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**ONONDAGA LAKE PRE-DESIGN INVESTIGATION:  
WASTEBED 13 SETTLEMENT PILOT STUDY  
MONITORING DATA – YEAR 2  
Onondaga County, New York**

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## SECTION 1

### PROJECT BACKGROUND

#### 1.1 INTRODUCTION

This *Onondaga Lake Phase I Pre-Design Investigation: Wastebed 13 Settlement Pilot Study Monitoring Data – Year 2 (Data Report)* presents the second year of monitoring data (i.e., November 2006 through October 2007) from the Phase I Pre-Design Investigation (PDI) Wastebed 13 Settlement Pilot Study (Pilot Study). This monitoring was performed by Parsons on behalf of Honeywell International, Inc. (Honeywell) to support future Onondaga Lake remediation activities associated with requirements of the Consent Decree (United States District Court, Northern District of New York, 2007) (89-CV-815) that Honeywell entered into with the New York State Department of Environmental Conservation (NYSDEC). This monitoring was performed in accordance with the schedule proposed in the *Onondaga Lake Pre-Design Investigation: Wastebed 13 Settlement Pilot Study Data Summary Report (Summary Report)* prepared by Parsons and Geosyntec (2008).

A major component of the NYSDEC's and United States Environmental Protection Agency's (USEPA) selected remedy for Onondaga Lake, as specified in the Record of Decision for the Onondaga Lake Bottom Subsite of the Onondaga Lake Superfund Site (NYSDEC and USEPA, 2005), includes the removal (i.e., dredging) and onsite consolidation of the majority of the removed sediments. Therefore, an onsite sediment consolidation area (SCA) is required. As discussed and concluded in the *Onondaga Lake SCA Siting Evaluation* (Parsons, 2006), Wastebed 13 is currently the recommended SCA location based on an evaluation of access considerations, capacity, current and future site use, geotechnical considerations, and potential community impacts. On the basis of this recommendation, several concurrent pre-design investigation activities were initiated, including the Pilot Study. Following this brief introduction, this section provides the site and Pilot Study background information, as well as the general organization for the remainder of this Report.

#### 1.2 SITE AND PILOT STUDY BACKGROUND INFORMATION

As indicated previously, the Pilot Study is located on Wastebed 13, which was originally designed as a settling basin for the disposal of Solvay waste, a by-product of sodium carbonate (soda ash) production via the Solvay process (i.e., process by which soda ash is formed from salt, limestone, carbon dioxide, and ammonia). Solvay waste is a combination of process residuals, unreacted material, and mineral salts that was deposited in a slurry. Solvay waste was produced by Honeywell's predecessor, Allied Chemical, between 1881 and 1986, and Wastebed 13 received the material from 1973 to 1985.

Wastebed 13 is located in the Town of Camillus, Onondaga County, New York (Figure 1.1). Wastebed 13 occupies approximately 163 acres and is bordered to the north by Ninemile Creek and CSX Railroad tracks; to the west by an Onondaga County Garage property, a former gravel

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excavation owned by Honeywell, and a few residential properties; and to the east and south by Wastebeds 12 and 14, respectively (Figure 1.2).

Additional background information, including site history and details regarding previous investigations, is available in the Summary Report (Parsons and Geosyntec, 2008). As discussed in this Report, the purpose of the Pilot Study was to evaluate potential Solvay waste behavior during the anticipated SCA design phases (i.e., construction, operation, and closure). Therefore, the Pilot Study included cone penetrometer testing, geotechnical sampling, laboratory testing, instrument installation, test plot construction, and monitoring. The monitoring of extensometers, 30-ft grid, and settlement profilers was completed during the first year of monitoring, and the corresponding data were provided in the Summary Report (Parsons and Geosyntec, 2008), which also contains detailed descriptions of the pre-construction, construction, and monitoring activities associated with the Pilot Study.

### **1.3 REPORT ORGANIZATION**

Following this introductory section, Section 2 summarizes the data collected during the second year of monitoring (i.e., the piezometer, settlement plate, and inclinometer data). Section 3 contains references. In addition, Appendices A through C provide the field data.

## **SECTION 2**

### **MONITORING**

#### **2.1 OVERVIEW**

This section summarizes the piezometer, settlement plate, and inclinometer data collected from November 2006 to November 2007 (i.e., the second year of Pilot Study monitoring). In addition, the monitoring schedule for next year is proposed. The Pilot Study location and instrumentation layout are provided in Figures 2.1 and 2.2, respectively.

#### **2.2 PIEZOMETERS**

The piezometers were measured at least every other month from November 2006 through October 2007, as proposed in the Summary Report (Parsons and Geosyntec, 2008). Additional measurements (i.e., weekly measurements) were taken in December 2006 to coincide with monitoring of the Phase II PDI piezometers. The measurements from those piezometers are provided as a separate submittal on a quarterly basis. For the remainder of the monitoring period (i.e., January 2007 through October 2007), the Pilot Study piezometers were measured approximately once a month.

The Pilot Study piezometer data are provided in Appendix A. Figures 2.3 through 2.7 show the changes in water level with time for the different piezometer depths (with respect to baseline water levels). Precipitation data are also included on these figures. The precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport). For informational purposes, Appendix A and the figures include all data collected from September 2005 (i.e., the beginning of the Pilot Study) through October 2007.

As indicated in the Summary Report (Parsons and Geosyntec, 2008), in 2004, O'Brien and Gere installed three standpipe piezometers (i.e., BA-1S, PZ-01A, and PZ-01B) in Wastebed 13. The approximate depths for BA-1S, PZ-01A, and PZ-01B are 20 ft, 47 ft, and 61.5 ft below the top of casing, respectively. Because of the proximity of these piezometers to the test plot, they have been monitored at the same frequency as the Pilot Study piezometers to obtain background water level data. These data are also provided in Appendix A.

#### **2.3 SETTLEMENT PLATES**

The settlement plates were measured at least every other month from November 2006 through November 2007, as proposed in the Summary Report (Parsons and Geosyntec, 2008). In November 2006, the settlement plates were surveyed twice. From December 6, 2006 through November 6, 2007, the settlement plates were surveyed every other month. A licensed surveyor also performed settlement plate measurements on December 6, 2006 to confirm the readings (see Appendix B). The settlement plate data are summarized in Table 2.1 and Figure 2.8. For

informational purposes, all data collected from September 2005 (i.e., the beginning of the Pilot Study) through November 2007 are included in Table 2.1 and Figure 2.8.

## **2.4 INCLINOMETERS**

The inclinometers were monitored every six months during the monitoring period (i.e., November 2006 through October 2007), as proposed in the Summary Report (Parsons and Geosyntec, 2008). Plots of cumulative and incremental displacement with time for each of the inclinometers are provided in Appendix C. These figures are based on baseline measurements that were taken prior to construction of the test fill. For informational purposes, the last readings taken during the 1-year monitoring period (i.e., the readings from October 18, 2006) are included on the plots.

## **2.5 FUTURE MONITORING**

The second year of monitoring was completed at the end of October/beginning of November 2007. Because the Pilot Study is still providing useful information, the following additional monitoring activities are proposed between November 2007 and October 2008:

- piezometer measurements every three months; and
- settlement plate measurements every three months.

## **SECTION 3**

### **REFERENCES**

NYSDEC and USEPA. 2005. *Record of Decision Onondaga Lake Bottom Subsite of the Onondaga Lake Superfund Site*. Town of Geddes and Salina, Villages of Solvay and Liverpool, and City of Syracuse, Onondaga County, New York.

Parsons. 2006. *Onondaga Lake Sediment Consolidation Area (SCA) Siting Evaluation*. Onondaga County, New York.

Parsons in association with Geosyntec. 2008. *Onondaga Lake Pre-Design Investigation: Wastebed 13 Settlement Pilot Study Data Summary Report*. Onondaga County, New York.

United States District Court, Northern District of New York. 2006. State of New York and Denise M. Sheehan against Honeywell International, Inc. Consent Decree Between the State of New York and Honeywell International, Inc. Senior Judge Scullin. Dated October 11, 2006. Filed January 4, 2007.

**TABLES**

**TABLE 2.1**  
**SETTLEMENT PLATE DATA SUMMARY**

Date	10/7/2005	10/25/2005	11/2/2005	11/21/2005	12/6/2005	12/23/2005	1/4/2006	1/19/2006	2/1/2006	2/16/2006	3/2/2006	3/8/2006	3/16/2006
Time Elapsed (days)	0	18	26	45	60	77	89	104	117	132	146	152	160
SP-1	0	-18.68	NA	-26.96	-28.21	-30.12	-30.62	-31.12	-31.37	-31.62	-31.62	-31.87	-32.24
SP-2	0	-18.80	NA	-26.56	-28.06	-28.97	-29.47	-29.84	-29.97	-30.22	-30.22	-30.60	-30.72
SP-3	0	-20.48	NA	-26.65	-27.90	-29.56	-29.81	-29.31	-30.56	-30.68	-30.69	-30.94	-31.06
SP-4	0	-16.16	NA	-23.87	-26.12	-27.78	-28.28	-28.66	-28.91	-29.15	-29.16	-29.53	-29.53
SP-5	0	-16.28	NA	-21.69	-22.19	-23.35	-23.60	-23.85	-23.98	-24.10	-24.10	-24.35	-24.35
SP-6	0	-17.36	NA	-23.29	-24.29	-24.95	-25.45	-25.83	-25.95	-26.08	-26.08	-26.45	-26.58
SP-7	0	-11.48	NA	-15.17	-15.67	-16.08	-16.33	-16.58	-16.58	-16.70	-16.83	-17.08	-17.08
SP-8	0	-15.68	NA	-22.39	-23.14	-24.30	-24.80	-25.05	-25.18	-25.42	-25.42	-25.68	-25.80
SP-9	0	-11.36	NA	-14.75	-15.75	-16.66	-17.16	-17.29	-17.41	-17.66	-17.79	-18.04	-18.04
SP-10	0	-14.24	NA	-10.74	-21.99	-23.40	-23.90	-24.15	-24.28	-24.65	-24.52	-24.90	-24.90
SP-11	0	-6.32	NA	-8.57	-9.32	-9.48	-9.48	-9.48	-9.73	-9.86	-9.73	-9.98	-9.98
SP-12	0	-11.12	NA	-15.11	-16.36	-17.02	-17.27	-17.52	-17.52	-17.77	-17.65	-18.02	-18.02
SP-13	0	NA	-0.21	-0.21	-0.46	-0.21	-0.33	-0.46	-0.46	-0.46	-0.58	-0.46	-0.33
SP-14	0	NA	-0.10	-0.10	-0.35	-0.10	-0.23	-0.35	-0.23	-0.10	-0.35	-0.23	-0.23
SP-15	0	NA	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16	-0.16	-0.29	-0.16	-0.03
SP-16	0	-12.80	NA	-17.11	-18.36	-18.77	-19.02	-19.27	-19.27	-19.39	-19.39	-19.77	-19.77
SP-17 (buried)	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-18	0	NA	-0.47	-0.47	-0.47	-0.47	-0.59	-0.72	-0.72	-0.59	-0.60	-0.60	-0.72
SP-19	0	NA	-0.12	-0.12	-0.12	0.13	-0.24	-0.24	-0.12	-0.12	-0.12	-0.12	-0.12
SP-20	0	-14.96	NA	-19.58	-20.83	-21.74	-21.99	-22.24	-22.24	-22.49	-22.49	-22.74	-22.74

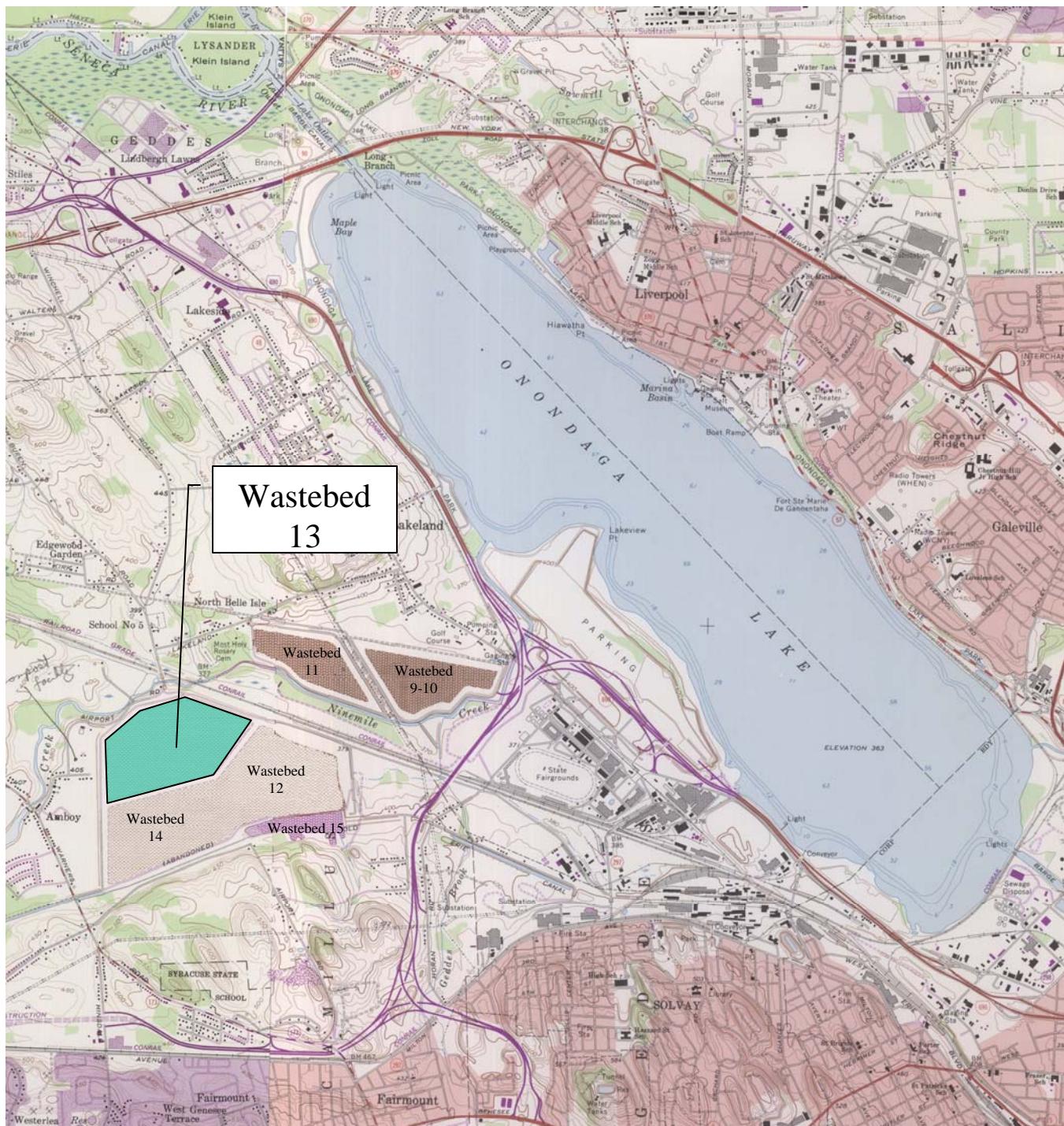
Date	3/31/2006	4/13/2006	4/26/2006	5/11/2006	5/25/2006	6/8/2006	6/22/2006	7/6/2006	7/20/2006	8/3/2006	8/17/2006	8/31/2006	9/14/2006
Time Elapsed (days)	175	188	201	216	230	244	258	272	286	300	314	328	342
SP-1	-32.25	-32.50	-32.62	-32.75	-33.25	-33.37	-33.62	-33.87	-34.12	-34.24	-34.50	-34.75	-34.87
SP-2	-31.10	-31.10	-31.22	-31.35	-31.85	-32.22	-32.47	-32.84	-32.97	-33.10	-33.35	-33.47	
SP-3	-31.19	-31.43	-31.56	-31.56	-32.06	-32.06	-32.19	-32.68	-32.68	-32.81	-32.94	-33.31	
SP-4	-29.91	-30.16	-30.28	-30.41	-30.78	-30.91	-31.16	-31.53	-31.78	-31.91	-32.03	-32.28	-32.41
SP-5	-24.73	-24.73	-24.85	-24.85	-25.35	-25.35	-25.48	-25.85	-25.97	-26.10	-26.35	-26.48	-26.48
SP-6	-26.95	-26.95	-27.08	-27.20	-27.70	-27.70	-27.95	-28.20	-28.83	-28.83	-29.08	-29.20	
SP-7	-17.08	-17.20	-17.33	-17.33	-17.70	-17.78	-17.83	-18.08	-17.95	-18.21	-18.33	-18.58	
SP-8	-26.18	-26.17	-26.42	-26.55	-26.80	-26.80	-27.18	-27.43	-27.43	-27.67	-27.80	-28.05	
SP-9	-18.29	-18.29	-18.53	-18.66	-19.04	-19.04	-19.29	-19.54	-19.54	-19.66	-20.04	-20.16	
SP-10	-25.28	-25.40	-25.52	-25.65	-26.15	-26.15	-26.65	-26.77	-27.15	-27.28	-27.53	-27.65	
SP-11	-10.11	-10.11	-10.23	-10.23	-10.61	-10.48	-10.48	-10.86	-10.86	-10.98	-11.11	-11.36	
SP-12	-18.40	-18.40	-18.52	-18.65	-19.27	-19.15	-19.39	-19.64	-20.27	-20.27	-20.40	-20.65	
SP-13	-0.46	-0.46	-0.46	-0.46	-0.58	-0.46	-0.46	-0.58	-0.71	-0.58	-0.46	-0.71	
SP-14	-0.10	-0.10	-0.10	-0.10	-0.23	0.02	0.02	-0.10	0.03	0.02	0.15	0.03	
SP-15	-0.16	-0.04	-0.03	-0.16	0.09	0.21	0.09	0.09	0.21	0.22	0.09	0.09	
SP-16	-19.90	-19.90	-20.02	-20.02	-20.40	-20.39	-20.52	-20.89	-20.89	-21.02	-21.15	-21.40	
SP-17 (buried)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
SP-18	-0.72	-0.72	-0.72	-0.72	-0.97	-0.72	-0.72	-0.97	-0.97	-0.97	-1.22	-1.22	
SP-19	-0.12	-0.12	-0.12	-0.12	-0.25	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	-0.12	
SP-20	-23.12	-23.11	-23.36	-23.49	-23.86	-23.86	-24.12	-24.37	-24.86	-24.99	-25.12	-25.37	

Date	9/28/2006	10/12/2006	10/26/2006	11/8/2006	11/15/2006	12/6/2006	1/11/2007	3/21/2007	5/10/2007	7/12/2007	9/20/2007	11/6/2007
Time Elapsed (days)	356	370	384	397.0	404	425	461	530	580	643	713	760
SP-1	-34.99	-35.24	-35.50	-35.50	-35.62	-35.74	-35.74	-36.25	-36.25	-36.12	-36.49	-36.87
SP-2	-33.72	-33.85	-34.10	-33.97	-34.10	-34.22	-34.22	-34.72	-34.85	-34.72	-35.10	-35.35
SP-3	-33.56	-33.68	-34.06	-33.81	-34.06	-34.18	-34.18	-34.44	-34.56	-34.31	-34.69	-35.06
SP-4	-32.66	-32.90	-33.16	-33.16	-33.28	-33.28	-33.41	-33.78	-33.78	-33.78	-34.03	-34.53
SP-5	-26.72	-26.85	-26.98	-26.98	-27.10	-27.23	-27.10	-27.48	-27.47	-27.35	-27.48	
SP-6	-29.45	-29.70	-29.83	-29.83	-29.95	-29.95	-29.95	-30.45	-30.58	-30.58	-30.95	-31.08
SP-7	-18.70	-18.83	-19.08	-18.95	-19.20	-19.20	-19.33	-19.58	-19.70	-19.45	-19.83	-20.33
SP-8	-28.30	-28.55	-28.80	-28.67	-28.80	-29.05	-29.05	-29.43	-29.42	-29.30	-29.68	-30.18
SP-9	-20.41	-20.41	-20.66	-20.66	-20.78	-20.91	-20.91	-21.29	-21.29	-21.29	-21.91	-22.29
SP-10	-28.03	-28.15	-28.40	-28.40	-28.52	-28.65	-28.65	-29.02	-29.15	-29.15	-29.53	-29.90
SP-11	-11.48	-11.61	-11.61	-11.61	-11.73	-11.73	-11.73	-11.98	-12.11	-11.86	-12.11	-12.36
SP-12	-20.77	-20.89	-21.15	-21.02	-21.14	-21.27	-21.27	-21.64	-21.77	-21.89	-22.27	-22.40
SP-13	-0.71	-0.71	-0.83	-0.83	-0.83	-0.83	-0.83	-0.84	-0.83	-0.58	-0.58	-0.71
SP-14	0.15	0.40	-0.10	-0.10	0.02	0.03	0.02	0.02	0.03	0.15	0.15	0.15
SP-15	0.34	0.34	0.22	0.22	0.22	0.22	0.22	0.46	0.46	0.71	0.84	0.72
SP-16	-21.52	-21.77	-21.90	-21.77	-22.02	-22.02	-22.02	-22.27	-22.27	-22.15	-22.27	-22.65
SP-17 (buried)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SP-18	-1.22	-1.34	-1.47	-1.34	-1.34	-1.34	-1.47	-1.47	-1.47	-1.35	-1.47	-1.72
SP-19	-0.12	-0.12	-0.12	-0.12	0.01	0.01	-0.12	-0.12	0.01	0.26	0.38	0.26
SP-20	-25.49	-25.61	-25.87	-25.87	-25.99	-25.99	-25.99	-26.24	-26.36	-26.36	-26.62	-26.87

**Notes:**

1. Settlement is in inches.
2. NA indicates data are not available.
3. Negative values indicate settlement, and positive values indicate upward movement.
4. SP-17 was buried during fill placement.
5. Data from October 17, 2005 appear to be anomalous because, upon review, it was observed that the data from that time period are inconsistent with field observations and baseline and subsequent readings performed by a licensed surveyor (i.e., a licensed surveyor performed the October 7, 2005 and October 25, 2005 readings). Therefore, these data are not included in this table or Figure 2.8.
6. Although some readings for SP-14, SP-15, and SP-19 are positive (i.e., they indicate upward movement), readings performed by a licensed surveyor on August 31, 2006 are not positive. As shown in Appendix B, all other settlement plate readings agreed relatively well with the licensed surveyor's readings.

**FIGURES**



**Wastebed  
13**



LATITUDE: N 43° 5' 57"  
LONGITUDE: W 76° 10' 41"



SOURCE: U.S.G.S.  
SYRACUSE WEST  
QUADRANGLE

**FIGURE 1.1**

**Honeywell**

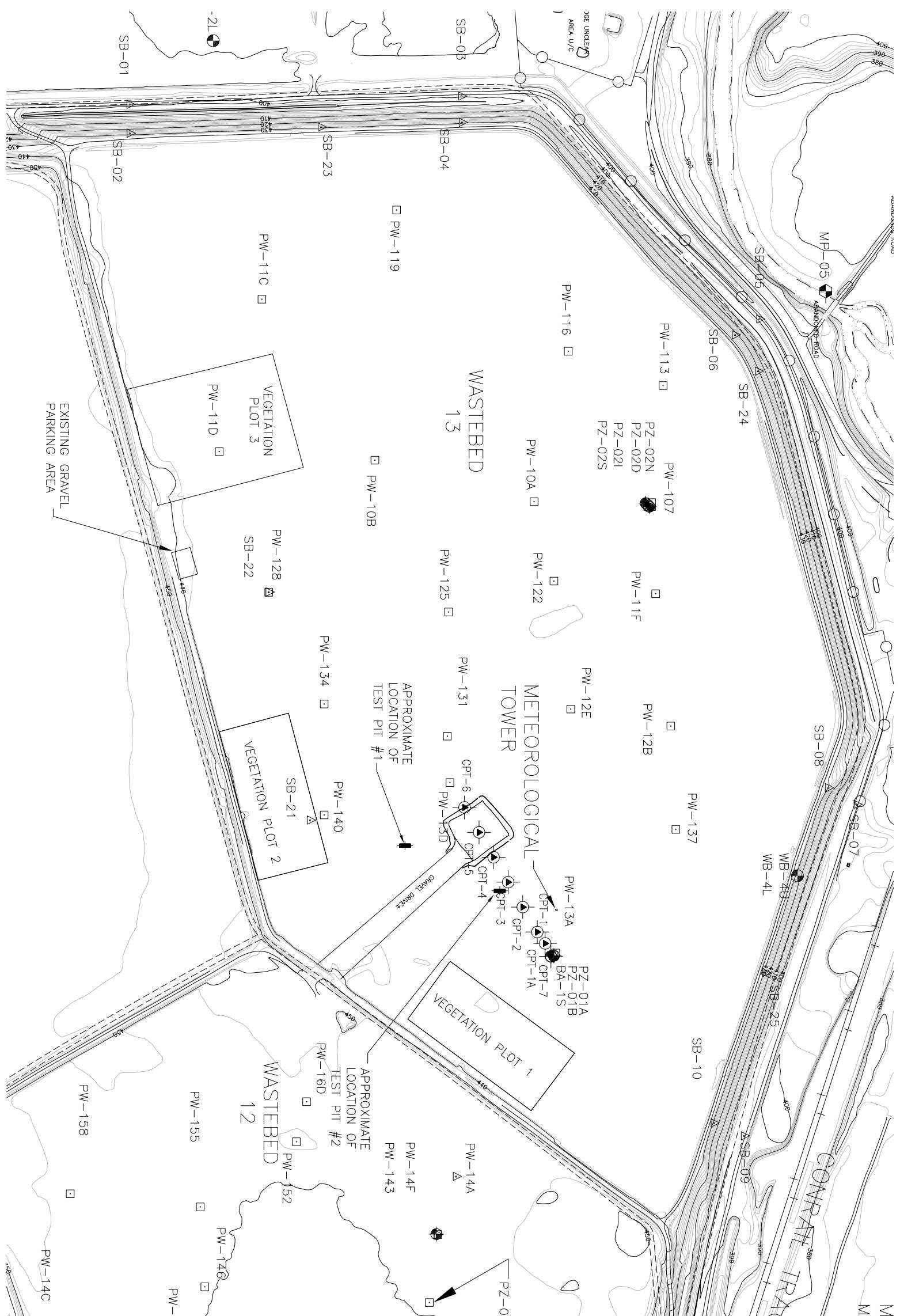
Wastebed 13 Settlement Pilot Study  
Data Summary Report  
Onondaga County, New York

## SITE LOCATION MAP

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**A-15**

**A-14**

**A-13**

**A-12**

**A-11**

**A-10**

**A-9**

**A-8**

**A-7**

**A-6**

**A-5**

**A-4**

**A-3**

**A-2**

**A-1**

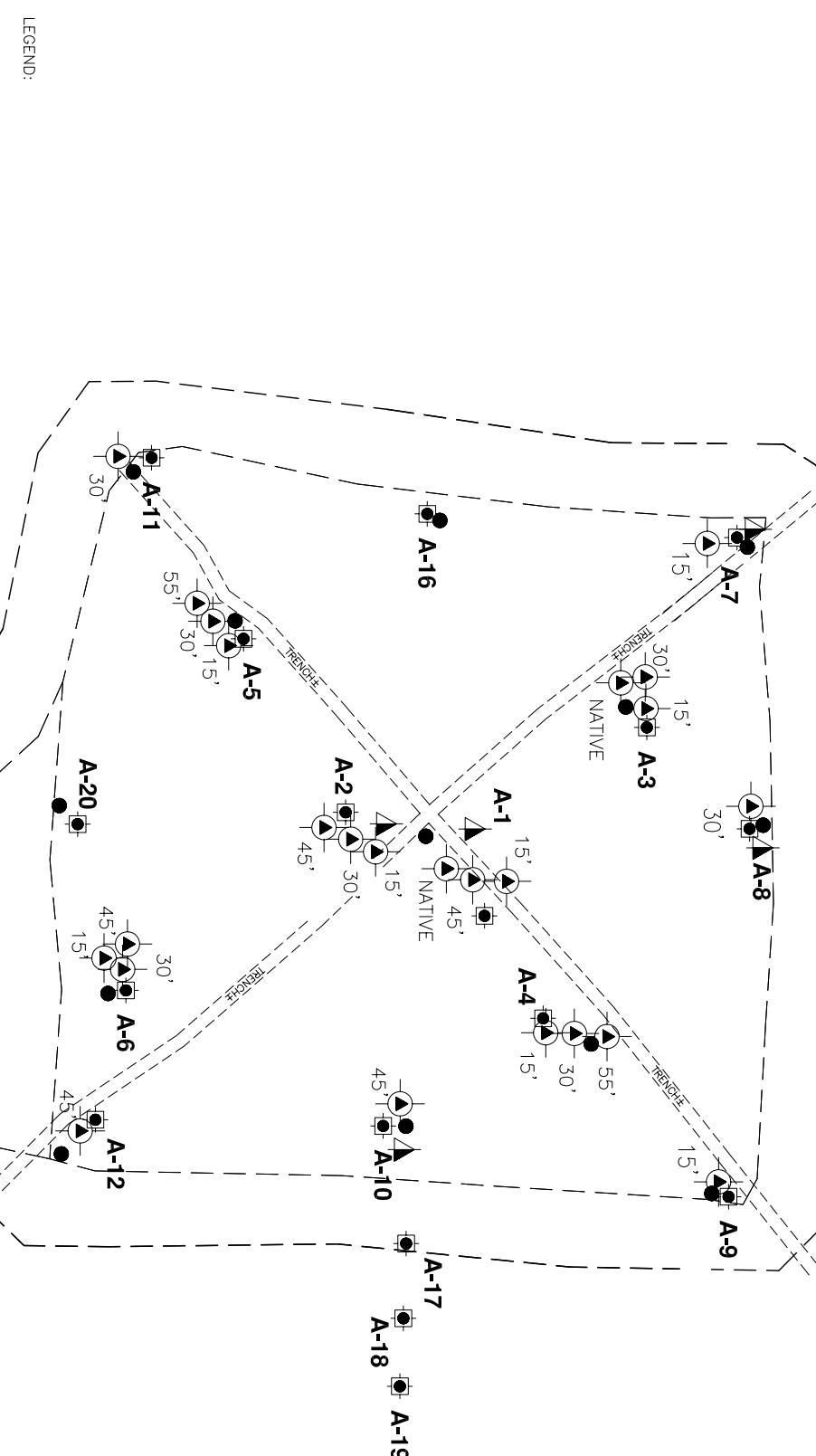
**A-16**

**A-17**

**A-18**

**A-19**

**A-20**



NOTES:

- ONLY AN INCLINOMETER WAS INSTALLED AT THIS LOCATION.
- NUMBERS IN PARENTHESES AFTER 100 INDICATE THE PIEZOMETER TIP INSTALLATION DEPTH (I.E., FEET BELOW INITIAL GROUND SURFACE). NATIVE INDICATES PIEZOMETERS WERE INSTALLED IN THE NATIVE SOIL BENEATH THE SOLVAY WASTE.

SCALE:  
1"=20'

HALF SIZE  
IF PRINTED 11x17

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A-15															
A-16															
A-17															
A-18															
A-19															
A-20															

NO.	REVISION	BY APPR.	APPR.	APPR.	DATE	NO.	REFERENCE	DWG. NO.	APPROVALS	DATE	BY APPR.	APPR.	APPR.	APPR.	DATE
A	ISSUED FOR REVIEW	J.R.	-	-	-										
A-1															
A-2															
A-3															
A-4															
A-5															
A-6															
A-7															
A-8															
A-9															
A-10															
A-11															
A-12															
A-13															
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A-16															
A-17															
A-18															
A-19															
A-20															

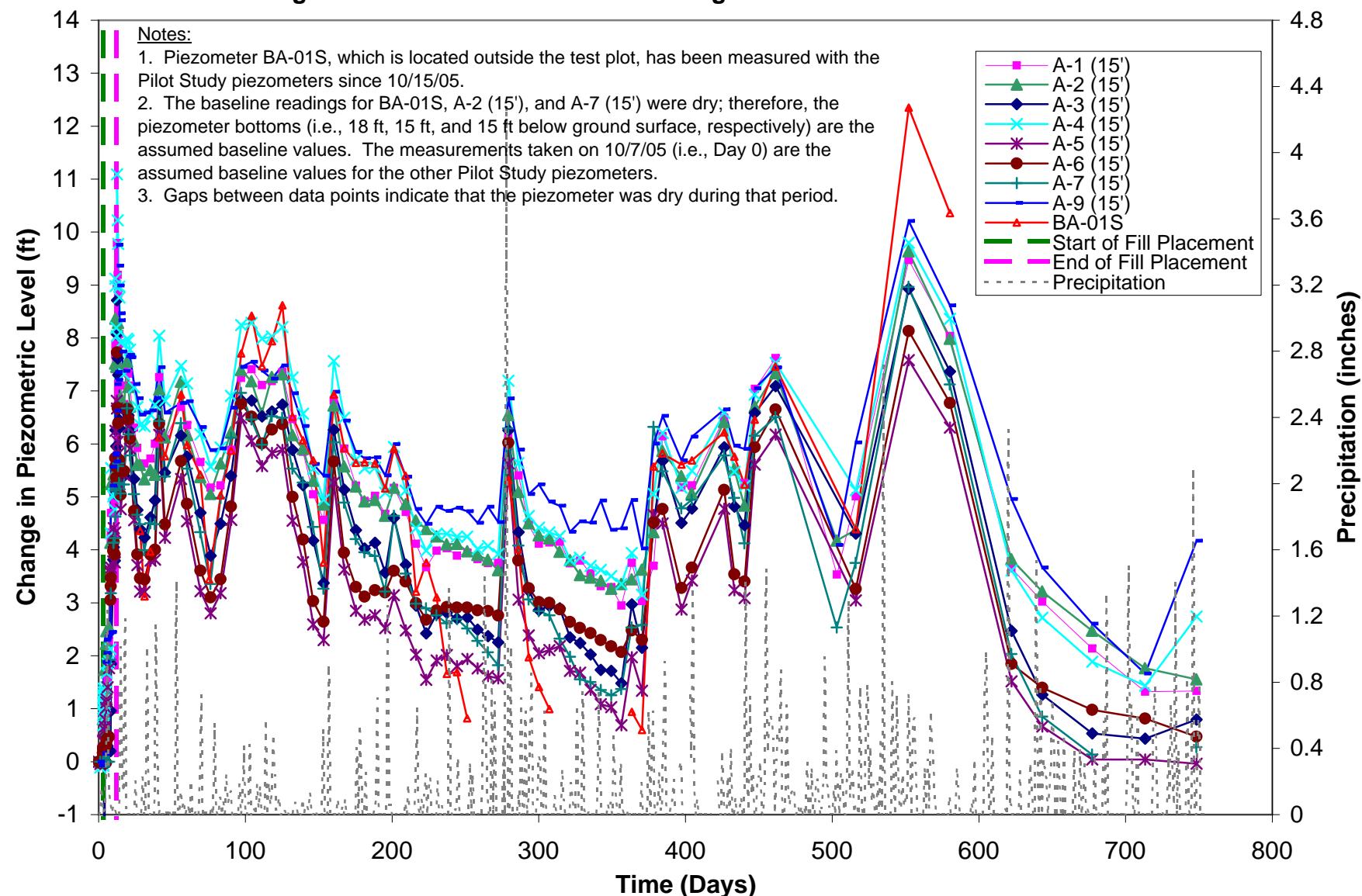
200 E. WOOD DMS. RD. SUITE 312, IJPPM, NY 11368, PHONE: 315-651-9560  
**PARSONS**

DATA SUMMARY REPORT  
WASTEWATER SETTLEMENT PILOT STUDY  
SYRACUSE, NEW YORK  
PILOT STUDY INSTRUMENTATION  
LAYOUT

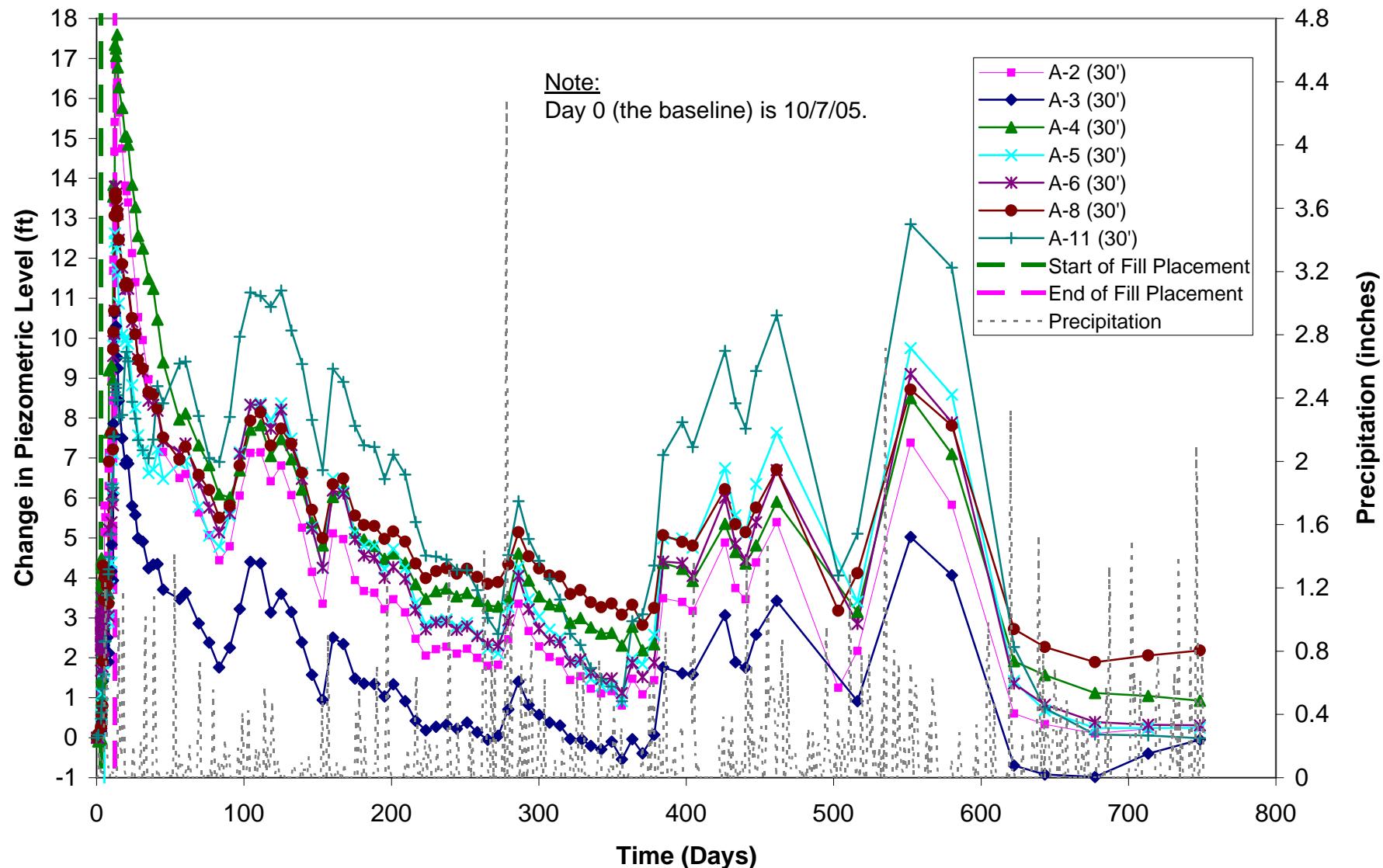
JAR  
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LOCATION  
FIGURE 2.2  
A

Honeywell  
101 COLLEGE ROAD, BOX 205  
TOUGH.COM, INC. N.Y. 10702

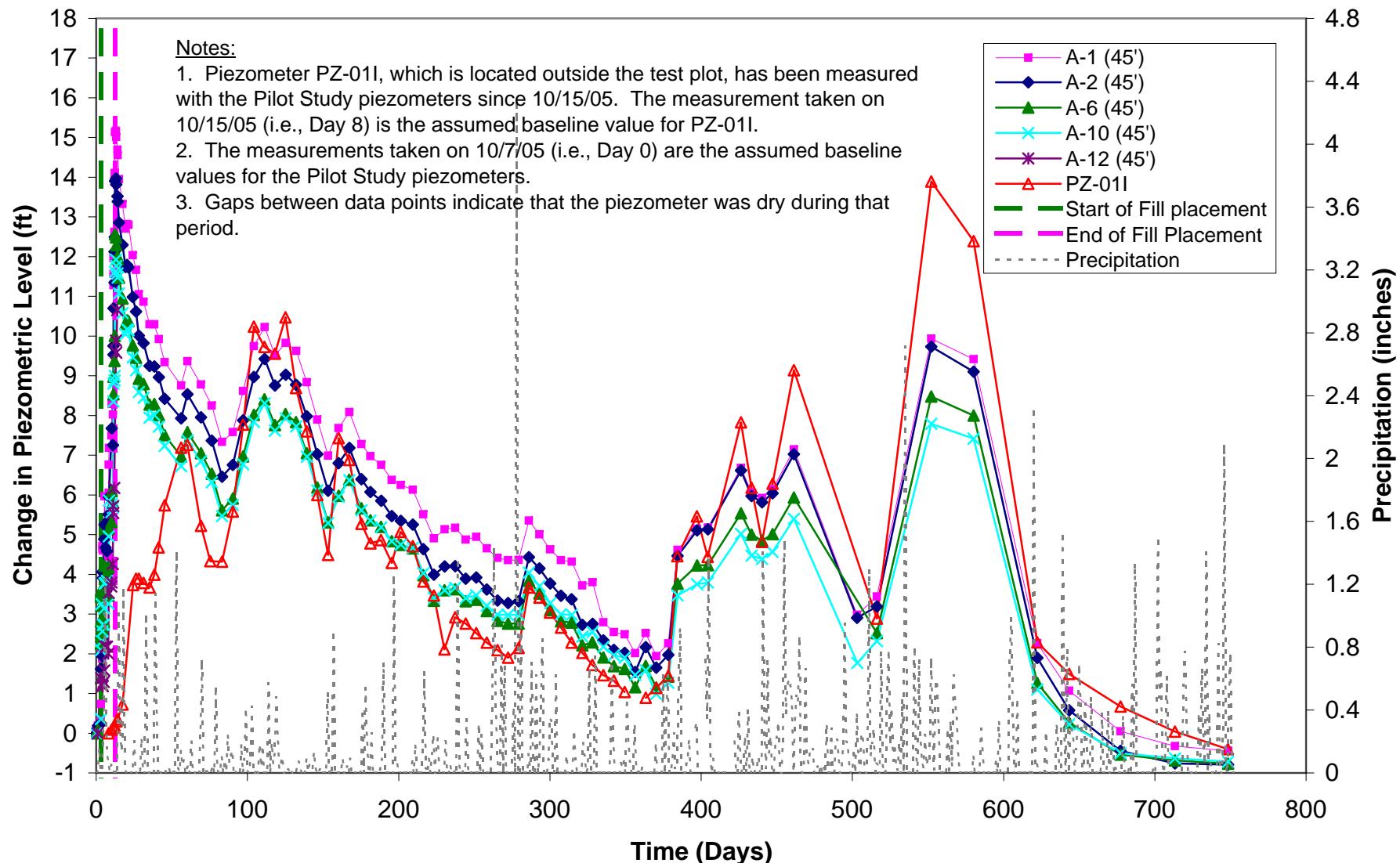
**Figure 2.3 15-ft Piezometers - Change in Piezometric Level with Time**



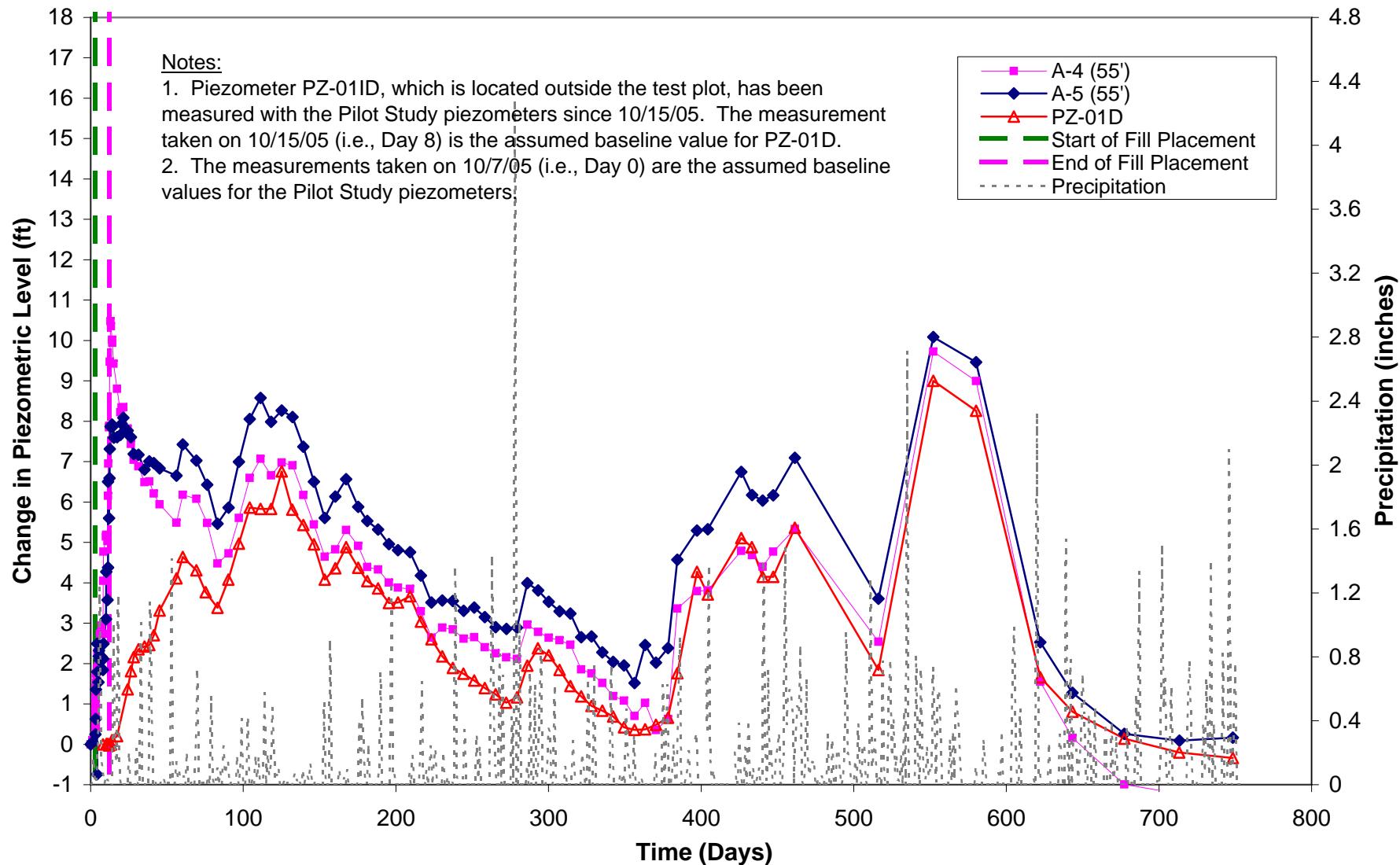
**Figure 2.4 30-ft Piezometers - Change in Piezometric Level with Time**



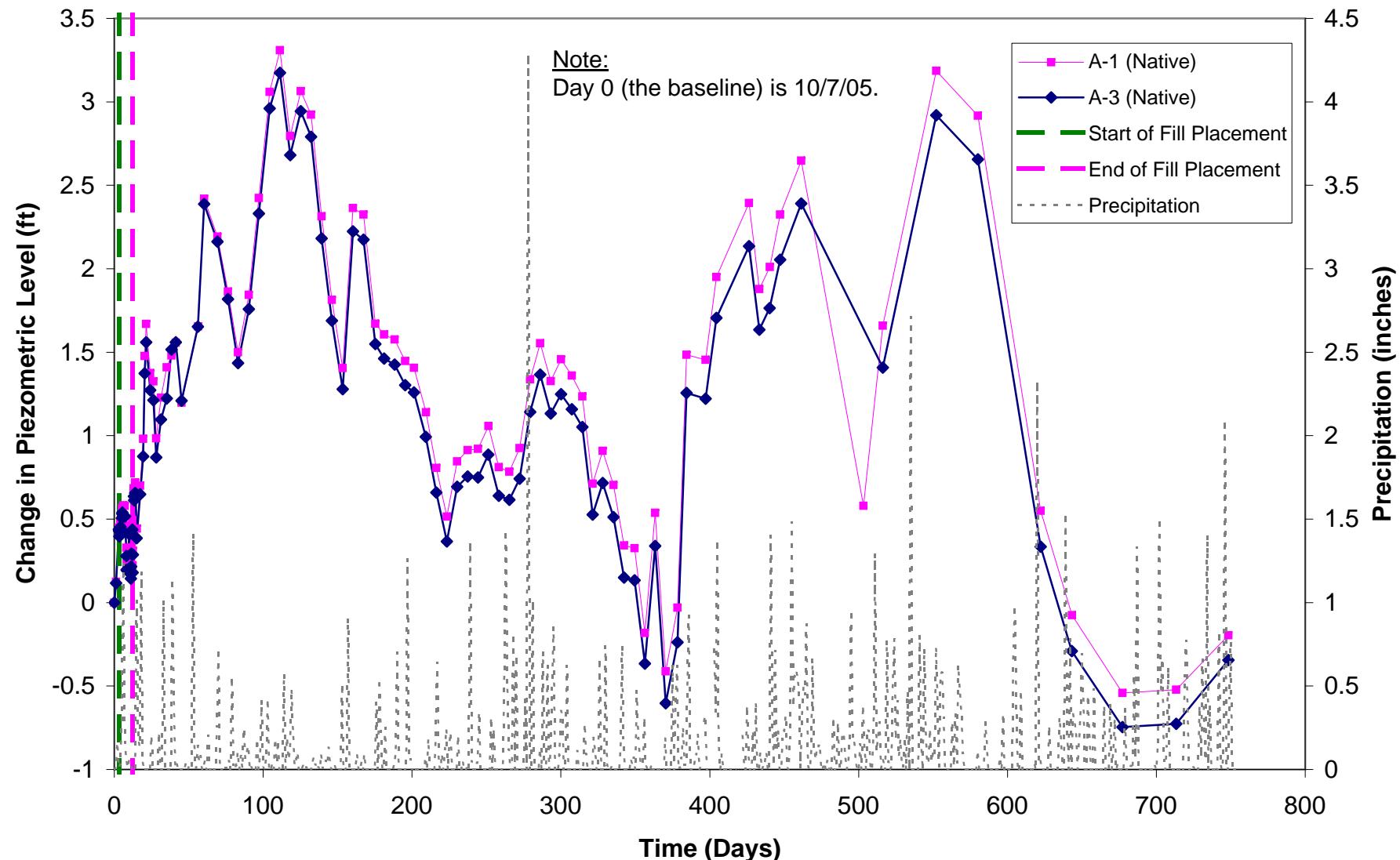
**Figure 2.5 45-ft Piezometers - Change in Piezometric Level with Time**

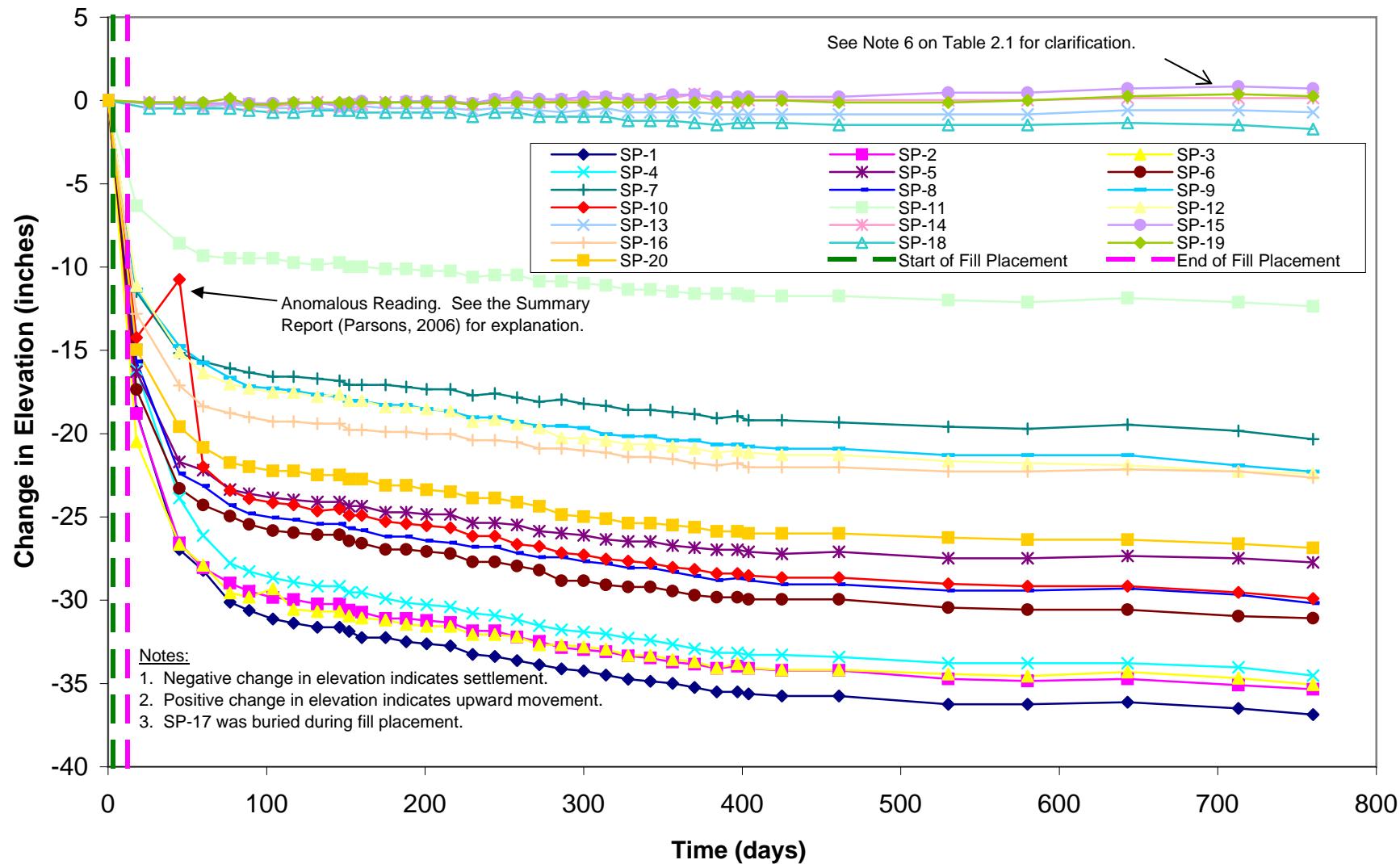


**Figure 2.6 55-ft Piezometers - Change in Piezometric Level with Time**



**Figure 2.7 Native Piezometers - Change in Piezometric Level with Time**



**Figure 2.8 Settlement Plate Data with Time**

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**APPENDIX A**  
**PIEZOMETRIC DATA**

**Wastebed 13 Pilot Study**

Location	Depth	Name	Tip Elevation (ft)	Baseline Piezometric Elevation (ft)	Serial Number	Type
A-1	15	A-1 (15')	415.59	NA	04-12596	Typ VW
A-1	45	A-1 (45')	385.63	389.78	04-12598	Typ VW
A-1	Native	A-1 (Native)	352.53	373.44	04-12602	Typ VW
A-2	15	A-2 (15')	415.35	NA	NA	SP
A-2	30	A-2 (30')	400.27	401.85	05-13904	PI VW
A-2	45	A-2 (45')	385.34	388.99	05-13906	PI VW
A-3	15	A-3 (15')	415.43	NA	04-12601	Typ VW
A-3	30	A-3 (30')	400.11	402.43	04-12606	Typ VW
A-3	Native	A-3 (Native)	351.36	372.21	05-13902	Typ VW
A-4	15	A-4 (15')	414.45	NA	05-13907	PI VW
A-4	30	A-4 (30')	399.54	401.76	05-13908	PI VW
A-4	55	A-4 (55')	375.58	416.54	05-13909	PI VW
A-5	15	A-5 (15')	416.02	416.26	04-12600	Typ VW
A-5	30	A-5 (30')	401.07	403.91	04-12605	Typ VW
A-5	55	A-5 (55')	376.33	384.72	04-12608	Typ VW
A-6	15	A-6 (15')	415.79	NA	04-12603	Typ VW
A-6	30	A-6 (30')	400.88	404.52	04-12604	Typ VW
A-6	45	A-6 (45')	385.89	390.92	04-12607	Typ VW
A-7	15	A-7 (15')	414.92	NA	NA	SP
A-8	30	A-8 (30')	399.83	400.44	04-12597	Typ VW
A-9	15	A-9 (15')	414.42	NA	05-13910	PI VW
A-10	45	A-10 (45')	385.36	391.19	04-12599	Typ VW
A-11	30	A-11 (30')	400.58	402.93	05-13911	PI VW
A-12	45	A-12 (45')	386.44	390.03	NA	SP

**Notes:**

Typ VW = Typical Vibrating Wire Piezometer (GeoKon model 4500S)

PI VW = Push-in Vibrating Wire Piezometer (GeoKon model 4500DP)

SP = Standpipe

Baseline piezometer reading on subsequent tables.

NA = Not Applicable because piezometer was dry initially.

**Wastebed 13 Pilot Study  
Piezometer A-1 (15 ft)**

**A-1 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout =

Serial # 04-12596

0 to 8 ft

Bentonite Seal =

8 to 11.5 ft

Sandpack =

11.5 to 15 ft

Depth to Piezometer Tip from Ground Surface =

14.5 ft

Ro =

8880

To =

12.8 degrees Celsius

Linear Gage Factor (psi) =

0.01558 psi/digit

Thermal Factor =

0.023924 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.09 ft

Piezometer Tip Elevation =

415.59 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/27/05 8:58	8880	14.1	0.0	0.1	14.4	415.7		
9/27/05 9:10	8890.2	14.0	-0.1	-0.3	>=14.5 ft	NA		
9/27/05 10:57	8896.4	11.6	-0.3	-0.7	>=14.5 ft	NA		
10/7/05 6:30	8895.6	10.1	-0.3	-0.7	>=14.5 ft	NA	0	0
10/8/05 9:10	8896.3	10.1	-0.3	-0.7	>=14.5 ft	NA	1.1	0.0
10/10/05 8:12	8891	10.1	-0.2	-0.5	>=14.5 ft	NA	3.1	0.2
10/10/05 11:50	8891.3	10.1	-0.2	-0.6	>=14.5 ft	NA	3.2	0.2
10/10/05 16:48	8891.7	10.3	-0.2	-0.6	>=14.5 ft	NA	3.4	0.2
10/11/05 7:37	8890.6	10.1	-0.2	-0.5	>=14.5 ft	NA	4.0	0.2
10/11/05 11:02	8889.8	10.1	-0.2	-0.5	>=14.5 ft	NA	4.2	0.2
10/11/05 11:28	8890.9	10.1	-0.2	-0.5	>=14.5 ft	NA	4.2	0.2
10/11/05 16:45	8890.2	10.2	-0.2	-0.5	>=14.5 ft	NA	4.4	0.2
10/12/05 8:10	8888	10.1	-0.2	-0.4	>=14.5 ft	NA	5.1	0.3
10/12/05 14:22	8886.5	10.1	-0.2	-0.4	>=14.5 ft	NA	5.3	0.3
10/12/05 17:07	8886.7	10.3	-0.2	-0.4	>=14.5 ft	NA	5.4	0.3
10/13/05 8:52	8854	11.2	0.4	0.8	13.7	416.4	6.1	1.6
10/14/2005 10:07	8834.4	11.6	0.7	1.6	12.9	417.2	7.2	2.3
10/15/2005 7:54	8805	10.2	1.1	2.6	11.9	418.1	8.1	3.3
10/15/2005 13:06	8780.3	11.2	1.5	3.5	11.0	419.1	8.3	4.2
10/15/2005 14:23	8775.8	10.4	1.6	3.6	10.9	419.2	8.3	4.3
10/15/2005 16:45	8765	10.1	1.7	4.0	10.5	419.6	8.4	4.7
10/17/05 8:14	8757	10.1	1.9	4.3	10.2	419.9	10.1	5.0
10/17/05 13:12	8752	10.1	1.9	4.5	10.0	420.0	10.3	5.2
10/18/2005 8:22	8759.9	10.1	1.8	4.2	10.3	419.8	11.1	4.9
10/18/2005 15:18	8689.5	10.1	2.9	6.7	7.8	422.3	11.4	7.4
10/18/2005 15:59	8682.8	10.7	3.0	7.0	7.5	422.6	11.4	7.7
10/18/2005 17:28	8676.8	10.1	3.1	7.2	7.3	422.7	11.5	7.9
10/19/2005 8:19	8686.2	10.1	3.0	6.8	7.7	422.4	12.1	7.5
10/19/2005 10:17	8682	10.2	3.0	7.0	7.5	422.6	12.2	7.7
10/19/2005 13:44	8644.8	10.2	3.6	8.3	6.2	423.9	12.3	9.0
10/19/2005 17:11	8623.3	10.1	3.9	9.1	5.4	424.7	12.4	9.8
10/20/2005 8:04	8640.1	10.2	3.7	8.5	6.0	424.1	13.1	9.2
10/20/2005 14:16	8649.7	10.1	3.5	8.1	6.4	423.7	13.3	8.8
10/21/2005 8:08	8671.1	10.2	3.2	7.4	7.1	423.0	14.1	8.1
10/21/2005 13:12	8676.1	10.1	3.1	7.2	7.3	422.8	14.3	7.9
10/22/2005 9:14	8697.8	9.9	2.8	6.4	8.1	422.0	15.1	7.1
10/24/2005 15:38	8708.1	10.2	2.6	6.0	8.5	421.6	17.4	6.7
10/26/2005 16:31	8690.1	10.2	2.9	6.7	7.8	422.3	19.4	7.4
10/27/2005 15:23	8692	10.2	2.9	6.6	7.9	422.2	20.4	7.3
10/28/2005 15:59	8698.3	10.2	2.8	6.4	8.1	422.0	21.4	7.1
10/31/2005 10:59	8720.3	10.2	2.4	5.6	8.9	421.2	24.2	6.3
11/2/2005 15:03	8731.3	10.4	2.3	5.2	9.3	420.8	26.4	5.9
11/4/2005 11:29	8739.9	10.3	2.1	4.9	9.6	420.5	28.2	5.6
11/7/2005 15:05	8739.4	10.3	2.1	4.9	9.6	420.5	31.4	5.6
11/11/2005 13:36	8736.8	10.3	2.2	5.0	9.5	420.6	35.3	5.7
11/14/2005 16:36	8729	10.3	2.3	5.3	9.2	420.9	38.4	6.0
11/17/2005 15:29	8694.1	10.4	2.8	6.6	7.9	422.1	41.4	7.3

**Wastebed 13 Pilot Study  
Piezometer A-1 (15 ft)**

**A-1 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout =

Serial # 04-12596

0 to 8 ft

Bentonite Seal =

8 to 11.5 ft

Sandpack =

11.5 to 15 ft

Depth to Piezometer Tip from Ground Surface =

14.5 ft

Ro =

8880

To =

12.8 degrees Celsius

Linear Gage Factor (psi) =

0.01558 psi/digit

Thermal Factor =

0.023924 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.09 ft

Piezometer Tip Elevation =

415.59 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/21/2005 12:21	8726.8	10.4	2.3	5.4	9.1	421.0	45.2	6.1
12/2/2005 11:56	8709.8	10.4	2.6	6.0	8.5	421.6	56.2	6.7
12/6/2005 14:53	8719.5	10.5	2.4	5.6	8.9	421.2	60.3	6.4
12/15/2005 14:44	8739.1	10.6	2.1	4.9	9.6	420.5	69.3	5.7
12/22/2005 15:22	8752.5	10.6	1.9	4.5	10.0	420.1	76.4	5.2
12/29/2005 11:08	8751.4	10.7	2.0	4.5	10.0	420.1	83.2	5.2
1/5/2006 14:06	8732.8	10.7	2.2	5.2	9.3	420.8	90.3	5.9
1/12/2006 10:36	8695	10.7	2.8	6.5	8.0	422.1	97.2	7.2
1/19/2006 13:40	8690.5	10.7	2.9	6.7	7.8	422.3	104.3	7.4
1/26/2006 14:11	8699	10.8	2.8	6.4	8.1	422.0	111.3	7.1
2/2/2006 11:24	8696.8	10.8	2.8	6.5	8.0	422.1	118.2	7.2
2/9/2006 12:28	8692.2	10.8	2.9	6.6	7.9	422.2	125.2	7.4
2/16/2006 11:18	8716.9	10.9	2.5	5.8	8.7	421.3	132.2	6.5
2/23/2006 14:18	8734.2	10.9	2.2	5.1	9.4	420.7	139.3	5.8
3/2/2006 11:52	8756.4	10.9	1.9	4.3	10.2	419.9	146.2	5.0
3/9/2006 15:18	8770.3	11.2	1.7	3.9	10.6	419.4	153.4	4.6
3/16/2006 14:10	8707.1	10.9	2.6	6.1	8.4	421.7	160.3	6.8
3/23/2006 15:01	8732.5	10.9	2.3	5.2	9.3	420.8	167.4	5.9
3/31/2006 15:31	8752	11	2.0	4.5	10.0	420.1	175.4	5.2
4/6/2006 13:55	8760	10.9	1.8	4.2	10.3	419.8	181.3	4.9
4/13/2006 16:06	8757.3	10.9	1.9	4.3	10.2	419.9	188.4	5.0
4/20/2006 15:59	8766.9	11	1.7	4.0	10.5	419.6	195.4	4.7
4/26/2006 14:37	8753.1	10.9	1.9	4.5	10.0	420.0	201.3	5.2
5/4/2006 14:11	8765.6	10.8	1.7	4.0	10.5	419.6	209.3	4.7
5/11/2006 15:10	8782.2	10.8	1.5	3.4	11.1	419.0	216.4	4.1
5/18/2006 14:50	8794.6	10.8	1.3	3.0	11.5	418.6	223.3	3.7
5/25/2006 14:38	8785.9	10.8	1.4	3.3	11.2	418.9	230.3	4.0
6/1/2006 14:24	8784.6	10.8	1.4	3.3	11.2	418.9	237.3	4.0
6/8/2006 14:39	8788.4	10.7	1.4	3.2	11.3	418.8	244.3	3.9
6/15/2006 13:39	8786.8	10.7	1.4	3.2	11.3	418.8	251.3	3.9
6/22/2006 13:54	8790.2	10.7	1.3	3.1	11.4	418.7	258.3	3.8
6/29/2006 15:23	8792.3	10.7	1.3	3.0	11.5	418.6	265.4	3.7
7/6/2006 15:15	8792	10.6	1.3	3.0	11.5	418.6	272.4	3.8
7/13/2006 14:52	8724.7	10.6	2.4	5.5	9.0	421.1	279.3	6.2
7/20/2006 10:35	8746.1	10.6	2.0	4.7	9.8	420.3	286.2	5.4
7/27/2006 10:16	8772.1	10.6	1.6	3.8	10.7	419.3	293.2	4.5
8/3/2006 10:00	8781.9	10.6	1.5	3.4	11.1	419.0	300.1	4.1
8/10/2006 13:47	8781.1	10.5	1.5	3.4	11.1	419.0	307.3	4.1
8/17/2006 15:38	8780.8	10.5	1.5	3.4	11.1	419.0	314.4	4.1
8/24/2006 15:18	8792.1	10.5	1.3	3.0	11.5	418.6	321.4	3.7
8/31/2006 10:07	8790.6	10.5	1.3	3.1	11.4	418.7	328.2	3.8
9/7/2006 14:54	8797.3	10.5	1.2	2.8	11.7	418.4	335.3	3.6
9/14/2006 14:51	8804.6	10.8	1.1	2.6	11.9	418.2	342.3	3.3
9/21/2006 17:23	8804.6	10.5	1.1	2.6	11.9	418.2	349.5	3.3
9/28/2006 15:32	8814.2	10.5	1.0	2.2	12.3	417.8	356.4	2.9
10/5/2006 15:52	8792	10.6	1.3	3.0	11.5	418.6	363.4	3.8
10/12/2006 15:02	8812	10.6	1.0	2.3	12.2	417.9	370.4	3.0
10/20/2006 14:26	8793.6	10.6	1.3	3.0	11.5	418.6	378.3	3.7
10/26/2006 15:19	8725.5	10.6	2.4	5.4	9.1	421.0	384.4	6.1

**Wastebed 13 Pilot Study  
Piezometer A-1 (15 ft)**

**A-1 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout =

Serial # 04-12596

0 to 8 ft

Bentonite Seal =

8 to 11.5 ft

Sandpack =

11.5 to 15 ft

Depth to Piezometer Tip from Ground Surface =

14.5 ft

Ro =

8880

To =

12.8 degrees Celsius

Linear Gage Factor (psi) =

0.01558 psi/digit

Thermal Factor =

0.023924 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.09 ft

Piezometer Tip Elevation =

415.59 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/8/2006 13:06	8752.6	10.8	1.9	4.5	10.0	420.1	397.3	5.2
11/15/2006 16:24	8751.5	10.7	2.0	4.5	10.0	420.1	404.4	5.2
12/7/2006 15:23	8716.1	10.8	2.5	5.8	8.7	421.4	426.4	6.5
12/14/06 14:21	8744.5	10.8	2.1	4.8	9.7	420.4	433.3	5.5
12/21/2006 13:44	8750.6	10.9	2.0	4.5	10.0	420.1	440.3	5.3
12/28/06 14:01	8701	10.9	2.7	6.3	8.2	421.9	447.3	7.0
1/11/2007 15:51	8685	11	3.0	6.9	7.6	422.5	461.4	7.6
2/22/07 11:00	8799	11.2	1.2	2.8	11.7	418.4	503.2	3.5
3/7/2007 10:33	8757.9	11.2	1.9	4.3	10.2	419.9	516.2	5.0
4/12/07 11:32	8633.8	11.2	3.8	8.8	5.7	424.4	552.2	9.5
5/10/2007 11:58	8673.6	11.1	3.2	7.3	7.2	422.9	580.2	8.0
6/21/07 13:26	8795.4	11	1.3	2.9	11.6	418.5	622.3	3.7
7/12/2007 13:29	8812.8	10.9	1.0	2.3	12.2	417.9	643.3	3.0
8/15/07 13:40	8837.3	10.8	0.6	1.4	13.1	417.0	677.3	2.1
9/20/2007 14:47	8859.9	10.8	0.3	0.6	13.9	416.2	713.3	1.3
10/25/07 15:46	8859.6	10.8	0.3	0.6	13.9	416.2	748.4	1.3

**Wastedbed 13 Pilot Study  
Piezometer A-1 (45 ft)**

**A-1 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/26/2005

Grout = 0 to 35.2 ft

Bentonite Seal = 35.2 to 41.5 ft

Sandpack = 41.5 to 45 ft

Depth to piezometer tip from ground surface = 44.5 ft

Ro = 8966

To = 15.2 degrees Celsius

Linear Gage Factor (psi) = 0.01622 psi/digit

Thermal Factor = 0.008635 psi/C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.13 ft

Piezometer Tip Elevation = 385.63 ft

Serial # 04-12598

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/26/05 12:30	8080	15.7	14.4	33.2	11.3	418.8		
9/26/05 13:30	8348.2	15.8	10.0	23.1	21.4	408.8		
9/27/05 11:06	8826.0	11.8	2.2	5.2	39.3	390.8		
9/30/05 14:06	8846.7	11	1.9	4.4	40.1	390.0		
10/7/05 6:30	8852.8	10.9	1.8	4.2	40.3	389.8	0	0
10/8/05 9:08	8847.7	10.9	1.9	4.3	40.2	390.0	1.1	0.2
10/10/05 8:11	8844.2	10.9	1.9	4.5	40.0	390.1	3.1	0.3
10/10/05 11:49	8833.2	10.9	2.1	4.9	39.6	390.5	3.2	0.7
10/10/05 16:37	8796.4	11	2.7	6.3	38.2	391.9	3.4	2.1
10/11/05 7:36	8802.6	10.9	2.6	6.0	38.5	391.7	4.0	1.9
10/11/05 10:58	8728.8	10.9	3.8	8.8	35.7	394.4	4.2	4.6
10/11/05 11:27	8726.7	10.9	3.8	8.9	35.6	394.5	4.2	4.7
10/11/05 16:42	8729.9	10.9	3.8	8.8	35.7	394.4	4.4	4.6
10/12/05 8:08	8749.7	10.9	3.5	8.0	36.5	393.6	5.1	3.9
10/12/05 14:20	8728.1	10.9	3.8	8.8	35.7	394.4	5.3	4.7
10/12/05 17:08	8693.5	11.1	4.4	10.1	34.4	395.7	5.4	6.0
10/13/05 8:54	8712.3	10.9	4.1	9.4	35.1	395.0	6.1	5.3
10/14/2005 10:09	8719.5	12.7	4.0	9.2	35.3	394.8	7.2	5.0
10/15/2005 7:53	8734.2	10.9	3.7	8.6	35.9	394.2	8.1	4.4
10/15/2005 13:06	8690.6	10	4.4	10.2	34.3	395.8	8.3	6.1
10/15/2005 14:21	8672.1	10.9	4.7	10.9	33.6	396.5	8.3	6.8
10/15/2005 16:46	8660.9	10.9	4.9	11.3	33.2	397.0	8.4	7.2
10/17/05 8:16	8652.6	10.9	5.0	11.6	32.9	397.3	10.1	7.5
10/17/2005 13:13	8631.4	10.9	5.4	12.4	32.1	398.1	10.3	8.3
10/18/2005 8:21	8638.5	10.9	5.3	12.2	32.3	397.8	11.1	8.0
10/18/2005 15:18	8551.5	10.9	6.7	15.4	29.1	401.1	11.4	11.3
10/18/2005 15:57	8543.8	10.9	6.8	15.7	28.8	401.3	11.4	11.6
10/18/2005 17:28	8533.3	10.9	7.0	16.1	28.4	401.7	11.5	12.0
10/19/2005 8:19	8519.9	10.9	7.2	16.6	27.9	402.2	12.1	12.5
10/19/2005 10:16	8515.5	10.9	7.3	16.8	27.7	402.4	12.2	12.6
10/19/2005 13:45	8476	10.9	7.9	18.3	26.2	403.9	12.3	14.1
10/19/2005 17:10	8448.5	10.9	8.4	19.3	25.2	404.9	12.4	15.1
10/20/2005 8:05	8447.6	10.9	8.4	19.3	25.2	404.9	13.1	15.2
10/20/2005 14:15	8451.6	10.9	8.3	19.2	25.3	404.8	13.3	15.0
10/21/2005 8:06	8460.2	10.9	8.2	18.8	25.7	404.5	14.1	14.7
10/21/2005 13:11	8463.9	10.9	8.1	18.7	25.8	404.3	14.3	14.6
10/22/2005 9:13	8480.1	10.9	7.8	18.1	26.4	403.7	15.1	14.0
10/24/2005 15:37	8496.9	10.9	7.6	17.5	27.0	403.1	17.4	13.3
10/26/2005 16:32	8513.3	10.9	7.3	16.9	27.6	402.5	19.4	12.7
10/27/2005 15:26	8510.3	10.9	7.4	17.0	27.5	402.6	20.4	12.8
10/28/2005 16:00	8510.8	10.9	7.3	17.0	27.5	402.6	21.4	12.8
10/31/2005 11:00	8531.2	10.8	7.0	16.2	28.3	401.8	24.2	12.0
11/2/2005 15:04	8541.2	10.8	6.9	15.8	28.7	401.4	26.4	11.7
11/4/2005 11:30	8557.4	10.8	6.6	15.2	29.3	400.8	28.2	11.1
11/7/2005 15:06	8562.6	10.8	6.5	15.0	29.5	400.6	31.4	10.9
11/11/2005 13:37	8577.7	10.8	6.3	14.4	30.1	400.1	35.3	10.3
11/14/2005 16:36	8577.7	10.8	6.3	14.4	30.1	400.1	38.4	10.3

**Wastebed 13 Pilot Study  
Piezometer A-1 (45 ft)**

**A-1 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/26/2005

Grout =

0 to 35.2 ft

Bentonite Seal =

35.2 to 41.5 ft

Sandpack =

41.5 to 45 ft

Depth to piezometer tip from ground surface =

44.5 ft

Ro =

8966

To =

15.2 degrees Celsius

Linear Gage Factor (psi) =

0.01622 psi/digit

Thermal Factor =

0.008635 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.13 ft

Piezometer Tip Elevation =

385.63 ft

Serial # 04-12598

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/17/2005 15:30	8587.6	10.8	6.1	14.1	30.4	399.7	41.4	9.9
11/21/2005 12:22	8603.1	10.8	5.8	13.5	31.0	399.1	45.2	9.3
12/2/2005 11:57	8618.9	10.8	5.6	12.9	31.6	398.5	56.2	8.8
12/6/2005 14:53	8602.5	10.8	5.9	13.5	31.0	399.1	60.3	9.4
12/15/2005 14:46	8618.1	10.8	5.6	12.9	31.6	398.6	69.3	8.8
12/22/2005 15:23	8632.3	10.8	5.4	12.4	32.1	398.0	76.4	8.3
12/29/2005 11:09	8656.8	10.8	5.0	11.5	33.0	397.1	83.2	7.3
1/5/2006 14:07	8650.2	10.8	5.1	11.7	32.8	397.4	90.3	7.6
1/12/2006 10:37	8622.5	10.8	5.5	12.8	31.7	398.4	97.2	8.6
1/19/2006 13:41	8592.4	10.8	6.0	13.9	30.6	399.5	104.3	9.7
1/26/2006 14:12	8579.5	10.8	6.2	14.4	30.1	400.0	111.3	10.2
2/2/2006 11:25	8598.4	10.8	5.9	13.7	30.8	399.3	118.2	9.5
2/9/2006 12:30	8590.2	10.8	6.1	14.0	30.5	399.6	125.3	9.8
2/16/2006 11:19	8595.5	10.8	6.0	13.8	30.7	399.4	132.2	9.6
2/23/2006 14:19	8616.6	10.8	5.6	13.0	31.5	398.6	139.3	8.8
3/2/2006 11:53	8641.7	10.8	5.2	12.1	32.4	397.7	146.2	7.9
3/9/2006 15:19	8666.1	10.8	4.8	11.1	33.4	396.8	153.4	7.0
3/16/2006 14:10	8647.5	10.8	5.1	11.8	32.7	397.5	160.3	7.7
3/23/2006 15:02	8636.6	10.7	5.3	12.2	32.3	397.9	167.4	8.1
3/31/2006 15:32	8658.3	10.7	5.0	11.4	33.1	397.1	175.4	7.3
4/6/2006 13:57	8666.4	10.7	4.8	11.1	33.4	396.8	181.3	7.0
4/13/2006 16:07	8672.2	10.7	4.7	10.9	33.6	396.5	188.4	6.8
4/20/2006 16:00	8682.4	10.7	4.6	10.5	34.0	396.2	195.4	6.4
4/26/2006 14:39	8685.7	10.7	4.5	10.4	34.1	396.0	201.3	6.3
5/4/2006 14:12	8688.9	10.7	4.5	10.3	34.2	395.9	209.3	6.1
5/11/2006 15:11	8705.4	10.7	4.2	9.7	34.8	395.3	216.4	5.5
5/18/2006 14:51	8721.7	10.7	3.9	9.1	35.4	394.7	223.3	4.9
5/25/2006 14:39	8715.6	10.7	4.0	9.3	35.2	394.9	230.3	5.1
6/1/2006 14:25	8714.6	10.7	4.0	9.3	35.2	395.0	237.3	5.2
6/8/2006 14:40	8722.4	10.7	3.9	9.0	35.5	394.7	244.3	4.9
6/15/2006 13:40	8720.6	10.7	3.9	9.1	35.4	394.7	251.3	4.9
6/22/2006 13:55	8728.3	10.7	3.8	8.8	35.7	394.4	258.3	4.7
6/29/2006 15:24	8734.8	10.7	3.7	8.6	35.9	394.2	265.4	4.4
7/6/2006 15:17	8736.2	10.7	3.7	8.5	36.0	394.1	272.4	4.4
7/13/2006 14:53	8736.1	10.7	3.7	8.5	36.0	394.1	279.3	4.4
7/20/2006 10:36	8709.6	10.7	4.1	9.5	35.0	395.1	286.2	5.4
7/27/2006 10:17	8718.9	10.7	4.0	9.2	35.3	394.8	293.2	5.0
8/3/2006 10:01	8729.1	10.7	3.8	8.8	35.7	394.4	300.1	4.6
8/10/2006 13:48	8736.3	10.7	3.7	8.5	36.0	394.1	307.3	4.4
8/17/2006 15:39	8737.3	10.7	3.7	8.5	36.0	394.1	314.4	4.3
8/24/2006 15:18	8753.3	10.7	3.4	7.9	36.6	393.5	321.4	3.7
8/31/2006 10:08	8751.2	10.7	3.4	8.0	36.5	393.6	328.2	3.8
9/7/2006 14:55	8778.1	10.6	3.0	6.9	37.6	392.6	335.4	2.8
9/14/2006 14:52	8784.7	10.7	2.9	6.7	37.8	392.3	342.3	2.5
9/21/2006 17:23	8786.1	10.7	2.9	6.6	37.9	392.3	349.5	2.5
9/28/2006 15:32	8798.8	10.7	2.7	6.2	38.3	391.8	356.4	2.0
10/5/2006 15:52	8785.3	10.7	2.9	6.7	37.8	392.3	363.4	2.5
10/12/2006 15:03	8800.9	10.8	2.6	6.1	38.4	391.7	370.4	1.9
10/20/2006 14:27	8792.3	10.7	2.8	6.4	38.1	392.0	378.3	2.3

**PARSONS**

**Wastebed 13 Pilot Study  
Piezometer A-1 (45 ft)**

**A-1 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/26/2005

Grout = 0 to 35.2 ft

Bentonite Seal = 35.2 to 41.5 ft

Sandpack = 41.5 to 45 ft

Depth to piezometer tip from ground surface = 44.5 ft

Ro = 8966

To = 15.2 degrees Celsius

Linear Gage Factor (psi) = 0.01622 psi/digit

Thermal Factor = 0.008635 psi/C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.13 ft

Piezometer Tip Elevation = 385.63 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/26/2006 15:20	8729.3	10.7	3.8	8.8	35.7	394.4	384.4	4.6
11/8/2006 13:07	8715.3	10.7	4.0	9.3	35.2	394.9	397.3	5.1
11/15/2006 16:25	8714.3	10.7	4.0	9.3	35.2	395.0	404.4	5.2
12/7/2006 15:24	8674.2	10.7	4.7	10.8	33.7	396.5	426.4	6.7
12/14/06 14:21	8690.7	10.6	4.4	10.2	34.3	395.8	433.3	6.1
12/21/2006 13:45	8694.5	10.7	4.4	10.1	34.4	395.7	440.3	5.9
12/28/06 14:03	8688.7	10.7	4.5	10.3	34.2	395.9	447.3	6.1
1/11/2007 15:52	8661.8	10.7	4.9	11.3	33.2	396.9	461.4	7.1
2/22/07 11:02	8773.0	10.6	3.1	7.1	37.4	392.8	503.2	3.0
3/7/2007 10:34	8760.8	10.7	3.3	7.6	36.9	393.2	516.2	3.4
4/12/07 11:33	8587.2	10.6	6.1	14.1	30.4	399.7	552.2	9.9
5/10/2007 11:58	8601.1	10.6	5.9	13.6	30.9	399.2	580.2	9.4
6/21/07 13:27	8792.0	10.6	2.8	6.4	38.1	392.1	622.3	2.3
7/12/2007 13:30	8824.0	10.6	2.3	5.2	39.3	390.9	643.3	1.1
8/15/07 13:40	8851.4	10.6	1.8	4.2	40.3	389.8	677.3	0.0
9/20/2007 14:48	8861.4	10.6	1.7	3.8	40.7	389.5	713.3	-0.3
10/25/07 15:47	8864.6	10.6	1.6	3.7	40.8	389.3	748.4	-0.4

**Wastebed 13 Pilot Study  
Piezometer A-1 (Native)**

**A-1 (Native)**

Typical Vibrating Piezometer

Date Installed: 9/23/2005

Grout =

Serial # 04-12602

0 to 63.3 ft

Bentonite Seal =

63.3 to 74.5 ft

Sandpack =

74.5 to 78 ft

Depth to piezometer tip from ground surface =

77.5 ft

Ro =

9329.4

18 degrees Celsius

Linear Gage Factor (psi) =

0.01641 psi/digit

Thermal Factor =

0.013692 psi/°C

Unit Weight of Water =

62.4 pcf

Ground Surface Elevation =

430.03 ft

Piezometer Tip Elevation =

352.53 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/23/05 10:48	8085	17.7	20.4	47.1	30.4	399.6		
9/23/05 11:55	8317.2	17.6	16.6	38.3	39.2	390.8		
9/30/05 14:00	8762.4	9.9	9.2	21.2	56.3	373.7		
10/7/05 6:30	8770.3	9.8	9.1	20.9	56.6	373.4	0	0
10/8/05 9:07	8767.0	9.8	9.1	21.0	56.5	373.6	1.1	0.1
10/10/05 8:10	8758.5	9.8	9.3	21.4	56.1	373.9	3.1	0.4
10/10/05 11:52	8758.6	9.9	9.3	21.4	56.1	373.9	3.2	0.4
10/10/05 16:35	8759.2	9.8	9.2	21.3	56.2	373.9	3.4	0.4
10/11/05 7:35	8758.2	10	9.3	21.4	56.1	373.9	4.0	0.5
10/11/05 11:01	8757.8	9.9	9.3	21.4	56.1	373.9	4.2	0.5
10/11/05 11:14	8757.5	9.9	9.3	21.4	56.1	373.9	4.2	0.5
10/11/05 11:26	8757.7	9.9	9.3	21.4	56.1	373.9	4.2	0.5
10/11/05 16:40	8758.0	9.8	9.3	21.4	56.1	373.9	4.4	0.5
10/12/05 8:02	8756.6	9.9	9.3	21.4	56.1	374.0	5.1	0.5
10/12/05 14:18	8755.5	9.9	9.3	21.5	56.0	374.0	5.3	0.6
10/12/05 17:09	8755.4	9.9	9.3	21.5	56.0	374.0	5.4	0.6
10/13/05 8:55	8755	9.9	9.3	21.5	56.0	374.0	6.1	0.6
10/14/2005 10:11	8755.9	10.9	9.3	21.5	56.0	374.0	7.2	0.6
10/15/2005 7:52	8761.7	9.9	9.2	21.2	56.3	373.8	8.1	0.3
10/15/2005 13:08	8764.3	9.9	9.2	21.1	56.4	373.7	8.3	0.2
10/15/2005 14:20	8764.3	9.8	9.2	21.1	56.4	373.7	8.3	0.2
10/15/2005 16:47	8764	9.8	9.2	21.2	56.3	373.7	8.4	0.2
10/17/05 8:18	8758.1	9.8	9.3	21.4	56.1	373.9	10.1	0.5
10/17/05 13:14	8758.1	9.8	9.3	21.4	56.1	373.9	10.3	0.5
10/18/2005 8:19	8765	9.8	9.1	21.1	56.4	373.6	11.1	0.2
10/18/2005 15:17	8763	9.8	9.2	21.2	56.3	373.7	11.4	0.3
10/18/2005 15:55	8762.7	9.8	9.2	21.2	56.3	373.7	11.4	0.3
10/18/2005 17:29	8761.6	9.8	9.2	21.2	56.3	373.8	11.5	0.3
10/19/2005 8:18	8757.3	9.8	9.3	21.4	56.1	373.9	12.1	0.5
10/19/2005 10:15	8759.7	9.8	9.2	21.3	56.2	373.8	12.2	0.4
10/19/2005 13:46	8764.4	9.8	9.2	21.1	56.4	373.7	12.3	0.2
10/19/2005 17:09	8762.2	9.9	9.2	21.2	56.3	373.8	12.4	0.3
10/20/2005 8:05	8752.2	9.8	9.4	21.6	55.9	374.1	13.1	0.7
10/20/2005 14:14	8752.6	9.8	9.4	21.6	55.9	374.1	13.3	0.7
10/21/2005 8:05	8751.3	9.8	9.4	21.6	55.9	374.2	14.1	0.7
10/21/2005 13:10	8752.1	9.9	9.4	21.6	55.9	374.1	14.3	0.7
10/22/2005 9:11	8758.7	9.9	9.3	21.4	56.1	373.9	15.1	0.4
10/24/2005 15:36	8751.9	9.9	9.4	21.6	55.9	374.1	17.4	0.7
10/26/2005 16:33	8744.4	9.8	9.5	21.9	55.6	374.4	19.4	1.0
10/27/2005 15:27	8731.3	9.8	9.7	22.4	55.1	374.9	20.4	1.5
10/28/2005 16:02	8726.2	9.8	9.8	22.6	54.9	375.1	21.4	1.7
10/31/2005 11:01	8734	9.8	9.7	22.3	55.2	374.8	24.2	1.4
11/2/2005 15:05	8735.3	9.8	9.6	22.2	55.3	374.8	26.4	1.3
11/4/2005 11:31	8744.3	9.8	9.5	21.9	55.6	374.4	28.2	1.0
11/7/2005 15:07	8737.9	9.8	9.6	22.1	55.4	374.7	31.4	1.2
11/11/2005 13:38	8733.1	9.8	9.7	22.3	55.2	374.9	35.3	1.4
11/14/2005 16:38	8731.2	9.8	9.7	22.4	55.1	374.9	38.4	1.5
11/17/2005 15:30	8729.2	9.8	9.7	22.5	55.0	375.0	41.4	1.6

**Wastebed 13 Pilot Study  
Piezometer A-1 (Native)**

**A-1 (Native)**

Typical Vibrating Piezometer

Date Installed: 9/23/2005

Grout = 0 to 63.3 ft

Bentonite Seal = 63.3 to 74.5 ft

Sandpack = 74.5 to 78 ft

Depth to piezometer tip from ground surface = 77.5 ft

Ro = 9329.4

To = 18 degrees Celsius

Linear Gage Factor (psi) = 0.01641 psi/digit

Thermal Factor = 0.013692 psi/°C

Unit Weight of Water = 62.4 pcf

Ground Surface Elevation = 430.03 ft

Piezometer Tip Elevation = 352.53 ft

Serial # 04-12602

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/21/2005 12:23	8738.7	9.8	9.6	22.1	55.4	374.6	45.2	1.2
12/2/2005 11:58	8726.6	9.8	9.8	22.6	54.9	375.1	56.2	1.7
12/6/2005 14:54	8706.5	9.9	10.1	23.3	54.2	375.9	60.3	2.4
12/15/2005 14:47	8712.4	9.8	10.0	23.1	54.4	375.6	69.3	2.2
12/22/2005 15:24	8721.1	9.8	9.9	22.8	54.7	375.3	76.4	1.9
12/29/2005 11:11	8730.7	9.8	9.7	22.4	55.1	374.9	83.2	1.5
1/5/2006 14:08	8721.6	9.8	9.9	22.8	54.7	375.3	90.3	1.8
1/12/2006 10:38	8706.3	9.8	10.1	23.3	54.2	375.9	97.2	2.4
1/19/2006 13:42	8689.5	9.8	10.4	24.0	53.5	376.5	104.3	3.1
1/26/2006 14:14	8682.9	9.8	10.5	24.2	53.3	376.8	111.3	3.3
2/2/2006 11:26	8696.5	9.8	10.3	23.7	53.8	376.2	118.2	2.8
2/9/2006 12:30	8689.4	9.8	10.4	24.0	53.5	376.5	125.3	3.1
2/16/2006 11:21	8693.1	9.8	10.3	23.8	53.7	376.4	132.2	2.9
2/23/2006 14:20	8709.2	9.8	10.1	23.2	54.3	375.8	139.3	2.3
3/2/2006 11:54	8722.4	9.8	9.8	22.7	54.8	375.3	146.2	1.8
3/9/2006 15:20	8733.2	9.8	9.7	22.3	55.2	374.8	153.4	1.4
3/16/2006 14:11	8707.9	9.8	10.1	23.3	54.2	375.8	160.3	2.4
3/23/2006 15:03	8708.9	9.8	10.1	23.2	54.3	375.8	167.4	2.3
3/31/2006 15:33	8726.1	9.7	9.8	22.6	54.9	375.1	175.4	1.7
4/6/2006 13:58	8727.9	9.8	9.8	22.5	55.0	375.0	181.3	1.6
4/13/2006 16:08	8728.6	9.7	9.7	22.5	55.0	375.0	188.4	1.6
4/20/2006 16:00	8732	9.7	9.7	22.4	55.1	374.9	195.4	1.4
4/26/2006 14:40	8733.1	9.7	9.7	22.3	55.2	374.8	201.3	1.4
5/4/2006 14:13	8740.1	9.7	9.6	22.1	55.4	374.6	209.3	1.1
5/11/2006 15:12	8748.9	9.7	9.4	21.7	55.8	374.3	216.4	0.8
5/18/2006 14:51	8756.6	9.7	9.3	21.4	56.1	374.0	223.3	0.5
5/25/2006 14:41	8747.9	9.7	9.4	21.8	55.7	374.3	230.3	0.8
6/1/2006 14:26	8746.1	9.7	9.5	21.8	55.7	374.4	237.3	0.9
6/8/2006 14:40	8746	9.8	9.5	21.8	55.7	374.4	244.3	0.9
6/15/2006 13:41	8742.3	9.7	9.5	22.0	55.5	374.5	251.3	1.1
6/22/2006 13:56	8748.8	9.7	9.4	21.7	55.8	374.3	258.3	0.8
6/29/2006 15:25	8749.5	9.7	9.4	21.7	55.8	374.2	265.4	0.8
7/6/2006 15:18	8745.8	9.7	9.5	21.8	55.7	374.4	272.4	0.9
7/13/2006 14:53	8734.9	9.7	9.6	22.3	55.2	374.8	279.3	1.3
7/20/2006 10:37	8729.2	9.7	9.7	22.5	55.0	375.0	286.2	1.6
7/27/2006 10:19	8735.2	9.7	9.6	22.2	55.3	374.8	293.2	1.3
8/3/2006 10:02	8731.8	9.8	9.7	22.4	55.1	374.9	300.1	1.5
8/10/2006 13:48	8734.3	9.7	9.7	22.3	55.2	374.8	307.3	1.4
8/17/2006 15:40	8737.6	9.7	9.6	22.1	55.4	374.7	314.4	1.2
8/24/2006 15:19	8751.4	9.7	9.4	21.6	55.9	374.2	321.4	0.7
8/31/2006 10:09	8746.2	9.7	9.5	21.8	55.7	374.4	328.2	0.9
9/7/2006 14:56	8751.7	9.8	9.4	21.6	55.9	374.1	335.4	0.7
9/14/2006 14:53	8761.2	9.7	9.2	21.3	56.2	373.8	342.3	0.3
9/21/2006 17:24	8761.6	9.7	9.2	21.2	56.3	373.8	349.5	0.3
9/28/2006 15:34	8775.1	9.8	9.0	20.7	56.8	373.3	356.4	-0.2
10/5/2006 15:53	8756.1	9.8	9.3	21.5	56.0	374.0	363.4	0.5
10/12/2006 15:04	8781.2	9.8	8.9	20.5	57.0	373.0	370.4	-0.4
10/20/2006 14:29	8771.1	9.8	9.0	20.9	56.6	373.4	378.3	0.0
10/26/2006 15:21	8731.1	9.8	9.7	22.4	55.1	374.9	384.4	1.5

**Wastebed 13 Pilot Study  
Piezometer A-1 (Native)**

**A-1 (Native)**

Typical Vibrating Piezometer

Date Installed: 9/23/2005

Grout = 0 to 63.3 ft

Bentonite Seal = 63.3 to 74.5 ft

Sandpack = 74.5 to 78 ft

Depth to piezometer tip from ground surface = 77.5 ft

Ro = 9329.4

To = 18 degrees Celsius

Linear Gage Factor (psi) = 0.01641 psi/digit

Thermal Factor = 0.013692 psi/°C

Unit Weight of Water = 62.4 pcf

Ground Surface Elevation = 430.03 ft

Piezometer Tip Elevation = 352.53 ft

Serial # 04-12602

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/8/2006 13:08	8731.9	9.8	9.7	22.4	55.1	374.9	397.3	1.5
11/15/2006 16:25	8718.8	9.8	9.9	22.9	54.6	375.4	404.4	2.0
12/7/2006 15:25	8707.1	9.8	10.1	23.3	54.2	375.8	426.4	2.4
12/14/06 14:22	8720.7	9.8	9.9	22.8	54.7	375.3	433.3	1.9
12/21/2006 13:46	8717.2	9.8	9.9	22.9	54.6	375.5	440.3	2.0
12/28/06 14:04	8708.9	9.8	10.1	23.2	54.3	375.8	447.3	2.3
1/11/2007 15:53	8700.4	9.8	10.2	23.6	53.9	376.1	461.4	2.6
2/22/07 11:03	8755	9.8	9.3	21.5	56.0	374.0	503.2	0.6
3/7/2007 10:35	8726.5	9.8	9.8	22.6	54.9	375.1	516.2	1.7
4/12/07 11:34	8686.1	9.7	10.4	24.1	53.4	376.6	552.2	3.2
5/10/2007 11:59	8693.2	9.7	10.3	23.8	53.7	376.4	580.2	2.9
6/21/07 13:28	8755.7	9.7	9.3	21.5	56.0	374.0	622.3	0.5
7/12/2007 13:31	8772.2	9.7	9.0	20.8	56.7	373.4	643.3	-0.1
8/15/07 13:41	8784.5	9.7	8.8	20.4	57.1	372.9	677.3	-0.5
9/20/2007 14:49	8784.1	9.8	8.8	20.4	57.1	372.9	713.3	-0.5
10/25/07 15:47	8775.4	9.7	9.0	20.7	56.8	373.2	748.4	-0.2

**Wastebed 13 Pilot Study  
Piezometer A-2 (15 ft)**

**A-2 (15 ft)**

Cable Cut during installation.

Standpipe Piezometer

Date Installed: 9/30/2005

Grout =

0 to 6.5 ft

Bentonite Seal =

6.5 to 11 ft

Sandpack Set Depth =

11 to 15 ft

Screened Interval =

12 to 15 ft

Piezometer Set Depth =

15 ft

Initial Casing Stickup =

3.2 ft

Intermediate Casing Stickup =

8.8 ft

Final Casing Stickup =

13.8 ft

Initial Top of Casing Elevation =

433.6 ft

Intermediate Top of Casing Elevation =

NA ft

Final Top of Casing Elevation =

444.2 ft

Initial Ground Surface Elevation =

430.35 ft

Standpipe Tip Elevation =

415.35 ft

\*\* Indicates that a baseline piezometric level of 15 ft bgs was assumed for this calculation.

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)**
9/19/05 13:50	Dry	Dry	Dry		
10/8/2005 9:37	Dry	Dry	Dry	1	0
10/10/05 8:20	17.41	14.2	416.1	2.9	0.8
10/11/05 7:30	22.09	13.3	417.1	3.9	1.7
10/11/05 16:55	22.79	14.0	416.4	4.3	1.0
10/12/05 9:00	21.6	12.8	417.6	5.0	2.2
10/12/05 17:35	21.36	12.5	417.8	5.3	2.5
10/13/05 12:51	21.89	13.1	417.3	6.1	1.9
10/14/2005 11:06	21.29	12.5	417.9	7.1	2.5
10/15/2005 8:34	19.69	10.9	419.5	8.0	4.1
10/15/2005 15:20	23.58	9.8	420.6	8.2	5.2
10/17/05 13:49	23.4	9.6	420.8	10.2	5.4
10/18/2005 8:08	23.47	9.6	420.7	10.9	5.4
10/18/2005 15:45	21.31	7.5	422.9	11.3	7.5
10/18/2005 17:25	20.46	6.6	423.7	11.3	8.4
10/19/2005 8:17	21.37	7.5	422.8	11.9	7.5
10/20/2005 13:45	20.54	6.7	423.6	13.2	8.3
10/20/2005 15:43	20.66	6.8	423.5	13.3	8.2
10/21/2005 8:24	21.34	7.5	422.8	13.9	7.5
10/21/2005 13:30	21.43	7.6	422.7	14.2	7.4
10/22/2005 9:08	21.95	8.1	422.2	15.0	6.9
10/24/2005 15:32	22.11	8.3	422.1	17.2	6.7
10/26/2005 16:35	21.27	7.4	422.9	19.3	7.6
10/27/2005 15:17	21.75	7.9	422.4	20.2	7.1
10/28/2005 16:05	22.12	8.3	422.1	21.3	6.7
10/31/2005 10:56	22.77	8.9	421.4	24.1	6.1
11/2/2005 15:00	23.21	9.4	421.0	26.2	5.6
11/4/2005 11:33	23.22	9.4	421.0	28.1	5.6
11/7/2005 15:10	23.49	9.7	420.7	31.2	5.3
11/11/2005 13:33	23.32	9.5	420.9	35.2	5.5
11/14/2005 16:30	23.41	9.6	420.8	38.3	5.4
11/17/2005 15:08	21.8	8.0	422.4	41.2	7.0
11/21/2005 12:07	22.7	8.9	421.5	45.1	6.1
12/2/2005 11:29	21.65	7.8	422.5	56.1	7.2
12/6/2005 14:33	22.66	8.8	421.5	60.2	6.2
12/15/2005 14:09	23.45	9.6	420.7	69.2	5.4
12/22/2005 14:53	23.77	9.9	420.4	76.2	5.1
12/29/2005 10:37	23.19	9.4	421.0	83.0	5.6
1/5/2006 13:40	22.6	8.8	421.6	90.2	6.2
1/12/2006 10:19	21.43	7.6	422.7	97.0	7.4
1/19/2006 13:17	21.64	7.8	422.5	104.2	7.2
1/26/2006 13:46	22.25	8.4	421.9	111.2	6.6

**Wastebed 13 Pilot Study  
Piezometer A-2 (15 ft)**

**A-2 (15 ft)**

Cable Cut during installation.

Standpipe Piezometer

Date Installed: 9/30/2005

Grout =

Serial # 05-13903

Bentonite Seal =

0 to 6.5 ft

Sandpack Set Depth =

6.5 to 11 ft

Screened Interval =

11 to 15 ft

Piezometer Set Depth =

12 to 15 ft

15 ft

Initial Casing Stickup =

3.2 ft

Intermediate Casing Stickup =

8.8 ft

Final Casing Stickup =

13.8 ft

Initial Top of Casing Elevation =

433.6 ft

Intermediate Top of Casing Elevation =

NA ft

Final Top of Casing Elevation =

444.2 ft

Initial Ground Surface Elevation =

430.35 ft

Standpipe Tip Elevation =

415.35 ft

\*\* Indicates that a baseline piezometric level of 15 ft bgs was assumed for this calculation.

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)**
2/2/2006 11:07	21.56	7.7	422.6	118.1	7.3
2/9/2006 12:07	21.51	7.7	422.7	125.1	7.3
2/16/2006 10:52	22.66	8.8	421.5	132.1	6.2
2/23/2006 13:51	22.92	9.1	421.3	139.2	5.9
3/2/2006 11:30	23.52	9.7	420.7	146.1	5.3
3/9/2006 14:55	23.97	10.1	420.2	153.2	4.9
3/16/2006 13:44	22.1	8.3	422.1	160.2	6.7
3/23/2006 14:34	23.25	9.4	420.9	167.2	5.6
3/31/2006 15:09	23.63	9.8	420.5	175.2	5.2
4/6/2006 13:32	23.91	10.1	420.3	181.2	4.9
4/13/2006 15:46	23.88	10.1	420.3	188.3	4.9
4/20/2006 15:34	24.18	10.4	420.0	195.2	4.6
4/26/2006 14:15	23.65	9.8	420.5	201.2	5.2
5/4/2006 13:50	23.96	10.1	420.2	209.2	4.9
5/11/2006 14:46	24.27	10.4	419.9	216.2	4.6
5/18/2006 13:55	24.43	10.6	419.7	223.2	4.4
5/25/2006 14:17	24.57	10.7	419.6	230.2	4.3
6/1/2006 14:07	24.72	10.9	419.5	237.2	4.1
6/8/2006 14:12	24.71	10.9	419.5	244.2	4.1
6/15/2006 13:22	24.85	11.0	419.3	251.2	4.0
6/22/2006 13:32	24.92	11.1	419.3	258.2	3.9
6/29/2006 14:58	25.01	11.2	419.2	265.2	3.8
7/6/2006 14:20	25.21	11.4	419.0	272.2	3.6
7/13/2006 14:32	22.28	8.5	421.9	279.2	6.5
7/20/2006 10:10	23.73	9.9	420.4	286.0	5.1
7/27/2006 9:53	24.32	10.5	419.9	293.0	4.5
8/3/2006 9:37	24.55	10.7	419.6	300.0	4.3
8/10/2006 13:30	24.61	10.8	419.6	307.2	4.2
8/17/2006 15:23	24.86	11.0	419.3	314.2	4.0
8/24/2006 14:57	25.02	11.2	419.2	321.2	3.8
8/31/2006 9:42	25.3	11.5	418.9	328.0	3.5
9/7/2006 14:22	25.35	11.5	418.8	335.2	3.5
9/14/2006 14:27	25.41	11.6	418.8	342.2	3.4
9/21/2006 17:03	25.56	11.7	418.6	349.3	3.3
9/28/2006 14:43	25.47	11.6	418.7	356.2	3.4
10/5/2006 15:27	25.38	11.6	418.8	363.2	3.4
10/12/2006 14:27	25.2	11.4	419.0	370.2	3.6
10/20/2006 15:04	24.49	10.7	419.7	378.2	4.3
10/26/2006 14:42	22.96	9.1	421.2	384.2	5.9
11/8/2006 12:44	23.43	9.6	420.7	397.1	5.4
11/15/2006 15:55	23.76	9.9	420.4	404.3	5.1
12/7/2006 14:46	22.41	8.6	421.8	426.2	6.4

**Wastebed 13 Pilot Study  
Piezometer A-2 (15 ft)**

**A-2 (15 ft)**

Cable Cut during installation.

Standpipe Piezometer

Date Installed: 9/30/2005

Grout =

0 to 6.5 ft

Bentonite Seal =

6.5 to 11 ft

Sandpack Set Depth =

11 to 15 ft

Screened Interval =

12 to 15 ft

Piezometer Set Depth =

15 ft

Initial Casing Stickup =

3.2 ft

Intermediate Casing Stickup =

8.8 ft

Final Casing Stickup =

13.8 ft

Initial Top of Casing Elevation =

433.6 ft

Intermediate Top of Casing Elevation =

NA ft

Final Top of Casing Elevation =

444.2 ft

Initial Ground Surface Elevation =

430.35 ft

Standpipe Tip Elevation =

415.35 ft

\*\* Indicates that a baseline piezometric level of 15 ft bgs was assumed for this calculation.

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)**
12/14/06 13:56	23.3	9.5	420.9	433.2	5.5
12/21/2006 13:17	23.99	10.2	420.2	440.2	4.8
12/28/06 13:32	22.12	8.3	422.1	447.2	6.7
1/11/2007 15:11	21.49	7.7	422.7	461.2	7.3
2/22/07 10:44	24.65	10.8	419.5	503.0	4.2
3/7/2007 10:25	24.45	10.6	419.7	516.0	4.4
4/12/07 11:11	19.19	5.4	425.0	552.1	9.6
5/10/2007 11:36	20.84	7.0	423.3	580.1	8.0
6/21/07 13:02	25	11.2	419.2	622.1	3.8
7/12/2007 13:02	25.61	11.8	418.6	643.1	3.2
8/15/07 13:09	26.35	12.5	417.8	677.1	2.5
9/20/2007 14:08	27.06	13.2	417.1	713.2	1.8
10/25/07 15:00	27.27	13.4	416.9	748.2	1.6

**Wastedbed 13 Pilot Study  
Piezometer A-2 (30 ft)**

**A-2 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/5/2005

Grout = 0 to 20.7 ft

Bentonite Seal = 20.7 to 25 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8839.3

To = 15.6 degrees Celsius

Linear Gage Factor (psi) = 0.01517 psi/digit

Thermal Factor = 0.00142 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.27 ft

Piezometer Tip Elevation = 400.27 ft

Serial # 05-13904

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/05/05 8:35	8635	11.8	3.1	7.1	22.9	407.4		
10/07/05 6:30	8793.7	11.1	0.7	1.6	28.4	401.9	0	0
10/08/05 9:05	8792.5	11.1	0.7	1.6	28.4	401.9	1.1	0.0
10/10/05 8:06	8789.0	11	0.8	1.7	28.3	402.0	3.1	0.2
10/10/05 11:48	8762.3	11.1	1.2	2.7	27.3	403.0	3.2	1.1
10/10/05 16:49	8744.1	11	1.4	3.3	26.7	403.6	3.4	1.7
10/11/05 7:35	8751.7	11.1	1.3	3.1	26.9	403.3	4.0	1.5
10/11/05 11:29	8680.9	11.1	2.4	5.5	24.5	405.8	4.2	3.9
10/11/05 16:37	8688.2	11	2.3	5.3	24.7	405.5	4.4	3.7
10/12/05 7:59	8695.3	11	2.2	5.0	25.0	405.3	5.1	3.4
10/12/05 14:17	8646.6	11.1	2.9	6.7	23.3	407.0	5.3	5.1
10/12/05 17:11	8627.9	11.4	3.2	7.4	22.6	407.7	5.4	5.8
10/13/05 8:57	8636.1	11.3	3.1	7.1	22.9	407.4	6.1	5.5
10/14/2005 10:13	8647.2	12.5	2.9	6.7	23.3	407.0	7.2	5.1
10/15/2005 7:50	8663.7	11.1	2.7	6.1	23.9	406.4	8.1	4.6
10/15/2005 13:09	8613.8	11.1	3.4	7.9	22.1	408.1	8.3	6.3
10/15/2005 14:18	8601.3	11	3.6	8.3	21.7	408.6	8.3	6.7
10/15/2005 16:37	8590.1	11	3.8	8.7	21.3	409.0	8.4	7.1
10/17/2005 8:20	8583.2	11.2	3.9	9.0	21.0	409.2	10.1	7.4
10/17/2005 13:16	8539	11.1	4.5	10.5	19.5	410.8	10.3	8.9
10/18/2005 8:12	8552.6	11.1	4.3	10.0	20.0	410.3	11.1	8.4
10/18/2005 15:15	8459.9	11	5.7	13.3	16.7	413.5	11.4	11.7
10/18/2005 15:54	8452	11	5.9	13.5	16.5	413.8	11.4	12.0
10/18/2005 17:29	8411.3	11	6.5	15.0	15.0	415.2	11.5	13.4
10/19/2005 8:16	8403.2	11.1	6.6	15.3	14.7	415.5	12.1	13.7
10/19/2005 10:13	8374.7	11	7.0	16.2	13.8	416.5	12.2	14.7
10/19/2005 13:47	8353.5	11	7.4	17.0	13.0	417.3	12.3	15.4
10/19/2005 17:07	8312.4	11	8.0	18.4	11.6	418.7	12.4	16.8
10/20/2005 8:10	8311.9	11.1	8.0	18.4	11.6	418.7	13.1	16.9
10/20/2005 13:45	8316.3	11	7.9	18.3	11.7	418.6	13.3	16.7
10/21/2005 8:04	8325.4	11.1	7.8	18.0	12.0	418.2	14.1	16.4
10/21/2005 13:07	8329.2	11	7.7	17.8	12.2	418.1	14.3	16.3
10/22/2005 9:08	8346.8	11.1	7.5	17.2	12.8	417.5	15.1	15.6
10/24/2005 15:34	8372.5	11	7.1	16.3	13.7	416.6	17.4	14.7
10/26/2005 16:37	8399	11.1	6.7	15.4	14.6	415.7	19.4	13.8
10/27/2005 15:20	8403.2	11.1	6.6	15.3	14.7	415.5	20.4	13.7
10/28/2005 15:57	8411.2	11	6.5	15.0	15.0	415.2	21.4	13.4
10/31/2005 10:57	8447.3	11	5.9	13.7	16.3	414.0	24.2	12.1
11/2/2005 15:01	8468.1	11	5.6	13.0	17.0	413.2	26.4	11.4
11/4/2005 11:36	8493.1	11.1	5.2	12.1	17.9	412.4	28.2	10.5
11/7/2005 15:11	8509.6	11.1	5.0	11.5	18.5	411.8	31.4	9.9
11/11/2005 13:35	8537.6	11.1	4.6	10.5	19.5	410.8	35.3	9.0
11/14/2005 16:39	8547.1	11.1	4.4	10.2	19.8	410.5	38.4	8.6
11/17/2005 15:28	8558.6	11.1	4.3	9.8	20.2	410.1	41.4	8.2
11/21/2005 12:20	8589.4	11.1	3.8	8.7	21.3	409.0	45.2	7.2
12/2/2005 11:59	8608.1	11.1	3.5	8.1	21.9	408.3	56.2	6.5
12/6/2005 14:51	8605.2	11.1	3.5	8.2	21.8	408.5	60.3	6.6
12/15/2005 14:40	8632.8	11.1	3.1	7.2	22.8	407.5	69.3	5.6

**Wastebed 13 Pilot Study  
Piezometer A-2 (30 ft)**

**A-2 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/5/2005

Grout = 0 to 20.7 ft

Bentonite Seal = 20.7 to 25 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8839.3

To = 15.6 degrees Celsius

Linear Gage Factor (psi) = 0.01517 psi/digit

Thermal Factor = 0.00142 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.27 ft

Piezometer Tip Elevation = 400.27 ft

Serial # 05-13904

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/22/2005 15:20	8648.9	11.1	2.9	6.7	23.3	406.9	76.4	5.1
12/29/2005 11:05	8666.9	11	2.6	6.0	24.0	406.3	83.2	4.4
1/5/2006 14:02	8656.9	11.2	2.8	6.4	23.6	406.6	90.3	4.8
1/12/2006 10:34	8620.7	11	3.3	7.6	22.4	407.9	97.2	6.1
1/19/2006 13:37	8590.1	11.1	3.8	8.7	21.3	409.0	104.3	7.1
1/26/2006 14:09	8589.8	11	3.8	8.7	21.3	409.0	111.3	7.1
2/2/2006 11:22	8610.4	11	3.5	8.0	22.0	408.3	118.2	6.4
2/9/2006 12:26	8599.2	11	3.6	8.4	21.6	408.7	125.2	6.8
2/16/2006 11:16	8620.3	11	3.3	7.7	22.3	407.9	132.2	6.1
2/23/2006 14:15	8643.6	11	3.0	6.8	23.2	407.1	139.3	5.3
3/2/2006 11:50	8675.2	11	2.5	5.7	24.3	406.0	146.2	4.1
3/9/2006 15:16	8698	11.2	2.1	4.9	25.1	405.2	153.4	3.4
3/16/2006 14:07	8647.7	11	2.9	6.7	23.3	407.0	160.3	5.1
3/23/2006 14:59	8651.8	11.1	2.8	6.5	23.5	406.8	167.4	5.0
3/31/2006 15:29	8681.1	11	2.4	5.5	24.5	405.8	175.4	3.9
4/6/2006 13:52	8688.8	11	2.3	5.3	24.7	405.5	181.3	3.7
4/13/2006 16:04	8690.2	11	2.3	5.2	24.8	405.5	188.4	3.6
4/20/2006 15:56	8701.9	11	2.1	4.8	25.2	405.1	195.4	3.2
4/26/2006 14:35	8694.8	11	2.2	5.0	25.0	405.3	201.3	3.5
5/4/2006 14:08	8704.1	11	2.0	4.7	25.3	405.0	209.3	3.1
5/11/2006 15:08	8722.9	11	1.8	4.1	25.9	404.3	216.4	2.5
5/18/2006 14:48	8735.1	11	1.6	3.6	26.4	403.9	223.3	2.1
5/25/2006 14:36	8730.4	11	1.6	3.8	26.2	404.1	230.3	2.2
6/1/2006 14:22	8728.7	11	1.7	3.9	26.1	404.1	237.3	2.3
6/8/2006 14:37	8733.6	11	1.6	3.7	26.3	404.0	244.3	2.1
6/15/2006 13:37	8730.1	11	1.7	3.8	26.2	404.1	251.3	2.2
6/22/2006 13:53	8736.6	11	1.6	3.6	26.4	403.9	258.3	2.0
6/29/2006 15:21	8742.4	11	1.5	3.4	26.6	403.6	265.4	1.8
7/6/2006 15:13	8741.7	11	1.5	3.4	26.6	403.7	272.4	1.8
7/13/2006 14:51	8723.3	11	1.8	4.0	26.0	404.3	279.3	2.5
7/20/2006 10:33	8697.9	11	2.1	4.9	25.1	405.2	286.2	3.4
7/27/2006 10:14	8717.5	11	1.8	4.2	25.8	404.5	293.2	2.7
8/3/2006 9:57	8728.5	11	1.7	3.9	26.1	404.1	300.1	2.3
8/10/2006 13:44	8736.2	11	1.6	3.6	26.4	403.9	307.3	2.0
8/17/2006 15:36	8739.1	11	1.5	3.5	26.5	403.8	314.4	1.9
8/24/2006 15:16	8752.5	11	1.3	3.0	27.0	403.3	321.4	1.4
8/31/2006 10:05	8749.8	11.1	1.4	3.1	26.9	403.4	328.1	1.5
9/7/2006 14:50	8758.6	11	1.2	2.8	27.2	403.1	335.3	1.2
9/14/2006 14:49	8762.1	11	1.2	2.7	27.3	403.0	342.3	1.1
9/21/2006 17:20	8760.4	11	1.2	2.7	27.3	403.0	349.5	1.2
9/28/2006 15:31	8770.8	11	1.0	2.4	27.6	402.7	356.4	0.8
10/5/2006 15:49	8751.6	11	1.3	3.1	26.9	403.3	363.4	1.5
10/12/2006 14:58	8762.7	11	1.2	2.7	27.3	402.9	370.4	1.1
10/20/2006 14:24	8752.7	11.1	1.3	3.0	27.0	403.3	378.3	1.4
10/26/2006 15:17	8694.1	11	2.2	5.1	24.9	405.3	384.4	3.5
11/8/2006 13:04	8696.7	11	2.2	5.0	25.0	405.2	397.3	3.4
11/15/2006 16:28	8703	11	2.1	4.8	25.2	405.0	404.4	3.2
12/7/2006 15:21	8654.3	11	2.8	6.5	23.5	406.7	426.4	4.9

**Wastebed 13 Pilot Study  
Piezometer A-2 (30 ft)**

**A-2 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/5/2005

Grout = 0 to 20.7 ft

Bentonite Seal = 20.7 to 25 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8839.3

To = 15.6 degrees Celsius

Linear Gage Factor (psi) = 0.01517 psi/digit

Thermal Factor = 0.00142 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.27 ft

Piezometer Tip Elevation = 400.27 ft

Serial # 05-13904

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/14/06 14:19	8686.7	11.1	2.3	5.3	24.7	405.6	433.3	3.7
12/21/2006 13:42	8694.8	11	2.2	5.0	25.0	405.3	440.3	3.5
12/28/06 13:58	8668.4	11	2.6	6.0	24.0	406.2	447.3	4.4
1/11/2007 15:48	8639.6	11	3.0	7.0	23.0	407.2	461.4	5.4
2/22/07 10:56	8757.9	11	1.2	2.8	27.2	403.1	503.2	1.3
3/7/2007 10:29	8731.6	11	1.6	3.8	26.2	404.0	516.2	2.2
4/12/07 11:30	8582.8	11	3.9	9.0	21.0	409.2	552.2	7.4
5/10/2007 11:56	8627.2	11	3.2	7.4	22.6	407.7	580.2	5.8
6/21/07 13:25	8776.5	11	0.9	2.2	27.8	402.5	622.3	0.6
7/12/2007 13:27	8784	11	0.8	1.9	28.1	402.2	643.3	0.3
8/15/07 13:37	8790.7	11.2	0.7	1.7	28.3	402.0	677.3	0.1
9/20/2007 14:44	8787.2	11	0.8	1.8	28.2	402.1	713.3	0.2
10/25/07 15:48	8786.4	11	0.8	1.8	28.2	402.1	748.4	0.3

**Wastebed 13 Pilot Study  
Piezometer A-2 (45 ft)**

**A-2 (45 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/4/2005

Grout = 0 to 33.5 ft

Bentonite Seal = 33.5 to 40 ft

Depth to piezometer tip from ground surface = 45 ft

Ro = 8816.6

To = 18 degrees Celsius

Linear Gage Factor (psi) = 0.01413 psi/digit

Thermal Factor = 0.00406 psi/C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.34 ft

Piezometer Tip Elevation = 385.34 ft

Serial # 05-13906

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/04/05 13:00	8672.7	12.4	2.0	4.6	40.4	390.0		
10/07/05 6:30	8702.7	11.4	1.6	3.7	41.3	389.0	0	0
10/08/05 9:06	8696.9	11.4	1.7	3.8	41.2	389.2	1.1	0.2
10/10/05 8:08	8695.2	11.4	1.7	3.9	41.1	389.2	3.1	0.2
10/10/05 11:47	8653.1	11.6	2.3	5.3	39.7	390.6	3.2	1.6
10/10/05 16:50	8630	11.4	2.6	6.0	39.0	391.4	3.4	2.4
10/11/05 7:34	8643.2	11.4	2.4	5.6	39.4	390.9	4.0	1.9
10/11/05 11:30	8578.1	11.4	3.3	7.7	37.3	393.1	4.2	4.1
10/11/05 16:35	8582.9	11.4	3.3	7.6	37.4	392.9	4.4	3.9
10/12/05 7:55	8599.5	11.4	3.0	7.0	38.0	392.4	5.1	3.4
10/12/05 14:16	8552.8	11.4	3.7	8.5	36.5	393.9	5.3	4.9
10/12/05 17:12	8541.7	11.7	3.9	8.9	36.1	394.2	5.4	5.3
10/13/05 8:58	8559.2	11	3.6	8.3	36.7	393.7	6.1	4.7
10/14/2005 10:16	8562.4	12.5	3.6	8.2	36.8	393.6	7.2	4.6
10/15/2005 7:50	8574.7	11.5	3.4	7.8	37.2	393.2	8.1	4.2
10/15/2005 13:10	8538.3	11.5	3.9	9.0	36.0	394.4	8.3	5.4
10/15/2005 14:17	8533.8	11.6	4.0	9.2	35.8	394.5	8.3	5.5
10/15/2005 16:48	8520.3	11.4	4.2	9.6	35.4	394.9	8.4	5.9
10/17/05 13:18	8467.2	11.4	4.9	11.3	33.7	396.7	10.3	7.7
10/18/2005 8:16	8480.3	11.4	4.7	10.9	34.1	396.2	11.1	7.3
10/18/2005 15:14	8410.5	11.6	5.7	13.2	31.8	398.5	11.4	9.5
10/18/2005 15:54	8403.6	11.4	5.8	13.4	31.6	398.7	11.4	9.8
10/18/2005 17:29	8374.6	11.4	6.2	14.4	30.6	399.7	11.5	10.7
10/19/2005 8:15	8354.6	11.4	6.5	15.0	30.0	400.3	12.1	11.4
10/19/2005 10:14	8330.8	11.4	6.8	15.8	29.2	401.1	12.2	12.1
10/19/2005 13:48	8319.6	11.4	7.0	16.1	28.9	401.5	12.3	12.5
10/19/2005 17:08	8276.3	11.4	7.6	17.6	27.4	402.9	12.4	13.9
10/20/2005 8:11	8274.3	11.4	7.6	17.6	27.4	403.0	13.1	14.0
10/20/2005 13:46	8278.9	11.4	7.6	17.5	27.5	402.8	13.3	13.8
10/21/2005 8:03	8288	11.4	7.4	17.2	27.8	402.5	14.1	13.5
10/21/2005 13:08	8292.1	11.5	7.4	17.0	28.0	402.4	14.3	13.4
10/22/2005 9:09	8308.4	11.4	7.2	16.5	28.5	401.8	15.1	12.9
10/24/2005 15:35	8325.7	11.4	6.9	15.9	29.1	401.3	17.4	12.3
10/26/2005 16:38	8342.6	11.4	6.7	15.4	29.6	400.7	19.4	11.7
10/27/2005 15:21	8341.1	11.4	6.7	15.4	29.6	400.8	20.4	11.8
10/28/2005 15:57	8343	11.4	6.7	15.4	29.6	400.7	21.4	11.7
10/31/2005 10:58	8365.8	11.4	6.3	14.6	30.4	400.0	24.2	11.0
11/2/2005 15:02	8377.1	11.4	6.2	14.3	30.7	399.6	26.4	10.6
11/4/2005 11:37	8395.6	11.4	5.9	13.7	31.3	399.0	28.2	10.0
11/7/2005 15:12	8401.4	11.4	5.8	13.5	31.5	398.8	31.4	9.8
11/11/2005 13:35	8419.1	11.4	5.6	12.9	32.1	398.2	35.3	9.2
11/14/2005 16:39	8419.5	11.4	5.6	12.9	32.1	398.2	38.4	9.2
11/17/2005 15:28	8427.8	11.4	5.5	12.6	32.4	398.0	41.4	9.0
11/21/2005 12:21	8444.5	11.4	5.2	12.1	32.9	397.4	45.2	8.4
12/2/2005 12:00	8459.5	11.4	5.0	11.6	33.4	396.9	56.2	7.9
12/6/2005 14:51	8441	11.4	5.3	12.2	32.8	397.5	60.3	8.5
12/15/2005 14:42	8458.8	11.4	5.0	11.6	33.4	396.9	69.3	8.0
12/22/2005 15:21	8476.7	11.4	4.8	11.0	34.0	396.4	76.4	7.4

**Wastedbed 13 Pilot Study  
Piezometer A-2 (45 ft)**

**A-2 (45 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/4/2005

Grout = 0 to 33.5 ft

Bentonite Seal = 33.5 to 40 ft

Depth to piezometer tip from ground surface = 45 ft

Ro = 8816.6

To = 18 degrees Celsius

Linear Gage Factor (psi) = 0.01413 psi/digit

Thermal Factor = 0.00406 psi/C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.34 ft

Piezometer Tip Elevation = 385.34 ft

Serial # 05-13906

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/29/2005 11:06	8504.6	11.4	4.4	10.1	34.9	395.5	83.2	6.5
1/5/2006 14:04	8495.6	11.4	4.5	10.4	34.6	395.7	90.3	6.8
1/12/2006 10:35	8461.1	11.4	5.0	11.5	33.5	396.9	97.2	7.9
1/19/2006 13:38	8427.5	11.3	5.5	12.6	32.4	398.0	104.3	9.0
1/26/2006 14:10	8413.7	11.4	5.7	13.1	31.9	398.4	111.3	9.4
2/2/2006 11:23	8434.3	11.5	5.4	12.4	32.6	397.7	118.2	8.8
2/9/2006 12:26	8425.9	11.5	5.5	12.7	32.3	398.0	125.2	9.0
2/16/2006 11:17	8433.5	11.3	5.4	12.4	32.6	397.8	132.2	8.8
2/23/2006 14:16	8458	11.3	5.0	11.6	33.4	397.0	139.3	8.0
3/2/2006 11:51	8487.3	11.5	4.6	10.7	34.3	396.0	146.2	7.0
3/9/2006 15:17	8515.4	11.3	4.2	9.8	35.2	395.1	153.4	6.1
3/16/2006 14:08	8494.2	11.3	4.5	10.4	34.6	395.8	160.3	6.8
3/23/2006 15:00	8482.4	11.3	4.7	10.8	34.2	396.2	167.4	7.2
3/31/2006 15:30	8506.6	11.3	4.4	10.0	35.0	395.4	175.4	6.4
4/6/2006 13:54	8516.5	11.3	4.2	9.7	35.3	395.1	181.3	6.1
4/13/2006 16:05	8523.1	11.3	4.1	9.5	35.5	394.8	188.4	5.9
4/20/2006 15:57	8534.9	11.3	4.0	9.1	35.9	394.5	195.4	5.5
4/26/2006 14:36	8538.7	11.3	3.9	9.0	36.0	394.3	201.3	5.3
5/4/2006 14:09	8541.5	11.3	3.9	8.9	36.1	394.2	209.3	5.3
5/11/2006 15:09	8560.5	11.3	3.6	8.3	36.7	393.6	216.4	4.6
5/18/2006 14:49	8580.2	11.3	3.3	7.6	37.4	393.0	223.3	4.0
5/25/2006 14:37	8573.9	11.3	3.4	7.9	37.1	393.2	230.3	4.2
6/1/2006 14:23	8573.6	11.3	3.4	7.9	37.1	393.2	237.3	4.2
6/8/2006 14:37	8583.4	11.3	3.3	7.5	37.5	392.9	244.3	3.9
6/15/2006 13:38	8582.3	11.2	3.3	7.6	37.4	392.9	251.3	3.9
6/22/2006 13:53	8591.6	11.2	3.2	7.3	37.7	392.6	258.3	3.6
6/29/2006 15:22	8600.2	11.2	3.0	7.0	38.0	392.3	265.4	3.3
7/6/2006 15:14	8602.2	11.3	3.0	6.9	38.1	392.3	272.4	3.3
7/13/2006 14:51	8600.8	11.2	3.0	7.0	38.0	392.3	279.3	3.3
7/20/2006 10:34	8566.8	11.3	3.5	8.1	36.9	393.4	286.2	4.4
7/27/2006 10:15	8575.4	11.2	3.4	7.8	37.2	393.1	293.2	4.1
8/3/2006 9:58	8587.1	11.3	3.2	7.4	37.6	392.8	300.1	3.8
8/10/2006 13:46	8596.5	11.2	3.1	7.1	37.9	392.5	307.3	3.5
8/17/2006 15:37	8599.2	11.2	3.0	7.0	38.0	392.4	314.4	3.4
8/24/2006 15:17	8618.9	11.2	2.8	6.4	38.6	391.7	321.4	2.7
8/31/2006 10:06	8618.1	11.2	2.8	6.4	38.6	391.7	328.1	2.8
9/7/2006 14:51	8630.9	11.2	2.6	6.0	39.0	391.3	335.3	2.3
9/14/2006 14:50	8638.3	11.2	2.5	5.8	39.2	391.1	342.3	2.1
9/21/2006 17:21	8640.7	11.3	2.5	5.7	39.3	391.0	349.5	2.0
9/28/2006 15:31	8655.4	11.2	2.3	5.2	39.8	390.5	356.4	1.5
10/5/2006 15:51	8636.1	11.3	2.5	5.8	39.2	391.2	363.4	2.2
10/12/2006 15:00	8652	11.2	2.3	5.3	39.7	390.6	370.4	1.7
10/20/2006 14:25	8642.3	11.4	2.4	5.6	39.4	391.0	378.3	2.0
10/26/2006 15:18	8565.7	11.2	3.5	8.1	36.9	393.5	384.4	4.5
11/8/2006 13:05	8545.9	11.2	3.8	8.8	36.2	394.1	397.3	5.1
11/15/2006 16:23	8545.2	11.2	3.8	8.8	36.2	394.1	404.4	5.1
12/7/2006 15:22	8499.8	11.2	4.4	10.3	34.7	395.6	426.4	6.6
12/14/06 14:20	8519.4	11.2	4.2	9.6	35.4	395.0	433.3	6.0

**Wastebed 13 Pilot Study  
Piezometer A-2 (45 ft)**

**A-2 (45 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/4/2005

Grout = 0 to 33.5 ft

Bentonite Seal = 33.5 to 40 ft

Depth to piezometer tip from ground surface = 45 ft

Ro = 8816.6

To = 18 degrees Celsius

Linear Gage Factor (psi) = 0.01413 psi/digit

Thermal Factor = 0.00406 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.34 ft

Piezometer Tip Elevation = 385.34 ft

Serial # 05-13906

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/21/2006 13:43	8524.3	11.2	4.1	9.5	35.5	394.8	440.3	5.8
12/28/06 14:00	8517.3	11.2	4.2	9.7	35.3	395.0	447.3	6.0
1/11/2007 15:49	8487.2	11.2	4.6	10.7	34.3	396.0	461.4	7.0
2/22/07 10:58	8613.6	11.3	2.8	6.6	38.4	391.9	503.2	2.9
3/7/2007 10:30	8604.9	11.2	3.0	6.8	38.2	392.2	516.2	3.2
4/12/07 11:31	8404.2	11.2	5.8	13.4	31.6	398.7	552.2	9.7
5/10/2007 11:57	8423.5	11	5.5	12.8	32.2	398.1	580.2	9.1
6/21/07 13:26	8644.5	11.3	2.4	5.5	39.5	390.9	622.3	1.9
7/12/2007 13:28	8684.9	11.1	1.8	4.2	40.8	389.6	643.3	0.6
8/15/07 13:39	8716.2	11.1	1.4	3.2	41.8	388.5	677.3	-0.4
9/20/2007 14:45	8726	11.1	1.3	2.9	42.1	388.2	713.3	-0.8
10/25/07 15:48	8726.8	11.1	1.2	2.9	42.1	388.2	748.4	-0.8

**Wastebed 13 Pilot Study  
Piezometer A-3 (15 ft)**

**A-3 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/21/2005

Grout = 0 to 6.8 ft

Bentonite Seal = 6.8 to 11.5 ft

Sandpack = 11.5 to 15 ft

Depth to piezometer tip from ground surface = 14.5 ft

Ro = 8888.8

To = 20.3 degrees Celsius

Linear Gage Factor (psi) = 0.01582 psi/digit

Thermal Factor = 0.010035 psi/C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.93 ft

Piezometer Tip Elevation = 415.43 ft

Serial # 04-12601

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/21/05 15:55	8690.1	21.8	3.2	7.3	7.2	422.7		
9/21/05 16:22	8795.5	20.9	1.5	3.4	11.1	418.9		
9/22/05 7:53	8883.8	12.5	0.0	0.0	14.5	415.4		
10/7/05 6:30	8891.1	10.1	-0.1	-0.3	>= 14.5 ft	NA	0	0
10/8/05 8:56	8892.0	10.1	-0.2	-0.4	>= 14.5 ft	NA	1.1	0.0
10/10/05 8:16	8886.4	10.1	-0.1	-0.1	>= 14.5 ft	NA	3.1	0.2
10/10/05 11:45	8886.7	10	-0.1	-0.2	>= 14.5 ft	NA	3.2	0.2
10/10/05 16:52	8887.6	10.1	-0.1	-0.2	>= 14.5 ft	NA	3.4	0.1
10/11/05 8:05	8971.5	11	-1.4	-3.2	>= 14.5 ft	NA	4.1	-2.9
10/11/05 11:46	8885.7	10.1	-0.1	-0.1	>= 14.5 ft	NA	4.2	0.2
10/11/05 17:29	8885.9	10.1	-0.1	-0.1	>= 14.5 ft	NA	4.5	0.2
10/12/05 8:52	8883.5	10.1	0.0	0.0	>= 14.5 ft	NA	5.1	0.3
10/12/05 14:07	8882.8	10.1	0.0	0.0	>= 14.5 ft	NA	5.3	0.3
10/12/05 17:14	8882.5	10.1	0.0	0.0	>= 14.5 ft	NA	5.4	0.3
10/13/05 8:44	8883.2	10.3	0.0	0.0	>= 14.5 ft	NA	6.1	0.3
10/14/2005 10:31	8886.7	11.6	-0.1	-0.1	>= 14.5 ft	NA	7.2	0.2
10/15/2005 7:39	8885.7	10.2	-0.1	-0.1	>= 14.5 ft	NA	8.0	0.2
10/15/2005 12:50	8864.9	10.2	0.3	0.6	13.9	416.1	8.3	1.0
10/15/2005 16:34	8840.6	10.1	0.7	1.5	13.0	417.0	8.4	1.8
10/17/2005 7:57	8786.6	10.1	1.5	3.5	11.0	418.9	10.1	3.8
10/17/2005 12:55	8780.2	10.1	1.6	3.7	10.8	419.2	10.3	4.0
10/18/2005 7:50	8787.1	10.1	1.5	3.5	11.0	418.9	11.1	3.8
10/18/2005 15:01	8752.5	10.1	2.1	4.7	9.8	420.2	11.4	5.1
10/18/2005 17:34	8719.6	10.1	2.6	5.9	8.6	421.4	11.5	6.3
10/19/2005 7:52	8728	10.1	2.4	5.6	8.9	421.1	12.1	6.0
10/19/2005 13:24	8670	10.1	3.4	7.8	6.7	423.2	12.3	8.1
10/19/2005 17:26	8652.4	10.1	3.6	8.4	6.1	423.8	12.5	8.7
10/20/2005 8:18	8682.5	10.1	3.2	7.3	7.2	422.7	13.1	7.6
10/20/2005 13:53	8691.1	10.1	3.0	7.0	7.5	422.4	13.3	7.3
10/21/2005 7:54	8714.4	10.2	2.7	6.1	8.4	421.6	14.1	6.5
10/21/2005 12:53	8718.7	10.2	2.6	6.0	8.5	421.4	14.3	6.3
10/22/2005 8:32	8739	10.2	2.3	5.2	9.3	420.7	15.1	5.6
10/24/2005 15:15	8743.2	10.1	2.2	5.1	9.4	420.5	17.4	5.4
10/26/2005 16:11	8710.8	10.2	2.7	6.3	8.2	421.7	19.4	6.6
10/27/2005 14:48	8712	10.1	2.7	6.2	8.3	421.6	20.3	6.5
10/28/2005 15:33	8720.1	10.1	2.6	5.9	8.6	421.4	21.4	6.2
10/31/2005 10:38	8744.9	10.1	2.2	5.0	9.5	420.4	24.2	5.3
11/2/2005 14:44	8761	10.2	1.9	4.4	10.1	419.9	26.3	4.8
11/4/2005 11:10	8770.9	10.2	1.8	4.1	10.4	419.5	28.2	4.4
11/7/2005 14:45	8775.3	10.2	1.7	3.9	10.6	419.3	31.3	4.2
11/11/2005 13:51	8764.8	10.2	1.9	4.3	10.2	419.7	35.3	4.6
11/14/2005 16:45	8756.1	10.3	2.0	4.6	9.9	420.0	38.4	4.9
11/17/2005 15:21	8705.5	10.3	2.8	6.5	8.0	421.9	41.4	6.8
11/21/2005 12:15	8741.7	10.3	2.2	5.1	9.4	420.6	45.2	5.5
12/2/2005 11:42	8722.7	10.5	2.5	5.8	8.7	421.3	56.2	6.2
12/6/2005 14:43	8733.5	10.4	2.4	5.4	9.1	420.9	60.3	5.8
12/15/2005 14:26	8762.6	10.5	1.9	4.4	10.1	419.8	69.3	4.7

**Wastebed 13 Pilot Study  
Piezometer A-3 (15 ft)**

**A-3 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/21/2005

Grout = 0 to 6.8 ft

Bentonite Seal = 6.8 to 11.5 ft

Sandpack = 11.5 to 15 ft

Depth to piezometer tip from ground surface = 14.5 ft

Ro = 8888.8

To = 20.3 degrees Celsius

Linear Gage Factor (psi) = 0.01582 psi/digit

Thermal Factor = 0.010035 psi/C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.93 ft

Piezometer Tip Elevation = 415.43 ft

Serial # 04-12601

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/22/2005 15:09	8784.8	10.5	1.5	3.6	10.9	419.0	76.4	3.9
12/29/2005 10:53	8768.3	10.6	1.8	4.2	10.3	419.6	83.2	4.5
1/5/2006 13:53	8743.6	10.6	2.2	5.1	9.4	420.5	90.3	5.4
1/12/2006 10:27	8704.5	10.6	2.8	6.5	8.0	421.9	97.2	6.8
1/19/2006 13:27	8704.6	10.6	2.8	6.5	8.0	421.9	104.3	6.8
1/26/2006 13:58	8712.9	10.7	2.7	6.2	8.3	421.6	111.3	6.5
2/2/2006 11:14	8710.4	10.7	2.7	6.3	8.2	421.7	118.2	6.6
2/9/2006 12:16	8706.7	10.7	2.8	6.4	8.1	421.9	125.2	6.7
2/16/2006 11:08	8730.3	10.8	2.4	5.6	8.9	421.0	132.2	5.9
2/23/2006 14:05	8748.6	10.8	2.1	4.9	9.6	420.3	139.3	5.2
3/2/2006 11:42	8777.2	10.8	1.7	3.9	10.6	419.3	146.2	4.2
3/9/2006 15:08	8799.1	10.8	1.3	3.1	11.4	418.5	153.4	3.4
3/16/2006 13:58	8719.9	10.8	2.6	5.9	8.6	421.4	160.3	6.3
3/23/2006 14:49	8750.8	10.8	2.1	4.8	9.7	420.2	167.3	5.1
3/31/2006 15:20	8771.8	10.8	1.8	4.1	10.4	419.5	175.4	4.4
4/6/2006 13:44	8781.3	10.8	1.6	3.7	10.8	419.1	181.3	4.0
4/13/2006 15:56	8778.4	10.8	1.7	3.8	10.7	419.2	188.4	4.1
4/20/2006 15:48	8793.8	10.8	1.4	3.2	11.3	418.7	195.4	3.6
4/26/2006 14:26	8765.5	10.8	1.9	4.3	10.2	419.7	201.3	4.6
5/4/2006 14:01	8789.6	10.8	1.5	3.4	11.1	418.8	209.3	3.7
5/11/2006 14:59	8810.7	10.7	1.1	2.6	11.9	418.1	216.4	2.9
5/18/2006 14:08	8825.2	10.7	0.9	2.1	12.4	417.5	223.3	2.4
5/25/2006 14:27	8815.1	10.7	1.1	2.5	12.0	417.9	230.3	2.8
6/1/2006 14:15	8814.5	10.7	1.1	2.5	12.0	417.9	237.3	2.8
6/8/2006 14:30	8817.4	10.7	1.0	2.4	12.1	417.8	244.3	2.7
6/15/2006 13:29	8816.8	10.6	1.0	2.4	12.1	417.8	251.3	2.7
6/22/2006 13:44	8823.2	10.6	0.9	2.2	12.3	417.6	258.3	2.5
6/29/2006 15:12	8826.5	10.6	0.9	2.0	12.5	417.5	265.4	2.4
7/6/2006 15:04	8829.7	10.6	0.8	1.9	12.6	417.4	272.4	2.3
7/13/2006 14:43	8720	10.5	2.6	5.9	8.6	421.4	279.3	6.3
7/20/2006 10:25	8772.8	10.7	1.7	4.0	10.5	419.4	286.2	4.3
7/27/2006 10:05	8802.9	10.5	1.3	2.9	11.6	418.3	293.1	3.2
8/3/2006 9:48	8812.9	10.5	1.1	2.5	12.0	418.0	300.1	2.9
8/10/2006 13:36	8810.8	10.5	1.1	2.6	11.9	418.1	307.3	2.9
8/17/2006 15:28	8812.1	10.5	1.1	2.6	11.9	418.0	314.4	2.9
8/24/2006 15:09	8827.1	10.5	0.9	2.0	12.5	417.5	321.4	2.3
8/31/2006 9:57	8829.9	10.4	0.8	1.9	12.6	417.4	328.1	2.2
9/7/2006 14:40	8835.9	10.4	0.7	1.7	12.8	417.1	335.3	2.0
9/14/2006 14:40	8843.9	10.5	0.6	1.4	13.1	416.8	342.3	1.7
9/21/2006 17:13	8844.4	10.4	0.6	1.4	13.1	416.8	349.4	1.7
9/28/2006 15:24	8851	10.7	0.5	1.2	13.3	416.6	356.4	1.5
10/5/2006 15:40	8810	10.5	1.1	2.6	11.9	418.1	363.4	3.0
10/12/2006 14:46	8832.4	10.5	0.8	1.8	12.7	417.3	370.3	2.2
10/20/2006 14:16	8768.2	11.1	1.8	4.2	10.3	419.6	378.3	4.5
10/26/2006 15:06	8735.8	10.5	2.3	5.4	9.1	420.8	384.4	5.7
11/8/2006 12:57	8768	10.6	1.8	4.2	10.3	419.6	397.3	4.5
11/15/2006 16:12	8760.6	10.7	1.9	4.5	10.0	419.9	404.4	4.8

**Wastebed 13 Pilot Study  
Piezometer A-3 (15 ft)**

**A-3 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/21/2005

Grout =

Serial # 04-12601

0 to 6.8 ft

Bentonite Seal =

6.8 to 11.5 ft

Sandpack =

11.5 to 15 ft

Depth to piezometer tip from ground surface =

14.5 ft

Ro =

8888.8

To = 20.3 degrees Celsius

Linear Gage Factor (psi) =

0.01582 psi/digit

Thermal Factor =

0.010035 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.93 ft

Piezometer Tip Elevation =

415.43 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/7/2006 15:10	8728.9	10.7	2.4	5.6	8.9	421.0	426.4	5.9
12/14/06 14:09	8759.6	10.8	1.9	4.5	10.0	419.9	433.3	4.8
12/21/2006 13:31	8769.2	10.8	1.8	4.1	10.4	419.6	440.3	4.5
12/28/06 13:47	8711.3	10.9	2.7	6.3	8.2	421.7	447.3	6.6
1/11/2007 15:34	8697.4	11	2.9	6.8	7.7	422.2	461.4	7.1
3/7/2007 10:55	8773.8	11.2	1.7	4.0	10.5	419.4	516.2	4.3
4/12/07 11:23	8647.3	11.3	3.7	8.6	5.9	424.0	552.2	8.9
5/10/2007 11:48	8690	11.2	3.1	7.0	7.5	422.5	580.2	7.4
6/21/07 13:16	8824.4	11.6	0.9	2.1	12.4	417.6	622.3	2.5
7/12/2007 13:18	8857	10.9	0.4	0.9	13.6	416.4	643.3	1.3
8/15/07 13:28	8876.9	10.8	0.1	0.2	14.3	415.6	677.3	0.5
9/20/2007 14:34	8879.6	10.8	0.1	0.1	14.4	415.5	713.3	0.4
10/25/07 15:15	8869.7	10.8	0.2	0.5	14.0	415.9	748.4	0.8

**Wastedbed 13 Pilot Study  
Piezometer A-3 (30 ft)**

**A-3 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/21/2005

Grout = 0 to 21.4 ft

Bentonite Seal = 21.4 to 26.5 ft

Sandpack = 26.5 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 9050.4

To = 16.2 degrees Celsius

Linear Gage Factor (psi) = 0.01595 psi/digit

Thermal Factor = 0.008498 psi/C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.61 ft

Piezometer Tip Elevation = 400.11 ft

Serial # 04-12606

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/21/05 11:40	8518	15.3	8.5	19.6	9.9	419.7		
9/21/05 12:55	8660	13.9	6.2	14.3	15.2	414.4		
9/21/05 16:33	8977.5	12	1.1	2.6	26.9	402.7		
9/22/05 9:22	8987.8	11.6	1.0	2.2	27.3	402.3		
10/7/05 6:30	8984.7	11	1.0	2.3	27.2	402.4	0	0
10/8/05 8:55	8984.9	11	1.0	2.3	27.2	402.4	1.1	0.0
10/10/05 8:17	8980.1	11	1.1	2.5	27.0	402.6	3.1	0.2
10/10/05 11:44	8978.5	11	1.1	2.5	27.0	402.7	3.2	0.2
10/10/05 16:53	8972.8	11	1.2	2.8	26.7	402.9	3.4	0.4
10/11/05 8:04	8885.9	10.1	2.6	5.9	23.6	406.0	4.1	3.6
10/11/05 11:45	8946.4	11	1.6	3.7	25.8	403.8	4.2	1.4
10/11/05 17:26	8897.5	11.0	2.4	5.5	24.0	405.6	4.5	3.2
10/12/05 8:50	8921.8	11	2.0	4.6	24.9	404.7	5.1	2.3
10/12/05 14:07	8917.2	11	2.1	4.8	24.7	404.9	5.3	2.5
10/12/05 17:15	8893.4	11.4	2.5	5.7	23.8	405.8	5.4	3.4
10/13/05 8:46	8902.8	11	2.3	5.3	24.2	405.4	6.1	3.0
10/14/2005 10:32	8917.3	12.3	2.1	4.8	24.7	404.9	7.2	2.5
10/15/2005 7:40	8933.1	11	1.8	4.2	25.3	404.3	8.0	1.9
10/15/2005 12:50	8927.1	11	1.9	4.4	25.1	404.5	8.3	2.1
10/15/2005 16:31	8893.1	11	2.5	5.7	23.8	405.8	8.4	3.4
10/17/2005 7:59	8871.7	11	2.8	6.5	23.0	406.6	10.1	4.2
10/17/2005 12:56	8853.5	11	3.1	7.1	22.4	407.3	10.3	4.8
10/18/2005 7:50	8877.8	11	2.7	6.3	23.2	406.4	11.1	3.9
10/18/2005 15:02	8818.8	11	3.6	8.4	21.1	408.5	11.4	6.1
10/18/2005 17:34	8771.2	11	4.4	10.2	19.3	410.3	11.5	7.9
10/19/2005 7:52	8779.2	11	4.3	9.9	19.6	410.0	12.1	7.6
10/19/2005 13:24	8696.4	11	5.6	12.9	16.6	413.0	12.3	10.6
10/19/2005 17:27	8695.7	11	5.6	13.0	16.5	413.1	12.5	10.6
10/20/2005 8:18	8705	11	5.5	12.6	16.9	412.7	13.1	10.3
10/20/2005 13:54	8710.9	11	5.4	12.4	17.1	412.5	13.3	10.1
10/21/2005 7:55	8726.2	11	5.1	11.8	17.7	411.9	14.1	9.5
10/21/2005 12:54	8733.5	11	5.0	11.6	17.9	411.7	14.3	9.2
10/22/2005 8:33	8755.6	11	4.7	10.7	18.8	410.9	15.1	8.4
10/24/2005 15:16	8781.1	11	4.3	9.8	19.7	409.9	17.4	7.5
10/26/2005 16:13	8798.6	11	4.0	9.2	20.3	409.3	19.4	6.8
10/27/2005 14:49	8796.2	11	4.0	9.3	20.2	409.4	20.3	6.9
10/28/2005 15:34	8798.3	11	4.0	9.2	20.3	409.3	21.4	6.9
10/31/2005 10:39	8827	10.9	3.5	8.1	21.4	408.2	24.2	5.8
11/2/2005 14:45	8833.1	10.9	3.4	7.9	21.6	408.0	26.3	5.6
11/4/2005 11:10	8849	10.9	3.2	7.3	22.2	407.4	28.2	5.0
11/7/2005 14:46	8851.3	10.9	3.1	7.2	22.3	407.3	31.3	4.9
11/11/2005 13:52	8869.5	10.9	2.8	6.6	22.9	406.7	35.3	4.2
11/14/2005 16:45	8866.9	10.9	2.9	6.7	22.8	406.8	38.4	4.3
11/17/2005 15:22	8866.6	10.9	2.9	6.7	22.8	406.8	41.4	4.3
11/21/2005 12:15	8883.9	10.9	2.6	6.0	23.5	406.1	45.2	3.7
12/2/2005 11:43	8890.3	10.9	2.5	5.8	23.7	405.9	56.2	3.5
12/6/2005 14:44	8886.1	10.9	2.6	5.9	23.6	406.1	60.3	3.6

**Wastebed 13 Pilot Study  
Piezometer A-3 (30 ft)**

**A-3 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/21/2005

Grout =

0 to 21.4 ft

Bentonite Seal =

21.4 to 26.5 ft

Sandpack =

26.5 to 30 ft

Depth to piezometer tip from ground surface =

29.5 ft

Ro =

9050.4

To =

16.2 degrees Celsius

Linear Gage Factor (psi) =

0.01595 psi/digit

Thermal Factor =

0.008498 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.61 ft

Piezometer Tip Elevation =

400.11 ft

Serial # 04-12606

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/15/2005 14:28	8907	10.9	2.2	5.2	24.3	405.3	69.3	2.9
12/22/2005 15:10	8919.9	10.9	2.0	4.7	24.8	404.8	76.4	2.4
12/29/2005 10:55	8936.9	10.9	1.8	4.1	25.4	404.2	83.2	1.8
1/5/2006 13:54	8923.4	10.9	2.0	4.6	24.9	404.7	90.3	2.3
1/12/2006 10:28	8897.2	10.9	2.4	5.5	24.0	405.6	97.2	3.2
1/19/2006 13:28	8865	10.9	2.9	6.7	22.8	406.8	104.3	4.4
1/26/2006 13:59	8866.1	11	2.9	6.7	22.8	406.8	111.3	4.4
2/2/2006 11:16	8899.5	10.9	2.4	5.5	24.0	405.6	118.2	3.1
2/9/2006 12:17	8886.8	11	2.6	5.9	23.6	406.0	125.2	3.6
2/16/2006 11:09	8899.2	10.9	2.4	5.5	24.0	405.6	132.2	3.1
2/23/2006 14:06	8919.8	10.9	2.0	4.7	24.8	404.8	139.3	2.4
3/2/2006 11:42	8942	11	1.7	3.9	25.6	404.0	146.2	1.6
3/9/2006 15:09	8958.9	10.9	1.4	3.3	26.2	403.4	153.4	0.9
3/16/2006 13:59	8916.5	10.9	2.1	4.8	24.7	404.9	160.3	2.5
3/23/2006 14:50	8921	10.9	2.0	4.7	24.8	404.8	167.3	2.3
3/31/2006 15:21	8944.4	10.9	1.6	3.8	25.7	403.9	175.4	1.5
4/6/2006 13:45	8947.8	10.8	1.6	3.7	25.8	403.8	181.3	1.4
4/13/2006 15:56	8948.1	10.8	1.6	3.7	25.8	403.8	188.4	1.3
4/20/2006 15:49	8956.5	10.9	1.5	3.4	26.1	403.5	195.4	1.0
4/26/2006 14:27	8948.3	10.8	1.6	3.7	25.8	403.8	201.3	1.3
5/4/2006 14:01	8959.7	10.8	1.4	3.2	26.3	403.3	209.3	0.9
5/11/2006 15:00	8973.2	10.9	1.2	2.7	26.8	402.8	216.4	0.4
5/18/2006 14:09	8979.5	10.8	1.1	2.5	27.0	402.6	223.3	0.2
5/25/2006 14:28	8977.1	10.8	1.1	2.6	26.9	402.7	230.3	0.3
6/1/2006 14:16	8975.7	10.9	1.1	2.6	26.9	402.8	237.3	0.3
6/8/2006 14:31	8978.6	10.9	1.1	2.5	27.0	402.6	244.3	0.2
6/15/2006 13:30	8974.2	10.8	1.2	2.7	26.8	402.8	251.3	0.4
6/22/2006 13:45	8980.9	10.8	1.1	2.5	27.0	402.6	258.3	0.1
6/29/2006 15:13	8986	10.9	1.0	2.3	27.2	402.4	265.4	0.0
7/6/2006 15:04	8983.3	10.9	1.0	2.4	27.1	402.5	272.4	0.0
7/13/2006 14:44	8965.3	10.9	1.3	3.0	26.5	403.1	279.3	0.7
7/20/2006 10:26	8946.5	10.9	1.6	3.7	25.8	403.8	286.2	1.4
7/27/2006 10:06	8962.4	10.9	1.4	3.1	26.4	403.2	293.1	0.8
8/3/2006 9:50	8969.1	10.9	1.3	2.9	26.6	403.0	300.1	0.6
8/10/2006 13:37	8974.3	10.9	1.2	2.7	26.8	402.8	307.3	0.4
8/17/2006 15:29	8976.3	10.9	1.1	2.6	26.9	402.7	314.4	0.3
8/24/2006 15:09	8985.4	10.9	1.0	2.3	27.2	402.4	321.4	0.0
9/1/2006 13:24	8985.8	10.9	1.0	2.3	27.2	402.4	329.3	0.0
9/7/2006 14:42	8990.2	11	0.9	2.1	27.4	402.2	335.3	-0.2
9/14/2006 14:41	8992.5	10.9	0.9	2.0	27.5	402.1	342.3	-0.3
9/21/2006 17:13	8987.4	10.9	1.0	2.2	27.3	402.3	349.4	-0.1
9/28/2006 15:25	8999.4	11	0.8	1.8	27.7	401.9	356.4	-0.5
10/5/2006 15:40	8985.6	10.9	1.0	2.3	27.2	402.4	363.4	0.0
10/12/2006 14:47	8995.2	10.9	0.8	1.9	27.6	402.0	370.3	-0.4
10/20/2006 14:17	8982.6	11	1.0	2.4	27.1	402.5	378.3	0.1
10/26/2006 15:07	8936.9	10.9	1.8	4.1	25.4	404.2	384.4	1.8
11/8/2006 12:58	8940.8	10.9	1.7	3.9	25.6	404.0	397.3	1.6

**Wastebed 13 Pilot Study  
Piezometer A-3 (30 ft)**

**A-3 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/21/2005

Grout =

0 to 21.4 ft

Bentonite Seal =

21.4 to 26.5 ft

Sandpack =

26.5 to 30 ft

Depth to piezometer tip from ground surface =

29.5 ft

Ro =

9050.4

To =

16.2 degrees Celsius

Linear Gage Factor (psi) =

0.01595 psi/digit

Thermal Factor =

0.008498 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.61 ft

Piezometer Tip Elevation =

400.11 ft

Serial # 04-12606

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/15/2006 16:14	8941.5	10.9	1.7	3.9	25.6	404.0	404.4	1.6
12/7/2006 15:11	8901.4	10.9	2.3	5.4	24.1	405.5	426.4	3.1
12/14/06 14:10	8933.3	10.9	1.8	4.2	25.3	404.3	433.3	1.9
12/21/2006 13:32	8937	10.9	1.8	4.1	25.4	404.2	440.3	1.8
12/28/06 13:48	8914.6	10.9	2.1	4.9	24.6	405.0	447.3	2.6
1/11/2007 15:35	8891.6	10.9	2.5	5.7	23.8	405.9	461.4	3.4
3/7/2007 10:56	8959.8	10.9	1.4	3.2	26.3	403.3	516.2	0.9
4/12/07 11:24	8848.1	10.9	3.2	7.3	22.2	407.5	552.2	5.0
5/10/2007 11:49	8874.1	10.8	2.8	6.4	23.1	406.5	580.2	4.1
6/21/07 13:17	9003.9	11.7	0.7	1.6	27.9	401.7	622.3	-0.7
7/12/2007 13:19	9009.7	11	0.6	1.4	28.1	401.5	643.3	-0.9
8/15/07 13:30	9011.3	10.9	0.6	1.3	28.2	401.4	677.3	-1.0
9/20/2007 14:35	8995.4	11	0.8	1.9	27.6	402.0	713.3	-0.4
10/25/07 15:16	8986.1	11	1.0	2.3	27.2	402.4	748.4	-0.1

**Wastebed 13 Pilot Study  
Piezometer A-3 (Native)**

**A-3 (Native)**

Typical Vibrating Wire Piezometer

Date Installed: 9/20/2005

Grout =

0 to 63.3 ft

Bentonite Seal =

63.3 to 75.5 ft

Sandpack =

75.5 to 79 ft

Depth to piezometer tip from ground surface =

78.5 ft

Ro =

8703.2

To =

19.2 degrees Celsius

Linear Gage Factor (psi) =

0.01443 psi/digit

Thermal Factor =

0.00276 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.86 ft

Piezometer Tip Elevation =

351.36 ft

Serial # 05-13902

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/20/05 13:46	7926.6	18.7	11.2	25.9	52.6	377.2		
9/20/05 14:23	7705.2	18.3	14.4	33.2	45.3	384.6		
9/21/05 16:29	8069.0	12.2	9.1	21.1	57.4	372.4		
9/22/05 7:52	8070.5	11.7	9.1	21.0	57.5	372.4		
10/7/05 6:30	8075.5	10.5	9.0	20.8	57.7	372.2	0	0
10/8/05 8:53	8072.0	10.6	9.1	21.0	57.5	372.3	1.1	0.1
10/10/05 8:15	8062.4	10.8	9.2	21.3	57.2	372.6	3.1	0.4
10/10/05 11:43	8062.6	10.5	9.2	21.3	57.2	372.6	3.2	0.4
10/10/05 16:54	8063.6	10.5	9.2	21.2	57.3	372.6	3.4	0.4
10/11/05 8:03	8062.4	10.6	9.2	21.3	57.2	372.6	4.1	0.4
10/11/05 11:45	8061.9	10.5	9.2	21.3	57.2	372.7	4.2	0.5
10/11/05 17:30	8062.3	10.6	9.2	21.3	57.2	372.6	4.5	0.4
10/12/05 8:54	8060.3	10.5	9.3	21.4	57.1	372.7	5.1	0.5
10/12/05 14:05	8059.3	10.5	9.3	21.4	57.1	372.7	5.3	0.5
10/12/05 17:16	8059.6	10.8	9.3	21.4	57.1	372.7	5.4	0.5
10/13/05 8:47	8060	10.6	9.3	21.4	57.1	372.7	6.1	0.5
10/14/2005 10:33	8060.2	11.6	9.3	21.4	57.1	372.7	7.2	0.5
10/15/2005 7:41	8067.1	10.5	9.2	21.1	57.4	372.5	8.0	0.3
10/15/2005 12:53	8069.6	10.6	9.1	21.0	57.5	372.4	8.3	0.2
10/15/2005 16:34	8069.7	10.5	9.1	21.0	57.5	372.4	8.4	0.2
10/17/2005 8:01	8063.2	10.5	9.2	21.3	57.2	372.6	10.1	0.4
10/17/2005 12:57	8063	10.5	9.2	21.3	57.2	372.6	10.3	0.4
10/18/2005 7:51	8071.2	10.5	9.1	21.0	57.5	372.4	11.1	0.1
10/18/2005 15:10	8069	10.5	9.1	21.1	57.4	372.4	11.4	0.2
10/18/2005 17:33	8066.7	10.5	9.2	21.1	57.4	372.5	11.5	0.3
10/19/2005 7:53	8062.4	10.6	9.2	21.3	57.2	372.6	12.1	0.4
10/19/2005 13:24	8070.1	10.5	9.1	21.0	57.5	372.4	12.3	0.2
10/19/2005 17:28	8066.9	10.5	9.2	21.1	57.4	372.5	12.5	0.3
10/20/2005 8:17	8056.4	10.5	9.3	21.5	57.0	372.8	13.1	0.6
10/20/2005 13:54	8057.1	10.5	9.3	21.5	57.0	372.8	13.3	0.6
10/21/2005 7:56	8055.8	10.5	9.3	21.5	57.0	372.9	14.1	0.7
10/21/2005 12:55	8056.4	10.5	9.3	21.5	57.0	372.8	14.3	0.6
10/22/2005 8:35	8063.9	10.5	9.2	21.2	57.3	372.6	15.1	0.4
10/24/2005 15:17	8056	10.5	9.3	21.5	57.0	372.9	17.4	0.6
10/26/2005 16:13	8049.2	10.6	9.4	21.7	56.8	373.1	19.4	0.9
10/27/2005 14:50	8034.3	10.6	9.6	22.2	56.3	373.6	20.3	1.4
10/28/2005 15:35	8028.7	10.6	9.7	22.4	56.1	373.8	21.4	1.6
10/31/2005 10:39	8037.3	10.6	9.6	22.1	56.4	373.5	24.2	1.3
11/2/2005 14:46	8039.1	10.6	9.6	22.1	56.4	373.4	26.3	1.2
11/4/2005 11:11	8049.4	10.6	9.4	21.7	56.8	373.1	28.2	0.9
11/7/2005 14:47	8042.6	10.6	9.5	21.9	56.6	373.3	31.3	1.1
11/11/2005 13:53	8038.8	10.6	9.6	22.1	56.4	373.4	35.3	1.2
11/14/2005 16:46	8030.0	10.6	9.7	22.4	56.1	373.7	38.4	1.5
11/17/2005 15:22	8028.7	10.6	9.7	22.4	56.1	373.8	41.4	1.6
11/21/2005 12:16	8039.2	10.6	9.6	22.1	56.4	373.4	45.2	1.2
12/2/2005 11:44	8025.9	10.6	9.7	22.5	56.0	373.9	56.2	1.7
12/6/2005 14:45	8003.8	10.6	10.1	23.2	55.3	374.6	60.3	2.4
12/15/2005 14:29	8010.6	10.6	10.0	23.0	55.5	374.4	69.3	2.2

**Wastebed 13 Pilot Study  
Piezometer A-3 (Native)**

**A-3 (Native)**

Typical Vibrating Wire Piezometer

Date Installed: 9/20/2005

Grout =

0 to 63.3 ft

Bentonite Seal =

63.3 to 75.5 ft

Sandpack =

75.5 to 79 ft

Depth to piezometer tip from ground surface =

78.5 ft

Ro =

8703.2

To =

19.2 degrees Celsius

Linear Gage Factor (psi) =

0.01443 psi/digit

Thermal Factor =

0.00276 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.86 ft

Piezometer Tip Elevation =

351.36 ft

Serial # 05-13902

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/22/2005 15:11	8020.9	10.5	9.8	22.7	55.8	374.0	76.4	1.8
12/29/2005 10:56	8032.4	10.5	9.7	22.3	56.2	373.6	83.2	1.4
1/5/2006 13:55	8022.7	10.5	9.8	22.6	55.9	374.0	90.3	1.8
1/12/2006 10:29	8005.5	10.5	10.0	23.2	55.3	374.5	97.2	2.3
1/19/2006 13:29	7986.6	10.5	10.3	23.8	54.7	375.2	104.3	3.0
1/26/2006 14:00	7980.2	10.5	10.4	24.0	54.5	375.4	111.3	3.2
2/2/2006 11:17	7995.0	10.5	10.2	23.5	55.0	374.9	118.2	2.7
2/9/2006 12:18	7987.1	10.5	10.3	23.8	54.7	375.2	125.2	2.9
2/16/2006 11:10	7991.7	10.5	10.2	23.6	54.9	375.0	132.2	2.8
2/23/2006 14:08	8010.0	10.5	10.0	23.0	55.5	374.4	139.3	2.2
3/2/2006 11:43	8024.8	10.5	9.8	22.5	56.0	373.9	146.2	1.7
3/9/2006 15:10	8037.1	10.5	9.6	22.1	56.4	373.5	153.4	1.3
3/16/2006 14:00	8008.7	10.5	10.0	23.1	55.4	374.4	160.3	2.2
3/23/2006 14:51	8010.2	10.5	10.0	23.0	55.5	374.4	167.3	2.2
3/31/2006 15:22	8029.0	10.5	9.7	22.4	56.1	373.8	175.4	1.5
4/6/2006 13:46	8031.6	10.5	9.7	22.3	56.2	373.7	181.3	1.5
4/13/2006 15:57	8032.7	10.5	9.7	22.3	56.2	373.6	188.4	1.4
4/20/2006 15:49	8036.4	10.5	9.6	22.1	56.4	373.5	195.4	1.3
4/26/2006 14:28	8037.7	10.5	9.6	22.1	56.4	373.5	201.3	1.3
5/4/2006 14:02	8045.7	10.5	9.5	21.8	56.7	373.2	209.3	1.0
5/11/2006 15:01	8055.7	10.5	9.3	21.5	57.0	372.9	216.4	0.7
5/18/2006 14:42	8064.5	10.5	9.2	21.2	57.3	372.6	223.3	0.4
5/25/2006 14:29	8054.7	10.6	9.3	21.5	57.0	372.9	230.3	0.7
6/1/2006 14:17	8052.8	10.5	9.4	21.6	56.9	373.0	237.3	0.8
6/8/2006 14:32	8053.0	10.5	9.4	21.6	56.9	373.0	244.3	0.7
6/15/2006 13:31	8048.9	10.5	9.4	21.7	56.8	373.1	251.3	0.9
6/22/2006 13:46	8056.3	10.5	9.3	21.5	57.0	372.8	258.3	0.6
6/29/2006 15:14	8057.0	10.5	9.3	21.5	57.0	372.8	265.4	0.6
7/6/2006 15:05	8053.2	10.5	9.4	21.6	56.9	372.9	272.4	0.7
7/13/2006 14:44	8041.2	10.5	9.5	22.0	56.5	373.3	279.3	1.1
7/20/2006 10:26	8034.5	10.5	9.6	22.2	56.3	373.6	286.2	1.4
7/27/2006 10:06	8041.5	10.5	9.5	22.0	56.5	373.3	293.1	1.1
8/3/2006 9:50	8038.0	10.5	9.6	22.1	56.4	373.5	300.1	1.2
8/10/2006 13:38	8040.7	10.4	9.5	22.0	56.5	373.4	307.3	1.2
8/17/2006 15:30	8043.9	10.4	9.5	21.9	56.6	373.3	314.4	1.1
8/24/2006 15:10	8059.7	10.6	9.3	21.4	57.1	372.7	321.4	0.5
8/31/2006 9:58	8054.0	10.6	9.3	21.6	56.9	372.9	328.1	0.7
9/7/2006 14:42	8060.1	10.4	9.3	21.4	57.1	372.7	335.3	0.5
9/14/2006 14:42	8071.0	10.5	9.1	21.0	57.5	372.4	342.3	0.1
9/21/2006 17:14	8071.5	10.4	9.1	21.0	57.5	372.3	349.4	0.1
9/28/2006 15:25	8086.5	10.7	8.9	20.5	58.0	371.8	356.4	-0.4
10/5/2006 15:41	8065.3	10.5	9.2	21.2	57.3	372.5	363.4	0.3
10/12/2006 14:48	8093.6	10.5	8.8	20.2	58.3	371.6	370.3	-0.6
10/20/2006 14:08	8082.8	11.2	8.9	20.6	57.9	372.0	378.3	-0.2
10/26/2006 15:07	8037.8	10.5	9.6	22.1	56.4	373.5	384.4	1.3
11/8/2006 12:58	8038.8	10.3	9.6	22.1	56.4	373.4	397.3	1.2
11/15/2006 16:16	8024.3	10.5	9.8	22.6	55.9	373.9	404.4	1.7
12/7/2006 15:12	8011.4	10.5	10.0	23.0	55.5	374.3	426.4	2.1

**Wastebed 13 Pilot Study  
Piezometer A-3 (Native)**

**A-3 (Native)**

Typical Vibrating Wire Piezometer

Date Installed: 9/20/2005

Grout =

0 to 63.3 ft

Bentonite Seal =

63.3 to 75.5 ft

Sandpack =

75.5 to 79 ft

Depth to piezometer tip from ground surface =

78.5 ft

Ro =

8703.2

To =

19.2 degrees Celsius

Linear Gage Factor (psi) =

0.01443 psi/digit

Thermal Factor =

0.00276 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.86 ft

Piezometer Tip Elevation =

351.36 ft

Serial # 05-13902

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/14/06 14:11	8026.4	10.4	9.7	22.5	56.0	373.8	433.3	1.6
12/21/2006 13:34	8022.5	10.4	9.8	22.6	55.9	374.0	440.3	1.8
12/28/06 13:49	8013.8	10.5	9.9	22.9	55.6	374.3	447.3	2.1
1/11/2007 15:36	8003.7	10.5	10.1	23.2	55.3	374.6	461.4	2.4
3/7/2007 10:57	8033.2	10.4	9.6	22.3	56.2	373.6	516.2	1.4
4/12/07 11:25	7987.8	10.4	10.3	23.8	54.7	375.1	552.2	2.9
5/10/2007 11:50	7995.8	10.6	10.2	23.5	55.0	374.9	580.2	2.7
6/21/07 13:18	8065.5	10.7	9.2	21.2	57.3	372.5	622.3	0.3
7/12/2007 13:20	8084.2	10.4	8.9	20.6	57.9	371.9	643.3	-0.3
8/15/07 13:30	8097.9	10.4	8.7	20.1	58.4	371.5	677.3	-0.7
9/20/2007 14:36	8097.3	10.4	8.7	20.1	58.4	371.5	713.3	-0.7
10/25/07 15:17	8085.8	10.3	8.9	20.5	58.0	371.9	748.4	-0.3

**Wastebed 13 Pilot Study  
Piezometer A-4 (15 ft)**

**A-4 (15 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/3/2005

Grout = 0 to 5.6 ft

Bentonite Seal = 5.6 to 10 ft

Depth to piezometer tip from ground surface = 15 ft

Ro = 8817.7

To = 20.4 degrees Celsius

Linear Gage Factor (psi) = 0.01477 psi/digit

Thermal Factor = 0.00587 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.45 ft

Piezometer Tip Elevation = 414.45 ft

Serial # 05-13907

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/3/05 14:27	9228.1	10.7	-6.1	-14.1	>=15	NA		
10/5/05 11:20	8866.1	10.2	-0.8	-1.8	>=15	NA		
<b>10/7/05 6:30</b>	<b>8882.3</b>	<b>10.2</b>	<b>-1.0</b>	<b>-2.3</b>	<b>&gt;=15</b>	<b>NA</b>	<b>0</b>	<b>0</b>
10/8/05 9:28	8885.5	10.3	-1.1	-2.4	>=15	NA	1.1	-0.1
10/10/05 8:30	8884.1	10.4	-1.0	-2.4	>=15	NA	3.1	-0.1
10/10/05 11:39	8884.7	10.2	-1.0	-2.4	>=15	NA	3.2	-0.1
10/10/05 13:40	8862.3	10.2	-0.7	-1.7	>=15	NA	3.3	0.7
10/10/05 13:50	8858.3	10.2	-0.7	-1.5	>=15	NA	3.3	0.8
10/10/05 14:16	8845.5	10.2	-0.5	-1.1	>=15	NA	3.3	1.3
10/10/05 14:26	8841.8	10.1	-0.4	-1.0	>=15	NA	3.3	1.4
10/10/05 14:35	8843.9	10.2	-0.4	-1.0	>=15	NA	3.3	1.3
10/10/05 14:45	8846.5	10.2	-0.5	-1.1	>=15	NA	3.3	1.2
10/10/05 15:00	8849.1	10.2	-0.5	-1.2	>=15	NA	3.4	1.1
10/10/05 15:01	8849.4	10.2	-0.5	-1.2	>=15	NA	3.4	1.1
10/10/05 15:16	8850.5	10.2	-0.5	-1.3	>=15	NA	3.4	1.1
10/10/05 15:31	8850.1	10.2	-0.5	-1.2	>=15	NA	3.4	1.1
10/10/05 15:45	8852.8	10.2	-0.6	-1.3	>=15	NA	3.4	1.0
10/10/05 16:01	8852.9	10.2	-0.6	-1.3	>=15	NA	3.4	1.0
10/10/05 16:19	8855.5	10.2	-0.6	-1.4	>=15	NA	3.4	0.9
10/10/05 17:03	8858.5	10.2	-0.7	-1.5	>=15	NA	3.4	0.8
10/11/05 7:58	8849.4	10.2	-0.5	-1.2	>=15	NA	4.1	1.1
10/11/05 11:34	8851.1	10.2	-0.6	-1.3	>=15	NA	4.2	1.1
10/11/05 17:06	8849.6	10.3	-0.5	-1.2	>=15	NA	4.4	1.1
10/12/05 8:35	8843.6	10.2	-0.4	-1.0	>=15	NA	5.1	1.3
10/12/05 14:03	8841	10.2	-0.4	-0.9	>=15	NA	5.3	1.4
10/12/05 16:58	8833.1	10.2	-0.3	-0.7	>=15	NA	5.4	1.7
10/13/05 8:34	8828.1	10.5	-0.2	-0.5	>=15	NA	6.1	1.9
10/14/2005 10:35	8827.1	11.4	-0.2	-0.4	>=15	NA	7.2	1.9
10/15/2005 7:35	8819.9	10.2	-0.1	-0.2	>=15	NA	8.0	2.1
10/15/2005 12:46	8755.9	10.3	0.9	2.0	13.0	416.4	8.3	4.3
10/15/2005 16:27	8719.6	10.2	1.4	3.2	11.8	417.7	8.4	5.5
10/17/2005 7:49	8735.3	10.2	1.2	2.7	12.3	417.1	10.1	5.0
10/17/2005 13:01	8734	10.2	1.2	2.7	12.3	417.2	10.3	5.1
10/18/2005 7:45	8742.8	10.2	1.0	2.4	12.6	416.9	11.1	4.8
10/18/2005 15:05	8614.7	10.2	2.9	6.8	8.2	421.2	11.4	9.1
10/18/2005 17:36	8618.8	10.2	2.9	6.6	8.4	421.1	11.5	9.0
10/19/2005 7:54	8641.9	10.2	2.5	5.9	9.1	420.3	12.1	8.2
10/19/2005 13:20	8646.5	10.2	2.5	5.7	9.3	420.1	12.3	8.0
10/19/2005 17:29	8557	10.2	3.8	8.7	6.3	423.2	12.5	11.1
10/20/2005 8:20	8582.4	10.3	3.4	7.9	7.1	422.3	13.1	10.2
10/20/2005 13:56	8595.5	10.2	3.2	7.4	7.6	421.9	13.3	9.8
10/21/2005 7:50	8619.2	10.3	2.9	6.6	8.4	421.1	14.1	9.0
10/21/2005 12:49	8625.2	10.4	2.8	6.4	8.6	420.9	14.3	8.8
10/22/2005 8:25	8650.3	10.3	2.4	5.6	9.4	420.0	15.1	7.9
10/24/2005 15:12	8667.8	10.4	2.2	5.0	10.0	419.4	17.4	7.3
10/26/2005 16:07	8648	10.3	2.4	5.6	9.4	420.1	19.4	8.0
10/27/2005 14:43	8649	10.4	2.4	5.6	9.4	420.1	20.3	8.0
10/28/2005 15:29	8654.2	10.4	2.4	5.4	9.6	419.9	21.4	7.8

**Wastebed 13 Pilot Study  
Piezometer A-4 (15 ft)**

**A-4 (15 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/3/2005

Grout = 0 to 5.6 ft

Bentonite Seal = 5.6 to 10 ft

Depth to piezometer tip from ground surface = 15 ft

Ro = 8817.7

To = 20.4 degrees Celsius

Linear Gage Factor (psi) = 0.01477 psi/digit

Thermal Factor = 0.00587 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.45 ft

Piezometer Tip Elevation = 414.45 ft

Serial # 05-13907

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/31/2005 10:35	8675	10.3	2.0	4.7	10.3	419.2	24.2	7.1
11/2/2005 14:41	8685.8	10.3	1.9	4.4	10.6	418.8	26.3	6.7
11/4/2005 11:06	8695.9	10.3	1.7	4.0	11.0	418.5	28.2	6.4
11/7/2005 14:42	8696.6	10.3	1.7	4.0	11.0	418.4	31.3	6.3
11/11/2005 13:48	8690.2	10.4	1.8	4.2	10.8	418.7	35.3	6.6
11/14/2005 16:48	8684.7	10.4	1.9	4.4	10.6	418.8	38.4	6.7
11/17/2005 15:16	8646.5	10.4	2.5	5.7	9.3	420.1	41.4	8.0
11/21/2005 12:12	8682.5	10.4	1.9	4.5	10.5	418.9	45.2	6.8
12/2/2005 11:38	8663.1	10.5	2.2	5.1	9.9	419.6	56.2	7.5
12/6/2005 14:40	8672.9	10.6	2.1	4.8	10.2	419.3	60.3	7.1
12/15/2005 14:20	8701.1	10.6	1.7	3.8	11.2	418.3	69.3	6.2
12/22/2005 15:04	8719.2	10.7	1.4	3.2	11.8	417.7	76.4	5.6
12/29/2005 10:43	8708.5	10.7	1.6	3.6	11.4	418.0	83.2	5.9
1/5/2006 13:47	8679.9	10.7	2.0	4.6	10.4	419.0	90.3	6.9
1/12/2006 10:24	8640.6	10.7	2.6	5.9	9.1	420.4	97.2	8.2
1/19/2006 13:23	8639.4	10.8	2.6	5.9	9.1	420.4	104.3	8.3
1/26/2006 13:53	8648.2	10.8	2.4	5.6	9.4	420.1	111.3	8.0
2/2/2006 11:10	8647	10.8	2.5	5.7	9.3	420.1	118.2	8.0
2/9/2006 12:12	8641.8	11	2.5	5.9	9.1	420.3	125.2	8.2
2/16/2006 11:05	8669.8	10.9	2.1	4.9	10.1	419.4	132.2	7.3
2/23/2006 14:01	8689.9	11	1.8	4.2	10.8	418.7	139.3	6.6
3/2/2006 11:37	8720.4	11	1.4	3.2	11.8	417.6	146.2	5.5
3/9/2006 15:04	8737.6	10.9	1.1	2.6	12.4	417.1	153.4	4.9
3/16/2006 13:54	8660.7	11	2.3	5.2	9.8	419.7	160.3	7.6
3/23/2006 14:45	8692	11	1.8	4.2	10.8	418.6	167.3	6.5
3/31/2006 15:16	8715.3	11	1.5	3.4	11.6	417.8	175.4	5.7
4/6/2006 13:40	8720.1	10.9	1.4	3.2	11.8	417.6	181.3	5.5
4/13/2006 15:52	8719.7	10.9	1.4	3.2	11.8	417.7	188.4	5.6
4/20/2006 15:44	8733.6	11	1.2	2.7	12.3	417.2	195.4	5.1
4/26/2006 14:23	8708.2	10.9	1.6	3.6	11.4	418.1	201.3	5.9
5/4/2006 13:56	8732.5	10.9	1.2	2.8	12.2	417.2	209.3	5.1
5/11/2006 14:55	8753.3	11.1	0.9	2.1	12.9	416.5	216.4	4.4
5/18/2006 14:06	8765.7	10.9	0.7	1.6	13.4	416.1	223.3	4.0
5/25/2006 14:23	8756.3	10.8	0.9	2.0	13.0	416.4	230.3	4.3
6/1/2006 14:12	8756.3	10.8	0.9	2.0	13.0	416.4	237.3	4.3
6/8/2006 14:24	8757.9	10.8	0.8	1.9	13.1	416.4	244.3	4.2
6/15/2006 13:26	8757.9	10.8	0.8	1.9	13.1	416.4	251.3	4.2
6/22/2006 13:40	8764.7	10.7	0.7	1.7	13.3	416.1	258.3	4.0
6/29/2006 15:07	8763	10.7	0.8	1.7	13.3	416.2	265.4	4.1
7/6/2006 15:01	8767.5	10.7	0.7	1.6	13.4	416.0	272.4	3.9
7/13/2006 14:39	8671.4	10.7	2.1	4.9	10.1	419.3	279.3	7.2
7/20/2006 10:20	8717.2	10.8	1.4	3.3	11.7	417.7	286.2	5.6
7/27/2006 10:00	8746.3	10.6	1.0	2.3	12.7	416.8	293.1	4.6
8/3/2006 9:44	8752.9	10.7	0.9	2.1	12.9	416.5	300.1	4.4
8/10/2006 13:32	8755.5	10.6	0.9	2.0	13.0	416.4	307.3	4.3
8/17/2006 15:25	8757.5	10.6	0.8	1.9	13.1	416.4	314.4	4.3
8/24/2006 15:04	8770.8	10.6	0.6	1.5	13.5	415.9	321.4	3.8

**Wastebed 13 Pilot Study  
Piezometer A-4 (15 ft)**

**A-4 (15 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/3/2005

Grout = 0 to 5.6 ft

Bentonite Seal = 5.6 to 10 ft

Depth to piezometer tip from ground surface = 15 ft

Ro = 8817.7

To = 20.4 degrees Celsius

Linear Gage Factor (psi) = 0.01477 psi/digit

Thermal Factor = 0.00587 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.45 ft

Piezometer Tip Elevation = 414.45 ft

Serial # 05-13907

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
8/31/2006 9:53	8769.5	10.7	0.7	1.5	13.5	416.0	328.1	3.9
9/7/2006 14:36	8774	10.6	0.6	1.4	13.6	415.8	335.3	3.7
9/14/2006 14:35	8776.3	10.7	0.6	1.3	13.7	415.7	342.3	3.6
9/21/2006 17:09	8779.6	10.6	0.5	1.2	13.8	415.6	349.4	3.5
9/28/2006 15:20	8784.1	10.6	0.4	1.0	14.0	415.5	356.4	3.4
10/5/2006 15:36	8766.9	10.6	0.7	1.6	13.4	416.0	363.4	3.9
10/12/2006 14:39	8790	10.7	0.4	0.8	14.2	415.3	370.3	3.2
10/20/2006 14:10	8734.2	10.7	1.2	2.7	12.3	417.2	378.3	5.1
10/26/2006 15:01	8700.5	10.7	1.7	3.9	11.1	418.3	384.4	6.2
11/8/2006 12:54	8730.7	10.7	1.2	2.8	12.2	417.3	397.3	5.2
11/15/2006 16:09	8721.4	10.8	1.4	3.2	11.8	417.6	404.4	5.5
12/7/2006 15:02	8689.4	10.9	1.8	4.2	10.8	418.7	426.4	6.6
12/14/06 14:04	8722	11	1.4	3.1	11.9	417.6	433.3	5.5
12/21/2006 13:27	8729.8	10.8	1.2	2.9	12.1	417.3	440.3	5.2
12/28/06 13:43	8679.3	11	2.0	4.6	10.4	419.0	447.3	6.9
1/11/2007 15:28	8661.7	11.1	2.2	5.2	9.8	419.6	461.4	7.5
3/7/2007 10:48	8732.3	11.2	1.2	2.8	12.2	417.2	516.2	5.1
4/12/07 11:19	8595.2	11.2	3.2	7.5	7.5	421.9	552.2	9.8
5/10/2007 11:45	8637.4	11.1	2.6	6.0	9.0	420.5	580.2	8.4
6/21/07 13:10	8776.7	11	0.6	1.3	13.7	415.7	622.3	3.6
7/12/2007 13:12	8802.8	10.9	0.2	0.4	14.6	414.8	643.3	2.7
8/15/07 13:24	8827.2	10.8	-0.2	-0.5	>=15	NA	677.3	1.9
9/20/2007 14:28	8840.5	10.8	-0.4	-0.9	>=15	NA	713.3	1.4
10/25/07 15:42	8802.1	10.8	0.2	0.4	14.6	414.9	748.4	2.7

**Wastebed 13 Pilot Study  
Piezometer A-4 (30 ft)**

**A-4 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/3/2005

Grout = 0 to 21 ft

Bentonite Seal = 21 to 25 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8787.3

To = 13.3 degrees Celsius

Linear Gage Factor (psi) = 0.01641 psi/digit

Thermal Factor = 0.00502 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.54 ft

Piezometer Tip Elevation = 399.54 ft

Serial # 05-13908

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/3/05 10:27	8735.2	11.3	0.8	1.9	28.1	401.5		
10/5/05 11:20	8718.8	11	1.1	2.6	27.4	402.1		
<b>10/7/05 6:30</b>	<b>8728.0</b>	<b>11</b>	<b>1.0</b>	<b>2.2</b>	<b>27.8</b>	<b>401.8</b>	<b>0</b>	<b>0</b>
10/8/05 9:24	8730.4	11	0.9	2.1	27.9	401.7	1.1	-0.1
10/10/05 8:29	8729.3	11	0.9	2.2	27.8	401.7	3.1	0.0
10/10/05 11:40	8728.8	11	0.9	2.2	27.8	401.7	3.2	0.0
10/10/05 13:39	8711.6	11	1.2	2.8	27.2	402.4	3.3	0.6
10/10/05 13:43	8709.2	11	1.3	2.9	27.1	402.5	3.3	0.7
10/10/05 13:45	8706.8	11	1.3	3.0	27.0	402.6	3.3	0.8
10/10/05 13:49	8703.3	11	1.4	3.2	26.8	402.7	3.3	0.9
10/10/05 13:52	8699.8	11	1.4	3.3	26.7	402.8	3.3	1.1
10/10/05 13:59	8692	11	1.6	3.6	26.4	403.1	3.3	1.4
10/10/05 14:04	8688.3	11	1.6	3.7	26.3	403.3	3.3	1.5
10/10/05 14:14	8675.4	11	1.8	4.2	25.8	403.8	3.3	2.0
10/10/05 14:19	8669.8	11	1.9	4.4	25.6	404.0	3.3	2.2
10/10/05 14:24	8663.3	11	2.0	4.7	25.3	404.2	3.3	2.5
10/10/05 14:34	8651.6	11	2.2	5.1	24.9	404.7	3.3	2.9
10/10/05 14:44	8642.1	11	2.4	5.5	24.5	405.0	3.3	3.3
10/10/05 14:50	8637.4	11	2.4	5.6	24.4	405.2	3.3	3.4
10/10/05 14:54	8633.4	11	2.5	5.8	24.2	405.3	3.3	3.6
10/10/05 14:59	8630	11	2.6	5.9	24.1	405.5	3.4	3.7
10/10/05 15:07	8625.7	11	2.6	6.1	23.9	405.6	3.4	3.9
10/10/05 15:15	8622.5	11	2.7	6.2	23.8	405.8	3.4	4.0
10/10/05 15:26	8615.6	11	2.8	6.5	23.5	406.0	3.4	4.3
10/10/05 15:31	8613.6	11	2.8	6.6	23.4	406.1	3.4	4.3
10/10/05 15:36	8611.3	11	2.9	6.6	23.4	406.2	3.4	4.4
10/10/05 15:45	8610.3	11	2.9	6.7	23.3	406.2	3.4	4.5
10/10/05 16:00	8609.5	11	2.9	6.7	23.3	406.2	3.4	4.5
10/10/05 16:07	8610.1	11	2.9	6.7	23.3	406.2	3.4	4.5
10/10/05 16:18	8612.5	11	2.9	6.6	23.4	406.1	3.4	4.4
10/10/05 17:05	8626.8	11	2.6	6.1	23.9	405.6	3.4	3.8
10/11/05 7:50	8671	11	1.9	4.4	25.6	403.9	4.1	2.2
10/11/05 11:34	8653.2	11	2.2	5.1	24.9	404.6	4.2	2.8
10/11/05 17:03	8646.2	11	2.3	5.3	24.7	404.9	4.4	3.1
10/12/05 8:31	8649.9	11.0	2.2	5.2	24.8	404.7	5.1	3.0
10/12/05 14:01	8648.7	11	2.3	5.2	24.8	404.8	5.3	3.0
10/12/05 16:57	8621.5	11	2.7	6.3	23.7	405.8	5.4	4.0
10/13/05 8:35	8622	11	2.7	6.2	23.8	405.8	6.1	4.0
10/14/2005 10:36	8622.8	12.3	2.7	6.2	23.8	405.8	7.2	4.0
10/15/2005 7:36	8632.6	11	2.5	5.8	24.2	405.4	8.0	3.6
10/15/2005 12:48	8526.3	11.1	4.3	9.9	20.1	409.4	8.3	7.6
10/15/2005 16:29	8485.2	11	4.9	11.4	18.6	411.0	8.4	9.2
10/17/2005 7:51	8482	11	5.0	11.5	18.5	411.1	10.1	9.3
10/17/2005 13:02	8481.8	11	5.0	11.5	18.5	411.1	10.3	9.3
10/18/2005 7:46	8491.3	11	4.8	11.2	18.8	410.7	11.1	9.0
10/18/2005 15:06	8370.4	11	6.8	15.8	14.2	415.3	11.4	13.5
10/18/2005 17:36	8362.6	11	7.0	16.1	13.9	415.6	11.5	13.8
10/19/2005 7:55	8364.1	11	6.9	16.0	14.0	415.5	12.1	13.8

**Wastedbed 13 Pilot Study  
Piezometer A-4 (30 ft)**

**A-4 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/3/2005

Grout = 0 to 21 ft

Bentonite Seal = 21 to 25 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8787.3

To = 13.3 degrees Celsius

Linear Gage Factor (psi) = 0.01641 psi/digit

Thermal Factor = 0.00502 psi/°C

Unit Weight of Water = 62.4pcf

Initial Ground Surface Elevation = 429.54 ft

Piezometer Tip Elevation = 399.54 ft

Serial # 05-13908

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/19/2005 13:20	8365.1	11	6.9	16.0	14.0	415.5	12.3	13.7
10/19/2005 17:29	8270.1	11	8.5	19.6	10.4	419.1	12.5	17.3
10/20/2005 8:21	8272.6	11	8.4	19.5	10.5	419.0	13.1	17.2
10/20/2005 13:57	8277.5	11	8.4	19.3	10.7	418.8	13.3	17.1
10/21/2005 7:51	8263.4	11	8.6	19.8	10.2	419.4	14.1	17.6
10/21/2005 12:50	8285.0	11.0	8.2	19.0	11.0	418.5	14.3	16.8
10/22/2005 8:27	8298.2	11	8.0	18.5	11.5	418.0	15.1	16.3
10/24/2005 15:12	8311.8	11	7.8	18.0	12.0	417.5	17.4	15.8
10/26/2005 16:08	8330.3	11	7.5	17.3	12.7	416.8	19.4	15.1
10/27/2005 14:44	8330.9	11	7.5	17.3	12.7	416.8	20.3	15.0
10/28/2005 15:30	8336.1	11	7.4	17.1	12.9	416.6	21.4	14.8
10/31/2005 10:36	8362.5	11	7.0	16.1	13.9	415.6	24.2	13.8
11/2/2005 14:42	8377.3	11	6.7	15.5	14.5	415.0	26.3	13.3
11/4/2005 11:06	8396.4	11	6.4	14.8	15.2	414.3	28.2	12.6
11/7/2005 14:42	8404.7	11	6.3	14.5	15.5	414.0	31.3	12.2
11/11/2005 13:49	8424.7	11	5.9	13.7	16.3	413.2	35.3	11.5
11/14/2005 16:48	8431.3	11	5.8	13.5	16.5	413.0	38.4	11.2
11/17/2005 15:17	8451.6	11	5.5	12.7	17.3	412.2	41.4	10.5
11/21/2005 12:12	8479.9	11	5.0	11.6	18.4	411.2	45.2	9.4
12/2/2005 11:39	8517.6	11	4.4	10.2	19.8	409.7	56.2	8.0
12/6/2005 14:41	8513.7	11	4.5	10.3	19.7	409.9	60.3	8.1
12/15/2005 14:22	8534.7	11	4.1	9.5	20.5	409.1	69.3	7.3
12/22/2005 15:05	8547.9	11	3.9	9.0	21.0	408.6	76.4	6.8
12/29/2005 10:44	8567.1	11	3.6	8.3	21.7	407.9	83.2	6.1
1/5/2006 13:48	8569.2	11	3.6	8.2	21.8	407.8	90.3	6.0
1/12/2006 10:25	8551.3	10.9	3.9	8.9	21.1	408.4	97.2	6.7
1/19/2006 13:24	8524.4	10.9	4.3	9.9	20.1	409.5	104.3	7.7
1/26/2006 13:54	8521.4	11	4.4	10.0	20.0	409.6	111.3	7.8
2/2/2006 11:11	8541.7	10.9	4.0	9.3	20.7	408.8	118.2	7.1
2/9/2006 12:13	8530.6	10.9	4.2	9.7	20.3	409.2	125.2	7.5
2/16/2006 11:06	8543.9	11.1	4.0	9.2	20.8	408.7	132.2	7.0
2/23/2006 14:02	8564	10.9	3.7	8.4	21.6	408.0	139.3	6.2
3/2/2006 11:38	8585.8	11.1	3.3	7.6	22.4	407.1	146.2	5.4
3/9/2006 15:05	8600.8	10.9	3.0	7.0	23.0	406.6	153.4	4.8
3/16/2006 13:55	8568.9	10.9	3.6	8.2	21.8	407.8	160.3	6.0
3/23/2006 14:46	8563.6	10.9	3.7	8.4	21.6	408.0	167.3	6.2
3/31/2006 15:17	8592.3	10.9	3.2	7.4	22.6	406.9	175.4	5.1
4/6/2006 13:41	8596.9	11	3.1	7.2	22.8	406.7	181.3	5.0
4/13/2006 15:53	8601.2	10.9	3.0	7.0	23.0	406.6	188.4	4.8
4/20/2006 15:45	8609.7	10.9	2.9	6.7	23.3	406.2	195.4	4.5
4/26/2006 14:23	8606.1	10.9	3.0	6.8	23.2	406.4	201.3	4.6
5/4/2006 13:58	8612.5	10.9	2.9	6.6	23.4	406.1	209.3	4.4
5/11/2006 14:56	8626.5	10.9	2.6	6.1	23.9	405.6	216.4	3.8
5/18/2006 14:06	8636.1	10.9	2.5	5.7	24.3	405.2	223.3	3.5
5/25/2006 14:24	8631	10.9	2.6	5.9	24.1	405.4	230.3	3.7
6/1/2006 14:13	8629.3	10.9	2.6	6.0	24.0	405.5	237.3	3.7
6/8/2006 14:25	8634.5	10.9	2.5	5.8	24.2	405.3	244.3	3.5
6/15/2006 13:27	8632.3	10.9	2.5	5.8	24.2	405.4	251.3	3.6

**Wastebed 13 Pilot Study  
Piezometer A-4 (30 ft)**

**A-4 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/3/2005

Grout = 0 to 21 ft

Bentonite Seal = 21 to 25 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8787.3

To = 13.3 degrees Celsius

Linear Gage Factor (psi) = 0.01641 psi/digit

Thermal Factor = 0.00502 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.54 ft

Piezometer Tip Elevation = 399.54 ft

Serial # 05-13908

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
6/2/2006 13:41	8637.5	11	2.4	5.6	24.4	405.2	258.3	3.4
6/29/2006 15:09	8640.6	10.8	2.4	5.5	24.5	405.1	265.4	3.3
7/6/2006 15:01	8641.3	10.9	2.4	5.5	24.5	405.0	272.4	3.3
7/13/2006 14:40	8635.7	10.9	2.5	5.7	24.3	405.3	279.3	3.5
7/20/2006 10:21	8606.2	10.9	3.0	6.8	23.2	406.4	286.2	4.6
7/27/2006 10:01	8624	10.9	2.7	6.2	23.8	405.7	293.1	3.9
8/3/2006 9:45	8634.5	10.9	2.5	5.8	24.2	405.3	300.1	3.5
8/10/2006 13:33	8639.7	10.9	2.4	5.6	24.4	405.1	307.3	3.3
8/17/2006 15:26	8641	10.9	2.4	5.5	24.5	405.1	314.4	3.3
8/24/2006 15:05	8652.1	11	2.2	5.1	24.9	404.6	321.4	2.9
8/31/2006 9:54	8648.8	10.9	2.3	5.2	24.8	404.8	328.1	3.0
9/7/2006 14:37	8655	10.9	2.2	5.0	25.0	404.5	335.3	2.8
9/14/2006 14:36	8659.2	10.9	2.1	4.8	25.2	404.4	342.3	2.6
9/21/2006 17:10	8658.6	10.9	2.1	4.8	25.2	404.4	349.4	2.6
9/28/2006 15:21	8667	10.9	2.0	4.5	25.5	404.1	356.4	2.3
10/5/2006 15:37	8654.5	10.9	2.2	5.0	25.0	404.5	363.4	2.8
10/12/2006 14:41	8670.2	10.9	1.9	4.4	25.6	403.9	370.3	2.2
10/20/2006 14:12	8666.3	11	2.0	4.6	25.4	404.1	378.3	2.3
10/26/2006 15:02	8612.6	11	2.9	6.6	23.4	406.1	384.4	4.4
11/8/2006 12:55	8616.3	10.9	2.8	6.4	23.6	406.0	397.3	4.2
11/15/2006 16:10	8624.4	11	2.7	6.1	23.9	405.7	404.4	3.9
12/7/2006 15:04	8586.6	10.9	3.3	7.6	22.4	407.1	426.4	5.4
12/14/06 14:05	8605.1	10.9	3.0	6.9	23.1	406.4	433.3	4.7
12/21/2006 13:28	8612.8	10.9	2.9	6.6	23.4	406.1	440.3	4.4
12/28/06 13:44	8600.9	10.9	3.0	7.0	23.0	406.6	447.3	4.8
1/11/2007 15:29	8571.9	10.9	3.5	8.1	21.9	407.7	461.4	5.9
3/7/2007 10:49	8644.8	10.9	2.3	5.4	24.6	404.9	516.2	3.1
4/12/07 11:20	8503.5	10.9	4.6	10.7	19.3	410.3	552.2	8.5
5/10/2007 11:46	8540.5	10.9	4.0	9.3	20.7	408.9	580.2	7.1
6/21/07 13:12	8677.4	10.9	1.8	4.1	25.9	403.7	622.3	1.9
7/12/2007 13:13	8686.6	10.9	1.6	3.8	26.2	403.3	643.3	1.6
8/15/07 13:25	8698.4	10.9	1.4	3.3	26.7	402.9	677.3	1.1
9/20/2007 14:29	8700.4	10.9	1.4	3.3	26.7	402.8	713.3	1.0
10/25/07 15:42	8703.5	10.9	1.4	3.1	26.9	402.7	748.4	0.9

**Wastedbed 13 Pilot Study  
Piezometer A-4 (55 ft)**

**A-4 (55 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 9/30/2005

Grout = Approximately 0 to 45 ft

Bentonite Seal = Approximately 45 to 50 ft

Depth to piezometer tip from ground surface = 53.8 ft

Ro = 8861.2

To = 12.2 degrees Celsius

Linear Gage Factor (psi) = 0.01611 psi/digit

Thermal Factor = 0.00816 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.38 ft

Piezometer Tip Elevation = 375.58 ft

Serial # 05-13909

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/30/05 13:09	7660.8	11.7	19.3	44.6	9.2	420.2		
10/05/05 11:20	7751.4	11	17.9	41.2	12.6	416.8		
10/7/05 6:30	7758.9	11	17.7	41.0	12.8	416.5	0	0
10/8/05 9:26	7756.2	11.1	17.8	41.1	12.7	416.6	1.1	0.1
10/10/05 8:28	7751.4	11	17.9	41.2	12.6	416.8	3.1	0.3
10/10/05 11:38	7751	11	17.9	41.3	12.5	416.8	3.2	0.3
10/10/05 13:38	7748.9	11.1	17.9	41.3	12.5	416.9	3.3	0.4
10/10/05 13:51	7747.3	11	17.9	41.4	12.4	417.0	3.3	0.4
10/10/05 14:17	7743.8	11	18.0	41.5	12.3	417.1	3.3	0.6
10/10/05 14:25	7742.3	11.1	18.0	41.6	12.2	417.2	3.3	0.6
10/10/05 14:34	7741	11	18.0	41.6	12.2	417.2	3.3	0.7
10/10/05 14:45	7738.9	11	18.1	41.7	12.1	417.3	3.3	0.7
10/10/05 14:59	7735.3	11	18.1	41.8	12.0	417.4	3.4	0.9
10/10/05 15:16	7731.9	11	18.2	42.0	11.8	417.5	3.4	1.0
10/10/05 15:32	7727.4	11	18.3	42.1	11.7	417.7	3.4	1.2
10/10/05 15:45	7724.4	11	18.3	42.2	11.6	417.8	3.4	1.3
10/10/05 16:01	7721.1	11	18.4	42.4	11.4	417.9	3.4	1.4
10/10/05 16:19	7717.9	11	18.4	42.5	11.3	418.1	3.4	1.5
10/10/05 17:04	7711.9	11	18.5	42.7	11.1	418.3	3.4	1.7
10/11/05 7:51	7716.8	11	18.4	42.5	11.3	418.1	4.1	1.6
10/11/05 11:33	7707.9	11.1	18.6	42.9	10.9	418.4	4.2	1.9
10/11/05 17:01	7697.7	11	18.7	43.2	10.6	418.8	4.4	2.3
10/12/05 8:28	7702	11.1	18.7	43.1	10.7	418.7	5.1	2.1
10/12/05 14:04	7703.1	11.1	18.6	43.0	10.8	418.6	5.3	2.1
10/12/05 16:59	7697.1	11	18.7	43.3	10.5	418.8	5.4	2.3
10/13/05 8:36	7685.4	11.1	18.9	43.7	10.1	419.3	6.1	2.7
10/14/2005 10:37	7680.4	12.1	19.0	43.9	9.9	419.5	7.2	2.9
10/15/2005 7:36	7685.5	11.1	18.9	43.7	10.1	419.3	8.0	2.7
10/15/2005 12:48	7650	11.1	19.5	45.0	8.8	420.6	8.3	4.1
10/15/2005 16:27	7630.6	11.1	19.8	45.7	8.1	421.3	8.4	4.8
10/17/2005 7:53	7620.5	11	20.0	46.1	7.7	421.7	10.1	5.1
10/17/2005 13:03	7619.4	11	20.0	46.1	7.7	421.7	10.3	5.2
10/18/2005 7:47	7623.6	11	19.9	46.0	7.8	421.6	11.1	5.0
10/18/2005 15:07	7593.4	11	20.4	47.1	6.7	422.7	11.4	6.2
10/18/2005 17:37	7572	11	20.8	47.9	5.9	423.5	11.5	6.9
10/19/2005 7:55	7547.7	11	21.2	48.8	5.0	424.4	12.1	7.9
10/19/2005 13:19	7546.7	11	21.2	48.8	5.0	424.4	12.3	7.9
10/19/2005 17:29	7504.1	11	21.9	50.4	3.4	426.0	12.5	9.5
10/20/2005 8:22	7477.1	11.1	22.3	51.4	2.4	427.0	13.1	10.5
10/20/2005 13:58	7480.4	11	22.2	51.3	2.5	426.9	13.3	10.4
10/21/2005 7:52	7489.5	11	22.1	51.0	2.8	426.6	14.1	10.0
10/21/05 12:51	7491.4	11.0	22.1	50.9	2.9	426.5	14.3	9.9
10/22/2005 8:29	7505.4	11	21.8	50.4	3.4	426.0	15.1	9.4
10/24/2005 15:13	7522.2	11	21.6	49.8	4.0	425.3	17.4	8.8
10/26/2005 16:09	7537.8	11	21.3	49.2	4.6	424.8	19.4	8.2
10/27/2005 14:45	7534.5	11	21.4	49.3	4.5	424.9	20.3	8.3
10/28/2005 15:31	7534.3	11	21.4	49.3	4.5	424.9	21.4	8.3
10/31/2005 10:36	7548.7	11	21.1	48.8	5.0	424.4	24.2	7.8

**Wastedbed 13 Pilot Study  
Piezometer A-4 (55 ft)**

**A-4 (55 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 9/30/2005

Grout = Approximately 0 to 45 ft

Bentonite Seal = Approximately 45 to 50 ft

Depth to piezometer tip from ground surface = 53.8 ft

Ro = 8861.2

To = 12.2 degrees Celsius

Linear Gage Factor (psi) = 0.01611 psi/digit

Thermal Factor = 0.00816 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.38 ft

Piezometer Tip Elevation = 375.58 ft

Serial # 05-13909

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/2/2005 14:42	7558.9	11	21.0	48.4	5.4	424.0	26.3	7.4
11/4/2005 11:07	7569.4	11	20.8	48.0	5.8	423.6	28.2	7.0
11/7/2005 14:43	7573.8	11	20.7	47.8	6.0	423.4	31.3	6.9
11/11/2005 13:50	7584.4	11	20.6	47.4	6.4	423.0	35.3	6.5
11/14/2005 16:50	7583.8	11	20.6	47.5	6.3	423.0	38.4	6.5
11/17/2005 15:17	7591.8	11	20.4	47.2	6.6	422.7	41.4	6.2
11/21/2005 12:13	7599	11	20.3	46.9	6.9	422.5	45.2	5.9
12/2/2005 11:40	7611.3	11	20.1	46.4	7.4	422.0	56.2	5.5
12/6/2005 14:42	7592.7	11	20.4	47.1	6.7	422.7	60.3	6.2
12/15/2005 14:23	7595.4	11	20.4	47.0	6.8	422.6	69.3	6.1
12/22/2005 15:06	7611.5	11	20.1	46.4	7.4	422.0	76.4	5.5
12/29/2005 10:46	7638.4	11	19.7	45.4	8.4	421.0	83.2	4.5
1/5/2006 13:49	7631.7	11	19.8	45.7	8.1	421.3	90.3	4.7
1/12/2006 10:25	7608.1	11	20.2	46.6	7.2	422.1	97.2	5.6
1/19/2006 13:25	7581.5	11	20.6	47.6	6.2	423.1	104.3	6.6
1/26/2006 13:55	7568.7	11	20.8	48.0	5.8	423.6	111.3	7.1
2/2/2006 11:12	7579.8	11	20.6	47.6	6.2	423.2	118.2	6.7
2/9/2006 12:14	7571.2	11	20.8	47.9	5.9	423.5	125.2	7.0
2/16/2006 11:06	7573.1	11	20.7	47.9	5.9	423.4	132.2	6.9
2/23/2006 14:03	7592.8	11	20.4	47.1	6.7	422.7	139.3	6.2
3/2/2006 11:39	7612.4	11	20.1	46.4	7.4	422.0	146.2	5.4
3/9/2006 15:06	7633.9	11	19.8	45.6	8.2	421.2	153.4	4.6
3/16/2006 13:56	7629.1	11	19.8	45.8	8.0	421.4	160.3	4.8
3/23/2006 14:47	7616.1	11	20.0	46.3	7.5	421.8	167.3	5.3
3/31/2006 15:18	7626.6	10.9	19.9	45.9	7.9	421.5	175.4	4.9
4/6/2006 13:42	7640.8	10.9	19.7	45.3	8.5	420.9	181.3	4.4
4/13/2006 15:54	7642.5	10.9	19.6	45.3	8.5	420.9	188.4	4.3
4/20/2006 15:46	7651.1	10.9	19.5	45.0	8.8	420.5	195.4	4.0
4/26/2006 14:24	7654.5	10.9	19.4	44.8	9.0	420.4	201.3	3.9
5/4/2006 13:59	7655.4	10.9	19.4	44.8	9.0	420.4	209.3	3.8
5/11/2006 14:57	7670.2	10.9	19.2	44.3	9.5	419.8	216.4	3.3
5/18/2006 14:07	7687.8	10.9	18.9	43.6	10.2	419.2	223.3	2.6
5/25/2006 14:25	7681.2	10.9	19.0	43.8	10.0	419.4	230.3	2.9
6/1/2006 14:14	7682.4	10.9	19.0	43.8	10.0	419.4	237.3	2.8
6/8/2006 14:28	7688.5	10.9	18.9	43.6	10.2	419.2	244.3	2.6
6/15/2006 13:28	7687.5	10.9	18.9	43.6	10.2	419.2	251.3	2.7
6/22/2006 13:42	7694.2	10.9	18.8	43.4	10.4	418.9	258.3	2.4
6/29/2006 15:10	7698.3	10.9	18.7	43.2	10.6	418.8	265.4	2.3
7/6/2006 15:02	7701	10.9	18.7	43.1	10.7	418.7	272.4	2.2
7/13/2006 14:41	7701.9	10.9	18.7	43.1	10.7	418.7	279.3	2.1
7/20/2006 10:22	7679.2	10.9	19.0	43.9	9.9	419.5	286.2	3.0
7/27/2006 10:02	7684	10.9	19.0	43.7	10.1	419.3	293.1	2.8
8/3/2006 9:46	7687.9	10.9	18.9	43.6	10.2	419.2	300.1	2.6
8/10/2006 13:34	7689.5	10.9	18.9	43.5	10.3	419.1	307.3	2.6
8/17/2006 15:27	7692.5	10.9	18.8	43.4	10.4	419.0	314.4	2.5
8/24/2006 15:06	7708.9	10.9	18.6	42.8	11.0	418.4	321.4	1.9
8/31/2006 9:55	7711.6	10.9	18.5	42.7	11.1	418.3	328.1	1.8
9/7/2006 14:38	7718	10.9	18.4	42.5	11.3	418.1	335.3	1.5
9/14/2006 14:38	7726.7	10.9	18.3	42.2	11.6	417.7	342.3	1.2

**Wastedbed 13 Pilot Study  
Piezometer A-4 (55 ft)**

**A-4 (55 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 9/30/2005

Grout = Approximately 0 to 45 ft

Bentonite Seal = Approximately 45 to 50 ft

Depth to piezometer tip from ground surface = 53.8 ft

Ro = 8861.2

To = 12.2 degrees Celsius

Linear Gage Factor (psi) = 0.01611 psi/digit

Thermal Factor = 0.00816 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.38 ft

Piezometer Tip Elevation = 375.58 ft

Serial # 05-13909

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/21/2006 17:11	7729.7	10.9	18.2	42.0	11.8	417.6	349.4	1.1
9/28/2006 15:22	7740	10.9	18.1	41.7	12.1	417.2	356.4	0.7
10/5/2006 15:37	7731.2	10.9	18.2	42.0	11.8	417.6	363.4	1.0
10/12/2006 14:42	7749.4	10.9	17.9	41.3	12.5	416.9	370.3	0.4
10/20/2006 14:13	7742.1	11.1	18.0	41.6	12.2	417.2	378.3	0.6
10/26/2006 15:03	7668.4	10.9	19.2	44.3	9.5	419.9	384.4	3.4
11/8/2006 12:55	7656.8	10.9	19.4	44.8	9.0	420.3	397.3	3.8
11/15/2006 16:11	7656.4	10.9	19.4	44.8	9.0	420.3	404.4	3.8
12/7/2006 15:05	7630.1	10.9	19.8	45.7	8.1	421.3	426.4	4.8
12/14/06 14:06	7632.8	10.9	19.8	45.6	8.2	421.2	433.3	4.7
12/21/2006 13:29	7640.4	10.9	19.7	45.4	8.4	420.9	440.3	4.4
12/28/06 13:45	7630.6	10.9	19.8	45.7	8.1	421.3	447.3	4.8
1/11/2007 15:31	7615.5	10.9	20.1	46.3	7.5	421.9	461.4	5.3
3/7/2007 10:50	7690.5	10.9	18.8	43.5	10.3	419.1	516.2	2.5
4/12/07 11:21	7497.2	10.8	22.0	50.7	3.1	426.3	552.2	9.7
5/10/2007 11:46	7516.8	10.8	21.6	50.0	3.8	425.5	580.2	9.0
6/21/07 13:13	7717.2	10.8	18.4	42.5	11.3	418.1	622.3	1.5
7/12/2007 13:15	7754.5	10.9	17.8	41.1	12.7	416.7	643.3	0.2
8/15/07 13:26	7785.6	11	17.3	40.0	13.8	415.5	677.3	-1.0
9/20/2007 14:30	7791.7	10.8	17.2	39.7	14.1	415.3	713.3	-1.2
10/25/07 15:42	7795.8	10.7	17.2	39.6	14.2	415.2	748.4	-1.4

**Wastebed 13 Pilot Study  
Piezometer A-5 (15 ft)**

**A-5 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/29/2005

Grout =

Approximately 0 to 6 ft

Bentonite Seal =

Approximately 6 to 11.5 ft

Sandpack =

11.5 to 15 ft

Depth to piezometer tip from ground surface =

14.5 ft

Ro =

8750.2

To =

13.5 degrees Celsius

Linear Gage Factor (psi) =

0.01707 psi/digit

Thermal Factor =

0.02447 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.52 ft

Piezometer Tip Elevation =

416.02 ft

Serial # 04-12600

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/29/05 13:31	8619.5	13.3	2.2	5.1	9.4	421.2		
9/29/05 14:01	8652.2	13.1	1.7	3.8	10.7	419.9		
9/30/05 13:55	8724.6	10.9	0.4	0.9	13.6	416.9		
9/30/05 14:25	8725.2	10.8	0.4	0.8	13.7	416.9		
10/7/05 6:30	8739.5	10.2	0.1	0.2	14.3	416.3	0	0
10/8/05 8:58	8740.6	10.2	0.1	0.2	14.3	416.2	1.1	0.0
10/10/05 8:00	8729.8	10.2	0.3	0.6	13.9	416.6	3.1	0.4
10/10/05 11:56	8729.4	10.2	0.3	0.6	13.9	416.7	3.2	0.4
10/10/05 16:59	8728.9	10.2	0.3	0.7	13.8	416.7	3.4	0.4
10/11/05 8:08	8724.3	10.2	0.4	0.8	13.7	416.9	4.1	0.6
10/11/05 11:42	8722.8	10.2	0.4	0.9	13.6	416.9	4.2	0.7
10/11/05 16:21	8719.3	10.2	0.4	1.0	13.5	417.1	4.4	0.8
10/12/05 7:49	8713.9	10.3	0.5	1.2	13.3	417.3	5.1	1.0
10/12/05 14:12	8711.1	10.2	0.6	1.4	13.1	417.4	5.3	1.1
10/12/05 17:19	8709.7	10.2	0.6	1.4	13.1	417.4	5.5	1.2
10/13/05 9:01	8704	10.3	0.7	1.6	12.9	417.7	6.1	1.4
10/14/2005 10:27	8696.8	11.7	0.9	2.0	12.5	418.0	7.2	1.8
10/15/2005 7:44	8649.3	10.3	1.6	3.8	10.7	419.8	8.1	3.6
10/15/2005 12:54	8648.3	10.3	1.7	3.8	10.7	419.9	8.3	3.6
10/15/2005 16:38	8646.5	10.2	1.7	3.9	10.6	419.9	8.4	3.7
10/17/2005 8:04	8643.6	10.3	1.7	4.0	10.5	420.0	10.1	3.8
10/17/2005 12:51	8627.7	10.3	2.0	4.6	9.9	420.7	10.3	4.4
10/18/2005 7:54	8644.1	10.3	1.7	4.0	10.5	420.0	11.1	3.8
10/18/2005 14:58	8629.7	10.3	2.0	4.6	9.9	420.6	11.4	4.3
10/18/2005 17:32	8581.1	10.3	2.8	6.5	8.0	422.5	11.5	6.2
10/19/2005 7:46	8607.9	10.3	2.4	5.4	9.1	421.4	12.1	5.2
10/19/2005 13:29	8566.7	10.3	3.1	7.0	7.5	423.1	12.3	6.8
10/19/2005 17:24	8570.4	10.3	3.0	6.9	7.6	422.9	12.5	6.7
10/20/2005 8:13	8586.3	10.3	2.7	6.3	8.2	422.3	13.1	6.0
10/20/2005 13:49	8592	10.3	2.6	6.1	8.4	422.1	13.3	5.8
10/21/2005 7:58	8604.4	10.3	2.4	5.6	8.9	421.6	14.1	5.3
10/21/2005 13:00	8606.7	10.3	2.4	5.5	9.0	421.5	14.3	5.2
10/22/2005 8:38	8618.7	10.3	2.2	5.0	9.5	421.0	15.1	4.8
10/24/2005 15:18	8602.4	10.4	2.4	5.6	8.9	421.7	17.4	5.4
10/26/2005 16:15	8573.2	10.3	2.9	6.8	7.7	422.8	19.4	6.6
10/27/2005 14:53	8579.4	10.3	2.8	6.5	8.0	422.6	20.3	6.3
10/28/2005 15:37	8589.6	10.3	2.7	6.1	8.4	422.2	21.4	5.9
10/31/2005 10:41	8624	10.4	2.1	4.8	9.7	420.8	24.2	4.6
11/2/2005 14:47	8645.7	10.5	1.7	3.9	10.6	420.0	26.3	3.7
11/4/2005 11:13	8658.2	10.4	1.5	3.4	11.1	419.5	28.2	3.2
11/7/2005 14:49	8658.4	10.4	1.5	3.4	11.1	419.5	31.3	3.2
11/11/2005 13:54	8643.6	10.5	1.7	4.0	10.5	420.0	35.3	3.8
11/14/2005 16:41	8643.3	10.6	1.8	4.0	10.5	420.1	38.4	3.8
11/17/2005 15:24	8583.3	10.5	2.8	6.4	8.1	422.4	41.4	6.2
11/21/2005 12:17	8632.6	10.5	1.9	4.5	10.0	420.5	45.2	4.2
12/2/2005 11:46	8604.7	10.7	2.4	5.6	8.9	421.6	56.2	5.3
12/6/2005 14:47	8624.9	10.7	2.1	4.8	9.7	420.8	60.3	4.5

**Wastedbed 13 Pilot Study  
Piezometer A-5 (15 ft)**

**A-5 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/29/2005

Grout =

Approximately 0 to 6 ft

Bentonite Seal =

Approximately 6 to 11.5 ft

Sandpack =

11.5 to 15 ft

Depth to piezometer tip from ground surface =

14.5 ft

Ro =

8750.2

To =

13.5 degrees Celsius

Linear Gage Factor (psi) =

0.01707 psi/digit

Thermal Factor =

0.02447 psi/C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.52 ft

Piezometer Tip Elevation =

416.02 ft

Serial # 04-12600

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/15/2005 14:33	8658.7	10.8	1.5	3.5	11.0	419.5	69.3	3.2
12/22/2005 15:14	8669.3	10.8	1.3	3.0	11.5	419.1	76.4	2.8
12/29/2005 10:58	8659.7	10.9	1.5	3.4	11.1	419.4	83.2	3.2
1/5/2006 13:58	8624.7	10.9	2.1	4.8	9.7	420.8	90.3	4.6
1/12/2006 10:30	8576	11.1	2.9	6.7	7.8	422.7	97.2	6.5
1/19/2006 13:31	8586.9	11	2.7	6.3	8.2	422.3	104.3	6.1
1/26/2006 14:03	8599.1	11.1	2.5	5.8	8.7	421.8	111.3	5.6
2/2/2006 11:18	8592.9	11.2	2.6	6.1	8.4	422.1	118.2	5.8
2/9/2006 12:20	8591.4	11.1	2.7	6.1	8.4	422.1	125.2	5.9
2/16/2006 11:11	8625.6	11.3	2.1	4.8	9.7	420.8	132.2	4.5
2/23/2006 14:10	8645.2	11.1	1.7	4.0	10.5	420.0	139.3	3.8
3/2/2006 11:45	8675.2	11.2	1.2	2.8	11.7	418.8	146.2	2.6
3/9/2006 15:11	8682.8	11.3	1.1	2.5	12.0	418.6	153.4	2.3
3/16/2006 14:02	8607.2	11.2	2.4	5.5	9.0	421.5	160.3	5.3
3/23/2006 14:53	8648.9	11.2	1.7	3.9	10.6	419.9	167.3	3.6
3/31/2006 15:24	8668.6	11.2	1.3	3.1	11.4	419.1	175.4	2.8
4/6/2006 13:48	8672.9	11.2	1.3	2.9	11.6	418.9	181.3	2.7
4/13/2006 16:00	8670.8	11.2	1.3	3.0	11.5	419.0	188.4	2.8
4/20/2006 15:52	8677	11.2	1.2	2.8	11.7	418.8	195.4	2.5
4/26/2006 14:30	8661.1	11.2	1.5	3.4	11.1	419.4	201.3	3.1
5/4/2006 14:04	8677.9	11.1	1.2	2.7	11.8	418.7	209.3	2.5
5/11/2006 15:03	8689.5	11.1	1.0	2.3	12.2	418.3	216.4	2.0
5/18/2006 14:43	8701.6	11.1	0.8	1.8	12.7	417.8	223.3	1.5
5/25/2006 14:31	8692.3	11.1	0.9	2.1	12.4	418.2	230.3	1.9
6/1/2006 14:18	8690	11.3	1.0	2.2	12.3	418.3	237.3	2.0
6/8/2006 14:33	8694.9	11	0.9	2.0	12.5	418.1	244.3	1.8
6/15/2006 13:33	8691.6	11.1	0.9	2.2	12.3	418.2	251.3	1.9
6/22/2006 13:48	8696	11	0.9	2.0	12.5	418.0	258.3	1.8
6/29/2006 15:16	8699.5	10.9	0.8	1.9	12.6	417.9	265.4	1.6
7/6/2006 15:07	8700.6	10.9	0.8	1.8	12.7	417.8	272.4	1.6
7/13/2006 14:47	8597.5	10.9	2.5	5.9	8.6	421.9	279.3	5.6
7/20/2006 10:29	8662.8	10.9	1.4	3.3	11.2	419.3	286.2	3.1
7/27/2006 10:09	8680.1	11	1.1	2.6	11.9	418.6	293.2	2.4
8/3/2006 9:53	8688.4	10.8	1.0	2.3	12.2	418.3	300.1	2.0
8/10/2006 13:40	8686.8	10.8	1.0	2.3	12.2	418.4	307.3	2.1
8/17/2006 15:32	8685	10.8	1.0	2.4	12.1	418.4	314.4	2.2
8/24/2006 15:12	8696.8	10.8	0.8	2.0	12.5	418.0	321.4	1.7
8/31/2006 10:00	8697.8	10.9	0.8	1.9	12.6	417.9	328.1	1.7
9/7/2006 14:44	8705.9	10.8	0.7	1.6	12.9	417.6	335.3	1.4
9/14/2006 14:44	8712.9	10.9	0.6	1.3	13.2	417.3	342.3	1.1
9/21/2006 17:17	8714.2	10.8	0.5	1.3	13.2	417.3	349.4	1.0
9/28/2006 15:27	8723.1	10.9	0.4	0.9	13.6	416.9	356.4	0.7
10/5/2006 15:44	8690.4	10.9	1.0	2.2	12.3	418.2	363.4	2.0
10/12/2006 14:51	8706.5	10.9	0.7	1.6	12.9	417.6	370.3	1.3
10/20/2006 14:20	8623.6	11.8	2.1	4.9	9.6	420.9	378.3	4.7
10/26/2006 15:10	8626.3	10.9	2.1	4.7	9.8	420.8	384.4	4.5
11/8/2006 13:01	8667.7	11	1.3	3.1	11.4	419.1	397.3	2.9

**Wastebed 13 Pilot Study  
Piezometer A-5 (15 ft)**

**A-5 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/29/2005

Grout =

Approximately 0 to 6 ft

Bentonite Seal =

Approximately 6 to 11.5 ft

Sandpack =

11.5 to 15 ft

Depth to piezometer tip from ground surface =

14.5 ft

Ro =

8750.2

To =

13.5 degrees Celsius

Linear Gage Factor (psi) =

0.01707 psi/digit

Thermal Factor =

0.02447 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.52 ft

Piezometer Tip Elevation =

416.02 ft

Serial # 04-12600

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
11/15/2006 16:18	8653.8	11	1.6	3.7	10.8	419.7	404.4	3.4
12/7/2006 15:15	8619.6	11.1	2.2	5.0	9.5	421.0	426.4	4.8
12/14/06 14:14	8658.9	11.3	1.5	3.5	11.0	419.5	433.3	3.2
12/21/2006 13:36	8662.6	11.2	1.4	3.3	11.2	419.3	440.3	3.1
12/28/06 13:53	8599	11.5	2.5	5.8	8.7	421.9	447.3	5.6
1/11/2007 15:40	8584.7	11.6	2.8	6.4	8.1	422.4	461.4	6.2
3/7/2007 11:04	8664.5	11.8	1.4	3.3	11.2	419.3	516.2	3.0
4/12/07 11:27	8548.9	11.5	3.4	7.8	6.7	423.8	552.2	7.6
5/10/2007 11:51	8581.7	11.8	2.8	6.5	8.0	422.6	580.2	6.3
6/21/07 13:21	8702.4	11.2	0.8	1.8	12.7	417.8	622.3	1.5
7/12/2007 13:23	8724.1	11.2	0.4	0.9	13.6	416.9	643.3	0.7
8/15/07 13:34	8739.8	11.1	0.1	0.3	14.2	416.3	677.3	0.0
9/20/2007 14:41	8739.8	11.1	0.1	0.3	14.2	416.3	713.3	0.0
10/25/07 15:20	8741.8	11.1	0.1	0.2	14.3	416.2	748.4	0.0

**Wastebed 13 Pilot Study  
Piezometer A-5 (30 ft)**

**A-5 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.4 ft

Sandpack = 26.4 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 8641.1

To = 20.9 degrees Celsius

Linear Gage Factor (psi) = 0.01522 psi/digit

Thermal Factor = 0.009671 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.57 ft

Piezometer Tip Elevation = 401.07 ft

Serial # 04-12605

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/28/05 15:41	7911.1	20.9	11.1	25.6	3.9	426.7		
9/29/05 9:25	8543.8	12.4	1.4	3.2	26.3	404.3		
9/30/05 14:21	8551.4	11.5	1.3	2.9	26.6	404.0		
10/7/05 6:30	8554	11	1.2	2.8	26.7	403.9	0	0
10/8/05 9:02	8553.4	11	1.2	2.9	26.6	403.9	1.1	0.0
10/10/05 8:02	8548	11	1.3	3.0	26.5	404.1	3.1	0.2
10/10/05 11:57	8537.5	11	1.5	3.4	26.1	404.5	3.2	0.6
10/10/05 16:58	8522.7	11	1.7	3.9	25.6	405.0	3.4	1.1
10/11/05 8:09	8530.8	11	1.6	3.7	25.8	404.7	4.1	0.8
10/11/05 11:41	8468	11	2.5	5.9	23.6	406.9	4.2	3.0
10/11/05 16:15	8500.8	11	2.0	4.7	24.8	405.8	4.4	1.9
10/12/05 7:45	8506.5	11.0	2.0	4.5	25.0	405.6	5.1	1.7
10/12/05 14:13	8746	11	-1.7	-3.9	33.4	397.2	5.3	-6.7
10/12/05 17:20	8467.9	11	2.5	5.9	23.6	406.9	5.5	3.0
10/13/05 9:02	8472.4	11	2.5	5.7	23.8	406.8	6.1	2.9
10/14/2005 10:27	8471.0	12.1	2.5	5.8	23.7	406.8	7.2	2.9
10/15/2005 7:45	8471.3	11	2.5	5.7	23.8	406.8	8.1	2.9
10/15/2005 12:54	8462	11	2.6	6.1	23.4	407.1	8.3	3.2
10/15/2005 16:37	8446.2	11	2.9	6.6	22.9	407.7	8.4	3.8
10/17/2005 8:06	8429.3	11	3.1	7.2	22.3	408.3	10.1	4.4
10/17/2005 12:52	8355.9	10.9	4.2	9.8	19.7	410.9	10.3	7.0
10/18/2005 7:54	8376.2	10.9	3.9	9.1	20.4	410.2	11.1	6.2
10/18/2005 14:58	8351.6	10.9	4.3	9.9	19.6	411.0	11.4	7.1
10/18/2005 17:31	8267.6	11	5.6	12.9	16.6	414.0	11.5	10.1
10/19/2005 7:46	8275	11	5.5	12.6	16.9	413.7	12.1	9.8
10/19/2005 13:30	8200.6	10.9	6.6	15.2	14.3	416.3	12.3	12.4
10/19/2005 17:24	8194.5	10.9	6.7	15.5	14.0	416.5	12.5	12.6
10/20/2005 8:15	8199.7	11	6.6	15.3	14.2	416.4	13.1	12.4
10/20/2005 13:50	8205.1	10.9	6.5	15.1	14.4	416.2	13.3	12.3
10/21/2005 7:59	8219.6	11	6.3	14.6	14.9	415.7	14.1	11.7
10/21/2005 13:01	8223.8	10.9	6.3	14.4	15.1	415.5	14.3	11.6
10/22/2005 8:40	8244.4	10.9	5.9	13.7	15.8	414.8	15.1	10.9
10/24/2005 15:18	8267	10.9	5.6	12.9	16.6	414.0	17.4	10.1
10/26/2005 16:16	8271.2	10.9	5.5	12.8	16.7	413.8	19.4	9.9
10/27/2005 14:54	8268.2	10.9	5.6	12.9	16.6	413.9	20.3	10.0
10/28/2005 15:38	8273.1	10.9	5.5	12.7	16.8	413.8	21.4	9.9
10/31/2005 10:41	8302.8	10.9	5.1	11.7	17.8	412.7	24.2	8.8
11/2/2005 14:48	8318.6	10.9	4.8	11.1	18.4	412.2	26.3	8.3
11/4/2005 11:14	8338.5	10.9	4.5	10.4	19.1	411.5	28.2	7.6
11/7/2005 14:50	8349.6	10.9	4.3	10.0	19.5	411.1	31.3	7.2
11/11/2005 13:55	8365.4	11	4.1	9.5	20.0	410.5	35.3	6.6
11/14/2005 16:42	8362.7	10.9	4.1	9.6	19.9	410.6	38.4	6.7
11/17/2005 15:25	8348.4	10.9	4.4	10.1	19.4	411.1	41.4	7.2
11/21/2005 12:17	8369.4	10.9	4.0	9.3	20.2	410.4	45.2	6.5
12/2/2005 11:47	8358.2	11	4.2	9.7	19.8	410.8	56.2	6.9
12/6/2005 14:47	8356.5	10.9	4.2	9.8	19.7	410.8	60.3	6.9
12/15/2005 14:34	8389.4	10.9	3.7	8.6	20.9	409.7	69.3	5.8
12/22/2005 15:15	8410	10.9	3.4	7.9	21.6	409.0	76.4	5.1

**Wastebed 13 Pilot Study  
Piezometer A-5 (30 ft)**

**A-5 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.4 ft

Sandpack = 26.4 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 8641.1

To = 20.9 degrees Celsius

Linear Gage Factor (psi) = 0.01522 psi/digit

Thermal Factor = 0.009671 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.57 ft

Piezometer Tip Elevation = 401.07 ft

Serial # 04-12605

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/29/2005 11:00	8417.7	10.8	3.3	7.6	21.9	408.7	83.2	4.8
1/5/2006 13:59	8395.7	10.9	3.6	8.4	21.1	409.5	90.3	5.6
1/12/2006 10:31	8350.5	10.8	4.3	10.0	19.5	411.1	97.2	7.1
1/19/2006 13:32	8316.4	10.8	4.8	11.2	18.3	412.2	104.3	8.3
1/26/2006 14:04	8315.6	10.9	4.9	11.2	18.3	412.3	111.3	8.4
2/2/2006 11:19	8327.7	10.8	4.7	10.8	18.7	411.9	118.2	7.9
2/9/2006 12:21	8315.5	10.8	4.9	11.2	18.3	412.3	125.2	8.4
2/16/2006 11:09	8340.7	10.8	4.5	10.3	19.2	411.4	132.2	7.5
2/23/2006 14:11	8365.4	10.8	4.1	9.5	20.0	410.5	139.3	6.6
3/2/2006 11:46	8403.9	10.9	3.5	8.1	21.4	409.2	146.2	5.3
3/9/2006 15:12	8433.1	10.8	3.1	7.1	22.4	408.2	153.4	4.2
3/16/2006 14:03	8369.3	10.8	4.0	9.3	20.2	410.4	160.3	6.5
3/23/2006 14:54	8378.6	10.8	3.9	9.0	20.5	410.1	167.3	6.2
3/31/2006 15:25	8407.6	10.8	3.5	8.0	21.5	409.0	175.4	5.1
4/6/2006 13:49	8417	10.8	3.3	7.6	21.9	408.7	181.3	4.8
4/13/2006 16:00	8417	10.8	3.3	7.6	21.9	408.7	188.4	4.8
4/20/2006 15:53	8433.7	10.8	3.1	7.1	22.4	408.1	195.4	4.2
4/26/2006 14:31	8419.5	10.8	3.3	7.6	21.9	408.6	201.3	4.7
5/4/2006 14:05	8433	10.8	3.1	7.1	22.4	408.2	209.3	4.2
5/11/2006 15:04	8457.9	10.8	2.7	6.2	23.3	407.3	216.4	3.4
5/18/2006 14:44	8473.2	10.8	2.5	5.7	23.8	406.7	223.3	2.8
5/25/2006 14:32	8470.3	10.8	2.5	5.8	23.7	406.8	230.3	2.9
6/1/2006 14:19	8469.6	10.8	2.5	5.8	23.7	406.9	237.3	3.0
6/8/2006 14:34	8474.6	10.8	2.4	5.6	23.9	406.7	244.3	2.8
6/15/2006 13:33	8472.1	10.8	2.5	5.7	23.8	406.8	251.3	2.9
6/22/2006 13:49	8480.6	10.8	2.3	5.4	24.1	406.5	258.3	2.6
6/29/2006 15:16	8490.4	10.8	2.2	5.1	24.4	406.1	265.4	2.2
7/6/2006 15:08	8493.8	10.8	2.1	4.9	24.6	406.0	272.4	2.1
7/13/2006 14:47	8460.7	10.8	2.6	6.1	23.4	407.2	279.3	3.3
7/20/2006 10:30	8432.2	10.8	3.1	7.1	22.4	408.2	286.2	4.3
7/27/2006 10:10	8455.3	10.8	2.7	6.3	23.2	407.4	293.2	3.5
8/3/2006 9:53	8467.5	10.9	2.5	5.9	23.6	406.9	300.1	3.0
8/10/2006 13:41	8476.8	10.8	2.4	5.5	24.0	406.6	307.3	2.7
8/17/2006 15:32	8482.5	10.8	2.3	5.3	24.2	406.4	314.4	2.5
8/24/2006 15:13	8499.3	10.8	2.1	4.8	24.7	405.8	321.4	1.9
8/31/2006 10:01	8500.5	10.9	2.0	4.7	24.8	405.8	328.1	1.9
9/7/2006 14:45	8512	10.8	1.9	4.3	25.2	405.4	335.3	1.5
9/14/2006 14:45	8517.1	10.8	1.8	4.1	25.4	405.2	342.3	1.3
9/21/2006 17:18	8517.2	10.8	1.8	4.1	25.4	405.2	349.4	1.3
9/28/2006 15:28	8527.9	10.9	1.6	3.8	25.7	404.8	356.4	0.9
10/5/2006 15:45	8497.5	10.7	2.1	4.8	24.7	405.9	363.4	2.0
10/12/2006 14:53	8501.6	10.9	2.0	4.7	24.8	405.7	370.3	1.8
10/20/2006 14:21	8481	11.4	2.3	5.4	24.1	406.5	378.3	2.6
10/26/2006 15:12	8412	10.9	3.4	7.8	21.7	408.9	384.4	5.0
11/8/2006 13:01	8411.9	10.8	3.4	7.8	21.7	408.9	397.3	5.0
11/15/2006 16:19	8418.5	10.9	3.3	7.6	21.9	408.7	404.4	4.8
12/7/2006 15:16	8361.8	10.8	4.2	9.6	19.9	410.7	426.4	6.7

**Wastebed 13 Pilot Study  
Piezometer A-5 (30 ft)**

**A-5 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.4 ft

Sandpack = 26.4 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 8641.1

To = 20.9 degrees Celsius

Linear Gage Factor (psi) = 0.01522 psi/digit

Thermal Factor = 0.009671 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.57 ft

Piezometer Tip Elevation = 401.07 ft

Serial # 04-12605

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/14/06 14:15	8395.3	10.7	3.6	8.4	21.1	409.5	433.3	5.6
12/21/2006 13:38	8408.3	10.8	3.4	8.0	21.5	409.0	440.3	5.1
12/28/06 13:54	8373.1	10.8	4.0	9.2	20.3	410.3	447.3	6.3
1/11/2007 15:41	8336.5	10.9	4.5	10.5	19.0	411.5	461.4	7.6
3/7/2007 11:05	8456.8	10.8	2.7	6.2	23.3	407.3	516.2	3.4
4/12/07 11:27	8276.4	10.9	5.5	12.6	16.9	413.7	552.2	9.7
5/10/2007 11:52	8309.8	11.4	5.0	11.4	18.1	412.5	580.2	8.6
6/21/07 13:22	8513.4	10.8	1.8	4.3	25.2	405.3	622.3	1.4
7/12/2007 13:24	8534.5	11	1.5	3.5	26.0	404.6	643.3	0.7
8/15/07 13:35	8547	10.8	1.3	3.1	26.4	404.1	677.3	0.2
9/20/2007 14:41	8547	10.9	1.3	3.1	26.4	404.2	713.3	0.2
10/25/07 15:21	8546.8	10.9	1.3	3.1	26.4	404.2	748.4	0.3

**Wastebed 13 Pilot Study  
Piezometer A-5 (55 ft)**

**A-5 (55 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout =

0 to 43.3 ft

Bentonite Seal =

43.3 to 51.5 ft

Sandpack =

51.5 to 55 ft

Depth to piezometer tip from ground surface =

54.5 ft

Ro =

9275.2

To =

15.9 degrees Celsius

Linear Gage Factor (psi) =

0.01586 psi/digit

Thermal Factor =

0.016431 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.83 ft

Piezometer Tip Elevation =

376.33 ft

Serial # 04-12608

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/28/05 10:43	7968.7	14.9	20.7	47.8	6.7	424.1		
9/28/05 11:04	8108.6	14.7	18.5	42.7	11.8	419.0		
<b>10/7/05 6:30</b>	<b>9041.0</b>	<b>11</b>	<b>3.6</b>	<b>8.4</b>	<b>46.1</b>	<b>384.7</b>	<b>0</b>	<b>0</b>
10/8/05 9:01	9039.6	11	3.7	8.4	46.1	384.8	1.1	0.1
10/10/05 8:01	9034.2	11	3.7	8.6	45.9	385.0	3.1	0.2
10/10/05 11:56	9023.7	10.9	3.9	9.0	45.5	385.3	3.2	0.6
10/10/05 17:01	9003.9	11	4.2	9.7	44.8	386.1	3.4	1.4
10/11/05 8:10	9061.4	11	3.3	7.6	46.9	384.0	4.1	-0.7
10/11/05 11:41	8973	11	4.7	10.9	43.6	387.2	4.2	2.5
10/11/05 16:19	8992.0	11	4.4	10.2	44.3	386.5	4.4	1.8
10/12/05 7:47	8999	11.0	4.3	9.9	44.6	386.3	5.1	1.5
10/12/05 14:11	8981.5	11	4.6	10.6	43.9	386.9	5.3	2.2
10/12/05 17:21	8977.7	11.2	4.6	10.7	43.8	387.0	5.5	2.3
10/13/05 9:03	8984.2	11	4.5	10.5	44.0	386.8	6.1	2.1
10/14/2005 10:28	8983.1	12.2	4.6	10.6	43.9	386.9	7.2	2.2
10/15/2005 7:46	8990.7	11	4.4	10.2	44.3	386.6	8.1	1.8
10/15/2005 12:55	8983.2	11	4.6	10.5	44.0	386.8	8.3	2.1
10/15/2005 16:38	8972.9	10.9	4.7	10.9	43.6	387.2	8.4	2.5
10/17/2005 8:08	8956.2	10.9	5.0	11.5	43.0	387.8	10.1	3.1
10/17/2005 12:53	8924.2	10.9	5.5	12.7	41.8	389.0	10.3	4.3
10/18/2005 7:55	8943.3	10.9	5.2	12.0	42.5	388.3	11.1	3.6
10/18/2005 14:59	8921.2	10.9	5.5	12.8	41.7	389.1	11.4	4.4
10/18/2005 17:31	8863.3	10.9	6.5	14.9	39.6	391.2	11.5	6.5
10/19/2005 7:47	8887.9	10.9	6.1	14.0	40.5	390.3	12.1	5.6
10/19/2005 13:31	8860.9	10.9	6.5	15.0	39.5	391.3	12.3	6.6
10/19/2005 17:25	8841.3	11.1	6.8	15.7	38.8	392.0	12.5	7.3
10/20/2005 8:15	8826.3	11.2	7.0	16.3	38.2	392.6	13.1	7.9
10/20/2005 13:51	8825.9	10.9	7.0	16.3	38.2	392.6	13.3	7.9
10/21/2005 8:00	8824.7	11	7.1	16.3	38.2	392.6	14.1	7.9
10/21/2005 13:02	8826	10.9	7.0	16.3	38.2	392.6	14.3	7.9
10/22/2005 8:41	8833.5	10.9	6.9	16.0	38.5	392.3	15.1	7.6
10/24/2005 15:19	8833.1	10.9	6.9	16.0	38.5	392.3	17.4	7.6
10/26/2005 16:17	8831.6	10.9	7.0	16.0	38.5	392.4	19.4	7.7
10/27/2005 14:56	8824.1	10.9	7.1	16.3	38.2	392.7	20.4	7.9
10/28/2005 15:39	8820.1	11	7.1	16.5	38.0	392.8	21.4	8.1
10/31/2005 10:42	8828.7	10.9	7.0	16.2	38.3	392.5	24.2	7.8
11/2/2005 14:49	8833.1	10.9	6.9	16.0	38.5	392.3	26.3	7.6
11/4/2005 11:15	8844.5	10.9	6.7	15.6	38.9	391.9	28.2	7.2
11/7/2005 14:51	8845	10.9	6.7	15.6	38.9	391.9	31.3	7.2
11/11/2005 13:56	8855	10.9	6.6	15.2	39.3	391.5	35.3	6.8
11/14/2005 16:43	8849.6	11	6.7	15.4	39.1	391.7	38.4	7.0
11/17/2005 15:25	8850.6	10.9	6.7	15.4	39.1	391.7	41.4	7.0
11/21/2005 12:18	8854.2	10.9	6.6	15.2	39.3	391.5	45.2	6.8
12/2/2005 11:48	8859.2	10.9	6.5	15.0	39.5	391.4	56.2	6.7
12/6/2005 14:48	8838	10.9	6.9	15.8	38.7	392.1	60.3	7.4
12/15/2005 14:36	8849	10.9	6.7	15.4	39.1	391.7	69.3	7.0
12/22/2005 15:16	8865.2	10.9	6.4	14.8	39.7	391.1	76.4	6.4
12/29/2005 11:01	8891.6	10.9	6.0	13.9	40.6	390.2	83.2	5.5

**Wastedbed 13 Pilot Study  
Piezometer A-5 (55 ft)**

**A-5 (55 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout =

0 to 43.3 ft

Bentonite Seal =

43.3 to 51.5 ft

Sandpack =

51.5 to 55 ft

Depth to piezometer tip from ground surface =

54.5 ft

Ro =

9275.2

To =

15.9 degrees Celsius

Linear Gage Factor (psi) =

0.01586 psi/digit

Thermal Factor =

0.016431 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.83 ft

Piezometer Tip Elevation =

376.33 ft

Serial # 04-12608

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
1/5/2006 13:59	8880.8	10.9	6.2	14.2	40.3	390.6	90.3	5.9
1/12/2006 10:32	8849.8	10.9	6.7	15.4	39.1	391.7	97.2	7.0
1/19/2006 13:33	8820.9	10.9	7.1	16.4	38.1	392.8	104.3	8.1
1/26/2006 14:06	8806.6	10.9	7.3	17.0	37.5	393.3	111.3	8.6
2/2/2006 11:20	8822.7	10.9	7.1	16.4	38.1	392.7	118.2	8.0
2/9/2006 12:22	8815	10.9	7.2	16.7	37.8	393.0	125.2	8.3
2/16/2006 11:13	8819.4	10.9	7.1	16.5	38.0	392.8	132.2	8.1
2/23/2006 14:12	8839.5	10.8	6.8	15.8	38.7	392.1	139.3	7.4
3/2/2006 11:47	8863.2	10.9	6.5	14.9	39.6	391.2	146.2	6.5
3/9/2006 15:13	8887.6	10.8	6.1	14.0	40.5	390.3	153.4	5.6
3/16/2006 14:04	8873.2	10.8	6.3	14.5	40.0	390.8	160.3	6.1
3/23/2006 14:55	8861.5	10.8	6.5	14.9	39.6	391.3	167.4	6.6
3/31/2006 15:26	8880.3	10.9	6.2	14.3	40.2	390.6	175.4	5.9
4/6/2006 13:50	8889.7	10.8	6.0	13.9	40.6	390.2	181.3	5.5
4/13/2006 16:01	8895.5	10.9	5.9	13.7	40.8	390.0	188.4	5.3
4/20/2006 15:53	8905.5	10.9	5.8	13.3	41.2	389.7	195.4	5.0
4/26/2006 14:32	8909.4	10.8	5.7	13.2	41.3	389.5	201.3	4.8
5/4/2006 14:06	8910.8	10.8	5.7	13.1	41.4	389.5	209.3	4.8
5/11/2006 15:05	8926.9	11	5.4	12.6	41.9	388.9	216.4	4.2
5/18/2006 14:45	8944.8	10.8	5.2	11.9	42.6	388.2	223.3	3.5
5/25/2006 14:33	8943.4	10.8	5.2	12.0	42.5	388.3	230.3	3.6
6/1/2006 14:20	8943.8	10.8	5.2	11.9	42.6	388.3	237.3	3.5
6/8/2006 14:35	8950.5	10.8	5.1	11.7	42.8	388.0	244.3	3.3
6/15/2006 13:34	8948.3	10.8	5.1	11.8	42.7	388.1	251.3	3.4
6/22/2006 13:50	8954.9	10.9	5.0	11.5	43.0	387.9	258.3	3.1
6/29/2006 15:17	8961.5	10.8	4.9	11.3	43.2	387.6	265.4	2.9
7/6/2006 15:09	8962.8	10.8	4.9	11.2	43.3	387.6	272.4	2.9
7/13/2006 14:48	8961.8	10.8	4.9	11.3	43.2	387.6	279.3	2.9
7/20/2006 10:31	8931.7	10.8	5.4	12.4	42.1	388.7	286.2	4.0
7/27/2006 10:10	8936.7	10.8	5.3	12.2	42.3	388.5	293.2	3.8
8/3/2006 9:54	8944.3	10.8	5.2	11.9	42.6	388.2	300.1	3.5
8/10/2006 13:42	8950.8	10.8	5.1	11.7	42.8	388.0	307.3	3.3
8/17/2006 15:33	8952.3	10.8	5.0	11.6	42.9	388.0	314.4	3.2
8/24/2006 15:14	8968.4	10.8	4.8	11.0	43.5	387.4	321.4	2.6
8/31/2006 10:02	8967.9	10.8	4.8	11.1	43.4	387.4	328.1	2.7
9/7/2006 14:46	8978.5	10.8	4.6	10.7	43.8	387.0	335.3	2.3
9/14/2006 14:46	8985.1	10.8	4.5	10.4	44.1	386.8	342.3	2.0
9/21/2006 17:18	8987.4	10.8	4.5	10.3	44.2	386.7	349.4	2.0
9/28/2006 15:29	8999.6	11	4.3	9.9	44.6	386.2	356.4	1.5
10/5/2006 15:46	8973.6	10.8	4.7	10.8	43.7	387.2	363.4	2.5
10/12/2006 14:54	8985.5	10.8	4.5	10.4	44.1	386.7	370.3	2.0
10/20/2006 14:21	8975.9	11.1	4.7	10.8	43.7	387.1	378.3	2.4
10/26/2006 15:14	8915.9	10.8	5.6	13.0	41.5	389.3	384.4	4.6
11/8/2006 13:02	8896.1	10.8	5.9	13.7	40.8	390.0	397.3	5.3
11/15/2006 16:20	8895.3	10.8	5.9	13.7	40.8	390.0	404.4	5.3
12/7/2006 15:18	8856.4	10.8	6.6	15.1	39.4	391.5	426.4	6.7
12/14/06 14:16	8872	10.7	6.3	14.6	39.9	390.9	433.3	6.2
12/21/2006 13:38	8875.9	10.8	6.2	14.4	40.1	390.8	440.3	6.0

**Wastebed 13 Pilot Study  
Piezometer A-5 (55 ft)**

**A-5 (55 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout =

0 to 43.3 ft

Bentonite Seal =

43.3 to 51.5 ft

Sandpack =

51.5 to 55 ft

Depth to piezometer tip from ground surface =

54.5 ft

Ro =

9275.2

To =

15.9 degrees Celsius

Linear Gage Factor (psi) =

0.01586 psi/digit

Thermal Factor =

0.016431 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.83 ft

Piezometer Tip Elevation =

376.33 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/28/06 13:55	8872.4	10.8	6.3	14.5	40.0	390.9	447.3	6.2
1/11/2007 15:42	8847	10.8	6.7	15.5	39.0	391.8	461.4	7.1
3/7/2007 11:06	8942.3	10.8	5.2	12.0	42.5	388.3	516.2	3.6
4/12/07 11:28	8765.3	10.8	8.0	18.5	36.0	394.8	552.2	10.1
5/10/2007 11:53	8782.5	11	7.7	17.8	36.7	394.2	580.2	9.5
6/21/07 13:22	8971.7	10.7	4.7	10.9	43.6	387.2	622.3	2.5
7/12/2007 13:25	9005.9	10.7	4.2	9.7	44.8	386.0	643.3	1.3
8/15/07 13:36	9033.7	10.7	3.7	8.6	45.9	385.0	677.3	0.3
9/20/2007 14:42	9038.3	10.7	3.7	8.5	46.0	384.8	713.3	0.1
10/25/07 15:22	9036.1	10.6	3.7	8.6	45.9	384.9	748.4	0.2

**Wastedbed 13 Pilot Study  
Piezometer A-6 (15 ft)**

**A-6 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = 0 to 8.9 ft

Bentonite Seal = 8.9 to 11.5 ft

Sandpack = 11.5 to 15 ft

Depth to piezometer tip from ground surface = 14.5 ft

Ro = 9525.8

To = 17.6 degrees Celsius

Linear Gage Factor (psi) = 0.01624 psi/digit

Thermal Factor = 0.007062 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.29 ft

Piezometer Tip Elevation = 415.79 ft

Serial # 04-12603

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/28/05 15:00	9329.5	17.9	3.2	7.4	7.1	423.2		
9/28/05 16:00	9406.6	17.8	1.9	4.5	10.0	420.3		
9/30/05 13:40	9527.0	10.7	-0.1	-0.2	>= 14.5 ft	NA		
10/7/05 6:30	9527.2	10.3	-0.1	-0.2	>= 14.5 ft	NA	0	0
10/8/05 9:14	9527.9	10.3	-0.1	-0.2	>= 14.5 ft	NA	1.1	0.0
10/10/05 8:40	9522.8	10.3	0.0	0.0	>= 14.5 ft	NA	3.1	0.2
10/10/05 8:46	9522.8	10.3	0.0	0.0	>= 14.5 ft	NA	3.1	0.2
10/10/05 9:01	9523	10.3	0.0	0.0	>= 14.5 ft	NA	3.1	0.2
10/10/05 9:15	9522.9	10.3	0.0	0.0	>= 14.5 ft	NA	3.1	0.2
10/10/05 9:31	9522.8	10.3	0.0	0.0	>= 14.5 ft	NA	3.1	0.2
10/10/05 10:01	9521.7	10.3	0.0	0.0	14.5	415.8	3.1	0.2
10/10/05 10:18	9520.8	10.3	0.0	0.1	14.4	415.9	3.2	0.2
10/10/05 10:31	9520.8	10.3	0.0	0.1	14.4	415.9	3.2	0.2
10/10/05 10:47	9520.5	10.3	0.0	0.1	14.4	415.9	3.2	0.3
10/10/05 11:00	9520.5	10.3	0.0	0.1	14.4	415.9	3.2	0.3
10/10/05 11:16	9520.4	10.3	0.0	0.1	14.4	415.9	3.2	0.3
10/10/05 11:30	9520.4	10.3	0.0	0.1	14.4	415.9	3.2	0.3
10/10/05 13:18	9520.6	10.3	0.0	0.1	14.4	415.9	3.3	0.2
10/10/05 16:23	9520.8	10.3	0.0	0.1	14.4	415.9	3.4	0.2
10/11/05 7:45	9520.6	10.3	0.0	0.1	14.4	415.9	4.1	0.2
10/11/05 11:37	9520.2	10.3	0.0	0.1	14.4	415.9	4.2	0.3
10/11/05 17:19	9527.9	10.3	-0.1	-0.2	>= 14.5 ft	NA	4.5	0.0
10/12/05 8:44	9527.9	10.3	-0.1	-0.2	>= 14.5 ft	NA	5.1	0.0
10/12/05 13:59	9518.7	10.3	0.1	0.1	14.4	415.9	5.3	0.3
10/12/05 16:52	9516.9	10.4	0.1	0.2	14.3	416.0	5.4	0.4
10/13/05 7:25	9515.6	10.3	0.1	0.3	14.2	416.1	6.0	0.4
10/14/2005 10:41	9515.0	10.9	0.1	0.3	14.2	416.1	7.2	0.5
10/15/2005 7:32	9445.8	10.3	1.2	2.9	11.6	418.7	8.0	3.1
10/15/2005 12:43	9438.9	10.4	1.4	3.1	11.4	418.9	8.3	3.3
10/15/2005 16:42	9434.5	10.3	1.4	3.3	11.2	419.1	8.4	3.5
10/17/2005 7:40	9421.1	10.3	1.6	3.8	10.7	419.6	10.0	4.0
10/17/2005 12:46	9416.5	10.3	1.7	4.0	10.5	419.8	10.3	4.1
10/18/2005 7:31	9422.8	10.3	1.6	3.7	10.8	419.5	11.0	3.9
10/18/2005 15:09	9374.3	10.3	2.4	5.6	8.9	421.3	11.4	5.7
10/18/2005 17:40	9378.4	10.3	2.3	5.4	9.1	421.2	11.5	5.6
10/19/2005 7:57	9384.2	10.3	2.2	5.2	9.3	421.0	12.1	5.4
10/19/2005 13:38	9374.2	10.3	2.4	5.6	8.9	421.4	12.3	5.7
10/19/2005 17:31	9321	10.3	3.3	7.6	6.9	423.3	12.5	7.7
10/20/2005 8:24	9349.1	10.3	2.8	6.5	8.0	422.3	13.1	6.7
10/20/2005 13:59	9356.7	10.3	2.7	6.2	8.3	422.0	13.3	6.4
10/21/2005 7:46	9375.1	10.3	2.4	5.5	9.0	421.3	14.1	5.7
10/21/2005 12:44	9378	10.3	2.3	5.4	9.1	421.2	14.3	5.6
10/22/2005 8:20	9392.8	10.4	2.1	4.9	9.6	420.7	15.1	5.0
10/24/2005 15:08	9380.8	10.4	2.3	5.3	9.2	421.1	17.4	5.5
10/26/2005 16:03	9349.6	10.4	2.8	6.5	8.0	422.3	19.4	6.7
10/27/2005 14:38	9354.7	10.4	2.7	6.3	8.2	422.1	20.3	6.5
10/28/2005 15:25	9364.5	10.4	2.6	5.9	8.6	421.7	21.4	6.1

**Wastebed 13 Pilot Study  
Piezometer A-6 (15 ft)**

**A-6 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = 0 to 8.9 ft

Bentonite Seal = 8.9 to 11.5 ft

Sandpack = 11.5 to 15 ft

Depth to piezometer tip from ground surface = 14.5 ft

Ro = 9525.8

To = 17.6 degrees Celsius

Linear Gage Factor (psi) = 0.01624 psi/digit

Thermal Factor = 0.007062 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.29 ft

Piezometer Tip Elevation = 415.79 ft

Serial # 04-12603

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/31/2005 10:32	9401	10.4	2.0	4.6	9.9	420.3	24.2	4.7
11/2/2005 14:38	9422.9	10.4	1.6	3.7	10.8	419.5	26.3	3.9
11/4/2005 11:02	9434.8	10.4	1.4	3.3	11.2	419.1	28.2	3.5
11/7/2005 14:37	9435.5	10.4	1.4	3.3	11.2	419.1	31.3	3.4
11/11/2005 13:45	9423	10.5	1.6	3.7	10.8	419.5	35.3	3.9
11/14/2005 16:52	9420.5	10.5	1.7	3.8	10.7	419.6	38.4	4.0
11/17/2005 15:12	9357.1	10.5	2.7	6.2	8.3	422.0	41.4	6.4
11/21/2005 12:09	9407.7	10.5	1.9	4.3	10.2	420.1	45.2	4.5
12/2/2005 11:33	9375.8	10.5	2.4	5.5	9.0	421.3	56.2	5.7
12/6/2005 14:37	9397.4	10.6	2.0	4.7	9.8	420.5	60.3	4.9
12/15/2005 14:15	9431.1	10.6	1.5	3.4	11.1	419.2	69.3	3.6
12/22/2005 15:01	9444.6	10.7	1.3	2.9	11.6	418.7	76.4	3.1
12/29/2005 10:39	9435.5	10.7	1.4	3.3	11.2	419.1	83.2	3.4
1/5/2006 13:42	9398.8	10.7	2.0	4.6	9.9	420.4	90.3	4.8
1/12/2006 10:20	9347.1	10.8	2.9	6.6	7.9	422.4	97.2	6.8
1/19/2006 13:19	9353.6	10.8	2.7	6.3	8.2	422.1	104.3	6.5
1/26/2006 13:49	9367.1	10.9	2.5	5.8	8.7	421.6	111.3	6.0
2/2/2006 11:07	9360.1	10.8	2.6	6.1	8.4	421.9	118.2	6.3
2/9/2006 12:07	9357.4	10.8	2.7	6.2	8.3	422.0	125.2	6.4
2/16/2006 11:01	9394.1	10.9	2.1	4.8	9.7	420.6	132.2	5.0
2/23/2006 13:56	9415.5	10.9	1.7	4.0	10.5	419.8	139.3	4.2
3/2/2006 11:33	9446.6	10.9	1.2	2.9	11.6	418.6	146.2	3.0
3/9/2006 15:01	9456.9	10.9	1.1	2.5	12.0	418.3	153.4	2.6
3/16/2006 13:49	9376.3	10.9	2.4	5.5	9.0	421.3	160.3	5.7
3/23/2006 14:20	9422.2	11	1.6	3.8	10.7	419.6	167.3	3.9
3/31/2006 15:12	9439.4	10.9	1.4	3.1	11.4	418.9	175.4	3.3
4/6/2006 13:36	9444.3	10.9	1.3	2.9	11.6	418.7	181.3	3.1
4/13/2006 15:48	9441.1	10.9	1.3	3.1	11.4	418.9	188.4	3.2
4/20/2006 15:38	9442.2	10.9	1.3	3.0	11.5	418.8	195.4	3.2
4/26/2006 14:18	9431.3	10.9	1.5	3.4	11.1	419.2	201.3	3.6
5/4/2006 13:52	9436.7	10.9	1.4	3.2	11.3	419.0	209.3	3.4
5/11/2006 14:51	9447.5	10.8	1.2	2.8	11.7	418.6	216.3	3.0
5/18/2006 14:02	9455.9	10.8	1.1	2.5	12.0	418.3	223.3	2.7
5/25/2006 14:20	9451.3	10.8	1.2	2.7	11.8	418.5	230.3	2.9
6/1/2006 14:08	9449.6	10.9	1.2	2.7	11.8	418.5	237.3	2.9
6/8/2006 14:20	9449.8	10.8	1.2	2.7	11.8	418.5	244.3	2.9
6/15/2006 13:22	9449.8	10.8	1.2	2.7	11.8	418.5	251.3	2.9
6/22/2006 13:37	9451.1	10.7	1.2	2.7	11.8	418.5	258.3	2.9
6/29/2006 15:03	9451.5	10.7	1.2	2.7	11.8	418.5	265.4	2.8
7/6/2006 14:55	9453.7	10.7	1.1	2.6	11.9	418.4	272.4	2.8
7/13/2006 14:33	9366.7	10.7	2.5	5.9	8.6	421.6	279.3	6.0
7/20/2006 10:13	9426	10.8	1.6	3.6	10.9	419.4	286.2	3.8
7/27/2006 9:54	9439.9	10.6	1.3	3.1	11.4	418.9	293.1	3.3
8/3/2006 9:37	9446.9	10.6	1.2	2.8	11.7	418.6	300.1	3.0
8/10/2006 13:28	9447.3	10.6	1.2	2.8	11.7	418.6	307.3	3.0
8/17/2006 15:21	9450.6	10.6	1.2	2.7	11.8	418.5	314.4	2.9
8/24/2006 15:01	9457	10.6	1.1	2.5	12.0	418.3	321.4	2.6

**Wastebed 13 Pilot Study  
Piezometer A-6 (15 ft)**

**A-6 (15 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = 0 to 8.9 ft

Bentonite Seal = 8.9 to 11.5 ft

Sandpack = 11.5 to 15 ft

Depth to piezometer tip from ground surface = 14.5 ft

Ro = 9525.8

To = 17.6 degrees Celsius

Linear Gage Factor (psi) = 0.01624 psi/digit

Thermal Factor = 0.007062 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.29 ft

Piezometer Tip Elevation = 415.79 ft

Serial # 04-12603

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
8/31/2006 9:48	9460	10.6	1.0	2.4	12.1	418.1	328.1	2.5
9/7/2006 14:32	9462.6	10.6	1.0	2.3	12.2	418.0	335.3	2.4
9/14/2006 14:30	9466.1	10.6	0.9	2.1	12.4	417.9	342.3	2.3
9/21/2006 17:06	9469.3	10.7	0.9	2.0	12.5	417.8	349.4	2.2
9/28/2006 15:16	9472.1	10.7	0.8	1.9	12.6	417.7	356.4	2.1
10/5/2006 15:31	9461.2	10.7	1.0	2.3	12.2	418.1	363.4	2.5
10/12/2006 14:32	9465.9	10.6	0.9	2.1	12.4	417.9	370.3	2.3
10/20/2006 14:03	9407	10.7	1.9	4.3	10.2	420.1	378.3	4.5
10/26/2006 14:51	9400.1	10.8	2.0	4.6	9.9	420.4	384.3	4.8
11/8/2006 12:51	9439.8	10.7	1.3	3.1	11.4	418.9	397.3	3.3
11/15/2006 16:05	9429.6	10.8	1.5	3.5	11.0	419.3	404.4	3.7
12/7/2006 14:56	9390.6	11	2.1	5.0	9.5	420.7	426.4	5.1
12/14/06 13:58	9433.1	11	1.5	3.4	11.1	419.2	433.3	3.5
12/21/2006 13:21	9436.7	11	1.4	3.2	11.3	419.0	440.3	3.4
12/28/06 13:37	9369.3	11.4	2.5	5.8	8.7	421.6	447.3	5.9
1/11/2007 15:17	9350.2	11.2	2.8	6.5	8.0	422.3	461.4	6.6
3/7/2007 10:07	9440.6	11.3	1.3	3.1	11.4	418.9	516.2	3.3
4/12/07 11:15	9310.7	11.5	3.5	8.0	6.5	423.8	552.2	8.1
5/10/2007 11:41	9347	11.4	2.9	6.6	7.9	422.4	580.2	6.8
6/21/07 13:06	9478.3	11.2	0.7	1.7	12.8	417.5	622.3	1.8
7/12/2007 13:05	9490.3	11	0.5	1.2	13.3	417.0	643.3	1.4
8/15/07 13:17	9501.3	10.9	0.4	0.8	13.7	416.6	677.3	1.0
9/20/2007 14:16	9505.8	10.9	0.3	0.6	13.9	416.4	713.3	0.8
10/25/07 15:26	9514.9	10.9	0.1	0.3	14.2	416.1	748.4	0.5

**Wastebed 13 Pilot Study  
Piezometer A-6 (30 ft)**

**A-6 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.5 ft

Sandpack = 26.5 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 8991.2

To = 14.8 degrees Celsius

Linear Gage Factor (psi) = 0.01598 psi/digit

Thermal Factor = 0.01338 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.38 ft

Piezometer Tip Elevation = 400.88 ft

Serial # 04-12604

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/28/05 10:54	8309.3	13.7	10.9	25.1	4.4	426.0		
9/28/05 11:14	8471.9	13.3	8.3	19.1	10.4	420.0		
9/30/05 13:50	8891.9	11.2	1.5	3.6	25.9	404.4		
<b>10/7/05 6:30</b>	<b>8889.2</b>	<b>11.0</b>	<b>1.6</b>	<b>3.6</b>	<b>25.9</b>	<b>404.5</b>	<b>0</b>	<b>0</b>
10/8/05 9:16	8889.3	11.1	1.6	3.6	25.9	404.5	1	0.0
10/10/05 8:39	8843.7	11	2.3	5.3	24.2	406.2	3	1.7
10/10/05 8:54	8811.4	11	2.8	6.5	23.0	407.4	3	2.9
10/10/05 8:55	8820.6	11	2.7	6.2	23.3	407.1	3	2.5
10/10/05 8:57	8824.3	11	2.6	6.0	23.5	406.9	3	2.4
10/10/05 8:59	8826.7	11	2.6	5.9	23.6	406.8	3	2.3
10/10/05 9:02	8825.8	11	2.6	6.0	23.5	406.9	3	2.3
10/10/05 9:04	8829.9	11.1	2.5	5.8	23.7	406.7	3	2.2
10/10/05 9:14	8825.5	11.1	2.6	6.0	23.5	406.9	3	2.4
10/10/05 9:21	8827.2	11.1	2.6	5.9	23.6	406.8	3	2.3
10/10/05 9:26	8827.6	11.2	2.6	5.9	23.6	406.8	3	2.3
10/10/05 9:29	8823.9	11	2.6	6.1	23.4	406.9	3	2.4
10/10/05 9:35	8815	11	2.8	6.4	23.1	407.3	3	2.7
10/10/05 9:42	8825.1	11	2.6	6.0	23.5	406.9	3	2.4
10/10/05 10:00	8826.1	11	2.6	6.0	23.5	406.9	3	2.3
10/10/05 10:09	8819.9	11	2.7	6.2	23.3	407.1	3	2.6
10/10/05 10:15	8805.8	11	2.9	6.7	22.8	407.6	3	3.1
10/10/05 10:22	8810.9	11	2.8	6.5	23.0	407.4	3	2.9
10/10/05 10:29	8813.1	11	2.8	6.5	23.0	407.3	3	2.8
10/10/05 10:33	8807.3	11	2.9	6.7	22.8	407.5	3	3.0
10/10/05 10:35	8805.8	11	2.9	6.7	22.8	407.6	3	3.1
10/10/05 10:36	8812.1	11	2.8	6.5	23.0	407.4	3	2.8
10/10/05 10:37	8794.2	11	3.1	7.1	22.4	408.0	3	3.5
10/10/05 10:38	8809.3	11	2.9	6.6	22.9	407.5	3	2.9
10/10/05 10:39	8811.8	11	2.8	6.5	23.0	407.4	3	2.9
10/10/05 10:42	8810.8	11	2.8	6.5	23.0	407.4	3	2.9
10/10/05 10:43	8800.1	11	3.0	6.9	22.6	407.8	3	3.3
10/10/05 10:43	8803.8	11	2.9	6.8	22.7	407.7	3	3.1
10/10/05 10:44	8810.5	11	2.8	6.5	23.0	407.4	3	2.9
10/10/05 10:49	8811.6	11	2.8	6.5	23.0	407.4	3	2.9
10/10/05 10:51	8812.4	11	2.8	6.5	23.0	407.4	3	2.8
10/10/05 10:53	8810.1	11	2.8	6.6	22.9	407.4	3	2.9
10/10/05 10:56	8806.8	11	2.9	6.7	22.8	407.6	3	3.0
10/10/05 10:58	8812.7	11	2.8	6.5	23.0	407.3	3	2.8
10/10/05 11:03	8812.4	11	2.8	6.5	23.0	407.4	3	2.8
10/10/05 11:07	8810.8	11	2.8	6.5	23.0	407.4	3	2.9
10/10/05 11:11	8813.9	11	2.8	6.4	23.1	407.3	3	2.8
10/10/05 11:14	8814.5	11	2.8	6.4	23.1	407.3	3	2.8
10/10/05 11:19	8813.9	11	2.8	6.4	23.1	407.3	3	2.8
10/10/05 11:24	8815.4	11	2.8	6.4	23.1	407.2	3	2.7
10/10/05 11:30	8816	11.1	2.8	6.3	23.2	407.2	3	2.7
10/10/05 13:16	8822	11	2.7	6.1	23.4	407.0	3	2.5
10/10/05 13:35	8822.2	11	2.6	6.1	23.4	407.0	3	2.5

**Wastebed 13 Pilot Study  
Piezometer A-6 (30 ft)**

**A-6 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.5 ft

Sandpack = 26.5 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 8991.2

To = 14.8 degrees Celsius

Linear Gage Factor (psi) = 0.01598 psi/digit

Thermal Factor = 0.01338 psi/°C

Unit Weight of Water = 62.4pcf

Initial Ground Surface Elevation = 430.38 ft

Piezometer Tip Elevation = 400.88 ft

Serial # 04-12604

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/10/05 16:22	8828.7	11	2.5	5.9	23.6	406.8	3	2.2
10/11/05 7:44	8841.1	11	2.3	5.4	24.1	406.3	4	1.8
10/11/05 11:36	8834.9	11	2.4	5.6	23.9	406.5	4	2.0
10/11/05 17:17	8835.4	11.0	2.4	5.6	23.9	406.5	4	2.0
10/12/05 8:42	8836.5	11	2.4	5.6	23.9	406.5	5	1.9
10/12/05 13:58	8816.2	11	2.7	6.3	23.2	407.2	5	2.7
10/12/05 16:53	8796.9	11	3.1	7.0	22.5	407.9	5	3.4
10/13/05 7:24	8800.4	11.1	3.0	6.9	22.6	407.8	6	3.3
10/14/2005 10:42	8790.4	11.5	3.2	7.3	22.2	408.2	7	3.7
10/15/2005 7:33	8806.8	11	2.9	6.7	22.8	407.6	8	3.0
10/15/2005 12:43	8781.8	11.1	3.3	7.6	21.9	408.5	8	4.0
10/15/2005 16:42	8747.9	11	3.8	8.9	20.6	409.7	8	5.2
10/17/2005 7:42	8743	11	3.9	9.0	20.5	409.9	10	5.4
10/17/2005 12:47	8723.8	11	4.2	9.7	19.8	410.6	10	6.1
10/18/2005 7:30	8731.3	11	4.1	9.5	20.0	410.3	11	5.8
10/18/2005 15:10	8630.1	11	5.7	13.2	16.3	414.1	11	9.6
10/18/2005 17:39	8620.1	11	5.9	13.6	15.9	414.4	11	9.9
10/19/2005 7:58	8615.1	11	6.0	13.8	15.7	414.6	12	10.1
10/19/2005 13:38	8599.3	11	6.2	14.3	15.2	415.2	12	10.7
10/19/2005 17:32	8515.2	11	7.6	17.4	12.1	418.3	12	13.8
10/20/2005 8:25	8515.1	11	7.6	17.4	12.1	418.3	13	13.8
10/20/2005 14:00	8520	11	7.5	17.3	12.2	418.1	13	13.6
10/21/2005 7:47	8530.1	11	7.3	16.9	12.6	417.8	14	13.2
10/21/2005 12:46	8534	11	7.3	16.7	12.8	417.6	14	13.1
10/22/2005 8:21	8551.3	11	7.0	16.1	13.4	417.0	15	12.5
10/24/2005 15:09	8570.2	11	6.7	15.4	14.1	416.3	17	11.8
10/26/2005 16:04	8584.8	11	6.4	14.9	14.6	415.7	19	11.2
10/27/2005 14:39	8582	11	6.5	15.0	14.5	415.9	20	11.3
10/28/2005 15:26	8584.6	11	6.4	14.9	14.6	415.8	21	11.2
10/31/2005 10:33	8607	11	6.1	14.1	15.4	414.9	24	10.4
11/2/2005 14:39	8615.2	11	6.0	13.7	15.8	414.6	26	10.1
11/4/2005 11:03	8632	11	5.7	13.1	16.4	414.0	28	9.5
11/7/2005 14:38	8640.5	11.1	5.6	12.8	16.7	413.7	31	9.2
11/11/2005 13:45	8660.6	11	5.2	12.1	17.4	413.0	35	8.4
11/14/2005 16:52	8663.3	11	5.2	12.0	17.5	412.9	38	8.3
11/17/2005 15:13	8667.3	11	5.1	11.8	17.7	412.7	41	8.2
11/21/2005 12:10	8688	11	4.8	11.1	18.4	411.9	45	7.4
12/2/2005 11:33	8695.3	11	4.7	10.8	18.7	411.7	56	7.2
12/6/2005 14:38	8689.5	11	4.8	11.0	18.5	411.9	60	7.4
12/15/2005 14:17	8716.1	11	4.3	10.0	19.5	410.9	69	6.4
12/22/2005 15:00	8733	11	4.1	9.4	20.1	410.3	76	5.8
12/29/2005 10:40	8749.9	11	3.8	8.8	20.7	409.7	83	5.1
1/5/2006 13:43	8736.9	11	4.0	9.3	20.2	410.1	90	5.6
1/12/2006 10:21	8696.4	11	4.7	10.8	18.7	411.6	97	7.1
1/19/2006 13:20	8663.1	10.9	5.2	12.0	17.5	412.9	104	8.3
1/26/2006 13:50	8663.5	11	5.2	12.0	17.5	412.8	111	8.3
2/2/2006 11:08	8679.3	10.9	4.9	11.4	18.1	412.3	118	7.7

**Wastebed 13 Pilot Study  
Piezometer A-6 (30 ft)**

**A-6 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.5 ft

Sandpack = 26.5 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 8991.2

To = 14.8 degrees Celsius

Linear Gage Factor (psi) = 0.01598 psi/digit

Thermal Factor = 0.01338 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.38 ft

Piezometer Tip Elevation = 400.88 ft

Serial # 04-12604

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
2/9/2006 12:08	8666.3	10.9	5.1	11.9	17.6	412.7	125	8.2
2/16/2006 11:02	8690.5	10.9	4.8	11.0	18.5	411.8	132	7.3
2/23/2006 13:57	8713.4	10.9	4.4	10.1	19.4	411.0	139	6.5
3/2/2006 11:34	8747.2	10.9	3.8	8.9	20.6	409.8	146	5.2
3/9/2006 15:01	8773.8	10.9	3.4	7.9	21.6	408.8	153	4.3
3/16/2006 13:50	8721.3	10.9	4.3	9.8	19.7	410.7	160	6.2
3/23/2006 14:41	8723.4	10.9	4.2	9.8	19.7	410.6	167	6.1
3/31/2006 15:13	8754.4	10.9	3.7	8.6	20.9	409.5	175	5.0
4/6/2006 13:37	8765.5	10.9	3.6	8.2	21.3	409.1	181	4.6
4/13/2006 15:49	8766.8	10.9	3.5	8.2	21.3	409.0	188	4.5
4/20/2006 15:39	8780.6	10.9	3.3	7.6	21.9	408.5	195	4.0
4/26/2006 14:19	8773.3	10.9	3.4	7.9	21.6	408.8	201	4.3
5/4/2006 13:53	8781.3	10.9	3.3	7.6	21.9	408.5	209	4.0
5/11/2006 14:52	8802.4	10.9	3.0	6.8	22.7	407.7	216	3.2
5/18/2006 14:03	8815.6	10.9	2.8	6.4	23.1	407.2	223	2.7
5/25/2006 14:20	8810.9	10.9	2.8	6.5	23.0	407.4	230	2.9
6/1/2006 14:09	8810.3	10.9	2.8	6.6	22.9	407.4	237	2.9
6/8/2006 14:21	8815.9	10.9	2.7	6.3	23.2	407.2	244	2.7
6/15/2006 13:23	8813.5	10.9	2.8	6.4	23.1	407.3	251	2.8
6/22/2006 13:37	8820.1	10.9	2.7	6.2	23.3	407.1	258	2.5
6/29/2006 15:04	8825.5	10.9	2.6	6.0	23.5	406.9	265	2.3
7/6/2006 14:56	8826.5	10.9	2.6	6.0	23.5	406.8	272	2.3
7/13/2006 14:34	8809.3	10.9	2.9	6.6	22.9	407.5	279	2.9
7/20/2006 10:14	8779.4	10.9	3.3	7.7	21.8	408.6	286	4.0
7/27/2006 9:55	8801.9	10.9	3.0	6.9	22.6	407.7	293	3.2
8/3/2006 9:38	8815	10.9	2.8	6.4	23.1	407.3	300	2.7
8/10/2006 13:29	8822.7	10.9	2.6	6.1	23.4	407.0	307	2.4
8/17/2006 15:22	8824.4	10.9	2.6	6.0	23.5	406.9	314	2.4
8/24/2006 15:02	8837.5	10.9	2.4	5.5	24.0	406.4	321	1.9
8/31/2006 9:48	8836	10.9	2.4	5.6	23.9	406.5	328	2.0
9/7/2006 14:33	8845.1	10.9	2.3	5.3	24.2	406.1	335	1.6
9/14/2006 14:32	8849.3	10.9	2.2	5.1	24.4	406.0	342	1.5
9/21/2006 17:06	8848.8	10.9	2.2	5.1	24.4	406.0	349	1.5
9/28/2006 15:17	8858.8	10.9	2.1	4.8	24.7	405.6	356	1.1
10/5/2006 15:32	8838.2	11	2.4	5.5	24.0	406.4	363	1.9
10/12/2006 15:33	8848	10.9	2.2	5.2	24.3	406.0	370	1.5
10/20/2006 14:04	8838.1	10.9	2.4	5.5	24.0	406.4	378	1.9
10/26/2006 14:53	8769.5	10.9	3.5	8.1	21.4	408.9	384	4.4
11/8/2006 12:51	8770.5	10.9	3.5	8.0	21.5	408.9	397	4.4
11/15/2006 16:05	8779.4	11	3.3	7.7	21.8	408.6	404	4.0
12/7/2006 14:57	8726.2	10.9	4.2	9.7	19.8	410.5	426	6.0
12/14/06 13:59	8757.5	10.9	3.7	8.5	21.0	409.4	433	4.9
12/21/2006 13:22	8768.5	10.9	3.5	8.1	21.4	409.0	440	4.4
12/28/06 13:38	8742.9	10.9	3.9	9.0	20.5	409.9	447	5.4
1/11/2007 15:19	8707.5	10.9	4.5	10.3	19.2	411.2	461	6.7
3/7/2007 10:09	8811.9	10.9	2.8	6.5	23.0	407.4	516	2.8
4/12/07 11:16	8642.3	10.9	5.5	12.7	16.8	413.6	552	9.1
5/10/2007 11:41	8675.2	10.9	5.0	11.5	18.0	412.4	580	7.9
6/21/07 13:07	8852.3	10.9	2.2	5.0	24.5	405.9	622	1.4

**Wastebed 13 Pilot Study  
Piezometer A-6 (30 ft)**

**A-6 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/28/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.5 ft

Sandpack = 26.5 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Ro = 8991.2

To = 14.8 degrees Celsius

Linear Gage Factor (psi) = 0.01598 psi/digit

Thermal Factor = 0.01338 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.38 ft

Piezometer Tip Elevation = 400.88 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
7/12/2007 13:06	8866.7	10.9	1.9	4.5	25.0	405.4	643	0.8
8/15/07 13:19	8878.4	10.9	1.8	4.0	25.5	404.9	677	0.4
9/20/2007 14:18	8880.4	10.9	1.7	4.0	25.5	404.8	713	0.3
10/25/07 15:26	8880.6	10.9	1.7	4.0	25.5	404.8	748	0.3

**Wastebed 13 Pilot Study  
Piezometer A-6 (45 ft)**

**A-6 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout =

0 to 36.2 ft

Bentonite Seal =

36.2 to 41.5 ft

Sandpack =

41.5 to 45 ft

Depth to piezometer tip from ground surface =

44.5 ft

Ro =

9100.2

To =

15.9 degrees Celsius

Linear Gage Factor (psi) =

0.01581 psi/digit

Thermal Factor =

0.016392 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.39 ft

Piezometer Tip Elevation =

385.89 ft

Serial # 04-12607

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/27/05 14:49	8098.2	15.9	15.8	36.6	7.9	422.4		
9/27/05 15:12	8268.4	15.6	13.1	30.3	14.2	416.2		
10/7/05 6:30	8957.3	11	2.2	5.0	39.5	390.9	0	0
10/8/05 9:15	8955.3	11.1	2.2	5.1	39.4	391.0	1.1	0.1
10/10/05 8:38	8919	11	2.8	6.4	38.1	392.3	3.1	1.4
10/10/05 8:52	8895.7	11	3.2	7.3	37.2	393.2	3.1	2.2
10/10/05 9:00	8895.3	11	3.2	7.3	37.2	393.2	3.1	2.3
10/10/05 9:16	8890.5	11	3.2	7.5	37.0	393.4	3.1	2.4
10/10/05 9:30	8888.1	11	3.3	7.6	36.9	393.4	3.1	2.5
10/10/05 9:59	8880.2	11	3.4	7.8	36.7	393.7	3.1	2.8
10/10/05 10:17	8861.1	11	3.7	8.5	36.0	394.4	3.2	3.5
10/10/05 10:30	8863.4	11	3.7	8.5	36.0	394.3	3.2	3.4
10/10/05 10:46	8858.5	11	3.7	8.6	35.9	394.5	3.2	3.6
10/10/05 10:59	8860.2	11	3.7	8.6	35.9	394.5	3.2	3.5
10/10/05 11:15	8861.9	11	3.7	8.5	36.0	394.4	3.2	3.5
10/10/05 11:31	8862.5	11	3.7	8.5	36.0	394.4	3.2	3.5
10/10/05 13:17	8869.4	11	3.6	8.2	36.3	394.1	3.3	3.2
10/10/05 16:22	8878.3	11	3.4	7.9	36.6	393.8	3.4	2.9
10/11/05 7:46	8884.2	11	3.3	7.7	36.8	393.6	4.1	2.7
10/11/05 11:37	8886.4	11	3.3	7.6	36.9	393.5	4.2	2.6
10/11/05 17:15	8881.8	11	3.4	7.8	36.7	393.7	4.4	2.8
10/12/05 8:40	8880.2	11.0	3.4	7.8	36.7	393.7	5.1	2.8
10/12/05 13:59	8855.7	11	3.8	8.7	35.8	394.6	5.3	3.7
10/12/05 16:54	8841.6	11	4.0	9.2	35.3	395.1	5.4	4.2
10/13/05 7:24	8850.5	11	3.9	8.9	35.6	394.8	6.0	3.9
10/14/2005 10:43	8847.0	11.6	3.9	9.1	35.4	395.0	7.2	4.0
10/15/2005 7:30	8862.4	10.9	3.7	8.5	36.0	394.4	8.0	3.5
10/15/2005 12:43	8843	11.1	4.0	9.2	35.3	395.1	8.3	4.2
10/15/2005 16:42	8816.2	11	4.4	10.2	34.3	396.1	8.4	5.1
10/17/2005 7:44	8811.5	11	4.5	10.3	34.2	396.2	10.1	5.3
10/17/2005 12:48	8790.1	11	4.8	11.1	33.4	397.0	10.3	6.1
10/18/2005 7:31	8798.2	11	4.7	10.8	33.7	396.7	11.0	5.8
10/18/2005 15:11	8723.3	11	5.9	13.6	30.9	399.5	11.4	8.5
10/18/2005 17:40	8711.3	11	6.1	14.0	30.5	399.9	11.5	9.0
10/19/2005 7:58	8700.4	11	6.2	14.4	30.1	400.3	12.1	9.4
10/19/2005 13:39	8683.1	11	6.5	15.0	29.5	400.9	12.3	10.0
10/19/2005 17:32	8612.8	11	7.6	17.6	26.9	403.5	12.5	12.6
10/20/2005 8:25	8615.1	11	7.6	17.5	27.0	403.4	13.1	12.5
10/20/2005 14:01	8620.4	11	7.5	17.3	27.2	403.2	13.3	12.3
10/21/2005 7:48	8628.2	11	7.4	17.0	27.5	402.9	14.1	12.0
10/21/05 12:47	8630.2	11	7.4	17.0	27.5	402.9	14.3	11.9
10/22/05 8:22	8643	11	7.1	16.5	28.0	402.4	15.1	11.5
10/24/05 15:09	8657.3	11	6.9	16.0	28.5	401.9	17.4	10.9

**Wastebed 13 Pilot Study  
Piezometer A-6 (45 ft)**

**A-6 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout = 0 to 36.2 ft

Bentonite Seal = 36.2 to 41.5 ft

Sandpack = 41.5 to 45 ft

Depth to piezometer tip from ground surface = 44.5 ft

Ro = 9100.2

To = 15.9 degrees Celsius

Linear Gage Factor (psi) = 0.01581 psi/digit

Thermal Factor = 0.016392 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.39 ft

Piezometer Tip Elevation = 385.89 ft

Serial # 04-12607

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/26/2005 16:04	8674.8	11	6.6	15.3	29.2	401.2	19.4	10.3
10/27/2005 14:40	8672.3	11	6.7	15.4	29.1	401.3	20.3	10.4
10/28/2005 15:27	8672.8	11	6.7	15.4	29.1	401.3	21.4	10.4
10/31/2005 10:33	8689.6	11	6.4	14.8	29.7	400.7	24.2	9.8
11/2/2005 14:39	8698	10.9	6.3	14.5	30.0	400.4	26.3	9.5
11/4/2005 11:04	8712.6	10.9	6.0	14.0	30.5	399.8	28.2	8.9
11/7/2005 14:39	8716.2	10.9	6.0	13.8	30.7	399.7	31.3	8.8
11/11/2005 13:46	8730.4	11	5.8	13.3	31.2	399.2	35.3	8.3
11/14/2005 16:53	8730.1	10.9	5.8	13.3	31.2	399.2	38.4	8.3
11/17/2005 15:14	8737.7	11	5.7	13.0	31.5	398.9	41.4	8.0
11/21/2005 12:10	8751.4	10.9	5.4	12.5	32.0	398.4	45.2	7.5
12/2/2005 11:34	8766.1	10.9	5.2	12.0	32.5	397.9	56.2	7.0
12/6/2005 14:39	8749.4	10.9	5.5	12.6	31.9	398.5	60.3	7.6
12/15/2005 14:18	8764.1	11	5.2	12.1	32.4	398.0	69.3	7.0
12/22/2005 15:02	8778.2	11	5.0	11.6	32.9	397.5	76.4	6.5
12/29/2005 10:41	8803.3	10.9	4.6	10.6	33.9	396.5	83.2	5.6
1/5/2006 13:44	8795.3	10.9	4.7	10.9	33.6	396.8	90.3	5.9
1/12/2006 10:22	8766.2	10.9	5.2	12.0	32.5	397.9	97.2	7.0
1/19/2006 13:21	8737.5	10.9	5.7	13.0	31.5	398.9	104.3	8.0
1/26/2006 13:51	8726.7	10.9	5.8	13.4	31.1	399.3	111.3	8.4
2/2/2006 11:09	8744.5	10.9	5.5	12.8	31.7	398.7	118.2	7.8
2/9/2006 12:09	8736.9	10.9	5.7	13.1	31.4	399.0	125.2	8.0
2/16/2006 11:03	8742.5	10.9	5.6	12.9	31.6	398.8	132.2	7.8
2/23/2006 13:59	8763.9	10.9	5.2	12.1	32.4	398.0	139.3	7.1
3/2/2006 11:34	8787.6	10.9	4.9	11.2	33.3	397.1	146.2	6.2
3/9/2006 15:03	8811.6	10.9	4.5	10.3	34.2	396.2	153.4	5.3
3/16/2006 13:52	8793.3	10.9	4.8	11.0	33.5	396.9	160.3	6.0
3/23/2006 14:42	8782.3	10.9	4.9	11.4	33.1	397.3	167.3	6.4
3/31/2006 15:14	8801.9	10.9	4.6	10.7	33.8	396.6	175.4	5.7
4/6/2006 13:38	8810.3	10.9	4.5	10.4	34.1	396.3	181.3	5.4
4/13/2006 15:50	8814.8	10.9	4.4	10.2	34.3	396.1	188.4	5.2
4/20/2006 15:40	8824.6	10.8	4.3	9.9	34.6	395.8	195.4	4.8
4/26/2006 14:20	8827.2	10.9	4.2	9.8	34.7	395.7	201.3	4.7
5/4/2006 13:54	8829.6	10.8	4.2	9.7	34.8	395.6	209.3	4.7
5/11/2006 14:53	8848.2	10.9	3.9	9.0	35.5	394.9	216.3	4.0
5/18/2006 14:04	8865.9	11	3.6	8.4	36.1	394.3	223.3	3.3
5/25/2006 14:21	8858.4	10.8	3.7	8.6	35.9	394.5	230.3	3.6
6/1/2006 14:10	8857.7	10.8	3.8	8.7	35.8	394.5	237.3	3.6
6/8/2006 14:22	8866.1	10.8	3.6	8.3	36.2	394.2	244.3	3.3
6/15/2006 13:24	8865	10.8	3.6	8.4	36.1	394.3	251.3	3.4
6/22/2006 13:38	8872.7	10.8	3.5	8.1	36.4	394.0	258.3	3.1
6/29/2006 15:05	8879.5	10.8	3.4	7.9	36.6	393.7	265.4	2.8
7/6/2006 14:57	8881.5	10.8	3.4	7.8	36.7	393.7	272.4	2.8
7/13/2006 14:35	8881.5	10.8	3.4	7.8	36.7	393.7	279.3	2.8
7/20/2006 10:14	8851.8	10.8	3.8	8.9	35.6	394.8	286.2	3.8
7/27/2006 9:56	8860.6	10.8	3.7	8.5	36.0	394.4	293.1	3.5

**Wastebed 13 Pilot Study  
Piezometer A-6 (45 ft)**

**A-6 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout =

0 to 36.2 ft

Bentonite Seal =

36.2 to 41.5 ft

Sandpack =

41.5 to 45 ft

Depth to piezometer tip from ground surface =

44.5 ft

Ro =

9100.2

To =

15.9 degrees Celsius

Linear Gage Factor (psi) =

0.01581 psi/digit

Thermal Factor =

0.016392 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

430.39 ft

Piezometer Tip Elevation =

385.89 ft

Serial # 04-12607

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
8/3/2006 9:39	8872	10.8	3.5	8.1	36.4	394.0	300.1	3.1
8/10/2006 13:30	8879.9	10.8	3.4	7.8	36.7	393.7	307.3	2.8
8/17/2006 15:23	8880.8	10.8	3.4	7.8	36.7	393.7	314.4	2.8
8/24/2006 15:02	8896.4	10.8	3.1	7.2	37.3	393.1	321.4	2.2
8/31/2006 9:50	8894.4	10.8	3.2	7.3	37.2	393.2	328.1	2.3
9/7/2006 14:34	8904.7	10.8	3.0	6.9	37.6	392.8	335.3	1.9
9/14/2006 14:33	8910.9	10.8	2.9	6.7	37.8	392.6	342.3	1.7
9/21/2006 17:07	8912.7	10.8	2.9	6.6	37.9	392.5	349.4	1.6
9/28/2006 15:18	8925.5	10.9	2.7	6.2	38.3	392.1	356.4	1.2
10/5/2006 15:34	8910.8	10.9	2.9	6.7	37.8	392.6	363.4	1.7
10/12/2006 14:35	8925.5	10.8	2.7	6.2	38.3	392.1	370.3	1.2
10/20/2006 14:06	8918.1	10.8	2.8	6.5	38.0	392.3	378.3	1.4
10/26/2006 14:57	8854	10.9	3.8	8.8	35.7	394.7	384.4	3.8
11/8/2006 12:52	8841.3	10.8	4.0	9.3	35.2	395.1	397.3	4.2
11/15/2006 16:06	8841.1	10.8	4.0	9.3	35.2	395.2	404.4	4.2
12/7/2006 14:58	8805.4	10.8	4.6	10.6	33.9	396.5	426.4	5.5
12/14/06 14:00	8820.1	10.8	4.3	10.0	34.5	395.9	433.3	5.0
12/21/2006 13:23	8824.2	10.8	4.3	9.9	34.6	395.8	440.3	4.8
12/28/06 13:39	8819.7	10.8	4.4	10.0	34.5	395.9	447.3	5.0
1/11/2007 15:20	8794.5	10.8	4.7	11.0	33.5	396.9	461.4	5.9
3/7/2007 10:10	8888	10.8	3.3	7.5	37.0	393.4	516.2	2.5
4/12/07 11:17	8724.8	10.8	5.9	13.5	31.0	399.4	552.2	8.5
5/10/2007 11:42	8737.9	10.8	5.6	13.0	31.5	398.9	580.2	8.0
6/21/07 13:08	8922.3	10.7	2.7	6.3	38.2	392.2	622.3	1.3
7/12/2007 13:07	8949.7	10.7	2.3	5.3	39.2	391.2	643.3	0.3
8/15/07 13:20	8971.9	10.8	1.9	4.5	40.0	390.4	677.3	-0.5
9/20/2007 14:20	8975.7	10.7	1.9	4.3	40.2	390.2	713.3	-0.7
10/25/07 15:26	8978	10.7	1.8	4.3	40.2	390.2	748.4	-0.8

**Wastebed 13 Pilot Study**  
**Piezometer A-7 (15 ft)**

Wastebed 13 Settlement Pilot Study  
Monitoring Data - Year 2

**A-7 (15 ft)**

**Standpipe Piezometer**

Date Installed: 9/15/2005

Grout = 0 to 7 ft

Bentonite Seal = 7 to 9.5 ft

Sandpack Set Depth = 9.5 to 15 ft

Screened Interval = 12 to 15 ft

Piezometer Set Depth = 15 ft

Initial Casing Stickup = 4 ft

Intermediate Casing Stickup as of 10/11/05 = 8.9 ft

Final Casing Stickup as of 10/19/05 = 13.9 ft

Initial Top of Casing Elevation = 433.92 ft

Intermediate Top of Casing Elevation = 438.85 ft

Final Top of Casing Elevation = 443.85 ft

Initial Ground Surface Elevation = 429.92 ft

Standpipe Tip Elevation = 414.92 ft

\*\* Indicates that a baseline piezometric level of 15 ft bgs was assumed for this calculation.

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)**
9/19/05 13:50	Dry (Init)	Dry	Dry		
10/8/05 9:35	Dry (Init)	Dry	Dry	1	0
10/10/05 8:24	Dry (Init)	Dry	Dry	3.0	NA
10/10/05 13:21	Dry (Init)	Dry	Dry	3.2	NA
10/11/05 7:32	Dry (Init)	Dry	Dry	3.9	NA
10/11/05 16:57	Dry (Init)	Dry	Dry	4.3	NA
10/12/05 9:00	Dry (Inter)	Dry	Dry	5.0	NA
10/12/05 17:42	Dry (Inter)	Dry	Dry	5.3	NA
10/13/05 12:52	Dry (Inter)	Dry	Dry	6.1	NA
10/14/2005 11:09	Dry (Inter)	Dry	Dry	7.1	NA
10/15/2005 8:36	22.01	13.1	416.8	8.0	1.9
10/15/2005 17:18	20.75	11.8	418.1	8.3	3.2
10/17/2005 8:45	19.8	10.9	419.1	10.0	4.1
10/17/05 13:35	19.8	10.9	419.1	10.2	4.1
10/18/2005 7:58	19.71	10.8	419.1	10.9	4.2
10/18/2005 15:45	19.31	10.4	419.5	11.3	4.6
10/18/2005 17:27	18.81	9.9	420.0	11.3	5.1
10/19/2005 7:42	18.78	9.8	420.1	11.9	5.2
10/20/2005 13:47	23.3	9.4	420.6	13.2	5.6
10/20/2005 15:41	23.35	9.4	420.5	13.3	5.6
10/21/2005 8:26	23.67	9.7	420.2	14.0	5.3
10/21/05 13:32	23.7	9.8	420.2	14.2	5.2
10/22/05 9:02	23.87	9.9	420.0	15.0	5.1
10/24/05 15:29	23.7	9.8	420.2	17.2	5.2
10/26/2005 16:28	22.26	8.3	421.6	19.3	6.7
10/27/2005 15:10	22.75	8.8	421.1	20.2	6.2
10/28/2005 16:08	23.15	9.2	420.7	21.3	5.8
10/31/2005 10:50	23.88	9.9	420.0	24.1	5.1
11/2/2005 14:57	24.27	10.3	419.6	26.2	4.7
11/4/2005 11:26	24.45	10.5	419.4	28.1	4.5
11/7/2005 15:03	24.94	11.0	418.9	31.2	4.0
11/11/2005 13:34	24.43	10.5	419.4	35.2	4.5
11/14/2005 16:32	24.45	10.5	419.4	38.3	4.5
11/17/2005 15:10	22.5	8.6	421.4	41.2	6.4
11/21/2005 12:09	23.55	9.6	420.3	45.1	5.4
12/2/2005 11:30	22.54	8.6	421.3	56.1	6.4
12/6/2005 14:35	23.4	9.5	420.5	60.2	5.5
12/15/2005 14:13	24.6	10.7	419.3	69.2	4.3
12/22/2005 14:55	25.58	11.6	418.3	76.2	3.4
12/29/2005 10:39	23.95	10.0	419.9	83.0	5.0
1/5/2006 13:41	22.82	8.9	421.0	90.2	6.1
1/12/2006 10:20	21.97	8.0	421.9	97.0	7.0
1/19/2006 13:19	22.47	8.5	421.4	104.2	6.5
1/26/2006 13:47	22.95	9.0	420.9	111.2	6.0

**Wastebed 13 Pilot Study  
Piezometer A-7 (15 ft)**

**A-7 (15 ft)**

**Standpipe Piezometer**

Date Installed: 9/15/2005

Grout =

0 to 7 ft

Bentonite Seal =

7 to 9.5 ft

Sandpack Set Depth =

9.5 to 15 ft

Screened Interval =

12 to 15 ft

Piezometer Set Depth =

15 ft

Initial Casing Stickup =

4 ft

Intermediate Casing Stickup as of 10/11/05 =

8.9 ft

Final Casing Stickup as of 10/19/05 =

13.9 ft

Initial Top of Casing Elevation =

433.92 ft

Intermediate Top of Casing Elevation =

438.85 ft

Final Top of Casing Elevation =

443.85 ft

Initial Ground Surface Elevation =

429.92 ft

Standpipe Tip Elevation =

414.92 ft

\*\* Indicates that a baseline piezometric level of 15 ft bgs was assumed for this calculation.

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)**
2/2/2006 11:09	22.41	8.5	421.4	118.1	6.5
2/9/2006 12:08	22.44	8.5	421.4	125.1	6.5
2/16/2006 10:55	23.4	9.5	420.5	132.1	5.5
2/23/2006 13:53	23.66	9.7	420.2	139.2	5.3
3/2/2006 11:32	24.5	10.6	419.4	146.1	4.4
3/9/2006 14:57	25.67	11.7	418.2	153.2	3.3
3/16/2006 13:45	22.9	9.0	421.0	160.2	6.0
3/23/2006 14:35	24.04	10.1	419.8	167.2	4.9
3/31/2006 15:10	24.73	10.8	419.1	175.2	4.2
4/6/2006 13:33	24.98	11.0	418.9	181.2	4.0
4/13/2006 15:47	25.05	11.1	418.8	188.3	3.9
4/20/2006 15:36	25.72	11.8	418.1	195.3	3.2
4/26/2006 14:17	24.29	10.4	419.6	201.2	4.6
5/4/2006 13:52	25.38	11.4	418.5	209.2	3.6
5/11/2006 14:48	25.95	12.0	417.9	216.2	3.0
5/18/2006 13:57	26.04	12.1	417.8	223.2	2.9
5/25/2006 14:20	26.17	12.2	417.7	230.2	2.8
6/1/2006 14:09	26.32	12.4	417.5	237.2	2.6
6/8/2006 14:15	26.24	12.3	417.6	244.2	2.7
6/15/2006 13:24	26.42	12.5	417.4	251.2	2.5
6/22/2006 13:34	26.65	12.7	417.2	258.2	2.3
6/29/2006 15:00	26.87	12.9	417.0	265.2	2.1
7/6/2006 14:22	27.11	13.2	416.7	272.2	1.8
7/13/2006 14:34	22.64	8.7	421.2	279.2	6.3
7/20/2006 10:12	24.85	10.9	419.0	286.0	4.1
7/27/2006 9:55	25.87	11.9	418.0	293.0	3.1
8/3/2006 9:40	26.09	12.2	417.8	300.0	2.8
8/10/2006 13:32	26.17	12.2	417.7	307.2	2.8
8/17/2006 15:24	26.61	12.7	417.2	314.2	2.3
8/24/2006 14:59	26.95	13.0	416.9	321.2	2.0
8/31/2006 9:44	27.38	13.4	416.5	328.0	1.6
9/7/2006 14:23	27.43	13.5	416.4	335.2	1.5
9/14/2006 14:29	27.58	13.6	416.3	342.2	1.4
9/21/2006 17:05	27.68	13.7	416.2	349.3	1.3
9/28/2006 14:45	27.56	13.6	416.3	356.2	1.4
10/5/2006 15:29	26.4	12.5	417.5	363.2	2.5
10/12/2006 14:29	26.35	12.4	417.5	370.2	2.6
10/20/2006 15:06	22.61	8.7	421.2	378.2	6.3
10/26/2006 14:44	23.45	9.5	420.4	384.2	5.5
11/8/2006 12:46	24.15	10.2	419.7	397.1	4.8
11/15/2006 15:57	23.99	10.1	419.9	404.3	4.9
12/7/2006 14:48	23.15	9.2	420.7	426.2	5.8
12/14/06 13:57	23.95	10.0	419.9	433.2	5.0
12/21/2006 13:19	24.81	10.9	419.0	440.2	4.1

**Wastebed 13 Pilot Study  
Piezometer A-7 (15 ft)**

**A-7 (15 ft)**

Standpipe Piezometer

Date Installed: 9/15/2005

Grout =

0 to 7 ft

Bentonite Seal =

7 to 9.5 ft

Sandpack Set Depth =

9.5 to 15 ft

Screened Interval =

12 to 15 ft

Piezometer Set Depth =

15 ft

Initial Casing Stickup =

4 ft

Intermediate Casing Stickup as of 10/11/05 =

8.9 ft

Final Casing Stickup as of 10/19/05 =

13.9 ft

Initial Top of Casing Elevation =

433.92 ft

Intermediate Top of Casing Elevation =

438.85 ft

Final Top of Casing Elevation =

443.85 ft

Initial Ground Surface Elevation =

429.92 ft

Standpipe Tip Elevation =

414.92 ft

\*\* Indicates that a baseline piezometric level of 15 ft bgs was assumed for this calculation.

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)**
12/28/06 13:34	22.78	8.8	421.1	447.2	6.2
1/11/2007 15:13	22.43	8.5	421.4	461.2	6.5
2/22/07 10:48	26.4	12.5	417.5	503.1	2.5
3/7/2007 10:27	25.18	11.2	418.7	516.0	3.8
4/12/07 11:12	19.97	6.0	423.9	552.1	9.0
5/10/2007 11:38	21.81	7.9	422.0	580.1	7.1
6/21/07 13:04	26.9	13.0	417.0	622.1	2.0
7/12/2007 13:04	28.08	14.1	415.8	643.1	0.9
8/15/07 13:10	28.8	14.9	415.1	677.1	0.1
9/20/2007 14:10	dry				
10/25/07 14:58	28.66	14.7	415.2	748.2	0.3

**Wastedbed 13 Pilot Study  
Piezometer A-8 (30 ft)**

**A-8 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.5 ft

Sandpack = 26.5 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Hole Plug (hole overdrilled) = 30 to 45 ft

Ro = 8900.3

To = 15.5 degrees Celsius

Linear Gage Factor (psi) = 0.01521 psi/digit

Thermal Factor = 0.005123 psi/°C

Unit Weight of Water = 62.4 pcf

Ground Surface Elevation = 429.33 ft

Piezometer Tip Elevation = 399.83 ft

Serial # 04-12597

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/27/05 12:13	8240.6	15	10.0	23.1	6.4	423.0		
9/27/05 12:45	8411.2	14.3	7.4	17.2	12.3	417.0		
10/7/05 6:30	8881.3	10.9	0.3	0.6	28.9	400.4	0	0
10/8/05 8:47	8879	11	0.3	0.7	28.8	400.5	1.1	0.1
10/10/05 8:26	8874.2	10.9	0.4	0.9	28.6	400.7	3.1	0.2
10/10/05 11:41	8873.2	10.9	0.4	0.9	28.6	400.7	3.2	0.3
10/10/05 16:31	8865.3	11	0.5	1.2	28.3	401.0	3.4	0.6
10/11/05 8:01	8858.6	11	0.6	1.4	28.1	401.2	4.1	0.8
10/11/05 11:47	8826.8	10.8	1.1	2.5	27.0	402.4	4.2	1.9
10/11/05 17:24	8758.7	10.8	2.1	4.9	24.6	404.7	4.5	4.3
10/12/05 8:48	8782.8	10.8	1.8	4.1	25.4	403.9	5.1	3.5
10/12/05 14:23	8782.2	10.8	1.8	4.1	25.4	403.9	5.3	3.5
10/12/05 17:01	8767.2	10.9	2.0	4.6	24.9	404.4	5.4	4.0
10/13/05 8:40	8764	10.9	2.0	4.7	24.8	404.6	6.1	4.1
10/14/2005 10:04	8773.7	12.3	1.9	4.4	25.1	404.2	7.1	3.8
10/15/2005 7:55	8785.9	11.1	1.7	4.0	25.5	403.8	8.1	3.4
10/15/2005 12:46	8764.1	10.9	2.0	4.7	24.8	404.6	8.3	4.1
10/15/2005 16:45	8684.4	10.8	3.3	7.5	22.0	407.4	8.4	6.9
10/17/2005 8:30	8664.5	10.9	3.6	8.2	21.3	408.1	10.1	7.6
10/17/05 13:10	8664.1	10.9	3.6	8.2	21.3	408.1	10.3	7.6
10/18/2005 8:00	8675.8	10.8	3.4	7.8	21.7	407.7	11.1	7.2
10/18/2005 15:28	8604.4	10.8	4.5	10.3	19.2	410.2	11.4	9.7
10/18/2005 17:27	8592	10.8	4.7	10.8	18.7	410.6	11.5	10.2
10/19/2005 7:41	8577	10.8	4.9	11.3	18.2	411.1	12.0	10.7
10/19/2005 13:43	8509.1	10.8	5.9	13.7	15.8	413.5	12.3	13.1
10/19/2005 17:22	8494.8	10.8	6.1	14.2	15.3	414.0	12.5	13.6
10/20/2005 8:03	8493.1	10.8	6.2	14.2	15.3	414.1	13.1	13.6
10/20/2005 14:09	8497.1	10.9	6.1	14.1	15.4	413.9	13.3	13.5
10/21/2005 8:11	8505.4	10.8	6.0	13.8	15.7	413.6	14.1	13.2
10/21/05 13:14	8509.7	10.8	5.9	13.7	15.8	413.5	14.3	13.0
10/22/05 8:58	8526.3	10.8	5.7	13.1	16.4	412.9	15.1	12.5
10/24/05 15:27	8543.6	10.8	5.4	12.5	17.0	412.3	17.4	11.9
10/26/2005 16:26	8558.6	10.8	5.2	11.9	17.6	411.8	19.4	11.3
10/27/2005 15:08	8557.2	10.9	5.2	12.0	17.5	411.8	20.4	11.4
10/28/2005 15:52	8559	10.8	5.2	11.9	17.6	411.8	21.4	11.3
10/31/2005 10:49	8582.1	10.8	4.8	11.1	18.4	410.9	24.2	10.5
11/2/2005 14:55	8593.5	10.8	4.6	10.7	18.8	410.5	26.4	10.1
11/4/2005 11:24	8612	10.8	4.4	10.1	19.4	409.9	28.2	9.5
11/7/2005 15:01	8618.1	10.8	4.3	9.8	19.7	409.7	31.4	9.2
11/11/2005 13:39	8634.8	10.8	4.0	9.3	20.2	409.1	35.3	8.7
11/14/2005 16:32	8636.4	10.8	4.0	9.2	20.3	409.0	38.4	8.6
11/17/2005 15:32	8646.5	10.8	3.8	8.9	20.6	408.7	41.4	8.2
11/21/2005 12:24	8667.3	10.8	3.5	8.1	21.4	408.0	45.2	7.5
12/2/2005 11:54	8683.1	10.8	3.3	7.6	21.9	407.4	56.2	7.0
12/6/2005 14:55	8673.8	10.8	3.4	7.9	21.6	407.7	60.4	7.3
12/15/2005 14:49	8693.8	10.8	3.1	7.2	22.3	407.0	69.3	6.6
12/22/2005 15:27	8704.7	10.8	3.0	6.8	22.7	406.6	76.4	6.2
12/29/2005 11:12	8724.5	10.8	2.6	6.1	23.4	405.9	83.2	5.5

**Wastebed 13 Pilot Study  
Piezometer A-8 (30 ft)**

**A-8 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout = Approximately 0 to 21.5 ft

Bentonite Seal = Approximately 21.5 to 26.5 ft

Sandpack = 26.5 to 30 ft

Depth to piezometer tip from ground surface = 29.5 ft

Hole Plug (hole overdrilled) = 30 to 45 ft

Ro = 8900.3

To = 15.5 degrees Celsius

Linear Gage Factor (psi) = 0.01521 psi/digit

Thermal Factor = 0.005123 psi/°C

Unit Weight of Water = 62.4pcf

Ground Surface Elevation = 429.33 ft

Piezometer Tip Elevation = 399.83 ft

Serial # 04-12597

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
1/5/2006 14:09	8715.8	10.8	2.8	6.4	23.1	406.3	90.3	5.8
1/12/2006 10:40	8687.4	10.9	3.2	7.4	22.1	407.2	97.2	6.8
1/19/2006 13:43	8655.3	10.8	3.7	8.5	21.0	408.4	104.3	7.9
1/26/2006 14:15	8649.3	10.8	3.8	8.8	20.7	408.6	111.3	8.1
2/2/2006 11:28	8672.9	10.9	3.4	7.9	21.6	407.8	118.2	7.3
2/9/2006 12:33	8660.9	10.8	3.6	8.3	21.2	408.2	125.3	7.7
2/16/2006 11:22	8671.7	10.8	3.5	8.0	21.5	407.8	132.2	7.4
2/23/2006 14:21	8692.5	10.8	3.1	7.2	22.3	407.1	139.3	6.6
3/2/2006 11:56	8718.9	10.9	2.7	6.3	23.2	406.1	146.2	5.7
3/9/2006 15:22	8739	10.8	2.4	5.6	23.9	405.4	153.4	5.0
3/16/2006 14:13	8700.6	10.8	3.0	7.0	22.5	406.8	160.3	6.3
3/23/2006 15:04	8696.4	10.7	3.1	7.1	22.4	406.9	167.4	6.5
3/31/2006 15:35	8722.8	10.7	2.7	6.2	23.3	406.0	175.4	5.6
4/6/2006 13:59	8729.6	10.7	2.6	5.9	23.6	405.8	181.3	5.3
4/13/2006 16:09	8730.3	10.7	2.6	5.9	23.6	405.7	188.4	5.3
4/20/2006 16:02	8739.5	10.7	2.4	5.6	23.9	405.4	195.4	5.0
4/26/2006 14:42	8734.2	10.7	2.5	5.8	23.7	405.6	201.3	5.2
5/4/2006 14:14	8741.4	10.7	2.4	5.5	24.0	405.4	209.3	4.9
5/11/2006 15:13	8757	10.7	2.2	5.0	24.5	404.8	216.4	4.4
5/18/2006 14:53	8767.5	10.8	2.0	4.6	24.9	404.4	223.3	4.0
5/25/2006 14:42	8762.5	10.7	2.1	4.8	24.7	404.6	230.3	4.2
6/1/2006 14:27	8760.4	10.7	2.1	4.9	24.6	404.7	237.3	4.2
6/8/2006 14:42	8764.3	10.7	2.0	4.7	24.8	404.5	244.3	4.1
6/15/2006 13:42	8760.8	10.8	2.1	4.8	24.7	404.7	251.3	4.2
6/22/2006 13:57	8766.6	10.7	2.0	4.6	24.9	404.5	258.3	4.0
6/29/2006 15:26	8771.6	10.7	1.9	4.5	25.0	404.3	265.4	3.8
7/6/2006 15:19	8770.3	10.8	2.0	4.5	25.0	404.3	272.4	3.9
7/13/2006 14:54	8757.8	10.7	2.1	4.9	24.6	404.8	279.3	4.3
7/20/2006 10:39	8734.8	10.8	2.5	5.8	23.7	405.6	286.2	5.1
7/27/2006 10:20	8751.9	10.7	2.2	5.2	24.3	405.0	293.2	4.5
8/3/2006 10:05	8760.7	10.8	2.1	4.8	24.7	404.7	300.1	4.2
8/10/2006 13:49	8765.6	10.7	2.0	4.7	24.8	404.5	307.3	4.1
8/17/2006 15:41	8766.4	10.9	2.0	4.6	24.9	404.5	314.4	4.0
8/24/2006 15:21	8778.9	10.8	1.8	4.2	25.3	404.0	321.4	3.6
8/31/2006 10:10	8776.1	10.9	1.9	4.3	25.2	404.1	328.2	3.7
9/7/2006 14:57	8784.6	10.7	1.7	4.0	25.5	403.8	335.4	3.4
9/14/2006 14:54	8788.2	10.8	1.7	3.9	25.6	403.7	342.3	3.3
9/21/2006 17:26	8785.5	10.8	1.7	4.0	25.5	403.8	349.5	3.4
9/28/2006 15:35	8793.6	10.8	1.6	3.7	25.8	403.5	356.4	3.1
10/5/2006 15:54	8786.4	10.8	1.7	3.9	25.6	403.8	363.4	3.3
10/12/2006 15:06	8800.9	10.8	1.5	3.4	26.1	403.3	370.4	2.8
10/20/2006 14:30	8788.9	11	1.7	3.9	25.6	403.7	378.3	3.2
10/26/2006 15:23	8736.9	10.8	2.5	5.7	23.8	405.5	384.4	5.1
11/8/2006 13:09	8741.6	10.7	2.4	5.5	24.0	405.3	397.3	4.9
11/15/2006 16:27	8744.4	10.8	2.3	5.4	24.1	405.2	404.4	4.8
12/7/2006 15:26	8704.1	10.8	3.0	6.8	22.7	406.7	426.4	6.2
12/14/2006 14:23	8729	10.7	2.6	6.0	23.5	405.8	433.3	5.3
12/21/2006 13:47	8734.8	10.9	2.5	5.8	23.7	405.6	440.3	5.1

**Wastebed 13 Pilot Study  
Piezometer A-8 (30 ft)**

**A-8 (30 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/27/2005

Grout =

Approximately 0 to 21.5 ft

Bentonite Seal =

Approximately 21.5 to 26.5 ft

Sandpack =

26.5 to 30 ft

Depth to piezometer tip from ground surface =

29.5 ft

Hole Plug (hole overdrilled) =

30 to 45 ft

Ro =

8900.3

To =

15.5 degrees Celsius

Linear Gage Factor (psi) =

0.01521 psi/digit

Thermal Factor =

0.005123 psi/°C

Unit Weight of Water =

62.4 pcf

Ground Surface Elevation =

429.33 ft

Piezometer Tip Elevation =

399.83 ft

Serial # 04-12597

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/28/06 14:06	8717.2	10.8	2.8	6.4	23.1	406.2	447.3	5.8
1/11/2007 15:55	8690	10.7	3.2	7.3	22.2	407.2	461.4	6.7
2/22/07 11:04	8790.8	10.8	1.6	3.8	25.7	403.6	503.2	3.2
3/7/2007 10:37	8764	10.8	2.0	4.7	24.8	404.6	516.2	4.1
4/12/07 11:35	8633.1	10.8	4.0	9.3	20.2	409.2	552.2	8.7
5/10/2007 12:00	8658.8	10.8	3.6	8.4	21.1	408.3	580.2	7.8
6/21/07 13:29	8803.8	10.8	1.4	3.3	26.2	403.2	622.3	2.7
7/12/2007 13:16	8816.6	10.8	1.2	2.9	26.6	402.7	643.3	2.3
8/15/07 13:27	8827.4	10.8	1.1	2.5	27.0	402.3	677.3	1.9
9/20/2007 14:32	8822.6	10.8	1.2	2.7	26.8	402.5	713.3	2.1
10/25/07 15:45	8819.1	10.8	1.2	2.8	26.7	402.6	748.4	2.2

**Wastebed 13 Pilot Study  
Piezometer A-9 (15 ft)**

**A-9 (15 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/5/2005

Grout = 0 to 6.1 ft

Bentonite Seal = 6.1 to 10 ft

Depth to piezometer tip from ground surface = 15 ft

Ro = 8873.3

To = 22 degrees Celsius

Linear Gage Factor (psi) = 0.01546 psi/digit

Thermal Factor = 0.00778 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.42 ft

Piezometer Tip Elevation = 414.42 ft

Serial # 05-13910

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/5/05 13:39	8981.2	12.2	-1.7	-4.0	>= 15 ft	NA		
10/7/05 6:30	8933.7	10.4	-1.0	-2.4	>= 15 ft	NA	0	0
10/8/05 8:45	8935.7	10.4	-1.1	-2.4	>= 15 ft	NA	1.1	-0.1
10/10/05 8:28	8929.6	10.4	-1.0	-2.2	>= 15 ft	NA	3.1	0.1
10/10/05 11:37	8929.3	10.4	-1.0	-2.2	>= 15 ft	NA	3.2	0.2
10/10/05 16:28	8880.9	10.4	-0.2	-0.5	>= 15 ft	NA	3.4	1.9
10/11/05 7:40	8876.2	10.5	-0.1	-0.3	>= 15 ft	NA	4.0	2.1
10/11/05 11:32	8869.3	10.4	0.0	-0.1	>= 15 ft	NA	4.2	2.3
10/11/05 16:58	8869.0	10.4	0.0	-0.1	>= 15 ft	NA	4.4	2.3
10/12/05 8:24	8867.7	10.4	0.0	0.0	>= 15 ft	NA	5.1	2.4
10/12/05 14:23	8867.2	10.5	0.0	0.0	15.0	414.4	5.3	2.4
10/12/05 17:03	8866.4	10.6	0.0	0.0	15.0	414.5	5.4	2.4
10/13/05 8:38	8866	10.4	0.0	0.1	14.9	414.5	6.1	2.4
10/14/2005 10:01	8865.9	11.6	0.0	0.1	14.9	414.5	7.1	2.4
10/15/2005 7:57	8865.2	10.5	0.0	0.1	14.9	414.5	8.1	2.4
10/15/2005 13:01	8787.7	10.5	1.2	2.8	12.2	417.3	8.3	5.2
10/15/2005 16:45	8777.7	10.4	1.4	3.2	11.8	417.6	8.4	5.6
10/17/2005 8:25	8771.4	10.4	1.5	3.4	11.6	417.8	10.1	5.8
10/17/2005 13:05	8770.6	10.5	1.5	3.5	11.5	417.9	10.3	5.8
10/18/2005 8:02	8775	10.5	1.4	3.3	11.7	417.7	11.1	5.7
10/18/2005 15:21	8748	10.4	1.8	4.3	10.7	418.7	11.4	6.6
10/18/2005 17:25	8734	10.5	2.1	4.8	10.2	419.2	11.5	7.1
10/19/2005 8:24	8727.4	10.4	2.2	5.0	10.0	419.4	12.1	7.4
10/19/2005 13:17	8731.7	10.4	2.1	4.8	10.2	419.3	12.3	7.2
10/19/2005 17:21	8660.2	10.5	3.2	7.4	7.6	421.8	12.5	9.8
10/20/2005 8:00	8671.2	10.4	3.0	7.0	8.0	421.4	13.1	9.4
10/20/2005 14:04	8681.7	10.4	2.9	6.6	8.4	421.0	13.3	9.0
10/21/2005 8:09	8696.4	10.4	2.6	6.1	8.9	420.5	14.1	8.5
10/21/2005 13:16	8700.2	10.4	2.6	6.0	9.0	420.4	14.3	8.3
10/22/05 8:55	8716.7	10.4	2.3	5.4	9.6	419.8	15.1	7.7
10/24/05 15:26	8727.0	10.4	2.2	5.0	10.0	419.4	17.4	7.4
10/26/2005 16:24	8719.3	10.5	2.3	5.3	9.7	419.7	19.4	7.7
10/27/2005 15:06	8718.5	10.5	2.3	5.3	9.7	419.7	20.4	7.7
10/28/2005 15:50	8719.7	10.5	2.3	5.3	9.7	419.7	21.4	7.6
10/31/2005 10:48	8734	10.5	2.1	4.8	10.2	419.2	24.2	7.1
11/2/2005 14:53	8741.5	10.5	1.9	4.5	10.5	418.9	26.3	6.9
11/4/2005 11:22	8750.1	10.5	1.8	4.2	10.8	418.6	28.2	6.6
11/7/2005 14:59	8749	10.5	1.8	4.2	10.8	418.6	31.4	6.6
11/11/2005 13:40	8747.9	10.5	1.8	4.3	10.7	418.7	35.3	6.6
11/14/2005 16:33	8741.4	10.6	2.0	4.5	10.5	418.9	38.4	6.9
11/17/2005 15:33	8725.1	10.6	2.2	5.1	9.9	419.5	41.4	7.4
11/21/2005 12:24	8749.1	10.7	1.8	4.2	10.8	418.6	45.2	6.6
12/2/2005 11:52	8744.1	10.7	1.9	4.4	10.6	418.8	56.2	6.8
12/6/2005 14:56	8743.1	10.7	1.9	4.4	10.6	418.9	60.4	6.8
12/15/2005 14:52	8756.8	10.8	1.7	4.0	11.0	418.4	69.3	6.3
12/22/2005 15:29	8769.1	10.8	1.5	3.5	11.5	417.9	76.4	5.9
12/29/2005 11:14	8768.1	10.8	1.5	3.6	11.4	418.0	83.2	5.9
1/5/2006 14:10	8746.7	10.9	1.9	4.3	10.7	418.7	90.3	6.7
1/12/2006 10:42	8725.1	10.9	2.2	5.1	9.9	419.5	97.2	7.5

**Wastebed 13 Pilot Study  
Piezometer A-9 (15 ft)**

**A-9 (15 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/5/2005

Grout = 0 to 6.1 ft

Bentonite Seal = 6.1 to 10 ft

Depth to piezometer tip from ground surface = 15 ft

Ro = 8873.3

To = 22 degrees Celsius

Linear Gage Factor (psi) = 0.01546 psi/digit

Thermal Factor = 0.00778 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.42 ft

Piezometer Tip Elevation = 414.42 ft

Serial # 05-13910

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
1/19/2006 13:44	8722.4	11.1	2.2	5.2	9.8	419.6	104.3	7.6
1/26/2006 14:16	8727.1	11.0	2.2	5.0	10.0	419.4	111.3	7.4
2/2/2006 11:29	8731.3	11.0	2.1	4.9	10.1	419.3	118.2	7.2
2/9/2006 12:35	8724.4	11.0	2.2	5.1	9.9	419.5	125.3	7.5
2/16/2006 11:23	8739.1	11.0	2.0	4.6	10.4	419.0	132.2	7.0
2/23/2006 14:23	8756.5	11.1	1.7	4.0	11.0	418.4	139.3	6.3
3/2/2006 11:57	8776.5	11.1	1.4	3.3	11.7	417.7	146.2	5.6
3/9/2006 15:23	8782.8	11.1	1.3	3.0	12.0	417.5	153.4	5.4
3/16/2006 14:14	8738.3	11.1	2.0	4.6	10.4	419.0	160.3	7.0
3/23/2006 15:05	8753.6	11.1	1.8	4.1	10.9	418.5	167.4	6.4
3/31/2006 15:36	8770.1	11.0	1.5	3.5	11.5	417.9	175.4	5.8
4/6/2006 14:00	8773.5	11.0	1.5	3.4	11.6	417.8	181.3	5.7
4/13/2006 16:11	8773.0	11.0	1.5	3.4	11.6	417.8	188.4	5.7
4/20/2006 16:04	8782.5	11.0	1.3	3.0	12.0	417.5	195.4	5.4
4/26/2006 14:43	8766.0	11.0	1.6	3.6	11.4	418.1	201.3	6.0
5/4/2006 14:15	8783.1	10.9	1.3	3.0	12.0	417.4	209.3	5.4
5/11/2006 15:15	8800.2	10.9	1.0	2.4	12.6	416.8	216.4	4.8
5/18/2006 14:54	8808.1	10.9	0.9	2.1	12.9	416.5	223.3	4.5
5/25/2006 14:44	8799.0	10.8	1.1	2.4	12.6	416.9	230.3	4.8
6/1/2006 14:28	8801.3	11.0	1.0	2.4	12.6	416.8	237.3	4.7
6/8/2006 14:43	8799.5	10.7	1.1	2.4	12.6	416.9	244.3	4.8
6/15/2006 13:43	8801.3	10.7	1.0	2.4	12.6	416.8	251.3	4.7
6/22/2006 13:59	8807.5	10.7	0.9	2.1	12.9	416.6	258.3	4.5
6/29/2006 15:29	8798.9	10.6	1.1	2.4	12.6	416.9	265.4	4.8
7/6/2006 15:22	8807.0	10.6	0.9	2.2	12.8	416.6	272.4	4.5
7/13/2006 14:56	8741.7	10.7	1.9	4.5	10.5	418.9	279.4	6.9
7/20/2006 10:40	8768.7	10.5	1.5	3.5	11.5	417.9	286.2	5.9
7/27/2006 10:21	8792.2	10.5	1.2	2.7	12.3	417.1	293.2	5.1
8/3/2006 10:06	8787.0	10.5	1.2	2.9	12.1	417.3	300.1	5.2
8/10/2006 13:51	8796.1	10.5	1.1	2.5	12.5	417.0	307.3	4.9
8/17/2006 15:42	8798.3	10.4	1.1	2.5	12.5	416.9	314.4	4.8
8/24/2006 15:23	8812.1	10.4	0.9	2.0	13.0	416.4	321.4	4.3
8/31/2006 10:12	8806.5	10.4	0.9	2.2	12.8	416.6	328.2	4.5
9/7/2006 14:58	8807.2	10.4	0.9	2.1	12.9	416.6	335.4	4.5
9/14/2006 14:56	8795.6	10.5	1.1	2.6	12.4	417.0	342.4	4.9
9/21/2006 17:27	8811.0	10.4	0.9	2.0	13.0	416.4	349.5	4.4
9/28/2006 15:36	8810.2	10.4	0.9	2.0	13.0	416.5	356.4	4.4
10/5/2006 15:56	8795.3	10.5	1.1	2.6	12.4	417.0	363.4	4.9
10/12/2006 15:09	8820.9	10.5	0.7	1.7	13.3	416.1	370.4	4.0
10/20/2006 14:32	8765.6	10.6	1.6	3.6	11.4	418.1	378.3	6.0
10/26/2006 15:24	8750.8	10.6	1.8	4.2	10.8	418.6	384.4	6.5
11/8/2006 13:10	8774.3	10.6	1.4	3.3	11.7	417.7	397.3	5.7
11/15/2006 16:28	8761.9	10.7	1.6	3.8	11.2	418.2	404.4	6.1
12/7/2006 15:27	8747.5	10.9	1.9	4.3	10.7	418.7	426.4	6.7
12/14/06 14:25	8766.8	10.9	1.6	3.6	11.4	418.0	433.3	6.0
12/21/2006 13:48	8768.5	11.0	1.5	3.5	11.5	418.0	440.3	5.9
12/28/06 14:08	8736.5	11.0	2.0	4.7	10.3	419.1	447.3	7.0
1/11/2007 15:57	8725.9	11.1	2.2	5.1	9.9	419.5	461.4	7.4
2/22/07 11:06	8819.5	11.3	0.7	1.7	13.3	416.1	503.2	4.1

**Wastebed 13 Pilot Study  
Piezometer A-9 (15 ft)**

**A-9 (15 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/5/2005

Grout = 0 to 6.1 ft

Bentonite Seal = 6.1 to 10 ft

Depth to piezometer tip from ground surface = 15 ft

$R_o$  = 8873.3

$T_o$  = 22 degrees Celsius

Linear Gage Factor (psi) = 0.01546 psi/digit

Thermal Factor = 0.00778 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 429.42 ft

Piezometer Tip Elevation = 414.42 ft

Serial # 05-13910

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
3/7/2007 10:39	8765.3	11.4	1.6	3.7	11.3	418.1	516.2	6.0
4/12/07 11:36	8648.1	11.3	3.4	7.8	7.2	422.3	552.2	10.2
5/10/2007 12:01	8693.2	12.3	2.7	6.3	8.7	420.7	580.2	8.6
6/21/07 13:30	8795.1	11.0	1.1	2.6	12.4	417.0	622.3	5.0
7/12/2007 13:10	8831.8	11.0	0.6	1.3	13.7	415.7	643.3	3.6
8/15/07 13:22	8860.8	10.7	0.1	0.2	14.8	414.7	677.3	2.6
9/20/2007 14:24	8887.2	10.6	-0.3	-0.7	>= 15 ft	NA	713.3	1.7
10/25/07 15:40	8816.9	10.7	0.8	1.8	13.2	416.2	748.4	4.2

**Wastedbed 13 Pilot Study  
Piezometer A-10 (45 ft)**

**A-10 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/26/2005

Grout =

0 to 34.1 ft

Bentonite Seal =

34.1 to 41.5 ft

Sandpack =

41.5 to 45 ft

Depth to piezometer tip from ground surface =

44.5 ft

Ro =

9035

To =

16.6 degrees Celsius

Linear Gage Factor (psi) =

0.01627 psi/digit

Thermal Factor =

0.011946 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.86 ft

Piezometer Tip Elevation =

385.36 ft

Serial # 04-12599

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/26/05 14:45	8100	16.3	15.2	35.1	9.4	420.5		
9/26/05 15:10	8258.4	15.7	12.6	29.1	15.4	414.5		
<b>10/7/05 6:30</b>	<b>8875.6</b>	<b>11.1</b>	<b>2.5</b>	<b>5.8</b>	<b>38.7</b>	<b>391.2</b>	<b>0</b>	<b>0</b>
10/10/05 8:33	8866.1	11.1	2.7	6.2	38.3	391.5	3.1	0.4
10/10/05 11:30	8820	11.3	3.4	7.9	36.6	393.3	3.2	2.1
10/10/05 16:26	8789	11.1	3.9	9.1	35.4	394.4	3.4	3.3
10/11/05 7:42	8813.9	11.1	3.5	8.1	36.4	393.5	4.0	2.3
10/11/05 11:30	8807.3	11.1	3.6	8.4	36.1	393.8	4.2	2.6
10/11/05 16:52	8802.9	11.2	3.7	8.6	35.9	393.9	4.4	2.7
10/12/05 8:12	8803.0	11.2	3.7	8.6	35.9	393.9	5.1	2.7
10/12/05 14:25	8792.1	11.2	3.9	9.0	35.5	394.3	5.3	3.1
10/12/05 17:05	8775.1	11.1	4.2	9.6	34.9	395.0	5.4	3.8
10/13/05 8:05	8775.1	11.2	4.2	9.6	34.9	395.0	6.1	3.8
10/14/2005 10:45	8774.0	11.8	4.2	9.7	34.8	395.0	7.2	3.8
10/15/2005 8:00	8789	11.3	3.9	9.1	35.4	394.5	8.1	3.3
10/15/2005 13:03	8743.7	11.2	4.7	10.8	33.7	396.1	8.3	5.0
10/15/2005 16:45	8719.5	11.1	5.1	11.7	32.8	397.1	8.4	5.9
10/17/2005 8:21	8727.2	11.1	4.9	11.4	33.1	396.8	10.1	5.6
10/17/2005 13:07	8722.2	11.8	5.0	11.6	32.9	397.0	10.3	5.8
10/18/2005 8:03	8724.2	11.1	5.0	11.5	33.0	396.9	11.1	5.7
10/18/2005 15:20	8653.1	11.1	6.1	14.2	30.3	399.5	11.4	8.4
10/18/2005 17:24	8641.1	11.1	6.3	14.6	29.9	400.0	11.5	8.8
10/19/2005 8:21	8639	11.1	6.4	14.7	29.8	400.1	12.1	8.9
10/19/2005 13:15	8636	11.1	6.4	14.8	29.7	400.2	12.3	9.0
10/19/2005 17:11	8566.3	11.1	7.6	17.4	27.1	402.8	12.4	11.6
10/20/2005 7:55	8558	11.1	7.7	17.8	26.7	403.1	13.1	11.9
10/20/2005 14:12	8562.2	11.1	7.6	17.6	26.9	403.0	13.3	11.8
10/21/2005 8:13	8567.3	11.1	7.5	17.4	27.1	402.8	14.1	11.6
10/21/2005 13:18	8569.9	11.1	7.5	17.3	27.2	402.7	14.3	11.5
10/22/2005 8:53	8580.6	11.1	7.3	16.9	27.6	402.3	15.1	11.1
10/24/2005 15:24	8593.8	11.1	7.1	16.4	28.1	401.8	17.4	10.6
10/26/2005 16:22	8608.0	11.1	6.9	15.9	28.6	401.2	19.4	10.0
10/27/2005 15:03	8604.7	11.1	6.9	16.0	28.5	401.4	20.4	10.2
10/28/2005 15:48	8605.5	11.2	6.9	16.0	28.5	401.3	21.4	10.1
10/31/2005 10:46	8623.6	11.1	6.6	15.3	29.2	400.7	24.2	9.5
11/2/2005 14:52	8632.2	11.2	6.5	15.0	29.5	400.3	26.3	9.1
11/4/2005 11:20	8646.8	11.1	6.3	14.4	30.1	399.8	28.2	8.6
11/7/2005 14:58	8650.6	11.1	6.2	14.3	30.2	399.6	31.4	8.4
11/11/2005 13:41	8664	11.1	6.0	13.8	30.7	399.1	35.3	7.9
11/14/2005 16:34	8662.2	11.1	6.0	13.8	30.7	399.2	38.4	8.0
11/17/2005 15:34	8670.1	11.2	5.9	13.6	30.9	398.9	41.4	7.7
11/21/2005 12:27	8682.9	11.1	5.7	13.1	31.4	398.4	45.2	7.2
12/2/2005 11:50	8696.5	11.1	5.4	12.6	31.9	397.9	56.2	6.7
12/6/2005 14:58	8679.3	11.1	5.7	13.2	31.3	398.6	60.4	7.4
12/15/2005 14:54	8693.1	11.1	5.5	12.7	31.8	398.0	69.3	6.9
12/22/2005 15:31	8707.2	11.1	5.3	12.2	32.3	397.5	76.4	6.3
12/29/2005 11:15	8729.9	11.1	4.9	11.3	33.2	396.7	83.2	5.5

**Wastedbed 13 Pilot Study  
Piezometer A-10 (45 ft)**

**A-10 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/26/2005

Grout =

0 to 34.1 ft

Bentonite Seal =

34.1 to 41.5 ft

Sandpack =

41.5 to 45 ft

Depth to piezometer tip from ground surface =

44.5 ft

Ro =

9035

To =

16.6 degrees Celsius

Linear Gage Factor (psi) =

0.01627 psi/digit

Thermal Factor =

0.011946 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.86 ft

Piezometer Tip Elevation =

385.36 ft

Serial # 04-12599

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
1/5/2006 14:12	8722.5	11.1	5.0	11.6	32.9	396.9	90.3	5.7
1/12/2006 10:43	8695.2	11.1	5.5	12.6	31.9	398.0	97.2	6.8
1/19/2006 13:47	8666.8	11.1	5.9	13.7	30.8	399.0	104.3	7.8
1/26/2006 14:18	8654.4	11.1	6.1	14.1	30.4	399.5	111.3	8.3
2/2/2006 11:30	8672.6	11.0	5.8	13.5	31.0	398.8	118.2	7.6
2/9/2006 12:37	8664.4	11.1	6.0	13.8	30.7	399.1	125.3	7.9
2/16/2006 11:25	8669.8	11.0	5.9	13.6	30.9	398.9	132.2	7.7
2/23/2006 14:25	8690.0	11.0	5.5	12.8	31.7	398.2	139.3	7.0
3/2/2006 11:59	8712.8	11.1	5.2	11.9	32.6	397.3	146.2	6.1
3/9/2006 15:25	8734.6	11.0	4.8	11.1	33.4	396.5	153.4	5.3
3/16/2006 14:16	8717.0	11.0	5.1	11.8	32.7	397.1	160.3	6.0
3/23/2006 15:07	8705.8	11.0	5.3	12.2	32.3	397.6	167.4	6.4
3/31/2006 15:37	8726.0	11.0	5.0	11.4	33.1	396.8	175.4	5.6
4/6/2006 14:02	8732.9	11.0	4.8	11.2	33.3	396.5	181.3	5.4
4/13/2006 16:13	8737.6	11.1	4.8	11.0	33.5	396.4	188.4	5.2
4/20/2006 16:06	8746.7	11.0	4.6	10.7	33.8	396.0	195.4	4.8
4/26/2006 14:44	8749.0	11.0	4.6	10.6	33.9	395.9	201.3	4.8
5/4/2006 14:16	8751.3	11.0	4.5	10.5	34.0	395.9	209.3	4.7
5/11/2006 15:16	8768.2	11.0	4.3	9.9	34.6	395.2	216.4	4.0
5/18/2006 14:56	8784.8	11.0	4.0	9.2	35.3	394.6	223.4	3.4
5/25/2006 14:46	8779.7	11.0	4.1	9.4	35.1	394.8	230.3	3.6
6/1/2006 14:29	8778.0	11.0	4.1	9.5	35.0	394.9	237.3	3.7
6/8/2006 14:44	8784.8	11.0	4.0	9.2	35.3	394.6	244.3	3.4
6/15/2006 13:44	8783.0	11.0	4.0	9.3	35.2	394.7	251.3	3.5
6/22/2006 14:00	8790.0	11.0	3.9	9.0	35.5	394.4	258.3	3.2
6/29/2006 15:30	8795.9	11.0	3.8	8.8	35.7	394.2	265.4	3.0
7/6/2006 15:23	8796.3	11.0	3.8	8.8	35.7	394.2	272.4	3.0
7/13/2006 14:57	8796.1	11.0	3.8	8.8	35.7	394.2	279.4	3.0
7/20/2006 10:41	8767.9	11.0	4.3	9.9	34.6	395.2	286.2	4.0
7/27/2006 10:23	8776.9	11.0	4.1	9.5	35.0	394.9	293.2	3.7
8/3/2006 10:08	8788.4	11.0	3.9	9.1	35.4	394.5	300.2	3.3
8/10/2006 13:52	8795.8	11.0	3.8	8.8	35.7	394.2	307.3	3.0
8/17/2006 15:43	8796.1	11.0	3.8	8.8	35.7	394.2	314.4	3.0
8/24/2006 15:25	8810.7	11.0	3.6	8.3	36.2	393.6	321.4	2.4
8/31/2006 10:13	8807.7	11.0	3.6	8.4	36.1	393.7	328.2	2.5
9/7/2006 15:00	8817.7	11.0	3.5	8.0	36.5	393.4	335.4	2.2
9/14/2006 14:59	8823.1	11.0	3.4	7.8	36.7	393.2	342.4	2.0
9/21/2006 17:28	8824.9	11.0	3.4	7.7	36.8	393.1	349.5	1.9
9/28/2006 15:38	8836.4	11.0	3.2	7.3	37.2	392.7	356.4	1.5
10/5/2006 15:57	8833.5	11.0	3.2	7.4	37.1	392.8	363.4	1.6
10/12/2006 15:11	8849.3	11.0	3.0	6.8	37.7	392.2	370.4	1.0
10/20/2006 14:33	8841.7	11.1	3.1	7.1	37.4	392.5	378.3	1.3
10/26/2006 15:26	8783.3	11.1	4.0	9.3	35.2	394.7	384.4	3.5
11/8/2006 13:12	8775.6	11.0	4.2	9.6	34.9	394.9	397.3	3.8
11/15/2006 16:29	8774.5	11.0	4.2	9.6	34.9	395.0	404.4	3.8
12/7/2006 15:28	8741.9	11.0	4.7	10.9	33.6	396.2	426.4	5.0
12/14/06 14:26	8756.3	10.9	4.5	10.3	34.2	395.7	433.3	4.5

**Wastebed 13 Pilot Study  
Piezometer A-10 (45 ft)**

**A-10 (45 ft)**

Typical Vibrating Wire Piezometer

Date Installed: 9/26/2005

Grout =

0 to 34.1 ft

Bentonite Seal =

34.1 to 41.5 ft

Sandpack =

41.5 to 45 ft

Depth to piezometer tip from ground surface =

44.5 ft

Ro =

9035

To =

16.6 degrees Celsius

Linear Gage Factor (psi) =

0.01627 psi/digit

Thermal Factor =

0.011946 psi/°C

Unit Weight of Water =

62.4 pcf

Initial Ground Surface Elevation =

429.86 ft

Piezometer Tip Elevation =

385.36 ft

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
12/21/2006 13:49	8758.5	10.9	4.4	10.2	34.3	395.6	440.3	4.4
12/28/06 14:09	8753.9	11.0	4.5	10.4	34.1	395.8	447.3	4.6
1/11/2007 15:58	8731.8	11.0	4.9	11.2	33.3	396.6	461.4	5.4
2/22/07 11:08	8828.3	11.0	3.3	7.6	36.9	393.0	503.2	1.8
3/7/2007 10:41	8813.7	10.9	3.5	8.2	36.3	393.5	516.2	2.3
4/12/07 11:37	8667.9	10.9	5.9	13.6	30.9	399.0	552.2	7.8
5/10/2007 12:03	8678.6	10.9	5.7	13.2	31.3	398.6	580.2	7.4
6/21/07 13:31	8846.3	11.1	3.0	6.9	37.6	392.3	622.3	1.1
7/12/2007 13:09	8869.4	10.9	2.6	6.1	38.4	391.4	643.3	0.2
8/15/07 13:21	8888.8	10.9	2.3	5.3	39.2	390.7	677.3	-0.5
9/20/2007 14:22	8892.3	10.9	2.3	5.2	39.3	390.6	713.3	-0.6
10/25/07 15:39	8894.5	10.8	2.2	5.1	39.4	390.5	748.4	-0.7

**Wastebed 13 Pilot Study  
Piezometer A-11 (30 ft)**

**A-11 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/6/2005

Grout = 0 to 17.5 ft

Bentonite Seal = 17.5 to 26 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8826.6

To = 20 degrees Celsius

Linear Gage Factor (psi) = 0.0148 psi/digit

Thermal Factor = 0.00437 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.58 ft

Piezometer Tip Elevation = 400.58 ft

Serial # 05-13911

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
10/06/05 16:00	9673.6	12.2	-12.6	-29.0				
10/07/05 6:30	8755.2	11.3	1.0	2.4	27.6	402.9	0	0
10/08/05 8:58	8753.2	11.3	1.0	2.4	27.6	403.0	1.1	0.1
10/10/05 7:59	8741.1	11.3	1.2	2.8	27.2	403.4	3.1	0.5
10/10/05 11:55	8736.8	11.3	1.3	3.0	27.0	403.6	3.2	0.6
10/10/05 16:56	8732.1	11.3	1.4	3.1	26.9	403.7	3.4	0.8
10/11/05 8:07	8726.4	11.3	1.4	3.3	26.7	403.9	4.1	1.0
10/11/05 11:43	8719.3	11.3	1.6	3.6	26.4	404.2	4.2	1.2
10/11/05 16:31	8712.3	11.4	1.7	3.8	26.2	404.4	4.4	1.5
10/12/05 7:53	8708.7	11.3	1.7	3.9	26.1	404.5	5.1	1.6
10/12/05 14:10	8684.8	11.4	2.1	4.8	25.2	405.3	5.3	2.4
10/12/05 17:18	8685.1	11.3	2.1	4.7	25.3	405.3	5.4	2.4
10/13/05 8:59	8684.3	11.3	2.1	4.8	25.2	405.4	6.1	2.4
10/14/2005 10:23	8651.1	12.5	2.6	5.9	24.1	406.5	7.2	3.6
10/15/2005 7:47	8635.3	11.3	2.8	6.4	23.6	407.0	8.1	4.1
10/15/2005 12:56	8631.7	11.4	2.8	6.6	23.4	407.1	8.3	4.2
10/15/2005 16:50	8622.9	11.3	3.0	6.9	23.1	407.4	8.4	4.5
10/17/2005 8:10	8606.1	11.3	3.2	7.4	22.6	408.0	10.1	5.1
10/17/2005 13:09	8569.7	11.3	3.8	8.7	21.3	409.3	10.3	6.3
10/18/2005 7:56	8580.8	11.4	3.6	8.3	21.7	408.9	11.1	6.0
10/18/2005 15:27	8572	11.3	3.7	8.6	21.4	409.2	11.4	6.3
10/18/2005 17:30	8534.8	11.3	4.3	9.9	20.1	410.5	11.5	7.5
10/19/2005 7:44	8534.3	11.3	4.3	9.9	20.1	410.5	12.1	7.5
10/19/2005 13:34	8507.8	11.3	4.7	10.8	19.2	411.4	12.3	8.4
10/19/2005 17:23	8501.9	11.3	4.8	11.0	19.0	411.6	12.5	8.7
10/20/2005 8:11	8496.3	11.3	4.9	11.2	18.8	411.8	13.1	8.8
10/20/2005 13:48	8498.9	11.3	4.8	11.1	18.9	411.7	13.3	8.8
10/21/2005 8:01	8504.2	11.3	4.7	10.9	19.1	411.5	14.1	8.6
10/21/2005 13:05	8507.7	11.3	4.7	10.8	19.2	411.4	14.3	8.5
10/22/2005 9:03	8520.5	11.3	4.5	10.4	19.6	410.9	15.1	8.0
10/24/2005 15:31	8518.7	11.4	4.5	10.4	19.6	411.0	17.4	8.1
10/26/2005 16:41	8477	11.3	5.1	11.9	18.1	412.4	19.4	9.5
10/27/2005 15:15	8472.4	11.3	5.2	12.0	18.0	412.6	20.4	9.7
10/28/2005 15:54	8479.3	11.3	5.1	11.8	18.2	412.4	21.4	9.4
10/31/2005 10:54	8509	11.3	4.7	10.8	19.2	411.3	24.2	8.4
11/2/2005 14:58	8521.4	11.4	4.5	10.3	19.7	410.9	26.4	8.0
11/4/2005 11:40	8537.1	11.3	4.2	9.8	20.2	410.4	28.2	7.4
11/7/2005 15:14	8544.5	11.3	4.1	9.5	20.5	410.1	31.4	7.2
11/11/2005 13:43	8550.4	11.3	4.0	9.3	20.7	409.9	35.3	7.0
11/14/2005 16:40	8536.7	11.3	4.3	9.8	20.2	410.4	38.4	7.5
11/17/2005 15:27	8497.5	11.3	4.8	11.2	18.8	411.7	41.4	8.8
11/21/2005 12:19	8510.1	11.2	4.6	10.7	19.3	411.3	45.2	8.4
12/2/2005 12:03	8481.1	11.3	5.1	11.7	18.3	412.3	56.2	9.4
12/6/2005 14:49	8479.5	11.3	5.1	11.8	18.2	412.3	60.3	9.4
12/15/2005 14:38	8519.4	11.3	4.5	10.4	19.6	411.0	69.3	8.1
12/22/2005 15:18	8550.2	11.2	4.1	9.4	20.6	409.9	76.4	7.0
12/29/2005 11:02	8553.1	11.2	4.0	9.3	20.7	409.8	83.2	6.9
1/5/2006 14:01	8520.1	11.2	4.5	10.4	19.6	411.0	90.3	8.0

**Wastebed 13 Pilot Study  
Piezometer A-11 (30 ft)**

**A-11 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/6/2005

Grout = 0 to 17.5 ft

Bentonite Seal = 17.5 to 26 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8826.6

To = 20 degrees Celsius

Linear Gage Factor (psi) = 0.0148 psi/digit

Thermal Factor = 0.00437 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.58 ft

Piezometer Tip Elevation = 400.58 ft

Serial # 05-13911

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
1/12/2006 10:33	8461.3	11.2	5.4	12.4	17.6	413.0	97.2	10.0
1/19/2006 13:35	8428.9	11.2	5.8	13.5	16.5	414.1	104.3	11.1
1/26/2006 14:07	8431.4	11.2	5.8	13.4	16.6	414.0	111.3	11.1
2/2/2006 11:21	8439.4	11.2	5.7	13.1	16.9	413.7	118.2	10.8
2/9/2006 12:23	8427.5	11.2	5.9	13.5	16.5	414.1	125.2	11.2
2/16/2006 11:14	8456.7	11.2	5.4	12.5	17.5	413.1	132.2	10.2
2/23/2006 14:13	8481.3	11.2	5.1	11.7	18.3	412.3	139.3	9.4
3/2/2006 11:48	8522.3	11.2	4.5	10.3	19.7	410.9	146.2	8.0
3/9/2006 15:14	8559	11.2	3.9	9.1	20.9	409.6	153.4	6.7
3/16/2006 14:06	8484.9	11.2	5.0	11.6	18.4	412.2	160.3	9.2
3/23/2006 14:57	8494.5	11.2	4.9	11.3	18.7	411.8	167.4	8.9
3/31/2006 15:27	8526.6	11.2	4.4	10.2	19.8	410.7	175.4	7.8
4/6/2006 13:51	8540.8	11.2	4.2	9.7	20.3	410.3	181.3	7.3
4/13/2006 16:02	8542.2	11.2	4.2	9.6	20.4	410.2	188.4	7.3
4/20/2006 15:54	8565.5	10.9	3.8	8.8	21.2	409.4	195.4	6.5
4/26/2006 14:33	8547.8	11.2	4.1	9.4	20.6	410.0	201.3	7.1
5/4/2006 14:07	8562.3	11.2	3.9	8.9	21.1	409.5	209.3	6.6
5/11/2006 15:06	8597.1	11.2	3.4	7.7	22.3	408.3	216.4	5.4
5/18/2006 14:46	8621.7	11.3	3.0	6.9	23.1	407.5	223.3	4.6
5/25/2006 14:34	8622.5	11.3	3.0	6.9	23.1	407.5	230.3	4.5
6/1/2006 14:21	8624.6	11.2	3.0	6.8	23.2	407.4	237.3	4.5
6/8/2006 14:35	8632.1	11.3	2.8	6.6	23.4	407.1	244.3	4.2
6/15/2006 13:35	8632.4	11.2	2.8	6.5	23.5	407.1	251.3	4.2
6/22/2006 13:51	8647.1	11.2	2.6	6.0	24.0	406.6	258.3	3.7
6/29/2006 15:19	8667.4	11.2	2.3	5.3	24.7	405.9	265.4	3.0
7/6/2006 15:12	8679.1	11.2	2.1	4.9	25.1	405.5	272.4	2.6
7/13/2006 14:49	8621.3	11.2	3.0	6.9	23.1	407.5	279.3	4.6
7/20/2006 10:32	8581.8	11.2	3.6	8.3	21.7	408.9	286.2	5.9
7/27/2006 10:12	8609.6	11.2	3.2	7.3	22.7	407.9	293.2	5.0
8/3/2006 9:55	8625.6	11.2	2.9	6.8	23.2	407.4	300.1	4.4
8/10/2006 13:43	8638.9	11.2	2.7	6.3	23.7	406.9	307.3	4.0
8/17/2006 15:34	8653.9	11.2	2.5	5.8	24.2	406.4	314.4	3.5
8/24/2006 15:15	8679	11.2	2.1	5.0	25.0	405.5	321.4	2.6
8/31/2006 10:03	8687.3	11.1	2.0	4.7	25.3	405.2	328.1	2.3
9/7/2006 14:47	8704.2	11.1	1.8	4.1	25.9	404.7	335.3	1.7
9/14/2006 14:48	8712.6	11.1	1.6	3.8	26.2	404.4	342.3	1.5
9/21/2006 17:19	8717.6	11.1	1.6	3.6	26.4	404.2	349.5	1.3
9/28/2006 15:30	8728.3	11.2	1.4	3.3	26.7	403.8	356.4	0.9
10/5/2006 15:47	8669.7	11.2	2.3	5.3	24.7	405.8	363.4	2.9
10/12/2006 14:56	8664.6	11.1	2.4	5.4	24.6	406.0	370.4	3.1
10/20/2006 14:23	8628.9	11.1	2.9	6.7	23.3	407.2	378.3	4.3
10/26/2006 15:15	8547.9	11.1	4.1	9.4	20.6	410.0	384.4	7.1
11/8/2006 13:03	8523.9	11.1	4.4	10.2	19.8	410.8	397.3	7.9
11/15/2006 16:21	8542.1	11.2	4.2	9.6	20.4	410.2	404.4	7.3
12/7/2006 15:20	8471.6	11.1	5.2	12.0	18.0	412.6	426.4	9.7
12/14/06 14:18	8510	11.1	4.6	10.7	19.3	411.3	433.3	8.4
12/21/2006 13:41	8528.6	11.1	4.4	10.1	19.9	410.7	440.3	7.7
12/28/06 13:56	8486.4	11.1	5.0	11.5	18.5	412.1	447.3	9.2

**Wastebed 13 Pilot Study  
Piezometer A-11 (30 ft)**

**A-11 (30 ft)**

Push-In Vibrating Wire Piezometer

Date Installed: 10/6/2005

Grout = 0 to 17.5 ft

Bentonite Seal = 17.5 to 26 ft

Depth to piezometer tip from ground surface = 30 ft

Ro = 8826.6

To = 20 degrees Celsius

Linear Gage Factor (psi) = 0.0148 psi/digit

Thermal Factor = 0.00437 psi/°C

Unit Weight of Water = 62.4 pcf

Initial Ground Surface Elevation = 430.58 ft

Piezometer Tip Elevation = 400.58 ft

Serial # 05-13911

Date and Time	R	T (°C)	Pressure (psi)	ft- water	Piezometric Level as Depth Below Original Ground Surface (ft)	Piezometric Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
1/11/2007 15:46	8445.6	11.1	5.6	12.9	17.1	413.5	461.4	10.6
2/22/07 10:53	8636.2	11.2	2.8	6.4	23.6	407.0	503.2	4.1
3/7/2007 10:27	8605.7	11.2	3.2	7.5	22.5	408.0	516.2	5.1
4/12/07 11:29	8378.9	11.1	6.6	15.2	14.8	415.8	552.2	12.9
5/10/2007 11:54	8410.7	11.1	6.1	14.1	15.9	414.7	580.2	11.8
6/21/07 13:23	8688.6	11.1	2.0	4.6	25.4	405.2	622.3	2.3
7/12/2007 13:22	8733.4	11.1	1.3	3.1	26.9	403.7	643.3	0.7
8/15/07 13:33	8752.8	11.1	1.1	2.4	27.6	403.0	677.3	0.1
9/20/2007 14:39	8753.5	11.1	1.0	2.4	27.6	403.0	713.3	0.1
10/25/07 15:24	8755.4	11	1.0	2.3	27.7	402.9	748.4	0.0

**Wastebed 13 Pilot Study  
Piezometer A-12 (45 ft)**

**A-12 (45 ft)**

Standpipe Piezometer

Date Installed: 9/15/2005

Grout =

0 to 37 ft

Bentonite Seal =

37 to 39 ft

Sandpack Set Depth =

39 to 44 ft

Screened Interval =

41.2 to 44.2 ft

Piezometer Set Depth =

44.2 ft

Initial Casing Stickup =

2.5 ft

Intermediate Casing Stickup =

9.58 ft

Final Casing Stickup =

9.58 ft

Initial Top of Casing Elevation =

433.14 ft

Intermediate Top of Casing Elevation =

NA ft

Final Top of Casing Elevation =

440.22 ft

Initial Ground Surface Elevation =

430.64 ft

Standpipe Tip Elevation =

386.44 ft

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
9/19/05 13:45	41	38.5			
10/8/05 9:42	43.11	40.61	390.0	1	0
10/10/05 17:10	48.81	39.23	391.4	3.3	1.4
10/11/05 7:25	48.98	39.40	391.2	3.9	1.2
10/11/05 16:50	49.01	39.43	391.2	4.3	1.2
10/12/05 9:00	48.9	39.32	391.3	5.0	1.3
10/12/05 17:32	48.61	39.03	391.6	5.3	1.6
10/13/05 12:49	48.01	38.43	392.2	6.1	2.2
10/14/05 11:03	48.0	38.43	392.2	7.1	2.2
10/15/2005 8:20	48.19	38.61	392.0	7.9	2.0
10/15/2005 17:25	46.66	37.08	393.6	8.3	3.5
10/17/2005 8:40	46.5	36.92	393.7	10.0	3.7
10/17/2005 13:20	46.4	36.82	393.8	10.2	3.8
10/18/2005 8:05	45.93	36.35	394.3	10.9	4.3
10/18/2005 15:45	44.65	35.07	395.6	11.3	5.5
10/18/2005 17:22	44.47	34.89	395.8	11.3	5.7
10/19/2005 8:19	44.02	34.44	396.2	11.9	6.2
10/20/2005 13:43	40.31	30.73	399.9	13.2	9.9
10/20/2005 15:45	40.61	31.03	399.6	13.3	9.6
10/21/2005 8:22	39.54	29.96	400.7	13.9	10.7
10/21/2005 13:25	36.31	26.73	403.9	14.2	13.9
10/22/2005 8:50	26.75	17.17	413.5	15.0	23.4
10/24/2005 15:22	dry at 30.61				PVC pipe buckled? Soft and mushy at bottom. Cannot get probe to bottom.
10/26/2005 16:20	dry at 30.6				
10/27/2005 14:58	dry at 30.6				
10/28/2005 15:42	dry at 31.53				
10/31/2005 10:45	dry at 30.54				
11/2/2005 14:51	dry at 30.5				
11/4/2005 11:17	dry at 30.48				
11/7/2005 14:55	dry at 30.51				
11/11/2005 13:30	dry at 30.5				
11/14/2005 16:30	dry at 30.46				
11/17/2005 15:00	dry at 30.6				
11/21/2005 12:06	dry at 30.4				
12/2/2005 11:28	dry at 30.4				
12/6/2005 14:32	dry at 29.89				
12/15/2005 14:07	dry at 29.92				
12/22/2005 14:51	dry at 29.87				
12/29/2005 10:36	dry at 29.87				
1/5/2006 13:38	dry at 29.87				
1/12/2006 10:17	dry at 29.87				
1/19/2006 13:15	dry at 29.87				
1/26/2006 13:34	dry at 29.86				
2/2/2006 11:05	dry at 29.85				

**Wastebed 13 Pilot Study  
Piezometer A-12 (45 ft)**

**A-12 (45 ft)**

Standpipe Piezometer

Date Installed: 9/15/2005

Grout =

0 to 37 ft

Bentonite Seal =

37 to 39 ft

Sandpack Set Depth =

39 to 44 ft

Screened Interval =

41.2 to 44.2 ft

Piezometer Set Depth =

44.2 ft

Initial Casing Stickup =

2.5 ft

Intermediate Casing Stickup =

9.58 ft

Final Casing Stickup =

9.58 ft

Initial Top of Casing Elevation =

433.14 ft

Intermediate Top of Casing Elevation =

NA ft

Final Top of Casing Elevation =

440.22 ft

Initial Ground Surface Elevation =

430.64 ft

Standpipe Tip Elevation =

386.44 ft

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
2/9/2006 12:05	dry at 29.85				
2/16/2006 10:50	dry at 29.86				
2/23/2006 13:49	dry at 29.84				
3/2/2006 11:28	dry at 29.85				
3/9/2006 14:53	dry at 29.84				
3/16/2006 13:42	dry at 29.84				
3/23/2006 14:32	dry at 29.83				
3/31/2006 15:07	dry at 29.82				
4/6/2006 13:27	dry at 29.82				
4/13/2006 15:45	dry at 29.83				
4/20/2006 15:31	dry at 29.82				
4/26/2006 14:14	dry at 29.84				
5/4/2006 13:49	dry at 29.82				
5/11/2006 14:45	dry at 29.82				
5/18/2006 14:54	dry at 29.85				
5/25/2006 14:15	dry at 29.85				
6/1/2006 14:06	dry at 29.84				
6/8/2006 14:11	dry at 29.84				
6/15/2006 13:20	dry at 29.81				
6/22/2006 13:50	dry at 29.81				
6/29/2006 14:45	dry at 29.85				
7/6/2006 14:18	dry at 29.82				
7/13/2006 14:30	dry at 29.85				
7/20/2006 10:07	dry at 29.81				
7/27/2006 9:51	dry at 29.81				
8/3/2006 9:34	dry at 29.80				
8/10/2006 13:29	dry at 29.82				
8/17/2006 15:22	dry at 29.83				
8/24/2006 14:55	dry at 29.82				
8/31/2006 9:40	dry at 29.80				
9/7/2006 14:20	dry at 29.82				
9/14/2006 14:20	dry at 29.84				
9/21/2006 17:02	dry at 29.82				
9/28/2006 14:40	dry at 29.83				
10/5/2006 15:25	dry at 29.82				
10/12/2006 14:25	dry at 29.81				
10/20/2006 15:02	dry at 29.84				
10/26/2006 14:40	dry at 29.81				
11/8/2006 12:42	dry at 29.84				
11/15/2006 15:53	dry at 29.81				
12/7/2006 14:44	dry at 29.82				
12/14/06 13:55	dry at 29.82				
12/21/2006 13:15	dry at 29.83				
12/28/06 13:30	dry at 29.83				
1/1/2007 15:09	dry at 29.82				

**Wastebed 13 Pilot Study  
Piezometer A-12 (45 ft)**

**A-12 (45 ft)**

Standpipe Piezometer

Date Installed: 9/15/2005

Grout =

0 to 37 ft

Bentonite Seal =

37 to 39 ft

Sandpack Set Depth =

39 to 44 ft

Screened Interval =

41.2 to 44.2 ft

Piezometer Set Depth =

44.2 ft

Initial Casing Stickup =

2.5 ft

Intermediate Casing Stickup =

9.58 ft

Final Casing Stickup =

9.58 ft

Initial Top of Casing Elevation =

433.14 ft

Intermediate Top of Casing Elevation =

NA ft

Final Top of Casing Elevation =

440.22 ft

Initial Ground Surface Elevation =

430.64 ft

Standpipe Tip Elevation =

386.44 ft

Date and Time	Depth from Top of Casing (ft)	Depth Below Ground Surface (ft)	Water Elevation (ft)	Time Elapsed (days)	Change in Piezometric Level (ft)
2/22/07 10:40	dry at 29.80				
3/7/2007 10:15	dry at 29.83				
4/12/07 11:10	dry at 29.82				
5/10/2007 11:34	dry at 29.82				
6/21/07 13:00	dry at 29.80				
7/12/2007 13:00	dry at 29.81				
8/15/07 13:07	dry at 29.81				
9/20/2007 14:06	dry at 29.81				
10/25/07 15:02	dry at 29.81				

**Wastebed 13 Pilot Study  
O'Brien and Gere Standpipe Piezometers**

Piezometer	Date and Time	Depth from Top of Casing (ft)
PZ-01I	10/15/2005 8:30	33.14
PZ-01I	10/17/2005 13:58	33.05
PZ-01I	10/18/2005 15:45	33.00
PZ-01I	10/19/2005 8:10	32.95
PZ-01I	10/20/2005 16:00	32.84
PZ-01I	10/21/2005 8:32	32.79
PZ-01I	10/24/2005 15:48	32.42
PZ-01I	10/31/2005 13:48	29.41
PZ-01I	11/2/2005 14:14	29.25
PZ-01I	11/4/2005 11:52	29.25
PZ-01I	11/7/2005 15:25	29.36
PZ-01I	11/11/2005 13:27	29.47
PZ-01I	11/14/2005 16:23	29.15
PZ-01I	11/17/2005 15:05	28.46
PZ-01I	11/21/2005 12:01	27.4
PZ-01I	12/2/2005 11:20	25.95
PZ-01I	12/6/2005 14:24	25.88
PZ-01I	12/15/2005 13:57	27.92
PZ-01I	12/21/2005 15:56	28.81
PZ-01I	12/29/2005 10:31	28.82
PZ-01I	1/5/2006 13:30	27.56
PZ-01I	1/12/2006 10:13	25.37
PZ-01I	1/19/2006 13:09	22.9
PZ-01I	1/26/2006 13:39	23.41
PZ-01I	2/2/2006 10:59	23.58
PZ-01I	2/23/2006 13:46	25.54
PZ-01I	3/2/2006 11:22	27.14
PZ-01I	3/9/2006 14:46	28.65
PZ-01I	3/16/2006 13:35	25.71
PZ-01I	3/23/2006 14:28	26.26
PZ-01I	3/31/2006 15:01	27.87
PZ-01I	4/6/2006 13:26	28.36
PZ-01I	4/13/2006 15:41	28.28
PZ-01I	4/20/2006 15:25	28.85
PZ-01I	4/26/2006 14:06	28.07
PZ-01I	5/4/2006 13:45	28.43
PZ-01I	5/11/2006 14:35	29.32
PZ-01I	5/18/2006 13:50	29.67
PZ-01I	5/25/2006 14:08	31.03
PZ-01I	6/1/2006 14:01	30.22

Piezometer	Date and Time	Depth from Top of Casing (ft)
PZ-01D	10/15/2005 8:30	49.36
PZ-01D	10/17/2005 13:55	49.35
PZ-01D	10/18/2005 15:45	49.35
PZ-01D	10/19/2005 8:10	49.39
PZ-01D	10/20/2005 16:00	49.36
PZ-01D	10/21/2005 8:30	49.26
PZ-01D	10/24/2005 15:45	49.16
PZ-01D	10/31/2005 13:45	48
PZ-01D	11/2/2005 14:11	47.55
PZ-01D	11/4/2005 11:50	47.2
PZ-01D	11/7/2005 15:20	47.01
PZ-01D	11/11/2005 13:25	46.94
PZ-01D	11/14/2005 16:22	46.9
PZ-01D	11/17/2005 15:05	46.66
PZ-01D	11/21/2005 12:00	46.05
PZ-01D	12/2/2005 11:19	45.25
PZ-01D	12/6/2005 14:23	44.72
PZ-01D	12/15/2005 13:55	45.05
PZ-01D	12/21/2005 15:55	45.59
PZ-01D	12/29/2005 10:30	45.98
PZ-01D	1/5/2006 13:28	45.28
PZ-01D	1/12/2006 10:12	44.39
PZ-01D	1/19/2006 13:05	43.5
PZ-01D	1/26/2006 13:38	43.53
PZ-01D	2/2/2006 10:58	43.53
PZ-01D	2/23/2006 13:44	43.93
PZ-01D	3/2/2006 11:20	44.41
PZ-01D	3/9/2006 14:45	45.28
PZ-01D	3/16/2006 13:34	45
PZ-01D	3/23/2006 14:26	44.48
PZ-01D	3/31/2006 15:00	44.99
PZ-01D	4/6/2006 13:25	45.32
PZ-01D	4/13/2006 15:40	45.5
PZ-01D	4/20/2006 15:23	45.86
PZ-01D	4/26/2006 14:04	45.85
PZ-01D	5/4/2006 13:43	45.69
PZ-01D	5/11/2006 14:36	46.32
PZ-01D	5/18/2006 13:48	46.76
PZ-01D	5/25/2006 14:07	47.18
PZ-01D	6/1/2006 14:00	47.47

Piezometer	Date and Time	Depth from Top of Casing (ft)
BA-1S	10/15/2005 8:30	Dry at 19.84
BA-1S	10/17/2005 14:00	Dry at 19.85
BA-1S	10/18/2005 15:45	Dry at 19.86
BA-1S	10/19/2005 8:12	Dry at 19.86
BA-1S	10/20/2005 16:00	Dry at 19.89
BA-1S	10/21/2005 8:33	Dry at 19.88
BA-1S	10/24/2005 15:50	Dry at 19.85
BA-1S	10/31/2005 13:51	Dry at 19.88
BA-1S	11/2/2005 14:16	Dry at 19.87
BA-1S	11/4/2005 11:56	15.51
BA-1S	11/7/2005 15:28	16.75
BA-1S	11/11/2005 13:28	15.9
BA-1S	11/14/2005 16:25	Dry at 19.88
BA-1S	11/17/2005 15:05	13.75
BA-1S	11/21/2005 12:02	14.1
BA-1S	12/2/2005 11:23	12.94
BA-1S	12/6/2005 14:25	13.89
BA-1S	12/15/2005 13:59	14.45
BA-1S	12/21/2005 15:57	16.43
BA-1S	12/29/2005 10:32	14.84
BA-1S	1/5/2006 13:30	14
BA-1S	1/12/2006 10:14	12.16
BA-1S	1/19/2006 13:11	11.45
BA-1S	1/26/2006 13:41	12.4
BA-1S	2/2/2006 10:58	11.93
BA-1S	2/23/2006 13:47	13.8
BA-1S	3/2/2006 11:23	14.18
BA-1S	3/9/2006 14:47	16.11
BA-1S	3/16/2006 13:36	12.94
BA-1S	3/23/2006 14:29	13.95
BA-1S	3/31/2006 15:03	14.23
BA-1S	4/6/2006 13:27	14.22
BA-1S	4/13/2006 15:43	14.24
BA-1S	4/20/2006 15:27	14.71
BA-1S	4/26/2006 14:07	13.96
BA-1S	5/4/2006 13:46	14.47
BA-1S	5/11/2006 14:37	16.66
BA-1S	5/18/2006 13:51	16.11
BA-1S	5/25/2006 14:10	16.77
BA-1S	6/1/2006 14:02	18.21

**Wastebed 13 Pilot Study  
O'Brien and Gere Standpipe Piezometers**

Piezometer	Date and Time	Depth from Top of Casing (ft)
PZ-01I	6/8/2006 14:06	30.38
PZ-01I	6/15/2006 13:16	30.62
PZ-01I	6/22/2006 13:25	30.86
PZ-01I	6/29/2006 14:48	31.05
PZ-01I	7/6/2006 14:10	31.24
PZ-01I	7/13/2006 14:15	30.99
PZ-01I	7/20/2006 9:59	29.47
PZ-01I	7/27/2006 9:44	29.72
PZ-01I	8/3/2006 9:25	30.1
PZ-01I	8/10/2006 13:23	30.48
PZ-01I	8/17/2006 15:16	30.86
PZ-01I	8/24/2006 14:50	31.12
PZ-01I	8/31/2006 9:31	31.42
PZ-01I	9/7/2006 14:17	31.68
PZ-01I	9/14/2006 14:19	31.82
PZ-01I	9/28/2006 14:22	Dry at 47.11
PZ-01I	10/5/2006 15:17	32.25
PZ-01I	10/12/2006 14:16	32
PZ-01I	10/20/2006 14:54	31.69
PZ-01I	10/26/2006 14:32	28.68
PZ-01I	11/8/2006 12:38	27.68
PZ-01I	11/15/2006 15:47	28.7
PZ-01I	12/7/2006 14:39	25.31
PZ-01I	12/14/2006 13:44	26.96
PZ-01I	12/21/2006 13:10	28.32
PZ-01I	12/28/2006 13:26	26.86
PZ-01I	1/11/2007 15:01	24
PZ-01I	3/7/2007 10:02	30.25
PZ-01I	4/12/2007 11:06	19.25
PZ-01I	5/10/2007 11:29	20.75
PZ-01I	6/21/2007 12:56	30.85
PZ-01I	7/12/2007 12:56	31.65
PZ-01I	8/15/2007 13:02	32.47
PZ-01I	9/20/2007 14:02	33.1
PZ-01I	10/25/2007 15:06	33.54

Piezometer	Date and Time	Depth from Top of Casing (ft)
PZ-01D	6/8/2006 14:04	47.61
PZ-01D	6/15/2006 13:15	47.78
PZ-01D	6/22/2006 13:24	47.97
PZ-01D	6/29/2006 14:46	48.12
PZ-01D	7/6/2006 14:08	48.33
PZ-01D	7/13/2006 14:14	48.2
PZ-01D	7/20/2006 9:57	47.41
PZ-01D	7/27/2006 9:42	46.98
PZ-01D	8/3/2006 9:23	47.16
PZ-01D	8/10/2006 13:22	47.52
PZ-01D	8/17/2006 15:15	47.92
PZ-01D	8/24/2006 14:51	48.17
PZ-01D	8/31/2006 9:30	48.41
PZ-01D	9/7/2006 14:15	48.53
PZ-01D	9/14/2006 14:17	48.67
PZ-01D	9/28/2006 14:20	49
PZ-01D	10/5/2006 15:15	48.99
PZ-01D	10/12/2006 14:15	48.88
PZ-01D	10/20/2006 14:52	48.7
PZ-01D	10/26/2006 14:30	47.6
PZ-01D	11/8/2006 12:36	45.09
PZ-01D	11/15/2006 15:45	45.65
PZ-01D	12/7/2006 14:38	44.25
PZ-01D	12/14/2006 13:42	44.48
PZ-01D	12/21/2006 13:08	45.21
PZ-01D	12/28/2006 13:25	45.21
PZ-01D	1/11/2007 14:59	44
PZ-01D	3/7/2007 10:04	47.52
PZ-01D	4/12/2007 11:05	40.36
PZ-01D	5/10/2007 11:27	41.1
PZ-01D	6/21/2007 12:55	47.7
PZ-01D	7/12/2007 12:55	48.55
PZ-01D	8/15/2007 13:00	49.22
PZ-01D	9/20/2007 14:00	49.56
PZ-01D	10/25/2007 15:05	49.7

Piezometer	Date and Time	Depth from Top of Casing (ft)
BA-1S	6/8/2006 14:07	18.18
BA-1S	6/15/2006 13:17	19.05
BA-1S	6/22/2006 13:26	Dry at 19.87
BA-1S	6/29/2006 14:51	Dry at 19.86
BA-1S	7/6/2006 14:12	Dry at 19.89
BA-1S	7/13/2006 14:17	14.55
BA-1S	7/20/2006 10:01	15.86
BA-1S	7/27/2006 9:46	17.9
BA-1S	8/3/2006 9:28	18.46
BA-1S	8/10/2006 13:24	18.88
BA-1S	8/17/2006 15:17	Dry at 19.87
BA-1S	8/24/2006 14:52	Dry at 19.86
BA-1S	8/31/2006 9:30	Dry at 19.85
BA-1S	9/7/2006 14:18	Dry at 19.83
BA-1S	9/14/2006 14:20	Dry at 19.85
BA-1S	9/28/2006 14:24	Dry at 19.87
BA-1S	10/5/2006 15:19	18.93
BA-1S	10/12/2006 14:18	19.27
BA-1S	10/20/2006 14:56	14.3
BA-1S	10/26/2006 14:34	14.05
BA-1S	11/8/2006 12:40	14.26
BA-1S	11/15/2006 15:49	14.18
BA-1S	12/7/2006 14:41	13.65
BA-1S	12/14/2006 13:45	14.11
BA-1S	12/21/2006 13:12	14.64
BA-1S	12/28/2006 13:27	13.41
BA-1S	1/11/2007 15:03	12.41
BA-1S	3/7/2007 10:00	15.48
BA-1S	4/12/2007 11:07	7.52
BA-1S	5/10/2007 11:30	9.51
BA-1S	6/21/2007 12:57	Dry at 19.85
BA-1S	7/12/2007 12:57	Dry at 19.85
BA-1S	8/15/2007 13:03	Dry at 19.86
BA-1S	9/20/2007 14:04	Dry at 19.85
BA-1S	10/25/2007 15:07	Dry at 19.85

## Precipitation Data

October 2005 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
10/1/2005		0
10/2/2005		0
10/3/2005		0
10/4/2005		0
10/5/2005		0
10/6/2005		0
10/7/2005	0	0
10/8/2005	1	0.01
10/9/2005	2	0.16
10/10/2005	3	0.01
10/11/2005	4	0.03
10/12/2005	5	0.34
10/13/2005	6	1.23
10/14/2005	7	0.16
10/15/2005	8	0.07
10/16/2005	9	0.01
10/17/2005	10	0.05
10/18/2005	11	0.03
10/19/2005	12	0.01
10/20/2005	13	0.01
10/21/2005	14	0
10/22/2005	15	1.01
10/23/2005	16	0.2
10/24/2005	17	0.14
10/25/2005	18	1.18
10/26/2005	19	0.04
10/27/2005	20	0
10/28/2005	21	0
10/29/2005	22	0
10/30/2005	23	0
10/31/2005	24	0

November 2005 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
11/1/2005	25	0.2
11/2/2005	26	0.01
11/3/2005	27	0
11/4/2005	28	0
11/5/2005	29	0
11/6/2005	30	0.22
11/7/2005	31	0
11/8/2005	32	0
11/9/2005	33	1.01
11/10/2005	34	0.01
11/11/2005	35	0
11/12/2005	36	0
11/13/2005	37	0
11/14/2005	38	0
11/15/2005	39	1.14
11/16/2005	40	0.42
11/17/2005	41	0.01
11/18/2005	42	0.03
11/19/2005	43	0
11/20/2005	44	0
11/21/2005	45	0
11/22/2005	46	0.01
11/23/2005	47	0.01
11/24/2005	48	0.03
11/25/2005	49	0
11/26/2005	50	0.01
11/27/2005	51	0.01
11/28/2005	52	0.01
11/29/2005	53	1.41
11/30/2005	54	0.03

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

December 2005 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
12/1/2005	55	0.01
12/2/2005	56	0.14
12/3/2005	57	0.05
12/4/2005	58	0.08
12/5/2005	59	0
12/6/2005	60	0.03
12/7/2005	61	0.05
12/8/2005	62	0
12/9/2005	63	0.2
12/10/2005	64	0
12/11/2005	65	0
12/12/2005	66	0.01
12/13/2005	67	0
12/14/2005	68	0
12/15/2005	69	0.26
12/16/2005	70	0.72
12/17/2005	71	0
12/18/2005	72	0
12/19/2005	73	0.01
12/20/2005	74	0.01
12/21/2005	75	0.01
12/22/2005	76	0.01
12/23/2005	77	0.05
12/24/2005	78	0
12/25/2005	79	0.55
12/26/2005	80	0.03
12/27/2005	81	0
12/28/2005	82	0.03
12/29/2005	83	0.1
12/30/2005	84	0
12/31/2005	85	0.08

January 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
1/1/2006	86	0.01
1/2/2006	87	0.24
1/3/2006	88	0.07
1/4/2006	89	0.11
1/5/2006	90	0.14
1/6/2006	91	0
1/7/2006	92	0.01
1/8/2006	93	0
1/9/2006	94	0
1/10/2006	95	0
1/11/2006	96	0.18
1/12/2006	97	0
1/13/2006	98	0.09
1/14/2006	99	0.41
1/15/2006	100	0.01
1/16/2006	101	0
1/17/2006	102	0.07
1/18/2006	103	0.42
1/19/2006	104	0
1/20/2006	105	0
1/21/2006	106	0.03
1/22/2006	107	0
1/23/2006	108	0.18
1/24/2006	109	0.04
1/25/2006	110	0.17
1/26/2006	111	0
1/27/2006	112	0
1/28/2006	113	0
1/29/2006	114	0.57
1/30/2006	115	0
1/31/2006	116	0.19

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

February 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
2/1/2006	117	0.06
2/2/2006	118	0.12
2/3/2006	119	0.48
2/4/2006	120	0.24
2/5/2006	121	0.03
2/6/2006	122	0.06
2/7/2006	123	0.1
2/8/2006	124	0
2/9/2006	125	0.01
2/10/2006	126	0.01
2/11/2006	127	0.02
2/12/2006	128	0
2/13/2006	129	0.01
2/14/2006	130	0
2/15/2006	131	0
2/16/2006	132	0
2/17/2006	133	0.05
2/18/2006	134	0.07
2/19/2006	135	0.03
2/20/2006	136	0
2/21/2006	137	0.01
2/22/2006	138	0
2/23/2006	139	0.09
2/24/2006	140	0.01
2/25/2006	141	0.05
2/26/2006	142	0.05
2/27/2006	143	0.03
2/28/2006	144	0.13

March 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
3/1/2006	145	0.03
3/2/2006	146	0
3/3/2006	147	0.01
3/4/2006	148	0.02
3/5/2006	149	0
3/6/2006	150	0
3/7/2006	151	0
3/8/2006	152	0
3/9/2006	153	0.51
3/10/2006	154	0
3/11/2006	155	0
3/12/2006	156	0.01
3/13/2006	157	0.9
3/14/2006	158	0.02
3/15/2006	159	0.02
3/16/2006	160	0
3/17/2006	161	0
3/18/2006	162	0.02
3/19/2006	163	0.09
3/20/2006	164	0
3/21/2006	165	0
3/22/2006	166	0.04
3/23/2006	167	0
3/24/2006	168	0.09
3/25/2006	169	0
3/26/2006	170	0
3/27/2006	171	0
3/28/2006	172	0
3/29/2006	173	0
3/30/2006	174	0
3/31/2006	175	0.01

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

April 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
4/1/2006	176	0.4
4/2/2006	177	0
4/3/2006	178	0.54
4/4/2006	179	0.23
4/5/2006	180	0.01
4/6/2006	181	0.01
4/7/2006	182	0.25
4/8/2006	183	0
4/9/2006	184	0
4/10/2006	185	0
4/11/2006	186	0
4/12/2006	187	0
4/13/2006	188	0.03
4/14/2006	189	0.09
4/15/2006	190	0.7
4/16/2006	191	0
4/17/2006	192	0
4/18/2006	193	0
4/19/2006	194	0
4/20/2006	195	0
4/21/2006	196	0
4/22/2006	197	1.26
4/23/2006	198	0.06
4/24/2006	199	0.06
4/25/2006	200	0
4/26/2006	201	0
4/27/2006	202	0
4/28/2006	203	0
4/29/2006	204	0
4/30/2006	205	0

May 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
5/1/2006	206	0
5/2/2006	207	0
5/3/2006	208	0
5/4/2006	209	0.07
5/5/2006	210	0
5/6/2006	211	0.18
5/7/2006	212	0
5/8/2006	213	0
5/9/2006	214	0
5/10/2006	215	0
5/11/2006	216	0.2
5/12/2006	217	0.64
5/13/2006	218	0.03
5/14/2006	219	0
5/15/2006	220	0.09
5/16/2006	221	0
5/17/2006	222	0.12
5/18/2006	223	0.24
5/19/2006	224	0
5/20/2006	225	0.16
5/21/2006	226	0.22
5/22/2006	227	0
5/23/2006	228	0
5/24/2006	229	0
5/25/2006	230	0
5/26/2006	231	0.2
5/27/2006	232	0
5/28/2006	233	0
5/29/2006	234	0.05
5/30/2006	235	0
5/31/2006	236	0

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

June 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
6/1/2006	237	0.01
6/2/2006	238	0
6/3/2006	239	1.36
6/4/2006	240	0.05
6/5/2006	241	0
6/6/2006	242	0
6/7/2006	243	0.03
6/8/2006	244	0.04
6/9/2006	245	0.34
6/10/2006	246	0.01
6/11/2006	247	0
6/12/2006	248	0
6/13/2006	249	0
6/14/2006	250	0
6/15/2006	251	0
6/16/2006	252	0
6/17/2006	253	0.31
6/18/2006	254	0
6/19/2006	255	0.24
6/20/2006	256	0
6/21/2006	257	0
6/22/2006	258	0
6/23/2006	259	0
6/24/2006	260	0
6/25/2006	261	0
6/26/2006	262	0.58
6/27/2006	263	1.43
6/28/2006	264	0.51
6/29/2006	265	0.12
6/30/2006	266	0

July 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
7/1/2006	267	0
7/2/2006	268	0.81
7/3/2006	269	0
7/4/2006	270	0.68
7/5/2006	271	0
7/6/2006	272	0
7/7/2006	273	0
7/8/2006	274	0
7/9/2006	275	0
7/10/2006	276	0.42
7/11/2006	277	0
7/12/2006	278	4.28
7/13/2006	279	0
7/14/2006	280	0
7/15/2006	281	1.01
7/16/2006	282	0
7/17/2006	283	0
7/18/2006	284	0
7/19/2006	285	0
7/20/2006	286	0.12
7/21/2006	287	0
7/22/2006	288	0.7
7/23/2006	289	0
7/24/2006	290	0
7/25/2006	291	0.62
7/26/2006	292	0
7/27/2006	293	0.1
7/28/2006	294	0.48
7/29/2006	295	0.85
7/30/2006	296	0
7/31/2006	297	0

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

August 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
8/1/2006	298	0
8/2/2006	299	0.09
8/3/2006	300	0.35
8/4/2006	301	0.33
8/5/2006	302	0
8/6/2006	303	0.01
8/7/2006	304	0.62
8/8/2006	305	0
8/9/2006	306	0
8/10/2006	307	0
8/11/2006	308	0
8/12/2006	309	0
8/13/2006	310	0
8/14/2006	311	0.11
8/15/2006	312	0
8/16/2006	313	0
8/17/2006	314	0
8/18/2006	315	0.01
8/19/2006	316	0.27
8/20/2006	317	0.09
8/21/2006	318	0
8/22/2006	319	0
8/23/2006	320	0
8/24/2006	321	0
8/25/2006	322	0.19
8/26/2006	323	0.11
8/27/2006	324	0
8/28/2006	325	0.03
8/29/2006	326	0.66
8/30/2006	327	0
8/31/2006	328	0

September 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
9/1/2006	329	0
9/2/2006	330	0.74
9/3/2006	331	0.03
9/4/2006	332	0
9/5/2006	333	0
9/6/2006	334	0.01
9/7/2006	335	0
9/8/2006	336	0
9/9/2006	337	0
9/10/2006	338	0
9/11/2006	339	0
9/12/2006	340	0.11
9/13/2006	341	0.74
9/14/2006	342	0.19
9/15/2006	343	0
9/16/2006	344	0
9/17/2006	345	0
9/18/2006	346	0
9/19/2006	347	0.06
9/20/2006	348	0.03
9/21/2006	349	0.07
9/22/2006	350	0
9/23/2006	351	0.47
9/24/2006	352	0.19
9/25/2006	353	0.07
9/26/2006	354	0
9/27/2006	355	0
9/28/2006	356	0.31
9/29/2006	357	0.03
9/30/2006	358	0.01

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

October 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
10/1/2006	359	0.01
10/2/2006	360	0
10/3/2006	361	0.03
10/4/2006	362	0
10/5/2006	363	0
10/6/2006	364	0
10/7/2006	365	0
10/8/2006	366	0
10/9/2006	367	0
10/10/2006	368	0
10/11/2006	369	0
10/12/2006	370	0.19
10/13/2006	371	0
10/14/2006	372	0
10/15/2006	373	0
10/16/2006	374	0
10/17/2006	375	0.62
10/18/2006	376	0
10/19/2006	377	0.39
10/20/2006	378	0.62
10/21/2006	379	0
10/22/2006	380	0.01
10/23/2006	381	0.07
10/24/2006	382	0.25
10/25/2006	383	0.03
10/26/2006	384	0.03
10/27/2006	385	0.55
10/28/2006	386	0.92
10/29/2006	387	0
10/30/2006	388	0
10/31/2006	389	0

November 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
11/1/2006	390	0.05
11/2/2006	391	0.09
11/3/2006	392	0.21
11/4/2006	393	0
11/5/2006	394	0.02
11/6/2006	395	
11/7/2006	396	0.29
11/8/2006	397	0.32
11/9/2006	398	0
11/10/2006	399	
11/11/2006	400	
11/12/2006	401	
11/13/2006	402	
11/14/2006	403	0.72
11/15/2006	404	0.35
11/16/2006	405	1.37
11/17/2006	406	0.15
11/18/2006	407	0
11/19/2006	408	0.09
11/20/2006	409	0.01
11/21/2006	410	0
11/22/2006	411	0
11/23/2006	412	0
11/24/2006	413	0
11/25/2006	414	0
11/26/2006	415	0
11/27/2006	416	0
11/28/2006	417	0
11/29/2006	418	
11/30/2006	419	

**Notes:**

- Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).
- Empty entries indicate precipitation data are not available.

## Precipitation Data

December 2006 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
12/1/2006	420	
12/2/2006	421	
12/3/2006	422	0.2
12/4/2006	423	0.03
12/5/2006	424	0
12/6/2006	425	0.38
12/7/2006	426	0.07
12/8/2006	427	0
12/9/2006	428	0
12/10/2006	429	0.23
12/11/2006	430	0
12/12/2006	431	0.4
12/13/2006	432	0
12/14/2006	433	0
12/15/2006	434	0.1
12/16/2006	435	0
12/17/2006	436	0.02
12/18/2006	437	0.05
12/19/2006	438	0.1
12/20/2006	439	0
12/21/2006	440	0
12/22/2006	441	1.4
12/23/2006	442	0.24
12/24/2006	443	0.03
12/25/2006	444	0.71
12/26/2006	445	0.13
12/27/2006	446	0.23
12/28/2006	447	0
12/29/2006	448	0.01
12/30/2006	449	0.18
12/31/2006	450	0.23

January 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
1/1/2007	451	0.32
1/2/2007	452	0.01
1/3/2007	453	0
1/4/2007	454	0.19
1/5/2007	455	1.48
1/6/2007	456	0.38
1/7/2007	457	0.56
1/8/2007	458	0.59
1/9/2007	459	0.56
1/10/2007	460	0.46
1/11/2007	461	0.01
1/12/2007	462	0.33
1/13/2007	463	0.49
1/14/2007	464	0.45
1/15/2007	465	0.87
1/16/2007	466	0.02
1/17/2007	467	0
1/18/2007	468	0.07
1/19/2007	469	0.66
1/20/2007	470	0.13
1/21/2007	471	0.06
1/22/2007	472	0.13
1/23/2007	473	0.14
1/24/2007	474	0.15
1/25/2007	475	0
1/26/2007	476	0.01
1/27/2007	477	0.04
1/28/2007	478	0
1/29/2007	479	0.05
1/30/2007	480	0
1/31/2007	481	0.03

**Notes:**

- Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).
- Empty entries indicate precipitation data are not available.

## Precipitation Data

February 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
2/1/2007	482	0
2/2/2007	483	0.31
2/3/2007	484	0
2/4/2007	485	0
2/5/2007	486	0.28
2/6/2007	487	0.02
2/7/2007	488	0.01
2/8/2007	489	0.2
2/9/2007	490	0.21
2/10/2007	491	0.08
2/11/2007	492	0
2/12/2007	493	0.04
2/13/2007	494	0.18
2/14/2007	495	0.95
2/15/2007	496	0.2
2/16/2007	497	0.17
2/17/2007	498	0.05
2/18/2007	499	0
2/19/2007	500	0
2/20/2007	501	0.15
2/21/2007	502	0
2/22/2007	503	0.38
2/23/2007	504	0.13
2/24/2007	505	0
2/25/2007	506	0.24
2/26/2007	507	0.23
2/27/2007	508	0.02
2/28/2007	509	0

March 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
3/1/2007	510	0.21
3/2/2007	511	1.29
3/3/2007	512	0.11
3/4/2007	513	0.19
3/5/2007	514	0.28
3/6/2007	515	0.01
3/7/2007	516	0.06
3/8/2007	517	0.04
3/9/2007	518	0
3/10/2007	519	0.77
3/11/2007	520	0.05
3/12/2007	521	0
3/13/2007	522	0.01
3/14/2007	523	0.55
3/15/2007	524	0.78
3/16/2007	525	0.18
3/17/2007	526	0.41
3/18/2007	527	0.08
3/19/2007	528	0.18
3/20/2007	529	0.03
3/21/2007	530	0.02
3/22/2007	531	0.19
3/23/2007	532	0
3/24/2007	533	0.46
3/25/2007	534	0
3/26/2007	535	2.71
3/27/2007	536	0
3/28/2007	537	0
3/29/2007	538	0
3/30/2007	539	0
3/31/2007	540	0

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

April 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
4/1/2007	541	0.8
4/2/2007	542	0.15
4/3/2007	543	0
4/4/2007	544	0.72
4/5/2007	545	0.23
4/6/2007	546	0.06
4/7/2007	547	0.04
4/8/2007	548	0.24
4/9/2007	549	0.05
4/10/2007	550	0.09
4/11/2007	551	0.08
4/12/2007	552	0.73
4/13/2007	553	0.41
4/14/2007	554	0.02
4/15/2007	555	0.57
4/16/2007	556	0.58
4/17/2007	557	0.31
4/18/2007	558	0
4/19/2007	559	0
4/20/2007	560	0
4/21/2007	561	0
4/22/2007	562	0
4/23/2007	563	0.28
4/24/2007	564	0.02
4/25/2007	565	0.33
4/26/2007	566	0.04
4/27/2007	567	0.62
4/28/2007	568	0.46
4/29/2007	569	0.35
4/30/2007	570	0.1

May 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
5/1/2007	571	0
5/2/2007	572	0
5/3/2007	573	0
5/4/2007	574	0
5/5/2007	575	0
5/6/2007	576	0
5/7/2007	577	0
5/8/2007	578	0
5/9/2007	579	0
5/10/2007	580	0.11
5/11/2007	581	0
5/12/2007	582	0
5/13/2007	583	0
5/14/2007	584	0
5/15/2007	585	0.28
5/16/2007	586	0.17
5/17/2007	587	0
5/18/2007	588	0
5/19/2007	589	0
5/20/2007	590	0
5/21/2007	591	0
5/22/2007	592	0
5/23/2007	593	0
5/24/2007	594	0
5/25/2007	595	0.07
5/26/2007	596	0
5/27/2007	597	0.33
5/28/2007	598	0
5/29/2007	599	0
5/30/2007	600	0
5/31/2007	601	0

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

June 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
6/1/2007	602	0
6/2/2007	603	0
6/3/2007	604	0.74
6/4/2007	605	0.98
6/5/2007	606	0.36
6/6/2007	607	0
6/7/2007	608	0
6/8/2007	609	0.47
6/9/2007	610	0
6/10/2007	611	0
6/11/2007	612	0
6/12/2007	613	0
6/13/2007	614	0
6/14/2007	615	0
6/15/2007	616	0
6/16/2007	617	0
6/17/2007	618	0.03
6/18/2007	619	0
6/19/2007	620	2.32
6/20/2007	621	0.05
6/21/2007	622	0.06
6/22/2007	623	0
6/23/2007	624	0
6/24/2007	625	0
6/25/2007	626	0
6/26/2007	627	0
6/27/2007	628	0.26
6/28/2007	629	0
6/29/2007	630	0
6/30/2007	631	0

July 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
7/1/2007	632	0
7/2/2007	633	0
7/3/2007	634	0
7/4/2007	635	0.31
7/5/2007	636	0.18
7/6/2007	637	0
7/7/2007	638	0
7/8/2007	639	1.53
7/9/2007	640	0.27
7/10/2007	641	0
7/11/2007	642	0.78
7/12/2007	643	0
7/13/2007	644	0.33
7/14/2007	645	0.28
7/15/2007	646	0.22
7/16/2007	647	0
7/17/2007	648	0.15
7/18/2007	649	0.3
7/19/2007	650	0.69
7/20/2007	651	0.45
7/21/2007	652	0
7/22/2007	653	0
7/23/2007	654	0.44
7/24/2007	655	0.21
7/25/2007	656	0
7/26/2007	657	0
7/27/2007	658	0.48
7/28/2007	659	0
7/29/2007	660	0
7/30/2007	661	0
7/31/2007	662	0

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

August 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
8/1/2007	663	0
8/2/2007	664	0
8/3/2007	665	0.38
8/4/2007	666	0
8/5/2007	667	0
8/6/2007	668	0
8/7/2007	669	0.39
8/8/2007	670	0
8/9/2007	671	0.1
8/10/2007	672	0.3
8/11/2007	673	0
8/12/2007	674	0.03
8/13/2007	675	0
8/14/2007	676	0
8/15/2007	677	0
8/16/2007	678	0
8/17/2007	679	0.36
8/18/2007	680	0
8/19/2007	681	0
8/20/2007	682	0.01
8/21/2007	683	0.02
8/22/2007	684	0
8/23/2007	685	0.56
8/24/2007	686	0.07
8/25/2007	687	1.33
8/26/2007	688	0
8/27/2007	689	0
8/28/2007	690	0
8/29/2007	691	0
8/30/2007	692	0
8/31/2007	693	0

September 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
9/1/2007	694	0
9/2/2007	695	0
9/3/2007	696	0
9/4/2007	697	0
9/5/2007	698	0
9/6/2007	699	0.02
9/7/2007	700	0
9/8/2007	701	0.16
9/9/2007	702	1.5
9/10/2007	703	0.48
9/11/2007	704	0.66
9/12/2007	705	0.05
9/13/2007	706	0
9/14/2007	707	0.14
9/15/2007	708	0.61
9/16/2007	709	0
9/17/2007	710	0
9/18/2007	711	0
9/19/2007	712	0
9/20/2007	713	0
9/21/2007	714	0
9/22/2007	715	0
9/23/2007	716	0
9/24/2007	717	0
9/25/2007	718	0
9/26/2007	719	0.56
9/27/2007	720	0.77
9/28/2007	721	0.37
9/29/2007	722	0
9/30/2007	723	0

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

## Precipitation Data

October 2007 SYR Airport 13211

Date	Time Elapsed from 10/7/05 (days)	Precipitation (inches)
10/1/2007	724	0
10/2/2007	725	0.01
10/3/2007	726	0
10/4/2007	727	0
10/5/2007	728	0
10/6/2007	729	0.38
10/7/2007	730	0.08
10/8/2007	731	0.66
10/9/2007	732	0.26
10/10/2007	733	0.06
10/11/2007	734	1.4
10/12/2007	735	0
10/13/2007	736	0.38
10/14/2007	737	0.03
10/15/2007	738	0
10/16/2007	739	0
10/17/2007	740	0.02
10/18/2007	741	0
10/19/2007	742	0.82
10/20/2007	743	0.03
10/21/2007	744	0
10/22/2007	745	0.08
10/23/2007	746	2.09
10/24/2007	747	0.03
10/25/2007	748	0
10/26/2007	749	0.43
10/27/2007	750	0.76
10/28/2007	751	0
10/29/2007	752	0
10/30/2007	753	0
10/31/2007	754	0

**Note:**

Precipitation data were obtained from [www.weather.com](http://www.weather.com) for zip code 13211 (Syracuse Hancock International Airport).

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**APPENDIX B**  
**SETTLEMENT PLATE DATA**

### Settlement Plate Data

Settlement Plate	3/8/2006		8/31/2006		12/6/2006	
	Day 152		Day 328		Day 425	
	Settlement (inches)		Settlement (inches)		Settlement (inches)	
	Ianuzi & Romans	Parsons	Ianuzi & Romans	Parsons	Ianuzi & Romans	Parsons
SP-1	-32.00	-31.87	-35.36	-34.74	-36.08	-35.62
SP-2	-30.80	-30.60	-33.92	-33.35	-34.52	-34.09
SP-3	-30.92	-30.93	-33.68	-33.31	-34.52	-34.06
SP-4	-29.60	-29.53	-32.72	-32.28	-33.68	-33.28
SP-5	-24.56	-24.35	-26.84	-26.48	-27.44	-27.10
SP-6	-26.60	-26.45	-29.36	-29.20	-30.20	-29.95
SP-7	-16.88	-17.08	-19.40	-18.58	-19.64	-19.20
SP-8	-25.64	-25.68	-28.64	-28.05	-29.36	-28.80
SP-9	-17.84	-18.04	-20.60	-20.16	-21.32	-20.78
SP-10	-24.92	-24.90	-28.04	-27.65	-29.00	-28.52
SP-11	-10.28	-9.98	-11.84	-11.36	-12.08	-11.73
SP-12	-18.20	-18.02	-20.84	-20.64	-21.44	-21.14
SP-13	-0.72	-0.46	-1.44	-0.71	-1.20	-0.83
SP-14	-0.36	-0.23	-0.36	0.03	-0.24	0.02
SP-15	-0.24	-0.16	-0.24	0.09	0.24	0.22
SP-16	-19.76	-19.77	-21.92	-21.39	-22.40	-22.02
SP-17 (buried)	NA	NA	NA	NA	NA	NA
SP-18	-0.60	-0.60	-1.56	-1.22	-1.56	-1.34
SP-19	-0.12	-0.12	-0.36	-0.12	-0.24	0.01
SP-20	-23.12	-22.74	-25.64	-25.37	-26.12	-25.99

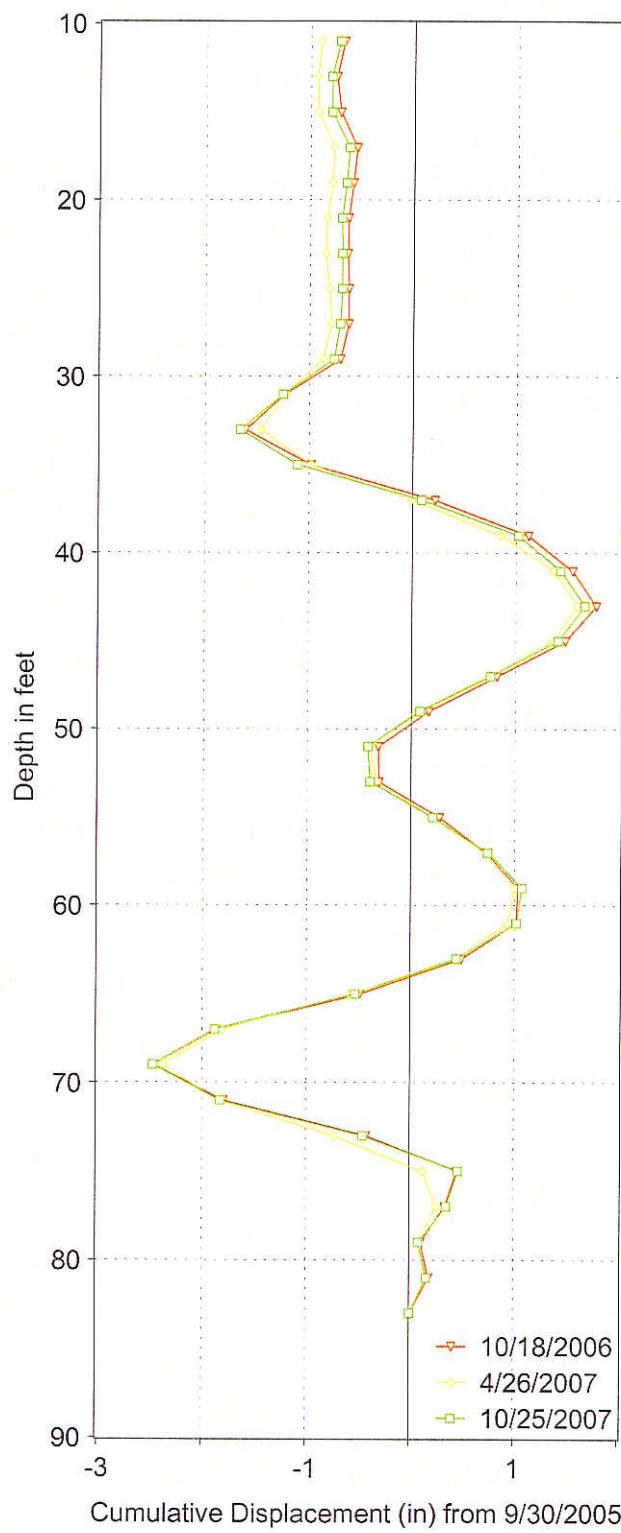
**Notes:**

1. NA indicates data are not available because the settlement plate was buried during fill placement.
2. Negative values indicate settlement, and positive values indicate upward movement.
3. Day 0 (baseline) is 10/7/2005.
4. Ianuzi & Romans is a licensed land surveyor.

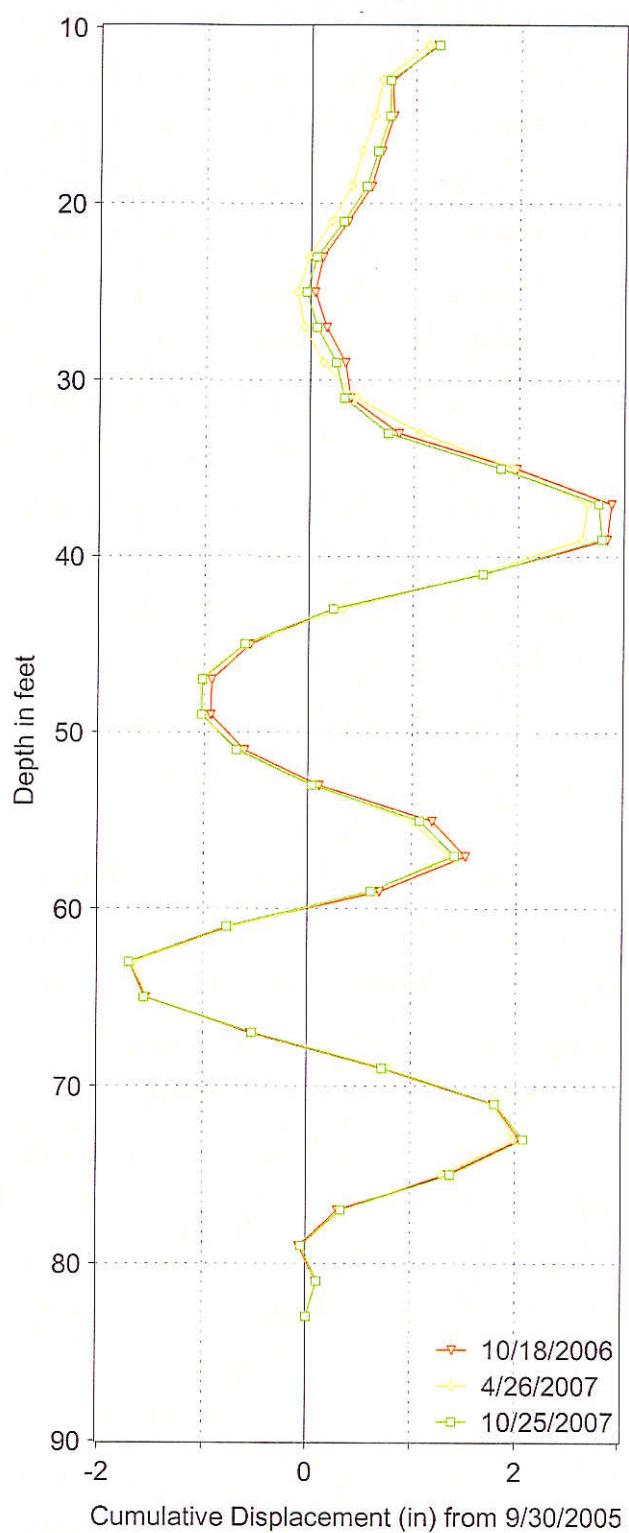
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**APPENDIX C**  
**INCLINOMETER RESULTS**

WB 13 A-1a, A-Axis



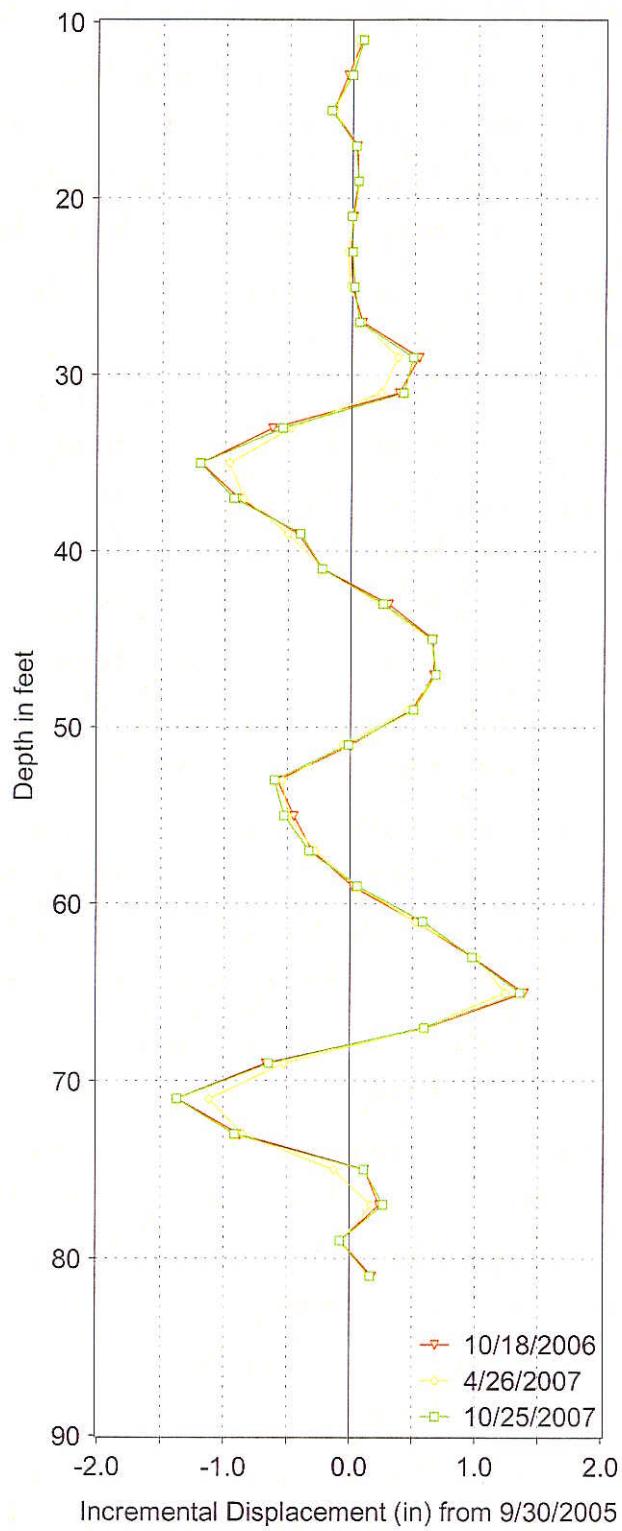
WB 13 A-1a, B-Axis



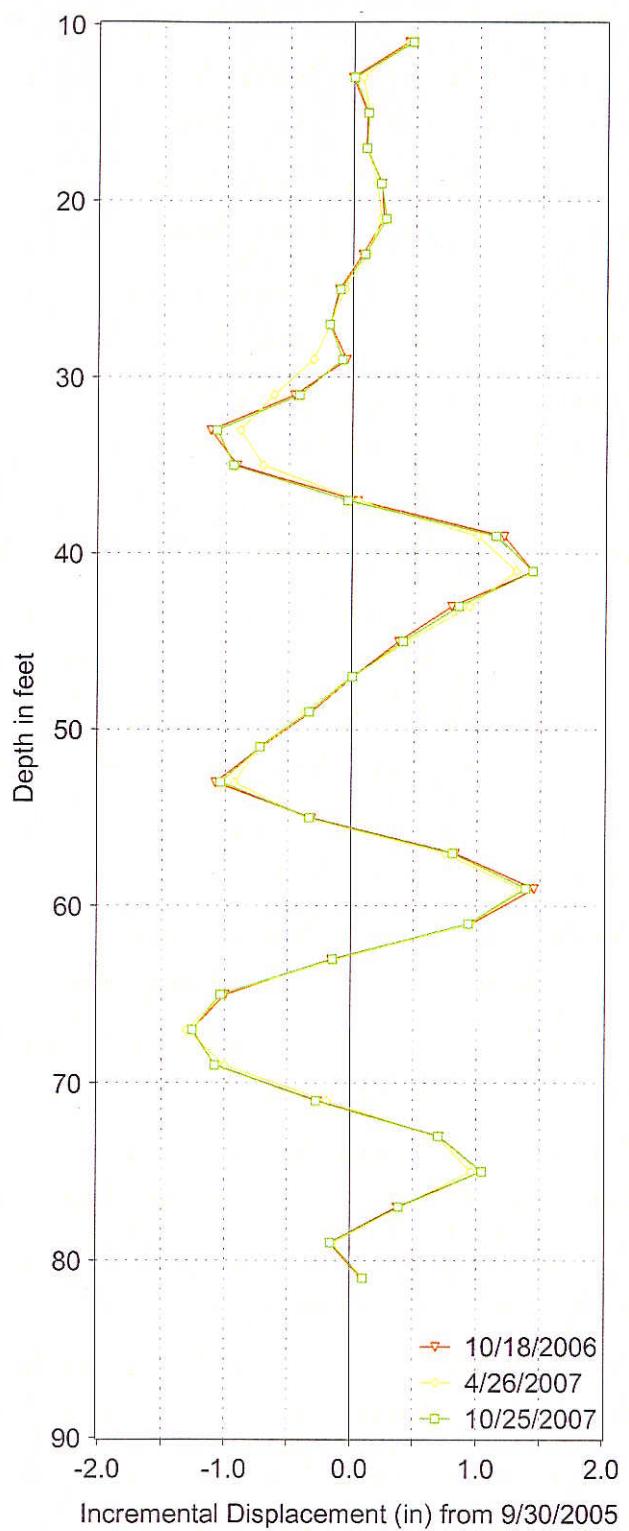
Wastedbed 13 Pilot Study  
Location SB915-INEX-A1 (A-1)  
December 2007

**PARSONS**

WB 13 A-1a, A-Axis



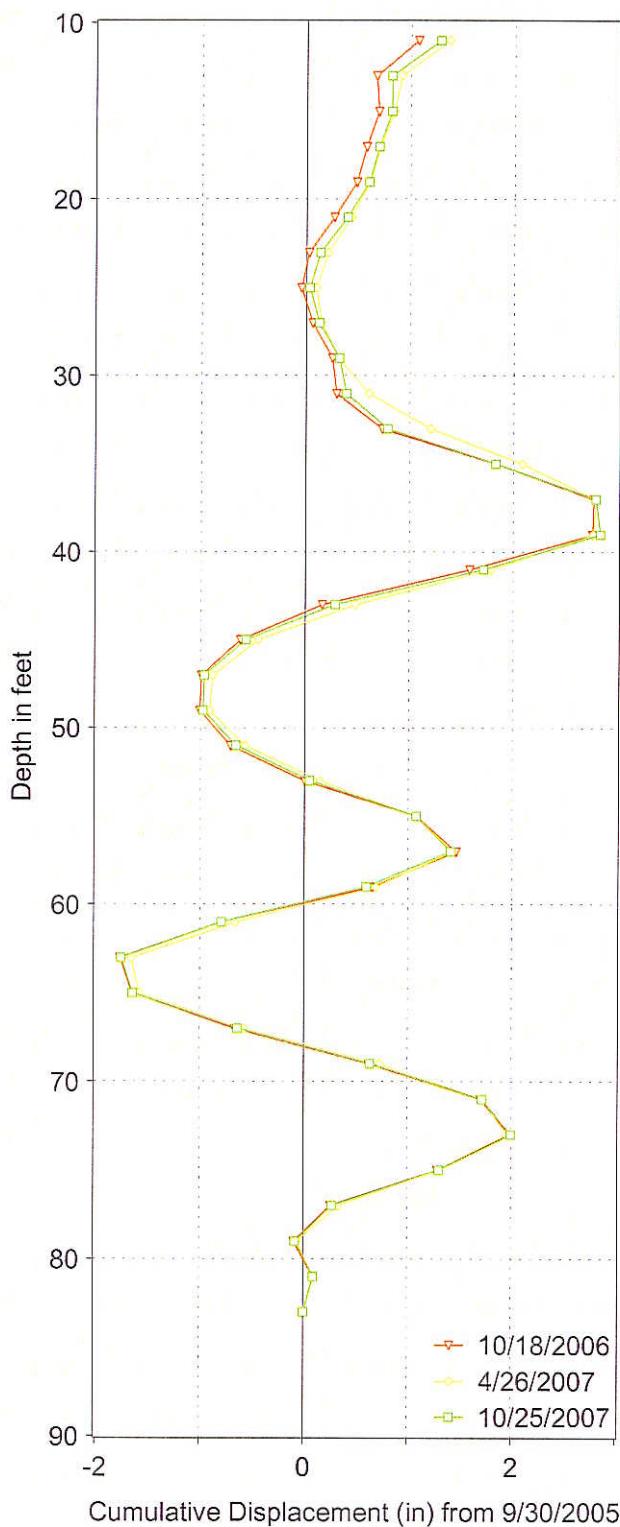
WB 13 A-1a, B-Axis



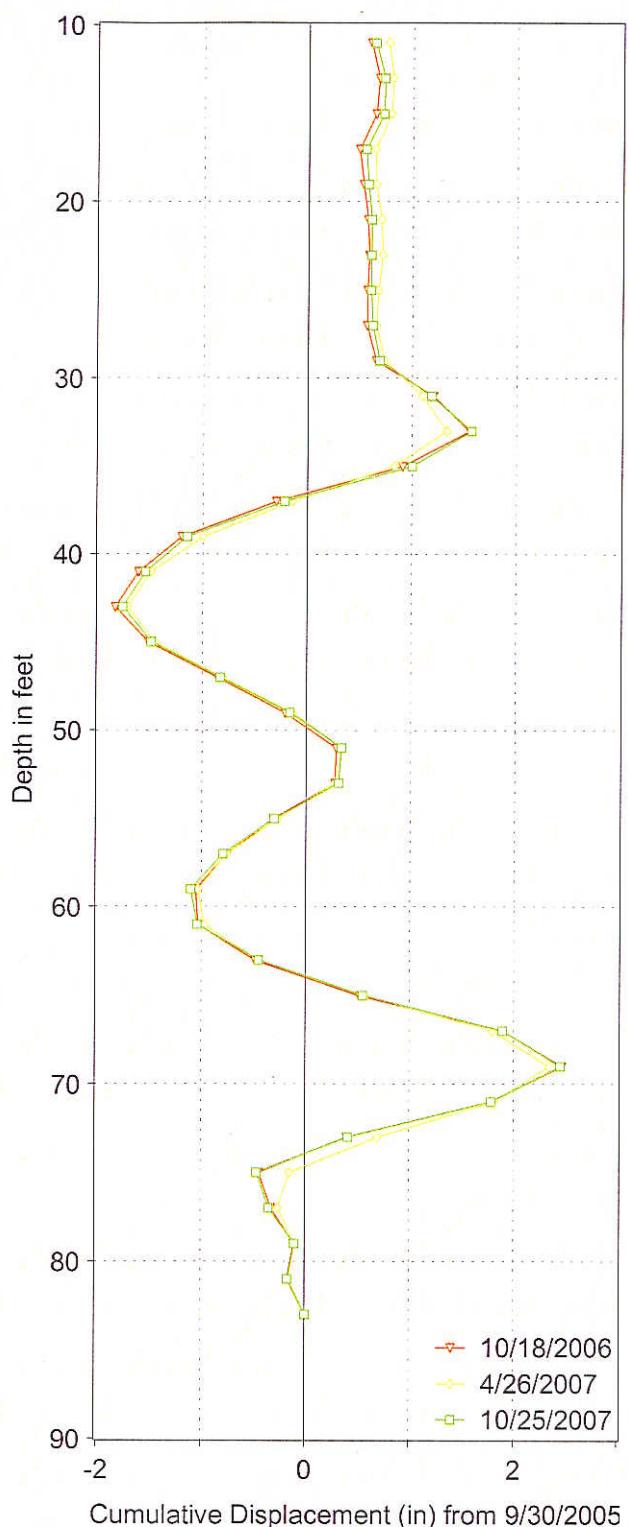
Wastebed 13 Pilot Study  
Location SB915-INEX-A1 (A-1)  
December 2007

**PARSONS**

WB 13 A-1b, A-Axis



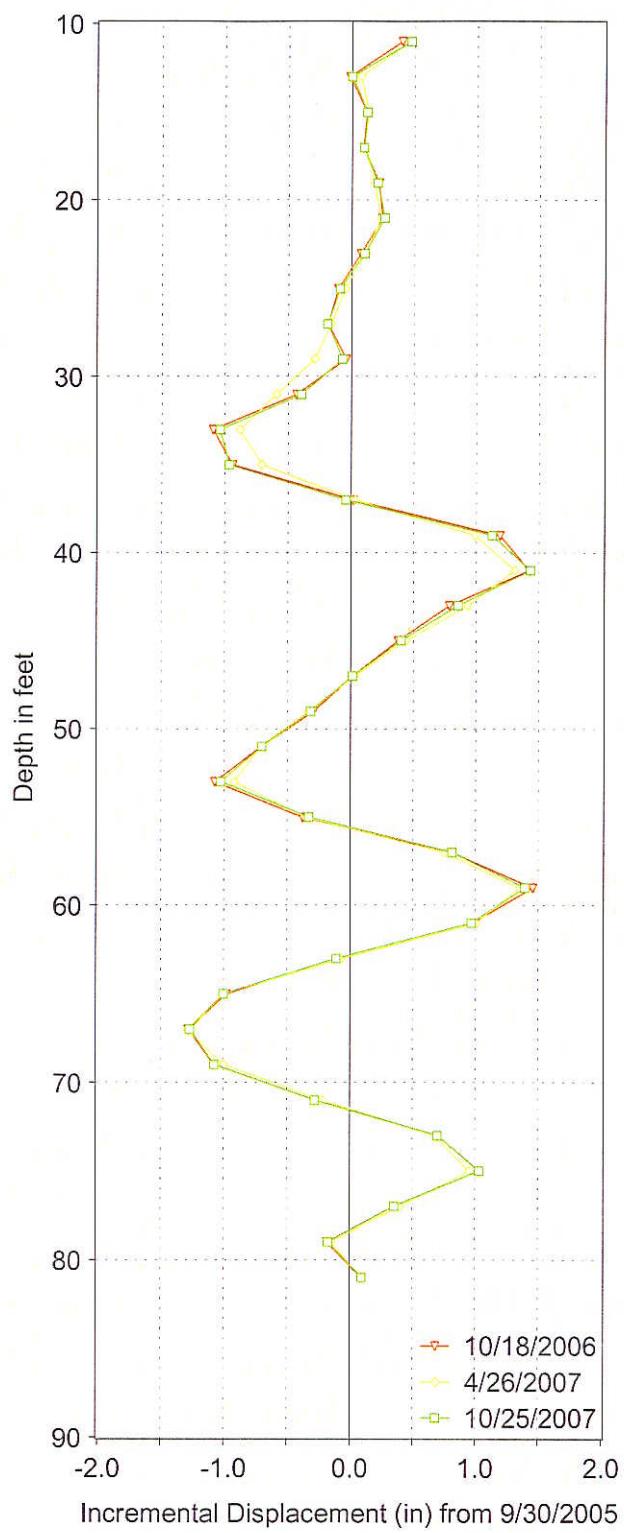
WB 13 A-1b, B-Axis



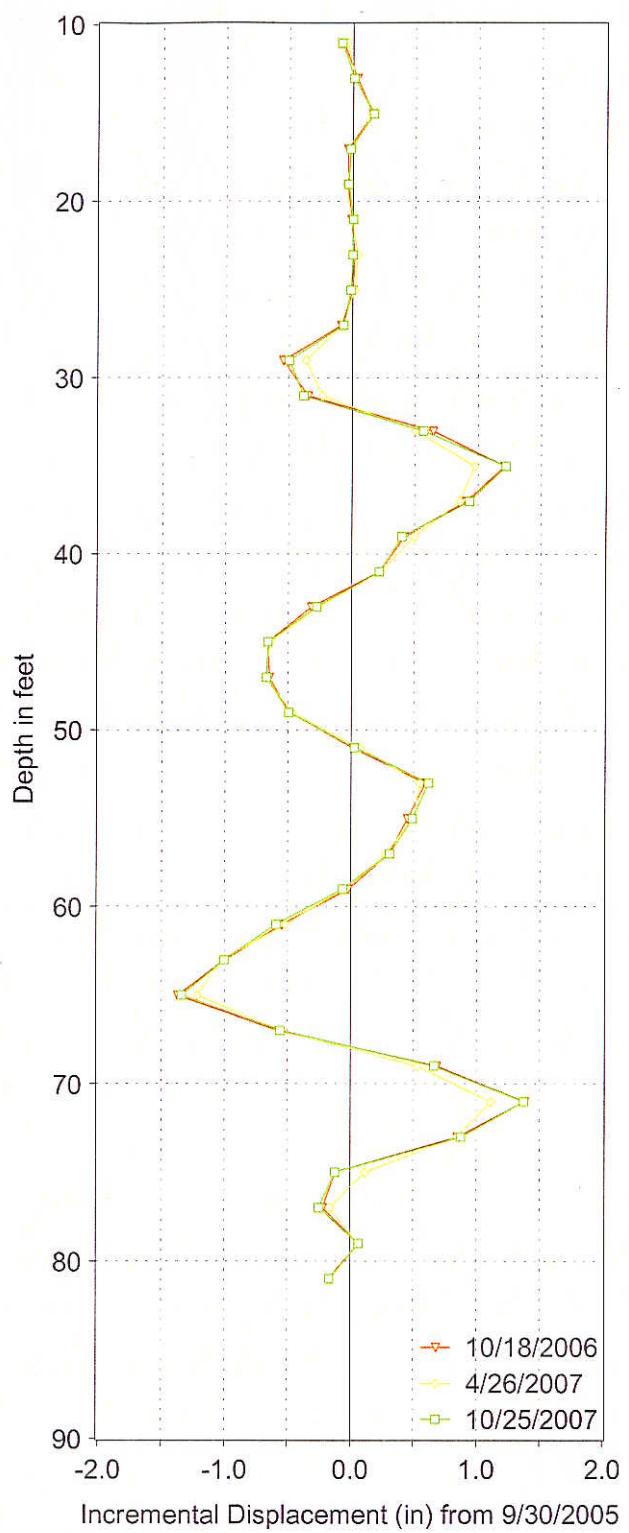
Wastedbed 13 Pilot Study  
Location SB915-INEX-A1 (A-1)  
December 2007

**PARSONS**

WB 13 A-1b, A-Axis



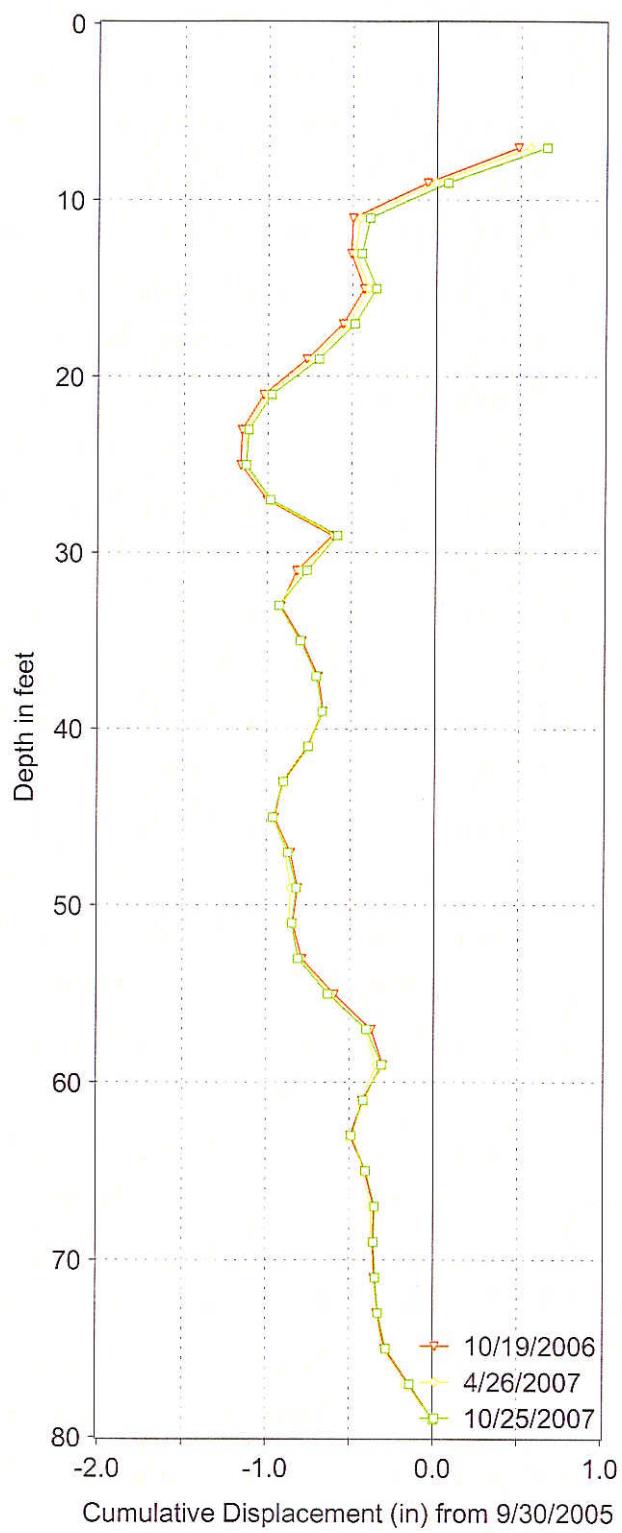
WB 13 A-1b, B-Axis



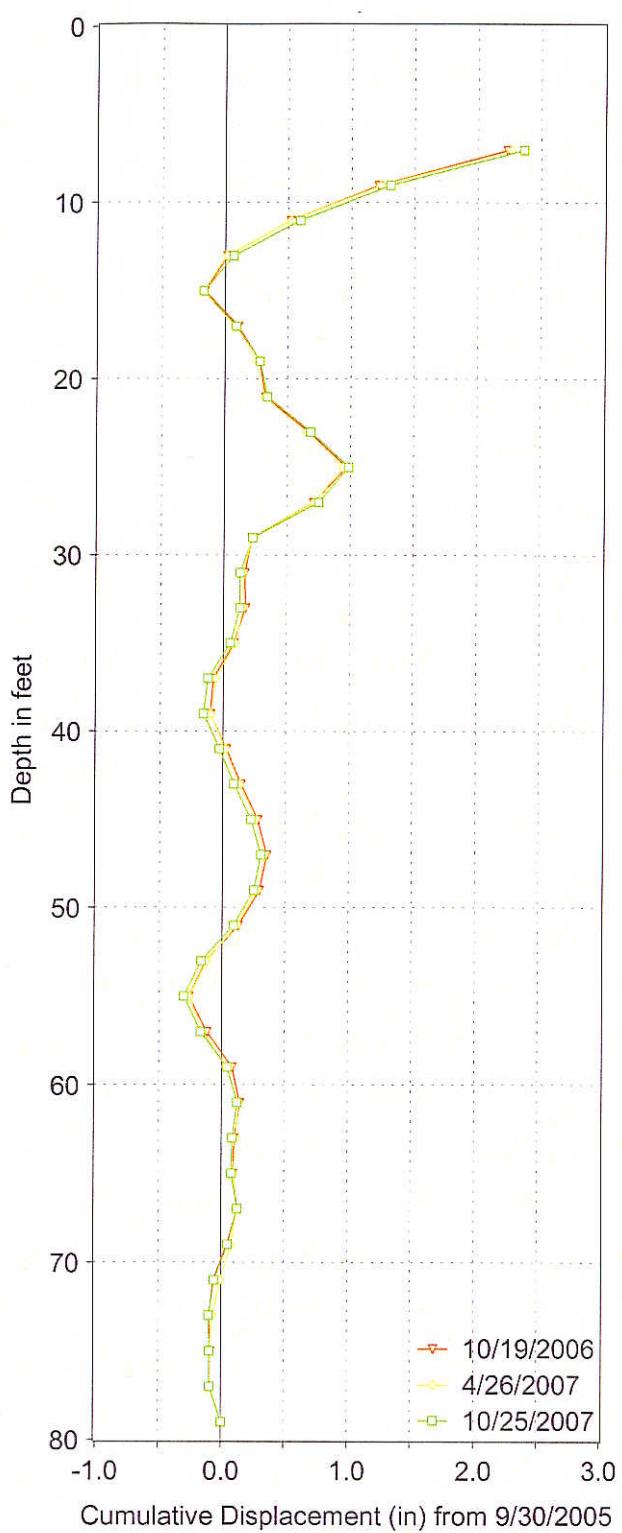
Wastebed 13 Pilot Study  
Location SB915-INEX-A1 (A-1)  
December 2007

**PARSONS**

WB 13 A-2a, A-Axis

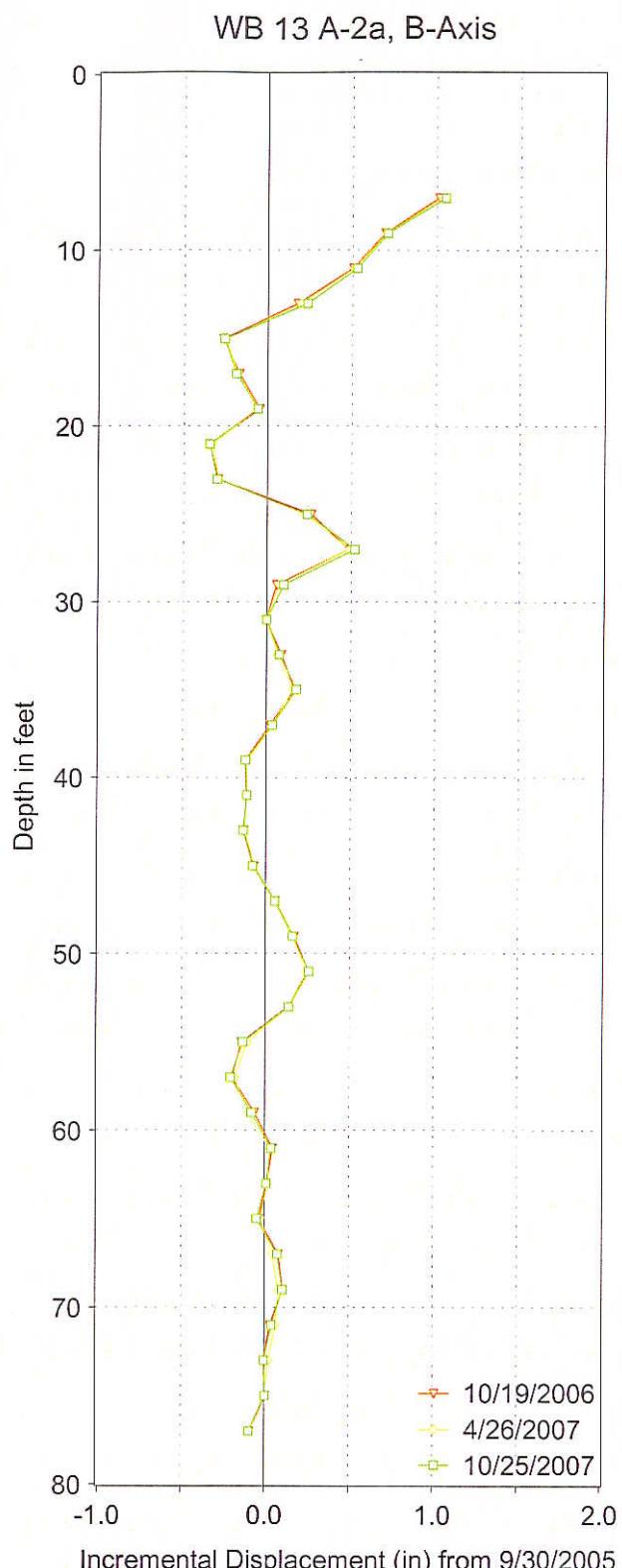
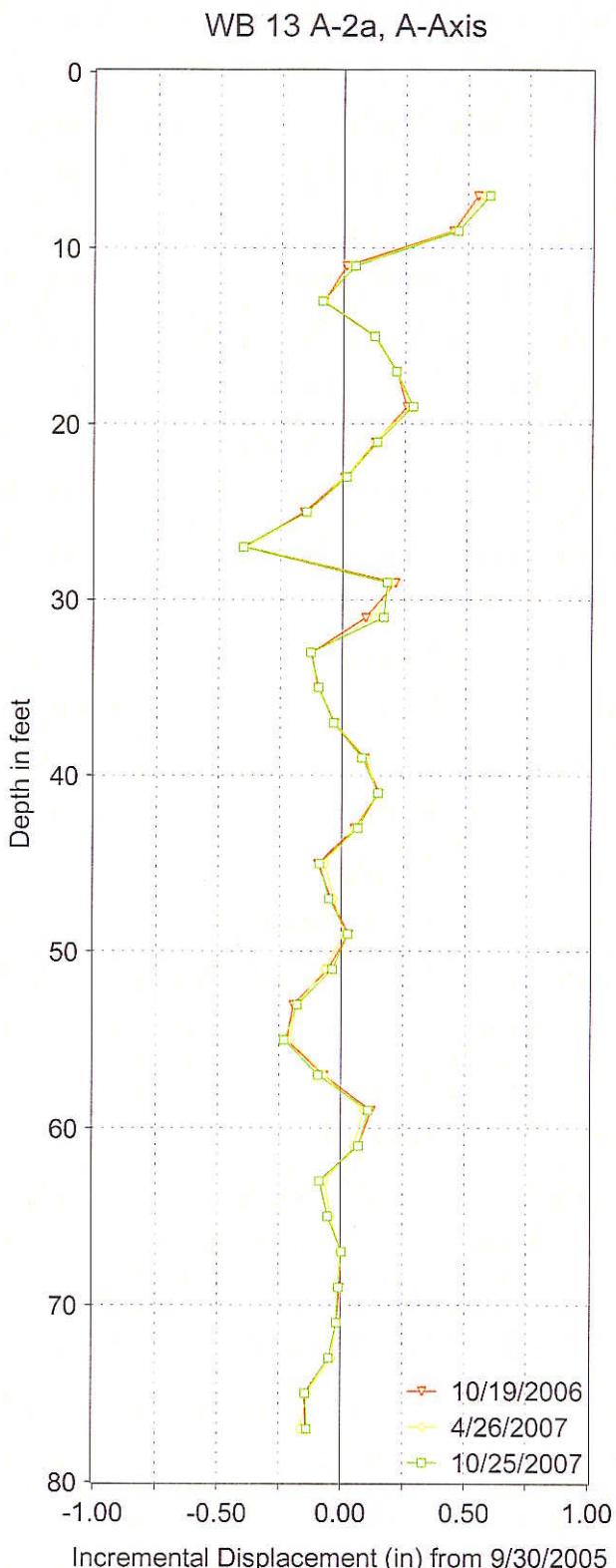


WB 13 A-2a, B-Axis



Wastebed 13 Pilot Study  
Location SB915-INEX-A2 (A-2)  
December 2007

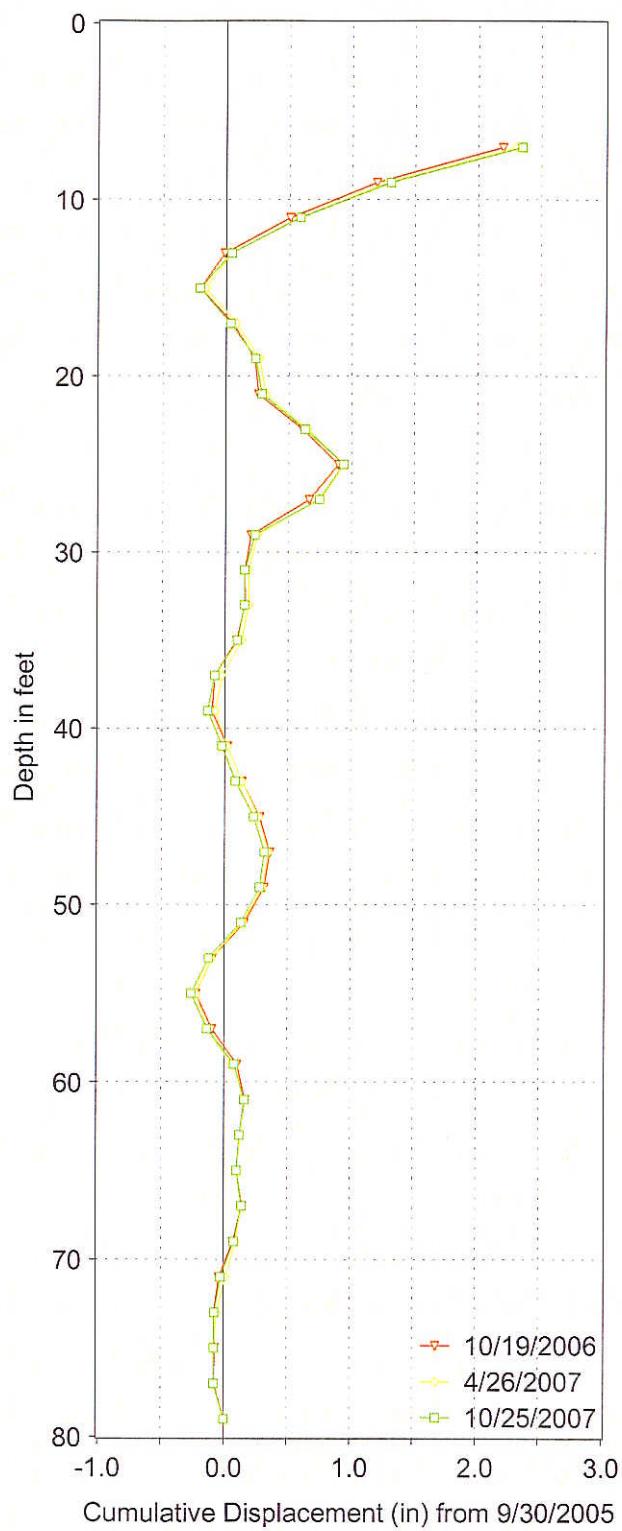
**PARSONS**



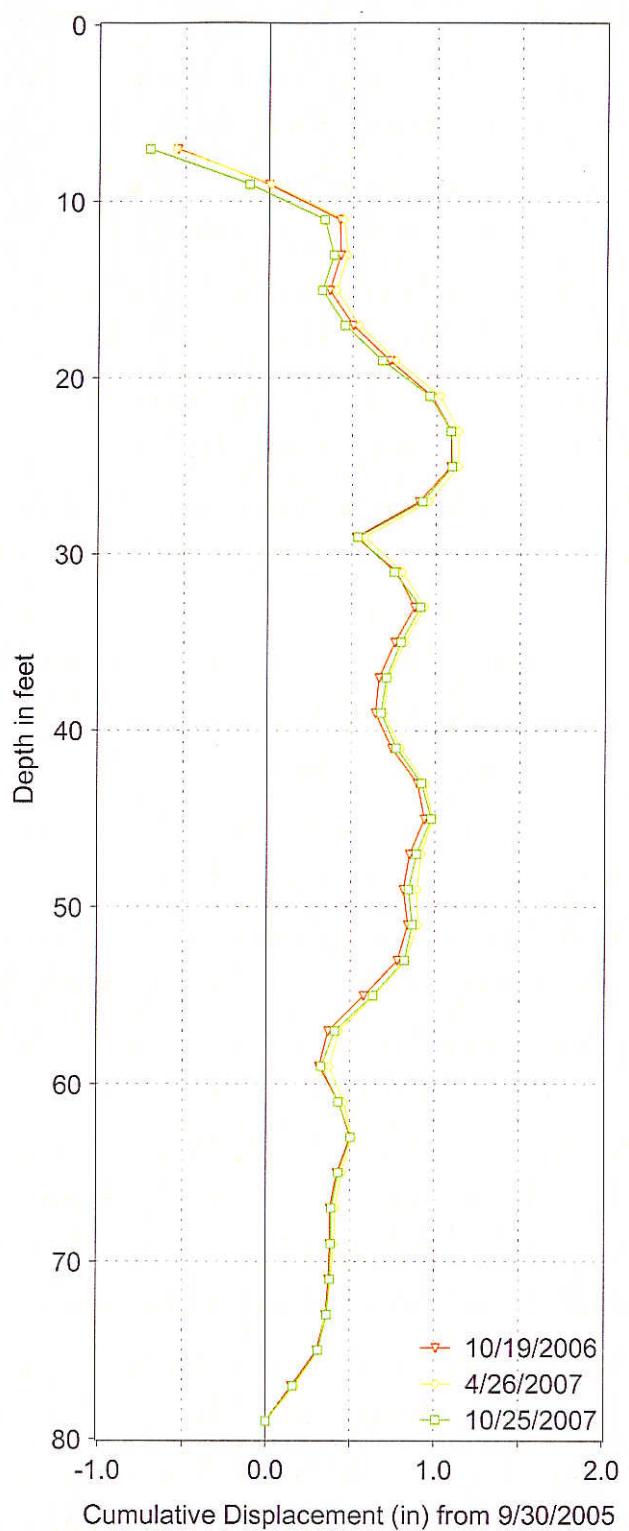
Wastebed 13 Pilot Study  
Location SB915-INEX-A2 (A-2)  
December 2007

**PARSONS**

WB 13 A-2b, A-Axis



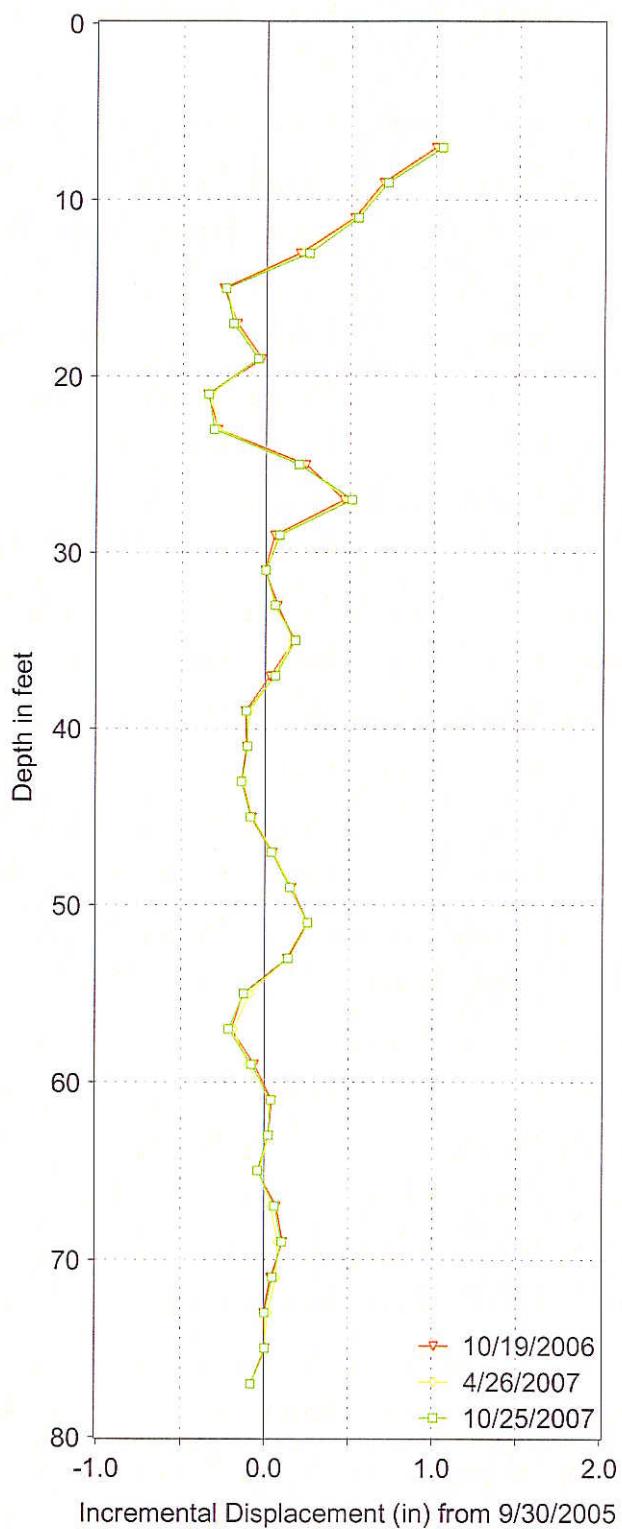
WB 13 A-2b, B-Axis



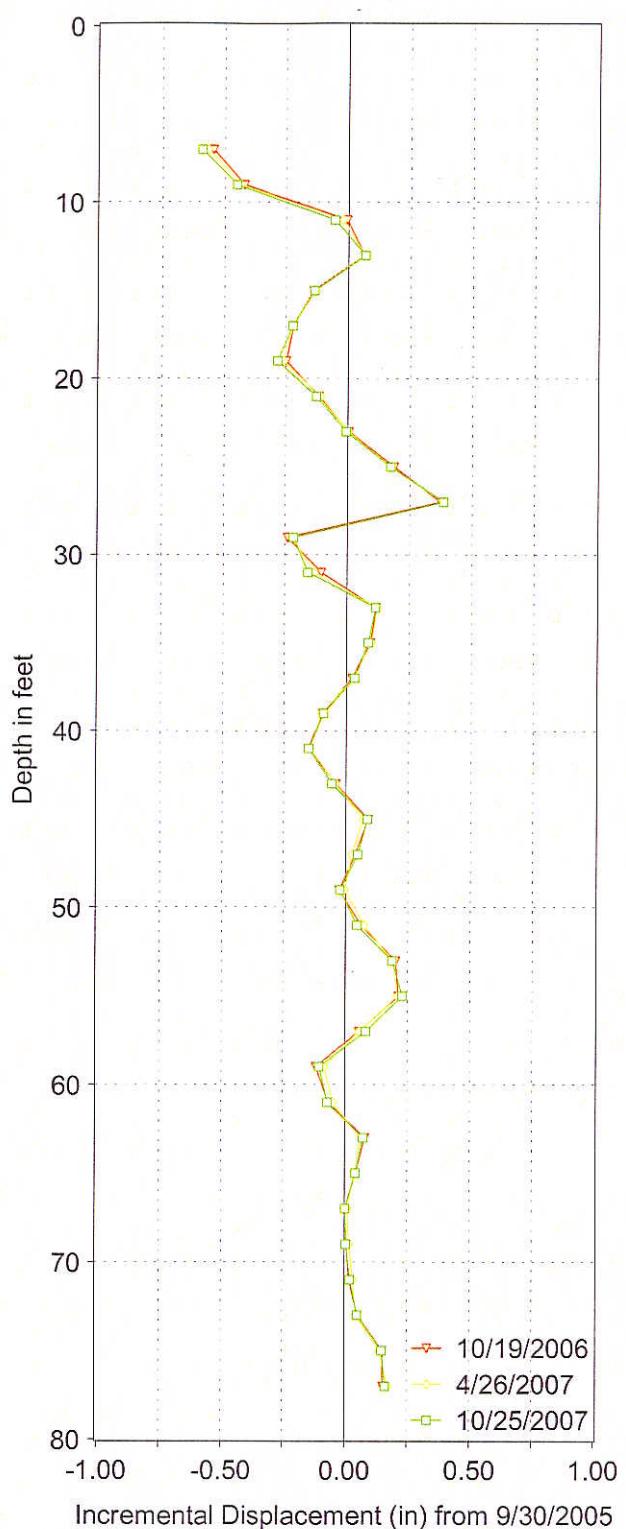
Wastebed 13 Pilot Study  
Location SB915-INEX-A2 (A-2)  
December 2007

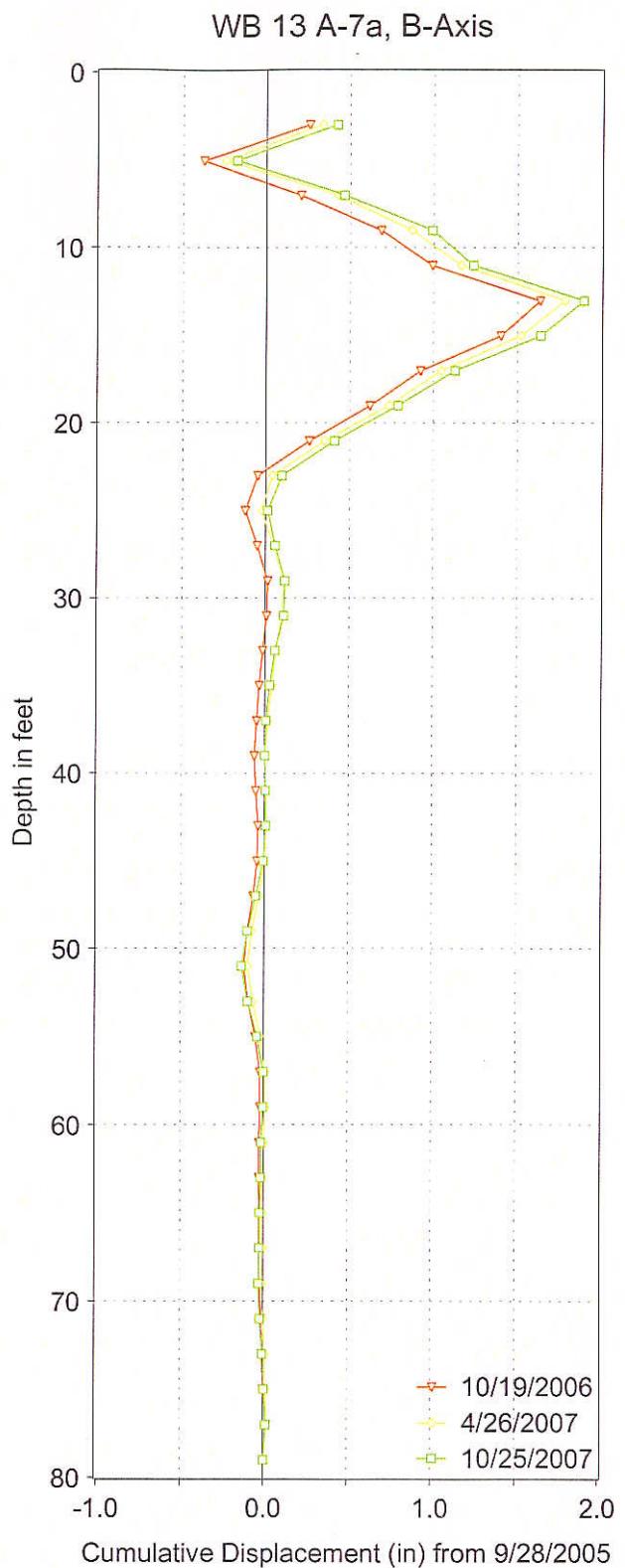
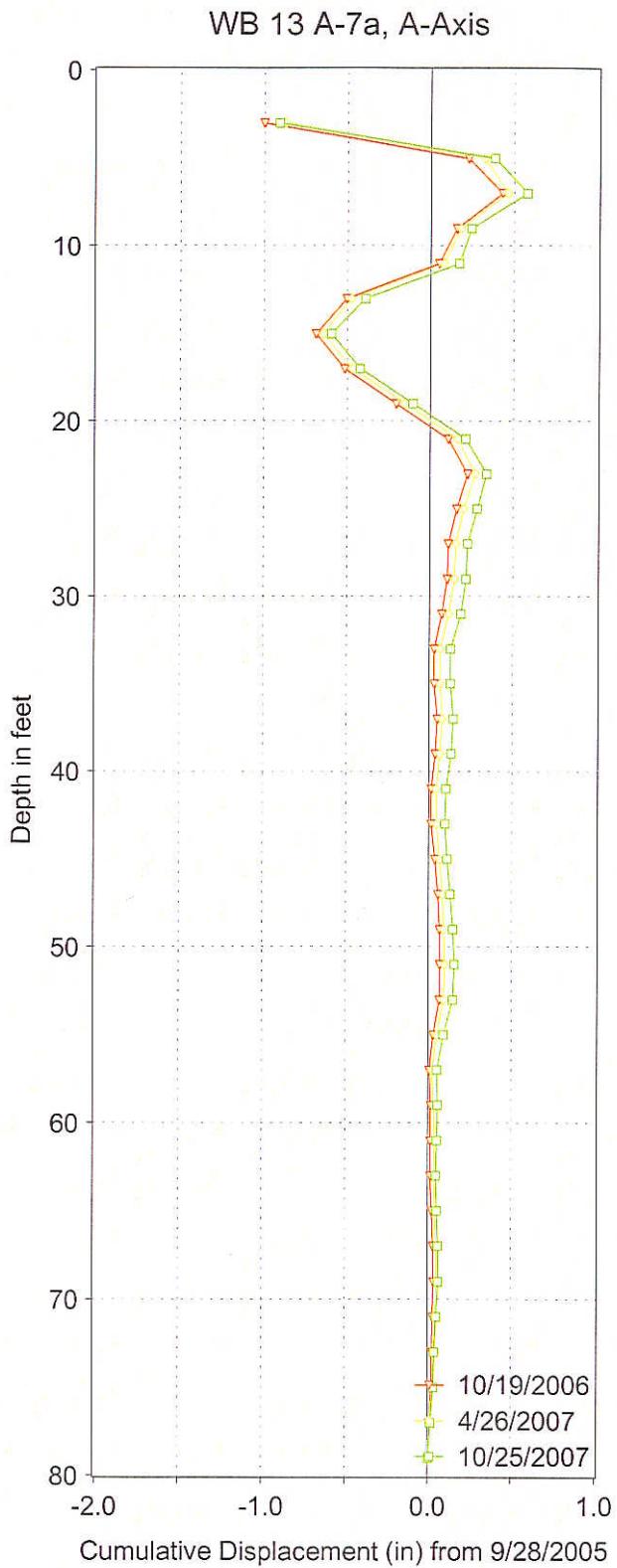
**PARSONS**

WB 13 A-2b, A-Axis

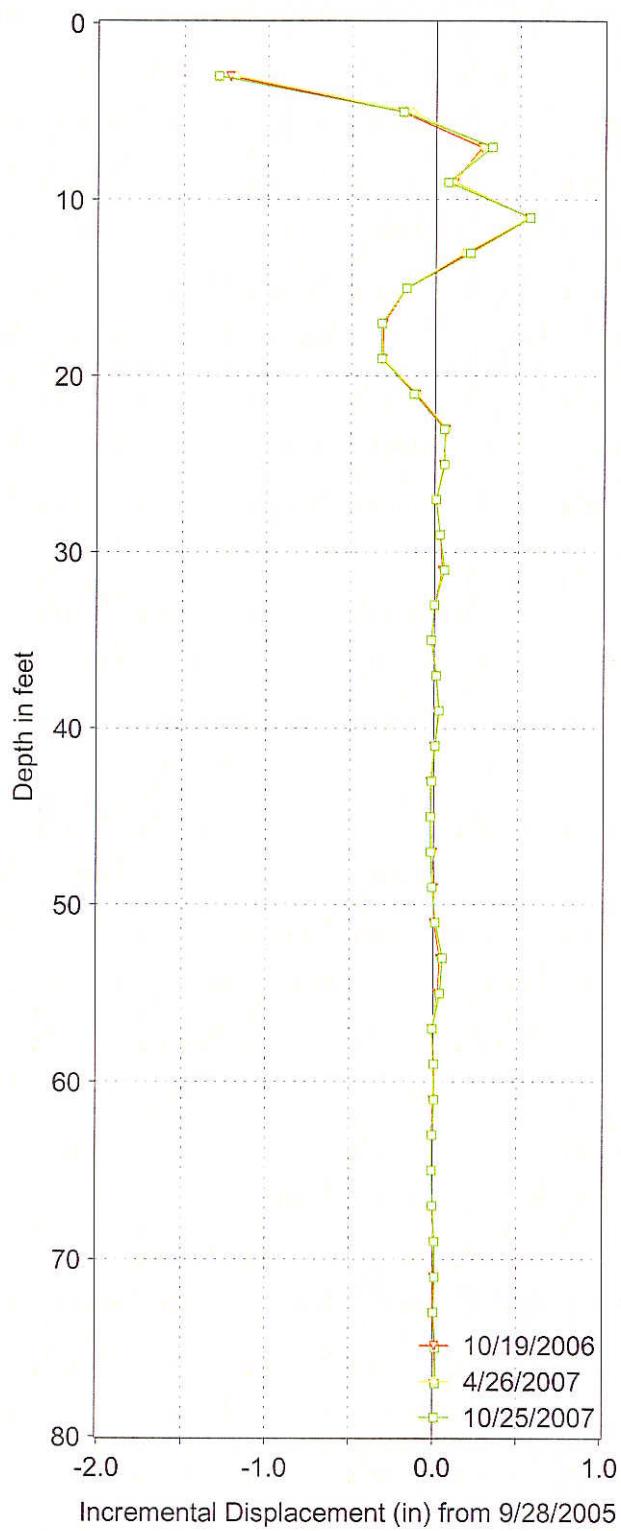


WB 13 A-2b, B-Axis

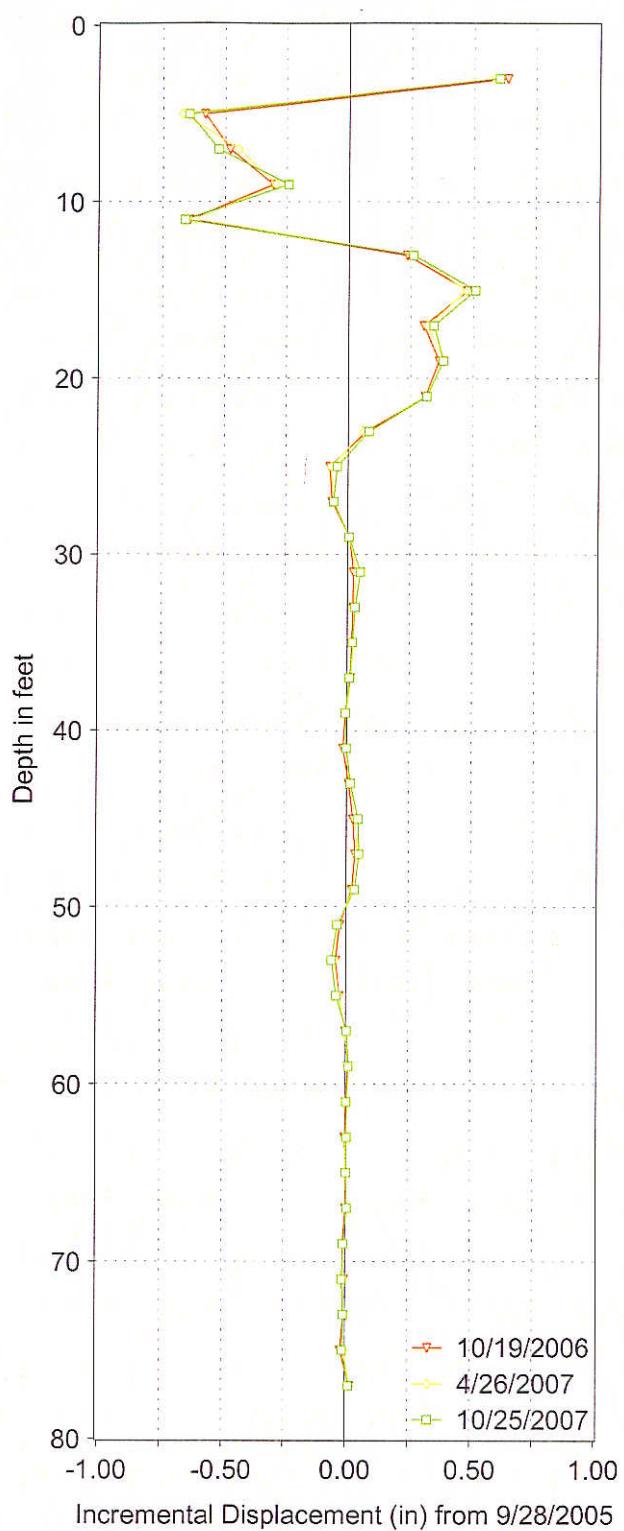




WB 13 A-7a, A-Axis



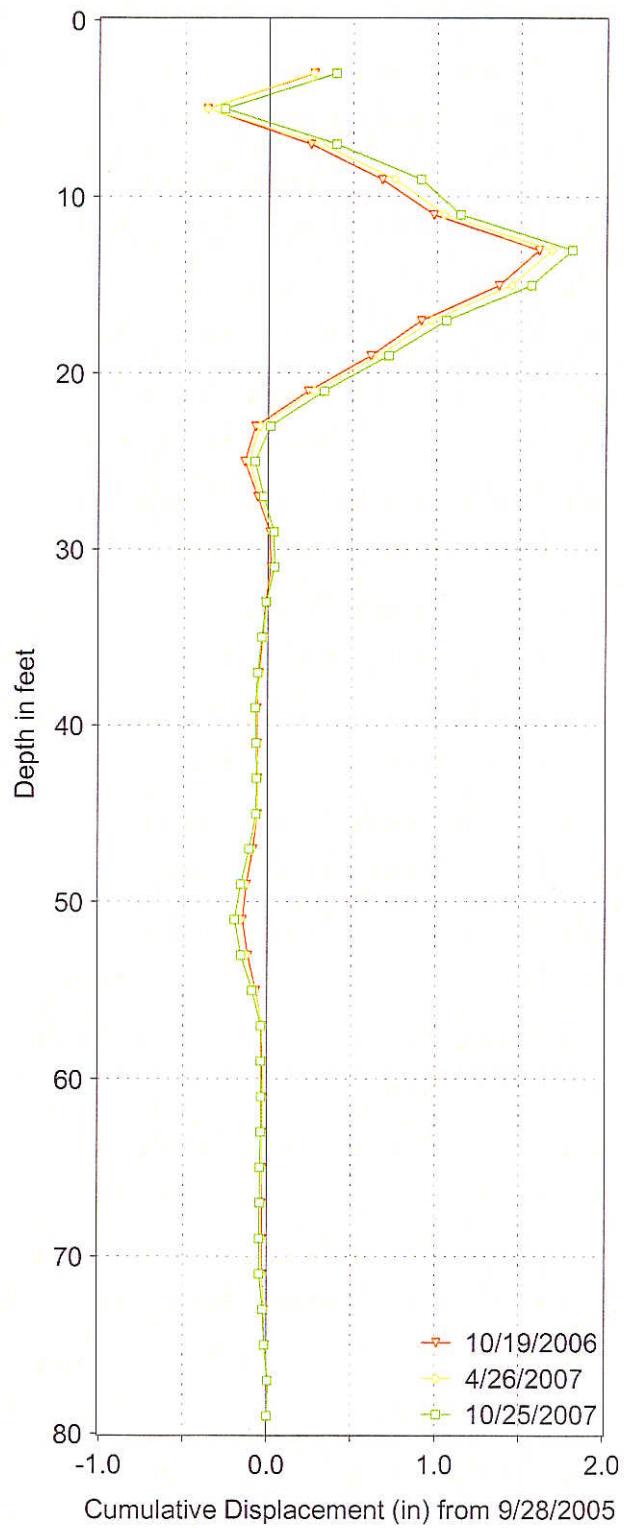
WB 13 A-7a, B-Axis



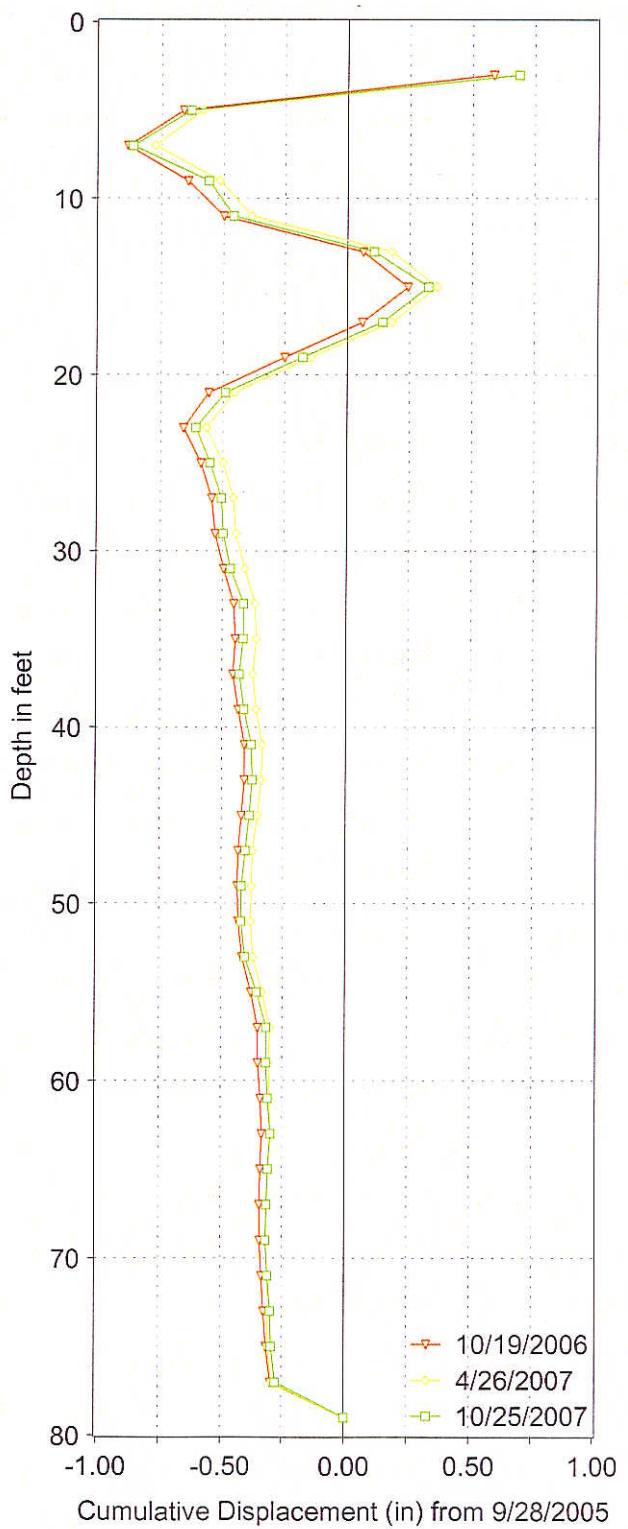
Wastebed 13 Pilot Study  
Location SB915-INEX-A7 (A-7)  
December 2007

**PARSONS**

WB 13 A-7b, A-Axis



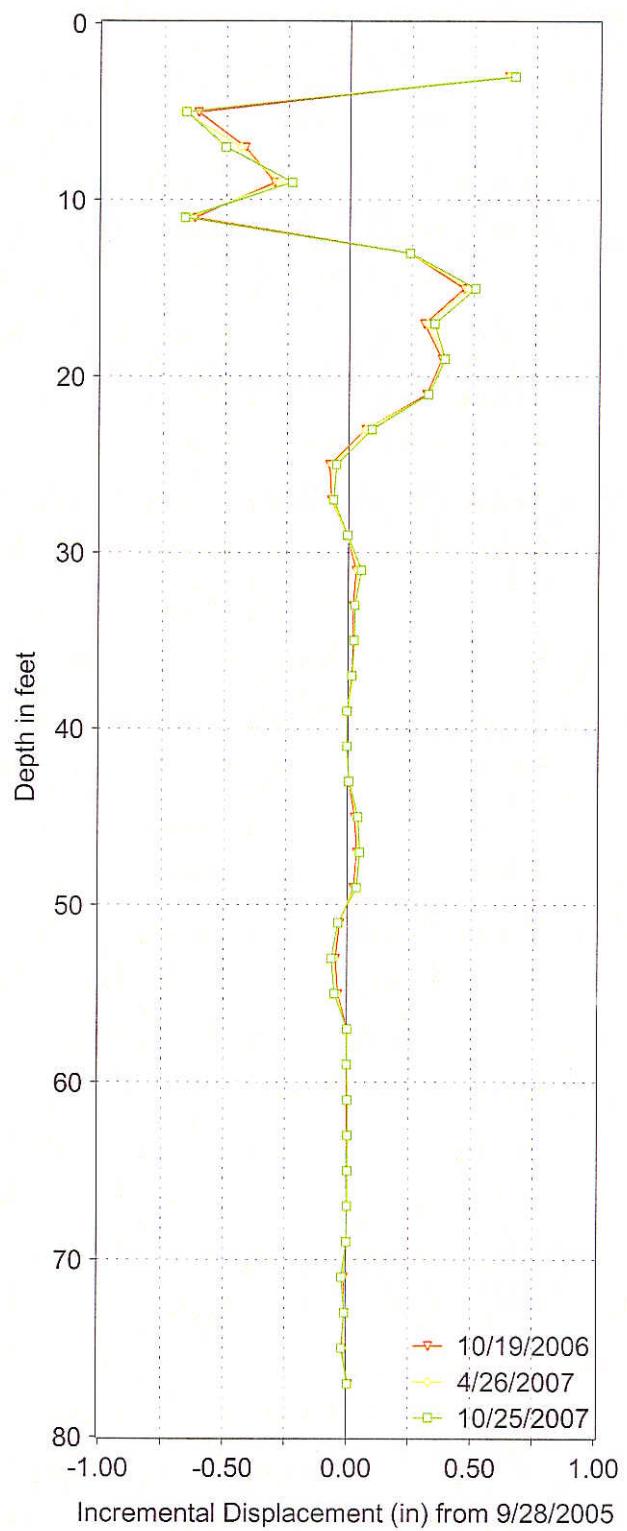
WB 13 A-7b, B-Axis



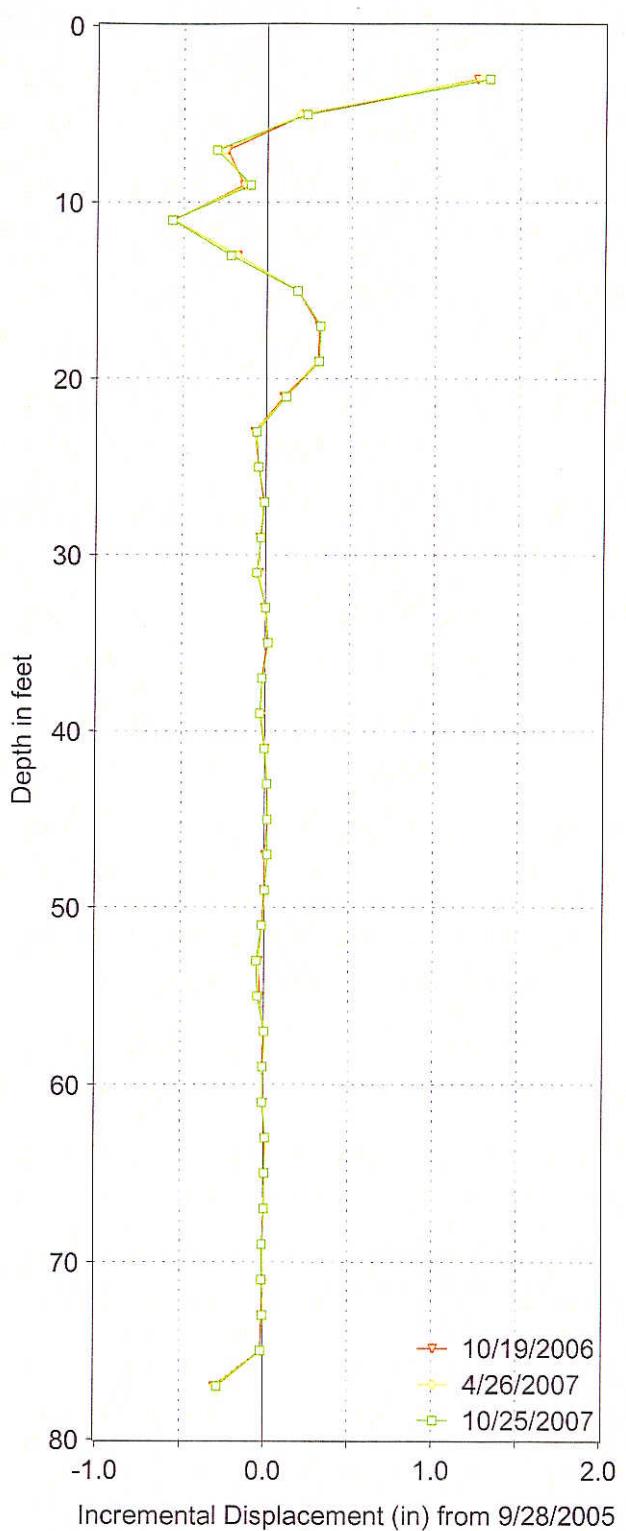
Wastedbed 13 Pilot Study  
Location SB915-INEX-A7 (A-7)  
December 2007

**PARSONS**

WB 13 A-7b, A-Axis

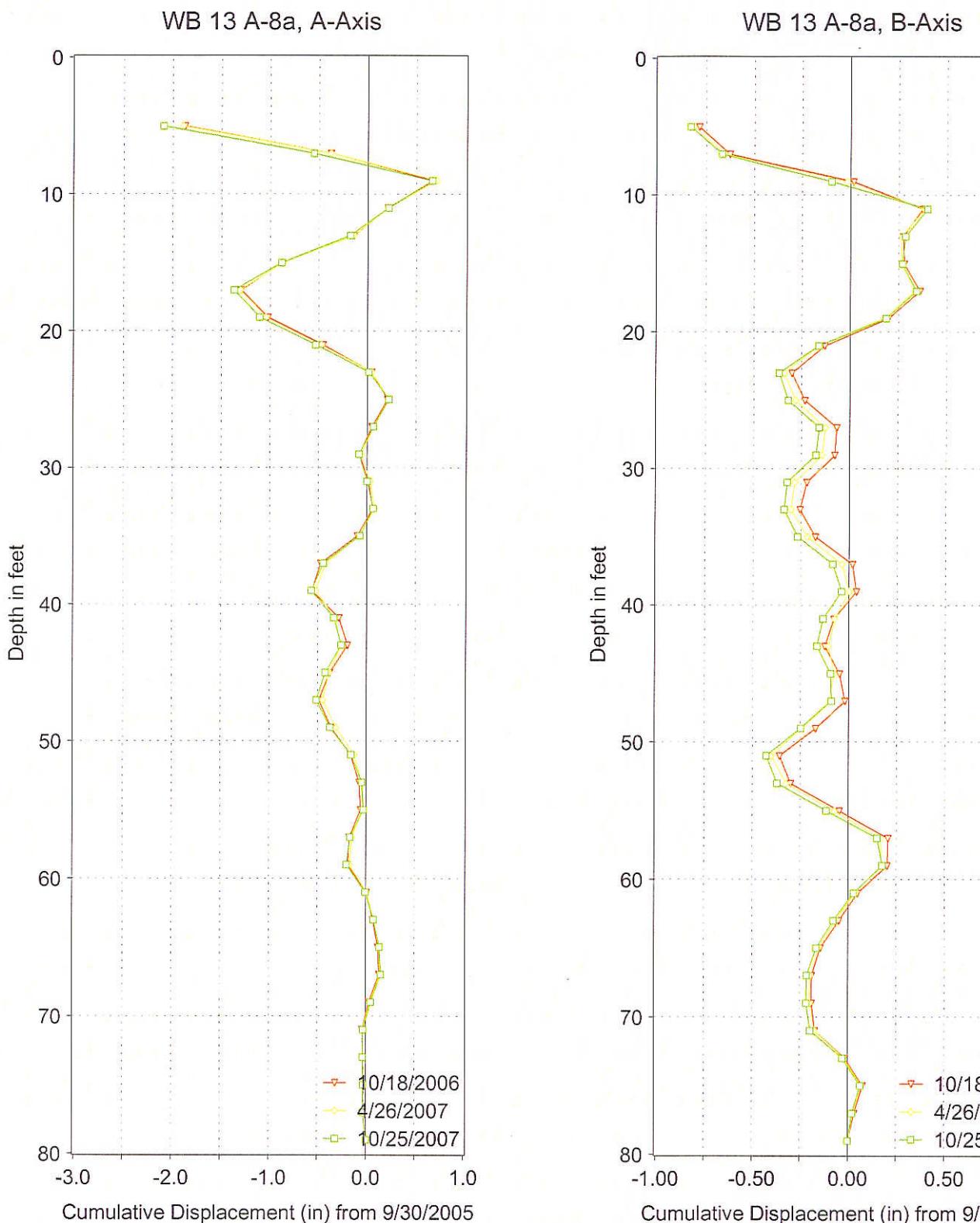


WB 13 A-7b, B-Axis

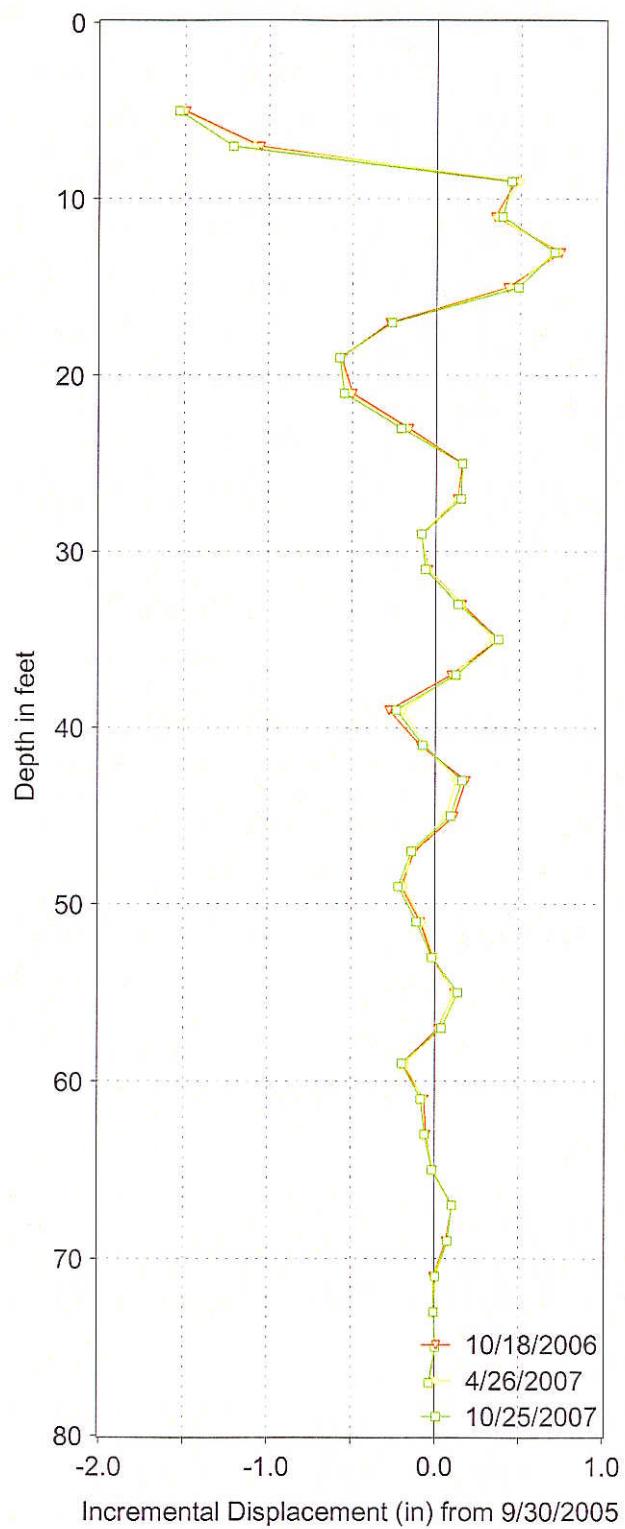


Wastebed 13 Pilot Study  
Location SB915-INEX-A7 (A-7)  
December 2007

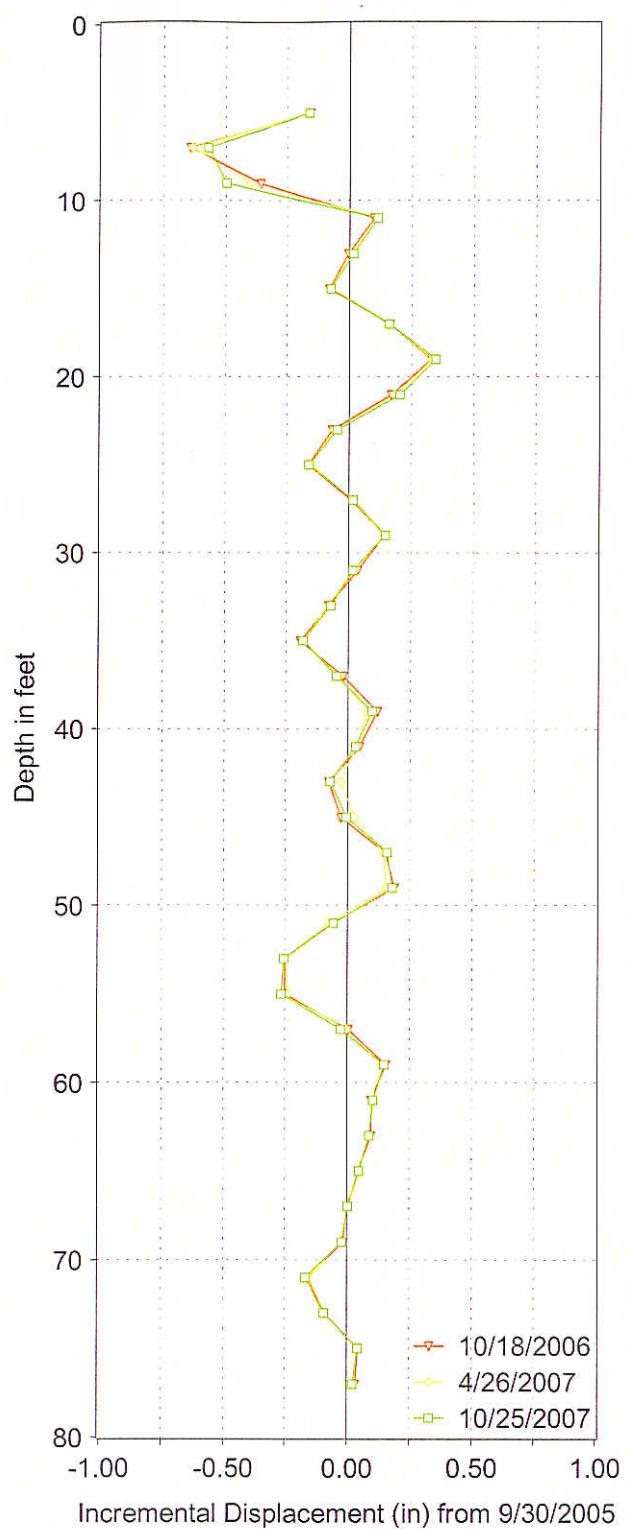
**PARSONS**



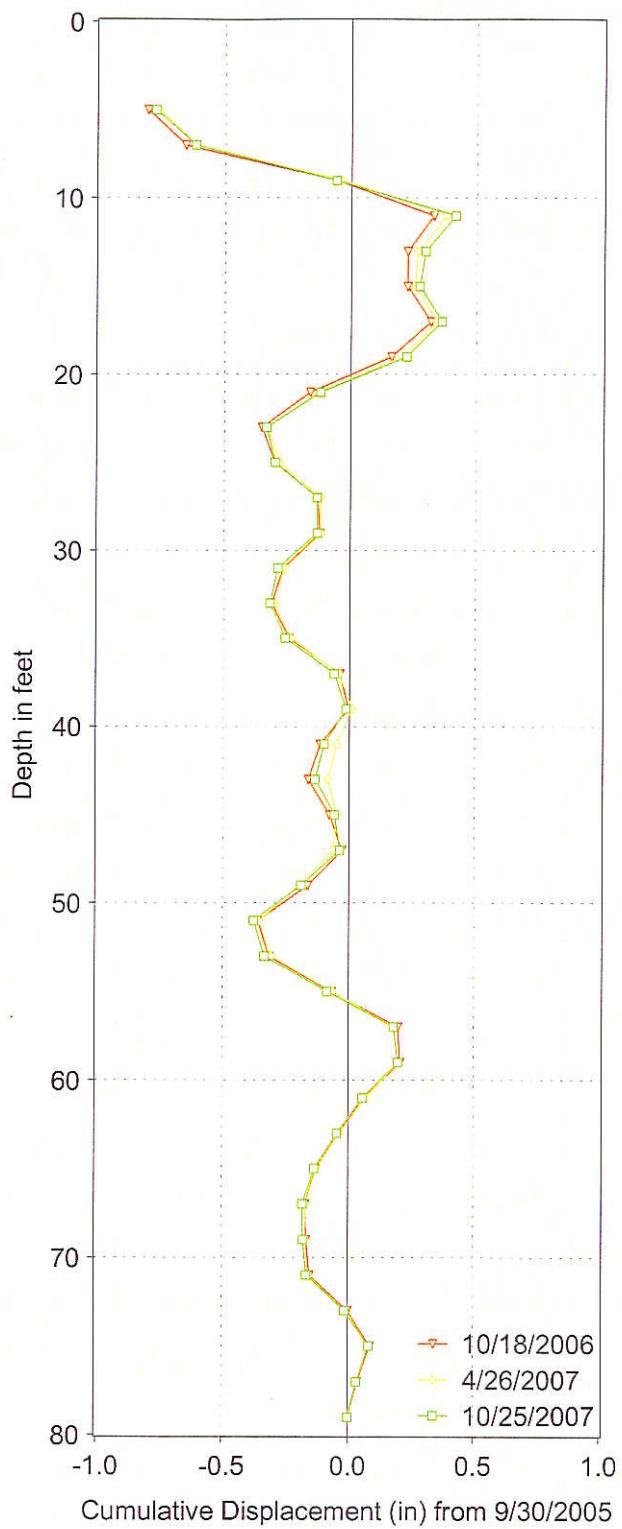
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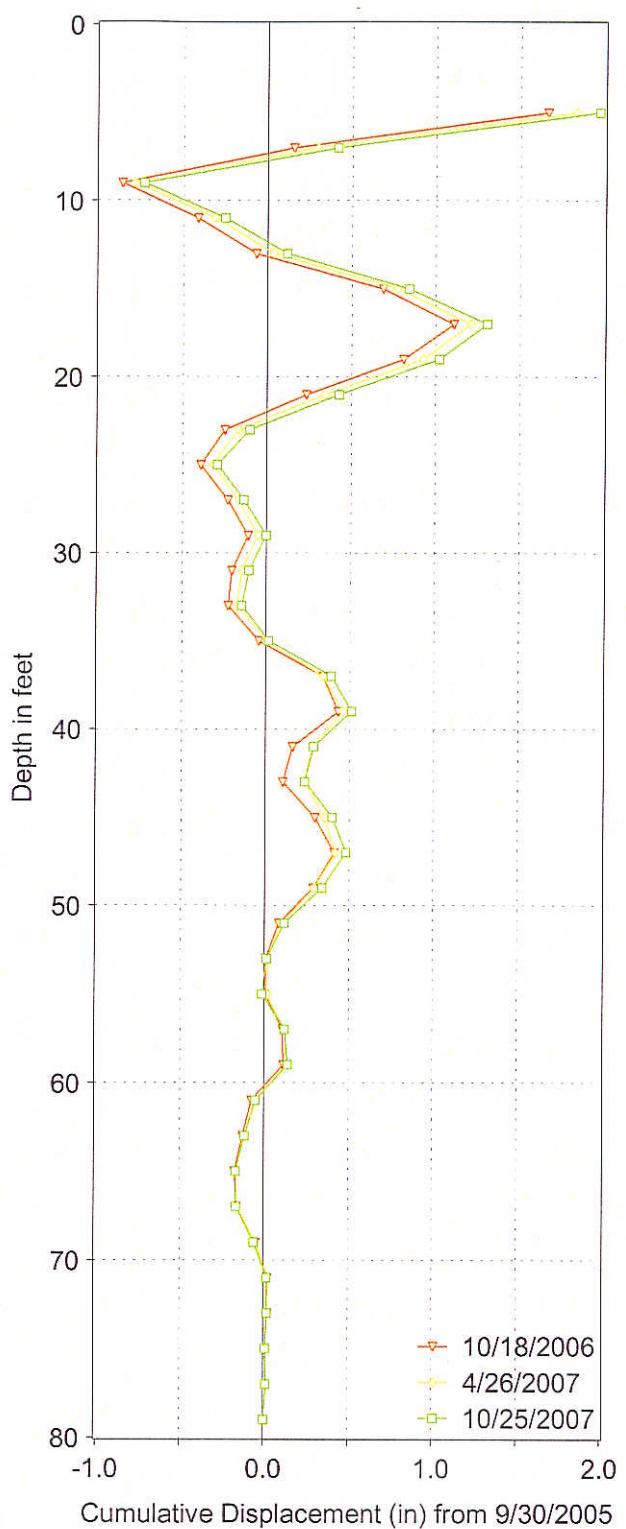
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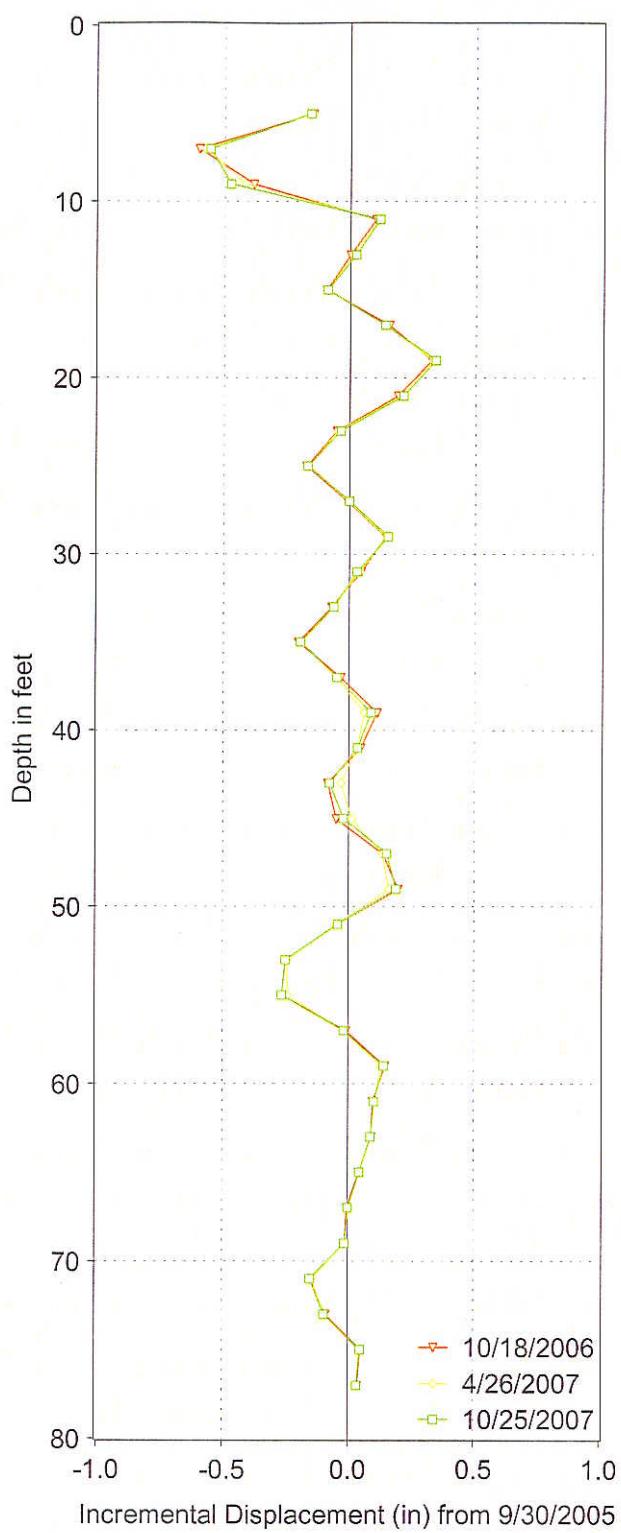
WB 13 A-8b, A-Axis



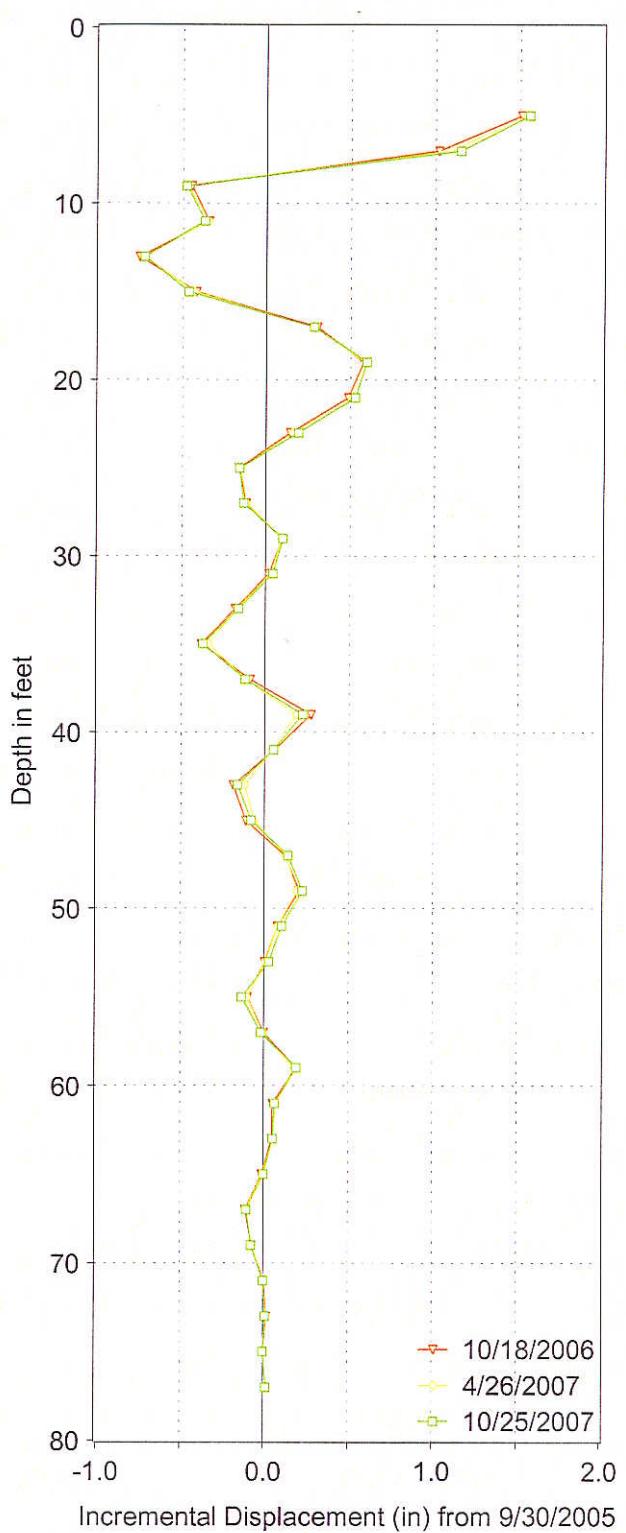
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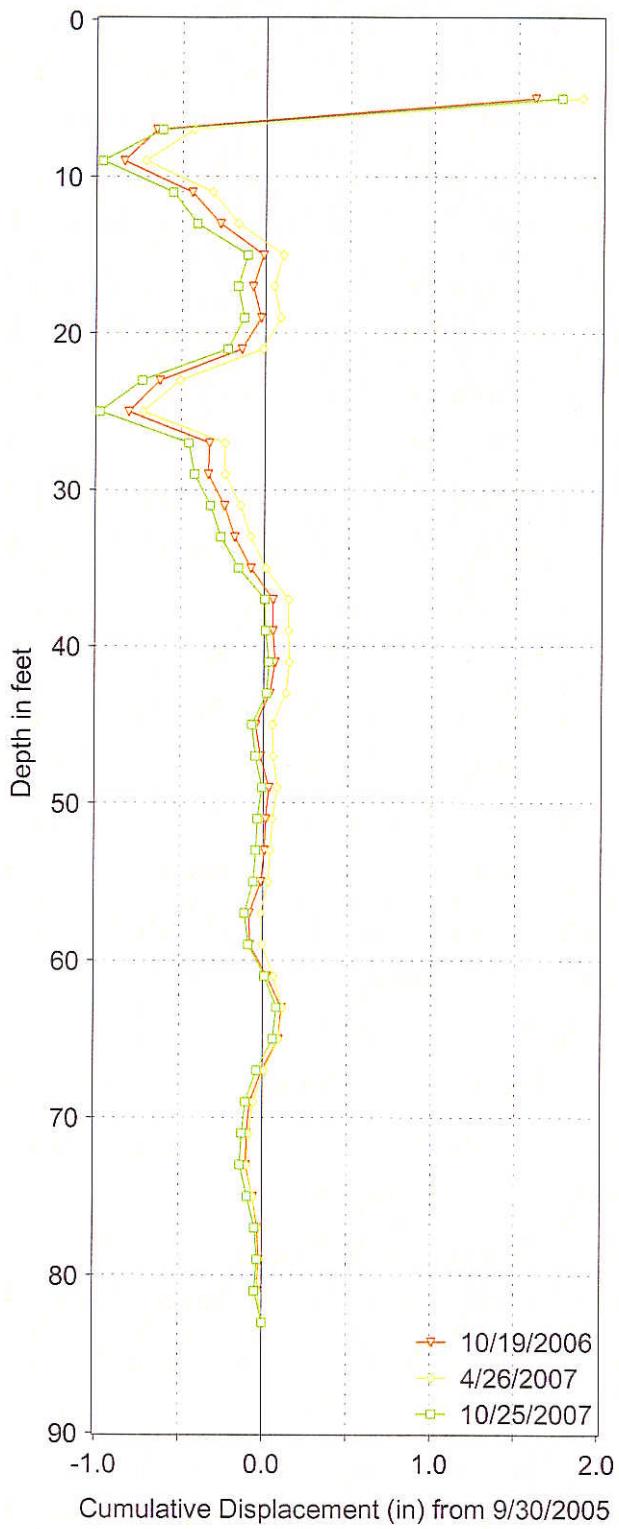
WB 13 A-8b, A-Axis



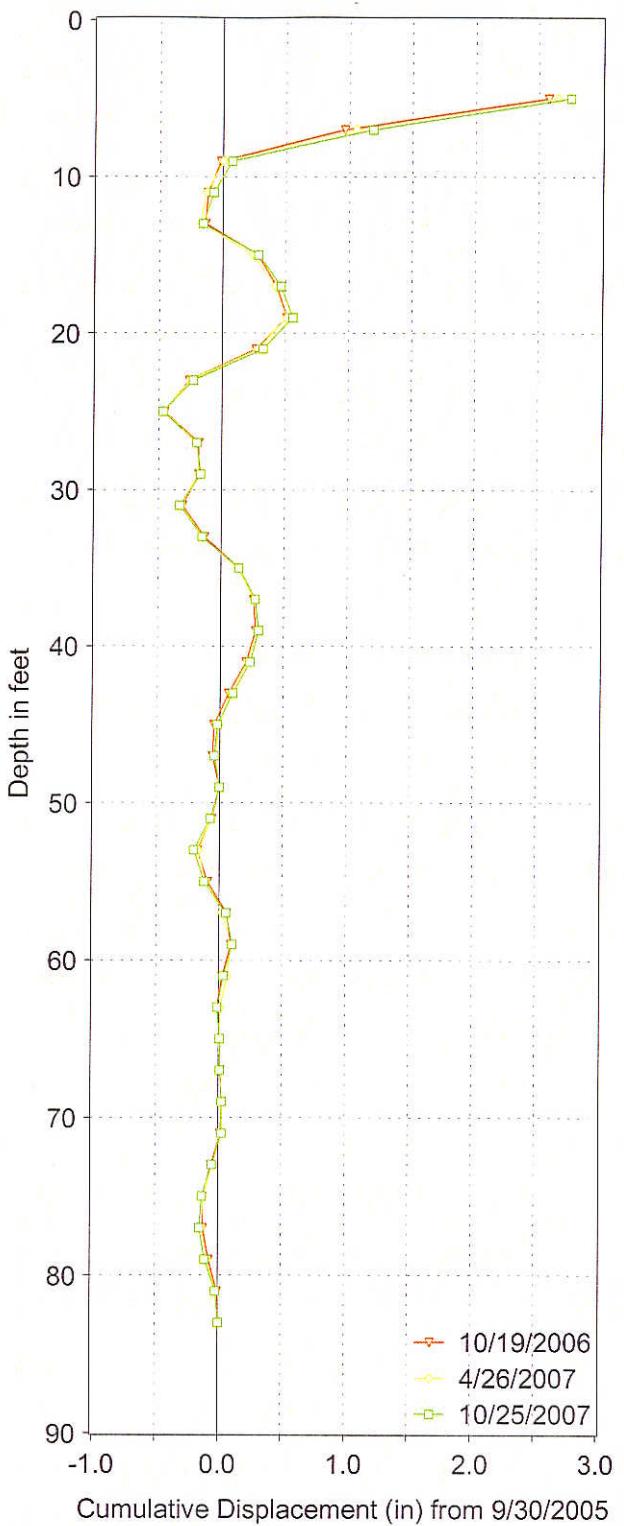
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WB 13 A-10a, A-Axis



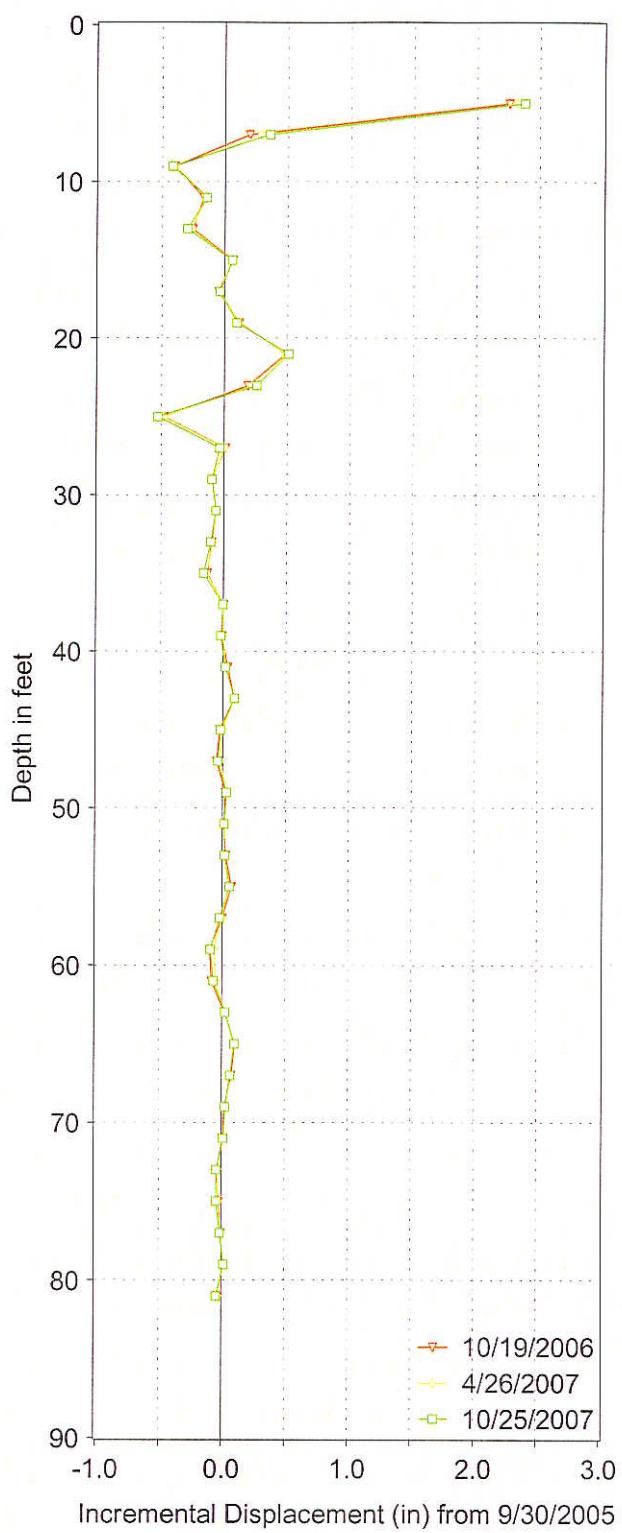
WB 13 A-10a, B-Axis



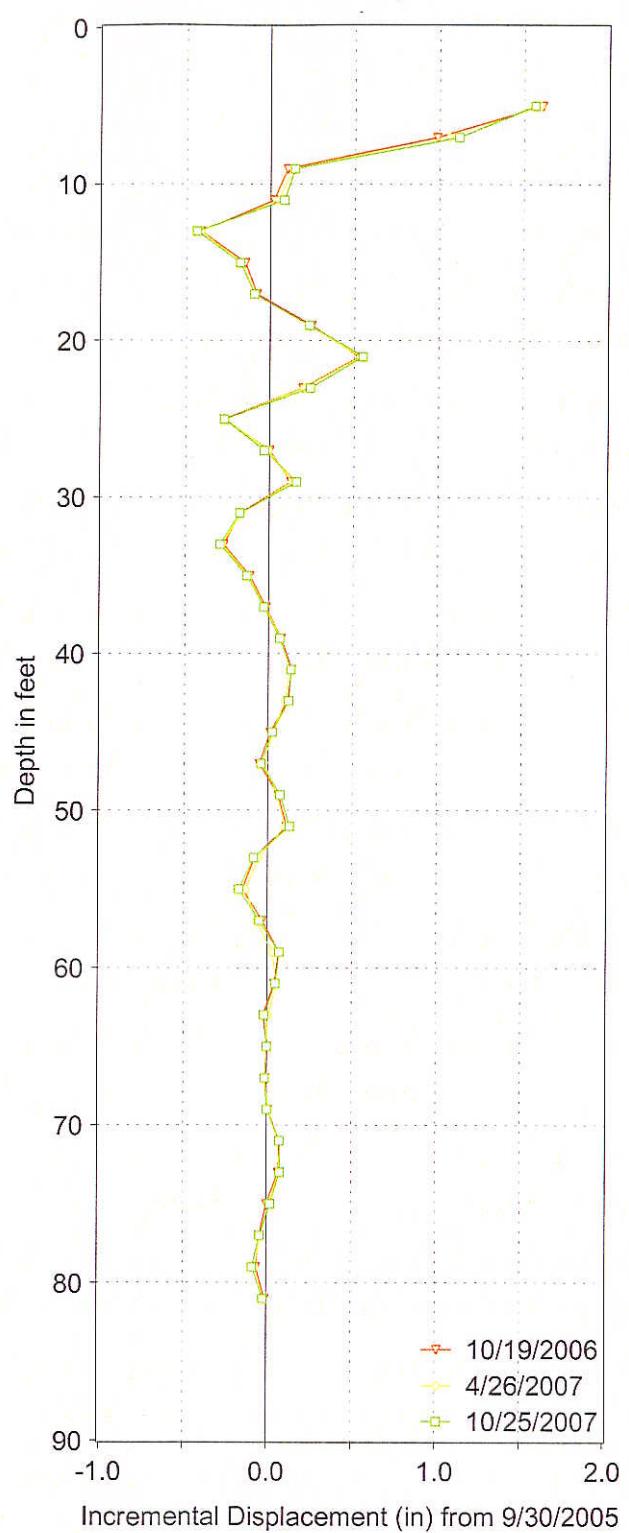
Wastebed 13 Pilot Study  
Location SB915-INEX-A10 (A-10)  
December 2007

**PARSONS**

WB 13 A-10a, A-Axis



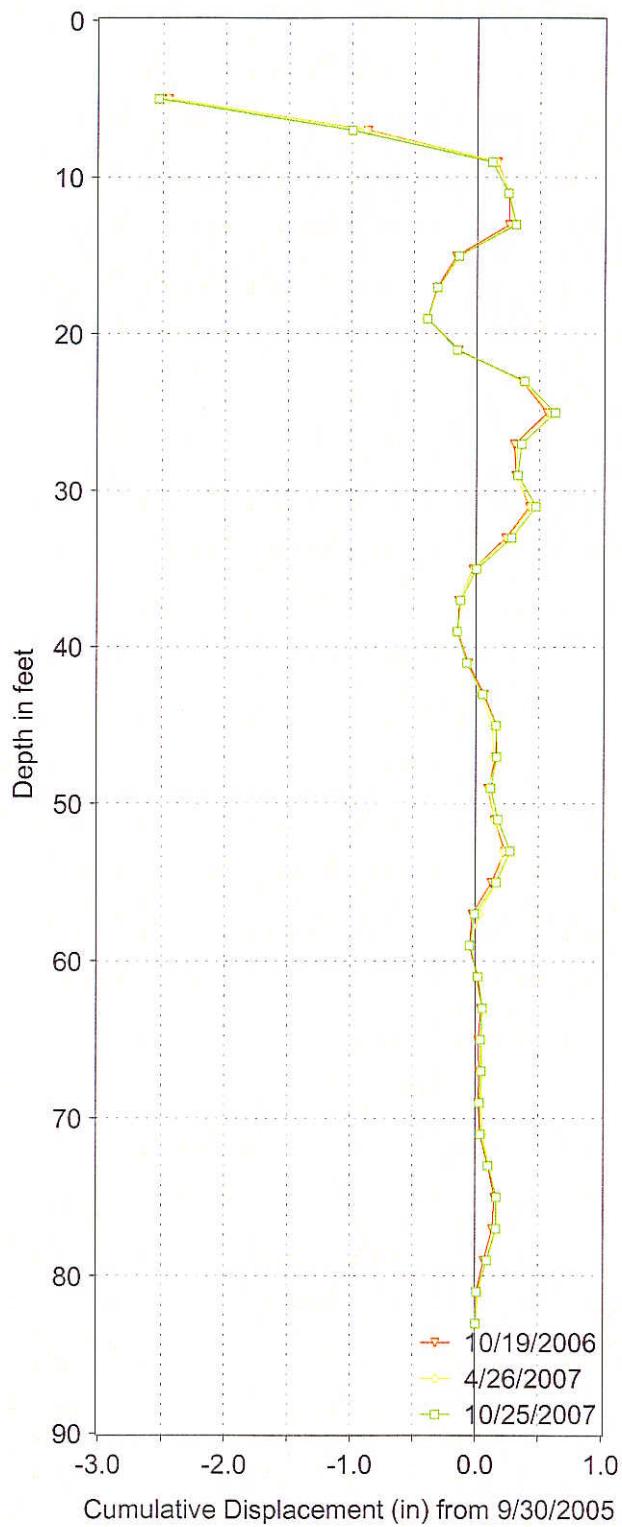
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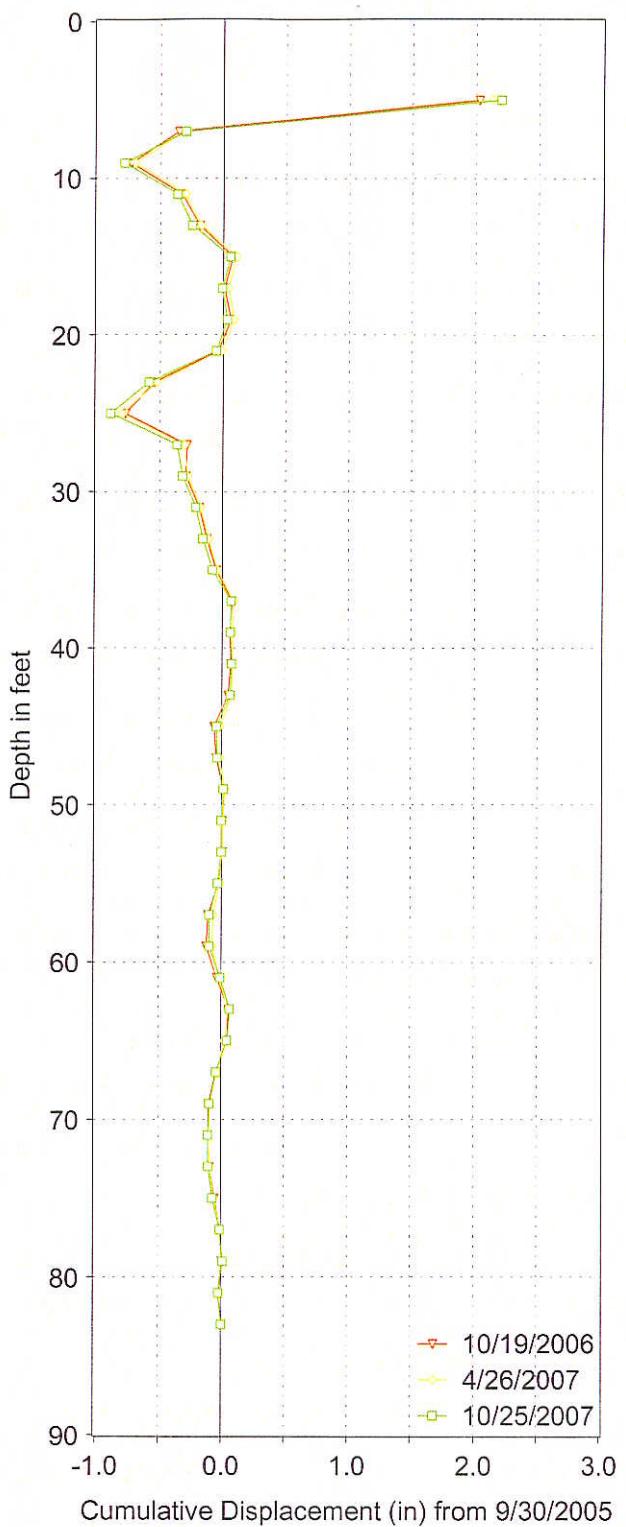
Wastebed 13 Pilot Study  
Location SB915-INEX-A10 (A-10)  
December 2007

**PARSONS**

WB 13 A-10b, A-Axis



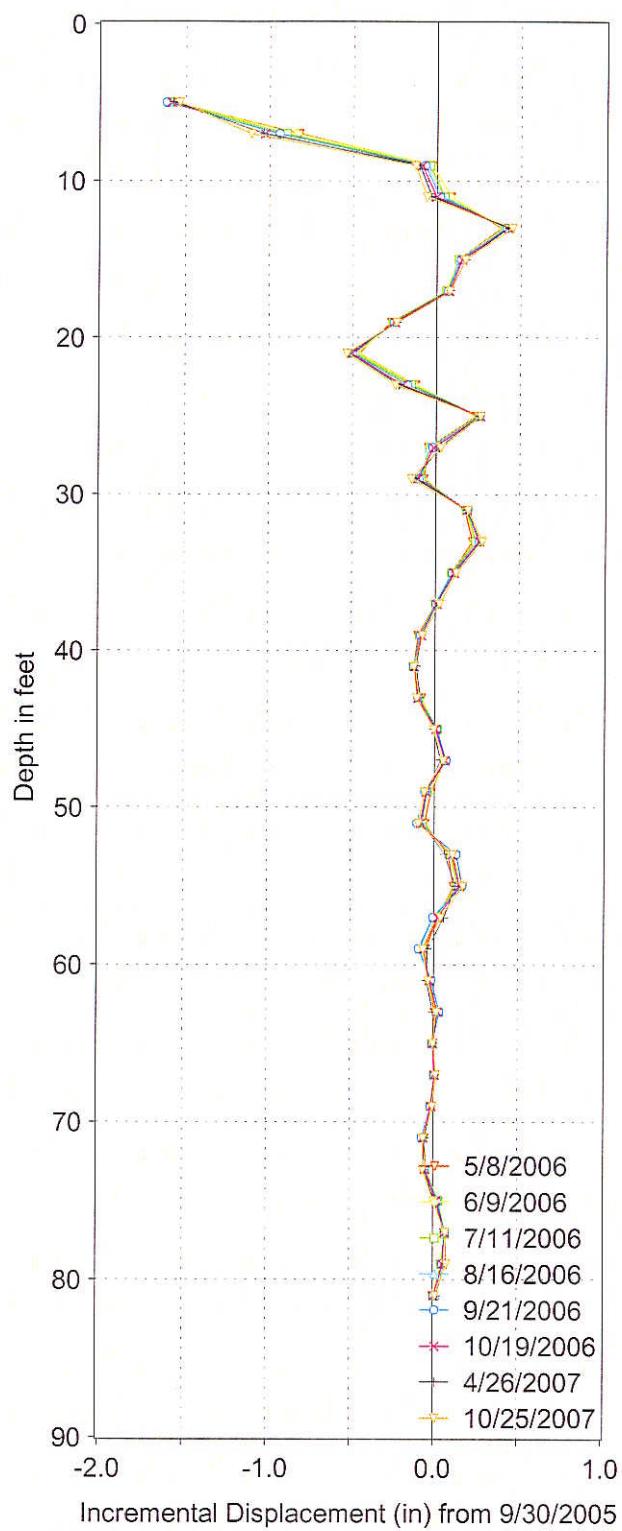
WB 13 A-10b, B-Axis



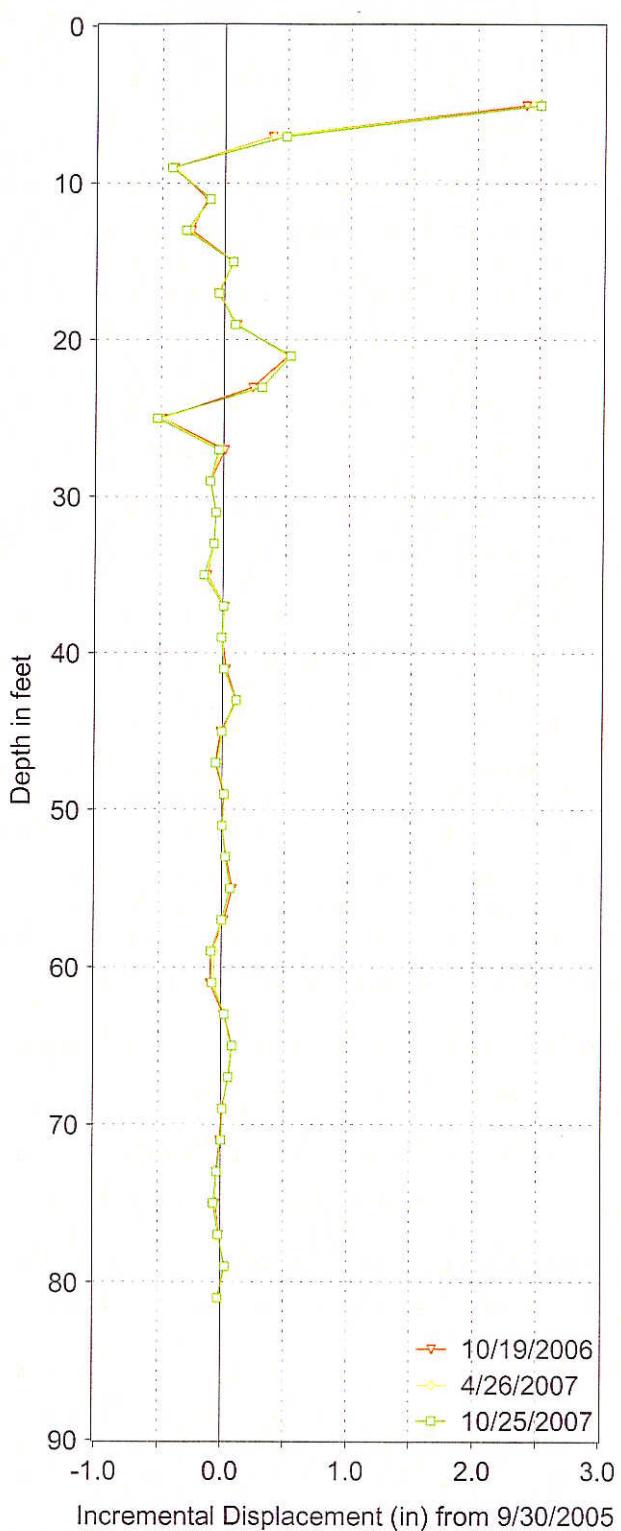
Wastedbed 13 Pilot Study  
Location SB915-INEX-A10 (A-10)  
December 2007

**PARSONS**

WB 13 A-10b, A-Axis



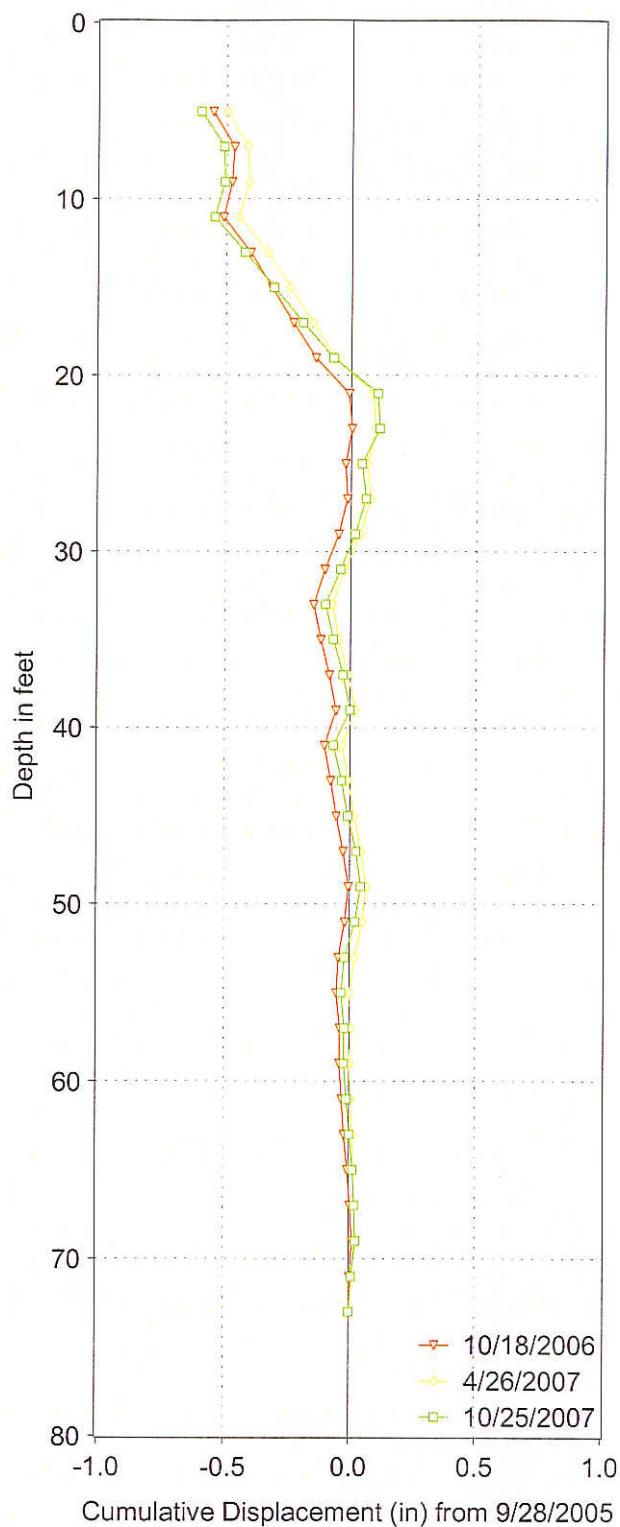
WB 13 A-10b, B-Axis



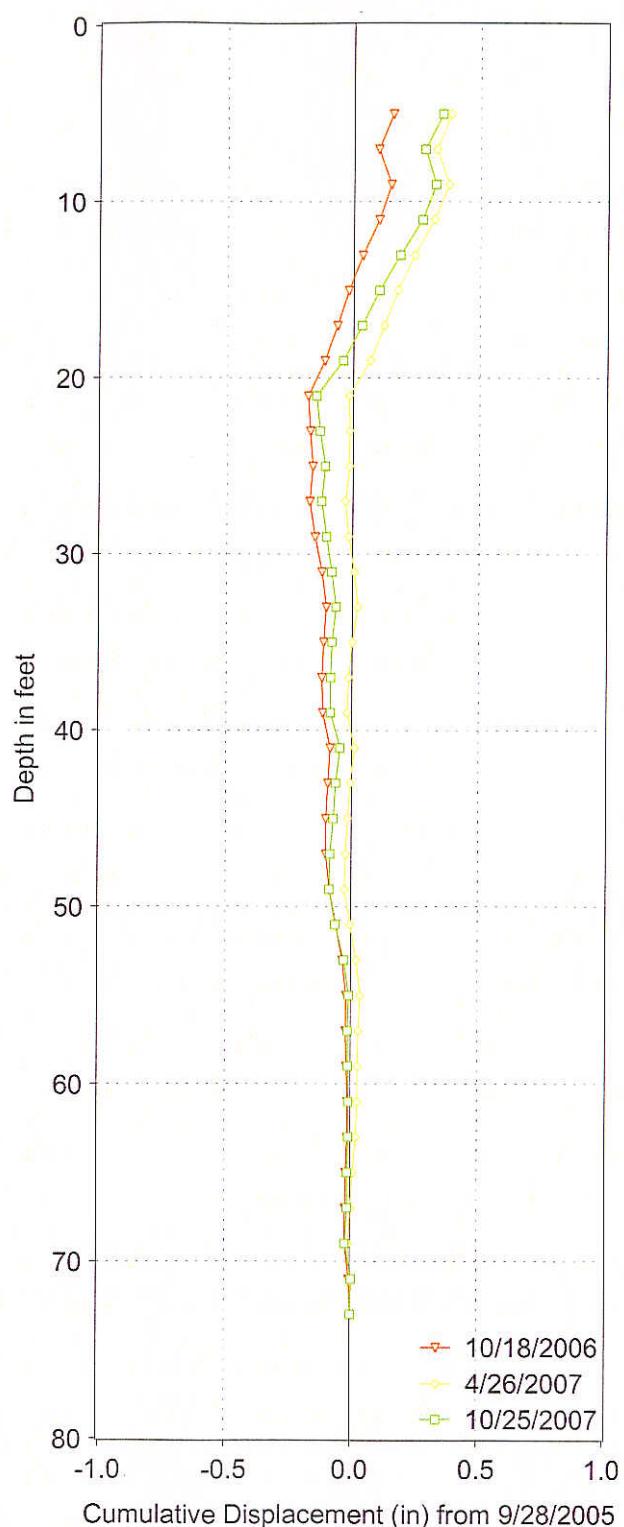
Wastebed 13 Pilot Study  
Location SB915-INEX-A10 (A-10)  
December 2007

**PARSONS**

WB 13 A-13a, A-Axis



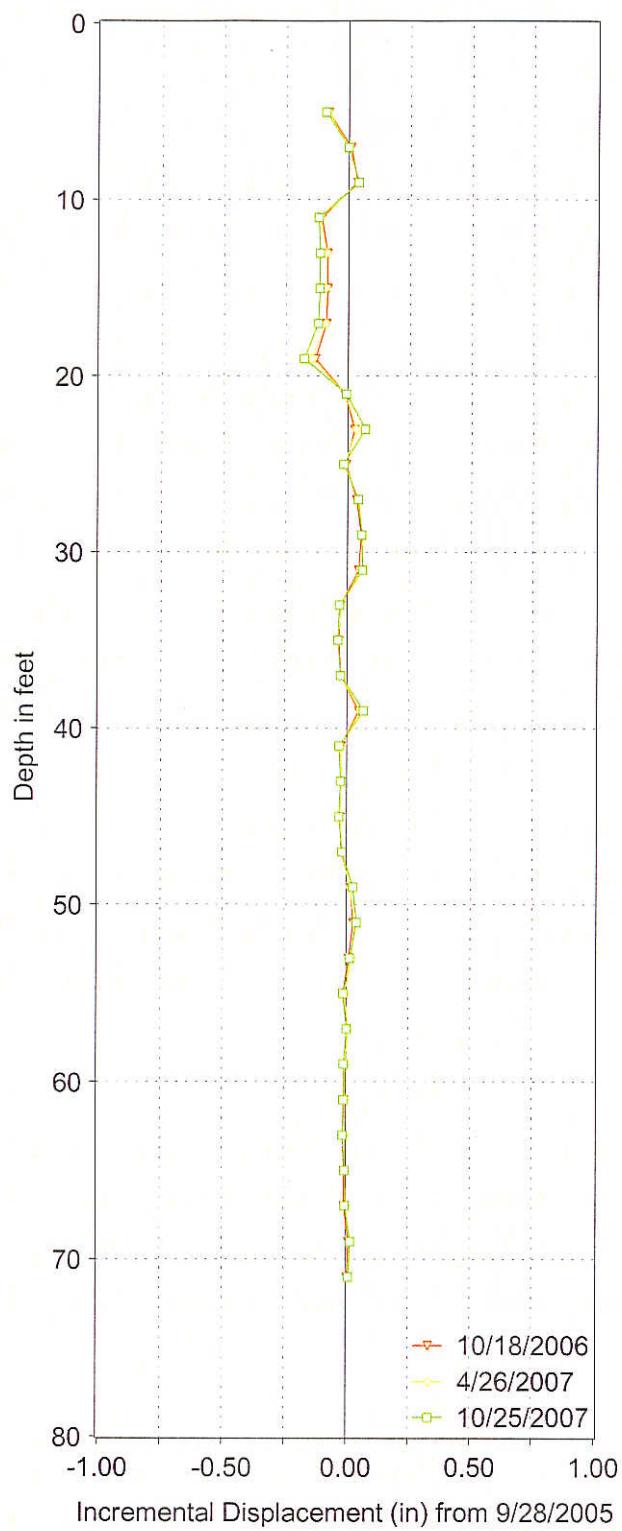
WB 13 A-13a, B-Axis



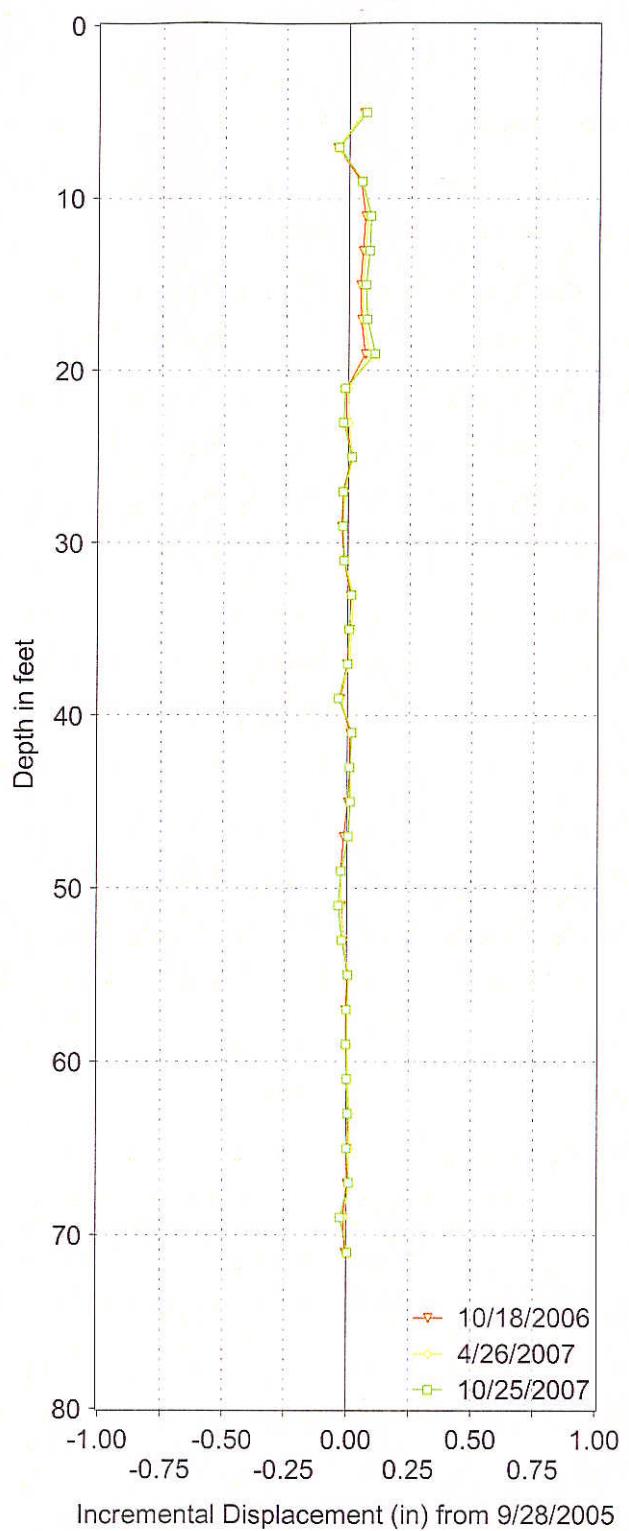
Wastebed 13 Pilot Study  
Location SB915-IN-A13 (A-13)  
December 2007

**PARSONS**

WB 13 A-13a, A-Axis



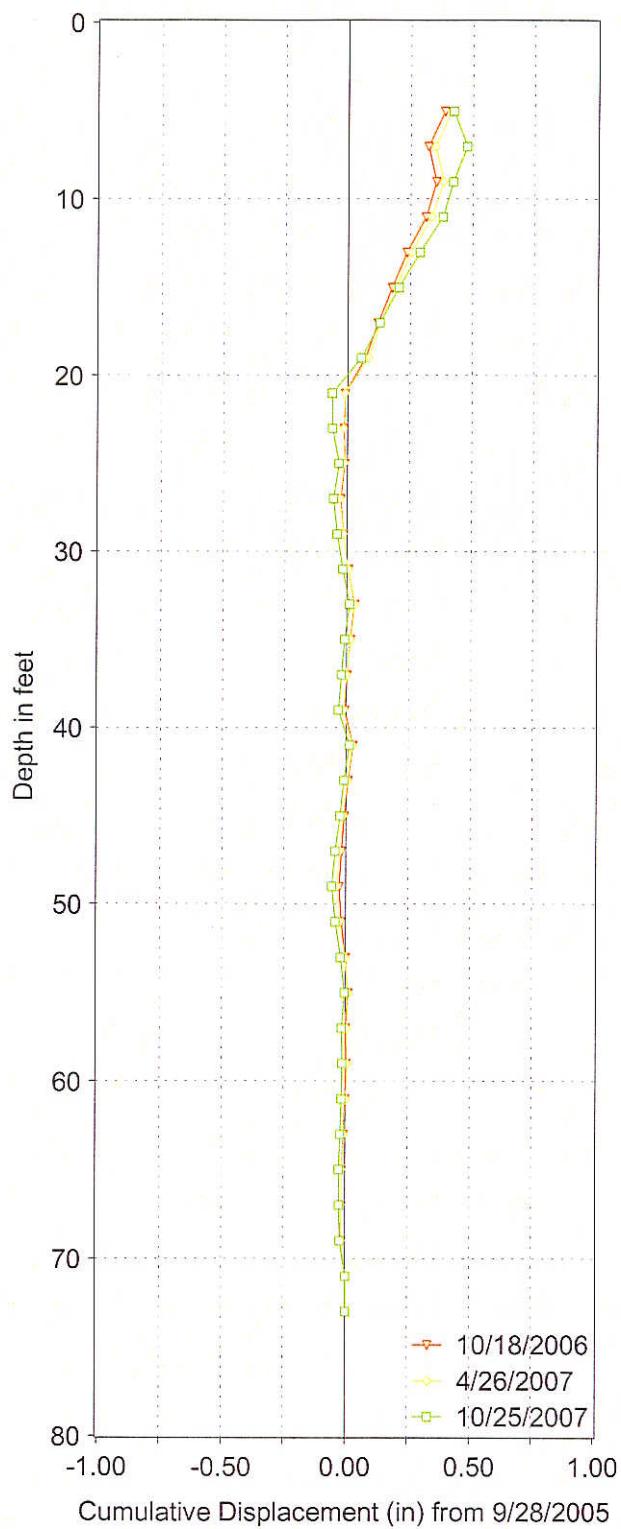
WB 13 A-13a, B-Axis



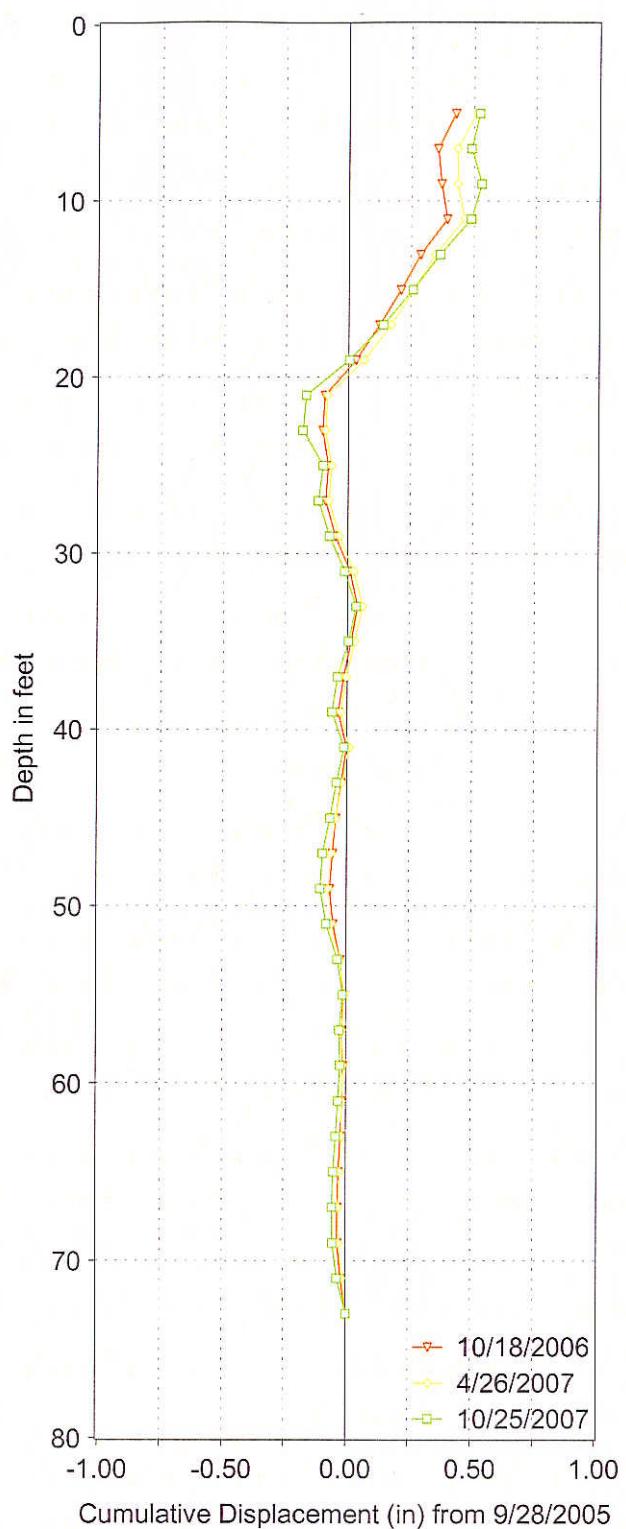
Wastebed 13 Pilot Study  
Location SB915-IN-A13 (A-13)  
December 2007

**PARSONS**

WB 13 A-13b, A-Axis



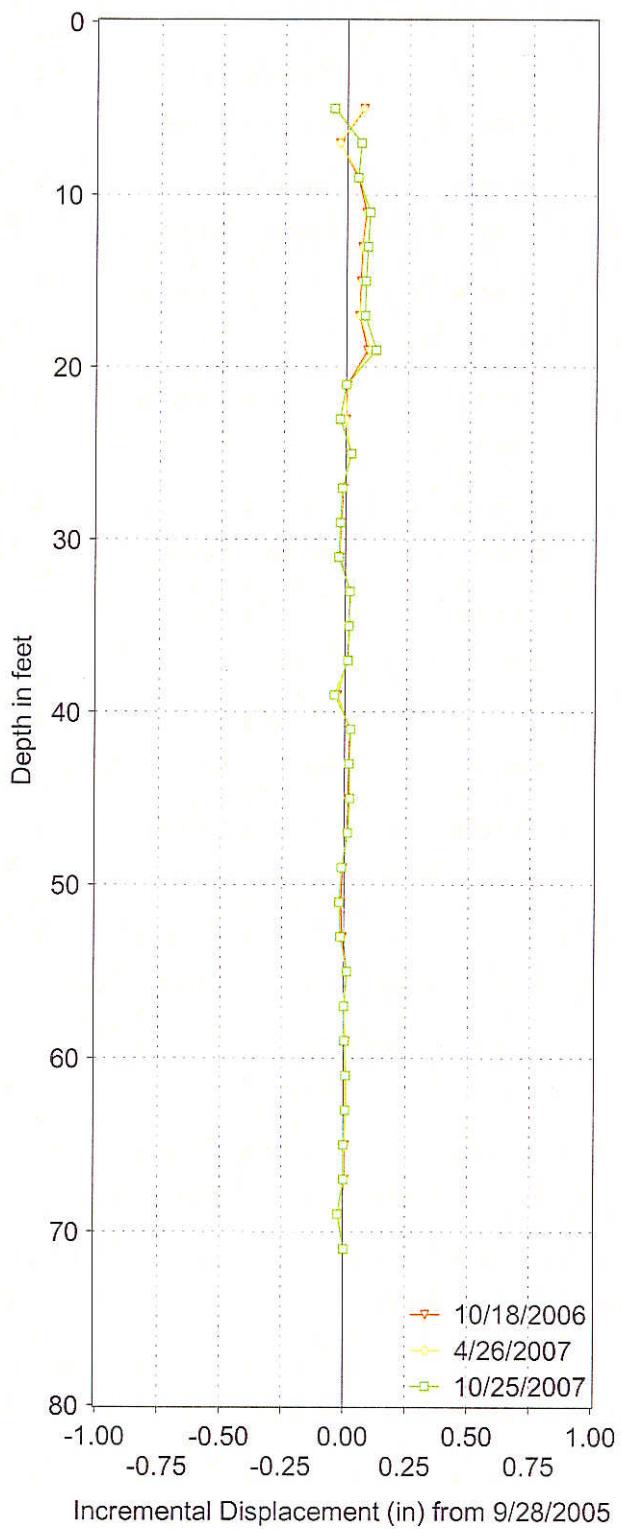
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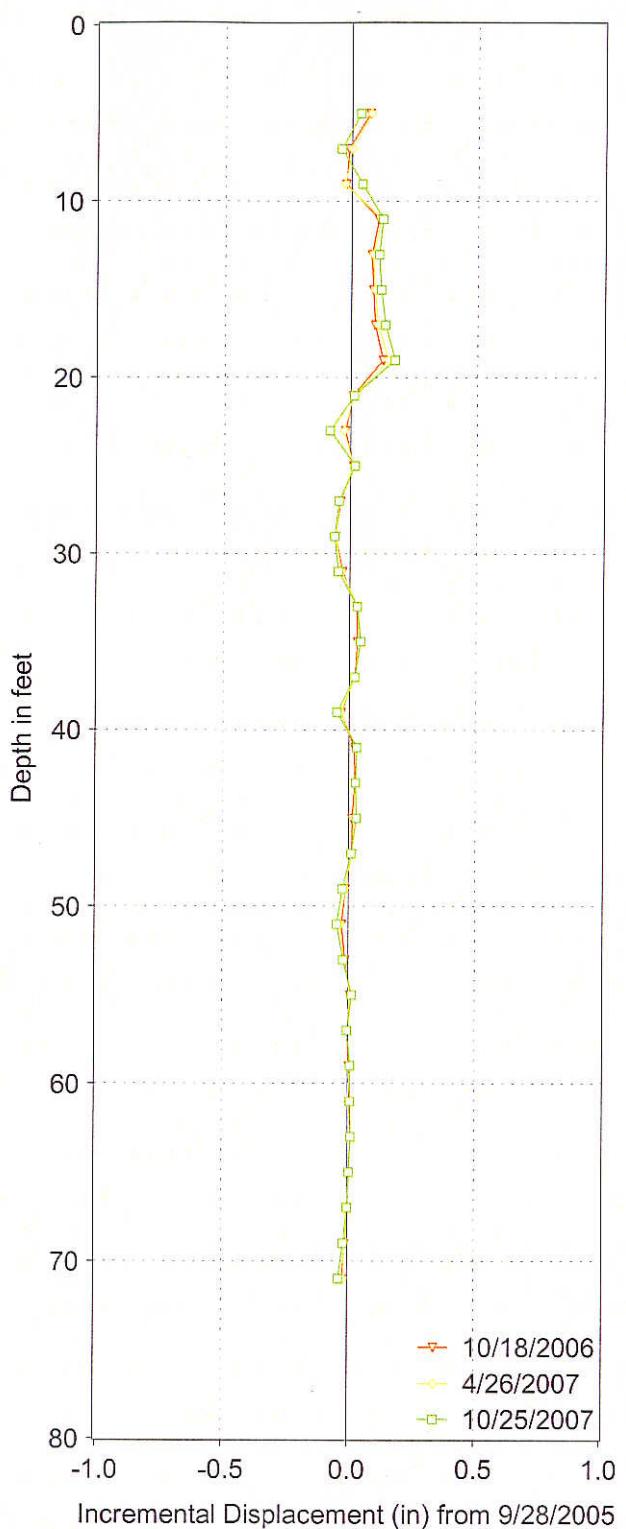
Wastebed 13 Pilot Study  
Location SB915-IN-A13 (A-13)  
December 2007

**PARSONS**

WB 13 A-13b, A-Axis



WB 13 A-13b, B-Axis



Wastebed 13 Pilot Study  
Location SB915-IN-A13 (A-13)  
December 2007

**PARSONS**