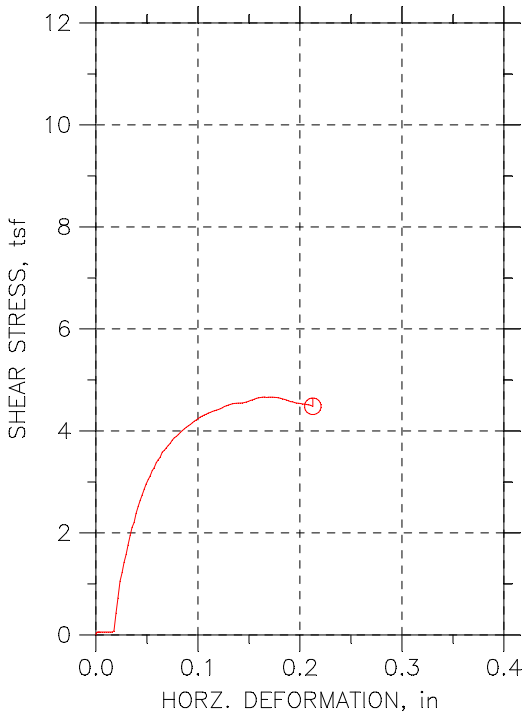
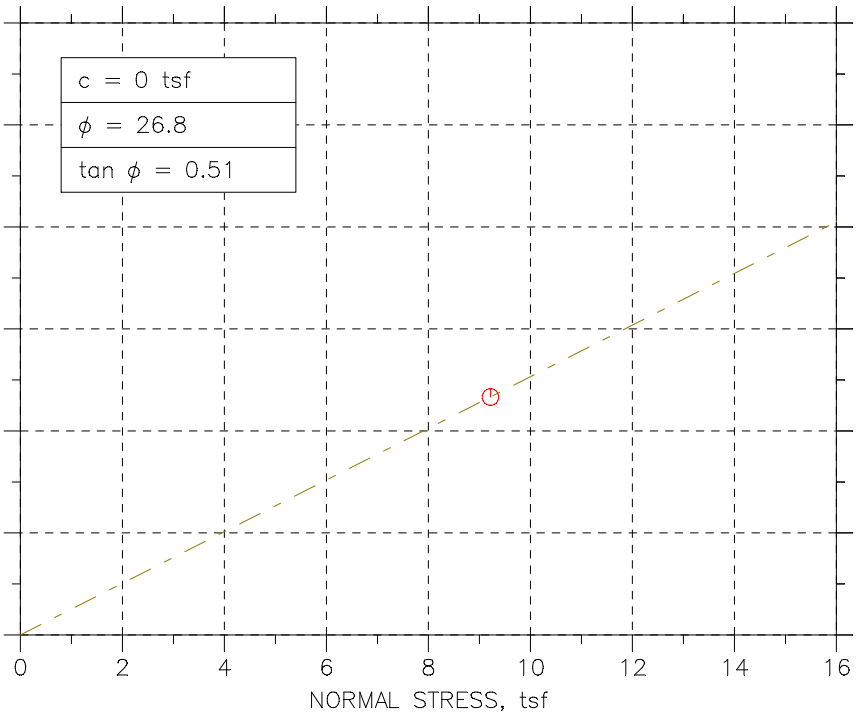
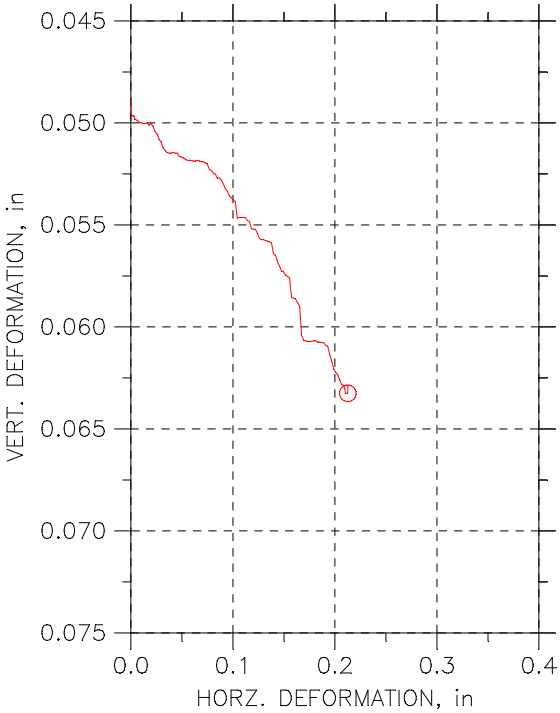
DIRECT SHEAR TEST REPORT







Symbol		⏲			
Test No.		102BOST2A			
Sample No.		OST-2			
Shape		Circular			
Initial	Dimension, in	2.5			
	Area, in^2	4.9087			
	Height, in	1.2161			
	Water Content, %	47.67			
	Dry Density, pcf	62.316			
	Saturation, %	83.25			
	Void Ratio	1.3342			
Consol. Height, in		1.1758			
Consol. Void Ratio		1.2568			
Final	Water Content, %	52.05			
	Dry Density, pcf	65.735			
	Saturation, %	100.00			
	Void Ratio	1.2128			
Normal Stress, tsf		9.2158			
Max. Shear Stress, tsf		4.6649			
Ult. Shear Stress, tsf		4.483			
Time to Failure, min		1040			
Disp. Rate, in/min		0.00017717			
Measured Specific Gravity		2.33			
Liquid Limit		NP			
Plastic Limit		NP			
Plasticity Index		NP			

Project: KINGSTON COAL	
Location: TN	
Project No.: 60095742	
Boring No.: 200 128 psi	
Sample Type: Remolded	

Description: FLYASH - GRAY - RECONSTITUTED FLY ASH FROM 200 SERIES SOIL BORINGS

Remarks: TEST PERFORMED AS PER ASTM D 3080

Fri, 05-JUN-2009 16:26:41

DIRECT SHEAR TEST DATA

Project: KINGSTON COAL
Boring No.: 200 128 psi
Sample No.: OST-2
Test No.: 102BOST2A

Location: TN
Tested By: BCM
Test Date: 02/09/09
Sample Type: Remolded

Project No.: 60095742
Checked By: WPQ
Depth: NA
Elevation: NA

Soil Description: FLYASH - GRAY - RECONSTITUTED FLY ASH FROM 200 SERIES SOIL BORINGS
Remarks: TEST PERFORMED AS PER ASTM D 3080

	Elapsed Time min	Vertical Stress tsf	Vertical Displacement in	Horizontal Stress tsf	Horizontal Displacement in
1	0.00	9.214	0.04894	0	0
2	66.82	9.218	0.04965	0.03307	0.0004318
3	75.06	9.218	0.04965	0.0441	0.0008156
4	82.51	9.217	0.04965	0.05276	0.001199
5	87.82	9.218	0.04965	0.05276	0.001583
6	90.70	9.218	0.04965	0.05433	0.002015
7	92.74	9.217	0.04968	0.05433	0.002399
8	96.27	9.217	0.04968	0.05433	0.002783
9	99.82	9.213	0.04968	0.05433	0.003166
10	102.34	9.22	0.04981	0.05433	0.00355
11	104.96	9.218	0.04981	0.05433	0.003982
12	119.73	9.218	0.04987	0.05512	0.005949
13	127.83	9.22	0.04997	0.05512	0.007916
14	138.08	9.215	0.05	0.05433	0.009883
15	149.33	9.213	0.05003	0.05433	0.01185
16	164.76	9.219	0.05003	0.05433	0.01382
17	176.02	9.212	0.05	0.05433	0.01578
18	185.06	9.213	0.0501	0.07638	0.01775
19	200.37	9.216	0.05003	0.4276	0.01972
20	213.96	9.216	0.05016	0.7252	0.02169
21	231.20	9.216	0.05042	1.054	0.02365
22	240.89	9.215	0.05055	1.223	0.02562
23	252.85	9.215	0.0508	1.42	0.02759
24	263.24	9.216	0.05093	1.576	0.02955
25	276.08	9.216	0.05122	1.762	0.03152
26	289.73	9.216	0.05135	1.947	0.03349
27	302.16	9.216	0.05145	2.106	0.03545
28	310.13	9.215	0.05148	2.204	0.03742
29	325.06	9.216	0.05148	2.38	0.03939
30	337.26	9.216	0.05145	2.516	0.04136
31	348.35	9.216	0.05148	2.63	0.04332
32	359.61	9.216	0.05148	2.741	0.04529
33	372.73	9.215	0.05164	2.857	0.04726
34	384.79	9.216	0.05167	2.957	0.04922
35	395.87	9.216	0.0517	3.044	0.05119
36	405.31	9.216	0.05177	3.116	0.05316
37	419.83	9.216	0.05183	3.221	0.05512
38	427.58	9.216	0.05183	3.274	0.05709
39	443.22	9.216	0.05183	3.374	0.05906
40	453.38	9.216	0.05187	3.432	0.06103
41	462.01	9.216	0.05187	3.485	0.06299
42	480.93	9.216	0.05183	3.586	0.06501
43	487.07	9.216	0.05187	3.617	0.06697
44	497.29	9.216	0.0519	3.666	0.06894
45	507.72	9.216	0.0519	3.715	0.07091
46	517.99	9.216	0.05196	3.758	0.07288
47	531.91	9.216	0.05199	3.816	0.07484
48	544.83	9.216	0.05228	3.863	0.07681
49	552.06	9.216	0.05232	3.891	0.07878
50	563.06	9.215	0.05248	3.928	0.08074
51	575.97	9.216	0.05251	3.97	0.08271
52	587.31	9.216	0.0527	4.006	0.08468
53	598.97	9.215	0.0527	4.041	0.08665
54	610.29	9.215	0.0528	4.072	0.08861
55	620.67	9.216	0.05299	4.099	0.09058
56	632.02	9.216	0.05322	4.125	0.09255
57	644.86	9.217	0.05335	4.16	0.09451
58	655.76	9.216	0.05357	4.189	0.09648
59	666.61	9.215	0.05367	4.217	0.09845
60	676.91	9.216	0.05376	4.244	0.1004
61	688.48	9.216	0.05386	4.272	0.1024
62	697.95	9.216	0.05467	4.292	0.1043
63	708.62	9.216	0.05463	4.312	0.1063
64	718.70	9.216	0.05463	4.33	0.1083
65	731.14	9.216	0.05463	4.351	0.1102
66	739.73	9.216	0.05463	4.362	0.1122
67	753.68	9.216	0.05479	4.381	0.1142
68	764.42	9.215	0.05483	4.394	0.1162
69	774.28	9.216	0.05518	4.407	0.1181
70	784.62	9.216	0.05521	4.421	0.1201
71	795.68	9.216	0.05521	4.436	0.1221
72	807.06	9.216	0.05541	4.455	0.124
73	820.03	9.216	0.05566	4.478	0.126
74	829.90	9.216	0.05573	4.493	0.128
75	840.82	9.216	0.05573	4.509	0.13
76	850.90	9.216	0.05576	4.521	0.1319
77	863.86	9.215	0.05579	4.532	0.1339
78	873.93	9.216	0.05582	4.538	0.1359
79	883.56	9.215	0.05589	4.54	0.1378
80	898.16	9.216	0.0564	4.544	0.1398
81	905.20	9.216	0.0565	4.546	0.1418
82	919.61	9.216	0.05682	4.548	0.1437
83	931.27	9.215	0.05701	4.557	0.1457
84	941.84	9.216	0.05727	4.568	0.1477
85	950.77	9.215	0.0573	4.578	0.1496
86	966.03	9.216	0.05746	4.597	0.1516

87	972.97	9.216	0.05753	4.608	0.1536
88	984.39	9.216	0.05759	4.625	0.1555
89	998.43	9.216	0.05856	4.639	0.1575
90	1009.14	9.216	0.05859	4.649	0.1595
91	1017.14	9.216	0.05862	4.655	0.1614
92	1025.63	9.216	0.05882	4.66	0.1634
93	1040.03	9.216	0.05898	4.665	0.1654
94	1048.23	9.216	0.06042	4.654	0.1673
95	1060.35	9.216	0.06065	4.661	0.1693
96	1073.07	9.216	0.06068	4.662	0.1713
97	1081.02	9.216	0.06071	4.661	0.1732
98	1092.97	9.215	0.06071	4.659	0.1752
99	1103.50	9.216	0.06071	4.654	0.1772
100	1113.40	9.215	0.06068	4.648	0.1791
101	1126.92	9.216	0.06068	4.639	0.1811
102	1139.07	9.216	0.06075	4.626	0.1831
103	1144.80	9.215	0.06075	4.616	0.185
104	1155.49	9.216	0.06078	4.605	0.187
105	1168.99	9.216	0.06078	4.59	0.189
106	1181.34	9.215	0.06091	4.573	0.1909
107	1186.91	9.216	0.06094	4.57	0.193
108	1200.77	9.215	0.06136	4.555	0.1949
109	1211.81	9.216	0.06168	4.546	0.1969
110	1221.55	9.216	0.06207	4.54	0.1989
111	1234.32	9.216	0.06223	4.535	0.2008
112	1243.61	9.216	0.06235	4.526	0.2028
113	1254.21	9.215	0.06261	4.526	0.2048
114	1269.54	9.216	0.06284	4.518	0.2067
115	1277.33	9.215	0.06287	4.512	0.2087
116	1289.47	9.215	0.06326	4.501	0.2107
117	1298.12	9.216	0.06326	4.483	0.2126