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Argonne NATIONAL LABORATORY

Annual Report of Groundwater Monitoring at Centralia, Kansas, in 2010

Environmental Science Division

USDA United States Department of Agriculture

Work sponsored by Commodity Credit Corporation,
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by
Applied Geosciences and Environmental Management Section
Environmental Science Division, Argonne National Laboratory

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Notation

AGEM	Applied Geosciences and Environmental Management
AMSL	above mean sea level
BGL	below ground level
°C	degree(s) Celsius
CAS	Corrective Action Study
CCC	Commodity Credit Corporation
CD	compact disc
COC	chain of custody
DO	dissolved oxygen
EPA	U.S. Environmental Protection Agency
ft	foot (feet)
IM	interim measure
in.	inch(es)
ISCR	*in situ* chemical reduction
KDHE	Kansas Department of Health and Environment
L	liter(s)
µg/L	microgram(s) per liter
µS/cm	microsiemen(s) per centimeter
mg/L	milligram(s) per liter
mi	mile(s)
mV	millivolt(s)
ORP	oxidation-reduction potential
RBSL	risk-based screening level
TOC	top of casing
USDA	U.S. Department of Agriculture
VOC	volatile organic compound
yr	year(s)

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1 Introduction and Background

In September 2005, periodic sampling of groundwater was initiated by the Commodity Credit Corporation of the U.S. Department of Agriculture (CCC/USDA) in the vicinity of a grain storage facility formerly operated by the CCC/USDA at Centralia, Kansas. The sampling at Centralia is performed on behalf of the CCC/USDA by Argonne National Laboratory, in accord with a monitoring program approved by the Kansas Department of Health and Environment (KDHE). The objective is to monitor levels of carbon tetrachloride contamination identified in the groundwater at Centralia (Argonne 2003, 2004, 2005a).

Under the KDHE-approved monitoring plan (Argonne 2005b), the groundwater was sampled twice yearly from September 2005 until September 2007 for analyses for volatile organic compounds (VOCs), as well as measurement of selected geochemical parameters to aid in the evaluation of possible natural contaminant degradation processes (reductive dechlorination) in the subsurface environment (Argonne 2006, 2007a, 2008a). The results from the two-year sampling program demonstrated the presence of carbon tetrachloride contamination at levels exceeding the KDHE Tier 2 risk-based screening level (RBSL) of 5 μg/L for this compound, in a localized groundwater plume that has shown little movement. The relative concentrations of chloroform, the primary degradation product of carbon tetrachloride, suggested that some degree of reductive dechlorination or natural biodegradation was talking place *in situ* at the former CCC/USDA facility on a localized scale.

The CCC/USDA subsequently developed an *Interim Measure Conceptual Design* (Argonne 2007b), proposing a pilot test of the Adventus EHC technology for *in situ* chemical reduction (ISCR). The proposed interim measure (IM) was approved by the KDHE in November 2007 (KDHE 2007). Implementation of the pilot test occurred in November-December 2007. The objective was to create highly reducing conditions that would enhance both chemical and biological reductive dechlorination in the injection test area (Argonne 2009a).

The KDHE (2008a) requested that sitewide monitoring continue until a final remedy is selected (as part of a Corrective Action Study [CAS] evaluation) and implemented. In response to this request, the established sampling across the site and additional sampling in the IM pilot test area continued in 2008 (Argonne 2008b, 2009a,b).

On the basis of results of the 2005-2008 sitewide monitoring and the 2008 IM pilot test monitoring, the CCC/USDA recommended a revised sampling program for both the wider site and the IM pilot test area (Section 4.2 in Argonne 2009b). The elements of this *interim monitoring plan* are as follows:

- Annual sampling of
    - Twelve monitoring points across the site (Figure 1.1) and
    - Five outlying IM pilot test monitoring points (PMP4, PMP5, PMP6, PMP7, PMP9; Figure 1.2).
- Twice yearly sampling of five IM pilot test monitoring points inside the injection area (PMP1-PMP3, PMP8, MW02; Figure 1.2).

With the approval of the KDHE (2009), the initial groundwater sampling for VOCs and geochemical analyses under the *interim monitoring plan* outlined above was conducted in 2009 (Argonne 2010). The present report documents the findings of the 2010 monitoring events, conducted on April 5 and September 19-21, 2010.

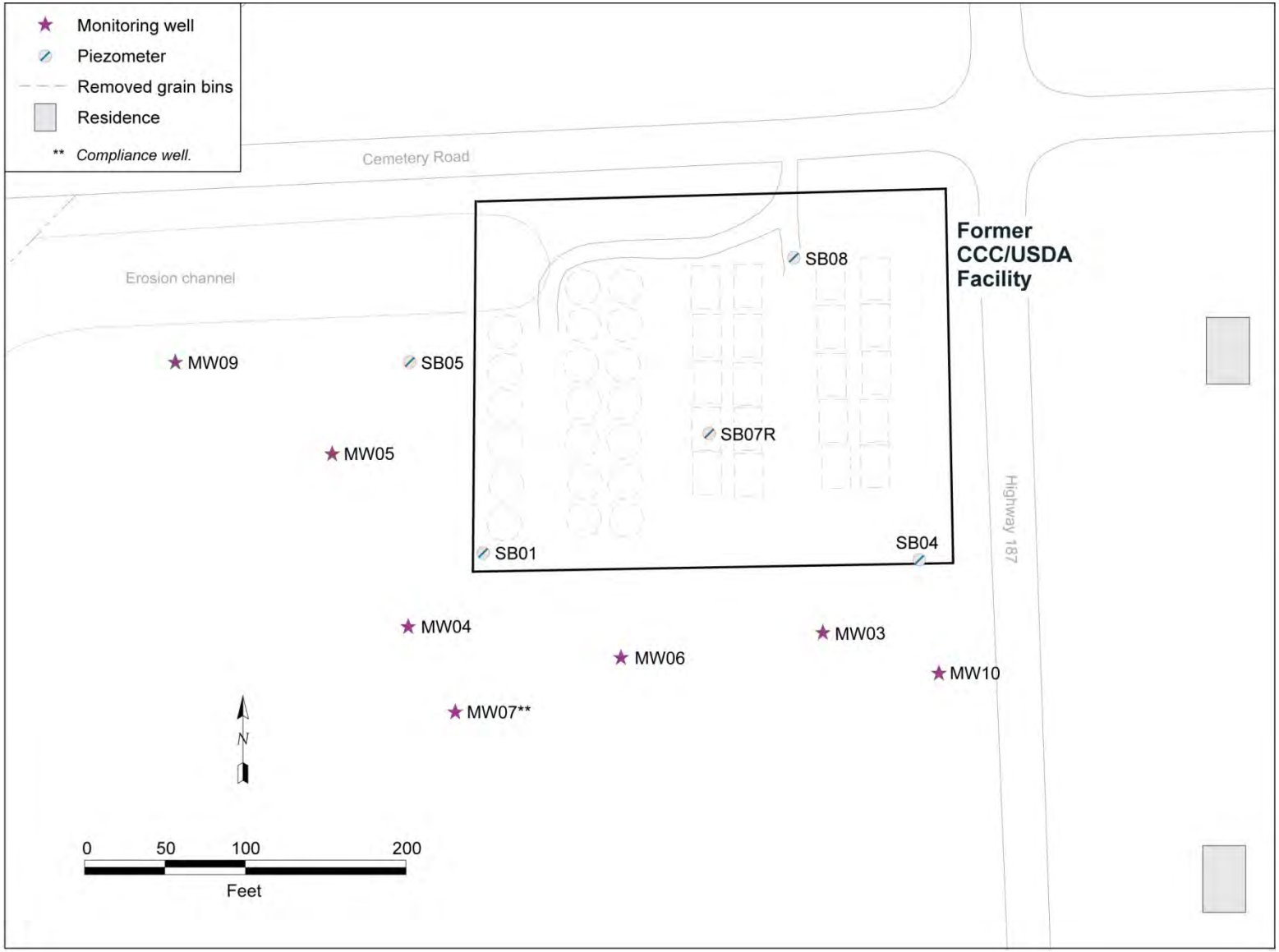

FIGURE 1.1 Currently approved annual sitewide monitoring network at Centralia.

FIGURE 1.2 Pilot test monitoring points currently approved for annual or twice-yearly sampling.

2 Sampling and Analysis Activities

2.1 Measurement of Groundwater Levels

Pilot test monitoring points PMP1-PMP3, PMP8, and MW02 (Figure 1.2) were sampled on April 5, 2010. Pilot test monitoring points PMP1-PMP9 and MW02 (Figure 1.2) and sitewide monitoring points MW03-MW07, MW09, MW10, SB01, SB04, SB05, SB07R, and SB08 (Figure 1.1) were sampled on September 19-21, 2010. Before each well or piezometer was sampled, a water level indicator was used to measure the depth to groundwater and the total depth of each well from the top of the well casing.

In wells MW01 and MW03-MW06, downhole pressure sensors equipped with automatic data loggers have been gathering long-term data on the groundwater elevation and gradient. During the current review period, the recorded water level data were retrieved from the loggers on April 28 and September 12, 2010. Water levels were also measured manually in these wells on the same dates as the downloads. In addition, manual water level measurements were made in all of the wells sampled on April 5 and September 19-21, 2010. The groundwater level data are presented and discussed in Section 3.1.

Automated measurement of the groundwater levels began in April 2002, and continuous monitoring of the levels in selected wells has been conducted since August 2004. As outlined in Section 3.1, the results of this program, in conjunction with periodic manual determinations of the water levels in all available monitoring points, have demonstrated long-term consistency in both the groundwater levels and the interpreted patterns of groundwater flow across the investigation site. In light of these findings, automated measurement of the groundwater levels was terminated during the current review period; the pressure sensors and data loggers were removed from the site after final downloads on April 5 and September 12, 2010.

2.2 Monitoring Well and Piezometer Sampling and Analyses

After manual measurement of water levels, each monitoring point was purged of a small volume by using a bladder pump or a Waterra pump. With the approval of the KDHE (2008b), the purging was performed by using low-flow techniques in accord with U.S. Environmental Protection Agency (EPA) procedure EPA/540/S-95/504 (Puls and Barcelona 1996) and the

equipment manufacturers' instructions. Field measurements of temperature, pH, conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP) were taken during purging until the measurements stabilized. Field measurements of iron(II) and carbon dioxide were made as outlined in the (2005-2007) monitoring plan (Argonne 2005b), in accord with procedures in the *Master Work Plan* (Argonne 2002). The sequence of activities during each of the 2010 sampling events (in April and September) is summarized in Appendix A, Table A.1.

Groundwater samples designated for VOCs analyses were collected in appropriate laboratory containers, labeled, packaged, and chilled to 4°C by placement in ice-filled coolers. The samples were shipped by an overnight delivery service to the Applied Geosciences and Environmental Management (AGEM) Laboratory at Argonne for VOCs analyses by EPA Method 524.2 (EPA 1995). Aliquots of selected samples (chosen in the field) were also shipped to TestAmerica Laboratories, Inc., South Burlington, Vermont, for verification VOCs analyses.

The analytical results for groundwater samples are discussed in Section 3.2.

2.3 Handling and Disposal of Investigation-Derived Waste

Purge water generated as potentially contaminated investigation-derived waste was containerized on-site. The accumulated purge water was sampled on September 30, 2010, and analyzed by Pace Analytical Services, Inc., Lenexa, Kansas, on October 3, 2010. Methods used were EPA Method 5030/8260 for VOCs, EPA Method 504.1 for ethylene dibromide, and EPA Method 300 for nitrate as nitrogen. No contamination was detected. The laboratory results are in Supplement 1, on the compact disc (CD) inside the back cover of this report. With the approval of the KDHE, the water was delivered on December 17, 2010 (together with purge water from several other CCC/USDA investigation sites in Kansas), for disposal the Sabetha publicly owned wastewater treatment plant.

2.4 Quality Control for Sample Collection, Handling, and Analysis

Quality assurance/quality control procedures followed during the April and September 2010 monitoring events are described in detail in the *Master Work Plan* (Argonne 2002). The results are summarized as follows:

- Sample collection and handling activities were monitored by the documentation of samples as they were collected and the use of chain-of-custody forms and custody seals to ensure sample integrity during handling and shipment.

- Samples designated for VOCs analyses were received with custody seals intact and at the appropriate preservation temperature. All samples were analyzed within the required holding times.

- Quality control samples were all free of carbon tetrachloride and chloroform contamination. These samples included a field blank, equipment rinsates, and trip blanks collected to monitor sample handling activities (Appendix B, Table B.1), as well as method blanks analyzed with the investigation samples to monitor analytical methodologies.

- Groundwater samples were analyzed for VOCs at the AGEM Laboratory with the purge-and-trap method on a gas chromatograph-mass spectrometer system. Calibration checks with each sample delivery group were required to be within ±20% of the standard. Surrogate standard determinations performed on samples and blanks were within the specified range of 80-120% for all samples, in either the initial analysis or a successful reanalysis.

- Accuracy and precision of the analytical methodology were evident in the analysis of two replicate samples and the duplicate analysis of three additional samples, with average relative percent difference values of 2% between the initial analysis and the associated quality control analysis for both carbon tetrachloride and chloroform (Table B.1 in Appendix B). The groundwater analytical data from the AGEM Laboratory are acceptable for quantitative determination of contaminant distribution.

- In accordance with the quality control procedures defined in the *Master Work Plan* (Argonne 2002), the analyses of water samples at the AGEM Laboratory were verified by a second laboratory. Three groundwater samples collected during the April 2010 monitoring event (from MW02, PMP2, and PMP3) and four samples from the September 2010 event (from MW06, MW07, MW08,

and SB09) were submitted to TestAmerica for verification organic analysis according to EPA Contract Laboratory Program methodology. Results (Table B.2 in Appendix B) showed good agreement over the range of contaminant concentrations detected, with average relative percent difference values of < 10% for both carbon tetrachloride and chloroform. The detection of methylene chloride, a secondary dechlorination by-product of carbon tetrachloride, was confirmed in the verification analyses. The verification organic analyses are on compact disc, in Supplement 2.

3 Results and Discussion

3.1 Groundwater Level Data

Depths to groundwater were measured manually in each of the wells sampled during the monitoring events on April 5 and September 19-21, 2010. Water levels were also measured manually in conjunction with the final data logger downloads on April 28 and September 12, 2010. The hand-measured water level data are in Table 3.1.

Hydrographs depicting the variations in water levels in monitored wells MW01 and MW03-MW06 during the current (2010) and previous (2009) review periods are in Figure 3.1. The water level traces are shown in conjunction with daily precipitation data obtained from the Kansas State University recording weather station in Powhattan, Kansas, approximately 26 mi east of Centralia (http://wdl.agron.ksu.edu/). Figure 3.1 indicates that the groundwater levels at Centralia have fluctuated by approximately 0.5-5 ft in response to both seasonal and shorter-term rainfall events but showed little net change in 2009-2010. The pronounced, transient water level "spikes" indicated in the hydrograph for monitoring well MW06 are believed to reflect localized flooding at the location of this (flush-mounted) monitoring well that occurs during heavy rainfall events, particularly in the spring and early summer. These observations are consistent with the results of the continuous automated monitoring conducted in selected wells since August 2004 (Argonne 2006, 2007a, 2008a,b, 2009b, 2010).

The potentiometric surface at Centralia, as determined from manual measurements on April 28, 2010, is depicted in Figure 3.2. The recent results are consistent with previous interpretations (Argonne 2006, 2007a, 2008a,b, 2009b, 2010), indicating an apparent groundwater flow direction toward the southwest across much of the former CCC/USDA facility. Like previous depictions, Figure 3.2 indicates that groundwater flow appears focused toward a localized low in the potentiometric surface, defined by the water level measurements at SB01, MW04, MW06, and MW07. Argonne's earlier investigations (Argonne 2003, 2004) suggested that the increased hydraulic gradients observed near these wells are a reflection of relatively low-permeability silts and clays that compose the aquifer unit in this portion of the study area, in comparison to the coarser-grained deposits identified in the northern and eastern portions of the site. The results of the sitewide groundwater analyses discussed in Section 3.2.1 support an interpretation of slow groundwater flow (and carbon tetrachloride migration) to the south-southwest, in keeping with the observed water level patterns.

3.2 Groundwater Analysis Results

In September 2010, sitewide groundwater sampling was performed, with the approval of the KDHE (2009), in a suite of 12 monitoring points (Figure 1.1). More detailed sampling in the IM pilot test area was conducted in April and September 2010, in the wells identified in Figure 1.2. The results of the 2010 sitewide (September) and IM pilot test area (April and September) monitoring efforts are summarized, respectively, in Section 3.2.1 and Section 3.2.2.

3.2.1 Sitewide Monitoring Results

The analytical data for VOCs in the groundwater samples collected in the network of sitewide monitoring wells in September 2010 are in Table 3.2, together with data generated since sampling of the monitoring wells began in 2004. The September 2010 data for carbon tetrachloride are illustrated in Figure 3.3, along with the lateral margins of the contaminant distribution, as interpreted on the basis of each of the sitewide groundwater sampling events summarized in Table 3.2.

Carbon tetrachloride was detected in September 2010 at 9 of the 12 sitewide monitoring locations on and downgradient from the former CCC/USDA facility (Figure 3.3), at concentrations ranging from 2.2 μg/L (at MW04) to a maximum of 374 μg/L (at SB05). Chloroform concentrations ranging from < 1 μg/L to 32 μg/L were detected at 8 of the 12 sampled locations (Table 3.2).

The carbon tetrachloride concentrations identified in the sitewide monitoring wells in September 2010 were generally comparable to the measurements obtained in the previous (2009) monitoring period, with individual wells showing only minor changes. The results in Table 3.2 and Figure 3.3 continue to indicate the longer-term trends (observed previously) of slightly increasing carbon tetrachloride levels at monitoring points SB05, MW04, MW07, and (since 2008) MW05 along the western and southern margins of the groundwater plume and in the apparent direction of groundwater flow.

The results of field measurements on the groundwater samples from wells in the sitewide monitoring network are summarized in Table 3.3. The presence of trace to relatively low levels of chloroform at all of the monitoring points (except for MW04) having detectable levels of

carbon tetrachloride (Table 3.2) suggests that some degradation of carbon tetrachloride is occurring at these locations. The relatively high DO concentrations (2.48-10.48 mg/L) and positive ORP levels (60 mV to 186 mV) identified at the sitewide monitoring points (Table 3.3) do not, however, support the widespread occurrence of anaerobic reducing conditions within the Centralia aquifer.

Table 3.3 indicates that the identified DO concentrations and ORP levels at monitoring well MW06 have fluctuated erratically since the monitoring of these parameters began in 2004. Low DO concentrations (< 1 mg/L) and negative ORP levels (-72 to -96 mV) detected at MW06 in September 2008 and October 2009 (Table 3.3), were interpreted as possibly suggesting the transient development of increasingly anaerobic reducing conditions at this location; however, these results were not reproduced in the current review period.

3.2.2 Monitoring Results for the IM Pilot Test Area

Baseline groundwater sampling was conducted within and adjacent to the IM pilot test area in September and November 2007, prior to the injection of the ISCR materials, to provide a basis for assessment of the ISCR treatment technology over time. The pre-treatment concentrations of carbon tetrachloride and the values of DO and ORP identified during this sampling (Argonne 2009a) are illustrated in Figures 3.4-3.6, respectively.

Injection of the ISCR materials (in November-December 2007) initially generated extremely reducing, oxygen-depleted groundwater conditions (conducive to the reductive dechlorination of carbon tetrachloride) within the injection field, while less dramatic reductions in DO and ORP were observed at monitoring points outside the treatment area. The extremely low DO and ORP levels were, however, maintained for only approximately 5-7 weeks after injection. Subsequent monitoring in 2008 (Argonne 2009a,b) demonstrated that the DO and ORP levels within the injection field remained consistently lower than those at monitoring points outside the injection area, but the results showed no clear indication of further geochemical effects beyond the limits of the injection field.

Reductions of 96-99% in the concentrations of carbon tetrachloride in groundwater within the injection field and of 20-70% at most monitoring points near the injection area were observed in the first 5-7 weeks after injection. Continued monitoring in 2008 showed that carbon

tetrachloride concentrations in the injection field generally remained near the initial post-injection levels or decreased slightly more, while the concentrations at points bordering or outside the injection area showed little consistency and variably decreased, increased, or remained relatively unchanged (Argonne 2009a) after the initial 5-7 weeks following the injection.

The analytical data for VOCs in the groundwater samples collected from the IM pilot test monitoring points (PMP1-PMP9 and MW02; Figure 1.2) in April and September 2010 are in Table 3.4, together with data for the most recent previous sampling events (October 2009, April 2009, and September 2008) at these locations. The corresponding field measurements for these locations and sampling events are in Table 3.5. Time series diagrams summarizing the complete sequence of analysis results for selected parameters (carbon tetrachloride, chloroform, methylene chloride, DO, ORP) at each IM monitoring point since the ISCR pilot test was implemented in November 2007 are in Appendix C, Figures C.1-C.10.

Carbon tetrachloride was detected at 3 of the 5 points sampled in the pilot test area during the April 2010 monitoring event and at 9 of the 10 points sampled in September 2010. In April 2010, carbon tetrachloride concentrations ranging from < 1 μg/L to 991 μg/L were identified at PMP1, PMP2, and PMP8. In September 2010, concentrations ranging from < 1 μg/L (at PMP8) to 779 μg/L (at PMP5) were detected at monitoring well MW02 and piezometers PMP1, PMP2, and PMP4-PMP9 (Table 3.4). No carbon tetrachloride was detected at monitoring point PMP3 during either 2010 sampling event.

The results of the September 2010 and October 2009 analyses for carbon tetrachloride are compared in Figure 3.7. The carbon tetrachloride concentrations in groundwater at monitoring points PMP1-PMP4, PMP6, PMP8, and PMP9 decreased from October 2009 to September 2010, with the most significant decrease during this period occurring at point PMP2 (from 1,384 μg/L in October 2009 to 117 μg/L in September 2010). The concentrations at MW02, PMP5, and PMP7 increased slightly from October 2009 to September 2010. These relatively short-term variations in carbon tetrachloride levels (from October 2009 to September 2010; Figure 3.7) in several cases do not appear representative, however, of possible longer-term trends in the contaminant concentrations at these monitoring points. The time series diagrams (Figures C.1-C.10 in Appendix C) suggest a net increase in the concentrations of carbon tetrachloride identified at locations PMP5, PMP6, and PMP9 (lying to the east and northwest of the pilot test injection field), and a net decrease in the concentrations at points PMP4 and PMP7

(lying to the southwest and downgradient of the injection field) since the September 2008 sampling event. Except for PMP2, the carbon tetrachloride concentrations at monitoring points in the injection field (MW02, PMP1, PMP3, and PMP8) gave little indication of increasing or decreasing trends during the 2009 and 2010 sampling events.

The DO concentrations and ORP levels identified in the pilot test area in September 2010 and October 2009 are summarized in Table 3.5 and Figures 3.8 and 3.9, respectively. Figure 3.9 and Figures C.1-C.10 in Appendix C illustrate that the observed ORP levels in and near the pilot test injection field remained relatively stable throughout 2009 and 2010. Consistently lower (and predominantly negative) ORP values have persisted in the injection field relative to the levels observed at the nearby monitoring points outside this area, demonstrating the apparent continued, localized influence of the ISCR treatment. Similarly, DO levels at monitoring points within the ISCR injection field (Table 3.5, Figure 3.8, and Figures C.1-C.10) have remained consistently lower, although somewhat more variable, than those at the nearby monitoring points immediately outside this area (with the possible exception of PMP7).

Relatively high levels of chloroform (relative to carbon tetrachloride; Table 3.4 and graphs in Appendix C) were also observed at PMP1, PMP2, and PMP4-PMP7 in the 2010 sampling events, and low levels of methylene chloride were detected at three of the pilot test monitoring locations (PMP2, PMP5, PMP7). Together, these findings confirm that geochemical conditions favorable to the degradation of carbon tetrachloride, via reductive dechlorination, persist in the pilot test area as a result of the November 2007 ISCR injections.

Data discussed previously (Argonne 2010) indicated that DO and ORP values decreased from September 2008 to October 2009 at monitoring points PMP4, PMP6, PMP7, and PMP9 immediately to the south, west, and downgradient of the pilot test injection field. Slightly lower concentrations of carbon tetrachloride were also identified at the PMP4 and PMP7 locations in October 2009 (Table 3.4). These relationships empirically suggested possible slow expansion of the range of influence of the ISCR treatment technology with time, in the direction of natural groundwater flow to the southwest. Additional monitoring in the pilot test area will be necessary, however, to substantiate this hypothesis, as the suggestion of coupled geochemical and concentration trends could not be confirmed on the basis of the 2010 monitoring results.

TABLE 3.1 Hand-measured water levels at Centralia in 2010.

Well	Top of Casing Elevation[b] (ft AMSL)	April 5, 2010[a]		April 28, 2010		September 12, 2010		September 19-21, 2010[a]	
		Depth to Groundwater[c] (ft TOC)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft TOC)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft TOC)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft TOC)	Groundwater Elevation (ft AMSL)
MW01	1329.17			9.97	1319.20	12.65	1316.52	12.17	1317.00
MW02	1334.67	18.70	1315.97	18.08	1316.59			19.72	1314.95
MW03	1334.51			17.88	1316.63	19.37	1315.14	19.42	1315.09
MW04	1322.57			20.88	1301.69	22.35	1300.22	22.42	1300.15
MW05	1317.97			7.93	1310.04	11.06	1306.91	10.38	1307.59
MW06	1329.63			34.27	1295.36	34.54	1295.09	34.96	1294.67
MW07	1324.76			24.75	1300.01			25.03	1299.73
MW08	1332.34			15.76	1316.58			17.52	1314.82
MW09	1310.41			0.20	1310.21			2.66	1307.75
MW10	1334.39			17.73	1316.66			19.92	1314.47
SB01	1325.15			14.07	1311.08			14.02	1311.13
SB04	1335.67			19.02	1316.65			20.42	1315.25
SB05	1321.28			6.75	1314.53			10.20	1311.08
SB07R	1331.57			14.95	1316.62			17.19	1314.38
SB08	1332.48			15.81	1316.67			17.23	1315.25
SB09	1311.07			4.36	1306.71			6.78	1304.29
PMP1	1333.70	17.25	1316.45					18.65	1315.05
PMP2	1333.67	17.16	1316.51					18.68	1314.99
PMP3	1334.57	17.90	1316.67					19.35	1315.22
PMP4	1331.99							16.83	1315.16
PMP5	1335.07							20.20	1314.87
PMP6	1335.19							20.00	1315.19
PMP7	1334.06							18.84	1315.22
PMP8	1332.94	16.12	1316.82					17.91	1315.03
PMP9	1331.83							15.30	1316.53

[a] Measurements made during sampling.

[b] 2009 surveyed elevations.

[c] Depths measured from the top of casing (TOC).

TABLE 3.2 Analytical results from the AGEM Laboratory for volatile organic compounds in groundwater samples collected from the sitewide monitoring points at Centralia, August 2004 to September 2010.

Well	Screen Interval (ft BGL)	Sample	Sample Date	Concentration (μg/L) Carbon Tetrachloride	Chloroform	Methylene Chloride
MW01	54.5-64.5	CNMW01-W-16158	8/24/04	ND[a]	ND	ND
		CNMW01-W-19276	9/10/05	ND	ND	ND
		CNMW01-W-16308	10/11/05	ND	ND	ND
		CNMW01-W-19890	3/15/06	ND	ND	ND
		CNMW01-W-22501	9/25/06	ND	ND	ND
		CNMW01-W-16326	3/29/07	ND	ND	ND
		CNMW01-W-16228	9/26/07	1.0 R[b]	ND	ND
		CNMW01-W-26023	3/19/08	ND	ND	ND
		CNMW01-W-26673	9/9/08	ND	ND	ND
MW02[c]	49.5-59.5	CNMW02-W-16159	8/26/04	215	6.2	ND
		CNMW02-W-19282	9/11/05	776	33	ND
		CNMW02-W-16309	10/12/05	528	21	ND
		CNMW02-W-19908	3/16/06	847	21	ND
		CNMW02-W-22508	9/26/06	1233	25	ND
		CNMW02-W-15489	3/26/07	829	14	ND
		CNMW02-W-16227	9/26/07	1138	18	ND
MW03	50.5-60.5	CNMW03-W-16178	8/24/04	1.2	ND	ND
		CNMW03-W-19277	9/10/05	1.6	ND	ND
		CNMW03-W-16310	10/11/05	1.8	ND	ND
		CNMW03-W-19909	3/17/06	2.6	0.2 J[d]	ND
		CNMW03-W-22513	9/26/06	2.7	ND	ND
		CNMW03-W-15494	3/27/07	2.5	ND	ND
		CNMW03-W-16223	9/25/07	3.5	ND	ND
		CNMW03-W-26001	3/12/08	2.3	ND	ND
		CNMW03-W-26675	9/9/08	3.2	0.3 J	ND
		CNMW03-W-27151	10/6/09	6.2	ND	ND
		CNMW03-W-27188	9/19/10	7.5	0.3 J	ND
MW04	37.5-47.5	CNMW04-W-16180	8/24/04	ND	ND	ND
		CNMW04-W-19280	9/11/05	0.9 J	ND	ND
		CNMW04-W-16311	10/11/05	0.8 J	ND	ND
		CNMW04-W-19891	3/15/06	1.3	ND	ND
		CNMW04-W-22506	9/25/06	1.4	0.1 J	ND
		CNMW04-W-16210	3/28/07	2.1	ND	ND
		CNMW04-W-16220	9/24/07	2.0	ND	ND
		CNMW04-W-26024	3/19/08	1.3	ND	ND
		CNMW04-W-26676	9/9/08	2.0	ND	ND
		CNMW04-W-27152	10/7/09	2.9	ND	ND
		CNMW04-W-27189	9/20/10	2.2	ND	ND

TABLE 3.2 (Cont.)

Well	Screen Interval (ft BGL)	Sample	Sample Date	Concentration (μg/L) Carbon Tetrachloride	Chloroform	Methylene Chloride
MW05	34.5-44.5	CNMW05-W-16183	8/25/04	ND	ND	ND
		CNMW05-W-19279	9/10/05	1.9	ND	ND
		CNMW05-W-16312	10/11/05	1.5	ND	ND
		CNMW05-W-19976	3/15/06	1.3	ND	ND
		CNMW05-W-22505	9/25/06	1.3	ND	ND
		CNMW05-W-16213	3/28/07	0.5 J	ND	ND
		CNMW05-W-16218	9/24/07	1.2	ND	ND
		CNMW05-W-26025	3/19/08	1.9	ND	ND
		CNMW05-W-26677	9/10/08	13	0.7 J	ND
		CNMW05-W-27153	10/7/09	18	1.1	ND
		CNMW05-W-27190	9/20/10	22	1.4	ND
MW06	46.5-56.5	CNMW06-W-16184	8/25/04	ND	ND	ND
		CNMW06-W-19278	9/10/05	ND	ND	ND
		CNMW06-W-16313	10/11/05	0.3 J	ND	ND
		CNMW06-W-19889	3/15/06	0.2 J	ND	ND
		CNMW06-W-22511	9/27/06	ND	ND	ND
		CNMW06-W-16208	3/27/07	ND	ND	ND
		CNMW06-W-16222	9/24/07	ND	ND	ND
		CNMW06-W-26026	3/19/08	ND	ND	ND
		CNMW06-W-26678	9/9/08	ND	ND	ND
		CNMW06-W-27154	10/6/09	ND	ND	ND
		CNMW06-W-27191	9/20/10	ND	ND	ND
MW07	45-55	CNMW07-W-19887	3/14/06	0.4 J	0.6 J	ND
		CNMW07-W-22512	9/26/06	1.1	ND	ND
		CNMW07-W-15492	3/26/07	1.8	ND	ND
		CNMW07-W-16221	9/24/07	2.4	ND	ND
		CNMW07-W-26027	3/19/08	3.0	ND	ND
		CNMW07-W-26679	9/9/08	4.0	0.2 J	ND
		CNMW07-W-27155	10/6/09	5.1	0.6 J	ND
		CNMW07-W-27192	9/20/10	6.6	0.3 J	ND
MW08	38-53	CNMW08-W-19284	3/14/06	ND	ND	ND
		CNMW08-W-22507	9/26/06	ND	ND	ND
		CNMW08-W-15493	3/27/07	ND	ND	ND
		CNMW08-W-16226	9/25/07	ND	ND	ND
		CNMW08-W-26028	3/20/08	ND	ND	ND
		CNMW08-W-26680	9/10/08	ND	ND	ND
MW09	25-35	CNMW09-W-19285	3/15/06	ND	ND	ND
		CNMW09-W-22504	9/25/06	ND	ND	ND
		CNMW09-W-16209	3/27/07	ND	ND	ND
		CNMW09-W-16219	9/24/07	ND	ND	ND
		CNMW09-W-26029	3/20/08	ND	ND	ND
		CNMW09-W-26681	9/10/08	ND	ND	ND
		CNMW09-W-27157	10/6/09	ND	ND	ND
		CNMW09-W-27194	9/19/10	ND	ND	ND

TABLE 3.2 (Cont.)

Well	Screen Interval (ft BGL)	Sample	Sample Date	Concentration (μg/L) Carbon Tetrachloride	Chloroform	Methylene Chloride
MW10	30-45	CNMW10-W-19886	3/14/06	ND	ND	ND
		CNMW10-W-22510	9/26/06	ND	ND	ND
		CNMW10-W-16215	3/28/07	ND	ND	ND
		CNMW10-W-16224	9/25/07	ND	ND	ND
		CNMW10-W-26030	3/20/08	ND	ND	ND
		CNMW10-W-26682	9/9/08	ND	ND	ND
		CNMW10-W-27158	10/6/09	ND	ND	ND
		CNMW10-W-27195	9/19/10	ND	ND	ND
SB01	40-50	CNSB01-W-16188	8/26/04	186	6.5	ND
		CNSB01-W-19274	9/9/05	269	6.8	ND
		CNSB01-W-16314	10/12/05	288	6.6	ND
		CNSB01-W-19979	3/17/06	320	5.7	ND
		CNSB01-W-22516	9/27/06	267	6.3	ND
		CNSB01-W-15491	3/27/07	222	4.9	ND
		CNSB01-W-16232	9/27/07	283	4.6	ND
		CNSB01-W-26031	3/20/08	325	4.8	ND
		CNSB01-W-26683	9/10/08	378	4.1	ND
		CNSB01-W-27159	10/7/09	396	5.0	ND
		CNSB01-W-27196	9/20/10	319	4.7	ND
SB04	51-61	CNSB04-W-16189	8/26/04	30	ND	ND
		CNSB04-W-19273	9/9/05	47	0.6 J	ND
		CNSB04-W-16315	10/12/05	44	0.5 J	ND
		CNSB04-W-19906	3/16/06	51	0.5 J	0.4 J B[e]
		CNSB04-W-22503	9/25/06	54	0.7 J	ND
		CNSB04-W-16216	3/28/07	44	0.5 J	ND
		CNSB04-W-16230	9/26/07	36	0.4 J	ND
		CNSB04-W-26002	3/12/08	30	0.3 J	ND
		CNSB04-W-26684	9/9/08	15	0.3 J	ND
		CNSB04-W-27160	10/8/09	17	0.3 J	ND
		CNSB04-W-27197	9/20/10	17	0.3 J	ND
SB05	32-42	CNSB05-W-16190	8/26/04	59	5.5	ND
		CNSB05-W-19275	9/9/05	77	7.2	ND
		CNSB05-W-16323	10/12/05	54	5.5	ND
		CNSB05-W-19904	3/17/06	104	7.2	ND
		CNSB05-W-19940	9/27/06	139	12	ND
		CNSB05-W-16212	3/28/07	138	12	ND
		CNSB05-W-16233	9/26/07	221	16	ND
		CNSB05-W-26032	3/20/08	224	17	ND
		CNSB05-W-26685	9/9/08	256	20	ND
		CNSB05-W-27161	10/8/09	289	19	ND
		CNSB05-W-27198	9/21/10	374	32	ND
SB07R	45-60	CNSB07R-W-19978	3/15/06	41	2.7	ND
		CNSB07R-W-19924	9/26/06	30	1.7	ND
		CNSB07R-W-15490	3/26/07	30	1.7	ND
		CNSB07R-W-16225	9/25/07	50	2.4	ND
		CNSB07R-W-26003	3/12/08	13	0.9 J	ND
		CNSB07R-W-26686	9/9/08	21	1.4	ND
		CNSB07R-W-27162	10/7/09	38	1.7	ND
		CNSB07R-W-27199	9/20/10	42	2.5	ND

TABLE 3.2 (Cont.)

Well	Screen Interval (ft BGL)	Sample	Sample Date	Concentration (µg/L) Carbon Tetrachloride	Chloroform	Methylene Chloride
SB08	52-62	CNSB08-W-16192	8/26/04	79	3.1	ND
		CNSB08-W-19272	9/8/05	80	2.6	ND
		CNSB08-W-16317	10/12/05	77	2.8	ND
		CNSB08-W-19903	3/17/06	91	2.7	ND
		CNSB08-W-22500	9/21/06	53	1.6	ND
		CNSB08-W-16214	3/28/07	64	2.0	ND
		CNSB08-W-16229	9/26/07	68	1.8	ND
		CNSB08-W-26004	3/12/08	28	1.1	ND
		CNSB08-W-26687	9/8/08	22	1.2	ND
		CBSB08-W-27163	10/8/09	29	1.2	ND
		CNSB08-W-27200	9/20/10	16	0.9 J	ND
SB09	32-42	CNSB09-W-16193	8/26/04	ND	ND	ND
		CNSB09-W-19281	9/11/05	ND	ND	ND
		CNSB09-W-16318	10/11/05	ND	ND	ND
		CNSB09-W-19902	3/17/06	ND	ND	ND
		CNSB09-W-22502	9/25/06	ND	ND	ND
		CNSB09-W-16211	3/28/07	ND	ND	ND
		CNSB09-W-16231	9/26/07	ND	ND	ND
		CNSB09-W-26033	3/20/08	ND	ND	ND
		CNSB09-W-26688	9/10/08	ND	ND	ND

[a] ND, not detected at an instrument detection limit of 0.1 µg/L.

[b] Qalifier R indicates that the contaminant was present in the associated equipment rinsate.

[c] Data are for samples collected prior to implementation of the IM ISCR pilot test in November 2007. More recent results are in Table 3.4.

[d] Qalifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L.

[e] Qualifier B indicates that the contaminant was present in the associated method blank.

TABLE 3.3 Field measurements for groundwater samples collected from the sitewide monitoring points at Centralia, August 2004 to September 2010.

Well	Screen Interval (ft BGL)	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	Concentration (mg/L) Dissolved Oxygen	Carbon Dioxide	Iron(II)	ORP (mV)
MW01	54.5-64.5	8/24/04	16.3	7.39	652	0.06	25	0.00	230
		9/10/05	16.3	7.26	599	6.31	–[a]	0.00	104
		10/11/05	16.4	6.45	634	–	–	–	–
		3/15/06	14.3	7.56	621	9.33	30	0.04	297
		9/25/06	13.3	7.01	782	6.82	50	0.31	92
		3/29/07	16.5	6.54	629	4.39	–	0.00	174
		9/26/07	17.8	7.06	630	0.89	35	0.09	146
		3/19/08	9.5	7.31	613	3.34	–	–	122
		9/9/08	13.9	7.28	595	5.18	20	0.03	28
MW02[b]	49.5-59.5	8/26/04	14.4	7.31	729	0.16	20	0.12	235
		9/11/05	15.3	7.02	739	1.28	–	–	–
		10/12/05	14.8	6.60	766	–	–	–	–
		3/16/06	14.2	6.78	759	1.24	–	0.00	295
		9/26/06	13.2	6.98	957	3.05	40	0.06	67
		3/26/07	15.7	6.39	739	2.29	50	–	67
		9/26/07	15.4	7.04	763	3.39	25	0.00	156
MW03	50.5-60.5	8/24/04	13.1	7.28	783	0.10	55	0.21	230
		9/10/05	15.1	7.05	715	10.42	65	0.00	142
		10/11/05	16.3	6.46	765	–	–	–	–
		3/17/06	13.8	6.75	753	9.39	77	0.00	290
		9/26/06	13.2	6.92	960	11.57	45	0.08	251
		3/27/07	15.3	6.40	774	7.73	25	–	268
		9/25/07	14.3	6.97	738	8.44	30	0.00	162
		3/12/08	14.6	7.12	777	7.90	–	3.13	88
		9/9/08	14.9	7.13	763	9.60	110	0.12	66
		10/6/09	13.8	7.08	770	9.66	95	0.03	216
		9/19/10	14.7	6.98	762	10.48	–	0.08	178
MW04	37.5-47.5	8/24/04	16.2	7.39	717	0.11	40	0.04	210
		9/11/05	15.4	7.18	665	8.43	60	0.00	226
		10/11/05	14.4	7.14	811	–	–	–	–
		3/15/06	13.5	7.78	675	6.82	55	0.06	283
		9/25/06	–	7.02	613	9.13	40	0.19	46
		3/28/07	15.4	6.47	678	5.46	–	0.00	197
		9/24/07	17.4	7.10	667	6.94	35	0.24	261
		3/19/08	11.2	7.32	636	7.55	–	–	164
		9/9/08	14.2	7.14	648	8.68	100	0.00	72
		10/7/09	13.9	7.17	671	8.64	100	0.02	183
		9/20/10	16.2	7.18	572	8.91	–	0.10	164

TABLE 3.3 (Cont.)

Well	Screen Interval (ft BGL)	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	Concentration (mg/L) Dissolved Oxygen	Carbon Dioxide	Iron(II)	ORP (mV)
MW05	34.5-44.5	8/25/04	14.3	7.14	613	0.08	25	0.06	215
		9/10/05	14.2	6.80	620	1.40	110	0.00	160
		10/11/05	14.8	6.35	610	–	–	–	–
		3/15/06	14.3	6.90	701	0.90	30	0.06	156
		9/25/06	13.6	6.95	768	0.09	50	0.02	55
		3/28/07	14.4	6.44	573	4.53	35	0.00	295
		9/24/07	15.8	7.06	368	3.09	45	0.00	182
		3/19/08	12.9	7.42	642	5.42	–	–	177
		9/10/08	13.9	7.11	663	7.14	95	0.00	130
		10/7/09	14.2	7.11	672	7.05	90	0.00	194
		9/20/10	17.2	7.18	675	6.07	–	0.01	183
MW06	46.5-56.5	8/25/04	15.9	7.50	637	0.05	15	0.00	215
		9/10/05	14.6	7.23	659	0.04	60	0.00	41
		10/11/05	15.8	6.99	638	–	–	–	–
		3/15/06	14.1	7.38	630	9.87	35	0.02	263
		9/27/06	13.1	6.16	652	0.05	45	1.12	63
		3/27/07	19.0	6.42	466	0.11	20	0.00	13
		9/24/07	16.8	7.11	463	8.00	25	0.41	191
		3/19/08	14.1	7.01	552	7.00	–	–	172
		9/9/08	14.4	7.20	437	0.36	105	0.07	-96
		10/6/09	13.5	6.69	255	0.61	110	0.06	-72
		9/20/10	15.6	6.97	369	2.48	–	0.04	86
MW07	45-55	3/14/06	14.7	6.61	709	0.34	–	0.03	143
		9/26/06	13.1	7.23	642	2.91	50	0.00	–
		3/26/07	15.8	6.50	642	1.87	30	0.00	261
		9/24/07	19.0	7.18	609	9.05	60	0.18	190
		3/19/08	12.5	7.29	647	2.70	–	–	215
		9/9/08	15.6	7.10	629	1.41	68	0.00	16
		10/6/09	13.9	7.19	618	1.42	70	0.00	53
		9/20/10	16.6	7.22	622	2.93	–	0.00	132
MW08	38-53	3/14/06	13.5	6.35	854	5.32	–	0.00	145
		9/26/06	13.3	6.75	1095	0.16	50	0.18	37
		3/27/07	15.8	6.31	874	1.49	30	0.21	237
		9/25/07	15.8	6.92	627	1.42	45	0.14	219
		3/20/08	13.5	7.19	869	2.11	–	–	185
		9/10/08	16.3	7.03	864	1.17	100	0.03	117
MW09	25-35	3/15/06	17.7	7.33	664	0.95	55	0.09	214
		9/25/06	12.8	6.87	859	1.59	45	0.18	90
		3/27/07	14.9	6.35	689	4.10	30	0.69	152
		9/24/07	16.6	6.94	1999	3.86	55	0.14	186
		3/20/08	13.5	7.17	720	4.70	–	–	173
		9/10/08	14.7	7.02	706	3.68	110	0.07	120
		10/6/09	13.2	7.00	715	3.73	110	0.08	148
		9/19/10	14.6	6.99	711	3.60	–	0.09	159

TABLE 3.3 (Cont.)

Well	Screen Interval (ft BGL)	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	Concentration (mg/L) Dissolved Oxygen	Carbon Dioxide	Iron(II)	ORP (mV)
MW10	30-45	3/14/06	14.8	6.60	834	6.42	65	0.00	166
		9/26/06	13.6	6.87	1058	6.94	50	0.50	51
		3/28/07	17.0	6.36	834	5.09	35	0.00	270
		9/25/07	15.8	6.94	827	6.64	35	0.21	199
		3/20/08	10.9	7.18	898	6.12	–	–	187
		9/9/08	14.8	7.05	879	7.18	100	0.06	94
		10/6/09	13.7	7.04	883	6.67	95	0.08	201
		9/19/10	15.1	6.95	882	6.76	–	0.00	186
SB01	40-50	8/26/04	26.0	7.46	699	5.21	30	0.00	210
		9/9/05	25.0	7.11	674	6.25	95	0.00	140
		10/12/05	13.8	7.23	686	–	–	–	–
		3/17/06	12.4	7.30	692	5.98	55	0.00	185
		9/27/06	14.4	7.03	832	6.54	40	0.52	198
		3/27/07	18.0	6.37	659	3.81	25	0.23	173
		9/27/07	13.5	7.24	720	6.55	45	1.04	143
		3/20/08	15.6	7.29	783	8.02	–	–	182
		9/10/08	16.5	7.10	676	2.89	100	0.17	100
		10/7/09	14.8	7.11	761	7.69	105	0.07	215
		9/20/10	17.1	7.24	679	7.10	–	0.00	163
SB04	51-61	8/26/04	17.9	7.14	765	3.78	55	0.37	230
		9/9/05	16.0	7.09	708	8.67	100	–	206
		10/12/05	13.9	7.17	813	–	–	–	–
		3/16/06	13.0	7.57	799	5.96	30	–	276
		9/25/06	14.9	7.16	791	9.32	70	1.18	64
		3/28/07	16.2	6.45	850	6.18	–	0.23	266
		9/26/07	19.8	7.03	760	6.61	30	0.00	202
		3/12/08	15.5	7.04	819	6.16	–	0.09	154
		9/9/08	16.5	7.11	802	6.48	100	0.02	70
		10/8/09	12.2	7.11	797	7.43	95	0.09	238
		9/20/10	22.3	7.04	806	6.98	–	0.06	143
SB05	32-42	8/26/04	15.7	7.25	761	–	25	0.06	220
		9/9/05	16.9	6.98	687	7.58	100	–	–
		10/12/05	14.0	7.00	728	–	–	–	–
		3/17/06	13.3	7.67	718	4.80	40	0.18	253
		9/27/06	13.7	6.58	763	4.70	50	0.25	78
		3/28/07	16.7	4.03	1100	2.58	35	0.07	296
		9/26/07	15.1	6.98	810	4.10	30	0.50	221
		3/20/08	14.5	7.11	870	5.56	–	–	206
		9/9/08	13.7	6.79	890	7.60	90	0.09	56
		10/8/09	12.7	7.09	874	6.63	100	0.08	209
		9/21/10	14.4	7.18	862	7.69	–	0.54	60
SB07R	45-60	3/15/06	16.8	7.24	685	7.41	60	0.08	83
		9/26/06	13.2	6.89	842	6.17	55	0.26	67
		3/26/07	19.0	6.38	668	5.08	40	0.07	237
		9/25/07	17.4	7.06	642	6.30	35	0.11	170
		3/12/08	17.3	7.18	639	5.33	–	0.00	108
		9/9/08	14.1	7.06	631	5.08	100	0.07	55
		10/7/09	13.3	7.11	629	6.67	110	0.10	224
		9/20/10	15.5	7.04	648	5.87	–	0.13	161

TABLE 3.3 (Cont.)

Well	Screen Interval (ft BGL)	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	Concentration (mg/L) Dissolved Oxygen	Carbon Dioxide	Iron(II)	ORP (mV)
SB08	52-62	8/26/04	19.5	7.31	635	0.16	20	0.53	235
		9/8/05	21.2	7.27	598	3.21	75	0.00	111
		10/12/05	13.9	7.15	630	–	–	–	–
		3/17/06	12.9	7.14	645	3.40	40	0.00	246
		9/21/06	14.1	6.96	809	4.53	40	0.00	37
		3/28/07	15.8	6.53	645	3.57	35	0.24	208
		9/26/07	17.4	7.11	617	4.56	40	0.77	156
		3/12/08	17.1	7.17	642	3.63	–	0.14	102
		9/8/08	13.6	7.14	626	2.70	90	0.00	230
		10/8/09	12.3	7.22	617	4.43	95	0.00	221
		9/20/10	15.2	7.12	616	3.73	–	0.05	166
SB09	32-42	8/26/04	30.9	7.09	910	0.26	75	0.00	185
		9/11/05	14.6	6.71	877	0.13	225	0.00	–
		10/11/05	13.9	6.85	910	–	–	–	–
		3/17/06	11.7	7.03	969	1.53	99	0.00	206
		9/25/06	14.2	7.00	976	0.29	70	0.38	86
		3/28/07	14.3	6.32	957	0.89	40	0.09	236
		9/26/07	15.2	6.77	969	1.53	45	0.12	199
		3/20/08	10.1	6.94	1000	1.57	–	–	221
		9/10/08	18.4	6.87	977	0.56	160	0.11	109

[a] No measurement obtained.

[b] Data are for samples collected prior to implementation of the IM ISCR pilot test in November 2007. More recent data are in Table 3.5.

TABLE 3.4 Analytical results from the AGEM Laboratory for volatile organic compounds in groundwater samples collected from the IM pilot test monitoring points at Centralia, September 2008 to September 2010.

Well	Screen Interval (ft BGL)	Sample	Sample Date	Concentration (μg/L) Carbon Tetrachloride	Chloroform	Methylene Chloride
MW02[a]	49.5-59.5	CNMW02-W-26674	9/8/08	18	57	11
		CNMW02-W-27140	4/22/09	ND[b]	ND	1.8
		CNMW02-W-27150	10/8/09	ND	ND	ND
		CNMW02-W-27179	4/5/10	ND	ND	ND
		CNMW02-W-27187	9/20/10	1.7	ND	ND
PMP1	50-60	CNPMP1-W-26689	9/9/08	136	30	ND
		CNPMP1-W-27141	4/22/09	102	21	ND
		CNPMP1-W-27165	10/7/09	167	20	ND
		CNPMP1-W-27180	4/5/10	91	15	ND
		CNPMP1-W-27202	9/21/10	103	11	ND
PMP2	50-60	CNPMP2-W-26690	9/9/08	1854	318	5.6
		CNPMP2-W-27142	4/22/09	1398	299	-[c]
		CNPMP2-W-27166	10/7/09	1384	272	6.6
		CNPMP2-W-27181	4/5/10	991	182	5.1
		CNPMP2-W-27203	9/21/10	117	55	2.3
PMP3	50-60	CNPMP3-W-26691	9/9/08	21	57	6.2
		CNPMP3-W-27143	4/22/09	3.2	5.8	ND
		CNPMP3-W-27167	10/7/09	0.5 J[d]	3.9	ND
		CNPMP3-W-27182	4/5/10	ND	ND	ND
		CNPMP3-W-27204	9/21/10	ND	ND	ND
PMP4	48.75-58.75	CNPMP4-W-26692	9/9/08	49	4.2	ND
		CNPMP4-W-27168	10/6/09	39	2.9	ND
		CNPMP4-W-27205	9/21/10	28	1.8	ND
PMP5	50-60	CNPMP5-W-26693	9/10/08	418	46	1.6
		CNPMP5-W-27169	10/8/09	728	43	1.2
		CNPMP5-W-27206	9/20/10	779	35	0.9 J
PMP6	50-60	CNPMP6-W-26694	9/8/08	110	7.8	ND
		CNPMP6-W-27170	10/6/09	199	12	ND
		CNPMP6-W-27207	9/21/10	143	9.6	ND
PMP7	50-60	CNPMP7-W-26695	9/9/08	119	13	ND
		CNPMP7-W-27171	10/6/09	84	23	1.8
		CNPMP7-W-27208	9/21/10	98	37	4.0

TABLE 3.4 (Cont.)

Well	Screen Interval (ft BGL)	Sample	Sample Date	Concentration (μg/L) Carbon Tetrachloride	Chloroform	Methylene Chloride
PMP8	50-60	CNPMP8-W-26696	9/9/08	72	125	3.4
		CNPMP8-W-27144	4/22/09	3.2	5.6	1.9
		CNPMP8-W-27172	10/7/09	16	21	1.8
		CNPMP8-W-27183	4/5/10	0.4 J	0.7 J	ND
		CNPMP8-W-27209	9/21/10	0.7 J	ND	ND
PMP9	50-60	CNPMP9-W-26697	9/9/08	7.6	0.4 J	ND
		CNPMP9-W-27173	10/7/09	29	0.5 J	ND
		CNPMP9-W-27210	9/21/10	24	0.2 J	ND

[a] Data are for samples collected after implementation of the IM ISCR pilot test in November 2007. Earlier data are in Table 3.2.

[b] ND, not detected at an instrument detection limit of 0.1 μg/L.

[c] No analysis.

[d] Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 μg/L.

TABLE 3.5 Field measurements for groundwater samples collected from the IM pilot test monitoring points at Centralia, September 2008 to September 2010.

Well	Screen Interval (ft BGL)	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	Concentration (mg/L) Dissolved Oxygen	Carbon Dioxide	Iron(II)	ORP (mV)
MW02[a]	49.5-59.5	9/8/08	13.1	6.12	6821	0.40	50	3.30[b]	-74
		4/22/09	14.8	6.71	2943	0.60	110	2.70	-131
		10/8/09	12.7	6.98	1829	0.44	50	3.06	-138
		4/5/10	15.0	8.79	1675	0.08	115	2.36	-72
		9/20/10	15.7	6.98	1608	0.01	–	3.30[b]	-139
PMP1	50-60	9/9/08	14.4	5.54	700	1.37	115	0.23	40
		4/22/09	15.1	6.97	667	3.62	115	0.60	-79
		10/7/09	13.8	7.30	623	0.56	110	0.33	-34
		4/5/10	15.0	7.13	545	0.24	110	0.00	53
		9/21/10	15.8	6.83	617	0.53	–	0.67	34
PMP2	50-60	9/9/08	14.4	7.09	997	0.05	180	1.68	-41
		4/22/09	15.0	6.91	829	3.57	150	1.36	-101
		10/7/09	13.9	7.65	775	0.19	160	1.53	-89
		4/5/10	13.6	7.05	667	0.22	140	1.87	-93
		9/21/10	15.8	6.82	747	0.21	–	3.06	-90
PMP3	50-60	9/9/08	14.5	6.98	1301	0.03	150	3.30[b]	-150
		4/22/09	14.3	7.13	506	2.64	130	2.51	-114
		10/7/09	14.0	8.06	472	0.17	140	0.37	-129
		4/5/10	13.3	7.59	433	0.16	140	0.24	-175
		9/21/10	16.1	7.28	492	2.02	–	1.18	-138
PMP4	48.75-58.75	9/9/08	14.3	4.97	738	4.87	100	0.49	134
		10/6/09	13.2	6.46	705	2.20	110	0.08	43
		9/21/10	15.5	7.15	747	5.66	–	0.25	36
PMP5	50-60	9/10/08	16.9	7.20	875	2.51	105	0.18	117
		10/8/09	10.7	7.10	839	3.18	100	0.00	43
		9/20/10	20.0	7.05	904	3.35	–	0.12	92
PMP6	50-60	9/8/08	13.2	6.87	787	3.32	75	0.09	173
		10/6/09	13.5	6.80	692	2.30	80	0.07	159
		9/21/10	15.5	7.22	777	1.90	–	0.59	91
PMP7	50-60	9/9/08	14.2	6.30	807	2.18	70	0.18	15
		10/6/09	13.4	6.74	655	0.46	70	0.12	-13
		9/21/10	15.2	7.23	664	0.20	–	0.07	-38
PMP8	50-60	9/9/08	14.4	7.05	1388	0.03	60	2.72	-129
		4/22/09	15.2	7.30	776	1.74	150	2.03	-139
		10/7/09	13.9	7.69	688	0.81	120	0.27	-155
		4/5/10	13.3	7.46	555	0.19	145	0.92	-156
		9/21/10	14.8	7.44	592	2.00	–	1.66	-138

TABLE 3.5 (Cont.)

Well	Screen Interval (ft BGL)	Sample Date	Temperature (°C)	pH	Conductivity (µS/cm)	Concentration (mg/L) Dissolved Oxygen	Carbon Dioxide	Iron(II)	ORP (mV)
PMP9	50-60	9/9/08	14.0	6.36	606	7.78	120	0.10	45
		10/7/09	13.7	7.50	568	5.82	125	0.06	-1
		9/21/10	15.2	7.26	605	6.67	–	0.15	44

[a] Data are for samples collected after implementation of the IM ISCR pilot test in November 2007. Earlier results are in Table 3.3.

[b] Maximum reading from instrument.

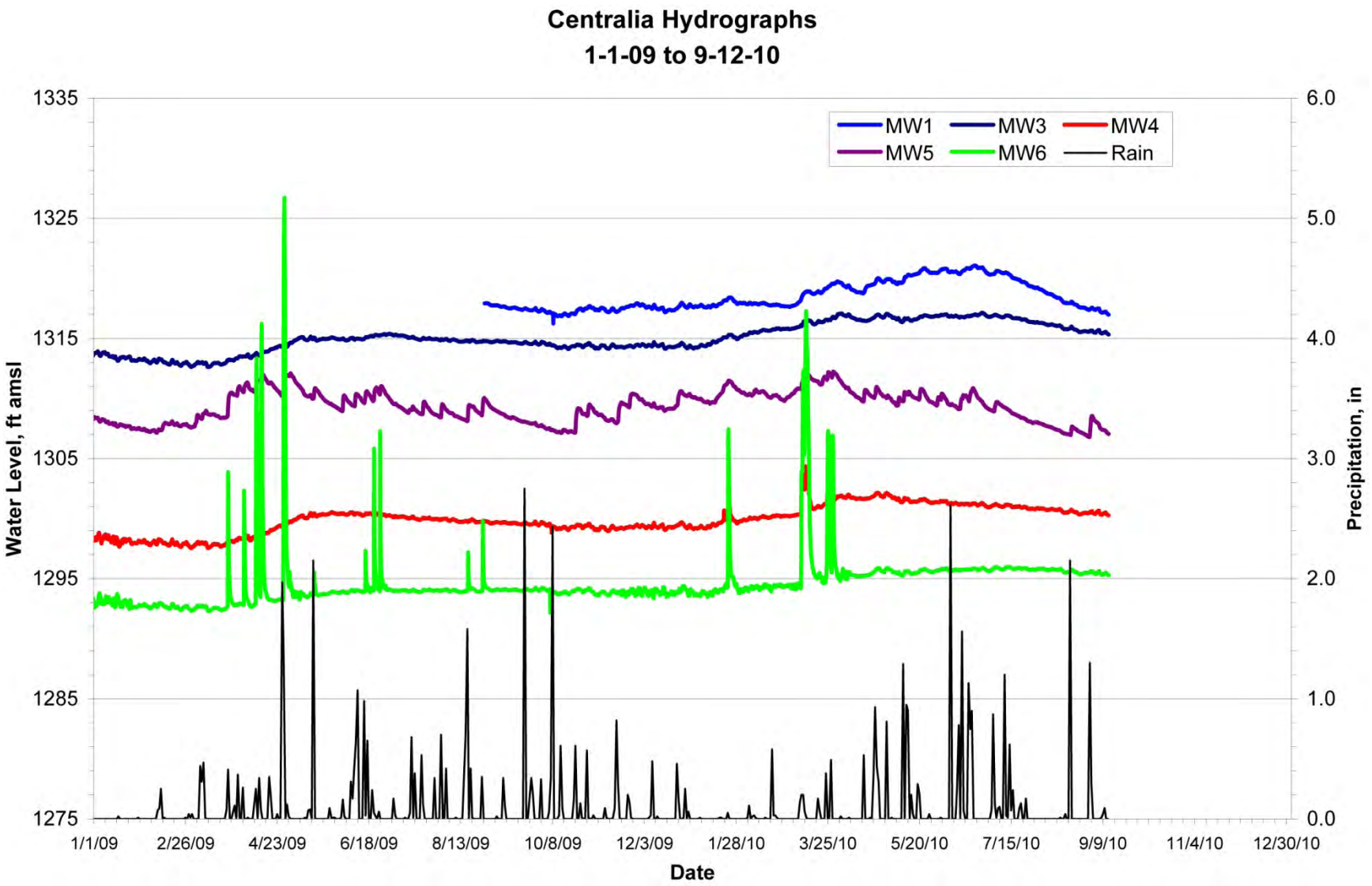

FIGURE 3.1 Hydrographs summarizing results of long-term water level monitoring at Centralia, January 2009 to September 2010.

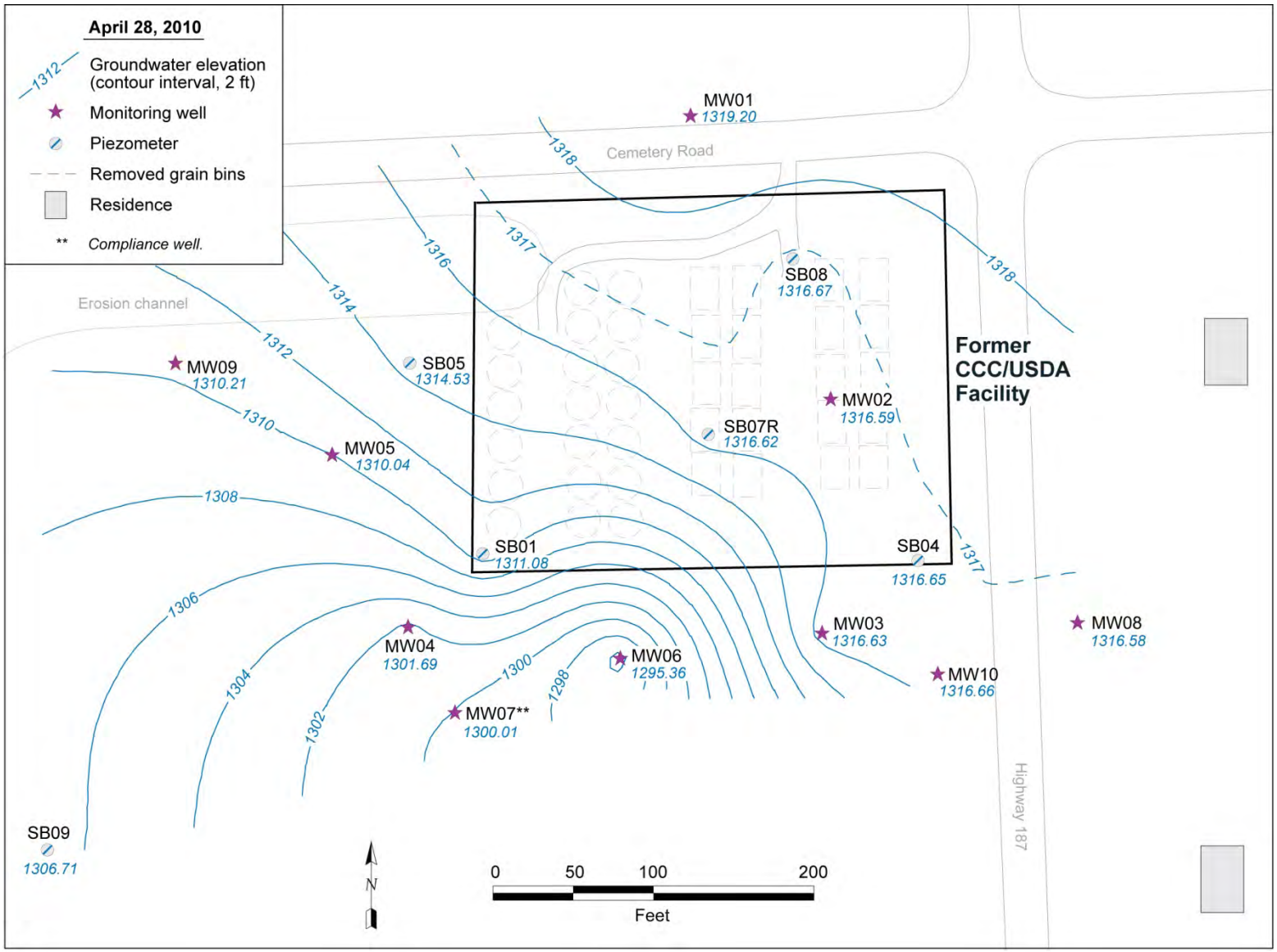

FIGURE 3.2 Potentiometric surface at Centralia, based on water levels measured manually on April 28, 2010.

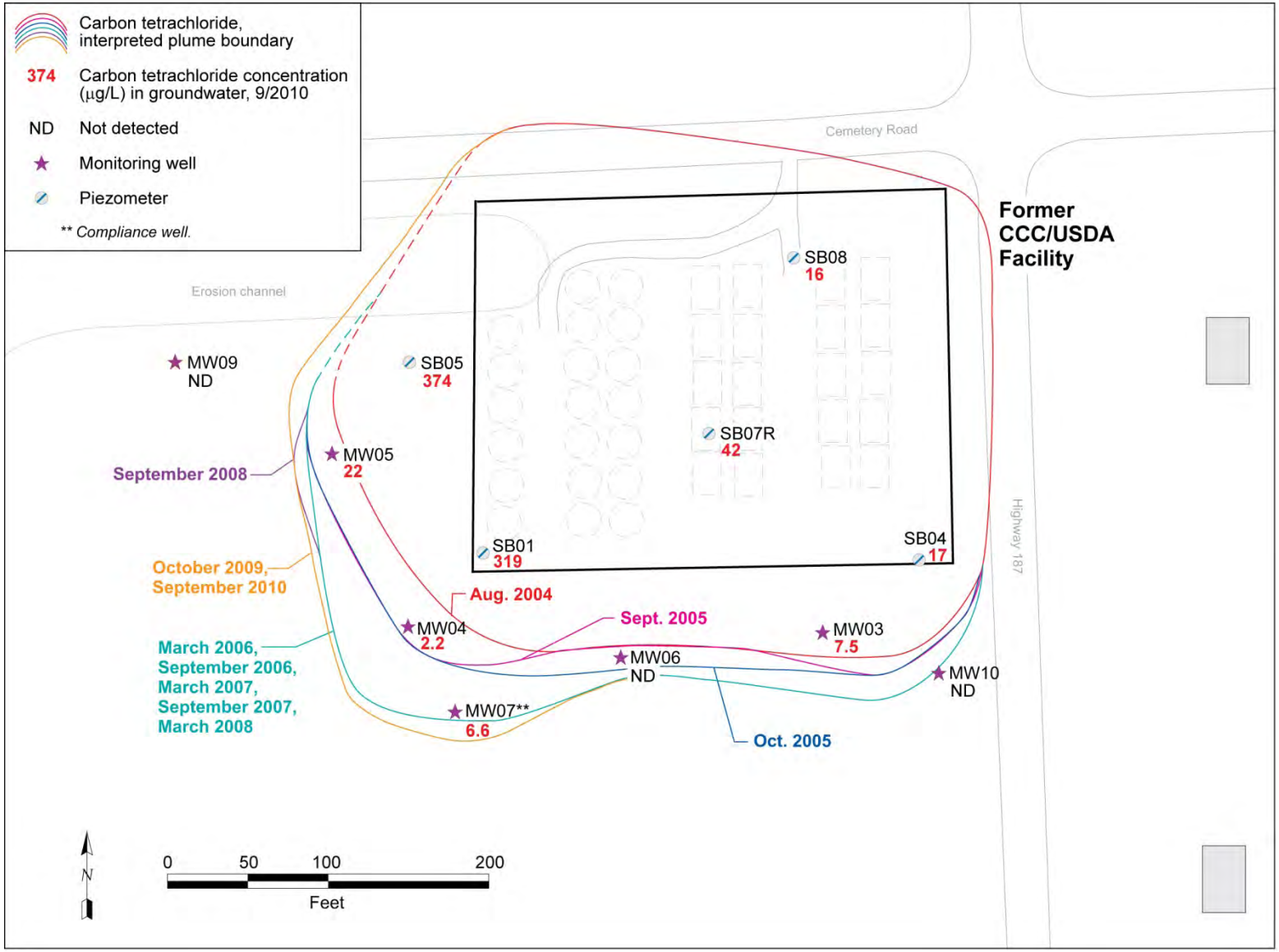

FIGURE 3.3 Carbon tetrachloride concentrations in groundwater in the sitewide monitoring wells sampled in September 2010, with the interpreted lateral extent of the contaminant at intervals during the period August 2004 to September 2010.

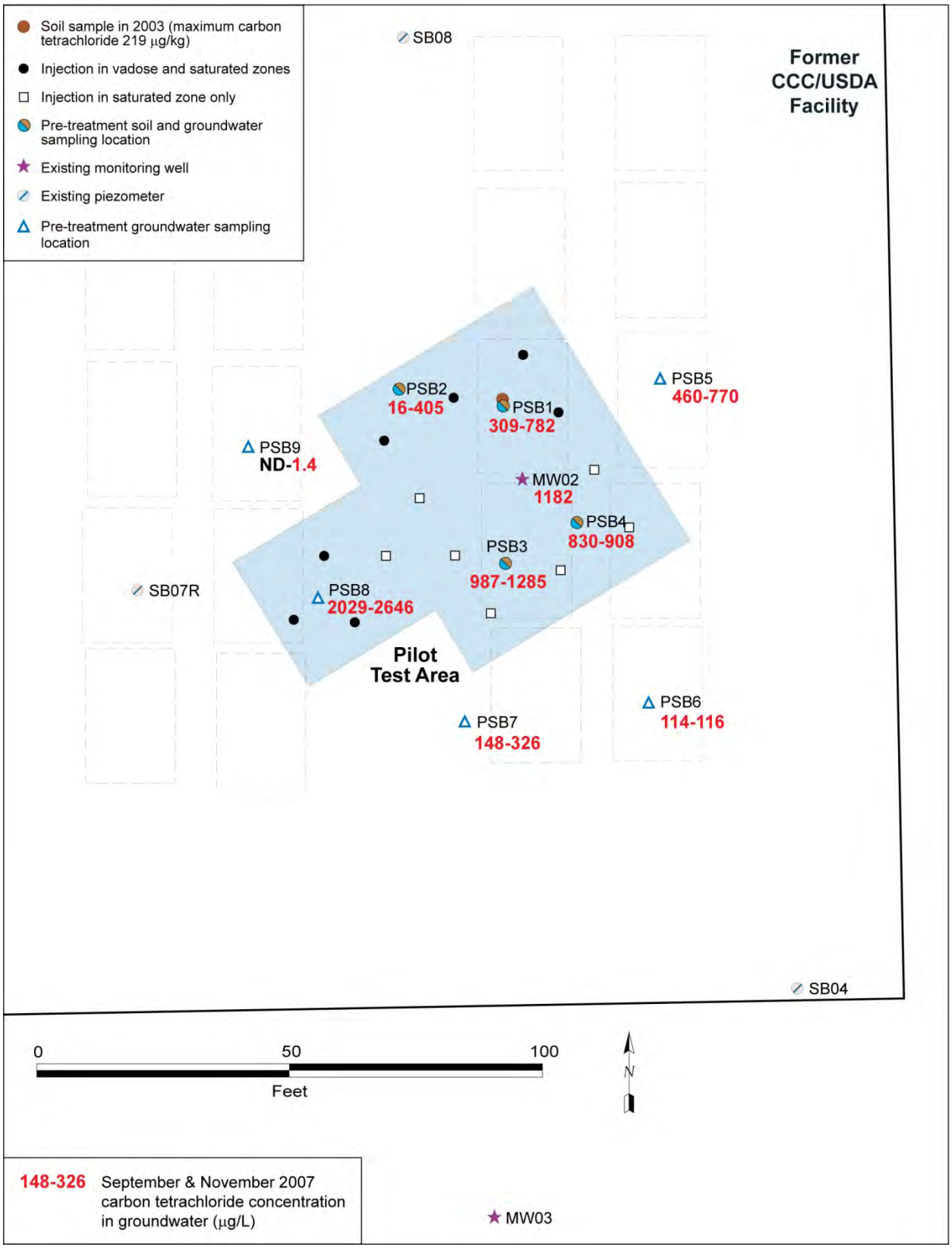

FIGURE 3.4 Carbon tetrachloride in groundwater samples collected during the pre-injection baseline sampling, September and November 2007.

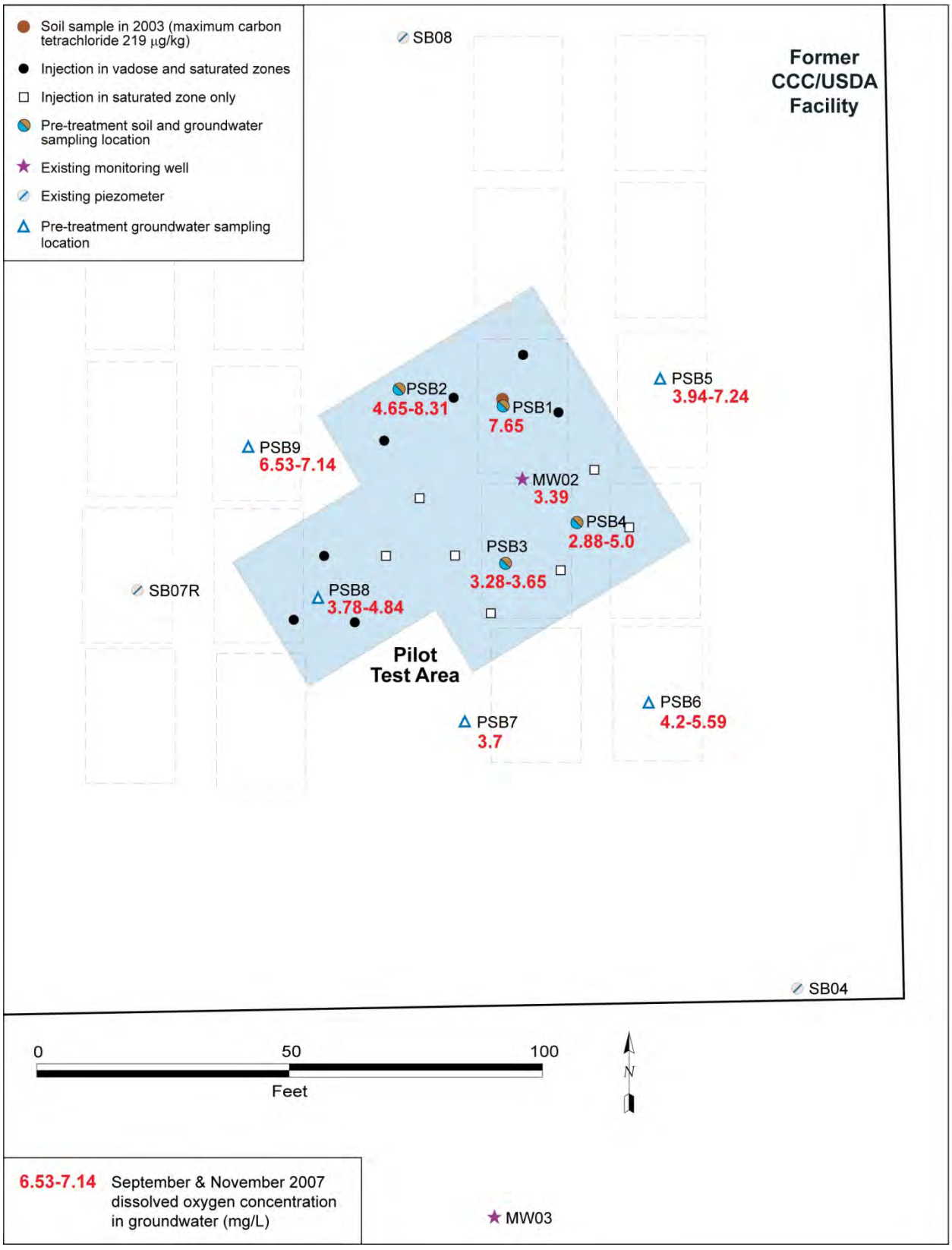

FIGURE 3.5 Field-measured results for DO in groundwater samples collected during the pre-injection baseline sampling, September and November 2007.

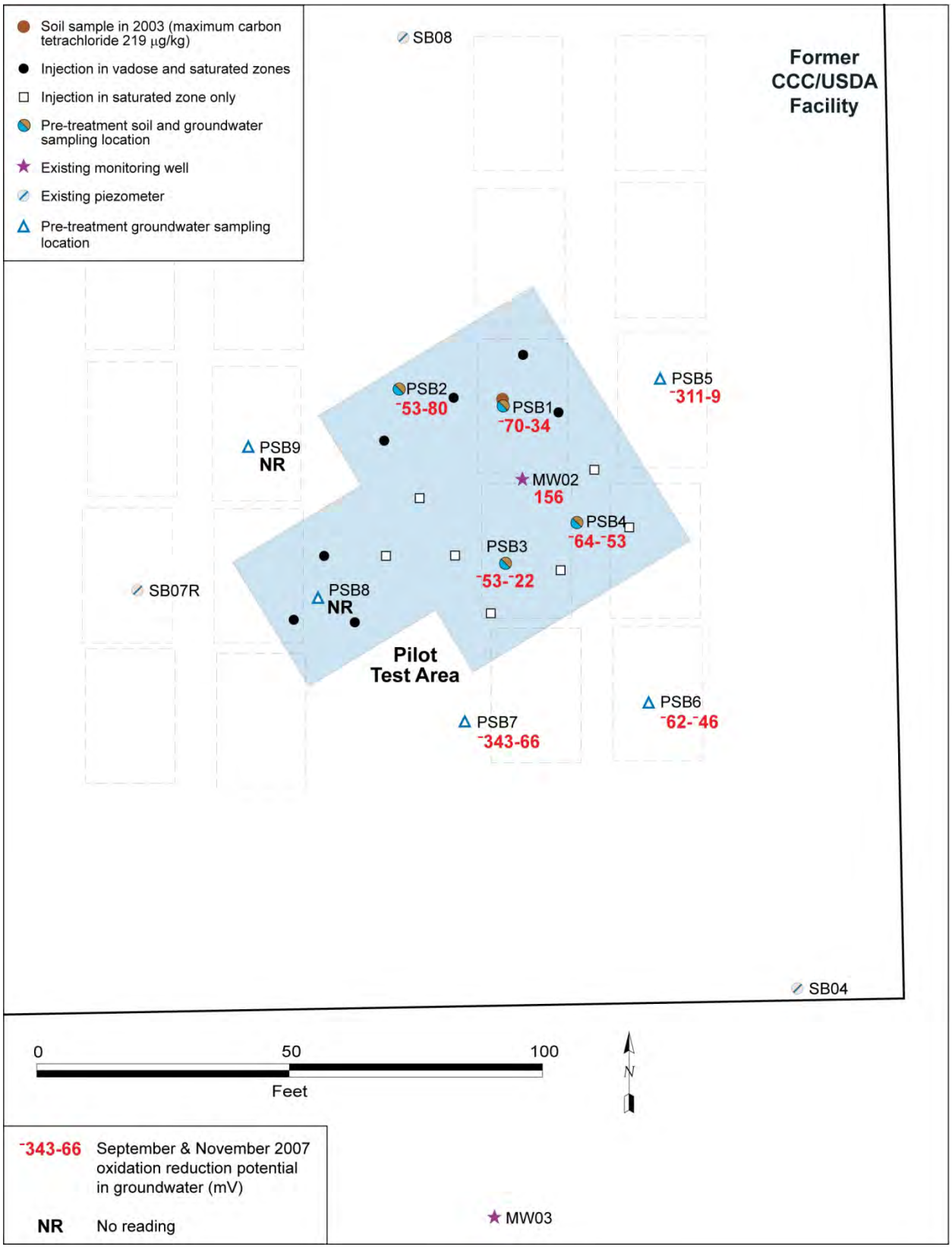

FIGURE 3.6 Field-measured results for ORP in groundwater samples collected during the pre-injection baseline sampling, September and November 2007.

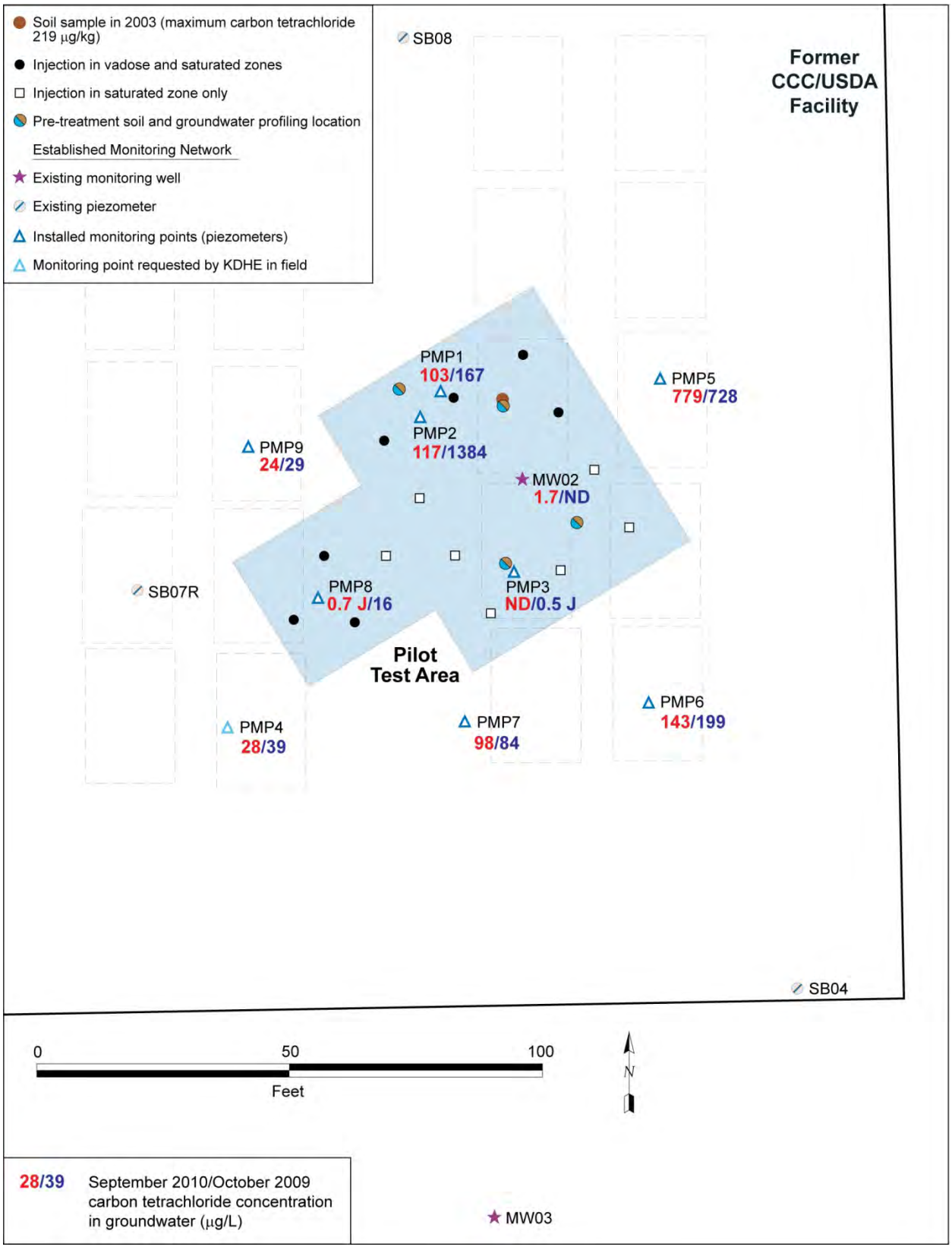

FIGURE 3.7 Analytical results for carbon tetrachloride in groundwater samples collected in September 2010 and October 2009 at the IM pilot test monitoring points.

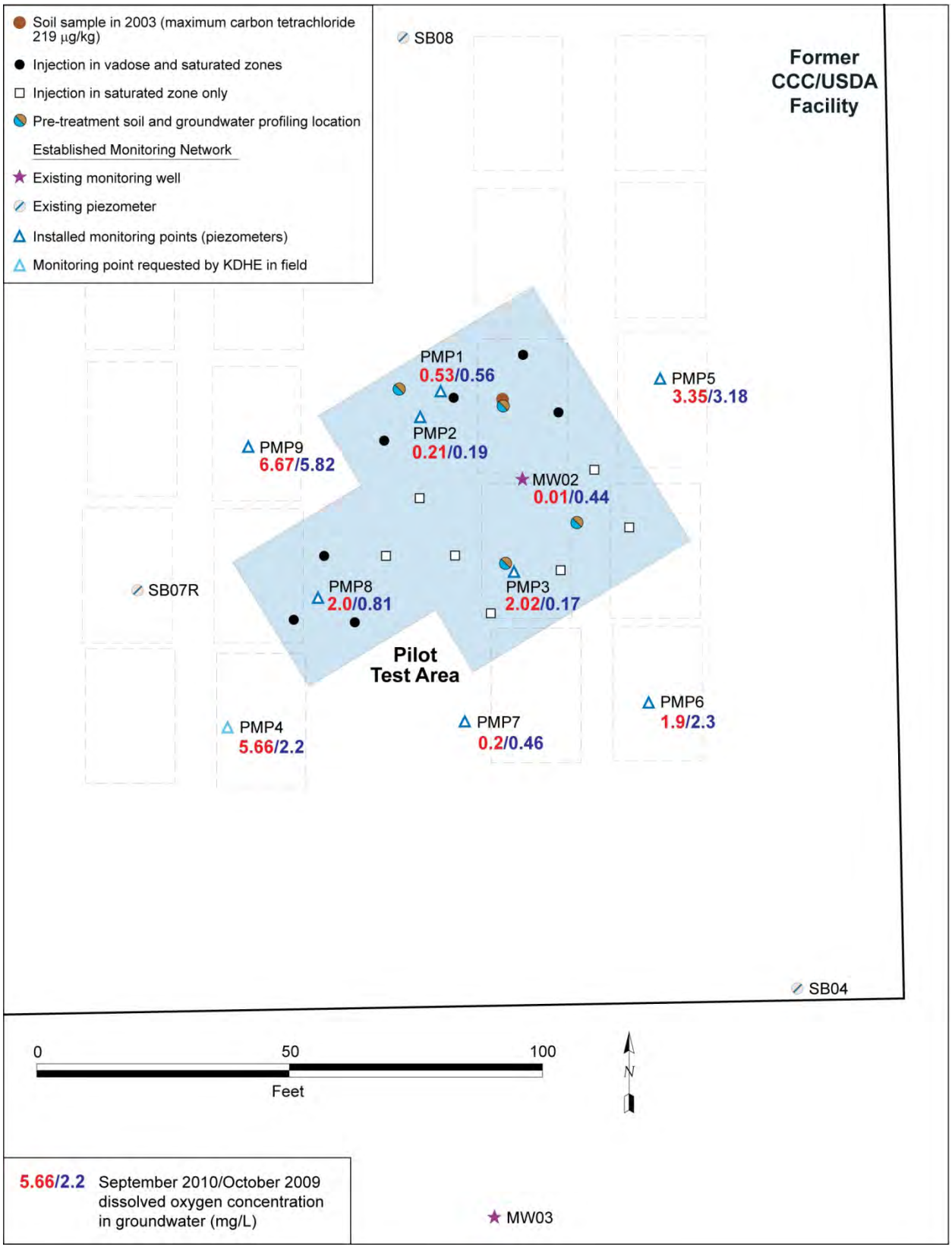

FIGURE 3.8 Field-measured results for DO in groundwater samples collected in September 2010 and October 2009 at the IM pilot test monitoring points.

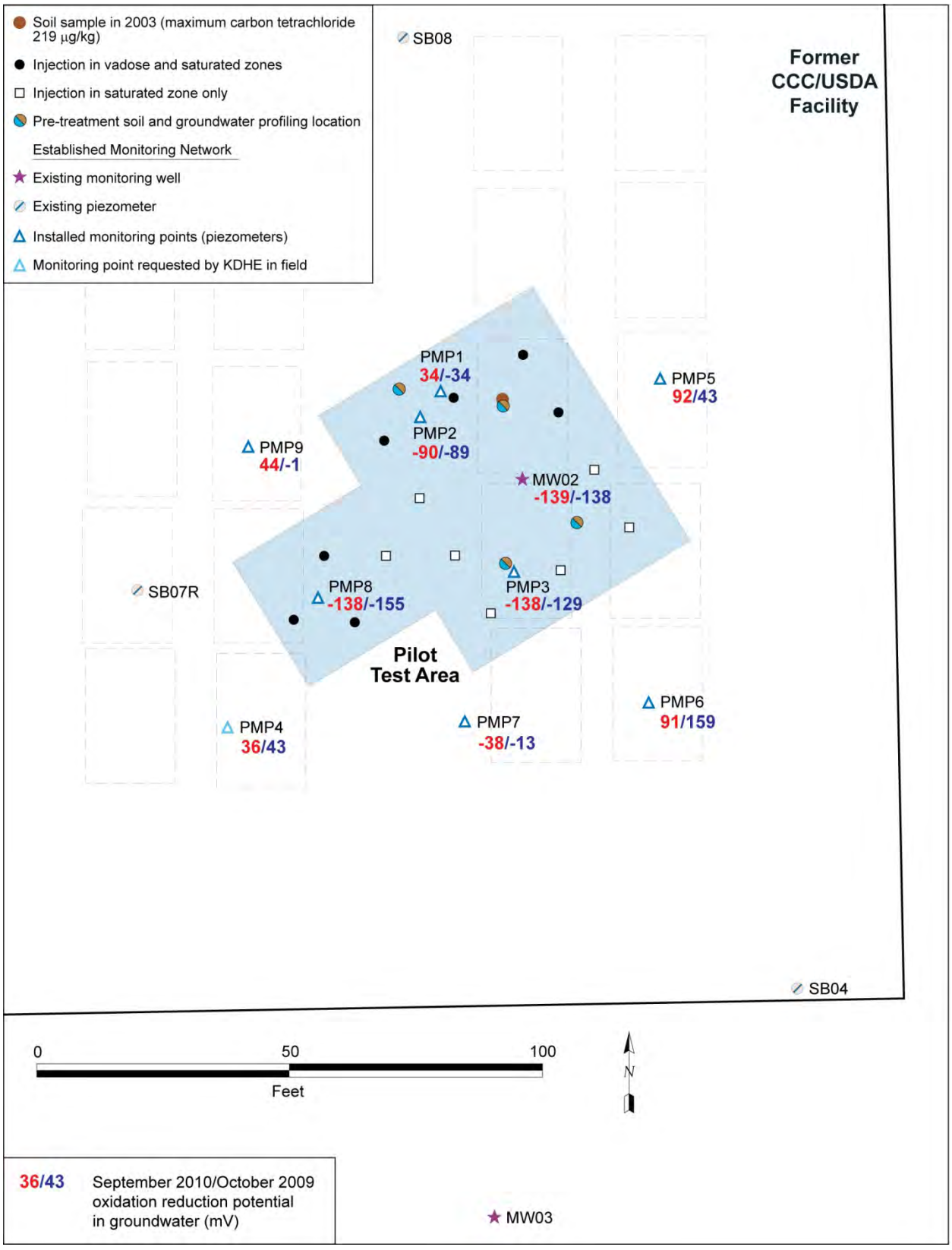

FIGURE 3.9 Field-measured results for ORP in groundwater samples collected in September 2010 and October 2009 at the IM pilot test monitoring points.

4 Conclusions and Recommendations

4.1 Conclusions

The findings of the sitewide monitoring in September 2010 support the following conclusions for the wider investigation area:

- Manual and automated measurements of groundwater levels continued to indicate a groundwater flow direction to the south-southwest across the former CCC/USDA facility. After six years of continuous automated measurement of groundwater levels, the pressure sensors and data loggers were removed from the site after final downloads on April 5 and September 12, 2010.

- The September 2010 carbon tetrachloride data for monitoring points in the approved sitewide network were generally consistent with previous results. Continuing longer-term trends of slightly increasing carbon tetrachloride concentrations along the western and southern margins of the contaminant distribution in groundwater suggest very slow downgradient expansion of the plume.

- The presence of trace to relatively low levels of chloroform at all but one of the sitewide monitoring points having detectable levels of carbon tetrachloride suggests that some degradation of carbon tetrachloride is occurring at these locations.

- The relatively high DO concentrations and positive ORP levels identified at the sitewide monitoring points indicate that —notwithstanding the observed chloroform concentrations — anaerobic reducing conditions conducive to the reductive dechlorination of carbon tetrachloride are not widely developed sitewide.

- Although the low DO concentrations and negative ORP levels detected at monitoring well MW06 in September 2008 and October 2009 hinted at possible development of increasingly anaerobic reducing conditions at this location, such values did not persist in the current review period. The

variability in these parameters (particularly the negative ORP levels) is somewhat greater at MW06 than at other monitoring locations, for reasons that are not clear.

The findings of the IM pilot test monitoring in April and September 2010 support the following conclusions for the pilot test area:

- The results of sampling in April and September 2010 indicate that the concentrations of carbon tetrachloride identified in groundwater in the IM pilot test injection field remained low or continued to decrease. The most significant reduction (by approximately an order of magnitude) occurred at piezometer PMP2. This is the location where a large increase in carbon tetrachloride concentrations was observed after ISCR injection (Section 4.2.5 in Argonne 2009a). The concentration at this location has now returned to approximately the pre-injection value.

- The 2010 results confirmed that relatively oxygen-depleted, chemically reducing conditions favorable to the degradation of carbon tetrachloride via reductive dechlorination persist in the injection field as a result of the ISCR injections in November 2007. The apparent lifetime (3 yr to date) suggested by these observations for the ISCR material is in the range of 1-5 yr estimated by the manufacturer (Adventus references cited in Argonne 2007b).

- Decreases in DO and ORP values observed from September 2008 to October 2009 at monitoring locations immediately southwest and downgradient of the pilot test injection field suggested that the range of influence of the injected ISCR treatment technology might be slowly increasing with time, in the direction of natural groundwater flow. Data from the 2010 sampling events did not, however, confirm this trend.

4.2 Recommendations

The groundwater sampling conducted at Centralia in April and September 2010 represented the second year of monitoring performed under the interim site monitoring plan (Section 1) approved by the KDHE (2009). The results support the following recommendations:

- Analytical results continue to indicate that groundwater movement and contaminant migration are slow and predictable. These findings demonstrate that the present KDHE-approved frequency for monitoring of the groundwater at Centralia is sufficient to remain protective of human health and the environment.

- Continued monitoring in the pilot test area is appropriate, because the injected ISCR material is still active. The full effects of the treatment and the lifetime of the material under the subsurface conditions at Centralia remain to be determined.

- Continued monitoring is needed to evaluate and confirm observations made in the 3 yr of monitoring after treatment. Examples are as follows:

  - More time is needed to test the hypothesis (suggested by geochemical and contaminant concentrations observed in 2009) that the range of influence of the ISCR material is expanding slowly with time in the direction of natural groundwater flow.

  - The concentration at location PMP2, where contaminant levels rose significantly after injection, is still changing rapidly. Whether these concentrations reach a stable level and what that level might be are issues of interest.

- Manual water level measurements in conjunction with groundwater sampling will be adequate to confirm the established groundwater flow direction.

- In keeping with the approved interim monitoring program, sampling will occur in 2011 on the following schedule:

- *April 2011* — Sampling at IM pilot test monitoring points PMP1-PMP3, PMP8, and MW02 (Figure 1.2) inside the injection area.

- *September 2011* — Sampling at sitewide monitoring points MW03-MW07, MW09, MW10, SB01, SB04, SB05, SB07R, and SB08 (Figure 1.1), as well as at IM pilot test monitoring points PMP1-PMP9 and MW02 (Figure 1.2).

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Appendix A:

Sequence of Sampling Activities in 2010

TABLE A.1 Sequence of sampling activities at Centralia in 2010.

Sample Date	Time	Sample	Sample Type[a]	Location	Depth (ft BGL)	Chain of Custody	Shipping Date	Sample Description
April 2010 monitoring								
4/5/10	18:32	CNPMP1-W-27180	MW	PMP1	50-60	2623	4/6/10	Depth to water = 17.25 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a Waterra pump positioned at 55 ft after purging of 5.2 L.
4/5/10	18:42	CNMW02-W-27179	MW	MW02	49.5-59.5	2623	4/6/10	Depth to water = 18.7 ft. Depth of 4-in. well = 59.5 ft. Sample collected by using a low-flow bladder pump positioned at 54.5 ft after purging of 8 L.
4/5/10	18:50	CNQCIR-W-27184[b]	RI	QC	–	2623	4/6/10	Rinsate of decontaminated sampling line after collection of sample CNMW02-W-27179.
4/5/10	19:10	CNPMP2-W-27181	MW	PMP2	50-60	2623	4/6/10	Depth to water = 17.16 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a Waterra pump positioned at 55 ft after purging of 5.3 L.
4/5/10	19:40	CNPMP3-W-27182	MW	PMP3	50-60	2623	4/6/10	Depth to water = 17.9 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a Waterra pump positioned at 55 ft after purging of 5.75 L.
4/5/10	20:05	CNPMP8-W-27183	MW	PMP8	50-60	2623	4/6/10	Depth to water = 16.12 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a Waterra pump positioned at 55 ft after purging of 5.3 L.
4/5/10	20:30	CNQCTB-W-27185[b]	TB	QC	–	2623	4/6/10	Trip blank sent to the AGEM Laboratory for organic analysis with water samples listed on chain-of-custody form (COC) 2623.
September 2010 monitoring								
9/19/10	15:06	CNMW08-W-27193	MW	MW08	38-53	2689	9/20/10	Depth to water = 17.52 ft. Depth of 2-in. well = 53 ft. Sample collected by using a low-flow bladder pump positioned at 45.5 ft after purging of 7.5 L.

TABLE A.1 (Cont.)

Sample Date	Time	Sample	Sample Type[a]	Location	Depth (ft BGL)	Chain of Custody	Shipping Date	Sample Description
September 2010 monitoring (cont.)								
9/19/10	15:42	CNSB09-W-27201	CPT/P	SB09	32-42	2689	9/20/10	Depth to water = 6.78 ft. Depth of 1-in. well = 42 ft. Sample collected by using a low-flow bladder pump positioned at 37 ft after purging of 2 L.
9/19/10	16:10	CNMW10-W-27195	MW	MW10	30-45	2689	9/20/10	Depth to water = 19.92 ft. Depth of 2-in. well = 45 ft. Sample collected by using a low-flow bladder pump positioned at 37.5 ft after purging of 9 L.
9/19/10	16:51	CNMW09-W-27194	MW	MW09	25-35	2689	9/20/10	Depth to water = 2.66 ft. Depth of 2-in. well = 35 ft. Sample collected by using a low-flow bladder pump positioned at 30 ft after purging of 7 L.
9/19/10	16:52	CNMW09DUP-W-27212[b]	MW	MW09	25-35	2689	9/20/10	Replicate of sample CNMW09-W-27194.
9/19/10	17:02	CNMW03-W-27188	MW	MW03	50.5-60.5	2689	9/20/10	Depth to water = 19.42 ft. Depth of 4-in. well = 60.5 ft. Sample collected by using a low-flow bladder pump positioned at 55.5 ft after purging of 8 L.
9/19/10	17:03	CNMW03DUP-W-27211[b]	MW	MW03	50.5-60.5	2689	9/20/10	Replicate of sample CNMW03-W-27188.
9/20/10	11:06	CNMW07-W-27192	MW	MW07	45-55	2689	9/20/10	Depth to water = 25.03 ft. Depth of 2-in. well = 55 ft. Sample collected by using a low-flow bladder pump positioned at 50 ft after purging of 4 L.
9/20/10	11:44	CNMW06-W-27191	MW	MW06	46.5-56.5	2689	9/20/10	Depth to water = 34.96. ft. Depth of 4-in. well = 56.5 ft. Sample collected by using a low-flow bladder pump positioned at 51.5 ft after purging of 20 L.
9/20/10	12:21	CNMW04-W-27189	MW	MW04	37.5-47.5	2689	9/20/10	Depth to water = 22.42 ft. Depth of 4-in. well = 47.5 ft. Sample collected by using a low-flow bladder pump positioned at 42.5 ft after purging of 13 L.
9/20/10	12:42	CNMW02-W-27187	MW	MW02	49.5-59.5	2689	9/20/10	Depth to water = 19.72 ft. Depth of 4-in. well = 59.5 ft. Sample collected by using a low-flow bladder pump positioned at 54.5 ft after purging of 9 L.

TABLE A.1 (Cont.)

Sample Date	Time	Sample	Sample Type[a]	Location	Depth (ft BGL)	Chain of Custody	Shipping Date	Sample Description
September 2010 monitoring (cont.)								
9/20/10	12:42	CNQCTB-W-27216[b]	TB	QC	–	2689	9/20/10	Trip blank sent to the AGEM Laboratory for organic analysis with water samples listed on COC 2689.
9/20/10	13:24	CNMW05-W-27190	MW	MW05	34.5-44.5	2717	9/21/10	Depth to water = 10.38 ft. Depth of 4-in. well = 44.5 ft. Sample collected by using a low-flow bladder pump positioned at 39.5 ft after purging of 8 L.
9/20/10	13:40	CNMW01-W-27186	MW	MW01	54.5-64.5	2717	9/21/10	Depth to water = 12.17 ft. Depth of 4-in. well = 64.5 ft. Sample collected by using a low-flow bladder pump positioned at 59.5 ft after purging of 9.5 L.
9/20/10	13:50	CNQCIR-W-27214[b]	RI	QC	–	2717	9/21/10	Rinsate of decontaminated sampling line after collection of sample CNMW05-W-27190.
9/20/10	14:52	CNPMP5-W-27206	MW	PMP5	50-60	2717	9/21/10	Depth to water = 20.2 ft. Depth of 1-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 3 L.
9/20/10	14:55	CNSB01-W-27196	CPT/P	SB01	40-50	2717	9/21/10	Depth to water = 14.02 ft. Depth of 1-in. well = 50 ft. Sample collected by using a low-flow bladder pump positioned at 45 ft after purging of 2 L.
9/20/10	15:46	CNSB04-W-27197	CPT/P	SB04	51-61	2717	9/21/10	Depth to water = 20.42 ft. Depth of 1-in. well = 61 ft. Sample collected by using a low-flow bladder pump positioned at 56 ft after purging of 4.1 L.
9/20/10	16:16	CNQCIR-W-27213[b]	RI	QC	–	2689	9/20/10	Rinsate of decontaminated sampling line after collection of sample CNMW10-W-27195.
9/20/10	16:40	CNSB07R-W-27199	CPT/P	SB07R	45-60	2717	9/21/10	Depth to water = 17.19 ft. Depth of 2-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 52.5 ft after purging of 6 L.

TABLE A.1 (Cont.)

Sample Date	Time	Sample	Sample Type[a]	Location	Depth (ft BGL)	Chain of Custody	Shipping Date	Sample Description
September 2010 monitoring (cont.)								
9/20/10	17:30	CNSB08-W-27200	CPT/P	SB08	52-62	2717	9/21/10	Depth to water = 17.23 ft. Depth of 1-in. well = 62 ft. Sample collected by using a low-flow bladder pump positioned at 57 ft after purging of 3 L.
9/21/10	10:44	CNPMP1-W-27202	MW	PMP1	50-60	2716	9/21/10	Depth to water = 18.65 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 6 L.
9/21/10	11:09	CNPMP2-W-27203	MW	PMP2	50-60	2716	9/21/10	Depth to water = 18.68 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 6 L.
9/21/10	11:42	CNPMP3-W-27204	MW	PMP3	50-60	2716	9/21/10	Depth to water = 19.35 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 6 L.
9/21/10	12:11	CNPMP4-W-27205	MW	PMP4	48.75-58.75	2716	9/21/10	Depth to water = 16.83 ft. Depth of 0.5-in. well = 58.75 ft. Sample collected by using a low-flow bladder pump positioned at 53.75 ft after purging of 6.5 L.
9/21/10	12:32	CNPMP7-W-27208	MW	PMP7	50-60	2716	9/21/10	Depth to water = 18.84 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 7 L.
9/21/10	12:47	CNPMP8-W-27209	MW	PMP8	50-60	2716	9/21/10	Depth to water = 17.91 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 7 L.
9/21/10	13:11	CNPMP9-W-27210	MW	PMP9	50-60	2716	9/21/10	Depth to water = 15.30 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 6.7 L.

TABLE A.1 (Cont.)

Sample Date	Time	Sample	Sample Type[a]	Location	Depth (ft BGL)	Chain of Custody	Shipping Date	Sample Description
September 2010 monitoring (cont.)								
9/21/10	13:42	CNSB05-W-27198	CPT/P	SB05	32-42	2716	9/21/10	Depth to water = 10.20 ft. Depth of 1-in. well = 42 ft. Sample collected by using a low-flow bladder pump positioned at 37 ft after purging of 15 L.
9/21/10	14:16	CNPMP6-W-27207	MW	PMP6	50-60	2716	9/21/10	Depth to water = 20.00 ft. Depth of 0.5-in. well = 60 ft. Sample collected by using a low-flow bladder pump positioned at 55 ft after purging of 7 L.
9/21/10	15:32	CNQCTB-W-27217[b]	TB	QC	–	2716	9/21/10	Trip blank sent to the AGEM Laboratory for organic analysis with water samples listed on COCs 2717 and 2716.
9/21/10	15:40	CNDIH2O-W-27215[b]	FB	QC	–	2716	9/21/10	Blank of water used for equipment decontamination.

[a] Sample types: CPT/P, piezometer; FB, field blank; MW, monitoring well; RI, rinsate; TB, trip blank.

[b] Quality control sample.

Appendix B:

Quality Control Data Summary

TABLE B.1 Analytical results from the AGEM Laboratory for quality control samples collected in 2010.

Location	Sample	Sample Date	Depth (ft BGL)	Concentration (µg/L)			Analysis Type
				Carbon Tetrachloride	Chloroform	Methylene Chloride	
PMP8	CNPMP8-W-27183	4/5/10	50-60	0.4 J[a]	0.7 J	ND[b]	Primary sample
PMP8	CNPMP8-W-27183DUP	4/5/10	50-60	0.4 J	0.7 J	ND	Duplicate analysis
QC	CNQCIR-W-27184	4/5/10	–	ND	ND	ND	Equipment rinsate
QC	CNQCTB-W-27185	4/5/10	–	ND	ND	ND	Trip blank
MW03	CNMW03-W-27188	9/19/10	50.5-60.5	7.5	0.3 J	ND	Primary sample
MW03	CNMW03DUP-W-27211	9/19/10	50.5-60.5	7.8	0.3 J	ND	Replicate
MW09	CNMW09-W-27194	9/19/10	25-35	ND	ND	ND	Primary sample
MW09	CNMW09DUP-W-27212	9/19/10	25-35	ND	ND	ND	Replicate
SB07R	CNSB07R-W-27199	9/20/10	45-60	42	2.5	ND	Primary sample
SB07R	CNSB07R-W-27199DUP	9/20/10	45-60	41	2.4	ND	Duplicate analysis
QC	CNQCIR-W-27213	9/20/10	–	ND	ND	ND	Equipment rinsate
QC	CNQCIR-W-27214	9/20/10	–	ND	ND	ND	Equipment rinsate
QC	CNQCTB-W-27216	9/20/10	–	ND	ND	ND	Trip blank
PMP4	CNPMP4-W-27205	9/21/10	48.75-58.75	28	1.8	ND	Primary sample
PMP4	CNPMP4-W-27205DUP	9/21/10	48.75-58.75	29	1.7	ND	Duplicate analysis
QC	CNDIH2O-W-27215	9/21/10	–	ND	ND	ND	Field blank
QC	CNQCTB-W-27217	9/21/10	–	ND	ND	ND	Trip blank

[a] Qualifier J indicates an estimated concentration below the purge-and-trap method quantitation limit of 1.0 µg/L.

[b] ND, not detected at an instrument detection limit of 0.1 µg/L.

TABLE B.2 Analytical results for verification groundwater samples analyzed at the AGEM Laboratrory and by TestAmerica.

				Concentration (µg/L)					
				AGEM Laborarory			TestAmerica		
Location	Sample	Sample Date	Depth (ft BGL)	Carbon Tetrachloride	Chloroform	Methylene Chloride	Carbon Tetrachloride	Chloroform	Methylene Chloride
MW02	CNMW02-W-27179	4/5/10	49.5-59.5	ND[a]	ND	ND	ND	ND	ND
PMP2	CNPMP2-W-27181	4/5/10	50-60	991	182	5.1	670	130	4.3
PMP3	CNPMP3-W-27182	4/5/10	50-60	ND	ND	ND	ND	ND	ND
MW06	CNMW06-W-27191	9/20/10	46.5-56.5	ND	ND	ND	0.15 J[b]	ND	ND
MW07	CNMW07-W-27192	9/20/10	45-55	6.6	0.3 J	ND	5.2	ND	ND
MW08	CNMW08-W-27193	9/19/10	38-53	ND	ND	ND	ND	ND	ND
SB09	CNSB09-W-27201	9/19/10	32-42	ND	ND	ND	ND	ND	ND

[a] ND, not detected at an instrument detection limit of 0.1 µg/L.

[b] Qualifier J indicates an estimated concentration below the method quantitation limit of 1.0 µg/L for analyses at the AGEM Laboratory or 0.5 µg/L for analyses by TestAmerica.

Appendix C:

Time Series Diagrams for Selected Parameters at IM Monitoring Points

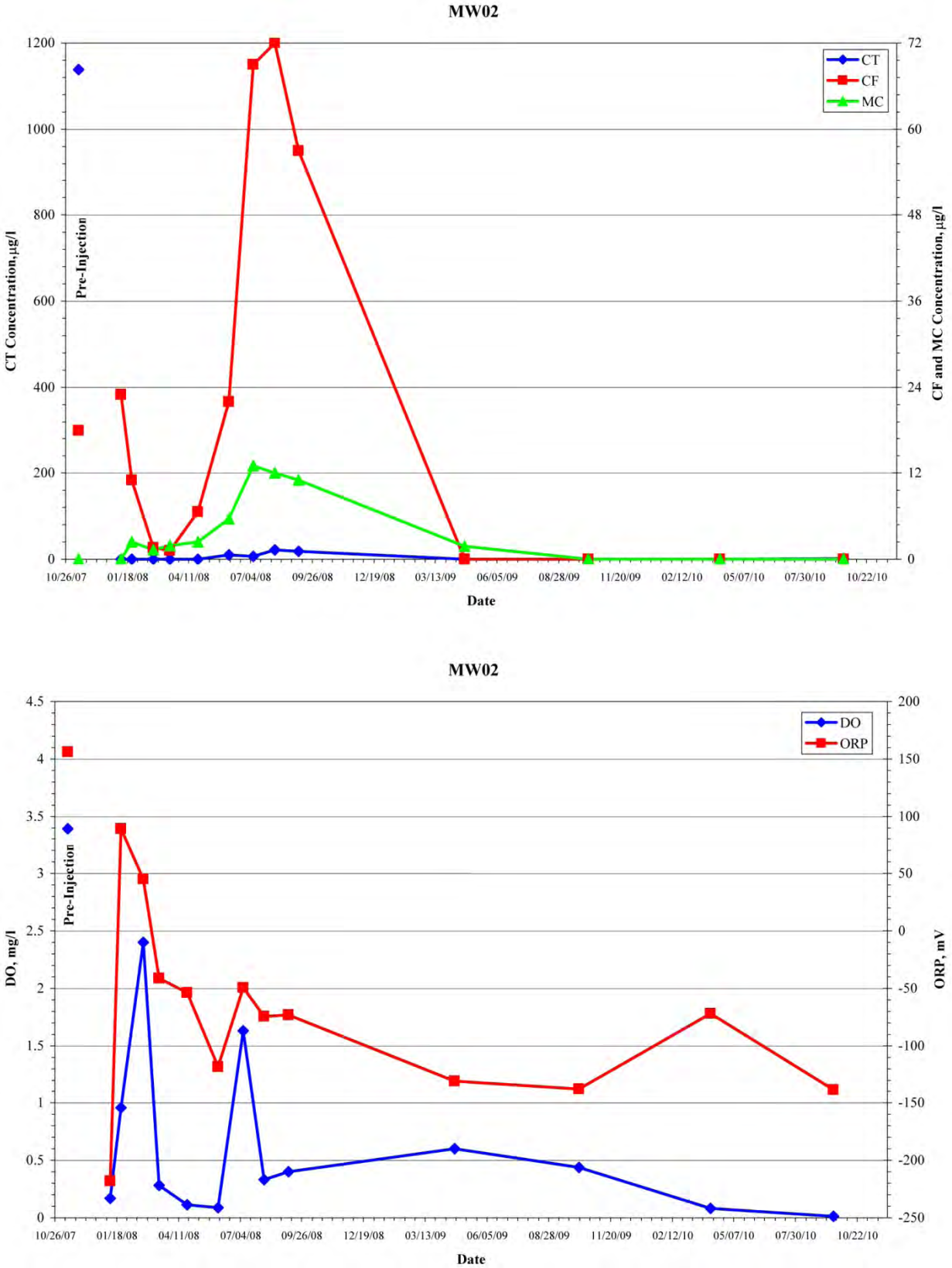
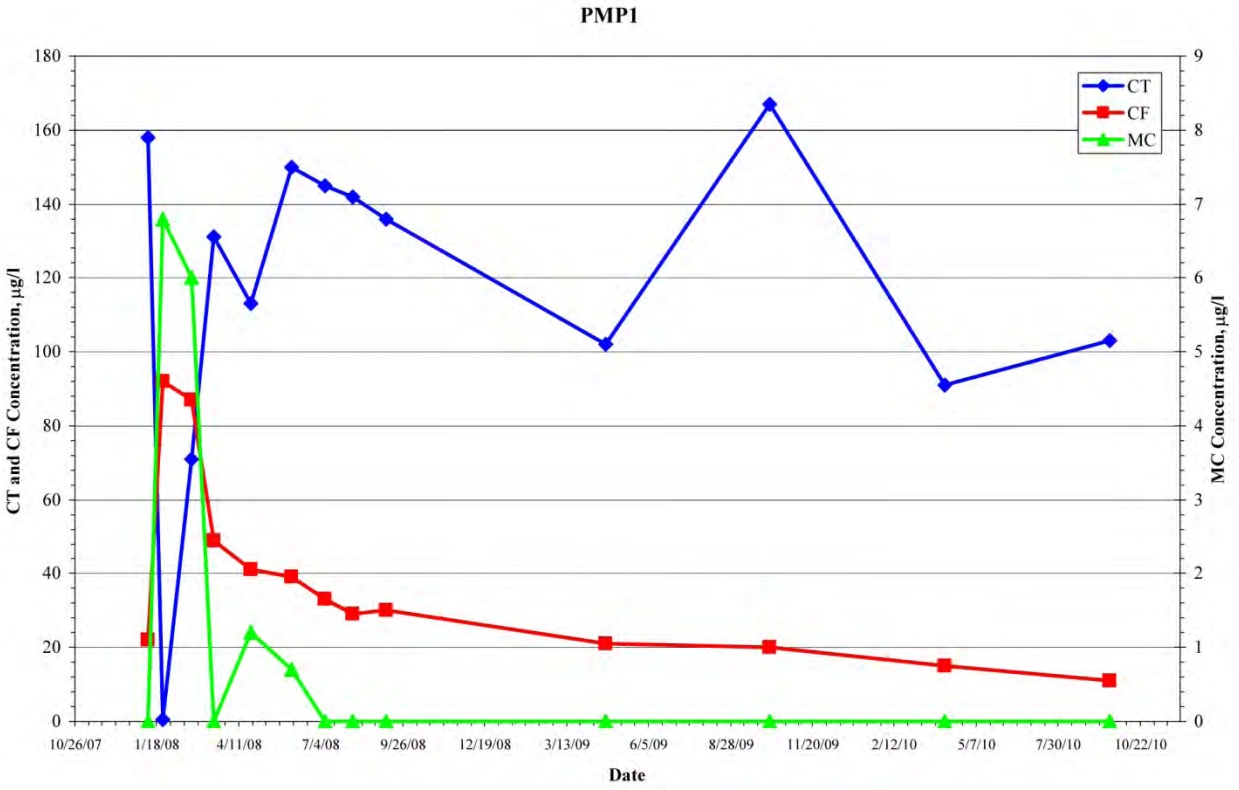


FIGURE C.1 Analytical results for VOCs, DO, and ORP in groundwater samples collected at location MW02, November 2007 to September 2010.



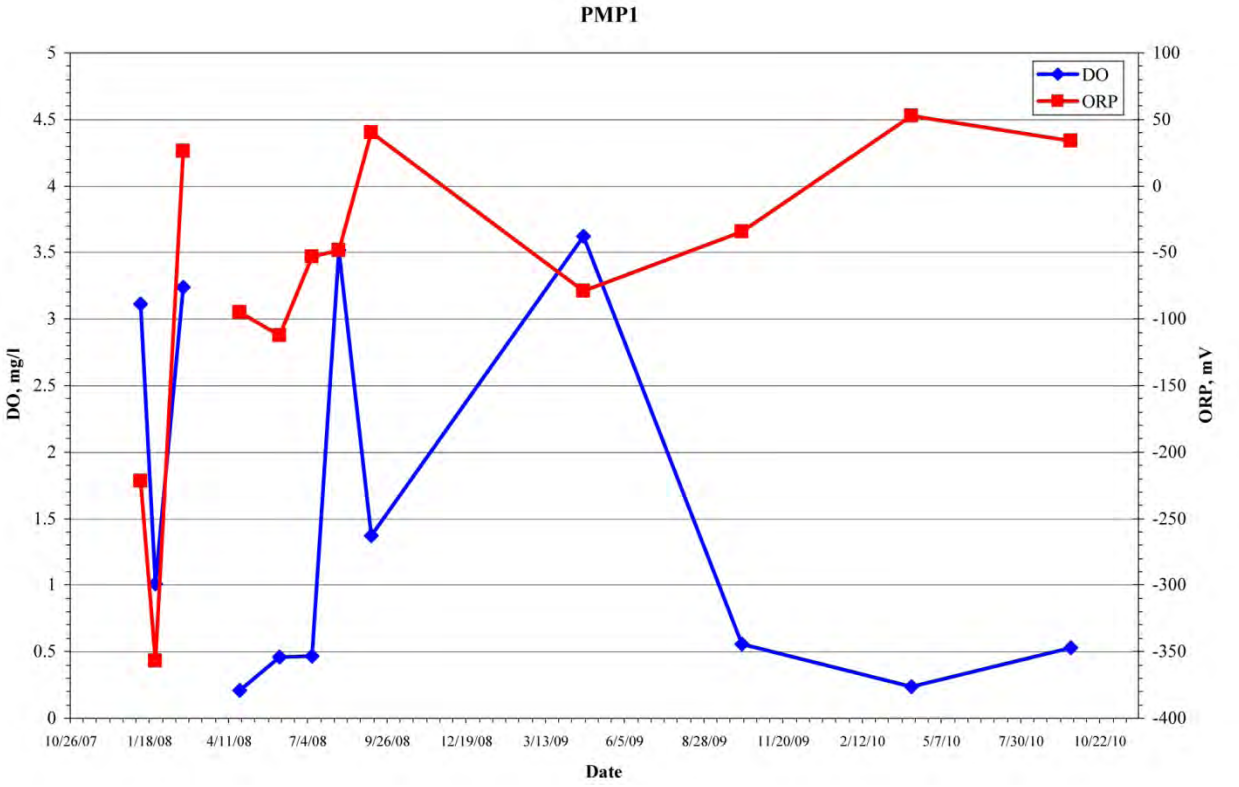


FIGURE C.2 Analytical results for VOCs, DO, and ORP in groundwater samples collected at location PMP1, January 2008 to September 2010.

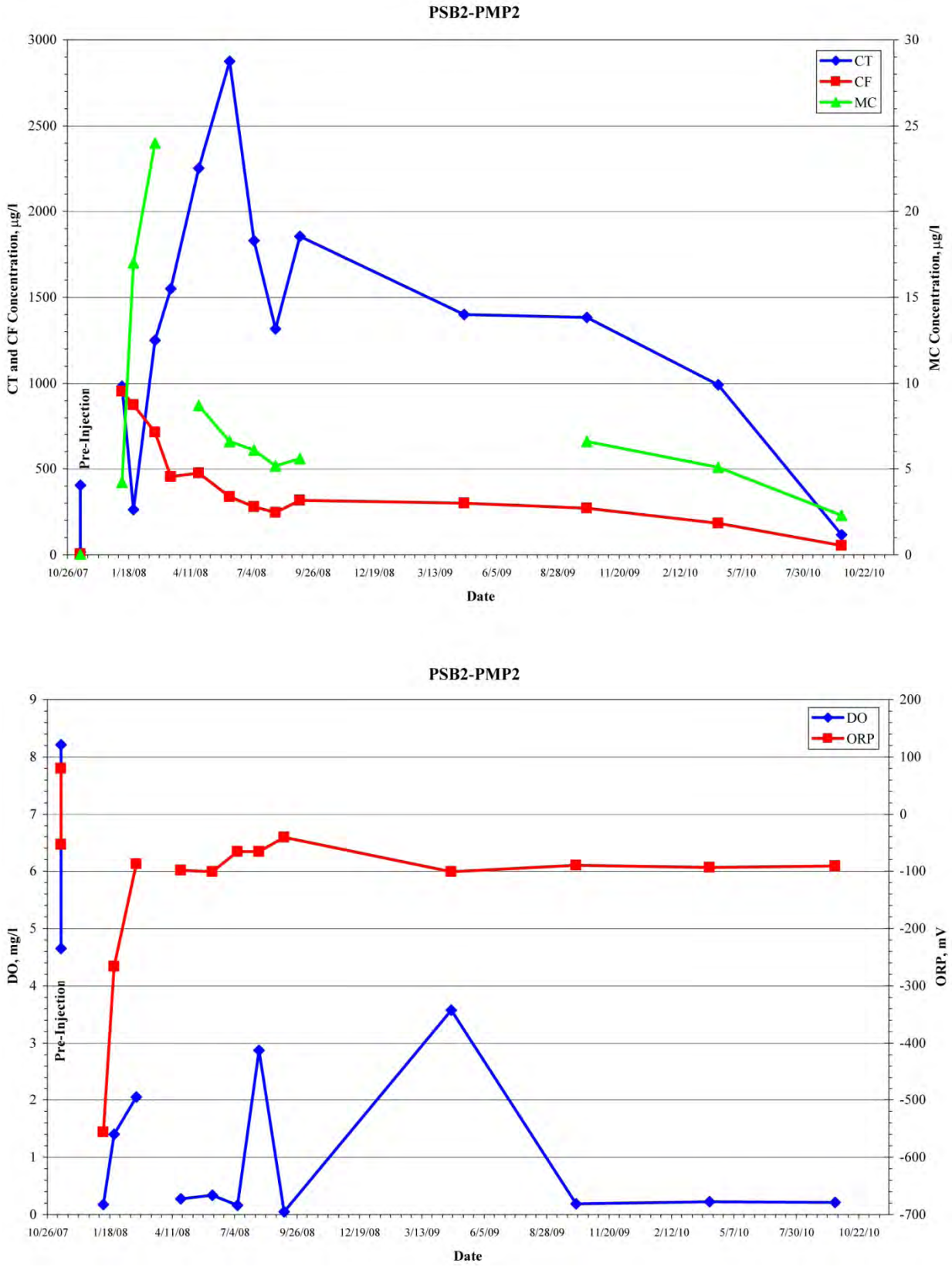


FIGURE C.3 Analytical results for VOCs, DO, and ORP in groundwater samples collected at locations PSB2 and PMP2, November 2007 to September 2010.

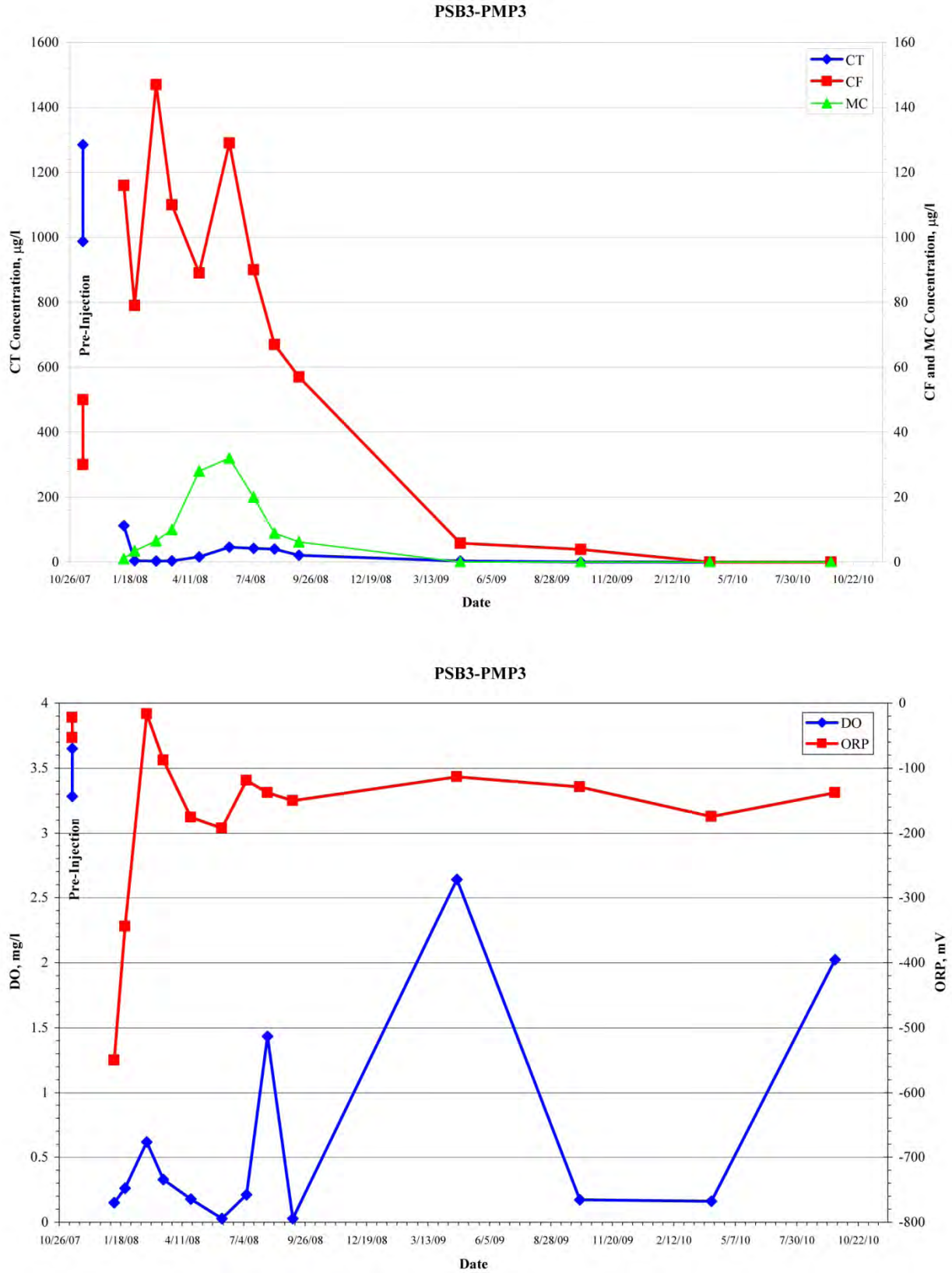


FIGURE C.4 Analytical results for VOCs, DO, and ORP in groundwater samples collected at locations PSB3 and PMP3, November 2007 to September 2010.

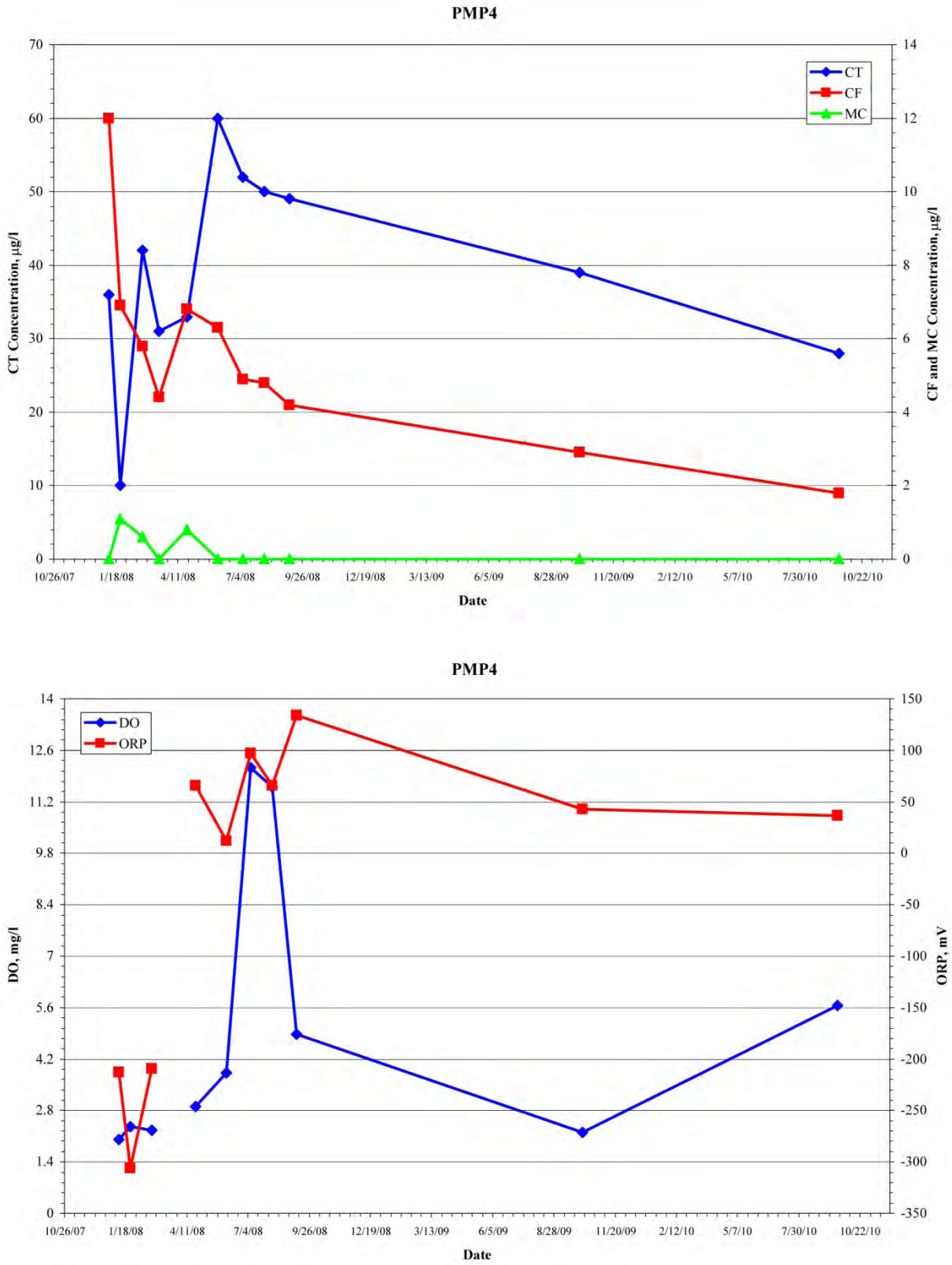


FIGURE C.5 Analytical results for VOCs, DO, and ORP in groundwater samples collected at location PMP4, January 2008 to September 2010.

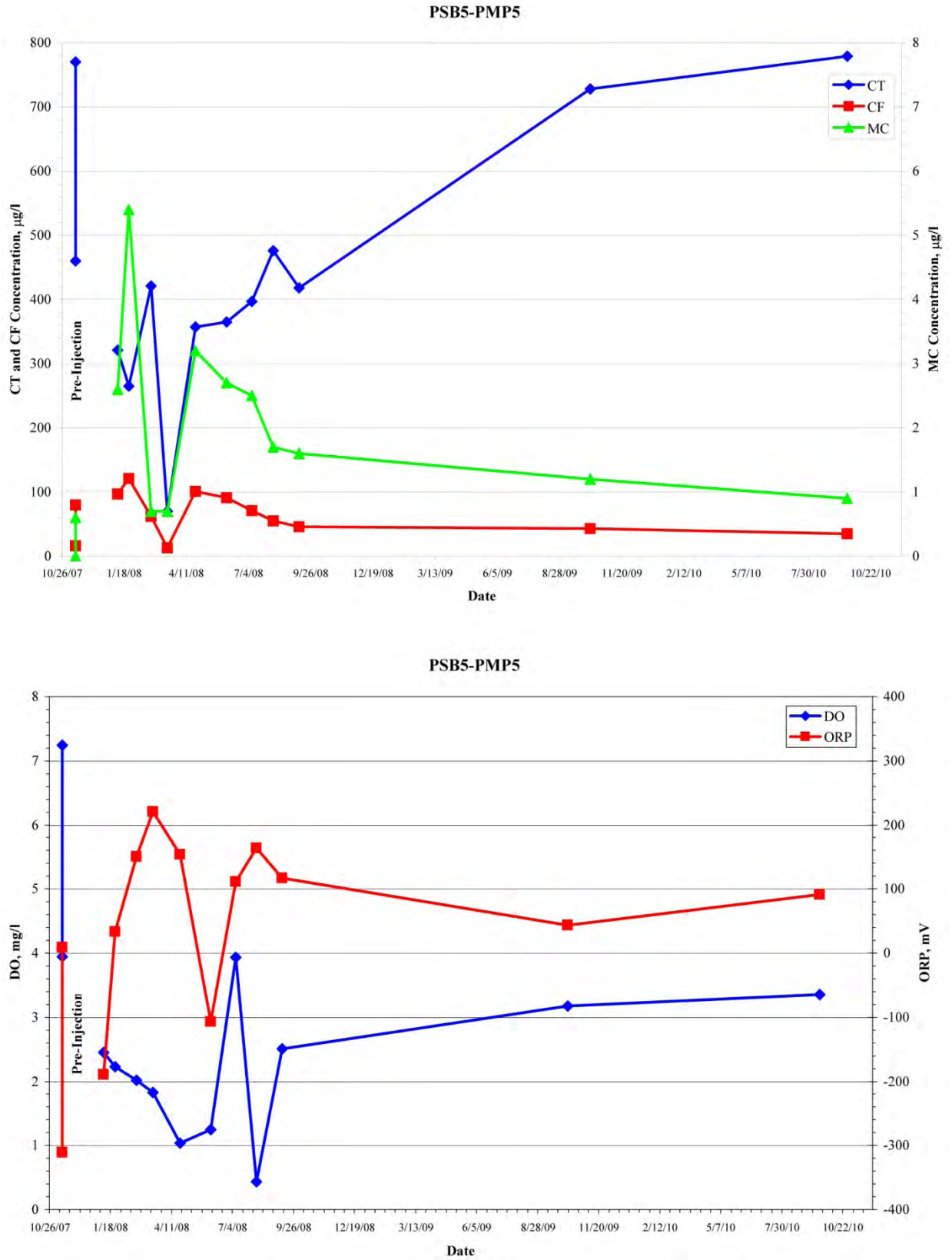


FIGURE C.6 Analytical results for VOCs, DO, and ORP in groundwater samples collected at locations PSB5 and PMP5, November 2007 to September 2010.

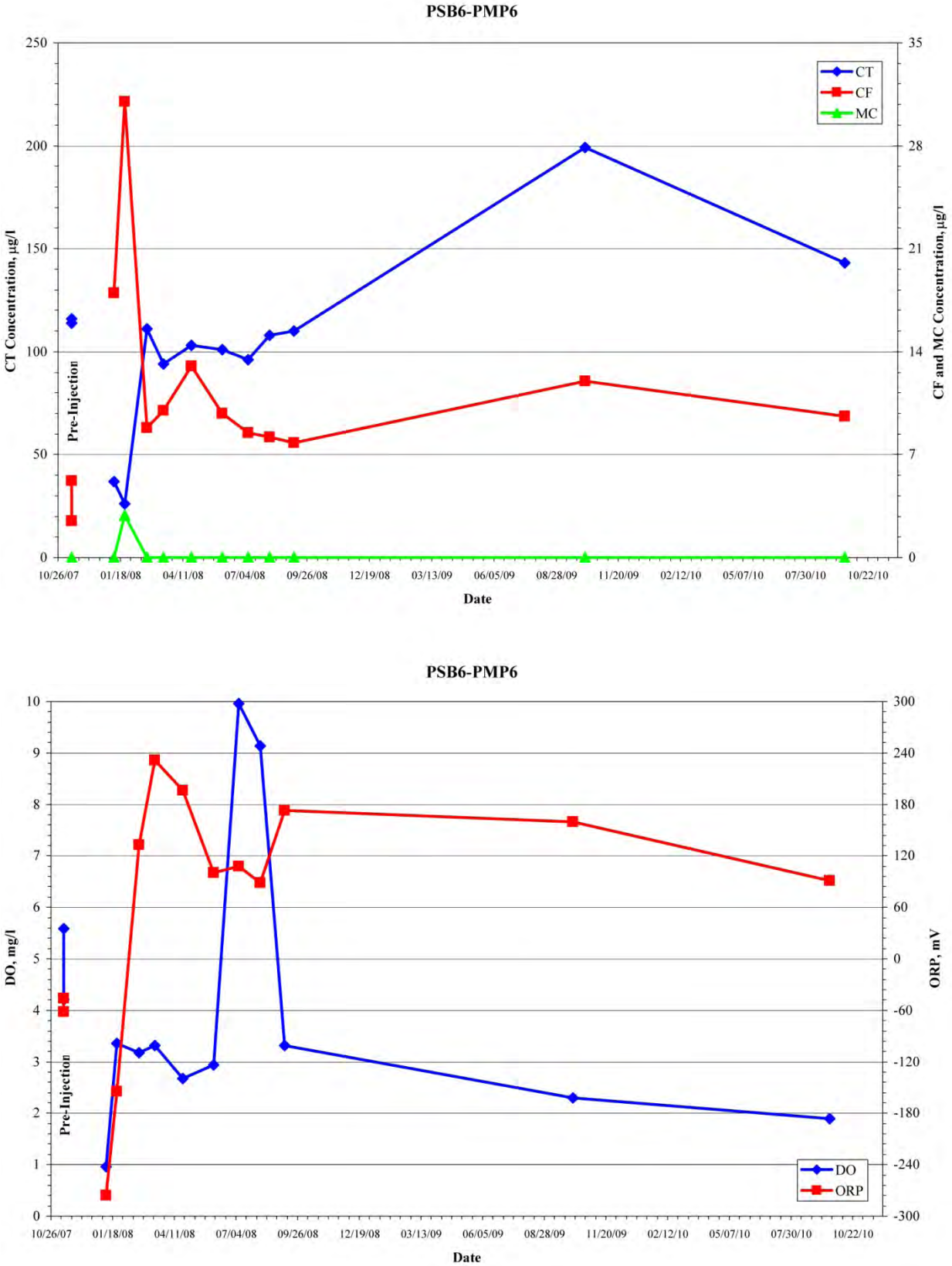


FIGURE C.7 Analytical results for VOCs, DO, and ORP in groundwater samples collected at locations PSB6 and PMP6, November 2007 to September 2010.

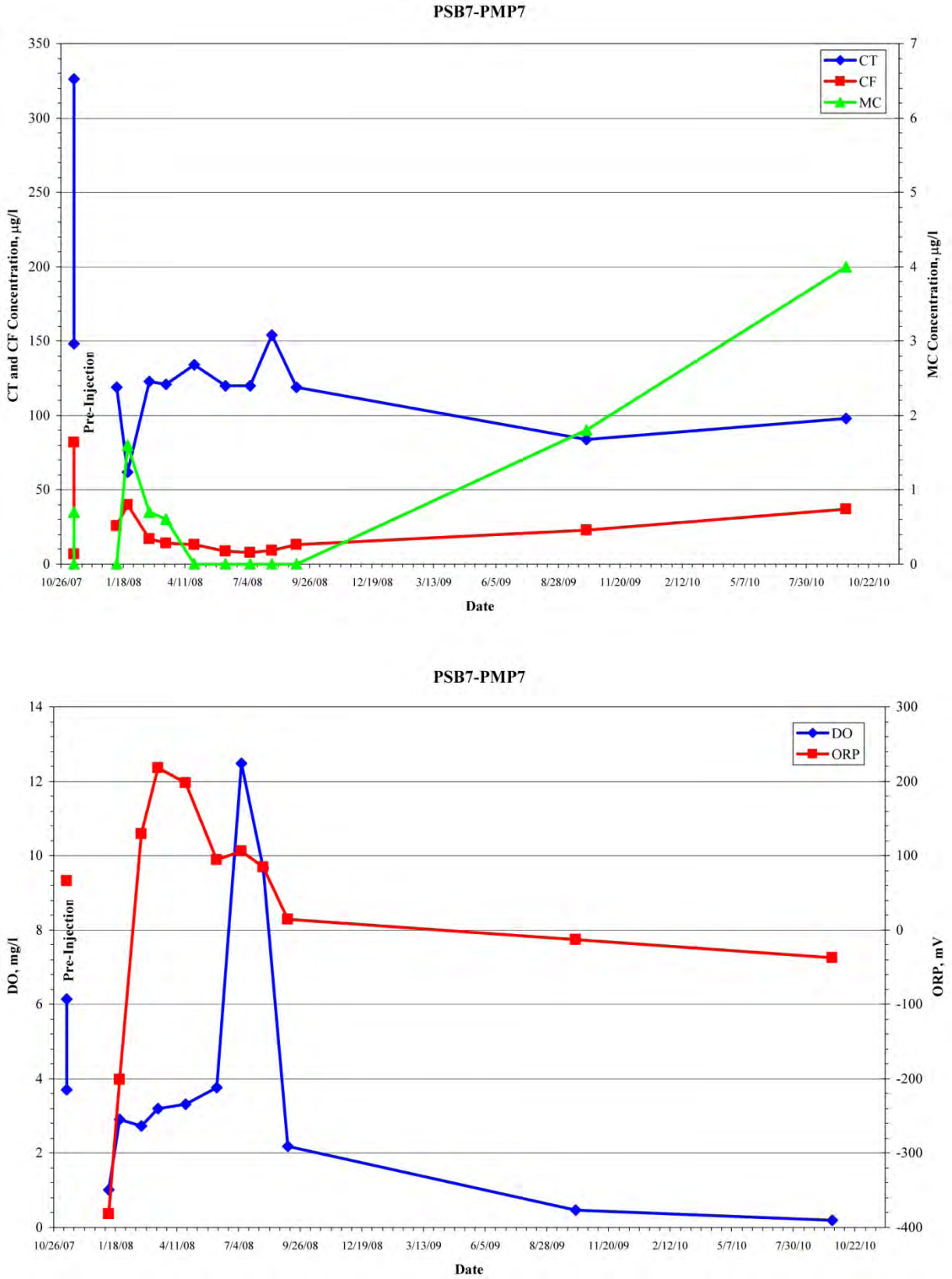


FIGURE C.8 Analytical results for VOCs, DO, and ORP in groundwater samples collected at locations PSB7 and PMP7, November 2007 to September 2010.

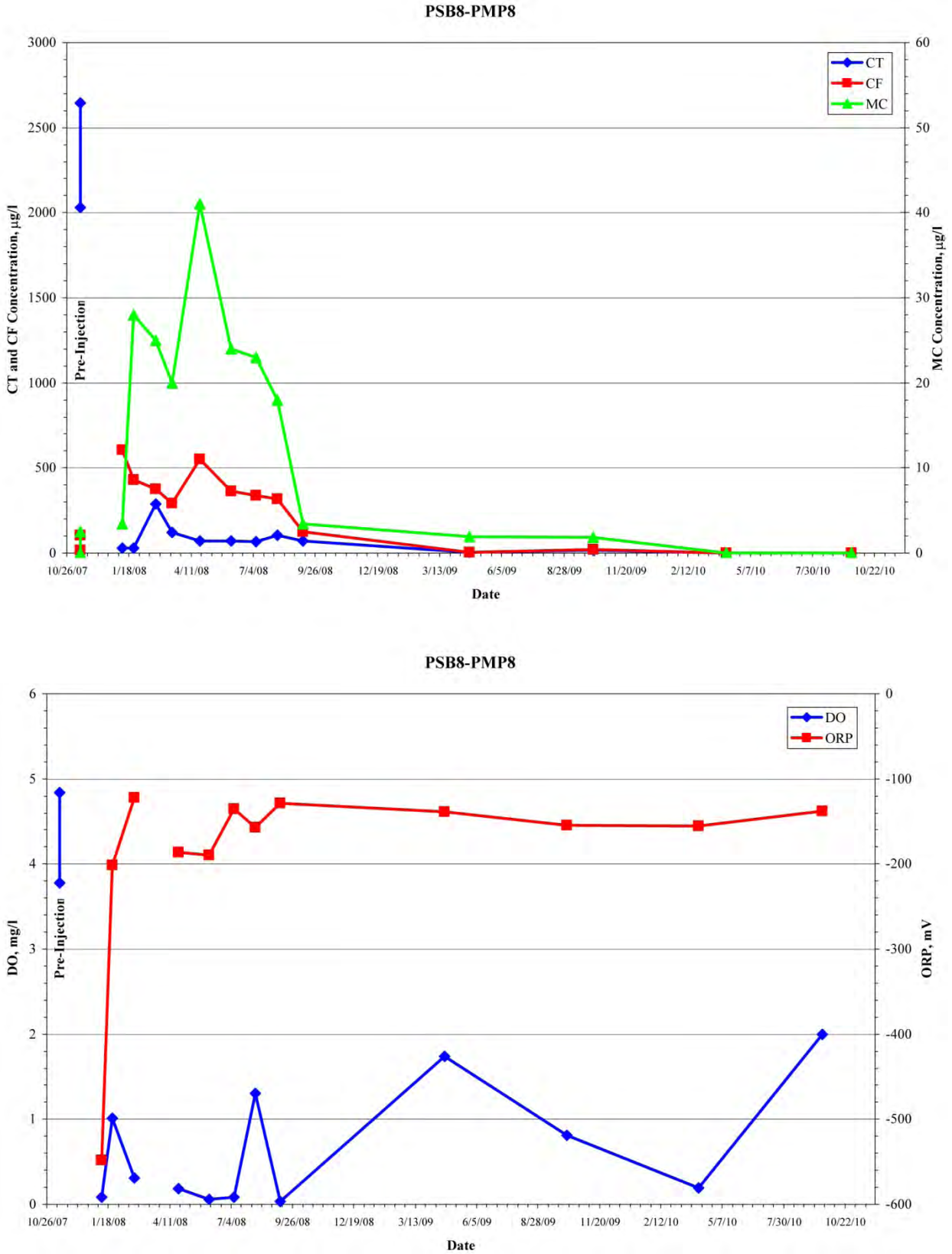
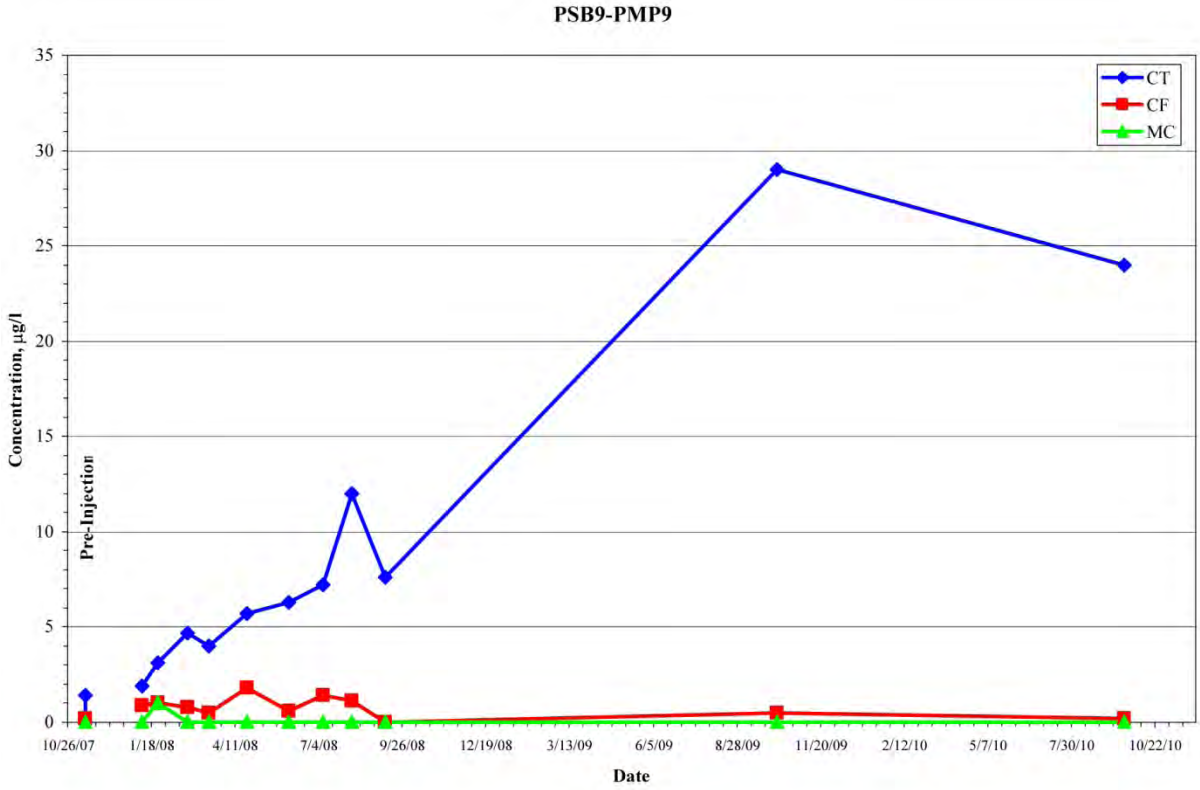


FIGURE C.9 Analytical results for VOCs, DO, and ORP in groundwater samples collected at locations PSB8 and PMP8, November 2007 to September 2010.



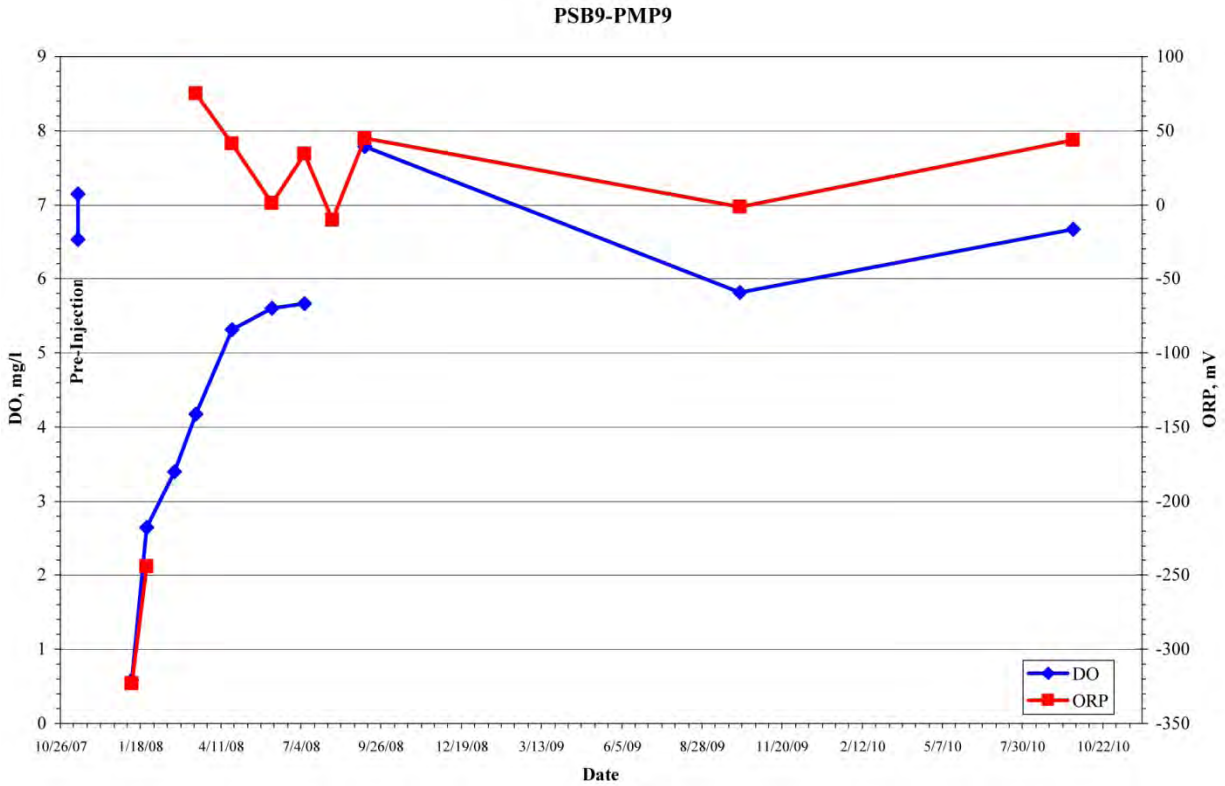


FIGURE C.10 Analytical results for VOCs, DO, and ORP in groundwater samples collected at locations PSB9 and PMP9, November 2007 to September 2010.

Supplement 1:

Waste Characterization and Disposal Documentation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 14, 2010

Mr. Travis Kamler
TCW Construction Inc
141 M Street
Lincoln, NE 68508

RE: Project: Kansas Waste Water
Pace Project No.: 6086606

Dear Mr. Kamler:
Enclosed are the analytical results for sample(s) received by the laboratory on October 01, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Trudy Gipson

trudy.gipson@pacelabs.com
Project Manager

Enclosures

cc: Mr. David Surgnier

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: Kansas Waste Water
Pace Project No.: 6086606

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: Kansas Waste Water
Pace Project No.: 6086606

Lab ID	Sample ID	Matrix	Date Collected	Date Received
6086606001	**BAPURGE-W-930101**	Water	09/30/10 09:00	10/01/10 09:15
6086606002	**CNPURGE-W-930102**	Water	09/30/10 10:00	10/01/10 09:15
6086606003	**EVPURGE-W-930103**	Water	09/30/10 11:32	10/01/10 09:15
6086606004	**MRPURGE-W-930104**	Water	09/30/10 13:42	10/01/10 09:15

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: Kansas Waste Water
Pace Project No.: 6086606

Lab ID	Sample ID	Method	Analysts	Analytes Reported
6086606001	**BAPURGE-W-930101**	EPA 504.1	NAW	1
		EPA 5030B/8260	HMW	70
		EPA 300.0	RAB	1
6086606002	**CNPURGE-W-930102**	EPA 504.1	NAW	1
		EPA 5030B/8260	HMW	70
		EPA 300.0	RAB	1
6086606003	**EVPURGE-W-930103**	EPA 504.1	NAW	1
		EPA 5030B/8260	HMW	70
		EPA 300.0	RAB	1
6086606004	**MRPURGE-W-930104**	EPA 504.1	NAW	1
		EPA 5030B/8260	HMW	70
		EPA 300.0	RAB	1

Pace Analytical Services, Inc.
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Lenexa, KS 66219
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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: BAPURGE-W-930101 **Lab ID: 6086606001** Collected: 09/30/10 09:00 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
504 GCS EDB and DBCP	Analytical Method: EPA 504.1 Preparation Method: EPA 504.1							
1,2-Dibromoethane (EDB)	ND	ug/L	0.029	1	10/07/10 00:00	10/07/10 21:23	106-93-4	
8260 MSV	Analytical Method: EPA 5030B/8260							
Acetone	**293**	ug/L	10.0	1		10/03/10 12:46	67-64-1	
Benzene	ND	ug/L	1.0	1		10/03/10 12:46	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		10/03/10 12:46	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		10/03/10 12:46	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		10/03/10 12:46	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/03/10 12:46	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/03/10 12:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		10/03/10 12:46	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		10/03/10 12:46	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		10/03/10 12:46	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		10/03/10 12:46	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		10/03/10 12:46	75-15-0	L3
Carbon tetrachloride	ND	ug/L	1.0	1		10/03/10 12:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/03/10 12:46	108-90-7	L3
Chloroethane	ND	ug/L	1.0	1		10/03/10 12:46	75-00-3	
Chloroform	ND	ug/L	1.0	1		10/03/10 12:46	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/03/10 12:46	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 12:46	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 12:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		10/03/10 12:46	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/03/10 12:46	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/03/10 12:46	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/03/10 12:46	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 12:46	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 12:46	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 12:46	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/03/10 12:46	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/03/10 12:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/03/10 12:46	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		10/03/10 12:46	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/03/10 12:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 12:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 12:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 12:46	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		10/03/10 12:46	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 12:46	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		10/03/10 12:46	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 12:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 12:46	10061-02-6	L3
Ethylbenzene	ND	ug/L	1.0	1		10/03/10 12:46	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		10/03/10 12:46	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		10/03/10 12:46	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		10/03/10 12:46	98-82-8	L3
p-Isopropyltoluene	ND	ug/L	1.0	1		10/03/10 12:46	99-87-6	

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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: BAPURGE-W-930101 **Lab ID: 6086606001** Collected: 09/30/10 09:00 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Methylene chloride	ND	ug/L	1.0	1		10/03/10 12:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		10/03/10 12:46	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/03/10 12:46	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		10/03/10 12:46	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		10/03/10 12:46	103-65-1	
Styrene	ND	ug/L	1.0	1		10/03/10 12:46	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 12:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 12:46	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/03/10 12:46	127-18-4	
Toluene	ND	ug/L	1.0	1		10/03/10 12:46	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 12:46	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 12:46	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/03/10 12:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/03/10 12:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/03/10 12:46	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/03/10 12:46	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		10/03/10 12:46	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 12:46	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 12:46	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		10/03/10 12:46	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/03/10 12:46	1330-20-7	
4-Bromofluorobenzene (S)	93	%	87-113	1		10/03/10 12:46	460-00-4	
Dibromofluoromethane (S)	103	%	86-112	1		10/03/10 12:46	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	82-119	1		10/03/10 12:46	17060-07-0	
Toluene-d8 (S)	102	%	90-110	1		10/03/10 12:46	2037-26-5	
Preservation pH	**7.0**		0.10	1		10/03/10 12:46		
300.0 IC Anions	Analytical Method: EPA 300.0							
Nitrate as N	**2.7**	mg/L	0.10	1		10/01/10 18:59	14797-55-8	

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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: CNPURGE-W-930102 **Lab ID: 6086606002** Collected: 09/30/10 10:00 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
504 GCS EDB and DBCP	Analytical Method: EPA 504.1 Preparation Method: EPA 504.1							
1,2-Dibromoethane (EDB)	ND	ug/L	0.029	1	10/07/10 00:00	10/07/10 21:34	106-93-4	
8260 MSV	Analytical Method: EPA 5030B/8260							
Acetone	**474**	ug/L	10.0	1		10/03/10 13:01	67-64-1	
Benzene	ND	ug/L	1.0	1		10/03/10 13:01	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		10/03/10 13:01	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		10/03/10 13:01	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		10/03/10 13:01	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/03/10 13:01	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/03/10 13:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		10/03/10 13:01	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:01	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:01	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:01	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		10/03/10 13:01	75-15-0	L3
Carbon tetrachloride	ND	ug/L	1.0	1		10/03/10 13:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/03/10 13:01	108-90-7	L3
Chloroethane	ND	ug/L	1.0	1		10/03/10 13:01	75-00-3	
Chloroform	ND	ug/L	1.0	1		10/03/10 13:01	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/03/10 13:01	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 13:01	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 13:01	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		10/03/10 13:01	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/03/10 13:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/03/10 13:01	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/03/10 13:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:01	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:01	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:01	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/03/10 13:01	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/03/10 13:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/03/10 13:01	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		10/03/10 13:01	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:01	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:01	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:01	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:01	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:01	10061-02-6	L3
Ethylbenzene	ND	ug/L	1.0	1		10/03/10 13:01	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		10/03/10 13:01	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		10/03/10 13:01	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		10/03/10 13:01	98-82-8	L3
p-Isopropyltoluene	ND	ug/L	1.0	1		10/03/10 13:01	99-87-6	

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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: CNPURGE-W-930102 **Lab ID: 6086606002** Collected: 09/30/10 10:00 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Methylene chloride	ND	ug/L	1.0	1		10/03/10 13:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		10/03/10 13:01	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/03/10 13:01	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		10/03/10 13:01	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		10/03/10 13:01	103-65-1	
Styrene	ND	ug/L	1.0	1		10/03/10 13:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 13:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 13:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/03/10 13:01	127-18-4	
Toluene	ND	ug/L	1.0	1		10/03/10 13:01	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:01	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:01	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/03/10 13:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/03/10 13:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/03/10 13:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/03/10 13:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		10/03/10 13:01	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 13:01	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 13:01	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		10/03/10 13:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/03/10 13:01	1330-20-7	
4-Bromofluorobenzene (S)	96	%	87-113	1		10/03/10 13:01	460-00-4	
Dibromofluoromethane (S)	105	%	86-112	1		10/03/10 13:01	1868-53-7	
1,2-Dichloroethane-d4 (S)	100	%	82-119	1		10/03/10 13:01	17060-07-0	
Toluene-d8 (S)	101	%	90-110	1		10/03/10 13:01	2037-26-5	
Preservation pH	**7.0**		0.10	1		10/03/10 13:01		
300.0 IC Anions	Analytical Method: EPA 300.0							
Nitrate as N	**1.7**	mg/L	0.10	1		10/01/10 19:15	14797-55-8	

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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: EVPURGE-W-930103 **Lab ID: 6086606003** Collected: 09/30/10 11:32 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
504 GCS EDB and DBCP	Analytical Method: EPA 504.1 Preparation Method: EPA 504.1							
1,2-Dibromoethane (EDB)	ND	ug/L	0.029	1	10/07/10 00:00	10/07/10 21:44	106-93-4	
8260 MSV	Analytical Method: EPA 5030B/8260							
Acetone	**787**	ug/L	10.0	1		10/03/10 13:16	67-64-1	E,P2
Benzene	ND	ug/L	1.0	1		10/03/10 13:16	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		10/03/10 13:16	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		10/03/10 13:16	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		10/03/10 13:16	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/03/10 13:16	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/03/10 13:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		10/03/10 13:16	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:16	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:16	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:16	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		10/03/10 13:16	75-15-0	L3
Carbon tetrachloride	ND	ug/L	1.0	1		10/03/10 13:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/03/10 13:16	108-90-7	L3
Chloroethane	ND	ug/L	1.0	1		10/03/10 13:16	75-00-3	
Chloroform	ND	ug/L	1.0	1		10/03/10 13:16	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/03/10 13:16	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 13:16	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 13:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		10/03/10 13:16	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/03/10 13:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/03/10 13:16	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/03/10 13:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:16	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/03/10 13:16	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/03/10 13:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/03/10 13:16	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		10/03/10 13:16	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:16	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:16	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:16	10061-02-6	L3
Ethylbenzene	ND	ug/L	1.0	1		10/03/10 13:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		10/03/10 13:16	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		10/03/10 13:16	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		10/03/10 13:16	98-82-8	L3
p-Isopropyltoluene	ND	ug/L	1.0	1		10/03/10 13:16	99-87-6	

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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: EVPURGE-W-930103 **Lab ID: 6086606003** Collected: 09/30/10 11:32 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Methylene chloride	ND	ug/L	1.0	1		10/03/10 13:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		10/03/10 13:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/03/10 13:16	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		10/03/10 13:16	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		10/03/10 13:16	103-65-1	
Styrene	ND	ug/L	1.0	1		10/03/10 13:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 13:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 13:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/03/10 13:16	127-18-4	
Toluene	ND	ug/L	1.0	1		10/03/10 13:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/03/10 13:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/03/10 13:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/03/10 13:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/03/10 13:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		10/03/10 13:16	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 13:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 13:16	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		10/03/10 13:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/03/10 13:16	1330-20-7	
4-Bromofluorobenzene (S)	96	%	87-113	1		10/03/10 13:16	460-00-4	
Dibromofluoromethane (S)	98	%	86-112	1		10/03/10 13:16	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%	82-119	1		10/03/10 13:16	17060-07-0	
Toluene-d8 (S)	100	%	90-110	1		10/03/10 13:16	2037-26-5	
Preservation pH	**7.0**		0.10	1		10/03/10 13:16		
300.0 IC Anions	Analytical Method: EPA 300.0							
Nitrate as N	**2.0**	mg/L	0.10	1		10/01/10 19:32	14797-55-8	

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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: MRPURGE-W-930104 **Lab ID: 6086606004** Collected: 09/30/10 13:42 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
504 GCS EDB and DBCP	Analytical Method: EPA 504.1 Preparation Method: EPA 504.1							
1,2-Dibromoethane (EDB)	ND	ug/L	0.029	1	10/07/10 00:00	10/07/10 21:55	106-93-4	
8260 MSV	Analytical Method: EPA 5030B/8260							
Acetone	**351**	ug/L	10.0	1		10/03/10 13:31	67-64-1	
Benzene	ND	ug/L	1.0	1		10/03/10 13:31	71-43-2	
Bromobenzene	ND	ug/L	1.0	1		10/03/10 13:31	108-86-1	
Bromochloromethane	ND	ug/L	1.0	1		10/03/10 13:31	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	1		10/03/10 13:31	75-27-4	
Bromoform	ND	ug/L	1.0	1		10/03/10 13:31	75-25-2	
Bromomethane	ND	ug/L	1.0	1		10/03/10 13:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	1		10/03/10 13:31	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:31	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:31	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	1		10/03/10 13:31	98-06-6	
Carbon disulfide	ND	ug/L	5.0	1		10/03/10 13:31	75-15-0	L3
Carbon tetrachloride	ND	ug/L	1.0	1		10/03/10 13:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		10/03/10 13:31	108-90-7	L3
Chloroethane	ND	ug/L	1.0	1		10/03/10 13:31	75-00-3	
Chloroform	ND	ug/L	1.0	1		10/03/10 13:31	67-66-3	
Chloromethane	ND	ug/L	1.0	1		10/03/10 13:31	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 13:31	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	1		10/03/10 13:31	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	1		10/03/10 13:31	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	1		10/03/10 13:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	1		10/03/10 13:31	106-93-4	
Dibromomethane	ND	ug/L	1.0	1		10/03/10 13:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:31	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	1		10/03/10 13:31	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	1		10/03/10 13:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		10/03/10 13:31	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	1		10/03/10 13:31	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		10/03/10 13:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:31	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:31	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	1		10/03/10 13:31	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		10/03/10 13:31	10061-02-6	L3
Ethylbenzene	ND	ug/L	1.0	1		10/03/10 13:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	1		10/03/10 13:31	87-68-3	
2-Hexanone	ND	ug/L	10.0	1		10/03/10 13:31	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	1		10/03/10 13:31	98-82-8	L3
p-Isopropyltoluene	ND	ug/L	1.0	1		10/03/10 13:31	99-87-6	

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ANALYTICAL RESULTS

Project: Kansas Waste Water
Pace Project No.: 6086606

Sample: MRPURGE-W-930104 **Lab ID: 6086606004** Collected: 09/30/10 13:42 Received: 10/01/10 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260							
Methylene chloride	ND	ug/L	1.0	1		10/03/10 13:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	1		10/03/10 13:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	1		10/03/10 13:31	1634-04-4	
Naphthalene	ND	ug/L	10.0	1		10/03/10 13:31	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	1		10/03/10 13:31	103-65-1	
Styrene	ND	ug/L	1.0	1		10/03/10 13:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 13:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		10/03/10 13:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		10/03/10 13:31	127-18-4	
Toluene	ND	ug/L	1.0	1		10/03/10 13:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	1		10/03/10 13:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		10/03/10 13:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		10/03/10 13:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		10/03/10 13:31	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	1		10/03/10 13:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	1		10/03/10 13:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 13:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	1		10/03/10 13:31	108-67-8	
Vinyl chloride	ND	ug/L	1.0	1		10/03/10 13:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1		10/03/10 13:31	1330-20-7	
4-Bromofluorobenzene (S)	95	%	87-113	1		10/03/10 13:31	460-00-4	
Dibromofluoromethane (S)	105	%	86-112	1		10/03/10 13:31	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	82-119	1		10/03/10 13:31	17060-07-0	
Toluene-d8 (S)	103	%	90-110	1		10/03/10 13:31	2037-26-5	
Preservation pH	**7.0**		0.10	1		10/03/10 13:31		
300.0 IC Anions	Analytical Method: EPA 300.0							
Nitrate as N	**0.99**	mg/L	0.10	1		10/01/10 19:48	14797-55-8	

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QUALITY CONTROL DATA

Project: Kansas Waste Water
Pace Project No.: 6086606

QC Batch: OEXT/25923 Analysis Method: EPA 504.1
QC Batch Method: EPA 504.1 Analysis Description: GCS 504 EDB DBCP
Associated Lab Samples: 6086606001, 6086606002, 6086606003, 6086606004

METHOD BLANK: 713551 Matrix: Water
Associated Lab Samples: 6086606001, 6086606002, 6086606003, 6086606004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.030	10/07/10 20:50	

LABORATORY CONTROL SAMPLE & LCSD: 713552 713553

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.25	0.29	0.28	114	112	70-130	2	20	

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QUALITY CONTROL DATA

Project: Kansas Waste Water
Pace Project No.: 6086606

QC Batch: MSV/32160 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 6086606001, 6086606002, 6086606003, 6086606004

METHOD BLANK: 711291 Matrix: Water
Associated Lab Samples: 6086606001, 6086606002, 6086606003, 6086606004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	10/03/10 11:44	
1,1,1-Trichloroethane	ug/L	ND	1.0	10/03/10 11:44	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/03/10 11:44	
1,1,2-Trichloroethane	ug/L	ND	1.0	10/03/10 11:44	
1,1-Dichloroethane	ug/L	ND	1.0	10/03/10 11:44	
1,1-Dichloroethene	ug/L	ND	1.0	10/03/10 11:44	
1,1-Dichloropropene	ug/L	ND	1.0	10/03/10 11:44	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	10/03/10 11:44	
1,2,3-Trichloropropane	ug/L	ND	2.5	10/03/10 11:44	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	10/03/10 11:44	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	10/03/10 11:44	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	10/03/10 11:44	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	10/03/10 11:44	
1,2-Dichlorobenzene	ug/L	ND	1.0	10/03/10 11:44	
1,2-Dichloroethane	ug/L	ND	1.0	10/03/10 11:44	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	10/03/10 11:44	
1,2-Dichloropropane	ug/L	ND	1.0	10/03/10 11:44	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	10/03/10 11:44	
1,3-Dichlorobenzene	ug/L	ND	1.0	10/03/10 11:44	
1,3-Dichloropropane	ug/L	ND	1.0	10/03/10 11:44	
1,4-Dichlorobenzene	ug/L	ND	1.0	10/03/10 11:44	
2,2-Dichloropropane	ug/L	ND	1.0	10/03/10 11:44	
2-Butanone (MEK)	ug/L	ND	10.0	10/03/10 11:44	
2-Chlorotoluene	ug/L	ND	1.0	10/03/10 11:44	
2-Hexanone	ug/L	ND	10.0	10/03/10 11:44	
4-Chlorotoluene	ug/L	ND	1.0	10/03/10 11:44	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/03/10 11:44	
Acetone	ug/L	ND	10.0	10/03/10 11:44	
Benzene	ug/L	ND	1.0	10/03/10 11:44	
Bromobenzene	ug/L	ND	1.0	10/03/10 11:44	
Bromochloromethane	ug/L	ND	1.0	10/03/10 11:44	
Bromodichloromethane	ug/L	ND	1.0	10/03/10 11:44	
Bromoform	ug/L	ND	1.0	10/03/10 11:44	
Bromomethane	ug/L	ND	1.0	10/03/10 11:44	
Carbon disulfide	ug/L	ND	5.0	10/03/10 11:44	
Carbon tetrachloride	ug/L	ND	1.0	10/03/10 11:44	
Chlorobenzene	ug/L	ND	1.0	10/03/10 11:44	
Chloroethane	ug/L	ND	1.0	10/03/10 11:44	
Chloroform	ug/L	ND	1.0	10/03/10 11:44	
Chloromethane	ug/L	ND	1.0	10/03/10 11:44	
cis-1,2-Dichloroethene	ug/L	ND	1.0	10/03/10 11:44	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/03/10 11:44	
Dibromochloromethane	ug/L	ND	1.0	10/03/10 11:44	

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QUALITY CONTROL DATA

Project: Kansas Waste Water
Pace Project No.: 6086606

METHOD BLANK: 711291 Matrix: Water

Associated Lab Samples: 6086606001, 6086606002, 6086606003, 6086606004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	10/03/10 11:44	
Dichlorodifluoromethane	ug/L	ND	1.0	10/03/10 11:44	
Ethylbenzene	ug/L	ND	1.0	10/03/10 11:44	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	10/03/10 11:44	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	10/03/10 11:44	
Methyl-tert-butyl ether	ug/L	ND	1.0	10/03/10 11:44	
Methylene chloride	ug/L	ND	1.0	10/03/10 11:44	
n-Butylbenzene	ug/L	ND	1.0	10/03/10 11:44	
n-Propylbenzene	ug/L	ND	1.0	10/03/10 11:44	
Naphthalene	ug/L	ND	10.0	10/03/10 11:44	
p-Isopropyltoluene	ug/L	ND	1.0	10/03/10 11:44	
sec-Butylbenzene	ug/L	ND	1.0	10/03/10 11:44	
Styrene	ug/L	ND	1.0	10/03/10 11:44	
tert-Butylbenzene	ug/L	ND	1.0	10/03/10 11:44	
Tetrachloroethene	ug/L	ND	1.0	10/03/10 11:44	
Toluene	ug/L	ND	1.0	10/03/10 11:44	
trans-1,2-Dichloroethene	ug/L	ND	1.0	10/03/10 11:44	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/03/10 11:44	
Trichloroethene	ug/L	ND	1.0	10/03/10 11:44	
Trichlorofluoromethane	ug/L	ND	1.0	10/03/10 11:44	
Vinyl chloride	ug/L	ND	1.0	10/03/10 11:44	
Xylene (Total)	ug/L	ND	3.0	10/03/10 11:44	
1,2-Dichloroethane-d4 (S)	%	93	82-119	10/03/10 11:44	
4-Bromofluorobenzene (S)	%	101	87-113	10/03/10 11:44	
Dibromofluoromethane (S)	%	102	86-112	10/03/10 11:44	
Toluene-d8 (S)	%	102	90-110	10/03/10 11:44	

LABORATORY CONTROL SAMPLE: 711292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	22.0	110	79-116	
1,1,1-Trichloroethane	ug/L	20	21.2	106	77-113	
1,1,2,2-Tetrachloroethane	ug/L	20	18.9	94	68-122	
1,1,2-Trichloroethane	ug/L	20	20.9	104	82-117	
1,1-Dichloroethane	ug/L	20	20.7	103	67-122	
1,1-Dichloroethene	ug/L	20	23.7	118	70-119	
1,1-Dichloropropene	ug/L	20	21.1	106	81-115	
1,2,3-Trichlorobenzene	ug/L	20	19.9	99	66-135	
1,2,3-Trichloropropane	ug/L	20	18.4	92	76-126	
1,2,4-Trichlorobenzene	ug/L	20	19.7	99	66-126	
1,2,4-Trimethylbenzene	ug/L	20	19.8	99	78-115	
1,2-Dibromo-3-chloropropane	ug/L	20	24.1	121	58-147	
1,2-Dibromoethane (EDB)	ug/L	20	21.2	106	84-121	
1,2-Dichlorobenzene	ug/L	20	20.9	105	79-116	
1,2-Dichloroethane	ug/L	20	19.2	96	74-119	

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QUALITY CONTROL DATA

Project: Kansas Waste Water
Pace Project No.: 6086606

LABORATORY CONTROL SAMPLE: 711292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	44.0	110	78-117	
1,2-Dichloropropane	ug/L	20	19.6	98	77-115	
1,3,5-Trimethylbenzene	ug/L	20	19.5	98	83-117	
1,3-Dichlorobenzene	ug/L	20	21.7	108	79-112	
1,3-Dichloropropane	ug/L	20	20.7	103	82-119	
1,4-Dichlorobenzene	ug/L	20	21.8	109	78-111	
2,2-Dichloropropane	ug/L	20	22.1	110	57-130	
2-Butanone (MEK)	ug/L	100	89.9	90	41-157	
2-Chlorotoluene	ug/L	20	20.1	100	82-118	
2-Hexanone	ug/L	100	96.1	96	57-137	
4-Chlorotoluene	ug/L	20	22.5	112	83-114	
4-Methyl-2-pentanone (MIBK)	ug/L	100	92.9	93	62-118	
Acetone	ug/L	100	93.6	94	38-174	
Benzene	ug/L	20	19.5	97	79-116	
Bromobenzene	ug/L	20	18.9	95	81-115	
Bromochloromethane	ug/L	20	20.3	102	72-123	
Bromodichloromethane	ug/L	20	21.9	110	76-113	
Bromoform	ug/L	20	22.9	115	62-129	
Bromomethane	ug/L	20	23.6	118	24-168	
Carbon disulfide	ug/L	20	28.3	142	45-129	L3
Carbon tetrachloride	ug/L	20	19.7	99	67-124	
Chlorobenzene	ug/L	20	23.0	115	79-113	L3
Chloroethane	ug/L	20	21.4	107	57-153	
Chloroform	ug/L	20	21.3	107	74-116	
Chloromethane	ug/L	20	17.7	88	51-138	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	77-120	
cis-1,3-Dichloropropene	ug/L	20	22.9	114	76-116	
Dibromochloromethane	ug/L	20	23.0	115	73-115	
Dibromomethane	ug/L	20	19.1	95	75-115	
Dichlorodifluoromethane	ug/L	20	13.9	69	6-181	
Ethylbenzene	ug/L	20	19.8	99	76-122	
Hexachloro-1,3-butadiene	ug/L	20	20.4	102	68-129	
Isopropylbenzene (Cumene)	ug/L	20	21.4	107	71-104	L3
Methyl-tert-butyl ether	ug/L	20	21.4	107	62-131	
Methylene chloride	ug/L	20	22.8	114	61-137	
n-Butylbenzene	ug/L	20	20.7	104	75-124	
n-Propylbenzene	ug/L	20	20.0	100	79-116	
Naphthalene	ug/L	20	18.3	91	60-145	
p-Isopropyltoluene	ug/L	20	19.4	97	79-114	
sec-Butylbenzene	ug/L	20	20.4	102	83-119	
Styrene	ug/L	20	21.0	105	70-125	
tert-Butylbenzene	ug/L	20	22.2	111	81-118	
Tetrachloroethene	ug/L	20	23.1	116	77-117	
Toluene	ug/L	20	20.3	101	75-120	
trans-1,2-Dichloroethene	ug/L	20	23.0	115	76-119	
trans-1,3-Dichloropropene	ug/L	20	21.3	106	64-105	L3
Trichloroethene	ug/L	20	19.4	97	78-118	
Trichlorofluoromethane	ug/L	20	20.9	105	73-118	

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QUALITY CONTROL DATA

Project: Kansas Waste Water
Pace Project No.: 6086606

LABORATORY CONTROL SAMPLE: 711292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/L	20	22.6	113	60-122	
Xylene (Total)	ug/L	60	61.1	102	74-124	
1,2-Dichloroethane-d4 (S)	%			89	82-119	
4-Bromofluorobenzene (S)	%			97	87-113	
Dibromofluoromethane (S)	%			105	86-112	
Toluene-d8 (S)	%			101	90-110	

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QUALITY CONTROL DATA

Project: Kansas Waste Water
Pace Project No.: 6086606

QC Batch: WETA/14191 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 6086606001, 6086606002, 6086606003, 6086606004

METHOD BLANK: 710224 Matrix: Water
Associated Lab Samples: 6086606001, 6086606002, 6086606003, 6086606004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	ND	0.10	10/01/10 18:26	

LABORATORY CONTROL SAMPLE: 710225

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	5	4.9	99	90-110	

MATRIX SPIKE SAMPLE: 710226

Parameter	Units	6086606004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	0.99	5	5.5	91	68-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 710227 710228

Parameter	Units	6086604004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.18	5	5	5.1	5.2	99	100	68-120	1	16	

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QUALIFIERS

Project: Kansas Waste Water
Pace Project No.: 6086606

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

BATCH QUALIFIERS

Batch: MSV/32160

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.

Sample Condition Upon Receipt

Pace Analytical® www.pacelabs.com

Client Name: TCW Project # Geo 866606

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other _____

Tracking #: 8717 9523 1713 Pace Shipping Label Used? ☐ Yes ☐ No

Custody Seal on Cooler/Box Present: ☑ Yes ☐ No Seals intact: ☑ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other _____

Thermometer Used: T-191 / T-194 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2.2

Temperature should be above freezing to 6°C

Optional	
Proj. Due Date:	10/13
Proj. Name:	

Date and Initials of person examining contents: 10/11/10 LG

		Comments:
Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. NO3
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	9.
-Pace containers used:	☐Yes ☑No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests	☐Yes ☐No ☑N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	13.
-Includes date/time/ID/analyses Matrix: WT		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed ✓ Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	15.
Pace Trip Blank lot # (if purchased): _____		
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State: _____

Client Notification/ Resolution: Copy COC to Client? Y / (N) Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: JDL Date: 10-1-10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1272142

Section A Required Client Information:

Company: TCW Construction
Address: 141 M Street
Lincoln NE 68508
Email To: tkamler@tcwconstruction
Phone: 402 416 7255 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: tkamler@tcwconstruction.com
Copy To: Sargnier@prodigy.net
Purchase Order No.:
Project Name: Kansas Waste Water
Project Number:

Section C Invoice Information:

Attention: Travis Kamler
Company Name: TCW
Address:
Pace Quote Reference:
Pace Project Manager: Trudy Gipson
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: KS

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: VOC	EDB	NITRATES	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BAPURGE-W-930101	WW	C	3/10		9/30/2010	0900	59	5	3					2			2	2	1		BP2U 2(0694U) 2(0691U)
2	CNPURGE-W-930102	WW	C	4/10		9-30	1000	60	5	3					2			2	2	1		
3	EVPURGE-W-930103	WW	C	4/10		9-30	1132	65	5	3					2			2	2	1		
4	MRPURGE-W-930104	WW	C	4/10		9-30	1342		5	3					2			2	2	1		
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Residual Chlorine (Y/N): Cool & Cool

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
All samples Collected from 55 gal Drum Stored at Each Site	TCW	9-30-10	1830		10/1/10	0915	2.2	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Travis Kamler
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 09/30/10

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

INVOICE

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: (913)599-5665

Invoice Number: 106081867
Date: 10/14/2010
Total Amount Due: $592.00

Sold To:

Mr. Travis Kamler
TCW Construction Inc
141 M Street
Lincoln, NE 68508
402-475-5030

Please Remit To:

Pace Analytical Services, Inc.
P.O. Box 684056
Milwaukee, WI 53268-4056

Client Number/Client ID	*Purchase Order No*	*Pace Project Mgr*	*Terms*	*Page*
60-508440 / TCW Const	Credit Card	Trudy Gipson	Net 30 Days**	1

Client Project: Kansas Waste Water
Client Name: TCW Construction Inc
Pace Project No: 6086606
Sample Received: 10/1/2010
Report Sent To: Mr. David Surgnier,
Mr. Travis Kamler, TCW Construction Inc
Comments:

ANALYTICAL CHARGES

Quantity	Unit	Description	Method	Matrix	Price	Total
4	Ea	300.0 IC Anions-Nitrate	EPA 300.0	Water	$18.00	$72.00
4	Ea	504 GCS EDB DBCP	EPA 504.1	Water	$60.00	$240.00
4	Ea	8260 VOC by GC/MS-Full Scan	EPA 5030B/8260	Water	$70.00	$280.00
					Analytical Subtotal	$592.00

Total Number of Charges 12 **Total Invoice Amount** **$592.00**

Samples Received for analysis:

Lab ID	Client Sample ID	Received
6086606001	BAPURGE-W-930101	10/1/2010 9:15:00
6086606002	CNPURGE-W-930102	10/1/2010 9:15:00
6086606003	EVPURGE-W-930103	10/1/2010 9:15:00
6086606004	MRPURGE-W-930104	10/1/2010 9:15:00

If you have any questions or to pay by credit card, please contact Trudy Gipson at Pace.
Phone: 1(913)563-1405 Email: trudy.gipson@pacelabs.com

****1.5% MONTHLY FINANCE CHARGE ASSESSED AFTER 30 DAYS OR TERMS OF CONTRACT.**
PLEASE REFERENCE THE INVOICE NUMBER ON ALL REMITTANCE ADVICE.

Please complete and return copy of invoice with your payment.

INVOICE TOTAL $592.00

Amount Paid: $ _____

Check No: _____

Customer No: 60-508440 Invoice No: 106081867

AGEM 40 L

CITY OF SABETHA Cash - Matt
805 MAIN
PO BOX 187
SABETHA KS 66534 785-284-2158

Receipt No: 2.001326 Dec 17, 2010

TCW Construction

WASTEWATER FUND-MISC MISCELLANEOUS INCOME-purged water	50.00
Total:	50.00
Cash	50.00
Total Applied:	50.00
Change Tendered:	.00

12/17/10 01:28PM

Supplement 2:

Data Summaries for Verification VOCs Analyses by TestAmerica Laboratories, Inc.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

April 28, 2010

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

Re: Laboratory Project No. 21005
Case: CNTRALIA; SDG: 136697

Dear Mr. Dennis:

Enclosed are analytical results for samples that were received by TestAmerica Burlington on April 7th, 2010. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 04/07/10 ETR No: 136697		
825166	CNMW02-W-27179	04/05/10	WATER
825167	CNPMP2-W-27181	04/05/10	WATER
825168	CNPMP3-W-27182	04/05/10	WATER
825169	CNQCTB-W-27185	04/05/10	WATER
825170	VHBLK01	04/07/10	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, as received, were not acid preserved. On that basis, the laboratory did provide for the analytical work to be performed within seven days of sample collection.

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.

SOM01.2 Volatile Organics (Trace Level Water)

A storage blank was prepared for volatile organics analysis, and stored in association with the storage of the samples. That storage blank, identified as VHBLK01, was carried through the holding period with the samples, and analyzed.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Samples CNMW02-W-27179 and CNPMP2-W-27181 were analyzed at a dilution in order to provide quantification within the range of calibrated instrument response. An additional, more concentrated analysis was performed on each of those samples in order to provide for a lower reporting limit for those compounds that were not identified in the primary analysis. Both sets of results for the analysis of samples CNMW02-W-27179 and CNPMP2-W-27181 are included in this submittal.

Each of the analyses associated with the sample set exhibited an acceptable internal standard performance, and there was an acceptable recovery of each deuterated monitoring compound (DMC) in each analysis. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. Trace concentrations of acetone and 2-butanone were identified in the analysis of each method blank associated with the analytical work. The concentration of each compound in each analysis was below the established reporting limit, and each analysis did meet the technical acceptance criteria for a compliant method blank analysis. Trace concentrations of acetone, 2-butanone, and chloroform were identified in the analysis of the storage blank associated with the sample set. The concentration of each compound in that analysis was below the established reporting limit, and the analysis did meet the technical acceptance criteria for a compliant storage blank analysis. Present in the method blank and storage blank analyses was a non-target constituent that represented a compound that is related to the DMC formulation. The fact that the presence of this compound is not within the laboratory's control is at issue. The derived results for that compound have been qualified with an "X" qualifier to reflect the source of the contamination.

The responses for each of the target analytes met the relative standard deviation criterion in the initial calibration. The response for each target analyte met the percent difference criterion in each continuing calibration check acquisition. The response for each target analyte met the 50.0 percent difference criterion in each closing calibration check acquisition.

The primary quantitation mass for methylcyclohexane that is specified in the Statement of Work is mass 83. The laboratory did identify a contribution to mass 83 from 1,2-dichloropropane-d_6, one of the deuterated monitoring compounds (DMCs). The laboratory did change the primary quantitation mass assignment to mass 55 for the quantification of methylcyclohexane.

Manual integration was employed in deriving certain of the analytical results. The values that have been derived from manual integration are qualified on the quantitation reports. Extracted ion current profiles for each manual integration are included in the data package, and further documented in the Sample Preparation section of this submittal.

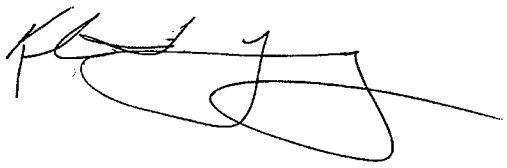
Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality 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.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,



Kirk F. Young
Project Manager

KFY/hsf
Enclosure

2624

FedEx # 8558 7682 9668

MATRIX: Water

RECEIVING LAB: Test America

PROJECT/SITE: Centralia KS

SAMPLER(S) (Signature)

ARGONNE NATIONAL LABORATORY
CHAIN OF CUSTODY RECORD*

Shipping Container No.

Shipping Info:

ANL Field Contact (Name & Temporary Phone): Dave Surgnier 630 408 7114

DATE OF COLLECTION	SAMPLE ID NUMBER(S)	Number of containers	ANALYSIS: VOC	REMARKS
April 5, 2010	CNMW02-W-27179	2	2	2 x 40 mL for VOC
"	CNPMP2-W-27181	2	2	"
"	CNPMP3-W-27182	2	2	"
April 5, 2010	CNQCTB-W-27185	2	2	2 x 40 mL for VOC

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	4-6-10	16:41					

Relinquished by (Signature)	Date	Time	Received for Laboratory by	Date	Time	Remarks
			Chrakalo	4/7/10	1040	Temp 3.0

Y	N	FOR LAB USE ONLY
X		Custody seal was intact when shipment received.
X		Sample containers were intact when received.
X		Shipment was at required temperature when received.
	X	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

ER-160 (12-94)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Data Summary – SOM01.2 Volatiles – Trace

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW02W27179

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825166

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825166D2

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 11.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.5	U
74-87-3	Chloromethane	5.5	U
75-01-4	Vinyl chloride	5.5	U
74-83-9	Bromomethane	5.5	U
75-00-3	Chloroethane	5.5	U
75-69-4	Trichlorofluoromethane	5.5	U
75-35-4	1,1-Dichloroethene	5.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5.5	U
67-64-1	Acetone	55	U
75-15-0	Carbon disulfide	5.5	U
79-20-9	Methyl acetate	5.5	U
75-09-2	Methylene chloride	5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	U
1634-04-4	Methyl tert-butyl ether	5.5	U
75-34-3	1,1-Dichloroethane	5.5	U
156-59-2	cis-1,2-Dichloroethene	5.5	U
78-93-3	2-Butanone	55	U
74-97-5	Bromochloromethane	5.5	U
67-66-3	Chloroform	5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	U
110-82-7	Cyclohexane	5.5	U
56-23-5	Carbon tetrachloride	5.5	U
71-43-2	Benzene	5.5	U
107-06-2	1,2-Dichloroethane	5.5	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW02W27179

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825166

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825166D2

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 11.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	5.5	U
108-87-2	Methylcyclohexane	5.5	U
78-87-5	1,2-Dichloropropane	5.5	U
75-27-4	Bromodichloromethane	5.5	U
10061-01-5	cis-1,3-Dichloropropene	5.5	U
108-10-1	4-Methyl-2-pentanone	55	U
108-88-3	Toluene	940	E
10061-02-6	trans-1,3-Dichloropropene	5.5	U
79-00-5	1,1,2-Trichloroethane	5.5	U
127-18-4	Tetrachloroethene	5.5	U
591-78-6	2-Hexanone	55	U
124-48-1	Dibromochloromethane	5.5	U
106-93-4	1,2-Dibromoethane	5.5	U
108-90-7	Chlorobenzene	5.5	U
100-41-4	Ethylbenzene	25	
95-47-6	o-Xylene	5.5	U
179601-23-1	m,p-Xylene	5.5	U
100-42-5	Styrene	5.5	U
75-25-2	Bromoform	5.5	U
98-82-8	Isopropylbenzene	5.5	U
79-34-5	1,1,2,2-Tetrachloroethane	5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	U
95-50-1	1,2-Dichlorobenzene	5.5	U
96-12-8	1,2-Dibromo-3-chloropropane	5.5	U
120-82-1	1,2,4-Trichlorobenzene	5.5	U
87-61-6	1,2,3-Trichlorobenzene	5.5	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
MW02W27179

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825166

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825166D2

Level: (TRACE or LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 11.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:(ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	31	JXB
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW02W27179DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825166D1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825166D

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 129.4

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	65	U
74-87-3	Chloromethane	65	U
75-01-4	Vinyl chloride	65	U
74-83-9	Bromomethane	65	U
75-00-3	Chloroethane	65	U
75-69-4	Trichlorofluoromethane	65	U
75-35-4	1,1-Dichloroethene	65	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	65	U
67-64-1	Acetone	170	DJB
75-15-0	Carbon disulfide	65	U
79-20-9	Methyl acetate	65	U
75-09-2	Methylene chloride	65	U
156-60-5	trans-1,2-Dichloroethene	65	U
1634-04-4	Methyl tert-butyl ether	65	U
75-34-3	1,1-Dichloroethane	65	U
156-59-2	cis-1,2-Dichloroethene	65	U
78-93-3	2-Butanone	650	U
74-97-5	Bromochloromethane	65	U
67-66-3	Chloroform	55	DJ
71-55-6	1,1,1-Trichloroethane	65	U
110-82-7	Cyclohexane	65	U
56-23-5	Carbon tetrachloride	65	U
71-43-2	Benzene	65	U
107-06-2	1,2-Dichloroethane	65	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW02W27179DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825166D1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825166D

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 129.4

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	65	U
108-87-2	Methylcyclohexane	65	U
78-87-5	1,2-Dichloropropane	65	U
75-27-4	Bromodichloromethane	65	U
10061-01-5	cis-1,3-Dichloropropene	65	U
108-10-1	4-Methyl-2-pentanone	650	U
108-88-3	Toluene	1600	D
10061-02-6	trans-1,3-Dichloropropene	65	U
79-00-5	1,1,2-Trichloroethane	65	U
127-18-4	Tetrachloroethene	65	U
591-78-6	2-Hexanone	650	U
124-48-1	Dibromochloromethane	65	U
106-93-4	1,2-Dibromoethane	65	U
108-90-7	Chlorobenzene	65	U
100-41-4	Ethylbenzene	27	DJ
95-47-6	o-Xylene	65	U
179601-23-1	m,p-Xylene	65	U
100-42-5	Styrene	65	U
75-25-2	Bromoform	65	U
98-82-8	Isopropylbenzene	65	U
79-34-5	1,1,2,2-Tetrachloroethane	65	U
541-73-1	1,3-Dichlorobenzene	65	U
106-46-7	1,4-Dichlorobenzene	65	U
95-50-1	1,2-Dichlorobenzene	65	U
96-12-8	1,2-Dibromo-3-chloropropane	65	U
120-82-1	1,2,4-Trichlorobenzene	65	U
87-61-6	1,2,3-Trichlorobenzene	65	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
MW02W27179DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825166D1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825166D

Level: (TRACE or LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 129.4

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	350	JXBD
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
PMP2W27181

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825167

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825167D2

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U
67-64-1	Acetone	100	B
75-15-0	Carbon disulfide	1.0	J
79-20-9	Methyl acetate	2.0	U
75-09-2	Methylene chloride	4.3	
156-60-5	trans-1,2-Dichloroethene	2.0	U
1634-04-4	Methyl tert-butyl ether	2.0	U
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
78-93-3	2-Butanone	68	B
74-97-5	Bromochloromethane	2.0	U
67-66-3	Chloroform	120	E
71-55-6	1,1,1-Trichloroethane	2.0	U
110-82-7	Cyclohexane	2.0	U
56-23-5	Carbon tetrachloride	690	E
71-43-2	Benzene	2.0	U
107-06-2	1,2-Dichloroethane	2.0	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
PMP2W27181

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825167

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825167D2

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	2.0	U
108-87-2	Methylcyclohexane	2.0	U
78-87-5	1,2-Dichloropropane	2.0	U
75-27-4	Bromodichloromethane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-10-1	4-Methyl-2-pentanone	20	U
108-88-3	Toluene	290	E
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
591-78-6	2-Hexanone	20	U
124-48-1	Dibromochloromethane	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
108-90-7	Chlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
95-47-6	o-Xylene	2.0	U
179601-23-1	m,p-Xylene	2.0	U
100-42-5	Styrene	2.0	U
75-25-2	Bromoform	2.0	U
98-82-8	Isopropylbenzene	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
PMP2W27181

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825167

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825167D2

Level: (TRACE or LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 4.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	75-18-3	Dimethyl sulfide	2.65	17	NJ
02		Unknown	7.01	11	JXB
03	624-92-0	Disulfide, dimethyl	7.14	3.3	NJ
04		Unknown	11.69	3.9	J
05					
06					
07					
08					
09					
10					
11					
12					
13					
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25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
PMP2W27181DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825167D1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825167D

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 46.3

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	23	U
74-87-3	Chloromethane	23	U
75-01-4	Vinyl chloride	23	U
74-83-9	Bromomethane	23	U
75-00-3	Chloroethane	23	U
75-69-4	Trichlorofluoromethane	23	U
75-35-4	1,1-Dichloroethene	23	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	23	U
67-64-1	Acetone	140	DJB
75-15-0	Carbon disulfide	23	U
79-20-9	Methyl acetate	23	U
75-09-2	Methylene chloride	23	U
156-60-5	trans-1,2-Dichloroethene	23	U
1634-04-4	Methyl tert-butyl ether	23	U
75-34-3	1,1-Dichloroethane	23	U
156-59-2	cis-1,2-Dichloroethene	23	U
78-93-3	2-Butanone	80	DJB
74-97-5	Bromochloromethane	23	U
67-66-3	Chloroform	130	D
71-55-6	1,1,1-Trichloroethane	23	U
110-82-7	Cyclohexane	23	U
56-23-5	Carbon tetrachloride	670	D
71-43-2	Benzene	23	U
107-06-2	1,2-Dichloroethane	23	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
PMP2W27181DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825167D1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825167D

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 46.3

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	23	U
108-87-2	Methylcyclohexane	23	U
78-87-5	1,2-Dichloropropane	23	U
75-27-4	Bromodichloromethane	23	U
10061-01-5	cis-1,3-Dichloropropene	23	U
108-10-1	4-Methyl-2-pentanone	230	U
108-88-3	Toluene	390	D
10061-02-6	trans-1,3-Dichloropropene	23	U
79-00-5	1,1,2-Trichloroethane	23	U
127-18-4	Tetrachloroethene	23	U
591-78-6	2-Hexanone	230	U
124-48-1	Dibromochloromethane	23	U
106-93-4	1,2-Dibromoethane	23	U
108-90-7	Chlorobenzene	23	U
100-41-4	Ethylbenzene	23	U
95-47-6	o-Xylene	23	U
179601-23-1	m,p-Xylene	23	U
100-42-5	Styrene	23	U
75-25-2	Bromoform	23	U
98-82-8	Isopropylbenzene	23	U
79-34-5	1,1,2,2-Tetrachloroethane	23	U
541-73-1	1,3-Dichlorobenzene	23	U
106-46-7	1,4-Dichlorobenzene	23	U
95-50-1	1,2-Dichlorobenzene	23	U
96-12-8	1,2-Dibromo-3-chloropropane	23	U
120-82-1	1,2,4-Trichlorobenzene	23	U
87-61-6	1,2,3-Trichlorobenzene	23	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
PMP2W27181DL

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825167D1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825167D

Level: (TRACE or LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 46.3

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:(ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	130	JXBD
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
PMP3W27182

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825168

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825168

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	1.1	JB
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	0.52	JB
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.21	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
PMP3W27182

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825168

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825168

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	3.7	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.40	J
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
PMP3W27182

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825168

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825168

Level: (TRACE or LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	3.0	JXB
02					
03					
04					
05					
06					
07					
08					
09					
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13					
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24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
QCTBW27185

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825169

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825169

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	8.4	B
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	1.2	JB
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.34	J
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
QCTBW27185

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825169

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825169

Level: (TRACE/LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.6	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.14	J
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.61	
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
QCTBW27185

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825169

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825169

Level: (TRACE or LOW/MED) TRACE Date Received: 04/07/2010

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	2.9	JXB
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A	0.57	J

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJM

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJM

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB03E

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.0	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	1.2	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJM

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJM

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB03E

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKJM

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJM

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB03E

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/08/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	2.9	JX
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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19					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJN

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJN

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB02F

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	2.6	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	1.1	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJN

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJN

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB02F

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKJN

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJN

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB02F

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/09/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:(ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	2.9	JX
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJO

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJO

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB02G

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/10/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	2.6	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	1.3	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJO

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJO

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB02G

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/10/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKJO

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: VBLKJO

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JAQB02G

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/10/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	2.9	JX
02					
03					
04					
05					
06					
07					
08					
09					
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13					
14					
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20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1)EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825170

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825170

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/10/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	1.3	JB
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	0.46	JB
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.36	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825170

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825170

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/10/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 825170

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 825170

Level: (TRACE or LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 04/10/2010

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	7.01	2.6	JXB
02					
03					
04					
05					
06					
07					
08					
09					
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11					
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19					
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22					
23					
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25					
26					
27					
28					
29					
30					
	E966796(1)	Total Alkanes	N/A		

(1) EPA-designated Registry Number.

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL)#	VDMC2 (CLA)#	VDMC3 (DCE)#	VDMC4 (BUT)#	VDMC5 (CLF)#	VDMC6 (DCA)#	VDMC7 (BEN)#
01	VBLKJM	93	98	75	90	91	94	95
02	QCTBW27185	95	102	77	83	92	96	100
03	PMP3W27182	87	94	75	127	91	97	98
04	PMP2W27181DL	87	94	72	96	92	95	91
05	PMP2W27181	86	95	72	107	109	90	93
06	VBLKJN	93	97	75	82	91	94	96
07	MW02W27179DL	95	101	80	68	83	90	100
08	MW02W27179	86	95	74	103	87	90	97
09	VBLKJO	94	99	76	88	94	95	97
10	VHBLK01	98	105	78	53	85	88	103
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29								
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		QC LIMITS
VDMC1	(VCL) = Vinyl chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

Column to be used to flag recovery values
* Values outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA)#	VDMC9 (TOL)#	VDMC10 (TDP)#	VDMC11 (HEX)#	VDMC12 (TCA)#	VDMC13 (DCZ)#	VDMC14 ( )#	TOT OUT
01	VBLKJM	82	95	94	82	88	95		0
02	QCTBW27185	89	101	95	81	89	96		0
03	PMP3W27182	86	98	98	122	94	100		0
04	PMP2W27181DL	81	94	91	89	87	92		0
05	PMP2W27181	83	94	89	98	83	93		0
06	VBLKJN	83	96	93	79	88	94		0
07	MW02W27179DL	85	102	88	68	79	97		0
08	MW02W27179	82	96	88	100	87	93		0
09	VBLKJO	84	98	94	83	91	96		0
10	VHBLK01	83	104	87	49	78	94		0
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12									
13									
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30									

		QC LIMITS
VDMC8 (DPA)	= 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL)	= Toluene-d8	(77-121)
VDMC10 (TDP)	= trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX)	= 2-Hexanone-d5	(28-135)
VDMC12 (TCA)	= 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13 (DCZ)	= 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJM

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Lab File ID: JAQB03E Lab Sample ID: VBLKJM

Instrument ID: J.i

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 04/08/2010

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0919

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	QCTBW27185	825169	825169	1048
02	PMP3W27182	825168	825168	1115
03	PMP2W27181DL	825167D1	825167D	1544
04	PMP2W27181	825167	825167D2	1611
05				
06				
07				
08				
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJN

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Lab File ID: JAQB02F Lab Sample ID: VBLKJN

Instrument ID: J.i

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 04/09/2010

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0833

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW02W27179DL	825166D1	825166D	0910
02	MW02W27179	825166	825166D2	0937
03				
04				
05				
06				
07				
08				
09				
10				
11				
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COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJO

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Lab File ID: JAQB02G Lab Sample ID: VBLKJO

Instrument ID: J.i

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 04/10/2010

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1042

GC Column: DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VHBLK01	825170	825170	1125
02				
03				
04				
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06				
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COMMENTS: _____

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Lab File ID: JAQ01PV BFB Injection Date: 04/05/2010

Instrument ID: J.i BFB Injection Time: 1223

GC Column: DB-624 ID: 0.53 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.0
75	30.0 - 80.0% of mass 95	48.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	66.9
175	5.0 - 9.0% of mass 174	6.0 (8.9)1
176	95.0 - 101.0% of mass 174	66.3 (99.2)1
177	5.0 - 9.0% of mass 176	4.5 (6.8)2

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.5JG	VSTD0.5JG	JAQ0005V	04/05/2010	1318
02	VSTD001JG	VSTD001JG	JAQ001V	04/05/2010	1345
03	VSTD005JG	VSTD005JG	JAQ005V	04/05/2010	1412
04	VSTD010JG	VSTD010JG	JAQ010V	04/05/2010	1438
05	VSTD020JG	VSTD020JG	JAQ020V	04/05/2010	1505
06					
07					
08					
09					
10					
11					
12					
13					
14					
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17					
18					
19					
20					
21					
22					

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJM

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Lab File ID: JAQ13PV BFB Injection Date: 04/08/2010

Instrument ID: J.i BFB Injection Time: 0716

GC Column: DB-624 ID: 0.53 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.5
75	30.0 - 80.0% of mass 95	48.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.7
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 120.0% of mass 95	69.8
175	5.0 - 9.0% of mass 174	5.5 (7.8)1
176	95.0 - 101.0% of mass 174	68.9 (98.7)1
177	5.0 - 9.0% of mass 176	4.9 (7.1)2

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005JM	VSTD005JM	JAQ005EV	04/08/2010	0852
02	VBLKJM	VBLKJM	JAQB03E	04/08/2010	0919
03	QCTBW27185	825169	825169	04/08/2010	1048
04	PMP3W27182	825168	825168	04/08/2010	1115
05	PMP2W27181DL	825167D1	825167D	04/08/2010	1544
06	PMP2W27181	825167	825167D2	04/08/2010	1611
07	VSTD005MJ	VSTD005MJ	JAQ05EC1	04/08/2010	1757
08					
09					
10					
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12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJN

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Lab File ID: JAQ15PV BFB Injection Date: 04/09/2010

Instrument ID: J.i BFB Injection Time: 0722

GC Column: DB-624 ID: 0.53 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.3
75	30.0 - 80.0% of mass 95	46.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.0
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 120.0% of mass 95	75.0
175	5.0 - 9.0% of mass 174	6.1 (8.1)1
176	95.0 - 101.0% of mass 174	74.5 (99.3)1
177	5.0 - 9.0% of mass 176	5.3 (7.2)2

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005JN	VSTD005JN	JAQ002FV	04/09/2010	0806
02	VBLKJN	VBLKJN	JAQB02F	04/09/2010	0833
03	MW02W27179DL	825166D1	825166D	04/09/2010	0910
04	MW02W27179	825166	825166D2	04/09/2010	0937
05	VSTD005NJ	VSTD005NJ	JAQ05FC1	04/09/2010	1740
06					
07					
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12					
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18					
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21					
22					

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJO

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Lab File ID: JAQ16PV BFB Injection Date: 04/10/2010

Instrument ID: J.i BFB Injection Time: 0920

GC Column: DB-624 ID: 0.53 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 80.0% of mass 95	48.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 120.0% of mass 95	65.8
175	5.0 - 9.0% of mass 174	5.8 (8.9)1
176	95.0 - 101.0% of mass 174	64.1 (97.4)1
177	5.0 - 9.0% of mass 176	4.9 (7.7)2

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005JO	VSTD005JO	JAQ005GV	04/10/2010	1015
02	VBLKJO	VBLKJO	JAQB02G	04/10/2010	1042
03	VHBLK01	825170	825170	04/10/2010	1125
04	VSTD005OJ	VSTD005OJ	JAQ05GC1	04/10/2010	1925
05					
06					
07					
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09					
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6A - FORM VI VOA-1
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date(s): 04/05/2010 04/05/2010

Heated Purge: (Y/N)N Calibration Time(s): 1318 1505

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

LAB FILE ID: RRF0.5 = JAQ0005V RRF1.0 = JAQ001V
RRF5.0 = JAQ005V RRF10 = JAQ010V RRF20 = JAQ020V

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.457	0.437	0.408	0.407	0.415	0.425	5.1
Chloromethane	0.462	0.439	0.449	0.448	0.455	0.451	1.9
Vinyl chloride	0.488	0.458	0.442	0.443	0.442	0.454	4.4
Bromomethane	0.187	0.173	0.161	0.165	0.170	0.171	5.8
Chloroethane	0.273	0.279	0.254	0.254	0.254	0.263	4.6
Trichlorofluoromethane	0.524	0.522	0.507	0.501	0.502	0.511	2.2
1,1-Dichloroethene	0.320	0.313	0.300	0.296	0.301	0.306	3.3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.348	0.330	0.315	0.310	0.314	0.323	4.8
Acetone	0.016	0.015	0.013	0.013	0.013	0.014	10.1
Carbon disulfide	1.128	0.982	0.959	0.931	0.933	0.986	8.3
Methyl acetate	0.067	0.054	0.048	0.047	0.047	0.053	16.1
Methylene chloride	0.262	0.252	0.250	0.242	0.246	0.250	3.0
trans-1,2-Dichloroethene	0.336	0.344	0.321	0.313	0.314	0.326	4.3
Methyl tert-butyl ether	0.403	0.409	0.394	0.383	0.395	0.397	2.5
1,1-Dichloroethane	0.606	0.610	0.595	0.588	0.584	0.597	1.9
cis-1,2-Dichloroethene	0.328	0.321	0.316	0.305	0.308	0.316	3.0
2-Butanone	0.029	0.028	0.027	0.027	0.028	0.028	3.2
Bromochloromethane	0.093	0.092	0.091	0.086	0.087	0.090	3.5
Chloroform	0.531	0.499	0.491	0.488	0.493	0.500	3.5
1,1,1-Trichloroethane	0.663	0.647	0.610	0.604	0.599	0.625	4.6
Cyclohexane	0.995	0.891	0.871	0.854	0.838	0.890	7.0
Carbon tetrachloride	0.554	0.529	0.509	0.510	0.507	0.522	3.8
Benzene	1.911	1.904	1.793	1.765	1.725	1.820	4.6
1,2-Dichloroethane	0.215	0.208	0.206	0.200	0.199	0.206	3.1
Trichloroethene	0.440	0.432	0.423	0.420	0.419	0.427	2.1
Methylcyclohexane	0.708	0.715	0.665	0.662	0.646	0.679	4.5

Report 1,4-Dioxane for Low-Medium VOA analysis only

6B - FORM VI VOA-2
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date(s): 04/05/2010 04/05/2010

Heated Purge: (Y/N)N Calibration Time(s): 1318 1505

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

LAB FILE ID: RRF0.5 = JAQ0005V RRF1.0 = JAQ001V
RRF5.0 = JAQ005V RRF10 = JAQ010V RRF20 = JAQ020V

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.395	0.375	0.374	0.364	0.359	0.373	3.8
Bromodichloromethane	0.404	0.377	0.383	0.382	0.386	0.386	2.6
cis-1,3-Dichloropropene	0.507	0.506	0.496	0.496	0.495	0.500	1.2
4-Methyl-2-pentanone	0.096	0.098	0.097	0.095	0.097	0.096	1.0
Toluene	2.055	1.965	1.891	1.836	1.831	1.916	4.9
trans-1,3-Dichloropropene	0.343	0.336	0.348	0.343	0.345	0.343	1.3
1,1,2-Trichloroethane	0.145	0.173	0.157	0.153	0.153	0.156	6.6
Tetrachloroethene	0.361	0.353	0.329	0.327	0.329	0.340	4.6
2-Hexanone	0.059	0.062	0.061	0.061	0.062	0.061	2.0
Dibromochloromethane	0.180	0.177	0.185	0.180	0.186	0.182	2.1
1,2-Dibromoethane	0.139	0.136	0.137	0.136	0.136	0.137	1.1
Chlorobenzene	1.030	1.037	1.003	0.993	1.006	1.014	1.9
Ethylbenzene	2.210	2.158	2.092	2.087	2.091	2.128	2.6
o-Xylene	0.780	0.732	0.712	0.713	0.711	0.730	4.0
m,p-Xylene	0.804	0.815	0.785	0.777	0.783	0.793	2.0
Styrene	1.065	1.065	1.069	1.071	1.078	1.070	0.5
Bromoform	0.173	0.191	0.197	0.198	0.195	0.191	5.4
Isopropylbenzene	2.046	2.083	2.024	2.024	2.025	2.040	1.3
1,1,2,2-Tetrachloroethane	0.144	0.152	0.144	0.147	0.146	0.147	2.1
1,3-Dichlorobenzene	1.688	1.654	1.599	1.626	1.601	1.634	2.3
1,4-Dichlorobenzene	1.655	1.589	1.520	1.528	1.510	1.560	3.9
1,2-Dichlorobenzene	1.282	1.238	1.179	1.183	1.162	1.209	4.1
1,2-Dibromo-3-chloropropane	0.063	0.052	0.044	0.045	0.044	0.050	16.8
1,2,4-Trichlorobenzene	0.546	0.549	0.542	0.558	0.571	0.553	2.1
1,2,3-Trichlorobenzene	0.323	0.373	0.373	0.381	0.396	0.369	7.5

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date(s): 04/05/2010 04/05/2010

Heated Purge: (Y/N)N Calibration Time(s): 1318 1505

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

LAB FILE ID: RRF0.5 = JAQ0005V RRF1.0 = JAQ001V
RRF5.0 = JAQ005V RRF10 = JAQ010V RRF20 = JAQ020V

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	$\overline{RRF}$	%RSD
Vinyl chloride-d3	0.452	0.420	0.399	0.389	0.396	0.411	6.2
Chloroethane-d5	0.316	0.320	0.304	0.305	0.305	0.310	2.4
1,1-Dichloroethene-d2	0.724	0.703	0.670	0.657	0.660	0.683	4.3
2-Butanone-d5	0.026	0.027	0.027	0.027	0.028	0.027	2.3
Chloroform-d	0.571	0.539	0.540	0.525	0.528	0.541	3.3
1,2-Dichloroethane-d4	0.172	0.176	0.167	0.165	0.165	0.169	3.0
Benzene-d6	1.846	1.824	1.730	1.708	1.689	1.760	4.0
1,2-Dichloropropane-d6	0.539	0.500	0.497	0.481	0.478	0.499	4.9
Toluene-d8	1.627	1.628	1.563	1.556	1.543	1.583	2.6
trans-1,3-Dichloropropene-d4	0.319	0.311	0.304	0.309	0.315	0.312	1.9
2-Hexanone-d5	0.032	0.033	0.034	0.034	0.034	0.033	2.9
1,1,2,2-Tetrachloroethane-d2	0.158	0.156	0.148	0.146	0.149	0.151	3.2
1,2-Dichlorobenzene-d4	0.774	0.783	0.759	0.761	0.744	0.764	1.9

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/08/2010 Time: 0852

Lab File ID: JAQ005EV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JM Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.425	0.404	0.010	-4.9	40.0
Chloromethane	0.451	0.462	0.010	2.6	40.0
Vinyl chloride	0.454	0.455	0.100	0.0	30.0
Bromomethane	0.171	0.161	0.100	-6.2	30.0
Chloroethane	0.263	0.257	0.010	-2.3	40.0
Trichlorofluoromethane	0.511	0.501	0.010	-2.0	40.0
1,1-Dichloroethene	0.306	0.292	0.100	-4.5	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.323	0.317	0.010	-1.8	40.0
Acetone	0.014	0.012	0.010	-13.8	40.0
Carbon disulfide	0.986	0.925	0.010	-6.2	40.0
Methyl acetate	0.053	0.046	0.010	-12.5	40.0
Methylene chloride	0.250	0.229	0.010	-8.7	40.0
trans-1,2-Dichloroethene	0.326	0.316	0.010	-3.1	40.0
Methyl tert-butyl ether	0.397	0.350	0.010	-11.9	40.0
1,1-Dichloroethane	0.597	0.583	0.200	-2.2	30.0
cis-1,2-Dichloroethene	0.316	0.299	0.010	-5.4	40.0
2-Butanone	0.028	0.024	0.010	-14.0	40.0
Bromochloromethane	0.090	0.084	0.050	-5.8	30.0
Chloroform	0.500	0.476	0.200	-4.8	30.0
1,1,1-Trichloroethane	0.625	0.632	0.100	1.1	30.0
Cyclohexane	0.890	0.886	0.010	-0.4	40.0
Carbon tetrachloride	0.522	0.532	0.100	1.9	30.0
Benzene	1.820	1.771	0.400	-2.7	30.0
1,2-Dichloroethane	0.206	0.191	0.100	-7.2	30.0
Trichloroethene	0.427	0.432	0.300	1.3	30.0
Methylcyclohexane	0.679	0.694	0.010	2.1	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/08/2010 Time: 0852

Lab File ID: JAQ005EV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JM Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.373	0.369	0.010	-1.1	40.0
Bromodichloromethane	0.386	0.374	0.200	-3.1	30.0
cis-1,3-Dichloropropene	0.500	0.483	0.200	-3.3	30.0
4-Methyl-2-pentanone	0.096	0.089	0.010	-8.1	40.0
Toluene	1.916	1.878	0.400	-2.0	30.0
trans-1,3-Dichloropropene	0.343	0.341	0.100	-0.6	30.0
1,1,2-Trichloroethane	0.156	0.148	0.100	-5.1	30.0
Tetrachloroethene	0.340	0.342	0.100	0.6	30.0
2-Hexanone	0.061	0.057	0.010	-7.0	40.0
Dibromochloromethane	0.182	0.173	0.100	-4.6	30.0
1,2-Dibromoethane	0.137	0.130	0.010	-5.1	30.0
Chlorobenzene	1.014	1.002	0.500	-1.2	30.0
Ethylbenzene	2.128	2.127	0.100	-0.0	30.0
o-Xylene	0.730	0.713	0.300	-2.3	30.0
m,p-Xylene	0.793	0.786	0.300	-0.8	30.0
Styrene	1.070	1.046	0.300	-2.2	30.0
Bromoform	0.191	0.185	0.050	-3.1	30.0
Isopropylbenzene	2.040	2.054	0.010	0.7	40.0
1,1,2,2-Tetrachloroethane	0.147	0.138	0.100	-6.2	30.0
1,3-Dichlorobenzene	1.634	1.554	0.400	-4.9	30.0
1,4-Dichlorobenzene	1.560	1.503	0.400	-3.7	30.0
1,2-Dichlorobenzene	1.209	1.117	0.400	-7.6	30.0
1,2-Dibromo-3-chloropropane	0.050	0.039	0.010	-21.1	40.0
1,2,4-Trichlorobenzene	0.553	0.516	0.200	-6.6	30.0
1,2,3-Trichlorobenzene	0.369	0.351	0.200	-4.9	30.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/08/2010 Time: 0852

Lab File ID: JAQ005EV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JM Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.411	0.405	0.010	-1.4	30.0
Chloroethane-d5	0.310	0.311	0.010	0.2	40.0
1,1-Dichloroethene-d2	0.683	0.674	0.010	-1.3	30.0
2-Butanone-d5	0.027	0.023	0.010	-12.7	40.0
Chloroform-d	0.541	0.505	0.010	-6.6	30.0
1,2-Dichloroethane-d4	0.169	0.160	0.010	-5.4	30.0
Benzene-d6	1.760	1.732	0.400	-1.6	30.0
1,2-Dichloropropane-d6	0.499	0.432	0.010	-13.5	40.0
Toluene-d8	1.583	1.576	0.010	-0.5	30.0
trans-1,3-Dichloropropene-d4	0.312	0.306	0.010	-1.8	30.0
2-Hexanone-d5	0.033	0.028	0.010	-14.8	40.0
1,1,2,2-Tetrachloroethane-d2	0.151	0.140	0.010	-7.7	30.0
1,2-Dichlorobenzene-d4	0.764	0.723	0.010	-5.4	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/08/2010 Time: 1757

Lab File ID: JAQ05EC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005MJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.425	0.446	0.010	5.1	50.0
Chloromethane	0.451	0.503	0.010	11.7	50.0
Vinyl chloride	0.454	0.492	0.010	8.3	50.0
Bromomethane	0.171	0.173	0.010	1.2	50.0
Chloroethane	0.263	0.283	0.010	7.8	50.0
Trichlorofluoromethane	0.511	0.545	0.010	6.5	50.0
1,1-Dichloroethene	0.306	0.317	0.010	3.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.323	0.344	0.010	6.4	50.0
Acetone	0.014	0.011	0.010	-19.4	50.0
Carbon disulfide	0.986	1.012	0.010	2.6	50.0
Methyl acetate	0.053	0.047	0.010	-10.0	50.0
Methylene chloride	0.250	0.254	0.010	1.6	50.0
trans-1,2-Dichloroethene	0.326	0.342	0.010	5.2	50.0
Methyl tert-butyl ether	0.397	0.367	0.010	-7.6	50.0
1,1-Dichloroethane	0.597	0.626	0.010	5.0	50.0
cis-1,2-Dichloroethene	0.316	0.324	0.010	2.7	50.0
2-Butanone	0.028	0.025	0.010	-9.6	50.0
Bromochloromethane	0.090	0.091	0.010	1.4	50.0
Chloroform	0.500	0.524	0.010	4.8	50.0
1,1,1-Trichloroethane	0.625	0.666	0.010	6.7	50.0
Cyclohexane	0.890	0.940	0.010	5.7	50.0
Carbon tetrachloride	0.522	0.553	0.010	6.0	50.0
Benzene	1.820	1.879	0.010	3.2	50.0
1,2-Dichloroethane	0.206	0.210	0.010	2.1	50.0
Trichloroethene	0.427	0.456	0.010	6.8	50.0
Methylcyclohexane	0.679	0.724	0.010	6.5	50.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/08/2010 Time: 1757

Lab File ID: JAQ05EC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005MJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.373	0.386	0.010	3.3	50.0
Bromodichloromethane	0.386	0.392	0.010	1.6	50.0
cis-1,3-Dichloropropene	0.500	0.502	0.010	0.5	50.0
4-Methyl-2-pentanone	0.096	0.092	0.010	-4.4	50.0
Toluene	1.916	1.972	0.010	2.9	50.0
trans-1,3-Dichloropropene	0.343	0.345	0.010	0.7	50.0
1,1,2-Trichloroethane	0.156	0.157	0.010	0.2	50.0
Tetrachloroethene	0.340	0.357	0.010	5.2	50.0
2-Hexanone	0.061	0.059	0.010	-3.6	50.0
Dibromochloromethane	0.182	0.183	0.010	0.8	50.0
1,2-Dibromoethane	0.137	0.136	0.010	-0.9	50.0
Chlorobenzene	1.014	1.036	0.010	2.2	50.0
Ethylbenzene	2.128	2.234	0.010	5.0	50.0
o-Xylene	0.730	0.754	0.010	3.3	50.0
m,p-Xylene	0.793	0.826	0.010	4.2	50.0
Styrene	1.070	1.088	0.010	1.8	50.0
Bromoform	0.191	0.191	0.010	0.3	50.0
Isopropylbenzene	2.040	2.155	0.010	5.7	50.0
1,1,2,2-Tetrachloroethane	0.147	0.139	0.010	-4.9	50.0
1,3-Dichlorobenzene	1.634	1.655	0.010	1.3	50.0
1,4-Dichlorobenzene	1.560	1.563	0.010	0.2	50.0
1,2-Dichlorobenzene	1.209	1.214	0.010	0.5	50.0
1,2-Dibromo-3-chloropropane	0.050	0.041	0.010	-17.9	50.0
1,2,4-Trichlorobenzene	0.553	0.540	0.010	-2.4	50.0
1,2,3-Trichlorobenzene	0.369	0.360	0.010	-2.4	50.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/08/2010 Time: 1757

Lab File ID: JAQ05EC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005MJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.411	0.437	0.010	6.3	50.0
Chloroethane-d5	0.310	0.332	0.010	7.0	50.0
1,1-Dichloroethene-d2	0.683	0.726	0.010	6.3	50.0
2-Butanone-d5	0.027	0.025	0.010	-7.4	50.0
Chloroform-d	0.541	0.549	0.010	1.6	50.0
1,2-Dichloroethane-d4	0.169	0.172	0.010	1.8	50.0
Benzene-d6	1.760	1.812	0.010	3.0	50.0
1,2-Dichloropropane-d6	0.499	0.503	0.010	0.9	50.0
Toluene-d8	1.583	1.674	0.010	5.7	50.0
trans-1,3-Dichloropropene-d4	0.312	0.313	0.010	0.6	50.0
2-Hexanone-d5	0.033	0.029	0.010	-13.1	50.0
1,1,2,2-Tetrachloroethane-d2	0.151	0.144	0.010	-4.8	50.0
1,2-Dichlorobenzene-d4	0.764	0.773	0.010	1.2	50.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/09/2010 Time: 0806

Lab File ID: JAQ002FV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JN Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.425	0.428	0.010	0.7	40.0
Chloromethane	0.451	0.475	0.010	5.5	40.0
Vinyl chloride	0.454	0.480	0.100	5.6	30.0
Bromomethane	0.171	0.182	0.100	6.1	30.0
Chloroethane	0.263	0.275	0.010	4.6	40.0
Trichlorofluoromethane	0.511	0.527	0.010	3.0	40.0
1,1-Dichloroethene	0.306	0.299	0.100	-2.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.323	0.326	0.010	0.8	40.0
Acetone	0.014	0.012	0.010	-15.9	40.0
Carbon disulfide	0.986	0.964	0.010	-2.3	40.0
Methyl acetate	0.053	0.048	0.010	-9.2	40.0
Methylene chloride	0.250	0.243	0.010	-2.8	40.0
trans-1,2-Dichloroethene	0.326	0.319	0.010	-2.0	40.0
Methyl tert-butyl ether	0.397	0.356	0.010	-10.2	40.0
1,1-Dichloroethane	0.597	0.597	0.200	0.0	30.0
cis-1,2-Dichloroethene	0.316	0.312	0.010	-1.1	40.0
2-Butanone	0.028	0.025	0.010	-10.8	40.0
Bromochloromethane	0.090	0.087	0.050	-3.0	30.0
Chloroform	0.500	0.499	0.200	-0.2	30.0
1,1,1-Trichloroethane	0.625	0.639	0.100	2.2	30.0
Cyclohexane	0.890	0.922	0.010	3.6	40.0
Carbon tetrachloride	0.522	0.536	0.100	2.7	30.0
Benzene	1.820	1.834	0.400	0.8	30.0
1,2-Dichloroethane	0.206	0.201	0.100	-2.3	30.0
Trichloroethene	0.427	0.432	0.300	1.3	30.0
Methylcyclohexane	0.679	0.706	0.010	3.9	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/09/2010 Time: 0806

Lab File ID: JAQ002FV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JN Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.373	0.372	0.010	-0.3	40.0
Bromodichloromethane	0.386	0.380	0.200	-1.6	30.0
cis-1,3-Dichloropropene	0.500	0.495	0.200	-0.9	30.0
4-Methyl-2-pentanone	0.096	0.089	0.010	-7.8	40.0
Toluene	1.916	1.929	0.400	0.7	30.0
trans-1,3-Dichloropropene	0.343	0.338	0.100	-1.4	30.0
1,1,2-Trichloroethane	0.156	0.149	0.100	-4.3	30.0
Tetrachloroethene	0.340	0.345	0.100	1.7	30.0
2-Hexanone	0.061	0.056	0.010	-8.6	40.0
Dibromochloromethane	0.182	0.175	0.100	-3.7	30.0
1,2-Dibromoethane	0.137	0.131	0.010	-4.0	30.0
Chlorobenzene	1.014	0.992	0.500	-2.2	30.0
Ethylbenzene	2.128	2.180	0.100	2.5	30.0
o-Xylene	0.730	0.721	0.300	-1.2	30.0
m,p-Xylene	0.793	0.821	0.300	3.5	30.0
Styrene	1.070	1.071	0.300	0.2	30.0
Bromoform	0.191	0.192	0.050	0.4	30.0
Isopropylbenzene	2.040	2.103	0.010	3.1	40.0
1,1,2,2-Tetrachloroethane	0.147	0.137	0.100	-6.7	30.0
1,3-Dichlorobenzene	1.634	1.607	0.400	-1.6	30.0
1,4-Dichlorobenzene	1.560	1.544	0.400	-1.1	30.0
1,2-Dichlorobenzene	1.209	1.182	0.400	-2.2	30.0
1,2-Dibromo-3-chloropropane	0.050	0.042	0.010	-15.9	40.0
1,2,4-Trichlorobenzene	0.553	0.535	0.200	-3.3	30.0
1,2,3-Trichlorobenzene	0.369	0.357	0.200	-3.3	30.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/09/2010 Time: 0806

Lab File ID: JAQ002FV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JN Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.411	0.420	0.010	2.1	30.0
Chloroethane-d5	0.310	0.322	0.010	3.8	40.0
1,1-Dichloroethene-d2	0.683	0.700	0.010	2.5	30.0
2-Butanone-d5	0.027	0.023	0.010	-13.0	40.0
Chloroform-d	0.541	0.530	0.010	-1.9	30.0
1,2-Dichloroethane-d4	0.169	0.166	0.010	-2.0	30.0
Benzene-d6	1.760	1.759	0.400	-0.0	30.0
1,2-Dichloropropane-d6	0.499	0.441	0.010	-11.6	40.0
Toluene-d8	1.583	1.619	0.010	2.2	30.0
trans-1,3-Dichloropropene-d4	0.312	0.302	0.010	-3.1	30.0
2-Hexanone-d5	0.033	0.028	0.010	-15.5	40.0
1,1,2,2-Tetrachloroethane-d2	0.151	0.137	0.010	-9.2	30.0
1,2-Dichlorobenzene-d4	0.764	0.760	0.010	-0.6	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/09/2010 Time: 1740

Lab File ID: JAQ05FC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005NJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.425	0.425	0.010	0.1	50.0
Chloromethane	0.451	0.482	0.010	7.0	50.0
Vinyl chloride	0.454	0.468	0.010	3.0	50.0
Bromomethane	0.171	0.166	0.010	-3.3	50.0
Chloroethane	0.263	0.268	0.010	1.9	50.0
Trichlorofluoromethane	0.511	0.510	0.010	-0.3	50.0
1,1-Dichloroethene	0.306	0.299	0.010	-2.2	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.323	0.329	0.010	1.7	50.0
Acetone	0.014	0.012	0.010	-15.4	50.0
Carbon disulfide	0.986	0.956	0.010	-3.1	50.0
Methyl acetate	0.053	0.048	0.010	-9.4	50.0
Methylene chloride	0.250	0.248	0.010	-1.1	50.0
trans-1,2-Dichloroethene	0.326	0.322	0.010	-1.0	50.0
Methyl tert-butyl ether	0.397	0.368	0.010	-7.2	50.0
1,1-Dichloroethane	0.597	0.593	0.010	-0.6	50.0
cis-1,2-Dichloroethene	0.316	0.308	0.010	-2.5	50.0
2-Butanone	0.028	0.026	0.010	-6.4	50.0
Bromochloromethane	0.090	0.086	0.010	-4.4	50.0
Chloroform	0.500	0.498	0.010	-0.6	50.0
1,1,1-Trichloroethane	0.625	0.631	0.010	1.0	50.0
Cyclohexane	0.890	0.894	0.010	0.5	50.0
Carbon tetrachloride	0.522	0.528	0.010	1.1	50.0
Benzene	1.820	1.817	0.010	-0.2	50.0
1,2-Dichloroethane	0.206	0.203	0.010	-1.3	50.0
Trichloroethene	0.427	0.430	0.010	0.7	50.0
Methylcyclohexane	0.679	0.700	0.010	3.1	50.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/09/2010 Time: 1740

Lab File ID: JAQ05FC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005NJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.373	0.374	0.010	0.2	50.0
Bromodichloromethane	0.386	0.380	0.010	-1.7	50.0
cis-1,3-Dichloropropene	0.500	0.493	0.010	-1.3	50.0
4-Methyl-2-pentanone	0.096	0.092	0.010	-4.3	50.0
Toluene	1.916	1.902	0.010	-0.7	50.0
trans-1,3-Dichloropropene	0.343	0.342	0.010	-0.3	50.0
1,1,2-Trichloroethane	0.156	0.151	0.010	-3.1	50.0
Tetrachloroethene	0.340	0.347	0.010	2.1	50.0
2-Hexanone	0.061	0.059	0.010	-3.1	50.0
Dibromochloromethane	0.182	0.181	0.010	-0.4	50.0
1,2-Dibromoethane	0.137	0.132	0.010	-3.5	50.0
Chlorobenzene	1.014	1.019	0.010	0.6	50.0
Ethylbenzene	2.128	2.131	0.010	0.2	50.0
o-Xylene	0.730	0.724	0.010	-0.8	50.0
m,p-Xylene	0.793	0.800	0.010	0.9	50.0
Styrene	1.070	1.064	0.010	-0.5	50.0
Bromoform	0.191	0.180	0.010	-5.6	50.0
Isopropylbenzene	2.040	2.085	0.010	2.2	50.0
1,1,2,2-Tetrachloroethane	0.147	0.144	0.010	-1.7	50.0
1,3-Dichlorobenzene	1.634	1.571	0.010	-3.8	50.0
1,4-Dichlorobenzene	1.560	1.508	0.010	-3.4	50.0
1,2-Dichlorobenzene	1.209	1.154	0.010	-4.5	50.0
1,2-Dibromo-3-chloropropane	0.050	0.040	0.010	-19.3	50.0
1,2,4-Trichlorobenzene	0.553	0.538	0.010	-2.6	50.0
1,2,3-Trichlorobenzene	0.369	0.383	0.010	3.7	50.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/09/2010 Time: 1740

Lab File ID: JAQ05FC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005NJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.411	0.413	0.010	0.4	50.0
Chloroethane-d5	0.310	0.322	0.010	3.8	50.0
1,1-Dichloroethene-d2	0.683	0.686	0.010	0.5	50.0
2-Butanone-d5	0.027	0.026	0.010	-4.8	50.0
Chloroform-d	0.541	0.533	0.010	-1.3	50.0
1,2-Dichloroethane-d4	0.169	0.167	0.010	-1.4	50.0
Benzene-d6	1.760	1.744	0.010	-0.9	50.0
1,2-Dichloropropane-d6	0.499	0.494	0.010	-1.1	50.0
Toluene-d8	1.583	1.598	0.010	0.9	50.0
trans-1,3-Dichloropropene-d4	0.312	0.308	0.010	-1.3	50.0
2-Hexanone-d5	0.033	0.030	0.010	-11.3	50.0
1,1,2,2-Tetrachloroethane-d2	0.151	0.140	0.010	-7.9	50.0
1,2-Dichlorobenzene-d4	0.764	0.748	0.010	-2.1	50.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/10/2010 Time: 1015

Lab File ID: JAQ005GV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JO Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.425	0.427	0.010	0.6	40.0
Chloromethane	0.451	0.479	0.010	6.4	40.0
Vinyl chloride	0.454	0.477	0.100	4.9	30.0
Bromomethane	0.171	0.185	0.100	7.8	30.0
Chloroethane	0.263	0.268	0.010	2.0	40.0
Trichlorofluoromethane	0.511	0.523	0.010	2.2	40.0
1,1-Dichloroethene	0.306	0.305	0.100	-0.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.323	0.333	0.010	2.9	40.0
Acetone	0.014	0.012	0.010	-15.6	40.0
Carbon disulfide	0.986	0.977	0.010	-1.0	40.0
Methyl acetate	0.053	0.046	0.010	-12.3	40.0
Methylene chloride	0.250	0.240	0.010	-4.2	40.0
trans-1,2-Dichloroethene	0.326	0.333	0.010	2.4	40.0
Methyl tert-butyl ether	0.397	0.356	0.010	-10.2	40.0
1,1-Dichloroethane	0.597	0.611	0.200	2.4	30.0
cis-1,2-Dichloroethene	0.316	0.313	0.010	-0.8	40.0
2-Butanone	0.028	0.024	0.010	-13.6	40.0
Bromochloromethane	0.090	0.087	0.050	-2.4	30.0
Chloroform	0.500	0.509	0.200	1.7	30.0
1,1,1-Trichloroethane	0.625	0.644	0.100	3.1	30.0
Cyclohexane	0.890	0.933	0.010	4.8	40.0
Carbon tetrachloride	0.522	0.543	0.100	4.1	30.0
Benzene	1.820	1.838	0.400	1.0	30.0
1,2-Dichloroethane	0.206	0.203	0.100	-1.3	30.0
Trichloroethene	0.427	0.442	0.300	3.6	30.0
Methylcyclohexane	0.679	0.716	0.010	5.4	40.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/10/2010 Time: 1015

Lab File ID: JAQ005GV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JO Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.373	0.370	0.010	-0.8	40.0
Bromodichloromethane	0.386	0.380	0.200	-1.6	30.0
cis-1,3-Dichloropropene	0.500	0.497	0.200	-0.6	30.0
4-Methyl-2-pentanone	0.096	0.089	0.010	-7.2	40.0
Toluene	1.916	1.932	0.400	0.9	30.0
trans-1,3-Dichloropropene	0.343	0.336	0.100	-1.9	30.0
1,1,2-Trichloroethane	0.156	0.152	0.100	-2.7	30.0
Tetrachloroethene	0.340	0.361	0.100	6.3	30.0
2-Hexanone	0.061	0.057	0.010	-6.7	40.0
Dibromochloromethane	0.182	0.180	0.100	-1.0	30.0
1,2-Dibromoethane	0.137	0.132	0.010	-3.7	30.0
Chlorobenzene	1.014	1.013	0.500	-0.0	30.0
Ethylbenzene	2.128	2.168	0.100	1.9	30.0
o-Xylene	0.730	0.731	0.300	0.2	30.0
m,p-Xylene	0.793	0.817	0.300	3.0	30.0
Styrene	1.070	1.077	0.300	0.7	30.0
Bromoform	0.191	0.186	0.050	-2.6	30.0
Isopropylbenzene	2.040	2.122	0.010	4.0	40.0
1,1,2,2-Tetrachloroethane	0.147	0.132	0.100	-9.9	30.0
1,3-Dichlorobenzene	1.634	1.618	0.400	-0.9	30.0
1,4-Dichlorobenzene	1.560	1.531	0.400	-1.9	30.0
1,2-Dichlorobenzene	1.209	1.162	0.400	-3.9	30.0
1,2-Dibromo-3-chloropropane	0.050	0.040	0.010	-19.5	40.0
1,2,4-Trichlorobenzene	0.553	0.525	0.200	-5.0	30.0
1,2,3-Trichlorobenzene	0.369	0.346	0.200	-6.4	30.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/10/2010 Time: 1015

Lab File ID: JAQ005GV Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JO Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.411	0.417	0.010	1.4	30.0
Chloroethane-d5	0.310	0.325	0.010	4.9	40.0
1,1-Dichloroethene-d2	0.683	0.704	0.010	3.1	30.0
2-Butanone-d5	0.027	0.023	0.010	-14.0	40.0
Chloroform-d	0.541	0.533	0.010	-1.5	30.0
1,2-Dichloroethane-d4	0.169	0.160	0.010	-5.1	30.0
Benzene-d6	1.760	1.784	0.400	1.4	30.0
1,2-Dichloropropane-d6	0.499	0.440	0.010	-11.8	40.0
Toluene-d8	1.583	1.623	0.010	2.5	30.0
trans-1,3-Dichloropropene-d4	0.312	0.304	0.010	-2.4	30.0
2-Hexanone-d5	0.033	0.028	0.010	-16.9	40.0
1,1,2,2-Tetrachloroethane-d2	0.151	0.137	0.010	-9.5	30.0
1,2-Dichlorobenzene-d4	0.764	0.755	0.010	-1.1	30.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/10/2010 Time: 1925

Lab File ID: JAQ05GC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005OJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.425	0.414	0.010	-2.4	50.0
Chloromethane	0.451	0.491	0.010	9.0	50.0
Vinyl chloride	0.454	0.479	0.010	5.4	50.0
Bromomethane	0.171	0.177	0.010	3.2	50.0
Chloroethane	0.263	0.271	0.010	3.1	50.0
Trichlorofluoromethane	0.511	0.516	0.010	1.0	50.0
1,1-Dichloroethene	0.306	0.312	0.010	2.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.323	0.328	0.010	1.5	50.0
Acetone	0.014	0.013	0.010	-11.0	50.0
Carbon disulfide	0.986	0.952	0.010	-3.4	50.0
Methyl acetate	0.053	0.045	0.010	-14.5	50.0
Methylene chloride	0.250	0.247	0.010	-1.2	50.0
trans-1,2-Dichloroethene	0.326	0.327	0.010	0.4	50.0
Methyl tert-butyl ether	0.397	0.353	0.010	-11.0	50.0
1,1-Dichloroethane	0.597	0.612	0.010	2.6	50.0
cis-1,2-Dichloroethene	0.316	0.310	0.010	-1.7	50.0
2-Butanone	0.028	0.025	0.010	-10.1	50.0
Bromochloromethane	0.090	0.086	0.010	-3.4	50.0
Chloroform	0.500	0.509	0.010	1.8	50.0
1,1,1-Trichloroethane	0.625	0.654	0.010	4.7	50.0
Cyclohexane	0.890	0.936	0.010	5.1	50.0
Carbon tetrachloride	0.522	0.549	0.010	5.2	50.0
Benzene	1.820	1.855	0.010	1.9	50.0
1,2-Dichloroethane	0.206	0.201	0.010	-2.1	50.0
Trichloroethene	0.427	0.447	0.010	4.9	50.0
Methylcyclohexane	0.679	0.725	0.010	6.8	50.0

Report 1,4-Dioxane for Low-Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/10/2010 Time: 1925

Lab File ID: JAQ05GC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005OJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.373	0.375	0.010	0.4	50.0
Bromodichloromethane	0.386	0.380	0.010	-1.5	50.0
cis-1,3-Dichloropropene	0.500	0.501	0.010	0.3	50.0
4-Methyl-2-pentanone	0.096	0.092	0.010	-4.5	50.0
Toluene	1.916	1.951	0.010	1.9	50.0
trans-1,3-Dichloropropene	0.343	0.336	0.010	-2.0	50.0
1,1,2-Trichloroethane	0.156	0.154	0.010	-1.6	50.0
Tetrachloroethene	0.340	0.352	0.010	3.6	50.0
2-Hexanone	0.061	0.058	0.010	-4.7	50.0
Dibromochloromethane	0.182	0.178	0.010	-2.1	50.0
1,2-Dibromoethane	0.137	0.130	0.010	-4.8	50.0
Chlorobenzene	1.014	1.028	0.010	1.4	50.0
Ethylbenzene	2.128	2.182	0.010	2.6	50.0
o-Xylene	0.730	0.729	0.010	-0.1	50.0
m,p-Xylene	0.793	0.814	0.010	2.7	50.0
Styrene	1.070	1.089	0.010	1.8	50.0
Bromoform	0.191	0.184	0.010	-3.6	50.0
Isopropylbenzene	2.040	2.118	0.010	3.8	50.0
1,1,2,2-Tetrachloroethane	0.147	0.135	0.010	-8.0	50.0
1,3-Dichlorobenzene	1.634	1.612	0.010	-1.3	50.0
1,4-Dichlorobenzene	1.560	1.531	0.010	-1.9	50.0
1,2-Dichlorobenzene	1.209	1.157	0.010	-4.3	50.0
1,2-Dibromo-3-chloropropane	0.050	0.044	0.010	-11.6	50.0
1,2,4-Trichlorobenzene	0.553	0.533	0.010	-3.6	50.0
1,2,3-Trichlorobenzene	0.369	0.359	0.010	-2.6	50.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

Instrument ID: J.i Calibration Date: 04/10/2010 Time: 1925

Lab File ID: JAQ05GC1 Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005OJ Init. Calib. Time(s): 1318 1505

Heated Purge: (Y/N)N GC Column: DB-624 ID: 0.53 (mm) Length: 75 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl chloride-d3	0.411	0.424	0.010	3.2	50.0
Chloroethane-d5	0.310	0.324	0.010	4.4	50.0
1,1-Dichloroethene-d2	0.683	0.696	0.010	1.9	50.0
2-Butanone-d5	0.027	0.025	0.010	-8.5	50.0
Chloroform-d	0.541	0.543	0.010	0.3	50.0
1,2-Dichloroethane-d4	0.169	0.163	0.010	-3.7	50.0
Benzene-d6	1.760	1.790	0.010	1.7	50.0
1,2-Dichloropropane-d6	0.499	0.498	0.010	-0.1	50.0
Toluene-d8	1.583	1.628	0.010	2.8	50.0
trans-1,3-Dichloropropene-d4	0.312	0.300	0.010	-3.8	50.0
2-Hexanone-d5	0.033	0.030	0.010	-10.5	50.0
1,1,2,2-Tetrachloroethane-d2	0.151	0.144	0.010	-4.7	50.0
1,2-Dichlorobenzene-d4	0.764	0.759	0.010	-0.6	50.0

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

GC Column: DB-624 ID: 0.53 (mm) Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JM Date Analyzed: 04/08/2010

Lab File ID (Standard): JAQ005EV Time Analyzed: 0852

Instrument ID: J.i Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	IS1(CBZ) RT #	IS2(DFB) AREA #	IS2(DFB) RT #	IS3(DCB) AREA #	IS3(DCB) RT #
	12 HOUR STD	820650	9.06	1111337	5.68	333261	11.89
	UPPER LIMIT	1148910	9.39	1555872	6.01	466565	12.23
	LOWER LIMIT	492390	8.72	666802	5.34	199957	11.56
	EPA SAMPLE NO.						
01	VBLKJM	802133	9.06	1059626	5.67	312955	11.89
02	QCTBW27185	787050	9.06	1076681	5.68	310257	11.89
03	PMP3W27182	819318	9.06	1099778	5.68	323574	11.89
04	PMP2W27181DL	790096	9.06	1038387	5.68	312663	11.89
05	PMP2W27181	803076	9.06	1067750	5.68	319241	11.89
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

GC Column: DB-624 ID: 0.53 (mm) Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JN Date Analyzed: 04/09/2010

Lab File ID (Standard): JAQ002FV Time Analyzed: 0806

Instrument ID: J.i Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(DCB) AREA #	RT #
	12 HOUR STD	787997	9.06	1047879	5.68	313821	11.89
	UPPER LIMIT	1103196	9.39	1467031	6.01	439349	12.23
	LOWER LIMIT	472798	8.72	628727	5.34	188293	11.56
	EPA SAMPLE NO.						
01	VBLKJN	771598	9.06	1033450	5.67	303403	11.89
02	MW02W27179DL	690449	9.06	952337	5.68	254964	11.89
03	MW02W27179	764334	9.06	1050642	5.67	306598	11.89
04							
05							
06							
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17							
18							
19							
20							
21							
22							

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CNTRALIA Mod. Ref No.: SDG No.: 136697

GC Column: DB-624 ID: 0.53 (mm) Init. Calib. Date(s): 04/05/2010 04/05/2010

EPA Sample No.(VSTD#####): VSTD005JO Date Analyzed: 04/10/2010

Lab File ID (Standard): JAQ005GV Time Analyzed: 1015

Instrument ID: J.i Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(DCB) AREA #	RT #
	12 HOUR STD	760486	9.06	1009953	5.67	305122	11.89
	UPPER LIMIT	1064680	9.39	1413934	6.01	427171	12.23
	LOWER LIMIT	456292	8.72	605972	5.34	183073	11.56
	EPA SAMPLE NO.						
01	VBLKJO	758797	9.06	998354	5.68	298160	11.89
02	VHBLK01	667924	9.05	948847	5.68	251933	11.89
03							
04							
05							
06							
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19							
20							
21							
22							

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CASE NARRATIVE

Client: Argonne National Laboratory

Project: CENTRALIA (200-1629)

Report Number: 200-1629-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Receipt

The samples were received on 9/21/2010. 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, as received, were not acid preserved. On that basis, the laboratory did provide for the analytical work to be performed within seven days of sample collection.

SOM01.2 Volatile Organics (Trace Level Water)

A storage blank was prepared for volatile organics analysis, and stored in association with the storage of the samples. That storage blank, identified as VHBLK01, was carried through the holding period with the samples, and analyzed.

Each sample was analyzed without a dilution. Each of the analyses associated with the sample set exhibited an acceptable internal standard performance. There was an acceptable recovery of each deuterated monitoring compound (DMC) in the analysis of the method blanks associated with the analytical work, and in the analysis of the storage blank associated with the sample set. The analysis of the samples in this sample set did meet the technical acceptance criteria specific to DMC recoveries, although not all DMC recoveries were within the control range in each analysis. The technical acceptance criteria does provide for the recovery of up to three DMCs to fall outside of the control range in the analysis of field samples. Matrix spike and matrix spike duplicate analyses were not performed on samples in this sample set. Trace concentrations of acetone and 1,2,3-trichlorobenzene were identified in the analysis of each method blank associated with the analytical work. The concentration of each compound in each analysis was below the established reporting limit, and each analysis did meet the technical acceptance criteria for a compliant method blank analysis. A trace concentration of

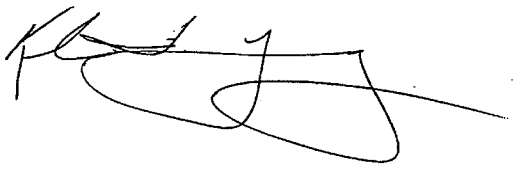
acetone was identified in the analysis of the storage blank associated with the sample set. The concentration of acetone in that analysis was below the established reporting limit, and the analysis did meet the technical acceptance criteria for a compliant storage blank analysis. Present in the method blank and storage blank analyses was a non-target constituent that represents a compound that is related to the DMC formulation. The fact that the presence of this compound is not within the laboratory's control is at issue. The derived results for that compound have been qualified with an "X" qualifier to reflect the source of the contamination.

The responses for each of the target analytes met the relative standard deviation criterion in the initial calibration. The response for each target analyte met the percent difference criterion in each continuing calibration check acquisition. The response for each target analyte met the 50.0 percent difference criterion in each closing calibration check acquisition.

The primary quantitation mass for methylcyclohexane that is specified in the Statement of Work is mass 83. The laboratory did identify a contribution to mass 83 from 1,2-dichloropropane-d_6, one of the deuterated monitoring compounds (DMCs). The laboratory did change the primary quantitation mass assignment to mass 55 for the quantification of methylcyclohexane.

Manual integration was employed in deriving certain of the analytical results. The values that have been derived from manual integration are qualified on the quantitation reports. Extracted ion current profiles for each manual integration are included in the data package, and further documented in the Sample Preparation section of this submittal.

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.



Kirk F. Young
Project Manager

MATRIX: Water
RECEIVING LAB: Test America
PROJECT/SITE: Centralia KS
SAMPLER(S) (Signature)

ARGONNE NATIONAL LABORATORY
CHAIN OF CUSTODY RECORD*

Shipping Container No.
Shipping Info:
ANL Field Contact (Name & Temporary Phone): Dave Swygnier G30 408 7114

DATE OF COLLECTION	SAMPLE ID NUMBER(S)	Number of containers	ANALYSIS: VOC	REMARKS
Sept 19, 2010	CNMW08-W-27193	2	2	2 x 40 mL for VOC
Sept 19, 2010	CNSB09-W-27201	2	2	
Sept 20, 2010	CNMW06-W-27191	2	2	
Sept 20, 2010	CNMW07-W-27192	2	2	
Sept 20, 2010	CNQCTB-W-27216	2	2	2 x 40 mL for VOC

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	9/20/10	12:52					

Relinquished by (Signature)	Date	Time	Received for laboratory by	Date	Time	Remarks
				9/21/10	1010	

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:
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

ER-160 (12-94)

Burlington Facility
Internal Chain of Custody Log (ICOC)

Project Information:	
LOG-IN NUMBER: 200-1629	Method: SOM01.2_Vol_Trace
CLIENT: Argonne	LAB IDs: 200-1629-1 thru 200-1629-5

Samples associated with this Log-in were placed into storage on 09/21/10 (Date) 1600 (Time[2]) by: *Sample Custodian Signature*

Storage Location: VOA Refrigerator B, Shelf 8 *Specify storage location (refrigerator, freezer ID or lab location) for original sample containers*

Storage Condition: ✓ Refrigeration ___ Frozen ___ Ambient

Internal Transfer Information

Sample Type		Lab ID(s)	Transfer	Transfer	Purpose of Transfer			Relinquished	Received	Storage Location
Original	Prepared[1]		Date	Time[2]	Prep	Analysis	Storage	By:	By:	Prepared Sample[1]
✓		1-5	9-21-10	1635	✓			Thomas Jackson	Thomas Jackson	VOA Prep
✓		1-5	9-21-10	1653			✓	Thomas Jackson	Thomas Jackson	VOA Fridge
✓		1	9/23/10	1615		✓		JH	JH	Analysis
✓		1	9/23/10	1630			✓	JH	JH	Storage

[1] Extract, digestate, or any other prepared sample that is no longer in original sample container

[2] Military Time

Burlington Facility
Internal Chain of Custody Log (ICOC)

Project Information:	
LOG-IN NUMBER: 200-1629	Method: HB-50M01.2 - Vol - Trace
CLIENT: Argonne	LAB IDs: 200-1629-6

Samples associated with this Log-in were placed into storage on 09/21/10 (Date) 1600 (Time[2]) by: _____ *Sample Custodian Signature*

Storage Location: VOA Refrigerator B, Shelf 8 *Specify storage location (refrigerator, freezer ID or lab location) for original sample containers*

Storage Condition: ✓ Refrigeration ___ Frozen ___ Ambient

Internal Transfer Information

Sample Type		Lab ID(s)	Transfer	Transfer	Purpose of Transfer			Relinquished	Received	Storage Location
Original	Prepared[1]		Date	Time[2]	Prep	Analysis	Storage	By:	By:	Prepared Sample[1]
✓		6	9-21-10	1635	✓			Thomas Jackson	Thomas Jackson	VOA Prep
✓		6	9-21-10	1653			✓	Thomas Jackson	Thomas Jackson	VOA Fridge
✓		"	9/24/10	0710		✓		TH	TH	Analysis
✓		"	9/24/10	0715			✓	TH	TH	Storage

[1] Extract, digestate, or any other prepared sample that is no longer in original sample container

[2] Military Time

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLKJF	101	101	77	103	102	108	105
02	CNMW08-S-27193	102	103	80	132	105	107	108
03	CNSB09-W-27201	98	100	78	123	103	110	104
04	CNMW06-W-27191	100	101	77	121	102	109	106
05	CNMW07-W-27192	102	102	79	152	105	108	109
06	CNQCTB-W-27216	98	100	78	212 *	100	106	106
07	VBLKJG	97	98	76	98	100	103	104
08	VHBLK01	104	105	81	104	103	107	109

		QC LIMITS
VDMC1	(VCL) = Vinyl Chloride-d3	(65-131)
VDMC2	(CLA) = Chloroethane-d5	(71-131)
VDMC3	(DCE) = 1,1-Dichloroethene-d2	(55-104)
VDMC4	(BUT) = 2-Butanone-d5	(49-155)
VDMC5	(CLF) = Chloroform-d	(78-121)
VDMC6	(DCA) = 1,2-Dichloroethane-d4	(78-129)
VDMC7	(BEN) = Benzene-d6	(77-124)

Column to be used to flag recovery values
* Values outside of contract required QC limits

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (TCA) #	VDMC13 (DCZ) #	OTHER	TOT OUT
01	VBLKJF	93	102	105	102	104	108		0
02	CNMW08-S-27193	96	106	103	115	110	112		0
03	CNSB09-W-27201	93	102	101	111	107	107		0
04	CNMW06-W-27191	93	103	100	107	105	109		0
05	CNMW07-W-27192	97	106	106	127	111	113		0
06	CNQCTB-W-27216	94	102	99	207 *	101	107		2
07	VBLKJG	91	100	99	95	101	103		0
08	VHBLK01	95	106	105	101	108	112		0

	QC LIMITS
VDMC8 (DPA) = 1,2-Dichloropropane-d6	(79-124)
VDMC9 (TOL) = Toluene-d8	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d4	(73-121)
VDMC11 (HEX) = 2-Hexanone-d5	(28-135)
VDMC12 (TCA) = 1,1,2,2-Tetrachloroethane-d2	(73-125)
VDMC13 (DCZ) = 1,2-Dichlorobenzene-d4	(80-131)

Column to be used to flag recovery values
* Values outside of contract required QC limits

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJF

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Lab File ID: JBMD04.D Lab Sample ID: MB 200-7052/4

Instrument ID: J.i

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 09/23/2010

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 1622

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	CNMW08-S-27193	200-1629-1	JBMD20.D	2358
02	CNSB09-W-27201	200-1629-2	JBMD21.D	0026
03	CNMW06-W-27191	200-1629-3	JBMD22.D	0054
04	CNMW07-W-27192	200-1629-4	JBMD23.D	0122
05	CNQCTB-W-27216	200-1629-5	JBMD24.D	0150

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKJG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Lab File ID: JBME04.D Lab Sample ID: MB 200-7048/4

Instrument ID: J.i

Matrix: (SOIL/SED/WATER) Water Date Analyzed: 09/24/2010

Level: (TRACE or LOW/MED) TRACE Time Analyzed: 0737

GC Column: DB-624 ID: 0.20 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VHBLK01	200-1629-6	JBME06.D	0842

COMMENTS: _____

5A - FORM V VOA
VOLATILE ORGANICS INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJB

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Lab File Id: JBM01.D BFB Injection Date: 09/21/2010

Instrument Id: J.i BFB Injection Time: 1417

GC Column: DB-624 ID: 0.20 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.2
75	30.0 - 80.0% of mass 95	51.0
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 120% of mass 95	88.5
175	5.0 - 9.0% of mass 174	6.3 (7.1)1
176	95.0 - 101% of mass 174	88.5 (100)1
177	5.0 - 9.0% of mass 176	5.8 (6.6)2

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.5JB	IC 200-6837/2	JBM02.D	09/21/2010	1435
02	VSTD001JB	IC 200-6837/3	JBM03.D	09/21/2010	1503
03	VSTD005JB	ICIS 200-6837/4	JBM04.D	09/21/2010	1531
04	VSTD010JB	IC 200-6837/5	JBM05.D	09/21/2010	1559
05	VSTD020JB	IC 200-6837/8	JBM08.D	09/21/2010	1724

5A - FORM V VOA
VOLATILE ORGANICS INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJF

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Lab File Id: JBMD01.D BFB Injection Date: 09/23/2010

Instrument Id: J.i BFB Injection Time: 1514

GC Column: DB-624 ID: 0.20 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.0
75	30.0 - 80.0% of mass 95	49.8
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	50.0 - 120% of mass 95	89.8
175	5.0 - 9.0% of mass 174	6.2 (6.9)1
176	95.0 - 101% of mass 174	89.4 (99.5)1
177	5.0 - 9.0% of mass 176	5.8 (6.5)2

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005JF	CCVIS 200-7052/2	JBMD02.D	09/23/2010	1526
02	VBLKJF	MB 200-7052/4	JBMD04.D	09/23/2010	1622
03	CNMW08-S-2 7193	200-1629-1	JBMD20.D	09/23/2010	2358
04	CNSB09-W-2 7201	200-1629-2	JBMD21.D	09/24/2010	0026
05	CNMW06-W-2 7191	200-1629-3	JBMD22.D	09/24/2010	0054
06	CNMW07-W-2 7192	200-1629-4	JBMD23.D	09/24/2010	0122
07	CNQCTB-W-2 7216	200-1629-5	JBMD24.D	09/24/2010	0150
08	VSTD005FJ	CCVC 200-7052/25	JBMD25.D	09/24/2010	0218

5A - FORM V VOA
VOLATILE ORGANICS INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.
BFBJG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Lab File Id: JBME01.D BFB Injection Date: 09/24/2010

Instrument Id: J.i BFB Injection Time: 0622

GC Column: DB-624 ID: 0.20 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 80.0% of mass 95	51.7
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	50.0 - 120% of mass 95	85.4
175	5.0 - 9.0% of mass 174	6.6 (7.8)1
176	95.0 - 101% of mass 174	84.3 (98.8)1
177	5.0 - 9.0% of mass 176	5.6 (6.7)2

1 - Value is %mass 174 2 - Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005JG	CCVIS 200-7048/2	JBME02.D	09/24/2010	0641
02	VBLKJG	MB 200-7048/4	JBME04.D	09/24/2010	0737
03	VHBLK01	200-1629-6	JBME06.D	09/24/2010	0842
04	VSTD005GJ	CCVC 200-7048/17	JBME17.D	09/24/2010	1354

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD005JF Date Analyzed: 09/23/2010

Lab File ID (Standard): JBMD02.D Time Analyzed: 1526

Instrument ID: J.i Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	581876		8.97		763681		5.59		261228		11.81	
	UPPER LIMIT	814626		9.30		1069153		5.92		365719		12.14	
	LOWER LIMIT	349126		8.64		458209		5.26		156737		11.48	
	EPA SAMPLE NO.												
01	VBLKJF	573613		8.97		757287		5.59		247010		11.80	
02	CNMW08-S-27193	565256		8.97		744353		5.60		238299		11.81	
03	CNSB09-W-27201	551114		8.97		715546		5.59		234562		11.81	
04	CNMW06-W-27191	558958		8.97		731368		5.60		236032		11.81	
05	CNMW07-W-27192	567640		8.97		747474		5.60		242014		11.81	
06	CNQCTB-W-27216	575409		8.97		761356		5.59		244530		11.81	

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

GC Column: DB-624 ID: 0.20 (mm) Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD#####): VSTD005JG Date Analyzed: 09/24/2010

Lab File ID (Standard): JBME02.D Time Analyzed: 0641

Instrument ID: J.i Heated Purge: (Y/N) N

		IS1 (CBZ) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (DCB) AREA	#	RT	#
	12 HOUR STD	588298		8.97		772826		5.59		266878		11.80	
	UPPER LIMIT	823617		9.30		1081956		5.92		373629		12.13	
	LOWER LIMIT	352979		8.64		463696		5.26		160127		11.47	
	EPA SAMPLE NO.												
01	VBLKJG	578406		8.97		761685		5.59		248197		11.81	
02	VHBLK01	543933		8.97		724734		5.59		226345		11.80	

IS1 (CBZ) = Chlorobenzene-d5
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = + 0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNMW06-W-27191

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-3

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD22.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	1.9	J B
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.15	J
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNMW06-W-27191

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-3

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD22.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.035	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CNMW06-W-27191

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-3

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD22.D

Level: (TRACE or LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	6.93	2.7	B X J
02	541-05-9	Cyclotrisiloxane, hexamethyl-	7.89	0.55	B J N
03	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNMW07-W-27192

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD23.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	2.3	J B
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	5.2	
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNMW07-W-27192

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD23.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CNMW07-W-27192

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD23.D

Level: (TRACE or LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	6.93	2.7	B X J
02	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNMW08-S-27193

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD20.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. Date Analyzed: 09/23/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	2.8	J B
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNMW08-S-27193

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD20.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/23/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CNMW08-S-27193

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-1

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD20.D

Level: (TRACE or LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/23/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	6.93	2.7	B X J
02	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNQCTB-W-27216

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-5

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD24.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	6.4	B
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.20	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNQCTB-W-27216

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-5

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD24.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.15	J
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.099	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.081	J
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.044	J
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.039	J
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CNQCTB-W-27216

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-5

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD24.D

Level: (TRACE or LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	6.93	2.6	B X J
02	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNSB09-W-27201

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-2

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD21.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	2.1	J B
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CNSB09-W-27201

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-2

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD21.D

Level: (TRACE/LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg)ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CNSB09-W-27201

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-2

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD21.D

Level: (TRACE or LOW/MED) TRACE Date Received: 09/21/2010

% Moisture: not dec. Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	6.93	2.7	B X J
02	541-05-9	Cyclotrisiloxane, hexamethyl-	7.89	0.60	B J N
03	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

6A - FORM VI VOA-1
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date(s): 09/21/2010 09/21/2010

Heated Purge: (Y/N) N Calibration Time(s): 1435 1724

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: RRF0.5 = JBM02.D RRF1.0 = JBM03.D

RRF5.0 = JBM04.D RRF10 = JBM05.D RRF20 = JBM08.D

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	$\overline{RRF}$	%RSD
Dichlorodifluoromethane	0.475	0.484	0.451	0.459	0.442	0.462	3.7
Chloromethane	0.426	0.401	0.361	0.348	0.328	0.373	10.8
Vinyl chloride	0.389	0.404	0.370	0.371	0.352	0.377	5.3
Bromomethane	0.228	0.221	0.198	0.200	0.203	0.210	6.5
Chloroethane	0.166	0.150	0.225	0.233	0.213	0.198	18.7
Trichlorofluoromethane	0.581	0.610	0.583	0.592	0.563	0.586	2.9
1,1-Dichloroethene	0.289	0.290	0.279	0.287	0.280	0.285	1.8
1,1,2-Trichloro-1,2,2-trifluoroethane	0.327	0.337	0.315	0.325	0.326	0.326	2.3
Acetone	0.016	0.016	0.011	0.011	0.011	0.013	21.7
Carbon disulfide	0.861	0.829	0.753	0.773	0.750	0.793	6.2
Methyl acetate	0.033	0.044	0.035	0.035	0.035	0.037	12.0
Methylene Chloride	0.211	0.211	0.215	0.217	0.209	0.213	1.6
trans-1,2-Dichloroethene	0.305	0.311	0.297	0.305	0.297	0.303	2.0
Methyl tert-butyl ether	0.311	0.336	0.321	0.333	0.323	0.325	3.1
1,1-Dichloroethane	0.480	0.528	0.487	0.502	0.481	0.496	4.0
cis-1,2-Dichloroethene	0.286	0.295	0.286	0.291	0.283	0.288	1.7
2-Butanone	0.018	0.020	0.019	0.019	0.019	0.019	4.1
Bromochloromethane	0.084	0.091	0.086	0.085	0.084	0.086	3.4
Chloroform	0.474	0.506	0.467	0.481	0.468	0.479	3.4
1,1,1-Trichloroethane	0.662	0.692	0.668	0.689	0.643	0.671	3.0
Cyclohexane	0.654	0.674	0.663	0.679	0.636	0.661	2.6
Carbon tetrachloride	0.589	0.622	0.610	0.629	0.599	0.610	2.7
Benzene	1.492	1.607	1.562	1.599	1.514	1.555	3.3
1,2-Dichloroethane	0.192	0.196	0.190	0.201	0.192	0.194	2.2
Trichloroethene	0.423	0.428	0.417	0.428	0.399	0.419	2.9
Methylcyclohexane	0.517	0.551	0.536	0.539	0.515	0.532	2.9

Report 1,4-Dioxane for Low-Medium VOA analysis only

6B - FORM VI VOA-2
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date(s): 09/21/2010 09/21/2010

Heated Purge: (Y/N) N Calibration Time(s): 1435 1724

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: RRF0.5 = JBM02.D RRF1.0 = JBM03.D

RRF5.0 = JBM04.D RRF10 = JBM05.D RRF20 = JBM08.D

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	$\overline{RRF}$	%RSD
1,2-Dichloropropane	0.262	0.296	0.287	0.301	0.282	0.286	5.2
Bromodichloromethane	0.314	0.351	0.353	0.353	0.344	0.343	4.8
cis-1,3-Dichloropropene	0.394	0.406	0.418	0.433	0.420	0.414	3.5
4-Methyl-2-pentanone	0.056	0.064	0.063	0.066	0.062	0.062	6.4
Toluene	1.605	1.697	1.663	1.702	1.646	1.663	2.4
trans-1,3-Dichloropropene	0.256	0.287	0.295	0.306	0.297	0.288	6.7
1,1,2-Trichloroethane	0.117	0.148	0.145	0.145	0.133	0.138	9.3
Tetrachloroethene	0.368	0.381	0.378	0.384	0.365	0.375	2.2
2-Hexanone	0.051	0.048	0.043	0.044	0.041	0.045	9.7
Dibromochloromethane	0.153	0.178	0.183	0.183	0.186	0.177	7.7
1,2-Dibromoethane	0.120	0.128	0.132	0.135	0.124	0.128	4.6
Chlorobenzene	0.963	1.022	0.976	1.005	0.964	0.986	2.7
Ethylbenzene	1.835	1.939	1.953	2.017	1.966	1.942	3.4
o-Xylene	0.623	0.659	0.679	0.700	0.676	0.667	4.4
m,p-Xylene	0.704	0.742	0.750	0.782	0.752	0.746	3.8
Styrene	0.843	0.908	0.965	1.030	1.002	0.950	7.9
Bromoform	0.174	0.161	0.181	0.165	0.181	0.172	5.3
Isopropylbenzene	1.847	1.942	1.997	2.070	2.014	1.974	4.3
1,1,2,2-Tetrachloroethane	0.114	0.124	0.126	0.126	0.120	0.122	4.3
1,3-Dichlorobenzene	1.498	1.516	1.496	1.507	1.482	1.500	0.9
1,4-Dichlorobenzene	1.507	1.528	1.457	1.468	1.422	1.476	2.8
1,2-Dichlorobenzene	1.040	1.100	1.099	1.114	1.078	1.086	2.7
1,2-Dibromo-3-Chloropropane	0.035	0.036	0.036	0.036	0.034	0.035	3.0
1,2,4-Trichlorobenzene	0.674	0.720	0.684	0.712	0.684	0.695	2.8
1,2,3-Trichlorobenzene	0.429	0.455	0.432	0.456	0.426	0.440	3.4

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date(s): 09/21/2010 09/21/2010

Heated Purge: (Y/N) N Calibration Time(s): 1435 1724

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.20 (mm) Length: 25 (m)

LAB FILE ID: RRF0.5 = JBM02.D RRF1.0 = JBM03.D

RRF5.0 = JBM04.D RRF10 = JBM05.D RRF20 = JBM08.D

COMPOUND	RRF0.5	RRF1.0	RRF5.0	RRF10	RRF20	$\overline{RRF}$	%RSD
Vinyl Chloride-d3	0.329	0.374	0.324	0.332	0.313	0.335	6.9
Chloroethane-d5	0.269	0.297	0.274	0.273	0.259	0.274	5.2
1,1-Dichloroethene-d2	0.534	0.546	0.524	0.531	0.512	0.530	2.3
2-Butanone-d5	0.017	0.022	0.020	0.020	0.020	0.020	7.8
Chloroform-d	0.474	0.497	0.471	0.485	0.471	0.480	2.4
1,2-Dichloroethane-d4	0.158	0.155	0.152	0.153	0.148	0.153	2.5
Benzene-d6	1.364	1.461	1.408	1.443	1.373	1.410	3.0
1,2-Dichloropropane-d6	0.373	0.397	0.385	0.337	0.366	0.372	6.1
Toluene-d8	1.321	1.416	1.382	1.436	1.374	1.386	3.2
trans-1,3-Dichloropropene-d4	0.241	0.251	0.259	0.273	0.260	0.257	4.7
2-Hexanone-d5	0.022	0.025	0.024	0.026	0.024	0.024	7.1
1,1,2,2-Tetrachloroethane-d2	0.100	0.119	0.121	0.123	0.117	0.116	8.0
1,2-Dichlorobenzene-d4	0.706	0.698	0.678	0.691	0.676	0.690	1.8

Report 1,4-Dioxane-d8 for Low-Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/23/2010 Time: 1526

Lab File Id: JBMD02.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005JF Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.462	0.479	0.010	3.7	40.0
Chloromethane	0.373	0.374	0.010	0.3	40.0
Vinyl chloride	0.377	0.390	0.010	3.5	30.0
Bromomethane	0.210	0.224	0.100	6.8	30.0
Chloroethane	0.198	0.218	0.010	10.3	40.0
Trichlorofluoromethane	0.586	0.603	0.010	3.0	40.0
1,1-Dichloroethene	0.285	0.290	0.100	1.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.326	0.329	0.010	1.0	40.0
Acetone	0.013	0.012	0.010	-8.1	40.0
Carbon disulfide	0.793	0.791	0.010	-0.3	40.0
Methyl acetate	0.037	0.037	0.010	1.0	40.0
Methylene Chloride	0.213	0.220	0.010	3.3	40.0
trans-1,2-Dichloroethene	0.303	0.301	0.010	-0.5	40.0
Methyl tert-butyl ether	0.325	0.317	0.010	-2.3	40.0
1,1-Dichloroethane	0.496	0.512	0.200	3.2	30.0
cis-1,2-Dichloroethene	0.288	0.296	0.010	2.5	40.0
2-Butanone	0.019	0.019	0.010	-1.0	40.0
Bromochloromethane	0.086	0.086	0.050	0.1	30.0
Chloroform	0.479	0.481	0.200	0.4	30.0
1,1,1-Trichloroethane	0.671	0.686	0.100	2.3	30.0
Cyclohexane	0.661	0.679	0.010	2.7	40.0
Carbon tetrachloride	0.610	0.621	0.100	1.9	30.0
Benzene	1.555	1.585	0.400	2.0	30.0
1,2-Dichloroethane	0.194	0.195	0.100	0.4	30.0
Trichloroethene	0.419	0.427	0.300	2.0	30.0
Methylcyclohexane	0.532	0.545	0.010	2.6	40.0

Report 1,4-Dioxane for Low/Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/23/2010 Time: 1526

Lab File Id: JBMD02.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005JF Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.286	0.301	0.010	5.3	40.0
Bromodichloromethane	0.343	0.353	0.200	2.9	30.0
cis-1,3-Dichloropropene	0.414	0.414	0.200	-0.1	30.0
4-Methyl-2-pentanone	0.062	0.062	0.010	-1.1	40.0
Toluene	1.663	1.693	0.400	1.8	30.0
trans-1,3-Dichloropropene	0.288	0.293	0.100	1.4	30.0
1,1,2-Trichloroethane	0.138	0.140	0.100	1.5	30.0
Tetrachloroethene	0.375	0.379	0.100	1.0	30.0
2-Hexanone	0.045	0.040	0.010	-11.2	40.0
Dibromochloromethane	0.177	0.185	0.100	4.6	30.0
1,2-Dibromoethane	0.128	0.127	0.010	-0.4	40.0
Chlorobenzene	0.986	1.001	0.500	1.6	30.0
Ethylbenzene	1.942	1.974	0.100	1.7	30.0
o-Xylene	0.667	0.686	0.300	2.8	30.0
m,p-Xylene	0.746	0.767	0.300	2.8	30.0
Styrene	0.950	1.000	0.300	5.3	30.0
Bromoform	0.172	0.174	0.050	1.3	30.0
Isopropylbenzene	1.974	2.020	0.010	2.3	40.0
1,1,2,2-Tetrachloroethane	0.122	0.121	0.100	-1.3	30.0
1,3-Dichlorobenzene	1.500	1.547	0.400	3.1	30.0
1,4-Dichlorobenzene	1.476	1.475	0.400	-0.1	30.0
1,2-Dichlorobenzene	1.086	1.141	0.400	5.0	30.0
1,2-Dibromo-3-Chloropropane	0.035	0.035	0.010	-2.0	40.0
1,2,4-Trichlorobenzene	0.695	0.701	0.200	1.0	30.0
1,2,3-Trichlorobenzene	0.440	0.452	0.200	2.8	30.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/23/2010 Time: 1526

Lab File Id: JBMD02.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005JF Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.335	0.345	0.010	3.1	30.0
Chloroethane-d5	0.274	0.283	0.010	3.3	40.0
1,1-Dichloroethene-d2	0.530	0.524	0.010	-1.1	30.0
2-Butanone-d5	0.020	0.019	0.010	-2.4	40.0
Chloroform-d	0.480	0.494	0.010	3.0	30.0
1,2-Dichloroethane-d4	0.153	0.154	0.010	0.5	30.0
Benzene-d6	1.410	1.446	0.010	2.6	30.0
1,2-Dichloropropane-d6	0.372	0.390	0.010	4.9	40.0
Toluene-d8	1.386	1.401	0.010	1.1	30.0
trans-1,3-Dichloropropene-d4	0.257	0.255	0.010	-0.6	30.0
2-Hexanone-d5	0.024	0.024	0.010	-1.3	40.0
1,1,2,2-Tetrachloroethane-d2	0.116	0.121	0.010	4.4	30.0
1,2-Dichlorobenzene-d4	0.690	0.703	0.010	1.9	30.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 0218

Lab File Id: JBMD25.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005FJ Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.462	0.455	0.010	-1.6	50.0
Chloromethane	0.373	0.370	0.010	-0.7	50.0
Vinyl chloride	0.377	0.379	0.010	0.5	50.0
Bromomethane	0.210	0.206	0.010	-1.8	50.0
Chloroethane	0.198	0.217	0.010	10.1	50.0
Trichlorofluoromethane	0.586	0.601	0.010	2.5	50.0
1,1-Dichloroethene	0.285	0.293	0.010	2.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.326	0.317	0.010	-2.7	50.0
Acetone	0.013	0.012	0.010	-7.0	50.0
Carbon disulfide	0.793	0.783	0.010	-1.3	50.0
Methyl acetate	0.037	0.031	0.010	-15.5	50.0
Methylene Chloride	0.213	0.217	0.010	2.1	50.0
trans-1,2-Dichloroethene	0.303	0.310	0.010	2.4	50.0
Methyl tert-butyl ether	0.325	0.336	0.010	3.3	50.0
1,1-Dichloroethane	0.496	0.517	0.010	4.3	50.0
cis-1,2-Dichloroethene	0.288	0.293	0.010	1.6	50.0
2-Butanone	0.019	0.020	0.010	4.8	50.0
Bromochloromethane	0.086	0.087	0.010	1.2	50.0
Chloroform	0.479	0.489	0.010	2.0	50.0
1,1,1-Trichloroethane	0.671	0.671	0.010	0.0	50.0
Cyclohexane	0.661	0.671	0.010	1.5	50.0
Carbon tetrachloride	0.610	0.618	0.010	1.3	50.0
Benzene	1.555	1.600	0.010	2.9	50.0
1,2-Dichloroethane	0.194	0.199	0.010	2.5	50.0
Trichloroethene	0.419	0.425	0.010	1.4	50.0
Methylcyclohexane	0.532	0.529	0.010	-0.5	50.0

Report 1,4-Dioxane for Low/Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 0218

Lab File Id: JBMD25.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005FJ Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.286	0.300	0.010	4.9	50.0
Bromodichloromethane	0.343	0.362	0.010	5.6	50.0
cis-1,3-Dichloropropene	0.414	0.417	0.010	0.6	50.0
4-Methyl-2-pentanone	0.062	0.065	0.010	3.9	50.0
Toluene	1.663	1.683	0.010	1.2	50.0
trans-1,3-Dichloropropene	0.288	0.300	0.010	4.1	50.0
1,1,2-Trichloroethane	0.138	0.143	0.010	3.9	50.0
Tetrachloroethene	0.375	0.374	0.010	-0.4	50.0
2-Hexanone	0.045	0.041	0.010	-9.1	50.0
Dibromochloromethane	0.177	0.196	0.010	11.2	50.0
1,2-Dibromoethane	0.128	0.131	0.010	2.6	50.0
Chlorobenzene	0.986	0.987	0.010	0.1	50.0
Ethylbenzene	1.942	1.959	0.010	0.9	50.0
o-Xylene	0.667	0.677	0.010	1.5	50.0
m,p-Xylene	0.746	0.766	0.010	2.7	50.0
Styrene	0.950	0.978	0.010	3.0	50.0
Bromoform	0.172	0.191	0.010	10.8	50.0
Isopropylbenzene	1.974	1.960	0.010	-0.7	50.0
1,1,2,2-Tetrachloroethane	0.122	0.129	0.010	5.3	50.0
1,3-Dichlorobenzene	1.500	1.510	0.010	0.7	50.0
1,4-Dichlorobenzene	1.476	1.464	0.010	-0.8	50.0
1,2-Dichlorobenzene	1.086	1.127	0.010	3.7	50.0
1,2-Dibromo-3-Chloropropane	0.035	0.037	0.010	3.9	50.0
1,2,4-Trichlorobenzene	0.695	0.646	0.010	-7.0	50.0
1,2,3-Trichlorobenzene	0.440	0.408	0.010	-7.1	50.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 0218

Lab File Id: JBMD25.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005FJ Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.335	0.340	0.010	1.7	50.0
Chloroethane-d5	0.274	0.276	0.010	0.7	50.0
1,1-Dichloroethene-d2	0.530	0.532	0.010	0.4	50.0
2-Butanone-d5	0.020	0.021	0.010	8.2	50.0
Chloroform-d	0.480	0.508	0.010	5.9	50.0
1,2-Dichloroethane-d4	0.153	0.158	0.010	3.3	50.0
Benzene-d6	1.410	1.453	0.010	3.1	50.0
1,2-Dichloropropane-d6	0.372	0.395	0.010	6.1	50.0
Toluene-d8	1.386	1.406	0.010	1.4	50.0
trans-1,3-Dichloropropene-d4	0.257	0.260	0.010	1.2	50.0
2-Hexanone-d5	0.024	0.025	0.010	4.5	50.0
1,1,2,2-Tetrachloroethane-d2	0.116	0.124	0.010	7.2	50.0
1,2-Dichlorobenzene-d4	0.690	0.716	0.010	3.8	50.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 0641

Lab File Id: JBME02.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005JG Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.462	0.513	0.010	11.0	40.0
Chloromethane	0.373	0.382	0.010	2.4	40.0
Vinyl chloride	0.377	0.420	0.010	11.4	30.0
Bromomethane	0.210	0.245	0.100	16.9	30.0
Chloroethane	0.198	0.240	0.010	21.5	40.0
Trichlorofluoromethane	0.586	0.636	0.010	8.5	40.0
1,1-Dichloroethene	0.285	0.304	0.100	6.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.326	0.351	0.010	7.7	40.0
Acetone	0.013	0.012	0.010	-6.8	40.0
Carbon disulfide	0.793	0.859	0.010	8.2	40.0
Methyl acetate	0.037	0.037	0.010	1.1	40.0
Methylene Chloride	0.213	0.232	0.010	8.9	40.0
trans-1,2-Dichloroethene	0.303	0.329	0.010	8.7	40.0
Methyl tert-butyl ether	0.325	0.316	0.010	-2.9	40.0
1,1-Dichloroethane	0.496	0.535	0.200	8.0	30.0
cis-1,2-Dichloroethene	0.288	0.311	0.010	7.8	40.0
2-Butanone	0.019	0.019	0.010	-2.6	40.0
Bromochloromethane	0.086	0.092	0.050	6.4	30.0
Chloroform	0.479	0.504	0.200	5.3	30.0
1,1,1-Trichloroethane	0.671	0.711	0.100	6.1	30.0
Cyclohexane	0.661	0.716	0.010	8.3	40.0
Carbon tetrachloride	0.610	0.655	0.100	7.3	30.0
Benzene	1.555	1.658	0.400	6.6	30.0
1,2-Dichloroethane	0.194	0.201	0.100	3.3	30.0
Trichloroethene	0.419	0.437	0.300	4.4	30.0
Methylcyclohexane	0.532	0.577	0.010	8.5	40.0

Report 1,4-Dioxane for Low/Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 0641

Lab File Id: JBME02.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005JG Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.286	0.315	0.010	10.2	40.0
Bromodichloromethane	0.343	0.374	0.200	9.0	30.0
cis-1,3-Dichloropropene	0.414	0.438	0.200	5.8	30.0
4-Methyl-2-pentanone	0.062	0.061	0.010	-1.5	40.0
Toluene	1.663	1.785	0.400	7.3	30.0
trans-1,3-Dichloropropene	0.288	0.304	0.100	5.4	30.0
1,1,2-Trichloroethane	0.138	0.142	0.100	3.1	30.0
Tetrachloroethene	0.375	0.403	0.100	7.5	30.0
2-Hexanone	0.045	0.039	0.010	-13.6	40.0
Dibromochloromethane	0.177	0.189	0.100	6.9	30.0
1,2-Dibromoethane	0.128	0.127	0.010	-0.4	40.0
Chlorobenzene	0.986	1.026	0.500	4.1	30.0
Ethylbenzene	1.942	2.100	0.100	8.1	30.0
o-Xylene	0.667	0.718	0.300	7.6	30.0
m,p-Xylene	0.746	0.805	0.300	8.0	30.0
Styrene	0.950	1.020	0.300	7.4	30.0
Bromoform	0.172	0.186	0.050	8.1	30.0
Isopropylbenzene	1.974	2.129	0.010	7.8	40.0
1,1,2,2-Tetrachloroethane	0.122	0.123	0.100	0.5	30.0
1,3-Dichlorobenzene	1.500	1.592	0.400	6.1	30.0
1,4-Dichlorobenzene	1.476	1.533	0.400	3.9	30.0
1,2-Dichlorobenzene	1.086	1.170	0.400	7.7	30.0
1,2-Dibromo-3-Chloropropane	0.035	0.034	0.010	-2.8	40.0
1,2,4-Trichlorobenzene	0.695	0.711	0.200	2.3	30.0
1,2,3-Trichlorobenzene	0.440	0.454	0.200	3.3	30.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 0641

Lab File Id: JBME02.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005JG Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.335	0.372	0.010	11.1	30.0
Chloroethane-d5	0.274	0.296	0.010	8.1	40.0
1,1-Dichloroethene-d2	0.530	0.564	0.010	6.5	30.0
2-Butanone-d5	0.020	0.019	0.010	-1.8	40.0
Chloroform-d	0.480	0.524	0.010	9.1	30.0
1,2-Dichloroethane-d4	0.153	0.161	0.010	4.7	30.0
Benzene-d6	1.410	1.512	0.010	7.2	30.0
1,2-Dichloropropane-d6	0.372	0.353	0.010	-5.0	40.0
Toluene-d8	1.386	1.473	0.010	6.3	30.0
trans-1,3-Dichloropropene-d4	0.257	0.271	0.010	5.5	30.0
2-Hexanone-d5	0.024	0.023	0.010	-4.1	40.0
1,1,2,2-Tetrachloroethane-d2	0.116	0.119	0.010	2.5	30.0
1,2-Dichlorobenzene-d4	0.690	0.728	0.010	5.5	30.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 1354

Lab File Id: JBME17.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005GJ Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.462	0.456	0.010	-1.3	50.0
Chloromethane	0.373	0.376	0.010	0.9	50.0
Vinyl chloride	0.377	0.374	0.010	-0.9	50.0
Bromomethane	0.210	0.209	0.010	-0.6	50.0
Chloroethane	0.198	0.215	0.010	9.0	50.0
Trichlorofluoromethane	0.586	0.607	0.010	3.7	50.0
1,1-Dichloroethene	0.285	0.286	0.010	0.4	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.326	0.328	0.010	0.6	50.0
Acetone	0.013	0.012	0.010	-6.6	50.0
Carbon disulfide	0.793	0.777	0.010	-2.1	50.0
Methyl acetate	0.037	0.036	0.010	-2.2	50.0
Methylene Chloride	0.213	0.220	0.010	3.5	50.0
trans-1,2-Dichloroethene	0.303	0.314	0.010	3.8	50.0
Methyl tert-butyl ether	0.325	0.339	0.010	4.2	50.0
1,1-Dichloroethane	0.496	0.520	0.010	4.8	50.0
cis-1,2-Dichloroethene	0.288	0.300	0.010	4.0	50.0
2-Butanone	0.019	0.019	0.010	0.1	50.0
Bromochloromethane	0.086	0.090	0.010	4.5	50.0
Chloroform	0.479	0.498	0.010	3.8	50.0
1,1,1-Trichloroethane	0.671	0.668	0.010	-0.4	50.0
Cyclohexane	0.661	0.664	0.010	0.5	50.0
Carbon tetrachloride	0.610	0.611	0.010	0.1	50.0
Benzene	1.555	1.575	0.010	1.3	50.0
1,2-Dichloroethane	0.194	0.197	0.010	1.4	50.0
Trichloroethene	0.419	0.427	0.010	1.8	50.0
Methylcyclohexane	0.532	0.533	0.010	0.3	50.0

Report 1,4-Dioxane for Low/Medium VOA analysis only

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 1354

Lab File Id: JBME17.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005GJ Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.286	0.301	0.010	5.2	50.0
Bromodichloromethane	0.343	0.357	0.010	4.0	50.0
cis-1,3-Dichloropropene	0.414	0.432	0.010	4.2	50.0
4-Methyl-2-pentanone	0.062	0.064	0.010	2.9	50.0
Toluene	1.663	1.670	0.010	0.4	50.0
trans-1,3-Dichloropropene	0.288	0.306	0.010	6.2	50.0
1,1,2-Trichloroethane	0.138	0.140	0.010	2.1	50.0
Tetrachloroethene	0.375	0.368	0.010	-1.9	50.0
2-Hexanone	0.045	0.042	0.010	-8.2	50.0
Dibromochloromethane	0.177	0.185	0.010	4.8	50.0
1,2-Dibromoethane	0.128	0.132	0.010	3.4	50.0
Chlorobenzene	0.986	0.993	0.010	0.7	50.0
Ethylbenzene	1.942	1.951	0.010	0.5	50.0
o-Xylene	0.667	0.685	0.010	2.7	50.0
m,p-Xylene	0.746	0.755	0.010	1.2	50.0
Styrene	0.950	0.967	0.010	1.8	50.0
Bromoform	0.172	0.187	0.010	8.6	50.0
Isopropylbenzene	1.974	1.966	0.010	-0.4	50.0
1,1,2,2-Tetrachloroethane	0.122	0.127	0.010	4.1	50.0
1,3-Dichlorobenzene	1.500	1.515	0.010	1.0	50.0
1,4-Dichlorobenzene	1.476	1.491	0.010	1.0	50.0
1,2-Dichlorobenzene	1.086	1.137	0.010	4.6	50.0
1,2-Dibromo-3-Chloropropane	0.035	0.034	0.010	-3.6	50.0
1,2,4-Trichlorobenzene	0.695	0.687	0.010	-1.1	50.0
1,2,3-Trichlorobenzene	0.440	0.448	0.010	1.9	50.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Instrument ID: J.i Calibration Date: 09/24/2010 Time: 1354

Lab File Id: JBME17.D Init. Calib. Date(s): 09/21/2010 09/21/2010

EPA Sample No.(VSTD####): VSTD005GJ Init. Calib. Time(s): 1435 1724

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.20(mm) Length: 25 (m)

Purge Volume: 25.0 (mL)

COMPOUND	$\overline{RRF}$	RRF5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.335	0.339	0.010	1.4	50.0
Chloroethane-d5	0.274	0.280	0.010	2.1	50.0
1,1-Dichloroethene-d2	0.530	0.534	0.010	0.8	50.0
2-Butanone-d5	0.020	0.021	0.010	7.4	50.0
Chloroform-d	0.480	0.504	0.010	5.0	50.0
1,2-Dichloroethane-d4	0.153	0.160	0.010	4.3	50.0
Benzene-d6	1.410	1.437	0.010	1.9	50.0
1,2-Dichloropropane-d6	0.372	0.389	0.010	4.6	50.0
Toluene-d8	1.386	1.384	0.010	-0.1	50.0
trans-1,3-Dichloropropene-d4	0.257	0.261	0.010	1.5	50.0
2-Hexanone-d5	0.024	0.025	0.010	4.5	50.0
1,1,2,2-Tetrachloroethane-d2	0.116	0.123	0.010	6.2	50.0
1,2-Dichlorobenzene-d4	0.690	0.715	0.010	3.7	50.0

Report 1,4-Dioxane-d8 for Low/Medium VOA analysis only

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJF

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-7052/4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD04.D

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/23/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.0	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJF

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-7052/4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD04.D

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/23/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.066	J

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKJF

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-7052/4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBMD04.D

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/23/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:(ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	1.68	0.66	J
02		Unknown	6.93	2.8	X J
03	541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	1.9	J N
04		Unknown siloxane derivative	10.72	2.3	J
05	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-7048/4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBME04.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	3.7	J
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKJG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-7048/4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBME04.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.084	J

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKJG

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: MB 200-7048/4

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBME04.D

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:(ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	6.93	2.6	X J
02	541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	1.1	J N
03		Unknown siloxane derivative	10.72	1.2	J
04	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-6

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBME06.D

Level: (TRACE/LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	1.8	J B
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

Report 1,4-Dioxane for Low-Medium VOA analysis only

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-6

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBME06.D

Level: (TRACE/LOW/MED) TRACE Date Received:

% Moisture: not dec. Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VHBLK01

Lab Name: TESTAMERICA BURLINGTON Contract: 8E-00302

Lab Code: STLV Case No.: CENTRA Mod. Ref No.: _____ SDG No.: 200-1629

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: 200-1629-6

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: JBME06.D

Level: (TRACE or LOW/MED) TRACE Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/24/2010

GC Column: DB-624 ID: 0.20 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	6.93	2.7	B X J
02	541-05-9	Cyclotrisiloxane, hexamethyl-	7.88	1.4	B J N
03		Unknown siloxane derivative	10.72	1.2	B J
04	E9667961	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

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