APPENDIX 3.5-L

Results of Consolidated Undrained Triaxial Compression and Direct Shear Testing, STS Consultants Ltd., 1988

STS Consultants Ltd.
Consulting Engineers

Laboratory Testing

Kenicott Geotechnical Project

Foth & VanDyke

REPORT

STS Consultants Ltd.
Consulting Engineers

111 Pfingsten Road
Northbrook, Illinois 60062
(312) 272-6520

March 15. 1988

Mr. Robert Rouse
Foth & VanDyke
2737 South Ridge Road
PO Box 19012
Green Bay. WI 54307-9012

RE: Laboratory Testing Pertaining to the Kenicott Geotechnical Project -- STS Project No. 25331

Dear Mr. Rouse:

Please find enclosed three (3) copies of laboratory test results pertaining to the above referenced testing program.

Included in our report is a discussion of the scope of services provided by STS Consultants. a description of the laboratory test equipment and testing procedures utilized throughout the testing program. a discussion of the laboratory testing results and a summarization of all laboratory testing data including graphs where applicable.

We are pleased to have been of service to you on this particular project. Should you have any questions or comments pertaining to the laboratory test data presented. the contents of this report. or if we may be of further assistance to you in any other way. please do not hesitate to contact us.

Respectfully.

STS CONSULTANTS. LTD.

William P. Quinn
Laboratory Manager

Charles W. Pfingsten. P.E.
Senior Principal Engineer

WPQ/nt
enc.

Scope of Services

STS Consultants was to provide Foth & Van Dyke with laboratory test data obtained by the performance of consolidated undrained triaxial compression and direct shear tests. The tests were performed on samples delivered to our Northbrook testing facility on February 24. 1988. The samples were in the form of 3 inch Shelby tube samples that had been extruded prior to their delivery at the STS laboratory. All selected samples and testing pressures including consolidating stresses for triaxial tests and normal loads for direct shear tests were as instructed by Foth & Van Dyke.

Testing Procedures

The consolidated isotropically undrained triaxial tests were performed utilizing standard triaxial equipment. This equipment consists of a triaxial compression cell adapted to test 3 inch diameter shelby tube specimen. a pore pressure panel used to regulate both cell and back pressures and having a pressure transducer which monitors pore water pressures throughout the test. and a triaxial loader with load cell to provide vertical loads to shear the test specimens.

The initial phase of testing was to encase each of the specimens in a flexible rubber membrane and seal it into the triaxial chamber. Once sealed in the chamber. each specimen was backpressure saturated. This was accomplished by providing a pressure differential of 0.15 ksc (kilograms per square centimeter) between the cell pressure and the backpressure. The pressures were simultaneously and incrementally increased until saturating pressures of 4.15 ksc cell pressure and 4.00 ksc backpressure were attained. The specimen saturation was considered complete when a Skempton's pore pressure B parameter of 0.95 or greater was attained. This B parameter is the ratio of an increase in pore water pressure to a corresponding and simultaneous increase in cell confining pressure.

Once full saturation had been attained. the confining pressure was increased to a predetermined stress to provide a consolidating stress to the test specimen. The valves to the specimen were then opened and the pore fluids were allowed to collect in a calibrated burette. Volumetric measurements of the pore fluids were periodically made until full specimen consolidation had been completed. This was determined by the stabilization of the pore fluid volumetric measurements. Consolidating stresses of 0.70. 2.11 and 3.52 ksc (10. 30 and 50 psi. respectively) were utilized throughout the testing program.

Once full specimen consolidation had been attained. the final stage was to shear the test specimen in the triaxial loader. During the loading process. a strain rate of 0.100 millimeters per minute was utilized. For this phase of testing. deformation and

pore water pressure measurements were recorded at regular time intervals. The procedures outlined previously were in general conformance with those procedures outlined in the Corps of Engineers Testing Manual EM110-2-1906, Appendix X.

The direct shear test was performed utilizing a Wykeham Farrance direct shear device. The test was performed as a consolidated drained direct shear test, utilizing one normal load per test as per instructions received from Foth & Van Dyke. A total of 3 tests were performed with normal loads of 0.7, 2.11 and 3.52 ksc (10, 30 and 50 psi). Strain rates of the tests were determined by determining the time of failure as 50 x T_{50} where T_{50} was the time required for specimen to achieve 50% of consolidation under the normal force. It is assumed that this rate of strain was sufficient to allow full drainage throughout the loading of the test specimen although the tests are normally performed utilizing 3 separate points, to eliminate assumptions.

During the setup of the direct shear specimens, a small section of the undisturbed sample was trimmed to approximately a 2 centimeter height. This was accomplished by trimming the specimen to fit into the direct shear shearing box. A normal force was then applied to the top of the test specimen and the consolidation of the specimen was recorded. During this time, water was used to fully inundate the test specimen in the shear box. When the consolidation of the test specimen had been completed, the top of the shear box was raised approximately 1/10 inch and a horizontal shearing force was applied to the shear box until the specimen was completely sheared. During this time, horizontal load, horizontal and vertical deformation readings were recorded. The test was performed in general conformance with those procedures outlined in ASTM D-3080, "Direct Shear Test of Soils Under Consolidated Drained Conditions".

Laboratory Test Results

The samples delivered to the STS laboratory for testing consisted of mostly silt material. Three of the four triaxial tests consisted of 3 separate points. The test utilizing specimens labeled S5, 45-47 feet consisted of two specimens. A third specimen originally scheduled for testing consisted mostly of sand. We were unable to obtain a suitable specimen for testing. The condition of all the specimens indicated some sample disturbance by the gouges on the specimen sides. Also moisture content and dry density test results varied from 1 to 2 percent, with samples used for the same triaxial test.

The direct shear test performed on S4, 31.5 to 32.5 feet indicates a very high shear stress. The sample initially was very dense and slightly dessicated. We recommend additional direct shear points be performed to determine a ϕ angle passing through the origin.

A summarization of all laboratory testing including graphs where applicable is attached to this report.

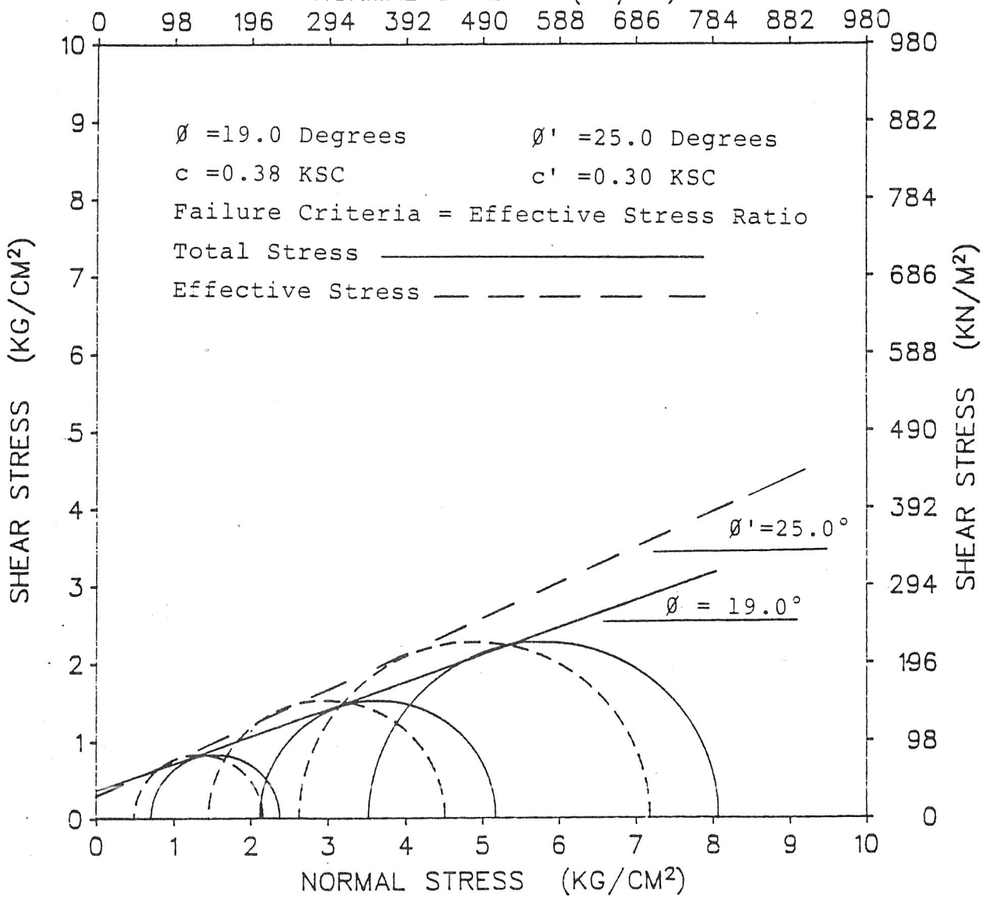
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring:	Sample: S-1	Depth: 25-27
Boring:	Sample: S-1	Depth: 27-29
Boring:	Sample: S-1	Depth: 23-25

MOHR ENVELOPE



Sigma 3 = 0.7 ksc
Sigma 3 = 2.1 ksc
Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

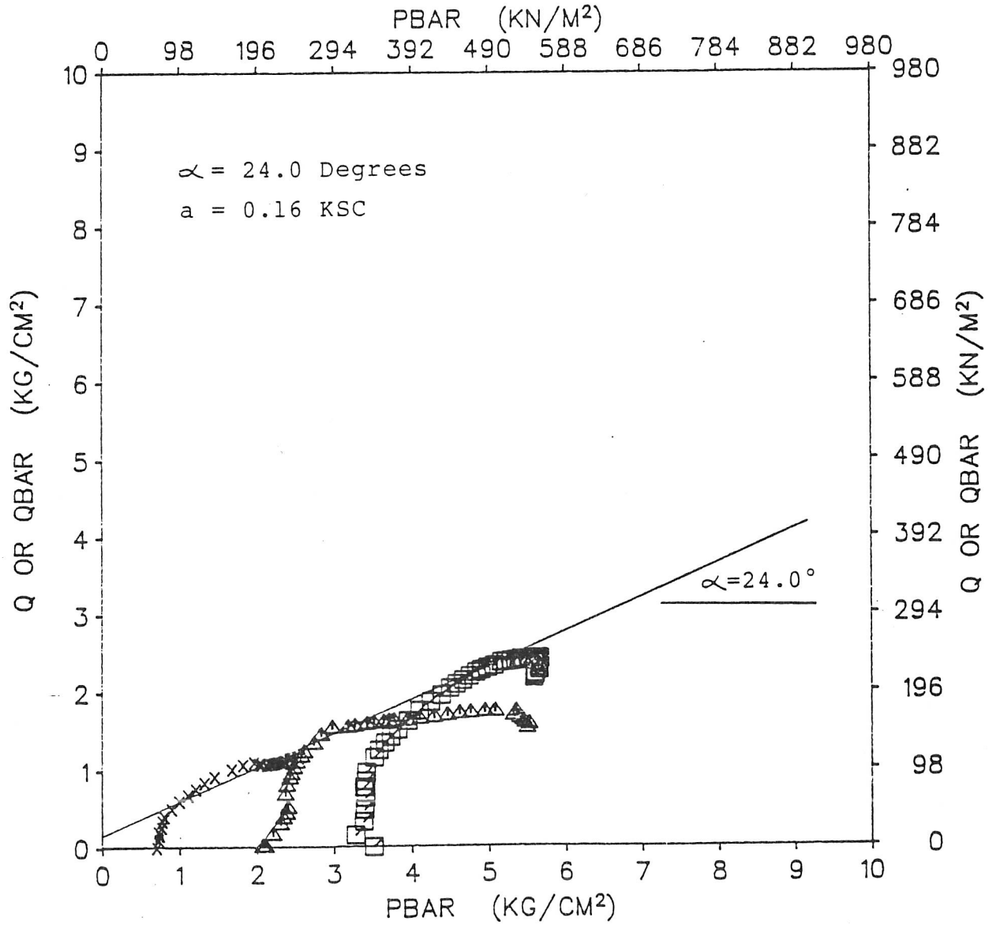
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring:	Sample: S-1	Depth: 25-27
Boring:	Sample: S-1	Depth: 27-29
Boring:	Sample: S-1	Depth: 23-25

STRESS PATH PLOT



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
☐ Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

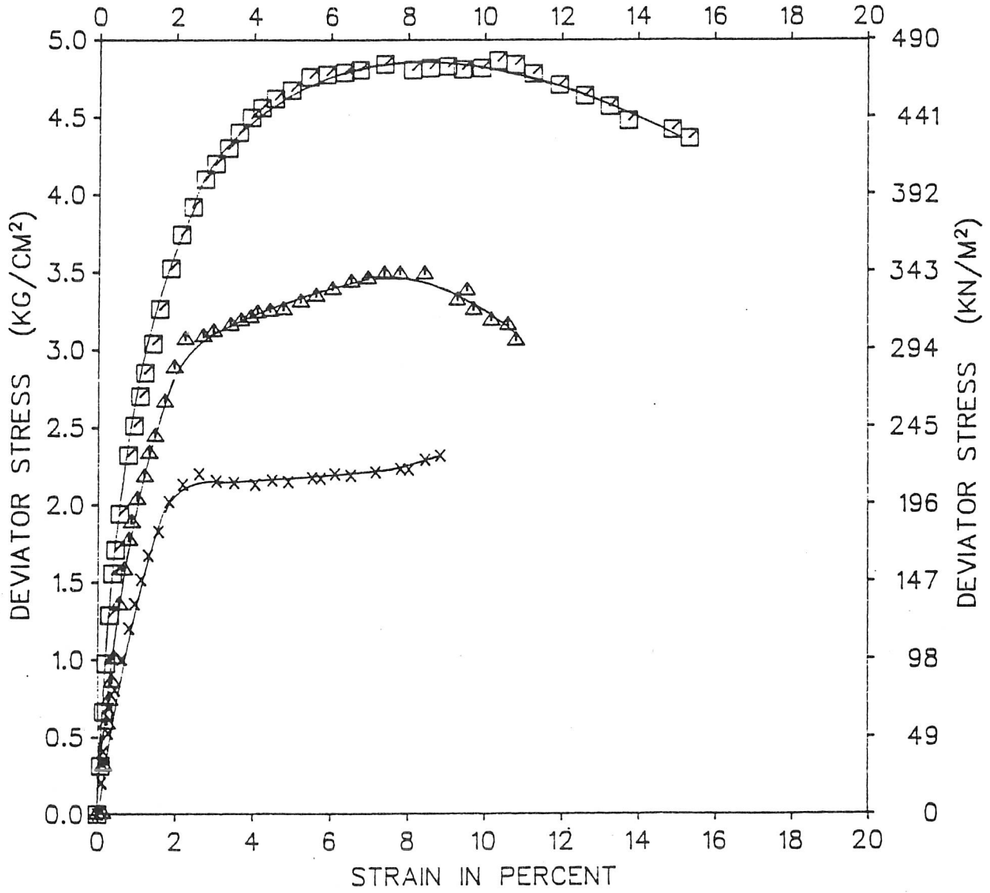
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring:	Sample: S-1	Depth: 25-27
Boring:	Sample: S-1	Depth: 27-29
Boring:	Sample: S-1	Depth: 23-25

DEVIATOR STRESS vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
⊡ Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

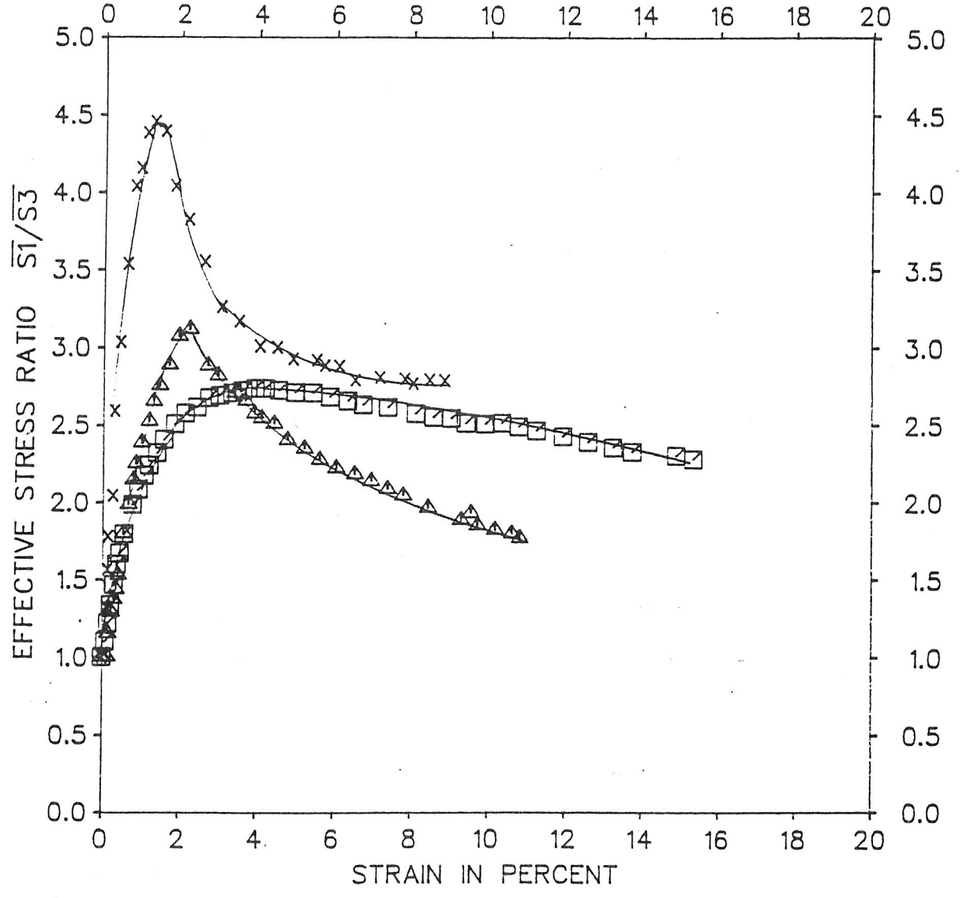
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring:	Sample: S-1	Depth: 25-27
Boring:	Sample: S-1	Depth: 27-29
Boring:	Sample: S-1	Depth: 23-25

EFFECTIVE STRESS RATIO vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
⊡ Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

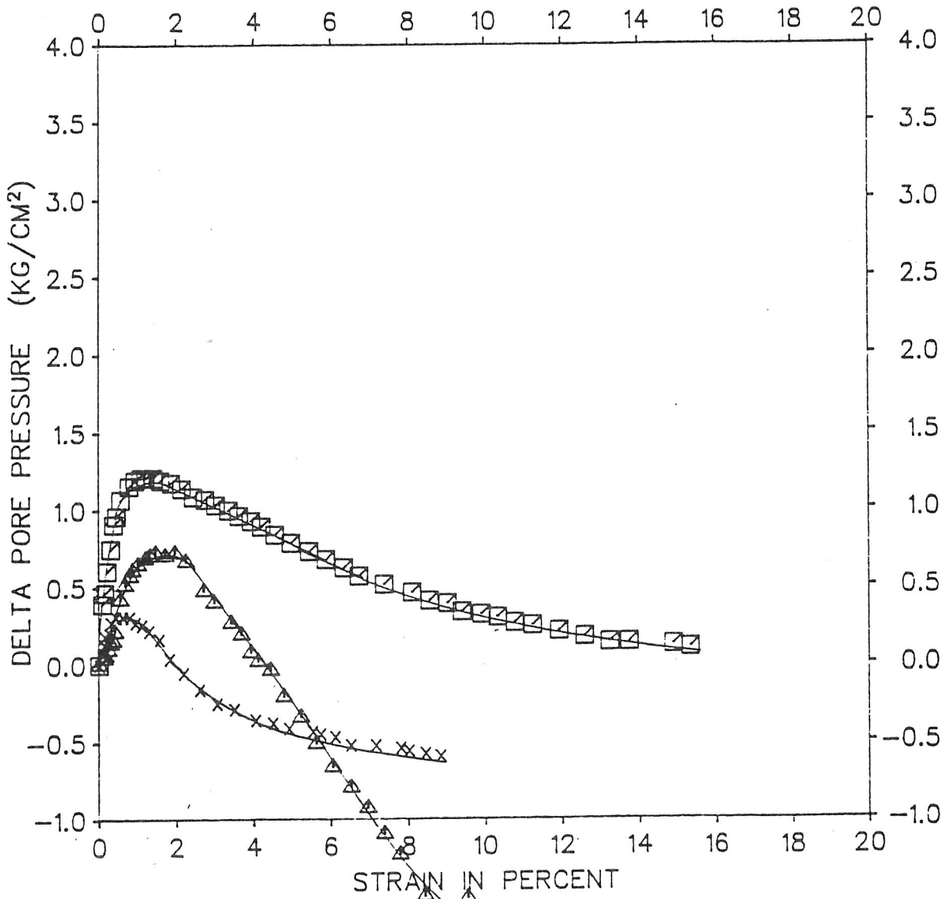
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring:	Sample: S-1	Depth: 25-27
Boring:	Sample: S-1	Depth: 27-29
Boring:	Sample: S-1	Depth: 23-25

DELTA PORE PRESSURE vs STRAIN



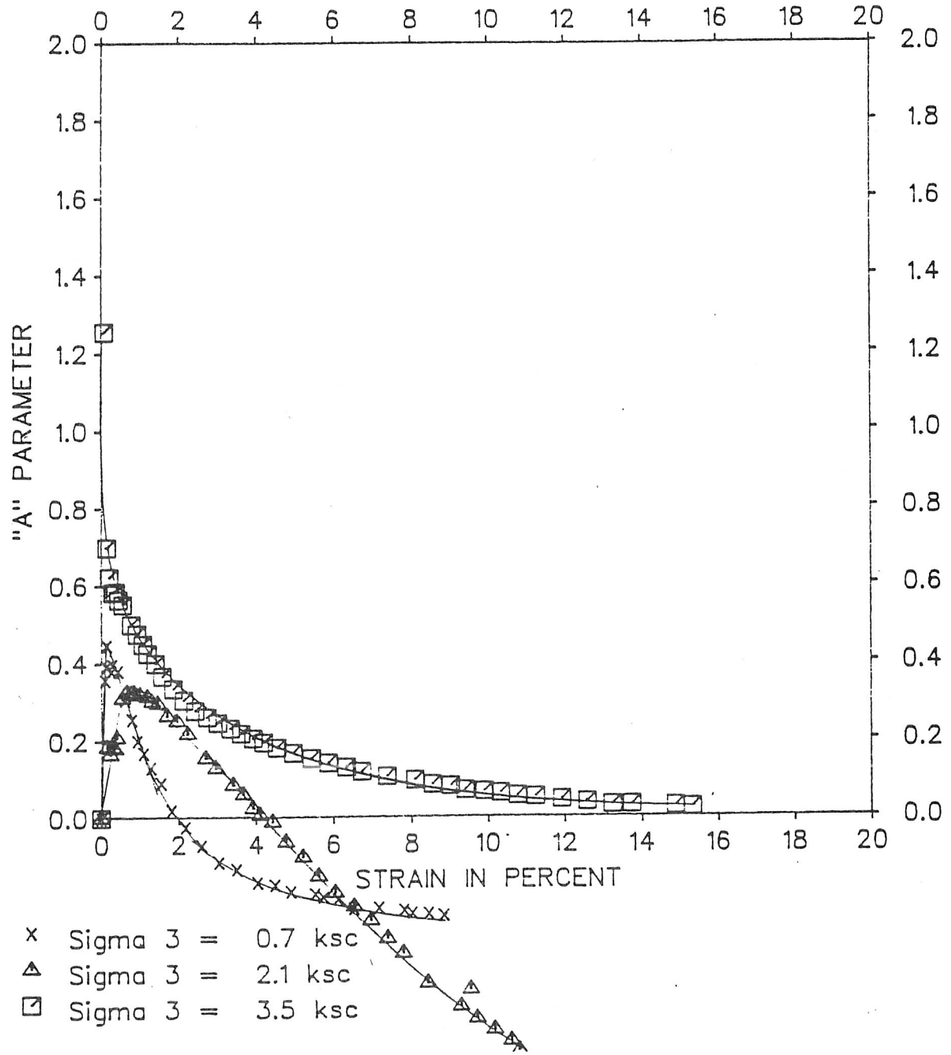
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring:	Sample: S-1	Depth: 25-27
Boring:	Sample: S-1	Depth: 27-29
Boring:	Sample: S-1	Depth: 23-25

"A" PARAMETER vs STRAIN



BORING:
SAMPLE: S-1
DEPTH : 25-27

STS JOB NO: 25331
EFF. SIGMA3: 0.700 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	3800.	0.00	0.70	0.70	0.70	0.70	0.0	0.00	1.00	0.70	0.70	0.00	0.00
7.7	0.16	3804.	0.07	0.90	0.70	0.83	0.63	0.1	0.20	1.32	0.80	0.73	0.10	0.36
12.3	0.20	3805.	0.13	1.02	0.70	0.90	0.57	0.1	0.32	1.56	0.86	0.74	0.16	0.39
15.4	0.22	3805.	0.18	1.10	0.70	0.92	0.52	0.1	0.40	1.78	0.90	0.72	0.20	0.44
20.0	0.40	3810.	0.20	1.22	0.70	1.03	0.50	0.3	0.52	2.04	0.96	0.76	0.26	0.38
26.1	0.44	3811.	0.27	1.38	0.70	1.11	0.43	0.3	0.68	2.59	1.04	0.77	0.34	0.39
30.7	0.66	3817.	0.30	1.50	0.70	1.20	0.39	0.4	0.80	3.04	1.10	0.80	0.40	0.38
38.3	0.92	3823.	0.30	1.70	0.70	1.40	0.39	0.6	1.00	3.54	1.20	0.90	0.50	0.30
46.0	1.19	3830.	0.30	1.90	0.70	1.60	0.39	0.8	1.20	4.04	1.30	1.00	0.60	0.25
52.1	1.41	3836.	0.27	2.06	0.70	1.79	0.43	0.9	1.36	4.16	1.38	1.11	0.68	0.20
58.3	1.65	3842.	0.25	2.22	0.70	1.96	0.45	1.1	1.52	4.38	1.46	1.21	0.76	0.17
64.4	1.93	3850.	0.22	2.37	0.70	2.16	0.48	1.3	1.67	4.46	1.54	1.32	0.84	0.13
70.5	2.33	3860.	0.16	2.53	0.70	2.36	0.54	1.6	1.83	4.39	1.61	1.45	0.91	0.09
78.2	2.73	3871.	0.04	2.72	0.70	2.68	0.66	1.8	2.02	4.04	1.71	1.67	1.01	0.02
82.8	3.27	3885.	-0.05	2.83	0.70	2.89	0.75	2.2	2.13	3.83	1.77	1.82	1.07	-0.03
85.8	3.90	3902.	-0.16	2.90	0.70	3.06	0.86	2.6	2.20	3.55	1.80	1.96	1.10	-0.07
84.3	4.56	3920.	-0.25	2.85	0.70	3.10	0.95	3.1	2.15	3.26	1.78	2.03	1.08	-0.12
84.3	5.24	3938.	-0.29	2.84	0.70	3.13	0.99	3.5	2.14	3.17	1.77	2.06	1.07	-0.13
84.3	6.05	3960.	-0.36	2.83	0.70	3.19	1.06	4.1	2.13	3.01	1.76	2.12	1.06	-0.17
85.8	6.71	3979.	-0.38	2.86	0.70	3.23	1.08	4.5	2.16	3.00	1.78	2.16	1.08	-0.17
85.8	7.33	3996.	-0.41	2.85	0.70	3.26	1.11	4.9	2.15	2.93	1.77	2.19	1.07	-0.19
87.4	8.25	4022.	-0.43	2.87	0.70	3.30	1.13	5.5	2.17	2.92	1.79	2.22	1.09	-0.20
87.4	8.56	4031.	-0.45	2.87	0.70	3.32	1.15	5.7	2.17	2.89	1.78	2.23	1.08	-0.21
88.9	9.12	4047.	-0.47	2.90	0.70	3.36	1.17	6.1	2.20	2.88	1.80	2.27	1.10	-0.21
88.9	9.72	4065.	-0.52	2.89	0.70	3.41	1.22	6.5	2.19	2.79	1.79	2.31	1.09	-0.24
90.4	10.68	4093.	-0.52	2.91	0.70	3.43	1.22	7.2	2.21	2.81	1.80	2.32	1.10	-0.24
91.9	11.65	4122.	-0.54	2.93	0.70	3.47	1.24	7.8	2.23	2.80	1.81	2.35	1.11	-0.24
91.9	11.97	4131.	-0.56	2.92	0.70	3.48	1.26	8.0	2.22	2.77	1.81	2.37	1.11	-0.25
95.0	12.61	4151.	-0.57	2.99	0.70	3.56	1.27	8.5	2.29	2.80	1.84	2.42	1.14	-0.25
96.5	13.19	4168.	-0.59	3.01	0.70	3.61	1.29	8.8	2.31	2.79	1.86	2.45	1.16	-0.26

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING:
SAMPLE: S-1
DEPTH : 27-29
SOIL DESC: CLAYEY SILT TRACE FINE SAND --
LTR. YELLOW BROWN & WHITE (ML)

STS JOB NO: 25331
DATE: 3-1-88
TESTED BY: JJ
APPROVED BY: [illegible]

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	70.620	69.266
LENGTH---AVERAGE	MM	145.600	144.580
AREA	CM2	39.169	37.682
VOLUME	CM3	570.304	544.801
WET DENSITY	G/CM3	2.243	2.395
DRY DENSITY	G/CM3	2.012	2.106
WATER CONTENT	%	11.500	13.700

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	6.110
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	6.110
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	2.110
EFFECTIVE SIGMA 3	KG/CM2	2.110
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING:
SAMPLE: S-1
DEPTH : 27-29

STS JOB NO: 25331
EFF. SIGMA3: 2.110 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	3768.	0.00	2.11	2.11	2.11	2.11	0.0	0.00	1.00	2.11	2.11	0.00	0.00
11.8	0.22	3774.	0.06	2.42	2.11	2.36	2.05	0.2	0.31	1.15	2.27	2.21	0.16	0.18
22.0	0.34	3777.	0.10	2.69	2.11	2.60	2.01	0.2	0.58	1.29	2.40	2.31	0.29	0.16
27.8	0.44	3780.	0.13	2.85	2.11	2.71	1.98	0.3	0.74	1.37	2.48	2.34	0.37	0.18
32.2	0.52	3782.	0.15	2.96	2.11	2.81	1.96	0.4	0.85	1.43	2.54	2.38	0.43	0.18
38.0	0.59	3784.	0.21	3.11	2.11	2.91	1.90	0.4	1.00	1.53	2.61	2.40	0.50	0.21
51.1	0.79	3789.	0.42	3.46	2.11	3.04	1.69	0.5	1.35	1.80	2.78	2.37	0.67	0.31
59.8	0.97	3794.	0.51	3.69	2.11	3.18	1.60	0.7	1.58	1.99	2.90	2.39	0.79	0.32
67.1	1.15	3798.	0.57	3.88	2.11	3.31	1.54	0.8	1.77	2.15	2.99	2.43	0.88	0.32
71.5	1.25	3801.	0.61	3.99	2.11	3.39	1.50	0.9	1.88	2.25	3.05	2.44	0.94	0.32
77.3	1.45	3806.	0.64	4.14	2.11	3.50	1.47	1.0	2.03	2.39	3.13	2.48	1.02	0.32
83.1	1.73	3814.	0.68	4.29	2.11	3.61	1.43	1.2	2.18	2.52	3.20	2.52	1.09	0.31
89.0	1.89	3818.	0.70	4.44	2.11	3.74	1.41	1.3	2.33	2.65	3.28	2.58	1.17	0.30
93.3	2.12	3824.	0.72	4.55	2.11	3.83	1.39	1.5	2.44	2.75	3.33	2.61	1.22	0.29
102.1	2.48	3834.	0.70	4.77	2.11	4.07	1.41	1.7	2.66	2.89	3.44	2.74	1.33	0.26
110.8	2.84	3844.	0.72	4.99	2.11	4.27	1.39	2.0	2.88	3.07	3.55	2.83	1.44	0.25
118.1	3.24	3855.	0.66	5.17	2.11	4.51	1.45	2.2	3.06	3.12	3.64	2.98	1.53	0.22
119.4	3.93	3873.	0.47	5.19	2.11	4.72	1.64	2.7	3.08	2.88	3.65	3.18	1.54	0.15
120.9	4.31	3884.	0.40	5.22	2.11	4.82	1.71	3.0	3.11	2.82	3.67	3.27	1.56	0.13
123.0	4.94	3901.	0.27	5.26	2.11	5.00	1.84	3.4	3.15	2.71	3.69	3.42	1.58	0.08
124.5	5.32	3912.	0.19	5.29	2.11	5.10	1.92	3.7	3.18	2.66	3.70	3.51	1.59	0.06
125.6	5.68	3922.	0.08	5.31	2.11	5.24	2.03	3.9	3.20	2.57	3.71	3.64	1.60	0.02
127.0	5.94	3930.	0.02	5.34	2.11	5.32	2.09	4.1	3.23	2.55	3.73	3.71	1.62	0.01
127.9	6.41	3943.	-0.04	5.35	2.11	5.39	2.15	4.4	3.24	2.51	3.73	3.77	1.62	-0.01
128.7	6.91	3957.	-0.21	5.36	2.11	5.57	2.32	4.8	3.25	2.40	3.74	3.94	1.63	-0.06
131.3	7.55	3976.	-0.34	5.41	2.11	5.75	2.45	5.2	3.30	2.35	3.76	4.10	1.65	-0.10
133.4	8.12	3992.	-0.51	5.45	2.11	5.96	2.62	5.6	3.34	2.27	3.78	4.29	1.67	-0.15
135.7	8.74	4011.	-0.66	5.49	2.11	6.16	2.77	6.0	3.38	2.22	3.80	4.46	1.69	-0.20
138.3	9.43	4031.	-0.79	5.54	2.11	6.33	2.90	6.5	3.43	2.18	3.83	4.62	1.72	-0.23
139.8	10.05	4050.	-0.93	5.56	2.11	6.49	3.04	7.0	3.45	2.14	3.84	4.76	1.73	-0.27
141.7	10.67	4068.	-1.10	5.59	2.11	6.69	3.21	7.4	3.48	2.09	3.85	4.95	1.74	-0.31
142.3	11.26	4086.	-1.23	5.59	2.11	6.82	3.34	7.8	3.48	2.04	3.85	5.08	1.74	-0.35
143.3	12.19	4115.	-1.50	5.59	2.11	7.09	3.61	8.4	3.48	1.96	3.85	5.35	1.74	-0.43
140.7	13.79	4165.	-1.51	5.49	2.11	7.00	3.62	9.5	3.38	1.93	3.80	5.31	1.69	-0.45
137.6	13.42	4154.	-1.63	5.42	2.11	7.05	3.74	9.3	3.31	1.89	3.77	5.39	1.66	-0.49
135.7	14.04	4173.	-1.70	5.36	2.11	7.06	3.81	9.7	3.25	1.85	3.74	5.44	1.63	-0.52
133.5	14.70	4195.	-1.76	5.29	2.11	7.05	3.87	10.2	3.18	1.82	3.70	5.46	1.59	-0.55
132.9	15.33	4215.	-1.83	5.26	2.11	7.10	3.94	10.6	3.15	1.80	3.69	5.52	1.58	-0.58
129.0	15.63	4225.	-1.85	5.16	2.11	7.02	3.96	10.8	3.05	1.77	3.64	5.49	1.53	-0.61

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING:
SAMPLE: S-1
DEPTH : 23-25
SOIL DESC: CLAYEY SILT TRACE FINE SAND - LT. YELLOW BROWN & WHITE (ML)

STS JOB NO: 25331
DATE: 3-1-88
TESTED BY: JJ
APPROVED BY: _____

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	71.440	69.683
LENGTH---AVERAGE	MM	140.000	138.320
AREA	CM2	40.084	38.137
VOLUME	CM3	561.178	527.508
WET DENSITY	G/CM3	2.160	2.296
DRY DENSITY	G/CM3	1.913	2.035
WATER CONTENT	%	12.900	12.800

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	7.510
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	7.510
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	3.510
EFFECTIVE SIGMA 3	KG/CM2	3.510
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING:
SAMPLE: S-1
DEPTH : 23-25

STS JOB NO: 25331
EFF. SIGMA3: 3.510 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	3814.	0.00	3.51	3.51	3.51	3.51	0.0	0.00	1.00	3.51	3.51	0.00	0.00
11.9	0.11	3817.	0.39	3.82	3.51	3.43	3.12	0.1	0.31	1.10	3.67	3.27	0.16	1.25
25.3	0.20	3819.	0.46	4.17	3.51	3.71	3.05	0.1	0.66	1.22	3.84	3.38	0.33	0.70
37.2	0.29	3822.	0.60	4.48	3.51	3.88	2.91	0.2	0.97	1.33	4.00	3.39	0.49	0.62
49.1	0.42	3825.	0.75	4.79	3.51	4.05	2.76	0.3	1.28	1.46	4.15	3.41	0.64	0.58
59.5	0.52	3828.	0.91	5.06	3.51	4.16	2.60	0.4	1.55	1.60	4.29	3.38	0.78	0.58
65.4	0.62	3831.	0.96	5.22	3.51	4.26	2.55	0.4	1.71	1.67	4.36	3.40	0.85	0.56
74.4	0.77	3835.	1.07	5.45	3.51	4.38	2.44	0.6	1.94	1.79	4.48	3.41	0.97	0.55
89.2	1.08	3844.	1.16	5.83	3.51	4.68	2.36	0.8	2.32	1.99	4.67	3.52	1.16	0.50
96.7	1.28	3849.	1.19	6.02	3.51	4.83	2.32	0.9	2.51	2.08	4.77	3.58	1.26	0.47
104.1	1.49	3855.	1.21	6.21	3.51	5.00	2.30	1.1	2.70	2.17	4.86	3.65	1.35	0.45
110.1	1.66	3860.	1.21	6.36	3.51	5.15	2.30	1.2	2.85	2.24	4.94	3.73	1.43	0.42
117.5	1.94	3868.	1.21	6.55	3.51	5.34	2.30	1.4	3.04	2.32	5.03	3.82	1.52	0.40
126.4	2.19	3875.	1.19	6.77	3.51	5.58	2.32	1.6	3.26	2.41	5.14	3.95	1.63	0.36
136.9	2.58	3886.	1.17	7.03	3.51	5.86	2.34	1.9	3.52	2.51	5.27	4.10	1.76	0.33
145.8	2.96	3897.	1.14	7.25	3.51	6.11	2.37	2.1	3.74	2.58	5.38	4.24	1.87	0.30
153.2	3.37	3909.	1.08	7.43	3.51	6.35	2.43	2.4	3.92	2.62	5.47	4.39	1.96	0.28
160.7	3.80	3921.	1.07	7.61	3.51	6.54	2.44	2.7	4.10	2.68	5.56	4.49	2.05	0.26
165.1	4.18	3932.	1.03	7.71	3.51	6.68	2.48	3.0	4.20	2.69	5.61	4.58	2.10	0.25
169.6	4.63	3946.	1.00	7.81	3.51	6.81	2.51	3.3	4.30	2.71	5.66	4.66	2.15	0.23
174.1	5.00	3957.	0.96	7.91	3.51	6.95	2.55	3.6	4.40	2.72	5.71	4.75	2.20	0.22
178.5	5.44	3970.	0.92	8.01	3.51	7.08	2.59	3.9	4.50	2.74	5.76	4.83	2.25	0.21
181.5	5.81	3981.	0.89	8.07	3.51	7.18	2.62	4.2	4.56	2.74	5.79	4.90	2.28	0.19
184.5	6.28	3995.	0.84	8.13	3.51	7.29	2.68	4.5	4.62	2.73	5.82	4.98	2.31	0.18
187.5	6.86	4013.	0.78	8.18	3.51	7.40	2.73	5.0	4.67	2.71	5.85	5.06	2.34	0.17
191.9	7.52	4033.	0.73	8.27	3.51	7.54	2.78	5.4	4.76	2.71	5.89	5.16	2.38	0.15
193.4	8.12	4052.	0.68	8.28	3.51	7.61	2.84	5.9	4.77	2.68	5.90	5.22	2.39	0.14
194.9	8.76	4072.	0.62	8.30	3.51	7.67	2.89	6.3	4.79	2.66	5.90	5.28	2.39	0.13
196.4	9.30	4089.	0.57	8.31	3.51	7.75	2.94	6.7	4.80	2.63	5.91	5.34	2.40	0.12
199.3	10.20	4117.	0.52	8.35	3.51	7.84	2.99	7.4	4.84	2.62	5.93	5.42	2.42	0.11
199.3	11.20	4150.	0.46	8.31	3.51	7.85	3.05	8.1	4.80	2.58	5.91	5.45	2.40	0.10
200.8	11.84	4171.	0.41	8.32	3.51	7.92	3.10	8.6	4.81	2.55	5.92	5.51	2.41	0.08
202.3	12.48	4192.	0.39	8.34	3.51	7.94	3.12	9.0	4.83	2.55	5.92	5.53	2.41	0.08
202.3	13.00	4209.	0.34	8.32	3.51	7.98	3.17	9.4	4.81	2.51	5.91	5.58	2.40	0.07
203.8	13.70	4233.	0.32	8.32	3.51	8.00	3.19	9.9	4.81	2.51	5.92	5.60	2.41	0.07
206.8	14.28	4253.	0.30	8.37	3.51	8.07	3.21	10.3	4.86	2.52	5.94	5.64	2.43	0.06
206.8	14.90	4274.	0.27	8.35	3.51	8.08	3.24	10.8	4.84	2.49	5.93	5.66	2.42	0.05
205.3	15.54	4296.	0.25	8.29	3.51	8.04	3.26	11.2	4.78	2.47	5.90	5.65	2.39	0.05
203.8	16.49	4330.	0.21	8.22	3.51	8.00	3.30	11.9	4.71	2.43	5.86	5.65	2.35	0.05
202.3	17.40	4362.	0.18	8.15	3.51	7.97	3.33	12.6	4.64	2.39	5.83	5.65	2.32	0.04
200.8	18.30	4395.	0.14	8.08	3.51	7.94	3.37	13.2	4.57	2.36	5.79	5.65	2.28	0.03
197.9	19.00	4421.	0.14	7.99	3.51	7.84	3.37	13.7	4.48	2.33	5.75	5.61	2.24	0.03
197.9	20.58	4480.	0.12	7.93	3.51	7.80	3.39	14.9	4.42	2.30	5.72	5.59	2.21	0.03
196.4	21.20	4504.	0.11	7.87	3.51	7.76	3.40	15.3	4.36	2.28	5.69	5.58	2.18	0.02

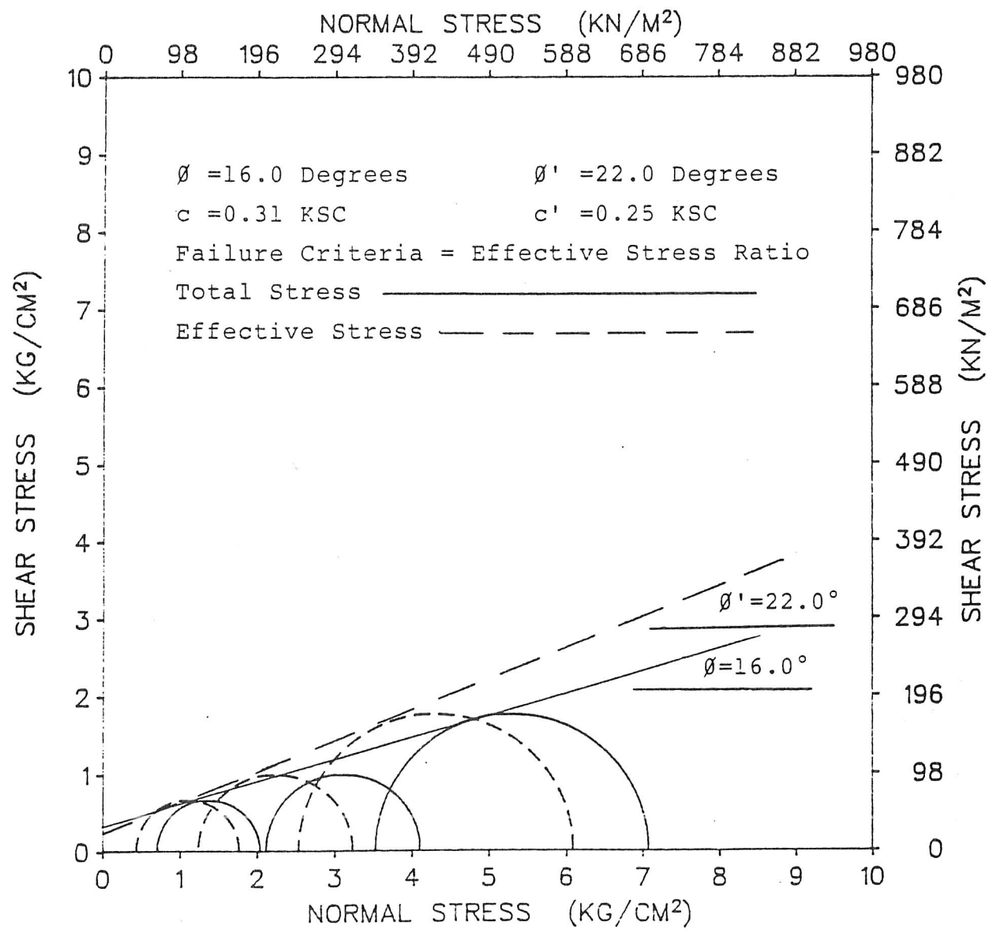
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-3	Sample: 3	Depth: 36-37
Boring: S3	Sample: S3	Depth: 37-38
Boring:	Sample: 3	Depth: 38-39

MOHR ENVELOPE



Sigma 3 = 0.7 ksc
Sigma 3 = 2.1 ksc
Sigma 3 = 3.5 ksc

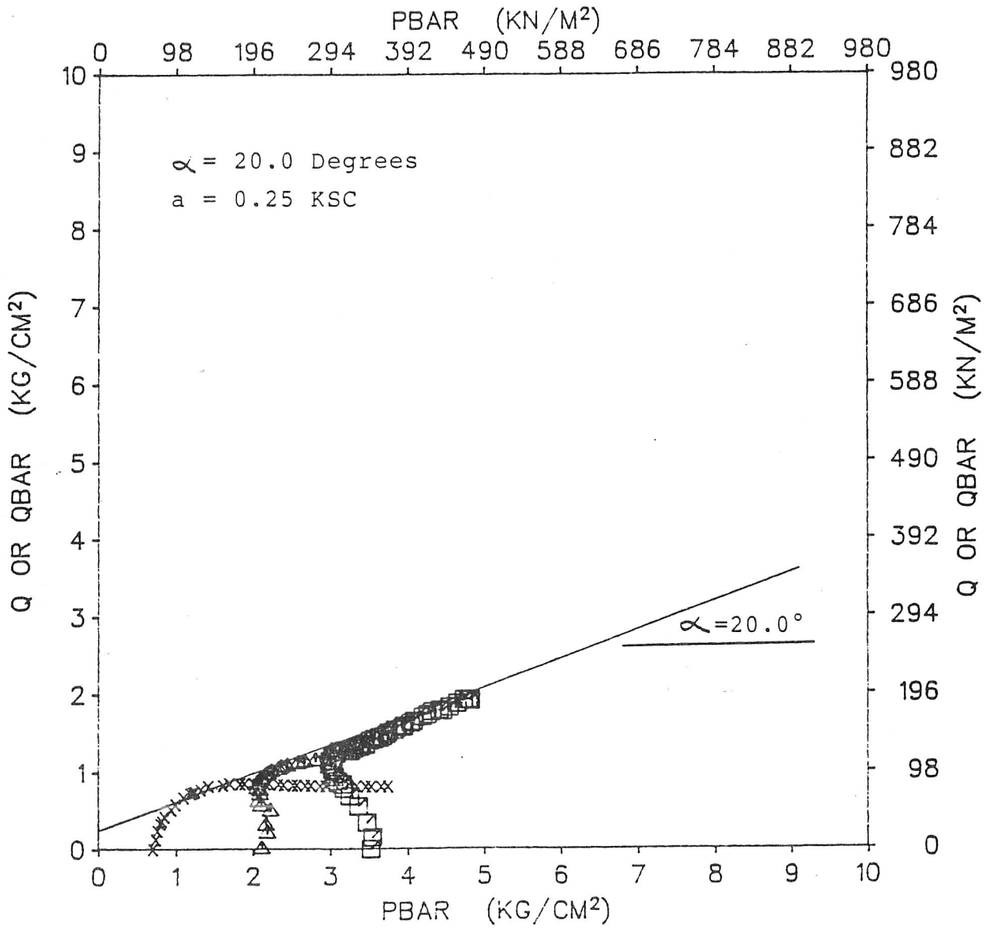
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-3	Sample: 3	Depth: 36-37
Boring: S3	Sample: S3	Depth: 37-38
Boring:	Sample: 3	Depth: 38-39

STRESS PATH PLOT



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
☐ Sigma 3 = 3.5 ksc

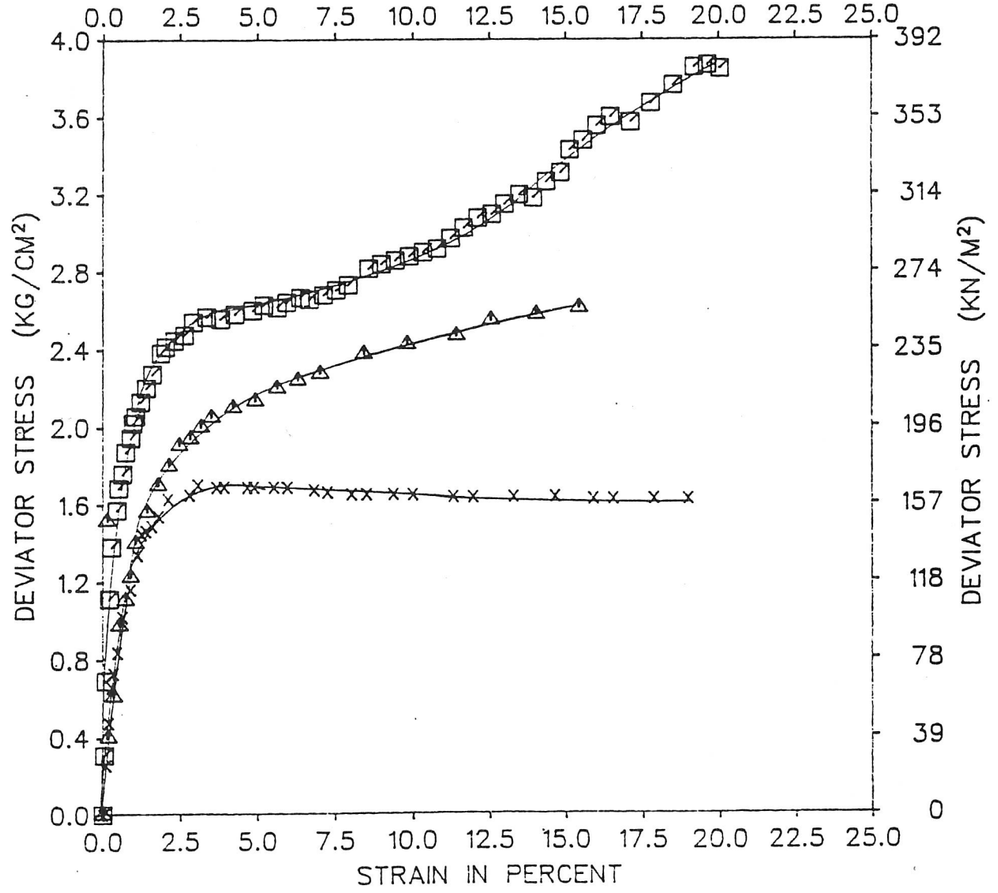
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-3	Sample: 3	Depth: 36-37
Boring: S3	Sample: S3	Depth: 37-38
Boring:	Sample: 3	Depth: 38-39

DEVIATOR STRESS vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
☐ Sigma 3 = 3.5 ksc

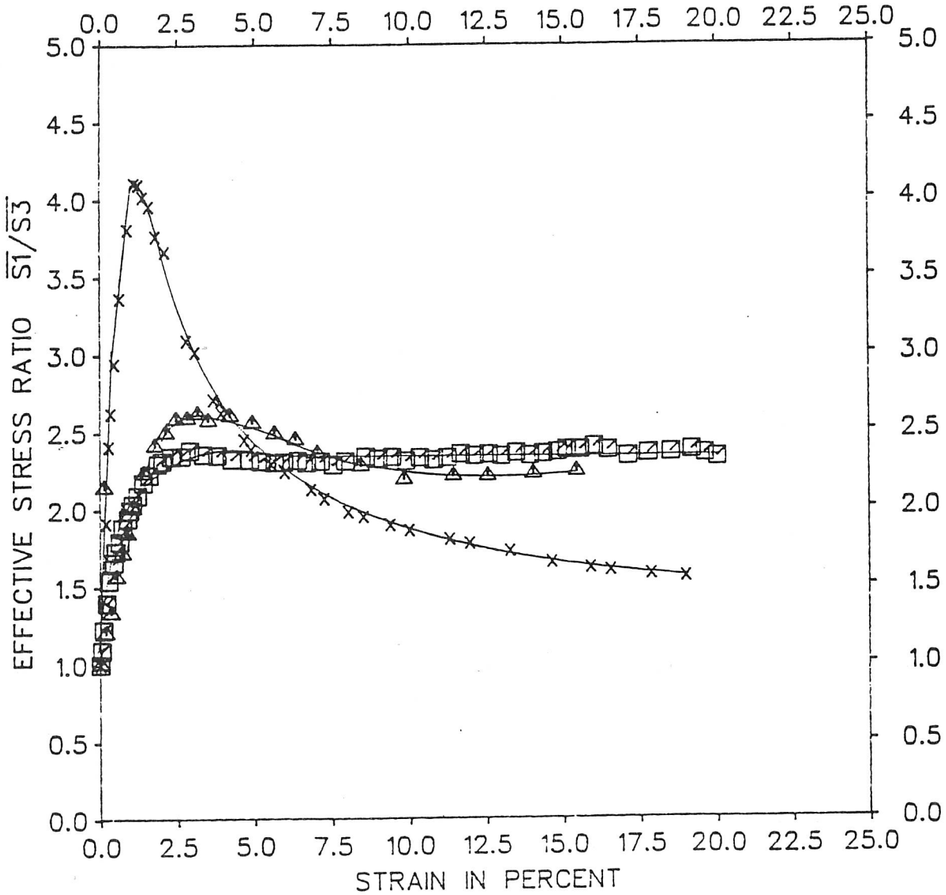
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-3	Sample: 3	Depth: 36-37
Boring: S3	Sample: S3	Depth: 37-38
Boring:	Sample: 3	Depth: 38-39

EFFECTIVE STRESS RATIO vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
□ Sigma 3 = 3.5 ksc

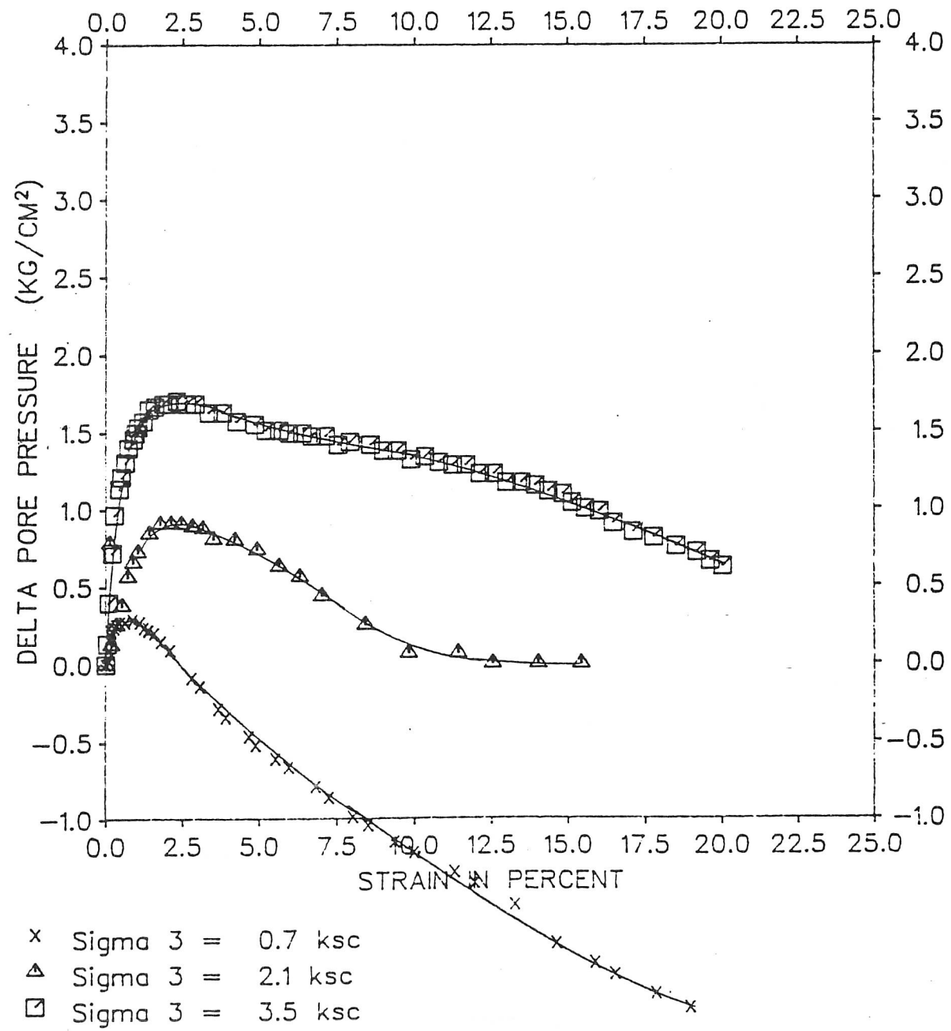
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-3	Sample: 3	Depth: 36-37
Boring: S3	Sample: S3	Depth: 37-38
Boring:	Sample: 3	Depth: 38-39

DELTA PORE PRESSURE vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
□ Sigma 3 = 3.5 ksc

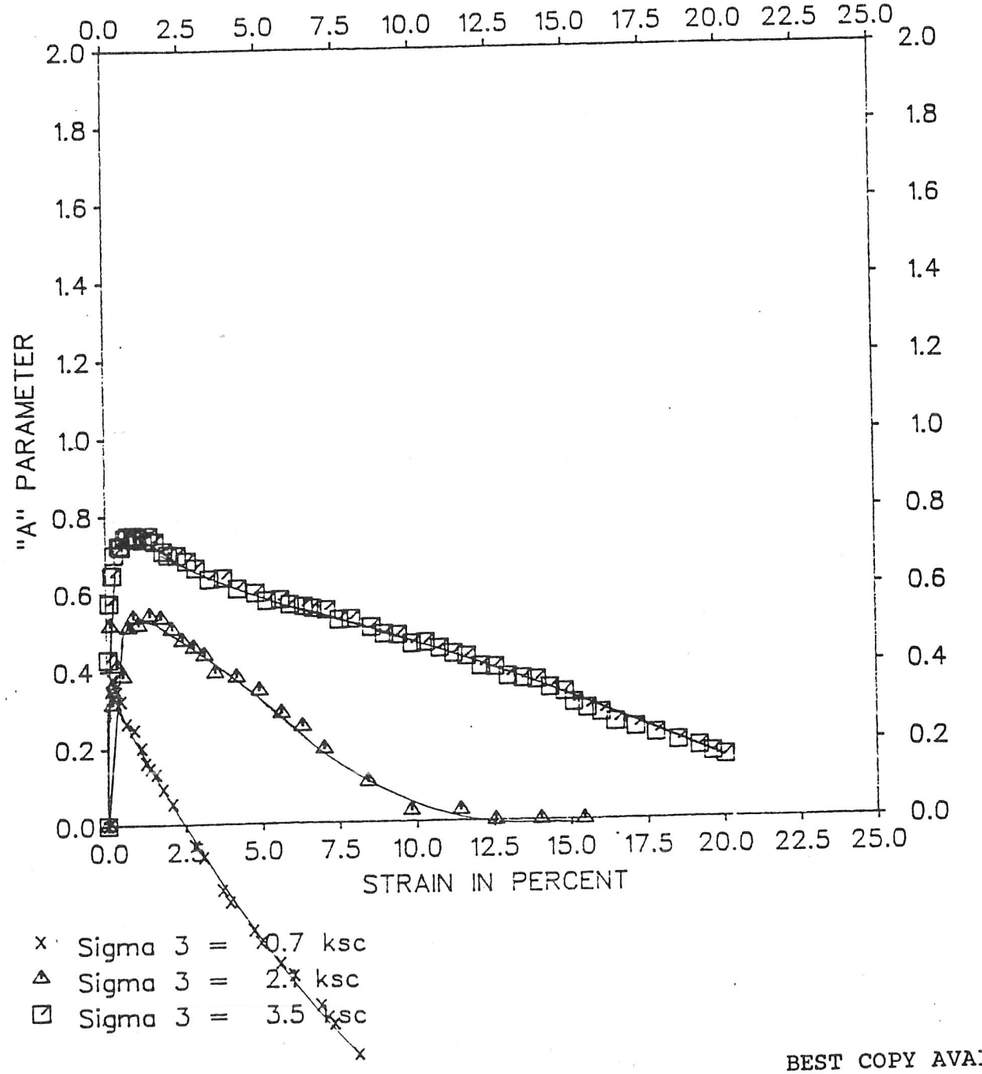
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-3 Sample: 3 Depth: 36-37
Boring: S3 Sample: S3 Depth: 37-38
Boring: Sample: 3 Depth: 38-39

"A" PARAMETER vs STRAIN



STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING: S-3
SAMPLE: 3
DEPTH : 36-37
SOIL DESC: SILT TRACE CLAY TRACE FINE SAND & FINE GRAVEL - BROWN (ML)

STS JOB NO: 25331
DATE: 3-7-88
TESTED BY: JJ
APPROVED BY: [illegible]

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	73.250	73.046
LENGTH---AVERAGE	MM	144.000	143.900
AREA	CM2	42.141	41.907
VOLUME	CM3	606.831	603.039
WET DENSITY	G/CM3	2.193	2.247
DRY DENSITY	G/CM3	1.935	1.947
WATER CONTENT	%	13.300	15.400

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	4.700
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	4.700
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	0.700
EFFECTIVE SIGMA 3	KG/CM2	0.700
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING: S-3
SAMPLE: 3
DEPTH : 36-37

STS JOB NO: 25331
EFF. SIGMA3: 0.700 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	4191.	0.00	0.70	0.70	0.70	0.70	0.0	0.00	1.00	0.70	0.70	0.00	0.00
10.7	0.14	4195.	0.09	0.96	0.70	0.87	0.61	0.1	0.26	1.42	0.83	0.74	0.13	0.35
19.9	0.26	4198.	0.18	1.17	0.70	1.00	0.52	0.2	0.47	1.91	0.94	0.76	0.24	0.38
27.6	0.40	4202.	0.23	1.36	0.70	1.12	0.47	0.3	0.66	2.41	1.03	0.80	0.33	0.35
30.6	0.48	4205.	0.25	1.43	0.70	1.18	0.45	0.3	0.73	2.62	1.06	0.81	0.36	0.34
35.2	0.66	4210.	0.27	1.54	0.70	1.27	0.43	0.5	0.84	2.94	1.12	0.85	0.42	0.32
42.9	0.90	4217.	0.27	1.72	0.70	1.45	0.43	0.6	1.02	3.36	1.21	0.94	0.51	0.26
49.0	1.27	4228.	0.29	1.86	0.70	1.57	0.41	0.9	1.16	3.81	1.28	0.99	0.58	0.25
56.7	1.59	4238.	0.27	2.04	0.70	1.77	0.43	1.1	1.34	4.10	1.37	1.10	0.67	0.20
61.3	1.77	4243.	0.23	2.14	0.70	1.91	0.47	1.2	1.44	4.09	1.42	1.19	0.72	0.16
62.1	1.97	4249.	0.22	2.16	0.70	1.95	0.48	1.4	1.46	4.01	1.43	1.22	0.73	0.15
63.3	2.25	4257.	0.20	2.19	0.70	1.99	0.50	1.6	1.49	3.96	1.44	1.25	0.74	0.13
65.6	2.57	4267.	0.14	2.24	0.70	2.09	0.56	1.8	1.54	3.76	1.47	1.33	0.77	0.09
69.6	3.01	4280.	0.09	2.33	0.70	2.24	0.61	2.1	1.63	3.66	1.51	1.42	0.81	0.05
71.1	4.02	4311.	-0.09	2.35	0.70	2.44	0.79	2.8	1.65	3.09	1.52	1.61	0.82	-0.05
73.5	4.42	4323.	-0.14	2.40	0.70	2.54	0.84	3.1	1.70	3.01	1.55	1.69	0.85	-0.08
73.4	5.28	4350.	-0.29	2.39	0.70	2.68	0.99	3.7	1.69	2.71	1.54	1.83	0.84	-0.17
73.7	5.64	4362.	-0.34	2.39	0.70	2.73	1.04	3.9	1.69	2.62	1.54	1.89	0.84	-0.20
74.2	6.71	4396.	-0.47	2.39	0.70	2.86	1.17	4.7	1.69	2.45	1.54	2.01	0.84	-0.28
74.4	7.03	4406.	-0.52	2.39	0.70	2.91	1.22	4.9	1.69	2.38	1.54	2.07	0.84	-0.31
74.9	7.95	4436.	-0.61	2.39	0.70	3.00	1.31	5.5	1.69	2.29	1.54	2.16	0.84	-0.36
75.2	8.58	4456.	-0.66	2.39	0.70	3.05	1.36	6.0	1.69	2.24	1.54	2.21	0.84	-0.39
75.3	9.82	4498.	-0.79	2.37	0.70	3.16	1.49	6.8	1.67	2.12	1.54	2.33	0.84	-0.47
75.1	10.44	4518.	-0.86	2.36	0.70	3.22	1.56	7.3	1.66	2.06	1.53	2.39	0.83	-0.52
75.2	11.55	4556.	-0.99	2.35	0.70	3.34	1.69	8.0	1.65	1.98	1.53	2.51	0.83	-0.60
75.6	12.24	4580.	-1.04	2.35	0.70	3.39	1.74	8.5	1.65	1.95	1.53	2.57	0.83	-0.63
76.3	13.48	4624.	-1.15	2.35	0.70	3.50	1.85	9.4	1.65	1.89	1.53	2.67	0.83	-0.70
76.8	14.38	4656.	-1.22	2.35	0.70	3.57	1.92	10.0	1.65	1.86	1.52	2.75	0.82	-0.74
77.4	16.27	4725.	-1.35	2.34	0.70	3.69	2.05	11.3	1.64	1.80	1.52	2.87	0.82	-0.82
77.9	17.21	4760.	-1.42	2.34	0.70	3.76	2.12	12.0	1.64	1.77	1.52	2.94	0.82	-0.87
79.1	19.10	4832.	-1.56	2.34	0.70	3.90	2.26	13.3	1.64	1.72	1.52	3.08	0.82	-0.95
80.4	21.06	4909.	-1.81	2.34	0.70	4.15	2.51	14.6	1.64	1.65	1.52	3.33	0.82	-1.11
81.0	22.87	4983.	-1.94	2.33	0.70	4.26	2.64	15.9	1.63	1.62	1.51	3.45	0.81	-1.19
81.6	23.80	5021.	-2.01	2.33	0.70	4.34	2.71	16.5	1.63	1.60	1.51	3.52	0.81	-1.24
82.9	25.70	5102.	-2.14	2.32	0.70	4.46	2.84	17.9	1.62	1.57	1.51	3.65	0.81	-1.32
84.0	27.31	5172.	-2.23	2.32	0.70	4.55	2.93	19.0	1.62	1.56	1.51	3.74	0.81	-1.37

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING: S3
SAMPLE: S3
DEPTH : 37-38
SOIL DESC: SILT TRACE CLAY TRACE F-M SAND & FINE GRAVEL - BROWN (ML)

STS JOB NO: 25331
DATE: 3-7-88
TESTED BY: JJ
APPROVED BY: MPC

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	72.090	71.121
LENGTH---AVERAGE	MM	144.350	142.730
AREA	CM2	40.817	39.727
VOLUME	CM3	589.192	567.021
WET DENSITY	G/CM3	2.147	2.206
DRY DENSITY	G/CM3	1.882	1.956
WATER CONTENT	%	14.100	12.800

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	6.110
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	6.110
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	2.110
EFFECTIVE SIGMA 3	KG/CM2	2.110
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING: S3
SAMPLE: S3
DEPTH : 37-38

STS JOB NO: 25331
EFF. SIGMA3: 2.110 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	3973.	0.00	2.11	2.11	2.11	2.11	0.0	0.00	1.00	2.11	2.11	0.00	0.00
15.9	0.25	3980.	0.13	2.51	2.11	2.38	1.99	0.2	0.40	1.20	2.31	2.18	0.20	0.31
24.3	0.50	3987.	0.25	2.72	2.11	2.47	1.86	0.4	0.61	1.33	2.41	2.16	0.30	0.41
38.9	0.75	3994.	0.38	3.08	2.11	2.71	1.74	0.5	0.97	1.56	2.60	2.22	0.49	0.38
44.2	1.02	4001.	0.56	3.21	2.11	2.65	1.55	0.7	1.10	1.71	2.66	2.10	0.55	0.51
49.1	1.26	4008.	0.66	3.34	2.11	2.68	1.45	0.9	1.23	1.84	2.72	2.07	0.61	0.54
56.2	1.48	4014.	0.72	3.51	2.11	2.79	1.39	1.0	1.40	2.01	2.81	2.09	0.70	0.52
60.3	0.18	3978.	0.78	3.63	2.11	2.84	1.33	0.1	1.52	2.14	2.87	2.09	0.76	0.52
62.9	2.01	4029.	0.84	3.67	2.11	2.83	1.27	1.4	1.56	2.23	2.89	2.05	0.78	0.54
68.7	2.52	4044.	0.91	3.81	2.11	2.90	1.20	1.8	1.70	2.41	2.96	2.05	0.85	0.53
73.0	3.03	4059.	0.91	3.91	2.11	3.00	1.20	2.1	1.80	2.50	3.01	2.10	0.90	0.50
77.6	3.51	4073.	0.91	4.02	2.11	3.11	1.20	2.5	1.91	2.58	3.06	2.16	0.95	0.48
79.3	4.03	4088.	0.89	4.05	2.11	3.16	1.22	2.8	1.94	2.59	3.08	2.19	0.97	0.46
82.0	4.52	4103.	0.88	4.11	2.11	3.23	1.24	3.2	2.00	2.62	3.11	2.23	1.00	0.44
84.4	5.01	4117.	0.81	4.16	2.11	3.35	1.30	3.5	2.05	2.57	3.13	2.33	1.02	0.39
87.1	6.00	4147.	0.80	4.21	2.11	3.41	1.31	4.2	2.10	2.60	3.16	2.36	1.05	0.38
89.2	7.03	4178.	0.74	4.24	2.11	3.51	1.37	4.9	2.13	2.56	3.18	2.44	1.07	0.35
92.6	8.04	4210.	0.63	4.31	2.11	3.68	1.48	5.6	2.20	2.49	3.21	2.58	1.10	0.29
95.0	9.01	4240.	0.56	4.35	2.11	3.79	1.55	6.3	2.24	2.45	3.23	2.67	1.12	0.25
97.2	10.02	4273.	0.44	4.38	2.11	3.95	1.67	7.0	2.27	2.36	3.25	2.81	1.14	0.19
103.0	12.02	4338.	0.25	4.48	2.11	4.23	1.86	8.4	2.37	2.28	3.30	3.05	1.19	0.11
106.8	14.01	4405.	0.07	4.53	2.11	4.47	2.04	9.8	2.42	2.19	3.32	3.25	1.21	0.03
110.7	16.30	4485.	0.07	4.58	2.11	4.51	2.04	11.4	2.47	2.21	3.34	3.28	1.23	0.03
115.7	17.91	4543.	0.00	4.66	2.11	4.66	2.11	12.5	2.55	2.21	3.38	3.38	1.27	0.00
119.0	20.03	4621.	0.00	4.69	2.11	4.68	2.11	14.0	2.58	2.22	3.40	3.40	1.29	0.00
122.6	22.03	4698.	0.00	4.72	2.11	4.72	2.11	15.4	2.61	2.24	3.41	3.41	1.30	0.00

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING:
SAMPLE: 3
DEPTH : 38-39
SOIL DESC: SILT TRACE CLAY TRACE F-M SAND & FINE GRAVEL - BROWN (ML)

STS JOB NO: 25331
DATE: 3-7-88
TESTED BY: JJ
APPROVED BY: LPO

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	71.520	69.434
LENGTH---AVERAGE	MM	142.600	138.970
AREA	CM2	40.174	37.864
VOLUME	CM3	572.881	526.199
WET DENSITY	G/CM3	2.145	2.309
DRY DENSITY	G/CM3	1.909	2.078
WATER CONTENT	%	12.400	11.100

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	7.520
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	7.520
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	3.520
EFFECTIVE SIGMA 3	KG/CM2	3.520
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING:
SAMPLE: 3
DEPTH : 38-39

STS JOB NO: 25331
EFF. SIGMA3: 3.520 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	3786.	0.00	3.52	3.52	3.52	3.52	0.0	0.00	1.00	3.52	3.52	0.00	0.00
11.7	0.06	3798.	0.13	3.83	3.52	3.70	3.39	0.0	0.31	1.09	3.67	3.54	0.15	0.43
26.2	0.14	3790.	0.40	4.21	3.52	3.81	3.12	0.1	0.69	1.22	3.87	3.47	0.35	0.57
42.2	0.28	3794.	0.72	4.63	3.52	3.91	2.80	0.2	1.11	1.40	4.08	3.36	0.56	0.65
52.4	0.38	3797.	0.97	4.90	3.52	3.94	2.55	0.3	1.38	1.54	4.21	3.25	0.69	0.70
59.7	0.61	3803.	1.14	5.09	3.52	3.95	2.38	0.4	1.57	1.66	4.30	3.17	0.78	0.72
64.1	0.69	3805.	1.21	5.20	3.52	3.99	2.31	0.5	1.68	1.73	4.36	3.15	0.84	0.72
67.0	0.87	3810.	1.31	5.28	3.52	3.97	2.21	0.6	1.76	1.79	4.40	3.09	0.88	0.74
71.4	1.01	3814.	1.40	5.39	3.52	3.99	2.12	0.7	1.87	1.88	4.46	3.06	0.94	0.75
74.3	1.23	3820.	1.46	5.46	3.52	4.01	2.06	0.9	1.94	1.94	4.49	3.04	0.97	0.75
77.2	1.33	3823.	1.50	5.54	3.52	4.04	2.02	1.0	2.02	2.00	4.53	3.03	1.01	0.74
78.7	1.45	3826.	1.53	5.58	3.52	4.04	1.99	1.0	2.06	2.03	4.55	3.02	1.03	0.75
81.6	1.67	3832.	1.57	5.65	3.52	4.08	1.95	1.2	2.13	2.09	4.58	3.01	1.06	0.74
84.5	1.93	3840.	1.65	5.72	3.52	4.07	1.87	1.4	2.20	2.17	4.62	2.97	1.10	0.75
87.4	2.20	3847.	1.67	5.79	3.52	4.13	1.85	1.6	2.27	2.22	4.66	2.99	1.14	0.73
91.8	2.58	3858.	1.68	5.90	3.52	4.22	1.84	1.9	2.38	2.30	4.71	3.03	1.19	0.71
93.2	2.80	3864.	1.68	5.93	3.52	4.25	1.84	2.0	2.41	2.31	4.73	3.04	1.21	0.70
94.7	3.20	3876.	1.70	5.96	3.52	4.26	1.82	2.3	2.44	2.34	4.74	3.04	1.22	0.70
96.1	3.65	3889.	1.68	5.99	3.52	4.31	1.84	2.6	2.47	2.35	4.76	3.07	1.24	0.68
99.0	4.05	3900.	1.68	6.06	3.52	4.37	1.84	2.9	2.54	2.38	4.79	3.11	1.27	0.66
100.5	4.65	3918.	1.63	6.09	3.52	4.46	1.89	3.3	2.57	2.36	4.80	3.18	1.28	0.63
100.5	5.28	3936.	1.63	6.07	3.52	4.45	1.89	3.8	2.55	2.35	4.80	3.17	1.28	0.64
102.0	5.92	3955.	1.57	6.10	3.52	4.53	1.95	4.3	2.58	2.32	4.81	3.24	1.29	0.61
103.4	6.73	3979.	1.55	6.12	3.52	4.57	1.97	4.8	2.60	2.32	4.82	3.27	1.30	0.60
104.9	7.23	3994.	1.51	6.15	3.52	4.63	2.01	5.2	2.63	2.31	4.83	3.32	1.31	0.58
104.9	7.84	4013.	1.51	6.13	3.52	4.62	2.01	5.6	2.61	2.30	4.83	3.31	1.31	0.58
106.3	8.26	4026.	1.50	6.16	3.52	4.67	2.02	5.9	2.64	2.30	4.84	3.35	1.32	0.57
107.8	8.88	4045.	1.50	6.19	3.52	4.69	2.02	6.4	2.67	2.32	4.85	3.36	1.33	0.56
107.8	9.29	4058.	1.48	6.18	3.52	4.70	2.04	6.7	2.66	2.30	4.85	3.37	1.33	0.56
109.2	9.91	4077.	1.48	6.20	3.52	4.72	2.04	7.1	2.68	2.31	4.86	3.38	1.34	0.55
110.7	10.47	4095.	1.42	6.22	3.52	4.80	2.10	7.5	2.70	2.29	4.87	3.45	1.35	0.52
112.2	11.00	4112.	1.44	6.25	3.52	4.81	2.08	7.9	2.73	2.31	4.88	3.45	1.36	0.53
116.5	11.92	4142.	1.42	6.33	3.52	4.91	2.10	8.6	2.81	2.34	4.93	3.51	1.41	0.50
118.0	12.49	4160.	1.38	6.36	3.52	4.98	2.14	9.0	2.84	2.33	4.94	3.56	1.42	0.49
119.4	13.11	4181.	1.38	6.38	3.52	4.99	2.14	9.4	2.86	2.34	4.95	3.57	1.43	0.48
120.9	13.74	4202.	1.32	6.40	3.52	5.07	2.20	9.9	2.88	2.31	4.96	3.63	1.44	0.46
122.4	14.36	4223.	1.34	6.42	3.52	5.08	2.18	10.3	2.90	2.33	4.97	3.63	1.45	0.46
123.8	14.99	4244.	1.31	6.44	3.52	5.13	2.21	10.8	2.92	2.32	4.98	3.67	1.46	0.45
126.7	15.61	4266.	1.29	6.49	3.52	5.20	2.23	11.2	2.97	2.33	5.01	3.72	1.49	0.43
129.6	16.21	4286.	1.29	6.54	3.52	5.26	2.23	11.7	3.02	2.35	5.03	3.74	1.51	0.43
132.5	16.84	4309.	1.23	6.60	3.52	5.37	2.29	12.1	3.08	2.34	5.06	3.83	1.54	0.40
134.0	17.48	4331.	1.23	6.61	3.52	5.38	2.29	12.6	3.09	2.35	5.07	3.84	1.55	0.40
136.9	18.05	4352.	1.17	6.67	3.52	5.49	2.35	13.0	3.15	2.34	5.09	3.92	1.57	0.37
139.8	18.73	4376.	1.17	6.71	3.52	5.54	2.35	13.5	3.19	2.36	5.12	3.94	1.60	0.37
139.8	19.36	4399.	1.15	6.70	3.52	5.54	2.37	13.9	3.18	2.34	5.11	3.96	1.59	0.36
144.2	19.96	4421.	1.12	6.78	3.52	5.67	2.40	14.4	3.26	2.36	5.15	4.03	1.63	0.34
147.1	20.61	4446.	1.10	6.83	3.52	5.73	2.42	14.8	3.31	2.37	5.17	4.08	1.65	0.33

TEST RESULTS----------CONTINUED FROM PREVIOUS PAGE----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
160.2	22.26	4509.	0.98	7.07	3.52	6.09	2.54	16.0	3.55	2.40	5.30	4.31	1.78	0.28
163.1	22.88	4533.	0.91	7.12	3.52	6.21	2.61	16.5	3.60	2.38	5.32	4.41	1.80	0.25
163.1	23.79	4568.	0.85	7.09	3.52	6.24	2.67	17.1	3.57	2.34	5.31	4.45	1.79	0.24
169.0	24.71	4605.	0.81	7.19	3.52	6.38	2.71	17.8	3.67	2.36	5.35	4.54	1.83	0.22
174.8	25.72	4646.	0.76	7.28	3.52	6.53	2.76	18.5	3.76	2.36	5.40	4.64	1.88	0.20
180.6	26.67	4686.	0.72	7.37	3.52	6.66	2.80	19.2	3.85	2.38	5.45	4.73	1.93	0.19
182.1	27.27	4711.	0.66	7.39	3.52	6.72	2.86	19.6	3.87	2.35	5.45	4.79	1.93	0.17
182.1	27.84	4735.	0.62	7.37	3.52	6.74	2.90	20.0	3.85	2.33	5.44	4.82	1.92	0.16

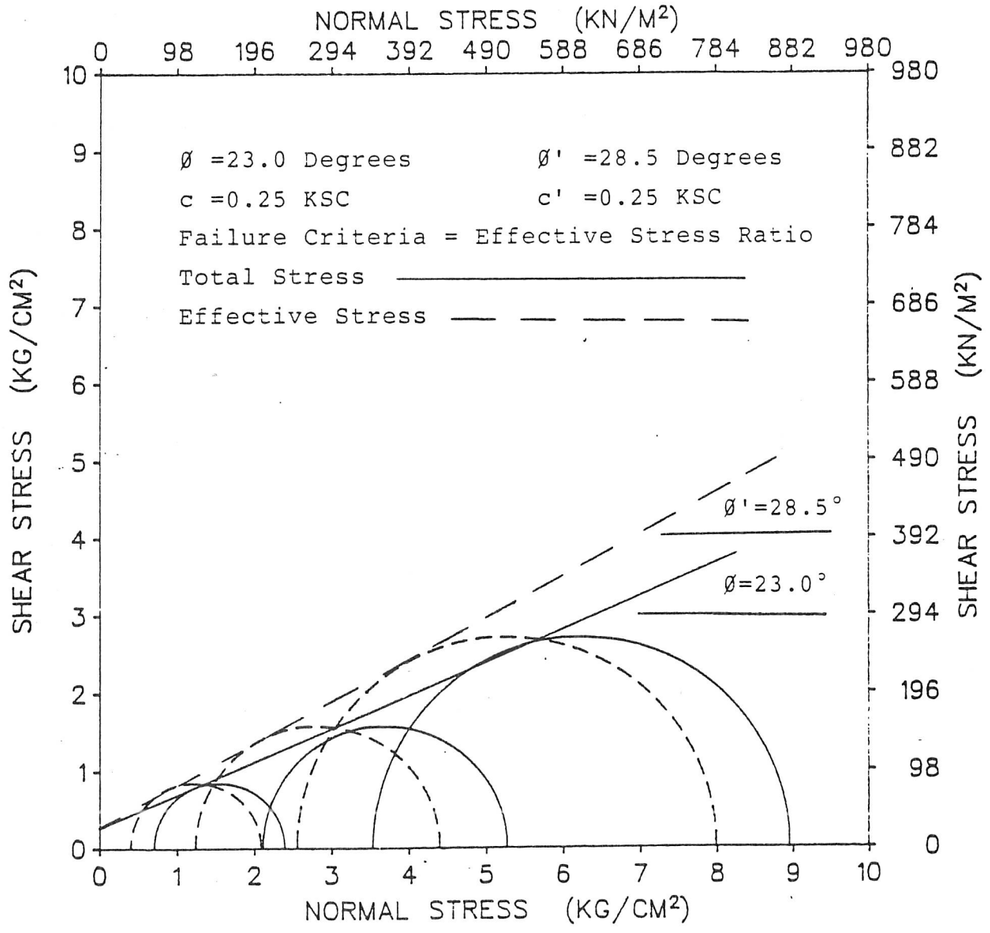
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-5	Sample: SS4	Depth: 18-20
Boring: S-5	Sample: SS6	Depth: 22-24
Boring: S-5	Sample: SS4	Depth: 25-27

MOHR ENVELOPE



Sigma 3 = 0.7 ksc
Sigma 3 = 2.1 ksc
Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

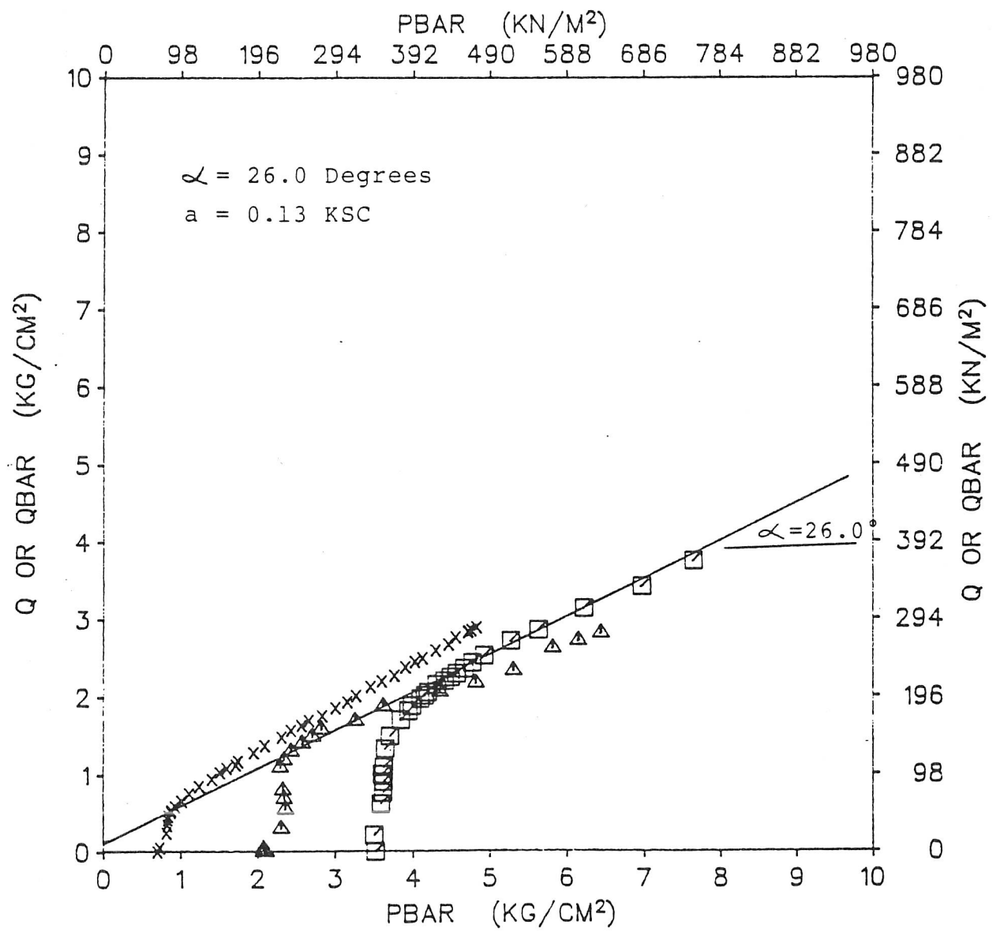
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-5	Sample: SS4	Depth: 18-20
Boring: S-5	Sample: SS6	Depth: 22-24
Boring: S-5	Sample: SS4	Depth: 25-27

STRESS PATH PLOT



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
⊡ Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

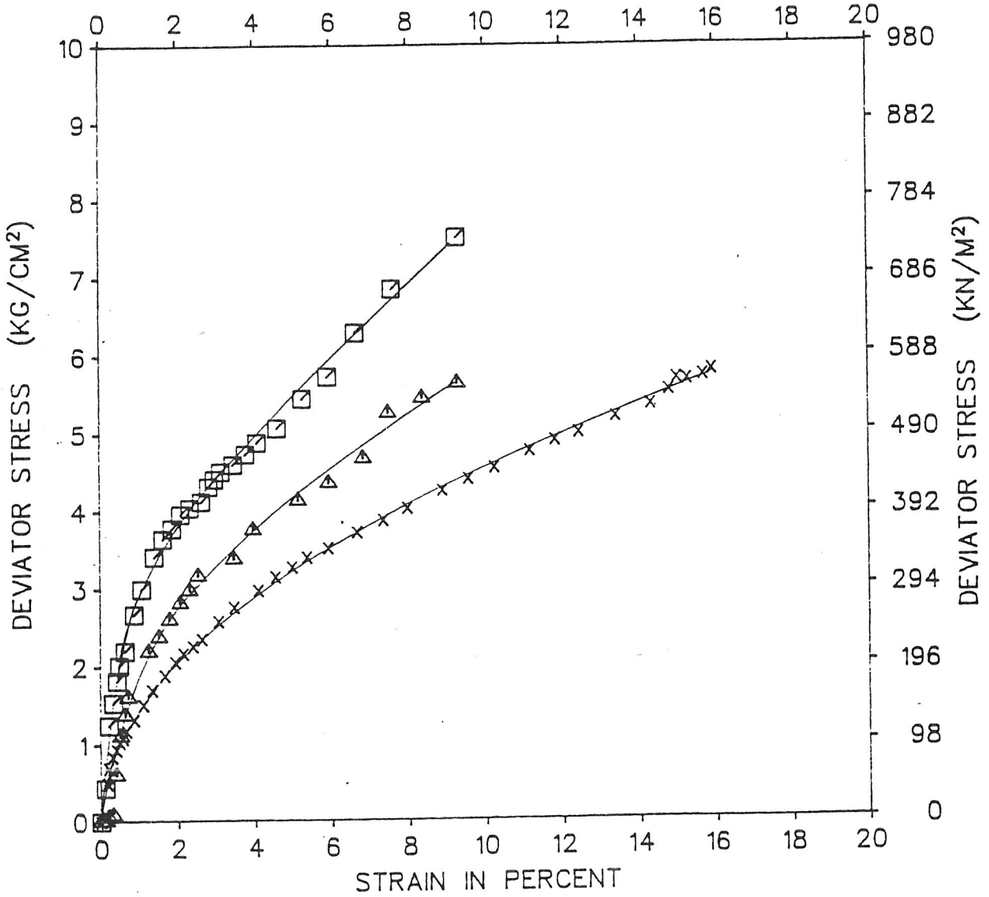
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-5	Sample: SS4	Depth: 18-20
Boring: S-5	Sample: SS6	Depth: 22-24
Boring: S-5	Sample: SS4	Depth: 25-27

DEVIATOR STRESS vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
☐ Sigma 3 = 3.5 ksc

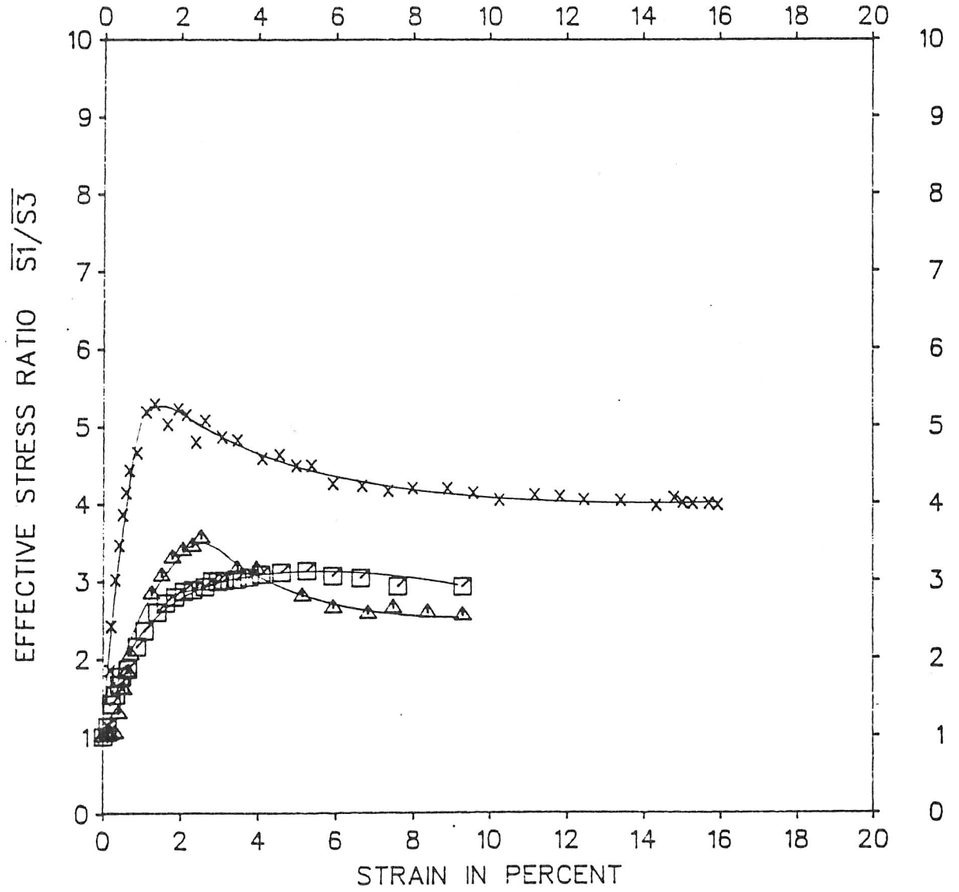
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-5	Sample: SS4	Depth: 18-20
Boring: S-5	Sample: SS6	Depth: 22-24
Boring: S-5	Sample: SS4	Depth: 25-27

EFFECTIVE STRESS RATIO vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
☐ Sigma 3 = 3.5 ksc

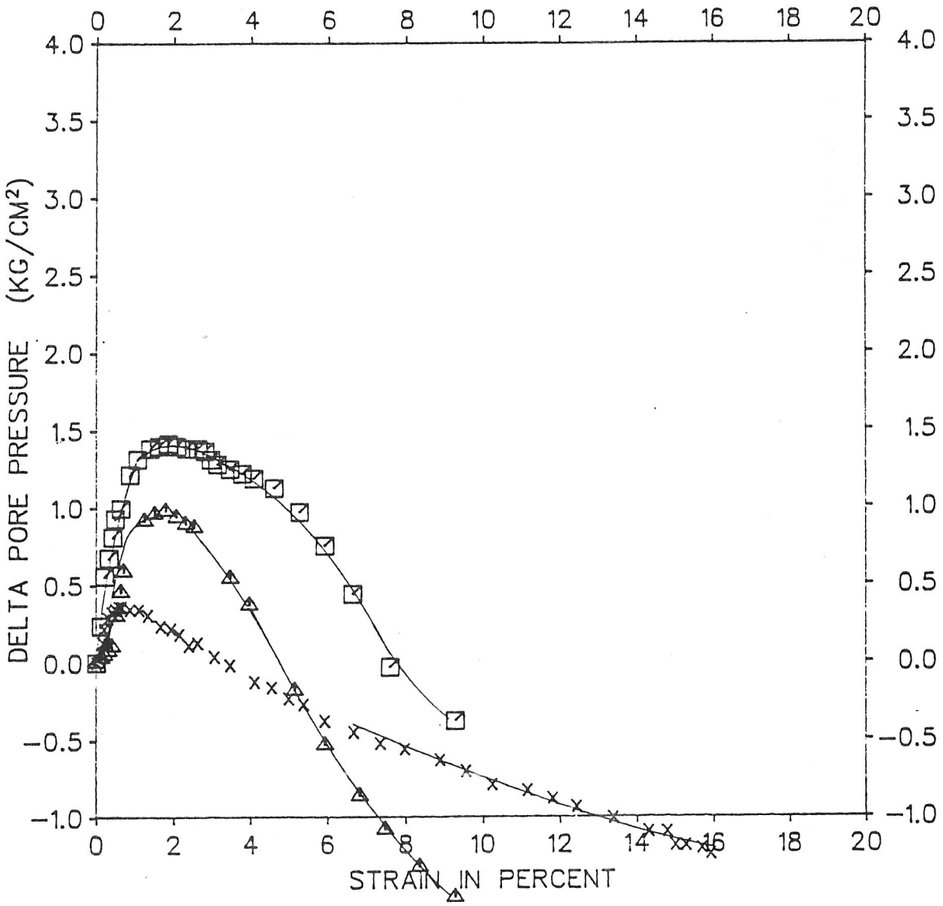
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-5	Sample: SS4	Depth: 18-20
Boring: S-5	Sample: SS6	Depth: 22-24
Boring: S-5	Sample: SS4	Depth: 25-27

DELTA PORE PRESSURE vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
☐ Sigma 3 = 3.5 ksc

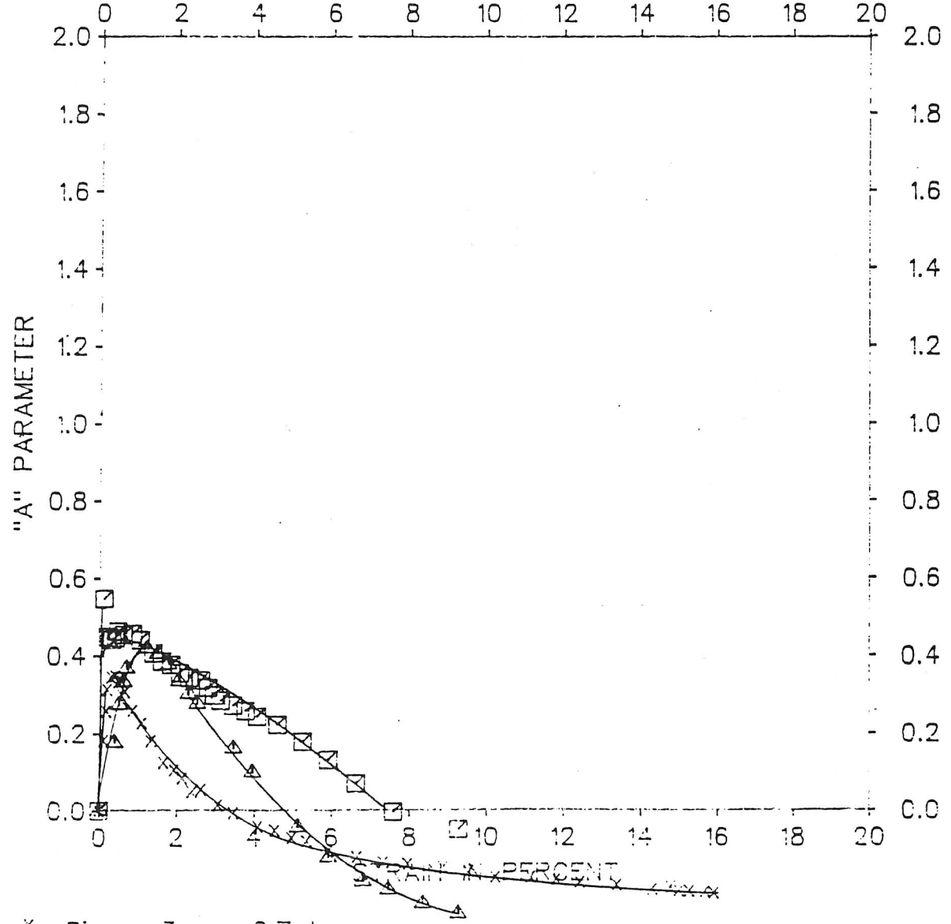
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S-5	Sample: SS4	Depth: 18-20
Boring: S-5	Sample: SS6	Depth: 22-24
Boring: S-5	Sample: SS4	Depth: 25-27

"A" PARAMETER vs STRAIN



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 2.1 ksc
☐ Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING: S-5
SAMPLE: SS4
DEPTH : 18-20
SOIL DESC: Silty Sand trace Fine Gravel trace
Clay - Reddish Brown (SM)

STS JOB NO: 25331
DATE: 3-1-88
TESTED BY: JJ
APPROVED BY: WPG

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	63.210	63.035
LENGTH---AVERAGE	MM	139.080	138.960
AREA	CM2	31.381	31.207
VOLUME	CM3	436.442	433.652
WET DENSITY	G/CM3	2.285	2.308
DRY DENSITY	G/CM3	2.070	2.083
WATER CONTENT	%	10.400	10.800

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	4.700
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	4.700
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	0.700
EFFECTIVE SIGMA 3	KG/CM2	0.700
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING: S-5
SAMPLE: SS4
DEPTH : 18-20

STS JOB NO: 25331
EFF. SIGMA3: 0.700 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q QBAR KG/CM2	QR	A
0.0	0.00	3121.	0.00	0.70	0.70	0.70	0.70	0.0	0.00	1.00	0.70	0.70	0.00	0.00	
3.1	0.14	3124.	0.02	0.80	0.70	0.78	0.68	0.1	0.10	1.15	0.75	0.73	0.05	0.18	
15.3	0.24	3126.	0.13	1.19	0.70	1.06	0.57	0.2	0.49	1.85	0.94	0.82	0.24	0.26	
21.5	0.28	3127.	0.22	1.39	0.70	1.17	0.48	0.2	0.69	2.42	1.04	0.83	0.34	0.31	
26.1	0.42	3130.	0.29	1.53	0.70	1.25	0.41	0.3	0.83	3.02	1.12	0.83	0.42	0.34	
29.1	0.56	3133.	0.32	1.63	0.70	1.31	0.38	0.4	0.93	3.46	1.16	0.84	0.46	0.35	
32.2	0.68	3136.	0.34	1.73	0.70	1.39	0.36	0.5	1.03	3.86	1.21	0.87	0.51	0.33	
33.7	0.80	3139.	0.36	1.77	0.70	1.41	0.34	0.6	1.07	4.15	1.24	0.88	0.54	0.33	
36.8	0.92	3141.	0.36	1.87	0.70	1.51	0.34	0.7	1.17	4.44	1.29	0.93	0.59	0.31	
41.4	1.20	3148.	0.34	2.02	0.70	1.67	0.36	0.9	1.32	4.66	1.36	1.02	0.66	0.26	
47.5	1.53	3155.	0.34	2.21	0.70	1.86	0.36	1.1	1.51	5.19	1.45	1.11	0.75	0.23	
53.6	1.85	3163.	0.30	2.39	0.70	2.09	0.39	1.3	1.69	5.29	1.55	1.24	0.85	0.18	
59.7	2.31	3173.	0.23	2.58	0.70	2.35	0.47	1.7	1.88	5.03	1.64	1.41	0.94	0.12	
65.3	2.69	3182.	0.22	2.75	0.70	2.54	0.48	1.9	2.05	5.23	1.73	1.51	1.03	0.10	
68.9	2.99	3189.	0.18	2.86	0.70	2.68	0.52	2.2	2.16	5.15	1.78	1.60	1.08	0.08	
72.0	3.33	3197.	0.11	2.95	0.70	2.84	0.59	2.4	2.25	4.80	1.83	1.72	1.13	0.05	
75.1	3.66	3205.	0.13	3.04	0.70	2.92	0.57	2.6	2.34	5.08	1.87	1.75	1.17	0.05	
82.7	4.26	3219.	0.04	3.27	0.70	3.23	0.66	3.1	2.57	4.87	1.98	1.95	1.28	0.01	
88.9	4.82	3233.	-0.02	3.45	0.70	3.47	0.72	3.5	2.75	4.83	2.07	2.09	1.37	-0.01	
96.5	5.70	3254.	-0.13	3.67	0.70	3.79	0.83	4.1	2.97	4.59	2.18	2.31	1.48	-0.04	
102.6	6.33	3270.	-0.16	3.84	0.70	4.00	0.86	4.6	3.14	4.64	2.27	2.43	1.57	-0.05	
107.2	6.93	3284.	-0.23	3.96	0.70	4.20	0.93	5.0	3.26	4.49	2.33	2.57	1.63	-0.07	
111.8	7.47	3298.	-0.27	4.09	0.70	4.36	0.97	5.4	3.39	4.50	2.39	2.66	1.69	-0.08	
116.4	8.23	3317.	-0.38	4.21	0.70	4.59	1.08	5.9	3.51	4.26	2.45	2.83	1.75	-0.11	
124.1	9.26	3344.	-0.45	4.41	0.70	4.86	1.15	6.7	3.71	4.23	2.56	3.00	1.86	-0.12	
130.2	10.20	3368.	-0.52	4.57	0.70	5.09	1.22	7.3	3.87	4.17	2.63	3.15	1.93	-0.13	
136.3	11.09	3391.	-0.56	4.72	0.70	5.28	1.26	8.0	4.02	4.20	2.71	3.27	2.01	-0.14	
145.5	12.35	3425.	-0.63	4.95	0.70	5.58	1.33	8.9	4.25	4.20	2.82	3.45	2.12	-0.15	
151.7	13.29	3451.	-0.70	5.10	0.70	5.80	1.40	9.6	4.40	4.14	2.90	3.60	2.20	-0.16	
157.8	14.24	3477.	-0.79	5.24	0.70	6.03	1.49	10.2	4.54	4.05	2.97	3.76	2.27	-0.17	
167.0	15.52	3513.	-0.83	5.45	0.70	6.28	1.53	11.2	4.75	4.12	3.08	3.90	2.38	-0.17	
173.1	16.43	3539.	-0.88	5.59	0.70	6.47	1.58	11.8	4.89	4.10	3.15	4.03	2.45	-0.18	
177.7	17.29	3564.	-0.93	5.69	0.70	6.62	1.63	12.4	4.99	4.05	3.19	4.13	2.49	-0.19	
186.9	18.62	3604.	-1.01	5.89	0.70	6.89	1.71	13.4	5.19	4.04	3.29	4.30	2.59	-0.19	
194.5	19.90	3642.	-1.10	6.04	0.70	7.14	1.80	14.3	5.34	3.97	3.37	4.47	2.67	-0.21	
202.2	20.56	3663.	-1.10	6.22	0.70	7.32	1.80	14.8	5.52	4.07	3.46	4.56	2.76	-0.20	
208.3	20.85	3672.	-1.18	6.37	0.70	7.56	1.88	15.0	5.67	4.01	3.54	4.72	2.84	-0.21	
208.3	21.23	3683.	-1.18	6.36	0.70	7.54	1.88	15.3	5.66	4.00	3.53	4.71	2.83	-0.21	
211.4	21.81	3702.	-1.20	6.41	0.70	7.61	1.90	15.7	5.71	4.00	3.56	4.76	2.86	-0.21	
214.5	22.13	3712.	-1.24	6.48	0.70	7.72	1.94	15.9	5.78	3.98	3.59	4.83	2.89	-0.21	

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING: S-5
SAMPLE: SS6
DEPTH : 22-24

STS JOB NO: 25331
DATE: 3-1-88
TESTED BY: JJ
APPROVED BY: [signature]

SOIL DESC: Silty Sand trace Fine Gravel trace
Clay - Reddish Brown (SM)

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	64.240	63.515
LENGTH---AVERAGE	MM	138.120	137.900
AREA	CM2	32.412	31.684
VOLUME	CM3	447.669	436.923
WET DENSITY	G/CM3	2.251	2.319
DRY DENSITY	G/CM3	2.065	2.116
WATER CONTENT	%	9.000	9.600

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	6.110
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	6.110
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	2.110
EFFECTIVE SIGMA 3	KG/CM2	2.110
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING: S-5
SAMPLE: SS6
DEPTH : 22-24

STS JOB NO: 25331
EFF. SIGMA3: 2.110 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	3168.	0.00	2.11	2.11	2.11	2.11	0.0	0.00	1.00	2.11	2.11	0.00	0.00
1.6	0.28	3175.	0.05	2.16	2.11	2.11	2.06	0.2	0.05	1.02	2.14	2.08	0.03	1.03
2.6	0.43	3178.	0.08	2.19	2.11	2.12	2.03	0.3	0.08	1.04	2.15	2.07	0.04	0.93
19.1	0.55	3181.	0.11	2.71	2.11	2.61	2.01	0.4	0.60	1.30	2.41	2.31	0.30	0.17
35.1	0.71	3185.	0.30	3.21	2.11	2.91	1.81	0.5	1.10	1.61	2.66	2.36	0.55	0.27
43.8	0.87	3189.	0.46	3.48	2.11	3.03	1.65	0.6	1.37	1.83	2.80	2.34	0.69	0.33
51.1	0.97	3191.	0.59	3.71	2.11	3.12	1.52	0.7	1.60	2.05	2.91	2.32	0.80	0.37
70.2	1.71	3208.	0.92	4.30	2.11	3.38	1.19	1.2	2.19	2.83	3.20	2.29	1.09	0.42
76.4	2.08	3217.	0.96	4.48	2.11	3.52	1.15	1.5	2.37	3.07	3.30	2.34	1.19	0.40
83.8	2.46	3226.	0.98	4.71	2.11	3.73	1.13	1.8	2.60	3.30	3.41	2.43	1.30	0.38
90.8	2.84	3235.	0.94	4.92	2.11	3.98	1.17	2.1	2.81	3.39	3.51	2.58	1.40	0.33
96.5	3.18	3243.	0.89	5.09	2.11	4.19	1.22	2.3	2.98	3.45	3.60	2.70	1.49	0.30
102.3	3.49	3251.	0.87	5.27	2.11	4.40	1.24	2.5	3.16	3.55	3.69	2.82	1.58	0.28
110.8	4.78	3282.	0.54	5.49	2.11	4.94	1.57	3.5	3.38	3.15	3.80	3.25	1.69	0.16
123.7	5.46	3299.	0.37	5.86	2.11	5.49	1.74	4.0	3.75	3.15	3.98	3.62	1.87	0.10
137.8	7.09	3340.	-0.18	6.24	2.11	6.42	2.29	5.1	4.13	2.80	4.17	4.35	2.06	-0.04
146.5	8.18	3368.	-0.53	6.46	2.11	6.99	2.64	5.9	4.35	2.65	4.28	4.82	2.17	-0.12
158.7	9.41	3400.	-0.86	6.78	2.11	7.64	2.97	6.8	4.67	2.57	4.44	5.30	2.33	-0.18
179.8	10.31	3424.	-1.08	7.36	2.11	8.44	3.19	7.5	5.25	2.65	4.74	5.82	2.63	-0.21
188.0	11.54	3458.	-1.32	7.55	2.11	8.87	3.43	8.4	5.44	2.58	4.83	6.15	2.72	-0.24
196.5	12.81	3493.	-1.52	7.74	2.11	9.25	3.63	9.3	5.63	2.55	4.92	6.44	2.81	-0.27

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING: S-5
SAMPLE: SS4
DEPTH : 25-27
SOIL DESC: Silty Sand trace Fine Gravel trace
CLAY -- REDDISH BROWN (SM)

STS JOB NO: 25331
DATE: 3-1-88
TESTED BY: JJ
APPROVED BY: [signature]

SPEC PREP: ENDS TRIMMED

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	63.470	62.795
LENGTH---AVERAGE	MM	129.950	129.400
AREA	CM2	31.639	30.970
VOLUME	CM3	411.153	400.755
WET DENSITY	G/CM3	2.299	2.335
DRY DENSITY	G/CM3	2.084	2.138
WATER CONTENT	%	10.300	9.200

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	7.520
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	7.520
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	3.520
EFFECTIVE SIGMA 3	KG/CM2	3.520
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING: S-5
SAMPLE: SS4
DEPTH : 25-27

STS JOB NO: 25331
EFF. SIGMA3: 3.520 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	3097.	0.00	3.52	3.52	3.52	3.52	0.0	0.00	1.00	3.52	3.52	0.00	0.00
13.4	0.15	3101.	0.24	3.95	3.52	3.72	3.28	0.1	0.43	1.13	3.74	3.50	0.22	0.55
38.6	0.27	3104.	0.56	4.76	3.52	4.21	2.96	0.2	1.24	1.42	4.14	3.58	0.62	0.45
47.6	0.42	3107.	0.68	5.05	3.52	4.38	2.84	0.3	1.53	1.54	4.29	3.61	0.77	0.44
56.5	0.54	3110.	0.81	5.34	3.52	4.53	2.71	0.4	1.82	1.67	4.43	3.62	0.91	0.45
62.5	0.62	3112.	0.93	5.53	3.52	4.60	2.59	0.5	2.01	1.77	4.52	3.60	1.00	0.46
68.4	0.81	3117.	0.99	5.71	3.52	4.72	2.53	0.6	2.19	1.87	4.62	3.62	1.10	0.45
83.3	1.12	3124.	1.22	6.19	3.52	4.97	2.30	0.9	2.67	2.16	4.85	3.64	1.33	0.46
93.7	1.37	3130.	1.32	6.51	3.52	5.20	2.20	1.1	2.99	2.36	5.02	3.70	1.50	0.44
107.1	1.80	3141.	1.38	6.93	3.52	5.55	2.14	1.4	3.41	2.60	5.23	3.84	1.71	0.41
114.5	2.09	3148.	1.40	7.16	3.52	5.76	2.12	1.6	3.64	2.72	5.34	3.94	1.82	0.38
119.0	2.40	3156.	1.42	7.29	3.52	5.87	2.10	1.9	3.77	2.79	5.41	3.99	1.89	0.38
125.0	2.69	3163.	1.40	7.47	3.52	6.07	2.12	2.1	3.95	2.86	5.50	4.10	1.98	0.35
127.9	3.00	3171.	1.38	7.55	3.52	6.17	2.14	2.3	4.03	2.89	5.54	4.15	2.02	0.34
130.9	3.39	3180.	1.38	7.64	3.52	6.25	2.14	2.6	4.12	2.93	5.58	4.19	2.06	0.34
137.4	3.64	3187.	1.37	7.83	3.52	6.46	2.15	2.8	4.31	3.00	5.68	4.31	2.16	0.32
140.6	3.83	3191.	1.31	7.93	3.52	6.61	2.21	3.0	4.41	3.00	5.72	4.41	2.20	0.30
143.9	4.05	3197.	1.28	8.02	3.52	6.74	2.24	3.1	4.50	3.01	5.77	4.49	2.25	0.28
147.4	4.47	3208.	1.25	8.11	3.52	6.86	2.27	3.5	4.59	3.02	5.82	4.57	2.30	0.27
152.1	4.88	3218.	1.22	8.25	3.52	7.03	2.30	3.8	4.73	3.05	5.88	4.66	2.36	0.26
157.4	5.27	3229.	1.19	8.40	3.52	7.21	2.33	4.1	4.88	3.09	5.96	4.77	2.44	0.24
164.3	5.95	3246.	1.13	8.58	3.52	7.46	2.39	4.6	5.06	3.11	6.05	4.93	2.53	0.22
177.8	6.80	3269.	0.97	8.96	3.52	7.99	2.55	5.3	5.44	3.13	6.24	5.27	2.72	0.18
188.3	7.65	3292.	0.75	9.24	3.52	8.49	2.77	5.9	5.72	3.07	6.38	5.63	2.86	0.13
208.3	8.58	3317.	0.44	9.80	3.52	9.36	3.08	6.6	6.28	3.04	6.66	6.22	3.14	0.07
229.3	9.82	3351.	-0.03	10.36	3.52	10.39	3.55	7.6	6.84	2.93	6.94	6.97	3.42	0.00
256.1	12.01	3414.	-0.38	11.02	3.52	11.40	3.89	9.3	7.50	2.93	7.27	7.65	3.75	-0.05

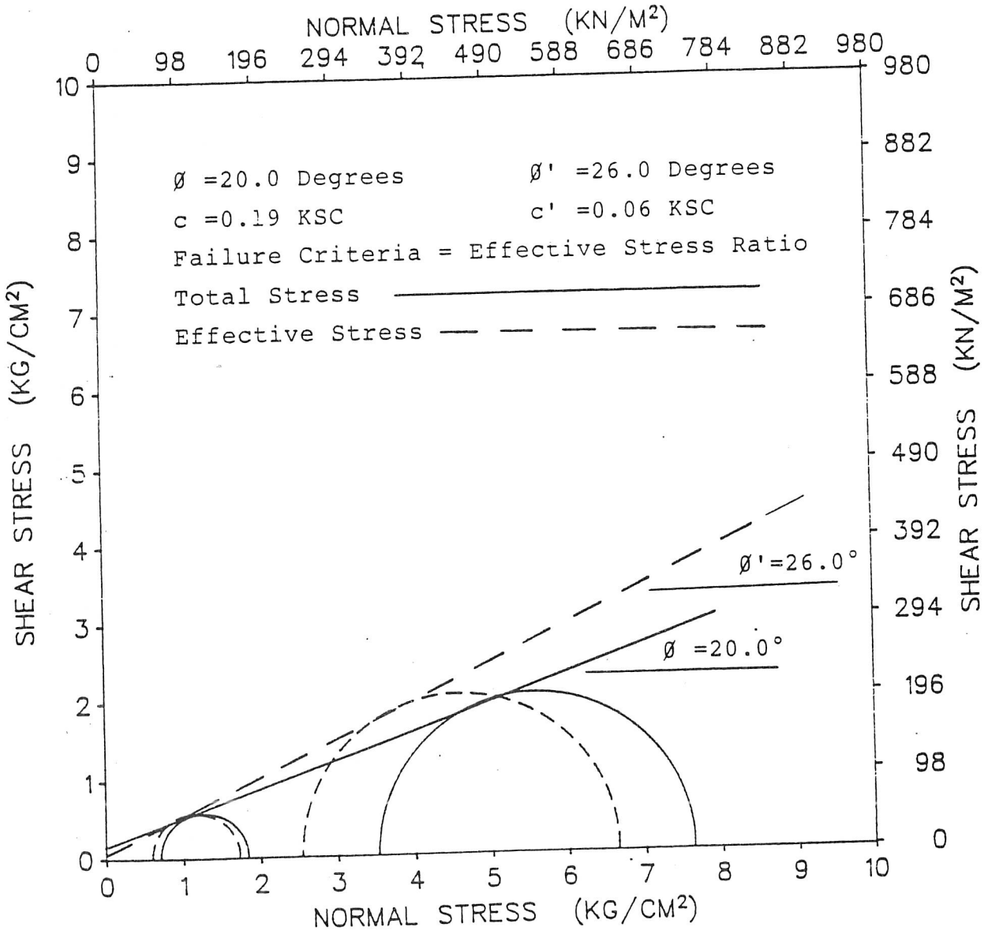
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S5 Sample: Depth: 45–46
Boring: S5 Sample: Depth: 46–47

MOHR ENVELOPE



Sigma 3 = 0.7 ksc
Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

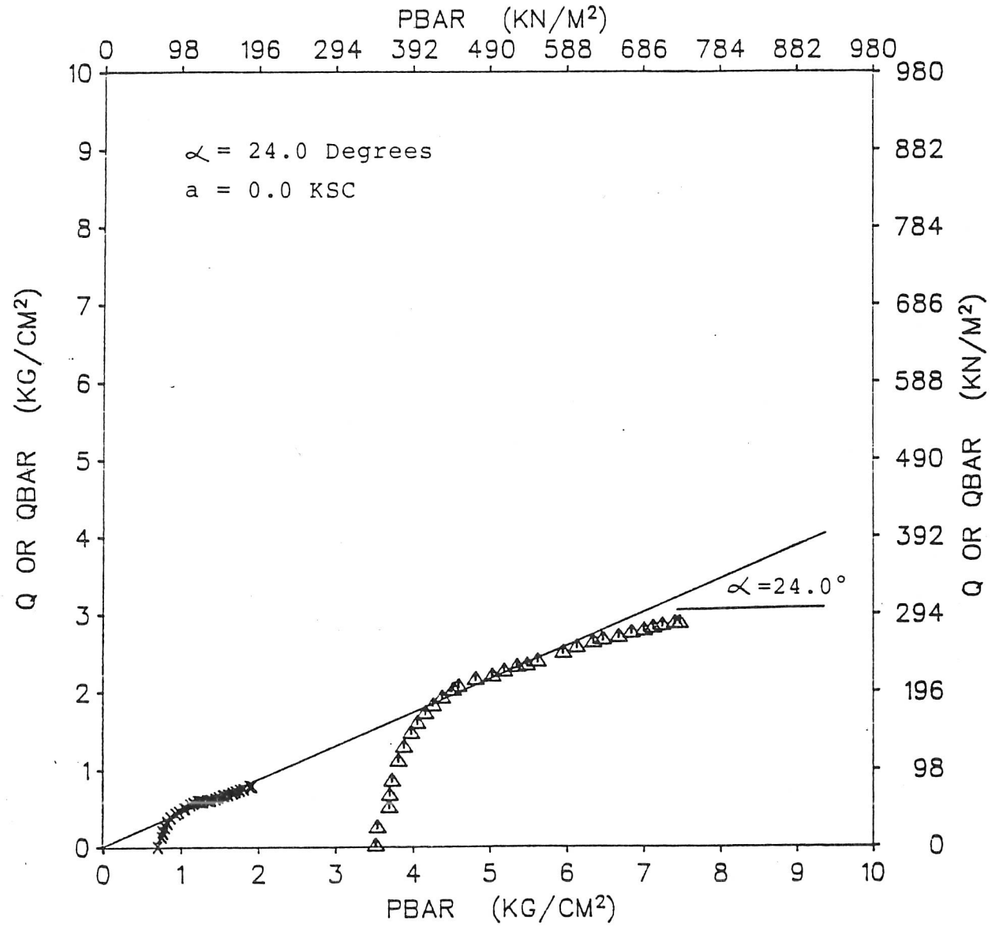
STS Consultants Ltd.

STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S5 Sample: Depth: 45–46
Boring: S5 Sample: Depth: 46–47

STRESS PATH PLOT



× Sigma 3 = 0.7 ksc
△ Sigma 3 = 3.5 ksc

BEST COPY AVAILABLE

STS Consultants Ltd.

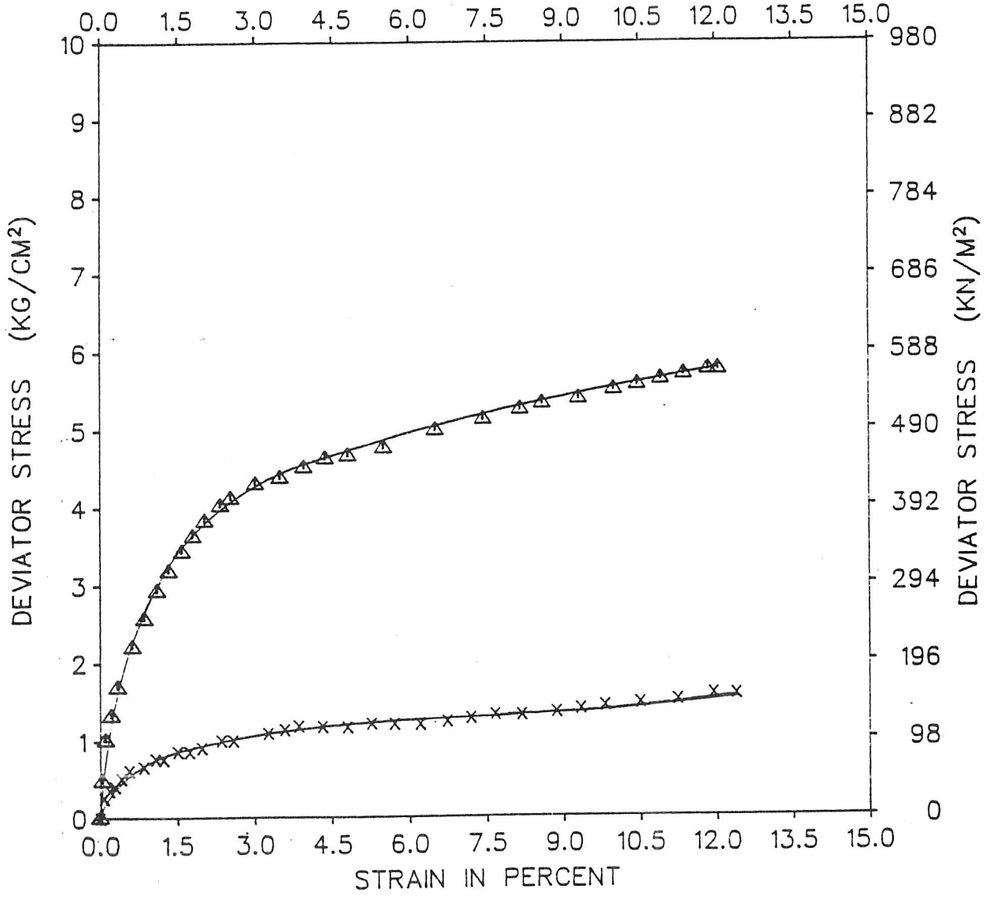
STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S5 Sample: Depth: 45–46

Boring: S5 Sample: Depth: 46–47

DEVIATOR STRESS vs STRAIN



× Sigma 3 = 0.7 ksc

△ Sigma 3 = 3.5 ksc

STS Consultants Ltd.

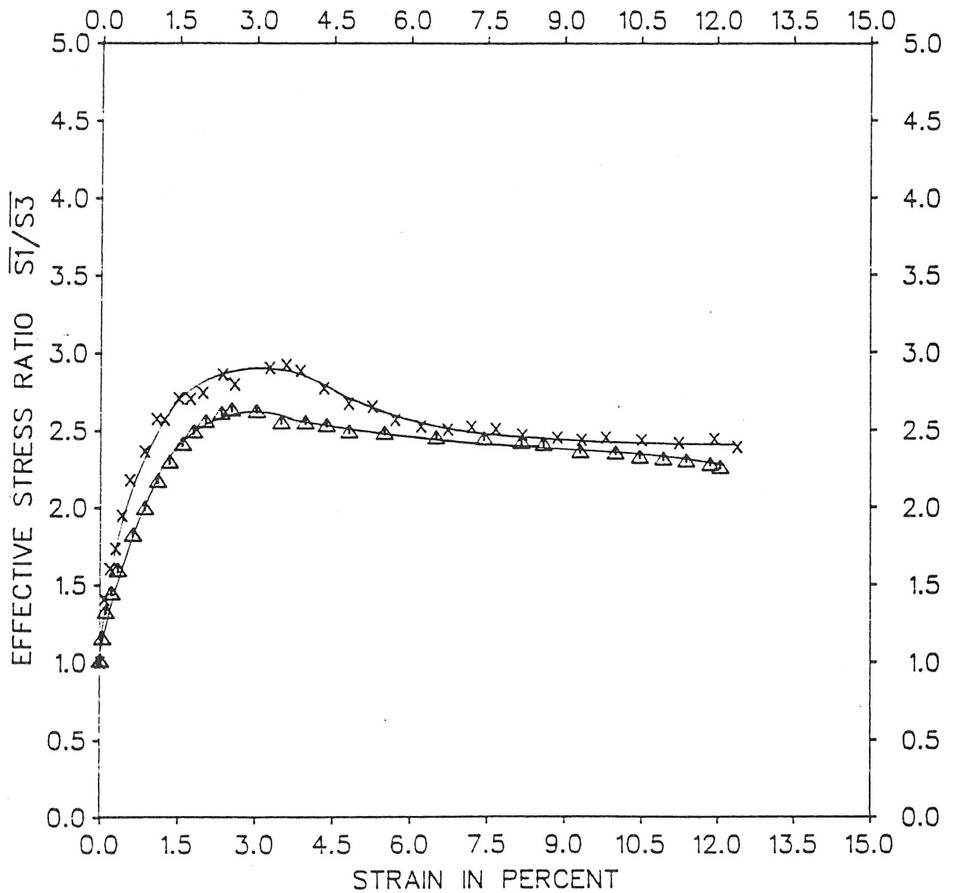
STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S5 Sample: Depth: 45–46

Boring: S5 Sample: Depth: 46–47

EFFECTIVE STRESS RATIO vs STRAIN



× Sigma 3 = 0.7 ksc

△ Sigma 3 = 3.5 ksc

STS Consultants Ltd.

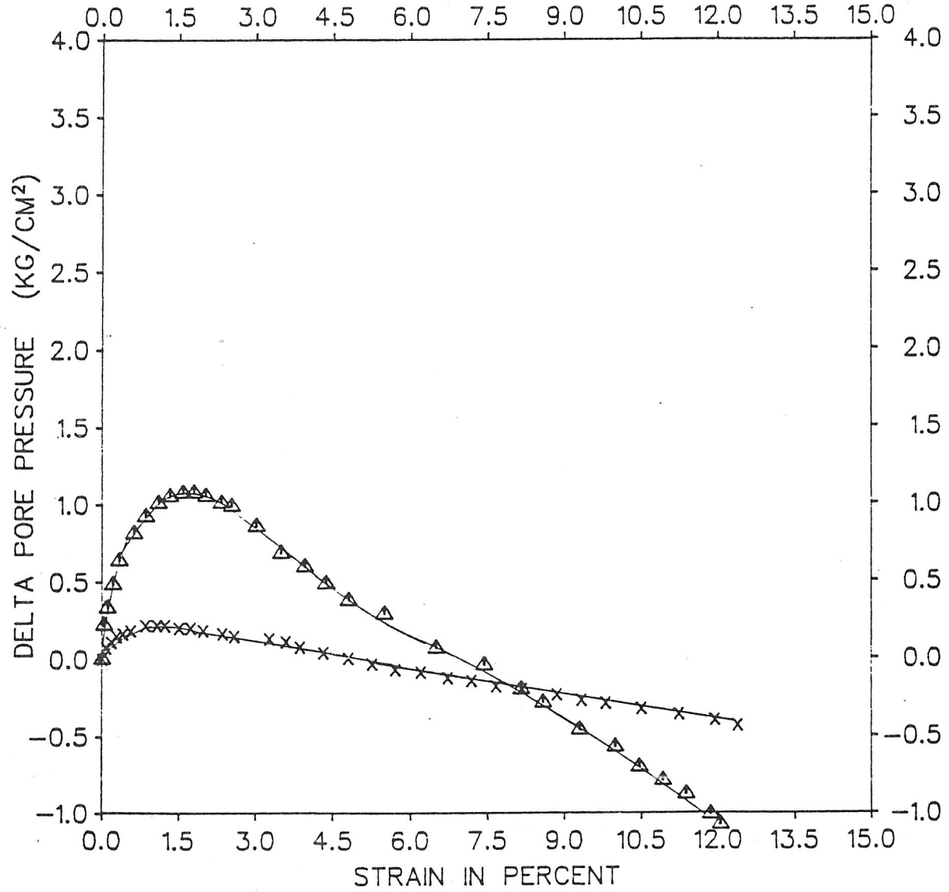
STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S5 Sample: Depth: 45–46

Boring: S5 Sample: Depth: 46–47

DELTA PORE PRESSURE vs STRAIN



× Sigma 3 = 0.7 ksc

△ Sigma 3 = 3.5 ksc

STS Consultants Ltd.

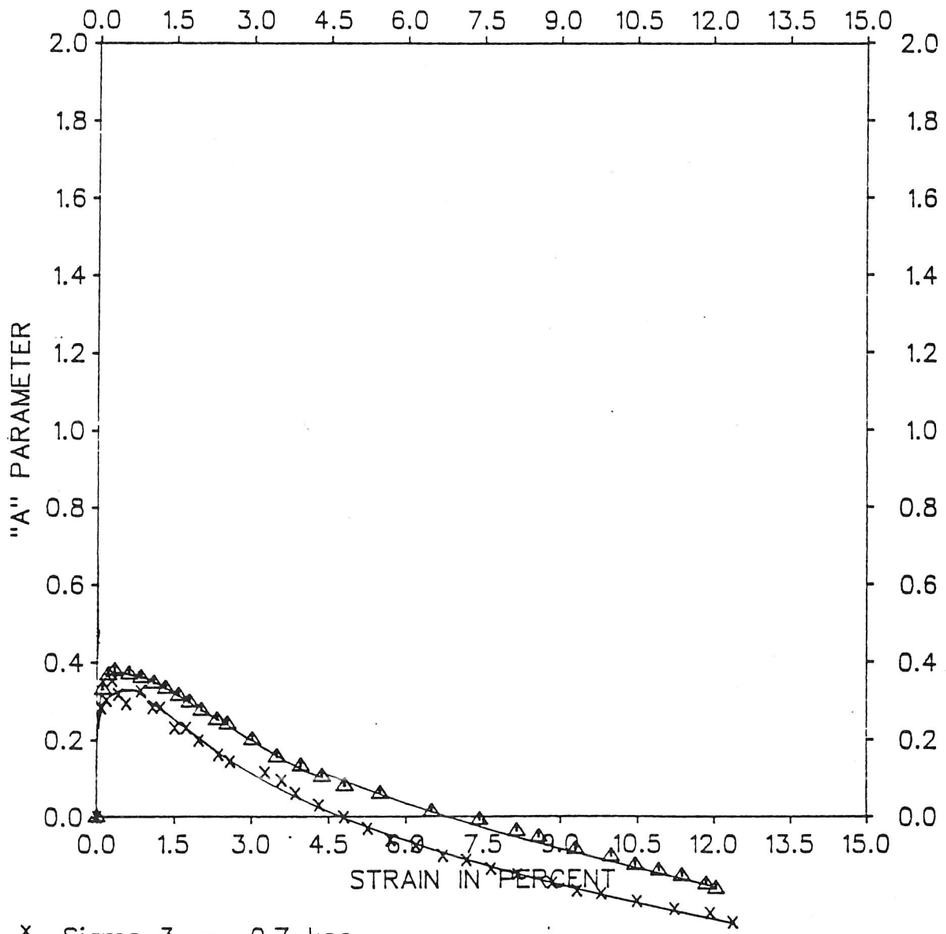
STS JOB NO. 25331

CONSOLIDATED UNDRAINED TRIAXIAL COMPRESSION TEST

Boring: S5 Sample: Depth: 45–46

Boring: S5 Sample: Depth: 46–47

"A" PARAMETER vs STRAIN



× Sigma 3 = 0.7 ksc

△ Sigma 3 = 3.5 ksc

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING: S5
SAMPLE:
DEPTH : 45-46
SOIL DESC: SILT TRACE CLAY TRACE FINE SAND
-- BROWN & VERY LT. REDDISH CREAM
(ML)
SPEC PREP: ENDS TRIMMED

STS JOB NO: 25331
DATE: 3-7-88
TESTED BY: JJ
APPROVED BY: [illegible]

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	62.070	61.634
LENGTH---AVERAGE	MM	132.000	131.060
AREA	CM2	30.259	29.835
VOLUME	CM3	399.418	391.017
WET DENSITY	G/CM3	2.224	2.320
DRY DENSITY	G/CM3	1.958	2.000
WATER CONTENT	%	13.600	16.000

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	4.700
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	4.700
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	0.700
EFFECTIVE SIGMA 3	KG/CM2	0.700
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING: S5
SAMPLE:
DEPTH : 45-46

STS JOB NO: 25331
EFF. SIGMA3: 0.700 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	2983.	0.00	0.70	0.70	0.70	0.70	0.0	0.00	1.00	0.70	0.70	0.00	0.00
7.6	0.10	2986.	0.07	0.95	0.70	0.88	0.63	0.1	0.25	1.41	0.83	0.76	0.13	0.28
10.7	0.24	2989.	0.11	1.06	0.70	0.95	0.59	0.2	0.36	1.60	0.88	0.77	0.18	0.30
12.2	0.38	2992.	0.14	1.11	0.70	0.96	0.56	0.3	0.41	1.73	0.90	0.76	0.20	0.35
15.3	0.54	2996.	0.16	1.21	0.70	1.05	0.54	0.4	0.51	1.95	0.96	0.79	0.26	0.32
18.4	0.74	3000.	0.18	1.31	0.70	1.13	0.52	0.6	0.61	2.18	1.01	0.83	0.31	0.29
19.9	1.11	3009.	0.22	1.36	0.70	1.15	0.48	0.8	0.66	2.37	1.03	0.81	0.33	0.33
23.0	1.41	3016.	0.22	1.46	0.70	1.25	0.48	1.1	0.76	2.58	1.08	0.87	0.38	0.28
23.0	1.61	3021.	0.22	1.46	0.70	1.24	0.48	1.2	0.76	2.57	1.08	0.86	0.38	0.28
26.0	1.97	3029.	0.20	1.56	0.70	1.36	0.50	1.5	0.86	2.71	1.13	0.93	0.43	0.23
26.0	2.27	3036.	0.20	1.56	0.70	1.36	0.50	1.7	0.86	2.71	1.13	0.93	0.43	0.23
27.6	2.59	3044.	0.18	1.61	0.70	1.43	0.52	2.0	0.91	2.74	1.15	0.97	0.45	0.20
30.6	3.09	3056.	0.16	1.70	0.70	1.54	0.54	2.4	1.00	2.86	1.20	1.04	0.50	0.16
30.6	3.39	3063.	0.14	1.70	0.70	1.56	0.56	2.6	1.00	2.80	1.20	1.06	0.50	0.14
33.7	4.28	3084.	0.13	1.79	0.70	1.67	0.57	3.3	1.09	2.90	1.25	1.12	0.55	0.12
35.2	4.70	3094.	0.11	1.84	0.70	1.73	0.59	3.6	1.14	2.92	1.27	1.16	0.57	0.09
36.7	5.06	3103.	0.07	1.88	0.70	1.81	0.63	3.9	1.18	2.88	1.29	1.22	0.59	0.06
36.7	5.66	3118.	0.04	1.88	0.70	1.84	0.66	4.3	1.18	2.77	1.29	1.25	0.59	0.03
36.7	6.29	3134.	0.00	1.87	0.70	1.87	0.70	4.8	1.17	2.67	1.29	1.29	0.59	0.00
38.3	6.89	3149.	-0.04	1.92	0.70	1.95	0.74	5.3	1.22	2.65	1.31	1.34	0.61	-0.03
38.3	7.47	3164.	-0.07	1.91	0.70	1.98	0.77	5.7	1.21	2.57	1.31	1.38	0.61	-0.06
38.3	8.13	3181.	-0.09	1.90	0.70	1.99	0.79	6.2	1.20	2.53	1.30	1.39	0.60	-0.07
39.8	8.82	3199.	-0.13	1.94	0.70	2.07	0.82	6.7	1.24	2.51	1.32	1.45	0.62	-0.10
41.3	9.42	3215.	-0.14	1.98	0.70	2.13	0.84	7.2	1.28	2.52	1.34	1.49	0.64	-0.11
42.9	10.04	3231.	-0.18	2.03	0.70	2.21	0.88	7.7	1.33	2.51	1.36	1.54	0.66	-0.13
42.9	10.72	3249.	-0.20	2.02	0.70	2.22	0.90	8.2	1.32	2.47	1.36	1.56	0.66	-0.15
44.4	11.61	3273.	-0.23	2.06	0.70	2.29	0.93	8.9	1.36	2.45	1.38	1.61	0.68	-0.17
45.9	12.23	3291.	-0.27	2.09	0.70	2.36	0.97	9.3	1.39	2.44	1.40	1.67	0.70	-0.19
47.5	12.85	3308.	-0.29	2.14	0.70	2.42	0.99	9.8	1.44	2.45	1.42	1.70	0.72	-0.20
49.0	13.76	3333.	-0.32	2.17	0.70	2.49	1.02	10.5	1.47	2.44	1.43	1.76	0.73	-0.22
50.5	14.72	3361.	-0.36	2.20	0.70	2.56	1.06	11.2	1.50	2.42	1.45	1.81	0.75	-0.24
53.6	15.64	3388.	-0.39	2.28	0.70	2.68	1.09	11.9	1.58	2.44	1.49	1.89	0.79	-0.25
53.6	16.23	3405.	-0.43	2.27	0.70	2.71	1.13	12.4	1.57	2.39	1.49	1.92	0.79	-0.27

STS CONSULTANTS, LTD.

TRIAXIAL COMPRESSION TEST
CONSOLIDATED UNDRAINED - DATA

PROJECT: KENNICOTT GEOTECNICAL
BORING: S5
SAMPLE:
DEPTH : 46-47
SOIL DESC: SILT TRACE CLAY TRACE FINE SAND
BROWN AND VERY LT. REDDISH CREAM
(ML)
SPEC PREP: ENDS TRIMMED

STS JOB NO: 25331
DATE: 3-7-88
TESTED BY: JJ
APPROVED BY: upc

SPECIMEN CHARACTERISTICS		INITIAL	CONSOLIDATED
DIAMETER-AVERAGE	MM	62.070	59.274
LENGTH---AVERAGE	MM	132.650	130.410
AREA	CM2	30.259	27.594
VOLUME	CM3	401.384	359.857
WET DENSITY	G/CM3	2.248	2.521
DRY DENSITY	G/CM3	1.995	2.225
WATER CONTENT	%	12.700	13.300

TEST PARAMETERS FOR CONSOLIDATION		
TOTAL SIGMA1 + BACK PRESSURE	KG/CM2	7.520
TOTAL SIGMA3 + BACK PRESSURE	KG/CM2	7.520
BACK PRESSURE	KG/CM2	4.000
EFFECTIVE SIGMA 1	KG/CM2	3.520
EFFECTIVE SIGMA 3	KG/CM2	3.520
CONSOLIDATION RATIO		1.000
STRAIN RATE	MM/MIN	0.100

BORING: S5
SAMPLE:
DEPTH : 46-47

STS JOB NO: 25331
EFF. SIGMA3: 3.520 KG/CM2

TEST RESULTS----------

LOAD KG	DEF MM	CORR AREA MM2	DELTA P.W.P. KG/CM2	SIGMA1 TOTAL KG/CM2	SIGMA3 TOTAL KG/CM2	SIGMA1 BAR KG/CM2	SIGMA3 BAR KG/CM2	STRAIN %	S1 - S3 KG/CM2	S1BAR/ S3BAR	P KG/CM2	PBAR KG/CM2	Q OR QBAR KG/CM2	A
0.0	0.00	2759.	0.00	3.52	3.52	3.52	3.52	0.0	0.00	1.00	3.52	3.52	0.00	0.00
13.1	0.05	2760.	0.22	3.99	3.52	3.78	3.30	0.0	0.47	1.14	3.76	3.54	0.24	0.46
27.6	0.14	2762.	0.33	4.52	3.52	4.19	3.19	0.1	1.00	1.31	4.02	3.69	0.50	0.33
36.4	0.28	2765.	0.48	4.84	3.52	4.35	3.04	0.2	1.32	1.43	4.18	3.70	0.66	0.37
46.6	0.44	2769.	0.64	5.20	3.52	4.57	2.88	0.3	1.68	1.58	4.36	3.73	0.84	0.38
61.1	0.81	2777.	0.81	5.72	3.52	4.91	2.71	0.6	2.20	1.81	4.62	3.81	1.10	0.37
71.3	1.11	2783.	0.92	6.08	3.52	5.16	2.60	0.9	2.56	1.99	4.80	3.88	1.28	0.36
81.5	1.43	2790.	1.01	6.44	3.52	5.43	2.51	1.1	2.92	2.16	4.98	3.97	1.46	0.35
88.8	1.73	2797.	1.05	6.70	3.52	5.64	2.47	1.3	3.18	2.29	5.11	4.06	1.59	0.33
96.1	2.06	2804.	1.07	6.95	3.52	5.87	2.45	1.6	3.43	2.40	5.23	4.16	1.71	0.31
101.3	2.34	2810.	1.07	7.15	3.52	6.07	2.45	1.8	3.63	2.48	5.33	4.26	1.81	0.30
107.7	2.64	2816.	1.05	7.34	3.52	6.29	2.47	2.0	3.82	2.55	5.43	4.38	1.91	0.28
113.6	3.04	2825.	1.01	7.54	3.52	6.53	2.51	2.3	4.02	2.60	5.53	4.52	2.01	0.25
116.5	3.30	2831.	0.99	7.64	3.52	6.65	2.53	2.5	4.12	2.62	5.58	4.59	2.06	0.24
122.3	3.93	2845.	0.86	7.82	3.52	6.96	2.66	3.0	4.30	2.61	5.67	4.81	2.15	0.20
125.2	4.55	2859.	0.68	7.90	3.52	7.22	2.84	3.5	4.38	2.54	5.71	5.03	2.19	0.16
129.6	5.16	2873.	0.59	8.03	3.52	7.44	2.93	4.0	4.51	2.54	5.78	5.18	2.26	0.13
133.5	5.70	2886.	0.48	8.15	3.52	7.66	3.04	4.4	4.63	2.52	5.83	5.35	2.31	0.10
135.2	6.27	2899.	0.37	8.18	3.52	7.81	3.15	4.8	4.66	2.48	5.85	5.48	2.33	0.08
139.1	7.16	2920.	0.29	8.28	3.52	8.00	3.23	5.5	4.76	2.47	5.90	5.62	2.38	0.06
147.2	8.48	2951.	0.07	8.51	3.52	8.44	3.45	6.5	4.99	2.44	6.01	5.95	2.49	0.01
152.8	9.69	2981.	-0.04	8.65	3.52	8.69	3.56	7.4	5.13	2.44	6.08	6.13	2.56	-0.01
157.8	10.64	3005.	-0.20	8.77	3.52	8.97	3.72	8.2	5.25	2.41	6.15	6.34	2.63	-0.04
160.8	11.20	3019.	-0.29	8.85	3.52	9.13	3.81	8.6	5.33	2.40	6.18	6.47	2.66	-0.05
163.9	12.13	3042.	-0.46	8.91	3.52	9.37	3.98	9.3	5.39	2.35	6.21	6.67	2.69	-0.09
168.6	13.03	3066.	-0.57	9.02	3.52	9.59	4.09	10.0	5.50	2.34	6.27	6.84	2.75	-0.10
171.4	13.64	3082.	-0.70	9.08	3.52	9.78	4.22	10.5	5.56	2.32	6.30	7.00	2.78	-0.13
174.3	14.24	3098.	-0.79	9.15	3.52	9.94	4.31	10.9	5.63	2.31	6.33	7.12	2.81	-0.14
177.1	14.83	3113.	-0.88	9.21	3.52	10.09	4.40	11.4	5.69	2.29	6.36	7.24	2.84	-0.15
180.0	15.45	3130.	-1.01	9.27	3.52	10.28	4.53	11.8	5.75	2.27	6.40	7.40	2.88	-0.18
180.4	15.71	3137.	-1.07	9.27	3.52	10.35	4.59	12.0	5.75	2.25	6.40	7.47	2.88	-0.19

STS Consultants Ltd.

DIRECT SHEAR TEST

PROJECT		SAMPLE LOCATION
Kenicott Geotechnical		---

FIELD SAMPLE NO.	DEPTH	
S-2	5-7'	STS Project No. 25331

TYPE OF SAMPLE	TESTED BY	APPROVED BY	DATE
3" Shelby Tube	STS-Northbrook	W.P.Q.	3/11/88

CLASSIFICATION: Silty sand, little fine gravel--reddish brown(sm) LL -- PI -- SPECIFIC GRAVITY

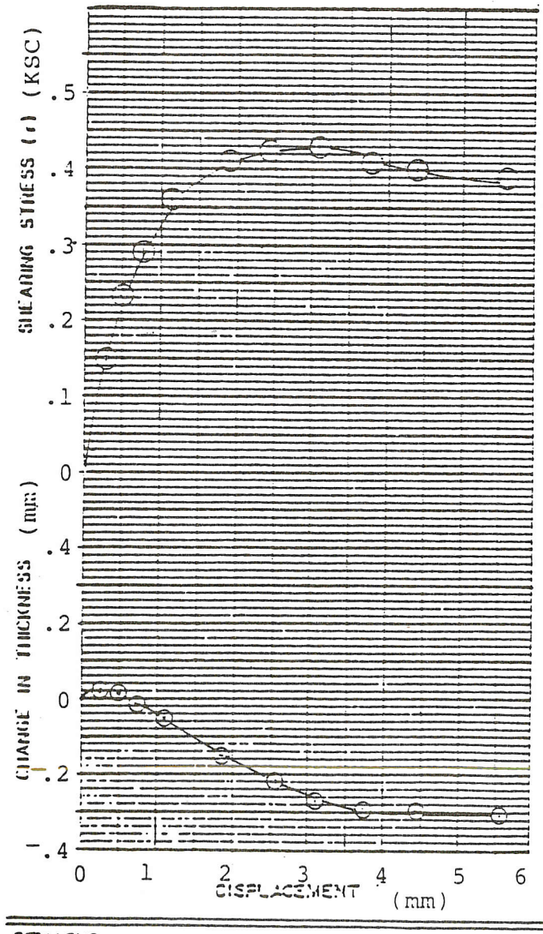
TYPE OF TEST	CONTROL	$G_s(-)^{\#4}$	
Drained	strain		--

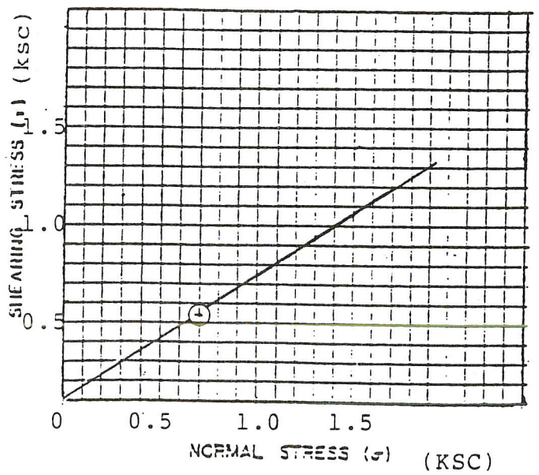
RATE OF LOADING	MOISTURE CONDITION	$G_s(-)^{\#4}$	
0.048mm/min	saturated		--

TYPE OF SPECIMEN	AREA	THICKNESS
Round undisturbed	28.27cm^2	2.00cm

TEST NO.	1	2	3	4
INIT MOISTURE, %	9.7			
DRY DENSITY, gm/cc	1.987			
INIT VOID RATIO	.349			
TEST DURATION, (min)	125			
FINAL MOISTURE, %	11.4			
NORMAL STRESS KSC	0.70			
MAX SHEAR STRESS KSC	0.41			

SHEAR VALUES	Ø	C
AT MAXIMUM STRESS	33°	0.0KSC





REMARKS

BEST COPY AVAILABLE

STS Consultants Ltd.

DIRECT SHEAR TEST

PROJECT		SAMPLE LOCATION
Kenicott Geotechnical		---

FIELD SAMPLE NO.	DEPTH	
S-4	31.5-32.5'	STS Project No.: 25331

TYPE OF SAMPLE	TESTED BY	APPROVED BY	DATE
3" Shelby Tube	STS-northbrook	W.P.Q.	3/11/88

CLASSIFICATION: Fine sandy silt--tan (ML) LL -- PI -- SPECIFIC GRAVITY

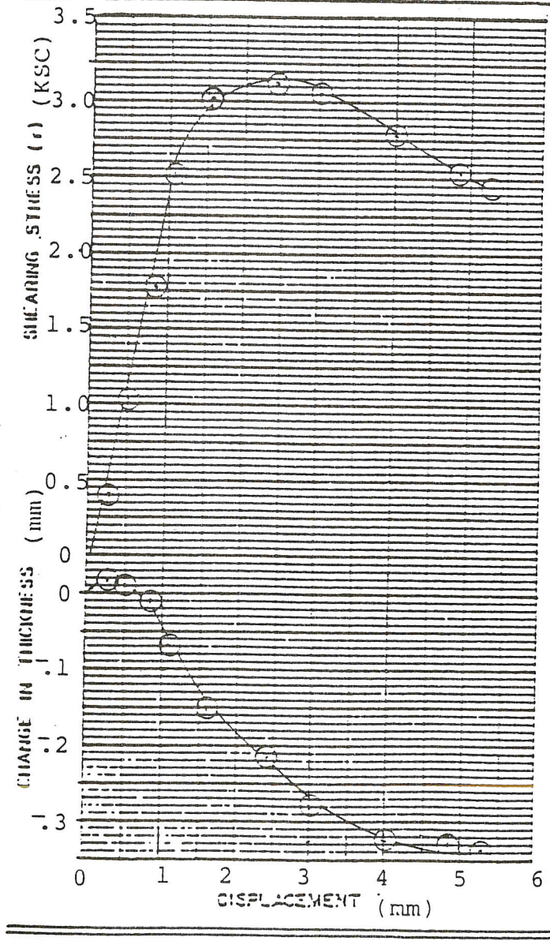
TYPE OF TEST	CONTROL	$G_s(-)^{\#4}$	
Drained	Strain		--

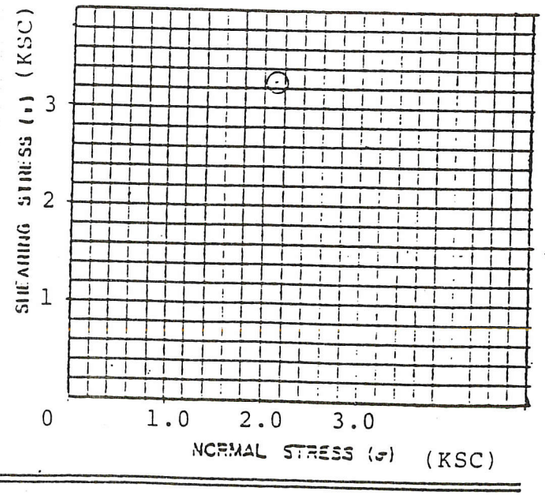
RATE OF LOADING	MOISTURE CONDITION	$G_s(-)^{\#4}$	
0.024mm/min	saturated		--

TYPE OF SPECIMEN	AREA	THICKNESS
round undisturbed	28.27cm^2	2.00cm

TEST NO.	1	2	3	4
INIT MOISTURE, %	13.0			
DRY DENSITY, gm/cc	1.939			
INIT VOID RATIO	.366			
TEST DURATION, (min)	250			
FINAL MOISTURE, %	13.8			
NORMAL STRESS KSC	2.11			
MAX SHEAR STRESS KSC	3.29			

SHEAR VALUES	Ø	C
AT MAXIMUM STRESS		





REMARKS

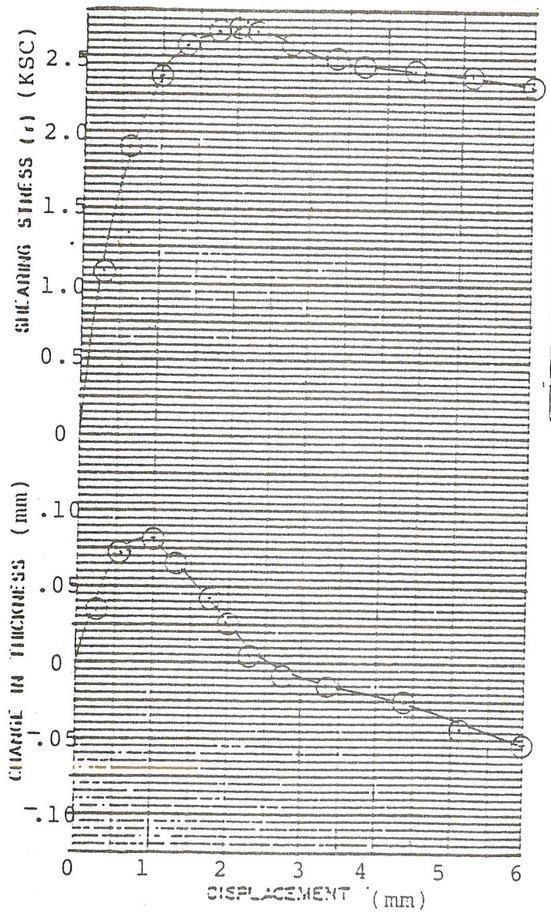
Note: Sample extreamly hard. Require additional direct shear points to determine Ø angle.

BEST COPY AVAILABLE

STS Consultants Ltd.

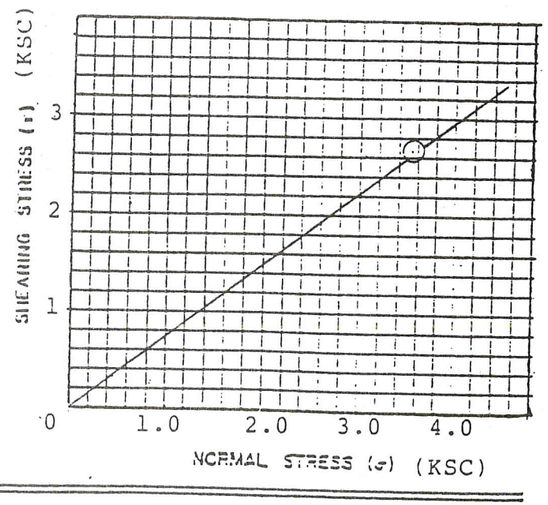
DIRECT SHEAR TEST

PROJECT: Kenicott Geotechnical		SAMPLE LOCATION: ---	
FIELD SAMPLE NO.: S-5	DEPTH: 35-36'	STS Project No.: 25331	
TYPE OF SAMPLE: 3" Shelby Tube	TESTED AT: STS-Northbrook	APPROVED BY: W.P.Q.	DATE: 3/11/88
CLASSIFICATION: Fine sand -- cream (SP)	LL --	PI --	SPECIFIC GRAVITY
TYPE OF TEST: Drained	CONTROL: Strain	$G_s(-)^{\#4}$	--
RATE OF LOADING: 0.048mm/min	MOISTURE CONDITION: saturated	$G_s(-)^{\#4}$	--
TYPE OF SPECIMEN: Round undisturbed	AREA: 28.27cm²	THICKNESS: 2.00cm	



TEST NO.	1	2	3	4
INIT. MOISTURE, %	18.5			
DRY DENSITY, $\frac{\text{LBS}}{\text{CU FT}}$	1.823			
INIT. VOID RATIO	.438			
TEST DURATION (min)	125			
FINAL MOISTURE, %	21.6			
NORMAL STRESS KSC	3.52			
MAX. SHEAR STRESS KSC	2.69			

SHEAR VALUES	Ø	C
AT MAXIMUM STRESS	36.5°	0.0



REMARKS