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November 7, 2012

Mr. David Stensby
Remedial Project Manager
U.S. Environmental Project Manager Agency-Region IX
75 Hawthrone Street (SFD-7-1)
San Francisco, CA 94105

Re: Performance Standard Verification Plan, Quarterly Monitoring Progress and Evaluation Report (July 1, 2012 to September 30, 2012), Groundwater Treatment System, Omega Chemical Superfund Site, Non-Time Critical Removal Action (NTCRA)
Omega Chemical Superfund Site, Whittier, California

Dear Mr. Stensby:

Enclosed for your review is the Performance Standard Verification Plan Quarterly Monitoring Progress and Performance Evaluation Report (July 1, 2012 to September 30, 2012), Groundwater Treatment System, Omega Chemical Superfund Site, Non-Time Critical Removal Action (NTCRA) (PSVP Quarterly Report) for the Omega Chemical Superfund site.

The enclosed PSVP Quarterly Report is being submitted in accordance with the reporting requirements defined in the February 2010 Operations, Maintenance, and Monitoring Manual for the operation of the groundwater treatment system (GWTS). Additionally, this quarterly report describes the GWTS performance monitoring activities per the April 2007 Performance Standards Verification Plan. Overall, this report is being provided to satisfy the data reporting requirements defined under Section IX of the February 2001 Consent Decree (CD) No. 00-12471 between the United States Environmental Protection Agency (USEPA) and OPOG to address contamination in Operable Unit 1 (OU-1).

Should you have any questions, regarding the above, please contact me.

Sincerely,
Omega Chemical Site PRP Organized Group

Edward Modiano
Project Coordinator

cc: Lynda Deschambault, USEPA
Tom Perina, CH2MHILL

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Performance Standard Verification Plan Quarterly Monitoring Progress Report (July 1 through September 30, 2012)

Groundwater Treatment System
Omega Chemical Superfund Site
Non-Time Critical Removal Action (NTCRA)

Prepared for:

Omega PRP Organized Group
(OPOG)

Project No. 10500-90421-EECA.PSVPMPR

November 7, 2012

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List of Acronyms

µg/L - micrograms per liter

CD - Consent Decree

COD – chemical oxygen demand

1,1-DCE - 1,1-dichloroethene

EPA - Environmental Protection Agency

GWTS – groundwater treatment system

gpd – gallons per day

gpm – gallons per minute

LACSD – Sanitation District of Los Angeles County

NTCRA – Non-Time Critical Removal Action

OM&M - operation, maintenance and monitoring

OPOG - Omega Chemical Site PRP Organized Group

OU-1 - Operable Unit 1

PCE - tetrachloroethene

PRP - Potentially Responsible Party

PSVP – Performance Standards Verification Plan

Site - Omega Chemical Superfund Site

USEPA - United States Environmental Protection Agency

VOC - volatile organic compound

VPGAC – vapor phase granular activated carbon

Executive Summary

On behalf of the Omega Chemical Superfund Site (Site) PRP Organized Group (OPOG), CDM Smith has prepared this Quarterly Monitoring Progress Report per the Operations, Maintenance, and Monitoring (OM&M) Manual (CDM, February 10, 2010) for the operation of the groundwater treatment system (GWTS). Additionally, this report describes GWTS performance monitoring activities per the Performance Standards Verification Plan (PSVP) (CDM, April 19, 2007). Overall, this report is being provided to satisfy the data reporting requirements defined under Section IX of the February 2001 Consent Decree (CD) No. 00-12471 between the United States Environmental Protection Agency (USEPA) and OPOG to address contamination in Operable Unit 1 (OU-1).

The GWTS began operation on a full time (24/7/365) basis on July 25, 2009 and OM&M activities have been performed since startup. Weekly system maintenance and data collection were performed to maintain and verify system performance. In addition, treated water samples were collected from the GWTS effluent and analyzed for compliance with the Sanitation Districts of Los Angeles County (LACSD) requirements. In addition, vapor samples were collected and analyzed for compliance with the South Coast Air Quality Management District (SCAQMD) requirements during this reporting period.

The overall trend in groundwater elevations in A-Zone wells and piezometers since 1Q2009 has been generally downward through mid-2011. From mid-2011 throughout January 2012, the overall trend appeared to be stable to slightly increasing. The overall trend appeared to be decreasing from January 2012 through the end of 1Q2012, but has rebounded and increased during 2Q2012. The water elevations in the A-zone wells and piezometers fluctuated through 3Q2012 without a consistent pattern. The overall trend in well OW4a, which is the farthest A-Zone well from the Putnam Street extraction and is not directly impacted by the remedial pumping, shows a steady decrease from 1Q2009 through mid-2011, followed by an overall, steady increase from mid-2011 throughout June 2012, decreased in July, and rebounded and remained stable in August and September 2012.

Groundwater elevation trends in all four B-Zone wells (Figure A2-2) correlate very well with each other. Groundwater elevations in B-Zone wells showed an initial decline from early 2009 through the end of 2009, increases through approximately June 2010, followed by decreases through approximately October 2010, and then gradual and significant increases from approximately November 2010 through July 2011, and have oscillated from decreasing to increasing through September 2012.

Aqueous samples from the monitoring wells, extraction wells and treatment system were collected for laboratory analysis of volatile organic compounds (VOCs) to assess VOC concentrations in the groundwater at the extraction and monitoring well locations, and performance of the GWTS. During the August 2012 semi-annual groundwater sampling event, tetrachloroethene (PCE) and total volatile organic compounds (VOC) concentrations increased in all five extraction wells and five of the 10 observation wells sampled. The remaining five observation wells had decreases in total VOC and PCE concentrations. 1,4-dioxance concentrations increased in two extraction wells and two monitoring wells, decreased in one extraction well and one monitoring well, and remained below the laboratory detection limit in the remaining wells.

The GWTS average uptime for the 3rd Quarter 2012 is 98.2% and 93.5% since operation began on July 25, 2009. A total of 725.1 pounds of VOCs have been removed cumulatively since GWTS operation began. During the 3rd Quarter 2012, a total of 14.4 pounds were removed in July, 15.4 pounds in August, and 16.7 pounds in September. The GWTS is anticipated to continue operating similarly during the next quarter. Due to the stable concentration trends observed for the groundwater influent and for the vapor influent, it is recommended that the sampling frequencies of the groundwater influent and the vapor influent be reduced from monthly to quarterly. Other sampling and data collection methods and frequencies will remain unchanged.

Section 1
Introduction

On behalf of the Omega Chemical Superfund Site (Site) PRP Organized Group (OPOG), CDM Smith has prepared this quarterly monitoring progress and performance evaluation report per the Operations, Maintenance, and Monitoring (OM&M) Manual (CDM, February 10, 2010) for the operation of the groundwater treatment system (GWTS). Additionally, this report describes GWTS performance monitoring activities per the Performance Standards Verification Plan (PSVP) (CDM, April 19, 2007). Overall, this report is being provided to satisfy the data reporting requirements defined under Section IX of the February 2001 Consent Decree (CD) No. 00-12471 between the United States Environmental Protection Agency (USEPA) and OPOG to address contamination in Operable Unit 1 (OU-1). A site map is presented in Figure 1-1.

1.1 Purpose and Scope

The purpose of this report is to summarize the GWTS operational and performance monitoring data collected during the period July 1 through September 30, 2012. GWTS operational data allow assessment of the efficiency of the system and confirmation of system performance in meeting the remedial goals of the project. Remedial Action Objectives (RAOs) are to provide horizontal and vertical containment within the Phase 1a Area (also known as Operable Unit 1 [OU1]) of the groundwater contamination associated with the Omega property and to meet air emission and water treatment standards associated with the treatment and disposal of the extracted groundwater.

The scope of the GWTS data collection is described in Sections 5 and 6 of the OM&M Manual and generally consists of GWTS compliance monitoring, process monitoring, performance monitoring, and vapor compliance monitoring. With respect to performance monitoring, there is an overlap between the OM&M Manual and the PSVP because the performance monitoring criteria are described in both documents. With this understanding, the performance monitoring criteria generally consist of water level and water quality data to confirm that the GWTS is performing as designed, and performance standards are being met.

1.2 Report Organization

The remaining sections of the report are organized as follows:

- Section 2 presents a brief description of the treatment system and discusses the monitoring results and summary for the treatment plant operation.
- Section 3 presents a brief summary of the performance monitoring activities and discusses the methodology and results.
- Section 4 presents the analysis and findings of the treatment system and performance monitoring results.
- Section 5 summarizes the observations and provides recommendations.
- Section 6 contains references.

The appendices are organized as follows:

- Appendix A Figures, Tables, and Graphs of Results

Appendix A includes treatment system operations data in Appendix A1, groundwater elevation data in Appendix A2 and monitoring and extraction well analytical data in Appendix A3.

- Appendix B Analytical Reports
- Appendix C Groundwater Field Logs
- Appendix D Data Validation

Source: Sheet No. C-2.1 Plan View of Extraction Wells, Treatment Plant, and Conveyance Piping RoutingPipe Alignment Survery by David Bush and Associates Inc. (Dwgs OCVAPOR1 042010 and OCVAPOR2 050510)

Legend

- Phase Ia Area
- Former Omega Chemical Facility
- Former Building
- Other Buildings
- Extraction Well
- Existing Shallow Observation Well / Piezometer
- Existing Deep Observation Well / Piezometer

N

50 25 0 50
Feet
1 inch = 100 feet

CDM Smith

Omega Chemical

Observation Well, Extraction Well and Piezometer Locations

Figure 1-1

Section 2
Treatment Plant Operations Summary

The GWTS began operating on a full time (24/7/365) basis on July 25, 2009. OM&M activities, including equipment inspection and data collection, are being performed in accordance with the procedures described in the OM&M Manual and PSVP.

As shown in Figure 2-1 (Process Flow Diagram; Record Drawing G-3) and Figure 2-2 (Plan View of Extraction Wells, Treatment System and Conveyance Piping), a total of five extraction wells (EW-1, EW-2, EW-3, EW-4 and EW-5) are in operation, and the extracted water is transported by a conveyance pipeline to the treatment plant.

Extracted groundwater enters the treatment plant, and passes through two bag filters in parallel to remove sediment and suspended particulate matter. An anti-scalant unit with a metering pump injects chemicals into the process piping to minimize scaling prior to treatment. The water flows into the air stripper system through five distribution aeration trays. Atmospheric air is pulled through the air stripper by an induced-draft blower through hundreds of small diameter holes in each aeration tray, forming a series of bubbles and generating a large mass transfer surface area where the contaminants are volatilized. The treated water flows through an in-ground concrete sample box (as required by Los Angeles County Sanitation District (LACSD) for periodic sampling) and subsequently into an in-ground concrete effluent sump. An effluent sump pump discharges the treated water through a flow meter prior to exiting the treatment plant to the sewer manhole.

The vapor stream containing volatilized constituents is treated by a pair of vapor phase granular activated carbon vessels configured in series. Procedures to verify operation and performance of the GWTS per the O&M Manual are discussed in the following sections.

2.1 System Runtime

System uptime is critical to ensure that the system is performing as designed. Part of maintaining uptime includes performing periodic equipment inspection, lubrication, cleaning, repair and maintenance as prescribed in the OM&M manual.

System uptime is calculated by the number of hours the system operated daily. Figure A1-1 in Appendix A.1 presents a graph of the system runtime data since system operation began on July 25, 2009. Table A1-1 in Appendix A.1 provides the data for monthly system uptime.

2.2 Groundwater Production

System Flow Rate

Groundwater production is a measure of the volume of water extracted and treated. The values can be expressed in gallons per minute (gpm), gallons per day (gpd), gallons per month, etc. The system effluent totalizing flow meter continuously records the total volume in gallons passing through the device and computes the flow rate in gpm prior to discharge into the sewer. Table A1-1 in Appendix A.1 presents a tabular summary for the Total Groundwater Treated and Average System Flow Rate in gpm and gpd. Figure A1-2 in Appendix A.1 presents a graph of treated daily groundwater production flow rate in gpd.

Extraction Wells Flow Rate

Each of the five extraction wells (EW-1 through EW-5) is equipped with a flow meter to record volumes in gallons and flow rates in gpm individually. The average flow rate (including downtime) for each extraction well is calculated by taking the difference between the two totalizer readings and divided by the time in days or minutes between the two recorded readings yielding the units of gallons per day or gallons per minute.

Table A1-2 in Appendix A.1 presents a summary of flow data for the extraction wells. Figure A1-3 in Appendix A.1 presents a graph of individual extraction wells production flow rate in gpd.

2.3 Contaminant Concentrations

Groundwater

Groundwater from each of the extraction wells is pumped into a common conveyance pipe as one combined influent source to the treatment plant for treatment. After treatment, effluent samples are collected to monitor the effectiveness of the treatment system and for compliance. The OM&M manual prescribes the method and frequency for the sampling of influent groundwater. Table A1-3 in Appendix A.1 presents the groundwater analytical results for system Influent and Effluent samples. Figure A1-4 in Appendix A.1 presents graphs of the total VOC and PCE concentrations from the influent samples. Laboratory analytical reports for vapor samples are presented in Appendix B. Influent groundwater concentrations have been on a relatively stable downward trend since April 2010. It is recommended that the sampling frequency of the groundwater influent be reduced from monthly to quarterly.

Vapor

Vapors from the air stripper are currently being treated by vapor phase granular activated carbon (VPGAC) vessels to comply with substantive South Coast Air Quality Management District air quality requirements. Influent at the inlet to the primary vessel, midpoint in-between primary and secondary vessels and effluent at the exhaust from the secondary vessel are monitored with the procedures and frequency as described in the OM&M manual. Table A1-4 in Appendix A.1 presents the vapor analytical results for Influent, Midpoint and Effluent samples. Figure A1-5 in Appendix A.1 presents a graph of the vapor influent results for total VOCs prior to carbon treatment. Laboratory analytical reports for vapor samples are presented in Appendix B. Vapor concentrations at the inlet to the primary VPGAC vessel have been on a relatively stable trend since October 2009 (with the exception of one data point from February 2011). It is recommended that the sampling frequency of the vapor influent be reduced from monthly to quarterly.

2.4 VOC Mass Removed from Groundwater

Mass removed from groundwater is calculated by multiplying the influent analytical concentrations (ug/L) with flow (gallons) and converting it to the correct units. The formula is as follows:

$$\text{Mass Removed (lb)} = \frac{\text{Concentration (ug/L)} * \text{Volume (gallons)}}{0.264 \text{ gallon/L} * 453.6\text{x}10^{6} \text{ ug/lb}}$$

Since groundwater influent laboratory analysis is performed on a monthly basis, mass removed is calculated using the concentrations from the laboratory results for the month and average volume of

groundwater produced for the month for the equation. Cumulative Mass Removed is a summation of the monthly mass removed values.

Table A1-1 in Appendix A.1 provides a summary for the Average VOC Mass Removed. Figure A1-6 in Appendix A.1 presents a graph of the cumulative VOC mass removed.

2.5 Compliance Monitoring

Groundwater

The LACSD issued an Industrial Waste Discharge Permit (No. 20039) for the discharge of treated groundwater from the Omega Chemical GWTS to the regional sanitary sewer system. Therefore, a sample of the effluent water is collected for laboratory analysis from the groundwater treatment system on a quarterly basis in accordance with the permit.

The permit requires that the treated water be discharged to the sample box constructed per LACSD specification and then quantified by a flow meter located inside the plant before being discharged into the sewer manhole (No. MH 18-0271) at Crowndale Street. The Industrial Wastewater Discharge Permit was renewed on August 20, 2012 and will expire on August 19, 2017.

All compliance samples are collected from the sample box identified as 20039A by a third party representative (currently Test America) as required by the permit, and submitted to a state-certified laboratory for analysis of the following parameters on a standard turnaround basis:

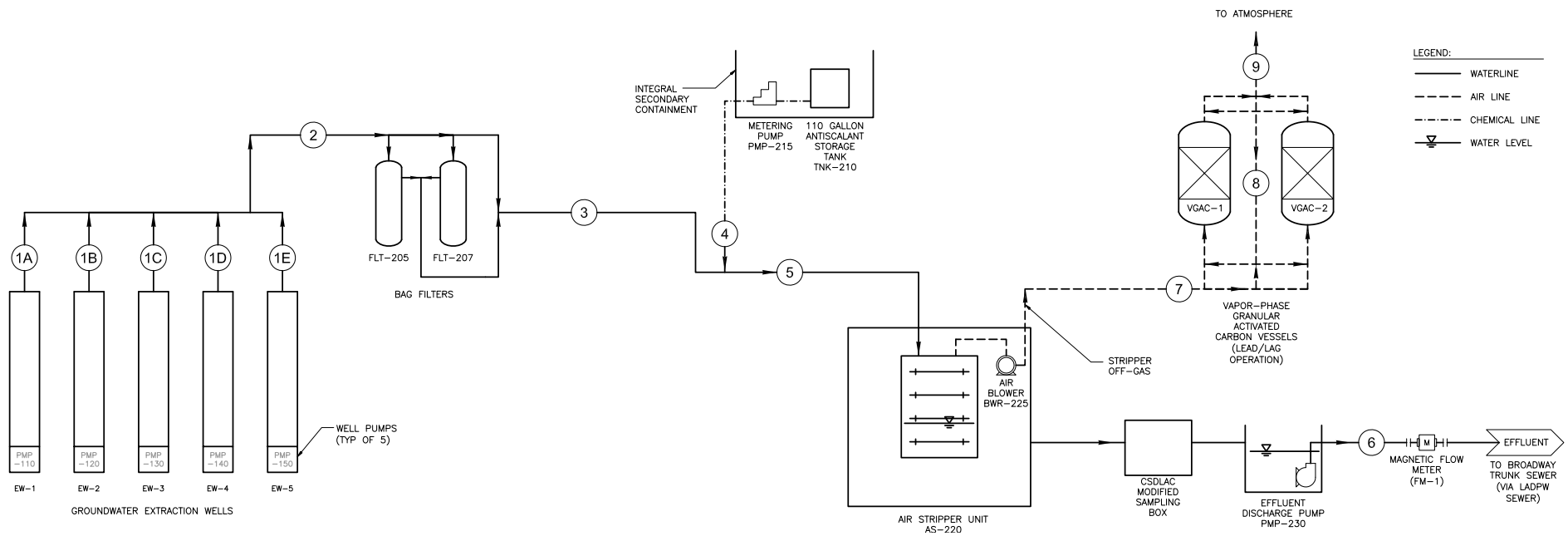
- TTO - Volatile organic compounds, by Method 8260B;
- 1,4-Dioxane by Method 8270M;
- TTO - Semi-volatile organic compounds by Method 8270C;
- Soluble Sulfide by Method SM4500 S2 D;
- pH by field analysis;
- TSS by Method SM2540D; and
- COD by Method SM5220D.

Chemical oxygen demand (COD) and total suspended solids (TSS) are collected as a 24 hour composite sample; while the other constituents are collected as grab samples.

Samples to fulfill LACSD requirements were collected during the 3rd Quarter 2012. Analytical results were submitted to LACSD with the required quarterly self-monitoring report on October 15, 2012. Laboratory results for the 3rd Quarter 2012 are provided in Appendix B.4.

Vapor

Although a permit to operate is not required from SCAQMD, monitoring of the VPGAC system is being performed to comply with substantive requirements.



RECORD DRAWING

REV. NO.	DATE	DRWN	CHKD	REMARKS
4	10/2/09	MTG	MTG	RECORD DRAWING
3	1/7/08	PJR	SHA	ISSUED FOR CONSTRUCTION
2	10/12/07	PJR	SHA	ISSUED FOR CITY PLAN CHECK
1	9/07	AT	RS	SUBMITTED FOR PLAN CHECK AND BIDDING
0	8/07	AT	RS	SUBMITTED FOR PLAN CHECK AND BIDDING

DESIGNED BY: K. SCHWARZ
DRAWN BY: S. NGUYEN
SHEET CHK'D BY: D. DY
CROSS CHK'D BY: A. SHAWWA
APPROVED BY: R. SUBRAMANIAN
DATE: OCTOBER 2007

WARNING
0 1/2 1"
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

REGISTERED PROFESSIONAL ENGINEER R. SUBRAMANIAN No. C053670 Exp. 06-30-2009 CIVIL STATE OF CALIFORNIA

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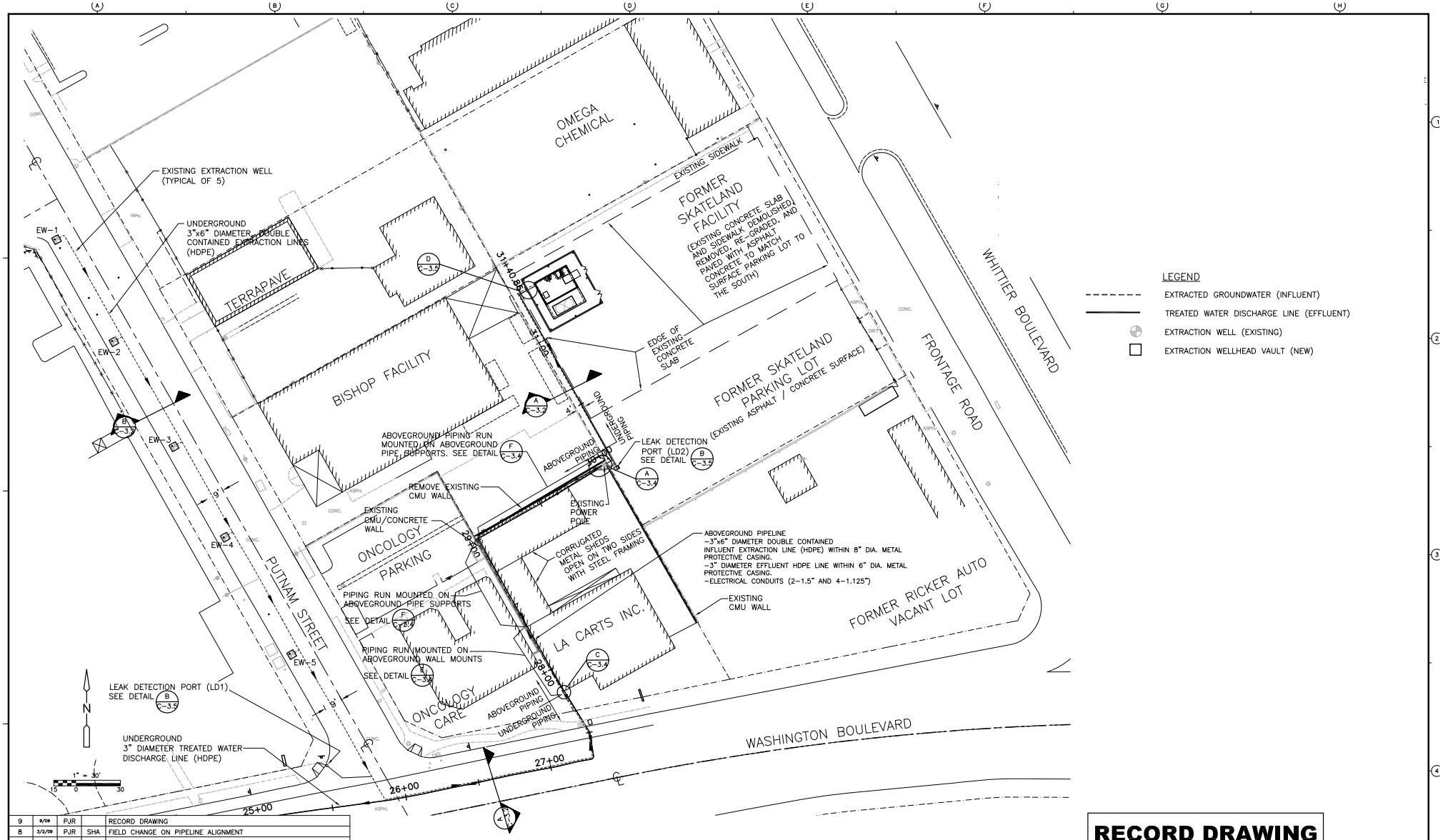
OMEGA CHEMICAL SUPERFUND SITE
12504/12512 EAST WHITTIER BOULEVARD
WHITTIER, CALIFORNIA

GROUNDWATER TREATMENT PLANT
PROCESS FLOW DIAGRAM

PROJECT NO. 10500-53426
SHEET NO. G-3

P:\10500\53426\Remedial Design\Ricker\ R-G-3 01/09/08 14:45 Riehlepj XREFS: OMEGA-bd

Figure 2-1



RECORD DRAWING

REV. NO.	DATE	DRWN	CHKD	REMARKS
9	9/09	PJR		RECORD DRAWING
8	3/2/09	PJR	SHA	FIELD CHANGE ON PIPELINE ALIGNMENT
7	1/5/09	PJR	SHA	FIELD CHANGE ON PIPELINE ALIGNMENT
6	11/12/08	PJR	SHA	CHANGED PIPE RUN CALLOUTS TO ABOVEGROUND SUPPORTS FROM STATIONS 30 TO 31
5	9/19/08	PJR	SHA	ISSUED FOR DEFERRED SUBMITTAL
4	1/7/08	PJR	SHA	ISSUED FOR CONSTRUCTION
3	1/7/08	PJR	SHA	REVISED PER CITY OF WHITTIER COMMENTS
2	10/12/07	PJR	SHA	ISSUED FOR CITY PLAN CHECK
1	9/07	PJR	SHA	SUBMITTED FOR PLAN CHECK
0	8/07	PJR	SHA	SUBMITTED FOR PLAN CHECK

DESIGNED BY: SHA
DRAWN BY: PJR
SHEET CHK'D BY: SHA
CROSS CHK'D BY: AS
APPROVED BY: RS
DATE: JUNE 2007

WARNING
0 1/2 1"
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

REGISTERED PROFESSIONAL ENGINEER RICHARD SUBRAMANIAN No. C053679 Exp. 06-30-2011 CIVIL STATE OF CALIFORNIA

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OMEGA CHEMICAL SUPERFUND SITE
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WHITTIER, CALIFORNIA

GROUND WATER TREATMENT PLANT
PLAN VIEW OF EXTRACTION WELLS, TREATMENT PLANT, AND CONVEYANCE PIPING ROUTING

PROJECT NO. 10500-70150
SHEET NO. C-2.2

P:\10500\53426\Sept 2009 Record Dwgs\Civil-2009 Record\ R-C-2.2 10/02/09 11:05 rieh1ep; XREFS: cwp1000R, OMEGA-bd-R, SURVEY, 00001PL, OMEGAAC, CA-Rwi-S-2011

Figure 2-2

Section 3
Performance Monitoring

Monitoring activities to verify performance of the GWTS per the PSVP are discussed in the following sections.

3.1 Monitoring Activities

Performance monitoring for the groundwater remedy began after the system was placed into operation in accordance with the PSVP. Prior to commencement of operations, "base line" piezometric and water quality data were collected. The PSVP specifies the monitoring of water levels and water quality in selected monitoring wells and piezometers to assess the effectiveness of the groundwater extraction system. The PSVP monitoring and reporting requirements are summarized in the following sections.

3.1.1 Monitoring (Water Levels and Water Quality Samples)

Wells specified for water level monitoring and water quality sampling and monitoring frequency are described below.

Water Levels

- Monitoring wells OW-1, OW-1b, OW-2, OW-3, OW-3b, OW-4a, OW-4b, OW-7, OW-8, OW-8b, OW-9, OW-10, and piezometers (PZ), PZ-1, PZ-2, PZ-3, PZ-4, PZ-5, PZ-6, PZ-7, PZ-8 and PZ-9;
- Extraction wells EW-1 through EW-5;
- The frequency of water level measurements was weekly for three months (September through November 2009) and then monthly since December 2009. The frequency was to be re-evaluated following two years of monitoring (i.e., in July 2011) and at this time no modifications to the frequency are proposed.

Water Quality Samples

- Monitoring wells OW-1, OW-1b, OW-2, OW-3, OW-3b, OW-4a, OW-4b, OW-7, OW-8, OW-8b, OW-9 and OW-10;
  - The frequency of sampling is semi-annual for the first two years at the above monitoring wells;
- Monitoring wells OW-9 and OW-10 were sampled quarterly for one year following system startup, and are now sampled semi-annually.
- Semi-annual monitoring of monitoring wells OW-5 and OW-6 began in 2001 and was discontinued in September, 2009. Semi-annual monitoring of OW-5 and OW-6 were resumed in August 2012 per EPA's request.
- Newly installed piezometer PZ-9 was sampled as a one-time monitoring event in August 2012.
- Extraction wells EW-1 through EW-5.

Monitoring wells OW-1b, OW-2, OW-3, OW-3b, OW-4a, OW-4b, OW-5, OW-6, OW-7, OW-8b, OW-9 and OW-10, and extraction wells EW-1 through EW-5 were sampled in August during the semi-annual sampling event. Additionally, newly installed piezometer PZ-9 was also sampled during this event. Well OW-8 was not sampled because it was dry. Well OW-1 was also not sampled during the August 2012 semi-annual sampling event. The water level at OW-1 was 0.22 feet below the bottom of the screened section and the well has a two and a half foot long bottom sump. The water in the well was therefore stagnant and not sampled.

All water quality samples collected from the monitoring wells, extraction wells and piezometers during 3Q2012 were analyzed for the following parameters at a fixed-base laboratory:

- VOCs, plus acetone, Freon 11, Freon 12, and Freon 113 by Method 8260B
- 1,4-Dioxane by Method 8270M

Specific conductance, temperature, pH, and turbidity were measured during monitoring well purging using field instruments.

3.1.2 Reporting Requirements

As required by the PSVP, reporting is being performed as indicated below:

- Quarterly Progress Reports which summarize remedial system performance monitoring activities and data collected.
- Annual Performance Monitoring Reports which include an evaluation of remedial system performance for each of the four quarters of the year.
- In the event of non-compliance with performance standards, EPA will be notified within five days of discovery.

3.2 Groundwater Elevation Summary

A discussion of groundwater elevation measurements and groundwater elevation trends is provided below.

3.2.1 Groundwater Elevation Measurements

The Omega Chemical observation wells, piezometers, and extraction wells were gauged monthly in the third quarter of 2012. The monitoring wells were gauged on July 30, August 21 (observation wells) and 28 (piezometers), and September 27, 2012 by Blaine Tech Services (Blaine Tech). Blaine Tech measured static water levels using a decontaminated, electronic water level sounder, prior to sampling. The measurement was repeated three times at each well to insure its accuracy. The sounder was decontaminated using a triple rinse of soapy water, tap water, and distilled water. The extraction wells were gauged on July 26, August 22, and September 26, 2012 by JHA Environmental, Inc. using the same methodology as the monitoring wells. Groundwater elevations are summarized in Table A2-1 in Appendix A.2.

3.2.2 Groundwater Elevation Trends

Groundwater elevation graphs illustrating water level trends during the period from 1Q2009 through 3Q2012 are included as Figures A2-1, A2-2, and A2-3 in Appendix A.2. Field water level summary sheets are provided in Appendix C. The following discusses general trends in A-Zone (essentially the

water table aquifer) wells and piezometers and B-Zone (water-bearing unit underlying the A-Zone and separated from the A-Zone by a confining unit) wells. Significant events that could potentially impact local groundwater elevations and trends are also noted in the discussion below.

As a result of the Putnam Street remedial pumping, A-Zone monitoring wells OW-2 and OW-8 on Putnam Street have been primarily dry since late-2009. Well OW-2 had four sporadic measurable depths to water until June 2012, when it became measurable, and has been measureable (and decreasing) through September 2012. Well OW-8 had one measurable water level between late 2009 and the present quarter when it was measurable in July and August, but dry in September 2012.

The overall trend in groundwater elevations in A-Zone observation wells and piezometers since 1Q2009 has been generally downward through mid-2011. From mid-2011 throughout January 2012, the overall trend appeared to be stable to slightly increasing. The overall trend appeared to be decreasing from January 2012 through the end of 1Q2012, but rebounded and increased during 2Q2012. The water levels in the A-zone wells and piezometers fluctuated through 3Q2012 without a consistent pattern. The water level in OW-1 decreased to dry in July 2012 and remained dry through 3Q2012. Figure A2-3 illustrates the trend over time as observed at the piezometers. Statistically during 3Q2012, the average change of all the observation wells and piezometers was a 0.24-foot average decrease in elevation with a maximum decrease of 2.65 feet in OW-9 and a maximum increase of 0.17 feet in OW-7.

The overall trend in well OW4a, which is the farthest A-Zone well from the Putnam Street extraction and is not directly impacted by the remedial pumping, shows a steady decrease from 1Q2009 through mid-2011, followed by an overall, steady increase from mid-2011 throughout June 2012, decreased in July, and rebounded and remained stable in August and September 2012.

The pumping groundwater elevations of the extraction wells are measured and graphed, but are not analyzed or discussed because of the unreliable nature of the data. Wells EW-1, EW-3, EW-4 and EW-5 operate on a cyclic pumping cycle and the pumps shut off when the water level reaches the pump intake, therefore, a true pumping level cannot be determined. The groundwater elevation in EW-2 has been consistently higher than the nearest piezometers, PZ-1 and PZ-2, indicating that it is also not a reliable measurement.

Groundwater elevation trends in all four B-Zone wells (Figure A2-2) correlate very well with each other. Groundwater elevations in B-Zone wells showed an initial decline from early 2009 through the end of 2009, increases through approximately June 2010, followed by decreases through approximately October 2010, and then gradual and significant increases from approximately November 2010 through July 2011, and have oscillated from decreasing to increasing through September 2012.. The minimum decrease was 0.05 feet at OW-4b and the maximum decrease was 3.03 feet at OW-3b. The average decrease was 1.71 feet.

Water levels from the Omega monitoring wells and piezometers were used to create the groundwater elevation contour map provided as Figure A2-5 in Appendix A.2. The extraction well data were excluded from the contour map for two reasons; first, because the data were collected on different days than the monitoring well and piezometer data were collected, and second, because the measured groundwater elevations are greater in the extraction wells than the nearby observation points, implying that the depth to water during pumping was not measured at its lowest point. JHA field personnel during recent months have endeavored (and will continue to do so) to collect water level

measurements at the lowest points in each extraction well during monitoring. Extraction well monitoring will also be performed the same day the observation wells are monitored.

3.3 Groundwater Analytical Summary

3.3.1 Groundwater Sampling Procedures

As previously discussed, monitoring wells and extraction wells were sampled in August 2012 and will be next sampled in February 2013 during the next scheduled semi-annual sampling event.

3.3.2 Groundwater Sampling Analytical Results

The most recent analytical results from the August 2012 sampling event, along with the historical results, are summarized in Tables A3-1 and A3-2 located in Appendix A.3. Concentration graphs of PCE, total VOCs, and 1,4-dioxane are included in Figures A3-1 through A3-17 in Appendix A.3. PCE concentrations are also illustrated on Figures A3-18 and A3-19 in Appendix A.3.

The total VOCs and PCE concentrations increased from February 2012 to August 2012 in all 5 extraction wells (EW-1 through EW-5). The greatest increase in PCE concentration (300 µg/L) occurred at well EW-2 which increased from 3,100 µg/L to3,400 µg/L. The concentrations of 1,4-dioxane increased in wells EW-1 and EW-2, decreased in wells EW-3 and EW-4, and remained below the laboratory detection level in well EW-5. The largest 1,4-dioxane concentration increase of 8 µg/L occurred in well EW-2 where the concentration increased from 67 µg/L to 75 µg/L.

In the A-Zone observation wells total VOCs and PCE have increased from February 2012 to August 2012 in wells OW-4a and OW-10, and decreased in wells OW-3 and OW-7. The largest increase in PCE concentration (319 µg/L) occurred in well OW-10 where the PCE concentration increased from 48 ug/L to 71 µg/L. The 1,4-dioxane concentration increased in well OW-3 and decreased in well OW-9. The largest increase in 1,4-dioxane (3.6 µg/L) occurred in well OW-3 where the concentration increased from 6 µg/L to 9.6 µg/L.

In the B-Zone monitoring wells total VOCs have increased from February 2012 to August 2012 in wells OW-1b, OW-3b and OW-8b and decreased in well OW-4b. The largest increase in total VOC concentration (17 µg/L) occurred in well OW-1b where the total VOC concentration increased from 21 µg/L to 38 µg/L. PCE was the only VOC detected in well OW-1b. PCE concentrations have increased in wells OW-1b, OW-4b and OW-8b and decreased in well OW-3b. The 1,4-dioxane concentrations in the original samples collected on August 2012 were below the laboratory detection limit in all four B-Zone wells, however, a concentration of 0.73 ug/l was detected in the duplicate sample from well OW-4b.

The total VOCs, PCE and 1,4-dioxane concentrations detected in PZ-9, sampled for the first time in 3Q2102, were 16,977 µg/L, 13,000 µg/L and 800 µg/L , respectively. The detected concentrations in this piezometer are consistent with the observed footprint of the VOC plume.

3.3.3 Data Quality Assessment

Data were evaluated to determine if they are usable for project objectives. A summary table of the data collected during this quarter in presented as Table 3-1.The table provides details regarding the type of sample collected, sampling dates, field and laboratory QC, level of validation, and data usability. Data were also reviewed to determine sampling frequency, target analyte list, reporting limits, and holding times. No secondary data are used for this project. In summary, all new data were determined to be usable for project objectives.

Data validation was performed during this quarter for the monitoring wells sampled in August 2012. The data validation memo is presented in Appendix D.

Sample collection and data review were conducted in accordance with the OM&M Manual and the Sampling and Analysis Plan for Long Term Operations and Maintenance of the Groundwater Treatment System and Groundwater Monitoring (dated August 9, 2010).

Table 3-1
Data Quality Assessment Table

Sampling Event	Sampling Rationale	Frequency of Analysis	Matrix	Lab WO #	Sampling Date	Field Quality Control Samples	Level 4 validation	Review of Laboratory Quality Control Samples	Data Usability
SDLAC Quarterly Sampling									
	Quarterly sampling of the treatment plant effluent is required per Los Angeles County Sanitation District Industrial Waste Discharge Permit Number 20039	Quarterly	Water	440-23161-1	9/12/2012	Equipment blanks are not needed as sampling equipment is not used. Trip blanks and field duplicates are not needed for this compliance sampling.	No	MB, LCS/LCSD, MS/MSD, surrogates	Results are usable for project objectives. Reporting limits, surrogates, and target compound list were all met. The 2-chloroethyl vinyl ether, acrolein and acrylonitrile results were analyzed 3 hours past the 7-day holding time for these compounds, which are collected unpreserved. Therefore, these results will be qualified as estimated due to holding time exceedances. The LCS and MS/MSD recoveries for acetone were above the upper control limit; but because acetone is not reported, no further action is required. MS and/or MSD recoveries for 2-chloroethyl vinyl ether were below acceptable control limits. However, the LCS was within criteria and no action was taken based on the MS/MSD.
GWTS PROCESS SAMPLING									
SCAQMD Compliance									
	Sampling of the influent, midpoint and effluent sample ports of the granular activated carbon (GAC) vessels is required monthly for the SCAQMD permit.	Monthly	Air	12-07-0244	7/5/2012	Equipment blanks are not needed as sampling equipment is not used to collect the vapor samples. Trip blanks are not typically submitted with Summa canisters. Field duplicates are not needed for this compliance sampling.	No	MB, LCS/LCSD, surrogates	Results are usable for project objectives. Holding times, reporting limits, target compound list, method blank, surrogates, and LCS/LCSD criteria were all met for target compounds.
				12-08-0682	8/9/2012				Results are usable for project objectives. Holding times, reporting limits, target compound list, method blank, surrogates, and LCS/LCSD criteria were all met for target compounds.
				12-09-0674	9/12/2012				Results are usable for project objectives. Holding times, reporting limits, target compound list, method blank, surrogates, and LCS/LCSD criteria were all met for target compounds.
Treatment System Process Sampling									
	Analysis of the influent and effluent samples (before and after the air stripper) from the treatment system groundwater are needed to assess the performance of the treatment equipment	Monthly (monthly for the first year of operation for the influent sample; frequency may change after 1st year); monthly for effluent sample	Water	440-16517-1	7/5/2012	Equipment blanks are not needed as no sampling equipment is used to collect these samples from the sample ports. Field duplicates are not needed for this treatment assessment sampling. Trip blanks were analyzed with these samples and all trip blank results were nondetect.	No	MB, LCS/LCSD, MS/MSD, surrogates	Results are usable for project objectives. Holding times, reporting limits, target compound list, method blank, and surrogate criteria were met for all compounds. LCS and/or LCSD recoveries for dibromochloromethane exceeded upper control limits. However, because this compound was not detected in associated samples, no further action is required. MS and/or MSD recoveries for dibromochloromethane were above acceptable control limits. However, since no action was needed based on the LCS results, no action was taken based on the MS/MSD.
				440-19955-1	8/9/2012				Results are usable for project objectives. Holding times, reporting limits, target compound list, method blank, and surrogate criteria were met for all compounds. LCS and/or LCSD recoveries for 2,2-dichloropropene, carbon tetrachloride, cis-1,3-dichloropropene, trans-1,3-dichloropropene exceeded upper control limits. However, because these compounds were not detected in associated samples, no further action is required. MS/MSD recoveries were high for 2,2-dichloropropene, carbon tetrachloride, cis-1,3-dichloropropene. However, since no action was needed based on the LCS results, no action was taken based on the MS/MSD. The continuing calibration verification (CCV) for 2,2-dichloropropane, carbon tetrachloride and cis-1,3-dichlopropene recovered above the upper control limit, according to the case narrative. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported without qualification. Two compounds, ethylbenzene and benzene, were not evaluated in the MS/MSD due to high concentrations in the original sample.
				440-23335-1	9/12/2012				Results are usable for project objectives. Holding times, reporting limits, target compound list, method blank, surrogates, LCS/LCSD, criteria were met for all compounds. The styrene recoveries in the MS and/or MSD sample were below the control limits, however, styrene was within the limits for the LCS/LCSD and therefore no action was required.
GROUNDWATER SAMPLING EVENTS									
Extraction Wells									
(EW1 through EW-5)	Extraction wells are monitored to assess the water quality of the groundwater contamination and the treatment system.	Semiannually (August)	Water	440-21340-1	8/22/2012	Equipment blanks are not needed as no sampling equipment is used to collect these samples from the sample ports. Field duplicates are not needed for this treatment assessment sampling. Trip blanks were analyzed with these samples and all trip blank results were nondetect.	No	MB, LCS/LCSD, MS/MSD, surrogates.	Results are usable for project objectives. Holding times, reporting limits, target compound list, method blank, and surrogate criteria were met for all compounds. The continuing calibration verification (CCV) for carbon tetrachloride recovered above the upper control limit, according to the case narrative. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported without qualification. LCS and/or LCSD recoveries for carbon tetrachloride and 1,1,2,2-tetrachloroethane exceeded upper control limits. However, because these compounds were not detected in associated samples, no further action is required. MS/MSD recoveries were above the limits for carbon tetrachloride. However, since no action was needed based on the LCS results, no action was taken based on the MS/MSD. Tetrachloroethene was not evaluated in the MS/MSD due to high concentrations in the original sample.
Observation Wells									
(OW1b, OW2, OW3, OW3b, OW4a, OW4b, OW5, OW6, OW7, OW8b, OW9, OW10, PZ9)	Required in the Omega Groundwater Remedy Performance Standards Verification Plan Monitoring	Semiannually (August)	Water	440-21053-1 440-21053-2 440-21316-1 440-21316-2 440-21702-1 440-21702-2	8/21/2012 to 8/22/2012	One equipment blank was collected each day of sampling. Trip blanks were analyzed with these samples. Two field duplicates and two split samples were collected during this sampling event. Field duplicate and split sample results and trip and equipment blank samples are discussed in the data validation memo.	Yes, one sample was validated with a level 4 data package. Lab QC data for all samples were reviewed and included in the validation.	Data validation	See Data Validation Memo in Appendix D.

Data were reviewed by Elizabeth Fortuna of CDM Smith
If a surrogate was diluted out due to a high dilution factor, the data are considered usable.
If an LCS or LCSD surrogate recovery was above laboratory limits, but the analyte was nondetect, the data are determined to be usable.
If an MS or MSD surrogate recovery was above laboratory acceptance limits, but the LCS was within criteria, the data are determined to be usable.
If analytes were detected in the method blank below reporting limits, no action was taken and the data were determined to be usable.

Section 4
Analysis and Findings

This section presents observations and findings from the performance monitoring results.

4.1 Groundwater Production and Mass Removed

The objective for the GWTS is to maintain hydraulic containment of contaminated groundwater in OU1. The volume of groundwater extracted and the mass of contaminants removed are discussed in the following text.

4.1.1 Groundwater Discharge Rates

The system produced the following volume and removed the following contaminant mass from the treated groundwater as summarized below:

A cumulative total of 21,417,019 gallons and overall monthly average of 542,129 gallons of groundwater have been processed since operations began on July 25, 2009. During the recent reporting period, 605,260 gallons were extracted in July; 598,691 gallons in August; and 696,307 gallons in September.

The average system flow rate since operations began on July 25, 2009 is approximately 18,089 gallons per day (gpd) and 12.6 gallons per minute (gpm). Flow rates during this reporting period were 19,525 gpd (13.6 gpm) in July; 19,313 gpd (13.4 gpm) in August; and 23,210 gpd(16.1 gpm) in September. *(Please note that the average system flow rate is recorded from the effluent flow meter and does not equal the sum of the individual extraction wells flow rate, potentially due in part to approximations.)*

4.1.2 Extraction Well Production Rates

The totalizer values and instantaneous pumping rates from each of the five extraction wells are also recorded manually on a weekly basis. The total volume pumped from each well and average extraction rates for the individual wells are summarized for this quarter as follows:

Summary of Extraction Well Production Data

Month	Extraction Wells				
	EW-1	EW-2	EW-3	EW-4	EW-5
July					
Monthly Volume *1	100,212	407,675	10,516	6,709	17,334
Average Flow Rate (gpm)	2.4	9.8	0.3	0.2	0.4
August					
Monthly Volume *2	122,282	469,450	12,806	7,999	19,997
Average Flow Rate (gpm)	2.4	9.3	0.3	0.2	0.4
September					
Monthly Volume *3	95,444	380,057	10,530	6,303	16,008
Average Flow Rate (gpm)	2.5	9.8	0.3	0.2	0.4
Cumulative					
Avg (gpm) this reporting period	2.4	9.6	0.3	0.2	0.4
Avg (gpm) since startup	1.8	10.4	0.2	0.1	0.4
Total Volume Extracted	2,968,905	17,343,949	382,328	204,225	632,962

Note:
*1 Readings recorded between 6/27/12 to 7/26/12
*2 Readings recorded between 7/26/12 to 8/30/12
*3 Readings recorded between 8/30/12 to 9/26/12

The average flow rate (including downtime) for EW-1 increased from 1.8 gpm (2nd Quarter 2012) to 2.4 gpm (3rd Quarter 2012). The average flow rate (including downtime) for EW-2 decreased from 12.9 gpm (2nd Quarter 2012) to 9.6 gpm (3rd Quarter 2012). The average flow rate (including downtime) for EW-3 increased from 0.2 gpm (2nd Quarter) to 0.3 gpm (3rd Quarter 2012). The EW-4 pump was repaired and resumed intermittent operation on June 26, 2012. The average flow rate (including downtime) for EW-4 was 0.2 gpm during the 3rd Quarter 2012. The average flow rate (including downtime) for EW-5 was remained at 0.4 gpm during the 2ndQuarter and 3rd Quarter 2012.

EW-2 is the only well that is pumping on a continuous basis without cycling on and off. The remaining wells constructed in lower permeability soil materials, pump intermittently. Table A1-2 in Appendix A.1 presents a summary of flow data for the extraction wells since system startup. Figure A1-3 in Appendix A.1 presents a graph of individual extraction wells production flow rate in gpd since system startup.

4.1.3 Mass Removed

A total of 725.1 pounds of VOCs have been removed cumulatively since July 25, 2009. For the 3rd Quarter 2012, a total of 14.4 pounds were removed in July, 15.4 pounds in August, and 16.7 pounds in September.

Section 5
Observations and Recommendations

This section briefly summarizes pertinent observations, and presents recommendations for modification(s), if required.

5.1 Observations

The overall trend in groundwater elevations in A-Zone wells and piezometers since 1Q2009 has been generally downward through mid-2011. From mid-2011 throughout January 2012, the overall trend appeared to be stable to slightly increasing. The overall trend appeared to be decreasing from January 2012 through the end of 1Q2012, but has rebounded and increased during 2Q2012. The water elevations in the A-zone wells and piezometers fluctuated through 3Q2012 without a consistent pattern. The overall trend in well OW4a, which is the farthest A-Zone well from the Putnam Street extraction and is not directly impacted by the remedial pumping, shows a steady decrease from 1Q2009 through mid-2011, followed by an overall, steady increase from mid-2011 throughout June 2012, decreased in July, and rebounded and remained stable in August and September 2012.

A-Zone groundwater elevations in the monitoring wells and piezometers along Putnam Street appear to be largely controlled by extraction well pumping, particularly from EW-2 which contributes the majority of the total extraction.

Groundwater elevation trends in all four B-Zone wells (Figure A2-2) correlate very well with each other. Groundwater elevations in B-Zone wells showed an initial decline from early 2009 through the end of 2009, increases through approximately June 2010, followed by decreases through approximately October 2010, and then gradual and significant increases from approximately November 2010 through July 2011, and have oscillated from decreasing to increasing through September 2012.

The discharge rates from the system have declined since system startup through January 2011. From January 2011 through August 2011, the system discharge rates were relatively stable. Since August 2011, the system discharge rates have been gradually increasing. The average system production rate (including downtime) is approximately 12.6 gpm since operation of the extraction wells began on a continual basis in July 2009.

EW-2 yields the greatest volume of groundwater and the most contaminant mass, and is the only well that is pumping on a continuous basis without cycling on and off. The remaining wells, constructed in lower permeability soil materials, pumped intermittently.

5.2 Recommendations

The GWTS is anticipated to continue operating similarly during the next quarter. Due to the stable concentration trends observed for the groundwater influent and for the vapor influent, it is recommended that the sampling frequencies of the groundwater influent and the vapor influent be reduced from monthly to quarterly. Other sampling and data collection methods and frequencies will remain unchanged.

The PSVP required that semi-annual groundwater sampling be performed for the first two years of operation of the GWTS. It is recommended that the sampling of monitoring wells and extraction wells for VOCs and 1,4-dioxane continue on a semi-annual basis for a fourth year (to July 2013), following which additional evaluation will again be performed to assess a potential change in sampling frequency.

Section 6
References

CDM, 2007. *Performance Standards Verification Plan for Phase 1a Area Groundwater Treatment System*, April 19.

CDM, 2010. *Final Operations, Maintenance and Monitoring Manual*, February 10.

CDM, 2010. *Sampling and Analysis Plan for Long Term Operation and Maintenance of the Ground Water Treatment System and Groundwater Monitoring*. August 9.

CDM, 2011. *Documentation of the Omega Non-Time Critical Removal Action Capture Zone Model Technical Memorandum*. May 23.

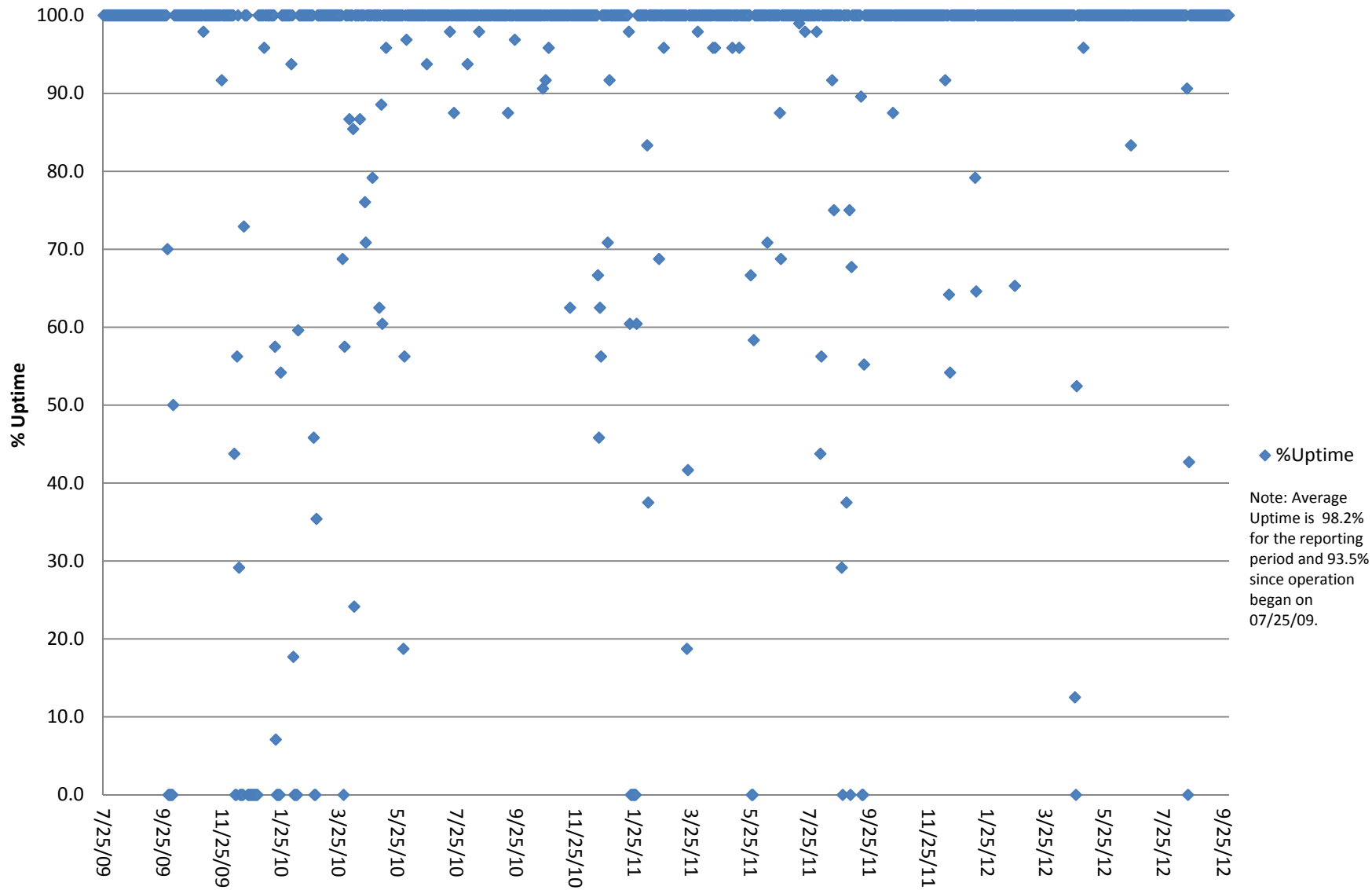
CDM. 2011. *Work Plan for Proposed Additional Piezometer and Monitoring Well*. October 13.

USEPA, 2001. *Consent Decree No. 00-12471*, February 28.

Appendix A
Figures, Tables, and Graphs of Results

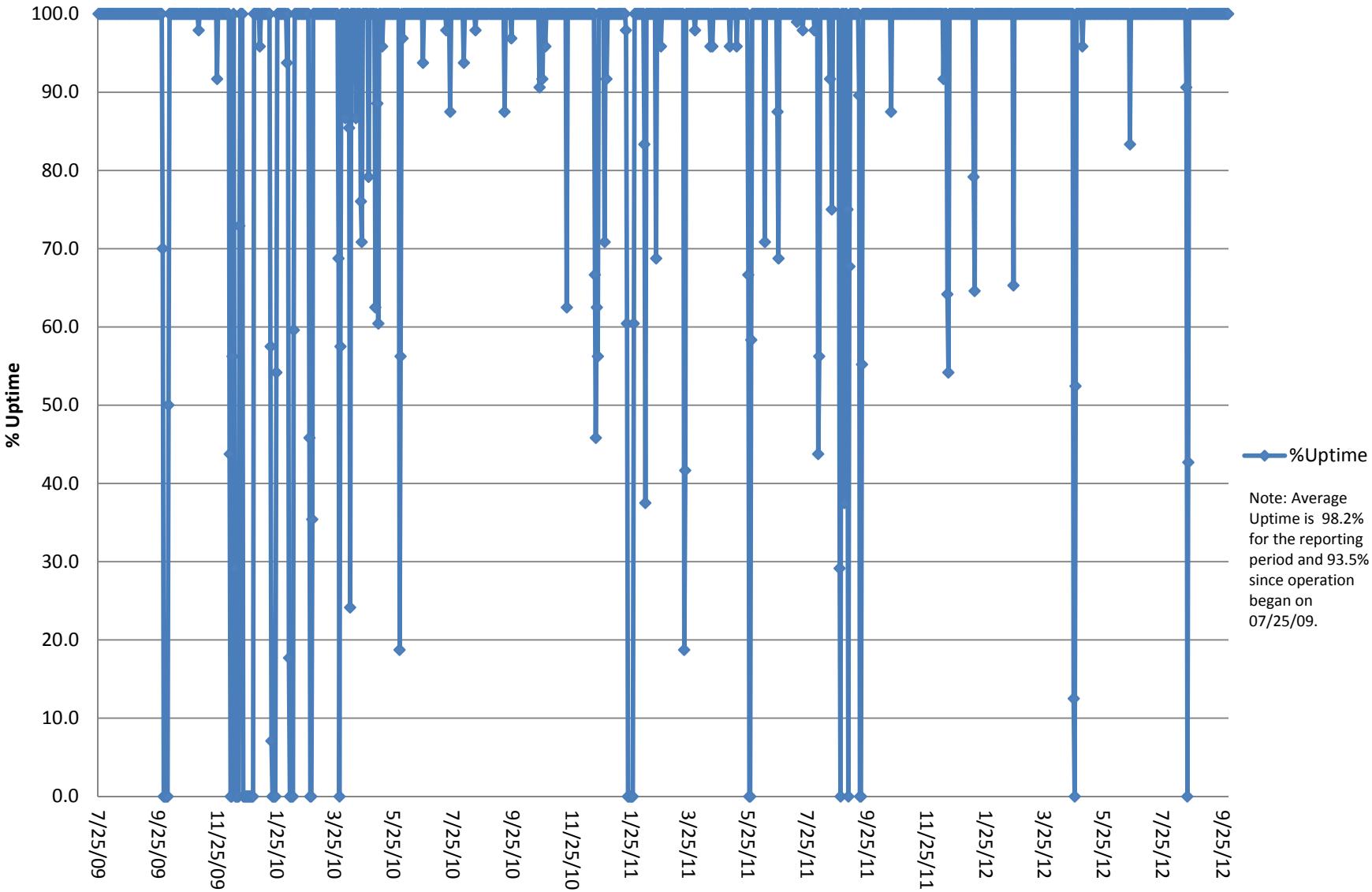
Attachment 1
Treatment System Operations
Summary of Tables and Graphs

Figure A1-1
Omega Chemical Superfund Site
GWTS Uptime



Note: Average Uptime is 98.2% for the reporting period and 93.5% since operation began on 07/25/09.

Figure A1-1
Omega Chemical Superfund Site
GWTS Uptime



Note: Average Uptime is 98.2% for the reporting period and 93.5% since operation began on 07/25/09.

Figure A1-2
Omega Chemical Superfund Site
Groundwater Production

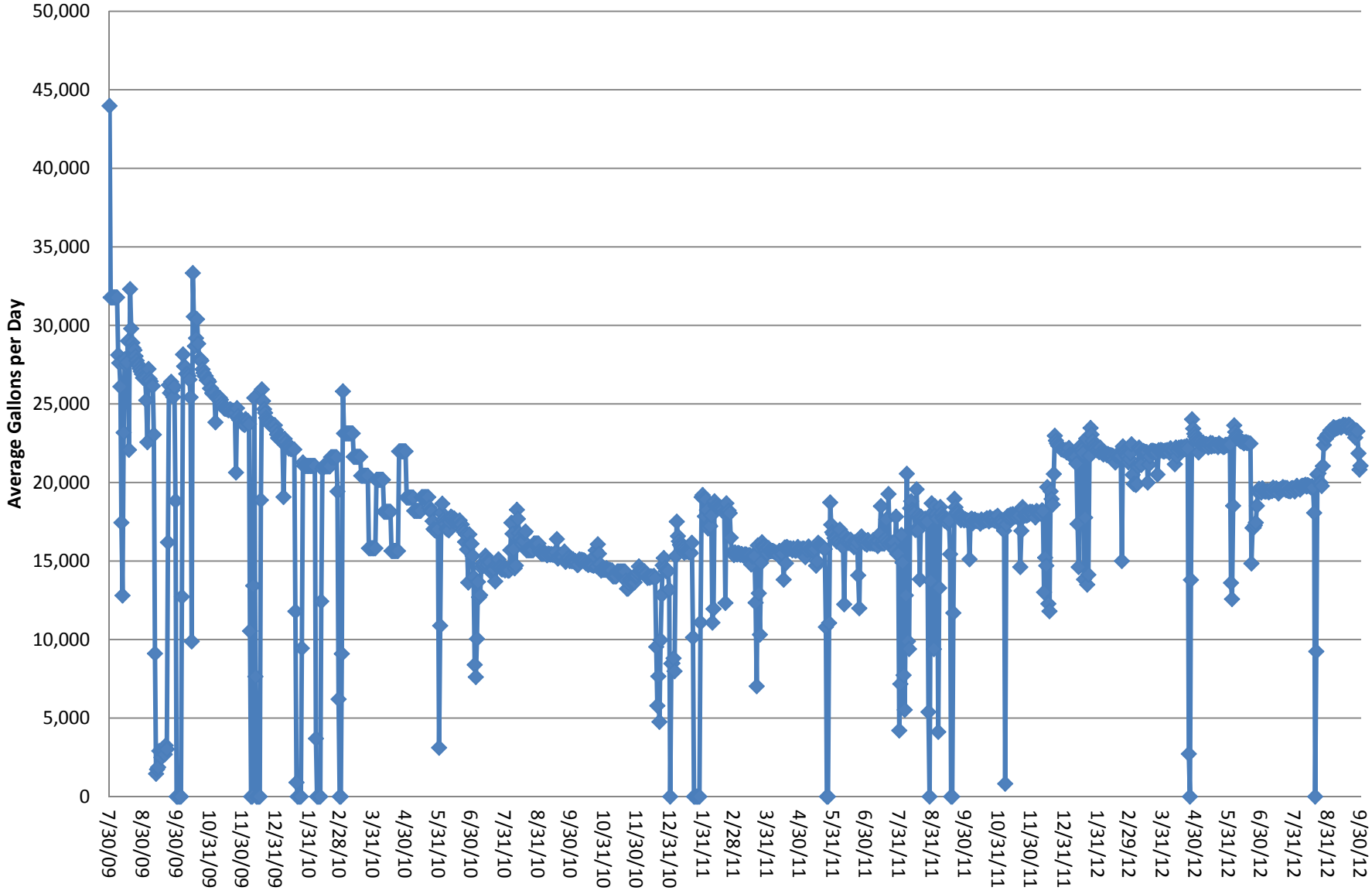


Figure A1-3
Omega Chemical Superfund Site
Individual Extraction Well Production

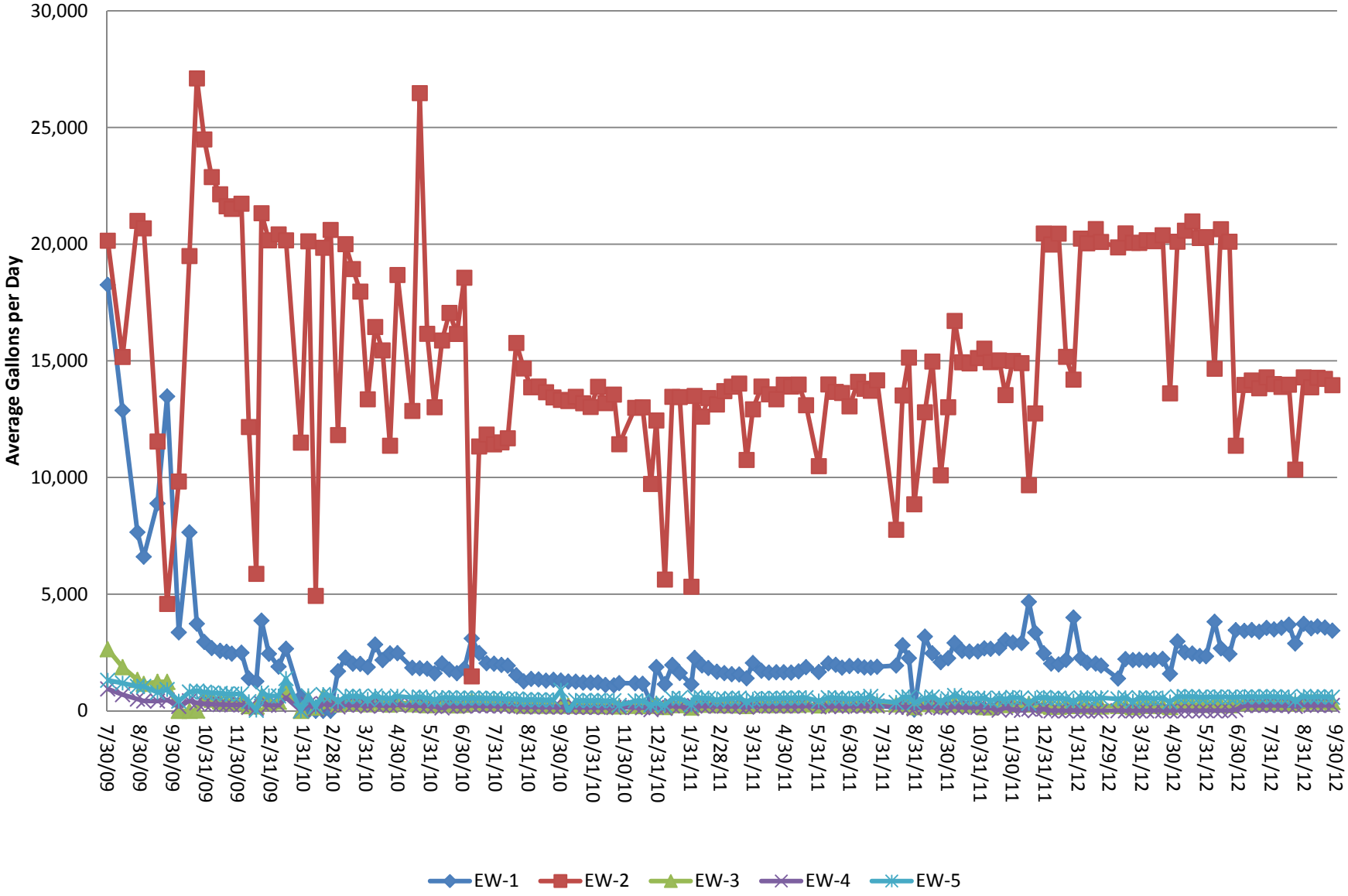


Figure A1-4
Omega Chemical Superfund Site
Combined Influent Groundwater Analytical Results
Total VOC and PCE (ug/L)

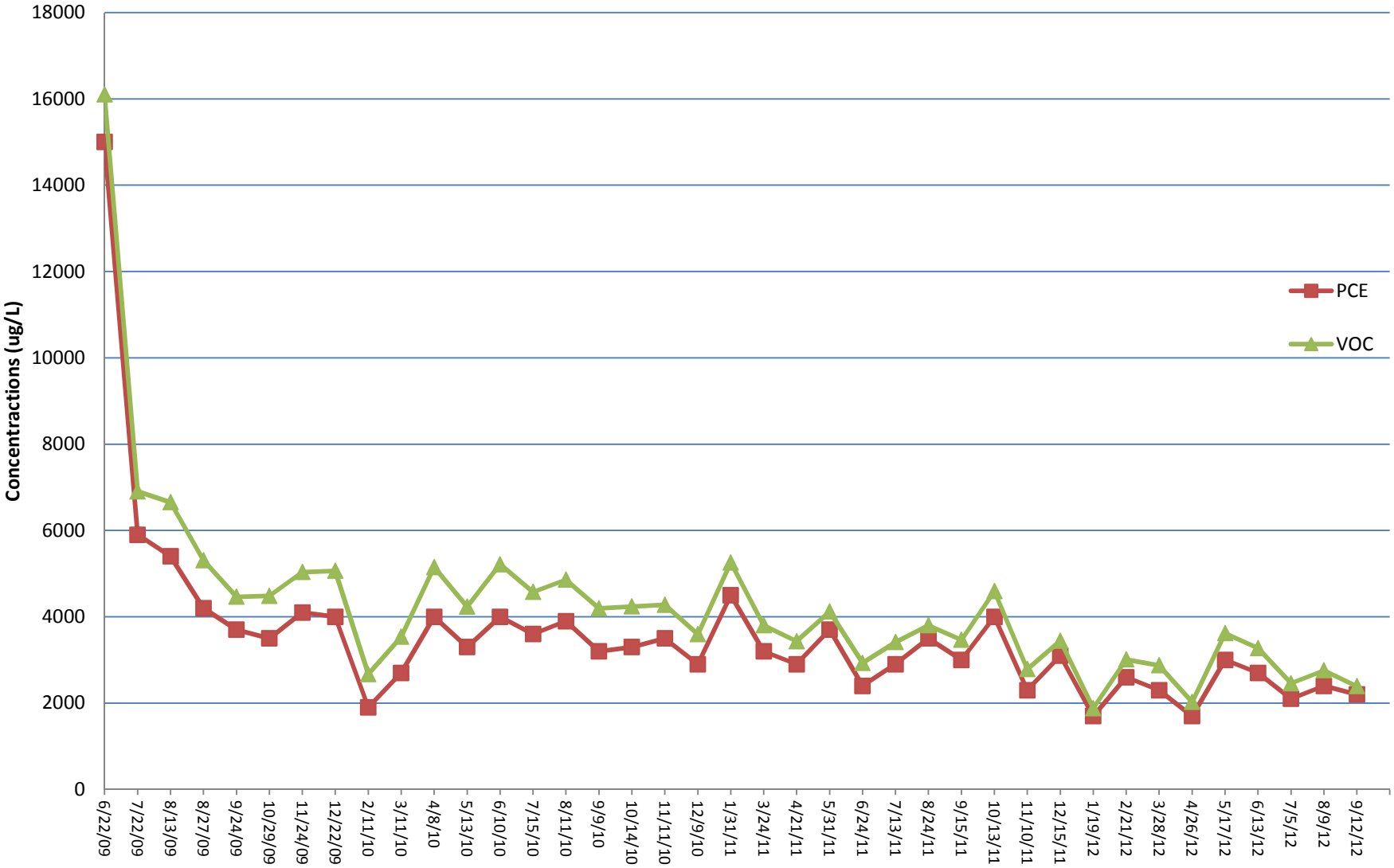


Figure A1-5
Omega Chemical Superfund Site
Vapor Influent Analytical Results
Total Volatile Organic Compounds (ppbv)

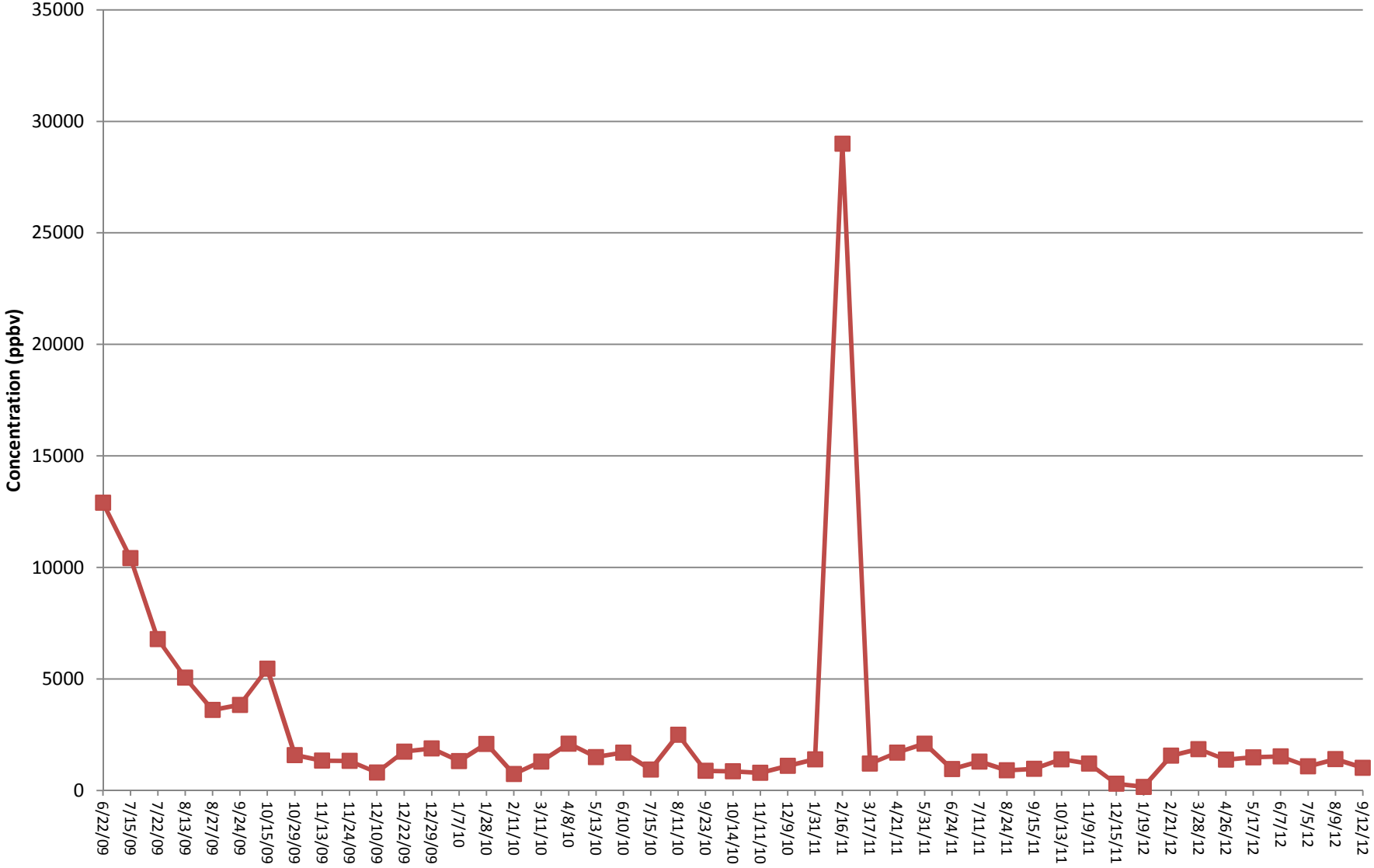


Figure A1-6
Omega Chemical Superfund Site
Cumulative VOC Mass Removed from Groundwater

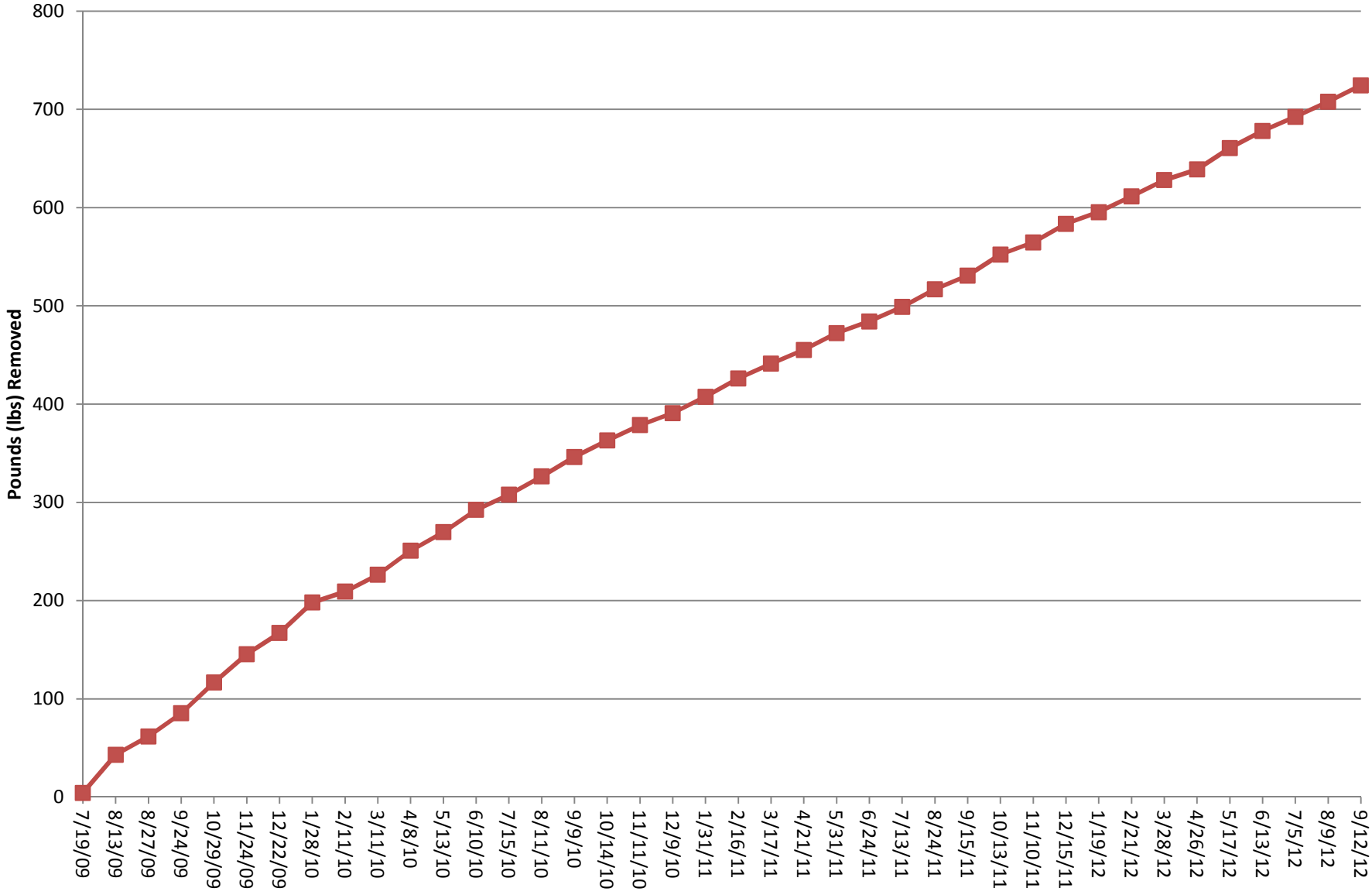


Table A1-1
Omega Chemical Superfund Site
Groundwater System Summary

Month of Operation	Total Groundwater Treated (Average gallons per month)	Average System Flow Rate (gallons per day)	Average System Flow Rate (gallons per minute)	Average System Uptime (%)	Approximate VOC Mass Removed (lbs)
July 2009	378,740	16,416	11.4	100%	40.0
August 2009	853,401	27,504	19.1	100%	22.0
September 2009	458,018	15,264	10.6	95.7%	24.0
October 2009	715,721	23,040	16.0	85.5%	31.0
November 2009	739,366	24,624	17.1	99.7%	29.0
December 2009	658,087	21,936	15.2	43.4%	21.6
January 2010	545,866	17,609	12.2	81.1%	30.9
February 2010	482,710	17,240	12.0	75.6%	11.1
March 2010	556,213	19,865	13.8	89.1%	17.1
April 2010	553,464	19,767	13.7	93.6%	24.5
May 2010	520,567	18,592	12.9	94.4%	18.9
June 2010	504,646	18,023	12.5	98.2%	22.6
July 2010	389,848	13,443	9.3	99.5%	15.4
August 2010	443,994	15,857	11.0	99.6%	18.6
September 2010	544,734	15,564	10.8	99.6%	19.8
October 2010	461,317	14,881	10.3	99.4%	16.8
November 2010	420,029	14,001	9.7	98.8%	15.6
December 2010	389,878	12,577	8.7	93.3%	12.3
January 2011	366,687	11,829	8.2	78.7%	16.6
February 2011	479,977	17,142	11.9	96.0%	18.7
March 2011	460,417	14,852	10.3	95.6%	15.0
April 2011	467,659	15,589	10.8	99.7%	14.0
May 2011	452,781	14,606	10.1	90.9%	17.1
June 2011	477,211	15,907	11.0	97.6%	12.0
July 2011	496,421	16,014	11.1	99.9%	14.7
August 2011	460,728	14,862	10.3	90.1%	18.0
September 2011	465,300	15,510	10.8	84.2%	13.9
October 2011	542,980	17,515	12.2	99.6%	21.4
November 2011	513,857	17,129	11.9	100.0%	12.4
December 2011	586,336	18,914	13.1	97.1%	18.9
January 2012	643,303	20,752	14.4	98.2%	11.9
February 2012	624,198	21,524	14.9	98.8%	16.2
March 2012	665,882	21,480	14.9	100.0%	16.5
April 2012	617,245	20,575	14.3	92.2%	10.8
May 2012	694,408	22,400	15.6	99.9%	21.9
June 2012	610,768	20,359	14.1	99.4%	17.4
July 2012	605,260	19,525	13.6	100.0%	14.4
August 2012	598,691	19,313	13.4	94.6%	15.4
September 2012	696,307	23,210	16.1	100.0%	16.7
Operation Average	542,129	18,082	12.6	93.5%	--
Operation Total	21,417,019	--	--	--	725.1

Notes:

- System began operation on 7/25/09.

- Total Groundwater Treated is tabulated using the data from the effluent flow meter. It measures the combined system flow rate processed through the plant in gallons over time (i.e., gallons per minute, gallons per day, gallons per month).

- Average System Flow Rate is collected from the effluent flow meter totalizer and calculated between the values at the beginning and ending of the month (gallons per month); then divided by number of monthly days; and divided by the number of daily hours. For example, assuming that monthly volume is 500,000 gallons; then 500,000 gallons/30 days = 16,667 gallons per day; and 16,667 gallons per day/1440 minutes = 11.6 gallons per minute.

- Operation Total is recorded from the effluent flow meter and does not equal to the sum of the monthly flow volume averages.

- System Uptime is calculated by averaging the daily percent runtime data over a period.

- VOC Mass Removed is calculated by converting the mass loading of system influent analytical concentrations (ug/L) multiplied by monthly flow (gallons). The formula used is as follows:

Mass Removed (lb) = (Concentration (ug/L) * Monthly Flow (gallons)) / (0.264 gallon/L * 453.6x10^6 ug/lb)

Table A1-2
Omega Chemical Superfund Site
Extraction Well Flow Summary

Date	Extraction Wells														
	EW-1			EW-2			EW-3			EW-4			EW-5		
	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)
7/28/2009	136,365			108,625			36,266			5,451			6,992		
7/30/2009	176,426	12.7	18,256	152,837	14.0	20,147	42,059	1.8	2,640	7,509	0.7	938	9,860	0.9	1,307
8/13/2009	353,521	8.9	12,873	361,472	10.5	15,166	67,779	1.3	1,870	17,028	0.5	692	26,192	0.8	1,187
8/27/2009	461,672	5.3	7,656	658,096	14.6	20,998	86,520	0.9	1,327	24,095	0.3	500	40,931	0.7	1,043
9/2/2009	500,028	4.6	6,603	778,242	14.4	20,683	93,242	0.8	1,157	26,546	0.3	422	46,985	0.7	1,042
9/15/2009	618,604	6.2	8,884	932,309	8.0	11,543	109,850	0.9	1,244	32,121	0.3	418	57,525	0.5	790
9/24/2009	736,198	9.4	13,472	972,324	3.2	4,584	120,707	0.9	1,244	36,169	0.3	464	65,468	0.6	910
10/5/2009	773,897	2.3	3,360	1,082,631	6.8	9,830	120,707	0.0	0	38,317	0.1	191	70,093	0.3	412
10/15/2009	848,847	5.3	7,651	1,273,592	13.5	19,494	120,707	0.0	0	42,484	0.3	425	77,981	0.6	805
10/22/2009	874,953	2.6	3,734	1,463,138	18.8	27,108	120,793	0.0	12	44,865	0.2	341	83,907	0.6	847
10/29/2009	895,474	2.1	2,952	1,633,366	17.0	24,488	124,659	0.4	556	46,933	0.2	297	89,474	0.6	801
11/5/2009	914,285	1.9	2,690	1,793,357	15.9	22,879	127,988	0.3	476	48,916	0.2	284	94,840	0.5	767
11/13/2009	935,061	1.8	2,570	1,972,307	15.4	22,138	131,249	0.3	403	51,102	0.2	270	100,857	0.5	744
11/19/2009	950,381	1.8	2,527	2,103,418	15.0	21,627	133,521	0.3	375	52,697	0.2	263	105,216	0.5	719
11/24/2009	962,473	1.7	2,450	2,209,609	14.9	21,513	135,267	0.2	354	53,956	0.2	255	108,736	0.5	713
12/3/2009	983,800	1.7	2,490	2,395,744	15.1	21,735	138,379	0.3	363	56,174	0.2	259	114,955	0.5	726
12/10/2009	993,512	1.0	1,387	2,480,909	8.4	12,166	139,759	0.1	197	57,198	0.1	146	117,680	0.3	389
12/17/2009	1,002,321	0.9	1,258	2,522,028	4.1	5,874	141,084	0.1	189	57,913	0.1	102	117,850	0.0	24
12/22/2009	1,021,652	2.7	3,866	2,628,657	14.8	21,326	144,133	0.4	610	59,491	0.2	316	121,678	0.5	766
12/29/2009	1,038,765	1.7	2,445	2,769,825	14.0	20,167	146,594	0.2	352	61,236	0.2	249	126,150	0.4	639
1/7/2010	1,055,808	1.3	1,894	2,953,631	14.2	20,423	150,111	0.3	391	63,375	0.2	238	131,857	0.4	634
1/14/2010	1,074,422	1.8	2,659	3,094,775	14.0	20,163	156,488	0.6	911	67,318	0.4	563	141,521	1.0	1,381
1/28/2010	1,082,669	0.4	589	3,255,738	8.0	11,497	156,488	0.0	0	67,318	0.0	0	141,521	0.0	0
2/4/2010	1,082,671	0.0	0	3,396,611	14.0	20,125	160,036	0.4	507	69,292	0.2	282	146,030	0.4	644
2/11/2010	1,082,672	0.0	0	3,431,119	3.4	4,930	161,044	0.1	144	69,841	0.1	78	147,202	0.1	167
2/18/2010	1,082,672	0.0	0	3,570,053	13.8	19,848	165,239	0.4	599	71,978	0.2	305	152,107	0.5	701
2/25/2010	1,082,673	0.0	0	3,714,347	14.3	20,613	168,123	0.3	412	73,779	0.2	257	156,634	0.4	647
3/4/2010	1,094,533	1.2	1,694	3,797,093	8.2	11,821	170,041	0.2	274	74,946	0.1	167	159,471	0.3	405
3/11/2010	1,110,504	1.6	2,282	3,937,113	13.9	20,003	172,668	0.3	375	76,756	0.2	259	163,654	0.4	598
3/18/2010	1,124,641	1.4	2,020	4,069,673	13.2	18,937	174,930	0.2	323	78,478	0.2	246	168,066	0.4	630
3/25/2010	1,138,699	1.4	2,008	4,195,460	12.5	17,970	177,136	0.2	315	80,167	0.2	241	172,331	0.4	609
4/1/2010	1,151,795	1.3	1,871	4,288,927	9.3	13,352	179,104	0.2	281	81,565	0.1	200	175,787	0.3	494
4/8/2010	1,171,702	2.0	2,844	4,404,100	11.4	16,453	182,168	0.3	438	83,432	0.2	267	180,221	0.4	633
4/15/2010	1,186,923	1.5	2,174	4,512,250	10.7	15,450	184,470	0.2	329	85,014	0.2	226	184,067	0.4	549
4/22/2010	1,204,127	1.7	2,458	4,591,785	7.9	11,362	186,349	0.2	268	86,632	0.2	231	187,763	0.4	528
4/29/2010	1,221,415	1.7	2,470	4,722,530	13.0	18,678	188,965	0.3	374	88,418	0.2	255	192,142	0.4	626
5/13/2010	1,247,211	1.3	1,843	4,902,503	8.9	12,855	192,977	0.2	287	91,511	0.2	221	200,080	0.4	567
5/20/2010	1,259,972	1.3	1,823	5,087,812	18.4	26,473	194,867	0.2	270	93,095	0.2	226	204,224	0.4	592
5/27/2010	1,272,580	1.3	1,801	5,200,941	11.2	16,161	196,573	0.2	244	94,553	0.1	208	208,033	0.4	544
6/3/2010	1,283,820	1.1	1,606	5,292,042	9.0	13,014	198,391	0.2	260	95,875	0.1	189	211,373	0.3	477
6/10/2010	1,298,022	1.4	2,029	5,403,168	11.0	15,875	200,521	0.2	304	96,741	0.1	124	215,315	0.4	563
6/17/2010	1,310,377	1.2	1,765	5,522,559	11.8	17,056	202,317	0.2	257	98,217	0.1	211	219,225	0.4	559
6/24/2010	1,321,668	1.1	1,613	5,635,652	11.2	16,156	203,942	0.2	232	99,579	0.1	195	222,965	0.4	534
7/1/2010	1,334,319	1.3	1,807	5,765,588	12.9	18,562	205,777	0.2	262	100,981	0.1	200	226,794	0.4	547
7/8/2010	1,356,040	2.2	3,103	5,775,925	1.0	1,477	208,812	0.3	434	102,608	0.2	232	230,623	0.4	547
7/15/2010	1,373,385	1.7	2,478	5,855,242	7.9	11,331	211,462	0.3	379	104,170	0.2	223	234,443	0.4	546
7/22/2010	1,387,653	1.4	2,038	5,938,123	8.2	11,840	213,802	0.2	334	105,651	0.1	212	238,178	0.4	534
7/29/2010	1,401,805	1.4	2,022	6,018,065	7.9	11,420	216,149	0.2	335	107,107	0.1	208	241,864	0.4	527

Table A1-2
Omega Chemical Superfund Site
Extraction Well Flow Summary

Date	Extraction Wells														
	EW-1			EW-2			EW-3			EW-4			EW-5		
	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)
8/5/2010	1,415,584	1.4	1,968	6,098,601	8.0	11,505	218,407	0.2	323	108,545	0.1	205	245,477	0.4	516
8/11/2010	1,427,203	1.3	1,937	6,168,688	8.1	11,681	220,307	0.2	317	109,739	0.1	199	248,485	0.3	501
8/19/2010	1,439,407	1.1	1,526	6,294,834	11.0	15,768	222,362	0.2	257	111,233	0.1	187	252,561	0.4	510
8/26/2010	1,448,248	0.9	1,263	6,397,539	10.2	14,672	223,895	0.2	219	112,381	0.1	164	255,813	0.3	465
9/2/2010	1,457,806	0.9	1,365	6,494,602	9.6	13,866	225,530	0.2	234	113,576	0.1	171	259,182	0.3	481
9/9/2010	1,467,211	0.9	1,344	6,591,911	9.7	13,901	227,114	0.2	226	114,740	0.1	166	262,479	0.3	471
9/16/2010	1,476,247	0.9	1,291	6,687,491	9.5	13,654	228,655	0.2	220	115,871	0.1	162	265,706	0.3	461
9/23/2010	1,485,573	0.9	1,332	6,781,531	9.3	13,434	230,267	0.2	230	117,010	0.1	163	268,959	0.3	465
9/30/2010	1,494,668	0.9	1,299	6,874,821	9.3	13,327	231,855	0.2	227	118,115	0.1	158	275,118	0.6	880
10/7/2010	1,503,465	0.9	1,257	6,967,757	9.2	13,277	233,416	0.2	223	119,202	0.1	155	274,897	0.0	-32
10/14/2010	1,512,215	0.9	1,250	7,061,977	9.3	13,460	234,968	0.2	222	120,283	0.1	154	278,022	0.3	446
10/21/2010	1,520,673	0.8	1,208	7,154,260	9.2	13,183	236,483	0.2	216	121,324	0.1	149	281,062	0.3	434
10/28/2010	1,529,082	0.8	1,201	7,245,414	9.0	13,022	238,003	0.2	217	122,355	0.1	147	284,111	0.3	436
11/4/2010	1,537,565	0.8	1,212	7,342,635	9.6	13,889	239,536	0.2	219	123,404	0.1	150	287,227	0.3	445
11/11/2010	1,545,330	0.8	1,109	7,434,939	9.2	13,186	240,932	0.1	199	124,376	0.1	139	290,168	0.3	420
11/19/2010	1,554,065	0.8	1,092	7,543,355	9.4	13,552	242,512	0.1	198	125,517	0.1	143	293,645	0.3	435
11/24/2010	1,559,987	0.8	1,184	7,600,499	7.9	11,429	243,451	0.1	188	126,238	0.1	144	294,799	0.2	231
12/9/2010	1,577,701	0.8	1,181	7,795,289	9.0	12,986	246,591	0.1	209	128,340	0.1	140	301,142	0.3	423
12/16/2010	1,585,822	0.8	1,160	7,886,338	9.0	13,007	248,003	0.1	202	129,298	0.1	137	304,047	0.3	415
12/24/2010	1,588,477	0.2	332	7,964,130	6.8	9,724	249,667	0.1	208	129,687	0.0	49	306,001	0.2	244
12/29/2010	1,597,868	1.3	1,878	8,026,352	8.6	12,444	251,108	0.2	288	130,428	0.1	148	307,663	0.2	332
1/6/2011	1,606,996	0.8	1,141	8,071,358	3.9	5,626	252,395	0.1	161	131,271	0.1	105	309,509	0.2	231
1/13/2011	1,620,746	1.4	1,964	8,165,555	9.3	13,457	254,336	0.2	277	132,743	0.1	210	313,239	0.4	533
1/20/2011	1,632,094	1.1	1,621	8,259,688	9.3	13,448	256,049	0.2	245	134,122	0.1	197	316,961	0.4	532
1/31/2011	1,644,650	0.8	1,141	8,318,220	3.7	5,321	257,609	0.1	142	135,231	0.1	101	319,719	0.2	251
2/3/2011	1,651,459	1.6	2,270	8,358,702	9.4	13,494	258,485	0.2	292	135,896	0.2	222	321,445	0.4	575
2/10/2011	1,665,077	1.4	1,945	8,446,980	8.8	12,611	260,345	0.2	266	137,330	0.1	205	325,210	0.4	538
2/16/2011	1,676,070	1.3	1,832	8,527,429	9.3	13,408	261,915	0.2	262	138,550	0.1	203	328,424	0.4	536
2/24/2011	1,689,459	1.2	1,674	8,632,466	9.1	13,130	263,877	0.2	245	140,126	0.1	197	332,111	0.3	461
3/3/2011	1,700,783	1.1	1,618	8,728,372	9.5	13,701	265,579	0.2	243	141,519	0.1	199	335,614	0.3	500
3/10/2011	1,711,763	1.1	1,569	8,825,638	9.6	13,895	267,220	0.2	234	142,888	0.1	196	339,323	0.4	530
3/17/2011	1,722,676	1.1	1,559	8,923,836	9.7	14,028	268,842	0.2	232	144,251	0.1	195	343,118	0.4	542
3/24/2011	1,732,445	1.0	1,396	8,999,113	7.5	10,754	270,269	0.1	204	145,357	0.1	158	345,928	0.3	401
3/30/2011	1,744,739	1.4	2,049	9,076,638	9.0	12,921	271,958	0.2	282	146,617	0.1	210	348,889	0.3	494
4/7/2011	1,758,473	1.2	1,717	9,187,839	9.7	13,900	274,069	0.2	264	148,261	0.1	206	353,154	0.4	533
4/14/2011	1,769,952	1.1	1,640	9,282,809	9.4	13,567	275,817	0.2	250	149,656	0.1	199	356,816	0.4	523
4/21/2011	1,781,537	1.1	1,655	9,376,296	9.3	13,355	277,627	0.2	258	151,058	0.1	200	360,544	0.4	533
4/28/2011	1,793,114	1.1	1,654	9,474,155	9.7	13,980	279,417	0.2	256	152,480	0.1	203	364,348	0.4	544
5/5/2011	1,804,587	1.1	1,639	9,571,468	9.7	13,902	281,187	0.2	253	153,890	0.1	201	368,167	0.4	546
5/12/2011	1,816,430	1.2	1,692	9,669,354	9.7	13,984	282,994	0.2	258	155,325	0.1	205	372,010	0.4	549
5/19/2011	1,829,526	1.3	1,871	9,761,028	9.1	13,096	284,933	0.2	277	156,805	0.1	211	375,918	0.4	558
5/31/2011	1,849,497	1.2	1,664	9,886,911	7.3	10,490	287,716	0.2	232	158,828	0.1	169	381,011	0.3	424
6/9/2011	1,867,761	1.4	2,029	10,012,833	9.7	13,991	290,264	0.2	283	160,559	0.1	192	386,052	0.4	560
6/16/2011	1,881,580	1.4	1,974	10,108,547	9.5	13,673	292,241	0.2	282	162,022	0.1	209	389,886	0.4	548
6/22/2011	1,892,688	1.3	1,851	10,190,285	9.5	13,623	293,838	0.2	266	163,087	0.1	178	393,098	0.4	535
6/29/2011	1,906,135	1.3	1,921	10,281,652	9.1	13,052	295,759	0.2	274	164,479	0.1	199	396,658	0.4	509

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7/7/2011	1,921,544	1.3	1,926	10,394,471	9.8	14,102	297,976	0.2	277	166,119	0.1	205	400,922	0.4	533
7/13/2011	1,932,714	1.3	1,862	10,477,310	9.6	13,807	299,579	0.2	267	167,313	0.1	199	404,094	0.4	529
7/19/2011	1,943,829	1.3	1,852	10,559,614	9.5	13,717	301,167	0.2	265	168,498	0.1	198	407,814	0.4	620
7/25/2011	1,955,158	1.3	1,888	10,644,596	9.8	14,164	302,800	0.2	272	169,717	0.1	203	410,399	0.3	431
8/12/2011	1,990,081	1.3	1,940	10,784,285	5.4	7,760	307,757	0.2	275	172,494	0.1	154	416,882	0.3	360
8/18/2011	2,006,930	2.0	2,808	10,865,395	9.4	13,518	309,536	0.2	297	173,480	0.1	164	420,358	0.4	579
8/24/2011	2,020,484	1.6	2,259	10,956,227	10.5	15,139	311,231	0.2	283	174,410	0.1	155	423,878	0.4	587
8/29/2011	2,020,734	0.0	50	11,000,497	6.1	8,854	312,022	0.1	158	174,863	0.1	90	425,578	0.2	340
9/8/2011	2,052,556	2.2	3,182	11,128,477	8.9	12,798	314,932	0.2	291	176,374	0.1	151	430,908	0.4	533
9/15/2011	2,069,799	1.7	2,463	11,233,285	10.4	14,973	317,007	0.2	297	177,504	0.1	161	435,069	0.4	595
9/23/2011	2,086,468	1.4	2,084	11,314,063	7.0	10,097	318,861	0.2	232	178,459	0.1	119	438,444	0.3	422
9/30/2011	2,102,222	1.6	2,251	11,405,156	9.0	13,013	320,780	0.2	274	179,445	0.1	141	442,067	0.4	518
10/6/2011	2,119,682	2.0	2,910	11,505,426	11.6	16,712	322,799	0.2	336	180,539	0.1	182	446,005	0.5	656
10/13/2011	2,137,688	1.8	2,572	11,609,989	10.4	14,938	324,669	0.2	267	181,619	0.1	154	449,848	0.4	549
10/20/2011	2,155,453	1.8	2,538	11,714,214	10.3	14,889	326,382	0.2	245	182,656	0.1	148	453,521	0.4	525
10/28/2011	2,175,814	1.8	2,545	11,835,182	10.5	15,121	328,331	0.2	244	183,819	0.1	145	457,713	0.4	524
11/3/2011	2,191,893	1.9	2,680	11,928,316	10.8	15,522	329,280	0.1	158	184,721	0.1	150	460,981	0.4	545
11/9/2011	2,207,830	1.8	2,656	12,017,994	10.4	14,946	330,200	0.1	153	185,439	0.1	120	463,591	0.3	435
11/17/2011	2,229,398	1.9	2,696	12,138,151	10.4	15,020	332,292	0.2	262	185,673	0.0	29	467,918	0.4	541
11/23/2011	2,247,581	2.1	3,030	12,219,353	9.4	13,534	333,771	0.2	247	186,489	0.1	136	470,910	0.3	499
11/30/2011	2,268,023	2.0	2,920	12,324,321	10.4	14,995	335,680	0.2	273	186,829	0.0	49	474,889	0.4	569
12/8/2011	2,291,288	2.0	2,908	12,443,548	10.3	14,903	337,825	0.2	268	186,974	0.0	18	479,294	0.4	551
12/15/2011	2,323,990	3.2	4,672	12,511,233	6.7	9,669	339,882	0.2	294	187,506	0.1	76	481,545	0.2	322
12/21/2011	2,344,110	2.3	3,353	12,587,717	8.9	12,747	341,539	0.2	276	187,547	0.0	7	484,713	0.4	528
12/29/2011	2,363,833	1.7	2,465	12,751,369	14.2	20,456	343,310	0.2	221	188,117	0.0	71	489,262	0.4	569
1/5/2012	2,377,993	1.4	2,023	12,891,260	13.9	19,985	344,570	0.1	180	188,117	0.0	0	492,965	0.4	529
1/12/2012	2,391,905	1.4	1,988	13,034,418	14.2	20,451	345,815	0.1	178	188,120	0.0	0	496,780	0.4	545
1/19/2012	2,407,179	1.5	2,182	13,140,643	10.5	15,175	347,264	0.1	207	188,120	0.0	0	500,353	0.4	510
1/26/2012	2,435,153	2.8	3,996	13,240,031	9.9	14,198	349,061	0.2	257	188,256	0.0	20	503,272	0.3	417
2/2/2012	2,451,052	1.6	2,271	13,381,711	14.1	20,240	350,545	0.1	212	188,256	0.0	0	507,144	0.4	553
2/8/2012	2,463,404	1.4	2,059	13,501,931	13.9	20,037	351,721	0.1	196	188,256	0.0	0	510,390	0.4	541
2/16/2012	2,479,617	1.4	2,027	13,667,137	14.3	20,651	353,292	0.1	196	188,256	0.0	0	514,367	0.3	497
2/21/2012	2,489,307	1.3	1,938	13,767,614	14.0	20,095	354,225	0.1	187	188,256	0.0	0	517,182	0.4	563
3/8/2012	2,511,443	1.0	1,383	14,085,394	13.8	19,861	357,603	0.1	211	188,278	0.0	1	525,280	0.4	506
3/15/2012	2,526,966	1.5	2,218	14,228,650	14.2	20,465	359,129	0.2	218	188,278	0.0	0	529,187	0.4	558
3/22/2012	2,542,188	1.5	2,175	14,369,071	13.9	20,060	360,226	0.1	157	188,278	0.0	0	532,063	0.3	411
3/28/2012	2,555,339	1.5	2,192	14,489,412	13.9	20,057	361,578	0.2	225	188,278	0.0	0	535,390	0.4	555
4/4/2012	2,570,418	1.5	2,154	14,630,604	14.0	20,170	363,112	0.2	219	188,278	0.0	0	539,225	0.4	548
4/11/2012	2,585,663	1.5	2,178	14,771,486	14.0	20,126	364,665	0.2	222	188,278	0.0	0	542,890	0.4	524
4/19/2012	2,603,470	1.5	2,226	14,934,570	14.2	20,385	366,395	0.2	216	188,278	0.0	0	547,291	0.4	550
4/26/2012	2,614,548	1.1	1,583	15,029,824	9.4	13,608	367,536	0.1	163	188,278	0.0	0	549,955	0.3	381
5/3/2012	2,635,367	2.1	2,974	15,170,581	14.0	20,108	369,530	0.2	285	188,278	0.0	0	554,160	0.4	601
5/10/2012	2,652,916	1.7	2,507	15,314,628	14.3	20,578	371,479	0.2	278	188,278	0.0	0	558,365	0.4	601
5/17/2012	2,670,089	1.7	2,453	15,461,480	14.6	20,979	373,335	0.2	265	188,304	0.0	4	562,620	0.4	608
5/24/2012	2,686,515	1.6	2,347	15,603,354	14.1	20,268	375,127	0.2	256	188,304	0.0	0	566,698	0.4	583
5/30/2012	2,700,529	1.6	2,336	15,725,172	14.1	20,303	376,670	0.2	257	188,351	0.0	8	570,176	0.4	580

Table A1-2
Omega Chemical Superfund Site
Extraction Well Flow Summary

Date	Extraction Wells														
	EW-1			EW-2			EW-3			EW-4			EW-5		
	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Totalizer (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)
6/7/2012	2,731,056	2.6	3,816	15,842,484	10.2	14,664	379,195	0.2	316	188,381	0.0	4	574,931	0.4	594
6/13/2012	2,747,111	1.9	2,676	15,966,335	14.3	20,642	380,721	0.2	254	188,395	0.0	2	578,485	0.4	592
6/21/2012	2,766,596	1.7	2,436	16,127,208	14.0	20,109	382,608	0.2	236	188,395	0.0	0	583,132	0.4	581
6/27/2012	2,787,332	2.4	3,456	16,195,393	7.9	11,364	384,743	0.2	356	188,665	0.0	45	586,615	0.4	580
7/5/2012	2,814,737	2.4	3,426	16,307,156	9.7	13,970	387,596	0.2	357	190,456	0.2	224	591,368	0.4	594
7/12/2012	2,838,964	2.4	3,461	16,406,255	9.8	14,157	390,147	0.3	364	192,098	0.2	235	595,586	0.4	603
7/19/2012	2,862,671	2.4	3,387	16,503,032	9.6	13,825	392,652	0.2	358	193,707	0.2	230	599,693	0.4	587
7/26/2012	2,887,544	2.5	3,553	16,603,068	9.9	14,291	395,259	0.3	372	195,374	0.2	238	603,949	0.4	608
8/2/2012	2,911,964	2.4	3,489	16,701,098	9.7	14,004	397,839	0.3	369	197,020	0.2	235	608,153	0.4	601
8/9/2012	2,936,883	2.5	3,560	16,798,277	9.6	13,883	400,406	0.3	367	198,638	0.2	231	612,262	0.4	587
8/16/2012	2,962,714	2.6	3,690	16,896,140	9.7	13,980	402,994	0.3	370	200,271	0.2	233	616,324	0.4	580
8/22/2012	2,980,010	2.0	2,883	16,958,178	7.2	10,340	404,842	0.2	308	201,396	0.1	188	619,034	0.3	452
8/30/2012	3,009,826	2.6	3,727	17,072,518	9.9	14,292	408,065	0.3	403	203,373	0.2	247	623,946	0.4	614
9/6/2012	3,034,568	2.5	3,535	17,169,593	9.6	13,868	410,808	0.3	392	204,993	0.2	231	628,067	0.4	589
9/12/2012	3,056,258	2.5	3,615	17,255,246	9.9	14,276	413,184	0.3	396	206,411	0.2	236	631,685	0.4	603
9/19/2012	3,081,224	2.5	3,567	17,354,854	9.9	14,230	415,920	0.3	391	208,062	0.2	236	635,872	0.4	598
9/26/2012	3,105,270	2.4	3,435	17,452,574	9.7	13,960	418,594	0.3	382	209,676	0.2	231	639,954	0.4	583

Table A1-2
Omega Chemical Superfund Site
Extraction Well Flow Summary

Month	Extraction Wells														
	EW-1			EW-2			EW-3			EW-4			EW-5		
	Volume (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Volume (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Volume (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Volume (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)	Volume (gal)	Q_{avg} (gpm)	Q_{avg} (gpd)
Aug 2009	325,307	8.7	2,287	549,471	14.6	19,845	50,254	1.3	340	18,644	0.5	239	33,939	0.9	659
Sep 2009	274,526	7.3	2,004	314,228	8.4	16,379	34,187	0.9	293	12,074	0.3	203	24,537	0.7	506
Nov 2009	66,999	1.8	2,193	576,243	15.3	16,161	10,608	0.3	327	7,023	0.2	209	19,262	0.5	507
Dec 2009	76,292	1.5	2,207	560,216	11.3	16,208	11,327	0.2	328	7,280	0.1	211	17,414	0.3	504
Jan 2010	43,904	1.0	1,463	485,913	11.2	16,197	9,894	0.2	330	6,082	0.1	203	15,371	0.4	512
Feb 2010	4	0.0	0	458,609	11.4	16,379	11,635	0.3	416	6,461	0.2	231	15,113	0.4	540
Mar 2010	56,026	1.4	2,001	481,113	11.9	17,183	9,013	0.2	322	6,388	0.2	228	15,697	0.4	561
Apr 2010	82,716	1.6	2,363	527,070	10.5	15,059	11,829	0.2	338	8,251	0.2	236	19,811	0.4	566
May 2010	51,165	1.3	1,827	478,411	11.9	17,086	7,608	0.2	272	6,135	0.2	219	15,891	0.4	568
Jun 2010	49,088	1.2	1,753	434,711	10.8	15,525	5,551	0.1	198	3,704	0.1	132	11,592	0.3	414
Jul 2010	67,486	1.7	2,410	252,477	6.3	9,017	10,372	0.3	370	6,126	0.2	219	15,070	0.4	538
Aug 2010	46,443	1.2	1,659	379,474	9.4	13,553	7,746	0.2	277	5,274	0.1	188	13,949	0.3	498
Sep 2010	46,420	0.9	1,326	477,282	9.5	13,637	7,960	0.2	227	5,734	0.1	164	19,305	0.4	552
Oct 2010	34,414	0.9	1,229	370,593	9.2	13,235	6,148	0.2	220	4,240	0.1	151	8,993	0.2	321
Nov 2010	30,905	0.8	1,145	355,085	9.1	13,151	5,448	0.1	202	3,883	0.1	144	10,688	0.3	396
Dec 2010	37,881	0.8	1,082	425,853	8.4	12,167	7,657	0.2	219	4,190	0.1	120	12,864	0.3	368
Jan 2011	46,782	1.0	1,418	291,868	6.1	8,844	6,501	0.1	197	4,803	0.1	146	12,056	0.3	365
Feb 2011	44,809	1.3	1,867	314,246	9.1	13,094	6,269	0.2	261	4,894	0.1	204	12,393	0.4	516
Mar 2011	55,280	1.1	1,626	444,172	9.1	13,064	8,081	0.2	238	6,492	0.1	191	16,778	0.3	493
Apr 2011	48,376	1.2	1,668	397,517	9.5	13,707	7,459	0.2	257	5,863	0.1	202	15,460	0.4	533
May 2011	56,383	1.2	1,709	412,756	8.7	12,508	8,299	0.2	251	6,348	0.1	192	16,663	0.4	505
Jun 2011	56,638	1.4	1,953	394,741	9.5	13,612	8,043	0.2	277	5,651	0.1	195	15,647	0.4	540
Jul 2011	49,022	1.3	1,885	362,945	9.7	13,959	7,041	0.2	271	5,237	0.1	201	13,741	0.4	528
Aug 2011	65,576	1.3	1,874	355,901	7.1	10,169	9,222	0.2	263	5,146	0.1	147	15,179	0.3	434
Sep 2011	81,489	1.8	2,547	404,659	8.8	12,646	8,758	0.2	274	4,582	0.1	143	16,489	0.4	515
Oct 2011	73,592	1.8	2,628	430,026	10.7	15,358	7,550	0.2	270	4,374	0.1	156	15,645	0.4	559
Nov 2011	92,209	1.9	2,794	489,139	10.3	14,822	7,349	0.2	223	3,010	0.1	91	17,177	0.4	521
Dec 2011	95,810	2.3	3,304	427,048	10.2	14,726	7,630	0.2	263	1,287	0.0	44	14,373	0.3	496
Jan 2012	71,319	1.8	2,547	488,662	12.1	17,452	5,751	0.1	205	140	0.0	5	14,010	0.3	500
Feb 2012	54,155	1.4	2,083	527,584	14.1	20,292	5,164	0.1	199	0	0.0	0	13,909	0.4	535
Mar 2012	66,032	1.3	1,834	721,798	13.9	20,050	7,353	0.1	204	21	0.0	1	18,209	0.4	506
Apr 2012	59,208	1.4	2,042	540,412	12.9	18,635	5,958	0.1	205	1	0.0	0	14,565	0.3	502
May 2012	85,981	1.8	2,529	695,348	14.2	20,451	9,134	0.2	269	73	0.0	2	20,222	0.4	595
Jun 2012	86,803	2.2	3,100	470,221	11.7	16,794	8,074	0.2	288	313	0.0	11	16,438	0.4	587
Jul 2012	100,212	2.4	3,456	407,675	9.8	14,058	10,516	0.3	363	6,709	0.2	231	17,334	0.4	598
Aug 2012	122,282	2.4	3,494	469,450	9.3	13,413	12,806	0.3	366	7,999	0.2	229	19,997	0.4	571
Sep 2012	95,444	2.5	3,535	380,057	9.8	14,076	10,530	0.3	390	6,303	0.2	233	16,008	0.4	593
Cumulative	**2,968,905**	**1.8**	**2,569**	**17,343,949**	**10.4**	**15,009**	**382,328**	**0.2**	**331**	**204,225**	**0.1**	**177**	**632,962**	**0.4**	**548**

Notes:
Q (avg) is the average pumping rate based on well production in gpm and gpd

Table A1-3
Omega Chemical Superfund Site
Groundwater Influent and Effluent Analytical Summary

Well ID	Sample Date	Sample Type	Total VOCs	PCE	TCE	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	1,4-Dioxane	Acetone	Benzene	c-1,2-DCE	Chloroform	Freon 113	t-1,2-DCE	Freon 11
SP-200	22-Jun-09	IN	16100	15000	440	250 U	250 U	250 U	400	120 U	280	--	120 U	250 U	260	--	250 U	250 U
SP-220A	22-Jun-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	250	--	0.5 U	1 U	1 U	--	1 U	1 U
SP-220A	15-Jul-09	EFF	35	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	210	35	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-200	22-Jul-09	IN	6905	5900	230	20 U	20 U	20 U	250	14	97	200 U	10 U	20 U	180	250	20 U	81
SP-220A	22-Jul-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	110	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-200	13-Aug-09	IN	6652	5400	230	20 U	20 U	20 U	220	32	230	200 U	10 U	20 U	130	520	20 U	120
SP-220A	13-Aug-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	220	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-200	27-Aug-09	IN	5310	4200	190	50 U	50 U	50 U	300	25 U	94	500 U	25 U	50 U	110	400	50 U	110
SP-220A	27-Aug-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	84	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	24-Sep-09	IN	4464	3700	130	3.6	2.7	5.6	130	23	120	10 U	0.66	1	80	290	5.9	92
SP-220A	24-Sep-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	150	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-200	29-Oct-09	IN	4483	3500	150	50 U	50 U	50 U	220	25 U	--	500 U	25 U	50 U	73	450	50 U	90
SP-220A	29-Oct-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	73	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	24-Nov-09	IN	5035	4100	160	10 U	10 U	10 U	250	17	94	100 U	5 U	10 U	69	340	10 U	99
SP-220A	24-Nov-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	56	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	22-Dec-09	IN	5066	4000	140	40 U	40 U	40 U	270	20 U	65	400 U	20 U	40 U	76	470	40 U	110
SP-220A	22-Dec-09	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	94	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	11-Feb-10	IN	2671	1900	100	20 U	20 U	20 U	200	10 U	23	200 U	10 U	20 U	35	360	20 U	76
SP-220A	11-Feb-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	24	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	11-Mar-10	IN	3536	2700	110	50 U	50 U	50 U	210	25 U	--	500 U	25 U	50 U	50	370	50 U	96
SP-220A	11-Mar-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	71	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	8-Apr-10	IN	5150	4000	150	50 U	50 U	50 U	260	25 U	--	500 U	25 U	50 U	80	540	50 U	120
SP-220A	22-Apr-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	55	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	13-May-10	IN	4231	3300	120	10 U	10 U	10 U	180	10	--	100 U	5 U	10 U	48	480	10 U	93
SP-220A	13-May-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	58	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	10-Jun-10	IN	5214	4000	170	20 U	20 U	20 U	280	17	--	200 U	10 U	20 U	77	550	20 U	120
SP-220A	10-Jun-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	76	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	15-Jul-10	IN	4575	3600	110	3.7 J	10 U	10 U	180	11	--	100 U	5 U	10 U	52	520	3.2 J	95
SP-220A	15-Jul-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	85	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	11-Aug-10	IN	4858	3900	120	50 U	50 U	50 U	200	25 U	--	500 U	25 U	50 U	68	460	50 U	110
SP-220A	11-Aug-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	70	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	09-Sep-10	IN	4193	3200	130	40 U	40 U	40 U	240	20 U	--	400 U	20 U	40 U	63	450	40 U	110
SP-220B	09-Sep-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	70	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	14-Oct-10	IN	4237	3330	130	10 U	10 U	10 U	230	14	--	100 U	5 U	10 U	69	370	10 U	94
SP-220B	14-Oct-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	68	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	11-Nov-10	IN	4277	3500	110	50 U	50 U	50 U	170	25 U	--	500 U	25 U	50 U	65	340	50 U	92
SP-220B	11-Nov-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	69	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	09-Dec-10	IN	3596	2900	110	50 U	50 U	50 U	200	25 U	--	500 U	25 U	50 U	50 U	310	50 U	76
SP-220B	09-Dec-10	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	50	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	31-Jan-11	IN	5256	4500	140	40 U	40 U	40 U	160	20 U	--	400 U	20 U	40 U	66	320	40 U	70
SP-220B	31-Jan-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	61	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	24-Mar-11	IN	3802	3200	120	7.1	10 U	10 U	160	11	--	100 U	5 U	10 U	52	190	10 U	62
SP-220B	24-Mar-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	48	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U

Table A1-3
Omega Chemical Superfund Site
Groundwater Influent and Effluent Analytical Summary

Well ID	Sample Date	Sample Type	Total VOCs	PCE	TCE	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	1,4-Dioxane	Acetone	Benzene	c-1,2-DCE	Chloroform	Freon 113	t-1,2-DCE	Freon 11
SP-210	21-Apr-11	IN	3431	2900	98	20 U	20 U	20 U	170	10 U	--	200 U	10 U	20 U	42	160	20 U	61
SP-220B	21-Apr-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	84	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	31-May-11	IN	4120	3700	110	50 U	50 U	50 U	180	25 U	--	500 U	25 U	50 U	70	250 U	50 U	60
SP-220B	31-May-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	57	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	24-Jun-11	IN	2911	2400	88	4.4	1 U	2.3	140	7.4	--	10 U	0.5 U	1 U	39	170	2	58
SP-220B	24-Jun-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	52	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	13-Jul-11	IN	3412	2900	99	20 U	20 U	20 U	140	10 U	--	200 U	10 U	20 U	43	180	20 U	50
SP-220B	13-Jul-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	63	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	24-Aug-11	IN	3800	3500	120	100 U	100 U	100 U	180	50 U	--	1000 U	50 U	100 U	100 U	500 U	100 U	100 U
SP-220B	24-Aug-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	64 J	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	15-Sep-11	IN	3466	3000	95	10 U	10 U	10 U	130	5.9	--	100 U	5 U	10 U	41	140	10 U	54
SP-220B	15-Sep-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	65	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	13-Oct-11	IN	4594	4000	120	10 U	10 U	10 U	180	6.7	--	100 U	5 U	10 U	47	190	10 U	50
SP-220B	13-Oct-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	51	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	09-Nov-11	IN	2786	2300	82	10 U	10 U	10 U	160	5.1	--	100 U	5 U	10 U	37	160	10 U	42
SP-220B	09-Nov-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	51	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	10-Dec-11	IN	3444	3100	100	50 U	50 U	50 U	140	25 U	--	500 U	25 U	50 U	52	250 U	50 U	52
SP-220B	10-Dec-11	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	56	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	19-Jan-12	IN	1881	1700	60	40 U	40 U	40 U	72	20 U	--	400 U	20 U	40 U	40 U	200 U	40 U	49
SP-220B	19-Jan-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	19	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	21-Feb-12	IN	3011	2600	110	3.9	1.2	3.1	150	10	--	10 U	0.5 U	1 U	67	5 U	1.9	64
SP-220B	21-Feb-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	50	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	28-Mar-12	IN	2875	2300	97	10 U	10 U	10 U	150	12	--	100 U	5 U	10 U	76	170	10 U	70
SP-220B	28-Mar-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	44	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	26-Apr-12	IN	2023	1700	69	20 U	20 U	20 U	93	20 U	--	200 U	10 U	20 U	24	100	20 U	37
SP-220B	26-Apr-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	19	10 U	0.5 U	1 U	0.65 J	5 U	1 U	1 U
SP-210	17-May-12	IN	3618	3000	110	50 U	50 U	50 U	180	50 U	--	500 U	25 U	50 U	71	190 J	50 U	67
SP-220B	17-May-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	45	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	13-Jun-12	IN	3274	2700	110	40 U	40 U	40 U	150	40 U	--	400 U	20 U	40 U	74	180 J	40 U	60
SP-220B	13-Jun-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	41	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	05-Jul-12	IN	2459	2100	93	50 U	50 U	50 U	150	50 U	--	500 U	25 U	50 U	53	250 U	50 U	63
SP-220B	05-Jul-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	43	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	09-Aug-12	IN	2945	2400	94	40 U	40 U	40 U	150	40 U	--	400 U	20 U	40 U	56	200 U	40 U	55
SP-220B	09-Aug-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	37	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U
SP-210	12-Sep-12	IN	2570	2200	80	50 U	50 U	50 U	110	50 U	--	500 U	25 U	50 U	50 U	250 U	50 U	50 U
SP-220B	12-Sep-12	EFF	0.0	1 U	1 U	1 U	1 U	1 U	1 U	1 U	37	10 U	0.5 U	1 U	1 U	5 U	1 U	1 U

Notes:
All results are in micrograms per liter (ug/L)
Only results detected at least once in one sample are presented on this table, except Chloromethane which was detected at 0.46J and 0.44J ug/L in the EFF sample in April and May 2011, respectively, and Methylene Chloride which was detected at 2.7 J ug/L in the April 2012 EFF sample.
IN = Influent
EFF = Effluent
U = not detected above reporting limit listed
J = result is detected as an estimated value above the laboratory method detection limit, but below the reporting limit
"--" = Not Analyzed
PCE = Tetrachloroethene; TCE = Trichloroethene; TCA = Trichloroethane; DCE = Dichloroethene; DCA = Dichloroethane; Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane; Freon 11 = Trichlorofluoromethane.

Table A1-4
Omega Chemical Superfund Site
Vapor Phase GAC Analytical Results

Well ID	Sample Date	Sample Type	PCE	TCE	1,1,2-TCA	1,1-DCA	1,2-DCA	Benzene	Chloroform	Methylene Chloride	Total VOCs
SP-241	22-Jun-09	IN	12000	440	60 U	60 U	72	19 J	340	29	13000
SP-245	22-Jun-09	INT	360	14	2 U	0.82 J	2.3	0.57 J	11	1.2 J	390
SP-242	22-Jun-09	EFF	0.46 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.46 J
SP-241	15-Jul-09	IN	9400	480	58 U	19 J	57 J	11 J	300	150	10000
SP-245	15-Jul-09	INT	0.99 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.99 J
SP-242	15-Jul-09	EFF	15	0.63 J	2 U	2 U	2 U	0.46 J	0.68 J	0.56 J	17 J
SP-241	22-Jul-09	IN	6000	430	40 U	16 J	26 J	40 U	290	19	6800
SP-245	22-Jul-09	INT	1.6 J	2 U	2 U	2 U	2 U	1.4 J	2 U	2 U	3 J
SP-242	22-Jul-09	EFF	23	1.3 J	2 U	2 U	2 U	0.63 J	1.8 J	1.2 J	29 J
SP-241	13-Aug-09	IN	4500	270	29 U	9.6 J	54	29 U	180	44	5100
SP-245	13-Aug-09	INT	0.42 J	2.1 U	2.1 U	2.1 U	2.1 U	0.51 J	2.1 U	98	99
SP-242	13-Aug-09	EFF	5.3	2.1 U	2.1 U	2.1 U	2.1 U	0.39 J	0.21 J	2.1 U	5.9
SP-241	27-Aug-09	IN	3200	210	2.6	8.2	35	2.5	140	11	3600
SP-245	27-Aug-09	INT	1.1 J	2 U	2 U	2 U	2 U	0.68 J	2 U	58	1.8 J
SP-242	27-Aug-09	EFF	6.9	2 U	2 U	2 U	2 U	0.54 J	0.17 J	8.5	16
SP-241	29-Dec-09	IN	1700	120	10 U	10 U	11	3.8 J	45	10 U	1800
SP-245	29-Dec-09	INT	9.5	1.9 U	1.9 U	1.7 J	1.9 U	0.86 J	9.3	1 J	22
SP-242	29-Dec-09	EFF	12	0.52 J	1.9 U	1.9 U	1.9 U	0.77 J	0.27 J	1.9 U	14
SP-241	07-Jan-10	IN	1200	81	9.9 U	9.9 U	8.2 J	2.1 J	30	9.9 U	1300
SP-245	07-Jan-10	INT	7.2	2 U	2 U	1.9 J	2 U	2 U	7.4	0.92 J	17
SP-242	07-Jan-10	EFF	1.4 J	2 U	2 U	2 U	2 U	0.52 J	2 U	2 U	1.9 J
SP-241	28-Jan-10	IN	1900	110	13 U	4.1 J	16	2.9 J	57	13 U	2200
SP-245	28-Jan-10	INT	11	1.9 U	1.9 U	4.1	1.9 U	0.41 J	17	1.9 U	33
SP-242	28-Jan-10	EFF	1.3 J	2.1 U	2.1 U	2.1 U	2.1 U	0.39 J	2.1 U	1.5 J	3.2
SP-241	11-Feb-10	IN	670	39	2.9 U	1.5 J	5.3	0.71 J	17	2.9 U	730
SP-245	11-Feb-10	INT	7.2	2 U	2 U	5.4	2 U	2 U	21	1.1 J	35
SP-242	11-Feb-10	EFF	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SP-241	11-Mar-10	IN	1200	61	9.9 U	2.4 J	7.5 J	9.9 U	35	9.9 U	1300
SP-245	11-Mar-10	INT	13	2 U	2 U	6.1	0.74 J	2 U	30	2 U	50
SP-242	11-Mar-10	EFF	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.91 J	0.91 J
SP-241	08-Apr-10	IN	2100	110	20 U	3.5 J	18 J	20 U	67	20 U	2300
SP-245	08-Apr-10	INT	7.8	2 U	2 U	7.1	1.1 J	2 U	49	2 U	65
SP-242	08-Apr-10	EFF	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
SP-241	13-May-10	IN	1400	71	8.1 U	2.6 J	11	2.2 J	42	8.1 U	1500
SP-245	13-May-10	INT	6.1	2 U	2 U	7.7	1.4 J	0.52 J	81	2 U	97
SP-242	13-May-10	EFF	2 U	2 U	2 U	0.92 J	2 U	0.48 J	0.60 J	2 U	2
SP-241	10-Jun-10	IN	1600	84	10 U	2.6 J	13	1.5 J	48	10 U	1700
SP-245	10-Jun-10	INT	4.5	2 U	2 U	6.5	2.3	2 U	84	2 U	97
SP-242	10-Jun-10	EFF	2 U	2 U	2 U	1.4 J	2 U	2 U	0.87 J	2 U	2.3
SP-241	08-Jul-10	IN	860	46	5.1 U	1.8 J	7.2	1.0 J	25	5.1 U	940
SP-245	08-Jul-10	INT	5.1	2 U	2 U	6	3.5	0.21 J	79	2 U	94
SP-242	08-Jul-10	EFF	1.8 J	2.1 U	2.1 U	2.5	2.1 U	0.19 J	2.2	2.1 U	6.7
SP-241	11-Aug-10	IN	2300	130	9.9 U	5.4 J	21	2.6 J	84	9.9 U	2500
SP-245	11-Aug-10	INT	5.5	2 U	2 U	6.0	9.1	0.17 J	88	2 U	110
SP-242	11-Aug-10	EFF	2 U	2 U	2 U	5.2	2 U	2 U	7.5	2 U	13
SP-241	23-Sep-10	IN	810	39	5 U	1.5 J	5.5	1.6 J	25	5 U	880
SP-245	23-Sep-10	INT	1.9 U	1.9 U	1.9 U	4.6	1.9 U	0.42 J	13	1.9 U	18
SP-242	23-Sep-10	EFF	2 U	2 U	2 U	2 U	2 U	0.66 J	2 U	2 U	0.66 J
SP-241	14-Oct-10	IN	790	40	3.4 U	1.6 J	4.5	1.2 J	20	0.75 J	860
SP-245	14-Oct-10	INT	0.29 J	1.9 U	1.9 U	3.7	1.9 U	0.45 J	11	0.51 J	16
SP-242	14-Oct-10	EFF	2 U	2 U	2 U	2 U	2 U	0.69 J	2 U	2 U	0.69 J
SP-241	11-Nov-10	IN	720	36	4.0 U	1.4 J	5.6	0.60 J	22	4 U	790
SP-245	11-Nov-10	INT	0.21 J	1.9 U	1.9 U	3.5	1.9 U	1.9 U	16	1.9 U	20
SP-242	11-Nov-10	EFF	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.41 J	0.41 J
SP-241	09-Dec-10	IN	990	68	7.8 U	7.8 U	6 J	2.2 J	26	1.5 J	1100
SP-245	09-Dec-10	INT	1.9 U	1.9 U	1.9 U	5.2	1.9 U	1.9 U	29	1.9 U	34
SP-242	09-Dec-10	EFF	2 U	2 U	2 U	2 U	2 U	0.22 J	0.29 J	0.70 J	1.2 J
SP-241	31-Jan-11	IN	1300	67	7.1 U	2.7 J	8.4	2.8 J	38	1.5 J	1400
SP-245	31-Jan-11	INT	1.6 U	1.6 U	1.6 U	5.4	1.6 U	0.41 J	36	0.93 J	43
SP-242	31-Jan-11	EFF	1.7 U	1.7 U	1.7 U	1.2 J	1.7 U	0.50 J	1 J	0.69 J	3.4
SP-241	16-Feb-11	IN	28000	670	130 U	23 J	130 U	28 J	240	130 U	29000
SP-245	16-Feb-11	INT	1.5 J	4.2 U	4.2 U	5.3	4.2 U	1.1 J	5.5	30	48
SP-242	16-Feb-11	EFF	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.52 J	1.7 U	1.7 U	0.52 J

Table A1-4
Omega Chemical Superfund Site
Vapor Phase GAC Analytical Results

Well ID	Sample Date	Sample Type	PCE	TCE	1,1,2-TCA	1,1-DCA	1,2-DCA	Benzene	Chloroform	Methylene Chloride	Total VOCs
SP-241	17-Mar-11	IN	1100	56	5.1 U	2.5 J	7	1.8 J	39	5.1 U	1200
SP-245	17-Mar-11	INT	1.7 U	1.7 U	1.7 U	5.1	1.7 U	0.29 J	49	1.7 U	54
SP-242	17-Mar-11	EFF	0.85 J	1.7 U	1.7 U	4.4	1.7 U	0.32 J	5.8	1.7 U	11
SP-241	21-Apr-11	IN	1600	69	8.5 U	2.6 J	8.6	1.9 J	44	8.5 U	1700
SP-245	21-Apr-11	INT	1.7 U	1.7 U	1.7 U	4.3	1.7 U	0.56 J	46	1.7 U	52
SP-242	21-Apr-11	EFF	0.84 J	1.7 U	1.7 U	4.1	1.7 U	0.44 J	8.0	1.7 U	13
SP-241	31-May-11	IN	1900	95	18 U	18 U	9.4 J	18 U	47	18 U	2100
SP-245	31-May-11	INT	0.29 J	1.7 U	1.7 U	4.3	1.7 U	1.7 U	53	1.7 U	58
SP-242	31-May-11	EFF	0.60 J	1.7 U	1.7 U	5.0	1.7 U	1.7 U	17	1.7 U	23
SP-241	24-Jun-11	IN	880	43	3.9 U	2.2 J	5.2	1.7 J	29	3.9 U	960
SP-245	24-Jun-11	INT	33	0.59 J	1.9 U	2.6	1.9 U	0.60 J	11	1.9 U	48
SP-242	24-Jun-11	EFF	66	1.3 J	2.0 U	2.0 U	2.0 U	0.87 J	0.40 J	2.0 U	69
SP-241	11-Jul-11	IN	1200	58	6.7 U	2.8 J	6.9	2.7 J	42	6.7 U	1300
SP-245	11-Jul-11	INT	0.89 J	1.7 U	1.7 U	2.6	1.7 U	0.53 J	11	1.7 U	15
SP-242	11-Jul-11	EFF	4.2	1.7 U	1.7 U	1.7 U	1.7 U	0.77 J	1.7 U	1.7 U	5.4
SP-241	24-Aug-11	IN	800	51	3.4 U	2.5 J	6.6	1.4 J	39	3.4 U	900
SP-245	24-Aug-11	INT	1.8 U	1.8 U	1.8 U	2.4	1.8 U	1.8 U	13	1.8 U	15
SP-242	24-Aug-11	EFF	2.7	1.7 U	1.7 U	1.7 U	1.7 U	0.35 J	1.7 U	1.7 U	3.1
SP-241	15-Sep-11	IN	890	38	4.5 U	2.2 J	5.4	1.4 J	33	4.5 U	970
SP-245	15-Sep-11	INT	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	2.2	2.2
SP-242	15-Sep-11	EFF	14	2.0 U	2.0 U	2.0 U	2.0 U	0.4 J	2.0 U	2.0 U	15
SP-241	13-Oct-11	IN	1300	65	6.4 U	2.7 J	9.7	3.9 J	44	6.4 U	1400
SP-245	13-Oct-11	INT	1.5 J	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.5 J
SP-242	13-Oct-11	EFF	5.0	1.7 U	1.7 U	1.7 U	1.7 U	0.79 J	1.7 U	1.7 U	5.8
SP-241	09-Nov-11	IN	1100	52	5.1 U	2.4 J	6.4	1.9 J	39	5.1 U	1200
SP-245	09-Nov-11	INT	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.53 J	1.7 U	1.7 U	0.53 J
SP-242	09-Nov-11	EFF	3.3	1.8 U	1.8 U	1.8 U	1.8 U	0.92 J	1.8 U	1.8 U	4.2
SP-241	15-Dec-11	IN	270	15	1.7 U	0.76 J	1.7	0.79 J	10	1.7 U	300
SP-245	15-Dec-11	INT	0.23 J	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.23 J
SP-242	15-Dec-11	EFF	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
SP-241	19-Jan-12	IN	140	14	1.7 U	1.7 U	1.7 U	0.93 J	1.4 J	0.46 J	160
SP-245	19-Jan-12	INT	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.73 J	0.31 J	1.7 U	1.0 J
SP-242	19-Jan-12	EFF	0.68 J	1.7 U	1.7 U	1.7 U	1.7 U	0.37 J	1.7 U	1.7 U	1.1 J
SP-241	21-Feb-12	IN	1400	87	5 U	5 U	10	5 U	60	50 U	1557
SP-245	21-Feb-12	INT	0.5 U	0.50 U	0.50 U	0.58	0.50 U	0.50 U	2.2	5.0 U	2.8
SP-242	21-Feb-12	EFF	2.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U
SP-241	28-Mar-12	IN	1700	85	2.5 U	3.6	10	2.5 U	58	25 U	1857
SP-245	28-Mar-12	INT	2.0	0.50 U	0.50 U	1.5	0.50 U	0.50 U	9.1	5.0 U	13
SP-242	28-Mar-12	EFF	6.9	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	6.9
SP-241	26-Apr-12	IN	1300	60	5 U	5 U	5 U	5 U	21	50 U	1381
SP-245	26-Apr-12	INT	0.50 U	0.50 U	0.50 U	1.7	0.50 U	0.50 U	11	5.0 U	12.7
SP-242	26-Apr-12	EFF	0.94	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U
SP-241	17-May-12	IN	1400	51	10 U	10 U	10 U	10 U	36	100 U	1487
SP-245	17-May-12	INT	2.0	0.50 U	0.50 U	2.4	0.50 U	0.50 U	19	5.0 U	23
SP-242	17-May-12	EFF	0.53	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	5.0 U	5.0 U
SP-241	07-Jun-12	IN	1400	66	5 U	5 U	9.0	5 U	49	50 U	1524
SP-245	07-Jun-12	INT	2.5 U	2.5 U	2.5 U	2.6	2.5 U	2.5 U	23	25 U	26
SP-242	07-Jun-12	EFF	1.3	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.54	5.0 U	5.0 U
SP-241	05-Jul-12	IN	970	63	0.80	2.3	6.6	0.65	38	5.0 U	1100
SP-245	05-Jul-12	INT	0.50 U	0.50 U	0.50 U	1.3	0.54	0.50 U	13	5.0 U	14
SP-242	05-Jul-12	EFF	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	12 U	12 U
SP-241	09-Aug-12	IN	1300	58	5.0 U	5.0 U	6.7	5.0 U	38	50 U	1400
SP-245	09-Aug-12	INT	2.5 U	16	2.5 U	3.1	2.5 U	2.5 U	35	25 U	58
SP-242	09-Aug-12	EFF	0.71	0.50 U	0.50 U	0.92	0.50 U	0.50 U	2.3	5.0 U	5.0 U
SP-241	12-Sep-12	IN	910	59	2.5 U	2.5	7.2	2.5 U	42	25 U	1000
SP-245	12-Sep-12	INT	0.50 U	0.50 U	0.50 U	3.7	3.8	0.50 U	37	5.0 U	45
SP-242	12-Sep-12	EFF	0.73	0.58 U	0.58 U	1.1	0.58 U	0.58 U	3.4	5.8 U	5.8 U

Notes:
All results are in parts per billion volume (ppbv)
Only results detected at least once in one sample are presented on this table except napthalene which was detected at 4.4 J ppbv in the intermediate sample in January 2011, at 0.86 J ppbv in the intermediate sample in April 2011, and at 0.97 J ppbv in the effluent sample in Septmeber 2011.
IN = Influent
INT = Intermediate samples
EFF = Effluent
J = Result is detected as an estimated value above the laboratory method detection limit, but below the reporting limit
U = not detected above reporting limit listed
PCE = Tetrachloroethene; TCE = Trichloroethene; TCA = Trichloroethane; DCA = Dichloroethane.

Attachment 2
Groundwater Elevation Summary Tables, Hydrographs, and Groundwater Elevation Contour Map

Table A2-1
Omega Chemical Superfund Site
Summary of Groundwater Elevations

Well No.	Top of Casing Elevation [1] (feet MSL[2])	Screen Interval (feet bgs[3])	Date	Depth to Water (feet btoc[4])	Groundwater Elevation (feet MSL[2])
EW-1	200.25	72 - 87	6/29/12	82.13	118.12
			7/26/12	82.07	118.18
			8/22/12	81.48	118.77
			9/26/12	81.76	118.49
EW-2	199.00	72 - 87	6/29/12	79.77	119.23
			7/26/12	79.65	119.35
			8/22/12	79.18	119.82
			9/26/12	79.52	119.48
EW-3	198.00	70 - 85	6/29/12	82.55	115.45
			7/26/12	82.54	115.46
			8/22/12	81.63	116.37
			9/26/12	82.54	115.46
EW-4	197.00	71 - 86	6/29/12	78.50	118.50
			7/26/12	78.90	118.10
			8/22/12	77.84	119.16
			9/26/12	78.40	118.60
EW-5	195.00	70 - 85	6/29/12	80.91	114.09
			7/26/12	81.13	113.87
			8/22/12	79.65	115.35
			9/26/12	81.07	113.93
PZ-1	198.04	68 - 88	6/26/12	80.60	117.44
			7/30/12	81.10	116.94
			8/28/12	80.96	117.08
			9/27/12	80.88	117.16
PZ-2	199.29	64 - 84	6/26/12	81.87	117.42
			7/30/12	82.10	117.19
			8/28/12	81.84	117.45
			9/27/12	81.84	117.45
PZ-3	201.59	69.8 - 89.8	6/26/12	80.53	121.06
			7/30/12	79.70	121.89
			8/28/12	80.32	121.27
			9/27/12	80.40	121.19
PZ-4	193.88	70 - 90	6/26/12	66.61	127.27
			7/30/12	66.56	127.32
			8/28/12	66.60	127.28
			9/27/12	66.58	127.30
PZ-5	208.86	83 - 98	6/26/12	81.87	126.99
			7/30/12	81.70	127.16
			8/28/12	81.82	127.04
			9/27/12	81.84	127.02
PZ-6	208.29	83 - 98	6/26/12	81.36	126.93
			7/30/12	81.35	126.94
			8/28/12	81.19	127.10
			9/27/12	81.20	127.09
PZ-7	208.84	86 - 101	6/26/12	83.97	124.87
			7/30/12	83.91	124.93
			8/28/12	83.18	125.66
			9/27/12	83.87	124.97

Table A2-1
Omega Chemical Superfund Site
Summary of Groundwater Elevations

Well No.	Top of Casing Elevation [1] (feet MSL[2])	Screen Interval (feet bgs[3])	Date	Depth to Water (feet btoc[4])	Groundwater Elevation (feet MSL[2])
PZ-8	209.31	86 - 101	6/26/12	83.66	125.65
			7/30/12	83.50	125.81
			8/28/12	83.44	125.87
			9/27/12	83.47	125.84
PZ-9	195.75	70 - 90	8/28/12	78.29	117.46
			9/27/12	78.35	117.40
OW-1*	210.30	62.5 - 77.5	6/26/12	79.52	130.78
			7/30/12	DRY (>80)	DRY(<130.30)
			8/21/12	DRY (>80)	DRY(<130.30)
			9/27/12	DRY (>80)	DRY(<130.30)
OW-1b	204.98	110 - 120	6/26/12	80.33	124.65
			7/30/12	81.76	123.22
			8/21/12	82.26	122.72
			9/27/12	82.84	122.14
OW-2	200.10	60 - 80	6/26/12	79.28	120.82
			7/30/12	79.35	120.75
			8/21/12	78.55	121.55
			9/27/12	79.26	120.84
OW-3	196.33	63 - 83	6/26/12	77.05	119.28
			7/30/12	77.01	119.32
			8/21/12	76.62	119.71
			9/27/12	77.55	118.78
OW-3b	194.86	112 - 122	6/26/12	79.83	115.03
			7/30/12	81.02	113.84
			8/21/12	81.72	113.14
			9/27/12	82.86	112.00
OW-4a	182.47	49.8 - 69.8	6/26/12	64.49	117.98
			7/30/12	65.31	117.16
			8/21/12	64.48	117.99
			9/27/12	64.53	117.94
OW-4b	182.22	112 - 122.3	6/26/12	67.77	114.45
			7/30/12	68.92	113.30
			8/28/12	67.83	114.39
			9/27/12	67.82	114.40
OW-5	151.96	30-50	6/26/12	NM	NM
			7/30/12	NM	NM
			8/28/12	36.42	115.54
			9/27/12	36.78	115.18
OW-6	170.54		6/26/12	53.26	117.28
			7/30/12	54.08	116.46
			8/21/12	53.42	117.12
			9/27/12	53.44	117.10
OW-7	212.01	70.9 - 90.9	6/26/12	82.85	129.16
			7/30/12	83.12	128.89
			8/21/12	82.84	129.17
			9/27/12	82.68	129.33
OW-8	198.42	60.4 - 80	6/26/12	DRY (>80)	DRY (<118.42)
			7/30/12	78.80	119.62
			8/21/12	78.76	119.66
			9/27/12	DRY (>80)	DRY (<118.42)

Table A2-1
Omega Chemical Superfund Site
Summary of Groundwater Elevations

Well No.	Top of Casing Elevation [1] (feet MSL[2])	Screen Interval (feet bgs[3])	Date	Depth to Water (feet btoc[4])	Groundwater Elevation (feet MSL[2])
OW-8b	198.65	116 - 126	6/26/12	82.98	115.67
			7/30/12	84.21	114.44
			8/21/12	84.89	113.76
			9/27/12	84.23	114.42
OW-9	195.70	70 - 90	6/26/12	73.30	122.40
			7/30/12	75.96	119.74
			8/21/12	75.59	120.11
			9/27/12	75.95	119.75
OW-10	193.17	69.5 - 89.5	6/26/12	70.75	122.42
			7/30/12	70.86	122.31
			8/21/12	70.48	122.69
			9/27/12	70.94	122.23

Notes:
1) Elevation data per California Coordinate System NAD27
2) MSL = mean sea level
3) bgs = below ground surface
4) btoc = below top of casing
NM - not measured due to no access
Water levels represent the twelve months of gauging in 2011.
Where multiple readings were taken on the same day, the last reading was used.
Well OW-1A has 2.5 feet of above ground stick up, and a 2.5-foot long sump.
* denotes a possible anomalous water level
The water level readings for PZ-3 and PZ-4 on August 28, 2012 were likely switched on the field form.

Figure A2-1
Omega Chemical Superfund Site
A-Zone Observation Well Hydrographs
2009 to 2012

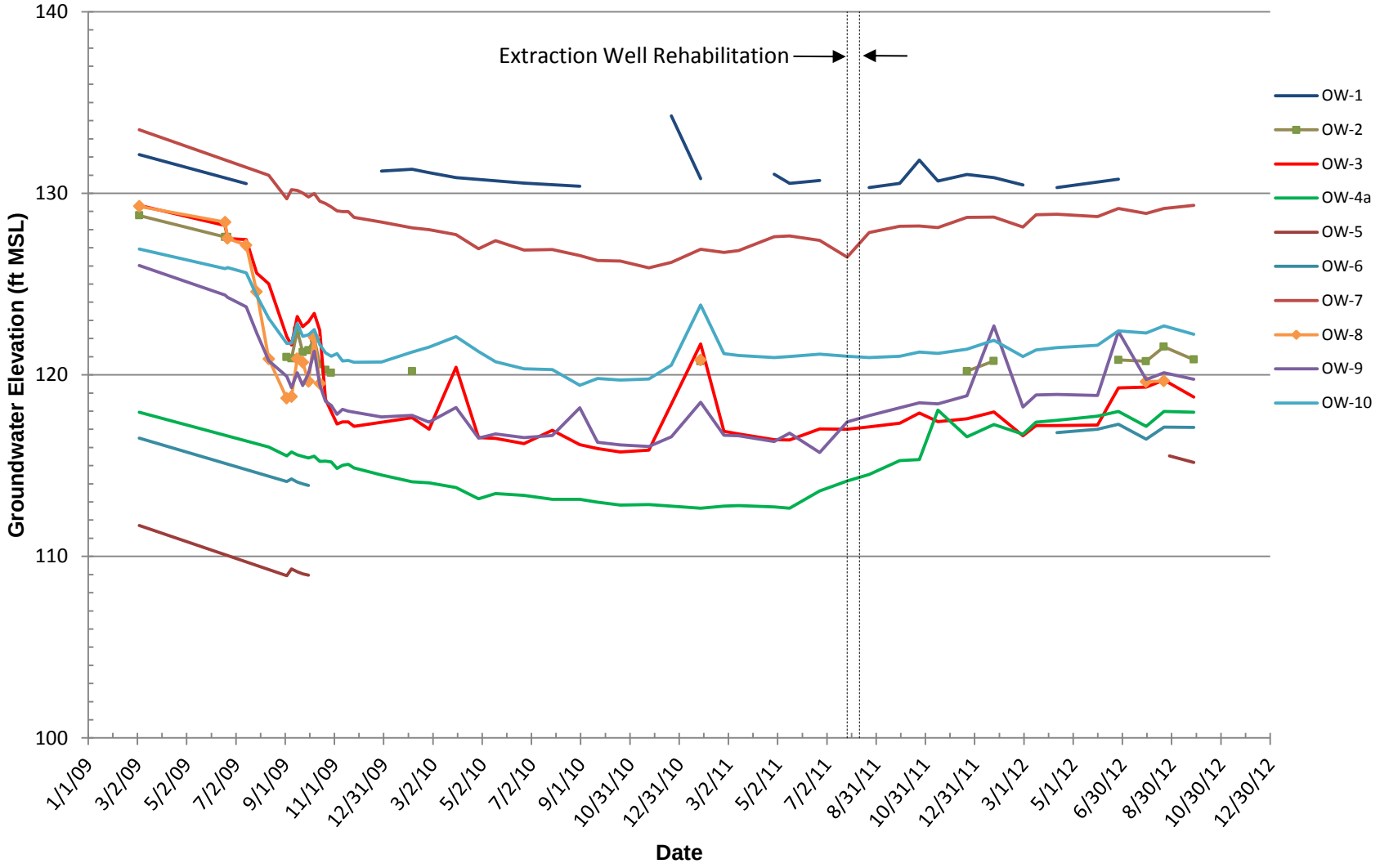


Figure A2-2
Omega Chemical Superfund Site
B-Zone Observation Well Hydrographs
2009 to 2012

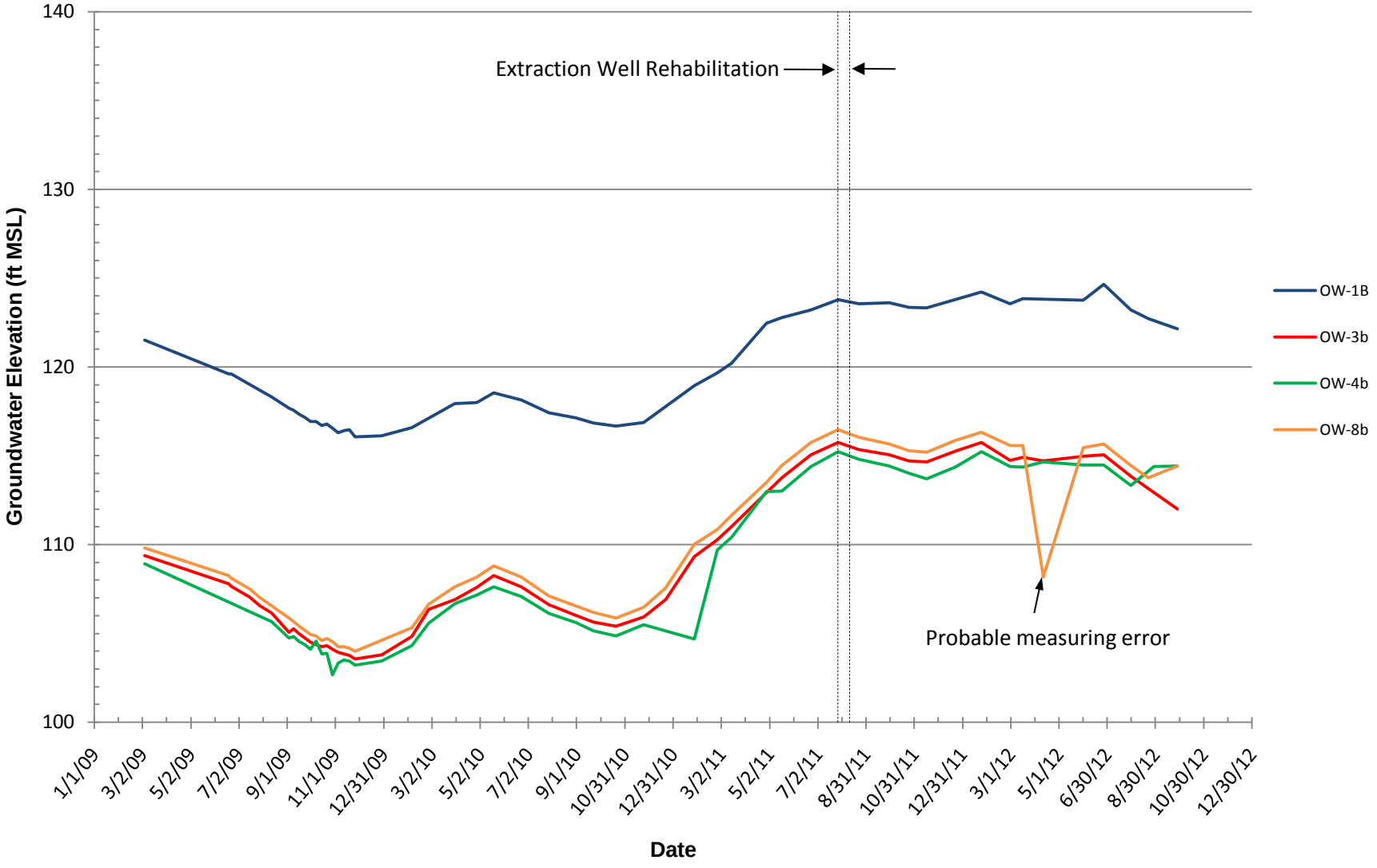


Figure A2-3
Omega Chemical Superfund Site
Piezometer Hydrographs
2009 to 2012

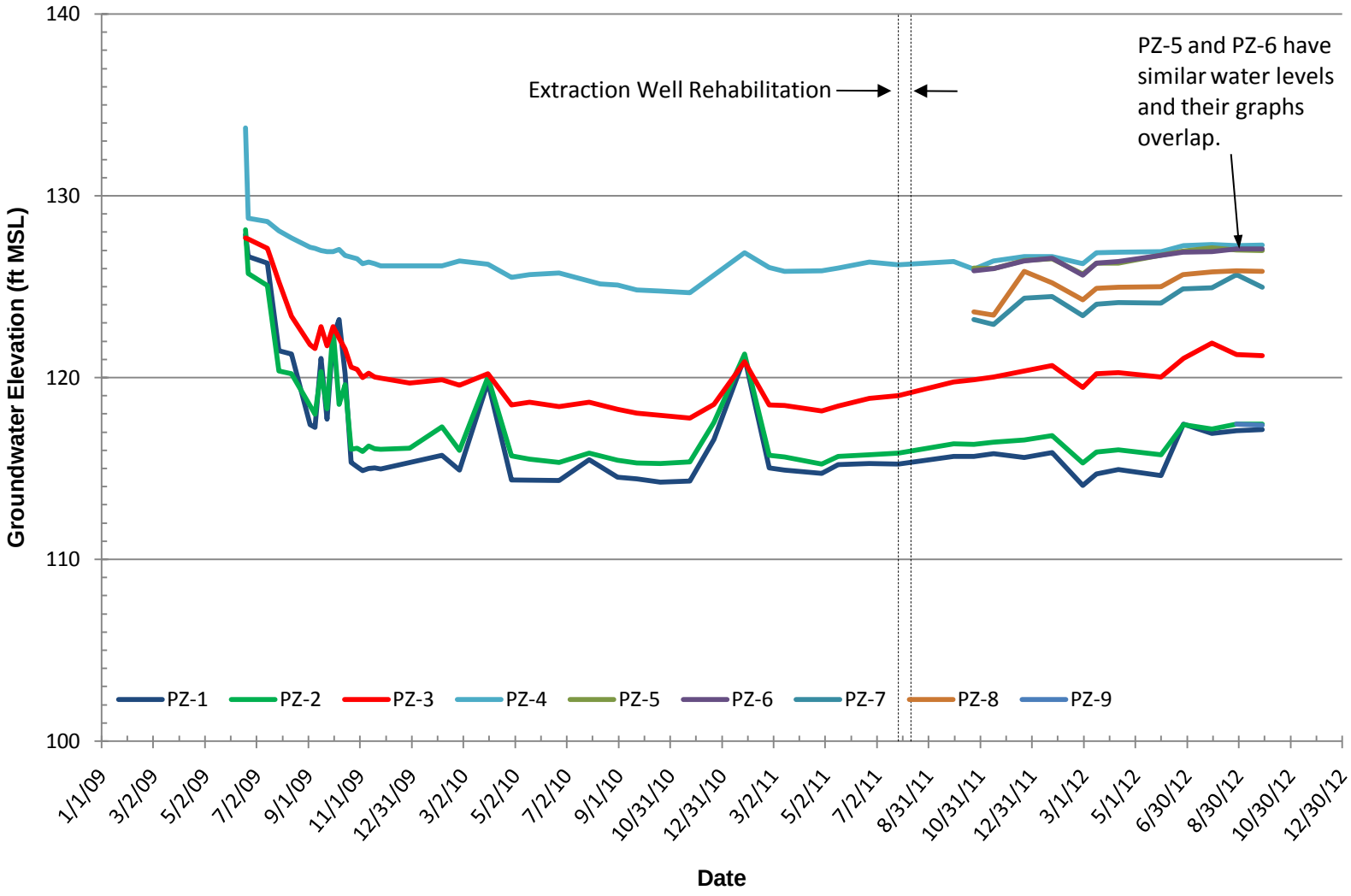
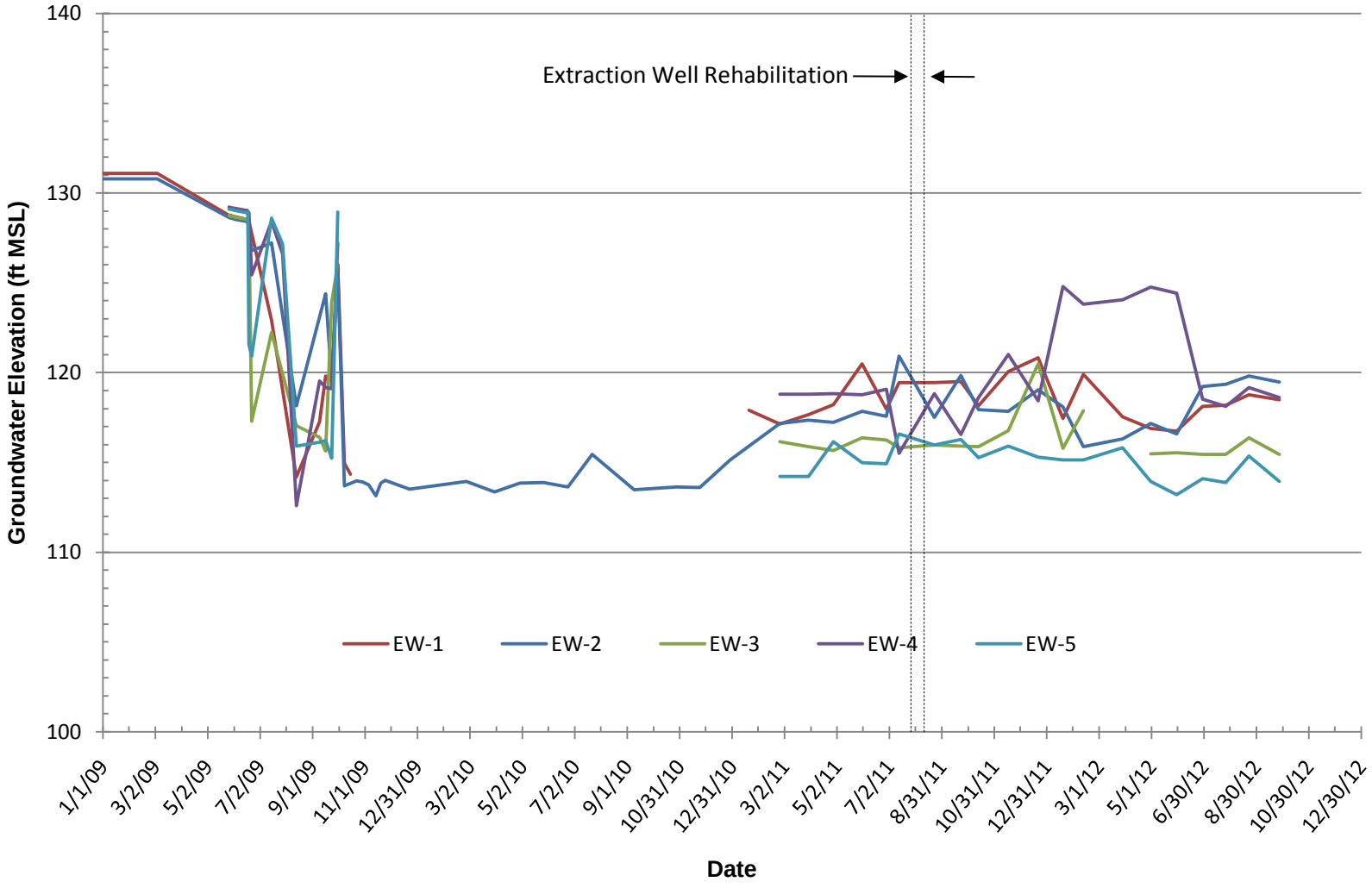
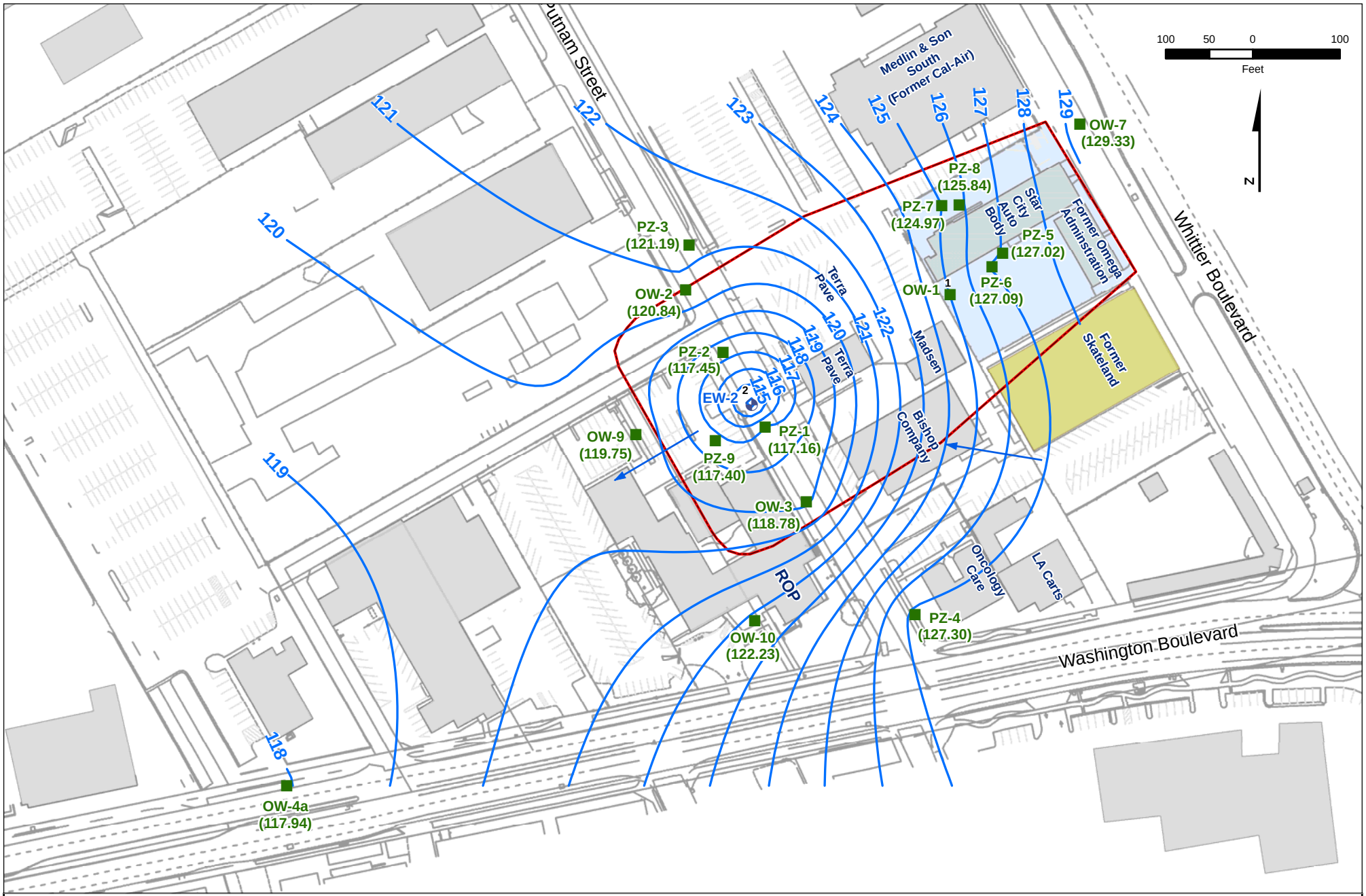


Figure A2-4
Omega Chemical Superfund Site
Extraction Well Hydrographs
2009 to 2012





1. Not used in groundwater contouring.
2. The historical low pumping water level was used for contouring the center of the cone of depression around EW-2.

Legend

- Former Omega Chemical Property
- Phase Ia Area
- Former Building
- Other Buildings
- Groundwater Elevation Contour (Feet above mean sea level)
- Groundwater Flow Direction
- Extraction Well
- Shallow Observation Well / Piezometer

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Omega Chemical
Groundwater Contour Map
September 27, 2012

Figure A2-5

Attachment 3
Summary of Extraction and Monitoring Wells Analytical Results and Graphs

Figure A3-1
Omega Chemical Superfund Site
PCE and Total VOC Concentrations
Well EW-2

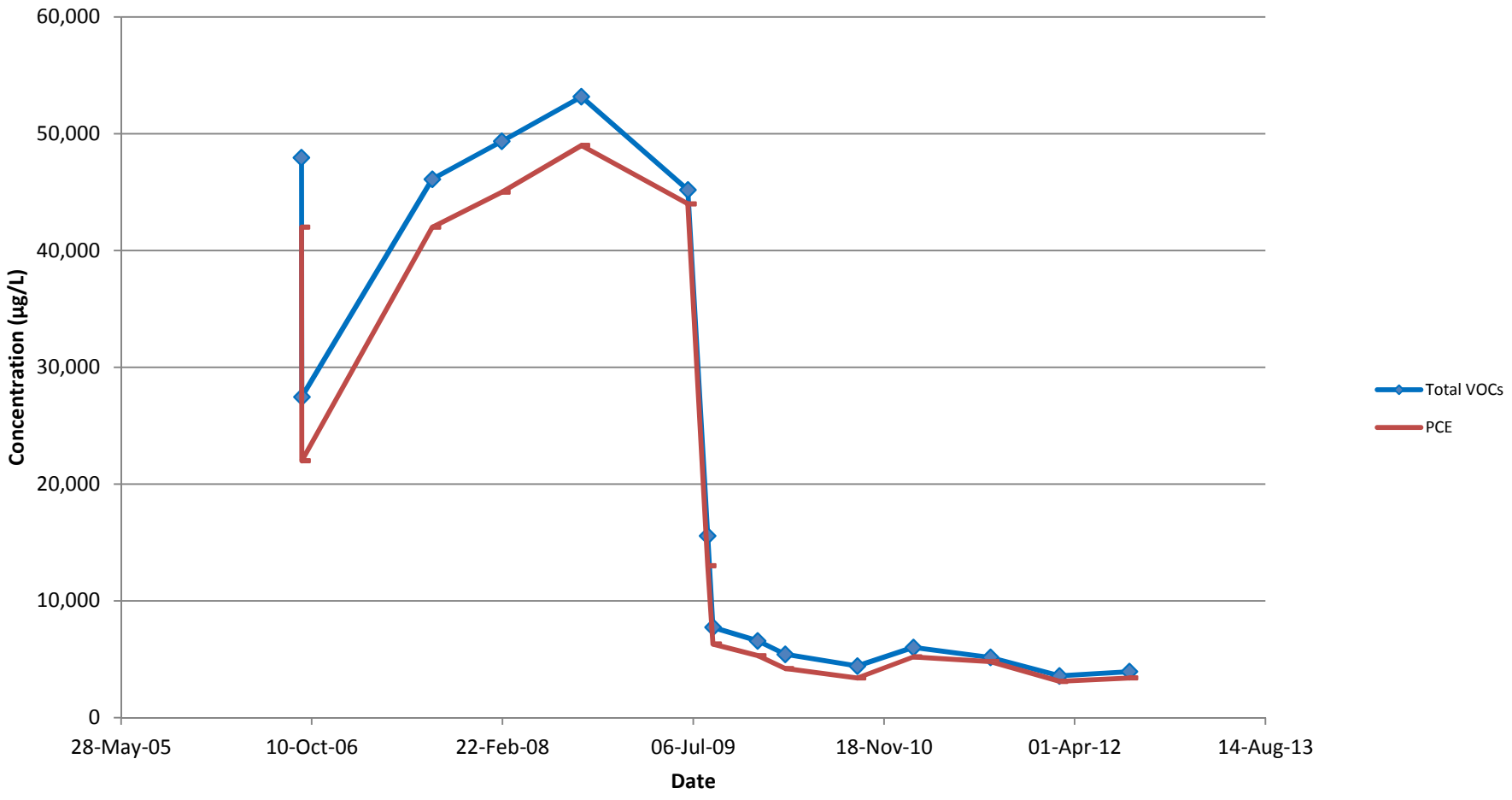


Figure A3-2
Omega Chemical Superfund Site
Total VOC Concentrations
Wells EW-1, EW-3, EW-4, and EW-5

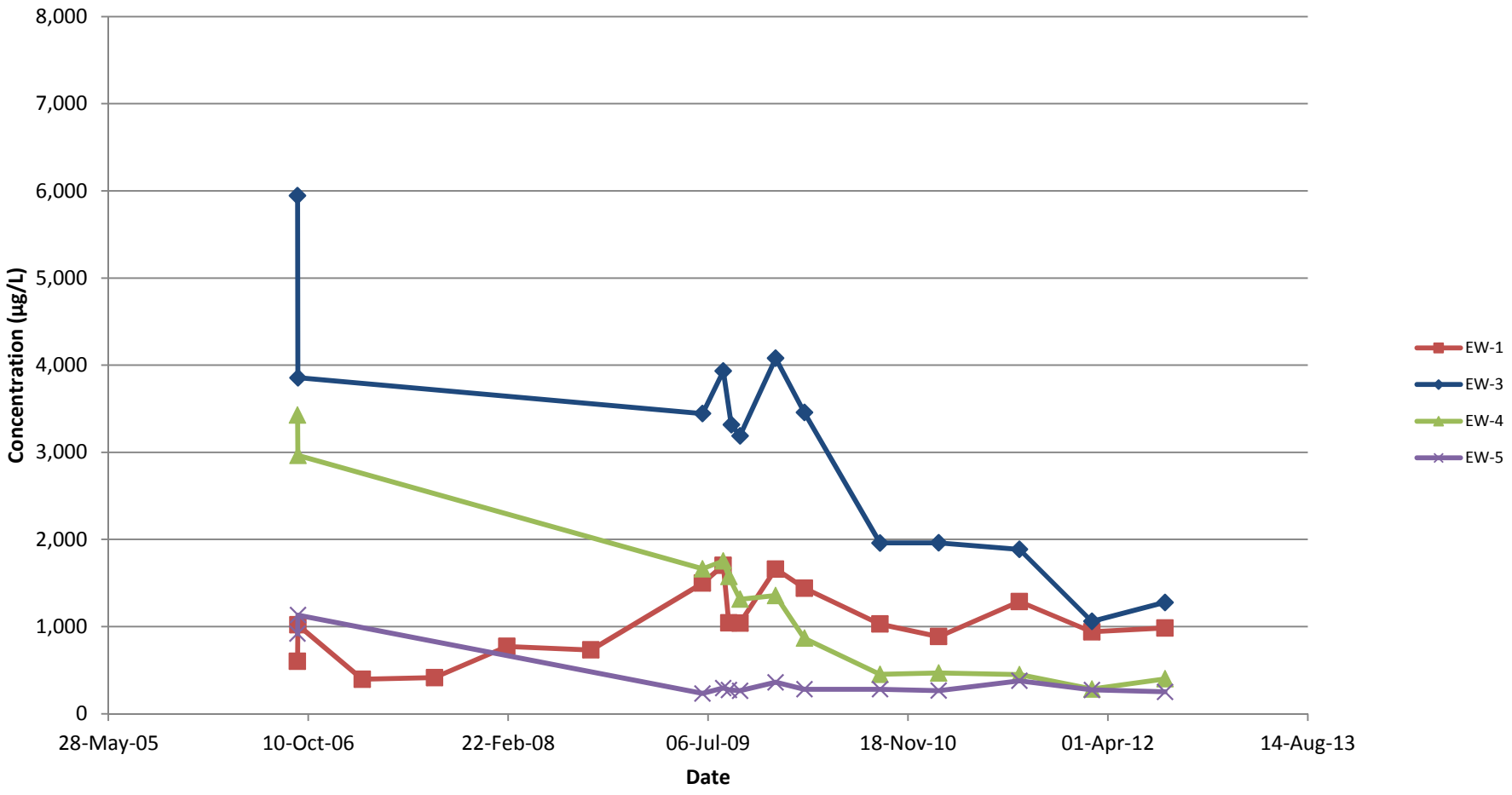


Figure A3-3
Omega Chemical Superfund Site
PCE Concentrations
Wells EW-1, EW-3, EW-4, and EW-5

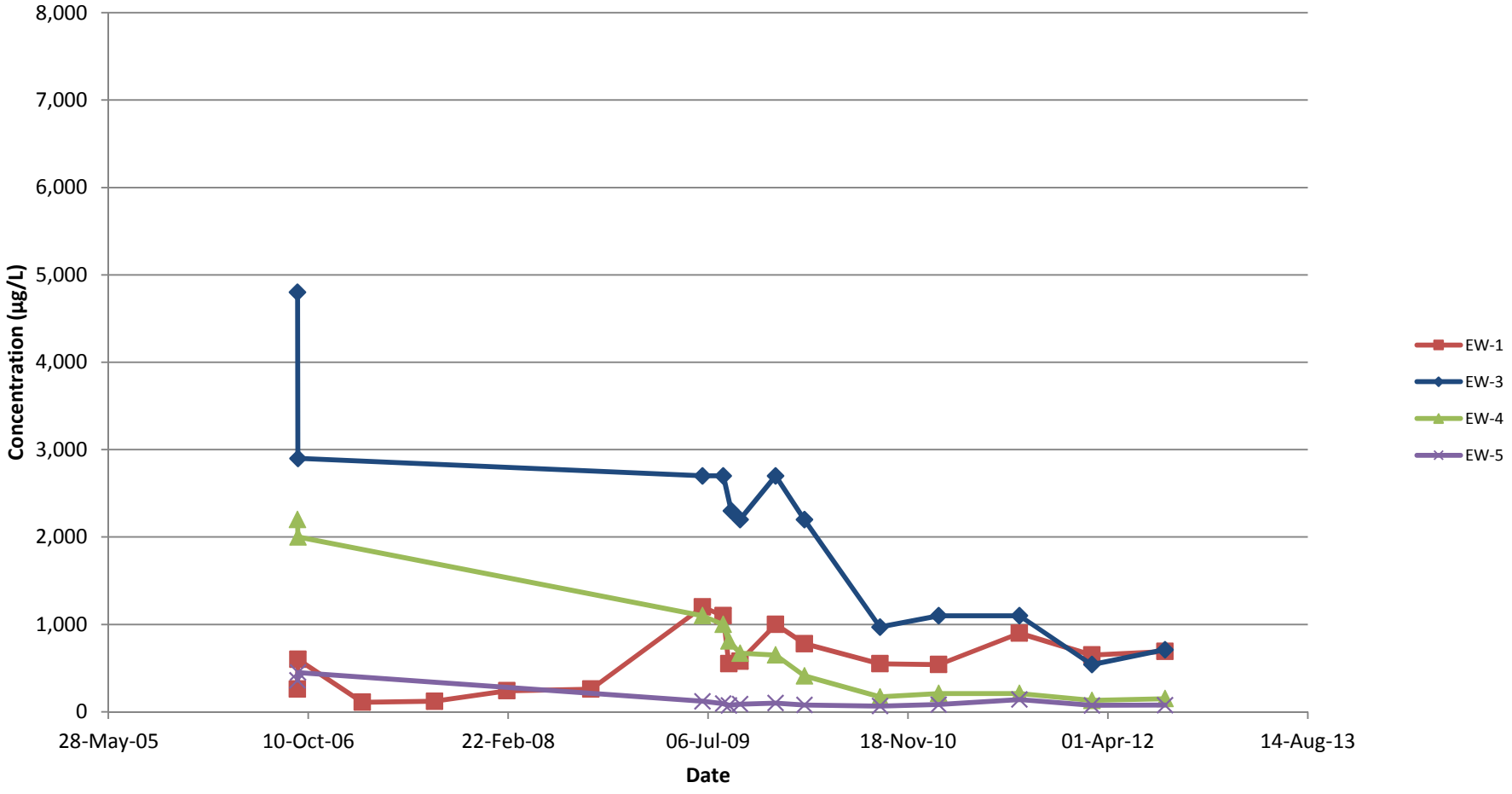


Figure A3-4
Omega Chemical Superfund Site
1-4 Dioxane Concentrations
Wells EW-1 and EW-3

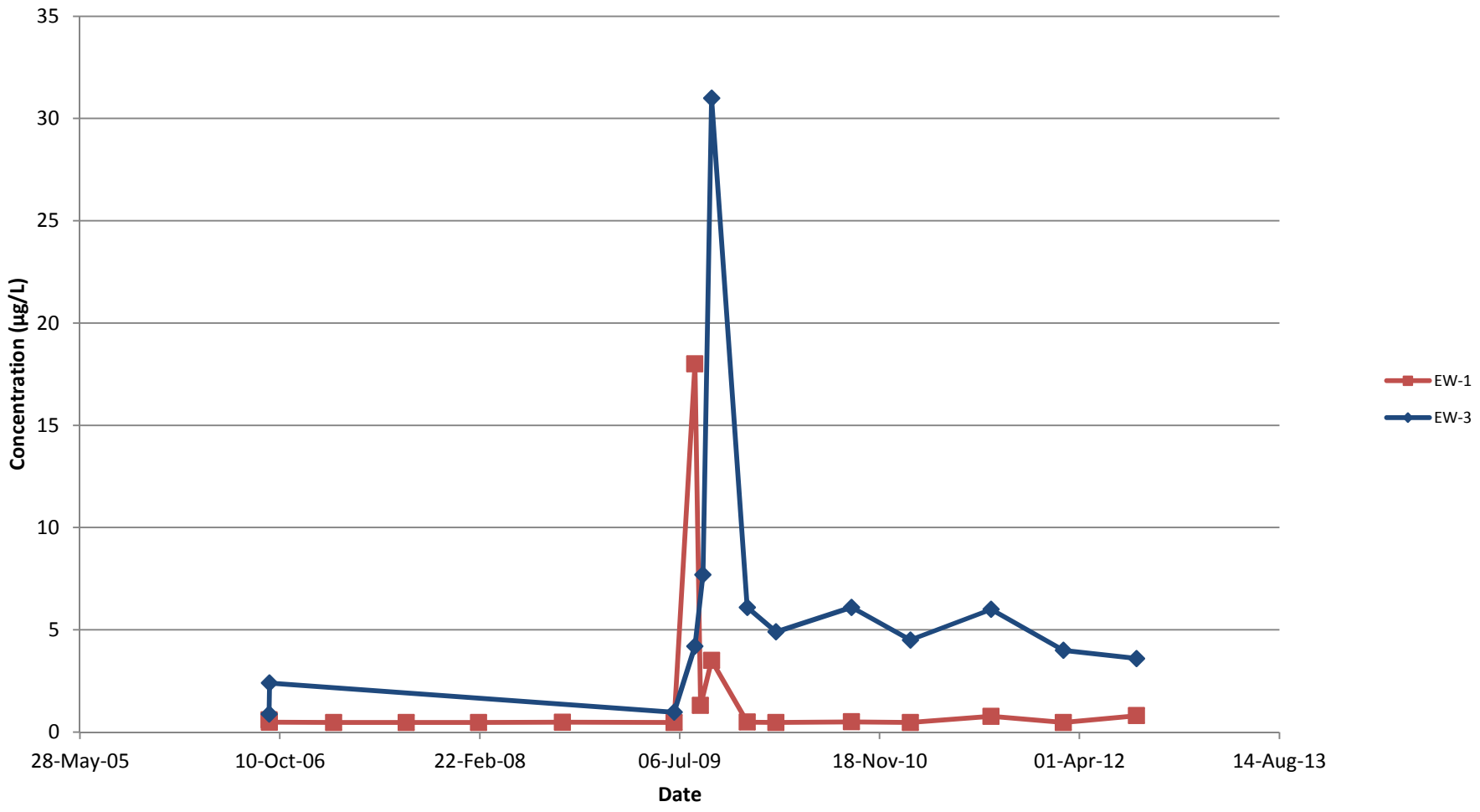


Figure A3-5
Omega Chemical Superfund Site
1-4 Dioxane Concentrations
Well EW-2

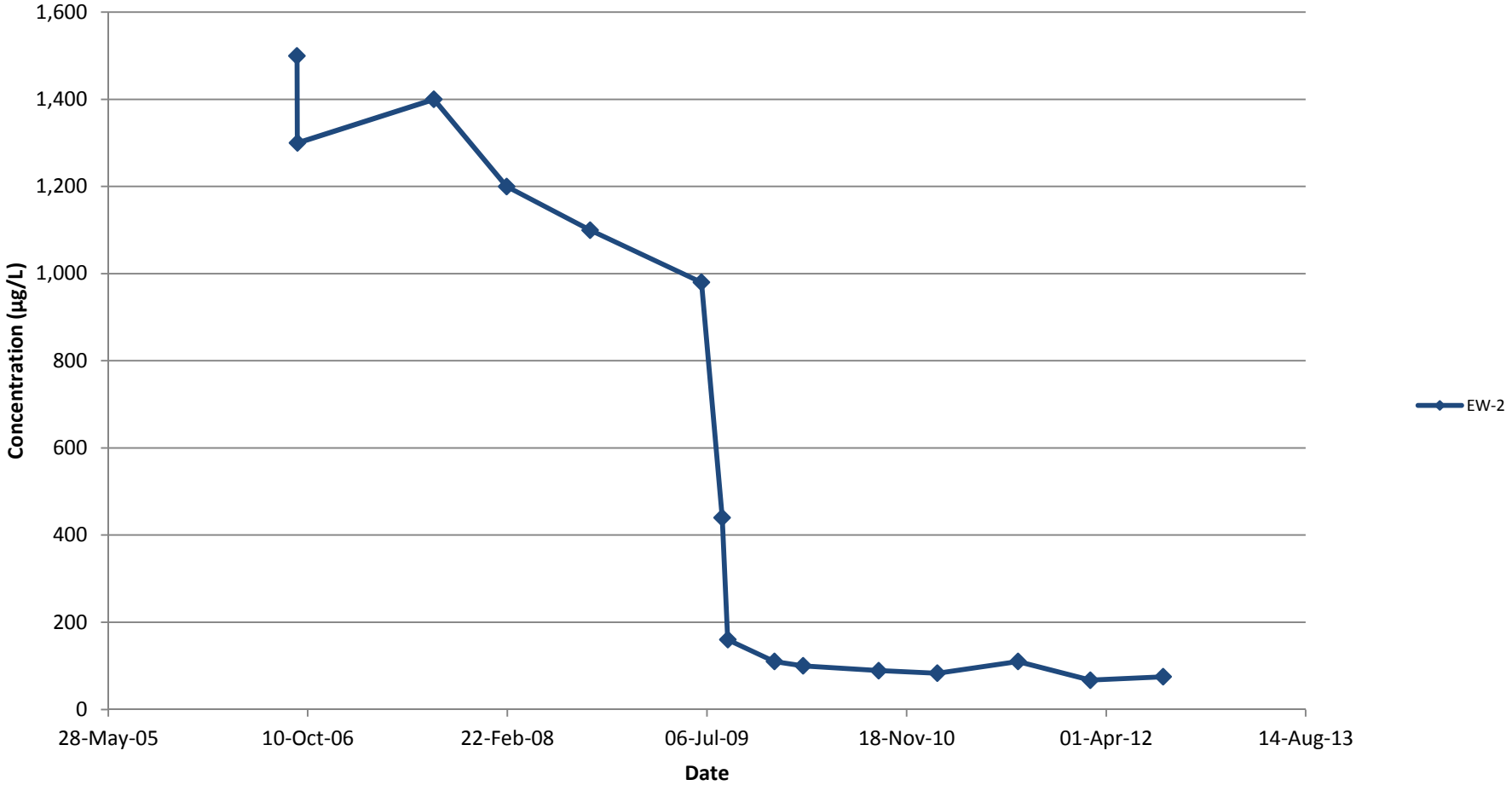


Figure A3-6
Omega Chemical Superfund Site
Total VOC Concentrations
Wells OW-1, OW-8 and OW-9

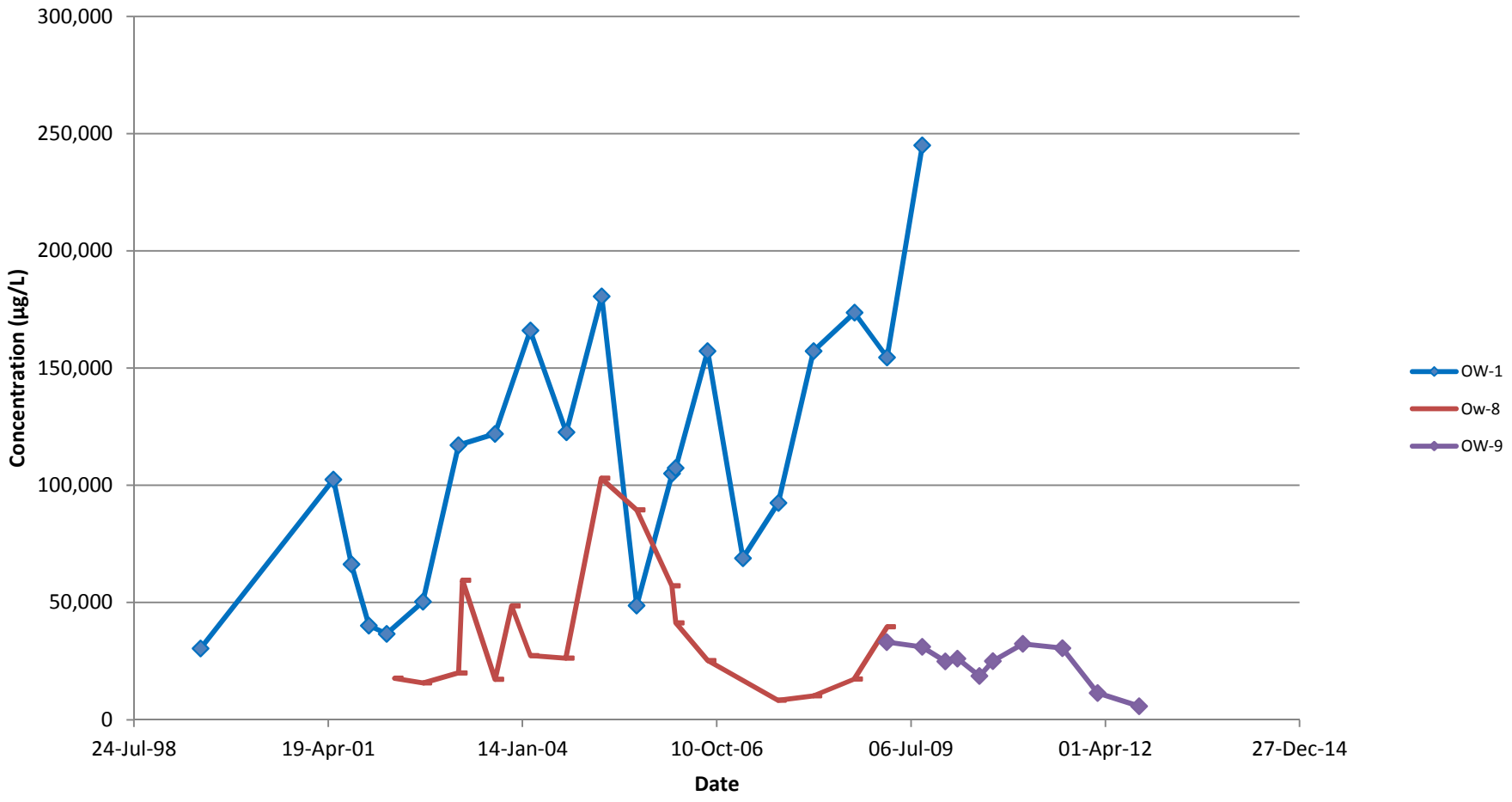


Figure A3-7
Omega Chemical Superfund Site
Total VOC Concentrations
Wells OW-2, OW-3 and OW-4a

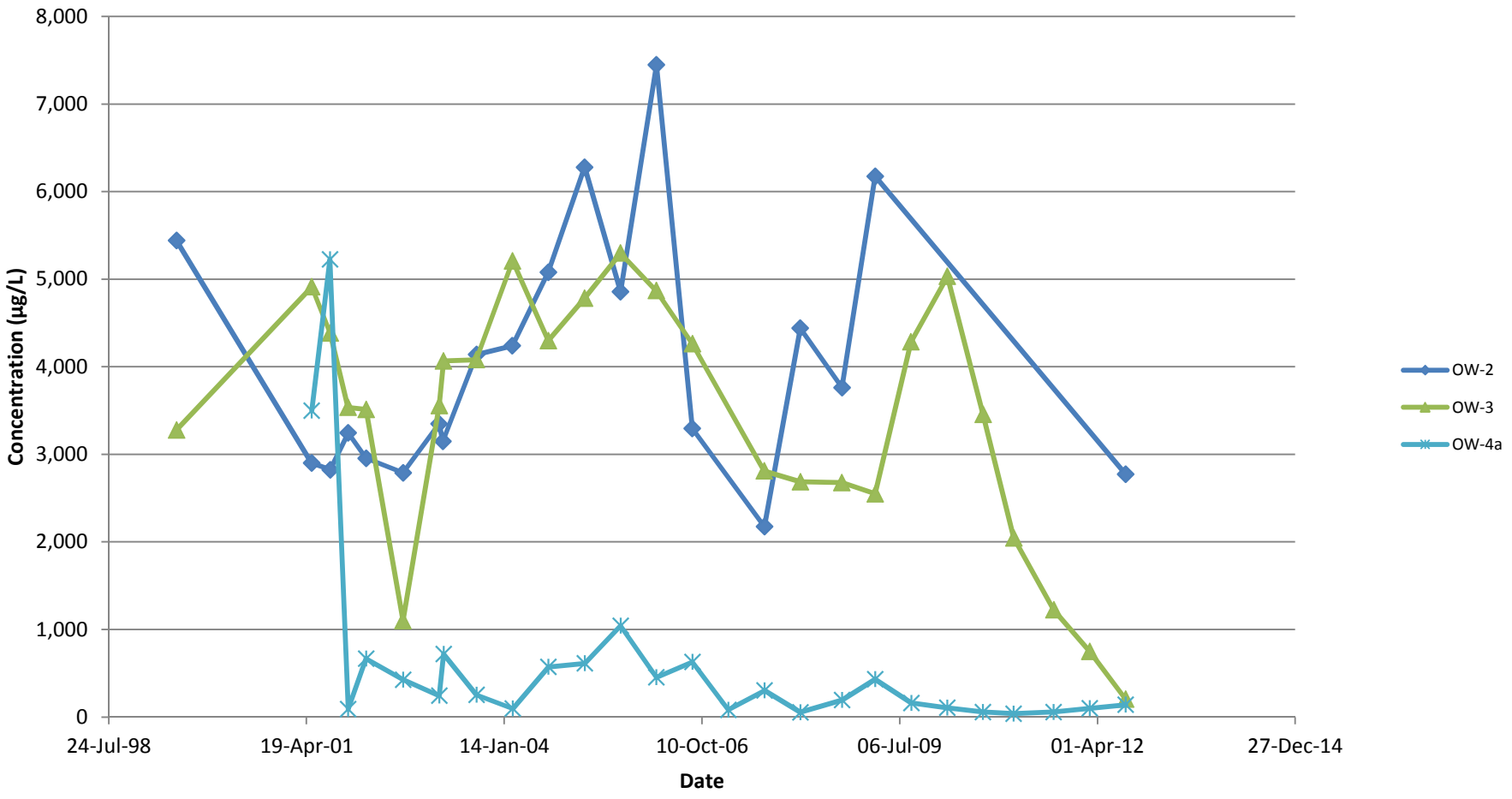


Figure A3-8
Omega Chemical Superfund Site
Total VOC Concentrations
Wells OW-1b, OW-7 and OW-10

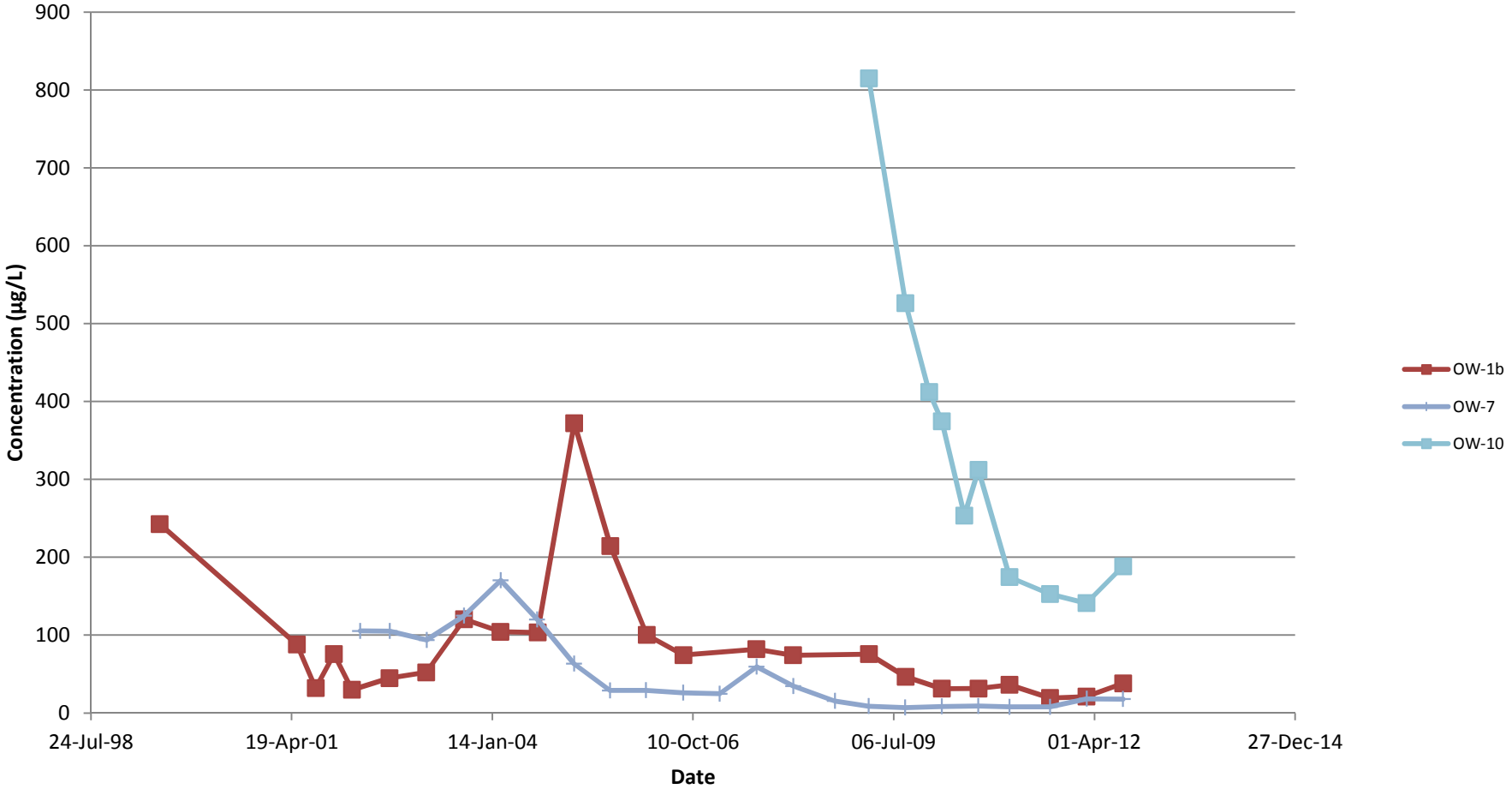


Figure A3-9
Omega Chemical Superfund Site
Total VOC Concentrations
Wells OW-3b, OW-4b and OW-8b

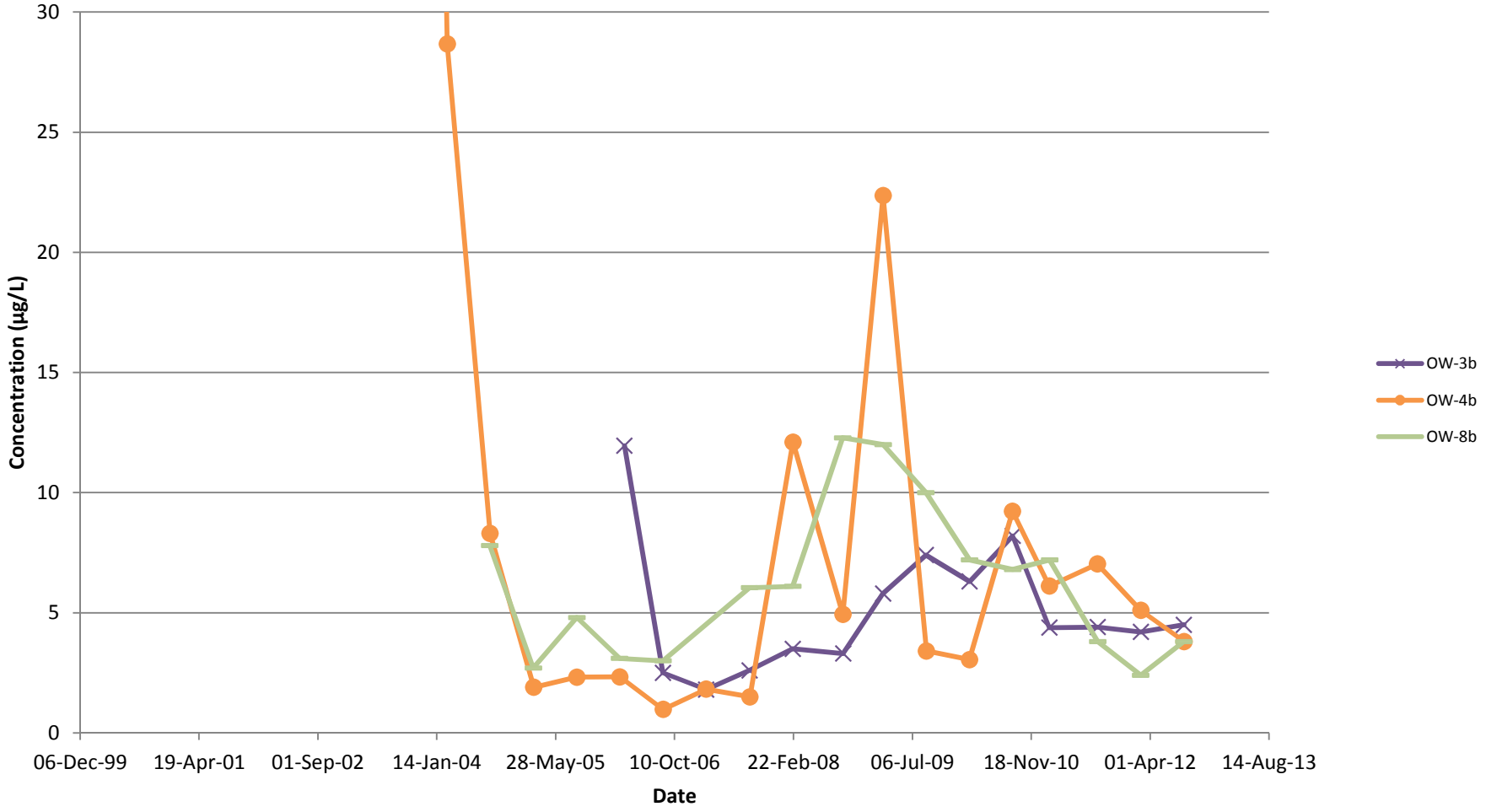


Figure A3-10
Omega Chemical Superfund Site
PCE Concentrations
Wells OW-1, OW-8 and OW-9

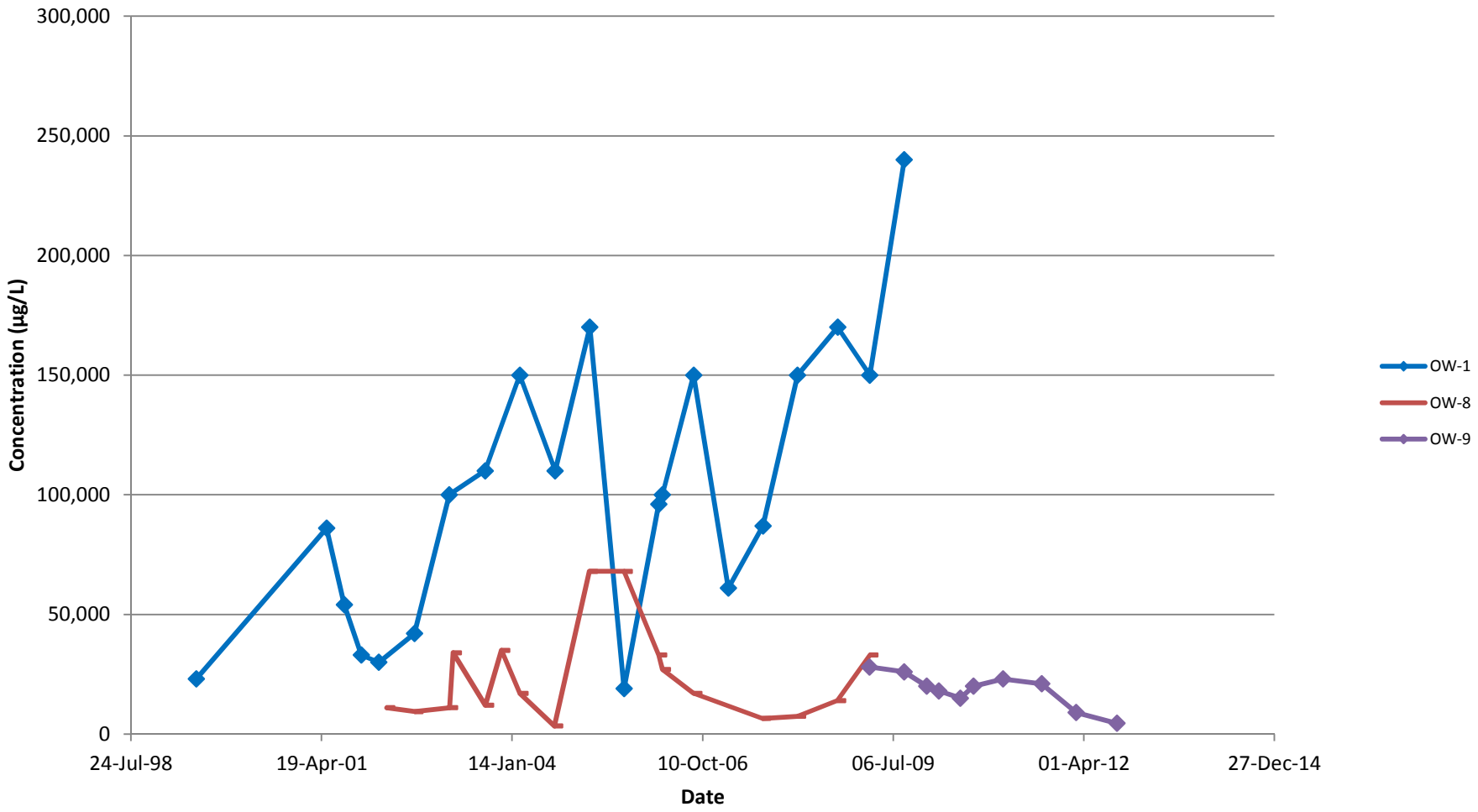


Figure A3-11
Omega Chemical Superfund Site
PCE Concentrations
Wells OW-1b, OW-7 and OW-10

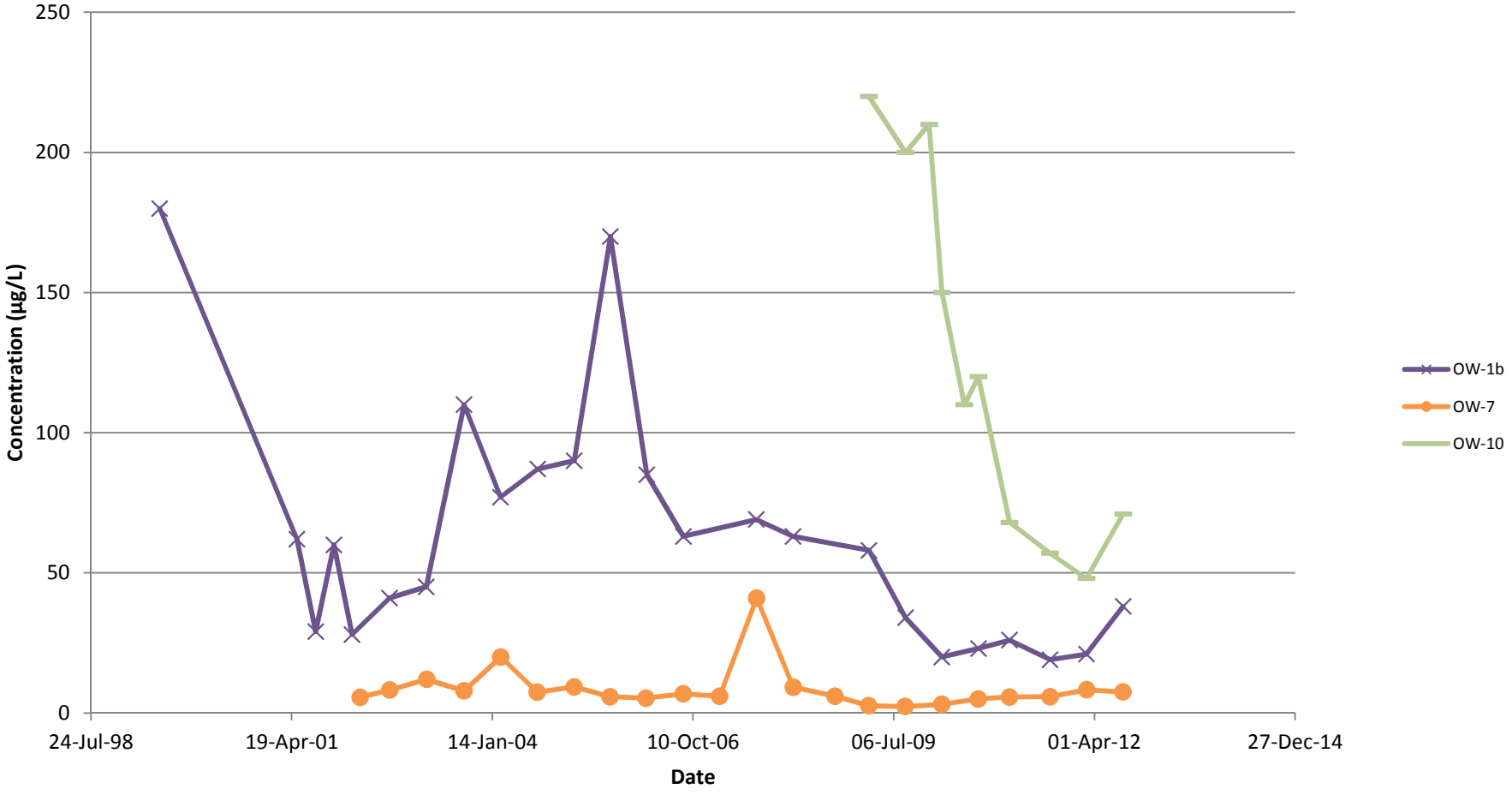


Figure A3-12
Omega Chemical Superfund Site
PCE Concentrations
Wells OW-2, OW-3 and OW-4a

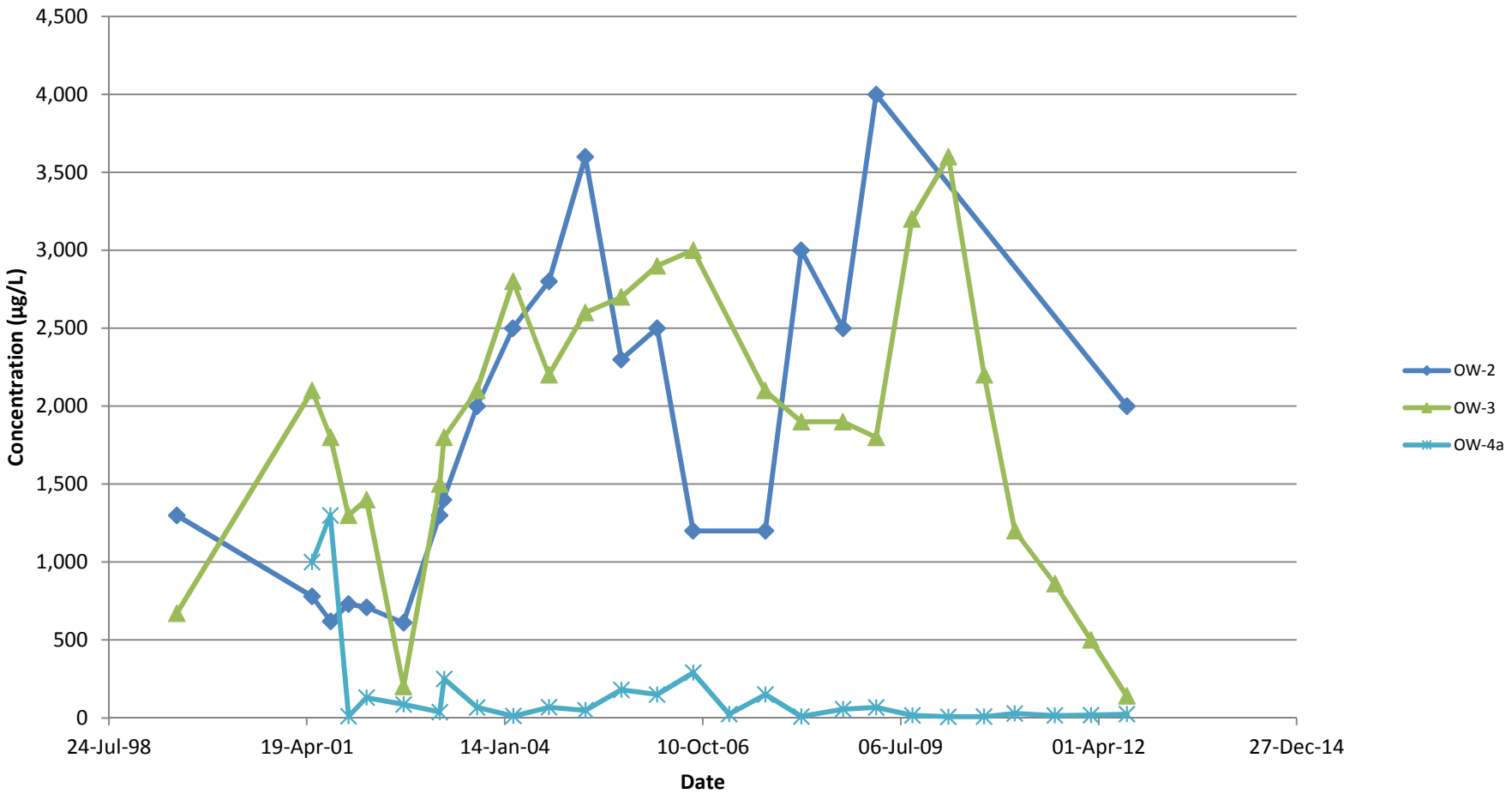


Figure A3-13
Omega Chemical Superfund Site
PCE Concentrations
Wells OW-3b, OW-4b and OW-8b

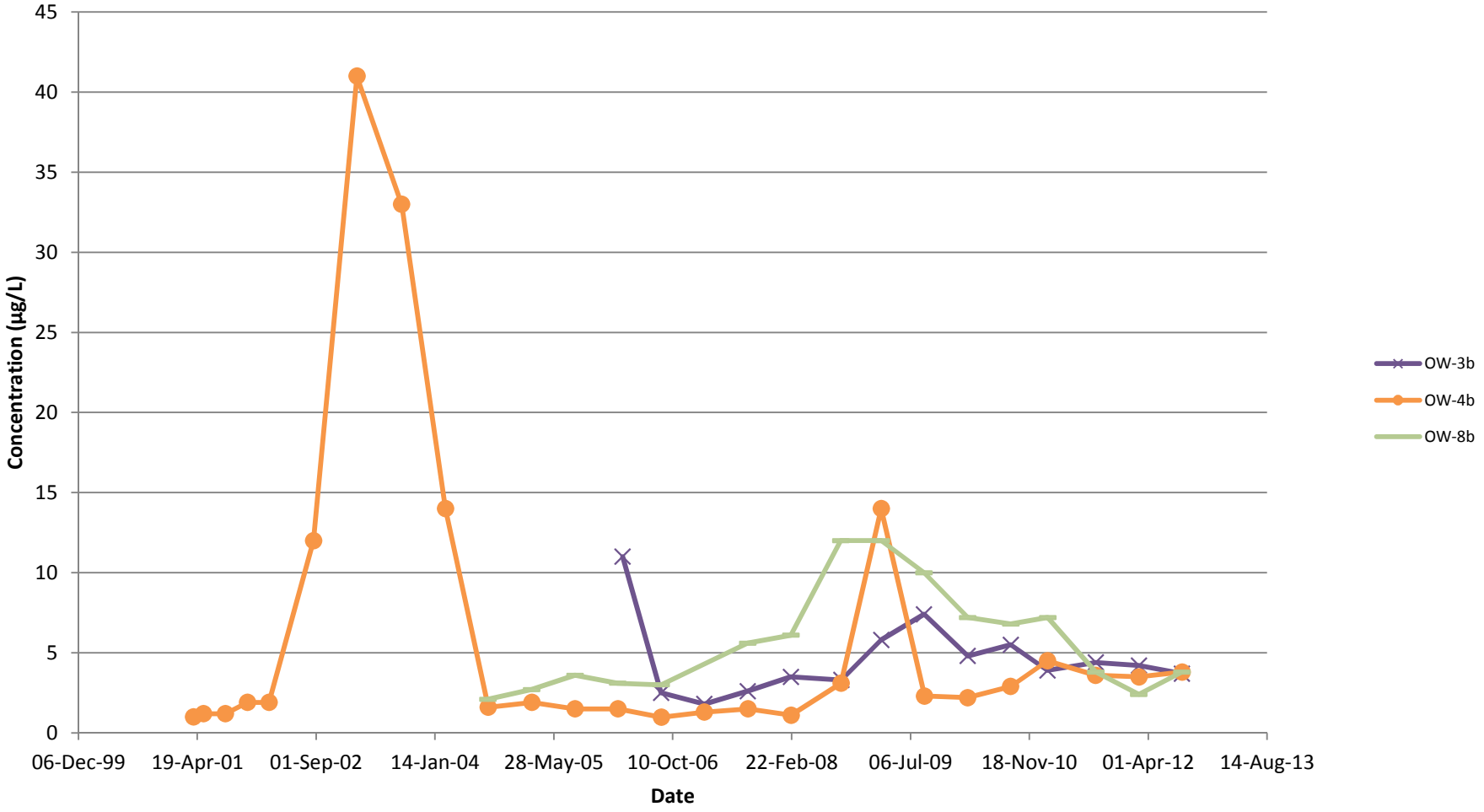


Figure A3-14
Omega Chemical Superfund Site
1-4 Dioxane Concentrations
Well OW-1

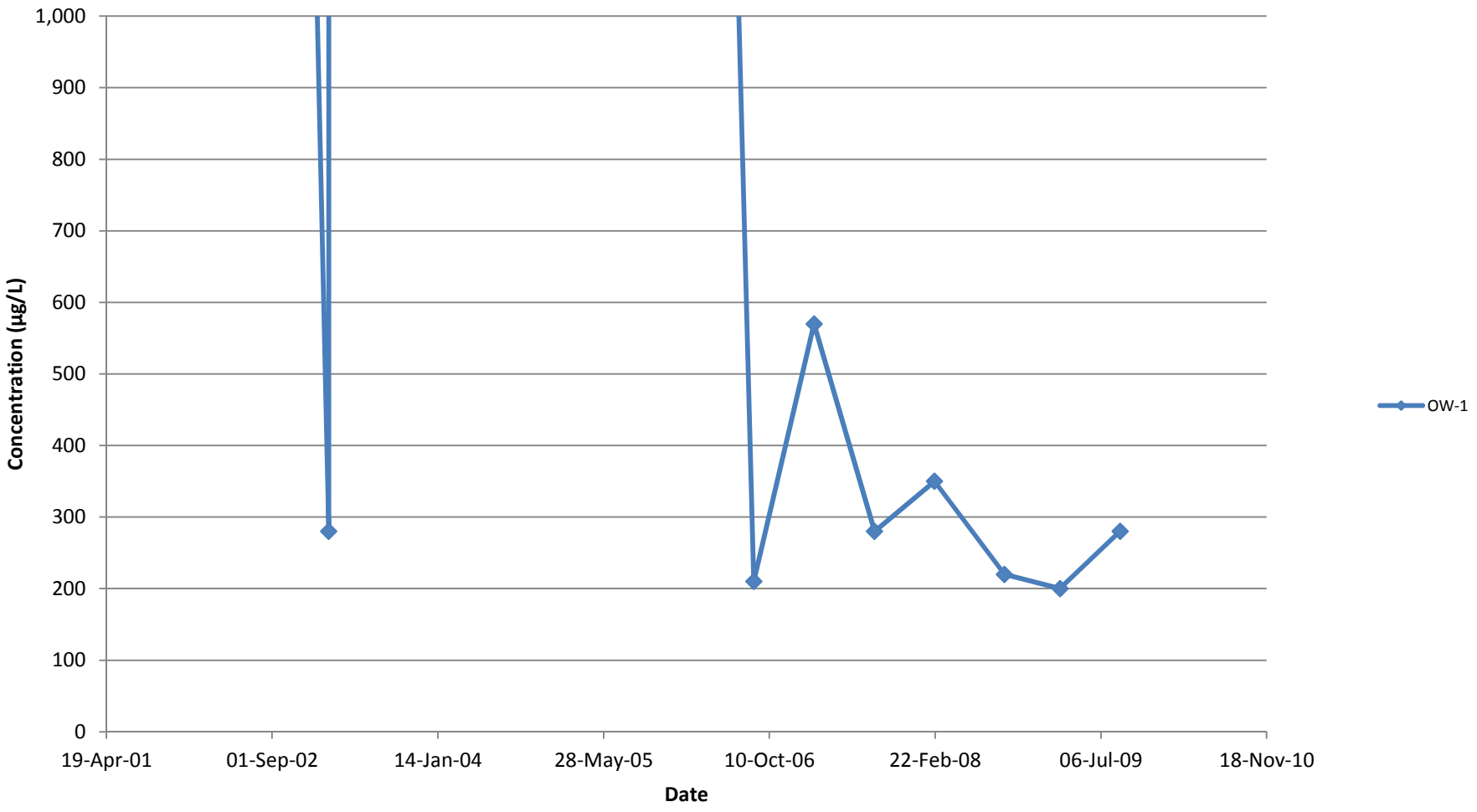


Figure A3-15
Omega Chemical Superfund Site
1-4 Dioxane Concentrations
Wells OW-1b and OW-7

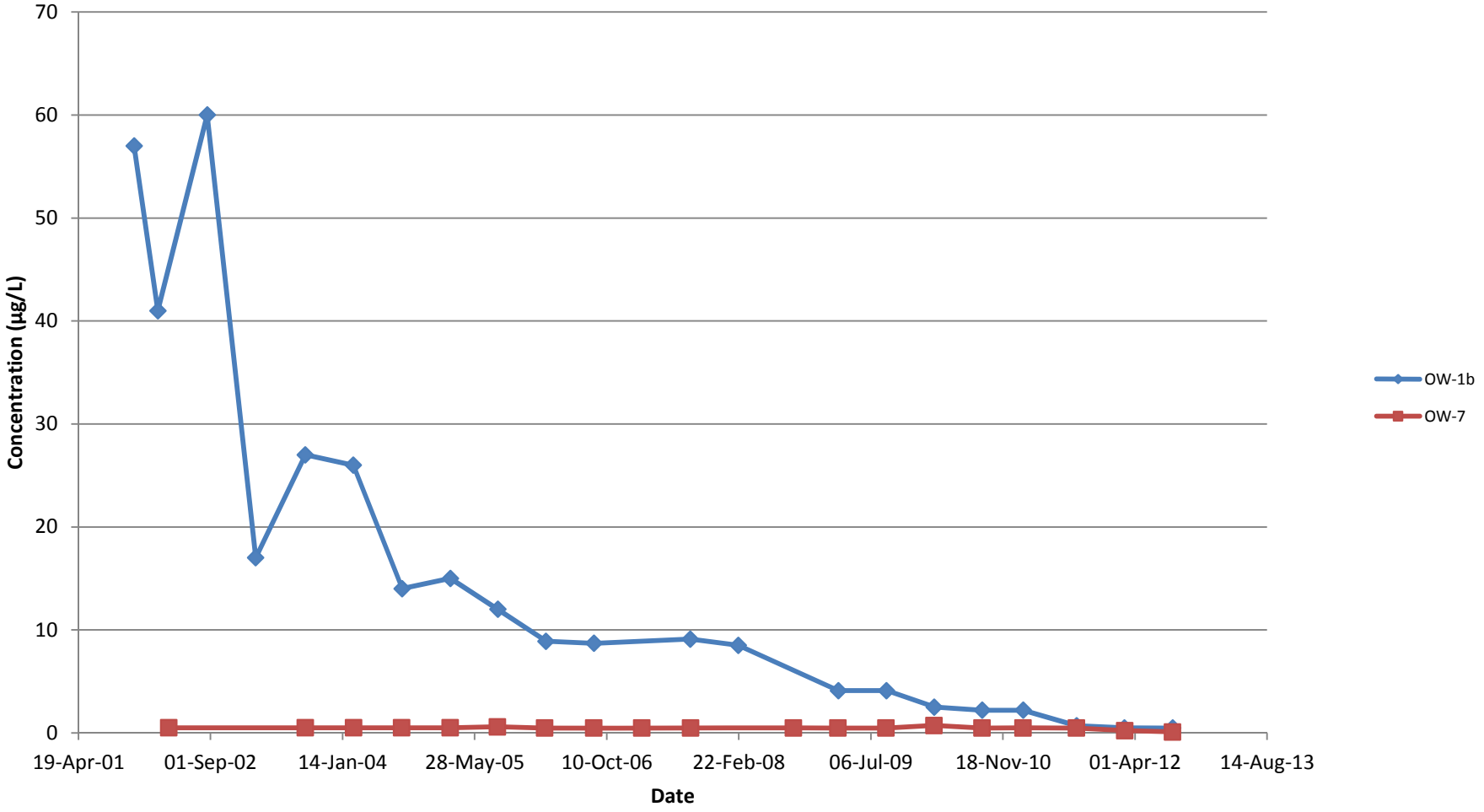


Figure A3-16
Omega Chemical Superfund Site
1-4 Dioxane Concentrations
Wells OW-3 and OW-4a

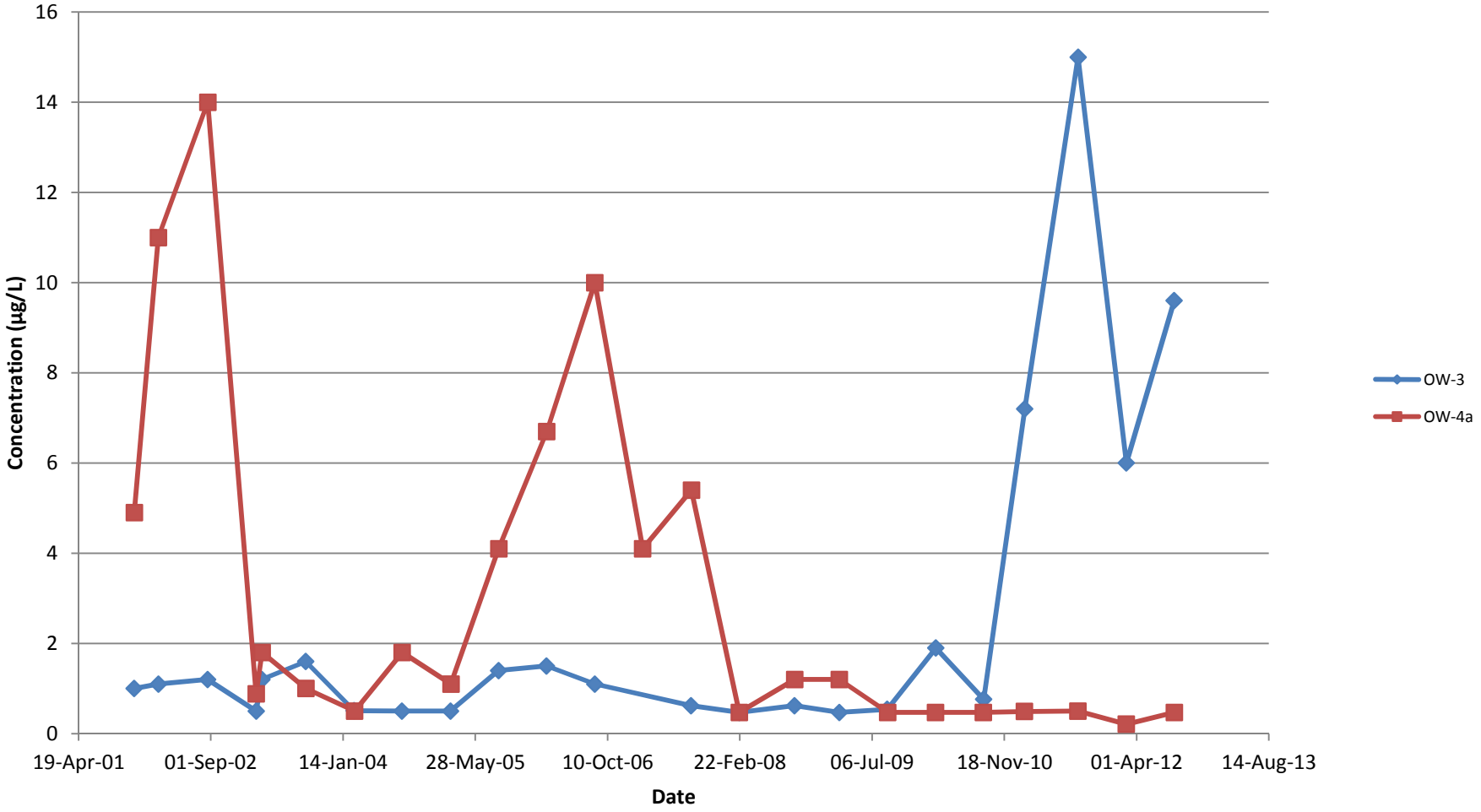
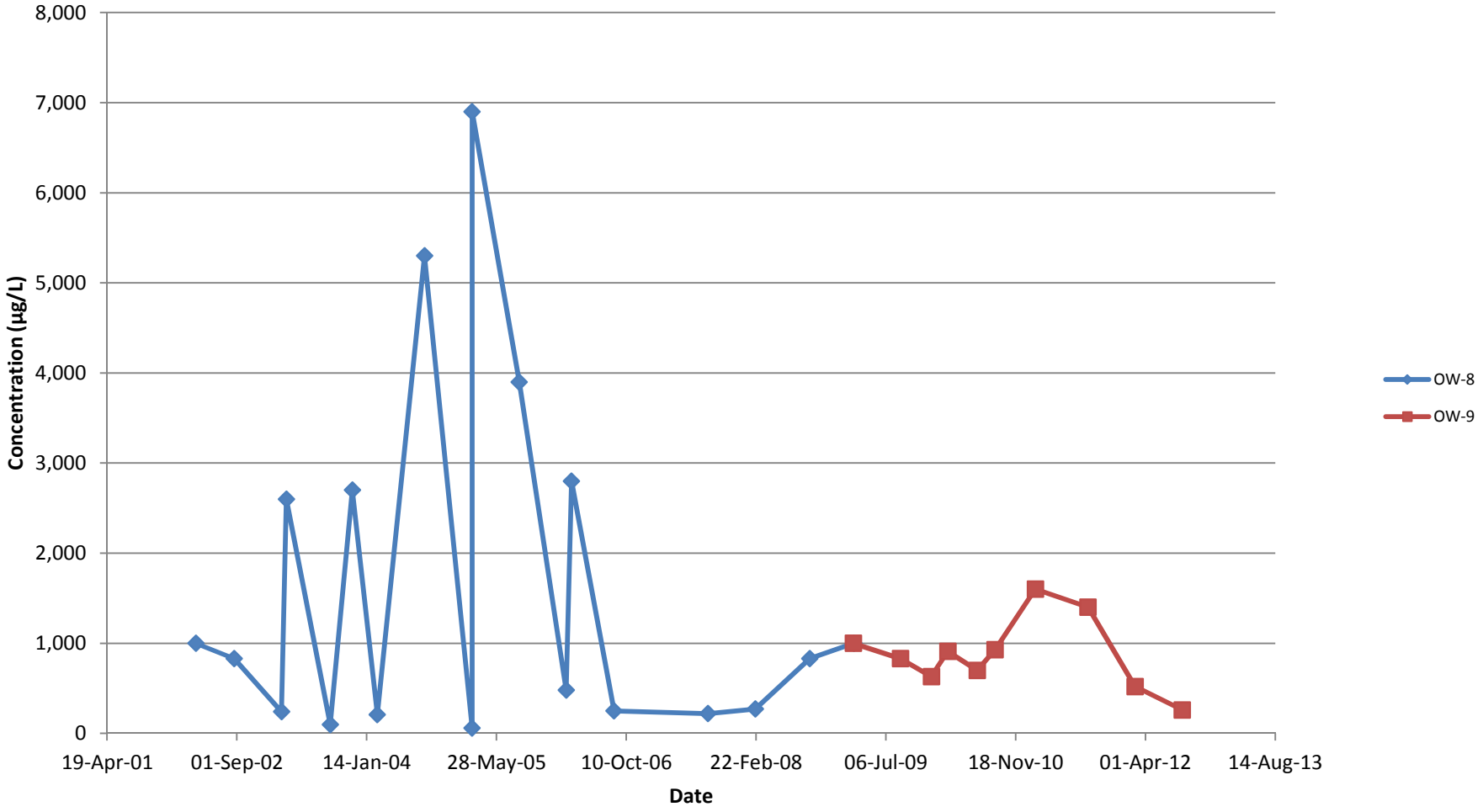
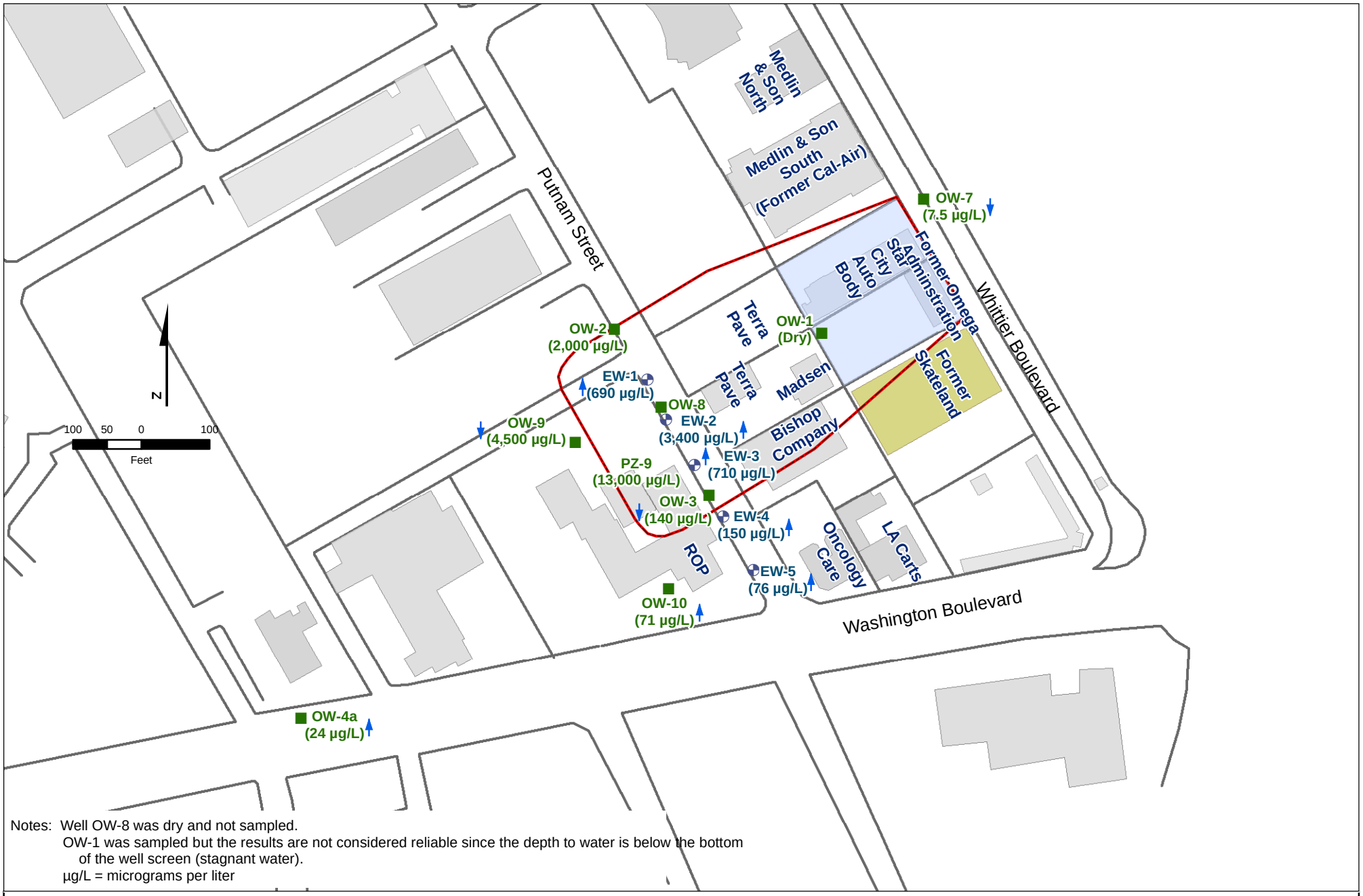


Figure A3-17
Omega Chemical Superfund Site
1-4 Dioxane Concentrations
Wells OW-8 and OW-9





Notes: Well OW-8 was dry and not sampled.
OW-1 was sampled but the results are not considered reliable since the depth to water is below the bottom of the well screen (stagnant water).
µg/L = micrograms per liter

Legend

- Former Omega Chemical Property
- Phase Ia Area
- Former Building
- Other Buildings
- Extraction Well
- Shallow Observation Well / Piezometer
- Concentration Increase from Previous Quarter
- Concentration Decrease from Previous Quarter
- Capture Zone Extent
- Particle Track

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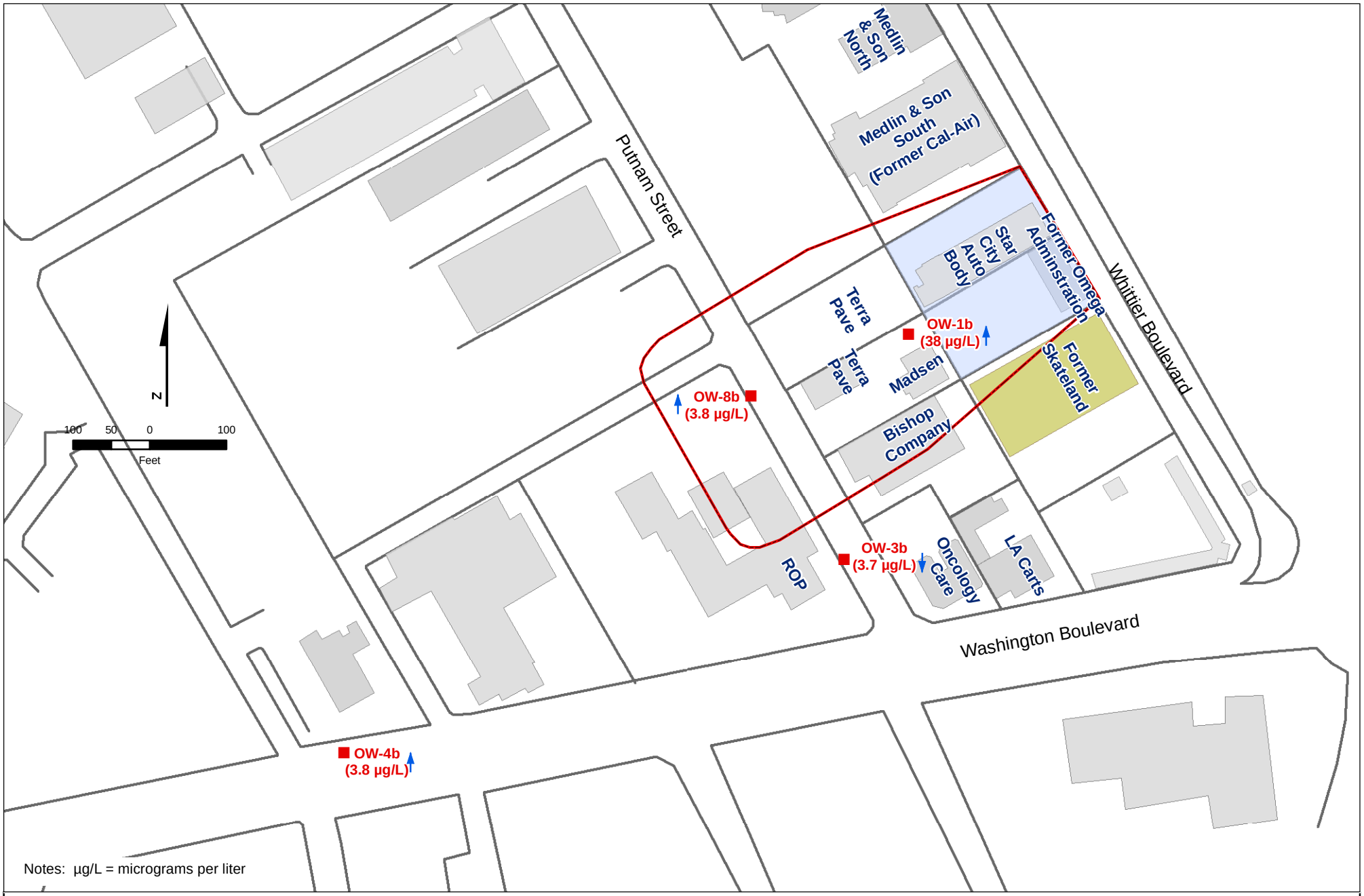
Omega Chemical

Tetrachloroethene (PCE) A-Zone Concentration Map - August 2012

Figure A3-18



Notes: µg/L = micrograms per liter

Legend

- Former Omega Chemical Property
- Phase Ia Area
- Former Building
- Other Buildings
- Extraction Well
- Deep Observation Well / Piezometer
- Concentration Increase from Previous Quarter
- Concentration Decrease from Previous Quarter

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Omega Chemical

Tetrachloroethene (PCE) B-Zone Concentration Map - August 2012

Figure A3-19

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
EW-1	72 - 87	09/13/2006	ORIG	260	36	0.59
		09/14/2006	ORIG	600	52	0.48 U
		02/22/2007	ORIG	110	29	0.47 U
		08/22/2007	ORIG	120	35	0.47 U
		08/22/2007	N	1 U	1 U	0.47 U
		02/19/2008	ORIG	240	55	0.47 U
		02/19/2008	N	1 U	1 U	0.5 U
		09/16/2008	ORIG	260	47	0.48 U
		06/22/2009	ORIG	1200	110	0.47
		08/13/2009	ORIG	1100	80	18
		08/27/2009	ORIG	550	55	1.3
		09/24/2009	ORIG	580	57	3.5
		12/22/2009	ORIG	1000	72	0.49 U
		03/04/2010	ORIG	780	76	0.47 U
		09/09/2010	ORIG	550	56	0.5 U
		02/03/2011	ORIG	540	48	0.47 U
		08/24/2011	ORIG	900	83	0.77 J
		02/21/2012	ORIG	650	76	0.47 U
		08/22/2012	ORIG	690	65	0.8
EW-2	72 - 87	09/13/2006	ORIG	42000	960	1500
		09/14/2006	ORIG	22000	880	1300
		08/22/2007	ORIG	42000 J	770	1400
		08/22/2007	DUP	38000 J	770	1500
		02/20/2008	ORIG	45000	890	1200
		02/20/2008	N	1 U	1 U	0.5 U
		02/20/2008	DUP	43000	800	1300
		09/16/2008	ORIG	49000	970	1100
		09/16/2008	DUP	32000	910	1000
		06/22/2009	ORIG	44000	1200	980
		08/13/2009	ORIG	13000	520	440
		08/27/2009	ORIG	6300	250	160
		12/22/2009	ORIG	5300	180	110
		03/04/2010	ORIG	4200	170	100
		09/09/2010	ORIG	3400	140	89
		02/03/2011	ORIG	5200	160	83
		08/24/2011	ORIG	4800	150	110
		02/21/2012	ORIG	3100	120	67
		08/22/2012	ORIG	3400	110	75
EW-3	70 - 85	09/13/2006	ORIG	4800	370	0.88
		09/14/2006	ORIG	2900	310	2.4
		06/22/2009	ORIG	2700	260	0.97
		08/13/2009	ORIG	2700	190	4.2

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
EW-3	70 - 85	09/02/2009	ORIG	2300	150	7.7
		09/24/2009	ORIG	2200	270	31
		12/22/2009	ORIG	2700	180	6.1
		03/04/2010	ORIG	2200	190	4.9
		09/09/2010	ORIG	970	100	6.1
		02/03/2011	ORIG	1100	100	4.5
		08/24/2011	ORIG	1100	95	6
		02/21/2012	ORIG	540	53	4
		08/22/2012	ORIG	710	81	3.6
EW-4	71 - 86	09/13/2006	ORIG	2200	220	0.47 U
		09/13/2006	DUP	2200	160	0.47
		09/14/2006	ORIG	2000	150	0.49 U
		06/22/2009	ORIG	1100	99	0.48 U
		08/13/2009	ORIG	1000	79	0.48 U
		08/27/2009	ORIG	810	68	0.64 U
		09/24/2009	ORIG	670	63	0.56 U
		12/22/2009	ORIG	650	52	0.48 U
		03/04/2010	ORIG	410	39	0.47 U
		09/09/2010	ORIG	170	21	0.47 U
		02/03/2011	ORIG	210	21	0.47 U
		08/24/2011	ORIG	210	22	0.48 U
		02/21/2012	ORIG	130	13	24
		08/22/2012	ORIG	150	15	0.48
EW-5	70 - 85	09/13/2006	ORIG	360	30	0.47 U
		09/14/2006	ORIG	450	39	0.47 U
		09/14/2006	DUP	460	45	0.47 U
		06/22/2009	ORIG	120	12	0.49 U
		08/13/2009	ORIG	93	10	0.49 U
		08/27/2009	ORIG	73	7.7	0.68 U
		09/24/2009	ORIG	88	9.6	0.48 U
		12/22/2009	ORIG	100	8.2	2 U
		03/04/2010	ORIG	78	8.1	0.47 U
		09/09/2010	ORIG	66	8	0.48 U
		02/03/2011	ORIG	82	8.4	0.47 U
		08/24/2011	ORIG	140	13	0.48 U
		02/21/2012	ORIG	74	7.1	0.47 U
		08/22/2012	ORIG	76	7	0.13 J
OW1	62.5 - 77.5	06/06/1996	ORIG	81000	3400	--
		07/02/1999	ORIG	23000	1300	--
		05/16/2001	ORIG	86000	2400	--
		08/17/2001	ORIG	54000	2000	--
		11/15/2001	ORIG	33000	1200	3300 E

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW1	62.5 - 77.5	02/14/2002	ORIG	30000	1200	11000 E
		08/20/2002	ORIG	42000	1900	4100 E
		02/19/2003	ORIG	100000	3000	52000
		08/26/2003	ORIG	110000	2200	8400
		08/26/2003	DUP	--	--	2700 E
		02/24/2004	ORIG	150000	3600	12000
		08/27/2004	ORIG	110000	2300	5600
		08/27/2004	DUP	150000	3500	6800
		02/25/2005	ORIG	170000	2500	3300
		08/24/2005	ORIG	19000	10000	3100
		02/22/2006	ORIG	96000	2800	2700
		03/13/2006	ORIG	100000	2200	3100
		08/24/2006	ORIG	150000	2600	210
		02/22/2007	ORIG	61000	2800	570
		02/22/2007	DUP	58000	2700	510
		08/23/2007	ORIG	87000	2500	280
		08/23/2007	DUP	90000	2600	290
		02/20/2008	ORIG	150000	3300	350
		02/20/2008	DUP	150000	3000	320 J
		09/18/2008	ORIG	170000	1900	220
		09/18/2008	DUP	110000	2000	210
		03/05/2009	ORIG	150000	2000	200
		03/05/2009	DUP	150000	1900	240
		09/02/2009	ORIG	240000	2300	280
OW1b	110 - 120	07/02/1999	ORIG	--	11	--
		07/02/1999	DUP	300	14	--
		05/16/2001	ORIG	62	2.4	--
		05/16/2001	DUP	56	1.9	--
		08/17/2001	ORIG	29	1 U	--
		11/16/2001	ORIG	60	5.6	57
		02/14/2002	ORIG	28	1 U	41
		08/20/2002	ORIG	41	1.4	60
		02/19/2003	ORIG	45	2.2	17
		08/26/2003	ORIG	110	3.5	27
		02/24/2004	ORIG	77	3.9	26
		08/27/2004	ORIG	87	2.8	14
		02/25/2005	ORIG	90	3.5	15
		08/24/2005	ORIG	170	4.2	12
		02/22/2006	ORIG	85	3.1	8.9
		08/23/2006	ORIG	63	2.1	8.7
		08/22/2007	ORIG	69	2.4	9.1
		02/20/2008	ORIG	63	2.3	8.5
		03/05/2009	ORIG	58	1.9	4.1

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW1b	110 - 120	09/03/2009	ORIG	34	1.7	4.1
		03/03/2010	ORIG	20	0.73 J	2.5
		03/03/2010	N	1 U	1 U	0.47 U
		09/01/2010	ORIG	23	0.76 J	2.2
		02/03/2011	ORIG	26	0.87 J	2.2
		08/24/2011	ORIG	19	0.29 J	0.7 U
		02/21/2012	ORIG	21	1 U	0.49 U
		08/22/2012	ORIG	38	1 U	0.47 U
OW2	60 - 80	07/02/1999	ORIG	1300	240	--
		05/15/2001	ORIG	780	150	--
		08/17/2001	ORIG	620	110	--
		11/16/2001	ORIG	730	130	0.5 U
		02/15/2002	ORIG	710	110	0.54 U
		08/21/2002	ORIG	610	120	1
		02/19/2003	ORIG	1300	150	1.4
		03/10/2003	ORIG	1400	160	0.5 U
		08/27/2003	ORIG	2000	230	0.5 U
		02/24/2004	ORIG	2500	200	0.5 U
		08/24/2004	ORIG	2800	300	12
		02/24/2005	ORIG	3600	300	1.7
		08/24/2005	ORIG	2300	280	0.51
		02/22/2006	ORIG	2500	810	0.47 U
		08/22/2006	ORIG	1200	150	0.47 U
		08/22/2007	ORIG	1200	120	0.47 U
		02/19/2008	ORIG	3000	270	0.47 U
		09/17/2008	ORIG	2500	210	2.3
		09/17/2008	N	0.68 J	1 U	0.74
		03/04/2009	ORIG	4000	340	0.47 U
		03/04/2009	N	1 U	1 U	0.47 U
		08/21/2012	ORIG	2000	290	0.47 U
OW3	63 - 83	07/02/1999	ORIG	670	170	--
		05/16/2001	ORIG	2100	270	--
		08/17/2001	ORIG	1800	200	--
		11/15/2001	ORIG	1300	180	1
		02/15/2002	ORIG	1400	180	1.1
		08/20/2002	ORIG	200	160	1.2
		02/20/2003	ORIG	1500	170	0.5 U
		03/13/2003	ORIG	1800	170	1.2
		08/26/2003	ORIG	2100	190	1.6 UB
		02/25/2004	ORIG	2800	260	0.51
		02/25/2004	DUP	3200	290	0.5 U
		08/24/2004	ORIG	2200	250	0.5 U

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW3	63 - 83	02/23/2005	ORIG	2600	200	0.5 U
		08/24/2005	ORIG	2700	320	1.4
		02/21/2006	ORIG	2900	280	1.5
		08/23/2006	ORIG	3000	260	1.1
		08/21/2007	ORIG	2100	170	0.62
		02/20/2008	ORIG	1900	180	0.47 U
		09/16/2008	ORIG	1900	170	0.62
		03/04/2009	ORIG	1800	150	0.47 U
		09/01/2009	ORIG	3200	240	0.54
		03/04/2010	ORIG	3600	350	1.9
		09/01/2010	ORIG	2200	190	0.76
		02/03/2011	ORIG	1200	180	7.2
		08/24/2011	ORIG	860	110	15 J
		02/22/2012	ORIG	500	60	6
		02/22/2012	DUP	450	54	5.3
		08/21/2012	ORIG	140	17	9.6
OW3B	112 - 122	03/13/2006	ORIG	11	1 U	0.48 U
		08/22/2006	ORIG	2.5	1 U	0.47 U
		08/22/2006	DUP	2.6	1 U	0.47 U
		02/20/2007	ORIG	1.8	1 U	0.47 U
		08/21/2007	ORIG	2.6	1 U	0.47 U
		08/21/2007	N	1 U	1 U	0.47 U
		02/19/2008	ORIG	3.5	1 U	0.47 U
		09/18/2008	ORIG	3.3	1 U	0.47 U
		03/05/2009	ORIG	5.8	1 U	0.47 U
		09/01/2009	ORIG	7.4	1 U	0.47 U
		09/01/2009	DUP	7.6	1 U	0.47 U
		03/04/2010	ORIG	4.8	1.5	0.47 U
		03/04/2010	N	1 U	1 U	0.47 U
		03/04/2010	DUP	4.6	1.7	0.47 U
		09/01/2010	ORIG	5.5	2.7	0.47 U
		09/01/2010	DUP	5.4	2.8	0.47 U
		02/02/2011	ORIG	3.9	0.48 J	0.48 U
		02/02/2011	N	1 U	1 U	0.51 U
		08/24/2011	ORIG	4.4	1 U	0.49 U
		08/24/2011	N	1 U	1 U	1.5 J
		02/22/2012	ORIG	4.2	1 U	0.47 U
		08/21/2012	ORIG	3.7	1 U	0.47 U
OW4A	49.8 - 69.8	05/16/2001	ORIG	1000	120	--
		08/16/2001	ORIG	1300	180	--
		11/16/2001	ORIG	9.8	30	4.9
		02/15/2002	ORIG	130	48	11

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW4A	49.8 - 69.8	08/21/2002	ORIG	87	50	14
		02/20/2003	ORIG	37	30	0.88
		03/14/2003	ORIG	250	25	1.8
		08/27/2003	ORIG	67	32	1 UB
		02/27/2004	ORIG	12	31	0.5 U
		08/25/2004	ORIG	68	12	1.8
		08/25/2004	DUP	75	13	1.9
		02/25/2005	ORIG	49	8.4	1.1
		08/25/2005	ORIG	180	19	4.1
		02/22/2006	ORIG	150	17	6.7
		08/23/2006	ORIG	290	29	10
		02/20/2007	ORIG	24	5.1	4.1
		08/23/2007	ORIG	150	16	5.4
		02/20/2008	ORIG	9.1	4.2	0.47 U
		09/17/2008	ORIG	56	6.2	1.2
		03/04/2009	ORIG	67	9	1.2
		09/03/2009	ORIG	16	3.7	0.47 U
		09/03/2009	DUP	15	3.6	0.47 U
		03/03/2010	ORIG	7.8	1.4	0.47 U
		03/03/2010	DUP	8.3	1.5	0.47 U
		08/31/2010	ORIG	8	1.3	0.47 U
		08/31/2010	N	1 U	1 U	0.47 U
		08/31/2010	DUP	8.2	1.4	0.47 U
		02/02/2011	ORIG	29	2.3	0.49 U
		08/23/2011	SPLIT	11	0.87	1 U
		08/23/2011	ORIG	15	0.99 J	0.5 U
		02/22/2012	ORIG	18	1.6	0.47 U
		08/22/2012	ORIG	24	2.3	0.47 U
		08/22/2012	N	1 U	1 U	0.47
OW4B	112 - 122.3	04/03/2001	ORIG	1 U	1 U	--
		05/16/2001	ORIG	1.2	1 U	--
		08/16/2001	ORIG	1.2	1 U	--
		11/16/2001	ORIG	1.9	1 U	0.53 U
		02/15/2002	ORIG	1.9	1 U	0.51 U
		08/21/2002	ORIG	12	7.9	0.5 U
		02/20/2003	ORIG	41	3.7	0.5 U
		08/27/2003	ORIG	33	3	0.6 UB
		02/27/2004	ORIG	14	0.31 J	0.5 U
		08/25/2004	ORIG	1.6	1 U	0.5 U
		02/25/2005	ORIG	1.9	1 U	0.5 U
		08/25/2005	ORIG	1.5	1 U	0.5 U
		02/22/2006	ORIG	1.5	1 U	0.47 U
		08/23/2006	ORIG	0.98 J	1 U	0.47 U

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW4B	112 - 122.3	02/20/2007	ORIG	1.3	0.52 J	0.82
		08/23/2007	ORIG	1.5	1 U	0.47 U
		08/23/2007	N	1 U	1 U	--
		02/20/2008	ORIG	1.1	1 U	0.47 U
		09/17/2008	ORIG	3.1	0.31 J	0.73
		03/05/2009	ORIG	14	0.95 J	0.47 U
		09/03/2009	ORIG	2.3	1 U	0.48 U
		09/03/2009	N	1 U	1 U	0.48 U
		03/03/2010	ORIG	2.2	1 U	0.47 U
		08/31/2010	ORIG	2.9	1 U	0.47 U
		02/02/2011	ORIG	4.5	0.29 J	0.48 U
		02/02/2011	DUP	4.8	0.32 J	0.48 U
		08/23/2011	ORIG	3.6 J	1 U	0.47 U
		08/23/2011	N	1 U	1 U	1.2 J
		08/23/2011	DUP	26 J	3	0.47 U
		02/22/2012	ORIG	3.5	0.27 J	0.47 U
		08/22/2012	SPLIT	3.2	0.5 U	1 U
		08/22/2012	ORIG	3.8	1 U	0.48 U
		08/22/2012	DUP	3.5	1 U	0.73 U
OW5	30 - 50	08/17/2001	ORIG	150	510	--
		08/17/2001	DUP	190	550	--
		11/16/2001	ORIG	130	470	0.76
		11/16/2001	DUP	130	570	0.88
		02/15/2002	ORIG	130	390	1.1
		02/15/2002	DUP	120	410	0.98
		08/22/2002	ORIG	150	300	--
		02/21/2003	ORIG	440	810	--
		08/28/2003	ORIG	25	34	0.58
		02/24/2004	ORIG	1500	420	68
		08/25/2004	ORIG	1800	320	85
		02/24/2005	ORIG	230	110	10
		08/22/2005	ORIG	2400	430	95
		02/17/2006	ORIG	2000	500	120
		08/24/2006	ORIG	2300	580	27
		02/20/2007	ORIG	2900	650	150
		08/22/2007	ORIG	2400	560	110
		02/21/2008	ORIG	1400	240	58
		09/18/2008	ORIG	840	150	47
		09/18/2008	N	1 U	1 U	0.59 U
		03/03/2009	ORIG	190	74	6.6
		03/03/2009	N	1 U	1 U	0.47 U
		09/02/2009	ORIG	55	330	1.4
		08/28/2012	ORIG	670	180	17

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW6	38 - 58	05/16/2001	ORIG	28	4	--
		08/17/2001	ORIG	24	4 U	--
		11/16/2001	ORIG	140	22	4
		02/15/2002	ORIG	69	13	0.86
		08/21/2002	ORIG	21	3.9	--
		02/21/2003	ORIG	72	15	--
		08/28/2003	ORIG	22	3.6	0.85
		02/25/2004	ORIG	17	2.5	0.7
		08/25/2004	ORIG	18	0.87 J	0.5 U
		02/23/2005	ORIG	43	1	0.5 U
		08/24/2005	ORIG	65	2.3	2.3
		02/17/2006	ORIG	60	0.93 J	0.47 U
		08/24/2006	ORIG	34	0.9 J	1.9 U
		02/22/2007	ORIG	26	0.84 J	0.47 U
		08/23/2007	ORIG	22	0.67 J	0.47 U
		02/21/2008	ORIG	48	0.94 J	0.47 U
		02/21/2008	N	1 U	1 U	0.5 U
		09/17/2008	ORIG	29	0.43 J	0.47 U
		03/03/2009	ORIG	70	0.68 J	0.47 U
		09/02/2009	ORIG	62	1.8	0.48 U
		09/02/2009	N	1 U	1 U	0.5 U
		08/22/2012	ORIG	76	2.8	0.47 U
OW7	70.9 - 90.9	03/27/2002	ORIG	5.6	1.2	0.5 U
		08/21/2002	ORIG	8.2	2	--
		02/21/2003	ORIG	12	1.8	--
		08/26/2003	ORIG	7.9	1 U	0.5 U
		02/25/2004	ORIG	20	1.4	0.5 U
		08/25/2004	ORIG	7.4	1.3	0.5 U
		02/24/2005	ORIG	9.3	1.6	0.5 U
		08/22/2005	ORIG	5.8	1.3	0.59
		02/17/2006	ORIG	5.3	1	0.47 U
		08/22/2006	ORIG	6.8	1.1	0.47 U
		02/20/2007	ORIG	6	0.76 J	0.47 U
		08/23/2007	ORIG	41	0.93 J	0.47 U
		02/21/2008	ORIG	9.2	0.38 J	--
		09/16/2008	ORIG	6	1 U	0.48 U
		03/03/2009	ORIG	2.6	0.33 J	0.47 U
		09/01/2009	ORIG	2.3	0.35 J	0.47 U
		03/02/2010	ORIG	3.1	0.34 J	0.72
		08/31/2010	ORIG	5	0.49 J	0.47 U
		02/02/2011	ORIG	5.7	1 U	0.48 U
		08/23/2011	ORIG	5.8	1 U	0.47 U

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW7	70.9 - 90.9	02/22/2012	ORIG	8.3	1 U	0.47 U
		02/22/2012	N	1 U	1 U	0.47 U
		08/21/2012	ORIG	7.5	1 U	0.47 U
		08/21/2012	N	1 U	1 U	0.072 J
OW8	60.4 - 80	03/27/2002	ORIG	11000	930	1000
		08/22/2002	ORIG	9400	910	830
		08/22/2002	DUP	10000	840	840
		02/20/2003	ORIG	11000	910	240
		02/20/2003	DUP	13000	1000	180
		03/11/2003	ORIG	34000	2200	2600
		03/11/2003	DUP	36000	2100	2600
		08/27/2003	ORIG	12000	880	98
		08/27/2003	DUP	14000	990	89
		11/20/2003	ORIG	35000	1600	2700
		02/24/2004	ORIG	17000	1000	210
		08/24/2004	ORIG	3400	1600	5300
		02/23/2005	ORIG	68000	3300	6900
		02/23/2005	DUP	62000	3400	6300
		08/24/2005	ORIG	68000	3000	3900
		08/24/2005	DUP	72000	2900	6000
		02/21/2006	ORIG	33000	2000	480
		02/21/2006	DUP	35000	1800	2100
		03/13/2006	ORIG	27000	1200	2800
		08/24/2006	ORIG	17000	890	250
		08/24/2006	DUP	16000	870	390
		08/21/2007	ORIG	6500	290	220
		02/19/2008	ORIG	7400	470	270
		09/16/2008	ORIG	14000	680	830
		03/05/2009	ORIG	33000	1400	1000
OW8B	116 - 126	08/24/2004	ORIG	2.1	1 U	0.5 U
		02/23/2005	ORIG	2.7	1 U	0.5 U
		08/25/2005	ORIG	3.6	1 U	0.5 U
		02/21/2006	ORIG	3.1	1 U	0.47 U
		08/22/2006	ORIG	3	1 U	0.48 U
		08/21/2007	ORIG	5.6	0.44 J	0.47 U
		02/19/2008	ORIG	6.1	1 U	0.47 U
		09/16/2008	ORIG	12	0.28 J	0.48 U
		09/16/2008	N	1 U	1 U	0.48 U
		03/05/2009	ORIG	12	1 U	0.47 U
		03/05/2009	N	1 U	1 U	0.52 U
		09/01/2009	ORIG	10	1 U	0.47 U
		03/04/2010	ORIG	7.2	1 U	0.47 U

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
OW8B	116 - 126	09/01/2010	ORIG	6.8	1 U	0.47 U
		09/01/2010	N	1 U	1 U	0.47 U
		02/03/2011	ORIG	7.2	1 U	0.47 U
		02/03/2011	N	1 U	1 U	0.47 U
		08/24/2011	ORIG	3.8	1 U	0.49 U
		02/21/2012	ORIG	2.4	1 U	0.48 U
		08/21/2012	ORIG	3.8	1 U	0.48 U
OW9	70 - 90	03/03/2009	ORIG	28000	1200	1000
		03/03/2009	DUP	26000	1100	890
		09/01/2009	ORIG	26000	1100	830
		09/01/2009	N	1 U	1 U	0.47 U
		12/29/2009	ORIG	20000	920	630
		12/29/2009	DUP	18000	930	740
		03/02/2010	ORIG	18000	1300	910
		03/02/2010	N	1 U	1 U	0.47 U
		06/23/2010	ORIG	15000	630	700
		06/23/2010	DUP	15000	670	560
		08/31/2010	ORIG	20000	830	930
		02/02/2011	ORIG	23000	1500	1600
		08/24/2011	SPLIT	19000	1300	2000 J
		08/24/2011	ORIG	21000	1400	1400 J
		08/24/2011	DUP	22000	1400	1400 J
		02/21/2012	ORIG	9000	440	520
		02/21/2012	DUP	9600	450	540
		08/21/2012	SPLIT	3400	220	390 J
		08/21/2012	ORIG	4500	220	260 J
		08/21/2012	DUP	4000	220	0.47 UJ
OW10	69.5 - 89.5	03/04/2009	ORIG	220	23	0.47 U
		09/02/2009	ORIG	200	20	0.47 U
		12/29/2009	ORIG	210	19	0.47 U
		12/29/2009	N	1 U	1 U	0.47 U
		03/03/2010	ORIG	150	16	0.47 U
		06/23/2010	ORIG	110	8.6	0.47 U
		06/23/2010	N	1 U	1 U	0.47 U
		09/01/2010	ORIG	120	9.8	0.47 U
		02/03/2011	ORIG	68	6.6	0.47 U
		02/03/2011	DUP	79	6.4	0.47 U
		08/24/2011	ORIG	57	3.7	0.47 U
		02/21/2012	ORIG	48	3.1	0.49 U
		08/22/2012	ORIG	71	5.4	0.47 U
PZ3	69.8 - 89.8	02/22/2012	ORIG	390	57	0.47 U
PZ5	83 - 98	02/21/2012	ORIG	50	11	0.47 U

Table A3-1
Omega Chemical Superfund Site
Tetrachloroethene, Trichloroethene, and 1,4-Dioxane Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval		Sample Date	Sample Type	PCE (5)	TCE (5)	1,4-Dioxane (3#)
PZ5	83 - 98	02/21/2012	N	1 U	1 U	0.53 U
PZ6	82 - 97	02/22/2012	ORIG	90	8.7	0.47 U
PZ9	70 - 90	08/28/2012	ORIG	13000	720	800

Notes:

Concentrations are reported in micrograms per liter (ug/l).

U = Not detected at a concentration greater than the reporting limit shown.
J = Estimated concentration below reporting limit.

PCE = Tetrachloroethene; TCE = Trichloroethene;

Screened interval is shown in feet below ground surface.

1,4-dioxane analyzed by EPA Method 8270 modified and PCE and TCE analyzed by Samples analyzed by EPA Methods 502.2, 524.2, 8240 or 8260.

Sample Type:
ORIG = Original sample
DUP = Duplicate sample
N = Equipment decontamination blank

California Maximum Contaminant Levels (MCLs) are shown in parenthesis
= California Notification Level

Table A3-2
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
EW-1	72 - 87																		
	09/13/2006	ORIG	1.7	1 U	1 U	50	1 U	0.69 J	0.63 J	0.5 U	1 U	1 U	1 U	1 U	2.3	5 U	190	61	5 U
	09/14/2006	ORIG	2.4	1 U	1 U	84	1 U	1.2	1.2	0.5 U	1 U	1 U	1 U	1 U	7	5 U	210	62	5 U
	02/22/2007	ORIG	1.2	1 U	1 U	34	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	170	51	5 U
	08/22/2007	ORIG	1.4	1 U	1 U	42	1 U	1 U	0.37 J	0.5 U	1 U	1 U	1 U	1 U	0.47 J	5 U	160	55	5 U
	08/22/2007	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/19/2008	ORIG	4.1	1 U	1 U	62	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	310	88	5 U
	02/19/2008	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/16/2008	ORIG	2.8	1 U	1 U	61	1 U	0.71 J	0.84 J	0.5 U	1 U	1 U	1 U	1 U	1.5	5 U	300	58	5 U
	06/22/2009	ORIG	25 U	25 U	25 U	110	25 U	25 U	25 U	12 U	25 U	25 U	25 U	25 U	25 U	120 U	--	79	120 U
	08/13/2009	ORIG	4 U	4 U	4 U	72	4 U	4 U	4 U	3.8	4 U	4 U	4 U	4 U	17	20 U	360	71	20 U
	08/27/2009	ORIG	10 U	10 U	10 U	110	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	50 U	260	66	50 U
	09/24/2009	ORIG	10 U	10 U	10 U	73	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	50 U	270	60	50 U
	12/22/2009	ORIG	5 U	5 U	5 U	170	5 U	5 U	5 U	2.5 U	5 U	5 U	5 U	5 U	5.2	25 U	340	72	25 U
	03/04/2010	ORIG	4 U	4 U	4 U	160	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	4.6	20 U	330	90	20 U
	09/09/2010	ORIG	1 U	1 U	1 U	120	1 U	0.53 J	1.1	0.5 U	1 U	1 U	1 U	1 U	3.2	5 U	240	59	5 U
	02/03/2011	ORIG	10 U	10 U	10 U	110	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	50 U	150	37	50 U
	08/24/2011	ORIG	20 U	20 U	20 U	150	20 U	20 U	20 U	10 U	20 U	20 U	20 U	20 U	20 U	100 U	120	34	100 U
	02/21/2012	ORIG	1 U	1 U	1 U	160	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	3.2	5 U	5 U	50	1 U
	08/22/2012	ORIG	0.3 U	0.3 U	0.27 U	96	0.32 U	0.3 U	0.64 J	0.28 U	0.32 U	0.37 U	0.36 U	0.3 U	2.1	0.95 U	87	34	0.26 U
EW-2	72 - 87																		
	09/13/2006	ORIG	150	6 J	20 U	930	19 J	29	46	340	6.4 J	20 U	20 U	20 U	1500	540	780	310	100 U
	09/14/2006	ORIG	120	14	4.5	670	17	26	42	250	9.5 U	0.58 J	1.6	1 U	1100	750	700	240	5 U
	08/22/2007	ORIG	120	4.4	1	730	20	17	35	270	2.6	0.48 J	1.2	1 U	1200	55	640	230	0.94 J
	08/22/2007	DUP	110	4.1	1.3	740	19	17	34	270	2.5	0.48 J	1.2	1 U	1200	51	650	240	0.75 J
	02/20/2008	ORIG	110	100 U	100 U	890	100 U	100 U	40 J	280	100 U	100 U	100 U	100 U	1100	96 J	740	210	500 U
	02/20/2008	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	0.3 J	1 U	5 U	5 U	1 U	5 U
	02/20/2008	DUP	79 J	100 U	100 U	910	100 U	100 U	30 J	180	100 U	100 U	100 U	100 U	860	500 U	470 J	140	500 U
	09/16/2008	ORIG	97 J	100 U	100 U	1100	100 U	100 U	100 U	200	100 U	100 U	100 U	100 U	1000	500 U	620	180	500 U
	09/16/2008	DUP	100	100 U	100 U	810	100 U	100 U	41 J	210	100 U	100 U	100 U	100 U	1100	500 U	490 J	170	500 U
	06/22/2009	ORIG	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U	500 U	1000 U	1000 U	1000 U	1000 U	1000 U	5000 U	--	1000 U	5000 U
	08/13/2009	ORIG	40 U	40 U	40 U	350	40 U	40 U	40 U	94	40 U	40 U	40 U	40 U	390	200 U	1000	200	200 U
	08/27/2009	ORIG	100 U	100 U	100 U	340	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	180	500 U	530	130	500 U

Table A3-2
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	12/22/2009	ORIG	50 U	50 U	50 U	290	50 U	50 U	50 U	25 U	50 U	50 U	50 U	50 U	100	250 U	570	130	250 U
	03/04/2010	ORIG	6.5 J	10 U	10 U	240	10 U	5.1 J	5.2 J	23	10 U	10 U	10 U	10 U	90	50 U	550	130	50 U
	09/09/2010	ORIG	5.9 J	10 U	10 U	230	10 U	3.5 J	10 U	15	10 U	10 U	10 U	10 U	71	50 U	450	100	50 U
	02/03/2011	ORIG	50 U	50 U	50 U	210	50 U	50 U	50 U	25 U	50 U	50 U	50 U	50 U	76	250 U	290	70	250 U
	08/24/2011	ORIG	100 U	100 U	100 U	200	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	100 U	500 U	500 U	100 U	500 U
	02/21/2012	ORIG	4.5	1.3	1.2	180	1 U	2.4	3.6	12	1 U	1 U	1 U	1 U	79	5 U	5 U	70	1 U
	08/22/2012	ORIG	3 U	3 U	2.7 U	130	3.2 U	3 U	4 U	11	3.2 U	3.7 U	3.6 U	3 U	63	9.5 U	170	53	2.6 U
EW-3	70 - 85																		
	09/13/2006	ORIG	3.7 J	10 U	10 U	500	3.6 J	10 U	5.6 J	5 U	10 U	10 U	10 U	10 U	56	50 U	120	85	50 U
	09/14/2006	ORIG	3.4	1 U	1 U	370	2.4	1.8	5.7	0.63	1 U	1 U	1 U	1 U	71	5 U	120	71	5 U
	06/22/2009	ORIG	50 U	50 U	50 U	420	50 U	50 U	50 U	25 U	50 U	50 U	50 U	50 U	50 U	250 U	--	65	250 U
	08/13/2009	ORIG	5 U	5 U	5 U	520	5 U	5 U	5 U	2.5 U	5 U	5 U	5 U	5 U	32	25 U	320	170	25 U
	09/02/2009	ORIG	1 U	1 U	1 U	580	1 U	1 U	2.3	0.58	1 U	1 U	1 U	1 U	25	5 U	160	100	5 U
	09/24/2009	ORIG	10 U	10 U	10 U	470	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	53	50 U	120	76	50 U
	12/22/2009	ORIG	20 U	20 U	20 U	680	20 U	20 U	20 U	10 U	20 U	20 U	20 U	20 U	39	100 U	310	170	100 U
	03/04/2010	ORIG	5 U	5 U	5 U	580	5 U	5 U	3.5 J	2.5 U	5 U	5 U	5 U	5 U	44	25 U	270	170	25 U
	09/09/2010	ORIG	2 U	2 U	2 U	360	2 U	2 U	1.9 J	0.62 J	2 U	2 U	2 U	2 U	25	12	300	190	10 U
	02/03/2011	ORIG	20 U	20 U	20 U	350	20 U	20 U	20 U	10 U	20 U	20 U	20 U	20 U	22	100 U	240	150	100 U
	08/24/2011	ORIG	20 U	20 U	20 U	310	20 U	20 U	20 U	10 U	20 U	20 U	20 U	20 U	22	100 U	230	130	100 U
	02/21/2012	ORIG	20 U	20 U	20 U	200	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	100 U	170	97	20 U
	08/22/2012	ORIG	0.6 U	0.6 U	0.54 U	200	0.64 U	0.6 U	1.2 J	0.56 U	0.64 U	0.74 U	0.72 U	0.6 U	16	1.9 U	160	110	0.52 U
EW-4	71 - 86																		
	09/13/2006	ORIG	3.8	2 U	2 U	720	1.2 J	0.78 J	2.9	1 U	2 U	2 U	2 U	2 U	19	10 U	170	90	10 U
	09/13/2006	DUP	3.4	1 U	1 U	640	0.88 J	0.5 J	2.3	0.5 U	1 U	1 U	1 U	1 U	17	5 U	140	70	5 U
	09/14/2006	ORIG	2.9	1 U	1 U	580	0.84 J	0.48 J	2.1	0.5 U	1 U	1 U	1 U	1 U	16	5 U	140	71	5 U
	06/22/2009	ORIG	25 U	25 U	25 U	410	25 U	25 U	25 U	12 U	25 U	25 U	25 U	25 U	25 U	120 U	--	54	120 U
	08/13/2009	ORIG	2.5 U	2.5 U	2.5 U	420	2.5 U	2.5 U	2.5 U	1.2 U	2.5 U	2.5 U	2.5 U	2.5 U	5.7	12 U	160	89	12 U
	08/27/2009	ORIG	10 U	10 U	10 U	480	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	50 U	130	87	50 U
	09/24/2009	ORIG	10 U	10 U	10 U	360	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	50 U	140	81	50 U
	12/22/2009	ORIG	5 U	5 U	5 U	430	5 U	5 U	5 U	2.5 U	5 U	5 U	5 U	5 U	5 U	25 U	140	84	25 U
	03/04/2010	ORIG	1 U	1 U	1 U	240	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	2.1	2.1 J	99	74	5 U
	09/09/2010	ORIG	1 U	1 U	1 U	130	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1.2	5 U	75	54	5 U
	02/03/2011	ORIG	5 U	5 U	5 U	130	5 U	5 U	5 U	2.5 U	5 U	5 U	5 U	5 U	5 U	25 U	65	42	25 U

Table A3-2
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	08/24/2011	ORIG	5 U	5 U	5 U	110	5 U	5 U	5 U	2.5 U	5 U	5 U	5 U	5 U	5.9	25 U	59	37	25 U
	02/21/2012	ORIG	2 U	2 U	2 U	85	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	35	20	2 U
	08/22/2012	ORIG	0.3 U	0.3 U	0.27 U	93	0.32 U	0.3 U	0.4 U	0.28 U	0.32 U	0.37 U	0.36 U	0.3 U	0.91 J	0.95 U	37	27	0.26 U
EW-5	70 - 85																		
	09/13/2006	ORIG	0.79 J	1 U	1 U	290	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.59 J	5 U	160	79	5 U
	09/14/2006	ORIG	1.1	1 U	1 U	360	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.91 J	5 U	190	92	5 U
	09/14/2006	DUP	1.2	1 U	1 U	370	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.96 J	5 U	150	100	5 U
	06/22/2009	ORIG	2.5 U	2.5 U	2.5 U	72	2.5 U	2.5 U	2.5 U	1.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U	--	29	12 U
	08/13/2009	ORIG	1 U	1 U	1 U	61	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	78	53	5 U
	08/27/2009	ORIG	1 U	1 U	1 U	74	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	67	52	5 U
	09/24/2009	ORIG	2 U	2 U	2 U	76	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	10 U	52	39	10 U
	12/22/2009	ORIG	1 U	1 U	1 U	110	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	86	57	5 U
	03/04/2010	ORIG	1 U	1 U	1 U	84	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	2.4 J	58	51	5 U
	09/09/2010	ORIG	1 U	1 U	1 U	70	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	76	61	5 U
	02/03/2011	ORIG	1 U	1 U	1 U	73	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	59	43	5 U
	08/24/2011	ORIG	1 U	1 U	1 U	120	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	61	44	5 U
	02/21/2012	ORIG	1 U	1 U	1 U	83	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	65	44	1 U
	08/22/2012	ORIG	0.3 U	0.3 U	0.27 U	63	0.32 U	0.3 U	0.4 U	0.28 U	0.32 U	0.37 U	0.36 U	0.3 U	0.33 U	0.95 U	60	46	0.26 U
OW1	62.5 - 77.5																		
	06/06/1996	ORIG	12000	500 U		3600	500 U	500 U	500 U	2600	500 U	500 U	500 U		3200	15000	1400	990	--
	07/02/1999	ORIG	2100	4.6	2.6	1200	5.4	160	86	120	0.97	1 U	2	1 U	400	110	1300	550	5 U
	05/16/2001	ORIG	8900	20 U	20 U	2700	20 U	100	130	87	20 U	20 U	20 U	20 U	500	490	720	410	100 U
	08/17/2001	ORIG	5800	100 U	100 U	2100	100 U	100 U	100 U	62	100 U	100 U	100 U	100 U	380	500 U	1400	620	500 U
	11/15/2001	ORIG	2200	2.2	4.7	1300	4	74	54	40	1 U	1 U	1.8	1 U	280	21	1400	590	5 U
	02/14/2002	ORIG	2200	100 U	100 U	1200	100 U	100 U	100 U	50 U	100 U	100 U	100 U	100 U	280	500 U	1300	480	500 U
	08/20/2002	ORIG	3100	200 U	200 U	1300	200 U	200 U	200 U	100 U	200 U	200 U	200 U	200 U	320	1000 U	1100	600	1000 U
	02/19/2003	ORIG	10000	4.7	32	2600	8.6	39	88	84	15	3	7.8	1 U	500	72	510	120	5 U
	08/26/2003	ORIG	7000	1.4	19	1600	7.2	43	71	53	4.5	1.2	4.1	1 U	360	42	380	170	5 U
	08/26/2003	DUP															--		--
	02/24/2004	ORIG	9600	0.58 J	12	2100	4.5	21	52	22	7	1.7	3.4	1 U	81	53	380 J	55	5 U
	08/27/2004	ORIG	8500	400 U	400 U	1900	400 U	400 U	400 U	200 U	400 U	400 U	400 U	400 U	400 U	2000 U	2000 U	400 U	2000 U
	08/27/2004	DUP	12000	0.35 J	5.3	2000	4.6	15	45	12	3.8	0.89 J	1.9	1 U	59	41	150	22	5 U
	02/25/2005	ORIG	6500	1 U	5	1300	3.4	13	41	7.2	5.3	1.3	2.5	1 U	52	42	94	13	5 U

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Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	08/24/2005	ORIG	14000	5 U	16	5100	6.8	22	67	39	4.6 J	5 U	2.8 J	5 U	100	48	160	66	25 U
	02/22/2006	ORIG	4600	200 U	200 U	1500	200 U	200 U	200 U	100 U	200 U	200 U	200 U	200 U	98 J	1000 U	1000 U	200 U	1000 U
	03/13/2006	ORIG	3700	630 U	630 U	1500	630 U	630 U	630 U	630 U	630 U	630 U	630 U	630 U	630 U	13000 U	6300 U	1300 U	1300 U
	08/24/2006	ORIG	3200	1 U	22	1000	6	22	48	25	4.2	1.1	5	1 U	120	34	140	59	5 U
	02/22/2007	ORIG	3700	0.47 J	16	1000	5.6	25	42	20	3.7	1 U	4.6	1 U	110	24	100	51	5 U
	02/22/2007	DUP	3700	0.54 J	17	1000	6.2	26	43	19	3.8	1 U	4.6	1 U	110	25	100	48	5 U
	08/23/2007	ORIG	2200	200 U	200 U	700	200 U	200 U	200 U	100 U	200 U	200 U	200 U	200 U	130 J	1000 U	1000 U	200 U	1000 U
	08/23/2007	DUP	2200	200 U	200 U	710	200 U	200 U	200 U	100 U	200 U	200 U	200 U	200 U	130 J	1000 U	1000 U	200 U	1000 U
	02/20/2008	ORIG	2600	200 U	58 J	730	200 U	200 U	200 U	100 U	200 U	200 U	200 U	200 U	130 J	480 J	1000 U	200 U	1000 U
	02/20/2008	DUP	2200	1000 U	1000 U	590 J	1000 U	1000 U	1000 U	500 U	1000 U	1000 U	1000 U	1000 U	1000 U	5000 U	5000 U	1000 U	5000 U
	09/18/2008	ORIG	1200	250 U	250 U	490	250 U	250 U	250 U	120 U	250 U	250 U	250 U	250 U	100 J	1200 U	1200 U	250 U	1200 U
	09/18/2008	DUP	1000	100 U	100 U	680	100 U	100 U	100 U	31 J	100 U	100 U	100 U	100 U	97 J	500 U	500 U	100 U	500 U
	03/05/2009	ORIG	2000	1000 U	1000 U	580 J	1000 U	1000 U	1000 U	500 U	1000 U	1000 U	1000 U	1000 U	1000 U	5000 U	5000 U	1000 U	5000 U
	03/05/2009	DUP	1800	1000 U	1000 U	490 J	1000 U	1000 U	1000 U	500 U	1000 U	1000 U	1000 U	1000 U	1000 U	5000 U	5000 U	1000 U	5000 U
	09/02/2009	ORIG	1900	10 U	17	560	34	11	41	17	18	10 U	6.8 J	10 U	42	50 U	42 J	4.4 J	50 U
OW1b	110 - 120																		
	07/02/1999	ORIG	7.4	0.5 U	1 U	11	0.5 U	0.65	2.4	8.8	0.5 U	1 U	1 U	1 U	6.6	10 U	12	2.9	5 U
	07/02/1999	DUP	7.8	0.5 U	1 U	13	0.5 U	0.78	2.8	10	0.5 U	1 U	1 U	1 U	7.7	10 U	12	3	5 U
	05/16/2001	ORIG	1 U	1 U	1 U	1.9	2.7	1 U	1 U	2.9	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	05/16/2001	DUP	1 U	1 U	1 U	1 U	2.4	1 U	1 U	2.2	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/17/2001	ORIG	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	11/16/2001	ORIG	6	1 U	1 U	1.6	1.4	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/14/2002	ORIG	1 U	1 U	1 U	1 U	1.1	1 U	1 U	0.69	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/20/2002	ORIG	1 U	1 U	1 U	1.1	1 U	1 U	1 U	0.76	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/19/2003	ORIG	1 U	1 U	1 U	3.1	1 U	1 U	1 U	0.64	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/26/2003	ORIG	1.5	1 U	1 U	2.9	1 U	1 U	1 U	1.4	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/24/2004	ORIG	0.3 J	1 U	1 U	3.4	0.45 J	1 U	0.43 J	0.87	1 U	1 U	1 U	1 U	1.1	0.8 J	4.8 J	1.8	5 U
	08/27/2004	ORIG	0.84 J	1 U	1 U	2.2	1 U	1 U	1 U	0.41 J	1 U	1 U	1 U	1 U	0.59 J	1.2 UJB	2.5 J	1	5 U
	02/25/2005	ORIG	0.52 J	1 U	1 U	2.6	1 U	1 U	1 U	0.37 J	1 U	1 U	1 U	1 U	0.6 J	5 U	3.5 J	1.2	5 U
	08/24/2005	ORIG	1.2	1 U	1 U	2.2	1 U	1 U	0.31 J	0.37 J	1 U	1 U	1 U	1 U	1 U	0.68 J	3.8 J	0.99 J	5 U
	02/22/2006	ORIG	1 U	1 U	1 U	1.3	1 U	1 U	1 U	0.3 J	1 U	1 U	1 U	1 U	1 U	5 U	2.8 J	0.9 J	5 U
	08/23/2006	ORIG	1 U	1 U	1 U	0.81 J	1 U	1 U	1 U	0.33 J	1 U	1 U	1 U	1 U	1 U	1.2 J	5.1	1.8	5 U
	08/22/2007	ORIG	1 U	1 U	1 U	0.57 J	1 U	1 U	1 U	0.46 J	1 U	1 U	1 U	1 U	0.34 J	5 U	6.2	2.7	5 U

Table A3-2
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Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	02/20/2008	ORIG	1 U	1 U	1 U	0.68 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	6.1	2.2	5 U
	03/05/2009	ORIG	1 U	1 U	1 U	0.53 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	7.7	2.5	5 U
	09/03/2009	ORIG	1 U	1 U	1 U	0.45 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.33 J	5 U	6.8	3.2	5 U
	03/03/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	6.9	3.7	5 U
	03/03/2010	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	4.9 J	2.8	5 U
	02/03/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	6.3	3	5 U
	08/24/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/21/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
	08/22/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
OW2	60 - 80																		
	07/02/1999	ORIG	8.5	2 U	4 U	680	2 U	2 U	2.8	2 U	2 U	4 U	4 U	4 U	4 U	40 U	2600	610	20 U
	05/15/2001	ORIG	10 U	10 U	10 U	500	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	50 U	1100	370	50 U
	08/17/2001	ORIG	2	1 U	1 U	360	1 U	1 U	1.1	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	1400	330	5 U
	11/16/2001	ORIG	2.6	1 U	1 U	390	1 U	1 U	1.5	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	1600	390	5 U
	02/15/2002	ORIG	2.1	1 U	1 U	350	1 U	1 U	1.5	0.5 U	1 U	1 U	1 U	1 U	1.2	5 U	1400	380	5 U
	08/21/2002	ORIG	4 U	4 U	4 U	350	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	4 U	20 U	1400	310	20 U
	02/19/2003	ORIG	5.9	1 U	1 U	790	1 U	1 U	1.9	0.5 U	1 U	1 U	1 U	1 U	1.9	5 U	820	280	5 U
	03/10/2003	ORIG	3.7	2 U	2 U	680	2 U	2 U	2.1	1 U	2 U	2 U	2 U	2 U	2.5	10 U	660	240	10 U
	08/27/2003	ORIG	5 U	5 U	5 U	870	5 U	5 U	5 U	2.5 U	5 U	5 U	5 U	5 U	5 U	25 U	750	290	25 U
	02/24/2004	ORIG	4.2 J	5 U	5 U	930	5 U	5 U	2.5 J	2.5 U	5 U	5 U	5 U	5 U	3.4 J	25 U	420	180	25 U
	08/24/2004	ORIG	3.3 J	10 U	10 U	1000	10 U	10 U	2.9 J	5 U	10 U	10 U	10 U	10 U	4.4 J	50 U	670	300	50 U
	02/24/2005	ORIG	10 U	10 U	10 U	970	10 U	10 U	3.9 J	5 U	10 U	10 U	10 U	10 U	5.1 J	50 U	1100	300	50 U
	08/24/2005	ORIG	2.6 J	5 U	5 U	720	5 U	1.5 J	5	2.5 U	5 U	5 U	5 U	5 U	7.1	25 U	1300	240	25 U
	02/22/2006	ORIG	5 J	10 U	10 U	1900	10 U	3.6 J	12	5 U	10 U	10 U	10 U	10 U	17	50 U	1200	1000	50 U
	08/22/2006	ORIG	5 U	5 U	5 U	300	5 U	5 U	2.2 J	2.5 U	5 U	5 U	5 U	5 U	2.9 J	25 U	1400	240	25 U
	08/22/2007	ORIG	1 U	1 U	1 U	180	1 U	0.39 J	1.8	0.5 U	1 U	1 U	1 U	1 U	2.2	5 U	570	100	5 U
	02/19/2008	ORIG	10 U	10 U	10 U	450	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	10 U	50 U	530	190	50 U
	09/17/2008	ORIG	5 U	5 U	5 U	330	5 U	1.6 J	4.2 J	2.5 U	5 U	5 U	5 U	5 U	6.9	25 U	600	110	25 U
	09/17/2008	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/04/2009	ORIG	20 U	20 U	20 U	550	20 U	20 U	20 U	10 U	20 U	20 U	20 U	20 U	16 J	100 U	1100	170	100 U
	03/04/2009	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/21/2012	ORIG	5 U	5 U	5 U	360	5 U	1.9 J	6.5	5 U	5 U	5 U	5 U	5 U	25	8 J	43	40	5 U

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Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
OW3	63 - 83																		
	07/02/1999	ORIG	28	2 U	4 U	1200	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	40 U	800	410	20 U
	05/16/2001	ORIG	33	20 U	20 U	1700	20 U	20 U	20 U	10 U	20 U	20 U	20 U	20 U	20 U	100 U	430	380	100 U
	08/17/2001	ORIG	22	4 U	4 U	1500	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	12	20 U	520	330	20 U
	11/15/2001	ORIG	17	1 U	1 U	1200	1 U	1 U	1.6	0.5 U	1 U	1 U	1 U	1 U	6.5	5 U	530	300	5 U
	02/15/2002	ORIG	14	4 U	4 U	1100	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	7.7	20 U	530	280	20 U
	08/20/2002	ORIG	12	4 U	4 U	130	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	7.4	20 U	360	230	20 U
	02/20/2003	ORIG	9.5	4 U	4 U	1100	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	7	20 U	450	320	20 U
	03/13/2003	ORIG	8.9	4 U	4 U	1400	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	6.8	20 U	430	250	20 U
	08/26/2003	ORIG	9.4	1 U	1 U	1100	1 U	1 U	2	0.5 U	1 U	1 U	1 U	1 U	9.5	5 U	370	300	5 U
	02/25/2004	ORIG	11	10 U	10 U	1500	10 U	10 U	2.8 J	5 U	10 U	10 U	10 U	10 U	14	50 U	390	230	50 U
	02/25/2004	DUP	12	10 U	10 U	1700	10 U	10 U	3.7 J	5 U	10 U	10 U	10 U	10 U	16	8.3 J	400	290	50 U
	08/24/2004	ORIG	7.4	5 U	5 U	1200	5 U	5 U	2.6 J	2.5 U	5 U	5 U	5 U	5 U	16	12 J	340	270	25 U
	02/23/2005	ORIG	6	1 U	1 U	1400	1.2	0.79 J	3	0.5 U	1 U	1 U	1 U	1 U	19	5 U	370	180	0.94 J
	08/24/2005	ORIG	4.2	1 U	1 U	1600	1.5	0.85 J	3.4	0.29 J	1 U	1 U	1 U	1 U	22	5 U	380	260	0.91 J
	02/21/2006	ORIG	5.2	5 U	5 U	1200	5 U	5 U	4.5 J	2.5 U	5 U	5 U	5 U	5 U	39	25 U	280	160	25 U
	08/23/2006	ORIG	2.5	1 U	1 U	630	1.2	0.72 J	2.8	0.5 U	1 U	1 U	1 U	1 U	23	0.89 J	200	140	5 U
	08/21/2007	ORIG	0.85 J	1 U	1 U	340	0.54 J	0.45 J	1.6	0.5 U	1 U	1 U	1 U	1 U	9.4	5 U	110	77	5 U
	02/20/2008	ORIG	5 U	5 U	5 U	410	5 U	5 U	5 U	2.5 U	5 U	5 U	5 U	5 U	7.8	5 J	110	74	25 U
	09/16/2008	ORIG	4 U	4 U	4 U	430	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	7.1	20 U	110	59	20 U
	03/04/2009	ORIG	10 U	10 U	10 U	430	10 U	10 U	10 U	5 U	10 U	10 U	10 U	10 U	12	50 U	98	59	50 U
	09/01/2009	ORIG	1	1 U	1 U	600	1.6	0.97 J	3.6	0.5 U	1 U	1 U	1 U	1 U	33	5 U	120	84	5 U
	03/04/2010	ORIG	5 U	5 U	5 U	800	3 J	1.7 J	6.6	2.5 U	5 U	5 U	5 U	5 U	67	25 U	120	83	25 U
	09/01/2010	ORIG	5 U	5 U	5 U	690	5 U	5 U	2.2 J	2.5 U	5 U	5 U	5 U	5 U	22	25 U	220	130	25 U
	02/03/2011	ORIG	2.5 U	2.5 U	2.5 U	490	1.6 J	2.5 U	3.4	1.2 U	2.5 U	2.5 U	2.5 U	2.5 U	35	12 U	88	46	12 U
	08/24/2011	ORIG	4 U	4 U	4 U	160	1.7 J	4 U	3.3 J	2 U	4 U	4 U	4 U	4 U	42	8.6 J	23	15	20 U
	02/22/2012	ORIG	10 U	10 U	10 U	140	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20	5 U	17 J	12 J	10 U
	02/22/2012	DUP	5 U	5 U	5 U	120	1.6 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	17	25 U	14 J	9.4 J	5 U
	08/21/2012	ORIG	1 U	1 U	1 U	28	1 U	1 U	0.52 J	1 U	1 U	1 U	1 U	1 U	7.1	5 U	2.1 J	2	1 U
OW3B	112 - 122																		
	03/13/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.95 J	5 U	1 U	5 U
	08/22/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/22/2006	DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U

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Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	02/20/2007	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/21/2007	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/21/2007	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/19/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/18/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/05/2009	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2009	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2009	DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/04/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/04/2010	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/04/2010	DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2010	DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/02/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/02/2011	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/24/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/24/2011	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/22/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
	08/21/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
OW4A	49.8 - 69.8																		
	05/16/2001	ORIG	20 U	20 U	20 U	1500	20 U	20 U	20 U	10 U	20 U	20 U	20 U	20 U	39	100 U	580	260	100 U
	08/16/2001	ORIG	21	1 U	1 U	2400	1 U	1 U	1.7	3.5	1 U	1 U	1 U	1 U	62	5 U	910	340	5.8
	11/16/2001	ORIG	1 U	1 U	1 U	10	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	32	5 U	5.3	2.2	5 U
	02/15/2002	ORIG	1.6	1 U	1 U	230	1 U	1 U	1 U	0.69	1 U	1 U	1 U	1 U	33	5 U	160	62	5 U
	08/21/2002	ORIG	1 U	1 U	1 U	120	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	37	5 U	88	44	5 U
	02/20/2003	ORIG	1 U	1 U	1 U	79	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	21	5 U	53	23	5 U
	03/14/2003	ORIG	1 U	1 U	1 U	210	1 U	1 U	1 U	0.77	1 U	1 U	1 U	1 U	13	5 U	150	69	5 U
	08/27/2003	ORIG	1 U	1 U	1 U	100	1 U	1 U	1 U	0.5	1 U	1 U	1 U	1 U	21	5 U	5 U	32	5 U
	02/27/2004	ORIG	1 U	1 U	1 U	14	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	22	5 U	11	7	5 U
	08/25/2004	ORIG	0.3 J	1 U	1 U	140	1 U	1 U	1 U	0.45 J	1 U	1 U	1 U	1 U	6.4	1.1 J	230	100	0.87 J
	08/25/2004	DUP	0.32 J	1 U	1 U	130	1 U	1 U	1 U	0.43 J	1 U	1 U	1 U	1 U	6.7	1 J	230	120	0.94 J
	02/25/2005	ORIG	1 U	1 U	1 U	110	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	5	5 U	310	130	5 U
	08/25/2005	ORIG	0.46 J	1 U	1 U	260	1 U	0.32 J	0.45 J	1.9	1 U	1 U	1 U	1 U	14	5 U	360	200	1.1 J

Table A3-2
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Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	02/22/2006	ORIG	1 U	1 U	1 U	140	1 U	1 U	0.37 J	1.5	1 U	1 U	1 U	1 U	12	5 U	91	41	5 U
	08/23/2006	ORIG	1 U	1 U	1 U	120	1 U	0.45 J	0.55 J	2.7	1 U	1 U	1 U	1 U	17	5 U	110	53	5 U
	02/20/2007	ORIG	1 U	1 U	1 U	22	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	3.3	5 U	19	9.1	5 U
	08/23/2007	ORIG	1 U	1 U	1 U	66	1 U	1 U	1 U	1.4	1 U	1 U	1 U	1 U	10	5 U	36	24	5 U
	02/20/2008	ORIG	1 U	1 U	1 U	11	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	2.5	5 U	9.5	3.6	5 U
	09/17/2008	ORIG	1 U	1 U	1 U	47	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	3.3	5 U	54	26	5 U
	03/04/2009	ORIG	1 U	1 U	1 U	100	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	4.5	5 U	180	70	5 U
	09/03/2009	ORIG	1 U	1 U	1 U	35	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	2.1	5 U	69	33	5 U
	09/03/2009	DUP	1 U	1 U	1 U	33	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	2	5 U	66	31	5 U
	03/03/2010	ORIG	1 U	1 U	1 U	12	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.68 J	5 U	55	24	5 U
	03/03/2010	DUP	1 U	1 U	1 U	12	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.7 J	5 U	58	25	5 U
	08/31/2010	ORIG	1 U	1 U	1 U	7.5	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.61 J	5 U	26	13	5 U
	08/31/2010	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/31/2010	DUP	1 U	1 U	1 U	6.6	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.7 J	5 U	26	13	5 U
	02/02/2011	ORIG	1 U	1 U	1 U	3	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1.7	5 U	1.7 J	0.62 J	5 U
	08/23/2011	SPLIT	0.5 U	0.5 U	0.5 U	5.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	21	11	1 U
	08/23/2011	ORIG	1 U	1 U	1 U	5.5	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.42 J	5 U	22	14	5 U
	02/22/2012	ORIG	1 U	1 U	1 U	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.48 J	5 U	32	23	1 U
	08/22/2012	ORIG	1 U	1 U	1 U	18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	56	40	1 U
	08/22/2012	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
OW4B	112 - 122.3																		
	04/03/2001	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	05/16/2001	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/16/2001	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	11/16/2001	ORIG	1 U	1 U	1 U	1.2	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/15/2002	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/21/2002	ORIG	1 U	1 U	1 U	22	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	86	14	5 U
	02/20/2003	ORIG	1 U	1 U	1 U	14	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	30	1 U	5 U
	08/27/2003	ORIG	1 U	1 U	1 U	12	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	30	2	5 U
	02/27/2004	ORIG	1 U	1 U	1 U	1.4	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	4.2 J	1 U	5 U
	08/25/2004	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.5 J	5 U	1 U	5 U
	02/25/2005	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/25/2005	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.41 J	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U

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Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	02/22/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.28 J	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/23/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/20/2007	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/23/2007	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/23/2007	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.42 J	5 U	5 U	0.43 J	5 U
	02/20/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/17/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	1.2 J	1 U	5 U
	03/05/2009	ORIG	1 U	1 U	1 U	0.9 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5.4	0.77 J	5 U
	09/03/2009	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	0.71 J	1 U	5 U
	09/03/2009	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/03/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	0.53 J	1 U	5 U
	08/31/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/02/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.36 J	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/02/2011	DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/23/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.49 J	1 U	1 U	1 U	1 U	1 U	2 U	5 U	1 U	5 U
	08/23/2011	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.8 J	5 U	1 U	5 U
	08/23/2011	DUP	1 U	1 U	1 U	3.4	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5.2	1 U	5 U
	02/22/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.46 J	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
	08/22/2012	SPLIT	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1 U
	08/22/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
	08/22/2012	DUP	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
OW5	30 - 50																		
	08/17/2001	ORIG	2 U	2 U	2 U	22	31	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	10 U	220	52	10 U
	08/17/2001	DUP	1 U	1 U	1 U	35	36	1.4	1 U	0.5 U	1 U	1 U	1 U	1 U	2.4	5 U	240	66	5 U
	11/16/2001	ORIG	1 U	1 U	1 U	24	26	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	2.1	5 U	180	46	5 U
	11/16/2001	DUP	1 U	1 U	1 U	18	30	1.6	1 U	0.5 U	1 U	1 U	1 U	1 U	2.3	5 U	170	47	5 U
	02/15/2002	ORIG	1 U	1 U	1 U	22	30	1.3	1 U	0.5 U	1 U	1 U	1 U	1 U	2	5 U	230	40	5 U
	02/15/2002	DUP	1 U	1 U	1 U	18	32	1.8	1 U	0.5 U	1 U	1 U	1 U	1 U	2.1	5 U	230	39	5 U
	08/22/2002	ORIG	1 U	1 U	1 U	37	34	1.2	1 U	0.5 U	1 U	1 U	1 U	1 U	2.1	5 U	200	61	5 U
	02/21/2003	ORIG	1 U	1 U	1 U	98	97	5.1	1 U	2.6	1 U	1 U	1 U	1 U	26	5 U	470	120	5 U
	08/28/2003	ORIG	1 U	1 U	1 U	5.4	3.6	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1.3	5 U	5 U	2.7	5 U
	02/24/2004	ORIG	3.1	0.91 J	1 U	390	33	2.9	3.8	26	1 U	1 U	1 U	1 U	160	20	450	190	5 U
	08/25/2004	ORIG	2.6	1.2	1 U	910	14	3.2	5.1	33	1 U	1 U	1 U	1 U	300	29	900	360	1.8 J

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Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	02/24/2005	ORIG	0.38 J	1 U	1 U	130	2.4	0.4 J	0.69 J	3.7	1 U	1 U	1 U	1 U	32	5 U	240	64	5 U
	08/22/2005	ORIG	2.8 J	1.8 J	5 U	1100	27	6	9.2	53	5 U	5 U	5 U	5 U	400	25 U	930	400	25 U
	02/17/2006	ORIG	1.8	1.3	1 U	930	31	6.2	7.8	33	1 U	1 U	1 U	1 U	320	21	950	300	1.1 J
	08/24/2006	ORIG	1.2	1.7	1 U	630	48	5.9	6.2	33	1 U	1 U	1 U	1 U	180	0.98 J	750	190	5 U
	02/20/2007	ORIG	1.2	1.5	1 U	830	36	5.1	6.3	40	1 U	1 U	1 U	1 U	210	5 U	1000	290	5 U
	08/22/2007	ORIG	0.97 J	1.4	1 U	410	57	4.6	4.6	38	1 U	1 U	1 U	1 U	170	18	630	210	0.68 J
	02/21/2008	ORIG	4 U	4 U	4 U	340	20	2.4 J	3.2 J	17	4 U	4 U	4 U	4 U	120	20 U	540	180	20 U
	09/18/2008	ORIG	2.5 U	2.5 U	2.5 U	320	11	1.5 J	2.3 J	13	2.5 U	2.5 U	2.5 U	2.5 U	89	12 U	390	150	12 U
	09/18/2008	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/03/2009	ORIG	1 U	1 U	1 U	94	1.8	1 U	0.44 J	1.9	1 U	1 U	1 U	1 U	16	5 U	140	52	5 U
	03/03/2009	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/02/2009	ORIG	1 U	1 U	1 U	42	2	1 U	1 U	0.47 J	1 U	1 U	1 U	1 U	4.6	5 U	77	30	5 U
	08/28/2012	ORIG	2 U	2 U	2 U	120	32	1.3 J	1.1 J	4.2	2 U	2 U	2 U	2 U	36	10 U	52	42	2 U
OW6	38 - 58																		
	05/16/2001	ORIG	4 U	4 U	4 U	39	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	4 U	20 U	160	96	20 U
	08/17/2001	ORIG	4 U	4 U	4 U	39	4 U	4 U	4 U	2 U	4 U	4 U	4 U	4 U	4 U	20 U	180	93	20 U
	11/16/2001	ORIG	2.9	1 U	1 U	190	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	5.7	5 U	770	440	5 U
	02/15/2002	ORIG	1.3	1 U	1 U	120	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	3.2	5 U	530	190	5 U
	08/21/2002	ORIG	1 U	1 U	1 U	35	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1.1	5 U	140	95	5 U
	02/21/2003	ORIG	1 U	1 U	1 U	91	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	3.3	5 U	460	350	5 U
	08/28/2003	ORIG	1 U	1 U	1 U	39	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	9.3	340	120	5 U
	02/25/2004	ORIG	1 U	1 U	1 U	16	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.83 J	5 U	62	46	5 U
	08/25/2004	ORIG	1 U	1 U	1 U	3.8	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.47 J	1.9 J	16	9.4	5 U
	02/23/2005	ORIG	1 U	1 U	1 U	6.6	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.43 J	5 U	11	4.8	5 U
	08/24/2005	ORIG	1 U	1 U	1 U	2.4	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1	5 U	22	12	5 U
	02/17/2006	ORIG	1 U	1 U	1 U	4.2	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.83 J	5 U	13	4.6	5 U
	08/24/2006	ORIG	1 U	1 U	1 U	5	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.78 J	5 U	39	13	5 U
	02/22/2007	ORIG	1 U	1 U	1 U	3.3	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.53 J	5 U	20	6.6	5 U
	08/23/2007	ORIG	1 U	1 U	1 U	2.2	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	24	5 U	15	8.4	5 U
	02/21/2008	ORIG	1 U	1 U	1 U	2.8	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.43 J	5 U	13	7.1	5 U
	02/21/2008	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.1 JUB	5 U	1 U	5 U
	09/17/2008	ORIG	1 U	1 U	1 U	2	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.33 J	5 U	9.1	4.6	5 U
	03/03/2009	ORIG	1 U	1 U	1 U	3.2	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.37 J	5 U	4.8 J	2.6	5 U

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Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	09/02/2009	ORIG	1 U	1 U	1 U	4.9	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.59 J	5 U	11	6.2	5 U
	09/02/2009	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.6 J	5 U	1 U	5 U
	08/22/2012	ORIG	1 U	1 U	1 U	3.5	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	5 U	9.7	4	1 U
OW7	70.9 - 90.9																		
	03/27/2002	ORIG	1 U	1 U	1 U	0.61 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	62	36	5 U
	08/21/2002	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	51	44	5 U
	02/21/2003	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	44	36	5 U
	08/26/2003	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	63	54	5 U
	02/25/2004	ORIG	1 U	1 U	1 U	0.94 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	52	34	5 U
	08/25/2004	ORIG	1 U	1 U	1 U	0.4 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	32	29	5 U
	02/24/2005	ORIG	1 U	1 U	1 U	0.47 J	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	31	21	5 U
	08/22/2005	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	17	5 U
	02/17/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	13	9.9	5 U
	08/22/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	9.5	8.5	5 U
	02/20/2007	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	9	8.9	5 U
	08/23/2007	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	8.3	9.1	5 U
	02/21/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	2 JUB	6.3	13	5 U
	09/16/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	4.7 J	4.1	5 U
	03/03/2009	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.49 J	5 U	0.98 J	1.2	5 U
	09/01/2009	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.64 J	5 U	0.86 J	0.88 J	5 U
	03/02/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.63 J	5 U	0.86 J	0.91 J	5 U
	08/31/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	1.4 J	2	5 U
	02/02/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	1.4 J	1 U	5 U
	08/23/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	0.73 J	1.3	5 U
	02/22/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3 U	1 U	5 U	1.1 J	1.8	1 U
	02/22/2012	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
	08/21/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1.2 J	1.7	1 U
	08/21/2012	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.41 J	2.9 J	5 U	1 U	1 U
OW8	60.4 - 80																		
	03/27/2002	ORIG	50	33	2.2	1600	6.3	92	48	110	1.7	1 U	1.2	1 U	390	36	2500	820	1.9 J
	08/22/2002	ORIG	49	20 U	20 U	1700	20 U	81	46	49	20 U	20 U	20 U	20 U	350	100 U	2100	1000	100 U
	08/22/2002	DUP	47	25	1.9	1500	9.7	66	45	86	1.2	1 U	1.1	1 U	340	140	5 U	910	5 U
	02/20/2003	ORIG	50	39	20 U	1200	20 U	58	46	240	20 U	20 U	20 U	20 U	550	930	2300	1000	100 U

Table A3-2
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	02/20/2003	DUP	48	58	25 U	1300	25 U	73	60	310	25 U	25 U	25 U	25 U	790	2400	2500	990	120 U
	03/11/2003	ORIG	390	100 U	100 U	2600	100 U	110	100	820	100 U	100 U	100 U	100 U	2000	6500	2800	810	500 U
	03/11/2003	DUP	380	100 U	100 U	2500	100 U	100 U	100 U	790	100 U	100 U	100 U	100 U	2000	6300	2600	820	500 U
	08/27/2003	ORIG	40	25 U	25 U	1500	25 U	46	39	140	25 U	25 U	25 U	25 U	420	120 U	1600	580	120 U
	08/27/2003	DUP	42	40 U	40 U	1700	40 U	43	42	150	40 U	40 U	40 U	40 U	480	200 U	1500	560	200 U
	11/20/2003	ORIG	290	41	1.7	1900	15	60	67	470	8.9	1 U	3	1 U	1300	2500	1700	540	5 U
	02/24/2004	ORIG	35 J	52	50 U	1400	50 U	68	56	350	50 U	50 U	50 U	50 U	670	1700	2200	730	250 U
	08/24/2004	ORIG	51 J	130	100 U	1300	100 U	100	110	780	100 U	100 U	100 U	100 U	1700	6300	2200	800	500 U
	02/23/2005	ORIG	400 J	94	1.4	2200	16	91	130	1100	39	3.6	7.6	1 U	2700	9100	2500	460 J	1.2 J
	02/23/2005	DUP	420	82 J	200 U	2200	200 U	84 J	150 J	1300	200 U	200 U	200 U	200 U	2800	9200	2500	480	1000 U
	08/24/2005	ORIG	450	49	1 U	2700	16	70	92	1200	24	2.6	4.8	1 U	2400	5000	2400	680	1.1 J
	08/24/2005	DUP	430	55	1 U	2500	20	81	110	1200	28	3	5.6	1 U	2400	4700	2000	590	1.6 J
	02/21/2006	ORIG	50 J	110	100 U	1100	100 U	99 J	120	720	100 U	100 U	100 U	100 U	1700	7400	2200	570	500 U
	02/21/2006	DUP	38 J	96	50 U	1000	50 U	85	99	640	50 U	50 U	50 U	50 U	1500	6000	2200	520	250 U
	03/13/2006	ORIG	200 U	200 U	200 U	860	200 U	200 U	200 U	450	200 U	200 U	200 U	200 U	1100	4600	2000 U	410	400 U
	08/24/2006	ORIG	17	43	3	450	4.5	42	41	210	3.3	1 U	2	1 U	790	2700	1700	280	5 U
	08/24/2006	DUP	21	35	0.58 J	370	4	39	43	230	2.7	1 U	1.7	1 U	520	2000	1800	210	0.79 J
	08/21/2007	ORIG	7.1	6.2	0.46 J	260	2.3	14	13	39	1 U	1 U	0.47 J	1 U	130	110	730	180	5 U
	02/19/2008	ORIG	20 U	20 U	20 U	360	20 U	20 U	20 U	61	20 U	20 U	20 U	20 U	190	140	1200	360	100 U
	09/16/2008	ORIG	40 U	24 J	40 U	390	40 U	27 J	32 J	120	40 U	40 U	40 U	40 U	320	300	1200	230	200 U
	03/05/2009	ORIG	100 U	90 J	100 U	750	100 U	49 J	74 J	310	100 U	100 U	100 U	100 U	770	1200	1700	240	500 U
OW8B	116 - 126																		
	08/24/2004	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/23/2005	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/25/2005	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/21/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/22/2006	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/21/2007	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/19/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/16/2008	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/16/2008	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/05/2009	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/05/2009	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U

Table A3-2
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	09/01/2009	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/04/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2010	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2010	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/03/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/03/2011	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	08/24/2011	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	02/21/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
	08/21/2012	ORIG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
OW9	70 - 90																		
	03/03/2009	ORIG	100 U	100 U	100 U	1400	100 U	100 U	43 J	230	100 U	100 U	100 U	100 U	1100	500 U	900	280	500 U
	03/03/2009	DUP	100 U	100 U	100 U	1500	100 U	100 U	40 J	240	100 U	100 U	100 U	100 U	1000	500 U	930	240	500 U
	09/01/2009	ORIG	100 U	100 U	100 U	1600	100 U	100 U	46 J	250	100 U	100 U	100 U	100 U	1100	500 U	710	260	500 U
	09/01/2009	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	12/29/2009	ORIG	9 J	16 J	25 U	1200	54	23 J	34	210	25 U	25 U	25 U	25 U	960	120 U	1200	300	120 U
	12/29/2009	DUP	7.8 J	14 J	25 U	1200	54	22 J	37	220	25 U	25 U	25 U	25 U	1000	120 U	1100	320	120 U
	03/02/2010	ORIG	6.5 J	26	10 U	2200	30	33	57	350	4 J	10 U	10 U	10 U	2000	50 U	1500	560	50 U
	03/02/2010	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	06/23/2010	ORIG	50 U	50 U	50 U	1000	40 J	17 J	28 J	150	50 U	50 U	50 U	50 U	770	250 U	770	250	250 U
	06/23/2010	DUP	50 U	50 U	50 U	1100	42 J	16 J	28 J	150	50 U	50 U	50 U	50 U	820	250 U	840	260	250 U
	08/31/2010	ORIG	50 U	50 U	50 U	1500	50	15 J	30 J	190	50 U	50 U	50 U	50 U	1100	250 U	900	350	250 U
	02/02/2011	ORIG	50 U	21 J	50 U	2800	50 U	24 J	52	320	50 U	50 U	50 U	50 U	2300	250 U	1600	760	250 U
	08/24/2011	SPLIT	1.8	22	0.5 U	2800	27	31	54	310	3.9	0.5 U	1.8	0.5 U	2200	7.2	1200	600	2.2
	08/24/2011	ORIG	100 U	100 U	100 U	2900	100 U	100 U	50 J	350	100 U	100 U	100 U	100 U	2500	210 J	1400	750	500 U
	08/24/2011	DUP	100 U	100 U	100 U	3000	100 U	30 J	53 J	360	100 U	100 U	100 U	100 U	2600	220 J	1400	790	500 U
	02/21/2012	ORIG	20 U	20 U	20 U	660	20 U	20 U	20 U	95	20 U	20 U	20 U	20 U	490	100 U	520	190	20 U
	02/21/2012	DUP	20 U	20 U	20 U	680	20 U	20 U	20 U	110	20 U	20 U	20 U	20 U	500	100 U	530	200	20 U
	08/21/2012	SPLIT	5 U	5 U	5 U	450	5 U	5 U	8.3	44	5 U	5 U	5 U	5 U	250	10 U	440	140	10 U
	09/21/2012	ORIG	10 U	10 U	10 U	330	10 U	3.2 J	5.7 J	48	10 U	10 U	10 U	10 U	200	50 U	350	130	10 U
	09/21/2012	DUP	10 U	10 U	10 U	360	3.2 J	3.8 J	7.9 J	47	10 U	10 U	10 U	10 U	230	24 J	290	120	10 U
OW10	69.5 - 89.5																		
	03/04/2009	ORIG	1 U	1 U	1 U	270	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.55 J	5 U	210	91	0.42 J
	09/02/2009	ORIG	1 U	1 U	1 U	210	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.53 J	5 U	61	35	5 U

Table A3-2
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA (200)	1,1,2-TCA (5)	PCA	1,1-DCE (6)	cis-1,2-DCE (6)	trans-1,2-DCE (10)	1,1-DCA (5)	1,2-DCA (0.5)	1,2-DCB (600)	1,4-DCB (5)	CBN (70)	1,2,3-TCB (0.5)	CFM (80)	MC (5)	Freon 113 (1200)	Freon 11 (150)	Freon 12 (1000#)
	12/29/2009	ORIG	1 U	1 U	1 U	120	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1.4	5 U	5 U	24	5 U
	12/29/2009	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	03/03/2010	ORIG	1 U	1 U	1 U	150	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	0.59 J	5 U	35	23	5 U
	06/23/2010	ORIG	1 U	1 U	1 U	86	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	32	17	5 U
	06/23/2010	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U
	09/01/2010	ORIG	1 U	1 U	1 U	120	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	34	22	5 U
	02/03/2011	ORIG	1 U	1 U	1 U	74	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	16 J	10 J	5 U
	02/03/2011	DUP	1 U	1 U	1 U	68	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	24 J	13 J	5 U
	08/24/2011	ORIG	1 U	1 U	1 U	65	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	5 U	16	11	5 U
	02/21/2012	ORIG	1 U	1 U	1 U	62	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	16	12	1 U
	08/22/2012	ORIG	1 U	1 U	1 U	73	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	21	18	1 U
PZ3	69.8 - 89.8																		
	02/22/2012	ORIG	5 U	5 U	5 U	220	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	77	46	5 U
PZ5	83 - 98																		
	02/21/2012	ORIG	1 U	1 U	1 U	1.9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	5 U	14	7.8	1 U
	02/21/2012	N	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
PZ6	82 - 97																		
	02/22/2012	ORIG	1 U	1 U	1 U	3.2	1 U	0.62 J	1 U	1 U	1 U	1 U	1 U	1 U	1.3	5 U	3.1 J	2.8	1 U
PZ9	70 - 90																		
	08/28/2012	ORIG	10 U	8.3 J	10 U	1100	5.6 J	13	22	150	10 U	10 U	10 U	10 U	740	50 U	860	330	10 U

Table A3-2
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary
Groundwater Analytical Results

Well ID/ Screened Interval	Sample Date	Sample Type	1,1,1-TCA	1,1,2-TCA	PCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCA	1,2-DCA	1,2-DCB	1,4-DCB	CBN	1,2,3-TCB	CFM	MC	Freon 113	Freon 11	Freon 12
			(200)	(5)		(6)	(6)	(10)	(5)	(0.5)	(600)	(5)	(70)	(0.5)	(80)	(5)	(1200)	(150)	(1000#)

Notes:

Concentrations are reported in micrograms per liter (ug/l).
Only chlorinated compounds detected above laboratory reporting limits in one or more groundwater samples are listed.
Samples analyzed by EPA Methods 502.2, 524.2, 8240 or 8260.
-- = analyte was either not reported or not analyzed.

TCA = Trichloroethane;TCB = Trichlorobenzene; PCA = 1,1,1,2-Tetrachloroethane; DCE = Dichloroethene; DCA = Dichloroethane; DCB = Dichlorobenzene; CBN = Chlorobenzene; CFM = Chloroform; MC = Methylene chloride; Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane; Freon 11 = Trichlorofluoromethane; Freon 12 = Dichlorodifluoromethane.

Screened interval is shown in feet below ground surface.

U = Not detected at a concentration greater than the reporting limit shown.
J = Estimated concentration below reporting limit.

Sample Type:
ORIG = Original sample
DUP = Duplicate sample
N = Equipment decontamination blank

California Maximum Contaminant Levels (MCLs) are shown in parenthesis
= California Notification Level
^ = Secondary MCL

Appendix B
Analytical Reports

Appendix B.1

Treatment Plant Analytical Results

Water

Appendix B.1.1

July 5, 2012
Water Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-16517-1
Client Project/Site: Omega Chemical Wastewater
Sampling Event: Quarterly Wastewater

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
7/19/2012 10:28:57 AM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-16517-1	OC_SP220B_EFF_070512	Water	07/05/12 09:00	07/05/12 15:45
440-16517-2	OC_SP210_INF_070512	Water	07/05/12 09:10	07/05/12 15:45
440-16517-3	OC_TB_070512	Water	07/05/12 08:00	07/05/12 15:45

Job ID: 440-16517-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-16517-1

Comments
No additional comments.

Receipt
The samples were received on 7/5/2012 3:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1º C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 37701 exceeded control limits for Chlorodibromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries associated with batch 37701 were outside control limits. Chlorodibromomethane was biased high in the MS and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: OC_SP220B_EFF_070512 (440-16517-1).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Client Sample ID: OC_SP220B_EFF_070512
Date Collected: 07/05/12 09:00
Date Received: 07/05/12 15:45

Lab Sample ID: 440-16517-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/10/12 17:22	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/10/12 17:22	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			07/10/12 17:22	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/10/12 17:22	1
1,1-Dichloroethane	ND		1.0		ug/L			07/10/12 17:22	1
1,1-Dichloroethene	ND		1.0		ug/L			07/10/12 17:22	1
1,1-Dichloropropene	ND		1.0		ug/L			07/10/12 17:22	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/10/12 17:22	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/10/12 17:22	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/10/12 17:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/10/12 17:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/10/12 17:22	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/10/12 17:22	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			07/10/12 17:22	1
1,2-Dichloroethane	ND		1.0		ug/L			07/10/12 17:22	1
1,2-Dichloropropane	ND		1.0		ug/L			07/10/12 17:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/10/12 17:22	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/10/12 17:22	1
1,3-Dichloropropane	ND		1.0		ug/L			07/10/12 17:22	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/10/12 17:22	1
2,2-Dichloropropane	ND		1.0		ug/L			07/10/12 17:22	1
2-Chlorotoluene	ND		1.0		ug/L			07/10/12 17:22	1
4-Chlorotoluene	ND		1.0		ug/L			07/10/12 17:22	1
p-Isopropyltoluene	ND		1.0		ug/L			07/10/12 17:22	1
Benzene	ND		0.50		ug/L			07/10/12 17:22	1
Bromobenzene	ND		1.0		ug/L			07/10/12 17:22	1
Bromochloromethane	ND		1.0		ug/L			07/10/12 17:22	1
Bromodichloromethane	ND		1.0		ug/L			07/10/12 17:22	1
Bromoform	ND		1.0		ug/L			07/10/12 17:22	1
Bromomethane	ND		1.0		ug/L			07/10/12 17:22	1
Carbon tetrachloride	ND		0.50		ug/L			07/10/12 17:22	1
Chlorobenzene	ND		1.0		ug/L			07/10/12 17:22	1
Chloroethane	ND		1.0		ug/L			07/10/12 17:22	1
Chloroform	ND		1.0		ug/L			07/10/12 17:22	1
Chloromethane	ND		1.0		ug/L			07/10/12 17:22	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/10/12 17:22	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/10/12 17:22	1
Dibromochloromethane	ND	*	1.0		ug/L			07/10/12 17:22	1
Dibromomethane	ND		1.0		ug/L			07/10/12 17:22	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/10/12 17:22	1
Ethylbenzene	ND		1.0		ug/L			07/10/12 17:22	1
Hexachlorobutadiene	ND		1.0		ug/L			07/10/12 17:22	1
Isopropylbenzene	ND		1.0		ug/L			07/10/12 17:22	1
m,p-Xylene	ND		1.0		ug/L			07/10/12 17:22	1
Methylene Chloride	ND		5.0		ug/L			07/10/12 17:22	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			07/10/12 17:22	1
Naphthalene	ND		1.0		ug/L			07/10/12 17:22	1
n-Butylbenzene	ND		1.0		ug/L			07/10/12 17:22	1
N-Propylbenzene	ND		1.0		ug/L			07/10/12 17:22	1
o-Xylene	ND		1.0		ug/L			07/10/12 17:22	1
sec-Butylbenzene	ND		1.0		ug/L			07/10/12 17:22	1

Client Sample ID: OC_SP220B_EFF_070512

Lab Sample ID: 440-16517-1

Date Collected: 07/05/12 09:00

Matrix: Water

Date Received: 07/05/12 15:45

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	ug/L			07/10/12 17:22	1
tert-Butylbenzene	ND		1.0	ug/L			07/10/12 17:22	1
Tetrachloroethene	ND		1.0	ug/L			07/10/12 17:22	1
Toluene	ND		1.0	ug/L			07/10/12 17:22	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			07/10/12 17:22	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			07/10/12 17:22	1
Trichloroethene	ND		1.0	ug/L			07/10/12 17:22	1
Trichlorofluoromethane	ND		1.0	ug/L			07/10/12 17:22	1
Vinyl chloride	ND		0.50	ug/L			07/10/12 17:22	1
Acetone	ND		10	ug/L			07/10/12 17:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			07/10/12 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/10/12 17:22*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*07/10/12 17:22*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/10/12 17:22*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**43**		4.7	ug/L		07/11/12 14:46	07/12/12 18:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*67*		*30 - 120*	*07/11/12 14:46*	*07/12/12 18:50*	*10*

Client Sample ID: OC_SP210_INF_070512

Lab Sample ID: 440-16517-2

Date Collected: 07/05/12 09:10

Matrix: Water

Date Received: 07/05/12 15:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	ug/L			07/10/12 17:50	50
1,1,1-Trichloroethane	ND		50	ug/L			07/10/12 17:50	50
1,1,2,2-Tetrachloroethane	ND		50	ug/L			07/10/12 17:50	50
1,1,2-Trichloroethane	ND		50	ug/L			07/10/12 17:50	50
1,1-Dichloroethane	ND		50	ug/L			07/10/12 17:50	50
1,1-Dichloroethene	**150**		50	ug/L			07/10/12 17:50	50
1,1-Dichloropropene	ND		50	ug/L			07/10/12 17:50	50
1,2,3-Trichlorobenzene	ND		50	ug/L			07/10/12 17:50	50
1,2,3-Trichloropropane	ND		50	ug/L			07/10/12 17:50	50
1,2,4-Trichlorobenzene	ND		50	ug/L			07/10/12 17:50	50
1,2,4-Trimethylbenzene	ND		50	ug/L			07/10/12 17:50	50
1,2-Dibromo-3-Chloropropane	ND		250	ug/L			07/10/12 17:50	50
1,2-Dichlorobenzene	ND		50	ug/L			07/10/12 17:50	50
1,2-Dibromoethane (EDB)	ND		50	ug/L			07/10/12 17:50	50
1,2-Dichloroethane	ND		50	ug/L			07/10/12 17:50	50
1,2-Dichloropropane	ND		50	ug/L			07/10/12 17:50	50
1,3,5-Trimethylbenzene	ND		50	ug/L			07/10/12 17:50	50
1,3-Dichlorobenzene	ND		50	ug/L			07/10/12 17:50	50
1,3-Dichloropropane	ND		50	ug/L			07/10/12 17:50	50
1,4-Dichlorobenzene	ND		50	ug/L			07/10/12 17:50	50
2,2-Dichloropropane	ND		50	ug/L			07/10/12 17:50	50
2-Chlorotoluene	ND		50	ug/L			07/10/12 17:50	50

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Client Sample ID: OC_SP210_INF_070512

Lab Sample ID: 440-16517-2

Date Collected: 07/05/12 09:10

Matrix: Water

Date Received: 07/05/12 15:45

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		50	ug/L			07/10/12 17:50	50
p-Isopropyltoluene	ND		50	ug/L			07/10/12 17:50	50
Benzene	ND		25	ug/L			07/10/12 17:50	50
Bromobenzene	ND		50	ug/L			07/10/12 17:50	50
Bromochloromethane	ND		50	ug/L			07/10/12 17:50	50
Bromodichloromethane	ND		50	ug/L			07/10/12 17:50	50
Bromoform	ND		50	ug/L			07/10/12 17:50	50
Bromomethane	ND		50	ug/L			07/10/12 17:50	50
Carbon tetrachloride	ND		25	ug/L			07/10/12 17:50	50
Chlorobenzene	ND		50	ug/L			07/10/12 17:50	50
Chloroethane	ND		50	ug/L			07/10/12 17:50	50
Chloroform	**53**		50	ug/L			07/10/12 17:50	50
Chloromethane	ND		50	ug/L			07/10/12 17:50	50
cis-1,2-Dichloroethene	ND		50	ug/L			07/10/12 17:50	50
cis-1,3-Dichloropropene	ND		25	ug/L			07/10/12 17:50	50
Dibromochloromethane	ND	*	50	ug/L			07/10/12 17:50	50
Dibromomethane	ND		50	ug/L			07/10/12 17:50	50
Dichlorodifluoromethane	ND		50	ug/L			07/10/12 17:50	50
Ethylbenzene	ND		50	ug/L			07/10/12 17:50	50
Hexachlorobutadiene	ND		50	ug/L			07/10/12 17:50	50
Isopropylbenzene	ND		50	ug/L			07/10/12 17:50	50
m,p-Xylene	ND		50	ug/L			07/10/12 17:50	50
Methylene Chloride	ND		250	ug/L			07/10/12 17:50	50
Methyl-t-Butyl Ether (MTBE)	ND		50	ug/L			07/10/12 17:50	50
Naphthalene	ND		50	ug/L			07/10/12 17:50	50
n-Butylbenzene	ND		50	ug/L			07/10/12 17:50	50
N-Propylbenzene	ND		50	ug/L			07/10/12 17:50	50
o-Xylene	ND		50	ug/L			07/10/12 17:50	50
sec-Butylbenzene	ND		50	ug/L			07/10/12 17:50	50
Styrene	ND		50	ug/L			07/10/12 17:50	50
tert-Butylbenzene	ND		50	ug/L			07/10/12 17:50	50
Tetrachloroethene	**2100**		50	ug/L			07/10/12 17:50	50
Toluene	ND		50	ug/L			07/10/12 17:50	50
trans-1,2-Dichloroethene	ND		50	ug/L			07/10/12 17:50	50
trans-1,3-Dichloropropene	ND		25	ug/L			07/10/12 17:50	50
Trichloroethene	**93**		50	ug/L			07/10/12 17:50	50
Trichlorofluoromethane	**63**		50	ug/L			07/10/12 17:50	50
Vinyl chloride	ND		25	ug/L			07/10/12 17:50	50
Acetone	ND		500	ug/L			07/10/12 17:50	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	ug/L			07/10/12 17:50	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/10/12 17:50*	*50*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*07/10/12 17:50*	*50*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/10/12 17:50*	*50*

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Client Sample ID: OC_TB_070512
Date Collected: 07/05/12 08:00
Date Received: 07/05/12 15:45

Lab Sample ID: 440-16517-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			07/10/12 18:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			07/10/12 18:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			07/10/12 18:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			07/10/12 18:19	1
1,1-Dichloroethane	ND		1.0		ug/L			07/10/12 18:19	1
1,1-Dichloroethene	ND		1.0		ug/L			07/10/12 18:19	1
1,1-Dichloropropene	ND		1.0		ug/L			07/10/12 18:19	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/10/12 18:19	1
1,2,3-Trichloropropane	ND		1.0		ug/L			07/10/12 18:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/10/12 18:19	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			07/10/12 18:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			07/10/12 18:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			07/10/12 18:19	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			07/10/12 18:19	1
1,2-Dichloroethane	ND		1.0		ug/L			07/10/12 18:19	1
1,2-Dichloropropane	ND		1.0		ug/L			07/10/12 18:19	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			07/10/12 18:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			07/10/12 18:19	1
1,3-Dichloropropane	ND		1.0		ug/L			07/10/12 18:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			07/10/12 18:19	1
2,2-Dichloropropane	ND		1.0		ug/L			07/10/12 18:19	1
2-Chlorotoluene	ND		1.0		ug/L			07/10/12 18:19	1
4-Chlorotoluene	ND		1.0		ug/L			07/10/12 18:19	1
p-Isopropyltoluene	ND		1.0		ug/L			07/10/12 18:19	1
Benzene	ND		0.50		ug/L			07/10/12 18:19	1
Bromobenzene	ND		1.0		ug/L			07/10/12 18:19	1
Bromochloromethane	ND		1.0		ug/L			07/10/12 18:19	1
Bromodichloromethane	ND		1.0		ug/L			07/10/12 18:19	1
Bromoform	ND		1.0		ug/L			07/10/12 18:19	1
Bromomethane	ND		1.0		ug/L			07/10/12 18:19	1
Carbon tetrachloride	ND		0.50		ug/L			07/10/12 18:19	1
Chlorobenzene	ND		1.0		ug/L			07/10/12 18:19	1
Chloroethane	ND		1.0		ug/L			07/10/12 18:19	1
Chloroform	ND		1.0		ug/L			07/10/12 18:19	1
Chloromethane	ND		1.0		ug/L			07/10/12 18:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			07/10/12 18:19	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/10/12 18:19	1
Dibromochloromethane	ND	*	1.0		ug/L			07/10/12 18:19	1
Dibromomethane	ND		1.0		ug/L			07/10/12 18:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			07/10/12 18:19	1
Ethylbenzene	ND		1.0		ug/L			07/10/12 18:19	1
Hexachlorobutadiene	ND		1.0		ug/L			07/10/12 18:19	1
Isopropylbenzene	ND		1.0		ug/L			07/10/12 18:19	1
m,p-Xylene	ND		1.0		ug/L			07/10/12 18:19	1
Methylene Chloride	ND		5.0		ug/L			07/10/12 18:19	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			07/10/12 18:19	1
Naphthalene	ND		1.0		ug/L			07/10/12 18:19	1
n-Butylbenzene	ND		1.0		ug/L			07/10/12 18:19	1
N-Propylbenzene	ND		1.0		ug/L			07/10/12 18:19	1
o-Xylene	ND		1.0		ug/L			07/10/12 18:19	1
sec-Butylbenzene	ND		1.0		ug/L			07/10/12 18:19	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Client Sample ID: OC_TB_070512

Lab Sample ID: 440-16517-3

Date Collected: 07/05/12 08:00

Matrix: Water

Date Received: 07/05/12 15:45

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0		ug/L			07/10/12 18:19	1
tert-Butylbenzene	ND		1.0		ug/L			07/10/12 18:19	1
Tetrachloroethene	ND		1.0		ug/L			07/10/12 18:19	1
Toluene	ND		1.0		ug/L			07/10/12 18:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			07/10/12 18:19	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/10/12 18:19	1
Trichloroethene	ND		1.0		ug/L			07/10/12 18:19	1
Trichlorofluoromethane	ND		1.0		ug/L			07/10/12 18:19	1
Vinyl chloride	ND		0.50		ug/L			07/10/12 18:19	1
Acetone	ND		10		ug/L			07/10/12 18:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			07/10/12 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*07/10/12 18:19*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*07/10/12 18:19*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*07/10/12 18:19*	*1*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Client Sample ID: OC_SP220B_EFF_070512 — Lab Sample ID: 440-16517-1

Date Collected: 07/05/12 09:00 — **Matrix: Water**
Date Received: 07/05/12 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	37701	07/10/12 17:22	AL	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	38083	07/11/12 14:46	DM	TAL IRV
Total/NA	Analysis	8270C SIM		10			38390	07/12/12 18:50	CP	TAL IRV

Client Sample ID: OC_SP210_INF_070512 — Lab Sample ID: 440-16517-2

Date Collected: 07/05/12 09:10 — **Matrix: Water**
Date Received: 07/05/12 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	10 mL	10 mL	37701	07/10/12 17:50	AL	TAL IRV

Client Sample ID: OC_TB_070512 — Lab Sample ID: 440-16517-3

Date Collected: 07/05/12 08:00 — **Matrix: Water**
Date Received: 07/05/12 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	37701	07/10/12 18:19	AL	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-37701/3
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			07/10/12 09:03	1
1,1,1-Trichloroethane	ND		1.0	ug/L			07/10/12 09:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			07/10/12 09:03	1
1,1,2-Trichloroethane	ND		1.0	ug/L			07/10/12 09:03	1
1,1-Dichloroethane	ND		1.0	ug/L			07/10/12 09:03	1
1,1-Dichloroethene	ND		1.0	ug/L			07/10/12 09:03	1
1,1-Dichloropropene	ND		1.0	ug/L			07/10/12 09:03	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			07/10/12 09:03	1
1,2,3-Trichloropropane	ND		1.0	ug/L			07/10/12 09:03	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			07/10/12 09:03	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			07/10/12 09:03	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			07/10/12 09:03	1
1,2-Dichlorobenzene	ND		1.0	ug/L			07/10/12 09:03	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			07/10/12 09:03	1
1,2-Dichloroethane	ND		1.0	ug/L			07/10/12 09:03	1
1,2-Dichloropropane	ND		1.0	ug/L			07/10/12 09:03	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			07/10/12 09:03	1
1,3-Dichlorobenzene	ND		1.0	ug/L			07/10/12 09:03	1
1,3-Dichloropropane	ND		1.0	ug/L			07/10/12 09:03	1
1,4-Dichlorobenzene	ND		1.0	ug/L			07/10/12 09:03	1
2,2-Dichloropropane	ND		1.0	ug/L			07/10/12 09:03	1
2-Chlorotoluene	ND		1.0	ug/L			07/10/12 09:03	1
4-Chlorotoluene	ND		1.0	ug/L			07/10/12 09:03	1
p-Isopropyltoluene	ND		1.0	ug/L			07/10/12 09:03	1
Benzene	ND		0.50	ug/L			07/10/12 09:03	1
Bromobenzene	ND		1.0	ug/L			07/10/12 09:03	1
Bromochloromethane	ND		1.0	ug/L			07/10/12 09:03	1
Bromodichloromethane	ND		1.0	ug/L			07/10/12 09:03	1
Bromoform	ND		1.0	ug/L			07/10/12 09:03	1
Bromomethane	ND		1.0	ug/L			07/10/12 09:03	1
Carbon tetrachloride	ND		0.50	ug/L			07/10/12 09:03	1
Chlorobenzene	ND		1.0	ug/L			07/10/12 09:03	1
Chloroethane	ND		1.0	ug/L			07/10/12 09:03	1
Chloroform	ND		1.0	ug/L			07/10/12 09:03	1
Chloromethane	ND		1.0	ug/L			07/10/12 09:03	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			07/10/12 09:03	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			07/10/12 09:03	1
Dibromochloromethane	ND		1.0	ug/L			07/10/12 09:03	1
Dibromomethane	ND		1.0	ug/L			07/10/12 09:03	1
Dichlorodifluoromethane	ND		1.0	ug/L			07/10/12 09:03	1
Ethylbenzene	ND		1.0	ug/L			07/10/12 09:03	1
Hexachlorobutadiene	ND		1.0	ug/L			07/10/12 09:03	1
Isopropylbenzene	ND		1.0	ug/L			07/10/12 09:03	1
m,p-Xylene	ND		1.0	ug/L			07/10/12 09:03	1
Methylene Chloride	ND		5.0	ug/L			07/10/12 09:03	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			07/10/12 09:03	1
Naphthalene	ND		1.0	ug/L			07/10/12 09:03	1
n-Butylbenzene	ND		1.0	ug/L			07/10/12 09:03	1
N-Propylbenzene	ND		1.0	ug/L			07/10/12 09:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-37701/3
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	ug/L			07/10/12 09:03	1
sec-Butylbenzene	ND		1.0	ug/L			07/10/12 09:03	1
Styrene	ND		1.0	ug/L			07/10/12 09:03	1
tert-Butylbenzene	ND		1.0	ug/L			07/10/12 09:03	1
Tetrachloroethene	ND		1.0	ug/L			07/10/12 09:03	1
Toluene	ND		1.0	ug/L			07/10/12 09:03	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			07/10/12 09:03	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			07/10/12 09:03	1
Trichloroethene	ND		1.0	ug/L			07/10/12 09:03	1
Trichlorofluoromethane	ND		1.0	ug/L			07/10/12 09:03	1
Vinyl chloride	ND		0.50	ug/L			07/10/12 09:03	1
Acetone	ND		10	ug/L			07/10/12 09:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			07/10/12 09:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/10/12 09:03*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*07/10/12 09:03*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/10/12 09:03*	*1*

Lab Sample ID: LCS 440-37701/4
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	31.7		ug/L		127	70 - 130
1,1,1-Trichloroethane	25.0	28.4		ug/L		114	65 - 135
1,1,2,2-Tetrachloroethane	25.0	23.0		ug/L		92	55 - 130
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	70 - 125
1,1-Dichloroethane	25.0	24.0		ug/L		96	70 - 125
1,1-Dichloroethene	25.0	24.4		ug/L		98	70 - 125
1,1-Dichloropropene	25.0	22.8		ug/L		91	75 - 130
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	65 - 125
1,2,3-Trichloropropane	25.0	21.6		ug/L		87	60 - 130
1,2,4-Trichlorobenzene	25.0	25.0		ug/L		100	70 - 135
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	21.6		ug/L		87	50 - 135
1,2-Dichlorobenzene	25.0	27.1		ug/L		108	75 - 120
1,2-Dibromoethane (EDB)	25.0	27.6		ug/L		110	75 - 125
1,2-Dichloroethane	25.0	27.7		ug/L		111	60 - 140
1,2-Dichloropropane	25.0	21.8		ug/L		87	70 - 125
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	75 - 125
1,3-Dichlorobenzene	25.0	27.1		ug/L		108	75 - 120
1,3-Dichloropropane	25.0	23.2		ug/L		93	70 - 120
1,4-Dichlorobenzene	25.0	26.9		ug/L		108	75 - 120
2,2-Dichloropropane	25.0	25.4		ug/L		102	65 - 140
2-Chlorotoluene	25.0	23.7		ug/L		95	70 - 125
4-Chlorotoluene	25.0	24.4		ug/L		97	75 - 125
p-Isopropyltoluene	25.0	25.6		ug/L		102	75 - 125
Benzene	25.0	22.4		ug/L		90	70 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-37701/4
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	25.0	26.2		ug/L		105	75 - 120
Bromochloromethane	25.0	28.0		ug/L		112	70 - 130
Bromodichloromethane	25.0	30.9		ug/L		124	70 - 135
Bromoform	25.0	26.8		ug/L		107	55 - 130
Bromomethane	25.0	28.4		ug/L		114	65 - 140
Carbon tetrachloride	25.0	31.6		ug/L		126	65 - 140
Chlorobenzene	25.0	26.7		ug/L		107	75 - 120
Chloroethane	25.0	20.7		ug/L		83	60 - 140
Chloroform	25.0	28.3		ug/L		113	70 - 130
Chloromethane	25.0	21.8		ug/L		87	50 - 140
cis-1,2-Dichloroethene	25.0	26.9		ug/L		107	70 - 125
cis-1,3-Dichloropropene	25.0	25.2		ug/L		101	75 - 125
Dibromochloromethane	25.0	34.3		ug/L		137	70 - 140
Dibromomethane	25.0	27.3		ug/L		109	70 - 125
Dichlorodifluoromethane	25.0	22.6		ug/L		90	35 - 155
Ethylbenzene	25.0	25.9		ug/L		103	75 - 125
Hexachlorobutadiene	25.0	25.2		ug/L		101	65 - 135
Isopropylbenzene	25.0	23.2		ug/L		93	75 - 130
m,p-Xylene	50.0	53.9		ug/L		108	75 - 125
Methylene Chloride	25.0	24.3		ug/L		97	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.7		ug/L		95	60 - 135
Naphthalene	25.0	24.5		ug/L		98	55 - 135
n-Butylbenzene	25.0	24.1		ug/L		96	70 - 130
N-Propylbenzene	25.0	23.2		ug/L		93	75 - 130
o-Xylene	25.0	28.5		ug/L		114	75 - 125
sec-Butylbenzene	25.0	24.0		ug/L		96	70 - 125
Styrene	25.0	29.4		ug/L		118	75 - 130
tert-Butylbenzene	25.0	25.5		ug/L		102	70 - 125
Tetrachloroethene	25.0	26.6		ug/L		106	70 - 125
Toluene	25.0	25.0		ug/L		100	70 - 120
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 125
trans-1,3-Dichloropropene	25.0	27.7		ug/L		111	70 - 125
Trichloroethene	25.0	27.9		ug/L		111	70 - 125
Trichlorofluoromethane	25.0	29.9		ug/L		120	65 - 145
Vinyl chloride	25.0	24.4		ug/L		98	55 - 135
Acetone	25.0	26.7		ug/L		107	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: LCSD 440-37701/6
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	31.7		ug/L		127	70 - 130	0	20
1,1,1-Trichloroethane	25.0	27.5		ug/L		110	65 - 135	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-37701/6
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	25.0	23.5		ug/L		94	55 - 130	2	25
1,1,2-Trichloroethane	25.0	23.6		ug/L		94	70 - 125	1	20
1,1-Dichloroethane	25.0	23.5		ug/L		94	70 - 125	2	20
1,1-Dichloroethene	25.0	24.0		ug/L		96	70 - 125	2	20
1,1-Dichloropropene	25.0	22.9		ug/L		92	75 - 130	0	20
1,2,3-Trichlorobenzene	25.0	26.7		ug/L		107	65 - 125	8	20
1,2,3-Trichloropropane	25.0	20.6		ug/L		83	60 - 130	5	20
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		104	70 - 135	4	20
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	75 - 125	2	20
1,2-Dibromo-3-Chloropropane	25.0	21.7		ug/L		87	50 - 135	0	30
1,2-Dichlorobenzene	25.0	26.4		ug/L		106	75 - 120	3	20
1,2-Dibromoethane (EDB)	25.0	27.1		ug/L		108	75 - 125	2	20
1,2-Dichloroethane	25.0	27.5		ug/L		110	60 - 140	1	20
1,2-Dichloropropane	25.0	21.3		ug/L		85	70 - 125	2	20
1,3,5-Trimethylbenzene	25.0	25.6		ug/L		102	75 - 125	2	20
1,3-Dichlorobenzene	25.0	26.9		ug/L		108	75 - 120	1	20
1,3-Dichloropropane	25.0	22.9		ug/L		92	70 - 120	1	20
1,4-Dichlorobenzene	25.0	26.5		ug/L		106	75 - 120	1	20
2,2-Dichloropropane	25.0	26.0		ug/L		104	65 - 140	2	25
2-Chlorotoluene	25.0	23.4		ug/L		94	70 - 125	1	20
4-Chlorotoluene	25.0	24.6		ug/L		98	75 - 125	1	20
p-Isopropyltoluene	25.0	25.4		ug/L		102	75 - 125	1	20
Benzene	25.0	22.2		ug/L		89	70 - 120	1	20
Bromobenzene	25.0	25.6		ug/L		103	75 - 120	2	20
Bromochloromethane	25.0	28.5		ug/L		114	70 - 130	2	20
Bromodichloromethane	25.0	30.9		ug/L		124	70 - 135	0	20
Bromoform	25.0	28.0		ug/L		112	55 - 130	4	25
Bromomethane	25.0	28.1		ug/L		112	65 - 140	1	20
Carbon tetrachloride	25.0	32.2		ug/L		129	65 - 140	2	25
Chlorobenzene	25.0	26.5		ug/L		106	75 - 120	1	20
Chloroethane	25.0	21.7		ug/L		87	60 - 140	5	20
Chloroform	25.0	27.2		ug/L		109	70 - 130	4	20
Chloromethane	25.0	21.9		ug/L		87	50 - 140	0	25
cis-1,2-Dichloroethene	25.0	26.4		ug/L		106	70 - 125	2	20
cis-1,3-Dichloropropene	25.0	25.2		ug/L		101	75 - 125	0	25
Dibromochloromethane	25.0	35.3	*	ug/L		141	70 - 140	3	20
Dibromomethane	25.0	27.7		ug/L		111	70 - 125	2	20
Dichlorodifluoromethane	25.0	21.7		ug/L		87	35 - 155	4	30
Ethylbenzene	25.0	25.2		ug/L		101	75 - 125	3	20
Hexachlorobutadiene	25.0	26.1		ug/L		104	65 - 135	4	20
Isopropylbenzene	25.0	22.6		ug/L		90	75 - 130	3	20
m,p-Xylene	50.0	54.4		ug/L		109	75 - 125	1	20
Methylene Chloride	25.0	24.4		ug/L		97	55 - 130	0	20
Methyl-t-Butyl Ether (MTBE)	25.0	23.4		ug/L		94	60 - 135	1	25
Naphthalene	25.0	26.4		ug/L		106	55 - 135	7	25
n-Butylbenzene	25.0	24.4		ug/L		97	70 - 130	1	20
N-Propylbenzene	25.0	22.4		ug/L		90	75 - 130	4	20
o-Xylene	25.0	28.0		ug/L		112	75 - 125	2	20
sec-Butylbenzene	25.0	23.1		ug/L		92	70 - 125	4	20
Styrene	25.0	28.9		ug/L		116	75 - 130	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-37701/6
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
tert-Butylbenzene			25.0	24.9		ug/L		100	70 - 125	2	20
Tetrachloroethene			25.0	25.8		ug/L		103	70 - 125	3	20
Toluene			25.0	24.4		ug/L		98	70 - 120	3	20
trans-1,2-Dichloroethene			25.0	24.1		ug/L		96	70 - 125	1	20
trans-1,3-Dichloropropene			25.0	27.9		ug/L		112	70 - 125	1	20
Trichloroethene			25.0	27.1		ug/L		108	70 - 125	3	20
Trichlorofluoromethane			25.0	28.9		ug/L		116	65 - 145	3	20
Vinyl chloride			25.0	24.0		ug/L		96	55 - 135	2	30
Acetone			25.0	33.6		ug/L		135	30 - 140	23	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 440-16254-A-1 MS
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1,2-Tetrachloroethane	ND		25.0	32.5		ug/L		130	65 - 140		
1,1,1-Trichloroethane	ND		25.0	28.3		ug/L		113	65 - 140		
1,1,2,2-Tetrachloroethane	ND		25.0	23.6		ug/L		95	55 - 135		
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	65 - 130		
1,1-Dichloroethane	1.3		25.0	24.9		ug/L		94	65 - 130		
1,1-Dichloroethene	29		25.0	51.2		ug/L		88	60 - 130		
1,1-Dichloropropene	ND		25.0	23.3		ug/L		93	70 - 135		
1,2,3-Trichlorobenzene	ND		25.0	24.1		ug/L		97	60 - 135		
1,2,3-Trichloropropane	ND		25.0	21.8		ug/L		87	55 - 135		
1,2,4-Trichlorobenzene	ND		25.0	25.2		ug/L		101	65 - 135		
1,2,4-Trimethylbenzene	ND		25.0	24.2		ug/L		97	55 - 135		
1,2-Dibromo-3-Chloropropane	ND		25.0	24.2		ug/L		97	45 - 145		
1,2-Dichlorobenzene	ND		25.0	28.1		ug/L		113	75 - 125		
1,2-Dibromoethane (EDB)	ND		25.0	27.8		ug/L		111	70 - 130		
1,2-Dichloroethane	ND		25.0	27.9		ug/L		112	60 - 140		
1,2-Dichloropropane	ND		25.0	21.9		ug/L		88	65 - 130		
1,3,5-Trimethylbenzene	ND		25.0	26.8		ug/L		107	70 - 130		
1,3-Dichlorobenzene	ND		25.0	28.5		ug/L		114	75 - 125		
1,3-Dichloropropane	ND		25.0	24.0		ug/L		96	65 - 135		
1,4-Dichlorobenzene	ND		25.0	27.5		ug/L		110	75 - 125		
2,2-Dichloropropane	ND		25.0	25.9		ug/L		103	60 - 145		
2-Chlorotoluene	ND		25.0	24.8		ug/L		99	65 - 135		
4-Chlorotoluene	ND		25.0	25.5		ug/L		102	70 - 135		
p-Isopropyltoluene	ND		25.0	26.2		ug/L		105	65 - 130		
Benzene	ND		25.0	23.2		ug/L		93	65 - 125		
Bromobenzene	ND		25.0	27.8		ug/L		111	70 - 125		
Bromochloromethane	ND		25.0	28.8		ug/L		115	65 - 135		
Bromodichloromethane	ND		25.0	31.6		ug/L		127	70 - 135		
Bromoform	ND		25.0	26.9		ug/L		108	55 - 135		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-16254-A-1 MS
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	ND		25.0	28.1		ug/L		112	55 - 145
Carbon tetrachloride	ND		25.0	31.9		ug/L		128	65 - 140
Chlorobenzene	ND		25.0	26.9		ug/L		108	75 - 125
Chloroethane	ND		25.0	22.1		ug/L		88	55 - 140
Chloroform	ND		25.0	28.5		ug/L		112	65 - 135
Chloromethane	ND		25.0	20.2		ug/L		81	45 - 145
cis-1,2-Dichloroethene	ND		25.0	27.2		ug/L		108	65 - 130
cis-1,3-Dichloropropene	ND		25.0	26.9		ug/L		108	70 - 130
Dibromochloromethane	ND	*	25.0	35.8	F	ug/L		143	65 - 140
Dibromomethane	ND		25.0	27.8		ug/L		111	65 - 135
Dichlorodifluoromethane	ND		25.0	20.3		ug/L		81	25 - 155
Ethylbenzene	ND		25.0	24.9		ug/L		100	65 - 130
Hexachlorobutadiene	ND		25.0	25.3		ug/L		101	60 - 135
Isopropylbenzene	ND		25.0	24.1		ug/L		96	70 - 135
m,p-Xylene	ND		50.0	52.7		ug/L		105	65 - 130
Methylene Chloride	ND		25.0	24.4		ug/L		97	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.3		ug/L		97	55 - 145
Naphthalene	ND		25.0	22.0		ug/L		88	50 - 140
n-Butylbenzene	ND		25.0	25.1		ug/L		100	65 - 135
N-Propylbenzene	ND		25.0	24.2		ug/L		97	70 - 135
o-Xylene	ND		25.0	27.6		ug/L		110	65 - 125
sec-Butylbenzene	ND		25.0	25.5		ug/L		102	70 - 125
Styrene	ND		25.0	20.8		ug/L		83	50 - 145
tert-Butylbenzene	ND		25.0	26.6		ug/L		106	65 - 130
Tetrachloroethene	ND		25.0	27.2		ug/L		109	65 - 130
Toluene	ND		25.0	25.2		ug/L		101	70 - 125
trans-1,2-Dichloroethene	ND		25.0	25.1		ug/L		99	65 - 130
trans-1,3-Dichloropropene	ND		25.0	28.9		ug/L		116	65 - 135
Trichloroethene	8.2		25.0	36.0		ug/L		111	65 - 125
Trichlorofluoromethane	ND		25.0	28.7		ug/L		115	60 - 145
Vinyl chloride	ND		25.0	23.0		ug/L		92	45 - 140
Acetone	ND		25.0	17.9		ug/L		72	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 440-16254-A-1 MSD
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	29.9		ug/L		120	65 - 140	8	20
1,1,1-Trichloroethane	ND		25.0	26.1		ug/L		104	65 - 140	8	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.6		ug/L		90	55 - 135	5	30
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	65 - 130	3	25
1,1-Dichloroethane	1.3		25.0	23.3		ug/L		88	65 - 130	7	20
1,1-Dichloroethene	29		25.0	48.3		ug/L		76	60 - 130	6	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-16254-A-1 MSD
Matrix: Water
Analysis Batch: 37701

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		25.0	21.1		ug/L		84	70 - 135	10	20
1,2,3-Trichlorobenzene	ND		25.0	24.1		ug/L		96	60 - 135	0	20
1,2,3-Trichloropropane	ND		25.0	20.3		ug/L		81	55 - 135	7	30
1,2,4-Trichlorobenzene	ND		25.0	24.1		ug/L		96	65 - 135	5	20
1,2,4-Trimethylbenzene	ND		25.0	21.5		ug/L		86	55 - 135	12	25
1,2-Dibromo-3-Chloropropane	ND		25.0	23.4		ug/L		94	45 - 145	3	30
1,2-Dichlorobenzene	ND		25.0	26.8		ug/L		107	75 - 125	5	20
1,2-Dibromoethane (EDB)	ND		25.0	26.8		ug/L		107	70 - 130	4	25
1,2-Dichloroethane	ND		25.0	26.0		ug/L		104	60 - 140	7	20
1,2-Dichloropropane	ND		25.0	20.3		ug/L		81	65 - 130	8	20
1,3,5-Trimethylbenzene	ND		25.0	24.2		ug/L		97	70 - 130	10	20
1,3-Dichlorobenzene	ND		25.0	26.6		ug/L		106	75 - 125	7	20
1,3-Dichloropropane	ND		25.0	22.5		ug/L		90	65 - 135	6	25
1,4-Dichlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125	5	20
2,2-Dichloropropane	ND		25.0	23.6		ug/L		94	60 - 145	9	25
2-Chlorotoluene	ND		25.0	22.1		ug/L		89	65 - 135	11	20
4-Chlorotoluene	ND		25.0	22.9		ug/L		92	70 - 135	11	20
p-Isopropyltoluene	ND		25.0	24.8		ug/L		99	65 - 130	6	20
Benzene	ND		25.0	21.8		ug/L		87	65 - 125	6	20
Bromobenzene	ND		25.0	25.5		ug/L		102	70 - 125	8	20
Bromochloromethane	ND		25.0	27.9		ug/L		111	65 - 135	3	25
Bromodichloromethane	ND		25.0	28.6		ug/L		114	70 - 135	10	20
Bromoform	ND		25.0	25.6		ug/L		102	55 - 135	5	25
Bromomethane	ND		25.0	26.0		ug/L		104	55 - 145	8	25
Carbon tetrachloride	ND		25.0	29.7		ug/L		119	65 - 140	7	25
Chlorobenzene	ND		25.0	25.0		ug/L		100	75 - 125	7	20
Chloroethane	ND		25.0	18.3		ug/L		73	55 - 140	19	25
Chloroform	ND		25.0	26.6		ug/L		104	65 - 135	7	20
Chloromethane	ND		25.0	19.7		ug/L		79	45 - 145	2	25
cis-1,2-Dichloroethene	ND		25.0	25.7		ug/L		101	65 - 130	6	20
cis-1,3-Dichloropropene	ND		25.0	24.7		ug/L		99	70 - 130	9	20
Dibromochloromethane	ND	*	25.0	32.6		ug/L		131	65 - 140	9	25
Dibromomethane	ND		25.0	25.8		ug/L		103	65 - 135	8	25
Dichlorodifluoromethane	ND		25.0	18.4		ug/L		74	25 - 155	10	30
Ethylbenzene	ND		25.0	23.5		ug/L		94	65 - 130	6	20
Hexachlorobutadiene	ND		25.0	23.9		ug/L		96	60 - 135	5	20
Isopropylbenzene	ND		25.0	22.2		ug/L		89	70 - 135	8	20
m,p-Xylene	ND		50.0	48.3		ug/L		97	65 - 130	9	25
Methylene Chloride	ND		25.0	23.2		ug/L		93	50 - 135	5	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	22.7		ug/L		91	55 - 145	7	25
Naphthalene	ND		25.0	21.0		ug/L		84	50 - 140	5	30
n-Butylbenzene	ND		25.0	23.9		ug/L		95	65 - 135	5	20
N-Propylbenzene	ND		25.0	21.8		ug/L		87	70 - 135	10	20
o-Xylene	ND		25.0	25.2		ug/L		101	65 - 125	9	20
sec-Butylbenzene	ND		25.0	23.1		ug/L		92	70 - 125	10	20
Styrene	ND		25.0	17.7		ug/L		71	50 - 145	16	30
tert-Butylbenzene	ND		25.0	24.6		ug/L		99	65 - 130	8	20
Tetrachloroethene	ND		25.0	25.3		ug/L		101	65 - 130	8	20
Toluene	ND		25.0	24.2		ug/L		97	70 - 125	4	20
trans-1,2-Dichloroethene	ND		25.0	23.4		ug/L		92	65 - 130	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-16254-A-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 37701

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	ND		25.0	27.3		ug/L		109	65 - 135	6	25
Trichloroethene	8.2		25.0	33.8		ug/L		103	65 - 125	6	20
Trichlorofluoromethane	ND		25.0	26.8		ug/L		107	60 - 145	7	25
Vinyl chloride	ND		25.0	21.5		ug/L		86	45 - 140	6	30
Acetone	ND		25.0	16.1		ug/L		64	20 - 150	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8270C SIM - 1,4 Dioxane by SIM

Lab Sample ID: MB 440-38083/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 38390 — **Prep Batch: 38083**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50		ug/L		07/11/12 14:46	07/12/12 16:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*77*		*30 - 120*	*07/11/12 14:46*	*07/12/12 16:10*	*1*

Lab Sample ID: LCS 440-38083/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 38390 — **Prep Batch: 38083**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	1.31		ug/L		66	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*68*		*30 - 120*

Lab Sample ID: 440-16473-C-1-A MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 38390 — **Prep Batch: 38083**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	1.7		1.92	2.73		ug/L		51	35 - 120	11	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*65*		*30 - 120*

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Method: 8270C SIM - 1,4 Dioxane by SIM (Continued)

Lab Sample ID: 440-16473-F-1-A MS
Matrix: Water
Analysis Batch: 38390

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 38083

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.7		1.94	3.04		ug/L		67	35 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*73*		*30 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

GC/MS VOA

Analysis Batch: 37701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-16254-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-16254-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-16517-1	OC_SP220B_EFF_070512	Total/NA	Water	8260B	
440-16517-2	OC_SP210_INF_070512	Total/NA	Water	8260B	
440-16517-3	OC_TB_070512	Total/NA	Water	8260B	
LCS 440-37701/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 440-37701/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 440-37701/3	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 38083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-16473-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	3520C	
440-16473-F-1-A MS	Matrix Spike	Total/NA	Water	3520C	
440-16517-1	OC_SP220B_EFF_070512	Total/NA	Water	3520C	
LCS 440-38083/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 440-38083/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 38390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-16473-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270C SIM	38083
440-16473-F-1-A MS	Matrix Spike	Total/NA	Water	8270C SIM	38083
440-16517-1	OC_SP220B_EFF_070512	Total/NA	Water	8270C SIM	38083
LCS 440-38083/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	38083
MB 440-38083/1-A	Method Blank	Total/NA	Water	8270C SIM	38083

Definitions/Glossary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-16517-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 12.002r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	New Mexico	State Program	6	N/A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	Federal		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

440-16517

TestAmerica
ANALYTICAL TESTING CORPORATION

- [ ] Nashville, TN
- [ ] Orlando, FL
- [ ] Cedar Falls, IA
- [ ] Dayton, OH
- [ ] Watertown, WI
- [ ] Pontiac, MI
- [ ] Indianapolis, IN
- [x] Irvine, CA

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring? (Yes) No
Enforcement Action? Yes (No)

Client Name/Account #: CDM
Address: CDM / Omega Chemical
City/State/Zip: Irvine, CA 92617
Project Manager: Sharon Wallin
Telephone Number: 949.752.5452 **Fax No.:**
Sampler Name: (Print) Carlton Hamm Jr.
Sampler Signature:

Report To: Sharon Wallin / Elizabeth DeCola
Invoice To: de maximis
TA Quote #:
Project ID: Omega
Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: VOC (8260B) (including freons)	1,4 Dioxane (8270M)	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
OC_SP220B_EFF_070512	7/5/2012	0900	5	x					x						x						x	x		x		
OC_SP210_INF_070512	7/5/2012	0910	3	x					x						x						x			x		
OC_TB_070512	7/5/2012	0800	2	x					x											x	x			x		

Special Instructions:

Method of Shipment:

Relinquished by:	Date	Time	Received by:	Date	Time
	7/5/12	1403	TAI	7/5/12	1403
Relinquished by: TAI	7/5/12	1545	Received by TestAmerica:	7/5/12	1545

Laboratory Comments:
Temperature Upon Receipt: 21°C
VOCs Free of Headspace? Y N

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-16517-1

Login Number: 16517
List Number: 1
Creator: Freitag, Kevin R

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Carlton Hamm Jr.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B.1.2

August 9, 2012
Water Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-19955-1
Client Project/Site: Omega Chemical Wastewater

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
8/23/2012 9:45:49 AM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-19955-3	OC_SP220B_EFF_080912	Water	08/09/12 10:10	08/09/12 16:12
440-19955-4	OC_SP210_INF_080912	Water	08/09/12 10:15	08/09/12 16:12
440-19955-5	OC_TB_080912	Water	08/09/12 10:00	08/09/12 16:12

Job ID: 440-19955-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-19955-1

Comments
No additional comments.

Receipt
The samples were received on 8/9/2012 4:12 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for 2,2-dichloropropane, carbon tetrachloride and cis-1,3-dichlopropene associated with batch 46187 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 46187 exceeded control limits for the following analytes: 2,2-dichloropropane, carbon tetrachloride, cis-1,3-dichloropropene, and trans-1,3-dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 46187 were outside control limits.

Method 8260B: Due to the high concentration of Benzene and Ethylbenzene the matrix spike / matrix spike duplicate (MS/MSD) for batch 46187 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 45591. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: OC_SP220B_EFF_080912 (440-19955-3).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

Client Sample ID: OC_SP220B_EFF_080912

Lab Sample ID: 440-19955-3

Date Collected: 08/09/12 10:10

Matrix: Water

Date Received: 08/09/12 16:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/17/12 22:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/17/12 22:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/17/12 22:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/17/12 22:36	1
1,1-Dichloroethane	ND		1.0		ug/L			08/17/12 22:36	1
1,1-Dichloroethene	ND		1.0		ug/L			08/17/12 22:36	1
1,1-Dichloropropene	ND		1.0		ug/L			08/17/12 22:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/17/12 22:36	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/17/12 22:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/17/12 22:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/17/12 22:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/17/12 22:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/17/12 22:36	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			08/17/12 22:36	1
1,2-Dichloroethane	ND		1.0		ug/L			08/17/12 22:36	1
1,2-Dichloropropane	ND		1.0		ug/L			08/17/12 22:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/17/12 22:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/17/12 22:36	1
1,3-Dichloropropane	ND		1.0		ug/L			08/17/12 22:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/17/12 22:36	1
2,2-Dichloropropane	ND	*	1.0		ug/L			08/17/12 22:36	1
2-Chlorotoluene	ND		1.0		ug/L			08/17/12 22:36	1
4-Chlorotoluene	ND		1.0		ug/L			08/17/12 22:36	1
p-Isopropyltoluene	ND		1.0		ug/L			08/17/12 22:36	1
Benzene	ND		0.50		ug/L			08/17/12 22:36	1
Bromobenzene	ND		1.0		ug/L			08/17/12 22:36	1
Bromochloromethane	ND		1.0		ug/L			08/17/12 22:36	1
Bromodichloromethane	ND		1.0		ug/L			08/17/12 22:36	1
Bromoform	ND		1.0		ug/L			08/17/12 22:36	1
Bromomethane	ND		1.0		ug/L			08/17/12 22:36	1
Carbon tetrachloride	ND	*	0.50		ug/L			08/17/12 22:36	1
Chlorobenzene	ND		1.0		ug/L			08/17/12 22:36	1
Chloroethane	ND		1.0		ug/L			08/17/12 22:36	1
Chloroform	ND		1.0		ug/L			08/17/12 22:36	1
Chloromethane	ND		1.0		ug/L			08/17/12 22:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/17/12 22:36	1
cis-1,3-Dichloropropene	ND	*	0.50		ug/L			08/17/12 22:36	1
Dibromochloromethane	ND		1.0		ug/L			08/17/12 22:36	1
Dibromomethane	ND		1.0		ug/L			08/17/12 22:36	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/17/12 22:36	1
Ethylbenzene	ND		1.0		ug/L			08/17/12 22:36	1
Hexachlorobutadiene	ND		1.0		ug/L			08/17/12 22:36	1
Isopropylbenzene	ND		1.0		ug/L			08/17/12 22:36	1
m,p-Xylene	ND		1.0		ug/L			08/17/12 22:36	1
Methylene Chloride	ND		5.0		ug/L			08/17/12 22:36	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			08/17/12 22:36	1
Naphthalene	ND		1.0		ug/L			08/17/12 22:36	1
n-Butylbenzene	ND		1.0		ug/L			08/17/12 22:36	1
N-Propylbenzene	ND		1.0		ug/L			08/17/12 22:36	1
o-Xylene	ND		1.0		ug/L			08/17/12 22:36	1
sec-Butylbenzene	ND		1.0		ug/L			08/17/12 22:36	1

Client Sample ID: OC_SP220B_EFF_080912

Lab Sample ID: 440-19955-3

Date Collected: 08/09/12 10:10

Matrix: Water

Date Received: 08/09/12 16:12

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	ug/L			08/17/12 22:36	1
tert-Butylbenzene	ND		1.0	ug/L			08/17/12 22:36	1
Tetrachloroethene	ND		1.0	ug/L			08/17/12 22:36	1
Toluene	ND		1.0	ug/L			08/17/12 22:36	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/17/12 22:36	1
trans-1,3-Dichloropropene	ND	*	0.50	ug/L			08/17/12 22:36	1
Trichloroethene	ND		1.0	ug/L			08/17/12 22:36	1
Trichlorofluoromethane	ND		1.0	ug/L			08/17/12 22:36	1
Vinyl chloride	ND		0.50	ug/L			08/17/12 22:36	1
Acetone	ND		10	ug/L			08/17/12 22:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			08/17/12 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*08/17/12 22:36*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/17/12 22:36*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*08/17/12 22:36*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**37**		4.7	ug/L		08/15/12 16:06	08/16/12 23:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*54*		*30 - 120*	*08/15/12 16:06*	*08/16/12 23:26*	*10*

Client Sample ID: OC_SP210_INF_080912

Lab Sample ID: 440-19955-4

Date Collected: 08/09/12 10:15

Matrix: Water

Date Received: 08/09/12 16:12

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		40	ug/L			08/17/12 23:05	40
1,1,1-Trichloroethane	ND		40	ug/L			08/17/12 23:05	40
1,1,2,2-Tetrachloroethane	ND		40	ug/L			08/17/12 23:05	40
1,1,2-Trichloroethane	ND		40	ug/L			08/17/12 23:05	40
1,1-Dichloroethane	ND		40	ug/L			08/17/12 23:05	40
1,1-Dichloroethene	**150**		40	ug/L			08/17/12 23:05	40
1,1-Dichloropropene	ND		40	ug/L			08/17/12 23:05	40
1,2,3-Trichlorobenzene	ND		40	ug/L			08/17/12 23:05	40
1,2,3-Trichloropropane	ND		40	ug/L			08/17/12 23:05	40
1,2,4-Trichlorobenzene	ND		40	ug/L			08/17/12 23:05	40
1,2,4-Trimethylbenzene	ND		40	ug/L			08/17/12 23:05	40
1,2-Dibromo-3-Chloropropane	ND		200	ug/L			08/17/12 23:05	40
1,2-Dichlorobenzene	ND		40	ug/L			08/17/12 23:05	40
1,2-Dibromoethane (EDB)	ND		40	ug/L			08/17/12 23:05	40
1,2-Dichloroethane	ND		40	ug/L			08/17/12 23:05	40
1,2-Dichloropropane	ND		40	ug/L			08/17/12 23:05	40
1,3,5-Trimethylbenzene	ND		40	ug/L			08/17/12 23:05	40
1,3-Dichlorobenzene	ND		40	ug/L			08/17/12 23:05	40
1,3-Dichloropropane	ND		40	ug/L			08/17/12 23:05	40
1,4-Dichlorobenzene	ND		40	ug/L			08/17/12 23:05	40
2,2-Dichloropropane	ND	*	40	ug/L			08/17/12 23:05	40
2-Chlorotoluene	ND		40	ug/L			08/17/12 23:05	40

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

Client Sample ID: OC_SP210_INF_080912

Lab Sample ID: 440-19955-4

Date Collected: 08/09/12 10:15
Matrix: Water
Date Received: 08/09/12 16:12

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		40	ug/L			08/17/12 23:05	40
p-Isopropyltoluene	ND		40	ug/L			08/17/12 23:05	40
Benzene	ND		20	ug/L			08/17/12 23:05	40
Bromobenzene	ND		40	ug/L			08/17/12 23:05	40
Bromochloromethane	ND		40	ug/L			08/17/12 23:05	40
Bromodichloromethane	ND		40	ug/L			08/17/12 23:05	40
Bromoform	ND		40	ug/L			08/17/12 23:05	40
Bromomethane	ND		40	ug/L			08/17/12 23:05	40
Carbon tetrachloride	ND	*	20	ug/L			08/17/12 23:05	40
Chlorobenzene	ND		40	ug/L			08/17/12 23:05	40
Chloroethane	ND		40	ug/L			08/17/12 23:05	40
Chloroform	**56**		40	ug/L			08/17/12 23:05	40
Chloromethane	ND		40	ug/L			08/17/12 23:05	40
cis-1,2-Dichloroethene	ND		40	ug/L			08/17/12 23:05	40
cis-1,3-Dichloropropene	ND	*	20	ug/L			08/17/12 23:05	40
Dibromochloromethane	ND		40	ug/L			08/17/12 23:05	40
Dibromomethane	ND		40	ug/L			08/17/12 23:05	40
Dichlorodifluoromethane	ND		40	ug/L			08/17/12 23:05	40
Ethylbenzene	ND		40	ug/L			08/17/12 23:05	40
Hexachlorobutadiene	ND		40	ug/L			08/17/12 23:05	40
Isopropylbenzene	ND		40	ug/L			08/17/12 23:05	40
m,p-Xylene	ND		40	ug/L			08/17/12 23:05	40
Methylene Chloride	ND		200	ug/L			08/17/12 23:05	40
Methyl-t-Butyl Ether (MTBE)	ND		40	ug/L			08/17/12 23:05	40
Naphthalene	ND		40	ug/L			08/17/12 23:05	40
n-Butylbenzene	ND		40	ug/L			08/17/12 23:05	40
N-Propylbenzene	ND		40	ug/L			08/17/12 23:05	40
o-Xylene	ND		40	ug/L			08/17/12 23:05	40
sec-Butylbenzene	ND		40	ug/L			08/17/12 23:05	40
Styrene	ND		40	ug/L			08/17/12 23:05	40
tert-Butylbenzene	ND		40	ug/L			08/17/12 23:05	40
Tetrachloroethene	**2400**		40	ug/L			08/17/12 23:05	40
Toluene	ND		40	ug/L			08/17/12 23:05	40
trans-1,2-Dichloroethene	ND		40	ug/L			08/17/12 23:05	40
trans-1,3-Dichloropropene	ND	*	20	ug/L			08/17/12 23:05	40
Trichloroethene	**94**		40	ug/L			08/17/12 23:05	40
Trichlorofluoromethane	**55**		40	ug/L			08/17/12 23:05	40
Vinyl chloride	ND		20	ug/L			08/17/12 23:05	40
Acetone	ND		400	ug/L			08/17/12 23:05	40
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		200	ug/L			08/17/12 23:05	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*08/17/12 23:05*	*40*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/17/12 23:05*	*40*
Toluene-d8 (Surr)	*110*		*80 - 120*		*08/17/12 23:05*	*40*

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

Client Sample ID: OC_TB_080912

Date Collected: 08/09/12 10:00
Date Received: 08/09/12 16:12

Lab Sample ID: 440-19955-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/17/12 23:34	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/17/12 23:34	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/17/12 23:34	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/17/12 23:34	1
1,1-Dichloroethane	ND		1.0		ug/L			08/17/12 23:34	1
1,1-Dichloroethene	ND		1.0		ug/L			08/17/12 23:34	1
1,1-Dichloropropene	ND		1.0		ug/L			08/17/12 23:34	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/17/12 23:34	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/17/12 23:34	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/17/12 23:34	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/17/12 23:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/17/12 23:34	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/17/12 23:34	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			08/17/12 23:34	1
1,2-Dichloroethane	ND		1.0		ug/L			08/17/12 23:34	1
1,2-Dichloropropane	ND		1.0		ug/L			08/17/12 23:34	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/17/12 23:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/17/12 23:34	1
1,3-Dichloropropane	ND		1.0		ug/L			08/17/12 23:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/17/12 23:34	1
2,2-Dichloropropane	ND	*	1.0		ug/L			08/17/12 23:34	1
2-Chlorotoluene	ND		1.0		ug/L			08/17/12 23:34	1
4-Chlorotoluene	ND		1.0		ug/L			08/17/12 23:34	1
p-Isopropyltoluene	ND		1.0		ug/L			08/17/12 23:34	1
Benzene	ND		0.50		ug/L			08/17/12 23:34	1
Bromobenzene	ND		1.0		ug/L			08/17/12 23:34	1
Bromochloromethane	ND		1.0		ug/L			08/17/12 23:34	1
Bromodichloromethane	ND		1.0		ug/L			08/17/12 23:34	1
Bromoform	ND		1.0		ug/L			08/17/12 23:34	1
Bromomethane	ND		1.0		ug/L			08/17/12 23:34	1
Carbon tetrachloride	ND	*	0.50		ug/L			08/17/12 23:34	1
Chlorobenzene	ND		1.0		ug/L			08/17/12 23:34	1
Chloroethane	ND		1.0		ug/L			08/17/12 23:34	1
Chloroform	ND		1.0		ug/L			08/17/12 23:34	1
Chloromethane	ND		1.0		ug/L			08/17/12 23:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/17/12 23:34	1
cis-1,3-Dichloropropene	ND	*	0.50		ug/L			08/17/12 23:34	1
Dibromochloromethane	ND		1.0		ug/L			08/17/12 23:34	1
Dibromomethane	ND		1.0		ug/L			08/17/12 23:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/17/12 23:34	1
Ethylbenzene	ND		1.0		ug/L			08/17/12 23:34	1
Hexachlorobutadiene	ND		1.0		ug/L			08/17/12 23:34	1
Isopropylbenzene	ND		1.0		ug/L			08/17/12 23:34	1
m,p-Xylene	ND		1.0		ug/L			08/17/12 23:34	1
Methylene Chloride	ND		5.0		ug/L			08/17/12 23:34	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			08/17/12 23:34	1
Naphthalene	ND		1.0		ug/L			08/17/12 23:34	1
n-Butylbenzene	ND		1.0		ug/L			08/17/12 23:34	1
N-Propylbenzene	ND		1.0		ug/L			08/17/12 23:34	1
o-Xylene	ND		1.0		ug/L			08/17/12 23:34	1
sec-Butylbenzene	ND		1.0		ug/L			08/17/12 23:34	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

Client Sample ID: OC_TB_080912

Lab Sample ID: 440-19955-5

Date Collected: 08/09/12 10:00

Matrix: Water

Date Received: 08/09/12 16:12

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0		ug/L			08/17/12 23:34	1
tert-Butylbenzene	ND		1.0		ug/L			08/17/12 23:34	1
Tetrachloroethene	ND		1.0		ug/L			08/17/12 23:34	1
Toluene	ND		1.0		ug/L			08/17/12 23:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			08/17/12 23:34	1
trans-1,3-Dichloropropene	ND	*	0.50		ug/L			08/17/12 23:34	1
Trichloroethene	ND		1.0		ug/L			08/17/12 23:34	1
Trichlorofluoromethane	ND		1.0		ug/L			08/17/12 23:34	1
Vinyl chloride	ND		0.50		ug/L			08/17/12 23:34	1
Acetone	ND		10		ug/L			08/17/12 23:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			08/17/12 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/17/12 23:34*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/17/12 23:34*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*08/17/12 23:34*	*1*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

Client Sample ID: OC_SP220B_EFF_080912

Lab Sample ID: 440-19955-3

Date Collected: 08/09/12 10:10

Matrix: Water

Date Received: 08/09/12 16:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	46187	08/17/12 22:36	MP	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	45591	08/15/12 16:06	DM	TAL IRV
Total/NA	Analysis	8270C SIM		10			45964	08/16/12 23:26	ES	TAL IRV

Client Sample ID: OC_SP210_INF_080912

Lab Sample ID: 440-19955-4

Date Collected: 08/09/12 10:15

Matrix: Water

Date Received: 08/09/12 16:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	10 mL	10 mL	46187	08/17/12 23:05	MP	TAL IRV

Client Sample ID: OC_TB_080912

Lab Sample ID: 440-19955-5

Date Collected: 08/09/12 10:00

Matrix: Water

Date Received: 08/09/12 16:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	46187	08/17/12 23:34	MP	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-46187/4
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/17/12 17:22	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/17/12 17:22	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/17/12 17:22	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/17/12 17:22	1
1,1-Dichloroethane	ND		1.0		ug/L			08/17/12 17:22	1
1,1-Dichloroethene	ND		1.0		ug/L			08/17/12 17:22	1
1,1-Dichloropropene	ND		1.0		ug/L			08/17/12 17:22	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/17/12 17:22	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/17/12 17:22	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/17/12 17:22	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/17/12 17:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/17/12 17:22	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/17/12 17:22	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			08/17/12 17:22	1
1,2-Dichloroethane	ND		1.0		ug/L			08/17/12 17:22	1
1,2-Dichloropropane	ND		1.0		ug/L			08/17/12 17:22	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/17/12 17:22	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/17/12 17:22	1
1,3-Dichloropropane	ND		1.0		ug/L			08/17/12 17:22	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/17/12 17:22	1
2,2-Dichloropropane	ND		1.0		ug/L			08/17/12 17:22	1
2-Chlorotoluene	ND		1.0		ug/L			08/17/12 17:22	1
4-Chlorotoluene	ND		1.0		ug/L			08/17/12 17:22	1
p-Isopropyltoluene	ND		1.0		ug/L			08/17/12 17:22	1
Benzene	ND		0.50		ug/L			08/17/12 17:22	1
Bromobenzene	ND		1.0		ug/L			08/17/12 17:22	1
Bromochloromethane	ND		1.0		ug/L			08/17/12 17:22	1
Bromodichloromethane	ND		1.0		ug/L			08/17/12 17:22	1
Bromoform	ND		1.0		ug/L			08/17/12 17:22	1
Bromomethane	ND		1.0		ug/L			08/17/12 17:22	1
Carbon tetrachloride	ND		0.50		ug/L			08/17/12 17:22	1
Chlorobenzene	ND		1.0		ug/L			08/17/12 17:22	1
Chloroethane	ND		1.0		ug/L			08/17/12 17:22	1
Chloroform	ND		1.0		ug/L			08/17/12 17:22	1
Chloromethane	ND		1.0		ug/L			08/17/12 17:22	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/17/12 17:22	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/17/12 17:22	1
Dibromochloromethane	ND		1.0		ug/L			08/17/12 17:22	1
Dibromomethane	ND		1.0		ug/L			08/17/12 17:22	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/17/12 17:22	1
Ethylbenzene	ND		1.0		ug/L			08/17/12 17:22	1
Hexachlorobutadiene	ND		1.0		ug/L			08/17/12 17:22	1
Isopropylbenzene	ND		1.0		ug/L			08/17/12 17:22	1
m,p-Xylene	ND		1.0		ug/L			08/17/12 17:22	1
Methylene Chloride	ND		5.0		ug/L			08/17/12 17:22	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			08/17/12 17:22	1
Naphthalene	ND		1.0		ug/L			08/17/12 17:22	1
n-Butylbenzene	ND		1.0		ug/L			08/17/12 17:22	1
N-Propylbenzene	ND		1.0		ug/L			08/17/12 17:22	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-46187/4
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	ug/L			08/17/12 17:22	1
sec-Butylbenzene	ND		1.0	ug/L			08/17/12 17:22	1
Styrene	ND		1.0	ug/L			08/17/12 17:22	1
tert-Butylbenzene	ND		1.0	ug/L			08/17/12 17:22	1
Tetrachloroethene	ND		1.0	ug/L			08/17/12 17:22	1
Toluene	ND		1.0	ug/L			08/17/12 17:22	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/17/12 17:22	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			08/17/12 17:22	1
Trichloroethene	ND		1.0	ug/L			08/17/12 17:22	1
Trichlorofluoromethane	ND		1.0	ug/L			08/17/12 17:22	1
Vinyl chloride	ND		0.50	ug/L			08/17/12 17:22	1
Acetone	ND		10	ug/L			08/17/12 17:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			08/17/12 17:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/17/12 17:22*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/17/12 17:22*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*08/17/12 17:22*	*1*

Lab Sample ID: LCS 440-46187/5
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	29.4		ug/L		118	70 - 130
1,1,1-Trichloroethane	25.0	31.7		ug/L		127	65 - 135
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		105	55 - 130
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	70 - 125
1,1-Dichloroethane	25.0	26.6		ug/L		107	70 - 125
1,1-Dichloroethene	25.0	26.7		ug/L		107	70 - 125
1,1-Dichloropropene	25.0	25.3		ug/L		101	75 - 130
1,2,3-Trichlorobenzene	25.0	24.0		ug/L		96	65 - 125
1,2,3-Trichloropropane	25.0	23.5		ug/L		94	60 - 130
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	70 - 135
1,2,4-Trimethylbenzene	25.0	28.4		ug/L		114	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	26.9		ug/L		108	50 - 135
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	75 - 120
1,2-Dibromoethane (EDB)	25.0	28.5		ug/L		114	75 - 125
1,2-Dichloroethane	25.0	26.8		ug/L		107	60 - 140
1,2-Dichloropropane	25.0	26.4		ug/L		106	70 - 125
1,3,5-Trimethylbenzene	25.0	27.9		ug/L		112	75 - 125
1,3-Dichlorobenzene	25.0	28.0		ug/L		112	75 - 120
1,3-Dichloropropane	25.0	25.2		ug/L		101	70 - 120
1,4-Dichlorobenzene	25.0	27.3		ug/L		109	75 - 120
2,2-Dichloropropane	25.0	41.5	*	ug/L		166	65 - 140
2-Chlorotoluene	25.0	26.5		ug/L		106	70 - 125
4-Chlorotoluene	25.0	27.2		ug/L		109	75 - 125
p-Isopropyltoluene	25.0	28.5		ug/L		114	75 - 125
Benzene	25.0	26.8		ug/L		107	70 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-46187/5
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	25.0	26.1		ug/L		105	75 - 120
Bromochloromethane	25.0	26.2		ug/L		105	70 - 130
Bromodichloromethane	25.0	31.3		ug/L		125	70 - 135
Bromoform	25.0	27.3		ug/L		109	55 - 130
Bromomethane	25.0	28.1		ug/L		112	65 - 140
Carbon tetrachloride	25.0	37.3	*	ug/L		149	65 - 140
Chlorobenzene	25.0	26.3		ug/L		105	75 - 120
Chloroethane	25.0	26.4		ug/L		106	60 - 140
Chloroform	25.0	28.0		ug/L		112	70 - 130
Chloromethane	25.0	26.0		ug/L		104	50 - 140
cis-1,2-Dichloroethene	25.0	27.0		ug/L		108	70 - 125
cis-1,3-Dichloropropene	25.0	33.9	*	ug/L		136	75 - 125
Dibromochloromethane	25.0	30.6		ug/L		123	70 - 140
Dibromomethane	25.0	26.6		ug/L		107	70 - 125
Dichlorodifluoromethane	25.0	24.5		ug/L		98	35 - 155
Ethylbenzene	25.0	27.2		ug/L		109	75 - 125
Hexachlorobutadiene	25.0	25.6		ug/L		102	65 - 135
Isopropylbenzene	25.0	25.5		ug/L		102	75 - 130
m,p-Xylene	50.0	54.8		ug/L		110	75 - 125
Methylene Chloride	25.0	27.5		ug/L		110	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	28.3		ug/L		113	60 - 135
Naphthalene	25.0	22.3		ug/L		89	55 - 135
n-Butylbenzene	25.0	30.0		ug/L		120	70 - 130
N-Propylbenzene	25.0	27.1		ug/L		108	75 - 130
o-Xylene	25.0	27.6		ug/L		111	75 - 125
sec-Butylbenzene	25.0	26.8		ug/L		107	70 - 125
Styrene	25.0	27.3		ug/L		109	75 - 130
tert-Butylbenzene	25.0	26.6		ug/L		106	70 - 125
Tetrachloroethene	25.0	26.7		ug/L		107	70 - 125
Toluene	25.0	28.4		ug/L		114	70 - 120
trans-1,2-Dichloroethene	25.0	26.7		ug/L		107	70 - 125
trans-1,3-Dichloropropene	25.0	31.8	*	ug/L		127	70 - 125
Trichloroethene	25.0	27.0		ug/L		108	70 - 125
Trichlorofluoromethane	25.0	29.2		ug/L		117	65 - 145
Vinyl chloride	25.0	25.9		ug/L		104	55 - 135
Acetone	25.0	21.2		ug/L		85	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

Lab Sample ID: 440-20463-E-3 MS
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		250	282		ug/L		113	65 - 140
1,1,1-Trichloroethane	ND		250	295		ug/L		118	65 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-20463-E-3 MS
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	ND		250	259		ug/L		103	55 - 135
1,1,2-Trichloroethane	ND		250	265		ug/L		106	65 - 130
1,1-Dichloroethane	ND		250	258		ug/L		103	65 - 130
1,1-Dichloroethene	ND		250	259		ug/L		103	60 - 130
1,1-Dichloropropene	ND		250	247		ug/L		99	70 - 135
1,2,3-Trichlorobenzene	ND		250	248		ug/L		99	60 - 135
1,2,3-Trichloropropane	ND		250	241		ug/L		96	55 - 135
1,2,4-Trichlorobenzene	ND		250	261		ug/L		105	65 - 135
1,2,4-Trimethylbenzene	34		250	329		ug/L		118	55 - 135
1,2-Dibromo-3-Chloropropane	ND		250	262		ug/L		105	45 - 145
1,2-Dichlorobenzene	ND		250	268		ug/L		107	75 - 125
1,2-Dibromoethane (EDB)	ND		250	291		ug/L		117	70 - 130
1,2-Dichloroethane	ND		250	263		ug/L		105	60 - 140
1,2-Dichloropropane	ND		250	257		ug/L		103	65 - 130
1,3,5-Trimethylbenzene	110		250	413		ug/L		120	70 - 130
1,3-Dichlorobenzene	ND		250	277		ug/L		111	75 - 125
1,3-Dichloropropane	ND		250	253		ug/L		101	65 - 135
1,4-Dichlorobenzene	ND		250	272		ug/L		109	75 - 125
2,2-Dichloropropane	ND	*	250	372	F	ug/L		149	60 - 145
2-Chlorotoluene	ND		250	273		ug/L		109	65 - 135
4-Chlorotoluene	ND		250	289		ug/L		116	70 - 135
p-Isopropyltoluene	ND		250	283		ug/L		113	65 - 130
Benzene	1800		250	2020	E 4	ug/L		67	65 - 125
Bromobenzene	ND		250	271		ug/L		108	70 - 125
Bromochloromethane	ND		250	257		ug/L		103	65 - 135
Bromodichloromethane	ND		250	301		ug/L		121	70 - 135
Bromoform	ND		250	263		ug/L		105	55 - 135
Bromomethane	ND		250	268		ug/L		107	55 - 145
Carbon tetrachloride	ND	*	250	346		ug/L		139	65 - 140
Chlorobenzene	ND		250	257		ug/L		103	75 - 125
Chloroethane	ND		250	243		ug/L		97	55 - 140
Chloroform	ND		250	270		ug/L		108	65 - 135
Chloromethane	ND		250	245		ug/L		98	45 - 145
cis-1,2-Dichloroethene	ND		250	272		ug/L		106	65 - 130
cis-1,3-Dichloropropene	ND	*	250	331	F	ug/L		132	70 - 130
Dibromochloromethane	ND		250	297		ug/L		119	65 - 140
Dibromomethane	ND		250	266		ug/L		106	65 - 135
Dichlorodifluoromethane	ND		250	231		ug/L		92	25 - 155
Ethylbenzene	1400		250	1510	4	ug/L		33	65 - 130
Hexachlorobutadiene	ND		250	246		ug/L		99	60 - 135
Isopropylbenzene	84		250	362		ug/L		111	70 - 135
m,p-Xylene	850		500	1360		ug/L		102	65 - 130
Methylene Chloride	ND		250	259		ug/L		99	50 - 135
Methyl-t-Butyl Ether (MTBE)	190		250	516		ug/L		132	55 - 145
Naphthalene	420		250	690		ug/L		107	50 - 140
n-Butylbenzene	21		250	317		ug/L		118	65 - 135
N-Propylbenzene	240		250	523		ug/L		115	70 - 135
o-Xylene	11		250	278		ug/L		107	65 - 125
sec-Butylbenzene	ND		250	277		ug/L		108	70 - 125
Styrene	ND		250	269		ug/L		107	50 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-20463-E-3 MS
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	ND		250	268		ug/L		107	65 - 130
Tetrachloroethene	ND		250	260		ug/L		104	65 - 130
Toluene	69		250	348		ug/L		112	70 - 125
trans-1,2-Dichloroethene	ND		250	259		ug/L		103	65 - 130
trans-1,3-Dichloropropene	ND	*	250	312		ug/L		125	65 - 135
Trichloroethene	ND		250	262		ug/L		105	65 - 125
Trichlorofluoromethane	ND		250	273		ug/L		109	60 - 145
Vinyl chloride	ND		250	241		ug/L		96	45 - 140
Acetone	ND		250	ND	F	ug/L		0	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-20463-E-3 MSD
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		250	301		ug/L		120	65 - 140	6	20
1,1,1-Trichloroethane	ND		250	304		ug/L		121	65 - 140	3	20
1,1,2,2-Tetrachloroethane	ND		250	269		ug/L		108	55 - 135	4	30
1,1,2-Trichloroethane	ND		250	273		ug/L		109	65 - 130	3	25
1,1-Dichloroethane	ND		250	264		ug/L		105	65 - 130	2	20
1,1-Dichloroethene	ND		250	271		ug/L		109	60 - 130	5	20
1,1-Dichloropropene	ND		250	256		ug/L		102	70 - 135	4	20
1,2,3-Trichlorobenzene	ND		250	253		ug/L		101	60 - 135	2	20
1,2,3-Trichloropropane	ND		250	249		ug/L		100	55 - 135	3	30
1,2,4-Trichlorobenzene	ND		250	268		ug/L		107	65 - 135	2	20
1,2,4-Trimethylbenzene	34		250	340		ug/L		122	55 - 135	4	25
1,2-Dibromo-3-Chloropropane	ND		250	263		ug/L		105	45 - 145	0	30
1,2-Dichlorobenzene	ND		250	276		ug/L		111	75 - 125	3	20
1,2-Dibromoethane (EDB)	ND		250	300		ug/L		120	70 - 130	3	25
1,2-Dichloroethane	ND		250	275		ug/L		110	60 - 140	4	20
1,2-Dichloropropane	ND		250	272		ug/L		109	65 - 130	6	20
1,3,5-Trimethylbenzene	110		250	416		ug/L		121	70 - 130	1	20
1,3-Dichlorobenzene	ND		250	285		ug/L		114	75 - 125	3	20
1,3-Dichloropropane	ND		250	264		ug/L		105	65 - 135	4	25
1,4-Dichlorobenzene	ND		250	275		ug/L		110	75 - 125	1	20
2,2-Dichloropropane	ND	*	250	406	F	ug/L		162	60 - 145	9	25
2-Chlorotoluene	ND		250	274		ug/L		110	65 - 135	1	20
4-Chlorotoluene	ND		250	296		ug/L		119	70 - 135	2	20
p-Isopropyltoluene	ND		250	291		ug/L		116	65 - 130	3	20
Benzene	1800		250	2060	E 4	ug/L		84	65 - 125	2	20
Bromobenzene	ND		250	281		ug/L		112	70 - 125	4	20
Bromochloromethane	ND		250	268		ug/L		107	65 - 135	4	25
Bromodichloromethane	ND		250	317		ug/L		127	70 - 135	5	20
Bromoform	ND		250	277		ug/L		111	55 - 135	5	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-20463-E-3 MSD
Matrix: Water
Analysis Batch: 46187

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	ND		250	272		ug/L		109	55 - 145	2	25
Carbon tetrachloride	ND	*	250	364	F	ug/L		146	65 - 140	5	25
Chlorobenzene	ND		250	272		ug/L		109	75 - 125	6	20
Chloroethane	ND		250	256		ug/L		102	55 - 140	5	25
Chloroform	ND		250	270		ug/L		108	65 - 135	0	20
Chloromethane	ND		250	252		ug/L		101	45 - 145	3	25
cis-1,2-Dichloroethene	ND		250	281		ug/L		110	65 - 130	3	20
cis-1,3-Dichloropropene	ND	*	250	349	F	ug/L		140	70 - 130	5	20
Dibromochloromethane	ND		250	310		ug/L		124	65 - 140	4	25
Dibromomethane	ND		250	278		ug/L		111	65 - 135	5	25
Dichlorodifluoromethane	ND		250	237		ug/L		95	25 - 155	2	30
Ethylbenzene	1400		250	1540	4	ug/L		45	65 - 130	2	20
Hexachlorobutadiene	ND		250	252		ug/L		101	60 - 135	2	20
Isopropylbenzene	84		250	368		ug/L		114	70 - 135	2	20
m,p-Xylene	850		500	1400		ug/L		110	65 - 130	3	25
Methylene Chloride	ND		250	266		ug/L		102	50 - 135	3	20
Methyl-t-Butyl Ether (MTBE)	190		250	533		ug/L		139	55 - 145	3	25
Naphthalene	420		250	709		ug/L		115	50 - 140	3	30
n-Butylbenzene	21		250	323		ug/L		121	65 - 135	2	20
N-Propylbenzene	240		250	525		ug/L		115	70 - 135	0	20
o-Xylene	11		250	293		ug/L		113	65 - 125	6	20
sec-Butylbenzene	ND		250	285		ug/L		111	70 - 125	3	20
Styrene	ND		250	287		ug/L		115	50 - 145	7	30
tert-Butylbenzene	ND		250	277		ug/L		111	65 - 130	3	20
Tetrachloroethene	ND		250	275		ug/L		110	65 - 130	5	20
Toluene	69		250	355		ug/L		115	70 - 125	2	20
trans-1,2-Dichloroethene	ND		250	266		ug/L		107	65 - 130	3	20
trans-1,3-Dichloropropene	ND	*	250	328		ug/L		131	65 - 135	5	25
Trichloroethene	ND		250	271		ug/L		108	65 - 125	3	20
Trichlorofluoromethane	ND		250	282		ug/L		113	60 - 145	3	25
Vinyl chloride	ND		250	247		ug/L		99	45 - 140	3	30
Acetone	ND		250	ND	F	ug/L		0	20 - 150	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Method: 8270C SIM - 1,4 Dioxane by SIM

Lab Sample ID: MB 440-45591/1-A
Matrix: Water
Analysis Batch: 45964

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45591

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50		ug/L		08/15/12 16:06	08/16/12 22:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*66*		*30 - 120*	*08/15/12 16:06*	*08/16/12 22:18*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM (Continued)

Lab Sample ID: LCS 440-45591/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 45964 — **Prep Batch: 45591**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	1.38		ug/L		69	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*69*		*30 - 120*

Lab Sample ID: LCSD 440-45591/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 45964 — **Prep Batch: 45591**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			2.00	1.29		ug/L		64	35 - 120	7	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*64*		*30 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

GC/MS VOA

Analysis Batch: 46187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-19955-3	OC_SP220B_EFF_080912	Total/NA	Water	8260B	
440-19955-4	OC_SP210_INF_080912	Total/NA	Water	8260B	
440-19955-5	OC_TB_080912	Total/NA	Water	8260B	
440-20463-E-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-20463-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-46187/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-46187/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 45591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-19955-3	OC_SP220B_EFF_080912	Total/NA	Water	3520C	
LCS 440-45591/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-45591/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-45591/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 45964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-19955-3	OC_SP220B_EFF_080912	Total/NA	Water	8270C SIM	45591
LCS 440-45591/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	45591
LCSD 440-45591/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	45591
MB 440-45591/1-A	Method Blank	Total/NA	Water	8270C SIM	45591

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-19955-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-12
USDA	Federal		P330-09-00080	06-06-14

440 - 19955

TestAmerica ANALYTICAL TESTING CORPORATION

- [ ] Nashville, TN
- [ ] Orlando, FL
- [ ] Cedar Falls, IA
- [ ] Dayton, OH
- [ ] Watertown, WI
- [ ] Pontiac, MI
- [ ] Indianapolis, IN
- [x] Irvine, CA

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring? (Yes) No

Enforcement Action? Yes (No)

Client Name/Account #: CDM

Address: CDM / Omega Chemical

City/State/Zip: Irvine, CA 92617

Project Manager: Sharon Wallin

Telephone Number: 949.752.5452 **Fax No.:**

Sampler Name: (Print) Carlton Hamm Jr.

Sampler Signature:

Report To: Sharon Wallin / Elizabeth DeCola

Invoice To: de maximis

TA Quote #:

Project ID: Omega

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: VOC (8260B) (including freons)	1,4 Dioxane (8270M)	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
OC_SP220B_EFF_080912	8/9/2012	1010	5	x					x						x						x	x		x		
OC_SP210_INF_080912	8/9/2012	1015	3	x					x						x						x			x		
OC_TB_080912	8/9/2012	1000	2	x					x											x	x			x		

Special Instructions:

Method of Shipment:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	8/9/12	1410	Ephrain Figueroa TAS	8-9-12	14:10
Ephrain Figueroa TAS	8-9-12	16:18	Tim Soderberg	8/9/12	1612

Laboratory Comments:

Temperature Upon Receipt: 3.7

VOCs Free of Headspace? Y N

1.6

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-19955-1

Login Number: 19955
List Number: 1
Creator: Robb, Kathleen

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Carlton Hamm Jr.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B.1.3

September 12, 2012
Water Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-23335-1
Client Project/Site: Omega
Sampling Event: Quarterly Wastewater

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
9/26/2012 3:56:58 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QC Sample Results 11
QC Association 18
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Certification Summary 20
Chain of Custody 21
Receipt Checklists 22

Sample Summary

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-23335-1	OC_SP220B_EFF_091212	Water	09/12/12 11:05	09/12/12 16:30
440-23335-2	OC_SP210_INF_091212	Water	09/12/12 11:10	09/12/12 16:30
440-23335-3	OC_TB_091212	Water	09/12/12 09:00	09/12/12 16:30

Case Narrative

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Job ID: 440-23335-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-23335-1

Comments
No additional comments.

Receipt
The samples were received on 9/12/2012 4:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3º C.

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 53911 were outside control limit. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Due to the level of dilution required for the following sample, 1,4-Dioxane surrogate recoveries do not provide useful information: OC_SP220B_EFF_091212 (440-23335-1).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Client Sample ID: OC_SP220B_EFF_091212

Lab Sample ID: 440-23335-1

Date Collected: 09/12/12 11:05

Matrix: Water

Date Received: 09/12/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			09/22/12 16:34	1
Benzene	ND		0.50		ug/L			09/22/12 16:34	1
Bromobenzene	ND		1.0		ug/L			09/22/12 16:34	1
Bromochloromethane	ND		1.0		ug/L			09/22/12 16:34	1
Bromodichloromethane	ND		1.0		ug/L			09/22/12 16:34	1
Bromoform	ND		1.0		ug/L			09/22/12 16:34	1
Bromomethane	ND		1.0		ug/L			09/22/12 16:34	1
Carbon tetrachloride	ND		0.50		ug/L			09/22/12 16:34	1
Chlorobenzene	ND		1.0		ug/L			09/22/12 16:34	1
Chloroethane	ND		1.0		ug/L			09/22/12 16:34	1
Chloroform	ND		1.0		ug/L			09/22/12 16:34	1
Chloromethane	ND		1.0		ug/L			09/22/12 16:34	1
2-Chlorotoluene	ND		1.0		ug/L			09/22/12 16:34	1
4-Chlorotoluene	ND		1.0		ug/L			09/22/12 16:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/22/12 16:34	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/22/12 16:34	1
Dibromochloromethane	ND		1.0		ug/L			09/22/12 16:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/22/12 16:34	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			09/22/12 16:34	1
Dibromomethane	ND		1.0		ug/L			09/22/12 16:34	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/22/12 16:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/22/12 16:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/22/12 16:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/22/12 16:34	1
1,1-Dichloroethane	ND		1.0		ug/L			09/22/12 16:34	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/12 16:34	1
1,1-Dichloroethene	ND		1.0		ug/L			09/22/12 16:34	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/12 16:34	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/12 16:34	1
2,2-Dichloropropane	ND		1.0		ug/L			09/22/12 16:34	1
1,1-Dichloropropene	ND		1.0		ug/L			09/22/12 16:34	1
Ethylbenzene	ND		1.0		ug/L			09/22/12 16:34	1
Hexachlorobutadiene	ND		1.0		ug/L			09/22/12 16:34	1
Isopropylbenzene	ND		1.0		ug/L			09/22/12 16:34	1
Methylene Chloride	ND		5.0		ug/L			09/22/12 16:34	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			09/22/12 16:34	1
m,p-Xylene	ND		1.0		ug/L			09/22/12 16:34	1
Naphthalene	ND		1.0		ug/L			09/22/12 16:34	1
n-Butylbenzene	ND		1.0		ug/L			09/22/12 16:34	1
N-Propylbenzene	ND		1.0		ug/L			09/22/12 16:34	1
o-Xylene	ND		1.0		ug/L			09/22/12 16:34	1
p-Isopropyltoluene	ND		1.0		ug/L			09/22/12 16:34	1
sec-Butylbenzene	ND		1.0		ug/L			09/22/12 16:34	1
Styrene	ND		1.0		ug/L			09/22/12 16:34	1
tert-Butylbenzene	ND		1.0		ug/L			09/22/12 16:34	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			09/22/12 16:34	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/12 16:34	1
Tetrachloroethene	ND		1.0		ug/L			09/22/12 16:34	1
Toluene	ND		1.0		ug/L			09/22/12 16:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/22/12 16:34	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/22/12 16:34	1

Client Sample ID: OC_SP220B_EFF_091212

Lab Sample ID: 440-23335-1

Date Collected: 09/12/12 11:05

Matrix: Water

Date Received: 09/12/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/22/12 16:34	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/22/12 16:34	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/22/12 16:34	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/22/12 16:34	1
Trichloroethene	ND		1.0	ug/L			09/22/12 16:34	1
Trichlorofluoromethane	ND		1.0	ug/L			09/22/12 16:34	1
1,2,3-Trichloropropane	ND		1.0	ug/L			09/22/12 16:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/22/12 16:34	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/22/12 16:34	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/22/12 16:34	1
Vinyl chloride	ND		0.50	ug/L			09/22/12 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/22/12 16:34*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*09/22/12 16:34*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/22/12 16:34*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**37**		9.5	ug/L		09/17/12 13:46	09/19/12 03:31	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*50*		*30 - 120*	*09/17/12 13:46*	*09/19/12 03:31*	*20*

Client Sample ID: OC_SP210_INF_091212

Lab Sample ID: 440-23335-2

Date Collected: 09/12/12 11:10

Matrix: Water

Date Received: 09/12/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		500	ug/L			09/22/12 17:28	50
Benzene	ND		25	ug/L			09/22/12 17:28	50
Bromobenzene	ND		50	ug/L			09/22/12 17:28	50
Bromochloromethane	ND		50	ug/L			09/22/12 17:28	50
Bromodichloromethane	ND		50	ug/L			09/22/12 17:28	50
Bromoform	ND		50	ug/L			09/22/12 17:28	50
Bromomethane	ND		50	ug/L			09/22/12 17:28	50
Carbon tetrachloride	ND		25	ug/L			09/22/12 17:28	50
Chlorobenzene	ND		50	ug/L			09/22/12 17:28	50
Chloroethane	ND		50	ug/L			09/22/12 17:28	50
Chloroform	ND		50	ug/L			09/22/12 17:28	50
Chloromethane	ND		50	ug/L			09/22/12 17:28	50
2-Chlorotoluene	ND		50	ug/L			09/22/12 17:28	50
4-Chlorotoluene	ND		50	ug/L			09/22/12 17:28	50
cis-1,2-Dichloroethene	ND		50	ug/L			09/22/12 17:28	50
cis-1,3-Dichloropropene	ND		25	ug/L			09/22/12 17:28	50
Dibromochloromethane	ND		50	ug/L			09/22/12 17:28	50
1,2-Dibromo-3-Chloropropane	ND		250	ug/L			09/22/12 17:28	50
1,2-Dibromoethane (EDB)	ND		50	ug/L			09/22/12 17:28	50
Dibromomethane	ND		50	ug/L			09/22/12 17:28	50
1,2-Dichlorobenzene	ND		50	ug/L			09/22/12 17:28	50
1,3-Dichlorobenzene	ND		50	ug/L			09/22/12 17:28	50

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Client Sample ID: OC_SP210_INF_091212

Lab Sample ID: 440-23335-2

Date Collected: 09/12/12 11:10

Matrix: Water

Date Received: 09/12/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		50		ug/L			09/22/12 17:28	50
Dichlorodifluoromethane	ND		50		ug/L			09/22/12 17:28	50
1,1-Dichloroethane	ND		50		ug/L			09/22/12 17:28	50
1,2-Dichloroethane	ND		50		ug/L			09/22/12 17:28	50
1,1-Dichloroethene	**110**		50		ug/L			09/22/12 17:28	50
1,2-Dichloropropane	ND		50		ug/L			09/22/12 17:28	50
1,3-Dichloropropane	ND		50		ug/L			09/22/12 17:28	50
2,2-Dichloropropane	ND		50		ug/L			09/22/12 17:28	50
1,1-Dichloropropene	ND		50		ug/L			09/22/12 17:28	50
Ethylbenzene	ND		50		ug/L			09/22/12 17:28	50
Hexachlorobutadiene	ND		50		ug/L			09/22/12 17:28	50
Isopropylbenzene	ND		50		ug/L			09/22/12 17:28	50
Methylene Chloride	ND		250		ug/L			09/22/12 17:28	50
Methyl-t-Butyl Ether (MTBE)	ND		50		ug/L			09/22/12 17:28	50
m,p-Xylene	ND		50		ug/L			09/22/12 17:28	50
Naphthalene	ND		50		ug/L			09/22/12 17:28	50
n-Butylbenzene	ND		50		ug/L			09/22/12 17:28	50
N-Propylbenzene	ND		50		ug/L			09/22/12 17:28	50
o-Xylene	ND		50		ug/L			09/22/12 17:28	50
p-Isopropyltoluene	ND		50		ug/L			09/22/12 17:28	50
sec-Butylbenzene	ND		50		ug/L			09/22/12 17:28	50
Styrene	ND		50		ug/L			09/22/12 17:28	50
tert-Butylbenzene	ND		50		ug/L			09/22/12 17:28	50
1,1,1,2-Tetrachloroethane	ND		50		ug/L			09/22/12 17:28	50
1,1,2,2-Tetrachloroethane	ND		50		ug/L			09/22/12 17:28	50
Tetrachloroethene	**2200**		50		ug/L			09/22/12 17:28	50
Toluene	ND		50		ug/L			09/22/12 17:28	50
trans-1,2-Dichloroethene	ND		50		ug/L			09/22/12 17:28	50
trans-1,3-Dichloropropene	ND		25		ug/L			09/22/12 17:28	50
1,2,3-Trichlorobenzene	ND		50		ug/L			09/22/12 17:28	50
1,2,4-Trichlorobenzene	ND		50		ug/L			09/22/12 17:28	50
1,1,1-Trichloroethane	ND		50		ug/L			09/22/12 17:28	50
1,1,2-Trichloroethane	ND		50		ug/L			09/22/12 17:28	50
Trichloroethene	**80**		50		ug/L			09/22/12 17:28	50
Trichlorofluoromethane	ND		50		ug/L			09/22/12 17:28	50
1,2,3-Trichloropropane	ND		50		ug/L			09/22/12 17:28	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250		ug/L			09/22/12 17:28	50
1,2,4-Trimethylbenzene	ND		50		ug/L			09/22/12 17:28	50
1,3,5-Trimethylbenzene	ND		50		ug/L			09/22/12 17:28	50
Vinyl chloride	ND		25		ug/L			09/22/12 17:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/22/12 17:28*	*50*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/22/12 17:28*	*50*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/22/12 17:28*	*50*

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Client Sample ID: OC_TB_091212

Lab Sample ID: 440-23335-3

Date Collected: 09/12/12 09:00

Matrix: Water

Date Received: 09/12/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			09/22/12 17:01	1
Benzene	ND		0.50		ug/L			09/22/12 17:01	1
Bromobenzene	ND		1.0		ug/L			09/22/12 17:01	1
Bromochloromethane	ND		1.0		ug/L			09/22/12 17:01	1
Bromodichloromethane	ND		1.0		ug/L			09/22/12 17:01	1
Bromoform	ND		1.0		ug/L			09/22/12 17:01	1
Bromomethane	ND		1.0		ug/L			09/22/12 17:01	1
Carbon tetrachloride	ND		0.50		ug/L			09/22/12 17:01	1
Chlorobenzene	ND		1.0		ug/L			09/22/12 17:01	1
Chloroethane	ND		1.0		ug/L			09/22/12 17:01	1
Chloroform	ND		1.0		ug/L			09/22/12 17:01	1
Chloromethane	ND		1.0		ug/L			09/22/12 17:01	1
2-Chlorotoluene	ND		1.0		ug/L			09/22/12 17:01	1
4-Chlorotoluene	ND		1.0		ug/L			09/22/12 17:01	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/22/12 17:01	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/22/12 17:01	1
Dibromochloromethane	ND		1.0		ug/L			09/22/12 17:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/22/12 17:01	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			09/22/12 17:01	1
Dibromomethane	ND		1.0		ug/L			09/22/12 17:01	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/22/12 17:01	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/22/12 17:01	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/22/12 17:01	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/22/12 17:01	1
1,1-Dichloroethane	ND		1.0		ug/L			09/22/12 17:01	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/12 17:01	1
1,1-Dichloroethene	ND		1.0		ug/L			09/22/12 17:01	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/12 17:01	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/12 17:01	1
2,2-Dichloropropane	ND		1.0		ug/L			09/22/12 17:01	1
1,1-Dichloropropene	ND		1.0		ug/L			09/22/12 17:01	1
Ethylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
Hexachlorobutadiene	ND		1.0		ug/L			09/22/12 17:01	1
Isopropylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
Methylene Chloride	ND		5.0		ug/L			09/22/12 17:01	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			09/22/12 17:01	1
m,p-Xylene	ND		1.0		ug/L			09/22/12 17:01	1
Naphthalene	ND		1.0		ug/L			09/22/12 17:01	1
n-Butylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
N-Propylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
o-Xylene	ND		1.0		ug/L			09/22/12 17:01	1
p-Isopropyltoluene	ND		1.0		ug/L			09/22/12 17:01	1
sec-Butylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
Styrene	ND		1.0		ug/L			09/22/12 17:01	1
tert-Butylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			09/22/12 17:01	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/12 17:01	1
Tetrachloroethene	ND		1.0		ug/L			09/22/12 17:01	1
Toluene	ND		1.0		ug/L			09/22/12 17:01	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/22/12 17:01	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/22/12 17:01	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Client Sample ID: OC_TB_091212

Lab Sample ID: 440-23335-3

Date Collected: 09/12/12 09:00

Matrix: Water

Date Received: 09/12/12 16:30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/22/12 17:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/12 17:01	1
1,1,1-Trichloroethane	ND		1.0		ug/L			09/22/12 17:01	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/12 17:01	1
Trichloroethene	ND		1.0		ug/L			09/22/12 17:01	1
Trichlorofluoromethane	ND		1.0		ug/L			09/22/12 17:01	1
1,2,3-Trichloropropane	ND		1.0		ug/L			09/22/12 17:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/22/12 17:01	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/22/12 17:01	1
Vinyl chloride	ND		0.50		ug/L			09/22/12 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*09/22/12 17:01*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*09/22/12 17:01*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/22/12 17:01*	*1*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Client Sample ID: OC_SP220B_EFF_091212

Lab Sample ID: 440-23335-1

Date Collected: 09/12/12 11:05

Matrix: Water

Date Received: 09/12/12 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	53911	09/22/12 16:34	AT	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	52524	09/17/12 13:46	DM	TAL IRV
Total/NA	Analysis	8270C SIM		20			52956	09/19/12 03:31	CP	TAL IRV

Client Sample ID: OC_SP210_INF_091212

Lab Sample ID: 440-23335-2

Date Collected: 09/12/12 11:10

Matrix: Water

Date Received: 09/12/12 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	10 mL	10 mL	53911	09/22/12 17:28	AT	TAL IRV

Client Sample ID: OC_TB_091212

Lab Sample ID: 440-23335-3

Date Collected: 09/12/12 09:00

Matrix: Water

Date Received: 09/12/12 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	53911	09/22/12 17:01	AT	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-53911/4
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			09/22/12 09:04	1
Benzene	ND		0.50		ug/L			09/22/12 09:04	1
Bromobenzene	ND		1.0		ug/L			09/22/12 09:04	1
Bromochloromethane	ND		1.0		ug/L			09/22/12 09:04	1
Bromodichloromethane	ND		1.0		ug/L			09/22/12 09:04	1
Bromoform	ND		1.0		ug/L			09/22/12 09:04	1
Bromomethane	ND		1.0		ug/L			09/22/12 09:04	1
Carbon tetrachloride	ND		0.50		ug/L			09/22/12 09:04	1
Chlorobenzene	ND		1.0		ug/L			09/22/12 09:04	1
Chloroethane	ND		1.0		ug/L			09/22/12 09:04	1
Chloroform	ND		1.0		ug/L			09/22/12 09:04	1
Chloromethane	ND		1.0		ug/L			09/22/12 09:04	1
2-Chlorotoluene	ND		1.0		ug/L			09/22/12 09:04	1
4-Chlorotoluene	ND		1.0		ug/L			09/22/12 09:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/22/12 09:04	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/22/12 09:04	1
Dibromochloromethane	ND		1.0		ug/L			09/22/12 09:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/22/12 09:04	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			09/22/12 09:04	1
Dibromomethane	ND		1.0		ug/L			09/22/12 09:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/22/12 09:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/22/12 09:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/22/12 09:04	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/22/12 09:04	1
1,1-Dichloroethane	ND		1.0		ug/L			09/22/12 09:04	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/12 09:04	1
1,1-Dichloroethene	ND		1.0		ug/L			09/22/12 09:04	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/12 09:04	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/12 09:04	1
2,2-Dichloropropane	ND		1.0		ug/L			09/22/12 09:04	1
1,1-Dichloropropene	ND		1.0		ug/L			09/22/12 09:04	1
Ethylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
Hexachlorobutadiene	ND		1.0		ug/L			09/22/12 09:04	1
Isopropylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
Methylene Chloride	ND		5.0		ug/L			09/22/12 09:04	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			09/22/12 09:04	1
m,p-Xylene	ND		1.0		ug/L			09/22/12 09:04	1
Naphthalene	ND		1.0		ug/L			09/22/12 09:04	1
n-Butylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
N-Propylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
o-Xylene	ND		1.0		ug/L			09/22/12 09:04	1
p-Isopropyltoluene	ND		1.0		ug/L			09/22/12 09:04	1
sec-Butylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
Styrene	ND		1.0		ug/L			09/22/12 09:04	1
tert-Butylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			09/22/12 09:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/12 09:04	1
Tetrachloroethene	ND		1.0		ug/L			09/22/12 09:04	1
Toluene	ND		1.0		ug/L			09/22/12 09:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-53911/4
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			09/22/12 09:04	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/22/12 09:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/22/12 09:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/12 09:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			09/22/12 09:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/12 09:04	1
Trichloroethene	ND		1.0		ug/L			09/22/12 09:04	1
Trichlorofluoromethane	ND		1.0		ug/L			09/22/12 09:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			09/22/12 09:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			09/22/12 09:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/22/12 09:04	1
Vinyl chloride	ND		0.50		ug/L			09/22/12 09:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*09/22/12 09:04*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*09/22/12 09:04*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/22/12 09:04*	*1*

Lab Sample ID: LCS 440-53911/6
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	20.9		ug/L		84	30 - 140
Benzene	25.0	23.1		ug/L		92	70 - 120
Bromobenzene	25.0	24.2		ug/L		97	75 - 120
Bromochloromethane	25.0	21.0		ug/L		84	70 - 130
Bromodichloromethane	25.0	23.6		ug/L		94	70 - 135
Bromoform	25.0	23.3		ug/L		93	55 - 130
Bromomethane	25.0	23.9		ug/L		96	65 - 140
Carbon tetrachloride	25.0	24.1		ug/L		97	65 - 140
Chlorobenzene	25.0	24.0		ug/L		96	75 - 120
Chloroethane	25.0	21.5		ug/L		86	60 - 140
Chloroform	25.0	21.3		ug/L		85	70 - 130
Chloromethane	25.0	23.3		ug/L		93	50 - 140
2-Chlorotoluene	25.0	22.3		ug/L		89	70 - 125
4-Chlorotoluene	25.0	23.2		ug/L		93	75 - 125
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	70 - 125
cis-1,3-Dichloropropene	25.0	23.3		ug/L		93	75 - 125
Dibromochloromethane	25.0	23.9		ug/L		95	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	21.9		ug/L		87	50 - 135
1,2-Dibromoethane (EDB)	25.0	25.3		ug/L		101	75 - 125
Dibromomethane	25.0	22.3		ug/L		89	70 - 125
1,2-Dichlorobenzene	25.0	24.1		ug/L		96	75 - 120
1,3-Dichlorobenzene	25.0	24.7		ug/L		99	75 - 120
1,4-Dichlorobenzene	25.0	24.6		ug/L		98	75 - 120
Dichlorodifluoromethane	25.0	23.7		ug/L		95	35 - 155
1,1-Dichloroethane	25.0	20.8		ug/L		83	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-53911/6
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	20.3		ug/L		81	60 - 140
1,1-Dichloroethene	25.0	23.1		ug/L		92	70 - 125
1,2-Dichloropropane	25.0	21.0		ug/L		84	70 - 125
1,3-Dichloropropane	25.0	21.5		ug/L		86	70 - 120
2,2-Dichloropropane	25.0	23.1		ug/L		92	65 - 140
1,1-Dichloropropene	25.0	20.1		ug/L		80	75 - 130
Ethylbenzene	25.0	25.2		ug/L		101	75 - 125
Hexachlorobutadiene	25.0	23.0		ug/L		92	65 - 135
Isopropylbenzene	25.0	23.5		ug/L		94	75 - 130
Methylene Chloride	25.0	20.4		ug/L		82	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	20.4		ug/L		82	60 - 135
m,p-Xylene	50.0	48.9		ug/L		98	75 - 125
Naphthalene	25.0	23.9		ug/L		96	55 - 135
n-Butylbenzene	25.0	25.0		ug/L		100	70 - 130
N-Propylbenzene	25.0	23.6		ug/L		94	75 - 130
o-Xylene	25.0	24.4		ug/L		98	75 - 125
p-Isopropyltoluene	25.0	25.3		ug/L		101	75 - 125
sec-Butylbenzene	25.0	24.4		ug/L		98	70 - 125
Styrene	25.0	25.0		ug/L		100	75 - 130
tert-Butylbenzene	25.0	23.7		ug/L		95	70 - 125
1,1,1,2-Tetrachloroethane	25.0	26.9		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	25.0	22.7		ug/L		91	55 - 130
Tetrachloroethene	25.0	25.4		ug/L		102	70 - 125
Toluene	25.0	24.4		ug/L		98	70 - 120
trans-1,2-Dichloroethene	25.0	23.0		ug/L		92	70 - 125
trans-1,3-Dichloropropene	25.0	23.7		ug/L		95	70 - 125
1,2,3-Trichlorobenzene	25.0	25.5		ug/L		102	65 - 125
1,2,4-Trichlorobenzene	25.0	22.6		ug/L		90	70 - 135
1,1,1-Trichloroethane	25.0	21.4		ug/L		85	65 - 135
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 125
Trichloroethene	25.0	23.1		ug/L		93	70 - 125
Trichlorofluoromethane	25.0	25.8		ug/L		103	65 - 145
1,2,3-Trichloropropane	25.0	20.8		ug/L		83	60 - 130
1,2,4-Trimethylbenzene	25.0	24.5		ug/L		98	75 - 125
1,3,5-Trimethylbenzene	25.0	24.9		ug/L		100	75 - 125
Vinyl chloride	25.0	22.2		ug/L		89	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 440-23438-B-4 MS
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	20.5		ug/L		82	20 - 150
Benzene	ND		25.0	22.6		ug/L		90	65 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-23438-B-4 MS
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	ND		25.0	23.1		ug/L		93	70 - 125
Bromochloromethane	ND		25.0	22.0		ug/L		88	65 - 135
Bromodichloromethane	ND		25.0	24.1		ug/L		96	70 - 135
Bromoform	ND		25.0	22.7		ug/L		91	55 - 135
Bromomethane	ND		25.0	22.2		ug/L		89	55 - 145
Carbon tetrachloride	ND		25.0	23.0		ug/L		92	65 - 140
Chlorobenzene	ND		25.0	23.5		ug/L		94	75 - 125
Chloroethane	ND		25.0	20.7		ug/L		83	55 - 140
Chloroform	ND		25.0	21.8		ug/L		87	65 - 135
Chloromethane	ND		25.0	23.1		ug/L		92	45 - 145
2-Chlorotoluene	ND		25.0	21.4		ug/L		86	65 - 135
4-Chlorotoluene	ND		25.0	21.8		ug/L		87	70 - 135
cis-1,2-Dichloroethene	ND		25.0	23.9		ug/L		96	65 - 130
cis-1,3-Dichloropropene	ND		25.0	22.6		ug/L		90	70 - 130
Dibromochloromethane	ND		25.0	22.8		ug/L		91	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	22.8		ug/L		91	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	24.4		ug/L		98	70 - 130
Dibromomethane	ND		25.0	22.6		ug/L		90	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.8		ug/L		95	75 - 125
1,3-Dichlorobenzene	ND		25.0	24.1		ug/L		97	75 - 125
1,4-Dichlorobenzene	ND		25.0	24.0		ug/L		96	75 - 125
Dichlorodifluoromethane	ND		25.0	23.0		ug/L		92	25 - 155
1,1-Dichloroethane	ND		25.0	20.7		ug/L		83	65 - 130
1,2-Dichloroethane	ND		25.0	21.0		ug/L		84	60 - 140
1,1-Dichloroethene	ND		25.0	22.1		ug/L		88	60 - 130
1,2-Dichloropropane	ND		25.0	21.2		ug/L		85	65 - 130
1,3-Dichloropropane	ND		25.0	21.1		ug/L		84	65 - 135
2,2-Dichloropropane	ND		25.0	22.7		ug/L		91	60 - 145
1,1-Dichloropropene	ND		25.0	19.9		ug/L		80	70 - 135
Ethylbenzene	ND		25.0	23.7		ug/L		95	65 - 130
Hexachlorobutadiene	ND		25.0	22.3		ug/L		89	60 - 135
Isopropylbenzene	ND		25.0	22.4		ug/L		90	70 - 135
Methylene Chloride	ND		25.0	20.9		ug/L		84	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.9		ug/L		87	55 - 145
m,p-Xylene	ND		50.0	47.4		ug/L		95	65 - 130
Naphthalene	ND		25.0	24.4		ug/L		98	50 - 140
n-Butylbenzene	ND		25.0	24.1		ug/L		96	65 - 135
N-Propylbenzene	ND		25.0	22.6		ug/L		90	70 - 135
o-Xylene	ND		25.0	23.3		ug/L		93	65 - 125
p-Isopropyltoluene	ND		25.0	24.9		ug/L		99	65 - 130
sec-Butylbenzene	ND		25.0	23.4		ug/L		93	70 - 125
Styrene	ND		25.0	12.3	F	ug/L		49	50 - 145
tert-Butylbenzene	ND		25.0	23.0		ug/L		92	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	25.3		ug/L		101	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	23.0		ug/L		92	55 - 135
Tetrachloroethene	ND		25.0	23.5		ug/L		94	65 - 130
Toluene	ND		25.0	24.2		ug/L		97	70 - 125
trans-1,2-Dichloroethene	ND		25.0	22.5		ug/L		90	65 - 130
trans-1,3-Dichloropropene	ND		25.0	24.0		ug/L		96	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	26.1		ug/L		104	60 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-23438-B-4 MS
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	ND		25.0	22.5		ug/L		90	65 - 135
1,1,1-Trichloroethane	ND		25.0	22.6		ug/L		90	65 - 140
1,1,2-Trichloroethane	ND		25.0	24.1		ug/L		97	65 - 130
Trichloroethene	ND		25.0	22.0		ug/L		88	65 - 125
Trichlorofluoromethane	ND		25.0	24.9		ug/L		100	60 - 145
1,2,3-Trichloropropane	ND		25.0	21.0		ug/L		84	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	23.7		ug/L		95	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	24.1		ug/L		97	70 - 130
Vinyl chloride	ND		25.0	22.1		ug/L		88	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 440-23438-B-4 MSD
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	19.9		ug/L		80	20 - 150	3	35
Benzene	ND		25.0	23.4		ug/L		94	65 - 125	4	20
Bromobenzene	ND		25.0	23.8		ug/L		95	70 - 125	3	20
Bromochloromethane	ND		25.0	22.3		ug/L		89	65 - 135	1	25
Bromodichloromethane	ND		25.0	24.2		ug/L		97	70 - 135	0	20
Bromoform	ND		25.0	25.6		ug/L		102	55 - 135	12	25
Bromomethane	ND		25.0	22.5		ug/L		90	55 - 145	1	25
Carbon tetrachloride	ND		25.0	24.6		ug/L		98	65 - 140	7	25
Chlorobenzene	ND		25.0	24.6		ug/L		99	75 - 125	5	20
Chloroethane	ND		25.0	20.7		ug/L		83	55 - 140	0	25
Chloroform	ND		25.0	21.1		ug/L		84	65 - 135	3	20
Chloromethane	ND		25.0	22.8		ug/L		91	45 - 145	1	25
2-Chlorotoluene	ND		25.0	22.3		ug/L		89	65 - 135	4	20
4-Chlorotoluene	ND		25.0	22.6		ug/L		91	70 - 135	4	20
cis-1,2-Dichloroethene	ND		25.0	23.9		ug/L		96	65 - 130	0	20
cis-1,3-Dichloropropene	ND		25.0	23.1		ug/L		92	70 - 130	2	20
Dibromochloromethane	ND		25.0	24.2		ug/L		97	65 - 140	6	25
1,2-Dibromo-3-Chloropropane	ND		25.0	24.6		ug/L		98	45 - 145	7	30
1,2-Dibromoethane (EDB)	ND		25.0	26.2		ug/L		105	70 - 130	7	25
Dibromomethane	ND		25.0	24.0		ug/L		96	65 - 135	6	25
1,2-Dichlorobenzene	ND		25.0	24.9		ug/L		100	75 - 125	4	20
1,3-Dichlorobenzene	ND		25.0	25.3		ug/L		101	75 - 125	5	20
1,4-Dichlorobenzene	ND		25.0	25.0		ug/L		100	75 - 125	4	20
Dichlorodifluoromethane	ND		25.0	22.1		ug/L		88	25 - 155	4	30
1,1-Dichloroethane	ND		25.0	20.2		ug/L		81	65 - 130	2	20
1,2-Dichloroethane	ND		25.0	21.5		ug/L		86	60 - 140	2	20
1,1-Dichloroethene	ND		25.0	22.1		ug/L		89	60 - 130	0	20
1,2-Dichloropropane	ND		25.0	21.0		ug/L		84	65 - 130	1	20
1,3-Dichloropropane	ND		25.0	21.6		ug/L		86	65 - 135	2	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-23438-B-4 MSD
Matrix: Water
Analysis Batch: 53911

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2-Dichloropropane	ND		25.0	22.5		ug/L		90	60 - 145	1	25
1,1-Dichloropropene	ND		25.0	20.5		ug/L		82	70 - 135	3	20
Ethylbenzene	ND		25.0	25.3		ug/L		101	65 - 130	7	20
Hexachlorobutadiene	ND		25.0	23.6		ug/L		94	60 - 135	5	20
Isopropylbenzene	ND		25.0	23.4		ug/L		94	70 - 135	4	20
Methylene Chloride	ND		25.0	20.3		ug/L		81	50 - 135	3	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.3		ug/L		85	55 - 145	2	25
m,p-Xylene	ND		50.0	50.1		ug/L		100	65 - 130	6	25
Naphthalene	ND		25.0	26.4		ug/L		106	50 - 140	8	30
n-Butylbenzene	ND		25.0	25.3		ug/L		101	65 - 135	5	20
N-Propylbenzene	ND		25.0	23.6		ug/L		95	70 - 135	4	20
o-Xylene	ND		25.0	24.0		ug/L		96	65 - 125	3	20
p-Isopropyltoluene	ND		25.0	25.6		ug/L		102	65 - 130	3	20
sec-Butylbenzene	ND		25.0	24.4		ug/L		98	70 - 125	4	20
Styrene	ND		25.0	8.84	F	ug/L		35	50 - 145	33	30
tert-Butylbenzene	ND		25.0	23.9		ug/L		96	65 - 130	4	20
1,1,1,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	65 - 140	8	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	55 - 135	4	30
Tetrachloroethene	ND		25.0	26.4		ug/L		106	65 - 130	12	20
Toluene	ND		25.0	24.5		ug/L		98	70 - 125	1	20
trans-1,2-Dichloroethene	ND		25.0	22.5		ug/L		90	65 - 130	0	20
trans-1,3-Dichloropropene	ND		25.0	24.7		ug/L		99	65 - 135	3	25
1,2,3-Trichlorobenzene	ND		25.0	26.6		ug/L		106	60 - 135	2	20
1,2,4-Trichlorobenzene	ND		25.0	24.2		ug/L		97	65 - 135	7	20
1,1,1-Trichloroethane	ND		25.0	21.4		ug/L		86	65 - 140	5	20
1,1,2-Trichloroethane	ND		25.0	24.9		ug/L		99	65 - 130	3	25
Trichloroethene	ND		25.0	24.0		ug/L		96	65 - 125	9	20
Trichlorofluoromethane	ND		25.0	24.6		ug/L		98	60 - 145	1	25
1,2,3-Trichloropropane	ND		25.0	21.7		ug/L		87	55 - 135	3	30
1,2,4-Trimethylbenzene	ND		25.0	24.9		ug/L		100	55 - 135	5	25
1,3,5-Trimethylbenzene	ND		25.0	24.6		ug/L		98	70 - 130	2	20
Vinyl chloride	ND		25.0	21.9		ug/L		87	45 - 140	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8270C SIM - 1,4 Dioxane by SIM

Lab Sample ID: MB 440-52524/1-A
Matrix: Water
Analysis Batch: 52956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 52524

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50		ug/L		09/17/12 13:46	09/19/12 01:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*47*		*30 - 120*	*09/17/12 13:46*	*09/19/12 01:14*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM (Continued)

Lab Sample ID: LCS 440-52524/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 52956 — **Prep Batch: 52524**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	0.765		ug/L		38	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*37*		*30 - 120*

Lab Sample ID: 440-22969-D-2-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 52956 — **Prep Batch: 52524**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane	ND		1.90	0.904		ug/L		48	35 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*45*		*30 - 120*

Lab Sample ID: 440-22969-D-2-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 52956 — **Prep Batch: 52524**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		1.90	1.11		ug/L		58	35 - 120	20	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*55*		*30 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

GC/MS VOA

Analysis Batch: 53911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23335-1	OC_SP220B_EFF_091212	Total/NA	Water	8260B	
440-23335-2	OC_SP210_INF_091212	Total/NA	Water	8260B	
440-23335-3	OC_TB_091212	Total/NA	Water	8260B	
440-23438-B-4 MS	Matrix Spike	Total/NA	Water	8260B	
440-23438-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-53911/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-53911/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 52524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-22969-D-2-A MS	Matrix Spike	Total/NA	Water	3520C	
440-22969-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	3520C	
440-23335-1	OC_SP220B_EFF_091212	Total/NA	Water	3520C	
LCS 440-52524/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 440-52524/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 52956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-22969-D-2-A MS	Matrix Spike	Total/NA	Water	8270C SIM	52524
440-22969-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270C SIM	52524
440-23335-1	OC_SP220B_EFF_091212	Total/NA	Water	8270C SIM	52524
LCS 440-52524/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	52524
MB 440-52524/1-A	Method Blank	Total/NA	Water	8270C SIM	52524

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Omega

TestAmerica Job ID: 440-23335-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	09-30-12
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14

440-23335

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To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring? (Yes) No

Enforcement Action? Yes (No)

Client Name/Account #: CDM

Address: CDM / Omega Chemical

City/State/Zip: Irvine, CA 92617

Report To: Sharon Wallin / Elizabeth DeCola

Project Manager: Sharon Wallin

Invoice To: de maximis

Telephone Number: 949.752.5452 **Fax No.:**

TA Quote #:

Sampler Name: (Print) Carlton Hamm Jr

Project ID: Omega

Sampler Signature:

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (specify):	Analyze For: VOC (8260B) (including freons)	1,4 Dioxane (8270M)	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
OC_SP220B_EFF_091212	9/12/2012	1105	5	x					x						x						x	x		x		
OC_SP210_INF_091212	9/12/2012	1110	3	x					x						x						x			x		
OC_TB_091212	9/12/2012	0900	2	x					x											x	x			x		

Special Instructions:

Laboratory Comments:

Temperature Upon Receipt: 2.9°C

VOCs Free of Headspace? Y N

Method of Shipment:

Relinquished by:	Date	Time	Received by:	Date	Time
	9/12/12	1350	TAI	9/12/12	1350
Relinquished by: TAI	9/12/12	1635	Received by TestAmerica:	9/12/12	1630

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-23335-1

Login Number: 23335
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Carlton Hamm Jr.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Appendix B.2

Treatment Plant Analytical Results

Vapor

Appendix B.2.1

July 5, 2012
Vapor Analytical Results

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-07-0244

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: de maximis, inc.

Client Project Name: Omega

Attention: Jaime Dinello
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 07/19/2012 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Client:	de maximis, inc. 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	12-07-0244
		Project name:	Omega
		Received:	07/05/12 17:35
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_070512 (12-07-0244-1)						
Benzene	**0.65**		0.50	ppb (v/v)	EPA TO-15	N/A
Chloroform	**38**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**2.3**		0.50	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	**6.6**		0.50	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**970**		10	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	**63**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1,2-Trichloroethane	**0.80**		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**1100**		100	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_INT_SP245_070512 (12-07-0244-2)						
Chloroform	**13**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**1.3**		0.50	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	**0.54**		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**14**		5.0	ppb (v/v)	EPA TO-15	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Client:	de maximis, inc. 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	12-07-0244
		Project name:	Omega
		Received:	07/05/12 17:35
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_070512 (12-07-0244-1)						
Benzene	**2.1**		1.6	ug/m3	EPA TO-15	N/A
Chloroform	**190**		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**9.4**		2.0	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	**27**		2.0	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**6600**		71	ug/m3	EPA TO-15	N/A
Trichloroethene	**340**		2.7	ug/m3	EPA TO-15	N/A
1,1,2-Trichloroethane	**4.3**		2.7	ug/m3	EPA TO-15	N/A
OC_VGAC_INT_SP245_070512 (12-07-0244-2)						
Chloroform	**61**		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**5.4**		2.0	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	**2.2**		2.0	ug/m3	EPA TO-15	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	07/05/12
1322 Scott Street, Suite 104		Work Order No:	12-07-0244
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: Omega			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_INF_SP241_070512	**12-07-0244-1-A**	**07/05/12 09:32**	**Air**	**GC/MS YY**	**N/A**	**07/06/12 06:27**	**120705L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.65	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	38	0.50	1		Tetrachloroethene	970	10	20.8	
1,1-Dichloroethane	2.3	0.50	1		Trichloroethene	63	0.50	1	
1,2-Dichloroethane	6.6	0.50	1		1,1,2-Trichloroethane	0.80	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	1100	100	20.8	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	57-129		1,2-Dichloroethane-d4	83	47-137	
Toluene-d8	99	78-156					

OC_VGAC_INT_SP245_070512	**12-07-0244-2-A**	**07/05/12 09:27**	**Air**	**GC/MS YY**	**N/A**	**07/06/12 03:47**	**120705L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	13	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	1.3	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	0.54	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	14	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-129		1,2-Dichloroethane-d4	82	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	07/05/12
1322 Scott Street, Suite 104		Work Order No:	12-07-0244
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: Omega			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_EFF_SP242_070512	**12-07-0244-3-A**	**07/05/12 09:22**	**Air**	**GC/MS YY**	**N/A**	**07/09/12 14:54**	**120709L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.2	2.43		Methylene Chloride	ND	12	2.43	
Carbon Tetrachloride	ND	1.2	2.43		Naphthalene	ND	12	2.43	
Chloroform	ND	1.2	2.43		Tetrachloroethene	ND	1.2	2.43	
1,1-Dichloroethane	ND	1.2	2.43		Trichloroethene	ND	1.2	2.43	
1,2-Dichloroethane	ND	1.2	2.43		1,1,2-Trichloroethane	ND	1.2	2.43	
1,4-Dichlorobenzene	ND	1.2	2.43		Vinyl Chloride	ND	1.2	2.43	
Methyl-t-Butyl Ether (MTBE)	ND	4.9	2.43		Total Volatile Organic Compounds	ND	12	2.43	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	95	57-129			1,2-Dichloroethane-d4	75	47-137		
Toluene-d8	95	78-156							

Method Blank	**099-15-617-1**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**07/05/12 13:29**	**120705L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	ND	5.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	96	57-129			1,2-Dichloroethane-d4	84	47-137		
Toluene-d8	99	78-156							

Method Blank	**099-15-617-2**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**07/09/12 14:00**	**120709L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	ND	5.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	97	57-129			1,2-Dichloroethane-d4	77	47-137		
Toluene-d8	97	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	07/05/12
1322 Scott Street, Suite 104		Work Order No:	12-07-0244
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3

Project: Omega

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_INF_SP241_070512	**12-07-0244-1-A**	**07/05/12 09:32**	**Air**	**GC/MS YY**	**N/A**	**07/06/12 06:27**	**120705L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	2.1	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	190	2.4	1		Tetrachloroethene	6600	71	20.8	
1,1-Dichloroethane	9.4	2.0	1		Trichloroethene	340	2.7	1	
1,2-Dichloroethane	27	2.0	1		1,1,2-Trichloroethane	4.3	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	57-129		1,2-Dichloroethane-d4	83	47-137	
Toluene-d8	99	78-156					

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_INT_SP245_070512	**12-07-0244-2-A**	**07/05/12 09:27**	**Air**	**GC/MS YY**	**N/A**	**07/06/12 03:47**	**120705L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	61	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	5.4	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	2.2	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-129		1,2-Dichloroethane-d4	82	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.		Date Received:	07/05/12
1322 Scott Street, Suite 104		Work Order No:	12-07-0244
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Omega			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_EFF_SP242_070512	**12-07-0244-3-A**	**07/05/12 09:22**	**Air**	**GC/MS YY**	**N/A**	**07/09/12 14:54**	**120709L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	3.9	2.43		Methylene Chloride	ND	42	2.43	
Carbon Tetrachloride	ND	7.6	2.43		Naphthalene	ND	64	2.43	
Chloroform	ND	5.9	2.43		Tetrachloroethene	ND	8.2	2.43	
1,1-Dichloroethane	ND	4.9	2.43		Trichloroethene	ND	6.5	2.43	
1,2-Dichloroethane	ND	4.9	2.43		1,1,2-Trichloroethane	ND	6.6	2.43	
1,4-Dichlorobenzene	ND	7.3	2.43		Vinyl Chloride	ND	3.1	2.43	
Methyl-t-Butyl Ether (MTBE)	ND	18	2.43						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	57-129		1,2-Dichloroethane-d4	75	47-137	
Toluene-d8	95	78-156					

Method Blank	**099-15-617-1**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**07/05/12 13:29**	**120705L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	ND	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	57-129		1,2-Dichloroethane-d4	84	47-137	
Toluene-d8	99	78-156					

Method Blank	**099-15-617-2**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**07/09/12 14:00**	**120709L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	ND	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1		Total Volatile Organic Compounds	0.00	0.00	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-129		1,2-Dichloroethane-d4	77	47-137	
Toluene-d8	97	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Date Received: N/A
Work Order No: 12-07-0244
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-1	**Air**	**GC/MS YY**	**N/A**	**07/05/12**	**120705L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	25.24	101	25.58	102	60-156	44-172	1	0-40	
Carbon Tetrachloride	25.00	20.52	82	20.65	83	64-154	49-169	1	0-32	
Chloroform	25.00	20.99	84	21.60	86	50-150	33-167	3	0-35	
1,1-Dichloroethane	25.00	22.20	89	23.03	92	50-150	33-167	4	0-35	
1,2-Dichloroethane	25.00	19.89	80	20.37	81	69-153	55-167	2	0-35	
1,4-Dichlorobenzene	25.00	19.10	76	19.26	77	36-156	16-176	1	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	21.29	85	22.52	90	50-150	33-167	6	0-35	
Methylene Chloride	25.00	23.76	95	24.61	98	50-150	33-167	4	0-35	
Naphthalene	25.00	26.59	106	27.23	109	40-190	15-215	2	0-35	
Tetrachloroethene	25.00	24.13	97	24.20	97	56-152	40-168	0	0-40	
Trichloroethene	25.00	23.53	94	23.85	95	63-159	47-175	1	0-34	
1,1,2-Trichloroethane	25.00	23.48	94	23.79	95	65-149	51-163	1	0-37	
Vinyl Chloride	25.00	20.71	83	21.38	86	45-177	23-199	3	0-36	

Total number of LCS compounds : 13
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Date Received: N/A
Work Order No: 12-07-0244
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-2	**Air**	**GC/MS YY**	**N/A**	**07/09/12**	**120709L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	25.33	101	25.34	101	60-156	44-172	0	0-40	
Carbon Tetrachloride	25.00	18.79	75	18.83	75	64-154	49-169	0	0-32	
Chloroform	25.00	20.01	80	20.25	81	50-150	33-167	1	0-35	
1,1-Dichloroethane	25.00	21.58	86	21.86	87	50-150	33-167	1	0-35	
1,2-Dichloroethane	25.00	18.23	73	18.48	74	69-153	55-167	1	0-35	
1,4-Dichlorobenzene	25.00	18.73	75	19.41	78	36-156	16-176	4	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	21.87	87	22.52	90	50-150	33-167	3	0-35	
Methylene Chloride	25.00	23.95	96	24.23	97	50-150	33-167	1	0-35	
Naphthalene	25.00	24.79	99	24.84	99	40-190	15-215	0	0-35	
Tetrachloroethene	25.00	24.30	97	24.58	98	56-152	40-168	1	0-40	
Trichloroethene	25.00	23.05	92	23.05	92	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	25.00	23.24	93	23.46	94	65-149	51-163	1	0-37	
Vinyl Chloride	25.00	20.88	84	21.02	84	45-177	23-199	1	0-36	

Total number of LCS compounds : 13
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Summa Canister Vacuum Summary

Work Order Number: **12-07-0244**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
OC_VGAC_INF_SP241_070512	-0.60	-29.50	SLC095	Summa Canister 1L
OC_VGAC_INT_SP245_070512	-1.00	-29.70	LC342	Summa Canister 1L
OC_VGAC_EFF_SP242_070512	-0.80	-29.70	LC061	Summa Canister 1L

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 12-07-0244

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
MPN - Most Probable Number

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

AIR CHAIN OF CUSTODY RECORD

DATE: 07/05/12
PAGE: 1 OF 1

LABORATORY CLIENT: de maximis
ADDRESS: 1322 Scott St., Suite 104
CITY: San Diego STATE: CA ZIP: 92106
TEL: (562) 756-8149 EMAIL: jdinello@demaximis.com

CLIENT PROJECT NAME / NUMBER: Omega
PROJECT ADDRESS: 12520 Whittier Blvd.
CITY: Whittier STATE: CA ZIP: 90602
PROJECT CONTACT: Andrew Miller - amiller@jacobandhefner.com

P.O. NO.:
LAB CONTACT OR QUOTE NO.:
LAB USE ONLY: 12-07-0244

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS
SAMPLER(S): (NAME / SIGNATURE) Carlton Hamm Jr.

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
■ EDD

SPECIAL INSTRUCTIONS: 1 - Select compounds: Benzene, Carbon tetrachloride, Chloroform, p-Dichlorobenzen, 1,1-Dichloroethane, Ethylene dichloride, Methyl tert-butyl ether, Methylene chloride, Naphthalene, Percholorehtylene, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl chloride

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type (I) Indoor (SV) Soil Vap. (A) Ambient	Sampling Equipment Info: Canister ID#	Canister Size 6L or 1L	Flow Controller ID#	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	TO-15 Select Compounds[1]				
1	OC_VGAC_INF_SP241_070512	SP241	SV	1310	1L	N/A	7/5/2012	0930	-30	7/5/2012	0932	-2	x				
2	OC_VGAC_INT_SP245_070512	SP245	SV	1553	1L	N/A	7/5/2012	0925	-30	7/5/2012	0927	-2	x				
3	OC_VGAC_EFF_SP242_070512	SP242	SV	1019	1L	N/A	7/5/2012	0920	-30	7/5/2012	0922	-2	x				
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	CEL	7/5/12	1430
	Dannyle	7/5/12	17:35

12/01/11 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-07-0244

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: DE MAXIMIS

DATE: 07/05/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature _____.____ °C - 0.3 °C (CF) = _____.____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☑ Air ☐ Filter **Initial:** DEE

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☑ N/A **Initial:** DEE

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** TS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na_2** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na_2** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na_2** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☑Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** TS

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** WSC

Preservative: **h:** HCL **n:** HNO_3 **na_2:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** WS

Appendix B.2.2

August 9, 2012
Vapor Analytical Results

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-08-0682

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: de maximis, inc.

Client Project Name: Omega

Attention: Jaime Dinello
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 08/17/2012 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Client:	de maximis, inc. 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	12-08-0682
		Project name:	Omega
		Received:	08/09/12 18:30
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_080912 (12-08-0682-1)						
Chloroform	**38**		5.0	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	**6.7**		5.0	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**1300**		10	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	**58**		5.0	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**1400**		100	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_INT_SP245_080912 (12-08-0682-2)						
Chloroform	**35**		2.5	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**3.1**		2.5	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	**16**		2.5	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**58**		25	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_EFF_SP242_080912 (12-08-0682-3)						
Chloroform	**2.3**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**0.92**		0.50	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**0.71**		0.50	ppb (v/v)	EPA TO-15	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Client:	de maximis, inc. 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	12-08-0682
		Project name:	Omega_
		Received:	08/09/12 18:30
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_080912 (12-08-0682-1)						
Chloroform	**190**		24	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	**27**		20	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**9100**		68	ug/m3	EPA TO-15	N/A
Trichloroethene	**310**		27	ug/m3	EPA TO-15	N/A
OC_VGAC_INT_SP245_080912 (12-08-0682-2)						
Chloroform	**170**		12	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**13**		10	ug/m3	EPA TO-15	N/A
Trichloroethene	**87**		13	ug/m3	EPA TO-15	N/A
OC_VGAC_EFF_SP242_080912 (12-08-0682-3)						
Chloroform	**11**		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**3.7**		2.0	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**4.8**		3.4	ug/m3	EPA TO-15	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	08/09/12
1322 Scott Street, Suite 104		Work Order No:	12-08-0682
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: Omega_			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_INF_SP241_080912	**12-08-0682-1-A**	**08/09/12 10:43**	**Air**	**GC/MS K**	**N/A**	**08/11/12 20:55**	**120811L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	5.0	10		Methylene Chloride	ND	50	10	
Carbon Tetrachloride	ND	5.0	10		Naphthalene	ND	50	10	
Chloroform	38	5.0	10		Tetrachloroethene	1300	10	20	
1,1-Dichloroethane	ND	5.0	10		Trichloroethene	58	5.0	10	
1,2-Dichloroethane	6.7	5.0	10		1,1,2-Trichloroethane	ND	5.0	10	
1,4-Dichlorobenzene	ND	5.0	10		Vinyl Chloride	ND	5.0	10	
Methyl-t-Butyl Ether (MTBE)	ND	20	10		Total Volatile Organic Compounds	1400	100	20	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	106	57-129		1,2-Dichloroethane-d4	101	47-137	
Toluene-d8	94	78-156					

OC_VGAC_INT_SP245_080912	**12-08-0682-2-A**	**08/09/12 10:38**	**Air**	**GC/MS K**	**N/A**	**08/11/12 22:35**	**120811L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.5	5		Methylene Chloride	ND	25	5	
Carbon Tetrachloride	ND	2.5	5		Naphthalene	ND	25	5	
Chloroform	35	2.5	5		Tetrachloroethene	ND	2.5	5	
1,1-Dichloroethane	3.1	2.5	5		Trichloroethene	16	2.5	5	
1,2-Dichloroethane	ND	2.5	5		1,1,2-Trichloroethane	ND	2.5	5	
1,4-Dichlorobenzene	ND	2.5	5		Vinyl Chloride	ND	2.5	5	
Methyl-t-Butyl Ether (MTBE)	ND	10	5		Total Volatile Organic Compounds	58	25	5	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	57-129		1,2-Dichloroethane-d4	104	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	08/09/12
1322 Scott Street, Suite 104		Work Order No:	12-08-0682
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: Omega_			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_EFF_SP242_080912	**12-08-0682-3-A**	**08/09/12 10:33**	**Air**	**GC/MS K**	**N/A**	**08/11/12 23:27**	**120811L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	2.3	0.50	1		Tetrachloroethene	0.71	0.50	1	
1,1-Dichloroethane	0.92	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	ND	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	100	57-129		1,2-Dichloroethane-d4	106	47-137	
Toluene-d8	96	78-156					

Method Blank	**099-15-617-3**	**N/A**	**Air**	**GC/MS K**	**N/A**	**08/11/12 14:49**	**120811L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	ND	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	98	57-129		1,2-Dichloroethane-d4	100	47-137	
Toluene-d8	99	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	08/09/12
1322 Scott Street, Suite 104		Work Order No:	12-08-0682
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Omega_			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_INF_SP241_080912	**12-08-0682-1-A**	**08/09/12 10:43**	**Air**	**GC/MS K**	**N/A**	**08/11/12 20:55**	**120811L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	16	10		Methylene Chloride	ND	170	10	
Carbon Tetrachloride	ND	31	10		Naphthalene	ND	260	10	
Chloroform	190	24	10		Tetrachloroethene	9100	68	20	
1,1-Dichloroethane	ND	20	10		Trichloroethene	310	27	10	
1,2-Dichloroethane	27	20	10		1,1,2-Trichloroethane	ND	27	10	
1,4-Dichlorobenzene	ND	30	10		Vinyl Chloride	ND	13	10	
Methyl-t-Butyl Ether (MTBE)	ND	72	10						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	106	57-129		1,2-Dichloroethane-d4	101	47-137	
Toluene-d8	94	78-156					

OC_VGAC_INT_SP245_080912	**12-08-0682-2-A**	**08/09/12 10:38**	**Air**	**GC/MS K**	**N/A**	**08/11/12 22:35**	**120811L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	8.0	5		Methylene Chloride	ND	87	5	
Carbon Tetrachloride	ND	16	5		Naphthalene	ND	130	5	
Chloroform	170	12	5		Tetrachloroethene	ND	17	5	
1,1-Dichloroethane	13	10	5		Trichloroethene	87	13	5	
1,2-Dichloroethane	ND	10	5		1,1,2-Trichloroethane	ND	14	5	
1,4-Dichlorobenzene	ND	15	5		Vinyl Chloride	ND	6.4	5	
Methyl-t-Butyl Ether (MTBE)	ND	36	5						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	57-129		1,2-Dichloroethane-d4	104	47-137	
Toluene-d8	95	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	08/09/12
1322 Scott Street, Suite 104		Work Order No:	12-08-0682
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Omega_			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_EFF_SP242_080912	**12-08-0682-3-A**	**08/09/12 10:33**	**Air**	**GC/MS K**	**N/A**	**08/11/12 23:27**	**120811L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	11	2.4	1		Tetrachloroethene	4.8	3.4	1	
1,1-Dichloroethane	3.7	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	100	57-129		1,2-Dichloroethane-d4	106	47-137	
Toluene-d8	96	78-156					

Method Blank	**099-15-617-3**	**N/A**	**Air**	**GC/MS K**	**N/A**	**08/11/12 14:49**	**120811L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	ND	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	98	57-129		1,2-Dichloroethane-d4	100	47-137	
Toluene-d8	99	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Date Received: N/A
Work Order No: 12-08-0682
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-3	**Air**	**GC/MS K**	**N/A**	**08/11/12**	**120811L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	24.63	99	24.72	99	60-156	44-172	0	0-40	
Carbon Tetrachloride	25.00	26.09	104	26.01	104	64-154	49-169	0	0-32	
Chloroform	25.00	24.62	98	24.40	98	50-150	33-167	1	0-35	
1,1-Dichloroethane	25.00	25.05	100	24.74	99	50-150	33-167	1	0-35	
1,2-Dichloroethane	25.00	24.97	100	24.49	98	69-153	55-167	2	0-35	
1,4-Dichlorobenzene	25.00	22.56	90	21.83	87	36-156	16-176	3	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	24.18	97	23.95	96	50-150	33-167	1	0-35	
Methylene Chloride	25.00	27.66	111	29.27	117	50-150	33-167	6	0-35	
Naphthalene	25.00	19.44	78	16.54	66	40-190	15-215	16	0-35	
Tetrachloroethene	25.00	25.97	104	23.46	94	56-152	40-168	10	0-40	
Trichloroethene	25.00	25.48	102	25.44	102	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	25.00	25.18	101	26.38	106	65-149	51-163	5	0-37	
Vinyl Chloride	25.00	26.75	107	26.06	104	45-177	23-199	3	0-36	

Total number of LCS compounds : 13
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Summa Canister Vacuum Summary

Work Order Number: **12-08-0682**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
OC_VGAC_INF_SP241_080912	-4.20	-29.70	LC105	Summa Canister 1L
OC_VGAC_INT_SP245_080912	-4.40	-29.80	LC437	Summa Canister 1L
OC_VGAC_EFF_SP242_080912	-3.00	-29.70	LC508	Summa Canister 1L

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 12-08-0682

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
MPN - Most Probable Number

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

AIR CHAIN OF CUSTODY RECORD

DATE: 08/09/12
PAGE: 1 OF 1

LABORATORY CLIENT: de maximis
ADDRESS: 1322 Scott St., Suite 104
CITY: San Diego STATE: CA ZIP: 92106
TEL: (562) 756-8149 EMAIL: jdinello@demaximis.com

CLIENT PROJECT NAME / NUMBER: Omega
PROJECT ADDRESS: 12520 Whittier Blvd.
CITY: Whittier STATE: CA ZIP: 90602
PROJECT CONTACT: Andrew Miller - amiller@jacobandhefner.com

P.O. NO.:
LAB CONTACT OR QUOTE NO.:
LAB USE ONLY: 12-08-0682

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SAMPLER(S): (NAME / SIGNATURE) Carlton Hamm Jr.

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☒ EDD

SPECIAL INSTRUCTIONS: 1 - Select compounds: Benzene, Carbon tetrachloride, Chloroform, p-Dichlorobenzen, 1,1-Dichloroethane, Ethylene dichloride, Methyl tert-butyl ether, Methylene chloride, Naphthalene, Percholorehtylene, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl chloride

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type (I) Indoor (SV) Soil Vap. (A) Ambient	Sampling Equipment Info: Canister ID#	Canister Size 6L or 1L	Flow Controller ID#	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	TO-15 Select Compounds [1]				
1	OC_VGAC_INF_SP241_080912	SP241	SV	1045	1L	NA	8/9/2012	1040	-30	8/9/2012	1043	-2	x				
2	OC_VGAC_INT_SP245_080912	SP245	SV	1675	1L	NA	8/9/2012	1035	-30	8/9/2012	1038	-2	x				
3	OC_VGAC_EFF_SP242_080912	SP242	SV	1449	1L	NA	8/9/2012	1030	-30	8/9/2012	1033	-2	x				
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	CEL	8/9/12	1415
	Bannyle CEL	8/9/12	18:30

12/01/11 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-08-0682

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: de maximis

DATE: 08/09/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature ____.____ °C - 0.3 °C (CF) = ____.____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☑ Air ☐ Filter Initial: AP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☑ N/A Initial: AP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: PS

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☑Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** PS

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** DC

Preservative: **h:** HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** K.C

Appendix B.2.3

September 12, 2012
Vapor Analytical Results

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-09-0674

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: de maximis, inc.

Client Project Name: Omega

Attention: Jaime Dinello
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Approved for release on 09/19/2012 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Client:	de maximis, inc. 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	12-09-0674
		Project name:	Omega
		Received:	09/12/12 18:15
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_091212 (12-09-0674-1)						
Chloroform	**42**		2.5	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**2.5**		2.5	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	**7.2**		2.5	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**910**		5.0	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	**59**		2.5	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**1000**		50	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_INT_SP245_091212 (12-09-0674-2)						
Chloroform	**37**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**3.7**		0.50	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	**3.8**		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**45**		5.0	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_EFF_SP242_091212 (12-09-0674-3)						
Chloroform	**3.4**		0.58	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**1.1**		0.58	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**0.73**		0.58	ppb (v/v)	EPA TO-15	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Client:	de maximis, inc. 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	12-09-0674
		Project name:	Omega
		Received:	09/12/12 18:15
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_091212 (12-09-0674-1)						
Chloroform	**210**		12	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**10**		10	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	**29**		10	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**6200**		34	ug/m3	EPA TO-15	N/A
Trichloroethene	**320**		13	ug/m3	EPA TO-15	N/A
OC_VGAC_INT_SP245_091212 (12-09-0674-2)						
Chloroform	**180**		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**15**		2.0	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	**15**		2.0	ug/m3	EPA TO-15	N/A
OC_VGAC_EFF_SP242_091212 (12-09-0674-3)						
Chloroform	**17**		2.8	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**4.6**		2.3	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**5.0**		3.9	ug/m3	EPA TO-15	N/A

Subcontracted analyses, if any, are not included in this summary.

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	09/12/12
1322 Scott Street, Suite 104		Work Order No:	12-09-0674
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: Omega			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_INF_SP241_091212	**12-09-0674-1-A**	**09/12/12 11:38**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 02:10**	**120912L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.5	5		Methylene Chloride	ND	25	5	
Carbon Tetrachloride	ND	2.5	5		Naphthalene	ND	25	5	
Chloroform	42	2.5	5		Tetrachloroethene	910	5.0	10	
1,1-Dichloroethane	2.5	2.5	5		Trichloroethene	59	2.5	5	
1,2-Dichloroethane	7.2	2.5	5		1,1,2-Trichloroethane	ND	2.5	5	
1,4-Dichlorobenzene	ND	2.5	5		Vinyl Chloride	ND	2.5	5	
Methyl-t-Butyl Ether (MTBE)	ND	10	5		Total Volatile Organic Compounds	1000	50	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	107	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	99	78-156					

OC_VGAC_INT_SP245_091212	**12-09-0674-2-A**	**09/12/12 11:33**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 03:05**	**120912L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	37	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	3.7	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	3.8	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	45	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	98	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.		Date Received:	09/12/12
1322 Scott Street, Suite 104		Work Order No:	12-09-0674
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ppb (v/v)
Project: Omega			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_EFF_SP242_091212	**12-09-0674-3-A**	**09/12/12 11:28**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 16:48**	**120913L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.58	1.16		Methylene Chloride	ND	5.8	1.16	
Carbon Tetrachloride	ND	0.58	1.16		Naphthalene	ND	5.8	1.16	
Chloroform	3.4	0.58	1.16		Tetrachloroethene	0.73	0.58	1.16	
1,1-Dichloroethane	1.1	0.58	1.16		Trichloroethene	ND	0.58	1.16	
1,2-Dichloroethane	ND	0.58	1.16		1,1,2-Trichloroethane	ND	0.58	1.16	
1,4-Dichlorobenzene	ND	0.58	1.16		Vinyl Chloride	ND	0.58	1.16	
Methyl-t-Butyl Ether (MTBE)	ND	2.3	1.16		Total Volatile Organic Compounds	ND	5.8	1.16	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	106	57-129		1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	95	78-156					

Method Blank	**099-15-617-5**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 15:44**	**120913L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	110	57-129		1,2-Dichloroethane-d4	108	47-137	
Toluene-d8	100	78-156					

Method Blank	**099-15-617-6**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**09/12/12 13:55**	**120912L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		Trichloroethene	ND	0.50	1	
1,2-Dichloroethane	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Vinyl Chloride	ND	0.50	1	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1		Total Volatile Organic Compounds	ND	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	105	57-129		1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	100	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	09/12/12
1322 Scott Street, Suite 104		Work Order No:	12-09-0674
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3

Project: Omega

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_INF_SP241_091212	**12-09-0674-1-A**	**09/12/12 11:38**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 02:10**	**120912L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	8.0	5		Methylene Chloride	ND	87	5	
Carbon Tetrachloride	ND	16	5		Naphthalene	ND	130	5	
Chloroform	210	12	5		Tetrachloroethene	6200	34	10	
1,1-Dichloroethane	10	10	5		Trichloroethene	320	13	5	
1,2-Dichloroethane	29	10	5		1,1,2-Trichloroethane	ND	14	5	
1,4-Dichlorobenzene	ND	15	5		Vinyl Chloride	ND	6.4	5	
Methyl-t-Butyl Ether (MTBE)	ND	36	5						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	107	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	99	78-156					

OC_VGAC_INT_SP245_091212	**12-09-0674-2-A**	**09/12/12 11:33**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 03:05**	**120912L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	180	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	15	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	15	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	98	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.		Date Received:	09/12/12
1322 Scott Street, Suite 104		Work Order No:	12-09-0674
San Diego, CA 92106-2727		Preparation:	N/A
		Method:	EPA TO-15
		Units:	ug/m3
Project: Omega			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC_VGAC_EFF_SP242_091212	**12-09-0674-3-A**	**09/12/12 11:28**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 16:48**	**120913L01**

Comment(s): -Total Volatile Organic Compounds equals the sum of listed compound detections found in the sample.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.9	1.16		Methylene Chloride	ND	20	1.16	
Carbon Tetrachloride	ND	3.6	1.16		Naphthalene	ND	30	1.16	
Chloroform	17	2.8	1.16		Tetrachloroethene	5.0	3.9	1.16	
1,1-Dichloroethane	4.6	2.3	1.16		Trichloroethene	ND	3.1	1.16	
1,2-Dichloroethane	ND	2.3	1.16		1,1,2-Trichloroethane	ND	3.2	1.16	
1,4-Dichlorobenzene	ND	3.5	1.16		Vinyl Chloride	ND	1.5	1.16	
Methyl-t-Butyl Ether (MTBE)	ND	8.4	1.16						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	106	57-129		1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	95	78-156					

Method Blank	**099-15-617-5**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**09/13/12 15:44**	**120913L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	ND	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	110	57-129		1,2-Dichloroethane-d4	108	47-137	
Toluene-d8	100	78-156					

Method Blank	**099-15-617-6**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**09/12/12 13:55**	**120912L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	ND	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	ND	2.0	1		Trichloroethene	ND	2.7	1	
1,2-Dichloroethane	ND	2.0	1		1,1,2-Trichloroethane	ND	2.7	1	
1,4-Dichlorobenzene	ND	3.0	1		Vinyl Chloride	ND	1.3	1	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	105	57-129		1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	100	78-156					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Date Received: N/A
Work Order No: 12-09-0674
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-6	**Air**	**GC/MS YY**	**N/A**	**09/12/12**	**120912L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	24.50	98	24.72	99	60-156	44-172	1	0-40	
Carbon Tetrachloride	25.00	25.74	103	25.93	104	64-154	49-169	1	0-32	
Chloroform	25.00	25.01	100	25.74	103	50-150	33-167	3	0-35	
1,1-Dichloroethane	25.00	25.95	104	25.83	103	50-150	33-167	0	0-35	
1,2-Dichloroethane	25.00	24.75	99	25.09	100	69-153	55-167	1	0-35	
1,4-Dichlorobenzene	25.00	20.58	82	20.24	81	36-156	16-176	2	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	24.96	100	26.27	105	50-150	33-167	5	0-35	
Methylene Chloride	25.00	23.71	95	24.10	96	50-150	33-167	2	0-35	
Naphthalene	25.00	23.53	94	23.72	95	40-190	15-215	1	0-35	
Tetrachloroethene	25.00	24.36	97	24.29	97	56-152	40-168	0	0-40	
Trichloroethene	25.00	24.62	98	24.79	99	63-159	47-175	1	0-34	
1,1,2-Trichloroethane	25.00	24.98	100	25.10	100	65-149	51-163	0	0-37	
Vinyl Chloride	25.00	26.12	104	26.62	106	45-177	23-199	2	0-36	

Total number of LCS compounds : 13
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.
1322 Scott Street, Suite 104
San Diego, CA 92106-2727

Date Received: N/A
Work Order No: 12-09-0674
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-5	**Air**	**GC/MS YY**	**N/A**	**09/13/12**	**120913L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	23.04	92	23.21	93	60-156	44-172	1	0-40	
Carbon Tetrachloride	25.00	24.18	97	24.23	97	64-154	49-169	0	0-32	
Chloroform	25.00	25.03	100	25.12	100	50-150	33-167	0	0-35	
1,1-Dichloroethane	25.00	26.38	106	27.92	112	50-150	33-167	6	0-35	
1,2-Dichloroethane	25.00	24.44	98	24.98	100	69-153	55-167	2	0-35	
1,4-Dichlorobenzene	25.00	19.14	77	18.99	76	36-156	16-176	1	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	23.84	95	25.75	103	50-150	33-167	8	0-35	
Methylene Chloride	25.00	22.61	90	23.28	93	50-150	33-167	3	0-35	
Naphthalene	25.00	22.96	92	22.87	91	40-190	15-215	0	0-35	
Tetrachloroethene	25.00	22.73	91	22.50	90	56-152	40-168	1	0-40	
Trichloroethene	25.00	23.28	93	23.30	93	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	25.00	24.16	97	24.18	97	65-149	51-163	0	0-37	
Vinyl Chloride	25.00	27.84	111	28.44	114	45-177	23-199	2	0-36	

Total number of LCS compounds : 13
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Summa Canister Vacuum Summary

Work Order Number: **12-09-0674**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
OC_VGAC_INF_SP241_091212	-2.00	-29.70	LC136	Summa Canister 1L
OC_VGAC_INT_SP245_091212	-2.00	-29.70	SLC082	Summa Canister 1L
OC_VGAC_EFF_SP242_091212	-2.00	-29.50	LC235	Summa Canister 1L

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 12-09-0674

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
MPN - Most Probable Number

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1427
TEL: (714) 895-5494 . FAX: (714) 894-7501

AIR CHAIN OF CUSTODY RECORD

DATE: 09/12/12
PAGE: 1 OF 1

LABORATORY CLIENT: de maximis
ADDRESS: 1322 Scott St., Suite 104
CITY: San Diego STATE: CA ZIP: 92106
TEL: (562) 756-8149 EMAIL: jdinello@demaximis.com

CLIENT PROJECT NAME / NUMBER: Omega
PROJECT ADDRESS: 12520 Whittier Blvd.
CITY: Whittier STATE: CA ZIP: 90602
PROJECT CONTACT: Andrew Miller - amiller@jacobandhefner.com

P.O. NO.:
LAB CONTACT OR QUOTE NO.:
LAB USE ONLY 12-09-0674

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS
SAMPLER(S): (NAME / SIGNATURE) Carlton Hamm Jr

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
■ EDD

SPECIAL INSTRUCTIONS: 1 - Select compounds: Benzene, Carbon tetrachloride, Chloroform, p-Dichlorobenzen, 1,1-Dichloroethane, Ethylene dichloride, Methyl tert-butyl ether, Methylene chloride, Naphthalene, Percholorehtylene, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl chloride

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	FIELD ID / Point of Collection	Air Type (I) Indoor (SV) Soil Vap. (A) Ambient	Sampling Equipment Info: Canister ID#	Canister Size 6L or 1L	Flow Controller ID#	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	TO-15 Select Compounds [1]				
1	OC_VGAC_INF_SP241_091212	SP241	SV	1048	1L	NA	9/12/2012	1135	-30	9/12/2012	1138	-2	x				
2	OC_VGAC_INT_SP245_091212	SP245	SV	1285	1L	NA	9/12/2012	1130	-30	9/12/2012	1133	-2	x				
3	OC_VGAC_EFF_SP242_091212	SP242	SV	1208	1L	NA	9/12/2012	1125	-30	9/12/2012	1128	-2	x				
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	[signature] CSL	9/12/12	1345
[signature]	[signature] CSL	9/12/12	18:15

12/01/11 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-09-0674

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: DE MAXIMS

DATE: 09/12/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature ____.____ °C - 0.3 °C (CF) = ____.____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☑ Air ☐ Filter **Initial:** AM

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☑ N/A **Initial:** AM

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** AM

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☐	☐	☑
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na_2** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na_2** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na_2** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☑Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** NL

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** C

Preservative: **h:** HCL **n:** HNO_3 **na_2:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** C

Appendix B.3

Extraction Well and Monitoring Well Analytical Results

Water

Appendix B.3.1

August 21 to 22, 2012
Observation Wells

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-08-1586

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: CDM Smith Inc.

Client Project Name: Omega Semi-Annual GW / 10500-90421

Attention: Sharon Wallin
111 Academy
Suite 150
Irvine, CA 92617-3000

Approved for release on 09/05/2012 by:
Stephen Nowak
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Calscience Environmental Laboratories, Inc.

Contents

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Work Order Number: 12-08-1586

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Calscience Environmental Laboratories, Inc.

Client:	CDM Smith Inc. 111 Academy Suite 150	Work Order:	12-08-1586
		Project name:	Omega Semi-Annual GW / 10500-90421
		Received:	08/22/12 15:07
Attn:	Sharon Wallin		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
OC-GW-OW9K2-082112 (12-08-1586-1)						
1,4-Dioxane	**390**		10	ug/L	EPA 8270C(M) Isotope Dilution	EPA 3520C
Chloroform	**250**		5.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethane	**8.3**		5.0	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	**44**		5.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	**450**		100	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	**3400**		100	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloro-1,2,2-Trifluoroethane	**440**		100	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	**220**		5.0	ug/L	EPA 8260B	EPA 5030C
Trichlorofluoromethane	**140**		5.0	ug/L	EPA 8260B	EPA 5030C
OC-GW-OW4BK2-082212 (12-08-1586-2)						
Tetrachloroethene	**3.2**		0.50	ug/L	EPA 8260B	EPA 5030C
Methyl-t-Butyl Ether (MTBE)	**0.90**		0.50	ug/L	EPA 8260B	EPA 5030C

Subcontracted analyses, if any, are not included in this summary.

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*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

CDM Smith Inc.		Date Received:	08/22/12
111 Academy		Work Order No:	12-08-1586
Suite 150		Preparation:	EPA 3520C
Irvine, CA 92617-3000		Method:	EPA 8270C(M) Isotope Dilution
Project: Omega Semi-Annual GW / 10500-90421			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC-GW-OW9K2-082112	**12-08-1586-1-D**	**08/21/12 09:53**	**Aqueous**	**GC/MS Y**	**08/24/12**	**08/28/12 15:34**	**120824L17**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	390	10	10		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	91	56-123	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC-GW-OW4BK2-082212	**12-08-1586-2-D**	**08/22/12 13:58**	**Aqueous**	**GC/MS Y**	**08/24/12**	**08/28/12 14:36**	**120824L17**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	88	56-123	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-09-004-2,048**	**N/A**	**Aqueous**	**GC/MS Y**	**08/24/12**	**08/28/12 12:10**	**120824L17**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	82	56-123	

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RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

CDM Smith Inc.		Date Received:	08/22/12
111 Academy		Work Order No:	12-08-1586
Suite 150		Preparation:	EPA 5030C
Irvine, CA 92617-3000		Method:	EPA 8260B
		Units:	ug/L

Project: Omega Semi-Annual GW / 10500-90421

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC-GW-OW9K2-082112	**12-08-1586-1-A**	**08/21/12 09:53**	**Aqueous**	**GC/MS L**	**08/24/12**	**08/24/12 14:22**	**120824L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	100	10		Acrolein	ND	200	10	
Benzene	ND	5.0	10		Acrylonitrile	ND	100	10	
Bromobenzene	ND	5.0	10		1,3-Dichloropropane	ND	10	10	
Bromochloromethane	ND	10	10		2,2-Dichloropropane	ND	10	10	
Bromodichloromethane	ND	5.0	10		1,1-Dichloropropene	ND	5.0	10	
Bromoform	ND	5.0	10		c-1,3-Dichloropropene	ND	5.0	10	
Bromomethane	ND	10	10		t-1,3-Dichloropropene	ND	5.0	10	
n-Butylbenzene	ND	5.0	10		Ethylbenzene	ND	5.0	10	
sec-Butylbenzene	ND	5.0	10		Isopropylbenzene	ND	5.0	10	
tert-Butylbenzene	ND	5.0	10		p-Isopropyltoluene	ND	5.0	10	
Carbon Tetrachloride	ND	5.0	10		Methylene Chloride	ND	10	10	
Chlorobenzene	ND	5.0	10		Naphthalene	ND	10	10	
Chloroethane	ND	5.0	10		n-Propylbenzene	ND	5.0	10	
2-Chloroethyl Vinyl Ether	ND	50	10		Styrene	ND	5.0	10	
Chloroform	250	5.0	10		1,1,1,2-Tetrachloroethane	ND	5.0	10	
Chloromethane	ND	5.0	10		1,1,2,2-Tetrachloroethane	ND	5.0	10	
2-Chlorotoluene	ND	5.0	10		Tetrachloroethene	3400	100	200	
4-Chlorotoluene	ND	5.0	10		Toluene	ND	5.0	10	
Dibromochloromethane	ND	5.0	10		1,2,3-Trichlorobenzene	ND	5.0	10	
1,2-Dibromo-3-Chloropropane	ND	50	10		1,2,4-Trichlorobenzene	ND	5.0	10	
1,2-Dibromoethane	ND	5.0	10		1,1,1-Trichloroethane	ND	5.0	10	
Dibromomethane	ND	5.0	10		Hexachloro-1,3-Butadiene	ND	20	10	
1,2-Dichlorobenzene	ND	5.0	10		1,1,2-Trichloro-1,2,2-Trifluoroethane	440	100	200	
1,3-Dichlorobenzene	ND	5.0	10		1,1,2-Trichloroethane	ND	5.0	10	
1,4-Dichlorobenzene	ND	5.0	10		Trichloroethene	220	5.0	10	
Dichlorodifluoromethane	ND	10	10		Trichlorofluoromethane	140	5.0	10	
1,1-Dichloroethane	8.3	5.0	10		1,2,3-Trichloropropane	ND	10	10	
1,2-Dichloroethane	44	5.0	10		1,2,4-Trimethylbenzene	ND	5.0	10	
1,1-Dichloroethene	450	100	200		1,3,5-Trimethylbenzene	ND	5.0	10	
c-1,2-Dichloroethene	ND	5.0	10		p/m-Xylene	ND	5.0	10	
t-1,2-Dichloroethene	ND	5.0	10		o-Xylene	ND	5.0	10	
1,2-Dichloropropane	ND	5.0	10		Methyl-t-Butyl Ether (MTBE)	ND	5.0	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	68-120		Dibromofluoromethane	108	80-127	
1,2-Dichloroethane-d4	120	80-128		Toluene-d8	103	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

CDM Smith Inc.		Date Received:	08/22/12
111 Academy		Work Order No:	12-08-1586
Suite 150		Preparation:	EPA 5030C
Irvine, CA 92617-3000		Method:	EPA 8260B
		Units:	ug/L

Project: Omega Semi-Annual GW / 10500-90421

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
OC-GW-OW4BK2-082212	**12-08-1586-2-A**	**08/22/12 13:58**	**Aqueous**	**GC/MS L**	**08/24/12**	**08/24/12 13:53**	**120824L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	10	1		Acrolein	ND	20	1	
Benzene	ND	0.50	1		Acrylonitrile	ND	10	1	
Bromobenzene	ND	0.50	1		1,3-Dichloropropane	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2,2-Dichloropropane	ND	1.0	1	
Bromodichloromethane	ND	0.50	1		1,1-Dichloropropene	ND	0.50	1	
Bromoform	ND	0.50	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromomethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
n-Butylbenzene	ND	0.50	1		Ethylbenzene	ND	0.50	1	
sec-Butylbenzene	ND	0.50	1		Isopropylbenzene	ND	0.50	1	
tert-Butylbenzene	ND	0.50	1		p-Isopropyltoluene	ND	0.50	1	
Carbon Tetrachloride	ND	0.50	1		Methylene Chloride	ND	1.0	1	
Chlorobenzene	ND	0.50	1		Naphthalene	ND	1.0	1	
Chloroethane	ND	0.50	1		n-Propylbenzene	ND	0.50	1	
2-Chloroethyl Vinyl Ether	ND	5.0	1		Styrene	ND	0.50	1	
Chloroform	ND	0.50	1		1,1,1,2-Tetrachloroethane	ND	0.50	1	
Chloromethane	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	0.50	1	
2-Chlorotoluene	ND	0.50	1		Tetrachloroethene	3.2	0.50	1	
4-Chlorotoluene	ND	0.50	1		Toluene	ND	0.50	1	
Dibromochloromethane	ND	0.50	1		1,2,3-Trichlorobenzene	ND	0.50	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		1,1,1-Trichloroethane	ND	0.50	1	
Dibromomethane	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	2.0	1	
1,2-Dichlorobenzene	ND	0.50	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Trichloroethene	ND	0.50	1	
Dichlorodifluoromethane	ND	1.0	1		Trichlorofluoromethane	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		1,2,3-Trichloropropane	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		1,2,4-Trimethylbenzene	ND	0.50	1	
1,1-Dichloroethene	ND	0.50	1		1,3,5-Trimethylbenzene	ND	0.50	1	
c-1,2-Dichloroethene	ND	0.50	1		p/m-Xylene	ND	0.50	1	
t-1,2-Dichloroethene	ND	0.50	1		o-Xylene	ND	0.50	1	
1,2-Dichloropropane	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	0.90	0.50	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	68-120		Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	110	80-128		Toluene-d8	90	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

CDM Smith Inc.		Date Received:	08/22/12
111 Academy		Work Order No:	12-08-1586
Suite 150		Preparation:	EPA 5030C
Irvine, CA 92617-3000		Method:	EPA 8260B
		Units:	ug/L

Project: Omega Semi-Annual GW / 10500-90421

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-10-025-2,478**	**N/A**	**Aqueous**	**GC/MS L**	**08/24/12**	**08/24/12 12:28**	**120824L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	10	1		Acrolein	ND	20	1	
Benzene	ND	0.50	1		Acrylonitrile	ND	10	1	
Bromobenzene	ND	0.50	1		1,3-Dichloropropane	ND	1.0	1	
Bromochloromethane	ND	1.0	1		2,2-Dichloropropane	ND	1.0	1	
Bromodichloromethane	ND	0.50	1		1,1-Dichloropropene	ND	0.50	1	
Bromoform	ND	0.50	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromomethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
n-Butylbenzene	ND	0.50	1		Ethylbenzene	ND	0.50	1	
sec-Butylbenzene	ND	0.50	1		Isopropylbenzene	ND	0.50	1	
tert-Butylbenzene	ND	0.50	1		p-Isopropyltoluene	ND	0.50	1	
Carbon Tetrachloride	ND	0.50	1		Methylene Chloride	ND	1.0	1	
Chlorobenzene	ND	0.50	1		Naphthalene	ND	1.0	1	
Chloroethane	ND	0.50	1		n-Propylbenzene	ND	0.50	1	
2-Chloroethyl Vinyl Ether	ND	5.0	1		Styrene	ND	0.50	1	
Chloroform	ND	0.50	1		1,1,1,2-Tetrachloroethane	ND	0.50	1	
Chloromethane	ND	0.50	1		1,1,2,2-Tetrachloroethane	ND	0.50	1	
2-Chlorotoluene	ND	0.50	1		Tetrachloroethene	ND	0.50	1	
4-Chlorotoluene	ND	0.50	1		Toluene	ND	0.50	1	
Dibromochloromethane	ND	0.50	1		1,2,3-Trichlorobenzene	ND	0.50	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,2,4-Trichlorobenzene	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		1,1,1-Trichloroethane	ND	0.50	1	
Dibromomethane	ND	0.50	1		Hexachloro-1,3-Butadiene	ND	2.0	1	
1,2-Dichlorobenzene	ND	0.50	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1	
1,3-Dichlorobenzene	ND	0.50	1		1,1,2-Trichloroethane	ND	0.50	1	
1,4-Dichlorobenzene	ND	0.50	1		Trichloroethene	ND	0.50	1	
Dichlorodifluoromethane	ND	1.0	1		Trichlorofluoromethane	ND	0.50	1	
1,1-Dichloroethane	ND	0.50	1		1,2,3-Trichloropropane	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		1,2,4-Trimethylbenzene	ND	0.50	1	
1,1-Dichloroethene	ND	0.50	1		1,3,5-Trimethylbenzene	ND	0.50	1	
c-1,2-Dichloroethene	ND	0.50	1		p/m-Xylene	ND	0.50	1	
t-1,2-Dichloroethene	ND	0.50	1		o-Xylene	ND	0.50	1	
1,2-Dichloropropane	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	68-120		Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	113	80-128		Toluene-d8	92	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

EPA TO-15 Tentatively Identified Compound List

Work Order	Sample #	Client ID	Compound	CAS No.	RT	On Column Conc. ug/L	Estimated Conc. ug/L
12-08-1586	1	OC-GW-OW9K2-082112	No TICs found				
12-08-1586	2	OC-GW-OW4BK2-082212	No TICs found				

RT Retention Time

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

CDM Smith Inc.		Date Received:	08/22/12
111 Academy		Work Order No:	12-08-1586
Suite 150		Preparation:	EPA 5030C
Irvine, CA 92617-3000		Method:	EPA 8260B

Project Omega Semi-Annual GW / 10500-90421

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
OC-GW-OW4BK2-082212	**Aqueous**	**GC/MS L**	**08/24/12**	**08/24/12**	**120824S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	10.88	109	10.25	103	76-124	6	0-20	
Carbon Tetrachloride	ND	10.00	11.00	110	10.77	108	74-134	2	0-20	
Chlorobenzene	ND	10.00	11.39	114	11.04	110	80-120	3	0-20	
1,2-Dibromoethane	ND	10.00	11.01	110	11.01	110	80-120	0	0-20	
1,2-Dichlorobenzene	ND	10.00	10.64	106	10.42	104	80-120	2	0-20	
1,2-Dichloroethane	ND	10.00	11.81	118	11.32	113	80-120	4	0-20	
1,1-Dichloroethene	ND	10.00	9.843	98	9.944	99	73-127	1	0-20	
Ethylbenzene	ND	10.00	10.96	110	10.61	106	78-126	3	0-20	
Toluene	ND	10.00	11.07	111	10.43	104	80-120	6	0-20	
Trichloroethene	ND	10.00	10.82	108	10.22	102	77-120	6	0-20	
Vinyl Chloride	ND	10.00	10.68	107	10.85	108	72-126	2	0-20	
p/m-Xylene	ND	20.00	23.06	115	22.12	111	70-130	4	0-30	
o-Xylene	ND	10.00	10.97	110	10.62	106	70-130	3	0-30	
Methyl-t-Butyl Ether (MTBE)	0.8966	10.00	9.238	83	9.558	87	67-121	3	0-49	
Tert-Butyl Alcohol (TBA)	ND	50.00	48.71	97	48.24	96	36-162	1	0-30	
Diisopropyl Ether (DIPE)	ND	10.00	10.87	109	10.92	109	60-138	0	0-45	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	8.666	87	8.994	90	69-123	4	0-30	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	8.462	85	8.257	83	65-120	2	0-20	
Ethanol	ND	100.0	151.8	152	153.2	153	30-180	1	0-72	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CDM Smith Inc.		Date Received:	N/A
111 Academy		Work Order No:	12-08-1586
Suite 150		Preparation:	EPA 3520C
Irvine, CA 92617-3000		Method:	EPA 8270C(M) Isotope Dilution

Project: Omega Semi-Annual GW / 10500-90421

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-2,048	**Aqueous**	**GC/MS Y**	**08/24/12**	**08/28/12**	**120824L17**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	200.0	238.2	119	244.9	122	50-130	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Return to Contents

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

CDM Smith Inc.		Date Received:	N/A
111 Academy		Work Order No:	12-08-1586
Suite 150		Preparation:	EPA 5030C
Irvine, CA 92617-3000		Method:	EPA 8260B

Project: Omega Semi-Annual GW / 10500-90421

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-025-2,478	**Aqueous**	**GC/MS L**	**08/24/12**	**08/24/12**	**120824L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	10.00	9.760	98	10.04	100	80-120	73-127	3	0-20	
Carbon Tetrachloride	10.00	10.86	109	9.983	100	74-134	64-144	8	0-20	
Chlorobenzene	10.00	10.93	109	10.37	104	80-120	73-127	5	0-20	
1,2-Dibromoethane	10.00	10.36	104	10.27	103	79-121	72-128	1	0-20	
1,2-Dichlorobenzene	10.00	9.820	98	9.866	99	80-120	73-127	0	0-20	
1,2-Dichloroethane	10.00	10.08	101	10.35	103	80-120	73-127	3	0-20	
1,1-Dichloroethene	10.00	10.00	100	8.962	90	78-126	70-134	11	0-28	
Ethylbenzene	10.00	10.76	108	9.830	98	80-120	73-127	9	0-20	
Toluene	10.00	10.52	105	10.04	100	80-120	73-127	5	0-20	
Trichloroethene	10.00	10.11	101	9.626	96	79-127	71-135	5	0-20	
Vinyl Chloride	10.00	10.80	108	10.64	106	72-132	62-142	2	0-20	
p/m-Xylene	20.00	22.30	111	20.52	103	75-125	67-133	8	0-25	
o-Xylene	10.00	10.46	105	9.812	98	75-125	67-133	6	0-25	
Methyl-t-Butyl Ether (MTBE)	10.00	8.221	82	7.704	77	69-123	60-132	6	0-20	
Tert-Butyl Alcohol (TBA)	50.00	50.21	100	48.53	97	63-123	53-133	3	0-20	
Diisopropyl Ether (DIPE)	10.00	11.21	112	9.954	100	59-137	46-150	12	0-37	
Ethyl-t-Butyl Ether (ETBE)	10.00	8.670	87	7.992	80	69-123	60-132	8	0-20	
Tert-Amyl-Methyl Ether (TAME)	10.00	7.633	76	7.904	79	70-120	62-128	3	0-20	
Ethanol	100.0	156.4	156	156.3	156	28-160	6-182	0	0-57	

Total number of LCS compounds : 19
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 12-08-1586

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
MPN - Most Probable Number

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Calscience Environmental Laboratories, Inc.

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
Other CA office locations: Concord and San Luis Obispo
For courier service / sample drop off information, contact sales@calscience.com or call us.

CHAIN OF CUSTODY RECORD

WO # / LAB USE ONLY: **12-08-1586**

Date 22 August 2012
Page 1 of 1

LABORATORY CLIENT: CDM Smith
ADDRESS: 111 Academy Ste. 150
CITY: Irvine STATE: CA ZIP: 92617
TEL: (949) 752-5452 E-MAIL: WallinSF@cdmsmith.com

CLIENT PROJECT NAME / NUMBER: Omega Semi-Annual GW
P.O. NO.: 10500-90421
PROJECT CONTACT: Sharon Wallin
SAMPLER(S): (PRINT) Nacolynn Begay

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ STANDARD

☐ COELT EDF GLOBAL ID LOG CODE

SPECIAL INSTRUCTIONS:
- Level 4 Deliverables on ALL samples.
- Low level DLs, multiple dilutions.

-Thanks!

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	TPH (g) or GRO	TPH (d) or DRO or (C6C36) or (C6-C44)	TPH ( )	BTEX / MTBE (8260) or (8260B) MTBE, TICs, acetone + freon	VOCs (8260)	Oxygenates (8260)	En Core / Terra Core Prep (5035)	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PNAs (8310) or (8270)	T22 Metals (6010B/747X)	Cr(VI) [7196 or 7199 or 218.6]	1,4-Dioxane (8270M)				
1	OC-GW-OW9K2-082112	8.21.12	0953	Aqu	4	X							X									X				
2	OC-GW-OW4BK2-082212	8.22.12	1358	Aqu	4	X							X									X				

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	[signature]	8.22.12	1507
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:

DISTRIBUTION: White with final report, Green and Yellow to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Green and Yellow copies respectively.

01/01/12 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-08-1586

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: CDM SMITH

DATE: 08/22/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.7 °C - 0.3 °C (CF) = 3.4 °C ☐ Blank ☑ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter **Initial:** JS

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** D.L

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☑ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Water: ☑VOA 3 ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☑1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** D.L

Container: C: Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** JS

Preservative: h: HCL **n:** HNO_3 **na$_2$:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** JS

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-21053-1
Client Project/Site: 10500-90421-EECA.Semiannual

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
9/6/2012 3:15:28 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-21053-1	OC-GW-TB-082112	Water	08/21/12 00:01	08/21/12 17:05
440-21053-4	OC-GW-OW8B-082112	Water	08/21/12 11:19	08/21/12 17:05
440-21053-5	OC-GW-OW3B-082112	Water	08/21/12 12:53	08/21/12 17:05
440-21053-6	OC-GW-OW7-082112	Water	08/21/12 14:08	08/21/12 17:05
440-21053-7	OC-GW-OW2-082112	Water	08/21/12 14:30	08/21/12 17:05
440-21053-8	OC-GW-OW3-082112	Water	08/21/12 14:55	08/21/12 17:05
440-21053-9	OC-GW-OW7N-082112	Water	08/21/12 15:30	08/21/12 17:05

Job ID: 440-21053-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-21053-1

Comments
No additional comments.

Receipt
The samples were received on 8/21/2012 5:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3º C and 8.9º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for 2,2-Dichloropropane and cis-1,3-Dichloropropene associated with batch 48254 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: Due to the high concentration of 1,1-Dichloroethene, the matrix spike / matrix spike duplicate (MS/MSD) for batch 48254 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 48254 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 47757. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 48373 was outside control limits. Individual recoveries were within control limits.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Client Sample ID: OC-GW-TB-082112

Lab Sample ID: 440-21053-1

Date Collected: 08/21/12 00:01

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/27/12 23:22	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 23:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/27/12 23:22	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 23:22	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/27/12 23:22	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/27/12 23:22	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/27/12 23:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/27/12 23:22	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/27/12 23:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/27/12 23:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/27/12 23:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/27/12 23:22	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/27/12 23:22	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/27/12 23:22	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/27/12 23:22	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/27/12 23:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/27/12 23:22	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/27/12 23:22	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/27/12 23:22	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/27/12 23:22	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/27/12 23:22	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/27/12 23:22	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/27/12 23:22	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/27/12 23:22	1
Benzene	ND		0.50	0.28	ug/L			08/27/12 23:22	1
Bromobenzene	ND		1.0	0.27	ug/L			08/27/12 23:22	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/27/12 23:22	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/27/12 23:22	1
Bromoform	ND		1.0	0.40	ug/L			08/27/12 23:22	1
Bromomethane	ND		1.0	0.42	ug/L			08/27/12 23:22	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/27/12 23:22	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/27/12 23:22	1
Chloroethane	ND		1.0	0.40	ug/L			08/27/12 23:22	1
Chloroform	ND		1.0	0.33	ug/L			08/27/12 23:22	1
Chloromethane	ND		1.0	0.40	ug/L			08/27/12 23:22	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/27/12 23:22	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/27/12 23:22	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/27/12 23:22	1
Dibromomethane	ND		1.0	0.36	ug/L			08/27/12 23:22	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/27/12 23:22	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/27/12 23:22	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/27/12 23:22	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/27/12 23:22	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/27/12 23:22	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/27/12 23:22	1
Naphthalene	ND		1.0	0.41	ug/L			08/27/12 23:22	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/27/12 23:22	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/27/12 23:22	1
o-Xylene	ND		1.0	0.30	ug/L			08/27/12 23:22	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/27/12 23:22	1
Styrene	ND		1.0	0.20	ug/L			08/27/12 23:22	1

Client Sample ID: OC-GW-TB-082112

Lab Sample ID: 440-21053-1

Date Collected: 08/21/12 00:01

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/27/12 23:22	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/27/12 23:22	1
Toluene	ND		1.0	0.36	ug/L			08/27/12 23:22	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/27/12 23:22	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/27/12 23:22	1
Trichloroethene	ND		1.0	0.26	ug/L			08/27/12 23:22	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/27/12 23:22	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/27/12 23:22	1
Acetone	ND		10	4.5	ug/L			08/27/12 23:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/27/12 23:22	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/12 23:22*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*08/27/12 23:22*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/27/12 23:22*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*08/27/12 23:22*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	0.95	ug/L			09/04/12 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/04/12 21:05*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*09/04/12 21:05*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*09/04/12 21:05*	*1*

Client Sample ID: OC-GW-OW8B-082112

Lab Sample ID: 440-21053-4

Date Collected: 08/21/12 11:19

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/27/12 22:54	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 22:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/27/12 22:54	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 22:54	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/27/12 22:54	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/27/12 22:54	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/27/12 22:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/27/12 22:54	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/27/12 22:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/27/12 22:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/27/12 22:54	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/27/12 22:54	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/27/12 22:54	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/27/12 22:54	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/27/12 22:54	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/27/12 22:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/27/12 22:54	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/27/12 22:54	1

Client Sample ID: OC-GW-OW8B-082112
Date Collected: 08/21/12 11:19
Date Received: 08/21/12 17:05

Lab Sample ID: 440-21053-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/27/12 22:54	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/27/12 22:54	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/27/12 22:54	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/27/12 22:54	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/27/12 22:54	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/27/12 22:54	1
Benzene	ND		0.50	0.28	ug/L			08/27/12 22:54	1
Bromobenzene	ND		1.0	0.27	ug/L			08/27/12 22:54	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/27/12 22:54	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/27/12 22:54	1
Bromoform	ND		1.0	0.40	ug/L			08/27/12 22:54	1
Bromomethane	ND		1.0	0.42	ug/L			08/27/12 22:54	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/27/12 22:54	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/27/12 22:54	1
Chloroethane	ND		1.0	0.40	ug/L			08/27/12 22:54	1
Chloroform	ND		1.0	0.33	ug/L			08/27/12 22:54	1
Chloromethane	ND		1.0	0.40	ug/L			08/27/12 22:54	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/27/12 22:54	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/27/12 22:54	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/27/12 22:54	1
Dibromomethane	ND		1.0	0.36	ug/L			08/27/12 22:54	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/27/12 22:54	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/27/12 22:54	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/27/12 22:54	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/27/12 22:54	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/27/12 22:54	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/27/12 22:54	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/27/12 22:54	1
Naphthalene	ND		1.0	0.41	ug/L			08/27/12 22:54	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/27/12 22:54	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/27/12 22:54	1
o-Xylene	ND		1.0	0.30	ug/L			08/27/12 22:54	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/27/12 22:54	1
Styrene	ND		1.0	0.20	ug/L			08/27/12 22:54	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/27/12 22:54	1
Tetrachloroethene	**3.8**		1.0	0.32	ug/L			08/27/12 22:54	1
Toluene	ND		1.0	0.36	ug/L			08/27/12 22:54	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/27/12 22:54	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/27/12 22:54	1
Trichloroethene	ND		1.0	0.26	ug/L			08/27/12 22:54	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/27/12 22:54	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/27/12 22:54	1
Acetone	ND		10	4.5	ug/L			08/27/12 22:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/27/12 22:54	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/12 22:54*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*08/27/12 22:54*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*08/27/12 22:54*	*1*

Client Sample ID: OC-GW-OW8B-082112

Lab Sample ID: 440-21053-4

Date Collected: 08/21/12 11:19

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		80 - 120		08/27/12 22:54	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.062	J	0.48	0.057	ug/L		08/28/12 13:48	08/29/12 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	52		30 - 120	08/28/12 13:48	08/29/12 18:50	1

Client Sample ID: OC-GW-OW3B-082112

Lab Sample ID: 440-21053-5

Date Collected: 08/21/12 12:53

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/28/12 00:46	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 00:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/28/12 00:46	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 00:46	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/28/12 00:46	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/28/12 00:46	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/28/12 00:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/28/12 00:46	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/28/12 00:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/28/12 00:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/28/12 00:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/28/12 00:46	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/28/12 00:46	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/28/12 00:46	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/28/12 00:46	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/28/12 00:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/28/12 00:46	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/28/12 00:46	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/28/12 00:46	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/28/12 00:46	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/28/12 00:46	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/28/12 00:46	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/28/12 00:46	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/28/12 00:46	1
Benzene	ND		0.50	0.28	ug/L			08/28/12 00:46	1
Bromobenzene	ND		1.0	0.27	ug/L			08/28/12 00:46	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/28/12 00:46	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/28/12 00:46	1
Bromoform	ND		1.0	0.40	ug/L			08/28/12 00:46	1
Bromomethane	ND		1.0	0.42	ug/L			08/28/12 00:46	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/28/12 00:46	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/28/12 00:46	1
Chloroethane	ND		1.0	0.40	ug/L			08/28/12 00:46	1
Chloroform	ND		1.0	0.33	ug/L			08/28/12 00:46	1
Chloromethane	ND		1.0	0.40	ug/L			08/28/12 00:46	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/28/12 00:46	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Client Sample ID: OC-GW-OW3B-082112

Lab Sample ID: 440-21053-5

Date Collected: 08/21/12 12:53
Matrix: Water
Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/28/12 00:46	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/28/12 00:46	1
Dibromomethane	ND		1.0	0.36	ug/L			08/28/12 00:46	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/28/12 00:46	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/28/12 00:46	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/28/12 00:46	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/28/12 00:46	1
m,p-Xylene	**0.80**	**J**	1.0	0.60	ug/L			08/28/12 00:46	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/28/12 00:46	1
Naphthalene	ND		1.0	0.41	ug/L			08/28/12 00:46	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/28/12 00:46	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/28/12 00:46	1
o-Xylene	ND		1.0	0.30	ug/L			08/28/12 00:46	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/28/12 00:46	1
Styrene	ND		1.0	0.20	ug/L			08/28/12 00:46	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/28/12 00:46	1
Tetrachloroethene	**3.7**		1.0	0.32	ug/L			08/28/12 00:46	1
Toluene	ND		1.0	0.36	ug/L			08/28/12 00:46	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/28/12 00:46	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/28/12 00:46	1
Trichloroethene	ND		1.0	0.26	ug/L			08/28/12 00:46	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/28/12 00:46	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/28/12 00:46	1
Acetone	ND		10	4.5	ug/L			08/28/12 00:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/28/12 00:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/12 00:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*08/28/12 00:46*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*08/28/12 00:46*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/28/12 00:46*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	0.95	ug/L			09/04/12 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/04/12 22:02*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*09/04/12 22:02*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/04/12 22:02*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.47	0.057	ug/L		08/28/12 13:48	08/29/12 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*53*		*30 - 120*	*08/28/12 13:48*	*08/29/12 19:14*	*1*

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Client Sample ID: OC-GW-OW7-082112

Lab Sample ID: 440-21053-6

Date Collected: 08/21/12 14:08
Matrix: Water
Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/27/12 21:30	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 21:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/27/12 21:30	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 21:30	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/27/12 21:30	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/27/12 21:30	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/27/12 21:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/27/12 21:30	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/27/12 21:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/27/12 21:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/27/12 21:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/27/12 21:30	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/27/12 21:30	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/27/12 21:30	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/27/12 21:30	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/27/12 21:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/27/12 21:30	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/27/12 21:30	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/27/12 21:30	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/27/12 21:30	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/27/12 21:30	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/27/12 21:30	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/27/12 21:30	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/27/12 21:30	1
Benzene	ND		0.50	0.28	ug/L			08/27/12 21:30	1
Bromobenzene	ND		1.0	0.27	ug/L			08/27/12 21:30	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/27/12 21:30	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/27/12 21:30	1
Bromoform	ND		1.0	0.40	ug/L			08/27/12 21:30	1
Bromomethane	ND		1.0	0.42	ug/L			08/27/12 21:30	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/27/12 21:30	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/27/12 21:30	1
Chloroethane	ND		1.0	0.40	ug/L			08/27/12 21:30	1
Chloroform	ND		1.0	0.33	ug/L			08/27/12 21:30	1
Chloromethane	ND		1.0	0.40	ug/L			08/27/12 21:30	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/27/12 21:30	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/27/12 21:30	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/27/12 21:30	1
Dibromomethane	ND		1.0	0.36	ug/L			08/27/12 21:30	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/27/12 21:30	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/27/12 21:30	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/27/12 21:30	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/27/12 21:30	1
m,p-Xylene	**0.66**	**J**	1.0	0.60	ug/L			08/27/12 21:30	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/27/12 21:30	1
Naphthalene	ND		1.0	0.41	ug/L			08/27/12 21:30	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/27/12 21:30	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/27/12 21:30	1
o-Xylene	ND		1.0	0.30	ug/L			08/27/12 21:30	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/27/12 21:30	1
Styrene	ND		1.0	0.20	ug/L			08/27/12 21:30	1

Client Sample ID: OC-GW-OW7-082112

Lab Sample ID: 440-21053-6

Date Collected: 08/21/12 14:08

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/27/12 21:30	1
Tetrachloroethene	**7.5**		1.0	0.32	ug/L			08/27/12 21:30	1
Toluene	ND		1.0	0.36	ug/L			08/27/12 21:30	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/27/12 21:30	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/27/12 21:30	1
Trichloroethene	ND		1.0	0.26	ug/L			08/27/12 21:30	1
Trichlorofluoromethane	**1.7**		1.0	0.34	ug/L			08/27/12 21:30	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/27/12 21:30	1
Acetone	ND		10	4.5	ug/L			08/27/12 21:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.2**	**J**	5.0	0.50	ug/L			08/27/12 21:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*4.0*		*ug/L*		*3.48*	*75-43-4*		*08/27/12 21:30*	*1*
1,2-Dichloro-1,1,2-trifluoroethane	*2.8*		*ug/L*		*3.88*	*354-23-4*		*08/27/12 21:30*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/12 21:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*08/27/12 21:30*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/27/12 21:30*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/27/12 21:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	0.95	ug/L			09/04/12 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/04/12 22:31*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*09/04/12 22:31*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/04/12 22:31*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.087**	**J**	0.47	0.057	ug/L		08/28/12 13:48	08/29/12 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*51*		*30 - 120*	*08/28/12 13:48*	*08/29/12 17:16*	*1*

Client Sample ID: OC-GW-OW2-082112

Lab Sample ID: 440-21053-7

Date Collected: 08/21/12 14:30

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	1.4	ug/L			08/28/12 01:14	5
1,1,1-Trichloroethane	ND		5.0	1.5	ug/L			08/28/12 01:14	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.5	ug/L			08/28/12 01:14	5
1,1,2-Trichloroethane	ND		5.0	1.5	ug/L			08/28/12 01:14	5
1,1-Dichloroethane	**6.5**		5.0	2.0	ug/L			08/28/12 01:14	5
1,1-Dichloroethene	**360**		5.0	2.1	ug/L			08/28/12 01:14	5
1,1-Dichloropropene	ND		5.0	1.4	ug/L			08/28/12 01:14	5
1,2,3-Trichlorobenzene	ND		5.0	1.5	ug/L			08/28/12 01:14	5
1,2,3-Trichloropropane	ND		5.0	2.0	ug/L			08/28/12 01:14	5

Client Sample ID: OC-GW-OW2-082112
Date Collected: 08/21/12 14:30
Date Received: 08/21/12 17:05

Lab Sample ID: 440-21053-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		5.0	2.4	ug/L			08/28/12 01:14	5
1,2,4-Trimethylbenzene	ND		5.0	1.2	ug/L			08/28/12 01:14	5
1,2-Dibromo-3-Chloropropane	ND		25	4.9	ug/L			08/28/12 01:14	5
1,2-Dichlorobenzene	ND		5.0	1.6	ug/L			08/28/12 01:14	5
1,2-Dibromoethane (EDB)	ND		5.0	2.0	ug/L			08/28/12 01:14	5
1,2-Dichloroethane	ND		5.0	1.4	ug/L			08/28/12 01:14	5
1,2-Dichloropropane	ND		5.0	1.8	ug/L			08/28/12 01:14	5
1,3,5-Trimethylbenzene	ND		5.0	1.3	ug/L			08/28/12 01:14	5
1,3-Dichlorobenzene	ND		5.0	1.8	ug/L			08/28/12 01:14	5
1,3-Dichloropropane	ND		5.0	1.6	ug/L			08/28/12 01:14	5
1,4-Dichlorobenzene	ND		5.0	1.9	ug/L			08/28/12 01:14	5
2,2-Dichloropropane	ND		5.0	1.7	ug/L			08/28/12 01:14	5
2-Chlorotoluene	ND		5.0	1.4	ug/L			08/28/12 01:14	5
4-Chlorotoluene	ND		5.0	1.5	ug/L			08/28/12 01:14	5
p-Isopropyltoluene	ND		5.0	1.4	ug/L			08/28/12 01:14	5
Benzene	ND		2.5	1.4	ug/L			08/28/12 01:14	5
Bromobenzene	ND		5.0	1.4	ug/L			08/28/12 01:14	5
Bromochloromethane	ND		5.0	2.0	ug/L			08/28/12 01:14	5
Bromodichloromethane	ND		5.0	1.5	ug/L			08/28/12 01:14	5
Bromoform	ND		5.0	2.0	ug/L			08/28/12 01:14	5
Bromomethane	ND		5.0	2.1	ug/L			08/28/12 01:14	5
Carbon tetrachloride	ND		2.5	1.4	ug/L			08/28/12 01:14	5
Chlorobenzene	ND		5.0	1.8	ug/L			08/28/12 01:14	5
Chloroethane	ND		5.0	2.0	ug/L			08/28/12 01:14	5
Chloroform	**25**		5.0	1.7	ug/L			08/28/12 01:14	5
Chloromethane	ND		5.0	2.0	ug/L			08/28/12 01:14	5
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			08/28/12 01:14	5
cis-1,3-Dichloropropene	ND		2.5	1.1	ug/L			08/28/12 01:14	5
Dibromochloromethane	ND		5.0	2.0	ug/L			08/28/12 01:14	5
Dibromomethane	ND		5.0	1.8	ug/L			08/28/12 01:14	5
Dichlorodifluoromethane	ND		5.0	1.3	ug/L			08/28/12 01:14	5
Ethylbenzene	ND		5.0	1.3	ug/L			08/28/12 01:14	5
Hexachlorobutadiene	ND		5.0	1.9	ug/L			08/28/12 01:14	5
Isopropylbenzene	ND		5.0	1.3	ug/L			08/28/12 01:14	5
m,p-Xylene	ND		5.0	3.0	ug/L			08/28/12 01:14	5
Methyl-t-Butyl Ether (MTBE)	ND		5.0	1.6	ug/L			08/28/12 01:14	5
Naphthalene	ND		5.0	2.1	ug/L			08/28/12 01:14	5
n-Butylbenzene	ND		5.0	1.9	ug/L			08/28/12 01:14	5
N-Propylbenzene	ND		5.0	1.4	ug/L			08/28/12 01:14	5
o-Xylene	ND		5.0	1.5	ug/L			08/28/12 01:14	5
sec-Butylbenzene	ND		5.0	1.3	ug/L			08/28/12 01:14	5
Styrene	ND		5.0	1.0	ug/L			08/28/12 01:14	5
tert-Butylbenzene	ND		5.0	1.1	ug/L			08/28/12 01:14	5
Toluene	ND		5.0	1.8	ug/L			08/28/12 01:14	5
trans-1,2-Dichloroethene	**1.9**	**J**	5.0	1.5	ug/L			08/28/12 01:14	5
trans-1,3-Dichloropropene	ND		2.5	1.6	ug/L			08/28/12 01:14	5
Trichloroethene	**290**		5.0	1.3	ug/L			08/28/12 01:14	5
Trichlorofluoromethane	**40**		5.0	1.7	ug/L			08/28/12 01:14	5
Vinyl chloride	ND		2.5	2.0	ug/L			08/28/12 01:14	5
Acetone	ND		50	23	ug/L			08/28/12 01:14	5

Client Sample ID: OC-GW-OW2-082112

Lab Sample ID: 440-21053-7

Date Collected: 08/21/12 14:30

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	43		25	2.5	ug/L			08/28/12 01:14	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/12 01:14*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/28/12 01:14*	*5*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*08/28/12 01:14*	*5*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/28/12 01:14*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	2000		25	8.0	ug/L			08/28/12 16:02	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/28/12 16:02*	*25*
Dibromofluoromethane (Surr)	*117*		*80 - 120*		*08/28/12 16:02*	*25*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/28/12 16:02*	*25*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	8.0	J B	25	4.8	ug/L			09/04/12 22:59	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/04/12 22:59*	*5*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*09/04/12 22:59*	*5*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/04/12 22:59*	*5*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.071	J	0.47	0.057	ug/L		08/28/12 13:48	08/29/12 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*46*		*30 - 120*	*08/28/12 13:48*	*08/29/12 19:38*	*1*

Client Sample ID: OC-GW-OW3-082112

Lab Sample ID: 440-21053-8

Date Collected: 08/21/12 14:55

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/29/12 03:21	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/29/12 03:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/29/12 03:21	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/29/12 03:21	1
1,1-Dichloroethane	0.52	J	1.0	0.40	ug/L			08/29/12 03:21	1
1,1-Dichloroethene	28		1.0	0.42	ug/L			08/29/12 03:21	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/29/12 03:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/29/12 03:21	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/29/12 03:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/29/12 03:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/29/12 03:21	1

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Client Sample ID: OC-GW-OW3-082112
Date Collected: 08/21/12 14:55
Date Received: 08/21/12 17:05

Lab Sample ID: 440-21053-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/29/12 03:21	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/29/12 03:21	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/29/12 03:21	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/29/12 03:21	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/29/12 03:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/29/12 03:21	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/29/12 03:21	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/29/12 03:21	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/29/12 03:21	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/29/12 03:21	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/29/12 03:21	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/29/12 03:21	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/29/12 03:21	1
Benzene	ND		0.50	0.28	ug/L			08/29/12 03:21	1
Bromobenzene	ND		1.0	0.27	ug/L			08/29/12 03:21	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/29/12 03:21	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/29/12 03:21	1
Bromoform	ND		1.0	0.40	ug/L			08/29/12 03:21	1
Bromomethane	ND		1.0	0.42	ug/L			08/29/12 03:21	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/29/12 03:21	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/29/12 03:21	1
Chloroethane	ND		1.0	0.40	ug/L			08/29/12 03:21	1
Chloroform	**7.1**		1.0	0.33	ug/L			08/29/12 03:21	1
Chloromethane	ND		1.0	0.40	ug/L			08/29/12 03:21	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/29/12 03:21	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/29/12 03:21	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/29/12 03:21	1
Dibromomethane	ND		1.0	0.36	ug/L			08/29/12 03:21	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/29/12 03:21	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/29/12 03:21	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/29/12 03:21	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/29/12 03:21	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/29/12 03:21	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/29/12 03:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/29/12 03:21	1
Naphthalene	ND		1.0	0.41	ug/L			08/29/12 03:21	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/29/12 03:21	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/29/12 03:21	1
o-Xylene	ND		1.0	0.30	ug/L			08/29/12 03:21	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/29/12 03:21	1
Styrene	ND		1.0	0.20	ug/L			08/29/12 03:21	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/29/12 03:21	1
Tetrachloroethene	**140**		1.0	0.32	ug/L			08/29/12 03:21	1
Toluene	ND		1.0	0.36	ug/L			08/29/12 03:21	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/29/12 03:21	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/29/12 03:21	1
Trichloroethene	**17**		1.0	0.26	ug/L			08/29/12 03:21	1
Trichlorofluoromethane	**2.0**		1.0	0.34	ug/L			08/29/12 03:21	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/29/12 03:21	1
Acetone	**5.0**	**J**	10	4.5	ug/L			08/29/12 03:21	1

Client Sample ID: OC-GW-OW3-082112

Lab Sample ID: 440-21053-8

Date Collected: 08/21/12 14:55

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	2.1	J	5.0	0.50	ug/L			08/29/12 03:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2.8*	*T J*	*ug/L*		*11.39*			*08/29/12 03:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/29/12 03:21*	*1*
Dibromofluoromethane (Surr)	*116*		*80 - 120*		*08/29/12 03:21*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/29/12 03:21*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	9.6		0.47	0.057	ug/L		08/28/12 13:48	08/29/12 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*52*		*30 - 120*	*08/28/12 13:48*	*08/29/12 20:01*	*1*

Client Sample ID: OC-GW-OW7N-082112

Lab Sample ID: 440-21053-9

Date Collected: 08/21/12 15:30

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/28/12 17:01	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 17:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/28/12 17:01	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 17:01	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/28/12 17:01	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/28/12 17:01	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/28/12 17:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/28/12 17:01	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/28/12 17:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/28/12 17:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/28/12 17:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/28/12 17:01	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/28/12 17:01	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/28/12 17:01	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/28/12 17:01	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/28/12 17:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/28/12 17:01	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/28/12 17:01	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/28/12 17:01	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/28/12 17:01	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/28/12 17:01	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/28/12 17:01	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/28/12 17:01	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/28/12 17:01	1
Benzene	ND		0.50	0.28	ug/L			08/28/12 17:01	1
Bromobenzene	ND		1.0	0.27	ug/L			08/28/12 17:01	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/28/12 17:01	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/28/12 17:01	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Client Sample ID: OC-GW-OW7N-082112

Lab Sample ID: 440-21053-9

Date Collected: 08/21/12 15:30
Matrix: Water
Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	0.40	ug/L			08/28/12 17:01	1
Bromomethane	ND		1.0	0.42	ug/L			08/28/12 17:01	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/28/12 17:01	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/28/12 17:01	1
Chloroethane	ND		1.0	0.40	ug/L			08/28/12 17:01	1
Chloroform	**0.41**	**J**	1.0	0.33	ug/L			08/28/12 17:01	1
Chloromethane	ND		1.0	0.40	ug/L			08/28/12 17:01	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/28/12 17:01	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/28/12 17:01	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/28/12 17:01	1
Dibromomethane	ND		1.0	0.36	ug/L			08/28/12 17:01	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/28/12 17:01	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/28/12 17:01	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/28/12 17:01	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/28/12 17:01	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/28/12 17:01	1
Methylene Chloride	**2.9**	**J**	5.0	0.95	ug/L			08/28/12 17:01	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/28/12 17:01	1
Naphthalene	ND		1.0	0.41	ug/L			08/28/12 17:01	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/28/12 17:01	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/28/12 17:01	1
o-Xylene	ND		1.0	0.30	ug/L			08/28/12 17:01	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/28/12 17:01	1
Styrene	ND		1.0	0.20	ug/L			08/28/12 17:01	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/28/12 17:01	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/28/12 17:01	1
Toluene	ND		1.0	0.36	ug/L			08/28/12 17:01	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/28/12 17:01	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/28/12 17:01	1
Trichloroethene	ND		1.0	0.26	ug/L			08/28/12 17:01	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/28/12 17:01	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/28/12 17:01	1
Acetone	ND		10	4.5	ug/L			08/28/12 17:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/28/12 17:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/12 17:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/28/12 17:01*	*1*
Dibromofluoromethane (Surr)	*120*		*80 - 120*		*08/28/12 17:01*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*08/28/12 17:01*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.072**	**J**	0.47	0.057	ug/L		08/28/12 13:48	08/29/12 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*72*		*30 - 120*	*08/28/12 13:48*	*08/29/12 20:25*	*1*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Client Sample ID: OC-GW-TB-082112 — Lab Sample ID: 440-21053-1

Date Collected: 08/21/12 00:01 — **Matrix: Water**
Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48179	08/27/12 23:22	YK	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	49675	09/04/12 21:05	RM	TAL IRV

Client Sample ID: OC-GW-OW8B-082112 — Lab Sample ID: 440-21053-4

Date Collected: 08/21/12 11:19 — **Matrix: Water**
Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48179	08/27/12 22:54	YK	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	48373	08/28/12 13:48	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			48592	08/29/12 18:50	CP	TAL IRV

Client Sample ID: OC-GW-OW3B-082112 — Lab Sample ID: 440-21053-5

Date Collected: 08/21/12 12:53 — **Matrix: Water**
Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48179	08/28/12 00:46	YK	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	49675	09/04/12 22:02	RM	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48373	08/28/12 13:48	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			48592	08/29/12 19:14	CP	TAL IRV

Client Sample ID: OC-GW-OW7-082112 — Lab Sample ID: 440-21053-6

Date Collected: 08/21/12 14:08 — **Matrix: Water**
Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48179	08/27/12 21:30	YK	TAL IRV
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	49675	09/04/12 22:31	RM	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48373	08/28/12 13:48	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			48592	08/29/12 17:16	CP	TAL IRV

Client Sample ID: OC-GW-OW2-082112 — Lab Sample ID: 440-21053-7

Date Collected: 08/21/12 14:30 — **Matrix: Water**
Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	10 mL	10 mL	48179	08/28/12 01:14	YK	TAL IRV
Total/NA	Analysis	8260B	DL	25	10 mL	10 mL	48254	08/28/12 16:02	VS	TAL IRV
Total/NA	Analysis	8260B	RA	5	10 mL	10 mL	49675	09/04/12 22:59	RM	TAL IRV
Total/NA	Prep	3520C			1060 mL	1 mL	48373	08/28/12 13:48	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			48592	08/29/12 19:38	CP	TAL IRV

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Client Sample ID: OC-GW-OW3-082112

Lab Sample ID: 440-21053-8

Date Collected: 08/21/12 14:55

Matrix: Water

Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48461	08/29/12 03:21	YK	TAL IRV
Total/NA	Prep	3520C			1060 mL	1 mL	48373	08/28/12 13:48	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			48592	08/29/12 20:01	CP	TAL IRV

Client Sample ID: OC-GW-OW7N-082112

Lab Sample ID: 440-21053-9

Date Collected: 08/21/12 15:30

Matrix: Water

Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48254	08/28/12 17:01	VS	TAL IRV
Total/NA	Prep	3520C			1060 mL	1 mL	48373	08/28/12 13:48	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			48592	08/29/12 20:25	CP	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-48179/4
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/27/12 20:21	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/27/12 20:21	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/27/12 20:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/27/12 20:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/27/12 20:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/27/12 20:21	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/27/12 20:21	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/27/12 20:21	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/27/12 20:21	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/27/12 20:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/27/12 20:21	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/27/12 20:21	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/27/12 20:21	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/27/12 20:21	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/27/12 20:21	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/27/12 20:21	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/27/12 20:21	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/27/12 20:21	1
Benzene	ND		0.50	0.28	ug/L			08/27/12 20:21	1
Bromobenzene	ND		1.0	0.27	ug/L			08/27/12 20:21	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
Bromoform	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Bromomethane	ND		1.0	0.42	ug/L			08/27/12 20:21	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/27/12 20:21	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/27/12 20:21	1
Chloroethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Chloroform	ND		1.0	0.33	ug/L			08/27/12 20:21	1
Chloromethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/27/12 20:21	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/27/12 20:21	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Dibromomethane	ND		1.0	0.36	ug/L			08/27/12 20:21	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/27/12 20:21	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/27/12 20:21	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/27/12 20:21	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/27/12 20:21	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/27/12 20:21	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/27/12 20:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/27/12 20:21	1
Naphthalene	ND		1.0	0.41	ug/L			08/27/12 20:21	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/27/12 20:21	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/27/12 20:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48179/4
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	0.30	ug/L			08/27/12 20:21	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/27/12 20:21	1
Styrene	ND		1.0	0.20	ug/L			08/27/12 20:21	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/27/12 20:21	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/27/12 20:21	1
Toluene	ND		1.0	0.36	ug/L			08/27/12 20:21	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/27/12 20:21	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/27/12 20:21	1
Trichloroethene	ND		1.0	0.26	ug/L			08/27/12 20:21	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/27/12 20:21	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/27/12 20:21	1
Acetone	ND		10	4.5	ug/L			08/27/12 20:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/27/12 20:21	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/12 20:21*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*08/27/12 20:21*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/27/12 20:21*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/27/12 20:21*	*1*

Lab Sample ID: LCS 440-48179/5
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	28.1		ug/L		113	70 - 130
1,1,1-Trichloroethane	25.0	26.7		ug/L		107	65 - 135
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	55 - 130
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	70 - 125
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 125
1,1-Dichloroethene	25.0	24.1		ug/L		97	70 - 125
1,1-Dichloropropene	25.0	23.3		ug/L		93	75 - 130
1,2,3-Trichlorobenzene	25.0	24.6		ug/L		99	65 - 125
1,2,3-Trichloropropane	25.0	23.8		ug/L		95	60 - 130
1,2,4-Trichlorobenzene	25.0	25.4		ug/L		102	70 - 135
1,2,4-Trimethylbenzene	25.0	26.2		ug/L		105	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	27.8		ug/L		111	50 - 135
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120
1,2-Dibromoethane (EDB)	25.0	26.0		ug/L		104	75 - 125
1,2-Dichloroethane	25.0	25.1		ug/L		100	60 - 140
1,2-Dichloropropane	25.0	23.4		ug/L		94	70 - 125
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	75 - 125
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	75 - 120
1,3-Dichloropropane	25.0	23.9		ug/L		96	70 - 120
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	75 - 120
2,2-Dichloropropane	25.0	25.6		ug/L		102	65 - 140
2-Chlorotoluene	25.0	25.2		ug/L		101	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48179/5
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	25.0	25.6		ug/L		103	75 - 125
p-Isopropyltoluene	25.0	26.2		ug/L		105	75 - 125
Benzene	25.0	23.8		ug/L		95	70 - 120
Bromobenzene	25.0	25.8		ug/L		103	75 - 120
Bromochloromethane	25.0	24.2		ug/L		97	70 - 130
Bromodichloromethane	25.0	27.6		ug/L		111	70 - 135
Bromoform	25.0	24.6		ug/L		99	55 - 130
Bromomethane	25.0	24.0		ug/L		96	65 - 140
Carbon tetrachloride	25.0	29.0		ug/L		116	65 - 140
Chlorobenzene	25.0	23.5		ug/L		94	75 - 120
Chloroethane	25.0	17.6		ug/L		71	60 - 140
Chloroform	25.0	26.2		ug/L		105	70 - 130
Chloromethane	25.0	19.1		ug/L		77	50 - 140
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	70 - 125
cis-1,3-Dichloropropene	25.0	24.8		ug/L		99	75 - 125
Dibromochloromethane	25.0	28.5		ug/L		114	70 - 140
Dibromomethane	25.0	25.2		ug/L		101	70 - 125
Dichlorodifluoromethane	25.0	16.2		ug/L		65	35 - 155
Ethylbenzene	25.0	25.0		ug/L		100	75 - 125
Hexachlorobutadiene	25.0	25.0		ug/L		100	65 - 135
Isopropylbenzene	25.0	25.1		ug/L		101	75 - 130
m,p-Xylene	50.0	48.3		ug/L		97	75 - 125
Methylene Chloride	25.0	24.0		ug/L		96	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	24.2		ug/L		97	60 - 135
Naphthalene	25.0	24.2		ug/L		97	55 - 135
n-Butylbenzene	25.0	26.3		ug/L		105	70 - 130
N-Propylbenzene	25.0	25.5		ug/L		102	75 - 130
o-Xylene	25.0	24.2		ug/L		97	75 - 125
sec-Butylbenzene	25.0	26.0		ug/L		104	70 - 125
Styrene	25.0	25.7		ug/L		103	75 - 130
tert-Butylbenzene	25.0	25.4		ug/L		102	70 - 125
Tetrachloroethene	25.0	25.4		ug/L		102	70 - 125
Toluene	25.0	24.4		ug/L		97	70 - 120
trans-1,2-Dichloroethene	25.0	24.9		ug/L		99	70 - 125
trans-1,3-Dichloropropene	25.0	26.6		ug/L		106	70 - 125
Trichloroethene	25.0	25.1		ug/L		100	70 - 125
Trichlorofluoromethane	25.0	29.2		ug/L		117	65 - 145
Vinyl chloride	25.0	21.5		ug/L		86	55 - 135
Acetone	25.0	20.6		ug/L		82	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21053-6 MS
Matrix: Water
Analysis Batch: 48179

Client Sample ID: OC-GW-OW7-082112
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	29.5		ug/L		118	65 - 140
1,1,1-Trichloroethane	ND		25.0	27.5		ug/L		110	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	27.4		ug/L		110	55 - 135
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	65 - 130
1,1-Dichloroethane	ND		25.0	25.5		ug/L		102	65 - 130
1,1-Dichloroethene	ND		25.0	25.1		ug/L		101	60 - 130
1,1-Dichloropropene	ND		25.0	24.1		ug/L		96	70 - 135
1,2,3-Trichlorobenzene	ND		25.0	26.1		ug/L		104	60 - 135
1,2,3-Trichloropropane	ND		25.0	25.8		ug/L		103	55 - 135
1,2,4-Trichlorobenzene	ND		25.0	27.3		ug/L		109	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	26.5		ug/L		106	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	28.4		ug/L		114	45 - 145
1,2-Dichlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	28.0		ug/L		112	70 - 130
1,2-Dichloroethane	ND		25.0	26.5		ug/L		106	60 - 140
1,2-Dichloropropane	ND		25.0	25.4		ug/L		102	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	26.8		ug/L		107	70 - 130
1,3-Dichlorobenzene	ND		25.0	26.9		ug/L		108	75 - 125
1,3-Dichloropropane	ND		25.0	26.0		ug/L		104	65 - 135
1,4-Dichlorobenzene	ND		25.0	25.1		ug/L		101	75 - 125
2,2-Dichloropropane	ND		25.0	27.1		ug/L		108	60 - 145
2-Chlorotoluene	ND		25.0	26.4		ug/L		106	65 - 135
4-Chlorotoluene	ND		25.0	27.0		ug/L		108	70 - 135
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	65 - 130
Benzene	ND		25.0	25.2		ug/L		101	65 - 125
Bromobenzene	ND		25.0	27.0		ug/L		108	70 - 125
Bromochloromethane	ND		25.0	25.7		ug/L		103	65 - 135
Bromodichloromethane	ND		25.0	29.2		ug/L		117	70 - 135
Bromoform	ND		25.0	26.4		ug/L		106	55 - 135
Bromomethane	ND		25.0	24.0		ug/L		96	55 - 145
Carbon tetrachloride	ND		25.0	29.6		ug/L		118	65 - 140
Chlorobenzene	ND		25.0	24.8		ug/L		99	75 - 125
Chloroethane	ND		25.0	20.2		ug/L		81	55 - 140
Chloroform	ND		25.0	27.4		ug/L		110	65 - 135
Chloromethane	ND		25.0	19.5		ug/L		78	45 - 145
cis-1,2-Dichloroethene	ND		25.0	27.6		ug/L		110	65 - 130
cis-1,3-Dichloropropene	ND		25.0	27.3		ug/L		109	70 - 130
Dibromochloromethane	ND		25.0	30.8		ug/L		123	65 - 140
Dibromomethane	ND		25.0	27.2		ug/L		109	65 - 135
Dichlorodifluoromethane	ND		25.0	16.0		ug/L		64	25 - 155
Ethylbenzene	ND		25.0	26.4		ug/L		106	65 - 130
Hexachlorobutadiene	ND		25.0	26.8		ug/L		107	60 - 135
Isopropylbenzene	ND		25.0	25.9		ug/L		103	70 - 135
m,p-Xylene	0.66	J	50.0	51.0		ug/L		101	65 - 130
Methylene Chloride	13		25.0	33.3		ug/L		83	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.4		ug/L		102	55 - 145
Naphthalene	ND		25.0	25.2		ug/L		101	50 - 140
n-Butylbenzene	ND		25.0	27.6		ug/L		110	65 - 135
N-Propylbenzene	ND		25.0	26.6		ug/L		106	70 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21053-6 MS
Matrix: Water
Analysis Batch: 48179

Client Sample ID: OC-GW-OW7-082112
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	ND		25.0	25.5		ug/L		102	65 - 125
sec-Butylbenzene	ND		25.0	26.8		ug/L		107	70 - 125
Styrene	ND		25.0	25.2		ug/L		101	50 - 145
tert-Butylbenzene	ND		25.0	26.0		ug/L		104	65 - 130
Tetrachloroethene	7.5		25.0	32.8		ug/L		101	65 - 130
Toluene	ND		25.0	25.8		ug/L		103	70 - 125
trans-1,2-Dichloroethene	ND		25.0	26.1		ug/L		104	65 - 130
trans-1,3-Dichloropropene	ND		25.0	28.9		ug/L		116	65 - 135
Trichloroethene	ND		25.0	26.2		ug/L		105	65 - 125
Trichlorofluoromethane	1.7		25.0	31.8		ug/L		120	60 - 145
Vinyl chloride	ND		25.0	22.3		ug/L		89	45 - 140
Acetone	ND		25.0	23.7		ug/L		95	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-21053-6 MSD
Matrix: Water
Analysis Batch: 48179

Client Sample ID: OC-GW-OW7-082112
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	28.5		ug/L		114	65 - 140	3	20
1,1,1-Trichloroethane	ND		25.0	26.9		ug/L		108	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	26.9		ug/L		107	55 - 135	2	30
1,1,2-Trichloroethane	ND		25.0	24.6		ug/L		98	65 - 130	4	25
1,1-Dichloroethane	ND		25.0	25.5		ug/L		102	65 - 130	0	20
1,1-Dichloroethene	ND		25.0	24.5		ug/L		98	60 - 130	2	20
1,1-Dichloropropene	ND		25.0	23.6		ug/L		94	70 - 135	2	20
1,2,3-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 135	3	20
1,2,3-Trichloropropane	ND		25.0	24.7		ug/L		99	55 - 135	4	30
1,2,4-Trichlorobenzene	ND		25.0	26.5		ug/L		106	65 - 135	3	20
1,2,4-Trimethylbenzene	ND		25.0	25.5		ug/L		102	55 - 135	4	25
1,2-Dibromo-3-Chloropropane	ND		25.0	28.1		ug/L		112	45 - 145	1	30
1,2-Dichlorobenzene	ND		25.0	25.7		ug/L		103	75 - 125	2	20
1,2-Dibromoethane (EDB)	ND		25.0	26.3		ug/L		105	70 - 130	7	25
1,2-Dichloroethane	ND		25.0	25.8		ug/L		103	60 - 140	3	20
1,2-Dichloropropane	ND		25.0	24.5		ug/L		98	65 - 130	4	20
1,3,5-Trimethylbenzene	ND		25.0	26.1		ug/L		105	70 - 130	2	20
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125	2	20
1,3-Dichloropropane	ND		25.0	24.4		ug/L		98	65 - 135	6	25
1,4-Dichlorobenzene	ND		25.0	24.5		ug/L		98	75 - 125	2	20
2,2-Dichloropropane	ND		25.0	27.2		ug/L		109	60 - 145	1	25
2-Chlorotoluene	ND		25.0	25.8		ug/L		103	65 - 135	2	20
4-Chlorotoluene	ND		25.0	26.3		ug/L		105	70 - 135	3	20
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	65 - 130	0	20
Benzene	ND		25.0	24.7		ug/L		99	65 - 125	2	20
Bromobenzene	ND		25.0	26.1		ug/L		104	70 - 125	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21053-6 MSD
Matrix: Water
Analysis Batch: 48179

Client Sample ID: OC-GW-OW7-082112
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromochloromethane	ND		25.0	25.1		ug/L		100	65 - 135	2	25
Bromodichloromethane	ND		25.0	28.1		ug/L		112	70 - 135	4	20
Bromoform	ND		25.0	25.6		ug/L		102	55 - 135	3	25
Bromomethane	ND		25.0	23.9		ug/L		96	55 - 145	1	25
Carbon tetrachloride	ND		25.0	29.3		ug/L		117	65 - 140	1	25
Chlorobenzene	ND		25.0	23.9		ug/L		96	75 - 125	4	20
Chloroethane	ND		25.0	21.0		ug/L		84	55 - 140	4	25
Chloroform	ND		25.0	26.5		ug/L		106	65 - 135	4	20
Chloromethane	ND		25.0	19.5		ug/L		78	45 - 145	0	25
cis-1,2-Dichloroethene	ND		25.0	26.8		ug/L		107	65 - 130	3	20
cis-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	70 - 130	5	20
Dibromochloromethane	ND		25.0	29.6		ug/L		119	65 - 140	4	25
Dibromomethane	ND		25.0	25.8		ug/L		103	65 - 135	5	25
Dichlorodifluoromethane	ND		25.0	16.0		ug/L		64	25 - 155	0	30
Ethylbenzene	ND		25.0	25.8		ug/L		103	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	26.1		ug/L		105	60 - 135	2	20
Isopropylbenzene	ND		25.0	25.6		ug/L		103	70 - 135	1	20
m,p-Xylene	0.66	J	50.0	49.4		ug/L		98	65 - 130	3	25
Methylene Chloride	13		25.0	34.6		ug/L		88	50 - 135	4	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.9		ug/L		100	55 - 145	2	25
Naphthalene	ND		25.0	24.3		ug/L		97	50 - 140	4	30
n-Butylbenzene	ND		25.0	27.2		ug/L		109	65 - 135	1	20
N-Propylbenzene	ND		25.0	26.2		ug/L		105	70 - 135	1	20
o-Xylene	ND		25.0	24.9		ug/L		100	65 - 125	2	20
sec-Butylbenzene	ND		25.0	26.4		ug/L		106	70 - 125	2	20
Styrene	ND		25.0	23.4		ug/L		93	50 - 145	7	30
tert-Butylbenzene	ND		25.0	25.7		ug/L		103	65 - 130	1	20
Tetrachloroethene	7.5		25.0	32.3		ug/L		99	65 - 130	2	20
Toluene	ND		25.0	25.1		ug/L		100	70 - 125	3	20
trans-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	65 - 135	3	25
Trichloroethene	ND		25.0	25.8		ug/L		103	65 - 125	2	20
Trichlorofluoromethane	1.7		25.0	31.1		ug/L		117	60 - 145	2	25
Vinyl chloride	ND		25.0	22.2		ug/L		89	45 - 140	1	30
Acetone	ND		25.0	22.8		ug/L		91	20 - 150	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: MB 440-48254/4
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/28/12 08:47	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 08:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/28/12 08:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48254/4
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 08:47	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/28/12 08:47	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/28/12 08:47	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/28/12 08:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/28/12 08:47	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/28/12 08:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/28/12 08:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/28/12 08:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/28/12 08:47	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/28/12 08:47	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/28/12 08:47	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/28/12 08:47	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/28/12 08:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/28/12 08:47	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/28/12 08:47	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/28/12 08:47	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/28/12 08:47	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/28/12 08:47	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/28/12 08:47	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/28/12 08:47	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/28/12 08:47	1
Benzene	ND		0.50	0.28	ug/L			08/28/12 08:47	1
Bromobenzene	ND		1.0	0.27	ug/L			08/28/12 08:47	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/28/12 08:47	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/28/12 08:47	1
Bromoform	ND		1.0	0.40	ug/L			08/28/12 08:47	1
Bromomethane	ND		1.0	0.42	ug/L			08/28/12 08:47	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/28/12 08:47	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/28/12 08:47	1
Chloroethane	ND		1.0	0.40	ug/L			08/28/12 08:47	1
Chloroform	ND		1.0	0.33	ug/L			08/28/12 08:47	1
Chloromethane	ND		1.0	0.40	ug/L			08/28/12 08:47	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/28/12 08:47	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/28/12 08:47	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/28/12 08:47	1
Dibromomethane	ND		1.0	0.36	ug/L			08/28/12 08:47	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/28/12 08:47	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/28/12 08:47	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/28/12 08:47	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/28/12 08:47	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/28/12 08:47	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/28/12 08:47	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/28/12 08:47	1
Naphthalene	ND		1.0	0.41	ug/L			08/28/12 08:47	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/28/12 08:47	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/28/12 08:47	1
o-Xylene	ND		1.0	0.30	ug/L			08/28/12 08:47	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/28/12 08:47	1
Styrene	ND		1.0	0.20	ug/L			08/28/12 08:47	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/28/12 08:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48254/4
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.32	ug/L			08/28/12 08:47	1
Toluene	ND		1.0	0.36	ug/L			08/28/12 08:47	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/28/12 08:47	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/28/12 08:47	1
Trichloroethene	ND		1.0	0.26	ug/L			08/28/12 08:47	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/28/12 08:47	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/28/12 08:47	1
Acetone	ND		10	4.5	ug/L			08/28/12 08:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/28/12 08:47	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/12 08:47*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/28/12 08:47*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*08/28/12 08:47*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/28/12 08:47*	*1*

Lab Sample ID: LCS 440-48254/27
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.8		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	65 - 135
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L		101	55 - 130
1,1,2-Trichloroethane	25.0	24.0		ug/L		96	70 - 125
1,1-Dichloroethane	25.0	24.9		ug/L		100	70 - 125
1,1-Dichloroethene	25.0	28.2		ug/L		113	70 - 125
1,1-Dichloropropene	25.0	25.1		ug/L		100	75 - 130
1,2,3-Trichlorobenzene	25.0	20.0		ug/L		80	65 - 125
1,2,3-Trichloropropane	25.0	24.8		ug/L		99	60 - 130
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 135
1,2,4-Trimethylbenzene	25.0	28.8		ug/L		115	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	23.3		ug/L		93	50 - 135
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120
1,2-Dibromoethane (EDB)	25.0	26.4		ug/L		106	75 - 125
1,2-Dichloroethane	25.0	24.6		ug/L		98	60 - 140
1,2-Dichloropropane	25.0	24.1		ug/L		97	70 - 125
1,3,5-Trimethylbenzene	25.0	28.4		ug/L		114	75 - 125
1,3-Dichlorobenzene	25.0	25.6		ug/L		103	75 - 120
1,3-Dichloropropane	25.0	24.0		ug/L		96	70 - 120
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120
2,2-Dichloropropane	25.0	29.9		ug/L		119	65 - 140
2-Chlorotoluene	25.0	26.8		ug/L		107	70 - 125
4-Chlorotoluene	25.0	27.0		ug/L		108	75 - 125
p-Isopropyltoluene	25.0	28.2		ug/L		113	75 - 125
Benzene	25.0	25.8		ug/L		103	70 - 120
Bromobenzene	25.0	26.0		ug/L		104	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48254/27
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromochloromethane	25.0	23.6		ug/L		94	70 - 130
Bromodichloromethane	25.0	25.7		ug/L		103	70 - 135
Bromoform	25.0	22.7		ug/L		91	55 - 130
Bromomethane	25.0	27.4		ug/L		110	65 - 140
Carbon tetrachloride	25.0	28.8		ug/L		115	65 - 140
Chlorobenzene	25.0	24.7		ug/L		99	75 - 120
Chloroethane	25.0	26.8		ug/L		107	60 - 140
Chloroform	25.0	24.4		ug/L		98	70 - 130
Chloromethane	25.0	27.6		ug/L		111	50 - 140
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	70 - 125
cis-1,3-Dichloropropene	25.0	27.7		ug/L		111	75 - 125
Dibromochloromethane	25.0	27.0		ug/L		108	70 - 140
Dibromomethane	25.0	25.4		ug/L		102	70 - 125
Dichlorodifluoromethane	25.0	28.5		ug/L		114	35 - 155
Ethylbenzene	25.0	28.1		ug/L		112	75 - 125
Hexachlorobutadiene	25.0	21.3		ug/L		85	65 - 135
Isopropylbenzene	25.0	28.4		ug/L		113	75 - 130
m,p-Xylene	50.0	53.0		ug/L		106	75 - 125
Methylene Chloride	25.0	23.4		ug/L		94	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	26.7		ug/L		107	60 - 135
Naphthalene	25.0	22.8		ug/L		91	55 - 135
n-Butylbenzene	25.0	28.7		ug/L		115	70 - 130
N-Propylbenzene	25.0	28.4		ug/L		114	75 - 130
o-Xylene	25.0	26.1		ug/L		105	75 - 125
sec-Butylbenzene	25.0	27.7		ug/L		111	70 - 125
Styrene	25.0	27.2		ug/L		109	75 - 130
tert-Butylbenzene	25.0	27.9		ug/L		112	70 - 125
Tetrachloroethene	25.0	25.7		ug/L		103	70 - 125
Toluene	25.0	26.1		ug/L		104	70 - 120
trans-1,2-Dichloroethene	25.0	26.6		ug/L		106	70 - 125
trans-1,3-Dichloropropene	25.0	26.6		ug/L		106	70 - 125
Trichloroethene	25.0	24.7		ug/L		99	70 - 125
Trichlorofluoromethane	25.0	28.6		ug/L		114	65 - 145
Vinyl chloride	25.0	28.1		ug/L		112	55 - 135
Acetone	25.0	26.9		ug/L		108	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: LCSD 440-48254/28
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.4		ug/L		110	70 - 130	2	20
1,1,1-Trichloroethane	25.0	27.4		ug/L		110	65 - 135	5	20
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		103	55 - 130	1	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-48254/28
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 125	3	20
1,1-Dichloroethane	25.0	26.1		ug/L		104	70 - 125	5	20
1,1-Dichloroethene	25.0	29.3		ug/L		117	70 - 125	4	20
1,1-Dichloropropene	25.0	25.9		ug/L		104	75 - 130	3	20
1,2,3-Trichlorobenzene	25.0	19.7		ug/L		79	65 - 125	1	20
1,2,3-Trichloropropane	25.0	24.8		ug/L		99	60 - 130	0	20
1,2,4-Trichlorobenzene	25.0	23.5		ug/L		94	70 - 135	1	20
1,2,4-Trimethylbenzene	25.0	29.0		ug/L		116	75 - 125	1	20
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	50 - 135	2	30
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120	0	20
1,2-Dibromoethane (EDB)	25.0	26.5		ug/L		106	75 - 125	0	20
1,2-Dichloroethane	25.0	25.1		ug/L		100	60 - 140	2	20
1,2-Dichloropropane	25.0	25.1		ug/L		100	70 - 125	4	20
1,3,5-Trimethylbenzene	25.0	28.9		ug/L		116	75 - 125	2	20
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	75 - 120	0	20
1,3-Dichloropropane	25.0	24.7		ug/L		99	70 - 120	3	20
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	75 - 120	1	20
2,2-Dichloropropane	25.0	31.4		ug/L		126	65 - 140	5	25
2-Chlorotoluene	25.0	27.1		ug/L		108	70 - 125	1	20
4-Chlorotoluene	25.0	27.7		ug/L		111	75 - 125	3	20
p-Isopropyltoluene	25.0	28.2		ug/L		113	75 - 125	0	20
Benzene	25.0	26.7		ug/L		107	70 - 120	4	20
Bromobenzene	25.0	26.2		ug/L		105	75 - 120	1	20
Bromochloromethane	25.0	25.3		ug/L		101	70 - 130	7	20
Bromodichloromethane	25.0	27.4		ug/L		110	70 - 135	6	20
Bromoform	25.0	23.0		ug/L		92	55 - 130	1	25
Bromomethane	25.0	28.5		ug/L		114	65 - 140	4	20
Carbon tetrachloride	25.0	29.7		ug/L		119	65 - 140	3	25
Chlorobenzene	25.0	25.4		ug/L		102	75 - 120	3	20
Chloroethane	25.0	28.5		ug/L		114	60 - 140	6	20
Chloroform	25.0	25.8		ug/L		103	70 - 130	6	20
Chloromethane	25.0	28.7		ug/L		115	50 - 140	4	25
cis-1,2-Dichloroethene	25.0	28.1		ug/L		113	70 - 125	5	20
cis-1,3-Dichloropropene	25.0	28.6		ug/L		114	75 - 125	3	25
Dibromochloromethane	25.0	27.8		ug/L		111	70 - 140	3	20
Dibromomethane	25.0	26.4		ug/L		106	70 - 125	4	20
Dichlorodifluoromethane	25.0	29.5		ug/L		118	35 - 155	4	30
Ethylbenzene	25.0	28.7		ug/L		115	75 - 125	2	20
Hexachlorobutadiene	25.0	21.1		ug/L		84	65 - 135	1	20
Isopropylbenzene	25.0	28.7		ug/L		115	75 - 130	1	20
m,p-Xylene	50.0	54.7		ug/L		109	75 - 125	3	20
Methylene Chloride	25.0	24.5		ug/L		98	55 - 130	5	20
Methyl-t-Butyl Ether (MTBE)	25.0	27.5		ug/L		110	60 - 135	3	25
Naphthalene	25.0	22.5		ug/L		90	55 - 135	1	25
n-Butylbenzene	25.0	28.7		ug/L		115	70 - 130	0	20
N-Propylbenzene	25.0	28.7		ug/L		115	75 - 130	1	20
o-Xylene	25.0	26.8		ug/L		107	75 - 125	2	20
sec-Butylbenzene	25.0	27.8		ug/L		111	70 - 125	0	20
Styrene	25.0	28.1		ug/L		112	75 - 130	3	20
tert-Butylbenzene	25.0	28.1		ug/L		112	70 - 125	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-48254/28
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene	25.0	26.3		ug/L		105	70 - 125	2	20
Toluene	25.0	27.1		ug/L		108	70 - 120	4	20
trans-1,2-Dichloroethene	25.0	27.8		ug/L		111	70 - 125	4	20
trans-1,3-Dichloropropene	25.0	27.2		ug/L		109	70 - 125	2	20
Trichloroethene	25.0	25.4		ug/L		101	70 - 125	3	20
Trichlorofluoromethane	25.0	29.8		ug/L		119	65 - 145	4	20
Vinyl chloride	25.0	29.1		ug/L		116	55 - 135	3	30
Acetone	25.0	27.4		ug/L		110	30 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-21440-B-3 MS
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	65 - 140
1,1,1-Trichloroethane	2.5		25.0	29.8		ug/L		109	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	27.1		ug/L		108	55 - 135
1,1,2-Trichloroethane	ND		25.0	25.2		ug/L		101	65 - 130
1,1-Dichloroethane	7.1		25.0	33.2		ug/L		104	65 - 130
1,1-Dichloroethene	200		25.0	234	4	ug/L		135	60 - 130
1,1-Dichloropropene	ND		25.0	25.0		ug/L		100	70 - 135
1,2,3-Trichlorobenzene	0.34	J	25.0	20.5		ug/L		80	60 - 135
1,2,3-Trichloropropane	ND		25.0	33.7		ug/L		135	55 - 135
1,2,4-Trichlorobenzene	ND		25.0	24.2		ug/L		97	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	28.5		ug/L		114	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	26.6		ug/L		106	45 - 145
1,2-Dichlorobenzene	0.98	J	25.0	26.5		ug/L		102	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	27.5		ug/L		110	70 - 130
1,2-Dichloroethane	0.61	J	25.0	27.1		ug/L		106	60 - 140
1,2-Dichloropropane	36		25.0	62.6		ug/L		108	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	27.7		ug/L		111	70 - 130
1,3-Dichlorobenzene	ND		25.0	25.5		ug/L		102	75 - 125
1,3-Dichloropropane	ND		25.0	25.3		ug/L		101	65 - 135
1,4-Dichlorobenzene	ND		25.0	25.7		ug/L		103	75 - 125
2,2-Dichloropropane	ND		25.0	30.3		ug/L		121	60 - 145
2-Chlorotoluene	ND		25.0	26.9		ug/L		108	65 - 135
4-Chlorotoluene	ND		25.0	26.6		ug/L		107	70 - 135
p-Isopropyltoluene	ND		25.0	27.9		ug/L		111	65 - 130
Benzene	0.53		25.0	26.9		ug/L		106	65 - 125
Bromobenzene	ND		25.0	26.5		ug/L		106	70 - 125
Bromochloromethane	ND		25.0	25.2		ug/L		101	65 - 135
Bromodichloromethane	ND		25.0	28.1		ug/L		112	70 - 135
Bromoform	ND		25.0	23.4		ug/L		94	55 - 135
Bromomethane	ND		25.0	26.2		ug/L		105	55 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21440-B-3 MS
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	ND		25.0	28.9		ug/L		116	65 - 140
Chlorobenzene	ND		25.0	25.2		ug/L		101	75 - 125
Chloroethane	ND		25.0	25.6		ug/L		103	55 - 140
Chloroform	ND		25.0	26.4		ug/L		105	65 - 135
Chloromethane	0.42	J	25.0	24.3		ug/L		95	45 - 145
cis-1,2-Dichloroethene	ND		25.0	27.5		ug/L		110	65 - 130
cis-1,3-Dichloropropene	ND		25.0	29.1		ug/L		116	70 - 130
Dibromochloromethane	ND		25.0	28.0		ug/L		112	65 - 140
Dibromomethane	ND		25.0	27.2		ug/L		109	65 - 135
Dichlorodifluoromethane	ND		25.0	21.6		ug/L		87	25 - 155
Ethylbenzene	ND		25.0	28.2		ug/L		113	65 - 130
Hexachlorobutadiene	ND		25.0	21.0		ug/L		84	60 - 135
Isopropylbenzene	ND		25.0	28.0		ug/L		112	70 - 135
m,p-Xylene	ND		50.0	52.6		ug/L		105	65 - 130
Methylene Chloride	41		25.0	65.8		ug/L		98	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.9		ug/L		111	55 - 145
Naphthalene	0.59	J	25.0	24.4		ug/L		95	50 - 140
n-Butylbenzene	ND		25.0	28.1		ug/L		112	65 - 135
N-Propylbenzene	ND		25.0	27.9		ug/L		112	70 - 135
o-Xylene	ND		25.0	26.1		ug/L		105	65 - 125
sec-Butylbenzene	ND		25.0	27.0		ug/L		108	70 - 125
Styrene	ND		25.0	26.7		ug/L		107	50 - 145
tert-Butylbenzene	ND		25.0	27.5		ug/L		110	65 - 130
Tetrachloroethene	3.6		25.0	28.9		ug/L		101	65 - 130
Toluene	2.3		25.0	29.0		ug/L		107	70 - 125
trans-1,2-Dichloroethene	ND		25.0	27.1		ug/L		108	65 - 130
trans-1,3-Dichloropropene	ND		25.0	28.0		ug/L		112	65 - 135
Trichloroethene	17		25.0	41.8		ug/L		99	65 - 125
Trichlorofluoromethane	1.6		25.0	29.8		ug/L		113	60 - 145
Vinyl chloride	ND		25.0	25.6		ug/L		102	45 - 140
Acetone	38		25.0	72.9		ug/L		138	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

Lab Sample ID: 440-21440-B-3 MSD
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	27.0		ug/L		108	65 - 140	2	20
1,1,1-Trichloroethane	2.5		25.0	28.4		ug/L		104	65 - 140	5	20
1,1,2,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	55 - 135	2	30
1,1,2-Trichloroethane	ND		25.0	24.9		ug/L		100	65 - 130	1	25
1,1-Dichloroethane	7.1		25.0	32.2		ug/L		100	65 - 130	3	20
1,1-Dichloroethene	200		25.0	219	4	ug/L		71	60 - 130	7	20
1,1-Dichloropropene	ND		25.0	24.2		ug/L		97	70 - 135	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21440-B-3 MSD
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	0.34	J	25.0	19.6		ug/L		77	60 - 135	4	20
1,2,3-Trichloropropane	ND		25.0	34.5	F	ug/L		138	55 - 135	2	30
1,2,4-Trichlorobenzene	ND		25.0	23.0		ug/L		92	65 - 135	5	20
1,2,4-Trimethylbenzene	ND		25.0	27.5		ug/L		110	55 - 135	4	25
1,2-Dibromo-3-Chloropropane	ND		25.0	25.6		ug/L		102	45 - 145	4	30
1,2-Dichlorobenzene	0.98	J	25.0	26.4		ug/L		102	75 - 125	0	20
1,2-Dibromoethane (EDB)	ND		25.0	27.2		ug/L		109	70 - 130	1	25
1,2-Dichloroethane	0.61	J	25.0	26.3		ug/L		103	60 - 140	3	20
1,2-Dichloropropane	36		25.0	60.9		ug/L		101	65 - 130	3	20
1,3,5-Trimethylbenzene	ND		25.0	26.6		ug/L		106	70 - 130	4	20
1,3-Dichlorobenzene	ND		25.0	25.6		ug/L		103	75 - 125	1	20
1,3-Dichloropropane	ND		25.0	24.5		ug/L		98	65 - 135	3	25
1,4-Dichlorobenzene	ND		25.0	25.6		ug/L		102	75 - 125	1	20
2,2-Dichloropropane	ND		25.0	28.8		ug/L		115	60 - 145	5	25
2-Chlorotoluene	ND		25.0	27.1		ug/L		108	65 - 135	1	20
4-Chlorotoluene	ND		25.0	27.5		ug/L		110	70 - 135	3	20
p-Isopropyltoluene	ND		25.0	27.2		ug/L		109	65 - 130	2	20
Benzene	0.53		25.0	26.7		ug/L		105	65 - 125	1	20
Bromobenzene	ND		25.0	26.7		ug/L		107	70 - 125	1	20
Bromochloromethane	ND		25.0	25.0		ug/L		100	65 - 135	1	25
Bromodichloromethane	ND		25.0	27.2		ug/L		109	70 - 135	3	20
Bromoform	ND		25.0	23.4		ug/L		94	55 - 135	0	25
Bromomethane	ND		25.0	25.8		ug/L		103	55 - 145	2	25
Carbon tetrachloride	ND		25.0	27.6		ug/L		110	65 - 140	5	25
Chlorobenzene	ND		25.0	24.8		ug/L		99	75 - 125	2	20
Chloroethane	ND		25.0	25.8		ug/L		103	55 - 140	1	25
Chloroform	ND		25.0	25.2		ug/L		101	65 - 135	4	20
Chloromethane	0.42	J	25.0	24.7		ug/L		97	45 - 145	2	25
cis-1,2-Dichloroethene	ND		25.0	26.1		ug/L		105	65 - 130	5	20
cis-1,3-Dichloropropene	ND		25.0	28.3		ug/L		113	70 - 130	3	20
Dibromochloromethane	ND		25.0	27.5		ug/L		110	65 - 140	2	25
Dibromomethane	ND		25.0	26.6		ug/L		106	65 - 135	2	25
Dichlorodifluoromethane	ND		25.0	20.0		ug/L		80	25 - 155	8	30
Ethylbenzene	ND		25.0	27.5		ug/L		110	65 - 130	3	20
Hexachlorobutadiene	ND		25.0	19.9		ug/L		79	60 - 135	5	20
Isopropylbenzene	ND		25.0	27.9		ug/L		111	70 - 135	0	20
m,p-Xylene	ND		50.0	51.5		ug/L		103	65 - 130	2	25
Methylene Chloride	41		25.0	63.5		ug/L		89	50 - 135	4	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.7		ug/L		111	55 - 145	1	25
Naphthalene	0.59	J	25.0	23.4		ug/L		91	50 - 140	4	30
n-Butylbenzene	ND		25.0	27.1		ug/L		108	65 - 135	3	20
N-Propylbenzene	ND		25.0	27.5		ug/L		110	70 - 135	2	20
o-Xylene	ND		25.0	25.7		ug/L		103	65 - 125	2	20
sec-Butylbenzene	ND		25.0	26.6		ug/L		107	70 - 125	1	20
Styrene	ND		25.0	25.1		ug/L		100	50 - 145	6	30
tert-Butylbenzene	ND		25.0	27.4		ug/L		110	65 - 130	0	20
Tetrachloroethene	3.6		25.0	28.4		ug/L		99	65 - 130	2	20
Toluene	2.3		25.0	28.0		ug/L		103	70 - 125	3	20
trans-1,2-Dichloroethene	ND		25.0	26.2		ug/L		105	65 - 130	3	20
trans-1,3-Dichloropropene	ND		25.0	27.6		ug/L		110	65 - 135	1	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21440-B-3 MSD
Matrix: Water
Analysis Batch: 48254

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene	17		25.0	40.1		ug/L		93	65 - 125	4	20
Trichlorofluoromethane	1.6		25.0	27.6		ug/L		104	60 - 145	8	25
Vinyl chloride	ND		25.0	24.6		ug/L		99	45 - 140	4	30
Acetone	38		25.0	74.6		ug/L		145	20 - 150	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 440-48461/4
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/28/12 20:59	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 20:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/28/12 20:59	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/28/12 20:59	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/28/12 20:59	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/28/12 20:59	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/28/12 20:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/28/12 20:59	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/28/12 20:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/28/12 20:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/28/12 20:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/28/12 20:59	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/28/12 20:59	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/28/12 20:59	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/28/12 20:59	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/28/12 20:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/28/12 20:59	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/28/12 20:59	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/28/12 20:59	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/28/12 20:59	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/28/12 20:59	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/28/12 20:59	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/28/12 20:59	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/28/12 20:59	1
Benzene	ND		0.50	0.28	ug/L			08/28/12 20:59	1
Bromobenzene	ND		1.0	0.27	ug/L			08/28/12 20:59	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/28/12 20:59	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/28/12 20:59	1
Bromoform	ND		1.0	0.40	ug/L			08/28/12 20:59	1
Bromomethane	ND		1.0	0.42	ug/L			08/28/12 20:59	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/28/12 20:59	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/28/12 20:59	1
Chloroethane	ND		1.0	0.40	ug/L			08/28/12 20:59	1
Chloroform	ND		1.0	0.33	ug/L			08/28/12 20:59	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48461/4
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.40	ug/L			08/28/12 20:59	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/28/12 20:59	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/28/12 20:59	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/28/12 20:59	1
Dibromomethane	ND		1.0	0.36	ug/L			08/28/12 20:59	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/28/12 20:59	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/28/12 20:59	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/28/12 20:59	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/28/12 20:59	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/28/12 20:59	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/28/12 20:59	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/28/12 20:59	1
Naphthalene	ND		1.0	0.41	ug/L			08/28/12 20:59	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/28/12 20:59	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/28/12 20:59	1
o-Xylene	ND		1.0	0.30	ug/L			08/28/12 20:59	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/28/12 20:59	1
Styrene	ND		1.0	0.20	ug/L			08/28/12 20:59	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/28/12 20:59	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/28/12 20:59	1
Toluene	ND		1.0	0.36	ug/L			08/28/12 20:59	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/28/12 20:59	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/28/12 20:59	1
Trichloroethene	ND		1.0	0.26	ug/L			08/28/12 20:59	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/28/12 20:59	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/28/12 20:59	1
Acetone	ND		10	4.5	ug/L			08/28/12 20:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/28/12 20:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/28/12 20:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/28/12 20:59*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/28/12 20:59*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/28/12 20:59*	*1*

Lab Sample ID: LCS 440-48461/5
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	28.9		ug/L		116	70 - 130
1,1,1-Trichloroethane	25.0	27.6		ug/L		111	65 - 135
1,1,2,2-Tetrachloroethane	25.0	28.2		ug/L		113	55 - 130
1,1,2-Trichloroethane	25.0	24.8		ug/L		99	70 - 125
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 125
1,1-Dichloroethene	25.0	26.4		ug/L		106	70 - 125
1,1-Dichloropropene	25.0	25.6		ug/L		102	75 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48461/5
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichlorobenzene	25.0	20.0		ug/L		80	65 - 125
1,2,3-Trichloropropane	25.0	27.8		ug/L		111	60 - 130
1,2,4-Trichlorobenzene	25.0	23.2		ug/L		93	70 - 135
1,2,4-Trimethylbenzene	25.0	30.0		ug/L		120	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	28.6		ug/L		114	50 - 135
1,2-Dichlorobenzene	25.0	26.0		ug/L		104	75 - 120
1,2-Dibromoethane (EDB)	25.0	28.0		ug/L		112	75 - 125
1,2-Dichloroethane	25.0	26.6		ug/L		106	60 - 140
1,2-Dichloropropane	25.0	24.5		ug/L		98	70 - 125
1,3,5-Trimethylbenzene	25.0	30.1		ug/L		120	75 - 125
1,3-Dichlorobenzene	25.0	26.4		ug/L		105	75 - 120
1,3-Dichloropropane	25.0	25.9		ug/L		103	70 - 120
1,4-Dichlorobenzene	25.0	26.0		ug/L		104	75 - 120
2,2-Dichloropropane	25.0	30.2		ug/L		121	65 - 140
2-Chlorotoluene	25.0	28.2		ug/L		113	70 - 125
4-Chlorotoluene	25.0	28.4		ug/L		113	75 - 125
p-Isopropyltoluene	25.0	29.2		ug/L		117	75 - 125
Benzene	25.0	26.0		ug/L		104	70 - 120
Bromobenzene	25.0	27.3		ug/L		109	75 - 120
Bromochloromethane	25.0	24.6		ug/L		99	70 - 130
Bromodichloromethane	25.0	27.9		ug/L		112	70 - 135
Bromoform	25.0	25.1		ug/L		100	55 - 130
Bromomethane	25.0	23.8		ug/L		95	65 - 140
Carbon tetrachloride	25.0	30.8		ug/L		123	65 - 140
Chlorobenzene	25.0	25.9		ug/L		103	75 - 120
Chloroethane	25.0	24.2		ug/L		97	60 - 140
Chloroform	25.0	25.6		ug/L		102	70 - 130
Chloromethane	25.0	19.0		ug/L		76	50 - 140
cis-1,2-Dichloroethene	25.0	26.8		ug/L		107	70 - 125
cis-1,3-Dichloropropene	25.0	27.7		ug/L		111	75 - 125
Dibromochloromethane	25.0	29.5		ug/L		118	70 - 140
Dibromomethane	25.0	27.0		ug/L		108	70 - 125
Dichlorodifluoromethane	25.0	15.3		ug/L		61	35 - 155
Ethylbenzene	25.0	29.2		ug/L		117	75 - 125
Hexachlorobutadiene	25.0	20.8		ug/L		83	65 - 135
Isopropylbenzene	25.0	29.8		ug/L		119	75 - 130
m,p-Xylene	50.0	55.1		ug/L		110	75 - 125
Methylene Chloride	25.0	23.1		ug/L		93	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	27.2		ug/L		109	60 - 135
Naphthalene	25.0	23.8		ug/L		95	55 - 135
n-Butylbenzene	25.0	29.1		ug/L		116	70 - 130
N-Propylbenzene	25.0	29.7		ug/L		119	75 - 130
o-Xylene	25.0	27.4		ug/L		110	75 - 125
sec-Butylbenzene	25.0	28.7		ug/L		115	70 - 125
Styrene	25.0	28.2		ug/L		113	75 - 130
tert-Butylbenzene	25.0	29.2		ug/L		117	70 - 125
Tetrachloroethene	25.0	26.6		ug/L		106	70 - 125
Toluene	25.0	26.7		ug/L		107	70 - 120
trans-1,2-Dichloroethene	25.0	26.4		ug/L		105	70 - 125
trans-1,3-Dichloropropene	25.0	27.3		ug/L		109	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48461/5
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	25.0	25.2		ug/L		101	70 - 125
Trichlorofluoromethane	25.0	29.0		ug/L		116	65 - 145
Vinyl chloride	25.0	23.1		ug/L		92	55 - 135
Acetone	25.0	34.7		ug/L		139	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 440-21243-B-2 MS
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	29.1		ug/L		117	65 - 140
1,1,1-Trichloroethane	ND		25.0	29.1		ug/L		116	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	27.0		ug/L		108	55 - 135
1,1,2-Trichloroethane	ND		25.0	24.7		ug/L		99	65 - 130
1,1-Dichloroethane	ND		25.0	26.1		ug/L		104	65 - 130
1,1-Dichloroethene	ND		25.0	27.8		ug/L		111	60 - 130
1,1-Dichloropropene	ND		25.0	26.4		ug/L		106	70 - 135
1,2,3-Trichlorobenzene	ND		25.0	19.7		ug/L		79	60 - 135
1,2,3-Trichloropropane	ND		25.0	26.7		ug/L		107	55 - 135
1,2,4-Trichlorobenzene	ND		25.0	23.6		ug/L		94	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	27.7		ug/L		111	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	27.0		ug/L		108	45 - 145
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L		104	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	27.8		ug/L		111	70 - 130
1,2-Dichloroethane	ND		25.0	26.7		ug/L		107	60 - 140
1,2-Dichloropropane	ND		25.0	25.2		ug/L		101	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	30.0		ug/L		120	70 - 130
1,3-Dichlorobenzene	ND		25.0	26.9		ug/L		107	75 - 125
1,3-Dichloropropane	ND		25.0	25.4		ug/L		101	65 - 135
1,4-Dichlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125
2,2-Dichloropropane	ND		25.0	33.3		ug/L		133	60 - 145
2-Chlorotoluene	ND		25.0	28.7		ug/L		115	65 - 135
4-Chlorotoluene	ND		25.0	29.0		ug/L		116	70 - 135
p-Isopropyltoluene	ND		25.0	29.7		ug/L		119	65 - 130
Benzene	ND		25.0	26.7		ug/L		107	65 - 125
Bromobenzene	ND		25.0	27.1		ug/L		108	70 - 125
Bromochloromethane	ND		25.0	24.4		ug/L		98	65 - 135
Bromodichloromethane	ND		25.0	28.3		ug/L		113	70 - 135
Bromoform	ND		25.0	24.8		ug/L		99	55 - 135
Bromomethane	ND		25.0	24.6		ug/L		98	55 - 145
Carbon tetrachloride	ND		25.0	32.6		ug/L		130	65 - 140
Chlorobenzene	ND		25.0	26.2		ug/L		105	75 - 125
Chloroethane	ND		25.0	25.3		ug/L		101	55 - 140
Chloroform	ND		25.0	26.3		ug/L		105	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21243-B-2 MS
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	ND		25.0	19.4		ug/L		77	45 - 145
cis-1,2-Dichloroethene	ND		25.0	27.9		ug/L		111	65 - 130
cis-1,3-Dichloropropene	ND		25.0	28.4		ug/L		114	70 - 130
Dibromochloromethane	ND		25.0	29.4		ug/L		118	65 - 140
Dibromomethane	ND		25.0	26.9		ug/L		108	65 - 135
Dichlorodifluoromethane	ND		25.0	15.6		ug/L		63	25 - 155
Ethylbenzene	ND		25.0	30.2		ug/L		121	65 - 130
Hexachlorobutadiene	ND		25.0	21.6		ug/L		86	60 - 135
Isopropylbenzene	ND		25.0	30.2		ug/L		121	70 - 135
m,p-Xylene	ND		50.0	55.9		ug/L		112	65 - 130
Methylene Chloride	ND		25.0	22.9		ug/L		92	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.5		ug/L		110	55 - 145
Naphthalene	ND		25.0	21.4		ug/L		86	50 - 140
n-Butylbenzene	ND		25.0	30.4		ug/L		122	65 - 135
N-Propylbenzene	ND		25.0	30.1		ug/L		120	70 - 135
o-Xylene	ND		25.0	27.6		ug/L		110	65 - 125
sec-Butylbenzene	ND		25.0	29.6		ug/L		118	70 - 125
Styrene	ND		25.0	23.3		ug/L		93	50 - 145
tert-Butylbenzene	ND		25.0	29.9		ug/L		120	65 - 130
Tetrachloroethene	ND		25.0	27.7		ug/L		111	65 - 130
Toluene	ND		25.0	27.3		ug/L		109	70 - 125
trans-1,2-Dichloroethene	ND		25.0	26.9		ug/L		107	65 - 130
trans-1,3-Dichloropropene	ND		25.0	27.8		ug/L		111	65 - 135
Trichloroethene	4.3		25.0	29.9		ug/L		103	65 - 125
Trichlorofluoromethane	ND		25.0	30.9		ug/L		123	60 - 145
Vinyl chloride	ND		25.0	23.8		ug/L		95	45 - 140
Acetone	ND		25.0	27.7		ug/L		111	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 440-21243-B-2 MSD
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	29.0		ug/L		116	65 - 140	1	20
1,1,1-Trichloroethane	ND		25.0	29.7		ug/L		119	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	27.3		ug/L		109	55 - 135	1	30
1,1,2-Trichloroethane	ND		25.0	25.0		ug/L		100	65 - 130	1	25
1,1-Dichloroethane	ND		25.0	26.4		ug/L		106	65 - 130	1	20
1,1-Dichloroethene	ND		25.0	27.8		ug/L		111	60 - 130	0	20
1,1-Dichloropropene	ND		25.0	26.6		ug/L		106	70 - 135	1	20
1,2,3-Trichlorobenzene	ND		25.0	20.4		ug/L		82	60 - 135	3	20
1,2,3-Trichloropropane	ND		25.0	26.6		ug/L		107	55 - 135	0	30
1,2,4-Trichlorobenzene	ND		25.0	24.5		ug/L		98	65 - 135	4	20
1,2,4-Trimethylbenzene	ND		25.0	26.6		ug/L		106	55 - 135	4	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21243-B-2 MSD
Matrix: Water
Analysis Batch: 48461

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		25.0	26.4		ug/L		106	45 - 145	2	30
1,2-Dichlorobenzene	ND		25.0	26.5		ug/L		106	75 - 125	2	20
1,2-Dibromoethane (EDB)	ND		25.0	27.5		ug/L		110	70 - 130	1	25
1,2-Dichloroethane	ND		25.0	26.6		ug/L		106	60 - 140	0	20
1,2-Dichloropropane	ND		25.0	25.4		ug/L		102	65 - 130	1	20
1,3,5-Trimethylbenzene	ND		25.0	29.8		ug/L		119	70 - 130	1	20
1,3-Dichlorobenzene	ND		25.0	27.1		ug/L		108	75 - 125	1	20
1,3-Dichloropropane	ND		25.0	25.2		ug/L		101	65 - 135	0	25
1,4-Dichlorobenzene	ND		25.0	27.1		ug/L		108	75 - 125	3	20
2,2-Dichloropropane	ND		25.0	32.8		ug/L		131	60 - 145	1	25
2-Chlorotoluene	ND		25.0	28.8		ug/L		115	65 - 135	0	20
4-Chlorotoluene	ND		25.0	29.1		ug/L		116	70 - 135	0	20
p-Isopropyltoluene	ND		25.0	30.0		ug/L		120	65 - 130	1	20
Benzene	ND		25.0	27.1		ug/L		108	65 - 125	1	20
Bromobenzene	ND		25.0	27.6		ug/L		110	70 - 125	2	20
Bromochloromethane	ND		25.0	25.2		ug/L		101	65 - 135	3	25
Bromodichloromethane	ND		25.0	28.3		ug/L		113	70 - 135	0	20
Bromoform	ND		25.0	24.2		ug/L		97	55 - 135	3	25
Bromomethane	ND		25.0	25.3		ug/L		101	55 - 145	3	25
Carbon tetrachloride	ND		25.0	32.5		ug/L		130	65 - 140	0	25
Chlorobenzene	ND		25.0	26.1		ug/L		104	75 - 125	0	20
Chloroethane	ND		25.0	26.2		ug/L		105	55 - 140	3	25
Chloroform	ND		25.0	26.6		ug/L		106	65 - 135	1	20
Chloromethane	ND		25.0	20.5		ug/L		82	45 - 145	6	25
cis-1,2-Dichloroethene	ND		25.0	28.6		ug/L		115	65 - 130	3	20
cis-1,3-Dichloropropene	ND		25.0	28.9		ug/L		116	70 - 130	2	20
Dibromochloromethane	ND		25.0	29.3		ug/L		117	65 - 140	0	25
Dibromomethane	ND		25.0	27.5		ug/L		110	65 - 135	2	25
Dichlorodifluoromethane	ND		25.0	15.9		ug/L		63	25 - 155	1	30
Ethylbenzene	ND		25.0	29.7		ug/L		119	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	22.2		ug/L		89	60 - 135	3	20
Isopropylbenzene	ND		25.0	30.5		ug/L		122	70 - 135	1	20
m,p-Xylene	ND		50.0	55.4		ug/L		111	65 - 130	1	25
Methylene Chloride	ND		25.0	23.4		ug/L		94	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	28.1		ug/L		112	55 - 145	2	25
Naphthalene	ND		25.0	21.8		ug/L		87	50 - 140	2	30
n-Butylbenzene	ND		25.0	30.6		ug/L		122	65 - 135	1	20
N-Propylbenzene	ND		25.0	30.4		ug/L		122	70 - 135	1	20
o-Xylene	ND		25.0	27.4		ug/L		110	65 - 125	1	20
sec-Butylbenzene	ND		25.0	29.8		ug/L		119	70 - 125	1	20
Styrene	ND		25.0	21.0		ug/L		84	50 - 145	10	30
tert-Butylbenzene	ND		25.0	30.2		ug/L		121	65 - 130	1	20
Tetrachloroethene	ND		25.0	27.6		ug/L		110	65 - 130	0	20
Toluene	ND		25.0	27.7		ug/L		111	70 - 125	1	20
trans-1,2-Dichloroethene	ND		25.0	27.1		ug/L		108	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	27.8		ug/L		111	65 - 135	0	25
Trichloroethene	4.3		25.0	30.2		ug/L		104	65 - 125	1	20
Trichlorofluoromethane	ND		25.0	30.7		ug/L		123	60 - 145	0	25
Vinyl chloride	ND		25.0	24.8		ug/L		99	45 - 140	4	30
Acetone	ND		25.0	28.5		ug/L		114	20 - 150	3	35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21243-B-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 48461

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: MB 440-49675/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	2.04	J	5.0	0.95	ug/L			09/04/12 19:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		80 - 120		09/04/12 19:58	1
Dibromofluoromethane (Surr)	96		80 - 120		09/04/12 19:58	1
Toluene-d8 (Surr)	96		80 - 120		09/04/12 19:58	1

Lab Sample ID: LCS 440-49675/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylene Chloride			25.0	20.1		ug/L		80	55 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 440-21316-B-7 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylene Chloride	ND		25.0	21.5		ug/L		86	50 - 135		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: 440-21316-B-7 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride	ND		25.0	21.6		ug/L		87	50 - 135	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21316-B-7 MSD
Matrix: Water
Analysis Batch: 49675

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-48373/1-A
Matrix: Water
Analysis Batch: 48592

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.060	ug/L		08/28/12 13:48	08/29/12 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	52		30 - 120	08/28/12 13:48	08/29/12 13:44	1

Lab Sample ID: LCS 440-48373/2-A
Matrix: Water
Analysis Batch: 48592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	4.00	1.91		ug/L		48	35 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	49		30 - 120

Lab Sample ID: 440-21053-6 MS
Matrix: Water
Analysis Batch: 48592

Client Sample ID: OC-GW-OW7-082112
Prep Type: Total/NA
Prep Batch: 48373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.087	J	3.77	2.50		ug/L		64	35 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	44		30 - 120

Lab Sample ID: 440-21053-6 MSD
Matrix: Water
Analysis Batch: 48592

Client Sample ID: OC-GW-OW7-082112
Prep Type: Total/NA
Prep Batch: 48373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.087	J	3.81	1.63	F	ug/L		41	35 - 120	42	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,4-Dioxane-d8 (Surr)	42		30 - 120

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

GC/MS VOA

Analysis Batch: 48179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-1	OC-GW-TB-082112	Total/NA	Water	8260B	
440-21053-4	OC-GW-OW8B-082112	Total/NA	Water	8260B	
440-21053-5	OC-GW-OW3B-082112	Total/NA	Water	8260B	
440-21053-6	OC-GW-OW7-082112	Total/NA	Water	8260B	
440-21053-6 MS	OC-GW-OW7-082112	Total/NA	Water	8260B	
440-21053-6 MSD	OC-GW-OW7-082112	Total/NA	Water	8260B	
440-21053-7	OC-GW-OW2-082112	Total/NA	Water	8260B	
LCS 440-48179/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-48179/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 48254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-7 - DL	OC-GW-OW2-082112	Total/NA	Water	8260B	
440-21053-9	OC-GW-OW7N-082112	Total/NA	Water	8260B	
440-21440-B-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-21440-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-48254/27	Lab Control Sample	Total/NA	Water	8260B	
LCSD 440-48254/28	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 440-48254/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 48461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-8	OC-GW-OW3-082112	Total/NA	Water	8260B	
440-21243-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-21243-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-48461/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-48461/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 49675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-1 - RA	OC-GW-TB-082112	Total/NA	Water	8260B	
440-21053-5 - RA	OC-GW-OW3B-082112	Total/NA	Water	8260B	
440-21053-6 - RA	OC-GW-OW7-082112	Total/NA	Water	8260B	
440-21053-7 - RA	OC-GW-OW2-082112	Total/NA	Water	8260B	
440-21316-B-7 MS	Matrix Spike	Total/NA	Water	8260B	
440-21316-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-49675/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-49675/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 48373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-4	OC-GW-OW8B-082112	Total/NA	Water	3520C	
440-21053-5	OC-GW-OW3B-082112	Total/NA	Water	3520C	
440-21053-6	OC-GW-OW7-082112	Total/NA	Water	3520C	
440-21053-6 MS	OC-GW-OW7-082112	Total/NA	Water	3520C	
440-21053-6 MSD	OC-GW-OW7-082112	Total/NA	Water	3520C	
440-21053-7	OC-GW-OW2-082112	Total/NA	Water	3520C	
440-21053-8	OC-GW-OW3-082112	Total/NA	Water	3520C	
440-21053-9	OC-GW-OW7N-082112	Total/NA	Water	3520C	
LCS 440-48373/2-A	Lab Control Sample	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 48373 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-48373/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 48592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-4	OC-GW-OW8B-082112	Total/NA	Water	8270C SIM	48373
440-21053-5	OC-GW-OW3B-082112	Total/NA	Water	8270C SIM	48373
440-21053-6	OC-GW-OW7-082112	Total/NA	Water	8270C SIM	48373
440-21053-6 MS	OC-GW-OW7-082112	Total/NA	Water	8270C SIM	48373
440-21053-6 MSD	OC-GW-OW7-082112	Total/NA	Water	8270C SIM	48373
440-21053-7	OC-GW-OW2-082112	Total/NA	Water	8270C SIM	48373
440-21053-8	OC-GW-OW3-082112	Total/NA	Water	8270C SIM	48373
440-21053-9	OC-GW-OW7N-082112	Total/NA	Water	8270C SIM	48373
LCS 440-48373/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	48373
MB 440-48373/1-A	Method Blank	Total/NA	Water	8270C SIM	48373

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	MS or MSD exceeds the control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-12
USDA	Federal		P330-09-00080	06-06-14

440-21053

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013 (0911)

CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CDM Smith / 111 Academy Ste. 150 Irvine, CA 92617

Project/PO Number: 10500-90421-EECA, Semiannual

Project Manager: Sharon Wallin

Phone Number: (949) 752-5452

Sampler: Nacolynn Begay

Fax Number: (949) 725-3790

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOCs (8240B) Include: freons, TICs, acetone, + MTBE.	1,4-Dioxane (8270M)		Level 4 Deliverables	24 HR TAT					Special Instructions
OC-GW-TB-082112	W	VOA	2	—	—	HCl	X									Note: Low level DLs, Multiple Dilutions! on ALL samples
-OW9-	Aqu.	VOA/Amber	5	8.21.12	0937	HCl/none	X	X		X	X					24 HR TAT only
-OW9K-					0945					X						
-OW8B-					1119											
-OW3B-					1253											
-OW7-			15 10		1408											MS/MSD
-OW2-			5		1430											
-OW3					1455											
OC-GW-OW7N-082112					1530											

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
	8.21.12/1705			same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours OW-9 only 5 days ____
				48 hours ____ normal X
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
			08/21/12 17:05	intact X on ice X 3.5°

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-21053-1

Login Number: 21053
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Nacolynn Begay
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-21053-2
Client Project/Site: 10500-90421-EECA.Semiannual

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
9/21/2012 2:35:06 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-21053-2	OC-GW-OW9-082112	Water	08/21/12 09:37	08/21/12 17:05
440-21053-3	OC-GW-OW9K-082112	Water	08/21/12 09:45	08/21/12 17:05

Job ID: 440-21053-2

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-21053-2

Comments
No additional comments.

Receipt
The samples were received on 8/21/2012 5:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3º C and 8.9º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 47144. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 48373 was outside control limits. Individual recoveries were within control limits.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-2

Client Sample ID: OC-GW-OW9-082112
Date Collected: 08/21/12 09:37
Date Received: 08/21/12 17:05

Lab Sample ID: 440-21053-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	2.7	ug/L			08/22/12 14:42	10
1,1,1-Trichloroethane	ND		10	3.0	ug/L			08/22/12 14:42	10
1,1,2,2-Tetrachloroethane	ND		10	3.0	ug/L			08/22/12 14:42	10
1,1,2-Trichloroethane	ND		10	3.0	ug/L			08/22/12 14:42	10
1,1-Dichloroethane	**5.7**	**J**	10	4.0	ug/L			08/22/12 14:42	10
1,1-Dichloroethene	**330**		10	4.2	ug/L			08/22/12 14:42	10
1,1-Dichloropropene	ND		10	2.8	ug/L			08/22/12 14:42	10
1,2,3-Trichlorobenzene	ND		10	3.0	ug/L			08/22/12 14:42	10
1,2,3-Trichloropropane	ND		10	4.0	ug/L			08/22/12 14:42	10
1,2,4-Trichlorobenzene	ND		10	4.8	ug/L			08/22/12 14:42	10
1,2,4-Trimethylbenzene	ND		10	2.3	ug/L			08/22/12 14:42	10
1,2-Dibromo-3-Chloropropane	ND		50	9.7	ug/L			08/22/12 14:42	10
1,2-Dichlorobenzene	ND		10	3.2	ug/L			08/22/12 14:42	10
1,2-Dibromoethane (EDB)	ND		10	4.0	ug/L			08/22/12 14:42	10
1,2-Dichloroethane	**48**		10	2.8	ug/L			08/22/12 14:42	10
1,2-Dichloropropane	ND		10	3.5	ug/L			08/22/12 14:42	10
1,3,5-Trimethylbenzene	ND		10	2.6	ug/L			08/22/12 14:42	10
1,3-Dichlorobenzene	ND		10	3.5	ug/L			08/22/12 14:42	10
1,3-Dichloropropane	ND		10	3.2	ug/L			08/22/12 14:42	10
1,4-Dichlorobenzene	ND		10	3.7	ug/L			08/22/12 14:42	10
2,2-Dichloropropane	ND		10	3.4	ug/L			08/22/12 14:42	10
2-Chlorotoluene	ND		10	2.8	ug/L			08/22/12 14:42	10
4-Chlorotoluene	ND		10	2.9	ug/L			08/22/12 14:42	10
p-Isopropyltoluene	ND		10	2.8	ug/L			08/22/12 14:42	10
Benzene	ND		5.0	2.8	ug/L			08/22/12 14:42	10
Bromobenzene	ND		10	2.7	ug/L			08/22/12 14:42	10
Bromochloromethane	ND		10	4.0	ug/L			08/22/12 14:42	10
Bromodichloromethane	ND		10	3.0	ug/L			08/22/12 14:42	10
Bromoform	ND		10	4.0	ug/L			08/22/12 14:42	10
Bromomethane	ND		10	4.2	ug/L			08/22/12 14:42	10
Carbon tetrachloride	ND		5.0	2.8	ug/L			08/22/12 14:42	10
Chlorobenzene	ND		10	3.6	ug/L			08/22/12 14:42	10
Chloroethane	ND		10	4.0	ug/L			08/22/12 14:42	10
Chloroform	**200**		10	3.3	ug/L			08/22/12 14:42	10
Chloromethane	ND		10	4.0	ug/L			08/22/12 14:42	10
cis-1,2-Dichloroethene	ND		10	3.2	ug/L			08/22/12 14:42	10
cis-1,3-Dichloropropene	ND		5.0	2.2	ug/L			08/22/12 14:42	10
Dibromochloromethane	ND		10	4.0	ug/L			08/22/12 14:42	10
Dibromomethane	ND		10	3.6	ug/L			08/22/12 14:42	10
Dichlorodifluoromethane	ND		10	2.6	ug/L			08/22/12 14:42	10
Ethylbenzene	ND		10	2.5	ug/L			08/22/12 14:42	10
Hexachlorobutadiene	ND		10	3.8	ug/L			08/22/12 14:42	10
Isopropylbenzene	ND		10	2.5	ug/L			08/22/12 14:42	10
m,p-Xylene	ND		10	6.0	ug/L			08/22/12 14:42	10
Methylene Chloride	ND		50	9.5	ug/L			08/22/12 14:42	10
Methyl-t-Butyl Ether (MTBE)	ND		10	3.2	ug/L			08/22/12 14:42	10
Naphthalene	ND		10	4.1	ug/L			08/22/12 14:42	10
n-Butylbenzene	ND		10	3.7	ug/L			08/22/12 14:42	10
N-Propylbenzene	ND		10	2.7	ug/L			08/22/12 14:42	10
o-Xylene	ND		10	3.0	ug/L			08/22/12 14:42	10
sec-Butylbenzene	ND		10	2.5	ug/L			08/22/12 14:42	10

Client Sample ID: OC-GW-OW9-082112

Lab Sample ID: 440-21053-2

Date Collected: 08/21/12 09:37

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		10	2.0	ug/L			08/22/12 14:42	10
tert-Butylbenzene	ND		10	2.2	ug/L			08/22/12 14:42	10
Toluene	ND		10	3.6	ug/L			08/22/12 14:42	10
trans-1,2-Dichloroethene	**3.2**	**J**	10	3.0	ug/L			08/22/12 14:42	10
trans-1,3-Dichloropropene	ND		5.0	3.2	ug/L			08/22/12 14:42	10
Trichloroethene	**220**		10	2.6	ug/L			08/22/12 14:42	10
Trichlorofluoromethane	**130**		10	3.4	ug/L			08/22/12 14:42	10
Vinyl chloride	ND		5.0	4.0	ug/L			08/22/12 14:42	10
Acetone	ND		100	45	ug/L			08/22/12 14:42	10
1,1,2-Trichloro-1,2,2-trifluoroethane	**350**		50	5.0	ug/L			08/22/12 14:42	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/22/12 14:42*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*08/22/12 14:42*	*10*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*08/22/12 14:42*	*10*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/22/12 14:42*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**4500**		50	16	ug/L			08/22/12 12:02	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/22/12 12:02*	*50*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*08/22/12 12:02*	*50*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/22/12 12:02*	*50*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**260**		100	12	ug/L		08/22/12 15:27	08/23/12 15:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*64*		*30 - 120*	*08/22/12 15:27*	*08/23/12 15:36*	*2*

Client Sample ID: OC-GW-OW9K-082112

Lab Sample ID: 440-21053-3

Date Collected: 08/21/12 09:45

Matrix: Water

Date Received: 08/21/12 17:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	2.7	ug/L			08/27/12 23:50	10
1,1,1-Trichloroethane	ND		10	3.0	ug/L			08/27/12 23:50	10
1,1,2,2-Tetrachloroethane	ND		10	3.0	ug/L			08/27/12 23:50	10
1,1,2-Trichloroethane	ND		10	3.0	ug/L			08/27/12 23:50	10
1,1-Dichloroethane	**7.9**	**J**	10	4.0	ug/L			08/27/12 23:50	10
1,1-Dichloroethene	**360**		10	4.2	ug/L			08/27/12 23:50	10
1,1-Dichloropropene	ND		10	2.8	ug/L			08/27/12 23:50	10
1,2,3-Trichlorobenzene	ND		10	3.0	ug/L			08/27/12 23:50	10
1,2,3-Trichloropropane	ND		10	4.0	ug/L			08/27/12 23:50	10
1,2,4-Trichlorobenzene	ND		10	4.8	ug/L			08/27/12 23:50	10
1,2,4-Trimethylbenzene	ND		10	2.3	ug/L			08/27/12 23:50	10

Client Sample ID: OC-GW-OW9K-082112
Date Collected: 08/21/12 09:45
Date Received: 08/21/12 17:05

Lab Sample ID: 440-21053-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		50	9.7	ug/L			08/27/12 23:50	10
1,2-Dichlorobenzene	ND		10	3.2	ug/L			08/27/12 23:50	10
1,2-Dibromoethane (EDB)	ND		10	4.0	ug/L			08/27/12 23:50	10
1,2-Dichloroethane	**47**		10	2.8	ug/L			08/27/12 23:50	10
1,2-Dichloropropane	ND		10	3.5	ug/L			08/27/12 23:50	10
1,3,5-Trimethylbenzene	ND		10	2.6	ug/L			08/27/12 23:50	10
1,3-Dichlorobenzene	ND		10	3.5	ug/L			08/27/12 23:50	10
1,3-Dichloropropane	ND		10	3.2	ug/L			08/27/12 23:50	10
1,4-Dichlorobenzene	ND		10	3.7	ug/L			08/27/12 23:50	10
2,2-Dichloropropane	ND		10	3.4	ug/L			08/27/12 23:50	10
2-Chlorotoluene	ND		10	2.8	ug/L			08/27/12 23:50	10
4-Chlorotoluene	ND		10	2.9	ug/L			08/27/12 23:50	10
p-Isopropyltoluene	ND		10	2.8	ug/L			08/27/12 23:50	10
Benzene	ND		5.0	2.8	ug/L			08/27/12 23:50	10
Bromobenzene	ND		10	2.7	ug/L			08/27/12 23:50	10
Bromochloromethane	ND		10	4.0	ug/L			08/27/12 23:50	10
Bromodichloromethane	ND		10	3.0	ug/L			08/27/12 23:50	10
Bromoform	ND		10	4.0	ug/L			08/27/12 23:50	10
Bromomethane	ND		10	4.2	ug/L			08/27/12 23:50	10
Carbon tetrachloride	ND		5.0	2.8	ug/L			08/27/12 23:50	10
Chlorobenzene	ND		10	3.6	ug/L			08/27/12 23:50	10
Chloroethane	ND		10	4.0	ug/L			08/27/12 23:50	10
Chloroform	**230**		10	3.3	ug/L			08/27/12 23:50	10
Chloromethane	ND		10	4.0	ug/L			08/27/12 23:50	10
cis-1,2-Dichloroethene	**3.2**	**J**	10	3.2	ug/L			08/27/12 23:50	10
cis-1,3-Dichloropropene	ND		5.0	2.2	ug/L			08/27/12 23:50	10
Dibromochloromethane	ND		10	4.0	ug/L			08/27/12 23:50	10
Dibromomethane	ND		10	3.6	ug/L			08/27/12 23:50	10
Dichlorodifluoromethane	ND		10	2.6	ug/L			08/27/12 23:50	10
Ethylbenzene	ND		10	2.5	ug/L			08/27/12 23:50	10
Hexachlorobutadiene	ND		10	3.8	ug/L			08/27/12 23:50	10
Isopropylbenzene	ND		10	2.5	ug/L			08/27/12 23:50	10
m,p-Xylene	**7.2**	**J**	10	6.0	ug/L			08/27/12 23:50	10
Methyl-t-Butyl Ether (MTBE)	ND		10	3.2	ug/L			08/27/12 23:50	10
Naphthalene	ND		10	4.1	ug/L			08/27/12 23:50	10
n-Butylbenzene	ND		10	3.7	ug/L			08/27/12 23:50	10
N-Propylbenzene	ND		10	2.7	ug/L			08/27/12 23:50	10
o-Xylene	ND		10	3.0	ug/L			08/27/12 23:50	10
sec-Butylbenzene	ND		10	2.5	ug/L			08/27/12 23:50	10
Styrene	ND		10	2.0	ug/L			08/27/12 23:50	10
tert-Butylbenzene	ND		10	2.2	ug/L			08/27/12 23:50	10
Toluene	ND		10	3.6	ug/L			08/27/12 23:50	10
trans-1,2-Dichloroethene	**3.8**	**J**	10	3.0	ug/L			08/27/12 23:50	10
trans-1,3-Dichloropropene	ND		5.0	3.2	ug/L			08/27/12 23:50	10
Trichloroethene	**220**		10	2.6	ug/L			08/27/12 23:50	10
Trichlorofluoromethane	**120**		10	3.4	ug/L			08/27/12 23:50	10
Vinyl chloride	ND		5.0	4.0	ug/L			08/27/12 23:50	10
Acetone	ND		100	45	ug/L			08/27/12 23:50	10
1,1,2-Trichloro-1,2,2-trifluoroethane	**290**		50	5.0	ug/L			08/27/12 23:50	10

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-2

Client Sample ID: OC-GW-OW9K-082112

Date Collected: 08/21/12 09:45
Date Received: 08/21/12 17:05

Lab Sample ID: 440-21053-3

Matrix: Water

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/12 23:50*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*08/27/12 23:50*	*10*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/27/12 23:50*	*10*
Toluene-d8 (Surr)	*105*		*80 - 120*		*08/27/12 23:50*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**4000**		50	16	ug/L			08/28/12 00:18	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*08/28/12 00:18*	*50*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*08/28/12 00:18*	*50*
Toluene-d8 (Surr)	*105*		*80 - 120*		*08/28/12 00:18*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	**24**	**J B**	50	9.5	ug/L			09/04/12 21:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/04/12 21:34*	*10*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*09/04/12 21:34*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*09/04/12 21:34*	*10*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.47	0.057	ug/L		08/28/12 13:48	08/29/12 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*63*		*30 - 120*	*08/28/12 13:48*	*08/29/12 20:48*	*1*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-2

Client Sample ID: OC-GW-OW9-082112

Lab Sample ID: 440-21053-2

Date Collected: 08/21/12 09:37

Matrix: Water

Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	50	10 mL	10 mL	46976	08/22/12 12:02	NA	TAL IRV
Total/NA	Analysis	8260B		10	10 mL	10 mL	46976	08/22/12 14:42	NA	TAL IRV
Total/NA	Prep	3520C			10 mL	1 mL	47144	08/22/12 15:27	DM	TAL IRV
Total/NA	Analysis	8270C SIM		2			47393	08/23/12 15:36	CP	TAL IRV

Client Sample ID: OC-GW-OW9K-082112

Lab Sample ID: 440-21053-3

Date Collected: 08/21/12 09:45

Matrix: Water

Date Received: 08/21/12 17:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	48179	08/27/12 23:50	YK	TAL IRV
Total/NA	Analysis	8260B	DL	50	10 mL	10 mL	48179	08/28/12 00:18	YK	TAL IRV
Total/NA	Analysis	8260B	RA	10	10 mL	10 mL	49675	09/04/12 21:34	RM	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48373	08/28/12 13:48	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			48592	08/29/12 20:48	CP	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-46976/4
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/22/12 08:55	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/22/12 08:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/22/12 08:55	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/22/12 08:55	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/22/12 08:55	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/22/12 08:55	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/22/12 08:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/22/12 08:55	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/22/12 08:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/22/12 08:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/22/12 08:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/22/12 08:55	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/22/12 08:55	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/22/12 08:55	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/22/12 08:55	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/22/12 08:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/22/12 08:55	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/22/12 08:55	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/22/12 08:55	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/22/12 08:55	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/22/12 08:55	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/22/12 08:55	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/22/12 08:55	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/22/12 08:55	1
Benzene	ND		0.50	0.28	ug/L			08/22/12 08:55	1
Bromobenzene	ND		1.0	0.27	ug/L			08/22/12 08:55	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/22/12 08:55	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/22/12 08:55	1
Bromoform	ND		1.0	0.40	ug/L			08/22/12 08:55	1
Bromomethane	ND		1.0	0.42	ug/L			08/22/12 08:55	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/22/12 08:55	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/22/12 08:55	1
Chloroethane	ND		1.0	0.40	ug/L			08/22/12 08:55	1
Chloroform	ND		1.0	0.33	ug/L			08/22/12 08:55	1
Chloromethane	ND		1.0	0.40	ug/L			08/22/12 08:55	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/22/12 08:55	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/22/12 08:55	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/22/12 08:55	1
Dibromomethane	ND		1.0	0.36	ug/L			08/22/12 08:55	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/22/12 08:55	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/22/12 08:55	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/22/12 08:55	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/22/12 08:55	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/22/12 08:55	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/22/12 08:55	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/22/12 08:55	1
Naphthalene	ND		1.0	0.41	ug/L			08/22/12 08:55	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/22/12 08:55	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/22/12 08:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-46976/4
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	0.30	ug/L			08/22/12 08:55	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/22/12 08:55	1
Styrene	ND		1.0	0.20	ug/L			08/22/12 08:55	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/22/12 08:55	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/22/12 08:55	1
Toluene	ND		1.0	0.36	ug/L			08/22/12 08:55	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/22/12 08:55	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/22/12 08:55	1
Trichloroethene	ND		1.0	0.26	ug/L			08/22/12 08:55	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/22/12 08:55	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/22/12 08:55	1
Acetone	ND		10	4.5	ug/L			08/22/12 08:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/22/12 08:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/22/12 08:55*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*08/22/12 08:55*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/22/12 08:55*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/22/12 08:55*	*1*

Lab Sample ID: LCS 440-46976/5
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	30.9		ug/L		124	70 - 130
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	65 - 135
1,1,2,2-Tetrachloroethane	25.0	20.8		ug/L		83	55 - 130
1,1,2-Trichloroethane	25.0	22.6		ug/L		90	70 - 125
1,1-Dichloroethane	25.0	22.1		ug/L		88	70 - 125
1,1-Dichloroethene	25.0	21.7		ug/L		87	70 - 125
1,1-Dichloropropene	25.0	21.0		ug/L		84	75 - 130
1,2,3-Trichlorobenzene	25.0	24.6		ug/L		99	65 - 125
1,2,3-Trichloropropane	25.0	19.3		ug/L		77	60 - 130
1,2,4-Trichlorobenzene	25.0	27.4		ug/L		110	70 - 135
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	25.3		ug/L		101	50 - 135
1,2-Dichlorobenzene	25.0	26.1		ug/L		104	75 - 120
1,2-Dibromoethane (EDB)	25.0	26.9		ug/L		107	75 - 125
1,2-Dichloroethane	25.0	28.0		ug/L		112	60 - 140
1,2-Dichloropropane	25.0	21.3		ug/L		85	70 - 125
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	75 - 125
1,3-Dichlorobenzene	25.0	26.5		ug/L		106	75 - 120
1,3-Dichloropropane	25.0	26.0		ug/L		104	70 - 120
1,4-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120
2,2-Dichloropropane	25.0	28.2		ug/L		113	65 - 140
2-Chlorotoluene	25.0	22.0		ug/L		88	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-46976/5
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	25.0	22.6		ug/L		91	75 - 125
p-Isopropyltoluene	25.0	28.4		ug/L		113	75 - 125
Benzene	25.0	20.9		ug/L		83	70 - 120
Bromobenzene	25.0	25.1		ug/L		100	75 - 120
Bromochloromethane	25.0	25.7		ug/L		103	70 - 130
Bromodichloromethane	25.0	27.1		ug/L		109	70 - 135
Bromoform	25.0	29.1		ug/L		116	55 - 130
Bromomethane	25.0	31.0		ug/L		124	65 - 140
Carbon tetrachloride	25.0	33.0		ug/L		132	65 - 140
Chlorobenzene	25.0	25.7		ug/L		103	75 - 120
Chloroethane	25.0	19.5		ug/L		78	60 - 140
Chloroform	25.0	24.8		ug/L		99	70 - 130
Chloromethane	25.0	25.9		ug/L		104	50 - 140
cis-1,2-Dichloroethene	25.0	23.9		ug/L		95	70 - 125
cis-1,3-Dichloropropene	25.0	23.4		ug/L		94	75 - 125
Dibromochloromethane	25.0	31.2		ug/L		125	70 - 140
Dibromomethane	25.0	24.3		ug/L		97	70 - 125
Dichlorodifluoromethane	25.0	25.9		ug/L		104	35 - 155
Ethylbenzene	25.0	23.6		ug/L		94	75 - 125
Hexachlorobutadiene	25.0	26.6		ug/L		106	65 - 135
Isopropylbenzene	25.0	22.8		ug/L		91	75 - 130
m,p-Xylene	50.0	49.7		ug/L		99	75 - 125
Methylene Chloride	25.0	19.2		ug/L		77	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	21.2		ug/L		85	60 - 135
Naphthalene	25.0	26.4		ug/L		105	55 - 135
n-Butylbenzene	25.0	24.8		ug/L		99	70 - 130
N-Propylbenzene	25.0	21.2		ug/L		85	75 - 130
o-Xylene	25.0	25.4		ug/L		102	75 - 125
sec-Butylbenzene	25.0	24.0		ug/L		96	70 - 125
Styrene	25.0	25.5		ug/L		102	75 - 130
tert-Butylbenzene	25.0	26.8		ug/L		107	70 - 125
Tetrachloroethene	25.0	27.3		ug/L		109	70 - 125
Toluene	25.0	23.4		ug/L		93	70 - 120
trans-1,2-Dichloroethene	25.0	22.0		ug/L		88	70 - 125
trans-1,3-Dichloropropene	25.0	26.3		ug/L		105	70 - 125
Trichloroethene	25.0	26.3		ug/L		105	70 - 125
Trichlorofluoromethane	25.0	29.9		ug/L		120	65 - 145
Vinyl chloride	25.0	27.5		ug/L		110	55 - 135
Acetone	25.0	13.5		ug/L		54	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-46976/6
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	109		80 - 120
Toluene-d8 (Surr)	95		80 - 120

Lab Sample ID: 440-20798-A-2 MS
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	29.2		ug/L		117	65 - 140
1,1,1-Trichloroethane	ND		25.0	25.7		ug/L		103	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	19.9		ug/L		79	55 - 135
1,1,2-Trichloroethane	ND		25.0	21.6		ug/L		86	65 - 130
1,1-Dichloroethane	ND		25.0	20.9		ug/L		84	65 - 130
1,1-Dichloroethene	ND		25.0	22.1		ug/L		89	60 - 130
1,1-Dichloropropene	ND		25.0	19.6		ug/L		78	70 - 135
1,2,3-Trichlorobenzene	ND		25.0	20.2		ug/L		81	60 - 135
1,2,3-Trichloropropane	ND		25.0	23.8		ug/L		95	55 - 135
1,2,4-Trichlorobenzene	ND		25.0	22.6		ug/L		90	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	23.5		ug/L		94	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	22.4		ug/L		90	45 - 145
1,2-Dichlorobenzene	ND		25.0	23.4		ug/L		94	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	26.1		ug/L		104	70 - 130
1,2-Dichloroethane	ND		25.0	26.9		ug/L		108	60 - 140
1,2-Dichloropropane	ND		25.0	19.8		ug/L		79	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	23.2		ug/L		93	70 - 130
1,3-Dichlorobenzene	ND		25.0	24.1		ug/L		96	75 - 125
1,3-Dichloropropane	ND		25.0	24.0		ug/L		96	65 - 135
1,4-Dichlorobenzene	ND		25.0	24.2		ug/L		97	75 - 125
2,2-Dichloropropane	ND		25.0	26.8		ug/L		107	60 - 145
2-Chlorotoluene	ND		25.0	19.9		ug/L		80	65 - 135
4-Chlorotoluene	ND		25.0	21.3		ug/L		85	70 - 135
p-Isopropyltoluene	ND		25.0	27.0		ug/L		108	65 - 130
Benzene	ND		25.0	19.5		ug/L		78	65 - 125
Bromobenzene	ND		25.0	23.4		ug/L		93	70 - 125
Bromochloromethane	ND		25.0	24.7		ug/L		99	65 - 135
Bromodichloromethane	ND		25.0	24.9		ug/L		100	70 - 135
Bromoform	ND		25.0	27.3		ug/L		109	55 - 135
Bromomethane	ND		25.0	28.8		ug/L		115	55 - 145
Carbon tetrachloride	ND		25.0	29.9		ug/L		120	65 - 140
Chlorobenzene	ND		25.0	23.7		ug/L		95	75 - 125
Chloroethane	ND		25.0	17.4		ug/L		70	55 - 140
Chloroform	ND		25.0	22.8		ug/L		91	65 - 135
Chloromethane	ND		25.0	23.8		ug/L		95	45 - 145
cis-1,2-Dichloroethene	ND		25.0	22.8		ug/L		91	65 - 130
cis-1,3-Dichloropropene	ND		25.0	21.9		ug/L		88	70 - 130
Dibromochloromethane	ND		25.0	28.2		ug/L		113	65 - 140
Dibromomethane	ND		25.0	23.3		ug/L		93	65 - 135
Dichlorodifluoromethane	ND		25.0	23.6		ug/L		94	25 - 155

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-20798-A-2 MS
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	ND		25.0	22.5		ug/L		90	65 - 130
Hexachlorobutadiene	ND		25.0	24.0		ug/L		96	60 - 135
Isopropylbenzene	ND		25.0	21.4		ug/L		86	70 - 135
m,p-Xylene	ND		50.0	46.6		ug/L		93	65 - 130
Methylene Chloride	ND		25.0	16.2		ug/L		65	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	20.0		ug/L		80	55 - 145
Naphthalene	ND		25.0	22.1		ug/L		89	50 - 140
n-Butylbenzene	ND		25.0	23.6		ug/L		95	65 - 135
N-Propylbenzene	ND		25.0	21.0		ug/L		84	70 - 135
o-Xylene	ND		25.0	24.2		ug/L		97	65 - 125
sec-Butylbenzene	ND		25.0	22.4		ug/L		90	70 - 125
Styrene	ND		25.0	21.6		ug/L		86	50 - 145
tert-Butylbenzene	ND		25.0	25.1		ug/L		101	65 - 130
Tetrachloroethene	ND		25.0	25.9		ug/L		104	65 - 130
Toluene	ND		25.0	22.1		ug/L		88	70 - 125
trans-1,2-Dichloroethene	ND		25.0	20.2		ug/L		81	65 - 130
trans-1,3-Dichloropropene	ND		25.0	24.9		ug/L		100	65 - 135
Trichloroethene	0.31	J	25.0	24.3		ug/L		96	65 - 125
Trichlorofluoromethane	ND		25.0	27.3		ug/L		109	60 - 145
Vinyl chloride	ND		25.0	23.6		ug/L		94	45 - 140
Acetone	ND		25.0	18.1		ug/L		72	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 440-20798-A-2 MSD
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	29.5		ug/L		118	65 - 140	1	20
1,1,1-Trichloroethane	ND		25.0	26.1		ug/L		105	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	20.8		ug/L		83	55 - 135	4	30
1,1,2-Trichloroethane	ND		25.0	22.9		ug/L		92	65 - 130	6	25
1,1-Dichloroethane	ND		25.0	21.5		ug/L		86	65 - 130	3	20
1,1-Dichloroethene	ND		25.0	23.6		ug/L		94	60 - 130	6	20
1,1-Dichloropropene	ND		25.0	20.3		ug/L		81	70 - 135	4	20
1,2,3-Trichlorobenzene	ND		25.0	21.6		ug/L		86	60 - 135	6	20
1,2,3-Trichloropropane	ND		25.0	24.8		ug/L		99	55 - 135	4	30
1,2,4-Trichlorobenzene	ND		25.0	25.2		ug/L		101	65 - 135	11	20
1,2,4-Trimethylbenzene	ND		25.0	23.8		ug/L		95	55 - 135	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	22.9		ug/L		92	45 - 145	2	30
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L		102	75 - 125	9	20
1,2-Dibromoethane (EDB)	ND		25.0	26.3		ug/L		105	70 - 130	1	25
1,2-Dichloroethane	ND		25.0	27.4		ug/L		110	60 - 140	2	20
1,2-Dichloropropane	ND		25.0	20.4		ug/L		82	65 - 130	3	20
1,3,5-Trimethylbenzene	ND		25.0	23.8		ug/L		95	70 - 130	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-20798-A-2 MSD
Matrix: Water
Analysis Batch: 46976

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	ND		25.0	25.5		ug/L		102	75 - 125	6	20
1,3-Dichloropropane	ND		25.0	24.3		ug/L		97	65 - 135	1	25
1,4-Dichlorobenzene	ND		25.0	24.2		ug/L		97	75 - 125	0	20
2,2-Dichloropropane	ND		25.0	27.1		ug/L		108	60 - 145	1	25
2-Chlorotoluene	ND		25.0	21.5		ug/L		86	65 - 135	8	20
4-Chlorotoluene	ND		25.0	21.2		ug/L		85	70 - 135	0	20
p-Isopropyltoluene	ND		25.0	27.3		ug/L		109	65 - 130	1	20
Benzene	ND		25.0	20.3		ug/L		81	65 - 125	4	20
Bromobenzene	ND		25.0	24.0		ug/L		96	70 - 125	3	20
Bromochloromethane	ND		25.0	25.5		ug/L		102	65 - 135	3	25
Bromodichloromethane	ND		25.0	27.1		ug/L		108	70 - 135	8	20
Bromoform	ND		25.0	28.6		ug/L		115	55 - 135	5	25
Bromomethane	ND		25.0	28.5		ug/L		114	55 - 145	1	25
Carbon tetrachloride	ND		25.0	30.4		ug/L		121	65 - 140	2	25
Chlorobenzene	ND		25.0	24.8		ug/L		99	75 - 125	4	20
Chloroethane	ND		25.0	19.5		ug/L		78	55 - 140	11	25
Chloroform	ND		25.0	23.5		ug/L		94	65 - 135	3	20
Chloromethane	ND		25.0	25.0		ug/L		100	45 - 145	5	25
cis-1,2-Dichloroethene	ND		25.0	23.7		ug/L		95	65 - 130	4	20
cis-1,3-Dichloropropene	ND		25.0	23.0		ug/L		92	70 - 130	5	20
Dibromochloromethane	ND		25.0	29.9		ug/L		120	65 - 140	6	25
Dibromomethane	ND		25.0	24.2		ug/L		97	65 - 135	4	25
Dichlorodifluoromethane	ND		25.0	24.1		ug/L		96	25 - 155	2	30
Ethylbenzene	ND		25.0	23.4		ug/L		94	65 - 130	4	20
Hexachlorobutadiene	ND		25.0	25.7		ug/L		103	60 - 135	7	20
Isopropylbenzene	ND		25.0	22.4		ug/L		89	70 - 135	4	20
m,p-Xylene	ND		50.0	47.8		ug/L		96	65 - 130	3	25
Methylene Chloride	ND		25.0	19.3		ug/L		77	50 - 135	17	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.0		ug/L		84	55 - 145	5	25
Naphthalene	ND		25.0	24.0		ug/L		96	50 - 140	8	30
n-Butylbenzene	ND		25.0	23.7		ug/L		95	65 - 135	0	20
N-Propylbenzene	ND		25.0	22.1		ug/L		88	70 - 135	5	20
o-Xylene	ND		25.0	24.6		ug/L		98	65 - 125	2	20
sec-Butylbenzene	ND		25.0	23.2		ug/L		93	70 - 125	4	20
Styrene	ND		25.0	22.4		ug/L		90	50 - 145	4	30
tert-Butylbenzene	ND		25.0	25.4		ug/L		102	65 - 130	1	20
Tetrachloroethene	ND		25.0	26.4		ug/L		106	65 - 130	2	20
Toluene	ND		25.0	23.2		ug/L		93	70 - 125	5	20
trans-1,2-Dichloroethene	ND		25.0	20.8		ug/L		83	65 - 130	3	20
trans-1,3-Dichloropropene	ND		25.0	25.6		ug/L		102	65 - 135	3	25
Trichloroethene	0.31	J	25.0	25.7		ug/L		102	65 - 125	6	20
Trichlorofluoromethane	ND		25.0	27.8		ug/L		111	60 - 145	2	25
Vinyl chloride	ND		25.0	24.4		ug/L		98	45 - 140	3	30
Acetone	ND		25.0	18.3		ug/L		73	20 - 150	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48179/4
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/27/12 20:21	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/27/12 20:21	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/27/12 20:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/27/12 20:21	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/27/12 20:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/27/12 20:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/27/12 20:21	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/27/12 20:21	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/27/12 20:21	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/27/12 20:21	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/27/12 20:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/27/12 20:21	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/27/12 20:21	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/27/12 20:21	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/27/12 20:21	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/27/12 20:21	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/27/12 20:21	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/27/12 20:21	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/27/12 20:21	1
Benzene	ND		0.50	0.28	ug/L			08/27/12 20:21	1
Bromobenzene	ND		1.0	0.27	ug/L			08/27/12 20:21	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/27/12 20:21	1
Bromoform	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Bromomethane	ND		1.0	0.42	ug/L			08/27/12 20:21	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/27/12 20:21	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/27/12 20:21	1
Chloroethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Chloroform	ND		1.0	0.33	ug/L			08/27/12 20:21	1
Chloromethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/27/12 20:21	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/27/12 20:21	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/27/12 20:21	1
Dibromomethane	ND		1.0	0.36	ug/L			08/27/12 20:21	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/27/12 20:21	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/27/12 20:21	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/27/12 20:21	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/27/12 20:21	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/27/12 20:21	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/27/12 20:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/27/12 20:21	1
Naphthalene	ND		1.0	0.41	ug/L			08/27/12 20:21	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/27/12 20:21	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/27/12 20:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48179/4
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	0.30	ug/L			08/27/12 20:21	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/27/12 20:21	1
Styrene	ND		1.0	0.20	ug/L			08/27/12 20:21	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/27/12 20:21	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/27/12 20:21	1
Toluene	ND		1.0	0.36	ug/L			08/27/12 20:21	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/27/12 20:21	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/27/12 20:21	1
Trichloroethene	ND		1.0	0.26	ug/L			08/27/12 20:21	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/27/12 20:21	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/27/12 20:21	1
Acetone	ND		10	4.5	ug/L			08/27/12 20:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/27/12 20:21	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/27/12 20:21*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*08/27/12 20:21*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/27/12 20:21*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/27/12 20:21*	*1*

Lab Sample ID: LCS 440-48179/5
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	28.1		ug/L		113	70 - 130
1,1,1-Trichloroethane	25.0	26.7		ug/L		107	65 - 135
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	55 - 130
1,1,2-Trichloroethane	25.0	23.7		ug/L		95	70 - 125
1,1-Dichloroethane	25.0	24.8		ug/L		99	70 - 125
1,1-Dichloroethene	25.0	24.1		ug/L		97	70 - 125
1,1-Dichloropropene	25.0	23.3		ug/L		93	75 - 130
1,2,3-Trichlorobenzene	25.0	24.6		ug/L		99	65 - 125
1,2,3-Trichloropropane	25.0	23.8		ug/L		95	60 - 130
1,2,4-Trichlorobenzene	25.0	25.4		ug/L		102	70 - 135
1,2,4-Trimethylbenzene	25.0	26.2		ug/L		105	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	27.8		ug/L		111	50 - 135
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	75 - 120
1,2-Dibromoethane (EDB)	25.0	26.0		ug/L		104	75 - 125
1,2-Dichloroethane	25.0	25.1		ug/L		100	60 - 140
1,2-Dichloropropane	25.0	23.4		ug/L		94	70 - 125
1,3,5-Trimethylbenzene	25.0	26.2		ug/L		105	75 - 125
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	75 - 120
1,3-Dichloropropane	25.0	23.9		ug/L		96	70 - 120
1,4-Dichlorobenzene	25.0	23.9		ug/L		96	75 - 120
2,2-Dichloropropane	25.0	25.6		ug/L		102	65 - 140
2-Chlorotoluene	25.0	25.2		ug/L		101	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48179/5
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	25.0	25.6		ug/L		103	75 - 125
p-Isopropyltoluene	25.0	26.2		ug/L		105	75 - 125
Benzene	25.0	23.8		ug/L		95	70 - 120
Bromobenzene	25.0	25.8		ug/L		103	75 - 120
Bromochloromethane	25.0	24.2		ug/L		97	70 - 130
Bromodichloromethane	25.0	27.6		ug/L		111	70 - 135
Bromoform	25.0	24.6		ug/L		99	55 - 130
Bromomethane	25.0	24.0		ug/L		96	65 - 140
Carbon tetrachloride	25.0	29.0		ug/L		116	65 - 140
Chlorobenzene	25.0	23.5		ug/L		94	75 - 120
Chloroethane	25.0	17.6		ug/L		71	60 - 140
Chloroform	25.0	26.2		ug/L		105	70 - 130
Chloromethane	25.0	19.1		ug/L		77	50 - 140
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	70 - 125
cis-1,3-Dichloropropene	25.0	24.8		ug/L		99	75 - 125
Dibromochloromethane	25.0	28.5		ug/L		114	70 - 140
Dibromomethane	25.0	25.2		ug/L		101	70 - 125
Dichlorodifluoromethane	25.0	16.2		ug/L		65	35 - 155
Ethylbenzene	25.0	25.0		ug/L		100	75 - 125
Hexachlorobutadiene	25.0	25.0		ug/L		100	65 - 135
Isopropylbenzene	25.0	25.1		ug/L		101	75 - 130
m,p-Xylene	50.0	48.3		ug/L		97	75 - 125
Methylene Chloride	25.0	24.0		ug/L		96	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	24.2		ug/L		97	60 - 135
Naphthalene	25.0	24.2		ug/L		97	55 - 135
n-Butylbenzene	25.0	26.3		ug/L		105	70 - 130
N-Propylbenzene	25.0	25.5		ug/L		102	75 - 130
o-Xylene	25.0	24.2		ug/L		97	75 - 125
sec-Butylbenzene	25.0	26.0		ug/L		104	70 - 125
Styrene	25.0	25.7		ug/L		103	75 - 130
tert-Butylbenzene	25.0	25.4		ug/L		102	70 - 125
Tetrachloroethene	25.0	25.4		ug/L		102	70 - 125
Toluene	25.0	24.4		ug/L		97	70 - 120
trans-1,2-Dichloroethene	25.0	24.9		ug/L		99	70 - 125
trans-1,3-Dichloropropene	25.0	26.6		ug/L		106	70 - 125
Trichloroethene	25.0	25.1		ug/L		100	70 - 125
Trichlorofluoromethane	25.0	29.2		ug/L		117	65 - 145
Vinyl chloride	25.0	21.5		ug/L		86	55 - 135
Acetone	25.0	20.6		ug/L		82	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21053-B-6 MS
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	29.5		ug/L		118	65 - 140
1,1,1-Trichloroethane	ND		25.0	27.5		ug/L		110	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	27.4		ug/L		110	55 - 135
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	65 - 130
1,1-Dichloroethane	ND		25.0	25.5		ug/L		102	65 - 130
1,1-Dichloroethene	ND		25.0	25.1		ug/L		101	60 - 130
1,1-Dichloropropene	ND		25.0	24.1		ug/L		96	70 - 135
1,2,3-Trichlorobenzene	ND		25.0	26.1		ug/L		104	60 - 135
1,2,3-Trichloropropane	ND		25.0	25.8		ug/L		103	55 - 135
1,2,4-Trichlorobenzene	ND		25.0	27.3		ug/L		109	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	26.5		ug/L		106	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	28.4		ug/L		114	45 - 145
1,2-Dichlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	28.0		ug/L		112	70 - 130
1,2-Dichloroethane	ND		25.0	26.5		ug/L		106	60 - 140
1,2-Dichloropropane	ND		25.0	25.4		ug/L		102	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	26.8		ug/L		107	70 - 130
1,3-Dichlorobenzene	ND		25.0	26.9		ug/L		108	75 - 125
1,3-Dichloropropane	ND		25.0	26.0		ug/L		104	65 - 135
1,4-Dichlorobenzene	ND		25.0	25.1		ug/L		101	75 - 125
2,2-Dichloropropane	ND		25.0	27.1		ug/L		108	60 - 145
2-Chlorotoluene	ND		25.0	26.4		ug/L		106	65 - 135
4-Chlorotoluene	ND		25.0	27.0		ug/L		108	70 - 135
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	65 - 130
Benzene	ND		25.0	25.2		ug/L		101	65 - 125
Bromobenzene	ND		25.0	27.0		ug/L		108	70 - 125
Bromochloromethane	ND		25.0	25.7		ug/L		103	65 - 135
Bromodichloromethane	ND		25.0	29.2		ug/L		117	70 - 135
Bromoform	ND		25.0	26.4		ug/L		106	55 - 135
Bromomethane	ND		25.0	24.0		ug/L		96	55 - 145
Carbon tetrachloride	ND		25.0	29.6		ug/L		118	65 - 140
Chlorobenzene	ND		25.0	24.8		ug/L		99	75 - 125
Chloroethane	ND		25.0	20.2		ug/L		81	55 - 140
Chloroform	ND		25.0	27.4		ug/L		110	65 - 135
Chloromethane	ND		25.0	19.5		ug/L		78	45 - 145
cis-1,2-Dichloroethene	ND		25.0	27.6		ug/L		110	65 - 130
cis-1,3-Dichloropropene	ND		25.0	27.3		ug/L		109	70 - 130
Dibromochloromethane	ND		25.0	30.8		ug/L		123	65 - 140
Dibromomethane	ND		25.0	27.2		ug/L		109	65 - 135
Dichlorodifluoromethane	ND		25.0	16.0		ug/L		64	25 - 155
Ethylbenzene	ND		25.0	26.4		ug/L		106	65 - 130
Hexachlorobutadiene	ND		25.0	26.8		ug/L		107	60 - 135
Isopropylbenzene	ND		25.0	25.9		ug/L		103	70 - 135
m,p-Xylene	0.66	J	50.0	51.0		ug/L		101	65 - 130
Methylene Chloride	13		25.0	33.3		ug/L		83	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.4		ug/L		102	55 - 145
Naphthalene	ND		25.0	25.2		ug/L		101	50 - 140
n-Butylbenzene	ND		25.0	27.6		ug/L		110	65 - 135
N-Propylbenzene	ND		25.0	26.6		ug/L		106	70 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21053-B-6 MS
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	ND		25.0	25.5		ug/L		102	65 - 125
sec-Butylbenzene	ND		25.0	26.8		ug/L		107	70 - 125
Styrene	ND		25.0	25.2		ug/L		101	50 - 145
tert-Butylbenzene	ND		25.0	26.0		ug/L		104	65 - 130
Tetrachloroethene	7.5		25.0	32.8		ug/L		101	65 - 130
Toluene	ND		25.0	25.8		ug/L		103	70 - 125
trans-1,2-Dichloroethene	ND		25.0	26.1		ug/L		104	65 - 130
trans-1,3-Dichloropropene	ND		25.0	28.9		ug/L		116	65 - 135
Trichloroethene	ND		25.0	26.2		ug/L		105	65 - 125
Trichlorofluoromethane	1.7		25.0	31.8		ug/L		120	60 - 145
Vinyl chloride	ND		25.0	22.3		ug/L		89	45 - 140
Acetone	ND		25.0	23.7		ug/L		95	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-21053-B-6 MSD
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	28.5		ug/L		114	65 - 140	3	20
1,1,1-Trichloroethane	ND		25.0	26.9		ug/L		108	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	26.9		ug/L		107	55 - 135	2	30
1,1,2-Trichloroethane	ND		25.0	24.6		ug/L		98	65 - 130	4	25
1,1-Dichloroethane	ND		25.0	25.5		ug/L		102	65 - 130	0	20
1,1-Dichloroethene	ND		25.0	24.5		ug/L		98	60 - 130	2	20
1,1-Dichloropropene	ND		25.0	23.6		ug/L		94	70 - 135	2	20
1,2,3-Trichlorobenzene	ND		25.0	25.4		ug/L		102	60 - 135	3	20
1,2,3-Trichloropropane	ND		25.0	24.7		ug/L		99	55 - 135	4	30
1,2,4-Trichlorobenzene	ND		25.0	26.5		ug/L		106	65 - 135	3	20
1,2,4-Trimethylbenzene	ND		25.0	25.5		ug/L		102	55 - 135	4	25
1,2-Dibromo-3-Chloropropane	ND		25.0	28.1		ug/L		112	45 - 145	1	30
1,2-Dichlorobenzene	ND		25.0	25.7		ug/L		103	75 - 125	2	20
1,2-Dibromoethane (EDB)	ND		25.0	26.3		ug/L		105	70 - 130	7	25
1,2-Dichloroethane	ND		25.0	25.8		ug/L		103	60 - 140	3	20
1,2-Dichloropropane	ND		25.0	24.5		ug/L		98	65 - 130	4	20
1,3,5-Trimethylbenzene	ND		25.0	26.1		ug/L		105	70 - 130	2	20
1,3-Dichlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125	2	20
1,3-Dichloropropane	ND		25.0	24.4		ug/L		98	65 - 135	6	25
1,4-Dichlorobenzene	ND		25.0	24.5		ug/L		98	75 - 125	2	20
2,2-Dichloropropane	ND		25.0	27.2		ug/L		109	60 - 145	1	25
2-Chlorotoluene	ND		25.0	25.8		ug/L		103	65 - 135	2	20
4-Chlorotoluene	ND		25.0	26.3		ug/L		105	70 - 135	3	20
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	65 - 130	0	20
Benzene	ND		25.0	24.7		ug/L		99	65 - 125	2	20
Bromobenzene	ND		25.0	26.1		ug/L		104	70 - 125	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21053-B-6 MSD
Matrix: Water
Analysis Batch: 48179

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromochloromethane	ND		25.0	25.1		ug/L		100	65 - 135	2	25
Bromodichloromethane	ND		25.0	28.1		ug/L		112	70 - 135	4	20
Bromoform	ND		25.0	25.6		ug/L		102	55 - 135	3	25
Bromomethane	ND		25.0	23.9		ug/L		96	55 - 145	1	25
Carbon tetrachloride	ND		25.0	29.3		ug/L		117	65 - 140	1	25
Chlorobenzene	ND		25.0	23.9		ug/L		96	75 - 125	4	20
Chloroethane	ND		25.0	21.0		ug/L		84	55 - 140	4	25
Chloroform	ND		25.0	26.5		ug/L		106	65 - 135	4	20
Chloromethane	ND		25.0	19.5		ug/L		78	45 - 145	0	25
cis-1,2-Dichloroethene	ND		25.0	26.8		ug/L		107	65 - 130	3	20
cis-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	70 - 130	5	20
Dibromochloromethane	ND		25.0	29.6		ug/L		119	65 - 140	4	25
Dibromomethane	ND		25.0	25.8		ug/L		103	65 - 135	5	25
Dichlorodifluoromethane	ND		25.0	16.0		ug/L		64	25 - 155	0	30
Ethylbenzene	ND		25.0	25.8		ug/L		103	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	26.1		ug/L		105	60 - 135	2	20
Isopropylbenzene	ND		25.0	25.6		ug/L		103	70 - 135	1	20
m,p-Xylene	0.66	J	50.0	49.4		ug/L		98	65 - 130	3	25
Methylene Chloride	13		25.0	34.6		ug/L		88	50 - 135	4	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.9		ug/L		100	55 - 145	2	25
Naphthalene	ND		25.0	24.3		ug/L		97	50 - 140	4	30
n-Butylbenzene	ND		25.0	27.2		ug/L		109	65 - 135	1	20
N-Propylbenzene	ND		25.0	26.2		ug/L		105	70 - 135	1	20
o-Xylene	ND		25.0	24.9		ug/L		100	65 - 125	2	20
sec-Butylbenzene	ND		25.0	26.4		ug/L		106	70 - 125	2	20
Styrene	ND		25.0	23.4		ug/L		93	50 - 145	7	30
tert-Butylbenzene	ND		25.0	25.7		ug/L		103	65 - 130	1	20
Tetrachloroethene	7.5		25.0	32.3		ug/L		99	65 - 130	2	20
Toluene	ND		25.0	25.1		ug/L		100	70 - 125	3	20
trans-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	65 - 135	3	25
Trichloroethene	ND		25.0	25.8		ug/L		103	65 - 125	2	20
Trichlorofluoromethane	1.7		25.0	31.1		ug/L		117	60 - 145	2	25
Vinyl chloride	ND		25.0	22.2		ug/L		89	45 - 140	1	30
Acetone	ND		25.0	22.8		ug/L		91	20 - 150	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: MB 440-49675/4
Matrix: Water
Analysis Batch: 49675

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	2.04	J	5.0	0.95	ug/L			09/04/12 19:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-49675/4 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		80 - 120		09/04/12 19:58	1
Dibromofluoromethane (Surr)	96		80 - 120		09/04/12 19:58	1
Toluene-d8 (Surr)	96		80 - 120		09/04/12 19:58	1

Lab Sample ID: LCS 440-49675/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	20.1		ug/L		80	55 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: 440-21316-B-7 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	ND		25.0	21.5		ug/L		86	50 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: 440-21316-B-7 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride	ND		25.0	21.6		ug/L		87	50 - 135	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	96		80 - 120

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-47144/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 47393 — **Prep Batch: 47144**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.060	ug/L		08/22/12 15:27	08/23/12 13:21	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 440-47144/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 47393 — **Prep Batch: 47144**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	62		30 - 120	08/22/12 15:27	08/23/12 13:21	1

Lab Sample ID: LCS 440-47144/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 47393 — **Prep Batch: 47144**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	1.23		ug/L		62	35 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	60		30 - 120

Lab Sample ID: LCSD 440-47144/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 47393 — **Prep Batch: 47144**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.00	1.14		ug/L		57	35 - 120	8	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Dioxane-d8 (Surr)	55		30 - 120

Lab Sample ID: MB 440-48373/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 48592 — **Prep Batch: 48373**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.060	ug/L		08/28/12 13:48	08/29/12 13:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	52		30 - 120	08/28/12 13:48	08/29/12 13:44	1

Lab Sample ID: LCS 440-48373/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 48592 — **Prep Batch: 48373**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	4.00	1.91		ug/L		48	35 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	49		30 - 120

Lab Sample ID: 440-21053-D-6-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 48592 — **Prep Batch: 48373**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.087	J	3.77	2.50		ug/L		64	35 - 120

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 440-21053-D-6-B MS
Matrix: Water
Analysis Batch: 48592

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48373

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*44*		*30 - 120*

Lab Sample ID: 440-21053-E-6-A MSD
Matrix: Water
Analysis Batch: 48592

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.087	J	3.81	1.63	F	ug/L		41	35 - 120	42	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*42*		*30 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-2

GC/MS VOA

Analysis Batch: 46976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-20798-A-2 MS	Matrix Spike	Total/NA	Water	8260B	
440-20798-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-21053-2 - DL	OC-GW-OW9-082112	Total/NA	Water	8260B	
440-21053-2	OC-GW-OW9-082112	Total/NA	Water	8260B	
LCS 440-46976/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 440-46976/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-46976/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 48179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-3	OC-GW-OW9K-082112	Total/NA	Water	8260B	
440-21053-3 - DL	OC-GW-OW9K-082112	Total/NA	Water	8260B	
440-21053-B-6 MS	Matrix Spike	Total/NA	Water	8260B	
440-21053-B-6 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-48179/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-48179/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 49675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-3 - RA	OC-GW-OW9K-082112	Total/NA	Water	8260B	
440-21316-B-7 MS	Matrix Spike	Total/NA	Water	8260B	
440-21316-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-49675/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-49675/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 47144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-2	OC-GW-OW9-082112	Total/NA	Water	3520C	
LCS 440-47144/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-47144/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-47144/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 47393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-2	OC-GW-OW9-082112	Total/NA	Water	8270C SIM	47144
LCS 440-47144/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	47144
LCSD 440-47144/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	47144
MB 440-47144/1-A	Method Blank	Total/NA	Water	8270C SIM	47144

Prep Batch: 48373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-3	OC-GW-OW9K-082112	Total/NA	Water	3520C	
440-21053-D-6-B MS	Matrix Spike	Total/NA	Water	3520C	
440-21053-E-6-A MSD	Matrix Spike Duplicate	Total/NA	Water	3520C	
LCS 440-48373/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 440-48373/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 48592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-3	OC-GW-OW9K-082112	Total/NA	Water	8270C SIM	48373

GC/MS Semi VOA (Continued)

Analysis Batch: 48592 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21053-D-6-B MS	Matrix Spike	Total/NA	Water	8270C SIM	48373
440-21053-E-6-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270C SIM	48373
LCS 440-48373/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	48373
MB 440-48373/1-A	Method Blank	Total/NA	Water	8270C SIM	48373

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC/MS VOA TICs

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
F	RPD of the MS and MSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA.Semiannual

TestAmerica Job ID: 440-21053-2

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	09-30-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14

440-21053

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013 (0911)

CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CDM Smith / 111 Academy Ste. 150 Irvine, CA 92617

Project/PO Number: 10500-90421-EECA, Semiannual

Project Manager: Sharon Wallin

Phone Number: (949) 752-5452

Sampler: Nacolynn Begay

Fax Number: (949) 725-3790

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOCs (8240B) Include: freons, TICs, acetone, + MTBE.	1,4-Dioxane (8270M)		Level 4 Deliverables	24 HR TAT					Special Instructions
OC-GW-TB-082112	W	VOA	2	—	—	HCl	X									Note: Low level DLs, Multiple Dilutions! on ALL samples
-OW9-	Aqu.	VOA/Amber	5	8.21.12	0937	HCl/none	X	X		X	X					24 HR TAT only
-OW9K-					0945					X						
-OW8B-					1119											
-OW3B-					1253											
-OW7-			15 10		1408											MS/MSD
-OW2-			5		1430											
-OW3					1455											
OC-GW-OW7N-082112					1530											

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
	8.21.12/1705			same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours OW-9 only 5 days ____
				48 hours ____ normal X
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
			08/21/12 17:05	intact X on ice X 3.5°

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-21053-2

Login Number: 21053

List Source: TestAmerica Irvine

List Number: 1

Creator: Perez, Angel

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Nacolynn Begay
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-21316-1
Client Project/Site: 10500-90421-EECA. Semiannual
Sampling Event: Quarterly Wastewater

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
9/11/2012 4:49:49 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-21316-1	OC-GW-TB-082212	Water	08/22/12 00:01	08/22/12 16:00
440-21316-2	OC-GW-OW6-082212	Water	08/22/12 07:42	08/22/12 16:00
440-21316-3	OC-GW-OW10-082212	Water	08/22/12 13:55	08/22/12 16:00
440-21316-4	OC-GW-OW1B-082212	Water	08/22/12 14:10	08/22/12 16:00
440-21316-5	OC-GW-OW4A-082212	Water	08/22/12 11:28	08/22/12 16:00
440-21316-6	OC-GW-OW4AN-082212	Water	08/22/12 11:40	08/22/12 16:00

Job ID: 440-21316-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-21316-1

Comments
No additional comments.

Receipt
The samples were received on 8/22/2012 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1º C and 3.7º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Carbon tetrachloride associated with batch 48829 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 48829 exceeded control limits for the following analytes: 1,1,1,2-Tetrachloroethane and Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) for 2,2-Dichloropropane, Carbon tetrachloride, and cis-1,3-Dichloropropene associated with batch 49388 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 49388 exceeded control limits for the following analytes: Carbon tetrachloride and 2,2-Dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 49388 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 49388 was outside control limits. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Method 8260B: The following sample was analyzed with headspace in the sample vial due to re-analysis: OC-GW-OW4AN-082212 (440-21316-6).

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 48736. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-TB-082212

Lab Sample ID: 440-21316-1

Date Collected: 08/22/12 00:01

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	1.0		ug/L			08/30/12 15:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/30/12 15:17	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/30/12 15:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/30/12 15:17	1
1,1-Dichloroethane	ND		1.0		ug/L			08/30/12 15:17	1
1,1-Dichloroethene	ND		1.0		ug/L			08/30/12 15:17	1
1,1-Dichloropropene	ND		1.0		ug/L			08/30/12 15:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/30/12 15:17	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/30/12 15:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/30/12 15:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/30/12 15:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/30/12 15:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/30/12 15:17	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			08/30/12 15:17	1
1,2-Dichloroethane	ND		1.0		ug/L			08/30/12 15:17	1
1,2-Dichloropropane	ND		1.0		ug/L			08/30/12 15:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/30/12 15:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/30/12 15:17	1
1,3-Dichloropropane	ND		1.0		ug/L			08/30/12 15:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/30/12 15:17	1
2,2-Dichloropropane	ND		1.0		ug/L			08/30/12 15:17	1
2-Chlorotoluene	ND		1.0		ug/L			08/30/12 15:17	1
4-Chlorotoluene	ND		1.0		ug/L			08/30/12 15:17	1
p-Isopropyltoluene	ND		1.0		ug/L			08/30/12 15:17	1
Benzene	ND		0.50		ug/L			08/30/12 15:17	1
Bromobenzene	ND		1.0		ug/L			08/30/12 15:17	1
Bromochloromethane	ND		1.0		ug/L			08/30/12 15:17	1
Bromodichloromethane	ND		1.0		ug/L			08/30/12 15:17	1
Bromoform	ND		1.0		ug/L			08/30/12 15:17	1
Bromomethane	ND		1.0		ug/L			08/30/12 15:17	1
Carbon tetrachloride	ND		0.50		ug/L			08/30/12 15:17	1
Chlorobenzene	ND		1.0		ug/L			08/30/12 15:17	1
Chloroethane	ND		1.0		ug/L			08/30/12 15:17	1
Chloroform	ND		1.0		ug/L			08/30/12 15:17	1
Chloromethane	ND		1.0		ug/L			08/30/12 15:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/30/12 15:17	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/30/12 15:17	1
Dibromochloromethane	ND		1.0		ug/L			08/30/12 15:17	1
Dibromomethane	ND		1.0		ug/L			08/30/12 15:17	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/30/12 15:17	1
Ethylbenzene	ND		1.0		ug/L			08/30/12 15:17	1
Hexachlorobutadiene	ND		1.0		ug/L			08/30/12 15:17	1
Isopropylbenzene	ND		1.0		ug/L			08/30/12 15:17	1
m,p-Xylene	ND		1.0		ug/L			08/30/12 15:17	1
Methylene Chloride	ND		5.0		ug/L			08/30/12 15:17	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			08/30/12 15:17	1
Naphthalene	ND		1.0		ug/L			08/30/12 15:17	1
n-Butylbenzene	ND		1.0		ug/L			08/30/12 15:17	1
N-Propylbenzene	ND		1.0		ug/L			08/30/12 15:17	1
o-Xylene	ND		1.0		ug/L			08/30/12 15:17	1
sec-Butylbenzene	ND		1.0		ug/L			08/30/12 15:17	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-TB-082212

Lab Sample ID: 440-21316-1
Date Collected: 08/22/12 00:01
Matrix: Water
Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	ug/L			08/30/12 15:17	1
tert-Butylbenzene	ND		1.0	ug/L			08/30/12 15:17	1
Tetrachloroethene	ND		1.0	ug/L			08/30/12 15:17	1
Toluene	ND		1.0	ug/L			08/30/12 15:17	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 15:17	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 15:17	1
Trichloroethene	ND		1.0	ug/L			08/30/12 15:17	1
Trichlorofluoromethane	ND		1.0	ug/L			08/30/12 15:17	1
Vinyl chloride	ND		0.50	ug/L			08/30/12 15:17	1
Acetone	ND		10	ug/L			08/30/12 15:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			08/30/12 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/30/12 15:17*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*08/30/12 15:17*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/30/12 15:17*	*1*

Client Sample ID: OC-GW-OW6-082212

Lab Sample ID: 440-21316-2
Date Collected: 08/22/12 07:42
Matrix: Water
Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	1.0	ug/L			08/30/12 15:45	1
1,1,1-Trichloroethane	ND		1.0	ug/L			08/30/12 15:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			08/30/12 15:45	1
1,1,2-Trichloroethane	ND		1.0	ug/L			08/30/12 15:45	1
1,1-Dichloroethane	ND		1.0	ug/L			08/30/12 15:45	1
1,1-Dichloroethene	**3.5**		1.0	ug/L			08/30/12 15:45	1
1,1-Dichloropropene	ND		1.0	ug/L			08/30/12 15:45	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			08/30/12 15:45	1
1,2,3-Trichloropropane	ND		1.0	ug/L			08/30/12 15:45	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			08/30/12 15:45	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			08/30/12 15:45	1
1,2-Dichlorobenzene	ND		1.0	ug/L			08/30/12 15:45	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			08/30/12 15:45	1
1,2-Dichloroethane	**1.0**		1.0	ug/L			08/30/12 15:45	1
1,2-Dichloropropane	ND		1.0	ug/L			08/30/12 15:45	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
1,3-Dichlorobenzene	ND		1.0	ug/L			08/30/12 15:45	1
1,3-Dichloropropane	ND		1.0	ug/L			08/30/12 15:45	1
1,4-Dichlorobenzene	ND		1.0	ug/L			08/30/12 15:45	1
2,2-Dichloropropane	ND		1.0	ug/L			08/30/12 15:45	1
2-Chlorotoluene	ND		1.0	ug/L			08/30/12 15:45	1
4-Chlorotoluene	ND		1.0	ug/L			08/30/12 15:45	1
p-Isopropyltoluene	ND		1.0	ug/L			08/30/12 15:45	1
Benzene	ND		0.50	ug/L			08/30/12 15:45	1
Bromobenzene	ND		1.0	ug/L			08/30/12 15:45	1
Bromochloromethane	ND		1.0	ug/L			08/30/12 15:45	1
Bromodichloromethane	ND		1.0	ug/L			08/30/12 15:45	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-OW6-082212

Lab Sample ID: 440-21316-2

Date Collected: 08/22/12 07:42
Matrix: Water
Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		1.0	ug/L			08/30/12 15:45	1
Bromomethane	ND		1.0	ug/L			08/30/12 15:45	1
Carbon tetrachloride	ND		0.50	ug/L			08/30/12 15:45	1
Chlorobenzene	ND		1.0	ug/L			08/30/12 15:45	1
Chloroethane	ND		1.0	ug/L			08/30/12 15:45	1
Chloroform	ND		1.0	ug/L			08/30/12 15:45	1
Chloromethane	ND		1.0	ug/L			08/30/12 15:45	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 15:45	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 15:45	1
Dibromochloromethane	ND		1.0	ug/L			08/30/12 15:45	1
Dibromomethane	ND		1.0	ug/L			08/30/12 15:45	1
Dichlorodifluoromethane	ND		1.0	ug/L			08/30/12 15:45	1
Ethylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
Hexachlorobutadiene	ND		1.0	ug/L			08/30/12 15:45	1
Isopropylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
m,p-Xylene	ND		1.0	ug/L			08/30/12 15:45	1
Methylene Chloride	ND		5.0	ug/L			08/30/12 15:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			08/30/12 15:45	1
Naphthalene	ND		1.0	ug/L			08/30/12 15:45	1
n-Butylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
N-Propylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
o-Xylene	ND		1.0	ug/L			08/30/12 15:45	1
sec-Butylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
Styrene	ND		1.0	ug/L			08/30/12 15:45	1
tert-Butylbenzene	ND		1.0	ug/L			08/30/12 15:45	1
Tetrachloroethene	**76**		1.0	ug/L			08/30/12 15:45	1
Toluene	ND		1.0	ug/L			08/30/12 15:45	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 15:45	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 15:45	1
Trichloroethene	**2.8**		1.0	ug/L			08/30/12 15:45	1
Trichlorofluoromethane	**4.0**		1.0	ug/L			08/30/12 15:45	1
Vinyl chloride	ND		0.50	ug/L			08/30/12 15:45	1
Acetone	ND		10	ug/L			08/30/12 15:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**9.7**		5.0	ug/L			08/30/12 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/30/12 15:45*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/30/12 15:45*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/30/12 15:45*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.47	ug/L		08/29/12 17:31	08/30/12 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*63*		*30 - 120*	*08/29/12 17:31*	*08/30/12 19:34*	*1*

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-OW10-082212

Date Collected: 08/22/12 13:55
Date Received: 08/22/12 16:00

Lab Sample ID: 440-21316-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	1.0		ug/L			08/30/12 16:14	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/30/12 16:14	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/30/12 16:14	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/30/12 16:14	1
1,1-Dichloroethane	ND		1.0		ug/L			08/30/12 16:14	1
1,1-Dichloroethene	**73**		1.0		ug/L			08/30/12 16:14	1
1,1-Dichloropropene	ND		1.0		ug/L			08/30/12 16:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/30/12 16:14	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/30/12 16:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/30/12 16:14	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/30/12 16:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/30/12 16:14	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/30/12 16:14	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			08/30/12 16:14	1
1,2-Dichloroethane	ND		1.0		ug/L			08/30/12 16:14	1
1,2-Dichloropropane	ND		1.0		ug/L			08/30/12 16:14	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/30/12 16:14	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/30/12 16:14	1
1,3-Dichloropropane	ND		1.0		ug/L			08/30/12 16:14	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/30/12 16:14	1
2,2-Dichloropropane	ND		1.0		ug/L			08/30/12 16:14	1
2-Chlorotoluene	ND		1.0		ug/L			08/30/12 16:14	1
4-Chlorotoluene	ND		1.0		ug/L			08/30/12 16:14	1
p-Isopropyltoluene	ND		1.0		ug/L			08/30/12 16:14	1
Benzene	ND		0.50		ug/L			08/30/12 16:14	1
Bromobenzene	ND		1.0		ug/L			08/30/12 16:14	1
Bromochloromethane	ND		1.0		ug/L			08/30/12 16:14	1
Bromodichloromethane	ND		1.0		ug/L			08/30/12 16:14	1
Bromoform	ND		1.0		ug/L			08/30/12 16:14	1
Bromomethane	ND		1.0		ug/L			08/30/12 16:14	1
Carbon tetrachloride	ND		0.50		ug/L			08/30/12 16:14	1
Chlorobenzene	ND		1.0		ug/L			08/30/12 16:14	1
Chloroethane	ND		1.0		ug/L			08/30/12 16:14	1
Chloroform	ND		1.0		ug/L			08/30/12 16:14	1
Chloromethane	ND		1.0		ug/L			08/30/12 16:14	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/30/12 16:14	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/30/12 16:14	1
Dibromochloromethane	ND		1.0		ug/L			08/30/12 16:14	1
Dibromomethane	ND		1.0		ug/L			08/30/12 16:14	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/30/12 16:14	1
Ethylbenzene	ND		1.0		ug/L			08/30/12 16:14	1
Hexachlorobutadiene	ND		1.0		ug/L			08/30/12 16:14	1
Isopropylbenzene	ND		1.0		ug/L			08/30/12 16:14	1
m,p-Xylene	ND		1.0		ug/L			08/30/12 16:14	1
Methylene Chloride	ND		5.0		ug/L			08/30/12 16:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			08/30/12 16:14	1
Naphthalene	ND		1.0		ug/L			08/30/12 16:14	1
n-Butylbenzene	ND		1.0		ug/L			08/30/12 16:14	1
N-Propylbenzene	ND		1.0		ug/L			08/30/12 16:14	1
o-Xylene	ND		1.0		ug/L			08/30/12 16:14	1
sec-Butylbenzene	ND		1.0		ug/L			08/30/12 16:14	1

Client Sample ID: OC-GW-OW10-082212

Lab Sample ID: 440-21316-3

Date Collected: 08/22/12 13:55

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	ug/L			08/30/12 16:14	1
tert-Butylbenzene	ND		1.0	ug/L			08/30/12 16:14	1
Tetrachloroethene	**71**		1.0	ug/L			08/30/12 16:14	1
Toluene	ND		1.0	ug/L			08/30/12 16:14	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 16:14	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 16:14	1
Trichloroethene	**5.4**		1.0	ug/L			08/30/12 16:14	1
Trichlorofluoromethane	**18**		1.0	ug/L			08/30/12 16:14	1
Vinyl chloride	ND		0.50	ug/L			08/30/12 16:14	1
Acetone	ND		10	ug/L			08/30/12 16:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**21**		5.0	ug/L			08/30/12 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/30/12 16:14*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/30/12 16:14*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/30/12 16:14*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.47	ug/L		08/29/12 17:31	08/30/12 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*64*		*30 - 120*	*08/29/12 17:31*	*08/30/12 19:58*	*1*

Client Sample ID: OC-GW-OW1B-082212

Lab Sample ID: 440-21316-4

Date Collected: 08/22/12 14:10

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	1.0	ug/L			08/30/12 16:42	1
1,1,1-Trichloroethane	ND		1.0	ug/L			08/30/12 16:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			08/30/12 16:42	1
1,1,2-Trichloroethane	ND		1.0	ug/L			08/30/12 16:42	1
1,1-Dichloroethane	ND		1.0	ug/L			08/30/12 16:42	1
1,1-Dichloroethene	ND		1.0	ug/L			08/30/12 16:42	1
1,1-Dichloropropene	ND		1.0	ug/L			08/30/12 16:42	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			08/30/12 16:42	1
1,2,3-Trichloropropane	ND		1.0	ug/L			08/30/12 16:42	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			08/30/12 16:42	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			08/30/12 16:42	1
1,2-Dichlorobenzene	ND		1.0	ug/L			08/30/12 16:42	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			08/30/12 16:42	1
1,2-Dichloroethane	ND		1.0	ug/L			08/30/12 16:42	1
1,2-Dichloropropane	ND		1.0	ug/L			08/30/12 16:42	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
1,3-Dichlorobenzene	ND		1.0	ug/L			08/30/12 16:42	1
1,3-Dichloropropane	ND		1.0	ug/L			08/30/12 16:42	1
1,4-Dichlorobenzene	ND		1.0	ug/L			08/30/12 16:42	1
2,2-Dichloropropane	ND		1.0	ug/L			08/30/12 16:42	1

Client Sample ID: OC-GW-OW1B-082212

Lab Sample ID: 440-21316-4

Date Collected: 08/22/12 14:10

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	ug/L			08/30/12 16:42	1
4-Chlorotoluene	ND		1.0	ug/L			08/30/12 16:42	1
p-Isopropyltoluene	ND		1.0	ug/L			08/30/12 16:42	1
Benzene	ND		0.50	ug/L			08/30/12 16:42	1
Bromobenzene	ND		1.0	ug/L			08/30/12 16:42	1
Bromochloromethane	ND		1.0	ug/L			08/30/12 16:42	1
Bromodichloromethane	ND		1.0	ug/L			08/30/12 16:42	1
Bromoform	ND		1.0	ug/L			08/30/12 16:42	1
Bromomethane	ND		1.0	ug/L			08/30/12 16:42	1
Carbon tetrachloride	ND		0.50	ug/L			08/30/12 16:42	1
Chlorobenzene	ND		1.0	ug/L			08/30/12 16:42	1
Chloroethane	ND		1.0	ug/L			08/30/12 16:42	1
Chloroform	ND		1.0	ug/L			08/30/12 16:42	1
Chloromethane	ND		1.0	ug/L			08/30/12 16:42	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 16:42	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 16:42	1
Dibromochloromethane	ND		1.0	ug/L			08/30/12 16:42	1
Dibromomethane	ND		1.0	ug/L			08/30/12 16:42	1
Dichlorodifluoromethane	ND		1.0	ug/L			08/30/12 16:42	1
Ethylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
Hexachlorobutadiene	ND		1.0	ug/L			08/30/12 16:42	1
Isopropylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
m,p-Xylene	ND		1.0	ug/L			08/30/12 16:42	1
Methylene Chloride	ND		5.0	ug/L			08/30/12 16:42	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			08/30/12 16:42	1
Naphthalene	ND		1.0	ug/L			08/30/12 16:42	1
n-Butylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
N-Propylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
o-Xylene	ND		1.0	ug/L			08/30/12 16:42	1
sec-Butylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
Styrene	ND		1.0	ug/L			08/30/12 16:42	1
tert-Butylbenzene	ND		1.0	ug/L			08/30/12 16:42	1
Tetrachloroethene	**38**		1.0	ug/L			08/30/12 16:42	1
Toluene	ND		1.0	ug/L			08/30/12 16:42	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 16:42	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 16:42	1
Trichloroethene	ND		1.0	ug/L			08/30/12 16:42	1
Trichlorofluoromethane	ND		1.0	ug/L			08/30/12 16:42	1
Vinyl chloride	ND		0.50	ug/L			08/30/12 16:42	1
Acetone	ND		10	ug/L			08/30/12 16:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			08/30/12 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/30/12 16:42*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*08/30/12 16:42*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/30/12 16:42*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.47	ug/L		08/29/12 17:31	08/30/12 20:21	1

Client Sample ID: OC-GW-OW1B-082212

Lab Sample ID: 440-21316-4

Date Collected: 08/22/12 14:10

Matrix: Water

Date Received: 08/22/12 16:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	60		30 - 120	08/29/12 17:31	08/30/12 20:21	1

Client Sample ID: OC-GW-OW4A-082212

Lab Sample ID: 440-21316-5

Date Collected: 08/22/12 11:28

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	1.0	ug/L			08/30/12 17:11	1
1,1,1-Trichloroethane	ND		1.0	ug/L			08/30/12 17:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			08/30/12 17:11	1
1,1,2-Trichloroethane	ND		1.0	ug/L			08/30/12 17:11	1
1,1-Dichloroethane	ND		1.0	ug/L			08/30/12 17:11	1
1,1-Dichloroethene	**18**		1.0	ug/L			08/30/12 17:11	1
1,1-Dichloropropene	ND		1.0	ug/L			08/30/12 17:11	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			08/30/12 17:11	1
1,2,3-Trichloropropane	ND		1.0	ug/L			08/30/12 17:11	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			08/30/12 17:11	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			08/30/12 17:11	1
1,2-Dichlorobenzene	ND		1.0	ug/L			08/30/12 17:11	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			08/30/12 17:11	1
1,2-Dichloroethane	ND		1.0	ug/L			08/30/12 17:11	1
1,2-Dichloropropane	ND		1.0	ug/L			08/30/12 17:11	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
1,3-Dichlorobenzene	ND		1.0	ug/L			08/30/12 17:11	1
1,3-Dichloropropane	ND		1.0	ug/L			08/30/12 17:11	1
1,4-Dichlorobenzene	ND		1.0	ug/L			08/30/12 17:11	1
2,2-Dichloropropane	ND		1.0	ug/L			08/30/12 17:11	1
2-Chlorotoluene	ND		1.0	ug/L			08/30/12 17:11	1
4-Chlorotoluene	ND		1.0	ug/L			08/30/12 17:11	1
p-Isopropyltoluene	ND		1.0	ug/L			08/30/12 17:11	1
Benzene	ND		0.50	ug/L			08/30/12 17:11	1
Bromobenzene	ND		1.0	ug/L			08/30/12 17:11	1
Bromochloromethane	ND		1.0	ug/L			08/30/12 17:11	1
Bromodichloromethane	ND		1.0	ug/L			08/30/12 17:11	1
Bromoform	ND		1.0	ug/L			08/30/12 17:11	1
Bromomethane	ND		1.0	ug/L			08/30/12 17:11	1
Carbon tetrachloride	ND		0.50	ug/L			08/30/12 17:11	1
Chlorobenzene	ND		1.0	ug/L			08/30/12 17:11	1
Chloroethane	ND		1.0	ug/L			08/30/12 17:11	1
Chloroform	ND		1.0	ug/L			08/30/12 17:11	1
Chloromethane	ND		1.0	ug/L			08/30/12 17:11	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 17:11	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 17:11	1
Dibromochloromethane	ND		1.0	ug/L			08/30/12 17:11	1
Dibromomethane	ND		1.0	ug/L			08/30/12 17:11	1
Dichlorodifluoromethane	ND		1.0	ug/L			08/30/12 17:11	1
Ethylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
Hexachlorobutadiene	ND		1.0	ug/L			08/30/12 17:11	1
Isopropylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
m,p-Xylene	ND		1.0	ug/L			08/30/12 17:11	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-OW4A-082212

Lab Sample ID: 440-21316-5

Date Collected: 08/22/12 11:28
Matrix: Water
Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	ug/L			08/30/12 17:11	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			08/30/12 17:11	1
Naphthalene	ND		1.0	ug/L			08/30/12 17:11	1
n-Butylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
N-Propylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
o-Xylene	ND		1.0	ug/L			08/30/12 17:11	1
sec-Butylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
Styrene	ND		1.0	ug/L			08/30/12 17:11	1
tert-Butylbenzene	ND		1.0	ug/L			08/30/12 17:11	1
Tetrachloroethene	**24**		1.0	ug/L			08/30/12 17:11	1
Toluene	ND		1.0	ug/L			08/30/12 17:11	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 17:11	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 17:11	1
Trichloroethene	**2.3**		1.0	ug/L			08/30/12 17:11	1
Trichlorofluoromethane	**40**		1.0	ug/L			08/30/12 17:11	1
Vinyl chloride	ND		0.50	ug/L			08/30/12 17:11	1
Acetone	ND		10	ug/L			08/30/12 17:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**56**		5.0	ug/L			08/30/12 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*08/30/12 17:11*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/30/12 17:11*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/30/12 17:11*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.47	ug/L		08/29/12 17:31	08/30/12 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*64*		*30 - 120*	*08/29/12 17:31*	*08/30/12 20:45*	*1*

Client Sample ID: OC-GW-OW4AN-082212

Lab Sample ID: 440-21316-6

Date Collected: 08/22/12 11:40
Matrix: Water
Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/01/12 20:42	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/01/12 20:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			09/01/12 20:42	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/01/12 20:42	1
1,1-Dichloroethane	ND		1.0	ug/L			09/01/12 20:42	1
1,1-Dichloroethene	ND		1.0	ug/L			09/01/12 20:42	1
1,1-Dichloropropene	ND		1.0	ug/L			09/01/12 20:42	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/01/12 20:42	1
1,2,3-Trichloropropane	ND		1.0	ug/L			09/01/12 20:42	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/01/12 20:42	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			09/01/12 20:42	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/01/12 20:42	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/01/12 20:42	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-OW4AN-082212

Lab Sample ID: 440-21316-6

Date Collected: 08/22/12 11:40

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	ug/L			09/01/12 20:42	1
1,2-Dichloropropane	ND		1.0	ug/L			09/01/12 20:42	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/01/12 20:42	1
1,3-Dichloropropane	ND		1.0	ug/L			09/01/12 20:42	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/01/12 20:42	1
2,2-Dichloropropane	ND	*	1.0	ug/L			09/01/12 20:42	1
2-Chlorotoluene	ND		1.0	ug/L			09/01/12 20:42	1
4-Chlorotoluene	ND		1.0	ug/L			09/01/12 20:42	1
p-Isopropyltoluene	ND		1.0	ug/L			09/01/12 20:42	1
Benzene	ND		0.50	ug/L			09/01/12 20:42	1
Bromobenzene	ND		1.0	ug/L			09/01/12 20:42	1
Bromochloromethane	ND		1.0	ug/L			09/01/12 20:42	1
Bromodichloromethane	ND		1.0	ug/L			09/01/12 20:42	1
Bromoform	ND		1.0	ug/L			09/01/12 20:42	1
Bromomethane	ND		1.0	ug/L			09/01/12 20:42	1
Carbon tetrachloride	ND	*	0.50	ug/L			09/01/12 20:42	1
Chlorobenzene	ND		1.0	ug/L			09/01/12 20:42	1
Chloroethane	ND		1.0	ug/L			09/01/12 20:42	1
Chloroform	ND		1.0	ug/L			09/01/12 20:42	1
Chloromethane	ND		1.0	ug/L			09/01/12 20:42	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/01/12 20:42	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			09/01/12 20:42	1
Dibromochloromethane	ND		1.0	ug/L			09/01/12 20:42	1
Dibromomethane	ND		1.0	ug/L			09/01/12 20:42	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/01/12 20:42	1
Ethylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
Hexachlorobutadiene	ND		1.0	ug/L			09/01/12 20:42	1
Isopropylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
m,p-Xylene	ND		1.0	ug/L			09/01/12 20:42	1
Methylene Chloride	ND		5.0	ug/L			09/01/12 20:42	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/01/12 20:42	1
Naphthalene	ND		1.0	ug/L			09/01/12 20:42	1
n-Butylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
N-Propylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
o-Xylene	ND		1.0	ug/L			09/01/12 20:42	1
sec-Butylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
Styrene	ND		1.0	ug/L			09/01/12 20:42	1
tert-Butylbenzene	ND		1.0	ug/L			09/01/12 20:42	1
Tetrachloroethene	ND		1.0	ug/L			09/01/12 20:42	1
Toluene	ND		1.0	ug/L			09/01/12 20:42	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/01/12 20:42	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			09/01/12 20:42	1
Trichloroethene	ND		1.0	ug/L			09/01/12 20:42	1
Trichlorofluoromethane	ND		1.0	ug/L			09/01/12 20:42	1
Vinyl chloride	ND		0.50	ug/L			09/01/12 20:42	1
Acetone	ND		10	ug/L			09/01/12 20:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/01/12 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/01/12 20:42*	*1*

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-OW4AN-082212
Date Collected: 08/22/12 11:40
Date Received: 08/22/12 16:00

Lab Sample ID: 440-21316-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	116		80 - 120		09/01/12 20:42	1
Toluene-d8 (Surr)	109		80 - 120		09/01/12 20:42	1

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.47		0.47	ug/L		08/29/12 17:31	08/30/12 21:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	60		30 - 120	08/29/12 17:31	08/30/12 21:08	1

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-TB-082212 — Lab Sample ID: 440-21316-1

Date Collected: 08/22/12 00:01 — **Matrix: Water**
Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48829	08/30/12 15:17	AL	TAL IRV

Client Sample ID: OC-GW-OW6-082212 — Lab Sample ID: 440-21316-2

Date Collected: 08/22/12 07:42 — **Matrix: Water**
Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48829	08/30/12 15:45	AL	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 19:34	CP	TAL IRV

Client Sample ID: OC-GW-OW10-082212 — Lab Sample ID: 440-21316-3

Date Collected: 08/22/12 13:55 — **Matrix: Water**
Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48829	08/30/12 16:14	AL	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 19:58	CP	TAL IRV

Client Sample ID: OC-GW-OW1B-082212 — Lab Sample ID: 440-21316-4

Date Collected: 08/22/12 14:10 — **Matrix: Water**
Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48829	08/30/12 16:42	AL	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 20:21	CP	TAL IRV

Client Sample ID: OC-GW-OW4A-082212 — Lab Sample ID: 440-21316-5

Date Collected: 08/22/12 11:28 — **Matrix: Water**
Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	48829	08/30/12 17:11	AL	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 20:45	CP	TAL IRV

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Client Sample ID: OC-GW-OW4AN-082212

Lab Sample ID: 440-21316-6

Date Collected: 08/22/12 11:40

Matrix: Water

Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	49388	09/01/12 20:42	JP	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 21:08	CP	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-48829/4
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			08/30/12 09:24	1
1,1,1-Trichloroethane	ND		1.0		ug/L			08/30/12 09:24	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			08/30/12 09:24	1
1,1,2-Trichloroethane	ND		1.0		ug/L			08/30/12 09:24	1
1,1-Dichloroethane	ND		1.0		ug/L			08/30/12 09:24	1
1,1-Dichloroethene	ND		1.0		ug/L			08/30/12 09:24	1
1,1-Dichloropropene	ND		1.0		ug/L			08/30/12 09:24	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/30/12 09:24	1
1,2,3-Trichloropropane	ND		1.0		ug/L			08/30/12 09:24	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/30/12 09:24	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			08/30/12 09:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			08/30/12 09:24	1
1,2-Dichlorobenzene	ND		1.0		ug/L			08/30/12 09:24	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			08/30/12 09:24	1
1,2-Dichloroethane	ND		1.0		ug/L			08/30/12 09:24	1
1,2-Dichloropropane	ND		1.0		ug/L			08/30/12 09:24	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			08/30/12 09:24	1
1,3-Dichlorobenzene	ND		1.0		ug/L			08/30/12 09:24	1
1,3-Dichloropropane	ND		1.0		ug/L			08/30/12 09:24	1
1,4-Dichlorobenzene	ND		1.0		ug/L			08/30/12 09:24	1
2,2-Dichloropropane	ND		1.0		ug/L			08/30/12 09:24	1
2-Chlorotoluene	ND		1.0		ug/L			08/30/12 09:24	1
4-Chlorotoluene	ND		1.0		ug/L			08/30/12 09:24	1
p-Isopropyltoluene	ND		1.0		ug/L			08/30/12 09:24	1
Benzene	ND		0.50		ug/L			08/30/12 09:24	1
Bromobenzene	ND		1.0		ug/L			08/30/12 09:24	1
Bromochloromethane	ND		1.0		ug/L			08/30/12 09:24	1
Bromodichloromethane	ND		1.0		ug/L			08/30/12 09:24	1
Bromoform	ND		1.0		ug/L			08/30/12 09:24	1
Bromomethane	ND		1.0		ug/L			08/30/12 09:24	1
Carbon tetrachloride	ND		0.50		ug/L			08/30/12 09:24	1
Chlorobenzene	ND		1.0		ug/L			08/30/12 09:24	1
Chloroethane	ND		1.0		ug/L			08/30/12 09:24	1
Chloroform	ND		1.0		ug/L			08/30/12 09:24	1
Chloromethane	ND		1.0		ug/L			08/30/12 09:24	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			08/30/12 09:24	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/30/12 09:24	1
Dibromochloromethane	ND		1.0		ug/L			08/30/12 09:24	1
Dibromomethane	ND		1.0		ug/L			08/30/12 09:24	1
Dichlorodifluoromethane	ND		1.0		ug/L			08/30/12 09:24	1
Ethylbenzene	ND		1.0		ug/L			08/30/12 09:24	1
Hexachlorobutadiene	ND		1.0		ug/L			08/30/12 09:24	1
Isopropylbenzene	ND		1.0		ug/L			08/30/12 09:24	1
m,p-Xylene	ND		1.0		ug/L			08/30/12 09:24	1
Methylene Chloride	ND		5.0		ug/L			08/30/12 09:24	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			08/30/12 09:24	1
Naphthalene	ND		1.0		ug/L			08/30/12 09:24	1
n-Butylbenzene	ND		1.0		ug/L			08/30/12 09:24	1
N-Propylbenzene	ND		1.0		ug/L			08/30/12 09:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48829/4
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	ug/L			08/30/12 09:24	1
sec-Butylbenzene	ND		1.0	ug/L			08/30/12 09:24	1
Styrene	ND		1.0	ug/L			08/30/12 09:24	1
tert-Butylbenzene	ND		1.0	ug/L			08/30/12 09:24	1
Tetrachloroethene	ND		1.0	ug/L			08/30/12 09:24	1
Toluene	ND		1.0	ug/L			08/30/12 09:24	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			08/30/12 09:24	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			08/30/12 09:24	1
Trichloroethene	ND		1.0	ug/L			08/30/12 09:24	1
Trichlorofluoromethane	ND		1.0	ug/L			08/30/12 09:24	1
Vinyl chloride	ND		0.50	ug/L			08/30/12 09:24	1
Acetone	ND		10	ug/L			08/30/12 09:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			08/30/12 09:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/30/12 09:24*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*08/30/12 09:24*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/30/12 09:24*	*1*

Lab Sample ID: LCS 440-48829/5
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	34.7	*	ug/L		139	70 - 130
1,1,1-Trichloroethane	25.0	23.8		ug/L		95	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.8		ug/L		91	55 - 130
1,1,2-Trichloroethane	25.0	21.1		ug/L		84	70 - 125
1,1-Dichloroethane	25.0	20.9		ug/L		84	70 - 125
1,1-Dichloroethene	25.0	22.2		ug/L		89	70 - 125
1,1-Dichloropropene	25.0	19.5		ug/L		78	75 - 130
1,2,3-Trichlorobenzene	25.0	24.6		ug/L		98	65 - 125
1,2,3-Trichloropropane	25.0	20.8		ug/L		83	60 - 130
1,2,4-Trichlorobenzene	25.0	25.7		ug/L		103	70 - 135
1,2,4-Trimethylbenzene	25.0	26.4		ug/L		106	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	20.4		ug/L		82	50 - 135
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	75 - 120
1,2-Dibromoethane (EDB)	25.0	27.7		ug/L		111	75 - 125
1,2-Dichloroethane	25.0	22.5		ug/L		90	60 - 140
1,2-Dichloropropane	25.0	21.2		ug/L		85	70 - 125
1,3,5-Trimethylbenzene	25.0	26.3		ug/L		105	75 - 125
1,3-Dichlorobenzene	25.0	27.6		ug/L		111	75 - 120
1,3-Dichloropropane	25.0	21.1		ug/L		84	70 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		102	75 - 120
2,2-Dichloropropane	25.0	23.1		ug/L		92	65 - 140
2-Chlorotoluene	25.0	23.5		ug/L		94	70 - 125
4-Chlorotoluene	25.0	23.9		ug/L		96	75 - 125
p-Isopropyltoluene	25.0	25.9		ug/L		104	75 - 125
Benzene	25.0	21.7		ug/L		87	70 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48829/5
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	25.0	29.1		ug/L		116	75 - 120
Bromochloromethane	25.0	26.3		ug/L		105	70 - 130
Bromodichloromethane	25.0	26.5		ug/L		106	70 - 135
Bromoform	25.0	29.8		ug/L		119	55 - 130
Bromomethane	25.0	24.8		ug/L		99	65 - 140
Carbon tetrachloride	25.0	31.9		ug/L		128	65 - 140
Chlorobenzene	25.0	24.0		ug/L		96	75 - 120
Chloroethane	25.0	19.4		ug/L		78	60 - 140
Chloroform	25.0	21.3		ug/L		85	70 - 130
Chloromethane	25.0	22.7		ug/L		91	50 - 140
cis-1,2-Dichloroethene	25.0	23.8		ug/L		95	70 - 125
cis-1,3-Dichloropropene	25.0	22.5		ug/L		90	75 - 125
Dibromochloromethane	25.0	30.4		ug/L		122	70 - 140
Dibromomethane	25.0	24.3		ug/L		97	70 - 125
Dichlorodifluoromethane	25.0	16.5		ug/L		66	35 - 155
Ethylbenzene	25.0	24.4		ug/L		98	75 - 125
Hexachlorobutadiene	25.0	22.4		ug/L		90	65 - 135
Isopropylbenzene	25.0	26.5		ug/L		106	75 - 130
m,p-Xylene	50.0	51.8		ug/L		104	75 - 125
Methylene Chloride	25.0	18.4		ug/L		74	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	20.3		ug/L		81	60 - 135
Naphthalene	25.0	27.9		ug/L		111	55 - 135
n-Butylbenzene	25.0	22.4		ug/L		90	70 - 130
N-Propylbenzene	25.0	24.0		ug/L		96	75 - 130
o-Xylene	25.0	25.7		ug/L		103	75 - 125
sec-Butylbenzene	25.0	24.9		ug/L		100	70 - 125
Styrene	25.0	25.5		ug/L		102	75 - 130
tert-Butylbenzene	25.0	26.5		ug/L		106	70 - 125
Tetrachloroethene	25.0	27.7		ug/L		111	70 - 125
Toluene	25.0	23.6		ug/L		94	70 - 120
trans-1,2-Dichloroethene	25.0	22.9		ug/L		92	70 - 125
trans-1,3-Dichloropropene	25.0	22.7		ug/L		91	70 - 125
Trichloroethene	25.0	27.5		ug/L		110	70 - 125
Trichlorofluoromethane	25.0	23.0		ug/L		92	65 - 145
Vinyl chloride	25.0	22.3		ug/L		89	55 - 135
Acetone	25.0	26.2		ug/L		105	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 440-21140-C-10 MS
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND	*	2500	3430		ug/L		137	65 - 140
1,1,1-Trichloroethane	ND		2500	2390		ug/L		96	65 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21140-C-10 MS
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	ND		2500	2300		ug/L		92	55 - 135
1,1,2-Trichloroethane	ND		2500	2100		ug/L		84	65 - 130
1,1-Dichloroethane	ND		2500	2040		ug/L		81	65 - 130
1,1-Dichloroethene	ND		2500	2310		ug/L		93	60 - 130
1,1-Dichloropropene	ND		2500	2030		ug/L		81	70 - 135
1,2,3-Trichlorobenzene	ND		2500	2390		ug/L		95	60 - 135
1,2,3-Trichloropropane	ND		2500	2070		ug/L		83	55 - 135
1,2,4-Trichlorobenzene	ND		2500	2550		ug/L		102	65 - 135
1,2,4-Trimethylbenzene	ND		2500	2710		ug/L		108	55 - 135
1,2-Dibromo-3-Chloropropane	ND		2500	1880		ug/L		75	45 - 145
1,2-Dichlorobenzene	ND		2500	2690		ug/L		108	75 - 125
1,2-Dibromoethane (EDB)	ND		2500	2790		ug/L		112	70 - 130
1,2-Dichloroethane	ND		2500	2220		ug/L		89	60 - 140
1,2-Dichloropropane	ND		2500	2090		ug/L		83	65 - 130
1,3,5-Trimethylbenzene	ND		2500	2710		ug/L		108	70 - 130
1,3-Dichlorobenzene	ND		2500	2810		ug/L		112	75 - 125
1,3-Dichloropropane	ND		2500	2100		ug/L		84	65 - 135
1,4-Dichlorobenzene	ND		2500	2560		ug/L		102	75 - 125
2,2-Dichloropropane	ND		2500	2320		ug/L		93	60 - 145
2-Chlorotoluene	ND		2500	2390		ug/L		96	65 - 135
4-Chlorotoluene	ND		2500	2420		ug/L		97	70 - 135
p-Isopropyltoluene	ND		2500	2760		ug/L		111	65 - 130
Benzene	ND		2500	2130		ug/L		85	65 - 125
Bromobenzene	ND		2500	2900		ug/L		116	70 - 125
Bromochloromethane	ND		2500	2570		ug/L		103	65 - 135
Bromodichloromethane	ND		2500	2550		ug/L		102	70 - 135
Bromoform	ND		2500	2980		ug/L		119	55 - 135
Bromomethane	ND		2500	2530		ug/L		101	55 - 145
Carbon tetrachloride	ND		2500	3320		ug/L		133	65 - 140
Chlorobenzene	ND		2500	2420		ug/L		97	75 - 125
Chloroethane	ND		2500	2000		ug/L		80	55 - 140
Chloroform	ND		2500	2050		ug/L		82	65 - 135
Chloromethane	ND		2500	2460		ug/L		98	45 - 145
cis-1,2-Dichloroethene	540		2500	2890		ug/L		94	65 - 130
cis-1,3-Dichloropropene	ND		2500	2250		ug/L		90	70 - 130
Dibromochloromethane	ND		2500	3140		ug/L		125	65 - 140
Dibromomethane	ND		2500	2390		ug/L		96	65 - 135
Dichlorodifluoromethane	ND		2500	2180		ug/L		87	25 - 155
Ethylbenzene	ND		2500	2470		ug/L		99	65 - 130
Hexachlorobutadiene	ND		2500	2400		ug/L		96	60 - 135
Isopropylbenzene	ND		2500	2750		ug/L		110	70 - 135
m,p-Xylene	ND		5000	5260		ug/L		105	65 - 130
Methylene Chloride	ND		2500	1860		ug/L		70	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		2500	2030		ug/L		81	55 - 145
Naphthalene	ND		2500	2650		ug/L		106	50 - 140
n-Butylbenzene	ND		2500	2360		ug/L		94	65 - 135
N-Propylbenzene	ND		2500	2470		ug/L		99	70 - 135
o-Xylene	ND		2500	2620		ug/L		105	65 - 125
sec-Butylbenzene	ND		2500	2620		ug/L		105	70 - 125
Styrene	ND		2500	2530		ug/L		101	50 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21140-C-10 MS
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	ND		2500	2770		ug/L		111	65 - 130
Tetrachloroethene	ND		2500	2880		ug/L		115	65 - 130
Toluene	ND		2500	2350		ug/L		94	70 - 125
trans-1,2-Dichloroethene	ND		2500	2260		ug/L		90	65 - 130
trans-1,3-Dichloropropene	ND		2500	2280		ug/L		91	65 - 135
Trichloroethene	ND		2500	2770		ug/L		111	65 - 125
Trichlorofluoromethane	ND		2500	2460		ug/L		99	60 - 145
Vinyl chloride	5500		2500	8360		ug/L		113	45 - 140
Acetone	ND		2500	2170		ug/L		87	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 440-21140-C-10 MSD
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	*	2500	3450		ug/L		138	65 - 140	1	20
1,1,1-Trichloroethane	ND		2500	2440		ug/L		98	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		2500	2330		ug/L		93	55 - 135	1	30
1,1,2-Trichloroethane	ND		2500	2230		ug/L		89	65 - 130	6	25
1,1-Dichloroethane	ND		2500	2130		ug/L		85	65 - 130	4	20
1,1-Dichloroethene	ND		2500	2360		ug/L		94	60 - 130	2	20
1,1-Dichloropropene	ND		2500	2070		ug/L		83	70 - 135	2	20
1,2,3-Trichlorobenzene	ND		2500	2470		ug/L		99	60 - 135	4	20
1,2,3-Trichloropropane	ND		2500	2050		ug/L		82	55 - 135	1	30
1,2,4-Trichlorobenzene	ND		2500	2660		ug/L		106	65 - 135	4	20
1,2,4-Trimethylbenzene	ND		2500	2770		ug/L		111	55 - 135	2	25
1,2-Dibromo-3-Chloropropane	ND		2500	1860		ug/L		75	45 - 145	1	30
1,2-Dichlorobenzene	ND		2500	2810		ug/L		112	75 - 125	4	20
1,2-Dibromoethane (EDB)	ND		2500	2760		ug/L		110	70 - 130	1	25
1,2-Dichloroethane	ND		2500	2320		ug/L		93	60 - 140	4	20
1,2-Dichloropropane	ND		2500	2180		ug/L		87	65 - 130	4	20
1,3,5-Trimethylbenzene	ND		2500	2770		ug/L		111	70 - 130	2	20
1,3-Dichlorobenzene	ND		2500	2890		ug/L		116	75 - 125	3	20
1,3-Dichloropropane	ND		2500	2100		ug/L		84	65 - 135	0	25
1,4-Dichlorobenzene	ND		2500	2650		ug/L		106	75 - 125	3	20
2,2-Dichloropropane	ND		2500	2410		ug/L		96	60 - 145	4	25
2-Chlorotoluene	ND		2500	2450		ug/L		98	65 - 135	3	20
4-Chlorotoluene	ND		2500	2490		ug/L		100	70 - 135	3	20
p-Isopropyltoluene	ND		2500	2790		ug/L		112	65 - 130	1	20
Benzene	ND		2500	2180		ug/L		87	65 - 125	2	20
Bromobenzene	ND		2500	3030		ug/L		121	70 - 125	4	20
Bromochloromethane	ND		2500	2660		ug/L		106	65 - 135	3	25
Bromodichloromethane	ND		2500	2710		ug/L		108	70 - 135	6	20
Bromoform	ND		2500	3020		ug/L		121	55 - 135	1	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21140-C-10 MSD
Matrix: Water
Analysis Batch: 48829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	ND		2500	2550		ug/L		102	55 - 145	1	25
Carbon tetrachloride	ND		2500	3340		ug/L		134	65 - 140	1	25
Chlorobenzene	ND		2500	2420		ug/L		97	75 - 125	0	20
Chloroethane	ND		2500	2020		ug/L		81	55 - 140	1	25
Chloroform	ND		2500	2170		ug/L		87	65 - 135	5	20
Chloromethane	ND		2500	2510		ug/L		101	45 - 145	2	25
cis-1,2-Dichloroethene	540		2500	2990		ug/L		98	65 - 130	3	20
cis-1,3-Dichloropropene	ND		2500	2340		ug/L		94	70 - 130	4	20
Dibromochloromethane	ND		2500	3200		ug/L		128	65 - 140	2	25
Dibromomethane	ND		2500	2430		ug/L		97	65 - 135	2	25
Dichlorodifluoromethane	ND		2500	2200		ug/L		88	25 - 155	1	30
Ethylbenzene	ND		2500	2460		ug/L		98	65 - 130	0	20
Hexachlorobutadiene	ND		2500	2430		ug/L		97	60 - 135	1	20
Isopropylbenzene	ND		2500	2770		ug/L		111	70 - 135	1	20
m,p-Xylene	ND		5000	5230		ug/L		105	65 - 130	1	25
Methylene Chloride	ND		2500	2010		ug/L		75	50 - 135	7	20
Methyl-t-Butyl Ether (MTBE)	ND		2500	2130		ug/L		85	55 - 145	5	25
Naphthalene	ND		2500	2740		ug/L		110	50 - 140	3	30
n-Butylbenzene	ND		2500	2420		ug/L		97	65 - 135	3	20
N-Propylbenzene	ND		2500	2530		ug/L		101	70 - 135	3	20
o-Xylene	ND		2500	2610		ug/L		104	65 - 125	0	20
sec-Butylbenzene	ND		2500	2650		ug/L		106	70 - 125	1	20
Styrene	ND		2500	2570		ug/L		103	50 - 145	1	30
tert-Butylbenzene	ND		2500	2810		ug/L		112	65 - 130	1	20
Tetrachloroethene	ND		2500	2850		ug/L		114	65 - 130	1	20
Toluene	ND		2500	2420		ug/L		97	70 - 125	3	20
trans-1,2-Dichloroethene	ND		2500	2300		ug/L		92	65 - 130	2	20
trans-1,3-Dichloropropene	ND		2500	2330		ug/L		93	65 - 135	2	25
Trichloroethene	ND		2500	2790		ug/L		111	65 - 125	1	20
Trichlorofluoromethane	ND		2500	2480		ug/L		99	60 - 145	1	25
Vinyl chloride	5500		2500	7570		ug/L		81	45 - 140	10	30
Acetone	ND		2500	2120		ug/L		85	20 - 150	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 440-49388/4
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/01/12 10:14	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/01/12 10:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			09/01/12 10:14	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/01/12 10:14	1
1,1-Dichloroethane	ND		1.0	ug/L			09/01/12 10:14	1
1,1-Dichloroethene	ND		1.0	ug/L			09/01/12 10:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-49388/4
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	ug/L			09/01/12 10:14	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/01/12 10:14	1
1,2,3-Trichloropropane	ND		1.0	ug/L			09/01/12 10:14	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/01/12 10:14	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			09/01/12 10:14	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/01/12 10:14	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/01/12 10:14	1
1,2-Dichloroethane	ND		1.0	ug/L			09/01/12 10:14	1
1,2-Dichloropropane	ND		1.0	ug/L			09/01/12 10:14	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/01/12 10:14	1
1,3-Dichloropropane	ND		1.0	ug/L			09/01/12 10:14	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/01/12 10:14	1
2,2-Dichloropropane	ND		1.0	ug/L			09/01/12 10:14	1
2-Chlorotoluene	ND		1.0	ug/L			09/01/12 10:14	1
4-Chlorotoluene	ND		1.0	ug/L			09/01/12 10:14	1
p-Isopropyltoluene	ND		1.0	ug/L			09/01/12 10:14	1
Benzene	ND		0.50	ug/L			09/01/12 10:14	1
Bromobenzene	ND		1.0	ug/L			09/01/12 10:14	1
Bromochloromethane	ND		1.0	ug/L			09/01/12 10:14	1
Bromodichloromethane	ND		1.0	ug/L			09/01/12 10:14	1
Bromoform	ND		1.0	ug/L			09/01/12 10:14	1
Bromomethane	ND		1.0	ug/L			09/01/12 10:14	1
Carbon tetrachloride	ND		0.50	ug/L			09/01/12 10:14	1
Chlorobenzene	ND		1.0	ug/L			09/01/12 10:14	1
Chloroethane	ND		1.0	ug/L			09/01/12 10:14	1
Chloroform	ND		1.0	ug/L			09/01/12 10:14	1
Chloromethane	ND		1.0	ug/L			09/01/12 10:14	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/01/12 10:14	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			09/01/12 10:14	1
Dibromochloromethane	ND		1.0	ug/L			09/01/12 10:14	1
Dibromomethane	ND		1.0	ug/L			09/01/12 10:14	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/01/12 10:14	1
Ethylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
Hexachlorobutadiene	ND		1.0	ug/L			09/01/12 10:14	1
Isopropylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
m,p-Xylene	ND		1.0	ug/L			09/01/12 10:14	1
Methylene Chloride	ND		5.0	ug/L			09/01/12 10:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/01/12 10:14	1
Naphthalene	ND		1.0	ug/L			09/01/12 10:14	1
n-Butylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
N-Propylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
o-Xylene	ND		1.0	ug/L			09/01/12 10:14	1
sec-Butylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
Styrene	ND		1.0	ug/L			09/01/12 10:14	1
tert-Butylbenzene	ND		1.0	ug/L			09/01/12 10:14	1
Tetrachloroethene	ND		1.0	ug/L			09/01/12 10:14	1
Toluene	ND		1.0	ug/L			09/01/12 10:14	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/01/12 10:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-49388/4
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.50	ug/L			09/01/12 10:14	1
Trichloroethene	ND		1.0	ug/L			09/01/12 10:14	1
Trichlorofluoromethane	ND		1.0	ug/L			09/01/12 10:14	1
Vinyl chloride	ND		0.50	ug/L			09/01/12 10:14	1
Acetone	ND		10	ug/L			09/01/12 10:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/01/12 10:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*09/01/12 10:14*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*09/01/12 10:14*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*09/01/12 10:14*	*1*

Lab Sample ID: LCS 440-49388/5
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	30.5		ug/L		122	70 - 130
1,1,1-Trichloroethane	25.0	32.3		ug/L		129	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.9		ug/L		92	55 - 130
1,1,2-Trichloroethane	25.0	25.2		ug/L		101	70 - 125
1,1-Dichloroethane	25.0	24.2		ug/L		97	70 - 125
1,1-Dichloroethene	25.0	23.3		ug/L		93	70 - 125
1,1-Dichloropropene	25.0	23.5		ug/L		94	75 - 130
1,2,3-Trichlorobenzene	25.0	22.0		ug/L		88	65 - 125
1,2,3-Trichloropropane	25.0	22.9		ug/L		92	60 - 130
1,2,4-Trichlorobenzene	25.0	23.4		ug/L		94	70 - 135
1,2,4-Trimethylbenzene	25.0	27.0		ug/L		108	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	26.7		ug/L		107	50 - 135
1,2-Dichlorobenzene	25.0	25.9		ug/L		104	75 - 120
1,2-Dibromoethane (EDB)	25.0	29.3		ug/L		117	75 - 125
1,2-Dichloroethane	25.0	27.7		ug/L		111	60 - 140
1,2-Dichloropropane	25.0	22.8		ug/L		91	70 - 125
1,3,5-Trimethylbenzene	25.0	26.6		ug/L		106	75 - 125
1,3-Dichlorobenzene	25.0	27.1		ug/L		108	75 - 120
1,3-Dichloropropane	25.0	23.9		ug/L		96	70 - 120
1,4-Dichlorobenzene	25.0	26.1		ug/L		104	75 - 120
2,2-Dichloropropane	25.0	40.7	*	ug/L		163	65 - 140
2-Chlorotoluene	25.0	24.9		ug/L		99	70 - 125
4-Chlorotoluene	25.0	25.3		ug/L		101	75 - 125
p-Isopropyltoluene	25.0	27.3		ug/L		109	75 - 125
Benzene	25.0	24.4		ug/L		98	70 - 120
Bromobenzene	25.0	24.9		ug/L		100	75 - 120
Bromochloromethane	25.0	25.0		ug/L		100	70 - 130
Bromodichloromethane	25.0	31.3		ug/L		125	70 - 135
Bromoform	25.0	28.3		ug/L		113	55 - 130
Bromomethane	25.0	25.7		ug/L		103	65 - 140
Carbon tetrachloride	25.0	40.2	*	ug/L		161	65 - 140
Chlorobenzene	25.0	25.5		ug/L		102	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-49388/5
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	22.3		ug/L		89	60 - 140
Chloroform	25.0	26.9		ug/L		107	70 - 130
Chloromethane	25.0	21.0		ug/L		84	50 - 140
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	70 - 125
cis-1,3-Dichloropropene	25.0	30.2		ug/L		121	75 - 125
Dibromochloromethane	25.0	31.3		ug/L		125	70 - 140
Dibromomethane	25.0	26.4		ug/L		106	70 - 125
Dichlorodifluoromethane	25.0	21.6		ug/L		86	35 - 155
Ethylbenzene	25.0	26.2		ug/L		105	75 - 125
Hexachlorobutadiene	25.0	25.6		ug/L		103	65 - 135
Isopropylbenzene	25.0	23.9		ug/L		96	75 - 130
m,p-Xylene	50.0	53.4		ug/L		107	75 - 125
Methylene Chloride	25.0	22.9		ug/L		91	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	27.1		ug/L		108	60 - 135
Naphthalene	25.0	19.3		ug/L		77	55 - 135
n-Butylbenzene	25.0	27.6		ug/L		111	70 - 130
N-Propylbenzene	25.0	24.3		ug/L		97	75 - 130
o-Xylene	25.0	26.4		ug/L		106	75 - 125
sec-Butylbenzene	25.0	25.1		ug/L		101	70 - 125
Styrene	25.0	25.7		ug/L		103	75 - 130
tert-Butylbenzene	25.0	25.2		ug/L		101	70 - 125
Tetrachloroethene	25.0	27.7		ug/L		111	70 - 125
Toluene	25.0	26.3		ug/L		105	70 - 120
trans-1,2-Dichloroethene	25.0	24.1		ug/L		96	70 - 125
trans-1,3-Dichloropropene	25.0	30.7		ug/L		123	70 - 125
Trichloroethene	25.0	26.2		ug/L		105	70 - 125
Trichlorofluoromethane	25.0	29.3		ug/L		117	65 - 145
Vinyl chloride	25.0	22.9		ug/L		92	55 - 135
Acetone	25.0	24.0		ug/L		96	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: LCSD 440-49388/6
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	31.0		ug/L		124	70 - 130	2	20
1,1,1-Trichloroethane	25.0	31.8		ug/L		127	65 - 135	1	20
1,1,2,2-Tetrachloroethane	25.0	24.0		ug/L		96	55 - 130	5	25
1,1,2-Trichloroethane	25.0	25.4		ug/L		102	70 - 125	1	20
1,1-Dichloroethane	25.0	23.8		ug/L		95	70 - 125	2	20
1,1-Dichloroethene	25.0	23.5		ug/L		94	70 - 125	1	20
1,1-Dichloropropene	25.0	23.8		ug/L		95	75 - 130	1	20
1,2,3-Trichlorobenzene	25.0	20.1		ug/L		81	65 - 125	9	20
1,2,3-Trichloropropane	25.0	23.8		ug/L		95	60 - 130	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-49388/6
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	25.0	21.6		ug/L		86	70 - 135	8	20
1,2,4-Trimethylbenzene	25.0	26.9		ug/L		108	75 - 125	1	20
1,2-Dibromo-3-Chloropropane	25.0	26.8		ug/L		107	50 - 135	1	30
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	75 - 120	2	20
1,2-Dibromoethane (EDB)	25.0	29.1		ug/L		116	75 - 125	1	20
1,2-Dichloroethane	25.0	27.4		ug/L		110	60 - 140	1	20
1,2-Dichloropropane	25.0	23.8		ug/L		95	70 - 125	4	20
1,3,5-Trimethylbenzene	25.0	26.8		ug/L		107	75 - 125	1	20
1,3-Dichlorobenzene	25.0	27.0		ug/L		108	75 - 120	1	20
1,3-Dichloropropane	25.0	25.1		ug/L		100	70 - 120	5	20
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	75 - 120	1	20
2,2-Dichloropropane	25.0	41.8	*	ug/L		167	65 - 140	3	25
2-Chlorotoluene	25.0	25.3		ug/L		101	70 - 125	2	20
4-Chlorotoluene	25.0	25.8		ug/L		103	75 - 125	2	20
p-Isopropyltoluene	25.0	27.1		ug/L		109	75 - 125	0	20
Benzene	25.0	24.5		ug/L		98	70 - 120	0	20
Bromobenzene	25.0	26.2		ug/L		105	75 - 120	5	20
Bromochloromethane	25.0	25.3		ug/L		101	70 - 130	1	20
Bromodichloromethane	25.0	31.4		ug/L		126	70 - 135	0	20
Bromoform	25.0	29.2		ug/L		117	55 - 130	3	25
Bromomethane	25.0	25.0		ug/L		100	65 - 140	3	20
Carbon tetrachloride	25.0	39.2	*	ug/L		157	65 - 140	3	25
Chlorobenzene	25.0	25.9		ug/L		104	75 - 120	1	20
Chloroethane	25.0	21.8		ug/L		87	60 - 140	2	20
Chloroform	25.0	26.0		ug/L		104	70 - 130	3	20
Chloromethane	25.0	21.1		ug/L		84	50 - 140	0	25
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	70 - 125	0	20
cis-1,3-Dichloropropene	25.0	30.7		ug/L		123	75 - 125	2	25
Dibromochloromethane	25.0	32.3		ug/L		129	70 - 140	3	20
Dibromomethane	25.0	26.2		ug/L		105	70 - 125	1	20
Dichlorodifluoromethane	25.0	20.1		ug/L		80	35 - 155	7	30
Ethylbenzene	25.0	26.8		ug/L		107	75 - 125	2	20
Hexachlorobutadiene	25.0	23.3		ug/L		93	65 - 135	10	20
Isopropylbenzene	25.0	24.5		ug/L		98	75 - 130	3	20
m,p-Xylene	50.0	52.7		ug/L		105	75 - 125	1	20
Methylene Chloride	25.0	22.4		ug/L		90	55 - 130	2	20
Methyl-t-Butyl Ether (MTBE)	25.0	27.1		ug/L		108	60 - 135	0	25
Naphthalene	25.0	19.0		ug/L		76	55 - 135	2	25
n-Butylbenzene	25.0	27.3		ug/L		109	70 - 130	1	20
N-Propylbenzene	25.0	25.2		ug/L		101	75 - 130	4	20
o-Xylene	25.0	26.7		ug/L		107	75 - 125	1	20
sec-Butylbenzene	25.0	25.5		ug/L		102	70 - 125	2	20
Styrene	25.0	25.9		ug/L		104	75 - 130	1	20
tert-Butylbenzene	25.0	26.0		ug/L		104	70 - 125	3	20
Tetrachloroethene	25.0	28.0		ug/L		112	70 - 125	1	20
Toluene	25.0	26.6		ug/L		106	70 - 120	1	20
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	70 - 125	0	20
trans-1,3-Dichloropropene	25.0	30.5		ug/L		122	70 - 125	1	20
Trichloroethene	25.0	26.2		ug/L		105	70 - 125	0	20
Trichlorofluoromethane	25.0	27.9		ug/L		112	65 - 145	5	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-49388/6
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl chloride			25.0	21.4		ug/L		86	55 - 135	7	30
Acetone			25.0	24.8		ug/L		99	30 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: 440-21436-A-1 MS
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1,2-Tetrachloroethane	ND		25.0	31.1		ug/L		124	65 - 140		
1,1,1-Trichloroethane	ND		25.0	32.2		ug/L		129	65 - 140		
1,1,2,2-Tetrachloroethane	ND		25.0	23.1		ug/L		92	55 - 135		
1,1,2-Trichloroethane	ND		25.0	25.3		ug/L		101	65 - 130		
1,1-Dichloroethane	ND		25.0	24.6		ug/L		99	65 - 130		
1,1-Dichloroethene	ND		25.0	22.8		ug/L		91	60 - 130		
1,1-Dichloropropene	ND		25.0	23.2		ug/L		93	70 - 135		
1,2,3-Trichlorobenzene	ND		25.0	22.4		ug/L		90	60 - 135		
1,2,3-Trichloropropane	ND		25.0	22.2		ug/L		89	55 - 135		
1,2,4-Trichlorobenzene	ND		25.0	22.9		ug/L		91	65 - 135		
1,2,4-Trimethylbenzene	ND		25.0	24.1		ug/L		96	55 - 135		
1,2-Dibromo-3-Chloropropane	ND		25.0	27.1		ug/L		108	45 - 145		
1,2-Dichlorobenzene	ND		25.0	25.3		ug/L		101	75 - 125		
1,2-Dibromoethane (EDB)	ND		25.0	28.4		ug/L		113	70 - 130		
1,2-Dichloroethane	ND		25.0	27.9		ug/L		112	60 - 140		
1,2-Dichloropropane	ND		25.0	23.5		ug/L		94	65 - 130		
1,3,5-Trimethylbenzene	ND		25.0	25.2		ug/L		101	70 - 130		
1,3-Dichlorobenzene	ND		25.0	25.8		ug/L		103	75 - 125		
1,3-Dichloropropane	ND		25.0	23.8		ug/L		95	65 - 135		
1,4-Dichlorobenzene	ND		25.0	25.6		ug/L		102	75 - 125		
2,2-Dichloropropane	ND	*	25.0	37.6	F	ug/L		150	60 - 145		
2-Chlorotoluene	ND		25.0	24.3		ug/L		97	65 - 135		
4-Chlorotoluene	ND		25.0	25.0		ug/L		100	70 - 135		
p-Isopropyltoluene	ND		25.0	26.0		ug/L		104	65 - 130		
Benzene	ND		25.0	24.2		ug/L		97	65 - 125		
Bromobenzene	ND		25.0	24.4		ug/L		98	70 - 125		
Bromochloromethane	ND		25.0	26.4		ug/L		106	65 - 135		
Bromodichloromethane	ND		25.0	31.2		ug/L		125	70 - 135		
Bromoform	ND		25.0	28.6		ug/L		114	55 - 135		
Bromomethane	ND		25.0	25.4		ug/L		101	55 - 145		
Carbon tetrachloride	ND	*	25.0	39.2	F	ug/L		157	65 - 140		
Chlorobenzene	ND		25.0	25.3		ug/L		101	75 - 125		
Chloroethane	ND		25.0	22.0		ug/L		88	55 - 140		
Chloroform	ND		25.0	26.9		ug/L		108	65 - 135		
Chloromethane	ND		25.0	19.5		ug/L		78	45 - 145		
cis-1,2-Dichloroethene	ND		25.0	25.1		ug/L		100	65 - 130		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21436-A-1 MS
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	ND		25.0	29.7		ug/L		119	70 - 130
Dibromochloromethane	ND		25.0	31.7		ug/L		127	65 - 140
Dibromomethane	ND		25.0	26.2		ug/L		105	65 - 135
Dichlorodifluoromethane	ND		25.0	20.8		ug/L		83	25 - 155
Ethylbenzene	ND		25.0	25.7		ug/L		103	65 - 130
Hexachlorobutadiene	ND		25.0	23.8		ug/L		95	60 - 135
Isopropylbenzene	ND		25.0	22.8		ug/L		91	70 - 135
m,p-Xylene	ND		50.0	51.3		ug/L		103	65 - 130
Methylene Chloride	ND		25.0	22.7		ug/L		91	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.1		ug/L		108	55 - 145
Naphthalene	ND		25.0	19.1		ug/L		76	50 - 140
n-Butylbenzene	ND		25.0	26.3		ug/L		105	65 - 135
N-Propylbenzene	ND		25.0	24.0		ug/L		96	70 - 135
o-Xylene	ND		25.0	25.3		ug/L		101	65 - 125
sec-Butylbenzene	ND		25.0	24.5		ug/L		98	70 - 125
Styrene	ND		25.0	2.82	F	ug/L		11	50 - 145
tert-Butylbenzene	ND		25.0	24.6		ug/L		98	65 - 130
Tetrachloroethene	ND		25.0	26.9		ug/L		108	65 - 130
Toluene	ND		25.0	25.9		ug/L		103	70 - 125
trans-1,2-Dichloroethene	ND		25.0	23.6		ug/L		94	65 - 130
trans-1,3-Dichloropropene	ND		25.0	31.0		ug/L		124	65 - 135
Trichloroethene	ND		25.0	25.5		ug/L		102	65 - 125
Trichlorofluoromethane	ND		25.0	28.3		ug/L		113	60 - 145
Vinyl chloride	ND		25.0	21.2		ug/L		85	45 - 140
Acetone	ND		25.0	21.8		ug/L		87	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*114*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-21436-A-1 MSD
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	32.5		ug/L		130	65 - 140	4	20
1,1,1-Trichloroethane	ND		25.0	32.5		ug/L		130	65 - 140	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	55 - 135	8	30
1,1,2-Trichloroethane	ND		25.0	26.7		ug/L		107	65 - 130	5	25
1,1-Dichloroethane	ND		25.0	25.3		ug/L		101	65 - 130	3	20
1,1-Dichloroethene	ND		25.0	24.0		ug/L		96	60 - 130	5	20
1,1-Dichloropropene	ND		25.0	23.7		ug/L		95	70 - 135	2	20
1,2,3-Trichlorobenzene	ND		25.0	22.0		ug/L		88	60 - 135	2	20
1,2,3-Trichloropropane	ND		25.0	24.1		ug/L		97	55 - 135	8	30
1,2,4-Trichlorobenzene	ND		25.0	23.5		ug/L		94	65 - 135	3	20
1,2,4-Trimethylbenzene	ND		25.0	25.9		ug/L		104	55 - 135	7	25
1,2-Dibromo-3-Chloropropane	ND		25.0	28.3		ug/L		113	45 - 145	4	30
1,2-Dichlorobenzene	ND		25.0	27.1		ug/L		108	75 - 125	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21436-A-1 MSD
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromoethane (EDB)	ND		25.0	30.1		ug/L		120	70 - 130	6	25
1,2-Dichloroethane	ND		25.0	29.0		ug/L		116	60 - 140	4	20
1,2-Dichloropropane	ND		25.0	24.4		ug/L		98	65 - 130	4	20
1,3,5-Trimethylbenzene	ND		25.0	26.6		ug/L		106	70 - 130	5	20
1,3-Dichlorobenzene	ND		25.0	27.3		ug/L		109	75 - 125	5	20
1,3-Dichloropropane	ND		25.0	25.8		ug/L		103	65 - 135	8	25
1,4-Dichlorobenzene	ND		25.0	26.7		ug/L		107	75 - 125	4	20
2,2-Dichloropropane	ND	*	25.0	39.1	F	ug/L		156	60 - 145	4	25
2-Chlorotoluene	ND		25.0	26.2		ug/L		105	65 - 135	7	20
4-Chlorotoluene	ND		25.0	26.0		ug/L		104	70 - 135	4	20
p-Isopropyltoluene	ND		25.0	26.9		ug/L		108	65 - 130	4	20
Benzene	ND		25.0	25.1		ug/L		100	65 - 125	4	20
Bromobenzene	ND		25.0	26.0		ug/L		104	70 - 125	6	20
Bromochloromethane	ND		25.0	26.6		ug/L		106	65 - 135	1	25
Bromodichloromethane	ND		25.0	32.6		ug/L		130	70 - 135	4	20
Bromoform	ND		25.0	29.3		ug/L		117	55 - 135	2	25
Bromomethane	ND		25.0	26.0		ug/L		104	55 - 145	2	25
Carbon tetrachloride	ND	*	25.0	41.0	F	ug/L		164	65 - 140	4	25
Chlorobenzene	ND		25.0	26.3		ug/L		105	75 - 125	4	20
Chloroethane	ND		25.0	22.0		ug/L		88	55 - 140	0	25
Chloroform	ND		25.0	28.6		ug/L		114	65 - 135	6	20
Chloromethane	ND		25.0	20.1		ug/L		80	45 - 145	3	25
cis-1,2-Dichloroethene	ND		25.0	26.1		ug/L		104	65 - 130	4	20
cis-1,3-Dichloropropene	ND		25.0	31.7		ug/L		127	70 - 130	6	20
Dibromochloromethane	ND		25.0	34.0		ug/L		136	65 - 140	7	25
Dibromomethane	ND		25.0	27.7		ug/L		111	65 - 135	6	25
Dichlorodifluoromethane	ND		25.0	21.1		ug/L		85	25 - 155	2	30
Ethylbenzene	ND		25.0	27.1		ug/L		109	65 - 130	5	20
Hexachlorobutadiene	ND		25.0	23.9		ug/L		96	60 - 135	0	20
Isopropylbenzene	ND		25.0	24.1		ug/L		96	70 - 135	5	20
m,p-Xylene	ND		50.0	54.1		ug/L		108	65 - 130	5	25
Methylene Chloride	ND		25.0	23.8		ug/L		95	50 - 135	5	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	29.1		ug/L		116	55 - 145	7	25
Naphthalene	ND		25.0	20.9		ug/L		83	50 - 140	9	30
n-Butylbenzene	ND		25.0	27.2		ug/L		109	65 - 135	4	20
N-Propylbenzene	ND		25.0	25.1		ug/L		100	70 - 135	4	20
o-Xylene	ND		25.0	27.2		ug/L		109	65 - 125	7	20
sec-Butylbenzene	ND		25.0	25.5		ug/L		102	70 - 125	4	20
Styrene	ND		25.0	8.55	F	ug/L		34	50 - 145	101	30
tert-Butylbenzene	ND		25.0	25.5		ug/L		102	65 - 130	4	20
Tetrachloroethene	ND		25.0	27.8		ug/L		111	65 - 130	3	20
Toluene	ND		25.0	27.0		ug/L		108	70 - 125	4	20
trans-1,2-Dichloroethene	ND		25.0	24.5		ug/L		98	65 - 130	4	20
trans-1,3-Dichloropropene	ND		25.0	32.4		ug/L		129	65 - 135	4	25
Trichloroethene	ND		25.0	26.2		ug/L		105	65 - 125	3	20
Trichlorofluoromethane	ND		25.0	29.2		ug/L		117	60 - 145	3	25
Vinyl chloride	ND		25.0	21.8		ug/L		87	45 - 140	3	30
Acetone	ND		25.0	23.3		ug/L		93	20 - 150	6	35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21436-A-1 MSD
Matrix: Water
Analysis Batch: 49388

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	111		80 - 120
Toluene-d8 (Surr)	108		80 - 120

Method: 8270C SIM - 1,4 Dioxane by SIM

Lab Sample ID: MB 440-48736/1-A
Matrix: Water
Analysis Batch: 49017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48736

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50		ug/L		08/29/12 17:31	08/30/12 16:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	74		30 - 120	08/29/12 17:31	08/30/12 16:50	1

Lab Sample ID: LCS 440-48736/2-A
Matrix: Water
Analysis Batch: 49017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48736

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	1.52		ug/L		76	35 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	77		30 - 120

Lab Sample ID: LCSD 440-48736/3-A
Matrix: Water
Analysis Batch: 49017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48736

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			2.00	1.29		ug/L		64	35 - 120	16	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Dioxane-d8 (Surr)	65		30 - 120

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

GC/MS VOA

Analysis Batch: 48829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21140-C-10 MS	Matrix Spike	Total/NA	Water	8260B	
440-21140-C-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-21316-1	OC-GW-TB-082212	Total/NA	Water	8260B	
440-21316-2	OC-GW-OW6-082212	Total/NA	Water	8260B	
440-21316-3	OC-GW-OW10-082212	Total/NA	Water	8260B	
440-21316-4	OC-GW-OW1B-082212	Total/NA	Water	8260B	
440-21316-5	OC-GW-OW4A-082212	Total/NA	Water	8260B	
LCS 440-48829/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-48829/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 49388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21316-6	OC-GW-OW4AN-082212	Total/NA	Water	8260B	
440-21436-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-21436-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-49388/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 440-49388/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 440-49388/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 48736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21316-2	OC-GW-OW6-082212	Total/NA	Water	3520C	
440-21316-3	OC-GW-OW10-082212	Total/NA	Water	3520C	
440-21316-4	OC-GW-OW1B-082212	Total/NA	Water	3520C	
440-21316-5	OC-GW-OW4A-082212	Total/NA	Water	3520C	
440-21316-6	OC-GW-OW4AN-082212	Total/NA	Water	3520C	
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-48736/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 49017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21316-2	OC-GW-OW6-082212	Total/NA	Water	8270C SIM	48736
440-21316-3	OC-GW-OW10-082212	Total/NA	Water	8270C SIM	48736
440-21316-4	OC-GW-OW1B-082212	Total/NA	Water	8270C SIM	48736
440-21316-5	OC-GW-OW4A-082212	Total/NA	Water	8270C SIM	48736
440-21316-6	OC-GW-OW4AN-082212	Total/NA	Water	8270C SIM	48736
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	48736
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	48736
MB 440-48736/1-A	Method Blank	Total/NA	Water	8270C SIM	48736

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-12
USDA	Federal		P330-09-00080	06-06-14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

440-21316

TAL-0013(1007)

Client Name/Address: CDM SMITH / 111 Academy Ste. 150 Irvine, CA 92617

Project/PO Number: 10500-90421-EECA. Semiannual

Project Manager: Sharon Wallin

Phone Number: (949) 752-5452

Sampler: Nacolynn Begay

Fax Number: (949) 725-3790

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOCs (8260B) w/ Freon, acetone, MTBE + TICs	1,4-Dioxane (8270M)	Level 4 Deliverables						
OC-GW-TB-082212	Aqu.	VOA	2	—	—	HCl	X								
OC-GW-OW6-082212		VOA/Amber	5	8.22.12	0742	HCl/none	X	X							
-OW10-					1355										
-OW1B-					1410										
-OW4A-					1128										
-OW4AN-					1140										
-OW4B-					1338				X						
-OW4BK-			5		1348				X						

Note: Low level DL's & multiple dilutions on ALL samples.

Special Instructions

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
	8.22.12/1600			same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours ____ 5 days ____
				48 hours ____ normal X
Relinquished By:	Date/Time:	Received in Lab By: Olga Orelcs	Date/Time: 8/22/12 16:00	Sample Integrity: (Check) intact ____ on ice 2.3/3.9°C

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-21316-1

Login Number: 21316
List Number: 1
Creator: Freitag, Kevin R

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Nacolynn Begay
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-21316-2
Client Project/Site: 10500-90421-EECA. Semiannual
Sampling Event: Quarterly Wastewater

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
9/11/2012 4:51:46 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-21316-7	OC-GW-OW4B-082212	Water	08/22/12 13:38	08/22/12 16:00
440-21316-8	OC-GW-OW4BK-082212	Water	08/22/12 13:48	08/22/12 16:00

Job ID: 440-21316-2

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-21316-2

Comments
No additional comments.

Receipt
The samples were received on 8/22/2012 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1º C and 3.7º C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 49388 exceeded control limits for the following analytes: carbon tetrachloride and 2,2-dichloropropene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 49388 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 49388 was outside control limits. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Method 8260B: The continuing calibration verification (CCV) for 2,2-Dichloropropane, carbon tetrachloride, and cis-1,3-dichloropropene associated with batch 49388 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) for several compounds associated with batch 49473 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 49473 exceeded control limits for the several analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 49473 were outside control limits.

Method 8260B: The continuing calibration verification (CCV) for Carbon tetrachloride associated with batch 49675 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 49675 exceeded control limits for Carbon tetrachloride. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 49675 were outside control limits.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 48736. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Job ID: 440-21316-2 (Continued)

Laboratory: TestAmerica Irvine (Continued)

VOA Prep

No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-2

Client Sample ID: OC-GW-OW4B-082212
Date Collected: 08/22/12 13:38
Date Received: 08/22/12 16:00

Lab Sample ID: 440-21316-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*	1.0		ug/L			09/04/12 23:28	1
1,1,1-Trichloroethane	ND		1.0		ug/L			09/04/12 23:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/04/12 23:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/04/12 23:28	1
1,1-Dichloroethane	ND		1.0		ug/L			09/04/12 23:28	1
1,1-Dichloroethene	ND		1.0		ug/L			09/04/12 23:28	1
1,1-Dichloropropene	ND		1.0		ug/L			09/04/12 23:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/04/12 23:28	1
1,2,3-Trichloropropane	ND		1.0		ug/L			09/04/12 23:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/04/12 23:28	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/04/12 23:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/04/12 23:28	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/04/12 23:28	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			09/04/12 23:28	1
1,2-Dichloroethane	ND		1.0		ug/L			09/04/12 23:28	1
1,2-Dichloropropane	ND		1.0		ug/L			09/04/12 23:28	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/04/12 23:28	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/04/12 23:28	1
1,3-Dichloropropane	ND		1.0		ug/L			09/04/12 23:28	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/04/12 23:28	1
2,2-Dichloropropane	ND		1.0		ug/L			09/04/12 23:28	1
2-Chlorotoluene	ND		1.0		ug/L			09/04/12 23:28	1
4-Chlorotoluene	ND		1.0		ug/L			09/04/12 23:28	1
p-Isopropyltoluene	ND		1.0		ug/L			09/04/12 23:28	1
Benzene	ND		0.50		ug/L			09/04/12 23:28	1
Bromobenzene	ND		1.0		ug/L			09/04/12 23:28	1
Bromochloromethane	ND		1.0		ug/L			09/04/12 23:28	1
Bromodichloromethane	ND		1.0		ug/L			09/04/12 23:28	1
Bromoform	ND		1.0		ug/L			09/04/12 23:28	1
Bromomethane	ND		1.0		ug/L			09/04/12 23:28	1
Carbon tetrachloride	ND	*	0.50		ug/L			09/04/12 23:28	1
Chlorobenzene	ND		1.0		ug/L			09/04/12 23:28	1
Chloroethane	ND		1.0		ug/L			09/04/12 23:28	1
Chloroform	ND		1.0		ug/L			09/04/12 23:28	1
Chloromethane	ND		1.0		ug/L			09/04/12 23:28	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/04/12 23:28	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/04/12 23:28	1
Dibromochloromethane	ND		1.0		ug/L			09/04/12 23:28	1
Dibromomethane	ND		1.0		ug/L			09/04/12 23:28	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/04/12 23:28	1
Ethylbenzene	ND		1.0		ug/L			09/04/12 23:28	1
Hexachlorobutadiene	ND		1.0		ug/L			09/04/12 23:28	1
Isopropylbenzene	ND		1.0		ug/L			09/04/12 23:28	1
m,p-Xylene	ND		1.0		ug/L			09/04/12 23:28	1
Methylene Chloride	ND		5.0		ug/L			09/04/12 23:28	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			09/04/12 23:28	1
Naphthalene	ND		1.0		ug/L			09/04/12 23:28	1
n-Butylbenzene	ND		1.0		ug/L			09/04/12 23:28	1
N-Propylbenzene	ND		1.0		ug/L			09/04/12 23:28	1
o-Xylene	ND		1.0		ug/L			09/04/12 23:28	1
sec-Butylbenzene	ND		1.0		ug/L			09/04/12 23:28	1

Client Sample ID: OC-GW-OW4B-082212

Lab Sample ID: 440-21316-7

Date Collected: 08/22/12 13:38

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	ug/L			09/04/12 23:28	1
tert-Butylbenzene	ND		1.0	ug/L			09/04/12 23:28	1
Tetrachloroethene	**3.8**		1.0	ug/L			09/04/12 23:28	1
Toluene	ND		1.0	ug/L			09/04/12 23:28	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/04/12 23:28	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			09/04/12 23:28	1
Trichloroethene	ND		1.0	ug/L			09/04/12 23:28	1
Trichlorofluoromethane	ND		1.0	ug/L			09/04/12 23:28	1
Vinyl chloride	ND		0.50	ug/L			09/04/12 23:28	1
Acetone	ND		10	ug/L			09/04/12 23:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/04/12 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/04/12 23:28*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*09/04/12 23:28*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*09/04/12 23:28*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.48	ug/L		08/29/12 17:31	08/30/12 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*60*		*30 - 120*	*08/29/12 17:31*	*08/30/12 21:31*	*1*

Client Sample ID: OC-GW-OW4BK-082212

Lab Sample ID: 440-21316-8

Date Collected: 08/22/12 13:48

Matrix: Water

Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/02/12 17:17	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/02/12 17:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			09/02/12 17:17	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/02/12 17:17	1
1,1-Dichloroethane	ND		1.0	ug/L			09/02/12 17:17	1
1,1-Dichloroethene	ND		1.0	ug/L			09/02/12 17:17	1
1,1-Dichloropropene	ND		1.0	ug/L			09/02/12 17:17	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/02/12 17:17	1
1,2,3-Trichloropropane	ND		1.0	ug/L			09/02/12 17:17	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/02/12 17:17	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			09/02/12 17:17	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/02/12 17:17	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/02/12 17:17	1
1,2-Dichloroethane	ND		1.0	ug/L			09/02/12 17:17	1
1,2-Dichloropropane	ND		1.0	ug/L			09/02/12 17:17	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/02/12 17:17	1
1,3-Dichloropropane	ND		1.0	ug/L			09/02/12 17:17	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/02/12 17:17	1
2,2-Dichloropropane	ND	*	1.0	ug/L			09/02/12 17:17	1
2-Chlorotoluene	ND		1.0	ug/L			09/02/12 17:17	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-2

Client Sample ID: OC-GW-OW4BK-082212

Lab Sample ID: 440-21316-8

Date Collected: 08/22/12 13:48
Matrix: Water
Date Received: 08/22/12 16:00

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	ug/L			09/02/12 17:17	1
p-Isopropyltoluene	ND		1.0	ug/L			09/02/12 17:17	1
Benzene	ND		0.50	ug/L			09/02/12 17:17	1
Bromobenzene	ND		1.0	ug/L			09/02/12 17:17	1
Bromochloromethane	ND		1.0	ug/L			09/02/12 17:17	1
Bromodichloromethane	ND		1.0	ug/L			09/02/12 17:17	1
Bromoform	ND		1.0	ug/L			09/02/12 17:17	1
Bromomethane	ND		1.0	ug/L			09/02/12 17:17	1
Carbon tetrachloride	ND	*	0.50	ug/L			09/02/12 17:17	1
Chlorobenzene	ND		1.0	ug/L			09/02/12 17:17	1
Chloroethane	ND		1.0	ug/L			09/02/12 17:17	1
Chloroform	ND		1.0	ug/L			09/02/12 17:17	1
Chloromethane	ND		1.0	ug/L			09/02/12 17:17	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/02/12 17:17	1
cis-1,3-Dichloropropene	ND	*	0.50	ug/L			09/02/12 17:17	1
Dibromochloromethane	ND		1.0	ug/L			09/02/12 17:17	1
Dibromomethane	ND		1.0	ug/L			09/02/12 17:17	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/02/12 17:17	1
Ethylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
Hexachlorobutadiene	ND		1.0	ug/L			09/02/12 17:17	1
Isopropylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
m,p-Xylene	ND		1.0	ug/L			09/02/12 17:17	1
Methylene Chloride	ND		5.0	ug/L			09/02/12 17:17	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/02/12 17:17	1
Naphthalene	ND		1.0	ug/L			09/02/12 17:17	1
n-Butylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
N-Propylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
o-Xylene	ND		1.0	ug/L			09/02/12 17:17	1
sec-Butylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
Styrene	ND		1.0	ug/L			09/02/12 17:17	1
tert-Butylbenzene	ND		1.0	ug/L			09/02/12 17:17	1
Tetrachloroethene	**3.5**		1.0	ug/L			09/02/12 17:17	1
Toluene	ND		1.0	ug/L			09/02/12 17:17	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/02/12 17:17	1
trans-1,3-Dichloropropene	ND	*	0.50	ug/L			09/02/12 17:17	1
Trichloroethene	ND		1.0	ug/L			09/02/12 17:17	1
Trichlorofluoromethane	ND		1.0	ug/L			09/02/12 17:17	1
Vinyl chloride	ND		0.50	ug/L			09/02/12 17:17	1
Acetone	ND		10	ug/L			09/02/12 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/02/12 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*09/02/12 17:17*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*09/02/12 17:17*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*09/02/12 17:17*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.73**		0.47	ug/L		08/29/12 17:31	08/30/12 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*62*		*30 - 120*	*08/29/12 17:31*	*08/30/12 21:55*	*1*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-2

Client Sample ID: OC-GW-OW4B-082212

Lab Sample ID: 440-21316-7

Date Collected: 08/22/12 13:38

Matrix: Water

Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	49675	09/04/12 23:28	RM	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 21:31	CP	TAL IRV

Client Sample ID: OC-GW-OW4BK-082212

Lab Sample ID: 440-21316-8

Date Collected: 08/22/12 13:48

Matrix: Water

Date Received: 08/22/12 16:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	49473	09/02/12 17:17	NA	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 21:55	CP	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-49473/4
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			09/02/12 13:00	1
1,1,1-Trichloroethane	ND		1.0		ug/L			09/02/12 13:00	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/02/12 13:00	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/02/12 13:00	1
1,1-Dichloroethane	ND		1.0		ug/L			09/02/12 13:00	1
1,1-Dichloroethene	ND		1.0		ug/L			09/02/12 13:00	1
1,1-Dichloropropene	ND		1.0		ug/L			09/02/12 13:00	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			09/02/12 13:00	1
1,2,3-Trichloropropane	ND		1.0		ug/L			09/02/12 13:00	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/02/12 13:00	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			09/02/12 13:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			09/02/12 13:00	1
1,2-Dichlorobenzene	ND		1.0		ug/L			09/02/12 13:00	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			09/02/12 13:00	1
1,2-Dichloroethane	ND		1.0		ug/L			09/02/12 13:00	1
1,2-Dichloropropane	ND		1.0		ug/L			09/02/12 13:00	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			09/02/12 13:00	1
1,3-Dichlorobenzene	ND		1.0		ug/L			09/02/12 13:00	1
1,3-Dichloropropane	ND		1.0		ug/L			09/02/12 13:00	1
1,4-Dichlorobenzene	ND		1.0		ug/L			09/02/12 13:00	1
2,2-Dichloropropane	ND		1.0		ug/L			09/02/12 13:00	1
2-Chlorotoluene	ND		1.0		ug/L			09/02/12 13:00	1
4-Chlorotoluene	ND		1.0		ug/L			09/02/12 13:00	1
p-Isopropyltoluene	ND		1.0		ug/L			09/02/12 13:00	1
Benzene	ND		0.50		ug/L			09/02/12 13:00	1
Bromobenzene	ND		1.0		ug/L			09/02/12 13:00	1
Bromochloromethane	ND		1.0		ug/L			09/02/12 13:00	1
Bromodichloromethane	ND		1.0		ug/L			09/02/12 13:00	1
Bromoform	ND		1.0		ug/L			09/02/12 13:00	1
Bromomethane	ND		1.0		ug/L			09/02/12 13:00	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/12 13:00	1
Chlorobenzene	ND		1.0		ug/L			09/02/12 13:00	1
Chloroethane	ND		1.0		ug/L			09/02/12 13:00	1
Chloroform	ND		1.0		ug/L			09/02/12 13:00	1
Chloromethane	ND		1.0		ug/L			09/02/12 13:00	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/02/12 13:00	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/12 13:00	1
Dibromochloromethane	ND		1.0		ug/L			09/02/12 13:00	1
Dibromomethane	ND		1.0		ug/L			09/02/12 13:00	1
Dichlorodifluoromethane	ND		1.0		ug/L			09/02/12 13:00	1
Ethylbenzene	ND		1.0		ug/L			09/02/12 13:00	1
Hexachlorobutadiene	ND		1.0		ug/L			09/02/12 13:00	1
Isopropylbenzene	ND		1.0		ug/L			09/02/12 13:00	1
m,p-Xylene	ND		1.0		ug/L			09/02/12 13:00	1
Methylene Chloride	ND		5.0		ug/L			09/02/12 13:00	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			09/02/12 13:00	1
Naphthalene	ND		1.0		ug/L			09/02/12 13:00	1
n-Butylbenzene	ND		1.0		ug/L			09/02/12 13:00	1
N-Propylbenzene	ND		1.0		ug/L			09/02/12 13:00	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-49473/4
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	ug/L			09/02/12 13:00	1
sec-Butylbenzene	ND		1.0	ug/L			09/02/12 13:00	1
Styrene	ND		1.0	ug/L			09/02/12 13:00	1
tert-Butylbenzene	ND		1.0	ug/L			09/02/12 13:00	1
Tetrachloroethene	ND		1.0	ug/L			09/02/12 13:00	1
Toluene	ND		1.0	ug/L			09/02/12 13:00	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/02/12 13:00	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			09/02/12 13:00	1
Trichloroethene	ND		1.0	ug/L			09/02/12 13:00	1
Trichlorofluoromethane	ND		1.0	ug/L			09/02/12 13:00	1
Vinyl chloride	ND		0.50	ug/L			09/02/12 13:00	1
Acetone	ND		10	ug/L			09/02/12 13:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/02/12 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/02/12 13:00*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*09/02/12 13:00*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*09/02/12 13:00*	*1*

Lab Sample ID: LCS 440-49473/5
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	31.4		ug/L		125	70 - 130
1,1,1-Trichloroethane	25.0	33.3		ug/L		133	65 - 135
1,1,2,2-Tetrachloroethane	25.0	25.0		ug/L		100	55 - 130
1,1,2-Trichloroethane	25.0	26.3		ug/L		105	70 - 125
1,1-Dichloroethane	25.0	24.6		ug/L		98	70 - 125
1,1-Dichloroethene	25.0	24.7		ug/L		99	70 - 125
1,1-Dichloropropene	25.0	24.6		ug/L		98	75 - 130
1,2,3-Trichlorobenzene	25.0	22.5		ug/L		90	65 - 125
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	60 - 130
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		94	70 - 135
1,2,4-Trimethylbenzene	25.0	27.7		ug/L		111	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	29.1		ug/L		116	50 - 135
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	75 - 120
1,2-Dibromoethane (EDB)	25.0	30.5		ug/L		122	75 - 125
1,2-Dichloroethane	25.0	28.9		ug/L		116	60 - 140
1,2-Dichloropropane	25.0	23.2		ug/L		93	70 - 125
1,3,5-Trimethylbenzene	25.0	27.7		ug/L		111	75 - 125
1,3-Dichlorobenzene	25.0	27.6		ug/L		110	75 - 120
1,3-Dichloropropane	25.0	24.9		ug/L		99	70 - 120
1,4-Dichlorobenzene	25.0	27.1		ug/L		108	75 - 120
2,2-Dichloropropane	25.0	45.6	*	ug/L		182	65 - 140
2-Chlorotoluene	25.0	26.2		ug/L		105	70 - 125
4-Chlorotoluene	25.0	26.2		ug/L		105	75 - 125
p-Isopropyltoluene	25.0	28.0		ug/L		112	75 - 125
Benzene	25.0	25.2		ug/L		101	70 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-49473/5
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	25.0	25.8		ug/L		103	75 - 120
Bromochloromethane	25.0	25.6		ug/L		102	70 - 130
Bromodichloromethane	25.0	31.5		ug/L		126	70 - 135
Bromoform	25.0	30.7		ug/L		123	55 - 130
Bromomethane	25.0	27.7		ug/L		111	65 - 140
Carbon tetrachloride	25.0	43.4	*	ug/L		174	65 - 140
Chlorobenzene	25.0	26.4		ug/L		106	75 - 120
Chloroethane	25.0	23.1		ug/L		92	60 - 140
Chloroform	25.0	26.8		ug/L		107	70 - 130
Chloromethane	25.0	23.5		ug/L		94	50 - 140
cis-1,2-Dichloroethene	25.0	25.1		ug/L		100	70 - 125
cis-1,3-Dichloropropene	25.0	32.0	*	ug/L		128	75 - 125
Dibromochloromethane	25.0	33.3		ug/L		133	70 - 140
Dibromomethane	25.0	27.3		ug/L		109	70 - 125
Dichlorodifluoromethane	25.0	25.5		ug/L		102	35 - 155
Ethylbenzene	25.0	27.5		ug/L		110	75 - 125
Hexachlorobutadiene	25.0	26.0		ug/L		104	65 - 135
Isopropylbenzene	25.0	24.9		ug/L		100	75 - 130
m,p-Xylene	50.0	55.1		ug/L		110	75 - 125
Methylene Chloride	25.0	23.0		ug/L		92	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	26.2		ug/L		105	60 - 135
Naphthalene	25.0	20.9		ug/L		84	55 - 135
n-Butylbenzene	25.0	29.1		ug/L		116	70 - 130
N-Propylbenzene	25.0	25.6		ug/L		102	75 - 130
o-Xylene	25.0	27.5		ug/L		110	75 - 125
sec-Butylbenzene	25.0	26.5		ug/L		106	70 - 125
Styrene	25.0	26.4		ug/L		106	75 - 130
tert-Butylbenzene	25.0	26.3		ug/L		105	70 - 125
Tetrachloroethene	25.0	28.3		ug/L		113	70 - 125
Toluene	25.0	27.1		ug/L		108	70 - 120
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	70 - 125
trans-1,3-Dichloropropene	25.0	32.4	*	ug/L		129	70 - 125
Trichloroethene	25.0	27.5		ug/L		110	70 - 125
Trichlorofluoromethane	25.0	31.2		ug/L		125	65 - 145
Vinyl chloride	25.0	24.7		ug/L		99	55 - 135
Acetone	25.0	23.1		ug/L		92	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: 440-21697-E-3 MS
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		25.0	32.9		ug/L		132	65 - 140
1,1,1-Trichloroethane	ND		25.0	35.1		ug/L		140	65 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21697-E-3 MS
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	ND		25.0	25.9		ug/L		104	55 - 135
1,1,2-Trichloroethane	ND		25.0	28.6		ug/L		115	65 - 130
1,1-Dichloroethane	ND		25.0	26.3		ug/L		105	65 - 130
1,1-Dichloroethene	ND		25.0	26.4		ug/L		106	60 - 130
1,1-Dichloropropene	ND		25.0	25.9		ug/L		104	70 - 135
1,2,3-Trichlorobenzene	ND		25.0	23.3		ug/L		93	60 - 135
1,2,3-Trichloropropane	ND		25.0	25.3		ug/L		101	55 - 135
1,2,4-Trichlorobenzene	ND		25.0	24.6		ug/L		98	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	29.2		ug/L		117	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	28.8		ug/L		115	45 - 145
1,2-Dichlorobenzene	ND		25.0	27.9		ug/L		112	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	31.6		ug/L		126	70 - 130
1,2-Dichloroethane	ND		25.0	30.7		ug/L		123	60 - 140
1,2-Dichloropropane	ND		25.0	25.9		ug/L		103	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	29.5		ug/L		118	70 - 130
1,3-Dichlorobenzene	ND		25.0	29.1		ug/L		116	75 - 125
1,3-Dichloropropane	ND		25.0	26.1		ug/L		105	65 - 135
1,4-Dichlorobenzene	ND		25.0	28.4		ug/L		114	75 - 125
2,2-Dichloropropane	ND	*	25.0	48.7	F	ug/L		195	60 - 145
2-Chlorotoluene	ND		25.0	27.5		ug/L		110	65 - 135
4-Chlorotoluene	ND		25.0	28.4		ug/L		113	70 - 135
p-Isopropyltoluene	ND		25.0	29.7		ug/L		119	65 - 130
Benzene	ND		25.0	27.3		ug/L		109	65 - 125
Bromobenzene	ND		25.0	27.7		ug/L		111	70 - 125
Bromochloromethane	ND		25.0	27.2		ug/L		109	65 - 135
Bromodichloromethane	ND		25.0	34.3	F	ug/L		137	70 - 135
Bromoform	ND		25.0	31.2		ug/L		125	55 - 135
Bromomethane	ND		25.0	28.7		ug/L		115	55 - 145
Carbon tetrachloride	ND	*	25.0	45.6	F	ug/L		182	65 - 140
Chlorobenzene	ND		25.0	27.6		ug/L		111	75 - 125
Chloroethane	ND		25.0	25.6		ug/L		102	55 - 140
Chloroform	ND		25.0	28.6		ug/L		114	65 - 135
Chloromethane	ND		25.0	24.6		ug/L		98	45 - 145
cis-1,2-Dichloroethene	ND		25.0	26.9		ug/L		108	65 - 130
cis-1,3-Dichloropropene	ND	*	25.0	35.5	F	ug/L		142	70 - 130
Dibromochloromethane	ND		25.0	34.5		ug/L		138	65 - 140
Dibromomethane	ND		25.0	29.5		ug/L		118	65 - 135
Dichlorodifluoromethane	ND		25.0	27.7		ug/L		111	25 - 155
Ethylbenzene	ND		25.0	28.3		ug/L		113	65 - 130
Hexachlorobutadiene	ND		25.0	26.6		ug/L		107	60 - 135
Isopropylbenzene	ND		25.0	25.8		ug/L		103	70 - 135
m,p-Xylene	ND		50.0	57.5		ug/L		115	65 - 130
Methylene Chloride	ND		25.0	24.8		ug/L		99	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	28.0		ug/L		112	55 - 145
Naphthalene	ND		25.0	20.9		ug/L		84	50 - 140
n-Butylbenzene	ND		25.0	29.9		ug/L		120	65 - 135
N-Propylbenzene	ND		25.0	27.1		ug/L		108	70 - 135
o-Xylene	ND		25.0	28.8		ug/L		115	65 - 125
sec-Butylbenzene	ND		25.0	27.7		ug/L		111	70 - 125
Styrene	ND		25.0	27.9		ug/L		112	50 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21697-E-3 MS
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
tert-Butylbenzene	ND		25.0	27.7		ug/L		111	65 - 130
Tetrachloroethene	ND		25.0	29.5		ug/L		118	65 - 130
Toluene	ND		25.0	28.9		ug/L		116	70 - 125
trans-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	65 - 130
trans-1,3-Dichloropropene	ND	*	25.0	35.3	F	ug/L		141	65 - 135
Trichloroethene	ND		25.0	28.4		ug/L		114	65 - 125
Trichlorofluoromethane	ND		25.0	32.0		ug/L		128	60 - 145
Vinyl chloride	ND		25.0	26.0		ug/L		104	45 - 140
Acetone	ND		25.0	22.7		ug/L		91	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: 440-21697-E-3 MSD
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	36.3	F	ug/L		145	65 - 140	10	20
1,1,1-Trichloroethane	ND		25.0	35.6	F	ug/L		142	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	55 - 135	6	30
1,1,2-Trichloroethane	ND		25.0	28.4		ug/L		114	65 - 130	1	25
1,1-Dichloroethane	ND		25.0	26.4		ug/L		106	65 - 130	0	20
1,1-Dichloroethene	ND		25.0	27.2		ug/L		109	60 - 130	3	20
1,1-Dichloropropene	ND		25.0	26.9		ug/L		108	70 - 135	4	20
1,2,3-Trichlorobenzene	ND		25.0	23.3		ug/L		93	60 - 135	0	20
1,2,3-Trichloropropane	ND		25.0	26.6		ug/L		107	55 - 135	5	30
1,2,4-Trichlorobenzene	ND		25.0	24.9		ug/L		100	65 - 135	1	20
1,2,4-Trimethylbenzene	ND		25.0	30.6		ug/L		122	55 - 135	4	25
1,2-Dibromo-3-Chloropropane	ND		25.0	29.3		ug/L		117	45 - 145	2	30
1,2-Dichlorobenzene	ND		25.0	28.8		ug/L		115	75 - 125	3	20
1,2-Dibromoethane (EDB)	ND		25.0	33.7	F	ug/L		135	70 - 130	6	25
1,2-Dichloroethane	ND		25.0	31.1		ug/L		124	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	26.4		ug/L		106	65 - 130	2	20
1,3,5-Trimethylbenzene	ND		25.0	30.4		ug/L		122	70 - 130	3	20
1,3-Dichlorobenzene	ND		25.0	30.4		ug/L		121	75 - 125	4	20
1,3-Dichloropropane	ND		25.0	28.0		ug/L		112	65 - 135	7	25
1,4-Dichlorobenzene	ND		25.0	29.1		ug/L		116	75 - 125	2	20
2,2-Dichloropropane	ND	*	25.0	47.5	F	ug/L		190	60 - 145	3	25
2-Chlorotoluene	ND		25.0	28.8		ug/L		115	65 - 135	5	20
4-Chlorotoluene	ND		25.0	29.4		ug/L		117	70 - 135	3	20
p-Isopropyltoluene	ND		25.0	30.2		ug/L		121	65 - 130	2	20
Benzene	ND		25.0	27.9		ug/L		112	65 - 125	2	20
Bromobenzene	ND		25.0	28.8		ug/L		115	70 - 125	4	20
Bromochloromethane	ND		25.0	27.8		ug/L		111	65 - 135	2	25
Bromodichloromethane	ND		25.0	35.4	F	ug/L		142	70 - 135	3	20
Bromoform	ND		25.0	33.7		ug/L		135	55 - 135	8	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21697-E-3 MSD
Matrix: Water
Analysis Batch: 49473

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	ND		25.0	28.7		ug/L		115	55 - 145	0	25
Carbon tetrachloride	ND	*	25.0	46.6	F	ug/L		186	65 - 140	2	25
Chlorobenzene	ND		25.0	29.6		ug/L		119	75 - 125	7	20
Chloroethane	ND		25.0	24.9		ug/L		100	55 - 140	3	25
Chloroform	ND		25.0	29.3		ug/L		117	65 - 135	2	20
Chloromethane	ND		25.0	25.0		ug/L		100	45 - 145	1	25
cis-1,2-Dichloroethene	ND		25.0	28.0		ug/L		112	65 - 130	4	20
cis-1,3-Dichloropropene	ND	*	25.0	36.1	F	ug/L		145	70 - 130	2	20
Dibromochloromethane	ND		25.0	37.6	F	ug/L		151	65 - 140	9	25
Dibromomethane	ND		25.0	30.1		ug/L		121	65 - 135	2	25
Dichlorodifluoromethane	ND		25.0	26.6		ug/L		106	25 - 155	4	30
Ethylbenzene	ND		25.0	30.6		ug/L		122	65 - 130	8	20
Hexachlorobutadiene	ND		25.0	26.7		ug/L		107	60 - 135	0	20
Isopropylbenzene	ND		25.0	27.1		ug/L		109	70 - 135	5	20
m,p-Xylene	ND		50.0	61.5		ug/L		123	65 - 130	7	25
Methylene Chloride	ND		25.0	25.0		ug/L		100	50 - 135	1	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	29.6		ug/L		118	55 - 145	5	25
Naphthalene	ND		25.0	21.0		ug/L		84	50 - 140	0	30
n-Butylbenzene	ND		25.0	30.7		ug/L		123	65 - 135	3	20
N-Propylbenzene	ND		25.0	28.2		ug/L		113	70 - 135	4	20
o-Xylene	ND		25.0	29.8		ug/L		119	65 - 125	4	20
sec-Butylbenzene	ND		25.0	28.7		ug/L		115	70 - 125	4	20
Styrene	ND		25.0	30.3		ug/L		121	50 - 145	8	30
tert-Butylbenzene	ND		25.0	28.6		ug/L		114	65 - 130	3	20
Tetrachloroethene	ND		25.0	31.7		ug/L		127	65 - 130	7	20
Toluene	ND		25.0	29.7		ug/L		119	70 - 125	3	20
trans-1,2-Dichloroethene	ND		25.0	26.2		ug/L		105	65 - 130	1	20
trans-1,3-Dichloropropene	ND	*	25.0	35.4	F	ug/L		142	65 - 135	1	25
Trichloroethene	ND		25.0	29.1		ug/L		116	65 - 125	2	20
Trichlorofluoromethane	ND		25.0	32.5		ug/L		130	60 - 145	1	25
Vinyl chloride	ND		25.0	26.2		ug/L		105	45 - 140	1	30
Acetone	ND		25.0	23.7		ug/L		95	20 - 150	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*109*		*80 - 120*

Lab Sample ID: MB 440-49675/4
Matrix: Water
Analysis Batch: 49675

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/04/12 19:58	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/04/12 19:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			09/04/12 19:58	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/04/12 19:58	1
1,1-Dichloroethane	ND		1.0	ug/L			09/04/12 19:58	1
1,1-Dichloroethene	ND		1.0	ug/L			09/04/12 19:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-49675/4
Matrix: Water
Analysis Batch: 49675

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	ug/L			09/04/12 19:58	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/04/12 19:58	1
1,2,3-Trichloropropane	ND		1.0	ug/L			09/04/12 19:58	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/04/12 19:58	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			09/04/12 19:58	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/04/12 19:58	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/04/12 19:58	1
1,2-Dichloroethane	ND		1.0	ug/L			09/04/12 19:58	1
1,2-Dichloropropane	ND		1.0	ug/L			09/04/12 19:58	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/04/12 19:58	1
1,3-Dichloropropane	ND		1.0	ug/L			09/04/12 19:58	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/04/12 19:58	1
2,2-Dichloropropane	ND		1.0	ug/L			09/04/12 19:58	1
2-Chlorotoluene	ND		1.0	ug/L			09/04/12 19:58	1
4-Chlorotoluene	ND		1.0	ug/L			09/04/12 19:58	1
p-Isopropyltoluene	ND		1.0	ug/L			09/04/12 19:58	1
Benzene	ND		0.50	ug/L			09/04/12 19:58	1
Bromobenzene	ND		1.0	ug/L			09/04/12 19:58	1
Bromochloromethane	ND		1.0	ug/L			09/04/12 19:58	1
Bromodichloromethane	ND		1.0	ug/L			09/04/12 19:58	1
Bromoform	ND		1.0	ug/L			09/04/12 19:58	1
Bromomethane	ND		1.0	ug/L			09/04/12 19:58	1
Carbon tetrachloride	ND		0.50	ug/L			09/04/12 19:58	1
Chlorobenzene	ND		1.0	ug/L			09/04/12 19:58	1
Chloroethane	ND		1.0	ug/L			09/04/12 19:58	1
Chloroform	ND		1.0	ug/L			09/04/12 19:58	1
Chloromethane	ND		1.0	ug/L			09/04/12 19:58	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/04/12 19:58	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			09/04/12 19:58	1
Dibromochloromethane	ND		1.0	ug/L			09/04/12 19:58	1
Dibromomethane	ND		1.0	ug/L			09/04/12 19:58	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/04/12 19:58	1
Ethylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
Hexachlorobutadiene	ND		1.0	ug/L			09/04/12 19:58	1
Isopropylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
m,p-Xylene	ND		1.0	ug/L			09/04/12 19:58	1
Methylene Chloride	ND		5.0	ug/L			09/04/12 19:58	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/04/12 19:58	1
Naphthalene	ND		1.0	ug/L			09/04/12 19:58	1
n-Butylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
N-Propylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
o-Xylene	ND		1.0	ug/L			09/04/12 19:58	1
sec-Butylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
Styrene	ND		1.0	ug/L			09/04/12 19:58	1
tert-Butylbenzene	ND		1.0	ug/L			09/04/12 19:58	1
Tetrachloroethene	ND		1.0	ug/L			09/04/12 19:58	1
Toluene	ND		1.0	ug/L			09/04/12 19:58	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/04/12 19:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-49675/4
Matrix: Water
Analysis Batch: 49675

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.50	ug/L			09/04/12 19:58	1
Trichloroethene	ND		1.0	ug/L			09/04/12 19:58	1
Trichlorofluoromethane	ND		1.0	ug/L			09/04/12 19:58	1
Vinyl chloride	ND		0.50	ug/L			09/04/12 19:58	1
Acetone	ND		10	ug/L			09/04/12 19:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/04/12 19:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*09/04/12 19:58*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/04/12 19:58*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*09/04/12 19:58*	*1*

Lab Sample ID: LCS 440-49675/5
Matrix: Water
Analysis Batch: 49675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	32.9	*	ug/L		132	70 - 130
1,1,1-Trichloroethane	25.0	27.1		ug/L		109	65 - 135
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	55 - 130
1,1,2-Trichloroethane	25.0	19.0		ug/L		76	70 - 125
1,1-Dichloroethane	25.0	21.2		ug/L		85	70 - 125
1,1-Dichloroethene	25.0	24.3		ug/L		97	70 - 125
1,1-Dichloropropene	25.0	20.1		ug/L		80	75 - 130
1,2,3-Trichlorobenzene	25.0	21.8		ug/L		87	65 - 125
1,2,3-Trichloropropane	25.0	20.7		ug/L		83	60 - 130
1,2,4-Trichlorobenzene	25.0	22.6		ug/L		90	70 - 135
1,2,4-Trimethylbenzene	25.0	26.9		ug/L		108	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	21.2		ug/L		85	50 - 135
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	75 - 120
1,2-Dibromoethane (EDB)	25.0	26.2		ug/L		105	75 - 125
1,2-Dichloroethane	25.0	22.3		ug/L		89	60 - 140
1,2-Dichloropropane	25.0	19.1		ug/L		76	70 - 125
1,3,5-Trimethylbenzene	25.0	27.1		ug/L		108	75 - 125
1,3-Dichlorobenzene	25.0	27.0		ug/L		108	75 - 120
1,3-Dichloropropane	25.0	20.4		ug/L		82	70 - 120
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	75 - 120
2,2-Dichloropropane	25.0	26.1		ug/L		104	65 - 140
2-Chlorotoluene	25.0	23.9		ug/L		96	70 - 125
4-Chlorotoluene	25.0	24.5		ug/L		98	75 - 125
p-Isopropyltoluene	25.0	27.5		ug/L		110	75 - 125
Benzene	25.0	20.5		ug/L		82	70 - 120
Bromobenzene	25.0	26.7		ug/L		107	75 - 120
Bromochloromethane	25.0	23.8		ug/L		95	70 - 130
Bromodichloromethane	25.0	25.8		ug/L		103	70 - 135
Bromoform	25.0	28.0		ug/L		112	55 - 130
Bromomethane	25.0	25.2		ug/L		101	65 - 140
Carbon tetrachloride	25.0	35.9	*	ug/L		143	65 - 140
Chlorobenzene	25.0	23.5		ug/L		94	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-49675/5
Matrix: Water
Analysis Batch: 49675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	21.4		ug/L		86	60 - 140
Chloroform	25.0	22.1		ug/L		88	70 - 130
Chloromethane	25.0	21.4		ug/L		86	50 - 140
cis-1,2-Dichloroethene	25.0	22.8		ug/L		91	70 - 125
cis-1,3-Dichloropropene	25.0	19.9		ug/L		80	75 - 125
Dibromochloromethane	25.0	29.5		ug/L		118	70 - 140
Dibromomethane	25.0	22.3		ug/L		89	70 - 125
Dichlorodifluoromethane	25.0	18.6		ug/L		74	35 - 155
Ethylbenzene	25.0	25.1		ug/L		100	75 - 125
Hexachlorobutadiene	25.0	24.0		ug/L		96	65 - 135
Isopropylbenzene	25.0	27.4		ug/L		110	75 - 130
m,p-Xylene	50.0	52.6		ug/L		105	75 - 125
Methylene Chloride	25.0	20.1		ug/L		80	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	17.8		ug/L		71	60 - 135
Naphthalene	25.0	24.3		ug/L		97	55 - 135
n-Butylbenzene	25.0	24.7		ug/L		99	70 - 130
N-Propylbenzene	25.0	25.0		ug/L		100	75 - 130
o-Xylene	25.0	25.6		ug/L		102	75 - 125
sec-Butylbenzene	25.0	27.0		ug/L		108	70 - 125
Styrene	25.0	23.8		ug/L		95	75 - 130
tert-Butylbenzene	25.0	27.5		ug/L		110	70 - 125
Tetrachloroethene	25.0	28.9		ug/L		115	70 - 125
Toluene	25.0	22.4		ug/L		90	70 - 120
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	70 - 125
trans-1,3-Dichloropropene	25.0	19.8		ug/L		79	70 - 125
Trichloroethene	25.0	26.7		ug/L		107	70 - 125
Trichlorofluoromethane	25.0	28.3		ug/L		113	65 - 145
Vinyl chloride	25.0	23.8		ug/L		95	55 - 135
Acetone	25.0	29.3		ug/L		117	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 440-21316-7 MS
Matrix: Water
Analysis Batch: 49675

Client Sample ID: OC-GW-OW4B-082212
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND	*	25.0	39.2	F	ug/L		157	65 - 140
1,1,1-Trichloroethane	ND		25.0	31.7		ug/L		127	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	24.4		ug/L		98	55 - 135
1,1,2-Trichloroethane	ND		25.0	23.0		ug/L		92	65 - 130
1,1-Dichloroethane	ND		25.0	25.0		ug/L		100	65 - 130
1,1-Dichloroethene	ND		25.0	26.8		ug/L		107	60 - 130
1,1-Dichloropropene	ND		25.0	22.9		ug/L		92	70 - 135
1,2,3-Trichlorobenzene	ND		25.0	23.0		ug/L		92	60 - 135
1,2,3-Trichloropropane	ND		25.0	22.2		ug/L		89	55 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21316-7 MS
Matrix: Water
Analysis Batch: 49675

Client Sample ID: OC-GW-OW4B-082212
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	ND		25.0	24.9		ug/L		99	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	27.2		ug/L		109	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	19.8		ug/L		79	45 - 145
1,2-Dichlorobenzene	ND		25.0	28.6		ug/L		114	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	30.5		ug/L		122	70 - 130
1,2-Dichloroethane	ND		25.0	27.3		ug/L		107	60 - 140
1,2-Dichloropropane	ND		25.0	22.6		ug/L		90	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	29.6		ug/L		118	70 - 130
1,3-Dichlorobenzene	ND		25.0	30.7		ug/L		123	75 - 125
1,3-Dichloropropane	ND		25.0	24.5		ug/L		98	65 - 135
1,4-Dichlorobenzene	ND		25.0	28.0		ug/L		112	75 - 125
2,2-Dichloropropane	ND		25.0	29.9		ug/L		120	60 - 145
2-Chlorotoluene	ND		25.0	27.1		ug/L		108	65 - 135
4-Chlorotoluene	ND		25.0	27.6		ug/L		110	70 - 135
p-Isopropyltoluene	ND		25.0	30.5		ug/L		122	65 - 130
Benzene	ND		25.0	23.6		ug/L		94	65 - 125
Bromobenzene	ND		25.0	30.9		ug/L		124	70 - 125
Bromochloromethane	ND		25.0	28.7		ug/L		115	65 - 135
Bromodichloromethane	ND		25.0	30.8		ug/L		123	70 - 135
Bromoform	ND		25.0	32.2		ug/L		129	55 - 135
Bromomethane	ND		25.0	30.0		ug/L		120	55 - 145
Carbon tetrachloride	ND	*	25.0	41.0	F	ug/L		164	65 - 140
Chlorobenzene	ND		25.0	26.6		ug/L		106	75 - 125
Chloroethane	ND		25.0	24.6		ug/L		99	55 - 140
Chloroform	ND		25.0	26.5		ug/L		106	65 - 135
Chloromethane	ND		25.0	26.9		ug/L		108	45 - 145
cis-1,2-Dichloroethene	ND		25.0	27.0		ug/L		108	65 - 130
cis-1,3-Dichloropropene	ND		25.0	23.5		ug/L		94	70 - 130
Dibromochloromethane	ND		25.0	35.5	F	ug/L		142	65 - 140
Dibromomethane	ND		25.0	26.7		ug/L		107	65 - 135
Dichlorodifluoromethane	ND		25.0	24.9		ug/L		100	25 - 155
Ethylbenzene	ND		25.0	28.2		ug/L		113	65 - 130
Hexachlorobutadiene	ND		25.0	26.5		ug/L		106	60 - 135
Isopropylbenzene	ND		25.0	29.9		ug/L		120	70 - 135
m,p-Xylene	ND		50.0	58.6		ug/L		117	65 - 130
Methylene Chloride	ND		25.0	21.5		ug/L		86	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	22.7		ug/L		89	55 - 145
Naphthalene	ND		25.0	24.2		ug/L		97	50 - 140
n-Butylbenzene	ND		25.0	27.4		ug/L		110	65 - 135
N-Propylbenzene	ND		25.0	28.0		ug/L		112	70 - 135
o-Xylene	ND		25.0	28.5		ug/L		114	65 - 125
sec-Butylbenzene	ND		25.0	29.8		ug/L		119	70 - 125
Styrene	ND		25.0	1.30	F	ug/L		5	50 - 145
tert-Butylbenzene	ND		25.0	30.5		ug/L		122	65 - 130
Tetrachloroethene	3.8		25.0	35.9		ug/L		128	65 - 130
Toluene	ND		25.0	25.8		ug/L		103	70 - 125
trans-1,2-Dichloroethene	ND		25.0	26.7		ug/L		107	65 - 130
trans-1,3-Dichloropropene	ND		25.0	24.3		ug/L		97	65 - 135
Trichloroethene	ND		25.0	30.1		ug/L		119	65 - 125
Trichlorofluoromethane	ND		25.0	33.0		ug/L		132	60 - 145

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21316-7 MS — **Client Sample ID: OC-GW-OW4B-082212**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		25.0	28.4		ug/L		114	45 - 140
Acetone	ND		25.0	23.4		ug/L		94	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 440-21316-7 MSD — **Client Sample ID: OC-GW-OW4B-082212**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	*	25.0	38.7	F	ug/L		155	65 - 140	1	20
1,1,1-Trichloroethane	ND		25.0	30.7		ug/L		123	65 - 140	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.6		ug/L		102	55 - 135	5	30
1,1,2-Trichloroethane	ND		25.0	23.3		ug/L		93	65 - 130	1	25
1,1-Dichloroethane	ND		25.0	24.4		ug/L		98	65 - 130	2	20
1,1-Dichloroethene	ND		25.0	26.3		ug/L		105	60 - 130	2	20
1,1-Dichloropropene	ND		25.0	22.5		ug/L		90	70 - 135	2	20
1,2,3-Trichlorobenzene	ND		25.0	25.6		ug/L		102	60 - 135	11	20
1,2,3-Trichloropropane	ND		25.0	22.5		ug/L		90	55 - 135	1	30
1,2,4-Trichlorobenzene	ND		25.0	26.5		ug/L		106	65 - 135	6	20
1,2,4-Trimethylbenzene	ND		25.0	26.1		ug/L		104	55 - 135	4	25
1,2-Dibromo-3-Chloropropane	ND		25.0	22.5		ug/L		90	45 - 145	13	30
1,2-Dichlorobenzene	ND		25.0	29.2		ug/L		117	75 - 125	2	20
1,2-Dibromoethane (EDB)	ND		25.0	30.5		ug/L		122	70 - 130	0	25
1,2-Dichloroethane	ND		25.0	27.6		ug/L		108	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	22.9		ug/L		92	65 - 130	1	20
1,3,5-Trimethylbenzene	ND		25.0	28.7		ug/L		115	70 - 130	3	20
1,3-Dichlorobenzene	ND		25.0	30.5		ug/L		122	75 - 125	1	20
1,3-Dichloropropane	ND		25.0	24.1		ug/L		97	65 - 135	1	25
1,4-Dichlorobenzene	ND		25.0	28.1		ug/L		112	75 - 125	0	20
2,2-Dichloropropane	ND		25.0	28.6		ug/L		114	60 - 145	5	25
2-Chlorotoluene	ND		25.0	26.4		ug/L		106	65 - 135	2	20
4-Chlorotoluene	ND		25.0	26.5		ug/L		106	70 - 135	4	20
p-Isopropyltoluene	ND		25.0	29.3		ug/L		117	65 - 130	4	20
Benzene	ND		25.0	23.3		ug/L		93	65 - 125	1	20
Bromobenzene	ND		25.0	30.8		ug/L		123	70 - 125	0	20
Bromochloromethane	ND		25.0	29.0		ug/L		116	65 - 135	1	25
Bromodichloromethane	ND		25.0	31.2		ug/L		125	70 - 135	1	20
Bromoform	ND		25.0	33.5		ug/L		134	55 - 135	4	25
Bromomethane	ND		25.0	28.8		ug/L		115	55 - 145	4	25
Carbon tetrachloride	ND	*	25.0	40.1	F	ug/L		161	65 - 140	2	25
Chlorobenzene	ND		25.0	26.0		ug/L		104	75 - 125	2	20
Chloroethane	ND		25.0	24.3		ug/L		97	55 - 140	1	25
Chloroform	ND		25.0	25.8		ug/L		103	65 - 135	2	20
Chloromethane	ND		25.0	26.6		ug/L		106	45 - 145	1	25
cis-1,2-Dichloroethene	ND		25.0	27.1		ug/L		108	65 - 130	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21316-7 MSD — **Client Sample ID: OC-GW-OW4B-082212**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49675

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	ND		25.0	23.8		ug/L		95	70 - 130	1	20
Dibromochloromethane	ND		25.0	35.7	F	ug/L		143	65 - 140	1	25
Dibromomethane	ND		25.0	26.8		ug/L		107	65 - 135	1	25
Dichlorodifluoromethane	ND		25.0	24.3		ug/L		97	25 - 155	2	30
Ethylbenzene	ND		25.0	27.4		ug/L		109	65 - 130	3	20
Hexachlorobutadiene	ND		25.0	25.0		ug/L		100	60 - 135	6	20
Isopropylbenzene	ND		25.0	29.1		ug/L		117	70 - 135	3	20
m,p-Xylene	ND		50.0	55.9		ug/L		112	65 - 130	5	25
Methylene Chloride	ND		25.0	21.6		ug/L		87	50 - 135	1	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.6		ug/L		92	55 - 145	4	25
Naphthalene	ND		25.0	27.0		ug/L		108	50 - 140	11	30
n-Butylbenzene	ND		25.0	26.5		ug/L		106	65 - 135	4	20
N-Propylbenzene	ND		25.0	27.1		ug/L		109	70 - 135	3	20
o-Xylene	ND		25.0	27.8		ug/L		111	65 - 125	2	20
sec-Butylbenzene	ND		25.0	28.7		ug/L		115	70 - 125	4	20
Styrene	ND		25.0	ND	F	ug/L		3	50 - 145	61	30
tert-Butylbenzene	ND		25.0	29.8		ug/L		119	65 - 130	2	20
Tetrachloroethene	3.8		25.0	34.5		ug/L		123	65 - 130	4	20
Toluene	ND		25.0	25.4		ug/L		102	70 - 125	2	20
trans-1,2-Dichloroethene	ND		25.0	25.9		ug/L		104	65 - 130	3	20
trans-1,3-Dichloropropene	ND		25.0	25.0		ug/L		100	65 - 135	3	25
Trichloroethene	ND		25.0	30.1		ug/L		119	65 - 125	0	20
Trichlorofluoromethane	ND		25.0	31.7		ug/L		127	60 - 145	4	25
Vinyl chloride	ND		25.0	27.9		ug/L		112	45 - 140	2	30
Acetone	ND		25.0	25.3		ug/L		101	20 - 150	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8270C SIM - 1,4 Dioxane by SIM

Lab Sample ID: MB 440-48736/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50		ug/L		08/29/12 17:31	08/30/12 16:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*74*		*30 - 120*	*08/29/12 17:31*	*08/30/12 16:50*	*1*

Lab Sample ID: LCS 440-48736/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	1.52		ug/L		76	35 - 120		

Method: 8270C SIM - 1,4 Dioxane by SIM (Continued)

Lab Sample ID: LCS 440-48736/2-A
Matrix: Water
Analysis Batch: 49017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48736

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*77*		*30 - 120*

Lab Sample ID: LCSD 440-48736/3-A
Matrix: Water
Analysis Batch: 49017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48736

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			2.00	1.29		ug/L		64	35 - 120	16	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*65*		*30 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-2

GC/MS VOA

Analysis Batch: 49473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21316-8	OC-GW-OW4BK-082212	Total/NA	Water	8260B	
440-21697-E-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-21697-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-49473/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-49473/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 49675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21316-7	OC-GW-OW4B-082212	Total/NA	Water	8260B	
440-21316-7 MS	OC-GW-OW4B-082212	Total/NA	Water	8260B	
440-21316-7 MSD	OC-GW-OW4B-082212	Total/NA	Water	8260B	
LCS 440-49675/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-49675/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 48736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21316-7	OC-GW-OW4B-082212	Total/NA	Water	3520C	
440-21316-8	OC-GW-OW4BK-082212	Total/NA	Water	3520C	
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-48736/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 49017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21316-7	OC-GW-OW4B-082212	Total/NA	Water	8270C SIM	48736
440-21316-8	OC-GW-OW4BK-082212	Total/NA	Water	8270C SIM	48736
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	48736
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	48736
MB 440-48736/1-A	Method Blank	Total/NA	Water	8270C SIM	48736

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: 10500-90421-EECA. Semiannual

TestAmerica Job ID: 440-21316-2

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

TAL-0013(1007)

440-21316

Client Name/Address: CDM SMITH / 111 Academy Ste. 150 Irvine, CA 92617

Project/PO Number: 10500-90421-EECA. Semiannual

Project Manager: Sharon Wallin

Phone Number: (949) 752-5452

Sampler: Nacolynn Begay

Fax Number: (949) 725-3790

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOCs (8260B) w/ Freon, acetone, MTBE + TICs	1,4-Dioxane (8270M)	Level 4 Deliverables						
OC-GW-TB-082212	Aqu.	VOA	2	—	—	HCl	X								
OC-GW-OW6-082212		VOA/Amber	5	8.22.12	0742	HCl/none	X	X							
-OW10-					1355										
-OW1B-					1410										
-OW4A-					1128										
-OW4AN-					1140										
-OW4B-					1338				X						
-OW4BK-			5		1348				X						

Note: Low level DL's & multiple dilutions on ALL samples.

Special Instructions

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
	8.22.12/1600			same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours ____ 5 days ____
				48 hours ____ normal X
Relinquished By:	Date/Time:	Received in Lab By: Olga Orelcs	Date/Time: 8/22/12 16:00	Sample Integrity: (Check) intact ____ on ice 2.3/3.9°C

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-21316-2

Login Number: 21316

List Number: 1

Creator: Freitag, Kevin R

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Nacolynn Begay
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-21702-1
Client Project/Site: Omega Chemical Groundwater, 10500-

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
8/30/2012 2:29:44 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-21702-1	OC-GW-OW5-082812	Water	08/28/12 09:20	08/28/12 18:05
440-21702-2	OC-GW-PZ9-082812	Water	08/28/12 10:00	08/28/12 18:05

Case Narrative

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

Job ID: 440-21702-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-21702-1

Comments
No additional comments.

Receipt
The samples were received on 8/28/2012 6:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7º C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) for batch 48524 exceeded control limit for 1,1,1,2-Tetrachloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

Client Sample ID: OC-GW-OW5-082812

Lab Sample ID: 440-21702-1

Date Collected: 08/28/12 09:20

Matrix: Water

Date Received: 08/28/12 18:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	9.0	ug/L			08/29/12 16:52	2
Benzene	ND		1.0	0.56	ug/L			08/29/12 16:52	2
Bromobenzene	ND		2.0	0.54	ug/L			08/29/12 16:52	2
Bromochloromethane	ND		2.0	0.80	ug/L			08/29/12 16:52	2
Bromodichloromethane	ND		2.0	0.60	ug/L			08/29/12 16:52	2
Bromoform	ND		2.0	0.80	ug/L			08/29/12 16:52	2
Bromomethane	ND		2.0	0.84	ug/L			08/29/12 16:52	2
Carbon tetrachloride	ND		1.0	0.56	ug/L			08/29/12 16:52	2
Chlorobenzene	ND		2.0	0.72	ug/L			08/29/12 16:52	2
Chloroethane	ND		2.0	0.80	ug/L			08/29/12 16:52	2
Chloroform	**36**		2.0	0.66	ug/L			08/29/12 16:52	2
Chloromethane	ND		2.0	0.80	ug/L			08/29/12 16:52	2
2-Chlorotoluene	ND		2.0	0.56	ug/L			08/29/12 16:52	2
4-Chlorotoluene	ND		2.0	0.58	ug/L			08/29/12 16:52	2
cis-1,2-Dichloroethene	**32**		2.0	0.64	ug/L			08/29/12 16:52	2
cis-1,3-Dichloropropene	ND		1.0	0.44	ug/L			08/29/12 16:52	2
Dibromochloromethane	ND		2.0	0.80	ug/L			08/29/12 16:52	2
1,2-Dibromo-3-Chloropropane	ND		10	1.9	ug/L			08/29/12 16:52	2
1,2-Dibromoethane (EDB)	ND		2.0	0.80	ug/L			08/29/12 16:52	2
Dibromomethane	ND		2.0	0.72	ug/L			08/29/12 16:52	2
1,2-Dichlorobenzene	ND		2.0	0.64	ug/L			08/29/12 16:52	2
1,3-Dichlorobenzene	ND		2.0	0.70	ug/L			08/29/12 16:52	2
1,4-Dichlorobenzene	ND		2.0	0.74	ug/L			08/29/12 16:52	2
Dichlorodifluoromethane	ND		2.0	0.52	ug/L			08/29/12 16:52	2
1,1-Dichloroethane	**1.1**	**J**	2.0	0.80	ug/L			08/29/12 16:52	2
1,2-Dichloroethane	**4.2**		2.0	0.56	ug/L			08/29/12 16:52	2
1,1-Dichloroethene	**120**		2.0	0.84	ug/L			08/29/12 16:52	2
1,2-Dichloropropane	ND		2.0	0.70	ug/L			08/29/12 16:52	2
1,3-Dichloropropane	ND		2.0	0.64	ug/L			08/29/12 16:52	2
2,2-Dichloropropane	ND		2.0	0.68	ug/L			08/29/12 16:52	2
1,1-Dichloropropene	ND		2.0	0.56	ug/L			08/29/12 16:52	2
Ethylbenzene	ND		2.0	0.50	ug/L			08/29/12 16:52	2
Hexachlorobutadiene	ND		2.0	0.76	ug/L			08/29/12 16:52	2
Isopropylbenzene	ND		2.0	0.50	ug/L			08/29/12 16:52	2
Methylene Chloride	ND		10	1.9	ug/L			08/29/12 16:52	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.64	ug/L			08/29/12 16:52	2
m,p-Xylene	ND		2.0	1.2	ug/L			08/29/12 16:52	2
Naphthalene	ND		2.0	0.82	ug/L			08/29/12 16:52	2
n-Butylbenzene	ND		2.0	0.74	ug/L			08/29/12 16:52	2
N-Propylbenzene	ND		2.0	0.54	ug/L			08/29/12 16:52	2
o-Xylene	ND		2.0	0.60	ug/L			08/29/12 16:52	2
p-Isopropyltoluene	ND		2.0	0.56	ug/L			08/29/12 16:52	2
sec-Butylbenzene	ND		2.0	0.50	ug/L			08/29/12 16:52	2
Styrene	ND		2.0	0.40	ug/L			08/29/12 16:52	2
tert-Butylbenzene	ND		2.0	0.44	ug/L			08/29/12 16:52	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.54	ug/L			08/29/12 16:52	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.60	ug/L			08/29/12 16:52	2
Toluene	ND		2.0	0.72	ug/L			08/29/12 16:52	2
trans-1,2-Dichloroethene	**1.3**	**J**	2.0	0.60	ug/L			08/29/12 16:52	2
trans-1,3-Dichloropropene	ND		1.0	0.64	ug/L			08/29/12 16:52	2
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/L			08/29/12 16:52	2

Client Sample ID: OC-GW-OW5-082812

Lab Sample ID: 440-21702-1

Date Collected: 08/28/12 09:20

Matrix: Water

Date Received: 08/28/12 18:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0	0.96	ug/L			08/29/12 16:52	2
1,1,1-Trichloroethane	ND		2.0	0.60	ug/L			08/29/12 16:52	2
1,1,2-Trichloroethane	ND		2.0	0.60	ug/L			08/29/12 16:52	2
Trichloroethene	**180**		2.0	0.52	ug/L			08/29/12 16:52	2
Trichlorofluoromethane	**42**		2.0	0.68	ug/L			08/29/12 16:52	2
1,2,3-Trichloropropane	ND		2.0	0.80	ug/L			08/29/12 16:52	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**52**		10	1.0	ug/L			08/29/12 16:52	2
1,2,4-Trimethylbenzene	ND		2.0	0.46	ug/L			08/29/12 16:52	2
1,3,5-Trimethylbenzene	ND		2.0	0.52	ug/L			08/29/12 16:52	2
Vinyl chloride	ND		1.0	0.80	ug/L			08/29/12 16:52	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*3.4*		*ug/L*		*3.48*	*75-43-4*		*08/29/12 16:52*	*2*
1,2-Dichloro-1,1,2-trifluoroethane	*6.4*		*ug/L*		*3.89*	*354-23-4*		*08/29/12 16:52*	*2*
Unknown	*16*	*T J*	*ug/L*		*16.24*			*08/29/12 16:52*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*08/29/12 16:52*	*2*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/29/12 16:52*	*2*
Toluene-d8 (Surr)	*106*		*80 - 120*		*08/29/12 16:52*	*2*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**670**		5.0	1.6	ug/L			08/29/12 13:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/29/12 13:18*	*5*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*08/29/12 13:18*	*5*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/29/12 13:18*	*5*

Client Sample ID: OC-GW-PZ9-082812

Lab Sample ID: 440-21702-2

Date Collected: 08/28/12 10:00

Matrix: Water

Date Received: 08/28/12 18:05

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		100	45	ug/L			08/29/12 13:47	10
Benzene	ND		5.0	2.8	ug/L			08/29/12 13:47	10
Bromobenzene	ND		10	2.7	ug/L			08/29/12 13:47	10
Bromochloromethane	ND		10	4.0	ug/L			08/29/12 13:47	10
Bromodichloromethane	ND		10	3.0	ug/L			08/29/12 13:47	10
Bromoform	ND		10	4.0	ug/L			08/29/12 13:47	10
Bromomethane	ND		10	4.2	ug/L			08/29/12 13:47	10
Carbon tetrachloride	ND		5.0	2.8	ug/L			08/29/12 13:47	10
Chlorobenzene	ND		10	3.6	ug/L			08/29/12 13:47	10
Chloroethane	ND		10	4.0	ug/L			08/29/12 13:47	10
Chloroform	**740**		10	3.3	ug/L			08/29/12 13:47	10
Chloromethane	ND		10	4.0	ug/L			08/29/12 13:47	10
2-Chlorotoluene	ND		10	2.8	ug/L			08/29/12 13:47	10
4-Chlorotoluene	ND		10	2.9	ug/L			08/29/12 13:47	10
cis-1,2-Dichloroethene	**5.6**	**J**	10	3.2	ug/L			08/29/12 13:47	10

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

Client Sample ID: OC-GW-PZ9-082812

Date Collected: 08/28/12 10:00
Date Received: 08/28/12 18:05

Lab Sample ID: 440-21702-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	2.2	ug/L			08/29/12 13:47	10
Dibromochloromethane	ND		10	4.0	ug/L			08/29/12 13:47	10
1,2-Dibromo-3-Chloropropane	ND		50	9.7	ug/L			08/29/12 13:47	10
1,2-Dibromoethane (EDB)	ND		10	4.0	ug/L			08/29/12 13:47	10
Dibromomethane	ND		10	3.6	ug/L			08/29/12 13:47	10
1,2-Dichlorobenzene	ND		10	3.2	ug/L			08/29/12 13:47	10
1,3-Dichlorobenzene	ND		10	3.5	ug/L			08/29/12 13:47	10
1,4-Dichlorobenzene	ND		10	3.7	ug/L			08/29/12 13:47	10
Dichlorodifluoromethane	ND		10	2.6	ug/L			08/29/12 13:47	10
1,1-Dichloroethane	**22**		10	4.0	ug/L			08/29/12 13:47	10
1,2-Dichloroethane	**150**		10	2.8	ug/L			08/29/12 13:47	10
1,1-Dichloroethene	**1100**		10	4.2	ug/L			08/29/12 13:47	10
1,2-Dichloropropane	ND		10	3.5	ug/L			08/29/12 13:47	10
1,3-Dichloropropane	ND		10	3.2	ug/L			08/29/12 13:47	10
2,2-Dichloropropane	ND		10	3.4	ug/L			08/29/12 13:47	10
1,1-Dichloropropene	ND		10	2.8	ug/L			08/29/12 13:47	10
Ethylbenzene	ND		10	2.5	ug/L			08/29/12 13:47	10
Hexachlorobutadiene	ND		10	3.8	ug/L			08/29/12 13:47	10
Isopropylbenzene	ND		10	2.5	ug/L			08/29/12 13:47	10
Methylene Chloride	ND		50	9.5	ug/L			08/29/12 13:47	10
Methyl-t-Butyl Ether (MTBE)	ND		10	3.2	ug/L			08/29/12 13:47	10
m,p-Xylene	ND		10	6.0	ug/L			08/29/12 13:47	10
Naphthalene	ND		10	4.1	ug/L			08/29/12 13:47	10
n-Butylbenzene	ND		10	3.7	ug/L			08/29/12 13:47	10
N-Propylbenzene	ND		10	2.7	ug/L			08/29/12 13:47	10
o-Xylene	ND		10	3.0	ug/L			08/29/12 13:47	10
p-Isopropyltoluene	ND		10	2.8	ug/L			08/29/12 13:47	10
sec-Butylbenzene	ND		10	2.5	ug/L			08/29/12 13:47	10
Styrene	ND		10	2.0	ug/L			08/29/12 13:47	10
tert-Butylbenzene	ND		10	2.2	ug/L			08/29/12 13:47	10
1,1,1,2-Tetrachloroethane	ND	*	10	2.7	ug/L			08/29/12 13:47	10
1,1,2,2-Tetrachloroethane	ND		10	3.0	ug/L			08/29/12 13:47	10
Toluene	ND		10	3.6	ug/L			08/29/12 13:47	10
trans-1,2-Dichloroethene	**13**		10	3.0	ug/L			08/29/12 13:47	10
trans-1,3-Dichloropropene	ND		5.0	3.2	ug/L			08/29/12 13:47	10
1,2,3-Trichlorobenzene	ND		10	3.0	ug/L			08/29/12 13:47	10
1,2,4-Trichlorobenzene	ND		10	4.8	ug/L			08/29/12 13:47	10
1,1,1-Trichloroethane	ND		10	3.0	ug/L			08/29/12 13:47	10
1,1,2-Trichloroethane	**8.3**	**J**	10	3.0	ug/L			08/29/12 13:47	10
Trichloroethene	**720**		10	2.6	ug/L			08/29/12 13:47	10
Trichlorofluoromethane	**330**		10	3.4	ug/L			08/29/12 13:47	10
1,2,3-Trichloropropane	ND		10	4.0	ug/L			08/29/12 13:47	10
1,1,2-Trichloro-1,2,2-trifluoroethane	**860**		50	5.0	ug/L			08/29/12 13:47	10
1,2,4-Trimethylbenzene	ND		10	2.3	ug/L			08/29/12 13:47	10
1,3,5-Trimethylbenzene	ND		10	2.6	ug/L			08/29/12 13:47	10
Vinyl chloride	ND		5.0	4.0	ug/L			08/29/12 13:47	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloro-1,1,2-trifluoroethane	*18*	*J*	*ug/L*		*3.81*	*354-23-4*		*08/29/12 13:47*	*10*
Ethyl ether	*10*	*J*	*ug/L*		*4.17*	*60-29-7*		*08/29/12 13:47*	*10*

Client Sample ID: OC-GW-PZ9-082812

Lab Sample ID: 440-21702-2

Date Collected: 08/28/12 10:00

Matrix: Water

Date Received: 08/28/12 18:05

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					08/29/12 13:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		80 - 120		08/29/12 13:47	10
Dibromofluoromethane (Surr)	99		80 - 120		08/29/12 13:47	10
Toluene-d8 (Surr)	99		80 - 120		08/29/12 13:47	10

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**13000**		200	64	ug/L			08/29/12 16:09	200

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		80 - 120		08/29/12 16:09	200
Dibromofluoromethane (Surr)	97		80 - 120		08/29/12 16:09	200
Toluene-d8 (Surr)	100		80 - 120		08/29/12 16:09	200

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

Client Sample ID: OC-GW-OW5-082812

Lab Sample ID: 440-21702-1

Date Collected: 08/28/12 09:20

Matrix: Water

Date Received: 08/28/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	10 mL	10 mL	48524	08/29/12 13:18	AT	TAL IRV
Total/NA	Analysis	8260B		2	10 mL	10 mL	48527	08/29/12 16:52	AT	TAL IRV

Client Sample ID: OC-GW-PZ9-082812

Lab Sample ID: 440-21702-2

Date Collected: 08/28/12 10:00

Matrix: Water

Date Received: 08/28/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	48524	08/29/12 13:47	AT	TAL IRV
Total/NA	Analysis	8260B	DL	200	10 mL	10 mL	48524	08/29/12 16:09	AT	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-48524/5
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			08/29/12 09:57	1
Benzene	ND		0.50	0.28	ug/L			08/29/12 09:57	1
Bromobenzene	ND		1.0	0.27	ug/L			08/29/12 09:57	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/29/12 09:57	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/29/12 09:57	1
Bromoform	ND		1.0	0.40	ug/L			08/29/12 09:57	1
Bromomethane	ND		1.0	0.42	ug/L			08/29/12 09:57	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/29/12 09:57	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/29/12 09:57	1
Chloroethane	ND		1.0	0.40	ug/L			08/29/12 09:57	1
Chloroform	ND		1.0	0.33	ug/L			08/29/12 09:57	1
Chloromethane	ND		1.0	0.40	ug/L			08/29/12 09:57	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/29/12 09:57	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/29/12 09:57	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/29/12 09:57	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/29/12 09:57	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/29/12 09:57	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/29/12 09:57	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/29/12 09:57	1
Dibromomethane	ND		1.0	0.36	ug/L			08/29/12 09:57	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/29/12 09:57	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/29/12 09:57	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/29/12 09:57	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/29/12 09:57	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/29/12 09:57	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/29/12 09:57	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/29/12 09:57	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/29/12 09:57	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/29/12 09:57	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/29/12 09:57	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/29/12 09:57	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/29/12 09:57	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/29/12 09:57	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/29/12 09:57	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/29/12 09:57	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/29/12 09:57	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/29/12 09:57	1
Naphthalene	ND		1.0	0.41	ug/L			08/29/12 09:57	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/29/12 09:57	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/29/12 09:57	1
o-Xylene	ND		1.0	0.30	ug/L			08/29/12 09:57	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/29/12 09:57	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/29/12 09:57	1
Styrene	ND		1.0	0.20	ug/L			08/29/12 09:57	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/29/12 09:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/29/12 09:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/29/12 09:57	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/29/12 09:57	1
Toluene	ND		1.0	0.36	ug/L			08/29/12 09:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48524/5
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/29/12 09:57	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/29/12 09:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/29/12 09:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/29/12 09:57	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/29/12 09:57	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/29/12 09:57	1
Trichloroethene	ND		1.0	0.26	ug/L			08/29/12 09:57	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/29/12 09:57	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/29/12 09:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/29/12 09:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/29/12 09:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/29/12 09:57	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/29/12 09:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/29/12 09:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/29/12 09:57*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*08/29/12 09:57*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*08/29/12 09:57*	*1*

Lab Sample ID: LCS 440-48524/6
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	28.4		ug/L		114	30 - 140
Benzene	25.0	20.8		ug/L		83	70 - 120
Bromobenzene	25.0	28.6		ug/L		115	75 - 120
Bromochloromethane	25.0	24.1		ug/L		96	70 - 130
Bromodichloromethane	25.0	26.2		ug/L		105	70 - 135
Bromoform	25.0	28.2		ug/L		113	55 - 130
Bromomethane	25.0	21.1		ug/L		85	65 - 140
Carbon tetrachloride	25.0	33.1		ug/L		132	65 - 140
Chlorobenzene	25.0	23.4		ug/L		93	75 - 120
Chloroethane	25.0	17.6		ug/L		70	60 - 140
Chloroform	25.0	20.5		ug/L		82	70 - 130
Chloromethane	25.0	17.0		ug/L		68	50 - 140
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 125
4-Chlorotoluene	25.0	24.0		ug/L		96	75 - 125
cis-1,2-Dichloroethene	25.0	22.3		ug/L		89	70 - 125
cis-1,3-Dichloropropene	25.0	21.5		ug/L		86	75 - 125
Dibromochloromethane	25.0	30.0		ug/L		120	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	18.2		ug/L		73	50 - 135
1,2-Dibromoethane (EDB)	25.0	26.5		ug/L		106	75 - 125
Dibromomethane	25.0	22.9		ug/L		91	70 - 125
1,2-Dichlorobenzene	25.0	26.0		ug/L		104	75 - 120
1,3-Dichlorobenzene	25.0	27.5		ug/L		110	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48524/6
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	75 - 120
Dichlorodifluoromethane	25.0	11.4		ug/L		46	35 - 155
1,1-Dichloroethane	25.0	19.8		ug/L		79	70 - 125
1,2-Dichloroethane	25.0	22.3		ug/L		89	60 - 140
1,1-Dichloroethene	25.0	21.0		ug/L		84	70 - 125
1,2-Dichloropropane	25.0	20.2		ug/L		81	70 - 125
1,3-Dichloropropane	25.0	20.9		ug/L		84	70 - 120
2,2-Dichloropropane	25.0	23.6		ug/L		94	65 - 140
1,1-Dichloropropene	25.0	19.8		ug/L		79	75 - 130
Ethylbenzene	25.0	23.9		ug/L		96	75 - 125
Hexachlorobutadiene	25.0	22.6		ug/L		91	65 - 135
Isopropylbenzene	25.0	27.2		ug/L		109	75 - 130
Methylene Chloride	25.0	16.7		ug/L		67	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	19.3		ug/L		77	60 - 135
m,p-Xylene	50.0	50.7		ug/L		101	75 - 125
Naphthalene	25.0	24.3		ug/L		97	55 - 135
n-Butylbenzene	25.0	23.8		ug/L		95	70 - 130
N-Propylbenzene	25.0	24.6		ug/L		98	75 - 130
o-Xylene	25.0	24.9		ug/L		100	75 - 125
p-Isopropyltoluene	25.0	27.0		ug/L		108	75 - 125
sec-Butylbenzene	25.0	25.9		ug/L		104	70 - 125
Styrene	25.0	24.9		ug/L		100	75 - 130
tert-Butylbenzene	25.0	27.4		ug/L		110	70 - 125
1,1,1,2-Tetrachloroethane	25.0	33.3	*	ug/L		133	70 - 130
1,1,2,2-Tetrachloroethane	25.0	21.9		ug/L		88	55 - 130
Tetrachloroethene	25.0	27.9		ug/L		112	70 - 125
Toluene	25.0	22.8		ug/L		91	70 - 120
trans-1,2-Dichloroethene	25.0	21.7		ug/L		87	70 - 125
trans-1,3-Dichloropropene	25.0	21.8		ug/L		87	70 - 125
1,2,3-Trichlorobenzene	25.0	22.8		ug/L		91	65 - 125
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		97	70 - 135
1,1,1-Trichloroethane	25.0	23.9		ug/L		96	65 - 135
1,1,2-Trichloroethane	25.0	20.6		ug/L		82	70 - 125
Trichloroethene	25.0	27.2		ug/L		109	70 - 125
Trichlorofluoromethane	25.0	22.8		ug/L		91	65 - 145
1,2,3-Trichloropropane	25.0	20.0		ug/L		80	60 - 130
1,2,4-Trimethylbenzene	25.0	26.6		ug/L		106	75 - 125
1,3,5-Trimethylbenzene	25.0	26.7		ug/L		107	75 - 125
Vinyl chloride	25.0	18.5		ug/L		74	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*92*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21217-B-1 MS
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	5.0	J	25.0	24.0		ug/L		76	20 - 150
Benzene	ND		25.0	21.0		ug/L		84	65 - 125
Bromobenzene	ND		25.0	28.5		ug/L		114	70 - 125
Bromochloromethane	ND		25.0	23.8		ug/L		95	65 - 135
Bromodichloromethane	3.3		25.0	30.0		ug/L		107	70 - 135
Bromoform	4.5		25.0	30.2		ug/L		103	55 - 135
Bromomethane	ND		25.0	21.0		ug/L		84	55 - 145
Carbon tetrachloride	ND		25.0	34.6		ug/L		138	65 - 140
Chlorobenzene	ND		25.0	23.0		ug/L		92	75 - 125
Chloroethane	ND		25.0	17.9		ug/L		72	55 - 140
Chloroform	2.2		25.0	23.1		ug/L		84	65 - 135
Chloromethane	ND		25.0	17.1		ug/L		69	45 - 145
2-Chlorotoluene	ND		25.0	23.7		ug/L		95	65 - 135
4-Chlorotoluene	ND		25.0	24.0		ug/L		96	70 - 135
cis-1,2-Dichloroethene	ND		25.0	22.2		ug/L		89	65 - 130
cis-1,3-Dichloropropene	ND		25.0	21.1		ug/L		85	70 - 130
Dibromochloromethane	5.8		25.0	36.2		ug/L		122	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	17.7		ug/L		71	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	25.7		ug/L		103	70 - 130
Dibromomethane	ND		25.0	22.8		ug/L		91	65 - 135
1,2-Dichlorobenzene	ND		25.0	25.9		ug/L		104	75 - 125
1,3-Dichlorobenzene	ND		25.0	27.3		ug/L		109	75 - 125
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	75 - 125
Dichlorodifluoromethane	ND		25.0	11.8		ug/L		47	25 - 155
1,1-Dichloroethane	ND		25.0	20.1		ug/L		80	65 - 130
1,2-Dichloroethane	ND		25.0	22.3		ug/L		89	60 - 140
1,1-Dichloroethene	ND		25.0	21.6		ug/L		87	60 - 130
1,2-Dichloropropane	ND		25.0	20.3		ug/L		81	65 - 130
1,3-Dichloropropane	ND		25.0	19.7		ug/L		79	65 - 135
2,2-Dichloropropane	ND		25.0	24.3		ug/L		97	60 - 145
1,1-Dichloropropene	ND		25.0	21.0		ug/L		84	70 - 135
Ethylbenzene	ND		25.0	23.9		ug/L		96	65 - 130
Hexachlorobutadiene	ND		25.0	23.4		ug/L		94	60 - 135
Isopropylbenzene	ND		25.0	27.2		ug/L		109	70 - 135
Methylene Chloride	ND		25.0	16.8		ug/L		67	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	19.1		ug/L		76	55 - 145
m,p-Xylene	ND		50.0	50.0		ug/L		100	65 - 130
Naphthalene	ND		25.0	23.4		ug/L		94	50 - 140
n-Butylbenzene	ND		25.0	23.3		ug/L		93	65 - 135
N-Propylbenzene	ND		25.0	24.6		ug/L		98	70 - 135
o-Xylene	ND		25.0	24.4		ug/L		98	65 - 125
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	65 - 130
sec-Butylbenzene	ND		25.0	25.9		ug/L		104	70 - 125
Styrene	ND		25.0	22.8		ug/L		91	50 - 145
tert-Butylbenzene	ND		25.0	27.2		ug/L		109	65 - 130
1,1,1,2-Tetrachloroethane	ND	*	25.0	32.8		ug/L		131	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	21.0		ug/L		84	55 - 135
Tetrachloroethene	ND		25.0	28.3		ug/L		113	65 - 130
Toluene	ND		25.0	23.1		ug/L		92	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21217-B-1 MS
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	ND		25.0	21.9		ug/L		87	65 - 130
trans-1,3-Dichloropropene	ND		25.0	21.6		ug/L		87	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	22.2		ug/L		89	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	23.7		ug/L		95	65 - 135
1,1,1-Trichloroethane	ND		25.0	24.9		ug/L		100	65 - 140
1,1,2-Trichloroethane	ND		25.0	20.1		ug/L		81	65 - 130
Trichloroethene	ND		25.0	27.7		ug/L		111	65 - 125
Trichlorofluoromethane	ND		25.0	24.0		ug/L		96	60 - 145
1,2,3-Trichloropropane	ND		25.0	18.7		ug/L		75	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	25.8		ug/L		103	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	25.2		ug/L		101	70 - 130
Vinyl chloride	ND		25.0	19.2		ug/L		77	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 440-21217-B-1 MSD
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	5.0	J	25.0	22.0		ug/L		68	20 - 150	9	35
Benzene	ND		25.0	19.4		ug/L		78	65 - 125	8	20
Bromobenzene	ND		25.0	26.6		ug/L		107	70 - 125	7	20
Bromochloromethane	ND		25.0	22.5		ug/L		90	65 - 135	6	25
Bromodichloromethane	3.3		25.0	28.5		ug/L		101	70 - 135	5	20
Bromoform	4.5		25.0	29.0		ug/L		98	55 - 135	4	25
Bromomethane	ND		25.0	19.0		ug/L		76	55 - 145	10	25
Carbon tetrachloride	ND		25.0	30.9		ug/L		124	65 - 140	11	25
Chlorobenzene	ND		25.0	21.3		ug/L		85	75 - 125	7	20
Chloroethane	ND		25.0	16.1		ug/L		64	55 - 140	11	25
Chloroform	2.2		25.0	21.2		ug/L		76	65 - 135	8	20
Chloromethane	ND		25.0	15.9		ug/L		63	45 - 145	8	25
2-Chlorotoluene	ND		25.0	21.4		ug/L		86	65 - 135	10	20
4-Chlorotoluene	ND		25.0	22.0		ug/L		88	70 - 135	9	20
cis-1,2-Dichloroethene	ND		25.0	20.2		ug/L		81	65 - 130	9	20
cis-1,3-Dichloropropene	ND		25.0	19.8		ug/L		79	70 - 130	7	20
Dibromochloromethane	5.8		25.0	34.6		ug/L		115	65 - 140	5	25
1,2-Dibromo-3-Chloropropane	ND		25.0	16.7		ug/L		67	45 - 145	6	30
1,2-Dibromoethane (EDB)	ND		25.0	24.7		ug/L		99	70 - 130	4	25
Dibromomethane	ND		25.0	21.5		ug/L		86	65 - 135	6	25
1,2-Dichlorobenzene	ND		25.0	24.0		ug/L		96	75 - 125	7	20
1,3-Dichlorobenzene	ND		25.0	25.3		ug/L		101	75 - 125	8	20
1,4-Dichlorobenzene	ND		25.0	23.0		ug/L		92	75 - 125	7	20
Dichlorodifluoromethane	ND		25.0	10.6		ug/L		43	25 - 155	10	30
1,1-Dichloroethane	ND		25.0	17.9		ug/L		72	65 - 130	11	20
1,2-Dichloroethane	ND		25.0	20.7		ug/L		83	60 - 140	8	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21217-B-1 MSD
Matrix: Water
Analysis Batch: 48524

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		25.0	19.2		ug/L		77	60 - 130	12	20
1,2-Dichloropropane	ND		25.0	18.8		ug/L		75	65 - 130	8	20
1,3-Dichloropropane	ND		25.0	18.9		ug/L		76	65 - 135	4	25
2,2-Dichloropropane	ND		25.0	21.9		ug/L		88	60 - 145	10	25
1,1-Dichloropropene	ND		25.0	18.4		ug/L		74	70 - 135	13	20
Ethylbenzene	ND		25.0	21.7		ug/L		87	65 - 130	10	20
Hexachlorobutadiene	ND		25.0	21.5		ug/L		86	60 - 135	9	20
Isopropylbenzene	ND		25.0	24.6		ug/L		99	70 - 135	10	20
Methylene Chloride	ND		25.0	15.7		ug/L		63	50 - 135	7	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	18.2		ug/L		73	55 - 145	5	25
m,p-Xylene	ND		50.0	45.7		ug/L		91	65 - 130	9	25
Naphthalene	ND		25.0	22.9		ug/L		91	50 - 140	3	30
n-Butylbenzene	ND		25.0	21.2		ug/L		85	65 - 135	10	20
N-Propylbenzene	ND		25.0	22.3		ug/L		89	70 - 135	10	20
o-Xylene	ND		25.0	22.6		ug/L		90	65 - 125	8	20
p-Isopropyltoluene	ND		25.0	24.1		ug/L		96	65 - 130	10	20
sec-Butylbenzene	ND		25.0	23.5		ug/L		94	70 - 125	10	20
Styrene	ND		25.0	20.6		ug/L		82	50 - 145	10	30
tert-Butylbenzene	ND		25.0	24.9		ug/L		99	65 - 130	9	20
1,1,1,2-Tetrachloroethane	ND	*	25.0	31.0		ug/L		124	65 - 140	5	20
1,1,2,2-Tetrachloroethane	ND		25.0	20.4		ug/L		82	55 - 135	3	30
Tetrachloroethene	ND		25.0	25.5		ug/L		102	65 - 130	10	20
Toluene	ND		25.0	20.9		ug/L		84	70 - 125	10	20
trans-1,2-Dichloroethene	ND		25.0	19.7		ug/L		79	65 - 130	11	20
trans-1,3-Dichloropropene	ND		25.0	20.6		ug/L		82	65 - 135	5	25
1,2,3-Trichlorobenzene	ND		25.0	21.2		ug/L		85	60 - 135	4	20
1,2,4-Trichlorobenzene	ND		25.0	22.5		ug/L		90	65 - 135	5	20
1,1,1-Trichloroethane	ND		25.0	22.2		ug/L		89	65 - 140	12	20
1,1,2-Trichloroethane	ND		25.0	19.2		ug/L		77	65 - 130	5	25
Trichloroethene	ND		25.0	24.7		ug/L		99	65 - 125	12	20
Trichlorofluoromethane	ND		25.0	21.0		ug/L		84	60 - 145	13	25
1,2,3-Trichloropropane	ND		25.0	18.4		ug/L		74	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	23.0		ug/L		92	55 - 135	11	25
1,3,5-Trimethylbenzene	ND		25.0	22.2		ug/L		89	70 - 130	13	20
Vinyl chloride	ND		25.0	17.1		ug/L		68	45 - 140	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 440-48527/4
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			08/29/12 08:46	1
Benzene	ND		0.50	0.28	ug/L			08/29/12 08:46	1
Bromobenzene	ND		1.0	0.27	ug/L			08/29/12 08:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48527/4
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.0	0.40	ug/L			08/29/12 08:46	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/29/12 08:46	1
Bromoform	ND		1.0	0.40	ug/L			08/29/12 08:46	1
Bromomethane	ND		1.0	0.42	ug/L			08/29/12 08:46	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/29/12 08:46	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/29/12 08:46	1
Chloroethane	ND		1.0	0.40	ug/L			08/29/12 08:46	1
Chloroform	ND		1.0	0.33	ug/L			08/29/12 08:46	1
Chloromethane	ND		1.0	0.40	ug/L			08/29/12 08:46	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/29/12 08:46	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/29/12 08:46	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/29/12 08:46	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/29/12 08:46	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/29/12 08:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/29/12 08:46	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/29/12 08:46	1
Dibromomethane	ND		1.0	0.36	ug/L			08/29/12 08:46	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/29/12 08:46	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/29/12 08:46	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/29/12 08:46	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/29/12 08:46	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/29/12 08:46	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/29/12 08:46	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/29/12 08:46	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/29/12 08:46	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/29/12 08:46	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/29/12 08:46	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/29/12 08:46	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/29/12 08:46	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/29/12 08:46	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/29/12 08:46	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/29/12 08:46	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/29/12 08:46	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/29/12 08:46	1
Naphthalene	ND		1.0	0.41	ug/L			08/29/12 08:46	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/29/12 08:46	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/29/12 08:46	1
o-Xylene	ND		1.0	0.30	ug/L			08/29/12 08:46	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/29/12 08:46	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/29/12 08:46	1
Styrene	ND		1.0	0.20	ug/L			08/29/12 08:46	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/29/12 08:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/29/12 08:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/29/12 08:46	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/29/12 08:46	1
Toluene	ND		1.0	0.36	ug/L			08/29/12 08:46	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/29/12 08:46	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/29/12 08:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/29/12 08:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/29/12 08:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-48527/4
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/29/12 08:46	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/29/12 08:46	1
Trichloroethene	ND		1.0	0.26	ug/L			08/29/12 08:46	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/29/12 08:46	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/29/12 08:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/29/12 08:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/29/12 08:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/29/12 08:46	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/29/12 08:46	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclotrisiloxane, hexamethyl-	*14.2*	*T J N*	*ug/L*		*16.04*	*541-5-9*		*08/29/12 08:46*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*08/29/12 08:46*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*08/29/12 08:46*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*08/29/12 08:46*	*1*

Lab Sample ID: LCS 440-48527/5
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	23.8		ug/L		95	30 - 140
Benzene	25.0	24.3		ug/L		97	70 - 120
Bromobenzene	25.0	26.3		ug/L		105	75 - 120
Bromochloromethane	25.0	26.3		ug/L		105	70 - 130
Bromodichloromethane	25.0	28.4		ug/L		114	70 - 135
Bromoform	25.0	25.5		ug/L		102	55 - 130
Bromomethane	25.0	27.5		ug/L		110	65 - 140
Carbon tetrachloride	25.0	28.3		ug/L		113	65 - 140
Chlorobenzene	25.0	23.7		ug/L		95	75 - 120
Chloroethane	25.0	23.0		ug/L		92	60 - 140
Chloroform	25.0	27.8		ug/L		111	70 - 130
Chloromethane	25.0	23.8		ug/L		95	50 - 140
2-Chlorotoluene	25.0	25.3		ug/L		101	70 - 125
4-Chlorotoluene	25.0	25.7		ug/L		103	75 - 125
cis-1,2-Dichloroethene	25.0	27.7		ug/L		111	70 - 125
cis-1,3-Dichloropropene	25.0	26.2		ug/L		105	75 - 125
Dibromochloromethane	25.0	29.5		ug/L		118	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	27.4		ug/L		110	50 - 135
1,2-Dibromoethane (EDB)	25.0	26.4		ug/L		106	75 - 125
Dibromomethane	25.0	26.1		ug/L		104	70 - 125
1,2-Dichlorobenzene	25.0	25.5		ug/L		102	75 - 120
1,3-Dichlorobenzene	25.0	25.6		ug/L		103	75 - 120
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	75 - 120
Dichlorodifluoromethane	25.0	21.8		ug/L		87	35 - 155
1,1-Dichloroethane	25.0	25.9		ug/L		103	70 - 125
1,2-Dichloroethane	25.0	25.9		ug/L		104	60 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-48527/5
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	25.5		ug/L		102	70 - 125
1,2-Dichloropropane	25.0	24.5		ug/L		98	70 - 125
1,3-Dichloropropane	25.0	24.7		ug/L		99	70 - 120
2,2-Dichloropropane	25.0	26.0		ug/L		104	65 - 140
1,1-Dichloropropene	25.0	22.4		ug/L		90	75 - 130
Ethylbenzene	25.0	24.4		ug/L		98	75 - 125
Hexachlorobutadiene	25.0	23.9		ug/L		96	65 - 135
Isopropylbenzene	25.0	24.4		ug/L		98	75 - 130
Methylene Chloride	25.0	25.4		ug/L		101	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	25.3		ug/L		101	60 - 135
m,p-Xylene	50.0	47.4		ug/L		95	75 - 125
Naphthalene	25.0	24.4		ug/L		97	55 - 135
n-Butylbenzene	25.0	25.5		ug/L		102	70 - 130
N-Propylbenzene	25.0	24.7		ug/L		99	75 - 130
o-Xylene	25.0	24.2		ug/L		97	75 - 125
p-Isopropyltoluene	25.0	25.1		ug/L		100	75 - 125
sec-Butylbenzene	25.0	24.9		ug/L		100	70 - 125
Styrene	25.0	25.9		ug/L		104	75 - 130
tert-Butylbenzene	25.0	24.3		ug/L		97	70 - 125
1,1,1,2-Tetrachloroethane	25.0	28.6		ug/L		115	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.8		ug/L		107	55 - 130
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 125
Toluene	25.0	24.7		ug/L		99	70 - 120
trans-1,2-Dichloroethene	25.0	25.7		ug/L		103	70 - 125
trans-1,3-Dichloropropene	25.0	28.4		ug/L		113	70 - 125
1,2,3-Trichlorobenzene	25.0	24.7		ug/L		99	65 - 125
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	70 - 135
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	65 - 135
1,1,2-Trichloroethane	25.0	24.9		ug/L		100	70 - 125
Trichloroethene	25.0	25.0		ug/L		100	70 - 125
Trichlorofluoromethane	25.0	29.9		ug/L		120	65 - 145
1,2,3-Trichloropropane	25.0	24.5		ug/L		98	60 - 130
1,2,4-Trimethylbenzene	25.0	25.8		ug/L		103	75 - 125
1,3,5-Trimethylbenzene	25.0	25.6		ug/L		102	75 - 125
Vinyl chloride	25.0	24.2		ug/L		97	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*112*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-21153-B-1 MS
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	21.1		ug/L		84	20 - 150
Benzene	ND		25.0	24.2		ug/L		97	65 - 125
Bromobenzene	ND		25.0	26.0		ug/L		104	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21153-B-1 MS
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromochloromethane	ND		25.0	25.0		ug/L		100	65 - 135
Bromodichloromethane	ND		25.0	26.9		ug/L		107	70 - 135
Bromoform	ND		25.0	24.9		ug/L		100	55 - 135
Bromomethane	ND		25.0	27.6		ug/L		111	55 - 145
Carbon tetrachloride	ND		25.0	29.1		ug/L		116	65 - 140
Chlorobenzene	ND		25.0	23.7		ug/L		95	75 - 125
Chloroethane	ND		25.0	17.8		ug/L		71	55 - 140
Chloroform	ND		25.0	26.7		ug/L		107	65 - 135
Chloromethane	ND		25.0	25.2		ug/L		101	45 - 145
2-Chlorotoluene	ND		25.0	25.3		ug/L		101	65 - 135
4-Chlorotoluene	ND		25.0	26.0		ug/L		104	70 - 135
cis-1,2-Dichloroethene	ND		25.0	26.9		ug/L		107	65 - 130
cis-1,3-Dichloropropene	ND		25.0	25.4		ug/L		102	70 - 130
Dibromochloromethane	ND		25.0	29.1		ug/L		116	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	26.0		ug/L		104	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	25.7		ug/L		103	70 - 130
Dibromomethane	ND		25.0	25.3		ug/L		101	65 - 135
1,2-Dichlorobenzene	ND		25.0	25.4		ug/L		102	75 - 125
1,3-Dichlorobenzene	ND		25.0	26.2		ug/L		105	75 - 125
1,4-Dichlorobenzene	ND		25.0	24.3		ug/L		97	75 - 125
Dichlorodifluoromethane	ND		25.0	22.7		ug/L		91	25 - 155
1,1-Dichloroethane	ND		25.0	25.1		ug/L		100	65 - 130
1,2-Dichloroethane	ND		25.0	25.2		ug/L		101	60 - 140
1,1-Dichloroethene	ND		25.0	24.9		ug/L		99	60 - 130
1,2-Dichloropropane	ND		25.0	24.3		ug/L		97	65 - 130
1,3-Dichloropropane	ND		25.0	24.1		ug/L		97	65 - 135
2,2-Dichloropropane	ND		25.0	26.6		ug/L		107	60 - 145
1,1-Dichloropropene	ND		25.0	22.7		ug/L		91	70 - 135
Ethylbenzene	ND		25.0	25.1		ug/L		101	65 - 130
Hexachlorobutadiene	ND		25.0	26.1		ug/L		104	60 - 135
Isopropylbenzene	ND		25.0	24.8		ug/L		99	70 - 135
Methylene Chloride	ND		25.0	24.0		ug/L		96	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.3		ug/L		93	55 - 145
m,p-Xylene	ND		50.0	47.8		ug/L		96	65 - 130
Naphthalene	ND		25.0	23.4		ug/L		94	50 - 140
n-Butylbenzene	ND		25.0	26.4		ug/L		105	65 - 135
N-Propylbenzene	ND		25.0	25.5		ug/L		102	70 - 135
o-Xylene	ND		25.0	24.1		ug/L		97	65 - 125
p-Isopropyltoluene	ND		25.0	26.0		ug/L		104	65 - 130
sec-Butylbenzene	ND		25.0	25.8		ug/L		103	70 - 125
Styrene	ND		25.0	24.4		ug/L		98	50 - 145
tert-Butylbenzene	ND		25.0	25.1		ug/L		100	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	28.5		ug/L		114	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	25.8		ug/L		103	55 - 135
Tetrachloroethene	ND		25.0	25.2		ug/L		101	65 - 130
Toluene	ND		25.0	24.7		ug/L		99	70 - 125
trans-1,2-Dichloroethene	ND		25.0	25.3		ug/L		101	65 - 130
trans-1,3-Dichloropropene	ND		25.0	27.5		ug/L		110	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	25.0		ug/L		100	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	26.0		ug/L		104	65 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21153-B-1 MS
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	26.8		ug/L		107	65 - 140
1,1,2-Trichloroethane	ND		25.0	23.6		ug/L		94	65 - 130
Trichloroethene	ND		25.0	25.4		ug/L		102	65 - 125
Trichlorofluoromethane	ND		25.0	30.2		ug/L		121	60 - 145
1,2,3-Trichloropropane	ND		25.0	23.3		ug/L		93	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	25.6		ug/L		102	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	25.8		ug/L		103	70 - 130
Vinyl chloride	ND		25.0	25.6		ug/L		103	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-21153-B-1 MSD
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	26.4		ug/L		106	20 - 150	23	35
Benzene	ND		25.0	24.3		ug/L		97	65 - 125	0	20
Bromobenzene	ND		25.0	26.2		ug/L		105	70 - 125	1	20
Bromochloromethane	ND		25.0	26.0		ug/L		104	65 - 135	4	25
Bromodichloromethane	ND		25.0	28.9		ug/L		116	70 - 135	7	20
Bromoform	ND		25.0	27.7		ug/L		111	55 - 135	11	25
Bromomethane	ND		25.0	26.9		ug/L		108	55 - 145	3	25
Carbon tetrachloride	ND		25.0	28.6		ug/L		115	65 - 140	2	25
Chlorobenzene	ND		25.0	23.7		ug/L		95	75 - 125	0	20
Chloroethane	ND		25.0	21.6		ug/L		87	55 - 140	19	25
Chloroform	ND		25.0	26.6		ug/L		106	65 - 135	0	20
Chloromethane	ND		25.0	23.5		ug/L		94	45 - 145	7	25
2-Chlorotoluene	ND		25.0	25.0		ug/L		100	65 - 135	1	20
4-Chlorotoluene	ND		25.0	25.7		ug/L		103	70 - 135	1	20
cis-1,2-Dichloroethene	ND		25.0	27.1		ug/L		108	65 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	26.7		ug/L		107	70 - 130	5	20
Dibromochloromethane	ND		25.0	30.8		ug/L		123	65 - 140	6	25
1,2-Dibromo-3-Chloropropane	ND		25.0	32.8		ug/L		131	45 - 145	23	30
1,2-Dibromoethane (EDB)	ND		25.0	28.1		ug/L		112	70 - 130	9	25
Dibromomethane	ND		25.0	27.9		ug/L		111	65 - 135	9	25
1,2-Dichlorobenzene	ND		25.0	25.9		ug/L		104	75 - 125	2	20
1,3-Dichlorobenzene	ND		25.0	25.8		ug/L		103	75 - 125	1	20
1,4-Dichlorobenzene	ND		25.0	24.3		ug/L		97	75 - 125	0	20
Dichlorodifluoromethane	ND		25.0	22.0		ug/L		88	25 - 155	3	30
1,1-Dichloroethane	ND		25.0	25.8		ug/L		103	65 - 130	3	20
1,2-Dichloroethane	ND		25.0	26.6		ug/L		106	60 - 140	5	20
1,1-Dichloroethene	ND		25.0	24.5		ug/L		98	60 - 130	1	20
1,2-Dichloropropane	ND		25.0	24.6		ug/L		98	65 - 130	1	20
1,3-Dichloropropane	ND		25.0	25.7		ug/L		103	65 - 135	6	25
2,2-Dichloropropane	ND		25.0	26.9		ug/L		107	60 - 145	1	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21153-B-1 MSD
Matrix: Water
Analysis Batch: 48527

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		25.0	22.4		ug/L		90	70 - 135	1	20
Ethylbenzene	ND		25.0	24.6		ug/L		98	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	25.2		ug/L		101	60 - 135	3	20
Isopropylbenzene	ND		25.0	24.4		ug/L		98	70 - 135	2	20
Methylene Chloride	ND		25.0	25.0		ug/L		100	50 - 135	4	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.3		ug/L		105	55 - 145	12	25
m,p-Xylene	ND		50.0	47.3		ug/L		95	65 - 130	1	25
Naphthalene	ND		25.0	26.5		ug/L		106	50 - 140	12	30
n-Butylbenzene	ND		25.0	25.7		ug/L		103	65 - 135	3	20
N-Propylbenzene	ND		25.0	25.1		ug/L		101	70 - 135	1	20
o-Xylene	ND		25.0	24.2		ug/L		97	65 - 125	0	20
p-Isopropyltoluene	ND		25.0	25.2		ug/L		101	65 - 130	3	20
sec-Butylbenzene	ND		25.0	25.1		ug/L		101	70 - 125	3	20
Styrene	ND		25.0	22.9		ug/L		92	50 - 145	6	30
tert-Butylbenzene	ND		25.0	24.7		ug/L		99	65 - 130	2	20
1,1,1,2-Tetrachloroethane	ND		25.0	29.1		ug/L		116	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	29.6		ug/L		119	55 - 135	14	30
Tetrachloroethene	ND		25.0	24.4		ug/L		98	65 - 130	3	20
Toluene	ND		25.0	24.8		ug/L		99	70 - 125	0	20
trans-1,2-Dichloroethene	ND		25.0	25.3		ug/L		101	65 - 130	0	20
trans-1,3-Dichloropropene	ND		25.0	29.6		ug/L		118	65 - 135	7	25
1,2,3-Trichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 135	5	20
1,2,4-Trichlorobenzene	ND		25.0	26.4		ug/L		106	65 - 135	2	20
1,1,1-Trichloroethane	ND		25.0	26.5		ug/L		106	65 - 140	1	20
1,1,2-Trichloroethane	ND		25.0	26.2		ug/L		105	65 - 130	10	25
Trichloroethene	ND		25.0	25.0		ug/L		100	65 - 125	2	20
Trichlorofluoromethane	ND		25.0	29.5		ug/L		118	60 - 145	2	25
1,2,3-Trichloropropane	ND		25.0	27.6		ug/L		110	55 - 135	17	30
1,2,4-Trimethylbenzene	ND		25.0	24.1		ug/L		96	55 - 135	6	25
1,3,5-Trimethylbenzene	ND		25.0	24.8		ug/L		99	70 - 130	4	20
Vinyl chloride	ND		25.0	23.6		ug/L		94	45 - 140	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

GC/MS VOA

Analysis Batch: 48524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21217-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-21217-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-21702-1 - DL	OC-GW-OW5-082812	Total/NA	Water	8260B	
440-21702-2	OC-GW-PZ9-082812	Total/NA	Water	8260B	
440-21702-2 - DL	OC-GW-PZ9-082812	Total/NA	Water	8260B	
LCS 440-48524/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-48524/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 48527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21153-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-21153-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-21702-1	OC-GW-OW5-082812	Total/NA	Water	8260B	
LCS 440-48527/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-48527/4	Method Blank	Total/NA	Water	8260B	

Definitions/Glossary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
N	Presumptive evidence of material.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-12
USDA	Federal		P330-09-00080	06-06-14

440-21702

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TAL-0013 (0911)

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1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CDM Smith, 111 Academy suite 150, Irvine CA 92617

Project/PO Number: Omega Chemical 10500-

Project Manager: Sharon Wallin

Phone Number: 949-752-5452

Sampler: Chad Marvin

Fax Number:

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOC's (8260B) Include: Freon, TIC's Acetone, MTBE	1,4 Dioxane (8270M)								Special Instructions
OC-GW-OW5-082812	GW	VOA's Amb	5	8/28/12	0920	HCL None	X	X								
OC-GW-PZ9-082812	GW	VOA's Amb	5	8/28/12	1000	HCL None	X	X								

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
Chad Marvin	8-28-12 / 18:05			same day ___ 72 hours ___
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours X 5 days ___
				48 hours ___ normal ___
Relinquished By:	Date/Time:	Received In Lab By:	Date/Time: 08/28/12 18:05	Sample Integrity: (Check) intact X on ice X 3.9°

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-21702-1

Login Number: 21702
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Chad Marvin
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-21702-2
Client Project/Site: Omega Chemical Groundwater, 10500-

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
8/31/2012 9:58:43 AM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-21702-1	OC-GW-OW5-082812	Water	08/28/12 09:20	08/28/12 18:05
440-21702-2	OC-GW-PZ9-082812	Water	08/28/12 10:00	08/28/12 18:05

Case Narrative

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

Job ID: 440-21702-2

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-21702-2

Comments
No additional comments.

Receipt
The samples were received on 8/28/2012 6:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7º C.

GC/MS Semi VOA
Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 48736. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: OC-GW-PZ9-082812 (440-21702-2).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

Client Sample ID: OC-GW-OW5-082812

Lab Sample ID: 440-21702-1

Date Collected: 08/28/12 09:20
Matrix: Water
Date Received: 08/28/12 18:05

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	17		0.48	0.057	ug/L		08/29/12 17:31	08/30/12 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*42*		*30 - 120*	*08/29/12 17:31*	*08/30/12 17:09*	*1*

Client Sample ID: OC-GW-PZ9-082812

Lab Sample ID: 440-21702-2

Date Collected: 08/28/12 10:00
Matrix: Water
Date Received: 08/28/12 18:05

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	800		95	11	ug/L		08/29/12 17:31	08/30/12 18:25	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*0*	*X*	*30 - 120*	*08/29/12 17:31*	*08/30/12 18:25*	*200*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

Client Sample ID: OC-GW-OW5-082812

Lab Sample ID: 440-21702-1

Date Collected: 08/28/12 09:20

Matrix: Water

Date Received: 08/28/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1045 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49016	08/30/12 17:09	CP	TAL IRV

Client Sample ID: OC-GW-PZ9-082812

Lab Sample ID: 440-21702-2

Date Collected: 08/28/12 10:00

Matrix: Water

Date Received: 08/28/12 18:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1050 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		200			49016	08/30/12 18:25	CP	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

QC Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-48736/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.060	ug/L		08/29/12 17:31	08/30/12 16:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*74*		*30 - 120*	*08/29/12 17:31*	*08/30/12 16:50*	*1*

Lab Sample ID: LCS 440-48736/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	1.52		ug/L		76	35 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*77*		*30 - 120*

Lab Sample ID: LCSD 440-48736/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.00	1.29		ug/L		64	35 - 120	16	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*65*		*30 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

GC/MS Semi VOA

Prep Batch: 48736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21702-1	OC-GW-OW5-082812	Total/NA	Water	3520C	
440-21702-2	OC-GW-PZ9-082812	Total/NA	Water	3520C	
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-48736/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 49016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21702-1	OC-GW-OW5-082812	Total/NA	Water	8270C SIM	48736
440-21702-2	OC-GW-PZ9-082812	Total/NA	Water	8270C SIM	48736

Analysis Batch: 49017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	48736
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	48736
MB 440-48736/1-A	Method Blank	Total/NA	Water	8270C SIM	48736

Definitions/Glossary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater, 10500-

TestAmerica Job ID: 440-21702-2

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-12
USDA	Federal		P330-09-00080	06-06-14

440-21702

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4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: CDM Smith, 111 Academy suite 150, Irvine CA 92617

Project/PO Number: Omega Chemical 10500-

Project Manager: Sharon Wallin

Phone Number: 949-752-5452

Sampler: Chad Marvin

Fax Number:

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOC's (8260B) Include: Freon, TIC's Acetone, MTBE	1,4 Dioxane (8270M)								Special Instructions
OC-GW-OW5-082812	GW	VOA's Amb	5	8/28/12	0920	HCL None	X	X								
OC-GW-PZ9-082812	GW	VOA's Amb	5	8/28/12	1000	HCL None	X	X								

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
Chad Marvin	8-28-12 / 18:05			same day ___ 72 hours ___
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours X 5 days ___
				48 hours ___ normal ___
Relinquished By:	Date/Time:	Received In Lab By:	Date/Time: 08/28/12 18:05	Sample Integrity: (Check) intact X on ice X 3.9°

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-21702-2

Login Number: 21702
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Chad Marvin
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Appendix B.3.2

August 22, 2012
Extraction Wells

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-21340-1
Client Project/Site: Omega Chemical Groundwater

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
9/13/2012 2:49:27 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-21340-1	OC_EW1_SP110_082212	Water	08/22/12 10:58	08/22/12 16:40
440-21340-2	OC_EW2_SP120_082212	Water	08/22/12 11:07	08/22/12 16:40
440-21340-3	OC_EW3_SP130_082212	Water	08/22/12 11:17	08/22/12 16:40
440-21340-4	OC_EW4_SP140_082212	Water	08/22/12 11:49	08/22/12 16:40
440-21340-5	OC_EW5_SP150_082212	Water	08/22/12 11:30	08/22/12 16:40

Job ID: 440-21340-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-21340-1

Comments
No additional comments.

Receipt
The samples were received on 8/22/2012 4:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Carbon tetrachloride associated with batch 49069 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 49069 exceeded control limits for the following analytes: 1,1,1,2-Tetrachloroethane and Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: Due to the high concentration of tetrachloroethane, the matrix spike / matrix spike duplicate (MS/MSD) for batch 49069 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 48736. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: OC_EW2_SP120_082212 (440-21340-2).

Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 48763. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW1_SP110_082212

Lab Sample ID: 440-21340-1

Date Collected: 08/22/12 10:58
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			08/31/12 00:13	1
Benzene	ND		0.50	0.28	ug/L			08/31/12 00:13	1
Bromobenzene	ND		1.0	0.27	ug/L			08/31/12 00:13	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/31/12 00:13	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/31/12 00:13	1
Bromoform	ND		1.0	0.40	ug/L			08/31/12 00:13	1
Bromomethane	ND		1.0	0.42	ug/L			08/31/12 00:13	1
Carbon tetrachloride	ND	*	0.50	0.28	ug/L			08/31/12 00:13	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/31/12 00:13	1
Chloroethane	ND		1.0	0.40	ug/L			08/31/12 00:13	1
Chloroform	**2.1**		1.0	0.33	ug/L			08/31/12 00:13	1
Chloromethane	ND		1.0	0.40	ug/L			08/31/12 00:13	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/31/12 00:13	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/31/12 00:13	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/31/12 00:13	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/31/12 00:13	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/31/12 00:13	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/31/12 00:13	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/31/12 00:13	1
Dibromomethane	ND		1.0	0.36	ug/L			08/31/12 00:13	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/31/12 00:13	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/31/12 00:13	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/31/12 00:13	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/31/12 00:13	1
1,1-Dichloroethane	**0.64**	**J**	1.0	0.40	ug/L			08/31/12 00:13	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/31/12 00:13	1
1,1-Dichloroethene	**96**		1.0	0.42	ug/L			08/31/12 00:13	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/31/12 00:13	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/31/12 00:13	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/31/12 00:13	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/31/12 00:13	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/31/12 00:13	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/31/12 00:13	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/31/12 00:13	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/31/12 00:13	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/31/12 00:13	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/31/12 00:13	1
Naphthalene	ND		1.0	0.41	ug/L			08/31/12 00:13	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/31/12 00:13	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/31/12 00:13	1
o-Xylene	ND		1.0	0.30	ug/L			08/31/12 00:13	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/31/12 00:13	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/31/12 00:13	1
Styrene	ND		1.0	0.20	ug/L			08/31/12 00:13	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/31/12 00:13	1
1,1,1,2-Tetrachloroethane	ND	*	1.0	0.27	ug/L			08/31/12 00:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/31/12 00:13	1
Toluene	ND		1.0	0.36	ug/L			08/31/12 00:13	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/31/12 00:13	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/31/12 00:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/31/12 00:13	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW1_SP110_082212

Lab Sample ID: 440-21340-1

Date Collected: 08/22/12 10:58
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/31/12 00:13	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/31/12 00:13	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/31/12 00:13	1
Trichloroethene	**65**		1.0	0.26	ug/L			08/31/12 00:13	1
Trichlorofluoromethane	**34**		1.0	0.34	ug/L			08/31/12 00:13	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/31/12 00:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**87**		5.0	0.50	ug/L			08/31/12 00:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/31/12 00:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/31/12 00:13	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/31/12 00:13	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*1.3*		*ug/L*		*3.42*	*75-43-4*		*08/31/12 00:13*	*1*
1,2-Dichloro-1,1,2-trifluoroethane	*4.8*		*ug/L*		*3.82*	*354-23-4*		*08/31/12 00:13*	*1*
Unknown	*2.6*	*T J*	*ug/L*		*9.44*			*08/31/12 00:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*08/31/12 00:13*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/31/12 00:13*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/31/12 00:13*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**690**		5.0	1.6	ug/L			08/31/12 00:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/31/12 00:41*	*5*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*08/31/12 00:41*	*5*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/31/12 00:41*	*5*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.80**		0.48	0.057	ug/L		08/29/12 17:31	08/30/12 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*62*		*30 - 120*	*08/29/12 17:31*	*08/30/12 22:18*	*1*

Client Sample ID: OC_EW2_SP120_082212

Lab Sample ID: 440-21340-2

Date Collected: 08/22/12 11:07
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		100	45	ug/L			08/31/12 01:10	10
Benzene	ND		5.0	2.8	ug/L			08/31/12 01:10	10
Bromobenzene	ND		10	2.7	ug/L			08/31/12 01:10	10
Bromochloromethane	ND		10	4.0	ug/L			08/31/12 01:10	10
Bromodichloromethane	ND		10	3.0	ug/L			08/31/12 01:10	10
Bromoform	ND		10	4.0	ug/L			08/31/12 01:10	10
Bromomethane	ND		10	4.2	ug/L			08/31/12 01:10	10
Carbon tetrachloride	ND	*	5.0	2.8	ug/L			08/31/12 01:10	10
Chlorobenzene	ND		10	3.6	ug/L			08/31/12 01:10	10

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW2_SP120_082212
Date Collected: 08/22/12 11:07
Date Received: 08/22/12 16:40

Lab Sample ID: 440-21340-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		10	4.0	ug/L			08/31/12 01:10	10
Chloroform	**63**		10	3.3	ug/L			08/31/12 01:10	10
Chloromethane	ND		10	4.0	ug/L			08/31/12 01:10	10
2-Chlorotoluene	ND		10	2.8	ug/L			08/31/12 01:10	10
4-Chlorotoluene	ND		10	2.9	ug/L			08/31/12 01:10	10
cis-1,2-Dichloroethene	ND		10	3.2	ug/L			08/31/12 01:10	10
cis-1,3-Dichloropropene	ND		5.0	2.2	ug/L			08/31/12 01:10	10
Dibromochloromethane	ND		10	4.0	ug/L			08/31/12 01:10	10
1,2-Dibromo-3-Chloropropane	ND		50	9.7	ug/L			08/31/12 01:10	10
1,2-Dibromoethane (EDB)	ND		10	4.0	ug/L			08/31/12 01:10	10
Dibromomethane	ND		10	3.6	ug/L			08/31/12 01:10	10
1,2-Dichlorobenzene	ND		10	3.2	ug/L			08/31/12 01:10	10
1,3-Dichlorobenzene	ND		10	3.5	ug/L			08/31/12 01:10	10
1,4-Dichlorobenzene	ND		10	3.7	ug/L			08/31/12 01:10	10
Dichlorodifluoromethane	ND		10	2.6	ug/L			08/31/12 01:10	10
1,1-Dichloroethane	ND		10	4.0	ug/L			08/31/12 01:10	10
1,2-Dichloroethane	**11**		10	2.8	ug/L			08/31/12 01:10	10
1,1-Dichloroethene	**130**		10	4.2	ug/L			08/31/12 01:10	10
1,2-Dichloropropane	ND		10	3.5	ug/L			08/31/12 01:10	10
1,3-Dichloropropane	ND		10	3.2	ug/L			08/31/12 01:10	10
2,2-Dichloropropane	ND		10	3.4	ug/L			08/31/12 01:10	10
1,1-Dichloropropene	ND		10	2.8	ug/L			08/31/12 01:10	10
Ethylbenzene	ND		10	2.5	ug/L			08/31/12 01:10	10
Hexachlorobutadiene	ND		10	3.8	ug/L			08/31/12 01:10	10
Isopropylbenzene	ND		10	2.5	ug/L			08/31/12 01:10	10
Methylene Chloride	ND		50	9.5	ug/L			08/31/12 01:10	10
Methyl-t-Butyl Ether (MTBE)	ND		10	3.2	ug/L			08/31/12 01:10	10
m,p-Xylene	ND		10	6.0	ug/L			08/31/12 01:10	10
Naphthalene	ND		10	4.1	ug/L			08/31/12 01:10	10
n-Butylbenzene	ND		10	3.7	ug/L			08/31/12 01:10	10
N-Propylbenzene	ND		10	2.7	ug/L			08/31/12 01:10	10
o-Xylene	ND		10	3.0	ug/L			08/31/12 01:10	10
p-Isopropyltoluene	ND		10	2.8	ug/L			08/31/12 01:10	10
sec-Butylbenzene	ND		10	2.5	ug/L			08/31/12 01:10	10
Styrene	ND		10	2.0	ug/L			08/31/12 01:10	10
tert-Butylbenzene	ND		10	2.2	ug/L			08/31/12 01:10	10
1,1,1,2-Tetrachloroethane	ND	*	10	2.7	ug/L			08/31/12 01:10	10
1,1,2,2-Tetrachloroethane	ND		10	3.0	ug/L			08/31/12 01:10	10
Toluene	ND		10	3.6	ug/L			08/31/12 01:10	10
trans-1,2-Dichloroethene	ND		10	3.0	ug/L			08/31/12 01:10	10
trans-1,3-Dichloropropene	ND		5.0	3.2	ug/L			08/31/12 01:10	10
1,2,3-Trichlorobenzene	ND		10	3.0	ug/L			08/31/12 01:10	10
1,2,4-Trichlorobenzene	ND		10	4.8	ug/L			08/31/12 01:10	10
1,1,1-Trichloroethane	ND		10	3.0	ug/L			08/31/12 01:10	10
1,1,2-Trichloroethane	ND		10	3.0	ug/L			08/31/12 01:10	10
Trichloroethene	**110**		10	2.6	ug/L			08/31/12 01:10	10
Trichlorofluoromethane	**53**		10	3.4	ug/L			08/31/12 01:10	10
1,2,3-Trichloropropane	ND		10	4.0	ug/L			08/31/12 01:10	10
1,1,2-Trichloro-1,2,2-trifluoroetha ne	**170**		50	5.0	ug/L			08/31/12 01:10	10
1,2,4-Trimethylbenzene	ND		10	2.3	ug/L			08/31/12 01:10	10

Client Sample ID: OC_EW2_SP120_082212

Lab Sample ID: 440-21340-2

Date Collected: 08/22/12 11:07

Matrix: Water

Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		10	2.6	ug/L			08/31/12 01:10	10
Vinyl chloride	ND		5.0	4.0	ug/L			08/31/12 01:10	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/12 01:10*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/31/12 01:10*	*10*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*08/31/12 01:10*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/31/12 01:10*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**3400**		50	16	ug/L			08/31/12 01:38	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/31/12 01:38*	*50*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/31/12 01:38*	*50*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/31/12 01:38*	*50*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**75**		9.5	1.1	ug/L		08/29/12 17:31	08/30/12 22:42	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*73*		*30 - 120*	*08/29/12 17:31*	*08/30/12 22:42*	*20*

Client Sample ID: OC_EW3_SP130_082212

Lab Sample ID: 440-21340-3

Date Collected: 08/22/12 11:17

Matrix: Water

Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	9.0	ug/L			08/31/12 02:06	2
Benzene	ND		1.0	0.56	ug/L			08/31/12 02:06	2
Bromobenzene	ND		2.0	0.54	ug/L			08/31/12 02:06	2
Bromochloromethane	ND		2.0	0.80	ug/L			08/31/12 02:06	2
Bromodichloromethane	ND		2.0	0.60	ug/L			08/31/12 02:06	2
Bromoform	ND		2.0	0.80	ug/L			08/31/12 02:06	2
Bromomethane	ND		2.0	0.84	ug/L			08/31/12 02:06	2
Carbon tetrachloride	ND	*	1.0	0.56	ug/L			08/31/12 02:06	2
Chlorobenzene	ND		2.0	0.72	ug/L			08/31/12 02:06	2
Chloroethane	ND		2.0	0.80	ug/L			08/31/12 02:06	2
Chloroform	**16**		2.0	0.66	ug/L			08/31/12 02:06	2
Chloromethane	ND		2.0	0.80	ug/L			08/31/12 02:06	2
2-Chlorotoluene	ND		2.0	0.56	ug/L			08/31/12 02:06	2
4-Chlorotoluene	ND		2.0	0.58	ug/L			08/31/12 02:06	2
cis-1,2-Dichloroethene	ND		2.0	0.64	ug/L			08/31/12 02:06	2
cis-1,3-Dichloropropene	ND		1.0	0.44	ug/L			08/31/12 02:06	2
Dibromochloromethane	ND		2.0	0.80	ug/L			08/31/12 02:06	2
1,2-Dibromo-3-Chloropropane	ND		10	1.9	ug/L			08/31/12 02:06	2
1,2-Dibromoethane (EDB)	ND		2.0	0.80	ug/L			08/31/12 02:06	2
Dibromomethane	ND		2.0	0.72	ug/L			08/31/12 02:06	2

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW3_SP130_082212

Lab Sample ID: 440-21340-3

Date Collected: 08/22/12 11:17
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		2.0	0.64	ug/L			08/31/12 02:06	2
1,3-Dichlorobenzene	ND		2.0	0.70	ug/L			08/31/12 02:06	2
1,4-Dichlorobenzene	ND		2.0	0.74	ug/L			08/31/12 02:06	2
Dichlorodifluoromethane	ND		2.0	0.52	ug/L			08/31/12 02:06	2
1,1-Dichloroethane	**1.2**	**J**	2.0	0.80	ug/L			08/31/12 02:06	2
1,2-Dichloroethane	ND		2.0	0.56	ug/L			08/31/12 02:06	2
1,1-Dichloroethene	**200**		2.0	0.84	ug/L			08/31/12 02:06	2
1,2-Dichloropropane	ND		2.0	0.70	ug/L			08/31/12 02:06	2
1,3-Dichloropropane	ND		2.0	0.64	ug/L			08/31/12 02:06	2
2,2-Dichloropropane	ND		2.0	0.68	ug/L			08/31/12 02:06	2
1,1-Dichloropropene	ND		2.0	0.56	ug/L			08/31/12 02:06	2
Ethylbenzene	ND		2.0	0.50	ug/L			08/31/12 02:06	2
Hexachlorobutadiene	ND		2.0	0.76	ug/L			08/31/12 02:06	2
Isopropylbenzene	ND		2.0	0.50	ug/L			08/31/12 02:06	2
Methylene Chloride	ND		10	1.9	ug/L			08/31/12 02:06	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.64	ug/L			08/31/12 02:06	2
m,p-Xylene	ND		2.0	1.2	ug/L			08/31/12 02:06	2
Naphthalene	ND		2.0	0.82	ug/L			08/31/12 02:06	2
n-Butylbenzene	ND		2.0	0.74	ug/L			08/31/12 02:06	2
N-Propylbenzene	ND		2.0	0.54	ug/L			08/31/12 02:06	2
o-Xylene	ND		2.0	0.60	ug/L			08/31/12 02:06	2
p-Isopropyltoluene	ND		2.0	0.56	ug/L			08/31/12 02:06	2
sec-Butylbenzene	ND		2.0	0.50	ug/L			08/31/12 02:06	2
Styrene	ND		2.0	0.40	ug/L			08/31/12 02:06	2
tert-Butylbenzene	ND		2.0	0.44	ug/L			08/31/12 02:06	2
1,1,1,2-Tetrachloroethane	ND	*	2.0	0.54	ug/L			08/31/12 02:06	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.60	ug/L			08/31/12 02:06	2
Toluene	ND		2.0	0.72	ug/L			08/31/12 02:06	2
trans-1,2-Dichloroethene	ND		2.0	0.60	ug/L			08/31/12 02:06	2
trans-1,3-Dichloropropene	ND		1.0	0.64	ug/L			08/31/12 02:06	2
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/L			08/31/12 02:06	2
1,2,4-Trichlorobenzene	ND		2.0	0.96	ug/L			08/31/12 02:06	2
1,1,1-Trichloroethane	ND		2.0	0.60	ug/L			08/31/12 02:06	2
1,1,2-Trichloroethane	ND		2.0	0.60	ug/L			08/31/12 02:06	2
Trichloroethene	**81**		2.0	0.52	ug/L			08/31/12 02:06	2
Trichlorofluoromethane	**110**		2.0	0.68	ug/L			08/31/12 02:06	2
1,2,3-Trichloropropane	ND		2.0	0.80	ug/L			08/31/12 02:06	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**160**		10	1.0	ug/L			08/31/12 02:06	2
1,2,4-Trimethylbenzene	ND		2.0	0.46	ug/L			08/31/12 02:06	2
1,3,5-Trimethylbenzene	ND		2.0	0.52	ug/L			08/31/12 02:06	2
Vinyl chloride	ND		1.0	0.80	ug/L			08/31/12 02:06	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/12 02:06*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*08/31/12 02:06*	*2*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*08/31/12 02:06*	*2*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/31/12 02:06*	*2*

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW3_SP130_082212

Lab Sample ID: 440-21340-3

Date Collected: 08/22/12 11:17
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**710**		10	3.2	ug/L			08/31/12 02:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/31/12 02:35*	*10*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/31/12 02:35*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/31/12 02:35*	*10*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.6**		0.48	0.057	ug/L		08/29/12 18:51	08/31/12 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*62*		*30 - 120*	*08/29/12 18:51*	*08/31/12 01:17*	*1*

Client Sample ID: OC_EW4_SP140_082212

Lab Sample ID: 440-21340-4

Date Collected: 08/22/12 11:49
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			08/30/12 20:24	1
Benzene	ND		0.50	0.28	ug/L			08/30/12 20:24	1
Bromobenzene	ND		1.0	0.27	ug/L			08/30/12 20:24	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/30/12 20:24	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/30/12 20:24	1
Bromoform	ND		1.0	0.40	ug/L			08/30/12 20:24	1
Bromomethane	ND		1.0	0.42	ug/L			08/30/12 20:24	1
Carbon tetrachloride	ND	*	0.50	0.28	ug/L			08/30/12 20:24	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/30/12 20:24	1
Chloroethane	ND		1.0	0.40	ug/L			08/30/12 20:24	1
Chloroform	**0.91**	**J**	1.0	0.33	ug/L			08/30/12 20:24	1
Chloromethane	ND		1.0	0.40	ug/L			08/30/12 20:24	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/30/12 20:24	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/30/12 20:24	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/30/12 20:24	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/30/12 20:24	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/30/12 20:24	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/30/12 20:24	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/30/12 20:24	1
Dibromomethane	ND		1.0	0.36	ug/L			08/30/12 20:24	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/30/12 20:24	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/30/12 20:24	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/30/12 20:24	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/30/12 20:24	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/30/12 20:24	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/30/12 20:24	1
1,1-Dichloroethene	**93**		1.0	0.42	ug/L			08/30/12 20:24	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/30/12 20:24	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/30/12 20:24	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/30/12 20:24	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/30/12 20:24	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/30/12 20:24	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW4_SP140_082212

Lab Sample ID: 440-21340-4

Date Collected: 08/22/12 11:49
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/30/12 20:24	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/30/12 20:24	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/30/12 20:24	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/30/12 20:24	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/30/12 20:24	1
Naphthalene	ND		1.0	0.41	ug/L			08/30/12 20:24	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/30/12 20:24	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/30/12 20:24	1
o-Xylene	ND		1.0	0.30	ug/L			08/30/12 20:24	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/30/12 20:24	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/30/12 20:24	1
Styrene	ND		1.0	0.20	ug/L			08/30/12 20:24	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/30/12 20:24	1
1,1,1,2-Tetrachloroethane	ND	*	1.0	0.27	ug/L			08/30/12 20:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/30/12 20:24	1
Tetrachloroethene	**150**		1.0	0.32	ug/L			08/30/12 20:24	1
Toluene	ND		1.0	0.36	ug/L			08/30/12 20:24	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/12 20:24	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/30/12 20:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/30/12 20:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/30/12 20:24	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/12 20:24	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/30/12 20:24	1
Trichloroethene	**15**		1.0	0.26	ug/L			08/30/12 20:24	1
Trichlorofluoromethane	**27**		1.0	0.34	ug/L			08/30/12 20:24	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/30/12 20:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**37**		5.0	0.50	ug/L			08/30/12 20:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/30/12 20:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/30/12 20:24	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/30/12 20:24	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Isopropyl alcohol	*77*	*J*	*ug/L*		*4.00*	*67-63-0*		*08/30/12 20:24*	*1*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/12 20:24*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/30/12 20:24*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 120*		*08/30/12 20:24*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/30/12 20:24*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.48**		0.47	0.057	ug/L		08/29/12 18:51	08/31/12 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*59*		*30 - 120*	*08/29/12 18:51*	*08/31/12 01:41*	*1*

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW5_SP150_082212

Lab Sample ID: 440-21340-5

Date Collected: 08/22/12 11:30

Matrix: Water

Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			08/31/12 03:04	1
Benzene	ND		0.50	0.28	ug/L			08/31/12 03:04	1
Bromobenzene	ND		1.0	0.27	ug/L			08/31/12 03:04	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/31/12 03:04	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/31/12 03:04	1
Bromoform	ND		1.0	0.40	ug/L			08/31/12 03:04	1
Bromomethane	ND		1.0	0.42	ug/L			08/31/12 03:04	1
Carbon tetrachloride	ND	*	0.50	0.28	ug/L			08/31/12 03:04	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/31/12 03:04	1
Chloroethane	ND		1.0	0.40	ug/L			08/31/12 03:04	1
Chloroform	ND		1.0	0.33	ug/L			08/31/12 03:04	1
Chloromethane	ND		1.0	0.40	ug/L			08/31/12 03:04	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/31/12 03:04	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/31/12 03:04	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/31/12 03:04	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/31/12 03:04	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/31/12 03:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/31/12 03:04	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/31/12 03:04	1
Dibromomethane	ND		1.0	0.36	ug/L			08/31/12 03:04	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/31/12 03:04	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/31/12 03:04	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/31/12 03:04	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/31/12 03:04	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/31/12 03:04	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/31/12 03:04	1
1,1-Dichloroethene	**63**		1.0	0.42	ug/L			08/31/12 03:04	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/31/12 03:04	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/31/12 03:04	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/31/12 03:04	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/31/12 03:04	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/31/12 03:04	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/31/12 03:04	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/31/12 03:04	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/31/12 03:04	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/31/12 03:04	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/31/12 03:04	1
Naphthalene	ND		1.0	0.41	ug/L			08/31/12 03:04	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/31/12 03:04	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/31/12 03:04	1
o-Xylene	ND		1.0	0.30	ug/L			08/31/12 03:04	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/31/12 03:04	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/31/12 03:04	1
Styrene	ND		1.0	0.20	ug/L			08/31/12 03:04	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/31/12 03:04	1
1,1,1,2-Tetrachloroethane	ND	*	1.0	0.27	ug/L			08/31/12 03:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/31/12 03:04	1
Tetrachloroethene	**76**		1.0	0.32	ug/L			08/31/12 03:04	1
Toluene	ND		1.0	0.36	ug/L			08/31/12 03:04	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/31/12 03:04	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/31/12 03:04	1

Client Sample Results

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW5_SP150_082212

Lab Sample ID: 440-21340-5

Date Collected: 08/22/12 11:30
Matrix: Water
Date Received: 08/22/12 16:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/31/12 03:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/31/12 03:04	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/31/12 03:04	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/31/12 03:04	1
Trichloroethene	**7.0**		1.0	0.26	ug/L			08/31/12 03:04	1
Trichlorofluoromethane	**46**		1.0	0.34	ug/L			08/31/12 03:04	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/31/12 03:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**60**		5.0	0.50	ug/L			08/31/12 03:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/31/12 03:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/31/12 03:04	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/31/12 03:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/31/12 03:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*08/31/12 03:04*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/31/12 03:04*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/31/12 03:04*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.13**	**J**	0.47	0.057	ug/L		08/29/12 18:51	08/31/12 02:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*57*		*30 - 120*	*08/29/12 18:51*	*08/31/12 02:04*	*1*

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Client Sample ID: OC_EW1_SP110_082212

Lab Sample ID: 440-21340-1
Date Collected: 08/22/12 10:58
Matrix: Water
Date Received: 08/22/12 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	10 mL	10 mL	49069	08/31/12 00:41	LB	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	49069	08/31/12 00:13	LB	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/30/12 22:18	CP	TAL IRV

Client Sample ID: OC_EW2_SP120_082212

Lab Sample ID: 440-21340-2
Date Collected: 08/22/12 11:07
Matrix: Water
Date Received: 08/22/12 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	10 mL	10 mL	49069	08/31/12 01:10	LB	TAL IRV
Total/NA	Analysis	8260B	DL	50	10 mL	10 mL	49069	08/31/12 01:38	LB	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	48736	08/29/12 17:31	DM	TAL IRV
Total/NA	Analysis	8270C SIM		20			49017	08/30/12 22:42	CP	TAL IRV

Client Sample ID: OC_EW3_SP130_082212

Lab Sample ID: 440-21340-3
Date Collected: 08/22/12 11:17
Matrix: Water
Date Received: 08/22/12 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	10 mL	10 mL	49069	08/31/12 02:06	LB	TAL IRV
Total/NA	Analysis	8260B	DL	10	10 mL	10 mL	49069	08/31/12 02:35	LB	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	48763	08/29/12 18:51	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/31/12 01:17	CP	TAL IRV

Client Sample ID: OC_EW4_SP140_082212

Lab Sample ID: 440-21340-4
Date Collected: 08/22/12 11:49
Matrix: Water
Date Received: 08/22/12 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	49069	08/30/12 20:24	LB	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48763	08/29/12 18:51	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/31/12 01:41	CP	TAL IRV

Client Sample ID: OC_EW5_SP150_082212

Lab Sample ID: 440-21340-5
Date Collected: 08/22/12 11:30
Matrix: Water
Date Received: 08/22/12 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	49069	08/31/12 03:04	LB	TAL IRV
Total/NA	Prep	3520C			1055 mL	1 mL	48763	08/29/12 18:51	DM	TAL IRV
Total/NA	Analysis	8270C SIM		1			49017	08/31/12 02:04	CP	TAL IRV

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-49069/4
Matrix: Water
Analysis Batch: 49069

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.5	ug/L			08/30/12 19:21	1
Benzene	ND		0.50	0.28	ug/L			08/30/12 19:21	1
Bromobenzene	ND		1.0	0.27	ug/L			08/30/12 19:21	1
Bromochloromethane	ND		1.0	0.40	ug/L			08/30/12 19:21	1
Bromodichloromethane	ND		1.0	0.30	ug/L			08/30/12 19:21	1
Bromoform	ND		1.0	0.40	ug/L			08/30/12 19:21	1
Bromomethane	ND		1.0	0.42	ug/L			08/30/12 19:21	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			08/30/12 19:21	1
Chlorobenzene	ND		1.0	0.36	ug/L			08/30/12 19:21	1
Chloroethane	ND		1.0	0.40	ug/L			08/30/12 19:21	1
Chloroform	ND		1.0	0.33	ug/L			08/30/12 19:21	1
Chloromethane	ND		1.0	0.40	ug/L			08/30/12 19:21	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			08/30/12 19:21	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			08/30/12 19:21	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			08/30/12 19:21	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			08/30/12 19:21	1
Dibromochloromethane	ND		1.0	0.40	ug/L			08/30/12 19:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			08/30/12 19:21	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			08/30/12 19:21	1
Dibromomethane	ND		1.0	0.36	ug/L			08/30/12 19:21	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			08/30/12 19:21	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			08/30/12 19:21	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			08/30/12 19:21	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			08/30/12 19:21	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			08/30/12 19:21	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			08/30/12 19:21	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			08/30/12 19:21	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			08/30/12 19:21	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			08/30/12 19:21	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			08/30/12 19:21	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			08/30/12 19:21	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/30/12 19:21	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			08/30/12 19:21	1
Isopropylbenzene	ND		1.0	0.25	ug/L			08/30/12 19:21	1
Methylene Chloride	ND		5.0	0.95	ug/L			08/30/12 19:21	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			08/30/12 19:21	1
m,p-Xylene	ND		1.0	0.60	ug/L			08/30/12 19:21	1
Naphthalene	ND		1.0	0.41	ug/L			08/30/12 19:21	1
n-Butylbenzene	ND		1.0	0.37	ug/L			08/30/12 19:21	1
N-Propylbenzene	ND		1.0	0.27	ug/L			08/30/12 19:21	1
o-Xylene	ND		1.0	0.30	ug/L			08/30/12 19:21	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			08/30/12 19:21	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			08/30/12 19:21	1
Styrene	ND		1.0	0.20	ug/L			08/30/12 19:21	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			08/30/12 19:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			08/30/12 19:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			08/30/12 19:21	1
Tetrachloroethene	ND		1.0	0.32	ug/L			08/30/12 19:21	1
Toluene	ND		1.0	0.36	ug/L			08/30/12 19:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-49069/4
Matrix: Water
Analysis Batch: 49069

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/12 19:21	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			08/30/12 19:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			08/30/12 19:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			08/30/12 19:21	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/12 19:21	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			08/30/12 19:21	1
Trichloroethene	ND		1.0	0.26	ug/L			08/30/12 19:21	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			08/30/12 19:21	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			08/30/12 19:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			08/30/12 19:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			08/30/12 19:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			08/30/12 19:21	1
Vinyl chloride	ND		0.50	0.40	ug/L			08/30/12 19:21	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*08/30/12 19:21*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*08/30/12 19:21*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*08/30/12 19:21*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/30/12 19:21*	*1*

Lab Sample ID: LCS 440-49069/5
Matrix: Water
Analysis Batch: 49069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	26.2		ug/L		105	30 - 140
Benzene	25.0	21.2		ug/L		85	70 - 120
Bromobenzene	25.0	29.4		ug/L		118	75 - 120
Bromochloromethane	25.0	25.2		ug/L		101	70 - 130
Bromodichloromethane	25.0	27.8		ug/L		111	70 - 135
Bromoform	25.0	29.5		ug/L		118	55 - 130
Bromomethane	25.0	24.8		ug/L		99	65 - 140
Carbon tetrachloride	25.0	35.4	*	ug/L		142	65 - 140
Chlorobenzene	25.0	24.3		ug/L		97	75 - 120
Chloroethane	25.0	20.8		ug/L		83	60 - 140
Chloroform	25.0	22.8		ug/L		91	70 - 130
Chloromethane	25.0	22.3		ug/L		89	50 - 140
2-Chlorotoluene	25.0	25.2		ug/L		101	70 - 125
4-Chlorotoluene	25.0	25.5		ug/L		102	75 - 125
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	70 - 125
cis-1,3-Dichloropropene	25.0	21.7		ug/L		87	75 - 125
Dibromochloromethane	25.0	31.7		ug/L		127	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	20.0		ug/L		80	50 - 135
1,2-Dibromoethane (EDB)	25.0	27.4		ug/L		110	75 - 125
Dibromomethane	25.0	24.0		ug/L		96	70 - 125
1,2-Dichlorobenzene	25.0	26.8		ug/L		107	75 - 120
1,3-Dichlorobenzene	25.0	28.5		ug/L		114	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-49069/5
Matrix: Water
Analysis Batch: 49069

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	75 - 120
Dichlorodifluoromethane	25.0	18.7		ug/L		75	35 - 155
1,1-Dichloroethane	25.0	21.6		ug/L		87	70 - 125
1,2-Dichloroethane	25.0	23.6		ug/L		94	60 - 140
1,1-Dichloroethene	25.0	23.5		ug/L		94	70 - 125
1,2-Dichloropropane	25.0	20.8		ug/L		83	70 - 125
1,3-Dichloropropane	25.0	21.8		ug/L		87	70 - 120
2,2-Dichloropropane	25.0	25.7		ug/L		103	65 - 140
1,1-Dichloropropene	25.0	20.5		ug/L		82	75 - 130
Ethylbenzene	25.0	25.2		ug/L		101	75 - 125
Hexachlorobutadiene	25.0	22.2		ug/L		89	65 - 135
Isopropylbenzene	25.0	28.3		ug/L		113	75 - 130
Methylene Chloride	25.0	18.5		ug/L		74	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	20.0		ug/L		80	60 - 135
m,p-Xylene	50.0	53.1		ug/L		106	75 - 125
Naphthalene	25.0	25.0		ug/L		100	55 - 135
n-Butylbenzene	25.0	24.3		ug/L		97	70 - 130
N-Propylbenzene	25.0	25.8		ug/L		103	75 - 130
o-Xylene	25.0	26.0		ug/L		104	75 - 125
p-Isopropyltoluene	25.0	27.5		ug/L		110	75 - 125
sec-Butylbenzene	25.0	26.7		ug/L		107	70 - 125
Styrene	25.0	24.8		ug/L		99	75 - 130
tert-Butylbenzene	25.0	27.7		ug/L		111	70 - 125
1,1,1,2-Tetrachloroethane	25.0	35.1	*	ug/L		140	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/L		92	55 - 130
Tetrachloroethene	25.0	28.8		ug/L		115	70 - 125
Toluene	25.0	23.3		ug/L		93	70 - 120
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	70 - 125
trans-1,3-Dichloropropene	25.0	22.1		ug/L		88	70 - 125
1,2,3-Trichlorobenzene	25.0	22.3		ug/L		89	65 - 125
1,2,4-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 135
1,1,1-Trichloroethane	25.0	26.8		ug/L		107	65 - 135
1,1,2-Trichloroethane	25.0	20.6		ug/L		83	70 - 125
Trichloroethene	25.0	27.6		ug/L		110	70 - 125
Trichlorofluoromethane	25.0	27.1		ug/L		108	65 - 145
1,2,3-Trichloropropane	25.0	21.0		ug/L		84	60 - 130
1,2,4-Trimethylbenzene	25.0	27.5		ug/L		110	75 - 125
1,3,5-Trimethylbenzene	25.0	27.8		ug/L		111	75 - 125
Vinyl chloride	25.0	23.3		ug/L		93	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21340-4 MS
Matrix: Water
Analysis Batch: 49069

Client Sample ID: OC_EW4_SP140_082212
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	24.0		ug/L		96	20 - 150
Benzene	ND		25.0	21.1		ug/L		84	65 - 125
Bromobenzene	ND		25.0	28.5		ug/L		114	70 - 125
Bromochloromethane	ND		25.0	25.0		ug/L		100	65 - 135
Bromodichloromethane	ND		25.0	28.1		ug/L		112	70 - 135
Bromoform	ND		25.0	28.6		ug/L		114	55 - 135
Bromomethane	ND		25.0	23.4		ug/L		94	55 - 145
Carbon tetrachloride	ND	*	25.0	35.4	F	ug/L		142	65 - 140
Chlorobenzene	ND		25.0	23.4		ug/L		94	75 - 125
Chloroethane	ND		25.0	20.0		ug/L		80	55 - 140
Chloroform	0.91	J	25.0	22.8		ug/L		88	65 - 135
Chloromethane	ND		25.0	21.7		ug/L		87	45 - 145
2-Chlorotoluene	ND		25.0	24.2		ug/L		97	65 - 135
4-Chlorotoluene	ND		25.0	24.7		ug/L		99	70 - 135
cis-1,2-Dichloroethene	ND		25.0	23.0		ug/L		92	65 - 130
cis-1,3-Dichloropropene	ND		25.0	21.5		ug/L		86	70 - 130
Dibromochloromethane	ND		25.0	30.6		ug/L		123	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	18.1		ug/L		72	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	26.9		ug/L		107	70 - 130
Dibromomethane	ND		25.0	23.8		ug/L		95	65 - 135
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L		104	75 - 125
1,3-Dichlorobenzene	ND		25.0	27.6		ug/L		110	75 - 125
1,4-Dichlorobenzene	ND		25.0	25.4		ug/L		102	75 - 125
Dichlorodifluoromethane	ND		25.0	18.2		ug/L		73	25 - 155
1,1-Dichloroethane	ND		25.0	21.2		ug/L		85	65 - 130
1,2-Dichloroethane	ND		25.0	23.7		ug/L		95	60 - 140
1,1-Dichloroethene	93		25.0	112		ug/L		76	60 - 130
1,2-Dichloropropane	ND		25.0	20.5		ug/L		82	65 - 130
1,3-Dichloropropane	ND		25.0	21.2		ug/L		85	65 - 135
2,2-Dichloropropane	ND		25.0	25.5		ug/L		102	60 - 145
1,1-Dichloropropene	ND		25.0	20.3		ug/L		81	70 - 135
Ethylbenzene	ND		25.0	24.6		ug/L		98	65 - 130
Hexachlorobutadiene	ND		25.0	22.2		ug/L		89	60 - 135
Isopropylbenzene	ND		25.0	27.1		ug/L		109	70 - 135
Methylene Chloride	ND		25.0	18.9		ug/L		76	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	19.7		ug/L		79	55 - 145
m,p-Xylene	ND		50.0	51.0		ug/L		102	65 - 130
Naphthalene	ND		25.0	23.1		ug/L		92	50 - 140
n-Butylbenzene	ND		25.0	23.3		ug/L		93	65 - 135
N-Propylbenzene	ND		25.0	25.1		ug/L		101	70 - 135
o-Xylene	ND		25.0	25.4		ug/L		101	65 - 125
p-Isopropyltoluene	ND		25.0	26.3		ug/L		105	65 - 130
sec-Butylbenzene	ND		25.0	25.6		ug/L		102	70 - 125
Styrene	ND		25.0	18.8		ug/L		75	50 - 145
tert-Butylbenzene	ND		25.0	26.9		ug/L		108	65 - 130
1,1,1,2-Tetrachloroethane	ND	*	25.0	34.6		ug/L		138	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	22.6		ug/L		90	55 - 135
Tetrachloroethene	150		25.0	158	4	ug/L		44	65 - 130
Toluene	ND		25.0	23.2		ug/L		93	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21340-4 MS
Matrix: Water
Analysis Batch: 49069

Client Sample ID: OC_EW4_SP140_082212
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	ND		25.0	22.0		ug/L		88	65 - 130
trans-1,3-Dichloropropene	ND		25.0	22.5		ug/L		90	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	22.2		ug/L		89	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	23.5		ug/L		94	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.9		ug/L		104	65 - 140
1,1,2-Trichloroethane	ND		25.0	20.5		ug/L		82	65 - 130
Trichloroethene	15		25.0	41.6		ug/L		108	65 - 125
Trichlorofluoromethane	27		25.0	52.4		ug/L		101	60 - 145
1,2,3-Trichloropropane	ND		25.0	20.1		ug/L		81	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	25.1		ug/L		100	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	26.4		ug/L		106	70 - 130
Vinyl chloride	ND		25.0	22.7		ug/L		91	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 440-21340-4 MSD
Matrix: Water
Analysis Batch: 49069

Client Sample ID: OC_EW4_SP140_082212
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	24.7		ug/L		99	20 - 150	3	35
Benzene	ND		25.0	20.9		ug/L		84	65 - 125	1	20
Bromobenzene	ND		25.0	28.8		ug/L		115	70 - 125	1	20
Bromochloromethane	ND		25.0	25.6		ug/L		102	65 - 135	2	25
Bromodichloromethane	ND		25.0	27.6		ug/L		110	70 - 135	2	20
Bromoform	ND		25.0	29.8		ug/L		119	55 - 135	4	25
Bromomethane	ND		25.0	23.8		ug/L		95	55 - 145	2	25
Carbon tetrachloride	ND	*	25.0	35.0		ug/L		140	65 - 140	1	25
Chlorobenzene	ND		25.0	23.5		ug/L		94	75 - 125	0	20
Chloroethane	ND		25.0	19.6		ug/L		79	55 - 140	2	25
Chloroform	0.91	J	25.0	23.1		ug/L		89	65 - 135	1	20
Chloromethane	ND		25.0	21.5		ug/L		86	45 - 145	1	25
2-Chlorotoluene	ND		25.0	24.4		ug/L		97	65 - 135	0	20
4-Chlorotoluene	ND		25.0	24.6		ug/L		99	70 - 135	0	20
cis-1,2-Dichloroethene	ND		25.0	23.4		ug/L		93	65 - 130	2	20
cis-1,3-Dichloropropene	ND		25.0	21.5		ug/L		86	70 - 130	0	20
Dibromochloromethane	ND		25.0	31.5		ug/L		126	65 - 140	3	25
1,2-Dibromo-3-Chloropropane	ND		25.0	19.3		ug/L		77	45 - 145	6	30
1,2-Dibromoethane (EDB)	ND		25.0	27.1		ug/L		108	70 - 130	1	25
Dibromomethane	ND		25.0	24.2		ug/L		97	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	26.6		ug/L		107	75 - 125	2	20
1,3-Dichlorobenzene	ND		25.0	27.9		ug/L		112	75 - 125	1	20
1,4-Dichlorobenzene	ND		25.0	25.6		ug/L		102	75 - 125	1	20
Dichlorodifluoromethane	ND		25.0	18.2		ug/L		73	25 - 155	0	30
1,1-Dichloroethane	ND		25.0	21.0		ug/L		84	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	23.9		ug/L		96	60 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-21340-4 MSD
Matrix: Water
Analysis Batch: 49069

Client Sample ID: OC_EW4_SP140_082212
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	93		25.0	108		ug/L		62	60 - 130	3	20
1,2-Dichloropropane	ND		25.0	20.6		ug/L		82	65 - 130	0	20
1,3-Dichloropropane	ND		25.0	21.2		ug/L		85	65 - 135	0	25
2,2-Dichloropropane	ND		25.0	25.0		ug/L		100	60 - 145	2	25
1,1-Dichloropropene	ND		25.0	20.2		ug/L		81	70 - 135	0	20
Ethylbenzene	ND		25.0	24.5		ug/L		98	65 - 130	0	20
Hexachlorobutadiene	ND		25.0	22.5		ug/L		90	60 - 135	1	20
Isopropylbenzene	ND		25.0	27.2		ug/L		109	70 - 135	0	20
Methylene Chloride	ND		25.0	19.3		ug/L		77	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	20.6		ug/L		82	55 - 145	4	25
m,p-Xylene	ND		50.0	50.8		ug/L		102	65 - 130	0	25
Naphthalene	ND		25.0	23.7		ug/L		95	50 - 140	3	30
n-Butylbenzene	ND		25.0	23.6		ug/L		95	65 - 135	1	20
N-Propylbenzene	ND		25.0	25.1		ug/L		100	70 - 135	0	20
o-Xylene	ND		25.0	25.5		ug/L		102	65 - 125	0	20
p-Isopropyltoluene	ND		25.0	26.7		ug/L		107	65 - 130	1	20
sec-Butylbenzene	ND		25.0	26.1		ug/L		104	70 - 125	2	20
Styrene	ND		25.0	16.2		ug/L		65	50 - 145	15	30
tert-Butylbenzene	ND		25.0	27.3		ug/L		109	65 - 130	1	20
1,1,1,2-Tetrachloroethane	ND	*	25.0	34.5		ug/L		138	65 - 140	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	22.5		ug/L		90	55 - 135	0	30
Tetrachloroethene	150		25.0	158	4	ug/L		42	65 - 130	0	20
Toluene	ND		25.0	23.2		ug/L		93	70 - 125	0	20
trans-1,2-Dichloroethene	ND		25.0	22.2		ug/L		89	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	22.8		ug/L		91	65 - 135	1	25
1,2,3-Trichlorobenzene	ND		25.0	23.4		ug/L		94	60 - 135	5	20
1,2,4-Trichlorobenzene	ND		25.0	24.9		ug/L		99	65 - 135	6	20
1,1,1-Trichloroethane	ND		25.0	25.4		ug/L		102	65 - 140	2	20
1,1,2-Trichloroethane	ND		25.0	21.0		ug/L		84	65 - 130	2	25
Trichloroethene	15		25.0	41.0		ug/L		106	65 - 125	1	20
Trichlorofluoromethane	27		25.0	51.1		ug/L		96	60 - 145	3	25
1,2,3-Trichloropropane	ND		25.0	20.0		ug/L		80	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	23.8		ug/L		95	55 - 135	5	25
1,3,5-Trimethylbenzene	ND		25.0	26.1		ug/L		105	70 - 130	1	20
Vinyl chloride	ND		25.0	22.7		ug/L		91	45 - 140	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-48736/1-A
Matrix: Water
Analysis Batch: 49017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.060	ug/L		08/29/12 17:31	08/30/12 16:50	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 440-48736/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	74		30 - 120	08/29/12 17:31	08/30/12 16:50	1

Lab Sample ID: LCS 440-48736/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	1.52		ug/L		76	35 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	77		30 - 120

Lab Sample ID: LCSD 440-48736/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48736**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.00	1.29		ug/L		64	35 - 120	16	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Dioxane-d8 (Surr)	65		30 - 120

Lab Sample ID: MB 440-48763/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48763**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.060	ug/L		08/29/12 18:51	08/31/12 00:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	58		30 - 120	08/29/12 18:51	08/31/12 00:07	1

Lab Sample ID: LCS 440-48763/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48763**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	1.26		ug/L		63	35 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	63		30 - 120

Lab Sample ID: LCSD 440-48763/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 49017 — **Prep Batch: 48763**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.00	1.18		ug/L		59	35 - 120	6	25

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 440-48763/3-A
Matrix: Water
Analysis Batch: 49017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48763

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*60*		*30 - 120*

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

GC/MS VOA

Analysis Batch: 49069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21340-1 - DL	OC_EW1_SP110_082212	Total/NA	Water	8260B	
440-21340-1	OC_EW1_SP110_082212	Total/NA	Water	8260B	
440-21340-2	OC_EW2_SP120_082212	Total/NA	Water	8260B	
440-21340-2 - DL	OC_EW2_SP120_082212	Total/NA	Water	8260B	
440-21340-3	OC_EW3_SP130_082212	Total/NA	Water	8260B	
440-21340-3 - DL	OC_EW3_SP130_082212	Total/NA	Water	8260B	
440-21340-4	OC_EW4_SP140_082212	Total/NA	Water	8260B	
440-21340-4 MS	OC_EW4_SP140_082212	Total/NA	Water	8260B	
440-21340-4 MSD	OC_EW4_SP140_082212	Total/NA	Water	8260B	
440-21340-5	OC_EW5_SP150_082212	Total/NA	Water	8260B	
LCS 440-49069/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-49069/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 48736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21340-1	OC_EW1_SP110_082212	Total/NA	Water	3520C	
440-21340-2	OC_EW2_SP120_082212	Total/NA	Water	3520C	
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-48736/1-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 48763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21340-3	OC_EW3_SP130_082212	Total/NA	Water	3520C	
440-21340-4	OC_EW4_SP140_082212	Total/NA	Water	3520C	
440-21340-5	OC_EW5_SP150_082212	Total/NA	Water	3520C	
LCS 440-48763/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-48763/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-48763/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 49017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-21340-1	OC_EW1_SP110_082212	Total/NA	Water	8270C SIM	48736
440-21340-2	OC_EW2_SP120_082212	Total/NA	Water	8270C SIM	48736
440-21340-3	OC_EW3_SP130_082212	Total/NA	Water	8270C SIM	48763
440-21340-4	OC_EW4_SP140_082212	Total/NA	Water	8270C SIM	48763
440-21340-5	OC_EW5_SP150_082212	Total/NA	Water	8270C SIM	48763
LCS 440-48736/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	48736
LCS 440-48763/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	48763
LCSD 440-48736/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	48736
LCSD 440-48763/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	48763
MB 440-48736/1-A	Method Blank	Total/NA	Water	8270C SIM	48736
MB 440-48763/1-A	Method Blank	Total/NA	Water	8270C SIM	48763

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
T	Result is a tentatively identified compound (TIC) and an estimated value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-21340-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-12
USDA	Federal		P330-09-00080	06-06-14

440-21340

TestAmerica
ANALYTICAL TESTING CORPORATION

- [ ] Nashville, TN
- [ ] Orlando, FL
- [ ] Cedar Falls, IA
- [ ] Dayton, OH
- [ ] Watertown, WI
- [ ] Pontiac, MI
- [ ] Indianapolis, IN
- [x] Irvine, CA

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?

Compliance Monitoring? (Yes) No

Enforcement Action? Yes (No)

Client Name/Account #: CDM

Address: CDM / Omega Chemical

City/State/Zip: Irvine, CA 92617

Project Manager: Sharon Wallin

Telephone Number: 949.752.5452 **Fax No.:**

Sampler Name: (Print) Carlton Hamm Jr.

Sampler Signature:

Report To: Sharon Wallin / Elizabeth DeCola

Invoice To: de maximis

TA Quote #:

Project ID: Omega

Project #:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass(Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: VOC (8260B) (including freons)	Analyze For: 1,4 Dioxane (8270M)	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
OC_EW1_SP110_082212	8/22/2012	1058	5	x					x						x						x	x		x		
OC_EW2_SP120_082212	8/22/2012	1107	5	x					x						x						x	x		x		
OC_EW3_SP130_082212	8/22/2012	1117	5	x					x						x						x	x		x		
OC_EW4_SP140_082212	8/22/2012	1149	5	x					x						x						x	x		x		
OC_EW5_SP150_082212	8/22/2012	1130	5	x					x						x						x	x		x		

Special Instructions:

Method of Shipment:

Laboratory Comments:
Temperature Upon Receipt: 4.9°C
VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
	8/22/12	1320		8/22/12	1320
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
	8/22/12	1640	Tim Sodlitton	8/22/12	1640

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-21340-1

Login Number: 21340
List Number: 1
Creator: Perez, Angel

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Carlton Hamm Jr.
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Appendix B.4

SDLAC Analytical Results

Water

Appendix B.4.1

September 12, 2012
Water Analytical Results

OMEGA CHEMICAL SITE PRP ORGANIZED GROUP
1322 Scott Street
Suite 104
San Diego, Ca 92106
(619) 546-8377
(619) 546-9980 FAX
e-mail: edm@demaximis.com

October 15, 2012

Mr. Stephen Maguin
County Sanitation Districts of Los Angeles County
Industrial Waste Section
P.O. Box 4998
Whittier, CA 90607-4998

Subject: Self Monitoring Report -3rd Quarter 2012
Permit Number 020039, Surcharge Account Number 2113183

Dear Mr. Maguin,

This letter has been prepared to submit the 3rd Quarter 2012 Self Monitoring Report (SMR) for the Omega Chemical Site located in Whittier, California.

Feel free to contact me if you need any additional information.

Sincerely,
Omega Chemical Site PRP Organized Group

Edward Modiano
Project Coordinator

LACSD USE ONLY

Lab Report	Signature
Y ☐ N ☐	Y ☐ N ☐
Date Received	Initials

SANITATION DISTRICTS OF LOS ANGELES COUNTY
Grace Robinson Chan, Chief Engineer & General Manager
For Information, please call (562) 699-7411 ext. 2900

Industrial Wastewater Self Monitoring Report

Report due no later than: 10/15/2012

Permit Number
020039
Surcharge Account No.
2113183

1. Name of Company Having Wastewater Discharge: OMEGA CHEMICAL SITE PRP GROUP LLC E

2. Has the Ownership or Occupancy Changed Since the Last Report? ☐ Yes ☒ No

3. Address of Wastewater Discharge: 12520 E WHITTIER BLVD WHITTIER, CA 90602

4. Name of Industrial Wastewater Contact: MR. RAVI SUBRAMANI

5. Phone No.: 949-752-5452 Ext.277

6. Mailing Address (If Different from Above): 1322 SCOTT ST #104 SAN DIEGO CA

7. Sic No. (s): 8999

8. Reporting Period: From: 07/01/2012 To: 09/30/2012

9. (Print) Name of Company Collecting Wastewater Sample: Test America

10. (Print) Sample Date: 9/12/12

11. (Print) Sample Location(s): Omega Chemical

12. Daily Wastewater Discharge For Reporting Period (Gal.)
Average: 20,655
Maximum: 23,683

13. Method For Determining Wastewater Flow for Sampling Day (Z01, Z02)
☒ Direct Measurement
☐ Adjusted Metered Water Supply
☐ No Discharge During Reporting Period

14. Type of Composite Sample
☒ Time Composite
☐ Flow Proportioned Composite

15. NOTE:

Code	Parameter (1)	Sampling Method	Test Results (2)	Lab ID Code (3)
Z01	WASTEWATER FLOW, TOTAL(GPD)	Direct	20,655	10256
Z02	WASTEWATER FLOW,PEAK(GPM)	Direct	16.4	10256
101	PH (UNITS)	GRAB	8.54	10256
151	SUSPENDED SOLIDS (MG/L)	COMPOSITE	<10	10256
252	SOLUBLE SULFIDE (MG/L)	GRAB	<0.1	10256
403	TOTAL COD (MG/L)	COMPOSITE	<20	10256
601	METHYLENE CHLORIDE (UG/L)	GRAB	<5	10256
602	CHLOROFORM (UG/L)	GRAB	<1	10256
603	1,1,1-TRICHLOROETHANE (UG/L)	GRAB	<1	10256
604	CARBON TETRACHLORIDE (UG/L)	GRAB	<0.5	10256
605	1,1-DICHLOROETHENE (UG/L)	GRAB	<1	10256
606	TRICHLOROETHYLENE (UG/L)	GRAB	<1	10256
607	TETRACHLOROETHYLENE (UG/L)	GRAB	<1	10256
608	BROMODICHLOROMETHANE (UG/L)	GRAB	<1	10256
609	DIBROMOCHLOROMETHANE (UG/L)	GRAB	<1	10256
610	BROMOFORM (UG/L)	GRAB	<1	10256
611	CHLOROBENZENE (UG/L)	GRAB	<1	10256

ORIGINAL

(1) Report the test results from the most recent sample collecetd within the reporting period and include all laboratory test sheets with the self-monitoring report form.
(2) Test results are valid only if the correct sampling method is observed and the laboratory analysis is performed by a State or Sanitation Districts' approved laboratory.
(3) Indicate the appropriate laboratory certification I.D. Code for each testing parameter.

CERTIFICATION BY PERMITTEE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of responsible company official: Edward Mariano Date: 10-15-12

Print name of official: Edward Mariano Title: OPOG Project Coordinator

Please submit this report to: Sanitation Districts of Los Angeles County Industrial Waste Section P.O. Box 4998 Whittier, CA 90607

LACSD USE ONLY

Lab Report	Signature
Y ☐ N ☐	Y ☐ N ☐
Date Received	Initials

SANITATION DISTRICTS OF LOS ANGELES COUNTY
Grace Robinson Chan, Chief Engineer & General Manager
For Information, please call (562) 699-7411 ext. 2900

Industrial Wastewater Self Monitoring Report

Report due no later than: 10/15/2012

Permit Number
020039
Surcharge Account No.
2113183

1. Name of Company Having Wastewater Discharge: OMEGA CHEMICAL SITE PRP GROUP LLC E

2. Has the Ownership or Occupancy Changed Since the Last Report? ☐ Yes ☒ No

3. Address of Wastewater Discharge: 12520 E WHITTIER BLVD WHITTIER, CA 90602

4. Name of Industrial Wastewater Contact: MR. RAVI SUBRAMANI

5. Phone No.: 949-752-5452 Ext.277

6. Mailing Address (If Different from Above): 1322 SCOTT ST #104 SAN DIEGO CA

7. Sic No. (s): 8999

8. Reporting Period: From: 07/01/2012 To: 09/30/2012

9. (Print) Name of Company Collecting Wastewater Sample: Test America

10. (Print) Sample Date: 1/12/12

11. (Print) Sample Location(s): OMEGA CHEMICAL

12. Daily Wastewater Discharge For Reporting Period (Gal.)
Average: _____
Maximum: _____

13. Method For Determining Wastewater Flow for Sampling Day (Z01, Z02)
☒ Direct Measurement
☐ Adjusted Metered Water Supply
☐ No Discharge During Reporting Period

14. Type of Composite Sample
☒ Time Composite
☐ Flow Proportioned Composite

15. NOTE:

Code	Parameter (1)	Sampling Method	Test Results (2)	Lab ID Code (3)
612	VINYL CHLORIDE (UG/L)	GRAB	<0.5	10256
613	O-DICHLOROBENZENE(UG/L)	GRAB	<1	10256
614	M-DICHLOROBENZENE(UG/L)	GRAB	<1	10256
615	P-DICHLOROBENZENE(UG/L)	GRAB	<1	10256
616	1,1-DICHLOROETHANE (UG/L)	GRAB	<1	10256
618	1,1,2-TRICHLOROETHANE (UG/L)	GRAB	<1	10256
619	1,2-DICHLOROETHANE (UG/L)	GRAB	<1	10256
620	BENZENE (UG/L)	GRAB	<0.5	10256
621	TOLUENE (UG/L)	GRAB	<1	10256
624	ETHYLBENZENE (UG/L)	GRAB	<1	10256
645	TRANS-1,2-DICHLOROETHYLENE (UG/L)	GRAB	<1	10256
646	BROMOMETHANE (UG/L)	GRAB	<1	10256
647	CHLOROETHANE (UG/L)	GRAB	<1	10256
648	2-CHLOROETHYL VINYL ETHER (UG/L)	GRAB	<2	10256
649	CHLOROMETHANE (UG/L)	GRAB	<1	10256
650	1,2-DICHLOROPROPANE (UG/L)	GRAB	<1	10256
651	CIS-1,3-DICHLOROPROPENE (UG/L)	GRAB	<0.5	10256

(1) Report the test results from the most recent sample collecetd within the reporting period and include all laboratory test sheets with the self-monitoring report form.
(2) Test results are valid only if the correct sampling method is observed and the laboratory analysis is performed by a State or Sanitation Districts' approved laboratory.
(3) Indicate the appropriate laboratory certification I.D. Code for each testing parameter.

CERTIFICATION BY PERMITTEE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of responsible company official: Edward Modiano Date: 10-15-12

Print name of official: Edward Modiano Title: PRPOG Project Coordinator

Please submit this report to: Sanitation Districts of Los Angeles County Industrial Waste Section P.O. Box 4998 Whittier, CA 90607

LACSD USE ONLY

Lab Report	Signature
Y ☐ N ☐	Y ☐ N ☐
Date Received	Initials

SANITATION DISTRICTS OF LOS ANGELES COUNTY
Grace Robinson Chan, Chief Engineer & General Manager
For Information, please call (562) 699-7411 ext. 2900

Industrial Wastewater Self Monitoring Report

Report due no later than: 10/15/2012

Permit Number
020039
Surcharge Account No.
2113183

1. Name of Company Having Wastewater Discharge: OMEGA CHEMICAL SITE PRP GROUP LLC E

2. Has the Ownership or Occupancy Changed Since the Last Report? ☐ Yes ☒ No

3. Address of Wastewater Discharge: 12520 E WHITTIER BLVD WHITTIER, CA 90602

4. Name of Industrial Wastewater Contact: MR. RAVI SUBRAMANI

5. Phone No.: 949-752-5452 Ext.277

6. Mailing Address (If Different from Above): 1322 SCOTT ST #104 SAN DIEGO CA

7. Sic No. (s): 8999

8. Reporting Period: From: 07/01/2012 To: 09/30/2012

9. (Print) Name of Company Collecting Wastewater Sample: Test American

10. (Print) Sample Date: 9/12/12

11. (Print) Sample Location(s): OMEGA chemical

12. Daily Wastewater Discharge For Reporting Period (Gal.)
Average: _____
Maximum: _____

13. Method For Determining Wastewater Flow for Sampling Day (Z01, Z02)
☒ Direct Measurement
☐ Adjusted Metered Water Supply
☐ No Discharge During Reporting Period

14. Type of Composite Sample
☒ Time Composite
☐ Flow Proportioned Composite

15. NOTE:

Code	Parameter (1)	Sampling Method	Test Results (2)	Lab ID Code (3)
652	TRANS-1,3-DICHLOROPROPENE (UG/L)	GRAB	<0.5	10256
653	1,1,2,2-TETRACHLOROETHANE (UG/L)	GRAB	<1	10256
696	1,4-DIOXANE(UG/L)	GRAB	45	10256
800	ACENAPHTHENE (UG/L)	COMP/GRAB	<11	10256
801	ACENAPHTHYLENE (UG/L)	COMP/GRAB	<11	10256
802	ANTHRACENE (UG/L)	COMP/GRAB	<11	10256
803	BENZIDINE (UG/L)	COMP/GRAB	<21	10256
804	1,2-BENZANTHRACENE (UG/L)	COMP/GRAB	<11	10256
805	BENZO(A)PYRENE (UG/L)	COMP/GRAB	<11	10256
806	3,4-BENZOFLUOROANTHENE (UG/L)	COMP/GRAB	<11	10256
807	1,12-BENZOPERYLENE (UG/L)	COMP/GRAB	<11	10256
808	11,12-BENZOFLUORANTHENE (UG/L)	COMP/GRAB	<11	10256
809	BIS(2-CHLOROETHOXY) METHANE (UG/L)	COMP/GRAB	<11	10256
810	BIS(2-CHLOROETHYL) ETHER (UG/L)	COMP/GRAB	<11	10256
811	BIS(2-CHLOROISOPROPYL) ETHER(UG/L)	COMP/GRAB	<11	10256
812	BIS(2-ETHYLHEXYL) PHTHALATE (UG/L)	COMP/GRAB	<53	10256
813	4-BROMOPHENYL PHENYL ETHER (UG/L)	COMP/GRAB	<11	10256

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(3) Indicate the appropriate laboratory certification I.D. Code for each testing parameter.

CERTIFICATION BY PERMITTEE

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Signature of responsible company official: Edward Molina Date: 10-15-12

Print name of official: Edward Molina Title: Project Coordinator

Please submit this report to: Sanitation Districts of Los Angeles County Industrial Waste Section P.O. Box 4998 Whittier, CA 90607

LACSD USE ONLY

Lab Report	Signature
Y ☐ N ☐	Y ☐ N ☐
Date Received	Initials

SANITATION DISTRICTS OF LOS ANGELES COUNTY
Grace Robinson Chan, Chief Engineer & General Manager
For Information, please call (562) 699-7411 ext. 2900

Industrial Wastewater Self Monitoring Report

Report due no later than: 10/15/2012

Permit Number
020039
Surcharge Account No.
2113183

1. Name of Company Having Wastewater Discharge: OMEGA CHEMICAL SITE PRP GROUP LLC E

2. Has the Ownership or Occupancy Changed Since the Last Report? ☐ Yes ☒ No

3. Address of Wastewater Discharge: 12520 E WHITTIER BLVD WHITTIER, CA 90602

4. Name of Industrial Wastewater Contact: MR. RAVI SUBRAMANI

5. Phone No.: 949-752-5452 Ext.277

6. Mailing Address (If Different from Above): 1322 SCOTT ST #104 SAN DIEGO CA

7. Sic No. (s): 8999

8. Reporting Period: From: 07/01/2012 To: 09/30/2012

9. (Print) Name of Company Collecting Wastewater Sample: Test America

10. (Print) Sample Date: 9/12/12

11. (Print) Sample Location(s): omega chemical

12. Daily Wastewater Discharge For Reporting Period (Gal.)
Average: _____
Maximum: _____

13. Method For Determining Wastewater Flow for Sampling Day (Z01, Z02)
☒ Direct Measurement
☐ Adjusted Metered Water Supply
☐ No Discharge During Reporting Period

14. Type of Composite Sample
☒ Time Composite
☐ Flow Proportioned Composite

15. NOTE:

Code	Parameter (1)	Sampling Method	Test Results (2)	Lab ID Code (3)
814	BUTYL BENZYL PHTHALATE (UG/L)	COMP/GRAB	<21	10256
815	2-CHLORONAPHTHALENE(UG/L)	COMP/GRAB	<11	10256
816	4-CHLOROPHENYL PHENYL ETHER (UG/L)	COMP/GRAB	<11	10256
817	CHRYSENE (UG/L)	COMP/GRAB	<11	10256
818	1,2,5,6-DIBENZANTHRACENE (UG/L)	COMP/GRAB	<21	10256
822	3,3-DICHLOROBENZIDINE (UG/L)	COMP/GRAB	<21	10256
823	DIETHYL PHTHALATE (UG/L)	COMP/GRAB	<11	10256
824	DIMETHYL PHTHALATE (UG/L)	COMP/GRAB	<11	10256
825	DI-N-BUTYL PHTHALATE (UG/L)	COMP/GRAB	<21	10256
826	2,4-DINITROTOLUENE (UG/L)	COMP/GRAB	<11	10256
827	2,6-DINITROTOLEUNE (UG/L)	COMP/GRAB	<11	10256
828	DI-N-OCTYL PHTHALATE (UG/L)	COMP/GRAB	<21	10256
829	1,2-DIPHENYLHYDRAZINE (UG/L)	COMP/GRAB	<21	10256
830	FLUORANTHENE (UG/L)	COMP/GRAB	<11	10256
831	FLUORENE (UG/L)	COMP/GRAB	<11	10256
832	HEXACHLOROBENZENE(TOTAL) (UG/L)	COMP/GRAB	<11	10256
833	HEXACHLOROBUTADIENE (UG/L)	COMP/GRAB	<11	10256

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(3) Indicate the appropriate laboratory certification I.D. Code for each testing parameter.

ORIGINAL

CERTIFICATION BY PERMITTEE

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Signature of responsible company official: Edward Modiano Date: 10-15-12

Print name of official: Edward Modiano Title: OPOG Project Coordinator

Please submit this report to: Sanitation Districts of Los Angeles County Industrial Waste Section P.O. Box 4998 Whittier, CA 90607

LACSD USE ONLY

Lab Report	Signature
Y ☐ N ☐	Y ☐ N ☐
Date Received	Initials

SANITATION DISTRICTS OF LOS ANGELES COUNTY
Grace Robinson Chan, Chief Engineer & General Manager
For Information, please call (562) 699-7411 ext. 2900

Industrial Wastewater Self Monitoring Report

Report due no later than: 10/15/2012

Permit Number
020039
Surcharge Account No.
2113183

1. Name of Company Having Wastewater Discharge	2. Has the Ownership or Occupancy Changed Since the Last Report?
OMEGA CHEMICAL SITE PRP GROUP LLC E	☐ Yes ☒ No

3. Address of Wastewater Discharge	4. Name of Industrial Wastewater Contact	5. Phone No.
12520 E WHITTIER BLVD WHITTIER, CA 90602	MR. RAVI SUBRAMANI	949-752-5452 Ext.277

6. Mailing Address (If Different from Above)	7. Sic No. (s)	8. Reporting Period
1322 SCOTT ST #104 SAN DIEGO CA	8999	From: 07/01/2012 To: 09/30/2012

9. (Print) Name of Company Collecting Wastewater Sample	10. (Print) Sample Date	11. (Print) Sample Location(s)
TCSI AMERICA	9/12/12	OMEGA CHEMICAL

12. Daily Wastewater Discharge For Reporting Period (Gal.)	13. Method For Determining Wastewater Flow for Sampling Day (Z01, Z02)	14. Type of Composite Sample
Average:	☒ Direct Measurement	☒ Time Composite
	☐ Adjusted Metered Water Supply	☐ Flow Proportioned Composite
Maximum:	☐ No Discharge During Reporting Period	

15. NOTE:

Code	Parameter (1)	Sampling Method	Test Results (2)	Lab ID Code (3)
834	HEXACHLOROCYCLOPENTADIENE (UG/L)	COMP/GRAB	<21	10256
835	HEXACHLOROETHANE (UG/L)	COMP/GRAB	<11	10256
836	INDENO(1,2,3-C,D)PYRENE (UG/L)	COMP/GRAB	<21	10256
837	ISOPHORONE (UG/L)	COMP/GRAB	<11	10256
838	NAPHTHALENE (UG/L)	COMP/GRAB	<11	10256
839	NITROBENZENE (UG/L)	COMP/GRAB	<21	10256
840	N-NITROSODIMETHYLAMINE (UG/L)	COMP/GRAB	<11	10256
841	N-NITROSODI-N-PROPYLAMINE (UG/L)	COMP/GRAB	<11	10256
842	PHENANTHRENE (UG/L)	COMP/GRAB	<11	10256
843	PYRENE (UG/L)	COMP/GRAB	<11	10256
845	2-CHLOROPHENOL (UG/L)	COMP/GRAB	<11	10256
846	1,2,4-TRICHLOROBENZENE (UG/L)	COMP/GRAB	<1	10256
847	2,4-DICHLOROPHENOL (UG/L)	COMP/GRAB	<11	10256
848	2,4-DIMETHYLPHENOL (UG/L)	COMP/GRAB	<21	10256
849	2,4-DINITROPHENOL (UG/L)	COMP/GRAB	<11	10256
850	2-METHYL-4,6 DINITROPHENOL (UG/L)	COMP/GRAB	<21	10256
851	2-NITROPHENOL (UG/L)	COMP/GRAB	<11	10256

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Signature of responsible company official: Edward Modiano Date: 10-15-12

Print name of official: Edward Modiano Title: OPOG Project Coordinator

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LACSD USE ONLY

Lab Report	Signature
Y ☐ N ☐	Y ☐ N ☐
Date Received	Initials

SANITATION DISTRICTS OF LOS ANGELES COUNTY
Grace Robinson Chan, Chief Engineer & General Manager
For Information, please call (562) 699-7411 ext. 2900

Industrial Wastewater Self Monitoring Report

Report due no later than: 10/15/2012

Permit Number
020039
Surcharge Account No.
2113183

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OMEGA CHEMICAL SITE PRP GROUP LLC E	☐ Yes ☒ No

3. Address of Wastewater Discharge	4. Name of Industrial Wastewater Contact	5. Phone No.
12520 E WHITTIER BLVD WHITTIER, CA 90602	MR. RAVI SUBRAMANI	949-752-5452 Ext.277

6. Mailing Address (If Different from Above)	7. Sic No. (s)	8. Reporting Period
1322 SCOTT ST #104 SAN DIEGO CA	8999	From: 07/01/2012 To: 09/30/2012

9. (Print) Name of Company Collecting Wastewater Sample	10. (Print) Sample Date	11. (Print) Sample Location(s)
Test America	9/12/12	Omega Chemical

12. Daily Wastewater Discharge For Reporting Period (Gal.)	13. Method For Determining Wastewater Flow for Sampling Day (Z01, Z02)	14. Type of Composite Sample
Average:	☒ Direct Measurement	☒ Time Composite
Maximum:	☐ Adjusted Metered Water Supply	☐ Flow Proportioned Composite
	☐ No Discharge During Reporting Period	

15. NOTE:

Code	Parameter (1)	Sampling Method	Test Results (2)	Lab ID Code (3)
852	4-NITROPHENOL (UG/L)	COMP/GRAB	<21	10256
853	4-CHLORO-3-METHYLPHENOL (UG/L)	COMP/GRAB	<21	10256
854	PENTACHLOROPHENOL (UG/L)	COMP/GRAB	<21	10256
855	PHENOL (UG/L)	COMP/GRAB	<11	10256
856	2,4,6-TRICHLOROPHENOL (UG/L)	COMP/GRAB	<21	10256
857	N-NITROSODIPHENYLAMINE (UG/L)	COMP/GRAB	<11	10256

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Print name of official: Edward Modiano Title: OPOG Project Coordinator

Please submit this report to: Sanitation Districts of Los Angeles County Industrial Waste Section P.O. Box 4998 Whittier, CA 90607

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-23161-1
Client Project/Site: Omega Chemical Wastewater
Sampling Event: Quarterly Wastewater

For:
CDM Smith, Inc.
111 Academy, Ste 150
Irvine, California 92617

Attn: Sharon Wallin

Authorized for release by:
9/26/2012 3:48:31 PM

Patty Mata
Project Manager I
patty.mata@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-23161-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-23161-1	Composite	Water	09/12/12 14:12	09/12/12 19:40
440-23161-2	Grab	Water	09/12/12 14:14	09/12/12 19:40

Job ID: 440-23161-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-23161-1

Comments
No additional comments.

Receipt
The samples were received on 9/12/2012 7:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

GC/MS VOA
Method 8260B: The following sample was analyzed almost three hours outside of analytical holding time: Grab (440-23161-2) for 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile. The lab uses unpreserved VOA vials for analysis of 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile due to acid-degradation issues with these compounds. We observe a 7 day hold time for unpreserved VOA vials, but we were unable to meet the 7 day hold time for this sample.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 53187 were outside control limits for 2-Chloroethyl vinyl ether. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C: The grand mean exception, as outlined in EPA Method 8000B, was applied to the continuing calibration verification (CCV) standard associated with batch 53819. This rule states that when one or more compounds in the CCV fail to meet acceptance criteria, the initial calibration (ICAL) may be used for quantitation if the average %D (the grand mean) of all the compounds in the CCV is less than or equal to 15 %D.

Method 8270C: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 53073. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: Due to the level of dilution required for the following sample, 1,4-Dioxane surrogate recoveries do not provide useful information: Grab (440-23161-2).

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample ID: Composite

Lab Sample ID: 440-23161-1

Date Collected: 09/12/12 14:12
Matrix: Water
Date Received: 09/12/12 19:40

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			09/17/12 19:19	1
Chemical Oxygen Demand	ND		20	mg/L			09/21/12 15:03	1

Client Sample ID: Grab

Lab Sample ID: 440-23161-2

Date Collected: 09/12/12 14:14
Matrix: Water
Date Received: 09/12/12 19:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND	H	2.0	ug/L			09/20/12 02:35	1
Acrolein	ND	H	5.0	ug/L			09/20/12 02:35	1
Acetone	ND		10	ug/L			09/22/12 17:45	1
Acrylonitrile	ND	H	2.0	ug/L			09/20/12 02:35	1
Benzene	ND		0.50	ug/L			09/22/12 17:45	1
Bromobenzene	ND		1.0	ug/L			09/22/12 17:45	1
Bromochloromethane	ND		1.0	ug/L			09/22/12 17:45	1
Bromodichloromethane	ND		1.0	ug/L			09/22/12 17:45	1
Bromoform	ND		1.0	ug/L			09/22/12 17:45	1
Bromomethane	ND		1.0	ug/L			09/22/12 17:45	1
Carbon tetrachloride	ND		0.50	ug/L			09/22/12 17:45	1
Chlorobenzene	ND		1.0	ug/L			09/22/12 17:45	1
Chloroethane	ND		1.0	ug/L			09/22/12 17:45	1
Chloroform	ND		1.0	ug/L			09/22/12 17:45	1
Chloromethane	ND		1.0	ug/L			09/22/12 17:45	1
2-Chlorotoluene	ND		1.0	ug/L			09/22/12 17:45	1
4-Chlorotoluene	ND		1.0	ug/L			09/22/12 17:45	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/22/12 17:45	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			09/22/12 17:45	1
Dibromochloromethane	ND		1.0	ug/L			09/22/12 17:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			09/22/12 17:45	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/22/12 17:45	1
Dibromomethane	ND		1.0	ug/L			09/22/12 17:45	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/22/12 17:45	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/22/12 17:45	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/22/12 17:45	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/22/12 17:45	1
1,1-Dichloroethane	ND		1.0	ug/L			09/22/12 17:45	1
1,2-Dichloroethane	ND		1.0	ug/L			09/22/12 17:45	1
1,1-Dichloroethene	ND		1.0	ug/L			09/22/12 17:45	1
1,2-Dichloropropane	ND		1.0	ug/L			09/22/12 17:45	1
1,3-Dichloropropane	ND		1.0	ug/L			09/22/12 17:45	1
2,2-Dichloropropane	ND		1.0	ug/L			09/22/12 17:45	1
1,1-Dichloropropene	ND		1.0	ug/L			09/22/12 17:45	1
Ethylbenzene	ND		1.0	ug/L			09/22/12 17:45	1
Hexachlorobutadiene	ND		1.0	ug/L			09/22/12 17:45	1
Isopropylbenzene	ND		1.0	ug/L			09/22/12 17:45	1
Methylene Chloride	ND		5.0	ug/L			09/22/12 17:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/22/12 17:45	1
m,p-Xylene	ND		1.0	ug/L			09/22/12 17:45	1
Naphthalene	ND		1.0	ug/L			09/22/12 17:45	1
n-Butylbenzene	ND		1.0	ug/L			09/22/12 17:45	1

Client Sample ID: Grab

Lab Sample ID: 440-23161-2

Date Collected: 09/12/12 14:14

Matrix: Water

Date Received: 09/12/12 19:40

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0	ug/L			09/22/12 17:45	1
o-Xylene	ND		1.0	ug/L			09/22/12 17:45	1
p-Isopropyltoluene	ND		1.0	ug/L			09/22/12 17:45	1
sec-Butylbenzene	ND		1.0	ug/L			09/22/12 17:45	1
Styrene	ND		1.0	ug/L			09/22/12 17:45	1
tert-Butylbenzene	ND		1.0	ug/L			09/22/12 17:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/22/12 17:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			09/22/12 17:45	1
Tetrachloroethene	ND		1.0	ug/L			09/22/12 17:45	1
Toluene	ND		1.0	ug/L			09/22/12 17:45	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/22/12 17:45	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			09/22/12 17:45	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/22/12 17:45	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/22/12 17:45	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/22/12 17:45	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/22/12 17:45	1
Trichloroethene	ND		1.0	ug/L			09/22/12 17:45	1
Trichlorofluoromethane	ND		1.0	ug/L			09/22/12 17:45	1
1,2,3-Trichloropropane	ND		1.0	ug/L			09/22/12 17:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/22/12 17:45	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/22/12 17:45	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/22/12 17:45	1
Vinyl chloride	ND		0.50	ug/L			09/22/12 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/22/12 17:45*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/20/12 02:35*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*09/22/12 17:45*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*09/22/12 17:45*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*09/20/12 02:35*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/20/12 02:35*	*1*

Method: 8270C SIM - 1,4 Dioxane by SIM

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**45**		5.4	ug/L		09/17/12 13:46	09/19/12 03:08	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*64*		*30 - 120*	*09/17/12 13:46*	*09/19/12 03:08*	*10*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Acenaphthylene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Aniline	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Anthracene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Benzidine	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Benzo[a]anthracene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Benzo[a]pyrene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Benzo[b]fluoranthene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Benzo[g,h,i]perylene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Benzoic acid	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Benzo[k]fluoranthene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1

Client Sample ID: Grab

Date Collected: 09/12/12 14:14
Date Received: 09/12/12 19:40

Lab Sample ID: 440-23161-2

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl alcohol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Bis(2-chloroethoxy)methane	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Bis(2-chloroethyl)ether	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
bis (2-chloroisopropyl) ether	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Bis(2-ethylhexyl) phthalate	ND		53	ug/L		09/19/12 11:16	09/21/12 18:47	1
4-Bromophenyl phenyl ether	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Butyl benzyl phthalate	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
4-Chloroaniline	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
4-Chloro-3-methylphenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
2-Chloronaphthalene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
2-Chlorophenol	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
4-Chlorophenyl phenyl ether	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Chrysene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Dibenz(a,h)anthracene	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Dibenzofuran	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
1,2-Dichlorobenzene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
1,3-Dichlorobenzene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
1,4-Dichlorobenzene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
3,3'-Dichlorobenzidine	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
2,4-Dichlorophenol	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Diethyl phthalate	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
2,4-Dimethylphenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Dimethyl phthalate	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Di-n-butyl phthalate	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
4,6-Dinitro-2-methylphenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
2,4-Dinitrophenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
2,4-Dinitrotoluene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
2,6-Dinitrotoluene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Di-n-octyl phthalate	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Fluoranthene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Fluorene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Hexachlorobenzene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Hexachlorobutadiene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Hexachlorocyclopentadiene	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Hexachloroethane	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Indeno[1,2,3-cd]pyrene	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Isophorone	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
2-Methylnaphthalene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
2-Methylphenol	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
4-Methylphenol	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Naphthalene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
2-Nitroaniline	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
3-Nitroaniline	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
4-Nitroaniline	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Nitrobenzene	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
2-Nitrophenol	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
4-Nitrophenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
N-Nitrosodi-n-propylamine	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
N-Nitrosodiphenylamine	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-23161-1

Client Sample ID: Grab
Date Collected: 09/12/12 14:14
Date Received: 09/12/12 19:40

Lab Sample ID: 440-23161-2
Matrix: Water

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Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
Phenanthrene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Phenol	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
Pyrene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
1,2,4-Trichlorobenzene	ND		11	ug/L		09/19/12 11:16	09/21/12 18:47	1
2,4,5-Trichlorophenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1
2,4,6-Trichlorophenol	ND		21	ug/L		09/19/12 11:16	09/21/12 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*50 - 120*	*09/19/12 11:16*	*09/21/12 18:47*	*1*
2-Fluorophenol (Surr)	*69*		*30 - 120*	*09/19/12 11:16*	*09/21/12 18:47*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*40 - 120*	*09/19/12 11:16*	*09/21/12 18:47*	*1*
Nitrobenzene-d5 (Surr)	*89*		*45 - 120*	*09/19/12 11:16*	*09/21/12 18:47*	*1*
Terphenyl-d14 (Surr)	*73*		*50 - 125*	*09/19/12 11:16*	*09/21/12 18:47*	*1*
Phenol-d6 (Surr)	*80*		*35 - 120*	*09/19/12 11:16*	*09/21/12 18:47*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.54	HF	0.100	SU			09/18/12 17:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved	ND	HF	0.10	mg/L		09/13/12 14:01	09/13/12 16:51	1

Lab Chronicle

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-23161-1

Client Sample ID: Composite

Lab Sample ID: 440-23161-1

Date Collected: 09/12/12 14:12
Matrix: Water
Date Received: 09/12/12 19:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		1	100 mL	100 mL	52638	09/17/12 19:19	DK	TAL IRV
Total/NA	Analysis	SM 5220D		1	2.5 mL	2.5 mL	53790	09/21/12 15:03	KYP	TAL IRV

Client Sample ID: Grab

Lab Sample ID: 440-23161-2

Date Collected: 09/12/12 14:14
Matrix: Water
Date Received: 09/12/12 19:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	53187	09/20/12 02:35	NA	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	53913	09/22/12 17:45	AL	TAL IRV
Total/NA	Prep	3520C			930 mL	1 mL	52524	09/17/12 13:46	DM	TAL IRV
Total/NA	Analysis	8270C SIM		10			52956	09/19/12 03:08	CP	TAL IRV
Total/NA	Prep	3520C			950 mL	2 mL	53073	09/19/12 11:16	AG	TAL IRV
Total/NA	Analysis	8270C		1			53819	09/21/12 18:47	DF	TAL IRV
Dissolved	Prep	SM 4500 S2 B			40 mL	40 mL	51806	09/13/12 14:01	NC	TAL IRV
Dissolved	Analysis	SM 4500 S2 D		1			51859	09/13/12 16:51	NC	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1			52895	09/18/12 17:29	EC	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-53187/11 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 53187

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND		2.0	ug/L			09/20/12 00:15	1
Acrolein	ND		5.0	ug/L			09/20/12 00:15	1
Acrylonitrile	ND		2.0	ug/L			09/20/12 00:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/20/12 00:15*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*09/20/12 00:15*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*09/20/12 00:15*	*1*

Lab Sample ID: LCS 440-53187/12 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 53187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	26.6		ug/L		106	25 - 170

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*113*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-22824-B-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 53187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	ND		50.0	ND	F	ug/L		0	25 - 170

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-22824-B-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 53187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloroethyl vinyl ether	ND		50.0	ND	F	ug/L		0	25 - 170	NC	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-53913/4
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			09/22/12 09:16	1
Benzene	ND		0.50	ug/L			09/22/12 09:16	1
Bromobenzene	ND		1.0	ug/L			09/22/12 09:16	1
Bromochloromethane	ND		1.0	ug/L			09/22/12 09:16	1
Bromodichloromethane	ND		1.0	ug/L			09/22/12 09:16	1
Bromoform	ND		1.0	ug/L			09/22/12 09:16	1
Bromomethane	ND		1.0	ug/L			09/22/12 09:16	1
Carbon tetrachloride	ND		0.50	ug/L			09/22/12 09:16	1
Chlorobenzene	ND		1.0	ug/L			09/22/12 09:16	1
Chloroethane	ND		1.0	ug/L			09/22/12 09:16	1
Chloroform	ND		1.0	ug/L			09/22/12 09:16	1
Chloromethane	ND		1.0	ug/L			09/22/12 09:16	1
2-Chlorotoluene	ND		1.0	ug/L			09/22/12 09:16	1
4-Chlorotoluene	ND		1.0	ug/L			09/22/12 09:16	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			09/22/12 09:16	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			09/22/12 09:16	1
Dibromochloromethane	ND		1.0	ug/L			09/22/12 09:16	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			09/22/12 09:16	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			09/22/12 09:16	1
Dibromomethane	ND		1.0	ug/L			09/22/12 09:16	1
1,2-Dichlorobenzene	ND		1.0	ug/L			09/22/12 09:16	1
1,3-Dichlorobenzene	ND		1.0	ug/L			09/22/12 09:16	1
1,4-Dichlorobenzene	ND		1.0	ug/L			09/22/12 09:16	1
Dichlorodifluoromethane	ND		1.0	ug/L			09/22/12 09:16	1
1,1-Dichloroethane	ND		1.0	ug/L			09/22/12 09:16	1
1,2-Dichloroethane	ND		1.0	ug/L			09/22/12 09:16	1
1,1-Dichloroethene	ND		1.0	ug/L			09/22/12 09:16	1
1,2-Dichloropropane	ND		1.0	ug/L			09/22/12 09:16	1
1,3-Dichloropropane	ND		1.0	ug/L			09/22/12 09:16	1
2,2-Dichloropropane	ND		1.0	ug/L			09/22/12 09:16	1
1,1-Dichloropropene	ND		1.0	ug/L			09/22/12 09:16	1
Ethylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
Hexachlorobutadiene	ND		1.0	ug/L			09/22/12 09:16	1
Isopropylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
Methylene Chloride	ND		5.0	ug/L			09/22/12 09:16	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			09/22/12 09:16	1
m,p-Xylene	ND		1.0	ug/L			09/22/12 09:16	1
Naphthalene	ND		1.0	ug/L			09/22/12 09:16	1
n-Butylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
N-Propylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
o-Xylene	ND		1.0	ug/L			09/22/12 09:16	1
p-Isopropyltoluene	ND		1.0	ug/L			09/22/12 09:16	1
sec-Butylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
Styrene	ND		1.0	ug/L			09/22/12 09:16	1
tert-Butylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			09/22/12 09:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			09/22/12 09:16	1
Tetrachloroethene	ND		1.0	ug/L			09/22/12 09:16	1
Toluene	ND		1.0	ug/L			09/22/12 09:16	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-53913/4
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	ug/L			09/22/12 09:16	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			09/22/12 09:16	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			09/22/12 09:16	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			09/22/12 09:16	1
1,1,1-Trichloroethane	ND		1.0	ug/L			09/22/12 09:16	1
1,1,2-Trichloroethane	ND		1.0	ug/L			09/22/12 09:16	1
Trichloroethene	ND		1.0	ug/L			09/22/12 09:16	1
Trichlorofluoromethane	ND		1.0	ug/L			09/22/12 09:16	1
1,2,3-Trichloropropane	ND		1.0	ug/L			09/22/12 09:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			09/22/12 09:16	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			09/22/12 09:16	1
Vinyl chloride	ND		0.50	ug/L			09/22/12 09:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*09/22/12 09:16*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*09/22/12 09:16*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*09/22/12 09:16*	*1*

Lab Sample ID: LCS 440-53913/5
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	25.0	23.3		ug/L		93	30 - 140
Benzene	25.0	25.3		ug/L		101	70 - 120
Bromobenzene	25.0	25.8		ug/L		103	75 - 120
Bromochloromethane	25.0	25.2		ug/L		101	70 - 130
Bromodichloromethane	25.0	26.6		ug/L		106	70 - 135
Bromoform	25.0	28.1		ug/L		112	55 - 130
Bromomethane	25.0	27.3		ug/L		109	65 - 140
Carbon tetrachloride	25.0	26.2		ug/L		105	65 - 140
Chlorobenzene	25.0	23.2		ug/L		93	75 - 120
Chloroethane	25.0	23.9		ug/L		96	60 - 140
Chloroform	25.0	25.6		ug/L		102	70 - 130
Chloromethane	25.0	27.0		ug/L		108	50 - 140
2-Chlorotoluene	25.0	26.8		ug/L		107	70 - 125
4-Chlorotoluene	25.0	27.3		ug/L		109	75 - 125
cis-1,2-Dichloroethene	25.0	27.5		ug/L		110	70 - 125
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	75 - 125
Dibromochloromethane	25.0	27.0		ug/L		108	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	23.2		ug/L		93	50 - 135
1,2-Dibromoethane (EDB)	25.0	26.8		ug/L		107	75 - 125
Dibromomethane	25.0	25.3		ug/L		101	70 - 125
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	75 - 120
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	75 - 120
1,4-Dichlorobenzene	25.0	24.2		ug/L		97	75 - 120
Dichlorodifluoromethane	25.0	29.5		ug/L		118	35 - 155
1,1-Dichloroethane	25.0	24.6		ug/L		98	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-53913/5
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	25.0	25.4		ug/L		102	60 - 140
1,1-Dichloroethene	25.0	24.3		ug/L		97	70 - 125
1,2-Dichloropropane	25.0	24.1		ug/L		96	70 - 125
1,3-Dichloropropane	25.0	25.0		ug/L		100	70 - 120
2,2-Dichloropropane	25.0	28.9		ug/L		116	65 - 140
1,1-Dichloropropene	25.0	23.9		ug/L		96	75 - 130
Ethylbenzene	25.0	26.4		ug/L		106	75 - 125
Hexachlorobutadiene	25.0	20.4		ug/L		82	65 - 135
Isopropylbenzene	25.0	27.2		ug/L		109	75 - 130
Methylene Chloride	25.0	23.3		ug/L		93	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	27.2		ug/L		109	60 - 135
m,p-Xylene	50.0	53.7		ug/L		107	75 - 125
Naphthalene	25.0	19.4		ug/L		78	55 - 135
n-Butylbenzene	25.0	24.3		ug/L		97	70 - 130
N-Propylbenzene	25.0	28.2		ug/L		113	75 - 130
o-Xylene	25.0	26.5		ug/L		106	75 - 125
p-Isopropyltoluene	25.0	26.6		ug/L		107	75 - 125
sec-Butylbenzene	25.0	25.5		ug/L		102	70 - 125
Styrene	25.0	26.0		ug/L		104	75 - 130
tert-Butylbenzene	25.0	26.1		ug/L		105	70 - 125
1,1,1,2-Tetrachloroethane	25.0	25.4		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		103	55 - 130
Tetrachloroethene	25.0	23.6		ug/L		94	70 - 125
Toluene	25.0	26.9		ug/L		107	70 - 120
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	70 - 125
trans-1,3-Dichloropropene	25.0	27.7		ug/L		111	70 - 125
1,2,3-Trichlorobenzene	25.0	21.1		ug/L		84	65 - 125
1,2,4-Trichlorobenzene	25.0	22.3		ug/L		89	70 - 135
1,1,1-Trichloroethane	25.0	25.5		ug/L		102	65 - 135
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 125
Trichloroethene	25.0	25.0		ug/L		100	70 - 125
Trichlorofluoromethane	25.0	29.1		ug/L		116	65 - 145
1,2,3-Trichloropropane	25.0	24.5		ug/L		98	60 - 130
1,2,4-Trimethylbenzene	25.0	28.0		ug/L		112	75 - 125
1,3,5-Trimethylbenzene	25.0	26.7		ug/L		107	75 - 125
Vinyl chloride	25.0	26.8		ug/L		107	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*80 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

Lab Sample ID: 440-23330-A-3 MS
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	78.3	F	ug/L		313	20 - 150
Benzene	41		25.0	64.8		ug/L		96	65 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-23330-A-3 MS
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	ND		25.0	26.8		ug/L		107	70 - 125
Bromochloromethane	ND		25.0	25.2		ug/L		101	65 - 135
Bromodichloromethane	ND		25.0	27.7		ug/L		111	70 - 135
Bromoform	ND		25.0	29.6		ug/L		118	55 - 135
Bromomethane	ND		25.0	23.5		ug/L		94	55 - 145
Carbon tetrachloride	ND		25.0	25.5		ug/L		102	65 - 140
Chlorobenzene	ND		25.0	24.3		ug/L		97	75 - 125
Chloroethane	ND		25.0	23.9		ug/L		95	55 - 140
Chloroform	ND		25.0	25.9		ug/L		104	65 - 135
Chloromethane	ND		25.0	23.3		ug/L		93	45 - 145
2-Chlorotoluene	ND		25.0	27.7		ug/L		111	65 - 135
4-Chlorotoluene	ND		25.0	27.9		ug/L		112	70 - 135
cis-1,2-Dichloroethene	ND		25.0	28.5		ug/L		112	65 - 130
cis-1,3-Dichloropropene	ND		25.0	28.7		ug/L		115	70 - 130
Dibromochloromethane	ND		25.0	28.1		ug/L		112	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	29.3		ug/L		117	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	28.9		ug/L		115	70 - 130
Dibromomethane	ND		25.0	26.8		ug/L		107	65 - 135
1,2-Dichlorobenzene	ND		25.0	27.4		ug/L		109	75 - 125
1,3-Dichlorobenzene	ND		25.0	26.9		ug/L		107	75 - 125
1,4-Dichlorobenzene	ND		25.0	25.0		ug/L		100	75 - 125
Dichlorodifluoromethane	ND		25.0	28.1		ug/L		113	25 - 155
1,1-Dichloroethane	ND		25.0	24.9		ug/L		100	65 - 130
1,2-Dichloroethane	ND		25.0	26.4		ug/L		106	60 - 140
1,1-Dichloroethene	ND		25.0	25.2		ug/L		101	60 - 130
1,2-Dichloropropane	ND		25.0	24.8		ug/L		99	65 - 130
1,3-Dichloropropane	ND		25.0	25.8		ug/L		103	65 - 135
2,2-Dichloropropane	ND		25.0	27.1		ug/L		108	60 - 145
1,1-Dichloropropene	ND		25.0	24.3		ug/L		97	70 - 135
Ethylbenzene	14		25.0	40.6		ug/L		107	65 - 130
Hexachlorobutadiene	ND		25.0	21.4		ug/L		86	60 - 135
Isopropylbenzene	2.9		25.0	31.3		ug/L		113	70 - 135
Methylene Chloride	ND		25.0	22.8		ug/L		91	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	29.1		ug/L		117	55 - 145
m,p-Xylene	9.7		50.0	65.6		ug/L		112	65 - 130
Naphthalene	5.2		25.0	29.5		ug/L		97	50 - 140
n-Butylbenzene	ND		25.0	26.5		ug/L		104	65 - 135
N-Propylbenzene	2.5		25.0	32.2		ug/L		119	70 - 135
o-Xylene	9.6		25.0	36.7		ug/L		109	65 - 125
p-Isopropyltoluene	ND		25.0	27.7		ug/L		111	65 - 130
sec-Butylbenzene	ND		25.0	26.3		ug/L		103	70 - 125
Styrene	ND		25.0	28.0		ug/L		112	50 - 145
tert-Butylbenzene	ND		25.0	27.5		ug/L		109	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	26.2		ug/L		105	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	27.0		ug/L		108	55 - 135
Tetrachloroethene	ND		25.0	24.0		ug/L		96	65 - 130
Toluene	8.7		25.0	36.3		ug/L		110	70 - 125
trans-1,2-Dichloroethene	ND		25.0	26.3		ug/L		105	65 - 130
trans-1,3-Dichloropropene	ND		25.0	29.4		ug/L		118	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	24.2		ug/L		97	60 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-23330-A-3 MS
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	ND		25.0	25.2		ug/L		101	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.1		ug/L		101	65 - 140
1,1,2-Trichloroethane	ND		25.0	26.0		ug/L		104	65 - 130
Trichloroethene	ND		25.0	25.5		ug/L		102	65 - 125
Trichlorofluoromethane	ND		25.0	28.4		ug/L		114	60 - 145
1,2,3-Trichloropropane	ND		25.0	26.3		ug/L		105	55 - 135
1,2,4-Trimethylbenzene	5.2		25.0	34.4		ug/L		117	55 - 135
1,3,5-Trimethylbenzene	1.2		25.0	28.7		ug/L		110	70 - 130
Vinyl chloride	ND		25.0	24.6		ug/L		98	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-23330-A-3 MSD
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	77.6	F	ug/L		310	20 - 150	1	35
Benzene	41		25.0	63.2		ug/L		90	65 - 125	2	20
Bromobenzene	ND		25.0	26.7		ug/L		107	70 - 125	0	20
Bromochloromethane	ND		25.0	25.0		ug/L		100	65 - 135	1	25
Bromodichloromethane	ND		25.0	26.9		ug/L		108	70 - 135	3	20
Bromoform	ND		25.0	29.7		ug/L		119	55 - 135	0	25
Bromomethane	ND		25.0	22.7		ug/L		91	55 - 145	4	25
Carbon tetrachloride	ND		25.0	25.0		ug/L		100	65 - 140	2	25
Chlorobenzene	ND		25.0	24.6		ug/L		98	75 - 125	1	20
Chloroethane	ND		25.0	22.9		ug/L		92	55 - 140	4	25
Chloroform	ND		25.0	24.8		ug/L		99	65 - 135	4	20
Chloromethane	ND		25.0	23.4		ug/L		94	45 - 145	1	25
2-Chlorotoluene	ND		25.0	28.0		ug/L		112	65 - 135	1	20
4-Chlorotoluene	ND		25.0	28.1		ug/L		112	70 - 135	1	20
cis-1,2-Dichloroethene	ND		25.0	27.2		ug/L		108	65 - 130	4	20
cis-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	70 - 130	5	20
Dibromochloromethane	ND		25.0	28.4		ug/L		114	65 - 140	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	28.1		ug/L		112	45 - 145	4	30
1,2-Dibromoethane (EDB)	ND		25.0	28.8		ug/L		115	70 - 130	0	25
Dibromomethane	ND		25.0	26.6		ug/L		106	65 - 135	1	25
1,2-Dichlorobenzene	ND		25.0	26.6		ug/L		106	75 - 125	3	20
1,3-Dichlorobenzene	ND		25.0	26.6		ug/L		106	75 - 125	1	20
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	75 - 125	1	20
Dichlorodifluoromethane	ND		25.0	25.9		ug/L		104	25 - 155	8	30
1,1-Dichloroethane	ND		25.0	24.5		ug/L		98	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	25.5		ug/L		102	60 - 140	3	20
1,1-Dichloroethene	ND		25.0	25.2		ug/L		101	60 - 130	0	20
1,2-Dichloropropane	ND		25.0	24.8		ug/L		99	65 - 130	0	20
1,3-Dichloropropane	ND		25.0	26.1		ug/L		104	65 - 135	1	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-23330-A-3 MSD
Matrix: Water
Analysis Batch: 53913

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,2-Dichloropropane	ND		25.0	29.2		ug/L		117	60 - 145	8	25
1,1-Dichloropropene	ND		25.0	24.6		ug/L		98	70 - 135	1	20
Ethylbenzene	14		25.0	41.0		ug/L		109	65 - 130	1	20
Hexachlorobutadiene	ND		25.0	20.6		ug/L		82	60 - 135	4	20
Isopropylbenzene	2.9		25.0	31.2		ug/L		113	70 - 135	0	20
Methylene Chloride	ND		25.0	22.6		ug/L		90	50 - 135	1	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	29.2		ug/L		117	55 - 145	0	25
m,p-Xylene	9.7		50.0	65.9		ug/L		112	65 - 130	0	25
Naphthalene	5.2		25.0	30.2		ug/L		100	50 - 140	2	30
n-Butylbenzene	ND		25.0	26.6		ug/L		104	65 - 135	1	20
N-Propylbenzene	2.5		25.0	31.8		ug/L		118	70 - 135	1	20
o-Xylene	9.6		25.0	37.7		ug/L		112	65 - 125	3	20
p-Isopropyltoluene	ND		25.0	27.5		ug/L		110	65 - 130	1	20
sec-Butylbenzene	ND		25.0	26.6		ug/L		104	70 - 125	1	20
Styrene	ND		25.0	28.7		ug/L		115	50 - 145	2	30
tert-Butylbenzene	ND		25.0	26.8		ug/L		106	65 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	26.0		ug/L		104	65 - 140	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	27.7		ug/L		111	55 - 135	3	30
Tetrachloroethene	ND		25.0	24.8		ug/L		99	65 - 130	3	20
Toluene	8.7		25.0	35.2		ug/L		106	70 - 125	3	20
trans-1,2-Dichloroethene	ND		25.0	26.4		ug/L		106	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	29.0		ug/L		116	65 - 135	2	25
1,2,3-Trichlorobenzene	ND		25.0	23.7		ug/L		95	60 - 135	2	20
1,2,4-Trichlorobenzene	ND		25.0	26.5		ug/L		106	65 - 135	5	20
1,1,1-Trichloroethane	ND		25.0	25.0		ug/L		100	65 - 140	0	20
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	65 - 130	1	25
Trichloroethene	ND		25.0	24.6		ug/L		99	65 - 125	3	20
Trichlorofluoromethane	ND		25.0	28.5		ug/L		114	60 - 145	0	25
1,2,3-Trichloropropane	ND		25.0	25.8		ug/L		103	55 - 135	2	30
1,2,4-Trimethylbenzene	5.2		25.0	33.7		ug/L		114	55 - 135	2	25
1,3,5-Trimethylbenzene	1.2		25.0	28.6		ug/L		110	70 - 130	0	20
Vinyl chloride	ND		25.0	24.1		ug/L		97	45 - 140	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-53073/1-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53073

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Acenaphthylene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Aniline	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Anthracene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-53073/1-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53073

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Benzo[a]anthracene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Benzo[a]pyrene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Benzo[b]fluoranthene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Benzo[g,h,i]perylene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Benzoic acid	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Benzo[k]fluoranthene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Benzyl alcohol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Bis(2-chloroethoxy)methane	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Bis(2-chloroethyl)ether	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
bis (2-chloroisopropyl) ether	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Bis(2-ethylhexyl) phthalate	ND		50	ug/L		09/19/12 11:16	09/21/12 17:16	1
4-Bromophenyl phenyl ether	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Butyl benzyl phthalate	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
4-Chloroaniline	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
4-Chloro-3-methylphenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
2-Chloronaphthalene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
2-Chlorophenol	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
4-Chlorophenyl phenyl ether	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Chrysene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Dibenz(a,h)anthracene	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Dibenzofuran	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
1,2-Dichlorobenzene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
1,3-Dichlorobenzene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
1,4-Dichlorobenzene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
3,3'-Dichlorobenzidine	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
2,4-Dichlorophenol	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Diethyl phthalate	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
2,4-Dimethylphenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Dimethyl phthalate	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Di-n-butyl phthalate	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
4,6-Dinitro-2-methylphenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
2,4-Dinitrophenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
2,4-Dinitrotoluene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
2,6-Dinitrotoluene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Di-n-octyl phthalate	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Fluoranthene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Fluorene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Hexachlorobenzene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Hexachlorobutadiene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Hexachlorocyclopentadiene	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Hexachloroethane	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Indeno[1,2,3-cd]pyrene	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Isophorone	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
2-Methylnaphthalene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
2-Methylphenol	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
4-Methylphenol	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Naphthalene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-53073/1-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53073

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
3-Nitroaniline	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
4-Nitroaniline	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Nitrobenzene	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
2-Nitrophenol	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
4-Nitrophenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
N-Nitrosodi-n-propylamine	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
N-Nitrosodiphenylamine	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Pentachlorophenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
Phenanthrene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Phenol	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
Pyrene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
1,2,4-Trichlorobenzene	ND		10	ug/L		09/19/12 11:16	09/21/12 17:16	1
2,4,5-Trichlorophenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1
2,4,6-Trichlorophenol	ND		20	ug/L		09/19/12 11:16	09/21/12 17:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*50 - 120*	*09/19/12 11:16*	*09/21/12 17:16*	*1*
2-Fluorophenol (Surr)	*65*		*30 - 120*	*09/19/12 11:16*	*09/21/12 17:16*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*40 - 120*	*09/19/12 11:16*	*09/21/12 17:16*	*1*
Nitrobenzene-d5 (Surr)	*84*		*45 - 120*	*09/19/12 11:16*	*09/21/12 17:16*	*1*
Terphenyl-d14 (Surr)	*84*		*50 - 125*	*09/19/12 11:16*	*09/21/12 17:16*	*1*
Phenol-d6 (Surr)	*63*		*35 - 120*	*09/19/12 11:16*	*09/21/12 17:16*	*1*

Lab Sample ID: LCS 440-53073/2-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	100	82.9		ug/L		83	60 - 120
Acenaphthylene	100	84.4		ug/L		84	60 - 120
Aniline	100	66.3		ug/L		66	35 - 120
Anthracene	100	92.9		ug/L		93	65 - 120
Benzidine	100	80.2		ug/L		80	30 - 160
Benzo[a]anthracene	100	85.5		ug/L		86	65 - 120
Benzo[a]pyrene	100	87.9		ug/L		88	55 - 130
Benzo[b]fluoranthene	100	83.4		ug/L		83	55 - 125
Benzo[g,h,i]perylene	100	92.7		ug/L		93	45 - 135
Benzoic acid	100	61.8		ug/L		62	25 - 120
Benzo[k]fluoranthene	100	95.6		ug/L		96	50 - 125
Benzyl alcohol	100	81.5		ug/L		82	50 - 120
Bis(2-chloroethoxy)methane	100	83.3		ug/L		83	55 - 120
Bis(2-chloroethyl)ether	100	81.8		ug/L		82	50 - 120
bis (2-chloroisopropyl) ether	100	102		ug/L		102	45 - 120
Bis(2-ethylhexyl) phthalate	100	80.6		ug/L		81	65 - 130
4-Bromophenyl phenyl ether	100	84.3		ug/L		84	60 - 120
Butyl benzyl phthalate	100	77.7		ug/L		78	55 - 130
4-Chloroaniline	100	80.1		ug/L		80	55 - 120
4-Chloro-3-methylphenol	100	85.1		ug/L		85	60 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-53073/2-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	100	75.2		ug/L		75	60 - 120
2-Chlorophenol	100	72.3		ug/L		72	45 - 120
4-Chlorophenyl phenyl ether	100	87.1		ug/L		87	65 - 120
Chrysene	100	82.8		ug/L		83	65 - 120
Dibenz(a,h)anthracene	100	90.2		ug/L		90	50 - 135
Dibenzofuran	100	86.1		ug/L		86	65 - 120
1,2-Dichlorobenzene	100	62.7		ug/L		63	40 - 120
1,3-Dichlorobenzene	100	59.5		ug/L		60	35 - 120
1,4-Dichlorobenzene	100	62.1		ug/L		62	35 - 120
3,3'-Dichlorobenzidine	100	65.7		ug/L		66	45 - 135
2,4-Dichlorophenol	100	73.2		ug/L		73	55 - 120
Diethyl phthalate	100	93.0		ug/L		93	55 - 120
2,4-Dimethylphenol	100	69.7		ug/L		70	40 - 120
Dimethyl phthalate	100	84.1		ug/L		84	30 - 120
Di-n-butyl phthalate	100	94.2		ug/L		94	60 - 125
4,6-Dinitro-2-methylphenol	100	88.8		ug/L		89	45 - 120
2,4-Dinitrophenol	100	91.3		ug/L		91	40 - 120
2,4-Dinitrotoluene	100	93.3		ug/L		93	65 - 120
2,6-Dinitrotoluene	100	81.6		ug/L		82	65 - 120
Di-n-octyl phthalate	100	80.4		ug/L		80	65 - 135
1,2-Diphenylhydrazine(as Azobenzene)	100	97.5		ug/L		97	60 - 120
Fluoranthene	100	101		ug/L		101	60 - 120
Fluorene	100	90.7		ug/L		91	65 - 120
Hexachlorobenzene	100	77.7		ug/L		78	60 - 120
Hexachlorobutadiene	100	50.3		ug/L		50	40 - 120
Hexachlorocyclopentadiene	100	46.8		ug/L		47	25 - 120
Hexachloroethane	100	53.9		ug/L		54	35 - 120
Indeno[1,2,3-cd]pyrene	100	97.0		ug/L		97	45 - 135
Isophorone	100	91.8		ug/L		92	50 - 120
2-Methylnaphthalene	100	79.5		ug/L		80	55 - 120
2-Methylphenol	100	79.9		ug/L		80	50 - 120
4-Methylphenol	100	80.3		ug/L		80	50 - 120
Naphthalene	100	74.7		ug/L		75	55 - 120
2-Nitroaniline	100	103		ug/L		103	65 - 120
3-Nitroaniline	100	94.3		ug/L		94	60 - 120
4-Nitroaniline	100	103		ug/L		103	55 - 125
Nitrobenzene	100	86.8		ug/L		87	55 - 120
2-Nitrophenol	100	71.4		ug/L		71	50 - 120
4-Nitrophenol	100	93.8		ug/L		94	45 - 120
N-Nitrosodi-n-propylamine	100	105		ug/L		105	45 - 120
N-Nitrosodiphenylamine	100	78.6		ug/L		79	60 - 120
Pentachlorophenol	100	81.7		ug/L		82	24 - 121
Phenanthrene	100	93.5		ug/L		93	65 - 120
Phenol	100	68.7		ug/L		69	40 - 120
Pyrene	100	82.5		ug/L		82	55 - 125
1,2,4-Trichlorobenzene	100	60.8		ug/L		61	45 - 120
2,4,5-Trichlorophenol	100	79.6		ug/L		80	55 - 120
2,4,6-Trichlorophenol	100	76.9		ug/L		77	55 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-53073/2-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53073

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*50 - 120*
2-Fluorophenol (Surr)	*66*		*30 - 120*
2,4,6-Tribromophenol (Surr)	*81*		*40 - 120*
Nitrobenzene-d5 (Surr)	*88*		*45 - 120*
Terphenyl-d14 (Surr)	*80*		*50 - 125*
Phenol-d6 (Surr)	*80*		*35 - 120*

Lab Sample ID: LCSD 440-53073/3-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 53073

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene			100	81.9		ug/L		82	60 - 120	1	20
Acenaphthylene			100	83.5		ug/L		84	60 - 120	1	20
Aniline			100	66.5		ug/L		67	35 - 120	0	30
Anthracene			100	90.0		ug/L		90	65 - 120	3	20
Benzidine			100	78.9		ug/L		79	30 - 160	2	35
Benzo[a]anthracene			100	86.4		ug/L		86	65 - 120	1	20
Benzo[a]pyrene			100	86.4		ug/L		86	55 - 130	2	25
Benzo[b]fluoranthene			100	82.9		ug/L		83	55 - 125	1	25
Benzo[g,h,i]perylene			100	91.3		ug/L		91	45 - 135	2	25
Benzoic acid			100	52.0		ug/L		52	25 - 120	17	30
Benzo[k]fluoranthene			100	91.8		ug/L		92	50 - 125	4	20
Benzyl alcohol			100	75.1		ug/L		75	50 - 120	8	20
Bis(2-chloroethoxy)methane			100	77.7		ug/L		78	55 - 120	7	20
Bis(2-chloroethyl)ether			100	74.6		ug/L		75	50 - 120	9	20
bis (2-chloroisopropyl) ether			100	96.4		ug/L		96	45 - 120	6	20
Bis(2-ethylhexyl) phthalate			100	83.5		ug/L		84	65 - 130	4	20
4-Bromophenyl phenyl ether			100	85.5		ug/L		86	60 - 120	1	25
Butyl benzyl phthalate			100	78.0		ug/L		78	55 - 130	0	20
4-Chloroaniline			100	74.6		ug/L		75	55 - 120	7	25
4-Chloro-3-methylphenol			100	77.2		ug/L		77	60 - 120	10	25
2-Chloronaphthalene			100	75.0		ug/L		75	60 - 120	0	20
2-Chlorophenol			100	66.6		ug/L		67	45 - 120	8	25
4-Chlorophenyl phenyl ether			100	83.8		ug/L		84	65 - 120	4	20
Chrysene			100	85.5		ug/L		86	65 - 120	3	20
Dibenz(a,h)anthracene			100	88.1		ug/L		88	50 - 135	2	25
Dibenzofuran			100	85.4		ug/L		85	65 - 120	1	20
1,2-Dichlorobenzene			100	62.2		ug/L		62	40 - 120	1	25
1,3-Dichlorobenzene			100	60.6		ug/L		61	35 - 120	2	25
1,4-Dichlorobenzene			100	61.1		ug/L		61	35 - 120	2	25
3,3'-Dichlorobenzidine			100	62.3		ug/L		62	45 - 135	5	25
2,4-Dichlorophenol			100	68.7		ug/L		69	55 - 120	6	20
Diethyl phthalate			100	89.2		ug/L		89	55 - 120	4	30
2,4-Dimethylphenol			100	68.0		ug/L		68	40 - 120	2	25
Dimethyl phthalate			100	83.1		ug/L		83	30 - 120	1	30
Di-n-butyl phthalate			100	90.4		ug/L		90	60 - 125	4	20
4,6-Dinitro-2-methylphenol			100	83.9		ug/L		84	45 - 120	6	25
2,4-Dinitrophenol			100	83.0		ug/L		83	40 - 120	9	25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-53073/3-A
Matrix: Water
Analysis Batch: 53819

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 53073

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	100	89.0		ug/L		89	65 - 120	5	20
2,6-Dinitrotoluene	100	78.8		ug/L		79	65 - 120	3	20
Di-n-octyl phthalate	100	81.7		ug/L		82	65 - 135	2	20
1,2-Diphenylhydrazine(as Azobenzene)	100	97.7		ug/L		98	60 - 120	0	25
Fluoranthene	100	96.2		ug/L		96	60 - 120	5	20
Fluorene	100	86.6		ug/L		87	65 - 120	5	20
Hexachlorobenzene	100	79.1		ug/L		79	60 - 120	2	20
Hexachlorobutadiene	100	54.2		ug/L		54	40 - 120	7	25
Hexachlorocyclopentadiene	100	52.8		ug/L		53	25 - 120	12	30
Hexachloroethane	100	55.4		ug/L		55	35 - 120	3	25
Indeno[1,2,3-cd]pyrene	100	95.3		ug/L		95	45 - 135	2	25
Isophorone	100	86.7		ug/L		87	50 - 120	6	20
2-Methylnaphthalene	100	74.8		ug/L		75	55 - 120	6	20
2-Methylphenol	100	71.3		ug/L		71	50 - 120	11	20
4-Methylphenol	100	73.3		ug/L		73	50 - 120	9	20
Naphthalene	100	72.6		ug/L		73	55 - 120	3	20
2-Nitroaniline	100	98.3		ug/L		98	65 - 120	5	20
3-Nitroaniline	100	88.2		ug/L		88	60 - 120	7	25
4-Nitroaniline	100	99.1		ug/L		99	55 - 125	4	20
Nitrobenzene	100	84.2		ug/L		84	55 - 120	3	25
2-Nitrophenol	100	68.3		ug/L		68	50 - 120	4	25
4-Nitrophenol	100	81.9		ug/L		82	45 - 120	14	30
N-Nitrosodi-n-propylamine	100	92.5		ug/L		92	45 - 120	13	20
N-Nitrosodiphenylamine	100	77.9		ug/L		78	60 - 120	1	20
Pentachlorophenol	100	80.9		ug/L		81	24 - 121	1	25
Phenanthrene	100	90.9		ug/L		91	65 - 120	3	20
Phenol	100	61.5		ug/L		62	40 - 120	11	25
Pyrene	100	83.0		ug/L		83	55 - 125	1	25
1,2,4-Trichlorobenzene	100	60.5		ug/L		60	45 - 120	0	20
2,4,5-Trichlorophenol	100	78.7		ug/L		79	55 - 120	1	30
2,4,6-Trichlorophenol	100	73.6		ug/L		74	55 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*50 - 120*
2-Fluorophenol (Surr)	*64*		*30 - 120*
2,4,6-Tribromophenol (Surr)	*79*		*40 - 120*
Nitrobenzene-d5 (Surr)	*85*		*45 - 120*
Terphenyl-d14 (Surr)	*88*		*50 - 125*
Phenol-d6 (Surr)	*69*		*35 - 120*

Method: 8270C SIM - 1,4 Dioxane by SIM

Lab Sample ID: MB 440-52524/1-A
Matrix: Water
Analysis Batch: 52956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 52524

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		09/17/12 13:46	09/19/12 01:14	1

Method: 8270C SIM - 1,4 Dioxane by SIM (Continued)

Lab Sample ID: MB 440-52524/1-A
Matrix: Water
Analysis Batch: 52956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 52524

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8 (Surr)	47		30 - 120	09/17/12 13:46	09/19/12 01:14	1

Lab Sample ID: LCS 440-52524/2-A
Matrix: Water
Analysis Batch: 52956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 52524

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	0.765		ug/L		38	35 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	37		30 - 120

Lab Sample ID: 440-22969-D-2-A MS
Matrix: Water
Analysis Batch: 52956

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 52524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		1.90	0.904		ug/L		48	35 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,4-Dioxane-d8 (Surr)	45		30 - 120

Lab Sample ID: 440-22969-D-2-B MSD
Matrix: Water
Analysis Batch: 52956

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 52524

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		1.90	1.11		ug/L		58	35 - 120	20	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,4-Dioxane-d8 (Surr)	55		30 - 120

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-52638/1
Matrix: Water
Analysis Batch: 52638

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			09/17/12 19:19	1

Lab Sample ID: LCS 440-52638/2
Matrix: Water
Analysis Batch: 52638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	996		mg/L		100	85 - 115

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 440-22918-B-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 52638

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	86		86.0		mg/L		0	10

Method: SM 4500 H+ B - pH

Lab Sample ID: 440-23120-B-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 52895

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	4.77		4.780		SU		0.2	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 440-51806/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 51859 — **Prep Batch: 51806**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved	ND		0.10	mg/L		09/13/12 14:01	09/13/12 16:51	1

Lab Sample ID: LCS 440-51806/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 51859 — **Prep Batch: 51806**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Dissolved	0.480	0.517		mg/L		108	80 - 120

Lab Sample ID: 440-23161-2 MS — **Client Sample ID: Grab**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 51859 — **Prep Batch: 51806**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Dissolved	ND	HF	0.480	0.465	HF	mg/L		97	70 - 130

Lab Sample ID: 440-23161-2 MSD — **Client Sample ID: Grab**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 51859 — **Prep Batch: 51806**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide, Dissolved	ND	HF	0.480	0.431	HF	mg/L		90	70 - 130	8	30

Method: SM 5220D - COD

Lab Sample ID: MB 440-53790/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 53790

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	mg/L			09/21/12 15:03	1

Method: SM 5220D - COD (Continued)

Lab Sample ID: LCS 440-53790/4
Matrix: Water
Analysis Batch: 53790

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	194		mg/L		97	90 - 110

Lab Sample ID: 440-23161-1 MS
Matrix: Water
Analysis Batch: 53790

Client Sample ID: Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		200	201		mg/L		100	70 - 120

Lab Sample ID: 440-23161-1 MSD
Matrix: Water
Analysis Batch: 53790

Client Sample ID: Composite
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	ND		200	194		mg/L		97	70 - 120	3	15

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-23161-1

GC/MS VOA

Analysis Batch: 53187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-22824-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-22824-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-23161-2	Grab	Total/NA	Water	8260B	
LCS 440-53187/12	Lab Control Sample	Total/NA	Water	8260B	
MB 440-53187/11	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 53913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23161-2	Grab	Total/NA	Water	8260B	
440-23330-A-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-23330-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-53913/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-53913/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 52524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-22969-D-2-A MS	Matrix Spike	Total/NA	Water	3520C	
440-22969-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	3520C	
440-23161-2	Grab	Total/NA	Water	3520C	
LCS 440-52524/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 440-52524/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 52956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-22969-D-2-A MS	Matrix Spike	Total/NA	Water	8270C SIM	52524
440-22969-D-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270C SIM	52524
440-23161-2	Grab	Total/NA	Water	8270C SIM	52524
LCS 440-52524/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	52524
MB 440-52524/1-A	Method Blank	Total/NA	Water	8270C SIM	52524

Prep Batch: 53073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23161-2	Grab	Total/NA	Water	3520C	
LCS 440-53073/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-53073/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-53073/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 53819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23161-2	Grab	Total/NA	Water	8270C	53073
LCS 440-53073/2-A	Lab Control Sample	Total/NA	Water	8270C	53073
LCSD 440-53073/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	53073
MB 440-53073/1-A	Method Blank	Total/NA	Water	8270C	53073

General Chemistry

Prep Batch: 51806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23161-2	Grab	Dissolved	Water	SM 4500 S2 B	
440-23161-2 MS	Grab	Dissolved	Water	SM 4500 S2 B	

QC Association Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-23161-1

General Chemistry (Continued)

Prep Batch: 51806 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23161-2 MSD	Grab	Dissolved	Water	SM 4500 S2 B	
LCS 440-51806/1-A	Lab Control Sample	Dissolved	Water	SM 4500 S2 B	
MB 440-51806/2-A	Method Blank	Dissolved	Water	SM 4500 S2 B	

Analysis Batch: 51859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23161-2	Grab	Dissolved	Water	SM 4500 S2 D	51806
440-23161-2 MS	Grab	Dissolved	Water	SM 4500 S2 D	51806
440-23161-2 MSD	Grab	Dissolved	Water	SM 4500 S2 D	51806
LCS 440-51806/1-A	Lab Control Sample	Dissolved	Water	SM 4500 S2 D	51806
MB 440-51806/2-A	Method Blank	Dissolved	Water	SM 4500 S2 D	51806

Analysis Batch: 52638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-22918-B-1 DU	Duplicate	Total/NA	Water	SM 2540D	
440-23161-1	Composite	Total/NA	Water	SM 2540D	
LCS 440-52638/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 440-52638/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 52895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23120-B-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	
440-23161-2	Grab	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 53790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-23161-1	Composite	Total/NA	Water	SM 5220D	
440-23161-1 MS	Composite	Total/NA	Water	SM 5220D	
440-23161-1 MSD	Composite	Total/NA	Water	SM 5220D	
LCS 440-53790/4	Lab Control Sample	Total/NA	Water	SM 5220D	
MB 440-53790/3	Method Blank	Total/NA	Water	SM 5220D	

Definitions/Glossary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-23161-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: CDM Smith, Inc.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-23161-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	09-30-12
New Mexico	State Program	6	N/A	01-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

CHAIN OF CUSTODY

440-23161

Client Name/Address:
Camp, Dresser & McKee
111 Academy, Ste 150
Irvine, CA 92617

Project / PO Number:
Omega Wastewater

Project Manager:
Sharon Wallin

Phone Number:
c(760) 272-0623

Sampler:
Efrain Figueroa

Fax Number:

ANALYSIS REQUIRED

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	TSS - SM2540D	COD-SM5520D	8270C +NDMA+Hydrazine	8270C-1,4-Dioxane-LL	pH	8260B-A+A+2CVE, LOW	8260B-VOC,8260-Low-MeCl5ppb	Sulfide, Dissolved		Special Instructions
Composite	WW	500ml poly	2	9/11-12/12	14:18	None,H2SO4	x	x								Meter: 1240789149
Grab	WW	Amber,poly, vol's	9	9/12/12	14:14	HCl's/NaOH			x	x	x	x	x	x		9/11/2012 @ 1410
																Meter: ~~1240~~ 1270 2410
																9/12/2012 @ 1410
																Field pH: 7.88
																Sampling Time: 2 hours

Relinquished By	Date/Time:	Received by	Date/Time:
Efrain Figueroa	9-12-12 14:40		
Relinquished By	Date/Time:	Received by	Date/Time:
Relinquished By	Date/Time:	Received in Lab by	Date/Time:
		Tim Sodenkamp	9/12/12 1940

Turnaround Time: (check)
Same Day _____ 72 Hours _____
24 Hours _____ 5 days _____
48 hours _____ normal _____

Sample Integrity: (Check)
Intact X On Ice: X Custody Seal: Ø

2.0°C

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-23161-1

Login Number: 23161
List Number: 1
Creator: Chavez, Elizabeth

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Efrain Figueroa
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Appendix C
Groundwater Field Logs

CDM Smith

Appendix C.1

Ground Water Levels

WELL GAUGING DATA

Project # 120730-B01 Date 7-30-12 Client CDM

Site 12511 Putnam St Whittier

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
OW1a	1124	4					80.53	82.60		
OW1b	1127	4					81.76	117.95		
OW2	1037	4					79.35	79.98		
OW3	1108	4					77.01	82.48		
OW3b	1113	4					81.02	121.43		
OW4a	1154	4					65.31	74.58		
OW4b	1159	4					68.92	126.20		
OW5	Unable to locate									
OW6	1208	4					54.08	58.16		
OW7	1219	4					83.12	88.90		
OW8	1055	4					78.80	79.10		
OW8b	1049	4					84.21	125.20		
OW9	1135	4					75.96	89.40		
OW10	1143	4					70.86	89.10		
PZ1	1102	2					81.10	87.20		
PZ2	1043	2					82.10	84.54		
PZ3	1031	2					79.70	88.80		

WELL GAUGING DATA

Project # 120730-BP1 Date 7-30-12 Client CDM

Site 12511 Putnam St Whittier

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
PZ 4	1120	2					66.56	82.20		
PZ 5	1250	4					81.70	98.22		
PZ 6	1242	4					81.35	96.46		
PZ 7	1228	4					83.91	101.05		
PZ 8	1232	4					83.50	101.20		

WELLHEAD INSPECTION CHECKLIST

Client CDM Date 7-30-12

Site Address 12511 Putman St, Whittier CA

Job Number 120730-BP1 Technician BP

Well ID	Well Inspected - No Corrective Action Required	WELL IS SECURABLE BY DESIGN (12"or less)	WELL IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL" (12"or less)	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
OW 1a		X	X							
OW 1b		X	X					X		
OW 2		X	X					X		
OW 3	X	X	X							
OW 3b		X	X					X		
OW 4a	X	X	X							
OW 4b	X	X	X							
OW 5	—	—	—	—	—	—	—	—		
OW 6		X	X					X		
OW 7	X	X	X							
OW 8	X	X	X							
OW 8b		X	X					X		
OW 9	X	X	X							
OW 10	X	X	X							
PZ1		X	X					X		
PZ2		X	X					X		
PZ3		X	X					X		

NOTES: OW2: 1/2 tabs stripped, PZ3: 2/2 bolts broken in tabs, PZ3: 1/3 bolts missing, 1/3 stripped OW 8B: 2/4 bolts missing PZ1 2/3 bolts missing 1/3 tabs stripped, OW3b 2/2 tabs stripped OW6 2/2 tabs stripped

WELLHEAD INSPECTION CHECKLIST

Client CDM Date 7-30-12

Site Address 12511 Putnam St Whittier

Job Number 120730-BP1 Technician BP

Well ID	Well Inspected - No Corrective Action Required	WELL IS SECURABLE BY DESIGN (12"or less)	WELL IS CLEARLY MARKED WITH THE WORDS "MONITORING WELL" (12"or less)	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
PZ4	X	X	X							
PZ5	X	X	X							
PZ6	X	X	X							
PZ7	X	X	X							
PZ8	X	X	X							

NOTES:

WATER LEVEL DATA SHEET

Project: Omega Chemical Semiannual GW Sampli Date: 8/21/12

Project No.: 10500-90421-EECA.SEMIANNUAL Page: 1 of 1

Well ID	Ref. Point	Time	PID	Depth to Water (ft. BTOC)	Total Depth (ft.BTOC)	Comments
OW-1A	TOC	0807		80.22	82.58	Well not Sampled due to Sludge in Well
OW-1B	TOC	0806		82.26	118.02	
OW-2	TOC	~~78.55~~ 1000		78.55	79.93	~~82.77~~ 77
OW-3	TOC	1140		76.62	82.77	
OW-3B	TOC	1206		81.72	122.06	
OW-4A	TOC	1001		64.48	74.71	
OW-4B	TOC	1151		69.59	~~126.22~~ 112.96	
OW-5	TOC	— Unable to		locate		
OW-6	TOC	0714		53.42	58.42	
OW-7	TOC	1337		82.84	89.26	
OW-8A	TOC	1032		78.76	78.92	
OW-8B	TOC	1036		84.89	125.16	
OW-9	TOC	0840		75.59	89.52	
OW-10	TOC	0840		70.48	89.29	

CDM Smith

WELL GAUGING DATA

Project # 120828-BM1 Date 8-28-12 Client CDM

Site 12511 Putnam St, Whittier

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
OW-45	0730	4					67.83	126.40		
OW5	0854	4					36.42	49.75		
P21	0700	2					80.96	87.46		
P2.2	0657	2					81.84	84.64		
P2.3	0650	2					66.60	84.42		
P2.4	0643	2					80.32	89.12		
P2.5	0715	4					81.82	98.50		
P2.6	0720	4					81.19	96.15		
P2.7	0815	4					83.18	101.40		
P2.8	0820	4					83.44	101.62		
P2.9	0939	4					78.29	90.28		

WELL GAUGING DATA

Project # 120927-ET1 Date 09/27/12 Client CDM

Site 12511 Putnam Street, Whittier CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
OW1a	4					80.41	82.63		
OW1b	4					82.84	118.26		
OW2	4					79.26	80.20		
OW3	4					77.55	82.93		
OW3b	4					82.86	122.16		
OW4a	4					64.53	74.74		
OW4b	4					67.82	126.84		
~~OW5~~			unable to locate						
OW6	4					53.44	58.41		
OW7	4					82.68	89.49		
OW8	4					DRY	79.30		
OW8b	4					84.23	125.17		
OW9	4					75.95	89.93		
OW10	4					70.94	89.37		
PZ1	2					80.88	87.50		
PZ2	2					81.84	84.65		
PZ3	2					80.40	89.27		

WELL GAUGING DATA

Project # 120927-ET1 Date 09/27/12 Client CDM

Site 12571 Putnam Street, Whittier, CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
PZ4	2					66.58	89.49		
PZ5	4					81.84	98.63		
PZ6	4					81.20	96.80		
PZ7	4					83.87	101.34		
PZ8	4					83.47	101.55		
PZ9	2					78.35	90.20		
OW5	4					36.78	49.57	TOC	

Appendix C.2

EW Inspection Forms

Extraction Well Inspection Form
Omega Chemical Treatment System

Technician: Hamm **Date/Time:** 7/26/12 Thu.

Well Measurements

** Additional Info : ON BACK!

Well	Pump		Time	Static Water Level (feet) A	Depth to Water (feet) B	Well drawdown A-B		Flow and Pressure		Valve Position	
EW-1	PMP-110	HAND OFF (AUTO)	1013	to be determined during start-up	82.07	NA		FIT-115 N/A gpm PT-114 N/A psi ph NA Turbidity NA NTU		BV-110 100 % Open BV-110A 100 % Open	* WL stable during pumping 82.07'
EW-2	PMP-120	HAND OFF (AUTO)	1001	to be determined during start-up	79.65'	NA		FIT-125 N/A gpm PT-124 N/A psi ph NA Turbidity NA NTU		BV-120 100 % Open BV-120A 100 % Open	* Water level pretty stable during pumping 79.65'
EW-3	PMP-130	HAND OFF (AUTO)	0950	to be determined during start-up	81.03 / 82.54	NA	81.80	FIT-135 N/A gpm PT-134 N/A psi ph NA Turbidity NA NTU		BV-130 100 % Open BV-130A 100 % Open	
EW-4	PMP-1140	HAND OFF (AUTO)	0937	to be determined during start-up	78.10' / 78.90	NA	77.57'	FIT-145 N/A gpm PT-144 N/A psi ph NA Turbidity NA NTU		BV-140 100 % Open BV-140A 50/75 % Open	
EW-5	PMP-150	HAND OFF (AUTO)	0915	to be determined during start-up	78.69' / 81.13'	NA	78.77'	FIT-155 N/A gpm PT-154 N/A psi ph NA Turbidity NA NTU		BV-150 100 % Open BV-150A 25 % Open	

Leak Detection Port 1 (in Putnam):
0927 DTW : 7.35' TD: 7.70'

Leak Detection Port 2 (near trailer):
1025 DTW: 0.0' TD: 3.70'

7/26/12 CH

EW-5 : LS-153 : Cleaned, tightened FE-155 : OK *Ground Wire : OK
PT-154 : OK CV-150 : OK
SP-150 : OK

EW-4 : LS-143 : Cleaned, tightened FE-145 : OK *Ground wire : broken / lid to ground :
PT-144 : OK CV-140 : OK
SP-140 : OK

EW-3 :
LS-133 : cleaned, tightened FE-135 : OK
PT-134 : Slight corrosion on fitting(s) CV-130 : OK *Ground Wire : OK
SP-130 : OK

EW-2 : LS-123 : cleaned, tightened FE-125 : OK
PT-124 : OK CV-120 : OK * Ground Wire : broken / lid to ground :
SP-120 : OK

EW-1 :
LS-113 : cleaned, tightened FE- 115 : OK * Ground wire : OK
PT-114 : OK CV-110 : OK
SP-110 : OK

JHA ENVIRONMENTAL, INC.

DAILY FIELD REPORT

Project Name: Omega	Project #: E742A	Date: 8/22/12 Wed.

0800 - onsite, Workscope Review, H+S, Calibrate PID
- Label/Bottle Prep for EW Sampling:
- GWTS Operations + Maintanence: Data Collection; EW Sampling

1050 - O/M completed:
* EW Sampling:
- EW1: 1058/DTW: 81.48 @ Sampling Time
- EW2: 1107/DTW: 79.18 @ " "
- EW3: 1117/DTW: 81.63 @ " "
- EW4: 1149/DTW: 77.84 @ * Mike Hoffman" assisted w/pump "off/on" (10min).
- EW5: 1130/DTW: 79.65 @ " "

1200 - Sampling completed: sample(s) to refrigerator; Completed COC/SCL
* - Process Water/GWTS: 11 drums present, settling:
* 1235 - changed filter socks

1320 - Processing Water cont: 7 drums processed, offload water (CDM); 225 gal
- Test America onsite, signed/copied relinquished COC.
- processing cont:

1345 - OW-5: locate; Mike Hoffman + myself searched location for OW-5: Can't locate!

1400 - Process Water: 4 drums processed;

1500 - GWTS: locked up, water settling 250 gal for processing; completed:

1540 - Input data to portal, copy/send DFR to responsible parties
- offsite

Extraction Well Inspection Form
Omega Chemical Treatment System

Technician: Hamm **Date/Time:** 9/26/12 Wed.

Well Measurements

Well	Pump		Time	Static Water Level (feet) A	Depth to Water (feet) B	Well drawdown A-B	Flow and Pressure	Valve Position
EW-1	PMP-110	HAND OFF (AUTO)	1108	to be determined during start-up	81.76'	NA	FIT-115 N/A gpm PT-114 N/A psi ph NA Turbidity NA NTU	BV-110 100 % Open 100 BV-110A 100 % Open 100 * Appears stable @ current level.
EW-2	PMP-120	HAND OFF (AUTO)	1101	to be determined during start-up	79.52	NA	FIT-125 N/A gpm PT-124 N/A psi ph NA Turbidity NA NTU	BV-120 100 % Open 100 BV-120A 100 % Open 100 * Stable while pumping @ level.
EW-3	PMP-130	HAND OFF (AUTO)	1044	to be determined during start-up	80.95 / 82.54	NA	81.74 FIT-135 N/A gpm PT-134 N/A psi ph NA Turbidity NA NTU	BV-130A 100 % Open 100 BV-130A 100 % Open 100
EW-4	PMP-1140	HAND OFF (AUTO)	1024	to be determined during start-up	77.85 / 78.40	NA	78.07' FIT-145 N/A gpm PT-144 N/A psi ph NA Turbidity NA NTU	BV-140[illegible] 100 % Open 100 BV-140A 50/75 % Open 50/75
EW-5	PMP-150	HAND OFF (AUTO)	1015	to be determined during start-up	78.65 / 81.07	NA	80.05' FIT-155 N/A gpm PT-154 N/A psi ph NA Turbidity NA NTU	BV-150[illegible] 100 % Open 100 BV-150A 25 % Open 25

Leak Detection Port 1 (in Putnam):

1010 DTW: 5.67' TD: 7.70'

Leak Detection Port 2 (near trailer):

1315 DTW: Ø.Ø TD: 3.70'

Appendix C.3

Purge Forms

Well No.: OW-1B	Site: **OMEGA CHEMICAL**	Date: 8/22/12
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: BN	with CDM RL	with Blaine Tech

Total Depth of Well (feet): 118.02 (X) 2" - 1.0
Depth to Water (feet): 82.26 (X) 4" - 1.3 Gal/ft. = 4.649 (X) 3 = 13.946
Water Column Height (feet): 35.76 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)
Well Reference Point: **TOC** __" - ____

PURGE METHOD: Submersible pump [X] Bladder pump [ ] Disposable bailer [ ]	
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet):
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N [ ]	Volume:

Start Time: 0812 Flow Rate: 3 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
0816 ~~0816~~	12	23.4	8.12	1141	110	0.89	-189	~~98.92~~	98.92
0820	24	23.5	8.08	1102	223	0.85	-193	~~114.8~~	114.82
	—	well Dewatered @ 24 Gallons						—	
								Start to Purge 3 GPM	
1410	—	23.4	7.97	1121	115	0.81	-150	83.01	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	–
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [ ] Flow Rate:	Sample ID: OC-GW- OW-1B-082212	Sample Time: 8321
Bailer: [X] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time: 1410
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW-2	Site: **OMEGA CHEMICAL**	Date: 8/21/12
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: NB with CDM	SR with Blaine Tech	

Total Depth of Well (feet): 79.93 ~~78.55~~ (X) 2" - 1.0

Depth to Water (feet): 78.55 ~~79.93~~ (X) 4" - 1.3 Gal/ft. = 1.79 (X) 3 = 5.38

Water Column Height (feet): 1.38 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: TOC __" - ____

PURGE METHOD: Submersible pump ☐ Bladder pump ☐ Disposable bailer ☒	
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 79.5
Purge equipment decontaminated? Y [x] N ☐	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N ☐	Volume:

Start Time: 1009 Flow Rate: Disp. Bailer

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
1015	0.5	23.3	7.23	1608	71	2.13	75	78.92	
1020	1	23.3	7.21	1590	313	2.09	80	79.21	
1025	1.5	23.3	7.18	1586	712	2.06	86	79.41	
1027	1.80	23.3	7.17	1585	721	2.04	87	79.46	
	— Well Dewatered @ 2 Gallons —								
1430	—	23.3	7.20	1576	89	2.00	84	~~78.09~~ 79.09	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
OC-GW-WELL# -MMDDYY	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
Sample Collection Method: ↘			

Pump: ☐ Flow Rate:	Sample ID: OC-GW-~~06~~ OW-2-082112	Sample Time: 1430
Bailer: ☒ Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: ☐ Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: ow-3	Site: OMEGA CHEMICAL	Date: 8/21/12
Client: OMEGA	Project Number: 10500 - 90421 -EECA.SEMIANNUAL	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: BR with CDM	BR with Blaine Tech	

Total Depth of Well (feet): 82.77 (X) 2" - 1.0

Depth to Water (feet): 76.62 (X) 4" - 1.3 Gal/ft. = 7.99 (X) 3 = 23.98

Water Column Height (feet): 6.15 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: TOC __" - ____

PURGE METHOD: Submersible pump [X] Bladder pump [ ] Disposable bailer [ ]

Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 82'
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N [ ]	Volume:

Start Time: 1147 Flow Rate: ~~0.5bpm~~ .16pm

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
~~1155~~	8								R
1149	2	23.1	7.53	1301	382	2.46	88	-	
1151	4	23.1	7.51	1297	512	2.40	93	-	
1153	6	23.1	7.49	1292	681	2.37	99	-	
1155	8	23.2	7.48	1287	716	2.34	104	-	
		Well	Dewatered	@	8	Gallons			
1455	—	23.1	7.46	1273	158	2.92	121	76.88	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [ ] Flow Rate:	Sample ID: OC-GW- ow-3-082112	Sample Time: 1455
Bailer: [X] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: ow-38	Site: **OMEGA CHEMICAL**	Date: 8/21/13
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: NB	with CDM SR	with Blaine Tech

Total Depth of Well (feet): 122.06 (X) 2" - 1.0

Depth to Water (feet): 81.72 (X) 4" - 1.3 Gal/ft. = 52.44 (X) 3 = 157.34

Water Column Height (feet): 40.34 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: **TOC** __" - ____

PURGE METHOD: Submersible pump [X] Bladder pump [ ] Disposable bailer [ ]	
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 120'
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N [ ]	Volume:

Start Time: 1212 Flow Rate: 4 lpm

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
1217	20	23.1	7.91	1095	80	2.68	34	40.81	
1222	40	23.2	7.83	1157	27	2.93	75	91.23	
1227	60	23.2	7.72	1206	11	3.87	89	91.28	
1232	80	23.3	7.69	1221	7	3.89	95	91.31	
1237	100	23.4	7.66	1232	7	3.94	106	91.34	
1242	120	23.4	7.64	1237	6	3.96	115	91.37	
1247	140	23.5	7.62	1244	5	3.98	119	91.38	
1252	158	23.5	7.61	1247	5	3.400	121	91.41	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [X] Flow Rate: 100 ml/min	Sample ID: OC-GW- ~~OW-35~~ OW-38-082113	Sample Time: 1253
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW-4A	Site: OMEGA CHEMICAL	Date: 8/22/12
Client: OMEGA	Project Number: 10500 - 90421 -EECA.SEMIANNUAL	
Well Casing Diameter (inches): 4	Well Casing Material: RVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: MB	with CDM SA	with Blaine Tech

Total Depth of Well (feet): 74.71 (X) 2" - 1.0

Depth to Water (feet): 64.48 (X) 4" - 1.3 Gal/ft. = 13.29 (X) 3 = 39.89

Water Column Height (feet): 10.23 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: TOC ___" - ___

PURGE METHOD: Submersible pump [X] Bladder pump [ ] Disposable bailer [ ]	
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 74'
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N [ ]	Volume:

Start Time: 1007 Flow Rate: 0.5 lpm

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
1003	3	24.3	7.25	1526	31	0.56	126	64.68	
1019	6	24.4	7.20	1506	15	0.54	106	64.84	
~~1035~~ 1033	12	24.5	7.18	1498	8	0.62	102	64.89	
1043 ~~1045~~	~~24~~ 18	24.6	7.17	1492	6	0.68	98	64.91	
1055	24	24.6	7.17	1485	6	0.69	95	64.93	
1107	30	24.7	7.16	1481	5	0.72	91	64.95	
1119	36	24.7	7.15	1478	4	0.75	88	64.97	
1127	40	24.6	7.15	1474	4	0.73	85	64.99	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [X] Flow Rate: low flow	Sample ID: OC-GW- OW-4A - 082212	Sample Time: 1128
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW- OW4AN-082212	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW-4B	Site: **OMEGA CHEMICAL**	Date: 8/22/12
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: BV with CDM	SR with Blaine Tech	

Total Depth of Well (feet): 112.46 ~~112.66~~ (X) 2" - 1.0 55.73 167.19

Depth to Water (feet): 69.59 (X) 4" - 1.3 Gal/ft. = ~~73.61~~ (X) 3 = ~~220.86~~ SR

Water Column Height (feet): 42.87 ~~56.63~~ (X) 6" - 1.8 SR Includes gravel pack purge volume (gallons)

Well Reference Point: **TOC** __" - ____

PURGE METHOD: Submersible pump ☒ Bladder pump ☐ Disposable bailer ☐		
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 110'	
Purge equipment decontaminated? Y [x] N ☐	Container type: Tank to water treatment system	
Purge/decon water containerized? Y [xx] N ☐	Volume:	

Start Time: 1203 Flow Rate: 5 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
1208	25	24.0	7.42	1614	21	2.68	168	72.89	
1213	50	24.0	7.41	1627	13	2.62	123	72.93	
1218	75	24.0	7.38	1662	8	2.51	115	72.96	
1223	100	24.0	7.36	1669	7	2.48	109	72.99	
1228	125	24.1	7.35	1681	7	2.41	106	73.02	
1233	150	24.0	7.34	1687	6	2.41	103	73.04	
1337	168	24.0	7.34	1688	5	2.38	99	73.09	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: ☐ Flow Rate:	Sample ID: OC-GW- OW-4B-082212	Sample Time: 1338
Bailer: ☐ Type: disposable	Duplicate (K) ID: OC-GW-OW4BK-082212	Sample Time: 1348
Other: ☐ Desc.:	~~Equip. blank (N)~~ ID: OC-GW- OW4BK2-082212	Sample Time: 1358

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW-5	Site: OMEGA CHEMICAL	Date: 8-18-12
Client: OMEGA	Project Number: 10500 - 90421 -EECA.SEMIANNUAL	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm): NA	FID (ppm): N/A	
Samplers: C. Marvin with CDM	Ben Stevens with Blaine Tech	

Total Depth of Well (feet): 49.75 (X) 2" - 1.0

Depth to Water (feet): 36.42 (X) 4" - 1.3 Gal/ft. = 8.7 (X) 3 = 26.1

Water Column Height (feet): 13.33 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: TOC ___" - ___

PURGE METHOD: Submersible pump [✓]	Bladder pump [ ]	Disposable bailer [ ]
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet):	
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system	
Purge/decon water containerized? Y [xx] N [ ]	Volume: 32 gallons	

Start Time: 0903 Flow Rate: 2 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
0905	4	24.01	6.56	1092	117	2.38	56.7	36.67	
0907	8	22.98	6.57	1093	86	2.57	98.9	36.70	
0909	12	22.84	6.61	1093	43	2.65	95.7	36.70	
0911	16	22.84	6.65	1680	20	2.61	91.2	36.70	
0913	20	22.84	6.67	1680	14	2.57	88.2	36.70	
0915	24	22.84	6.68	1682	10	2.60	85.4	36.70	
0917	28	22.84	6.69	1682	8	2.62	83.5	36.70	
0919	32	22.84	6.69	1683	7	2.63	82.2	36.70	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [X] Flow Rate:	Sample ID: OC-GW- OW-5-082012	Sample Time: 0920
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW-6	Site: **OMEGA CHEMICAL**	Date: 8/22/12
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: B.V with CDM SR	with Blaine Tech	

Total Depth of Well (feet): 58.42 (X) 2" - 1.0

Depth to Water (feet): 53.42 (X) 4" - 1.3 Gal/ft. = 6.5 (X) 3 = 19.5

Water Column Height (feet): 5 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: **TOC** __" - ____

PURGE METHOD: Submersible pump [x]	Bladder pump [ ]	Disposable bailer [ ]
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 58'	
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system	
Purge/decon water containerized? Y [xx] N [ ]	Volume:	

Start Time: 0718 Flow Rate: ~~2-1/2~~ 0.5 GPM → 1 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
0724	~~4~~ 3	23.4	6.96	3259	12	3.87	132	54.12	
~~0726~~ 0727	6	23.4	6.93	2814	8	3.53	127	54.21	1 GPM
0730	9	23.5	6.90	2494	7	3.46	116	54.24	
0733	12	23.5	6.88	2368	7	3.41	113	54.27	
0736	15	23.6	6.87	2345	7	3.38	113	54.31	
0739	18	23.6	6.86	2327	8	3.34	111	54.34	
0741	20	23.7	6.86	2324	8	3.33	109	54.35	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [x] Flow Rate: 100 ml/min	Sample ID: OC-GW- OW-6-082212	Sample Time: 0742
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW-7	Site: **OMEGA CHEMICAL**	Date: 8/22/12
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches):	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: NB	with CDM SR	with Blaine Tech

Total Depth of Well (feet): 89.26 (X) 2" - 1.0

Depth to Water (feet): 82.84 (X) 4" - 1.3 Gal/ft. = 8.34 (X) 3 = ~~2946~~ 25.04

Water Column Height (feet): 6.42 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: **TOC** ___" - ___

PURGE METHOD: Submersible pump [X] Bladder pump [ ] Disposable bailer [ ]

Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 83
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N [ ]	Volume:

Start Time: 1341 Flow Rate: 1 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
1345	4	23.7	7.59	1275	9	4.21	100	84.12	
1349	8	23.7	7.54	1246	8	4.04	113	84.57	
1353	12	23.8	7.51	1227	8	3.85	120	84.83	
1357	16	23.8	7.48	1219	8	3.68	128	84.94	
1401	20	23.8	7.47	1208	9	3.62	136	84.96	
1405	24	23.8	7.46	1197	9	3.57	142	85.01	
1407 ~~1406~~	25.5	23.9	7.45	1189	8	3.54	144	85.04	

~~MS/MSD Taken~~ -82

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY		MS/MSD collected	
Sample Collection Method: ↘			

Pump: [X] Flow Rate: 1 gal/min	Sample ID: OC-GW- OW-7 - 082112	Sample Time: 1408
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW- OW7N-082112	Sample Time: 1530

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW 8B	Site: **OMEGA CHEMICAL**	Date: 8/21/12
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: NB with CDM	SR with Blaine Tech	

Total Depth of Well (feet): 125.16 ~~84.89~~ (X) 2" - 1.0

Depth to Water (feet): 84.89 ~~125.16~~ (X) 4" - 1.3 Gal/ft. = 52.35 (X) 3 = 157.05

Water Column Height (feet): 40.27 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: **TOC** __" - ____

PURGE METHOD: Submersible pump [X] Bladder pump [ ] Disposable bailer [ ]	
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 123'
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N [ ]	Volume:

Start Time: 1046 Flow Rate: 5 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
1050	20	22.9	7.12	1214	12	4.94	18	86.02	
1054	40	22.9	7.13	1219	9	4.68	~~24~~ 24	86.08	
1058	60	22.9	7.14	1236	6	4.52	27	86.12	
1102	80	23.0	7.14	1249	4	4.31	29	86.15	
1106	100	22.9	7.15	1259	4	4.22	35	86.17	
1110	120	23.0	7.15	1263	3	4.17	43	86.19	
1114	140	22.9	7.15	1268	3	4.14	50	86.21	
1118	158	22.9	7.16	1273	3	4.11	53	86.23	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [X] Flow Rate: 100 mL/min	Sample ID: OC-GW- OW-8B-082112	Sample Time: 1119
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW9	Site: **OMEGA CHEMICAL**	Date: 8/21/12
Client: OMEGA	Project Number: **10500 - 90421 -EECA.SEMIANNUAL**	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: MB with CDM	SR with Blaine Tech	

Total Depth of Well (feet): 89.52 (X) 2" - 1.0

Depth to Water (feet): 75.59 (X) 4" - 1.3 Gal/ft. = 18.11 (X) 3 = 54.33

Water Column Height (feet): 13.93 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: **TOC** __" - ____

PURGE METHOD: Submersible pump [X]	Bladder pump [ ]	Disposable bailer [ ]
Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 89'	
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system	
Purge/decon water containerized? Y [xx] N [ ]	Volume:	

Start Time: 0850 Flow Rate: 2 GPM → 1 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
0853	6	24.2	6.95	1367	648	2.15	-67	80.77	
0856	12	24.3	6.98	1342	405	2.24	-51	81.87	
0859	18	24.4	6.99	1323	244	2.32	-47	83.91	lowered to 1 GPM
0905	24	24.3	6.98	1298	114	2.38	-41	84.15	
0911	30	24.3	6.99	1296	66	2.44	-35	84.20	
0917	36	24.3	6.99	1292	48	2.49	-21	84.26	
0923	42	24.3	7.09	1287	40	2.53	-13	84.29	
0929	48	24.3	7.10	1284	39	2.57	-3	84.33	
0935	54	24.4	7.11	1279	38	2.59	-1	84.36	
0936	55	24.4	7.11	1278	37	2.60	1	84.37	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [x] Flow Rate: 100 mL/min	Sample ID: OC-GW-OW9-082112	Sample Time: 0937
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-OW9K-082112	Sample Time: 0945
Other: [ ] Desc.:	~~Equip. blank (N)~~ Split ID: OC-GW- OW9K2-082112	Sample Time: 0953

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: OW-10	Site: OMEGA CHEMICAL	Date: 8/22/12
Client: OMEGA	Project Number: 10500 - 90421 -EECA.SEMIANNUAL	
Well Casing Diameter (inches): 4	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm):	FID (ppm): N/A	
Samplers: BN with CDM	SL with Blaine Tech	

Total Depth of Well (feet): 84.29 (X) 2" - 1.0

Depth to Water (feet): 70.48 (X) 4" - 1.3 Gal/ft. = 24.45 (X) 3 = 73.36

Water Column Height (feet): 13.81 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: TOC __" - ____

PURGE METHOD: Submersible pump ☑ Bladder pump ☐ Disposable bailer ☐

Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet): 88'
Purge equipment decontaminated? Y [x] N ☐	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N ☐	Volume:

Start Time: 0843 Flow Rate: 1 GPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
0850	7	24.2	7.26	1433	51	3.40	-23	73.12	
0857	14	24.3	7.23	1393	42	3.56	-16	75.24	
0904	21	24.3	7.19	1385	37	3.64	-8	77.98	
0911	28	24.4	7.17	1379	34	3.81	-4	79.87	
0918	35	24.5	7.18	1374	31	3.91	-3	81.91	
0925	42	24.5	7.16	1369	29	4.09	7	83.61	
0932	49	24.5	7.15	1365	26	4.17	11	84.43	
0939	56	24.4	7.14	1359	29	4.23	22	85.91	
		— well Dewatered @ 57 Gallons —							
1355	—	24.1	7.16	1321	19	4.61	6	72.63	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	--
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: ☐ Flow Rate:	Sample ID: OC-GW- OW-10-082212	Sample Time: 1355
Bailer: ☒ Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: ☐ Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Well No.: P2-9	Site: OMEGA CHEMICAL	Date: 8-28-12
Client: OMEGA	Project Number: 10500 - 90421 -EECA.SEMIANNUAL	
Well Casing Diameter (inches): 2	Well Casing Material: PVC SS Other:	
Well Headspace: PID (ppm): N/A	FID (ppm): N/A	
Samplers: C. Marvin with CDM	Ben Stevens with Blaine Tech	

Total Depth of Well (feet): 90.28 (X) 2" - 1.0

Depth to Water (feet): 78.29 (X) 4" - 1.3 Gal/ft. = 1.9 (X) 3 = 5.7

Water Column Height (feet): 11.99 (X) 6" - 1.8 Includes gravel pack purge volume (gallons)

Well Reference Point: TOC __" - ____

PURGE METHOD: Submersible pump [X] Bladder pump [ ] Disposable bailer [ ]

Pump Make/Model: 2" Grundfos Rediflo	Depth of pump intake (feet):
Purge equipment decontaminated? Y [x] N [ ]	Container type: Tank to water treatment system
Purge/decon water containerized? Y [xx] N [ ]	Volume: 7 gallons

Start Time: 0945 Flow Rate: 0.5 LPM

Time	Gallons	Temp. (°C/°F)	pH	Conductivity (µmhos/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	DTW (ft TOC)	Comments
0947	1	23.30	7.20	1606	817	2.06	94.6	79.30	
0949	2	23.31	7.06	1576	289	2.19	96.7	79.38	
0951	3	23.69	7.00	1606	124	1.79	74.6	79.40	
0953	4	23.73	6.98	1609	84	1.81	80.3	79.40	
0955	5	23.78	6.96	1606	34	1.80	79.7	79.40	
0957	6	23.81	6.94	1604	28	1.84	78.3	79.40	
0959	7	23.82	6.94	1604	24	1.87	81.6	79.40	

Sample Analyses: →	Method	Container Type/Volume	Preservative
	VOCs (8260B)	3 - VOAs	HCl
	1,4-Dioxane (8270M)	2- 1 L. Ambers	–
OC-GW-WELL# -MMDDYY			
Sample Collection Method: ↘			

Pump: [X] Flow Rate:	Sample ID: OC-GW- P2-9-082812	Sample Time: 1020
Bailer: [ ] Type: disposable	Duplicate (K) ID: OC-GW-	Sample Time:
Other: [ ] Desc.:	Equip. blank (N) ID: OC-GW-	Sample Time:

CDM Smith MONITORING WELL PURGE AND SAMPLING FORM

Appendix D
Data Validation

DATA VALIDATION REPORT
CLP-LIKE DATA PACKAGE

Project: Omega Chemical Superfund Site
Groundwater Monitoring Well Sampling – August 2012

References: USEPA CLP National Functional Guidelines for Superfund Organic Methods Data Review June 2008 (EPA540/R-08/01)

USEPA CLP National Functional Guidelines for Low Concentration Organic Data Review June 2001 (EPA540/R-00/006)

Omega Chemical Superfund Site
Sampling and Analysis Plan for Long Term Operation and Maintenance of the Ground Water Treatment System and Groundwater Monitoring, August 9, 2010 (SAP)

Omega Chemical Superfund Site
Final Operations, Maintenance and Monitoring Manual, February 10, 2010.

SW-846 Method 8000B, December 1996
SW-846 Method 8260B, December 1996
SW-846 Method 8270C, December 1996

Reviewer: Elizabeth Fortuna
CDM – Irvine, California

Date: October 18, 2012

Work Order Number: 440-21702-2
440-21702-1
440-21316-2
440-21316-1
440-21053-2
440-21053-1

Analytical Laboratory: Test America Laboratories Inc.
Irvine, California 92614

DATA REVIEW

Nineteen (19) water samples (listed below) were collected on August 21, 22, and 28, 2012 and transported to Test America Laboratories, Inc. (Test America). Samples

were collected from groundwater monitoring wells and piezometers and analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and 1,4-dioxane by EPA Method 8270 (modified). A level 4 data package was only requested for samples OC-GW-OW9-082112 and OC-GW-OW9K-082112. The raw data for these results were provided. Sample identification and collection dates are summarized in the following table.

Sample Summary Table

Sample ID	*VOCs*	*1,4-Dioxane*	*Lab Sample ID*	*Sample Type* [1]	*Date Collected*	*VOC Date Analyzed*
OC-GW-OW5-082812	X	X	440-21702-1	GW	8/28/12	8/29/12
OC-GW-PZ9-082812	X	X	440-21702-2	GW	8/28/12	8/29/12
OC-GW-OW4B-082212	X	X	440-21316-7	GW	8/22/12	9/4/12
OC-GW-OW4BK-082212	X	X	440-21316-8	K	8/22/12	9/2/12
OC-GW-TB-082212	X		440-21316-1	TB	8/22/12	8/30/12
OC-GW-OW6-082212	X	X	440-21316-2	GW	8/22/12	8/30/12
OC-GW-OW10-082212	X	X	440-21316-3	GW	8/22/12	8/30/12
OC-GW-OW1B-082212	X	X	440-21316-4	GW	8/22/12	8/30/12
OC-GW-OW4A-082212	X	X	440-21316-5	GW	8/22/12	8/30/12
OC-GW-OW4AN-082212	X	X	440-21316-6	N	8/22/12	9/1/2012
OC-GW-OW9-082112	X	X	440-21053-2	GW	8/21/12	8/22/12
OC-GW-OW9K-082112	X	X	440-21053-3	K	8/21/12	8/27/12
OC-GW-TB-082112	X		440-21053-1	TB	8/21/12	8/27/12
OC-GW-OW8B-082112	X	X	440-21053-4	GW	8/21/12	8/27/12
OC-GW-OW3B-082112	X	X	440-21053-5	GW	8/21/12	8/27/12
OC-GW-OW7-082112	X	X	440-21053-6	GW	8/21/12	8/27/12
OC-GW-OW2-082112	X	X	440-21053-7	GW	8/21/12	8/28/12
OC-GW-OW3-082112	X	X	440-21053-8	GW	8/21/12	8/28/12
OC-GW-OW7N-082112	X	X	440-21053-9	N	8/21/12	8/28/12

Notes:

[1]	GW	=	Groundwater sample
	N	=	Equipment decontamination blank
	TB	=	Trip Blank
	K	=	Field duplicate

Sample OC-GW-OW9K-082112 was reanalyzed on August 28, 2012 for dilution and was also reanalyzed on September 4, 2012 for methylene chloride. Samples OC-GW-082112, OC-GW-OW3B-082112, OC-GW-OW7-082112 and OC-GW-OW2-082112 were reanalyzed on September 4, 2012.

Sample OC-GW-OW4AN-082212 had headspace in the sample vial.

The laboratory was contacted on October 16, 2012, regarding errors in the case narrative for several packages. The case narratives described analytical batches that were not included in the data package. The laboratory responded on October 19, 2012 with the revised case narratives.

VOLATILE ORGANIC COMPOUNDS ASSESSMENT - METHOD 8260B

Several samples were analyzed at a higher dilution due to analytes that exceeded the calibration range.

I. TECHNICAL HOLDING TIMES

All technical holding times requirements were met. Water samples were analyzed between August 22, 2012 and September 4, 2012, which is within the 14-day holding time criteria.

II. INITIAL CALIBRATION

Initial calibration of the instrument must be performed using a minimum of five standard concentrations. For initial calibration to be accepted, five system performance check compounds (SPCCs) must meet the following minimum average response factors (RFs):

Chloromethane	0.10
1,1-Dichloroethene	0.10
Bromoform	0.10
Chlorobenzene	0.30
1,1,2,2-Tetrachloroethane	0.30

SPCCs are used to check compound instability and to check for degradation caused by contaminated lines or active sites in the system. The average RF for each of the five SPCCs met the minimum calibration criteria listed above.

Additionally, the relative standard deviation (RSD) of the response factors of the initial calibration curve should be less than or equal to 15 percent for all target analytes and less than or equal to 30 percent for six calibration check compounds

(CCCs). The six CCCs are: 1,1-dichloroethene, chloroform, 1,2-dichloropropane, toluene, ethylbenzene and vinyl chloride. If the RSD of the target analytes is less than 15 percent and less than 30 percent for the six CCCs, then the RF is assumed to be constant over the calibration range and the average RF can be used for quantitation.

If the RSD of the target analytes exceeds the 15 percent criterion, other calibration options can be employed. As discussed in Section 7.0 of Method 8000, linear calibration using a least squares regression may be used with the initial calibration data to demonstrate the instrument calibration linearity. Least squares regression was used for the target analytes listed above, which did not have an average RF of 15 percent or less. For initial calibration to be accepted using a least squares model, the coefficient of determination must be greater than or equal to 0.99.

Sample OC-GW-OW9-082112 was analyzed on instrument GCMS43 on August 22, 2012 and sample OC-GW-OW9K-082112 was analyzed on instrument GCMS34 on August 27, 2012 using a minimum of six concentrations ranging from 0.25 to 300 µg/L. The reanalysis of OC-GW-OW9K-082112 was performed on instrument GCMS36 on September 4, 2012. This meets the method requirement of initial calibration using five concentration levels. All CCC and SPCC criteria were met. The initial calibration was performed on instrument GCMS 34 on August 24, 2012, on instrument GCMS36 on July 5, 2012 and on instrument GCMS43 on July 30, 2012. Extended calibration (for other select analytes) was performed on August 25, 2012 for instrument GCMS34, on July 6, 2012 for instrument GCMS36 and on August 1, 2012 for instrument GCMS43. Target analytes met the 15 percent calibration criteria or the coefficient of determination 0.99 criteria on instruments GCMS 34, GCMS 36, GCMS 43. Therefore, no action was required.

III. CONTINUING CALIBRATION

The initial GC/MS calibration is verified once every 12 hours by analyzing a 4-bromofluorobenzene tuning standard and a calibration verification standard (a midpoint check standard) and prior to analyzing any samples. The calibration verification standard must contain each of the five SPCCs used during initial calibration. The minimum RF for each SPCC must meet the criteria specified for initial calibration (i.e., 0.10 to 0.30). In addition, initial calibration is checked using the CCCs used during initial calibration. If the percent difference (%D) of each of the CCCs is less than 20 percent, the initial calibration is assumed to be valid.

Samples OC-GW-OW9-082112 and OC-GW-OW9K-082112 were analyzed on August 22, 27 and September 4, 2012. Prior to sample analysis, a 50 ng BFB tuning standard was analyzed. Mass ion abundance criteria were met for the system. Each of the five SPCCs and the six CCCs were contained in a mid-point check standard at concentrations of 25 µg/L each. The RF for each of the SPCCs was greater than the criteria specified and the %D between the continuing calibration and the initial calibration for each of the CCCs was less than 20 percent for each batch of samples. The daily continuing calibration checks for August 22, 27 and September 4, 2012 showed that all target compounds were within the acceptable recovery limits provided by the laboratory, which varied from 20 to 75 percent difference, except for

1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene on July 5, which is associated with the IC, and carbon tetrachloride on September 4, 2012 on instrument GCMS36. However, only methylene chloride was reported from instrument GCMS36 and therefore no action was needed for these compounds, as the initial calibrations were validated and continuing calibration criteria were met for other compounds.

The raw data and summary forms for the continuing calibration was not validated for all samples, however the case narrative in several of the data packages, the continuing calibrations results in several samples were above the upper control limit. The 2,2-dichloropropane and cis-1,3-dichloropropene in samples OC-GW-OW2-082112 and OC-GW-OW7N-082112; carbon tetrachloride in samples OC-GW-TB-082212, OC-GW-OW6-082212, OC-GW-OW10-082212, OC-GW-OW1B-082212, OC-GW-OW4A-082212; 2,2-dichloropropane, cis-1,3-dichloropropene and carbon tetrachloride in sample OC-GW-OW4AN-082212, carbon tetrachloride in sample OC-GW-4B-082212 and several compounds in sample OC-GW-OW4BK-082212. However, because the results were nondetect, the laboratory reported the results from this analysis.

IV. METHOD BLANKS

A method blank must be analyzed with each batch of samples for each matrix type immediately after initial calibration is verified and before sample analysis. Methylene chloride was detected in the method blank associated with samples OC-GW-OW9K-082112 and OC-GW-OW2-082112 at a concentration of 2.04 ug/L. The concentration in sample OC-GW-OW2-082112 was 8.0 ug/L, which is below the Blank Action Limit (BAL) of 20.4 ug/L (10x the method blank contamination concentration) and below the reporting limit of 25 ug/L and therefore the result will be qualified as nondetect at the reporting limit of 25 ug/L. The concentration in sample OC-GW-OW9K-082112 was 24 ug/L, which is above the Blank Action Limit (BAL) of 20.4 ug/L (10x the method blank contamination concentration) and therefore no action is needed based on this method blank contamination.

V. SURROGATES

Three surrogate spikes (dibromofluoromethane, toluene-d8 and 4-bromofluorobenzene) were added to each environmental sample, QC sample, and method blank, as required by the method. Surrogate control limits were presented in Table 3-3 of the SAP (Section 3.0 of the SAP is the QAPP) and are 80 to 120 for all three surrogates.

All surrogate recoveries were within the acceptable control limits.

VI. MATRIX SPIKE/MATRIX SPIKE DUPLICATES

One MS and MSD sample pair was analyzed with each analytical batch in this Work Order. Acceptance limits for MS and MSD recoveries and the relative percent difference (RPD) between the MS and the MSD were statistically determined by the laboratory and were provided with the laboratory report for each analyte. The SAP indicates that that the MS/MSD sample is spiked with all target compounds and that percent recoveries vary for each analyte from as low as 25 percent to as high as 160

percent. If an MS/MSD could not be analyzed due to insufficient volume, a LCS Duplicate (LCSD) sample was analyzed to assess precision.

The percent recoveries for the MS and MSD samples and the RPDs were within the acceptance criteria for the majority of spiked compounds. In some cases, however, compounds recovered above the laboratory MS/MSD limits. Because the corresponding sample results were nondetect, the potentially high bias had no affect so qualification is not required. For analytical batch 49475 in laboratory package J21316-2 and analytical batch 49388 in laboratory package J21316-1, styrene recovered below the laboratory limits in the MS and MSD, however styrene was within the limits for the LCS samples and therefore no action was taken on the MS/MSD.

VII. LABORATORY CONTROL SAMPLES (LCS)

An LCS sample was analyzed with each batch of samples analyzed which meets the analytical method requirement of one LCS per analytical batch. Results from the LCS samples were included in the analytical report. The SAP indicates that that the LCS sample is spiked with all target compounds and that percent recoveries vary for each analyte from as low as 30 percent to as high as 140 percent. Therefore, LCS recoveries were compared to the criteria limits listed in the laboratory report. Also, if no MS/MSD samples were analyzed with an analytical batch, an LCSD sample was also analyzed. All LCS analyte recoveries were within the acceptance limits established by the laboratory, except for several compounds that were above the LCS limits. However, no validation actions are needed as the LCS recoveries were all above the limits and all the sample results were nondetect.

VIII. REGIONAL QUALITY ASSURANCE AND QUALITY CONTROL

Field duplicates were analyzed as part of this sampling event. Two field duplicate pairs were collected during the August 2012 semi-annual sampling event. Sample OC-GW-OW4K-082212 is a field duplicate of sample OC-GW-OW4-082212 and sample OC-GW-OW9K-082112 is a field duplicate of sample OC-GW-OW9-082112. The RPDs between the primary and duplicate samples were within 20 percent for all detected analytes, except for the 1,1-dichloroethane results in the OW9 sample pair, which had an RPD of 32.3 percent. Therefore, the 1,1-dichloroethane results in samples OC-GW-OW9-082112 and OC-GW-OW9K-082112 are qualified as estimated (flagged with a "J") due to field duplicate imprecision.

Also, samples OC-GW-OW7N-082112 and OC-GW-OW4AN-082212 are equipment blanks, which were collected on August 21 and 22, 2012, respectively. Chloroform and methylene chloride were detected in sample OC-GW-OW7N-082112 at concentrations of 0.41 ug/L and 2.9 ug/L, respectively. Methylene chloride was also detected in sample OC-GW-OW9K-082112 at a concentration of 24 ug/L, with a reporting limit of 50 ug/L. The BAL (10x the equipment blank contamination for common laboratory analytes like methylene chloride) is 29 ug/L. Therefore, the methylene chloride result in sample OC-GW-OW9K-082112 is qualified as not detected at the reporting limit of 50 ug/L. Chloroform was detected in sample OC-GW-OW2-082112 at a concentration of 25 ug/L, in sample OC-GW-OW3-082112 at a concentration of 7.1 ug/L, in sample OC-GW-OW9-082112 at a concentration of 200

ug/L, and in sample OC-GW-OW9K-082112 at a concentration of 230 ug/L. However, the BAL (5x the equipment blank concentration) is 2.05 ug/L, and all the sample results are above the BAL and therefore no qualification is needed.

Trip blank samples were also submitted with the samples during the August 2012 sampling event on August 21 and 22, 2012. No VOCs were detected in the trip blank samples.

Additionally, two split samples for samples OC-GW-OW9-082112 and OC-GW-OW4B-082212 were submitted to an independent laboratory (Calscience) to check precision between laboratories. The split sample precision limit of 20 percent between the samples was met for the OC-GW-OW4B-082212 split sample pair for detected compounds. The split sample precision limit of 20 percent between the samples was not met for the OC-GW-OW9-082112 split sample pair for 1,1-dichloroethane, 1,1-dichloroethene, chloroform, tetrachloroethene, and 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113). Therefore these results in the split sample pair for OC-GW-OW9-082112 will be qualified (flagged with a "J") as estimated due to split sample imprecision.

In addition, the laboratory summary QC data for the split samples, including laboratory blanks, MS, MSD, LCS, and LCS duplicate data were reviewed; however calibration and raw data were not provided for these samples. Based on the limited data review, no qualification was needed.

IX. INTERNAL STANDARDS

IS area counts for OC-GW-OW9-082112 and OC-GW-OW9K-082112 were within -50 - +100 percent of the IS area count from the daily calibration standard. IS retention times were within ±30 seconds from the retention time of the associated daily standard.

X. TARGET COMPOUND IDENTIFICATION

All positive compound identifications for samples OC-GW-OW9K-082112 and OC-GW-OW9-082112 were confirmed through the mass spectra library.

XI. COMPOUND QUANTITATION

Several positive results were recalculated to ensure that compound quantitation was accurate. No errors were encountered. Compound quantitation was based on the initial calibration average RF.

XII. SYSTEM PERFORMANCE

The system performance was acceptable.

XIII. OVERALL ASSESSMENT OF VOC DATA

All QC criteria evaluated during data validation of the VOC analyses were within acceptable limits and can be used as reported and meet the project objectives, except for several results that are qualified based on method blank, equipment blank, or field

duplicate and split sample precision issues. The methylene chloride result in sample OC-GW-OW2-082112 is qualified as not detected at the reporting limit of 25 ug/L due to method blank contamination. The methylene chloride result in sample OC-GW-OW9K-082112 is qualified as not detected at the reporting limit of 50 ug/L. The 1,1-dichloroethane results in samples OC-GW-OW9-082112 and OC-GW-OW9K-082112 are qualified as estimated (flagged with a "J") due to field duplicate imprecision.

The 1,1-dichloroethane, 1,1-dichloroethene, chloroform, tetrachloroethene, and 1,1,2-trichloro-1,2,2-trifluoroethane results in the OC-GW-OW9-082112 split sample pair are qualified as estimated (flagged with a "J") due to split sample imprecision.

1,4-DIOXANE DATA ASSESSMENT

Seventeen samples (17) were analyzed for low-level 1,4-dioxane. A level 4 data package was requested for samples OC-GW-OW9-082112 and OC-GW-OW9K-082112. The raw data for this sample and the associated laboratory QC were included. Because there is no analytical method promulgated by EPA for the analysis of low-level 1,4-dioxane, the SAP specifies using modified EPA Method 8270C method (EPA Method 8270C M), using isotopic dilution with GC/MS. The data were reviewed for compliance with the Omega Chemical Superfund Site Sampling and Analysis Plan for Long Term Operation and Maintenance of the Ground Water Treatment System and Groundwater Monitoring (CDM, 2010).

1,4-Dioxane in two samples (OC-GW-PZ9-082812 and OC-GW-OW9-082112) exceeded the calibration range so were analyzed at a higher dilution.

I. TECHNICAL HOLDING TIMES

In accordance with Method 8270C, the holding time for 1,4-dioxane in water is 7 days from sample collection until extraction; and 14 days from extraction to analysis. Table 2-1 of the Sampling and Analysis Plan incorrectly lists the holding time for 1, 4-dioxane as 14 days. The samples were extracted on August 22, 28 and 29, 2012 and were analyzed on August 23, 29, and 30, 2012. Therefore, all holding times were met.

II. INITIAL CALIBRATION

Initial calibration data were reviewed for the samples OC-GW-OW9-082112 and OC-GW-OW9K-082112. Initial calibration of GCMS05 was performed on January 19, 2012, and on GCMS50 on August 16, 2012, using seven standard concentrations ranging from 0.2 to 20 ug/L, which meet the 8270C requirement of initial calibration using five concentration levels. The %RSD of the response factors over the entire calibration curve was 5.7 percent for GCMS05 and 13 percent for GCMS50, which meets general criteria (specified in Method 8000) of less than 15 percent. Therefore, the calibration curve was considered linear.

III. CONTINUING CALIBRATION

Continuing calibration was reviewed for the samples OC-GW-OW9-082112 and OC-GW-OW9K-082112. Sample OC-GW-OW9-082112 was analyzed on instrument GCMS05 and sample OC-GW-OW9K-082112 was analyzed on instrument GCMS50.

The initial calibration was verified prior to sample analysis by analyzing 2 ug/L standard (mid point of the curve). Continuing calibration data were reviewed for analyses conducted on August 23, 2012 and August 28, 2012. The difference between the continuing calibration verification standard and the initial value was 0.5 percent for instrument GCMS05 and 2.5 percent for instrument GCMS50, which demonstrates that the initial calibration was valid. While the SAP indicates that a DFTPP tuning standard be analyzed prior to sample analysis, Test America does not perform the DFTPP when using SIM. An instrument blank of methylene chloride is used to check the instrument.

IV. METHOD BLANKS

One method blank was analyzed with each batch of samples to verify that the instrument is free from contamination. 1,4-Dioxane was not detected in any of the method blanks.

V. LABORATORY CONTROL SAMPLE (LCS)

One LCS sample was analyzed with each batch of samples, which meets Method 8270C criteria. An LCSD sample was analyzed with each sample batch. The LCS recoveries for 1,4-dioxane were within acceptance criteria of 35 to 120 percent (specified in Table 3-4 of the SAP as well as the acceptance limits established by the laboratory).

VI. SURROGATES

One surrogate spike (1,4-dioxane-d8) was added to each environmental sample, QC sample, and method blank, as required by the method. Table 3-2 of the SAP specified a surrogate recovery of 30 to 120 percent. All surrogate recoveries were within the specified criteria, except for the surrogate for sample OC-GW-PZ9-082812, which was diluted out due to the high dilution factor (200x). Therefore, no action is required due to the surrogate out of criteria.

VII. MATRIX SPIKE/MATRIX SPIKE DUPLICATES

One MS and MSD sample pair was analyzed with samples. The MS/MSD sample was from sample OC-GW-OW7-082112. Acceptance limits for MS and MSD recoveries and the RPD between the MS and the MSD were statistically determined by the laboratory and were provided with the laboratory report for each analyte. Table 3-4 of the SAP indicates that that the MS/MSD percent recovery 35 to 120 percent and the RPD must be less than 25 percent.

The percent recoveries for the MS and MSD samples were within the acceptance criteria, however the RPD of 42 percent exceeded the limit of 25 percent. The 1,4-dioxane result in sample OC-GW-OW7-082112 would normally be qualified as estimated due to an MS/MSD RPD exceedance, however it is qualified qualified as not detect due to equipment blank contamination (see Section VIII) and therefore no action is needed.

VIII. REGIONAL QUALITY ASSURANCE AND QUALITY CONTROL

Samples OC-GW-OW4AN-082212 and OC-GW-OW7N-082112 are equipment blanks, which were collected during the August 2012 sampling event. 1,4-Dioxane was detected in OC-GW-OW4AN-082212 at a concentration of 0.47 ug/L and in OC-GW-OW7N-082112 at a concentration of 0.072 ug/L. The 1,4-dioxane result in sample OC-GW-4BK-082212 was the only sample associated with equipment blank OC-GW-OW4AN-082212 that had a 1,4-dioxane detection. A BAL of 2.7 ug/L was calculated (5x the sample concentration) for OC-GW-OW4AN-082212. The concentration in sample OC-GW-4BK-082112 was 0.73 ug/L, which is below the BAL of 2.7 ug/L and above the reporting limit of 0.47 ug/L. Therefore the result will be qualified as nondetect at the result of 0.73 ug/L. Sample OC-GW-OW7N-082112 has a blank action limit of 0.36 ug/L. Therefore, the 1,4-dioxane results in samples OC-GW-OW8B-082112, OC-GW-OW7-082112 and OC-GW-OW2-082112, which are all below the reporting limit, are qualified as not detected at the reporting limit of 0.47 ug/L.

Field duplicates were analyzed as part of this sampling event. Two field duplicate pairs were collected during the August 2012 semi-annual sampling event. Sample OC-GW-OW4BK-082212 is a field duplicate of sample OC-GW-OW4B-082212 and sample OC-GW-OW9K-082112 is a field duplicate of sample OC-GW-OW9-082112.

In field duplicate pair collected from OW4B, 1,4-dioxane was not detected at a reporting limit of 0.48 ug/L in the original sample and qualified as not detected at 0.73 ug/L in the field duplicate. Therefore, an RPD was not calculated for these results. In field duplicate pair OW9, 1,4-dioxane was detected at 260 ug/L in the original sample and was not detected in the duplicate sample. The split sample for well OW9, which is discussed below, had a result of 390 ug/L for 1, 4-dioxane, which suggests that the field duplicate of OW9 is an anomaly. The laboratory was contacted on October 17, 2012 to review the OW9 field duplicate results for any issues that could explain this discrepancy. The laboratory responded on October 31, 2012 indicating that there was no laboratory error. Additionally, the field sampler was contacted and indicated that there was no field issues that occurred during sampling that could explain this discrepancy. Based on the large difference between the field duplicates, both values are qualified as estimated (flagged with a "J") due to field duplicate imprecision.

Additionally, two split samples for samples OC-GW-OW9-082112 and OC-GW-OW4B-082212 were submitted to an independent laboratory (Calscience) to check precision between laboratories. The split sample precision limit of 20 percent between the samples was not met for the OC-GW-OW9-082112 split sample pair for 1,4-dioxane, which had a %RPD of 40 percent. Therefore, 1,4-dioxane in OC-GW-OW9-082112 is qualified (flagged with a "J") as estimated due to split sample imprecision. 1,4-Dioxane was not detected in OC-GW-OW4B-082212 and therefore no evaluation was required.

In addition, the laboratory summary QC data for the split samples, including laboratory blanks, LCS, and LCS duplicate data were reviewed; however calibration

and raw data were not provided for these samples. Based on the limited data review, no qualification was needed.

IX. INTERNAL STANDARDS

Internal standard (IS) area counts and retention times for were within method criteria for samples OC-GW-OW9K-082112 and OC-GW-OW9-082112. IS area counts for analyzed were within -50 - +100 percent of the IS area count from the daily calibration standard. IS retention times were within ±30 seconds from the retention time of the associated daily standard for samples where the raw data were provided.

X. TARGET COMPOUND IDENTIFICATION

All positive compound identifications were confirmed through the mass spectra library.

XI. COMPOUND QUANTITATION

A positive result was recalculated to ensure that compound quantitation was accurate. No errors were encountered. Compound quantitation was based on the initial calibration average RF.

XII. SYSTEM PERFORMANCE

The system performance was acceptable.

XIII. OVERALL ASSESSMENT OF 1,4-DIOXANE DATA

Because there is no analytical method promulgated by EPA for the analysis of low-level 1,4-dioxane, the SAP specifies a modified EPA Method 8270C method (EPA Method 8270C M), using isotopic dilution with GC/MS. The data were reviewed for compliance with the Omega Chemical Superfund Site Sampling and Analysis Plan for Long Term Operation and Maintenance of the Ground Water Treatment System and Groundwater Monitoring (CDM, 2010). All QC criteria evaluated during data validation of the 1,4-dioxane analyses were within acceptable limits and can be used as reported and meet the project objectives, except for several results which are qualified based on equipment blank contamination, field duplicate imprecision and split sample imprecision. The 1,4-dioxane result in sample OC-GW-OW4BK-082112 is qualified as nondetect at the result of 0.73 ug/L as a result of equipment blank contamination. 1,4-Dioxane results in samples OC-GW-OW8B-082112, OC-GW-OW7-082112 and OC-GW-OW2-082112 are qualified as not detected at the reporting limit of 0.47 ug/L due to equipment blank contamination.

1, 4-Dioxane results in samples OC-GW-OW9-082112, OC-GW-OW9K and OC-GW-OW9K2-082112 are qualified as estimated (flagged with a "J") due to field duplicate and split sample imprecision.