

# **Final Report: Groundwater Monitoring at Centralia, Kansas, in September–October 2005 and March 2006, with Expansion of the Monitoring Network in January 2006**

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**Environmental Science Division**



**United States Department of Agriculture**

Work sponsored by Commodity Credit Corporation,  
United States Department of Agriculture

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by  
Applied Geosciences and Environmental Management Section  
Environmental Science Division, Argonne National Laboratory

October 2006



**United States Department of Agriculture**

Work sponsored by Commodity Credit Corporation,  
United States Department of Agriculture

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## Notation

AGEM	Applied Geosciences and Environmental Management
AMSL	above mean sea level
BGL	below ground level
°C	degree(s) Celsius
CCC	Commodity Credit Corporation
CD	compact disc
CLP	Contract Laboratory Program
COC	chain of custody
cpm	count(s) per minute
CPT	cone penetrometer
DF	dilution factor
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ESC	Expedited Site Characterization
ft	foot (feet)
gal	gallon(s)
GC-MS	gas chromatograph-mass spectrometer
gpm	gallon(s) per minute
in.	inch(es)
KDHE	Kansas Department of Health and Environment
µg/kg	microgram(s) per kilogram
µg/L	microgram(s) per liter
µS/cm	microsiemen(s) per centimeter
mg/kg	milligram(s) per kilogram
mg/L	milligram(s) per liter
min	minute(s)
mL	milliliter(s)
mV	millivolt(s)
NAD	North American Datum
NGVD	National Geodetic Vertical Datum
nM	nanomole(s)
ORP	oxidation-reduction potential
QA	quality assurance
QC	quality control
RPD	relative percent difference

RSK	Risk-Based Standards for Kansas
SDG	sample delivery group
TOC	top of casing
TU	tritium unit(s)
USDA	U.S. Department of Agriculture
VOC	volatile organic compound



## **Final Report: Groundwater Monitoring at Centralia, Kansas in September–October 2005 and March 2006, with Expansion of the Monitoring Network in January 2006**

### **Executive Summary**

This document reports the results of groundwater sampling in September–October 2005 and March 2006 at the grain storage facility formerly operated at Centralia, Kansas, by the Commodity Credit Corporation of the U.S. Department of Agriculture (CCC/USDA). These activities were the first and second twice yearly sampling events of the two-year monitoring program approved by the CCC/USDA and Kansas Department of Health and Environment (KDHE) project managers.

The initial monitoring network sampled in September and October 2005 consisted of six monitoring wells (MW1–MW6) installed in 2004, plus five groundwater piezometers (SB01, SB04, SB05, SB08, SB09) installed in 2002. The combined September–October 2005 sampling was the first monitoring event in the planned two-year program for Centralia. The groundwater samples collected in both September and October were analyzed for volatile organic compounds (VOCs), and samples collected in September were analyzed for dissolved hydrogen and additional groundwater parameters to aid in evaluating the potential for reductive dechlorination processes.

After the monitoring in September–October 2005, Argonne recommended expansion of the initial monitoring network. Previous sampling (August 2004) had already suggested that this network of six monitoring wells and five piezometers was inadequate to delineate the extent of the carbon tetrachloride plume. With the approval of the CCC/USDA and KDHE project managers, the monitoring network was expanded in January 2006 through the installation of four additional monitoring wells (MW7–MW10) and one new piezometer (SB07R) to replace a damaged piezometer (the former SB07). Details of the monitoring well and piezometer installations are reported in this document.

The expanded monitoring network of ten monitoring wells (MW01–MW10) and six piezometers (SB01, SB04, SB05, SB07R, SB08, and SB09) was sampled in March 2006. This March 2006 sampling was the second monitoring event in the planned two-year program. Results

of analyses for VOCs showed *further increases in contaminant levels and expansion of the carbon tetrachloride plume* toward the south and west from the former CCC/USDA facility.

The groundwater samples collected in March 2006 were also analyzed for additional groundwater parameters to aid in the evaluation of the potential for reductive dechlorination processes. Preliminary screening of groundwater parameters provided *limited evidence that reductive dechlorination of carbon tetrachloride is taking place at some locations* on the former CCC/USDA facility.

Groundwater levels measured manually in September 2005, March 2006, and June 2006 were used to map the potentiometric surface at Centralia. Overall, these results were consistent with each other and with previous measurements, generally indicating a *groundwater flow direction toward the south-southwest from the former CCC/USDA facility*.

Data recorders installed in wells MW01–MW06 in August 2004 are gathering long-term data on the groundwater elevation and gradient. Data downloaded in March 2005, September 2005, and June 2006 indicate that two wells north and west of the former CCC/USDA facility boundary show distinct, transient and seasonal water level variations. In contrast, two different wells southwest and south of the former facility boundary show virtually no response to the same events.

The first two monitoring events of the planned two-year monitoring program for Centralia have demonstrated increased carbon tetrachloride concentrations and lateral expansion of the contaminated zone. Argonne recommends that the CCC/USDA and KDHE project managers *consider development and approval of a work plan to expedite the selection and implementation of an active remedial alternative* addressing the concentrated areas of groundwater contamination before the end of the two-year monitoring program in 2007.

## **1 Introduction**

The city of Centralia, Kansas, is located in Nemaha County, in the northeastern corner of the state (Figure 1.1). The current population is approximately 530. The Commodity Credit Corporation, U.S. Department of Agriculture (CCC/USDA), operated a grain storage facility approximately 1,100 ft north of Centralia from 1949 until 1971. None of the structures remain, and the property is now fenced pastureland.

This document reports the results of groundwater sampling in September–October 2005 and March 2006 at the grain storage facility formerly operated by the CCC/USDA. These activities were the first and second twice yearly sampling events of the planned two-year monitoring program at this site (Argonne 2005a).

The activities reported here were conducted as part of an ongoing environmental investigation being performed by the Environmental Science Division of Argonne National Laboratory. Argonne is a nonprofit, multidisciplinary research center operated by the University of Chicago for the U.S. Department of Energy (DOE). Under an interagency agreement between DOE and the USDA, Argonne provides technical assistance to the CCC/USDA with environmental site characterization and remediation at its former grain storage facilities.

### **1.1 Background**

In August–September 1998, the Kansas Department of Health and Environment (KDHE) conducted preliminary investigations at the former CCC/USDA facility at Centralia. Carbon tetrachloride was detected in the domestic well at the Don Morris residence, approximately 3,500 ft north-northeast (upgradient) of the former CCC/USDA facility (Figure 1.2), as well as in soil and groundwater at the former CCC/USDA facility south-southwest (downgradient) of the Morris residence. The details of the KDHE investigation and a summary of the findings were reported previously (Argonne 2002a).

In 2002, Argonne (on behalf of the CCC/USDA) initiated an investigation of the former CCC/USDA grain storage facility. Phase I of Argonne's investigation was conducted in March–April 2002. The results confirmed the presence of carbon tetrachloride in soils and groundwater at the former CCC/USDA facility (Argonne 2003). The groundwater gradient, as determined by measurements of depth to groundwater in the six piezometers installed during Phase I, was found

to be to the west-southwest. This finding, which placed the former CCC/USDA facility downgradient of the Morris well, was the driver for subsequent work to confirm that the contamination in the Morris well has a local source.

Phase II of Argonne's investigation, conducted in March–April 2003, focused on delineating the soil and groundwater contamination detected during Phase I (Argonne 2004a). The principal Phase II findings with regard to contaminated groundwater were as follows:

1. The lateral extent of the contaminated groundwater at the former CCC/USDA facility was generally limited to the former facility's boundary (Figure 1.3).
2. The vertical extent of the contaminated groundwater was limited to the upper portion of the shallow aquifer within the glacial outwash deposits of the Pleistocene Upper Independence Formation.
3. The concentrations of chloroform — a primary degradation product of carbon tetrachloride — detected in the groundwater suggested that reductive dechlorination or natural biodegradation of carbon tetrachloride is taking place *in situ* at the former CCC/USDA facility.

These findings resulted in the Phase II recommendation that monitoring wells be installed to (1) confirm the lateral distribution of carbon tetrachloride in the groundwater; (2) track any migration of contaminants that might take place; and (3) serve as monitoring points, together with the existing piezometers, for the collection of geochemical data. These data could be used to characterize *in situ* conditions and provide information for the evaluation of monitored natural attenuation as a viable corrective action alternative (Argonne 2004a).

To carry out the Phase II recommendations, Argonne developed a work plan involving installation of six monitoring wells (MW1–MW6; Argonne 2004b,c). These six monitoring wells supplemented the existing groundwater piezometers (SB01, SB04, SB05, SB08, SB09) installed at and downgradient of the former CCC/USDA facility during the Phase I investigation (Argonne 2003) and established an initial monitoring network at the former CCC/USDA facility. Field work associated with the installation of the six monitoring wells occurred on July 19–28, 2004. Sampling of the six monitoring wells and five piezometers occurred on August 24–27,

2004. The results suggested that the initial monitoring network was not adequate to delineate the extent of the carbon tetrachloride plume (Figure 1.4; Argonne 2005b).

Argonne developed a groundwater monitoring plan involving twice yearly monitoring at Centralia for at least two years (Argonne 2005a). After sampling in September–October 2005, Argonne recommended expansion of the monitoring network, per agreement between the CCC/USDA and KDHE project managers (Argonne 2005c).

## **1.2 The 2005–2006 Sampling Activities and the 2006 Network Expansion**

On September 8–11, 2005, the initial monitoring network (MW1–MW6, SB01, SB04, SB05, SB08, SB09) at Centralia was sampled, in accordance with the approved monitoring plan (Argonne 2005a). Confirmation sampling followed on October 11–12, 2005. The second monitoring event on March 14–17, 2006, sampled a monitoring network that had been expanded in January 2006 (Argonne 2005c and Section 2.1 of the current report) with the installation of four additional monitoring wells (MW7–MW10) and the installation of a new piezometer (SB07R) to replace a damaged one (the former SB07).

Procedures for sampling and well installation are described in Section 2. The results of both the September–October 2005 and March 2006 sampling events are reported in Section 3.

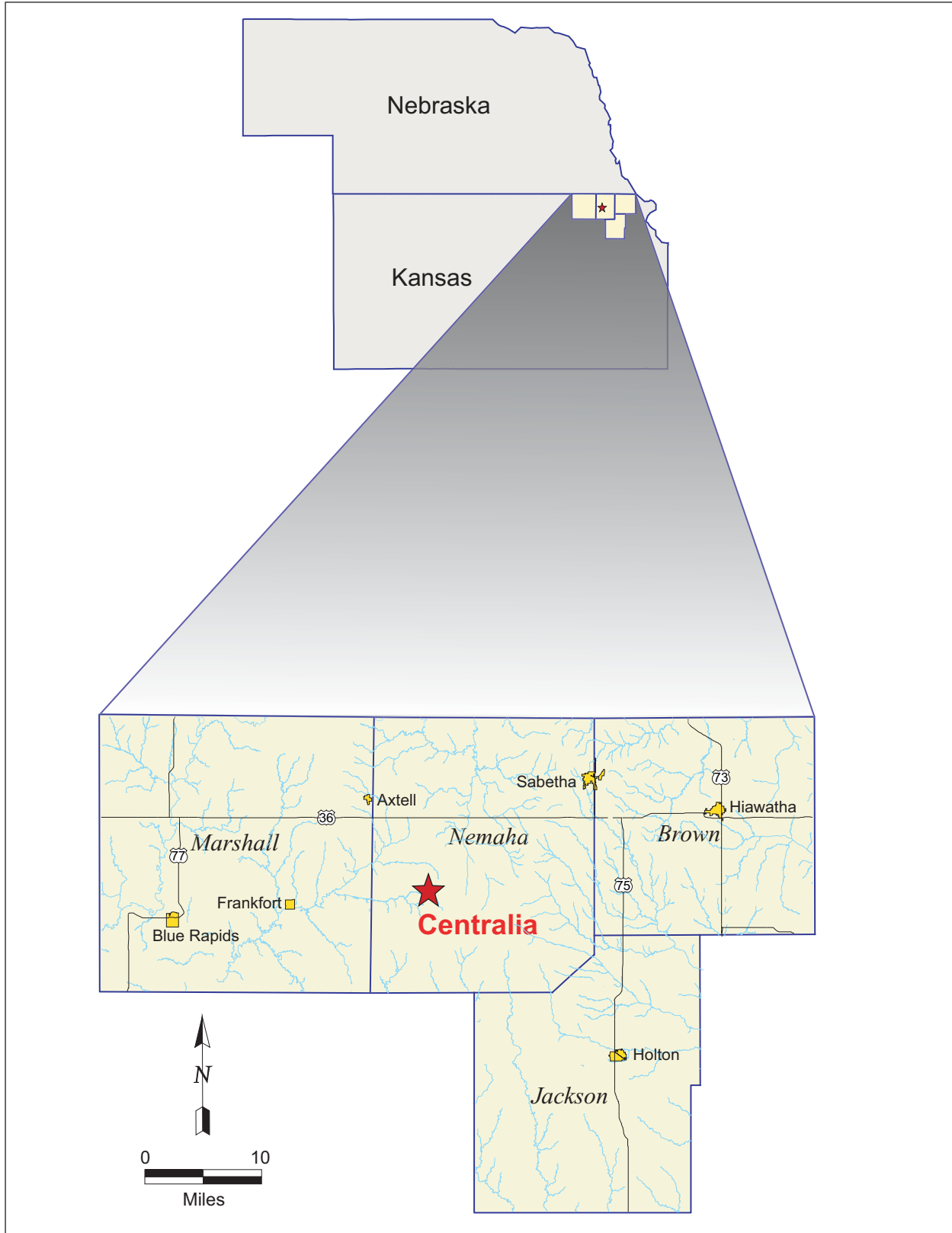


FIGURE 1.1 Location of Centralia, Kansas.

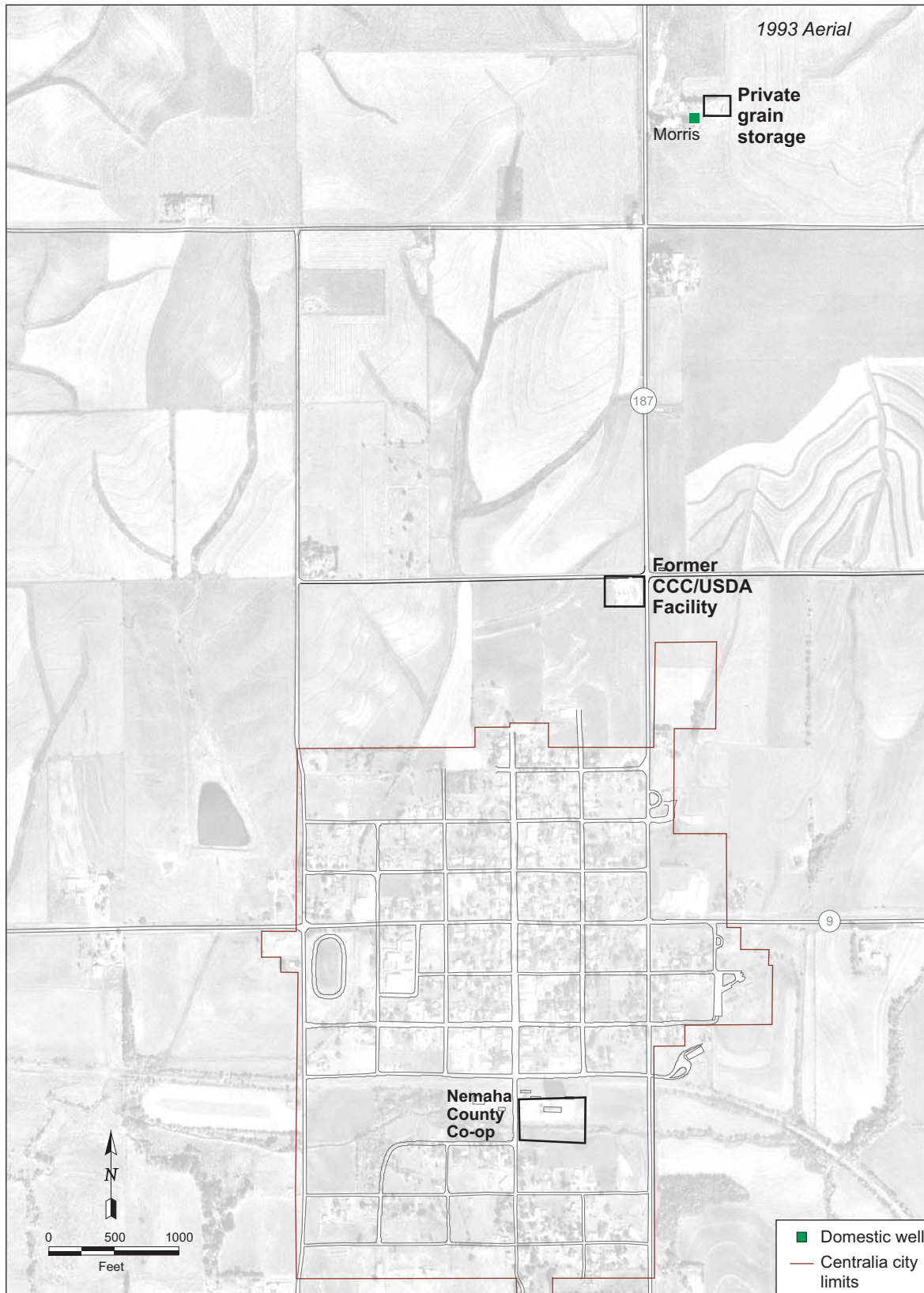


FIGURE 1.2 Locations of the contaminated Morris well and current and former grain storage facilities at Centralia. Source of photograph: USDA (1993).

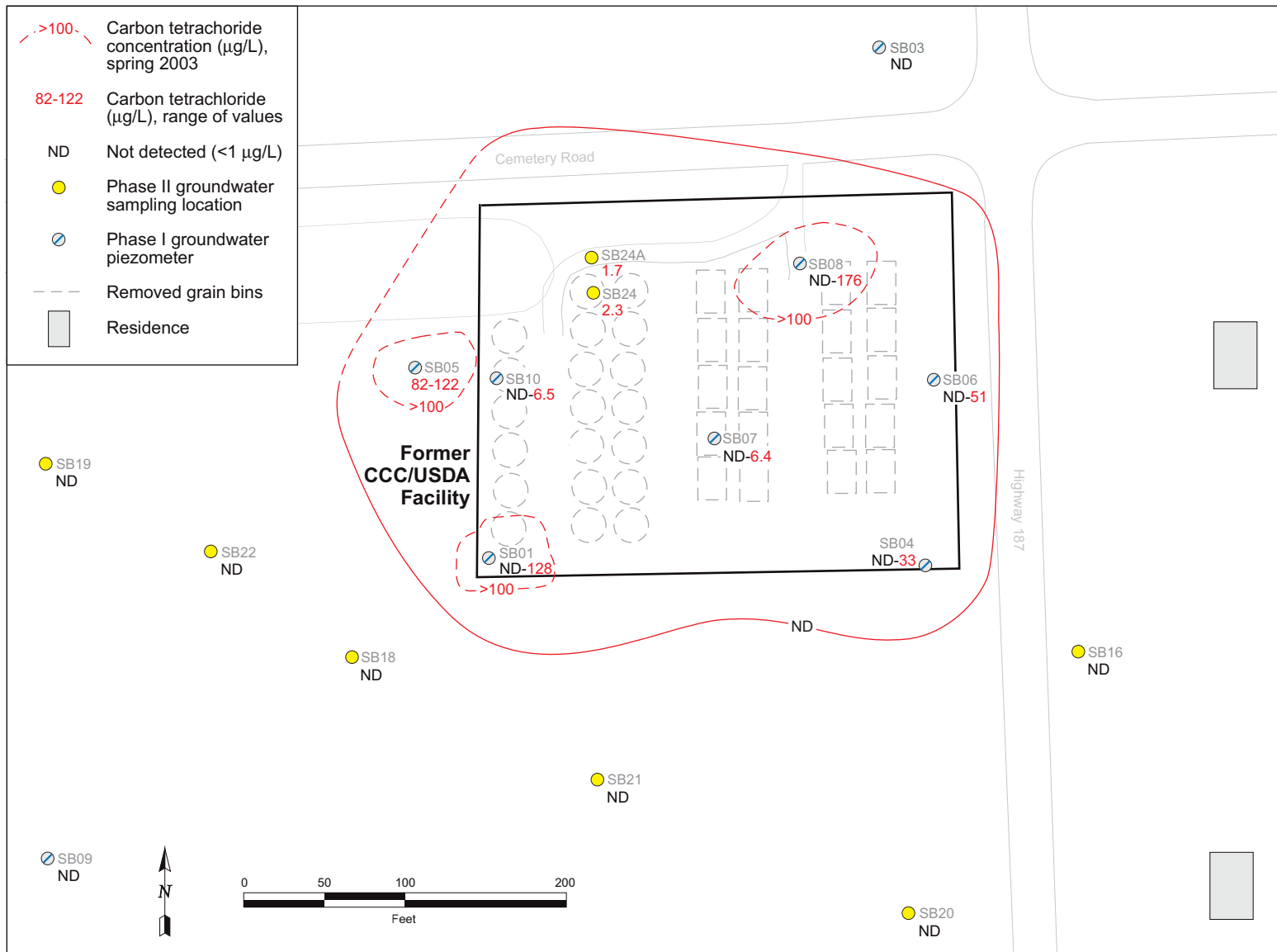


FIGURE 1.3 Lateral extent of the carbon tetrachloride contamination in groundwater at Centralia, as interpreted on the basis of sampling and analyses in spring 2003.



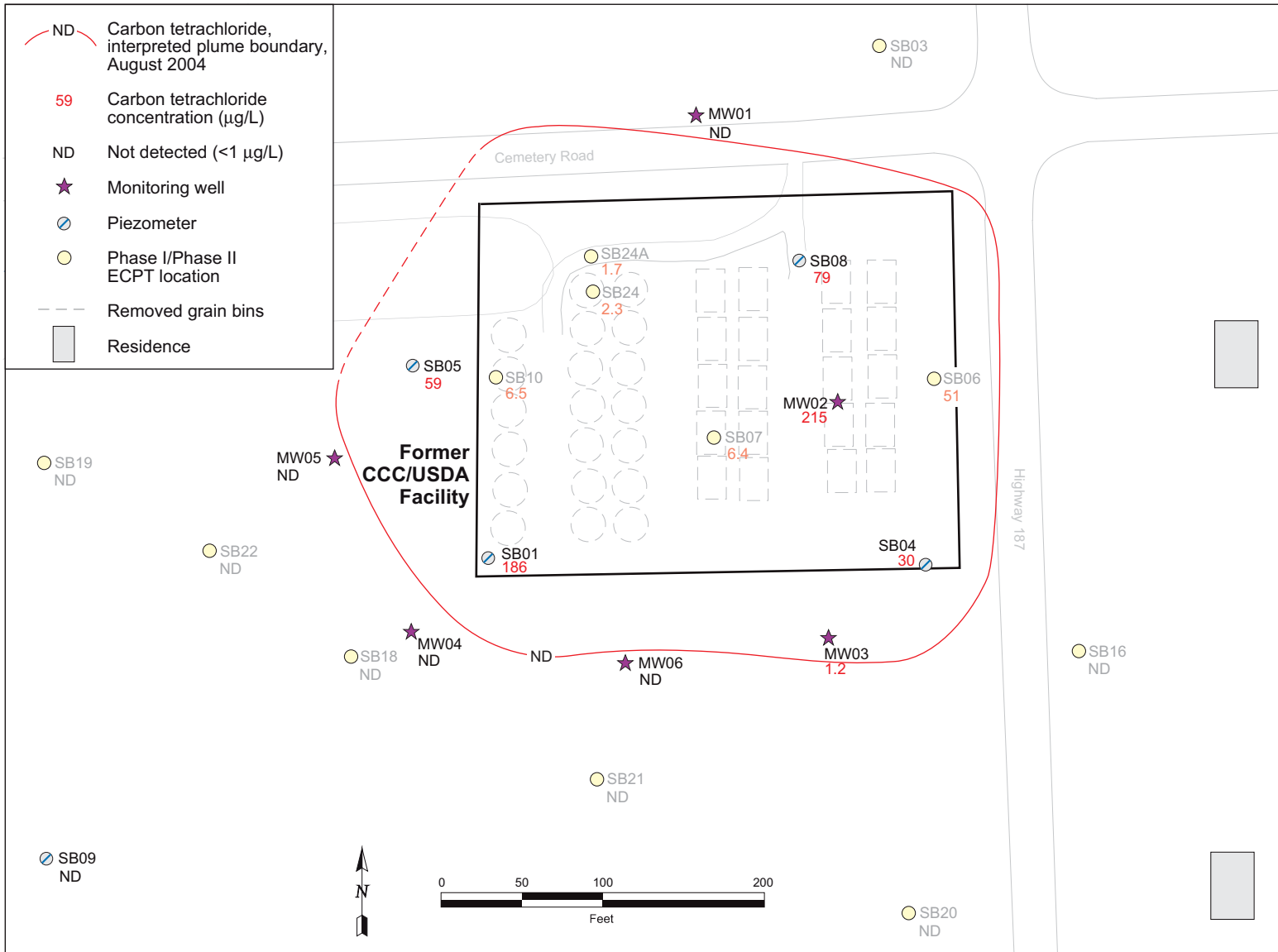


FIGURE 1.4 Lateral extent of the carbon tetrachloride contamination in groundwater at Centralia, as interpreted on the basis of sampling and analyses in August 2004.

## 2 Field Activities

### 2.1 Monitoring Wells and Replacement Piezometer

Four monitoring wells, MW7–MW10, were installed in January 2006. The locations of these new wells and the remainder of the monitoring network are shown in Figure 2.1. The 2006 expansion was intended to establish a monitoring network adequate to delineate the extent of the carbon tetrachloride plume. In addition, former piezometer SB07, which was in a critical location but had been damaged and could not be sampled, was replaced with a new piezometer, SB07R. Construction diagrams and the well registration forms for the new monitoring wells and the piezometer are in Appendix A.

#### 2.1.1 Well and Replacement Piezometer Installation in January 2006

The four new monitoring wells (MW07–MW10) were installed according to the general procedures in Section 6.4.3 of the *Master Work Plan* (Argonne 2002b). All four wells were installed in the upper portion of the shallow aquifer identified within the glacial outwash deposits of the Pleistocene Upper Independence Formation. The wells consist of 2-in. polyvinyl chloride casing installed in 8.25-in.-diameter boreholes. The boreholes were drilled by Boart Longyear with a hollow-stem-auger drill rig. Screens consist of 0.010-slot screen with a 10/20 sand filter pack. The bottom of each well consists of a 5-ft section of blank casing to serve as a silt trap.

Replacement piezometer SB07R was installed according to the procedures in Section 6.4.6 and Appendix F of the *Master Work Plan* (Argonne 2002b). Specific details about well and piezometer construction are in Table 2.1.

#### 2.1.2 Construction and Development of Wells and Replacement Piezometer SB07R in January 2006

All wells and replacement piezometer SB07R were constructed in accordance with applicable KDHE guidelines. Surface completions for the monitoring wells consist of KDHE-approved flush mounts, as shown in the specifications for a 2-in. casing in Figure F.4, Appendix F, of the *Master Work Plan* (Argonne 2002b). The appropriate variances were

TABLE 2.1 Construction details for monitoring wells MW07–MW10 and replacement piezometer SB07R at Centralia, Kansas.

Well/ Piezometer	Surveyed Elevation for Top of Casing (ft AMSL)	Depth (ft BGL) <sup>a</sup>		
		Filter Pack Interval	Screen Interval	Total
MW07	1324.83	43–60	45–55	60
MW08	1332.41	36–58	38–53	58
MW09	1310.49	23–40	25–35	40
MW10	1334.56	27–50	30–45	50
SB07R	1331.71	43–60	45–60	60

<sup>a</sup> BGL, below ground level.

obtained from the state of Kansas for the flush-mount completions. Completion diagrams for wells MW07–MW10 and replacement piezometer SB07R are in Appendix A.

The wells and replacement piezometer SB07R were developed by surging and bailing for 2 hr and then pumping with an electric submersible pump. Development water was placed in plastic storage tanks at the investigation site. Waste characterization, handling, and disposal are discussed in Section 3.5.

## 2.2 Sampling of Monitoring Wells and Piezometers in September–October 2005 and March 2006

After measurement of water levels, wells and piezometers were purged of a minimum three well volumes. Field measurements of temperature, pH, and conductivity were taken during purging until the measurements stabilized. Per the monitoring plan, field measurements of carbon dioxide, iron(II), dissolved oxygen, and oxidation reduction potential (ORP) were made for the evaluation of possible biodegradation processes. Turbidity was also evaluated. The sequence of activities in the September–October 2005 and March 2006 field events is summarized in Appendix B.

Existing wells MW01–MW6 and piezometers SB01, SB04, SB05, SB08, and SB09 were sampled in September and October 2005, according to procedures in the *Master Work Plan* (Argonne 2002b). These samples were subjected to off-site laboratory analyses for volatile organic compounds (VOCs), including carbon tetrachloride, chloroform, and methylene chloride.

Existing wells MW01–MW6 and piezometers SB01, SB04, SB05, SB08, and SB09 were sampled again in March 2006. New wells MW07–MW10 and replacement piezometer SB07R were also sampled in March 2006. The samples were subjected to off-site laboratory analyses for VOCs and for other groundwater parameters to aid in the evaluation of reductive dechlorination processes (EPA 1998a; ITRC 2002). The additional parameters investigated included alkalinity, total organic carbon, manganese, phosphate, nitrate, nitrite, chloride, sulfate, sulfide, and methane.

Samples from the newly installed monitoring wells and replacement piezometer SB07R were analyzed for tritium at the University of Miami Tritium Laboratory in Miami, Florida.

In each sampling event, immediately after collection in the appropriate laboratory containers, the groundwater samples were labeled, packaged, and chilled to 4°C by placement in an ice-filled cooler. The samples were shipped for overnight delivery to the Applied Geosciences and Environmental Management (AGEM) Laboratory at Argonne for VOCs analyses with U.S. Environmental Protection Agency (EPA) Method 524.2 (EPA 1995).

In the September 2005 and March 2006 monitoring events, aliquots for laboratory analyses of degradation parameters were collected and shipped to Severn-Trent Laboratories, Colchester, Vermont. The analyses included dissolved chloride, sulfate, nitrate, and phosphate concentrations by EPA Method 300; total alkalinity by EPA Method 310.1; nitrate/nitrite nitrogen by EPA Method 353.2; nitrite nitrogen by EPA Method 354.1; sulfide by EPA Method 376.2; total organic carbon by EPA Method 415.1; and dissolved metals (aluminum, calcium, iron, magnesium, manganese, phosphorus, potassium, silicon, sodium, and zinc) by EPA Method 6010 (EPA 1998b). Analyses for the natural attenuation indicators methane, ethane, and ethene were conducted by using Method RSK-175 (Kampbell and Vandegrift 1998).

In the September 2005 monitoring, additional groundwater samples were collected from selected wells for dissolved hydrogen analysis at Microseeps Laboratory, Pittsburgh, Pennsylvania, by Method AM20GAX.

The analytical results are summarized in Section 3.2.

## 2.3 Measurement of Groundwater Levels

Before the wells and piezometers were purged in September and October 2005 and in March 2006, a water level indicator was used to measure the depth to groundwater and total depth of each well from the top of the well casing, to within 0.01 ft.

Data recorders installed in MW01–MW06 in August 2004 are gathering long-term data on the groundwater elevation and gradient. The data recorders were downloaded on March 18, 2005, September 23, 2005, and June 16, 2006.

Groundwater level data are discussed in Sections 3.3 and 4.1.

## 2.4 Quality Control for Sample Collection, Handling, and Analysis

Quality assurance/quality control (QA/QC) procedures for sample collection, handling, and analysis are described in detail in the *Master Work Plan* (Argonne 2002b). Significant points for the work at Centralia include the following:

- Sample integrity was preserved during sample collection, shipping, and analysis through the use of custody seals and chain-of-custody records.
- Field blanks, equipment rinsates, and trip blanks were used to evaluate sample collection and handling activities.
- In addition to the primary samples, ten blind replicate samples were collected for analysis by the AGEM Laboratory, and three samples were selected for verification organic analysis at a secondary laboratory.

Results of the QA/QC activities are summarized in Section 3.4.

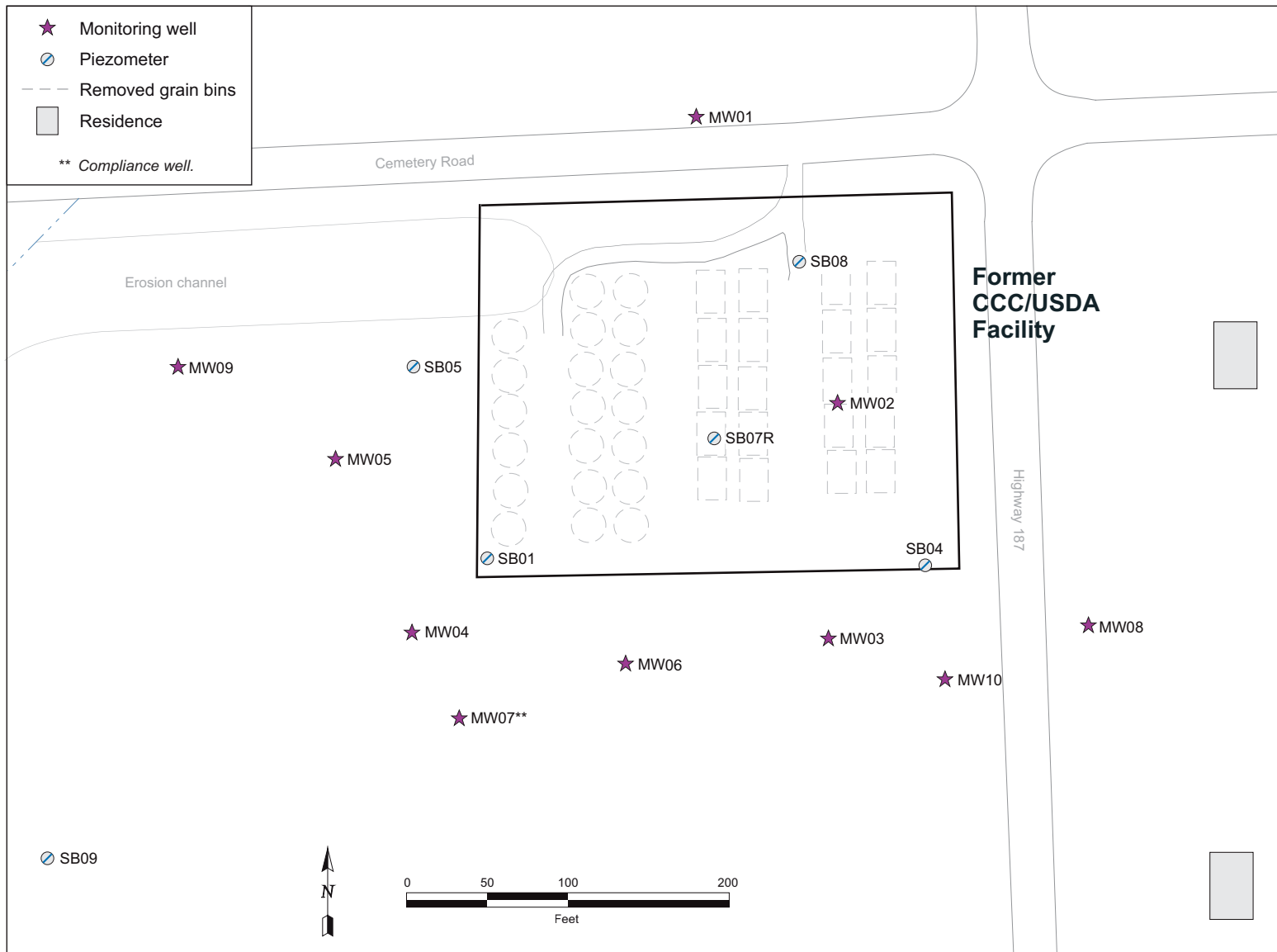


FIGURE 2.1 Monitoring network at Centralia, as of March 2006.

### **3 Field and Laboratory Data**

#### **3.1 Coordinates Survey Data**

To provide horizontal and vertical control for water level monitoring, the four newly installed monitoring wells (MW07–MW10) and replacement piezometer SB07R were surveyed by Schwab-Eaton, P.A., Manhattan, Kansas. For each location, the elevation of the top of the casing (TOC) was surveyed. Coordinates survey data for the monitoring wells and piezometer are in Appendix C, Table C.1.

#### **3.2 Analytical Data for Groundwater**

Groundwater samples were collected from monitoring wells MW01–MW06 and from piezometers SB01, SB04, SB05, SB08, and SB09 in September 2005 and October 2005. After expansion of the monitoring network in January 2006, groundwater samples were collected in March 2006 from monitoring wells MW01–MW10 and from piezometers SB01, SB04, SB05, SB07R, SB08, and SB09. Descriptions of the samples are in Supplement 1, Table S1.1. (Supplements 1–4 are on a compact disc [CD] inside the back cover of this report.)

##### **3.2.1 Field Measurements**

Field measurements of temperature, pH, electrical conductivity, dissolved oxygen, ORP, carbon dioxide, iron(II), and turbidity were made during collection of groundwater samples in all three events reported here. The results are in Supplement 1, Table S1.2 (on CD).

##### **3.2.2 Contaminant Data**

The analytical data for VOCs and nitrate in groundwater samples collected in the September 2005, October 2005, and March 2006 sampling events (as well as the results from the previous sampling in August 2004) are summarized in Table 3.1. Complete results are in Supplement 1, Table S1.3 (on CD).

TABLE 3.1 Contaminant levels during long-term monitoring at Centralia.

Well	Screen Interval (ft below TOC)	Sample Date	Concentration (µg/L)			Nitrate (mg/L)
			Carbon Tetrachloride	Chloroform	Methylene Chloride	
MW01	54.5–64.5	8/24/04	ND <sup>a</sup>	ND	ND	0.459
		9/10/05	ND	ND	ND	0.434
		10/11/05	ND	ND	ND	NS <sup>b</sup>
		3/15/06	ND	ND	ND	0.82
MW02	49.5–59.5	8/26/04	215	6.2	ND	7.92
		9/11/05	776	33	ND	9.31
		10/12/05	528	21	ND	NS
		3/16/06	847	21	ND	9.92
MW03	50.5–60.5	8/24/04	1.2	ND	ND	6.43
		9/10/05	1.6	ND	ND	7.06
		10/11/05	1.8	ND	ND	NS
		3/17/06	2.6	0.2 J <sup>c</sup>	ND	9.17
MW04	37.5–47.5	8/24/04	ND	ND	ND	4.28
		9/11/05	0.9 J	ND	ND	4.45
		10/11/05	0.8 J	ND	ND	NS
		3/15/06	1.3	ND	ND	4.97
MW05	34.5–44.5	8/25/04	ND	ND	ND	2.46
		9/10/05	1.9	ND	ND	3.07
		10/11/05	1.5	ND	ND	NS
		3/15/06	1.3	ND	ND	3.36
MW06	46.5–56.5	8/25/04	ND	ND	ND	0.379
		9/10/05	ND	ND	ND	0.58
		10/11/05	0.3 J	ND	ND	NS
		3/15/06	0.2 J	ND	ND	0.524
MW07	45–55	3/14/06	0.4 J	0.6 J	ND	1.18
MW08	38–53	3/14/06	ND	ND	ND	2.47
MW09	25–35	3/15/06	ND	ND	ND	3.25
MW10	30–45	3/14/06	ND	ND	ND	1.23



TABLE 3.1 (Cont.)

Well	Screen Interval (ft (below TOC))	Sample Date	Concentration (µg/L)			
			Carbon Tetrachloride	Chloroform	Methylene Chloride	Nitrate (mg/L)
SB01	40–50	8/26/04	186	6.5	ND	2.32
		9/9/05	269	6.8	ND	1.05
		10/12/05	288	6.6	ND	NS
		3/17/06	320	5.7	ND	1.14
SB04	51–61	8/26/04	30	ND	ND	1.84
		9/9/05	47	0.6 J	ND	1.73
		10/12/05	44	0.5 J	ND	NS
		3/16/06	51	0.5 J	0.4 JB	3.07
SB05	32–42	8/26/04	59	5.5	ND	2.42
		9/9/05	77	7.2	ND	2.57
		10/12/05	54	5.5	ND	NS
		3/17/06	104	7.2	ND	2.56
SB07R <sup>d</sup>	45–60	3/15/06	41	2.7	ND	1.27
SB08	52–62	8/26/04	79	3.1	ND	1.12
		9/8/05	80	2.6	ND	1.37
		10/12/05	77	2.8	ND	NS
		3/17/06	91	2.7	ND	1.69
SB09	32–42	8/26/04	ND	ND	ND	4.92
		9/11/05	ND	ND	ND	4.37
		10/11/05	ND	ND	ND	NS
		3/17/06	ND	ND	ND	4.67

<sup>a</sup> ND, not detected at the instrument detection limit of 0.1 µg/L.

<sup>b</sup> NS, sample not analyzed for nitrate.

<sup>c</sup> Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L.

<sup>d</sup> The SB07 location was sampled with the cone penetrometer in 2002. Carbon tetrachloride was found at a concentration of 6.4 µg/L in a sample collected at 46–50 ft BGL. Subsequently, a piezometer and data logger were installed at this location for water level measurements. No sampling for VOCs occurred, however, before the data logger became jammed in the piezometer and sampling was impossible. The replacement piezometer SB07R was installed in January 2006 and sampled for the first time in March 2006.

The August 2004 results for carbon tetrachloride are shown in Figure 1.4, with earlier results. The September 2005, October 2005, and March 2006 results for carbon tetrachloride are in Figures 3.1, 3.2, and 3.3, respectively. The March 2006 results for chloroform and nitrate are in Figures 3.4 and 3.5, respectively.

### **3.2.3 Groundwater Characterization Data**

The groundwater samples collected in March 2006 from ten monitoring wells (MW01–MW10) and six piezometers (SB01, SB04, SB05, SB07R, SB08, and SB09) were analyzed for multiple parameters. Complete analytical results are in Supplement 1, Table S1.4 (on CD).

### **3.2.4 Tritium Data**

Groundwater samples from the four newly installed monitoring wells (MW07–MW10) and the replacement piezometer (SB07R) were analyzed for tritium. Tritium values at the five locations ranged from low values of 0.31 TU (tritium units) at MW07 and 0.32 TU at SB07R to a high value of 4.63 TU at MW08. Complete analytical results are in Supplement 1, Table S1.5 (on CD).

## **3.3 Groundwater Level Data**

Depths to groundwater were measured manually in all available monitoring wells and piezometers on September 24, 2005, March 14–17, 2006, and June 16, 2006. The hand-measured water level data are in Supplement 2, Table S2.1 (on CD). Long-term recording transducers were installed in monitoring wells MW01–MW06 in August 2004. Data for the period August 31, 2004, through June 16, 2006, are in Supplement 2, Table S2.2. These data were analyzed to evaluate the groundwater gradient and assess the magnitude of seasonal variations. The results are interpreted in Section 4.1.

### 3.4 Results of Quality Control Activities

The QA/QC procedures followed during collection, handling, and analysis of soil and groundwater samples are described in detail in the *Master Work Plan* (Argonne 2002b) and the monitoring plan (Argonne 2005a). A detailed QA/QC report addressing activities related to sample collection, handling, and analysis during the September–October 2005 and March 2006 sampling events is in Supplement 3 (on CD). Chain-of-custody forms and analytical data from reference laboratories are in Supplement 4 (also on CD).

Results of the QA/QC activities are summarized as follows:

- Samples shipped to the AGEM Laboratory were received with custody seals intact and at the appropriate temperature. All samples were analyzed within required holding times. Analyses of field blanks, equipment rinsates, and trip blanks indicated that cross-contamination of samples did not occur during sample collection and handling. Carbon tetrachloride and chloroform, the contaminants of concern in the investigation, were not detected in laboratory method blanks analyzed with the samples.
- Monitoring samples were analyzed for VOCs at the AGEM Laboratory by the purge-and-trap method with a gas chromatograph-mass spectrometer (GC-MS) system. The compounds eluting from the GC column were identified by retention time and by comparison with reference library spectra. The concentration of each component was calculated by comparison of the MS response for the quantitation ion to corresponding calibration curves, the responses for internal standards, or both. The internal standard recovery limits were 80–120%. Calibration checks with each sample delivery group (SDG) were required to be within  $\pm 20\%$  of the standard.
- Blind replicate groundwater samples were analyzed at the AGEM Laboratory as a measure of consistency in the sampling and analytical methodologies. Consistency in both methodologies is indicated by the average relative percent difference (RPD) values of 13.1% for carbon tetrachloride and 7.9% for chloroform in the dual analyses in which the contaminants were present.

- Three groundwater samples, including a sample from the KDHE-approved compliance well MW07 (installed in January 2006), were also analyzed for VOCs according to the EPA's Contract Laboratory Program (CLP) methodology by Envirosystems, Inc., of Columbia, Maryland. Results were as follows:
  - No contamination was detected in the sample from monitoring well MW09 by either the AGEM Laboratory or the CLP laboratory.
  - Because of the low detection limits achieved in the purge-and-trap analyses at the AGEM Laboratory, the trace concentrations of carbon tetrachloride and chloroform ( $< 1.0 \mu\text{g/L}$ ) detected in the sample from monitoring well MW07 were not identified by the CLP analysis, which has a quantitation limit of  $5.0 \mu\text{g/L}$ .
  - For the sample from replacement piezometer SB07R (installed in January 2006) contaminant concentrations were above the purge-and-trap quantitation limit of  $1 \mu\text{g/L}$ ; the RPD values were 24.7% for carbon tetrachloride and 3.8% for chloroform.
- The results for attenuation parameters in groundwater samples sent to Severn-Trent Laboratories are acceptable for evaluation of biodegradation processes, on the basis of the recovery of known concentrations of the analytes of interest in laboratory quality control samples analyzed with the groundwater samples.
- The results for dissolved hydrogen analysis of groundwater samples at Microseeps Laboratory are accepted. The associated trip blank contained no dissolved hydrogen.
- Tritium concentrations in groundwater samples were reported by the University of Miami Tritium Laboratory on the basis of the U.S. National Institute of Science and Technology tritium water standard #4926E, which has a half-life of 12.32 years, corrected for cosmic intensity and gas pressure to

account for background concentration and instrument counting efficiency. The tritium results are acceptable for evaluation of relative age of the groundwater.

### **3.5 Waste Characterization, Handling, and Disposal**

Purge water from wells historically containing carbon tetrachloride at concentrations exceeding the Risk-Based Standards for Kansas (RSK) of 5 µg/L was held in containers on-site. Wastewater from the September and October monitoring events was taken to the publicly owned treatment works at Sabetha, Kansas. A sample of the wastewater from the January–March activities was analyzed by M.D. Chemical and Testing, Inc., Topeka, Kansas, on June 15, 2006. No volatile organic compounds were detected. The drummed wastewater was discharged to the ground on June 20, 2006.

Four drums of potentially contaminated subsurface soil cuttings from the Centralia well installations were stored pending analysis and disposal. Neither carbon tetrachloride nor chloroform was detected at a detection limit of 0.05 mg/kg in a composite sample analyzed by M.D. Chemical and Testing, Inc., on June 7, 2006. In accordance with KDHE special waste disposal authorization 06-0581, the soil cuttings were taken to the Rolling Meadows landfill on June 20, 2006, for disposal.

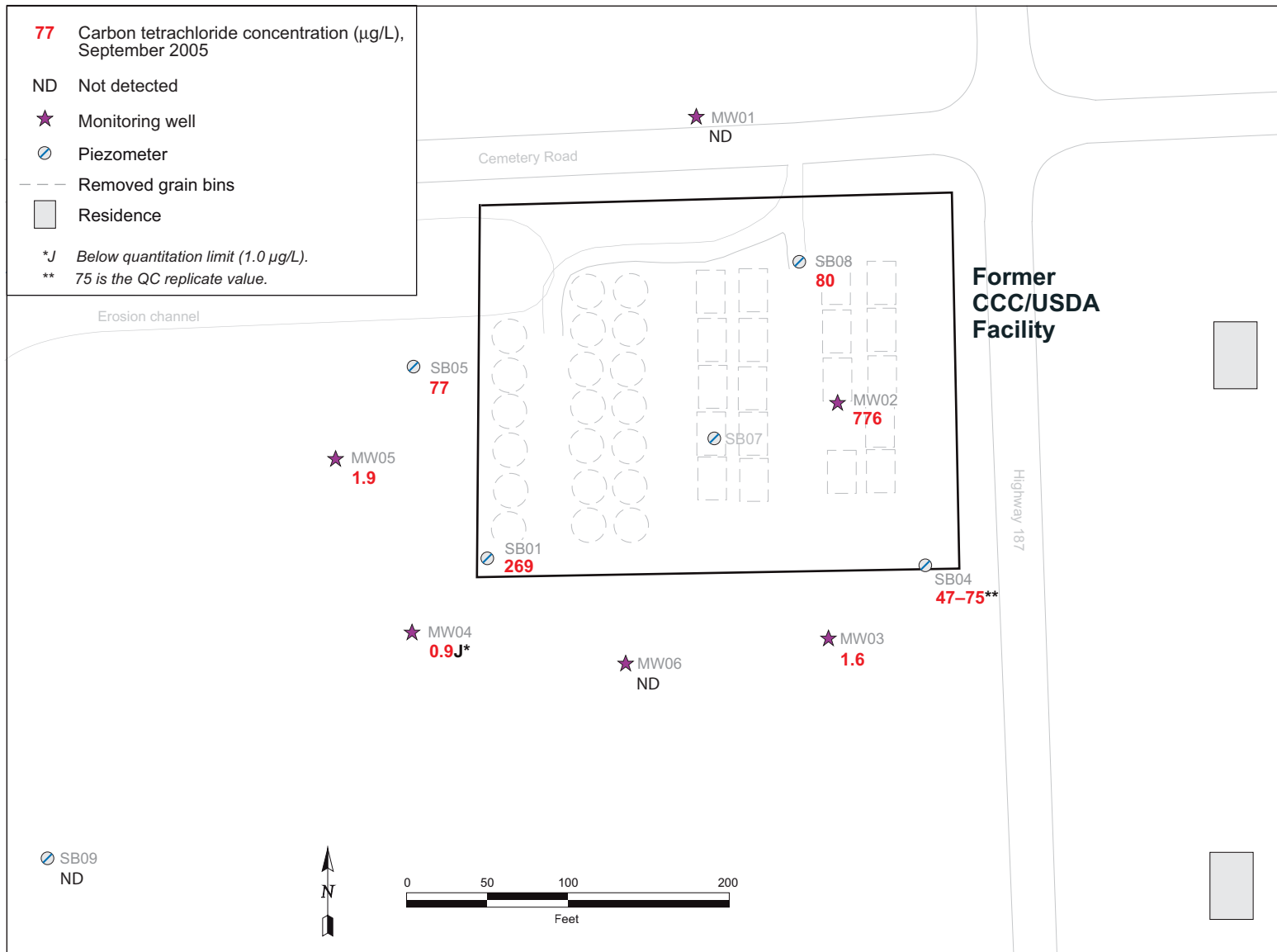


FIGURE 3.1 Carbon tetrachloride levels in groundwater at Centralia, September 2005.

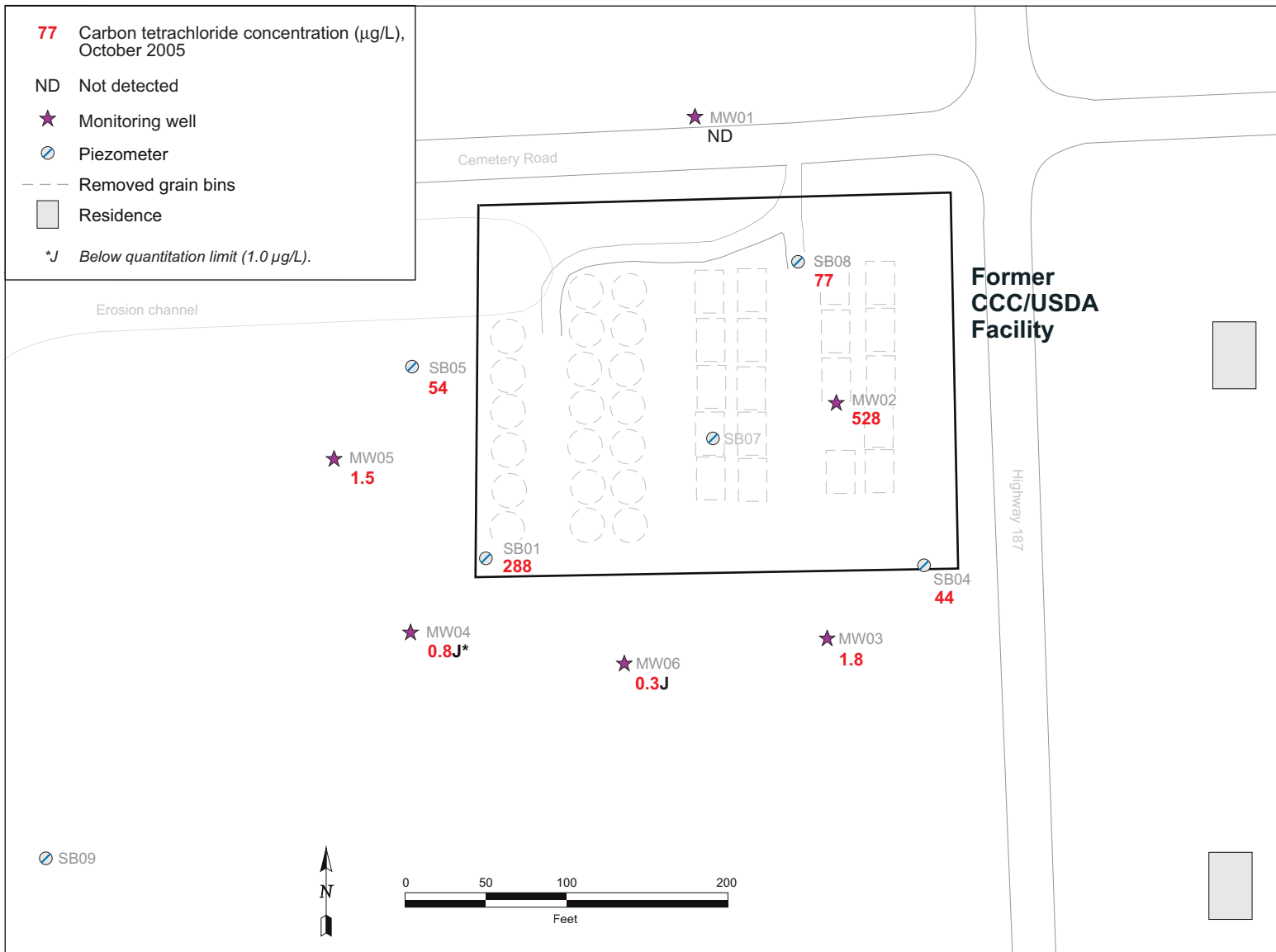


FIGURE 3.2 Carbon tetrachloride levels in groundwater at Centralia, October 2005.

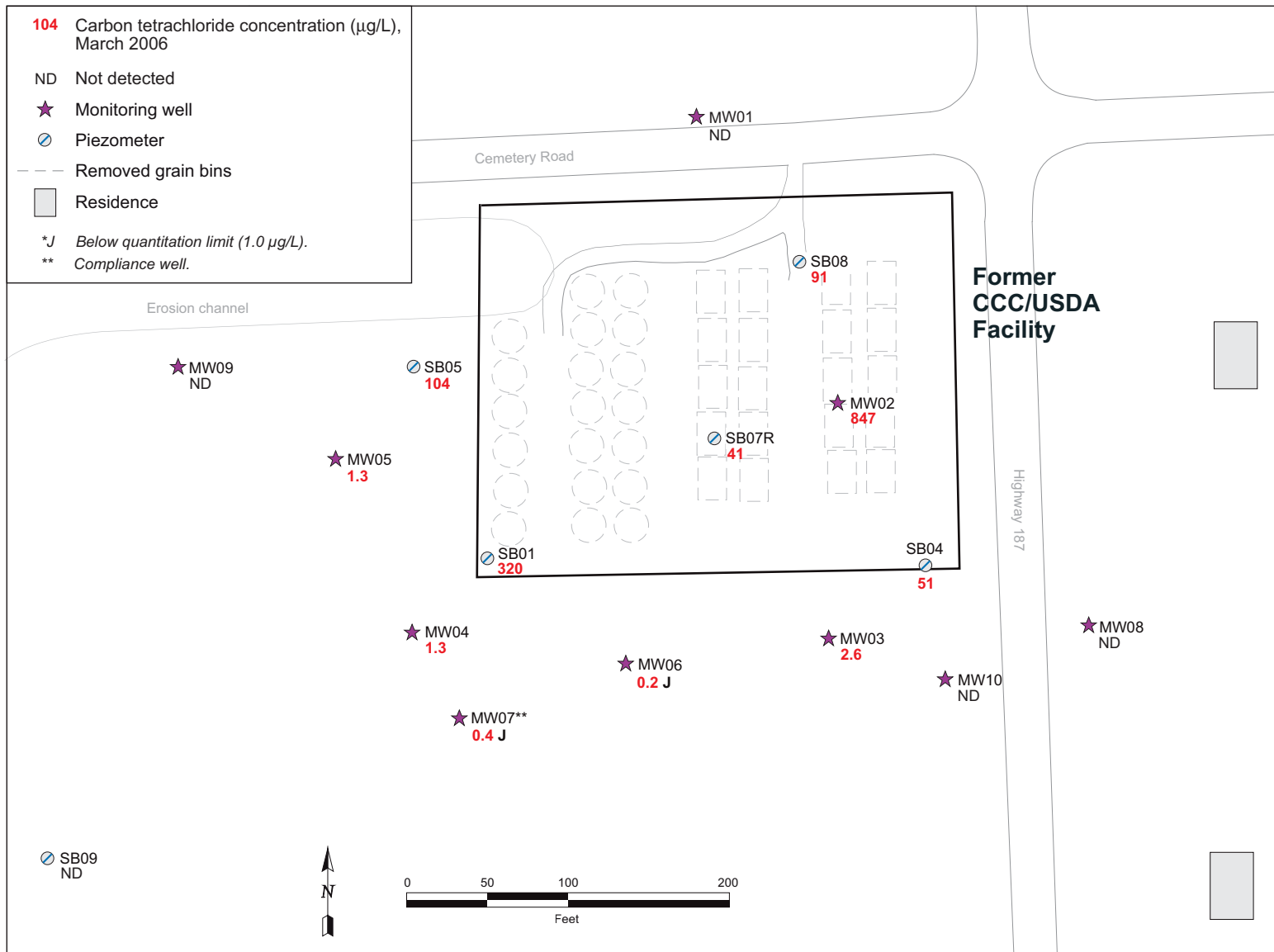


FIGURE 3.3 Carbon tetrachloride levels in groundwater at Centralia, March 2006.



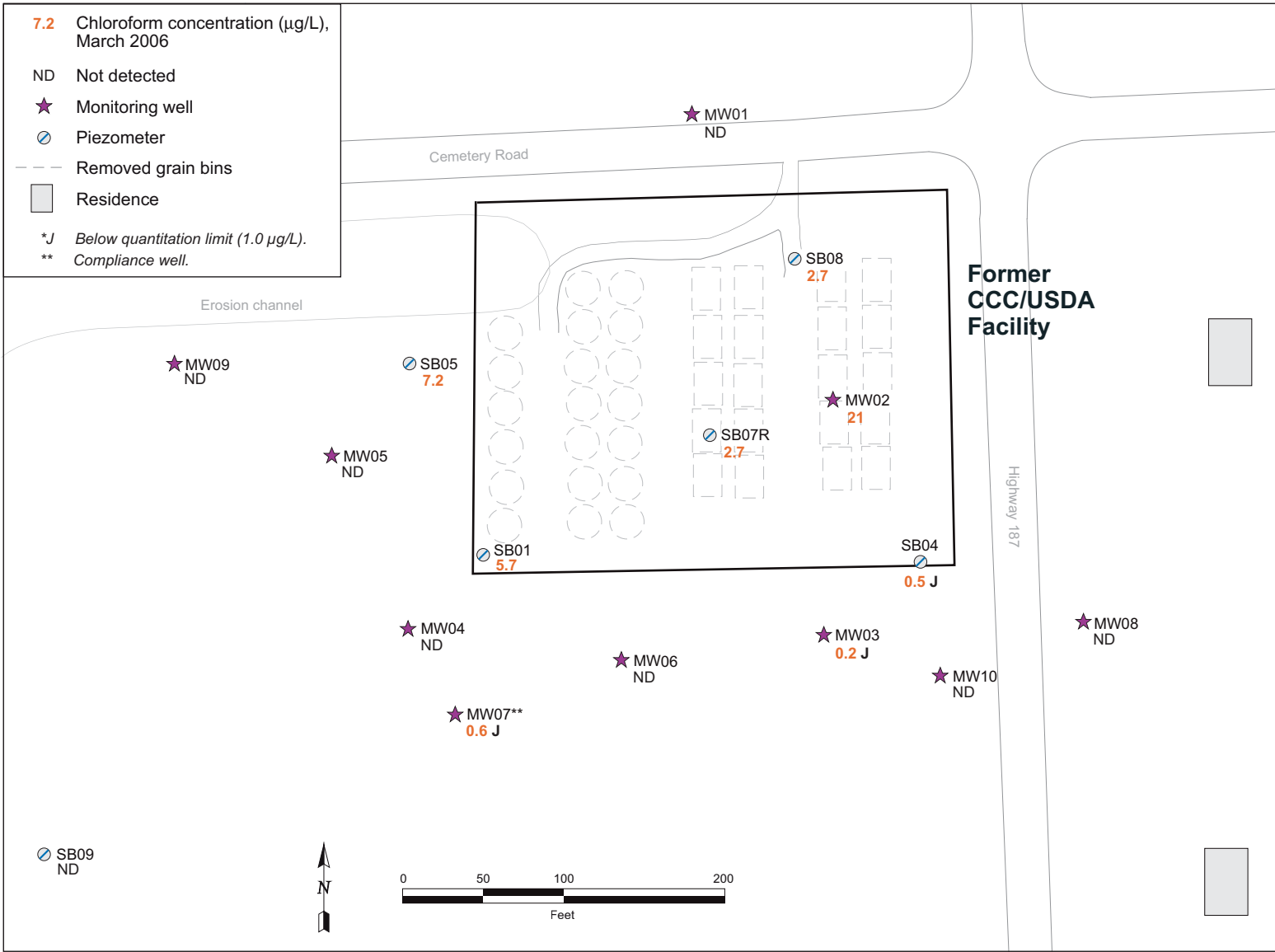


FIGURE 3.4 Chloroform levels in groundwater at Centralia, March 2006.

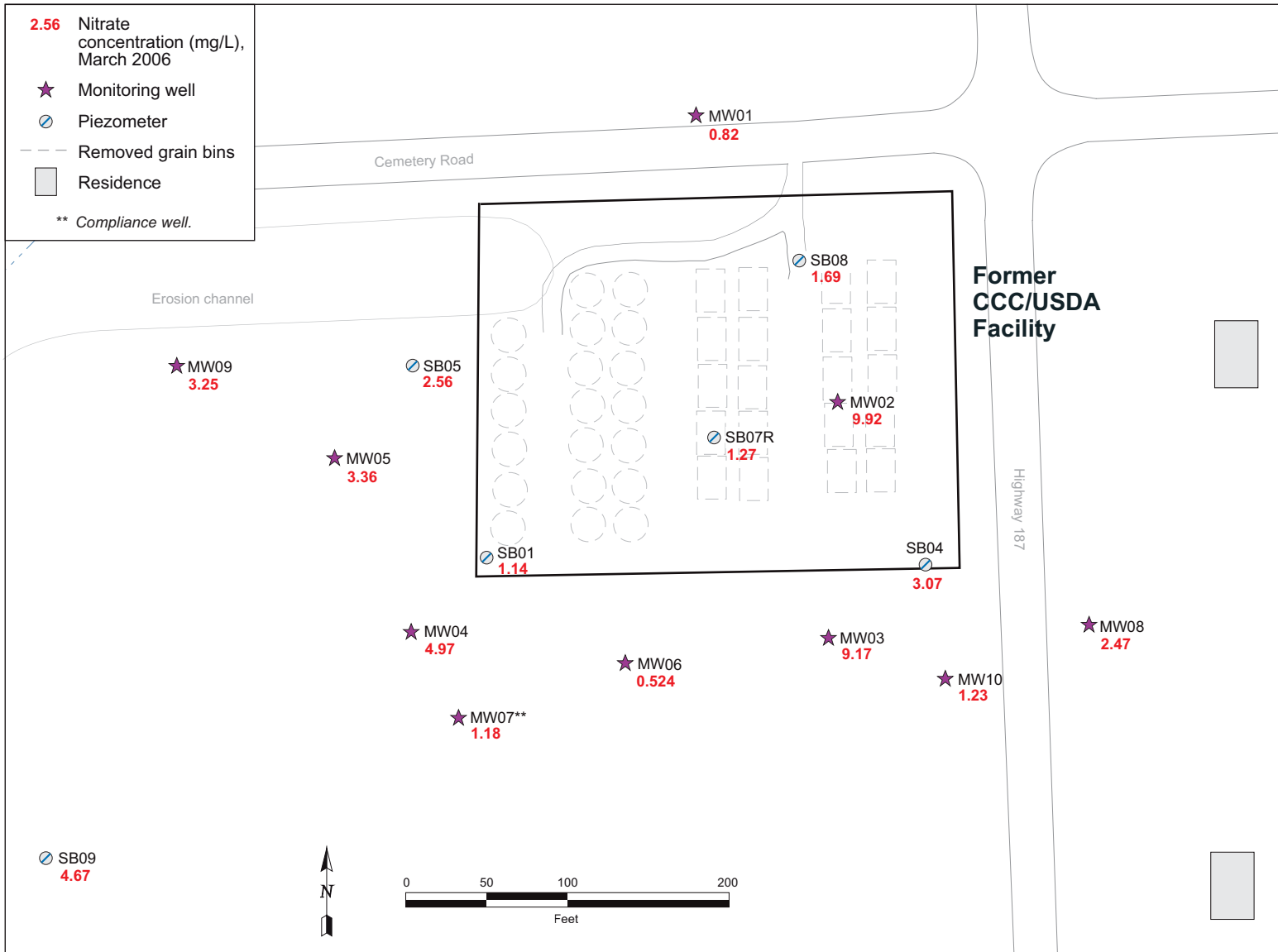


FIGURE 3.5 Nitrate levels in groundwater at Centralia, March 2006.

## 4 Interpretation of Field and Laboratory Data

### 4.1 Groundwater Level Data

The potentiometric surface at Centralia, based on manual measurements on September 24, 2005, March 14–17, 2006, and June 16, 2006, is depicted in Figures 4.1, 4.2, and 4.3, respectively. Overall, the recent results are consistent with each other and with previous measurements (Figure 4.1 in Argonne 2005b), indicating a groundwater flow direction generally toward the south-southwest from the former CCC/USDA facility. The continued monitoring has shown that the relatively high water level at SB09, which initially appeared anomalous, is a persistent feature of the groundwater flow pattern.

The results of long-term water level monitoring in wells MW01–MW06, from August 31, 2004, to June 16, 2006, are summarized in Figure 4.4. The traces for MW01 and (especially) MW05 show distinct, transient and seasonal water level variations. These wells are north and west of the former CCC/USDA facility boundary, respectively. In contrast, the traces for MW04 and MW06 (southwest and south of the former facility boundary) show virtually no response to these events. (The very sharp downward spikes on some traces are artifacts corresponding to sampling events, when the recorders were pulled from the wells.)

### 4.2 Delineation of Contaminants in Groundwater

#### 4.2.1 Carbon Tetrachloride

In the September 2005 sampling (Figure 3.1), carbon tetrachloride was detected at 8 of the 11 monitoring locations, at concentrations ranging from  $< 1 \mu\text{g/L}$  (1 location) to a maximum  $776 \mu\text{g/L}$  at well MW02. This concentration is far above the RSK value of  $5 \mu\text{g/L}$ . The concentration found at MW02 represented a significant increase from the previous value of  $215 \mu\text{g/L}$  at that location in August 2004.

In confirmatory sampling in October 2005 (Figure 3.2), carbon tetrachloride was detected at 9 of the 11 monitoring locations. Concentrations at 2 locations were  $< 1 \mu\text{g/L}$ , and the maximum of  $528 \mu\text{g/L}$  again occurred at well MW02. A notable observation was the detection,

for the first time, of carbon tetrachloride at MW06, which had previously been interpreted as lying south of the contaminant plume.

In March 2006 (Figure 3.3), carbon tetrachloride was detected at 11 of 16 monitoring locations, at concentrations ranging from  $< 1 \mu\text{g/L}$  (2 locations) to a maximum concentration of  $847 \mu\text{g/L}$  at well MW02. A trace level of carbon tetrachloride was again found at well MW06. Moreover, a trace level of the contaminant was found at MW07, which had been designated the sentinel well to alert investigators to expansion of the plume (Argonne 2005c).

The combined analytical results in August 2004, September 2005, October 2005, and March 2006 indicate an increase in contaminant levels and expansion of the carbon tetrachloride plume toward the south and west, in the direction of groundwater flow (Section 4.1). The interpreted lateral extent of the carbon tetrachloride contamination in March 2006 is illustrated in Figure 4.5, together with the August 2004 interpretation.

#### 4.2.2 Chloroform

In the September 2005 sampling, chloroform was detected at 5 of the 11 monitoring locations, at concentrations ranging from  $< 1 \mu\text{g/L}$  (1 location) to a maximum of  $33 \mu\text{g/L}$  at well MW02. This concentration is below the RSK value of  $100 \mu\text{g/L}$  for chloroform. Chloroform is a breakdown product of carbon tetrachloride.

In confirmatory sampling in October 2005, chloroform was again detected at 5 of the 11 monitoring locations. The concentration at 1 location was again  $< 1 \mu\text{g/L}$ , and the maximum of  $21 \mu\text{g/L}$  again occurred at well MW02.

In March 2006 (Figure 3.4), chloroform was detected at 8 of 16 monitoring locations, at concentrations ranging from  $< 1 \mu\text{g/L}$  (2 locations) to a maximum concentration of  $21 \mu\text{g/L}$  at well MW02.

The presence of the breakdown product chloroform at concentrations of  $5.5 \mu\text{g/L}$  to  $33 \mu\text{g/L}$  at locations MW02, SB01, and SB05 in all three 2005–2006 sampling events suggests that carbon tetrachloride is being degraded at these locations. The higher chloroform levels at

MW02 (33 µg/L, 21 µg/L, and 21 µg/L, respectively, in the three events) are particularly indicative of degradation.

#### 4.2.3 Nitrate

Nitrate was detected in the March 2006 sampling at 16 of 16 monitoring locations (Figure 3.5), at concentrations ranging from < 1 mg/L (2 locations) to a maximum concentration of 9.92 mg/L at MW02. This concentration does not exceed the RSK value of 10 mg/L. These results are consistent with results of the September and October 2005 monitoring (Table 3.1). The nitrate levels in groundwater are not associated with activities of the CCC/USDA.

### 4.3 Preliminary Screening for Anaerobic Biodegradation Processes

Results for the analytical parameters identified in Section 2.2 were used in a preliminary screening of the site to aid in determining whether the *in situ* conditions there are appropriate for anaerobic biodegradation. Long-term monitoring data would be required for a definitive determination of the importance of biodegradation at Centralia, but examining the results of the present sampling for evidence that *in situ* conditions are amenable for biodegradation is valuable nevertheless.

The methodology used in this preliminary evaluation of biodegradation for the Centralia site was presented by the EPA (1998a). This protocol examines the results of the groundwater parameter analyses to establish evidence that anaerobic biodegradation is taking place via reductive dechlorination — only one of the processes by which carbon tetrachloride is biodegraded. Degradation of carbon tetrachloride is also known to take place via a reductive denitrification cometabolic pathway, as discussed by ITRC (2002). However, this initial examination evaluates the evidence for reductive dechlorination on the basis of the EPA (1998a) protocol.

The commonly used EPA protocol is based on the premise that biodegradation causes predictable changes in groundwater chemistry. The March 2006 analytical results for samples from wells MW01–MW10 and piezometers SB01, SB04, SB05, SB07R, SB08, and SB09 were evaluated by using the EPA protocol. The results are in Table 4.1.

“Limited evidence” for anaerobic biodegradation of carbon tetrachloride (scores of 6–14 in the scale used in Table 4.1) was identified at locations MW02, MW07, SB04, SB05, and SB08. Though the data density and distribution could affect the screening results to an extent, the available evidence does not suggest that better coverage would reveal a significant potential for anaerobic biodegradation of carbon tetrachloride at the Centralia site.

TABLE 4.1 Scoring of biodegradation processes at Centralia — March 2006 data.<sup>a</sup>

Constituent	Units	MW01		MW02		MW03		MW04		MW05		MW06		MW07		MW08	
		Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points
Dissolved Oxygen	mg/L	9.33	-3	1.24	0	9.39	0	6.82	-3	0.9	0	9.87	-3	0.34	3	5.32	-3
Nitrate	mg/L	0.82	2	9.92	0	9.17	0	4.97	0	3.36	0	0.524	2	1.18	0	2.47	0
Iron(II)	mg/L	0.04	0	0	0	0	0	0.06	0	0.06	0	0.02	0	0.03	0	0	0
Sulfate	mg/L	6.3	2	12.2	2	9.15	2	6.38	2	5.17	2	5	2	28.5	0	14.4	2
Sulfide	mg/L	< 0.02	0	0.0381	0	<0.02	0	0.0794	0	< 0.02	0	< 0.02	0	< 0.02	0	< 0.02	0
Methane	mg/L	< 0.002	0	0.034	0	< 0.002	0	0.051	0	< 0.002	0	0.0023	0	< 0.002	0	< 0.002	0
ORP	mV	297	0	295	0	290	0	283	0	156	0	263	0	143	0	145	0
pH	–	7.56	0	6.78	0	6.75	0	7.78	0	6.9	0	7.38	0	6.61	0	6.35	0
Total Organic Carbon	mg/L	6.19	0	3.57	0	1.23	0	5.07	0	5.54	0	4.12	0	35.4	2	9	0
Temperature	°C	14.3	0	14.2	0	13.8	0	13.5	0	14.3	0	14.1	0	14.7	0	13.5	0
Carbon Dioxide <sup>b</sup>	mg/L	30	0	NR <sup>c</sup>	–	77	1	55	0	30	0	35	0	NR	–	NR	–
Alkalinity <sup>b</sup>	mg/L	325	0	364	0	353	0	337	0	304	0	343	0	299	0	342	0
Chloride <sup>b</sup>	mg/L	14.9	0	8.45	0	24	0	11.9	0	9.66	0	8.98	0	8.72	0	47.4	2
Dissolved Hydrogen	nM	NA <sup>d</sup>	–	3.1 <sup>e</sup>	3	NA	–	NA	–	NA	–	NA	–	NA	–	NA	–
Chloroform	µg/L	ND <sup>f</sup>	0	21	2	0.2 J <sup>g</sup>	2	ND	0	ND	0	ND	0	0.6 J	2	ND	0
Dichloromethane (methylene chloride)	µg/L	ND	0	ND	0	ND	0	ND	0	ND	0	ND	0	ND	0	ND	0
Total points =>		1		7		5		-1		2		1		7		1	

TABLE 4.1 (Cont.)

Constituent	Units	MW09		MW10		SB01		SB04		SB05		SB07R		SB08		SB09	
		Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points	Conc.	Points
Dissolved Oxygen	mg/L	0.95	0	6.42	-3	5.98	-3	5.96	-3	4.8	0	7.41	-3	3.4	0	1.53	0
Nitrate	mg/L	3.25	0	1.23	0	1.14	0	3.07	0	2.56	0	1.27	0	1.69	0	4.67	0
Iron(II)	mg/L	0.09	0	0	0	0	0	NR	–	0.18	0	0.08	0	0	0	0	0
Sulfate	mg/L	6.23	2	10.8	2	4.87	2	5.98	2	2.96	2	16.8	2	9.25	2	38.8	0
Sulfide	mg/L	< 0.02	0	< 0.02	0	< 0.02	0	< 0.02	0	< 0.02	0	< 0.02	0	< 0.02	0	< 0.02	0
Methane	mg/L	< 0.002	0	< 0.002	0	< 0.002	0	< 0.002	0	< 0.002	0	< 0.002	0	< 0.002	0	< 0.002	0
ORP	mV	214	0	166	0	185	0	276	0	253	0	83	0	246	0	206	0
pH	–	7.33	0	6.6	0	7.3	0	7.57	0	7.67	0	7.24	0	7.14	0	7.03	0
Total Organic Carbon	mg/L	10.7	0	7.96	0	8.97	0	3.78	0	4.97	0	11.2	0	5.99	0	6.88	0
Temperature	°C	17.7	0	14.8	0	12.4	0	13	0	13.3	0	16.8	0	12.9	0	11.7	0
Carbon Dioxide <sup>b</sup>	mg/L	55	0	65	1	55	0	30	0	40	0	60	1	40	0	99	1
Alkalinity <sup>b</sup>	mg/L	329	0	298	0	338	0	371	0	324	0	318	0	327	0	495	0
Chloride <sup>b</sup>	mg/L	6.39	0	74.3	2	22.5	0	40	2	57.1	2	30.4	2	19.3	0	15.6	0
Dissolved Hydrogen	nM	NA	–	NA	–	71 <sup>a</sup>	3	24 <sup>a</sup>	3	11 <sup>a</sup>	3	NA	–	6.1 <sup>a</sup>	3	NA	–
Chloroform	µg/L	ND	0	ND	0	5.7	2	0.5 <sup>J</sup>	2	7.2	2	2.7	2	2.7	2	ND	0
Dichloromethane (methylene chloride)	µg/L	ND	0	ND	0	ND	0	ND	0	ND	0	ND	0	ND	0	ND	0
Total points =>			2	2	4	6	9	4	7	1							

<sup>a</sup> Scoring is based on results for samples collected in March 2006. Points are interpreted as follows (EPA 1998a):

- 0–5 Inadequate evidence for reductive dechlorination.
- 6–14 Limited evidence for reductive dechlorination.**
- 15–20 Adequate evidence for reductive dechlorination.
- > 20 Strong evidence for reductive dechlorination.

<sup>b</sup> For evaluation of alkalinity, carbon dioxide, and chloride, MW01 (because of its location) was selected to represent background levels. For these constituents, points are awarded when the concentration is greater than twice the background concentration.

<sup>c</sup> NR, not recorded.

<sup>d</sup> NA, not analyzed for dissolved hydrogen in March 2006.

<sup>e</sup> Dissolved hydrogen result from September 2005 sampling.

<sup>f</sup> ND, not detected at an instrument detection limit of 0.1 µg/L.

<sup>g</sup> Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L.



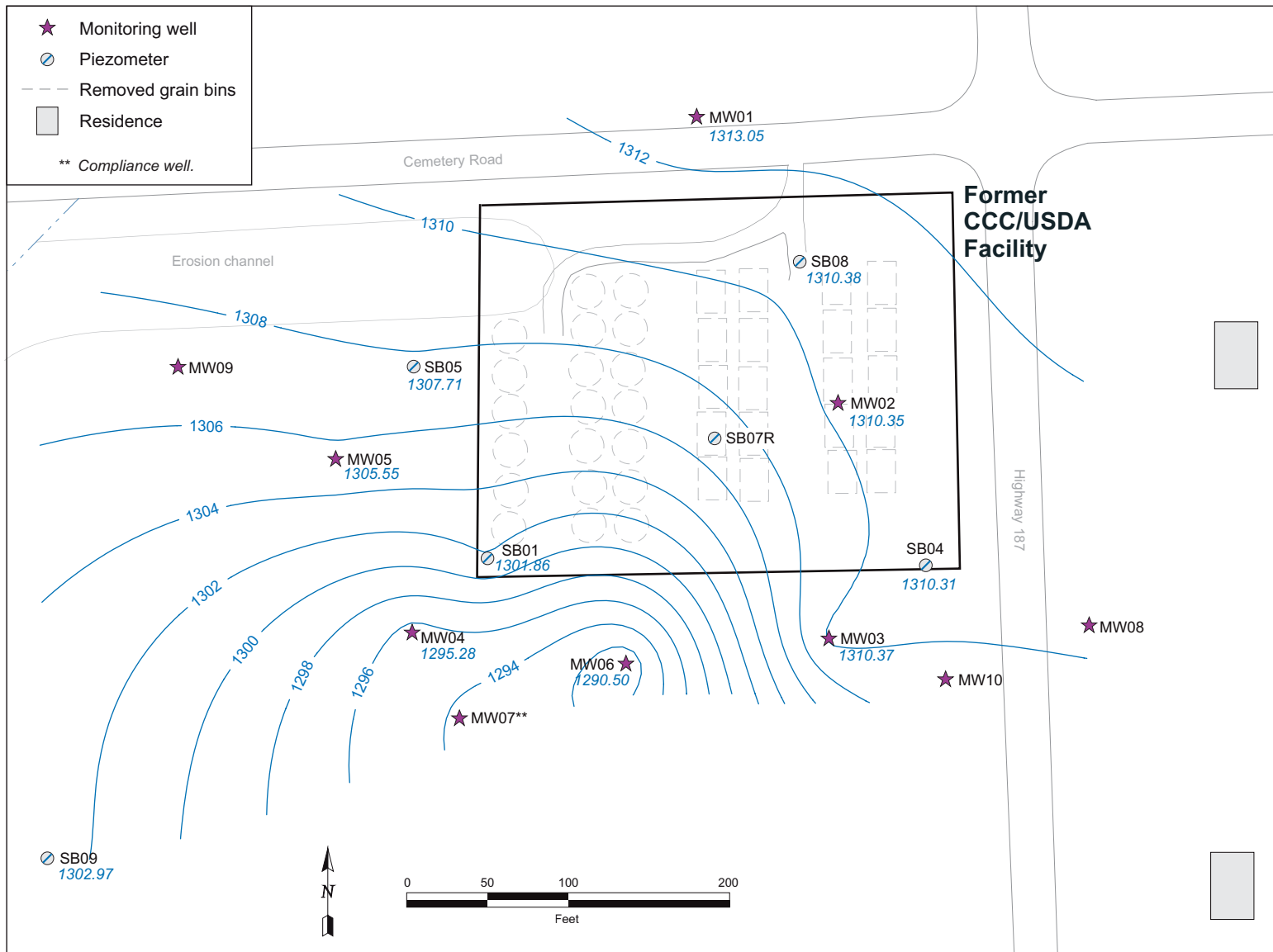


FIGURE 4.1 Potentiometric surface at Centralia, based on water levels measured manually on September 24, 2005.

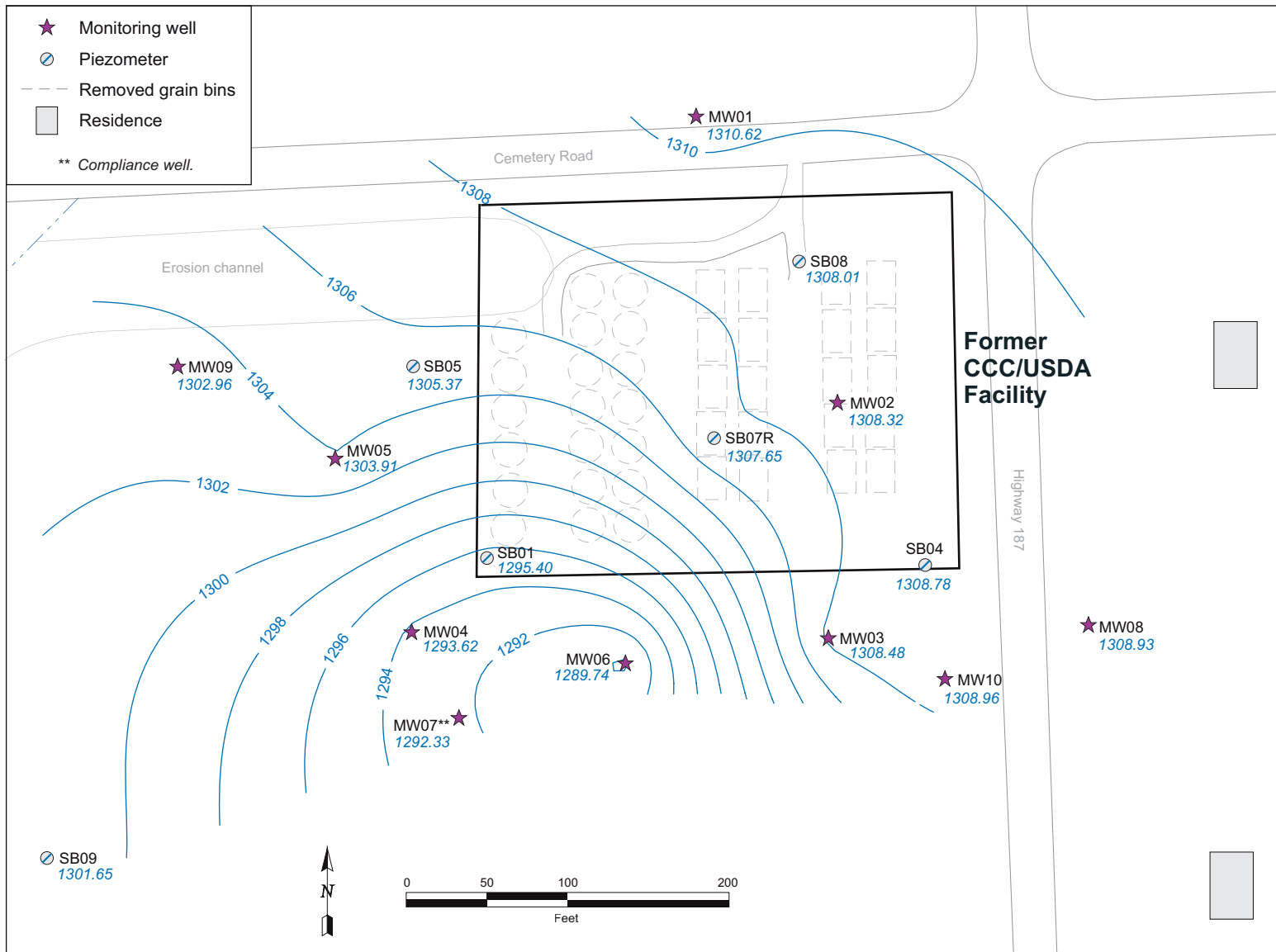


FIGURE 4.2 Potentiometric surface at Centralia, based on water levels measured manually on March 14–17, 2006.

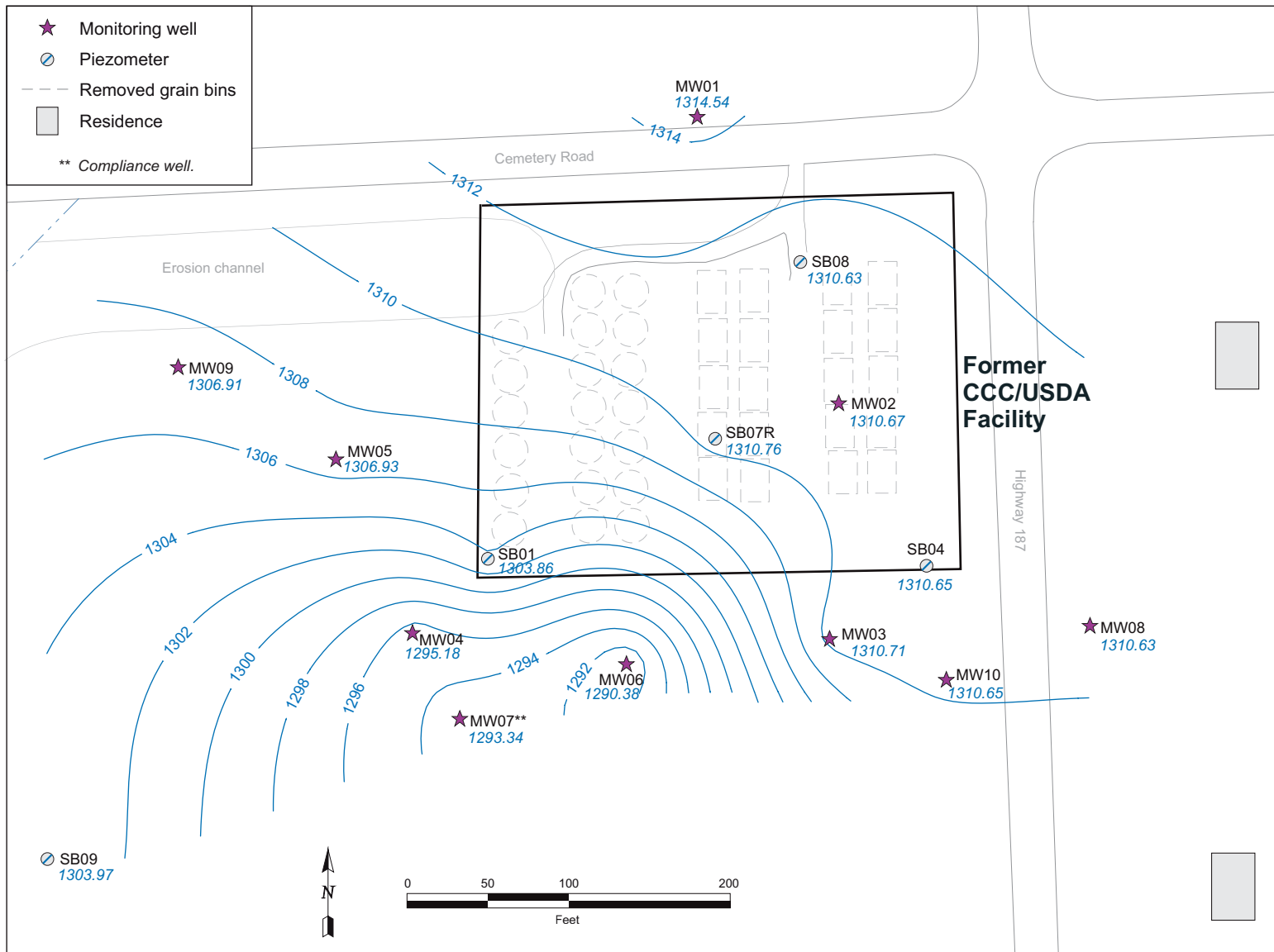


FIGURE 4.3 Potentiometric surface at Centralia, based on water levels measured manually on June 16, 2006.

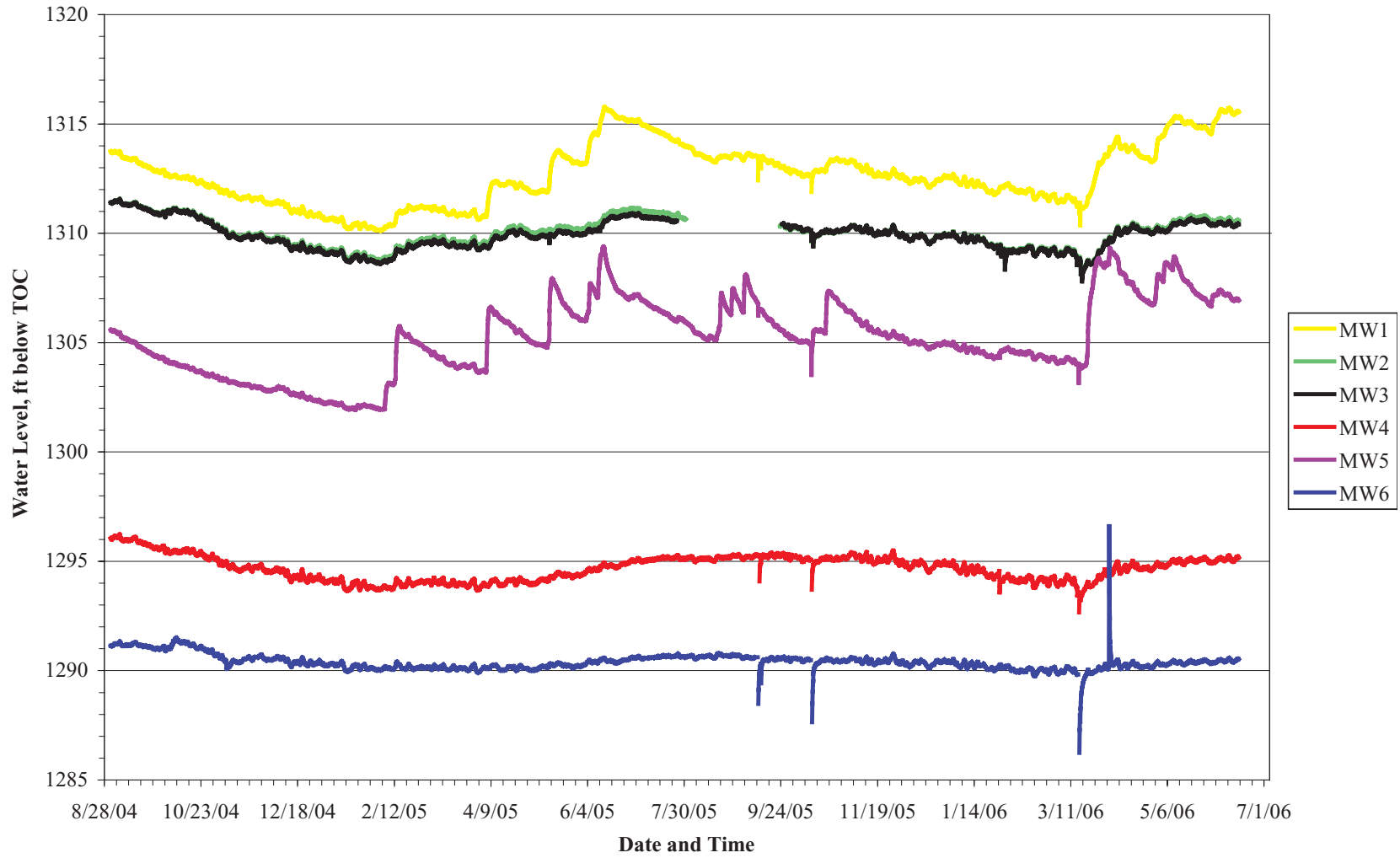


FIGURE 4.4 Hydrographs summarizing results of long-term water level monitoring in wells MW01–MW06 at Centralia from August 31, 2004, to June 16, 2006.

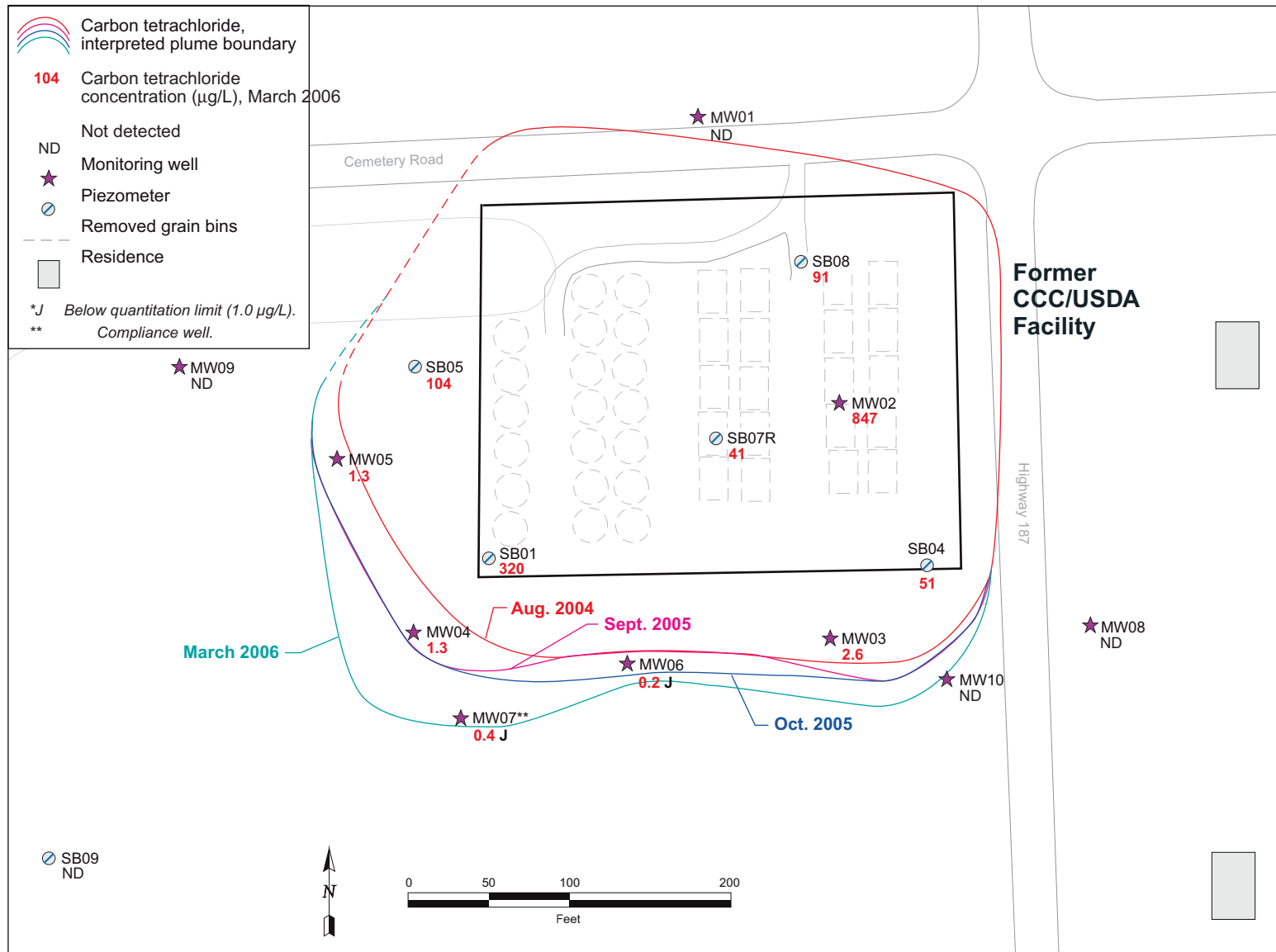


FIGURE 4.5 Lateral extent of the carbon tetrachloride contamination in groundwater at Centralia, as interpreted on the basis of sampling and analyses in March 2006, with the interpreted lateral extent as of August 2004, September 2005, and October 2005.

## 5 Conclusion and Recommendations

### 5.1 Conclusions

The findings of the September–October 2005 and March 2006 monitoring events at Centralia support the following conclusions:

- The September–October 2005 results indicated that the groundwater plume at Centralia was expanding and that additional monitoring wells were needed.
- The March 2006 results, gathered after expansion of the monitoring network in January 2006, showed further increases in contaminant levels and further expansion of the carbon tetrachloride plume toward the south and west from the former CCC/USDA facility.
- Hand-measured groundwater levels on September 24, 2005, March 14–17, 2006, and June 16, 2006, were consistent with each other, as well as with results from August 31, 2004, in indicating a groundwater flow direction generally to the south-southwest from the former CCC/USDA facility. The relatively high water level at SB09, southwest of the former CCC/USDA facility, is a persistent feature of the groundwater flow pattern and not an artifact of the measurements.
- Long-term measurements of groundwater levels in wells MW01–MW06, from August 31, 2004, to June 16, 2006, indicate that water levels in two wells (MW01 and MW05) north and west of the former CCC/USDA facility boundary respond distinctly to apparent rainfall/recharge events. In contrast, levels in two wells (MW06 and MW04) south and southwest of the former facility boundary show virtually no response.
- Preliminary screening of groundwater parameters provided limited evidence that reductive dechlorination of carbon tetrachloride is taking place at some locations on the former CCC/USDA facility.

- The combined September–October 2005 monitoring events and the March 2006 event were the first and second in the planned series of twice yearly events, to run for at least two years (Argonne 2005a). Subsequent monitoring events would occur in September 2006, March 2007, and September 2007, in the absence of other action.

## 5.2 Recommendations

The following recommendations are based on the results reported here and previous work at Centralia:

- Active remediation alternatives should be evaluated for implementation at the Centralia site, to address the observed increases in carbon tetrachloride values through time and the apparent southward and westward expansion of contaminated groundwater. This process should begin before the end of the two-year monitoring program in 2007.
- The following factors should be considered in the evaluation of remedial alternatives for the Centralia site:
  - The absence of downgradient receptors.
  - Needs of the current landowner.
  - Implementation of institutional controls.

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**Appendix A:**

**Well Construction Diagrams  
and Registration Forms**

# Monitor Well Installation (MW-07)

## Centralia, KS

NE, NE, NE of Section 1, Township 4 South, Range 11 East

Nemaha County, Kansas

01/27/06

### WELL HEAD PROTECTION

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing is fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

### CONCRETE PAD

Is a minimum of 8" thick and extends at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allows for placement of a surveyor pin.

### IMPERVIOUS GROUT

The well is grouted with High Solids Bentonite grout, tremied as required, mixed with clean fresh water and having a minimum density of 9.4 lbs. per gallon and Neat Cement with a density 15.5 lbs per gallon.

### WELL CASING

Well casing is terminate as high as possible inside the Flush Mount and is capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock.

### HOLE SIZE

The hole is 8¼" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

### GRAVEL / SAND PACK

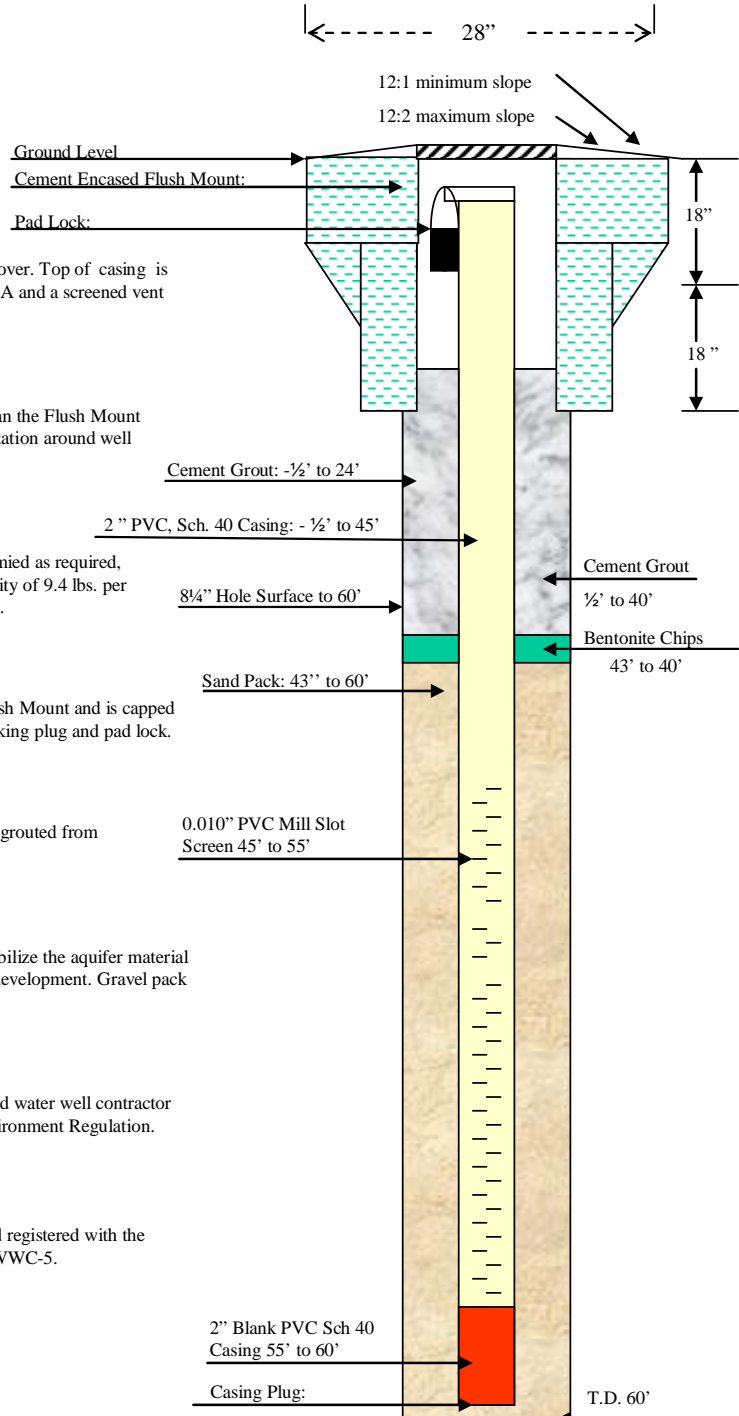
Gravel / Sand Pack is of 10/20 sand and is designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length of the screen and 2' above the screen.

### CONTRACTOR LICENSING

All wells were constructed under the direction of a licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

### REGISTRATION

The well was constructed by a licensed Kansas Driller and registered with the Kansas Department of Health and Environment on form WWC-5.



(NOT TO SCALE)

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**WATER WELL RECORD Form WWC-5 KSA 82a-1212 ID No.**

LOCATION OF WATER WELL: County: <u>Nebraska</u>	Fraction <u>NE 1/4 NE 1/4 NE 1/4</u>	Section Number <u>1</u>	Township Number <u>T 4 S</u>	Range Number <u>R 11 E</u>
--	---	----------------------------	---------------------------------	-------------------------------

Distance and direction from nearest town or city street address of well if located within city?  
Centralia, KS 1/4 mile north of town SW of Cemetery Road & Highway 187 MW-07

WATER WELL OWNER: USDA/CCC

RR#, St. Address, Box # : Stop 0513 - Room 477.6  
City, State, ZIP Code : 1409 Independence Ave SW Washington, DC 20250

Board of Agriculture, Division of Water Resources  
Application Number: \_\_\_\_\_

LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

	N	
	X	
NW		NE
W		E
	S	

DEPTH OF COMPLETED WELL: 60 ft. ELEVATION: \_\_\_\_\_ ft.

Depth(s) Groundwater Encountered 1 \_\_\_\_\_ ft. 2 \_\_\_\_\_ ft. 3 \_\_\_\_\_ ft.

WELL'S STATIC WATER LEVEL \_\_\_\_\_ ft. below land surface measured on mo/day/yr \_\_\_\_\_

Pump test data: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm

Est. Yield \_\_\_\_\_ gpm: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm

WELL WATER TO BE USED AS:  
1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)  
2 Irrigation 4 Industrial 7 Domestic (lawn & garden)  Monitoring well

Was a chemical/bacteriological sample submitted to Department? Yes \_\_\_\_\_ No \_\_\_\_\_; If yes, mo/day/yr sample was submitted \_\_\_\_\_

Water Well Disinfected? Yes \_\_\_\_\_ No \_\_\_\_\_

TYPE OF BLANK CASING USED:

1 Steel	3 RMP (SR)	5 Wrought iron	8 Concrete tile	CASING JOINTS: Glued _____ Clamped _____
<input checked="" type="checkbox"/> PVC	4 ABS	6 Asbestos-Cement	9 Other (specify below)	Welded _____
		7 Fiberglass		Threaded <u>1/2" x 3/8"</u>

Blank casing diameter \_\_\_\_\_ in. to \_\_\_\_\_ in. Dia \_\_\_\_\_ ft. Dia \_\_\_\_\_ in. to \_\_\_\_\_ in. Dia \_\_\_\_\_ ft.

Casing height above land surface \_\_\_\_\_ in., weight \_\_\_\_\_ lbs./ft. Wall thickness or gauge No. sch 40

TYPE OF SCREEN OR PERFORATION MATERIAL:

1 Steel	3 Stainless Steel	5 Fiberglass	<input checked="" type="checkbox"/> PVC	10 Asbestos-Cement
2 Brass	4 Galvanized Steel	6 Concrete tile	8 RMP (SR)	11 Other (Specify) _____
			9 ABS	12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE:

1 Continuous slot	<input checked="" type="checkbox"/> Mill slot	5 Gauzed wrapped	8 Saw cut	11 None (open hole)
2 Louvered shutter	4 Key punched	6 Wire wrapped	9 Drilled holes	
		7 Torch cut	10 Other (specify) _____	

SCREEN-PERFORATED INTERVALS: From 45' ft. to 55' ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

GRAVEL PACK INTERVALS: From 43' ft. to 60' ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

6 GROUT MATERIAL:  Neat cement 2 Cement grout  Bentonite 4 Other \_\_\_\_\_

Grout intervals: From 43' ft. to 40' ft. From 40' ft. to 20' ft. From 20' ft. to 3' Unpacked ft.

What is the nearest source of possible contamination:

1 Septic tank	4 Lateral lines	7 Pit privy	10 Livestock pens	14 Abandoned water well
2 Sewer lines	5 Cess pool	8 Sewage lagoon	11 Fuel storage	15 Oil well/Gas well
3 Watertight sewer lines	6 Seepage pit	9 Feedyard	12 Fertilizer storage	16 Other (specify below)
			13 Insecticide storage	

Direction from well? \_\_\_\_\_ How many feet? \_\_\_\_\_

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
<u>0</u>	<u>35'</u>	<u>Brown Clay some silt</u>			
<u>35'</u>	<u>45'</u>	<u>light Brown clay</u>			
<u>45'</u>	<u>55'</u>	<u>Gray Clay</u>			
<u>55'</u>	<u>60'</u>	<u>Yellow Sand</u>			

CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was  constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 11/28/06 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's Licence No 6-58 This Water Well Record was completed on (mo/day/yr) 3/16/06 under the business name of Boart Longyear Company by (signature) [Signature]

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send two copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-261-5622. Send one to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each duplicate well.

**Monitor Well Installation (MW-08)**  
**Centralia, KS**  
**NW, NW, SW of Section 6, Township 4 South, Range 12 East**  
**Mitchell County, Kansas**  
**01/29/06**

**WELL HEAD PROTECTION**

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing is fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

**CONCRETE PAD**

Is a minimum of 8" thick and extends at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allows for placement of a surveyor pin.

**IMPERVIOUS GROUT**

The well is grouted with High Solids Bentonite grout, tremied as required, mixed with clean fresh water and having a minimum density of 9.4 lbs. per gallon and Neat Cement with a density 15.5 lbs per gallon.

**WELL CASING**

Well casing is terminate as high as possible inside the Flush Mount and is capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock.

**HOLE SIZE**

The hole is 8¼" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

**GRAVEL / SAND PACK**

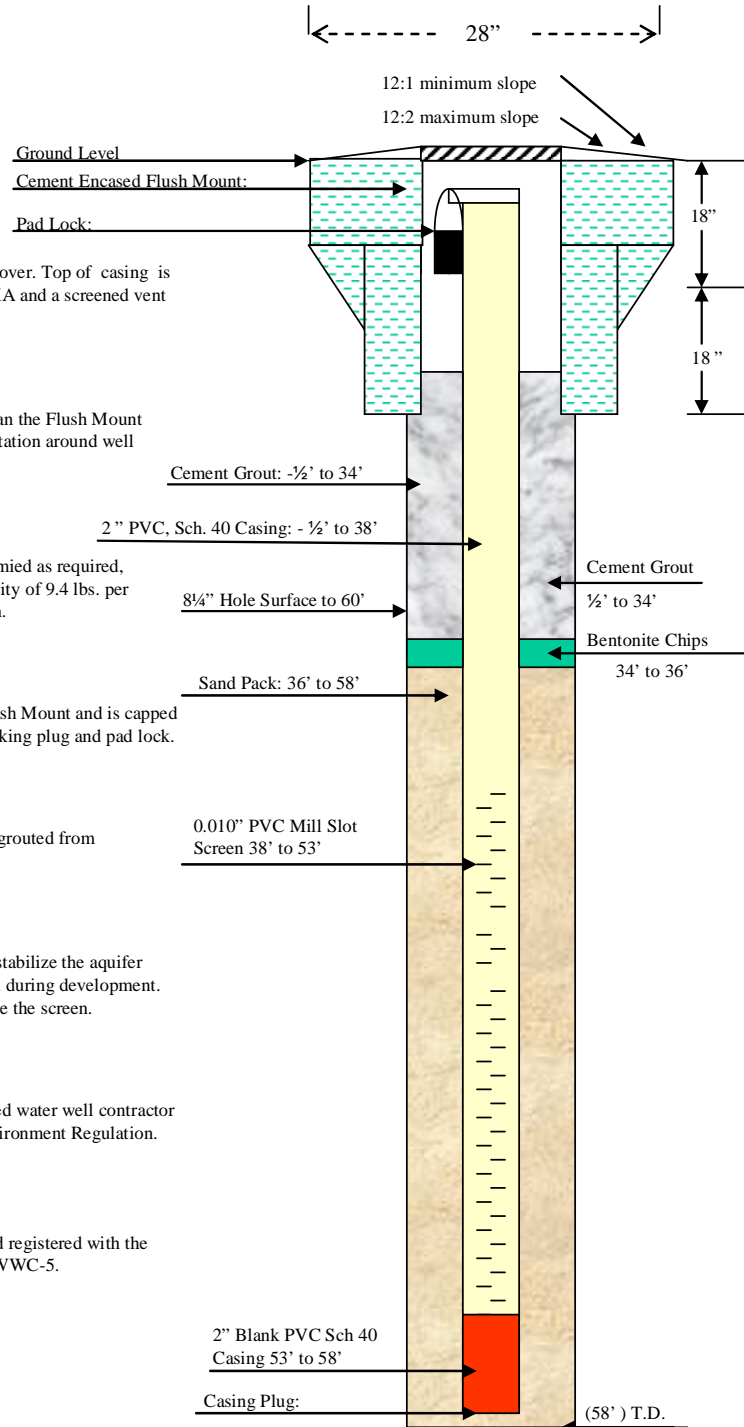
Gravel / Sand Pack is of 10/20 sand and was designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length of the screen and 2' above the screen.

**CONTRACTOR LICENSING**

All wells were constructed under the direction of a licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

**REGISTRATION**

The well was constructed by a licensed Kansas Driller and registered with the Kansas Department of Health and Environment on form WWC-5.



(NOT TO SCALE)

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BOART LONGYEAR

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WATER WELL RECORD Form WWC-5 KSA 82a-1212 ID No. \_\_\_\_\_

**LOCATION OF WATER WELL:** Fraction NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> Section Number 6 Township Number T 4 S Range Number R 12 E  
 County: Mitchell

Distance and direction from nearest town or city street address of well if located within city?  
Centralia, KS, 1/4 mile north of town SE. of Cemetery Road & Highway 187 MW-08

**WATER WELL OWNER:** USDA/CCC  
 P.O. St. Address, Box #: stop 0513 - Room 4725 Board of Agriculture, Division of Water Resources  
 City, State, ZIP Code: Washington DC 20250 Application Number: \_\_\_\_\_

**LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:** DEPTH OF COMPLETED WELL 58 ft. ELEVATION: \_\_\_\_\_  
 (Diagram of section box with 'X' in NW corner)

Depth(s) Groundwater Encountered 1 \_\_\_\_\_ ft. 2 \_\_\_\_\_ ft. 3 \_\_\_\_\_ ft.  
 WELL'S STATIC WATER LEVEL \_\_\_\_\_ ft. below land surface measured on mo/day/yr \_\_\_\_\_  
 Pump test data: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm  
 Est. Yield \_\_\_\_\_ gpm: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm  
 WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well  
 1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)  
 2 Irrigation 4 Industrial 7 Domestic (lawn & garden)  Monitoring well \_\_\_\_\_

Was a chemical/bacteriological sample submitted to Department? Yes \_\_\_\_\_ No \_\_\_\_\_; If yes, mo/day/yr sample was submitted Water Well Disinfected? Yes \_\_\_\_\_ No \_\_\_\_\_

**5 TYPE OF BLANK CASING USED:** 1 Steel 3 RMP (SR) 5 Wrought Iron 8 Concrete tile CASING JOINTS: Glued \_\_\_\_\_ Clamped \_\_\_\_\_  
 PVC 4 ABS 6 Asbestos-Cement 9 Other (specify below) Welded \_\_\_\_\_  
 7 Fiberglass Threaded Flash/Thread  
 Blank casing diameter \_\_\_\_\_ in. to \_\_\_\_\_ ft., Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft. Wall thickness or gauge No. Sch. 40  
 Casing height above land surface 0 in., weight \_\_\_\_\_ lbs./ft.

**TYPE OF SCREEN OR PERFORATION MATERIAL:** 1 Steel 3 Stainless Steel 5 Fiberglass  PVC 10 Asbestos-Cement  
 2 Brass 4 Galvanized Steel 6 Concrete tile 8 RMP (SR) 11 Other (Specify) \_\_\_\_\_  
 9 ABS 12 None used (open hole)

**SCREEN OR PERFORATION OPENINGS ARE:** 5 Gauzed wrapped 8 Saw cut 11 None (open hole)  
 1 Continuous slot  Mill slot 6 Wire wrapped 9 Drilled holes  
 2 Louvered shutter 4 Key punched 7 Torch cut 10 Other (specify) \_\_\_\_\_

**SCREEN-PERFORATED INTERVALS:** From 38' ft. to 53' ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
**GRAVEL PACK INTERVALS:** From 36' ft. to 58' ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

**6 GROUT MATERIAL:**  Neat cement 2 Cement grout  Bentonite 4 Other \_\_\_\_\_  
 Grout Intervals: From 36' ft. to 34' ft. From 34' ft. to 20' ft. From 20' ft. to 3' ft. Neat cement  
 What is the nearest source of possible contamination: 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 14 Abandoned water well  
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 15 Oil well/Gas well  
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 16 Other (specify below)  
 Direction from well? \_\_\_\_\_ How many feet? \_\_\_\_\_

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	10'	Light Brown Clay			
10	30'	Brown Clay Some Silt			
30	50'	Dark Brown Clay Some Silt			
50	60'	Light Yellow Sand Very Fine			

**7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION:** This water well was  constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 1/24/06 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 668 This Water Well Record was completed on (mo/day/yr) 3/15/06 under the business name of Boart Longyear Company by (signature) [Signature]

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1867. Telephone 785-298-5522. Send one to WATER WELL OWNER and retain one for your records. Fee of \$6.00 for each constructed well.

## Monitor Well Installation (MW-09)

### Centralia, KS

NE, NE, SE of Section 1, Township 4 South, Range 11 East

Nemaha County, Kansas

01/29/06

#### WELL HEAD PROTECTION

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing is fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

#### CONCRETE PAD

Is a minimum of 8" thick and extends at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allows for placement of a surveyor pin.

#### IMPERVIOUS GROUT

The well is grouted with High Solids Bentonite grout, tremied as required, mixed with clean fresh water and having a minimum density of 9.4 lbs. per gallon and Neat Cement with a density 15.5 lbs per gallon.

#### WELL CASING

Well casing is terminate as high as possible inside the Flush Mount and is capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock.

#### HOLE SIZE

The hole is 8¼" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

#### GRAVEL / SAND PACK

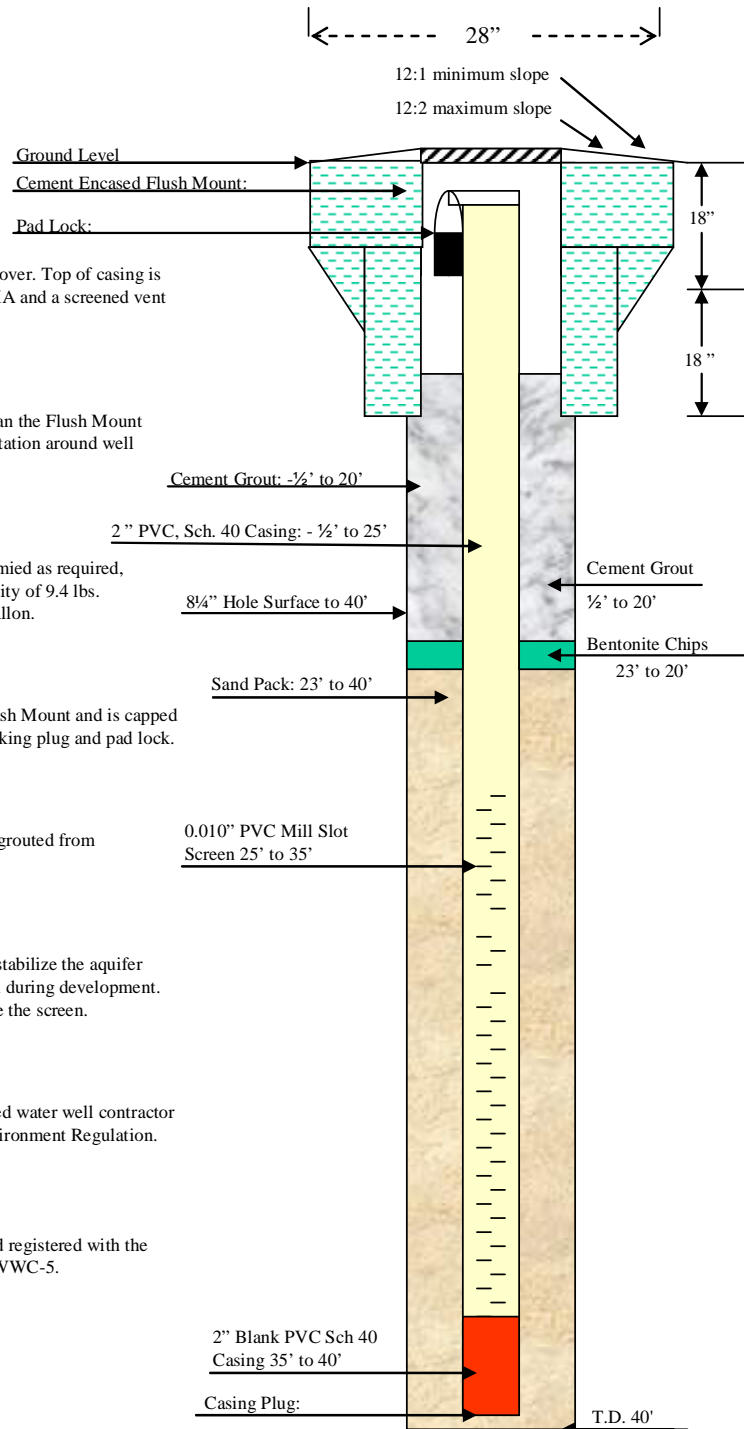
Gravel / Sand Pack is of 10/20 sand and was designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length of the screen and 2' above the screen.

#### CONTRACTOR LICENSING

All wells were constructed under the direction of a licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

#### REGISTRATION

The well was constructed by a licensed Kansas Driller and registered with the Kansas Department of Health and Environment on form WWC-5.



(NOT TO SCALE)

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BOART LONGYEAR

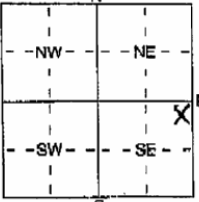
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WATER WELL RECORD Form WWC-5 KSA 82a-1212 ID No.

LOCATION OF WATER WELL: Fraction NE 1/4 NE 1/4 SE 1/4 Section Number 1 Township Number T 4 S Range Number R 11 E  
 County: Nebraska

Distance and direction from nearest town or city street address of well if located within city?  
Centralia, KS, 1/4 mile north of Town SW of Cemetery Road & Highway 187, NW-09

WATER WELL OWNER: USDA JCC  
 RR#, St. Address, Box #: Stop 0513-Room 4725  
 City, State, ZIP Code: Washington DC 20250  
 Board of Agriculture, Division of Water Resources  
 Application Number:

LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX: DEPTH OF COMPLETED WELL 40 ft. ELEVATION:  


Depth(s) Groundwater Encountered 1 \_\_\_\_\_ ft. 2 \_\_\_\_\_ ft. 3 \_\_\_\_\_ ft.  
 WELL'S STATIC WATER LEVEL \_\_\_\_\_ ft. below land surface measured on mo/day/yr  
 Pump test data: Well water was \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm  
 Est. Yield \_\_\_\_\_ gpm: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm  
 WELL WATER TO BE USED AS:  
 1 Domestic 3 Feedlot 6 Oil field water supply 8 Air conditioning 11 Injection well  
 2 Irrigation 4 Industrial 7 Domestic (lawn & garden)  Monitoring well 12 Other (Specify below)

Was a chemical/bacteriological sample submitted to Department? Yes \_\_\_\_\_ No \_\_\_\_\_; If yes, mo/day/yr sample was submitted  
 Water Well Disinfected? Yes \_\_\_\_\_ No \_\_\_\_\_

TYPE OF BLANK CASING USED:  
 1 Steel 3 RMP (SR) 5 Wrought iron 8 Concrete tile CASING JOINTS: Glued \_\_\_\_\_ Clamped \_\_\_\_\_  
 PVC 4 ABS 6 Asbestos-Cement 9 Other (specify below) Welded \_\_\_\_\_  
 7 Fiberglass Threaded Flush Thread

Blank casing diameter \_\_\_\_\_ in. to \_\_\_\_\_ ft. Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft. Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft.  
 Casing height above land surface \_\_\_\_\_ in., weight \_\_\_\_\_ lbs./ft. Well thickness or gauge No. sch 40

TYPE OF SCREEN OR PERFORATION MATERIAL:  
 1 Steel 3 Stainless Steel 5 Fiberglass  PVC 10 Asbestos-Cement  
 2 Brass 4 Galvanized Steel 6 Concrete tile 8 RMP (SR) 11 Other (Specify) \_\_\_\_\_  
 9 ABS 12 None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE:  
 1 Continuous slot  Mill slot 5 Gauzed wrapped 8 Saw cut 11 None (open hole)  
 2 Louvered shutter 4 Key punched 6 Wire wrapped 9 Drilled holes  
 7 Torch cut 10 Other (specify) \_\_\_\_\_ ft.

SCREEN-PERFORATED INTERVALS: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 GRAVEL PACK INTERVALS: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
 From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

GROUT MATERIAL:  Neat cement 2 Cement grout  Bentonite 4 Other \_\_\_\_\_  
 Grout Intervals: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

What is the nearest source of possible contamination:  
 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 14 Abandoned water well  
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 15 Oil well/Gas well  
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 16 Other (specify below)  
 13 Insecticide storage

Direction from well? How many feet?

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	15'	Light Brown Clay Some Silt			
15'	25'	Brown Clay Some Silt			
25'	35'	Brown Clay			
35'	40'	Yellow Sand			

CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was  constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 11/29/06 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's Licence No. 658. This Water Well Record was completed on (mo/day/yr) 3/16/06 under the business name of Boart Longyear Company by (signature) [Signature]

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1387. Telephone 785-296-5522. Send one to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each completed well.



# Monitor Well Installation (MW-10)

## Centralia, KS

NE, NE, SE of Section 1, Township 4 South, Range 11 East

Nemaha County, Kansas

Ground Elevation: 1,332.4

January 27, 2006

### WELL HEAD PROTECTION

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

### CONCRETE PAD

Is a minimum of 8" thick and extends at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allows for placement of a surveyor pin.

### IMPERVIOUS GROUT

The well was grouted with Neat Cement, tremied as required, mixed with clean fresh water and having a minimum density of 15.5 lbs. per gallon.

### WELL CASING

Well casing is terminate as high as possible inside the Flush Mount and is capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock.

### HOLE SIZE

The hole is 8¼" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

### GRAVEL / SAND PACK

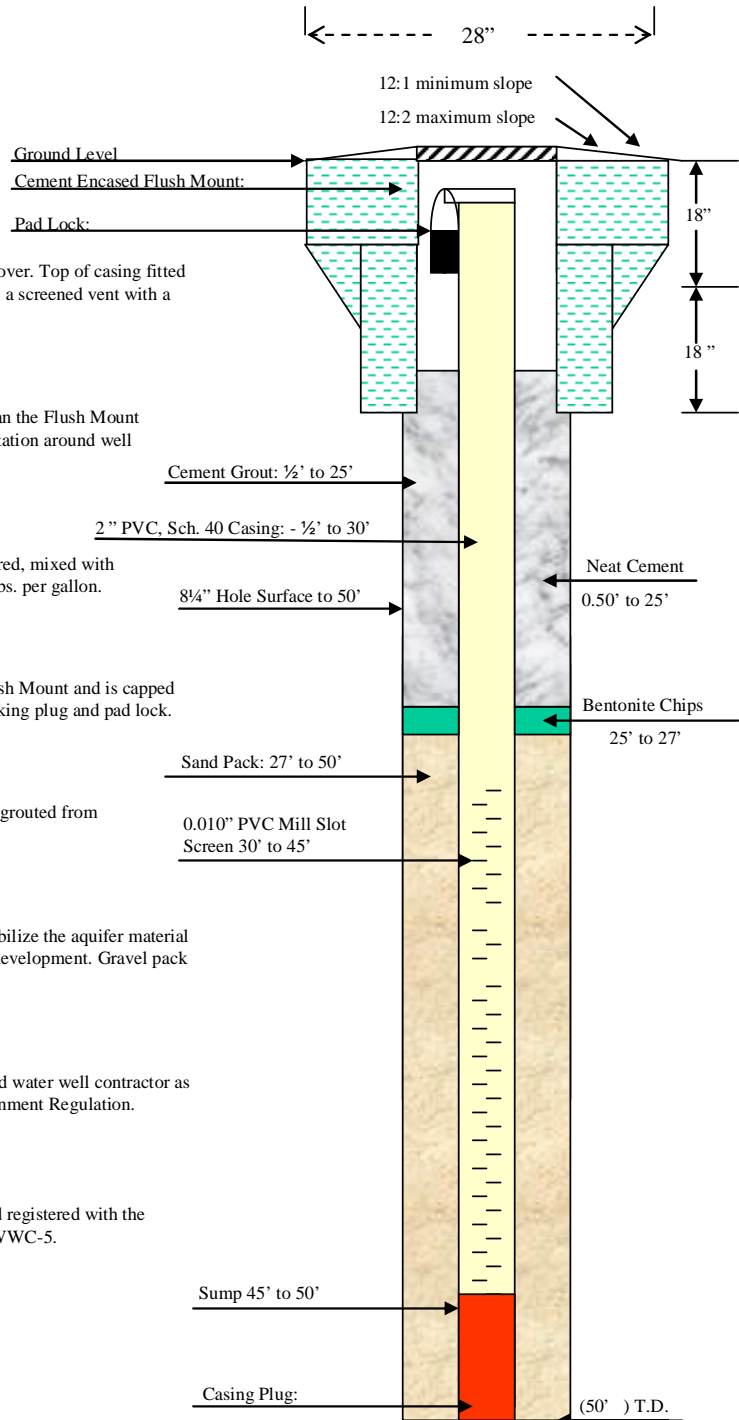
Gravel / Sand Pack is of 10/20 sand and is designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length of the screen and 3' above the screen.

### CONTRACTOR LICENSING

The wells was constructed under the direction of a licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

### REGISTRATION

The well was constructed by a licensed Kansas Driller and registered with the Kansas Department of Health and Environment on form WWC-5.



(NOT TO SCALE)

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BOART LONGYEAR

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WATER WELL RECORD Form WWC-5 KSA 82a-1212 ID No. \_\_\_\_\_

LOCATION OF WATER WELL: County: <u>Nemaha</u>	Fraction <u>NE 1/4 NE 1/4 SE 1/4</u>	Section Number <u>1</u>	Township Number <u>T 4 S</u>	Range Number <u>R 11 E</u>
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Distance and direction from nearest town or city street address of well if located within city?  
Centralia, KS 1/4 Mile north of town SW of Cemetery Road & Highway 187 MW-10

WATER WELL OWNER: USDA ICC  
FR#, St. Address, Box #: Step 0513 - Room 4725  
City, State, ZIP Code: 1400 Independence Ave SW Washington, DC 20250

Board of Agriculture, Division of Water Resources  
Application Number: \_\_\_\_\_

LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

N
--NW-- --NE--
W                          X E
--SW-- --SE--
S

DEPTH OF COMPLETED WELL: 50' ft. ELEVATION: \_\_\_\_\_

WELL'S STATIC WATER LEVEL: \_\_\_\_\_ ft. below land surface measured on (mo/day/yr) \_\_\_\_\_

Pump test data: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm  
Est. Yield \_\_\_\_\_ gpm: Well water was \_\_\_\_\_ ft. after \_\_\_\_\_ hours pumping \_\_\_\_\_ gpm

WELL WATER TO BE USED AS:

1 Domestic	3 Feedlot	6 Oil field water supply	9 Dewatering	12 Other (Specify below)
2 Irrigation	4 Industrial	7 Domestic (lawn & garden)	10 Monitoring well	

Was a chemical/bacteriological sample submitted to Department? Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, mo/day/yr sample was submitted \_\_\_\_\_  
Water Well Disinfected? Yes \_\_\_\_\_ No \_\_\_\_\_

TYPE OF BLANK CASING USED:

1 Steel	3 RMP (SR)	5 Wrought iron	8 Concrete tile	CASING JOINTS: Glued _____ Clamped _____
6 PVC	4 ABS	7 Fiberglass	9 Other (specify below)	Welded _____ Threaded <u>Plastic Thread</u>

Blank casing diameter 2 in. to 30' ft., Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft., Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft., Dia \_\_\_\_\_ in. to \_\_\_\_\_ ft.  
Casing height above land surface 0 in., weight \_\_\_\_\_ lbs./ft. Wall thickness or gauge No. sch 40

TYPE OF SCREEN OR PERFORATION MATERIAL:

1 Steel	3 Stainless Steel	5 Fiberglass	8 RMP (SR)	10 Asbestos-Cement
2 Brass	4 Galvanized Steel	6 Concrete tile	9 ABS	11 Other (Specify)
12 None used (open hole)				

SCREEN OR PERFORATION OPENINGS ARE:

1 Continuous slot	3 Mill slot	5 Gauzed wrapped	8 Saw cut	11 None (open hole)
2 Louvered shutter	4 Key punched	6 Wire wrapped	9 Drilled holes	10 Other (specify)
10 Other (specify) _____ ft.				

SCREEN-PERFORATED INTERVALS: From 30' ft. to 45' ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.  
GRAVEL PACK INTERVALS: From 27' ft. to 50' ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

6] GROUT MATERIAL:  Neat cement     Cement grout     Bentonite     Other \_\_\_\_\_  
Grout intervals: From 27' ft. to 25' ft. Best ft., From 25' ft. to 3' ft. Neat Cement ft., From \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

What is the nearest source of possible contamination:

1 Septic tank	4 Lateral lines	7 Pit privy	10 Livestock pens	14 Abandoned water well
2 Sewer lines	5 Cess pool	8 Sewage lagoon	11 Fuel storage	15 Oil well/Gas well
3 Watertight sewer lines	6 Seepage pit	9 Feedyard	12 Fertilizer storage	16 Other (specify below)
13 Insecticide storage				

Direction from well? \_\_\_\_\_ How many feet? \_\_\_\_\_

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
<u>0</u>	<u>25'</u>	<u>Brown Clay Some Silt</u>			
<u>25'</u>	<u>35'</u>	<u>Light Brown clay/silt some fine sand</u>			
<u>35'</u>	<u>50'</u>	<u>Brown Clay some silt</u>			
<u>50'</u>	<u>55'</u>	<u>Yellow sand</u>			

7] CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was  constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) 1/28/06 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 658. This Water Well Record was completed on (mo/day/yr) 3/19/06 under the business name of Boart Longyear Company by (signature) [Signature]

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-234-3522. Send one to WATER WELL OWNER and retain one for your records. Fee of \$6.00 for each registered well.

## Monitor Well Installation (SB-07R)

### Centralia, KS

NE, NE, SE of Section 1, Township 4 South, Range 11 East

Nemaha County, Kansas

Ground Elevation: 1,332.4

January 30, 2006

#### WELL HEAD PROTECTION

12" Morrison Brothers, Co. Model 418XA Flush mount cover. Top of casing fitted with a (J-Plug) Morrison Brothers, Co. Model 678XA and a screened vent with a locking pipe plug and pad lock.

#### CONCRETE PAD

Is a minimum of 8" thick and extends at least 8" larger than the Flush Mount (28" minimum). Sloped to prevent pooling of water, vegetation around well and allows for placement of a surveyor pin.

#### IMPERVIOUS GROUT

The well was grouted with Neat Cement, tremied as required, mixed with clean fresh water and having a minimum density of 15.5 lbs. per gallon.

#### WELL CASING

Well casing is terminate as high as possible inside the Flush Mount and is capped with a (J-Plug) Morrison Brothers, Co. Model 678XA locking plug and pad lock.

#### HOLE SIZE

The hole is 8¼" in diameter from the surface to T.D. and grouted from the top of the sand pack to the base of the Flush Mount.

#### GRAVEL / SAND PACK

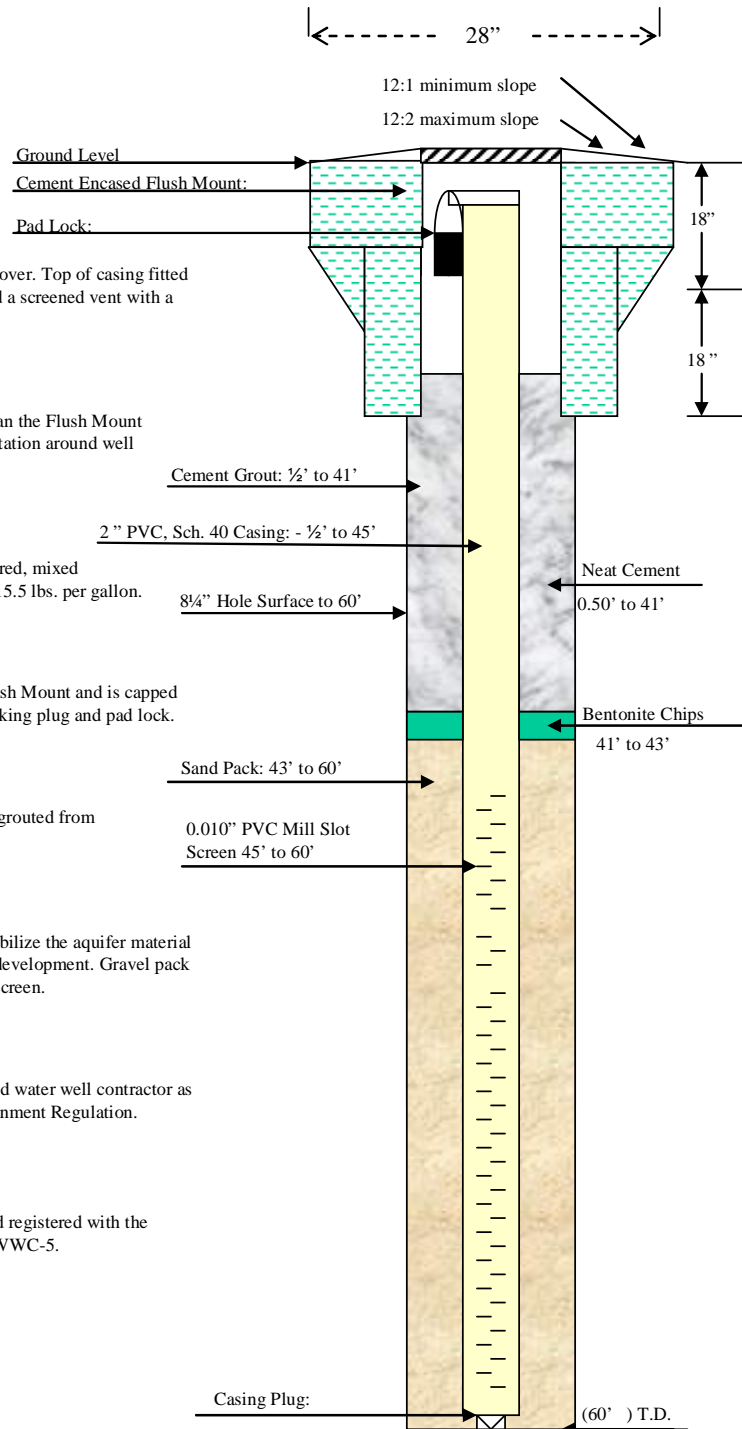
Gravel / Sand Pack is of 10/20 sand and is designed to stabilize the aquifer material and permit the fine fraction to move into the well during development. Gravel pack extends the length of the screen and at least 2' above the screen.

#### CONTRACTOR LICENSING

The wells was constructed under the direction of a licensed water well contractor as specified under, Kansas Department of Health and Environment Regulation.

#### REGISTRATION

The well was constructed by a licensed Kansas Driller and registered with the Kansas Department of Health and Environment on form WWC-5.



WATER WELL RECORD Form WW-5 KSA 82a-1212 ID No. **SB-07R**

1 LOCATION OF WATER WELL:		Fraction	Section Number	Township Number	Range Number
County: <b>Nemaha</b>		<b>NE</b> <input type="checkbox"/> <b>NE</b> <input type="checkbox"/> <b>SE</b> <input type="checkbox"/>	<b>1</b>	<b>T 4 S</b>	<b>R 11 E</b>
Distance and direction from nearest town or city street address of well if located within city?					

2 WATER WELL OWNER: **USDA/CCC**  
RR#, St. Address, Box #: **Stop 0513, Room 4717-S/ 1400 Independence Ave SW** Board of Agriculture, Division of Water Resources  
City, State, ZIP Code: **Washington, DC 20250-0513** Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:		4 DEPTH OF COMPLETED WELL	
		60 ft. ELEVATION: <b>1,332.4'</b>	
		Depth(s) Groundwater Encountered 1 <b>48</b> ft. 2 _____ ft. 3 _____ ft.	
WELL'S STATIC WATER LEVEL <b>17.75</b> ft. below land surface measured on (mo/day/yr) <b>01/30/06</b>		Pump test data: Well water was <b>N/A</b> ft. after <b>N/A</b> hours pumping <b>N/A</b> gpm	
Est. Yield <b>N/A</b> gpm: Well water was <b>N/A</b> ft. after <b>N/A</b> hours pumping <b>N/A</b> gpm		Bore Hole Diameter <b>8.25</b> in. to <b>60</b> ft. and <b>N/A</b> in. to <b>N/A</b> ft.	
WELL WATER TO BE USED AS: 5 Public water supply 8 Air conditioning 11 Injection well		1 Domestic 3 Food lot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)	
2 Irrigation 4 Industrial 7 Lawn and garden (domestic) 10 Monitoring well		Was a chemical/bacteriological sample submitted to Department? Yes _____ No <b>X</b> If yes, (mo/day/yr) sample was submitted <b>N/A</b>	
5 TYPE OF BLANK CASING USED:		Water Well Disinfected? Yes _____ No <b>X</b>	
1 Steel 3 RMP (SR) 5 Wrought Iron 8 Concrete tile CASING JOINTS: Glued _____ Clamped _____		2 PVC 4 ABS 6 Asbestos-Cement 9 Other (specify below) Welded _____	
Blank casing diameter <b>2"</b> in. to <b>45</b> ft. Dia <b>N/A</b> in. to <b>N/A</b> ft. Dia <b>N/A</b> in. to <b>N/A</b> ft.		7 Fiberglass Threaded <b>X</b>	
Casing height above land surface <b>Flush Mount</b> in. weight <b>Schedule 40</b> lbs./ft. Wall thickness or gauge No. <b>1540"</b>		TYPE OF SCREEN OR PERFORATION MATERIAL:	
1 Steel 3 Stainless steel 5 Fiberglass 8 RMP (SR) 11 Other (specify) _____		2 Brass 4 Galvanized steel 6 Concrete tile 9 ABS 12 None used (open hole)	
SCREEN OR PERFORATION OPENINGS ARE:		5 Gauzed wrapped 8 Saw cut 11 None (open hole)	
1 Continuous slot 3 Mill slot 6 Wire wrapped 9 Drilled holes		2 Louvered shutter 4 Key punched 7 Torch cut 10 Other (specify) _____	
SCREEN-PERFORATED INTERVALS:		From <b>45</b> ft. to <b>60</b> ft. From _____ ft. to _____ ft.	
GRAVEL PACK INTERVALS:		From <b>43</b> ft. to <b>60</b> ft. From _____ ft. to _____ ft.	
6 GROUT MATERIAL:		3 Bentonite 4 Other <b>BenSeal</b>	
1 Neat cement 2 Cement grout		Grout Intervals From <b>41 (#1)</b> ft. to <b>0.5</b> ft. From <b>43 (#4)</b> ft. to <b>41</b> ft. From <b>N/A</b> ft. to <b>N/A</b> ft.	
What is the nearest source of possible contamination:		10 Livestock pens 14 Abandoned water well	
1 Septic tank 4 Lateral lines 7 Pit privy 11 Fuel storage 15 Oil well/ Gas well		2 Sewer lines 5 Cess pool 8 <b>Sewage lagoons</b> 12 Fertilizer storage 16 Other (specify below)	
3 Watertight sewer lines 6 Seepage pit 9 Feedyard 13 Insecticide storage		Direction from well? _____ How many feet? <b>1,200' East</b>	

FROM	TO	CODE	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	2'		Top Soil			
2'	46'		Silt and Clay			
46'	47 1/2'		Silty Clay			
47 1/2'	48'		Silty Clay with some Sand			
48'	54'		Silty Clay and Sand			
54'	60'		Clay and Silt			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/yr) **01/30/06** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. **680** This Water Well Record was completed on (mo/day/yr) **01-29-06** under the business name of **Delta Environmental** by (signature) \_\_\_\_\_

INSTRUCTIONS: Please fill in blanks and circle the correct answers. Send three copies to Kansas Department of Health and Environment, Bureau of Water, 1000 S.W. Jackson St., Ste. 420, Topeka, Kansas 66612-1367. Telephone: 913-296-5545. Send one to WATER WELL OWNER and retain one for your records.

**Appendix B:**

**Chronological Summary of Field Activities**

TABLE B.1 Field log sequence of sampling activities in 2005-2006 at Centralia, Kansas.

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>September 2005 Sampling Event</i>									
09/08/05	17:15	SB08	52–62	CNSB08-W-19272	Water	CPT/P	4360	5; 78	Depth to water from top of casing (TOC) = 22.15 ft. Depth of well = 62 ft below TOC. Sample collected by using a valved tube as a bailer after purging of 4.8 gal with a Waterra pump.
09/08/05	17:15	SB08	52–62	CNSB08-W-15483	Water	CPT/P	4360	5; 78	Sample collected for anion and cation analyses without additional purging by using a valved tube as a bailer.
09/08/05	17:15	SB08	52–62	CNSB08-A-19272	Vapor	CPT/P	1548A	5; 78	Well vapor effluent sample collected for dissolved hydrogen analysis at Microseeps, Inc., in Pittsburgh, Pennsylvania, with Method AM20GAX.
09/09/05	10:15	SB04	51–61	CNSB04-W-19273	Water	CPT/P	4360	5; 82	Depth to water from TOC = 25.30 ft. Depth of well = 58.5 ft below TOC. Sample collected by using a valved tube as a bailer after purging of > 4 gal with a Waterra pump.
09/09/05	10:15	SB04	51–61	CNQCDU-W-15475 <sup>d</sup>	Water	CPT/P	4360	5; 82	Replicate of sample CNSB04-W-19273 for organic analysis. Aliquot collected without additional purging by using a valved tube as a bailer.
09/09/05	10:15	SB04	51–61	CNSB04-W-15484	Water	CPT/P	4360	5; 82	Sample collected for anion and cation analyses. Aliquot collected without additional purging by using a valved tube as a bailer.
09/09/05	10:15	SB04	51–61	CNSB04-A-19273	Vapor	CPT/P	1548A	5; 82	Well vapor effluent sample collected for dissolved hydrogen analysis.
09/09/05	15:40	SB01	40–50	CNSB01-W-19274	Water	CPT/P	4360	5; 86	Depth to water from TOC = 24.30 ft. Depth of well = 49 ft below TOC. Sample collected by using a valved tube as a bailer after purging dry with a Waterra pump and allowing to recharge.
09/09/05	15:40	SB01	40–50	CNSB01-A-19274	Vapor	CPT/P	1548A	5; 86	Well vapor effluent sample collected for dissolved hydrogen analysis.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>September 2005 Sampling Event (cont.)</i>									
09/09/05	17:13	SB05	32–42	CNSB05-W-19275	Water	CPT/P	4360	5; 90	Depth to water from TOC = 12.9 ft. Depth of well = 41.02 ft below TOC. Sample collected by using a valved tube as a bailer after purging of 3.5 gal with a Waterra pump.
09/09/05	17:13	SB05	32–42	CNSB05-A-19275	Vapor	CPT/P	1548A	5; 90	Well vapor effluent sample collected for dissolved hydrogen analysis.
09/10/05	10:45	MW01	54.5–64.5	CNMW01-W-19276	Water	MW	4360	5; 94	Depth to water from TOC = 16.97 ft. Depth of well = 69.5 ft below TOC. Sample collected at low flow after purging of 34 gal with a Redi-Flo pump.
09/10/05	13:55	MW03	50.5–60.5	CNMW03-W-19277	Water	MW	4360	5; 98	Depth to water from TOC = 24.6 ft. Depth of well = 62.41 ft below TOC. Sample collected at low flow after purging of 25 gal with a Redi-Flo pump.
09/10/05	15:35	MW06	46.5–56.5	CNMW06-W-19278	Water	MW	4360	5; 102	Depth to water from TOC = 39.3 ft. Depth of well = 59.8 ft below TOC. Sample collected at low flow after purging of 13 gal with a Redi-Flo pump.
09/10/05	17:47	MW05	34.5–44.5	CNMW05-W-19279	Water	MW	4360	5; 106	Depth to water from TOC = 11.32 ft. Depth of well = 47.52 ft below TOC. Sample collected at low flow after purging of 24 gal with a Redi-Flo pump.
09/11/05	9:35	MW04	37.5–47.5	CNMW04-W-19280	Water	MW	4360	5; 110	Depth to water from TOC = 27.53 ft. Depth of well = 50.4 ft below TOC. Sample collected at low flow after purging dry with a Redi-Flo pump and allowing to recharge.
09/11/05	10:50	SB09	32–42	CNSB09-W-19281	Water	CPT/P	4360	5; 114	Depth to water from TOC = 7.05 ft. Depth of well = 38.95 ft below TOC. Sample collected by using a valved tube as a bailer after purging of 4 gal with a Waterra pump.
09/11/05	11:45	QC	—	CNQCTB-W-15476 <sup>d</sup>	Water	TB	4360	5; 89	Trip blank sent to STL for methane analysis with samples listed on COC 4252.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>September 2005 Sampling Event (cont.)</i>									
09/11/05	13:45	QC	–	CNQCTB-W-15478 <sup>d</sup>	Water	TB	4360	5; 121	Trip blank sent with samples for organic analysis.
09/11/05	14:00	QC	–	CNQCRI-W-15479 <sup>d</sup>	Water	RI	4360	5; 121	Rinsate of Redi-Flo valve.
09/11/05	14:05	QC	–	CNQCFB-W-15480 <sup>d</sup>	Water	FB	4361	5; 121	Field blank of water used during 9/05 sampling event for equipment decontamination.
09/11/05	14:55	MW02	49.5–59.5	CNMW02-W-19282	Water	MW	4360	5; 118	Depth to water from TOC = 24.6 ft. Depth of well = 61.1 ft below TOC. Sample collected at low flow after purging of 75 gal with a Redi-Flo pump.
09/11/05	14:55	MW02	49.5–59.5	CNQCDU-W-15477 <sup>d</sup>	Water	MW	4360	5; 118	Replicate of sample CNMW02-W-19282 for organic analysis. Aliquot collected without additional purging by using a Redi-Flo pump at low flow.
09/11/05	14:55	MW02	49.5–59.5	CNQCDU-W-15486 <sup>d</sup>	Water	MW	4360	5; 118	Replicate of sample CNMW02-W-19282 for anion and cation analyses. Aliquot collected without additional purging by using a Redi-Flo pump at low flow.
09/11/05	14:55	MW02	49.5–59.5	CNMW02-A-19282	Vapor	MW	1548A	5; 118	Well vapor effluent sample collected for dissolved hydrogen analysis.
09/11/05	15:30	QC	–	CNQCRI-W-19283 <sup>d</sup>	Water	RI	4361	5; 121	Rinsate of Redi-Flo sampling tube.
09/11/05	15:40	QC	–	CNQCDRUM1-W-15481 <sup>d</sup>	Water	BT	4361	5; 121	Waste purge water containerized in Drum #1.
09/11/05	15:40	QC	–	CNQCDRUM2-W-15482 <sup>d</sup>	Water	BT	4361	5; 121	Waste purge water containerized in Drum #2.
09/12/05	8:30	QC	–	CNQCTB-W-15485 <sup>d</sup>	Water	TB	4360	5; 121	Trip blank sent to STL for methane analysis with samples listed on COC 1556.
<i>October 2005 Sampling Event</i>									
10/11/05	8:00	QC	–	CNQCRI-W-15487 <sup>d</sup>	Water	RI	4415	5; 125	Rinsate of decontaminated Redi-Flo reel hose.
10/11/05	8:05	QC	–	CNQCFB-W-15488 <sup>d</sup>	Water	FB	4415	5; 125	Blank of water used for equipment decontamination during 10/05 monitoring.



TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>October 2005 Sampling Event (cont.)</i>									
10/11/05	9:20	MW01	54.5–64.5	CNMW01-W-16308	Water	MW	4415	5; 126	Depth to water from TOC = 17.05 ft. Depth of well = 69.5 ft below TOC. Sample collected at low flow after purging of ~ 76 gal with a Redi-Flo pump. Well pumped dry during purge and allowed to recover.
10/11/05	11:00	MW06	46.5–56.5	CNMW06-W-16313	Water	MW	4415	5; 130	Depth to water from TOC = 39.48 ft. Depth of well = 60.0 ft below TOC. Sample collected at low flow after purging of ~ 40 gal with a Redi-Flo pump. Necessary to reduce pump rate to keep water level from dropping.
10/11/05	13:10	MW04	37.5–47.5	CNMW04-W-16311	Water	MW	4415	5; 136	Depth to water from TOC = 27.75 ft. Depth of well = 49.25 ft below TOC. Sample collected at low flow after purging of ~ 42 gal with a Redi-Flo pump. Pumped dry during purge and allowed to recover.
10/11/05	14:27	MW03	50.5–60.5	CNMW03-W-16310	Water	MW	4415	5; 140	Depth to water from TOC = 24.58 ft. Depth of well = 62.36 ft below TOC. Sample collected at low flow after purging of ~ 74 gal with a Redi-Flo pump. Water level nearly constant during purge. Two vials collected for possible verification analysis; provided as KDHE split.
10/11/05	15:35	MW05	34.5–44.5	CNMW05-W-16312	Water	MW	4415	5; 146	Depth to water from TOC = 13.18 ft. Depth of well = 47.5 ft below TOC. Sample collected at low flow after purging of ~ 67 gal with a Redi-Flo pump.
10/11/05	16:43	SB05	32–42	CNSB05-W-16316T	Water	CPT/P	4415	5; 150	Depth to water from TOC = 14.25 ft. Depth of well = 40.9 ft below TOC. Sample collected by using by using a valved tube as a bailer after purging of 4 gal with a Waterra pump.
10/11/05	17:40	SB09	32–42	CNSB09-W-16318	Water	CPT/P	4415	5; 154	Depth to water from TOC = 8.60 ft. Depth of well = 36.39 ft below TOC. Sample collected by using a valved tube as a bailer after purging of 3.5 gal with a Waterra pump.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>October 2005 Sampling Event (cont.)</i>									
10/12/05	9:30	SB05	32–42	CNSB05-W-16323	Water	CPT/P	4415	5; 150	Sample from SB05 collected with a bailer the following morning, without additional purging.
10/12/05	10:00	SB08	52–62	CNSB08-W-16317	Water	CPT/P	4415	5; 158	Depth to water from TOC = 22.68 ft. Depth of well = 59.80 ft below TOC. Sample collected by using a valved tube as a bailer after purging of 4.5 gal with a Waterra pump. Purged dry after ~ 3 gal. Allowed to recover about 20 min before completing purge.
10/12/05	10:00	SB08	52–62	CNQCDU-W-16321 <sup>d</sup>	Water	CPT/P	4415	5; 158	Replicate of sample CNSB08-W-16317. Aliquot collected without additional purging by using a valved tube as a bailer.
10/12/05	11:00	SB01	40–50	CNSB01-W-16314	Water	CPT/P	4415	5; 162	Depth to water not measured. Depth of well = 49 ft below TOC. Sample collected by using a valved tube as a bailer after purging of 4 gal with a Waterra pump. Purged dry. Short recharge. Short additional purge prior to sampling.
10/12/05	12:30	SB04	51–61	CNSB04-W-16315	Water	CPT/P	4415	5; 166	Depth to water from TOC = 25.85 ft. Depth of well = 58.5 ft below TOC. Sample collected by using a valved tube as a bailer after purging dry with a Waterra pump and allowing to recharge over lunch break. An additional 0.5 gal was purged prior to sampling. KDHE took a split sample.
10/12/05	13:55	MW02	49.5–59.5	CNMW02-W-16309	Water	MW	4415	5; 170	Depth to water from TOC = 24.90 ft. Depth of well = 61.27 ft. Sample collected at low flow after purging of ~ 71 gal with a Redi-Flo pump. KDHE took a split sample.
10/12/05	13:55	MW02	49.5–59.5	CNQCDU-W-16322 <sup>d</sup>	Water	MW	4416	5; 170	Replicate of sample CNMW02-W-16309. Aliquot collected without additional purging by using a Redi-Flo pump at low flow.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>October 2005 Sampling Event (cont.)</i>									
10/12/05	15:00	QC	–	CNQCDR-W-16324 <sup>d</sup>	Water	BT	4416	5; 173	Composite sample from three drums of purge water from contaminated wells prior to disposal at Sabetha publicly owned treatment works.
10/12/05	18:00	QC	–	CNQCTB-W-16325 <sup>d</sup>	Water	TB	4416	5; 173	Trip blank sent to the AGEM Laboratory with samples listed on COCs 4415 and 4416.
<i>February 2006 Monitoring Well Installation</i>									
01/29/06	17:30	QC	–	CNQCD-W-16198 <sup>d</sup>	Water	BT	3242	6; 45	Blank of water used during installation of monitoring wells MW7, MW8, MW9, and MW10 and replacement piezometer SB07R.
02/01/06	Not recorded	QC	–	EVTB3-W-13226 <sup>d</sup>	Water	TB	3242	COC	Trip blank sent to the AGEM Laboratory with samples listed on COC 3242.
02/14/06	15:14	QC	–	CNCM-G-16199 <sup>d</sup>	Water	BT	4547	6; 49	Sample of containerized potentially contaminated development water from new monitoring wells and replacement piezometer.
02/14/06	15:57	QC	–	EVFB-W-13239 <sup>d</sup>	Water	TB	4547	COC	Trip blank sent to the AGEM Laboratory with samples listed on COC 4547.
02/15/06	9:09	QC	–	CNCM-S-16200 <sup>d</sup>	Soil	BT	4542	6; 53	Composite sample from 14 drums of containerized potentially contaminated soil cuttings from drilling of MW08.
02/15/06	16:26	MW10	30–45	CNMW10-G-16204 <sup>d</sup>	Water	MW	4543	6; 69	Depth to water = 25.2 ft below TOC. Depth of well = 48.7 ft below TOC. Sample collected with a bailer prior to development.
02/15/06	16:41	MW09	25–35	CNMW09-G-16201 <sup>d</sup>	Water	MW	4543	6; 57	Depth to water = 6.02 ft below TOC. Depth of well = 39.5 ft below TOC. Sample collected with a bailer prior to development.
02/15/06	16:45	MW08	38–53	CNMW08-G-16205 <sup>d</sup>	Water	MW	4543	6; 73	Depth to water = 24.1 ft below TOC. Depth of well = 57.15 ft below TOC. Sample collected with a bailer prior to development.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>February 2006 Monitoring Well Installation (cont.)</i>									
02/15/06	16:48	MW07	45–55	CNMW07-G-16202 <sup>d</sup>	Water	MW	4543	6; 61	Depth to water = 31.4 ft below TOC. Depth of well = 58 ft below TOC. Sample collected with a bailer prior to development.
02/15/06	17:09	SB07R	45–60	CNSB07-G-16203 <sup>d</sup>	Water	CPT/P	4543	6; 65	Depth to water = 26.7 ft below TOC. Depth of well = 59 ft below TOC. Sample collected with a bailer prior to development.
02/15/06	17:15	SB07R	45–60	CNSB07-G-16206 <sup>d</sup>	Water	CPT/P	4543	6; 77	Replicate of sample CNSB07-G-16203.
<i>March 2006 Sampling Event</i>									
03/14/06	10:54	MW08	38–53	CNMW08-W-19284	Water	MW	4509	7; 6	New 2-in. monitoring well. Depth to water from TOC = 23.48 ft. Depth of well from TOC = 56.6 ft below TOC. Sample collected at low flow after purging of 16.5 gal with Redi-Flo pump.
03/14/06	12:47	MW10	30–45	CNMW10-W-19886	Water	MW	4509	7; 10	New 2-in. monitoring well. Depth to water from TOC = 25.6 ft. Depth of well = 47.76 ft below TOC. Purged 15 gal with Redi-Flo at 0.5 gpm. Increased purge rate, but well went dry immediately. Sample collected at low flow after lunch break, after purging of additional 2.5 gal.
03/14/06	15:30	MW07	45–55	CNMW07-W-19887	Water	MW	4509	7; 14	New 2-in. monitoring well. Depth to water from TOC = 32.5 ft. Depth of well from TOC = 56.62 ft. After purging of ~ 12 gal at 1 gpm, the minimum purge volume, Redi-Flo pump failed repeatedly because of sand at reduced flow rate. Sampled by using a valved tube as a bailer.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>March 2006 Sampling Event (cont.)</i>									
03/14/06	15:30	MW07	45–55	CNQCMW07-W-19888 <sup>d</sup>	Water	MW	4510	7; 14	Aliquot for verification analysis at outside laboratory. Corresponds to sample CNMW07-W-19887, submitted for analysis at the AGEM Laboratory. Aliquot collected without additional purging by using a valved tube as a bailer.
03/14/06	15:40	QC	–	CNQCTB-W-19894 <sup>d</sup>	Water	TB	4510	7; 17	Trip blank sent to EnviroSystems for verification organic analysis with sample listed on COC 4510.
03/14/06	15:40	QC	–	CNQCTB-W-19895 <sup>d</sup>	Water	TB	4508	7; 17	Trip blank sent to STL for methane analysis with samples listed on COC 4508.
03/14/06	16:10	QC	–	CNQCTB-W-19893 <sup>d</sup>	Water	TB	4509	7; 17	Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 4509.
03/15/06	9:00	MW06	46.5–56.5	CNMW06-W-19889	Water	MW	2475	7; 18	Depth to water from TOC = 40.08 ft. Depth of well from TOC = 59.8 ft. Purged dry with a Redi-Flo pump after removing 20 gal. Lowered pump and resumed purge at 0.25 gpm to sample.
03/15/06	10:12	MW01	54.5–64.5	CNMW01-W-19890	Water	MW	2475	7; 22	Depth to water from TOC = 18.68 ft. Depth of well from TOC = 70.0 ft. Purged dry with a Redi-Flo pump after removing 50 gal at 2.4 gpm. Waited 10 min for recharge. Sample collected at low flow after purging of additional 6 gal at 0.25 gpm.
03/15/06	11:45	QC	–	CNQCTB-W-19892 <sup>d</sup>	Water	TB	2475	7; 25	Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 2475.
03/15/06	11:55	MW04	37.5–47.5	CNMW04-W-19891	Water	MW	2475	7; 26	Depth to water from TOC = 29.09 ft. Depth of well from TOC = 49.14 ft. Purged dry with a Redi-Flo pump at 2 gpm after 20 gal. Waited 15 min for recharge. Purged additional 7 gal at 0.25 gpm prior to sampling at low flow. KDHE took split sample.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>March 2006 Sampling Event (cont.)</i>									
03/15/06	12:15	MW04	37.5–47.5	CNMW04-W-19900	Water	MW	2477	7; 26	Aliquots for attenuation parameter analyses collected without additional purging by using a Redi-Flo pump at low flow. Corresponds to sample CNMW04-W-19891, collected the previous day and submitted for organic analysis at the AGEM Laboratory.
03/15/06	13:40	MW05	34.5–44.5	CNMW05-W-19976	Water	MW	2475	7; 30	Depth to water from TOC = 14.2 ft. Depth of well from TOC = 47.52 ft. Sample collected at low flow after purging of 65 gal with a Redi-Flo pump. Initial purge rate of 3 gpm reduced to 0.25 gpm before sampling.
03/15/06	13:40	MW05	34.5–44.5	CNQCDU-W-19985 <sup>d</sup>	Water	MW	2475	7; 30	Replicate of sample CNMW05-W-19976. Aliquot collected at low flow without additional purging.
03/15/06	14:50	MW05	34.5–44.5	CNMW05-W-19907	Water	MW	2477	7; 30	Aliquots for attenuation parameter analyses. Corresponds to sample CNMW05-W-19976, collected the previous day and submitted for organic analysis at the AGEM Laboratory.
03/15/06	15:50	MW09	25–35	CNMW09-W-19285	Water	MW	2475	7; 34	New 2-in. monitoring well. Depth to water from TOC = 7.53 ft. Depth of well from TOC = 39.15 ft. Poorly producing well. Sample collected at low flow after purging of 10 gal at 0.5 gpm with a Redi-Flo pump.
03/15/06	15:50	MW09	25–35	CNQCMW09-W-19977 <sup>d</sup>	Water	MW	2476	7; 34	Aliquot for verification analysis at outside laboratory collected at low flow without additional purging. Corresponds to sample CNMW09-W-19285, submitted for analysis at the AGEM Laboratory.
03/15/06	16:30	QC	–	CNQCTB-W-19984 <sup>d</sup>	Water	TB	2476	7; 37	Trip blank sent to EnviroSystems for verification organic analysis with samples listed on COC 2476.
03/15/06	16:30	QC	–	CNQCTB-W-19983 <sup>d</sup>	Water	TB	4511	7; 37	Trip blank sent to STL for methane analysis with samples listed on COC 4511.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>March 2006 Sampling Event (cont.)</i>									
03/15/06	17:21	SB07R	45–60	CNSB07R-W-19978	Water	CPT/P	2475	7; 38	New 2-in. piezometer to replace abandoned SB07 piezometer. Depth to water from TOC = 24.06 ft. Depth of well from TOC = 58.65 ft. Sample collected at low flow after purging of ~ 18 gal with a Redi-Flo pump at 0.5 gpm.
03/15/06	17:21	SB07R	45–60	CNQCUDU-W-19981 <sup>d</sup>	Water	CPT/P	2475	7; 38	Replicate of sample CNSB07R-W-19978. Aliquot collected at low flow without additional purging.
03/15/06	17:21	SB07R	45–60	CNQC SB07R-W-19982 <sup>d</sup>	Water	CPT/P	2476	7; 38	Aliquot for verification analysis at outside laboratory collected at low flow without additional purging. Corresponds to sample CNSB07R-W-19978, submitted for analysis at the AGEM Laboratory.
03/16/06	8:30	QC	–	CNQCRI-W-19897 <sup>d</sup>	Water	RI	2481	7; 18	Rinsate of decontaminated sampling bailer used for collection of sample CNMW06-W-19896.
03/16/06	8:45	MW06	46.5–56.5	CNMW06-W-19896	Water	MW	2477	7; 18	Aliquots for attenuation parameter analyses collected without additional purging by using a bailer. Corresponds to sample CNMW06-W-19889, collected the previous day and submitted for organic analysis at the AGEM Laboratory.
03/16/06	10:30	QC	–	CNQCRI-W-19899 <sup>d</sup>	Water	RI	2481	7; 22	Rinsate of decontaminated sampling bailer used for collection of sample CNMW01-W-19898.
03/16/06	10:30	MW01	54.5–64.5	CNMW01-W-19898	Water	MW	2477	7; 22	Aliquots for attenuation parameter analyses collected without additional purging by using a bailer. Corresponds to sample CNMW01-W-19890, collected the previous day and submitted for organic analysis at the AGEM Laboratory.

TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>March 2006 Sampling Event (cont.)</i>									
03/16/06	13:50	SB04	51–61	CNSB04-W-19906	Water	CPT/P	2481	7; 42	Depth to water from TOC = 26.95 ft. Depth of well from TOC = 59.18 ft. Sample collected from 1-in. piezometer by using a valved tube as a bailer after purging of 4 gal with a Waterra pump. KDHE took split sample.
03/16/06	13:50	SB04	51–61	CNQCDU-W-19915 <sup>d</sup>	Water	CPT/P	2481	7; 42	Replicate of sample CNSB04-W-19906 collected without additional purging by using a valved tube as a bailer.
03/16/06	15:40	QC	–	CNQCBL-W-19912 <sup>d</sup>	Water	FB	2481	7; 45	Field blank of commercial distilled water used during 3/06 monitoring event.
03/16/06	15:40	QC	–	CNQCTB-W-19914 <sup>d</sup>	Water	TB	2477	7; 45	Trip blank sent to STL for methane analysis with samples listed on COC 2477.
03/16/06	15:40	QC	–	CNQCTB-W-19913 <sup>d</sup>	Water	TB	2481	7; 45	Trip blank sent to AGEM Laboratory for organic analysis with samples listed on COC 2481.
03/16/06	16:43	MW02	49.5–59.5	CNMW02-W-19908	Water	MW	2481	7; 46	Depth to water from TOC = 26.50 ft. Depth of well from TOC = 61.11 ft. Sample collected at low flow after purging of 75-80 gal with a Redi-Flo pump at 2 gpm into drums because of prior contamination levels.
03/17/06	8:00	QC	–	CNQCRI-W-19901 <sup>d</sup>	Water	RI	3709	7; 49	Rinsate of decontaminated Redi-Flo sampling tube, following collection of samples at MW02.
03/17/06	9:42	MW03	50.5–60.5	CNMW03-W-19909	Water	MW	3709	7; 50	Depth to water from TOC = 26.22 ft. Depth of well from TOC = 62.15 ft. Sample collected at low flow after purging of 70 gal with a Redi-Flo pump at 2 gpm.
03/17/06	11:40	SB09	32–42	CNSB09-W-19902	Water	CPT/P	3709	7; 54	Depth to water from TOC = 9.39 ft. Depth of well from TOC = 35.52 ft. Sample collected from 1-in. piezometer by using a valved tube as a bailer after purging of 5 gal with a Waterra pump.



TABLE B.1 (Cont.)

Sample Date	Time	Location	Depth (ft below TOC)	Sample	Medium	Sample Type <sup>a</sup>	COC <sup>b</sup>	Log; Page <sup>c</sup>	Sample Description
<i>March 2006 Sampling Event (cont.)</i>									
03/17/06	14:00	SB08	52–62	CNSB08-W-19903	Water	CPT/P	3709	7; 58	Depth to water from TOC = 24.55 ft. Depth of well from TOC = 60.0 ft. Sample collected from 1-in. piezometer by using a valved tube as a bailer after purging of 5 gal with a Waterra pump.
03/17/06	14:52	QC	–	CNQCTB-W-19905 <sup>d</sup>	Water	TB	3709	7; 61	Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 3709.
03/17/06	14:53	QC	–	CNQCTB-W-19910 <sup>d</sup>	Water	TB	3708	7; 61	Trip blank sent to STL for methane analysis with samples listed on COC 3708.
03/17/06	15:40	SB05	32–42	CNSB05-W-19904	Water	CPT/P	3709	7; 62	Depth to water from TOC = 15.91 ft. Depth of well from TOC = 40.92 ft. Sample collected from 1-in. piezometer by using a valved tube as a bailer after purging of 3 gal with a Waterra pump.
03/17/06	15:40	SB05	32–42	CNQCDU-W-19911 <sup>d</sup>	Water	CPT/P	3709	7; 62	Replicate of sample CNSB05-W-19904. Aliquot collected without additional purging by using a valved tube as a bailer.
03/17/06	18:00	SB01	40–50	CNSB01-W-19979	Water	CPT/P	3709	7; 66	Depth to water from TOC = 29.76 ft. Depth of well from TOC = 49.0 ft. Sample collected from 1-in. piezometer by using a valved tube as a bailer after purging of 1 gal with a Waterra pump. Purged dry and sampled after 45-min recharge.

<sup>a</sup> Sample types: BT, waste characterization; CPT/P, piezometer; FB, field blank; MW, monitoring well; RI, rinsate; TB, trip blank.

<sup>b</sup> Chain-of-custody form number.

<sup>c</sup> Location of record in logbook; on file at Argonne.

<sup>d</sup> Quality control sample.

**Appendix C:**  
**Coordinates Survey Data**

TABLE C.1 Survey coordinates for monitoring locations at Centralia, Kansas.

Well	Horizontal Location <sup>a</sup> (ft)		Elevation <sup>b</sup> (ft AMSL)	
	Easting	Northing	Representative Ground Surface	Reference <sup>c</sup>
<i>Monitoring locations installed in 2002</i>				
SB01	1838927.09	514987.31	1325.6	1325.16
SB03	1839170.99	515298.68	1333.1	1333.68
SB04	1839195.59	514979.88	1336.2	1335.73
SB05	1838883.36	515105.24	1321.6	1321.28
SB07	1839066.82	515059.50	1332.4	1331.94
SB08	1839120.47	515167.10	1333.0	1332.56
SB09	1838653.42	514805.65	1311.5	1311.04
<i>Monitoring locations installed in 2004</i>				
MW01	1839058.40	515257.20	1326.6	1329.30
MW02	1839143.00	515079.90	1335.2	1334.82
MW03	1839135.80	514935.90	1334.9	1334.70
MW04	1838880.50	514942.50	1323.1	1322.71
MW05	1838835.00	515049.60	1318.5	1318.11
MW06	1839011.20	514922.30	1330.1	1329.82
<i>Monitoring locations installed in 2006</i>				
MW07	1838906.81	514889.00	1325 <sup>d</sup>	1324.83
MW08	1839294.42	514939.55	1333 <sup>d</sup>	1332.41
MW09	1838737.40	515104.02	1311 <sup>d</sup>	1310.49
MW10	1839205.53	514909.93	1335 <sup>d</sup>	1334.56
SB07R	1839067.03	515059.30	1332 <sup>d</sup>	1331.71

<sup>a</sup> Horizontal coordinates are target location centers. Northings and eastings are Kansas State Plane Coordinates. Horizontal datum is North American Datum (NAD) 83.

<sup>b</sup> Vertical datum is National Geodetic Vertical Datum (NGVD) 88.

<sup>c</sup> Location for measurement of water level.

<sup>d</sup> Estimated ground surface elevation (not surveyed).



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**Supplementary Material for  
Draft Report: Groundwater Monitoring at  
Centralia, Kansas, in September–October 2005  
and March 2006, with Expansion of the  
Monitoring Network in January 2006**

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Applied Geosciences and Environmental Management Section,  
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S3_qualitycontrol.pdf	Supplement 3: Quality Control for Sample Collection, Handling, and Analysis
S4_COC-analytics.pdf	Supplement 4: Chain-of-Custody Forms and Outside Laboratory Data

June 2006

Work sponsored by Commodity Credit Corporation, United States Department of Agriculture

**Supplement 1:**  
**Groundwater Sample Data**

TABLE S1.1 Groundwater samples collected during 2005-2006 monitoring at Centralia, Kansas.

Location	Sample	Depth (ft below TOC)	Sample Date	Medium	Type <sup>a</sup>	Sample Description
<i>September 2005 Sampling Event</i>						
MW01	CNMW01-W-19276	54.5–64.5	09/10/05	Water	MW	Depth to water from TOC = 16.97 ft. Depth of well = 69.5 ft below TOC. Sample collected after purging of 34 gal.
MW02	CNMW02-W-19282	49.5–59.5	09/11/05	Water	MW	Depth to water from TOC = 24.6 ft. Depth of well = 61.1 ft below TOC.
MW02	CNMW02-A-19282	49.5–59.5	09/11/05	Vapor	MW	Well vapor effluent sample collected for dissolved hydrogen analysis at Microseeps, Inc., in Pittsburgh, Pennsylvania, with Method AM20GAX.
MW03	CNMW03-W-19277	50.5–60.5	09/10/05	Water	MW	Depth to water from TOC = 24.6 ft. Depth of well = 62.41 ft below TOC. Sample collected after purging of 25 gal.
MW04	CNMW04-W-19280	37.5–47.5	09/11/05	Water	MW	Depth to water from TOC = 27.53 ft. Depth of well = 50.4 ft below TOC. Sample collected after purging dry and allowing to recharge.
MW05	CNMW05-W-19279	34.5–44.5	09/10/05	Water	MW	Depth to water from TOC = 11.32 ft. Depth of well = 47.52 ft below TOC. Sample collected after purging of 24 gal.
MW06	CNMW06-W-19278	46.5–56.5	09/10/05	Water	MW	Depth to water from TOC = 39.3 ft. Depth of well = 59.8 ft below TOC. Sample collected after purging of 13 gal.
SB01	CNSB01-W-19274	40–50	09/09/05	Water	CPT/P	Depth to water from TOC = 24.30 ft. Depth of well = 49 ft below TOC. Sample collected after purging dry and allowing to recharge.
SB01	CNSB01-A-19274	40–50	09/09/05	Vapor	CPT/P	Well vapor effluent sample collected for dissolved hydrogen analysis.
SB04	CNSB04-W-19273	51–61	09/09/05	Water	CPT/P	Depth to water from TOC = 25.30 ft. Depth of well = 58.5 ft below TOC. Sample collected after purging of > 4 gal.
SB04	CNSB04-W-15484	51–61	09/09/05	Water	CPT/P	Sample collected for anion and cation analyses.
SB04	CNSB04-A-19273	51–61	09/09/05	Vapor	CPT/P	Well vapor effluent sample collected for dissolved hydrogen analysis.
SB05	CNSB05-W-19275	32–42	09/09/05	Water	CPT/P	Depth to water from TOC = 12.9 ft. Depth of well = 41.02 ft below TOC. Sample collected after purging of 3.5 gal.
SB05	CNSB05-A-19275	32–42	09/09/05	Vapor	CPT/P	Well vapor effluent sample collected for dissolved hydrogen analysis.
SB08	CNSB08-W-19272	52–62	09/08/05	Water	CPT/P	Depth to water from TOC = 22.15 ft. Depth of well = 62 ft below TOC.
SB08	CNSB08-W-15483	52–62	09/08/05	Water	CPT/P	Sample collected for anion and cation analysis.
SB08	CNSB08-A-19272	52–62	09/08/05	Vapor	CPT/P	Well vapor effluent sample collected for dissolved hydrogen analysis.
SB09	CNSB09-W-19281	32–42	09/11/05	Water	CPT/P	Depth to water from TOC = 7.05 ft. Depth of well = 38.95 ft below TOC. Sample collected after purging of 4 gal.

TABLE S.1 (Cont.)

Location	Sample	Depth (ft below TOC)	Sample Date	Medium	Type <sup>a</sup>	Sample Description
<i>October 2005 Sampling Event</i>						
MW01	CNMW01-W-16308	54.5–64.5	10/11/05	Water	MW	Depth to water from TOC = 17.05 ft. Depth of well = 69.5 ft below TOC. Sample collected after purging of ~ 76 gal. Well pumped dry during purge and allowed to recover.
MW02	CNMW02-W-16309	49.5–59.5	10/12/05	Water	MW	Depth to water from TOC = 24.90 ft. Depth of well = 61.27 ft below TOC. Sample collected after purging of ~ 71 gal. KDHE took a split sample.
MW03	CNMW03-W-16310	50.5–60.5	10/11/05	Water	MW	Depth to water from TOC = 24.58 ft. Depth of well = 62.36 ft below TOC. Sample collected after purging of ~ 74 gal. Water level nearly constant during purge. Two vials collected for possible verification analysis provided as KDHE split.
MW04	CNMW04-W-16311	37.5–47.5	10/11/05	Water	MW	Depth to water from TOC = 27.75 ft. Depth of well = 49.25 ft below TOC. Sample collected after purging of ~ 42 gal. Pumped dry during purge and allowed to recover.
MW05	CNMW05-W-16312	34.5–44.5	10/11/05	Water	MW	Depth to water from TOC = 13.18 ft. Depth of well = 47.5 ft below TOC. Sample collected after purging of ~ 67 gal.
MW06	CNMW06-W-16313	46.5–56.5	10/11/05	Water	MW	Depth to water from TOC = 39.48 ft. Depth of well = 60.0 ft below TOC. Sample collected after purging of ~ 40 gal. Necessary to reduce pump rate to keep water level from dropping.
SB01	CNSB01-W-16314	40–50	10/12/05	Water	CPT/P	Depth to water not measured. Depth of well = 49 ft below TOC. Sample collected after purging of 4 gal. Purged dry. Short recharge. Short additional purge prior to sampling.
SB04	CNSB04-W-16315	51–61	10/12/05	Water	CPT/P	Depth to water from TOC = 25.85 ft. Depth of well = 58.5 ft below TOC. Sample collected after purging dry and allowing to recharge over lunch break. An additional 0.5 gal purged prior to sampling. KDHE took a split sample.
SB05	CNSB05-W-16323	32–42	10/12/05	Water	CPT/P	Depth to water from TOC = 14.25 ft. Depth of well = 40.9 ft below TOC. Well purged. Sample collected the following morning without additional purge.
SB08	CNSB08-W-16317	52–62	10/12/05	Water	CPT/P	Depth to water from TOC = 22.68 ft. Depth of well = 59.80 ft below TOC. Sample collected after purging of 4.5 gal. Purged dry after ~ 3 gal and allowed to recover for about 20 min before completing purge.
SB09	CNSB09-W-16318	32–42	10/11/05	Water	CPT/P	Depth to water from TOC = 8.60 ft. Depth of well = 36.39 ft below TOC. Sample collected after purging of 3.5 gal.



TABLE S.1 (Cont.)

Location	Sample	Depth (ft below TOC)	Sample Date	Medium	Type <sup>a</sup>	Sample Description
<i>March 2006 Sampling Event</i>						
MW01	CNMW01-W-19890	54.5–64.5	03/15/06	Water	MW	Depth to water from TOC = 18.68 ft. Depth of well from TOC = 70.0 ft. Purged dry after removing 50 gal at 2.4 gpm. Waited 10 minutes for recharge. Sample collected after purging additional 6 gal at 0.25 gpm.
MW01	CNMW01-W-19898	54.5–64.5	03/16/06	Water	MW	Aliquots for attenuation parameter analyses. Corresponds to sample CNMW01-W-19890, collected the previous day and submitted for organic analysis at the AGEM Laboratory.
MW02	CNMW02-W-19908	49.5–59.5	03/16/06	Water	MW	Depth to water from TOC = 26.50 ft. Depth of well from TOC = 61.11 ft. Sample collected after purging of 75-80 gal at 2 gpm into drums, because of prior contamination levels.
MW03	CNMW03-W-19909	50.5–60.5	03/17/06	Water	MW	Depth to water from TOC = 26.22 ft. Depth of well from TOC = 62.15 ft. Sample collected after purging of 70 gal at 2 gpm.
MW04	CNMW04-W-19891	37.5–47.5	03/15/06	Water	MW	Depth to water from TOC = 29.09 ft. Depth of well from TOC = 49.14 ft. Purged dry at 2 gpm after 20 gal. Waited 15 min for recharge. Purged additional 7 gal at 0.25 gpm prior to sampling. KDHE took split sample.
MW04	CNMW04-W-19900	37.5–47.5	03/15/06	Water	MW	Aliquots for attenuation parameter analyses. Corresponds to sample CNMW04-W-19891, collected the previous day and submitted for organic analysis at the AGEM Laboratory.
MW05	CNMW05-W-19976	34.5–44.5	03/15/06	Water	MW	Depth to water from TOC = 14.2 ft. Depth of well from TOC = 47.52 ft. Sample collected after purging of 65 gal. Initial purge rate of 3 gpm reduced to 0.25 gpm prior to sampling.
MW05	CNMW05-W-19907	34.5–44.5	03/15/06	Water	MW	Aliquots for attenuation parameter analyses. Corresponds to sample CNMW05-W-19976, collected the previous day and submitted for organic analysis at the AGEM Laboratory.
MW06	CNMW06-W-19889	46.5–56.5	03/15/06	Water	MW	Depth to water from TOC = 40.08 ft. Depth of well from TOC = 59.8 ft. Purged dry after removing 20 gal. Lowered pump and resumed purge at 0.25 gpm to sample.
MW06	CNMW06-W-19896	46.5–56.5	03/16/06	Water	MW	Aliquots for attenuation parameter analyses. Corresponds to sample CNMW06-W-19889, collected the previous day and submitted for organic analysis at the AGEM Laboratory.
MW07	CNMW07-W-19887	45–55	03/14/06	Water	MW	New 2-in. monitoring well. Depth to water from TOC = 32.5 ft. Depth of well from TOC = 56.62 ft. After purging of ~ 12 gal at 1 gpm, the minimum purge volume, Redi-Flo pump failed repeatedly because of sand at reduced rate. Sampled by using Waterra pump.

TABLE S.1 (Cont.)

Location	Sample	Depth (ft below TOC)	Sample Date	Medium	Type <sup>a</sup>	Sample Description
<i>March 2006 Sampling Event (cont.)</i>						
MW08	CNMW08-W-19284	38–53	03/14/06	Water	MW	New 2-in. monitoring well. Depth to water from TOC = 23.48 ft. Depth of well from TOC = 56.6 ft. Sample collected after purging of 16.5 gal with Redi-Flo pump.
MW09	CNMW09-W-19285	25–35	03/15/06	Water	MW	New 2-in. monitoring well. Depth to water from TOC = 7.53 ft. Depth of well from TOC = 39.15 ft. Poorly producing well. Sample collected after purging of 10 gal at 0.5 gpm.
MW10	CNMW10-W-19886	30–45	03/14/06	Water	MW	New 2-in. monitoring well. Depth to water from TOC = 25.6 ft. Depth of well = 47.76 ft below TOC. Purged 15 gal with Redi-Flo pump at 0.5 gpm. Increased purge rate, but well went dry immediately. Sampled after lunch break after purging additional 2.5 gal.
SB01	CNSB01-W-19979	40–50	03/17/06	Water	CPT/P	Depth to water from TOC = 29.76 ft. Depth of well from TOC = 49.0 ft. Sample collected from 1-in. piezometer after purging of 1 gal with Waterra pump. Purged dry and sampled after 45-min. recharge.
SB04	CNSB04-W-19906	51–61	03/16/06	Water	CPT/P	Depth to water from TOC = 26.95 ft. Depth of well from TOC = 59.18 ft. Sample collected from 1-in. piezometer after purging of 4 gal with Waterra pump. KDHE took split sample.
SB05	CNSB05-W-19904	32–42	03/17/06	Water	CPT/P	Depth to water from TOC = 15.91 ft. Depth of well from TOC = 40.92 ft. Sample collected from 1-in. piezometer after purging of 3 gal with Waterra pump.
SB07R	CNSB07R-W-19978	45–60	03/15/06	Water	CPT/P	New 2-in. piezometer to replace abandoned SB07 piezometer. Depth to water from TOC = 24.06 ft. Depth of well from TOC = 58.65 ft. Sample collected after purging of ~ 18 gal at 0.5 gpm.
SB08	CNSB08-W-19903	52–62	03/17/06	Water	CPT/P	Depth to water from TOC = 24.55 ft. Depth of well from TOC = 60.0 ft. Sample collected from 1-in. piezometer after purging of 5 gal with Waterra pump.
SB09	CNSB09-W-19902	32–42	03/17/06	Water	CPT/P	Depth to water from TOC = 9.39 ft. Depth of well from TOC = 35.52 ft. Sample collected from 1-in. piezometer after purging of 5 gal with Waterra pump.

<sup>a</sup> Sample types: CPT/P, piezometer; MW, monitoring well.

TABLE S1.2 Field measurements made during groundwater sampling at Centralia, Kansas, in September 2005 through March 2006.

Location	Sample	Depth (ft below TOC)	Sample Date	Type <sup>a</sup>	Temperature (°C)	pH	Conductivity (μS/cm)	Concentration (mg/L)			ORP (mV)
								Dissolved Oxygen	Carbon Dioxide	Fe(II)	
<i>September 2005 Sampling Event</i>											
MW01	CNMW01-W-19276	54.5–64.5	9/10/05	MW	16.3	7.26	599	6.31	NR	0	104
MW02	CNMW02-W-19282	49.5–59.5	9/11/05	MW	15.3	7.02	739	1.28	NR	NR	NR
MW03	CNMW03-W-19277	50.5–60.5	9/10/05	MW	15.1	7.05	715	10.42	65	0	142
MW04	CNMW04-W-19280	37.5–47.5	9/11/05	MW	15.4	7.18	665	8.43	60	0	226
MW05	CNMW05-W-19279	34.5–44.5	9/10/05	MW	14.2	6.8	620	1.4	110	0	160
MW06	CNMW06-W-19278	46.5–56.5	9/10/05	MW	14.6	7.23	659	0.04	60	0	41
SB01	CNSB01-W-19274	40–50	9/9/05	CPT/P	25	7.11	674	6.25	95	0	140
SB04	CNSB04-W-19273	51–61	9/9/05	CPT/P	16	7.09	708	8.67	100	NR	206
SB05	CNSB05-W-19275	32–42	9/9/05	CPT/P	16.9	6.98	687	7.58	100	NR	NR
SB08	CNSB08-W-19272	52–62	9/8/05	CPT/P	21.2	7.27	598	3.21	75	0	111
SB09	CNSB09-W-19281	32–42	9/11/05	CPT/P	14.6	6.71	877	0.13	225	0	NR
<i>October 2005 Sampling Event</i>											
MW01	CNMW01-W-16308	54.5–64.5	10/11/05	MW	16.4	6.45	634	NS <sup>c</sup>	NS	NS	NS
MW02	CNMW02-W-16309	49.5–59.5	10/12/05	MW	14.8	6.6	766	NS	NS	NS	NS
MW03	CNMW03-W-16310	50.5–60.5	10/11/05	MW	16.3	6.46	765	NS	NS	NS	NS
MW04	CNMW04-W-16311	37.5–47.5	10/11/05	MW	14.4	7.14	811	NS	NS	NS	NS
MW05	CNMW05-W-16312	34.5–44.5	10/11/05	MW	14.8	6.35	610	NS	NS	NS	NS
MW06	CNMW06-W-16313	46.5–56.5	10/11/05	MW	15.8	6.99	638	NS	NS	NS	NS
SB01	CNSB01-W-16314	40–50	10/12/05	CPT/P	13.8	7.23	686	NS	NS	NS	NS
SB04	CNSB04-W-16315	51–61	10/12/05	CPT/P	13.9	7.17	813	NS	NS	NS	NS
SB05	CNSB05-W-16323	32–42	10/12/05	CPT/P	14	7	728	NS	NS	NS	NS
SB08	CNSB08-W-16317	52–62	10/12/05	CPT/P	13.9	7.15	630	NS	NS	NS	NS
SB09	CNSB09-W-16318	32–42	10/11/05	CPT/P	13.9	6.85	910	NS	NS	NS	NS

TABLE S1.2 (Cont.)

Location	Sample	Depth (ft below TOC)	Sample Date	Type <sup>a</sup>	Temperature (°C)	pH	Conductivity (μS/cm)	Concentration (mg/L)			ORP (mV)
								Dissolved Oxygen	Carbon Dioxide	Fe(II)	
<i>March 2006 Sampling Event</i>											
MW01	CNMW01-W-19890	54.5–64.5	3/15/06	MW	14.3	7.56	621	9.33	30	0.04	297
MW02	CNMW02-W-19908	49.5–59.5	3/16/06	MW	14.2	6.78	759	1.24	NR	0	295
MW03	CNMW03-W-19909	50.5–60.5	3/17/06	MW	13.8	6.75	753	9.39	77	0	290
MW04	CNMW04-W-19891	37.5–47.5	3/15/06	MW	13.5	7.78	675	6.82	55	0.06	283
MW05	CNMW05-W-19976	34.5–44.5	3/15/06	MW	14.3	6.9	701	0.9	30	0.06	156
MW06	CNMW06-W-19889	46.5–56.5	3/15/06	MW	14.1	7.38	630	9.87	35	0.02	263
MW07	CNMW07-W-19887	45–55	3/14/06	MW	14.7	6.61	709	0.34	NR	0.03	143
MW08	CNMW08-W-19284	38–53	3/14/06	MW	13.5	6.35	854	5.32	NR	0	145
MW09	CNMW09-W-19285	25–35	3/15/06	MW	17.7	7.33	664	0.95	55	0.09	214
MW10	CNMW10-W-19886	30–45	3/14/06	MW	14.8	6.6	834	6.42	65	0	166
SB01	CNSB01-W-19979	40–50	3/17/06	CPT/P	12.4	7.3	692	5.98	55	0	185
SB04	CNSB04-W-19906	51–61	3/16/06	CPT/P	13	7.57	799	5.96	30	NR	276
SB05	CNSB05-W-19904	32–42	3/17/06	CPT/P	13.3	7.67	718	4.8	40	0.18	253
SB07R	CNSB07R-W-19978	45–60	3/15/06	CPT/P	16.8	7.24	685	7.41	60	0.08	83
SB08	CNSB08-W-19903	52–62	3/17/06	CPT/P	12.9	7.14	645	3.4	40	0	246
SB09	CNSB09-W-19902	32–42	3/17/06	CPT/P	11.7	7.03	969	1.53	99	0	206

<sup>a</sup> Sample types: CPT/P, piezometer; MW, monitoring well.

<sup>b</sup> NR, not recorded.

<sup>c</sup> NS, not sampled for this parameter.

TABLE S1.3 Results of organic analyses at the AGEM Laboratory for monitoring samples collected at Centralia, Kansas, in September 2005 through March 2006.

Location	Sample	Depth (ft below TOC)	Sample Date	Type <sup>a</sup>	Concentration (µg/L)		
					Carbon Tetrachloride	Chloroform	Methylene Chloride
<i>September 2005 Sampling Event</i>							
MW01	CNMW01-W-19276	54.5–64.5	9/10/05	MW	ND <sup>b</sup>	ND	ND
MW02	CNMW02-W-19282	49.5–59.5	9/11/05	MW	776	33	ND
MW03	CNMW03-W-19277	50.5–60.5	9/10/05	MW	1.6	ND	ND
MW04	CNMW04-W-19280	37.5–47.5	9/11/05	MW	0.9 J <sup>c</sup>	ND	ND
MW05	CNMW05-W-19279	34.5–44.5	9/10/05	MW	1.9	ND	ND
MW06	CNMW06-W-19278	46.5–56.5	9/10/05	MW	ND	ND	ND
SB01	CNSB01-W-19274	40–50	9/9/05	CPT/P	269	6.8	ND
SB04	CNSB04-W-19273	51–61	9/9/05	CPT/P	47	0.6 J	ND
SB05	CNSB05-W-19275	32–42	9/9/05	CPT/P	77	7.2	ND
SB08	CNSB08-W-19272	52–62	9/8/05	CPT/P	80	2.6	ND
SB09	CNSB09-W-19281	32–42	9/11/05	CPT/P	ND	ND	ND
<i>October 2005 Sampling Event</i>							
MW01	CNMW01-W-16308	54.5–64.5	10/11/05	MW	ND	ND	ND
MW02	CNMW02-W-16309	49.5–59.5	10/12/05	MW	528	21	ND
MW03	CNMW03-W-16310	50.5–60.5	10/11/05	MW	1.8	ND	ND
MW04	CNMW04-W-16311	37.5–47.5	10/11/05	MW	0.8 J	ND	ND
MW05	CNMW05-W-16312	34.5–44.5	10/11/05	MW	1.5	ND	ND
MW06	CNMW06-W-16313	46.5–56.5	10/11/05	MW	0.3 J	ND	ND
SB01	CNSB01-W-16314	40–50	10/12/05	CPT/P	288	6.6	ND
SB04	CNSB04-W-16315	51–61	10/12/05	CPT/P	44	0.5 J	ND
SB05	CNSB05-W-16323	32–42	10/12/05	CPT/P	54	5.5	ND
SB08	CNSB08-W-16317	52–62	10/12/05	CPT/P	77	2.8	ND
SB09	CNSB09-W-16318	32–42	10/11/05	CPT/P	ND	ND	ND
<i>March 2006 Sampling Event</i>							
MW01	CNMW01-W-19890	54.5–64.5	3/15/06	MW	ND	ND	ND
MW02	CNMW02-W-19908	49.5–59.5	3/16/06	MW	847	21	ND
MW03	CNMW03-W-19909	50.5–60.5	3/17/06	MW	2.6	0.2 J	ND
MW04	CNMW04-W-19891	37.5–47.5	3/15/06	MW	1.3	ND	ND
MW05	CNMW05-W-19976	34.5–44.5	3/15/06	MW	1.3	ND	ND
MW06	CNMW06-W-19889	46.5–56.5	3/15/06	MW	0.2 J	ND	ND
MW07	CNMW07-W-19887	45–55	3/14/06	MW	0.4 J	0.6 J	ND
MW08	CNMW08-W-19284	38–53	3/14/06	MW	ND	ND	ND
MW09	CNMW09-W-19285	25–35	3/15/06	MW	ND	ND	ND
MW10	CNMW10-W-19886	30–45	3/14/06	MW	ND	ND	ND
SB01	CNSB01-W-19979	40–50	3/17/06	CPT/P	320	5.7	ND
SB04	CNSB04-W-19906	51–61	3/16/06	CPT/P	51	0.5 J	ND

TABLE S1.3 (cont.)

Location	Sample	Depth (ft below TOC)	Sample Date	Type <sup>a</sup>	Concentration (µg/L)		
					Carbon Tetrachloride	Chloroform	Methylene Chloride
<i>March 2006 Sampling Event (cont.)</i>							
SB05	CNSB05-W-19904	32–42	3/17/06	CPT/P	104	7.2	ND
SB07R	CNSB07R-W-19978	45–60	3/15/06	CPT/P	41	2.7	ND
SB08	CNSB08-W-19903	52–62	3/17/06	CPT/P	91	2.7	ND
SB09	CNSB09-W-19902	32–42	3/17/06	CPT/P	ND	ND	ND

<sup>a</sup> Sample types: CPT/P, piezometer; MW, monitoring well.

<sup>b</sup> ND, contaminant not detected at the instrument detection limit of 0.1 µg/L.

<sup>c</sup> Qualifier J indicates an estimated concentration below the method quantitation limit of 1 µg/L.

TABLE S1.4 Results of analyses for attenuation parameters at Severn-Trent Laboratories and Microseeps, Inc., on monitoring samples collected at Centralia, Kansas, in September 2005 through March 2006.

Location	Sample	Depth (ft below TOC)	Sample Date	Concentration (mg/L)							
				Total Alkalinity	Aluminum	Calcium	Chloride	Iron	Magnesium	Manganese	Nitrate
<i>September 2005 Sampling Event</i>											
MW01	CNMW01-W-19276	54.5–64.5	9/10/05	303	< 0.2	71.7	< 0.2	< 0.1	30.2	0.0153	0.434
MW02	CNMW02-W-19282	49.5–59.5	9/11/05	352	< 0.2	71.8	7.03	< 0.1	27.2	0.0167	9.31
MW03	CNMW03-W-19277	50.5–60.5	9/10/05	338	< 0.2	78.9	19.6	< 0.1	28.8	< 0.015	7.06
MW04	CNMW04-W-19280	37.5–47.5	9/11/05	336	< 0.2	74.5	10.2	< 0.1	29.4	0.0373	4.45
MW05	CNMW05-W-19279	34.5–44.5	9/10/05	303	< 0.2	85.4	9.42	< 0.1	30.2	< 0.015	3.07
MW06	CNMW06-W-19278	46.5–56.5	9/10/05	317	< 0.2	77.2	6.88	< 0.1	29.8	0.305	0.58
SB01	CNSB01-W-19274	40–50	9/9/05	339	< 0.2	75.2	18.9	0.18 B <sup>a</sup>	30.3	< 0.015	1.05
SB04 <sup>b</sup>	CNSB04-W-19273/15484	51–61	9/9/05	358	< 0.2	79.0	45.5	< 0.1	30.0	< 0.015	1.73
SB05	CNSB05-W-19275	32–42	9/9/05	318	< 0.2	88.1	57.4	< 0.1	33.0	< 0.015	2.57
SB08 <sup>b</sup>	CNSB08-W-19272/15483	52–62	9/8/05	316	< 0.2	73.0	16.2	0.15 B	29.2	< 0.015	1.37
SB09	CNSB09-W-19281	32–42	9/11/05	446	< 0.2	119	13.4	< 0.1	42.2	< 0.015	4.37
<i>March 2006 Sampling Event</i>											
MW01	CNMW01-W-19898	54.5–64.5	3/16/06	325	< 0.2	72.2	14.9	< 0.1	30.1	0.217	0.82
MW02	CNMW02-W-19908	49.5–59.5	3/16/06	364	< 0.2	73.6	8.45	< 0.1	28	< 0.015	9.92
MW03	CNMW03-W-19909	50.5–60.5	3/17/06	353	< 0.2	83.2	24.0	< 0.1	29.7	< 0.015	9.17
MW04	CNMW04-W-19900	37.5–47.5	3/15/06	337	< 0.2	69.8	11.9	< 0.1	27.2	0.0626	4.97
MW05	CNMW05-W-19907	34.5–44.5	3/15/06	304	< 0.2	79.8	9.66	< 0.1	27.7	< 0.015	3.36
MW06	CNMW06-W-19896	46.5–56.5	3/16/06	343	< 0.2	73.2	8.98	< 0.1	28.9	0.124	0.524
MW07	CNMW07-W-19887	45–55	3/14/06	299	< 0.2	59.6	8.72	< 0.1	23.1	0.077	1.18
MW08	CNMW08-W-19284	38–53	3/14/06	342	< 0.2	86.5	47.4	< 0.1	33.1	0.194	2.47
MW09	CNMW09-W-19285	25–35	3/15/06	329	< 0.2	83.2	6.39	< 0.1	28.8	0.133	3.25
MW10	CNMW10-W-19886	30–45	3/14/06	298	< 0.2	91.6	74.3	< 0.1	32.0	0.129	1.23
SB01	CNSB01-W-19979	40–50	3/17/06	338	< 0.2	66.1	22.5	< 0.1	26.5	< 0.015	1.14
SB04	CNSB04-W-19906	51–61	3/16/06	371	< 0.2	82.6	40.0	< 0.1	31.4	< 0.015	3.07
SB05	CNSB05-W-19904	32–42	3/17/06	324	< 0.2	92.6	57.1	< 0.1	35.0	< 0.015	2.56
SB07R	CNSB07R-W-19978	45–60	3/15/06	318	< 0.2	72.4	30.4	< 0.1	26.0	0.179	1.27
SB08	CNSB08-W-19903	52–62	3/17/06	327	< 0.2	72.7	19.3	< 0.1	29.1	< 0.015	1.69
SB09	CNSB09-W-19902	32–42	3/17/06	495	< 0.2	115	15.6	< 0.1	40.4	< 0.015	4.67

TABLE S1.4 (Cont.)

Location	Sample	Depth (ft below TOC)	Sample Date	Concentration (mg/L)							
				Nitrite	Nitrogen	Phosphate	Phosphorus	Potassium	Silicon	Sodium	Sulfate
<i>September 2005 Sampling Event</i>											
MW01	CNMW01-W-19276	54.5–64.5	9/10/05	< 0.005	0.299	0.328	< 0.25	< 5	31.6	24.6	< 0.2
MW02	CNMW02-W-19282	49.5–59.5	9/11/05	0.028	9.79	< 0.2	< 0.25	< 5	15.9	56.4	14.7
MW03	CNMW03-W-19277	50.5–60.5	9/10/05	0.019	8.36	0.351	< 0.25	< 5	30.9	44.4	7.82
MW04	CNMW04-W-19280	37.5–47.5	9/11/05	0.015	5.05	0.435	< 0.25	< 5	15.5	48.0	7.90
MW05	CNMW05-W-19279	34.5–44.5	9/10/05	0.022	3.22	0.312	< 0.25	< 5	15.6	12.5	5.35
MW06	CNMW06-W-19278	46.5–56.5	9/10/05	0.0094	0.345	0.283	< 0.25	< 5	15.6	27.1	4.61
SB01	CNSB01-W-19274	40–50	9/9/05	0.0082	1.86	< 0.2	< 0.25	< 5	31.7	44.1	4.31
SB04 <sup>b</sup>	CNSB04-W-19273/15484	51–61	9/9/05	0.0077	2.64	< 0.2	< 0.25	< 5	15.0	54.9	5.05
SB05	CNSB05-W-19275	32–42	9/9/05	0.010	2.41	< 0.2	< 0.25	< 5	33.4	20.3	4.27
SB08 <sup>b</sup>	CNSB08-W-19272/15483	52–62	9/8/05	0.012	1.28	< 0.2	< 0.25	< 5	14.9	26.7	7.83
SB09	CNSB09-W-19281	32–42	9/11/05	0.021	4.91	< 0.2	< 0.25	< 5	15.0	57.0	30.1
<i>March 2006 Sampling Event</i>											
MW01	CNMW01-W-19898	54.5–64.5	3/16/06	< 0.005	0.315	< 0.2	< 0.25	< 5	15.2	24.8	6.3
MW02	CNMW02-W-19908	49.5–59.5	3/16/06	0.007	9.27	0.25	< 0.25	< 5	16.4	56.1	12.2
MW03	CNMW03-W-19909	50.5–60.5	3/17/06	< 0.005	8.59	< 0.2	< 0.25	< 5	15.0	46.8	9.15
MW04	CNMW04-W-19900	37.5–47.5	3/15/06	< 0.005	4.84	< 0.2	< 0.25	< 5	15.1	43.8	6.38
MW05	CNMW05-W-19907	34.5–44.5	3/15/06	0.0073	3.20	< 0.2	< 0.25	< 5	14.2	11.6	5.17
MW06	CNMW06-W-19896	46.5–56.5	3/16/06	0.0055	0.218	< 0.2	< 0.25	< 5	15.5	25.8	5.00
MW07	CNMW07-W-19887	45–55	3/14/06	0.0175	0.978	< 0.2	< 0.25	< 5	10.5	33.3	28.5
MW08	CNMW08-W-19284	38–53	3/14/06	0.0124	2.14	< 0.2	< 0.25	< 5	15.8	57.5	14.4
MW09	CNMW09-W-19285	25–35	3/15/06	0.0203	2.93	< 0.2	< 0.25	< 5	13.6	11.6	6.23
MW10	CNMW10-W-19886	30–45	3/14/06	0.0175	0.814	< 0.2	< 0.25	< 5	14.5	38.7	10.8
SB01	CNSB01-W-19979	40–50	3/17/06	2.50	< 0.2	< 0.25	< 0.25	< 5	16.1	35.8	4.87
SB04	CNSB04-W-19906	51–61	3/16/06	< 0.005	2.85	< 0.2	< 0.25	< 5	16.5	56.9	5.98
SB05	CNSB05-W-19904	32–42	3/17/06	< 0.005	2.73	< 0.2	< 0.25	< 5	14.5	21.3	2.96
SB07R	CNSB07R-W-19978	45–60	3/15/06	0.0084	1.04	< 0.2	< 0.25	< 5	13.8	38.2	16.8
SB08	CNSB08-W-19903	52–62	3/17/06	< 0.005	1.41	< 0.2	< 0.25	< 5	14.6	26.1	9.25
SB09	CNSB09-W-19902	32–42	3/17/06	< 0.005	4.76	< 0.2	< 0.25	< 5	14.2	54.9	38.8



TABLE S1.4 (Cont.)

Location	Sample	Depth (ft below TOC)	Sample Date	Concentration (mg/L)			Dissolved Hydrogen (nM)	Concentration (µg/L)		
				Sulfide	Zinc	Total Organic Carbon		Ethane	Ethene	Methane
<i>September 2005 Sampling Event</i>										
MW01	CNMW01-W-19276	54.5–64.5	9/10/05	0.054	< 0.02	< 1	--	< 4	< 3	< 2
MW02	CNMW02-W-19282	49.5–59.5	9/11/05	0.0563	< 0.02	< 1	3.1	< 4	< 3	59
MW03	CNMW03-W-19277	50.5–60.5	9/10/05	< 0.02	< 0.02	< 1	--	< 4	< 3	< 2
MW04	CNMW04-W-19280	37.5–47.5	9/11/05	< 0.02	< 0.02	< 1	--	< 4	< 3	4.5
MW05	CNMW05-W-19279	34.5–44.5	9/10/05	< 0.02	< 0.02	< 1	--	< 4	< 3	< 2
MW06	CNMW06-W-19278	46.5–56.5	9/10/05	0.0228	< 0.02	< 1	--	< 4	< 3	< 2
SB01	CNSB01-W-19274	40–50	9/9/05	< 0.02	< 0.02	1.86	71	< 4	< 3	< 2
SB04 <sup>b</sup>	CNSB04-W-19273/15484	51–61	9/9/05	< 0.02	< 0.02	< 1	24	< 4	< 3	< 2
SB05	CNSB05-W-19275	32–42	9/9/05	< 0.02	< 0.02	< 1	11	< 4	< 3	< 2
SB08 <sup>b</sup>	CNSB08-W-19272/15483	52–62	9/8/05	< 0.02	< 0.02	< 1	6.1	< 4	< 3	< 2
SB09	CNSB09-W-19281	32–42	9/11/05	< 0.02	< 0.02	1.57	--	< 4	< 3	< 2
<i>March 2006 Sampling Event</i>										
MW01	CNMW01-W-19898	54.5–64.5	3/16/06	< 0.02	< 0.02	6.19	--	< 4	< 3	< 2
MW02	CNMW02-W-19908	49.5–59.5	3/16/06	0.0381	< 0.02	3.57	--	< 4	< 3	34
MW03	CNMW03-W-19909	50.5–60.5	3/17/06	< 0.02	< 0.02	1.23	--	< 4	< 3	< 2
MW04	CNMW04-W-19900	37.5–47.5	3/15/06	0.0794	< 0.02	5.07	--	< 4	< 3	51
MW05	CNMW05-W-19907	34.5–44.5	3/15/06	< 0.02	< 0.02	5.54	--	< 4	< 3	< 2
MW06	CNMW06-W-19896	46.5–56.5	3/16/06	< 0.02	< 0.02	4.12	--	< 4	< 3	2.3
MW07	CNMW07-W-19887	45–55	3/14/06	< 0.02	< 0.02	35.4	--	< 4	< 3	< 2
MW08	CNMW08-W-19284	38–53	3/14/06	< 0.02	< 0.02	9.00	--	< 4	< 3	< 2
MW09	CNMW09-W-19285	25–35	3/15/06	< 0.02	< 0.02	10.7	--	< 4	< 3	< 2
MW10	CNMW10-W-19886	30–45	3/14/06	< 0.02	< 0.02	7.96	--	< 4	< 3	< 2
SB01	CNSB01-W-19979	40–50	3/17/06	< 0.02	< 0.02	8.97	--	< 4	< 3	< 2
SB04	CNSB04-W-19906	51–61	3/16/06	< 0.02	< 0.02	3.78	--	< 4	< 3	< 2
SB05	CNSB05-W-19904	32–42	3/17/06	< 0.02	< 0.02	4.97	--	< 4	< 3	< 2
SB07R	CNSB07R-W-19978	45–60	3/15/06	< 0.02	< 0.02	11.2	--	< 4	< 3	< 2
SB08	CNSB08-W-19903	52–62	3/17/06	< 0.02	< 0.02	5.99	--	< 4	< 3	< 2
SB09	CNSB09-W-19902	32–42	3/17/06	< 0.02	< 0.02	6.88	--	< 4	< 3	< 2

<sup>a</sup> Qualifier B indicates that the analyte was present in the associated method blank.

<sup>b</sup> Two sample identifiers were used for aliquots from this sampling location.

TABLE S1.5 Results of tritium analyses on groundwater samples collected at Centralia, Kansas, in 2002–2006

Location	Sample	Depth (ft below TOC)	Sample Date	Type <sup>a</sup>	Tritium (TU)
<i>Phase I Investigation (2002)</i>					
SB01	CNSB01-W-15322	40–45	3/27/02	CPT	0.29 ± 0.10
SB01	CNSB01-W-15207	51–56	4/5/02	CPT	0.34 ± 0.09
SB01	CNSB01-W-15311	86–91	3/27/02	CPT	0.04 ± 0.09
SB03	CNSB03A-W-15305	55.5–58.5	3/26/02	CPT	-0.08 ± 0.10
SB04	CNSB04-W-15274	52.5–55.5	3/22/02	CPT	0.04 ± 0.09
SB04	CNSB04-W-15315	56–60	3/27/02	CPT	0.21 ± 0.10
SB04	CNSB04-W-15375	87–91	4/5/02	CPT	-0.01 ± 0.09
SB04	CNSB04-W-15318	99–104	3/27/02	CPT	0.09 ± 0.11
SB05	CNSB05-W-15264	34–37	3/21/02	CPT	0.4 ± 0.4
SB05	CNSB05-W-15265	37–40.2	3/22/02	CPT	0.6 ± 0.4
SB06	CNSB06-W-15141	61–66	4/5/02	CPT	2.45 ± 0.09
SB07	CNSB07-W-15240	46–50	4/8/02	CPT	0.04 ± 0.09
SB07	CNSB07-W-15244	64–69	4/9/02	CPT	0.04 ± 0.09
SB07	CNSB07-W-15217	95–100	4/10/02	CPT	0.17 ± 0.09
SB08	CNSB08-W-15238	53–58	4/8/02	CPT	0.15 ± 0.09
SB08	CNSB08-W-15367	62–67	4/10/02	CPT	0.13 ± 0.09
SB09	CNSB09-W-15372	32–37	4/10/02	CPT	9.2 ± 0.3
SB09	CNSB09-W-15215	36.5–41.5	4/9/02	CPT	10.5 ± 0.3
SB10	CNSB05-W-15200	41–45	4/6/02	CPT	0.03 ± 0.09
<i>Phase II Investigation (2003)</i>					
SB16	CNSB16-W-15427	52.5–55.8	3/31/03	CPT	1.92 ± 0.09
SB18	CNSB18-W-15429	37.6–42.6	4/1/03	CPT	0.04 ± 0.09
SB19	CNSB19-W-15435	27.8–32.8	4/1/03	CPT	10.5 ± 0.3
SB20	CNSB20-W-15432	46–49	4/1/03	CPT	-0.05 ± 0.09
SB21	CNSB21-W-15468	44.2–49.2	4/4/03	CPT	0.03 ± 0.09
SB22	CNSB22-W-15467	30.5–35.5	4/3/03	CPT	0.64 ± 0.09
SB24	CNSB24-W-15425	40.9–45.9	3/31/03	CPT	0.6 ± 0.09
<i>Monitoring Well Installation and Sampling (2004)</i>					
MW01	CNMW01-W-16158	54.5–64.5	8/24/04	MW	0.11 ± 0.09
MW02	CNMW02-W-16159	49.5–59.5	8/26/04	MW	0.78 ± 0.09
MW03	CNMW03-W-16178	50.5–60.5	8/24/04	MW	0.09 ± 0.09
MW04	CNMW04-W-16180	37.5–47.5	8/24/04	MW	0.15 ± 0.09
MW05	CNMW05-W-16183	34.5–44.5	8/25/04	MW	0.16 ± 0.09
MW06	CNMW06-W-16184	46.5–56.5	8/25/04	MW	0.10 ± 0.09
<i>March 2006 Sampling Event</i>					
MW07	CNMW07-W-19887	45–55	3/14/06	MW	0.31 ± 0.09
MW08	CNMW08-W-19284	38–53	3/14/06	MW	4.63 ± 0.15
MW09	CNMW09-W-19285	25–35	3/15/06	MW	1.87 ± 0.09
MW10	CNMW10-W-19886	30–45	3/14/06	MW	1.39 ± 0.09
SB07R	CNSB07R-W-19978	45–60	3/15/06	CPT/P	0.32 ± 0.09

<sup>a</sup> Sample types: CPT, cone penetrometer; CPT/P, piezometer; MW, monitoring well.

**Supplement 2:**

**Water Level Data**

TABLE S2.1 Hand-measured water levels at Centralia in September 2005 through March 2006.

Well/ Piezometer	Reference Elevation (ft AMSL)	September 24, 2005		March 14-17, 2006		June 16, 2006	
		Depth (ft below TOC)	Elevation (ft AMSL)	Depth (ft below TOC)	Elevation (ft AMSL)	Depth (ft below TOC)	Elevation (ft AMSL)
SB01	1325.16	23.30	1301.86	29.76	1295.40	21.30	1303.86
SB04	1335.73	25.42	1310.31	26.95	1308.78	25.08	1310.65
SB05	1321.28	13.57	1307.71	15.91	1305.37	Blocked	
SB07	1331.94	Blocked					
SB07R	1331.71			24.06	1307.65	20.95	1310.76
SB08	1332.56	22.18	1310.38	24.55	1308.01	21.93	1310.63
SB09	1311.04	8.07	1302.97	9.39	1301.65	7.07	1303.97
MW01	1329.30	16.25	1313.05	18.68	1310.62	14.76	1314.54
MW02	1334.82	24.47	1310.35	26.50	1308.32	24.15	1310.67
MW03	1334.70	24.33	1310.37	26.22	1308.48	23.99	1310.71
MW04	1322.71	27.43	1295.28	29.09	1293.62	27.53	1295.18
MW05	1318.11	12.56	1305.55	14.20	1303.91	11.18	1306.93
MW06	1329.82	39.32	1290.50	40.08	1289.74	39.44	1290.38
MW07	1324.83			32.50	1292.33	31.49	1293.34
MW08	1332.41			23.48	1308.93	21.78	1310.63
MW09	1310.49			7.53	1302.96	3.58	1306.91
MW10	1334.56			25.60	1308.96	23.91	1310.65

TABLE S2.2 Automatically measured water levels at Centralia, August 31, 2004, to June 16, 2006.

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
8/31/2004	16:00	15.543	23.421	23.294	26.645	12.517	38.676
8/31/2004	20:00	15.572	23.418	23.294	26.657	12.529	38.679
9/1/2004	0:00	15.582	23.429	23.306	26.681	12.545	38.689
9/1/2004	4:00	15.591	23.431	23.308	26.683	12.552	38.691
9/1/2004	8:00	15.596	23.436	23.314	26.699	12.566	38.692
9/1/2004	12:00	15.611	23.438	23.32	26.696	12.576	38.694
9/1/2004	16:00	15.609	23.423	23.306	26.667	12.571	38.687
9/1/2004	20:00	15.596	23.412	23.294	26.65	12.562	38.674
9/2/2004	0:00	15.598	23.414	23.294	26.656	12.571	38.667
9/2/2004	4:00	15.594	23.405	23.286	26.643	12.571	38.659
9/2/2004	8:00	15.587	23.394	23.277	26.634	12.571	38.648
9/2/2004	12:00	15.589	23.384	23.269	26.623	12.576	38.637
9/2/2004	16:00	15.579	23.362	23.248	26.587	12.566	38.622
9/2/2004	20:00	15.561	23.347	23.234	26.569	12.562	38.604
9/3/2004	0:00	15.559	23.351	23.236	26.583	12.578	38.598
9/3/2004	4:00	15.563	23.347	23.236	26.581	12.585	38.593
9/3/2004	8:00	15.567	23.343	23.232	26.587	12.595	38.589
9/3/2004	12:00	15.576	23.346	23.234	26.592	12.609	38.589
9/3/2004	16:00	15.581	23.338	23.226	26.574	12.611	38.585
9/3/2004	20:00	15.579	23.333	23.224	26.574	12.616	38.58
9/4/2004	0:00	15.591	23.346	23.236	26.597	12.637	38.585
9/4/2004	4:00	15.605	23.351	23.244	26.605	12.651	38.591
9/4/2004	8:00	15.616	23.358	23.249	26.619	12.666	38.596
9/4/2004	12:00	15.631	23.358	23.251	26.62	12.677	38.598
9/4/2004	16:00	15.631	23.344	23.238	26.587	12.67	38.591
9/4/2004	20:00	15.622	23.338	23.23	26.576	12.67	38.581
9/5/2004	0:00	15.626	23.342	23.234	26.588	12.682	38.58
9/5/2004	4:00	15.629	23.336	23.226	26.576	12.687	38.572
9/5/2004	8:00	15.626	23.325	23.216	26.568	12.687	38.565
9/5/2004	12:00	15.615	23.307	23.199	26.539	12.682	38.548
9/5/2004	16:00	15.591	23.273	23.164	26.505	12.656	38.522
9/5/2004	20:00	15.563	23.255	23.146	26.481	12.649	38.497
9/6/2004	0:00	15.578	23.286	23.179	26.543	12.687	38.506
9/6/2004	4:00	15.611	23.31	23.203	26.579	12.72	38.526
9/6/2004	8:00	15.652	23.346	23.24	26.634	12.755	38.557
9/6/2004	12:00	15.689	23.371	23.265	26.665	12.784	38.583
9/6/2004	16:00	15.716	23.382	23.274	26.665	12.796	38.6
9/6/2004	20:00	15.735	23.401	23.296	26.687	12.812	38.618
9/7/2004	0:00	15.759	23.425	23.32	26.718	12.833	38.639
9/7/2004	4:00	15.779	23.44	23.335	26.729	12.847	38.65
9/7/2004	8:00	15.802	23.465	23.36	26.758	12.866	38.668
9/7/2004	12:00	15.826	23.478	23.376	26.773	12.883	38.683
9/7/2004	16:00	15.829	23.469	23.364	26.742	12.873	38.679
9/7/2004	20:00	15.826	23.475	23.37	26.738	12.873	38.677
9/8/2004	0:00	15.833	23.48	23.378	26.749	12.883	38.676
9/8/2004	4:00	15.839	23.489	23.385	26.758	12.892	38.677
9/8/2004	8:00	15.852	23.504	23.401	26.776	12.909	38.685
9/8/2004	12:00	15.861	23.504	23.401	26.769	12.911	38.687
9/8/2004	16:00	15.853	23.484	23.38	26.731	12.897	38.672
9/8/2004	20:00	15.844	23.48	23.378	26.724	12.897	38.663
9/9/2004	0:00	15.848	23.491	23.387	26.744	12.911	38.663
9/9/2004	4:00	15.849	23.486	23.383	26.736	12.916	38.657
9/9/2004	8:00	15.857	23.497	23.393	26.745	12.928	38.661

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
9/9/2004	12:00	15.868	23.502	23.399	26.758	12.939	38.664
9/9/2004	16:00	15.862	23.48	23.376	26.72	12.93	38.652
9/9/2004	20:00	15.855	23.478	23.375	26.714	12.93	38.644
9/10/2004	0:00	15.859	23.486	23.385	26.733	12.947	38.646
9/10/2004	4:00	15.866	23.488	23.385	26.733	12.956	38.644
9/10/2004	8:00	15.879	23.502	23.403	26.755	12.975	38.653
9/10/2004	12:00	15.898	23.51	23.411	26.767	12.987	38.661
9/10/2004	16:00	15.894	23.493	23.393	26.736	12.977	38.653
9/10/2004	20:00	15.89	23.493	23.393	26.733	12.984	38.648
9/11/2004	0:00	15.899	23.506	23.407	26.756	13.001	38.653
9/11/2004	4:00	15.903	23.502	23.403	26.749	13.004	38.65
9/11/2004	8:00	15.912	23.519	23.42	26.767	13.022	38.657
9/11/2004	12:00	15.927	23.521	23.423	26.765	13.027	38.661
9/11/2004	16:00	15.923	23.508	23.409	26.744	13.024	38.653
9/11/2004	20:00	15.92	23.508	23.409	26.744	13.032	38.648
9/12/2004	0:00	15.927	23.517	23.418	26.758	13.043	38.649
9/12/2004	4:00	15.931	23.511	23.413	26.75	13.048	38.648
9/12/2004	8:00	15.935	23.517	23.42	26.757	13.057	38.646
9/12/2004	12:00	15.946	23.519	23.42	26.755	13.065	38.648
9/12/2004	16:00	15.931	23.491	23.393	26.712	13.048	38.631
9/12/2004	20:00	15.916	23.484	23.385	26.7	13.05	38.618
9/13/2004	0:00	15.92	23.489	23.391	26.716	13.065	38.615
9/13/2004	4:00	15.916	23.476	23.38	26.7	13.062	38.605
9/13/2004	8:00	15.91	23.469	23.374	26.692	13.067	38.596
9/13/2004	12:00	15.91	23.461	23.366	26.678	13.069	38.589
9/13/2004	16:00	15.894	23.441	23.345	26.645	13.06	38.572
9/13/2004	20:00	15.879	23.426	23.329	26.634	13.062	38.557
9/14/2004	0:00	15.886	23.437	23.339	26.654	13.079	38.557
9/14/2004	4:00	15.89	23.434	23.337	26.656	13.088	38.555
9/14/2004	8:00	15.894	23.439	23.343	26.665	13.098	38.557
9/14/2004	12:00	15.903	23.437	23.341	26.656	13.107	38.555
9/14/2004	16:00	15.899	23.41	23.315	26.619	13.098	38.544
9/14/2004	20:00	15.883	23.404	23.308	26.614	13.1	38.533
9/15/2004	0:00	15.888	23.412	23.315	26.629	13.119	38.535
9/15/2004	4:00	15.884	23.408	23.315	26.61	13.117	38.53
9/15/2004	8:00	15.899	23.423	23.327	26.671	13.145	38.539
9/15/2004	12:00	15.927	23.454	23.356	26.705	13.174	38.559
9/15/2004	16:00	15.953	23.461	23.366	26.713	13.188	38.576
9/15/2004	20:00	15.971	23.482	23.387	26.738	13.209	38.592
9/16/2004	0:00	16.005	23.517	23.422	26.785	13.242	38.618
9/16/2004	4:00	16.036	23.541	23.446	26.813	13.261	38.642
9/16/2004	8:00	16.056	23.557	23.463	26.833	13.275	38.66
9/16/2004	12:00	16.08	23.574	23.477	26.842	13.289	38.66
9/16/2004	16:00	16.082	23.561	23.465	26.806	13.277	38.662
9/16/2004	20:00	16.073	23.563	23.467	26.805	13.275	38.66
9/17/2004	0:00	16.082	23.574	23.479	26.822	13.291	38.664
9/17/2004	4:00	16.084	23.574	23.481	26.817	13.294	38.66
9/17/2004	8:00	16.09	23.581	23.487	26.833	13.301	38.662
9/17/2004	12:00	16.099	23.587	23.49	26.83	13.31	38.664
9/17/2004	16:00	16.092	23.567	23.471	26.791	13.296	38.653
9/17/2004	20:00	16.092	23.576	23.481	26.813	13.308	38.653
9/18/2004	0:00	16.097	23.578	23.482	26.813	13.317	38.653
9/18/2004	4:00	16.105	23.591	23.496	26.825	13.329	38.659
9/18/2004	8:00	16.123	23.607	23.514	26.861	13.348	38.668

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
9/18/2004	12:00	16.13	23.609	23.516	26.853	13.353	38.67
9/18/2004	16:00	16.129	23.6	23.508	26.826	13.348	38.666
9/18/2004	20:00	16.132	23.611	23.518	26.849	13.36	38.67
9/19/2004	0:00	16.147	23.63	23.537	26.877	13.381	38.681
9/19/2004	4:00	16.166	23.648	23.555	26.897	13.398	38.694
9/19/2004	8:00	16.182	23.665	23.57	26.921	13.412	38.707
9/19/2004	12:00	16.199	23.674	23.58	26.928	13.424	38.716
9/19/2004	16:00	16.203	23.665	23.57	26.902	13.419	38.714
9/19/2004	20:00	16.195	23.661	23.566	26.893	13.416	38.708
9/20/2004	0:00	16.197	23.668	23.574	26.902	13.426	38.708
9/20/2004	4:00	16.203	23.672	23.578	26.905	13.433	38.707
9/20/2004	8:00	16.208	23.683	23.59	26.921	13.447	38.712
9/20/2004	12:00	16.21	23.674	23.58	26.911	13.445	38.707
9/20/2004	16:00	16.203	23.659	23.564	26.874	13.438	38.696
9/20/2004	20:00	16.193	23.657	23.566	26.872	13.44	38.688
9/21/2004	0:00	16.197	23.666	23.574	26.894	13.457	38.686
9/21/2004	4:00	16.21	23.677	23.584	26.905	13.469	38.692
9/21/2004	8:00	16.221	23.691	23.597	26.926	13.485	38.701
9/21/2004	12:00	16.232	23.694	23.601	26.928	13.49	38.707
9/21/2004	16:00	16.234	23.69	23.597	26.919	13.492	38.707
9/21/2004	20:00	16.241	23.701	23.609	26.935	13.504	38.71
9/22/2004	0:00	16.258	23.724	23.631	26.968	13.525	38.723
9/22/2004	4:00	16.275	23.733	23.64	26.976	13.537	38.732
9/22/2004	8:00	16.291	23.749	23.66	26.994	13.554	38.747
9/22/2004	12:00	16.304	23.755	23.664	27.001	13.556	38.755
9/22/2004	16:00	16.297	23.731	23.642	26.957	13.542	38.742
9/22/2004	20:00	16.286	23.731	23.64	26.953	13.542	38.734
9/23/2004	0:00	16.282	23.731	23.64	26.954	13.549	38.729
9/23/2004	4:00	16.277	23.727	23.638	26.945	13.549	38.721
9/23/2004	8:00	16.279	23.733	23.644	26.954	13.559	38.721
9/23/2004	12:00	16.293	23.755	23.667	26.994	13.582	38.734
9/23/2004	16:00	16.301	23.748	23.659	26.979	13.582	38.734
9/23/2004	20:00	16.31	23.764	23.673	26.996	13.594	38.742
9/24/2004	0:00	16.327	23.781	23.691	27.021	13.613	38.753
9/24/2004	4:00	16.341	23.786	23.698	27.029	13.62	38.747
9/24/2004	8:00	16.358	23.814	23.724	27.061	13.641	38.771
9/24/2004	12:00	16.378	23.823	23.733	27.068	13.651	38.786
9/24/2004	16:00	16.373	23.809	23.72	27.039	13.638	38.782
9/24/2004	20:00	16.371	23.816	23.728	27.043	13.646	38.78
9/25/2004	0:00	16.388	23.838	23.749	27.081	13.667	38.793
9/25/2004	4:00	16.399	23.846	23.757	27.087	13.674	38.801
9/25/2004	8:00	16.417	23.87	23.78	27.114	13.693	38.814
9/25/2004	12:00	16.44	23.886	23.798	27.134	13.705	38.828
9/25/2004	16:00	16.44	23.875	23.784	27.107	13.698	38.828
9/25/2004	20:00	16.438	23.883	23.796	27.114	13.704	38.83
9/26/2004	0:00	16.447	23.892	23.803	27.125	13.716	38.834
9/26/2004	4:00	16.449	23.888	23.8	27.118	13.714	38.828
9/26/2004	8:00	16.454	23.899	23.811	27.128	13.724	38.834
9/26/2004	12:00	16.461	23.903	23.815	27.13	13.73	38.838
9/26/2004	16:00	16.45	23.881	23.792	27.089	13.714	38.823
9/26/2004	20:00	16.436	23.874	23.786	27.078	13.712	38.81
9/27/2004	0:00	16.436	23.881	23.794	27.092	13.723	38.81
9/27/2004	4:00	16.434	23.873	23.786	27.083	13.721	38.801
9/27/2004	8:00	16.434	23.881	23.794	27.094	13.735	38.801

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
9/27/2004	12:00	16.445	23.888	23.802	27.101	13.745	38.804
9/27/2004	16:00	16.439	23.868	23.778	27.069	13.733	38.795
9/27/2004	20:00	16.43	23.87	23.784	27.074	13.738	38.788
9/28/2004	0:00	16.447	23.897	23.809	27.118	13.761	38.8
9/28/2004	4:00	16.46	23.903	23.819	27.128	13.773	38.81
9/28/2004	8:00	16.478	23.925	23.84	27.162	13.792	38.825
9/28/2004	12:00	16.508	23.949	23.866	27.189	13.811	38.847
9/28/2004	16:00	16.511	23.936	23.85	27.158	13.802	38.847
9/28/2004	20:00	16.51	23.94	23.856	27.158	13.804	38.846
9/29/2004	0:00	16.517	23.951	23.866	27.171	13.816	38.85
9/29/2004	4:00	16.515	23.94	23.852	27.152	13.809	38.839
9/29/2004	8:00	16.51	23.938	23.854	27.153	13.811	38.835
9/29/2004	12:00	16.513	23.94	23.854	27.149	13.818	38.834
9/29/2004	16:00	16.498	23.91	23.825	27.1	13.797	38.813
9/29/2004	20:00	16.474	23.898	23.812	27.085	13.79	38.797
9/30/2004	0:00	16.467	23.896	23.811	27.085	13.797	38.787
9/30/2004	4:00	16.461	23.887	23.802	27.076	13.795	38.778
9/30/2004	8:00	16.454	23.883	23.798	27.077	13.8	38.769
9/30/2004	12:00	16.458	23.881	23.796	27.074	13.806	38.764
9/30/2004	16:00	16.445	23.853	23.769	27.03	13.792	38.749
9/30/2004	20:00	16.426	23.842	23.757	27.018	13.79	38.734
10/1/2004	0:00	16.424	23.844	23.761	27.026	13.799	38.728
10/1/2004	4:00	16.417	23.825	23.743	27.004	13.792	38.716
10/1/2004	8:00	16.408	23.827	23.745	27.012	13.8	38.71
10/1/2004	12:00	16.413	23.838	23.755	27.034	13.816	38.712
10/1/2004	16:00	16.449	23.877	23.796	27.097	13.851	38.74
10/1/2004	20:00	16.495	23.931	23.848	27.18	13.891	38.78
10/2/2004	0:00	16.554	23.979	23.897	27.246	13.929	38.828
10/2/2004	4:00	16.598	24.016	23.932	27.28	13.953	38.869
10/2/2004	8:00	16.628	24.038	23.955	27.307	13.967	38.896
10/2/2004	12:00	16.654	24.016	23.934	27.32	13.979	38.913
10/2/2004	16:00	16.656	23.923	23.84	27.28	13.965	38.904
10/2/2004	20:00	16.643	23.847	23.765	27.251	13.95	38.88
10/3/2004	0:00	16.635	23.849	23.768	27.252	13.95	38.869
10/3/2004	4:00	16.63	23.849	23.766	27.234	13.946	38.854
10/3/2004	8:00	16.619	23.849	23.766	27.221	13.941	38.837
10/3/2004	12:00	16.606	23.844	23.757	27.205	13.934	38.821
10/3/2004	16:00	16.589	23.772	23.689	27.165	13.922	38.78
10/3/2004	20:00	16.58	23.748	23.665	27.183	13.929	38.758
10/4/2004	0:00	16.593	23.779	23.698	27.229	13.957	38.763
10/4/2004	4:00	16.619	23.811	23.73	27.262	13.981	38.78
10/4/2004	8:00	16.648	23.851	23.77	27.313	14.01	38.806
10/4/2004	12:00	16.682	23.851	23.77	27.34	14.026	38.817
10/4/2004	16:00	16.696	23.825	23.745	27.324	14.026	38.81
10/4/2004	20:00	16.7	23.822	23.741	27.322	14.026	38.804
10/5/2004	0:00	16.708	23.836	23.755	27.328	14.036	38.806
10/5/2004	4:00	16.713	23.853	23.772	27.336	14.04	38.811
10/5/2004	8:00	16.721	23.868	23.788	27.346	14.047	38.819
10/5/2004	12:00	16.724	23.838	23.757	27.337	14.047	38.797
10/5/2004	16:00	16.711	23.792	23.71	27.294	14.031	38.749
10/5/2004	20:00	16.695	23.737	23.656	27.28	14.026	38.66
10/6/2004	0:00	16.693	23.744	23.663	27.289	14.033	38.645
10/6/2004	4:00	16.693	23.751	23.671	27.287	14.038	38.645
10/6/2004	8:00	16.693	23.762	23.683	27.289	14.045	38.653



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
10/6/2004	12:00	16.7	23.748	23.663	27.307	14.054	38.609
10/6/2004	16:00	16.691	23.709	23.626	27.263	14.04	38.553
10/6/2004	20:00	16.678	23.677	23.595	27.242	14.036	38.476
10/7/2004	0:00	16.674	23.685	23.605	27.247	14.04	38.48
10/7/2004	4:00	16.671	23.685	23.603	27.236	14.04	38.489
10/7/2004	8:00	16.663	23.688	23.609	27.222	14.04	38.485
10/7/2004	12:00	16.661	23.692	23.609	27.229	14.045	38.483
10/7/2004	16:00	16.65	23.661	23.579	27.198	14.035	38.439
10/7/2004	20:00	16.641	23.653	23.574	27.198	14.04	38.378
10/8/2004	0:00	16.645	23.659	23.578	27.203	14.049	38.385
10/8/2004	4:00	16.645	23.663	23.582	27.2	14.052	38.406
10/8/2004	8:00	16.652	23.681	23.601	27.215	14.064	38.433
10/8/2004	12:00	16.669	23.696	23.615	27.24	14.08	38.419
10/8/2004	16:00	16.676	23.687	23.607	27.234	14.083	38.345
10/8/2004	20:00	16.691	23.705	23.624	27.263	14.102	38.312
10/9/2004	0:00	16.715	23.731	23.652	27.291	14.116	38.35
10/9/2004	4:00	16.73	23.742	23.663	27.293	14.123	38.389
10/9/2004	8:00	16.743	23.766	23.687	27.309	14.135	38.43
10/9/2004	12:00	16.759	23.779	23.7	27.32	14.144	38.452
10/9/2004	16:00	16.752	23.761	23.681	27.276	14.128	38.444
10/9/2004	20:00	16.745	23.766	23.689	27.275	14.13	38.432
10/10/2004	0:00	16.75	23.777	23.698	27.289	14.14	38.444
10/10/2004	4:00	16.75	23.775	23.698	27.28	14.14	38.461
10/10/2004	8:00	16.752	23.792	23.714	27.291	14.151	38.483
10/10/2004	12:00	16.765	23.803	23.726	27.305	14.161	38.505
10/10/2004	16:00	16.758	23.79	23.714	27.273	14.149	38.503
10/10/2004	20:00	16.758	23.805	23.726	27.286	14.158	38.516
10/11/2004	0:00	16.767	23.812	23.734	27.298	14.168	38.533
10/11/2004	4:00	16.767	23.812	23.735	27.291	14.168	38.544
10/11/2004	8:00	16.772	23.822	23.745	27.296	14.177	38.557
10/11/2004	12:00	16.782	23.829	23.751	27.304	14.184	38.555
10/11/2004	16:00	16.774	23.81	23.733	27.271	14.175	38.52
10/11/2004	20:00	16.769	23.812	23.735	27.269	14.175	38.511
10/12/2004	0:00	16.774	23.823	23.745	27.28	14.187	38.524
10/12/2004	4:00	16.765	23.801	23.725	27.249	14.175	38.52
10/12/2004	8:00	16.752	23.794	23.716	27.229	14.17	38.513
10/12/2004	12:00	16.746	23.794	23.714	27.222	14.173	38.516
10/12/2004	16:00	16.73	23.772	23.694	27.191	14.161	38.5
10/12/2004	20:00	16.721	23.77	23.694	27.191	14.163	38.487
10/13/2004	0:00	16.722	23.775	23.698	27.196	14.173	38.492
10/13/2004	4:00	16.717	23.768	23.692	27.189	14.172	38.494
10/13/2004	8:00	16.719	23.779	23.702	27.205	14.187	38.496
10/13/2004	12:00	16.739	23.803	23.73	27.238	14.205	38.524
10/13/2004	16:00	16.758	23.818	23.741	27.251	14.213	38.542
10/13/2004	20:00	16.77	23.833	23.757	27.271	14.227	38.557
10/14/2004	0:00	16.789	23.844	23.766	27.276	14.236	38.575
10/14/2004	4:00	16.785	23.829	23.753	27.249	14.227	38.579
10/14/2004	8:00	16.774	23.82	23.745	27.234	14.222	38.575
10/14/2004	12:00	16.767	23.81	23.737	27.209	14.22	38.566
10/14/2004	16:00	16.743	23.779	23.7	27.156	14.196	38.548
10/14/2004	20:00	16.717	23.762	23.688	27.136	14.189	38.527
10/15/2004	0:00	16.708	23.759	23.685	27.13	14.191	38.522
10/15/2004	4:00	16.698	23.753	23.677	27.132	14.191	38.516
10/15/2004	8:00	16.698	23.762	23.689	27.154	14.208	38.522

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
10/15/2004	12:00	16.719	23.781	23.708	27.178	14.227	38.536
10/15/2004	16:00	16.733	23.788	23.714	27.187	14.234	38.551
10/15/2004	20:00	16.75	23.814	23.741	27.227	14.255	38.571
10/16/2004	0:00	16.782	23.846	23.77	27.26	14.279	38.603
10/16/2004	4:00	16.804	23.864	23.79	27.28	14.291	38.629
10/16/2004	8:00	16.819	23.875	23.802	27.295	14.298	38.643
10/16/2004	12:00	16.841	23.896	23.823	27.318	14.312	38.665
10/16/2004	16:00	16.844	23.888	23.815	27.287	14.305	38.669
10/16/2004	20:00	16.841	23.888	23.817	27.284	14.305	38.671
10/17/2004	0:00	16.848	23.903	23.829	27.296	14.314	38.678
10/17/2004	4:00	16.85	23.899	23.827	27.291	14.316	38.682
10/17/2004	8:00	16.845	23.894	23.821	27.28	14.312	38.678
10/17/2004	12:00	16.843	23.89	23.819	27.273	14.314	38.673
10/17/2004	16:00	16.826	23.859	23.786	27.216	14.293	38.654
10/17/2004	20:00	16.802	23.849	23.778	27.203	14.286	38.638
10/18/2004	0:00	16.794	23.844	23.772	27.194	14.288	38.628
10/18/2004	4:00	16.776	23.814	23.743	27.152	14.274	38.608
10/18/2004	8:00	16.761	23.812	23.741	27.163	14.279	38.599
10/18/2004	12:00	16.761	23.818	23.747	27.176	14.288	38.597
10/18/2004	16:00	16.771	23.827	23.757	27.191	14.302	38.603
10/18/2004	20:00	16.793	23.859	23.786	27.242	14.329	38.625
10/19/2004	0:00	16.818	23.879	23.809	27.269	14.345	38.641
10/19/2004	4:00	16.843	23.899	23.828	27.287	14.362	38.669
10/19/2004	8:00	16.87	23.931	23.862	27.338	14.381	38.698
10/19/2004	12:00	16.896	23.947	23.875	27.353	14.392	38.718
10/19/2004	16:00	16.907	23.953	23.881	27.344	14.395	38.732
10/19/2004	20:00	16.926	23.977	23.906	27.377	14.409	38.752
10/20/2004	0:00	16.944	23.995	23.924	27.398	14.423	38.77
10/20/2004	4:00	16.963	24.01	23.939	27.408	14.43	38.785
10/20/2004	8:00	16.976	24.027	23.957	27.426	14.439	38.8
10/20/2004	12:00	16.991	24.04	23.97	27.444	14.449	38.812
10/20/2004	16:00	16.991	24.032	23.963	27.42	14.444	38.812
10/20/2004	20:00	16.992	24.04	23.97	27.422	14.447	38.814
10/21/2004	0:00	16.998	24.047	23.977	27.435	14.454	38.818
10/21/2004	4:00	16.998	24.042	23.972	27.42	14.451	38.816
10/21/2004	8:00	16.994	24.051	23.982	27.411	14.451	38.814
10/21/2004	12:00	16.989	24.132	24.062	27.397	14.447	38.814
10/21/2004	16:00	16.972	24.112	24.042	27.362	14.435	38.8
10/21/2004	20:00	16.961	24.108	24.041	27.36	14.435	38.792
10/22/2004	0:00	16.955	24.097	24.029	27.358	14.437	38.787
10/22/2004	4:00	16.943	24.073	24.004	27.331	14.425	38.77
10/22/2004	8:00	16.935	24.069	24.002	27.327	14.43	38.765
10/22/2004	12:00	16.93	24.054	23.986	27.316	14.428	38.755
10/22/2004	16:00	16.903	24.021	23.951	27.265	14.409	38.726
10/22/2004	20:00	16.896	24.012	23.941	27.263	14.411	38.717
10/23/2004	0:00	16.881	23.997	23.93	27.251	14.409	38.706
10/23/2004	4:00	16.883	24.01	23.941	27.283	14.423	38.707
10/23/2004	8:00	16.909	24.042	23.973	27.338	14.454	38.728
10/23/2004	12:00	16.941	24.069	24	27.382	14.477	38.759
10/23/2004	16:00	16.965	24.077	24.009	27.391	14.487	38.777
10/23/2004	20:00	16.985	24.095	24.027	27.409	14.498	38.798
10/24/2004	0:00	17.009	24.112	24.044	27.435	14.513	38.816
10/24/2004	4:00	17.016	24.112	24.042	27.428	14.515	38.822
10/24/2004	8:00	17.026	24.121	24.054	27.438	14.522	38.829

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
10/24/2004	12:00	17.033	24.119	24.048	27.429	14.52	38.831
10/24/2004	16:00	17.018	24.101	24.033	27.396	14.508	38.82
10/24/2004	20:00	17.018	24.117	24.05	27.42	14.52	38.822
10/25/2004	0:00	17.046	24.154	24.085	27.48	14.548	38.844
10/25/2004	4:00	17.072	24.173	24.107	27.515	14.565	38.864
10/25/2004	8:00	17.096	24.201	24.134	27.544	14.581	38.886
10/25/2004	12:00	17.127	24.225	24.158	27.568	14.595	38.912
10/25/2004	16:00	17.127	24.21	24.144	27.533	14.584	38.914
10/25/2004	20:00	17.127	24.217	24.15	27.537	14.591	38.916
10/26/2004	0:00	17.135	24.219	24.153	27.539	14.596	38.919
10/26/2004	4:00	17.126	24.204	24.14	27.52	14.581	38.91
10/26/2004	8:00	17.074	24.158	24.091	27.506	14.541	38.873
10/26/2004	12:00	17.077	24.171	24.105	27.517	14.553	38.875
10/26/2004	16:00	17.079	24.171	24.105	27.513	14.55	38.875
10/26/2004	20:00	17.096	24.199	24.134	27.555	14.572	38.892
10/27/2004	0:00	17.124	24.228	24.163	27.595	14.596	38.916
10/27/2004	4:00	17.144	24.238	24.173	27.608	14.605	38.931
10/27/2004	8:00	17.161	24.262	24.196	27.635	14.619	38.949
10/27/2004	12:00	17.187	24.284	24.219	27.661	14.636	38.971
10/27/2004	16:00	17.194	24.275	24.21	27.632	14.626	38.977
10/27/2004	20:00	17.19	24.278	24.216	27.626	14.626	38.982
10/28/2004	0:00	17.196	24.282	24.22	27.626	14.633	38.984
10/28/2004	4:00	17.183	24.265	24.2	27.606	14.619	38.971
10/28/2004	8:00	17.166	24.249	24.185	27.58	14.61	38.954
10/28/2004	12:00	17.163	24.254	24.188	27.564	14.61	38.945
10/28/2004	16:00	17.137	24.228	24.161	27.506	14.589	38.921
10/28/2004	20:00	17.118	24.263	24.2	27.5	14.584	38.91
10/29/2004	0:00	17.111	24.258	24.195	27.497	14.586	38.903
10/29/2004	4:00	17.094	24.234	24.169	27.469	14.574	38.888
10/29/2004	8:00	17.072	24.206	24.142	27.44	14.562	38.866
10/29/2004	12:00	17.059	24.271	24.21	27.418	14.56	38.866
10/29/2004	16:00	17.033	24.33	24.276	27.376	14.546	38.894
10/29/2004	20:00	17.039	24.415	24.352	27.431	14.568	38.986
10/30/2004	0:00	17.057	24.426	24.358	27.46	14.589	39.012
10/30/2004	4:00	17.068	24.428	24.362	27.482	14.605	39.028
10/30/2004	8:00	17.09	24.441	24.381	27.522	14.626	39.045
10/30/2004	12:00	17.127	24.472	24.41	27.569	14.652	39.085
10/30/2004	16:00	17.151	24.47	24.408	27.571	14.659	39.119
10/30/2004	20:00	17.166	24.48	24.418	27.593	14.671	39.132
10/31/2004	0:00	17.188	24.489	24.428	27.613	14.683	39.143
10/31/2004	4:00	17.198	24.482	24.42	27.608	14.683	39.144
10/31/2004	8:00	17.2	24.48	24.416	27.615	14.685	39.143
10/31/2004	12:00	17.213	24.483	24.422	27.628	14.695	39.143
10/31/2004	16:00	17.201	24.454	24.393	27.577	14.678	39.124
10/31/2004	20:00	17.188	24.446	24.385	27.569	14.673	39.109
11/1/2004	0:00	17.192	24.448	24.387	27.582	14.685	39.102
11/1/2004	4:00	17.187	24.43	24.37	27.566	14.676	39.088
11/1/2004	8:00	17.163	24.411	24.352	27.559	14.659	39.061
11/1/2004	12:00	17.163	24.417	24.356	27.571	14.657	39.054
11/1/2004	16:00	17.177	24.426	24.367	27.591	14.657	39.058
11/1/2004	20:00	17.213	24.472	24.414	27.668	14.685	39.085
11/2/2004	0:00	17.257	24.515	24.455	27.73	14.714	39.117
11/2/2004	4:00	17.3	24.553	24.494	27.777	14.735	39.155
11/2/2004	8:00	17.333	24.581	24.523	27.812	14.752	39.185

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
11/2/2004	12:00	17.37	24.611	24.552	27.85	14.768	39.213
11/2/2004	16:00	17.386	24.618	24.56	27.843	14.768	39.227
11/2/2004	20:00	17.403	24.635	24.578	27.865	14.782	39.241
11/3/2004	0:00	17.416	24.641	24.581	27.861	14.785	39.246
11/3/2004	4:00	17.416	24.635	24.576	27.841	14.78	39.242
11/3/2004	8:00	17.405	24.622	24.566	27.821	14.773	39.229
11/3/2004	12:00	17.392	24.605	24.545	27.794	14.761	39.207
11/3/2004	16:00	17.362	24.561	24.506	27.726	14.735	39.172
11/3/2004	20:00	17.34	24.557	24.5	27.726	14.73	39.148
11/4/2004	0:00	17.329	24.546	24.488	27.717	14.731	39.13
11/4/2004	4:00	17.325	24.552	24.494	27.726	14.737	39.122
11/4/2004	8:00	17.338	24.572	24.516	27.768	14.756	39.13
11/4/2004	12:00	17.375	24.622	24.564	27.85	14.796	39.163
11/4/2004	16:00	17.411	24.644	24.586	27.872	14.811	39.215
11/4/2004	20:00	17.435	24.668	24.611	27.896	14.822	39.303
11/5/2004	0:00	17.451	24.676	24.62	27.903	14.83	39.32
11/5/2004	4:00	17.457	24.672	24.613	27.887	14.827	39.316
11/5/2004	8:00	17.453	24.661	24.605	27.868	14.82	39.305
11/5/2004	12:00	17.436	24.664	24.611	27.832	14.808	39.312
11/5/2004	16:00	17.401	24.652	24.599	27.761	14.78	39.349
11/5/2004	20:00	17.381	24.666	24.611	27.757	14.778	39.416
11/6/2004	0:00	17.366	24.653	24.599	27.757	14.775	39.39
11/6/2004	4:00	17.357	24.644	24.587	27.755	14.775	39.36
11/6/2004	8:00	17.355	24.633	24.578	27.75	14.778	39.336
11/6/2004	12:00	17.351	24.698	24.642	27.752	14.782	39.375
11/6/2004	16:00	17.337	24.763	24.71	27.717	14.771	39.51
11/6/2004	20:00	17.335	24.805	24.751	27.744	14.782	39.718
11/7/2004	0:00	17.349	24.814	24.761	27.781	14.799	39.703
11/7/2004	4:00	17.368	24.823	24.77	27.812	14.82	39.676
11/7/2004	8:00	17.401	24.857	24.804	27.872	14.848	39.668
11/7/2004	12:00	17.448	24.892	24.841	27.941	14.877	39.672
11/7/2004	16:00	17.475	24.894	24.84	27.943	14.882	39.663
11/7/2004	20:00	17.498	24.909	24.856	27.967	14.898	39.659
11/8/2004	0:00	17.523	24.923	24.871	27.998	14.91	39.657
11/8/2004	4:00	17.538	24.927	24.873	28.007	14.915	39.648
11/8/2004	8:00	17.559	24.945	24.895	28.029	14.929	39.648
11/8/2004	12:00	17.575	24.955	24.901	28.043	14.936	39.642
11/8/2004	16:00	17.566	24.921	24.869	27.987	14.919	39.613
11/8/2004	20:00	17.557	24.912	24.86	27.976	14.917	39.587
11/9/2004	0:00	17.553	24.91	24.86	27.976	14.919	39.567
11/9/2004	4:00	17.542	24.894	24.842	27.965	14.917	39.539
11/9/2004	8:00	17.536	24.887	24.834	27.954	14.917	39.517
11/9/2004	12:00	17.535	24.883	24.831	27.952	14.919	39.499
11/9/2004	16:00	17.514	24.842	24.792	27.899	14.9	39.463
11/9/2004	20:00	17.496	24.833	24.782	27.886	14.896	39.436
11/10/2004	0:00	17.492	24.829	24.778	27.89	14.9	39.417
11/10/2004	4:00	17.479	24.809	24.759	27.875	14.896	39.393
11/10/2004	8:00	17.47	24.796	24.747	27.861	14.896	39.371
11/10/2004	12:00	17.473	24.803	24.753	27.877	14.905	39.362
11/10/2004	16:00	17.466	24.794	24.743	27.87	14.903	39.349
11/10/2004	20:00	17.462	24.801	24.753	27.896	14.905	39.338
11/11/2004	0:00	17.492	24.829	24.778	27.941	14.915	39.351
11/11/2004	4:00	17.52	24.848	24.797	27.972	14.917	39.364
11/11/2004	8:00	17.542	24.875	24.827	28.007	14.924	39.384

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
11/11/2004	12:00	17.581	24.905	24.856	28.043	14.938	39.406
11/11/2004	16:00	17.59	24.896	24.846	28.016	14.929	39.41
11/11/2004	20:00	17.594	24.907	24.86	28.027	14.934	39.412
11/12/2004	0:00	17.609	24.923	24.873	28.047	14.945	39.419
11/12/2004	4:00	17.612	24.92	24.871	28.045	14.943	39.417
11/12/2004	8:00	17.618	24.931	24.883	28.058	14.952	39.417
11/12/2004	12:00	17.64	24.953	24.905	28.087	14.967	39.428
11/12/2004	16:00	17.642	24.949	24.903	28.069	14.962	39.427
11/12/2004	20:00	17.651	24.96	24.913	28.087	14.974	39.428
11/13/2004	0:00	17.67	24.982	24.934	28.111	14.988	39.439
11/13/2004	4:00	17.681	24.986	24.938	28.12	14.99	39.445
11/13/2004	8:00	17.686	24.992	24.944	28.134	14.997	39.447
11/13/2004	12:00	17.703	25.008	24.959	28.149	15.009	39.454
11/13/2004	16:00	17.703	24.999	24.951	28.118	15.002	39.447
11/13/2004	20:00	17.701	25.001	24.953	28.123	15.009	39.441
11/14/2004	0:00	17.71	25.006	24.959	28.131	15.016	39.441
11/14/2004	4:00	17.718	25.016	24.969	28.14	15.021	39.445
11/14/2004	8:00	17.714	25.01	24.963	28.136	15.021	39.438
11/14/2004	12:00	17.725	25.025	24.978	28.154	15.033	39.439
11/14/2004	16:00	17.725	25.019	24.973	28.129	15.028	39.434
11/14/2004	20:00	17.725	25.019	24.973	28.138	15.033	39.428
11/15/2004	0:00	17.736	25.029	24.982	28.151	15.045	39.432
11/15/2004	4:00	17.74	25.029	24.98	28.143	15.045	39.428
11/15/2004	8:00	17.73	25.018	24.971	28.136	15.04	39.419
11/15/2004	12:00	17.731	25.014	24.969	28.127	15.042	39.412
11/15/2004	16:00	17.721	24.995	24.949	28.096	15.035	39.397
11/15/2004	20:00	17.708	24.982	24.936	28.08	15.03	39.38
11/16/2004	0:00	17.699	24.973	24.928	28.065	15.028	39.366
11/16/2004	4:00	17.69	24.962	24.916	28.049	15.028	39.353
11/16/2004	8:00	17.675	24.949	24.903	28.038	15.021	39.336
11/16/2004	12:00	17.668	24.942	24.895	28.034	15.023	39.323
11/16/2004	16:00	17.659	24.927	24.881	28.007	15.019	39.308
11/16/2004	20:00	17.655	24.925	24.881	28.014	15.023	39.299
11/17/2004	0:00	17.653	24.92	24.873	28.007	15.026	39.292
11/17/2004	4:00	17.655	24.921	24.875	28.012	15.033	39.29
11/17/2004	8:00	17.655	24.921	24.877	28.016	15.038	39.286
11/17/2004	12:00	17.66	24.927	24.881	28.032	15.045	39.286
11/17/2004	16:00	17.656	24.91	24.866	28.001	15.042	39.279
11/17/2004	20:00	17.657	24.916	24.871	28.012	15.049	39.277
11/18/2004	0:00	17.664	24.918	24.873	28.021	15.054	39.277
11/18/2004	4:00	17.668	24.916	24.869	28.012	15.057	39.275
11/18/2004	8:00	17.668	24.912	24.867	28.007	15.057	39.274
11/18/2004	12:00	17.666	24.905	24.86	28.003	15.059	39.266
11/18/2004	16:00	17.651	24.881	24.837	27.963	15.047	39.25
11/18/2004	20:00	17.642	24.873	24.829	27.959	15.045	39.237
11/19/2004	0:00	17.633	24.864	24.819	27.941	15.042	39.222
11/19/2004	4:00	17.619	24.846	24.802	27.917	15.035	39.205
11/19/2004	8:00	17.607	24.836	24.794	27.906	15.03	39.192
11/19/2004	12:00	17.603	24.836	24.792	27.914	15.035	39.187
11/19/2004	16:00	17.595	24.82	24.774	27.89	15.03	39.174
11/19/2004	20:00	17.605	24.842	24.798	27.93	15.049	39.179
11/20/2004	0:00	17.62	24.855	24.811	27.954	15.064	39.19
11/20/2004	4:00	17.638	24.87	24.825	27.974	15.073	39.203
11/20/2004	8:00	17.66	24.892	24.848	28.007	15.087	39.222

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
11/20/2004	12:00	17.688	24.921	24.877	28.049	15.104	39.246
11/20/2004	16:00	17.706	24.927	24.883	28.047	15.109	39.259
11/20/2004	20:00	17.732	24.958	24.916	28.089	15.127	39.284
11/21/2004	0:00	17.764	24.988	24.946	28.134	15.144	39.312
11/21/2004	4:00	17.784	24.997	24.955	28.14	15.149	39.327
11/21/2004	8:00	17.801	25.018	24.975	28.151	15.158	39.341
11/21/2004	12:00	17.816	25.029	24.986	28.165	15.165	39.355
11/21/2004	16:00	17.807	25.005	24.963	28.114	15.151	39.343
11/21/2004	20:00	17.799	25.006	24.965	28.109	15.154	39.336
11/22/2004	0:00	17.794	24.997	24.955	28.1	15.149	39.327
11/22/2004	4:00	17.777	24.971	24.93	28.061	15.134	39.305
11/22/2004	8:00	17.76	24.958	24.918	28.041	15.13	39.284
11/22/2004	12:00	17.747	24.945	24.904	28.025	15.128	39.268
11/22/2004	16:00	17.723	24.91	24.869	27.972	15.109	39.238
11/22/2004	20:00	17.703	24.901	24.86	27.956	15.106	39.218
11/23/2004	0:00	17.694	24.894	24.854	27.956	15.106	39.205
11/23/2004	4:00	17.686	24.884	24.844	27.952	15.106	39.194
11/23/2004	8:00	17.686	24.89	24.85	27.966	15.116	39.191
11/23/2004	12:00	17.701	24.901	24.862	27.992	15.13	39.2
11/23/2004	16:00	17.695	24.884	24.846	27.959	15.125	39.192
11/23/2004	20:00	17.694	24.888	24.848	27.961	15.132	39.191
11/24/2004	0:00	17.705	24.899	24.86	27.983	15.144	39.198
11/24/2004	4:00	17.706	24.888	24.848	27.975	15.141	39.194
11/24/2004	8:00	17.707	24.894	24.854	27.976	15.149	39.192
11/24/2004	12:00	17.718	24.903	24.862	27.992	15.158	39.2
11/24/2004	16:00	17.718	24.894	24.856	27.977	15.156	39.196
11/24/2004	20:00	17.727	24.914	24.874	28.005	15.172	39.203
11/25/2004	0:00	17.744	24.923	24.883	28.019	15.177	39.214
11/25/2004	4:00	17.742	24.908	24.87	27.997	15.172	39.209
11/25/2004	8:00	17.73	24.888	24.848	27.963	15.163	39.194
11/25/2004	12:00	17.723	24.884	24.846	27.957	15.165	39.185
11/25/2004	16:00	17.701	24.857	24.819	27.908	15.151	39.163
11/25/2004	20:00	17.694	24.859	24.821	27.915	15.156	39.152
11/26/2004	0:00	17.696	24.859	24.819	27.923	15.161	39.146
11/26/2004	4:00	17.686	24.844	24.803	27.906	15.156	39.137
11/26/2004	8:00	17.675	24.831	24.792	27.89	15.154	39.124
11/26/2004	12:00	17.675	24.829	24.79	27.893	15.158	39.116
11/26/2004	16:00	17.658	24.803	24.764	27.844	15.147	39.098
11/26/2004	20:00	17.653	24.81	24.772	27.866	15.156	39.094
11/27/2004	0:00	17.66	24.812	24.774	27.877	15.161	39.096
11/27/2004	4:00	17.666	24.829	24.79	27.914	15.172	39.104
11/27/2004	8:00	17.694	24.864	24.825	27.972	15.196	39.126
11/27/2004	12:00	17.734	24.903	24.866	28.023	15.217	39.163
11/27/2004	16:00	17.762	24.918	24.881	28.032	15.224	39.187
11/27/2004	20:00	17.784	24.944	24.909	28.063	15.239	39.211
11/28/2004	0:00	17.816	24.971	24.936	28.094	15.253	39.238
11/28/2004	4:00	17.838	24.986	24.949	28.111	15.258	39.258
11/28/2004	8:00	17.849	24.997	24.961	28.123	15.262	39.272
11/28/2004	12:00	17.86	25.001	24.967	28.118	15.267	39.277
11/28/2004	16:00	17.855	24.986	24.949	28.08	15.257	39.27
11/28/2004	20:00	17.853	25.003	24.967	28.1	15.267	39.271
11/29/2004	0:00	17.873	25.025	24.992	28.138	15.281	39.283
11/29/2004	4:00	17.884	25.032	25	28.145	15.284	39.292
11/29/2004	8:00	17.88	25.036	25.002	28.165	15.276	39.292

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
11/29/2004	12:00	17.901	25.058	25.023	28.191	15.291	39.306
11/29/2004	16:00	17.917	25.067	25.035	28.193	15.298	39.32
11/29/2004	20:00	17.934	25.092	25.057	28.22	15.31	39.336
11/30/2004	0:00	17.951	25.104	25.07	28.224	15.317	39.351
11/30/2004	4:00	17.949	25.09	25.055	28.196	15.307	39.347
11/30/2004	8:00	17.94	25.086	25.05	28.185	15.302	39.34
11/30/2004	12:00	17.932	25.077	25.039	28.169	15.3	39.329
11/30/2004	16:00	17.915	25.058	25.023	28.132	15.288	39.312
11/30/2004	20:00	17.906	25.056	25.021	28.134	15.284	39.299
12/1/2004	0:00	17.908	25.062	25.027	28.145	15.286	39.297
12/1/2004	4:00	17.914	25.073	25.039	28.161	15.293	39.303
12/1/2004	8:00	17.923	25.082	25.049	28.18	15.298	39.31
12/1/2004	12:00	17.938	25.103	25.068	28.211	15.31	39.323
12/1/2004	16:00	17.943	25.099	25.064	28.189	15.307	39.325
12/1/2004	20:00	17.945	25.101	25.066	28.196	15.305	39.327
12/2/2004	0:00	17.951	25.104	25.072	28.198	15.305	39.332
12/2/2004	4:00	17.956	25.11	25.074	28.2	15.302	39.334
12/2/2004	8:00	17.954	25.108	25.076	28.198	15.298	39.334
12/2/2004	12:00	17.964	25.125	25.091	28.227	15.307	39.341
12/2/2004	16:00	17.968	25.125	25.092	28.216	15.307	39.341
12/2/2004	20:00	17.971	25.127	25.091	28.216	15.302	39.345
12/3/2004	0:00	17.971	25.123	25.089	28.207	15.298	39.341
12/3/2004	4:00	17.967	25.116	25.082	28.194	15.288	39.338
12/3/2004	8:00	17.954	25.097	25.064	28.167	15.274	39.325
12/3/2004	12:00	17.943	25.09	25.057	28.161	15.267	39.312
12/3/2004	16:00	17.928	25.075	25.043	28.132	15.255	39.297
12/3/2004	20:00	17.925	25.075	25.043	28.134	15.255	39.288
12/4/2004	0:00	17.919	25.071	25.039	28.134	15.253	39.282
12/4/2004	4:00	17.912	25.06	25.027	28.112	15.246	39.273
12/4/2004	8:00	17.904	25.053	25.021	28.105	15.243	39.264
12/4/2004	12:00	17.901	25.056	25.023	28.116	15.246	39.26
12/4/2004	16:00	17.901	25.055	25.023	28.107	15.246	39.257
12/4/2004	20:00	17.914	25.069	25.037	28.134	15.258	39.264
12/5/2004	0:00	17.925	25.08	25.046	28.154	15.265	39.273
12/5/2004	4:00	17.928	25.073	25.041	28.143	15.265	39.275
12/5/2004	8:00	17.923	25.058	25.023	28.112	15.255	39.268
12/5/2004	12:00	17.91	25.04	25.008	28.09	15.246	39.253
12/5/2004	16:00	17.871	24.995	24.965	28.014	15.213	39.218
12/5/2004	20:00	17.841	24.977	24.945	28.008	15.191	39.19
12/6/2004	0:00	17.834	24.979	24.948	28.021	15.177	39.181
12/6/2004	4:00	17.836	24.988	24.957	28.041	15.165	39.181
12/6/2004	8:00	17.845	24.995	24.965	28.054	15.158	39.187
12/6/2004	12:00	17.851	25.005	24.973	28.07	15.154	39.194
12/6/2004	16:00	17.84	24.979	24.948	28.03	15.135	39.185
12/6/2004	20:00	17.836	24.994	24.963	28.041	15.137	39.189
12/7/2004	0:00	17.834	24.986	24.955	28.041	15.13	39.187
12/7/2004	4:00	17.836	24.994	24.965	28.052	15.133	39.188
12/7/2004	8:00	17.854	25.029	25	28.107	15.154	39.209
12/7/2004	12:00	17.89	25.067	25.037	28.167	15.177	39.24
12/7/2004	16:00	17.912	25.077	25.049	28.174	15.187	39.26
12/7/2004	20:00	17.932	25.092	25.064	28.18	15.194	39.281
12/8/2004	0:00	17.952	25.116	25.087	28.216	15.208	39.303
12/8/2004	4:00	17.954	25.104	25.076	28.192	15.203	39.303
12/8/2004	8:00	17.952	25.103	25.072	28.18	15.201	39.303

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
12/8/2004	12:00	17.947	25.088	25.058	28.161	15.194	39.294
12/8/2004	16:00	17.915	25.043	25.016	28.079	15.166	39.262
12/8/2004	20:00	17.901	25.051	25.023	28.09	15.168	39.25
12/9/2004	0:00	17.897	25.043	25.018	28.09	15.168	39.238
12/9/2004	4:00	17.886	25.031	25.004	28.083	15.161	39.227
12/9/2004	8:00	17.878	25.023	24.996	28.072	15.161	39.214
12/9/2004	12:00	17.877	25.023	24.996	28.072	15.163	39.211
12/9/2004	16:00	17.869	25.019	24.992	28.066	15.163	39.203
12/9/2004	20:00	17.891	25.055	25.031	28.123	15.192	39.222
12/10/2004	0:00	17.925	25.084	25.058	28.172	15.215	39.249
12/10/2004	4:00	17.945	25.101	25.074	28.196	15.229	39.27
12/10/2004	8:00	17.965	25.121	25.093	28.223	15.246	39.29
12/10/2004	12:00	18.001	25.154	25.126	28.269	15.27	39.31
12/10/2004	16:00	18.028	25.173	25.148	28.287	15.284	39.336
12/10/2004	20:00	18.054	25.204	25.177	28.323	15.305	39.368
12/11/2004	0:00	18.076	25.221	25.196	28.334	15.315	39.391
12/11/2004	4:00	18.088	25.221	25.195	28.331	15.317	39.4
12/11/2004	8:00	18.088	25.219	25.192	28.325	15.317	39.402
12/11/2004	12:00	18.088	25.214	25.189	28.307	15.317	39.399
12/11/2004	16:00	18.064	25.171	25.146	28.23	15.291	39.371
12/11/2004	20:00	18.034	25.151	25.124	28.194	15.277	39.343
12/12/2004	0:00	18.012	25.13	25.105	28.163	15.267	39.319
12/12/2004	4:00	17.989	25.114	25.089	28.15	15.26	39.295
12/12/2004	8:00	17.991	25.141	25.117	28.205	15.281	39.295
12/12/2004	12:00	18.036	25.201	25.177	28.307	15.326	39.332
12/12/2004	16:00	18.075	25.225	25.198	28.336	15.343	39.362
12/12/2004	20:00	18.112	25.26	25.235	28.378	15.362	39.397
12/13/2004	0:00	18.158	25.31	25.286	28.442	15.388	39.443
12/13/2004	4:00	18.191	25.339	25.317	28.475	15.402	39.482
12/13/2004	8:00	18.217	25.358	25.334	28.498	15.411	39.506
12/13/2004	12:00	18.254	25.404	25.381	28.56	15.437	39.542
12/13/2004	16:00	18.282	25.421	25.399	28.56	15.442	39.566
12/13/2004	20:00	18.304	25.452	25.43	28.599	15.459	39.59
12/14/2004	0:00	18.334	25.48	25.459	28.626	15.475	39.614
12/14/2004	4:00	18.36	25.498	25.473	28.644	15.485	39.631
12/14/2004	8:00	18.367	25.502	25.478	28.641	15.487	39.635
12/14/2004	12:00	18.369	25.506	25.482	28.63	15.489	39.638
12/14/2004	16:00	18.356	25.478	25.457	28.566	15.475	39.616
12/14/2004	20:00	18.336	25.458	25.434	28.529	15.466	39.59
12/15/2004	0:00	18.313	25.434	25.412	28.493	15.456	39.561
12/15/2004	4:00	18.291	25.404	25.383	28.451	15.445	39.528
12/15/2004	8:00	18.26	25.371	25.35	28.402	15.428	39.491
12/15/2004	12:00	18.234	25.36	25.338	28.393	15.426	39.463
12/15/2004	16:00	18.217	25.339	25.317	28.36	15.419	39.437
12/15/2004	20:00	18.21	25.347	25.325	28.382	15.428	39.428
12/16/2004	0:00	18.215	25.352	25.331	28.393	15.44	39.426
12/16/2004	4:00	18.228	25.363	25.342	28.414	15.454	39.434
12/16/2004	8:00	18.239	25.373	25.352	28.433	15.466	39.443
12/16/2004	12:00	18.262	25.398	25.377	28.478	15.487	39.461
12/16/2004	16:00	18.274	25.402	25.381	28.466	15.492	39.472
12/16/2004	20:00	18.287	25.415	25.395	28.484	15.501	39.483
12/17/2004	0:00	18.299	25.421	25.399	28.487	15.506	39.491
12/17/2004	4:00	18.308	25.424	25.401	28.484	15.513	39.495
12/17/2004	8:00	18.306	25.415	25.391	28.469	15.511	39.491



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
12/17/2004	12:00	18.295	25.393	25.371	28.44	15.504	39.476
12/17/2004	16:00	18.265	25.347	25.327	28.356	15.48	39.443
12/17/2004	20:00	18.243	25.341	25.319	28.347	15.475	39.421
12/18/2004	0:00	18.23	25.33	25.311	28.345	15.473	39.402
12/18/2004	4:00	18.225	25.33	25.309	28.347	15.48	39.395
12/18/2004	8:00	18.228	25.337	25.317	28.361	15.489	39.393
12/18/2004	12:00	18.241	25.352	25.333	28.396	15.506	39.402
12/18/2004	16:00	18.25	25.356	25.335	28.387	15.511	39.406
12/18/2004	20:00	18.278	25.395	25.377	28.456	15.534	39.434
12/19/2004	0:00	18.311	25.428	25.411	28.509	15.549	39.463
12/19/2004	4:00	18.347	25.458	25.442	28.544	15.565	39.495
12/19/2004	8:00	18.376	25.482	25.465	28.575	15.579	39.524
12/19/2004	12:00	18.395	25.493	25.475	28.58	15.582	39.541
12/19/2004	16:00	18.38	25.447	25.428	28.493	15.558	39.524
12/19/2004	20:00	18.35	25.411	25.393	28.425	15.544	39.495
12/20/2004	0:00	18.311	25.363	25.346	28.363	15.52	39.452
12/20/2004	4:00	18.25	25.284	25.266	28.248	15.48	39.384
12/20/2004	8:00	18.186	25.225	25.208	28.152	15.449	39.316
12/20/2004	12:00	18.126	25.173	25.154	28.097	15.423	39.257
12/20/2004	16:00	18.087	25.16	25.142	28.088	15.419	39.216
12/20/2004	20:00	18.11	25.219	25.204	28.208	15.456	39.235
12/21/2004	0:00	18.145	25.249	25.232	28.27	15.485	39.26
12/21/2004	4:00	18.169	25.265	25.249	28.297	15.501	39.288
12/21/2004	8:00	18.2	25.297	25.278	28.348	15.527	39.323
12/21/2004	12:00	18.247	25.347	25.327	28.423	15.56	39.371
12/21/2004	16:00	18.269	25.349	25.331	28.409	15.567	39.393
12/21/2004	20:00	18.299	25.386	25.37	28.451	15.591	39.426
12/22/2004	0:00	18.336	25.421	25.405	28.507	15.608	39.461
12/22/2004	4:00	18.363	25.437	25.422	28.529	15.615	39.485
12/22/2004	8:00	18.391	25.456	25.442	28.554	15.629	39.507
12/22/2004	12:00	18.419	25.485	25.471	28.587	15.638	39.535
12/22/2004	16:00	18.413	25.467	25.453	28.529	15.629	39.535
12/22/2004	20:00	18.426	25.484	25.467	28.558	15.645	39.539
12/23/2004	0:00	18.437	25.491	25.477	28.567	15.655	39.541
12/23/2004	4:00	18.447	25.498	25.487	28.585	15.657	39.544
12/23/2004	8:00	18.465	25.517	25.504	28.618	15.669	39.555
12/23/2004	12:00	18.497	25.563	25.551	28.664	15.688	39.59
12/23/2004	16:00	18.5	25.565	25.553	28.635	15.683	39.603
12/23/2004	20:00	18.515	25.57	25.557	28.653	15.697	39.605
12/24/2004	0:00	18.526	25.565	25.551	28.649	15.697	39.605
12/24/2004	4:00	18.517	25.539	25.527	28.616	15.69	39.598
12/24/2004	8:00	18.495	25.5	25.49	28.558	15.674	39.574
12/24/2004	12:00	18.465	25.496	25.487	28.514	15.669	39.55
12/24/2004	16:00	18.413	25.443	25.43	28.394	15.627	39.498
12/24/2004	20:00	18.378	25.424	25.411	28.376	15.624	39.46
12/25/2004	0:00	18.357	25.406	25.397	28.361	15.617	39.43
12/25/2004	4:00	18.339	25.382	25.37	28.345	15.615	39.402
12/25/2004	8:00	18.326	25.367	25.356	28.352	15.617	39.384
12/25/2004	12:00	18.332	25.391	25.38	28.379	15.634	39.389
12/25/2004	16:00	18.332	25.378	25.368	28.359	15.634	39.388
12/25/2004	20:00	18.347	25.402	25.393	28.405	15.658	39.4
12/26/2004	0:00	18.382	25.437	25.426	28.467	15.683	39.428
12/26/2004	4:00	18.41	25.454	25.444	28.5	15.7	39.448
12/26/2004	8:00	18.434	25.474	25.465	28.534	15.714	39.472

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
12/26/2004	12:00	18.469	25.526	25.516	28.589	15.733	39.509
12/26/2004	16:00	18.485	25.52	25.51	28.56	15.728	39.526
12/26/2004	20:00	18.498	25.533	25.522	28.569	15.738	39.539
12/27/2004	0:00	18.519	25.552	25.543	28.598	15.75	39.554
12/27/2004	4:00	18.526	25.543	25.533	28.585	15.747	39.554
12/27/2004	8:00	18.517	25.53	25.52	28.56	15.745	39.542
12/27/2004	12:00	18.517	25.543	25.531	28.565	15.749	39.542
12/27/2004	16:00	18.511	25.526	25.516	28.529	15.745	39.531
12/27/2004	20:00	18.502	25.519	25.508	28.518	15.745	39.52
12/28/2004	0:00	18.502	25.524	25.514	28.523	15.754	39.515
12/28/2004	4:00	18.496	25.509	25.498	28.501	15.75	39.504
12/28/2004	8:00	18.48	25.487	25.477	28.472	15.743	39.483
12/28/2004	12:00	18.478	25.485	25.477	28.481	15.747	39.472
12/28/2004	16:00	18.465	25.471	25.461	28.445	15.743	39.458
12/28/2004	20:00	18.469	25.487	25.479	28.479	15.757	39.458
12/29/2004	0:00	18.489	25.508	25.498	28.512	15.771	39.471
12/29/2004	4:00	18.504	25.517	25.508	28.525	15.776	39.482
12/29/2004	8:00	18.507	25.515	25.506	28.523	15.776	39.485
12/29/2004	12:00	18.518	25.524	25.516	28.536	15.785	39.493
12/29/2004	16:00	18.506	25.495	25.485	28.47	15.771	39.476
12/29/2004	20:00	18.489	25.478	25.469	28.452	15.766	39.458
12/30/2004	0:00	18.469	25.452	25.444	28.408	15.757	39.436
12/30/2004	4:00	18.45	25.434	25.424	28.383	15.75	39.412
12/30/2004	8:00	18.417	25.395	25.387	28.328	15.731	39.377
12/30/2004	12:00	18.4	25.389	25.381	28.332	15.733	39.354
12/30/2004	16:00	18.393	25.389	25.381	28.335	15.74	39.345
12/30/2004	20:00	18.404	25.408	25.401	28.374	15.757	39.353
12/31/2004	0:00	18.424	25.428	25.418	28.403	15.776	39.367
12/31/2004	4:00	18.45	25.459	25.451	28.454	15.795	39.395
12/31/2004	8:00	18.478	25.485	25.479	28.496	15.804	39.423
12/31/2004	12:00	18.517	25.528	25.522	28.56	15.823	39.46
12/31/2004	16:00	18.537	25.532	25.522	28.547	15.828	39.48
12/31/2004	20:00	18.561	25.557	25.551	28.583	15.839	39.502
1/1/2005	0:00	18.58	25.57	25.564	28.596	15.847	39.52
1/1/2005	4:00	18.587	25.569	25.562	28.58	15.849	39.528
1/1/2005	8:00	18.583	25.559	25.553	28.558	15.844	39.522
1/1/2005	12:00	18.578	25.55	25.543	28.545	15.847	39.513
1/1/2005	16:00	18.561	25.526	25.52	28.497	15.837	39.493
1/1/2005	20:00	18.558	25.537	25.531	28.521	15.847	39.485
1/2/2005	0:00	18.583	25.583	25.578	28.601	15.873	39.506
1/2/2005	4:00	18.618	25.613	25.607	28.641	15.884	39.531
1/2/2005	8:00	18.65	25.639	25.634	28.676	15.894	39.559
1/2/2005	12:00	18.672	25.663	25.658	28.7	15.906	39.585
1/2/2005	16:00	18.678	25.655	25.65	28.669	15.903	39.59
1/2/2005	20:00	18.687	25.667	25.662	28.685	15.913	39.602
1/3/2005	0:00	18.692	25.667	25.662	28.683	15.913	39.603
1/3/2005	4:00	18.685	25.652	25.648	28.656	15.906	39.596
1/3/2005	8:00	18.663	25.628	25.623	28.641	15.882	39.574
1/3/2005	12:00	18.661	25.644	25.638	28.658	15.894	39.572
1/3/2005	16:00	18.661	25.639	25.635	28.636	15.884	39.568
1/3/2005	20:00	18.676	25.663	25.658	28.674	15.884	39.578
1/4/2005	0:00	18.687	25.672	25.666	28.685	15.882	39.589
1/4/2005	4:00	18.691	25.676	25.671	28.687	15.88	39.592
1/4/2005	8:00	18.691	25.676	25.671	28.674	15.877	39.594

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
1/4/2005	12:00	18.692	25.678	25.673	28.685	15.877	39.596
1/4/2005	16:00	18.676	25.65	25.646	28.621	15.858	39.578
1/4/2005	20:00	18.668	25.641	25.638	28.636	15.851	39.569
1/5/2005	0:00	18.663	25.639	25.639	28.647	15.849	39.563
1/5/2005	4:00	18.646	25.613	25.607	28.614	15.832	39.544
1/5/2005	8:00	18.641	25.607	25.607	28.612	15.835	39.537
1/5/2005	12:00	18.644	25.611	25.611	28.621	15.842	39.535
1/5/2005	16:00	18.63	25.587	25.588	28.581	15.83	39.526
1/5/2005	20:00	18.628	25.585	25.582	28.59	15.83	39.517
1/6/2005	0:00	18.626	25.582	25.58	28.597	15.832	39.511
1/6/2005	4:00	18.624	25.569	25.566	28.592	15.835	39.502
1/6/2005	8:00	18.626	25.567	25.564	28.594	15.839	39.5
1/6/2005	12:00	18.63	25.576	25.574	28.605	15.844	39.511
1/6/2005	16:00	18.615	25.57	25.568	28.554	15.832	39.522
1/6/2005	20:00	18.613	25.554	25.553	28.55	15.837	39.506
1/7/2005	0:00	18.607	25.557	25.555	28.546	15.837	39.504
1/7/2005	4:00	18.602	25.55	25.547	28.539	15.835	39.496
1/7/2005	8:00	18.6	25.552	25.551	28.539	15.84	39.493
1/7/2005	12:00	18.611	25.576	25.576	28.572	15.854	39.504
1/7/2005	16:00	18.615	25.58	25.58	28.563	15.859	39.509
1/7/2005	20:00	18.641	25.62	25.619	28.621	15.882	39.53
1/8/2005	0:00	18.676	25.635	25.638	28.667	15.901	39.541
1/8/2005	4:00	18.696	25.622	25.625	28.683	15.906	39.542
1/8/2005	8:00	18.709	25.622	25.623	28.69	15.911	39.55
1/8/2005	12:00	18.724	25.654	25.652	28.714	15.917	39.583
1/8/2005	16:00	18.707	25.646	25.646	28.639	15.904	39.594
1/8/2005	20:00	18.704	25.654	25.654	28.634	15.908	39.592
1/9/2005	0:00	18.705	25.65	25.652	28.625	15.908	39.589
1/9/2005	4:00	18.685	25.613	25.615	28.574	15.894	39.561
1/9/2005	8:00	18.663	25.576	25.576	28.543	15.885	39.517
1/9/2005	12:00	18.657	25.602	25.603	28.568	15.894	39.522
1/9/2005	16:00	18.668	25.624	25.627	28.605	15.911	39.53
1/9/2005	20:00	18.702	25.661	25.664	28.676	15.937	39.552
1/10/2005	0:00	18.742	25.683	25.685	28.725	15.953	39.572
1/10/2005	4:00	18.763	25.672	25.675	28.729	15.948	39.576
1/10/2005	8:00	18.752	25.65	25.654	28.679	15.939	39.57
1/10/2005	12:00	18.744	25.655	25.658	28.665	15.941	39.581
1/10/2005	16:00	18.724	25.626	25.627	28.599	15.927	39.563
1/10/2005	20:00	18.715	25.611	25.613	28.612	15.932	39.535
1/11/2005	0:00	18.72	25.62	25.623	28.632	15.943	39.531
1/11/2005	4:00	18.718	25.607	25.611	28.619	15.941	39.524
1/11/2005	8:00	18.713	25.604	25.605	28.621	15.941	39.517
1/11/2005	12:00	18.705	25.6	25.601	28.601	15.937	39.524
1/11/2005	16:00	18.683	25.585	25.59	28.537	15.922	39.519
1/11/2005	20:00	18.663	25.567	25.57	28.513	15.918	39.489
1/12/2005	0:00	18.646	25.55	25.553	28.475	15.908	39.471
1/12/2005	4:00	18.62	25.522	25.523	28.433	15.896	39.443
1/12/2005	8:00	18.593	25.491	25.495	28.411	15.884	39.412
1/12/2005	12:00	18.583	25.498	25.5	28.426	15.892	39.4
1/12/2005	16:00	18.583	25.5	25.504	28.437	15.899	39.397
1/12/2005	20:00	18.604	25.524	25.528	28.502	15.92	39.406
1/13/2005	0:00	18.637	25.543	25.545	28.546	15.944	39.421
1/13/2005	4:00	18.663	25.569	25.572	28.588	15.96	39.445
1/13/2005	8:00	18.704	25.617	25.621	28.679	15.984	39.483

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
1/13/2005	12:00	18.761	25.67	25.677	28.767	16.005	39.53
1/13/2005	16:00	18.803	25.709	25.714	28.798	16.019	39.598
1/13/2005	20:00	18.855	25.755	25.759	28.874	16.041	39.622
1/14/2005	0:00	18.907	25.8	25.804	28.931	16.06	39.666
1/14/2005	4:00	18.948	25.837	25.843	28.956	16.071	39.72
1/14/2005	8:00	18.97	25.853	25.858	28.967	16.074	39.758
1/14/2005	12:00	18.985	25.885	25.89	29	16.086	39.793
1/14/2005	16:00	18.983	25.9	25.905	28.969	16.081	39.814
1/14/2005	20:00	19.009	25.901	25.907	28.987	16.095	39.81
1/15/2005	0:00	19.029	25.925	25.932	29.02	16.104	39.819
1/15/2005	4:00	19.048	25.944	25.95	29.029	16.112	39.834
1/15/2005	8:00	19.057	25.948	25.954	29.027	16.116	39.838
1/15/2005	12:00	19.063	25.968	25.973	29.051	16.123	39.854
1/15/2005	16:00	19.051	25.968	25.973	29.009	16.121	39.852
1/15/2005	20:00	19.061	25.975	25.979	29	16.121	39.843
1/16/2005	0:00	19.068	25.962	25.967	29.013	16.128	39.83
1/16/2005	4:00	19.077	25.966	25.971	29.018	16.133	39.828
1/16/2005	8:00	19.081	25.97	25.975	29.018	16.135	39.832
1/16/2005	12:00	19.074	25.986	25.991	29.033	16.145	39.845
1/16/2005	16:00	19.055	25.996	26	28.98	16.135	39.826
1/16/2005	20:00	19.063	25.985	25.989	28.951	16.128	39.806
1/17/2005	0:00	19.063	25.972	25.977	28.956	16.135	39.806
1/17/2005	4:00	19.053	25.972	25.977	28.949	16.138	39.804
1/17/2005	8:00	19.048	25.983	25.987	28.947	16.142	39.803
1/17/2005	12:00	19.048	26.003	26.008	28.972	16.156	39.799
1/17/2005	16:00	19.048	25.988	25.993	28.931	16.149	39.782
1/17/2005	20:00	19.059	25.973	25.981	28.923	16.154	39.766
1/18/2005	0:00	19.063	25.951	25.956	28.929	16.156	39.766
1/18/2005	4:00	19.05	25.927	25.934	28.905	16.152	39.758
1/18/2005	8:00	19.027	25.896	25.901	28.861	16.142	39.738
1/18/2005	12:00	18.988	25.879	25.886	28.821	16.133	39.716
1/18/2005	16:00	18.942	25.833	25.837	28.706	16.104	39.657
1/18/2005	20:00	18.914	25.818	25.823	28.69	16.097	39.627
1/19/2005	0:00	18.903	25.805	25.812	28.695	16.097	39.605
1/19/2005	4:00	18.903	25.798	25.804	28.71	16.109	39.583
1/19/2005	8:00	18.916	25.796	25.804	28.737	16.126	39.581
1/19/2005	12:00	18.929	25.835	25.841	28.799	16.142	39.614
1/19/2005	16:00	18.933	25.818	25.823	28.759	16.138	39.622
1/19/2005	20:00	18.929	25.8	25.806	28.735	16.135	39.626
1/20/2005	0:00	18.914	25.77	25.777	28.697	16.128	39.611
1/20/2005	4:00	18.887	25.737	25.744	28.653	16.119	39.583
1/20/2005	8:00	18.863	25.72	25.728	28.633	16.114	39.559
1/20/2005	12:00	18.859	25.722	25.732	28.653	16.182	39.548
1/20/2005	16:00	18.852	25.707	25.714	28.624	16.109	39.563
1/20/2005	20:00	18.857	25.731	25.74	28.664	16.109	39.581
1/21/2005	0:00	18.87	25.744	25.755	28.692	16.104	39.594
1/21/2005	4:00	18.877	25.75	25.759	28.708	16.088	39.602
1/21/2005	8:00	18.874	25.744	25.755	28.699	16.064	39.602
1/21/2005	12:00	18.865	25.728	25.738	28.67	16.036	39.592
1/21/2005	16:00	18.837	25.687	25.697	28.604	15.996	39.563
1/21/2005	20:00	18.824	25.702	25.713	28.624	15.986	39.554
1/22/2005	0:00	18.835	25.731	25.744	28.681	15.989	39.565
1/22/2005	4:00	18.874	25.781	25.794	28.772	16	39.596
1/22/2005	8:00	18.926	25.829	25.843	28.868	16.029	39.651

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
1/22/2005	12:00	18.988	25.89	25.903	28.941	16.048	39.681
1/22/2005	16:00	19.013	25.933	25.946	28.967	16.06	39.729
1/22/2005	20:00	19.053	25.944	25.956	28.998	16.071	39.757
1/23/2005	0:00	19.083	25.957	25.969	29.018	16.081	39.773
1/23/2005	4:00	19.085	25.937	25.948	28.99	16.067	39.773
1/23/2005	8:00	19.072	25.924	25.934	28.963	16.06	39.764
1/23/2005	12:00	19.038	25.938	25.95	28.921	16.05	39.764
1/23/2005	16:00	18.998	25.892	25.903	28.815	16.022	39.738
1/23/2005	20:00	18.979	25.866	25.88	28.792	16.015	39.703
1/24/2005	0:00	18.968	25.835	25.847	28.775	16.008	39.662
1/24/2005	4:00	18.939	25.805	25.816	28.746	15.993	39.633
1/24/2005	8:00	18.913	25.79	25.802	28.737	15.989	39.609
1/24/2005	12:00	18.898	25.813	25.823	28.742	15.989	39.618
1/24/2005	16:00	18.896	25.79	25.802	28.711	15.982	39.607
1/24/2005	20:00	18.896	25.789	25.8	28.719	15.984	39.6
1/25/2005	0:00	18.898	25.785	25.796	28.717	15.986	39.598
1/25/2005	4:00	18.883	25.759	25.773	28.682	15.972	39.583
1/25/2005	8:00	18.863	25.739	25.753	28.66	15.965	39.563
1/25/2005	12:00	18.852	25.731	25.746	28.651	15.963	39.548
1/25/2005	16:00	18.835	25.711	25.724	28.618	15.953	39.53
1/25/2005	20:00	18.835	25.726	25.74	28.655	15.961	39.528
1/26/2005	0:00	18.863	25.763	25.779	28.722	15.977	39.552
1/26/2005	4:00	18.892	25.798	25.814	28.777	15.984	39.583
1/26/2005	8:00	18.916	25.818	25.831	28.81	15.987	39.609
1/26/2005	12:00	18.957	25.868	25.884	28.879	16.003	39.651
1/26/2005	16:00	18.983	25.879	25.895	28.883	16.003	39.677
1/26/2005	20:00	19.003	25.905	25.919	28.914	16.008	39.701
1/27/2005	0:00	19.029	25.931	25.946	28.941	16.017	39.727
1/27/2005	4:00	19.048	25.944	25.96	28.952	16.022	39.744
1/27/2005	8:00	19.055	25.951	25.968	28.959	16.022	39.753
1/27/2005	12:00	19.07	25.966	25.979	28.974	16.031	39.764
1/27/2005	16:00	19.072	25.959	25.973	28.948	16.027	39.766
1/27/2005	20:00	19.07	25.962	25.977	28.948	16.029	39.762
1/28/2005	0:00	19.072	25.959	25.973	28.939	16.029	39.758
1/28/2005	4:00	19.068	25.953	25.967	28.925	16.026	39.753
1/28/2005	8:00	19.059	25.942	25.958	28.915	16.024	39.738
1/28/2005	12:00	19.055	25.94	25.956	28.908	16.027	39.733
1/28/2005	16:00	19.037	25.912	25.929	28.855	16.015	39.712
1/28/2005	20:00	19.026	25.909	25.925	28.861	16.017	39.699
1/29/2005	0:00	19.024	25.909	25.927	28.866	16.02	39.694
1/29/2005	4:00	19.02	25.903	25.921	28.857	16.022	39.688
1/29/2005	8:00	19.013	25.898	25.913	28.853	16.022	39.683
1/29/2005	12:00	19.02	25.911	25.927	28.873	16.031	39.684
1/29/2005	16:00	19.027	25.911	25.927	28.87	16.039	39.688
1/29/2005	20:00	19.033	25.92	25.938	28.888	16.043	39.692
1/30/2005	0:00	19.042	25.929	25.948	28.899	16.053	39.699
1/30/2005	4:00	19.051	25.933	25.95	28.904	16.055	39.707
1/30/2005	8:00	19.051	25.933	25.952	28.901	16.057	39.709
1/30/2005	12:00	19.061	25.946	25.964	28.921	16.067	39.716
1/30/2005	16:00	19.061	25.931	25.948	28.886	16.062	39.712
1/30/2005	20:00	19.059	25.938	25.956	28.901	16.065	39.714
1/31/2005	0:00	19.064	25.946	25.964	28.91	16.072	39.716
1/31/2005	4:00	19.074	25.959	25.977	28.928	16.081	39.723
1/31/2005	8:00	19.081	25.968	25.987	28.941	16.086	39.731

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
1/31/2005	12:00	19.096	25.986	26.006	28.968	16.095	39.746
1/31/2005	16:00	19.103	25.983	26.003	28.95	16.095	39.749
1/31/2005	20:00	19.111	25.998	26.016	28.968	16.102	39.758
2/1/2005	0:00	19.12	26.005	26.024	28.985	16.107	39.766
2/1/2005	4:00	19.127	26.01	26.032	28.988	16.112	39.773
2/1/2005	8:00	19.131	26.016	26.036	28.985	16.112	39.779
2/1/2005	12:00	19.14	26.027	26.047	29.005	16.121	39.786
2/1/2005	16:00	19.144	26.027	26.045	28.992	16.121	39.79
2/1/2005	20:00	19.151	26.04	26.059	29.01	16.128	39.797
2/2/2005	0:00	19.151	26.034	26.053	29.003	16.126	39.795
2/2/2005	4:00	19.151	26.033	26.051	28.997	16.128	39.794
2/2/2005	8:00	19.151	26.036	26.055	28.997	16.131	39.791
2/2/2005	12:00	19.153	26.038	26.057	29.001	16.133	39.792
2/2/2005	16:00	19.144	26.018	26.038	28.957	16.128	39.78
2/2/2005	20:00	19.144	26.033	26.053	28.979	16.135	39.783
2/3/2005	0:00	19.146	26.033	26.051	28.985	16.138	39.78
2/3/2005	4:00	19.149	26.036	26.055	28.994	16.143	39.782
2/3/2005	8:00	19.153	26.042	26.063	28.997	16.147	39.784
2/3/2005	12:00	19.164	26.055	26.075	29.021	16.154	39.793
2/3/2005	16:00	19.162	26.042	26.063	28.992	16.152	39.791
2/3/2005	20:00	19.164	26.051	26.073	28.999	16.159	39.795
2/4/2005	0:00	19.172	26.055	26.077	29.01	16.159	39.799
2/4/2005	4:00	19.164	26.042	26.063	28.99	16.157	39.791
2/4/2005	8:00	19.162	26.047	26.069	28.995	16.161	39.79
2/4/2005	12:00	19.162	26.044	26.065	28.99	16.164	39.788
2/4/2005	16:00	19.149	26.022	26.042	28.948	16.157	39.775
2/4/2005	20:00	19.144	26.02	26.042	28.944	16.159	39.766
2/5/2005	0:00	19.14	26.014	26.036	28.942	16.159	39.756
2/5/2005	4:00	19.127	26.001	26.02	28.928	16.154	39.744
2/5/2005	8:00	19.12	25.988	26.009	28.908	16.154	39.733
2/5/2005	12:00	19.112	25.981	26.001	28.902	16.154	39.723
2/5/2005	16:00	19.092	25.951	25.974	28.851	16.143	39.699
2/5/2005	20:00	19.083	25.953	25.975	28.855	16.147	39.688
2/6/2005	0:00	19.087	25.957	25.979	28.871	16.152	39.687
2/6/2005	4:00	19.081	25.955	25.977	28.884	16.152	39.683
2/6/2005	8:00	19.064	25.937	25.958	28.879	16.136	39.67
2/6/2005	12:00	19.053	25.935	25.958	28.879	16.105	39.661
2/6/2005	16:00	19.029	25.911	25.935	28.837	15.97	39.642
2/6/2005	20:00	19.024	25.931	25.956	28.864	15.765	39.644
2/7/2005	0:00	19.024	25.946	25.97	28.882	15.595	39.655
2/7/2005	4:00	19.007	25.944	25.968	28.891	15.439	39.657
2/7/2005	8:00	19	25.959	25.983	28.908	15.304	39.666
2/7/2005	12:00	19.007	25.986	26.01	28.946	15.228	39.69
2/7/2005	16:00	18.998	25.972	25.997	28.919	15.145	39.694
2/7/2005	20:00	18.992	25.986	26.01	28.939	15.101	39.707
2/8/2005	0:00	18.994	25.992	26.014	28.948	15.065	39.72
2/8/2005	4:00	18.988	25.979	26.003	28.946	15.032	39.723
2/8/2005	8:00	18.974	25.964	25.989	28.939	15.011	39.72
2/8/2005	12:00	18.963	25.955	25.979	28.937	14.992	39.72
2/8/2005	16:00	18.933	25.918	25.942	28.893	14.961	39.705
2/8/2005	20:00	18.909	25.905	25.931	28.897	14.956	39.694
2/9/2005	0:00	18.913	25.909	25.933	28.906	14.968	39.697
2/9/2005	4:00	18.911	25.894	25.919	28.906	14.966	39.699
2/9/2005	8:00	18.905	25.888	25.915	28.917	14.971	39.701

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
2/9/2005	12:00	18.914	25.9	25.927	28.944	14.982	39.714
2/9/2005	16:00	18.909	25.875	25.902	28.911	14.973	39.712
2/9/2005	20:00	18.909	25.872	25.898	28.926	14.978	39.716
2/10/2005	0:00	18.916	25.875	25.902	28.94	14.99	39.725
2/10/2005	4:00	18.922	25.877	25.903	28.948	14.997	39.735
2/10/2005	8:00	18.927	25.881	25.907	28.977	15.004	39.746
2/10/2005	12:00	18.944	25.894	25.921	29.002	15.023	39.764
2/10/2005	16:00	18.946	25.868	25.896	28.962	15.013	39.764
2/10/2005	20:00	18.933	25.853	25.88	28.944	15.006	39.759
2/11/2005	0:00	18.931	25.853	25.88	28.955	15.018	39.759
2/11/2005	4:00	18.937	25.853	25.88	28.964	15.023	39.762
2/11/2005	8:00	18.933	25.842	25.868	28.962	15.023	39.76
2/11/2005	12:00	18.939	25.844	25.87	28.973	15.032	39.766
2/11/2005	16:00	18.922	25.802	25.828	28.909	15.013	39.749
2/11/2005	20:00	18.894	25.774	25.802	28.878	14.994	39.727
2/12/2005	0:00	18.877	25.75	25.777	28.862	14.956	39.708
2/12/2005	4:00	18.857	25.728	25.754	28.836	14.897	39.692
2/12/2005	8:00	18.829	25.696	25.725	28.809	14.843	39.668
2/12/2005	12:00	18.807	25.676	25.703	28.791	14.803	39.649
2/12/2005	16:00	18.765	25.618	25.649	28.716	14.732	39.64
2/12/2005	20:00	18.709	25.567	25.594	28.661	14.363	39.583
2/13/2005	0:00	18.642	25.533	25.536	28.61	13.886	39.559
2/13/2005	4:00	18.568	25.456	25.475	28.537	13.513	39.478
2/13/2005	8:00	18.498	25.408	25.436	28.499	13.243	39.438
2/13/2005	12:00	18.441	25.397	25.425	28.508	13.04	39.419
2/13/2005	16:00	18.404	25.406	25.436	28.539	12.882	39.421
2/13/2005	20:00	18.389	25.43	25.458	28.601	12.759	39.443
2/14/2005	0:00	18.383	25.445	25.473	28.641	12.653	39.469
2/14/2005	4:00	18.38	25.454	25.483	28.656	12.56	39.496
2/14/2005	8:00	18.369	25.458	25.487	28.67	12.485	39.519
2/14/2005	12:00	18.365	25.467	25.499	28.692	12.443	39.541
2/14/2005	16:00	18.348	25.447	25.475	28.654	12.395	39.546
2/14/2005	20:00	18.322	25.439	25.47	28.643	12.372	39.548
2/15/2005	0:00	18.302	25.434	25.462	28.643	12.367	39.546
2/15/2005	4:00	18.291	25.43	25.462	28.661	12.376	39.552
2/15/2005	8:00	18.283	25.432	25.464	28.672	12.393	39.561
2/15/2005	12:00	18.293	25.459	25.491	28.725	12.435	39.587
2/15/2005	16:00	18.302	25.465	25.497	28.736	12.464	39.607
2/15/2005	20:00	18.322	25.508	25.54	28.811	12.518	39.646
2/16/2005	0:00	18.346	25.528	25.559	28.849	12.563	39.679
2/16/2005	4:00	18.36	25.535	25.565	28.856	12.589	39.703
2/16/2005	8:00	18.363	25.541	25.573	28.862	12.613	39.721
2/16/2005	12:00	18.374	25.552	25.584	28.882	12.641	39.74
2/16/2005	16:00	18.361	25.528	25.559	28.836	12.636	39.736
2/16/2005	20:00	18.35	25.528	25.561	28.836	12.648	39.738
2/17/2005	0:00	18.345	25.532	25.563	28.851	12.669	39.738
2/17/2005	4:00	18.343	25.522	25.553	28.849	12.688	39.738
2/17/2005	8:00	18.334	25.517	25.547	28.838	12.702	39.738
2/17/2005	12:00	18.33	25.511	25.544	28.834	12.719	39.738
2/17/2005	16:00	18.306	25.482	25.514	28.787	12.71	39.723
2/17/2005	20:00	18.291	25.474	25.508	28.785	12.721	39.718
2/18/2005	0:00	18.289	25.474	25.505	28.803	12.743	39.718
2/18/2005	4:00	18.285	25.472	25.505	28.814	12.764	39.72
2/18/2005	8:00	18.3	25.495	25.526	28.856	12.804	39.738

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
2/18/2005	12:00	18.315	25.5	25.532	28.871	12.835	39.755
2/18/2005	16:00	18.309	25.474	25.505	28.825	12.832	39.751
2/18/2005	20:00	18.295	25.461	25.495	28.807	12.832	39.747
2/19/2005	0:00	18.282	25.443	25.475	28.789	12.832	39.738
2/19/2005	4:00	18.259	25.421	25.454	28.765	12.83	39.721
2/19/2005	8:00	18.232	25.384	25.415	28.721	12.813	39.696
2/19/2005	12:00	18.21	25.36	25.392	28.699	12.811	39.675
2/19/2005	16:00	18.172	25.308	25.341	28.628	12.787	39.64
2/19/2005	20:00	18.141	25.288	25.32	28.608	12.78	39.616
2/20/2005	0:00	18.119	25.256	25.291	28.586	12.776	39.594
2/20/2005	4:00	18.078	25.202	25.234	28.521	12.747	39.557
2/20/2005	8:00	18.041	25.178	25.215	28.497	12.738	39.53
2/20/2005	12:00	18.041	25.197	25.23	28.555	12.771	39.533
2/20/2005	16:00	18.054	25.208	25.242	28.588	12.802	39.546
2/20/2005	20:00	18.071	25.229	25.263	28.63	12.837	39.572
2/21/2005	0:00	18.097	25.245	25.279	28.663	12.87	39.602
2/21/2005	4:00	18.108	25.247	25.279	28.67	12.884	39.618
2/21/2005	8:00	18.117	25.256	25.293	28.694	12.906	39.637
2/21/2005	12:00	18.13	25.266	25.3	28.703	12.925	39.655
2/21/2005	16:00	18.128	25.251	25.287	28.681	12.922	39.657
2/21/2005	20:00	18.126	25.26	25.294	28.692	12.934	39.664
2/22/2005	0:00	18.141	25.277	25.314	28.725	12.96	39.681
2/22/2005	4:00	18.152	25.28	25.316	28.741	12.979	39.694
2/22/2005	8:00	18.171	25.304	25.343	28.783	13.007	39.716
2/22/2005	12:00	18.199	25.332	25.368	28.821	13.045	39.744
2/22/2005	16:00	18.208	25.321	25.357	28.799	13.047	39.753
2/22/2005	20:00	18.209	25.325	25.361	28.803	13.054	39.76
2/23/2005	0:00	18.215	25.328	25.366	28.801	13.066	39.767
2/23/2005	4:00	18.213	25.319	25.355	28.794	13.066	39.768
2/23/2005	8:00	18.202	25.308	25.345	28.776	13.064	39.76
2/23/2005	12:00	18.199	25.303	25.339	28.768	13.069	39.755
2/23/2005	16:00	18.184	25.28	25.316	28.737	13.057	39.742
2/23/2005	20:00	18.167	25.269	25.306	28.723	13.054	39.729
2/24/2005	0:00	18.165	25.264	25.301	28.725	13.064	39.725
2/24/2005	4:00	18.154	25.247	25.283	28.708	13.062	39.716
2/24/2005	8:00	18.139	25.232	25.271	28.697	13.062	39.703
2/24/2005	12:00	18.147	25.254	25.291	28.734	13.09	39.712
2/24/2005	16:00	18.152	25.24	25.277	28.723	13.097	39.712
2/24/2005	20:00	18.143	25.229	25.265	28.712	13.099	39.709
2/25/2005	0:00	18.143	25.227	25.263	28.708	13.109	39.709
2/25/2005	4:00	18.134	25.206	25.242	28.681	13.104	39.7
2/25/2005	8:00	18.117	25.186	25.222	28.663	13.097	39.687
2/25/2005	12:00	18.117	25.195	25.232	28.686	13.118	39.687
2/25/2005	16:00	18.117	25.179	25.217	28.666	13.123	39.683
2/25/2005	20:00	18.112	25.179	25.217	28.675	13.132	39.683
2/26/2005	0:00	18.119	25.184	25.221	28.692	13.156	39.688
2/26/2005	4:00	18.126	25.188	25.224	28.699	13.17	39.696
2/26/2005	8:00	18.126	25.179	25.217	28.694	13.18	39.698
2/26/2005	12:00	18.13	25.178	25.215	28.692	13.194	39.701
2/26/2005	16:00	18.117	25.147	25.185	28.646	13.18	39.688
2/26/2005	20:00	18.099	25.132	25.17	28.632	13.175	39.674
2/27/2005	0:00	18.089	25.123	25.162	28.624	13.18	39.663
2/27/2005	4:00	18.082	25.108	25.147	28.611	13.182	39.653
2/27/2005	8:00	18.067	25.092	25.129	28.597	13.178	39.641



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
2/27/2005	12:00	18.063	25.09	25.129	28.601	13.189	39.637
2/27/2005	16:00	18.06	25.075	25.113	28.588	13.194	39.632
2/27/2005	20:00	18.056	25.08	25.121	28.604	13.208	39.632
2/28/2005	0:00	18.069	25.088	25.127	28.63	13.237	39.639
2/28/2005	4:00	18.075	25.079	25.117	28.615	13.244	39.641
2/28/2005	8:00	18.076	25.084	25.122	28.628	13.258	39.644
2/28/2005	12:00	18.089	25.092	25.131	28.644	13.282	39.656
2/28/2005	16:00	18.093	25.092	25.129	28.639	13.291	39.661
2/28/2005	20:00	18.101	25.097	25.139	28.657	13.305	39.668
3/1/2005	0:00	18.11	25.103	25.143	28.67	13.326	39.676
3/1/2005	4:00	18.123	25.106	25.145	28.677	13.343	39.683
3/1/2005	8:00	18.132	25.119	25.16	28.697	13.362	39.694
3/1/2005	12:00	18.148	25.136	25.176	28.721	13.39	39.711
3/1/2005	16:00	18.15	25.118	25.159	28.675	13.383	39.707
3/1/2005	20:00	18.145	25.114	25.154	28.67	13.383	39.703
3/2/2005	0:00	18.139	25.103	25.145	28.666	13.388	39.698
3/2/2005	4:00	18.138	25.095	25.137	28.657	13.395	39.691
3/2/2005	8:00	18.125	25.077	25.12	28.628	13.388	39.678
3/2/2005	12:00	18.121	25.079	25.119	28.633	13.397	39.672
3/2/2005	16:00	18.112	25.062	25.104	28.601	13.395	39.661
3/2/2005	20:00	18.108	25.068	25.11	28.619	13.404	39.659
3/3/2005	0:00	18.113	25.07	25.11	28.639	13.423	39.661
3/3/2005	4:00	18.117	25.068	25.11	28.639	13.438	39.663
3/3/2005	8:00	18.125	25.073	25.115	28.648	13.452	39.668
3/3/2005	12:00	18.13	25.068	25.11	28.639	13.459	39.67
3/3/2005	16:00	18.119	25.043	25.086	28.595	13.45	39.657
3/3/2005	20:00	18.113	25.049	25.094	28.606	13.459	39.656
3/4/2005	0:00	18.117	25.053	25.096	28.624	13.473	39.656
3/4/2005	4:00	18.115	25.042	25.083	28.613	13.478	39.65
3/4/2005	8:00	18.115	25.046	25.088	28.617	13.49	39.652
3/4/2005	12:00	18.124	25.058	25.1	28.642	13.511	39.659
3/4/2005	16:00	18.13	25.047	25.09	28.617	13.513	39.659
3/4/2005	20:00	18.139	25.068	25.112	28.648	13.537	39.67
3/5/2005	0:00	18.162	25.094	25.137	28.697	13.57	39.691
3/5/2005	4:00	18.186	25.114	25.156	28.732	13.601	39.711
3/5/2005	8:00	18.215	25.142	25.188	28.768	13.632	39.739
3/5/2005	12:00	18.249	25.171	25.215	28.803	13.667	39.768
3/5/2005	16:00	18.254	25.153	25.197	28.757	13.66	39.77
3/5/2005	20:00	18.25	25.149	25.194	28.737	13.658	39.768
3/6/2005	0:00	18.247	25.142	25.186	28.726	13.655	39.761
3/6/2005	4:00	18.228	25.118	25.162	28.695	13.643	39.742
3/6/2005	8:00	18.213	25.103	25.149	28.668	13.634	39.722
3/6/2005	12:00	18.197	25.079	25.125	28.635	13.624	39.7
3/6/2005	16:00	18.154	25.014	25.057	28.529	13.582	39.652
3/6/2005	20:00	18.106	24.973	25.018	28.473	13.546	39.606
3/7/2005	0:00	18.076	24.957	25.003	28.469	13.539	39.576
3/7/2005	4:00	18.065	24.96	25.007	28.504	13.554	39.563
3/7/2005	8:00	18.076	24.977	25.022	28.544	13.584	39.569
3/7/2005	12:00	18.104	25.001	25.046	28.589	13.62	39.591
3/7/2005	16:00	18.123	25.007	25.052	28.6	13.641	39.608
3/7/2005	20:00	18.143	25.034	25.081	28.637	13.674	39.632
3/8/2005	0:00	18.173	25.058	25.106	28.67	13.705	39.661
3/8/2005	4:00	18.188	25.06	25.106	28.675	13.714	39.674
3/8/2005	8:00	18.195	25.062	25.108	28.675	13.726	39.681

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
3/8/2005	12:00	18.208	25.073	25.12	28.684	13.743	39.692
3/8/2005	16:00	18.212	25.071	25.12	28.67	13.745	39.694
3/8/2005	20:00	18.215	25.079	25.127	28.675	13.754	39.694
3/9/2005	0:00	18.232	25.095	25.143	28.699	13.776	39.705
3/9/2005	4:00	18.236	25.09	25.137	28.69	13.776	39.707
3/9/2005	8:00	18.241	25.108	25.155	28.715	13.795	39.713
3/9/2005	12:00	18.273	25.142	25.188	28.763	13.83	39.737
3/9/2005	16:00	18.28	25.125	25.172	28.726	13.823	39.737
3/9/2005	20:00	18.267	25.11	25.159	28.69	13.816	39.726
3/10/2005	0:00	18.256	25.094	25.141	28.664	13.806	39.713
3/10/2005	4:00	18.225	25.042	25.088	28.588	13.771	39.674
3/10/2005	8:00	18.197	25.044	25.092	28.593	13.769	39.654
3/10/2005	12:00	18.206	25.058	25.102	28.622	13.79	39.652
3/10/2005	16:00	18.199	25.033	25.079	28.586	13.783	39.639
3/10/2005	20:00	18.208	25.068	25.116	28.651	13.814	39.65
3/11/2005	0:00	18.236	25.092	25.141	28.693	13.849	39.67
3/11/2005	4:00	18.258	25.105	25.153	28.708	13.866	39.691
3/11/2005	8:00	18.263	25.101	25.149	28.697	13.873	39.696
3/11/2005	12:00	18.262	25.09	25.139	28.666	13.87	39.692
3/11/2005	16:00	18.23	25.038	25.085	28.58	13.83	39.663
3/11/2005	20:00	18.186	24.996	25.044	28.513	13.797	39.62
3/12/2005	0:00	18.167	24.997	25.046	28.527	13.802	39.6
3/12/2005	4:00	18.152	24.972	25.02	28.505	13.79	39.576
3/12/2005	8:00	18.128	24.944	24.997	28.474	13.778	39.552
3/12/2005	12:00	18.125	24.957	25.007	28.498	13.795	39.547
3/12/2005	16:00	18.145	24.997	25.05	28.571	13.835	39.569
3/12/2005	20:00	18.186	25.036	25.087	28.655	13.882	39.602
3/13/2005	0:00	18.225	25.07	25.12	28.691	13.922	39.639
3/13/2005	4:00	18.256	25.083	25.135	28.704	13.941	39.667
3/13/2005	8:00	18.282	25.112	25.164	28.744	13.969	39.696
3/13/2005	12:00	18.313	25.142	25.192	28.775	13.998	39.722
3/13/2005	16:00	18.324	25.134	25.184	28.739	13.993	39.731
3/13/2005	20:00	18.328	25.145	25.197	28.755	14	39.737
3/14/2005	0:00	18.345	25.168	25.217	28.786	14.026	39.75
3/14/2005	4:00	18.365	25.184	25.234	28.801	14.04	39.762
3/14/2005	8:00	18.38	25.201	25.252	28.815	14.055	39.774
3/14/2005	12:00	18.4	25.219	25.271	28.832	14.073	39.788
3/14/2005	16:00	18.406	25.208	25.26	28.797	14.069	39.788
3/14/2005	20:00	18.404	25.218	25.269	28.808	14.073	39.788
3/15/2005	0:00	18.415	25.232	25.285	28.832	14.09	39.794
3/15/2005	4:00	18.43	25.242	25.293	28.837	14.099	39.799
3/15/2005	8:00	18.435	25.249	25.301	28.839	14.107	39.803
3/15/2005	12:00	18.445	25.256	25.308	28.841	14.118	39.807
3/15/2005	16:00	18.441	25.243	25.295	28.804	14.109	39.799
3/15/2005	20:00	18.43	25.238	25.291	28.795	14.102	39.79
3/16/2005	0:00	18.434	25.249	25.301	28.817	14.116	39.786
3/16/2005	4:00	18.432	25.24	25.291	28.801	14.116	39.779
3/16/2005	8:00	18.432	25.242	25.295	28.797	14.121	39.775
3/16/2005	12:00	18.432	25.24	25.293	28.79	14.126	39.772
3/16/2005	16:00	18.421	25.216	25.269	28.742	14.109	39.755
3/16/2005	20:00	18.4	25.205	25.258	28.724	14.097	39.739
3/17/2005	0:00	18.391	25.193	25.246	28.719	14.097	39.722
3/17/2005	4:00	18.38	25.182	25.234	28.702	14.093	39.707
3/17/2005	8:00	18.365	25.164	25.219	28.677	14.086	39.692

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
3/17/2005	12:00	18.354	25.151	25.207	28.657	14.081	39.676
3/17/2005	16:00	18.33	25.116	25.168	28.6	14.062	39.648
3/17/2005	20:00	18.311	25.112	25.166	28.602	14.057	39.633
3/18/2005	0:00	18.304	25.103	25.157	28.604	14.062	39.622
3/18/2005	4:00	18.295	25.088	25.143	28.589	14.057	39.609
3/18/2005	8:00	18.287	25.084	25.137	28.587	14.062	39.602
3/18/2005	12:00	18.289	25.09	25.143	28.598	14.071	39.602
3/18/2005	16:00	18.297	25.11	25.162	28.626	14.095	39.613
3/18/2005	20:00	18.33	25.149	25.203	28.698	14.133	39.641
3/19/2005	0:00	18.369	25.175	25.229	28.742	14.164	39.67
3/19/2005	4:00	18.391	25.188	25.242	28.755	14.18	39.694
3/19/2005	8:00	18.419	25.229	25.283	28.806	14.216	39.726
3/19/2005	12:00	18.448	25.251	25.306	28.826	14.234	39.751
3/19/2005	16:00	18.463	25.251	25.306	28.81	14.239	39.761
3/19/2005	20:00	18.471	25.264	25.318	28.815	14.246	39.772
3/20/2005	0:00	18.484	25.279	25.334	28.837	14.258	39.781
3/20/2005	4:00	18.489	25.277	25.332	28.826	14.26	39.781
3/20/2005	8:00	18.5	25.295	25.349	28.85	14.277	39.79
3/20/2005	12:00	18.509	25.295	25.349	28.839	14.282	39.792
3/20/2005	16:00	18.495	25.264	25.32	28.775	14.258	39.774
3/20/2005	20:00	18.478	25.26	25.314	28.762	14.253	39.759
3/21/2005	0:00	18.472	25.256	25.312	28.762	14.253	39.748
3/21/2005	4:00	18.454	25.227	25.283	28.724	14.237	39.724
3/21/2005	8:00	18.435	25.221	25.277	28.709	14.232	39.707
3/21/2005	12:00	18.437	25.227	25.281	28.722	14.242	39.702
3/21/2005	16:00	18.428	25.205	25.262	28.7	14.23	39.687
3/21/2005	20:00	18.417	25.212	25.267	28.713	14.234	39.681
3/22/2005	0:00	18.419	25.212	25.269	28.731	14.237	39.681
3/22/2005	4:00	18.415	25.203	25.258	28.711	14.213	39.676
3/22/2005	8:00	18.413	25.21	25.267	28.711	14.194	39.676
3/22/2005	12:00	18.424	25.223	25.283	28.735	14.187	39.685
3/22/2005	16:00	18.424	25.223	25.281	28.731	14.173	39.687
3/22/2005	20:00	18.426	25.24	25.299	28.755	14.173	39.696
3/23/2005	0:00	18.443	25.26	25.318	28.784	14.18	39.713
3/23/2005	4:00	18.445	25.255	25.312	28.771	14.166	39.716
3/23/2005	8:00	18.441	25.26	25.318	28.775	14.161	39.718
3/23/2005	12:00	18.452	25.275	25.334	28.795	14.168	39.731
3/23/2005	16:00	18.441	25.256	25.316	28.76	14.147	39.724
3/23/2005	20:00	18.43	25.251	25.308	28.751	14.138	39.716
3/24/2005	0:00	18.432	25.262	25.322	28.766	14.145	39.72
3/24/2005	4:00	18.423	25.242	25.301	28.744	14.13	39.713
3/24/2005	8:00	18.413	25.236	25.297	28.739	14.126	39.707
3/24/2005	12:00	18.408	25.225	25.285	28.726	14.123	39.7
3/24/2005	16:00	18.389	25.207	25.266	28.704	14.109	39.687
3/24/2005	20:00	18.384	25.216	25.276	28.726	14.116	39.687
3/25/2005	0:00	18.398	25.232	25.293	28.755	14.135	39.698
3/25/2005	4:00	18.41	25.234	25.295	28.773	14.145	39.707
3/25/2005	8:00	18.421	25.253	25.313	28.804	14.164	39.724
3/25/2005	12:00	18.445	25.277	25.338	28.837	14.187	39.748
3/25/2005	16:00	18.46	25.277	25.338	28.839	14.194	39.759
3/25/2005	20:00	18.467	25.284	25.344	28.85	14.204	39.768
3/26/2005	0:00	18.487	25.303	25.363	28.873	14.223	39.785
3/26/2005	4:00	18.493	25.303	25.363	28.87	14.225	39.794
3/26/2005	8:00	18.5	25.314	25.373	28.886	14.234	39.803

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
3/26/2005	12:00	18.519	25.334	25.394	28.908	14.253	39.818
3/26/2005	16:00	18.522	25.321	25.383	28.884	14.246	39.818
3/26/2005	20:00	18.515	25.315	25.377	28.875	14.244	39.812
3/27/2005	0:00	18.515	25.312	25.373	28.868	14.244	39.809
3/27/2005	4:00	18.508	25.301	25.359	28.85	14.234	39.799
3/27/2005	8:00	18.498	25.294	25.353	28.844	14.234	39.79
3/27/2005	12:00	18.5	25.291	25.353	28.842	14.239	39.786
3/27/2005	16:00	18.48	25.254	25.316	28.78	14.213	39.764
3/27/2005	20:00	18.45	25.229	25.289	28.749	14.192	39.737
3/28/2005	0:00	18.435	25.221	25.281	28.746	14.192	39.72
3/28/2005	4:00	18.419	25.199	25.26	28.718	14.18	39.702
3/28/2005	8:00	18.4	25.179	25.241	28.702	14.171	39.683
3/28/2005	12:00	18.393	25.173	25.235	28.698	14.173	39.674
3/28/2005	16:00	18.38	25.151	25.211	28.664	14.161	39.659
3/28/2005	20:00	18.356	25.127	25.188	28.644	14.147	39.637
3/29/2005	0:00	18.345	25.118	25.18	28.649	14.152	39.628
3/29/2005	4:00	18.328	25.083	25.143	28.598	14.131	39.604
3/29/2005	8:00	18.299	25.061	25.124	28.576	14.119	39.58
3/29/2005	12:00	18.291	25.062	25.12	28.589	14.123	39.573
3/29/2005	16:00	18.284	25.046	25.11	28.571	14.121	39.565
3/29/2005	20:00	18.273	25.033	25.097	28.567	14.116	39.556
3/30/2005	0:00	18.267	25.025	25.087	28.574	14.121	39.549
3/30/2005	4:00	18.256	25.001	25.063	28.54	14.112	39.537
3/30/2005	8:00	18.238	24.983	25.046	28.518	14.105	39.523
3/30/2005	12:00	18.238	25.007	25.067	28.565	14.126	39.532
3/30/2005	16:00	18.288	25.072	25.131	28.678	14.185	39.573
3/30/2005	20:00	18.343	25.123	25.186	28.771	14.242	39.628
3/31/2005	0:00	18.393	25.166	25.229	28.833	14.287	39.679
3/31/2005	4:00	18.434	25.19	25.252	28.855	14.31	39.718
3/31/2005	8:00	18.478	25.238	25.301	28.912	14.348	39.764
3/31/2005	12:00	18.528	25.288	25.351	28.974	14.386	39.812
3/31/2005	16:00	18.56	25.299	25.363	28.963	14.395	39.838
3/31/2005	20:00	18.582	25.323	25.386	28.983	14.412	39.86
4/1/2005	0:00	18.608	25.351	25.414	29.017	14.431	39.881
4/1/2005	4:00	18.623	25.356	25.421	29.008	14.435	39.888
4/1/2005	8:00	18.639	25.38	25.447	29.032	14.452	39.901
4/1/2005	12:00	18.658	25.393	25.457	29.036	14.459	39.908
4/1/2005	16:00	18.658	25.373	25.437	28.981	14.445	39.897
4/1/2005	20:00	18.647	25.371	25.435	28.968	14.438	39.886
4/2/2005	0:00	18.643	25.377	25.443	28.981	14.443	39.879
4/2/2005	4:00	18.643	25.377	25.441	28.979	14.447	39.871
4/2/2005	8:00	18.648	25.386	25.451	28.983	14.454	39.87
4/2/2005	12:00	18.652	25.384	25.449	28.974	14.459	39.868
4/2/2005	16:00	18.643	25.356	25.421	28.917	14.44	39.849
4/2/2005	20:00	18.621	25.341	25.408	28.886	14.424	39.829
4/3/2005	0:00	18.604	25.33	25.394	28.877	14.414	39.811
4/3/2005	4:00	18.593	25.321	25.388	28.873	14.414	39.794
4/3/2005	8:00	18.586	25.312	25.379	28.862	14.414	39.783
4/3/2005	12:00	18.589	25.314	25.379	28.866	14.417	39.779
4/3/2005	16:00	18.573	25.288	25.351	28.817	14.405	39.761
4/3/2005	20:00	18.556	25.277	25.344	28.802	14.398	39.748
4/4/2005	0:00	18.552	25.279	25.342	28.811	14.402	39.74
4/4/2005	4:00	18.539	25.253	25.318	28.786	14.393	39.724
4/4/2005	8:00	18.526	25.244	25.311	28.773	14.391	39.713

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
4/4/2005	12:00	18.523	25.236	25.303	28.764	14.391	39.703
4/4/2005	16:00	18.502	25.205	25.27	28.715	14.376	39.683
4/4/2005	20:00	18.488	25.201	25.268	28.711	14.374	39.67
4/5/2005	0:00	18.488	25.208	25.276	28.737	14.386	39.67
4/5/2005	4:00	18.48	25.186	25.254	28.715	14.379	39.659
4/5/2005	8:00	18.475	25.192	25.26	28.722	14.386	39.658
4/5/2005	12:00	18.486	25.207	25.274	28.751	14.405	39.668
4/5/2005	16:00	18.497	25.216	25.283	28.769	14.419	39.678
4/5/2005	20:00	18.517	25.245	25.313	28.811	14.447	39.7
4/6/2005	0:00	18.541	25.258	25.326	28.828	14.464	39.718
4/6/2005	4:00	18.545	25.251	25.318	28.819	14.462	39.722
4/6/2005	8:00	18.508	25.221	25.291	28.819	14.405	39.696
4/6/2005	12:00	18.495	25.238	25.307	28.837	14.091	39.695
4/6/2005	16:00	18.417	25.238	25.309	28.833	13.578	39.694
4/6/2005	20:00	18.277	25.247	25.314	28.819	13.07	39.689
4/7/2005	0:00	18.14	25.268	25.338	28.833	12.635	39.698
4/7/2005	4:00	17.997	25.275	25.344	28.831	12.285	39.702
4/7/2005	8:00	17.871	25.292	25.361	28.839	12.035	39.709
4/7/2005	12:00	17.775	25.308	25.381	28.857	11.86	39.726
4/7/2005	16:00	17.677	25.288	25.355	28.817	11.716	39.722
4/7/2005	20:00	17.577	25.266	25.334	28.786	11.621	39.711
4/8/2005	0:00	17.499	25.262	25.33	28.788	11.574	39.709
4/8/2005	4:00	17.431	25.242	25.311	28.78	11.543	39.706
4/8/2005	8:00	17.368	25.225	25.295	28.769	11.532	39.698
4/8/2005	12:00	17.324	25.201	25.272	28.751	11.532	39.693
4/8/2005	16:00	17.263	25.151	25.221	28.691	11.51	39.672
4/8/2005	20:00	17.19	25.099	25.169	28.636	11.494	39.639
4/9/2005	0:00	17.146	25.088	25.157	28.649	11.52	39.628
4/9/2005	4:00	17.103	25.049	25.12	28.618	11.527	39.612
4/9/2005	8:00	17.068	25.016	25.089	28.605	11.543	39.597
4/9/2005	12:00	17.048	25	25.069	28.602	11.567	39.593
4/9/2005	16:00	17.022	24.961	25.032	28.569	11.577	39.582
4/9/2005	20:00	16.992	24.94	25.011	28.571	11.6	39.573
4/10/2005	0:00	16.99	24.937	25.009	28.6	11.645	39.58
4/10/2005	4:00	16.985	24.909	24.98	28.585	11.666	39.578
4/10/2005	8:00	16.983	24.913	24.984	28.616	11.706	39.589
4/10/2005	12:00	16.994	24.902	24.974	28.613	11.74	39.6
4/10/2005	16:00	16.989	24.879	24.951	28.591	11.749	39.6
4/10/2005	20:00	16.979	24.861	24.931	28.596	11.763	39.597
4/11/2005	0:00	16.978	24.85	24.922	28.6	11.789	39.599
4/11/2005	4:00	16.968	24.815	24.886	28.589	11.787	39.588
4/11/2005	8:00	16.961	24.805	24.877	28.582	11.782	39.582
4/11/2005	12:00	16.959	24.791	24.861	28.565	11.77	39.58
4/11/2005	16:00	16.942	24.756	24.824	28.527	11.732	39.565
4/11/2005	20:00	16.918	24.746	24.82	28.534	11.723	39.558
4/12/2005	0:00	16.918	24.748	24.82	28.56	11.735	39.564
4/12/2005	4:00	16.92	24.754	24.824	28.571	11.744	39.573
4/12/2005	8:00	16.924	24.757	24.83	28.594	11.756	39.586
4/12/2005	12:00	16.937	24.77	24.844	28.622	11.782	39.604
4/12/2005	16:00	16.95	24.781	24.853	28.644	11.799	39.626
4/12/2005	20:00	16.959	24.785	24.857	28.664	11.815	39.643
4/13/2005	0:00	16.968	24.792	24.865	28.68	11.834	39.659
4/13/2005	4:00	16.981	24.802	24.877	28.7	11.853	39.678
4/13/2005	8:00	17	24.826	24.9	28.74	11.884	39.702

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
4/13/2005	12:00	17.027	24.85	24.923	28.78	11.921	39.73
4/13/2005	16:00	17.048	24.853	24.928	28.773	11.933	39.75
4/13/2005	20:00	17.055	24.861	24.935	28.786	11.945	39.765
4/14/2005	0:00	17.066	24.876	24.951	28.815	11.971	39.779
4/14/2005	4:00	17.079	24.878	24.953	28.822	11.985	39.792
4/14/2005	8:00	17.087	24.883	24.959	28.828	11.997	39.801
4/14/2005	12:00	17.096	24.883	24.957	28.826	12.011	39.807
4/14/2005	16:00	17.092	24.863	24.939	28.786	12.002	39.801
4/14/2005	20:00	17.074	24.852	24.925	28.771	11.995	39.79
4/15/2005	0:00	17.068	24.85	24.926	28.786	12.009	39.785
4/15/2005	4:00	17.07	24.852	24.927	28.797	12.025	39.789
4/15/2005	8:00	17.079	24.857	24.935	28.817	12.049	39.794
4/15/2005	12:00	17.092	24.857	24.933	28.815	12.068	39.8
4/15/2005	16:00	17.09	24.837	24.914	28.777	12.063	39.796
4/15/2005	20:00	17.081	24.829	24.906	28.775	12.066	39.792
4/16/2005	0:00	17.079	24.828	24.902	28.784	12.08	39.79
4/16/2005	4:00	17.083	24.822	24.9	28.791	12.096	39.789
4/16/2005	8:00	17.089	24.826	24.9	28.8	12.115	39.794
4/16/2005	12:00	17.102	24.824	24.902	28.806	12.136	39.801
4/16/2005	16:00	17.1	24.807	24.883	28.771	12.134	39.796
4/16/2005	20:00	17.092	24.798	24.875	28.762	12.139	39.79
4/17/2005	0:00	17.09	24.794	24.871	28.775	12.153	39.79
4/17/2005	4:00	17.089	24.778	24.856	28.76	12.158	39.783
4/17/2005	8:00	17.085	24.776	24.852	28.76	12.172	39.781
4/17/2005	12:00	17.087	24.761	24.838	28.742	12.177	39.778
4/17/2005	16:00	17.072	24.73	24.807	28.693	12.165	39.759
4/17/2005	20:00	17.052	24.713	24.789	28.671	12.16	39.742
4/18/2005	0:00	17.04	24.7	24.776	28.673	12.165	39.731
4/18/2005	4:00	17.027	24.674	24.75	28.649	12.167	39.715
4/18/2005	8:00	17.015	24.661	24.739	28.636	12.17	39.702
4/18/2005	12:00	17.005	24.643	24.723	28.62	12.172	39.691
4/18/2005	16:00	16.987	24.615	24.694	28.582	12.165	39.674
4/18/2005	20:00	16.966	24.591	24.671	28.554	12.16	39.656
4/19/2005	0:00	16.966	24.598	24.677	28.589	12.186	39.654
4/19/2005	4:00	16.959	24.567	24.647	28.563	12.186	39.641
4/19/2005	8:00	16.955	24.571	24.649	28.565	12.203	39.639
4/19/2005	12:00	16.961	24.563	24.642	28.567	12.219	39.641
4/19/2005	16:00	16.961	24.55	24.632	28.556	12.229	39.639
4/19/2005	20:00	16.959	24.55	24.63	28.558	12.245	39.639
4/20/2005	0:00	16.974	24.56	24.64	28.591	12.274	39.648
4/20/2005	4:00	16.978	24.55	24.63	28.585	12.288	39.65
4/20/2005	8:00	16.985	24.558	24.638	28.598	12.307	39.656
4/20/2005	12:00	16.998	24.552	24.632	28.594	12.323	39.659
4/20/2005	16:00	16.996	24.539	24.618	28.576	12.325	39.658
4/20/2005	20:00	16.994	24.537	24.618	28.571	12.335	39.654
4/21/2005	0:00	17.003	24.55	24.63	28.598	12.359	39.661
4/21/2005	4:00	17.003	24.521	24.601	28.565	12.356	39.652
4/21/2005	8:00	17.007	24.535	24.616	28.591	12.377	39.656
4/21/2005	12:00	17.022	24.539	24.618	28.591	12.394	39.663
4/21/2005	16:00	17.002	24.502	24.583	28.536	12.373	39.643
4/21/2005	20:00	16.998	24.515	24.595	28.56	12.392	39.641
4/22/2005	0:00	17.007	24.506	24.587	28.554	12.406	39.641
4/22/2005	4:00	16.992	24.484	24.564	28.516	12.394	39.626
4/22/2005	8:00	16.994	24.502	24.585	28.554	12.413	39.628

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
4/22/2005	12:00	17.033	24.552	24.636	28.644	12.479	39.661
4/22/2005	16:00	17.079	24.587	24.669	28.693	12.526	39.696
4/22/2005	20:00	17.122	24.617	24.698	28.733	12.569	39.731
4/23/2005	0:00	17.163	24.646	24.729	28.764	12.604	39.765
4/23/2005	4:00	17.188	24.661	24.745	28.771	12.621	39.787
4/23/2005	8:00	17.211	24.685	24.766	28.793	12.644	39.805
4/23/2005	12:00	17.238	24.702	24.784	28.797	12.659	39.822
4/23/2005	16:00	17.237	24.685	24.768	28.755	12.644	39.814
4/23/2005	20:00	17.222	24.674	24.756	28.729	12.633	39.8
4/24/2005	0:00	17.22	24.682	24.764	28.735	12.64	39.794
4/24/2005	4:00	17.218	24.68	24.762	28.729	12.644	39.787
4/24/2005	8:00	17.213	24.678	24.76	28.724	12.647	39.778
4/24/2005	12:00	17.214	24.669	24.752	28.702	12.644	39.772
4/24/2005	16:00	17.188	24.626	24.71	28.633	12.611	39.742
4/24/2005	20:00	17.151	24.598	24.68	28.593	12.59	39.711
4/25/2005	0:00	17.126	24.584	24.669	28.573	12.581	39.687
4/25/2005	4:00	17.1	24.554	24.638	28.536	12.564	39.659
4/25/2005	8:00	17.072	24.532	24.616	28.512	12.552	39.634
4/25/2005	12:00	17.055	24.521	24.605	28.5	12.552	39.617
4/25/2005	16:00	17.037	24.493	24.575	28.467	12.538	39.599
4/25/2005	20:00	17.024	24.49	24.573	28.482	12.55	39.589
4/26/2005	0:00	17.026	24.489	24.571	28.491	12.564	39.588
4/26/2005	4:00	17.022	24.473	24.556	28.465	12.564	39.58
4/26/2005	8:00	17.022	24.482	24.566	28.489	12.581	39.584
4/26/2005	12:00	17.044	24.504	24.589	28.522	12.614	39.599
4/26/2005	16:00	17.064	24.515	24.599	28.545	12.64	39.613
4/26/2005	20:00	17.077	24.524	24.611	28.562	12.659	39.626
4/27/2005	0:00	17.102	24.551	24.636	28.6	12.694	39.648
4/27/2005	4:00	17.129	24.572	24.657	28.624	12.725	39.671
4/27/2005	8:00	17.153	24.591	24.677	28.642	12.748	39.689
4/27/2005	12:00	17.177	24.606	24.69	28.653	12.769	39.706
4/27/2005	16:00	17.19	24.606	24.692	28.633	12.772	39.711
4/27/2005	20:00	17.19	24.608	24.692	28.635	12.777	39.709
4/28/2005	0:00	17.194	24.608	24.692	28.635	12.788	39.707
4/28/2005	4:00	17.196	24.604	24.692	28.622	12.788	39.704
4/28/2005	8:00	17.201	24.617	24.706	28.644	12.802	39.704
4/28/2005	12:00	17.214	24.626	24.714	28.651	12.821	39.709
4/28/2005	16:00	17.222	24.624	24.712	28.635	12.823	39.709
4/28/2005	20:00	17.22	24.628	24.716	28.633	12.828	39.709
4/29/2005	0:00	17.227	24.637	24.724	28.656	12.844	39.711
4/29/2005	4:00	17.227	24.63	24.716	28.629	12.844	39.706
4/29/2005	8:00	17.231	24.632	24.72	28.633	12.852	39.704
4/29/2005	12:00	17.246	24.652	24.739	28.655	12.873	39.711
4/29/2005	16:00	17.255	24.65	24.735	28.646	12.878	39.713
4/29/2005	20:00	17.255	24.654	24.743	28.642	12.883	39.713
4/30/2005	0:00	17.264	24.673	24.761	28.675	12.906	39.722
4/30/2005	4:00	17.279	24.682	24.768	28.684	12.923	39.728
4/30/2005	8:00	17.3	24.708	24.795	28.713	12.949	39.744
4/30/2005	12:00	17.32	24.711	24.799	28.715	12.961	39.754
4/30/2005	16:00	17.329	24.711	24.797	28.693	12.96	39.755
4/30/2005	20:00	17.327	24.719	24.805	28.693	12.967	39.757
5/1/2005	0:00	17.333	24.732	24.819	28.715	12.982	39.763
5/1/2005	4:00	17.351	24.75	24.838	28.739	13.008	39.772
5/1/2005	8:00	17.377	24.78	24.868	28.775	13.034	39.79

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/1/2005	12:00	17.399	24.785	24.877	28.777	13.05	39.803
5/1/2005	16:00	17.403	24.78	24.865	28.746	13.043	39.801
5/1/2005	20:00	17.403	24.787	24.877	28.744	13.05	39.801
5/2/2005	0:00	17.409	24.802	24.891	28.77	13.067	39.805
5/2/2005	4:00	17.414	24.804	24.893	28.766	13.074	39.803
5/2/2005	8:00	17.426	24.819	24.908	28.777	13.09	39.811
5/2/2005	12:00	17.44	24.826	24.914	28.784	13.102	39.814
5/2/2005	16:00	17.436	24.809	24.899	28.744	13.09	39.805
5/2/2005	20:00	17.424	24.802	24.891	28.717	13.083	39.792
5/3/2005	0:00	17.418	24.809	24.899	28.735	13.093	39.789
5/3/2005	4:00	17.416	24.806	24.897	28.728	13.098	39.781
5/3/2005	8:00	17.426	24.824	24.916	28.753	13.119	39.787
5/3/2005	12:00	17.44	24.833	24.922	28.762	13.13	39.794
5/3/2005	16:00	17.438	24.817	24.906	28.731	13.126	39.787
5/3/2005	20:00	17.431	24.815	24.904	28.713	13.126	39.779
5/4/2005	0:00	17.433	24.824	24.914	28.731	13.138	39.781
5/4/2005	4:00	17.436	24.828	24.92	28.737	13.149	39.779
5/4/2005	8:00	17.448	24.843	24.934	28.748	13.163	39.787
5/4/2005	12:00	17.462	24.852	24.941	28.762	13.18	39.794
5/4/2005	16:00	17.457	24.826	24.918	28.717	13.168	39.785
5/4/2005	20:00	17.444	24.819	24.91	28.693	13.161	39.772
5/5/2005	0:00	17.449	24.841	24.932	28.731	13.182	39.776
5/5/2005	4:00	17.449	24.832	24.924	28.717	13.185	39.772
5/5/2005	8:00	17.457	24.839	24.934	28.726	13.199	39.776
5/5/2005	12:00	17.466	24.844	24.938	28.728	13.208	39.781
5/5/2005	16:00	17.457	24.822	24.914	28.691	13.199	39.766
5/5/2005	20:00	17.442	24.815	24.906	28.671	13.194	39.754
5/6/2005	0:00	17.442	24.818	24.912	28.68	13.204	39.75
5/6/2005	4:00	17.439	24.811	24.904	28.671	13.204	39.742
5/6/2005	8:00	17.435	24.813	24.906	28.669	13.211	39.739
5/6/2005	12:00	17.438	24.806	24.897	28.655	13.213	39.737
5/6/2005	16:00	17.416	24.769	24.862	28.598	13.19	39.711
5/6/2005	20:00	17.39	24.756	24.85	28.578	13.182	39.691
5/7/2005	0:00	17.392	24.767	24.86	28.604	13.199	39.689
5/7/2005	4:00	17.385	24.756	24.85	28.593	13.202	39.683
5/7/2005	8:00	17.385	24.756	24.848	28.591	13.208	39.678
5/7/2005	12:00	17.385	24.75	24.842	28.578	13.211	39.674
5/7/2005	16:00	17.37	24.732	24.825	28.556	13.204	39.663
5/7/2005	20:00	17.355	24.715	24.811	28.536	13.204	39.648
5/8/2005	0:00	17.361	24.73	24.823	28.564	13.22	39.65
5/8/2005	4:00	17.357	24.715	24.807	28.54	13.218	39.643
5/8/2005	8:00	17.348	24.706	24.801	28.529	13.218	39.634
5/8/2005	12:00	17.348	24.7	24.796	28.513	13.223	39.63
5/8/2005	16:00	17.342	24.689	24.784	28.509	13.223	39.623
5/8/2005	20:00	17.331	24.689	24.784	28.538	13.22	39.617
5/9/2005	0:00	17.324	24.678	24.774	28.516	13.225	39.608
5/9/2005	4:00	17.331	24.685	24.782	28.531	13.227	39.612
5/9/2005	8:00	17.339	24.704	24.799	28.553	13.237	39.623
5/9/2005	12:00	17.363	24.722	24.817	28.578	13.256	39.641
5/9/2005	16:00	17.374	24.724	24.819	28.569	13.258	39.649
5/9/2005	20:00	17.368	24.721	24.817	28.556	13.256	39.647
5/10/2005	0:00	17.374	24.732	24.827	28.573	13.267	39.652
5/10/2005	4:00	17.379	24.734	24.829	28.571	13.27	39.654
5/10/2005	8:00	17.383	24.739	24.834	28.573	13.275	39.656



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/10/2005	12:00	17.385	24.732	24.825	28.553	13.275	39.65
5/10/2005	16:00	17.379	24.724	24.821	28.54	13.272	39.645
5/10/2005	20:00	17.366	24.717	24.813	28.526	13.27	39.634
5/11/2005	0:00	17.364	24.728	24.823	28.542	13.279	39.632
5/11/2005	4:00	17.377	24.739	24.834	28.564	13.293	39.637
5/11/2005	8:00	17.4	24.772	24.871	28.619	13.324	39.66
5/11/2005	12:00	17.418	24.774	24.871	28.626	13.331	39.673
5/11/2005	16:00	17.399	24.747	24.842	28.591	13.279	39.652
5/11/2005	20:00	17.383	24.728	24.823	28.569	13.206	39.639
5/12/2005	0:00	17.368	24.75	24.846	28.597	13.166	39.643
5/12/2005	4:00	17.339	24.748	24.844	28.584	13.111	39.641
5/12/2005	8:00	17.294	24.763	24.862	28.602	13.074	39.647
5/12/2005	12:00	17.248	24.765	24.862	28.597	13.043	39.649
5/12/2005	16:00	17.181	24.752	24.852	28.551	12.993	39.643
5/12/2005	20:00	17.007	24.636	25.078	28.526	12.249	39.562
5/13/2005	0:00	16.898	24.656	25.146	28.473	11.659	39.536
5/13/2005	4:00	16.754	24.645	24.827	28.427	11.233	39.516
5/13/2005	8:00	16.609	24.647	24.743	28.405	10.924	39.505
5/13/2005	12:00	16.489	24.661	24.759	28.411	10.704	39.507
5/13/2005	16:00	16.383	24.667	24.766	28.407	10.539	39.512
5/13/2005	20:00	16.282	24.667	24.764	28.409	10.418	39.512
5/14/2005	0:00	16.195	24.671	24.77	28.411	10.326	39.516
5/14/2005	4:00	16.115	24.669	24.769	28.396	10.246	39.514
5/14/2005	8:00	16.043	24.68	24.778	28.405	10.196	39.523
5/14/2005	12:00	15.993	24.7	24.8	28.431	10.184	39.538
5/14/2005	16:00	15.956	24.711	24.811	28.436	10.196	39.555
5/14/2005	20:00	15.906	24.713	24.811	28.429	10.21	39.564
5/15/2005	0:00	15.869	24.724	24.825	28.451	10.246	39.575
5/15/2005	4:00	15.842	24.726	24.827	28.449	10.274	39.582
5/15/2005	8:00	15.825	24.745	24.846	28.477	10.319	39.597
5/15/2005	12:00	15.81	24.743	24.843	28.469	10.352	39.604
5/15/2005	16:00	15.784	24.726	24.827	28.433	10.371	39.601
5/15/2005	20:00	15.747	24.704	24.803	28.391	10.387	39.588
5/16/2005	0:00	15.714	24.697	24.796	28.391	10.423	39.577
5/16/2005	4:00	15.688	24.676	24.776	28.369	10.451	39.564
5/16/2005	8:00	15.669	24.673	24.772	28.367	10.487	39.556
5/16/2005	12:00	15.654	24.65	24.751	28.351	10.515	39.547
5/16/2005	16:00	15.625	24.615	24.714	28.294	10.524	39.527
5/16/2005	20:00	15.597	24.599	24.7	28.276	10.546	39.512
5/17/2005	0:00	15.581	24.587	24.689	28.283	10.583	39.501
5/17/2005	4:00	15.568	24.567	24.667	28.267	10.617	39.492
5/17/2005	8:00	15.556	24.56	24.659	28.263	10.65	39.485
5/17/2005	12:00	15.549	24.539	24.64	28.245	10.673	39.477
5/17/2005	16:00	15.532	24.51	24.609	28.205	10.687	39.461
5/17/2005	20:00	15.519	24.506	24.607	28.207	10.718	39.459
5/18/2005	0:00	15.521	24.502	24.603	28.227	10.763	39.457
5/18/2005	4:00	15.525	24.501	24.601	28.236	10.803	39.461
5/18/2005	8:00	15.529	24.491	24.593	28.227	10.834	39.461
5/18/2005	12:00	15.541	24.499	24.601	28.252	10.876	39.472
5/18/2005	16:00	15.553	24.491	24.593	28.247	10.909	39.475
5/18/2005	20:00	15.562	24.491	24.593	28.242	10.938	39.483
5/19/2005	0:00	15.584	24.51	24.613	28.291	10.99	39.499
5/19/2005	4:00	15.599	24.504	24.607	28.285	11.016	39.505
5/19/2005	8:00	15.614	24.515	24.619	28.296	11.049	39.516

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/19/2005	12:00	15.634	24.517	24.621	28.302	11.079	39.525
5/19/2005	16:00	15.64	24.504	24.607	28.276	11.091	39.525
5/19/2005	20:00	15.645	24.515	24.617	28.289	11.12	39.529
5/20/2005	0:00	15.664	24.53	24.634	28.322	11.165	39.542
5/20/2005	4:00	15.682	24.536	24.638	28.333	11.197	39.551
5/20/2005	8:00	15.71	24.562	24.665	28.371	11.243	39.571
5/20/2005	12:00	15.745	24.576	24.681	28.391	11.28	39.593
5/20/2005	16:00	15.762	24.569	24.675	28.373	11.297	39.599
5/20/2005	20:00	15.767	24.573	24.677	28.364	11.311	39.601
5/21/2005	0:00	15.779	24.58	24.683	28.38	11.337	39.606
5/21/2005	4:00	15.782	24.565	24.671	28.36	11.344	39.601
5/21/2005	8:00	15.784	24.563	24.669	28.353	11.353	39.595
5/21/2005	12:00	15.782	24.552	24.658	28.324	11.354	39.588
5/21/2005	16:00	15.764	24.523	24.627	28.28	11.339	39.566
5/21/2005	20:00	15.745	24.512	24.617	28.267	11.344	39.549
5/22/2005	0:00	15.747	24.517	24.623	28.284	11.368	39.545
5/22/2005	4:00	15.762	24.538	24.644	28.329	11.405	39.556
5/22/2005	8:00	15.797	24.567	24.673	28.38	11.458	39.579
5/22/2005	12:00	15.838	24.586	24.693	28.397	11.497	39.604
5/22/2005	16:00	15.851	24.569	24.675	28.366	11.502	39.608
5/22/2005	20:00	15.845	24.56	24.667	28.346	11.505	39.604
5/23/2005	0:00	15.847	24.56	24.667	28.349	11.519	39.601
5/23/2005	4:00	15.843	24.551	24.658	28.329	11.517	39.593
5/23/2005	8:00	15.845	24.554	24.66	28.335	11.536	39.59
5/23/2005	12:00	15.86	24.562	24.667	28.342	11.554	39.595
5/23/2005	16:00	15.858	24.545	24.652	28.315	11.554	39.588
5/23/2005	20:00	15.847	24.53	24.636	28.298	11.557	39.575
5/24/2005	0:00	15.854	24.545	24.652	28.324	11.585	39.579
5/24/2005	4:00	15.864	24.549	24.656	28.329	11.604	39.58
5/24/2005	8:00	15.871	24.552	24.662	28.331	11.621	39.584
5/24/2005	12:00	15.888	24.563	24.669	28.344	11.642	39.593
5/24/2005	16:00	15.904	24.563	24.669	28.346	11.658	39.599
5/24/2005	20:00	15.901	24.556	24.665	28.326	11.663	39.595
5/25/2005	0:00	15.912	24.576	24.687	28.36	11.694	39.604
5/25/2005	4:00	15.93	24.573	24.681	28.362	11.71	39.608
5/25/2005	8:00	15.94	24.593	24.702	28.38	11.729	39.617
5/25/2005	12:00	15.962	24.601	24.71	28.386	11.753	39.627
5/25/2005	16:00	15.973	24.595	24.702	28.37	11.755	39.63
5/25/2005	20:00	15.986	24.626	24.735	28.422	11.79	39.645
5/26/2005	0:00	16.012	24.643	24.753	28.45	11.826	39.66
5/26/2005	4:00	16.041	24.658	24.765	28.463	11.852	39.676
5/26/2005	8:00	16.062	24.673	24.782	28.472	11.869	39.689
5/26/2005	12:00	16.084	24.68	24.79	28.466	11.883	39.698
5/26/2005	16:00	16.082	24.662	24.771	28.419	11.866	39.689
5/26/2005	20:00	16.063	24.649	24.759	28.397	11.857	39.675
5/27/2005	0:00	16.056	24.652	24.763	28.408	11.868	39.663
5/27/2005	4:00	16.062	24.656	24.767	28.413	11.88	39.662
5/27/2005	8:00	16.065	24.656	24.765	28.408	11.887	39.658
5/27/2005	12:00	16.073	24.66	24.769	28.406	11.899	39.656
5/27/2005	16:00	16.073	24.649	24.757	28.384	11.897	39.649
5/27/2005	20:00	16.054	24.626	24.735	28.342	11.88	39.63
5/28/2005	0:00	16.043	24.627	24.735	28.352	11.887	39.621
5/28/2005	4:00	16.043	24.623	24.734	28.348	11.897	39.614
5/28/2005	8:00	16.047	24.627	24.737	28.351	11.908	39.612

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/28/2005	12:00	16.058	24.632	24.741	28.362	11.925	39.614
5/28/2005	16:00	16.06	24.619	24.73	28.331	11.923	39.61
5/28/2005	20:00	16.049	24.608	24.718	28.311	11.918	39.601
5/29/2005	0:00	16.041	24.606	24.718	28.324	11.927	39.595
5/29/2005	4:00	16.038	24.597	24.708	28.302	11.927	39.586
5/29/2005	8:00	16.045	24.617	24.728	28.339	11.951	39.59
5/29/2005	12:00	16.062	24.621	24.732	28.342	11.97	39.595
5/29/2005	16:00	16.071	24.623	24.735	28.335	11.979	39.597
5/29/2005	20:00	16.082	24.632	24.745	28.348	11.998	39.604
5/30/2005	0:00	16.095	24.643	24.757	28.375	12.02	39.614
5/30/2005	4:00	16.108	24.649	24.761	28.372	12.036	39.619
5/30/2005	8:00	16.127	24.669	24.782	28.392	12.057	39.632
5/30/2005	12:00	16.138	24.671	24.784	28.39	12.064	39.636
5/30/2005	16:00	16.147	24.667	24.78	28.377	12.072	39.636
5/30/2005	20:00	16.143	24.661	24.774	28.357	12.067	39.63
5/31/2005	0:00	16.139	24.658	24.772	28.359	12.074	39.625
5/31/2005	4:00	16.136	24.654	24.769	28.344	12.072	39.617
5/31/2005	8:00	16.139	24.66	24.772	28.346	12.081	39.614
5/31/2005	12:00	16.138	24.651	24.765	28.33	12.083	39.606
5/31/2005	16:00	16.121	24.619	24.734	28.301	12.057	39.586
5/31/2005	20:00	16.104	24.615	24.728	28.299	12.06	39.573
6/1/2005	0:00	16.11	24.628	24.741	28.319	12.079	39.575
6/1/2005	4:00	16.11	24.617	24.73	28.295	12.074	39.568
6/1/2005	8:00	16.112	24.627	24.739	28.301	12.081	39.571
6/1/2005	12:00	16.121	24.634	24.747	28.31	12.093	39.575
6/1/2005	16:00	16.119	24.617	24.732	28.279	12.086	39.566
6/1/2005	20:00	16.114	24.617	24.732	28.273	12.085	39.562
6/2/2005	0:00	16.114	24.617	24.732	28.275	12.093	39.558
6/2/2005	4:00	16.108	24.61	24.724	28.259	12.09	39.551
6/2/2005	8:00	16.11	24.617	24.732	28.266	12.1	39.551
6/2/2005	12:00	16.119	24.628	24.741	28.284	12.114	39.556
6/2/2005	16:00	16.106	24.587	24.704	28.217	12.09	39.534
6/2/2005	20:00	16.095	24.586	24.702	28.215	12.093	39.525
6/3/2005	0:00	16.089	24.582	24.697	28.215	12.095	39.518
6/3/2005	4:00	16.078	24.564	24.675	28.186	12.085	39.505
6/3/2005	8:00	16.043	24.545	24.664	28.191	12.048	39.481
6/3/2005	12:00	16.012	24.525	24.638	28.149	11.944	39.455
6/3/2005	16:00	15.953	24.516	24.636	28.126	11.857	39.442
6/3/2005	20:00	15.875	24.497	24.613	28.133	11.814	39.427
6/4/2005	0:00	15.795	24.493	24.611	28.128	11.79	39.426
6/4/2005	4:00	15.692	24.462	24.578	28.087	11.738	39.405
6/4/2005	8:00	15.606	24.464	24.582	28.087	11.703	39.398
6/4/2005	12:00	15.543	24.48	24.598	28.12	11.693	39.407
6/4/2005	16:00	15.47	24.46	24.58	28.095	11.665	39.403
6/4/2005	20:00	15.34	24.401	24.51	28.038	11.342	39.348
6/5/2005	0:00	15.262	24.414	24.531	28.062	10.876	39.346
6/5/2005	4:00	15.172	24.418	24.537	28.055	10.6	39.344
6/5/2005	8:00	15.105	24.444	24.56	28.097	10.467	39.359
6/5/2005	12:00	15.061	24.475	24.594	28.131	10.42	39.387
6/5/2005	16:00	15.022	24.484	24.601	28.142	10.413	39.407
6/5/2005	20:00	14.977	24.49	24.607	28.137	10.43	39.42
6/6/2005	0:00	14.942	24.505	24.623	28.155	10.46	39.435
6/6/2005	4:00	14.914	24.508	24.628	28.157	10.486	39.444
6/6/2005	8:00	14.892	24.516	24.634	28.162	10.512	39.451

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
6/6/2005	12:00	14.875	24.519	24.64	28.157	10.536	39.462
6/6/2005	16:00	14.851	24.503	24.621	28.128	10.555	39.457
6/6/2005	20:00	14.811	24.479	24.596	28.09	10.564	39.44
6/7/2005	0:00	14.787	24.486	24.605	28.108	10.604	39.438
6/7/2005	4:00	14.768	24.468	24.586	28.086	10.628	39.429
6/7/2005	8:00	14.746	24.46	24.58	28.077	10.647	39.42
6/7/2005	12:00	14.742	24.464	24.584	28.089	10.68	39.426
6/7/2005	16:00	14.735	24.449	24.568	28.068	10.701	39.424
6/7/2005	20:00	14.713	24.427	24.549	28.042	10.713	39.409
6/8/2005	0:00	14.711	24.434	24.553	28.069	10.753	39.409
6/8/2005	4:00	14.705	24.414	24.531	28.042	10.77	39.403
6/8/2005	8:00	14.69	24.41	24.53	28.038	10.786	39.396
6/8/2005	12:00	14.701	24.421	24.541	28.062	10.826	39.407
6/8/2005	16:00	14.711	24.419	24.541	28.064	10.857	39.413
6/8/2005	20:00	14.711	24.414	24.533	28.058	10.881	39.414
6/9/2005	0:00	14.727	24.436	24.559	28.101	10.93	39.427
6/9/2005	4:00	14.744	24.445	24.563	28.113	10.966	39.44
6/9/2005	8:00	14.761	24.442	24.561	28.119	10.996	39.448
6/9/2005	12:00	14.781	24.473	24.592	28.15	11.029	39.468
6/9/2005	16:00	14.796	24.458	24.578	28.144	11.048	39.472
6/9/2005	20:00	14.792	24.431	24.551	28.088	11.036	39.461
6/10/2005	0:00	14.785	24.432	24.553	28.137	11.03	39.459
6/10/2005	4:00	14.761	24.414	24.539	28.088	10.933	39.435
6/10/2005	8:00	14.707	24.379	24.5	28.064	10.387	39.394
6/10/2005	12:00	14.657	24.395	24.518	28.07	10.025	39.394
6/10/2005	16:00	14.581	24.36	24.483	27.999	9.787	39.376
6/10/2005	20:00	14.502	24.379	24.502	28.021	9.681	39.376
6/11/2005	0:00	14.424	24.351	24.473	27.991	9.591	39.356
6/11/2005	4:00	14.333	24.517	24.59	28.09	9.432	39.326
6/11/2005	8:00	14.261	24.294	24.426	27.938	9.248	39.308
6/11/2005	12:00	14.207	24.305	24.426	27.953	9.156	39.311
6/11/2005	16:00	14.15	24.294	24.419	27.928	9.095	39.313
6/11/2005	20:00	14.093	24.286	24.409	27.931	9.083	39.313
6/12/2005	0:00	14.048	24.281	24.403	27.948	9.097	39.32
6/12/2005	4:00	14.017	24.272	24.393	27.942	9.109	39.324
6/12/2005	8:00	13.974	24.251	24.413	27.953	9.099	39.32
6/12/2005	12:00	13.92	24.214	24.356	27.913	8.917	39.302
6/12/2005	16:00	13.876	24.196	24.317	27.884	8.828	39.299
6/12/2005	20:00	13.811	24.15	24.271	27.845	8.766	39.282
6/13/2005	0:00	13.739	24.129	24.253	27.82	8.738	39.265
6/13/2005	4:00	13.684	24.09	24.216	27.791	8.733	39.249
6/13/2005	8:00	13.643	24.081	24.205	27.82	8.759	39.25
6/13/2005	12:00	13.609	24.055	24.179	27.807	8.785	39.248
6/13/2005	16:00	13.574	24.024	24.148	27.776	8.82	39.241
6/13/2005	20:00	13.543	24.011	24.136	27.787	8.884	39.245
6/14/2005	0:00	13.535	24.015	24.14	27.834	8.965	39.258
6/14/2005	4:00	13.55	24.016	24.14	27.867	9.045	39.28
6/14/2005	8:00	13.571	24.024	24.15	27.906	9.123	39.308
6/14/2005	12:00	13.593	24.02	24.144	27.92	9.191	39.33
6/14/2005	16:00	13.609	24.016	24.138	27.918	9.262	39.348
6/14/2005	20:00	13.617	24.005	24.129	27.92	9.336	39.359
6/15/2005	0:00	13.624	24	24.125	27.938	9.406	39.369
6/15/2005	4:00	13.639	23.994	24.119	27.948	9.473	39.378
6/15/2005	8:00	13.654	23.994	24.117	27.958	9.527	39.389

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
6/15/2005	12:00	13.669	23.983	24.107	27.962	9.584	39.396
6/15/2005	16:00	13.674	23.961	24.086	27.933	9.628	39.396
6/15/2005	20:00	13.669	23.939	24.063	27.908	9.671	39.389
6/16/2005	0:00	13.663	23.928	24.053	27.915	9.721	39.383
6/16/2005	4:00	13.665	23.92	24.045	27.918	9.768	39.38
6/16/2005	8:00	13.68	23.92	24.043	27.938	9.822	39.387
6/16/2005	12:00	13.689	23.9	24.024	27.92	9.855	39.385
6/16/2005	16:00	13.691	23.881	24.006	27.9	9.888	39.382
6/16/2005	20:00	13.689	23.869	23.993	27.896	9.921	39.376
6/17/2005	0:00	13.68	23.85	23.975	27.882	9.95	39.365
6/17/2005	4:00	13.682	23.833	23.959	27.873	9.983	39.357
6/17/2005	8:00	13.695	23.843	23.969	27.897	10.028	39.365
6/17/2005	12:00	13.713	23.839	23.965	27.906	10.068	39.374
6/17/2005	16:00	13.722	23.824	23.952	27.891	10.096	39.376
6/17/2005	20:00	13.726	23.817	23.942	27.88	10.125	39.374
6/18/2005	0:00	13.739	23.822	23.95	27.906	10.172	39.378
6/18/2005	4:00	13.748	23.815	23.942	27.9	10.203	39.38
6/18/2005	8:00	13.767	23.826	23.952	27.924	10.24	39.391
6/18/2005	12:00	13.791	23.83	23.956	27.935	10.281	39.404
6/18/2005	16:00	13.8	23.815	23.942	27.913	10.295	39.404
6/18/2005	20:00	13.802	23.811	23.938	27.908	10.323	39.4
6/19/2005	0:00	13.815	23.819	23.946	27.931	10.363	39.406
6/19/2005	4:00	13.832	23.822	23.95	27.94	10.396	39.409
6/19/2005	8:00	13.852	23.835	23.963	27.959	10.434	39.422
6/19/2005	12:00	13.88	23.846	23.973	27.968	10.467	39.435
6/19/2005	16:00	13.893	23.833	23.961	27.951	10.484	39.435
6/19/2005	20:00	13.896	23.835	23.963	27.951	10.509	39.435
6/20/2005	0:00	13.915	23.85	23.977	27.977	10.547	39.444
6/20/2005	4:00	13.93	23.85	23.979	27.979	10.573	39.448
6/20/2005	8:00	13.95	23.865	23.994	27.997	10.604	39.457
6/20/2005	12:00	13.976	23.874	24.002	28.002	10.632	39.47
6/20/2005	16:00	13.982	23.854	23.983	27.968	10.637	39.463
6/20/2005	20:00	13.976	23.854	23.983	27.957	10.654	39.453
6/21/2005	0:00	13.991	23.867	23.993	27.989	10.687	39.459
6/21/2005	4:00	13.998	23.856	23.985	27.973	10.699	39.453
6/21/2005	8:00	14.011	23.865	23.994	27.993	10.722	39.457
6/21/2005	12:00	14.02	23.857	23.987	27.959	10.729	39.455
6/21/2005	16:00	14.019	23.856	23.985	27.955	10.736	39.45
6/21/2005	20:00	14.015	23.839	23.969	27.937	10.736	39.439
6/22/2005	0:00	14.019	23.844	23.975	27.948	10.755	39.435
6/22/2005	4:00	14.022	23.839	23.969	27.941	10.767	39.431
6/22/2005	8:00	14.031	23.846	23.975	27.95	10.786	39.431
6/22/2005	12:00	14.048	23.85	23.979	27.946	10.803	39.437
6/22/2005	16:00	14.048	23.832	23.963	27.915	10.8	39.428
6/22/2005	20:00	14.033	23.815	23.946	27.889	10.796	39.411
6/23/2005	0:00	14.031	23.815	23.944	27.895	10.809	39.402
6/23/2005	4:00	14.03	23.806	23.934	27.884	10.817	39.394
6/23/2005	8:00	14.03	23.8	23.932	27.879	10.826	39.389
6/23/2005	12:00	14.039	23.798	23.928	27.869	10.838	39.385
6/23/2005	16:00	14.031	23.783	23.913	27.837	10.831	39.374
6/23/2005	20:00	14.015	23.761	23.891	27.815	10.826	39.356
6/24/2005	0:00	14.009	23.759	23.889	27.82	10.84	39.347
6/24/2005	4:00	14.011	23.754	23.884	27.815	10.852	39.341
6/24/2005	8:00	14.017	23.754	23.884	27.822	10.871	39.339

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
6/24/2005	12:00	14.03	23.759	23.891	27.825	10.89	39.343
6/24/2005	16:00	14.039	23.754	23.885	27.809	10.897	39.339
6/24/2005	20:00	14.035	23.743	23.874	27.797	10.899	39.332
6/25/2005	0:00	14.041	23.754	23.886	27.824	10.928	39.334
6/25/2005	4:00	14.056	23.752	23.884	27.819	10.944	39.335
6/25/2005	8:00	14.067	23.763	23.895	27.838	10.965	39.343
6/25/2005	12:00	14.087	23.769	23.901	27.842	10.987	39.348
6/25/2005	16:00	14.098	23.763	23.897	27.813	10.989	39.347
6/25/2005	20:00	14.096	23.754	23.886	27.802	10.991	39.339
6/26/2005	0:00	14.1	23.763	23.896	27.824	11.013	39.339
6/26/2005	4:00	14.109	23.761	23.895	27.817	11.027	39.339
6/26/2005	8:00	14.12	23.771	23.903	27.828	11.041	39.341
6/26/2005	12:00	14.133	23.772	23.905	27.824	11.055	39.341
6/26/2005	16:00	14.141	23.765	23.899	27.8	11.057	39.337
6/26/2005	20:00	14.135	23.756	23.889	27.784	11.057	39.328
6/27/2005	0:00	14.137	23.763	23.895	27.802	11.074	39.326
6/27/2005	4:00	14.146	23.763	23.895	27.8	11.088	39.324
6/27/2005	8:00	14.155	23.763	23.897	27.804	11.102	39.324
6/27/2005	12:00	14.165	23.761	23.895	27.793	11.109	39.323
6/27/2005	16:00	14.168	23.754	23.887	27.771	11.114	39.315
6/27/2005	20:00	14.163	23.748	23.884	27.758	11.112	39.306
6/28/2005	0:00	14.168	23.756	23.887	27.777	11.133	39.306
6/28/2005	4:00	14.163	23.739	23.872	27.775	11.119	39.297
6/28/2005	8:00	14.15	23.706	23.839	27.768	11.1	39.276
6/28/2005	12:00	14.133	23.698	23.833	27.737	11.076	39.256
6/28/2005	16:00	14.126	23.687	23.822	27.693	11.036	39.243
6/28/2005	20:00	14.122	23.689	23.824	27.689	11.022	39.24
6/29/2005	0:00	14.122	23.695	23.829	27.702	11.024	39.236
6/29/2005	4:00	14.124	23.682	23.817	27.684	11.02	39.23
6/29/2005	8:00	14.118	23.685	23.819	27.676	11.02	39.228
6/29/2005	12:00	14.12	23.684	23.819	27.678	11.022	39.225
6/29/2005	16:00	14.118	23.673	23.806	27.651	11.015	39.217
6/29/2005	20:00	14.111	23.674	23.812	27.64	11.017	39.212
6/30/2005	0:00	14.126	23.695	23.829	27.691	11.048	39.221
6/30/2005	4:00	14.133	23.693	23.827	27.702	11.057	39.221
6/30/2005	8:00	14.15	23.702	23.835	27.71	11.057	39.23
6/30/2005	12:00	14.155	23.704	23.843	27.711	11.036	39.232
6/30/2005	16:00	14.154	23.691	23.829	27.689	10.982	39.225
6/30/2005	20:00	14.144	23.691	23.827	27.666	10.939	39.219
7/1/2005	0:00	14.144	23.706	23.843	27.691	10.932	39.225
7/1/2005	4:00	14.15	23.706	23.843	27.689	10.925	39.225
7/1/2005	8:00	14.157	23.732	23.87	27.713	10.932	39.238
7/1/2005	12:00	14.172	23.75	23.887	27.728	10.949	39.251
7/1/2005	16:00	14.17	23.734	23.87	27.691	10.932	39.245
7/1/2005	20:00	14.161	23.734	23.87	27.675	10.925	39.24
7/2/2005	0:00	14.157	23.735	23.872	27.684	10.928	39.234
7/2/2005	4:00	14.155	23.732	23.864	27.689	10.925	39.228
7/2/2005	8:00	14.152	23.737	23.876	27.675	10.93	39.227
7/2/2005	12:00	14.159	23.735	23.876	27.666	10.937	39.228
7/2/2005	16:00	14.15	23.717	23.854	27.633	10.925	39.216
7/2/2005	20:00	14.137	23.702	23.841	27.606	10.913	39.201
7/3/2005	0:00	14.13	23.708	23.843	27.613	10.92	39.193
7/3/2005	4:00	14.117	23.684	23.817	27.575	10.911	39.175
7/3/2005	8:00	14.109	23.678	23.81	27.574	10.913	39.164

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
7/3/2005	12:00	14.102	23.685	23.819	27.574	10.92	39.162
7/3/2005	16:00	14.109	23.684	23.815	27.589	10.937	39.162
7/3/2005	20:00	14.115	23.68	23.814	27.589	10.951	39.16
7/4/2005	0:00	14.133	23.711	23.847	27.629	10.984	39.179
7/4/2005	4:00	14.159	23.711	23.845	27.635	11.01	39.188
7/4/2005	8:00	14.18	23.741	23.878	27.664	11.036	39.206
7/4/2005	12:00	14.211	23.754	23.887	27.677	11.062	39.223
7/4/2005	16:00	14.233	23.769	23.901	27.689	11.078	39.238
7/4/2005	20:00	14.25	23.782	23.915	27.702	11.1	39.247
7/5/2005	0:00	14.276	23.806	23.94	27.729	11.126	39.265
7/5/2005	4:00	14.292	23.804	23.938	27.72	11.133	39.267
7/5/2005	8:00	14.305	23.819	23.954	27.728	11.147	39.276
7/5/2005	12:00	14.329	23.843	23.977	27.755	11.173	39.289
7/5/2005	16:00	14.342	23.835	23.971	27.73	11.171	39.289
7/5/2005	20:00	14.337	23.828	23.961	27.709	11.166	39.278
7/6/2005	0:00	14.342	23.835	23.969	27.721	11.178	39.276
7/6/2005	4:00	14.34	23.826	23.961	27.702	11.175	39.269
7/6/2005	8:00	14.342	23.83	23.963	27.7	11.18	39.264
7/6/2005	12:00	14.359	23.847	23.981	27.719	11.204	39.269
7/6/2005	16:00	14.363	23.833	23.969	27.693	11.204	39.264
7/6/2005	20:00	14.355	23.824	23.961	27.677	11.201	39.254
7/7/2005	0:00	14.359	23.833	23.969	27.691	11.218	39.252
7/7/2005	4:00	14.363	23.824	23.959	27.678	11.22	39.247
7/7/2005	8:00	14.368	23.832	23.969	27.686	11.232	39.249
7/7/2005	12:00	14.385	23.843	23.979	27.693	11.253	39.254
7/7/2005	16:00	14.392	23.833	23.969	27.673	11.253	39.252
7/7/2005	20:00	14.383	23.822	23.957	27.657	11.251	39.243
7/8/2005	0:00	14.39	23.833	23.971	27.68	11.275	39.243
7/8/2005	4:00	14.4	23.833	23.969	27.673	11.281	39.243
7/8/2005	8:00	14.411	23.848	23.984	27.693	11.303	39.251
7/8/2005	12:00	14.424	23.839	23.975	27.666	11.308	39.247
7/8/2005	16:00	14.431	23.843	23.979	27.671	11.319	39.249
7/8/2005	20:00	14.425	23.826	23.963	27.644	11.315	39.238
7/9/2005	0:00	14.427	23.835	23.973	27.659	11.329	39.236
7/9/2005	4:00	14.437	23.835	23.973	27.657	11.341	39.234
7/9/2005	8:00	14.442	23.841	23.981	27.662	11.353	39.234
7/9/2005	12:00	14.461	23.852	23.99	27.675	11.376	39.241
7/9/2005	16:00	14.47	23.841	23.977	27.646	11.376	39.24
7/9/2005	20:00	14.461	23.83	23.967	27.631	11.374	39.23
7/10/2005	0:00	14.464	23.843	23.981	27.652	11.393	39.23
7/10/2005	4:00	14.477	23.841	23.981	27.651	11.407	39.23
7/10/2005	8:00	14.485	23.847	23.986	27.657	11.419	39.232
7/10/2005	12:00	14.501	23.854	23.992	27.657	11.435	39.234
7/10/2005	16:00	14.509	23.848	23.986	27.639	11.44	39.232
7/10/2005	20:00	14.503	23.837	23.975	27.622	11.435	39.223
7/11/2005	0:00	14.501	23.837	23.975	27.624	11.447	39.217
7/11/2005	4:00	14.509	23.835	23.975	27.622	11.456	39.214
7/11/2005	8:00	14.518	23.848	23.986	27.639	11.473	39.216
7/11/2005	12:00	14.531	23.85	23.986	27.633	11.487	39.216
7/11/2005	16:00	14.54	23.846	23.986	27.62	11.494	39.216
7/11/2005	20:00	14.542	23.844	23.985	27.615	11.497	39.214
7/12/2005	0:00	14.548	23.852	23.99	27.631	11.516	39.214
7/12/2005	4:00	14.562	23.861	24	27.637	11.53	39.217
7/12/2005	8:00	14.579	23.874	24.014	27.657	11.549	39.225

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
7/12/2005	12:00	14.598	23.88	24.019	27.657	11.565	39.23
7/12/2005	16:00	14.579	23.846	23.986	27.64	11.527	39.216
7/12/2005	20:00	14.571	23.846	23.986	27.621	11.527	39.205
7/13/2005	0:00	14.583	23.854	23.994	27.63	11.534	39.205
7/13/2005	4:00	14.592	23.856	23.996	27.621	11.534	39.205
7/13/2005	8:00	14.599	23.865	24.004	27.628	11.537	39.206
7/13/2005	12:00	14.611	23.869	24.012	27.631	11.549	39.21
7/13/2005	16:00	14.616	23.865	24.006	27.608	11.548	39.206
7/13/2005	20:00	14.611	23.857	23.998	27.586	11.539	39.199
7/14/2005	0:00	14.607	23.861	24	27.595	11.544	39.193
7/14/2005	4:00	14.611	23.857	23.996	27.584	11.546	39.186
7/14/2005	8:00	14.616	23.865	24.006	27.595	11.556	39.188
7/14/2005	12:00	14.623	23.865	24.006	27.59	11.565	39.186
7/14/2005	16:00	14.627	23.857	24	27.57	11.568	39.181
7/14/2005	20:00	14.625	23.854	23.996	27.56	11.572	39.173
7/15/2005	0:00	14.632	23.867	24.008	27.582	11.589	39.175
7/15/2005	4:00	14.645	23.87	24.014	27.587	11.603	39.179
7/15/2005	8:00	14.664	23.887	24.029	27.606	11.624	39.19
7/15/2005	12:00	14.679	23.891	24.031	27.606	11.636	39.194
7/15/2005	16:00	14.682	23.881	24.023	27.584	11.636	39.19
7/15/2005	20:00	14.682	23.878	24.021	27.571	11.636	39.183
7/16/2005	0:00	14.688	23.887	24.029	27.588	11.653	39.184
7/16/2005	4:00	14.697	23.887	24.027	27.584	11.662	39.182
7/16/2005	8:00	14.708	23.896	24.041	27.592	11.674	39.186
7/16/2005	12:00	14.721	23.898	24.041	27.59	11.685	39.188
7/16/2005	16:00	14.721	23.884	24.025	27.56	11.681	39.181
7/16/2005	20:00	14.714	23.874	24.014	27.537	11.679	39.166
7/17/2005	0:00	14.712	23.878	24.021	27.546	11.686	39.162
7/17/2005	4:00	14.712	23.871	24.012	27.535	11.692	39.153
7/17/2005	8:00	14.718	23.876	24.019	27.541	11.702	39.153
7/17/2005	12:00	14.725	23.872	24.014	27.53	11.712	39.151
7/17/2005	16:00	14.723	23.857	24.002	27.508	11.709	39.14
7/17/2005	20:00	14.718	23.85	23.994	27.493	11.714	39.131
7/18/2005	0:00	14.718	23.856	24	27.506	11.726	39.127
7/18/2005	4:00	14.736	23.878	24.018	27.559	11.757	39.136
7/18/2005	8:00	14.754	23.882	24.025	27.577	11.773	39.144
7/18/2005	12:00	14.775	23.895	24.039	27.57	11.773	39.157
7/18/2005	16:00	14.791	23.896	24.041	27.569	11.771	39.164
7/18/2005	20:00	14.797	23.9	24.045	27.557	11.768	39.164
7/19/2005	0:00	14.808	23.913	24.059	27.572	11.778	39.169
7/19/2005	4:00	14.821	23.919	24.062	27.577	11.785	39.171
7/19/2005	8:00	14.83	23.926	24.07	27.579	11.794	39.175
7/19/2005	12:00	14.847	23.932	24.076	27.582	11.804	39.181
7/19/2005	16:00	14.84	23.911	24.054	27.537	11.785	39.166
7/19/2005	20:00	14.827	23.904	24.049	27.52	11.778	39.151
7/20/2005	0:00	14.828	23.911	24.054	27.531	11.789	39.147
7/20/2005	4:00	14.827	23.898	24.043	27.513	11.789	39.138
7/20/2005	8:00	14.828	23.904	24.049	27.517	11.799	39.134
7/20/2005	12:00	14.845	23.919	24.065	27.531	11.818	39.142
7/20/2005	16:00	14.849	23.907	24.054	27.517	11.822	39.14
7/20/2005	20:00	14.847	23.902	24.049	27.506	11.825	39.129
7/21/2005	0:00	14.862	23.922	24.07	27.535	11.853	39.134
7/21/2005	4:00	14.877	23.93	24.074	27.547	11.867	39.14
7/21/2005	8:00	14.897	23.946	24.091	27.564	11.891	39.151



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
7/21/2005	12:00	14.921	23.961	24.107	27.578	11.912	39.164
7/21/2005	16:00	14.936	23.966	24.113	27.575	11.922	39.173
7/21/2005	20:00	14.938	23.955	24.103	27.555	11.922	39.168
7/22/2005	0:00	14.949	23.97	24.119	27.572	11.941	39.171
7/22/2005	4:00	14.962	23.976	24.121	27.574	11.948	39.171
7/22/2005	8:00	14.978	23.991	24.138	27.597	11.967	39.179
7/22/2005	12:00	14.999	24.005	24.154	27.597	11.983	39.188
7/22/2005	16:00	15.013	24.005	24.152	27.594	11.99	39.193
7/22/2005	20:00	15.01	23.998	24.146	27.577	11.99	39.186
7/23/2005	0:00	15.015	24.009	24.156	27.588	12.004	39.184
7/23/2005	4:00	15.026	24.011	24.158	27.588	12.016	39.183
7/23/2005	8:00	15.034	24.013	24.16	27.584	12.024	39.181
7/23/2005	12:00	15.047	24.026	24.173	27.592	12.04	39.186
7/23/2005	16:00	15.054	24.015	24.163	27.564	12.04	39.182
7/23/2005	20:00	15.045	24.003	24.15	27.543	12.035	39.169
7/24/2005	0:00	15.049	24.013	24.162	27.559	12.056	39.166
7/24/2005	4:00	15.06	24.015	24.162	27.562	12.068	39.166
7/24/2005	8:00	15.065	24.02	24.169	27.572	12.082	39.166
7/24/2005	12:00	15.08	24.022	24.169	27.562	12.094	39.168
7/24/2005	16:00	15.086	24.016	24.163	27.539	12.099	39.164
7/24/2005	20:00	15.08	24.003	24.152	27.524	12.096	39.155
7/25/2005	0:00	15.08	24.009	24.158	27.535	12.113	39.149
7/25/2005	4:00	15.084	24	24.15	27.515	12.115	39.142
7/25/2005	8:00	15.082	23.994	24.144	27.506	12.118	39.133
7/25/2005	12:00	15.082	23.985	24.136	27.49	12.122	39.123
7/25/2005	16:00	15.084	23.976	24.126	27.468	12.127	39.112
7/25/2005	20:00	15.067	23.957		27.437	12.122	39.098
7/26/2005	0:00	15.075	23.966		27.49	12.134	39.099
7/26/2005	4:00	15.049	23.931		27.471	12.113	39.072
7/26/2005	8:00	15.026	23.907		27.44	12.049	39.051
7/26/2005	12:00	15.036	23.933		27.477	11.997	39.053
7/26/2005	16:00	15.069	23.965		27.517	11.971	39.079
7/26/2005	20:00	15.099	23.996		27.545	11.964	39.105
7/27/2005	0:00	15.13	24.028		27.585	11.978	39.133
7/27/2005	4:00	15.16	24.053		27.603	11.993	39.157
7/27/2005	8:00	15.186	24.081		27.628	12.009	39.179
7/27/2005	12:00	15.208	24.092		27.628	12.016	39.192
7/27/2005	16:00	15.21	24.089		27.595	12.004	39.192
7/27/2005	20:00	15.206	24.087		27.584	11.998	39.188
7/28/2005	0:00	15.21	24.1		27.601	12.007	39.186
7/28/2005	4:00	15.215	24.103		27.592	12.009	39.184
7/28/2005	8:00	15.223	24.116		27.605	12.021	39.188
7/28/2005	12:00	15.234	24.118		27.603	12.03	39.188
7/28/2005	16:00	15.234	24.113		27.583	12.03	39.186
7/28/2005	20:00	15.232	24.113		27.572	12.033	39.181
7/29/2005	0:00	15.236	24.118		27.584	12.045	39.179
7/29/2005	4:00	15.241	24.12		27.577	12.052	39.177
7/29/2005	8:00	15.254	24.144		27.608	12.075	39.186
7/29/2005	12:00	15.278	24.153		27.621	12.101	39.199
7/29/2005	16:00	15.284	24.144		27.592	12.104	39.197
7/29/2005	20:00	15.284	24.146		27.581	12.106	39.195
7/30/2005	0:00	15.287	24.155		27.605	12.125	39.197
7/30/2005	4:00	15.298	24.159		27.603	12.137	39.199
7/30/2005	8:00	15.311	24.174		27.616	12.156	39.205

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
7/30/2005	12:00	15.328	24.181		27.626	12.172	39.214
7/30/2005	16:00	15.328	24.166		27.59	12.17	39.206
7/30/2005	20:00	15.321	24.161		27.574	12.17	39.197
7/31/2005	0:00	15.323	24.17		27.588	12.184	39.193
7/31/2005	4:00	15.328			27.583	12.196	39.19
7/31/2005	8:00	15.336			27.59	12.21	39.192
7/31/2005	12:00	15.343			27.581	12.217	39.192
7/31/2005	16:00	15.336			27.552	12.214	39.181
7/31/2005	20:00	15.328			27.533	12.217	39.168
8/1/2005	0:00	15.328			27.545	12.231	39.166
8/1/2005	4:00	15.336			27.548	12.248	39.162
8/1/2005	8:00	15.348			27.557	12.264	39.166
8/1/2005	12:00	15.36			27.55	12.278	39.169
8/1/2005	16:00	15.356			27.526	12.278	39.16
8/1/2005	20:00	15.354			27.517	12.285	39.151
8/2/2005	0:00	15.358			27.525	12.302	39.149
8/2/2005	4:00	15.365			27.528	12.314	39.147
8/2/2005	8:00	15.374			27.534	12.33	39.149
8/2/2005	12:00	15.389			27.541	12.349	39.155
8/2/2005	16:00	15.387			27.508	12.347	39.147
8/2/2005	20:00	15.38			27.495	12.352	39.136
8/3/2005	0:00	15.385			27.501	12.368	39.133
8/3/2005	4:00	15.391			27.508	12.38	39.131
8/3/2005	8:00	15.404			27.53	12.406	39.136
8/3/2005	12:00	15.424			27.532	12.422	39.145
8/3/2005	16:00	15.432			27.519	12.429	39.144
8/3/2005	20:00	15.432			27.51	12.436	39.138
8/4/2005	0:00	15.443			27.537	12.462	39.144
8/4/2005	4:00	15.471			27.574	12.493	39.158
8/4/2005	8:00	15.502			27.617	12.526	39.177
8/4/2005	12:00	15.539			27.64	12.557	39.203
8/4/2005	16:00	15.568			27.657	12.581	39.223
8/4/2005	20:00	15.589			27.674	12.599	39.236
8/5/2005	0:00	15.621			27.714	12.63	39.256
8/5/2005	4:00	15.643			27.707	12.637	39.264
8/5/2005	8:00	15.663			27.729	12.659	39.276
8/5/2005	12:00	15.689			27.74	12.675	39.287
8/5/2005	16:00	15.693			27.712	12.668	39.287
8/5/2005	20:00	15.683			27.681	12.658	39.271
8/6/2005	0:00	15.682			27.694	12.67	39.265
8/6/2005	4:00	15.685			27.68	12.673	39.258
8/6/2005	8:00	15.685			27.68	12.677	39.251
8/6/2005	12:00	15.695			27.674	12.687	39.249
8/6/2005	16:00	15.685			27.634	12.675	39.236
8/6/2005	20:00	15.667			27.605	12.668	39.216
8/7/2005	0:00	15.665			27.625	12.682	39.208
8/7/2005	4:00	15.669			27.612	12.687	39.201
8/7/2005	8:00	15.669			27.614	12.696	39.197
8/7/2005	12:00	15.682			27.623	12.715	39.201
8/7/2005	16:00	15.685			27.596	12.713	39.195
8/7/2005	20:00	15.67			27.581	12.711	39.183
8/8/2005	0:00	15.678			27.599	12.732	39.181
8/8/2005	4:00	15.689			27.594	12.739	39.182
8/8/2005	8:00	15.693			27.594	12.748	39.179

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
8/8/2005	12:00	15.707			27.608	12.767	39.186
8/8/2005	16:00	15.715			27.583	12.767	39.184
8/8/2005	20:00	15.707			27.568	12.77	39.175
8/9/2005	0:00	15.715			27.589	12.786	39.175
8/9/2005	4:00	15.726			27.583	12.798	39.173
8/9/2005	8:00	15.735			27.603	12.812	39.177
8/9/2005	12:00	15.75			27.601	12.826	39.181
8/9/2005	16:00	15.757			27.583	12.831	39.181
8/9/2005	20:00	15.752			27.565	12.828	39.169
8/10/2005	0:00	15.763			27.598	12.855	39.173
8/10/2005	4:00	15.779			27.6	12.869	39.179
8/10/2005	8:00	15.794			27.619	12.883	39.184
8/10/2005	12:00	15.811			27.625	12.9	39.192
8/10/2005	16:00	15.818			27.598	12.9	39.188
8/10/2005	20:00	15.813			27.585	12.9	39.181
8/11/2005	0:00	15.818			27.601	12.916	39.177
8/11/2005	4:00	15.828			27.599	12.926	39.179
8/11/2005	8:00	15.837			27.601	12.932	39.177
8/11/2005	12:00	15.843			27.592	12.94	39.173
8/11/2005	16:00	15.843			27.572	12.94	39.166
8/11/2005	20:00	15.833			27.552	12.939	39.155
8/12/2005	0:00	15.839			27.574	12.956	39.153
8/12/2005	4:00	15.85			27.583	12.956	39.151
8/12/2005	8:00	15.848			27.577	12.965	39.147
8/12/2005	12:00	15.87			27.611	12.989	39.158
8/12/2005	16:00	15.877			27.587	12.987	39.157
8/12/2005	20:00	15.877			27.576	12.987	39.155
8/13/2005	0:00	15.879			27.59	12.973	39.151
8/13/2005	4:00	15.848			27.552	12.942	39.122
8/13/2005	8:00	15.852			27.567	12.923	39.123
8/13/2005	12:00	15.85			27.572	12.887	39.118
8/13/2005	16:00	15.85			27.559	12.831	39.112
8/13/2005	20:00	15.865			27.583	12.8	39.122
8/14/2005	0:00	15.881			27.609	12.8	39.136
8/14/2005	4:00	15.898			27.607	12.8	39.145
8/14/2005	8:00	15.913			27.639	12.817	39.164
8/14/2005	12:00	15.937			27.658	12.835	39.181
8/14/2005	16:00	15.944			27.645	12.84	39.184
8/14/2005	20:00	15.952			27.645	12.845	39.19
8/15/2005	0:00	15.964			27.669	12.862	39.199
8/15/2005	4:00	15.977			27.678	12.876	39.206
8/15/2005	8:00	15.99			27.687	12.892	39.216
8/15/2005	12:00	16.005			27.692	12.904	39.223
8/15/2005	16:00	16.005			27.669	12.904	39.219
8/15/2005	20:00	16.003			27.667	12.909	39.217
8/16/2005	0:00	16.016			27.692	12.93	39.223
8/16/2005	4:00	16.026			27.691	12.942	39.223
8/16/2005	8:00	16.037			27.705	12.956	39.23
8/16/2005	12:00	16.053			27.715	12.973	39.24
8/16/2005	16:00	16.05			27.685	12.968	39.234
8/16/2005	20:00	16.044			27.671	12.97	39.227
8/17/2005	0:00	16.048			27.68	12.982	39.225
8/17/2005	4:00	16.044			27.658	12.98	39.214
8/17/2005	8:00	16.037			27.636	12.978	39.203

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
8/17/2005	12:00	16.029			27.621	12.977	39.193
8/17/2005	16:00	16.007			27.571	12.961	39.169
8/17/2005	20:00	15.935			27.508	12.859	39.105
8/18/2005	0:00	15.92			27.515	12.819	39.09
8/18/2005	4:00	15.909			27.499	12.783	39.079
8/18/2005	8:00	15.872			27.478	12.708	39.051
8/18/2005	12:00	15.872			27.49	12.663	39.057
8/18/2005	16:00	15.865			27.481	12.632	39.059
8/18/2005	20:00	15.848			27.477	12.611	39.055
8/19/2005	0:00	15.835			27.503	12.587	39.046
8/19/2005	4:00	15.839			27.503	12.486	39.05
8/19/2005	8:00	15.839			27.509	12.391	39.057
8/19/2005	12:00	15.848			27.527	12.356	39.075
8/19/2005	16:00	15.85			27.534	12.337	39.086
8/19/2005	20:00	15.787			27.552	11.99	39.063
8/20/2005	0:00	15.781			27.514	11.408	39.053
8/20/2005	4:00	15.785			27.512	11.08	39.063
8/20/2005	8:00	15.785			27.53	10.908	39.075
8/20/2005	12:00	15.798			27.558	10.856	39.098
8/20/2005	16:00	15.8			27.545	10.858	39.11
8/20/2005	20:00	15.785			27.536	10.896	39.114
8/21/2005	0:00	15.787			27.561	10.962	39.123
8/21/2005	4:00	15.789			27.563	11.011	39.131
8/21/2005	8:00	15.787			27.57	11.063	39.136
8/21/2005	12:00	15.794			27.576	11.122	39.145
8/21/2005	16:00	15.796			27.557	11.163	39.149
8/21/2005	20:00	15.778			27.539	11.196	39.142
8/22/2005	0:00	15.776			27.544	11.245	39.138
8/22/2005	4:00	15.774			27.532	11.278	39.136
8/22/2005	8:00	15.768			27.537	11.314	39.133
8/22/2005	12:00	15.778			27.545	11.359	39.138
8/22/2005	16:00	15.778			27.521	11.382	39.136
8/22/2005	20:00	15.766			27.506	11.399	39.125
8/23/2005	0:00	15.768			27.519	11.439	39.129
8/23/2005	4:00	15.774			27.519	11.47	39.131
8/23/2005	8:00	15.776			27.517	11.493	39.129
8/23/2005	12:00	15.785			27.53	11.529	39.134
8/23/2005	16:00	15.792			27.521	11.555	39.138
8/23/2005	20:00	15.792			27.516	11.574	39.138
8/24/2005	0:00	15.802			27.533	11.609	39.144
8/24/2005	4:00	15.809			27.532	11.631	39.147
8/24/2005	8:00	15.813			27.526	11.65	39.147
8/24/2005	12:00	15.816			27.532	11.673	39.149
8/24/2005	16:00	15.818			27.526	11.685	39.147
8/24/2005	20:00	15.816			27.515	11.701	39.144
8/25/2005	0:00	15.824			27.523	11.725	39.145
8/25/2005	4:00	15.831			27.527	11.744	39.151
8/25/2005	8:00	15.84			27.541	11.765	39.157
8/25/2005	12:00	15.853			27.55	11.794	39.164
8/25/2005	16:00	15.859			27.53	11.805	39.168
8/25/2005	20:00	15.859			27.525	11.817	39.168
8/26/2005	0:00	15.865			27.534	11.838	39.168
8/26/2005	4:00	15.852			27.503	11.812	39.157
8/26/2005	8:00	15.809			27.47	11.659	39.11

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
8/26/2005	12:00	15.794			27.47	11.163	39.103
8/26/2005	16:00	15.77			27.446	10.855	39.096
8/26/2005	20:00	15.741			27.432	10.709	39.09
8/27/2005	0:00	15.724			27.452	10.659	39.092
8/27/2005	4:00	15.715			27.448	10.645	39.096
8/27/2005	8:00	15.705			27.459	10.65	39.103
8/27/2005	12:00	15.702			27.457	10.662	39.107
8/27/2005	16:00	15.689			27.435	10.685	39.107
8/27/2005	20:00	15.676			27.426	10.723	39.105
8/28/2005	0:00	15.67			27.439	10.775	39.107
8/28/2005	4:00	15.672			27.445	10.82	39.109
8/28/2005	8:00	15.672			27.439	10.856	39.11
8/28/2005	12:00	15.679			27.464	10.905	39.12
8/28/2005	16:00	15.683			27.448	10.936	39.12
8/28/2005	20:00	15.676			27.444	10.96	39.116
8/29/2005	0:00	15.687			27.474	11.009	39.127
8/29/2005	4:00	15.694			27.465	11.037	39.129
8/29/2005	8:00	15.703			27.463	11.063	39.133
8/29/2005	12:00	15.715			27.477	11.094	39.142
8/29/2005	16:00	15.711			27.437	11.104	39.136
8/29/2005	20:00	15.7			27.423	11.12	39.127
8/30/2005	0:00	15.7			27.433	11.151	39.123
8/30/2005	4:00	15.696			27.419	11.17	39.116
8/30/2005	8:00	15.702			27.432	11.2	39.118
8/30/2005	12:00	15.713			27.434	11.231	39.123
8/30/2005	16:00	15.711			27.412	11.248	39.122
8/30/2005	20:00	15.707			27.408	11.274	39.116
8/31/2005	0:00	15.716			27.426	11.307	39.12
8/31/2005	4:00	15.726			27.437	11.337	39.123
8/31/2005	8:00	15.746			27.466	11.382	39.138
8/31/2005	12:00	15.774			27.486	11.427	39.158
8/31/2005	16:00	15.792			27.49	11.456	39.171
8/31/2005	20:00	15.807			27.507	11.491	39.182
9/1/2005	0:00	15.835			27.543	11.538	39.201
9/1/2005	4:00	15.861			27.561	11.571	39.216
9/1/2005	8:00	15.885			27.587	11.612	39.232
9/1/2005	12:00	15.916			27.608	11.649	39.254
9/1/2005	16:00	15.929			27.587	11.661	39.26
9/1/2005	20:00	15.929			27.578	11.673	39.258
9/2/2005	0:00	15.942			27.601	11.706	39.265
9/2/2005	4:00	15.946			27.616	11.72	39.262
9/2/2005	8:00	15.952			27.634	11.725	39.262
9/2/2005	12:00	15.935			27.609	11.444	39.234
9/2/2005	16:00	15.914			27.57	10.817	39.217
9/2/2005	20:00	15.877			27.543	10.435	39.205
9/3/2005	0:00	15.852			27.557	10.234	39.205
9/3/2005	4:00	15.826			27.548	10.111	39.203
9/3/2005	8:00	15.8			27.55	10.052	39.201
9/3/2005	12:00	15.789			27.543	10.024	39.205
9/3/2005	16:00	15.765			27.508	10.012	39.201
9/3/2005	20:00	15.727			27.481	10.021	39.188
9/4/2005	0:00	15.709			27.501	10.062	39.186
9/4/2005	4:00	15.696			27.495	10.092	39.184
9/4/2005	8:00	15.683			27.503	10.128	39.186

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
9/4/2005	12:00	15.683			27.51	10.175	39.193
9/4/2005	16:00	15.676			27.485	10.213	39.195
9/4/2005	20:00	15.661			27.481	10.262	39.193
9/5/2005	0:00	15.663			27.501	10.321	39.199
9/5/2005	4:00	15.665			27.499	10.369	39.201
9/5/2005	8:00	15.663			27.503	10.411	39.203
9/5/2005	12:00	15.672			27.512	10.463	39.214
9/5/2005	16:00	15.679			27.49	10.499	39.217
9/5/2005	20:00	15.67			27.483	10.534	39.216
9/6/2005	0:00	15.678			27.501	10.588	39.219
9/6/2005	4:00	15.683			27.496	10.624	39.219
9/6/2005	8:00	15.689			27.512	10.667	39.225
9/6/2005	12:00	15.711			27.543	10.728	39.24
9/6/2005	16:00	15.729			27.53	10.761	39.249
9/6/2005	20:00	15.729			27.526	10.791	39.249
9/7/2005	0:00	15.742			27.548	10.836	39.258
9/7/2005	4:00	15.757			27.545	10.867	39.262
9/7/2005	8:00	15.761			27.543	10.893	39.262
9/7/2005	12:00	15.768			27.541	10.921	39.265
9/7/2005	16:00	15.772			27.512	10.94	39.264
9/7/2005	20:00	15.763			27.496	10.955	39.254
9/8/2005	0:00	15.766			27.506	10.985	39.251
9/8/2005	4:00	15.768			27.494	11.004	39.245
9/8/2005	8:00	15.755			27.49	11.018	39.236
9/8/2005	12:00	15.755			27.47	11.037	39.228
9/8/2005	16:00	15.754			27.441	11.049	39.221
9/8/2005	20:00	15.748			27.423	11.058	39.21
9/9/2005	0:00	15.744			27.432	11.089	39.204
9/9/2005	4:00	15.752			27.437	11.115	39.202
9/9/2005	8:00	15.755			27.446	11.144	39.205
9/9/2005	12:00	15.766			27.447	11.172	39.208
9/9/2005	16:00	15.77			27.421	11.186	39.206
9/9/2005	20:00	15.77			27.415	11.207	39.203
9/10/2005	0:00	15.776			27.432	11.238	39.203
9/10/2005	4:00	15.785			27.43	11.264	39.203
9/10/2005	8:00	15.792			27.439	11.288	39.206
9/10/2005	12:00				27.441	11.318	39.21
9/10/2005	16:00	16.887			27.428	11.335	
9/10/2005	20:00	16.058			27.434	11.863	
9/11/2005	0:00	15.915			27.454	11.619	41.342
9/11/2005	4:00	15.862			27.461	11.58	40.69
9/11/2005	8:00	15.834			27.486	11.584	40.3
9/11/2005	12:00	15.836				11.598	40.046
9/11/2005	16:00	15.83			28.629	11.593	39.865
9/11/2005	20:00	15.816			28.146	11.595	39.73
9/12/2005	0:00	15.815			27.937	11.614	39.638
9/12/2005	4:00	15.815			27.79	11.623	39.568
9/12/2005	8:00	15.815			27.699	11.635	39.514
9/12/2005	12:00	16.335			27.766	11.617	40.397
9/12/2005	16:00	15.858			27.582	11.6	39.934
9/12/2005	20:00	15.81			27.516	11.602	39.707
9/13/2005	0:00	15.798			27.48	11.616	39.571
9/13/2005	4:00	15.791			27.442	11.626	39.479
9/13/2005	8:00	15.789			27.428	11.642	39.42

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
9/13/2005	12:00	15.798			27.419	11.661	39.379
9/13/2005	16:00	15.802			27.411	11.683	39.349
9/13/2005	20:00	15.811			27.415	11.708	39.333
9/14/2005	0:00	15.841			27.461	11.755	39.336
9/14/2005	4:00	15.869			27.472	11.789	39.338
9/14/2005	8:00	15.898			27.49	11.822	39.349
9/14/2005	12:00	15.926			27.505	11.85	39.36
9/14/2005	16:00	15.93			27.464	11.85	39.347
9/14/2005	20:00	15.928			27.454	11.859	39.336
9/15/2005	0:00	15.939			27.461	11.876	39.332
9/15/2005	4:00	15.945			27.463	11.888	39.325
9/15/2005	8:00	15.946			27.47	11.907	39.321
9/15/2005	12:00	15.967			27.486	11.933	39.327
9/15/2005	16:00	15.971			27.466	11.935	39.321
9/15/2005	20:00	15.982			27.479	11.959	39.323
9/16/2005	0:00	16.006			27.503	11.989	39.334
9/16/2005	4:00	16.02			27.506	12.006	39.338
9/16/2005	8:00	16.039			27.53	12.032	39.349
9/16/2005	12:00	16.067			27.546	12.058	39.364
9/16/2005	16:00	16.067			27.501	12.049	39.356
9/16/2005	20:00	16.054			27.477	12.044	39.342
9/17/2005	0:00	16.054			27.481	12.058	39.336
9/17/2005	4:00	16.05			27.463	12.056	39.321
9/17/2005	8:00	16.037			27.444	12.053	39.306
9/17/2005	12:00	16.035			27.419	12.056	39.295
9/17/2005	16:00	16.013			27.373	12.039	39.271
9/17/2005	20:00	15.992			27.363	12.041	39.251
9/18/2005	0:00	15.994			27.377	12.063	39.245
9/18/2005	4:00	15.991			27.355	12.063	39.234
9/18/2005	8:00	15.983			27.353	12.07	39.225
9/18/2005	12:00	15.998			27.375	12.101	39.231
9/18/2005	16:00	16			27.346	12.101	39.225
9/18/2005	20:00	15.991			27.337	12.107	39.218
9/19/2005	0:00	15.994			27.35	12.129	39.22
9/19/2005	4:00	16.017			27.39	12.162	39.232
9/19/2005	8:00	16.033			27.413	12.19	39.244
9/19/2005	12:00	16.063			27.437	12.224	39.262
9/19/2005	16:00	16.079			27.43	12.237	39.273
9/19/2005	20:00	16.096			27.461	12.263	39.284
9/20/2005	0:00	16.122			27.492	12.297	39.304
9/20/2005	4:00	16.15			27.516	12.325	39.323
9/20/2005	8:00	16.166			27.527	12.341	39.332
9/20/2005	12:00	16.191			27.539	12.363	39.345
9/20/2005	16:00	16.194			27.503	12.36	39.341
9/20/2005	20:00	16.187			27.487	12.356	39.332
9/21/2005	0:00	16.187			27.496	12.37	39.328
9/21/2005	4:00	16.185			27.477	12.372	39.323
9/21/2005	8:00	16.172			27.455	12.365	39.306
9/21/2005	12:00	16.163			27.423	12.358	39.286
9/21/2005	16:00	16.141			27.372	12.341	39.264
9/21/2005	20:00	16.113			27.35	12.332	39.238
9/22/2005	0:00	16.104			27.35	12.341	39.225
9/22/2005	4:00	16.105			27.368	12.363	39.223
9/22/2005	8:00	16.107			27.385	12.379	39.223

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
9/22/2005	12:00	16.129			27.423	12.417	39.238
9/22/2005	16:00	16.146			27.413	12.429	39.247
9/22/2005	20:00	16.164			27.453	12.46	39.264
9/23/2005	0:00	16.19			27.474	12.49	39.28
9/23/2005	4:00	16.211			27.481	12.507	39.295
9/23/2005	8:00	16.225			27.495	12.523	39.304
9/23/2005	12:00	16.29	24.501		27.495	12.531	39.295
9/23/2005	16:00	16.29	24.488		27.464	12.53	39.29
9/23/2005	20:00	16.283	24.485		27.453	12.53	39.284
9/24/2005	0:00	16.283	24.485		27.453	12.54	39.279
9/24/2005	4:00	16.281	24.473		27.435	12.538	39.271
9/24/2005	8:00	16.275	24.47		27.43	12.54	39.266
9/24/2005	12:00	16.275	24.47		27.435	12.549	39.26
9/24/2005	16:00	16.257	24.453	24.283	27.375	12.537	39.238
9/24/2005	20:00	16.246	24.451	24.284	27.375	12.542	39.227
9/25/2005	0:00	16.244	24.449	24.281	27.382	12.554	39.221
9/25/2005	4:00	16.242	24.442	24.273	27.366	12.557	39.216
9/25/2005	8:00	16.246	24.449	24.278	27.386	12.573	39.216
9/25/2005	12:00	16.251	24.442	24.273	27.375	12.58	39.212
9/25/2005	16:00	16.242	24.424	24.255	27.344	12.578	39.203
9/25/2005	20:00	16.238	24.429	24.261	27.357	12.587	39.199
9/26/2005	0:00	16.261	24.461	24.294	27.415	12.627	39.216
9/26/2005	4:00	16.296	24.49	24.323	27.466	12.665	39.24
9/26/2005	8:00	16.336	24.534	24.368	27.523	12.708	39.277
9/26/2005	12:00	16.379	24.558	24.391	27.554	12.741	39.308
9/26/2005	16:00	16.398	24.562	24.393	27.541	12.746	39.321
9/26/2005	20:00	16.409	24.571	24.405	27.543	12.755	39.33
9/27/2005	0:00	16.422	24.579	24.411	27.554	12.765	39.338
9/27/2005	4:00	16.427	24.581	24.412	27.546	12.769	39.337
9/27/2005	8:00	16.433	24.588	24.42	27.55	12.779	39.339
9/27/2005	12:00	16.435	24.581	24.413	27.53	12.774	39.336
9/27/2005	16:00	16.414	24.548	24.378	27.472	12.75	39.312
9/27/2005	20:00	16.388	24.529	24.36	27.446	12.739	39.286
9/28/2005	0:00	16.373	24.516	24.346	27.433	12.736	39.267
9/28/2005	4:00	16.353	24.492	24.325	27.397	12.724	39.244
9/28/2005	8:00	16.342	24.509	24.343	27.408	12.736	39.238
9/28/2005	12:00	16.372	24.553	24.385	27.51	12.79	39.262
9/28/2005	16:00	16.416	24.581	24.413	27.563	12.83	39.29
9/28/2005	20:00	16.459	24.618	24.452	27.605	12.869	39.325
9/29/2005	0:00	16.501	24.647	24.479	27.641	12.899	39.358
9/29/2005	4:00	16.522	24.656	24.49	27.639	12.908	39.374
9/29/2005	8:00	16.544	24.681	24.514	27.663	12.93	39.395
9/29/2005	12:00	16.557	24.675	24.508	27.641	12.928	39.398
9/29/2005	16:00	16.536	24.636	24.471	27.57	12.892	39.376
9/29/2005	20:00	16.507	24.616	24.45	27.532	12.871	39.349
9/30/2005	0:00	16.488	24.603	24.438	27.519	12.864	39.326
9/30/2005	4:00	16.466	24.581	24.415	27.492	12.852	39.302
9/30/2005	8:00	16.451	24.572	24.405	27.476	12.849	39.282
9/30/2005	12:00	16.446	24.566	24.401	27.472	12.857	39.273
9/30/2005	16:00	16.429	24.538	24.37	27.433	12.842	39.252
9/30/2005	20:00	16.416	24.538	24.372	27.439	12.854	39.242
10/1/2005	0:00	16.42	24.544	24.378	27.455	12.871	39.242
10/1/2005	4:00	16.429	24.551	24.385	27.472	12.89	39.245
10/1/2005	8:00	16.44	24.555	24.388	27.484	12.906	39.253



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
10/1/2005	12:00	16.459	24.571	24.405	27.506	12.927	39.267
10/1/2005	16:00	16.462	24.558	24.393	27.485	12.925	39.265
10/1/2005	20:00	16.459	24.555	24.389	27.481	12.93	39.262
10/2/2005	0:00	16.464	24.559	24.393	27.481	12.939	39.264
10/2/2005	4:00	16.457	24.54	24.372	27.472	12.927	39.255
10/2/2005	8:00	16.451	24.538	24.373	27.468	12.934	39.245
10/2/2005	12:00	16.464	24.551	24.385	27.474	12.951	39.249
10/2/2005	16:00	16.464	24.542	24.378	27.461	12.951	39.249
10/2/2005	20:00	16.468	24.553	24.387	27.479	12.965	39.252
10/3/2005	0:00	16.488	24.575	24.411	27.512	12.989	39.264
10/3/2005	4:00	16.505	24.581	24.417	27.526	13.001	39.275
10/3/2005	8:00	16.514	24.59	24.426	27.533	13.015	39.28
10/3/2005	12:00	16.534	24.607	24.444	27.548	13.031	39.293
10/3/2005	16:00	16.54	24.594	24.428	27.523	13.027	39.293
10/3/2005	20:00	16.538	24.605	24.44	27.534	13.036	39.295
10/4/2005	0:00	16.553	24.62	24.455	27.559	13.055	39.302
10/4/2005	4:00	16.564	24.623	24.459	27.561	13.062	39.306
10/4/2005	8:00	16.566	24.622	24.459	27.561	13.067	39.306
10/4/2005	12:00	16.577	24.623	24.461	27.554	13.071	39.308
10/4/2005	16:00	16.568	24.607	24.448	27.526	13.065	39.299
10/4/2005	20:00	16.555	24.599	24.436	27.508	13.057	39.284
10/5/2005	0:00	16.555	24.597	24.436	27.51	13.067	39.278
10/5/2005	4:00	16.555	24.599	24.436	27.519	13.074	39.276
10/5/2005	8:00	16.56	24.618	24.453	27.543	13.086	39.28
10/5/2005	12:00	16.544	24.603	24.44	27.588	13.062	39.269
10/5/2005	16:00	16.577	24.629	24.465	27.614	13.043	39.295
10/5/2005	20:00	16.601	24.664	24.5	27.654	13.039	39.323
10/6/2005	0:00	16.64	24.699	24.535	27.696	13.06	39.356
10/6/2005	4:00	16.666	24.725	24.562	27.723	13.072	39.385
10/6/2005	8:00	16.679	24.734	24.574	27.723	13.069	39.398
10/6/2005	12:00	16.694	24.747	24.586	27.729	13.079	39.409
10/6/2005	16:00	16.694	24.742	24.578	27.698	13.062	39.407
10/6/2005	20:00	16.684	24.743	24.58	27.693	13.057	39.402
10/7/2005	0:00	16.69	24.76	24.597	27.707	13.069	39.404
10/7/2005	4:00	16.695	24.76	24.598	27.711	13.072	39.404
10/7/2005	8:00	16.695	24.764	24.601	27.714	13.074	39.402
10/7/2005	12:00	16.697	24.758	24.596	27.7	13.076	39.396
10/7/2005	16:00	16.683	24.736	24.574	27.65	13.053	39.38
10/7/2005	20:00	16.662	24.725	24.562	27.632	13.041	39.363
10/8/2005	0:00	16.655	24.723	24.562	27.636	13.045	39.354
10/8/2005	4:00	16.651	24.719	24.557	27.629	13.045	39.347
10/8/2005	8:00	16.644	24.716	24.555	27.632	13.05	39.341
10/8/2005	12:00	16.646	24.712	24.551	27.63	13.055	39.335
10/8/2005	16:00	16.631	24.684	24.524	27.577	13.039	39.321
10/8/2005	20:00	16.616	24.677	24.514	27.568	13.034	39.306
10/9/2005	0:00	16.61	24.673	24.512	27.568	13.039	39.299
10/9/2005	4:00	16.608	24.672	24.51	27.572	13.043	39.295
10/9/2005	8:00	16.608	24.669	24.508	27.574	13.053	39.295
10/9/2005	12:00	16.61	24.666	24.506	27.572	13.06	39.291
10/9/2005	16:00	16.605	24.651	24.489	27.543	13.055	39.282
10/9/2005	20:00	16.605	24.666	24.504	27.57	13.071	39.286
10/10/2005	0:00	16.62	24.681	24.52	27.598	13.097	39.297
10/10/2005	4:00	16.636	24.688	24.529	27.605	13.112	39.308
10/10/2005	8:00	16.655	24.705	24.545	27.632	13.131	39.321

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
10/10/2005	12:00	16.671	24.718	24.557	27.652	13.15	39.334
10/10/2005	16:00	16.679	24.71	24.551	27.632	13.15	39.337
10/10/2005	20:00	16.683	24.716	24.557	27.636	13.157	39.339
10/11/2005	0:00	16.692	24.725	24.564	27.65	13.168	39.345
10/11/2005	4:00	16.697	24.723	24.564	27.641	13.173	39.345
10/11/2005	8:00		24.727	24.568	27.643	13.178	39.347
10/11/2005	12:00		24.727	24.566	27.645	13.18	
10/11/2005	16:00	17.413	25.196	25.039		14.578	
10/11/2005	20:00	16.95	25.056	24.902	29.004	13.501	
10/12/2005	0:00	16.82	24.986	24.833	28.5	13.367	42.174
10/12/2005	4:00	16.736	24.891	24.74	28.22	13.256	41.326
10/12/2005	8:00	16.674	24.862	24.707	28.063	13.119	40.771
10/12/2005	12:00	16.625		24.743	27.985	12.916	40.444
10/12/2005	16:00	16.577	25.429	25.287	27.909	12.755	40.304
10/12/2005	20:00	16.536	25.268	25.127	27.881	12.67	39.974
10/13/2005	0:00	16.509	25.179	25.038	27.849	12.616	39.847
10/13/2005	4:00	16.485	25.119	24.979	27.823	12.59	39.765
10/13/2005	8:00	16.472	25.082	24.942	27.807	12.578	39.693
10/13/2005	12:00	16.464	25.058	24.919	27.801	12.573	39.705
10/13/2005	16:00	16.447	25.016	24.878	27.754	12.547	39.649
10/13/2005	20:00	16.433	24.995	24.856	27.741	12.538	39.608
10/14/2005	0:00	16.429	24.984	24.845	27.741	12.538	39.579
10/14/2005	4:00	16.42	24.96	24.821	27.723	12.524	39.549
10/14/2005	8:00	16.42	24.96	24.821	27.734	12.531	39.533
10/14/2005	12:00	16.431	24.96	24.821	27.743	12.54	39.525
10/14/2005	16:00	16.429	24.94	24.802	27.716	12.531	39.509
10/14/2005	20:00	16.427	24.936	24.798	27.716	12.533	39.496
10/15/2005	0:00	16.438	24.944	24.808	27.739	12.547	39.496
10/15/2005	4:00	16.447	24.938	24.8	27.743	12.554	39.49
10/15/2005	8:00	16.458	24.942	24.804	27.751	12.564	39.489
10/15/2005	12:00	16.473	24.944	24.808	27.754	12.573	39.492
10/15/2005	16:00	16.462	24.914	24.776	27.703	12.554	39.476
10/15/2005	20:00	16.451	24.905	24.769	27.692	12.55	39.459
10/16/2005	0:00	16.453	24.903	24.767	27.696	12.554	39.453
10/16/2005	4:00	16.451	24.892	24.753	27.694	12.554	39.442
10/16/2005	8:00	16.449	24.888	24.753	27.694	12.561	39.435
10/16/2005	12:00	16.46	24.894	24.757	27.703	12.573	39.439
10/16/2005	16:00	16.451	24.862	24.726	27.654	12.557	39.422
10/16/2005	20:00	16.431	24.84	24.705	27.626	12.542	39.4
10/17/2005	0:00	16.423	24.829	24.693	27.615	12.542	39.387
10/17/2005	4:00	16.403	24.794	24.658	27.574	12.526	39.361
10/17/2005	8:00	16.388	24.786	24.65	27.575	12.528	39.347
10/17/2005	12:00	16.395	24.797	24.662	27.594	12.547	39.347
10/17/2005	16:00	16.401	24.786	24.65	27.581	12.554	39.343
10/17/2005	20:00	16.403	24.788	24.652	27.595	12.566	39.345
10/18/2005	0:00	16.419	24.799	24.664	27.616	12.592	39.355
10/18/2005	4:00	16.427	24.792	24.656	27.612	12.597	39.356
10/18/2005	8:00	16.427	24.784	24.65	27.61	12.604	39.354
10/18/2005	12:00	16.434	24.784	24.65	27.601	12.613	39.354
10/18/2005	16:00	16.423	24.755	24.621	27.55	12.594	39.339
10/18/2005	20:00	16.408	24.747	24.611	27.544	12.594	39.324
10/19/2005	0:00	16.41	24.755	24.621	27.561	12.611	39.324
10/19/2005	4:00	16.429	24.773	24.641	27.603	12.639	39.335
10/19/2005	8:00	16.447	24.779	24.646	27.628	12.663	39.347

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
10/19/2005	12:00	16.466	24.786	24.652	27.63	12.684	39.359
10/19/2005	16:00	16.473	24.773	24.639	27.61	12.684	39.357
10/19/2005	20:00	16.469	24.77	24.637	27.601	12.687	39.354
10/20/2005	0:00	16.445	24.738	24.608	27.579	12.642	39.331
10/20/2005	4:00	16.382	24.673	24.539	27.506	12.181	39.272
10/20/2005	8:00	16.34	24.67	24.537	27.499	11.751	39.256
10/20/2005	12:00	16.29	24.673	24.539	27.513	11.432	39.245
10/20/2005	16:00	16.246	24.683	24.549	27.513	11.104	39.247
10/20/2005	20:00	16.209	24.703	24.569	27.541	10.934	39.26
10/21/2005	0:00	16.184	24.723	24.59	27.566	10.865	39.28
10/21/2005	4:00	16.157	24.736	24.606	27.568	10.818	39.295
10/21/2005	8:00	16.133	24.753	24.621	27.592	10.797	39.311
10/21/2005	12:00	16.122	24.771	24.639	27.615	10.789	39.328
10/21/2005	16:00	16.101	24.766	24.633	27.584	10.771	39.333
10/21/2005	20:00	16.077	24.77	24.639	27.588	10.771	39.335
10/22/2005	0:00	16.062	24.775	24.643	27.59	10.782	39.339
10/22/2005	4:00	16.044	24.77	24.637	27.579	10.789	39.341
10/22/2005	8:00	16.018	24.755	24.621	27.555	10.794	39.333
10/22/2005	12:00	15.999	24.747	24.619	27.561	10.815	39.328
10/22/2005	16:00	15.962	24.714	24.582	27.508	10.799	39.306
10/22/2005	20:00	15.944	24.723	24.592	27.533	10.811	39.302
10/23/2005	0:00	15.942	24.73	24.598	27.55	10.825	39.306
10/23/2005	4:00	15.944	24.743	24.612	27.572	10.846	39.322
10/23/2005	8:00	15.953	24.764	24.633	27.61	10.874	39.341
10/23/2005	12:00	15.964	24.777	24.645	27.628	10.903	39.357
10/23/2005	16:00	15.964	24.775	24.644	27.617	10.91	39.368
10/23/2005	20:00	15.97	24.797	24.666	27.654	10.941	39.387
10/24/2005	0:00	15.975	24.804	24.672	27.659	10.964	39.4
10/24/2005	4:00	15.979	24.808	24.676	27.659	10.978	39.409
10/24/2005	8:00	15.979	24.81	24.679	27.663	10.99	39.414
10/24/2005	12:00	15.979	24.812	24.679	27.665	11.004	39.418
10/24/2005	16:00	15.964	24.791	24.66	27.626	11	39.407
10/24/2005	20:00	15.951	24.788	24.656	27.623	11.009	39.402
10/25/2005	0:00	15.946	24.78	24.65	27.623	11.023	39.396
10/25/2005	4:00	15.938	24.775	24.644	27.617	11.035	39.392
10/25/2005	8:00	15.938	24.779	24.646	27.626	11.056	39.392
10/25/2005	12:00	15.942	24.777	24.646	27.632	11.078	39.394
10/25/2005	16:00	15.925	24.743	24.613	27.575	11.066	39.378
10/25/2005	20:00	15.907	24.729	24.6	27.559	11.068	39.365
10/26/2005	0:00	15.894	24.716	24.584	27.55	11.075	39.354
10/26/2005	4:00	15.883	24.703	24.574	27.541	11.082	39.344
10/26/2005	8:00	15.881	24.701	24.572	27.546	11.104	39.341
10/26/2005	12:00	15.881	24.697	24.567	27.546	11.123	39.341
10/26/2005	16:00	15.874	24.681	24.551	27.52	11.127	39.333
10/26/2005	20:00	15.879	24.693	24.565	27.55	11.158	39.341
10/27/2005	0:00	15.899	24.708	24.579	27.584	11.2	39.355
10/27/2005	4:00	15.92	24.719	24.59	27.608	11.236	39.372
10/27/2005	8:00	15.946	24.736	24.607	27.628	11.269	39.39
10/27/2005	12:00	15.972	24.753	24.623	27.652	11.304	39.409
10/27/2005	16:00	15.979	24.736	24.606	27.619	11.307	39.411
10/27/2005	20:00	15.979	24.742	24.611	27.623	11.319	39.413
10/28/2005	0:00	15.988	24.747	24.617	27.637	11.342	39.418
10/28/2005	4:00	15.996	24.742	24.613	27.632	11.354	39.418
10/28/2005	8:00	16.001	24.743	24.615	27.632	11.371	39.42

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
10/28/2005	12:00	16.009	24.742	24.612	27.628	11.382	39.422
10/28/2005	16:00	15.996	24.712	24.582	27.579	11.368	39.407
10/28/2005	20:00	15.983	24.708	24.578	27.575	11.371	39.396
10/29/2005	0:00	15.983	24.706	24.579	27.584	11.387	39.392
10/29/2005	4:00	15.981	24.697	24.569	27.575	11.397	39.385
10/29/2005	8:00	15.981	24.69	24.563	27.566	11.408	39.379
10/29/2005	12:00	15.983	24.69	24.561	27.564	11.42	39.381
10/29/2005	16:00	15.968	24.653	24.524	27.51	11.406	39.359
10/29/2005	20:00	15.959	24.66	24.532	27.522	11.423	39.355
10/30/2005	0:00	15.966	24.658	24.53	27.533	11.444	39.355
10/30/2005	4:00	15.961	24.638	24.51	27.51	11.446	39.346
10/30/2005	8:00	15.961	24.638	24.512	27.513	11.46	39.344
10/30/2005	12:00	15.972	24.647	24.518	27.528	11.486	39.35
10/30/2005	16:00	15.97	24.627	24.499	27.497	11.489	39.343
10/30/2005	20:00	15.975	24.638	24.51	27.52	11.513	39.346
10/31/2005	0:00	15.992	24.649	24.522	27.541	11.541	39.357
10/31/2005	4:00	16.007	24.653	24.524	27.559	11.564	39.367
10/31/2005	8:00	16.025	24.668	24.539	27.588	11.597	39.379
10/31/2005	12:00	16.053	24.681	24.553	27.603	11.626	39.394
10/31/2005	16:00	16.059	24.671	24.544	27.572	11.626	39.396
10/31/2005	20:00	16.062	24.677	24.549	27.577	11.64	39.398
11/1/2005	0:00	16.075	24.682	24.553	27.59	11.659	39.403
11/1/2005	4:00	16.072	24.668	24.54	27.564	11.656	39.398
11/1/2005	8:00	16.064	24.655	24.528	27.553	11.659	39.387
11/1/2005	12:00	16.066	24.66	24.532	27.55	11.671	39.385
11/1/2005	16:00	16.06	24.642	24.514	27.522	11.666	39.372
11/1/2005	20:00	16.06	24.651	24.522	27.541	11.682	39.372
11/2/2005	0:00	16.072	24.653	24.524	27.544	11.701	39.374
11/2/2005	4:00	16.07	24.634	24.506	27.524	11.702	39.366
11/2/2005	8:00	16.057	24.616	24.491	27.5	11.697	39.35
11/2/2005	12:00	16.053	24.608	24.479	27.482	11.699	39.341
11/2/2005	16:00	16.033	24.57	24.446	27.422	11.676	39.317
11/2/2005	20:00	16.016	24.57	24.444	27.431	11.682	39.304
11/3/2005	0:00	16.014	24.56	24.435	27.424	11.694	39.296
11/3/2005	4:00	16.003	24.534	24.409	27.396	11.687	39.28
11/3/2005	8:00	15.983	24.51	24.382	27.365	11.678	39.26
11/3/2005	12:00	15.972	24.494	24.368	27.342	11.678	39.243
11/3/2005	16:00	15.951	24.472	24.347	27.307	11.666	39.223
11/3/2005	20:00	15.946	24.479	24.355	27.338	11.69	39.221
11/4/2005	0:00	15.968	24.492	24.368	27.366	11.728	39.232
11/4/2005	4:00	15.986	24.499	24.374	27.391	11.753	39.245
11/4/2005	8:00	15.996	24.496	24.37	27.391	11.77	39.25
11/4/2005	12:00	16.009	24.496	24.37	27.387	11.789	39.256
11/4/2005	16:00	16.003	24.479	24.355	27.349	11.782	39.25
11/4/2005	20:00	16.003	24.483	24.358	27.365	11.794	39.248
11/5/2005	0:00	16.012	24.481	24.356	27.367	11.81	39.25
11/5/2005	4:00	16.012	24.474	24.349	27.356	11.815	39.248
11/5/2005	8:00	16.01	24.47	24.345	27.356	11.824	39.243
11/5/2005	12:00	16.02	24.477	24.353	27.369	11.841	39.245
11/5/2005	16:00	16.023	24.47	24.345	27.354	11.846	39.243
11/5/2005	20:00	16.042	24.494	24.37	27.398	11.881	39.256
11/6/2005	0:00	16.073	24.527	24.403	27.449	11.926	39.28
11/6/2005	4:00	16.116	24.562	24.439	27.504	11.973	39.313
11/6/2005	8:00	16.151	24.586	24.464	27.533	12.006	39.34

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
11/6/2005	12:00	16.186	24.61	24.489	27.564	12.042	39.364
11/6/2005	16:00	16.199	24.597	24.475	27.517	12.035	39.368
11/6/2005	20:00	16.203	24.601	24.477	27.517	12.035	39.368
11/7/2005	0:00	16.212	24.61	24.487	27.528	12.051	39.37
11/7/2005	4:00	16.218	24.609	24.485	27.52	12.058	39.37
11/7/2005	8:00	16.218	24.598	24.476	27.506	12.051	39.361
11/7/2005	12:00	16.214	24.599	24.477	27.504	12.058	39.354
11/7/2005	16:00	16.209	24.586	24.464	27.475	12.051	39.342
11/7/2005	20:00	16.212	24.601	24.479	27.502	12.07	39.344
11/8/2005	0:00	16.225	24.607	24.483	27.515	12.089	39.348
11/8/2005	4:00	16.233	24.601	24.479	27.5	12.094	39.346
11/8/2005	8:00	16.225	24.586	24.462	27.473	12.084	39.339
11/8/2005	12:00	16.214	24.57	24.446	27.458	12.077	39.324
11/8/2005	16:00	16.201	24.553	24.431	27.424	12.068	39.306
11/8/2005	20:00	16.196	24.558	24.437	27.438	12.077	39.3
11/9/2005	0:00	16.203	24.568	24.444	27.458	12.101	39.304
11/9/2005	4:00	16.257	24.636	24.516	27.575	12.177	39.346
11/9/2005	8:00	16.307	24.673	24.552	27.621	12.224	39.387
11/9/2005	12:00	16.353	24.712	24.588	27.672	12.266	39.425
11/9/2005	16:00	16.386	24.723	24.602	27.668	12.285	39.448
11/9/2005	20:00	16.416	24.756	24.635	27.706	12.314	39.473
11/10/2005	0:00	16.438	24.764	24.641	27.708	12.323	39.486
11/10/2005	4:00	16.449	24.77	24.645	27.701	12.33	39.49
11/10/2005	8:00	16.455	24.767	24.647	27.69	12.33	39.488
11/10/2005	12:00	16.455	24.766	24.643	27.683	12.328	39.483
11/10/2005	16:00	16.434	24.73	24.607	27.615	12.299	39.455
11/10/2005	20:00	16.412	24.716	24.594	27.588	12.28	39.431
11/11/2005	0:00	16.397	24.705	24.584	27.579	12.276	39.412
11/11/2005	4:00	16.377	24.681	24.559	27.551	12.264	39.389
11/11/2005	8:00	16.362	24.673	24.551	27.535	12.259	39.372
11/11/2005	12:00	16.351	24.658	24.536	27.517	12.255	39.357
11/11/2005	16:00	16.323	24.618	24.495	27.456	12.226	39.326
11/11/2005	20:00	16.301	24.609	24.487	27.442	12.221	39.308
11/12/2005	0:00	16.286	24.588	24.468	27.427	12.219	39.289
11/12/2005	4:00	16.264	24.558	24.439	27.391	12.205	39.265
11/12/2005	8:00	16.238	24.522	24.402	27.341	12.186	39.236
11/12/2005	12:00	16.212	24.5	24.378	27.316	12.174	39.213
11/12/2005	16:00	16.184	24.483	24.363	27.292	12.162	39.191
11/12/2005	20:00	16.205	24.538	24.417	27.398	12.224	39.215
11/13/2005	0:00	16.266	24.599	24.479	27.504	12.306	39.265
11/13/2005	4:00	16.334	24.649	24.528	27.595	12.38	39.32
11/13/2005	8:00	16.397	24.693	24.573	27.644	12.434	39.374
11/13/2005	12:00	16.462	24.745	24.625	27.699	12.481	39.427
11/13/2005	16:00	16.497	24.758	24.637	27.704	12.5	39.455
11/13/2005	20:00	16.521	24.777	24.659	27.715	12.519	39.477
11/14/2005	0:00	16.541	24.788	24.666	27.713	12.529	39.49
11/14/2005	4:00	16.542	24.781	24.66	27.702	12.521	39.484
11/14/2005	8:00	16.532	24.758	24.637	27.657	12.505	39.466
11/14/2005	12:00	16.51	24.727	24.606	27.602	12.477	39.438
11/14/2005	16:00	16.466	24.683	24.563	27.524	12.429	39.394
11/14/2005	20:00	16.438	24.673	24.551	27.518	12.42	39.364
11/15/2005	0:00	16.425	24.66	24.538	27.507	12.418	39.346
11/15/2005	4:00	16.405	24.636	24.514	27.482	12.406	39.324
11/15/2005	8:00	16.392	24.633	24.512	27.518	12.408	39.313

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
11/15/2005	12:00	16.403	24.657	24.538	27.547	12.439	39.32
11/15/2005	16:00	16.432	24.684	24.567	27.593	12.46	39.342
11/15/2005	20:00	16.477	24.731	24.609	27.662	12.505	39.379
11/16/2005	0:00	16.529	24.769	24.649	27.702	12.536	39.42
11/16/2005	4:00	16.56	24.788	24.668	27.724	12.557	39.447
11/16/2005	8:00	16.586	24.819	24.699	27.759	12.583	39.473
11/16/2005	12:00	16.634	24.869	24.75	27.828	12.625	39.512
11/16/2005	16:00	16.664	24.882	24.763	27.821	12.635	39.531
11/16/2005	20:00	16.68	24.895	24.777	27.83	12.642	39.544
11/17/2005	0:00	16.693	24.903	24.783	27.821	12.647	39.551
11/17/2005	4:00	16.697	24.912	24.793	27.823	12.647	39.551
11/17/2005	8:00	16.691	24.901	24.781	27.806	12.642	39.538
11/17/2005	12:00	16.695	24.906	24.789	27.808	12.647	39.534
11/17/2005	16:00	16.679	24.882	24.761	27.752	12.621	39.512
11/17/2005	20:00	16.671	24.892	24.773	27.766	12.623	39.503
11/18/2005	0:00	16.676	24.903	24.783	27.781	12.637	39.503
11/18/2005	4:00	16.68	24.895	24.777	27.77	12.637	39.499
11/18/2005	8:00	16.673	24.888	24.77	27.764	12.635	39.49
11/18/2005	12:00	16.671	24.879	24.76	27.746	12.635	39.481
11/18/2005	16:00	16.639	24.828	24.711	27.657	12.595	39.447
11/18/2005	20:00	16.601	24.792	24.672	27.606	12.559	39.409
11/19/2005	0:00	16.565	24.766	24.647	27.571	12.538	39.377
11/19/2005	4:00	16.538	24.744	24.623	27.542	12.524	39.352
11/19/2005	8:00	16.523	24.744	24.625	27.564	12.531	39.337
11/19/2005	12:00	16.538	24.762	24.645	27.606	12.564	39.344
11/19/2005	16:00	16.554	24.775	24.656	27.624	12.588	39.359
11/19/2005	20:00	16.582	24.803	24.686	27.675	12.626	39.383
11/20/2005	0:00	16.612	24.823	24.707	27.702	12.661	39.407
11/20/2005	4:00	16.639	24.84	24.725	27.721	12.682	39.431
11/20/2005	8:00	16.654	24.843	24.729	27.724	12.692	39.44
11/20/2005	12:00	16.666	24.849	24.732	27.724	12.701	39.447
11/20/2005	16:00	16.665	24.838	24.721	27.697	12.697	39.442
11/20/2005	20:00	16.665	24.84	24.725	27.699	12.701	39.44
11/21/2005	0:00	16.664	24.832	24.715	27.684	12.699	39.433
11/21/2005	4:00	16.662	24.823	24.707	27.673	12.697	39.425
11/21/2005	8:00	16.649	24.814	24.697	27.655	12.692	39.412
11/21/2005	12:00	16.649	24.819	24.701	27.668	12.704	39.409
11/21/2005	16:00	16.655	24.821	24.707	27.666	12.711	39.407
11/21/2005	20:00	16.667	24.832	24.715	27.688	12.73	39.414
11/22/2005	0:00	16.678	24.84	24.725	27.697	12.744	39.42
11/22/2005	4:00	16.686	24.842	24.725	27.695	12.751	39.424
11/22/2005	8:00	16.688	24.836	24.719	27.686	12.753	39.422
11/22/2005	12:00	16.688	24.831	24.715	27.677	12.753	39.418
11/22/2005	16:00	16.669	24.794	24.678	27.611	12.727	39.392
11/22/2005	20:00	16.645	24.777	24.664	27.589	12.713	39.374
11/23/2005	0:00	16.619	24.74	24.623	27.535	12.69	39.342
11/23/2005	4:00	16.588	24.71	24.594	27.496	12.668	39.313
11/23/2005	8:00	16.564	24.696	24.581	27.485	12.661	39.291
11/23/2005	12:00	16.556	24.696	24.581	27.5	12.673	39.283
11/23/2005	16:00	16.554	24.69	24.575	27.493	12.675	39.276
11/23/2005	20:00	16.564	24.703	24.589	27.52	12.701	39.285
11/24/2005	0:00	16.578	24.716	24.604	27.544	12.725	39.298
11/24/2005	4:00	16.602	24.74	24.628	27.586	12.758	39.318
11/24/2005	8:00	16.638	24.777	24.664	27.642	12.798	39.35

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
11/24/2005	12:00	16.689	24.829	24.715	27.724	12.85	39.392
11/24/2005	16:00	16.723	24.834	24.723	27.715	12.864	39.416
11/24/2005	20:00	16.752	24.864	24.752	27.748	12.89	39.442
11/25/2005	0:00	16.771	24.868	24.754	27.748	12.897	39.455
11/25/2005	4:00	16.776	24.86	24.746	27.726	12.893	39.453
11/25/2005	8:00	16.773	24.855	24.742	27.704	12.886	39.447
11/25/2005	12:00	16.762	24.836	24.721	27.675	12.871	39.429
11/25/2005	16:00	16.728	24.788	24.674	27.593	12.831	39.39
11/25/2005	20:00	16.701	24.777	24.663	27.58	12.819	39.364
11/26/2005	0:00	16.689	24.775	24.663	27.587	12.824	39.35
11/26/2005	4:00	16.682	24.764	24.651	27.576	12.824	39.337
11/26/2005	8:00	16.673	24.749	24.637	27.556	12.822	39.324
11/26/2005	12:00	16.662	24.733	24.619	27.538	12.815	39.309
11/26/2005	16:00	16.632	24.688	24.577	27.467	12.786	39.28
11/26/2005	20:00	16.61	24.677	24.563	27.454	12.779	39.259
11/27/2005	0:00	16.595	24.666	24.551	27.447	12.777	39.245
11/27/2005	4:00	16.575	24.631	24.516	27.407	12.76	39.221
11/27/2005	8:00	16.552	24.611	24.497	27.383	12.756	39.202
11/27/2005	12:00	16.536	24.592	24.478	27.361	12.749	39.184
11/27/2005	16:00	16.493	24.527	24.413	27.274	12.706	39.143
11/27/2005	20:00	16.443	24.488	24.375	27.257	12.671	39.103
11/28/2005	0:00	16.419	24.47	24.355	27.232	12.635	39.082
11/28/2005	4:00	16.382	24.448	24.338	27.224	12.597	39.062
11/28/2005	8:00	16.36	24.468	24.357	27.263	12.595	39.068
11/28/2005	12:00	16.369	24.498	24.386	27.325	12.609	39.093
11/28/2005	16:00	16.38	24.527	24.415	27.37	12.623	39.125
11/28/2005	20:00	16.417	24.577	24.464	27.449	12.661	39.173
11/29/2005	0:00	16.451	24.62	24.507	27.505	12.694	39.221
11/29/2005	4:00	16.49	24.662	24.55	27.571	12.725	39.267
11/29/2005	8:00	16.528	24.708	24.596	27.624	12.763	39.313
11/29/2005	12:00	16.575	24.758	24.649	27.691	12.803	39.361
11/29/2005	16:00	16.608	24.788	24.676	27.709	12.819	39.394
11/29/2005	20:00	16.641	24.823	24.713	27.751	12.845	39.427
11/30/2005	0:00	16.667	24.849	24.738	27.764	12.86	39.451
11/30/2005	4:00	16.675	24.853	24.74	27.764	12.855	39.461
11/30/2005	8:00	16.675	24.851	24.738	27.751	12.845	39.457
11/30/2005	12:00	16.665	24.836	24.723	27.715	12.827	39.442
11/30/2005	16:00	16.639	24.812	24.7	27.662	12.796	39.418
11/30/2005	20:00	16.626	24.819	24.707	27.682	12.798	39.407
12/1/2005	0:00	16.634	24.842	24.731	27.713	12.815	39.411
12/1/2005	4:00	16.665	24.892	24.781	27.8	12.858	39.438
12/1/2005	8:00	16.702	24.925	24.814	27.851	12.897	39.466
12/1/2005	12:00	16.749	24.966	24.853	27.897	12.931	39.503
12/1/2005	16:00	16.763	24.954	24.842	27.864	12.923	39.514
12/1/2005	20:00	16.765	24.954	24.843	27.851	12.919	39.516
12/2/2005	0:00	16.771	24.964	24.854	27.853	12.923	39.519
12/2/2005	4:00	16.767	24.96	24.851	27.844	12.916	39.512
12/2/2005	8:00	16.754	24.94	24.83	27.815	12.9	39.497
12/2/2005	12:00	16.738	24.914	24.803	27.773	12.879	39.473
12/2/2005	16:00	16.693	24.862	24.752	27.682	12.831	39.433
12/2/2005	20:00	16.665	24.855	24.744	27.687	12.819	39.409
12/3/2005	0:00	16.654	24.845	24.733	27.676	12.817	39.394
12/3/2005	4:00	16.641	24.836	24.727	27.669	12.815	39.383
12/3/2005	8:00	16.625	24.823	24.713	27.66	12.81	39.368

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
12/3/2005	12:00	16.63	24.834	24.727	27.687	12.827	39.372
12/3/2005	16:00	16.636	24.838	24.731	27.684	12.836	39.374
12/3/2005	20:00	16.662	24.867	24.758	27.751	12.874	39.398
12/4/2005	0:00	16.702	24.91	24.801	27.809	12.919	39.433
12/4/2005	4:00	16.734	24.932	24.824	27.835	12.947	39.462
12/4/2005	8:00	16.76	24.954	24.846	27.864	12.969	39.486
12/4/2005	12:00	16.793	24.988	24.879	27.913	12.999	39.516
12/4/2005	16:00	16.815	24.991	24.882	27.897	13.006	39.529
12/4/2005	20:00	16.837	25.014	24.908	27.931	13.025	39.545
12/5/2005	0:00	16.862	25.038	24.929	27.953	13.044	39.564
12/5/2005	4:00	16.876	25.041	24.933	27.946	13.047	39.573
12/5/2005	8:00	16.873	25.027	24.918	27.921	13.037	39.566
12/5/2005	12:00	16.86	25.006	24.896	27.889	13.018	39.547
12/5/2005	16:00	16.823	24.954	24.845	27.795	12.971	39.506
12/5/2005	20:00	16.78	24.932	24.824	27.76	12.94	39.471
12/6/2005	0:00	16.786	24.966	24.859	27.829	12.973	39.47
12/6/2005	4:00	16.804	24.984	24.877	27.869	13.006	39.482
12/6/2005	8:00	16.837	25.017	24.91	27.922	13.042	39.509
12/6/2005	12:00	16.871	25.054	24.945	27.977	13.075	39.538
12/6/2005	16:00	16.893	25.056	24.951	27.962	13.082	39.555
12/6/2005	20:00	16.921	25.086	24.978	28.002	13.108	39.578
12/7/2005	0:00	16.952	25.115	25.007	28.039	13.134	39.602
12/7/2005	4:00	16.98	25.136	25.026	28.057	13.151	39.623
12/7/2005	8:00	16.998	25.15	25.042	28.072	13.162	39.637
12/7/2005	12:00	17.015	25.161	25.054	28.088	13.169	39.648
12/7/2005	16:00	17.013	25.145	25.038	28.048	13.155	39.639
12/7/2005	20:00	17.013	25.149	25.042	28.055	13.155	39.634
12/8/2005	0:00	17.004	25.137	25.031	28.033	13.143	39.621
12/8/2005	4:00	16.997	25.126	25.019	28.01	13.139	39.608
12/8/2005	8:00	16.987	25.115	25.009	27.993	13.129	39.593
12/8/2005	12:00	16.976	25.106	24.999	27.984	13.125	39.58
12/8/2005	16:00	16.96	25.089	24.984	27.946	13.113	39.56
12/8/2005	20:00	16.958	25.093	24.988	27.959	13.122	39.554
12/9/2005	0:00	16.961	25.097	24.991	27.971	13.127	39.555
12/9/2005	4:00	16.965	25.099	24.992	27.973	13.139	39.555
12/9/2005	8:00	16.965	25.093	24.986	27.962	13.141	39.551
12/9/2005	12:00	16.961	25.086	24.98	27.953	13.139	39.545
12/9/2005	16:00	16.941	25.049	24.943	27.889	13.115	39.521
12/9/2005	20:00	16.919	25.027	24.922	27.853	13.096	39.499
12/10/2005	0:00	16.889	24.991	24.887	27.811	13.073	39.47
12/10/2005	4:00	16.854	24.945	24.84	27.753	13.042	39.433
12/10/2005	8:00	16.821	24.925	24.818	27.727	13.028	39.405
12/10/2005	12:00	16.8	24.927	24.82	27.745	13.032	39.394
12/10/2005	16:00	16.808	24.921	24.817	27.747	13.044	39.387
12/10/2005	20:00	16.825	24.947	24.842	27.796	13.075	39.405
12/11/2005	0:00	16.841	24.954	24.847	27.813	13.096	39.42
12/11/2005	4:00	16.847	24.947	24.84	27.805	13.101	39.423
12/11/2005	8:00	16.85	24.94	24.832	27.789	13.101	39.423
12/11/2005	12:00	16.847	24.929	24.822	27.774	13.099	39.418
12/11/2005	16:00	16.826	24.901	24.795	27.725	13.077	39.398
12/11/2005	20:00	16.823	24.912	24.809	27.747	13.087	39.396
12/12/2005	0:00	16.834	24.921	24.815	27.776	13.103	39.402
12/12/2005	4:00	16.837	24.925	24.82	27.783	13.108	39.407
12/12/2005	8:00	16.856	24.951	24.846	27.825	13.134	39.423



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
12/12/2005	12:00	16.887	24.982	24.877	27.871	13.162	39.449
12/12/2005	16:00	16.906	24.982	24.879	27.862	13.167	39.46
12/12/2005	20:00	16.919	24.997	24.892	27.878	13.181	39.475
12/13/2005	0:00	16.932	24.997	24.892	27.873	13.179	39.482
12/13/2005	4:00	16.923	24.988	24.885	27.858	13.169	39.477
12/13/2005	8:00	16.91	24.964	24.859	27.822	13.153	39.46
12/13/2005	12:00	16.891	24.943	24.84	27.789	13.134	39.442
12/13/2005	16:00	16.858	24.901	24.797	27.718	13.099	39.407
12/13/2005	20:00	16.817	24.869	24.766	27.683	13.07	39.37
12/14/2005	0:00	16.787	24.847	24.745	27.652	13.054	39.343
12/14/2005	4:00	16.769	24.847	24.743	27.67	13.054	39.329
12/14/2005	8:00	16.782	24.877	24.776	27.734	13.085	39.343
12/14/2005	12:00	16.813	24.901	24.799	27.776	13.117	39.366
12/14/2005	16:00	16.826	24.908	24.805	27.776	13.127	39.383
12/14/2005	20:00	16.837	24.916	24.812	27.787	13.139	39.398
12/15/2005	0:00	16.847	24.925	24.822	27.791	13.146	39.411
12/15/2005	4:00	16.843	24.916	24.813	27.783	13.141	39.411
12/15/2005	8:00	16.834	24.908	24.805	27.772	13.134	39.403
12/15/2005	12:00	16.839	24.919	24.817	27.787	13.144	39.407
12/15/2005	16:00	16.839	24.919	24.817	27.783	13.146	39.407
12/15/2005	20:00	16.849	24.934	24.83	27.812	13.16	39.416
12/16/2005	0:00	16.858	24.947	24.844	27.818	13.172	39.429
12/16/2005	4:00	16.869	24.956	24.855	27.838	13.179	39.438
12/16/2005	8:00	16.874	24.96	24.859	27.847	13.186	39.444
12/16/2005	12:00	16.9	24.997	24.894	27.905	13.214	39.466
12/16/2005	16:00	16.921	25.004	24.902	27.905	13.221	39.479
12/16/2005	20:00	16.939	25.03	24.929	27.938	13.241	39.497
12/17/2005	0:00	16.974	25.071	24.97	27.991	13.269	39.529
12/17/2005	4:00	17.006	25.099	24.999	28.029	13.29	39.558
12/17/2005	8:00	17.033	25.123	25.021	28.06	13.304	39.578
12/17/2005	12:00	17.06	25.145	25.044	28.093	13.321	39.6
12/17/2005	16:00	17.072	25.15	25.05	28.08	13.321	39.61
12/17/2005	20:00	17.089	25.171	25.071	28.108	13.333	39.624
12/18/2005	0:00	17.115	25.204	25.105	28.146	13.354	39.647
12/18/2005	4:00	17.137	25.223	25.122	28.166	13.363	39.661
12/18/2005	8:00	17.158	25.245	25.143	28.193	13.375	39.678
12/18/2005	12:00	17.18	25.267	25.169	28.217	13.392	39.695
12/18/2005	16:00	17.191	25.265	25.165	28.193	13.385	39.696
12/18/2005	20:00	17.191	25.271	25.171	28.19	13.382	39.695
12/19/2005	0:00	17.194	25.276	25.175	28.186	13.382	39.693
12/19/2005	4:00	17.195	25.282	25.182	28.191	13.385	39.691
12/19/2005	8:00	17.189	25.271	25.171	28.177	13.375	39.682
12/19/2005	12:00	17.185	25.271	25.171	28.175	13.378	39.675
12/19/2005	16:00	17.163	25.235	25.134	28.104	13.347	39.648
12/19/2005	20:00	17.141	25.223	25.122	28.091	13.33	39.628
12/20/2005	0:00	17.122	25.204	25.105	28.062	13.316	39.608
12/20/2005	4:00	17.108	25.195	25.095	28.051	13.309	39.593
12/20/2005	8:00	17.093	25.184	25.083	28.042	13.304	39.58
12/20/2005	12:00	17.084	25.178	25.078	28.042	13.304	39.569
12/20/2005	16:00	17.074	25.161	25.064	28.016	13.3	39.56
12/20/2005	20:00	17.067	25.156	25.056	28.018	13.297	39.553
12/21/2005	0:00	17.063	25.152	25.052	28.016	13.302	39.549
12/21/2005	4:00	17.058	25.139	25.04	27.996	13.295	39.543
12/21/2005	8:00	17.044	25.125	25.025	27.98	13.288	39.532

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
12/21/2005	12:00	17.039	25.128	25.031	27.994	13.297	39.53
12/21/2005	16:00	17.035	25.11	25.011	27.965	13.29	39.521
12/21/2005	20:00	17.028	25.104	25.006	27.96	13.29	39.516
12/22/2005	0:00	17.019	25.089	24.992	27.943	13.286	39.507
12/22/2005	4:00	17.004	25.067	24.968	27.909	13.274	39.492
12/22/2005	8:00	16.98	25.036	24.937	27.87	13.252	39.47
12/22/2005	12:00	16.959	25.019	24.918	27.854	13.243	39.451
12/22/2005	16:00	16.932	24.984	24.885	27.797	13.222	39.422
12/22/2005	20:00	16.911	24.964	24.865	27.785	13.205	39.402
12/23/2005	0:00	16.895	24.951	24.852	27.777	13.196	39.387
12/23/2005	4:00	16.876	24.934	24.836	27.761	13.184	39.374
12/23/2005	8:00	16.869	24.932	24.834	27.768	13.182	39.368
12/23/2005	12:00	16.867	24.93	24.83	27.779	13.182	39.368
12/23/2005	16:00	16.85	24.901	24.801	27.733	13.165	39.355
12/23/2005	20:00	16.843	24.901	24.801	27.743	13.163	39.353
12/24/2005	0:00	16.841	24.904	24.805	27.759	13.167	39.357
12/24/2005	4:00	16.837	24.903	24.803	27.757	13.172	39.357
12/24/2005	8:00	16.834	24.908	24.809	27.777	13.174	39.363
12/24/2005	12:00	16.85	24.936	24.838	27.835	13.2	39.385
12/24/2005	16:00	16.863	24.945	24.846	27.839	13.21	39.399
12/24/2005	20:00	16.874	24.964	24.867	27.868	13.222	39.42
12/25/2005	0:00	16.878	24.968	24.871	27.874	13.222	39.433
12/25/2005	4:00	16.874	24.969	24.873	27.872	13.217	39.438
12/25/2005	8:00	16.869	24.973	24.875	27.874	13.212	39.442
12/25/2005	12:00	16.869	24.986	24.889	27.894	13.217	39.45
12/25/2005	16:00	16.858	24.975	24.877	27.87	13.205	39.444
12/25/2005	20:00	16.854	24.982	24.885	27.881	13.205	39.448
12/26/2005	0:00	16.848	24.98	24.883	27.883	13.2	39.45
12/26/2005	4:00	16.834	24.966	24.869	27.868	13.191	39.44
12/26/2005	8:00	16.815	24.951	24.856	27.839	13.174	39.429
12/26/2005	12:00	16.806	24.947	24.852	27.843	13.17	39.422
12/26/2005	16:00	16.78	24.92	24.823	27.792	13.144	39.402
12/26/2005	20:00	16.761	24.916	24.821	27.792	13.137	39.392
12/27/2005	0:00	16.745	24.901	24.803	27.781	13.127	39.379
12/27/2005	4:00	16.721	24.873	24.778	27.75	13.108	39.361
12/27/2005	8:00	16.691	24.851	24.753	27.717	13.092	39.34
12/27/2005	12:00	16.674	24.833	24.737	27.704	13.082	39.324
12/27/2005	16:00	16.652	24.822	24.725	27.684	13.07	39.311
12/27/2005	20:00	16.664	24.857	24.762	27.759	13.106	39.328
12/28/2005	0:00	16.686	24.871	24.776	27.788	13.127	39.35
12/28/2005	4:00	16.695	24.881	24.784	27.808	13.137	39.367
12/28/2005	8:00	16.711	24.895	24.799	27.835	13.156	39.385
12/28/2005	12:00	16.73	24.908	24.811	27.857	13.172	39.403
12/28/2005	16:00	16.737	24.901	24.805	27.839	13.167	39.407
12/28/2005	20:00	16.743	24.914	24.819	27.857	13.179	39.418
12/29/2005	0:00	16.752	24.929	24.832	27.875	13.189	39.433
12/29/2005	4:00	16.754	24.923	24.827	27.872	13.186	39.434
12/29/2005	8:00	16.752	24.914	24.821	27.866	13.182	39.431
12/29/2005	12:00	16.754	24.916	24.821	27.87	13.186	39.431
12/29/2005	16:00	16.734	24.883	24.788	27.813	13.158	39.413
12/29/2005	20:00	16.712	24.871	24.776	27.795	13.144	39.396
12/30/2005	0:00	16.702	24.86	24.766	27.782	13.137	39.387
12/30/2005	4:00	16.691	24.862	24.768	27.804	13.137	39.379
12/30/2005	8:00	16.695	24.866	24.772	27.826	13.151	39.381

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
12/30/2005	12:00	16.708	24.879	24.784	27.844	13.167	39.39
12/30/2005	16:00	16.713	24.877	24.782	27.841	13.167	39.398
12/30/2005	20:00	16.725	24.892	24.797	27.868	13.184	39.409
12/31/2005	0:00	16.743	24.91	24.817	27.888	13.2	39.427
12/31/2005	4:00	16.758	24.916	24.821	27.908	13.21	39.44
12/31/2005	8:00	16.762	24.914	24.823	27.91	13.215	39.446
12/31/2005	12:00	16.771	24.921	24.828	27.919	13.224	39.453
12/31/2005	16:00	16.756	24.886	24.793	27.846	13.193	39.434
12/31/2005	20:00	16.741	24.879	24.786	27.848	13.184	39.422
1/1/2006	0:00	16.73	24.868	24.772	27.828	13.175	39.411
1/1/2006	4:00	16.712	24.844	24.751	27.798	13.156	39.392
1/1/2006	8:00	16.68	24.81	24.718	27.76	13.135	39.365
1/1/2006	12:00	16.654	24.786	24.692	27.733	13.12	39.34
1/1/2006	16:00	16.623	24.751	24.659	27.68	13.092	39.308
1/1/2006	20:00	16.606	24.749	24.657	27.698	13.094	39.296
1/2/2006	0:00	16.61	24.757	24.665	27.716	13.106	39.298
1/2/2006	4:00	16.634	24.803	24.71	27.798	13.149	39.328
1/2/2006	8:00	16.676	24.846	24.753	27.884	13.198	39.368
1/2/2006	12:00	16.728	24.879	24.786	27.93	13.239	39.409
1/2/2006	16:00	16.771	24.916	24.827	27.97	13.272	39.451
1/2/2006	20:00	16.813	24.943	24.852	28.023	13.302	39.49
1/3/2006	0:00	16.846	24.971	24.879	28.037	13.321	39.52
1/3/2006	4:00	16.867	24.979	24.887	28.032	13.324	39.536
1/3/2006	8:00	16.869	24.968	24.879	28.021	13.314	39.532
1/3/2006	12:00	16.863	24.955	24.862	27.997	13.305	39.523
1/3/2006	16:00	16.834	24.908	24.815	27.906	13.262	39.49
1/3/2006	20:00	16.809	24.908	24.817	27.908	13.25	39.47
1/4/2006	0:00	16.804	24.918	24.827	27.935	13.262	39.464
1/4/2006	4:00	16.837	24.973	24.883	28.03	13.309	39.494
1/4/2006	8:00	16.882	25.006	24.914	28.092	13.347	39.527
1/4/2006	12:00	16.92	25.038	24.945	28.13	13.376	39.56
1/4/2006	16:00	16.943	25.042	24.949	28.116	13.378	39.576
1/4/2006	20:00	16.965	25.067	24.974	28.15	13.394	39.597
1/5/2006	0:00	16.985	25.086	24.996	28.174	13.409	39.614
1/5/2006	4:00	17.009	25.103	25.013	28.187	13.42	39.63
1/5/2006	8:00	17.026	25.117	25.029	28.201	13.428	39.643
1/5/2006	12:00	17.043	25.13	25.041	28.221	13.435	39.654
1/5/2006	16:00	17.048	25.134	25.046	28.207	13.435	39.656
1/5/2006	20:00	17.057	25.147	25.058	28.221	13.439	39.662
1/6/2006	0:00	17.067	25.156	25.066	28.234	13.446	39.667
1/6/2006	4:00	17.076	25.164	25.072	28.239	13.451	39.671
1/6/2006	8:00	17.076	25.154	25.064	28.219	13.442	39.667
1/6/2006	12:00	17.07	25.147	25.058	28.205	13.435	39.658
1/6/2006	16:00	17.037	25.091	25.002	28.106	13.387	39.621
1/6/2006	20:00	17.002	25.075	24.984	28.079	13.364	39.593
1/7/2006	0:00	16.972	25.049	24.957	28.053	13.342	39.564
1/7/2006	4:00	16.948	25.032	24.942	28.039	13.333	39.541
1/7/2006	8:00	16.932	25.014	24.924	28.019	13.321	39.523
1/7/2006	12:00	16.913	24.992	24.903	27.999	13.312	39.507
1/7/2006	16:00	16.876	24.934	24.844	27.911	13.272	39.468
1/7/2006	20:00	16.837	24.908	24.821	27.875	13.251	39.438
1/8/2006	0:00	16.795	24.86	24.77	27.816	13.218	39.4
1/8/2006	4:00	16.75	24.82	24.73	27.769	13.192	39.361
1/8/2006	8:00	16.73	24.82	24.731	27.791	13.199	39.346

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
1/8/2006	12:00	16.738	24.847	24.759	27.858	13.229	39.359
1/8/2006	16:00	16.774	24.895	24.807	27.935	13.276	39.394
1/8/2006	20:00	16.845	24.971	24.883	28.061	13.352	39.462
1/9/2006	0:00	16.917	25.029	24.942	28.146	13.406	39.527
1/9/2006	4:00	16.971	25.064	24.974	28.186	13.442	39.579
1/9/2006	8:00	17.024	25.112	25.023	28.247	13.48	39.628
1/9/2006	12:00	17.089	25.169	25.082	28.32	13.517	39.682
1/9/2006	16:00	17.122	25.177	25.09	28.307	13.522	39.706
1/9/2006	20:00	17.144	25.197	25.109	28.312	13.529	39.724
1/10/2006	0:00	17.159	25.202	25.115	28.312	13.529	39.733
1/10/2006	4:00	17.154	25.195	25.107	28.288	13.518	39.722
1/10/2006	8:00	17.139	25.165	25.08	28.23	13.492	39.698
1/10/2006	12:00	17.126	25.164	25.076	28.232	13.485	39.684
1/10/2006	16:00	17.093	25.116	25.027	28.144	13.442	39.641
1/10/2006	20:00	17.061	25.097	25.01	28.124	13.425	39.614
1/11/2006	0:00	17.041	25.084	24.996	28.106	13.411	39.59
1/11/2006	4:00	17.011	25.047	24.959	28.064	13.39	39.558
1/11/2006	8:00	16.98	25.019	24.932	28.026	13.369	39.529
1/11/2006	12:00	16.965	25.012	24.926	28.026	13.369	39.512
1/11/2006	16:00	16.945	24.988	24.901	27.991	13.352	39.49
1/11/2006	20:00	16.934	24.981	24.893	27.991	13.355	39.481
1/12/2006	0:00	16.928	24.977	24.891	27.991	13.355	39.479
1/12/2006	4:00	16.915	24.949	24.864	27.964	13.343	39.464
1/12/2006	8:00	16.893	24.925	24.837	27.929	13.331	39.444
1/12/2006	12:00	16.883	24.921	24.835	27.933	13.333	39.436
1/12/2006	16:00	16.873	24.916	24.829	27.92	13.331	39.429
1/12/2006	20:00	16.899	24.964	24.879	28.013	13.376	39.455
1/13/2006	0:00	16.946	25.003	24.916	28.082	13.421	39.496
1/13/2006	4:00	16.974	25.027	24.944	28.111	13.444	39.523
1/13/2006	8:00	17.024	25.067	24.982	28.175	13.485	39.564
1/13/2006	12:00	17.072	25.112	25.027	28.234	13.527	39.608
1/13/2006	16:00	17.104	25.128	25.045	28.239	13.539	39.634
1/13/2006	20:00	17.131	25.152	25.068	28.259	13.553	39.656
1/14/2006	0:00	17.156	25.169	25.084	28.272	13.567	39.675
1/14/2006	4:00	17.167	25.173	25.088	28.268	13.565	39.68
1/14/2006	8:00	17.165	25.167	25.08	28.255	13.558	39.674
1/14/2006	12:00	17.165	25.16	25.074	28.239	13.553	39.667
1/14/2006	16:00	17.139	25.117	25.031	28.155	13.515	39.636
1/14/2006	20:00	17.107	25.09	25.004	28.119	13.489	39.602
1/15/2006	0:00	17.08	25.062	24.975	28.073	13.466	39.571
1/15/2006	4:00	17.046	25.029	24.942	28.026	13.44	39.536
1/15/2006	8:00	17.002	24.99	24.905	27.98	13.411	39.497
1/15/2006	12:00	16.978	24.973	24.887	27.971	13.404	39.472
1/15/2006	16:00	16.952	24.945	24.86	27.923	13.383	39.444
1/15/2006	20:00	16.935	24.936	24.85	27.929	13.385	39.429
1/16/2006	0:00	16.926	24.929	24.842	27.918	13.383	39.42
1/16/2006	4:00	16.924	24.927	24.842	27.934	13.388	39.422
1/16/2006	8:00	16.933	24.947	24.862	27.978	13.409	39.431
1/16/2006	12:00	16.967	24.984	24.899	28.042	13.451	39.464
1/16/2006	16:00	16.996	25.006	24.922	28.069	13.477	39.49
1/16/2006	20:00	17.035	25.043	24.959	28.131	13.515	39.527
1/17/2006	0:00	17.08	25.077	24.99	28.168	13.546	39.562
1/17/2006	4:00	17.109	25.093	25.01	28.182	13.563	39.589
1/17/2006	8:00	17.124	25.101	25.016	28.188	13.57	39.603

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
1/17/2006	12:00	17.133	25.099	25.014	28.175	13.57	39.604
1/17/2006	16:00	17.126	25.082	25	28.128	13.551	39.592
1/17/2006	20:00	17.124	25.091	25.008	28.151	13.556	39.59
1/18/2006	0:00	17.131	25.097	25.014	28.155	13.563	39.59
1/18/2006	4:00	17.133	25.095	25.012	28.146	13.565	39.588
1/18/2006	8:00	17.13	25.09	25.006	28.137	13.558	39.579
1/18/2006	12:00	17.131	25.093	25.01	28.146	13.565	39.577
1/18/2006	16:00	17.124	25.069	24.984	28.095	13.549	39.562
1/18/2006	20:00	17.109	25.062	24.979	28.086	13.539	39.549
1/19/2006	0:00	17.102	25.054	24.971	28.078	13.537	39.536
1/19/2006	4:00	17.089	25.034	24.951	28.049	13.525	39.521
1/19/2006	8:00	17.076	25.021	24.94	28.038	13.515	39.509
1/19/2006	12:00	17.083	25.053	24.973	28.089	13.542	39.516
1/19/2006	16:00	17.107	25.079	24.996	28.124	13.568	39.532
1/19/2006	20:00	17.144	25.123	25.043	28.202	13.605	39.568
1/20/2006	0:00	17.189	25.156	25.074	28.248	13.634	39.603
1/20/2006	4:00	17.217	25.175	25.093	28.253	13.643	39.628
1/20/2006	8:00	17.237	25.182	25.099	28.266	13.65	39.645
1/20/2006	12:00	17.25	25.191	25.109	28.271	13.657	39.654
1/20/2006	16:00	17.25	25.193	25.113	28.257	13.653	39.654
1/20/2006	20:00	17.27	25.228	25.146	28.319	13.674	39.673
1/21/2006	0:00	17.304	25.26	25.177	28.359	13.697	39.695
1/21/2006	4:00	17.335	25.287	25.207	28.388	13.716	39.719
1/21/2006	8:00	17.354	25.3	25.22	28.392	13.721	39.737
1/21/2006	12:00	17.38	25.328	25.245	28.43	13.738	39.754
1/21/2006	16:00	17.389	25.328	25.247	28.403	13.735	39.759
1/21/2006	20:00	17.394	25.336	25.253	28.406	13.735	39.761
1/22/2006	0:00	17.4	25.339	25.259	28.412	13.738	39.761
1/22/2006	4:00	17.409	25.356	25.274	28.426	13.747	39.767
1/22/2006	8:00	17.413	25.361	25.28	28.426	13.749	39.767
1/22/2006	12:00	17.424	25.374	25.294	28.439	13.754	39.772
1/22/2006	16:00	17.42	25.36	25.279	28.395	13.74	39.763
1/22/2006	20:00	17.426	25.376	25.296	28.421	13.752	39.765
1/23/2006	0:00	17.431	25.378	25.298	28.426	13.754	39.765
1/23/2006	4:00	17.43	25.376	25.292	28.414	13.752	39.761
1/23/2006	8:00	17.424	25.369	25.288	28.395	13.745	39.754
1/23/2006	12:00	17.424	25.371	25.29	28.401	13.747	39.748
1/23/2006	16:00	17.404	25.337	25.255	28.328	13.721	39.726
1/23/2006	20:00	17.383	25.323	25.243	28.308	13.707	39.708
1/24/2006	0:00	17.365	25.304	25.224	28.29	13.693	39.687
1/24/2006	4:00	17.352	25.299	25.218	28.288	13.69	39.675
1/24/2006	8:00	17.357	25.323	25.241	28.33	13.712	39.68
1/24/2006	12:00	17.387	25.356	25.277	28.392	13.747	39.702
1/24/2006	16:00	17.405	25.358	25.277	28.382	13.752	39.715
1/24/2006	20:00	17.428	25.393	25.315	28.424	13.775	39.741
1/25/2006	0:00	17.461	25.428	25.348	28.479	13.799	39.772
1/25/2006	4:00	17.485	25.445	25.364	28.497	13.811	39.793
1/25/2006	8:00	17.504	25.456	25.377	28.499	13.818	39.807
1/25/2006	12:00	17.526	25.483	25.403	28.534	13.837	39.826
1/25/2006	16:00	17.527	25.465	25.385	28.488	13.818	39.822
1/25/2006	20:00	17.52	25.454	25.374	28.455	13.806	39.813
1/26/2006	0:00	17.511	25.45	25.37	28.446	13.799	39.802
1/26/2006	4:00	17.494	25.435	25.358	28.426	13.787	39.783
1/26/2006	8:00	17.48	25.422	25.344	28.406	13.778	39.765

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
1/26/2006	12:00	17.476	25.421	25.341	28.404	13.78	39.756
1/26/2006	16:00	17.455	25.387	25.307	28.344	13.759	39.732
1/26/2006	20:00	17.437	25.38	25.304	28.335	13.752	39.713
1/27/2006	0:00	17.433	25.382	25.302	28.346	13.754	39.708
1/27/2006	4:00	17.428	25.374	25.298	28.342	13.754	39.7
1/27/2006	8:00	17.428	25.378	25.298	28.351	13.761	39.698
1/27/2006	12:00	17.435	25.384	25.307	28.359	13.771	39.702
1/27/2006	16:00	17.422	25.345	25.267	28.304	13.752	39.687
1/27/2006	20:00	17.413	25.678	25.597	28.302	13.752	39.682
1/28/2006	0:00	17.411	25.591	25.512	28.304	13.754	39.678
1/28/2006	4:00	17.398	25.517	25.438	28.271	13.738	39.662
1/28/2006	8:00	17.348	25.434	25.354	28.209	13.691	39.617
1/28/2006	12:00	17.32	25.395	25.317	28.153	13.665	39.671
1/28/2006	16:00	17.282	25.454	25.376	29.124	13.599	39.58
1/28/2006	20:00	17.237	25.378	25.298	29.008	13.785	39.553
1/29/2006	0:00	17.213	25.352	25.274	28.838	13.636	39.538
1/29/2006	4:00	17.204	25.343	25.263	28.738	13.582	39.538
1/29/2006	8:00	17.193	25.334	25.257	28.667	13.547	39.545
1/29/2006	12:00	17.194	25.768	25.687	28.632	13.495	39.568
1/29/2006	16:00	17.18	25.563	25.496	28.565	13.497	39.577
1/29/2006	20:00	17.184	25.827	25.751	28.588	13.502	39.603
1/30/2006	0:00	17.189	25.672	25.595	28.572	13.502	39.627
1/30/2006	4:00	17.189	25.602	25.525	28.568	13.492	39.645
1/30/2006	8:00	17.185	25.565	25.491	28.565	13.487	39.66
1/30/2006	12:00	17.2	25.552	25.477	28.588	13.502	39.682
1/30/2006	16:00	17.209	25.646	25.57	28.564	13.492	39.697
1/30/2006	20:00	17.205	25.615	25.539	28.623	13.487	39.704
1/31/2006	0:00	17.206	25.591	25.514	28.592	13.48	39.708
1/31/2006	4:00	17.194	25.559	25.483	28.55	13.464	39.704
1/31/2006	8:00	17.169	25.519	25.442	28.499	13.438	39.686
1/31/2006	12:00	17.146	25.528	25.448	28.466	13.426	39.669
1/31/2006	16:00	17.117	25.691	25.611	28.424	13.473	39.641
1/31/2006	20:00	17.094	26.434	26.355	28.422	13.426	39.628
2/1/2006	0:00	17.089	26.172	26.096	28.433	13.409	39.627
2/1/2006	4:00	17.106	26.044	25.969	28.468	13.421	39.641
2/1/2006	8:00	17.107	25.948	25.872	28.459	13.417	39.651
2/1/2006	12:00	17.113	25.883	25.808	28.457	13.421	39.658
2/1/2006	16:00	17.109	25.807	25.732	28.409	13.405	39.654
2/1/2006	20:00	17.097	25.759	25.683	28.4	13.393	39.649
2/2/2006	0:00	17.087	25.711	25.638	28.382	13.386	39.639
2/2/2006	4:00	17.076	25.672	25.598	28.355	13.376	39.632
2/2/2006	8:00	17.058	25.624	25.551	28.329	13.36	39.615
2/2/2006	12:00	17.043	25.587	25.514	28.311	13.353	39.603
2/2/2006	16:00	17.035	25.565	25.491	28.3	13.348	39.595
2/2/2006	20:00	17.033	25.558	25.483	28.327	13.355	39.599
2/3/2006	0:00	17.047	25.554	25.479	28.355	13.372	39.61
2/3/2006	4:00	17.069	25.561	25.487	28.387	13.391	39.63
2/3/2006	8:00	17.093	25.578	25.504	28.435	13.417	39.658
2/3/2006	12:00	17.134	25.6	25.528	28.488	13.45	39.693
2/3/2006	16:00	17.159	25.6	25.526	28.489	13.461	39.715
2/3/2006	20:00	17.184	25.613	25.541	28.52	13.478	39.739
2/4/2006	0:00	17.209	25.626	25.557	28.552	13.497	39.763
2/4/2006	4:00	17.237	25.637	25.563	28.57	13.513	39.783
2/4/2006	8:00	17.259	25.645	25.572	28.59	13.525	39.802

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
2/4/2006	12:00	17.274	25.646	25.572	28.592	13.532	39.813
2/4/2006	16:00	17.276	25.62	25.547	28.548	13.516	39.807
2/4/2006	20:00	17.27	25.609	25.537	28.537	13.504	39.8
2/5/2006	0:00	17.258	25.589	25.514	28.515	13.492	39.787
2/5/2006	4:00	17.243	25.561	25.489	28.486	13.478	39.769
2/5/2006	8:00	17.228	25.547	25.473	28.469	13.466	39.752
2/5/2006	12:00	17.228	25.548	25.475	28.486	13.471	39.748
2/5/2006	16:00	17.222	25.534	25.459	28.462	13.466	39.743
2/5/2006	20:00	17.237	25.556	25.485	28.513	13.488	39.757
2/6/2006	0:00	17.261	25.578	25.506	28.566	13.514	39.778
2/6/2006	4:00	17.287	25.587	25.514	28.582	13.53	39.796
2/6/2006	8:00	17.308	25.602	25.531	28.602	13.547	39.817
2/6/2006	12:00	17.339	25.63	25.559	28.648	13.57	39.844
2/6/2006	16:00	17.354	25.628	25.555	28.63	13.57	39.855
2/6/2006	20:00	17.367	25.635	25.563	28.639	13.578	39.866
2/7/2006	0:00	17.374	25.633	25.561	28.641	13.578	39.87
2/7/2006	4:00	17.378	25.632	25.559	28.641	13.58	39.872
2/7/2006	8:00	17.383	25.633	25.561	28.641	13.582	39.874
2/7/2006	12:00	17.396	25.643	25.572	28.659	13.589	39.881
2/7/2006	16:00	17.391	25.615	25.543	28.613	13.573	39.868
2/7/2006	20:00	17.378	25.602	25.53	28.593	13.561	39.857
2/8/2006	0:00	17.365	25.587	25.518	28.575	13.549	39.844
2/8/2006	4:00	17.356	25.581	25.512	28.577	13.547	39.835
2/8/2006	8:00	17.363	25.598	25.528	28.61	13.566	39.84
2/8/2006	12:00	17.389	25.626	25.555	28.657	13.592	39.859
2/8/2006	16:00	17.406	25.62	25.549	28.648	13.596	39.868
2/8/2006	20:00	17.415	25.633	25.561	28.659	13.606	39.881
2/9/2006	0:00	17.433	25.646	25.576	28.688	13.62	39.898
2/9/2006	4:00	17.439	25.637	25.565	28.673	13.615	39.899
2/9/2006	8:00	17.422	25.602	25.531	28.611	13.592	39.881
2/9/2006	12:00	17.402	25.576	25.508	28.577	13.573	39.861
2/9/2006	16:00	17.354	25.519	25.448	28.478	13.526	39.815
2/9/2006	20:00	17.33	25.517	25.448	28.493	13.521	39.793
2/10/2006	0:00	17.335	25.532	25.463	28.538	13.54	39.794
2/10/2006	4:00	17.341	25.528	25.459	28.546	13.545	39.796
2/10/2006	8:00	17.345	25.532	25.463	28.553	13.554	39.8
2/10/2006	12:00	17.361	25.543	25.473	28.571	13.568	39.811
2/10/2006	16:00	17.359	25.526	25.458	28.544	13.561	39.809
2/10/2006	20:00	17.37	25.545	25.475	28.575	13.578	39.82
2/11/2006	0:00	17.387	25.559	25.489	28.6	13.594	39.835
2/11/2006	4:00	17.396	25.552	25.483	28.595	13.596	39.84
2/11/2006	8:00	17.394	25.552	25.483	28.593	13.599	39.84
2/11/2006	12:00	17.415	25.578	25.508	28.635	13.622	39.857
2/11/2006	16:00	17.43	25.576	25.508	28.633	13.625	39.864
2/11/2006	20:00	17.437	25.58	25.51	28.633	13.632	39.87
2/12/2006	0:00	17.441	25.571	25.5	28.613	13.627	39.87
2/12/2006	4:00	17.424	25.539	25.469	28.569	13.604	39.853
2/12/2006	8:00	17.393	25.511	25.444	28.522	13.578	39.826
2/12/2006	12:00	17.398	25.547	25.477	28.589	13.606	39.831
2/12/2006	16:00	17.424	25.565	25.496	28.626	13.627	39.844
2/12/2006	20:00	17.443	25.584	25.516	28.655	13.648	39.863
2/13/2006	0:00	17.457	25.574	25.506	28.635	13.648	39.87
2/13/2006	4:00	17.448	25.548	25.481	28.595	13.629	39.863
2/13/2006	8:00	17.417	25.508	25.44	28.527	13.599	39.833

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
2/13/2006	12:00	17.389	25.487	25.417	28.494	13.58	39.809
2/13/2006	16:00	17.359	25.447	25.378	28.436	13.549	39.772
2/13/2006	20:00	17.333	25.441	25.372	28.445	13.547	39.752
2/14/2006	0:00	17.337	25.449	25.38	28.467	13.559	39.748
2/14/2006	4:00	17.328	25.428	25.361	28.438	13.549	39.739
2/14/2006	8:00	17.306	25.404	25.337	28.412	13.535	39.722
2/14/2006	12:00	17.3	25.397	25.327	28.407	13.538	39.713
2/14/2006	16:00	17.282	25.367	25.3	28.36	13.519	39.695
2/14/2006	20:00	17.269	25.371	25.304	28.376	13.523	39.687
2/15/2006	0:00	17.296	25.415	25.349	28.46	13.568	39.711
2/15/2006	4:00	17.328	25.43	25.364	28.491	13.59	39.737
2/15/2006	8:00	17.341	25.426	25.361	28.487	13.597	39.748
2/15/2006	12:00	17.356	25.437	25.372	28.505	13.611	39.763
2/15/2006	16:00	17.354	25.423	25.357	28.467	13.601	39.759
2/15/2006	20:00	17.348	25.436	25.37	28.467	13.601	39.754
2/16/2006	0:00	17.354	25.432	25.364	28.471	13.609	39.754
2/16/2006	4:00	17.348	25.406	25.339	28.438	13.594	39.745
2/16/2006	8:00	17.335	25.397	25.333	28.432	13.587	39.732
2/16/2006	12:00	17.35	25.436	25.372	28.496	13.62	39.748
2/16/2006	16:00	17.393	25.484	25.417	28.576	13.663	39.781
2/16/2006	20:00	17.461	25.563	25.499	28.702	13.724	39.842
2/17/2006	0:00	17.535	25.622	25.559	28.786	13.774	39.905
2/17/2006	4:00	17.596	25.661	25.594	28.828	13.802	39.96
2/17/2006	8:00	17.628	25.696	25.631	28.844	13.819	39.994
2/17/2006	12:00	17.678	25.748	25.683	28.914	13.85	40.034
2/17/2006	16:00	17.7	25.744	25.679	28.877	13.842	40.047
2/17/2006	20:00	17.711	25.759	25.695	28.883	13.847	40.053
2/18/2006	0:00	17.729	25.77	25.705	28.892	13.857	40.054
2/18/2006	4:00	17.737	25.781	25.719	28.89	13.862	40.054
2/18/2006	8:00	17.746	25.789	25.722	28.892	13.862	40.053
2/18/2006	12:00	17.752	25.805	25.74	28.897	13.868	40.054
2/18/2006	16:00	17.739	25.778	25.713	28.839	13.84	40.036
2/18/2006	20:00	17.718	25.757	25.691	28.806	13.821	40.01
2/19/2006	0:00	17.705	25.748	25.684	28.788	13.814	39.988
2/19/2006	4:00	17.694	25.726	25.662	28.759	13.805	39.966
2/19/2006	8:00	17.672	25.704	25.639	28.722	13.786	39.942
2/19/2006	12:00	17.652	25.702	25.637	28.715	13.781	39.927
2/19/2006	16:00	17.624	25.659	25.594	28.651	13.753	39.898
2/19/2006	20:00	17.596	25.632	25.569	28.625	13.736	39.868
2/20/2006	0:00	17.578	25.617	25.553	28.614	13.731	39.848
2/20/2006	4:00	17.561	25.595	25.53	28.583	13.722	39.826
2/20/2006	8:00	17.541	25.571	25.506	28.554	13.71	39.805
2/20/2006	12:00	17.522	25.558	25.495	28.542	13.706	39.793
2/20/2006	16:00	17.498	25.523	25.46	28.492	13.682	39.77
2/20/2006	20:00	17.478	25.511	25.448	28.483	13.675	39.754
2/21/2006	0:00	17.476	25.517	25.454	28.514	13.687	39.752
2/21/2006	4:00	17.481	25.513	25.45	28.518	13.699	39.752
2/21/2006	8:00	17.481	25.504	25.442	28.505	13.699	39.75
2/21/2006	12:00	17.48	25.498	25.436	28.501	13.699	39.752
2/21/2006	16:00	17.463	25.462	25.397	28.439	13.677	39.732
2/21/2006	20:00	17.446	25.46	25.397	28.439	13.675	39.723
2/22/2006	0:00	17.448	25.474	25.411	28.476	13.691	39.724
2/22/2006	4:00	17.457	25.473	25.407	28.487	13.701	39.726
2/22/2006	8:00	17.467	25.478	25.417	28.498	13.715	39.734



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
2/22/2006	12:00	17.48	25.486	25.421	28.512	13.727	39.745
2/22/2006	16:00	17.478	25.463	25.401	28.463	13.715	39.735
2/22/2006	20:00	17.481	25.484	25.425	28.496	13.732	39.743
2/23/2006	0:00	17.502	25.508	25.446	28.543	13.755	39.759
2/23/2006	4:00	17.52	25.51	25.448	28.554	13.767	39.77
2/23/2006	8:00	17.541	25.541	25.479	28.591	13.791	39.791
2/23/2006	12:00	17.578	25.576	25.514	28.647	13.824	39.819
2/23/2006	16:00	17.596	25.574	25.512	28.629	13.829	39.831
2/23/2006	20:00	17.605	25.58	25.518	28.618	13.831	39.839
2/24/2006	0:00	17.615	25.585	25.524	28.629	13.836	39.842
2/24/2006	4:00	17.609	25.571	25.508	28.602	13.826	39.833
2/24/2006	8:00	17.6	25.554	25.493	28.578	13.819	39.817
2/24/2006	12:00	17.592	25.539	25.479	28.552	13.81	39.802
2/24/2006	16:00	17.568	25.515	25.454	28.507	13.788	39.776
2/24/2006	20:00	17.559	25.523	25.462	28.521	13.793	39.767
2/25/2006	0:00	17.585	25.571	25.51	28.598	13.831	39.787
2/25/2006	4:00	17.626	25.613	25.555	28.684	13.869	39.82
2/25/2006	8:00	17.676	25.661	25.6	28.746	13.904	39.863
2/25/2006	12:00	17.728	25.707	25.647	28.806	13.935	39.909
2/25/2006	16:00	17.753	25.713	25.652	28.793	13.937	39.931
2/25/2006	20:00	17.77	25.73	25.668	28.797	13.947	39.948
2/26/2006	0:00	17.794	25.755	25.695	28.824	13.961	39.968
2/26/2006	4:00	17.805	25.759	25.697	28.828	13.961	39.974
2/26/2006	8:00	17.807	25.755	25.695	28.811	13.958	39.97
2/26/2006	12:00	17.809	25.75	25.689	28.791	13.956	39.964
2/26/2006	16:00	17.783	25.702	25.641	28.7	13.916	39.931
2/26/2006	20:00	17.739	25.665	25.604	28.642	13.885	39.891
2/27/2006	0:00	17.707	25.632	25.569	28.594	13.859	39.852
2/27/2006	4:00	17.663	25.585	25.526	28.536	13.829	39.808
2/27/2006	8:00	17.622	25.556	25.493	28.501	13.81	39.769
2/27/2006	12:00	17.605	25.547	25.485	28.494	13.805	39.749
2/27/2006	16:00	17.581	25.513	25.452	28.454	13.789	39.722
2/27/2006	20:00	17.568	25.521	25.462	28.472	13.796	39.714
2/28/2006	0:00	17.576	25.521	25.462	28.49	13.808	39.717
2/28/2006	4:00	17.578	25.519	25.458	28.492	13.812	39.721
2/28/2006	8:00	17.57	25.515	25.454	28.492	13.815	39.721
2/28/2006	12:00	17.58	25.515	25.456	28.494	13.824	39.725
2/28/2006	16:00	17.57	25.491	25.431	28.454	13.812	39.715
2/28/2006	20:00	17.554	25.476	25.417	28.439	13.805	39.701
3/1/2006	0:00	17.552	25.476	25.417	28.437	13.81	39.697
3/1/2006	4:00	17.539	25.452	25.39	28.408	13.798	39.682
3/1/2006	8:00	17.52	25.436	25.376	28.388	13.786	39.666
3/1/2006	12:00	17.526	25.456	25.396	28.423	13.805	39.669
3/1/2006	16:00	17.537	25.469	25.411	28.45	13.822	39.682
3/1/2006	20:00	17.572	25.528	25.468	28.545	13.864	39.715
3/2/2006	0:00	17.628	25.578	25.522	28.627	13.916	39.763
3/2/2006	4:00	17.674	25.606	25.547	28.66	13.942	39.806
3/2/2006	8:00	17.707	25.634	25.575	28.694	13.963	39.839
3/2/2006	12:00	17.753	25.682	25.623	28.751	13.997	39.878
3/2/2006	16:00	17.783	25.694	25.637	28.742	14.001	39.9
3/2/2006	20:00	17.798	25.711	25.652	28.762	14.011	39.916

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
3/3/2006	0:00	17.824	25.739	25.682	28.798	14.03	39.933
3/3/2006	4:00	17.853	25.767	25.707	28.826	14.044	39.955
3/3/2006	8:00	17.87	25.783	25.724	28.842	14.051	39.968
3/3/2006	12:00	17.892	25.802	25.742	28.853	14.06	39.981
3/3/2006	16:00	17.894	25.787	25.728	28.811	14.049	39.977
3/3/2006	20:00	17.879	25.776	25.719	28.787	14.034	39.962
3/4/2006	0:00	17.872	25.772	25.713	28.778	14.03	39.95
3/4/2006	4:00	17.872	25.772	25.715	28.773	14.032	39.942
3/4/2006	8:00	17.861	25.763	25.703	28.782	14.023	39.931
3/4/2006	12:00	17.852	25.754	25.699	28.751	14.015	39.916
3/4/2006	16:00	17.835	25.72	25.662	28.694	13.992	39.896
3/4/2006	20:00	17.809	25.7	25.645	28.663	13.968	39.872
3/5/2006	0:00	17.792	25.693	25.635	28.661	13.961	39.856
3/5/2006	4:00	17.77	25.658	25.6	28.607	13.94	39.83
3/5/2006	8:00	17.753	25.665	25.608	28.632	13.937	39.819
3/5/2006	12:00	17.761	25.685	25.629	28.665	13.952	39.824
3/5/2006	16:00	17.778	25.698	25.643	28.678	13.961	39.837
3/5/2006	20:00	17.798	25.722	25.664	28.718	13.975	39.857
3/6/2006	0:00	17.816	25.739	25.682	28.747	13.989	39.878
3/6/2006	4:00	17.824	25.731	25.674	28.725	13.985	39.883
3/6/2006	8:00	17.835	25.754	25.697	28.753	13.997	39.896
3/6/2006	12:00	17.853	25.771	25.715	28.776	14.011	39.911
3/6/2006	16:00	17.859	25.759	25.701	28.742	14.004	39.911
3/6/2006	20:00	17.855	25.761	25.707	28.738	13.999	39.911
3/7/2006	0:00	17.852	25.758	25.699	28.736	13.997	39.907
3/7/2006	4:00	17.842	25.739	25.682	28.707	13.985	39.894
3/7/2006	8:00	17.824	25.709	25.651	28.663	13.966	39.872
3/7/2006	12:00	17.787	25.665	25.612	28.578	13.933	39.835
3/7/2006	16:00	17.744	25.619	25.561	28.512	13.897	39.789
3/7/2006	20:00	17.715	25.615	25.559	28.512	13.888	39.763
3/8/2006	0:00	17.702	25.608	25.551	28.526	13.886	39.75
3/8/2006	4:00	17.681	25.573	25.515	28.503	13.865	39.728
3/8/2006	8:00	17.648	25.541	25.485	28.439	13.846	39.701
3/8/2006	12:00	17.622	25.51	25.452	28.402	13.827	39.673
3/8/2006	16:00	17.583	25.469	25.413	28.333	13.793	39.64
3/8/2006	20:00	17.581	25.506	25.448	28.415	13.813	39.645
3/9/2006	0:00	17.598	25.515	25.456	28.455	13.824	39.656
3/9/2006	4:00	17.587	25.489	25.433	28.399	13.813	39.653
3/9/2006	8:00	17.585	25.486	25.427	28.419	13.813	39.653
3/9/2006	12:00	17.585	25.489	25.435	28.415	13.815	39.658
3/9/2006	16:00	17.572	25.471	25.415	28.382	13.803	39.649
3/9/2006	20:00	17.58	25.504	25.448	28.437	13.824	39.662
3/10/2006	0:00	17.606	25.53	25.476	28.492	13.848	39.686
3/10/2006	4:00	17.624	25.541	25.487	28.51	13.86	39.704
3/10/2006	8:00	17.646	25.563	25.509	28.543	13.883	39.726
3/10/2006	12:00	17.674	25.582	25.526	28.565	13.902	39.749
3/10/2006	16:00	17.674	25.56	25.507	28.521	13.888	39.747
3/10/2006	20:00	17.676	25.575	25.52	28.532	13.895	39.752
3/11/2006	0:00	17.689	25.58	25.526	28.546	13.905	39.758
3/11/2006	4:00	17.683	25.563	25.509	28.517	13.893	39.749
3/11/2006	8:00	17.694	25.597	25.544	28.57	13.917	39.761

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
3/11/2006	12:00	17.739	25.656	25.602	28.663	13.961	39.796
3/11/2006	16:00	17.77	25.667	25.614	28.67	13.976	39.819
3/11/2006	20:00	17.796	25.7	25.647	28.707	13.997	39.846
3/12/2006	0:00	17.831	25.724	25.668	28.738	14.016	39.872
3/12/2006	4:00	17.839	25.715	25.662	28.716	14.011	39.876
3/12/2006	8:00	17.831	25.693	25.635	28.672	13.994	39.863
3/12/2006	12:00	17.8	25.658	25.602	28.599	13.959	39.832
3/12/2006	16:00	17.757	25.599	25.544	28.512	13.919	39.785
3/12/2006	20:00	17.72	25.578	25.523	28.486	13.898	39.747
3/13/2006	0:00	17.715	25.591	25.538	28.526	13.905	39.736
3/13/2006	4:00	17.73	25.621	25.565	28.579	13.924	39.747
3/13/2006	8:00	17.763	25.671	25.618	28.654	13.964	39.776
3/13/2006	12:00	17.817	25.73	25.674	28.745	14.013	39.826
3/13/2006	16:00	17.865	25.759	25.705	28.78	14.037	39.868
3/13/2006	20:00	17.898	25.8	25.746	28.82	14.061	39.907
3/14/2006	0:00	17.941	25.839	25.785	28.871	14.087	39.946
3/14/2006	4:00	17.963	25.848	25.795	28.874	14.089	39.966
3/14/2006	8:00	17.983	25.874	25.82	28.894	14.098	39.986
3/14/2006	12:00	18.042	26.17	26.116	28.907	14.108	40.003
3/14/2006	16:00	18.038	26.209	26.155	28.911	14.091	39.996
3/14/2006	20:00	18.029	26.135	26.081	29.281	14.087	39.988
3/15/2006	0:00	18.042	26.114	26.061	29.25	14.103	39.994
3/15/2006	4:00	18.048	26.081	26.03	29.168	14.098	39.994
3/15/2006	8:00	18.042	26.055	26.003	29.102	14.094	39.986
3/15/2006	12:00		26.015	25.96		14.077	
3/15/2006	16:00		25.95	25.896		14.949	
3/15/2006	20:00	18.381	26.015	25.96	30.042	14.335	
3/16/2006	0:00	18.037	25.948	25.898	29.558	14.187	43.584
3/16/2006	4:00	17.935	25.917	25.865	29.312	14.13	42.53
3/16/2006	8:00	17.915	25.946	25.898	29.272	14.142	41.87
3/16/2006	12:00	18.932	25.998	25.946	29.281	14.175	42.159
3/16/2006	16:00	18.095	26.066	26.017	29.474		41.549
3/16/2006	20:00	18.082	26.681	26.556	29.344	14.232	41.213
3/17/2006	0:00	18.107	26.561	26.441	29.307	14.243	40.994
3/17/2006	4:00	18.128	26.499	26.378	29.276	14.248	40.837
3/17/2006	8:00	18.142	26.46	26.343	29.248	14.253	40.717
3/17/2006	12:00	18.166	26.958	26.897	29.248	14.264	40.636
3/17/2006	16:00	18.159	26.793	26.72	29.161	14.241	40.547
3/17/2006	20:00	18.139	26.667	26.584		14.222	40.5
3/18/2006	0:00	18.141	26.608	26.525	29.137	14.205	40.405
3/18/2006	4:00	18.133	26.547	26.466	29.099	14.196	40.343
3/18/2006	8:00	18.124	26.506	26.423	29.082	14.191	40.294
3/18/2006	12:00	18.122	26.479	26.396	29.059	14.193	40.256
3/18/2006	16:00	18.111	26.431	26.348	29.011	14.177	40.213
3/18/2006	20:00	18.092	26.395	26.311	28.989	14.165	40.173
3/19/2006	0:00	18.089	26.381	26.297	28.987	14.167	40.145
3/19/2006	4:00	18.079	26.349	26.264	28.962	14.158	40.117
3/19/2006	8:00	18.065	26.325	26.243	28.942	14.151	40.09
3/19/2006	12:00	18.059	26.31	26.225	28.929	14.148	40.07
3/19/2006	16:00	18.039	26.266	26.18	28.878	14.12	40.034
3/19/2006	20:00	18.024	26.249	26.164	28.874	14.096	40.012

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
3/20/2006	0:00	17.991	26.209	26.124	28.84	14.037	39.975
3/20/2006	4:00	17.961	26.177	26.093	28.801	13.945	39.942
3/20/2006	8:00	17.918	26.146	26.062	28.765	13.829	39.913
3/20/2006	12:00	17.85	26.085	25.999	28.69	13.685	39.865
3/20/2006	16:00	17.778	26.059	25.974	28.652	13.477	39.826
3/20/2006	20:00	17.719	26.046	25.964	28.663	13.052	39.8
3/21/2006	0:00	17.676	26.046	25.964	28.677	12.605	39.793
3/21/2006	4:00	17.635	26.046	25.964	28.69	12.26	39.791
3/21/2006	8:00	17.619	26.083	26.001	28.75	12.034	39.815
3/21/2006	12:00	17.617	26.124	26.042	28.807	11.866	39.85
3/21/2006	16:00	17.611	26.151	26.069	28.834	11.726	39.883
3/21/2006	20:00	17.596	26.162	26.081	28.847	11.561	39.905
3/22/2006	0:00	17.572	26.179	26.097	28.863	11.398	39.924
3/22/2006	4:00	17.55	26.19	26.108	28.878	11.268	39.94
3/22/2006	8:00	17.524	26.196	26.116	28.878	11.152	39.95
3/22/2006	12:00	17.493	26.201	26.118	28.878	11.065	39.955
3/22/2006	16:00	17.456	26.192	26.11	28.854	10.98	39.953
3/22/2006	20:00	17.415	26.188	26.106	28.845	10.911	39.95
3/23/2006	0:00	17.376	26.187	26.106	28.854	10.838	39.948
3/23/2006	4:00	17.336	26.177	26.095	28.843	10.763	39.942
3/23/2006	8:00	17.297	26.172	26.091	28.834	10.694	39.938
3/23/2006	12:00	17.261	26.172	26.089	28.838	10.64	39.937
3/23/2006	16:00	17.226	26.151	26.069	28.805	10.578	39.929
3/23/2006	20:00	17.184	26.14	26.06	28.794	10.463	39.922
3/24/2006	0:00	17.136	26.122	26.04	28.778	10.297	39.911
3/24/2006	4:00	17.075	26.092	26.011	28.745	10.179	39.894
3/24/2006	8:00	17.01	26.076	25.995	28.73	10.106	39.879
3/24/2006	12:00	16.96	26.068	25.986	28.73	10.066	39.874
3/24/2006	16:00	16.906	26.035	25.955	28.688	9.99	39.856
3/24/2006	20:00	16.847	26.022	25.941	28.681	9.834	39.848
3/25/2006	0:00	16.791	26.013	25.933	28.688	9.733	39.846
3/25/2006	4:00	16.732	25.991	25.91	28.674	9.666	39.839
3/25/2006	8:00	16.682	25.989	25.908	28.683	9.636	39.843
3/25/2006	12:00	16.647	25.981	25.902	28.685	9.624	39.848
3/25/2006	16:00	16.597	25.946	25.865	28.639	9.57	39.837
3/25/2006	20:00	16.536	25.917	25.836	28.601	9.471	39.824
3/26/2006	0:00	16.484	25.898	25.818	28.595	9.416	39.815
3/26/2006	4:00	16.427	25.856	25.776	28.555	9.376	39.795
3/26/2006	8:00	16.375	25.828	25.748	28.533	9.367	39.778
3/26/2006	12:00	16.327	25.787	25.707	28.486	9.36	39.758
3/26/2006	16:00	16.258	25.721	25.641	28.404	9.305	39.716
3/26/2006	20:00	16.199	25.698	25.618	28.391	9.272	39.695
3/27/2006	0:00	16.17	25.688	25.608	28.409	9.281	39.688
3/27/2006	4:00	16.133	25.636	25.554	28.369	9.265	39.67
3/27/2006	8:00	16.09	25.604	25.526	28.347	9.26	39.655
3/27/2006	12:00	16.073	25.608	25.528	28.378	9.289	39.66
3/27/2006	16:00	16.07	25.606	25.526	28.411	9.322	39.677
3/27/2006	20:00	16.081	25.624	25.546	28.457	9.371	39.703
3/28/2006	0:00	16.101	25.639	25.56	28.495	9.411	39.736
3/28/2006	4:00	16.107	25.628	25.552	28.495	9.433	39.754
3/28/2006	8:00	16.11	25.634	25.556	28.513	9.459	39.771

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
3/28/2006	12:00	16.123	25.641	25.563	28.53	9.497	39.793
3/28/2006	16:00	16.112	25.608	25.53	28.486	9.499	39.789
3/28/2006	20:00	16.085	25.584	25.507	28.462	9.506	39.78
3/29/2006	0:00	16.073	25.575	25.495	28.462	9.537	39.778
3/29/2006	4:00	16.053	25.547	25.468	28.435	9.551	39.765
3/29/2006	8:00	16.027	25.523	25.445	28.42	9.572	39.751
3/29/2006	12:00	16.009	25.499	25.419	28.391	9.591	39.741
3/29/2006	16:00	15.973	25.442	25.363	28.32	9.584	39.71
3/29/2006	20:00	15.925	25.401	25.324	28.282	9.591	39.681
3/30/2006	0:00	15.903	25.39	25.311	28.289	9.629	39.668
3/30/2006	4:00	15.877	25.342	25.266	28.241	9.638	39.646
3/30/2006	8:00	15.84	25.309	25.229	28.218	9.655	39.622
3/30/2006	12:00	15.816	25.273	25.194	28.183	9.669	39.603
3/30/2006	16:00	15.755	25.192	25.106	28.087	9.629	39.555
3/30/2006	20:00	15.705	25.162	25.085	28.083	9.577	39.524
3/31/2006	0:00	15.709	25.201	25.126	28.185	9.527	39.546
3/31/2006	4:00	15.718	25.208	25.135	28.216	9.475	39.572
3/31/2006	8:00	15.733	25.231	25.155	28.272	9.464	39.607
3/31/2006	12:00	15.751	25.255	25.18	28.309	9.464	39.646
3/31/2006	16:00	15.761	25.262	25.188	28.32	9.461	39.675
3/31/2006	20:00	15.761	25.272	25.198	28.345	9.471	39.697
4/1/2006	0:00	15.768	25.286	25.211	28.371	9.494	39.721
4/1/2006	4:00	15.774	25.283	25.207	28.367	9.511	39.734
4/1/2006	8:00	15.766	25.283	25.205	28.371	9.527	39.741
4/1/2006	12:00	15.764	25.272	25.196	28.355	9.549	39.743
4/1/2006	16:00	15.731	25.225	25.151	28.276	9.532	39.721
4/1/2006	20:00	15.685	25.183	25.108	28.223	9.52	39.69
4/2/2006	0:00	15.64	25.149	25.077	28.19	9.525	39.66
4/2/2006	4:00	15.542	25.042	24.993	28.231	9.208	33.22
4/2/2006	8:00	15.476	24.998	24.925	28.017	8.965	36.254
4/2/2006	12:00	15.415	24.987	24.914	28.013	8.856	37.422
4/2/2006	16:00	15.381	24.996	24.924	28.057	8.816	38.074
4/2/2006	20:00	15.365	25.005	24.937	28.092	8.797	38.487
4/3/2006	0:00	15.374	25.048	24.98	28.183	8.833	38.79
4/3/2006	4:00	15.4	25.087	25.017	28.247	8.868	39.017
4/3/2006	8:00	15.424	25.127	25.056	28.305	8.904	39.192
4/3/2006	12:00	15.446	25.153	25.085	28.338	8.937	39.328
4/3/2006	16:00	15.455	25.155	25.087	28.323	8.949	39.421
4/3/2006	20:00	15.439	25.15	25.081	28.305	8.953	39.48
4/4/2006	0:00	15.424	25.146	25.077	28.305	8.975	39.522
4/4/2006	4:00	15.402	25.127	25.06	28.276	8.982	39.544
4/4/2006	8:00	15.381	25.12	25.05	28.269	9.001	39.564
4/4/2006	12:00	15.366	25.103	25.036	28.252	9.024	39.575
4/4/2006	16:00	15.331	25.061	24.993	28.181	9.019	39.568
4/4/2006	20:00	15.289	25.024	24.956	28.139	9.027	39.553
4/5/2006	0:00	15.254	24.996	24.931	28.123	9.053	39.542
4/5/2006	4:00	15.222	24.963	24.896	28.09	9.074	39.528
4/5/2006	8:00	15.198	24.931	24.865	28.063	9.095	39.515
4/5/2006	12:00	15.168	24.889	24.824	28.017	9.109	39.496
4/5/2006	16:00	15.131	24.837	24.768	27.953	9.112	39.47
4/5/2006	20:00	15.089	24.796	24.727	27.913	9.123	39.446

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
4/6/2006	0:00	15.057	24.761	24.694	27.902	9.152	39.428
4/6/2006	4:00	15.028	24.715	24.647	27.857	9.164	39.402
4/6/2006	8:00	14.998	24.684	24.614	27.833	9.182	39.387
4/6/2006	12:00	14.982	24.65	24.585	27.822	9.208	39.376
4/6/2006	16:00	14.952	24.593	24.529	27.751	9.211	39.352
4/6/2006	20:00	14.919	24.562	24.499	27.74	9.23	39.334
4/7/2006	0:00	14.904	24.541	24.478	27.738	9.265	39.328
4/7/2006	4:00	14.896	24.521	24.455	27.74	9.301	39.326
4/7/2006	8:00	14.896	24.512	24.449	27.749	9.338	39.33
4/7/2006	12:00	14.928	24.549	24.488	27.84	9.423	39.367
4/7/2006	16:00	14.985	24.584	24.523	27.926	9.511	39.415
4/7/2006	20:00	15.078	24.684	24.624	28.094	9.648	39.504
4/8/2006	0:00	15.178	24.734	24.673	28.168	9.749	39.579
4/8/2006	4:00	15.258	24.77	24.71	28.216	9.813	39.64
4/8/2006	8:00	15.328	24.817	24.754	28.269	9.875	39.695
4/8/2006	12:00	15.38	24.831	24.768	28.267	9.901	39.725
4/8/2006	16:00	15.404	24.83	24.766	28.241	9.908	39.734
4/8/2006	20:00	15.409	24.82	24.758	28.207	9.906	39.727
4/9/2006	0:00	15.415	24.828	24.766	28.216	9.919	39.727
4/9/2006	4:00	15.415	24.813	24.752	28.192	9.919	39.712
4/9/2006	8:00	15.415	24.809	24.748	28.183	9.929	39.703
4/9/2006	12:00	15.419	24.8	24.737	28.165	9.936	39.693
4/9/2006	16:00	15.398	24.759	24.698	28.101	9.919	39.666
4/9/2006	20:00	15.372	24.739	24.676	28.068	9.915	39.642
4/10/2006	0:00	15.366	24.734	24.673	28.075	9.934	39.629
4/10/2006	4:00	15.356	24.709	24.649	28.052	9.941	39.614
4/10/2006	8:00	15.346	24.698	24.638	28.044	9.95	39.603
4/10/2006	12:00	15.35	24.687	24.628	28.035	9.972	39.598
4/10/2006	16:00	15.333	24.654	24.593	27.988	9.972	39.581
4/10/2006	20:00	15.318	24.639	24.579	27.97	9.979	39.566
4/11/2006	0:00	15.32	24.63	24.571	27.979	10.007	39.563
4/11/2006	4:00	15.306	24.599	24.538	27.937	10.005	39.546
4/11/2006	8:00	15.291	24.578	24.519	27.917	10.012	39.529
4/11/2006	12:00	15.289	24.567	24.507	27.913	10.028	39.522
4/11/2006	16:00	15.283	24.545	24.488	27.893	10.04	39.511
4/11/2006	20:00	15.278	24.552	24.496	27.913	10.071	39.513
4/12/2006	0:00	15.329	24.619	24.562	28.039	10.17	39.561
4/12/2006	4:00	15.389	24.647	24.589	28.094	10.239	39.601
4/12/2006	8:00	15.44	24.68	24.624	28.134	10.291	39.642
4/12/2006	12:00	15.504	24.717	24.661	28.187	10.349	39.686
4/12/2006	16:00	15.535	24.713	24.655	28.163	10.364	39.703
4/12/2006	20:00	15.542	24.706	24.649	28.139	10.366	39.701
4/13/2006	0:00	15.555	24.717	24.659	28.152	10.388	39.706
4/13/2006	4:00	15.557	24.7	24.643	28.121	10.383	39.695
4/13/2006	8:00	15.548	24.684	24.626	28.092	10.376	39.679
4/13/2006	12:00	15.535	24.658	24.601	28.044	10.359	39.658
4/13/2006	16:00	15.5	24.621	24.564	27.979	10.333	39.623
4/13/2006	20:00	15.47	24.599	24.542	27.962	10.331	39.596
4/14/2006	0:00	15.457	24.591	24.536	27.962	10.35	39.581
4/14/2006	4:00	15.439	24.545	24.492	27.908	10.338	39.553
4/14/2006	8:00	15.417	24.53	24.476	27.897	10.336	39.533
4/14/2006	12:00	15.418	24.538	24.484	27.913	10.364	39.533
4/14/2006	16:00	15.42	24.523	24.468	27.9	10.383	39.529
4/14/2006	20:00	15.417	24.513	24.461	27.902	10.404	39.526

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
4/15/2006	0:00	15.424	24.514	24.461	27.913	10.435	39.528
4/15/2006	4:00	15.424	24.489	24.437	27.882	10.437	39.52
4/15/2006	8:00	15.409	24.464	24.412	27.851	10.43	39.504
4/15/2006	12:00	15.396	24.44	24.389	27.811	10.425	39.487
4/15/2006	16:00	15.363	24.377	24.324	27.725	10.388	39.448
4/15/2006	20:00	15.306	24.353	24.303	27.696	10.366	39.409
4/16/2006	0:00	15.293	24.338	24.289	27.698	10.39	39.393
4/16/2006	4:00	15.302	24.345	24.297	27.738	10.428	39.398
4/16/2006	8:00	15.324	24.362	24.315	27.787	10.473	39.417
4/16/2006	12:00	15.37	24.401	24.352	27.849	10.534	39.452
4/16/2006	16:00	15.417	24.427	24.379	27.891	10.588	39.489
4/16/2006	20:00	15.456	24.453	24.406	27.935	10.638	39.52
4/17/2006	0:00	15.494	24.471	24.425	27.959	10.678	39.548
4/17/2006	4:00	15.524	24.478	24.434	27.962	10.699	39.564
4/17/2006	8:00	15.548	24.497	24.453	27.982	10.721	39.579
4/17/2006	12:00	15.574	24.51	24.462	27.99	10.744	39.592
4/17/2006	16:00	15.583	24.499	24.451	27.955	10.737	39.589
4/17/2006	20:00	15.574	24.492	24.445	27.937	10.732	39.579
4/18/2006	0:00	15.568	24.477	24.432	27.922	10.737	39.567
4/18/2006	4:00	15.555	24.451	24.404	27.875	10.723	39.544
4/18/2006	8:00	15.531	24.428	24.383	27.844	10.704	39.518
4/18/2006	12:00	15.53	24.442	24.397	27.866	10.723	39.511
4/18/2006	16:00	15.555	24.471	24.428	27.919	10.77	39.528
4/18/2006	20:00	15.589	24.504	24.459	27.973	10.82	39.555
4/19/2006	0:00	15.641	24.545	24.503	28.055	10.891	39.596
4/19/2006	4:00	15.683	24.563	24.521	28.061	10.921	39.623
4/19/2006	8:00	15.711	24.58	24.539	28.072	10.94	39.642
4/19/2006	12:00	15.737	24.59	24.546	28.07	10.957	39.651
4/19/2006	16:00	15.741	24.578	24.535	28.03	10.947	39.648
4/19/2006	20:00	15.731	24.576	24.537	28.017	10.945	39.638
4/20/2006	0:00	15.737	24.591	24.55	28.046	10.971	39.64
4/20/2006	4:00	15.75	24.599	24.558	28.056	10.99	39.642
4/20/2006	8:00	15.77	24.619	24.579	28.086	11.018	39.653
4/20/2006	12:00	15.794	24.627	24.587	28.085	11.035	39.661
4/20/2006	16:00	15.8	24.621	24.581	28.061	11.035	39.659
4/20/2006	20:00	15.802	24.634	24.595	28.068	11.049	39.662
4/21/2006	0:00	15.809	24.63	24.591	28.072	11.061	39.659
4/21/2006	4:00	15.809	24.63	24.593	28.061	11.068	39.653
4/21/2006	8:00	15.82	24.641	24.605	28.076	11.082	39.657
4/21/2006	12:00	15.833	24.647	24.613	28.081	11.096	39.661
4/21/2006	16:00	15.833	24.634	24.597	28.046	11.092	39.653
4/21/2006	20:00	15.826	24.632	24.597	28.035	11.094	39.644
4/22/2006	0:00	15.828	24.638	24.603	28.055	11.113	39.644
4/22/2006	4:00	15.831	24.634	24.601	27.988	11.125	39.638
4/22/2006	8:00	15.839	24.643	24.609	27.997	11.139	39.644
4/22/2006	12:00	15.853	24.651	24.616	28.065	11.155	39.648
4/22/2006	16:00	15.859	24.643	24.609	28.044	11.158	39.644
4/22/2006	20:00	15.853	24.638	24.605	28.028	11.16	39.638
4/23/2006	0:00	15.853	24.639	24.609	28.039	11.174	39.637
4/23/2006	4:00	15.857	24.638	24.605	28.039	11.186	39.635
4/23/2006	8:00	15.863	24.645	24.615	28.045	11.2	39.637
4/23/2006	12:00	15.868	24.641	24.609	28.032	11.207	39.635
4/23/2006	16:00	15.861	24.621	24.591	27.997	11.2	39.62
4/23/2006	20:00	15.853	24.619	24.591	27.988	11.21	39.613

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
4/24/2006	0:00	15.853	24.619	24.585	28.006	11.219	39.611
4/24/2006	4:00	15.84	24.599	24.57	27.99	11.219	39.596
4/24/2006	8:00	15.863	24.66	24.632	28.059	11.262	39.622
4/24/2006	12:00	15.852	24.608	24.578	27.997	11.231	39.6
4/24/2006	16:00	15.85	24.586	24.558	27.966	11.21	39.59
4/24/2006	20:00	15.839	24.586	24.558	27.959	11.198	39.583
4/25/2006	0:00	15.848	24.608	24.581	27.999	11.221	39.59
4/25/2006	4:00	15.865	24.621	24.595	28.026	11.243	39.6
4/25/2006	8:00	15.89	24.652	24.628	28.07	11.278	39.622
4/25/2006	12:00	15.929	24.684	24.657	28.11	11.314	39.651
4/25/2006	16:00	15.952	24.693	24.669	28.116	11.325	39.668
4/25/2006	20:00	15.964	24.702	24.677	28.114	11.332	39.675
4/26/2006	0:00	15.985	24.723	24.7	28.132	11.347	39.69
4/26/2006	4:00	15.994	24.725	24.702	28.123	11.349	39.69
4/26/2006	8:00	16.005	24.739	24.716	28.136	11.358	39.696
4/26/2006	12:00	16.02	24.752	24.729	28.143	11.368	39.703
4/26/2006	16:00	16.018	24.734	24.712	28.105	11.354	39.694
4/26/2006	20:00	15.998	24.719	24.698	28.07	11.337	39.675
4/27/2006	0:00	16	24.734	24.712	28.094	11.351	39.673
4/27/2006	4:00	15.998	24.728	24.708	28.081	11.351	39.666
4/27/2006	8:00	15.998	24.73	24.71	28.083	11.358	39.662
4/27/2006	12:00	16.009	24.736	24.714	28.081	11.368	39.664
4/27/2006	16:00	15.994	24.704	24.683	28.023	11.342	39.646
4/27/2006	20:00	15.968	24.686	24.667	28.001	11.33	39.624
4/28/2006	0:00	15.963	24.695	24.675	28.019	11.344	39.618
4/28/2006	4:00	15.961	24.684	24.665	28.001	11.347	39.611
4/28/2006	8:00	15.952	24.68	24.663	28.012	11.347	39.603
4/28/2006	12:00	15.937	24.656	24.64	27.986	11.325	39.585
4/28/2006	16:00	15.929	24.649	24.63	27.972	11.281	39.578
4/28/2006	20:00	15.905	24.632	24.613	27.952	11.238	39.563
4/29/2006	0:00	15.876	24.608	24.591	27.946	11.184	39.544
4/29/2006	4:00	15.818	24.58	24.562	27.899	11.04	39.517
4/29/2006	8:00	15.724	24.56	24.543	27.862	10.86	39.493
4/29/2006	12:00	15.62	24.553	24.537	27.848	10.711	39.478
4/29/2006	16:00	15.506	24.529	24.513	27.824	10.567	39.458
4/29/2006	20:00	15.391	24.504	24.486	27.795	10.404	39.436
4/30/2006	0:00	15.287	24.492	24.474	27.78	10.262	39.419
4/30/2006	4:00	15.191	24.473	24.457	27.751	10.142	39.404
4/30/2006	8:00	15.111	24.477	24.461	27.766	10.069	39.401
4/30/2006	12:00	15.056	24.49	24.475	27.789	10.026	39.41
4/30/2006	16:00	15.015	24.501	24.486	27.808	10.002	39.426
4/30/2006	20:00	14.98	24.51	24.494	27.824	9.995	39.437
5/1/2006	0:00	14.965	24.54	24.525	27.875	10.024	39.461
5/1/2006	4:00	14.958	24.554	24.539	27.888	10.043	39.484
5/1/2006	8:00	14.948	24.578	24.564	27.921	10.071	39.504
5/1/2006	12:00	14.954	24.599	24.585	27.946	10.102	39.53
5/1/2006	16:00	14.95	24.606	24.593	27.941	10.118	39.546
5/1/2006	20:00	14.934	24.61	24.597	27.939	10.132	39.552
5/2/2006	0:00	14.926	24.615	24.603	27.952	10.158	39.555
5/2/2006	4:00	14.911	24.604	24.593	27.921	10.163	39.552
5/2/2006	8:00	14.897	24.614	24.601	27.897	10.175	39.55
5/2/2006	12:00	14.889	24.61	24.595	27.921	10.196	39.55
5/2/2006	16:00	14.878	24.591	24.58	27.884	10.196	39.541
5/2/2006	20:00	14.847	24.575	24.562	27.864	10.201	39.526



TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/3/2006	0:00	14.828	24.567	24.554	27.864	10.222	39.515
5/3/2006	4:00	14.828	24.575	24.562	27.895	10.255	39.515
5/3/2006	8:00	14.832	24.597	24.589	27.928	10.291	39.526
5/3/2006	12:00	14.854	24.602	24.593	27.952	10.321	39.541
5/3/2006	16:00	14.852	24.601	24.591	27.952	10.295	39.543
5/3/2006	20:00	14.834	24.597	24.589	27.932	10.033	39.541
5/4/2006	0:00	14.802	24.617	24.609	27.957	9.797	39.548
5/4/2006	4:00	14.762	24.602	24.593	27.935	9.65	39.544
5/4/2006	8:00	14.726	24.638	24.628	27.979	9.587	39.561
5/4/2006	12:00	14.702	24.651	24.642	27.994	9.547	39.576
5/4/2006	16:00	14.665	24.634	24.626	27.957	9.499	39.574
5/4/2006	20:00	14.619	24.628	24.621	27.932	9.466	39.568
5/5/2006	0:00	14.584	24.639	24.63	27.959	9.469	39.57
5/5/2006	4:00	14.552	24.628	24.621	27.944	9.459	39.563
5/5/2006	8:00	14.528	24.638	24.63	27.952	9.471	39.567
5/5/2006	12:00	14.512	24.636	24.628	27.952	9.483	39.568
5/5/2006	16:00	14.48	24.615	24.609	27.913	9.476	39.561
5/5/2006	20:00	14.443	24.595	24.589	27.886	9.476	39.546
5/6/2006	0:00	14.414	24.593	24.586	27.89	9.492	39.541
5/6/2006	4:00	14.388	24.578	24.572	27.875	9.506	39.531
5/6/2006	8:00	14.369	24.573	24.568	27.877	9.528	39.528
5/6/2006	12:00	14.356	24.564	24.56	27.873	9.549	39.526
5/6/2006	16:00	14.338	24.541	24.541	27.846	9.558	39.517
5/6/2006	20:00	14.317	24.529	24.525	27.83	9.575	39.509
5/7/2006	0:00	14.304	24.523	24.521	27.839	9.601	39.507
5/7/2006	4:00	14.29	24.501	24.498	27.82	9.615	39.498
5/7/2006	8:00	14.282	24.497	24.496	27.824	9.639	39.496
5/7/2006	12:00	14.275	24.479	24.479	27.808	9.655	39.493
5/7/2006	16:00	14.262	24.455	24.453	27.784	9.662	39.484
5/7/2006	20:00	14.241	24.431	24.434	27.753	9.669	39.467
5/8/2006	0:00	14.227	24.41	24.41	27.744	9.683	39.456
5/8/2006	4:00	14.203	24.371	24.374	27.7	9.679	39.434
5/8/2006	8:00	14.188	24.37	24.372	27.708	9.7	39.426
5/8/2006	12:00	14.188	24.349	24.352	27.7	9.721	39.421
5/8/2006	16:00	14.171	24.32	24.323	27.664	9.73	39.406
5/8/2006	20:00	14.154	24.294	24.298	27.64	9.744	39.393
5/9/2006	0:00	14.151	24.307	24.309	27.682	9.784	39.402
5/9/2006	4:00	14.117	24.262	24.267	27.651	9.643	39.367
5/9/2006	8:00	14.093	24.244	24.249	27.631	9.402	39.356
5/9/2006	12:00	14.067	24.251	24.257	27.658	9.279	39.365
5/9/2006	16:00	14.036	24.242	24.247	27.651	9.215	39.371
5/9/2006	20:00	14.003	24.246	24.251	27.658	9.192	39.378
5/10/2006	0:00	13.982	24.253	24.259	27.676	9.194	39.389
5/10/2006	4:00	13.975	24.26	24.268	27.702	9.21	39.402
5/10/2006	8:00	13.977	24.279	24.286	27.729	9.237	39.421
5/10/2006	12:00	13.99	24.299	24.305	27.769	9.281	39.448
5/10/2006	16:00	13.986	24.273	24.28	27.733	9.288	39.448
5/10/2006	20:00	13.973	24.279	24.286	27.731	9.322	39.448
5/11/2006	0:00	13.979	24.288	24.296	27.757	9.373	39.46
5/11/2006	4:00	13.98	24.281	24.288	27.706	9.404	39.462
5/11/2006	8:00	13.99	24.286	24.294	27.693	9.444	39.469
5/11/2006	12:00	14.005	24.296	24.305	27.784	9.484	39.482
5/11/2006	16:00	14.008	24.279	24.288	27.76	9.51	39.48

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/11/2006	20:00	13.999	24.263	24.272	27.735	9.536	39.471
5/12/2006	0:00	13.997	24.259	24.268	27.74	9.574	39.467
5/12/2006	4:00	13.992	24.24	24.249	27.629	9.591	39.456
5/12/2006	8:00	13.993	24.236	24.247	27.655	9.624	39.454
5/12/2006	12:00	14.008	24.229	24.239	27.72	9.657	39.454
5/12/2006	16:00	13.993	24.198	24.208	27.675	9.666	39.44
5/12/2006	20:00	13.975	24.174	24.185	27.651	9.685	39.421
5/13/2006	0:00	13.969	24.168	24.179	27.655	9.723	39.412
5/13/2006	4:00	13.969	24.157	24.169	27.609	9.754	39.408
5/13/2006	8:00	13.984	24.166	24.179	27.618	9.799	39.415
5/13/2006	12:00	14.012	24.179	24.191	27.711	9.848	39.434
5/13/2006	16:00	14.032	24.17	24.183	27.706	9.879	39.441
5/13/2006	20:00	14.038	24.168	24.181	27.708	9.914	39.445
5/14/2006	0:00	14.066	24.19	24.202	27.753	9.973	39.463
5/14/2006	4:00	14.093	24.2	24.212	27.708	10.014	39.478
5/14/2006	8:00	14.121	24.214	24.23	27.715	10.051	39.493
5/14/2006	12:00	14.156	24.233	24.247	27.815	10.091	39.513
5/14/2006	16:00	14.179	24.235	24.247	27.815	10.118	39.524
5/14/2006	20:00	14.188	24.233	24.247	27.813	10.137	39.526
5/15/2006	0:00	14.208	24.248	24.261	27.837	10.172	39.537
5/15/2006	4:00	14.227	24.25	24.265	27.815	10.193	39.541
5/15/2006	8:00	14.243	24.259	24.275	27.795	10.217	39.548
5/15/2006	12:00	14.266	24.268	24.284	27.857	10.243	39.558
5/15/2006	16:00	14.275	24.263	24.278	27.857	10.25	39.559
5/15/2006	20:00	14.269	24.244	24.259	27.813	10.25	39.543
5/16/2006	0:00	14.269	24.244	24.259	27.817	10.266	39.537
5/16/2006	4:00	14.269	24.235	24.251	27.799	10.274	39.528
5/16/2006	8:00	14.267	24.231	24.247	27.751	10.283	39.523
5/16/2006	12:00	14.273	24.224	24.242	27.786	10.295	39.517
5/16/2006	16:00	14.267	24.203	24.222	27.751	10.292	39.508
5/16/2006	20:00	14.247	24.179	24.197	27.72	10.288	39.486
5/17/2006	0:00	14.238	24.172	24.191	27.724	10.307	39.475
5/17/2006	4:00	14.23	24.161	24.179	27.706	10.314	39.463
5/17/2006	8:00	14.229	24.157	24.175	27.646	10.328	39.46
5/17/2006	12:00	14.234	24.146	24.166	27.697	10.342	39.454
5/17/2006	16:00	14.227	24.118	24.136	27.649	10.337	39.44
5/17/2006	20:00	14.199	24.091	24.109	27.613	10.33	39.419
5/18/2006	0:00	14.193	24.104	24.123	27.653	10.365	39.416
5/18/2006	4:00	14.212	24.111	24.131	27.682	10.408	39.423
5/18/2006	8:00	14.23	24.116	24.136	27.693	10.432	39.434
5/18/2006	12:00	14.245	24.111	24.131	27.682	10.448	39.438
5/18/2006	16:00	14.249	24.094	24.115	27.651	10.455	39.434
5/18/2006	20:00	14.236	24.076	24.096	27.627	10.455	39.423
5/19/2006	0:00	14.221	24.059	24.078	27.607	10.458	39.404
5/19/2006	4:00	14.206	24.037	24.057	27.582	10.458	39.386
5/19/2006	8:00	14.197	24.026	24.049	27.573	10.465	39.373
5/19/2006	12:00	14.197	24.018	24.039	27.569	10.479	39.368
5/19/2006	16:00	14.197	24.009	24.029	27.553	10.493	39.362
5/19/2006	20:00	14.206	24.024	24.047	27.587	10.531	39.371
5/20/2006	0:00	14.229	24.042	24.064	27.635	10.583	39.386
5/20/2006	4:00	14.251	24.055	24.078	27.644	10.611	39.399

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/20/2006	8:00	14.277	24.068	24.092	27.662	10.642	39.416
5/20/2006	12:00	14.301	24.083	24.109	27.689	10.668	39.43
5/20/2006	16:00	14.325	24.081	24.107	27.684	10.692	39.44
5/20/2006	20:00	14.332	24.081	24.109	27.671	10.699	39.443
5/21/2006	0:00	14.341	24.091	24.119	27.693	10.72	39.447
5/21/2006	4:00	14.345	24.081	24.109	27.673	10.724	39.438
5/21/2006	8:00	14.354	24.094	24.121	27.684	10.741	39.441
5/21/2006	12:00	14.367	24.098	24.127	27.691	10.755	39.445
5/21/2006	16:00	14.373	24.089	24.119	27.673	10.765	39.441
5/21/2006	20:00	14.379	24.098	24.129	27.679	10.781	39.443
5/22/2006	0:00	14.397	24.124	24.154	27.724	10.819	39.456
5/22/2006	4:00	14.414	24.122	24.154	27.719	10.838	39.46
5/22/2006	8:00	14.436	24.15	24.183	27.755	10.866	39.476
5/22/2006	12:00	14.454	24.146	24.179	27.746	10.876	39.482
5/22/2006	16:00	14.456	24.137	24.17	27.721	10.876	39.476
5/22/2006	20:00	14.452	24.137	24.168	27.704	10.881	39.471
5/23/2006	0:00	14.458	24.146	24.181	27.726	10.899	39.469
5/23/2006	4:00	14.454	24.137	24.171	27.708	10.9	39.46
5/23/2006	8:00	14.467	24.152	24.187	27.732	10.921	39.463
5/23/2006	12:00	14.475	24.142	24.175	27.704	10.921	39.46
5/23/2006	16:00	14.458	24.12	24.156	27.664	10.911	39.447
5/23/2006	20:00	14.445	24.102	24.138	27.639	10.906	39.428
5/24/2006	0:00	14.436	24.111	24.148	27.657	10.923	39.421
5/24/2006	4:00	14.434	24.096	24.133	27.637	10.928	39.41
5/24/2006	8:00	14.439	24.111	24.146	27.657	10.949	39.414
5/24/2006	12:00	14.46	24.12	24.156	27.675	10.973	39.423
5/24/2006	16:00	14.46	24.104	24.136	27.65	10.977	39.421
5/24/2006	20:00	14.449	24.094	24.129	27.621	10.977	39.408
5/25/2006	0:00	14.449	24.098	24.134	27.637	10.996	39.406
5/25/2006	4:00	14.445	24.091	24.127	27.626	11.001	39.399
5/25/2006	8:00	14.453	24.102	24.138	27.644	11.02	39.401
5/25/2006	12:00	14.469	24.107	24.142	27.644	11.034	39.408
5/25/2006	16:00	14.464	24.085	24.121	27.613	11.029	39.399
5/25/2006	20:00	14.449	24.078	24.113	27.595	11.034	39.388
5/26/2006	0:00	14.452	24.091	24.125	27.619	11.06	39.388
5/26/2006	4:00	14.455	24.079	24.119	27.604	11.062	39.382
5/26/2006	8:00	14.462	24.091	24.127	27.619	11.079	39.382
5/26/2006	12:00	14.484	24.102	24.134	27.648	11.105	39.395
5/26/2006	16:00	14.467	24.067	24.105	27.573	11.074	39.377
5/26/2006	20:00	14.449	24.048	24.086	27.553	11.072	39.358
5/27/2006	0:00	14.442	24.048	24.086	27.557	11.081	39.349
5/27/2006	4:00	14.423	24.026	24.064	27.537	11.072	39.331
5/27/2006	8:00	14.423	24.024	24.064	27.537	11.084	39.325
5/27/2006	12:00	14.438	24.041	24.08	27.553	11.102	39.336
5/27/2006	16:00	14.443	24.033	24.071	27.535	11.105	39.333
5/27/2006	20:00	14.432	24.024	24.066	27.526	11.107	39.327
5/28/2006	0:00	14.449	24.052	24.092	27.575	11.145	39.336
5/28/2006	4:00	14.468	24.055	24.096	27.579	11.159	39.344
5/28/2006	8:00	14.482	24.067	24.108	27.59	11.176	39.353
5/28/2006	12:00	14.503	24.089	24.125	27.61	11.199	39.368
5/28/2006	16:00	14.519	24.089	24.131	27.61	11.211	39.377

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
5/28/2006	20:00	14.525	24.092	24.133	27.614	11.225	39.377
5/29/2006	0:00	14.542	24.113	24.152	27.644	11.251	39.388
5/29/2006	4:00	14.558	24.12	24.162	27.646	11.263	39.392
5/29/2006	8:00	14.573	24.146	24.187	27.675	11.287	39.404
5/29/2006	12:00	14.604	24.172	24.213	27.71	11.315	39.423
5/29/2006	16:00	14.629	24.177	24.22	27.707	11.329	39.436
5/29/2006	20:00	14.63	24.176	24.218	27.69	11.327	39.432
5/30/2006	0:00	14.643	24.198	24.238	27.719	11.346	39.441
5/30/2006	4:00	14.666	24.213	24.252	27.752	11.369	39.451
5/30/2006	8:00	14.678	24.235	24.277	27.754	11.381	39.458
5/30/2006	12:00	14.708	24.257	24.298	27.781	11.407	39.476
5/30/2006	16:00	14.725	24.261	24.3	27.781	11.41	39.486
5/30/2006	20:00	14.713	24.248	24.288	27.738	11.395	39.471
5/31/2006	0:00	14.717	24.264	24.304	27.767	11.412	39.473
5/31/2006	4:00	14.728	24.27	24.312	27.765	11.419	39.473
5/31/2006	8:00	14.738	24.285	24.325	27.783	11.429	39.478
5/31/2006	12:00	14.756	24.301	24.343	27.794	11.44	39.487
5/31/2006	16:00	14.695	24.237	24.279	27.769	11.327	39.467
5/31/2006	20:00	14.643	24.233	24.275	27.756	11.195	39.463
6/1/2006	0:00	14.569	24.25	24.292	27.781	11.098	39.462
6/1/2006	4:00	14.491	24.238	24.281	27.752	11.02	39.454
6/1/2006	8:00	14.425	24.257	24.298	27.765	10.984	39.456
6/1/2006	12:00	14.377	24.264	24.308	27.765	10.965	39.458
6/1/2006	16:00	14.334	24.266	24.31	27.756	10.951	39.46
6/1/2006	20:00	14.286	24.263	24.306	27.736	10.935	39.452
6/2/2006	0:00	14.255	24.27	24.312	27.754	10.939	39.451
6/2/2006	4:00	14.227	24.276	24.318	27.75	10.939	39.451
6/2/2006	8:00	14.21	24.283	24.325	27.758	10.942	39.454
6/2/2006	12:00	14.199	24.294	24.337	27.763	10.949	39.46
6/2/2006	16:00	14.181	24.287	24.329	27.734	10.939	39.456
6/2/2006	20:00	14.153	24.275	24.32	27.71	10.928	39.447
6/3/2006	0:00	14.125	24.274	24.316	27.709	10.928	39.438
6/3/2006	4:00	14.104	24.264	24.308	27.694	10.921	39.43
6/3/2006	8:00	14.09	24.268	24.312	27.7	10.92	39.427
6/3/2006	12:00	14.083	24.261	24.302	27.687	10.925	39.421
6/3/2006	16:00	14.057	24.24	24.285	27.634	10.906	39.404
6/3/2006	20:00	14.034	24.231	24.275	27.625	10.904	39.393
6/4/2006	0:00	14.01	24.22	24.263	27.614	10.904	39.381
6/4/2006	4:00	13.994	24.207	24.25	27.612	10.904	39.369
6/4/2006	8:00	13.959	24.181	24.224	27.605	10.862	39.345
6/4/2006	12:00	13.929	24.176	24.218	27.585	10.781	39.336
6/4/2006	16:00	13.879	24.168	24.212	27.568	10.739	39.331
6/4/2006	20:00	13.829	24.167	24.213	27.565	10.72	39.329
6/5/2006	0:00	13.79	24.178	24.222	27.59	10.722	39.333
6/5/2006	4:00	13.759	24.174	24.218	27.588	10.724	39.334
6/5/2006	8:00	13.736	24.178	24.224	27.585	10.722	39.336
6/5/2006	12:00	13.725	24.194	24.242	27.607	10.736	39.348
6/5/2006	16:00	13.698	24.172	24.22	27.557	10.719	39.336
6/5/2006	20:00	13.674	24.159	24.209	27.541	10.713	39.325
6/6/2006	0:00	13.664	24.165	24.213	27.565	10.727	39.327
6/6/2006	4:00	13.649	24.156	24.205	27.548	10.724	39.321

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
6/6/2006	8:00	13.648	24.168	24.218	27.568	10.741	39.327
6/6/2006	12:00	13.657	24.181	24.23	27.588	10.758	39.338
6/6/2006	16:00	13.664	24.181	24.23	27.581	10.772	39.342
6/6/2006	20:00	13.664	24.185	24.234	27.579	10.786	39.346
6/7/2006	0:00	13.674	24.204	24.253	27.616	10.812	39.359
6/7/2006	4:00	13.686	24.213	24.263	27.627	10.831	39.368
6/7/2006	8:00	13.707	24.241	24.29	27.661	10.861	39.386
6/7/2006	12:00	13.729	24.254	24.304	27.669	10.88	39.401
6/7/2006	16:00	13.735	24.248	24.298	27.65	10.883	39.403
6/7/2006	20:00	13.733	24.251	24.3	27.643	10.89	39.401
6/8/2006	0:00	13.736	24.261	24.312	27.663	10.904	39.406
6/8/2006	4:00	13.733	24.25	24.3	27.647	10.901	39.399
6/8/2006	8:00	13.746	24.279	24.329	27.687	10.928	39.412
6/8/2006	12:00	13.759	24.281	24.331	27.674	10.935	39.416
6/8/2006	16:00	13.748	24.261	24.31	27.638	10.923	39.405
6/8/2006	20:00	13.731	24.248	24.298	27.614	10.918	39.39
6/9/2006	0:00	13.723	24.248	24.3	27.62	10.927	39.383
6/9/2006	4:00	13.712	24.237	24.287	27.601	10.923	39.372
6/9/2006	8:00	13.705	24.239	24.288	27.603	10.927	39.368
6/9/2006	12:00	13.699	24.224	24.277	27.576	10.923	39.36
6/9/2006	16:00	13.677	24.192	24.244	27.532	10.904	39.338
6/9/2006	20:00	13.646	24.168	24.22	27.494	10.892	39.312
6/10/2006	0:00	13.627	24.159	24.211	27.494	10.899	39.296
6/10/2006	4:00	13.608	24.14	24.191	27.474	10.899	39.281
6/10/2006	8:00	13.599	24.146	24.195	27.49	10.906	39.278
6/10/2006	12:00	13.594	24.128	24.174	27.476	10.913	39.27
6/10/2006	16:00	13.585	24.115	24.168	27.459	10.908	39.263
6/10/2006	20:00	13.575	24.107	24.16	27.45	10.911	39.254
6/11/2006	0:00	13.588	24.128	24.178	27.501	10.944	39.265
6/11/2006	4:00	13.607	24.139	24.191	27.534	10.972	39.279
6/11/2006	8:00	13.625	24.167	24.218	27.556	10.998	39.298
6/11/2006	12:00	13.655	24.185	24.238	27.572	11.022	39.318
6/11/2006	16:00	13.675	24.196	24.248	27.585	11.036	39.333
6/11/2006	20:00	13.694	24.209	24.263	27.605	11.057	39.344
6/12/2006	0:00	13.718	24.237	24.29	27.638	11.083	39.36
6/12/2006	4:00	13.742	24.252	24.306	27.649	11.1	39.377
6/12/2006	8:00	13.773	24.292	24.347	27.7	11.135	39.401
6/12/2006	12:00	13.805	24.303	24.357	27.702	11.149	39.416
6/12/2006	16:00	13.822	24.313	24.366	27.7	11.152	39.425
6/12/2006	20:00	13.82	24.309	24.362	27.684	11.147	39.421
6/13/2006	0:00	13.831	24.326	24.38	27.711	11.164	39.425
6/13/2006	4:00	13.84	24.329	24.382	27.702	11.166	39.425
6/13/2006	8:00	13.846	24.342	24.394	27.716	11.173	39.427
6/13/2006	12:00	13.86	24.348	24.401	27.713	11.183	39.432
6/13/2006	16:00	13.855	24.333	24.384	27.671	11.166	39.421
6/13/2006	20:00	13.835	24.316	24.37	27.647	11.152	39.403
6/14/2006	0:00	13.825	24.324	24.376	27.66	11.166	39.396
6/14/2006	4:00	13.82	24.313	24.369	27.642	11.161	39.384
6/14/2006	8:00	13.812	24.309	24.362	27.638	11.159	39.375
6/14/2006	12:00	13.81	24.303	24.36	27.618	11.159	39.37
6/14/2006	16:00	13.794	24.279	24.333	27.571	11.138	39.353

TABLE S2.2 (Cont.)

Date	Time	Depth to Water Level (ft below TOC)					
		MW1	MW2	MW3	MW4	MW5	MW6
6/14/2006	20:00	13.766	24.259	24.314	27.545	11.121	39.331
6/15/2006	0:00	13.755	24.259	24.314	27.56	11.131	39.32
6/15/2006	4:00	13.738	24.233	24.289	27.512	11.116	39.303
6/15/2006	8:00	13.733	24.239	24.293	27.536	11.123	39.298
6/15/2006	12:00	13.735	24.242	24.298	27.538	11.137	39.298
6/15/2006	16:00	13.738	24.231	24.285	27.516	11.137	39.296
6/15/2006	20:00	13.723	24.213	24.269	27.492	11.126	39.283
6/16/2006	0:00	13.725	24.231	24.287	27.532	11.149	39.287
6/16/2006	4:00	13.742	24.237	24.291	27.543	11.168	39.294
6/16/2006	8:00	13.753	24.239	24.293	27.545	11.18	39.3

**Supplement 3:**

**Quality Control for Sample Collection, Handling, and Analysis**

## Supplement 3:

### Quality Control for Sample Collection, Handling, and Analysis

Groundwater monitoring was conducted at Centralia, Kansas, in 2005–2006, as outlined in the *Work Plan* (Argonne 2005a). The initial monitoring event of the twice yearly, two-year program occurred in September 2005. Resampling in October 2005 confirmed higher-than-expected concentrations in monitoring well MW02, on the former CCC/USDA property. Because of the increase in concentrations and apparent expansion of the contaminant plume observed in fall 2005, the monitoring network was expanded through installation of additional wells in January 2006. The second monitoring event of the two-year program occurred in March 2006. Supplement 3 reports on the results of QA/QC activities during the first two monitoring events.

#### S3.1 Sampling to Monitor Sampling Collection, Handling, and Analysis Procedures

Sample collection and handling activities were monitored by the documentation of samples as they were collected and the use of chain-of-custody (COC) forms and custody seals to ensure sample integrity during handling and shipment of samples. The QA/QC samples collected included field blanks, equipment rinsates, trip blanks, replicate samples, and waste characterization samples. The QA/QC samples are listed in Table S3.1. Analytical results for the QA/QC samples collected to monitor sample collection, handling, and analysis are in Table S3.2.

##### S3.1.1 Field Blanks

Four field blanks of waters used during monitoring activities were collected (Table S3.1). Carbon tetrachloride was not detected in the blanks, although chloroform was present, generally at trace concentrations  $< 1 \mu\text{g/L}$  (Table S3.2).



### **S3.1.2 Equipment Rinsates**

Six equipment rinsates were collected to monitor decontamination procedures for reusable sampling equipment (Table S3.1). Trace levels of carbon tetrachloride ( $< 1 \mu\text{g/L}$ ) were detected in rinsates of the Redi-Flo tubing used for well purging in September and October 2005, but no carbon tetrachloride was detected in bailer or Redi-Flo rinsates in March 2006 (Table S3.2). Equipment decontamination procedures were satisfactory.

### **S3.1.3 Trip Blanks**

As an indicator of cross-contamination of samples during shipment, 16 trip blanks were prepared and included with water samples shipped for VOCs or methane analyses. Included in this total were 8 trip blanks sent to the AGEM Laboratory with samples for VOCs analyses; 2 trip blanks sent to EnviroSystems, Inc. (ENVSYS), with samples for verification VOCs analyses; and 6 trip blanks sent to Severn-Trent Laboratories (STL) with samples for methane analysis. Results for the trip blanks indicate that sample-handling procedures were followed during the sampling event and that cross-contamination of samples did not occur during shipment.

### **S3.1.4 Replicate Groundwater Samples**

As an indicator of the consistency of the sampling methodology followed and to provide a measure of analytical precision, 13 replicate groundwater samples were collected, including 10 replicates submitted to the AGEM Laboratory for VOCs analyses and 3 replicates submitted to ENVSYS for verification VOCs analyses.

### **S3.1.5 Waste Characterization Samples**

Ten waste characterization samples were collected to determine the appropriate waste handling and disposal procedures.

### **S3.2 Quality Control for Organic Analysis of Water Samples at the AGEM Laboratory**

Groundwater sampling was conducted at 16 locations, including 10 monitoring wells and 6 piezometers. Water samples shipped to the AGEM Laboratory were analyzed by the purge-and-trap method with a GC-MS system. For the purge-and-trap analyses, VOCs present in the groundwater sample are extracted (purged) from the sample matrix by bubbling an inert gas through the sample. The purged components are trapped in a specified sorbent tube. After the purging, the sorbent tube is heated and backflushed with an inert gas to desorb the components into the GC-MS system. The compounds eluting from the GC column are identified by retention time and by comparison with reference library spectra. The concentration of each component is calculated by comparison of the MS response for the quantitation ion with corresponding calibration curves, the responses for internal standards, or both. The recovery limits for the internal standard were 80–120%. Calibration checks with each SDG were required to be within  $\pm 20\%$  of the standard.

Samples submitted to the AGEM Laboratory for organic analysis were analyzed in 14 SDGs, as shown in Table S3.3. The QA/QC procedures followed included analysis of instrument calibration check standards, analysis of laboratory blanks, monitoring of surrogate spike recovery, and analysis of blind replicate samples. Significant results include the following:

- Samples shipped to the AGEM Laboratory were received with custody seals intact and at the appropriate temperature. All samples were analyzed within required holding times.
- Carbon tetrachloride and chloroform, contaminants of concern in the investigation, were not detected in laboratory method blanks analyzed with the samples.
- For each SDG, analytical instrument calibration was monitored by the analysis of calibration check standards. The RPD values between the known and calculated concentrations of calibration check standards measured in all SDGs were within the acceptable range of  $\pm 20\%$  (Table S3.3).

- Surrogate standard determinations were performed on samples and blanks by using surrogate spike compounds fluorobenzene, 1,4-dichlorobenzene-d4, and bromofluorobenzene. With one exception, the surrogate recoveries were within the specified range of 80–120% for all samples (Table S3.3). Low recovery was achieved for two of the three surrogate compounds in the analysis of trip blank CNQCTB-W-15478 in SDG 05-9-13. The results for groundwater samples shipped with the trip blank indicate that cross-contamination of the samples did not occur; the trip blank result is accepted without qualification.
- Blind replicate groundwater samples were analyzed as a measure of consistency in the sampling and analytical methodologies. Table S3.4 summarizes the analytical results for carbon tetrachloride and chloroform in the primary samples and the associated replicate analyses. Consistency in both the sampling and analytical methodologies is indicated by the average RPD values of 13.1% for carbon tetrachloride and 7.9% for chloroform in the dual analyses in which the contaminants were present.

The analytical data from AGEM Laboratory are acceptable for quantitative determination of contaminant distribution.

### **S3.3 Quality Control for Verification Organic Analysis of Groundwater Samples by EnviroSystems, Inc.**

In accordance with the QA/QC procedures defined in the *Master Work Plan* (Argonne 2002b), the analyses of water samples at the AGEM Laboratory by EPA Method 524.2 were verified at a second laboratory by using EPA-defined CLP methodology. Three groundwater samples, including a sample from the KDHE-approved compliance well MW07 installed in January 2006, were also analyzed according to CLP methodology by ENVSYS. The results were reported in one SDG. The quality of the organic analytical data obtained with CLP methodology is discussed below.

The QA/QC procedures followed in the CLP analysis included initial and continuing calibration of instruments, analysis of laboratory blanks, monitoring of surrogate spike recovery, and matrix spike/matrix spike duplicate analysis. Significant results include the following:

- Samples shipped to the CLP laboratory were received with custody seals intact and at the appropriate temperature. All samples were analyzed within required holding times.
- Analytical instruments were properly tuned; initial and continuing calibration checks remained within the allowable limits for all contaminants of interest.
- Carbon tetrachloride and chloroform were not detected in the laboratory method blanks. Methylene chloride was present at low concentrations in laboratory blanks. Similar concentrations reported in all samples resulted in qualification of the methylene chloride results.
- Surrogate standard determinations were performed on samples and blanks by using the surrogate spike compounds toluene-d<sub>8</sub>, bromofluorobenzene, and 1,2-dichloroethane-d<sub>4</sub>. Table S3.5 shows the percent recoveries of the system-monitoring compounds for each of the CLP analyses. The recoveries of the surrogate spikes were within the acceptable ranges (identified in Table S3.5) specific to the surrogates for the three replicate groundwater samples.
- The recovery of spike compounds and the RPD value for a spike/spike duplicate analysis conducted with the SDG were within QC limits.

Analytical results for groundwater samples analyzed at the AGEM Laboratory with EPA Method 524.2 are supported by the analytical results obtained by ENVSY with EPA CLP methodology. The verification organic results for the groundwater samples are summarized in Table S3.6. Agreement is good over the range of contaminant concentrations detected. Specific observations are as follows:

- The sample from monitoring well MW09 was analyzed at the AGEM Laboratory with no detection of contamination and at the CLP laboratory with similar result.
- The trace concentrations of carbon tetrachloride and chloroform (< 1 µg/L) detected by the AGEM Laboratory during purge-and-trap analysis of the sample from monitoring well MW07 were not detected by the CLP analysis

with its quantitation limit of 5 µg/L. This discrepancy is a result of the difference in detection limits.

- For the sample from replacement piezometer SB07R (installed in January 2006), with contaminant concentrations above the purge-and-trap quantitation limit of 1 µg/L, the RPD values were 24.7% for carbon tetrachloride and 3.8% for chloroform.

### **S3.4 Quality Control for Attenuation Parameter Analyses of Groundwater Samples at Severn-Trent Laboratories and Microseeps Laboratory**

Groundwater samples were collected for additional analyses at STL to aid in evaluation of biodegradation processes through use the EPA's technical protocol (EPA 1998). The analyses included EPA Method 300 for dissolved anion concentrations (chloride, sulfate, nitrate, and phosphate), EPA Method 310.1 for total alkalinity, EPA Method 353.2 for nitrate/nitrite nitrogen, EPA Method 354.1 for nitrite nitrogen, EPA Method 376.2 for sulfide, EPA Method 415.1 for total organic carbon, and EPA Method 6010 for dissolved metals (aluminum, calcium, iron, magnesium, manganese, phosphorus, potassium, silicon, sodium, and zinc). Analysis for the natural attenuation indicators methane, ethane, and ethene was conducted by using Method RSK-175 (<http://www.epa.gov/NE/info/testmethods/pdfs/rsk-sop-175.pdf>). In addition, groundwater samples were collected from selected wells for dissolved hydrogen analysis at Microseeps Laboratory with Method AM20GAX ([http://www.dtic.mil/ndia/2004Chemistry/McLaughlin\\_AFCEE2004Microseeps.pdf](http://www.dtic.mil/ndia/2004Chemistry/McLaughlin_AFCEE2004Microseeps.pdf)). The EPA methods are indexed online (<http://www.epa.gov/ne/info/testmethods/pdfs/testmeth.pdf>).

The attenuation parameter analyses of the groundwater samples were conducted in seven SDGs. The QA/QC procedures followed included instrument calibration through analysis of spiked calibration check standards, verification of interelement and background correction factors through analysis of inductively coupled plasma interference check samples, and analysis of laboratory quality control samples. Significant points are as follows:

- Samples shipped to STL for attenuation parameter analysis were received with custody seals intact and at the appropriate temperature. All samples were analyzed within required holding times.

- Analytical instruments were properly tuned; initial and continuing calibration checks remained within the allowable ranges.
- Contaminants of concern were not detected in the trip blanks or laboratory method blanks associated with the samples.
- A laboratory quality control sample was prepared and analyzed with the samples to evaluate the accuracy and precision the analytical methodology. Table S3.7 shows the percent recovery of each spike compound in these analyses. Except for sulfide in SDG 113204, the recoveries of the target analytes were within the acceptable range of 70–130%. Qualification of the sulfide results for samples associated with SDG 113204 is not warranted, because sulfide was not detected in the samples, and high recovery would not inhibit detection.

The attenuation parameter results for groundwater samples from STL are acceptable for evaluation of biodegradation processes, on the basis of the recovery of known concentrations of the analytes of concern in laboratory quality control samples analyzed with the groundwater samples.

### **S3.5 Quality Control for Tritium Analyses of Groundwater Samples at the University of Miami Tritium Laboratory**

Groundwater samples were collected for tritium analysis at the University of Miami Tritium Laboratory to aid in geochemical characterization of the water-bearing zone. Tritium concentrations were reported on the basis of the U.S. National Institute of Standards and Technology tritium water standard #4926E, with a half-life of 12.32 years. Concentrations were reported in tritium units (TU), equivalent to 3.222 picocuries per kilogram of water. Because counting efficiency and background concentration are different for each instrument, the reported concentrations were corrected for cosmic intensity and gas pressure. Typical efficiencies are equivalent to 1 count per minute (cpm) per 2.4 TU. Background is about 0.3 cpm, known to  $\pm 0.02$  cpm. The tritium results are acceptable for evaluating the ages of the groundwater samples.

TABLE S3.1 Quality control samples collected during 2005–2006 monitoring at Centralia, Kansas.

Location	Sample	Sample Date	Time	Depth (ft below TOC)	Sample Description
<i>Field Blanks</i>					
QC	CNQCFB-W-15480	09/11/05	14:05	–	Blank of water used for equipment decontamination during 9/05 monitoring.
QC	CNQCFB-W-15488	10/11/05	8:05	–	Blank of water used for equipment decontamination during 10/05 monitoring.
QC	CNQCD-W-16198	01/29/06	17:30	–	Blank of water used during installation of monitoring wells MW7, MW8, MW9, and MW10 and replacement piezometer SB07R.
QC	CNQCBL-W-19912	03/16/06	15:40	–	Field blank of commercial distilled water used during 3/06 monitoring event.
<i>Equipment Rinsates</i>					
QC	CNQCRI-W-15479	09/11/05	14:00	–	Rinsate of Redi-Flo valve.
QC	CNQCRI-W-19283	09/11/05	15:30	–	Rinsate of Redi-Flo sampling tube.
QC	CNQCRI-W-15487	10/11/05	8:00	–	Rinsate of decontaminated Redi-Flo reel hose.
QC	CNQCRI-W-19897	03/15/06	8:30	–	Rinsate of decontaminated sampling bailer used to collect samples at MW06.
QC	CNQCRI-W-19899	03/15/06	10:30	–	Rinsate of decontaminated sampling bailer used to collect samples at MW01.
QC	CNQCRI-W-19901	03/17/06	8:00	–	Rinsate of decontaminated Redi-Flo sampling tube following collection of samples at MW02.
<i>Trip Blanks</i>					
QC	CNQCTB-W-15476	09/11/05	11:45	–	Trip blank sent to STL for methane analysis with samples listed on COC 4252.
QC	CNQCTB-W-15478	09/11/05	13:45	–	Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COCs 4360 and 4361.
QC	CNQCTB-W-15485	09/12/05	8:30	–	Trip blank sent to the AGEM Laboratory to STL for methane analysis with samples listed on COC 1556.

TABLE S3.1 (Cont.)

Location	Sample	Sample Date	Time	Depth (ft below TOC)	Sample Description
<i>Trip Blanks (Cont.)</i>					
QC	CNQCTB-W-16325	10/12/05	18:00	–	Trip blank sent to the AGEM Laboratory with samples listed on COCs 4415 and 4416.
QC	EVTB3-W-13226	02/01/06		–	Trip blank sent to the AGEM Laboratory with samples listed on COC 3242.
QC	EVFB-W-13239	02/14/06	15:57	–	Trip blank sent to the AGEM Laboratory with samples listed on COC 4547.
QC	CNQCTB-W-19895	03/14/06	15:40	–	Trip blank sent to STL for methane analysis with samples listed on COC 4508.
QC	CNQCTB-W-19894	03/14/06	15:40	–	Trip blank sent to ENVSY for verification organic analysis with sample listed on COC 4510.
QC	CNQCTB-W-19893	03/14/06	16:10	–	Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 4509.
QC	CNQCTB-W-19892	03/15/06	11:45	–	Trip blank sent to the AGEM Laboratory for organic analysis with samples listed on COC 2475.
QC	CNQCTB-W-19983	03/15/06	16:30	–	Trip blank sent to STL for methane analysis with samples listed on COC 4511.
QC	CNQCTB-W-19984	03/15/06	16:30	–	Trip blank sent to ENVSY for verification organic analysis with samples listed on COC 2476.
QC	CNQCTB-W-19913	03/16/06	15:40	–	Trip blank sent to AGEM Laboratory for organic analysis with samples listed on COC 2481.
QC	CNQCTB-W-19914	03/16/06	15:40	–	Trip blank sent to STL for methane analysis with samples listed on COC 2477.
QC	CNQCTB-W-19905	03/17/06	14:52	–	Trip blank sent to AGEM Laboratory for organic analysis with samples listed on COC 3709.
QC	CNQCTB-W-19910	03/17/06	14:53	–	Trip blank sent to STL for methane analysis with samples listed on COC 3708.
<i>Waste Characterization Samples</i>					
QC	CNQCDRUM1-W-15481	09/11/05	15:40	–	Waste purge water.
QC	CNQCDRUM2-W-15482	09/11/05	15:40	–	Waste purge water.



TABLE S3.1 (Cont.)

Location	Sample	Sample Date	Time	Depth (ft below TOC)	Sample Description
<i>Waste Characterization Samples (Cont.)</i>					
QC	CNQCDR-W-16324	10/12/05	15:00	–	Composite sample from three drums of purge water from historically contaminated wells prior to disposal at Sabetha publicly owned treatment works.
QC	CNCM-G-16199	02/14/06	15:14	–	Sample of containerized potentially contaminated development water from new monitoring wells and replacement piezometer.
QC	CNCM-S-16200	02/15/06	9:09	–	Composite sample from 14 drums of containerized potentially contaminated soil cuttings from drilling of monitoring wells.
MW07	CNMW07-G-16202	02/15/06	16:48	45–55	Sample collected from new monitoring well MW07 prior to development for waste disposal evaluation.
MW08	CNMW08-G-16205	02/15/06	16:45	38–53	Sample collected from new monitoring well MW08 prior to development for waste disposal evaluation.
MW09	CNMW09-G-16201	02/15/06	16:41	25–35	Sample collected from new monitoring well MW09 prior to development for waste disposal evaluation.
MW10	CNMW10-G-16204	02/15/06	16:26	30–45	Sample collected from new monitoring well MW10 prior to development for waste disposal evaluation.
SB07R	CNSB07-G-16203	02/15/06	17:09	45–60	Sample collected from replacement piezometer SB07R prior to development for waste disposal evaluation.
<i>Replicate Samples Analyzed at the AGEM Laboratory</i>					
MW02	CNQCDU-W-16322	10/12/05	13:55	49.5–59.5	Replicate of sample CNMW02-W-16309.
MW02	CNQCDU-W-15486	09/11/05	14:55	49.5–59.5	Replicate of sample CNMW02-W-19282 for anion and cation analyses.
MW02	CNQCDU-W-15477	09/11/05	14:55	49.5–59.5	Replicate of sample CNMW02-W-19282 for organic analysis.
MW05	CNQCDU-W-19985	03/15/06	13:40	34.5–44.5	Replicate of sample CNMW05-W-19976.
SB04	CNQCDU-W-15475	09/09/05	10:15	51–61	Replicate of sample CNSB04-W-19273 for organic analysis.
SB04	CNQCDU-W-19915	03/16/06	13:50	51–61	Replicate of sample CNSB04-W-19906.
SB05	CNQCDU-W-19911	03/17/06	15:40	32–42	Replicate of sample CNSB05-W-19904.
SB07R	CNSB07-G-16206	02/15/06	17:15	45–60	Replicate of sample CNSB07-G-16203.

TABLE S3.1 (Cont.)

Location	Sample	Sample Date	Time	Depth (ft below TOC)	Sample Description
<i>Replicate Samples Analyzed at the AGEM Laboratory (Cont.)</i>					
SB07R	CNQCDU-W-19981	03/15/06	17:21	45–60	Replicate of sample CNSB07R-W-19978.
SB08	CNQCDU-W-16321	10/12/05	10:00	52–62	Replicate of sample CNSB08-W-16317.
<i>Samples Submitted for Verification Organic Analysis by ENVSY</i>					
MW07	CNQCMW07-W-19888	03/14/06	15:30	45–55	Aliquot for verification analysis by the outside laboratory. Corresponds to sample CNMW07-W-19887, submitted for analysis at the AGEM Laboratory.
MW09	CNQCMW09-W-19977	03/15/06	15:50	25–35	Aliquot for verification analysis by the outside laboratory. Corresponds to sample CNMW09-W-19285, submitted for analysis at the AGEM Laboratory.
SB07R	CNQCSB07R-W-19982	03/15/06	17:21	45–60	Aliquot for verification analysis by the outside laboratory. Corresponds to sample CNSB07R-W-19978, submitted for analysis at the AGEM Laboratory.

TABLE S3.2 Results for organic analyses on quality control samples collected to monitor sample collection and handling activities.

Sample	Sample Date	Medium	Type <sup>a</sup>	Analysis Date	Analytical Method <sup>b</sup>	Laboratory	Concentration (µg/L in water; µg/kg in soil)					Quantitation Limit
							Carbon Tetrachloride	Chloroform	Methylene Chloride	Acetone	Methane	
<i>September 2005 Sampling Event</i>												
CNQCFB-W-15480	9/11/05	Water	FB	9/14/05	524.2	AGEM	ND <sup>c</sup>	0.2 J <sup>d</sup>	ND	ND	– <sup>e</sup>	1
CNQCRI-W-15479	9/11/05	Water	RI	9/13/05	524.2	AGEM	ND	0.2 J	ND	ND	–	1
CNQCRI-W-19283	9/11/05	Water	RI	9/14/05	524.2	AGEM	0.3 J	ND	ND	ND	–	1
CNQCTB-W-15478	9/11/05	Water	TB	9/13/05	524.2	AGEM	ND	0.2 J	ND	ND	–	1
CNQCTB-W-15476	9/11/05	Water	TB	9/14/05	RSK-175	STL	–	–	–	–	ND	2
CNQCTB-W-15485	9/12/05	Water	TB	9/15/05	RSK-175	STL	–	–	–	–	ND	2
CNQCDRUM1-W-15481	9/11/05	Water	BT	9/13/05	524.2	AGEM	18	5.8	ND	ND	–	1
CNQCDRUM2-W-15482	9/11/05	Water	BT	9/13/05	524.2	AGEM	1.2	9.9	ND	ND	–	1
<i>October 2005 Sampling Event</i>												
CNQCFB-W-15488	10/11/05	Water	FB	10/14/05	524.2	AGEM	ND	0.4 J	ND	ND	–	1
CNQCRI-W-15487	10/11/05	Water	RI	10/14/05	524.2	AGEM	0.3 J	13	ND	ND	–	1
CNQCTB-W-16325	10/12/05	Water	TB	10/14/05	524.2	AGEM	ND	0.5 J	ND	ND	–	1
CNQCDR-W-16324	10/12/05	Water	BT	10/14/05	524.2	AGEM	354	15	ND	ND	–	1
<i>February 2006 Monitoring Well Installation</i>												
CNQCD-W-16198	1/29/06	Water	FB	2/2/06	524.2	AGEM	ND	2.1	ND	ND	–	1
EVTB3-W-13226	2/1/06	Water	TB	2/2/06	524.2	AGEM	ND	ND	ND	ND	–	1
CNCM-G-16199	2/14/06	Water	BT	2/15/06	524.2	AGEM	0.4 J	1.1	ND	ND	–	1
EVFB-W-13239	2/14/06	Water	TB	2/15/06	524.2	AGEM	ND	ND	ND	ND	–	1
CNCM-S-16200	2/15/06	Soil	BT	2/20/06	8260B	AGEM	ND	ND	ND	ND	–	10
CNMW07-G-16202	2/15/06	Water	BT	2/17/06	524.2	AGEM	0.9 J	1.2	ND	ND	–	1
CNMW08-G-16205	2/15/06	Water	BT	2/17/06	524.2	AGEM	ND	0.2 J	ND	ND	–	1
CNMW09-G-16201	2/15/06	Water	BT	2/17/06	524.2	AGEM	ND	0.1 J	ND	ND	–	1
CNMW10-G-16204	2/15/06	Water	BT	2/17/06	524.2	AGEM	ND	ND	ND	ND	–	1
CNSB07-G-16203	2/15/06	Water	BT	2/17/06	524.2	AGEM	27	1.8	ND	ND	–	1

TABLE S3.2 (Cont.)

Sample	Sample Date	Medium	Type <sup>a</sup>	Analysis Date	Analytical Method <sup>b</sup>	Laboratory	Concentration (µg/L in water; µg/kg in soil)					Quantitation Limit
							Carbon Tetrachloride	Chloroform	Methylene Chloride	Acetone	Methane	
<i>March 2006 Sampling Event</i>												
CNQCTB-W-19893	3/14/06	Water	TB	3/15/06	524.2	AGEM	ND	ND	ND	ND	–	1
CNQCTB-W-19894	3/14/06	Water	TB	3/26/06	OLM04.3	ENVSY	ND	ND	1.7 JB <sup>f</sup>	4.9 JB	–	5
CNQCTB-W-19895	3/14/06	Water	TB	3/16/06	RSK-175	STL	–	–	–	–	ND	2
CNQCRI-W-19897	3/15/06	Water	RI	3/17/06	524.2	AGEM	ND	0.1 J	0.5 JB	ND	–	1
CNQCRI-W-19899	3/15/06	Water	RI	3/17/06	524.2	AGEM	ND	ND	0.4 JB	ND	–	1
CNQCTB-W-19892	3/15/06	Water	TB	3/17/06	524.2	AGEM	ND	ND	0.5 JB	ND	–	1
CNQCTB-W-19984	3/15/06	Water	TB	3/26/06	OLM04.3	ENVSY	ND	ND	1.8 JB	4.4 JB	–	5
CNQCTB-W-19983	3/15/06	Water	TB	3/16/06	RSK-175	STL	–	–	–	–	ND	2
CNQCBL-W-19912	3/16/06	Water	FB	3/17/06	524.2	AGEM	ND	0.1 J	0.5 JB	ND	–	1
CNQCTB-W-19913	3/16/06	Water	TB	3/17/06	524.2	AGEM	ND	0.1 J	0.5 JB	ND	–	1
CNQCTB-W-19914	3/16/06	Water	TB	3/17/06	RSK-175	STL	–	–	–	–	ND	2
CNQCRI-W-19901	3/17/06	Water	RI	3/20/06	524.2	AGEM	ND	0.2 J	ND	ND	–	1
CNQCTB-W-19905	3/17/06	Water	TB	3/20/06	524.2	AGEM	ND	0.2 J	ND	ND	–	1
CNQCTB-W-19910	3/17/06	Water	TB	3/19/06	RSK-175	STL	–	–	–	–	ND	2

<sup>a</sup> Sample types: BT, waste characterization; FB, field blank; RI, rinsate; TB, trip blank.

<sup>b</sup> Analytical methods: EPA Method 524.2 ([http://www.accustandard.com/asi/pdfs/epa\\_methods/524\\_2.pdf](http://www.accustandard.com/asi/pdfs/epa_methods/524_2.pdf)); EPA Method 8260B ([http://www.accustandard.com/asi/pdfs/epa\\_methods/8260b.pdf](http://www.accustandard.com/asi/pdfs/epa_methods/8260b.pdf)); OLM04.3 (<http://www.epa.gov/superfund/programs/clp/olm4.htm>); RSK-175 (Kampbell D.H., and S.A. Vandegrift, 1998, *Journal of Chromatographic Science* 36:253–256; <http://www.epa.gov/NE/info/testmethods/pdfs/rsk-sop-175.pdf>).

<sup>c</sup> ND, not detected at the method detection limit.

<sup>d</sup> Qualifier J indicates an estimated concentration below the indicated quantitation limit.

<sup>e</sup> Sample not analyzed for this constituent.

<sup>f</sup> Qualifier B indicates that the analyte was found in the associated method blank.

TABLE S3.3 Results for quality control procedures monitoring organic analyses of groundwater samples at the AGEM Laboratory by the purge-and-trap method.

Sample	Measured Concentration and RPD Value for Calibration Check Standard								
	Recovery of Surrogate Compounds <sup>a</sup> (%)			Carbon Tetrachloride		Chloroform		Methylene Chloride	
	Fluorobenzene	Bromo- fluorobenzene	1,4-Dichloro- benzene-d <sub>4</sub>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>
<i>SDG 05-9-13, Analysis Date September 13, 2005</i>									
20-μg/L standard	95	100	96	17.88	2.8	18.79	1.6	19.4	0.8
Laboratory blank	100	100	100						
CNSB08-W-19272	98	97	101						
CNSB04-W-19273	103	106	107						
CNSB01-W-19274	112	110	113	Outside calibration range for carbon tetrachloride at dilution factor one (DF1). Analyzed at dilution in SDG 05-9-14.					
CNSB05-W-19275	99	100	102						
CNMW01-W-19276	102	103	105						
CNMW03-W-19277	108	106	109						
CNMW06-W-19278	93	92	96						
CNMW06-W-19278DUP	100	97	99						
CNMW05-W-19279	108	87	96						
CNMW04-W-19280	104	106	108						
CNSB09-W-19281	101	102	103						
Laboratory blank	97	94	96						
CNMW02-W-19282	96	93	95	Outside calibration range for carbon tetrachloride at DF1. Analyzed at dilution in SDG 05-9-14.					
CNQCDU-W-15475	99	101	101						
CNQCDU-W-15477	105	100	106	Outside calibration range for carbon tetrachloride at DF1. Analyzed at dilution in SDG 05-9-14.					
CNQCDRUM2-W-15482	95	96	100						
CNQCDRUM1-W-15481	94	92	98						
CNQCRI-W-15479	93	95	98						
CNQCTB-W-15478	83	73 <sup>c</sup>	77 <sup>c</sup>	Accepted.					

TABLE S3.3 (Cont.)

Sample	Measured Concentration and RPD Value for Calibration Check Standard								
	Recovery of Surrogate Compounds <sup>a</sup> (%)			Carbon Tetrachloride		Chloroform		Methylene Chloride	
	Fluorobenzene	Bromo- fluorobenzene	1,4-Dichloro- benzene-d <sub>4</sub>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>
<i>SDG 05-9-14, Analysis Date September 14, 2005</i>									
20-μg/L standard	107	105	112	17.63	3.1	18.81	1.5	20.06	0.1
Methanol blank	100	100	100						
CNSB01-W-19274	96	98	97	Analysis at DF10.					
CNQCDCU-W-15477	91	95	93	Analysis at DF10.					
CNMW02-W-19282	86	90	90	Analysis at DF10.					
CNQCRI-W-19283	98	108	106						
CNQCFCB-W-15480	80	83	83						
<i>SDG 05-10-14, Analysis Date October 14, 2005</i>									
20-μg/L standard	95	90	97	16.94	4.1	18.06	2.5	17.95	2.7
Laboratory blank	100	100	100						
CNMW01-W-16308	103	103	104						
CNMW02-W-16309	108	108	110						
CNMW03-W-16310	97	99	101						
CNMW04-W-16311	96	96	97						
CNMW05-W-16312	98	100	101						
CNMW05-W-16312DUP	97	95	96						
CNMW06-W-16313	92	87	86						
CNSB01-W-16314	95	93	97						
CNSB01-W-16314DUP	98	96	100						
CNSB05-W-16316T	104	98	97						
CNSB04-W-16315	88	87	96						
CNSB08-W-16317	89	82	81						
CNSB09-W-16318	110	105	107						
Laboratory blank 2	91	83	85						
CNQCDCU-W-16321	97	90	91						

TABLE S3.3 (Cont.)

Sample	Measured Concentration and RPD Value for Calibration Check Standard								
	Recovery of Surrogate Compounds <sup>a</sup> (%)			Carbon Tetrachloride		Chloroform		Methylene Chloride	
	Fluorobenzene	Bromo- fluorobenzene	1,4-Dichloro- benzene-d <sub>4</sub>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>
<i>SDG 05-10-14, Analysis Date October 14, 2005 (Cont.)</i>									
CNQCDU-W-16322	98	95	94	Outside calibration range for carbon tetrachloride at DF1. Analyzed at dilution in SDG 05-10-19.					
CNSB05-W-16323	104	91	93						
CNQCDR-W-16324	100	92	85	Outside calibration range for carbon tetrachloride at DF1. Analyzed at dilution in SDG 05-10-19.					
CNQCTB-W-16325	93	87	88						
CNQCRI-W-15487	93	84	83						
CNQCFB-W-15488	90	84	84						
<i>SDG 05-10-19, Analysis Date October 19, 2005</i>									
20-μg/L standard	97	101	94	22.36	2.8	22.75	3.2	20	0.0
Laboratory blank	107	110	109						
CNQCDR-W-16324	92	91	84	Analysis at DF10.					
CNQCDU-W-16322	95	91	86	Analysis at DF10.					
<i>SDG 06-2-2, Analysis Date February 2, 2006</i>									
20-μg/L standard	85	95	95	16.54	4.7	19.66	0.4	22.71	3.2
Laboratory blank	100	100	100						
CNQCD-W-16198	103	104	104						
EVTB3-W-13226	88	88	93						
<i>SDG 06-2-15, Analysis Date February 15, 2006</i>									
20-μg/L standard	88	89	88	19.6	0.5	21.73	2.1	29.97	10.0
Laboratory blank	108	108	107						
EVFB-W-13239	101	101	102						

TABLE S3.3 (Cont.)

Sample	Measured Concentration and RPD Value for Calibration Check Standard								
	Recovery of Surrogate Compounds <sup>a</sup> (%)			Carbon Tetrachloride		Chloroform		Methylene Chloride	
	Fluorobenzene	Bromo- fluorobenzene	1,4-Dichloro- benzene-d <sub>4</sub>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>
<i>SDG 06-2-15, Analysis Date February 15, 2006 (Cont.)</i>									
CNCM-G-16199	87	88	86						
<i>SDG 06-2-17, Analysis Date February 17, 2006</i>									
20-μg/L standard	97	105	106	18.74	1.6	19.85	0.2	19.93	0.1
Laboratory blank	90	90	91						
CNMW09-G-16201	90	93	94						
CNMW08-G-16205	110	110	109						
CNSB07-G-16203	105	101	95						
CNMW07-G-16202	83	88	89						
CNMW10-G-16204	92	87	84						
<i>SDG 06-2-20, Analysis Date February 20, 2006</i>									
20-μg/L standard	95	98	96	18.18	2.4	23.34	3.9	20	0.0
Laboratory blank	100	100	100						
CNSB07-G-16206	90	84	85						
CNCM-S-16200	100	94	90						
<i>SDG 06-3-15, Analysis Date March 15, 2006</i>									
20-μg/L standard	93	103	116	20.03	0.0	19.33	0.9	15.85	5.8
Laboratory blank	109	104	104						
CNMW08-W-19284	96	94	94						
CNMW10-W-19886	119	118	118						
CNMW10-W-19886DUP	82	84	84						
CNMW07-W-19887	95	97	97						
CNQCTB-W-19893	82	83	83						



TABLE S3.3 (Cont.)

Sample	Measured Concentration and RPD Value for Calibration Check Standard									
	Recovery of Surrogate Compounds <sup>a</sup> (%)			Carbon Tetrachloride		Chloroform		Methylene Chloride		
	Fluorobenzene	Bromo- fluorobenzene	1,4-Dichloro- benzene-d <sub>4</sub>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>	μg/L	RPD <sup>b</sup>	
<i>SDG 06-3-16, Analysis Date March 16, 2006</i>										
20-μg/L standard	120	116	114	20.88	1.1	22	2.4	17.07	4.0	
Laboratory blank	107	111	116							
CNSB07R-W-19978	101	102	101							
CNQCDCU-W-19985	107	111	111							
CNMW09-W-19285	104	108	109							
CNMW01-W-19890	103	105	102							
CNMW01-W-19890DUP	92	94	92							
CNMW04-W-19891	107	102	97							
CNMW05-W-19976	92	90	87							
CNMW06-W-19889	99	101	98							
CNQCDCU-W-19981	81	82	81							
<i>SDG 06-3-17, Analysis Date March 17, 2006</i>										
20-μg/L standard	85	112	115	21.1	1.3	20.34	0.4	21.19	1.4	
Laboratory blank	100	100	100							
CNSB04-W-19906	94	99	99							
CNQCDCU-W-19915	92	104	106							
CNMW02-W-19908	101	106	105							
CNQCRI-W-19899	91	96	97							
CNQCCTB-W-19913	86	84	83							
CNQCRI-W-19897	86	90	87							
CNQCBL-W-19912	89	91	86							
CNQCCTB-W-19892	90	98	95							
				Carbon tetrachloride outside calibration range at DF1. Analyzed at dilution in SDG 06-3-20a.						

TABLE S3.3 (Cont.)

Sample	Measured Concentration and RPD Value for Calibration Check Standard								
	Recovery of Surrogate Compounds <sup>a</sup> (%)			Carbon Tetrachloride		Chloroform		Methylene Chloride	
	Fluorobenzene	Bromo- fluorobenzene	1,4-Dichloro- benzene-d <sub>4</sub>	µg/L	RPD <sup>b</sup>	µg/L	RPD <sup>b</sup>	µg/L	RPD <sup>b</sup>
<i>SDG 06-3-20a, Analysis Date March 20, 2006</i>									
20-µg/L standard	112	113	116	23.9	4.4	23.77	4.3	20	0.0
Laboratory blank	118	117	116	Reanalyzed in SDG 06-3-21.					
CNSB09-W-19902	78 <sup>c</sup>	84	86						
CNSB08-W-19903	104	108	111	Analysis at DF10.					
CNSB01-W-19979	90	95	98						
CNMW03-W-19909	101	106	111						
CNSB05-W-19904	94	97	96						
CNQCDU-W-19911	92	95	95						
CNQCTB-W-19905	90	89	90						
CNQCRI-W-19901	86	88	89						
CNMW02-W-19908	96	96	93						
<i>SDG 06-3-20b, Analysis Date March 20, 2006</i>									
20-µg/L standard	103	81	102	Duplicate analysis at DF10.					
Laboratory blank	100	100	100						
CNSB01-W-19979DUP									
CNMW02-W-19908DUP									
<i>SDG 06-3-21, Analysis Date March 21, 2006</i>									
20-µg/L standard	92	112	102	18.48	2.0	17.69	3.1	18.3	2.2
Laboratory blank	118	119	113						
CNSB09-W-19902	92	92	91						

TABLE S3.3 (Cont.)

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- <sup>a</sup> Quality control range for surrogate recovery = 80–120%.
- <sup>b</sup> Quality control range for RPD =  $\pm 20\%$ .
- <sup>c</sup> Surrogate recovery outside quality control range.

TABLE S3.4 Comparison of AGEM Laboratory results for primary and secondary analyses of groundwater samples collected during monitoring at Centralia, Kansas.

Location	Sample Type <sup>a</sup>	Sample	Replicate	Sample Concentration (µg/L)		Replicate Concentration (µg/L)		Relative Percent Difference	
				Carbon Tetrachloride	Chloroform	Carbon Tetrachloride	Chloroform	Carbon Tetrachloride	Chloroform
<i>September 2005 Sampling Event</i>									
MW02	MW	CNMW02-W-19282	CNQCDU-W-15477	776	33	732	31	5.8	6.3
SB04	CPT/P	CNSB04-W-19273	CNQCDU-W-15475	47	0.6 J <sup>b</sup>	75	0.8 J	45.9	28.5
<i>October 2005 Sampling Event</i>									
MW02	MW	CNMW02-W-16309	CNQCDU-W-16322	528	21	602	21	13.1	0
SB08	CPT/P	CNSB08-W-16317	CNQCDU-W-16321	77	2.8	62	2.4	21.6	15.4
<i>February 2006 Monitoring Well Installation</i>									
SB07R	CPT/P	CNSB07-G-16203	CNSB07-G-16206	27	1.8	32	1.8	16.9	0
<i>March 2006 Sample Event</i>									
MW05	MW	CNMW05-W-19976	CNQCDU-W-19985	1.3	ND <sup>c</sup>	1.3	ND	0	— <sup>d</sup>
SB04	CPT/P	CNSB04-W-19906	CNQCDU-W-19915	51	0.5 J	55	0.5 J	7.5	0
SB05	CPT/P	CNSB05-W-19904	CNQCDU-W-19911	104	7.2	102	7.4	1.9	2.7
SB07R	CPT/P	CNSB07R-W-19978	CNQCDU-W-19981	41	2.7	43	3	4.8	10.5

<sup>a</sup> Sample types: CPT/P, piezometer; MW, monitoring well.

<sup>b</sup> Qualifier J indicates on estimated concentration below the method quantitation limit of 1 µg/L.

<sup>c</sup> ND, contaminant not detected at instrument detection limit of 0.1 µg/L.

<sup>d</sup> RPD value not calculated; analyte not detected.

TABLE S3.5 Recovery of system-monitoring compounds in verification organic analyses of water samples by EnviroSystems, Inc.

Sample	Analysis Date	SDG	Recovery <sup>a</sup> (%)		
			Toluene-d <sub>8</sub>	Bromofluoro- benzene	1,2-Dichloro- ethane-d <sub>4</sub>
VBLKHP	3/26/06	0605045	102	92	98
CNQCMW07-W-19888	3/26/06	0605045	102	96	98
CNQCTB-W-19894	3/26/06	0605045	102	94	100
CNQCSTB07R-W-19982	3/26/06	0605045	102	92	100
CNQCTB-W-19984	3/26/06	0605045	104	94	100
CNQCMW09-W-19977	3/26/06	0605045	102	92	102
VHBLKHQ	3/26/06	0605045	102	84 <sup>b</sup>	102

<sup>a</sup> Quality control ranges:

<u>Compound</u>	<u>Recovery (%)</u>
Toluene-d <sub>8</sub>	88–110
Bromofluorobenzene	86–115
1,2-Dichloroethane-d <sub>4</sub>	76–114

<sup>b</sup> Recovery outside quality control range.

TABLE S3.6 Comparison of organic results for verification analyses of groundwater samples by EnviroSystems, Inc., during monitoring at Centralia, Kansas.

Location	Sample Type	AGEM Laboratory Sample	ENVSYS Sample	AGEM Laboratory Concentration (µg/L)		ENVSYS Concentration (µg/L)		Relative Percent Difference	
				Carbon Tetrachloride	Chloroform	Carbon Tetrachloride	Chloroform	Carbon Tetrachloride	Chloroform
MW07	MW	CNMW07-W-19887	CNQCMW07-W-19888	0.4 J <sup>b</sup>	0.6 J	ND <sup>c</sup>	ND	0	0
MW09	MW	CNMW09-W-19285	CNQCMW09-W-19977	ND	ND	ND	ND	0	0
SB07R	CPT/P	CNSB07R-W-19978	CNQCSB07R-W-19982	41	2.7	32	2.6 J	24.7	3.8

<sup>a</sup> Sample types: CPT/P, piezometer; MW, monitoring well.

<sup>b</sup> Qualifier J indicates an estimated concentration below the method quantitation limits of 1 µg/L for purge-and-trap analysis at the AGEM Laboratory or 5 µg/L for CLP analysis by ENVSYS.

<sup>c</sup> ND, contaminant not detected.

TABLE S3.7 Recovery of known analyte concentrations achieved during inorganic and attenuation parameter analyses of laboratory quality control samples by Severn Trent Laboratories.

Compound	Recovery <sup>a</sup> (%) in SDG						
	SDG 109634	SDG 109640	SDG 109671	SDG 113130	SDG 113158	SDG 113173	SDG 113204
Alkalinity	107	107	NA <sup>b</sup>	107	106–107	107	107
Nitrate	102	NA	NA	97	97	95–99	99–102
Phosphate	99	NA	NA	100	100	93–102	102
Sulfate	97–102	NA	NA	101–103	101–112	102–112	109–112
Chloride	96–100	NA	NA	93–99	99	99–104	100
Nitrate/Nitrite N	NA	90–97	90–94	93	93	97	98–99
Nitrite Nitrogen	98	NA	NA	107	97	93	97
Sulfide	NA	97	97	96	96	96	142 <sup>c</sup>
Total Organic Carbon	NA	101	101–106	96–98	98	96	102
Aluminum	NA	100.2	97.6	97.3	97.3	99.8	99.8
Calcium	NA	100.4	104	98.5	98.5	99.1	99.1
Iron	NA	96.9	103.4	98.6	98.6	98.1	98.1
Magnesium	NA	100.5	104.8	98.8	98.8	99.8	99.8
Manganese	NA	100.5	105.5	97.7	97.7	88	88
Phosphorus	NA	98.4	106.6	96.9	96.9	88.6	88.6
Potassium	NA	99	94.1	96.5	96.5	95.9	95.9
Silicon	NA	111.7	98.9	101.7	101.7	102.2	93.4
Sodium	NA	102	103.1	99.2	99.2	99.2	99.2
Zinc	NA	96.5	102.1	100.6	100.6	86.6	86.6
Methane	NA	107	122	110	110	94	94
Ethane	NA	114	107	107	107	93	114
Ethene	NA	108	108	108	108	100	115

<sup>a</sup> Quality control range for recovery is 70–130%.

<sup>b</sup> NA, samples in this SDG were not analyzed for the indicated constituent.

<sup>c</sup> The high recovery for sulfide in SDG 113204 did not require qualification of samples, because no sulfide was detected in the samples associated with this SDG (19909, 19902, 19903, 19904, 19979).

**Supplement 4:**

**Chain-of-Custody Forms and  
Outside Laboratory Data**



### Supplement 4 Contents

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Chain log of 2 w/# 4361

4360

MATRIX: WATER		ARGONNE NATIONAL LABORATORY		Shipping Container No. Med Bld wht	
RECEIVING LAB: A G E M		CHAIN OF CUSTODY RECORD*		Shipping Info:	
PROJECT/SITE: Centralia		ANALYSIS		ANL Field Contact (Name & Temporary Phone): John Taylor 630 319 5545	
SAMPLER(S) (Signature) BWWashed		Number of con-tainers		REMARKS	
DATE OF COLLECTION		SAMPLE ID NUMBER(S)			
8 SEP 05	CNSB08-W-19272	6			
9 SEP 05	CNSB04-W-19273	6			
9 SEP 05	CNSB01-W-19274	6			
9 SEP 05	CNSB05-W-19275	6			
10 SEP 05	CNMW01-W-19276	6			
10 SEP 05	CNMW03-W-19277	6			
10 SEP 05	CNMW06-W-19278	6			
10 SEP 05	CNMW05-W-19279	6			
11 SEP 05	CNMW04-W-19280	6			SBO9
11 SEP 05	CNMW09-W-19281	6			
11 SEP 05	CNMW02-W-19282	6			QC Replicate
9 SEP 05	CNQC0U-W-15475	6			" "
11 SEP 05	CNQC0U-W-15477	6			TRIP BLANK
11 SEP 05	CNQC0TB-W-15478	2			Rinsate
11 SEP 05	CNQC0RI-W-15479	1			
Relinquished by (Signature) BWWashed		Received by (Signature) JPP		Date 12 SEP 05	
Relinquished by (Signature)		Received for Laboratory by		Date 9/13/05	
		Time 0900 HR		Time 10am	
		Date		Remarks TEPC	
Y		FOR LAB USE ONLY			
N		Custody seal was intact when shipment received.			
		Sample containers were intact when received.			
		Shipment was at required temperature when received.			
		Sample labels, Tags and COC agree.			

\*A sample is under custody if:  
 1. It is in your possession; or,  
 2. It is in your view, after having been in your possession; or,  
 3. It was in your possession and you locked it up; or,  
 4. It is in a designated secure area.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439

4361

Chain of custody w/coc #4360

MATRIX: WATER		ARGONNE NATIONAL LABORATORY		Shipping Container No.	
RECEIVING LAB: A G E M		CHAIN OF CUSTODY RECORD*		Shipping Info:	
PROJECT/SITE: CENTRALIA		ANALYSIS		ANL Field Contact (Name & Temporary Phone):	
SAMPLER(S) (Signature) <i>BW Nashed</i>		Number of con-tainers		REMARKS	
DATE OF COLLECTION		SAMPLE ID NUMBER(S)			
11 SEP 05	CNQCFB-W-15480	1	✓	QC Field Blank	
11 SEP 05	CNQCRI-W-19A83	2	✓	QC Rinstate	
11 SEP 05	CNQCDRUM 1-W-15481	2	✓	Waste Drum 1 - QA/QC	
11 SEP 05	CNQCDRUM 2-W-15482	2	✓	Waste Drum 2 - QA/QC	
<del>Blank</del>					
Relinquished by (Signature) <i>BW Nashed</i>		Received by (Signature)		Received by (Signature)	
Date: 10 SEP 05		Time: 0900 HR		Date: _____	
Relinquished by (Signature)		Received for Laboratory by <i>Joyr Charles</i>		Remarks: TE KC	
Date: _____		Time: _____		Date: 9/13/05	
Time: _____		Time: _____		Time: 1000	

\*A sample is under custody if:

1. It is in your possession; or,
2. It is in your view, after having been in your possession; or,
3. It was in your possession and you locked it up; or,
4. It is in a designated secure area.

FOR LAB USE ONLY

Custody seal was intact when shipment received.

Sample containers were intact when received.

Shipment was at required temperature when received.

Sample labels, Tags and COC agree.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439

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COC 1 of 2 w/# 4416

MATRIX: WATER		ARGONNE NATIONAL LABORATORY		Shipping Container No.	
RECEIVING LAB: AGEN		CHAIN OF CUSTODY RECORD*		Shipping Info:	
PROJECT/SITE: Centralia				ANL Field Contact (Name & Temporary Phone):	
SAMPLER(S) (Signature) <i>BW Marshall</i>		ANALYSIS		REMARKS	
DATE OF COLLECTION		Number of containers			
SAMPLE ID NUMBER(S)					
11 OCT 05	CNQCRI-W-15487	2			QC Rinse
11 OCT 05	CNQCIFB-W-15488	2			QC Field Blank
11 OCT 05	CNMW01-W-16308	6			
11 OCT 05	CNMW06-W-16313	6			
11 OCT 05	CNMW04-W-16311	6			
11 OCT 05	CNMW03-W-16310	4			<del>QC Rinse</del> (KOH has split)
11 OCT 05	CNMW05-W-16317	6			Met Hods test
11 OCT 05	CNSB05-W-16316T	6			
12 OCT 05	CNSB05-W-16323	6			
12 OCT 05	CNSB09-W-16318	6			
12 OCT 05	CNSB08-W-16317	6			
12 OCT 05	CNSB01-W-16314	6			
12 OCT 05	CNSB04-W-16315	6			
12 OCT 05	CNQC00-W-16321	6			QC Repl
12 OCT 05	CNMW02-W-16309	6			
Relinquished by (Signature) <i>BW Marshall</i>	Date 12 OCT 05	Time 1830 HR	Received by (Signature)	Date	Time
Received for Laboratory by <i>Joy Abauch</i>	Date 10/19/05	Time 11:15	Relinquished by (Signature)	Date	Time
Remarks	F=40C				

\*A sample is under custody if:  
 1. It is in your possession; or,  
 2. It is in your view, after having been in your possession; or,  
 3. It was in your possession and you locked it up; or,  
 4. It is in a designated secure area.

FOR LAB USE ONLY	
Y	N
	Custody seal was intact when shipment received.
	Sample containers were intact when received.
	Shipment was at required temperature when received.
	Sample labels, Tags and COC agree.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439





4362

MATRIX: <b>WATER</b>	ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD*				Shipping Container No.
RECEIVING LAB: <b>SEVERN TRENT</b>	Shipping Info:				ANL Field Contact (Name & Temporary Phone): <b>John Taylor</b>
PROJECT/SITE: <b>Centralia</b>	ANALYSIS				<b>630 319 5543</b>
SAMPLER(S) (Signature) <i>BW Ashford</i>	Number of containers				REMARKS <b>Time sensitive due to Nitrate analysis. All samples collected between 9-1030 AM on 12 SEP 05. For purposes of Nitrate analysis 15484 replaced and 15483 replaced 12722 (Replaced sample arrived past holding time)</b>
DATE OF COLLECTION	SAMPLE ID NUMBER(S)				
<b>12 SEP 05</b>	<b>CNMW01-W-19276</b>				
	<b>CNMW02-W-19282</b>				
	<b>CNMW03-W-19277</b>				
	<b>CNMW04-W-19280</b>				
	<b>CNMW05-W-19279</b>				
	<b>CNMW06-W-19278</b>				
	<b>CNSB09-W-19281</b>				
	<b>CNSB01-W-19274</b>				
	<b>CNSB04-W-15484</b>				
	<b>CNSB05-W-19275</b>				
<b>12 SEP 05</b>	<b>CNSB08-W-15483</b>				
<b>12 SEP 05</b>	<b>CNC01-W-15486</b>				
Relinquished by (Signature) <i>BW Ashford</i>	Date <b>12 SEP 05</b>	Time <b>1140 HR</b>	Received by (Signature)	Relinquished by (Signature)	Date <b>9-13-05</b>
Relinquished by (Signature)	Date	Time	Received for Laboratory by <i>[Signature]</i>	Time <b>0930</b>	Remarks <b>OK</b>
Y	N	FOR LAB USE ONLY			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Custody seal was intact when shipment received.			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample containers were intact when received.			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shipment was at required temperature when received.			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample labels, tags and COC agree.			

\*A sample is under custody if:

1. It is in your possession; or,
2. It is in your view, after having been in your possession; or,
3. It was in your possession and you locked it up; or,
4. It is in a designated secure area.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439

1556

MATRIX: WATER		ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD*				Shipping Container No. L4 Silver Maxi			
RECEIVING LAB: SEVERN TRENT		ANALYSIS				Shipping Info: FOX 831434979134			
PROJECT/SITE: Centralia		CATIONS				ANL Field Contact (Name & Temporary Phone): John Taylor 630 319 5543			
SAMPLERS (Signature) <i>BWT Ashford</i>		SULFIDE							
DATE OF COLLECTION		TOTAL N				REMARKS			
SAMPLE ID NUMBER(S)		METHANE							
9 SEP 05	CNSB01-W-19274	1	1	3		TOTAL N and TOC samples			
9 SEP 05	CNSB05-W-19275	1	1	1		preserved pH $\approx$ 2 H <sub>2</sub> SO <sub>4</sub>			
10 SEP 05	CNMW01-W-19276	1	1	1		Sulfide samples preserved			
10 SEP 05	CNMW03-W-19277	1	1	1		Zn acetate pH 7.9 NaOH			
10 SEP 05	CNMW06-W-19278	1	1	1					
10 SEP 05	CNMW05-W-19279	1	1	1					
11 SEP 05	CNMW04-W-19280	1	1	1					
11 SEP 05	CNSB09-W-19281	1	1	1					
11 SEP 05	CNMW07-W-19282	1	1	1					
12 SEP 04	CNQC7B-W-15485	1	1	1		TRIP BLANK - Methane			
		<i>BWT Ashford</i>							
		<i>Doc</i>							
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Relinquished by (Signature)	Date	Time	Received by (Signature)
<i>BWT Ashford</i>	18 SEP 05	1130 HR	<i>[Signature]</i>	9/15/05					
Relinquished by (Signature)	Date	Time	Received for Laboratory by	Date	Time	Remarks			

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1. It is in your possession; or,
2. It is in your view, after having been in your possession; or,
3. It was in your possession and you locked it up; or,
4. It is in a designated secure area.

FOR LAB USE ONLY

Custody seal was intact when shipment received.

Sample containers were intact when received.

Shipment was at required temperature when received.

Sample labels, Tags and COC agree.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439



1548 A  
 2050911070

**CHAIN - OF - CUSTODY RECORD**

Phone: (412) 826-5745

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company: Argonne National Lab  
 Co. Address: 9700 South Cass Ave, Bldg 203  
 Proj. Manager: Lorraine LaFreniere  
 Proj. Location: (Contact: Jorge Alvarado 630-252-  
Centralia 5267  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Results to: Jorge Alvarado  
 Invoice to: Per instruction on PO

Sampler's signature: BW Nashbold **2005 HR**

Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	Parameters Requested	Cooler ID	Cooler Temp.	Remarks
1	CNSB01-A-19274	9SEP	1540				Dissoolved Hydrogen			
2	CNSB05-A-19275	9SEP	1713							
3	CNSB08-A-19272	8SEP	1715							
4	CNSB04-A-19273	9SEP	1015							
5	<del>CNSB02-A-19271</del>	<del>11SEP</del>	<del>1455</del>							
5	CNMW02-A-19282	11SEP	1455							
5 each vials collected using bubble stream method. Flow rate = 250 ml/min. Strip = 15 min. Note - Bubble size increased to between double and triple starting volume apparently, to degassing of water through it from depth.										

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
<u>BW Nashbold</u>	Argonne Nat'l	18 Sep	1015A	<u>[Signature]</u>	Argonne	9/25/05	1711
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

WHITE COPY : Accompany Samples

YELLOW COPY : Laboratory File

PINK COPY : Submitter









MATRIX: <u>Water</u>		ARGONNE NATIONAL LABORATORY				Shipping Container No. <u>8389 23758061</u>	
RECEIVING LAB: <u>AGEM</u>		CHAIN OF CUSTODY RECORD*				Shipping Info:	
PROJECT/SITE: <u>Cementillage</u>		ANL Field Contact (Name & Temporary Phone):					
SAMPLER(S) (Signature)		Number of containers	ANALYSIS		REMARKS		
<u>[Signature]</u>							
DATE OF COLLECTION	SAMPLE ID NUMBER(S)						
<u>14 Mar 06</u>	<u>CNMW10-W-19886</u>	<u>4</u>					
<u>14 Mar 06</u>	<u>CNMW08-W-19284</u>	<u>4</u>					
<u>14 Mar 06</u>	<u>CNQ5TB-W-19893</u>	<u>2</u>					
<u>14 Mar 06</u>	<u>CNMW07-W-19887</u>	<u>4</u>					
<u>400</u>							
Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Received by (Signature)	
<u>[Signature]</u>	<u>14 Mar</u>	<u>1700</u>					
Relinquished by (Signature)	Date	Time	Received for Laboratory by	Date	Time	Remarks	
			<u>[Signature]</u>	<u>3/15/06</u>	<u>10:00</u>		
Y	N	FOR LAB USE ONLY					
		Custody seal was intact when shipment received.					
		Sample containers were intact when received.					
		Shipment was at required temperature when received.					
		Sample labels, Tags and COC agree.					

\*A sample is under custody if:  
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2. It is in your view, after having been in your possession; or  
3. It was in your possession and you locked it up; or  
4. It is in a designated secure area.

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2410

Shipping Container No. **8389 2575 8050**

**ARGONNE NATIONAL LABORATORY  
CHAIN OF CUSTODY RECORD\***

MATRIX: **WATER**  
RECEIVING LAB: **ASEM**  
PROJECT/SITE: **Centralia**

Shipping Info:  
ANL Field Contact (Name & Temporary Phone):

SAMPLER(S) (Signature): *B. Mashold*  
REMARKS: **B. Mashold  
630 758 7698**

DATE OF COLLECTION	SAMPLE ID NUMBER(S)	Number of containers	ANALYSIS										
15 MAR 06	CNMW06-W-19889	4											
	CNMW01-W-19890	4											
	CNQCIB-W-19892	2											
	CNMW04-W-19891	4											
	CNMW05-W-19976	4											
	CNQCUDU-W-19985	4											
	<del>CNMW09-W-19977</del>	<del>4</del>											
15 MAR 06	CNSB07R-W-19978	4											
15 MAR 06	CNMW09-W-19285	4											
15 MAR 06	CNQCUDU-W-19981	2											

Relinquished by (Signature): *B. Mashold*

Received by (Signature): *[Signature]*

Date: 15 MAR 06  
Time: 1800 HR

Relinquished by (Signature):  
Date: 3/10/06  
Time: 2:00

Received for Laboratory by: *[Signature]*

Remarks: **TS YOC**

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Remarks
<i>B. Mashold</i>	15 MAR 06	1800 HR				

FOR LAB USE ONLY

- Custody seal was intact when shipment received.
- Sample containers were intact when received.
- Shipment was at required temperature when received.
- Sample labels, Tags and COC agree.

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3. It was in your possession and you locked it up; or,
4. It is in a designated secure area.







4508

*Barney Washed*

MATRIX: WATER		ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD*				Shipping Container No. Red + Whit 69	
RECEIVING LAB: Severn-Trent		PROJECT/SITE: Centralia				Shipping Info: 85091481 0180	
SAMPLER(S) (Signature) <i>Barney Washed</i>		ANALYSIS				ANL Field Contact (Name & Temporary Phone): TRAVIS KAMLER 402.643.0463	
DATE OF COLLECTION	SAMPLE ID NUMBER(S)	Number of con-tainers	Alcids	Methane	TOC	Sulfide	Total N
14 MAR 06	CNMW08-W-19284	8	✓	✓	✓	✓	✓
14 MAR 06	CNMW10-W-19886	8	✓	✓	✓	✓	✓
14 MAR 06	CNMW07-W-19887	8	✓	✓	✓	✓	✓
14 MAR 06	CNQCTB-W-19895	8	✓	✓	✓	✓	✓
<i>DM</i>							
Relinquished by (Signature) <i>Barney Washed</i>	Date 15 MAR 06	Time 1640 HR	Received by (Signature)	Received by (Signature)	Date	Time	Received by (Signature)
Relinquished by (Signature)	Date	Time	Received for Laboratory by	Received for Laboratory by	Date	Time	Remarks
			<i>[Signature]</i>	<i>[Signature]</i>	3-15-06	0945	
Y	N	FOR LAB USE ONLY					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Custody seal was intact when shipment received.					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample containers were intact when received.					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shipment was at required temperature when received.					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample labels, Tags and COC agree.					

- \* A sample is under custody if:
1. It is in your possession; or,
  2. It is in your view, after having been in your possession; or,
  3. It was in your possession and you locked it up; or,
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4511

85091481 0170

MATRIX: WATER		ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD*		Shipping Container No. <del>85091481 0170</del>	
RECEIVING LAB: STL				Shipping Info:	
PROJECT/SITE: Centralia				ANL Field Contact (Name & Temporary Phone): G. Washold 6308527698	
SAMPLER(S) (Signature)				Sorge Alvarado-ANL	
DATE OF COLLECTION	SAMPLE ID NUMBER(S)	Number of containers	ANALYSIS		
			ANIONS	METHANS	TOC
15 MAR 06	CNMW09-W-19285	8	✓	✓	✓
15 MAR 06	CNPT8-W-19983	2	✓	✓	✓
15 MAR 06	CNSB07A-W-19978	8	✓	✓	✓
<del>REMAINDER OF TABLE</del>					
Relinquished by (Signature) <i>Bullman</i>	Date 15 MAR 06	Time 1800 HR	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received for Laboratory by <i>Millie</i>	Date 3-16-06	Time 0930
Remarks					

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 1. It is in your possession; or,  
 2. It is in your view, after having been in your possession; or,  
 3. It was in your possession and you locked it up; or,  
 4. It is in a designated secure area.

FOR LAB USE ONLY  
 Custody seal was intact when shipment received.  
 Sample containers were intact when received.  
 Shipment was at required temperature when received.  
 Sample labels, Tags and COC agree.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439









MM Mar 20  
8:45 ARANDA

3710

MATRIX: WATER		ARGONNE NATIONAL LABORATORY		Shipping Container No.	
RECEIVING LAB: A-65 MIAMI TRITIUM		CHAIN OF CUSTODY RECORD*		Shipping Info: 8509 1480 9740	
PROJECT/SITE: Centralia		ANALYSIS		ANL Field Contact (Name & Temporary Phone): Barney Washold 630 252 7698	
SAMPLER(S) (Signature) B.W. Washold		Number of con-tainers		REMARKS Contact = Jorge Alvarado at AVL	
DATE OF COLLECTION	SAMPLE ID NUMBER(S)				
15 MAR 06	CNSB07B-W-19978	1			
15 MAR 06	CNMMW09-W-19285	1			
14 MAR 06	CNMMW08-W-19284	1			
14 MAR 06	CNMMW07-W-19887	1			
14 MAR 06	CNMMW10-W-19886	1			
<i>B.W.</i>					
Relinquished by (Signature) B.W. Washold	Date 18 MAR 06	Time 1200 HR	Received by (Signature)	Date	Time
Relinquished by (Signature)	Date	Time	Received for Laboratory by	Date	Time
Y	N	FOR LAB USE ONLY			
		Custody seal was intact when shipment received.			
		Sample containers were intact when received.			
		Shipment was at required temperature when received.			
		Sample labels, Tags and COC agree.			

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 4. It is in a designated secure area.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439



# ENVIROSYSTEMS, INC.

---

9200 Rumsey Road • Suite B102 • Columbia, Maryland 21045-1934  
Phone (410) 964-0330 • Fax (410) 740-9306  
Email: info@envsystems.com • Webpage: www.envsystems.com/envsys

May 19, 2006

Jorge S. Alvarado, Ph.D  
Argonne National Laboratory  
Environmental Research Division  
Applied Geoscience and Environmental  
Management Section  
9700 South Cass Avenue, ER-203  
Argonne, Illinois 60439

**RE: ENVSYS Report 0605045**

Dear Jorge:

Enclosed are the results of analysis for the samples received for volatile organics analysis by US EPA CLP SOW OLM04.3 with a lower reporting limit of 5ug/L.

Please do not hesitate to call me if you have any questions, comments, or require additional information.

Sincerely,



Mohan Khare, Ph.D  
President/CEO

MK/pl

1. Narrative

00001

**SDG NARRATIVE**

LABORATORY NAME: ENVIROSYSTEMS, INC.

CLIENT: Argonne National Laboratory

DATE SAMPLES RECEIVED AT LABORATORY: 15 - 24 March 2006

SAMPLE ANALYSES INCLUDED IN THIS REPORT:

Client#	Lab ID #	Analysis	Matrix
CNQCMW07-W-19888	0060315-01	VOA	WATER
CNCQCTB-W-19894	0060315-02	VOA	WATER
CNQCSB07R-W-19982	0060320-01	VOA	WATER
CNQCTB-W-19984	0060320-02	VOA	WATER
CNQCMW09-W-19977	0060320-03	VOA	WATER
MRQCMW-11S-W-2006	0060328-01	VOA	WATER
MRQCFB-W-2007	0060328-02	VOA	WATER
MRMW3SW19994	0060329-01	VOA	WATER
EVMW4W20117	0060329-02	VOA	WATER
EVQCTBW26120	0060329-03	VOA	WATER
EVPT1W20125	0060330-01	VOA	WATER
EVQCTBW20126	0060330-02	VOA	WATER

*Centralia*

*Morril*

*EVEREST*

Matrix spike/matrix spike duplicate analysis was performed on sample EVMW4-W-20117.

Samples for this SDG are analyzed by EPA SOW OLM04.3 for multi-media multi-concentration organics. Sample detection limits have been modified to meet client requirements.

The cooler temperature was measured to be 2-4 degrees C.

The volatile analysis was performed on a Agilent 5975 GC/MS using a Restek RTX-624 20 meter column with an inner diameter of 0.18 mm and a 1 micron film thickness. The trap used with the autosampler is a 30 cm EST K Trap (VOCARB 3000) packed with Carbopack B/Carboxen 1000 & 1001.

The surrogate's recoveries were within the QC limits for all samples and QC samples except for one.

The MS/MSD recoveries were within acceptable range for all compounds.

I CERTIFY THAT THIS DATA PACKAGE IS IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE CONTRACT, BOTH TECHNICALLY AND FOR COMPLETENESS, FOR OTHER THAN THE CONDITIONS DETAILED ABOVE. RELEASE OF THE DATA CONTAINED IN THIS HARDCOPY DATA PACKAGE HAS BEEN AUTHORIZED BY THE LABORATORY MANAGER OR HIS/HER DESIGNEE, AS VERIFIED BY THE FOLLOWING SIGNATURE:

  
 Dr. Mohan Khare  
 president/CEO

DATE: 5/19/06  
 19 MAY 2006

*OIA*

2. SDG Cover Sheet / Traffic Report



2476

3

MATRIX: WATER			ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD*			Shipping Container No. 8509481635		
RECEIVING LAB: ENVIRO SYSTEMS			Shipping Info:			ANL Field Contact (Name & Temporary Phone):		
PROJECT/SITE: CENTRALIA			ANALYSIS			BARNEY WASHOLD 630.857.7628		
SAMPLER(S) (Signature) <i>BW Washold</i>			Number of con-tainers			Remarks		
DATE OF COLLECTION			SAMPLE ID NUMBER(S)			ANL		
15 MAR 06	ENQCMM09-W-19988	2						
15 MAR 06	ENQCSB07R-W-19982	2						
15 MAR 06	ENQCTB-W-19984	2						
15 MAR 06	ENQCMW09-W-19977	2						
<i>BW</i>								
<i>ENQCMW09-W-19977</i>								
<i>ENQCSB07R-W-19982</i>								
<i>ENQCTB-W-19984</i>								
<i>ENQCMW09-W-19977</i>								
<i>BW</i>								
<i>ENQCMW09-W-19977</i>								
<i>ENQCSB07R-W-19982</i>								
<i>ENQCTB-W-19984</i>								
<i>ENQCMW09-W-19977</i>								

Relinquished by (Signature)		Date	Time	Received by (Signature)	Date	Time	Received by (Signature)
<i>BW Washold</i>		15 MAR 06	1800 HR				
Relinquished by (Signature)		Date	Time	Received for Laboratory by	Date	Time	Remarks
		16 Mar 06	10100 a.m.	<i>BW Washold</i>			

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3. It was in your possession and you locked it up; or,
4. It is in a designated secure area.

*30C cooler*

VOLATILES SAMPLE DATA

00023

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCMW07 -W-19888
----------------------

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060315-01

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 031501

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl Chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
67-64-1	Acetone	3.1	JB	
75-15-0	Carbon Disulfide	5.0	U	
79-20-9	Methyl Acetate	5.0	U	
75-09-2	Methylene Chloride	2.0	JB	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-Butyl Ether	5.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
156-59-2	cis-1,2-Dichloroethene	5.0	U	
78-93-3	2-Butanone	5.0	U	
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
56-23-5	Carbon Tetrachloride	5.0	U	
71-43-2	Benzene	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	



1B  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCMW07 -W-19888
----------------------

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060315-01

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 031501

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
79-01-6	Trichloroethene	5.0	U	
108-87-2	Methylcyclohexane	5.0	U	
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-Pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	5.0	U	
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	

1F  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CNQCMW07  
 -W-19888

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060315-01

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 031501

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCTB-W-19894

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060315-02

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 031502

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl Chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
67-64-1	Acetone	4.9	JB	
75-15-0	Carbon Disulfide	5.0	U	
79-20-9	Methyl Acetate	5.0	U	
75-09-2	Methylene Chloride	1.7	JB	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-Butyl Ether	5.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
156-59-2	cis-1,2-Dichloroethene	5.0	U	
78-93-3	2-Butanone	5.0	U	
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
56-23-5	Carbon Tetrachloride	5.0	U	
71-43-2	Benzene	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	

1B  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCTB-W-19894

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060315-02

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 031502

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
79-01-6	Trichloroethene		5.0	U
108-87-2	Methylcyclohexane		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-Pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
127-18-4	Tetrachloroethene		5.0	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U
120-82-1	1,2,4-Trichlorobenzene		5.0	U

1F  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CNQCTB-W-19894

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060315-02

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 031502

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNOCB07  
R-W-19982

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-01

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032001

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl Chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
67-64-1	Acetone		2.2	JB
75-15-0	Carbon Disulfide		5.0	U
79-20-9	Methyl Acetate		5.0	U
75-09-2	Methylene Chloride		1.8	JB
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-Butyl Ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
78-93-3	2-Butanone		5.0	U
67-66-3	Chloroform		2.6	J
71-55-6	1,1,1-Trichloroethane		5.0	U
110-82-7	Cyclohexane		5.0	U
56-23-5	Carbon Tetrachloride		32	
71-43-2	Benzene		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U

1B  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCSB07 R-W-19982
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Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-01

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032001

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/L	Q
79-01-6	Trichloroethene	5.0	U	
108-87-2	Methylcyclohexane	5.0	U	
78-87-5	1,2-Dichloropropane	5.0	U	
75-27-4	Bromodichloromethane	5.0	U	
10061-01-5	cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-Pentanone	5.0	U	
108-88-3	Toluene	5.0	U	
10061-02-6	trans-1,3-Dichloropropene	5.0	U	
79-00-5	1,1,2-Trichloroethane	5.0	U	
127-18-4	Tetrachloroethene	5.0	U	
591-78-6	2-Hexanone	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
1330-20-7	Xylene (Total)	5.0	U	
100-42-5	Styrene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	

1F  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CNQCSB07  
 R-W-19982

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-01

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032001

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCTB-W-19984

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-02

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032002

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-71-8	Dichlorodifluoromethane		5.0	U
74-87-3	Chloromethane		5.0	U
75-01-4	Vinyl Chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		5.0	U
67-64-1	Acetone		4.4	JB
75-15-0	Carbon Disulfide		5.0	U
79-20-9	Methyl Acetate		5.0	U
75-09-2	Methylene Chloride		1.8	JB
156-60-5	trans-1,2-Dichloroethene		5.0	U
1634-04-4	Methyl tert-Butyl Ether		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
156-59-2	cis-1,2-Dichloroethene		5.0	U
78-93-3	2-Butanone		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
110-82-7	Cyclohexane		5.0	U
56-23-5	Carbon Tetrachloride		5.0	U
71-43-2	Benzene		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U

1B  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCTB-W-19984

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-02

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032002

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
79-01-6	Trichloroethene		5.0	U
108-87-2	Methylcyclohexane		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
75-27-4	Bromodichloromethane		5.0	U
10061-01-5	cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-Pentanone		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	trans-1,3-Dichloropropene		5.0	U
79-00-5	1,1,2-Trichloroethane		5.0	U
127-18-4	Tetrachloroethene		5.0	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		5.0	U
106-93-4	1,2-Dibromoethane		5.0	U
108-90-7	Chlorobenzene		5.0	U
100-41-4	Ethylbenzene		5.0	U
1330-20-7	Xylene (Total)		5.0	U
100-42-5	Styrene		5.0	U
75-25-2	Bromoform		5.0	U
98-82-8	Isopropylbenzene		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		5.0	U
541-73-1	1,3-Dichlorobenzene		5.0	U
106-46-7	1,4-Dichlorobenzene		5.0	U
95-50-1	1,2-Dichlorobenzene		5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.0	U
120-82-1	1,2,4-Trichlorobenzene		5.0	U

1F  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CNQCTB-W-19984

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS

Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-02

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032002

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCMW09 -W-19977
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Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-03

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032003

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
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75-71-8	Dichlorodifluoromethane	5.0	U	
74-87-3	Chloromethane	5.0	U	
75-01-4	Vinyl Chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	5.0	U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	
67-64-1	Acetone	2.0	JB	
75-15-0	Carbon Disulfide	5.0	U	
79-20-9	Methyl Acetate	5.0	U	
75-09-2	Methylene Chloride	1.7	JB	
156-60-5	trans-1,2-Dichloroethene	5.0	U	
1634-04-4	Methyl tert-Butyl Ether	5.0	U	
75-34-3	1,1-Dichloroethane	5.0	U	
156-59-2	cis-1,2-Dichloroethene	5.0	U	
78-93-3	2-Butanone	5.0	U	
67-66-3	Chloroform	5.0	U	
71-55-6	1,1,1-Trichloroethane	5.0	U	
110-82-7	Cyclohexane	5.0	U	
56-23-5	Carbon Tetrachloride	5.0	U	
71-43-2	Benzene	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	

1B  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CNQCMW09  
-W-19977

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-03

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032003

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

79-01-6	Trichloroethene	5.0	U
108-87-2	Methylcyclohexane	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-Pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U

1F  
 VOLATILE ORGANICS ANALYSIS DATA SHEET  
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CNQCMW09  
 -W-19977

Lab Name: ENVIROSYSTEMS, INC.

Contract:

Lab Code: ENVSYS Case No.:

SAS No.:

SDG No.: AR0329

Matrix: (soil/water) WATER

Lab Sample ID: 060320-03

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: 032003

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/26/06

GC Column: RTX-624 ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

Number TICs found: 0

CONCENTRATION UNITS:  
 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				



Client Name: Argonne National Laboratory  
Contact: Jorge Al Varado  
Address: 9700 Cass Street  
Bldg. 201, OCF-PRO  
Argonne, IL 60439

Page: Page 1 of 6  
Lab Proj #: P0509170  
Report Date: 09/23/05  
Client Proj Name: Centralia  
Client Proj #: ANL-1

### Laboratory Results

Total pages in data package: 7

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P0509170-01	CNSB01-A-19274
P0509170-02	CNSB05-A-19275
P0509170-03	CNSB08-A-19272
P0509170-04	CNSB04-A-19273
P0509170-05	CNMW02-A-19282

Microseeps test results meet all the requirements of the NELAC standards.

**Approved By:** 

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.  
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

### Case Narrative:

Client Name: Argonne National Laboratory  
Contact: Jorge Al Varado  
Address: 9700 Cass Street  
Bldg. 201, OCF-PRO  
Argonne, IL 60439

Page: Page 2 of 6  
Lab Proj #: P0509170  
Report Date: 09/23/05  
Client Proj Name: Centralia  
Client Proj #: ANL-1

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
CNSB01-A-19274	Vapor	P0509170-01	09 Sep. 05 15:40	13 Sep. 05 12:11		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u> Hydrogen	71.000	1.000	nM	AM20GAX	9/20/05	bc

*nM = nanomoles per liter*





Client Name: Argonne National Laboratory  
Contact: Jorge Al Varado  
Address: 9700 Cass Street  
Bldg. 201, OCF-PRO  
Argonne, IL 60439

Page: Page 3 of 6  
Lab Proj #: P0509170  
Report Date: 09/23/05  
Client Proj Name: Centralia  
Client Proj #: ANL-1

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
CNSB05-A-19275	Vapor	P0509170-02	09 Sep. 05 17:13	13 Sep. 05 12:11		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u> Hydrogen	11.000	1.000	nM	AM20GAX	9/20/05	bc



Client Name: Argonne National Laboratory  
Contact: Jorge Al Varado  
Address: 9700 Cass Street  
Bldg. 201, OCF-PRO  
Argonne, IL 60439

Page: Page 4 of 6  
Lab Proj #: P0509170  
Report Date: 09/23/05  
Client Proj Name: Centralia  
Client Proj #: ANL-1

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
CNSB08-A-19272	Vapor	P0509170-03	08 Sep. 05 17:15	13 Sep. 05 12:11		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u> Hydrogen	6.100	1.000	nM	AM20GAX	9/20/05	bc



Client Name: Argonne National Laboratory  
Contact: Jorge Al Varado  
Address: 9700 Cass Street  
Bldg. 201, OCF-PRO  
Argonne, IL 60439

Page: Page 5 of 6  
Lab Proj #: P0509170  
Report Date: 09/23/05  
Client Proj Name: Centralia  
Client Proj #: ANL-1

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
CNSB04-A-19273	Vapor	P0509170-04	09 Sep. 05 10:15	13 Sep. 05 12:11		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u> Hydrogen	24.000	1.000	nM	AM20GAX	9/20/05	bc



Client Name: Argonne National Laboratory  
Contact: Jorge Al Varado  
Address: 9700 Cass Street  
Bldg. 201, OCF-PRO  
Argonne, IL 60439

Page: Page 6 of 6  
Lab Proj #: P0509170  
Report Date: 09/23/05  
Client Proj Name: Centralia  
Client Proj #: ANL-1

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>	<u>Sampled Date/Time</u>	<u>Received</u>		
CNMW02-A-19282	Vapor	P0509170-05	11 Sep. 05 14:55	13 Sep. 05 12:11		
<u>Analyte(s)</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<u>RiskAnalysis</u> Hydrogen	3.100	1.000	nM	AM20GAX	9/21/05	bc



1548 A  
205091070

CHAIN - OF - CUSTODY RECORD

Phone: (412) 826-5245

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15238

Fax No.: (412) 826-3433

Company: Argonne National Lab  
 Co. Address: 9700 South Cass Ave, Bldg 203  
 Proj. Manager: Lorraine LaFreniere  
 Proj. Location: (Contact: Jorge Alvarado 630-251-5267)  
 Proj. Number: Centralia 5267  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Sampler's signature: BW Nashold

2005 HR

Sample ID	Sample Description	Date	Time	Comp.	Grab	# Cont.	Parameters Requested	Cooler ID	Cooler Temp.	Remarks
1	CNSB01-A-19274	9SEP	1540							
2	CNSB05-A-19275	9SEP	1713							
3	CNSB08-A-19272	8SEP	1715							
4	CNSB04-A-19273	9SEP	1015							
5	<del>CNSB02-A-19271</del>	<del>11SEP</del>	<del>1455</del>							
	CNMWD3-A-19282	11SEP	1455							
5 each vials collected using bubble strip method.										
Flow rate = 250 ml/min. Strip = 15 min.										
Note - Bubble size increased to between double and triple starting volume approximately, to degassing of water bugs at from death.										

Results to: Jorge Alvarado  
 Invoice to: see instruction on PO

Cooler ID	Cooler Temp.
	<u>N/A</u>

Relinquished by:	<u>BW Nashold</u>	Company:	<u>Argonne Natl</u>	Date:	<u>18 SEP 05</u>	Time:	<u>10:55 AM</u>	Received by:	<u>[Signature]</u>	Company:	<u>Argonne</u>	Date:	<u>9/20/05</u>	Time:	<u>12:11</u>
Relinquished by:		Company:		Date:		Time:		Received by:		Company:		Date:		Time:	
Relinquished by:		Company:		Date:		Time:		Received by:		Company:		Date:		Time:	

October 28, 2005

Mr. Clyde Dennis  
Argonne National Laboratory  
Chief Financial Officer  
9700 S. Cass Avenue, Bldg. 201  
Argonne, IL 60439

**STL Burlington**  
208 South Park Drive, Suite 1  
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248  
www.stl-inc.com

Re: Laboratory Project No. 21005  
Case: CENTRALIA; SDG: 109634

Dear Mr. Dennis:

Enclosed are analytical results for samples that were received by STL Burlington on September 13<sup>th</sup>, 2005. This report is sequentially numbered starting with page 1 and ending with page 38. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 09/13/05 ETR No: 109634			
637285	CNMW01-W-19276	09/12/05	Water
637286	CNMW01-W-19276F	09/12/05	Filtrate
637287	CNMW02-W-19282	09/12/05	Water
637288	CNMW02-W-19282F	09/12/05	Filtrate
637289	CNMW03-W-19277	09/12/05	Water
637290	CNMW03-W-19277F	09/12/05	Filtrate
637291	CNMW04-W-19280	09/12/05	Water
637292	CNMW04-W-19280F	09/12/05	Filtrate
637293	CNMW05-W-19279	09/12/05	Water
637294	CNMW05-W-19279F	09/12/05	Filtrate
637295	CNMW06-W-19278	09/12/05	Water
637296	CNMW06-W-19278F	09/12/05	Filtrate
637297	CNSB09-W-19281	09/12/05	Water
637298	CNSB09-W-19281F	09/12/05	Filtrate
637299	CNSB01-W-19274	09/12/05	Water
637300	CNSB01-W-19274F	09/12/05	Filtrate
637301	CNSB04-W-15484	09/12/05	Water
637302	CNSB04-W-15484F	09/12/05	Filtrate
637303	CNSB05-W-19275	09/12/05	Water
637304	CNSB05-W-19275F	09/12/05	Filtrate
637305	CNSB08-W-15483	09/12/05	Water
637306	CNSB08-W-15483F	09/12/05	Filtrate
637307	CNQCDU-W-15486	09/12/05	Water
637316	CNQCDU-W-15486F	09/12/05	Filtrate

Documentation of the condition of the samples at the time of their receipt and any exception to

the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. The analytical work for nitrate nitrogen, nitrite nitrogen, and ortho-phosphate occurred within the 48-hour holding time specified by Method 300.0 for the analysis of nitrate nitrogen and ortho-phosphate, and by Method 354.1 for nitrite nitrogen

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

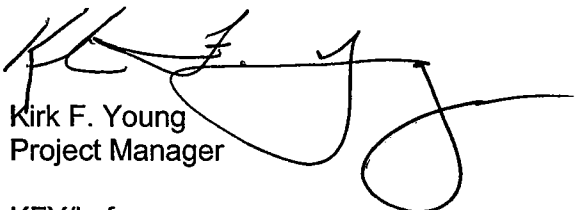
The analysis of the samples for nitrate nitrogen was performed by USEPA Method 300.0, using ion chromatography. The analytical work occurred within the 48-hour holding time specified by Method 300.0 for the analysis of nitrate. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive results in the analysis of the method blank and in the analysis of performance blanks.

The analysis of the samples for ortho-phosphate was performed by USEPA Method 300.0, using ion chromatography. The analytical work occurred within the 48-hour holding time specified by Method 300.0 for the analysis of ortho-phosphate. It should be noted that, for this parameter as well, there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive results in the analysis of the method blank and in the analysis of performance blanks.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young  
Project Manager

KFY/hsf  
Enclosure

## STL Burlington Data Qualifier Definitions

---

### Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

### Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- \* Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

### Method Codes:

- P ICP-AES
- MS ICP-MS
- CV Cold Vapor AA
- AS Semi-Automated Spectrophotometric







**Sample Data Summary Package  
For Wet Chemistry**

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. CNMW01-W-19276
-------------------------------------

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637285

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/13/05	BLKIC091305A	ug/L	1	200	200	U
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	200	U
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	434	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	328	
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	5.0	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW01-W-19276F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 637286

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	303000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	293000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	10000	
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

Printed on: 10/27/05 11:31 AM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW02-W-19282

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637287

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/13/05	BLKIC091305A	ug/L	1	200	7030	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	14700	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	9310	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	200	U
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	28.0	

Printed on: 10/27/05 11:31 AM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW02-W-19282F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637288

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	352000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	347000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	5340	
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW03-W-19277

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 637289

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/16/05	BLKIC091805B	ug/L	2	400	19600	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	7820	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	7060	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	351	
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	19.0	

Printed on: 10/27/05 11:31 AM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW03-W-19277F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637290

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	338000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	338000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U



# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW04-W-19280

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 637291

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/13/05	BLKIC091305A	ug/L	1	200	10200	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	7900	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	4450	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	435	
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	15.0	

Printed on: 10/27/05 11:31 AM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW04-W-19280F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637292

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RI	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	336000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	336000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW05-W-19279

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637293

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/13/05	BLKIC091305A	ug/L	1	200	9420	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	5350	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	3070	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	312	
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	22.0	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW05-W-19279F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 637294

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	303000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	303000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW06-W-19278

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVLT

Case No.: CENTRALIA

Lab Sample ID: 637295

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/13/05	BLKIC091305A	ug/L	1	200	6880	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	4610	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	580	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	283	
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	9.4	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW06-W-19278F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637296

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	317000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	317000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB09-W-19281

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 637297

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/13/05	BLKIC091305A	ug/L	1	200	13400	
300.0	Sulfate	09/17/05	BLKIC091705D	ug/L	5	1000	30100	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	4370	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	200	U
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	21.0	

# WET CHEMISTRY

## Sample Report Summary

**Client Sample No.**  
CNSB09-W-19281F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637298

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	446000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	446000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U



# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB01-W-19274

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637299

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/16/05	BLKIC091605B	ug/L	2	400	18900	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	4310	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	1050	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	200	U
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	8.2	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. <b>CNSB01-W-19274F</b>
---

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637300

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	339000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	339000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB04-W-15484

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637301

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/16/05	BLKIC091605B	ug/L	10	2000	45500	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	5050	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	1730	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	200	U
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	7.7	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB04-W-15484F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 637302

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	369000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	369000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB05-W-19275

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 637303

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/16/05	BLKIC091605B	ug/L	10	2000	57400	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	4270	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	2570	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	200	U
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	10.0	

Printed on: 10/27/05 11:31 AM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB05-W-19275F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVY

Case No.: CENTRALIA

Lab Sample ID: 637304

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	318000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	318000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

Printed on: 10/27/05 11:31 AM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB08-W-15483

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637305

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/16/05	BLKIC091605B	ug/L	2	400	16200	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	7830	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	1370	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	200	U
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	12.0	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB08-W-15483F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637306

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	319000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	319000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U



# WET CHEMISTRY

## Sample Report Summary

Client Sample No. <b>CNQCDU-W-15486</b>
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Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637307

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	09/13/05	BLKIC091305A	ug/L	1	200	7400	
300.0	Sulfate	09/13/05	BLKIC091305B	ug/L	1	200	13700	
300.0	Nitrate as N	09/13/05	BLKIC091305C	ug/L	1	200	9240	
300.0	O-Phosphate as P	09/13/05	BLKIC091305D	ug/L	1	200	200	U
354.1	Nitrite Nitrogen	09/13/05	BLKNI091305A	ug/L	1	5.0	5.1	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. CNQCDU-W-15486F
--------------------------------------

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109634

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637316

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	353000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	353000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

November 3, 2005

Mr. Clyde Dennis  
Argonne National Laboratory  
9700 South Cass Avenue  
Building 203, Office B149  
Argonne, IL 60439

**STL Burlington**  
208 South Park Drive, Suite 1  
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248  
www.stl-inc.com

Re: Laboratory Project No. 21005  
Case: CENTRALIA; SDG: 109640

Dear Mr. Dennis:

Enclosed are the analytical results for samples received by STL Burlington on September 12<sup>th</sup>, 2005. This report is sequentially numbered starting with page 1 and ending with page 72. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 09/12/05 ETR No: 109640			
637329	CNSB08-W-19272	09/08/05	Water
637330	CNSB08-W-19272F	09/08/05	Filtrate
637331	CNSB04-W-19273	09/09/05	Water
637332	CNSB04-W-19273F	09/09/05	Filtrate
637333	CNQCTB-W-15476	09/09/05	Water

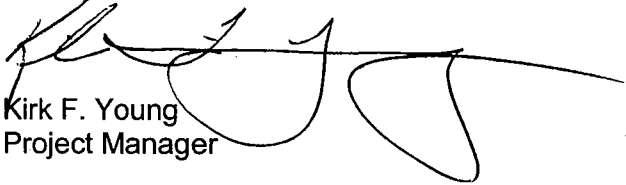
Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. The samples were delayed in transit, and the holding time specific to the anion analyses had expired as of the time of receipt. This was communicated to the field personnel, and the request for the analysis of the samples for those parameters was withdrawn. Additionally, the laboratory was directed to change the sample identifier for the sample that was received as CNQCDU-W-15475. The sample identifier that was provided was CNSB04-W-19273.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity and for the major cations. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young  
Project Manager

KFY/hsf  
Enclosure

## STL Burlington Data Qualifier Definitions

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### Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

### Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- \* Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

### Method Codes:

- P ICP-AES  
MS ICP-MS  
CV Cold Vapor AA  
AS Semi-Automated Spectrophotometric

4252

MATRIX: WATER		Shipping Container No. R-164642C1a	
RECEIVING LAB: SEVERN TRENT		Shipping Info: 831434979112	
PROJECT/SITE: CENTRALIA		ANL Field Contact (Name & Temporary Phone): John Taylor 630 319 5543	
SAMPLER(S) (Signature) <i>Barney N. Mabel</i>		REMARKS TOL and Nitrate/Nitrite (Y.N.) samples analyzed TOPHZ using AZSO4. (TRINBLAVIK) Anion sample is time sens- itive because nitrate deten- mination to be made. Sample # 8 SEP 05 # 19272 collected at 1715 HR ON 8 SEP. Sample # 19273 collected at 1015 HR on 9 SEP 05.	
DATE OF COLLECTION		ANALYSIS	
SAMPLE ID NUMBER(S)		Number of containers	
8 SEP 05	CNSB08-W-19272	8	TOL (4+2)
9 SEP 05	CNQC0U-W-15475	8	METHANE
9 SEP 05	CNQC0B-W-15476	2	AMMONIUM
			CATIONS
			NITRATE
			NITRITE
			SULFIDE

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time	Received by (Signature)
<i>BW Mabel</i>	9 SEP 05	1315 HR				
				9-12-05	0430	
						Remarks: Sample W-15475 arrived labeled "CN 5804-W-19273"

Y	N	FOR LAB USE ONLY
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Custody seal was intact when shipment received.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample containers were intact when received.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Shipment was at required temperature when received.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample labels, Tags and COC agree.

\*A sample is under custody if:  
 1. It is in your possession; or,  
 2. It is in your view, after having been in your possession; or,  
 3. It was in your possession and you locked it up; or,  
 4. It is in a designated secure area.

Argonne National Laboratory, Applied Geosciences & Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439



**Sample Data Summary Package  
For Wet Chemistry**

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB08-W-19272

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109640

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637329

Matrix: WATER

Client: ARGLAB

Date Received: 09/12/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/16/05	BLKNN091605B	ug/L	1	10.0	1280	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/14/05	BLKTO091405B	ug/L	1	1000	1000	U

Printed on: 10/24/05 10:54 AM



# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB08-W-19272F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109640

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637330

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/12/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	316000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	316000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

Printed on: 10/24/05 10:54 AM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB04-W-19273

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109640

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637331

Matrix: WATER

Client: ARGLAB

Date Received: 09/12/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/30/05	BLKNN093005A	ug/L	10	100.0	2640	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/14/05	BLKTO091405B	ug/L	1	1000	1000	U

**WET CHEMISTRY**  
**Sample Report Summary**

Client Sample No.

CNSB04-W-19273F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109640

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637332

Matrix: FILTRATE

Client: ARGLAB

Date Received: 09/12/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Total Alkalinity	09/22/05	BLKAL092205A	ug/L	1	1000	358000	
310.1	Bicarbonate Alkalinity	09/22/05	BLKAL092205B	ug/L	1	1000	358000	
310.1	Carbonate Alkalinity	09/22/05	BLKAL092205C	ug/L	1	1000	1000	U
310.1	Hydroxide Alkalinity	09/22/05	BLKAL092205D	ug/L	1	1000	1000	U

Printed on: 10/24/05 10:54 AM



**Sample Data Summary Package  
For Metals**

USEPA-CLP METALS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 109640

SOW No.: \_\_\_\_\_

<u>EPA Sample No.</u>	<u>Lab Sample ID.</u>
<u>CNSB04-W-19273F</u>	<u>637332</u>
<u>CNSB08-W-19272F</u>	<u>637330</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES  
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_ Name: \_\_\_\_\_

Date: \_\_\_\_\_ Title: \_\_\_\_\_

COVER PAGE - IN

**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNSB04-W-19273F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 109640  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637332  
 Level (low/med): LOW Date Received: 9/12/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	54.6	U		P
7440-70-2	Calcium	79000			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	30000			P
7439-96-5	Manganese	1.9	U		P
7723-14-0	Phosphorous	24.2	U		P
7440-09-7	Potassium	2790	B		P
7440-21-3	Silicon	15000		E	P
7440-23-5	Sodium	54900			P
7440-66-6	Zinc	1.8	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNSB08-W-19272F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 109640  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637330  
 Level (low/med): LOW Date Received: 9/12/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	157	B		P
7440-70-2	Calcium	73000			P
7439-89-6	Iron	155	B		P
7439-95-4	Magnesium	29200			P
7439-96-5	Manganese	1.9	U		P
7723-14-0	Phosphorous	24.2	U		P
7440-09-7	Potassium	2490	B		P
7440-21-3	Silicon	14900		X	P
7440-23-5	Sodium	26700			P
7440-66-6	Zinc	3.7	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_

Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**RSK-175**

**SAMPLE DATA SUMMARY PACKAGE**



FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNQCTBW15476

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109640

Matrix: (soil/water) WATER

Lab Sample ID: 637333

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 14SEP051128-R031

Level: (low/med) LOW

Date Received: 09/12/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/14/05

GC Column: RTUPLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-----	Methane	2.0	U	
74-84-0-----	Ethane	4.0	U	
74-85-1-----	Ethene	3.0	U	

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB04W19273

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109640

Matrix: (soil/water) WATER

Lab Sample ID: 637331

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 14SEP051128-R021

Level: (low/med) LOW

Date Received: 09/12/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/14/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-----	Methane	2.0	U	
74-84-0-----	Ethane	4.0	U	
74-85-1-----	Ethene	3.0	U	

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB08W19272

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109640

Matrix: (soil/water) WATER

Lab Sample ID: 637329

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 14SEP051128-R011

Level: (low/med) LOW

Date Received: 09/12/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/14/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-----	Methane	2.0	U	
74-84-0-----	Ethane	4.0	U	
74-85-1-----	Ethene	3.0	U	

FORM I VOA

November 30, 2005

Mr. Clyde Dennis  
Argonne National Laboratory  
9700 S. Cass Avenue  
Bldg. 203, Office B149  
Argonne, IL 60439

**STL Burlington**  
208 South Park Drive, Suite 1  
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248  
www.stl-inc.com

Re: Laboratory Project No. 21005  
Case: CENTRALIA; SDG: 109671

Dear Mr. Dennis:

Enclosed are the analytical results for samples received by STL Burlington on September 13, 2005. This report is sequentially numbered starting with page 0001 and ending with page 0104. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 09/13/05 ETR No: 109671			
637517	CNSB01-W-19274	09/09/05	Water
637518	CNSB05-W-19275	09/09/05	Water
637519	CNMW01-W-19276	09/10/05	Water
637520	CNMW03-W-19277	09/10/05	Water
637521	CNMW06-W-19278	09/10/05	Water
637522	CNMW05-W-19279	09/10/05	Water
637525	CNMW04-W-19280	09/11/05	Water
637526	CNSB09-W-19281	09/11/05	Water
637527	CNMW02-W-19282	09/11/05	Water
637528	CNQCTB-W-15485	09/12/05	Water
637529	CNSB01-W-19274F	09/09/05	Filtrate
637530	CNSB05-W-19275F	09/09/05	Filtrate
637531	CNMW01-W-19276F	09/10/05	Filtrate
637532	CNMW03-W-19277F	09/10/05	Filtrate
637533	CNMW06-W-19278F	09/10/05	Filtrate
637534	CNMW05-W-19279F	09/10/05	Filtrate
637535	CNMW04-W-19280F	09/11/05	Filtrate
637536	CNSB09-W-19281F	09/11/05	Filtrate
637537	CNMW02-W-19282F	09/11/05	Filtrate

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. In order to accommodate field length limitations in processing the data summary forms, the laboratory did, in certain instances, abbreviate the sample identifier. The electronically formatted data provides for the full sample identifier.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes.

Analysis of the samples for metals elements, including phosphorus, was performed in the context of SW846 Method 3010A/6010B. A laboratory control sample was prepared and analyzed in association with the samples, and the target elements recovered well in the analyses. The analysis of the method blank associated with the analytical work did yield results below the established reporting limits.

Analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2, using preserved sample volumes. Laboratory control samples were prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blanks associated with the analytical work did yield results below the established reporting limit.

The samples were analyzed for total organic carbon by USEPA Method 415.1. Laboratory control samples were prepared and analyzed in association with the samples, and the spiked organic carbon was recovered well in the analysis. The analysis of the method blanks associated with the analytical work did yield results below the established reporting limit.

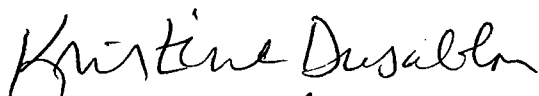
The samples were analyzed for sulfide by USEPA Method 376.2. A laboratory control sample was prepared and analyzed in association with the samples, and there was acceptable recovery. The analysis of the method blank associated with the analytical work was free of contamination.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that analysis. The method blank that was analyzed in association with the samples was free of contamination.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young  
Project Manager



Enclosure

## STL Burlington Data Qualifier Definitions

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### Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

### Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- \* Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

### Method Codes:

- P ICP-AES  
MS ICP-MS  
CV Cold Vapor AA  
AS Semi-Automated Spectrophotometric

MATRIX: WATER RECEIVING LAB: SEVERN TRENT PROJECT/SITE: Centralia		ARGONNE NATIONAL LABORATORY CHAIN OF CUSTODY RECORD*				Shipping Container No. L4 SVR MAXI Shipping Info: FOX 831434979134 ANL Field Contact (Name & Temporary Phone): John Taylor 630 319 5543	
SAMPLE(S) (Signature) <i>SWT Ashford</i>		ANALYSIS METHANE TOC TOTAL N SULFIDE CATIONS		REMARKS TOTAL N and TOC samples preserved pH ~ 7.504, sulfide samples preserved Zn acetate pH 7.9 NaOH			
DATE OF COLLECTION SAMPLE ID NUMBER(S)		Number of con-tainers		Relinquished by (Signature)		Received by (Signature)	
9 SEP 05 CNSB01-W-19274		7		Date 9/13/05		Date 9/13/05	
9 SEP 05 CNSB05-W-19275				Time 1130 HR		Time 0930	
10 SEP 05 CNMW01-W-19276				Relinquished by (Signature)		Received by (Signature)	
10 SEP 05 CNMW03-W-19277				Date 9/13/05		Date 9/13/05	
10 SEP 05 CNMW06-W-19278				Time 1130 HR		Time 0930	
10 SEP 05 CNMW05-W-19279				Relinquished by (Signature)		Received by (Signature)	
11 SEP 05 CNMW04-W-19280				Date 9/13/05		Date 9/13/05	
11 SEP 05 CNSB09-W-19281				Time 1130 HR		Time 0930	
11 SEP 05 CNMW07-W-19282				Relinquished by (Signature)		Received by (Signature)	
12 SEP 04 CNQCTB-W-15485				Date 9/13/05		Date 9/13/05	
Relinquished by (Signature) <i>SWT Ashford</i>		Received by (Signature) <i>John Taylor</i>		Relinquished by (Signature)		Received by (Signature)	
Relinquished by (Signature)		Received for Laboratory by		Date		Remarks	
Y N		FOR LAB USE ONLY		Date		Remarks	
X Custody seal was intact when shipment received.				Date		Remarks	
X Sample containers were intact when received.				Date		Remarks	
X Shipment was at required temperature when received.				Date		Remarks	
X Sample labels, Tags and COC agree.				Date		Remarks	

\*A sample is under custody if:

1. It is in your possession; or,
2. It is in your view, after having been in your possession; or,
3. It was in your possession and you locked it up; or,
4. It is in a designated secure area.

Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439



**Sample Data Summary Package  
For Wet Chemistry**



# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB01-W-19274

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637517

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	1	10.0	1860	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/16/05	BLKTO091605C	ug/L	1	1000	1860	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB05-W-19275

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVY

Case No.: CENTRALIA

Lab Sample ID: 637518

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	2	20.0	2410	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/16/05	BLKTO091605C	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW01-W-19276

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637519

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/16/05	BLKNN091605B	ug/L	1	10.0	299	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	54.0	
415.1	Organic Carbon, Total	09/16/05	BLKTO091605C	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW03-W-19277

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637520

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	10	100	8360	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/16/05	BLKTO091605C	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. CNMW06-W-19278
-------------------------------------

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637521

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	1	10.0	345	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	22.8	
415.1	Organic Carbon, Total	09/16/05	BLKTO091605C	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW05-W-19279

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637522

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	5	50.0	3220	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/16/05	BLKTO091605C	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW04-W-19280

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVY

Case No.: CENTRALIA

Lab Sample ID: 637525

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	5	50.0	5050	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/16/05	BLKTO091605D	ug/L	1	1000	1000	U

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB09-W-19281

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637526

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	5	50.0	4910	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	09/16/05	BLKTO091605D	ug/L	1	1000	1570	



# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW02-W-19282

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 109671

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 637527

Matrix: WATER

Client: ARGLAB

Date Received: 09/13/05

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	09/17/05	BLKNN091705A	ug/L	10	100	9790	
376.2	Sulfide	09/15/05	BLKSL091505A	ug/L	1	20.0	56.3	
415.1	Organic Carbon, Total	09/16/05	BLKTO091605D	ug/L	1	1000	1000	U



**Sample Data Summary Package  
For Metals**

**USEPA-CLP METALS**

**COVER PAGE - INORGANIC ANALYSES DATA PACKAGE**

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671

SOW No.: \_\_\_\_\_

EPA Sample No.	Lab Sample ID.
<u>CNMW01-W-19276F</u>	<u>637531</u>
<u>CNMW02-W-19282F</u>	<u>637537</u>
<u>CNMW03-W-19277F</u>	<u>637532</u>
<u>CNMW04-W-19280F</u>	<u>637535</u>
<u>CNMW05-W-19279F</u>	<u>637534</u>
<u>CNMW06-W-19278F</u>	<u>637533</u>
<u>CNSB01-W-19274F</u>	<u>637529</u>
<u>CNSB05-W-19275F</u>	<u>637530</u>
<u>CNSB09-W-19281F</u>	<u>637536</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES  
 If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_ Name: \_\_\_\_\_

Date: \_\_\_\_\_ Title: \_\_\_\_\_

**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW01-W-19276F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637531  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.3	U		P
7440-70-2	Calcium	71700			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	30200			P
7439-96-5	Manganese	15.3			P
7723-14-0	Phosphorous	40.3	B		P
7440-09-7	Potassium	3050	B		P
7440-21-3	Silicon	31600		E	P
7440-23-5	Sodium	24600		E	P
7440-66-6	Zinc	2.3	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW02-W-19282F

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671

Matrix (soil/water): FILTRATE Lab Sample ID: 637537

Level (low/med): LOW Date Received: 9/13/2005

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	69.2	B		P
7440-70-2	Calcium	71800			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	27200			P
7439-96-5	Manganese	16.7			P
7723-14-0	Phosphorous	24.2	U		P
7440-09-7	Potassium	2550	B		P
7440-21-3	Silicon	15900		E	P
7440-23-5	Sodium	56400		E	P
7440-66-6	Zinc	3.2	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_

Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

USEPA-CLP METALS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNMW03-W-19277F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637532  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.3	U		P
7440-70-2	Calcium	78900			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	28800			P
7439-96-5	Manganese	1.9	U		P
7723-14-0	Phosphorous	29.4	B		P
7440-09-7	Potassium	2060	B		P
7440-21-3	Silicon	30900		E	P
7440-23-5	Sodium	44400		E	P
7440-66-6	Zinc	1.7	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
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**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNW04-W-19280F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637535  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.3	U		P
7440-70-2	Calcium	74500			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	29400			P
7439-96-5	Manganese	37.3			P
7723-14-0	Phosphorous	146	B		P
7440-09-7	Potassium	2210	B		P
7440-21-3	Silicon	15500		E	P
7440-23-5	Sodium	48000		E	P
7440-66-6	Zinc	5.1	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
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**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW05-W-19279F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637534  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.3	U		P
7440-70-2	Calcium	85400			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	30200			P
7439-96-5	Manganese	1.9	U		P
7723-14-0	Phosphorous	34.6	B		P
7440-09-7	Potassium	1930	B		P
7440-21-3	Silicon	15600		E	P
7440-23-5	Sodium	12500		E	P
7440-66-6	Zinc	2.0	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
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**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW06-W-19278F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637533  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.3	U		P
7440-70-2	Calcium	77200			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	29800			P
7439-96-5	Manganese	305			P
7723-14-0	Phosphorous	96.6	B		P
7440-09-7	Potassium	3080	B		P
7440-21-3	Silicon	15600		E	P
7440-23-5	Sodium	27100		E	P
7440-66-6	Zinc	10.8	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
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**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNSB01-W-19274F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637529  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	130	B		P
7440-70-2	Calcium	75200			P
7439-89-6	Iron	178	B		P
7439-95-4	Magnesium	30300			P
7439-96-5	Manganese	1.9	U		P
7723-14-0	Phosphorous	24.2	U		P
7440-09-7	Potassium	2730	B		P
7440-21-3	Silicon	31700		E	P
7440-23-5	Sodium	44100		E	P
7440-66-6	Zinc	3.8	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNSB05-W-19275F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637530  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.3	U		P
7440-70-2	Calcium	88100			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	33000			P
7439-96-5	Manganese	1.9	U		P
7723-14-0	Phosphorous	24.2	U		P
7440-09-7	Potassium	1730	B		P
7440-21-3	Silicon	33400		E	P
7440-23-5	Sodium	20300		E	P
7440-66-6	Zinc	1.7	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP METALS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

**CNSB09-W-19281F**

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: 21005 SAS No.: \_\_\_\_\_ SDG No.: 109671  
 Matrix (soil/water): FILTRATE Lab Sample ID: 637536  
 Level (low/med): LOW Date Received: 9/13/2005  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	65.3	U		P
7440-70-2	Calcium	119000			P
7439-89-6	Iron	84.3	U		P
7439-95-4	Magnesium	42200			P
7439-96-5	Manganese	2.9	B		P
7723-14-0	Phosphorous	24.2	U		P
7440-09-7	Potassium	1890	B		P
7440-21-3	Silicon	15000		E	P
7440-23-5	Sodium	57000		E	P
7440-66-6	Zinc	1.7	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**RSK-175**

**SAMPLE DATA SUMMARY PACKAGE**

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW01W19276

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637519

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R031

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW02W19282

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637527

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R091

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	59	
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW03W19277

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637520

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R041

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U



FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW04W19280

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637525

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R071

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	4.5	
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW05W19279

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637522

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R061

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8	Methane	2.0	U	
74-84-0	Ethane	4.0	U	
74-85-1	Ethene	3.0	U	

74-82-8	Methane	2.0	U
74-84-0	Ethane	4.0	U
74-85-1	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW06W19278

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637521

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R051

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-_____	Methane	2.0	U	
74-84-0-_____	Ethane	4.0	U	
74-85-1-_____	Ethene	3.0	U	

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNQCTBW15485

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637528

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R101

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-----	Methane	2.0	U	
74-84-0-----	Ethane	4.0	U	
74-85-1-----	Ethene	3.0	U	

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB01W19274

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637517

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R011

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB05W19275

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637518

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R021

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-_____	Methane	2.0	U
74-84-0-_____	Ethane	4.0	U
74-85-1-_____	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB09W19281

Lab Name: STL BURLINGTON

Contract: 25001

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 109671

Matrix: (soil/water) WATER

Lab Sample ID: 637526

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20SEP051452-R081

Level: (low/med) LOW

Date Received: 09/13/05

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 09/20/05

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8	Methane	2.0	U
74-84-0	Ethane	4.0	U
74-85-1	Ethene	3.0	U

March 31, 2006

**STL Burlington**  
208 South Park Drive, Suite 1  
Colchester, VT 05446

Mr. Clyde Dennis  
Argonne National Laboratory  
9700 South Cass Avenue  
Building 203, Office B149  
Argonne, IL 60439

Tel: 802 655 1203 Fax: 802 655 1248  
www.stl-inc.com

Re: Laboratory Project No. 21005  
Case: CENTRALIA; SDG: 113130

Dear Mr. Dennis:

Enclosed are the analytical results for the samples that were received by STL Burlington on March 15<sup>th</sup>, 2006. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/15/06 ETR No: 113130			
661073	CNMW08-W-19284	03/14/06	Water
661074	CNMW08-W-19284F	03/14/06	Filtrate
661075	CNMW10-W-19886	03/14/06	Water
661076	CNMW10-W-19886F	03/14/06	Filtrate
661077	CNMW07-W-19887	03/14/06	Water
661078	CNMW07-W-19887F	03/14/06	Filtrate
661079	CNQCTB-W-19895	03/14/06	Water

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1 for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of the method blank associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the concentration levels in the field samples.



The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for orthophosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive result in the analysis of the method blank.

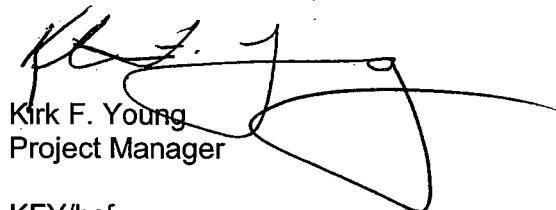
The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that analysis. The method blank that was analyzed in association with the samples was free of contamination.

The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young  
Project Manager

KFY/hsf  
Enclosure

## STL Burlington Data Qualifier Definitions

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### Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

### Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- \* Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

### Method Codes:

- P ICP-AES  
MS ICP-MS  
CV Cold Vapor AA  
AS Semi-Automated Spectrophotometric





**Sample Data Summary Package  
For Wet Chemistry**

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW08-W-19284

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113130

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661073

Matrix: WATER

Client: ARGLAB

Date Received: 03/15/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/23/06	BLKIC032306B	ug/L	5	1000	47400	
300.0	Sulfate	03/16/06	BLKIC031606A	ug/L	1	200	14400	
300.0	Nitrate as N	03/16/06	BLKIC031606B	ug/L	1	200	2470	
300.0	O-Phosphate as P	03/16/06	BLKIC031606C	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/24/06	BLKNN032406A	ug/L	5	10.0	2140	
354.1	Nitrite Nitrogen	03/15/06	BLKNI031506A	ug/L	1	5.0	12.4	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/17/06	BLKTO031706A	ug/L	1	1000	9000	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW08-W-19284F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113130

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661074

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/15/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	342000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	342000	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW10-W-19886

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113130

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661075

Matrix: WATER

Client: ARGLAB

Date Received: 03/15/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/23/06	BLKIC032306B	ug/L	10	2000	74300	
300.0	Sulfate	03/16/06	BLKIC031606A	ug/L	1	200	10800	
300.0	Nitrate as N	03/16/06	BLKIC031606B	ug/L	1	200	1230	
300.0	O-Phosphate as P	03/16/06	BLKIC031606C	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/24/06	BLKNN032406A	ug/L	1	50.0	814	
354.1	Nitrite Nitrogen	03/15/06	BLKNI031506A	ug/L	1	5.0	17.5	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/17/06	BLKTO031706A	ug/L	1	1000	7960	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW10-W-19886F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113130

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661076

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/15/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	298000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	298000	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW07-W-19887

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113130

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661077

Matrix: WATER

Client: ARGLAB

Date Received: 03/15/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/24/06	BLKIC032406A	ug/L	1	200	8720	
300.0	Sulfate	03/24/06	BLKIC032406B	ug/L	5	1000	28500	
300.0	Nitrate as N	03/16/06	BLKIC031606B	ug/L	1	200	1180	
300.0	O-Phosphate as P	03/16/06	BLKIC031606C	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/24/06	BLKNN032406A	ug/L	1	10.0	978	
354.1	Nitrite Nitrogen	03/15/06	BLKNI031506A	ug/L	1	5.0	17.5	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/20/06	BLKTO032006A	ug/L	5	5000	35400	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW07-W-19887F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113130

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661078

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/15/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	2100	
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	297000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	299000	

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**Sample Data Summary Package  
For Metals**

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113130

SOW No.: \_\_\_\_\_

EPA Sample No.	Lab Sample ID.
<u>CNMW07-W-19887F</u>	<u>661078</u>
<u>CNMW08-W-19284F</u>	<u>661074</u>
<u>CNMW10-W-19886F</u>	<u>661076</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES  
 If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_ Name: \_\_\_\_\_

Date: \_\_\_\_\_ Title: \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW07-W-19887F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113130  
 Matrix (soil/water): WATER Lab Sample ID: 661078  
 Level (low/med): LOW Date Received: 03/15/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	76.3	B		P
7440-70-2	Calcium	59600			P
7439-89-6	Iron	69.0	B		P
7439-95-4	Magnesium	23100			P
7439-96-5	Manganese	77.0			P
7723-14-0	Phosphorous	18.9	B		P
7440-09-7	Potassium	3790	B		P
7440-21-3	Silicon	10500			P
7440-23-5	Sodium	33300		H	P
7440-66-6	Zinc	7.5	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

**CNMW08-W-19284F**

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113130  
 Matrix (soil/water): WATER Lab Sample ID: 661074  
 Level (low/med): LOW Date Received: 03/15/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	56.2	B		P
7440-70-2	Calcium	86500			P
7439-89-6	Iron	35.8	U		P
7439-95-4	Magnesium	33100			P
7439-96-5	Manganese	194			P
7723-14-0	Phosphorous	24.0	B		P
7440-09-7	Potassium	3710	B		P
7440-21-3	Silicon	15800			P
7440-23-5	Sodium	57500		E	P
7440-66-6	Zinc	7.5	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

**CNMW10-W-19886F**

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113130  
 Matrix (soil/water): WATER Lab Sample ID: 661076  
 Level (low/med): LOW Date Received: 03/15/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	46.4	U		P
7440-70-2	Calcium	91600			P
7439-89-6	Iron	35.8	U		P
7439-95-4	Magnesium	32000			P
7439-96-5	Manganese	129			P
7723-14-0	Phosphorous	24.6	B		P
7440-09-7	Potassium	3490	B		P
7440-21-3	Silicon	14500			P
7440-23-5	Sodium	38700		E	P
7440-66-6	Zinc	7.5	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**RSK-175**

**SAMPLE DATA SUMMARY PACKAGE**



FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMMW07W19887

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113130

Matrix: (soil/water) WATER

Lab Sample ID: 661077

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20MA061030-R091

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/20/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8	Methane	2.0	U	
74-84-0	Ethane	4.0	U	
74-85-1	Ethene	3.0	U	

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW08W19284

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113130

Matrix: (soil/water) WATER

Lab Sample ID: 661073

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20MA061030-R071

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/20/06

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW10W19886

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113130

Matrix: (soil/water) WATER

Lab Sample ID: 661075

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20MA061030-R081

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/20/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8	Methane	2.0	U
74-84-0	Ethane	4.0	U
74-85-1	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNQCTBW19895

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113130

Matrix: (soil/water) WATER

Lab Sample ID: 661079

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20MA061030-R101

Level: (low/med) LOW

Date Received: 03/15/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/20/06

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8	Methane	2.0	U	
74-84-0	Ethane	4.0	U	
74-85-1	Ethene	3.0	U	

March 31, 2006

Mr. Clyde Dennis  
Argonne National Laboratory  
9700 South Cass Avenue  
Building 203, Office B149  
Argonne, IL 60439

**STL Burlington**  
208 South Park Drive, Suite 1  
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248  
www.stl-inc.com

Re: Laboratory Project No. 21005  
Case: CENTRALIA; SDG: 113158

Dear Mr. Dennis:

Enclosed are the analytical results for the samples that were received by STL Burlington on March 16<sup>th</sup>, 2006. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/16/06 ETR No: 113158			
661224	CNMW09-W-19285	03/15/06	Water
661225	CNMW09-W-19285F	03/15/06	Filtrate
661226	CNQCTB-W-19983	03/15/06	Water
661227	CNSB07R-W-19978	03/15/06	Water
661228	CNSB07R-W-19978F	03/15/06	Filtrate

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1 for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of the method blank associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the concentration levels in the field samples.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for orthophosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an

observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive result in the analysis of the method blank.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that analysis. The method blank that was analyzed in association with the samples was free of contamination.

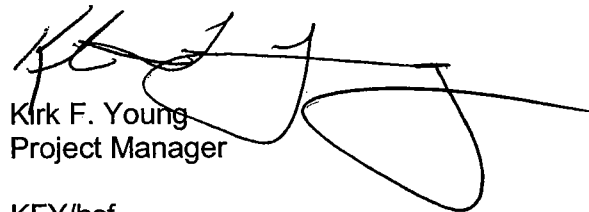
The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

It should be noted that a matrix spike analysis was performed on sample CNMW09-W-19285 for total organic carbon by USEPA Method 415.1. The recovery of the spiked organic carbon in that analysis was 42 percent.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young  
Project Manager

KFY/hsf  
Enclosure





**Sample Data Summary Package  
For Wet Chemistry**



# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW09-W-19285

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113158

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661224

Matrix: WATER

Client: ARGLAB

Date Received: 03/16/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/27/06	BLKIC032706A	ug/L	1	200	6390	
300.0	Sulfate	03/16/06	BLKIC031606A	ug/L	1	200	6230	
300.0	Nitrate as N	03/16/06	BLKIC031606B	ug/L	1	200	3250	
300.0	O-Phosphate as P	03/16/06	BLKIC031606C	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/24/06	BLKNN032406A	ug/L	5	50.0	2930	
354.1	Nitrite Nitrogen	03/16/06	BLKNI031606A	mg/L	1	5.0	20.3	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/17/06	BLKTO031706A	ug/L	1	1000	10700	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. CNMW09-W-19285F
--------------------------------------

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113158

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661225

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/16/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	329000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	329000	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB07R-W-19978

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113158

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661227

Matrix: WATER

Client: ARGLAB

Date Received: 03/16/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/27/06	BLKIC032706A	ug/L	5	1000	30400	
300.0	Sulfate	03/27/06	BLKIC032706B	ug/L	2	400	16800	
300.0	Nitrate as N	03/16/06	BLKIC031606B	ug/L	1	200	1270	
300.0	O-Phosphate as P	03/16/06	BLKIC031606C	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/24/06	BLKNN032406A	ug/L	1	10.0	1040	
354.1	Nitrite Nitrogen	03/16/06	BLKNI031606A	mg/L	1	5.0	8.4	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/17/06	BLKTO031706A	ug/L	1	1000	11200	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB07R-W-19978F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113158

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 661228

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/16/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	318000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	318000	

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**Sample Data Summary Package  
For Metals**

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113158

SOW No.: \_\_\_\_\_

<u>EPA Sample No.</u>	<u>Lab Sample ID.</u>
<u>CNMW09-W-19285F</u>	<u>661225</u>
<u>CNSB07R-W-19978F</u>	<u>661228</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES  
If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_ Name: \_\_\_\_\_

Date: \_\_\_\_\_ Title: \_\_\_\_\_

COVER PAGE - IN

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW09-W-19285F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113158  
 Matrix (soil/water): WATER Lab Sample ID: 661225  
 Level (low/med): LOW Date Received: 03/16/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	81.6	B		P
7440-70-2	Calcium	83200			P
7439-89-6	Iron	78.1	B		P
7439-95-4	Magnesium	28800			P
7439-96-5	Manganese	133			P
7723-14-0	Phosphorous	18.4	U		P
7440-09-7	Potassium	3200	B		P
7440-21-3	Silicon	13600			P
7440-23-5	Sodium	11600			P
7440-66-6	Zinc	9.4	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNSB07R-W-19978F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113158  
 Matrix (soil/water): WATER Lab Sample ID: 661228  
 Level (low/med): LOW Date Received: 03/16/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	46.4	U		P
7440-70-2	Calcium	72400			P
7439-89-6	Iron	35.8	U		P
7439-95-4	Magnesium	26000			P
7439-96-5	Manganese	179			P
7723-14-0	Phosphorous	25.9	B		P
7440-09-7	Potassium	3820	B		P
7440-21-3	Silicon	13800			P
7440-23-5	Sodium	38200			P
7440-66-6	Zinc	7.5	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





**RSK-175**

**SAMPLE DATA SUMMARY PACKAGE**

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW09W19285

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113158

Matrix: (soil/water) WATER

Lab Sample ID: 661224

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20MA061030-R111

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/20/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8	Methane	2.0	U
74-84-0	Ethane	4.0	U
74-85-1	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNQCTBW19983

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113158

Matrix: (soil/water) WATER

Lab Sample ID: 661226

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20MA061030-R121

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/20/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-----	Methane	2.0	U	
74-84-0-----	Ethane	4.0	U	
74-85-1-----	Ethene	3.0	U	

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

NSB07RW19978

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113158

Matrix: (soil/water) WATER

Lab Sample ID: 661227

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 20MA061030-R131

Level: (low/med) LOW

Date Received: 03/16/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/20/06

GC Column: RTUPLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM I VOA

March 31, 2006

Mr. Clyde Dennis  
Argonne National Laboratory  
9700 South Cass Avenue  
Building 203, Office B149  
Argonne, IL 60439

**STL Burlington**  
208 South Park Drive, Suite 1  
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248  
www.stl-inc.com

Re: Laboratory Project No. CENTRALIA  
Case: CENTRALIA; SDG: 113173

Dear Mr. Dennis:

Enclosed are the analytical results for the samples that were received by STL Burlington on March 17<sup>th</sup>, 2006. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/17/06 ETR No: 113173			
661338	CNMW02-W-19908	03/16/06	Water
661338DP	CNMW02-W-19908REP	03/16/06	Water
661338MD	CNMW02-W-19908MSD	03/16/06	Water
661339	CNMW02-W-19908F	03/16/06	Filtrate
661339DP	CNMW02-W-19908FREP	03/16/06	Filtrate
661339MD	CNMW02-W-19908FMDS	03/16/06	Filtrate
661340	CNQCTB-W-19914	03/16/06	Water
661341	CNMW05-W-19907	03/16/06	Water
661342	CNMW05-W-19907F	03/16/06	Filtrate
661343	CNMW04-W-19900	03/16/06	Water
661344	CNMW04-W-19900F	03/16/06	Filtrate
661345	CNMW01-W-19898	03/16/06	Water
661346	CNMW01-W-19898F	03/16/06	Filtrate
661347	CNMW06-W-19896	03/16/06	Water
661348	CNMW06-W-19896F	03/16/06	Filtrate
661349	CNSB04-W-19906	03/16/06	Water
661350	CNSB04-W-19906F	03/16/06	Filtrate

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1 for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of the method blank associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the concentration levels in the field samples.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for orthophosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive result in the analysis of the method blank. The positive result reported from the USEPA Method 300.3 analysis of sample CNMW02-W-19908 likely reflects the offset issue.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. A laboratory control sample was prepared and analyzed in association with the samples, and there was an acceptable recovery of the target analytes in that analysis. The method blank that was analyzed in association with the samples was free of contamination.

The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

It should be noted that a matrix spike analysis was performed on sample CNMW02-W-19908. Of particular note was the fact that there was no recovery in the USEPA Method 353.2 matrix spike analysis.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young  
Project Manager

KFY/hsf  
Enclosure

## STL Burlington Data Qualifier Definitions

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### Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

### Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- \* Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

#### Method Codes:

- P ICP-AES  
MS ICP-MS  
CV Cold Vapor AA  
AS Semi-Automated Spectrophotometric







**Sample Data Summary Package  
For Wet Chemistry**

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW02-W-19908

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661338

Matrix: WATER

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/17/06	BLKIC031706D	ug/L	1	200	8450	
300.0	Sulfate	03/17/06	BLKIC031706E	ug/L	1	200	12200	
300.0	Nitrate as N	03/17/06	BLKIC031706F	ug/L	1	200	9920	
300.0	O-Phosphate as P	03/17/06	BLKIC031706G	ug/L	1	200	250	
353.2	Nitrate/Nitrite Nitrogen	03/27/06	BLKNN032706A	ug/L	10	100	9270	
354.1	Nitrite Nitrogen	03/17/06	BLKNI031706A	ug/L	1	5.0	7.0	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	38.1	
415.1	Organic Carbon, Total	03/20/06	BLKTO032006A	ug/L	1	1000	3570	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. <b>CNMW02-W-19908F</b>
---

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 661339

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	364000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	364000	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW05-W-19907

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661341

Matrix: WATER

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/17/06	BLKIC031706D	ug/L	1	200	9660	
300.0	Sulfate	03/17/06	BLKIC031706E	ug/L	1	200	5170	
300.0	Nitrate as N	03/17/06	BLKIC031706F	ug/L	1	200	3360	
300.0	O-Phosphate as P	03/17/06	BLKIC031706G	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/27/06	BLKNN032706A	ug/L	5	50.0	3200	
354.1	Nitrite Nitrogen	03/17/06	BLKNI031706A	ug/L	1	5.0	7.3	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/20/06	BLKTO032006A	ug/L	1	1000	5540	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW05-W-19907F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661342

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	304000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	304000	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW04-W-19900

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661343

Matrix: WATER

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/17/06	BLKIC031706D	ug/L	1	200	11900	
300.0	Sulfate	03/17/06	BLKIC031706E	ug/L	1	200	6380	
300.0	Nitrate as N	03/17/06	BLKIC031706F	ug/L	1	200	4970	
300.0	O-Phosphate as P	03/17/06	BLKIC031706G	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/27/06	BLKNN032706A	ug/L	5	50.0	4840	
354.1	Nitrite Nitrogen	03/17/06	BLKNI031706A	ug/L	1	5.0	5.0	U
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	79.4	
415.1	Organic Carbon, Total	03/20/06	BLKTO032006A	ug/L	1	1000	5070	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW04-W-19900F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661344

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	337000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	337000	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW01-W-19898

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661345

Matrix: WATER

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/17/06	BLKIC031706D	ug/L	1	200	14900	
300.0	Sulfate	03/17/06	BLKIC031706E	ug/L	1	200	6300	
300.0	Nitrate as N	03/17/06	BLKIC031706F	ug/L	1	200	820	
300.0	O-Phosphate as P	03/17/06	BLKIC031706G	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/27/06	BLKNN032706A	ug/L	1	10.0	315	
354.1	Nitrite Nitrogen	03/17/06	BLKNI031706A	ug/L	1	5.0	5.0	U
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/20/06	BLKTO032006A	ug/L	1	1000	6190	



# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW01-W-19898F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 661346

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	325000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	325000	

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# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW06-W-19896

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661347

Matrix: WATER

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/17/06	BLKIC031706D	ug/L	1	200	8980	
300.0	Sulfate	03/17/06	BLKIC031706E	ug/L	1	200	5000	
300.0	Nitrate as N	03/17/06	BLKIC031706F	ug/L	1	200	524	
300.0	O-Phosphate as P	03/17/06	BLKIC031706G	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/27/06	BLKNN032706A	ug/L	1	10.0	218	
354.1	Nitrite Nitrogen	03/17/06	BLKNI031706A	ug/L	1	5.0	5.5	
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/20/06	BLKTO032006A	ug/L	1	1000	4120	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW06-W-19896F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661348

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	343000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	343000	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB04-W-19906

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661349

Matrix: WATER

Client: ARGLAB

Date Received: 03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/27/06	BLKIC032706A	ug/L	10	2000	40000	
300.0	Sulfate	03/17/06	BLKIC031706E	ug/L	1	200	5980	
300.0	Nitrate as N	03/17/06	BLKIC031706F	ug/L	1	200	3070	
300.0	O-Phosphate as P	03/17/06	BLKIC031706G	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/27/06	BLKNN032706A	ug/L	2	20.0	2850	
354.1	Nitrite Nitrogen	03/17/06	BLKNI031706A	ug/L	1	5.0	5.0	U
376.2	Sulfide	03/20/06	BLKSU032006A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/20/06	BLKTO032006A	ug/L	1	1000	3780	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. CNSB04-W-19906F
--------------------------------------

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113173

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661350

Matrix: FILTRATE

Client: ARGLAB

Date Received: .03/17/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	371000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	371000	



**Sample Data Summary Package  
For Metals**

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113173

SOW No.: \_\_\_\_\_

<u>EPA Sample No.</u>	<u>Lab Sample ID.</u>
<u>CNMW01-W-19898F</u>	<u>661346</u>
<u>CNMW02-W-19908F</u>	<u>661339</u>
<u>CNMW02-W-19908FD</u>	<u>661339DP</u>
<u>CNMW02-W-19908FS</u>	<u>661339MS</u>
<u>CNMW04-W-19900F</u>	<u>661344</u>
<u>CNMW05-W-19907F</u>	<u>661342</u>
<u>CNMW06-W-19896F</u>	<u>661348</u>
<u>CNSB04-W-19906F</u>	<u>661350</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_ Name: \_\_\_\_\_

Date: \_\_\_\_\_ Title: \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW01-W-19898F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113173  
 Matrix (soil/water): FILTRATE Lab Sample ID: 661346  
 Level (low/med): LOW Date Received: 3/17/2006  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	72200			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	30100			P
7439-96-5	Manganese	217			P
7723-14-0	Phosphorous	18.4	U		P
7440-09-7	Potassium	553	B		P
7440-21-3	Silicon	15200			P
7440-23-5	Sodium	24800			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

**CNMW02-W-19908F**

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113173  
 Matrix (soil/water): FILTRATE Lab Sample ID: 661339  
 Level (low/med): LOW Date Received: 3/17/2006  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	73600			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	28000			P
7439-96-5	Manganese	8.9	B		P
7723-14-0	Phosphorous	18.4	U		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	16400			P
7440-23-5	Sodium	56100			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW04-W-19900F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113173  
 Matrix (soil/water): FILTRATE Lab Sample ID: 661344  
 Level (low/med): LOW Date Received: 3/17/2006  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	69800			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	27200			P
7439-96-5	Manganese	62.6			P
7723-14-0	Phosphorous	109	B		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	15100			P
7440-23-5	Sodium	43800			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_

Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNMW05-W-19907F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113173  
 Matrix (soil/water): FILTRATE Lab Sample ID: 661342  
 Level (low/med): LOW Date Received: 3/17/2006  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	79800			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	27700			P
7439-96-5	Manganese	5.4	B		P
7723-14-0	Phosphorous	71.8	B		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	14200			P
7440-23-5	Sodium	11600			P
7440-66-6	Zinc	16.3	B		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW06-W-19896F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113173  
 Matrix (soil/water): FILTRATE Lab Sample ID: 661348  
 Level (low/med): LOW Date Received: 3/17/2006  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	73200			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	28900			P
7439-96-5	Manganese	124			P
7723-14-0	Phosphorous	50.2	B		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	15500			P
7440-23-5	Sodium	25800			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNSB04-W-19906F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113173  
 Matrix (soil/water): FILTRATE Lab Sample ID: 661350  
 Level (low/med): LOW Date Received: 3/17/2006  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	82600			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	31400			P
7439-96-5	Manganese	0.80	U		P
7723-14-0	Phosphorous	18.4	U		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	16500			P
7440-23-5	Sodium	56900			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**RSK-175**

**SAMPLE DATA SUMMARY PACKAGE**

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW01W19898

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: 661345

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R051

Level: (low/med) LOW

Date Received: 03/17/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW02W19908

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: 661338

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R011

Level: (low/med) LOW

Date Received: 03/17/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-82-8-----	Methane	34	
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U



FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW04W19900

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: 661343

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R041

Level: (low/med) LOW

Date Received: 03/17/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L                      Q

74-82-8-----	Methane	51	
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW05W19907

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: 661341

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R031

Level: (low/med) LOW

Date Received: 03/17/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW06W19896

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: 661347

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R061

Level: (low/med) LOW

Date Received: 03/17/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-----	Methane	2.3		
74-84-0-----	Ethane	4.0	U	
74-85-1-----	Ethene	3.0	U	

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNQCTBW19914

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: 661340

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R021

Level: (low/med) LOW

Date Received: 03/17/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB04W19906

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: 661349

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R071

Level: (low/med) LOW

Date Received: 03/17/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8-----	Methane	2.0	U	
74-84-0-----	Ethane	4.0	U	
74-85-1-----	Ethene	3.0	U	

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLKR032106A

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113173

Matrix: (soil/water) WATER

Lab Sample ID: MBLKR032106A

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA060906-R021

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-_____	Methane	2.0	U
74-84-0-_____	Ethane	4.0	U
74-85-1-_____	Ethene	3.0	U

March 31, 2006

Mr. Clyde Dennis  
Argonne National Laboratory  
9700 South Cass Avenue  
Building 203, Office B149  
Argonne, IL 60439

**STL Burlington**  
208 South Park Drive, Suite 1  
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248  
www.stl-inc.com

Re: Laboratory Project No. CENTRALIA  
Case: CENTRALIA; SDG: 113204

Dear Mr. Dennis:

Enclosed are the analytical results for the samples that were received by STL Burlington on March 18<sup>th</sup>, 2006. Laboratory identification numbers were assigned, and designated as follows:

<u>Lab ID</u>	<u>Client Sample ID</u>	<u>Sample Date</u>	<u>Sample Matrix</u>
Received: 03/18/06 ETR No: 113204			
661599	CNMW03-W-19909	03/17/06	Water
661600	CNMW03-W-19909F	03/17/06	Filtrate
661601	CNSB09-W-19902	03/17/06	Water
661601MS	CNSB09-W-19902MS	03/17/06	Water
661601MD	CNSB09-W-19902MSD	03/17/06	Water
661602	CNSB09-W-19902F	03/17/06	Filtrate
661603	CNSB08-W-19903	03/17/06	Water
661604	CNSB08-W-19903F	03/17/06	Filtrate
661605	CNQCTB-W-19910	03/17/06	Water
661606	CNSB05-W-19904	03/17/06	Water
661607	CNSB05-W-19904F	03/17/06	Filtrate
661608	CNSB01-W-19979	03/17/06	Water

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. The nitrate and ortho-phosphate analyses that were performed by USEPA Method 300.0 did occur beyond the 48-hour holding time that is specified by the method. The analytical work occurred over the March 27<sup>th</sup> and March 28<sup>th</sup> timeframe.

Sample volumes were filtered by the laboratory through a 0.45-micron filter prior to being analyzed for alkalinity. An "F" suffix has been added to the sample identifiers to distinguish these sample volumes as being filtrates. The analytical work for each of the other parameters was performed without a specific filtration of the sample volumes, although, for the ion chromatography analysis, the instrumentation has within it a pretreatment system that does provide filtration as a function of routine operation.

The primary analysis of the samples for nitrate nitrogen was performed in the context of USEPA Method 353.2 for nitrate/nitrite nitrogen, using preserved sample volumes, and USEPA Method 354.1

for nitrite. Secondly, results for nitrate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed background in the analysis of the method blanks associated with the Method 353.2 analysis. The background concentration level approximated the established reporting limit, and was significantly less than the concentration levels in the field samples.

The primary analysis of the samples for phosphorus was performed in the context of SW846 Methods 3010A/6010B. Secondly, results for orthophosphate are reported from the analysis of the samples by USEPA Method 300.0, using ion chromatography. It should be noted that there was an observed offset in the calibration associated with the ion chromatography analysis that did elevate results at or near the reporting limit. This is reflected in the positive result in the analysis of the method blank.

The samples were analyzed for methane, ethane, and ethene by Method RSK-175. Matrix spike and matrix spike duplicate analyses were performed on sample CNSB09-W-19902, and there was an acceptable recovery of the target analytes in those analyses. A laboratory control sample was prepared and analyzed in association with the samples, and in that analysis as well there was an acceptable recovery of the target analytes. The method blank that was analyzed in association with the samples was free of contamination.

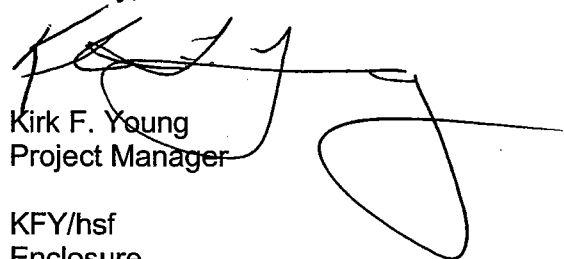
The samples were additionally analyzed for sulfate and chloride by USEPA Method 300.0, for alkalinity by USEPA Method 310.1, for sulfide by USEPA Method 376.2, for total organic carbon by USEPA Method 415.1, and for trace metals by SW846 Methods 3010A/6010B.

It should be noted that a matrix spike analysis was performed on sample CNSB08-W-19903 for nitrate/nitrite analysis by USEPA Method 353.2. The recovery of the spiked analyte in that analysis was 30 percent.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,



Kirk F. Young  
Project Manager

KFY/hsf  
Enclosure



## STL Burlington Data Qualifier Definitions

---

### Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

### Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- \* Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

### Method Codes:

- P ICP-AES  
MS ICP-MS  
CV Cold Vapor AA  
AS Semi-Automated Spectrophotometric

MATRIX: WATER		Shipping Container No.	
RECEIVING LAB: STL		Shipping Info: 8509 1481 0158	
PROJECT/SITE: Centralia		ANL Field Contact (Name & Temporary Phone): Barney Unshold 630 257 7698	
SAMPLER(S) (Signature): <i>Barney Unshold</i>		Remarks: Contact = Jorge Alvarado ANL	
DATE OF COLLECTION	SAMPLE ID NUMBER(S)	Number of containers	ANALYSIS
17 MAR 06	CNMW03-W-19909	8	✓ VOC
↓	CN5B09-W-19907	8	✓ TOTAL
↓	CN5B08-W-19903	8	✓ TOTAL
18 MAR 06	CNQCCTB-W-19910	2	✓ METHANE
	CN5B05-W-19904	8	✓ TOTAL
	<del>CN5B01-W-19979</del>	<del>6</del>	<del>✓ TOTAL</del>
			Methane Trip
			Analyze Anions within 48 hr
			TOC Total Not Selfide appropriately preserved
Relinquished by (Signature): <i>Barney Unshold</i>	Date: 17 MAR 06	Time: 1815 HR	Received by (Signature)
Relinquished by (Signature)	Date	Time	Received by (Signature)
Y			
N			
<input checked="" type="checkbox"/>	FOR LAB USE ONLY		
<input checked="" type="checkbox"/>	Custody seal was intact when shipment received.		
<input checked="" type="checkbox"/>	Sample containers were intact when received.		
<input checked="" type="checkbox"/>	Shipment was at required temperature when received.		
<input checked="" type="checkbox"/>	Sample labels, Tags and COC agree.		
Argonne National Laboratory, Applied Geosciences & Environmental Mgt. Group, Environmental Research Division, 9700 S. Cass Avenue, Argonne, IL 60439			



**Sample Data Summary Package  
For Wet Chemistry**

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNMW03-W-19909

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661599

Matrix: WATER

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/28/06	BLKIC032806A	ug/L	10	2000	24000	
300.0	Sulfate	03/27/06	BLKIC032706B	ug/L	1	200	9150	
300.0	Nitrate as N	03/27/06	BLKIC032706C	ug/L	1	200	9170	
300.0	O-Phosphate as P	03/27/06	BLKIC032706D	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/28/06	BLKNN032806A	ug/L	10	100	8590	
354.1	Nitrite Nitrogen	03/19/06	BLKNI031906A	ug/L	1	5.0	5.0	U
376.2	Sulfide	03/22/06	BLKSU032206A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/30/06	BLKTO033006A	ug/L	1	1000	1230	

Printed on: 03/30/06 03:07 PM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNMW03-W-19909F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661600

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	353000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	353000	

Printed on: 03/30/06 03:07 PM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB09-W-19902

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661601

Matrix: WATER

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/28/06	BLKIC032806A	ug/L	2	400	15600	
300.0	Sulfate	03/28/06	BLKIC032806B	ug/L	10	2000	38800	
300.0	Nitrate as N	03/27/06	BLKIC032706C	ug/L	1	200	4670	
300.0	O-Phosphate as P	03/27/06	BLKIC032706D	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/28/06	BLKNN032806A	ug/L	5	50.0	4760	
354.1	Nitrite Nitrogen	03/19/06	BLKNI031906A	ug/L	1	5.0	5.0	U
376.2	Sulfide	03/22/06	BLKSU032206A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/30/06	BLKTO033006A	ug/L	1	1000	6880	

Printed on: 03/30/06 03:07 PM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.  
CNSB09-W-19902F

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661602

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	495000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	495000	

Printed on: 03/30/06 03:07 PM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB08-W-19903

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661603

Matrix: WATER

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/28/06	BLKIC032806A	ug/L	5	1000	19300	
300.0	Sulfate	03/28/06	BLKIC032806B	ug/L	1	200	9250	
300.0	Nitrate as N	03/28/06	BLKIC032806C	ug/L	1	200	1690	
300.0	O-Phosphate as P	03/27/06	BLKIC032706D	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/28/06	BLKNN032806A	ug/L	1	10.0	1410	
354.1	Nitrite Nitrogen	03/19/06	BLKNI031906A	ug/L	1	5.0	5.0	U
376.2	Sulfide	03/22/06	BLKSU032206A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/30/06	BLKTO033006A	ug/L	1	1000	5990	

Printed on: 03/30/06 03:07 PM



# WET CHEMISTRY

## Sample Report Summary

Client Sample No. <b>CNSB08-W-19903F</b>
---

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661604

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	327000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	327000	

# WET CHEMISTRY

## Sample Report Summary

Client Sample No.

CNSB05-W-19904

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661606

Matrix: WATER

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
300.0	Chloride	03/28/06	BLKIC032806A	ug/L	10	2000	57100	
300.0	Sulfate	03/28/06	BLKIC032806B	ug/L	1	200	2960	
300.0	Nitrate as N	03/28/06	BLKIC032806C	ug/L	1	200	2560	
300.0	O-Phosphate as P	03/27/06	BLKIC032706D	ug/L	1	200	200	U
353.2	Nitrate/Nitrite Nitrogen	03/28/06	BLKNN032806C	ug/L	5	50.0	2730	
354.1	Nitrite Nitrogen	03/19/06	BLKNI031906A	ug/L	1	5.0	5.0	U
376.2	Sulfide	03/22/06	BLKSU032206A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/30/06	BLKTO033006A	ug/L	1	1000	4970	

Printed on: 03/30/06 03:07 PM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. <b>CNSB05-W-19904F</b>
---

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLV

Case No.: CENTRALIA

Lab Sample ID: 661607

Matrix: FILTRATE

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
310.1	Hydroxide Alkalinity	03/21/06	BLKAL032106E	ug/L	1	1000	1000	U
310.1	Carbonate Alkalinity	03/21/06	BLKAL032106D	ug/L	1	1000	1000	U
310.1	Bicarbonate Alkalinity	03/21/06	BLKAL032106C	ug/L	1	1000	324000	
310.1	Total Alkalinity	03/21/06	BLKAL032106B	ug/L	1	1000	324000	

Printed on: 03/30/06 03:07 PM

# WET CHEMISTRY

## Sample Report Summary

Client Sample No. <b>CNSB01-W-19979</b>
--

Lab Name: STL BURLINGTON

Contract: 3E-00361

SDG No.: 113204

Lab Code: STLVT

Case No.: CENTRALIA

Lab Sample ID: 661608

Matrix: WATER

Client: ARGLAB

Date Received: 03/18/06

% Solids:

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
353.2	Nitrate/Nitrite Nitrogen	03/28/06	BLKNN032806A	ug/L	2	20.0	2500	
376.2	Sulfide	03/22/06	BLKSU032206A	ug/L	1	20.0	20.0	U
415.1	Organic Carbon, Total	03/30/06	BLKTO033006A	ug/L	1	1000	8970	



**Sample Data Summary Package  
For Metals**

USEPA-CLP FORMS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: STL BURLINGTON Contract: 21005

Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113204

SOW No.: \_\_\_\_\_

<u>EPA Sample No.</u>	<u>Lab Sample ID.</u>
<u>CNMW03-W-19909F</u>	<u>661600</u>
<u>CNSB05-W-19904F</u>	<u>661607</u>
<u>CNSB08-W-19903F</u>	<u>661604</u>
<u>CNSB09-W-19902F</u>	<u>661602</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_ Name: \_\_\_\_\_

Date: \_\_\_\_\_ Title: \_\_\_\_\_

**USEPA-CLP FORMS**

-1-

**INORGANIC ANALYSES DATA SHEET**

EPA SAMPLE NO.

CNMW03-W-19909F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113204  
 Matrix (soil/water): WATER Lab Sample ID: 661600  
 Level (low/med): LOW Date Received: 03/18/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	46.4	U		P
7440-70-2	Calcium	83200			P
7439-89-6	Iron	35.8	U		P
7439-95-4	Magnesium	29700			P
7439-96-5	Manganese	0.70	U		P
7723-14-0	Phosphorous	23.1	B		P
7440-09-7	Potassium	1920	B		P
7440-21-3	Silicon	15000			P
7440-23-5	Sodium	46800			P
7440-66-6	Zinc	7.5	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNSB05-W-19904F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113204  
 Matrix (soil/water): WATER Lab Sample ID: 661607  
 Level (low/med): LOW Date Received: 03/18/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	92600			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	35000			P
7439-96-5	Manganese	0.80	U		P
7723-14-0	Phosphorous	18.4	U		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	14500			P
7440-23-5	Sodium	21300			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNSB08-W-19903F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113204  
 Matrix (soil/water): WATER Lab Sample ID: 661604  
 Level (low/med): LOW Date Received: 03/18/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	72700			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	29100			P
7439-96-5	Manganese	0.80	U		P
7723-14-0	Phosphorous	18.4	U		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	14600			P
7440-23-5	Sodium	26100			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

USEPA-CLP FORMS

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CNSB09-W-19902F

Lab Name: STL BURLINGTON Contract: 21005  
 Lab Code: STLVT Case No.: CENTRALI SAS No.: \_\_\_\_\_ SDG No.: 113204  
 Matrix (soil/water): WATER Lab Sample ID: 661602  
 Level (low/med): LOW Date Received: 03/18/06  
 % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	16.5	U		P
7440-70-2	Calcium	115000			P
7439-89-6	Iron	54.3	U		P
7439-95-4	Magnesium	40400			P
7439-96-5	Manganese	0.80	U		P
7723-14-0	Phosphorous	18.4	U		P
7440-09-7	Potassium	521	U		P
7440-21-3	Silicon	14200			P
7440-23-5	Sodium	54900			P
7440-66-6	Zinc	16.0	U		P

Color Before: colorless Clarity Before: clear Texture: \_\_\_\_\_  
 Color After: colorless Clarity After: clear Artifacts: \_\_\_\_\_

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**RSK-175**

**SAMPLE DATA SUMMARY PACKAGE**

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

B09W19902

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113204

Matrix: (soil/water) WATER

Lab Sample ID: 661601

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R091

Level: (low/med) LOW

Date Received: 03/18/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNMW03W19909
--------------

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113204

Matrix: (soil/water) WATER

Lab Sample ID: 661599

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R081

Level: (low/med) LOW

Date Received: 03/18/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPL0T ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8	Methane	2.0	U	
74-84-0	Ethane	4.0	U	
74-85-1	Ethene	3.0	U	

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNQCTBW19910

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113204

Matrix: (soil/water) WATER

Lab Sample ID: 661605

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R111

Level: (low/med) LOW

Date Received: 03/18/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB01W19979

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113204

Matrix: (soil/water) WATER

Lab Sample ID: 661608

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R131

Level: (low/med) LOW

Date Received: 03/18/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8	Methane	2.0	U	
74-84-0	Ethane	4.0	U	
74-85-1	Ethene	3.0	U	

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB05W19904

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113204

Matrix: (soil/water) WATER

Lab Sample ID: 661606

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R121

Level: (low/med) LOW

Date Received: 03/18/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-82-8-----	Methane	2.0	U
74-84-0-----	Ethane	4.0	U
74-85-1-----	Ethene	3.0	U



FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

ARGLAB SAMPLE NO.

CNSB08W19903

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113204

Matrix: (soil/water) WATER

Lab Sample ID: 661603

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA061010-R101

Level: (low/med) LOW

Date Received: 03/18/06

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8	Methane	2.0	U	
74-84-0	Ethane	4.0	U	
74-85-1	Ethene	3.0	U	

FORM I VOA

FORM 1  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLKR032106A

Lab Name: STL BURLINGTON

Contract: 21005

Lab Code: STLVT

Case No.: CENTRALIA SAS No.:

SDG No.: 113204

Matrix: (soil/water) WATER

Lab Sample ID: MBLKR032106A

Sample wt/vol: \_\_\_\_\_ (g/mL) ML

Lab File ID: 21MA060906-R021

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 03/21/06

GC Column: RTUPLLOT ID: 0.32 (mm)

Dilution Factor: 1.0

Soil Extract Volume: \_\_\_\_\_ (uL)

Soil Aliquot Volume: \_\_\_\_\_ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-82-8	Methane	2.0	U	
74-84-0	Ethane	4.0	U	
74-85-1	Ethene	3.0	U	

FORM I VOA