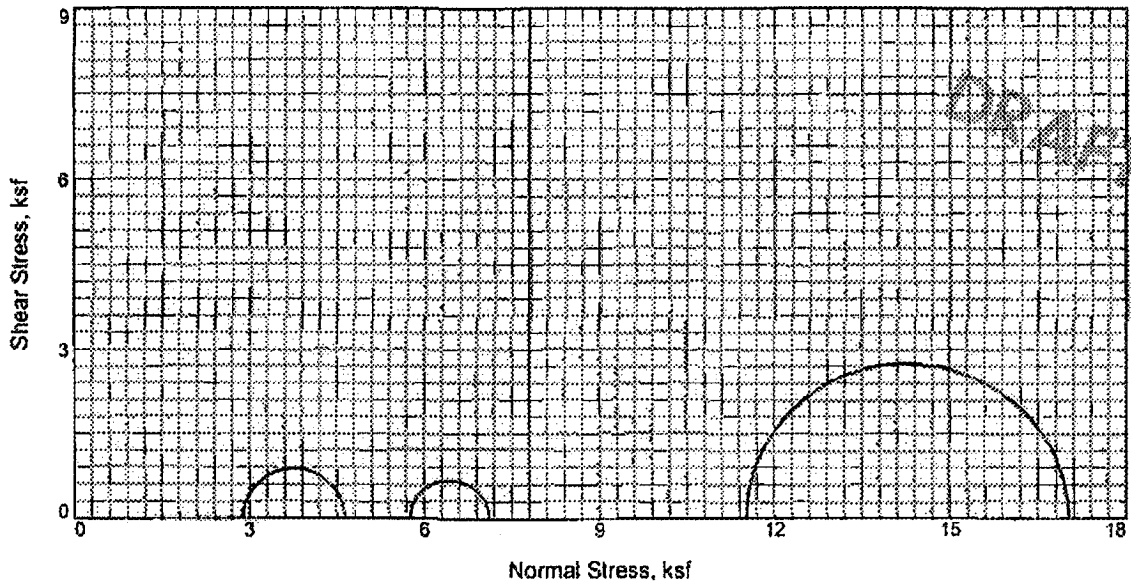
Sample Number: UD-4,5,and 6

Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander _____ Checked By: Hamlett _____



Sample No.	1	2	3	
Initial	Water Content,	25.8	31.3	27.5
	Dry Density, pcf	94.4	87.2	91.7
	Saturation,	86.6	89.0	86.7
	Void Ratio	0.8193	0.9683	0.8712
	Diameter, in.	2.82	2.86	2.83
At Test	Height, in.	6.05	5.90	5.92
	Water Content,	29.8	35.2	31.7
	Dry Density, pcf	94.4	87.2	91.7
	Saturation,	100.0	100.0	100.0
	Void Ratio	0.8193	0.9683	0.8712
2	Diameter, in.	2.82	2.86	2.83
	Height, in.	6.05	5.90	5.92
	Strain rate, in./min.	0.02	0.02	0.02
	Back Pressure, ksf	2.9	2.9	2.9
	Cell Pressure, ksf	5.8	8.6	14.4
	Fail. Stress, ksf	1.8	1.4	5.5
	Ult. Stress, ksf			
	σ_1 Failure, ksf	4.6	7.1	17.0
	σ_3 Failure, ksf	2.9	5.8	11.5

Type of Test:
Unconsolidated Undrained
Sample Type: undisturbed
Description: UU

Specific Gravity= 2.75

Remarks:

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-47A

Sample Number: UD-4,5,and 6

Depth: 18'-27'

Proj. No.: 3043051021

Date:

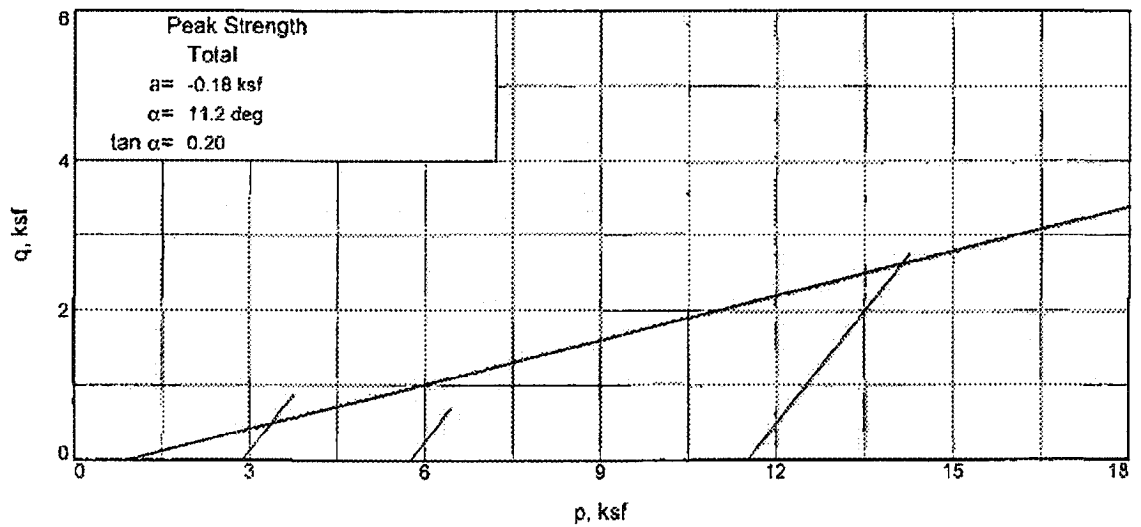
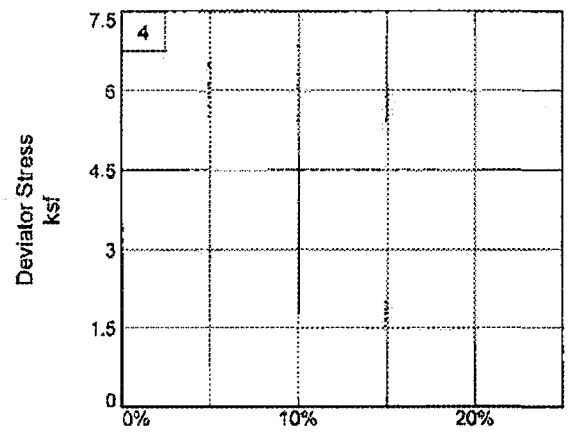
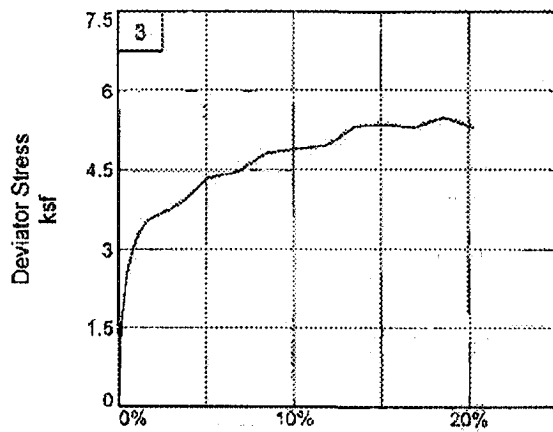
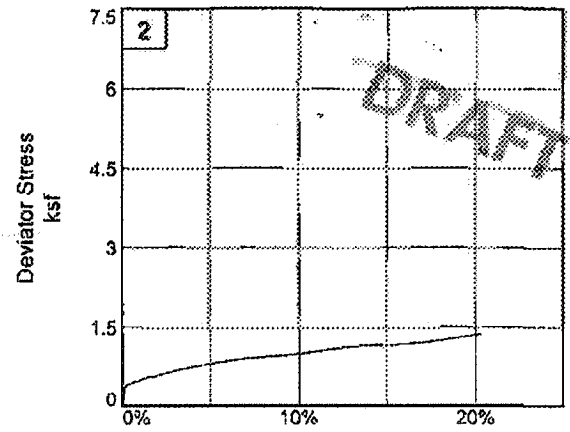
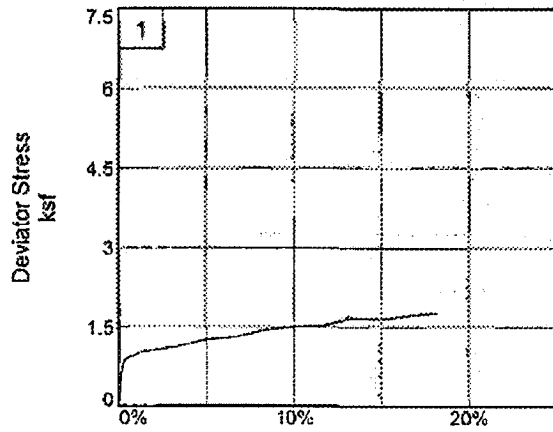
TRIAXIAL SHEAR TEST REPORT

MACTEC, INC.

Figure _____

Tested By: Alexander _____

Checked By: Hamlett _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-47A

Depth: 18'-27'

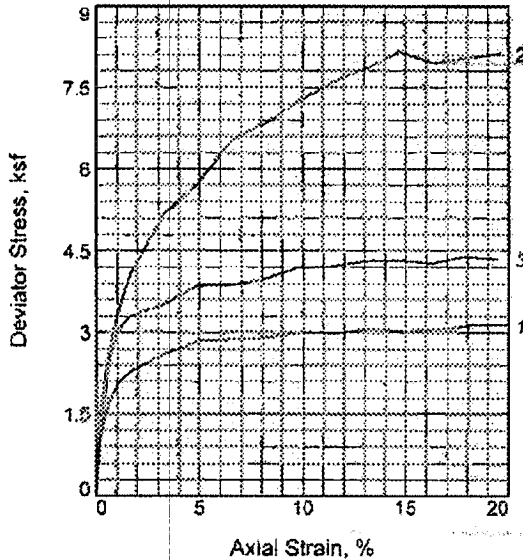
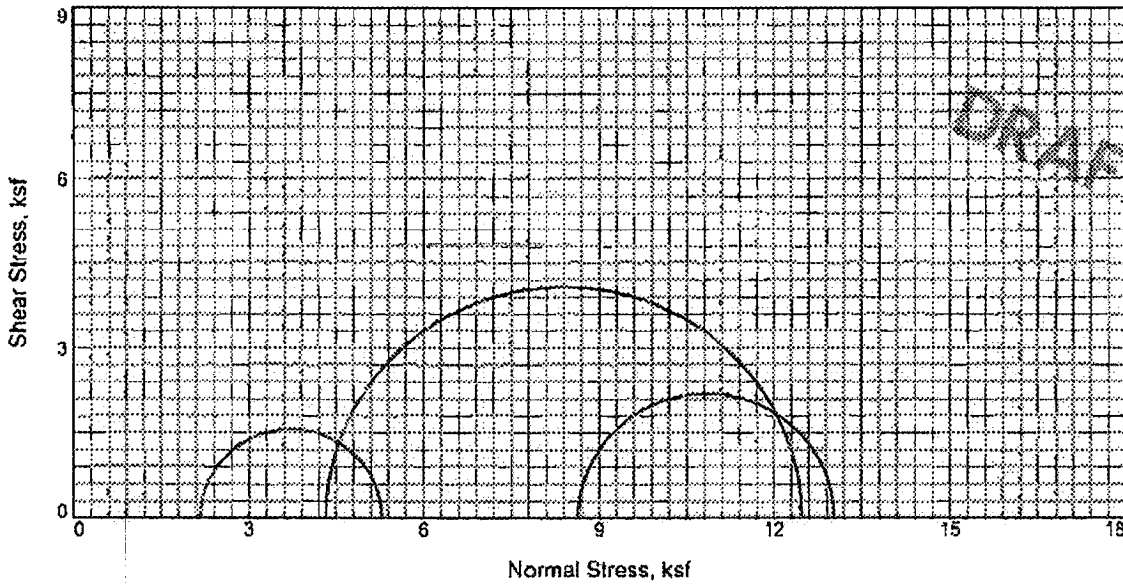
Sample Number: UD-4,5,and 6

Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander Checked By: Hamlett



Sample No.	1	2	3	
Initial	Water Content,	26.0	19.5	31.2
	Dry Density, pcf	92.7	105.1	87.3
	Saturation,	84.1	84.8	88.9
	Void Ratio	0.8511	0.6339	0.9654
	Diameter, in.	2.85	2.86	2.83
At Test	Height, in.	6.03	6.12	6.17
	Water Content,	30.9	23.1	35.1
	Dry Density, pcf	92.7	105.1	87.3
	Saturation,	100.0	100.0	100.0
	Void Ratio	0.8511	0.6339	0.9654
Test Parameters	Diameter, in.	2.85	2.86	2.83
	Height, in.	6.03	6.12	6.17
	Strain rate, in./min.	0.02	0.02	0.02
	Back Pressure, ksf	5.8	5.8	5.8
	Cell Pressure, ksf	7.9	10.1	14.4
	Fail. Stress, ksf	3.1	8.2	4.4
	Ult. Stress, ksf			
	σ_1 Failure, ksf	5.3	12.5	13.0
	σ_3 Failure, ksf	2.2	4.3	8.6

Type of Test:
Unconsolidated Undrained
Sample Type: undisturbed
Description: UU

Specific Gravity: 2.75
Remarks:

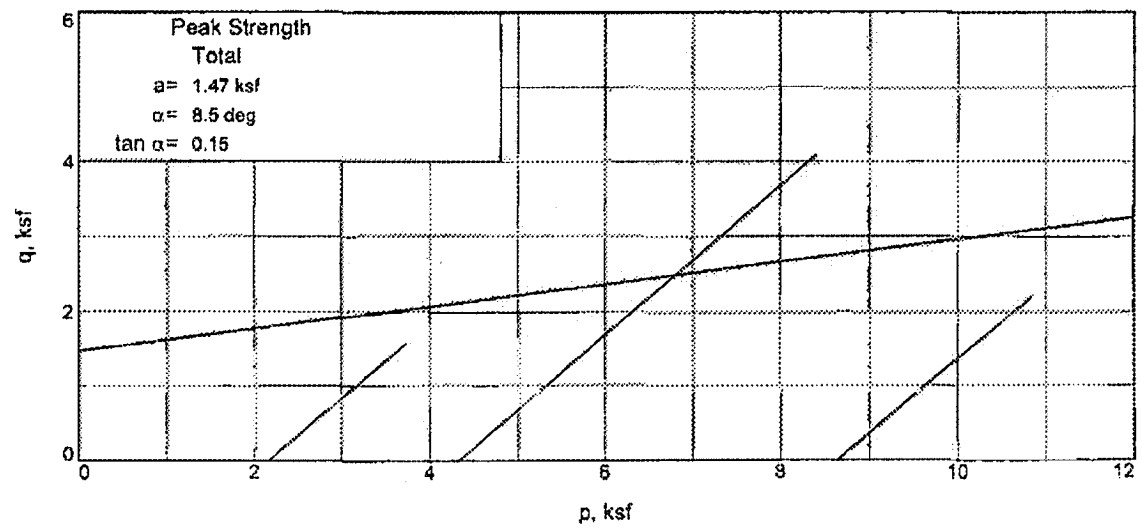
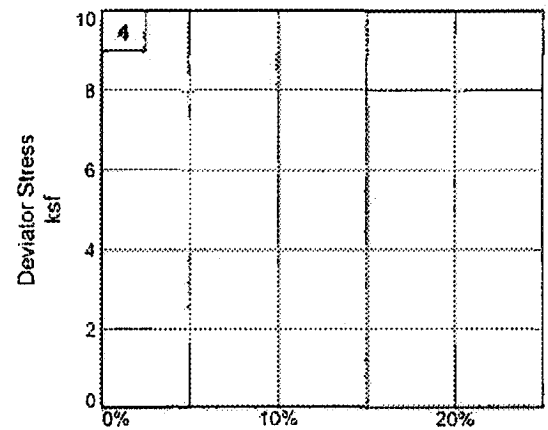
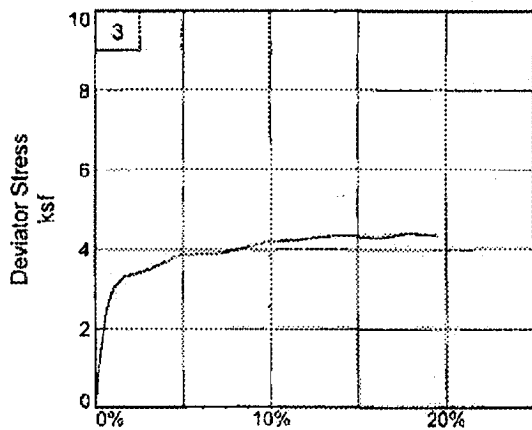
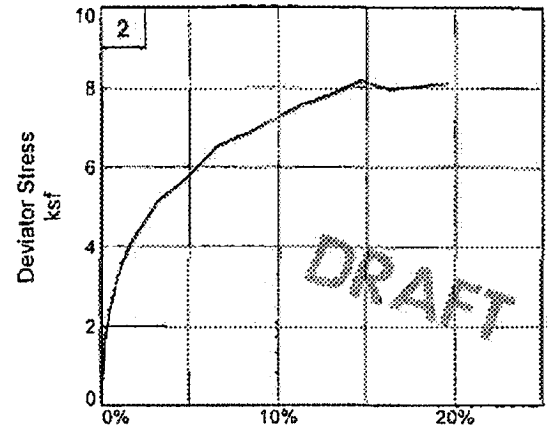
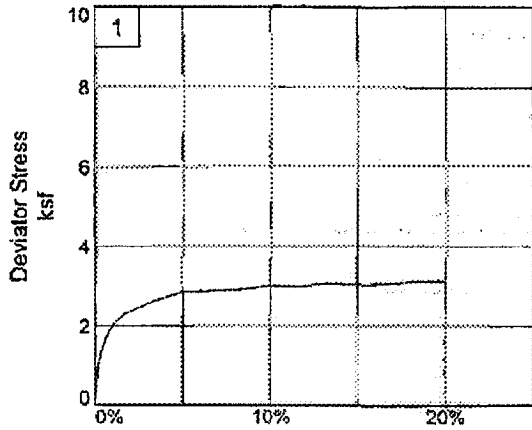
Figure

Client: TVA
Project: TVA Kingston - Proposed Gypsum Stack
Location: NB-77
Sample Number: UD-1,2,and 3 **Depth:** 4'-14'
Proj. No.: 3043051021 **Date:**

TRIAXIAL SHEAR TEST REPORT
MACTEC, INC.

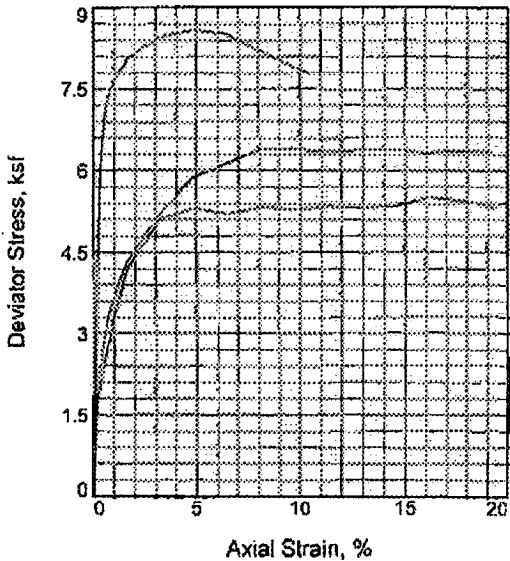
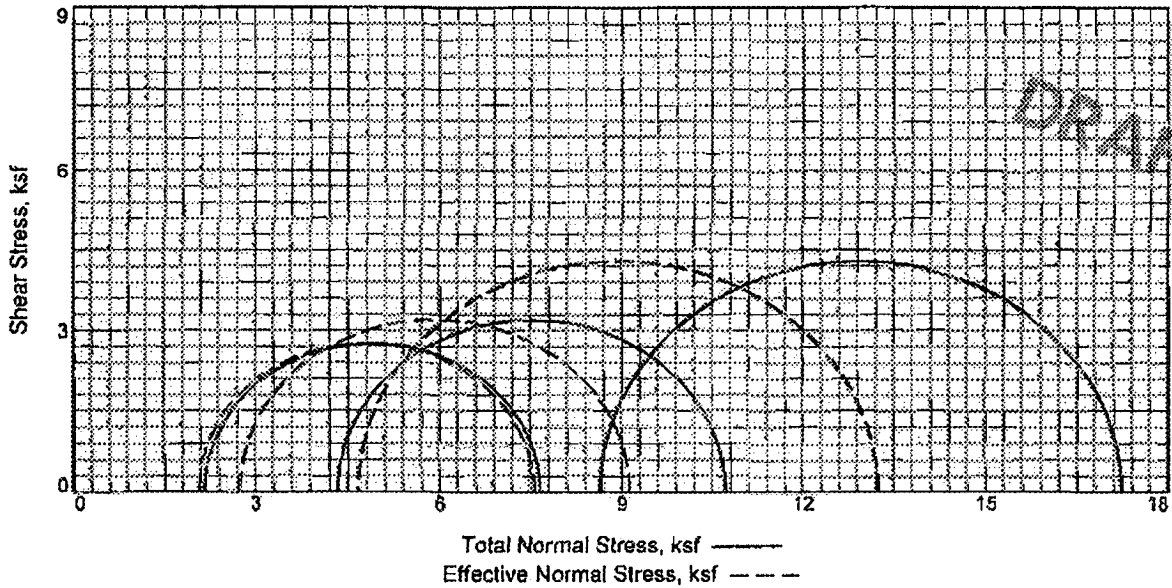
Tested By: Alexander

Checked By: Hamlett



Client: TVA
 Project: TVA Kingston - Proposed Gypsum Stack
 Location: NB-77 Depth: 4'-14' Sample Number: UD-1,2, and 3
 Project No.: 3043051021 Figure _____ MACTEC, INC.

Tested By: Alexander Checked By: Hamlett



Sample No.	1	2	3	
Initial	Water Content,	24.6	19.0	30.2
	Dry Density, pcf	99.2	105.0	87.2
	Saturation,	92.9	82.4	85.7
	Void Ratio	0.7298	0.6350	0.9695
	Diameter, in.	2.84	2.86	2.82
At Test	Height, in.	6.03	6.10	6.07
	Water Content,	31.8	27.7	40.8
	Dry Density, pcf	91.5	97.4	80.9
	Saturation,	100.0	100.0	100.0
	Void Ratio	0.8753	0.7627	1.1220
Strain rate, in./min.	Diameter, in.	2.92	2.93	2.89
	Height, in.	6.19	6.25	6.22
	Back Pressure, ksf	5.8	5.8	5.8
	Cell Pressure, ksf	7.9	10.1	14.4
	Fail. Stress, ksf	5.5	6.4	8.6
	Total Pore Pr., ksf	5.9	7.3	9.7
	Ult. Stress, ksf			
	Total Pore Pr., ksf			
	$\bar{\sigma}_1$ Failure, ksf	7.6	9.1	13.2
	$\bar{\sigma}_3$ Failure, ksf	2.1	2.7	4.7

Type of Test:
CU with Pore Pressures

Sample Type: undisturbed

Description: CU

Specific Gravity= 2.75

Remarks:

Figure _____

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

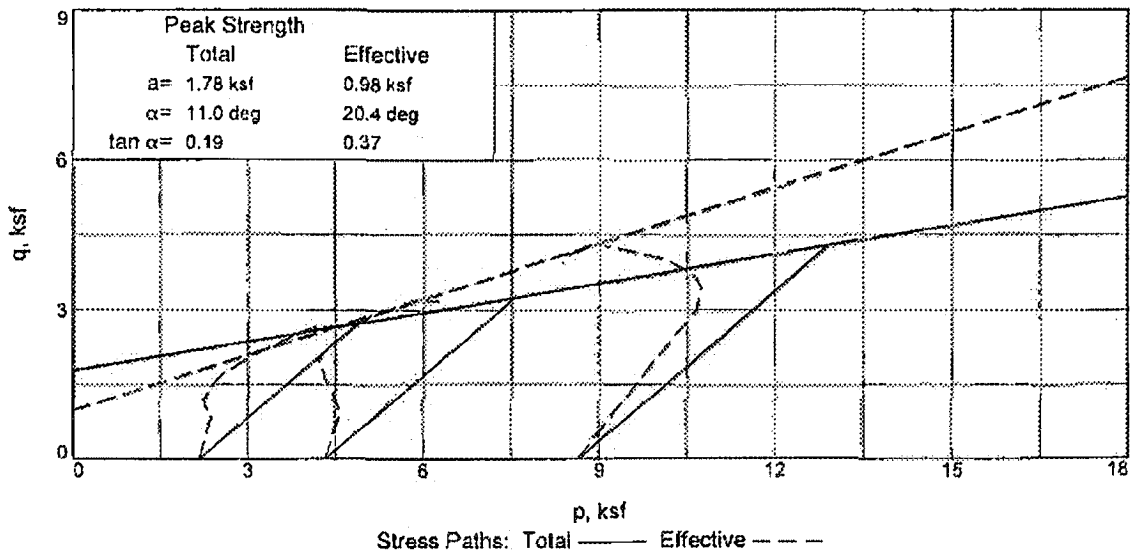
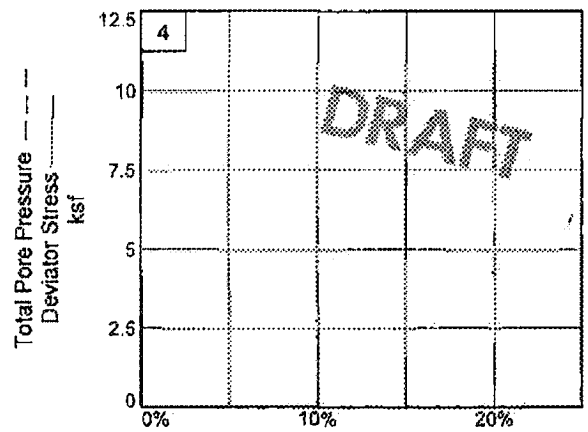
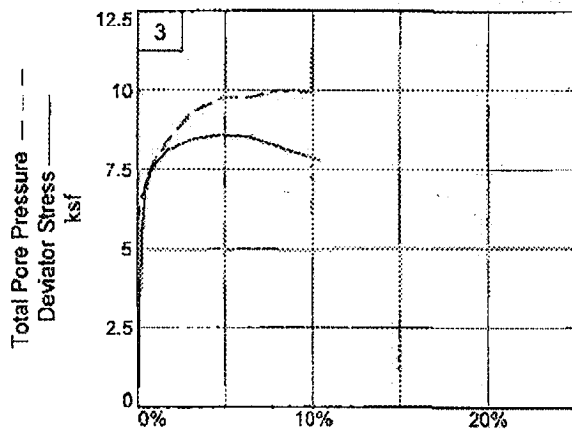
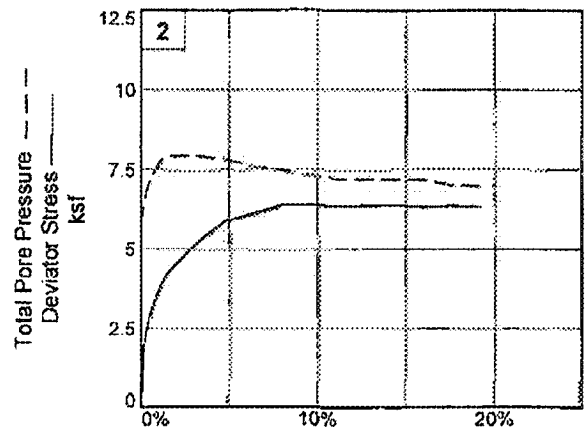
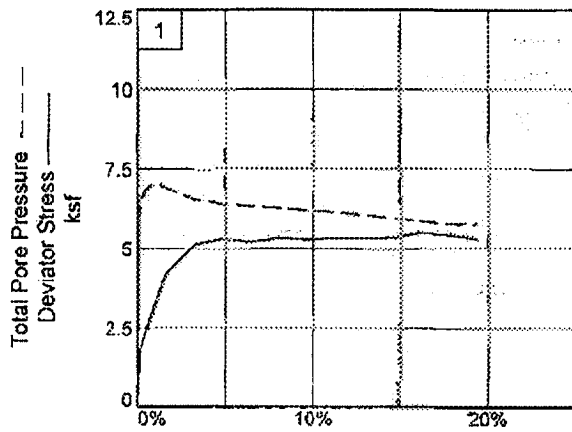
Location: NB-77

Sample Number: UD-1,2,and 3 **Depth:** 4'-14'

Proj. No.: 3043051021 **Date:**

TRIAXIAL SHEAR TEST REPORT
MACTEC, INC.

Tested By: Alexander _____ **Checked By:** Hamlett _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-77

Depth: 4'-14'

Sample Number: UD-1,2,and 3

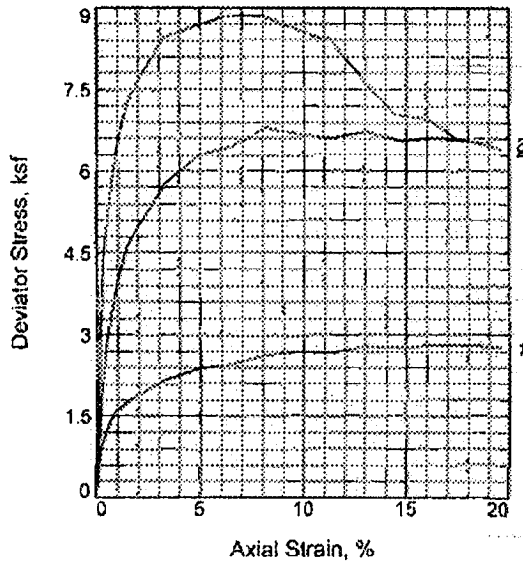
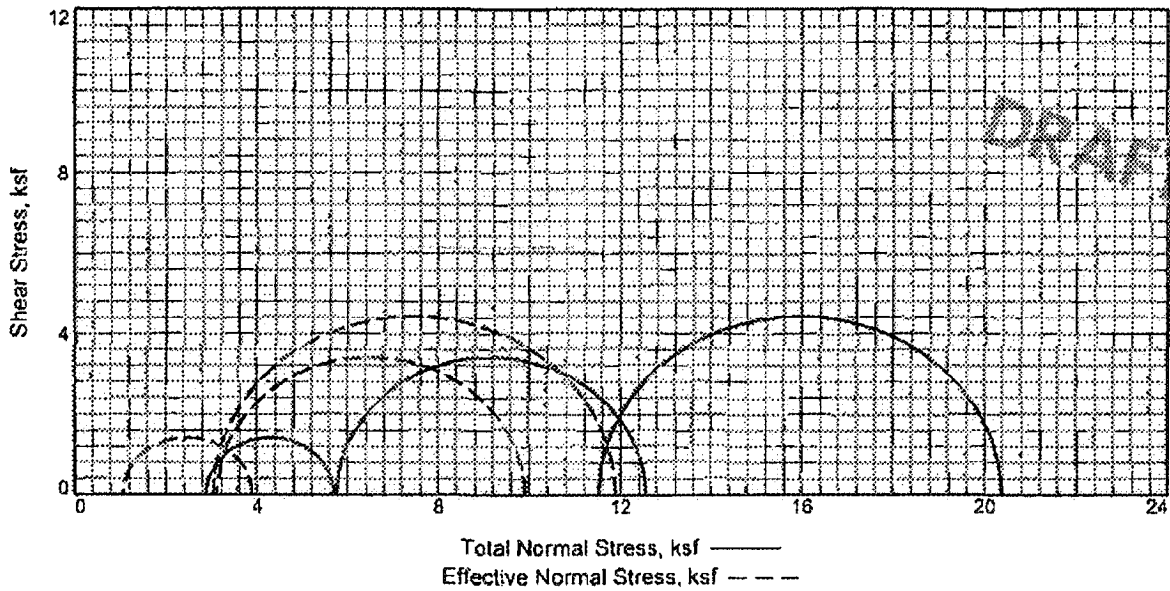
Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander

Checked By: Hamlett



Sample No.	1	2	3	
Initial	Water Content,	39.1	21.6	26.5
	Dry Density, pcf	81.0	100.1	94.0
	Saturation,	96.1	83.0	88.2
	Void Ratio	1.1197	0.7155	0.8266
	Diameter, in.	2.85	2.75	2.84
At Test	Height, in.	5.98	5.96	6.11
	Water Content,	47.3	31.4	34.4
	Dry Density, pcf	74.6	92.1	88.3
	Saturation,	100.0	100.0	100.0
	Void Ratio	1.3019	0.8641	0.9450
Test Parameters	Diameter, in.	2.93	2.83	2.90
	Height, in.	6.14	6.13	6.24
	Strain rate, in./min.	0.02	0.02	0.02
	Back Pressure, ksf	2.9	2.9	2.9
	Cell Pressure, ksf	5.8	8.6	14.4
Failure	Fail. Stress, ksf	2.8	6.8	8.8
	Total Pore Pr., ksf	4.7	5.5	11.4
	Ult. Stress, ksf			
Failure	Total Pore Pr., ksf			
	$\bar{\sigma}_1$ Failure, ksf	3.9	9.9	11.9
	$\bar{\sigma}_3$ Failure, ksf	1.1	3.1	3.0

Type of Test:
CU with Pore Pressures

Sample Type: undisturbed

Description: CU

Specific Gravity: 2.75

Remarks:

Figure _____

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-77

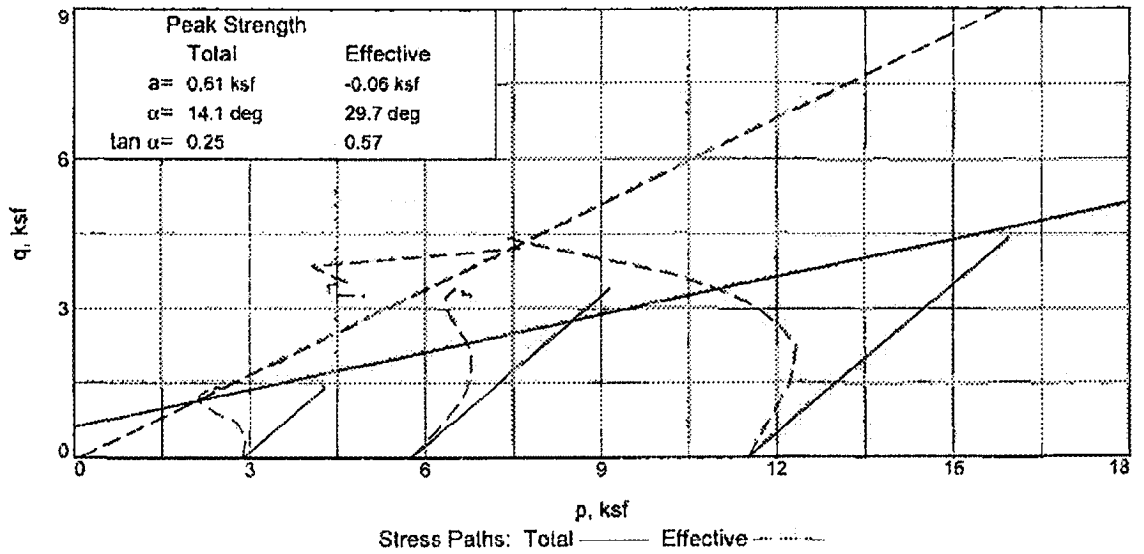
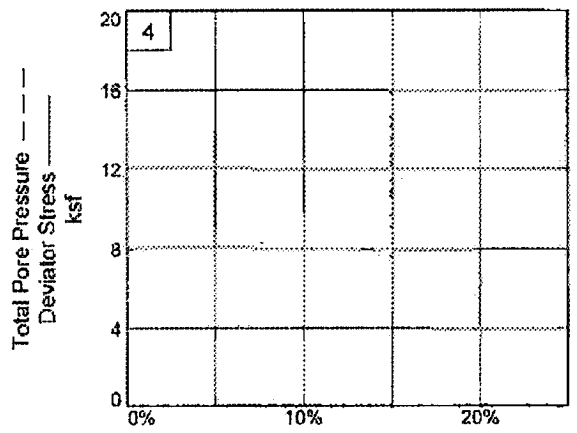
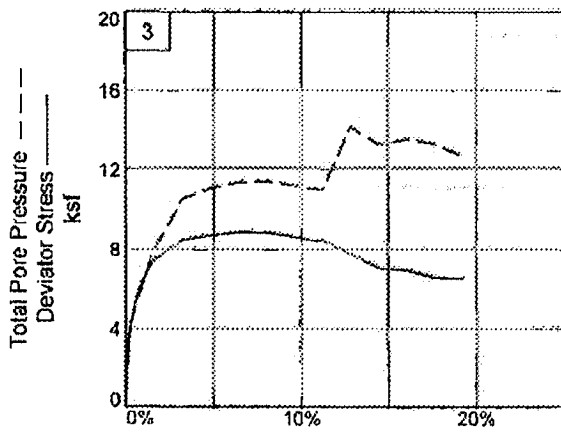
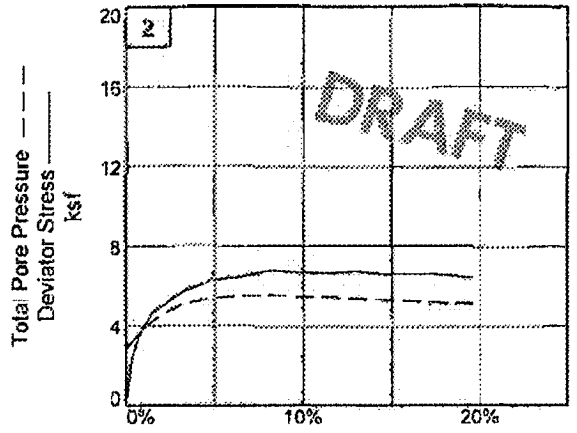
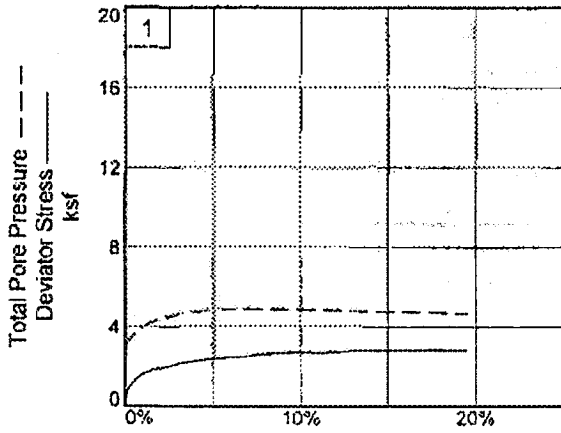
Sample Number: UD-4,5,and7 **Depth:** 15'-26'

Proj. No.: 3043051021 **Date:**

TRIAxIAL SHEAR TEST REPORT

MACTEC, INC.

Tested By: Alexander _____ **Checked By:** Hamlett _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-77

Depth: 15'-26'

Sample Number: UD-4,5,and7

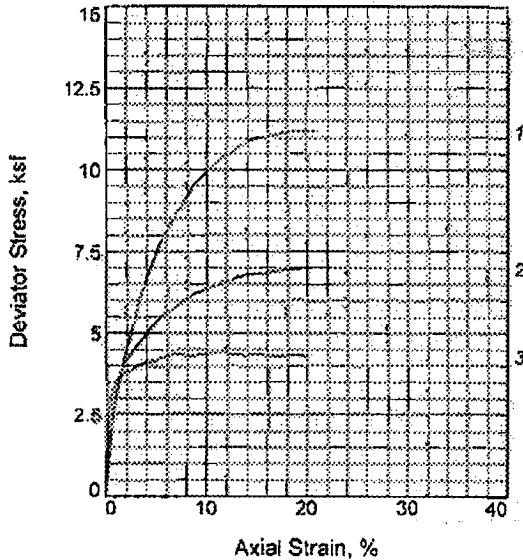
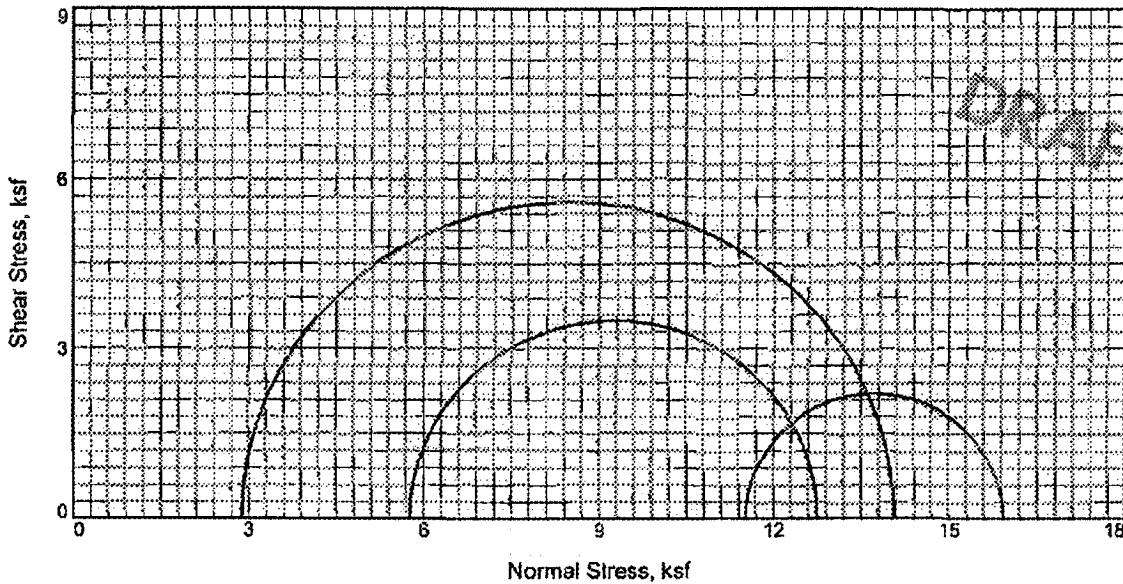
Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander

Checked By: Hamlett



Sample No.		1	2	3
Initial	Water Content,	21.2	21.1	39.8
	Dry Density, pcf	92.4	96.8	81.0
	Saturation,	68.0	75.0	97.6
	Void Ratio	0.8581	0.7739	1.1202
	Diameter, in.	2.87	2.87	2.83
At Test	Height, in.	5.73	5.82	6.01
	Water Content,	31.2	28.1	40.7
	Dry Density, pcf	92.4	96.8	81.0
	Saturation,	100.0	100.0	100.0
	Void Ratio	0.8581	0.7739	1.1202
Test Parameters	Diameter, in.	2.87	2.87	2.83
	Height, in.	5.73	5.82	6.01
	Strain rate, in./min.	0.02	0.02	0.02
	Back Pressure, ksf	2.9	2.9	2.9
	Cell Pressure, ksf	5.8	8.6	14.4
	Fail. Stress, ksf	11.2	7.0	4.4
	Ult. Stress, ksf			
	σ_1 Failure, ksf	14.1	12.8	15.9
	σ_3 Failure, ksf	2.9	5.8	11.5

Type of Test:
Unconsolidated Undrained
Sample Type: undisturbed
Description: UU

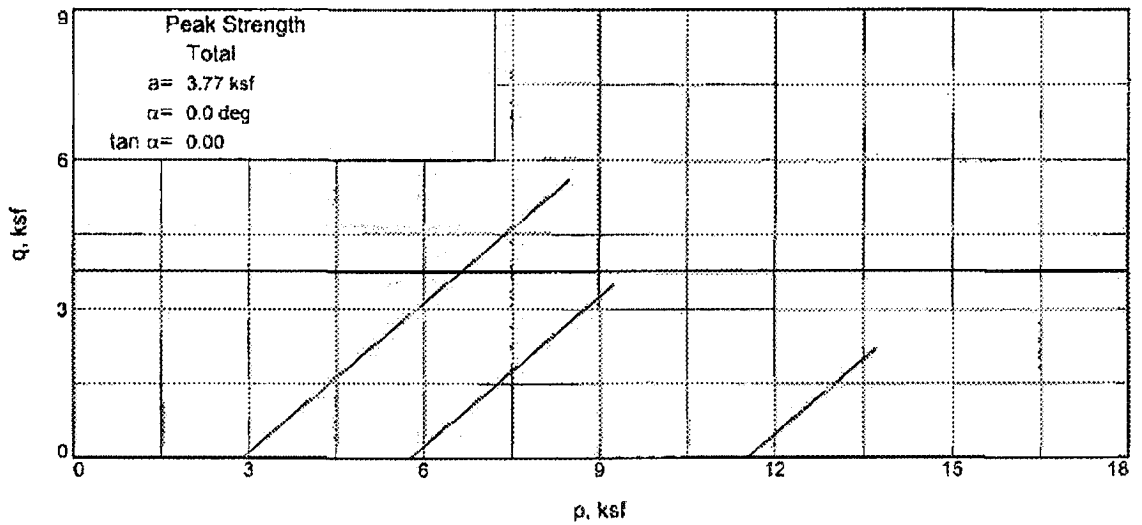
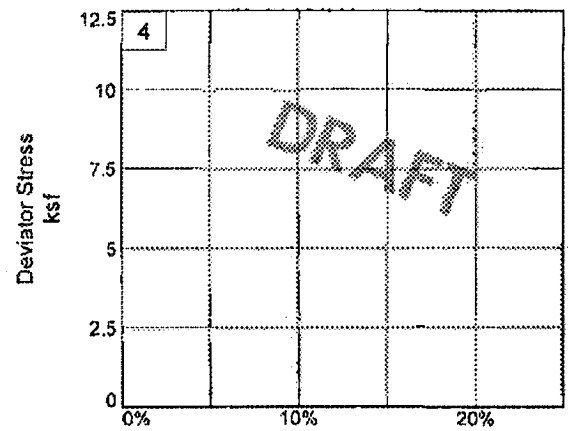
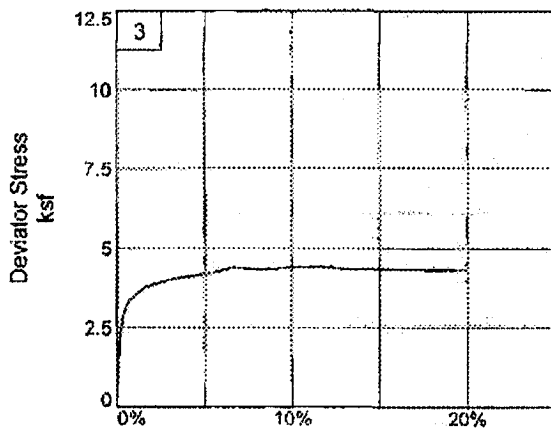
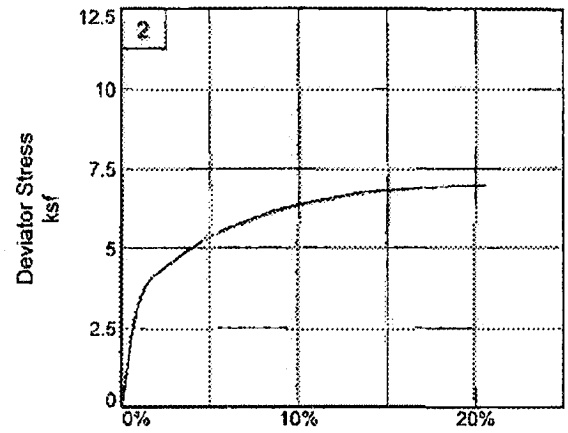
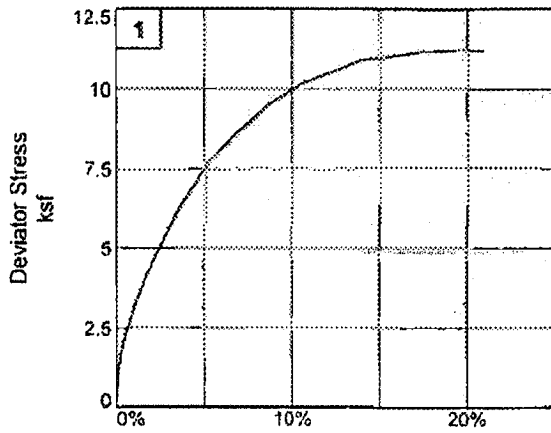
Specific Gravity= 2.75
Remarks:

Figure _____

Client: TVA
Project: TVA Kingston - Proposed Gypsum Stack
Location: NB-77
Sample Number: UD-4,5,and 7 **Depth:** 15'-26'
Proj. No.: 3043051021 **Date:**

TRIAxIAL SHEAR TEST REPORT
MACTEC, INC.

Tested By: Alexander _____ **Checked By:** Hamlett _____



Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Location: NB-77

Depth: 15'-26'

Sample Number: UD-4,5,and 7

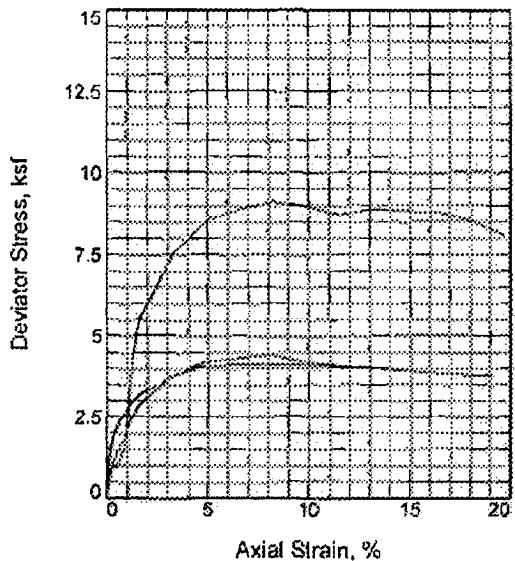
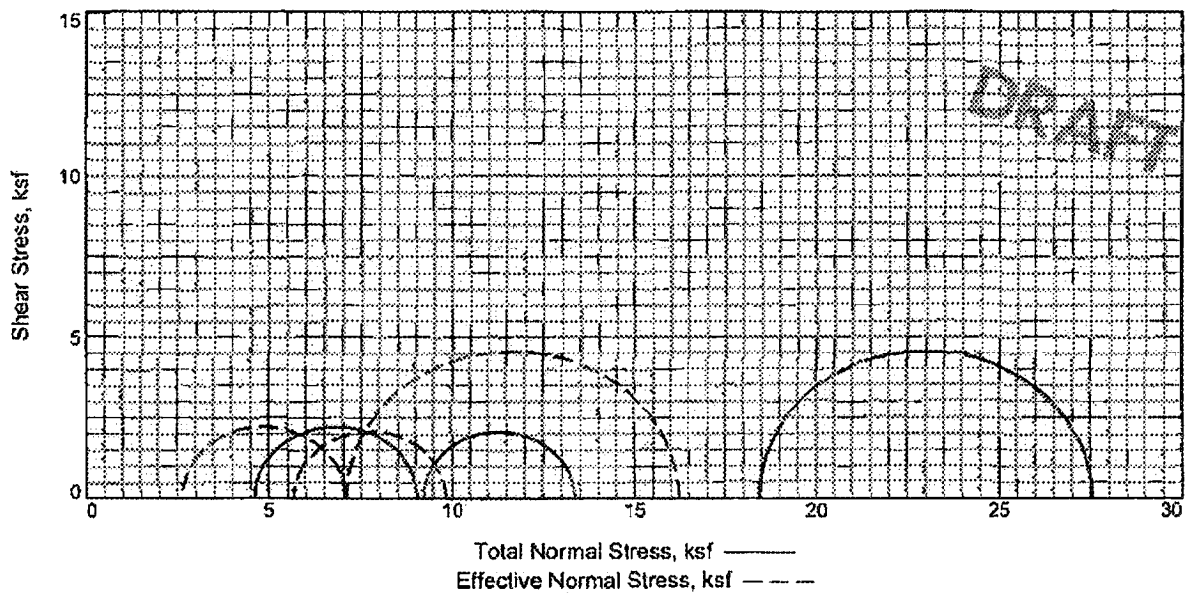
Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander

Checked By: Hamlett



Sample No.	1	2	3	
Initial	Water Content,	24.5	29.9	26.5
	Dry Density, pcf	97.3	90.8	90.0
	Saturation,	88.3	92.2	80.4
	Void Ratio	0.7639	0.8907	0.9068
	Diameter, in.	2.85	2.84	2.89
At Test	Height, in.	5.98	6.09	5.88
	Water Content,	33.0	39.4	40.3
	Dry Density, pcf	90.0	82.4	81.5
	Saturation,	100.0	100.0	100.0
	Void Ratio	0.9080	1.0840	1.1077
Strain rate, in./min.	Diameter, in.	2.93	2.94	2.99
	Height, in.	6.14	6.29	6.08
	Back Pressure, ksf	0.02	0.02	0.02
	Cell Pressure, ksf	2.9	2.9	2.9
	Fail. Stress, ksf	7.5	12.1	21.3
Ult. Stress, ksf	Total Pore Pr., ksf	4.4	4.1	9.1
	Cell Pressure, ksf	4.9	6.4	14.2
	Back Pressure, ksf	7.1	9.8	16.2
	Cell Pressure, ksf	2.6	5.7	7.1
	Cell Pressure, ksf			

Type of Test:
CU with Pore Pressures
Sample Type: undisturbed
Description:

Specific Gravity= 2.75

Remarks:

Figure _____

Client: TVA

Project: TVA Kingston - Proposed Gypsum Stack

Sample Number: NB-21A

Depth: 30'-38'

Proj. No.: 3043051021

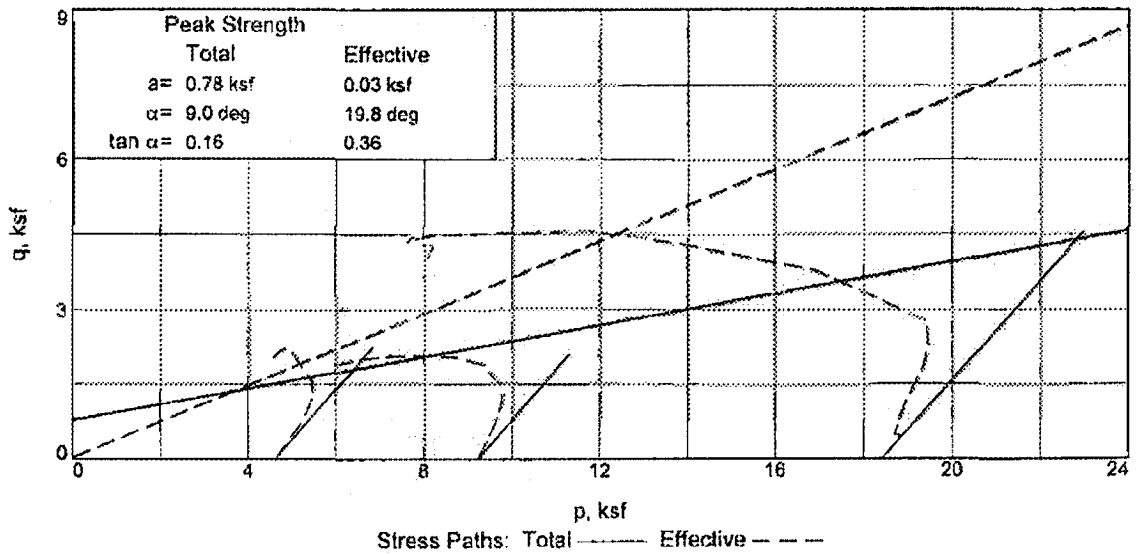
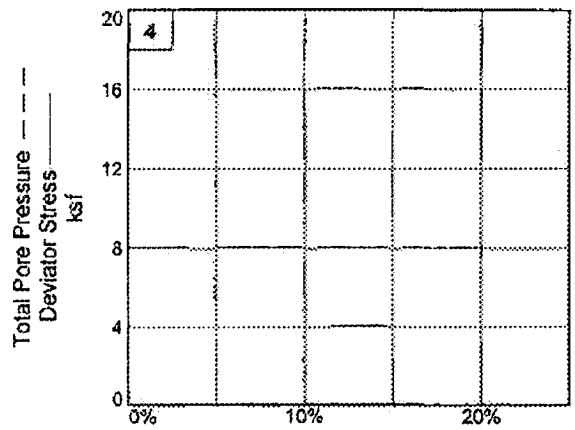
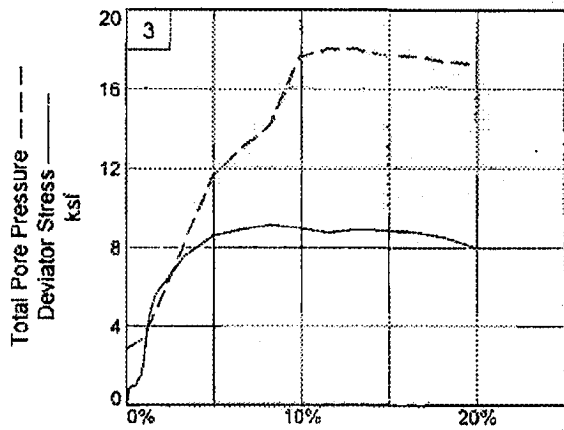
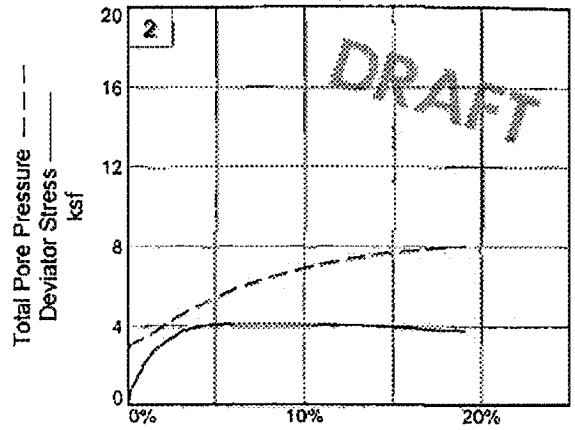
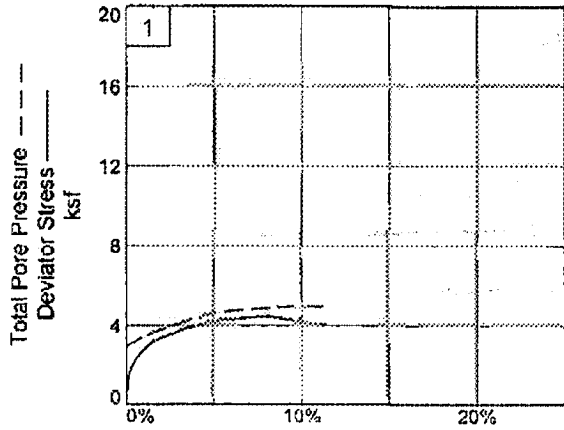
Date:

TRIAXIAL SHEAR TEST REPORT

MACTEC, INC.

Tested By: Alexander

Checked By: Hamlett



Client: TVA
 Project: TVA Kingston - Proposed Gypsum Stack
 Sample Number: NB-21A
 Project No.: 3043051021

Figure _____

MACTEC, INC.

Tested By: Alexander _____ Checked By: Hamlett _____