Attachment A-2.3.2a

NTH Consultants, Ltd. (2008) *Settlement Monitoring Report: Master Cell VI-E – Phase I*.

Introduction

Master Cell VI-E

Settlement Monitoring Event
September 2008

Project No. 62-080256-04
November 2008

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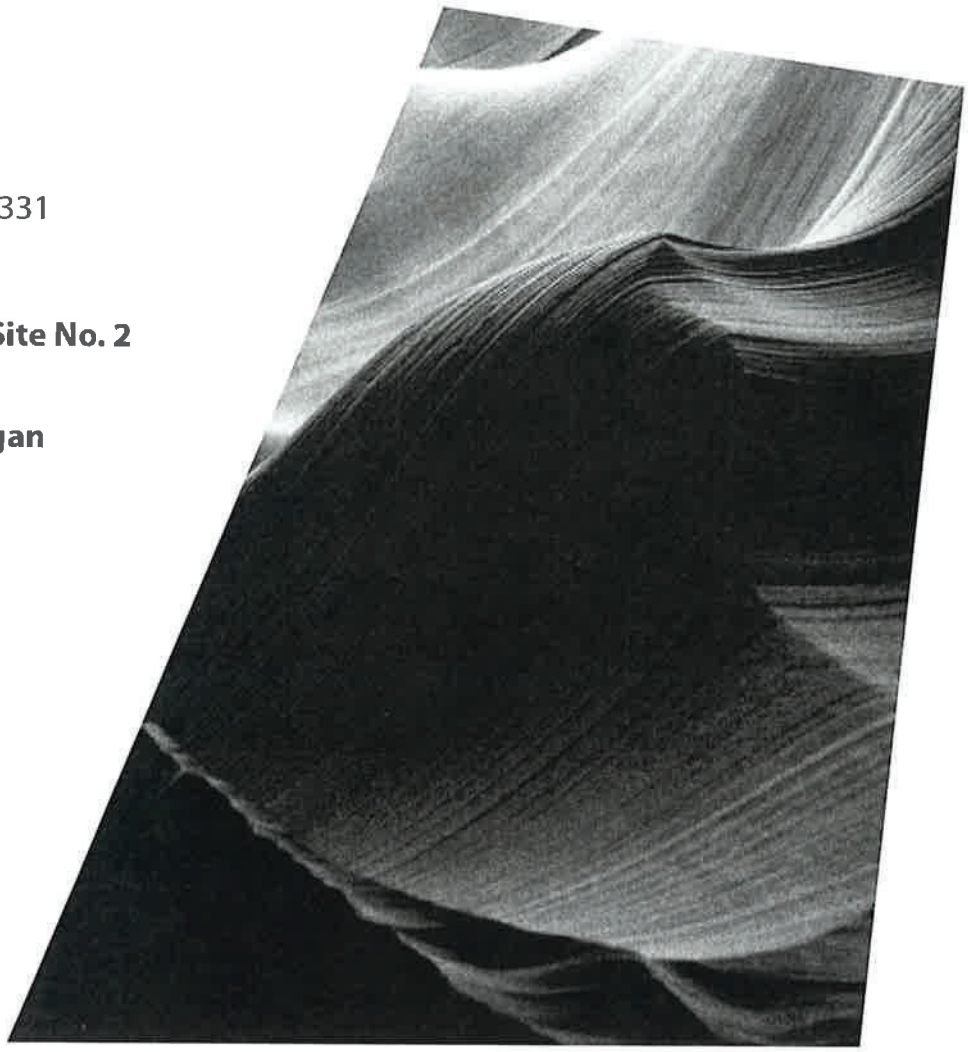
Prepared For:
Wayne Disposal Inc., Site No. 2
Van Buren Township,
Wayne County, Michigan



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1.0 BACKGROUND

Wayne Disposal, Inc., Site No. 2 (WDI) is located in Van Buren Township, Wayne County, near Belleville, Michigan. Master Cells (MC) V, VI and VII comprise the hazardous waste landfills at the site. MC VI is a fully licensed, operating landfill unit. MC V and MC VII were previously filled and have been closed, in accordance with approved Closure Plans, for more than 10 years.

The previously approved design modification incorporates raising the top of waste of MC VI (sub-cells A-North, A-South, B, C and D) and extending MC VI over the existing final cover of MC V. The portion of MC VI to be constructed over MC V, designated as sub-cell VI-E, will be constructed in several phases. Phase 1 construction was complete in 2004 and waste placement began on September 24, 2004 and on the eastern half of the cell began in September 2005. Phase 2 (SE) construction was completed in 2006. Waste placement in this area commenced in October 2007. The construction of Phase 2 West was completed in early 2008 and waste placement began in late September 2008.

This report documents the September 2008 monitoring of VI-E Phase 1 and Phase 2 settlement and horizontal tensile strain behavior in accordance with the "MC VI-E Settlement Monitoring Plan" (Third Revision, August 12, 2002) and "Revisions to the Settlement Monitoring Plan", dated May 24, 2006. Locations for the settlement and strain monitoring instruments are displayed on Plates 1 and 2, in Appendix A. The data collected from the various instruments has been compared to the Level I Criteria for differential settlement and horizontal tensile strain in Table 1 of the aforementioned monitoring plan. In addition, a quality assurance evaluation was completed for the data collected during this monitoring event.

Since the last monitoring event in March 2008, waste has been placed within the Phase 1 and Phase 2 SE area over the instrumentation and profilers. The top of the waste is approximately at Elevation 770 feet on the western side of Phase 1 and Elevation 798 on the eastern side of Phase 1. The top of the waste in the Phase 2 SE area is approximately at Elevation 790 feet extending northerly from the Phase 1 area.

2.0 HORIZONTAL TENSILE STRAIN

Strain in the primary geomembrane liner is measured by 49 strain meters (Geokon Model 4430) installed at seven locations, or "clusters", in the primary clay, beneath the primary geomembrane in the Phase 1 area (Appendix A, Plate 1). Each cluster is laid in a 44-foot long trench and consists of a string of six strain meters placed end to end, in series, with one foot of space between them.

A seventh strain meter is located parallel to the fourth meter in each series. We refer to the pairing of the fourth and seventh meters as "companion" meters. The purpose of the companion meters is to verify data consistency/reliability (see Section 2.2). The companion meter pairs are:

- Cluster 1: SM-4 and SM-5
- Cluster 2: SM-11 and SM-12
- Cluster 3: SM-18 and SM-19
- Cluster 4: SM-25 and SM-26
- Cluster 5: SM-31 and SM-33 (Original companion meters were SM-32 and SM-33. See the report for November 2004 monitoring event for a detailed discussion on the change.)
- Cluster 6: SM-39 and SM-40
- Cluster 7: SM-45 and SM-46 (Original companion meters were SM-46 and SM-47. See the report for the November 2004 monitoring event for a detailed discussion on the change.)

2.1 DATA REDUCTION

Average baseline readings and all subsequent readings collected to date for the strain meters are presented on attached Figures 1 through 7 and summarized in Table 1. The readings and associated data reduction spreadsheet, as well as a sample calculation, are presented in Appendix B.

During this monitoring period, five of the 49 strain meters provided no readings (SM-10, SM-13, SM-30, SM-34, SM-47). These five strain meters were among the eight "non reading" strain meters identified during Geokon's testing. Geokon's test results for the "non reading" strain meters were presented in the March 2005 report.

2.2 DATA QUALITY ASSURANCE EVALUATION

The data quality assurance evaluation was performed as described in the MC VI-E Settlement Monitoring Plan. The purpose of this evaluation is to ensure that the collected data is statistically consistent – that is to say that the difference between companion strain meters (within a single cluster) is statistically equal from one monitoring event to the next. The difference between the paired strain meters for each cluster was evaluated using control charts. The control charts were established using the mean and 3-standard deviations (3s) of the differences between companion meters measured during the baseline monitoring period. Table 2 presents the parameters used to establish the control charts for all the clusters. A sample

Strain Meter	Cluster	Average Baseline 8/04	11/15/04	/28/07	09/27/07	04/02/08	09/24/08
1	1	Compression	Compression	Cpression	Compression	Compression	Compression
2	1	Compression	Compression	Cpression	Compression	Compression	Compression
3	1	Compression	Compression	Cpression	Compression	Compression	Compression
4	1	Compression	Compression	Cpression	Compression	Compression	Compression
5	1	Compression	Compression	Cpression	Compression	Compression	Compression
6	1	Compression	Compression	C0.10	0.12	0.18	0.44
7	1	0.16	0.13	0.24	0.27	0.37	0.69
8	2	0.04	Compression	Cpression	Compression	Compression	Compression
9	2	0.12	0.08	0.08	0.10	0.03	0.06
10	2	Compression	NR	NR	NR	NR	NR
11	2	0.11	0.10	0.14	0.17	0.12	0.21
12	2	0.15	0.18	0.26	0.28	0.21	0.23
13	2	Compression	NR	NR	NR	NR	NR
14	2	Compression	Compression	C0.01	0.05	Compression	0.02
15	3	1.11	1.13	1.18	1.21	1.15	1.19
16	3	Compression	Compression	Cpression	Compression	Compression	Compression
17	3	Compression	Compression	Cpression	Compression	Compression	Compression
18	3	Compression	Compression	Cpression	Compression	Compression	Compression
19	3	Compression	Compression	Cpression	Compression	Compression	Compression
20	3	Compression	Compression	Cpression	Compression	Compression	Compression
21	3	0.05	0.05	0.03	0.05	0.00	0.03
22	4	Compression	Compression	Cpression	Compression	Compression	Compression
23	4	0.12	0.17	0.34	ORC	0.38	0.41
24	4	0.13	0.21	0.41	0.43	0.41	0.44
25	4	0.20	0.32	0.52	0.54	0.53	0.55
26	4	0.16	0.24	0.42	0.44	0.43	0.44
27	4	Compression	0.06	0.37	0.38	0.37	0.38
28	4	0.11	0.16	0.29	0.30	0.28	0.30
29	5	Compression	Compression	Cpression	Compression	Compression	Compression
30	5	Compression	NR	NR	NR	NR	NR
31	5	Compression	Compression	Cpression	Compression	Compression	Compression
32	5	Compression	ORC	ORC	Compression	Compression	Compression
33	5	Compression	Compression	Cpression	Compression	Compression	Compression
34	5	Compression	NR	NR	NR	NR	NR
35	5	Compression	Compression	Cpression	Compression	Compression	Compression
36	6	0.29	0.15	0.09	0.05	0.06	0.05
37	6	Compression	Compression	Cpression	Compression	Compression	Compression
38	6	0.14	0.13	0.19	0.16	0.14	0.13
39	6	0.12	0.15	0.21	0.19	0.17	0.14
40	6	0.13	0.00	C 0.00	Compression	Compression	Compression
41	6	Compression	Compression	Cpression	Compression	Compression	Compression
42	6	0.11	0.09	0.30	0.28	0.29	0.29
43	7	Compression	Compression	Cpression	Compression	Compression	Compression
44	7	0.01	Compression	Cpression	Compression	Compression	Compression
45	7	0.10	0.14	0.07	0.09	0.07	0.08
46	7	Compression	Compression	Cpression	Compression	Compression	Compression
47	7	0.15	NR	NR	NR	NR	NR
48	7	0.07	NR	ORC	NR	Compression	Compression
49	7	0.13	0.14	0.08	0.08	0.05	0.05

Notes:

1. Unit: %
2. NR = No Reading
3. ORC = Over Range in Compression = Reading is greater than 1.6%
4. Level I criteria: 8.4%

calculation of these parameters is included in Appendix B. The control chart for each of the clusters is presented in Figures 8 through 14. The upper and lower limits of the control charts were established as the larger of mean ± 3s or mean ± 3 x manufacturer error where manufacturer error is ± 0.03 inches of strain or ± 0.05 percent (0.03/61x100 where 0.03 is the instrument error in inches and 61 is the instrument length in inches). In other words, the error in the differences between companion strain meter measurements cannot be less than the meter measurement error stated by the manufacturer.

Using data from the most recent monitoring event, differences between companion strain meters were plotted on the control charts (Figures 8 through 14). All strain differences are between the upper and lower limits of the control charts.

TABLE 2
STRAIN METER
CONTROL CHART PARAMETERS

Cluster	Companion Strain Meters	Mean[1]	Standard Deviation (s)[1]	3s	3 x Accuracy
1	SM-4 / SM-5	0.4291	0.0545	0.1635[2]	0.15
2	SM-11 / SM-12	-0.0392	0.0385	0.1155	0.15[2]
3	SM-18 / SM-19	0.5634	0.0113	0.0339	0.15[2]
4	SM-25 / SM-26	0.0329	0.0944	0.2832[2]	0.15
5	SM-31 / SM-33	-0.6193	0.3090	0.9270[2]	0.15
6	SM-39 / SM-40	-0.0068	0.0774	0.2322[2]	0.15
7	SM-45 / SM-46	0.2050	0.2108	0.6324[2]	0.15

[1] Developed using data collected during baseline monitoring.

[2] Used in calculating upper and lower limits of control chart.

2.3 DATA COMPARISON TO CRITERIA

The percent strain measured from each of the strain meters, which was summarized in Table 1, was compared to the Level I Criteria of the MC VI-E Settlement Monitoring Plan. The Level I Criteria for tensile strain is one-third of the ultimate biaxial tensile strain of the primary geomembrane. Testing of the geomembrane

used in the construction of the VI-E liner indicates that the mean ultimate biaxial tensile strain is 25.1 percent (Appendix C). Therefore, the Level I Criteria for tensile strain is 8.4 percent. As shown on Table 1, the maximum tensile strain measured during the March 2008 monitoring event was 1.19 percent, which is below the Level I Criteria.

Review of the strain meter data shows increases in the strain meter clusters except for SM-3 in cluster 1 and the strain meters in cluster 6 from the previous monitoring event. SM-3 in cluster 1 and the strain meters in cluster 6 show decreases in strain for the two previous monitoring events.

3.0 DIFFERENTIAL SETTLEMENT

3.1 SETTLEMENT PROFILER

There are three settlement profilers in VI-E Phase 1 designated as north-south, northern east-west and southern east-west profilers and two settlement profilers in VI-E Phase 2 designated as Phase 2 north-south and Phase 2 east-west profilers. The settlement profiler alignments are shown on Plate 2 in Appendix A. The Phase 2 north-south profiler is a continuation of the Phase 1 north-south profiler. The settlement profilers are HDPE pipelines that span the floor of the cell buried within the leachate collection system sand layer. A sensor (Geokon Model 4651) was pulled through each pipeline to measure elevations at set points or "stations" from which slopes and settlement were determined. The stations were located as follows:

- Every 200 feet as the sensor was pulled away from the reference station
- Every 20 feet as the sensor was pulled toward the reference station

During the installation of the Phase 2 north-south profiler, the first 80 feet of the Phase 1 north-south profiler was cut out to install the Phase 2 north-south profiler. The Phase 1/Phase 2 connection for the north-south profiler occurs at station 80 on the Phase 1 north-south profiler and station 690 on the Phase 2 north-south profiler.

During this monitoring event, we were able to pull the profiler sensor through all four profiler pipes and complete the elevation survey.

3.1.1 Data Reduction

Elevation profiles are presented on Figures 15 through 19. These figures present the baseline readings, a mid-

term settlement reading, the current monitoring event elevation profile, and the 5-year settlement projection limits (for the north-south, northern east-west and southern east-west profiler) as calculated in section 4.0 of this report. The readings and associated data reduction spreadsheet, as well as a sample calculation, are presented in Appendix B.

3.1.2 Data Quality Assurance Evaluation

The data quality assurance evaluation is described in the MC VI-E Settlement Monitoring Plan. The procedure of measuring elevations every 200 feet going away from the reference station and every 20 feet approaching the reference station creates duplicate elevation measurements at the following stations:

- Phase 1 north-south profiler: 200, 400 feet
- Phase 2 north-south profiler: 0, 200, 400, 600 feet
- Northern east-west profiler: 0, 200, 400, 600, 800, 1,000 and 1,200 feet
- Southern east-west profiler: 0, 200, 400, 600, 800, 1,000 and 1,200 feet
- Phase 2 east-west profiler: 0, 200, 400, 600 feet

Differences between duplicate elevation measurements during the baseline monitoring period were used to develop control charts. Differences between duplicate elevation measurements during post-baseline monitoring events will always be compared to the control charts to verify data quality.

During the four-day baseline monitoring period for each profiler pipe, we calculated a daily mean and standard deviation of the differences between duplicate measurements (i.e. for each profiler pipe there were four means and four standard deviations). Then we calculated the mean and three standard deviations of the daily means (Centerline and Upper/Lower Limits respectively in Figures 20, 22, 24, 26 and 28); and the mean and three standard deviations of the daily standard deviations (Centerline and Upper/Lower Limits respectively in Figures 21, 23, 25, 27 and 29). These means and standard deviations were used to prepare control charts (Figures 20-29). Control chart parameters are presented in Table 3 and a sample calculation is included in Appendix B. Elevation differences between the Phase 1 settlement gauges (Section 3.2) and the northern east-west profiler were included in the data used to create the control charts for the northern east-west profiler. The elevation differences between the Phase 2 western settlement gauge and the Phase 2 east-west profiler were included in the data used to create the control charts for the Phase 2 east-west profiler.

TABLE 3
PROFILER SURVEY
CONTROL CHART PARAMETERS

Northern East-West Profiler			Southern East-West Profiler			Phase 1 North-South Profiler			Phase 2 East-West Profiler			Phase 2 North-South Profiler		
Date	Avg. (ft)	St. Dev. (ft)	Date	Avg. (ft)	St. Dev. (ft)	Date	Avg. (ft)	St. Dev. (ft)	Date	Avg. (ft)	St. Dev. (ft)	Date	Avg. (ft)	St. Dev. (ft)
9/15/04	0.09	0.1453	8/25/04	0.03	0.0771	9/15/04	-0.10	0.0867	6/12/08	-0.11	0.2369	6/12/08	0.07	0.0392
9/16/04	0.02	0.1538	8/26/04	-0.02	0.0416	9/16/04	-0.17	0.1672	7/9/08	-0.01	0.2418	7/9/08	-0.01	0.0216
9/17/04	-0.01	0.1460	8/27/04	0.00	0.0338	9/17/04	0.02	0.0352	7/11/08	-0.16	0.2648	7/11/08	-0.01	0.0728
9/18/04	-0.09	0.1200	8/28/04	0.06	0.0738	9/18/04	-0.13	0.1160	7/15/08	-0.13	0.3128	7/15/08	0.31	0.0667
Avg.	0.0002	0.1413	Avg.	0.02	0.0566	Avg.	-0.10	0.1013	Avg.	-0.1035	0.2641	Avg.	0.09	0.0500
St. Dev. (σ)	0.0743	0.0743	St. Dev. (σ)	0.0359	0.0221	St. Dev. (σ)	0.0853	0.0552	St. Dev. (σ)	0.0639	0.0347	St. Dev. (σ)	0.1537	0.0239
3σ	0.2228	0.0441	3σ	0.1077	0.0662	3σ	0.2559	0.1656	3σ	0.1917	0.1041	3σ	0.4611	0.0718

The purpose of the control charts is to provide an ongoing statistical comparison of the differences in duplicate elevation measurements to the corresponding differences measured during the baseline period. For each post-baseline monitoring event the differences in duplicate elevation measurements will be calculated and from those differences a mean and standard deviation will be calculated and plotted. Means will be plotted on Figures 20, 22, 24, 26 and 28; standard deviations on Figures 21, 23, 25, 27 and 29. For the differences in duplicate measurements to be acceptable – i.e. to be statistically consistent – the plotted points must fall inside of the Upper and Lower Limits shown in Figures 20 through 29. Review of the control charts, updated with the most recent data, indicates that duplicate elevation measurements are statistically consistent.

3.1.3 Data Comparison to Criteria

The MC VI-E Settlement Monitoring Plan Level I Criteria limits the amount by which the slope of the VI-E floor can rise or fall, relative to the original (baseline) slope, to a maximum of plus or minus three percent without slope reversal (i.e. uphill slopes must remain uphill; downhill slopes must remain downhill). For each post-baseline monitoring event, the slope of each 20-foot increment will be measured and compared to the corresponding average baseline slope (Tables 4 through 8). Provided the difference between current and average baseline slope is, in all cases, no more than plus or minus three percent, and no slopes have changed direction, Level I Criteria will be satisfied. For example, for a baseline slope of 4 percent, the current slope must be between 1 percent and 7 percent to satisfy Level I Criteria. For a baseline slope of 1 percent, the current slope must remain greater than zero (cannot subtract 3 percent from 1 percent without creating a slope reversal) and less than or equal to 4 percent. However, as stated in the "Revisions to the Settlement Monitoring Plan", dated May 24, 2006, the slope criteria in the settlement monitoring plan should not be applied to the surveyed slopes between stations located on side slopes, pipe crossings, and where profile pipes are oriented parallel to the floor slopes

Review of Tables 4 through 8 indicates that the measured pipe slopes along all the profilers does not exceed the Level 1 criteria between stations not located in pipe crossings and pipe access sections.

Based on the data from the stations not located in the pipe crossings and pipe access sections, the Phase 1 north-south pipe has minimal settlement since the last monitoring event in March 2007 and as much as 1.6 feet since the background period.

Table 4
Slope Comparison
Phase 1 North-South Pro

Station Interval (ft)	Station Interval Location	Average Baseline Slope 8/04	11/15/2004		1/20/2005		2/1/2005		3/24/2005		5/24/2005		5/27/2005		7/19/2005		Sl
			Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	
0-20	side slope	-	-		-		-		-		-		-		-		
20-40	side slope	4.55	4.73	-0.18	4.95	-0.39	5.06	-0.50	5.29	-0.73	2.90	1.65	5.58	-1.03	4.15	0.40	5
40-60	side slope	27.99	27.68	0.31	26.55	1.45	25.85	2.15	28.30	-0.31	25.68	2.32	25.66	2.33	29.79	-1.80	2
60-80	side slope	-22.41	-22.84	0.43	-22.94	0.53	-23.52	1.11	-23.48	1.08	-20.43	-1.98	-20.86	-1.55	-23.97	1.56	-2
80-100	side slope	-8.02	-7.70	-0.32	-7.60	-0.42	-6.62	-1.40	-8.16	0.15	-8.96	0.94	-8.27	0.25	-7.64	-0.37	-
100-120	cell floor	-2.30	-2.56	0.26	-2.49	0.19	-3.08	0.78	-2.31	0.01	-2.63	0.33	-2.59	0.29	-2.74	0.44	-
120-140	cell floor	-1.70	-1.33	-0.37	-1.64	-0.07	-1.37	-0.34	-1.57	-0.14	-0.74	-0.97	-0.42	-1.28	-0.26	-1.44	-
140-160	cell floor	-3.11	-3.39	0.28	-3.31	0.20	-3.60	0.49	-3.21	0.10	-4.45	1.34	-4.79	1.68	-3.70	0.58	-
160-180	pipe crossing	3.02	3.03	-0.01	2.60	0.42	2.07	0.95	3.07	-0.05	3.51	-0.49	2.70	0.32	2.96	0.06	2
180-200	pipe crossing	-6.81	-7.07	0.26	-6.74	-0.07	-6.54	-0.28	-7.28	0.47	-7.28	0.47	-6.77	-0.04	-7.08	0.27	-
200-220	pipe crossing	-3.02	-2.92	-0.10	-2.57	-0.45	-2.78	-0.24	-2.54	-0.49	-2.21	-0.82	-3.09	0.06	-3.09	0.07	-
220-240	cell floor	-1.46	-1.69	0.23	-2.19	0.73	-2.04	0.58	-2.14	0.68	-1.45	-0.01	-1.68	0.21	-1.43	-0.03	-
240-260	cell floor	-3.22	-3.22	0.00	-3.16	-0.06	-3.42	0.20	-3.61	0.39	-2.09	-1.13	-2.15	-1.07	-2.87	-0.35	-
260-280	cell floor	-2.55	-1.93	-0.62	-2.06	-0.49	-2.15	-0.40	-1.76	-0.79	-5.16	2.61	-0.83	-1.72	-1.43	-1.12	-
280-300	cell floor	-1.25	-1.74	0.49	-1.65	0.40	-1.37	0.12	-1.38	0.13	2.39	-3.65	-2.08	0.82	-0.60	-0.65	-
300-320	cell floor	-1.75	-2.03	0.28	-2.34	0.59	-2.80	1.04	-2.28	0.52	-2.48	0.72	-1.67	-0.09	-2.50	0.75	-
320-340	cell floor	-4.36	-4.35	-0.01	-4.03	-0.33	-3.48	-0.88	-4.15	-0.21	-6.49	2.13	-5.23	0.87	-4.71	0.36	-
340-360	cell floor	-1.07	-1.34	0.27	-1.44	0.36	-2.47	1.39	-1.49	0.41	-1.85	0.77	-0.79	-0.28	-1.72	0.65	-
360-380	cell floor	-2.49	-2.17	-0.32	-2.47	-0.02	-2.08	-0.40	-3.48	0.99	-2.26	-0.22	-2.74	0.26	-2.32	-0.17	-
380-400	cell floor	-2.91	-2.69	-0.22	-2.96	0.05	-3.25	0.34	-2.75	-0.15	-3.26	0.36	-4.55	1.64	-3.60	0.70	-
400-420	cell floor	-2.79	-2.57	-0.22	-2.58	-0.21	-1.58	-1.21	-1.92	-0.88	-3.05	0.26	-2.42	-0.38	-2.41	-0.38	-
420-440	cell floor	-2.13	-2.56	0.43	-2.62	0.49	-2.42	0.29	-1.81	-0.32	-3.02	0.89	-3.29	1.16	-3.46	1.33	-
440-460	pipe crossing	-2.84	-2.60	-0.24	-0.49	-2.34	-3.53	0.69	-4.19	1.35	-3.28	0.45	-1.44	-1.39	-3.75	0.91	
460-480	pipe crossing	1.87	2.64	-0.77	0.58	1.30	3.07	-1.20	1.36	0.51	2.76	-0.89	1.00	0.87	3.67	-1.79	
480-500	pipe crossing	-4.27	-4.97	0.70	-6.38	2.11	-5.63	1.36			-4.55	0.29	-6.17	1.91	-6.25	1.99	
500-520	cell floor	-5.95	-5.38	-0.57	-4.69	-1.27	-6.28	0.33			-5.75	-0.21	-4.76	-1.19	-5.61	-0.34	
520-540	cell floor	-3.29	-3.76	0.47	-4.08	0.79	-2.97	-0.32			-3.66	0.37	-4.62	1.33	-5.52	2.23	
540-560	cell floor	-1.79	-1.98	0.19	0.96	-2.75	-1.08	-0.71			-3.19	1.40	-2.50	0.71	-1.34	-0.45	
560-580	cell floor	-2.40	-2.13	-0.27	-4.24	1.84	-3.59	1.19			-1.61	-0.79	-1.60	-0.80	-2.99	0.59	
580-600	cell floor	-3.53	-3.23	-0.30	-3.80	0.27	-2.58	-0.94			-3.66	0.13	-3.46	-0.07	-3.17	-0.36	

Notes:

1. Elevation at station 0 is taken at the reference station prior to 9/23/2008 readings. Subsequent readings from 9/23/2008 use the reference station from Phase 2 North-South Profiler since the Phase 1 and Phase 2 profilers were joined.
2. Level 1 Criteria: slope difference must be less than ± 3% and not reverse direction
3. Unit: %
4. Shaded numbers indicate an anomalous result.
5. Pipe crossing and sideslope intervals are not compared to Level 1 Criteria
6. N/A: The Phase 1 profiler pipe was cut at station 80 to install the Phase 2 profiler pipe. These stations are no longer available for readings.

Table 5 Slope Comparison Phase 2 North-South Profiler				
Station Interval (ft)	Station Interval Location	Average Baseline Slope 7/08	9/23/2008	
			Slope	Slope Difference
0-20	side slope	-	-	
20-40	side slope	-33.48	-34.52	1.03
40-60	side slope	-25.83	-27.31	1.48
60-80	side slope	-16.74	-17.89	1.14
80-100	cell floor	0.40	0.37	0.03
100-120	cell floor	1.72	1.81	-0.08
120-140	pipe crossing	0.95	1.05	-0.09
140-160	pipe crossing	2.54	2.71	-0.17
160-180	pipe crossing	2.65	2.47	0.18
180-200	cell floor	0.60	0.68	-0.08
200-220	pipe crossing	1.82	1.82	0.01
220-240	pipe crossing	2.94	3.10	-0.15
240-260	pipe crossing	2.05	2.27	-0.22
260-280	cell floor	2.11	1.60	0.50
280-300	cell floor	1.54	1.48	0.06
300-320	cell floor	1.00	1.46	-0.46
320-340	pipe crossing	1.29	1.33	-0.05
340-360	pipe crossing	2.41	2.17	0.24
360-380	pipe crossing	2.99	2.98	0.00
380-400	cell floor	-0.44	-0.53	0.09
400-420	cell floor	0.36	1.39	-1.03
420-440	cell floor	2.01	1.76	0.24
440-460	cell floor	0.32	0.31	0.01
460-480	cell floor	1.60	2.10	-0.50
480-500	cell floor	1.95	2.00	-0.05
500-520	cell floor	2.28	2.19	0.08
520-540	pipe crossing	1.95	2.12	-0.17
540-560	pipe crossing	3.72	3.55	0.17
560-580	pipe crossing	0.71	0.88	-0.18
580-600	cell floor	6.70	6.53	0.17
600-620	cell floor	6.66	6.71	-0.05
620-640	cell floor	2.80	2.84	-0.04
640-660	P2/P1 Tie-In (Sideslope)	7.88	5.87	2.01
660-680	P2/P1 Tie-In (Sideslope)	-4.47	-3.84	-0.63

Notes:

1. Elevation at station 0 is taken at the reference station
2. Level 1 Criteria: slope difference must be less than ± 3% and not reverse direction
3. Unit: %
4. Shaded numbers indicate an anomalous result.
5. Pipe crossing and sideslope intervals are not compared to Level 1 Criteria

Table 6
Slope Comparison
Northern East-West Profiler

Station Interval	Location	Average Baseline Slope 8/04	11/15/2004		1/18/2005		3/23/2005		5/24/2005		5/25/2005		7/18/2005		9/20/2005		9/21/2005	
			Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference
0-20	sideslope	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20-40	sideslope	-31.04	-29.85	-1.18	-28.40	-2.64	-29.09	-1.95	-27.40	-3.64	-29.61	-1.43	-29.40	-1.64	-29.21	-1.83	-28.24	-2.80
40-60	sideslope	-2.40	-3.09	0.69	-2.36	-0.03	-2.47	0.08	-3.07	0.67	-1.38	-1.02	-1.62	-0.77	-2.30	-0.09	-3.20	0.81
60-80	sideslope	4.57	4.82	-0.25	4.86	-0.29	4.71	-0.15	3.29	1.28	4.21	0.35	4.84	-0.27	4.80	-0.24	4.73	-0.16
80-100	cell floor	4.95	5.02	-0.07	4.84	0.11	5.09	-0.14	4.91	0.04	6.12	-1.17	4.91	0.04	4.35	0.59	5.01	-0.06
100-120	cell floor	5.09	5.07	0.03	5.32	-0.22	5.06	0.03	5.46	-0.37	3.67	1.42	4.70	0.39	5.10	-0.01	4.82	0.28
120-140	cell floor	4.69	4.67	0.01	4.73	-0.05	4.88	-0.20	5.61	-0.92	5.60	-0.91	4.67	0.01	5.45	-0.76	4.82	-0.14
140-160	cell floor	4.99	5.10	-0.11	4.69	0.30	4.82	0.17	3.96	1.03	4.19	0.80	4.42	0.57	4.15	0.83	5.37	-0.39
160-180	cell floor	5.00	4.91	0.08	5.01	-0.01	4.73	0.27	4.07	0.92	5.35	-0.35	5.61	-0.61	4.51	0.49	4.37	0.63
180-200	cell floor	3.13	3.21	-0.08	2.89	0.24	3.45	-0.32	6.00	-2.87	4.26	-1.13	3.47	-0.33	1.80	1.33	3.56	-0.43
200-220	cell floor	3.40	3.30	0.10	3.81	-0.41	3.66	-0.26	3.03	0.37	3.35	0.05	2.94	0.46	5.38	-1.99	3.12	0.28
220-240	pipe crossing	5.77	5.97	-0.20	5.84	-0.07	5.91	-0.14	6.13	-0.36	6.09	-0.32	5.74	0.03	7.11	-1.34	7.12	-1.35
240-260	pipe crossing	0.75	0.52	0.23	0.99	-0.24	0.23	0.52	-0.59	1.34	0.05	0.70	0.13	0.62	-1.66	2.41	-1.09	1.84
260-280	pipe crossing	1.80	1.81	-0.01	1.56	0.24	1.60	0.20	0.48	1.32	0.05	1.75	1.92	-0.12	1.92	-0.13	2.23	-0.43
280-300	cell floor	1.86	1.91	-0.05	1.45	0.42	2.01	-0.15	2.52	-0.66	1.84	0.03	1.94	-0.08	1.70	0.16	1.74	0.12
300-320	cell floor	2.51	2.40	0.11	2.22	0.30	2.73	-0.22	2.37	0.14	2.55	-0.04	2.89	-0.37	3.53	-1.02	2.39	0.13
320-340	cell floor	2.01	2.09	-0.08	2.03	-0.03	1.92	0.08	1.85	0.15	2.17	-0.17	0.93	1.08	1.76	0.25	1.77	0.24
340-360	cell floor	0.98	1.05	-0.07	1.00	-0.02	0.98	0.00	0.81	0.17	0.71	0.27	1.64	-0.66	1.29	-0.30	1.36	-0.38
360-380	cell floor	1.18	1.22	-0.05	1.63	-0.46	1.28	-0.10	1.52	-0.35	0.98	0.20	1.00	0.18	1.69	-0.51	0.91	0.27
380-400	cell floor	1.00	0.85	0.15	0.84	0.16	0.94	0.06	0.53	0.47	1.13	-0.13	0.93	0.07	0.56	0.44	0.87	0.13
400-420	cell floor	1.48	1.42	0.06	1.51	-0.03	1.52	-0.03	2.29	-0.81	1.44	0.04	2.11	-0.63	0.80	0.68	1.32	0.17
420-440	pipe crossing	3.12	3.87	-0.75	3.45	-0.33	3.78	-0.66	3.71	-0.58	4.79	-1.67	4.11	-0.99	5.47	-2.35	5.39	-2.27
440-460	pipe crossing	1.37	0.73	0.63	1.21	0.16	0.43	0.93	1.87	-0.51	0.46	0.91	0.24	1.13	-0.84	2.20	-1.14	2.50
460-480	pipe crossing	-0.58	-0.39	-0.18	-0.71	0.14	-0.33	-0.24	0.44	-1.02	-0.40	-0.18	-0.14	-0.44	0.42	-1.00	0.33	-0.90
480-500	pipe crossing	1.42	1.34	0.08	1.91	-0.49	1.79	-0.37	-0.70	2.12	1.85	-0.43	1.31	0.10	1.44	-0.02	1.54	-0.12
500-520	cell floor	1.63	1.59	0.05	1.32	0.31	1.84	-0.21	2.77	-1.13	2.00	-0.37	1.98	-0.34	2.05	-0.41	2.08	-0.45
520-540	cell floor	0.75	0.84	-0.08	0.86	-0.11	0.57	0.19	0.28	0.47	0.35	0.41	0.74	0.02	0.54	0.21	0.62	0.13
540-560	cell floor	1.03	1.41	-0.38	1.17	-0.13	1.24	-0.20	0.95	0.09	1.20	-0.17	0.94	0.09	1.42	-0.39	1.44	-0.41
560-580	cell floor	1.41	0.90	0.51	1.40	0.02	1.11	0.31	1.50	-0.09	1.18	0.24	1.15	0.26	1.28	0.13	1.01	0.40
580-600	cell floor	0.99	1.03	-0.04	0.84	0.15	1.14	-0.15	1.16	-0.17	1.42	-0.43	1.44	-0.45	1.03	-0.04	1.11	-0.12
600-620	pipe crossing	0.84	0.73	0.12	0.78	0.06	0.57	0.27	0.34	0.50	0.23	0.62	0.07	0.78	0.13	0.71	0.13	0.71
620-640	pipe crossing	0.29	0.45	-0.17	0.81	-0.53	0.54	-0.26	0.79	-0.50	0.94	-0.65	0.53	-0.25	2.73	-2.44	2.46	-2.18
640-660	pipe crossing	1.36	1.29	0.07	0.84	0.51	0.88	0.48	0.23	1.12	0.09	1.26	0.11	1.24	-2.95	4.31	-2.57	3.92
660-680	pipe crossing	-5.70	-5.47	-0.23	-5.53	-0.17	-5.52	-0.18	-5.10	-0.60	-5.30	-0.40	-5.00	-0.70	-4.27	-1.43	-4.85	-0.85
680-700	pipe crossing	-1.81	-2.10	0.29	-2.26	0.44	-2.07	0.26	-1.87	0.06	-1.52	-0.29	-1.57	-0.24	-1.29	-0.52	-0.46	-1.35
700-720	cell floor	-0.91	-0.84	-0.07	-0.42	-0.49	-1.20	0.29	-0.76	-0.15	-0.92	0.01	-0.67	-0.24	-1.38	0.48	-1.35	0.44
720-740	cell floor	-0.65	-0.73	0.08	-0.80	0.15	-0.20	-0.45	-0.64	-0.01	-0.74	0.09	-0.80	0.14	0.20	-0.86	-0.71	0.06
740-760	cell floor	-0.73	-0.77	0.04	-0.68	-0.05	-0.77	0.04	-0.77	0.04	-0.56	-0.17	-0.48	-0.25	-1.40	0.67	-0.51	-0.22
760-780	cell floor	-1.34	-1.33	-0.01	-1.39	0.05	-1.23	-0.11	-1.36	0.02	-1.66	0.32	-1.68	0.34	-0.89	-0.45	-1.51	0.16
780-800	cell floor	-1.47	-1.46	-0.01	-1.46	-0.01	-1.38	-0.09	-1.51	0.03	-1.17	-0.30	-1.21	-0.26	-1.36	-0.11	-1.16	-0.31
800-820	cell floor	-1.65	-1.51	-0.15	-1.42	-0.23	-1.71	0.05	-1.45	-0.20	-1.76	0.11	-1.63	-0.02	-1.88	0.22	-2.00	0.35
820-840	pipe crossing	1.67	1.60	0.08	1.49	0.18	2.14	-0.47	2.09	-0.42	2.22	-0.54	2.47	-0.79	3.25	-1.58	3.90	-2.22
840-860	pipe crossing	-1.45	-1.24	-0.20	-0.81	-0.63	-1.79	0.35	-1.51	0.06	-1.73	0.29	-2.06	0.61	-3.07	1.62	-4.05	2.60
860-880	pipe crossing	-3.12	-3.66	0.55	-3.91	0.80	-3.55	0.44	-3.46	0.34	-3.30	0.19	-3.56	0.45	-3.09	-0.02	-3.22	0.10
880-900	cell floor	-1.63	-1.43	-0.19	-2.50	0.87	-0.93	-0.69	-1.59	-0.04	-1.23	-0.40	-1.44	-0.19	-1.69	0.06	-1.75	0.12
[illegible]	cell floor	-1.78	-1.60	-0.18	-0.85	-0.93	-2.02	0.24	-1.88	0.10	-1.87	0.09	-2.00	0.22	-1.11	-0.68	-1.32	-0.46
	cell floor	-1.78	-2.13	0.35	-2.39	0.62	-2.22	0.45	-2.19	0.42	-2.74	0.96	-1.54	-0.24	-2.93	1.15	-0.92	-0.86
	cell floor	-2.38	-2.57	0.19	-2.61	0.23	-2.67	0.29	-2.68	0.30	-2.35	-0.03	-2.24	-0.13	-2.42	0.05	-2.89	0.51
960-980	cell floor	-2.01	-1.97	-0.03	-1.83	-0.18	-2.11	0.10	-1.79	-0.22	-2.30	0.29	-2.09	0.09	-0.92	-1.09	-2.37	0.36
980-1000	cell floor	-2.79	-2.66	-0.13	-2.57	-0.22	-2.55	-0.24	-2.80	0.02	-2.64	-0.15	-3.06	0.27	-4.20	1.41	-2.98	0.19
1000-1020	cell floor	-2.96	-2.77	-0.19	-2.66	-0.29	-3.38	0.42	-2.97	0.01	-2.93	-0.02	-3.07	0.11	-3.06	0.10	-2.94	-0.02
1020-1040	pipe crossing	-1.22	-1.32	0.10	-1.43	0.20	-0.96	-0.26	-1.00	-0.23	-0.54	-0.69	-0.22	-1.00	0.63	-1.85	0.44	-1.67
1040-1060	pipe crossing	-2.51	-2.47	-0.04	-2.54	0.03	-2.68	0.16	-3.04	0.52	-3.56	1.05	-4.05	1.54	-5.87	3.36	-5.09	2.58
1060-1080	cell floor	-7.57	-7.55	-0.02	-7.80	0.24	-7.14	-0.42	-7.27	-0.30	-7.07	-0.50	-6.63	-0.94	-6.21	-1.36	-7.42	-0.14
1080-1100	cell floor	-3.74	-4.01	0.27	-3.73	-0.01	-3.39	-0.35	-3.92	0.18	-4.10	0.36	-4.38	0.64	-4.32	0.58	-4.42	0.68
1100-1120	cell floor	-4.32	-4.15	-0.18	-4.22	-0.10	-4.50	0.17	-4.17	-0.16	-4.04	-0.29	-4.27	-0.06	-4.34	0.02	-3.84	-0.49
1120-1140	cell floor	-3.17	-3.28	0.11	-3.26	0.09	-3.53	0.37	-2.99	-0.17	-3.34	0.17	-2.49	-0.68	-2.41	-0.76	-3.11	-0.06
1140-1160	cell floor	-3.66	-3.53	-0.13	-3.58	-0.08	-3.51	-0.15	-3.87	0.20	-3.73	0.07	-3.77	0.11	-4.12	0.46	-3.45	-0.22
1160-1180	cell floor	-4.03	-4.17	0.14	-4.39	0.36	-4.31	0.28	-4.30	0.27	-4.57	0.54	-3.96	-0.07	-3.93	-0.11	-4.14	0.11
1180-1200	sideslope	-1.31	-1.40	0.09	-1.33	0.02	-1.04	-0.27	-0.71	-0.60	-0.50	-0.81	-0.67	-0.64	1.10	-2.41	0.81	-2.12
1200-1220	sideslope	14.15	14.98	-0.83	13.81	0.33	16.59	-2.44	16.68	-2.54	16.31	-2.17	16.11	-1.96	21.00	-6.86	18.90	-4.76
1220-1240	sideslope	28.04	26.59	1.45	28.22	-0.18	26.04	2.00	25.17	2.86	27.17	0.86	26.20	1.84	20.05	7.99	19.36	8.68

Notes:

1. Elevation at station 0 is taken at the reference station
2. Level 1 Criteria: slope difference must be less than ± 3% and not reverse direction
3. Unit: %
4. Shaded numbers indicate an anomalous result.
5. Pipe crossing and sideslope intervals are not compared to Level 1 Criteria

Station Interval (m)	Location	Average Baseline Slope 8/04	11/16/2004		5/26/2005		5/31/2005		3/27/2007		6/27/2007		9/27/2007		3/31/2008		9/24/2008	
			Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference	Slope	Slope Difference
0-20	sideslope	-	-		-		-		-		-		-		-		-	
20-40	sideslope	-28.32	-30.35	2.03	-30.17	1.84	-30.48	9.10	0.78	-30.57	2.24	-30.03	1.70	-35.91	7.59	-28.79	0.47	
40-60	sideslope	-15.57	-13.57	-2.00	-16.51	0.93	-15.23	5.25	-0.32	-15.09	-0.48	-15.10	-0.48	-14.42	-1.16	-15.71	0.14	
60-80	sideslope	-3.50	-3.20	-0.30	-4.22	0.72	-4.04	.86	0.36	-3.51	0.01	-3.94	0.44	-5.02	1.52	-3.90	0.40	
80-100	pipe access	1.44	1.46	-0.01	0.35	1.09	0.32	.24	1.68	-0.45	1.89	-0.16	1.60	1.08	0.37	-0.32	1.76	
100-120	pipe access	1.93	1.73	0.20	0.68	1.26	0.88	.99	0.94	0.70	1.24	0.94	1.00	4.52	-2.58	1.16	0.77	
120-140	pipe access	1.78	1.99	-0.22	2.01	-0.24	2.44	.58	-0.81	2.41	-0.63	2.34	-0.56	4.15	-2.37	2.30	-0.52	
140-160	pipe access	2.19	1.41	0.78	2.05	0.14	1.90	.41	0.78	1.54	0.65	1.31	0.89	0.07	2.12	1.44	0.76	
160-180	pipe access	1.05	0.83	0.22	2.14	-1.09	2.26	.93	-1.88	2.84	-1.79	2.71	-1.66	1.69	-0.64	2.60	-1.55	
180-200	pipe access	0.86	0.58	0.27	2.25	-1.39	1.50	.09	-0.24	1.06	-0.20	1.27	-0.41	2.73	-1.88	1.44	-0.59	
200-220	pipe access	-0.06	-0.60	0.54	-0.14	0.08	-0.12	.88	-0.94	1.14	-1.20	0.97	-1.03	1.02	-1.08	1.15	-1.21	
220-240	pipe access	-0.87	-0.94	0.06	-0.82	-0.06	-0.52	.32	-0.56	-0.37	-0.51	-0.31	-0.57	-0.38	-0.49	-0.69	-0.19	
240-260	pipe access	-0.87	-0.35	-0.52	-0.11	-0.76	-0.23	.00	-0.87	0.02	-0.89	0.11	-0.98	-0.59	-0.28	0.28	-1.15	
260-280	pipe crossing	-0.15	-0.18	0.03	0.87	-1.01	0.18	.53	-0.67	0.35	-0.49	0.35	-0.49	0.06	-0.20	0.39	-0.54	
280-300	pipe crossing	3.85	4.23	-0.37	4.35	-0.49	5.26	.26	-0.40	4.20	-0.35	4.28	-0.43	4.48	-0.62	4.44	-0.59	
300-320	pipe crossing	-0.71	-1.63	0.92	-1.11	0.40	-1.92	.50	1.79	-2.55	1.84	-2.41	1.70	-1.92	1.21	-2.54	1.84	
320-340	pipe crossing	-1.42	-1.09	-0.33	-0.34	-1.08	-0.58	.01	-1.41	0.12	-1.54	-0.05	-1.37	-1.68	0.26	-0.02	-1.40	
340-360	cell floor	1.74	2.63	-0.90	2.12	-0.39	2.66	.40	-0.66	2.53	-0.80	2.66	-0.93	3.27	-1.54	2.61	-0.87	
360-380	cell floor	3.03	3.46	-0.43	2.44	0.59	3.01	.87	0.16	2.86	0.17	2.87	0.16	4.21	-1.18	2.72	0.31	
380-400	cell floor	2.67	2.88	-0.21	1.22	1.45	1.23	.07	-0.40	2.73	-0.06	2.80	-0.13	0.81	1.86	2.78	-0.11	
400-420	cell floor	2.94	3.07	-0.13	3.09	-0.15	2.92	.48	0.46	2.70	0.24	2.70	0.24	3.23	-0.29	2.52	0.42	
420-440	cell floor	2.96	3.18	-0.22	2.97	-0.01	3.62	.07	-0.11	2.89	0.07	2.85	0.11	2.01	0.95	2.93	0.03	
440-460	cell floor	3.05	3.18	-0.13	3.51	-0.46	2.92	.70	0.35	2.90	0.15	2.95	0.10	4.22	-1.17	2.94	0.11	
460-480	cell floor	2.85	2.97	-0.12	4.67	-1.82	3.59	.55	-0.71	3.45	-0.60	2.89	-0.04	0.69	2.16	2.91	-0.06	
480-500	pipe crossing	6.07	6.59	-0.53	6.29	-0.23	7.97	.64	-1.57	7.71	-1.64	8.18	-2.12	9.11	-3.05	8.17	-2.11	
500-520	pipe crossing	3.73	3.17	0.56	2.77	0.95	2.13	.16	3.57	-0.09	3.82	-0.37	4.09	-0.53	4.26	-0.51	4.23	
520-540	pipe crossing	-1.52	-1.15	-0.37	-1.10	-0.42	-1.02	.21	-1.73	0.30	-1.82	0.37	-1.89	-0.27	-1.25	0.41	-1.93	
540-560	cell floor	2.82	2.80	0.02	2.74	0.08	3.14	.28	-0.46	3.41	-0.59	3.31	-0.49	4.01	-1.20	3.44	-0.62	
560-580	cell floor	2.62	2.62	0.01	2.90	-0.28	2.37	.28	-0.65	2.74	-0.12	2.73	-0.11	2.99	-0.36	2.79	-0.17	
580-600	cell floor	2.70	2.52	0.17	2.66	0.04	2.60	.84	0.86	1.46	1.24	1.73	0.96	1.08	1.62	1.37	1.33	
600-620	cell floor	2.01	2.05	-0.04	2.04	-0.03	2.02	.65	-0.65	2.77	-0.77	2.34	-0.34	2.73	-0.72	2.40	-0.39	
620-640	cell floor	2.15	1.99	0.16	2.18	-0.03	2.13	.46	-0.32	2.38	-0.23	2.35	-0.21	1.83	0.31	2.09	0.05	
640-660	cell floor	3.95	3.98	-0.03	4.21	-0.25	4.34	.38	-0.42	4.08	-0.12	4.10	-0.14	5.13	-1.17	3.85	0.10	
660-680	pipe crossing	2.75	2.81	-0.06	2.82	-0.08	2.70	.41	1.34	1.35	1.39	1.12	1.63	1.05	1.70	1.25	1.49	
680-700	pipe crossing	1.03	1.04	-0.02	1.24	-0.21	0.81	.88	0.14	0.70	0.33	0.86	0.17	0.07	0.95	0.48	0.55	
700-720	pipe crossing	-3.53	-3.71	0.18	-4.44	0.91	-4.00	.12	4.60	-7.92	4.39	-8.05	4.52	-7.84	4.31	-8.61	5.09	
720-740	cell floor	-5.84	-5.85	0.01	-5.31	-0.53	-5.89	.55	-0.29	-5.06	-0.78	-5.42	-0.42	-5.47	-0.37	-5.44	-0.40	
740-760	cell floor	-3.34	-3.32	-0.01	-3.69	0.36	-2.79	.05	0.71	-3.07	-0.27	-3.99	0.65	-6.15	2.81	-4.35	1.01	
760-780	cell floor	-2.53	-2.66	0.12	-2.63	0.09	-3.06	.94	0.40	-3.86	1.33	-3.11	0.58	-1.87	-0.67	-3.40	0.87	
780-800	cell floor	-2.93	-2.96	0.02	-2.53	-0.41	-2.94	.76	-1.17	-1.90	-1.03	-1.31	-1.63	-0.51	-2.42	-1.59	-1.35	
800-820	cell floor	-2.26	-1.96	-0.30	-2.69	0.43	-2.05	.66	1.40	-2.82	0.56	-3.95	1.69	-4.25	1.99	-4.25	1.99	
820-840	cell floor	-3.39	-3.30	-0.09	-3.10	-0.28	-2.59	.20	-0.19	-3.54	0.16	-3.18	-0.21	-5.19	1.81	-3.65	0.26	
840-860	cell floor	-2.51	-2.77	0.26	-2.48	-0.04	-3.52	.87	0.36	-2.57	0.06	-2.77	0.26	-1.51	-1.00	-2.64	0.13	
[illegible]	cell floor	-2.23	-2.45	0.22	-2.63	0.41	-2.73	.03	0.80	-3.37	1.15	-3.02	0.79	-1.63	-0.59	-2.71	0.48	
[illegible]	pipe crossing	-1.08	-1.02	-0.06	-0.99	-0.09	-1.00	.21	-4.29	3.37	-4.45	3.02	-4.10	3.84	-4.92	3.22	-4.30	
900-920	pipe crossing	0.32	0.33	-0.02	0.28	0.04	0.19	.88	7.19	-7.16	7.47	-6.34	6.65	-8.24	8.55	-6.20	6.52	
920-940	pipe crossing	-6.93	-6.64	-0.29	-6.81	-0.12	-5.47	.88	-4.05	-2.90	-4.03	-2.92	-4.01	-2.96	-3.97	-2.28	-4.65	
940-960	pipe crossing	-2.06	-1.86	-0.20	-1.45	-0.61	-2.51	.71	-1.35	-1.58	-0.48	-1.05	-1.00	1.52	-3.58	-1.07	-0.99	
960-980	pipe access	0.17	0.29	-0.12	0.30	-0.13	0.19	28	-1.11	1.50	-1.33	1.43	-1.26	0.61	-0.44	1.61	-1.44	
980-1000	pipe access	0.60	0.65	-0.05	0.82	-0.22	0.98	.72	1.32	0.28	0.32	-0.63	1.23	-1.48	2.08	-0.20	0.80	
1000-1020	pipe access	0.37	0.11	0.26	0.17	0.20	0.02	.76	1.13	-1.79	2.16	-0.63	1.00	0.99	-0.61	-0.72	1.09	
1020-1040	pipe access	0.03	0.09	-0.05	-0.65	0.68	0.18	.54	1.58	-0.57	0.60	-1.14	1.17	-2.13	2.17	-0.80	0.84	
1040-1060	pipe access	-0.69	-0.44	-0.25	-0.56	-0.12	-1.14	.54	0.86	-1.54	0.86	-1.34	0.65	0.71	-1.40	-1.87	1.18	
1060-1080	pipe access	-0.79	-0.64	-0.15	-0.65	-0.14	-0.60	.22	-0.56	0.03	-0.82	-0.16	-0.63	-0.43	-0.35	0.33	-1.12	
1080-1100	pipe access	0.47	0.24	0.23	0.46	0.01	0.36	.20	-0.73	1.02	-0.55	1.11	-0.64	-1.83	2.30	1.29	-0.82	
1100-1120	pipe crossing	1.13	1.39	-0.26	1.54	-0.41	2.20	.44	-3.31	4.51	-3.38	4.95	-3.82	8.51	-7.38	4.76	-3.62	
1120-1140	pipe crossing	6.82	6.34	0.49	5.83	1.00	5.61	.62	7.44	-0.22	7.05	-1.07	7.89	-1.14	7.97	-1.00	7.82	
1140-1160	pipe crossing	-5.58	-5.79	0.20	-6.48	0.90	-6.99	.38	-1.20	-5.18	-0.40	-4.02	-1.56	-4.41	-1.18	-3.67	-1.91	
1160-1180	pipe crossing	-2.22	-2.01	-0.21	-1.31	-0.91	-0.74	.43	-1.79	0.04	-2.26	-0.47	-1.75	-0.57	-1.65	-0.44	-1.78	
1180-1200	pipe crossing	-1.10	-1.33	0.24	-1.04	-0.06	-1.27	.15	-2.25	0.94	-2.04	1.56	-2.65	-0.32	-0.78	1.32	-2.41	
1200-1220	pipe crossing	2.57	2.72	-0.16	3.17	-0.60	2.85	91	0.66	2.03	0.54	1.62	0.95	1.66	0.91	1.67	0.90	
1220-1240	pipe crossing	-0.98	-1.49	0.51	-1.98	1.01	-1.40	.10	2.12	-3.14	2.17	-3.11	2.13	-2.21	1.24	-2.79	1.82	
1240-1260	pipe crossing	-4.76	-4.83	0.07	-4.51	-0.25	-5.04	.96	-3.80	-0.21	-4.55	-0.80	-3.96	-0.75	-4.01	-0.80	-3.96	
1260-1280	pipe crossing	-1.79	-1.85	0.06	-1.78	-0.01	-1.37	.12	-1.91	-0.42	-1.38	0.03	-1.82	1.78	-3.57	0.09	-1.88	
1280-1300	pipe crossing	-2.06	-1.83	-0.24	-1.78	-0.28	-1.91	54	-2.60	0.44	-2.50	1.16	-3.22	-0.17	-1.89	1.55	-3.61	
1300-1320	sideslope	0.08	-0.06	0.14	0.83	-0.76	0.36	68	-9.60	10.44	-10.37	10.21	-10.14	8.92	-8.85	10.84	-10.77	
1320-1340	sideslope	12.16	12.27	-0.11	13.54	-1.38	13.75	.18	-14.03	25.69	-13.53	25.54	-13.38	26.73	-14.58	26.28	-14.12	
1340-1360	sideslope	28.37	28.54	-0.18	26.78	1.59	29.42	.43	8.94	18.66	9.71	18.71	9.66	20.73	7.64	18.75	9.62	

Notes:

1. Elevation at station 0 is taken at the reference station
2. Level 1 Criteria: slope difference must be less than ± 3% and not reverse direction
3. Unit: %
4. Shaded numbers indicate an anomalous result.
5. Pipe crossing and sideslope intervals are not compared to Level 1 Criteria

Table 8 Slope Comparison Phase 2 East-West Profiler				
Station Interval (ft)	Station Interval Location	Average Baseline Slope 7/08	9/23/2008	
			Slope	Slope Difference
0-20	side slope	-	-	
20-40	side slope	-33.58	-34.32	0.74
40-60	side slope	-30.25	-29.76	-0.49
60-80	side slope	-8.09	-8.18	0.09
80-100	cell floor	0.23	0.06	0.17
100-120	cell floor	1.15	1.12	0.03
120-140	cell floor	0.73	1.13	-0.40
140-160	cell floor	1.49	1.85	-0.36
160-180	cell floor	0.83	0.22	0.61
180-200	pipe crossing	2.17	2.53	-0.36
200-220	pipe crossing	6.20	5.80	0.40
220-240	pipe crossing	-2.41	-2.23	-0.19
240-260	cell floor	2.33	2.54	-0.21
260-280	cell floor	2.47	2.70	-0.23
280-300	cell floor	2.52	2.53	-0.01
300-320	cell floor	2.58	2.89	-0.31
320-340	cell floor	1.87	1.82	0.05
340-360	cell floor	2.05	1.85	0.20
360-380	pipe crossing	3.03	2.76	0.28
380-400	pipe crossing	2.30	2.20	0.10
400-420	pipe crossing	8.04	8.87	-0.82
420-440	cell floor	-3.58	-3.80	0.22
440-460	pipe crossing	3.22	2.83	0.39
460-480	pipe crossing	3.54	3.54	0.00
480-500	pipe crossing	3.76	3.49	0.27
500-520	cell floor	1.66	2.06	-0.40
520-540	cell floor	1.46	1.44	0.02
540-560	cell floor	0.92	0.91	0.01
560-580	cell floor	2.09	2.59	-0.50
580-600	cell floor	2.81	3.00	-0.19
600-620	pipe crossing	7.75	9.64	-1.90
620-633	side slope	27.18	24.48	2.70

Notes:

1. Elevation at station 0 is taken at the reference station
2. Level 1 Criteria: slope difference must be less than ± 3% and not reverse direction
3. Unit: %
4. Shaded numbers indicate an anomalous result.
5. Pipe crossing and sideslope intervals are not compared to Level 1 Criteria

Based on the data from the stations not located in the pipe crossings and pipe access sections, the northern east-west profiler pipe has settled as much as 1.6 feet on the east side of the cell and as much as 0.9 feet on the west side of the cell since the previous monitoring event. The northern east-west profiler has settled as much as 2.8 feet on the east side of the cell and 0.9 feet on the west side of the cell since the background monitoring period. The settlement on the east side can be attributed to the active filling in the Phase 2 SE area which extends laterally over the Phase 1 area and the northern east-west profiler.

Based on the data from the stations not located in the pipe crossings and pipe access sections, the southern east-west profiler pipe has settled as much as 0.6 feet since the previous monitoring event and as much as 3.5 feet since the background monitoring period.

Based on the data from the stations not located in the pipe crossings and pipe access sections, the Phase 2 profiler pipes have minimal settlement, since no waste had been placed in the Phase 2 West area at the time of monitoring.

3.2 SETTLEMENT GAUGES

There are three settlement gauges (Geokon Model 4650): two in the Phase 1 area (one on the east side of VI-E and one on the west side, adjacent to the northern east-west profiler) and one in the Phase 2 area (adjacent to the Phase 2 east-west profiler) and are shown on Plate 2. The purpose of the gauges is to provide duplicate liner elevation measurements for comparison to measurements obtained from the adjacent profilers. The Phase 1 area west and east settlement gauges measure elevations at approximately the same locations as stations 171 feet and 1067 feet, respectively, of the northern east-west profiler. The Phase 2 western settlement gauge measures elevation at approximately the same location as station 476 on the Phase 2 east-west profiler.

3.2.1 Data Reduction

Figures 17, 19, 30, and 31 present the elevations of the settlement sensors. Readings, data reduction and a sample calculation are presented in Appendix B. The Phase 1 west settlement sensor has minimal settlement since the previous monitoring period while the east sensor has settled 0.5 feet. The Phase 1 west

and east sensors have settled 0.5 and 2.2 feet, respectively, since the background monitoring period. The settlement experienced in the east sensor can be attributed to the active filling in the southeast corner of Phase 2 SE area which extends laterally over the Phase 1 area and the settlement gauge. The Phase 2 western settlement gauge has minimal settlement since no waste had been placed in Phase 2 West at the time of monitoring.

3.2.2 Data Quality Assurance Evaluation

We compared the elevations of the two settlement gauges to the corresponding elevations of the northern east-west profiler pipe for the Phase 1 area and the Phase 2 western settlement gauge with the Phase 2 east-west profiler pipe. The differences in elevations were used in the data quality assurance evaluation, as explained in Section 3.1.2

4.0 FIVE-YEAR PROJECTIONS OF SETTLEMENT

The MC VI-E Settlement Monitoring Plan requires that a five-year settlement projection be performed once every year. Based on the plan, a range of five-year projections should be estimated, based on the observed settlement at each location, (assumed to be the mean for that location) and on confidence limits about that mean. Baseline data was used to estimate a 95% confidence interval associated with the profiler measurements. For each location of the profiler pipes, the upper and lower limits of the elevation measurements were estimated as the measured elevation plus/minus the 95% confidence interval for each event. The sample calculations for estimating the 95% confidence interval, determining the modified compression index, and the five-year projections of settlement, are included in Appendix B.

For each monitoring event at each station, the value of the modified compression index was estimated based on the measured elevation. Then for each station, we determined the mean value of the modified compression index using the modified compression index that was estimated for each of the available monitoring events. The mean value of modified compression index at each station was then used to complete the future settlement projection for each station. The above approach was then repeated using the upper and lower limits of the elevation measurements to estimate the upper and lower bounds of the future settlement projections.

The eastern half of the northern east-west profiler pipe, southern east-west profiler pipe and the Phase 1 north-south profiler pipe located under more than five feet of waste were used for this evaluation. The Phase 1 north-south and southern east-west profiler pipes were evaluated based on available data from 2005 to 2008. The eastern half of the northern east-west profiler pipe was evaluated based on data from the March 2008 and September 2008 monitoring events. The western half of the northern east-west, the Phase 2 east-west, and the Phase 2 north-south profilers were not used in this analysis because there is less than five feet of waste above the pipes. The equations and spreadsheets used to determine the five-year settlement projections are included in Appendix B. The results of the settlement projection are summarized on Tables 9, 10, and 11.

The predicted five-year settlement for each location was compared to the Level I criteria presented on Table 1 of the monitoring plan. The Level I criteria is defined as five-year settlement profiler slope, as compared to baseline, that has a total reversed slope height of greater than one foot. Review of Table 9 through Table 11 indicate no predicted pipe slopes with a reversed slope height greater than one foot for the Phase 1 north-south profiler, the southern east-west profiler, and the eastern half of the northern east-west profiler for the stations not located on the pipe crossings and pipe access sections.

Table 9
Five-Year Projection of Settlement
Phase 1 North-South Profiler
Average

P1 Station	Baseline Measure Pipe Elevation ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
120	736.85	-2.30	1.42	734.92			cell floor
140	736.51	-1.70	1.05	735.02	0.50	0.10	cell floor
160	735.89	-3.11	0.63	734.81	-1.09		cell floor
180	736.49	3.02	0.62	735.24	2.17		pipe crossing
200	735.13	-6.81	0.67	733.77	-7.38		pipe crossing
220	734.53	-3.02	0.70	733.34	-2.13		pipe crossing
240	734.23	-1.46	0.99	732.60	-3.70		cell floor
260	733.59	-3.22	0.57	732.47	-0.65		cell floor
280	733.08	-2.55	0.43	732.17	-1.51		cell floor
300	732.83	-1.25	0.66	731.40	-3.85		cell floor
320	732.48	-1.75	0.47	731.39	-0.06		cell floor
340	731.61	-4.36	0.79	730.30	-5.44		cell floor
360	731.39	-1.07	1.03	729.66	-3.19		cell floor
380	730.90	-2.49	1.18	728.99	-3.40		cell floor
400	730.32	-2.91	1.43	728.19	-3.97		cell floor
420	729.76	-2.79	1.37	727.73	-2.29		cell floor
440	729.33	-2.13	2.08	726.24	-7.49		cell floor
460	728.77	-2.84	2.15	725.69	-2.75		pipe crossing
480	729.14	1.87	2.23	726.11	2.09		pipe crossing
500	728.29	-4.27	3.20	723.75	-11.90		pipe crossing
520	727.10	-5.95	3.23	722.61	-5.69		cell floor
540	726.44	-3.29	3.26	722.09	-2.60		cell floor
560	726.08	-1.79	3.51	721.39	-3.49		cell floor
580	725.60	-2.40	3.47	721.04	-1.76		cell floor
600	724.90	-3.53	3.36	720.46	-2.89		cell floor

= Slope Reversal

Table 9
Five-Year Projection of Settlement
Phase 1 North-South Profiler
95% Confidence- Upper Limit

P1 Station	Baseline Measure Pipe Elevation ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
120	736.85	-2.30	1.25	735.10			cell floor
140	736.51	-1.70	0.91	735.16	0.34	0.07	cell floor
160	735.89	-3.11	0.57	734.87	-1.49		cell floor
180	736.49	3.02	0.61	735.24	1.89		pipe crossing
200	735.13	-6.81	0.72	733.72	-7.66		pipe crossing
220	734.53	-3.02	0.63	733.41	-1.53		pipe crossing
240	734.23	-1.46	0.91	732.68	-3.65		cell floor
260	733.59	-3.22	0.43	732.61	-0.34		cell floor
280	733.08	-2.55	0.30	732.30	-1.57		cell floor
300	732.83	-1.25	0.55	731.51	-3.95		cell floor
320	732.48	-1.75	0.31	731.55	0.20	0.04	cell floor
340	731.61	-4.36	0.64	730.45	-5.51		cell floor
360	731.39	-1.07	0.82	729.87	-2.88		cell floor
380	730.90	-2.49	1.00	729.17	-3.55		cell floor
400	730.32	-2.91	1.28	728.34	-4.14		cell floor
420	729.76	-2.79	1.14	727.96	-1.89		cell floor
440	729.33	-2.13	1.82	726.50	-7.32		cell floor
460	728.77	-2.84	2.07	725.77	-3.63		pipe crossing
480	729.14	1.87	2.13	726.21	2.19		pipe crossing
500	728.29	-4.27	3.40	723.55	-13.43		pipe crossing
520	727.10	-5.95	3.14	722.70	-4.23		cell floor
540	726.44	-3.29	2.93	722.42	-1.44		cell floor
560	726.08	-1.79	3.25	721.65	-3.81		cell floor
580	725.60	-2.40	3.11	721.40	-1.26		cell floor
600	724.90	-3.53	2.93	720.89	-2.56		cell floor

= Slope Reversal

Table 9
Five-Year Projection of Settlement
Phase 1 North-South Profiler
95% Confidence-Lower Limit

P1 Station	Baseline Measure Pipe Elevation ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
120	736.85	-2.30	1.81	734.53			cell floor
140	736.51	-1.70	1.28	734.79	1.33	0.27	cell floor
160	735.89	-3.11	0.80	734.64	-0.79		cell floor
180	736.49	3.02	0.83	735.02	1.93		pipe crossing
200	735.13	-6.81	0.91	733.53	-7.48		pipe crossing
220	734.53	-3.02	0.90	733.14	-1.97		pipe crossing
240	734.23	-1.46	1.11	732.49	-3.26		cell floor
260	733.59	-3.22	0.68	732.36	-0.63		cell floor
280	733.08	-2.55	0.50	732.10	-1.28		cell floor
300	732.83	-1.25	0.73	731.33	-3.90		cell floor
320	732.48	-1.75	0.58	731.28	-0.21		cell floor
340	731.61	-4.36	0.89	730.20	-5.42		cell floor
360	731.39	-1.07	1.24	729.46	-3.72		cell floor
380	730.90	-2.49	1.36	728.81	-3.26		cell floor
400	730.32	-2.91	1.59	728.03	-3.87		cell floor
420	729.76	-2.79	1.58	727.52	-2.54		cell floor
440	729.33	-2.13	2.34	725.98	-7.77		cell floor
460	728.77	-2.84	2.84	725.20	-3.88		pipe crossing
480	729.14	1.87	2.56	725.78	2.89		pipe crossing
500	728.29	-4.27	4.13	722.82	-14.98		pipe crossing
520	727.10	-5.95	3.42	722.42	-1.97		cell floor
540	726.44	-3.29	3.55	721.79	-3.14		cell floor
560	726.08	-1.79	3.73	721.17	-3.11		cell floor
580	725.60	-2.40	3.79	720.72	-2.24		cell floor
600	724.90	-3.53	3.74	720.08	-3.23		cell floor

= Slope Reversal

Table 10
Five-Year Projection of Settlement
Southern East-West Profiler
Average

Station	Baseline Measure Pipe Elevation ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
40	724.91	-28.32	3.53	719.60			Sideslope
60	721.83	-15.57	0.93	719.10	-2.53		Sideslope
80	721.14	-3.50	0.63	718.62	-2.40		Sideslope
100	721.42	1.44	0.55	718.63	0.07		Pipe Access
120	721.81	1.93	0.49	718.92	1.46		Pipe Access
140	722.17	1.78	0.38	719.49	2.85		Pipe Access
160	722.60	2.19	0.38	719.79	1.47		Pipe Access
180	722.81	1.05	0.29	720.39	3.02		Pipe Access
200	722.99	0.86	0.36	720.61	1.10		Pipe Access
220	722.97	-0.06	0.58	720.62	0.04	0.01	Pipe Access
240	722.80	-0.87	0.83	720.24	-1.92		Pipe Access
260	722.62	-0.87	1.08	720.05	-0.95		Pipe Access
280	722.60	-0.15	1.44	719.76	-1.45		Pipe Crossing
300	723.37	3.85	2.04	720.05	1.46		Pipe Crossing
320	723.22	-0.71	2.47	719.11	-4.68		Pipe Crossing
340	722.94	-1.42	2.73	718.84	-1.35		Pipe Crossing
360	723.29	1.74	2.56	719.53	3.46		Cell Floor
380	723.89	3.03	2.32	720.32	3.91		Cell Floor
400	724.43	2.67	2.51	720.68	1.84		Cell Floor
420	725.02	2.94	2.59	721.11	2.12		Cell Floor
440	725.61	2.96	2.60	721.69	2.89		Cell Floor
460	726.22	3.05	2.40	722.47	3.93		Cell Floor
480	726.79	2.85	2.10	723.35	4.39		Cell Floor
500	728.00	6.07	0.83	726.26	14.69		Pipe Crossing
520	728.74	3.73	2.35	724.63	-8.17		Pipe Crossing
540	728.44	-1.52	1.19	725.88	6.26	-0.38	Pipe Crossing
560	729.00	2.82	0.88	726.87	4.99		Cell Floor
580	729.53	2.62	0.75	727.56	3.41		Cell Floor
600	730.06	2.70	0.95	727.63	0.39		Cell Floor
620	730.47	2.01	0.92	728.14	2.54		Cell Floor
640	730.90	2.15	0.19	729.29	5.77		Cell Floor
660	731.69	3.95	0.06	730.19	4.51		Cell Floor
680	732.23	2.75	0.34	730.16	-0.15	-0.03	Pipe Crossing
700	732.44	1.03	0.42	730.17	0.05		Pipe Crossing
720	731.73	-3.53	1.15	727.73	-12.30		Pipe Crossing
740	730.57	-5.84	1.01	726.78	-4.75		Cell Floor
760	729.90	-3.34	0.94	725.99	-3.96		Cell Floor
780	729.39	-2.53	1.00	725.25	-3.72		Cell Floor
800	728.81	-2.93	0.69	725.24	-0.02		Cell Floor
820	728.36	-2.26	0.67	724.41	-4.18		Cell Floor
840	727.68	-3.39	0.65	723.71	-3.52		Cell Floor
860	727.18	-2.51	0.62	723.21	-2.50		Cell Floor
880	726.73	-2.23	0.62	722.66	-2.74		Cell Floor
900	726.52	-1.08	0.26	723.67	5.05		Pipe Crossing
920	726.58	0.32	0.86	721.83	-9.22	-0.83	Pipe Crossing
940	725.20	-6.93	0.43	721.81	-0.12		Pipe Crossing
960	724.78	-2.06	0.31	721.71	-0.50		Pipe Crossing
980	724.82	0.17	0.28	722.06	1.77		Pipe Access
1000	724.94	0.60	0.32	721.98	-0.40		Pipe Access
1020	725.01	0.37	0.39	721.77	-1.07		Pipe Access
1040	725.02	0.03	0.49	721.51	-1.28	-0.55	Pipe Access
1060	724.88	-0.69	0.59	721.04	-2.38		Pipe Access
1080	724.73	-0.79	0.63	721.06	0.12	0.02	Pipe Access
1100	724.82	0.47	0.63	721.32	1.28		Pipe Access
1120	725.05	1.13	0.31	722.59	6.38		Pipe Crossing
1140	726.41	6.82	0.78	721.92	-3.37	-0.67	Pipe Crossing
1160	725.29	-5.58	0.58	721.38	-2.67		Pipe Crossing
1180	724.85	-2.22	0.43	721.45	0.33		Pipe Crossing
1200	724.63	-1.10	0.35	721.79	1.71	0.41	Pipe Crossing
1220	725.14	2.57	0.42	722.05	1.31		Pipe Crossing
1240	724.95	-0.98	0.65	721.27	-3.94		Pipe Crossing
1260	724.00	-4.76	0.49	721.26	0.00		Pipe Crossing
1280	723.64	-1.79	0.53	721.24	-0.12		Pipe Crossing
1300	723.23	-2.06	0.39	721.69	2.24	0.45	Pipe Crossing

= slope reversal

Table 10 cont.
Five-Year Projection of Settlement
Southern East-West Profiler
95% Confidence-Upper Limit

Station	Baseline Measure Pipe Elevation ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
40	724.91	-28.32	2.86	720.27			Sideslope
60	721.83	-15.57	0.89	719.14	-5.68		Sideslope
80	721.14	-3.50	0.59	718.66	-2.40		Sideslope
100	721.42	1.44	0.53	718.66	-0.01	0.00	Pipe Access
120	721.81	1.93	0.48	718.94	1.41		Pipe Access
140	722.17	1.78	0.33	719.55	3.05		Pipe Access
160	722.60	2.19	0.37	719.80	1.24		Pipe Access
180	722.81	1.05	0.28	720.40	3.04		Pipe Access
200	722.99	0.86	0.35	720.63	1.11		Pipe Access
220	722.97	-0.06	0.56	720.64	0.08	0.02	Pipe Access
240	722.80	-0.87	0.78	720.29	-1.76		Pipe Access
260	722.62	-0.87	1.01	720.11	-0.92		Pipe Access
280	722.60	-0.15	1.35	719.85	-1.28		Pipe Crossing
300	723.37	3.85	1.86	720.22	1.86		Pipe Crossing
320	723.22	-0.71	2.33	719.25	-4.90		Pipe Crossing
340	722.94	-1.42	2.60	718.98	-1.35		Pipe Crossing
360	723.29	1.74	2.37	719.73	3.78		Cell Floor
380	723.89	3.03	2.07	720.57	4.22		Cell Floor
400	724.43	2.67	2.34	720.86	1.43		Cell Floor
420	725.02	2.94	2.39	721.31	2.27		Cell Floor
440	725.61	2.96	2.34	721.94	3.15		Cell Floor
460	726.22	3.05	2.25	722.63	3.42		Cell Floor
480	726.79	2.85	1.94	723.51	4.43		Cell Floor
500	728.00	6.07	0.62	726.46	14.91		Pipe Crossing
520	728.74	3.73	2.22	724.76	-8.54		Pipe Crossing
540	728.44	-1.52	1.07	725.99	6.19	-0.47	Pipe Crossing
560	729.00	2.82	0.82	726.93	4.68		Cell Floor
580	729.53	2.62	0.67	727.64	3.58		Cell Floor
600	730.06	2.70	0.74	727.85	1.00		Cell Floor
620	730.47	2.01	0.76	728.30	2.30		Cell Floor
640	730.90	2.15	0.07	729.41	5.55		Cell Floor
660	731.69	3.95	-0.01	730.26	4.24		Cell Floor
680	732.23	2.75	0.29	730.21	-0.24		Pipe Crossing
700	732.44	1.03	0.39	730.21	-0.01	-0.05	Pipe Crossing
720	731.73	-3.53	1.10	727.78	-12.22		Pipe Crossing
740	730.57	-5.84	0.97	726.83	-4.78		Cell Floor
760	729.90	-3.34	0.89	726.04	-3.95		Cell Floor
780	729.39	-2.53	0.97	725.28	-3.79		Cell Floor
800	728.81	-2.93	0.65	725.28	0.00	0.00	Cell Floor
820	728.36	-2.26	0.62	724.47	-4.08		Cell Floor
840	727.68	-3.39	0.62	723.73	-3.68		Cell Floor
860	727.18	-2.51	0.59	723.23	-2.49		Cell Floor
880	726.73	-2.23	0.56	722.72	-2.58		Cell Floor
900	726.52	-1.08	0.20	723.72	5.03		Pipe Crossing
920	726.58	0.32	0.83	721.86	-9.35	-0.86	Pipe Crossing
940	725.20	-6.93	0.39	721.84	-0.11		Pipe Crossing
960	724.78	-2.06	0.30	721.72	-0.58		Pipe Crossing
980	724.82	0.17	0.25	722.09	1.84		Pipe Access
1000	724.94	0.60	0.30	722.00	-0.47		Pipe Access
1020	725.01	0.37	0.36	721.80	-0.99		Pipe Access
1040	725.02	0.03	0.46	721.54	-1.30	-0.55	Pipe Access
1060	724.88	-0.69	0.57	721.05	-2.43		Pipe Access
1080	724.73	-0.79	0.61	721.08	0.14	0.03	Pipe Access
1100	724.82	0.47	0.59	721.36	1.38		Pipe Access
1120	725.05	1.13	0.29	722.61	6.26		Pipe Crossing
1140	726.41	6.82	0.74	721.95	-3.28	-0.66	Pipe Crossing
1160	725.29	-5.58	0.56	721.41	-2.73		Pipe Crossing
1180	724.85	-2.22	0.40	721.48	0.34		Pipe Crossing
1200	724.63	-1.10	0.32	721.82	1.72	0.41	Pipe Crossing
1220	725.14	2.57	0.40	722.07	1.27		Pipe Crossing
1240	724.95	-0.98	0.61	721.30	-3.86		Pipe Crossing
1260	724.00	-4.76	0.45	721.31	0.03	0.01	Pipe Crossing
1280	723.64	-1.79	0.48	721.30	-0.06		Pipe Crossing
1300	723.23	-2.06	0.29	721.80	2.51	0.50	Pipe Crossing

= slope reversal

Table 10 cont.
Five-Year Projection of Settlement
Southern East-West Profiler
95% Confidence-Lower Limit

Station	Baseline Measure Pipe Elevation ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
40	724.91	-28.32	3.59	719.54			Sideslope
60	721.83	-15.57	0.97	719.06	-2.40		Sideslope
80	721.14	-3.50	0.67	718.58	-2.41		Sideslope
100	721.42	1.44	0.58	718.61	0.14		Pipe Access
120	721.81	1.93	0.51	718.91	1.51		Pipe Access
140	722.17	1.78	0.44	719.44	2.65		Pipe Access
160	722.60	2.19	0.38	719.78	1.71		Pipe Access
180	722.81	1.05	0.30	720.38	3.00		Pipe Access
200	722.99	0.86	0.38	720.60	1.08		Pipe Access
220	722.97	-0.06	0.61	720.60	0.00	0.00	Pipe Access
240	722.80	-0.87	0.88	720.18	-2.07		Pipe Access
260	722.62	-0.87	1.14	719.99	-0.99		Pipe Access
280	722.60	-0.15	1.54	719.66	-1.62		Pipe Crossing
300	723.37	3.85	2.21	719.87	1.05		Pipe Crossing
320	723.22	-0.71	2.60	718.98	-4.46		Pipe Crossing
340	722.94	-1.42	2.86	718.71	-1.34		Pipe Crossing
360	723.29	1.74	2.76	719.34	3.14		Cell Floor
380	723.89	3.03	2.58	720.06	3.60		Cell Floor
400	724.43	2.67	2.69	720.51	2.24		Cell Floor
420	725.02	2.94	2.80	720.90	1.98		Cell Floor
440	725.61	2.96	2.85	721.43	2.63		Cell Floor
460	726.22	3.05	2.56	722.32	4.44		Cell Floor
480	726.79	2.85	2.27	723.19	4.35		Cell Floor
500	728.00	6.07	1.03	726.05	14.47		Pipe Crossing
520	728.74	3.73	2.49	724.49	-7.81		Pipe Crossing
540	728.44	-1.52	1.30	725.76	6.33	-0.29	Pipe Crossing
560	729.00	2.82	0.93	726.82	5.31		Cell Floor
580	729.53	2.62	0.84	727.47	3.25		Cell Floor
600	730.06	2.70	1.16	727.42	-0.23	-0.05	Cell Floor
620	730.47	2.01	1.09	727.98	2.78		Cell Floor
640	730.90	2.15	0.31	729.17	5.98		Cell Floor
660	731.69	3.95	0.12	730.13	4.78		Cell Floor
680	732.23	2.75	0.39	730.12	-0.05	-0.01	Pipe Crossing
700	732.44	1.03	0.46	730.14	0.11		Pipe Crossing
720	731.73	-3.53	1.20	727.68	-12.38		Pipe Crossing
740	730.57	-5.84	1.06	726.74	-4.72		Cell Floor
760	729.90	-3.34	0.98	725.94	-3.97		Cell Floor
780	729.39	-2.53	1.03	725.22	-3.65		Cell Floor
800	728.81	-2.93	0.72	725.21	-0.04		Cell Floor
820	728.36	-2.26	0.73	724.35	-4.29		Cell Floor
840	727.68	-3.39	0.67	723.68	-3.36		Cell Floor
860	727.18	-2.51	0.65	723.18	-2.52		Cell Floor
880	726.73	-2.23	0.68	722.60	-2.90		Cell Floor
900	726.52	-1.08	0.32	723.61	5.07		Pipe Crossing
920	726.58	0.32	0.89	721.80	-9.08	-0.80	Pipe Crossing
940	725.20	-6.93	0.46	721.77	-0.13		Pipe Crossing
960	724.78	-2.06	0.33	721.69	-0.42		Pipe Crossing
980	724.82	0.17	0.31	722.03	1.69		Pipe Access
1000	724.94	0.60	0.34	721.96	-0.33		Pipe Access
1020	725.01	0.37	0.43	721.73	-1.16		Pipe Access
1040	725.02	0.03	0.52	721.48	-1.25	-0.55	Pipe Access
1060	724.88	-0.69	0.61	721.02	-2.32		Pipe Access
1080	724.73	-0.79	0.65	721.04	0.10	0.02	Pipe Access
1100	724.82	0.47	0.68	721.27	1.17		Pipe Access
1120	725.05	1.13	0.33	722.57	6.50		Pipe Crossing
1140	726.41	6.82	0.82	721.88	-3.46	-0.69	Pipe Crossing
1160	725.29	-5.58	0.61	721.35	-2.61		Pipe Crossing
1180	724.85	-2.22	0.46	721.42	0.32		Pipe Crossing
1200	724.63	-1.10	0.38	721.76	1.71	0.41	Pipe Crossing
1220	725.14	2.57	0.44	722.03	1.35		Pipe Crossing
1240	724.95	-0.98	0.69	721.23	-4.02		Pipe Crossing
1260	724.00	-4.76	0.53	721.22	-0.03		Pipe Crossing
1280	723.64	-1.79	0.59	721.18	-0.18		Pipe Crossing
1300	723.23	-2.06	0.50	721.58	1.98	0.39	Pipe Crossing

= slope reversal

Table 11
Five-Year Projection of Settlement
Northern East-West Profiler
Average

Station	Baseline Measured Pipe Elev ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
680	736.52	-5.70	1.33	734.07	-		pipe crossing
700	736.16	-1.81	1.00	733.75	-1.62		pipe crossing
720	735.98	-0.91	0.68	733.85	0.50		cell floor
740	735.85	-0.65	0.45	733.99	0.71	0.14	cell floor
760	735.70	-0.73	0.43	733.79	-1.01		cell floor
780	735.43	-1.34	0.48	733.30	-2.44		cell floor
800	735.14	-1.47	0.44	733.03	-1.36		cell floor
820	734.81	-1.65	0.30	732.78	-1.27		pipe crossing
840	735.14	1.67	0.11	733.66	4.43		pipe crossing
860	734.85	-1.45	0.20	732.06	-8.05		pipe crossing
880	734.23	-3.12	0.16	731.58	-2.41		pipe crossing
900	733.90	-1.63	0.13	731.33	-1.24		cell floor
920	733.55	-1.78	0.13	730.82	-2.53		cell floor
940	733.19	-1.78	0.12	730.28	-2.70		cell floor
960	732.72	-2.38	0.12	729.82	-2.28		cell floor
980	732.32	-2.01	0.17	729.45	-1.88		cell floor
1000	731.76	-2.79	0.23	728.81	-3.22		cell floor
1020	731.17	-2.96	0.25	728.25	-2.80		pipe crossing
1040	730.92	-1.22	0.21	728.73	2.42	0.48	pipe crossing
1060	730.42	-2.51	0.46	726.82	-9.60		pipe crossing
1080	728.91	-7.57	0.32	726.03	-3.95		cell floor
1100	728.16	-3.74	0.24	725.66	-1.83		cell floor
1120	727.30	-4.32	0.24	725.12	-2.70		cell floor
1140	726.67	-3.17	0.26	724.76	-1.83		cell floor
1160	725.93	-3.66	0.35	724.04	-3.61		cell floor
1180	725.13	-4.03	0.25	723.79	-1.25		sideslope

= slope reversal

Five-Year Projection of Settlement
Northern East-West Profiler
95% Confidence Upper Limit

Station	Baseline Measured Pipe Elev ft	Baseline Slope %	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Slope Height ft	Comments
680	736.52	-5.70	1.78	733.61	-		pipe crossing
700	736.16	-1.81	1.21	733.54	-0.35		pipe crossing
720	735.98	-0.91	0.73	733.80	1.29		cell floor
740	735.85	-0.65	0.42	734.03	1.13	0.23	cell floor
760	735.70	-0.73	0.39	733.83	-0.98		cell floor
780	735.43	-1.34	0.43	733.35	-2.41		cell floor
800	735.14	-1.47	0.43	733.04	-1.54		cell floor
820	734.81	-1.65	0.30	732.78	-1.31		pipe crossing
840	735.14	1.67	0.10	733.68	4.47		pipe crossing
860	734.85	-1.45	0.20	732.06	-8.09		pipe crossing
880	734.23	-3.12	0.15	731.59	-2.37		pipe crossing
900	733.90	-1.63	0.12	731.34	-1.26		cell floor
920	733.55	-1.78	0.12	730.83	-2.55		cell floor
940	733.19	-1.78	0.11	730.29	-2.68		cell floor
960	732.72	-2.38	0.11	729.84	-2.29		cell floor
980	732.32	-2.01	0.15	729.47	-1.83		cell floor
1000	731.76	-2.79	0.20	728.83	-3.20		cell floor
1020	731.17	-2.96	0.23	728.27	-2.79		pipe crossing
1040	730.92	-1.22	0.18	728.76	2.42	0.48	pipe crossing
1060	730.42	-2.51	0.41	726.86	-9.51		pipe crossing
1080	728.91	-7.57	0.28	726.08	-3.93		cell floor
1100	728.16	-3.74	0.19	725.71	-1.81		cell floor
1120	727.30	-4.32	0.18	725.18	-2.65		cell floor
1140	726.67	-3.17	0.18	724.84	-1.73		cell floor
1160	725.93	-3.66	0.20	724.19	-3.24		cell floor
1180	725.13	-4.03	0.16	723.88	-1.55		sideslope

= slope reversal

Five-Year Projection of Settlement Northern East-West Profiler 95% Confidence Lower Limit							
Station	Baseline Measured Pipe Elev	Baseline Slope	Final Settlement	Final Pipe Elevation	Final Slope	Slope Height	Comments
	ft	%	ft	ft	%	ft	
680	736.52	-5.70	2.58	732.82	-		pipe crossing
700	736.16	-1.81	1.66	733.09	1.34		pipe crossing
720	735.98	-0.91	0.92	733.61	2.61		cell floor
740	735.85	-0.65	0.53	733.92	1.52	0.30	cell floor
760	735.70	-0.73	0.49	733.73	-0.92		cell floor
780	735.43	-1.34	0.53	733.26	-2.39		cell floor
800	735.14	-1.47	0.52	732.95	-1.52		cell floor
820	734.81	-1.65	0.35	732.73	-1.09		pipe crossing
840	735.14	1.67	0.13	733.64	4.57		pipe crossing
860	734.85	-1.45	0.21	732.05	-7.99		pipe crossing
880	734.23	-3.12	0.18	731.56	-2.44		pipe crossing
900	733.90	-1.63	0.14	731.32	-1.22		cell floor
920	733.55	-1.78	0.13	730.82	-2.51		cell floor
940	733.19	-1.78	0.13	730.28	-2.70		cell floor
960	732.72	-2.38	0.12	729.82	-2.27		cell floor
980	732.32	-2.01	0.18	729.44	-1.90		cell floor
1000	731.76	-2.79	0.23	728.80	-3.20		cell floor
1020	731.17	-2.96	0.25	728.25	-2.78		pipe crossing
1040	730.92	-1.22	0.20	728.73	2.42	0.48	pipe crossing
1060	730.42	-2.51	0.44	726.84	-9.52		pipe crossing
1080	728.91	-7.57	0.30	726.05	-3.94		cell floor
1100	728.16	-3.74	0.22	725.69	-1.80		cell floor
1120	727.30	-4.32	0.21	725.15	-2.69		cell floor
1140	726.67	-3.17	0.22	724.80	-1.78		cell floor
1160	725.93	-3.66	0.26	724.13	-3.36		cell floor
1180	725.13	-4.03	0.35	723.69	-2.16		sideslope
= slope reversal							

5.0 CONCLUSION

Data was collected from the functioning strain meters, settlement profiler pipes and settlement gauges on September 23 and 24, 2008.

Review of the profiler data for the stations not located on the pipe crossings and pipe access sections indicates that as much as 3.5 feet of settlement has occurred since waste placement began in September 2004

A comparison of the data to the control charts is within the acceptable limits for each instrument. In addition, Level I Criteria for all horizontal strains and differential settlements between stations not located on the pipe crossings and pipe access sections were not exceeded.

The 5-year settlement predictions were performed for this monitoring event based on data collected from 2005 to 2008, in accordance with the monitoring plan. The eastern half of the northern east-west profiler, southern east-west profiler pipe and the Phase 1 north-south profiler pipe under more than five feet of waste were used for this evaluation. The western half of the northern east-west profiler as well as the Phase 2 north-south profiler and the Phase 2 east-west profiler, were not used in the evaluation because of the limited waste over the profiler pipes. Review of the results indicates the Level I criteria were not exceeded at any station not located on the pipe crossings or pipe access sections.

The next monitoring event will take place in March 2009.

Figure 1
Cluster 1
Strain Meter Measurements

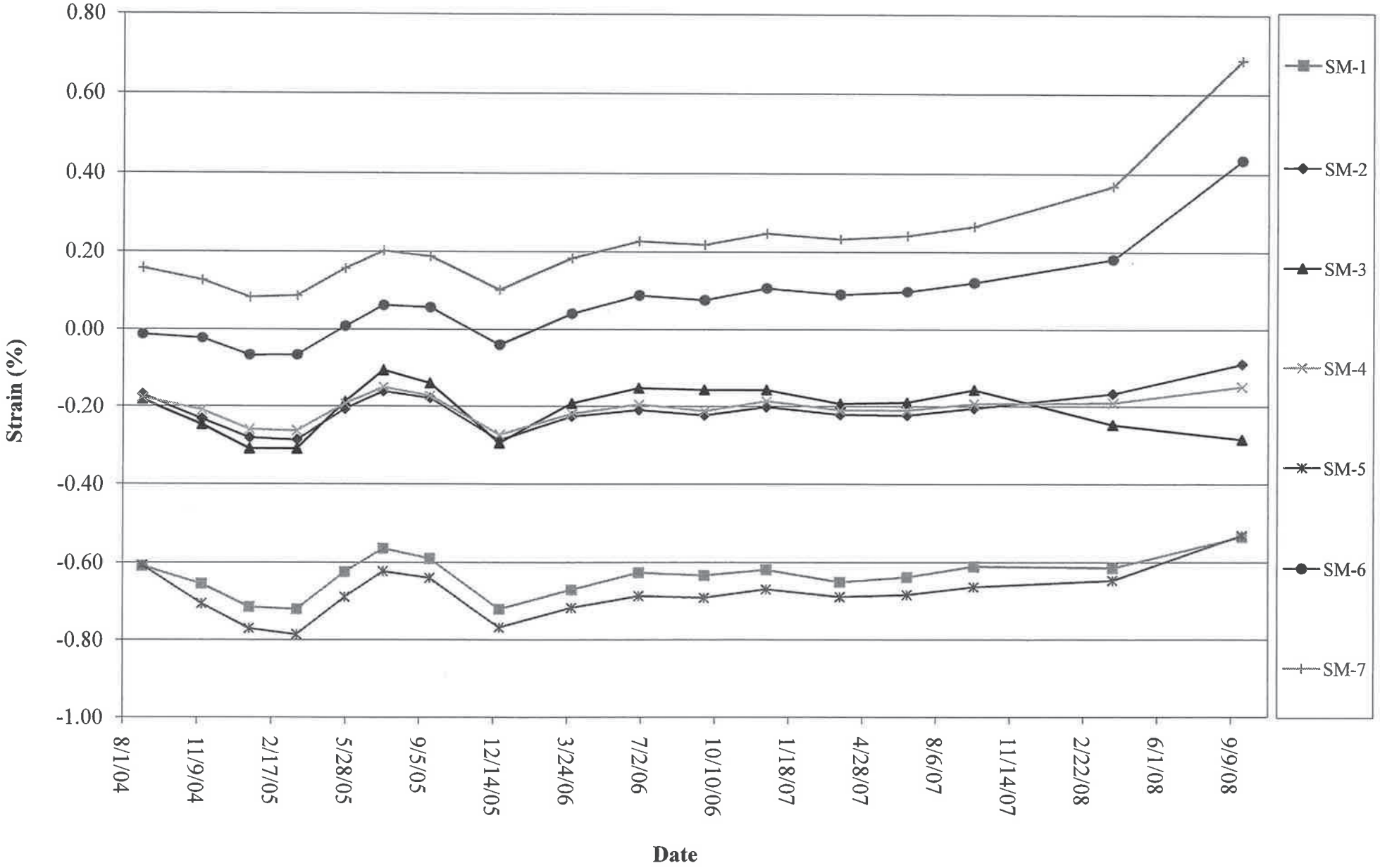


Figure 2
Cluster 2
Strain Meter Measurements

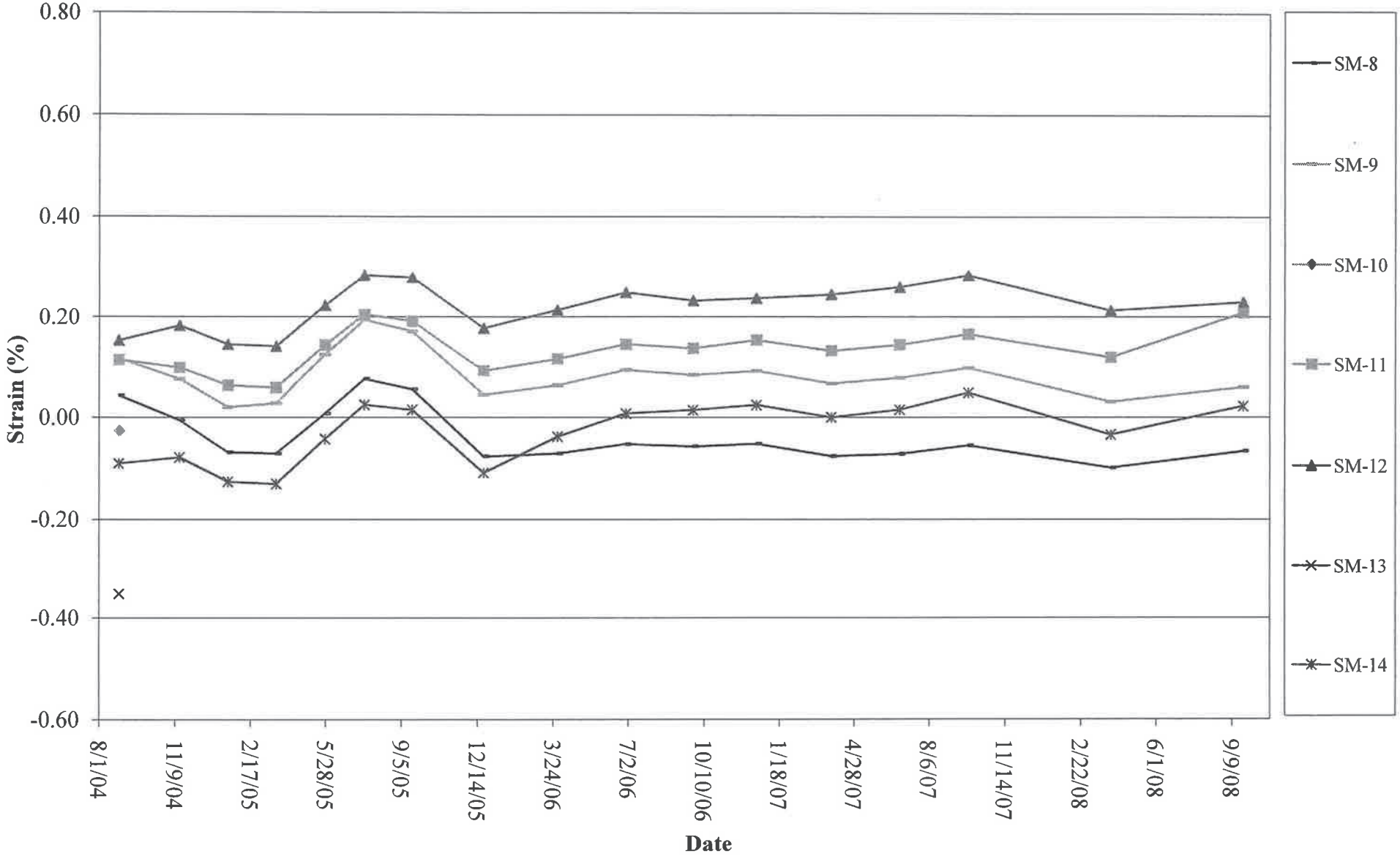


Figure 3
Cluster 3
Strain Meter Measurements

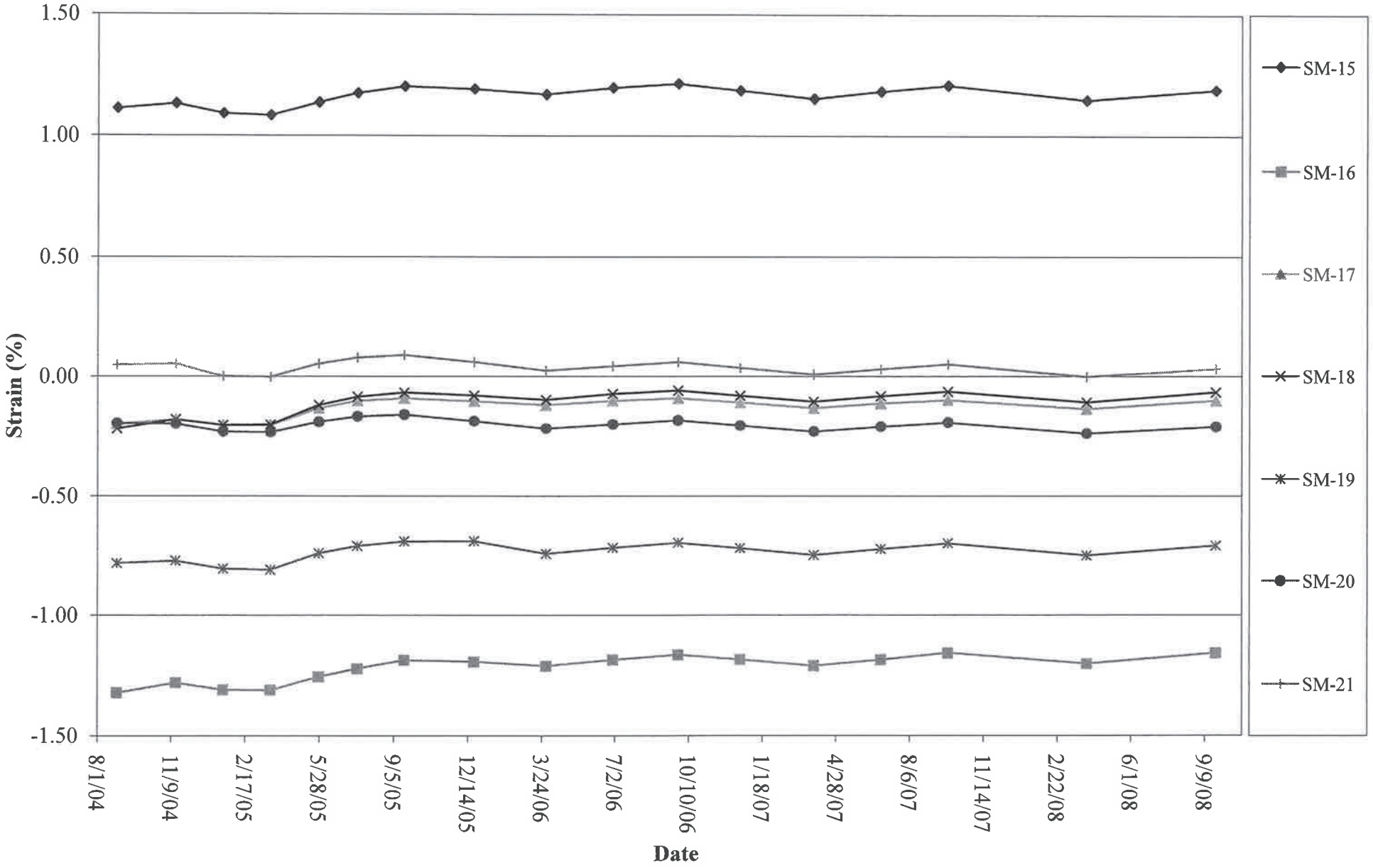


Figure 4
Cluster 4
Strain Meter Measurements

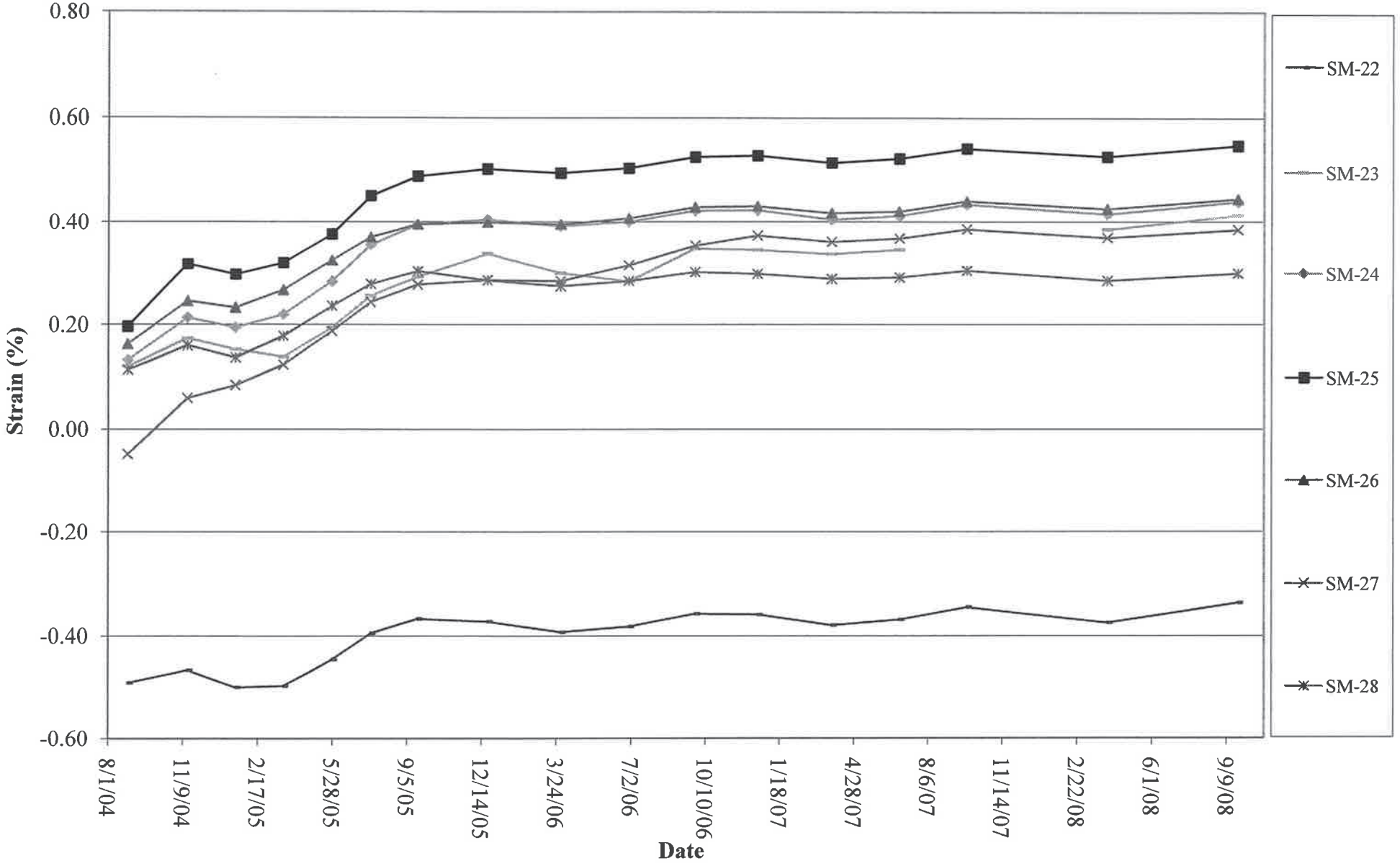


Figure 5
Cluster 5
Strain Meter Measurements

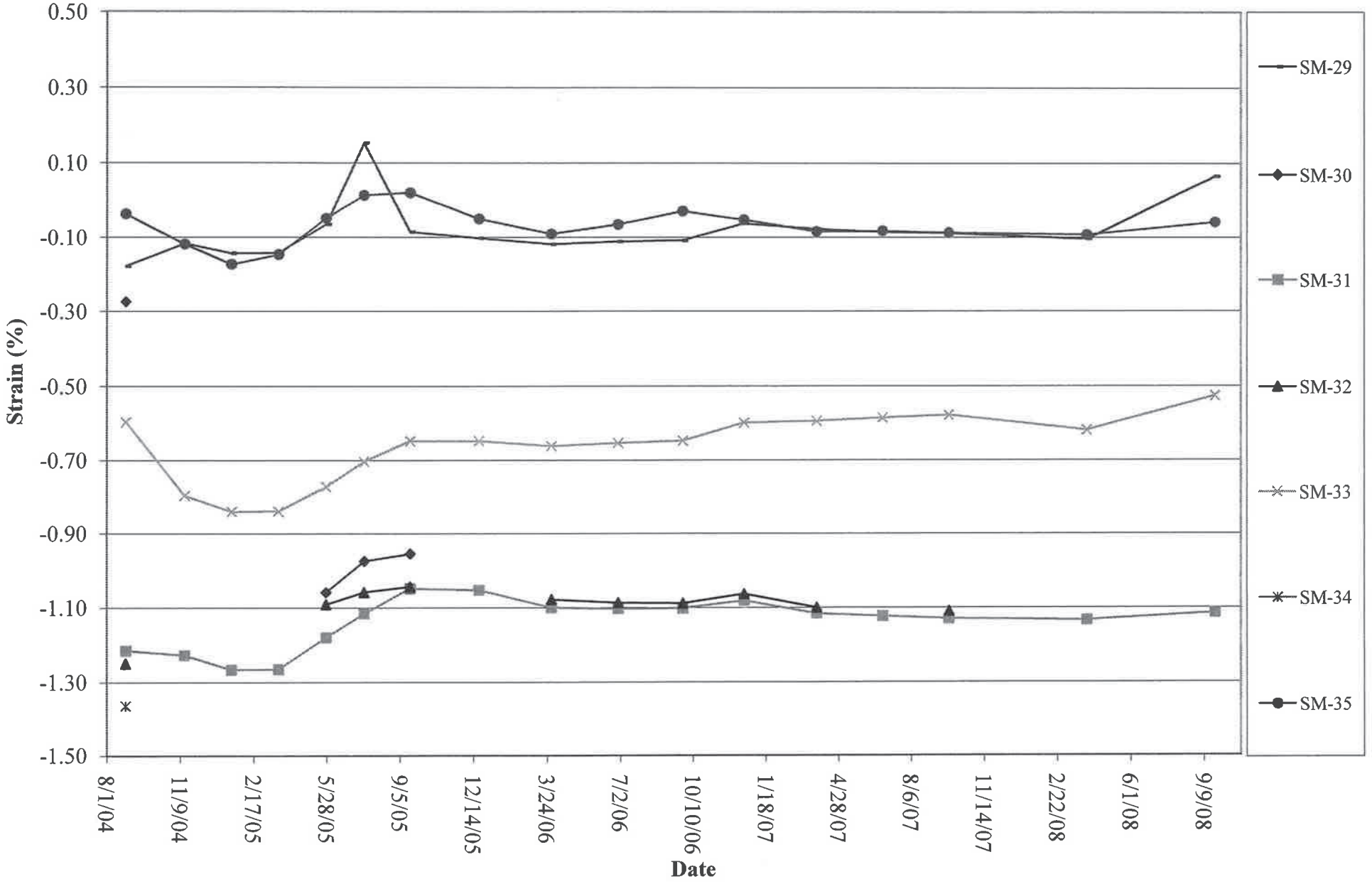


Figure 6
Cluster 6
Strain Meter Measurements

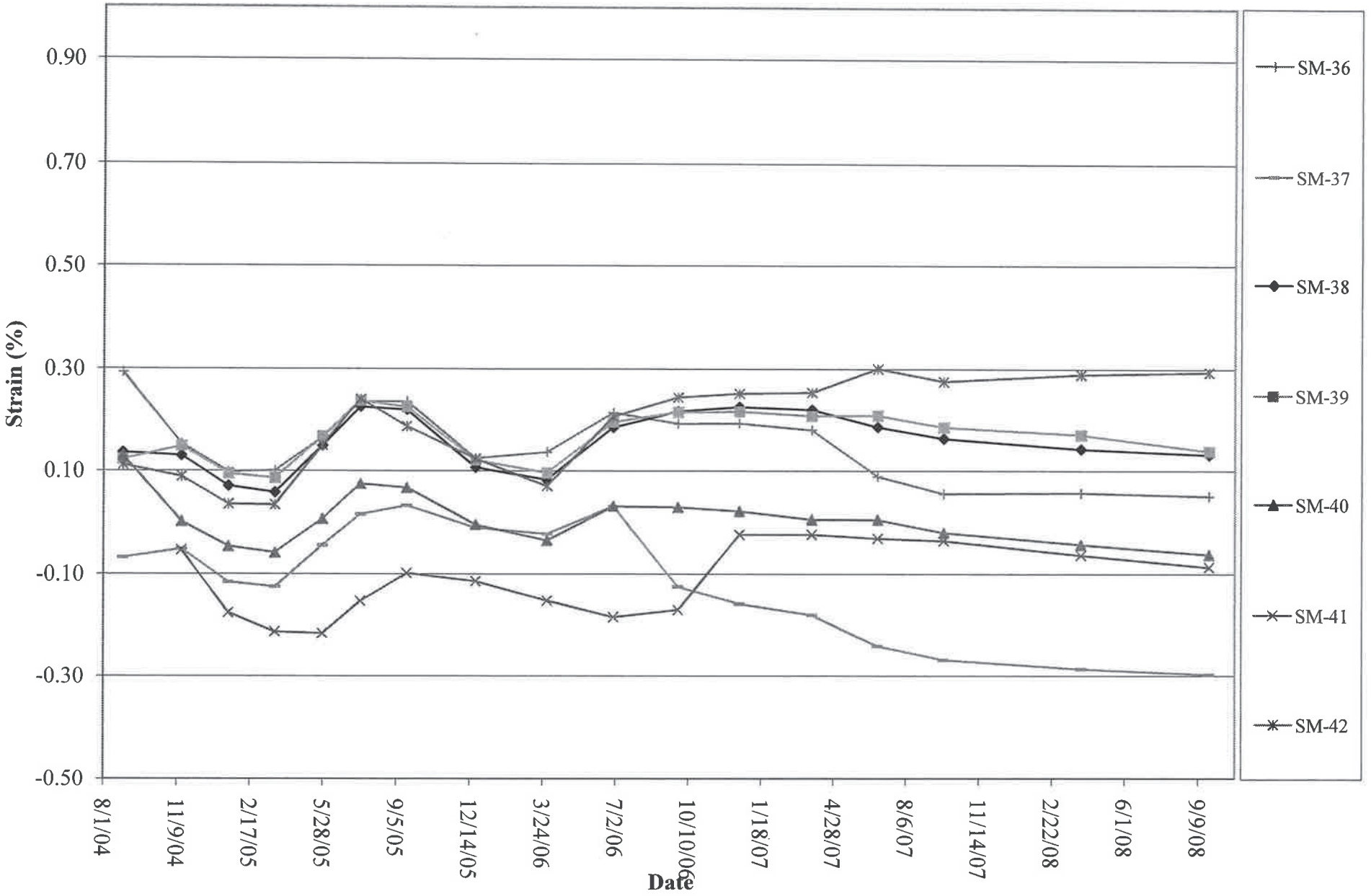


Figure 7
Cluster 7
Strain Meter Measurements

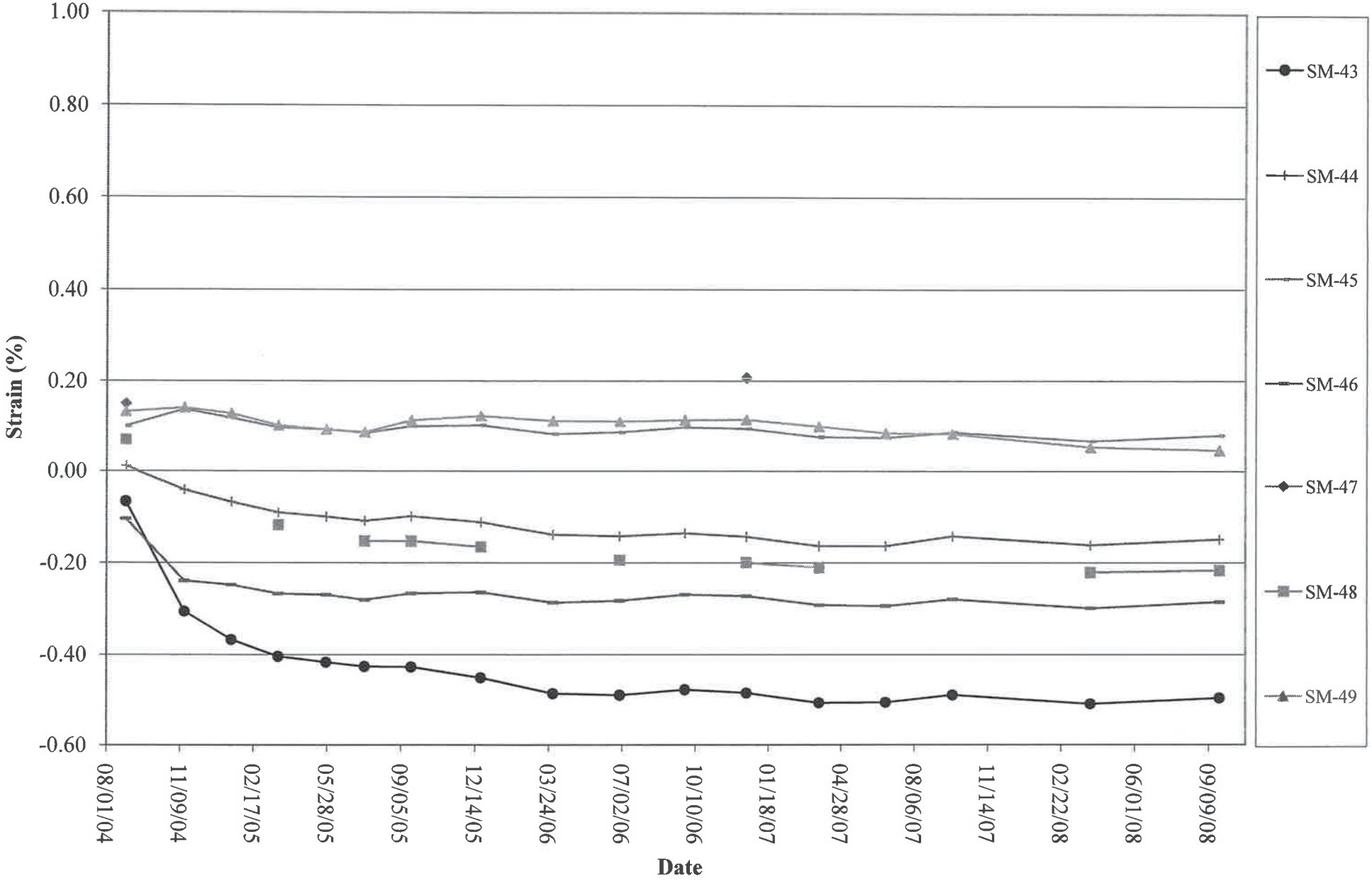


Figure 8
Cluster 1 - Control Chart
Strain Meter Data Quality Verification
SM-4/SM-5 Differential

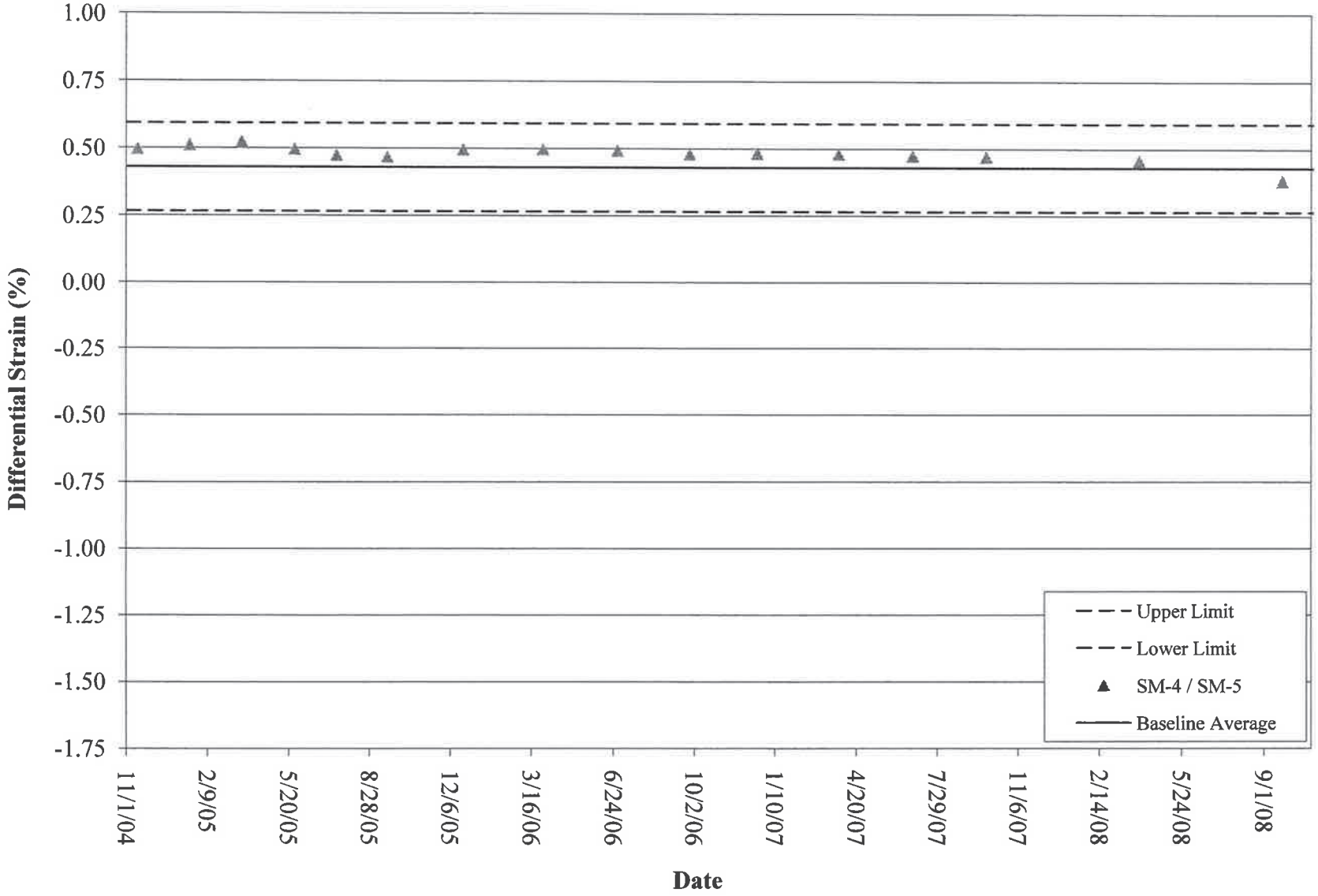


Figure 9
Cluster 2 - Control Chart
Strain Meter Data Quality Verification
SM-11/SM-12 Differential

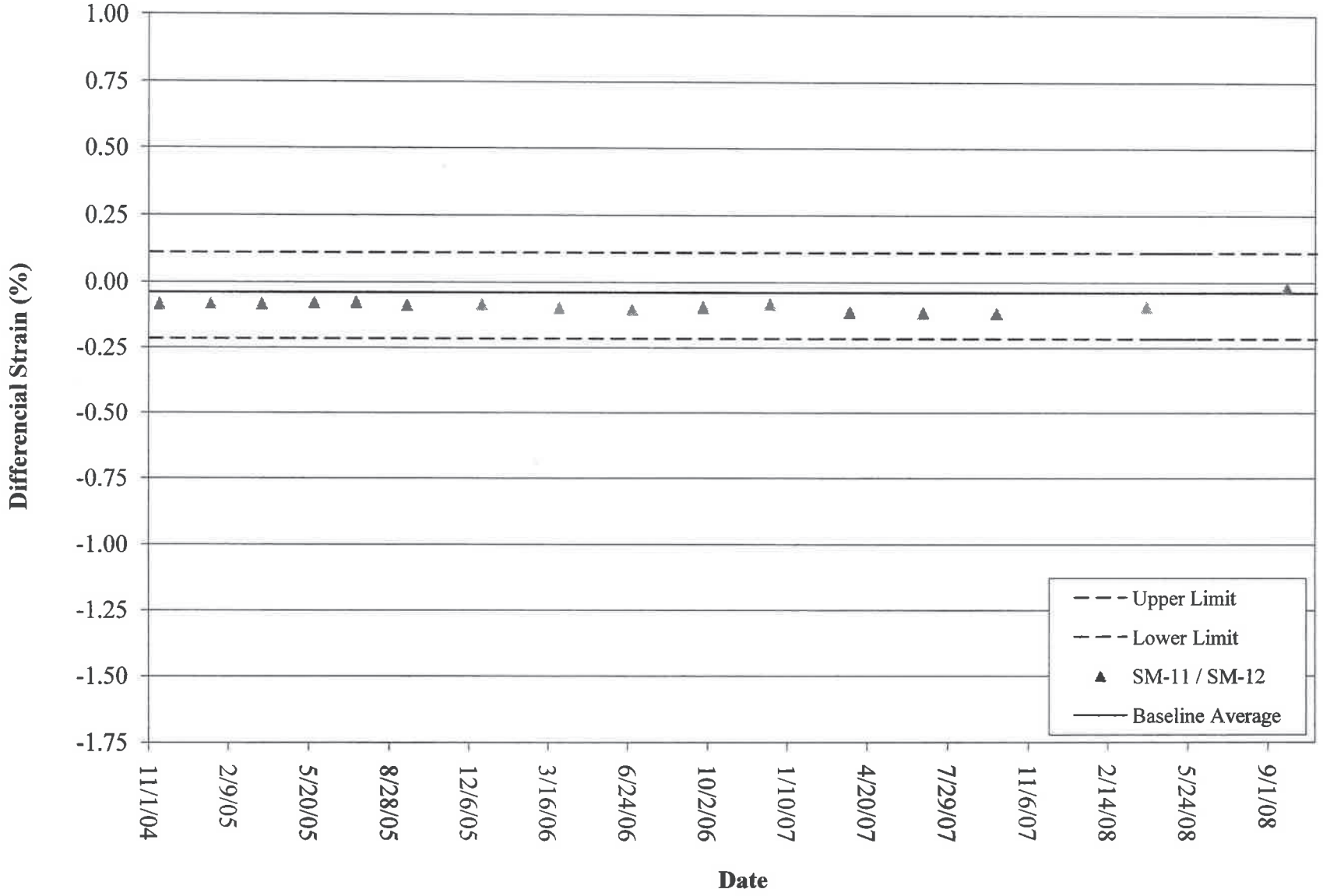


Figure 10
Cluster 3 - Control Chart
Strain Meter Data Quality Verification
SM-18/SM-19 Differential

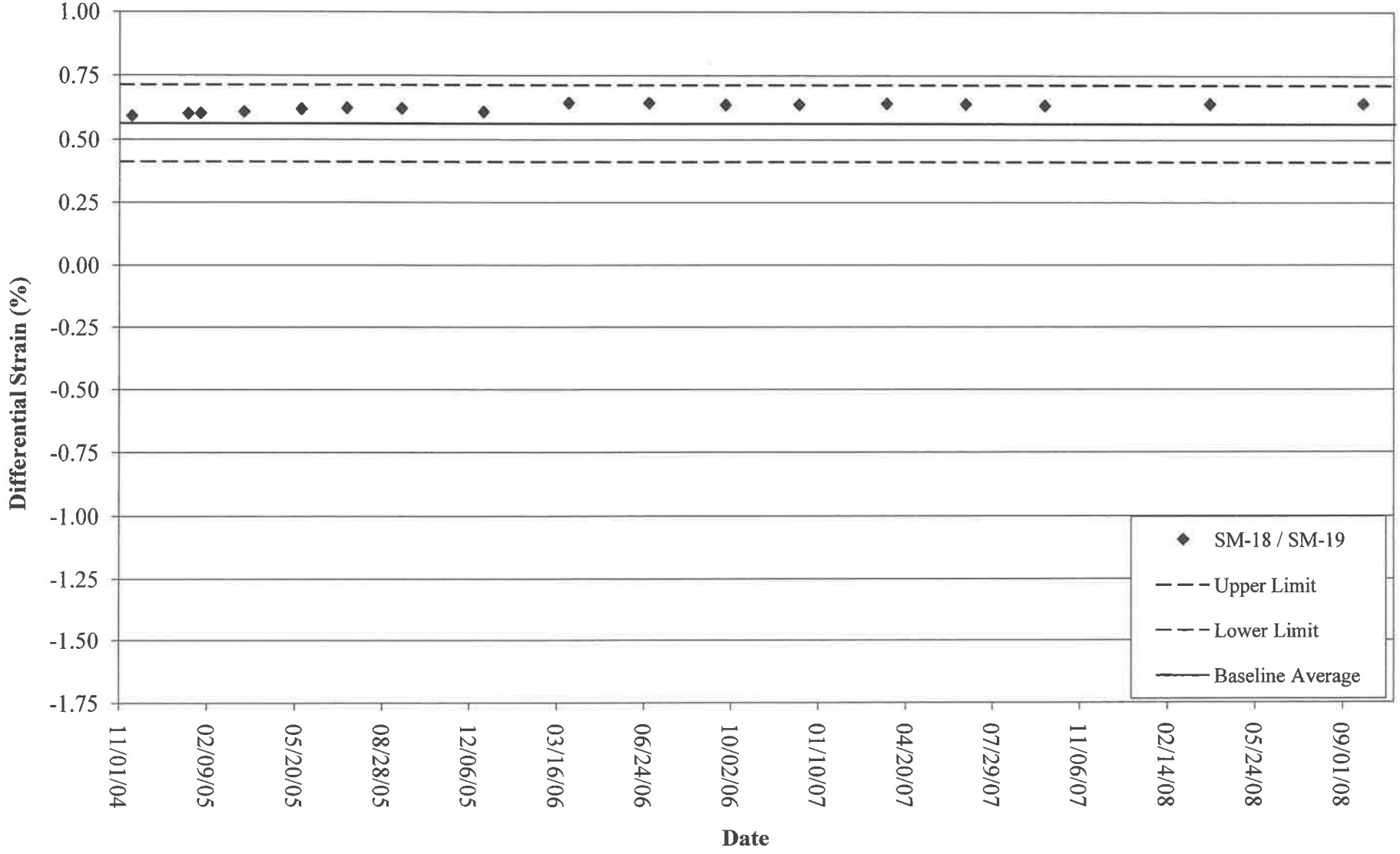


Figure 11
Cluster 3 - Control Chart
Strain Meter Data Quality Verification
SM-25/SM-26 Differential

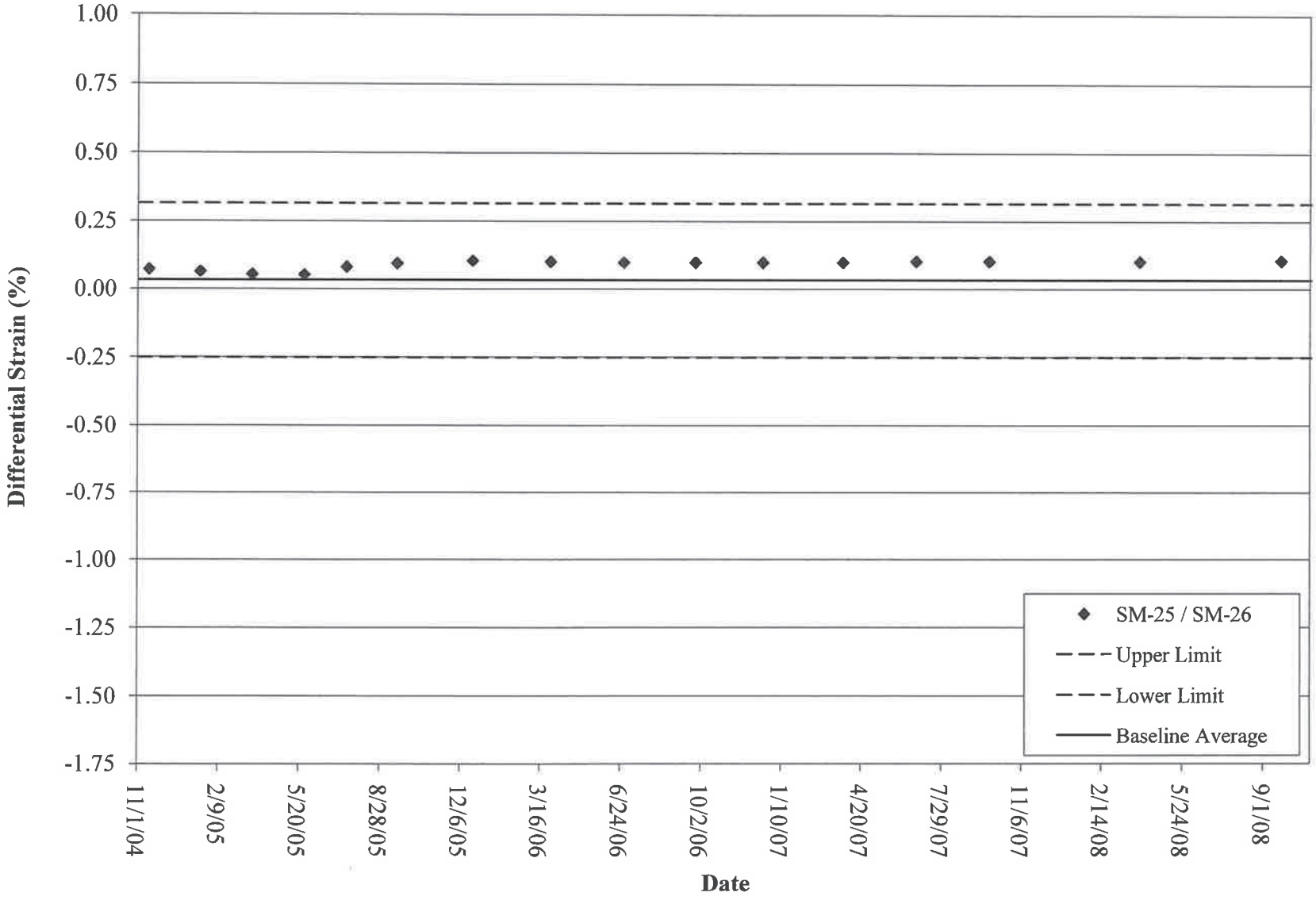


Figure 12
Cluster 5 - Control Chart
Strain Meter Data Quality Verification
SM-31/SM-33 Differential

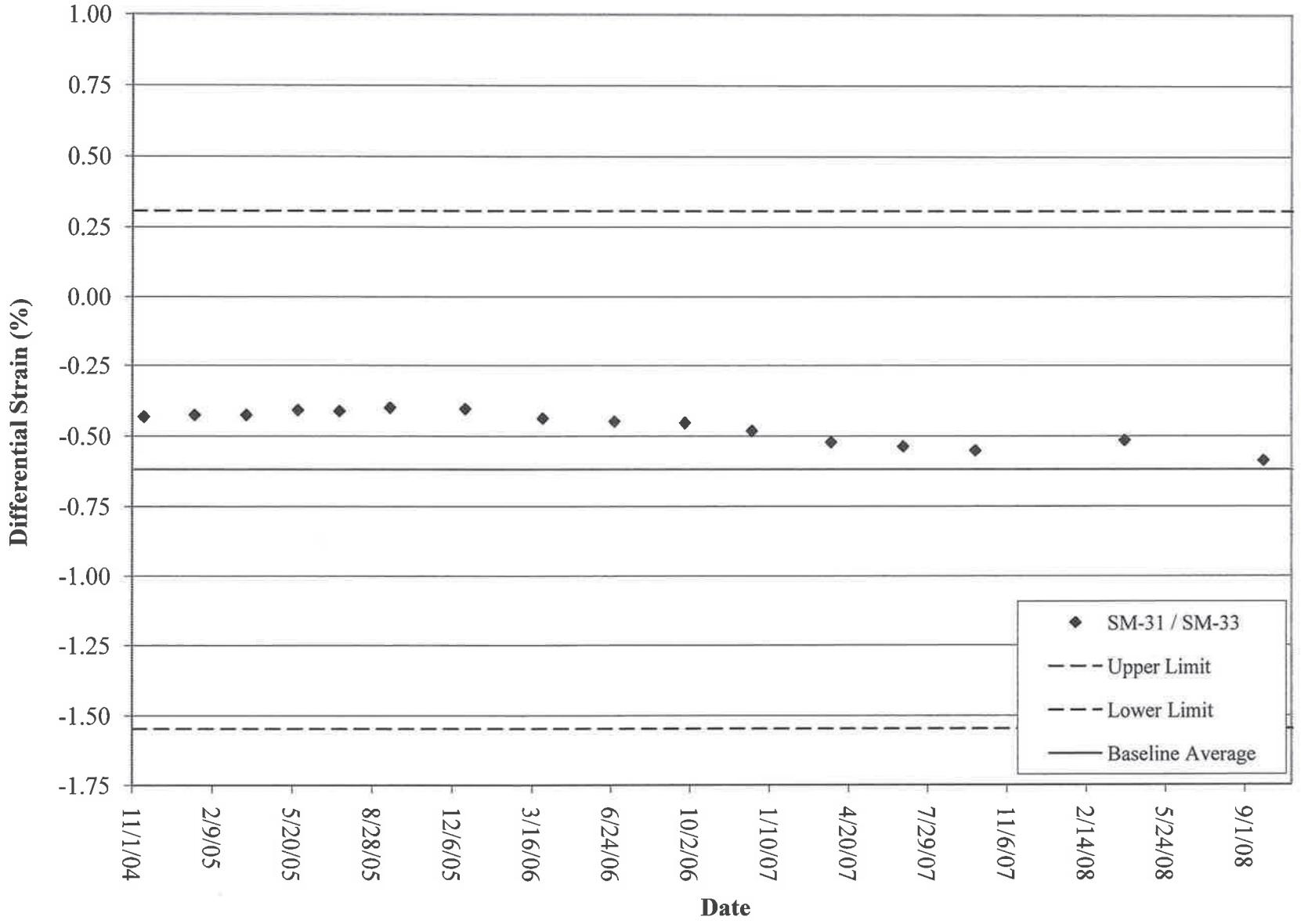


Figure 13
Cluster 6 - Control Chart
Strain Meter Data Quality Verification
SM-39/SM-40

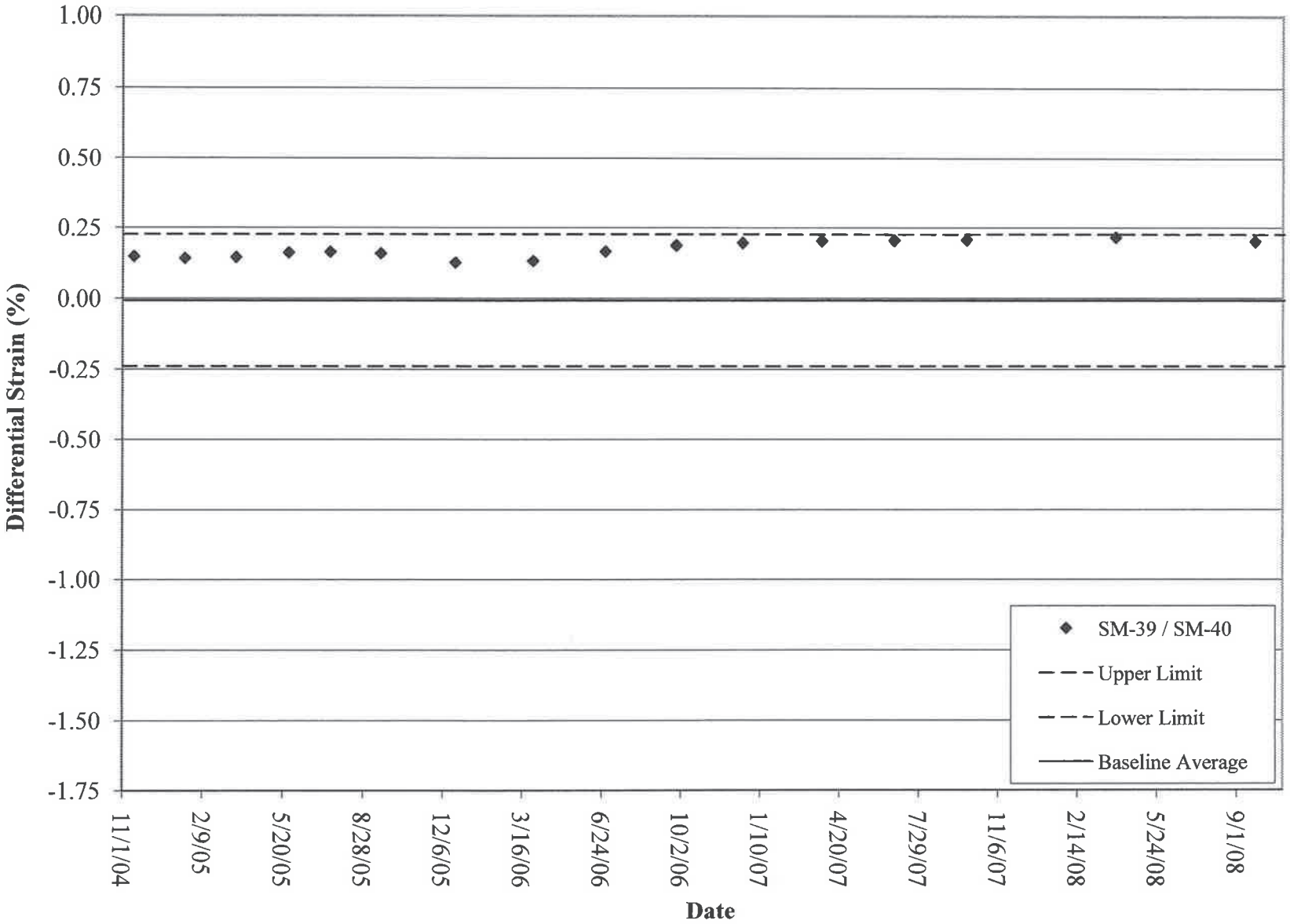


Figure 14
Cluster 7 - Control Chart
Strain Meter Data Quality Verification
SM-45/SM-46 Differential

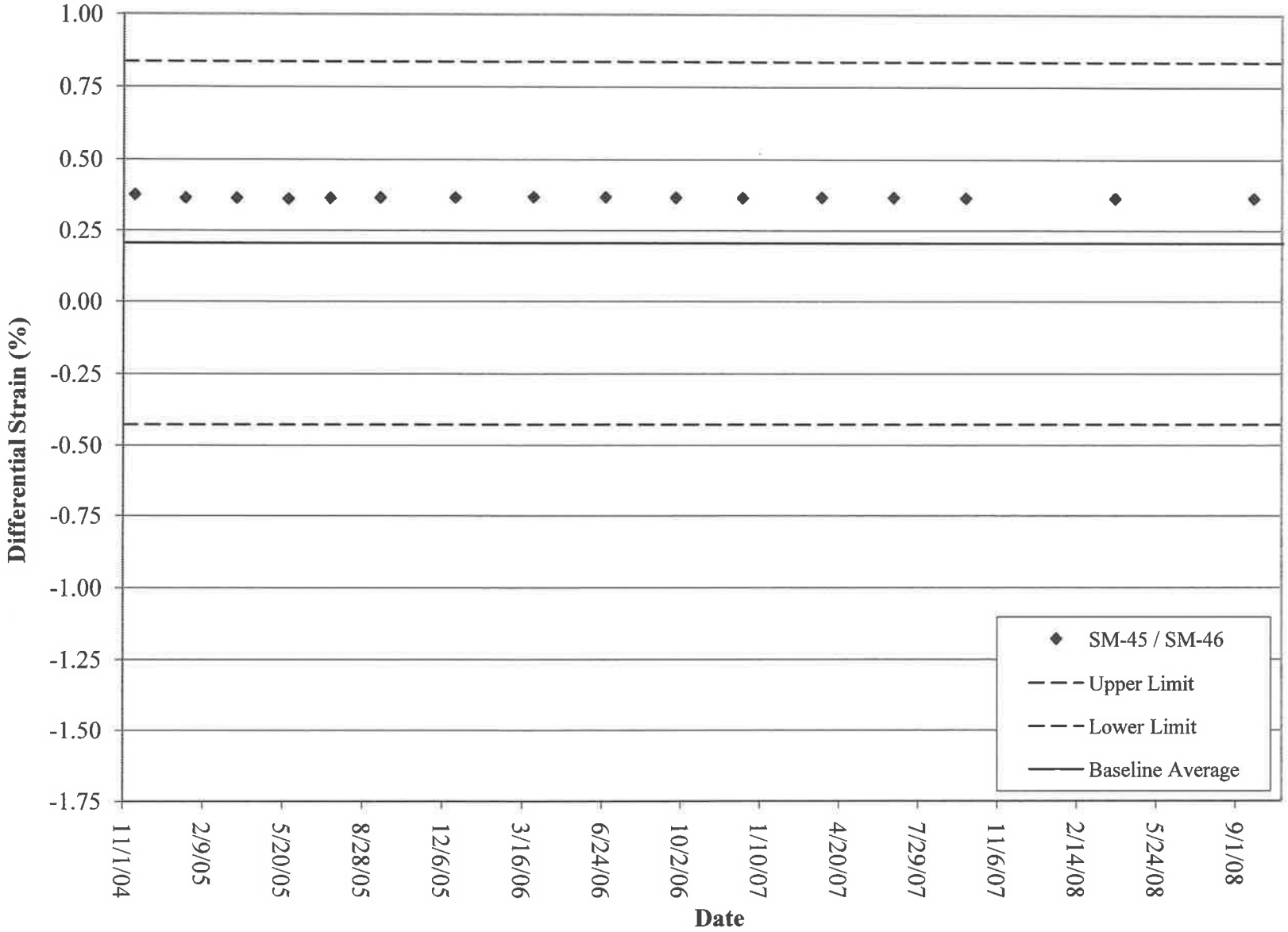


Figure 15
Phase 1 North-South Profiler

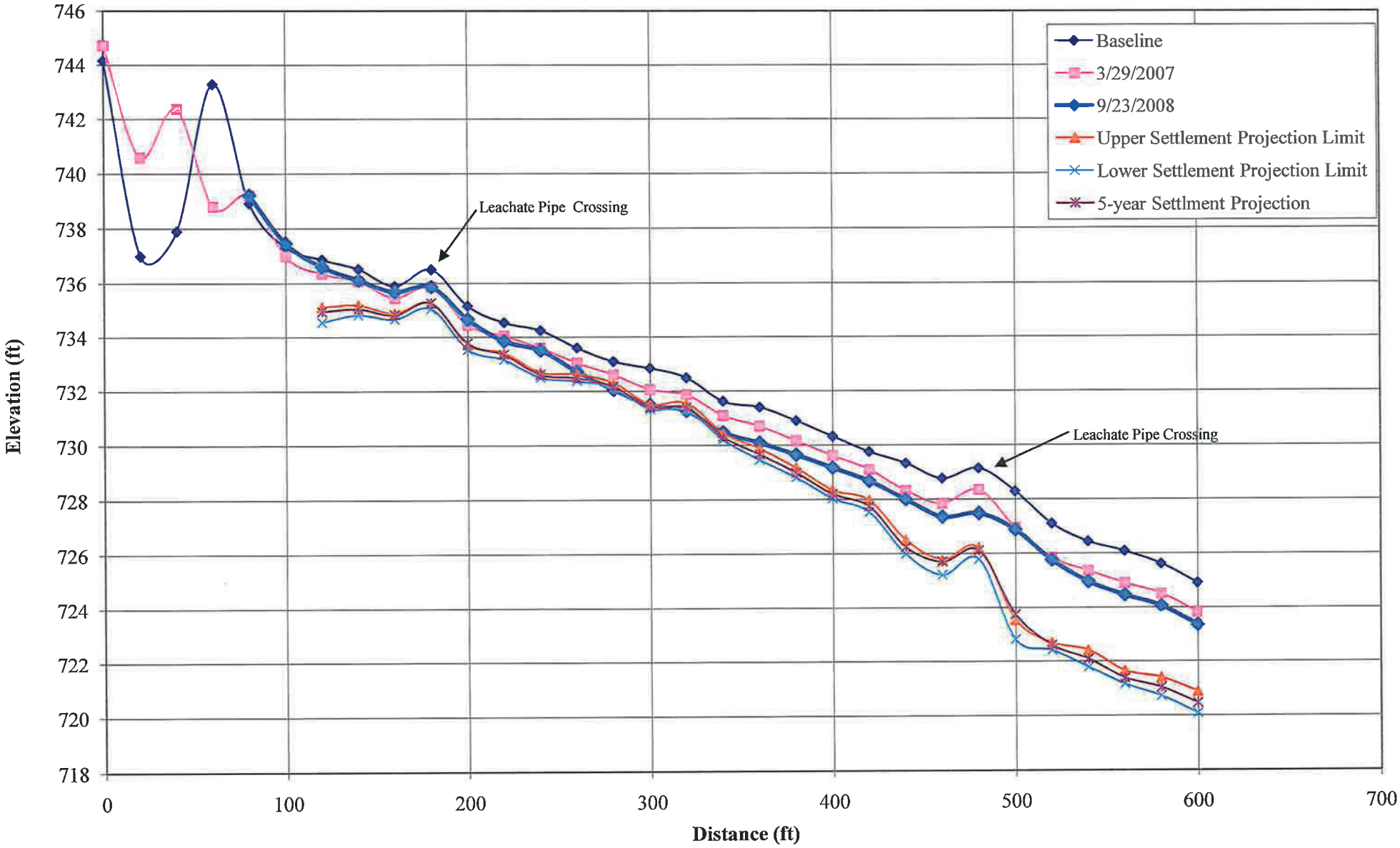


Figure 16
Phase 2 North - South Profiler

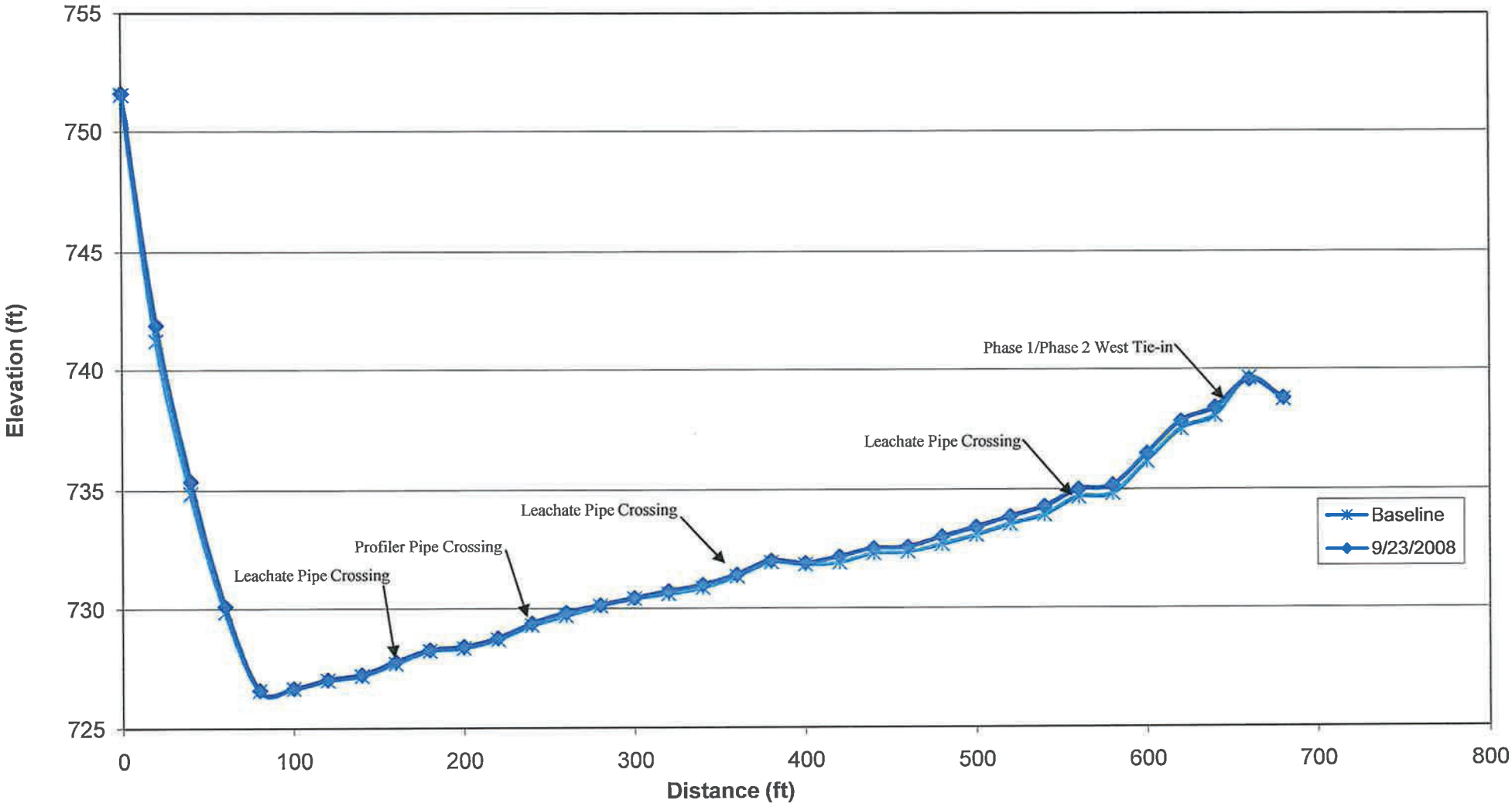


Figure 17
Northern East-West Profiler

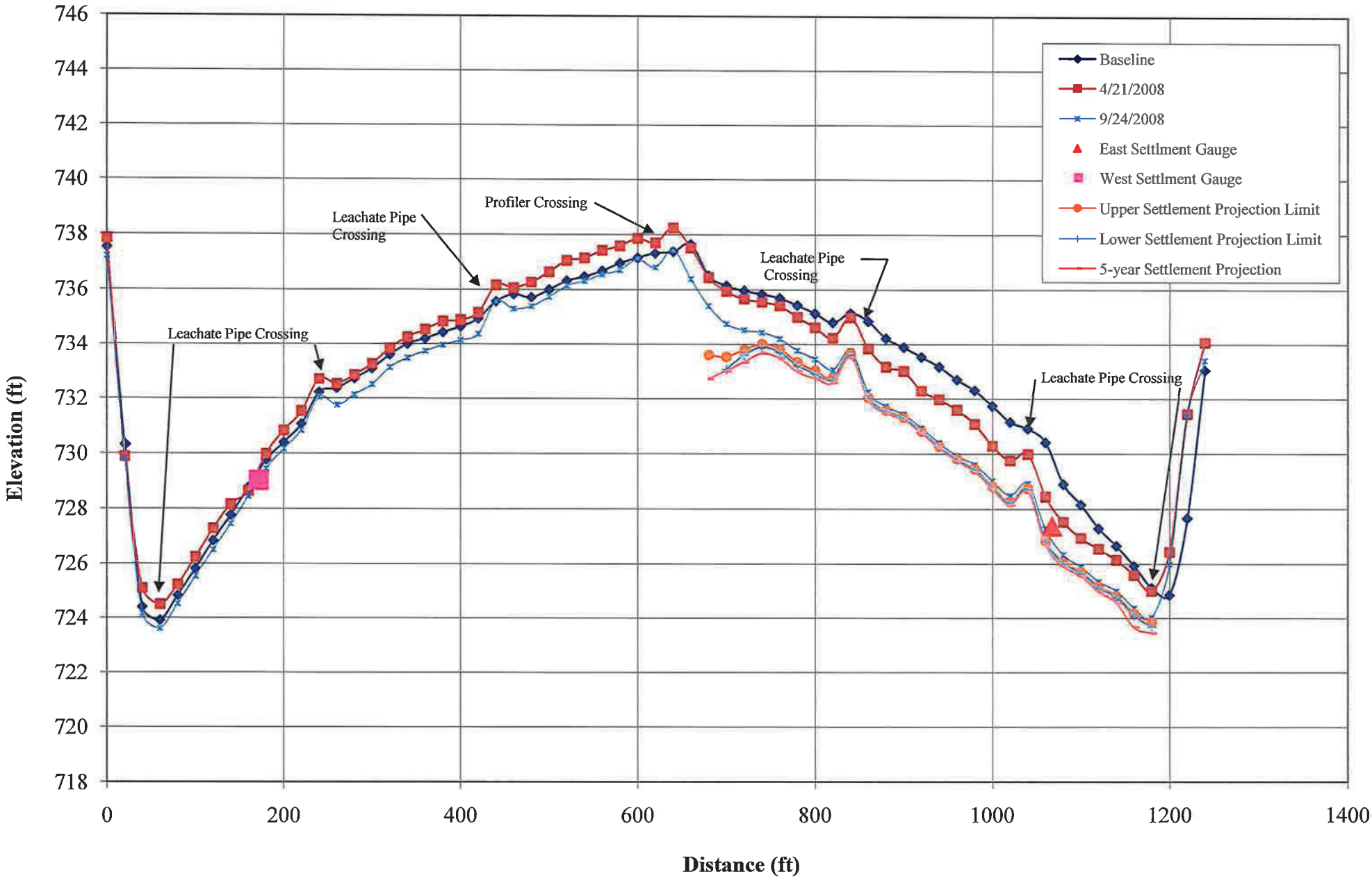


Figure 18
Southern East-West Profiler

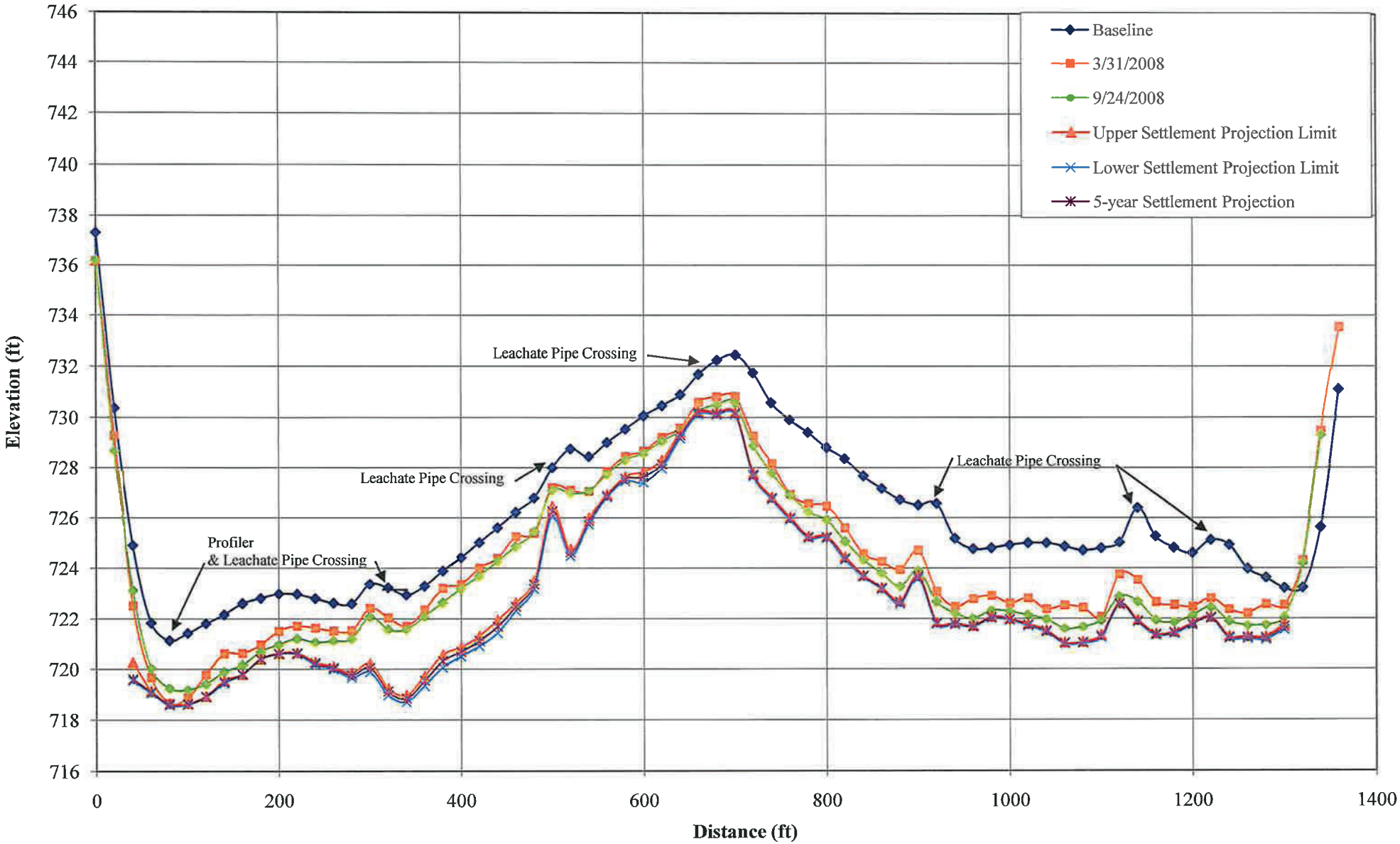


Figure 19
Phase 2 East-West Profiler

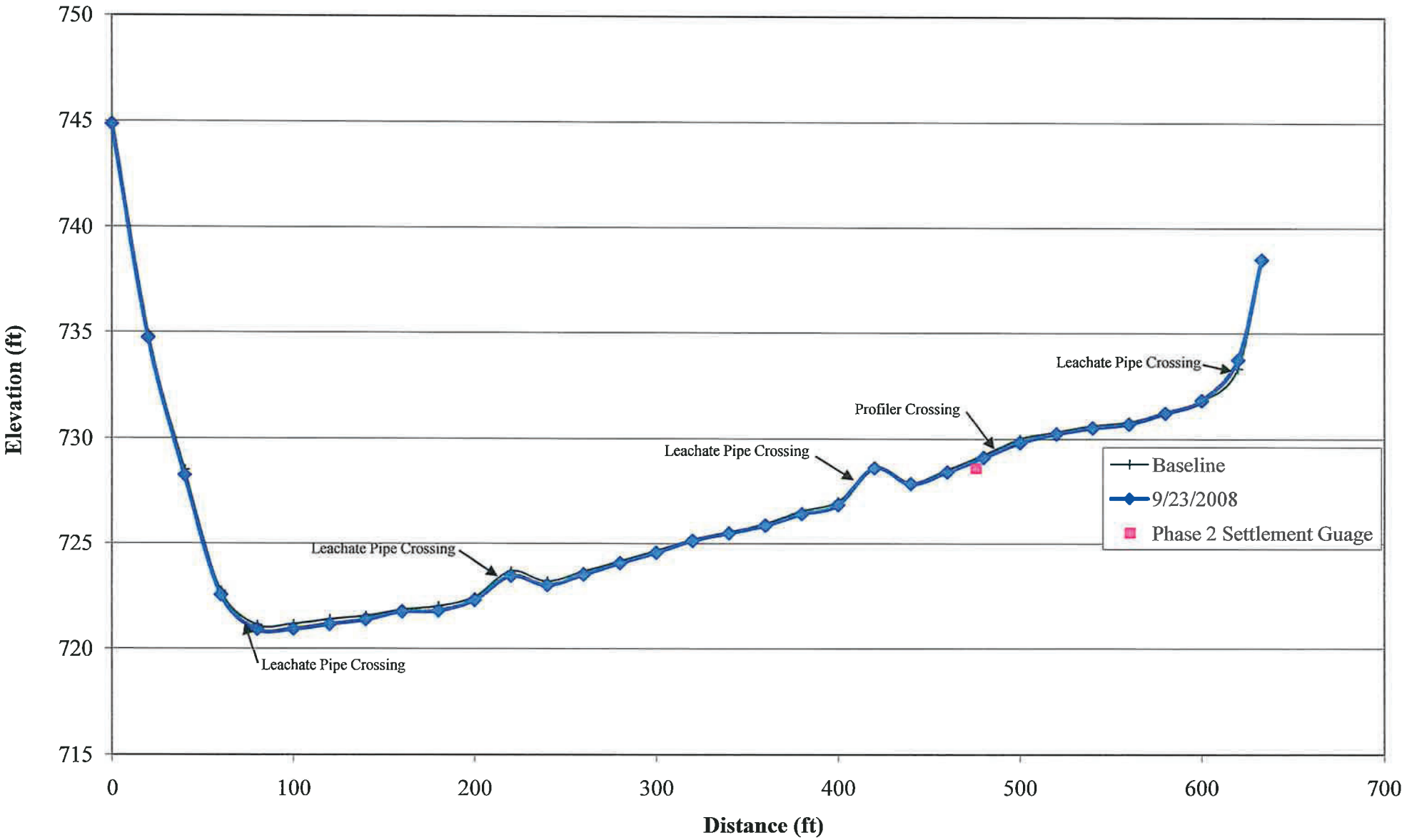


Figure 20
Phase 1 North-South Profiler
Control Chart - Mean

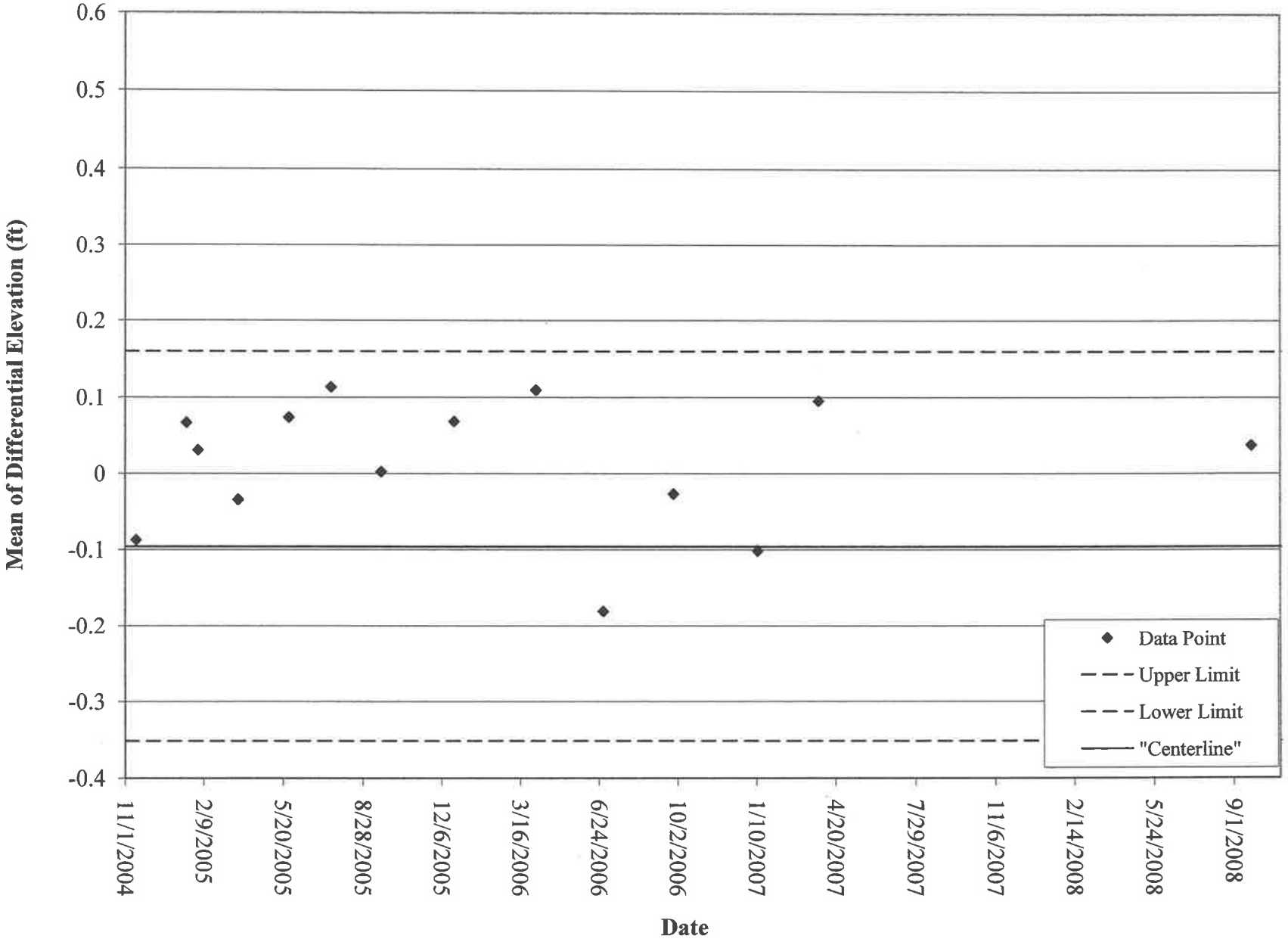


Figure 21
Phase 1 North-South Profiler
Control Chart - Standard Deviation

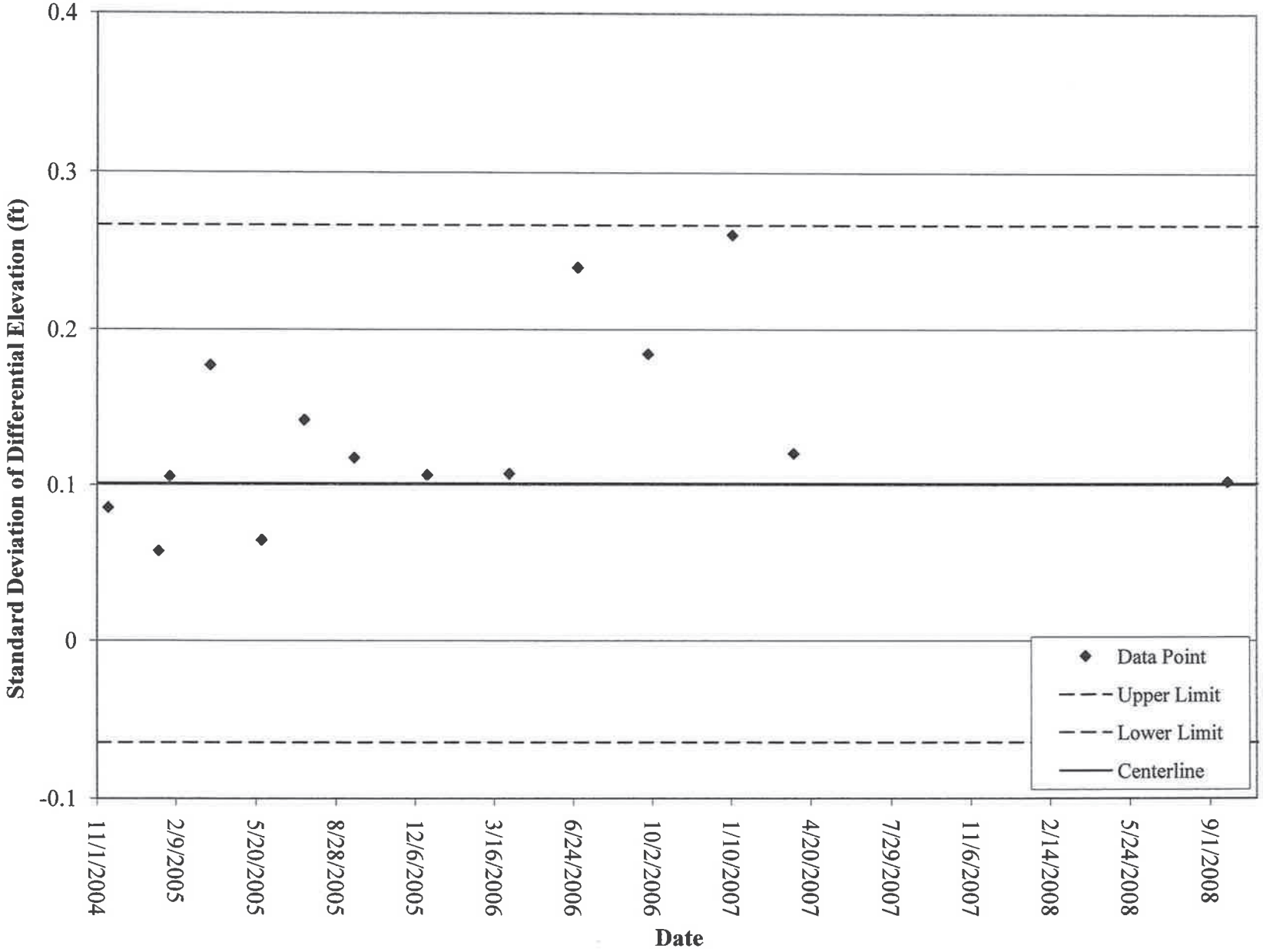


Figure 22
Phase 2 North-South Profiler
Control Chart - Mean

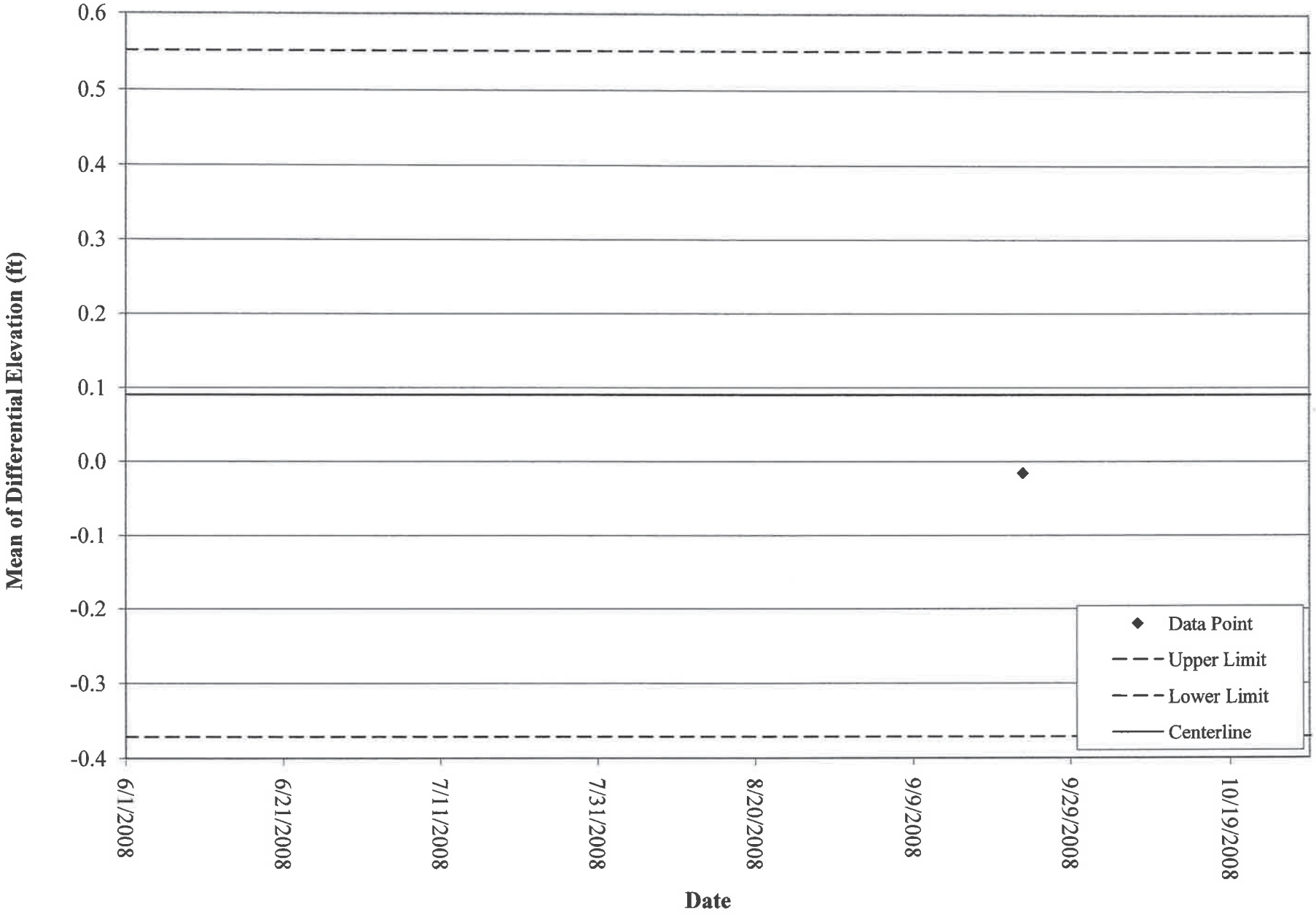


Figure 23
Phase 2 North-South Profiler
Control Chart - Standard Deviation

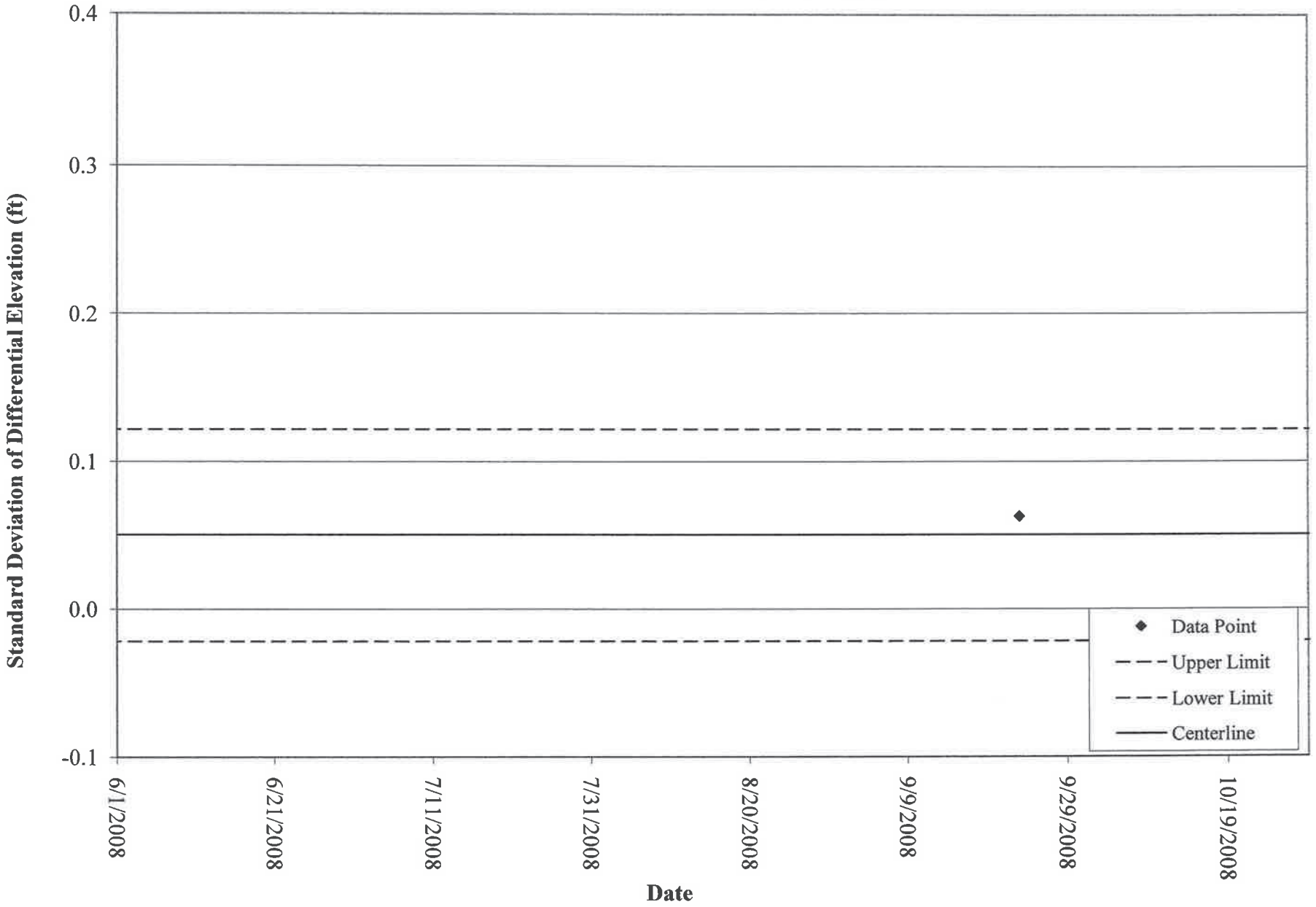


Figure 24
Northern East-West Profiler
Control Chart - Mean

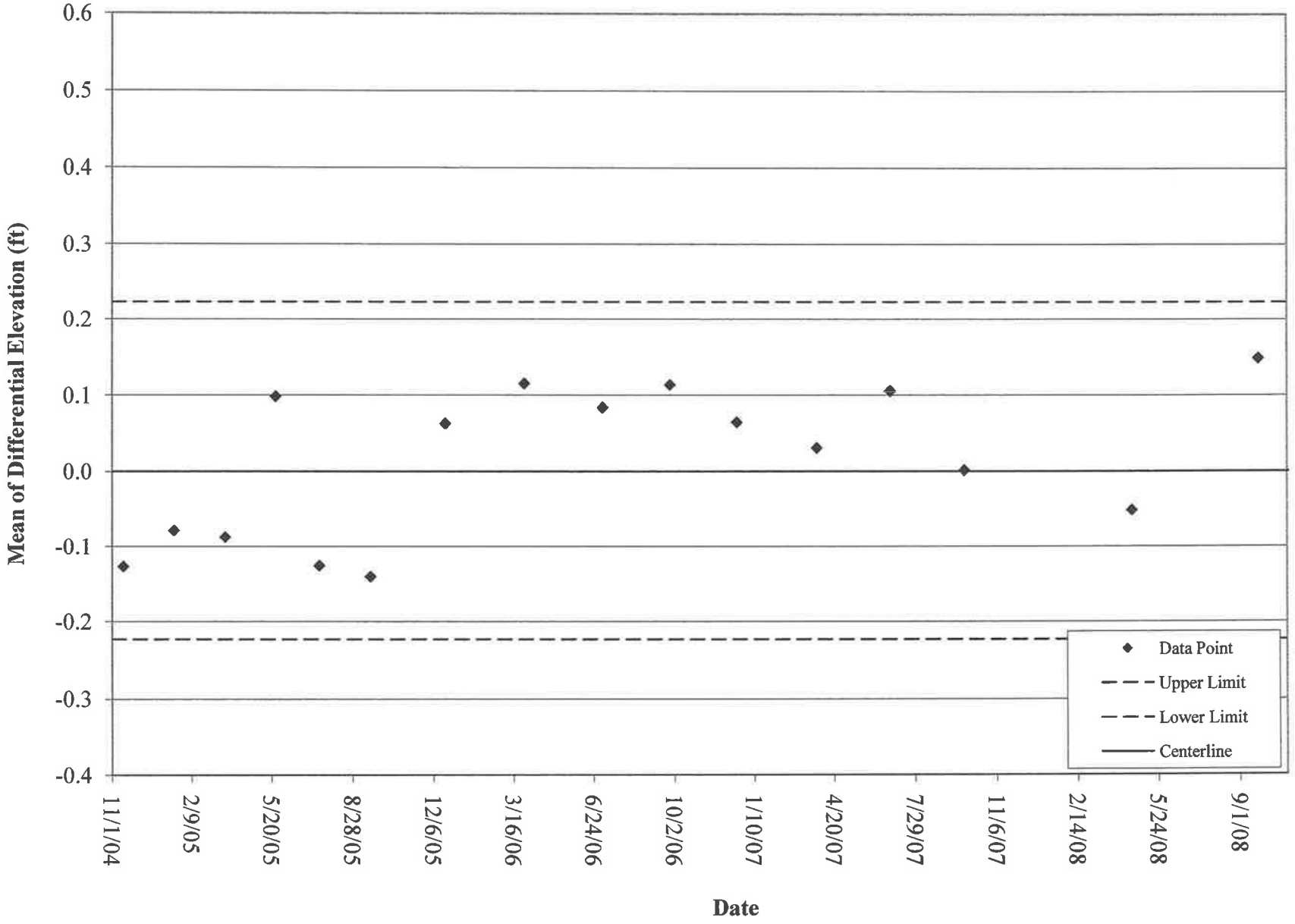


Figure 25
Northern East-West Profiler
Control Chart - Standard Deviation

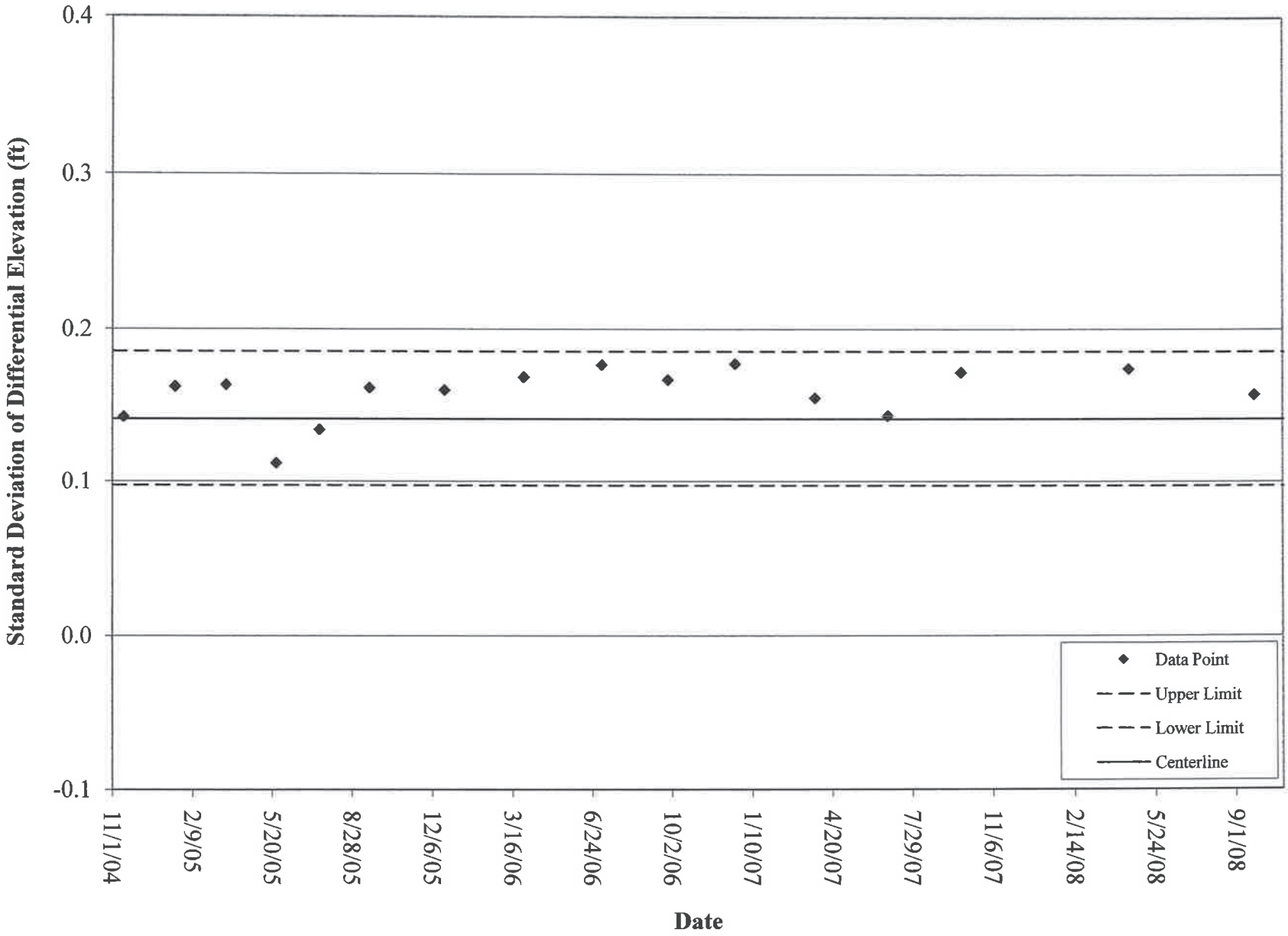


Figure 26
Southern East-West Profiler
Control Chart - Mean

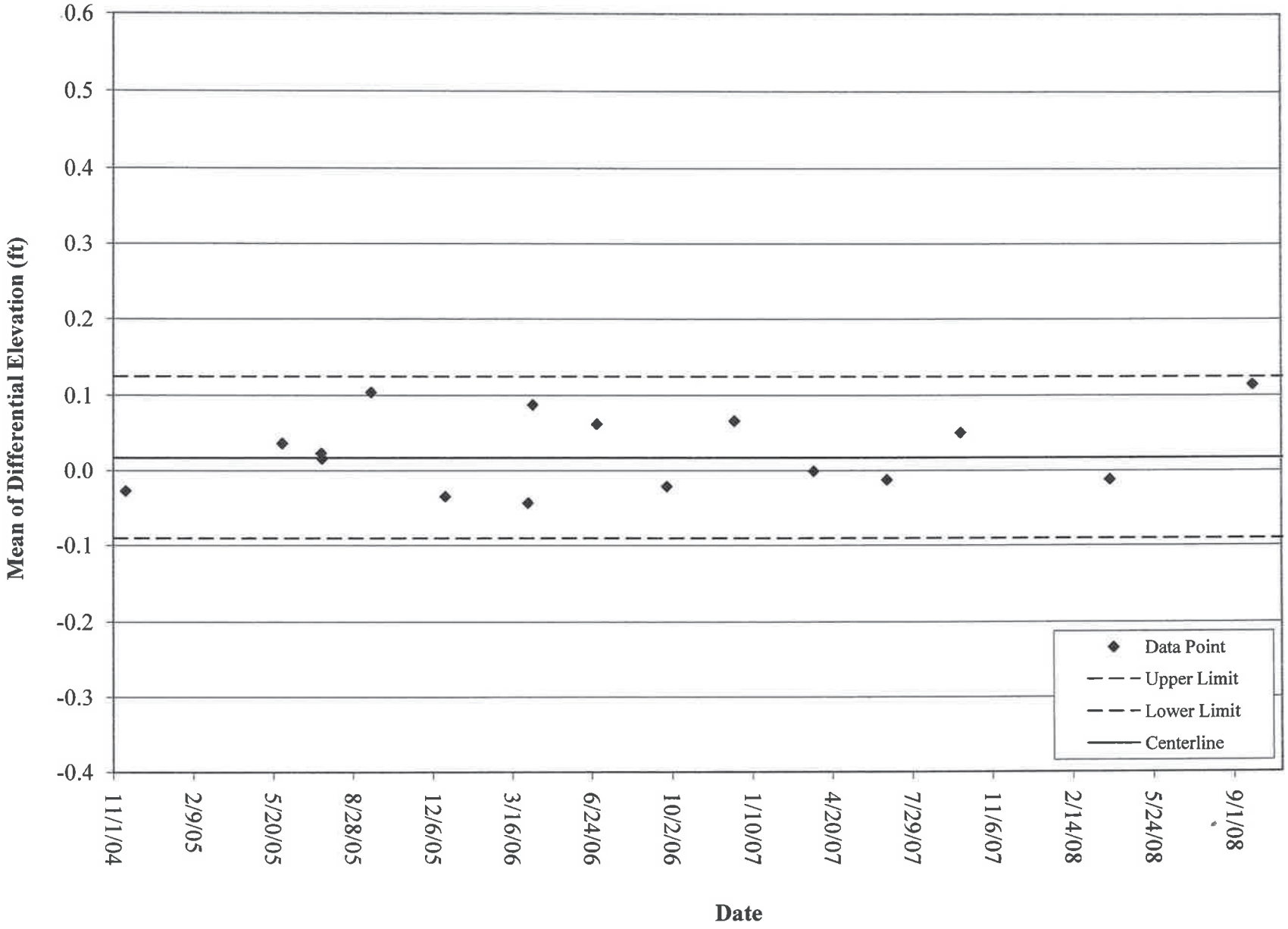


Figure 27
Southern East-West Profiler
Control Chart - Standard Deviation

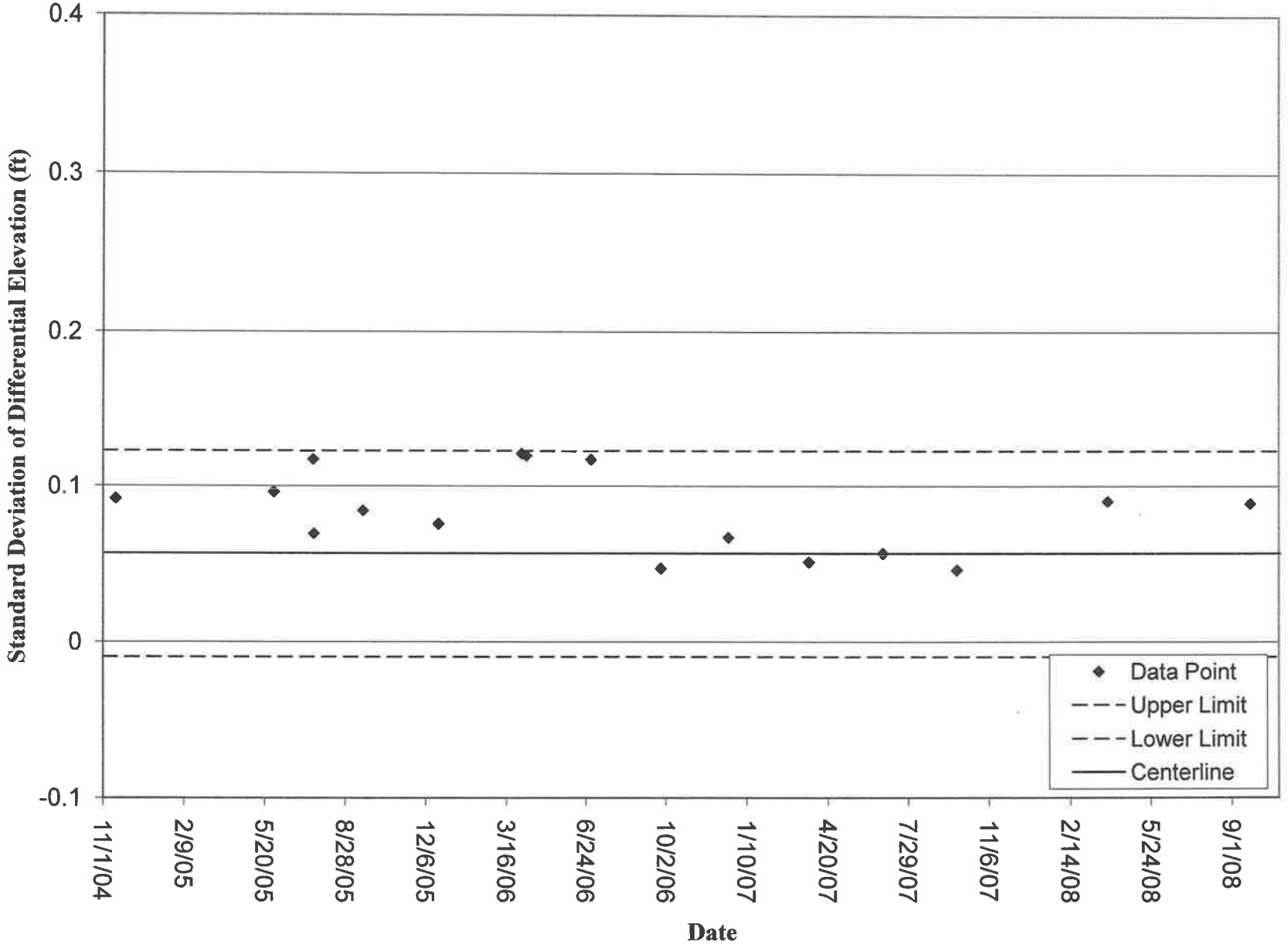


Figure 28
Phase 2 East-West Profiler
Control Chart - Mean

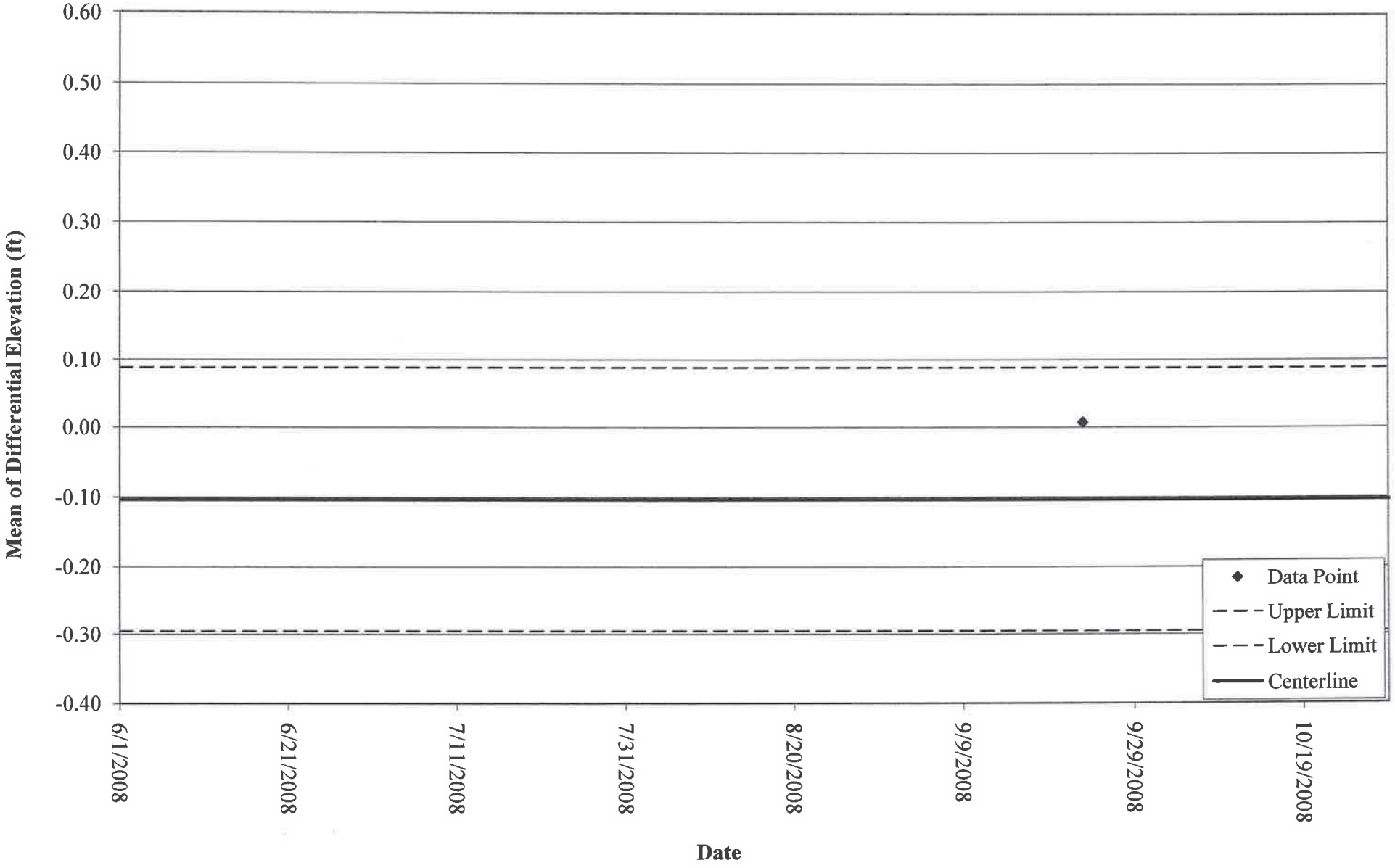


Figure 29
Phase 2 East-West Profiler
Control Chart - Standard Deviation

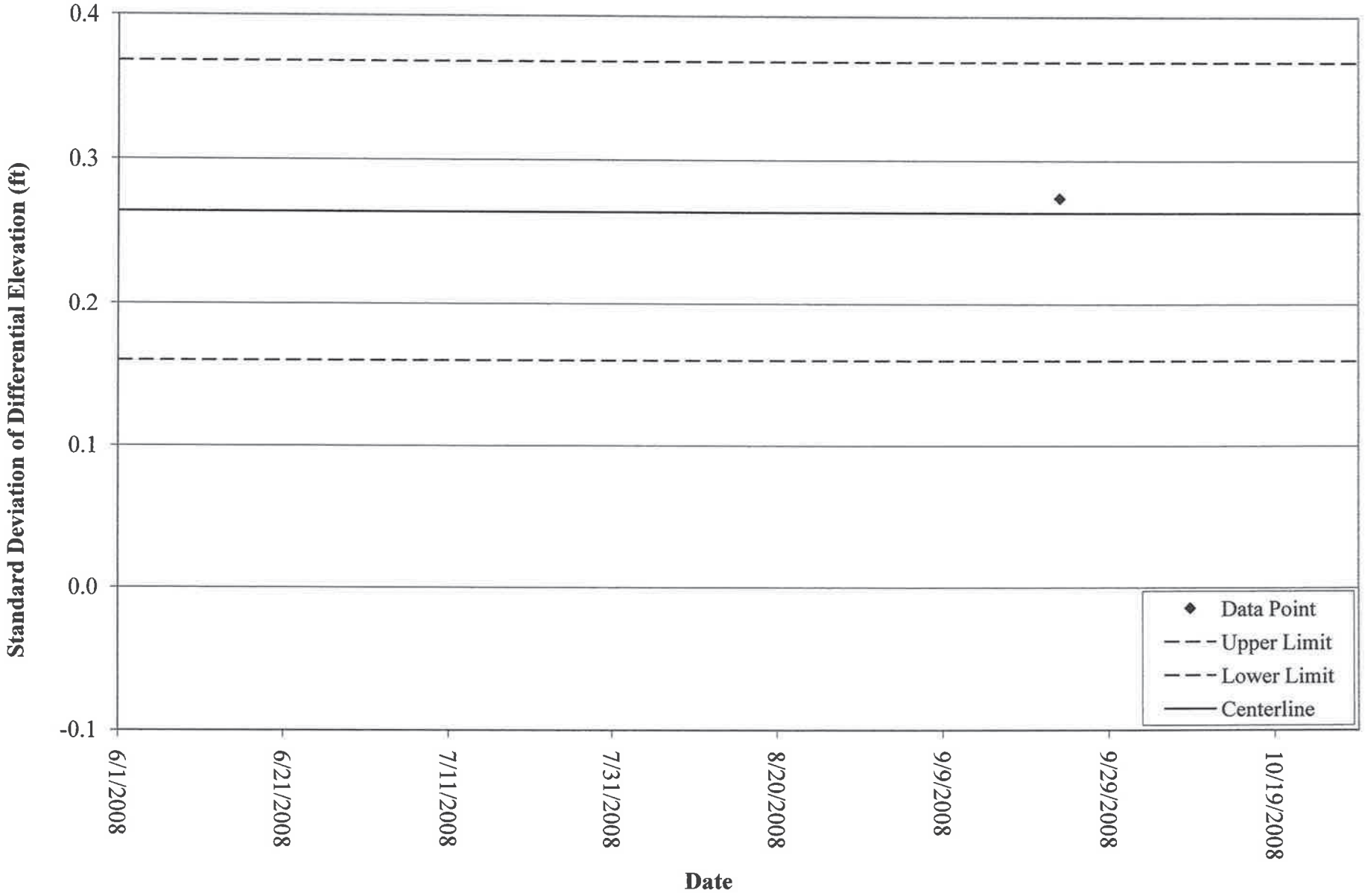


Figure 30
Phase 1 Settlement Gauge Measurements

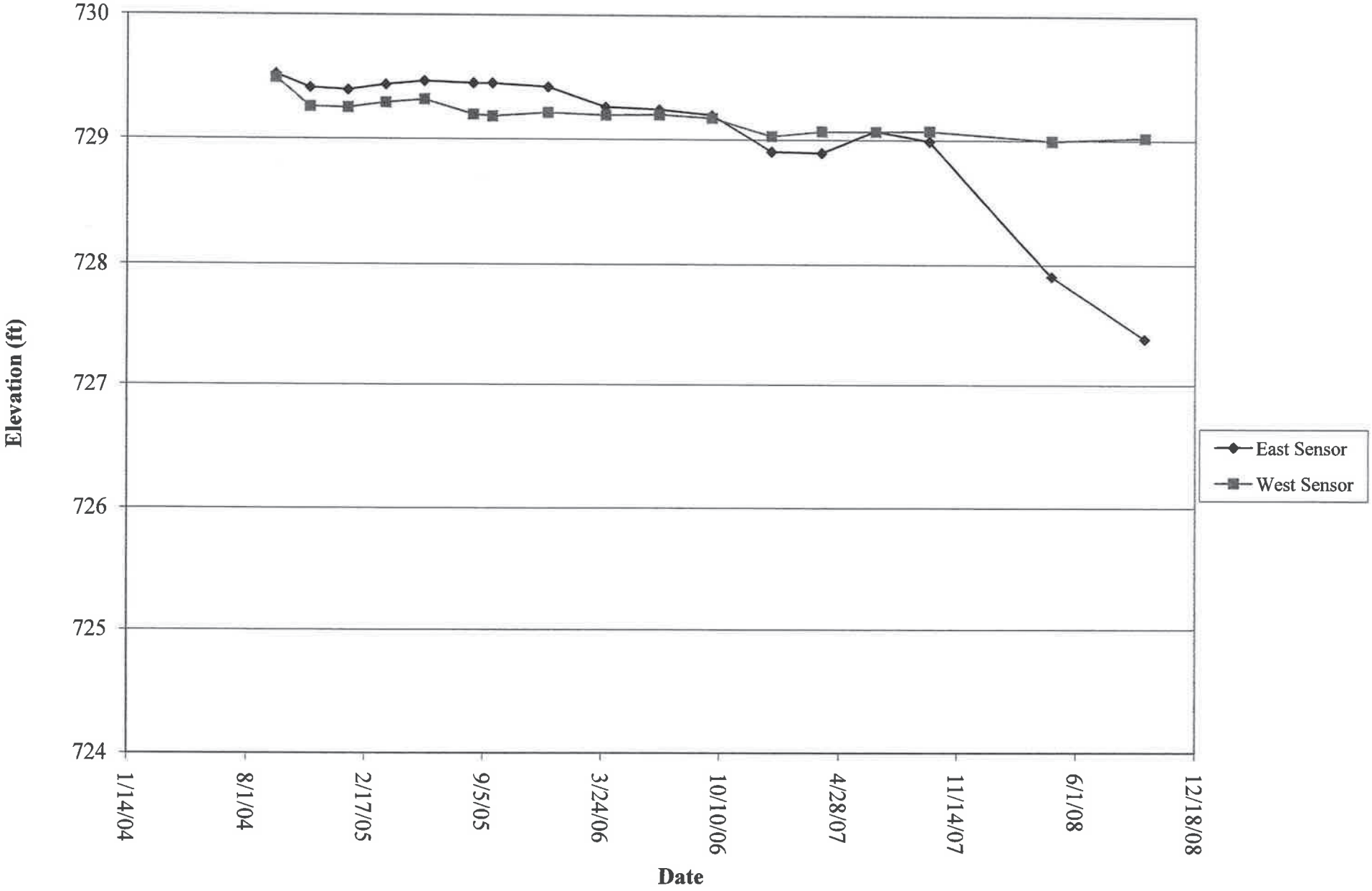
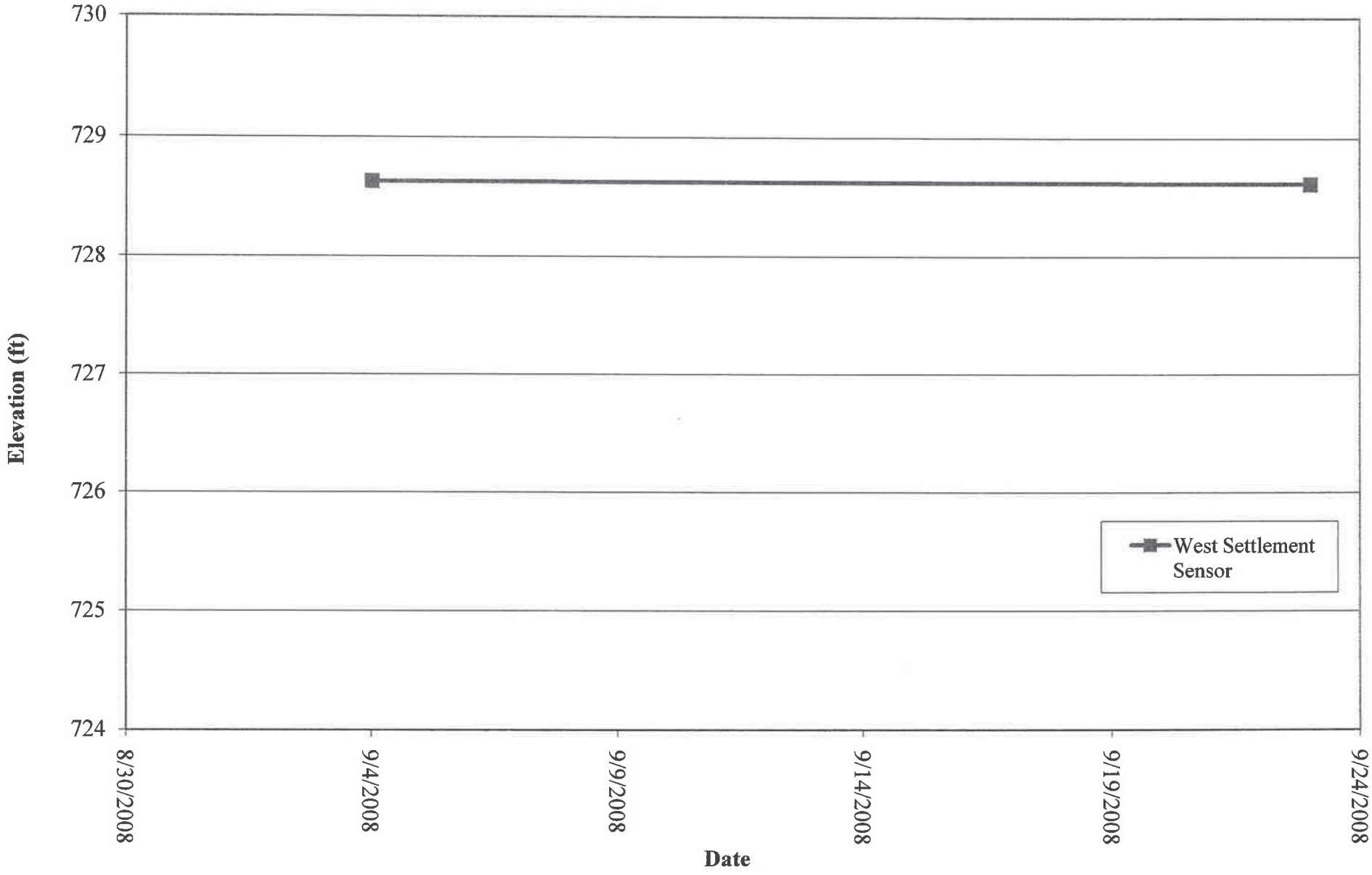


Figure 31
Phase 2 Settlement Gauge Measurements



Attachment A-2.3.2b

NTH Consultants, Ltd. (2008) *Settlement Monitoring Report: Master Cell VI-E – Phase I*.

Appendix B Part II

= 4812 psf

Stress at mid-height of MC V waste at future waste height

σ'_f = 4812 + (111 pcf * (748.5-740.8-3 ft) +(130 pcf * 3 ft) = 5725 psf

Settlement at Point 100 can be estimated as

ΔH_{i-f} = 0.17 * 43.42 Log (5725/4812) = 0.55 feet

7. Estimate of Post Settlement Slope

For Stations 100 and 120,

Estimated Settlement is 0.55 feet and 0.49 feet for Stations 100 and 120, respectively
Current Pipe Elevation for Station 100 is 719.18
Current Pipe Elevation for Station 120 is 719.42
Post-Settlement Elevation for Station 100 = 719.18 – 0.55 = 718.63
Post-Settlement Elevation for Station 120 = 719.42 – 0.49 = 718.92
Baseline floor slope from Stations 100 to 120 is approximately 1.93%
Distance between Stations 100 to 120 is approximately 20 feet
Post settlement slope for Stations 100 to 120 is
(718.63 – 718.92) / 20 * 100= 1.45%

There is no slope reversal between Station 100 and 120

8. Steps 6 and 7 are repeated using the upper and lower limits of the estimated values of $C_{c\varepsilon}$.

9. If there is a slope reversal, as shown between Station 200 and 220 on Table 10, the total reversed slope height is calculated.

Final projected pipe elevation for Station 200 = 720.61
Final projected pipe elevation for Station 220 = 720.62
Total reversed slope height = 720.62– 720.61= 0.01 feet

Estimation of Modified Compression Index
North-South Profiler
January 2005 Monitoring Event

Station	MC V T Liner Elev	2/1/05 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	2/1/05 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast Initial	Final	Estimated Modif. Compres Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
400	690	738.5	730.32	-2.91	729.55	0.77	30.3	7.2	2380	3177	0.20
420	690	738.5	729.76	-2.79	729.23	0.53	29.8	7.7	2363	3222	0.13
440	690	734.5	729.33	-2.13	728.75	0.59	29.3	4.2	2350	2813	0.26
460	683	737.0	728.77	-2.84	728.04	0.72	35.8	7.2	2543	3346	0.17
480	683	737.0	729.14	1.87	728.66	0.48	36.1	6.9	2554	3316	0.12
500	683	737.0	728.29	-4.27	727.53	0.76	35.3	7.7	2529	3385	0.17
520	683	736.0	727.10	-5.95	726.28	0.82	34.1	7.9	2493	3370	0.18
540	683	736.0	726.44	-3.29	725.68	0.76	33.4	8.6	2473	3423	0.16
560	683	735.5	726.08	-1.79	725.47	0.61	33.1	8.4	2462	3397	0.13
580	683	735.5	725.60	-2.40	724.75	0.85	32.6	8.9	2448	3436	0.18
600	683	736.0	724.90	-3.53	724.24	0.66	31.9	10.1	2427	3548	0.13

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - January 2005 Monitoring Event											
		2/1/05	Baseline		2/1/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
400	690	738.5	730.32	-2.91	729.63	0.69	30.3	7.2	2380	3177	0.18
420	690	738.5	729.76	-2.79	729.34	0.42	29.8	7.7	2363	3222	0.10
440	690	734.5	729.33	-2.13	728.86	0.48	29.3	4.2	2350	2813	0.21
460	683	737.0	728.77	-2.84	728.15	0.61	35.8	7.2	2543	3346	0.14
480	683	737.0	729.14	1.87	728.73	0.41	36.1	6.9	2554	3316	0.10
500	683	737.0	728.29	-4.27	727.66	0.63	35.3	7.7	2529	3385	0.14
520	683	736.0	727.10	-5.95	726.33	0.77	34.1	7.9	2493	3370	0.17
540	683	736.0	726.44	-3.29	725.80	0.64	33.4	8.6	2473	3423	0.14
560	683	735.5	726.08	-1.79	725.55	0.53	33.1	8.4	2462	3397	0.11
580	683	735.5	725.60	-2.40	724.87	0.73	32.6	8.9	2448	3436	0.15
600	683	736.0	724.90	-3.53	724.38	0.52	31.9	10.1	2427	3548	0.10

Estimation of Modified Compression Index

North-South Profiler

95% Confidence Lower Limit - January 2005 Monitoring Event

		2/1/05	Baseline		2/1/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initia	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
400	690	738.5	730.32	-2.91	729.47	0.85	30.3	7.2	2380	3177	0.22
420	690	738.5	729.76	-2.79	729.12	0.64	29.8	7.7	2363	3222	0.16
440	690	734.5	729.33	-2.13	728.64	0.70	29.3	4.2	2350	2813	0.30
460	683	737.0	728.77	-2.84	727.93	0.84	35.8	7.2	2543	3346	0.20
480	683	737.0	729.14	1.87	728.58	0.56	36.1	6.9	2554	3316	0.14
500	683	737.0	728.29	-4.27	727.40	0.88	35.3	7.7	2529	3385	0.20
520	683	736.0	727.10	-5.95	726.23	0.87	34.1	7.9	2493	3370	0.20
540	683	736.0	726.44	-3.29	725.57	0.87	33.4	8.6	2473	3423	0.18
560	683	735.5	726.08	-1.79	725.38	0.70	33.1	8.4	2462	3397	0.15
580	683	735.5	725.60	-2.40	724.63	0.97	32.6	8.9	2448	3436	0.20
600	683	736.0	724.90	-3.53	724.10	0.80	31.9	10.1	2427	3548	0.15

Estimation of Modified Compression Index											
North-South Profiler											
March 2005 Monitoring Event											
		4/1/05	Baseline		3/24/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	730.95	0.44	31.4	5.6	2412	3034	0.14
380	690	740.0	730.90	-2.49	730.26	0.64	30.9	8.1	2397	3296	0.15
400	690	740.5	730.32	-2.91	729.71	0.61	30.3	9.2	2380	3399	0.13
420	690	741.5	729.76	-2.79	729.32	0.43	29.8	10.7	2363	3555	0.08
440	690	742.0	729.33	-2.13	728.96	0.37	29.3	11.7	2350	3645	0.07
460	683	741.5	728.77	-2.84	728.13	0.64	35.8	11.7	2543	3846	0.10
480	683	741.5	729.14	1.87	728.40	0.74	36.1	11.4	2554	3815	0.12

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - March 2005 Monitoring Event											
		4/1/05	Baseline		3/24/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	731.06	0.33	31.4	5.6	2412	3034	0.11
380	690	740.0	730.90	-2.49	730.36	0.53	30.9	8.1	2397	3296	0.13
400	690	740.5	730.32	-2.91	729.79	0.53	30.3	9.2	2380	3399	0.11
420	690	741.5	729.76	-2.79	729.43	0.32	29.8	10.7	2363	3555	0.06
440	690	742.0	729.33	-2.13	729.07	0.26	29.3	11.7	2350	3645	0.05
460	683	741.5	728.77	-2.84	728.24	0.53	35.8	11.7	2543	3846	0.08
480	683	741.5	729.14	1.87	728.47	0.67	36.1	11.4	2554	3815	0.11

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - March 2005 Monitoring Event											
		4/1/05	Baseline		3/24/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	730.84	0.56	31.4	5.6	2412	3034	0.18
380	690	740.0	730.90	-2.49	730.15	0.75	30.9	8.1	2397	3296	0.17
400	690	740.5	730.32	-2.91	729.63	0.69	30.3	9.2	2380	3399	0.15
420	690	741.5	729.76	-2.79	729.21	0.54	29.8	10.7	2363	3555	0.10
440	690	742.0	729.33	-2.13	728.85	0.48	29.3	11.7	2350	3645	0.09
460	683	741.5	728.77	-2.84	728.01	0.75	35.8	11.7	2543	3846	0.12
480	683	741.5	729.14	1.87	728.32	0.82	36.1	11.4	2554	3815	0.13

Estimation of Modified Compression Index											
North-South Profiler											
May 2005 Monitoring Event											
		5/1/05	Baseline		5/27/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	730.86	0.54	31.4	5.6	2412	3034	0.17
380	690	740.0	730.90	-2.49	730.31	0.59	30.9	8.1	2397	3296	0.14
400	690	740.5	730.32	-2.91	729.40	0.92	30.3	9.2	2380	3399	0.19
420	690	741.5	729.76	-2.79	728.92	0.84	29.8	10.7	2363	3555	0.16
440	690	742.0	729.33	-2.13	728.26	1.07	29.3	11.7	2350	3645	0.19
460	683	741.5	728.77	-2.84	727.97	0.79	35.8	11.7	2543	3846	0.12
480	683	742.0	729.14	1.87	728.17	0.97	36.1	11.9	2554	3871	0.15
500	683	741.0	728.29	-4.27	726.94	1.35	35.3	11.7	2529	3829	0.21
520	683	740.0	727.10	-5.95	725.99	1.11	34.1	11.9	2493	3814	0.18
540	683	740.0	726.44	-3.29	725.06	1.38	33.4	12.6	2473	3867	0.21
560	683	739.0	726.08	-1.79	724.57	1.52	33.1	11.9	2462	3785	0.25
580	683	738.0	725.60	-2.40	724.25	1.36	32.6	11.4	2448	3713	0.23
600	683	736.0	724.90	-3.53	723.55	1.34	31.9	10.1	2427	3548	0.26

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - May 2005 Monitoring Event											
		5/1/05	Baseline		5/27/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	730.97	0.42	31.4	5.6	2412	3034	0.14
380	690	740.0	730.90	-2.49	730.42	0.48	30.9	8.1	2397	3296	0.11
400	690	740.5	730.32	-2.91	729.48	0.83	30.3	9.2	2380	3399	0.18
420	690	741.5	729.76	-2.79	729.03	0.73	29.8	10.7	2363	3555	0.14
440	690	742.0	729.33	-2.13	728.37	0.96	29.3	11.7	2350	3645	0.17
460	683	741.5	728.77	-2.84	728.09	0.68	35.8	11.7	2543	3846	0.11
480	683	742.0	729.14	1.87	728.25	0.89	36.1	11.9	2554	3871	0.14
500	683	741.0	728.29	-4.27	727.07	1.22	35.3	11.7	2529	3829	0.19
520	683	740.0	727.10	-5.95	726.04	1.06	34.1	11.9	2493	3814	0.17
540	683	740.0	726.44	-3.29	725.18	1.26	33.4	12.6	2473	3867	0.19
560	683	739.0	726.08	-1.79	724.65	1.43	33.1	11.9	2462	3785	0.23
580	683	738.0	725.60	-2.40	724.36	1.24	32.6	11.4	2448	3713	0.21
600	683	736.0	724.90	-3.53	723.69	1.20	31.9	10.1	2427	3548	0.23

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - May 2005 Monitoring Event											
		5/1/05	Baseline		5/27/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	730.75	0.65	31.4	5.6	2412	3034	0.21
380	690	740.0	730.90	-2.49	730.21	0.69	30.9	8.1	2397	3296	0.16
400	690	740.5	730.32	-2.91	729.32	1.00	30.3	9.2	2380	3399	0.21
420	690	741.5	729.76	-2.79	728.81	0.95	29.8	10.7	2363	3555	0.18
440	690	742.0	729.33	-2.13	728.15	1.18	29.3	11.7	2350	3645	0.21
460	683	741.5	728.77	-2.84	727.86	0.91	35.8	11.7	2543	3846	0.14
480	683	742.0	729.14	1.87	728.10	1.04	36.1	11.9	2554	3871	0.16
500	683	741.0	728.29	-4.27	726.81	1.47	35.3	11.7	2529	3829	0.23
520	683	740.0	727.10	-5.95	725.94	1.16	34.1	11.9	2493	3814	0.18
540	683	740.0	726.44	-3.29	724.95	1.49	33.4	12.6	2473	3867	0.23
560	683	739.0	726.08	-1.79	724.48	1.60	33.1	11.9	2462	3785	0.26
580	683	738.0	725.60	-2.40	724.13	1.47	32.6	11.4	2448	3713	0.25
600	683	736.0	724.90	-3.53	723.41	1.48	31.9	10.1	2427	3548	0.28

Estimation of Modified Compression Index											
North-South Profiler											
July 2005 Monitoring Event											
		7/28/05	Baseline		7/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	731.03	0.37	31.4	5.6	2412	3034	0.12
380	690	740.0	730.90	-2.49	730.56	0.33	30.9	8.1	2397	3296	0.08
400	690	740.5	730.32	-2.91	729.84	0.47	30.3	9.2	2380	3399	0.10
420	690	741.5	729.76	-2.79	729.36	0.40	29.8	10.7	2363	3555	0.08
440	690	742.0	729.33	-2.13	728.67	0.66	29.3	11.7	2350	3645	0.12
460	683	741.5	728.77	-2.84	727.92	0.84	35.8	11.7	2543	3846	0.13
480	683	742.0	729.14	1.87	728.65	0.49	36.1	11.9	2554	3871	0.07
500	683	741.0	728.29	-4.27	727.41	0.88	35.3	11.7	2529	3829	0.14
520	683	740.5	727.10	-5.95	726.28	0.81	34.1	12.4	2493	3870	0.13
540	683	740.0	726.44	-3.29	725.18	1.26	33.4	12.6	2473	3867	0.19
560	683	739.0	726.08	-1.79	724.91	1.17	33.1	11.9	2462	3785	0.19
580	683	738.0	725.60	-2.40	724.32	1.29	32.6	11.4	2448	3713	0.22
600	683	736.0	724.90	-3.53	723.68	1.22	31.9	10.1	2427	3548	0.23

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - July 2005 Monitoring Event											
		7/28/05	Baseline		7/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	731.14	0.25	31.4	5.6	2412	3034	0.08
380	690	740.0	730.90	-2.49	730.67	0.23	30.9	8.1	2397	3296	0.05
400	690	740.5	730.32	-2.91	729.93	0.39	30.3	9.2	2380	3399	0.08
420	690	741.5	729.76	-2.79	729.47	0.29	29.8	10.7	2363	3555	0.05
440	690	742.0	729.33	-2.13	728.78	0.55	29.3	11.7	2350	3645	0.10
460	683	741.5	728.77	-2.84	728.03	0.73	35.8	11.7	2543	3846	0.11
480	683	742.0	729.14	1.87	728.73	0.41	36.1	11.9	2554	3871	0.06
500	683	741.0	728.29	-4.27	727.53	0.75	35.3	11.7	2529	3829	0.12
520	683	740.5	727.10	-5.95	726.33	0.76	34.1	12.4	2493	3870	0.12
540	683	740.0	726.44	-3.29	725.29	1.15	33.4	12.6	2473	3867	0.18
560	683	739.0	726.08	-1.79	725.00	1.08	33.1	11.9	2462	3785	0.18
580	683	738.0	725.60	-2.40	724.43	1.17	32.6	11.4	2448	3713	0.20
600	683	736.0	724.90	-3.53	723.82	1.08	31.9	10.1	2427	3548	0.20

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - July 2005 Monitoring Event											
		7/28/05	Baseline		7/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
340											
360	690	738.0	731.39	-1.07	730.91	0.48	31.4	5.6	2412	3034	0.15
380	690	740.0	730.90	-2.49	730.46	0.44	30.9	8.1	2397	3296	0.10
400	690	740.5	730.32	-2.91	729.76	0.55	30.3	9.2	2380	3399	0.12
420	690	741.5	729.76	-2.79	729.25	0.51	29.8	10.7	2363	3555	0.10
440	690	742.0	729.33	-2.13	728.56	0.77	29.3	11.7	2350	3645	0.14
460	683	741.5	728.77	-2.84	727.81	0.96	35.8	11.7	2543	3846	0.15
480	683	742.0	729.14	1.87	728.58	0.56	36.1	11.9	2554	3871	0.09
500	683	741.0	728.29	-4.27	727.28	1.01	35.3	11.7	2529	3829	0.16
520	683	740.5	727.10	-5.95	726.23	0.87	34.1	12.4	2493	3870	0.13
540	683	740.0	726.44	-3.29	725.07	1.37	33.4	12.6	2473	3867	0.21
560	683	739.0	726.08	-1.79	724.83	1.25	33.1	11.9	2462	3785	0.20
580	683	738.0	725.60	-2.40	724.20	1.40	32.6	11.4	2448	3713	0.24
600	683	736.0	724.90	-3.53	723.54	1.36	31.9	10.1	2427	3548	0.26

Estimation of Modified Compression Index											
North-South Profiler											
September 2005 Monitoring Event											
		8/30/05	Baseline		9/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	731.08	0.32	31.4	5.6	2412	3034	0.10
380	690	740.0	730.90	-2.49	730.55	0.35	30.9	8.1	2397	3296	0.08
400	690	741.0	730.32	-2.91	729.89	0.43	30.3	9.7	2380	3454	0.09
420	690	741.5	729.76	-2.79	729.44	0.32	29.8	10.7	2363	3555	0.06
440	690	741.5	729.33	-2.13	728.68	0.65	29.3	11.2	2350	3590	0.12
460	683	741.5	728.77	-2.84	728.10	0.67	35.8	11.7	2543	3846	0.10
480	683	742.0	729.14	1.87	728.38	0.76	36.1	11.9	2554	3871	0.12
500	683	741.0	728.29	-4.27	727.10	1.18	35.3	11.7	2529	3829	0.19
520	683	740.5	727.10	-5.95	726.09	1.01	34.1	12.4	2493	3870	0.15
540	683	740.0	726.44	-3.29	725.41	1.03	33.4	12.6	2473	3867	0.16
560	683	739.0	726.08	-1.79	724.97	1.12	33.1	11.9	2462	3785	0.18
580	683	738.0	725.60	-2.40	724.46	1.14	32.6	11.4	2448	3713	0.19
600	683	736.0	724.90	-3.53	723.84	1.06	31.9	10.1	2427	3548	0.20

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - September 2005 Monitoring Event											
		8/30/05	Baseline		9/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	731.19	0.21	31.4	5.6	2412	3034	0.07
380	690	740.0	730.90	-2.49	730.66	0.24	30.9	8.1	2397	3296	0.06
400	690	740.5	730.32	-2.91	729.97	0.34	30.3	9.2	2380	3399	0.07
420	690	741.5	729.76	-2.79	729.55	0.21	29.8	10.7	2363	3555	0.04
440	690	742.0	729.33	-2.13	728.79	0.54	29.3	11.7	2350	3645	0.10
460	683	741.5	728.77	-2.84	728.21	0.55	35.8	11.7	2543	3846	0.09
480	683	742.0	729.14	1.87	728.46	0.68	36.1	11.9	2554	3871	0.10
500	683	741.0	728.29	-4.27	727.23	1.06	35.3	11.7	2529	3829	0.17
520	683	740.5	727.10	-5.95	726.14	0.96	34.1	12.4	2493	3870	0.15
540	683	740.0	726.44	-3.29	725.53	0.91	33.4	12.6	2473	3867	0.14
560	683	739.0	726.08	-1.79	725.05	1.03	33.1	11.9	2462	3785	0.17
580	683	738.0	725.60	-2.40	724.57	1.03	32.6	11.4	2448	3713	0.17
600	683	736.0	724.90	-3.53	723.98	0.92	31.9	10.1	2427	3548	0.18

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - September 2005 Monitoring Event											
		8/30/05	Baseline		9/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
360	690	738.0	731.39	-1.07	730.96	0.43	31.4	5.6	2412	3034	0.14
380	690	740.0	730.90	-2.49	730.45	0.45	30.9	8.1	2397	3296	0.11
400	690	740.5	730.32	-2.91	729.81	0.51	30.3	9.2	2380	3399	0.11
420	690	741.5	729.76	-2.79	729.33	0.43	29.8	10.7	2363	3555	0.08
440	690	742.0	729.33	-2.13	728.57	0.76	29.3	11.7	2350	3645	0.14
460	683	741.5	728.77	-2.84	727.98	0.78	35.8	11.7	2543	3846	0.12
480	683	742.0	729.14	1.87	728.30	0.84	36.1	11.9	2554	3871	0.13
500	683	741.0	728.29	-4.27	726.98	1.31	35.3	11.7	2529	3829	0.21
520	683	740.5	727.10	-5.95	726.04	1.06	34.1	12.4	2493	3870	0.16
540	683	740.0	726.44	-3.29	725.30	1.14	33.4	12.6	2473	3867	0.18
560	683	739.0	726.08	-1.79	724.88	1.20	33.1	11.9	2462	3785	0.19
580	683	738.0	725.60	-2.40	724.34	1.26	32.6	11.4	2448	3713	0.21
600	683	736.0	724.90	-3.53	723.70	1.20	31.9	10.1	2427	3548	0.23

Estimation of Modified Compression Index											
North-South Profiler											
December 2005 Monitoring Event											
		1/3/06	Baseline		12/21/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	749.4	736.85	-2.30	736.35	0.50	36.8	11.6	2575	3862	0.08
140	690	752.4	736.51	-1.70	736.09	0.41	36.5	14.9	2565	4217	0.05
160	690	753.4	735.89	-3.11	735.36	0.53	35.9	16.5	2547	4378	0.06
180	691	754.0	736.49	3.02	736.27	0.22	36.0	16.5	2550	4382	0.03
200	691	754.0	735.13	-6.81	734.40	0.73	34.1	17.9	2494	4477	0.08
220	692	753.8	734.53	-3.02	734.07	0.46	33.0	18.2	2461	4485	0.05
240	692	753.3	734.23	-1.46	733.66	0.57	32.2	18.1	2437	4445	0.07
260	692	752.9	733.59	-3.22	733.41	0.18	31.6	18.3	2418	4448	0.02
280	692	751.4	733.08	-2.55	733.13	-0.05	31.1	17.3	2402	4328	-0.01
300	693	746.2	732.83	-1.25	732.51	0.32	30.3	12.3	2380	3748	0.05
320	693	743.0	732.48	-1.75	732.46	0.02	29.5	9.6	2354	3416	0.00
340	692	741.7	731.61	-4.36	731.10	0.51	29.6	9.1	2358	3372	0.11
360	691	742.2	731.39	-1.07	730.87	0.53	30.4	9.8	2382	3469	0.11
380	691	742.5	730.90	-2.49	730.22	0.68	30.4	10.6	2382	3559	0.13
400	690	742.8	730.32	-2.91	729.76	0.55	30.3	11.5	2380	3651	0.10
420	690	742.4	729.76	-2.79	729.21	0.55	29.8	11.7	2363	3659	0.10
440	690	742.3	729.33	-2.13	728.76	0.57	29.3	11.9	2350	3676	0.10
460	683	742.2	728.77	-2.84	727.83	0.94	35.8	12.4	2543	3924	0.14
480	683	742.1	729.14	1.87	728.51	0.63	36.1	12.0	2554	3883	0.10
500	683	741.7	728.29	-4.27	727.14	1.15	35.3	12.4	2529	3909	0.17
520	683	740.7	727.10	-5.95	725.96	1.14	34.1	12.6	2493	3886	0.17
540	683	740.1	726.44	-3.29	725.44	1.00	33.4	12.6	2473	3873	0.15
560	683	738.6	726.08	-1.79	725.34	0.74	33.1	11.5	2462	3743	0.12
580	683	736.8	725.60	-2.40	725.03	0.57	32.6	10.2	2448	3581	0.11
600	683	735.7	724.90	-3.53	724.59	0.30	31.9	9.8	2427	3509	0.06

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - December 2005 Monitoring Event											
		1/3/06	Baseline		12/21/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	749.4	736.85	-2.30	736.48	0.37	36.8	11.6	2575	3862	0.06
140	690	752.4	736.51	-1.70	736.22	0.29	36.5	14.9	2565	4217	0.04
160	690	753.4	735.89	-3.11	735.47	0.41	35.9	16.5	2547	4378	0.05
180	691	754.0	736.49	3.02	736.39	0.10	36.0	16.5	2550	4382	0.01
200	691	754.0	735.13	-6.81	734.50	0.63	34.1	17.9	2494	4477	0.07
220	692	753.8	734.53	-3.02	734.19	0.34	33.0	18.2	2461	4485	0.04
240	692	753.3	734.23	-1.46	733.74	0.49	32.2	18.1	2437	4445	0.06
260	692	752.9	733.59	-3.22	733.53	0.06	31.6	18.3	2418	4448	0.01
280	692	751.4	733.08	-2.55	733.23	-0.15	31.1	17.3	2402	4328	-0.02
300	693	746.2	732.83	-1.25	732.61	0.22	30.3	12.3	2380	3748	0.04
320	693	743.0	732.48	-1.75	732.59	-0.11	29.5	9.6	2354	3416	-0.02
340	692	741.7	731.61	-4.36	731.21	0.40	29.6	9.1	2358	3372	0.09
360	691	742.2	731.39	-1.07	730.98	0.42	30.4	9.8	2382	3469	0.08
380	691	742.5	730.90	-2.49	730.32	0.57	30.4	10.6	2382	3559	0.11
400	690	742.8	730.32	-2.91	729.85	0.47	30.3	11.5	2380	3651	0.08
420	690	742.4	729.76	-2.79	729.32	0.44	29.8	11.7	2363	3659	0.08
440	690	742.3	729.33	-2.13	728.87	0.46	29.3	11.9	2350	3676	0.08
460	683	742.2	728.77	-2.84	727.94	0.82	35.8	12.4	2543	3924	0.12
480	683	742.1	729.14	1.87	728.59	0.55	36.1	12.0	2554	3883	0.08
500	683	741.7	728.29	-4.27	727.27	1.02	35.3	12.4	2529	3909	0.15
520	683	740.7	727.10	-5.95	726.01	1.09	34.1	12.6	2493	3886	0.17
540	683	740.1	726.44	-3.29	725.56	0.88	33.4	12.6	2473	3873	0.14
560	683	738.6	726.08	-1.79	725.42	0.66	33.1	11.5	2462	3743	0.11
580	683	736.8	725.60	-2.40	725.15	0.45	32.6	10.2	2443	3581	0.08
600	683	735.7	724.90	-3.53	724.73	0.16	31.9	9.8	2427	3509	0.03

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - December 2005 Monitoring Event											
		1/3/06	Baseline		12/21/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	749.4	736.85	-2.30	736.22	0.63	36.8	11.6	2575	3862	0.10
140	690	752.4	736.51	-1.70	735.97	0.54	36.5	14.9	2565	4217	0.07
160	690	753.4	735.89	-3.11	735.25	0.64	35.9	16.5	2547	4378	0.08
180	691	754.0	736.49	3.02	736.16	0.33	36.0	16.5	2550	4382	0.04
200	691	754.0	735.13	-6.81	734.31	0.83	34.1	17.9	2494	4477	0.10
220	692	753.8	734.53	-3.02	733.94	0.58	33.0	18.2	2461	4485	0.07
240	692	753.3	734.23	-1.46	733.58	0.65	32.2	18.1	2437	4445	0.08
260	692	752.9	733.59	-3.22	733.29	0.30	31.6	18.3	2418	4448	0.04
280	692	751.4	733.08	-2.55	733.02	0.06	31.1	17.3	2402	4328	0.01
300	693	746.2	732.83	-1.25	732.41	0.42	30.3	12.3	2380	3748	0.07
320	693	743.0	732.48	-1.75	732.33	0.15	29.5	9.6	2354	3416	0.03
340	692	741.7	731.61	-4.36	730.99	0.62	29.6	9.1	2358	3372	0.13
360	691	742.2	731.39	-1.07	730.75	0.64	30.4	9.8	2382	3469	0.13
380	691	742.5	730.90	-2.49	730.11	0.78	30.4	10.6	2382	3559	0.15
400	690	742.8	730.32	-2.91	729.68	0.63	30.3	11.5	2380	3651	0.11
420	690	742.4	729.76	-2.79	729.10	0.66	29.8	11.7	2363	3659	0.12
440	690	742.3	729.33	-2.13	728.65	0.68	29.3	11.9	2350	3676	0.12
460	683	742.2	728.77	-2.84	727.71	1.05	35.8	12.4	2543	3924	0.16
480	683	742.1	729.14	1.87	728.44	0.70	36.1	12.0	2554	3883	0.11
500	683	741.7	728.29	-4.27	727.01	1.27	35.3	12.4	2529	3909	0.19
520	683	740.7	727.10	-5.95	725.91	1.19	34.1	12.6	2493	3886	0.18
540	683	740.1	726.44	-3.29	725.33	1.11	33.4	12.6	2473	3873	0.17
560	683	738.6	726.08	-1.79	725.25	0.83	33.1	11.5	2462	3743	0.14
580	683	736.8	725.60	-2.40	724.92	0.69	32.6	10.2	2448	3581	0.13
600	683	735.7	724.90	-3.53	724.45	0.44	31.9	9.8	2427	3509	0.09

Estimation of Modified Compression Index											
North-South Profiler											
March 2006 Monitoring Event											
		3/30/06	Baseline		4/4/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	749.2	736.85	-2.30	735.61	1.24	36.8	11.3	2575	3831	0.20
140	690	753.5	736.51	-1.70	735.09	1.42	36.5	16.0	2565	4339	0.17
160	690	761.5	735.89	-3.11	734.66	1.23	35.9	24.6	2547	5273	0.11
180	691	766.7	736.49	3.02	734.84	1.65	36.0	29.2	2550	5793	0.13
200	691	767.9	735.13	-6.81	733.72	1.41	34.1	31.8	2494	6021	0.11
220	692	763.0	734.53	-3.02	733.31	1.21	33.0	27.4	2461	5507	0.11
240	692	756.2	734.23	-1.46	732.89	1.34	32.2	20.9	2437	4759	0.14
260	692	755.4	733.59	-3.22	732.73	0.86	31.6	20.8	2418	4730	0.09
280	692	751.4	733.08	-2.55	732.14	0.95	31.1	17.3	2402	4321	0.12
300	693	746.1	732.83	-1.25	731.93	0.90	30.3	12.3	2380	3743	0.15
320	693	743.0	732.48	-1.75	731.77	0.71	29.5	9.6	2354	3416	0.15
340	692	741.7	731.61	-4.36	730.38	1.23	29.6	9.1	2358	3372	0.27
360	691	742.2	731.39	-1.07	730.23	1.16	30.4	9.8	2382	3471	0.23
380	691	742.4	730.90	-2.49	729.54	1.36	30.4	10.5	2382	3551	0.26
400	690	745.3	730.32	-2.91	729.00	1.32	30.3	14.0	2380	3931	0.20
420	690	745.7	729.76	-2.79	728.59	1.17	29.8	15.0	2363	4024	0.17
440	690	745.3	729.33	-2.13	727.82	1.51	29.3	15.0	2350	4010	0.22
460	683	744.6	728.77	-2.84	727.35	1.41	35.8	14.8	2543	4184	0.18
480	683	743.7	729.14	1.87	728.11	1.03	36.1	13.6	2554	4060	0.14
500	683	742.3	728.29	-4.27	726.46	1.82	35.3	13.0	2529	3970	0.26
520	683	741.2	727.10	-5.95	725.34	1.75	34.1	13.1	2493	3942	0.26
540	683	740.1	726.44	-3.29	724.77	1.67	33.4	12.6	2473	3873	0.26
560	683	738.6	726.08	-1.79	724.32	1.76	33.1	11.5	2462	3743	0.29
580	683	736.8	725.60	-2.40	724.30	1.30	32.6	10.2	2448	3581	0.24
600	683	735.7	724.90	-3.53	723.24	1.66	31.9	9.8	2427	3509	0.32

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - March 2006 Monitoring Event											
		3/30/06	Baseline		4/4/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	749.2	736.85	-2.30	735.74	1.11	36.8	11.3	2575	3831	0.17
140	690	753.5	736.51	-1.70	735.22	1.29	36.5	16.0	2565	4339	0.15
160	690	761.5	735.89	-3.11	734.77	1.12	35.9	24.6	2547	5273	0.10
180	691	766.7	736.49	3.02	734.96	1.53	36.0	29.2	2550	5793	0.12
200	691	767.9	735.13	-6.81	733.82	1.31	34.1	31.8	2494	6021	0.10
220	692	763.0	734.53	-3.02	733.44	1.09	33.0	27.4	2461	5507	0.09
240	692	756.2	734.23	-1.46	732.97	1.26	32.2	20.9	2437	4759	0.13
260	692	755.4	733.59	-3.22	732.85	0.74	31.6	20.8	2418	4730	0.08
280	692	751.4	733.08	-2.55	732.24	0.84	31.1	17.3	2402	4321	0.11
300	693	746.1	732.83	-1.25	732.03	0.81	30.3	12.3	2380	3743	0.14
320	693	743.0	732.48	-1.75	731.90	0.58	29.5	9.6	2354	3416	0.12
340	692	741.7	731.61	-4.36	730.49	1.12	29.6	9.1	2358	3372	0.24
360	691	742.2	731.39	-1.07	730.35	1.05	30.4	9.8	2382	3471	0.21
380	691	742.4	730.90	-2.49	729.65	1.25	30.4	10.5	2382	3551	0.24
400	690	745.3	730.32	-2.91	729.08	1.23	30.3	14.0	2380	3931	0.19
420	690	745.7	729.76	-2.79	728.70	1.06	29.8	15.0	2363	4024	0.15
440	690	745.3	729.33	-2.13	727.93	1.40	29.3	15.0	2350	4010	0.21
460	683	744.6	728.77	-2.84	727.47	1.30	35.8	14.8	2543	4184	0.17
480	683	743.7	729.14	1.87	728.18	0.96	36.1	13.6	2554	4060	0.13
500	683	742.3	728.29	-4.27	726.59	1.70	35.3	13.0	2529	3970	0.25
520	683	741.2	727.10	-5.95	725.40	1.70	34.1	13.1	2493	3942	0.25
540	683	740.1	726.44	-3.29	724.89	1.55	33.4	12.6	2473	3873	0.24
560	683	738.6	726.08	-1.79	724.40	1.68	33.1	11.5	2462	3743	0.28
580	683	736.8	725.60	-2.40	724.42	1.19	32.6	10.2	2448	3581	0.22
600	683	735.7	724.90	-3.53	723.38	1.52	31.9	9.8	2427	3509	0.30

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - March 2006 Monitoring Event											
		3/30/06	Baseline		4/4/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	749.2	736.85	-2.30	735.48	1.37	36.8	11.3	2575	3831	0.22
140	690	753.5	736.51	-1.70	734.96	1.55	36.5	16.0	2565	4339	0.19
160	690	761.5	735.89	-3.11	734.54	1.34	35.9	24.6	2547	5273	0.12
180	691	766.7	736.49	3.02	734.73	1.76	36.0	29.2	2550	5793	0.14
200	691	767.9	735.13	-6.81	733.62	1.51	34.1	31.8	2494	6021	0.12
220	692	763.0	734.53	-3.02	733.19	1.34	33.0	27.4	2461	5507	0.12
240	692	756.2	734.23	-1.46	732.81	1.42	32.2	20.9	2437	4759	0.15
260	692	755.4	733.59	-3.22	732.61	0.98	31.6	20.8	2418	4730	0.11
280	692	751.4	733.08	-2.55	732.03	1.05	31.1	17.3	2402	4321	0.13
300	693	746.1	732.83	-1.25	731.83	1.00	30.3	12.3	2380	3743	0.17
320	693	743.0	732.48	-1.75	731.64	0.84	29.5	9.6	2354	3416	0.18
340	692	741.7	731.61	-4.36	730.26	1.35	29.6	9.1	2358	3372	0.29
360	691	742.2	731.39	-1.07	730.12	1.27	30.4	9.8	2382	3471	0.26
380	691	742.4	730.90	-2.49	729.44	1.46	30.4	10.5	2382	3551	0.28
400	690	745.3	730.32	-2.91	728.92	1.40	30.3	14.0	2380	3931	0.21
420	690	745.7	729.76	-2.79	728.48	1.28	29.8	15.0	2363	4024	0.19
440	690	745.3	729.33	-2.13	727.71	1.62	29.3	15.0	2350	4010	0.24
460	683	744.6	728.77	-2.84	727.24	1.52	35.8	14.8	2543	4184	0.20
480	683	743.7	729.14	1.87	728.03	1.11	36.1	13.6	2554	4060	0.15
500	683	742.3	728.29	-4.27	726.34	1.95	35.3	13.0	2529	3970	0.28
520	683	741.2	727.10	-5.95	725.29	1.80	34.1	13.1	2493	3942	0.27
540	683	740.1	726.44	-3.29	724.66	1.78	33.4	12.6	2473	3873	0.27
560	683	738.6	726.08	-1.79	724.23	1.85	33.1	11.5	2462	3743	0.31
580	683	736.8	725.60	-2.40	724.18	1.42	32.6	10.2	2448	3581	0.26
600	683	735.7	724.90	-3.53	723.10	1.80	31.9	9.8	2427	3509	0.35

Estimation of Modified Compression Index											
North-South Profiler											
June 2006 Monitoring Event											
		3/29/06	Baseline		6/29/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	750.1	736.85	-2.30	735.54	1.31	36.8	12.3	2575	3939	0.19
140	690	756.3	736.51	-1.70	735.17	1.34	36.5	18.8	2565	4649	0.14
160	690	762.7	735.89	-3.11	735.14	0.74	35.9	25.8	2547	5407	0.06
180	691	766.6	736.49	3.02	735.33	1.16	36.0	29.1	2550	5775	0.09
200	691	767.2	735.13	-6.81	733.89	1.24	34.1	31.1	2494	5947	0.10
220	692	763.0	734.53	-3.02	733.55	0.97	33.0	27.4	2461	5505	0.08
240	692	755.9	734.23	-1.46	733.30	0.93	32.2	20.6	2437	4725	0.10
260	692	755.7	733.59	-3.22	733.08	0.51	31.6	21.1	2418	4758	0.06
280	692	756.0	733.08	-2.55	733.02	0.06	31.1	21.9	2402	4830	0.01
300	693	756.0	732.83	-1.25	732.58	0.25	30.3	22.2	2380	4844	0.03
320	693	755.7	732.48	-1.75	732.48	0.00	29.5	22.2	2354	4822	0.00
340	692	756.0	731.61	-4.36	731.02	0.59	29.6	23.4	2358	4955	0.06
360	691	756.0	731.39	-1.07	730.62	0.77	30.4	23.6	2382	5002	0.08
380	691	755.8	730.90	-2.49	729.57	1.33	30.4	23.9	2382	5033	0.13
400	690	751.3	730.32	-2.91	728.46	1.85	30.3	20.0	2380	4601	0.21
420	690	746.5	729.76	-2.79	728.15	1.61	29.8	15.8	2363	4111	0.23
440	690	745.2	729.33	-2.13	727.78	1.55	29.3	14.9	2350	4000	0.23
460	683	744.1	728.77	-2.84	727.58	1.18	35.8	14.3	2543	4129	0.16
480	683	742.3	729.14	1.87	727.59	1.55	36.1	12.1	2554	3901	0.23
500	683	741.3	728.29	-4.27	726.17	2.12	35.3	12.0	2529	3858	0.33
520	683	740.8	727.10	-5.95	725.55	1.55	34.1	12.7	2493	3901	0.23
540	683	740.1	726.44	-3.29	724.43	2.02	33.4	12.6	2473	3875	0.31
560	683	739.0	726.08	-1.79	723.89	2.19	33.1	11.9	2462	3780	0.36
580	683	737.7	725.60	-2.40	723.51	2.09	32.6	11.0	2448	3674	0.36
600	683	736.8	724.90	-3.53	722.98	1.92	31.9	10.9	2427	3632	0.34

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - June 2006 Monitoring Event											
		6/29/06	Baseline		6/29/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	750.1	736.85	-2.30	735.67	1.18	36.8	12.3	2575	3939	0.17
140	690	756.3	736.51	-1.70	735.30	1.21	36.5	18.8	2565	4649	0.13
160	690	762.7	735.89	-3.11	735.25	0.63	35.9	25.8	2547	5407	0.05
180	691	766.6	736.49	3.02	735.45	1.04	36.0	29.1	2550	5775	0.08
200	691	767.2	735.13	-6.81	733.99	1.14	34.1	31.1	2494	5947	0.09
220	692	763.0	734.53	-3.02	733.68	0.85	33.0	27.4	2461	5505	0.07
240	692	755.9	734.23	-1.46	733.39	0.85	32.2	20.6	2437	4725	0.09
260	692	755.7	733.59	-3.22	733.20	0.39	31.6	21.1	2418	4758	0.04
280	692	756.0	733.08	-2.55	733.12	-0.04	31.1	21.9	2402	4830	0.00
300	693	756.0	732.83	-1.25	732.67	0.16	30.3	22.2	2380	4844	0.02
320	693	755.7	732.48	-1.75	732.60	-0.12	29.5	22.2	2354	4822	-0.01
340	692	756.0	731.61	-4.36	731.13	0.48	29.6	23.4	2358	4955	0.05
360	691	756.0	731.39	-1.07	730.73	0.66	30.4	23.6	2382	5002	0.07
380	691	755.8	730.90	-2.49	729.67	1.22	30.4	23.9	2382	5033	0.12
400	690	751.3	730.32	-2.91	728.55	1.77	30.3	20.0	2380	4601	0.20
420	690	746.5	729.76	-2.79	728.26	1.50	29.8	15.8	2363	4111	0.21
440	690	745.2	729.33	-2.13	727.89	1.44	29.3	14.9	2350	4000	0.21
460	683	744.1	728.77	-2.84	727.70	1.07	35.8	14.3	2543	4129	0.14
480	683	742.3	729.14	1.87	727.67	1.47	36.1	12.1	2554	3901	0.22
500	683	741.3	728.29	-4.27	726.30	1.99	35.3	12.0	2529	3858	0.31
520	683	740.8	727.10	-5.95	725.60	1.50	34.1	12.7	2493	3901	0.23
540	683	740.1	726.44	-3.29	724.54	1.90	33.4	12.6	2473	3875	0.29
560	683	739.0	726.08	-1.79	723.97	2.11	33.1	11.9	2462	3780	0.34
580	683	737.7	725.60	-2.40	723.63	1.98	32.6	11.0	2448	3674	0.34
600	683	736.8	724.90	-3.53	723.12	1.78	31.9	10.9	2427	3632	0.32

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - June 2006 Monitoring Event											
		3/29/06	Baseline		6/29/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	750.1	736.85	-2.30	735.41	1.44	36.8	12.3	2575	3939	0.21
140	690	756.3	736.51	-1.70	735.04	1.46	36.5	18.8	2565	4649	0.16
160	690	762.7	735.89	-3.11	735.03	0.86	35.9	25.8	2547	5407	0.07
180	691	766.6	736.49	3.02	735.21	1.27	36.0	29.1	2550	5775	0.10
200	691	767.2	735.13	-6.81	733.79	1.34	34.1	31.1	2494	5947	0.10
220	692	763.0	734.53	-3.02	733.43	1.09	33.0	27.4	2461	5505	0.09
240	692	755.9	734.23	-1.46	733.22	1.01	32.2	20.6	2437	4725	0.11
260	692	755.7	733.59	-3.22	732.95	0.64	31.6	21.1	2418	4758	0.07
280	692	756.0	733.08	-2.55	732.92	0.17	31.1	21.9	2402	4830	0.02
300	693	756.0	732.83	-1.25	732.48	0.35	30.3	22.2	2380	4844	0.04
320	693	755.7	732.48	-1.75	732.35	0.13	29.5	22.2	2354	4822	0.01
340	692	756.0	731.61	-4.36	730.90	0.71	29.6	23.4	2358	4955	0.07
360	691	756.0	731.39	-1.07	730.51	0.89	30.4	23.6	2382	5002	0.09
380	691	755.8	730.90	-2.49	729.46	1.44	30.4	23.9	2382	5033	0.15
400	690	751.3	730.32	-2.91	728.38	1.93	30.3	20.0	2380	4601	0.22
420	690	746.5	729.76	-2.79	728.04	1.72	29.8	15.8	2363	4111	0.24
440	690	745.2	729.33	-2.13	727.67	1.66	29.3	14.9	2350	4000	0.25
460	683	744.1	728.77	-2.84	727.47	1.30	35.8	14.3	2543	4129	0.17
480	683	742.3	729.14	1.87	727.52	1.62	36.1	12.1	2554	3901	0.24
500	683	741.3	728.29	-4.27	726.04	2.24	35.3	12.0	2529	3858	0.35
520	683	740.8	727.10	-5.95	725.50	1.60	34.1	12.7	2493	3901	0.24
540	683	740.1	726.44	-3.29	724.31	2.13	33.4	12.6	2473	3875	0.33
560	683	739.0	726.08	-1.79	723.80	2.28	33.1	11.9	2462	3780	0.37
580	683	737.7	725.60	-2.40	723.39	2.21	32.6	11.0	2448	3674	0.38
600	683	736.8	724.90	-3.53	722.84	2.06	31.9	10.9	2427	3632	0.37

Estimation of Modified Compression Index
North-South Profiler
September 2006 Monitoring Event

Station	MC V T Liner Elev	9/29/06 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	9/26/06 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast Initial	Stress @ Midpoint of MC V Wast Final	Estimated Modif. Compres Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	750.2	736.85	-2.30	736.28	0.57	36.8	12.3	2575	3942	0.08
140	690	755.3	736.51	-1.70	736.01	0.50	36.5	17.8	2565	4539	0.06
160	690	762.1	735.89	-3.11	735.32	0.57	35.9	25.2	2547	5346	0.05
180	691	766.4	736.49	3.02	735.85	0.00	36.0	28.9	2550	5758	0.00
200	691	767.2	735.13	-6.81	734.38	0.00	34.1	31.1	2494	5942	0.00
220	692	763.0	734.53	-3.02	734.02	0.00	33.0	27.4	2461	5506	0.00
240	692	756.7	734.23	-1.46	733.16	1.07	32.2	21.4	2437	4815	0.11
260	692	755.8	733.59	-3.22	732.78	0.81	31.6	21.2	2418	4773	0.09
280	692	755.7	733.08	-2.55	732.58	0.50	31.1	21.6	2402	4797	0.05
300	693	756.0	732.83	-1.25	731.82	1.01	30.3	22.2	2380	4841	0.11
320	693	756.0	732.48	-1.75	731.73	0.75	29.5	22.5	2354	4854	0.08
340	692	756.9	731.61	-4.36	730.64	0.97	29.6	24.3	2358	5052	0.10
360	691	756.5	731.39	-1.07	730.34	1.05	30.4	24.1	2382	5054	0.11
380	691	755.8	730.90	-2.49	729.78	1.12	30.4	23.9	2382	5035	0.11
400	690	753.6	730.32	-2.91	729.50	0.82	30.3	22.2	2380	4849	0.09
420	690	751.1	729.76	-2.79	728.79	0.97	29.8	20.3	2363	4621	0.11
440	690	748.5	729.33	-2.13	728.09	1.25	29.3	18.2	2350	4370	0.16
460	683	746.4	728.77	-2.84	727.40	0.00	35.8	16.6	2543	4384	0.00
480	683	744.6	729.14	1.87	727.96	0.00	36.1	14.5	2554	4163	0.00
500	683	742.2	728.29	-4.27	726.21	0.00	35.3	12.9	2529	3965	0.00
520	683	741.7	727.10	-5.95	725.40	1.70	34.1	13.6	2493	4004	0.24
540	683	740.0	726.44	-3.29	725.20	1.24	33.4	12.5	2473	3866	0.19
560	683	739.0	726.08	-1.79	724.40	1.68	33.1	11.9	2462	3780	0.27
580	683	737.7	725.60	-2.40	724.30	1.30	32.6	11.0	2448	3674	0.23
600	683	736.8	724.90	-3.53	723.28	1.62	31.9	10.9	2427	3632	0.29

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - September 2006 Monitoring Event											
		9/29/06	Baseline		9/26/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	750.2	736.85	-2.30	736.41	0.44	36.8	12.3	2575	3942	0.07
140	690	755.3	736.51	-1.70	736.13	0.38	36.5	17.8	2565	4539	0.04
160	690	762.1	735.89	-3.11	735.43	0.46	35.9	25.2	2547	5346	0.04
180	691	766.4	736.49	3.02	735.97	0.52	36.0	28.9	2550	5758	0.04
200	691	767.2	735.13	-6.81	734.48	0.65	34.1	31.1	2494	5942	0.05
220	692	763.0	734.53	-3.02	734.15	0.38	33.0	27.4	2461	5506	0.03
240	692	756.7	734.23	-1.46	733.25	0.99	32.2	21.4	2437	4815	0.10
260	692	755.8	733.59	-3.22	732.90	0.69	31.6	21.2	2418	4773	0.07
280	692	755.7	733.08	-2.55	732.69	0.40	31.1	21.6	2402	4797	0.04
300	693	756.0	732.83	-1.25	731.92	0.92	30.3	22.2	2380	4841	0.10
320	693	756.0	732.48	-1.75	731.85	0.63	29.5	22.5	2354	4854	0.07
340	692	756.9	731.61	-4.36	730.75	0.85	29.6	24.3	2358	5052	0.09
360	691	756.5	731.39	-1.07	730.45	0.94	30.4	24.1	2382	5054	0.09
380	691	755.8	730.90	-2.49	729.88	1.01	30.4	23.9	2382	5035	0.10
400	690	753.6	730.32	-2.91	729.58	0.74	30.3	22.2	2380	4849	0.08
420	690	751.1	729.76	-2.79	728.90	0.86	29.8	20.3	2363	4621	0.10
440	690	748.5	729.33	-2.13	728.20	1.14	29.3	18.2	2350	4370	0.14
460	683	746.4	728.77	-2.84	727.51	1.26	35.8	16.6	2543	4384	0.15
480	683	744.6	729.14	1.87	728.04	1.10	36.1	14.5	2554	4163	0.14
500	683	742.2	728.29	-4.27	726.33	1.95	35.3	12.9	2529	3965	0.28
520	683	741.7	727.10	-5.95	725.45	1.65	34.1	13.6	2493	4004	0.24
540	683	740.0	726.44	-3.29	725.31	1.13	33.4	12.5	2473	3866	0.17
560	683	739.0	726.08	-1.79	724.49	1.60	33.1	11.9	2462	3780	0.26
580	683	737.7	725.60	-2.40	724.41	1.19	32.6	11.0	2448	3674	0.21
600	683	736.8	724.90	-3.53	723.42	1.48	31.9	10.9	2427	3632	0.27

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - September 2006 Monitoring Event											
		9/29/06	Baseline		9/26/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	750.2	736.85	-2.30	736.15	0.70	36.8	12.3	2575	3942	0.10
140	690	755.3	736.51	-1.70	735.88	0.63	36.5	17.8	2565	4539	0.07
160	690	762.1	735.89	-3.11	735.20	0.68	35.9	25.2	2547	5346	0.06
180	691	766.4	736.49	3.02	735.73	0.76	36.0	28.9	2550	5758	0.06
200	691	767.2	735.13	-6.81	734.28	0.85	34.1	31.1	2494	5942	0.07
220	692	763.0	734.53	-3.02	733.90	0.63	33.0	27.4	2461	5506	0.05
240	692	756.7	734.23	-1.46	733.08	1.15	32.2	21.4	2437	4815	0.12
260	692	755.8	733.59	-3.22	732.66	0.93	31.6	21.2	2418	4773	0.10
280	692	755.7	733.08	-2.55	732.48	0.60	31.1	21.6	2402	4797	0.06
300	693	756.0	732.83	-1.25	731.72	1.11	30.3	22.2	2380	4841	0.12
320	693	756.0	732.48	-1.75	731.60	0.88	29.5	22.5	2354	4854	0.10
340	692	756.9	731.61	-4.36	730.53	1.08	29.6	24.3	2358	5052	0.11
360	691	756.5	731.39	-1.07	730.23	1.17	30.4	24.1	2382	5054	0.12
380	691	755.8	730.90	-2.49	729.67	1.23	30.4	23.9	2382	5035	0.12
400	690	753.6	730.32	-2.91	729.42	0.90	30.3	22.2	2380	4849	0.10
420	690	751.1	729.76	-2.79	728.68	1.08	29.8	20.3	2363	4621	0.12
440	690	748.5	729.33	-2.13	727.98	1.36	29.3	18.2	2350	4370	0.17
460	683	746.4	728.77	-2.84	727.28	1.48	35.8	16.6	2543	4384	0.18
480	683	744.6	729.14	1.87	727.88	1.26	36.1	14.5	2554	4163	0.16
500	683	742.2	728.29	-4.27	726.08	2.21	35.3	12.9	2529	3965	0.32
520	683	741.7	727.10	-5.95	725.34	1.75	34.1	13.6	2493	4004	0.25
540	683	740.0	726.44	-3.29	725.08	1.36	33.4	12.5	2473	3866	0.21
560	683	739.0	726.08	-1.79	724.32	1.77	33.1	11.9	2462	3780	0.29
580	683	737.7	725.60	-2.40	724.18	1.42	32.6	11.0	2448	3674	0.25
600	683	736.8	724.90	-3.53	723.14	1.76	31.9	10.9	2427	3632	0.32

Estimation of Modified Compression Index											
North-South Profiler											
December 2006 Monitoring Event											
		1/2/07	Baseline		1/11/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	751.5	736.85	-2.30	736.75	0.10	36.8	13.7	2575	4095	0.01
140	690	755.6	736.51	-1.70	735.81	0.70	36.5	18.1	2565	4575	0.08
160	690	762.1	735.89	-3.11	735.17	0.71	35.9	25.2	2547	5343	0.06
180	691	767.0	736.49	3.02	735.88	0.61	36.0	29.5	2550	5827	0.05
200	691	766.9	735.13	-6.81	734.46	0.67	34.1	30.8	2494	5914	0.05
220	692	762.6	734.53	-3.02	733.76	0.77	33.0	27.1	2461	5465	0.07
240	692	757.5	734.23	-1.46	733.55	0.68	32.2	22.3	2437	4907	0.07
260	692	755.8	733.59	-3.22	733.31	0.28	31.6	21.2	2418	4770	0.03
280	692	755.3	733.08	-2.55	732.51	0.57	31.1	21.2	2402	4757	0.06
300	693	755.4	732.83	-1.25	732.11	0.72	30.3	21.5	2380	4770	0.08
320	693	755.3	732.48	-1.75	732.06	0.42	29.5	21.8	2354	4776	0.05
340	692	755.8	731.61	-4.36	731.57	0.04	29.6	23.2	2358	4929	0.00
360	691	756.4	731.39	-1.07	731.15	0.24	30.4	24.0	2382	5046	0.02
380	691	756.1	730.90	-2.49	730.58	0.32	30.4	24.2	2382	5070	0.03
400	690	755.4	730.32	-2.91	729.79	0.53	30.3	24.1	2380	5053	0.05
420	690	752.3	729.76	-2.79	729.23	0.53	29.8	21.6	2363	4758	0.06
440	690	749.2	729.33	-2.13	728.18	1.15	29.3	18.8	2350	4441	0.14
460	683	747.0	728.77	-2.84	727.64	1.13	35.8	17.2	2543	4451	0.13
480	683	744.8	729.14	1.87	728.36	0.78	36.1	14.6	2554	4177	0.10
500	683	742.9	728.29	-4.27	727.65	0.63	35.3	13.6	2529	4036	0.09
520	683	740.5	727.10	-5.95	726.08	1.02	34.1	12.4	2493	3870	0.16
540	683	739.7	726.44	-3.29	725.63	0.81	33.4	12.3	2473	3835	0.13
560	683	739.0	726.08	-1.79	725.38	0.70	33.1	11.9	2462	3780	0.11
580	683	738.3	725.60	-2.40	724.44	1.16	32.6	11.7	2448	3743	0.19
600	683	737.6	724.90	-3.53	724.00	0.90	31.9	11.7	2427	3728	0.15

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - December 2006 Monitoring Event											
		1/2/07	Baseline		1/11/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	751.5	736.85	-2.30	736.88	-0.03	36.8	13.7	2575	4095	0.00
140	690	755.6	736.51	-1.70	735.94	0.57	36.5	18.1	2565	4575	0.06
160	690	762.1	735.89	-3.11	735.28	0.60	35.9	25.2	2547	5343	0.05
180	691	767.0	736.49	3.02	736.00	0.49	36.0	29.5	2550	5827	0.04
200	691	766.9	735.13	-6.81	734.56	0.57	34.1	30.8	2494	5914	0.04
220	692	762.6	734.53	-3.02	733.88	0.65	33.0	27.1	2461	5465	0.06
240	692	757.5	734.23	-1.46	733.63	0.60	32.2	22.3	2437	4907	0.06
260	692	755.8	733.59	-3.22	733.43	0.16	31.6	21.2	2418	4770	0.02
280	692	755.3	733.08	-2.55	732.62	0.46	31.1	21.2	2402	4757	0.05
300	693	755.4	732.83	-1.25	732.21	0.62	30.3	21.5	2380	4770	0.07
320	693	755.3	732.48	-1.75	732.19	0.29	29.5	21.8	2354	4776	0.03
340	692	755.8	731.61	-4.36	731.68	-0.07	29.6	23.2	2358	4929	-0.01
360	691	756.4	731.39	-1.07	731.27	0.13	30.4	24.0	2382	5046	0.01
380	691	756.1	730.90	-2.49	730.68	0.22	30.4	24.2	2382	5070	0.02
400	690	755.4	730.32	-2.91	729.87	0.44	30.3	24.1	2380	5053	0.04
420	690	752.3	729.76	-2.79	729.34	0.42	29.8	21.6	2363	4758	0.05
440	690	749.2	729.33	-2.13	728.29	1.04	29.3	18.8	2350	4441	0.13
460	683	747.0	728.77	-2.84	727.75	1.01	35.8	17.2	2543	4451	0.12
480	683	744.8	729.14	1.87	728.44	0.70	36.1	14.5	2564	4177	0.09
500	683	742.9	728.29	-4.27	727.78	0.51	35.3	13.5	2529	4036	0.07
520	683	740.5	727.10	-5.95	726.13	0.97	34.1	12.4	2493	3870	0.15
540	683	739.7	726.44	-3.29	725.74	0.70	33.4	12.3	2473	3835	0.11
560	683	739.0	726.08	-1.79	725.46	0.62	33.1	11.9	2462	3780	0.10
580	683	738.3	725.60	-2.40	724.56	1.04	32.6	11.7	2448	3743	0.17
600	683	737.6	724.90	-3.53	724.14	0.76	31.9	11.7	2427	3728	0.13

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - December 2006 Monitoring Event											
		1/2/07	Baseline		1/11/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	751.5	736.85	-2.30	736.62	0.23	36.8	13.7	2575	4095	0.03
140	690	755.6	736.51	-1.70	735.68	0.82	36.5	18.1	2565	4575	0.09
160	690	762.1	735.89	-3.11	735.06	0.83	35.9	25.2	2547	5343	0.07
180	691	767.0	736.49	3.02	735.77	0.72	36.0	29.5	2550	5827	0.06
200	691	766.9	735.13	-6.81	734.37	0.77	34.1	30.8	2494	5914	0.06
220	692	762.6	734.53	-3.02	733.63	0.89	33.0	27.1	2461	5465	0.08
240	692	757.5	734.23	-1.46	733.47	0.76	32.2	22.3	2437	4907	0.08
260	692	755.8	733.59	-3.22	733.19	0.40	31.6	21.2	2418	4770	0.04
280	692	755.3	733.08	-2.55	732.41	0.67	31.1	21.2	2402	4757	0.07
300	693	755.4	732.83	-1.25	732.01	0.82	30.3	21.5	2380	4770	0.09
320	693	755.3	732.48	-1.75	731.93	0.55	29.5	21.8	2354	4776	0.06
340	692	755.8	731.61	-4.36	731.45	0.16	29.6	23.2	2358	4929	0.02
360	691	756.4	731.39	-1.07	731.04	0.35	30.4	24.0	2382	5046	0.04
380	691	756.1	730.90	-2.49	730.47	0.43	30.4	24.2	2382	5070	0.04
400	690	755.4	730.32	-2.91	729.71	0.61	30.3	24.1	2380	5053	0.06
420	690	752.3	729.76	-2.79	729.12	0.64	29.8	21.6	2363	4758	0.07
440	690	749.2	729.33	-2.13	728.07	1.26	29.3	18.8	2350	4441	0.16
460	683	747.0	728.77	-2.84	727.53	1.24	35.8	17.2	2543	4451	0.14
480	683	744.8	729.14	1.87	728.29	0.85	36.1	14.6	2554	4177	0.11
500	683	742.9	728.29	-4.27	727.53	0.76	35.3	13.6	2529	4036	0.11
520	683	740.5	727.10	-5.95	726.03	1.07	34.1	12.4	2493	3870	0.16
540	683	739.7	726.44	-3.29	725.51	0.93	33.4	12.3	2473	3835	0.15
560	683	739.0	726.08	-1.79	725.29	0.79	33.1	11.9	2462	3780	0.13
580	683	738.3	725.60	-2.40	724.33	1.28	32.6	11.7	2448	3743	0.21
600	683	737.6	724.90	-3.53	723.86	1.04	31.9	11.7	2427	3728	0.17

Estimation of Modified Compression Index											
North-South Profiler											
March 2007 Monitoring Event											
		4/2/07	Baseline		3/29/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	751.5	736.85	-2.30	736.34	0.51	36.8	13.7	2575	4095	0.07
140	690	755.6	736.51	-1.70	736.07	0.44	36.5	18.1	2565	4575	0.05
160	690	762.1	735.89	-3.11	735.43	0.45	35.9	25.2	2547	5343	0.04
180	691	767.0	736.49	3.02	735.86	0.63	36.0	29.5	2550	5827	0.05
200	691	767.1	735.13	-6.81	734.44	0.69	34.1	30.9	2494	5927	0.05
220	692	763.3	734.53	-3.02	734.04	0.49	33.0	27.7	2461	5541	0.04
240	692	758.3	734.23	-1.46	733.59	0.64	32.2	23.1	2437	4998	0.06
260	692	755.8	733.59	-3.22	733.04	0.55	31.6	21.2	2418	4769	0.06
280	692	755.4	733.08	-2.55	732.60	0.48	31.1	21.3	2402	4771	0.05
300	693	755.4	732.83	-1.25	732.06	0.77	30.3	21.5	2380	4769	0.08
320	693	755.3	732.48	-1.75	731.86	0.62	29.5	21.8	2354	4777	0.07
340	692	755.8	731.61	-4.36	731.09	0.52	29.6	23.2	2358	4929	0.05
360	691	756.4	731.39	-1.07	730.70	0.70	30.4	24.0	2382	5046	0.07
380	691	756.1	730.90	-2.49	730.16	0.74	30.4	24.2	2382	5070	0.07
400	690	755.4	730.32	-2.91	729.62	0.70	30.3	24.1	2380	5053	0.07
420	690	752.3	729.76	-2.79	729.10	0.66	29.8	21.6	2363	4758	0.07
440	690	749.2	729.33	-2.13	728.32	1.02	29.3	18.8	2350	4441	0.13
460	683	747.6	728.77	-2.84	727.84	0.92	35.8	17.9	2543	4526	0.10
480	683	747.7	729.14	1.87	728.34	0.80	36.1	17.6	2554	4505	0.09
500	683	744.4	728.29	-4.27	726.95	1.34	35.3	15.1	2529	4203	0.17
520	683	743.3	727.10	-5.95	725.84	1.26	34.1	15.2	2493	4180	0.16
540	683	742.2	726.44	-3.29	725.35	1.09	33.4	14.3	2473	4114	0.15
560	683	740.5	726.08	-1.79	724.90	1.18	33.1	13.5	2462	3956	0.17
580	683	739.3	725.60	-2.40	724.51	1.09	32.6	12.7	2448	3860	0.17
600	683	738.4	724.90	-3.53	723.82	1.08	31.9	12.5	2427	3817	0.17

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Upper Limit - March 2007 Monitoring Event											
		4/2/07	Baseline		3/29/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	751.5	736.85	-2.30	736.47	0.38	36.8	13.7	2575	4095	0.05
140	690	755.6	736.51	-1.70	736.20	0.31	36.5	18.1	2565	4575	0.03
160	690	762.1	735.89	-3.11	735.55	0.34	35.9	25.2	2547	5343	0.03
180	691	767.0	736.49	3.02	735.97	0.52	36.0	29.5	2550	5827	0.04
200	691	767.1	735.13	-6.81	734.54	0.59	34.1	30.9	2494	5927	0.05
220	692	763.3	734.53	-3.02	734.16	0.36	33.0	27.7	2461	5541	0.03
240	692	758.3	734.23	-1.46	733.68	0.56	32.2	23.1	2437	4998	0.06
260	692	755.8	733.59	-3.22	733.16	0.43	31.6	21.2	2418	4769	0.05
280	692	755.4	733.08	-2.55	732.71	0.37	31.1	21.3	2402	4771	0.04
300	693	755.4	732.83	-1.25	732.15	0.68	30.3	21.5	2380	4769	0.07
320	693	755.3	732.48	-1.75	731.99	0.49	29.5	21.8	2354	4777	0.05
340	692	755.8	731.61	-4.36	731.20	0.41	29.6	23.2	2358	4929	0.04
360	691	756.4	731.39	-1.07	730.81	0.58	30.4	24.0	2382	5046	0.06
380	691	756.1	730.90	-2.49	730.27	0.63	30.4	24.2	2382	5070	0.06
400	690	755.4	730.32	-2.91	729.70	0.61	30.3	24.1	2380	5053	0.06
420	690	752.3	729.76	-2.79	729.21	0.55	29.8	21.6	2363	4758	0.06
440	690	749.2	729.33	-2.13	728.43	0.91	29.3	18.8	2350	4441	0.11
460	683	747.6	728.77	-2.84	727.95	0.81	35.8	17.9	2543	4526	0.09
480	683	747.7	729.14	1.87	728.42	0.72	36.1	17.6	2554	4505	0.08
500	683	744.4	728.29	-4.27	727.08	1.21	35.3	15.1	2529	4203	0.16
520	683	743.3	727.10	-5.95	725.89	1.20	34.1	15.2	2493	4180	0.16
540	683	742.2	726.44	-3.29	725.46	0.98	33.4	14.8	2473	4114	0.13
560	683	740.5	726.08	-1.79	724.99	1.10	33.1	13.5	2462	3956	0.16
580	683	739.3	725.60	-2.40	724.63	0.98	32.6	12.7	2448	3860	0.15
600	683	738.4	724.90	-3.53	723.96	0.94	31.9	12.5	2427	3817	0.15

Estimation of Modified Compression Index											
North-South Profiler											
95% Confidence Lower Limit - March 2007 Monitoring Event											
		4/2/07	Baseline		3/29/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC V-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	751.5	736.85	-2.30	736.21	0.63	36.8	13.7	2575	4095	0.09
140	690	755.6	736.51	-1.70	735.94	0.56	36.5	18.1	2565	4575	0.06
160	690	762.1	735.89	-3.11	735.32	0.57	35.9	25.2	2547	5343	0.05
180	691	767.0	736.49	3.02	735.74	0.75	36.0	29.5	2550	5827	0.06
200	691	767.1	735.13	-6.81	734.34	0.79	34.1	30.9	2494	5927	0.06
220	692	763.3	734.53	-3.02	733.92	0.61	33.0	27.7	2461	5541	0.05
240	692	758.3	734.23	-1.46	733.51	0.72	32.2	23.1	2437	4998	0.07
260	692	755.8	733.59	-3.22	732.92	0.67	31.6	21.2	2413	4769	0.07
280	692	755.4	733.08	-2.55	732.50	0.58	31.1	21.3	2402	4771	0.06
300	693	755.4	732.83	-1.25	731.96	0.87	30.3	21.5	2380	4769	0.10
320	693	755.3	732.48	-1.75	731.73	0.75	29.5	21.8	2354	4777	0.08
340	692	755.8	731.61	-4.36	730.98	0.63	29.6	23.2	2353	4929	0.07
360	691	756.4	731.39	-1.07	730.59	0.81	30.4	24.0	2382	5046	0.08
380	691	756.1	730.90	-2.49	730.06	0.84	30.4	24.2	2382	5070	0.08
400	690	755.4	730.32	-2.91	729.54	0.78	30.3	24.1	2380	5053	0.08
420	690	752.3	729.76	-2.79	728.99	0.77	29.8	21.6	2363	4758	0.08
440	690	749.2	729.33	-2.13	728.21	1.13	29.3	18.8	2350	4441	0.14
460	683	747.6	728.77	-2.84	727.73	1.04	35.8	17.9	2543	4526	0.12
480	683	747.7	729.14	1.87	728.26	0.88	36.1	17.6	2554	4505	0.10
500	683	744.4	728.29	-4.27	726.82	1.47	35.3	15.1	2529	4203	0.19
520	683	743.3	727.10	-5.95	725.79	1.31	34.1	15.2	2493	4180	0.17
540	683	742.2	726.44	-3.29	725.23	1.21	33.4	14.8	2473	4114	0.16
560	683	740.5	726.08	-1.79	724.82	1.27	33.1	13.5	2462	3956	0.19
580	683	739.3	725.60	-2.40	724.39	1.21	32.6	12.7	2448	3860	0.19
600	683	738.4	724.90	-3.53	723.68	1.22	31.9	12.5	2427	3817	0.19

Estimation of Modified Compression Index											
Phase 1 North-South Profiler											
September 2008 Monitoring Event											
		9/4/08	Baseline		9/23/08				Stress @ Midpoint of		Estimated
P1	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	754.1	736.85	-2.30	736.34	0.25	36.8	16.2	2575	4376	0.03
140	690	760.8	736.51	-1.70	736.07	0.40	36.5	23.3	2565	5152	0.04
160	690	766.6	735.89	-3.11	735.43	0.23	35.9	29.7	2547	5841	0.02
180	691	767.4	736.49	3.02	735.86	0.64	36.0	29.9	2550	5866	0.05
200	691	766.9	735.13	-6.81	734.44	0.49	34.1	30.7	2494	5907	0.04
220	692	762.7	734.53	-3.02	734.04	0.69	33.0	27.2	2461	5481	0.06
240	692	765.0	734.23	-1.46	733.59	0.73	32.2	29.7	2437	5736	0.06
260	692	770.8	733.59	-3.22	733.04	0.88	31.6	36.3	2418	6442	0.07
280	692	775.8	733.08	-2.55	732.60	1.04	31.1	41.7	2402	7030	0.07
300	693	778.7	732.83	-1.25	732.06	1.36	30.3	44.9	2380	7361	0.09
320	693	778.0	732.48	-1.75	731.86	1.22	29.5	44.5	2354	7295	0.08
340	692	774.9	731.61	-4.36	731.09	1.14	29.6	42.3	2358	7055	0.08
360	691	771.1	731.39	-1.07	730.70	1.31	30.4	38.7	2382	6680	0.10
380	691	766.4	730.90	-2.49	730.16	1.25	30.4	34.5	2382	6209	0.10
400	690	761.5	730.32	-2.91	729.62	1.15	30.3	30.2	2380	5733	0.10
420	690	756.6	729.76	-2.79	729.10	1.08	29.8	25.8	2363	5229	0.11
440	690	751.9	729.33	-2.13	728.32	1.34	29.3	21.6	2350	4742	0.15
460	683	747.4	728.77	-2.84	727.84	1.41	35.8	17.6	2543	4496	0.16
480	683	744.9	729.14	1.87	728.34	1.66	36.1	14.8	2554	4192	0.21
500	683	743.6	728.29	-4.27	726.95	1.41	35.3	14.3	2529	4116	0.19
520	683	743.7	727.10	-5.95	725.84	1.35	34.1	15.6	2493	4224	0.17
540	683	742.5	726.44	-3.29	725.35	1.49	33.4	15.1	2473	4146	0.20
560	683	741.1	726.08	-1.79	724.90	1.62	33.1	14.0	2462	4019	0.23
580	683	739.9	725.60	-2.40	724.51	1.54	32.6	13.2	2448	3919	0.23
600	683	739.0	724.90	-3.53	723.82	1.55	31.9	13.1	2427	3878	0.24

Estimation of Modified Compression Index											
Phase 1 North-South Profiler											
95% Confidence Upper Limit - March 2008 Monitoring Event											
		9/4/08	Baseline		9/23/08				Stress @ Midpoint of		Estimated
P1	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	754.1	736.85	-2.30	736.47	0.38	36.8	16.2	2575	4376	0.04
140	690	760.8	736.51	-1.70	736.20	0.31	36.5	23.3	2565	5152	0.03
160	690	766.6	735.89	-3.11	735.54	0.34	35.9	29.7	2547	5841	0.03
180	691	767.4	736.49	3.02	735.97	0.52	36.0	29.9	2550	5866	0.04
200	691	766.9	735.13	-6.81	734.54	0.59	34.1	30.7	2494	5907	0.05
220	692	762.7	734.53	-3.02	734.16	0.36	33.0	27.2	2461	5481	0.03
240	692	765.0	734.23	-1.46	733.67	0.56	32.2	29.7	2437	5736	0.05
260	692	770.8	733.59	-3.22	733.16	0.43	31.6	36.3	2413	6442	0.03
280	692	775.8	733.08	-2.55	732.71	0.38	31.1	41.7	2402	7030	0.03
300	693	778.7	732.83	-1.25	732.15	0.68	30.3	44.9	2380	7361	0.05
320	693	778.0	732.48	-1.75	731.99	0.49	29.5	44.5	2354	7295	0.03
340	692	774.9	731.61	-4.36	731.20	0.41	29.6	42.3	2353	7055	0.03
360	691	771.1	731.39	-1.07	730.81	0.59	30.4	38.7	2382	6680	0.04
380	691	766.4	730.90	-2.49	730.27	0.63	30.4	34.5	2382	6209	0.05
400	690	761.5	730.32	-2.91	729.70	0.62	30.3	30.2	2380	5733	0.05
420	690	756.6	729.76	-2.79	729.21	0.55	29.8	25.8	2363	5229	0.05
440	690	751.9	729.33	-2.13	728.42	0.91	29.3	21.6	2350	4742	0.10
460	683	747.4	728.77	-2.84	727.95	0.81	35.8	17.6	2543	4496	0.09
480	683	744.9	729.14	1.87	728.41	0.73	36.1	14.8	2554	4192	0.09
500	683	743.6	728.29	-4.27	727.07	1.21	35.3	14.3	2529	4116	0.16
520	683	743.7	727.10	-5.95	725.90	1.20	34.1	15.6	2493	4224	0.15
540	683	742.5	726.44	-3.29	725.48	0.97	33.4	15.1	2473	4146	0.13
560	683	741.1	726.08	-1.79	725.00	1.09	33.1	14.0	2462	4019	0.15
580	683	739.9	725.60	-2.40	724.64	0.96	32.6	13.2	2448	3919	0.14
600	683	739.0	724.90	-3.53	723.98	0.92	31.9	13.1	2427	3878	0.14

Estimation of Modified Compression Index											
Phase 1 North-South Profiler											
95% Confidence Lower Limit - March 2008 Monitoring Event											
		9/4/08	Baseline		9/23/08				Stress @ Midpoint of		Estimated
P1	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Waste		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
120	690	754.1	736.85	-2.30	736.22	0.63	36.8	16.2	2575	4376	0.07
140	690	760.8	736.51	-1.70	735.95	0.56	36.5	23.3	2565	5152	0.05
160	690	766.6	735.89	-3.11	735.32	0.56	35.9	29.7	2547	5841	0.04
180	691	767.4	736.49	3.02	735.74	0.75	36.0	29.9	2550	5866	0.06
200	691	766.9	735.13	-6.81	734.34	0.79	34.1	30.7	2494	5907	0.06
220	692	762.7	734.53	-3.02	733.92	0.61	33.0	27.2	2461	5481	0.05
240	692	765.0	734.23	-1.46	733.51	0.72	32.2	29.7	2437	5736	0.06
260	692	770.8	733.59	-3.22	732.92	0.67	31.6	36.3	2418	6442	0.05
280	692	775.8	733.08	-2.55	732.50	0.58	31.1	41.7	2402	7030	0.04
300	693	778.7	732.83	-1.25	731.96	0.87	30.3	44.9	2380	7361	0.06
320	693	778.0	732.48	-1.75	731.74	0.74	29.5	44.5	2354	7295	0.05
340	692	774.9	731.61	-4.36	730.98	0.63	29.6	42.3	2358	7055	0.04
360	691	771.1	731.39	-1.07	730.59	0.81	30.4	38.7	2382	6680	0.06
380	691	766.4	730.90	-2.49	730.06	0.84	30.4	34.5	2382	6209	0.07
400	690	761.5	730.32	-2.91	729.54	0.78	30.3	30.2	2380	5733	0.07
420	690	756.6	729.76	-2.79	728.99	0.77	29.8	25.8	2363	5229	0.07
440	690	751.9	729.33	-2.13	728.21	1.12	29.3	21.6	2350	4742	0.13
460	683	747.4	728.77	-2.84	727.73	1.04	35.8	17.6	2543	4496	0.12
480	683	744.9	729.14	1.87	728.26	0.88	36.1	14.8	2554	4192	0.11
500	683	743.6	728.29	-4.27	726.82	1.46	35.3	14.3	2529	4116	0.20
520	683	743.7	727.10	-5.95	725.79	1.31	34.1	15.6	2493	4224	0.17
540	683	742.5	726.44	-3.29	725.22	1.22	33.4	15.1	2473	4146	0.16
560	683	741.1	726.08	-1.79	724.81	1.28	33.1	14.0	2462	4019	0.18
580	683	739.9	725.60	-2.40	724.38	1.22	32.6	13.2	2448	3919	0.18
600	683	739.0	724.90	-3.53	723.66	1.24	31.9	13.1	2427	3878	0.19

Five-Year Projection of Settlement
Phase 1 North-South Profiler
Average

P1 Station	Baseline Measured Pipe Elev ft	Baseline Slope %	9/23/08 Measured Pipe Elev ft	Measured settlement ft	Stress @ Midpoint of MC V Waste Initial psf	Average Modif. Compres Index	Final Waste Elevation ft	Final Waste Thickness ft	Final stress psf	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Check	Slope Difference	Comments
120	736.85	-2.30	736.34	0.25	4376	0.09	815.00	77.15	11196	1.42	734.92				cell floor
140	736.51	-1.70	736.07	0.40	5152	0.08	817.00	79.49	11446	1.05	735.02	0.50	slope reversal	0.10	cell floor
160	735.89	-3.11	735.43	0.23	5841	0.06	819.50	82.61	11774	0.63	734.81	-1.09			cell floor
180	736.49	3.02	735.86	0.64	5866	0.06	821.50	84.01	11932	0.62	735.24	2.17			pipe crossing
200	735.13	-6.81	734.44	0.49	5907	0.06	824.00	87.87	12304	0.67	733.77	-7.38			pipe crossing
220	734.53	-3.02	734.04	0.69	5481	0.06	826.00	90.47	12560	0.70	733.34	-2.13			pipe crossing
240	734.23	-1.46	733.59	0.73	5736	0.09	828.00	92.77	12791	0.99	732.60	-3.70			cell floor
260	733.59	-3.22	733.04	0.88	6442	0.06	829.50	94.91	13010	0.57	732.47	-0.65			cell floor
280	733.08	-2.55	732.60	1.04	7030	0.05	830.50	96.42	13162	0.43	732.17	-1.51			cell floor
300	732.83	-1.25	732.06	1.36	7361	0.08	831.00	97.17	13223	0.66	731.40	-3.85			cell floor
320	732.48	-1.75	731.86	1.22	7295	0.06	831.00	97.52	13236	0.47	731.39	-0.06			cell floor
340	731.61	-4.36	731.09	1.14	7055	0.10	830.50	97.89	13281	0.79	730.30	-5.44			cell floor
360	731.39	-1.07	730.70	1.31	6680	0.11	830.50	98.11	13329	1.03	729.66	-3.19			cell floor
380	730.90	-2.49	730.16	1.25	6209	0.12	830.00	98.10	13328	1.18	728.99	-3.40			cell floor
400	730.32	-2.91	729.62	1.15	5733	0.13	830.00	98.68	13390	1.43	728.19	-3.97			cell floor
420	729.76	-2.79	729.10	1.08	5229	0.11	829.50	98.74	13380	1.37	727.73	-2.29			cell floor
440	729.33	-2.13	728.32	1.34	4742	0.16	829.50	99.17	13415	2.08	726.24	-7.49			cell floor
460	728.77	-2.84	727.84	1.41	4496	0.12	829.00	99.23	13615	2.15	725.69	-2.75			pipe crossing
480	729.14	1.87	728.34	1.66	4192	0.12	829.00	98.86	13585	2.23	726.11	2.09			pipe crossing
500	728.29	-4.27	726.95	1.41	4116	0.17	829.00	99.71	13654	3.20	723.75	-11.90			pipe crossing
520	727.10	-5.95	725.84	1.35	4224	0.19	828.50	100.40	13695	3.23	722.61	-5.69			cell floor
540	726.44	-3.29	725.35	1.49	4146	0.19	825.00	97.56	13359	3.26	722.09	-2.60			cell floor
560	726.08	-1.79	724.90	1.62	4019	0.21	820.00	92.92	12833	3.51	721.39	-3.49			cell floor
580	725.60	-2.40	724.51	1.54	3919	0.21	815.00	88.40	12317	3.47	721.04	-1.76			cell floor
600	724.90	-3.53	723.82	1.55	3878	0.22	810.00	84.10	11819	3.36	720.46	-2.89			cell floor

Five-Year Projection of Settlement
Phase 1 North-South Profiler
95% Confidence Upper Limit - Average

P1 Station	Baseline Measured Pipe Elev ft	Baseline Slope %	9/23/08 Measured Pipe Elev ft	Measured settlement ft	Stress @ Midpoint of MC V Waste Initial psf	Average Modif. Compres Index	Final Waste Elevation ft	Final Waste Thickness ft	Final stress psf	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Check	Slope Difference	Comments
120	736.85	-2.30	736.34	0.25	4376	0.08	815.00	77.15	11529	1.25	735.10				cell floor
140	736.51	-1.70	736.07	0.40	5152	0.07	817.00	79.49	11779	0.91	735.16	0.34	slope reversal	0.07	cell floor
160	735.89	-3.11	735.43	0.23	5841	0.05	819.50	82.61	12107	0.57	734.87	-1.49			cell floor
180	736.49	3.02	735.86	0.64	5866	0.05	821.50	84.01	12265	0.61	735.24	1.89			pipe crossing
200	735.13	-6.81	734.44	0.49	5907	0.06	824.00	87.87	12637	0.72	733.72	-7.66			pipe crossing
220	734.53	-3.02	734.04	0.69	5481	0.05	826.00	90.47	12893	0.63	733.41	-1.53			pipe crossing
240	734.23	-1.46	733.59	0.73	5736	0.08	828.00	92.77	13124	0.91	732.68	-3.65			cell floor
260	733.59	-3.22	733.04	0.88	6442	0.04	829.50	94.91	13343	0.43	732.61	-0.34			cell floor
280	733.08	-2.55	732.60	1.04	7030	0.03	830.50	96.42	13495	0.30	732.30	-1.57			cell floor
300	732.83	-1.25	732.06	1.36	7361	0.07	831.00	97.17	13556	0.55	731.51	-3.95			cell floor
320	732.48	-1.75	731.86	1.22	7295	0.04	831.00	97.52	13569	0.31	731.55	0.20	slope reversal	0.04	cell floor
340	731.61	-4.36	731.09	1.14	7055	0.08	830.50	97.89	13614	0.64	730.45	-5.51			cell floor
360	731.39	-1.07	730.70	1.31	6680	0.09	830.50	98.11	13662	0.82	729.87	-2.88			cell floor
380	730.90	-2.49	730.16	1.25	6209	0.10	830.00	98.10	13661	1.00	729.17	-3.55			cell floor
400	730.32	-2.91	729.62	1.15	5733	0.11	830.00	98.68	13723	1.28	728.34	-4.14			cell floor
420	729.76	-2.79	729.10	1.08	5229	0.09	829.50	98.74	13713	1.14	727.96	-1.89			cell floor
440	729.33	-2.13	728.32	1.34	4742	0.13	829.50	99.17	13748	1.82	726.50	-7.32			cell floor
460	728.77	-2.84	727.84	1.41	4496	0.12	829.00	99.23	13948	2.07	725.77	-3.63			pipe crossing
480	729.14	1.87	728.34	1.66	4192	0.11	829.00	98.86	13918	2.13	726.21	2.19			pipe crossing
500	728.29	-4.27	726.95	1.41	4116	0.18	829.00	99.71	13987	3.40	723.55	-13.43			pipe crossing
520	727.10	-5.95	725.84	1.35	4224	0.18	828.50	100.40	14028	3.14	722.70	-4.23			cell floor
540	726.44	-3.29	725.35	1.49	4146	0.17	825.00	97.56	13692	2.93	722.42	-1.44			cell floor
560	726.08	-1.79	724.90	1.62	4019	0.19	820.00	92.92	13166	3.25	721.65	-3.81			cell floor
580	725.60	-2.40	724.51	1.54	3919	0.19	815.00	88.40	12650	3.11	721.40	-1.26			cell floor
600	724.90	-3.53	723.82	1.55	3878	0.19	810.00	84.10	12152	2.93	720.89	-2.56			cell floor

Five-Year Projection of Settlement
Phase 1 North-South Profiler
95% Confidence Lower Limit - Average

P1 Station	Baseline Measured Pipe Elev	Baseline Slope	9/23/08 Measured Pipe Elev	Measured settlement	Stress @ Midpoint of MC V Waste Initial	Average Modif. Compres Index	Final Waste Elevation	Final Waste Thickness	Final stress	Final Settlement	Final Pipe Elevation	Final Slope	Check	Slope Difference	Comments
	ft	%	ft	ft	psf		ft	ft	psf	ft	ft	%			
120	736.85	-2.30	736.34	0.25	4376	0.12	815.00	77.15	11529	1.81	734.53				cell floor
140	736.51	-1.70	736.07	0.40	5152	0.10	817.00	79.49	11779	1.28	734.79	1.33	slope reversal	0.27	cell floor
160	735.89	-3.11	735.43	0.23	5841	0.07	819.50	82.61	12107	0.80	734.64	-0.79			cell floor
180	736.49	3.02	735.86	0.64	5866	0.07	821.50	84.01	12265	0.83	735.02	1.93			pipe crossing
200	735.13	-6.81	734.44	0.49	5907	0.08	824.00	87.87	12637	0.91	733.53	-7.48			pipe crossing
220	734.53	-3.02	734.04	0.69	5481	0.07	826.00	90.47	12893	0.90	733.14	-1.97			pipe crossing
240	734.23	-1.46	733.59	0.73	5736	0.10	828.00	92.77	13124	1.11	732.49	-3.26			cell floor
260	733.59	-3.22	733.04	0.88	6442	0.07	829.50	94.91	13343	0.68	732.36	-0.63			cell floor
280	733.08	-2.55	732.60	1.04	7030	0.06	830.50	96.42	13495	0.50	732.10	-1.28			cell floor
300	732.83	-1.25	732.06	1.36	7361	0.09	831.00	97.17	13556	0.73	731.33	-3.90			cell floor
320	732.48	-1.75	731.86	1.22	7295	0.07	831.00	97.52	13569	0.58	731.28	-0.21			cell floor
340	731.61	-4.36	731.09	1.14	7055	0.11	830.50	97.89	13614	0.89	730.20	-5.42			cell floor
360	731.39	-1.07	730.70	1.31	6680	0.13	830.50	98.11	13662	1.24	729.46	-3.72			cell floor
380	730.90	-2.49	730.16	1.25	6209	0.13	830.00	98.10	13661	1.36	728.81	-3.26			cell floor
400	730.32	-2.91	729.62	1.15	5733	0.14	830.00	98.68	13723	1.59	728.03	-3.87			cell floor
420	729.76	-2.79	729.10	1.08	5229	0.13	829.50	98.74	13713	1.58	727.52	-2.54			cell floor
440	729.33	-2.13	728.32	1.34	4742	0.17	829.50	99.17	13748	2.34	725.98	-7.77			cell floor
460	728.77	-2.84	727.84	1.41	4496	0.15	829.00	99.23	13948	2.64	725.20	-3.88			pipe crossing
480	729.14	1.87	728.34	1.66	4192	0.14	829.00	98.86	13918	2.56	725.78	2.89			pipe crossing
500	728.29	-4.27	726.95	1.41	4116	0.22	829.00	99.71	13987	4.13	722.82	-14.98			pipe crossing
520	727.10	-5.95	725.84	1.35	4224	0.19	828.50	100.40	14028	3.42	722.42	-1.97			cell floor
540	726.44	-3.29	725.35	1.49	4146	0.20	825.00	97.56	13692	3.55	721.79	-3.14			cell floor
560	726.08	-1.79	724.90	1.62	4019	0.22	820.00	92.92	13166	3.73	721.17	-3.11			cell floor
580	725.60	-2.40	724.51	1.54	3919	0.23	815.00	88.40	12650	3.79	720.72	-2.24			cell floor
600	724.90	-3.53	723.82	1.55	3878	0.24	810.00	84.10	12152	3.74	720.08	-3.23			cell floor

Estimation of Modified Compression Index

Southern East-West Profiler

May 2005 Monitoring Event

Station	MC V T Liner Elev	5/2/05 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	5/31/05 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast Initial	Stress @ Midpoint of MC V Wast Final	Estimated Modif. Compres Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.53	-					
40			724.91	-28.32	723.70	1.21					
60	668	729.0	721.83	-15.57	720.69	1.15	43.8	6.2	2785	3469	0.27
80	668	736.0	721.14	-3.50	719.88	1.25	43.1	13.9	2764	4303	0.15
100	668	741.0	721.42	1.44	719.95	1.48	43.4	18.6	2773	4835	0.14
120	668	746.5	721.81	1.93	720.12	1.69	43.8	23.7	2784	5414	0.13
140	668	746.0	722.17	1.78	720.61	1.56	44.2	22.8	2795	5330	0.13
160	668	745.0	722.60	2.19	720.99	1.62	44.6	21.4	2808	5183	0.14
180	668	744.5	722.81	1.05	721.44	1.37	44.8	20.7	2814	5111	0.12
200	668	743.0	722.99	0.86	721.74	1.25	45.0	19.0	2820	4930	0.11
220	668	741.5	722.97	-0.06	721.72	1.26	45.0	17.5	2819	4765	0.12
240	683	741.0	722.80	-0.87	721.61	1.19	29.8	17.2	2364	4273	0.15
260	683	739.5	722.62	-0.87	721.57	1.06	29.6	15.9	2359	4121	0.15
280	683	738.5	722.60	-0.15	721.60	0.99	29.6	14.9	2358	4012	0.15
300	683	737.0	723.37	3.85	722.65	0.71	30.4	12.6	2381	3783	0.12
320	683	735.0	723.22	-0.71	722.27	0.96	30.2	10.8	2377	3573	0.18
340	683	733.5	722.94	-1.42	722.15	0.79	29.9	9.6	2368	3429	0.16
360	683	734.0	723.29	1.74	722.68	0.60	30.3	9.7	2379	3457	0.12
380	683	735.0	723.89	3.03	723.29	0.61	30.9	10.1	2397	3519	0.12
400	683	733.0	724.43	2.67	723.53	0.89	31.4	7.6	2413	3253	0.22
420	683	733.0	725.02	2.94	724.12	0.90	32.0	7.0	2430	3206	0.23
440	683	734.0	725.61	2.96	724.84	0.77	32.6	7.4	2448	3269	0.19
460	683	735.0	726.22	3.05	725.42	0.79	33.2	7.8	2466	3330	0.18
480	683	736.0	726.79	2.85	726.14	0.64	33.8	8.2	2484	3395	0.14
500	683	736.5	728.00	6.07	727.73	0.27	35.0	7.5	2520	3353	0.06
520	683	736.5	728.74	3.73	728.16	0.58	35.7	6.8	2542	3292	0.15
540	683	737.0	728.44	-1.52	727.95	0.48	35.4	7.6	2533	3373	0.11
560	690	737.5	729.00	2.82	728.58	0.42	29.0	7.5	2340	3172	0.11
580	690	737.0	729.53	2.62	729.05	0.47	29.5	6.5	2356	3074	0.14
600	690	736.0	730.06	2.70	729.58	0.49	30.1	4.9	2372	2920	0.18

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - May 2005 Monitoring Event											
		5/2/05	Baseline		5/31/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.67						
40			724.91	-28.32	723.88	1.03					
60	668	729.0	721.83	-15.57	720.75	1.09	43.8	6.2	2785	3469	0.26
80	668	736.0	721.14	-3.50	719.98	1.16	43.1	13.9	2764	4303	0.14
100	668	741.0	721.42	1.44	720.03	1.39	43.4	18.6	2773	4835	0.13
120	668	746.5	721.81	1.93	720.18	1.63	43.8	23.7	2784	5414	0.13
140	668	746.0	722.17	1.78	720.87	1.29	44.2	22.8	2795	5330	0.10
160	668	745.0	722.60	2.19	721.03	1.58	44.6	21.4	2808	5183	0.13
180	668	744.5	722.81	1.05	721.51	1.30	44.8	20.7	2814	5111	0.11
200	668	743.0	722.99	0.86	721.81	1.18	45.0	19.0	2820	4930	0.11
220	668	741.5	722.97	-0.06	721.77	1.20	45.0	17.5	2819	4765	0.12
240	683	741.0	722.80	-0.87	721.70	1.10	29.8	17.2	2364	4273	0.14
260	683	739.5	722.62	-0.87	721.63	0.99	29.6	15.9	2359	4121	0.14
280	683	738.5	722.60	-0.15	721.67	0.92	29.6	14.9	2358	4012	0.14
300	683	737.0	723.37	3.85	722.74	0.63	30.4	12.6	2381	3783	0.10
320	683	735.0	723.22	-0.71	722.33	0.90	30.2	10.8	2377	3573	0.17
340	683	733.5	722.94	-1.42	722.20	0.74	29.9	9.6	2368	3429	0.15
360	683	734.0	723.29	1.74	722.75	0.54	30.3	9.7	2379	3457	0.11
380	683	735.0	723.89	3.03	723.38	0.51	30.9	10.1	2397	3519	0.10
400	683	733.0	724.43	2.67	723.59	0.84	31.4	7.6	2413	3253	0.20
420	683	733.0	725.02	2.94	724.19	0.83	32.0	7.0	2430	3206	0.22
440	683	734.0	725.61	2.96	724.93	0.68	32.6	7.4	2448	3269	0.17
460	683	735.0	726.22	3.05	725.48	0.74	33.2	7.8	2466	3330	0.17
480	683	736.0	726.79	2.85	726.20	0.58	33.8	8.2	2484	3395	0.13
500	683	736.5	728.00	6.07	727.81	0.19	35.0	7.5	2520	3353	0.04
520	683	736.5	728.74	3.73	728.21	0.53	35.7	6.8	2542	3292	0.13
540	683	737.0	728.44	-1.52	728.01	0.43	35.4	7.6	2533	3373	0.10
560	690	737.5	729.00	2.82	728.61	0.39	29.0	7.5	2340	3172	0.10
580	690	737.0	729.53	2.62	729.11	0.42	29.5	6.5	2356	3074	0.12
600	690	736.0	730.06	2.70	729.70	0.36	30.1	4.9	2372	2920	0.13

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - May 2005 Monitoring Event											
		5/2/05	Baseline		5/31/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.39						
40			724.91	-28.32	723.52	1.39					
60	668	729.0	721.83	-15.57	720.63	1.21	43.8	6.2	2785	3469	0.29
80	668	736.0	721.14	-3.50	719.78	1.35	43.1	13.9	2764	4303	0.16
100	668	741.0	721.42	1.44	719.86	1.56	43.4	18.6	2773	4835	0.15
120	668	746.5	721.81	1.93	720.06	1.75	43.8	23.7	2784	5414	0.14
140	668	746.0	722.17	1.78	720.35	1.82	44.2	22.8	2795	5330	0.15
160	668	745.0	722.60	2.19	720.95	1.66	44.6	21.4	2808	5183	0.14
180	668	744.5	722.81	1.05	721.37	1.44	44.8	20.7	2814	5111	0.12
200	668	743.0	722.99	0.86	721.67	1.31	45.0	19.0	2820	4930	0.12
220	668	741.5	722.97	-0.06	721.66	1.31	45.0	17.5	2819	4765	0.13
240	683	741.0	722.80	-0.87	721.53	1.27	29.8	17.2	2364	4273	0.17
260	683	739.5	722.62	-0.87	721.50	1.13	29.6	15.9	2359	4121	0.16
280	683	738.5	722.60	-0.15	721.53	1.06	29.6	14.9	2358	4012	0.16
300	683	737.0	723.37	3.85	722.57	0.80	30.4	12.6	2381	3783	0.13
320	683	735.0	723.22	-0.71	722.21	1.01	30.2	10.8	2377	3573	0.19
340	683	733.5	722.94	-1.42	722.10	0.84	29.9	9.6	2368	3429	0.17
360	683	734.0	723.29	1.74	722.62	0.67	30.3	9.7	2379	3457	0.14
380	683	735.0	723.89	3.03	723.19	0.70	30.9	10.1	2397	3519	0.14
400	683	733.0	724.43	2.67	723.47	0.95	31.4	7.6	2413	3253	0.23
420	683	733.0	725.02	2.94	724.05	0.97	32.0	7.0	2430	3206	0.25
440	683	734.0	725.61	2.96	724.75	0.85	32.6	7.4	2448	3269	0.21
460	683	735.0	726.22	3.05	725.37	0.85	33.2	7.8	2466	3330	0.20
480	683	736.0	726.79	2.85	726.08	0.70	33.8	8.2	2484	3395	0.15
500	683	736.5	728.00	6.07	727.65	0.34	35.0	7.5	2520	3353	0.08
520	683	736.5	728.74	3.73	728.10	0.64	35.7	6.8	2542	3292	0.16
540	683	737.0	728.44	-1.52	727.90	0.54	35.4	7.6	2533	3373	0.12
560	690	737.5	729.00	2.82	728.55	0.45	29.0	7.5	2340	3172	0.12
580	690	737.0	729.53	2.62	729.00	0.52	29.5	6.5	2356	3074	0.15
600	690	736.0	730.06	2.70	729.45	0.62	30.1	4.9	2372	2920	0.23

Estimation of Modified Compression Index											
Southern East-West Profiler											
July 2005 Monitoring Event											
		7/28/05	Baseline		7/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.56	-					
40			724.91	-28.32	723.69	1.22					
60	668	734.0	721.83	-15.57	720.51	1.32	43.8	11.2	2785	4024	0.19
80	668	740.0	721.14	-3.50	719.61	1.53	43.1	17.9	2764	4747	0.15
100	668	745.0	721.42	1.44	719.57	1.85	43.4	22.6	2773	5279	0.15
120	668	750.0	721.81	1.93	719.80	2.01	43.8	27.2	2784	5802	0.14
140	668	755.0	722.17	1.78	720.26	1.91	44.2	31.8	2795	6329	0.12
160	668	760.5	722.60	2.19	720.54	2.07	44.6	36.9	2808	6904	0.12
180	668	761.5	722.81	1.05	720.99	1.82	44.8	37.7	2814	6998	0.10
200	668	756.5	722.99	0.86	721.22	1.76	45.0	32.5	2820	6429	0.11
220	668	752.0	722.97	-0.06	721.43	1.55	45.0	28.0	2819	5930	0.11
240	683	748.5	722.80	-0.87	721.43	1.37	29.8	24.7	2364	5106	0.14
260	683	744.5	722.62	-0.87	721.40	1.22	29.6	20.9	2359	4676	0.14
280	683	741.0	722.60	-0.15	721.38	1.22	29.6	17.4	2358	4290	0.16
300	683	738.0	723.37	3.85	722.30	1.06	30.4	13.6	2381	3894	0.16
320	683	736.0	723.22	-0.71	722.02	1.21	30.2	11.8	2377	3684	0.21
340	683	733.5	722.94	-1.42	721.93	1.01	29.9	9.6	2368	3429	0.21
360	683	734.0	723.29	1.74	722.44	0.85	30.3	9.7	2379	3457	0.17
380	683	735.0	723.89	3.03	723.12	0.77	30.9	10.1	2397	3519	0.15
400	683	733.0	724.43	2.67	723.46	0.97	31.4	7.6	2413	3253	0.24
420	683	733.0	725.02	2.94	724.12	0.89	32.0	7.0	2430	3206	0.23
440	683	734.0	725.61	2.96	724.74	0.86	32.6	7.4	2448	3269	0.21
460	683	735.0	726.22	3.05	725.34	0.88	33.2	7.8	2466	3330	0.20
480	683	736.0	726.79	2.85	725.96	0.82	33.8	8.2	2484	3395	0.18
500	683	736.5	728.00	6.07	727.63	0.37	35.0	7.5	2520	3353	0.08
520	683	736.5	728.74	3.73	727.84	0.90	35.7	6.8	2542	3292	0.22
540	683	737.0	728.44	-1.52	727.80	0.63	35.4	7.6	2533	3373	0.14
560	690	737.5	729.00	2.82	728.26	0.74	29.0	7.5	2340	3172	0.19
580	690	737.0	729.53	2.62	728.99	0.54	29.5	6.5	2356	3074	0.16
600	690	736.0	730.06	2.70	729.42	0.64	30.1	4.9	2372	2920	0.24

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - July 2005 Monitoring Event											
		7/28/05	Baseline		7/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.70						
40			724.91	-28.32	723.88	1.04					
60	668	734.0	721.83	-15.57	720.57	1.26	43.8	11.2	2785	4024	0.18
80	668	740.0	721.14	-3.50	719.70	1.43	43.1	17.9	2764	4747	0.14
100	668	745.0	721.42	1.44	719.66	1.76	43.4	22.6	2773	5279	0.15
120	668	750.0	721.81	1.93	719.86	1.95	43.8	27.2	2784	5802	0.14
140	668	755.0	722.17	1.78	720.52	1.65	44.2	31.8	2795	6329	0.11
160	668	760.5	722.60	2.19	720.58	2.03	44.6	36.9	2808	6904	0.12
180	668	761.5	722.81	1.05	721.06	1.75	44.8	37.7	2814	6998	0.10
200	668	756.5	722.99	0.86	721.29	1.70	45.0	32.5	2820	6429	0.11
220	668	752.0	722.97	-0.06	721.48	1.49	45.0	28.0	2819	5930	0.10
240	683	748.5	722.80	-0.87	721.51	1.29	29.8	24.7	2364	5106	0.13
260	683	744.5	722.62	-0.87	721.47	1.15	29.6	20.9	2359	4676	0.13
280	683	741.0	722.60	-0.15	721.45	1.14	29.6	17.4	2358	4290	0.15
300	683	738.0	723.37	3.85	722.39	0.98	30.4	13.6	2381	3894	0.15
320	683	736.0	723.22	-0.71	722.07	1.15	30.2	11.8	2377	3684	0.20
340	683	733.5	722.94	-1.42	721.98	0.96	29.9	9.6	2368	3429	0.20
360	683	734.0	723.29	1.74	722.50	0.78	30.3	9.7	2379	3457	0.16
380	683	735.0	723.89	3.03	723.21	0.68	30.9	10.1	2397	3519	0.13
400	683	733.0	724.43	2.67	723.52	0.91	31.4	7.6	2413	3253	0.22
420	683	733.0	725.02	2.94	724.19	0.82	32.0	7.0	2430	3206	0.21
440	683	734.0	725.61	2.96	724.83	0.78	32.6	7.4	2448	3269	0.19
460	683	735.0	726.22	3.05	725.39	0.82	33.2	7.8	2466	3330	0.19
480	683	736.0	726.79	2.85	726.02	0.76	33.8	8.2	2484	3395	0.17
500	683	736.5	728.00	6.07	727.71	0.29	35.0	7.5	2520	3353	0.07
520	683	736.5	728.74	3.73	727.90	0.84	35.7	6.8	2542	3292	0.21
540	683	737.0	728.44	-1.52	727.86	0.58	35.4	7.6	2533	3373	0.13
560	690	737.5	729.00	2.82	728.30	0.71	29.0	7.5	2340	3172	0.18
580	690	737.0	729.53	2.62	729.04	0.49	29.5	6.5	2356	3074	0.14
600	690	736.0	730.06	2.70	729.55	0.52	30.1	4.9	2372	2920	0.19

Estimation of Modified Compression Index

Southern East-West Profiler

95% Confidence Lower Limit - July 2005 Monitoring Event

Station	MC V T Liner Elev	7/28/05 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	7/20/05 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast Initial	Stress @ Midpoint of MC V Wast Final	Estimated Modif. Compres Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.42						
40			724.91	-28.32	723.51	1.40					
60	668	734.0	721.83	-15.57	720.45	1.38	43.8	11.2	2785	4024	0.20
80	668	740.0	721.14	-3.50	719.51	1.63	43.1	17.9	2764	4747	0.16
100	668	745.0	721.42	1.44	719.49	1.94	43.4	22.6	2773	5279	0.16
120	668	750.0	721.81	1.93	719.73	2.08	43.8	27.2	2784	5802	0.15
140	668	755.0	722.17	1.78	720.00	2.17	44.2	31.8	2795	6329	0.14
160	668	760.5	722.60	2.19	720.50	2.11	44.6	36.9	2808	6904	0.12
180	668	761.5	722.81	1.05	720.92	1.89	44.8	37.7	2814	6998	0.11
200	668	756.5	722.99	0.86	721.15	1.83	45.0	32.5	2820	6429	0.11
220	668	752.0	722.97	-0.06	721.37	1.60	45.0	28.0	2819	5930	0.11
240	683	748.5	722.80	-0.87	721.34	1.46	29.8	24.7	2364	5106	0.15
260	683	744.5	722.62	-0.87	721.34	1.29	29.6	20.9	2359	4676	0.15
280	683	741.0	722.60	-0.15	721.31	1.29	29.6	17.4	2358	4290	0.17
300	683	738.0	723.37	3.85	722.22	1.15	30.4	13.6	2381	3894	0.18
320	683	736.0	723.22	-0.71	721.96	1.27	30.2	11.8	2377	3684	0.22
340	683	733.5	722.94	-1.42	721.88	1.06	29.9	9.6	2368	3429	0.22
360	683	734.0	723.29	1.74	722.37	0.91	30.3	9.7	2379	3457	0.19
380	683	735.0	723.89	3.03	723.03	0.87	30.9	10.1	2397	3519	0.17
400	683	733.0	724.43	2.67	723.40	1.03	31.4	7.6	2413	3253	0.25
420	683	733.0	725.02	2.94	724.06	0.96	32.0	7.0	2430	3206	0.25
440	683	734.0	725.61	2.96	724.66	0.95	32.6	7.4	2448	3269	0.23
460	683	735.0	726.22	3.05	725.29	0.93	33.2	7.8	2466	3330	0.21
480	683	736.0	726.79	2.85	725.90	0.88	33.8	8.2	2484	3395	0.19
500	683	736.5	728.00	6.07	727.55	0.45	35.0	7.5	2520	3353	0.10
520	683	736.5	728.74	3.73	727.79	0.95	35.7	6.8	2542	3292	0.24
540	683	737.0	728.44	-1.52	727.75	0.69	35.4	7.6	2533	3373	0.16
560	690	737.5	729.00	2.82	728.23	0.77	29.0	7.5	2340	3172	0.20
580	690	737.0	729.53	2.62	728.93	0.59	29.5	6.5	2356	3074	0.17
600	690	736.0	730.06	2.70	729.30	0.77	30.1	4.9	2372	2920	0.28

Estimation of Modified Compression Index											
Southern East-West Profiler											
September 2005 Monitoring Event											
		8/30/05	Baseline		9/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.25	-					
40			724.91	-28.32	723.44	1.48					
60	668	734.0	721.83	-15.57	720.41	1.43	43.8	11.2	2785	4024	0.20
80	668	740.0	721.14	-3.50	719.62	1.52	43.1	17.9	2764	4747	0.15
100	668	745.0	721.42	1.44	719.57	1.85	43.4	22.6	2773	5279	0.15
120	668	750.0	721.81	1.93	719.80	2.01	43.8	27.2	2784	5802	0.14
140	668	755.0	722.17	1.78	720.29	1.88	44.2	31.8	2795	6329	0.12
160	668	761.0	722.60	2.19	720.57	2.03	44.6	37.4	2808	6959	0.12
180	668	761.5	722.81	1.05	721.08	1.74	44.8	37.7	2814	6998	0.10
200	668	756.5	722.99	0.86	721.33	1.65	45.0	32.5	2820	6429	0.10
220	668	752.5	722.97	-0.06	721.51	1.47	45.0	28.5	2819	5986	0.10
240	683	748.5	722.80	-0.87	721.49	1.31	29.8	24.7	2364	5106	0.13
260	683	744.5	722.62	-0.87	721.45	1.17	29.6	20.9	2359	4676	0.13
280	683	741.0	722.60	-0.15	721.43	1.17	29.6	17.4	2358	4290	0.15
300	683	738.0	723.37	3.85	722.42	0.94	30.4	13.6	2381	3894	0.15
320	683	736.0	723.22	-0.71	722.11	1.11	30.2	11.8	2377	3684	0.19
340	683	733.5	722.94	-1.42	722.06	0.88	29.9	9.6	2368	3429	0.18
360	683	734.0	723.29	1.74	722.48	0.81	30.3	9.7	2379	3457	0.16
380	683	735.0	723.89	3.03	723.04	0.86	30.9	10.1	2397	3519	0.17
400	683	733.0	724.43	2.67	723.67	0.76	31.4	7.6	2413	3253	0.19
420	683	733.0	725.02	2.94	724.31	0.70	32.0	7.0	2430	3206	0.18
440	683	734.0	725.61	2.96	724.97	0.64	32.6	7.4	2448	3269	0.16
460	683	735.0	726.22	3.05	725.61	0.61	33.2	7.8	2466	3330	0.14
480	683	736.0	726.79	2.85	726.25	0.54	33.8	8.2	2484	3395	0.12
500	683	736.5	728.00	6.07	727.80	0.20	35.0	7.5	2520	3353	0.05
520	683	736.5	728.74	3.73	727.99	0.75	35.7	6.8	2542	3292	0.19
540	683	737.0	728.44	-1.52	727.99	0.45	35.4	7.6	2533	3373	0.10
560	690	737.5	729.00	2.82	728.60	0.40	29.0	7.5	2340	3172	0.11
580	690	737.0	729.53	2.62	729.18	0.35	29.5	6.5	2356	3074	0.10
600	690	736.0	730.06	2.70	729.63	0.43	30.1	4.9	2372	2920	0.16

Estimation of Modified Compression Index

Southern East-West Profiler

95% Confidence Upper Limit - September 2005 Monitoring Event

Station	MC V T Liner Elev	8/30/05 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	9/20/05 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast Initial	Stress @ Midpoint of MC V Wast Final	Estimated Modif. Compres Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.39	-					
40			724.91	-28.32	723.62	1.29					
60	668	734.0	721.83	-15.57	720.47	1.37	43.8	11.2	2785	4024	0.20
80	668	740.0	721.14	-3.50	719.72	1.42	43.1	17.9	2764	4747	0.14
100	668	745.0	721.42	1.44	719.66	1.76	43.4	22.6	2773	5279	0.15
120	668	750.0	721.81	1.93	719.87	1.94	43.8	27.2	2784	5802	0.14
140	668	755.0	722.17	1.78	720.55	1.61	44.2	31.8	2795	6329	0.10
160	668	761.0	722.60	2.19	720.61	1.99	44.6	37.4	2808	6959	0.11
180	668	761.5	722.81	1.05	721.15	1.67	44.8	37.7	2814	6998	0.09
200	668	756.5	722.99	0.86	721.40	1.58	45.0	32.5	2820	6429	0.10
220	668	752.5	722.97	-0.06	721.56	1.41	45.0	28.5	2819	5986	0.10
240	683	748.5	722.80	-0.87	721.57	1.23	29.8	24.7	2364	5106	0.12
260	683	744.5	722.62	-0.87	721.52	1.11	29.6	20.9	2359	4676	0.13
280	683	741.0	722.60	-0.15	721.50	1.10	29.6	17.4	2358	4290	0.14
300	683	738.0	723.37	3.85	722.51	0.86	30.4	13.6	2381	3894	0.13
320	683	736.0	723.22	-0.71	722.17	1.05	30.2	11.8	2377	3684	0.18
340	683	733.5	722.94	-1.42	722.12	0.82	29.9	9.6	2368	3429	0.17
360	683	734.0	723.29	1.74	722.54	0.75	30.3	9.7	2379	3457	0.15
380	683	735.0	723.89	3.03	723.13	0.76	30.9	10.1	2397	3519	0.15
400	683	733.0	724.43	2.67	723.73	0.70	31.4	7.6	2413	3253	0.17
420	683	733.0	725.02	2.94	724.38	0.64	32.0	7.0	2430	3206	0.17
440	683	734.0	725.61	2.96	725.05	0.55	32.6	7.4	2448	3269	0.14
460	683	735.0	726.22	3.05	725.66	0.55	33.2	7.8	2466	3330	0.13
480	683	736.0	726.79	2.85	726.31	0.48	33.8	8.2	2484	3395	0.10
500	683	736.5	728.00	6.07	727.88	0.12	35.0	7.5	2520	3353	0.03
520	683	736.5	728.74	3.73	728.05	0.70	35.7	6.8	2542	3292	0.17
540	683	737.0	728.44	-1.52	728.05	0.39	35.4	7.6	2533	3373	0.09
560	690	737.5	729.00	2.82	728.63	0.37	29.0	7.5	2340	3172	0.10
580	690	737.0	729.53	2.62	729.23	0.29	29.5	6.5	2356	3074	0.09
600	690	736.0	730.06	2.70	729.76	0.31	30.1	4.9	2372	2920	0.11

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - September 2005 Monitoring Event											
		8/30/05	Baseline		9/20/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.11	-					
40			724.91	-28.32	723.25	1.66					
60	668	734.0	721.83	-15.57	720.35	1.49	43.8	11.2	2785	4024	0.21
80	668	740.0	721.14	-3.50	719.52	1.62	43.1	17.9	2764	4747	0.16
100	668	745.0	721.42	1.44	719.49	1.94	43.4	22.6	2773	5279	0.16
120	668	750.0	721.81	1.93	719.74	2.07	43.8	27.2	2784	5802	0.15
140	668	755.0	722.17	1.78	720.03	2.14	44.2	31.8	2795	6329	0.14
160	668	761.0	722.60	2.19	720.53	2.07	44.6	37.4	2808	6959	0.12
180	668	761.5	722.81	1.05	721.01	1.81	44.8	37.7	2814	6998	0.10
200	668	756.5	722.99	0.86	721.27	1.72	45.0	32.5	2820	6429	0.11
220	668	752.5	722.97	-0.06	721.45	1.52	45.0	28.5	2819	5986	0.10
240	683	748.5	722.80	-0.87	721.40	1.40	29.8	24.7	2364	5106	0.14
260	683	744.5	722.62	-0.87	721.39	1.24	29.6	20.9	2359	4676	0.14
280	683	741.0	722.60	-0.15	721.36	1.24	29.6	17.4	2358	4290	0.16
300	683	738.0	723.37	3.85	722.34	1.03	30.4	13.6	2381	3894	0.16
320	683	736.0	723.22	-0.71	722.06	1.17	30.2	11.8	2377	3684	0.20
340	683	733.5	722.94	-1.42	722.01	0.93	29.9	9.6	2368	3429	0.19
360	683	734.0	723.29	1.74	722.41	0.88	30.3	9.7	2379	3457	0.18
380	683	735.0	723.89	3.03	722.94	0.95	30.9	10.1	2397	3519	0.18
400	683	733.0	724.43	2.67	723.61	0.82	31.4	7.6	2413	3253	0.20
420	683	733.0	725.02	2.94	724.24	0.77	32.0	7.0	2430	3206	0.20
440	683	734.0	725.61	2.96	724.88	0.73	32.6	7.4	2448	3269	0.18
460	683	735.0	726.22	3.05	725.56	0.66	33.2	7.8	2466	3330	0.15
480	683	736.0	726.79	2.85	726.19	0.60	33.8	8.2	2484	3395	0.13
500	683	736.5	728.00	6.07	727.72	0.28	35.0	7.5	2520	3353	0.06
520	683	736.5	728.74	3.73	727.94	0.80	35.7	6.8	2542	3292	0.20
540	683	737.0	728.44	-1.52	727.93	0.51	35.4	7.6	2533	3373	0.11
560	690	737.5	729.00	2.82	728.57	0.43	29.0	7.5	2340	3172	0.11
580	690	737.0	729.53	2.62	729.13	0.40	29.5	6.5	2356	3074	0.12
600	690	736.0	730.06	2.70	729.51	0.56	30.1	4.9	2372	2920	0.21

Estimation of Modified Compression Index
Southern East-West Profiler
December 2005 Monitoring Event

		1/3/06	Baseline		12/22/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.08	-					
40			724.91	-28.32	723.41	1.51					
60	668	735.5	721.83	-15.57	720.42	1.41	43.8	12.7	2785	4191	0.18
80	668	742.3	721.14	-3.50	719.40	1.74	43.1	20.2	2764	5005	0.16
100	668	748.4	721.42	1.44	719.66	1.76	43.4	25.9	2773	5653	0.13
120	668	750.2	721.81	1.93	719.70	2.11	43.8	27.4	2784	5823	0.15
140	668	755.5	722.17	1.78	720.08	2.09	44.2	32.4	2795	6388	0.13
160	668	758.0	722.60	2.19	720.47	2.14	44.6	34.4	2808	6626	0.13
180	668	758.0	722.81	1.05	721.15	1.67	44.8	34.2	2814	6609	0.10
200	668	757.7	722.99	0.86	721.23	1.76	45.0	33.7	2820	6556	0.11
220	668	753.5	722.97	-0.06	721.53	1.44	45.0	29.5	2819	6098	0.10
240	683	748.6	722.80	-0.87	721.38	1.42	29.8	24.8	2364	5117	0.14
260	683	744.5	722.62	-0.87	721.35	1.28	29.6	20.8	2359	4673	0.15
280	683	740.2	722.60	-0.15	721.67	0.93	29.6	16.6	2358	4197	0.13
300	683	735.7	723.37	3.86	722.43	0.94	30.4	11.4	2381	3043	0.17
320	683	735.1	723.22	-0.71	722.44	0.78	30.2	10.9	2377	3587	0.15
340	683	734.0	722.94	-1.42	722.12	0.82	29.9	10.1	2368	3485	0.16
360	683	734.0	723.29	1.74	722.81	0.48	30.3	9.7	2379	3457	0.10
380	683	734.2	723.89	3.03	723.03	0.86	30.9	9.3	2397	3425	0.18
400	683	734.4	724.43	2.67	723.64	0.78	31.4	8.9	2413	3405	0.17
420	683	735.6	725.02	2.94	724.60	0.42	32.0	9.5	2430	3490	0.08
440	683	736.7	725.61	2.96	725.26	0.34	32.6	10.1	2448	3571	0.06
460	683	737.5	726.22	3.05	725.97	0.25	33.2	10.3	2466	3609	0.05
480	683	738.2	726.79	2.85	726.56	0.23	33.8	10.4	2484	3637	0.04
500	683	738.8	728.00	6.07	728.21	-0.21	35.0	9.8	2520	3607	-0.04
520	683	739.0	728.74	3.73	728.30	0.45	35.7	9.2	2542	3565	0.09
540	683	739.2	728.44	-1.52	728.12	0.31	35.4	9.8	2533	3618	0.06
560	690	739.3	729.00	2.82	728.73	0.27	29.0	9.3	2340	3372	0.06
580	690	739.1	729.53	2.62	729.33	0.19	29.5	8.6	2356	3305	0.04
600	691	738.9	730.06	2.70	729.79	0.27	29.1	7.8	2342	3207	0.07
620	692	738.3	730.47	2.01	730.33	0.14	28.5	6.8	2324	3078	0.04
640	693	737.7	730.90	2.15	731.20	-0.31	27.9	5.8	2307	2950	-0.10
660	693	736.6	731.69	3.95	732.00	-0.31	28.7	5.9	2331	2987	-0.10
680	692	739.3	732.23	2.75	732.25	-0.02	30.2	6.1	2377	3054	-0.01
700	691	739.5	732.44	1.03	732.36	0.08	31.4	6.0	2413	3083	0.02
720	690	738.5	731.73	-3.53	730.74	1.00	31.7	5.8	2422	3063	0.31
740	689	738.1	730.57	-5.84	729.78	0.79	31.6	6.5	2417	3138	0.22
760	689	737.5	729.90	-3.34	729.31	0.59	30.9	6.6	2397	3125	0.17
780	689	737.3	729.39	-2.53	728.75	0.64	30.4	6.9	2382	3146	0.18
800	689	737.1	728.81	-2.93	728.34	0.47	29.8	7.2	2364	3168	0.12
820	689	736.7	728.36	-2.26	727.81	0.55	29.4	7.4	2351	3170	0.14
840	689	736.4	727.68	-3.39	727.13	0.55	28.7	7.7	2330	3186	0.14
860	690	735.9	727.18	-2.51	726.65	0.53	27.7	7.8	2300	3162	0.14
880	690	735.1	726.73	-2.23	726.15	0.58	27.2	7.4	2287	3106	0.16
900	690	734.5	726.52	-1.08	726.77	-0.25	26.5	7.0	2265	3041	-0.07
920	690	734.8	726.56	0.32	724.95	1.63	26.6	7.2	2267	3069	0.47
940	688	736.0	725.20	-6.93	724.29	0.91	27.2	9.8	2286	3374	0.20
960	686	737.3	724.78	-2.06	724.40	0.38	29.3	11.5	2349	3627	0.07
980	683	737.8	724.82	0.17	724.43	0.39	31.8	12.0	2425	3754	0.06
1000	681	740.7	724.94	0.60	724.44	0.50	33.9	14.8	2488	4131	0.07
1020	681	744.2	725.01	0.37	724.47	0.54	34.0	18.2	2490	4509	0.06
1040	680	743.7	725.02	0.03	724.55	0.47	35.0	17.7	2521	4483	0.05
1060	679	740.4	724.88	-0.69	724.13	0.76	35.9	14.6	2546	4162	0.10
1080	679	739.6	724.73	-0.79	723.95	0.78	35.7	13.9	2542	4086	0.11
1100	679	740.0	724.82	0.47	724.08	0.74	36.3	14.2	2560	4134	0.10
1120	679	740.0	725.05	1.13	725.47	-0.43	36.5	14.0	2566	4115	-0.06
1140	678	740.0	726.41	6.82	724.86	1.55	38.4	12.6	2622	4020	0.22
1160	678	740.0	725.29	-5.58	724.20	1.10	37.3	13.7	2589	4110	0.15
1180	678	737.5	724.85	-2.22	724.21	0.64	36.8	11.6	2575	3865	0.10
1200	678	735.0	724.63	-1.10	724.45	0.18	36.6	9.3	2569	3605	0.03
1220	678	732.2	725.14	2.57	724.81	0.33	37.1	6.0	2584	3252	0.09
1240	678	731.6	724.95	-0.98	724.04	0.91	36.9	5.6	2578	3202	0.26
1260	678	730.6	724.00	-4.76	723.70	0.30	36.5	5.6	2565	3188	0.09
1280	678	729.2	723.64	-1.79	723.24	0.39	36.1	4.6	2554	3059	0.14
1300	677	726.9	723.23	-2.06	723.17	0.05	36.2	2.7	2557	2856	0.03

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - December 2005 Monitoring Event											
		1/3/06	Baseline		12/22/05			Stress @ Midpoint of			Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.22						
40			724.91	-28.32	723.59	1.32					
60	668	735.5	721.83	-15.57	720.48	1.35	43.8	12.7	2785	4191	0.17
80	668	742.3	721.14	-3.50	719.49	1.64	43.1	20.2	2764	5005	0.15
100	668	748.4	721.42	1.44	719.75	1.67	43.4	25.9	2773	5653	0.12
120	668	750.2	721.81	1.93	719.76	2.05	43.8	27.4	2784	5823	0.15
140	668	755.5	722.17	1.78	720.34	1.83	44.2	32.4	2795	6388	0.12
160	668	758.0	722.60	2.19	720.51	2.10	44.6	34.4	2808	6626	0.13
180	668	758.0	722.81	1.05	721.22	1.60	44.8	34.2	2814	6609	0.10
200	668	757.7	722.99	0.86	721.30	1.69	45.0	33.7	2820	6556	0.10
220	668	753.5	722.97	-0.06	721.59	1.38	45.0	29.5	2819	6098	0.09
240	683	748.6	722.80	-0.87	721.47	1.33	29.8	24.8	2364	5117	0.13
260	683	744.5	722.62	-0.87	721.41	1.21	29.6	20.8	2359	4673	0.14
280	683	740.2	722.60	-0.15	721.74	0.86	29.6	16.6	2358	4197	0.12
300	683	735.7	723.37	3.85	722.51	0.85	30.4	11.4	2361	3643	0.15
320	683	735.1	723.22	-0.71	722.50	0.73	30.2	10.9	2377	3587	0.13
340	683	734.0	722.94	-1.42	722.17	0.77	29.9	10.1	2368	3485	0.15
360	683	734.0	723.29	1.74	722.87	0.41	30.3	9.7	2379	3457	0.08
380	683	734.2	723.89	3.03	723.13	0.77	30.9	9.3	2397	3425	0.16
400	683	734.4	724.43	2.67	723.70	0.72	31.4	8.9	2413	3405	0.15
420	683	735.6	725.02	2.94	724.66	0.35	32.0	9.5	2430	3490	0.07
440	683	736.7	725.61	2.96	725.35	0.26	32.6	10.1	2448	3571	0.05
460	683	737.5	726.22	3.05	726.02	0.20	33.2	10.3	2466	3609	0.04
480	683	738.2	726.79	2.85	726.62	0.17	33.8	10.4	2484	3637	0.03
500	683	738.8	728.00	6.07	728.29	-0.29	35.0	9.8	2520	3607	-0.05
520	683	739.0	728.74	3.73	728.35	0.39	35.7	9.2	2542	3565	0.07
540	683	739.2	728.44	-1.52	728.18	0.26	35.4	9.8	2533	3618	0.05
560	690	739.3	729.00	2.82	728.76	0.24	29.0	9.3	2340	3372	0.05
580	690	739.1	729.53	2.62	729.38	0.14	29.5	8.6	2356	3305	0.03
600	691	738.9	730.06	2.70	729.92	0.15	29.1	7.8	2342	3207	0.04
620	692	738.3	730.47	2.01	730.41	0.06	28.5	6.8	2324	3078	0.02
640	693	737.7	730.90	2.15	731.32	-0.42	27.9	5.8	2307	2950	-0.14
660	693	738.6	731.69	3.95	732.07	-0.38	28.7	5.9	2331	2987	-0.12
680	692	739.3	732.23	2.75	732.30	-0.07	30.2	6.1	2377	3054	-0.02
700	691	739.5	732.44	1.03	732.40	0.04	31.4	6.0	2413	3083	0.01
720	690	738.5	731.73	-3.53	730.80	0.94	31.7	5.8	2422	3063	0.29
740	689	738.1	730.57	-5.84	729.84	0.73	31.6	6.5	2417	3138	0.20
760	689	737.5	729.90	-3.34	729.37	0.53	30.9	6.6	2397	3125	0.15
780	689	737.3	729.39	-2.53	728.79	0.60	30.4	6.9	2382	3146	0.16
800	689	737.1	728.81	-2.93	728.40	0.41	29.8	7.2	2364	3168	0.11
820	689	736.7	728.36	-2.26	727.91	0.45	29.4	7.4	2351	3170	0.12
840	689	736.4	727.68	-3.39	727.18	0.50	28.7	7.7	2330	3186	0.13
860	690	735.9	727.18	-2.51	726.70	0.47	27.7	7.8	2300	3162	0.12
880	690	735.1	726.73	-2.23	726.27	0.46	27.2	7.4	2287	3106	0.13
900	690	734.5	726.52	-1.08	726.88	-0.36	26.5	7.0	2265	3041	-0.11
920	690	734.8	726.58	0.32	725.02	1.55	26.6	7.2	2267	3069	0.45
940	688	736.0	725.20	-6.93	724.39	0.81	27.2	9.8	2286	3374	0.18
960	686	737.3	724.78	-2.06	724.46	0.32	29.3	11.5	2349	3627	0.06
980	683	737.8	724.82	0.17	724.55	0.27	31.8	12.0	2425	3754	0.05
1000	681	740.7	724.94	0.60	724.51	0.43	33.9	14.8	2488	4131	0.06
1020	681	744.2	725.01	0.37	724.61	0.40	34.0	18.2	2490	4509	0.05
1040	680	743.7	725.02	0.03	724.66	0.36	35.0	17.7	2521	4483	0.04
1060	679	740.4	724.88	-0.69	724.19	0.69	35.9	14.6	2546	4162	0.09
1080	679	739.6	724.73	-0.79	724.02	0.71	35.7	13.9	2542	4000	0.10
1100	679	740.0	724.82	0.47	724.21	0.61	36.3	14.2	2560	4134	0.08
1120	679	740.0	725.05	1.13	725.54	-0.49	36.5	14.0	2566	4115	-0.07
1140	678	740.0	726.41	6.82	724.99	1.42	38.4	12.6	2622	4020	0.20
1160	678	740.0	725.29	-5.58	724.31	0.98	37.3	13.7	2589	4110	0.13
1180	678	737.5	724.85	-2.22	724.34	0.51	36.8	11.6	2575	3865	0.08
1200	678	735.0	724.63	-1.10	724.58	0.05	36.6	9.3	2569	3605	0.01
1220	678	732.2	725.14	2.57	724.89	0.25	37.1	6.0	2584	3252	0.07
1240	678	731.6	724.95	-0.98	724.16	0.79	36.9	5.6	2578	3202	0.23
1260	678	730.6	724.00	-4.76	723.82	0.18	36.5	5.6	2565	3188	0.05
1280	678	729.2	723.64	-1.79	723.36	0.28	36.1	4.6	2554	3059	0.10
1300	677	726.9	723.23	-2.06	723.32	-0.09	36.2	2.7	2557	2856	-0.05

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - December 2005 Monitoring Event											
		1/3/06	Baseline		12/22/05				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.94						
40			724.91	-28.32	723.22	1.69					
60	668	735.5	721.83	-15.57	720.36	1.48	43.8	12.7	2785	4191	0.19
80	668	742.3	721.14	-3.50	719.30	1.84	43.1	20.2	2764	5005	0.17
100	668	748.4	721.42	1.44	719.58	1.85	43.4	25.9	2773	5653	0.14
120	668	750.2	721.81	1.93	719.64	2.18	43.8	27.4	2784	5823	0.15
140	668	755.5	722.17	1.78	719.81	2.35	44.2	32.4	2795	6366	0.15
160	668	758.0	722.60	2.19	720.43	2.18	44.6	34.4	2808	6626	0.13
180	668	758.0	722.81	1.05	721.08	1.74	44.8	34.2	2814	6609	0.10
200	668	757.7	722.99	0.86	721.16	1.82	45.0	33.7	2820	6556	0.11
220	668	753.5	722.97	-0.06	721.48	1.50	45.0	29.5	2819	6098	0.10
240	683	748.6	722.80	-0.87	721.30	1.50	29.8	24.8	2364	5117	0.15
260	683	744.5	722.62	0.87	721.28	1.34	29.6	20.8	2359	4673	0.15
280	683	740.2	722.60	-0.15	721.60	1.00	29.6	16.6	2358	4197	0.13
300	683	735.7	723.37	3.85	722.34	1.02	30.4	11.4	2381	3643	0.18
320	683	735.1	723.22	-0.71	722.38	0.84	30.2	10.9	2377	3587	0.16
340	683	734.0	722.94	-1.42	722.07	0.87	29.9	10.1	2368	3485	0.17
360	683	734.0	723.29	1.74	722.75	0.54	30.3	9.7	2379	3457	0.11
380	683	734.2	723.89	3.03	722.94	0.95	30.9	9.3	2397	3425	0.20
400	683	734.4	724.43	2.67	723.58	0.84	31.4	8.9	2413	3405	0.18
420	683	735.6	725.02	2.94	724.53	0.49	32.0	9.5	2430	3490	0.10
440	683	736.7	725.61	2.96	725.18	0.43	32.6	10.1	2448	3571	0.08
460	683	737.5	726.22	3.05	725.91	0.30	33.2	10.3	2466	3609	0.06
480	683	738.2	726.79	2.85	726.50	0.29	33.8	10.4	2484	3637	0.05
500	683	738.8	728.00	6.07	728.13	-0.13	35.0	9.8	2520	3607	-0.02
520	683	739.0	728.74	3.73	728.24	0.50	35.7	9.2	2542	3565	0.10
540	683	739.2	728.44	-1.52	728.07	0.37	35.4	9.8	2533	3618	0.07
560	690	739.3	729.00	2.82	728.70	0.31	29.0	9.3	2340	3372	0.07
580	690	739.1	729.53	2.62	729.28	0.25	29.5	8.6	2356	3305	0.06
600	691	738.9	730.06	2.70	729.67	0.40	29.1	7.8	2342	3207	0.10
620	692	738.3	730.47	2.01	730.25	0.21	28.5	6.8	2324	3076	0.06
640	693	737.7	730.90	2.15	731.09	-0.19	27.9	5.8	2307	2950	-0.06
660	693	736.6	731.69	3.95	731.93	-0.24	28.7	5.9	2331	2987	-0.08
680	692	739.3	732.23	2.75	732.20	0.04	30.2	6.1	2377	3054	0.01
700	691	739.5	732.44	1.03	732.32	0.12	31.4	6.0	2413	3083	0.04
720	690	738.5	731.73	-3.53	730.68	1.06	31.7	5.8	2422	3063	0.33
740	689	738.1	730.57	-5.84	729.73	0.84	31.6	6.5	2417	3138	0.24
760	689	737.5	729.90	-3.34	729.25	0.65	30.9	6.6	2397	3125	0.18
780	689	737.3	729.39	-2.53	728.71	0.69	30.4	6.9	2382	3146	0.19
800	689	737.1	728.81	-2.93	728.28	0.53	29.8	7.2	2364	3168	0.14
820	689	736.7	728.36	-2.26	727.70	0.66	29.4	7.4	2351	3170	0.17
840	689	736.4	727.68	-3.39	727.08	0.60	28.7	7.7	2330	3186	0.15
860	690	735.9	727.18	-2.51	726.59	0.59	27.7	7.8	2300	3162	0.15
880	690	735.1	726.73	-2.23	726.03	0.70	27.2	7.4	2287	3106	0.19
900	690	734.5	726.52	-1.08	726.66	-0.14	26.5	7.0	2265	3041	-0.04
920	690	734.8	726.58	0.32	724.88	1.70	26.6	7.2	2267	3069	0.49
940	688	736.0	725.20	-6.93	724.19	1.00	27.2	9.8	2286	3374	0.22
960	686	737.3	724.78	-2.06	724.35	0.44	29.3	11.5	2349	3627	0.08
980	683	737.8	724.82	0.17	724.32	0.50	31.8	12.0	2425	3754	0.08
1000	681	740.7	724.94	0.60	724.37	0.57	33.9	14.8	2488	4131	0.08
1020	681	744.2	725.01	0.37	724.34	0.68	34.0	18.2	2490	4509	0.08
1040	680	743.7	725.02	0.03	724.43	0.59	35.0	17.7	2521	4483	0.07
1060	679	740.4	724.88	-0.69	724.07	0.82	35.9	14.6	2546	4162	0.11
1080	679	739.6	724.73	-0.79	723.88	0.84	35.7	13.9	2542	4086	0.11
1100	679	740.0	724.82	0.47	723.95	0.87	36.3	14.2	2560	4134	0.12
1120	679	740.0	725.05	1.13	725.41	-0.36	36.5	14.0	2566	4115	-0.05
1140	678	740.0	726.41	6.82	724.73	1.68	38.4	12.6	2622	4020	0.24
1160	678	740.0	725.29	-5.58	724.09	1.21	37.3	13.7	2589	4110	0.16
1180	678	737.5	724.85	-2.22	724.07	0.78	36.8	11.6	2575	3865	0.12
1200	678	735.0	724.63	-1.10	724.32	0.31	36.6	9.3	2569	3605	0.06
1220	678	732.2	725.14	2.57	724.73	0.41	37.1	6.0	2584	3252	0.11
1240	678	731.6	724.95	-0.98	723.92	1.03	36.9	5.6	2578	3202	0.30
1260	678	730.6	724.00	-4.76	723.58	0.42	36.5	5.6	2565	3188	0.12
1280	678	729.2	723.64	-1.79	723.13	0.51	36.1	4.6	2554	3059	0.18
1300	677	726.9	723.23	-2.06	723.03	0.20	36.2	2.7	2557	2856	0.11

Estimation of Modified Compression Index											
Southern East-West Profiler											
March 2006 Monitoring Event											
		3/30/06	Baseline		4/10/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.36	-					
40	668	729.7	724.91	-26.32	723.62	1.30	46.9	3.8	2877	3298	0.47
60	668	735.5	721.83	-15.57	720.70	1.14	43.8	12.7	2785	4191	0.15
80	668	742.3	721.14	-3.50	719.87	1.27	43.1	20.2	2764	5005	0.11
100	668	749.3	721.42	1.44	719.31	2.11	43.4	26.9	2773	5755	0.15
120	668	750.2	721.81	1.93	719.60	2.21	43.8	27.4	2784	5823	0.16
140	668	755.5	722.17	1.78	720.53	1.64	44.2	32.4	2795	6388	0.10
160	668	760.1	722.60	2.19	720.76	1.84	44.6	36.5	2808	6859	0.11
180	668	761.4	722.81	1.05	721.24	1.58	44.8	37.6	2814	6983	0.09
200	668	757.7	722.99	0.86	721.56	1.43	45.0	33.7	2820	6556	0.09
220	668	753.5	722.97	-0.06	721.89	1.09	45.0	29.5	2819	6098	0.07
240	683	748.6	722.80	-0.87	721.77	1.03	29.8	24.8	2364	5117	0.10
260	683	744.5	722.62	-0.87	721.64	0.98	29.6	20.8	2359	4673	0.11
280	683	740.2	722.60	-0.15	721.48	1.11	29.6	16.6	2358	4197	0.15
300	683	735.7	723.37	3.85	722.39	0.97	30.4	11.4	2381	3643	0.17
320	683	735.1	723.22	-0.71	722.39	0.83	30.2	10.9	2377	3587	0.15
340	683	734.0	722.94	-1.42	721.65	1.29	29.9	10.1	2368	3485	0.26
360	683	734.0	723.29	1.74	722.17	1.12	30.3	9.7	2379	3457	0.23
380	683	734.2	723.89	3.03	723.04	0.86	30.9	9.3	2397	3425	0.18
400	683	734.4	724.43	2.67	723.83	0.60	31.4	8.9	2413	3405	0.13
420	683	736.9	725.02	2.94	724.38	0.64	32.0	10.8	2430	3634	0.11
440	683	738.9	725.61	2.96	724.68	0.93	32.6	12.2	2448	3807	0.15
460	683	740.5	726.22	3.05	725.42	0.80	33.2	13.3	2466	3940	0.12
480	683	740.7	726.79	2.85	726.43	0.35	33.8	12.9	2484	3917	0.05
500	683	741.5	728.00	6.07	728.14	-0.14	35.0	12.5	2520	3910	-0.02
520	683	741.5	728.74	3.73	728.01	0.73	35.7	11.8	2542	3850	0.11
540	683	741.6	728.44	-1.52	728.62	-0.18	35.4	12.2	2533	3885	-0.03
560	690	742.1	729.00	2.82	729.19	-0.19	29.0	12.1	2340	3681	-0.03
580	690	741.9	729.53	2.62	729.68	-0.15	29.5	11.4	2356	3618	-0.03
600	691	739.0	730.06	2.70	730.04	0.02	29.1	7.9	2342	3217	0.01
620	692	738.3	730.47	2.01	730.74	-0.28	28.5	6.8	2324	3078	-0.08
640	693	737.7	730.90	2.15	731.17	-0.28	27.9	5.8	2307	2950	-0.09
660	693	738.6	731.69	3.95	732.24	-0.55	28.7	5.9	2331	2987	-0.18
680	692	739.3	732.23	2.75	732.48	-0.25	30.2	6.1	2377	3054	-0.08
700	691	739.5	732.44	1.03	732.46	-0.02	31.4	6.0	2413	3081	-0.01
720	690	738.5	731.73	-3.53	730.91	0.83	31.7	5.8	2422	3063	0.25
740	689	738.1	730.57	-5.84	729.65	0.92	31.6	6.5	2417	3138	0.26
760	689	737.5	729.90	-3.34	729.48	0.42	30.9	6.6	2397	3125	0.12
780	689	737.3	729.39	-2.53	728.89	0.50	30.4	6.9	2382	3146	0.14
800	689	737.1	728.81	-2.93	728.29	0.52	29.8	7.2	2364	3168	0.14
820	689	736.7	728.36	-2.26	727.56	0.80	29.4	7.4	2351	3170	0.21
840	689	736.4	727.68	-3.39	727.19	0.49	28.7	7.7	2330	3186	0.13
860	690	735.9	727.18	-2.51	726.65	0.53	27.7	7.8	2300	3162	0.14
880	690	735.1	726.73	-2.23	726.32	0.42	27.2	7.4	2287	3106	0.11
900	690	734.7	726.52	-1.08	726.19	0.33	26.5	7.2	2265	3060	0.09
920	690	737.7	726.58	0.32	725.46	1.12	26.6	10.1	2267	3389	0.24
940	688	739.2	725.20	-6.93	724.68	0.52	27.2	13.0	2286	3730	0.09
960	686	740.2	724.78	-2.06	724.36	0.42	29.3	14.4	2349	3944	0.06
980	683	742.1	724.82	0.17	724.46	0.35	31.8	16.3	2425	4228	0.05
1000	681	744.6	724.94	0.60	724.42	0.52	33.9	18.7	2488	4561	0.06
1020	681	747.2	725.01	0.37	724.19	0.83	34.0	21.2	2490	4845	0.08
1040	680	749.9	725.02	0.03	723.90	1.12	35.0	23.8	2521	5167	0.10
1060	679	752.6	724.88	-0.69	723.76	1.12	35.9	26.8	2546	5517	0.09
1080	679	754.3	724.73	-0.79	723.38	1.34	35.7	28.6	2542	5712	0.11
1100	679	754.3	724.82	0.47	723.44	1.38	36.3	28.5	2560	5718	0.11
1120	679	754.0	725.05	1.13	724.45	0.60	36.5	28.0	2566	5671	0.05
1140	678	753.7	726.41	6.82	724.24	2.17	38.4	26.3	2622	5536	0.17
1160	678	753.4	725.29	-5.58	723.43	1.87	37.3	27.1	2589	5602	0.15
1180	678	753.1	724.85	-2.22	723.08	1.77	36.8	27.3	2575	5604	0.14
1200	678	752.8	724.63	-1.10	723.52	1.11	36.6	27.1	2569	5580	0.09
1220	678	752.2	725.14	2.57	723.90	1.24	37.1	26.1	2584	5480	0.10
1240	678	749.4	724.95	-0.98	723.25	1.70	36.9	23.4	2578	5176	0.15
1260	678	744.6	724.00	-4.76	722.93	1.07	36.5	19.6	2565	4740	0.11
1280	678	739.2	723.64	-1.79	722.78	0.86	36.1	14.6	2554	4175	0.11
1300	677	733.3	723.23	-2.06	723.17	0.06	36.2	9.1	2557	3567	0.01

Estimation of Modified Compression Index
Southern East-West Profiler
95% Confidence Upper Limit - March 2006 Monitoring Event

		3/30/06	Baseline		4/10/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.50						
40	668	729.7	724.91	-28.32	723.80	1.11	46.9	3.8	2877	3298	0.40
60	668	735.5	721.83	-15.57	720.76	1.08	43.8	12.7	2785	4191	0.14
80	668	742.3	721.14	-3.50	719.97	1.17	43.1	20.2	2764	5005	0.11
100	668	749.3	721.42	1.44	719.40	2.03	43.4	26.9	2773	5755	0.15
120	668	750.2	721.81	1.93	719.66	2.15	43.8	27.4	2784	5823	0.15
140	668	755.5	722.17	1.78	720.79	1.38	44.2	32.4	2795	6388	0.09
160	668	760.1	722.60	2.19	720.80	1.80	44.6	36.5	2808	6859	0.10
180	668	761.4	722.81	1.05	721.31	1.51	44.8	37.6	2814	6983	0.09
200	668	757.7	722.99	0.86	721.62	1.36	45.0	33.7	2820	6556	0.08
220	668	753.5	722.97	-0.06	721.94	1.03	45.0	29.5	2819	6098	0.07
240	683	748.6	722.80	-0.87	721.85	0.94	29.8	24.8	2364	5117	0.09
260	683	744.5	722.62	-0.87	721.71	0.92	29.6	20.8	2359	4673	0.10
280	683	740.2	722.60	-0.15	721.55	1.04	29.6	16.6	2358	4197	0.14
300	683	735.7	723.07	3.05	722.48	0.80	30.4	11.4	2381	3643	0.16
320	683	735.1	723.22	-0.71	722.45	0.77	30.2	10.9	2377	3587	0.14
340	683	734.0	722.94	-1.42	721.70	1.24	29.9	10.1	2368	3485	0.25
360	683	734.0	723.29	1.74	722.24	1.05	30.3	9.7	2379	3457	0.21
380	683	734.2	723.89	3.03	723.13	0.76	30.9	9.3	2397	3425	0.16
400	683	734.4	724.43	2.67	723.89	0.54	31.4	8.9	2413	3405	0.11
420	683	736.9	725.02	2.94	724.44	0.57	32.0	10.8	2430	3634	0.10
440	683	738.9	725.61	2.96	724.77	0.84	32.6	12.2	2448	3807	0.13
460	683	740.5	726.22	3.05	725.47	0.75	33.2	13.3	2466	3940	0.11
480	683	740.7	726.79	2.85	726.49	0.29	33.8	12.9	2484	3917	0.04
500	683	741.5	728.00	6.07	728.22	-0.22	35.0	12.5	2520	3910	-0.03
520	683	741.5	728.74	3.73	728.07	0.68	35.7	11.8	2542	3850	0.11
540	683	741.6	728.44	-1.52	728.67	-0.24	35.4	12.2	2533	3885	-0.04
560	690	742.1	729.00	2.82	729.23	-0.22	29.0	12.1	2340	3681	-0.04
580	690	741.9	729.53	2.62	729.73	-0.21	29.5	11.4	2356	3618	-0.04
600	691	739.0	730.06	2.70	730.17	-0.10	29.1	7.9	2342	3217	-0.03
620	692	738.3	730.47	2.01	730.82	-0.35	28.5	6.8	2324	3078	-0.10
640	693	737.7	730.90	2.15	731.29	-0.40	27.9	5.8	2307	2950	-0.13
660	693	738.6	731.69	3.95	732.31	-0.62	28.7	5.9	2331	2987	-0.20
680	692	739.3	732.23	2.75	732.54	-0.30	30.2	6.1	2377	3054	-0.09
700	691	739.5	732.44	1.03	732.50	-0.06	31.4	6.0	2413	3081	-0.02
720	690	738.5	731.73	-3.53	730.97	0.77	31.7	5.8	2422	3063	0.24
740	689	738.1	730.57	-5.84	729.70	0.87	31.6	6.5	2417	3138	0.24
760	689	737.5	729.90	-3.34	729.53	0.37	30.9	6.6	2397	3125	0.10
780	689	737.3	729.39	-2.53	728.94	0.46	30.4	6.9	2382	3146	0.13
800	689	737.1	728.81	-2.93	728.35	0.46	29.8	7.2	2364	3168	0.12
820	689	736.7	728.36	-2.26	727.67	0.69	29.4	7.4	2351	3170	0.18
840	689	736.4	727.68	-3.39	727.24	0.44	28.7	7.7	2330	3186	0.11
860	690	735.9	727.18	-2.51	726.70	0.47	27.7	7.8	2300	3162	0.12
880	690	735.1	726.73	-2.23	726.43	0.30	27.2	7.4	2287	3106	0.08
900	690	734.7	726.52	-1.08	726.30	0.21	26.5	7.2	2265	3060	0.06
920	690	737.7	726.58	0.32	725.53	1.05	26.6	10.1	2267	3389	0.23
940	688	739.2	725.20	-6.93	724.77	0.42	27.2	13.0	2286	3730	0.07
960	686	740.2	724.78	-2.06	724.42	0.36	29.3	14.4	2349	3944	0.06
980	683	742.1	724.82	0.17	724.58	0.24	31.8	16.3	2425	4228	0.03
1000	681	744.6	724.94	0.60	724.49	0.45	33.9	18.7	2488	4561	0.05
1020	681	747.2	725.01	0.37	724.32	0.69	34.0	21.2	2490	4845	0.07
1040	680	749.9	725.02	0.03	724.01	1.01	35.0	23.8	2521	5167	0.09
1060	679	752.6	724.88	-0.69	723.82	1.06	35.9	26.8	2546	5517	0.09
1080	679	754.3	724.73	-0.79	723.45	1.28	35.7	28.6	2542	5712	0.10
1100	679	754.3	724.82	0.47	723.57	1.25	36.3	28.5	2560	5718	0.10
1120	679	754.0	725.05	1.13	724.52	0.53	36.5	28.0	2566	5671	0.04
1140	678	753.7	726.41	6.82	724.37	2.03	38.4	26.3	2622	5536	0.16
1160	678	753.4	725.29	-5.58	723.54	1.76	37.3	27.1	2589	5602	0.14
1180	678	753.1	724.85	-2.22	723.21	1.64	36.8	27.3	2575	5604	0.13
1200	678	752.8	724.63	-1.10	723.65	0.98	36.6	27.1	2569	5580	0.08
1220	678	752.2	725.14	2.57	723.99	1.16	37.1	26.1	2584	5480	0.10
1240	678	749.4	724.95	-0.98	723.37	1.58	36.9	23.4	2578	5176	0.14
1260	678	744.6	724.00	-4.76	723.05	0.95	36.5	19.6	2565	4740	0.10
1280	678	739.2	723.64	-1.79	722.89	0.75	36.1	14.6	2554	4175	0.10
1300	677	733.3	723.23	-2.06	723.31	-0.08	36.2	9.1	2557	3567	-0.02

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit -March 2006 Monitoring Event											
		3/30/06	Baseline		4/10/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.22						
40	668	729.7	724.91	-28.32	723.43	1.48	46.9	3.8	2877	3298	0.53
60	668	735.5	721.83	-15.57	720.64	1.20	43.8	12.7	2785	4191	0.15
80	668	742.3	721.14	-3.50	719.77	1.37	43.1	20.2	2764	5005	0.12
100	668	749.3	721.42	1.44	719.22	2.20	43.4	26.9	2773	5755	0.16
120	668	750.2	721.81	1.93	719.54	2.27	43.8	27.4	2784	5823	0.16
140	668	755.5	722.17	1.78	720.27	1.90	44.2	32.4	2795	6388	0.12
160	668	760.1	722.60	2.19	720.72	1.88	44.6	36.5	2808	6859	0.11
180	668	761.4	722.81	1.05	721.17	1.65	44.8	37.6	2814	6983	0.09
200	668	757.7	722.99	0.86	721.49	1.50	45.0	33.7	2820	6556	0.09
220	668	753.5	722.97	-0.06	721.83	1.14	45.0	29.5	2819	6098	0.08
240	683	748.6	722.80	-0.87	721.68	1.12	29.8	24.8	2364	5117	0.11
260	683	744.5	722.62	-0.87	721.58	1.05	29.6	20.8	2359	4673	0.12
280	683	740.2	722.60	-0.15	721.41	1.19	29.6	16.6	2358	4197	0.16
300	683	735.7	723.37	3.85	722.31	1.06	30.4	11.4	2381	3643	0.19
320	683	735.1	723.22	-0.71	722.34	0.89	30.2	10.9	2377	3587	0.16
340	683	734.0	722.94	-1.42	721.60	1.34	29.9	10.1	2368	3485	0.27
360	683	734.0	723.29	1.74	722.11	1.18	30.3	9.7	2379	3457	0.24
380	683	734.2	723.89	3.03	722.94	0.95	30.9	9.3	2397	3425	0.20
400	683	734.4	724.43	2.67	723.77	0.66	31.4	8.9	2413	3405	0.14
420	683	736.9	725.02	2.94	724.31	0.71	32.0	10.8	2430	3634	0.13
440	683	738.9	725.61	2.96	724.59	1.01	32.6	12.2	2448	3807	0.16
460	683	740.5	726.22	3.05	725.36	0.85	33.2	13.3	2466	3940	0.13
480	683	740.7	726.79	2.85	726.37	0.41	33.8	12.9	2484	3917	0.06
500	683	741.5	728.00	6.07	728.06	-0.06	35.0	12.5	2520	3910	-0.01
520	683	741.5	728.74	3.73	727.96	0.78	35.7	11.8	2542	3850	0.12
540	683	741.6	728.44	-1.52	728.56	-0.12	35.4	12.2	2533	3885	-0.02
560	690	742.1	729.00	2.82	729.16	-0.16	29.0	12.1	2340	3681	-0.03
580	690	741.9	729.53	2.62	729.63	-0.10	29.5	11.4	2356	3618	-0.02
600	691	739.0	730.06	2.70	729.91	0.15	29.1	7.9	2342	3217	0.04
620	692	738.3	730.47	2.01	730.67	-0.20	28.5	6.8	2324	3078	-0.06
640	693	737.7	730.90	2.15	731.06	-0.16	27.9	5.8	2307	2950	-0.05
660	693	738.6	731.69	3.95	732.17	-0.48	28.7	5.9	2331	2987	-0.16
680	692	739.3	732.23	2.75	732.43	-0.20	30.2	6.1	2377	3054	-0.06
700	691	739.5	732.44	1.03	732.42	0.02	31.4	6.0	2413	3081	0.00
720	690	738.5	731.73	-3.53	730.85	0.88	31.7	5.8	2422	3063	0.27
740	689	738.1	730.57	-5.84	729.59	0.98	31.6	6.5	2417	3138	0.27
760	689	737.5	729.90	-3.34	729.42	0.48	30.9	6.6	2397	3125	0.14
780	689	737.3	729.39	-2.53	728.85	0.54	30.4	6.9	2382	3146	0.15
800	689	737.1	728.81	-2.93	728.23	0.58	29.8	7.2	2364	3168	0.15
820	689	736.7	728.36	-2.26	727.45	0.90	29.4	7.4	2351	3170	0.24
840	689	736.4	727.68	-3.39	727.14	0.53	28.7	7.7	2330	3186	0.14
860	690	735.9	727.18	-2.51	726.59	0.58	27.7	7.8	2300	3162	0.15
880	690	735.1	726.73	-2.23	726.20	0.53	27.2	7.4	2287	3106	0.15
900	690	734.7	726.52	-1.08	726.08	0.44	26.5	7.2	2265	3060	0.13
920	690	737.7	726.58	0.32	725.39	1.19	26.6	10.1	2267	3389	0.26
940	688	739.2	725.20	-6.93	724.58	0.61	27.2	13.0	2286	3730	0.11
960	686	740.2	724.78	-2.06	724.30	0.48	29.3	14.4	2349	3944	0.07
980	683	742.1	724.82	0.17	724.35	0.47	31.8	16.3	2425	4228	0.06
1000	681	744.6	724.94	0.60	724.35	0.59	33.9	18.7	2488	4561	0.07
1020	681	747.2	725.01	0.37	724.05	0.96	34.0	21.2	2490	4845	0.10
1040	680	749.9	725.02	0.03	723.79	1.23	35.0	23.8	2521	5167	0.11
1060	679	752.6	724.86	-0.69	723.70	1.16	35.9	26.8	2546	5517	0.10
1080	679	754.3	724.73	-0.79	723.31	1.41	35.7	28.6	2542	5712	0.11
1100	679	754.3	724.82	0.47	723.31	1.51	36.3	28.5	2560	5718	0.12
1120	679	754.0	725.05	1.13	724.38	0.66	36.5	28.0	2566	5671	0.05
1140	678	753.7	726.41	6.82	724.11	2.30	38.4	26.3	2622	5536	0.18
1160	678	753.4	725.29	-5.56	723.32	1.98	37.3	27.1	2589	5602	0.16
1180	678	753.1	724.85	-2.22	722.94	1.91	36.8	27.3	2575	5604	0.15
1200	678	752.8	724.63	-1.10	723.39	1.24	36.6	27.1	2569	5580	0.10
1220	678	752.2	725.14	2.57	723.82	1.32	37.1	26.1	2584	5480	0.11
1240	678	749.4	724.95	-0.98	723.13	1.82	36.9	23.4	2578	5176	0.16
1260	678	744.6	724.00	-4.76	722.81	1.19	36.5	19.6	2565	4740	0.12
1280	678	739.2	723.64	-1.79	722.66	0.98	36.1	14.6	2554	4175	0.13
1300	677	733.3	723.23	-2.06	723.02	0.20	36.2	9.1	2557	3567	0.04

Estimation of Modified Compression Index
Southern East-West Profiler
June 2006 Monitoring Event

		6/29/06	Baseline		6/30/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.17	-					
40	668	729.7	724.91	-28.32	723.18	1.73	46.9	3.8	2877	3298	0.62
60	668	735.5	721.83	-15.57	720.65	1.19	43.8	12.7	2785	4191	0.15
80	668	742.3	721.14	-3.50	720.11	1.03	43.1	20.2	2764	5005	0.09
100	668	749.3	721.42	1.44	719.45	1.97	43.4	26.9	2773	5755	0.14
120	668	750.2	721.81	1.93	719.56	2.25	43.8	27.4	2784	5823	0.16
140	668	755.5	722.17	1.78	720.26	1.91	44.2	32.4	2795	6388	0.12
160	668	760.1	722.60	2.19	720.58	2.03	44.6	36.5	2808	6859	0.12
180	668	761.4	722.81	1.05	720.88	1.93	44.8	37.6	2814	6983	0.11
200	668	757.7	722.99	0.86	721.23	1.75	45.0	33.7	2820	6556	0.11
220	668	753.5	722.97	-0.06	721.04	1.93	45.0	29.5	2819	6098	0.13
240	683	748.6	722.80	-0.87	721.32	1.48	29.8	24.8	2364	5117	0.15
260	683	744.5	722.62	-0.87	721.46	1.15	29.6	20.8	2359	4673	0.13
280	683	740.2	722.60	-0.15	721.45	1.14	29.6	16.6	2358	4197	0.15
300	683	736.7	723.37	3.85	722.00	1.36	30.4	11.4	2301	3640	0.24
320	683	735.1	723.22	-0.71	722.79	0.44	30.2	10.9	2377	3587	0.08
340	683	734.0	722.94	-1.42	721.32	1.62	29.9	10.1	2368	3485	0.32
360	683	734.7	723.29	1.74	722.15	1.14	30.3	10.5	2379	3539	0.22
380	683	735.3	723.89	3.03	722.75	1.14	30.9	10.4	2397	3556	0.21
400	683	737.0	724.43	2.67	723.25	1.17	31.4	11.6	2413	3701	0.20
420	683	738.7	725.02	2.94	723.70	1.32	32.0	12.7	2430	3837	0.21
440	683	739.8	725.61	2.96	724.15	1.45	32.6	13.2	2448	3913	0.22
460	683	740.9	726.22	3.05	725.08	1.13	33.2	13.7	2466	3984	0.16
480	683	741.0	726.79	2.85	725.78	1.01	33.8	13.2	2484	3951	0.15
500	683	741.5	728.00	6.07	727.64	0.36	35.0	12.5	2520	3908	0.05
520	683	742.5	728.74	3.73	727.60	1.14	35.7	12.7	2542	3954	0.17
540	683	744.4	728.44	-1.52	727.96	0.48	35.4	14.9	2533	4192	0.06
560	690	745.7	729.00	2.82	728.90	0.10	29.0	15.7	2340	4083	0.01
580	690	750.4	729.53	2.62	729.09	0.43	29.5	19.9	2356	4566	0.05
600	691	755.5	730.06	2.70	729.21	0.85	29.1	24.4	2342	5051	0.09
620	692	756.0	730.47	2.01	729.79	0.68	28.5	24.5	2324	5047	0.07
640	693	756.0	730.90	2.15	730.67	0.22	27.9	24.1	2307	4982	0.02
660	693	756.0	731.69	3.95	731.63	0.06	28.7	23.3	2331	4918	0.01
680	692	756.0	732.23	2.75	731.72	0.51	30.2	22.8	2377	4904	0.05
700	691	756.3	732.44	1.03	731.92	0.52	31.4	22.8	2413	4947	0.05
720	690	754.4	731.73	-3.53	730.51	1.22	31.7	21.7	2422	4827	0.13
740	689	748.6	730.57	-5.84	729.32	1.25	31.6	17.0	2417	4303	0.16
760	689	745.9	729.90	-3.34	728.88	1.02	30.9	15.0	2397	4063	0.14
780	689	744.3	729.39	-2.53	728.12	1.28	30.4	13.9	2382	3928	0.19
800	689	742.7	728.81	-2.93	727.55	1.25	29.8	12.9	2364	3791	0.21
820	689	741.3	728.36	-2.26	727.40	0.96	29.4	12.0	2351	3680	0.17
840	689	740.1	727.68	-3.39	726.75	0.93	28.7	11.4	2330	3599	0.17
860	690	738.8	727.18	-2.51	726.17	1.01	27.7	10.6	2300	3479	0.20
880	690	738.3	726.73	-2.23	725.73	1.00	27.2	10.6	2287	3464	0.20
900	690	737.9	726.52	-1.08	726.26	0.26	26.5	10.4	2265	3423	0.05
920	690	738.5	726.58	0.32	724.75	1.83	26.6	11.0	2267	3484	0.37
940	688	738.9	725.20	-6.93	724.14	1.05	27.2	12.7	2286	3699	0.18
960	686	740.2	724.78	-2.06	723.81	0.97	29.3	14.4	2349	3946	0.15
980	683	742.2	724.82	0.17	723.82	1.00	31.8	16.4	2425	4245	0.13
1000	681	744.8	724.94	0.60	723.59	1.35	33.9	18.9	2488	4585	0.15
1020	681	747.6	725.01	0.37	723.38	1.64	34.0	21.6	2490	4883	0.16
1040	680	750.6	725.02	0.03	723.17	1.85	35.0	24.5	2521	5243	0.17
1060	679	753.5	724.88	-0.69	722.83	2.05	35.9	27.6	2546	5613	0.17
1080	679	756.6	724.73	-0.79	722.68	2.05	35.7	30.9	2542	5968	0.15
1100	679	760.2	724.82	0.47	722.73	2.09	36.3	34.4	2560	6380	0.14
1120	679	763.0	725.05	1.13	723.66	1.38	36.5	36.9	2566	6667	0.09
1140	678	763.3	726.41	6.82	723.23	3.18	38.4	35.9	2622	6602	0.21
1160	678	760.7	725.29	-5.58	722.48	2.82	37.3	34.4	2589	6405	0.19
1180	678	757.7	724.85	-2.22	722.33	2.52	36.8	31.8	2575	6106	0.18
1200	678	753.9	724.63	-1.10	722.55	2.08	36.6	28.3	2569	5710	0.16
1220	678	752.6	725.14	2.57	722.82	2.32	37.1	26.5	2584	5521	0.19
1240	678	749.4	724.95	-0.98	722.24	2.71	36.9	23.4	2578	5176	0.24
1260	678	744.6	724.00	-4.76	722.07	1.93	36.5	19.6	2565	4740	0.20
1280	678	739.2	723.64	-1.79	721.96	1.68	36.1	14.6	2554	4175	0.22
1300	677	733.3	723.23	-2.06	722.13	1.10	36.2	9.1	2557	3567	0.21

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - June 2006 Monitoring Event											
		6/29/06	Baseline		6/30/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.30	-					
40	668	729.7	724.91	-28.32	723.36	1.55	46.9	3.8	2877	3298	0.56
60	668	735.5	721.83	-15.57	720.71	1.13	43.8	12.7	2785	4191	0.15
80	668	742.3	721.14	-3.50	720.21	0.93	43.1	20.2	2764	5005	0.08
100	668	749.3	721.42	1.44	719.54	1.88	43.4	26.9	2773	5755	0.14
120	668	750.2	721.81	1.93	719.63	2.19	43.8	27.4	2784	5823	0.16
140	668	755.5	722.17	1.78	720.52	1.65	44.2	32.4	2795	6388	0.10
160	668	760.1	722.60	2.19	720.62	1.99	44.6	36.5	2808	6859	0.11
180	668	761.4	722.81	1.05	720.95	1.86	44.8	37.6	2814	6983	0.11
200	668	757.7	722.99	0.86	721.30	1.69	45.0	33.7	2820	6556	0.10
220	668	753.5	722.97	-0.06	721.10	1.86	45.0	29.5	2819	6098	0.12
240	683	748.6	722.80	-0.87	721.40	1.40	29.8	24.8	2364	5117	0.14
260	683	744.5	722.62	-0.87	721.54	1.08	29.6	20.8	2359	4673	0.12
280	683	740.2	722.60	-0.15	721.52	1.07	29.6	16.6	2358	4197	0.14
300	683	735.7	723.37	3.85	722.09	1.28	30.4	11.4	2381	3643	0.23
320	683	735.1	723.22	-0.71	722.85	0.38	30.2	10.9	2377	3587	0.07
340	683	734.0	722.94	-1.42	721.37	1.57	29.9	10.1	2368	3485	0.31
360	683	734.7	723.29	1.74	722.21	1.08	30.3	10.5	2379	3539	0.21
380	683	735.3	723.89	3.03	722.85	1.04	30.9	10.4	2397	3556	0.20
400	683	737.0	724.43	2.67	723.31	1.12	31.4	11.6	2413	3701	0.19
420	683	738.7	725.02	2.94	723.77	1.25	32.0	12.7	2430	3837	0.20
440	683	739.8	725.61	2.96	724.24	1.37	32.6	13.2	2448	3913	0.21
460	683	740.9	726.22	3.05	725.14	1.08	33.2	13.7	2466	3984	0.16
480	683	741.0	726.79	2.85	725.84	0.95	33.8	13.2	2484	3951	0.14
500	683	741.5	728.00	6.07	727.72	0.28	35.0	12.5	2520	3908	0.04
520	683	742.5	728.74	3.73	727.65	1.09	35.7	12.7	2542	3954	0.16
540	683	744.4	728.44	-1.52	728.02	0.42	35.4	14.9	2533	4192	0.05
560	690	745.7	729.00	2.82	728.93	0.07	29.0	15.7	2340	4083	0.01
580	690	750.4	729.53	2.62	729.15	0.38	29.5	19.9	2356	4566	0.04
600	691	755.5	730.06	2.70	729.34	0.72	29.1	24.4	2342	5051	0.07
620	692	756.0	730.47	2.01	729.87	0.60	28.5	24.5	2324	5047	0.06
640	693	756.0	730.90	2.15	730.79	0.10	27.9	24.1	2307	4982	0.01
660	693	756.0	731.69	3.95	731.70	-0.01	28.7	23.3	2331	4918	0.00
680	692	756.0	732.23	2.75	731.77	0.46	30.2	22.8	2377	4904	0.05
700	691	756.3	732.44	1.03	731.96	0.48	31.4	22.8	2413	4947	0.05
720	690	754.4	731.73	-3.53	730.57	1.16	31.7	21.7	2422	4827	0.12
740	689	748.6	730.57	-5.84	729.38	1.19	31.6	17.0	2417	4303	0.15
760	689	745.9	729.90	-3.34	728.93	0.97	30.9	15.0	2397	4063	0.14
780	689	744.3	729.39	-2.53	728.16	1.23	30.4	13.9	2382	3928	0.19
800	689	742.7	728.81	-2.93	727.61	1.19	29.8	12.9	2364	3791	0.20
820	689	741.3	728.36	-2.26	727.51	0.85	29.4	12.0	2351	3680	0.15
840	689	740.1	727.68	-3.39	726.80	0.88	28.7	11.4	2330	3599	0.16
860	690	738.8	727.18	-2.51	726.22	0.95	27.7	10.6	2300	3479	0.19
880	690	738.3	726.73	-2.23	725.85	0.88	27.2	10.6	2287	3464	0.18
900	690	737.9	726.52	-1.08	726.37	0.15	26.5	10.4	2265	3423	0.03
920	690	738.5	726.58	0.32	724.82	1.76	26.6	11.0	2267	3484	0.36
940	688	738.9	725.20	-6.93	724.24	0.96	27.2	12.7	2286	3699	0.17
960	686	740.2	724.78	-2.06	723.87	0.92	29.3	14.4	2349	3946	0.14
980	683	742.2	724.82	0.17	723.93	0.89	31.8	16.4	2425	4245	0.11
1000	681	744.8	724.94	0.60	723.66	1.28	33.9	18.9	2488	4585	0.14
1020	681	747.6	725.01	0.37	723.52	1.50	34.0	21.6	2490	4883	0.15
1040	680	750.6	725.02	0.03	723.28	1.74	35.0	24.5	2521	5243	0.16
1060	679	753.5	724.88	-0.69	722.90	1.99	35.9	27.6	2546	5613	0.16
1080	679	756.6	724.73	-0.79	722.75	1.98	35.7	30.9	2542	5968	0.15
1100	679	760.2	724.82	0.47	722.86	1.96	36.3	34.4	2560	6380	0.14
1120	679	763.0	725.05	1.13	723.73	1.32	36.5	36.9	2566	6667	0.09
1140	678	763.3	726.41	6.82	723.36	3.05	38.4	35.9	2622	6602	0.20
1160	678	760.7	725.29	-5.58	722.59	2.71	37.3	34.4	2589	6405	0.18
1180	678	757.7	724.85	-2.22	722.46	2.39	36.8	31.8	2575	6106	0.17
1200	678	753.9	724.63	-1.10	722.68	1.95	36.6	28.3	2569	5710	0.15
1220	678	752.6	725.14	2.57	722.90	2.24	37.1	26.5	2584	5521	0.18
1240	678	749.4	724.95	-0.98	722.36	2.59	36.9	23.4	2578	5176	0.23
1260	678	744.6	724.00	-4.76	722.19	1.80	36.5	19.6	2565	4740	0.19
1280	678	739.2	723.64	-1.79	722.07	1.56	36.1	14.6	2554	4175	0.20
1300	677	733.3	723.23	-2.06	722.28	0.95	36.2	9.1	2557	3567	0.18

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - June 2006 Monitoring Event											
		6/29/06	Baseline		6/30/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.03	-					
40	668	729.7	724.91	-28.32	723.00	1.91	46.9	3.8	2877	3298	0.69
60	668	735.5	721.83	-15.57	720.58	1.25	43.8	12.7	2785	4191	0.16
80	668	742.3	721.14	-3.50	720.01	1.12	43.1	20.2	2764	5005	0.10
100	668	749.3	721.42	1.44	719.37	2.06	43.4	26.9	2773	5755	0.15
120	668	750.2	721.81	1.93	719.50	2.31	43.8	27.4	2784	5823	0.16
140	668	755.5	722.17	1.78	719.99	2.17	44.2	32.4	2795	6388	0.14
160	668	760.1	722.60	2.19	720.54	2.07	44.6	36.5	2808	6859	0.12
180	668	761.4	722.81	1.05	720.81	2.00	44.8	37.6	2814	6983	0.11
200	668	757.7	722.99	0.86	721.16	1.82	45.0	33.7	2820	6556	0.11
220	668	753.5	722.97	-0.06	720.98	1.99	45.0	29.5	2819	6098	0.13
240	683	748.6	722.80	-0.87	721.23	1.57	29.8	24.8	2364	5117	0.16
260	683	744.5	722.62	-0.87	721.41	1.21	29.6	20.8	2350	4673	0.14
280	683	740.2	722.60	-0.15	721.38	1.21	29.6	16.6	2358	4197	0.16
300	683	738.7	723.37	3.85	721.92	1.45	30.4	11.4	2381	3643	0.26
320	683	735.1	723.22	-0.71	722.73	0.49	30.2	10.9	2377	3587	0.09
340	683	734.0	722.94	-1.42	721.27	1.68	29.9	10.1	2368	3485	0.33
360	683	734.7	723.29	1.74	722.08	1.21	30.3	10.5	2379	3539	0.23
380	683	735.3	723.89	3.03	722.66	1.23	30.9	10.4	2397	3556	0.23
400	683	737.0	724.43	2.67	723.19	1.23	31.4	11.6	2413	3701	0.21
420	683	738.7	725.02	2.94	723.63	1.39	32.0	12.7	2430	3837	0.22
440	683	739.8	725.61	2.96	724.07	1.54	32.6	13.2	2448	3913	0.23
460	683	740.9	726.22	3.05	725.03	1.19	33.2	13.7	2466	3984	0.17
480	683	741.0	726.79	2.85	725.72	1.07	33.8	13.2	2484	3951	0.16
500	683	741.5	728.00	6.07	727.56	0.44	35.0	12.5	2520	3908	0.07
520	683	742.5	728.74	3.73	727.55	1.20	35.7	12.7	2542	3954	0.17
540	683	744.4	728.44	-1.52	727.91	0.53	35.4	14.9	2533	4192	0.07
560	690	745.7	729.00	2.82	728.87	0.13	29.0	15.7	2340	4083	0.02
580	690	750.4	729.53	2.62	729.04	0.49	29.5	19.9	2356	4566	0.06
600	691	755.5	730.06	2.70	729.09	0.98	29.1	24.4	2342	5051	0.10
620	692	756.0	730.47	2.01	729.71	0.75	28.5	24.5	2324	5047	0.08
640	693	756.0	730.90	2.15	730.56	0.34	27.9	24.1	2307	4982	0.04
660	693	756.0	731.69	3.95	731.56	0.13	28.7	23.3	2331	4918	0.01
680	692	756.0	732.23	2.75	731.67	0.57	30.2	22.8	2377	4904	0.06
700	691	756.3	732.44	1.03	731.88	0.56	31.4	22.8	2413	4947	0.06
720	690	754.4	731.73	-3.53	730.45	1.28	31.7	21.7	2422	4827	0.14
740	689	748.6	730.57	-5.84	729.26	1.31	31.6	17.0	2417	4303	0.17
760	689	745.9	729.90	-3.34	728.82	1.08	30.9	15.0	2397	4063	0.15
780	689	744.3	729.39	-2.53	728.08	1.32	30.4	13.9	2382	3928	0.20
800	689	742.7	728.81	-2.93	727.50	1.31	29.8	12.9	2364	3791	0.21
820	689	741.3	728.36	-2.26	727.29	1.06	29.4	12.0	2351	3680	0.19
840	689	740.1	727.68	-3.39	726.70	0.98	28.7	11.4	2330	3599	0.18
860	690	738.8	727.18	-2.51	726.11	1.06	27.7	10.6	2300	3479	0.21
880	690	738.3	726.73	-2.23	725.61	1.12	27.2	10.6	2287	3464	0.23
900	690	737.9	726.52	-1.08	726.14	0.37	26.5	10.4	2265	3423	0.08
920	690	738.5	726.58	0.32	724.68	1.90	26.6	11.0	2267	3484	0.38
940	688	738.9	725.20	-6.93	724.05	1.15	27.2	12.7	2286	3699	0.20
960	686	740.2	724.78	-2.06	723.75	1.03	29.3	14.4	2349	3946	0.16
980	683	742.2	724.82	0.17	723.70	1.12	31.8	16.4	2425	4245	0.14
1000	681	744.8	724.94	0.60	723.52	1.42	33.9	18.9	2488	4585	0.16
1020	681	747.6	725.01	0.37	723.24	1.77	34.0	21.6	2490	4883	0.18
1040	680	750.6	725.02	0.03	723.06	1.96	35.0	24.5	2521	5243	0.18
1060	679	753.5	724.88	-0.69	722.77	2.11	35.9	27.6	2546	5613	0.17
1080	679	756.6	724.73	-0.79	722.61	2.11	35.7	30.9	2542	5968	0.16
1100	679	760.2	724.82	0.47	722.60	2.22	36.3	34.4	2560	6380	0.15
1120	679	763.0	725.05	1.13	723.60	1.45	36.5	36.9	2566	6667	0.10
1140	678	763.3	726.41	6.82	723.10	3.31	38.4	35.9	2622	6602	0.22
1160	678	760.7	725.29	-5.58	722.36	2.93	37.3	34.4	2589	6405	0.20
1180	678	757.7	724.85	-2.22	722.19	2.66	36.8	31.8	2575	6106	0.19
1200	678	753.9	724.63	-1.10	722.42	2.21	36.6	28.3	2569	5710	0.17
1220	678	752.6	725.14	2.57	722.74	2.41	37.1	26.5	2584	5521	0.20
1240	678	749.4	724.95	-0.98	722.11	2.83	36.9	23.4	2578	5176	0.25
1260	678	744.6	724.00	-4.76	721.95	2.05	36.5	19.6	2565	4740	0.21
1280	678	739.2	723.64	-1.79	721.85	1.79	36.1	14.6	2554	4175	0.23
1300	677	733.3	723.23	-2.06	721.99	1.24	36.2	9.1	2557	3567	0.24

Estimation of Modified Compression Index
Southern East-West Profiler
September 2006 Monitoring Event

Station	MC V T Liner Elev	9/29/06 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	9/26/06 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast Initial	Stress @ Midpoint of MC V Wast Final	Estimated Modif. Compres Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.09	-					
40	668	733.1	724.91	-28.32	723.54	1.37	46.9	7.2	2877	3672	0.28
60	668	735.8	721.83	-15.57	720.27	1.57	43.8	13.0	2785	4229	0.20
80	668	739.4	721.14	-3.50	719.63	1.50	43.1	17.2	2764	4677	0.15
100	668	743.1	721.42	1.44	719.67	1.75	43.4	20.7	2773	5071	0.15
120	668	747.2	721.81	1.93	719.98	1.83	43.8	24.4	2784	5489	0.14
140	668	751.4	722.17	1.78	720.31	1.85	44.2	28.2	2795	5930	0.13
160	668	755.6	722.60	2.19	720.58	2.03	44.6	32.0	2808	6361	0.13
180	668	759.6	722.81	1.05	721.16	1.65	44.8	35.8	2814	6790	0.10
200	668	757.6	722.99	0.86	721.42	1.57	45.0	33.7	2820	6555	0.10
220	668	753.5	722.97	-0.06	721.72	1.26	45.0	29.5	2819	6098	0.08
240	683	748.6	722.80	-0.87	721.55	1.25	29.8	24.8	2364	5117	0.13
260	683	744.5	722.62	-0.87	721.54	1.09	29.6	20.8	2359	4673	0.12
280	683	740.2	722.60	-0.15	721.67	0.92	29.6	16.6	2358	4197	0.12
300	683	735.7	723.37	3.85	722.54	0.83	30.4	11.4	2381	3643	0.15
320	683	735.1	723.22	-0.71	722.08	1.14	30.2	10.9	2377	3587	0.21
340	683	734.0	722.94	-1.42	722.01	0.93	29.9	10.1	2368	3485	0.19
360	683	734.7	723.29	1.74	722.59	0.70	30.3	10.5	2379	3539	0.13
380	683	735.7	723.89	3.03	723.14	0.75	30.9	10.8	2397	3600	0.14
400	683	737.0	724.43	2.67	723.82	0.61	31.4	11.5	2413	3694	0.10
420	683	740.8	725.02	2.94	724.31	0.71	32.0	14.8	2430	4074	0.10
440	683	744.0	725.61	2.96	724.89	0.71	32.6	17.4	2448	4380	0.09
460	683	746.0	726.22	3.05	725.40	0.82	33.2	18.8	2466	4549	0.09
480	683	747.9	726.79	2.85	725.98	0.80	33.8	20.1	2484	4720	0.09
500	683	749.3	728.00	6.07	727.77	0.22	35.0	20.3	2520	4775	0.02
520	683	750.5	728.74	3.73	727.70	1.05	35.7	20.8	2542	4846	0.10
540	683	751.1	728.44	-1.52	727.82	0.62	35.4	21.7	2533	4937	0.06
560	690	753.9	729.00	2.82	728.47	0.53	29.0	23.9	2340	4995	0.06
580	690	755.8	729.53	2.62	729.10	0.43	29.5	25.3	2356	5166	0.04
600	691	756.2	730.06	2.70	729.46	0.61	29.1	25.1	2342	5133	0.06
620	692	756.6	730.47	2.01	729.99	0.48	28.5	25.1	2324	5109	0.05
640	693	757.1	730.90	2.15	730.47	0.43	27.9	25.2	2307	5099	0.04
660	693	756.8	731.69	3.95	731.42	0.27	28.7	24.1	2331	5004	0.03
680	692	756.1	732.23	2.75	731.72	0.52	30.2	22.8	2377	4911	0.05
700	691	754.4	732.44	1.03	731.98	0.46	31.4	20.9	2413	4734	0.05
720	690	752.3	731.73	-3.53	730.42	1.32	31.7	19.6	2422	4593	0.15
740	689	750.1	730.57	-5.84	729.48	1.08	31.6	18.6	2417	4478	0.13
760	689	747.5	729.90	-3.34	728.86	1.04	30.9	16.6	2397	4235	0.14
780	689	744.2	729.39	-2.53	728.27	1.13	30.4	13.8	2382	3912	0.17
800	689	742.7	728.81	-2.93	728.01	0.80	29.8	12.9	2364	3791	0.13
820	689	741.4	728.36	-2.26	727.39	0.97	29.4	12.0	2351	3685	0.17
840	689	740.9	727.68	-3.39	726.79	0.89	28.7	12.2	2330	3684	0.16
860	690	739.9	727.18	-2.51	726.25	0.92	27.7	11.7	2300	3599	0.17
880	690	738.1	726.73	-2.23	725.72	1.01	27.2	10.4	2287	3437	0.21
900	690	737.3	726.52	-1.08	726.32	0.19	26.5	9.8	2265	3350	0.04
920	690	738.1	726.58	0.32	724.83	1.75	26.6	10.6	2267	3440	0.36
940	688	739.3	725.20	-6.93	724.26	0.94	27.2	13.1	2286	3743	0.16
960	686	740.2	724.78	-2.06	724.02	0.77	29.3	14.4	2349	3946	0.12
980	683	742.2	724.82	0.17	724.11	0.70	31.8	16.4	2425	4245	0.09
1000	681	744.8	724.94	0.60	723.95	0.99	33.9	18.9	2488	4585	0.11
1020	681	747.6	725.01	0.37	723.73	1.29	34.0	21.6	2490	4883	0.13
1040	680	750.6	725.02	0.03	723.39	1.63	35.0	24.5	2521	5243	0.15
1060	679	753.5	724.88	-0.69	723.00	1.88	35.9	27.6	2546	5613	0.15
1080	679	756.6	724.73	-0.79	722.87	1.86	35.7	30.9	2542	5968	0.14
1100	679	760.2	724.82	0.47	722.99	1.83	36.3	34.4	2560	6380	0.13
1120	679	763.0	725.05	1.13	723.90	1.15	36.5	36.9	2566	6667	0.08
1140	678	763.3	726.41	6.82	723.60	2.81	38.4	35.9	2622	6602	0.18
1160	678	760.7	725.29	-5.58	722.74	2.55	37.3	34.4	2589	6405	0.17
1180	678	757.7	724.85	-2.22	722.64	2.21	36.8	31.8	2575	6106	0.16
1200	678	753.9	724.63	-1.10	722.93	1.70	36.6	28.3	2569	5709	0.13
1220	678	752.5	725.14	2.57	723.22	1.92	37.1	26.3	2584	5505	0.16
1240	678	748.9	724.95	-0.98	722.60	2.35	36.9	23.0	2578	5127	0.21
1260	678	743.9	724.00	-4.76	722.41	1.59	36.5	18.9	2565	4661	0.17
1280	678	739.1	723.64	-1.79	722.42	1.22	36.1	14.5	2554	4160	0.16
1300	677	733.4	723.23	-2.06	722.61	0.62	36.2	9.2	2557	3576	0.12

Estimation of Modified Compression Index
Southern East-West Profiler
95% Confidence Upper Limit - September 2006 Monitoring Event

		9/29/06	Baseline		9/26/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.23	-					
40	668	733.1	724.91	-28.32	723.72	1.19	46.9	7.2	2877	3672	0.24
60	668	735.8	721.83	-15.57	720.33	1.51	43.8	13.0	2785	4229	0.19
80	668	739.4	721.14	-3.50	719.73	1.40	43.1	17.2	2764	4677	0.14
100	668	743.1	721.42	1.44	719.76	1.66	43.4	20.7	2773	5071	0.15
120	668	747.2	721.81	1.93	720.04	1.77	43.8	24.4	2784	5489	0.14
140	668	751.4	722.17	1.78	720.57	1.59	44.2	28.2	2795	5930	0.11
160	668	755.6	722.60	2.19	720.62	1.99	44.6	32.0	2808	6361	0.13
180	668	759.6	722.81	1.05	721.23	1.58	44.8	35.8	2814	6790	0.09
200	668	757.6	722.99	0.86	721.48	1.50	45.0	33.7	2820	6555	0.09
220	668	753.5	722.97	-0.06	721.77	1.20	45.0	29.5	2819	6098	0.08
240	683	748.6	722.80	-0.87	721.63	1.17	29.8	24.8	2364	5117	0.12
260	683	744.5	722.62	-0.87	721.60	1.02	29.6	20.8	2359	4673	0.12
280	683	740.2	722.60	-0.15	721.74	0.85	29.6	16.6	2358	4197	0.12
300	683	735.7	723.07	3.05	722.62	0.74	30.4	11.4	2381	3643	0.13
320	683	735.1	723.22	-0.71	722.14	1.09	30.2	10.9	2377	3587	0.20
340	683	734.0	722.94	-1.42	722.06	0.88	29.9	10.1	2368	3485	0.18
360	683	734.7	723.29	1.74	722.65	0.63	30.3	10.5	2379	3539	0.12
380	683	735.7	723.89	3.03	723.23	0.66	30.9	10.8	2397	3600	0.12
400	683	737.0	724.43	2.67	723.88	0.55	31.4	11.5	2413	3694	0.09
420	683	740.8	725.02	2.94	724.38	0.64	32.0	14.8	2430	4074	0.09
440	683	744.0	725.61	2.96	724.98	0.63	32.6	17.4	2448	4360	0.08
460	683	746.0	726.22	3.05	725.45	0.76	33.2	18.8	2466	4549	0.09
480	683	747.9	726.79	2.85	726.04	0.75	33.8	20.1	2484	4720	0.08
500	683	749.3	728.00	6.07	727.85	0.15	35.0	20.3	2520	4775	0.01
520	683	750.5	728.74	3.73	727.75	0.99	35.7	20.8	2542	4846	0.10
540	683	751.1	728.44	-1.52	727.88	0.56	35.4	21.7	2533	4937	0.05
560	690	753.9	729.00	2.82	728.50	0.50	29.0	23.9	2340	4995	0.05
580	690	755.8	729.53	2.62	729.15	0.37	29.5	25.3	2356	5166	0.04
600	691	756.2	730.06	2.70	729.58	0.48	29.1	25.1	2342	5133	0.05
620	692	756.6	730.47	2.01	730.07	0.40	28.5	25.1	2324	5109	0.04
640	693	757.1	730.90	2.15	730.58	0.31	27.9	25.2	2307	5099	0.03
660	693	756.8	731.69	3.95	731.49	0.20	28.7	24.1	2331	5004	0.02
680	692	756.1	732.23	2.75	731.77	0.46	30.2	22.8	2377	4911	0.05
700	691	754.4	732.44	1.03	732.02	0.42	31.4	20.9	2413	4734	0.05
720	690	752.3	731.73	-3.53	730.48	1.26	31.7	19.6	2422	4593	0.14
740	689	750.1	730.57	-5.84	729.54	1.03	31.6	18.6	2417	4478	0.12
760	689	747.5	729.90	-3.34	728.92	0.98	30.9	16.6	2397	4235	0.13
780	689	744.2	729.39	-2.53	728.31	1.09	30.4	13.8	2382	3912	0.17
800	689	742.7	728.81	-2.93	728.07	0.74	29.8	12.9	2364	3791	0.12
820	689	741.4	728.36	-2.26	727.49	0.86	29.4	12.0	2351	3685	0.15
840	689	740.9	727.68	-3.39	726.84	0.84	28.7	12.2	2330	3684	0.15
860	690	739.9	727.18	-2.51	726.31	0.87	27.7	11.7	2300	3599	0.16
880	690	738.1	726.73	-2.23	725.84	0.89	27.2	10.4	2287	3437	0.19
900	690	737.3	726.52	-1.08	726.43	0.08	26.5	9.8	2265	3350	0.02
920	690	738.1	726.58	0.32	724.90	1.68	26.6	10.6	2267	3440	0.35
940	688	739.3	725.20	-6.93	724.36	0.84	27.2	13.1	2286	3743	0.14
960	686	740.2	724.78	-2.06	724.07	0.71	29.3	14.4	2349	3946	0.11
980	683	742.2	724.82	0.17	724.23	0.59	31.8	16.4	2425	4245	0.08
1000	681	744.8	724.94	0.60	724.02	0.92	33.9	18.9	2488	4585	0.10
1020	681	747.6	725.01	0.37	723.86	1.15	34.0	21.6	2490	4883	0.12
1040	680	750.6	725.02	0.03	723.50	1.52	35.0	24.5	2521	5243	0.14
1060	679	753.5	724.88	-0.69	723.06	1.82	35.9	27.6	2546	5613	0.15
1080	679	756.6	724.73	-0.79	722.94	1.79	35.7	30.9	2542	5968	0.14
1100	679	760.2	724.82	0.47	723.12	1.70	36.3	34.4	2560	6380	0.12
1120	679	763.0	725.05	1.13	723.96	1.08	36.5	36.9	2566	6667	0.07
1140	678	763.3	726.41	6.82	723.73	2.68	38.4	35.9	2622	6602	0.17
1160	678	760.7	725.29	-5.58	722.85	2.44	37.3	34.4	2589	6405	0.17
1180	678	757.7	724.85	-2.22	722.77	2.08	36.8	31.8	2575	6106	0.15
1200	678	753.9	724.63	-1.10	723.06	1.57	36.6	28.3	2569	5709	0.12
1220	678	752.5	725.14	2.57	723.31	1.84	37.1	26.3	2584	5505	0.15
1240	678	748.9	724.95	-0.98	722.72	2.23	36.9	23.0	2578	5127	0.20
1260	678	743.9	724.00	-4.76	722.53	1.47	36.5	18.9	2565	4661	0.15
1280	678	739.1	723.64	-1.79	722.53	1.11	36.1	14.5	2554	4160	0.14
1300	677	733.4	723.23	-2.06	722.76	0.47	36.2	9.2	2557	3576	0.09

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - September 2006 Monitoring Event											
		9/29/06	Baseline		9/26/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.95	-					
40	668	733.1	724.91	-28.32	723.36	1.55	46.9	7.2	2877	3672	0.31
60	668	735.8	721.83	-15.57	720.21	1.63	43.8	13.0	2785	4229	0.20
80	668	739.4	721.14	-3.50	719.54	1.60	43.1	17.2	2764	4677	0.16
100	668	743.1	721.42	1.44	719.59	1.84	43.4	20.7	2773	5071	0.16
120	668	747.2	721.81	1.93	719.92	1.89	43.8	24.4	2784	5489	0.15
140	668	751.4	722.17	1.78	720.05	2.12	44.2	28.2	2795	5930	0.15
160	668	755.6	722.60	2.19	720.54	2.07	44.6	32.0	2808	6361	0.13
180	668	759.6	722.81	1.05	721.09	1.72	44.8	35.8	2814	6790	0.10
200	668	757.6	722.99	0.86	721.35	1.64	45.0	33.7	2820	6555	0.10
220	668	753.5	722.97	-0.06	721.66	1.31	45.0	29.5	2819	6098	0.09
240	683	748.6	722.80	-0.87	721.46	1.34	29.8	24.8	2364	5117	0.13
260	683	744.5	722.62	-0.87	721.47	1.15	29.6	20.8	2359	4673	0.13
280	683	740.2	722.60	-0.15	721.60	1.00	29.6	16.6	2358	4197	0.13
300	683	735.7	723.37	3.85	722.46	0.91	30.4	11.4	2381	3643	0.16
320	683	735.1	723.22	-0.71	722.02	1.20	30.2	10.9	2377	3587	0.22
340	683	734.0	722.94	-1.42	721.95	0.99	29.9	10.1	2368	3485	0.20
360	683	734.7	723.29	1.74	722.52	0.76	30.3	10.5	2379	3539	0.15
380	683	735.7	723.89	3.03	723.05	0.84	30.9	10.8	2397	3600	0.15
400	683	737.0	724.43	2.67	723.76	0.67	31.4	11.5	2413	3694	0.11
420	683	740.8	725.02	2.94	724.24	0.77	32.0	14.8	2430	4074	0.11
440	683	744.0	725.61	2.96	724.81	0.80	32.6	17.4	2448	4380	0.10
460	683	746.0	726.22	3.05	725.34	0.87	33.2	18.8	2466	4549	0.10
480	683	747.9	726.79	2.85	725.92	0.86	33.8	20.1	2484	4720	0.09
500	683	749.3	728.00	6.07	727.70	0.30	35.0	20.3	2520	4775	0.03
520	683	750.5	728.74	3.73	727.64	1.10	35.7	20.8	2542	4846	0.11
540	683	751.1	728.44	-1.52	727.76	0.68	35.4	21.7	2533	4937	0.07
560	690	753.9	729.00	2.82	728.44	0.56	29.0	23.9	2340	4995	0.06
580	690	755.8	729.53	2.62	729.04	0.48	29.5	25.3	2356	5166	0.05
600	691	756.2	730.06	2.70	729.33	0.73	29.1	25.1	2342	5133	0.07
620	692	756.6	730.47	2.01	729.91	0.55	28.5	25.1	2324	5109	0.06
640	693	757.1	730.90	2.15	730.35	0.55	27.9	25.2	2307	5099	0.06
660	693	756.8	731.69	3.95	731.35	0.34	28.7	24.1	2331	5004	0.04
680	692	756.1	732.23	2.75	731.67	0.57	30.2	22.8	2377	4911	0.06
700	691	754.4	732.44	1.03	731.94	0.50	31.4	20.9	2413	4734	0.05
720	690	752.3	731.73	-3.53	730.36	1.38	31.7	19.6	2422	4593	0.16
740	689	750.1	730.57	-5.84	729.43	1.14	31.6	18.6	2417	4478	0.13
760	689	747.5	729.90	-3.34	728.80	1.10	30.9	16.6	2397	4235	0.14
780	689	744.2	729.39	-2.53	728.23	1.17	30.4	13.8	2382	3912	0.18
800	689	742.7	728.81	-2.93	727.95	0.86	29.8	12.9	2364	3791	0.14
820	689	741.4	728.36	-2.26	727.28	1.08	29.4	12.0	2351	3685	0.19
840	689	740.9	727.68	-3.39	726.74	0.94	28.7	12.2	2330	3684	0.16
860	690	739.9	727.18	-2.51	726.20	0.98	27.7	11.7	2300	3599	0.18
880	690	738.1	726.73	-2.23	725.60	1.13	27.2	10.4	2287	3437	0.23
900	690	737.3	726.52	-1.08	726.21	0.31	26.5	9.8	2265	3350	0.07
920	690	738.1	726.58	0.32	724.76	1.82	26.6	10.6	2267	3440	0.38
940	688	739.3	725.20	-6.93	724.16	1.03	27.2	13.1	2286	3743	0.18
960	686	740.2	724.78	-2.06	723.96	0.83	29.3	14.4	2349	3946	0.13
980	683	742.2	724.82	0.17	724.00	0.82	31.8	16.4	2425	4245	0.11
1000	681	744.8	724.94	0.60	723.88	1.06	33.9	18.9	2488	4585	0.12
1020	681	747.6	725.01	0.37	723.59	1.42	34.0	21.6	2490	4883	0.14
1040	680	750.6	725.02	0.03	723.28	1.74	35.0	24.5	2521	5243	0.16
1060	679	753.5	724.88	-0.69	722.94	1.94	35.9	27.6	2546	5613	0.16
1080	679	756.6	724.73	-0.79	722.80	1.92	35.7	30.9	2542	5968	0.15
1100	679	760.2	724.82	0.47	722.86	1.96	36.3	34.4	2560	6380	0.14
1120	679	763.0	725.05	1.13	723.83	1.22	36.5	36.9	2566	6667	0.08
1140	678	763.3	726.41	6.82	723.47	2.94	38.4	35.9	2622	6602	0.19
1160	678	760.7	725.29	-5.58	722.63	2.66	37.3	34.4	2589	6405	0.18
1180	678	757.7	724.85	-2.22	722.50	2.35	36.8	31.8	2575	6106	0.17
1200	678	753.9	724.63	-1.10	722.80	1.83	36.6	28.3	2569	5709	0.14
1220	678	752.5	725.14	2.57	723.14	2.00	37.1	26.3	2584	5505	0.16
1240	678	748.9	724.95	-0.98	722.48	2.47	36.9	23.0	2578	5127	0.22
1260	678	743.9	724.00	-4.76	722.29	1.71	36.5	18.9	2565	4661	0.18
1280	678	739.1	723.64	-1.79	722.30	1.34	36.1	14.5	2554	4160	0.17
1300	677	733.4	723.23	-2.06	722.47	0.76	36.2	9.2	2557	3576	0.14

Estimation of Modified Compression Index
Southern East-West Profiler
December 2006 Monitoring Event

Station	MC V T Liner Elev	1/2/07 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	12/19/06 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast		Estimated Modif. Compres Index
									Initial	Final	
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.93	-					
40	668	728.6	724.91	-28.32	723.67	1.24	46.9	2.7	2877	3177	0.61
60	668	732.8	721.83	-15.57	720.36	1.48	43.8	10.0	2785	3893	0.23
80	668	736.6	721.14	-3.50	719.81	1.32	43.1	14.5	2764	4371	0.15
100	668	740.8	721.42	1.44	719.57	1.86	43.4	18.4	2773	4812	0.18
120	668	744.7	721.81	1.93	719.89	1.92	43.8	21.9	2784	5217	0.16
140	668	748.6	722.17	1.78	720.52	1.65	44.2	25.4	2795	5618	0.12
160	668	752.4	722.60	2.19	720.56	2.05	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.16	1.65	44.8	32.4	2814	6414	0.10
200	668	757.4	722.99	0.86	721.62	1.37	45.0	33.4	2820	6531	0.08
220	668	753.6	722.97	-0.06	721.91	1.06	45.0	29.6	2819	6104	0.07
240	683	749.3	722.80	-0.87	721.46	1.34	29.8	25.5	2364	5197	0.13
260	683	744.8	722.62	-0.87	721.48	1.14	29.6	21.1	2359	4705	0.13
280	683	740.2	722.60	-0.15	721.63	0.97	29.6	16.7	2358	4206	0.13
300	683	736.9	723.37	3.05	722.02	0.74	30.4	12.5	2381	3771	0.12
320	683	736.5	723.22	-0.71	722.39	0.84	30.2	12.3	2377	3742	0.14
340	683	736.3	722.94	-1.42	722.08	0.86	29.9	12.4	2368	3745	0.14
360	683	734.8	723.29	1.74	722.61	0.68	30.3	10.5	2379	3542	0.13
380	683	735.8	723.89	3.03	723.32	0.57	30.9	10.9	2397	3602	0.10
400	683	736.5	724.43	2.67	723.91	0.52	31.4	11.1	2413	3647	0.09
420	683	739.1	725.02	2.94	724.27	0.75	32.0	13.1	2430	3883	0.11
440	683	742.5	725.61	2.96	724.88	0.72	32.6	15.9	2448	4217	0.09
460	683	745.9	726.22	3.05	725.62	0.60	33.2	18.7	2466	4538	0.07
480	683	748.2	726.79	2.85	726.05	0.74	33.8	20.4	2484	4752	0.08
500	683	749.6	728.00	6.07	727.71	0.29	35.0	20.6	2520	4806	0.03
520	683	750.7	728.74	3.73	727.86	0.88	35.7	21.0	2542	4872	0.09
540	683	753.1	728.44	-1.52	728.16	0.28	35.4	23.6	2533	5156	0.03
560	690	754.9	729.00	2.82	728.62	0.38	29.0	24.9	2340	5103	0.04
580	690	756.5	729.53	2.62	729.22	0.31	29.5	26.0	2356	5239	0.03
600	691	756.5	730.06	2.70	729.63	0.44	29.1	25.4	2342	5165	0.04
620	692	756.7	730.47	2.01	730.44	0.02	28.5	25.3	2324	5130	0.00
640	693	756.5	730.90	2.15	730.91	-0.01	27.9	24.7	2307	5043	0.00
660	693	756.2	731.69	3.95	731.81	-0.12	28.7	23.5	2331	4936	-0.01
680	692	756.4	732.23	2.75	732.03	0.21	30.2	23.2	2377	4949	0.02
700	691	757.5	732.44	1.03	731.99	0.45	31.4	24.1	2413	5088	0.04
720	690	762.3	731.73	-3.53	730.34	1.39	31.7	29.6	2422	5706	0.12
740	689	768.1	730.57	-5.84	729.65	0.92	31.6	36.6	2417	6477	0.07
760	689	770.4	729.90	-3.34	728.45	1.45	30.9	39.5	2397	6778	0.10
780	689	770.3	729.39	-2.53	728.14	1.25	30.4	39.9	2382	6813	0.09
800	689	770.1	728.81	-2.93	727.65	1.16	29.8	40.3	2364	6833	0.08
820	689	767.5	728.36	-2.26	727.00	1.36	29.4	38.2	2351	6590	0.10
840	689	764.9	727.68	-3.39	726.35	1.33	28.7	36.2	2330	6349	0.11
860	690	761.1	727.18	-2.51	726.09	1.09	27.7	32.9	2300	5953	0.10
880	690	755.7	726.73	-2.23	725.36	1.38	27.2	28.0	2287	5397	0.14
900	690	752.1	726.52	-1.08	725.97	0.55	26.5	24.6	2265	4997	0.06
920	690	747.1	726.58	0.32	724.72	1.86	26.6	19.6	2267	4437	0.24
940	688	746.0	725.20	-6.93	724.30	0.90	27.2	19.9	2286	4489	0.11
960	686	755.7	724.78	-2.06	723.97	0.82	29.3	29.9	2349	5664	0.07
980	683	758.8	724.82	0.17	724.02	0.80	31.8	33.0	2425	6085	0.06
1000	681	760.8	724.94	0.60	723.98	0.96	33.9	34.8	2488	6354	0.07
1020	681	762.0	725.01	0.37	723.53	1.48	34.0	36.0	2490	6489	0.10
1040	680	763.3	725.02	0.03	723.19	1.83	35.0	37.2	2521	6655	0.12
1060	679	764.1	724.88	-0.69	722.85	2.03	35.9	38.2	2546	6786	0.13
1080	679	764.5	724.73	-0.79	722.91	1.82	35.7	38.8	2542	6843	0.12
1100	679	764.1	724.82	0.47	722.97	1.85	36.3	38.3	2560	6810	0.12
1120	679	762.4	725.05	1.13	723.85	1.20	36.5	36.3	2566	6598	0.08
1140	678	756.9	726.41	6.82	723.60	2.80	38.4	29.5	2622	5897	0.21
1160	678	753.6	725.29	-5.58	722.76	2.53	37.3	27.3	2589	5620	0.20
1180	678	753.2	724.85	-2.22	723.06	1.79	36.8	27.3	2575	5611	0.14
1200	678	752.7	724.63	-1.10	722.97	1.66	36.6	27.1	2569	5574	0.13
1220	678	752.2	725.14	2.57	723.72	1.43	37.1	26.1	2584	5478	0.12
1240	678	749.3	724.95	-0.98	722.80	2.14	36.9	23.4	2578	5175	0.19
1260	678	744.1	724.00	-4.76	722.57	1.43	36.5	19.1	2565	4682	0.15
1280	678	739.0	723.64	-1.79	722.79	0.84	36.1	14.4	2554	4152	0.11
1300	677	734.2	723.23	-2.06	722.96	0.27	36.2	9.9	2557	3659	0.05

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - December 2006 Monitoring Event											
		1/2/07	Baseline		12/19/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.07	-					
40	668	728.6	724.91	-28.32	723.86	1.06	46.9	2.7	2877	3177	0.52
60	668	732.8	721.83	-15.57	720.42	1.42	43.8	10.0	2785	3893	0.22
80	668	736.6	721.14	-3.50	719.91	1.23	43.1	14.5	2764	4371	0.14
100	668	740.8	721.42	1.44	719.65	1.77	43.4	18.4	2773	4812	0.17
120	668	744.7	721.81	1.93	719.95	1.86	43.8	21.9	2784	5217	0.16
140	668	748.6	722.17	1.78	720.78	1.38	44.2	25.4	2795	5618	0.10
160	668	752.4	722.60	2.19	720.60	2.01	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.23	1.58	44.8	32.4	2814	6414	0.10
200	668	757.4	722.99	0.86	721.68	1.30	45.0	33.4	2820	6531	0.08
220	668	753.6	722.97	-0.06	721.97	1.01	45.0	29.6	2819	6104	0.07
240	683	749.3	722.80	-0.87	721.54	1.26	29.8	25.5	2364	5197	0.12
260	683	744.8	722.62	-0.87	721.55	1.08	29.6	21.1	2359	4705	0.12
280	683	740.2	722.60	-0.15	721.70	0.90	29.6	16.7	2358	4206	0.12
300	683	736.9	723.37	3.85	722.71	0.66	30.4	12.5	2381	3771	0.11
320	683	736.5	723.22	-0.71	722.45	0.78	30.2	12.3	2377	3742	0.13
340	683	736.3	722.94	-1.42	722.13	0.81	29.9	12.4	2368	3745	0.14
360	683	734.8	723.29	1.74	722.67	0.61	30.3	10.5	2379	3542	0.12
380	683	735.8	723.89	3.03	723.42	0.48	30.9	10.9	2397	3602	0.09
400	683	736.5	724.43	2.67	723.96	0.46	31.4	11.1	2413	3647	0.08
420	683	739.1	725.02	2.94	724.33	0.68	32.0	13.1	2430	3883	0.10
440	683	742.5	725.61	2.96	724.97	0.64	32.6	15.9	2448	4217	0.08
460	683	745.9	726.22	3.05	725.67	0.55	33.2	18.7	2466	4538	0.06
480	683	748.2	726.79	2.85	726.11	0.68	33.8	20.4	2484	4752	0.07
500	683	749.6	728.00	6.07	727.79	0.21	35.0	20.6	2520	4806	0.02
520	683	750.7	728.74	3.73	727.91	0.83	35.7	21.0	2542	4872	0.08
540	683	753.1	728.44	-1.52	728.21	0.22	35.4	23.6	2533	5156	0.02
560	690	754.9	729.00	2.82	728.65	0.35	29.0	24.9	2340	5103	0.04
580	690	756.5	729.53	2.62	729.27	0.26	29.5	26.0	2356	5239	0.02
600	691	756.5	730.06	2.70	729.76	0.31	29.1	25.4	2342	5165	0.03
620	692	756.7	730.47	2.01	730.52	-0.05	28.5	25.3	2324	5130	-0.01
640	693	756.5	730.90	2.15	731.02	-0.13	27.9	24.7	2307	5043	-0.01
660	693	756.2	731.69	3.95	731.88	-0.19	28.7	23.5	2331	4936	-0.02
680	692	756.4	732.23	2.75	732.08	0.15	30.2	23.2	2377	4949	0.02
700	691	757.5	732.44	1.03	732.03	0.41	31.4	24.1	2413	5088	0.04
720	690	762.3	731.73	-3.53	730.40	1.33	31.7	29.6	2422	5706	0.11
740	689	768.1	730.57	-5.84	729.71	0.86	31.6	36.6	2417	6477	0.06
760	689	770.4	729.90	-3.34	728.51	1.39	30.9	39.5	2397	6778	0.10
780	689	770.3	729.39	-2.53	728.18	1.21	30.4	39.9	2382	6813	0.09
800	689	770.1	728.81	-2.93	727.71	1.10	29.8	40.3	2364	6833	0.08
820	689	767.5	728.36	-2.26	727.10	1.25	29.4	38.2	2351	6590	0.10
840	689	764.9	727.68	-3.39	726.39	1.29	28.7	36.2	2330	6349	0.10
860	690	761.1	727.18	-2.51	726.15	1.03	27.7	32.9	2300	5953	0.09
880	690	755.7	726.73	-2.23	725.47	1.26	27.2	28.0	2287	5397	0.12
900	690	752.1	726.52	-1.08	726.08	0.44	26.5	24.6	2265	4997	0.05
920	690	747.1	726.58	0.32	724.79	1.79	26.6	19.6	2267	4437	0.23
940	688	746.0	725.20	-6.93	724.39	0.80	27.2	19.9	2286	4489	0.10
960	686	755.7	724.78	-2.06	724.03	0.76	29.3	29.9	2349	5664	0.07
980	683	758.8	724.62	0.17	724.13	0.69	31.8	33.0	2425	6085	0.05
1000	681	760.8	724.94	0.60	724.05	0.89	33.9	34.8	2488	6354	0.06
1020	681	762.0	725.01	0.37	723.67	1.35	34.0	36.0	2490	6489	0.10
1040	680	763.3	725.02	0.03	723.30	1.72	35.0	37.2	2521	6655	0.12
1060	679	764.1	724.88	-0.69	722.92	1.97	35.9	38.2	2546	6786	0.13
1080	670	764.5	724.73	0.70	722.07	1.75	35.7	30.8	2542	6043	0.11
1100	679	764.1	724.82	0.47	723.10	1.72	36.3	38.3	2560	6810	0.11
1120	679	762.4	725.05	1.13	723.92	1.13	36.5	36.3	2566	6598	0.08
1140	678	756.9	726.41	6.82	723.73	2.67	38.4	29.5	2622	5897	0.20
1160	678	753.6	725.29	-5.58	722.87	2.42	37.3	27.3	2589	5620	0.19
1180	678	753.2	724.85	-2.22	723.19	1.66	36.8	27.3	2575	5611	0.13
1200	678	752.7	724.63	-1.10	723.10	1.53	36.6	27.1	2569	5574	0.12
1220	678	752.2	725.14	2.57	723.80	1.35	37.1	26.1	2584	5478	0.11
1240	678	749.3	724.95	-0.98	722.92	2.02	36.9	23.4	2578	5175	0.18
1260	678	744.1	724.00	-4.76	722.69	1.31	36.5	19.1	2565	4682	0.14
1280	678	739.0	723.64	-1.79	722.91	0.73	36.1	14.4	2554	4152	0.10
1300	677	734.2	723.23	-2.06	723.10	0.13	36.2	9.9	2557	3659	0.02

Estimation of Modified Compression Index
Southern East-West Profiler
95% Confidence Lower Limit - December 2006 Monitoring Event

		1/2/07	Baseline		12/19/06				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.80	-					
40	668	728.6	724.91	-28.32	723.49	1.42	46.9	2.7	2877	3177	0.71
60	668	732.8	721.83	-15.57	720.30	1.54	43.8	10.0	2785	3893	0.24
80	668	736.6	721.14	-3.50	719.71	1.42	43.1	14.5	2764	4371	0.17
100	668	740.8	721.42	1.44	719.48	1.94	43.4	18.4	2773	4812	0.19
120	668	744.7	721.81	1.93	719.83	1.98	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.26	1.91	44.2	25.4	2795	5618	0.14
160	668	752.4	722.60	2.19	720.52	2.09	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.09	1.72	44.8	32.4	2814	6414	0.11
200	668	757.4	722.99	0.86	721.55	1.44	45.0	33.4	2820	6531	0.09
220	668	753.6	722.97	-0.06	721.86	1.12	45.0	29.6	2819	6104	0.07
240	683	749.3	722.80	-0.87	721.37	1.43	29.8	25.5	2364	5197	0.14
260	683	744.8	722.62	-0.87	721.42	1.21	29.6	21.1	2359	4705	0.14
280	683	740.2	722.60	-0.15	721.56	1.04	29.6	16.7	2358	4206	0.14
300	683	736.9	723.37	3.85	722.54	0.83	30.4	12.6	2381	3771	0.14
320	683	736.5	723.22	-0.71	722.33	0.89	30.2	12.3	2377	3742	0.15
340	683	736.3	722.94	-1.42	722.03	0.91	29.9	12.4	2368	3745	0.15
360	683	734.8	723.29	1.74	722.54	0.74	30.3	10.5	2379	3542	0.14
380	683	735.8	723.89	3.03	723.23	0.66	30.9	10.9	2397	3602	0.12
400	683	736.5	724.43	2.67	723.85	0.58	31.4	11.1	2413	3647	0.10
420	683	739.1	725.02	2.94	724.20	0.82	32.0	13.1	2430	3883	0.13
440	683	742.5	725.61	2.96	724.80	0.81	32.6	15.9	2448	4217	0.11
460	683	745.9	726.22	3.05	725.56	0.65	33.2	18.7	2466	4538	0.07
480	683	748.2	726.79	2.85	725.99	0.80	33.8	20.4	2484	4752	0.08
500	683	749.6	728.00	6.07	727.63	0.37	35.0	20.6	2520	4806	0.04
520	683	750.7	728.74	3.73	727.81	0.94	35.7	21.0	2542	4872	0.09
540	683	753.1	728.44	-1.52	728.10	0.34	35.4	23.6	2533	5156	0.03
560	690	754.9	729.00	2.82	728.59	0.41	29.0	24.9	2340	5103	0.04
580	690	756.5	729.53	2.62	729.16	0.36	29.5	26.0	2356	5239	0.04
600	691	756.5	730.06	2.70	729.50	0.56	29.1	25.4	2342	5165	0.06
620	692	756.7	730.47	2.01	730.37	0.10	28.5	25.3	2324	5130	0.01
640	693	756.5	730.90	2.15	730.79	0.11	27.9	24.7	2307	5043	0.01
660	693	756.2	731.69	3.95	731.74	-0.05	28.7	23.5	2331	4936	-0.01
680	692	756.4	732.23	2.75	731.98	0.26	30.2	23.2	2377	4949	0.03
700	691	757.5	732.44	1.03	731.95	0.49	31.4	24.1	2413	5088	0.05
720	690	762.3	731.73	-3.53	730.28	1.45	31.7	29.6	2422	5706	0.12
740	689	768.1	730.57	-5.84	729.60	0.97	31.6	36.6	2417	6477	0.07
760	689	770.4	729.90	-3.34	728.40	1.50	30.9	39.5	2397	6778	0.11
780	689	770.3	729.39	-2.53	728.10	1.29	30.4	39.9	2382	6813	0.09
800	689	770.1	728.81	-2.93	727.59	1.22	29.8	40.3	2364	6833	0.09
820	689	767.5	728.36	-2.26	726.89	1.46	29.4	38.2	2351	6590	0.11
840	689	764.9	727.68	-3.39	726.30	1.38	28.7	36.2	2330	6349	0.11
860	690	761.1	727.18	-2.51	726.04	1.14	27.7	32.9	2300	5953	0.10
880	690	755.7	726.73	-2.23	725.24	1.49	27.2	28.0	2287	5397	0.15
900	690	752.1	726.52	-1.08	725.86	0.66	26.5	24.6	2265	4997	0.07
920	690	747.1	726.58	0.32	724.65	1.93	26.6	19.6	2267	4437	0.25
940	688	746.0	725.20	-6.93	724.20	1.00	27.2	19.9	2286	4469	0.13
960	686	755.7	724.78	-2.06	723.91	0.87	29.3	29.9	2349	5664	0.08
980	683	758.8	724.82	0.17	723.90	0.92	31.8	33.0	2425	6085	0.07
1000	681	760.8	724.94	0.60	723.91	1.03	33.9	34.8	2488	6354	0.07
1020	681	762.0	725.01	0.37	723.39	1.62	34.0	36.0	2490	6489	0.11
1040	680	763.3	725.02	0.03	723.08	1.94	35.0	37.2	2521	6655	0.13
1060	679	764.1	724.88	-0.69	722.79	2.09	35.9	38.2	2546	6786	0.14
1080	679	764.5	724.73	-0.79	722.84	1.89	35.7	38.8	2542	6843	0.12
1100	679	764.1	724.82	0.47	722.84	1.98	36.3	38.3	2560	6810	0.13
1120	679	762.4	725.05	1.13	723.78	1.26	36.5	36.3	2566	6598	0.08
1140	678	756.9	726.41	6.82	723.47	2.94	38.4	29.5	2622	5897	0.22
1160	678	753.6	725.29	-5.58	722.65	2.64	37.3	27.3	2589	5620	0.21
1180	678	753.2	724.85	-2.22	722.92	1.93	36.8	27.3	2575	5611	0.15
1200	678	752.7	724.63	-1.10	722.84	1.79	36.6	27.1	2569	5574	0.15
1220	678	752.2	725.14	2.57	723.63	1.51	37.1	26.1	2584	5478	0.12
1240	678	749.3	724.95	-0.98	722.68	2.27	36.9	23.4	2578	5175	0.20
1260	678	744.1	724.00	-4.76	722.45	1.55	36.5	19.1	2565	4682	0.16
1280	678	739.0	723.64	-1.79	722.68	0.96	36.1	14.4	2554	4152	0.13
1300	677	734.2	723.23	-2.06	722.81	0.42	36.2	9.9	2557	3659	0.07

Estimation of Modified Compression Index Southern East-West Profiler March 2007 Monitoring Event											
		4/2/07	Baseline		3/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.06	-					
40	668	728.6	724.91	-28.32	723.47	1.45	46.9	2.7	2877	3177	0.72
60	668	732.8	721.83	-15.57	720.45	1.38	43.8	10.0	2785	3893	0.22
80	668	736.6	721.14	-3.50	719.68	1.46	43.1	14.5	2764	4371	0.17
100	668	740.8	721.42	1.44	719.63	1.79	43.4	18.4	2773	4812	0.17
120	668	744.7	721.81	1.93	719.83	1.98	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.35	1.82	44.2	25.4	2795	5618	0.14
160	668	752.4	722.60	2.19	720.63	1.98	44.6	28.8	2808	6004	0.13
180	668	756.2	722.81	1.05	721.21	1.60	44.8	32.4	2814	6414	0.10
200	668	757.4	722.99	0.86	721.43	1.55	45.0	33.4	2820	6531	0.09
220	668	753.6	722.97	-0.06	721.61	1.36	45.0	29.6	2819	6104	0.09
240	683	749.3	722.80	-0.87	721.55	1.25	29.8	25.5	2364	5197	0.12
260	683	744.8	722.62	-0.87	721.55	1.08	29.6	21.1	2359	4705	0.12
280	683	740.2	722.60	-0.15	721.65	0.94	29.6	16.7	2358	4206	0.13
300	683	736.9	723.37	3.85	722.50	0.86	30.4	12.5	2361	3771	0.14
320	683	736.5	723.22	-0.71	722.00	1.22	30.2	12.3	2377	3742	0.21
340	683	736.3	722.94	-1.42	722.00	0.94	29.9	12.4	2368	3745	0.16
360	683	735.5	723.29	1.74	722.48	0.81	30.3	11.2	2379	3621	0.15
380	683	737.2	723.89	3.03	723.05	0.84	30.9	12.3	2397	3759	0.14
400	683	737.8	724.43	2.67	723.67	0.76	31.4	12.4	2413	3790	0.12
420	683	739.1	725.02	2.94	724.16	0.85	32.0	13.1	2430	3882	0.13
440	683	740.9	725.61	2.96	724.78	0.83	32.6	14.3	2448	4038	0.12
460	683	745.3	726.22	3.05	725.32	0.90	33.2	18.1	2466	4471	0.10
480	683	748.3	726.79	2.85	726.03	0.76	33.8	20.5	2484	4755	0.08
500	683	750.5	728.00	6.07	727.55	0.45	35.0	21.5	2520	4909	0.04
520	683	750.9	728.74	3.73	727.58	1.16	35.7	21.2	2542	4893	0.11
540	683	752.8	728.44	-1.52	727.62	0.81	35.4	23.4	2533	5129	0.07
560	690	754.9	729.00	2.82	728.28	0.72	29.0	24.9	2340	5103	0.07
580	690	756.5	729.53	2.62	728.93	0.59	29.5	26.0	2356	5239	0.06
600	691	756.5	730.06	2.70	729.30	0.76	29.1	25.4	2342	5165	0.08
620	692	756.7	730.47	2.01	729.83	0.63	28.5	25.3	2324	5130	0.06
640	693	756.5	730.90	2.15	730.32	0.57	27.9	24.7	2307	5043	0.06
660	693	756.2	731.69	3.95	731.20	0.49	28.7	23.5	2331	4936	0.05
680	692	756.5	732.23	2.75	731.48	0.75	30.2	23.2	2377	4954	0.08
700	691	757.5	732.44	1.03	731.66	0.78	31.4	24.1	2413	5086	0.08
720	690	763.8	731.73	-3.53	730.04	1.70	31.7	31.1	2422	5873	0.14
740	689	770.4	730.57	-5.84	728.93	1.64	31.6	38.8	2417	6727	0.12
760	689	771.1	729.90	-3.34	728.12	1.78	30.9	40.2	2397	6863	0.13
780	689	770.9	729.39	-2.53	727.53	1.86	30.4	40.5	2382	6880	0.13
800	689	771.8	728.81	-2.93	727.18	1.63	29.8	42.0	2364	7021	0.12
820	689	769.7	728.36	-2.26	726.45	1.91	29.4	40.4	2351	6830	0.14
840	689	766.0	727.68	-3.39	725.81	1.87	28.7	37.3	2330	6476	0.15
860	690	769.3	727.18	-2.51	725.23	1.94	27.7	41.1	2300	6861	0.15
880	690	771.4	726.73	-2.23	724.63	2.10	27.2	43.7	2287	7139	0.16
900	690	774.2	726.52	-1.08	725.27	1.25	26.5	46.7	2265	7447	0.09
920	690	775.1	726.58	0.32	723.90	2.68	26.6	47.5	2267	7539	0.19
940	688	776.0	725.20	-6.93	723.32	1.87	27.2	49.8	2286	7814	0.13
960	686	775.8	724.78	-2.06	723.18	1.60	29.3	50.0	2349	7898	0.10
980	683	770.6	724.82	0.17	723.44	1.38	31.8	44.8	2425	7398	0.09
1000	681	765.9	724.94	0.60	723.29	1.65	33.9	39.9	2488	6922	0.11
1020	681	765.5	725.01	0.37	723.14	1.87	34.0	39.4	2490	6868	0.12
1040	680	765.1	725.02	0.03	722.83	2.19	35.0	39.1	2521	6855	0.14
1060	679	765.9	724.88	-0.69	722.52	2.36	35.9	40.0	2546	6991	0.15
1080	679	765.3	724.73	0.70	722.48	2.26	35.7	39.6	2642	6038	0.14
1100	679	764.6	724.82	0.47	722.72	2.10	36.3	38.8	2560	6867	0.13
1120	679	763.2	725.05	1.13	723.61	1.44	36.5	37.1	2566	6689	0.09
1140	678	757.5	726.41	6.82	723.48	2.93	38.4	30.1	2622	5961	0.21
1160	678	753.6	725.29	-5.58	722.61	2.69	37.3	27.3	2589	5621	0.21
1180	678	753.2	724.85	-2.22	722.52	2.33	36.8	27.4	2575	5611	0.19
1200	678	752.7	724.63	-1.10	722.75	1.88	36.6	27.1	2569	5575	0.15
1220	678	752.2	725.14	2.57	723.13	2.01	37.1	26.1	2584	5479	0.17
1240	678	749.3	724.95	-0.98	722.51	2.44	36.9	23.4	2578	5175	0.22
1260	678	744.1	724.00	-4.76	722.32	1.68	36.5	19.1	2565	4682	0.18
1280	678	739.0	723.64	-1.79	722.34	1.30	36.1	14.4	2554	4152	0.17
1300	677	734.2	723.23	-2.06	722.45	0.78	36.2	9.9	2557	3659	0.14

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - March 2007 Monitoring Event											
		4/2/07	Baseline		3/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.19	-					
40	668	728.6	724.91	-28.32	723.65	1.26	46.9	2.7	2877	3177	0.63
60	668	732.8	721.83	-15.57	720.51	1.32	43.8	10.0	2785	3693	0.21
80	668	736.6	721.14	-3.50	719.78	1.36	43.1	14.5	2764	4371	0.16
100	668	740.8	721.42	1.44	719.72	1.71	43.4	18.4	2773	4812	0.16
120	668	744.7	721.81	1.93	719.89	1.92	43.8	21.9	2784	5217	0.16
140	668	748.6	722.17	1.78	720.61	1.56	44.2	25.4	2795	5618	0.12
160	668	752.4	722.60	2.19	720.67	1.94	44.6	28.8	2808	6004	0.13
180	668	756.2	722.81	1.05	721.28	1.53	44.8	32.4	2814	6414	0.10
200	668	757.4	722.99	0.86	721.50	1.49	45.0	33.4	2820	6531	0.09
220	668	753.6	722.97	-0.06	721.67	1.31	45.0	29.6	2819	6104	0.09
240	683	749.3	722.80	-0.87	721.63	1.17	29.8	25.5	2364	5197	0.11
260	683	744.8	722.62	-0.87	721.61	1.01	29.6	21.1	2359	4705	0.11
280	683	740.2	722.60	-0.15	721.72	0.87	29.6	16.7	2358	4206	0.12
300	683	736.9	723.37	3.85	722.59	0.78	30.4	12.5	2381	3771	0.13
320	683	736.5	723.22	-0.71	722.06	1.17	30.2	12.3	2377	3742	0.20
340	683	736.3	722.94	-1.42	722.05	0.89	29.9	12.4	2368	3745	0.15
360	683	735.5	723.29	1.74	722.54	0.74	30.3	11.2	2379	3621	0.13
380	683	737.2	723.89	3.03	723.15	0.75	30.9	12.3	2397	3759	0.12
400	683	737.8	724.43	2.67	723.73	0.70	31.4	12.4	2413	3790	0.11
420	683	739.1	725.02	2.94	724.23	0.78	32.0	13.1	2430	3882	0.12
440	683	740.9	725.61	2.96	724.86	0.74	32.6	14.3	2448	4038	0.10
460	683	745.3	726.22	3.05	725.37	0.85	33.2	18.1	2466	4471	0.10
480	683	748.3	726.79	2.85	726.09	0.70	33.8	20.5	2484	4755	0.07
500	683	750.5	728.00	6.07	727.63	0.37	35.0	21.5	2520	4909	0.04
520	683	750.9	728.74	3.73	727.64	1.11	35.7	21.2	2542	4893	0.11
540	683	752.8	728.44	-1.52	727.68	0.76	35.4	23.4	2533	5129	0.07
560	690	754.9	729.00	2.82	728.31	0.69	29.0	24.9	2340	5103	0.07
580	690	756.5	729.53	2.62	728.99	0.54	29.5	26.0	2356	5239	0.05
600	691	756.5	730.06	2.70	729.43	0.64	29.1	25.4	2342	5165	0.06
620	692	756.7	730.47	2.01	729.91	0.56	28.5	25.3	2324	5130	0.06
640	693	756.5	730.90	2.15	730.44	0.45	27.9	24.7	2307	5043	0.05
660	693	756.2	731.69	3.95	731.27	0.42	28.7	23.5	2331	4936	0.04
680	692	756.5	732.23	2.75	731.53	0.70	30.2	23.2	2377	4954	0.07
700	691	757.5	732.44	1.03	731.70	0.74	31.4	24.1	2413	5086	0.07
720	690	763.8	731.73	-3.53	730.10	1.64	31.7	31.1	2422	5873	0.13
740	689	770.4	730.57	-5.84	728.98	1.58	31.6	38.8	2417	6727	0.11
760	689	771.1	729.90	-3.34	728.18	1.73	30.9	40.2	2397	6863	0.12
780	689	770.9	729.39	-2.53	727.57	1.82	30.4	40.5	2382	6880	0.13
800	689	771.8	728.81	-2.93	727.24	1.57	29.8	42.0	2364	7021	0.11
820	689	769.7	728.36	-2.26	726.55	1.80	29.4	40.4	2351	6830	0.13
840	689	766.0	727.68	-3.39	725.85	1.82	28.7	37.3	2330	6476	0.14
860	690	769.3	727.18	-2.51	725.29	1.89	27.7	41.1	2300	6861	0.14
880	690	771.4	726.73	-2.23	724.75	1.99	27.2	43.7	2287	7139	0.15
900	690	774.2	726.52	-1.08	725.38	1.13	26.5	46.7	2265	7447	0.08
920	690	775.1	726.58	0.32	723.97	2.61	26.6	47.5	2267	7539	0.19
940	688	776.0	725.20	-6.93	723.42	1.78	27.2	49.8	2286	7814	0.12
960	686	775.8	724.78	-2.06	723.24	1.55	29.3	50.0	2349	7898	0.10
980	683	770.6	724.82	0.17	723.55	1.27	31.8	44.8	2425	7398	0.08
1000	681	765.9	724.94	0.60	723.36	1.57	33.9	39.9	2488	6922	0.10
1020	681	765.5	725.01	0.37	723.28	1.74	34.0	39.4	2490	6868	0.12
1040	680	765.1	725.02	0.03	722.94	2.08	35.0	39.1	2521	6855	0.14
1060	679	765.9	724.88	-0.69	722.59	2.30	35.9	40.0	2546	6991	0.15
1080	679	765.3	724.73	-0.79	722.55	2.18	35.7	39.6	2542	6938	0.14
1100	679	764.6	724.82	0.47	722.85	1.97	36.3	38.8	2560	6867	0.13
1120	679	763.2	725.05	1.13	723.67	1.37	36.5	37.1	2566	6689	0.09
1140	678	757.5	726.41	6.82	723.61	2.79	38.4	30.1	2622	5961	0.20
1160	678	753.6	725.29	-5.58	722.72	2.58	37.3	27.3	2589	5621	0.21
1180	678	753.2	724.85	-2.22	722.65	2.19	36.8	27.4	2575	5611	0.18
1200	678	752.7	724.63	-1.10	722.88	1.75	36.6	27.1	2569	5575	0.14
1220	678	752.2	725.14	2.57	723.21	1.93	37.1	26.1	2584	5479	0.16
1240	678	749.3	724.95	-0.98	722.63	2.31	36.9	23.4	2578	5175	0.21
1260	678	744.1	724.00	-4.76	722.44	1.56	36.5	19.1	2565	4682	0.16
1280	678	739.0	723.64	-1.79	722.46	1.18	36.1	14.4	2554	4152	0.15
1300	677	734.2	723.23	-2.06	722.60	0.63	36.2	9.9	2557	3659	0.11

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - March 2007 Monitoring Event											
		4/2/07	Baseline		3/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.92	-					
40	668	728.6	724.91	-28.32	723.28	1.63	46.9	2.7	2877	3177	0.81
60	668	732.8	721.83	-15.57	720.39	1.44	43.8	10.0	2785	3893	0.23
80	668	736.6	721.14	-3.50	719.58	1.55	43.1	14.5	2764	4371	0.18
100	668	740.8	721.42	1.44	719.54	1.88	43.4	18.4	2773	4812	0.16
120	668	744.7	721.81	1.93	719.77	2.04	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.08	2.08	44.2	25.4	2795	5618	0.16
160	668	752.4	722.60	2.19	720.59	2.02	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.14	1.67	44.8	32.4	2814	6414	0.10
200	668	757.4	722.99	0.86	721.37	1.62	45.0	33.4	2820	6531	0.10
220	668	753.6	722.97	-0.06	721.55	1.42	45.0	29.6	2819	6104	0.09
240	683	749.3	722.80	-0.87	721.46	1.34	29.8	25.5	2364	5197	0.13
260	683	744.8	722.62	-0.87	721.48	1.14	29.6	21.1	2359	4705	0.13
280	683	740.2	722.60	-0.15	721.58	1.02	29.6	16.7	2358	4206	0.14
300	683	736.9	723.37	3.85	722.42	0.95	30.4	12.5	2381	3771	0.16
320	683	736.5	723.22	-0.71	721.94	1.28	30.2	12.3	2377	3742	0.21
340	683	736.3	722.94	-1.42	721.95	0.99	29.9	12.4	2368	3745	0.17
360	683	735.5	723.29	1.74	722.41	0.87	30.3	11.2	2379	3621	0.16
380	683	737.2	723.89	3.03	722.96	0.93	30.9	12.3	2397	3759	0.15
400	683	737.8	724.43	2.67	723.61	0.82	31.4	12.4	2413	3790	0.13
420	683	739.1	725.02	2.94	724.09	0.92	32.0	13.1	2430	3882	0.14
440	683	740.9	725.61	2.96	724.69	0.92	32.6	14.3	2448	4038	0.13
460	683	745.3	726.22	3.05	725.26	0.95	33.2	18.1	2466	4471	0.11
480	683	748.3	726.79	2.85	725.97	0.82	33.8	20.5	2484	4755	0.09
500	683	750.5	728.00	6.07	727.47	0.53	35.0	21.5	2520	4909	0.05
520	683	750.9	728.74	3.73	727.53	1.21	35.7	21.2	2542	4893	0.12
540	683	752.8	728.44	-1.52	727.57	0.87	35.4	23.4	2533	5129	0.08
560	690	754.9	729.00	2.82	728.25	0.75	29.0	24.9	2340	5103	0.08
580	690	756.5	729.53	2.62	728.88	0.65	29.5	26.0	2356	5239	0.06
600	691	756.5	730.06	2.70	729.18	0.89	29.1	25.4	2342	5165	0.09
620	692	756.7	730.47	2.01	729.75	0.71	28.5	25.3	2324	5130	0.07
640	693	756.5	730.90	2.15	730.21	0.69	27.9	24.7	2307	5043	0.07
660	693	756.2	731.69	3.95	731.13	0.56	28.7	23.5	2331	4936	0.06
680	692	756.5	732.23	2.75	731.43	0.81	30.2	23.2	2377	4954	0.08
700	691	757.5	732.44	1.03	731.62	0.82	31.4	24.1	2413	5086	0.08
720	690	763.8	731.73	-3.53	729.98	1.76	31.7	31.1	2422	5873	0.14
740	689	770.4	730.57	-5.84	728.87	1.70	31.6	38.8	2417	6727	0.12
760	689	771.1	729.90	-3.34	728.06	1.84	30.9	40.2	2397	6863	0.13
780	689	770.9	729.39	-2.53	727.49	1.90	30.4	40.5	2382	6880	0.14
800	689	771.8	728.81	-2.93	727.12	1.69	29.8	42.0	2364	7021	0.12
820	689	769.7	728.36	-2.26	726.34	2.01	29.4	40.4	2351	6830	0.15
840	689	766.0	727.68	-3.39	725.76	1.92	28.7	37.3	2330	6476	0.15
860	690	769.3	727.18	-2.51	725.18	2.00	27.7	41.1	2300	6861	0.15
880	690	771.4	726.73	-2.23	724.51	2.22	27.2	43.7	2287	7139	0.17
900	690	774.2	726.52	-1.08	725.16	1.36	26.5	46.7	2265	7447	0.10
920	690	775.1	726.58	0.32	723.83	2.75	26.6	47.5	2267	7539	0.20
940	688	776.0	725.20	-6.93	723.23	1.97	27.2	49.8	2286	7814	0.14
960	686	775.8	724.78	-2.06	723.12	1.66	29.3	50.0	2349	7898	0.11
980	683	770.6	724.82	0.17	723.32	1.50	31.8	44.8	2425	7398	0.10
1000	681	765.9	724.94	0.60	723.22	1.72	33.9	39.9	2488	6922	0.11
1020	681	765.5	725.01	0.37	723.00	2.01	34.0	39.4	2490	6868	0.13
1040	680	765.1	725.02	0.03	722.72	2.30	35.0	39.1	2521	6855	0.15
1060	679	765.9	724.88	-0.69	722.46	2.42	35.9	40.0	2546	6991	0.15
1080	679	765.3	724.73	-0.79	722.41	2.31	35.7	39.6	2542	6938	0.15
1100	679	764.6	724.82	0.47	722.59	2.23	36.3	38.8	2560	6867	0.14
1120	679	763.2	725.05	1.13	723.54	1.51	36.5	37.1	2566	6689	0.10
1140	678	757.5	726.41	6.82	723.35	3.06	38.4	30.1	2622	5961	0.22
1160	678	753.6	725.29	-5.58	722.50	2.80	37.3	27.3	2589	5621	0.22
1180	678	753.2	724.85	-2.22	722.39	2.46	36.8	27.4	2575	5611	0.20
1200	678	752.7	724.63	-1.10	722.62	2.01	36.6	27.1	2569	5575	0.16
1220	678	752.2	725.14	2.57	723.05	2.09	37.1	26.1	2584	5479	0.17
1240	678	749.3	724.95	-0.98	722.39	2.56	36.9	23.4	2578	5175	0.23
1260	678	744.1	724.00	-4.76	722.20	1.80	36.5	19.1	2565	4682	0.19
1280	678	739.0	723.64	-1.79	722.23	1.41	36.1	14.4	2554	4152	0.18
1300	677	734.2	723.23	-2.06	722.31	0.92	36.2	9.9	2557	3659	0.16

Estimation of Modified Compression Index
Southern East-West Profiler
June 2007 Monitoring Event

		7/2/07	Baseline		6/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.22	-					
40	668	728.6	724.91	-28.32	723.37	1.54	46.9	2.7	2877	3177	0.76
60	668	732.8	721.83	-15.57	720.39	1.45	43.8	10.0	2785	3893	0.23
80	668	736.6	721.14	-3.50	719.69	1.45	43.1	14.5	2764	4371	0.17
100	668	740.8	721.42	1.44	719.60	1.83	43.4	18.4	2773	4812	0.18
120	668	744.7	721.81	1.93	719.74	2.07	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.22	1.95	44.2	25.4	2795	5618	0.15
160	668	752.4	722.60	2.19	720.53	2.08	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.09	1.72	44.8	32.4	2814	6414	0.11
200	668	757.4	722.99	0.86	721.31	1.68	45.0	33.4	2820	6531	0.10
220	668	753.6	722.97	-0.06	721.53	1.44	45.0	29.6	2819	6104	0.10
240	683	749.3	722.80	-0.87	721.46	1.34	29.8	25.5	2364	5197	0.13
260	683	744.8	722.62	-0.87	721.47	1.16	29.6	21.1	2359	4705	0.13
280	683	740.2	722.60	-0.15	721.53	1.06	29.6	16.7	2358	4206	0.14
300	683	736.9	723.37	3.85	722.37	0.99	30.4	12.5	2381	3771	0.16
320	683	736.5	723.22	-0.71	721.86	1.36	30.2	12.3	2377	3742	0.23
340	683	736.3	722.94	-1.42	721.89	1.05	29.9	12.4	2368	3745	0.18
360	683	735.5	723.29	1.74	722.39	0.89	30.3	11.2	2379	3621	0.16
380	683	737.2	723.89	3.03	722.97	0.93	30.9	12.3	2397	3762	0.15
400	683	738.1	724.43	2.67	723.51	0.92	31.4	12.7	2413	3817	0.15
420	683	739.0	725.02	2.94	724.05	0.96	32.0	13.0	2430	3874	0.15
440	683	739.2	725.61	2.96	724.63	0.98	32.6	12.6	2448	3850	0.15
460	683	740.7	726.22	3.05	725.21	1.01	33.2	13.4	2466	3958	0.15
480	683	742.0	726.79	2.85	725.90	0.89	33.8	14.2	2484	4059	0.12
500	683	745.2	728.00	6.07	727.43	0.56	35.0	16.2	2520	4321	0.07
520	683	749.3	728.74	3.73	727.42	1.33	35.7	19.5	2542	4708	0.14
540	683	753.7	728.44	-1.52	727.48	0.96	35.4	24.2	2533	5224	0.09
560	690	758.3	729.00	2.82	728.16	0.84	29.0	28.3	2340	5478	0.08
580	690	762.5	729.53	2.62	728.71	0.82	29.5	32.0	2356	5904	0.07
600	691	767.8	730.06	2.70	729.00	1.07	29.1	36.7	2342	6417	0.08
620	692	772.8	730.47	2.01	729.55	0.91	28.5	41.4	2324	6917	0.07
640	693	776.7	730.90	2.15	730.03	0.87	27.9	44.8	2307	7280	0.06
660	693	780.2	731.69	3.95	730.84	0.84	28.7	47.5	2331	7606	0.06
680	692	782.2	732.23	2.75	731.11	1.12	30.2	48.9	2377	7809	0.07
700	691	782.4	732.44	1.03	731.25	1.19	31.4	48.9	2413	7845	0.07
720	690	781.2	731.73	-3.53	729.67	2.06	31.7	48.5	2422	7802	0.13
740	689	779.7	730.57	-5.84	728.66	1.91	31.6	48.1	2417	7757	0.12
760	689	776.4	729.90	-3.34	728.05	1.85	30.9	45.5	2397	7446	0.12
780	689	775.3	729.39	-2.53	727.28	2.12	30.4	44.9	2382	7363	0.14
800	689	774.5	728.81	-2.93	726.90	1.91	29.8	44.7	2364	7327	0.13
820	689	773.0	728.36	-2.26	726.33	2.02	29.4	43.6	2351	7192	0.14
840	689	771.2	727.68	-3.39	725.62	2.05	28.7	42.6	2330	7054	0.15
860	690	770.7	727.18	-2.51	725.11	2.07	27.7	42.6	2300	7024	0.15
880	690	771.6	726.73	-2.23	724.44	2.30	27.2	43.9	2287	7155	0.17
900	690	774.3	726.52	-1.08	725.11	1.41	26.5	46.8	2265	7461	0.10
920	690	775.5	726.58	0.32	723.68	2.90	26.6	47.9	2267	7585	0.21
940	688	776.0	725.20	-6.93	723.10	2.09	27.2	49.8	2286	7814	0.14
960	686	776.0	724.78	-2.06	722.79	2.00	29.3	50.2	2349	7922	0.13
980	683	774.0	724.82	0.17	723.09	1.73	31.8	48.2	2425	7777	0.11
1000	681	765.9	724.94	0.60	723.14	1.79	33.9	40.0	2488	6929	0.12
1020	681	765.5	725.01	0.37	722.79	2.23	34.0	39.4	2490	6869	0.15
1040	680	765.1	725.02	0.03	722.67	2.35	35.0	39.0	2521	6854	0.15
1060	679	765.9	724.88	-0.69	722.36	2.52	35.9	40.1	2546	6992	0.16
1080	679	765.3	724.73	-0.79	722.37	2.36	35.7	39.6	2542	6938	0.15
1100	679	764.6	724.82	0.47	722.57	2.25	36.3	38.8	2560	6867	0.14
1120	679	763.2	725.05	1.13	723.47	1.57	36.5	37.1	2566	6689	0.10
1140	678	757.5	726.41	6.82	723.43	2.98	38.4	30.1	2622	5961	0.22
1160	678	753.6	725.29	-5.58	722.39	2.90	37.3	27.3	2589	5621	0.23
1180	678	753.2	724.85	-2.22	722.40	2.45	36.8	27.4	2575	5611	0.20
1200	678	752.7	724.63	-1.10	722.59	2.04	36.6	27.1	2569	5575	0.17
1220	678	752.2	725.14	2.57	723.00	2.15	37.1	26.1	2584	5479	0.18
1240	678	749.3	724.95	-0.98	722.37	2.58	36.9	23.4	2578	5175	0.23
1260	678	744.1	724.00	-4.76	722.33	1.67	36.5	19.1	2565	4682	0.18
1280	678	739.0	723.64	-1.79	722.24	1.40	36.1	14.4	2554	4152	0.18
1300	677	734.2	723.23	-2.06	722.33	0.90	36.2	9.9	2557	3659	0.16

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - June 2007 Monitoring Event											
		7/2/07	Baseline		6/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.36	-					
40	668	728.6	724.91	-28.32	723.56	1.36	46.9	2.7	2877	3177	0.67
60	668	732.8	721.83	-15.57	720.45	1.39	43.8	10.0	2785	3893	0.22
80	668	736.6	721.14	-3.50	719.78	1.35	43.1	14.5	2764	4371	0.16
100	668	740.8	721.42	1.44	719.68	1.74	43.4	18.4	2773	4812	0.17
120	668	744.7	721.81	1.93	719.80	2.01	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.48	1.69	44.2	25.4	2795	5618	0.13
160	668	752.4	722.60	2.19	720.57	2.04	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.16	1.65	44.8	32.4	2814	6414	0.10
200	668	757.4	722.99	0.86	721.37	1.61	45.0	33.4	2820	6531	0.10
220	668	753.6	722.97	-0.06	721.59	1.38	45.0	29.6	2819	6104	0.09
240	683	749.3	722.80	-0.87	721.55	1.25	29.8	25.5	2364	5197	0.12
260	683	744.8	722.62	-0.87	721.53	1.09	29.6	21.1	2359	4705	0.12
280	683	740.2	722.60	-0.15	721.61	0.99	29.6	16.7	2358	4206	0.13
300	683	736.9	723.37	3.85	722.46	0.91	30.4	12.5	2381	3771	0.15
320	683	736.5	723.22	-0.71	721.92	1.30	30.2	12.3	2377	3742	0.22
340	683	736.3	722.94	-1.42	721.94	1.00	29.9	12.4	2368	3745	0.17
360	683	735.5	723.29	1.74	722.46	0.83	30.3	11.2	2379	3621	0.15
380	683	737.2	723.89	3.03	723.06	0.83	30.9	12.3	2397	3762	0.14
400	683	738.1	724.43	2.67	723.57	0.86	31.4	12.7	2413	3817	0.14
420	683	739.0	725.02	2.94	724.12	0.90	32.0	13.0	2430	3874	0.14
440	683	739.2	725.61	2.96	724.72	0.89	32.6	12.6	2448	3850	0.14
460	683	740.7	726.22	3.05	725.26	0.95	33.2	13.4	2466	3958	0.14
480	683	742.0	726.79	2.85	725.96	0.83	33.8	14.2	2484	4059	0.12
500	683	745.2	728.00	6.07	727.51	0.49	35.0	16.2	2520	4321	0.06
520	683	749.3	728.74	3.73	727.47	1.27	35.7	19.5	2542	4708	0.13
540	683	753.7	728.44	-1.52	727.53	0.90	35.4	24.2	2533	5224	0.08
560	690	758.3	729.00	2.82	728.19	0.81	29.0	28.3	2340	5478	0.08
580	690	762.5	729.53	2.62	728.76	0.77	29.5	32.0	2356	5904	0.07
600	691	767.8	730.06	2.70	729.12	0.94	29.1	36.7	2342	6417	0.07
620	692	772.8	730.47	2.01	729.63	0.84	28.5	41.4	2324	6917	0.06
640	693	776.7	730.90	2.15	730.14	0.75	27.9	44.8	2307	7280	0.05
660	693	780.2	731.69	3.95	730.91	0.77	28.7	47.5	2331	7606	0.05
680	692	782.2	732.23	2.75	731.16	1.07	30.2	48.9	2377	7809	0.07
700	691	782.4	732.44	1.03	731.29	1.15	31.4	48.9	2413	7845	0.07
720	690	781.2	731.73	-3.53	729.73	2.00	31.7	48.5	2422	7802	0.12
740	689	779.7	730.57	-5.84	728.72	1.85	31.6	48.1	2417	7757	0.12
760	689	776.4	729.90	-3.34	728.10	1.80	30.9	45.5	2397	7446	0.12
780	689	775.3	729.39	-2.53	727.32	2.08	30.4	44.9	2382	7363	0.14
800	689	774.5	728.81	-2.93	726.96	1.85	29.8	44.7	2364	7327	0.13
820	689	773.0	728.36	-2.26	726.44	1.92	29.4	43.6	2351	7192	0.13
840	689	771.2	727.68	-3.39	725.67	2.01	28.7	42.6	2330	7054	0.15
860	690	770.7	727.18	-2.51	725.17	2.01	27.7	42.6	2300	7024	0.15
880	690	771.6	726.73	-2.23	724.55	2.18	27.2	43.9	2287	7155	0.16
900	690	774.3	726.52	-1.08	725.22	1.29	26.5	46.8	2265	7461	0.09
920	690	775.5	726.58	0.32	723.75	2.83	26.6	47.9	2267	7585	0.20
940	688	776.0	725.20	-6.93	723.20	2.00	27.2	49.8	2286	7814	0.14
960	686	776.0	724.78	-2.06	722.84	1.94	29.3	50.2	2349	7922	0.13
980	683	774.0	724.82	0.17	723.20	1.62	31.8	48.2	2425	7777	0.10
1000	681	765.9	724.94	0.60	723.22	1.72	33.9	40.0	2488	6929	0.11
1020	681	765.5	725.01	0.37	722.92	2.09	34.0	39.4	2490	6869	0.14
1040	680	765.1	725.02	0.03	722.78	2.24	35.0	39.0	2521	6854	0.15
1060	679	765.9	724.88	-0.69	722.43	2.46	35.9	40.1	2546	6992	0.16
1080	679	765.3	724.73	-0.79	722.44	2.29	35.7	39.6	2542	6938	0.15
1100	679	764.6	724.82	0.47	722.70	2.12	36.3	38.8	2560	6867	0.14
1120	679	763.2	725.05	1.13	723.54	1.50	36.5	37.1	2566	6689	0.10
1140	678	757.5	726.41	6.82	723.56	2.85	38.4	30.1	2622	5961	0.21
1160	678	753.6	725.29	-5.58	722.51	2.79	37.3	27.3	2589	5621	0.22
1180	678	753.2	724.85	-2.22	722.54	2.31	36.8	27.4	2575	5611	0.19
1200	678	752.7	724.63	-1.10	722.72	1.91	36.6	27.1	2569	5575	0.15
1220	678	752.2	725.14	2.57	723.08	2.07	37.1	26.1	2584	5479	0.17
1240	678	749.3	724.95	-0.98	722.49	2.46	36.9	23.4	2578	5175	0.22
1260	678	744.1	724.00	-4.76	722.45	1.55	36.5	19.1	2565	4682	0.16
1280	678	739.0	723.64	-1.79	722.36	1.28	36.1	14.4	2554	4152	0.17
1300	677	734.2	723.23	-2.06	722.47	0.75	36.2	9.9	2557	3659	0.13

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - June 2007 Monitoring Event											
		7/2/07	Baseline		6/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.08	-					
40	668	728.6	724.91	-28.32	723.19	1.72	46.9	2.7	2877	3177	0.85
60	668	732.8	721.83	-15.57	720.33	1.51	43.8	10.0	2785	3893	0.24
80	668	736.6	721.14	-3.50	719.59	1.55	43.1	14.5	2764	4371	0.18
100	668	740.8	721.42	1.44	719.51	1.91	43.4	18.4	2773	4812	0.18
120	668	744.7	721.81	1.93	719.67	2.14	43.8	21.9	2784	5217	0.18
140	668	746.6	722.17	1.78	719.90	2.21	44.2	25.4	2795	5618	0.17
160	668	752.4	722.60	2.19	720.49	2.12	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.02	1.79	44.8	32.4	2814	6414	0.11
200	668	757.4	722.99	0.86	721.24	1.75	45.0	33.4	2820	6531	0.11
220	668	753.6	722.97	-0.06	721.48	1.50	45.0	29.6	2819	6104	0.10
240	683	749.3	722.80	-0.87	721.38	1.42	29.8	25.5	2364	5197	0.14
260	683	744.8	722.62	-0.87	721.40	1.23	29.6	21.1	2359	4705	0.14
280	683	740.2	722.60	-0.15	721.46	1.13	29.6	16.7	2358	4206	0.15
300	683	736.9	723.37	3.85	722.29	1.08	30.4	12.5	2361	3771	0.18
320	683	736.5	723.22	-0.71	721.81	1.42	30.2	12.3	2377	3742	0.24
340	683	736.3	722.94	-1.42	721.84	1.10	29.9	12.4	2368	3745	0.19
360	683	735.5	723.29	1.74	722.33	0.96	30.3	11.2	2379	3621	0.17
380	683	737.2	723.89	3.03	722.87	1.02	30.9	12.3	2397	3762	0.17
400	683	738.1	724.43	2.67	723.45	0.98	31.4	12.7	2413	3817	0.16
420	683	739.0	725.02	2.94	723.98	1.03	32.0	13.0	2430	3874	0.16
440	683	739.2	725.61	2.96	724.54	1.06	32.6	12.6	2448	3850	0.17
460	683	740.7	726.22	3.05	725.15	1.06	33.2	13.4	2466	3958	0.16
480	683	742.0	726.79	2.85	725.84	0.95	33.8	14.2	2484	4059	0.13
500	683	745.2	728.00	6.07	727.36	0.64	35.0	16.2	2520	4321	0.08
520	683	749.3	728.74	3.73	727.36	1.38	35.7	19.5	2542	4708	0.14
540	683	753.7	728.44	-1.52	727.42	1.02	35.4	24.2	2533	5224	0.09
560	690	758.3	729.00	2.82	728.13	0.88	29.0	28.3	2340	5478	0.08
580	690	762.5	729.53	2.62	728.65	0.87	29.5	32.0	2356	5904	0.07
600	691	767.8	730.06	2.70	728.87	1.19	29.1	36.7	2342	6417	0.09
620	692	772.8	730.47	2.01	729.47	0.99	28.5	41.4	2324	6917	0.07
640	693	776.7	730.90	2.15	729.91	0.99	27.9	44.8	2307	7280	0.07
660	693	780.2	731.69	3.95	730.77	0.91	28.7	47.5	2331	7606	0.06
680	692	782.2	732.23	2.75	731.06	1.17	30.2	48.9	2377	7809	0.08
700	691	782.4	732.44	1.03	731.21	1.23	31.4	48.9	2413	7845	0.08
720	690	781.2	731.73	-3.53	729.61	2.12	31.7	48.5	2422	7802	0.13
740	689	779.7	730.57	-5.84	728.61	1.96	31.6	48.1	2417	7757	0.12
760	689	776.4	729.90	-3.34	727.99	1.91	30.9	45.5	2397	7446	0.13
780	689	775.3	729.39	-2.53	727.24	2.16	30.4	44.9	2382	7363	0.14
800	689	774.5	728.81	-2.93	726.84	1.97	29.8	44.7	2364	7327	0.13
820	689	773.0	728.36	-2.26	726.23	2.13	29.4	43.6	2351	7192	0.15
840	689	771.2	727.68	-3.39	725.58	2.10	28.7	42.6	2330	7054	0.15
860	690	770.7	727.18	-2.51	725.06	2.12	27.7	42.6	2300	7024	0.16
880	690	771.6	726.73	-2.23	724.32	2.41	27.2	43.9	2287	7155	0.18
900	690	774.3	726.52	-1.08	725.00	1.52	26.5	46.8	2265	7461	0.11
920	690	775.5	726.58	0.32	723.61	2.97	26.6	47.9	2267	7585	0.21
940	688	776.0	725.20	-6.93	723.01	2.19	27.2	49.8	2286	7814	0.15
960	686	776.0	724.78	-2.06	722.73	2.06	29.3	50.2	2349	7922	0.13
980	683	774.0	724.82	0.17	722.97	1.85	31.8	48.2	2425	7777	0.11
1000	681	765.9	724.94	0.60	723.07	1.87	33.9	40.0	2488	6929	0.12
1020	681	765.5	725.01	0.37	722.65	2.36	34.0	39.4	2490	6869	0.16
1040	680	765.1	725.02	0.03	722.56	2.46	35.0	39.0	2521	6854	0.16
1060	679	765.9	724.88	-0.69	722.30	2.58	35.9	40.1	2546	6992	0.16
1080	679	765.3	724.73	-0.79	722.30	2.42	35.7	39.6	2542	6938	0.16
1100	679	764.6	724.82	0.47	722.44	2.38	36.3	38.8	2560	6867	0.15
1120	679	763.2	725.05	1.13	723.41	1.64	36.5	37.1	2566	6669	0.11
1140	678	757.5	726.41	6.82	723.30	3.11	38.4	30.1	2622	5961	0.23
1160	678	753.6	725.29	-5.58	722.28	3.01	37.3	27.3	2589	5621	0.24
1180	678	753.2	724.85	-2.22	722.27	2.58	36.8	27.4	2575	5611	0.21
1200	678	752.7	724.63	-1.10	722.46	2.17	36.6	27.1	2569	5575	0.18
1220	678	752.2	725.14	2.57	722.91	2.23	37.1	26.1	2584	5479	0.18
1240	678	749.3	724.95	-0.98	722.25	2.70	36.9	23.4	2578	5175	0.24
1260	678	744.1	724.00	-4.76	722.20	1.79	36.5	19.1	2565	4682	0.19
1280	678	739.0	723.64	-1.79	722.13	1.51	36.1	14.4	2554	4152	0.20
1300	677	734.2	723.23	-2.06	722.19	1.04	36.2	9.9	2557	3659	0.18

Estimation of Modified Compression Index											
Southern East-West Profiler											
September 2007 Monitoring Event											
		10/2/07	Baseline		9/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.15	-					
40	668	728.6	724.91	-28.32	723.40	1.51	46.9	2.7	2877	3177	0.75
60	668	732.8	721.83	-15.57	720.42	1.42	43.8	10.0	2785	3693	0.22
80	668	736.6	721.14	-3.50	719.63	1.51	43.1	14.5	2764	4371	0.18
100	668	740.8	721.42	1.44	719.60	1.83	43.4	18.4	2773	4812	0.18
120	668	744.7	721.81	1.93	719.78	2.03	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.25	1.91	44.2	25.4	2795	5618	0.14
160	668	752.4	722.60	2.19	720.51	2.09	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	721.05	1.76	44.8	32.4	2814	6414	0.11
200	668	757.4	722.99	0.86	721.31	1.68	45.0	33.4	2820	6531	0.10
220	668	753.6	722.97	-0.06	721.50	1.47	45.0	29.6	2819	6104	0.10
240	683	749.3	722.80	-0.87	721.44	1.36	29.8	25.5	2364	5197	0.13
260	683	744.8	722.62	-0.87	721.46	1.16	29.6	21.1	2359	4705	0.13
280	683	740.2	722.60	-0.15	721.53	1.06	29.6	16.7	2358	4206	0.14
300	683	736.9	723.37	3.85	722.39	0.98	30.4	12.5	2381	3771	0.16
320	683	736.5	723.22	-0.71	721.91	1.32	30.2	12.3	2377	3742	0.22
340	683	736.3	722.94	-1.42	721.90	1.04	29.9	12.4	2368	3745	0.18
360	683	735.5	723.29	1.74	722.43	0.86	30.3	11.2	2379	3621	0.16
380	683	737.2	723.89	3.03	723.00	0.89	30.9	12.3	2397	3762	0.15
400	683	738.1	724.43	2.67	723.56	0.86	31.4	12.7	2413	3817	0.14
420	683	739.0	725.02	2.94	724.10	0.91	32.0	13.0	2430	3874	0.14
440	683	739.2	725.61	2.96	724.67	0.93	32.6	12.6	2448	3850	0.15
460	683	740.7	726.22	3.05	725.26	0.95	33.2	13.4	2466	3958	0.14
480	683	742.0	726.79	2.85	725.84	0.95	33.8	14.2	2484	4059	0.13
500	683	745.2	728.00	6.07	727.47	0.53	35.0	16.2	2520	4321	0.06
520	683	749.3	728.74	3.73	727.40	1.34	35.7	19.5	2542	4708	0.14
540	683	753.7	728.44	-1.52	727.47	0.97	35.4	24.2	2533	5224	0.09
560	690	758.3	729.00	2.82	728.13	0.87	29.0	28.3	2340	5478	0.08
580	690	762.5	729.53	2.62	728.68	0.85	29.5	32.0	2356	5904	0.07
600	691	767.8	730.06	2.70	729.03	1.04	29.1	36.7	2342	6417	0.08
620	692	772.8	730.47	2.01	729.50	0.97	28.5	41.4	2324	6917	0.07
640	693	776.7	730.90	2.15	729.97	0.93	27.9	44.8	2307	7280	0.07
660	693	780.2	731.69	3.95	730.78	0.90	28.7	47.5	2331	7606	0.06
680	692	782.1	732.23	2.75	731.01	1.23	30.2	48.9	2377	7806	0.08
700	691	782.8	732.44	1.03	731.18	1.26	31.4	49.3	2413	7890	0.08
720	690	782.2	731.73	-3.53	729.58	2.16	31.7	49.5	2422	7911	0.13
740	689	783.0	730.57	-5.84	728.49	2.07	31.6	51.5	2417	8130	0.12
760	689	783.6	729.90	-3.34	727.70	2.20	30.9	52.7	2397	8248	0.13
780	689	786.2	729.39	-2.53	727.07	2.32	30.4	55.8	2382	8571	0.14
800	689	788.9	728.81	-2.93	726.81	2.00	29.8	59.1	2364	8928	0.12
820	689	791.4	728.36	-2.26	726.02	2.33	29.4	62.0	2351	9238	0.13
840	689	793.5	727.68	-3.39	725.39	2.29	28.7	64.8	2330	9522	0.13
860	690	794.3	727.18	-2.51	724.83	2.34	27.7	66.1	2300	9637	0.14
880	690	792.8	726.73	-2.23	724.23	2.50	27.2	65.1	2287	9513	0.15
900	690	791.5	726.52	-1.06	724.83	1.68	26.5	64.0	2265	9368	0.10
920	690	790.2	726.58	0.32	723.57	3.01	26.6	62.6	2267	9219	0.19
940	688	787.2	725.20	-6.93	722.99	2.21	27.2	61.0	2286	9053	0.14
960	686	781.5	724.78	-2.06	722.77	2.01	29.3	55.8	2349	8537	0.12
980	683	777.2	724.82	0.17	723.06	1.76	31.8	51.4	2425	8127	0.11
1000	681	775.7	724.94	0.60	722.93	2.00	33.9	49.8	2488	8016	0.12
1020	681	775.2	725.01	0.37	722.81	2.21	34.0	49.2	2490	7955	0.13
1040	680	774.9	725.02	0.03	722.58	2.44	35.0	48.9	2521	7949	0.14
1060	679	774.6	724.88	-0.69	722.31	2.57	35.9	48.7	2546	7952	0.14
1080	679	774.2	724.73	-0.79	722.28	2.45	35.7	48.5	2542	7925	0.14
1100	679	771.9	724.82	0.47	722.50	2.32	36.3	46.1	2560	7676	0.13
1120	679	762.9	725.05	1.13	723.49	1.55	36.5	36.9	2566	6660	0.10
1140	678	757.7	726.41	6.82	723.28	3.13	38.4	30.3	2622	5990	0.23
1160	678	756.6	725.29	-5.58	722.47	2.82	37.3	30.3	2589	5957	0.21
1180	678	756.1	724.85	-2.22	722.38	2.47	36.8	30.3	2575	5934	0.18
1200	678	754.9	724.63	-1.10	722.69	1.94	36.6	29.3	2569	5817	0.15
1220	678	754.2	725.14	2.57	723.01	2.13	37.1	28.1	2584	5702	0.17
1240	678	753.1	724.95	-0.98	722.39	2.56	36.9	27.2	2578	5597	0.21
1260	678	747.0	724.00	-4.76	722.23	1.76	36.5	22.0	2565	5009	0.17
1280	678	739.9	723.64	-1.79	722.24	1.40	36.1	15.2	2554	4245	0.18
1300	677	734.2	723.23	-2.06	722.47	0.76	36.2	9.9	2557	3658	0.13

Estimation of Modified Compression Index
Southern East-West Profiler
95% Confidence Upper Limit - September 2007 Monitoring Event

		10/2/07	Baseline		9/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.29	-					
40	668	728.6	724.91	-28.32	723.58	1.33	46.9	2.7	2877	3177	0.66
60	668	732.8	721.83	-15.57	720.48	1.36	43.8	10.0	2785	3893	0.21
80	668	736.6	721.14	-3.50	719.73	1.41	43.1	14.5	2764	4371	0.16
100	668	740.8	721.42	1.44	719.68	1.74	43.4	18.4	2773	4812	0.17
120	668	744.7	721.81	1.93	719.85	1.96	43.8	21.9	2784	5217	0.16
140	668	748.6	722.17	1.78	720.51	1.65	44.2	25.4	2795	5618	0.12
160	668	752.4	722.60	2.19	720.55	2.05	44.6	28.8	2808	6004	0.14
180	668	756.2	722.61	1.00	721.12	1.09	44.6	32.4	2814	6414	0.11
200	668	757.4	722.99	0.86	721.37	1.61	45.0	33.4	2820	6531	0.10
220	668	753.6	722.97	-0.06	721.56	1.42	45.0	29.6	2819	6104	0.09
240	683	749.3	722.80	-0.87	721.52	1.27	29.8	25.5	2364	5197	0.12
260	683	744.8	722.62	-0.87	721.53	1.10	29.6	21.1	2359	4705	0.12
280	683	740.2	722.60	-0.15	721.60	0.99	29.6	16.7	2358	4206	0.13
300	683	736.9	723.37	3.85	722.47	0.89	30.4	12.5	2381	3771	0.15
320	683	736.5	723.22	-0.71	721.96	1.26	30.2	12.3	2377	3742	0.21
340	683	736.3	722.94	-1.42	721.95	0.99	29.9	12.4	2368	3745	0.17
360	683	735.5	723.29	1.74	722.49	0.79	30.3	11.2	2379	3621	0.14
380	683	737.2	723.89	3.03	723.10	0.80	30.9	12.3	2397	3762	0.13
400	683	738.1	724.43	2.67	723.62	0.80	31.4	12.7	2413	3817	0.13
420	683	739.0	725.02	2.94	724.17	0.84	32.0	13.0	2430	3874	0.13
440	683	739.2	725.61	2.96	724.76	0.85	32.6	12.6	2448	3850	0.13
460	683	740.7	726.22	3.05	725.32	0.90	33.2	13.4	2466	3958	0.13
480	683	742.0	726.79	2.85	725.90	0.89	33.8	14.2	2484	4059	0.12
500	683	745.2	728.00	6.07	727.55	0.45	35.0	16.2	2520	4321	0.05
520	683	749.3	728.74	3.73	727.45	1.29	35.7	19.5	2542	4708	0.13
540	683	753.7	728.44	-1.52	727.53	0.91	35.4	24.2	2533	5224	0.08
560	690	758.3	729.00	2.82	728.17	0.84	29.0	28.3	2340	5478	0.08
580	690	762.5	729.53	2.62	728.73	0.79	29.5	32.0	2356	5904	0.07
600	691	767.8	730.06	2.70	729.15	0.91	29.1	36.7	2342	6417	0.07
620	692	772.8	730.47	2.01	729.57	0.89	28.5	41.4	2324	6917	0.07
640	693	776.7	730.90	2.15	730.08	0.81	27.9	44.8	2307	7280	0.06
660	693	780.2	731.69	3.95	730.85	0.83	28.7	47.5	2331	7606	0.06
680	692	782.1	732.23	2.75	731.06	1.17	30.2	48.9	2377	7806	0.08
700	691	782.8	732.44	1.03	731.22	1.22	31.4	49.3	2413	7890	0.08
720	690	782.2	731.73	-3.53	729.64	2.10	31.7	49.5	2422	7911	0.13
740	689	783.0	730.57	-5.84	728.55	2.02	31.6	51.5	2417	8130	0.12
760	689	783.6	729.90	-3.34	727.75	2.15	30.9	52.7	2397	8248	0.13
780	689	786.2	729.39	-2.53	727.11	2.28	30.4	55.8	2382	8571	0.13
800	689	788.9	728.81	-2.93	726.87	1.94	29.8	59.1	2364	8928	0.11
820	689	791.4	728.36	-2.26	726.13	2.23	29.4	62.0	2351	9238	0.13
840	689	793.5	727.68	-3.39	725.43	2.25	28.7	64.8	2330	9522	0.13
860	690	794.3	727.18	-2.51	724.89	2.29	27.7	66.1	2300	9637	0.13
880	690	792.8	726.73	-2.23	724.35	2.38	27.2	65.1	2287	9513	0.14
900	690	791.5	726.52	-1.08	724.95	1.57	26.5	64.0	2265	9368	0.10
920	690	790.2	726.58	0.32	723.64	2.94	26.6	62.6	2267	9219	0.18
940	688	787.2	725.20	-6.93	723.08	2.11	27.2	61.0	2286	9053	0.13
960	686	781.5	724.78	-2.06	722.83	1.95	29.3	55.8	2349	8537	0.12
980	683	777.2	724.82	0.17	723.18	1.64	31.8	51.4	2425	8127	0.10
1000	681	775.7	724.94	0.60	723.00	1.93	33.9	49.8	2488	8016	0.11
1020	681	775.2	725.01	0.37	722.94	2.07	34.0	49.2	2490	7955	0.12
1040	680	774.9	725.02	0.03	722.69	2.33	35.0	48.9	2521	7949	0.13
1060	679	774.6	724.88	-0.69	722.37	2.51	35.9	48.7	2546	7952	0.14
1080	679	774.2	724.73	-0.79	722.35	2.38	35.7	48.5	2542	7925	0.13
1100	679	771.9	724.82	0.47	722.63	2.19	36.3	46.1	2560	7676	0.13
1120	679	762.9	725.05	1.13	723.56	1.49	36.5	36.9	2566	6660	0.10
1140	678	757.7	726.41	6.82	723.41	3.00	38.4	30.3	2622	5990	0.22
1160	678	756.6	725.29	-5.58	722.58	2.71	37.3	30.3	2589	5957	0.20
1180	678	756.1	724.85	-2.22	722.51	2.34	36.8	30.3	2575	5934	0.17
1200	678	754.9	724.63	-1.10	722.82	1.81	36.6	29.3	2569	5817	0.14
1220	678	754.2	725.14	2.57	723.10	2.05	37.1	28.1	2584	5702	0.16
1240	678	753.1	724.95	-0.98	722.51	2.43	36.9	27.2	2578	5597	0.20
1260	678	747.0	724.00	-4.76	722.35	1.64	36.5	22.0	2565	5009	0.15
1280	678	739.9	723.64	-1.79	722.35	1.29	36.1	15.2	2554	4245	0.16
1300	677	734.2	723.23	-2.06	722.62	0.61	36.2	9.9	2557	3658	0.11

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - September 2007 Monitoring Event											
		10/2/07	Baseline		9/27/07				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.02	-					
40	668	728.6	724.91	-28.32	723.22	1.69	46.9	2.7	2877	3177	0.84
60	668	732.8	721.83	-15.57	720.36	1.48	43.8	10.0	2785	3893	0.23
80	668	736.6	721.14	-3.50	719.53	1.60	43.1	14.5	2764	4371	0.19
100	668	740.6	721.42	1.44	719.51	1.91	43.4	18.4	2773	4812	0.18
120	668	744.7	721.81	1.93	719.72	2.09	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	719.99	2.18	44.2	25.4	2795	5618	0.16
160	668	752.4	722.60	2.19	720.47	2.13	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	720.98	1.83	44.8	32.4	2814	6414	0.11
200	668	757.4	722.99	0.86	721.24	1.75	45.0	33.4	2820	6531	0.11
220	668	753.6	722.97	-0.06	721.44	1.53	45.0	29.6	2819	6104	0.10
240	683	749.3	722.80	-0.87	721.35	1.45	29.8	25.5	2364	5197	0.14
260	683	744.8	722.62	-0.87	721.40	1.23	29.6	21.1	2359	4705	0.14
280	683	740.2	722.60	-0.15	721.46	1.13	29.6	16.7	2358	4206	0.15
300	683	736.9	723.37	3.85	722.30	1.06	30.4	12.5	2381	3771	0.18
320	683	736.5	723.22	-0.71	721.85	1.38	30.2	12.3	2377	3742	0.23
340	683	736.3	722.94	-1.42	721.84	1.10	29.9	12.4	2368	3745	0.18
360	683	735.5	723.29	1.74	722.36	0.92	30.3	11.2	2379	3621	0.17
380	683	737.2	723.89	3.03	722.91	0.98	30.9	12.3	2397	3762	0.16
400	683	738.1	724.43	2.67	723.50	0.92	31.4	12.7	2413	3817	0.15
420	683	739.0	725.02	2.94	724.04	0.98	32.0	13.0	2430	3874	0.15
440	683	739.2	725.61	2.96	724.59	1.02	32.6	12.6	2448	3850	0.16
460	683	740.7	726.22	3.05	725.21	1.01	33.2	13.4	2466	3958	0.15
480	683	742.0	726.79	2.85	725.78	1.01	33.8	14.2	2484	4059	0.14
500	683	745.2	728.00	6.07	727.39	0.60	35.0	16.2	2520	4321	0.07
520	683	749.3	728.74	3.73	727.34	1.40	35.7	19.5	2542	4708	0.15
540	683	753.7	728.44	-1.52	727.41	1.02	35.4	24.2	2533	5224	0.09
560	690	758.3	729.00	2.82	728.10	0.90	29.0	28.3	2340	5478	0.08
580	690	762.5	729.53	2.62	728.63	0.90	29.5	32.0	2356	5904	0.08
600	691	767.8	730.06	2.70	728.90	1.16	29.1	36.7	2342	6417	0.09
620	692	772.8	730.47	2.01	729.42	1.05	28.5	41.4	2324	6917	0.08
640	693	776.7	730.90	2.15	729.85	1.05	27.9	44.8	2307	7280	0.08
660	693	780.2	731.69	3.95	730.72	0.97	28.7	47.5	2331	7606	0.07
680	692	782.1	732.23	2.75	730.96	1.28	30.2	48.9	2377	7806	0.08
700	691	782.8	732.44	1.03	731.14	1.30	31.4	49.3	2413	7890	0.08
720	690	782.2	731.73	-3.53	729.52	2.22	31.7	49.5	2422	7911	0.14
740	689	783.0	730.57	-5.84	728.44	2.13	31.6	51.5	2417	8130	0.13
760	689	783.6	729.90	-3.34	727.64	2.26	30.9	52.7	2397	8248	0.14
780	689	786.2	729.39	-2.53	727.03	2.36	30.4	55.8	2382	8571	0.14
800	689	788.9	728.81	-2.93	726.75	2.05	29.8	59.1	2364	8928	0.12
820	689	791.4	728.36	-2.26	725.92	2.44	29.4	62.0	2351	9238	0.14
840	689	793.5	727.68	-3.39	725.34	2.34	28.7	64.8	2330	9522	0.13
860	690	794.3	727.18	-2.51	724.78	2.40	27.7	66.1	2300	9637	0.14
880	690	792.8	726.73	-2.23	724.11	2.62	27.2	65.1	2287	9513	0.16
900	690	791.5	726.52	-1.08	724.72	1.79	26.5	64.0	2265	9368	0.11
920	690	790.2	726.58	0.32	723.50	3.08	26.6	62.6	2267	9219	0.19
940	688	787.2	725.20	-6.93	722.89	2.31	27.2	61.0	2286	9053	0.14
960	686	781.5	724.78	-2.06	722.72	2.07	29.3	55.8	2349	8537	0.13
980	683	777.2	724.82	0.17	722.95	1.87	31.8	51.4	2425	8127	0.11
1000	681	775.7	724.94	0.60	722.86	2.08	33.9	49.8	2488	8016	0.12
1020	681	775.2	725.01	0.37	722.67	2.34	34.0	49.2	2490	7955	0.14
1040	680	774.9	725.02	0.03	722.47	2.55	35.0	48.9	2521	7949	0.15
1060	679	774.0	724.00	-0.09	722.25	2.63	35.9	48.7	2548	7952	0.15
1080	679	774.2	724.73	-0.79	722.21	2.51	35.7	48.5	2542	7925	0.14
1100	679	771.9	724.82	0.47	722.37	2.45	36.3	46.1	2560	7676	0.14
1120	679	762.9	725.05	1.13	723.43	1.62	36.5	36.9	2566	6660	0.11
1140	678	757.7	726.41	6.82	723.15	3.26	38.4	30.3	2622	5990	0.24
1160	678	756.6	725.29	-5.58	722.36	2.93	37.3	30.3	2589	5957	0.22
1180	678	756.1	724.85	-2.22	722.25	2.60	36.8	30.3	2575	5934	0.19
1200	678	754.9	724.63	-1.10	722.56	2.07	36.6	29.3	2569	5817	0.16
1220	678	754.2	725.14	2.57	722.93	2.21	37.1	28.1	2584	5702	0.17
1240	678	753.1	724.95	-0.98	722.27	2.68	36.9	27.2	2578	5597	0.22
1260	678	747.0	724.00	-4.76	722.11	1.89	36.5	22.0	2565	5009	0.18
1280	678	739.9	723.64	-1.79	722.13	1.51	36.1	15.2	2554	4245	0.19
1300	677	734.2	723.23	-2.06	722.33	0.90	36.2	9.9	2557	3658	0.16

Estimation of Modified Compression Index
Southern East-West Profiler
March 2008 Monitoring Event

		4/3/08	Baseline		3/31/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.28						
40	668	728.7	724.91	-28.32	722.52	2.39	46.9	2.7	2877	3182	1.16
60	668	732.8	721.83	-15.57	719.67	2.17	43.8	10.0	2785	3893	0.34
80	668	736.6	721.14	-3.50	718.67	2.47	43.1	14.5	2764	4371	0.29
100	668	740.8	721.42	1.44	718.88	2.54	43.4	18.4	2773	4812	0.24
120	668	744.7	721.81	1.93	719.78	2.03	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.61	1.55	44.2	25.4	2795	5618	0.12
160	668	752.4	722.60	2.19	720.63	1.98	44.6	28.8	2808	6004	0.13
180	668	756.2	722.81	1.05	720.97	1.85	44.8	32.4	2814	6414	0.12
200	668	757.2	722.99	0.86	721.51	1.47	45.0	33.3	2820	6511	0.09
220	668	753.3	722.97	-0.06	721.72	1.26	45.0	29.4	2819	6077	0.08
240	683	748.8	722.80	-0.87	721.64	1.16	29.8	25.0	2364	5139	0.12
260	683	744.5	722.62	-0.87	721.52	1.10	29.6	20.8	2359	4670	0.13
280	683	740.2	722.60	-0.15	721.53	1.06	29.6	16.6	2358	4203	0.14
300	683	736.5	723.37	3.85	722.43	0.94	30.4	12.1	2381	3729	0.16
320	683	736.2	723.22	-0.71	722.04	1.18	30.2	11.9	2377	3703	0.20
340	683	735.9	722.94	-1.42	721.71	1.23	29.9	11.9	2368	3692	0.21
360	683	733.9	723.29	1.74	722.36	0.93	30.3	9.6	2379	3448	0.19
380	683	737.5	723.89	3.03	723.20	0.69	30.9	12.6	2397	3797	0.11
400	683	738.6	724.43	2.67	723.36	1.06	31.4	13.2	2413	3875	0.16
420	683	739.0	725.02	2.94	724.01	1.01	32.0	13.0	2430	3868	0.16
440	683	739.7	725.61	2.96	724.41	1.19	32.6	13.1	2448	3901	0.18
460	683	740.6	726.22	3.05	725.26	0.96	33.2	13.4	2466	3954	0.14
480	683	742.6	726.79	2.85	725.39	1.39	33.8	14.8	2484	4127	0.19
500	683	745.7	728.00	6.07	727.21	0.79	35.0	16.7	2520	4375	0.09
520	683	749.5	728.74	3.73	727.10	1.64	35.7	19.7	2542	4733	0.17
540	683	753.5	728.44	-1.52	727.05	1.39	35.4	24.0	2533	5200	0.13
560	690	758.1	729.00	2.82	727.85	1.15	29.0	28.1	2340	5456	0.11
580	690	762.7	729.53	2.62	728.45	1.08	29.5	32.1	2356	5922	0.09
600	691	767.2	730.06	2.70	728.66	1.40	29.1	36.1	2342	6354	0.11
620	692	772.0	730.47	2.01	729.21	1.26	28.5	40.6	2324	6827	0.09
640	693	776.5	730.90	2.15	729.58	1.32	27.9	44.6	2307	7254	0.10
660	693	779.6	731.69	3.95	730.60	1.09	28.7	46.9	2331	7542	0.07
680	692	781.7	732.23	2.75	730.81	1.43	30.2	48.5	2377	7760	0.09
700	691	783.4	732.44	1.03	730.82	1.62	31.4	49.9	2413	7957	0.10
720	690	784.3	731.73	-3.53	729.26	2.47	31.7	51.5	2422	8140	0.15
740	689	784.2	730.57	-5.84	728.17	2.40	31.6	52.6	2417	8256	0.14
760	689	783.8	729.90	-3.34	726.94	2.96	30.9	52.9	2397	8266	0.18
780	689	783.7	729.39	-2.53	726.57	2.83	30.4	53.3	2382	8294	0.17
800	689	791.0	728.81	-2.93	726.47	2.34	29.8	61.2	2364	9155	0.13
820	689	795.1	728.36	-2.26	725.62	2.74	29.4	65.7	2351	9646	0.15
840	689	795.2	727.68	-3.39	724.58	3.10	28.7	66.6	2330	9719	0.17
860	690	796.0	727.18	-2.51	724.28	2.90	27.7	67.8	2300	9830	0.17
880	690	796.2	726.73	-2.23	723.95	2.78	27.2	68.5	2287	9891	0.16
900	690	796.4	726.52	-1.08	724.72	1.80	26.5	68.9	2265	9908	0.11
920	690	796.5	726.58	0.32	723.08	3.50	26.6	68.9	2267	9917	0.21
940	688	796.0	725.20	-6.93	722.49	2.71	27.2	69.8	2286	10034	0.16
960	686	794.6	724.78	-2.06	722.79	1.99	29.3	68.8	2349	9991	0.11
980	683	792.2	724.82	0.17	722.91	1.91	31.8	66.4	2425	9790	0.10
1000	681	788.4	724.94	0.60	722.62	2.32	33.9	62.4	2488	9417	0.12
1020	681	784.1	725.01	0.37	722.81	2.20	34.0	58.1	2490	8938	0.12
1040	680	778.6	725.02	0.03	722.39	2.63	35.0	52.6	2521	8358	0.14
1060	679	772.4	724.88	-0.69	722.53	2.35	35.9	46.5	2546	7711	0.14
1080	679	767.8	724.73	-0.79	722.44	2.28	35.7	42.0	2542	7207	0.14
1100	679	766.0	724.82	0.47	722.08	2.74	36.3	40.2	2560	7018	0.17
1120	679	764.8	725.05	1.13	723.77	1.27	36.5	38.7	2566	6864	0.08
1140	678	764.0	726.41	6.82	723.54	2.86	38.4	36.6	2622	6684	0.18
1160	678	763.1	725.29	-5.58	722.66	2.63	37.3	36.8	2589	6673	0.17
1180	678	762.3	724.85	-2.22	722.55	2.30	36.8	36.4	2575	6617	0.15
1200	678	758.7	724.63	-1.10	722.49	2.14	36.6	33.0	2569	6237	0.15
1220	678	754.4	725.14	2.57	722.82	2.33	37.1	28.2	2584	5717	0.18
1240	678	750.0	724.95	-0.98	722.37	2.57	36.9	24.0	2578	5246	0.23
1260	678	744.6	724.00	-4.76	722.22	1.77	36.5	19.6	2565	4737	0.18
1280	678	739.5	723.64	-1.79	722.58	1.06	36.1	14.8	2554	4202	0.14
1300	677	734.7	723.23	-2.06	722.55	0.68	36.2	10.5	2557	3717	0.12

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Upper Limit - March 2008 Monitoring Event											
		4/3/08	Baseline		3/31/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.42	-					
40	668	728.7	724.91	-28.32	722.71	2.21	46.9	2.7	2877	3182	1.08
60	668	732.8	721.83	-15.57	719.73	2.11	43.8	10.0	2785	3893	0.33
80	668	736.6	721.14	-3.50	718.76	2.37	43.1	14.5	2764	4371	0.28
100	668	740.8	721.42	1.44	718.97	2.45	43.4	18.4	2773	4812	0.24
120	668	744.7	721.81	1.93	719.85	1.96	43.8	21.9	2784	5217	0.16
140	668	748.6	722.17	1.78	720.88	1.29	44.2	25.4	2795	5618	0.10
160	668	752.4	722.60	2.19	720.67	1.94	44.6	28.8	2808	6004	0.13
180	668	756.2	722.81	1.05	721.04	1.78	44.8	32.4	2814	6414	0.11
200	668	757.2	722.99	0.86	721.58	1.41	45.0	33.3	2820	6511	0.09
220	668	753.3	722.97	-0.06	721.77	1.20	45.0	29.4	2819	6077	0.08
240	683	748.8	722.80	-0.87	721.72	1.07	29.8	25.0	2364	5139	0.11
260	683	744.5	722.62	-0.87	721.59	1.04	29.6	20.8	2359	4670	0.12
280	683	740.2	722.60	-0.15	721.60	0.99	29.6	16.6	2358	4203	0.13
300	683	736.5	723.37	3.85	722.51	0.86	30.4	12.1	2381	3729	0.14
320	683	736.2	723.22	-0.71	722.10	1.12	30.2	11.9	2377	3703	0.19
340	683	735.9	722.94	-1.42	721.76	1.18	29.9	11.9	2368	3692	0.20
360	683	733.9	723.29	1.74	722.42	0.86	30.3	9.6	2379	3448	0.18
380	683	737.5	723.89	3.03	723.29	0.60	30.9	12.6	2397	3797	0.10
400	683	738.6	724.43	2.67	723.42	1.00	31.4	13.2	2413	3875	0.16
420	683	739.0	725.02	2.94	724.08	0.94	32.0	13.0	2430	3868	0.15
440	683	739.7	725.61	2.96	724.50	1.11	32.6	13.1	2448	3901	0.17
460	683	740.6	726.22	3.05	725.31	0.91	33.2	13.4	2466	3954	0.13
480	683	742.6	726.79	2.85	725.45	1.33	33.8	14.8	2484	4127	0.18
500	683	745.7	728.00	6.07	727.29	0.71	35.0	16.7	2520	4375	0.08
520	683	749.5	728.74	3.73	727.16	1.58	35.7	19.7	2542	4733	0.16
540	683	753.5	728.44	-1.52	727.11	1.33	35.4	24.0	2533	5200	0.12
560	690	758.1	729.00	2.82	727.88	1.12	29.0	28.1	2340	5456	0.10
580	690	762.7	729.53	2.62	728.50	1.02	29.5	32.1	2356	5922	0.09
600	691	767.2	730.06	2.70	728.79	1.28	29.1	36.1	2342	6354	0.10
620	692	772.0	730.47	2.01	729.29	1.18	28.5	40.6	2324	6827	0.09
640	693	776.5	730.90	2.15	729.69	1.20	27.9	44.6	2307	7254	0.09
660	693	779.6	731.69	3.95	730.67	1.02	28.7	46.9	2331	7542	0.07
680	692	781.7	732.23	2.75	730.86	1.37	30.2	48.5	2377	7760	0.09
700	691	783.4	732.44	1.03	730.86	1.58	31.4	49.9	2413	7957	0.10
720	690	784.3	731.73	-3.53	729.32	2.41	31.7	51.5	2422	8140	0.14
740	689	784.2	730.57	-5.84	728.23	2.34	31.6	52.6	2417	8256	0.14
760	689	783.8	729.90	-3.34	727.00	2.90	30.9	52.9	2397	8266	0.17
780	689	783.7	729.39	-2.53	726.61	2.79	30.4	53.3	2382	8294	0.17
800	689	791.0	728.81	-2.93	726.53	2.28	29.8	61.2	2364	9155	0.13
820	689	795.1	728.36	-2.26	725.72	2.63	29.4	65.7	2351	9646	0.15
840	689	795.2	727.68	-3.39	724.63	3.05	28.7	66.6	2330	9719	0.17
860	690	796.0	727.18	-2.51	724.33	2.84	27.7	67.8	2300	9830	0.16
880	690	796.2	726.73	-2.23	724.07	2.66	27.2	68.5	2287	9891	0.15
900	690	796.4	726.52	-1.08	724.83	1.69	26.5	68.9	2265	9908	0.10
920	690	796.5	726.58	0.32	723.15	3.43	26.6	68.9	2267	9917	0.20
940	688	796.0	725.20	-6.93	722.58	2.61	27.2	69.8	2286	10034	0.15
960	686	794.6	724.78	-2.06	722.85	1.94	29.3	68.8	2349	9991	0.11
980	683	792.2	724.82	0.17	723.03	1.79	31.8	66.4	2425	9790	0.09
1000	681	788.4	724.94	0.60	722.69	2.25	33.9	62.4	2488	9417	0.11
1020	681	784.1	725.01	0.37	722.95	2.06	34.0	58.1	2490	8938	0.11
1040	680	778.6	725.02	0.03	722.50	2.52	35.0	52.6	2521	8358	0.14
1060	679	772.4	724.88	-0.69	722.59	2.29	35.9	46.5	2546	7711	0.13
1080	679	767.8	724.73	-0.79	722.51	2.22	35.7	42.0	2542	7207	0.14
1100	679	766.0	724.82	0.47	722.21	2.61	36.3	40.2	2560	7018	0.16
1120	679	764.8	725.05	1.13	723.84	1.21	36.5	38.7	2566	6864	0.08
1140	678	764.0	726.41	6.82	723.68	2.73	38.4	36.6	2622	6684	0.18
1160	678	763.1	725.29	-5.58	722.77	2.52	37.3	36.8	2589	6673	0.16
1180	678	762.3	724.85	-2.22	722.68	2.17	36.8	36.4	2575	6617	0.14
1200	678	758.7	724.63	-1.10	722.62	2.01	36.6	33.0	2569	6237	0.14
1220	678	754.4	725.14	2.57	722.90	2.24	37.1	28.2	2584	5717	0.18
1240	678	750.0	724.95	-0.98	722.50	2.45	36.9	24.0	2578	5246	0.22
1260	678	744.6	724.00	-4.76	722.35	1.65	36.5	19.6	2565	4737	0.17
1280	678	739.5	723.64	-1.79	722.69	0.95	36.1	14.8	2554	4202	0.12
1300	677	734.7	723.23	-2.06	722.69	0.54	36.2	10.5	2557	3717	0.09

Estimation of Modified Compression Index
Southern East-West Profiler
95% Confidence Lower Limit - March 2008 Monitoring Event

		4/3/08	Baseline		3/31/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		729.14	-					
40	668	728.7	724.91	-28.32	722.34	2.57	46.9	2.7	2877	3182	1.25
60	668	732.8	721.83	-15.57	719.61	2.23	43.8	10.0	2785	3893	0.35
80	668	736.6	721.14	-3.50	718.57	2.57	43.1	14.5	2764	4371	0.30
100	668	740.8	721.42	1.44	718.80	2.63	43.4	18.4	2773	4812	0.25
120	668	744.7	721.81	1.93	719.72	2.09	43.8	21.9	2784	5217	0.17
140	668	748.6	722.17	1.78	720.35	1.81	44.2	25.4	2795	5618	0.14
160	668	752.4	722.60	2.19	720.59	2.02	44.6	28.8	2808	6004	0.14
180	668	756.2	722.81	1.05	720.90	1.92	44.8	32.4	2814	6414	0.12
200	668	757.2	722.99	0.86	721.44	1.54	45.0	33.3	2820	6511	0.09
220	668	753.3	722.97	-0.06	721.66	1.31	45.0	29.4	2819	6077	0.09
240	683	748.8	722.80	-0.87	721.55	1.25	29.8	25.0	2364	5139	0.12
260	683	744.5	722.62	-0.87	721.45	1.17	29.6	20.8	2359	4670	0.13
280	683	740.2	722.60	-0.15	721.46	1.14	29.6	16.6	2358	4203	0.16
300	683	736.5	723.37	3.85	722.34	1.02	30.4	12.1	2381	3729	0.17
320	683	736.2	723.22	-0.71	721.99	1.24	30.2	11.9	2377	3703	0.21
340	683	735.9	722.94	-1.42	721.65	1.29	29.9	11.9	2368	3692	0.22
360	683	733.9	723.29	1.74	722.30	0.99	30.3	9.6	2379	3448	0.20
380	683	737.5	723.89	3.03	723.11	0.78	30.9	12.6	2397	3797	0.13
400	683	738.6	724.43	2.67	723.30	1.12	31.4	13.2	2413	3875	0.17
420	683	739.0	725.02	2.94	723.94	1.07	32.0	13.0	2430	3868	0.17
440	683	739.7	725.61	2.96	724.33	1.28	32.6	13.1	2448	3901	0.19
460	683	740.6	726.22	3.05	725.20	1.01	33.2	13.4	2466	3954	0.15
480	683	742.6	726.79	2.85	725.33	1.45	33.8	14.8	2484	4127	0.19
500	683	745.7	728.00	6.07	727.13	0.87	35.0	16.7	2520	4375	0.10
520	683	749.5	728.74	3.73	727.05	1.69	35.7	19.7	2542	4733	0.18
540	683	753.5	728.44	-1.52	726.99	1.45	35.4	24.0	2533	5200	0.13
560	690	758.1	729.00	2.82	727.82	1.18	29.0	28.1	2340	5456	0.11
580	690	762.7	729.53	2.62	728.39	1.13	29.5	32.1	2356	5922	0.10
600	691	767.2	730.06	2.70	728.54	1.53	29.1	36.1	2342	6354	0.12
620	692	772.0	730.47	2.01	729.13	1.33	28.5	40.6	2324	6827	0.10
640	693	776.5	730.90	2.15	729.46	1.44	27.9	44.6	2307	7254	0.10
660	693	779.6	731.69	3.95	730.53	1.15	28.7	46.9	2331	7542	0.08
680	692	781.7	732.23	2.75	730.76	1.48	30.2	48.5	2377	7760	0.10
700	691	783.4	732.44	1.03	730.78	1.66	31.4	49.9	2413	7957	0.10
720	690	784.3	731.73	-3.53	729.20	2.53	31.7	51.5	2422	8140	0.15
740	689	784.2	730.57	-5.84	728.11	2.45	31.6	52.6	2417	8256	0.15
760	689	783.8	729.90	-3.34	726.89	3.02	30.9	52.9	2397	8266	0.18
780	689	783.7	729.39	-2.53	726.53	2.87	30.4	53.3	2382	8294	0.17
800	689	791.0	728.81	-2.93	726.41	2.40	29.8	61.2	2364	9155	0.14
820	689	795.1	728.36	-2.26	725.51	2.84	29.4	65.7	2351	9646	0.16
840	689	795.2	727.68	-3.39	724.53	3.15	28.7	66.6	2330	9719	0.18
860	690	796.0	727.18	-2.51	724.22	2.95	27.7	67.8	2300	9830	0.17
880	690	796.2	726.73	-2.23	723.83	2.90	27.2	68.5	2287	9891	0.17
900	690	796.4	726.52	-1.08	724.61	1.91	26.5	68.9	2265	9908	0.11
920	690	796.5	726.58	0.32	723.01	3.57	26.6	68.9	2267	9917	0.21
940	688	796.0	725.20	-6.93	722.39	2.81	27.2	69.8	2286	10034	0.16
960	686	794.6	724.78	-2.06	722.73	2.05	29.3	68.8	2349	9991	0.11
980	683	792.2	724.82	0.17	722.80	2.02	31.8	66.4	2425	9790	0.10
1000	681	788.4	724.94	0.60	722.55	2.39	33.9	62.4	2488	9417	0.12
1020	681	784.1	725.01	0.37	722.68	2.34	34.0	58.1	2490	8938	0.12
1040	680	778.6	725.02	0.03	722.28	2.74	35.0	52.6	2521	8358	0.15
1060	679	772.4	724.88	-0.69	722.47	2.41	35.9	46.5	2546	7711	0.14
1080	679	767.8	724.73	-0.79	722.38	2.35	35.7	42.0	2542	7207	0.15
1100	679	766.0	724.82	0.47	721.95	2.87	36.3	40.2	2560	7018	0.18
1120	679	764.8	725.05	1.13	723.71	1.34	36.5	38.7	2566	6864	0.09
1140	678	764.0	726.41	6.82	723.41	2.99	38.4	36.6	2622	6684	0.19
1160	678	763.1	725.29	-5.58	722.55	2.74	37.3	36.8	2589	6673	0.18
1180	678	762.3	724.85	-2.22	722.42	2.43	36.8	36.4	2575	6617	0.16
1200	678	758.7	724.63	-1.10	722.35	2.28	36.6	33.0	2569	6237	0.16
1220	678	754.4	725.14	2.57	722.74	2.41	37.1	28.2	2584	5717	0.19
1240	678	750.0	724.95	-0.98	722.25	2.69	36.9	24.0	2578	5246	0.24
1260	678	744.6	724.00	-4.76	722.10	1.89	36.5	19.6	2565	4737	0.19
1280	678	739.5	723.64	-1.79	722.47	1.17	36.1	14.8	2554	4202	0.15
1300	677	734.7	723.23	-2.06	722.40	0.83	36.2	10.5	2557	3717	0.14

Estimation of Modified Compression Index											
Southern East-West Profiler											
September 2008 Monitoring Event											
		9/4/08	Baseline		9/24/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.67						
40	668	728.7	724.91	-28.32	723.13	1.78	46.9	2.7	2877	3182	0.87
60	668	732.8	721.83	-15.57	720.03	1.81	43.8	10.0	2785	3694	0.28
80	668	736.6	721.14	-3.50	719.25	1.89	43.1	14.5	2764	4371	0.22
100	668	740.8	721.42	1.44	719.18	2.24	43.4	18.4	2773	4812	0.22
120	668	744.7	721.81	1.93	719.42	2.39	43.8	21.9	2784	5217	0.20
140	668	748.6	722.17	1.78	719.88	2.29	44.2	25.4	2795	5619	0.17
160	668	752.4	722.60	2.19	720.16	2.44	44.6	28.8	2808	6005	0.17
180	668	756.2	722.81	1.05	720.68	2.13	44.8	32.4	2814	6414	0.13
200	668	757.2	722.99	0.86	720.97	2.01	45.0	33.3	2820	6511	0.12
220	668	753.3	722.97	-0.06	721.20	1.77	45.0	29.4	2819	6078	0.12
240	683	748.8	722.80	-0.87	721.07	1.73	29.8	25.0	2364	5139	0.17
260	683	744.5	722.62	-0.87	721.12	1.50	29.6	20.8	2359	4671	0.17
280	683	740.2	722.60	-0.15	721.20	1.40	29.6	16.6	2358	4203	0.19
300	683	736.5	723.37	3.85	722.09	1.28	30.4	12.1	2381	3730	0.22
320	683	736.2	723.22	-0.71	721.58	1.65	30.2	11.9	2377	3703	0.28
340	683	735.9	722.94	-1.42	721.57	1.37	29.9	11.9	2368	3692	0.24
360	683	733.9	723.29	1.74	722.10	1.19	30.3	9.6	2379	3448	0.24
380	683	737.5	723.89	3.03	722.64	1.25	30.9	12.6	2397	3797	0.20
400	683	738.6	724.43	2.67	723.20	1.23	31.4	13.2	2413	3875	0.19
420	683	739.0	725.02	2.94	723.70	1.32	32.0	13.0	2430	3868	0.20
440	683	739.7	725.61	2.96	724.28	1.32	32.6	13.1	2448	3901	0.20
460	683	740.6	726.22	3.05	724.87	1.34	33.2	13.4	2466	3954	0.20
480	683	742.6	726.79	2.85	725.45	1.33	33.8	14.8	2484	4127	0.18
500	683	745.7	728.00	6.07	727.08	0.91	35.0	16.7	2520	4374	0.11
520	683	749.5	728.74	3.73	726.98	1.76	35.7	19.7	2542	4733	0.18
540	683	753.5	728.44	-1.52	727.06	1.37	35.4	24.0	2533	5200	0.12
560	690	758.1	729.00	2.82	727.75	1.25	29.0	28.1	2340	5455	0.12
580	690	762.6	729.53	2.62	728.31	1.22	29.5	32.1	2356	5922	0.10
600	691	767.2	730.06	2.70	728.58	1.48	29.1	36.1	2342	6353	0.12
620	692	772.0	730.47	2.01	729.06	1.40	28.5	40.6	2324	6827	0.11
640	693	776.5	730.90	2.15	729.48	1.41	27.9	44.6	2307	7254	0.10
660	693	779.6	731.69	3.95	730.25	1.43	28.7	46.9	2331	7541	0.10
680	692	781.7	732.23	2.75	730.50	1.73	30.2	48.5	2377	7760	0.11
700	691	783.4	732.44	1.03	730.60	1.84	31.4	49.9	2413	7957	0.11
720	690	784.2	731.73	-3.53	728.88	2.85	31.7	51.5	2422	8139	0.17
740	689	784.2	730.57	-5.84	727.80	2.77	31.6	52.6	2417	8256	0.16
760	689	783.8	729.90	-3.34	726.93	2.97	30.9	52.9	2397	8266	0.18
780	689	783.7	729.39	-2.53	726.25	3.15	30.4	53.3	2382	8295	0.19
800	689	791.0	728.81	-2.93	725.93	2.88	29.8	61.2	2364	9156	0.16
820	689	795.1	728.36	-2.26	725.08	3.28	29.4	65.7	2351	9645	0.18
840	689	794.4	727.68	-3.39	724.35	3.33	28.7	65.7	2330	9626	0.19
860	690	795.6	727.18	-2.51	723.82	3.35	27.7	67.5	2300	9788	0.19
880	690	796.6	726.73	-2.23	723.28	3.45	27.2	68.8	2287	9928	0.20
900	690	797.1	726.52	-1.08	723.93	2.59	26.5	69.6	2265	9994	0.15
920	690	797.4	726.58	0.32	722.69	3.89	26.6	69.8	2267	10020	0.23
940	688	796.4	725.20	-6.93	722.23	2.96	27.2	70.2	2286	10081	0.17
960	686	793.9	724.78	-2.06	722.02	2.77	29.3	68.1	2349	9905	0.15
980	683	790.7	724.82	0.17	722.34	2.48	31.8	64.8	2425	9623	0.13
1000	681	788.1	724.94	0.60	722.30	2.64	33.9	62.2	2488	9387	0.13
1020	681	783.9	725.01	0.37	722.16	2.86	34.0	57.9	2490	8917	0.15
1040	680	779.1	725.02	0.03	722.00	3.02	35.0	53.1	2521	8413	0.16
1060	679	773.9	724.88	-0.69	721.62	3.26	35.9	48.1	2546	7881	0.19
1080	679	769.0	724.73	-0.79	721.69	3.04	35.7	43.3	2542	7346	0.18
1100	679	765.9	724.82	0.47	721.95	2.87	36.3	40.1	2560	7014	0.18
1120	679	764.9	725.05	1.13	722.90	2.15	36.5	38.8	2566	6875	0.14
1140	678	763.7	726.41	6.82	722.70	3.71	38.4	36.3	2622	6655	0.24
1160	678	762.6	725.29	-5.58	721.96	3.33	37.3	36.3	2589	6623	0.22
1180	678	760.4	724.85	-2.22	721.88	2.97	36.8	34.5	2575	6408	0.20
1200	678	757.0	724.63	-1.10	722.14	2.49	36.6	31.3	2569	6048	0.18
1220	678	753.3	725.14	2.57	722.47	2.67	37.1	27.2	2584	5602	0.21
1240	678	749.2	724.95	-0.98	721.92	3.03	36.9	23.2	2578	5157	0.27
1260	678	745.0	724.00	-4.76	721.76	2.24	36.5	20.0	2565	4790	0.23
1280	678	740.9	723.64	-1.79	721.77	1.87	36.1	16.3	2554	4358	0.22
1300	677	736.7	723.23	-2.06	722.08	1.14	36.2	12.5	2557	3940	0.17

Estimation of Modified Compression Index
Southern East-West Profiler
95% Confidence Upper Limit - September 2008 Monitoring Event

		9/4/08	Baseline		9/24/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.80	-					
40	668	728.7	724.91	-28.32	723.32	1.60	46.9	2.7	2877	3182	0.78
60	668	732.8	721.83	-15.57	720.09	1.75	43.8	10.0	2785	3894	0.27
80	668	736.6	721.14	-3.50	719.35	1.79	43.1	14.5	2764	4371	0.21
100	668	740.8	721.42	1.44	719.27	2.15	43.4	18.4	2773	4812	0.21
120	668	744.7	721.81	1.93	719.48	2.33	43.8	21.9	2784	5217	0.20
140	668	748.6	722.17	1.78	720.14	2.03	44.2	25.4	2795	5619	0.15
160	668	752.4	722.60	2.19	720.20	2.40	44.6	28.8	2808	6005	0.16
180	668	756.2	722.81	1.05	720.75	2.06	44.8	32.4	2814	6414	0.13
200	668	757.2	722.99	0.86	721.04	1.95	45.0	33.3	2820	6511	0.12
220	668	753.3	722.97	-0.06	721.26	1.71	45.0	29.4	2819	6078	0.11
240	683	748.8	722.80	-0.87	721.15	1.65	29.8	25.0	2364	5139	0.16
260	683	744.5	722.62	-0.87	721.19	1.44	29.6	20.8	2359	4671	0.16
280	683	740.2	722.60	-0.15	721.27	1.33	29.6	16.6	2358	4203	0.18
300	683	736.5	723.37	3.85	722.17	1.20	30.4	12.1	2381	3730	0.20
320	683	736.2	723.22	-0.71	721.64	1.59	30.2	11.9	2377	3703	0.27
340	683	735.9	722.94	-1.42	721.63	1.31	29.9	11.9	2368	3692	0.23
360	683	733.9	723.29	1.74	722.16	1.13	30.3	9.6	2379	3448	0.23
380	683	737.5	723.89	3.03	722.73	1.16	30.9	12.6	2397	3797	0.19
400	683	738.6	724.43	2.67	723.26	1.17	31.4	13.2	2413	3875	0.18
420	683	739.0	725.02	2.94	723.77	1.25	32.0	13.0	2430	3868	0.19
440	683	739.7	725.61	2.96	724.37	1.24	32.6	13.1	2448	3901	0.19
460	683	740.6	726.22	3.05	724.93	1.29	33.2	13.4	2466	3954	0.19
480	683	742.6	726.79	2.85	725.51	1.27	33.8	14.8	2484	4127	0.17
500	683	745.7	728.00	6.07	727.16	0.84	35.0	16.7	2520	4374	0.10
520	683	749.5	728.74	3.73	727.03	1.71	35.7	19.7	2542	4733	0.18
540	683	753.5	728.44	-1.52	727.12	1.32	35.4	24.0	2533	5200	0.12
560	690	758.1	729.00	2.82	727.78	1.22	29.0	28.1	2340	5455	0.11
580	690	762.6	729.53	2.62	728.36	1.16	29.5	32.1	2356	5922	0.10
600	691	767.2	730.06	2.70	728.71	1.36	29.1	36.1	2342	6353	0.11
620	692	772.0	730.47	2.01	729.14	1.33	28.5	40.6	2324	6827	0.10
640	693	776.5	730.90	2.15	729.60	1.30	27.9	44.6	2307	7254	0.09
660	693	779.6	731.69	3.95	730.32	1.36	28.7	46.9	2331	7541	0.09
680	692	781.7	732.23	2.75	730.55	1.68	30.2	48.5	2377	7760	0.11
700	691	783.4	732.44	1.03	730.64	1.80	31.4	49.9	2413	7957	0.11
720	690	784.2	731.73	-3.53	728.94	2.79	31.7	51.5	2422	8139	0.17
740	689	784.2	730.57	-5.84	727.85	2.72	31.6	52.6	2417	8256	0.16
760	689	783.8	729.90	-3.34	726.98	2.92	30.9	52.9	2397	8266	0.18
780	689	783.7	729.39	-2.53	726.29	3.11	30.4	53.3	2382	8295	0.19
800	689	791.0	728.81	-2.93	725.99	2.82	29.8	61.2	2364	9156	0.16
820	689	795.1	728.36	-2.26	725.19	3.17	29.4	65.7	2351	9645	0.18
840	689	794.4	727.68	-3.39	724.40	3.28	28.7	65.7	2330	9626	0.19
860	690	795.6	727.18	-2.51	723.88	3.30	27.7	67.5	2300	9788	0.19
880	690	796.6	726.73	-2.23	723.40	3.33	27.2	68.8	2287	9928	0.19
900	690	797.1	726.52	-1.08	724.04	2.48	26.5	69.6	2265	9994	0.15
920	690	797.4	726.58	0.32	722.76	3.82	26.6	69.8	2267	10020	0.22
940	688	796.4	725.20	-6.93	722.33	2.87	27.2	70.2	2286	10081	0.16
960	686	793.9	724.78	-2.06	722.08	2.71	29.3	68.1	2349	9905	0.15
980	683	790.7	724.82	0.17	722.46	2.36	31.8	64.8	2425	9623	0.12
1000	681	788.1	724.94	0.60	722.37	2.57	33.9	62.2	2488	9387	0.13
1020	681	783.9	725.01	0.37	722.29	2.72	34.0	57.9	2490	8917	0.14
1040	680	779.1	725.02	0.03	722.11	2.91	35.0	53.1	2521	8413	0.16
1060	679	773.9	724.88	-0.60	721.68	3.20	35.9	48.1	2546	7881	0.18
1080	679	769.0	724.73	-0.79	721.76	2.97	35.7	43.3	2542	7346	0.18
1100	679	765.9	724.82	0.47	722.08	2.74	36.3	40.1	2560	7014	0.17
1120	679	764.9	725.05	1.13	722.96	2.08	36.5	38.8	2566	6875	0.13
1140	678	763.7	726.41	6.82	722.63	3.58	36.4	36.3	2622	6655	0.23
1160	678	762.6	725.29	-5.58	722.07	3.22	37.3	36.3	2589	6623	0.21
1180	678	760.4	724.85	-2.22	722.01	2.84	36.8	34.5	2575	6408	0.19
1200	678	757.0	724.63	-1.10	722.27	2.36	36.6	31.3	2569	6048	0.17
1220	678	753.3	725.14	2.57	722.56	2.59	37.1	27.2	2584	5602	0.21
1240	678	749.2	724.95	-0.98	722.04	2.91	36.9	23.2	2578	5157	0.26
1260	678	745.0	724.00	-4.76	721.88	2.12	36.5	20.0	2565	4790	0.21
1280	678	740.9	723.64	-1.79	721.89	1.75	36.1	16.3	2554	4358	0.21
1300	677	736.7	723.23	-2.06	722.23	1.00	36.2	12.5	2557	3940	0.15

Estimation of Modified Compression Index											
Southern East-West Profiler											
95% Confidence Lower Limit - September 2008 Monitoring Event											
		9/4/08	Baseline		9/24/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
20			730.36		728.53	-					
40	668	728.7	724.91	-28.32	722.95	1.96	46.9	2.7	2877	3182	0.96
60	668	732.8	721.83	-15.57	719.97	1.87	43.8	10.0	2785	3894	0.29
80	668	736.6	721.14	-3.50	719.15	1.98	43.1	14.5	2764	4371	0.23
100	668	740.8	721.42	1.44	719.10	2.33	43.4	18.4	2773	4812	0.22
120	668	744.7	721.81	1.93	719.35	2.46	43.8	21.9	2784	5217	0.21
140	668	748.6	722.17	1.78	719.61	2.55	44.2	25.4	2795	5619	0.19
160	668	752.4	722.60	2.19	720.12	2.48	44.6	28.8	2808	6005	0.17
180	668	756.2	722.81	1.05	720.61	2.20	44.8	32.4	2814	6414	0.14
200	668	757.2	722.99	0.86	720.91	2.08	45.0	33.3	2820	6511	0.13
220	668	753.3	722.97	-0.06	721.15	1.83	45.0	29.4	2819	6078	0.12
240	683	748.8	722.80	-0.87	720.98	1.82	29.8	25.0	2364	5139	0.18
260	683	744.5	722.62	-0.87	721.06	1.57	29.6	20.8	2359	4671	0.18
280	683	740.2	722.60	-0.15	721.13	1.47	29.6	16.6	2358	4203	0.20
300	683	736.5	723.37	3.85	722.00	1.36	30.4	12.1	2381	3730	0.23
320	683	736.2	723.22	-0.71	721.52	1.70	30.2	11.9	2377	3703	0.29
340	683	735.9	722.94	-1.42	721.52	1.42	29.9	11.9	2368	3692	0.25
360	683	733.9	723.29	1.74	722.03	1.26	30.3	9.6	2379	3448	0.26
380	683	737.5	723.89	3.03	722.55	1.35	30.9	12.6	2397	3797	0.22
400	683	738.6	724.43	2.67	723.14	1.29	31.4	13.2	2413	3875	0.20
420	683	739.0	725.02	2.94	723.63	1.38	32.0	13.0	2430	3868	0.21
440	683	739.7	725.61	2.96	724.20	1.41	32.6	13.1	2448	3901	0.21
460	683	740.6	726.22	3.05	724.82	1.40	33.2	13.4	2466	3954	0.21
480	683	742.6	726.79	2.85	725.39	1.39	33.8	14.8	2484	4127	0.19
500	683	745.7	728.00	6.07	727.00	0.99	35.0	16.7	2520	4374	0.12
520	683	749.5	728.74	3.73	726.93	1.81	35.7	19.7	2542	4733	0.19
540	683	753.5	728.44	-1.52	727.01	1.43	35.4	24.0	2533	5200	0.13
560	690	758.1	729.00	2.82	727.72	1.28	29.0	28.1	2340	5455	0.12
580	690	762.6	729.53	2.62	728.26	1.27	29.5	32.1	2356	5922	0.11
600	691	767.2	730.06	2.70	728.46	1.61	29.1	36.1	2342	6353	0.13
620	692	772.0	730.47	2.01	728.99	1.48	28.5	40.6	2324	6827	0.11
640	693	776.5	730.90	2.15	729.36	1.53	27.9	44.6	2307	7254	0.11
660	693	779.6	731.69	3.95	730.18	1.50	28.7	46.9	2331	7541	0.10
680	692	781.7	732.23	2.75	730.45	1.78	30.2	48.5	2377	7760	0.11
700	691	783.4	732.44	1.03	730.56	1.88	31.4	49.9	2413	7957	0.12
720	690	784.2	731.73	-3.53	728.82	2.91	31.7	51.5	2422	8139	0.17
740	689	784.2	730.57	-5.84	727.74	2.83	31.6	52.6	2417	8256	0.17
760	689	783.8	729.90	-3.34	726.87	3.03	30.9	52.9	2397	8266	0.18
780	689	783.7	729.39	-2.53	726.21	3.19	30.4	53.3	2382	8295	0.19
800	689	791.0	728.81	-2.93	725.87	2.94	29.8	61.2	2364	9156	0.17
820	689	795.1	728.36	-2.26	724.98	3.38	29.4	65.7	2351	9645	0.19
840	689	794.4	727.68	-3.39	724.30	3.38	28.7	65.7	2330	9626	0.19
860	690	795.6	727.18	-2.51	723.77	3.41	27.7	67.5	2300	9788	0.20
880	690	796.6	726.73	-2.23	723.16	3.57	27.2	68.8	2287	9928	0.21
900	690	797.1	726.52	-1.08	723.81	2.70	26.5	69.6	2265	9994	0.16
920	690	797.4	726.58	0.32	722.62	3.96	26.6	69.8	2267	10020	0.23
940	688	796.4	725.20	-6.93	722.14	3.06	27.2	70.2	2286	10081	0.17
960	686	793.9	724.78	-2.06	721.96	2.82	29.3	68.1	2349	9905	0.15
980	683	790.7	724.82	0.17	722.23	2.59	31.8	64.8	2425	9623	0.14
1000	681	788.1	724.94	0.60	722.23	2.71	33.9	62.2	2488	9387	0.14
1020	681	783.9	725.01	0.37	722.02	2.99	34.0	57.9	2490	8917	0.16
1040	680	779.1	725.02	0.03	721.89	3.13	35.0	53.1	2521	8413	0.17
1060	679	773.9	724.88	-0.69	721.56	3.32	35.9	48.1	2546	7881	0.19
1080	679	769.0	724.73	-0.79	721.62	3.10	35.7	43.3	2542	7346	0.19
1100	679	765.9	724.82	0.47	721.82	3.00	36.3	40.1	2560	7014	0.19
1120	679	764.9	725.05	1.13	722.83	2.22	36.5	38.8	2566	6875	0.14
1140	678	763.7	726.41	6.82	722.57	3.84	38.4	36.3	2622	6655	0.25
1160	678	762.6	725.29	-5.58	721.85	3.44	37.3	36.3	2589	6623	0.23
1180	678	760.4	724.85	-2.22	721.74	3.11	36.8	34.5	2575	6408	0.21
1200	678	757.0	724.63	-1.10	722.01	2.62	36.6	31.3	2569	6048	0.19
1220	678	753.3	725.14	2.57	722.39	2.75	37.1	27.2	2584	5602	0.22
1240	678	749.2	724.95	-0.98	721.79	3.15	36.9	23.2	2578	5157	0.28
1260	678	745.0	724.00	-4.76	721.63	2.36	36.5	20.0	2565	4790	0.24
1280	678	740.9	723.64	-1.79	721.66	1.98	36.1	16.3	2554	4358	0.24
1300	677	736.7	723.23	-2.06	721.94	1.29	36.2	12.5	2557	3940	0.19

Five-Year Projection of Settlement

Southern East-West Profiler

Average

Station	Baseline Measured Pipe Elev ft	Baseline Slope %	9/24/08 Measured Pipe Elev ft	Measured settlement ft	Stress @ Midpoint of MC V Wast Initial psf	Final psf	Average Modif. Compres Index	Final Waste Elevation ft	Final Waste Thickness ft	Final stress psf	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Check	Slope Difference	Comments
20	730.36		728.67													
40	724.91	-28.32	723.13	1.78	2877	2877	0.69	735.50	9.59	3694	3.53	719.60				Sideslope
60	721.83	-15.57	720.03	1.81	3894	5002	0.22	741.00	18.17	4858	0.93	719.10	-2.53			Sideslope
80	721.14	-3.50	719.25	1.89	4371	5977	0.16	745.00	22.86	5359	0.63	718.62	-2.40			Sideslope
100	721.42	1.44	719.18	2.24	4812	6851	0.17	748.50	26.08	5724	0.55	718.63	0.07			Pipe Access
120	721.81	1.93	719.42	2.39	5217	7650	0.16	752.50	29.69	6137	0.49	718.92	1.46			Pipe Access
140	722.17	1.78	719.88	2.29	5619	8442	0.13	756.50	33.33	6552	0.38	719.49	2.85			Pipe Access
160	722.60	2.19	720.16	2.44	6005	9201	0.13	760.50	36.90	6961	0.38	719.79	1.47			Pipe Access
180	722.81	1.05	720.68	2.13	6414	10014	0.11	764.50	40.69	7388	0.29	720.39	3.02			Pipe Access
200	722.99	0.86	720.97	2.01	6511	10202	0.10	768.50	44.51	7818	0.36	720.61	1.10			Pipe Access
220	722.97	-0.06	721.20	1.77	6078	9336	0.10	772.50	48.53	8263	0.58	720.62	0.04	slope reversal	0.01	Pipe Access
240	722.80	-0.87	721.07	1.73	5139	7914	0.13	776.50	52.70	8271	0.83	720.24	-1.92			Pipe Access
260	722.62	-0.87	721.12	1.50	4671	6983	0.13	780.50	56.88	8729	1.08	720.05	-0.95			Pipe Access
280	722.60	-0.15	721.20	1.40	4203	6049	0.14	784.00	60.40	9120	1.44	719.76	-1.45			Pipe Crossing
300	723.37	3.85	722.09	1.28	3730	5078	0.16	789.00	64.63	9612	2.04	720.05	1.46			Pipe Crossing
320	723.22	-0.71	721.58	1.65	3703	5029	0.19	792.50	68.28	10012	2.47	719.11	-4.68			Pipe Crossing
340	722.94	-1.42	721.57	1.37	3692	5015	0.20	797.50	73.56	10590	2.73	718.84	-1.35			Pipe Crossing
360	723.29	1.74	722.10	1.19	3448	4518	0.17	802.50	78.21	11117	2.56	719.53	3.46			Cell Floor
380	723.89	3.03	722.64	1.25	3797	5197	0.15	808.00	83.11	11679	2.32	720.32	3.91			Cell Floor
400	724.43	2.67	723.20	1.23	3875	5337	0.16	812.50	87.07	12135	2.51	720.68	1.84			Cell Floor
420	725.02	2.94	723.70	1.32	3868	5306	0.16	817.50	91.48	12642	2.59	721.11	2.12			Cell Floor
440	725.61	2.96	724.28	1.32	3901	5353	0.15	822.50	95.89	13149	2.60	721.69	2.89			Cell Floor
460	726.22	3.05	724.87	1.34	3954	5441	0.13	827.50	100.28	13655	2.40	722.47	3.93			Cell Floor
480	726.79	2.85	725.45	1.33	4127	5770	0.12	829.50	101.71	13831	2.10	723.35	4.39			Cell Floor
500	728.00	6.07	727.08	0.91	4374	6229	0.05	829.50	100.50	13733	0.83	726.26	14.69			Pipe Crossing
520	728.74	3.73	726.98	1.76	4733	6923	0.14	829.50	99.76	13672	2.35	724.63	-8.17	slope reversal		Pipe Crossing
540	728.44	-1.52	727.06	1.37	5200	7866	0.08	830.00	100.56	13753	1.19	725.88	6.26	slope reversal	-0.38	Pipe Crossing
560	729.00	2.82	727.75	1.25	5455	8571	0.08	830.00	100.00	13497	0.88	726.87	4.99			Cell Floor
	729.53	2.62	728.31	1.22	5922	9487	0.07	830.00	99.47	13454	0.75	727.56	3.41			Cell Floor
	730.06	2.70	728.58	1.48	6353	10365	0.10	830.00	98.94	13381	0.95	727.63	0.39			Cell Floor
620	730.47	2.01	729.06	1.40	6827	11329	0.11	830.50	99.03	13374	0.92	728.14	2.54			Cell Floor
640	730.90	2.15	729.48	1.41	7254	12200	0.03	831.00	99.10	13364	0.19	729.29	5.77			Cell Floor
660	731.69	3.95	730.25	1.43	7541	12752	0.01	831.00	98.31	13300	0.06	730.19	4.51			Cell Floor
680	732.23	2.75	730.50	1.73	7760	13143	0.05	831.00	97.77	13286	0.34	730.16	-0.15	slope reversal	-0.03	Pipe Crossing
700	732.44	1.03	730.60	1.84	7957	13501	0.06	831.00	97.56	13299	0.42	730.17	0.05			Pipe Crossing
720	731.73	-3.53	728.88	2.85	8139	13857	0.17	831.00	98.27	13386	1.15	727.73	-12.30			Pipe Crossing
740	730.57	-5.84	727.80	2.77	8256	14094	0.15	831.00	99.43	13511	1.01	726.78	-4.75			Cell Floor
760	729.90	-3.34	726.93	2.97	8266	14134	0.14	831.00	100.10	13565	0.94	725.99	-3.96			Cell Floor
780	729.39	-2.53	726.25	3.15	8295	14207	0.15	830.50	100.11	13551	1.00	725.25	-3.72			Cell Floor
800	728.81	-2.93	725.93	2.88	9156	15947	0.13	830.50	100.69	13598	0.69	725.24	-0.02			Cell Floor
820	728.36	-2.26	725.08	3.28	9645	16940	0.15	830.00	100.64	13579	0.67	724.41	-4.18			Cell Floor
840	727.68	-3.39	724.35	3.33	9626	16921	0.15	830.00	101.32	13634	0.65	723.71	-3.52			Cell Floor
860	727.18	-2.51	723.82	3.35	9788	17277	0.15	830.00	101.82	13660	0.62	723.21	-2.50			Cell Floor
880	726.73	-2.23	723.28	3.45	9928	17569	0.17	829.50	101.77	13640	0.62	722.66	-2.74			Cell Floor
900	726.52	-1.08	723.93	2.59	9994	17723	0.07	829.00	101.48	13587	0.26	723.67	5.05	slope reversal		Pipe Crossing
920	726.58	0.32	722.69	3.89	10020	17773	0.27	825.50	97.92	13194	0.86	721.83	-9.22	slope reversal	-0.83	Pipe Crossing
940	725.20	-6.93	722.23	2.96	10081	17875	0.15	821.00	94.80	12866	0.43	721.81	-0.12			Pipe Crossing
960	724.78	-2.06	722.02	2.77	9905	17461	0.11	816.00	90.22	12419	0.31	721.71	-0.50			Pipe Crossing
980	724.82	0.17	722.34	2.48	9623	16821	0.09	811.50	85.68	11992	0.28	722.06	1.77			Pipe Access
1000	724.94	0.60	722.30	2.64	9387	16286	0.11	807.00	81.06	11543	0.32	721.98	-0.40	slope reversal		Pipe Access
1020	725.01	0.37	722.16	2.86	8917	15344	0.12	803.00	76.99	11093	0.39	721.77	-1.07	slope reversal		Pipe Access
1040	725.02	0.03	722.00	3.02	8413	14306	0.13	799.00	72.98	10678	0.49	721.51	-1.28	slope reversal	-0.55	Pipe Access
1060	724.88	-0.69	721.62	3.26	7881	13216	0.14	795.00	69.12	10275	0.59	721.04	-2.38			Pipe Access
1080	724.73	-0.79	721.69	3.04	7346	12149	0.14	791.00	65.27	9844	0.63	721.06	0.12	slope reversal	0.02	Pipe Access
1100	724.82	0.47	721.95	2.87	7014	11468	0.14	787.00	61.18	9408	0.63	721.32	1.28			Pipe Access
1120	725.05	1.13	722.90	2.15	6875	11184	0.08	782.50	56.45	8890	0.31	722.59	6.38			Pipe Crossing
1140	726.41	6.82	722.70	3.71	6655	10687	0.21	778.50	51.09	8350	0.78	721.92	-3.37	slope reversal	-0.67	Pipe Crossing
1160	725.29	-5.58	721.96	3.33	6623	10657	0.19	774.50	48.21	7997	0.58	721.38	-2.67			Pipe Crossing
1180	724.85	-2.22	721.88	2.97	6408	10240	0.17	770.00	44.15	7533	0.43	721.45	0.33	slope reversal		Pipe Crossing
1200	724.63	-1.10	722.14	2.49	6048	9526	0.14	766.00	40.37	7107	0.35	721.79	1.71	slope reversal	0.41	Pipe Crossing
1220	725.14	2.57	722.47	2.67	5602	8619	0.16	762.00	35.86	6621	0.42	722.05	1.31			Pipe Crossing
1240	724.95	-0.98	721.92	3.03	5157	7735	0.22	758.00	32.05	6193	0.65	721.27	-3.94			Pipe Crossing
1260	724.00	-4.76	721.76	2.24	4790	7016	0.16	753.50	28.50	5786	0.49	721.26	0.00			Pipe Crossing
1280	723.64	-1.79	721.77	1.87	4358	6162	0.16	749.50	24.86	5371	0.53	721.24	-0.12			Pipe Crossing
1300	723.23	-2.06	722.08	1.14	3940	5323	0.11	745.00	20.77	4920	0.39	721.69	2.24	slope reversal	0.45	Pipe Crossing

Five-Year Projection of Settlement
Southern East-West Profiler
95% Confidence Upper Limit - Average

Station	Baseline Measured Pipe Elev ft	Baseline Slope %	9/24/08 Measured Pipe Elev ft	Measured settlement ft	Stress @ Midpoint of MC V Wast Initial psf	Stress @ Midpoint of MC V Wast Final psf	Average Modif. Compres Index	Final Waste Elevation ft	Final Waste Thickness ft	Final stress psf	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Check	Slope Difference	Comments
20	730.36		728.67													
40	724.91	-28.32	723.13	1.78	3182	3487	0.61	735.50	9.59	3999	2.86	720.27				Sideslope
60	721.83	-15.57	720.03	1.81	3894	5002	0.21	741.00	18.17	4858	0.89	719.14	-5.68			Sideslope
80	721.14	-3.50	719.25	1.89	4371	5977	0.15	745.00	22.86	5359	0.59	718.66	-2.40			Sideslope
100	721.42	1.44	719.18	2.24	4812	6851	0.16	748.50	26.08	5724	0.53	718.66	-0.01	slope reversal	0.00	Pipe Access
120	721.81	1.93	719.42	2.39	5217	7650	0.15	752.50	29.69	6137	0.48	718.94	1.41			Pipe Access
140	722.17	1.78	719.88	2.29	5619	8442	0.11	756.50	33.33	6552	0.33	719.55	3.05			Pipe Access
160	722.60	2.19	720.16	2.44	6005	9201	0.13	760.50	36.90	6961	0.37	719.80	1.24			Pipe Access
180	722.81	1.05	720.68	2.13	6414	10014	0.10	764.50	40.69	7388	0.28	720.40	3.04			Pipe Access
200	722.99	0.86	720.97	2.01	6511	10202	0.10	768.50	44.51	7818	0.35	720.63	1.11			Pipe Access
220	722.97	-0.06	721.20	1.77	6078	9336	0.09	772.50	48.53	8263	0.56	720.64	0.08	slope reversal	0.02	Pipe Access
240	722.80	-0.87	721.07	1.73	5139	7914	0.13	776.50	52.70	8271	0.78	720.29	-1.76			Pipe Access
260	722.62	-0.97	721.12	1.50	4671	6083	0.13	780.50	56.88	8729	1.01	720.11	-0.92			Pipe Access
280	722.60	-0.15	721.20	1.40	4203	6049	0.14	784.00	60.40	9120	1.35	719.85	-1.28			Pipe Crossing
300	723.37	3.85	722.09	1.28	3730	5078	0.15	789.00	64.63	9612	1.86	720.22	1.86			Pipe Crossing
320	723.22	-0.71	721.58	1.65	3703	5029	0.18	792.50	68.28	10012	2.33	719.25	-4.90			Pipe Crossing
340	722.94	-1.42	721.57	1.37	3692	5015	0.19	797.50	73.56	10590	2.60	718.98	-1.35			Pipe Crossing
360	723.29	1.74	722.10	1.19	3448	4518	0.15	802.50	78.21	11117	2.37	719.73	3.78			Cell Floor
380	723.89	3.03	722.64	1.25	3797	5197	0.14	808.00	83.11	11679	2.07	720.57	4.22			Cell Floor
400	724.43	2.67	723.20	1.23	3875	5337	0.15	812.50	87.07	12135	2.34	720.86	1.43			Cell Floor
420	725.02	2.94	723.70	1.32	3868	5306	0.14	817.50	91.48	12642	2.39	721.31	2.27			Cell Floor
440	725.61	2.96	724.28	1.32	3901	5353	0.14	822.50	95.89	13149	2.34	721.94	3.15			Cell Floor
460	726.22	3.05	724.87	1.34	3954	5441	0.13	827.50	100.28	13655	2.25	722.63	3.42			Cell Floor
480	726.79	2.85	725.45	1.33	4127	5770	0.11	829.50	101.71	13831	1.94	723.51	4.43			Cell Floor
500	728.00	6.07	727.08	0.91	4374	6229	0.04	829.50	100.50	13733	0.62	726.46	14.91			Pipe Crossing
520	728.74	3.73	726.98	1.76	4733	6923	0.13	829.50	99.76	13672	2.22	724.76	-8.54	slope reversal		Pipe Crossing
540	728.44	-1.52	727.06	1.37	5200	7866	0.07	830.00	100.56	13753	1.07	725.99	6.19	slope reversal	-0.47	Pipe Crossing
560	729.00	2.82	727.75	1.25	5455	8571	0.07	830.00	100.00	13497	0.82	726.93	4.68			Cell Floor
580	729.53	2.62	728.31	1.22	5922	9487	0.06	830.00	99.47	13454	0.67	727.64	3.58			Cell F
600	730.06	2.70	728.58	1.48	6353	10365	0.08	830.00	98.94	13381	0.74	727.85	1.00			Cell Fl
620	730.47	2.01	729.06	1.40	6827	11329	0.09	830.50	99.03	13374	0.76	728.30	2.30			Cell Floor
640	730.90	2.15	729.48	1.41	7254	12200	0.01	831.00	99.10	13364	0.07	729.41	5.55			Cell Floor
660	731.69	3.95	730.25	1.43	7541	12752	0.00	831.00	98.31	13300	-0.01	730.26	4.24			Cell Floor
680	732.23	2.75	730.50	1.73	7760	13143	0.04	831.00	97.77	13286	0.29	730.21	-0.24	slope reversal		Pipe Crossing
700	732.44	1.03	730.60	1.84	7957	13501	0.06	831.00	97.56	13299	0.39	730.21	-0.01	slope reversal	-0.05	Pipe Crossing
720	731.73	-3.53	728.88	2.85	8139	13857	0.16	831.00	98.27	13386	1.10	727.78	-12.22			Pipe Crossing
740	730.57	-5.84	727.80	2.77	8256	14094	0.14	831.00	99.43	13511	0.97	726.83	-4.78			Cell Floor
760	729.90	-3.34	726.93	2.97	8266	14134	0.13	831.00	100.10	13565	0.89	726.04	-3.95			Cell Floor
780	729.39	-2.53	726.25	3.15	8295	14207	0.15	830.50	100.11	13551	0.97	725.28	-3.79			Cell Floor
800	728.81	-2.93	725.93	2.88	9156	15947	0.13	830.50	100.69	13598	0.65	725.28	0.00	slope reversal	0.00	Cell Floor
820	728.36	-2.26	725.08	3.28	9645	16940	0.14	830.00	100.64	13579	0.62	724.47	-4.08			Cell Floor
840	727.68	-3.39	724.35	3.33	9626	16921	0.14	830.00	101.32	13634	0.62	723.73	-3.68			Cell Floor
860	727.18	-2.51	723.82	3.35	9788	17277	0.15	830.00	101.82	13660	0.59	723.23	-2.49			Cell Floor
880	726.73	-2.23	723.28	3.45	9928	17569	0.15	829.50	101.77	13640	0.56	722.72	-2.58			Cell Floor
900	726.52	-1.08	723.93	2.59	9994	17723	0.06	829.00	101.48	13587	0.20	723.72	5.03	slope reversal		Pipe Crossing
920	726.58	0.32	722.69	3.89	10020	17773	0.26	825.50	97.92	13194	0.83	721.86	-9.35	slope reversal	-0.86	Pipe Crossing
940	725.20	-6.93	722.23	2.96	10081	17875	0.14	821.00	94.80	12866	0.39	721.84	-0.11			Pipe Crossing
960	724.78	-2.06	722.02	2.77	9905	17461	0.10	816.00	90.22	12419	0.30	721.72	-0.58			Pipe Crossing
980	724.82	0.17	722.34	2.48	9623	16821	0.08	811.50	85.68	11992	0.25	722.09	1.84			Pipe Access
1000	724.94	0.60	722.30	2.64	9387	16286	0.10	807.00	81.06	11543	0.30	722.00	-0.47	slope reversal		Pipe Access
1020	725.01	0.37	722.16	2.86	8917	15344	0.11	803.00	76.99	11093	0.36	721.80	-0.99	slope reversal		Pipe Access
1040	725.02	0.03	722.00	3.02	8413	14306	0.13	799.00	72.98	10678	0.46	721.54	-1.30	slope reversal	-0.55	Pipe Access
1060	724.88	-0.69	721.62	3.26	7881	13216	0.14	795.00	69.12	10275	0.57	721.05	-2.43			Pipe Access
1080	724.73	-0.79	721.69	3.04	7346	12149	0.13	791.00	65.27	9844	0.61	721.08	0.14	slope reversal	0.03	Pipe Access
1100	724.82	0.47	721.95	2.87	7014	11468	0.13	787.00	61.18	9408	0.59	721.36	1.38			Pipe Access
1120	725.05	1.13	722.90	2.15	6875	11184	0.07	782.50	56.45	8890	0.29	722.61	6.26			Pipe Crossing
1140	726.41	6.82	722.70	3.71	6655	10687	0.20	778.50	51.09	8350	0.74	721.95	-3.28	slope reversal	-0.66	Pipe Crossing
1160	725.29	-5.58	721.96	3.33	6623	10657	0.18	774.50	48.21	7997	0.56	721.41	-2.73			Pipe Crossing
1180	724.85	-2.22	721.88	2.97	6408	10240	0.15	770.00	44.15	7533	0.40	721.48	0.34	slope reversal		Pipe Crossing
1200	724.63	-1.10	722.14	2.49	6046	9526	0.12	766.00	40.37	7107	0.32	721.82	1.72	slope reversal	0.41	Pipe Crossing
1220	725.14	2.57	722.47	2.67	5602	8619	0.15	762.00	35.86	6621	0.40	722.07	1.27			Pipe Crossing
1240	724.95	-0.98	721.92	3.03	5157	7735	0.21	758.00	32.05	6193	0.61	721.30	-3.86			Pipe Crossing
1260	724.00	-4.76	721.76	2.24	4790	7016	0.15	753.50	28.50	5786	0.45	721.31	0.03	slope reversal	0.01	Pipe Crossing
1280	723.64	-1.79	721.77	1.87	4358	6162	0.15	749.50	24.86	5371	0.48	721.30	-0.06			Pipe Crossing
1300	723.23	-2.06	722.08	1.14	3940	5323	0.08	745.00	20.77	4920	0.29	721.80	2.51	slope reversal	0.50	Pipe Crossing

Five-Year Projection of Settlement
Southern East-West Profiler
95% Confidence Lower Limit - Average

Station	Baseline Measured Pipe Elev ft	Baseline Slope %	9/24/08 Measured Pipe Elev ft	Measured settlement ft	Stress @ Midpoint of MC V Wast Initial psf	Stress @ Midpoint of MC V Wast Final psf	Average Modif. Compres Index	Final Waste Elevation ft	Final Waste Thickness ft	Final stress psf	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Check	Slope Difference	Comments
20	730.36		728.67													
40	724.91	-28.32	723.13	1.78	3182	3487	0.77	735.50	9.59	3999	3.59	719.54				Sideslope
60	721.83	-15.57	720.03	1.81	3894	5002	0.23	741.00	18.17	4858	0.97	719.06	-2.40			Sideslope
80	721.14	-3.50	719.25	1.89	4371	5977	0.18	745.00	22.86	5359	0.67	718.58	-2.41			Sideslope
100	721.42	1.44	719.18	2.24	4812	6851	0.18	748.50	26.08	5724	0.58	718.61	0.14			Pipe Access
120	721.81	1.93	719.42	2.39	5217	7650	0.16	752.50	29.69	6137	0.51	718.91	1.51			Pipe Access
140	722.17	1.78	719.88	2.29	5619	8442	0.15	756.50	33.33	6552	0.44	719.44	2.65			Pipe Access
160	722.60	2.19	720.16	2.44	6005	9201	0.13	760.50	36.90	6961	0.38	719.78	1.71			Pipe Access
180	722.81	1.05	720.68	2.13	6414	10014	0.11	764.50	40.69	7388	0.30	720.38	3.00			Pipe Access
200	722.99	0.86	720.97	2.01	6511	10202	0.11	768.50	44.51	7818	0.38	720.60	1.08			Pipe Access
220	722.97	-0.06	721.20	1.77	6078	9336	0.10	772.50	48.53	8263	0.61	720.60	0.00	slope reversal	0.00	Pipe Access
240	722.80	-0.87	721.07	1.73	5139	7914	0.14	776.50	52.70	8271	0.88	720.18	-2.07			Pipe Access
260	722.62	-0.87	721.12	1.50	4671	6983	0.14	780.50	56.88	8729	1.14	719.99	-0.99			Pipe Access
280	722.60	-0.15	721.20	1.40	4203	6049	0.15	784.00	60.40	9120	1.54	719.66	-1.62			Pipe Crossing
300	723.37	3.85	722.09	1.28	3730	5078	0.18	789.00	64.63	9612	2.21	719.87	1.05			Pipe Crossing
320	723.22	-0.71	721.58	1.65	3703	5029	0.20	792.50	68.28	10012	2.60	718.98	-4.46			Pipe Crossing
340	722.94	-1.42	721.57	1.37	3692	5015	0.21	797.50	73.56	10590	2.86	718.71	-1.34			Pipe Crossing
360	723.29	1.74	722.10	1.19	3448	4518	0.18	802.50	78.21	11117	2.76	719.34	3.14			Cell Floor
380	723.89	3.03	722.64	1.25	3797	5197	0.17	808.00	83.11	11679	2.58	720.06	3.60			Cell Floor
400	724.43	2.67	723.20	1.23	3875	5337	0.17	812.50	87.07	12135	2.69	720.51	2.24			Cell Floor
420	725.02	2.94	723.70	1.32	3868	5306	0.17	817.50	91.48	12642	2.80	720.90	1.98			Cell Floor
440	725.61	2.96	724.28	1.32	3901	5353	0.17	822.50	95.89	13149	2.85	721.43	2.63			Cell Floor
460	726.22	3.05	724.87	1.34	3954	5441	0.14	827.50	100.28	13655	2.56	722.32	4.44			Cell Floor
480	726.79	2.85	725.45	1.33	4127	5770	0.13	829.50	101.71	13831	2.27	723.19	4.35			Cell Floor
500	728.00	6.07	727.08	0.91	4374	6229	0.06	829.50	100.50	13733	1.03	726.05	14.47			Pipe Crossing
520	728.74	3.73	726.98	1.76	4733	6923	0.15	829.50	99.76	13672	2.49	724.49	-7.81	slope reversal		Pipe Crossing
	728.44	-1.52	727.06	1.37	5200	7866	0.09	830.00	100.56	13753	1.30	725.76	6.33	slope reversal	-0.29	Pipe Crossing
	729.00	2.82	727.75	1.25	5455	8571	0.08	830.00	100.00	13497	0.93	726.82	5.31			Cell Floor
560	729.53	2.62	728.31	1.22	5922	9487	0.08	830.00	99.47	13454	0.84	727.47	3.25			Cell Floor
600	730.06	2.70	728.58	1.48	6353	10365	0.12	830.00	98.94	13381	1.16	727.42	-0.23	slope reversal	-0.05	Cell Floor
620	730.47	2.01	729.06	1.40	6827	11329	0.13	830.50	99.03	13374	1.09	727.98	2.78			Cell Floor
640	730.90	2.15	729.48	1.41	7254	12200	0.04	831.00	99.10	13364	0.31	729.17	5.98			Cell Floor
660	731.69	3.95	730.25	1.43	7541	12752	0.02	831.00	98.31	13300	0.12	730.13	4.78			Cell Floor
680	732.23	2.75	730.50	1.73	7760	13143	0.05	831.00	97.77	13286	0.39	730.12	-0.05	slope reversal	-0.01	Pipe Crossing
700	732.44	1.03	730.60	1.84	7957	13501	0.07	831.00	97.56	13299	0.46	730.14	0.11			Pipe Crossing
720	731.73	-3.53	728.88	2.85	8139	13857	0.18	831.00	98.27	13386	1.20	727.68	-12.38			Pipe Crossing
740	730.57	-5.84	727.80	2.77	8256	14094	0.16	831.00	99.43	13511	1.06	726.74	-4.72			Cell Floor
760	729.90	-3.34	726.93	2.97	8266	14134	0.15	831.00	100.10	13565	0.98	725.94	-3.97			Cell Floor
780	729.39	-2.53	726.25	3.15	8295	14207	0.16	830.50	100.11	13551	1.03	725.22	-3.65			Cell Floor
800	728.81	-2.93	725.93	2.88	9156	15947	0.14	830.50	100.69	13598	0.72	725.21	-0.04			Cell Floor
820	728.36	-2.26	725.08	3.28	9645	16940	0.17	830.00	100.64	13579	0.73	724.35	-4.29			Cell Floor
840	727.68	-3.39	724.35	3.33	9626	16921	0.16	830.00	101.32	13634	0.67	723.68	-3.36			Cell Floor
860	727.18	-2.51	723.82	3.35	9788	17277	0.16	830.00	101.82	13660	0.65	723.18	-2.52			Cell Floor
880	726.73	-2.23	723.28	3.45	9928	17569	0.18	829.50	101.77	13640	0.68	722.60	-2.90			Cell Floor
900	726.52	-1.08	723.93	2.59	9994	17723	0.09	829.00	101.48	13587	0.32	723.61	5.07	slope reversal		Pipe Crossing
920	726.58	0.32	722.69	3.89	10020	17773	0.28	825.50	97.92	13194	0.89	721.80	-9.08	slope reversal	-0.80	Pipe Crossing
940	725.20	-6.93	722.23	2.96	10081	17875	0.16	821.00	94.80	12866	0.46	721.77	-0.13			Pipe Crossing
960	724.78	-2.06	722.02	2.77	9905	17461	0.11	816.00	90.22	12419	0.33	721.69	-0.42			Pipe Crossing
980	724.82	0.17	722.34	2.48	9623	16821	0.10	811.50	85.68	11992	0.31	722.03	1.69			Pipe Access
1000	724.94	0.60	722.30	2.64	9387	16286	0.11	807.00	81.06	11543	0.34	721.96	-0.33	slope reversal		Pipe Access
1020	725.01	0.37	722.16	2.86	8917	15344	0.13	803.00	76.99	11093	0.43	721.73	-1.16	slope reversal		Pipe Access
1040	725.02	0.03	722.00	3.02	8413	14306	0.14	799.00	72.98	10678	0.52	721.48	-1.25	slope reversal	-0.55	Pipe Access
1060	724.88	-0.69	721.62	3.26	7881	13216	0.15	795.00	69.12	10275	0.61	721.02	-2.32			Pipe Access
1080	724.73	-0.79	721.69	3.04	7346	12149	0.14	791.00	65.27	9844	0.65	721.04	0.10	slope reversal	0.02	Pipe Access
1100	724.82	0.47	721.95	2.87	7014	11468	0.15	787.00	61.18	9408	0.68	721.27	1.17			Pipe Access
1120	725.05	1.13	722.90	2.15	6875	11184	0.08	782.50	56.45	8890	0.33	722.57	6.50			Pipe Crossing
1140	726.41	6.82	722.70	3.71	6655	10687	0.22	778.50	51.09	8350	0.82	721.88	-3.46	slope reversal	-0.69	Pipe Crossing
1160	725.29	-5.58	721.96	3.33	6623	10657	0.20	774.50	48.21	7997	0.61	721.35	-2.61			Pipe Crossing
1180	724.85	-2.22	721.88	2.97	6408	10240	0.18	770.00	44.15	7533	0.46	721.42	0.32	slope reversal		Pipe Crossing
1200	724.63	-1.10	722.14	2.49	6048	9526	0.15	766.00	40.37	7107	0.38	721.76	1.71	slope reversal	0.41	Pipe Crossing
1220	725.14	2.57	722.47	2.67	5602	8619	0.16	762.00	35.86	6621	0.44	722.03	1.35			Pipe Crossing
1240	724.95	-0.98	721.92	3.03	5157	7735	0.23	758.00	32.05	6193	0.69	721.23	-4.02			Pipe Crossing
1260	724.00	-4.76	721.76	2.24	4790	7016	0.18	753.50	28.50	5786	0.53	721.22	-0.03			Pipe Crossing
1280	723.64	-1.79	721.77	1.87	4358	6162	0.18	749.50	24.86	5371	0.59	721.18	-0.18			Pipe Crossing
	723.23	-2.06	722.08	1.14	3940	5323	0.14	745.00	20.77	4920	0.50	721.58	1.98	slope reversal	0.39	Pipe Crossing

Settlement estimate Sept08 FINAL © E W AVG All

Estimation of Modified Compression Index											
Northern East-West Profiler											
March 2008 Monitoring Event											
		4/3/08	Baseline		1/21/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
680	686	747.5	736.52	-5.70	736.45	1.12	40.9	12.8	2696	4118	0.15
700	685	750.3	736.16	-1.81	735.95	1.40	41.1	25.7	2702	5552	0.11
720	685	762.8	735.98	-0.91	735.66	1.44	41.4	27.1	2712	5716	0.11
740	684	764.0	735.65	-0.65	735.55	1.40	41.8	30.8	2725	6139	0.09
760	683	767.6	735.70	-0.73	735.41	1.48	42.2	33.6	2737	6467	0.09
780	683	770.3	735.43	-1.34	735.00	1.65	42.5	32.1	2745	6314	0.11
800	682	768.6	735.14	-1.47	734.62	1.67	42.8	31.7	2753	6273	0.11
820	682	767.8	734.81	-1.65	734.24	1.73	43.0	32.7	2759	6389	0.11
840	681	768.5	735.14	1.67	734.98	1.36	43.9	32.9	2786	6438	0.09
860	681	769.0	734.85	-1.45	733.85	2.59	44.1	33.9	2793	6559	0.16
880	680	769.8	734.23	-3.12	733.18	2.49	44.0	34.7	2791	6648	0.15
900	680	770.0	733.90	-1.63	733.02	2.45	44.2	34.3	2797	6599	0.15
920	679	769.2	733.55	-1.78	732.30	2.60	44.4	33.9	2802	6560	0.16
940	679	768.4	733.19	-1.78	731.98	2.79	44.3	31.2	2799	6257	0.18
960	679	765.3	732.72	-2.38	731.61	2.77	44.1	30.4	2793	6164	0.18
980	678	764.1	732.32	-2.01	731.10	2.69	44.0	30.4	2789	6163	0.18
1000	678	763.7	731.76	-2.79	730.30	2.73	43.7	30.2	2780	6132	0.18
1020	678	763.0	731.17	-2.96	729.77	2.67	43.4	30.1	2771	6114	0.18
1040	678	762.3	730.92	-1.22	730.00	1.99	43.4	30.2	2772	6124	0.13
1060	677	762.1	730.42	-2.51	728.46	3.15	43.2	28.2	2765	5897	0.22
1080	677	759.6	728.91	-7.57	727.53	2.56	41.9	23.3	2728	5311	0.21
1100	677	753.2	728.16	-3.74	726.95	2.26	41.4	17.9	2713	4695	0.23
1120	676	747.0	727.30	-4.32	726.56	1.94	40.9	13.4	2696	4188	0.25
1140	676	741.7	726.67	-3.17	726.15	1.65	40.5	9.3	2685	3715	0.29
1160	676	736.9	725.93	-3.66	725.61	1.55	40.0	5.1	2671	3236	0.46
1180	676	732.0	725.13	-4.03	725.01	1.09	39.5	5.9	2655	3309	0.29

Estimation of Modified Compression Index											
Northern East-West Profiler											
95% Confidence Upper Limit - March 2008 Monitoring Event											
		4/3/08	Baseline		4/21/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif, Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
680	686	747.5	736.52	-5.70	736.57	-0.05	40.9	10.0	2696	3804	-0.01
700	685	750.3	736.16	-1.81	736.07	0.09	41.1	13.2	2702	4164	0.01
720	685	762.8	735.98	-0.91	735.76	0.21	41.4	25.9	2712	5584	0.02
740	684	764.0	735.85	-0.65	735.64	0.20	41.8	27.2	2725	5742	0.01
760	683	767.6	735.70	-0.73	735.50	0.19	42.2	30.9	2737	6168	0.01
780	683	770.3	735.43	-1.34	735.10	0.33	42.5	33.9	2745	6505	0.02
800	682	768.6	735.14	-1.47	734.73	0.41	42.8	32.4	2753	6354	0.03
820	682	767.8	734.81	-1.65	734.32	0.48	43.0	32.0	2759	6316	0.03
840	681	768.5	735.14	1.67	735.07	0.07	43.9	32.4	2786	6378	0.00
860	681	769.0	734.85	-1.45	733.90	0.96	44.1	33.2	2793	6477	0.06
880	680	769.8	734.23	-3.12	733.31	0.92	44.0	34.6	2791	6626	0.06
900	680	770.0	733.90	-1.63	733.13	0.77	44.2	35.1	2797	6691	0.05
920	679	769.2	733.55	-1.78	732.37	1.18	44.4	34.6	2802	6643	0.07
940	679	768.4	733.19	-1.78	732.09	1.10	44.3	34.2	2799	6597	0.07
960	679	765.3	732.72	-2.38	731.70	1.02	44.1	31.6	2793	6304	0.07
980	678	764.1	732.32	-2.01	731.23	1.09	44.0	30.8	2789	6205	0.07
1000	678	763.7	731.76	-2.79	730.41	1.35	43.7	31.0	2780	6216	0.09
1020	678	763.0	731.17	-2.96	729.87	1.30	43.4	30.8	2771	6188	0.09
1040	678	762.3	730.92	-1.22	730.09	0.84	43.4	30.4	2772	6142	0.06
1060	677	762.1	730.42	-2.51	728.53	1.89	43.2	30.7	2765	6173	0.13
1080	677	759.6	728.91	-7.57	727.62	1.29	41.9	29.7	2728	6027	0.09
1100	677	753.2	728.16	-3.74	727.05	1.12	41.4	24.0	2713	5380	0.09
1120	676	747.0	727.30	-4.32	726.66	0.64	40.9	18.7	2696	4773	0.06
1140	676	741.7	726.67	-3.17	726.25	0.42	40.5	14.1	2685	4248	0.05
1160	676	736.9	725.93	-3.66	725.72	0.22	40.0	10.0	2671	3782	0.04
1180	676	732.0	725.13	-4.03	725.18	-0.05	39.5	5.9	2655	3309	-0.01

Estimation of Modified Compression Index											
Northern East-West Profiler											
95% Confidence Lower Limit - March 2008 Monitoring Event											
		4/3/08	Baseline		4/21/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
680	686	747.5	736.52	-5.70	736.33	0.19	40.9	10.0	2696	3804	0.03
700	685	750.3	736.16	-1.81	735.83	0.33	41.1	13.2	2702	4164	0.04
720	685	762.8	735.98	-0.91	735.56	0.42	41.4	25.9	2712	5584	0.03
740	684	764.0	735.85	-0.65	735.45	0.39	41.8	27.2	2725	5742	0.03
760	683	767.6	735.70	-0.73	735.31	0.39	42.2	30.9	2737	6168	0.03
780	683	770.3	735.43	-1.34	734.90	0.54	42.5	33.9	2745	6505	0.03
800	682	768.6	735.14	-1.47	734.52	0.62	42.8	32.4	2753	6354	0.04
820	682	767.8	734.81	-1.65	734.15	0.65	43.0	32.0	2759	6316	0.04
840	681	768.5	735.14	1.67	734.90	0.25	43.9	32.4	2786	6378	0.02
860	681	769.0	734.85	-1.45	733.80	1.05	44.1	33.2	2793	6477	0.07
880	680	769.8	734.23	-3.12	733.04	1.18	44.0	34.6	2791	6626	0.07
900	680	770.0	733.90	-1.63	732.91	0.99	44.2	35.1	2797	6691	0.06
920	679	769.2	733.55	-1.78	732.23	1.32	44.4	34.6	2802	6643	0.08
940	679	768.4	733.19	-1.78	731.87	1.32	44.3	34.2	2799	6597	0.08
960	679	765.3	732.72	-2.38	731.52	1.20	44.1	31.6	2793	6304	0.08
980	678	764.1	732.32	-2.01	730.96	1.35	44.0	30.8	2789	6205	0.09
1000	678	763.7	731.76	-2.79	730.18	1.58	43.7	31.0	2780	6216	0.10
1020	678	763.0	731.17	-2.96	729.68	1.49	43.4	30.8	2771	6188	0.10
1040	678	762.3	730.92	-1.22	729.92	1.01	43.4	30.4	2772	6142	0.07
1060	677	762.1	730.42	-2.51	728.39	2.03	43.2	30.7	2765	6173	0.13
1080	677	759.6	728.91	-7.57	727.44	1.47	41.9	29.7	2728	6027	0.10
1100	677	753.2	728.16	-3.74	726.85	1.31	41.4	24.0	2713	5360	0.11
1120	676	747.0	727.30	-4.32	726.45	0.85	40.9	18.7	2696	4773	0.08
1140	676	741.7	726.67	-3.17	726.05	0.61	40.5	14.1	2685	4248	0.08
1160	676	736.9	725.93	-3.66	725.49	0.44	40.0	10.0	2671	3782	0.07
1180	676	732.0	725.13	-4.03	724.83	0.30	39.5	5.9	2655	3309	0.08

Estimation of Modified Compression Index Northern East-West Profiler September 2008 Monitoring Event											
		9/4/08	Baseline		9/24/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
680	686	745.7	736.52	-5.70	735.40	1.12	40.9	15.2	2696	4385	0.13
700	685	752.7	736.16	-1.81	734.75	1.40	41.1	24.2	2702	5393	0.11
720	685	761.4	735.98	-0.91	734.54	1.44	41.4	33.9	2712	6471	0.09
740	684	770.8	735.85	-0.65	734.45	1.40	41.8	35.8	2725	6695	0.09
760	683	772.6	735.70	-0.73	734.22	1.48	42.2	36.6	2737	6796	0.09
780	683	773.3	735.43	-1.34	733.78	1.65	42.5	37.5	2745	6907	0.10
800	682	773.9	735.14	-1.47	733.47	1.67	42.8	44.9	2753	7741	0.09
820	682	781.1	734.81	-1.65	733.08	1.73	43.0	52.6	2759	8597	0.08
840	681	788.4	735.14	1.67	733.78	1.36	43.9	55.2	2786	8908	0.06
860	681	791.3	734.85	-1.45	732.26	2.59	44.1	56.2	2793	9026	0.12
880	680	792.0	734.23	-3.12	731.74	2.49	44.0	56.9	2791	9103	0.11
900	680	792.1	733.90	-1.63	731.46	2.45	44.2	57.0	2797	9129	0.11
920	679	791.9	733.55	-1.78	730.95	2.60	44.4	56.6	2802	9084	0.11
940	679	791.1	733.19	-1.78	730.41	2.79	44.3	56.0	2799	9010	0.12
960	679	790.1	732.72	-2.38	729.94	2.77	44.1	52.3	2793	8603	0.13
980	678	786.1	732.32	-2.01	729.62	2.69	44.0	47.1	2789	8014	0.13
1000	678	780.4	731.76	-2.79	729.03	2.73	43.7	42.4	2780	7489	0.14
1020	678	775.2	731.17	-2.96	728.50	2.67	43.4	38.0	2771	6991	0.15
1040	678	770.2	730.92	-1.22	728.94	1.99	43.4	32.5	2772	6383	0.13
1060	677	764.5	730.42	-2.51	727.27	3.15	43.2	29.6	2765	6051	0.21
1080	677	761.0	728.91	-7.57	726.35	2.56	41.9	28.2	2728	5857	0.18
1100	677	758.1	728.16	-3.74	725.91	2.26	41.4	23.9	2713	5361	0.18
1120	676	753.0	727.30	-4.32	725.36	1.94	40.9	19.7	2696	4879	0.18
1140	676	748.0	726.67	-3.17	725.02	1.65	40.5	15.4	2685	4392	0.19
1160	676	743.0	725.93	-3.66	724.38	1.55	40.0	10.3	2671	3817	0.25
1180	676	737.3	725.13	-4.03	724.04	1.09	39.5	11.1	2655	3891	0.17

Estimation of Modified Compression Index
Northern East-West Profiler
March 2008 Monitoring Event

Station	MC V T Liner Elev	4/3/08 MC VI-E Waste Elev	Baseline Measured Pipe Elev	Baseline Slope	4/21/08 Measured Pipe Elev	Measured settlement	MC V Waste Thick.	MC VI-E Waste Thick.	Stress @ Midpoint of MC V Wast		Estimated Modif. Compres Index
									Initial	Final	
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
680	686	747.5	736.52	-5.70	736.45	0.07	40.9	12.8	2696	4118	0.01
700	685	750.3	736.16	-1.81	735.95	0.21	41.1	25.7	2702	5552	0.02
720	685	762.8	735.98	-0.91	735.66	0.31	41.4	27.1	2712	5716	0.02
740	684	764.0	735.85	-0.65	735.55	0.30	41.8	30.8	2725	6139	0.02
760	683	767.6	735.70	-0.73	735.41	0.29	42.2	33.6	2737	6467	0.02
780	683	770.3	735.43	-1.34	735.00	0.43	42.5	32.1	2745	6314	0.03
800	682	768.6	735.14	-1.47	734.62	0.51	42.8	31.7	2753	6273	0.03
820	682	767.8	734.81	-1.65	734.24	0.57	43.0	32.7	2759	6389	0.04
840	681	768.5	735.14	1.67	734.98	0.16	43.9	32.9	2786	6438	0.01
860	681	769.0	734.85	-1.45	733.85	1.00	44.1	33.9	2793	6559	0.06
880	680	769.8	734.23	-3.12	733.18	1.05	44.0	34.7	2791	6648	0.06
900	680	770.0	733.90	-1.63	733.02	0.88	44.2	34.3	2797	6599	0.05
920	679	769.2	733.55	-1.78	732.30	1.25	44.4	33.9	2802	6560	0.08
940	679	768.4	733.19	-1.78	731.98	1.21	44.3	31.2	2799	6257	0.08
960	679	765.3	732.72	-2.38	731.61	1.11	44.1	30.4	2793	6164	0.07
980	678	764.1	732.32	-2.01	731.10	1.22	44.0	30.4	2789	6163	0.08
1000	678	763.7	731.76	-2.79	730.30	1.46	43.7	30.2	2780	6132	0.10
1020	678	763.0	731.17	-2.96	729.77	1.40	43.4	30.1	2771	6114	0.09
1040	678	762.3	730.92	-1.22	730.00	0.92	43.4	30.2	2772	6124	0.06
1060	677	762.1	730.42	-2.51	728.46	1.96	43.2	28.2	2765	5897	0.14
1080	677	759.6	728.91	-7.57	727.53	1.38	41.9	23.3	2728	5311	0.11
1100	677	753.2	728.16	-3.74	726.95	1.21	41.4	17.9	2713	4695	0.12
1120	676	747.0	727.30	-4.32	726.56	0.74	40.9	13.4	2696	4188	0.10
1140	676	741.7	726.67	-3.17	726.15	0.52	40.5	9.3	2685	3715	0.09
1160	676	736.9	725.93	-3.66	725.61	0.33	40.0	5.1	2671	3236	0.10
1180	676	732.0	725.13	-4.03	725.01	0.12	39.5	5.9	2655	3309	0.03

Estimation of Modified Compression Index											
Northern East-West Profiler											
95% Confidence Lower Limit - September 2008 Monitoring Event											
		9/4/08	Baseline		9/24/08				Stress @ Midpoint of		Estimated
	MC V	MC VI-E	Measured	Baseline	Measured	Measured	MC V	MC VI-E	MC V Wast		Modif. Compres
Station	T Liner Elev	Waste Elev	Pipe Elev	Slope	Pipe Elev	settlement	Waste Thick.	Waste Thick.	Initial	Final	Index
	ft	ft	ft	%	ft	ft	ft	ft	psf	psf	
680	686	745.7	736.52	-5.70	735.28	1.24	40.9	8.2	2696	3604	0.24
700	685	752.7	736.16	-1.81	734.63	1.52	41.1	15.6	2702	4431	0.17
720	685	761.4	735.98	-0.91	734.43	1.54	41.4	24.4	2712	5424	0.12
740	684	770.8	735.85	-0.65	734.35	1.49	41.8	34.0	2725	6497	0.09
760	683	772.6	735.70	-0.73	734.12	1.58	42.2	35.9	2737	6723	0.10
780	683	773.3	735.43	-1.34	733.68	1.75	42.5	36.8	2745	6834	0.10
800	682	773.9	735.14	-1.47	733.37	1.77	42.8	37.8	2753	6947	0.10
820	682	781.1	734.81	-1.65	732.99	1.81	43.0	45.3	2759	7784	0.09
840	681	788.4	735.14	1.67	733.69	1.45	43.9	52.3	2786	8586	0.07
860	681	791.3	734.85	-1.45	732.21	2.64	44.1	55.4	2793	8948	0.12
880	680	792.0	734.23	-3.12	731.60	2.62	44.0	56.8	2791	9093	0.12
900	680	792.1	733.90	-1.63	731.35	2.56	44.2	57.2	2797	9145	0.11
920	679	791.9	733.55	-1.78	730.88	2.67	44.4	57.4	2802	9173	0.12
940	679	791.1	733.19	-1.78	730.30	2.90	44.3	57.0	2799	9121	0.13
960	679	790.1	732.72	-2.38	729.85	2.86	44.1	56.4	2793	9056	0.13
980	678	786.1	732.32	-2.01	729.49	2.83	44.0	52.7	2789	8644	0.13
1000	678	780.4	731.76	-2.79	728.92	2.84	43.7	47.6	2780	8068	0.14
1020	678	775.2	731.17	-2.96	728.41	2.76	43.4	43.0	2771	7545	0.15
1040	678	770.2	730.92	-1.22	728.85	2.07	43.4	38.3	2772	7019	0.12
1060	677	764.5	730.42	-2.51	727.20	3.22	43.2	33.0	2765	6432	0.20
1080	677	761.0	728.91	-7.57	726.26	2.65	41.9	31.1	2728	6181	0.18
1100	677	758.1	728.16	-3.74	725.81	2.35	41.4	28.9	2713	5926	0.17
1120	676	753.0	727.30	-4.32	725.26	2.04	40.9	24.7	2696	5439	0.16
1140	676	748.0	726.67	-3.17	724.92	1.74	40.5	20.3	2685	4939	0.16
1160	676	743.0	725.93	-3.66	724.27	1.66	40.0	16.1	2671	4460	0.19
1180	676	737.3	725.13	-4.03	723.87	1.26	39.5	11.1	2655	3891	0.19

Five-Year Projection of Settlement
Northern East-West Profiler
Average

Station	Baseline Slope %	9/24/08 Measured Pipe Elev ft	Measured settlement ft	MC V Waste Thick. ft	Stress @ Midpoint of MC V Wast Initial psf	Final psf	Average Modif. Compres Index	Final Waste Elevation ft	Final Waste Thickness ft	Final stress psf	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Check	Slope Difference	Comments
680	-5.70	735.40	1.12	40.9	3604	4512	0.07	807.79	69.63	10553	1.33	734.07	-	-		pipe crossing
700	-1.81	734.75	1.40	41.1	4431	6159	0.07	807.15	69.30	10528	1.00	733.75	-1.62			pipe crossing
720	-0.91	734.54	1.44	41.4	5424	8135	0.06	806.45	68.78	10481	0.68	733.85	0.50	slope reversal		cell floor
740	-0.65	734.45	1.40	41.8	6497	10270	0.05	805.76	68.22	10431	0.45	733.99	0.71	slope reversal	0.14	cell floor
760	-0.73	734.22	1.48	42.2	6723	10709	0.05	805.06	67.61	10382	0.43	733.79	-1.01			cell floor
780	-1.34	733.78	1.65	42.5	6834	10923	0.06	804.31	67.07	10336	0.48	733.30	-2.44			cell floor
800	-1.47	733.47	1.67	42.8	6947	11142	0.06	803.50	66.55	10287	0.44	733.03	-1.36			cell floor
820	-1.65	733.08	1.73	43.0	7784	12810	0.06	802.69	66.08	10240	0.30	732.78	-1.27			pipe crossing
840	1.67	733.78	1.36	43.9	8586	14386	0.04	801.88	64.79	10140	0.11	733.66	4.43			pipe crossing
860	-1.45	732.26	2.59	44.1	8948	15103	0.09	800.93	64.08	10074	0.20	732.06	-8.05			pipe crossing
880	-3.12	731.74	2.49	44.0	9093	15395	0.09	799.93	63.44	10030	0.16	731.58	-2.41			pipe crossing
900	-1.63	731.46	2.45	44.2	9145	15493	0.08	798.67	62.47	9932	0.13	731.33	-1.24			cell floor
920	-1.78	730.95	2.60	44.4	9173	15544	0.10	797.38	61.54	9833	0.13	730.82	-2.53			cell floor
940	-1.78	730.41	2.79	44.3	9121	15442	0.10	796.09	60.64	9727	0.12	730.28	-2.70			cell floor
960	-2.38	729.94	2.77	44.1	9056	15320	0.10	794.83	58.71	9634	0.12	729.82	-2.28			cell floor
980	-2.01	729.62	2.69	44.0	8644	14499	0.11	792.42	54.15	9407	0.17	729.45	-1.88			cell floor
1000	-2.79	729.03	2.73	43.7	8068	13355	0.12	787.46	49.74	8910	0.23	728.81	-3.22			cell floor
1020	-2.96	728.50	2.67	43.4	7545	12319	0.12	782.50	45.36	8415	0.25	728.25	-2.80			pipe crossing
1040	-1.22	728.94	1.99	43.4	7019	11265	0.09	777.52	40.61	7890	0.21	728.73	2.42	slope reversal	0.48	pipe crossing
1060	-2.51	727.27	3.15	43.2	6432	10099	0.18	772.53	36.10	7385	0.46	726.82	-9.60			pipe crossing
1080	-7.57	726.35	2.56	41.9	6181	9635	0.15	767.52	32.58	6959	0.32	726.03	-3.95			cell floor
1100	-3.74	725.91	2.26	41.4	5926	9138	0.15	762.49	28.30	6470	0.24	725.66	-1.83			cell floor
1120	-4.32	725.36	1.94	40.9	5439	8182	0.14	757.47	24.14	5990	0.24	725.12	-2.70			cell floor
1140	-3.17	725.02	1.65	40.5	4939	7193	0.14	752.44	19.75	5492	0.26	724.76	-1.83			cell floor
1160	-3.66	724.38	1.55	40.0	4460	6248	0.17	747.42	15.46	5002	0.35	724.04	-3.61			cell floor
1180	-4.03	724.04	1.09	39.5	3891	5126	0.10	742.39	-726.13	4517	0.25	723.79	-1.25			sideslope

Note: Total Reversed Slope Height at Sta. 740 is calculated from 740 to 720 due to the fact the slope reversal goes into a pipe crossing and the elevation cannont be accurately determined.

Five-Year Projection of Settlement
Northern East-West Profiler
95% Confidence Upper Limit - Average

		9/24/08			Stress @ Midpoint of		Average									
	Baseline	Measured	Measured	MC V	MC V Wast		Modif. Compres	Final Waste	Final		Final	Final Pipe	Final		Slope	
Station	Slope	Pipe Elev	se:tlement	Waste Thick.	Initial	Final	Index	Elevation	Waste Thickness	Final stress	Settlement	Elevation	Slope	Check	Difference	Comments
	%	ft	ft	ft	psf	psf		ft	ft	psf	ft	ft	%			
680	-5.70	735.40	1.12	40.9	3604	4512	0.09	807.79	70.27	10553	1.78	733.61	-	-		pipe crossing
700	-1.81	734.75	1.40	41.1	4431	6159	0.08	807.15	69.99	10528	1.21	733.54	-0.35			pipe crossing
720	-0.91	734.54	1.44	41.4	5424	8135	0.06	806.45	69.48	10481	0.73	733.80	1.29	slope reversal		cell floor
740	-0.65	734.45	1.40	41.8	6497	10270	0.05	805.76	68.91	10431	0.42	734.03	1.13	slope reversal	0.23	cell floor
760	-0.73	734.22	1.48	42.2	6723	10709	0.05	805.06	68.36	10382	0.39	733.83	-0.98			cell floor
780	-1.34	733.78	1.65	42.5	6834	10923	0.06	804.31	67.87	10336	0.43	733.35	-2.41			cell floor
800	-1.47	733.47	1.67	42.8	6947	11142	0.06	803.50	67.36	10287	0.43	733.04	-1.54			cell floor
820	-1.65	733.08	1.73	43.0	7784	12810	0.06	802.69	66.89	10240	0.30	732.78	-1.31			pipe crossing
840	1.67	733.78	1.36	43.9	8586	14386	0.03	801.88	65.74	10140	0.10	733.68	4.47			pipe crossing
860	-1.45	732.26	2.59	44.1	8948	15103	0.09	800.93	65.08	10074	0.20	732.06	-8.09			pipe crossing
880	-3.12	731.74	2.49	44.0	9093	15395	0.08	799.93	64.70	10030	0.15	731.59	-2.37			pipe crossing
900	-1.63	731.46	2.45	44.2	9145	15493	0.07	798.67	63.76	9932	0.12	731.34	-1.26			cell floor
920	-1.78	730.95	2.60	44.4	9173	15544	0.09	797.38	62.83	9833	0.12	730.83	-2.55			cell floor
940	-1.78	730.41	2.79	44.3	9121	15442	0.09	796.09	61.90	9727	0.11	730.29	-2.68			cell floor
960	-2.38	729.94	2.77	44.1	9056	15320	0.09	794.83	61.11	9634	0.11	729.84	-2.29			cell floor
980	-2.01	729.62	2.69	44.0	8644	14499	0.09	792.42	59.11	9407	0.15	729.47	-1.83			cell floor
1000	-2.79	729.03	2.73	43.7	8068	13355	0.11	787.46	54.70	8910	0.20	728.83	-3.20			cell floor
1020	-2.96	728.50	2.67	43.4	7545	12319	0.11	782.50	50.33	8415	0.23	728.27	-2.79			pipe crossing
1040	-1.22	728.94	1.99	43.4	7019	11265	0.08	777.52	45.60	7890	0.18	728.76	2.42	slope reversal	0.48	pipe crossing
1060	-2.51	727.27	3.15	43.2	6432	10099	0.16	772.53	41.11	7385	0.41	726.86	-9.51			pipe crossing
1080	-7.57	726.35	2.56	41.9	6181	9635	0.13	767.52	37.61	6959	0.28	726.08	-3.93			cell floor
1100	-3.74	725.91	2.26	41.4	5926	9138	0.12	762.49	33.33	6470	0.19	725.71	-1.81			cell floor
1120	-4.32	725.36	1.94	40.9	5439	8182	0.11	757.47	29.17	5990	0.18	725.18	-2.65			cell floor
1140	-3.17	725.02	1.65	40.5	4939	7193	0.10	752.44	24.78	5492	0.18	724.84	-1.73			cell floor
1160	-3.66	724.38	1.55	40.0	4460	6248	0.10	747.42	20.48	5002	0.20	724.19	-3.24			cell floor
1180	-4.03	724.04	1.09	39.5	3891	5126	0.06	742.39	16.26	4517	0.16	723.88	-1.55			sideslope
Note:	Total Reversed Slope Height at Sta. 740 is calculated from 740 to 720 due to the fact the slope reversal goes into a pipe crossing and the elevation cannont be accurately determined.															

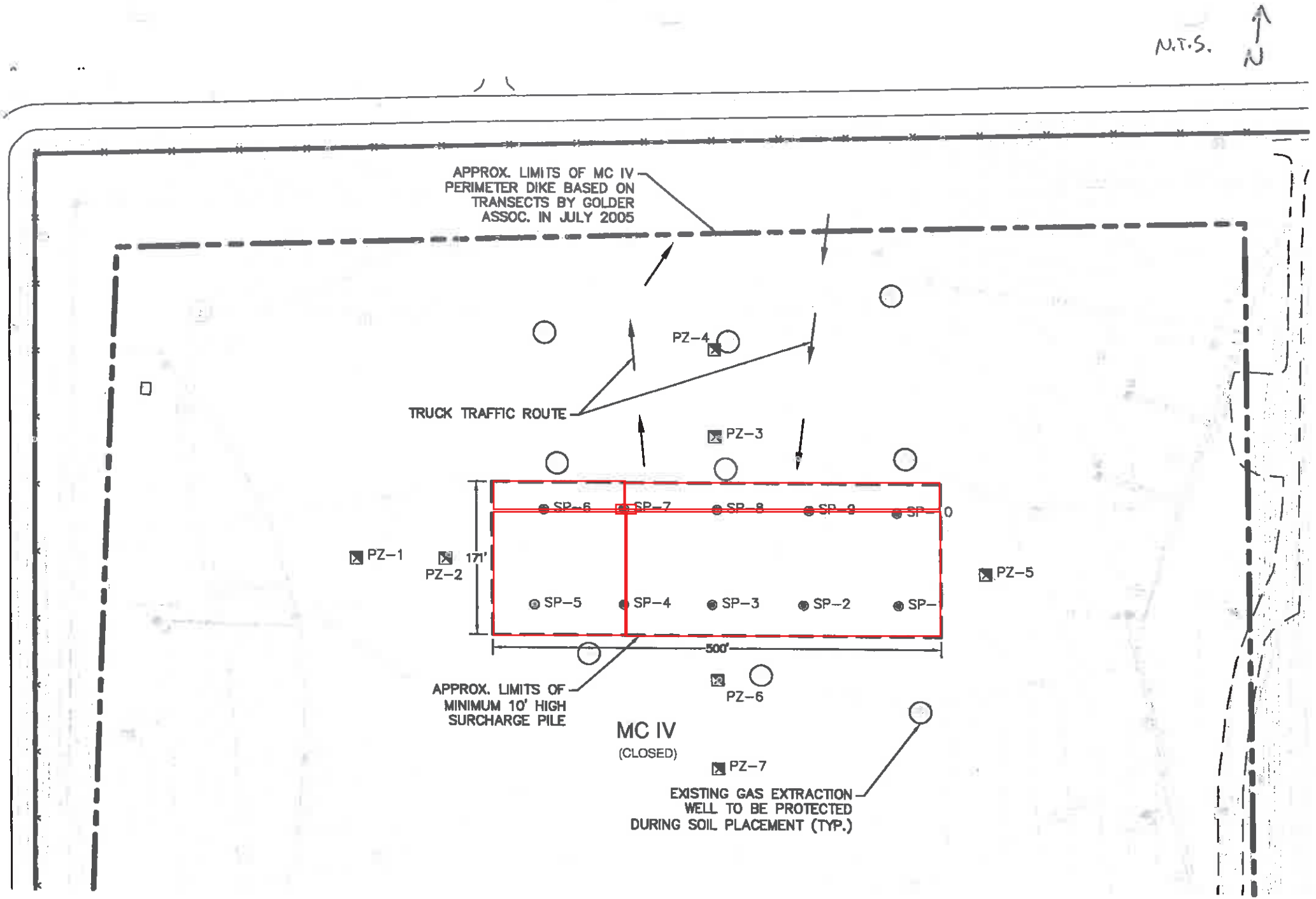
Five-Year Projection of Settlement
Northern East-West Profiler
95% Confidence Lower Limit - Average

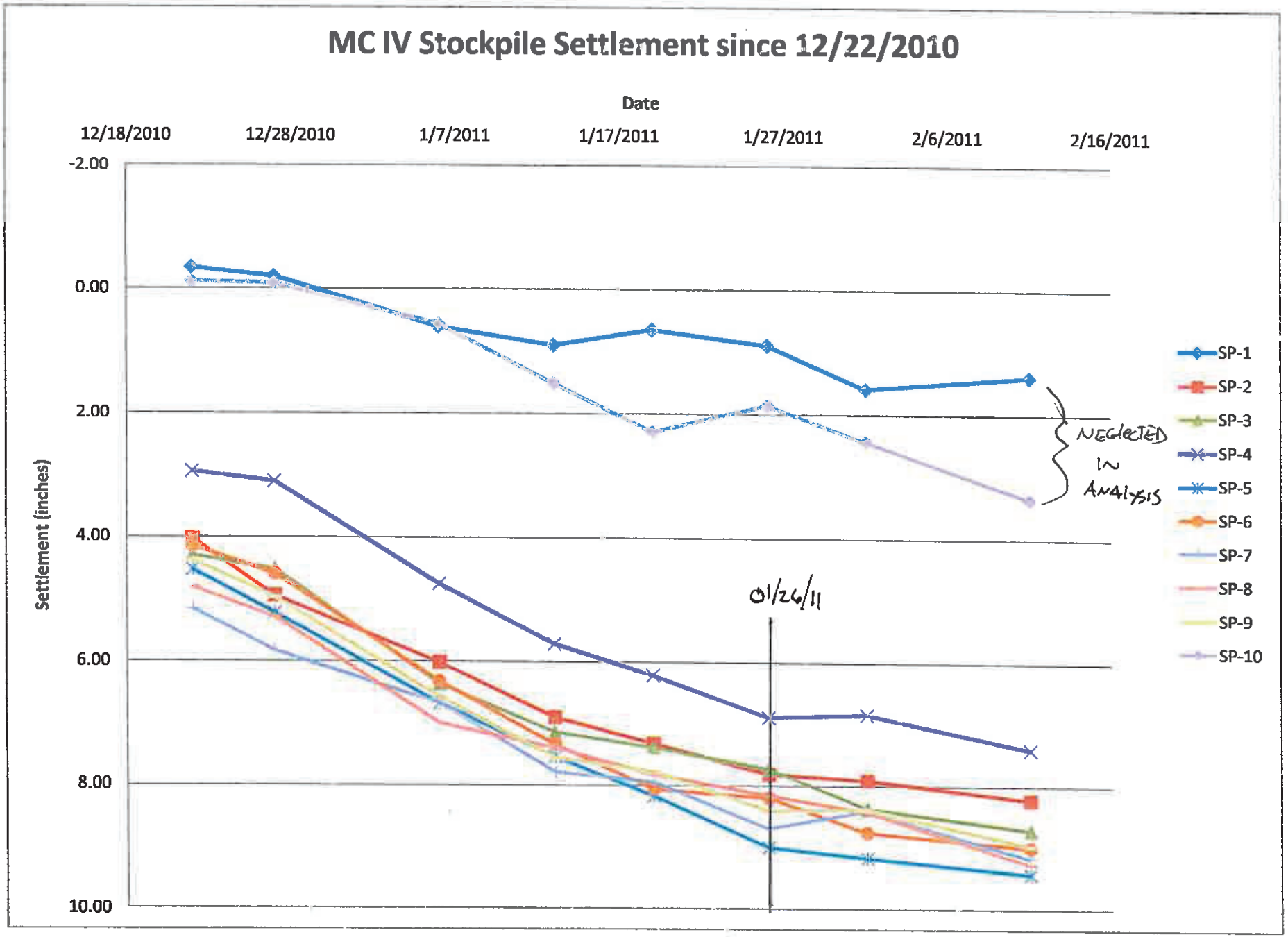
Station	Baseline Slope %	9/24/08 Measured Pipe Elev ft	Measured settlement ft	MC V Waste Thick. ft	Stress @ Midpoint of MC V Wast Initial psf	Stress @ Midpoint of MC V Wast Final psf	Average Modif. Compres Index	Final Waste Elevation ft	Final Waste Thickness ft	Final stress psf	Final Settlement ft	Final Pipe Elevation ft	Final Slope %	Check	Slope Difference	Comments
680	-5.70	735.40	1.12	40.9	3604	4512	0.14	807.79	70.27	10553	2.58	732.82	-	-		pipe crossing
700	-1.81	734.75	1.40	41.1	4431	6159	0.11	807.15	69.99	10528	1.66	733.09	1.34	slope reversal		pipe crossing
720	-0.91	734.54	1.44	41.4	5424	8135	0.08	806.45	69.48	10481	0.92	733.61	2.61	slope reversal		cell floor
740	-0.65	734.45	1.40	41.8	6497	10270	0.06	805.76	68.91	10431	0.53	733.92	1.52	slope reversal	0.30	cell floor
760	-0.73	734.22	1.48	42.2	6723	10709	0.06	805.06	68.36	10382	0.49	733.73	-0.92			cell floor
780	-1.34	733.78	1.65	42.5	6834	10923	0.07	804.31	67.87	10336	0.53	733.26	-2.39			cell floor
800	-1.47	733.47	1.67	42.8	6947	11142	0.07	803.50	67.36	10287	0.52	732.95	-1.52			cell floor
820	-1.65	733.08	1.73	43.0	7784	12810	0.07	802.69	66.89	10240	0.35	732.73	-1.09			pipe crossing
840	1.67	733.78	1.36	43.9	8586	14386	0.04	801.88	65.74	10140	0.13	733.64	4.57			pipe crossing
860	-1.45	732.26	2.59	44.1	8948	15103	0.09	800.93	65.08	10074	0.21	732.05	-7.99			pipe crossing
880	-3.12	731.74	2.49	44.0	9093	15395	0.09	799.93	64.70	10030	0.18	731.56	-2.44			pipe crossing
900	-1.63	731.46	2.45	44.2	9145	15493	0.09	798.67	63.76	9932	0.14	731.32	-1.22			cell floor
920	-1.78	730.95	2.60	44.4	9173	15544	0.10	797.38	62.83	9833	0.13	730.82	-2.51			cell floor
940	-1.78	730.41	2.79	44.3	9121	15442	0.10	796.09	61.90	9727	0.13	730.28	-2.70			cell floor
960	-2.38	729.94	2.77	44.1	9056	15320	0.10	794.83	61.11	9634	0.12	729.82	-2.27			cell floor
980	-2.01	729.62	2.69	44.0	8644	14499	0.11	792.42	59.11	9407	0.18	729.44	-1.90			cell floor
1000	-2.79	729.03	2.73	43.7	8068	13355	0.12	787.46	54.70	8910	0.23	728.80	-3.20			cell floor
1020	-2.96	728.50	2.67	43.4	7545	12319	0.12	782.50	50.33	8415	0.25	728.25	-2.78			pipe crossing
1040	-1.22	728.94	1.99	43.4	7019	11265	0.09	777.52	45.60	7890	0.20	728.73	2.42	slope reversal	0.48	pipe crossing
1060	-2.51	727.27	3.15	43.2	6432	10099	0.17	772.53	41.11	7385	0.44	726.84	-9.52			pipe crossing
1080	-7.57	726.35	2.56	41.9	6181	9635	0.14	767.52	37.61	6959	0.30	726.05	-3.94			cell floor
1100	-3.74	725.91	2.26	41.4	5926	9138	0.14	762.49	33.33	6470	0.22	725.69	-1.80			cell floor
1120	-4.32	725.36	1.94	40.9	5439	8182	0.12	757.47	29.17	5990	0.21	725.15	-2.69			cell floor
1140	-3.17	725.02	1.65	40.5	4939	7193	0.12	752.44	24.78	5492	0.22	724.80	-1.78			cell floor
1160	-3.66	724.38	1.55	40.0	4460	6248	0.13	747.42	20.48	5002	0.26	724.13	-3.36			cell floor
1180	-4.03	724.04	1.09	39.5	3891	5126	0.14	742.39	16.26	4517	0.35	723.69	-2.16			sideslope

Note: Total Reversed Slope Height at Sta. 740 is calculated from 740 to 720 due to the fact the slope reversal goes into a pipe crossing and the elevation cannont be accuralely determined.

Attachment A-2.3.3

NTH Consultants, Ltd. (2011a) *Volume III: Basis of Design Report – WDI Operating License Application Master Cells VI F & G*. Stockpile Test.


N.T.S.
N
APPROX. LIMITS OF MC IV PERIMETER DIKE BASED ON TRANSECTS BY GOLDER ASSOC. IN JULY 2005
PZ-4
TRUCK TRAFFIC ROUTE
PZ-3
SP-6
SP-7
SP-8
SP-9
SP-0
PZ-1
PZ-2
171'
PZ-5
SP-5
SP-4
SP-3
SP-2
SP-
500'
APPROX. LIMITS OF MINIMUM 10' HIGH SURCHARGE PILE
PZ-6
MC IV
(CLOSED)
PZ-7
EXISTING GAS EXTRACTION WELL TO BE PROTECTED DURING SOIL PLACEMENT (TYP.)


MC IV Stockpile Settlement since 12/22/2010
Date
12/18/2010
12/28/2010
1/7/2011
1/17/2011
1/27/2011
2/6/2011
2/16/2011
-2.00
0.00
2.00
4.00
6.00
8.00
10.00
Settlement (inches)
SP-1
SP-2
SP-3
SP-4
SP-5
SP-6
SP-7
SP-8
SP-9
SP-10
NEGLECTED IN ANALYSIS
01/26/11

EQ8 - MC 4 SETTLEMENT PLATES

				12/16/2010				12/22/2010				12/27/2010				1/6/2011				1/13/2011				1/19/2011				1/26/2011				2/1/2011				2/11/2011			
ID	NORTHING	EASTING	ORIGINAL GROUND SURFACE	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)	T/PIPE ELEV.	INC. SETT.	PILE ELEV.	Sett. to Date (inches)
SP-1	5335.93	4631.56	727.81	737.63	-	-	0	737.53	-0.03	-	-0.34	737.85	0.01	-	-0.20	737.56	0.07	735.78	0.61	737.56	0.02	-	0.90	737.58	-0.02	-	0.85	737.58	0.02	-	0.89	737.50	0.08	-	1.59	737.52	-0.02	-	1.39
SP-2	5335.86	4526.54	728.97	740.08	-	-	0	744.78	0.34	-	4.03	744.70	0.08	-	4.94	744.61	0.09	742.44	6.01	744.54	0.07	-	6.90	744.51	0.03	-	7.31	744.46	0.04	-	7.61	744.46	0.01	-	7.80	744.43	0.03	-	8.22
SP-3	5335.72	4423.85	733.52	743.67	-	-	0	748.35	0.38	-	4.20	748.33	0.02	-	4.51	748.17	0.15	748.56	5.36	748.11	0.06	-	7.14	748.08	0.02	-	7.36	748.08	0.03	-	7.73	748.01	0.05	-	8.30	747.98	0.03	-	8.70
SP-4	5335.51	4325.28	732.53	743.08	-	-	0	747.88	0.25	-	2.94	747.87	0.01	-	3.10	747.73	0.14	745.29	4.75	747.65	0.08	-	5.71	747.61	0.04	-	6.21	747.55	0.06	-	6.63	747.58	0.00	-	6.94	747.51	0.05	-	7.40
SP-5	5335.17	4225.68	729.29	739.20	-	-	0	743.88	0.38	-	4.52	743.80	0.08	-	5.22	743.63	0.12	740.42	9.67	743.61	0.07	-	7.54	743.56	0.05	-	8.18	743.49	0.07	-	8.98	743.47	0.01	-	9.16	743.45	0.02	-	9.41
SP-6	5441.21	4226.59	725.15	736.24	-	-	0	742.89	0.25	-	4.14	742.80	0.04	-	4.58	742.74	0.14	740.17	8.32	742.66	0.08	-	7.34	742.60	0.06	-	8.05	742.59	0.01	-	8.19	742.54	0.05	-	8.75	742.52	0.02	-	8.99
SP-7	5442.16	4326.11	730.16	740.31	-	-	0	744.92	0.43	-	5.15	744.86	0.06	-	5.69	744.79	0.07	742.89	6.67	744.70	0.09	-	7.78	744.63	0.01	-	7.94	744.62	0.08	-	8.08	744.65	-0.02	-	8.49	744.59	0.06	-	9.18
SP-8	5441.88	4429.67	731.20	741.42	-	-	0	746.06	0.40	-	4.81	746.02	0.04	-	5.26	745.87	0.14	743.80	8.01	745.84	0.03	-	7.39	745.69	0.04	-	7.92	745.76	0.03	-	9.19	745.73	0.02	-	9.42	745.66	0.07	-	9.29
SP-9	5441.22	4532.30	728.72	738.98	-	-	0	743.87	0.36	-	4.37	743.82	0.05	-	4.96	743.46	0.13	738.62	8.57	743.40	0.05	-	7.55	743.36	0.02	-	7.77	743.33	0.05	-	8.41	743.33	0.00	-	8.97	743.26	0.05	-	9.68
SP-10	5439.80	4630.45	724.84	734.74	-	-	0	734.75	-0.01	-	-0.11	734.74	0.00	-	-0.09	734.69	0.05	730.43	0.58	734.61	0.08	-	1.51	734.55	0.07	-	2.29	734.59	-0.04	-	1.80	734.53	0.05	-	2.43	734.48	0.05	-	3.35

updated with length of additional rod
from top of rod to center of coupling was 60-7/16 inches = 5.036 feet

NTH Consultants, Ltd.
Infrastructure Engineering and Environmental Services

Job	WD1 F/G SET[illegible]	Project No.	13-060921-03	Sheet No.	1
Subject	ANALYSIS OF PARAMETER [illegible] MC IV SURCHARGE	By	DRI	Date	1/19/11
		Checked By	KRO	Date	2/23/11

ASSUME FOLLOWING:

$$S_T = \underset{\text{FIXED}}{\overset{0.01}{S_{COV}}} + S_{USAT\ WASTE} + S_{WASTE} + S_{CLAY} + \underbrace{\overset{0}{S_{SILT}} + \overset{0.01}{S_{SAND}}}_{\text{FIXED}}$$

"Due to short loading time of MC IV stockpile [...] of lower clay, assume consolidation has not occurred."

possibly sand

S_{CLAY}: DUE TO SHORT LOADING TIME OF MC IV STOCKPILE & [illegible] STRENGTH OF LOWER CLAY, ASSUME CONSOLIDATION HAS NOT OCCURRED

S_{SILT} & S_{SAND}: ASSUME [illegible] OF THESE INPUT PARAMETERS HAVE LITTLE TO NO EFFECT ON SETTLEMENT [illegible] ASSUME A FIXED VALUE. BASED ON SETTLEMENT ESTIMATE & DEPTH OF [illegible] SETTLEMENT OF THESE LAYERS IS NEGLIGIBLE.

S_{COV}: DUE TO RELATIVE THICKNESS OF THIS LAYER, STRENGTH OF CLAY RELATIVE TO WASTE & UNSATURATED NATURE OF CLAY COVER, ASSUME SETTLEMENT IS NEGLIGIBLE.

Settlement of Cover

SINCE SP-[illegible] & SP-[illegible] ARE OUTSIDE OF [illegible] FOR STOCKPILE [illegible], NEGLECT [illegible] FOR THIS ANALYSIS.

→ AVERAGE TOTAL SETTLEMENT ESTIMATED FOR SP-2 TO SP-9

$S_T = 0.72$ ft

$\therefore S_T = S_{UNSAT\ WASTE} + S_{SAT\ WASTE} + 0.02$

$0.72 - 0.02 = S_{WASTE}$

$= \underline{0.70 \text{ ft}}$

→ TOTAL MEASURED SETTLEMENT (AVG) FOR SP-2 TO SP-9

$S_T = 0.69$ ft

USING $C_{CE} = 0.236$, $C_{\alpha E} = 0.024$ for MC IV GRANULAR WASTE

NTH Consultants, Ltd.
Infrastructure Engineering
and Environmental Services

Job	[illegible]	Project No.	13-[illegible]	Sheet No.	2
Subject	[illegible]	By	DRC	Date	1/19/11
	[illegible]	Checked By	KRO	Date	2/23/11

SP-7
N8442 E4326

COVER UNIFACTOR

EXISTING STRESS = ((730 - 721)/2) × 0.130
MID PT. σ_i
= 0.62 KSF

Depth to mid of layer = 5 ft
FROM [illegible]

$\Delta\sigma_z$ = 1.21 ksf (FROM STRESS CALCULATOR)

FUTURE STRESS = $\sigma_i + \Delta\sigma_z$ = 0.62 ksf + 1.21 ksf = 1.83 ksf
MID PT. σ_f

Elastic compression = (730 - 721) × (1.21/900) = 0.010 ft

Primary Consolidation ∅
Secondary Consolidation ∅
No consolidation occurs in this layer since the clay is unsaturated.

TOTAL COMPRESSION OF LAYER = 0.01 ft

UNSAT [illegible]

EXISTING STRESS = 0.62 + ((730-721)/2 × 0.130) + (721-698)/2 × [illegible] = 2.21 ksf
@ MID σ_i

DEPTH [illegible] = (730-721) + (721-698)/2 = 21 ft
LAYER [illegible]

$\Delta\sigma_z$ = 0.33 ksf (FROM [illegible] CALCULATOR)

FUTURE [illegible] = 2.21 + 0.33 = 2.54 ksf
MID PT. σ_f

PRIMARY COMPRESSION = 23 × (0.236 log (2.54/2.21)) = 0.32 ft

SECONDARY COMPRESSION = 23 × (0.024 log (2/[illegible])) = 0.16 ft

TOTAL COMPRESSION OF LAYER = 0.49 ft

NTH Consultants, Ltd.
Infrastructure Engineering and Environmental Services

Job	WDI F/G Development	Project No.	13-[illegible]	Sheet No.	3
Subject	MC IV Surcharge	By	DLL	Date	1/19/11
	Pile Settlement Estimate	Checked By	KRO	Date	2/23/11

SAT. WASTE

EXISTING STRESS @ MID σ_z = 2.2 kg/ft + [(721-698)/2 × 0.086 kg] + [(698-675)/2 × (0.086-0.0684)] = 3.46 kg

DEPTH TO MID PT. OF LAYER = (730-721) + (721-698) + (698-675)/2 = 44 ft

$\Delta\sigma_z$ = 0.10 kg (from stress calculator

FINAL STRESS @ MID PT. OF = 3.46 + 0.1 = 3.56 kg

PRIMARY COMPRESSION = 23 × (0.236 log (3.56/3.46)) = 0.07 ft

SECONDARY COMPRESSION = 23 × (0.024 log (2/1)) = 0.17 ft

TOTAL COMPRESSION IN LAYER = 0.23 ft

NEGLECT SETTLEMENT IN LOWER CLAY LAYERS SINCE STRESS [illegible] & STRENGTH OF CLAY RESULT IN [illegible] SETTLEMENT OCCURRING OVER the SHORT TIME FRAME OF MC IV SURCHARGE RELATIVE to the COMPRESSIBLE WASTE LAYERS.

SETTLEMENT IN SILT IS NEGLIGIBLE & FIXED @ 0.01 ft, SETTLEMENT IN SAND IS NEGLIGIBLE & FIXED @ 0.0 ft.

TOTAL ESTIMATED SETTLEMENT = ST = 0.01 + 0.49 + 0.23 + 0.01 + 0

(0.01 = SCOV, FIXED; 0.49 + 0.23 = SWASTE; 0.01 = SILT; 0 = SAND, FIXED)

ST = 0.74 ft

TOTAL MEASURED SETTLEMENT OF SETTLEMENT PLATE AS OF 01/19/11 : ST = 0.76 ft

Table 1
Summary of Settlement Points

Point	Northing	Easting	Existing Ground Surface Elevation (ft)	Estimated Final Ground Surface Elevation (ft)	Measured Final Ground Surface as of 01/19/11 (ft)	Total Estimated Settlement (ft)	Total Measured Settlement (ft)	Difference (ft)
SP-1	8336	4632	727.6	727.0	727.5	0.6	0.1	0.5
SP-2	8336	4526	730.0	729.4	729.3	0.6	0.7	-0.1
SP-3	8336	4424	733.5	732.8	732.9	0.7	0.6	0.1
SP-4	8336	4325	733.0	732.2	732.4	0.8	0.6	0.2
SP-5	8335	4226	729.2	728.4	728.4	0.8	0.8	0.0
SP-6	8441	4237	728.2	727.5	727.5	0.7	0.7	0.0
SP-7	8442	4326	730.2	729.4	729.4	0.7	0.8	0.0
SP-8	8442	4430	731.2	730.5	730.5	0.7	0.7	0.0
SP-9	8441	4532	728.7	728.0	728.0	0.8	0.7	0.0
SP-10	8440	4630	724.6	723.7	724.5	0.9	0.1	0.8

Not included in analysis. Outside of full stockpile surcharge height.

S:\Waste\Engineering\Site #2\6F & G development\Calculation packages\[Settlment Analysis MC IV Surcharge Pile (Modified Indices & Stress Distribution).xls]Summary Table

Table of Settlement Estimates - Sheet 1 of 1

Point		SP-1	SP-2	SP-3	SP-4	SP-5	SP-6	SP-7	SP-8	SP-9	SP-10
Northing	ft	N8336	N8336	N8336	N8336	N8335	N8441	N8442	N8442	N8441	N8440
Easting	ft	E4632	E4526	E4424	E4325	E4226	E4237	E4326	E4430	E4532	E4630
Bottom of clay elevation	ft	644	650	656	658	660	661	659	653	642	638
MC IV liner elevation	ft	674	674	674	671	687	675	675	675	675	675
Current MC IV cover elevation	ft	728	730	734	733	729	728	730	731	729	725
Top of MC IV waste	ft	714	715	723	723	722	718	721	720	719	718
Existing leachate elevation	ft	704	703	703	702	700	696	698	699	700	701
Thickness of existing unsaturated waste	ft	10	12	20	21	22	22	23	21	19	17
Thickness of existing saturated waste	ft	30	29	29	31	13	21	23	24	25	26
MC IV Surcharge elevation	ft	736	742	747	745	740	740	743	744	740	730
Thickness of Surcharge	ft	8	12	13	12	11	12	13	12	11	6
Cover on MC IV											
Depth to Midpoint of Layer	ft	7	7	5	5	4	5	5	6	5	3
Existing stress at midpoint	ksf	0.86	0.95	0.71	0.63	0.47	0.69	0.62	0.73	0.63	0.44
Future stress at midpoint	ksf	1.85	1.94	1.92	1.84	1.81	1.90	1.83	1.83	1.84	1.90
Elastic compression	ft	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Primary consolidation	ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Secondary compression	ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total compression in layer	ft	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Existing Unsaturated MC IV Waste											
Depth to Midpoint of Layer	ft	18	21	21	20	18	21	21	22	19	15
Existing stress at midpoint	ksf	2.17	2.44	2.27	2.17	1.88	2.31	2.21	2.36	2.08	1.60
Future stress at midpoint	ksf	2.57	2.77	2.60	2.52	2.28	2.64	2.54	2.67	2.46	2.10
Elastic compression	ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Primary consolidation	ft	0.18	0.16	0.27	0.33	0.44	0.29	0.32	0.27	0.33	0.47
Secondary compression	ft	0.08	0.09	0.14	0.15	0.16	0.16	0.16	0.15	0.14	0.12
Total compression in layer	ft	0.26	0.25	0.41	0.48	0.59	0.45	0.49	0.42	0.46	0.59
Existing Saturated MC IV Waste											
Depth to Midpoint of Layer	ft	39	41	45	46	35	43	44	44	41	37
Existing stress at midpoint	ksf	2.97	3.31	3.45	3.46	2.97	3.48	3.46	3.55	3.19	2.64
Future stress at midpoint	ksf	3.10	3.43	3.55	3.56	3.12	3.59	3.56	3.65	3.31	2.78
Elastic compression	ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Primary consolidation	ft	0.13	0.11	0.08	0.09	0.06	0.07	0.07	0.07	0.09	0.14
Secondary compression	ft	0.22	0.21	0.21	0.22	0.09	0.15	0.17	0.17	0.18	0.19
Total compression in layer	ft	0.35	0.32	0.29	0.31	0.15	0.22	0.23	0.24	0.28	0.33
Upper Clay Layer*		**	**	**	**		**	**	**	**	**
Depth to Midpoint of Layer	ft	-	-	-	-	45	-	-	-	-	-
Existing stress at midpoint	ksf	-	-	-	-	3.37	-	-	-	-	-
Future stress at midpoint	ksf	-	-	-	-	3.47	-	-	-	-	-
Elastic compression	ft	-	-	-	-	0.00	-	-	-	-	-
Primary consolidation	ft	-	-	-	-	0.01	-	-	-	-	-
Secondary compression	ft	-	-	-	-	0.01	-	-	-	-	-
Total compression in layer	ft	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
Middle Clay Layer*											
Depth to Midpoint of Layer	ft	69	68	66	64	59	58	63	67	70	68
Existing stress at midpoint	ksf	4.42	4.53	4.47	4.29	4.38	4.26	4.32	4.62	4.68	4.30
Future stress at midpoint	ksf	4.47	4.58	4.52	4.34	4.44	4.32	4.37	4.67	4.72	4.35
Elastic compression	ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Primary consolidation	ft	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Secondary compression	ft	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.04	0.06	0.06
Total compression in layer	ft	0.07	0.06	0.05	0.04	0.04	0.04	0.04	0.05	0.07	0.09
Silt Layer											
Depth to Midpoint of Layer	ft	93	92	93	91	87	85	88	92	95	93
Existing stress at midpoint	ksf	6.12	6.19	6.11	5.79	6.48	5.90	5.97	6.31	6.43	6.07
Future stress at midpoint	ksf	6.15	6.22	6.14	5.82	6.51	5.93	6.00	6.34	6.45	6.10
Elastic compression	ft	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Primary consolidation	ft	-	-	-	-	-	-	-	-	-	-
Secondary compression	ft	-	-	-	-	-	-	-	-	-	-
Total compression in layer	ft	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Sand Layer											
Depth to Midpoint of Layer	ft	125	127	131	130	127	126	128	129	126	122
Existing stress at midpoint	ksf	7.90	8.16	8.25	8.02	8.75	8.20	8.22	8.38	8.16	7.66
Future stress at midpoint	ksf	7.91	8.17	8.26	8.03	8.76	8.21	8.23	8.39	8.17	7.67
Elastic compression	ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Primary consolidation	ft	-	-	-	-	-	-	-	-	-	-
Secondary compression	ft	-	-	-	-	-	-	-	-	-	-
Total compression in layer	ft	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Settlement - MC IV Cover	ft	0.6	0.6	0.7	0.8	0.8	0.7	0.7	0.7	0.8	0.9

* Assume Clay Settlment has not occurred. Removed from Final Settlment Amount

** No upper clay in this area. Assume Middle Clay extends to MC IV Liner.

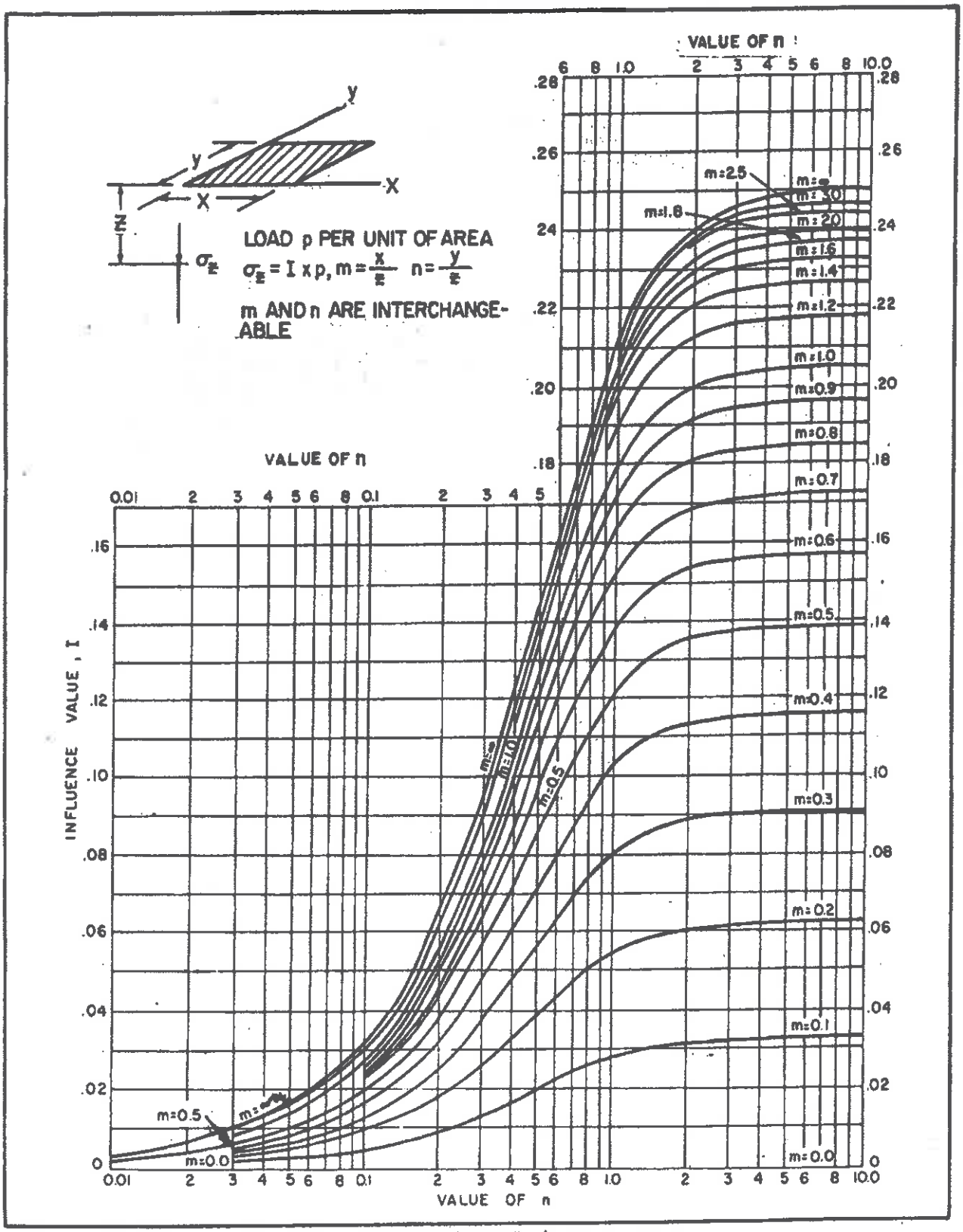


FIGURE 4
Influence Value for Vertical Stress Beneath a Corner of a Uniformly Loaded Rectangular Area (Boussinesq Case)

NTH Consultant, Ltd.
Stress Distribution Calculation
Project Name: WDI MC VI F/G Development
NTH Project No.: 13-060921-03
Calculated By: David R. Lutz
Checked By:

	x	y
Ground Contact Pressure(psi):		11.25
Contact Dimension (ft x ft):	428	99
Soil Unit Weight (pcf):		135
Stockpile Height (ft)		12



m=x/z, x=17.8 ft?

n=y/z, y=4.2 ft?

4 x I x 11.25 psi suggests Pe is at center of stockpile

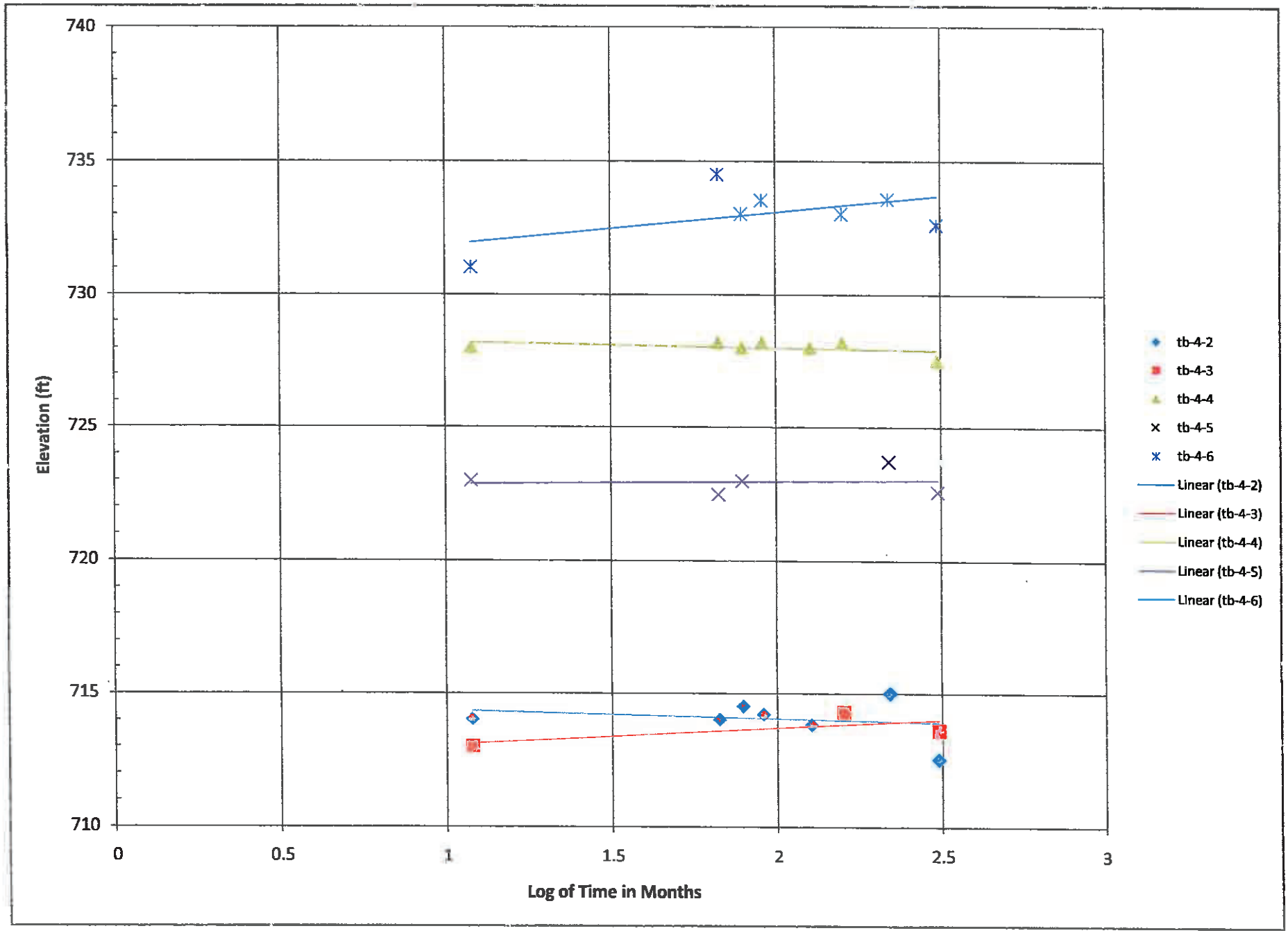
Depth (ft)	I	Pe (psi)	Pe (ksf)	m	n
3	0.226	10.15	1.46	5.94	1.38
5	0.187	8.43	1.21	3.57	0.83
7	0.153	6.89	0.99	2.55	0.59
15	0.077	3.46	0.50	1.19	0.28
18	0.062	2.79	0.40	0.99	0.23
19	0.058	2.61	0.38	0.94	0.22
20	0.054	2.44	0.35	0.89	0.21
21	0.051	2.29	0.33	0.85	0.20
22	0.048	2.15	0.31	0.81	0.19
35	0.024	1.06	0.15	0.51	0.12
37	0.021	0.97	0.14	0.48	0.11
39	0.020	0.88	0.13	0.46	0.11
41	0.018	0.81	0.12	0.43	0.10
43	0.017	0.75	0.11	0.41	0.10
44	0.016	0.72	0.10	0.41	0.09
45	0.015	0.69	0.10	0.40	0.09
46	0.015	0.66	0.10	0.39	0.09
58	0.010	0.43	0.06	0.31	0.07
59	0.009	0.42	0.06	0.30	0.07
63	0.008	0.37	0.05	0.28	0.07
64	0.008	0.36	0.05	0.28	0.06
66	0.008	0.34	0.05	0.27	0.06
67	0.007	0.33	0.05	0.27	0.06
68	0.007	0.32	0.05	0.26	0.06
69	0.007	0.31	0.05	0.26	0.06
70	0.007	0.31	0.04	0.25	0.06
85	0.005	0.21	0.03	0.21	0.05
87	0.004	0.20	0.03	0.20	0.05
88	0.004	0.20	0.03	0.20	0.05
91	0.004	0.18	0.03	0.20	0.05
92	0.004	0.18	0.03	0.19	0.04
93	0.004	0.18	0.03	0.19	0.04
95	0.004	0.17	0.02	0.19	0.04
122	0.002	0.10	0.02	0.15	0.03
125	0.002	0.10	0.01	0.14	0.03
126	0.002	0.10	0.01	0.14	0.03
127	0.002	0.10	0.01	0.14	0.03
128	0.002	0.09	0.01	0.14	0.03
130	0.002	0.09	0.01	0.14	0.03
131	0.002	0.09	0.01	0.14	0.03

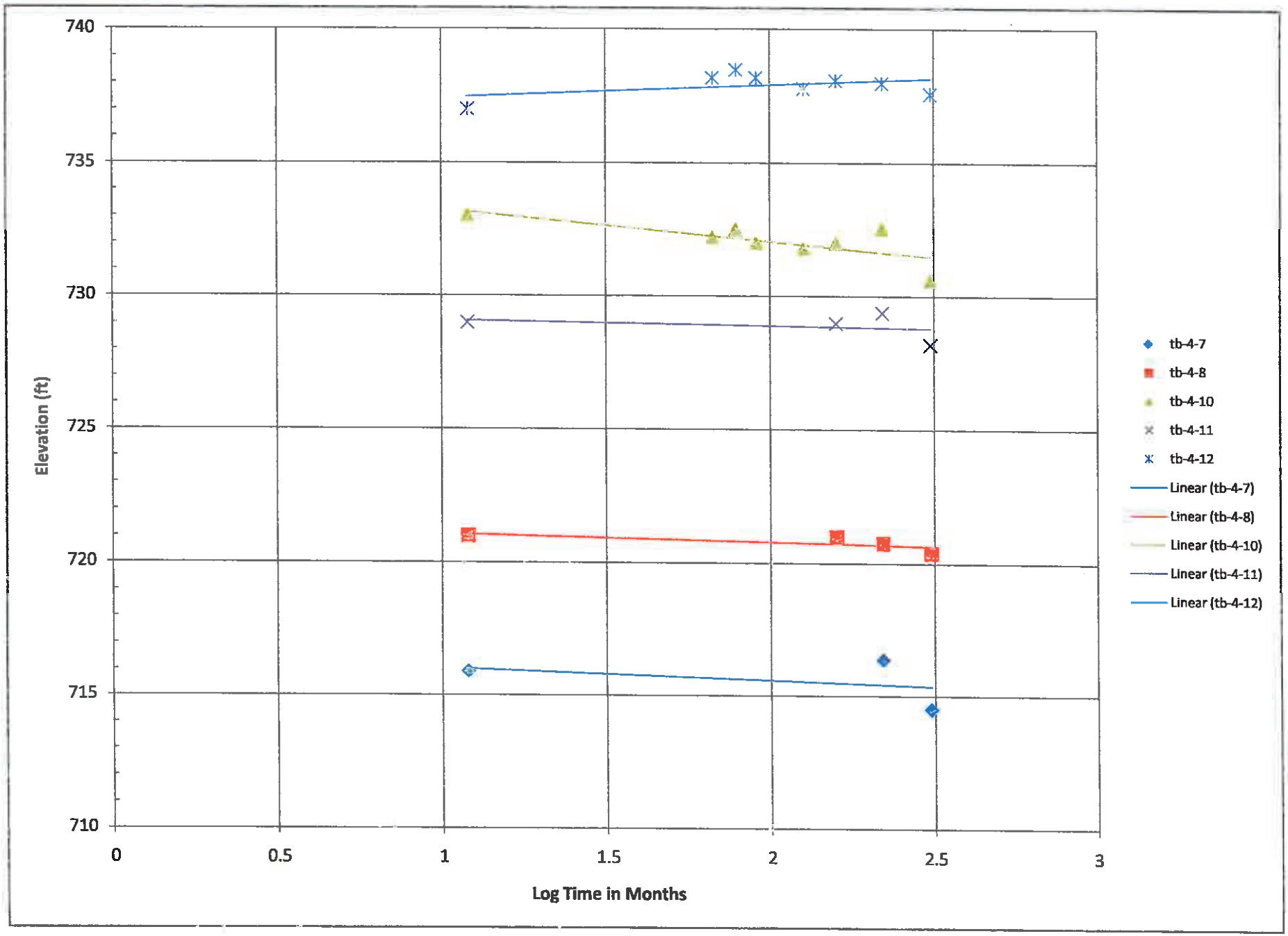
Determination of C_α / E

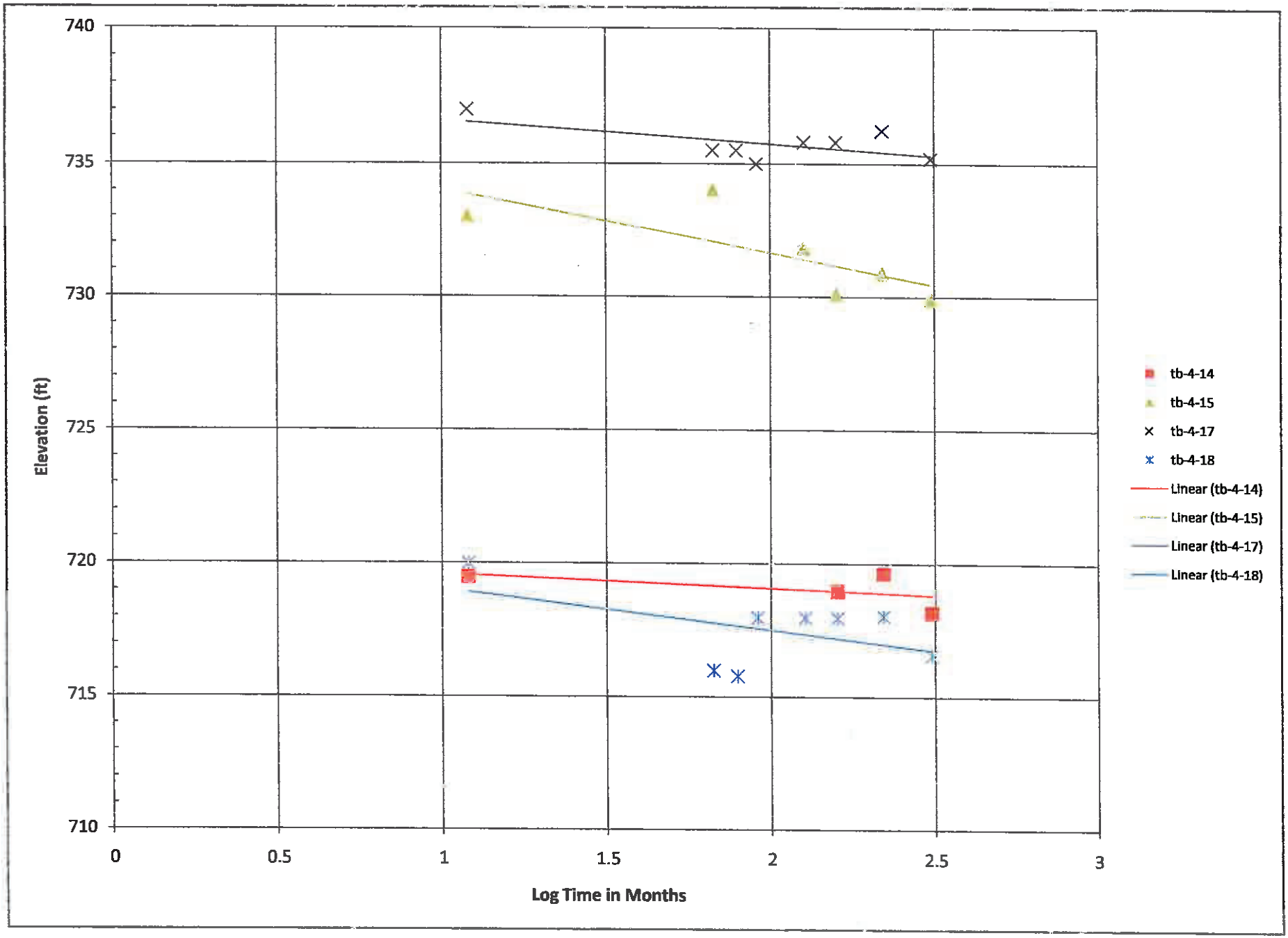
TB	N	E	Liner Elevation	Waste Thickness (ft)	May-08	Jan-01	Dec-95	Apr-93	Apr-92	Apr-90	Apr-89	Apr-88	Sep-83	Slope	Modified Index
tb-4-2	8709.01	4218.68	675.5	31	712.5	715.0	714.3	713.8		714.2	714.5	714	714	0.31457	0.01015
tb-4-3	8561.04	4941.60	682.6	26	713.6		714.3						713	-0.63108	
tb-4-4	8555.73	4522.19	691.5	31	727.5		728.2	728		728.2	728	728.2	728	0.20920	0.00675
tb-4-5	8543.41	4004.36	687.6	17	722.6	723.7					723	722.5	723	-0.10563	
tb-4-6	8397.15	4450.68	673.6	54	732.6	733.5	733			733.5	733	734.5	731	-1.21047	
tb-4-7	8380.50	3803.97	674.5	34	714.5	716.4							715.9	0.44679	0.01314
tb-4-8	8333.74	4851.49	661.4	51	720.4	720.8	721						721	0.28290	0.00555
tb-4-10	8248.81	4156.86	692.6	31	730.6	732.5	732	731.8		732	732.5	732.2	733	1.17604	0.03794
tb-4-11	8123.84	4744.32	660.2	44	728.2	729.4	729						729	0.19913	0.00453
tb-4-12	8114.52	4262.79	737.6	46	737.6	738.0	738.1	737.8		738.2	738.5	738.2	737	-0.47971	
tb-4-13	8086.91	3804.42	672.2	40	718.2	719.9				718.5	721	719	720	0.83351	0.02084
tb-4-14	7869.58	4911.80	673.2	40	718.2	719.7	719						719.5	0.51187	0.01280
tb-4-15	7942.88	4623.23	692.9	32	729.9	730.9	730.1	731.8				734	733	2.38543	0.07454
tb-4-17	7949.07	4184.93	691.2	36.5	735.2	736.2	735.8	735.8		735	735.5	735.5	737	0.87702	0.02403
tb-4-18	7798.94	3979.03	674.6	36.5	716.6	718.1	718	718		718	715.8	716	720	1.52085	0.04167
tb-4-19	7995.23	4374.15	678	51	735	736.5	735.8	737		741		739.5	736	0.82997	0.01627
tb-4-20	8190.02	4440.79	693	32	735	736.9	735.9	736.5		739.9		738.5	737	1.30671	0.04083
tb-4-21	8458.90	4358.61	675	46	730	731.5	730.5	730.5		730.5	731	731.8	729.5	-0.58516	
tb-1-2	6832.47	4917.83	674.4	31	709.4	710.9		710	709.8	710.5	710.5	710	711	0.72726	0.02346
tb-1-3	6847.69	3970.06	667.8	42	715.8	717.0		716.5	717	715	717	717	719	1.96608	0.04681
tb-1-5	6654.26	4115.69	687.8	24	722.8	724.8		723.8	724.2	723.5	725	725	725	1.14365	0.04765
tb-1-6	6455.09	4885.98	689	19	716	717.1		716.5	716		713.9	714	715	-1.45075	
tb-1-8	6458.92	3891.50	698.9	17	726.9	728.9		727	728	727.5	729	729	730	1.89261	0.11133
tb-1-9	6334.58	4449.41	680.9	32	723.9	726.6		726.2				726.5	727	1.46579	0.04581
tb-1-10	6797.10	4250.48	683	25.5	721	723.5		721.8	722.1	721	723	723	724.2	1.71538	0.06727
tb-1-11	6592.96	4458.17	666	46	723	724.9		724.5	724.5	724.5	725	725	725.8	1.52318	0.03311
tb-1-12	6368.94	4247.03	683	38	726	728.9		729.8		729	729.8		729.5	1.61540	0.04251

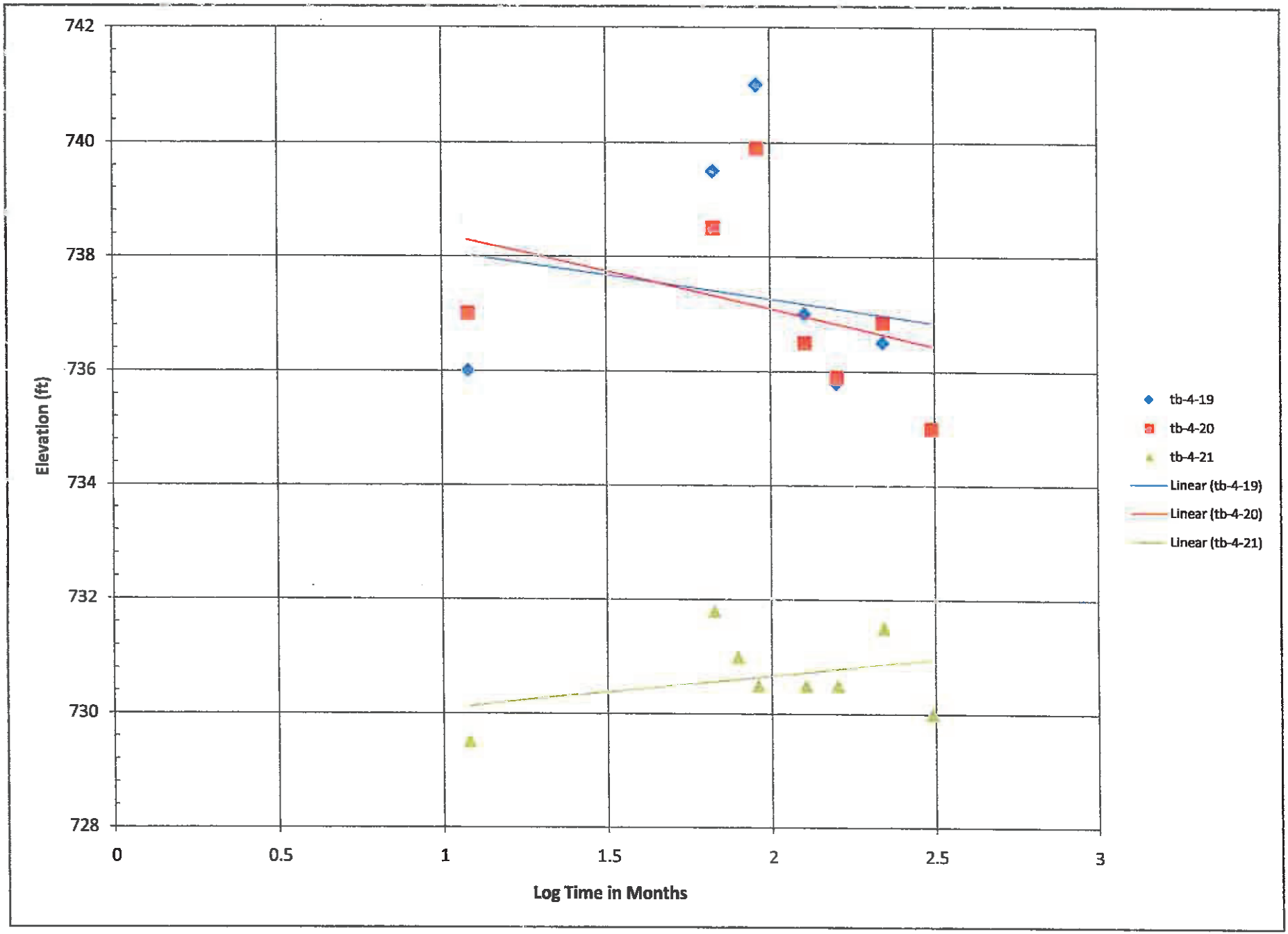
Indicates Invalid Slope.

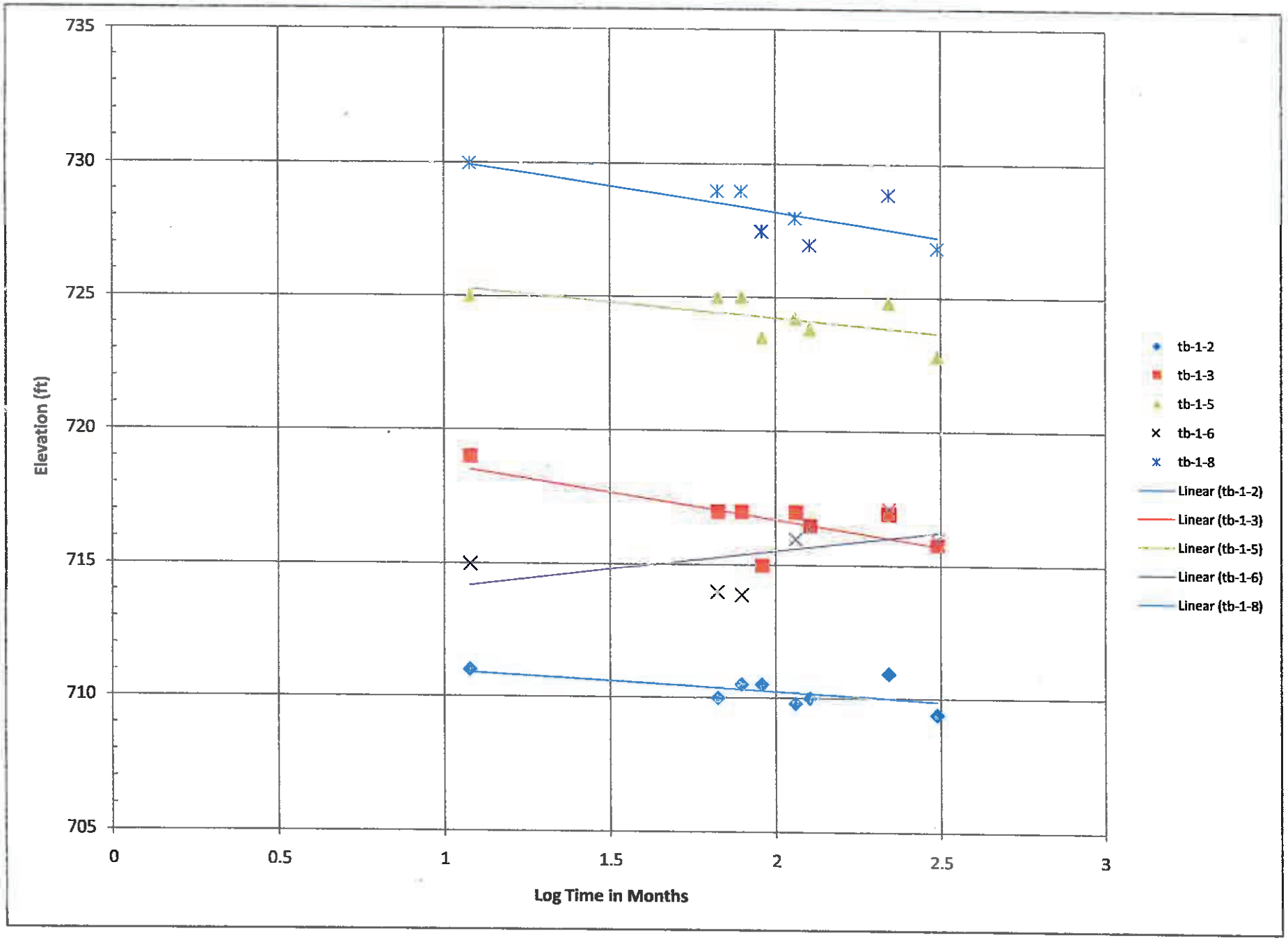
$$\text{Modified Index} = \frac{C_\alpha}{1+e_o} = \frac{\Delta}{H \log t_2/t_1} = \frac{\text{Slope of Line}}{H} \quad (H = \text{Waste Thickness})$$

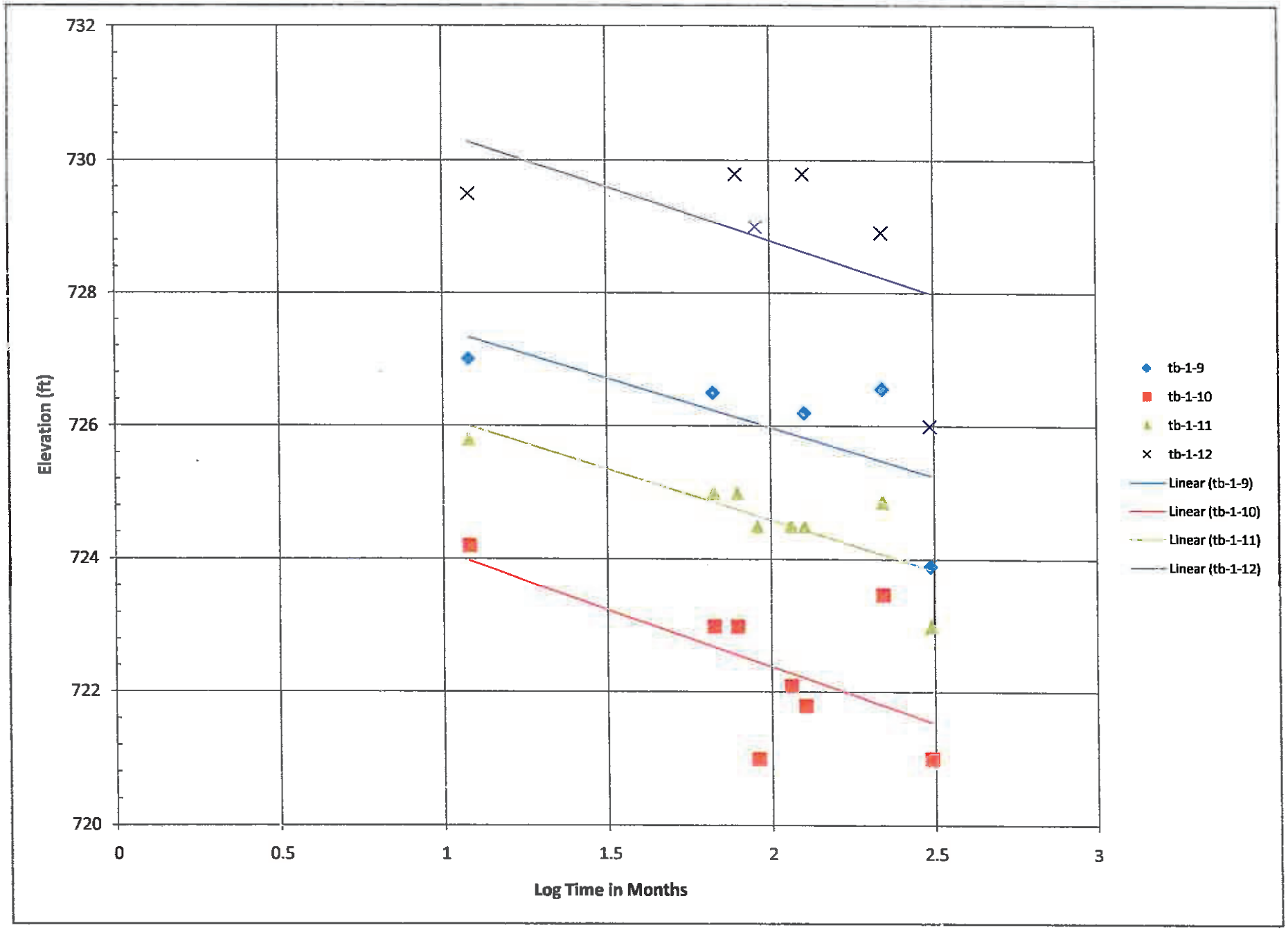

740
735
730
725
720
715
710
Elevation (ft)
0
0.5
1
1.5
2
2.5
3
Log of Time in Months
tb-4-2
tb-4-3
tb-4-4
tb-4-5
tb-4-6
Linear (tb-4-2)
Linear (tb-4-3)
Linear (tb-4-4)
Linear (tb-4-5)
Linear (tb-4-6)


740
735
730
725
720
715
710
Elevation (ft)
0
0.5
1
1.5
2
2.5
3
Log Time in Months
tb-4-7
tb-4-8
tb-4-10
tb-4-11
tb-4-12
Linear (tb-4-7)
Linear (tb-4-8)
Linear (tb-4-10)
Linear (tb-4-11)
Linear (tb-4-12)


740
735
730
725
720
715
710
Elevation (ft)
0
0.5
1
1.5
2
2.5
3
Log Time in Months
tb-4-14
tb-4-15
tb-4-17
tb-4-18
Linear (tb-4-14)
Linear (tb-4-15)
Linear (tb-4-17)
Linear (tb-4-18)


742
740
738
736
734
732
730
728
Elevation (ft)
0
0.5
1
1.5
2
2.5
3
Log Time in Months
tb-4-19
tb-4-20
tb-4-21
Linear (tb-4-19)
Linear (tb-4-20)
Linear (tb-4-21)


735
730
725
720
715
710
705
Elevation (ft)
0
0.5
1
1.5
2
2.5
3
Log Time in Months
tb-1-2
tb-1-3
tb-1-5
tb-1-6
tb-1-8
Linear (tb-1-2)
Linear (tb-1-3)
Linear (tb-1-5)
Linear (tb-1-6)
Linear (tb-1-8)


732
730
728
726
724
722
720
Elevation (ft)
0
0.5
1
1.5
2
2.5
3
Log Time in Months
tb-1-9
tb-1-10
tb-1-11
tb-1-12
Linear (tb-1-9)
Linear (tb-1-10)
Linear (tb-1-11)
Linear (tb-1-12)

Attachment A-2.3.4

CTI Back-Calculation of C'_c from NTH (2011a) Stockpile Test Results

midpoint depth	Clay Layer	Top Elevation	Bottom Elevation	Midpoint Elevation	Taken from CTI Data Review	Thickness	AVG MC	e_0	$\gamma_{soil,\ moist}$	$\sigma_{excavate}$	$u_{excavation}$	p_c	c_v	C_{cv} (assumed same as C_c)	C_c
ft bgs						ft	%		pcf	psf	psf	psf	ft.^{2}/day		
0.00	1	687	687	687	655	0	18	0.47	129.8	0	0	1660	0.08	0.1499	0.1499
7.00	2	680	680	680	655	0	18	0.47	129.8	0	0	1660	0.08	0.1499	0.1499
14.00	3	676	669	673	655	7	18	0.47	135.7	475	0	1660	0.08	0.1499	0.1499
21.00	4	669	662	666	655	7	18	0.47	135.7	1425	0	1660	0.08	0.1499	0.1499
28.00	5	662	655	659	655	7	22	0.47	128.1	2348	0	1660	0.08	0.1499	0.1499
35.00	6	655	648	652	655	7	22	0.76	128.1	3245	218	2724	0.08	0.3010	0.3010
42.00	7	648	641	645	655	7	22	0.76	128.1	4142	655	2724	0.08	0.3010	0.3010

Point Name	Unit	SP-1 (2)			SP-2			SP-3			SP-4 (2)			SP-6		
Existing Topo Elevation, from 2/11/2011	ft.	736			742			747			745			740		
Soil stockpile thickness (H_{soil})	ft.	8			12			13			12			12		
Cover thickness (H_{cover})	ft.	14			15			11			10			10		
Top of Waste Elevation	ft.	714			715			723			723			718		
Elevation of Bottom of Waste	ft.	674			674			674			671			675		
Waste thickness (H_w)	ft.	40			41			49			52			43		
Bottom of Clay	ft.	644			650			656			658			661		
Clay thickness (H_{clay})	ft.	30			24			18			13			14		
Waste unit weight (γ_{moist})	pcf							77								
Water unit weight (γ_w)	pcf							62.4								
Cover soil unit weight (γ_{cover})	pcf							120								
Soil stockpile unit weight (γ_{soil})	pcf							120								
Elevation of Top of Leachate Level		704			703			703			702			696		
Time Elapsed since waste placement	years							30								
Time Elapsed since stockpile placement	days							57								
Maximum settlement (S_w)	ft.	0.12			0.68			0.73			0.62			0.75		
WASTE																
Waste Element thickness ($H_e = H_w / 3$)	ft.	13.33			13.67			16.33			17.33			14.33		
Initial depth to element midpoint ($z = 1/6\ H_w$; $3/2\ H_w$; $5/6\ H_w$)	ft.	6.67	20.00	33.33	6.83	20.50	34.17	8.17	24.50	40.83	8.67	26.00	43.33	7.17	21.50	35.83
Pore Pressure prior to leachate, u0	psf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Pore Pressure, uf	psf	0.00	624.00	1456.00	0.00	530.40	1383.20	0.00	280.80	1300.00	0.00	312.00	1393.60	0.00	0.00	863.20
Final eff. stress at midpoint ($\sigma_0' = z * \gamma_{moist} + H_{cover} * \gamma_{soil}$)-uf	psf	2193.33	2596.00	2790.67	2206.17	2728.10	2927.63	2308.83	3285.70	3524.17	2347.33	3370.00	3623.07	2231.83	3335.50	3575.97
Change in stress from stockpile (from 2V:1H Pressure Distribution)	psf	1488.67	1287.56	1128.03	1488.67	1273.99	1117.12	1471.38	1222.01	1045.43	1454.42	1209.56	1026.32	1488.67	1260.65	1095.83
Final stress ($\sigma_f' = \sigma_0' + \Delta\sigma$)	psf	3682.00	3883.56	3918.69	3694.84	4002.09	4044.75	3780.21	4507.71	4569.59	3801.75	4579.56	4649.39	3720.50	4824.17	5064.64
TOP 3 CLAY LAYERS																
Clay Element thickness ($H_{cClay} = H_{clay} / 6$)	ft.	5.00			4.00			3.00			2.17			2.33		
Initial depth to element midpoint ($z = 1/12\ H_{clay}$; $3/12\ H_{clay}$; $5/12\ H_{clay}$)	ft.	2.50	7.50	12.50	2.00	6.00	10.00	1.50	4.50	7.50	1.08	3.25	5.42	1.17	3.50	5.83
Elevation		671.50	666.50	661.50	672.00	668.00	664.00	672.50	669.50	666.50	669.92	667.75	665.58	673.83	671.50	669.17
midpoint depth within clay	ft bgs	15.00	20.00	25.00	14.50	18.50	22.50	14.00	17.00	20.00	16.58	18.75	20.92	12.67	15.00	17.33
upper layer midpoint depth	ft bgs	14.00	14.00	21.00	14.00	14.00	21.00	14.00	14.00	14.00	14.00	14.00	14.00	7.00	14.00	14.00
lower layer midpoint depth	ft bgs	21.00	21.00	28.00	21.00	21.00	28.00	21.00	21.00	21.00	21.00	21.00	21.00	14.00	21.00	21.00
upper preconsolidation stress (total)	psf	474.95	474.95	1424.85	474.95	474.95	1424.85	474.95	474.95	474.95	474.95	474.95	474.95	0.00	474.95	474.95
lower preconsolidation stress (total)	psf	1424.85	1424.85	2348.15	1424.85	1424.85	2348.15	1424.85	1424.85	1424.85	1424.85	1424.85	1424.85	474.95	1424.85	1424.85
preconsolidation stress (total)	psf	610.65	1289.15	1952.45	542.80	1085.60	1622.70	474.95	882.05	1289.15	825.51	1119.53	1413.54	384.48	610.65	927.28
Total Stress at Midpoint	psf	610.65	1289.15	1952.45	542.80	1085.60	1622.70	474.95	882.05	1289.15	825.51	1119.53	1413.54	384.48	610.65	927.28
Initial Pore Pressure, u0	psf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Drainage Height of Clay, H_{cc}, based on free draining in aquifer and waste	ft.	15.00			12.00			9.00			6.50			7.00		
Tv from waste (30 years)		3.89	3.89	3.89	6.08	6.08	6.08	10.81	10.81	10.81	20.73	20.73	20.73	17.88	17.88	17.88
U (percent consolidation of clay), avg from waste		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Tv from stockpile		0.02	0.02	0.02	0.03	0.03	0.03	0.06	0.06	0.06	0.11	0.11	0.11	0.09	0.09	0.09
U (percent consolidation of clay), avg from stockpile		0.41	0.01	0.00	0.51	0.05	0.00	0.62	0.14	0.01	0.72	0.28	0.08	0.70	0.25	0.06
Final eff. stress at midpoint due to waste ($\sigma_0' = z * \gamma_{moist} * (U_{clay\ from\ waste}) * (H_w * \gamma_{moist} + H_{cover} * \gamma_{soil})$), consolidation from 1981-2011 - u0	psf	5370.54	6048.86	6712.06	5499.80	6042.60	6579.70	5567.95	5975.05	6382.15	6029.51	6323.53	6617.54	5375.48	5601.65	5918.28
Final Pore Pressure, uf	psf	1773.20	1575.60	1378.00	1684.80	1435.20	1185.60	1653.60	1341.60	1029.60	1757.60	1404.00	1050.40	1170.00	889.20	608.40
Change in stress from stockpile (from 2V:1H Pressure Distribution) * U_stockpile	psf	607.00	16.71	0.01	755.93	59.77	1.01	911.36	166.41	14.10	1046.99	342.39	87.11	1040.98	311.32	65.99
Final stress ($\sigma_f' = \sigma_0 + \Delta\sigma$) from stockpile - uf	psf	4204.35	4489.98	5334.06	4570.93	4667.17	5395.11	4825.71	4799.86	5366.65	5318.89	5261.91	5654.25	5246.47	5023.77	5375.88
Element Settlement $S_{cClay} = [H_{cClay} * C_{c,clay} * \log(\sigma_f / \sigma_0)]/(1+e_{0,clay})$	ft.	0.03	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.02	0.01	0.00	0.02	0.01	0.00
BOTTOM 3 CLAY LAYERS																
Initial depth to element midpoint ($z = 7/12\ H_{clay}$; $9/12\ H_{clay}$; $11/12\ H_{clay}$)	ft.	17.50	22.50	27.50	14.00	18.00	22.00	10.50	13.50	16.50	7.58	9.75	11.92	8.17	10.50	12.83
Elevation		656.50	651.50	646.50	660.00	656.00	652.00	663.50	660.50	657.50	663.42	661.25	659.08	666.83	664.50	662.17
midpoint depth within clay	ft bgs	30.00	35.00	40.00	26.50	30.50	34.50	23.00	26.00	29.00	23.08	25.25	27.42	19.67	22.00	24.33
upper layer midpoint depth	ft bgs	28.00	35.00	35.00	21.00	28.00	28.00	21.00	21.00	28.00	21.00	21.00	21.00	14.00	21.00	21.00
lower layer midpoint depth	ft bgs	35.00	42.00	42.00	28.00	35.00	35.00	28.00	28.00	35.00	28.00	28.00	28.00	21.00	28.00	28.00
upper preconsolidation stress (total)	psf	2348.15	3244.85	3244.85	1424.85	2348.15	2348.15	1424.85	1424.85	2348.15	1424.85	1424.85	1424.85	474.95	1424.85	1424.85
lower preconsolidation stress (total)	psf	3244.85	4141.55	4141.55	2348.15	3244.85	3244.85	2348.15	2348.15	3244.85	2348.15	2348.15	2348.15	1424.85	2348.15	2348.15
preconsolidation stress (total)	psf	2604.35	3244.85	3885.35	2150.30	2668.40	3180.80	1688.65	2084.35	2476.25	1699.64	1985.43	2271.21	1243.92	1556.75	1864.52
Total Stress at Midpoint	psf	2604.35	3244.85	3885.35	2150.30	2668.40	3180.80	1688.65	2084.35	2476.25	1699.64	1985.43	2271.21	1243.92	1556.75	1864.52
Initial Pore Pressure, u0	psf	0.00	218.40	530.40	0.00	0.00	187.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tv from waste (30 years)		3.89	3.89	3.89	6.08	6.08	6.08	10.81	10.81	10.81	20.73	20.73	20.73	17.88	17.88	17.88
U (percent consolidation of clay), avg from waste		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Tv from stockpile		0.02	0.02	0.02	0.03	0.03	0.03	0.06	0.06	0.06	0.11	0.06	0.06	0.09	0.09	0.09
U (percent consolidation of clay), avg from stockpile		0.00	0.01	0.41	0.00	0.05	0.51	0.01	0.14	0.62	0.08	0.14	0.62	0.06	0.25	0.70
Final stress at midpoint due to waste ($\sigma_0' = z * \gamma_{clay} * (U_{clay\ from\ waste}) * (H_w * \gamma_{moist} + H_{cover} * \gamma_{soil})$), consolidation from 1990-2020 - u0	psf	7363.96	7786.16	8114.84	7107.30	7625.40	7950.60	6781.65	7177.35	7569.25	6903.64	7189.43	7475.21	5754.92	6067.75	6375.52
Final Pore Pressure, uf	psf	1180.40	982.80	785.20	936.00	686.40	436.80	717.60	405.60	93.60	696.80	343.20	0.00	327.60	46.80	0.00
Change in stress from stockpile (from 2V:1H Pressure Distribution) * U_stockpile	psf	0.01	16.70	459.76	1.34	59.74	567.09	19.84	166.36	647.40	123.42	164.66	635.57	89.63	311.25	766.17
Final stress ($\sigma_f = \sigma_0 + \Delta\sigma$) from stockpile - uf	psf	6183.56	6820.06	7789.41	6172.64	6998.74	8080.89	6083.89	6938.11	8123.05	6330.26	7010.89	8110.78	5516.95	6332.20	7141.69
Element Settlement $S_{cClay} = H_{cClay} * C_{c,clay} * \log(\sigma_f / \sigma_0)]/(1+e_{0,\ clay})$	ft.	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01
CLAY																
Max total settlement of clay (S_{cClay})	ft.	0.06			0.06			0.05			0.04			0.05		
WASTE																
Element settlement S_c =Cc'*Hn * log (sf / s0)	ft.	0.03	0.02	0.02	0.28	0.20	0.17	0.31	0.20	0.17	0.27	0.17	0.14	0.30	0.22	0.21
C_c' (trial and error)		0.010			0.090			0.090			0.075			0.095		

midpoint depth	Clay Layer	Top Elevation	Bottom Elevation	Midpoint Elevation	Taken from CTI Data Review	Thickness	AVG MC	e_0	$\gamma_{soil,\ moist}$	$\sigma_{excavation}$	$u_{excavation}$	p_c	c_v	C_{α} (assumed same as C_c)	C_c
ft bgs						ft	%		pcf	psf	psf	psf	$ft.^2$/day		
3.50	1	690	683	687	655	7	18	0.47	129.8	454	0	1660	0.08	0.1499	0.1499
10.50	2	683	676	680	655	7	18	0.47	129.8	1363	0	1660	0.08	0.1499	0.1499
17.50	3	676	669	673	655	7	18	0.47	135.7	2292	0	1660	0.08	0.1499	0.1499
24.50	4	669	662	666	655	7	18	0.47	135.7	3242	0	1660	0.08	0.1499	0.1499
31.50	5	662	655	659	655	7	22	0.47	128.1	4165	0	1660	0.08	0.1499	0.1499
38.50	6	655	648	652	655	7	22	0.76	128.1	5062	218	2724	0.08	0.3010	0.3010
45.50	7	648	641	645	655	7	22	0.76	128.1	5959	655	2724	0.08	0.3010	0.3010

Point Name		SP-5 (2)			
	Unit				
Existing Topo Elevation, from 2/11/2011	ft.	740			
Soil stockpile thickness (H_{pile})	ft.	11			
Cover thickness (H_{cover})	ft.	7			
Top of Waste Elevation	ft.	722			
Elevation of Bottom of Waste	ft.	687			
Waste thickness (H_w)	ft.	35			
Bottom of Clay	ft.	660			
Clay thickness (H_{clay})	ft.	27			
Waste unit weight (γ_{mswa})	pcf				77
Water unit weight (γ_w)	pcf				62.4
Cover soil unit weight (γ_{soil})	pcf				120
Soil stockpile unit weight (γ_{soil})	pcf				120
Elevation of Top of Leachate Level		700			
Time Elapsed since waste placement	years				30
Time Elapsed since stockpile placement	days				57
Maximum settlement (S_w)	ft.	0.78			
WASTE					
Waste Element thickness ($H_{EL} = H_w$ / 3)	ft.	11.67			
Initial depth to element midpoint (z = 1/6 H_w; 1/2 H_w; 5/6 H_w)	ft.	5.83	17.50	29.17	
Pore Pressure prior to leachate, u0	psf	0.00	0.00	0.00	
Final Pore Pressure, uf	psf	0.00	0.00	447.20	
Final eff. stress at midpoint ($\sigma_0' = z * \gamma_{mswa} + H_{cover} * \gamma_{soil}$) -uf	psf	1289.17	2187.50	2638.63	
Change in stress from stockpile (from 2V:1H Pressure Distribution)	psf	1506.31	1315.45	1173.46	
Final stress ($\sigma_f' = \sigma_0' + \Delta\sigma$)	psf	2795.48	3502.95	3812.09	
TOP 3 CLAY LAYERS					
Clay Element thickness ($H_{EL,clay} = H_{clay}$ / 6)	ft.	4.50			
Initial depth to element midpoint (z = 1/12 H_{clay}; 3/12 H_{clay}; 5/12 H_{clay})	ft.	2.25	6.75	11.25	
Elevation		684.75	680.25	675.75	
midpoint depth within clay	ft bgs	5.25	9.75	14.25	
upper layer midpoint depth	ft bgs	3.50	3.50	10.50	
lower layer midpoint depth	ft bgs	10.50	10.50	17.50	
upper preconsolidation stress (total)	psf	454.30	454.30	1362.90	
lower preconsolidation stress (total)	psf	1362.90	1362.90	2292.15	
preconsolidation stress (total)	psf	681.45	1265.55	1860.71	
Total Stress at Midpoint	psf	681.45	1265.55	1860.71	
Initial Pore Pressure, u0	psf	0.00	0.00	0.00	
Drainage Height of Clay, H_{DL}, based on free draining in aquifer and waste	ft.	13.50			
Tv from waste (30 years)		4.81	4.81	4.81	
U (percent consolidation of clay), avg from waste		1.00	1.00	1.00	
Tv from stockpile		0.03	0.03	0.03	
U (percent consolidation of clay), avg from stockpile		0.46	0.03	0.00	
Final eff. stress at midpoint due to waste ($\sigma_0' = z * \gamma_{mswa} + (U_{clay\ from\ waste}) * (H_w * \gamma_{mswa} + H_{cover} * \gamma_{soil})$), consolidation from 1981-2011 - u0	psf	4216.44	4800.53	5395.68	
Final Pore Pressure, uf	psf	717.60	530.40	343.20	
Change in stress from stockpile (from 2V:1H Pressure Distribution) * U_stockpile	psf	687.22	33.38	0.19	
Final stress ($\sigma_f' = \sigma_0 + \Delta\sigma$) from stockpile - uf	psf	4186.06	4303.51	5052.68	
Element Settlement $S_{EL,clay} = \{H_{EL,clay} * C_{c,clay} * \log(\sigma_f / \sigma_0)\}/(1+e_{0,\ clay})\}$	ft.	0.04	0.00	0.00	
BOTTOM 3 CLAY LAYERS					
Initial depth to element midpoint (z = 7/12 H_{clay}; 9/12 H_{clay}; 11/12 H_{clay})	ft.	15.75	20.25	24.75	
Elevation		671.25	666.75	662.25	
midpoint depth within clay	ft bgs	18.75	23.25	27.75	
upper layer midpoint depth	ft bgs	17.50	17.50	24.50	
lower layer midpoint depth	ft bgs	24.50	24.50	31.50	
upper preconsolidation stress (total)	psf	2292.15	2292.15	3242.05	
lower preconsolidation stress (total)	psf	3242.05	3242.05	4165.35	
preconsolidation stress (total)	psf	2461.78	3072.43	3670.73	
Total Stress at Midpoint	psf	2461.78	3072.43	3670.73	
Initial Pore Pressure, u0	psf	0.00	0.00	0.00	
Tv from waste (30 years)		4.81	4.81	4.81	
U (percent consolidation of clay), avg from waste		1.00	1.00	1.00	
Tv from stockpile		0.03	0.03	0.03	
U (percent consolidation of clay), avg from stockpile		0.00	0.03	0.46	
Final stress at midpoint due to waste ($\sigma_0' = z * \gamma_{mswa} + (U_{clay\ from\ waste}) * (H_w * \gamma_{mswa} + H_{cover} * \gamma_{soil})$), consolidation from 1990-2020 - u0	psf	5996.74	6607.40	7205.72	
Final Pore Pressure, uf	psf	156.00	0.00	0.00	
Change in stress from stockpile (from 2V:1H Pressure Distribution) * U_stockpile	psf	0.25	33.36	535.18	
Final stress ($\sigma_f = \sigma_0 + \Delta\sigma$) from stockpile - uf	psf	5840.99	6640.76	7740.89	
Element Settlement $S_{EL,clay} = H_{EL,clay} * C_{c,clay} * \log(\sigma_f / \sigma_0)\}/(1+e_{0,\ clay})$	ft.	0.00	0.00	0.01	
CLAY					
Max total settlement of clay (S_{clay})	ft.		0.05		
WASTE					
Element settlement S_w =Cc'*Hm * log (sf / s0)	ft.	0.35	0.21	0.17	
C_c' (trial and error)		0.090			

midpoint depth	Clay Layer	Top Elevation	Bottom Elevation	Midpoint Elevation	Taken from CTI Data Review	Thickness	AVG MC	e_0	$\gamma_{soil,\ moist}$	$\sigma_{excavate}$	$u_{excavate}$	p_c	c_v	C_v (assumed same as C_c)	C_c
ft bgs						ft	%		pcf	psf	psf	psf	ft^2/day		
0.00	1	687	687	687	655	0	18	0.47	129.8	0	0	1660	0.08	0.1499	0.1499
7.00	2	680	680	680	655	0	18	0.47	129.8	0	0	1660	0.08	0.1499	0.1499
14.00	3	676	669	673	655	7	18	0.47	135.7	475	0	1660	0.08	0.1499	0.1499
21.00	4	669	662	666	655	7	18	0.47	135.7	1425	0	1660	0.08	0.1499	0.1499
28.00	5	662	655	659	655	7	22	0.47	128.1	2348	0	1660	0.08	0.1499	0.1499
35.00	6	655	648	652	655	7	22	0.76	128.1	3245	218	2724	0.08	0.3010	0.3010
42.00	7	648	641	645	655	7	22	0.76	128.1	4142	655	2724	0.08	0.3010	0.3010

Point Name	Unit	SP-7			SP-9 (2)			SP-10				SP-10					
Existing Topo Elevation, from 2/11/2011	ft.	743			744			740				730					
Soil stockpile thickness (H_{pile})	ft.	13			12			11				6					
Cover thickness (H_{cover})	ft.	9			12			10				6					
Top of Waste Elevation	ft.	721			720			719				718					
Elevation of Bottom of Waste	ft.	675			675			675				675					
Waste thickness (H_w)	ft.	46			45			44				43					
Bottom of Clay	ft.	659			653			642				638					
Clay thickness (H_{clay})	ft.	16			22			33				37					
Waste unit weight (γ_{moist})	pcf	77															
Water unit weight (γ_w)	pcf	62.4															
Cover soil unit weight (γ_{soil})	pcf	120															
Soil stockpile unit weight (γ_{soil})	pcf	120															
Elevation of Top of Leachate Level		698			699			700									
Time Elapsed since waste placement	years	30															
Time Elapsed since stockpile placement	days	57															
Maximum settlement (S_c)	ft.	0.76			0.77			0.75				0.28					
WASTE																	
Waste Element thickness ($H_L = H_w$ / 3)	ft.	15.33			15.00			14.67				14.67					
Initial depth to element midpoint (z = 1/6 H_w; 1/2 H_w; 5/6 H_w)	ft.	7.67	23.00	38.33	7.50	22.50	37.50	7.33	22.00	36.67		7.17	21.50	35.83			
Pore Pressure prior to leachate, u0	psf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00			
Final Pore Pressure, uf	psf	0.00	0.00	956.80	0.00	93.60	1029.60	0.00	187.20	1102.40		0.00	156.00	1050.40			
Final eff. stress at midpoint ($\sigma_0' = z * \gamma_{moist} + H_{cover} * \gamma_{soil}$) -uf	psf	1670.33	2851.00	3074.87	1657.50	2718.90	2937.90	1644.67	2586.80	2800.93		1631.83	2579.50	2788.77			
Change in stress from stockpile (from 2V:1H Pressure Distribution)	psf	1471.38	1247.55	1075.20	1471.38	1247.55	1075.20	1488.67	1260.65	1085.43		1488.67	1260.65	1095.83			
Final stress ($\sigma_0' = \sigma_0' + \Delta\sigma$)	psf	3141.71	4098.55	4150.06	3128.88	4190.28	4409.28	3133.34	4075.47	4289.60		3120.50	4068.17	4277.44			
TOP 3 CLAY LAYERS																	
Clay Element thickness ($H_{L,clay} = H_{clay}$ / 6)	ft.	2.67			3.67			5.50				6.17					
Initial depth to element midpoint (z = 1/12 H_{clay}; 3/12 H_{clay}; 5/12 H_{clay})	ft.	1.33	4.00	6.67	1.83	5.50	9.17	2.75	8.25	13.75		3.08	9.25	15.42			
Elevation		673.67	671.00	668.33	673.17	669.50	665.83	672.25	666.75	661.25		671.92	665.75	659.58			
midpoint depth within clay	ft bgs	12.83	15.50	18.17	13.33	17.00	20.67	14.25	19.75	25.25		14.58	20.75	26.92			
upper layer midpoint depth	ft bgs	7.00	14.00	14.00	7.00	14.00	14.00	14.00	14.00	21.00		14.00	14.00	21.00			
lower layer midpoint depth	ft bgs	14.00	21.00	21.00	14.00	21.00	21.00	21.00	21.00	28.00		21.00	21.00	28.00			
upper preconsolidation stress (total)	psf	0.00	474.95	474.95	0.00	474.95	474.95	474.95	474.95	1424.85		474.95	474.95	1424.85			
lower preconsolidation stress (total)	psf	474.95	1424.85	1424.85	474.95	1424.85	1424.85	1424.85	1424.85	2348.15		1424.85	1424.85	2348.15			
preconsolidation stress (total)	psf	395.79	678.50	1040.37	429.72	882.05	1379.62	508.88	1255.23	1985.43		554.11	1390.93	2205.26			
Total Stress at Midpoint	psf	395.79	678.50	1040.37	429.72	882.05	1379.62	508.88	1255.23	1985.43		554.11	1390.93	2205.26			
Initial Pore Pressure, u0	psf	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00			
Drainage Height of Clay, H_{dr}, based on free draining in aquifer and waste	ft.	8.00			11.00			16.50				18.50					
Tv from waste (30 years)		13.69	13.69	13.69	7.24	7.24	7.24	3.22	3.22	3.22		3.22	3.22	3.22			
U (percent consolidation of clay), avg from waste		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Tv from stockpile		0.07	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02		0.02	0.02	0.02			
U (percent consolidation of clay), avg from stockpile		0.66	0.19	0.03	0.54	0.07	0.00	0.36	0.01	0.00		0.31	0.00	0.00			
Final eff. stress at midpoint due to waste ($\sigma_0' = z * \gamma_{Cov} + (U_{clay\ from\ waste} * (H_L * \gamma_{moist} + H_{cover} * \gamma_{soil}))$ consolidation from 1981-2011 - u0	psf	5017.79	5300.50	5662.37	5334.72	5787.05	6284.62	5096.34	5841.75	6571.41		5141.51	5977.32	6791.19			
Final Pore Pressure, uf	psf	1294.80	1014.00	733.20	1383.20	1154.40	925.60	1497.60	1372.80	1248.00		1490.04	1350.11	1210.18			
Change in stress from stockpile (from 2V:1H Pressure Distribution) * U_stockpile	psf	969.39	231.26	31.44	800.11	85.51	0.00	539.61	7.90	0.00		457.37	2.73	0.00			
Final stress ($\sigma_0' = \sigma_0 + \Delta\sigma$) from stockpile - uf	psf	4692.38	4517.76	4960.61	4751.63	4718.16	5359.02	4138.35	4476.85	5323.41		4108.84	4629.93	5581.00			
Element Settlement $S_{c,clay}$ = {$H_{c,clay}$ * $C_{c,clay}$*log (σ_f / σ_0)}/(1+$e_{0,\ clay}$)}	ft.	0.03	0.01	0.00	0.03	0.00	0.00	0.03	0.00	0.00		0.03	0.00	0.00			
BOTTOM 3 CLAY LAYERS																	
Initial depth to element midpoint (z = 7/12 H_{clay}; 9/12 H_{clay}; 11/12 H_{clay})	ft.	9.33	12.00	14.67	12.83	16.50	20.17	19.25	24.75	30.25		21.58	27.75	33.92			
Elevation		665.67	663.00	660.33	662.17	658.50	654.83	655.75	650.25	644.75		653.42	647.25	641.08			
midpoint depth within clay	ft bgs	20.83	23.50	26.17	24.33	28.00	31.67	30.75	36.25	41.75		33.08	39.25	45.42			
upper layer midpoint depth	ft bgs	14.00	21.00	21.00	21.00	28.00	28.00	28.00	35.00	35.00		28.00	35.00	42.00			
lower layer midpoint depth	ft bgs	21.00	28.00	28.00	28.00	35.00	35.00	35.00	42.00	42.00		35.00	42.00				
upper preconsolidation stress (total)	psf	474.95	1424.85	1424.85	1424.85	2348.15	2348.15	2348.15	3244.85	3244.85		2348.15	3244.85				
lower preconsolidation stress (total)	psf	1424.85	2348.15	2348.15	2348.15	3244.85	3244.85	3244.85	4141.55	4141.55		3244.85	4141.55				
preconsolidation stress (total)	psf	1402.23	1754.60	2106.33	1864.52	2348.15	2817.85	2700.43	3404.98	4109.53		2999.33	3789.28				
Total Stress at Midpoint	psf	1402.23	1754.60	2106.33	1864.52	2348.15	2817.85	2700.43	3404.98	4109.53		2999.33	3789.28	3791.13			
Initial Pore Pressure, u0	psf	0.00	0.00	0.00	0.00	0.00	10.40	0.00	296.40	639.60		98.80	483.60	868.40			
Tv from waste (30 years)		13.69	13.69	13.69	7.24	7.24	7.24	3.22	3.22	3.22		3.22	3.22	3.22			
U (percent consolidation of clay), avg from waste		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00			
Tv from stockpile		0.07	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02		0.02	0.02	0.02			
U (percent consolidation of clay), avg from stockpile		0.03	0.19	0.66	0.00	0.07	0.54	0.00	0.01	0.36		0.00	0.01	0.36			
Final stress at midpoint due to waste ($\sigma_0' = z * \gamma_{Cov} + (U_{clay\ from\ waste} * (H_L * \gamma_{moist} + H_{cover} * \gamma_{soil}))$ consolidation from 1990-2020 - u0	psf	6024.23	6376.60	6728.33	6769.52	7253.15	7712.45	7286.41	7695.10	8057.39		7486.68	7892.68	7510.91			
Final Pore Pressure, uf	psf	452.40	171.60	0.00	696.80	468.00	239.20	1123.20	998.40	873.60		1070.25	930.33	790.40			
Change in stress from stockpile (from 2V:1H Pressure Distribution) * U_stockpile	psf	43.01	231.20	708.25	0.00	85.47	584.52	0.00	7.89	393.26		-0.04	7.89	397.03			
Final stress ($\sigma_0 = \sigma_0 + \Delta\sigma$) from stockpile - uf	psf	5614.85	6436.20	7436.59	6072.72	6870.62	8057.77	6163.21	6704.60	7577.05		6416.39	6970.24	7117.54			
Element Settlement $S_{c,clay}$ = $H_{L,clay}$ * $C_{c,clay}$*log (σ_f / σ_0)}/(1+$e_{0,\ clay}$)	ft.	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.02		0.00	0.00	0.02			
CLAY																	
Max total settlement of clay ($S_{c,clay}$)	ft.	0.05			0.06			0.06				0.06					
WASTE																	
Element settlement S_c =Cc'*Hm * log (sf / s0)	ft.	0.36	0.21	0.17	0.31	0.21	0.20	0.31	0.22	0.20		0.10	0.07	0.07			
C_c' (trial and error)		0.085			0.075			0.075				0.025					

Attachment A-2.3.5

NTH Consultants, Ltd. (2011b) *Volume III: Basis of Design Report – WDI Operating License Application Master Cells VI F & G*. Section 2.2 – Settlement Analysis.

2.2 SETTLEMENT ANALYSIS (Rule 299.9505(d)(i))

Settlement of the landfill floor may adversely affect the overlying liner and leachate collection system. Excessive differential settlement, occurring over very short distances, may reduce the functionality of the leachate collection system. Rule 299.905(d)(i) requires settlement analysis on soils underlying the liner system to estimate total and differential settlement, including immediate settlement, primary consolidation, and secondary consolidation based on maximum loading.

We performed settlement analysis to estimate the expected total and differential settlements within the floor of MC VI-F & G due to the placement of waste. Our analysis included estimating the anticipated change in the major leachate collection pipe bedding slopes due to such settlement. The settlement of the cell floor due to compressions of MC VI-F & G liner system, MC I/IV waste (where applicable), underlying native clay layers, and native silt/sand layer was estimated.

2.2.1 Background Data & Assumptions

Based on the engineering plans, the cell floor slopes from 2.5 percent to 33 percent and the leachate collection pipes slope at a minimum of 1 percent in the MC VI-F & G. The final cover elevations at MC VI-F & G range from 709 to 851 feet and the cover slopes ranging from 4 to 25 percent.

To complete our analysis, we needed soil compressibility characteristics for the underlying silts/sands and clayey soils, as well as the MC I/IV waste. These properties include compression index, secondary compression index, and soil elastic modulus. The compressibility characteristics of the soils and waste were developed based on the subsurface soil investigations completed in the area and a test surcharge loading over MC IV. The development of these properties and subsurface profiles are provided in a calculation package, entitled Subsurface Soil/Waste Profiles and Corresponding Physical Properties and included in Appendix A. The clay layer that occurs in the wooded lot area was divided into three sub-layers designated as upper, middle and lower, based on its compressibility characteristics. These properties are summarized in the following table:

TABLE 1 SUMMARY OF COMPRESSIBILITY CHARACTERISTICS			
LAYER	$C_{c\varepsilon}$	$C_{\alpha\varepsilon}$	**E** (ksf)
MC I/IV Final Cover Clay	0.07	0.01	1050
MC I Granular/Clayey Waste	0.236	0.024	N/A
MC IV Clayey Waste	0.147	0.024	N/A
MC IV Granular Waste	0.236	0.024	N/A
Upper Sand	N/A	N/A	280
Upper Clay	0.102	0.005	1000
Middle Clay			2250
Lower Clay	0.171	0.009	1000
Silt	N/A	N/A	114
Sand	N/A	N/A	350

N/A - Not Applicable

Additionally, in order to account for the difference in compressibility of the inter-cell clay dikes and the waste, an evaluation of the MC IV inter-cell dike locations was conducted. This evaluation included a review of existing historical records, the hydrogeologic investigation of MC IV, and an electromagnetic geophysical survey of the cell in order to approximate the location of the inter-cell dike structures. These dike locations were incorporated into the settlement calculations to evaluate the impact that settlement will have on floor drainage slopes and the strain in the liner over the dikes. The complete evaluation of the inter-cell dike locations is included with the settlement calculation in Appendix B.

An intra-cell dike investigation was not completed for MC I at this time. As mentioned previously, construction of Master Cell 6G (Phases 3 to 6), overlaying the existing MC I is not anticipated to be completed for approximately 20 years. A minimum of 5 years prior to construction of Master Cell 6G (Phases 3 to 6), an inter-cell dike investigation will be completed to confirm the design

assumptions used. If necessary, the design will be revised and submitted to the MDEQ for approval at that time.

2.2.2 Method of Analysis

We estimated the settlements at 137 locations across the MC VI-F & G floor. These points are located either on slope breaks, on an approximately 200-foot grid, or on the locations of major leachate collection pipes. For the clay soils and clayey waste, we used the consolidation theory to estimate the settlement. For the sandy soils and granular waste, we used elastic method to estimate settlement.

2.2.3 Results of Settlement Analysis

The settlement analysis is detailed in Appendix B. The results of our analysis indicate that the total settlements of the MC VI-F & G cell floor ranges from 2.5 feet to 17 feet under maximum waste loading. Such settlements are expected to occur over more than 30 years. The post settlement cell floor slopes are greater than 2.24 percent and the floor at the major leachate pipe locations slopes a minimum of 1 percent, satisfying Rule 299.9620(4).

2.3 BEARING CAPACITY CALCULATION (Rule 299.9505(d)(ii))

Rule 299.9505(d)(ii) requires strength analysis which determines the bearing capacity and stability of the underlying soils. We completed bearing capacity calculation for the underlying soils and waste to evaluate their capacities to support the waste in MC VI-F & G using a conventional bearing capacity model. In general, a conventional bearing capacity failure of a landfill is unlikely. Our bearing capacity calculations support this conclusion, indicating that there is a very large factor of safety against this mode of failure. Our bearing capacity calculations are presented in Appendix C.

2.4 SLOPE STABILITY ANALYSIS (Rule 299.9505(d)(iii))

Rule 299.9505(d)(iii) requires slope stability analysis, including all of the following information: (A) side slope stability under excavation; (B) liner system stability under construction; (C) waste mass stability during filling; (D) final cover stability; and (E) long-term post closure stability. We completed slope stability analyses on ten profiles to evaluate side slope stability under excavation,