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May 17, 2013

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

Subject: Performance Standard Verification Plan, Quarterly Monitoring Progress Report (January 1, 2013 to March 31, 2013), Groundwater Treatment System, Omega Chemical Superfund Site, Non-Time Critical Removal Action (NTCRA), Whittier, California

Dear Mr. Stensby,

Enclosed for your review is the Performance Standard Verification Plan Quarterly Monitoring Progress Report (January 1, 2013 to December 31, 2013), Groundwater Treatment System, Omega Chemical Superfund Site, Non-Time Critical Removal Action (NTCRA).

The enclosed report, including 1st Quarter 2013 data, 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 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 Omega Chemical Site PRP Organized Group (OPOG) to address contamination in Operable Unit 1 (OU-1).

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

Sincerely,
Omega Chemical Site PRP Organized Group

Edward Modiano
Project Coordinator

cc:
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PERFORMANCE STANDARD VERIFICATION PLAN

Quarterly Monitoring Progress Report

GROUNDWATER TREATMENT SYSTEM

Omega Chemical Superfund Site

Non-Time Critical Removal Action (NTCRA)

FIRST QUARTER 2013

TABLE OF CONTENTS

Section Page

ACRONYMS AND ABBREVIATIONS....iii

1. 0 INTRODUCTION.... 1

2. 0 QUARTERLY OPERATIONAL STATISTICS.... 2

2.1 OPERATIONAL DATA SUMMARY.... 2

2.2 OPERATIONS EXCEPTION REPORT/PLANNED ACTIVITIES 3

3. 0 MONITORING ACTIVITIES.... 3

3.1 COMPLIANCE MONITORING 3

3.2 PERFORMANCE MONITORING.... 4

3.3 GROUNDWATER ELEVATION SUMMARY 5

3.4 GROUNDWATER ANALYTICAL SUMMARY 6

3.5 DATA QUALITY ASSESSMENT.... 6

4. 0 RECOMMENDATIONS 7

5. 0 REFERENCES.... 8

TABLES

Table

1 GWTS Operational Data Summary
2 GWTS Influent and Effluent Analytical Summary
3 Vapor Phase GAC Influent and Effluent Analytical Summary
4 Groundwater Elevation Summary
5 Chlorinated VOCs Analytical Summary in Groundwater
6 Data Quality Assessment Table

FIGURES

Figure

1 Site Map
2 Process Flow Diagram
3 Plan View of Extraction Wells, Treatment Plant, and Conveyance Piping
4 PCE Zone A – Concentration Map
5 PCE Zone B – Concentration Map

ATTACHMENTS

Attachment

A SDLAC Self-Monitoring Report

B Laboratory Analytical Results

C Groundwater Elevation Evaluation

D Groundwater Monitoring Field Forms

E Data Validation Report

ACRONYMS AND ABBREVIATIONS

µg/L	micrograms per liter
CDM	Camp Dresser & McKee Inc.
CD	Consent Decree
COD	chemical oxygen demand
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
RAOs	Remedial Action Objectives
SCAQMD	South Coast Air Quality Management District
Site	Omega Chemical Superfund Site
TCE	trichloroethene
TSS	total suspended solids
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
VPGAC	vapor phase granular activated carbon

PERFORMANCE STANDARD VERIFICATION PLAN
Quarterly Monitoring Progress Report

GROUNDWATER TREATMENT SYSTEM
Omega Chemical Superfund Site
Non-Time Critical Removal Action (NTCRA)

FIRST QUARTER 2013

1.0 INTRODUCTION

On behalf of the Omega Chemical Superfund Site (Site) Potentially Responsible Party (PRP) Organized Group (OPOG), *de maximis*, inc (*de maximis*) and ddms, inc. (ddms) have prepared this quarterly monitoring progress and performance evaluation report per the Final Operations, Maintenance, and Monitoring (OM&M) Manual (Camp Dresser & McKee Inc. [CDM], 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, 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 (USEPA, 2001) 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.

The purpose of this report is to summarize the GWTS operational and performance monitoring data collected during the First Quarter 2013 period (i.e., January 1, 2013 through March 31, 2013). 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 OU-1) 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.

2.0 QUARTERLY OPERATIONAL STATISTICS

The GWTS began operation on July 25, 2009 and OM&M activities, including weekly system maintenance and data collection, are being performed in accordance with the procedures described in the OM&M Manual (CDM, 2010) and PSVP (CDM, 2007). As shown in Figure 2 (Process Flow Diagram) and Figure 3 (Plan View of Extraction Wells, Treatment Plant, and Conveyance Piping Routing), a total of five extraction wells (EW-1, EW-2, EW-3, EW-4, and EW-5) are in operation. Further details of the GWTS are available in the O&M Manual (CDM, 2010).

2.1 OPERATIONAL DATA SUMMARY

OM&M activities are conducted weekly to maintain and verify system performance. Key performance parameters are presented below. An operational data summary of these parameters, by month, can be found in Table 1.

- Average system run time (for quarter): 91%
- Average system flow rate (for quarter): 13 gallons per minute (gpm)
- Total gallons processed (for quarter): 1,714,910 gallons
- Cumulative gallons processed: 25,010,239 gallons
- Average mass removal (per month): 11.7 pounds (lbs)
- Cumulative mass removed: 800.5 lbs

NOTE: 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.

2.2 OPERATIONS EXCEPTION REPORT/PLANNED ACTIVITIES

The following is a listing of any exceptions to normal GWTS operations during the First Quarter 2013 period (exceptions include, but are not limited to, off-line equipment, significant maintenance, or unusual operating parameters).

- GWTS Operation: No exceptions to normal operations. Minor downtime for routine maintenance.
- Extraction Well Operations: Minor downtime due to excessive water in well vaults during periods of substantial rain.
- VPGAC: Minor downtime for carbon changeout in January.

The GWTS is expected to operate per design, and weekly OM&M activities are planned through the Second Quarter 2013 period.

3.0 MONITORING ACTIVITIES

Monitoring activities to verify performance and to comply with regulatory requirements are discussed in the following sections.

3.1 COMPLIANCE MONITORING

Groundwater

The Sanitation Districts of Los Angeles County (LACSD) issued an Industrial Waste Discharge Permit (No. 20039) for the discharge of treated groundwater from the Omega Chemical GWTS to sewer manhole (No. MH 18-0271) at Crowndale Street. Effluent water is collected for laboratory analysis from the GWTS on a quarterly basis, in accordance with the permit, and analyzed for the following:

Summary of GWTS Effluent Analysis

Analyte	Collection Method
Volatile organic compounds (VOCs) by Method 8260B	Grab Sample
1,4-Dioxane by Method 8270M	Grab Sample
Semi-volatile organic compounds (SVOCs) by Method 8270C	Grab Sample
Soluble Sulfide by Method SM4500S $^{+}$D	Grab Sample
pH by field analysis	Grab Sample
Total suspended solids (TSS) by Method SM2540D	24 hour composite sample
Chemical oxygen demand (COD) by Method SM5220D	24 hour composite sample

The First Quarter 2013 samples were collected in February. Analytical results were submitted to LACSD with the required quarterly Self Monitoring Report on April 10, 2013 (Attachment A).

In addition to LACSD quarterly compliance samples, monthly process samples are collected from the GWTS Influent and Effluent. The OM&M Manual (CDM, 2010) prescribes the method and frequency for GWTS Influent and Effluent samples. Table 2 presents the groundwater analytical results for GWTS Influent and Effluent samples collected during the First Quarter 2013 period. Corresponding laboratory results can be found in Attachment B.

Vapor

Although a permit to operate is not required from South Coast Air Quality Management District (SCAQMD), monitoring of the VPGAC system is being performed to comply with substantive requirements.

Summary of SCAQMD Substantive Permit Requirements

Analyte	Effluent Concentration Limit (ppb)
Benzene	20
Carbon tetrachloride	10
Chloroform	13
Dichlorobenzene, p	10
Dichloroethane, 1,1	60
Ethylene dichloride	4.6
Methyl tert-butyl ether	20
Methylene chloride	31.2
Naphthalene	10
Perchloroethylene	268.6
Trichloroethane, 1,1,2	30
Trichloroethylene	13.4
Vinyl chloride	20

The OM&M Manual (CDM, 2010) prescribes the method and frequency for VPGAC Influent, Intermediate, and Effluent samples. Table 3 presents the vapor analytical results for VPGAC Influent, Intermediate, and Effluent samples collected during the First Quarter 2013. Corresponding laboratory results can be found in Attachment B. All effluent concentrations were within the limits defined in the SCAQMD substantive requirements (i.e., permit to operate).

3.2 PERFORMANCE MONITORING

Performance monitoring for the groundwater remedy is assessed in the PSVP (CDM, 2007) and specifies the monitoring of water levels and water quality in selected observation wells and piezometers to assess the effectiveness of the GWTS. The PSVP monitoring and reporting requirements are summarized in the following sections.

Well Monitoring Summary

Well Type	Well	Aquifer	Water Level Monitoring	Sampling Frequency	Water Quality Monitoring	Sampling Frequency
Observation Well	OW-1	A-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-1b	B-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-2	A-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-3	A-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-3b	B-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-4a	A-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-4b	B-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-5	A-Zone	✓	Monthly	×	As Required
Observation Well	OW-6	A-Zone	✓	Monthly	×	As Required
Observation Well	OW-7	A-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-8	A-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-8b	B-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-9	A-Zone	✓	Monthly	✓	Semi-annual
Observation Well	OW-10	A-Zone	✓	Monthly	✓	Semi-annual
Piezometer	PZ-1	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-2	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-3	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-4	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-5	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-6	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-7	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-8	A-Zone	✓	Monthly	×	As Required
Piezometer	PZ-9	A-Zone	✓	Monthly	✓	Semi-annual
Extraction Well	EW-1	A-Zone	✓	Monthly	✓	Semi-annual
Extraction Well	EW-2	A-Zone	✓	Monthly	✓	Semi-annual
Extraction Well	EW-3	A-Zone	✓	Monthly	✓	Semi-annual
Extraction Well	EW-4	A-Zone	✓	Monthly	✓	Semi-annual
Extraction Well	EW-5	A-Zone	✓	Monthly	✓	Semi-annual

3.3 GROUNDWATER ELEVATION SUMMARY

The Omega Chemical observation wells, piezometers, and extraction wells were gauged monthly during the First Quarter 2013 period. The sampling technique, method, and frequency of these operations are defined within Appendix H of the OM&M Manual (CDM, 2010). Groundwater elevations collected during the First Quarter 2013 period can be found in Table 4. A Groundwater Contour Map and brief evaluation of groundwater elevations are provided in Attachment C.

3.4 GROUNDWATER ANALYTICAL SUMMARY

The Semi-Annual Groundwater Monitoring Event was conducted in February 2013, and will be conducted next in August 2013. All water quality samples collected from the observation wells, extraction wells, and piezometers were analyzed for the following parameters:

- VOCs, plus acetone, isopropyl alcohol, methyl tert-butyl ether, 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 observation well purging using field instruments. Analytical results and Field Forms from the Semi-Annual Groundwater Monitoring event can be found in Attachment B and Attachment D, respectively.

The most recent analytical results for observations wells, extraction wells, and piezometers, compared to the historical maximum and minimum results for respective wells, are summarized in Table 5. Additionally, Figures 4 and 5 illustrate tetrachloroethene (PCE) concentrations in A-Zone and B-Zone wells, respectively. An arrow is included beside each result, indicating the trend in concentration compared to the prior sampling event.

3.5 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 is presented as Table 6. 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 Reports can be found in Attachment E.

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 (CDM, 2010a).

4.0 RECOMMENDATIONS

The GWTS is anticipated to continue operating similarly during the next quarter. Sampling and data collection methods and frequencies will also 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 (April 2013 to April 2014), following which additional evaluation will again be performed to assess a potential change in sampling frequency.

To continue to assess the adequacy of capture, OPOG recently installed an additional down-gradient monitoring well (OW-11) which will be added to the semi-annual groundwater monitoring program. In addition, OPOG is in process of collecting additional lithologic and in-situ groundwater quality data to assess the possible installation of an additional extraction well (EW-6) north of existing extraction well EW-1.

5.0 REFERENCES

1. CDM, 2007. *Performance Standards Verification Plan for Phase 1a Area Groundwater Treatment System*, April 19.
2. CDM, 2010. *Final Operations, Maintenance and Monitoring Manual*, February 10.
3. CDM, 2010a. *Sampling and Analysis Plan for Long Term Operation and Maintenance of the Ground Water Treatment System and Groundwater Monitoring*. August 9.
4. USEPA, 2001. *Consent Decree No. 00-12471*, February 28.

TABLES

Table 1
Omega Chemical Superfund Site
GWTS Operational Data Summary
First Quarter 2013

Month	System Runtime (%)	Average System Flow Rate (gpm)	Average System Flow Rate (gpd)	Total Gallons Processed (gal)	Mass Removed (lbs)
January	100	14	20,230	627,130	13.1
February	74	12	16,905	473,340	10.2
March	99	14	19,821	614,440	11.8

Notes:

gpm = gallons per minute
gpd = gallons per day
gal = gallons
lbs = pounds

Table 2
Omega Chemical Superfund Site
GWTS Influent and Effluent Analytical Summary
First Quarter 2013

Sample ID	Sample Date	Sample Type	PCE	TCE	1,4-Dioxane	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	Acetone	Benzene	CFM	Freon 113	Freon 11
OC_SP210_INF_12413	1/24/2013	INFLUENT	2000	94	--	20 U	20 U	20 U	140	20 U	20 U	20 U	200 U	10 U	57	150	58
OC_SP220B_EFF_12413	1/24/2013	EFFLUENT	1 U	1 U	33	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	1 U	5 U	1 U
OC_SP210_INF_22613	2/26/2013	INFLUENT	2100	90	--	40 U	40 U	40 U	110	40 U	40 U	40 U	400 U	20 U	48	130	35
OC_SP220B_EFF_22613	2/26/2013	EFFLUENT	1 U	1 U	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	1 U	5 U	1 U
OC_SP210_INF_32613	3/26/2013	INFLUENT	1900	77	--	25 U	25 U	25 U	120	25 U	25 U	25 U	250 U	13 U	46	130	34
OC_SP220B_EFF_32613	3/26/2013	EFFLUENT	1 U	1 U	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	1 U	5 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.

U = not detected above reporting limit listed
PCE = Tetrachloroethene; TCE = Trichloroethene; TCA = Trichloroethane; DCA = Dichloroethane; DCE = Dichloroethene; CFM = Chloroform; Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane; Freon 11 = Trichlorofluoromethane
-- = Not Analyzed

Table 3
Omega Chemical Superfund Site
Vapor Phase GAC Analytical Summary
First Quarter 2013

Sample ID	Sample Date	Sample Location	PCE	TCE	1,1,2-TCA	1,1-DCA	1,2-DCA	BZ	CFM	MCL	TVOC
OC_VGAC_INF_SP241	1/24/2013	INFLUENT	870	55	0.73	2	6.8	0.52 U	35	5.2 U	980
OC_VGAC_INT_SP245	1/24/2013	INTERMEDIATE	0.5 U	0.5 U	0.5 U	1.7	0.5 U	0.5 U	15	5 U	17
OC_VGAC_EFF_SP242	1/24/2013	EFFLUENT	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U
OC_VGAC_INF_SP241	2/26/2013	INFLUENT	1400	66	0.84	1.9	6.8	0.7	33	5 U	1500
OC_VGAC_INT_SP245	2/26/2013	INTERMEDIATE	0.5 U	0.71	0.5 U	1.6	0.5 U	0.5 U	14	5 U	17
OC_VGAC_EFF_SP242	2/26/2013	EFFLUENT	5.6	0.5 U	0.5 U	0.5 U	0.5 U	0.76	0.59	5 U	7.9
OC_VGAC_INF_SP241	3/26/2013	INFLUENT	460	44	0.7	1.7	5.4	0.5 U	27	5 U	540
OC_VGAC_INT_SP245	3/26/2013	INTERMEDIATE	0.5 U	3.8	0.5 U	1.9	0.5 U	0.5 U	16	5 U	23
OC_VGAC_EFF_SP242	3/26/2013	EFFLUENT	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U	23 U	23 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.

U = not detected above reporting limit listed
PCE = Tetrachloroethene; TCE = Trichloroethene; TCA = Trichloroethane; DCA = Dichloroethane; BZ = Benzene; CFM = Chloroform; MCL = Methylene Chloride; TVOC = Total VOCs

Table 4
Omega Chemical Superfund Site
Groundwater Elevation Summary
First Quarter 2013

Well No.	Elevation (ft MSL)	Screen Interval (feet bgs)	Date	Depth To Water (feet btoc)	Groundwater Elevation (feet MSL)
EW-1	200.25	72 - 87	1/29/2013	81.59	118.66
			2/27/2013	81.87	118.38
			3/29/2013	82.15	118.1
EW-2	199	72 - 87	1/29/2013	79.18	119.82
			2/27/2013	79.47	119.53
			3/29/2013	79.8	119.2
EW-3	198	70 - 85	1/29/2013	82.55	115.45
			2/27/2013	81.13	116.87
			3/29/2013	81.85	116.15
EW-4	197	71 - 86	1/29/2013	78.4	118.6
			2/27/2013	77.43	119.57
			3/29/2013	78.85	118.15
EW-5	195	70 - 85	1/29/2013	80.85	114.15
			2/27/2013	75.69	119.31
			3/29/2013	81.17	113.83
OW1	210.3	63 - 77.5	1/29/2013	Dry	Dry
			2/27/2013	Dry	Dry
			3/29/2013	Dry	Dry
OW1b	204.98	110 - 120	1/29/2013	83.75	121.23
			2/27/2013	83.65	121.33
			3/29/2013	83.96	121.02
OW2	200.1	60 - 80	1/29/2013	Dry	Dry
			2/27/2013	Dry	Dry
			3/29/2013	Dry	Dry
OW3	196.33	63 - 83	1/29/2013	77	119.33
			2/27/2013	77.53	118.8
			3/29/2013	77.85	118.48
OW3b	194.86	112 - 122	1/29/2013	83.82	111.04
			2/27/2013	83.78	111.08
			3/29/2013	84.11	110.75
OW4a	182.47	49.8 - 69.8	1/29/2013	65.52	116.95
			2/27/2013	65.81	116.66
			3/29/2013	66.04	116.43
OW4b	182.22	112 - 122.3	1/29/2013	71.79	110.43
			2/27/2013	71.7	110.52
			3/29/2013	72.04	110.18
OW5	151.96	30 - 50	1/29/2013	38.94	113.02
			2/27/2013	39.28	112.68
			3/29/2013	39.47	112.49
OW6	170.54	38 - 58	1/29/2013	54.9	115.64
			2/27/2013	54.93	115.61
			3/29/2013	55.17	115.37
OW7	212.01	70.9 - 90.9	1/29/2013	82.6	129.41
			2/27/2013	82.73	129.28
			3/29/2013	83.11	128.9

Table 4
Omega Chemical Superfund Site
Groundwater Elevation Summary
First Quarter 2013

Well No.	Elevation (ft MSL)	Screen Interval (feet bgs)	Date	Depth To Water (feet btoc)	Groundwater Elevation (feet MSL)
OW8	198.42	60.4 - 80	1/29/2013	Dry	Dry
			2/27/2013	Dry	Dry
			3/29/2013	Dry	Dry
OW8b	198.65	116 - 126	1/29/2013	87.1	111.55
			2/27/2013	87.01	111.64
			3/29/2013	87.41	111.24
OW9	195.7	70 - 90	1/29/2013	75.9	119.8
			2/27/2013	76.44	119.26
			3/29/2013	76.8	118.9
OW10	193.17	69.5 - 89.5	1/29/2013	71.15	122.02
			2/27/2013	71.29	121.88
			3/29/2013	71.53	121.64
PZ-1	198.04	68 - 88	1/29/2013	80.6	117.44
			2/27/2013	80.84	117.2
			3/29/2013	81.21	116.83
PZ-2	199.29	64 - 84	1/29/2013	81.53	117.76
			2/27/2013	81.79	117.5
			3/29/2013	82.18	117.11
PZ-3	201.59	69.8 - 89.8	1/29/2013	79.93	121.66
			2/27/2013	80.51	121.08
			3/29/2013	80.83	120.76
PZ-4	193.88	70 - 90	1/29/2013	66.84	127.04
			2/27/2013	66.63	127.25
			3/29/2013	66.95	126.93
PZ-5	208.86	83 - 98	1/29/2013	81.4	127.46
			2/27/2013	81.61	127.25
			3/29/2013	82.02	126.84
PZ-6	208.29	83 - 98	1/29/2013	80.9	127.39
			2/27/2013	81.22	127.07
			3/29/2013	81.51	126.78
PZ-7	208.84	86 - 101	1/29/2013	83.51	125.33
			2/27/2013	83.75	125.09
			3/29/2013	84.11	124.73
PZ-8	209.31	86 - 101	1/29/2013	83.2	126.11
			2/27/2013	83.49	125.82
			3/29/2013	83.8	125.51
PZ-9	195.75	70 - 90	1/29/2013	78.1	117.65
			2/27/2013	78.39	117.36
			3/29/2013	78.71	117.04

Notes:
Elevation data per California Coordinate System NAD27
MSL = mean sea level
bgs = below ground surface
btoc = below top of casing

Table 5
Omega Chemical Superfund Site
Chlorinated VOCs Analytical Summary in Groundwater
First Quarter 2013

Well ID	Sample Date	Sample Type	PCE	TCE	1,4-Dioxane	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
		Historical Max (ug/l)	240000	10000	52000	14000	1000	1000	5100	1000	1000	1000	2600	1000	1000	1000	1000	3200	15000	6300	1300	5000
		Historical Min (ug/l)	0.68	0.27	0.072	0.3	0.3	0.27	0.4	0.32	0.3	0.31	0.28	0.32	0.37	0.36	0.3	0.33	0.68	0.5	0.43	0.26
		Historical Max Date (ug/l)	02/09/09	08/24/05	02/19/03	08/24/05	06/22/09	06/22/09	08/24/05	06/22/09	06/22/09	06/22/09	06/06/96	06/22/09	06/22/09	06/22/09	06/22/09	06/06/96	06/06/96	03/13/06	03/13/06	06/22/09
		Historical Min Date (ug/l)	09/17/08	02/22/12	08/21/12	08/22/12	08/22/12	08/22/12	08/25/04	08/22/12	08/22/12	08/24/05	08/22/12	08/22/12	08/22/12	08/22/12	08/22/12	08/22/12	08/24/05	08/22/12	08/23/07	08/22/12
EW-1	03/01/13	ORIG	540	63	1.6	2 U	2 U	2 U	130	2 U	2 U	0.91	2 U	2 U	2 U	2 U	2 U	4	3	120	39	2 U
EW-2	03/01/13	ORIG	2500	91	75	5 U	5 U	5 U	140	5 U	1.5	3	15	5 U	5 U	5 U	5 U	83	8.5	210	57	5 U
EW-3	03/01/13	ORIG	580	52	0.27	2 U	2 U	2 U	180	2 U	2 U	1.2	2 U	2 U	2 U	2 U	2 U	15	3.2	140	83	2 U
EW-4	03/01/13	ORIG	110	10	0.31	1 U	1 U	1 U	98	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1.1	72	46	1 U
EW-5	03/01/13	ORIG	57	5.2	3.5	1 U	1 U	1 U	62	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.38	5 U	77	53	1 U
OW1			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW1b	03/01/13	ORIG	5.1	0.3	0.41	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			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW3	03/01/13	ORIG	190	20	4.8	1 U	1 U	1 U	65	0.4	1 U	0.58	1 U	1 U	1 U	1 U	0.38	6.5	5 U	6.2	5.1	1 U
OW3B	03/01/13	ORIG	2.3	1 U	0.95 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	1 U	5 U	5 U	1 U	1 U
OW4A	02/27/13	ORIG	18	1.9	0.66	1 U	1 U	1 U	19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.86	5 U	43	28	1 U
OW4B	02/27/13	ORIG	2.4	1 U	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.46	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
OW5	03/01/13	ORIG	550	220	31	2 U	2 U	2 U	150	53	1.7	1.6	5.9	2 U	2 U	2 U	2 U	44	10 U	120	53	2 U
OW6	03/01/13	ORIG	58	1.2	0.21	1 U	1 U	1 U	1.6	1 U	1 U	1 U	0.54	1 U	1 U	1 U	1 U	0.61	5 U	4.7	1.6	1 U
OW7	02/28/13	DUP	9.1	1 U	0.95 J	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	1.5	1.5	1 U
	02/28/13	ORIG	8.2	1 U	0.12	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	1.3	1.5	1 U
OW8			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW8B	02/28/13	ORIG	4.5	1 U	0.96 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	1 U	5 U	5 U	1 U	1 U
OW9	03/01/13	ORIG	3700	220	300	20 U	20 U	20 U	320	20 U	20 U	20 U	50	20 U	20 U	20 U	20 U	260	100 U	350	120	20 U
OW10	03/01/13	ORIG	61	5.3	0.21	1 U	1 U	1 U	79	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	19	17	1 U
PZ3	03/01/13	ORIG	470	100	0.2	2 U	2 U	2 U	240	2 U	2 U	0.82	2 U	2 U	2 U	2 U	2 U	1.3	10 U	77	53	2 U
PZ9	03/01/13	ORIG	10000	630	1100	50 U	50 U	50 U	1000	50 U	50 U	21	160	50 U	50 U	50 U	50 U	830	250 U	950	330	50 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.

U = not detected above reporting limit listed
J = results are qualified as estimated
PCE = Tetrachloroethene; TCE = Trichloroethene; TCA = Trichloroethane; DCE = Dichloroethene; DCA = Dichloroethane; DCB = Dichlorobenzene; TCB = Trichlorobenzene; CFM = Chloroform; MC = Methylene Chloride; Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane; Freon 11 = Trichlorofluoromethane; Freon 12 = Dichlorodifluoromethane; PCA = Tetrachloroethane
-- = Not Analyzed

Table 6
Omega Chemical Superfund Site
Data Quality Assessment
First Quarter 2013

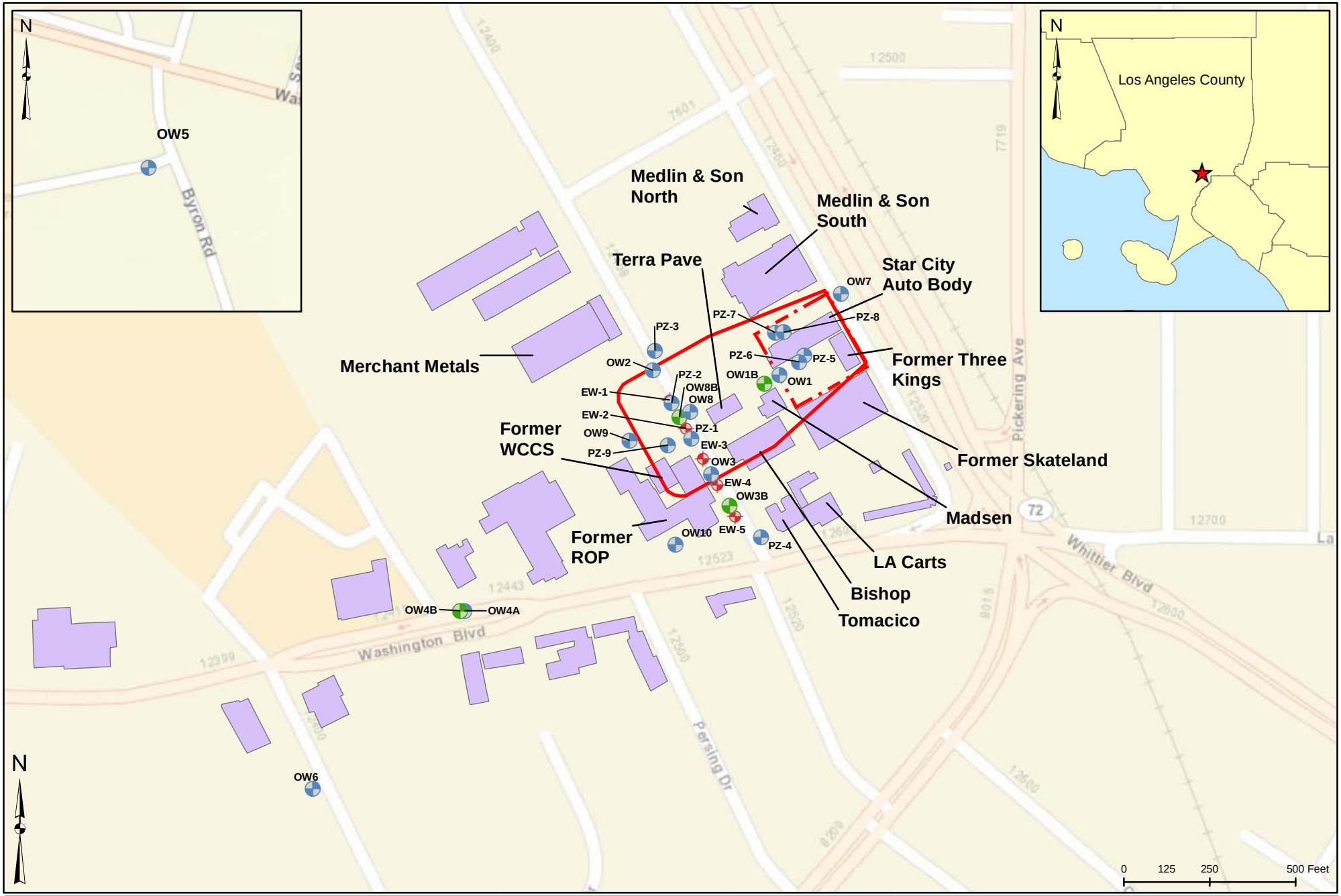
Sampling Event	Sampling Rationale	Frequency of Analysis	Matrix	Lab WO#	Sampling Date	Field Quality Control Samples	Level 4 Validation	Review of Laboratory QC Samples	Data Usability
SDLAC Quarterly Sampling									
	Quarterly sampling of the treatment plant effluent is required per Los Angeles Count Sanitation District Industrial Waste Discharge Permit Number 20039	Quarterly	Water	42073	3/27/2013	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 for pH and dissolved Sulfide are qualified as estimated (J,UJ). These parameters are 'analyze immediately' parameters. Field measurements should be used. Results for 1,4-Dioxane are qualified as estimated (J,UJ) due to low LCS/LCSD and/or surrogate recoveries and high RPD between LCS and LCSD. Volatile results are qualified as estimated (J,UJ) for Chloromethane and Dichlorodifluoromethane due to low LCS recoveries. Semi-volatile results for Benzoic acid, 1,2-Dichlorobenzene,1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Hexachloroethane, Hexachlorobutadiene, Hexachlorocyclopentadiene and 1,2,3-Trichlorobenzene are qualified as estimated (J,UJ) due to low LCS and/or LCSD recoveries.
GWTS Process Sampling									
SCAQMD Compliance									
	Sampling of the influent, intermediate, and effluent sample ports of the VPGAC vessels is required monthly for the SCAQMD permit.	Monthly	Air	1405	1/24/2013	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	No qualification of sample results was warranted.
				1570	2/26/2013				Results for Naphthalene are qualified as estiamted (UJ) due to low LCS/LCSD recoveries.
				1982	3/26/2013				No qualification of sample results was warranted
Treatment System Process Sampling									
	Analysis of the influent and effluent samples (before and after the air stripper) from the GWTS 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	36007	1/24/2013	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 for 1,4-Dioxane are qualified as estimated (J,UJ) due to low LCS/LCSD recoveries.
				39578	2/26/2013				Results for Methylene chloride qualified as not detected (U) due to Trip Blank contamination. Results for Dichlorodifluoromethane are qualified as estimated (J,UJ) due to low MS/MSD and LCS recoveries. Results for Acetone are qualified as estimated (J,UJ) due to low MS/MSD (SP220B_EFF-22613) recoveries.
				41939	3/26/2013				Results for 1,4-Dioxane are qualified as estimated (J,UJ) due to low LCS/LCSD recoveries and high RPD. Results are qualified as estimated (J,UJ) for Dichlorodifluoromethane due to low LCS recovery.

Table 6
Omega Chemical Superfund Site
Data Quality Assessment
First Quarter 2013

Sampling Event	Sampling Rationale	Frequency of Analysis	Matrix	Lab WO#	Sampling Date	Field Quality Control Samples	Level 4 Validation	Review of Laboratory QC Samples	Data Usability
Groundwater Sampling Events									
Extraction Wells									
	Extraction wells are monitored to asses the water quality of the groundwater contamination and the treatment system.	Semi-Annual (February)	Water	39676-1	3/1/2013	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.	10% full, remainder no	MB, LCS/LCSD, MS/MSD, surrogates	Results for 1,4-Dioxane were qualified as estimated (J,UJ) due to low MS/MSD (OW3B) and LCS recoveries. Isotope dilution was not used as specified in SAP for the analysis of 1,4-Dioxane. The data user must use caution when comparing sample concentrations against those calculated using isotope dilution. Results for Acetone and Dichlorodifluoromethane were qualified as estimated (J,UJ) due to low MS/MSD (OW3B and PZ9N) recoveries.
Observation Wells									
	Required in the Omega Groundwater Remedy Performance Standards Verification Plan Monitoring	Semi-Annual (February)	Water	39576	2/28/2013	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, two samples were validated with level 4 data package. Lab QC data for all samples were reviewed and included in the validation.	Data Validation	Results for 1,4-Dioxane were qualified as estimated (J,UJ) due to low LCS recovery. Isotope dilution was not used as specified in SAP for the analysis of 1,4-Dioxane. The data user must use caution when comparing sample concentrations against those calculated using isotope dilution. Results for Styrene and Dichlorodifluoromethane were qualified as estimated (J,UJ) due to low MS and/or MSD (OW4A) recoveries.
				39565	2/27/2013				
				39633	3/1/2013				Results for 1,4-Dioxane were qualified as estimated (J,UJ) due to low LCS recovery. Isotope dilution was not used as specified in SAP for the analysis of 1,4-Dioxane. The data user must use caution when comparing sample concentrations against those calculated using isotope dilution. Results for Acetone and Dichlorodifluoromethane were qualified as estimated (J,UJ) due to low MS and/or MSD (OW3B and PZ9N) recoveries.
				39676-1	3/1/2013				
				39676-2	3/1/2013				

Review and data usability statements made were based solely on the information provided in the packages provided by the laboratory.
For those samples not receiving full validation, the following information was not provided by the laboratory and the impact to the data usability could not be assessed:
Initial and continuing calibration data.
Tune standard data
Internal standard summary
Sample chromatograms
Mass spectra for target analytes and TICs.
Undiluted analysis where samples was analyzed at dilution to bring concentrations within calibration range.

FIGURES



Legend

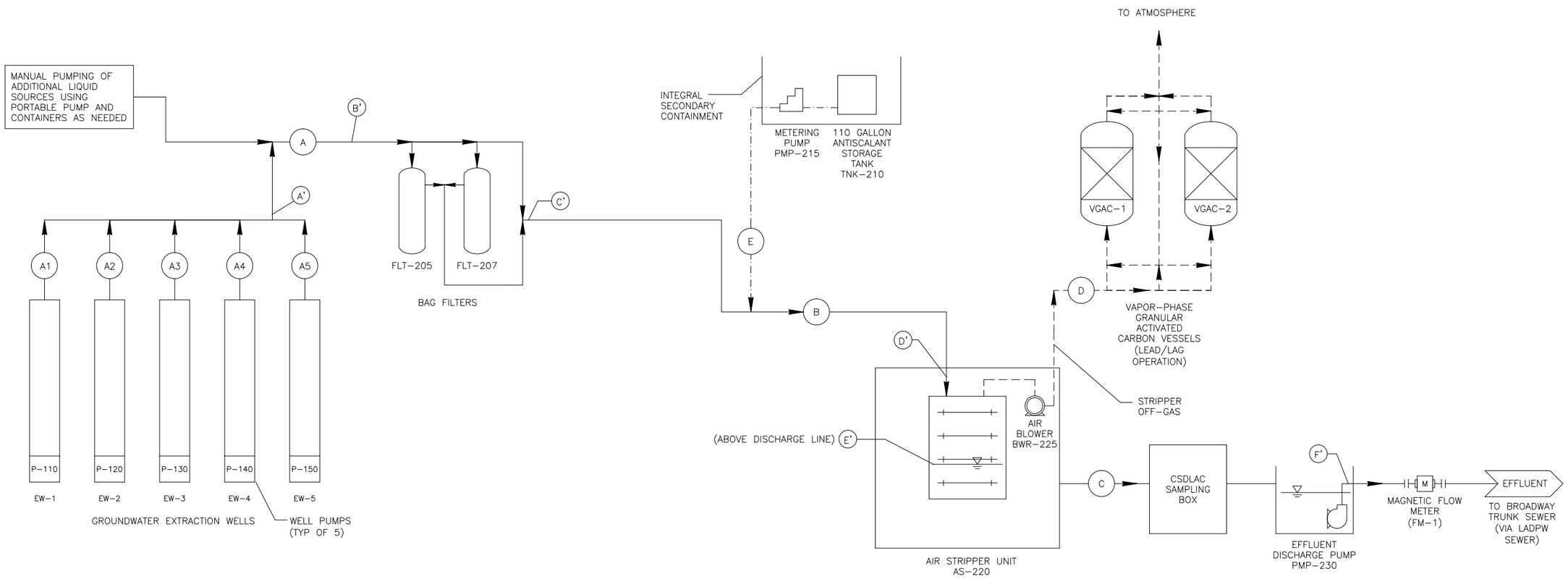
- Extraction Well
- Shallow Observation Well/Piezometer
- Deep Observation Well
- Building
- Phase IA Area
- Former Omega Chemical Facility

ddms

de maximis, inc.

Approved By:
Reviewed By: JLD
Drawn By: EJI
Date: 5/14/2013

Figure 1
Site Map
OMEGA CHEMICAL SUPERFUND SITE
12504/12512 East Whittier Boulevard
Whittier, California



ADDITIONAL LIQUID SOURCES CONTAINING THE FOLLOWING:

1. PURGED GROUNDWATER (APPROX. 1000 GAL. PER YEAR.)
2. CONDENSATE FROM VAPOR EXTRACTION (APPROX. 400 GAL. PER MONTH AND 4800 GAL. PER YEAR.)

LEGEND:

- WATERLINE
- AIR LINE
- CHEMICAL LINE
- WATER LEVEL

REV. NO.	DATE	DRWN	CHKD	REMARKS
5	7/20/12	PJR	RS	ISSUED FOR SDLAC PERMIT RENEWAL
4	2/15/12	PJR	MG	ADDED MANUAL PUMPING OF LIQUID SOURCES
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: M. HOOK
SHEET CHK'D BY: J. DINELLO
CROSS CHK'D BY: J. DINELLO
APPROVED BY: E. MODIANO
DATE: MAY 2013

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

REGISTERED PROFESSIONAL ENGINEER No. C053679 Exp. 06-30-2013 STATE OF CALIFORNIA

de maximis, inc. ddms

OMEGA CHEMICAL SUPERFUND SITE

12504/12512 EAST WHITTIER BOULEVARD
WHITTIER, CALIFORNIA

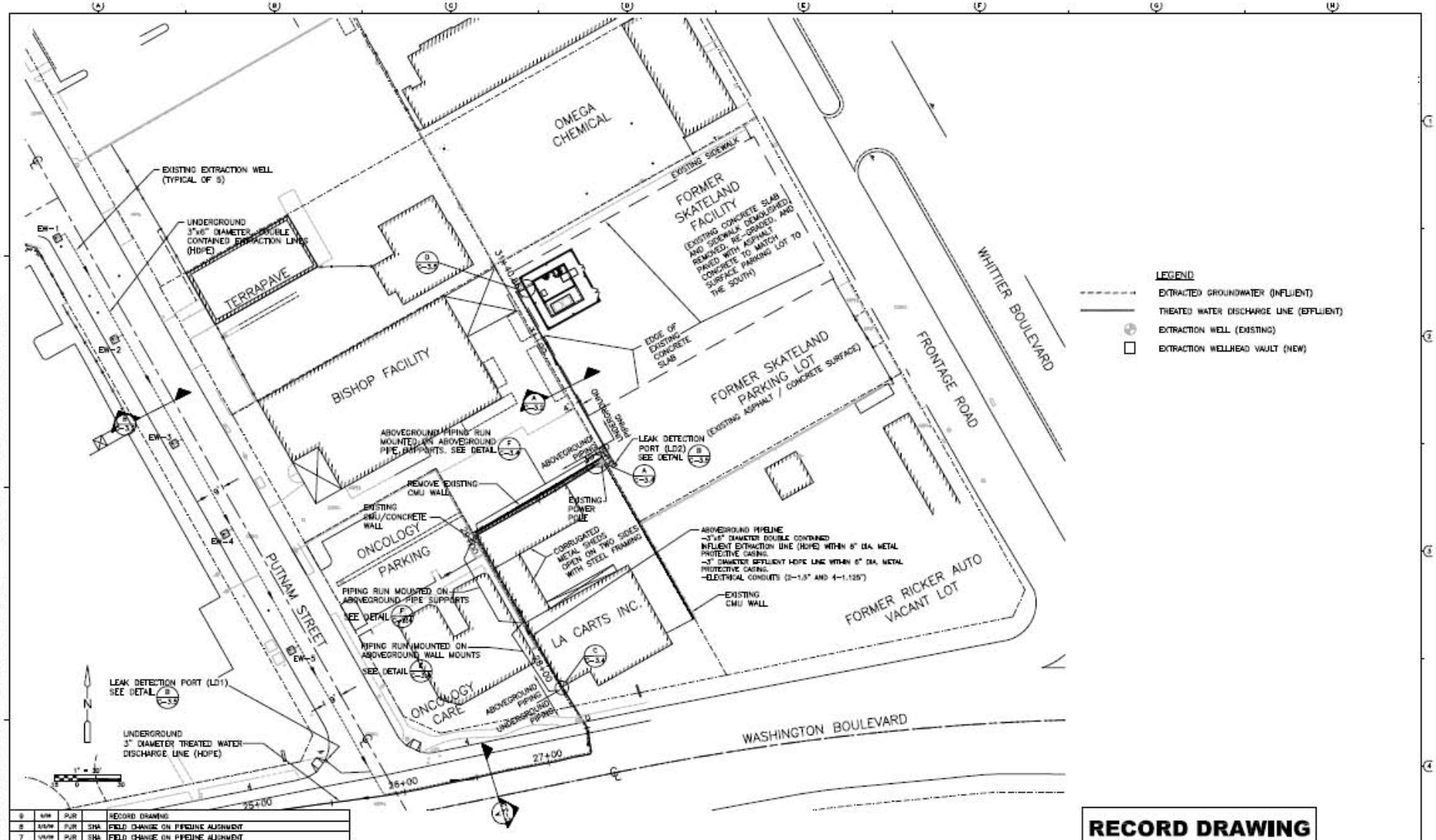
GROUNDWATER TREATMENT PLANT

PROCESS FLOW DIAGRAM

PROJECT NO. 10500-53426

SHEET NO.

FIGURE 2



REV NO.	DATE	DRWN	CHKD	REMARKS
9	6/08	PJR		RECORD DRAWING
8	2/2/08	PJR	SHA	FIELD CHANGE ON PIPELINE ALIGNMENT
7	1/4/08	PJR	SHA	FIELD CHANGE ON PIPELINE ALIGNMENT
6	11/19/08	PJR	SHA	CHANGED PIPE RUN CALLOUTS TO ABOVEGROUND SUPPORTS FROM STATIONS 30 TO 31
5	8/19/08	PJR	SHA	ISSUED FOR DEFERRED SUBMITTAL
4	1/11/08	PJR	SHA	ISSUED FOR CONSTRUCTION
3	1/11/08	PJR	SHA	REVISED PER CITY OF WHITTIER COMMENTS
2	8/16/07	PJR	SHA	ISSUED FOR CITY PLAN CHECK
1	8/07	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

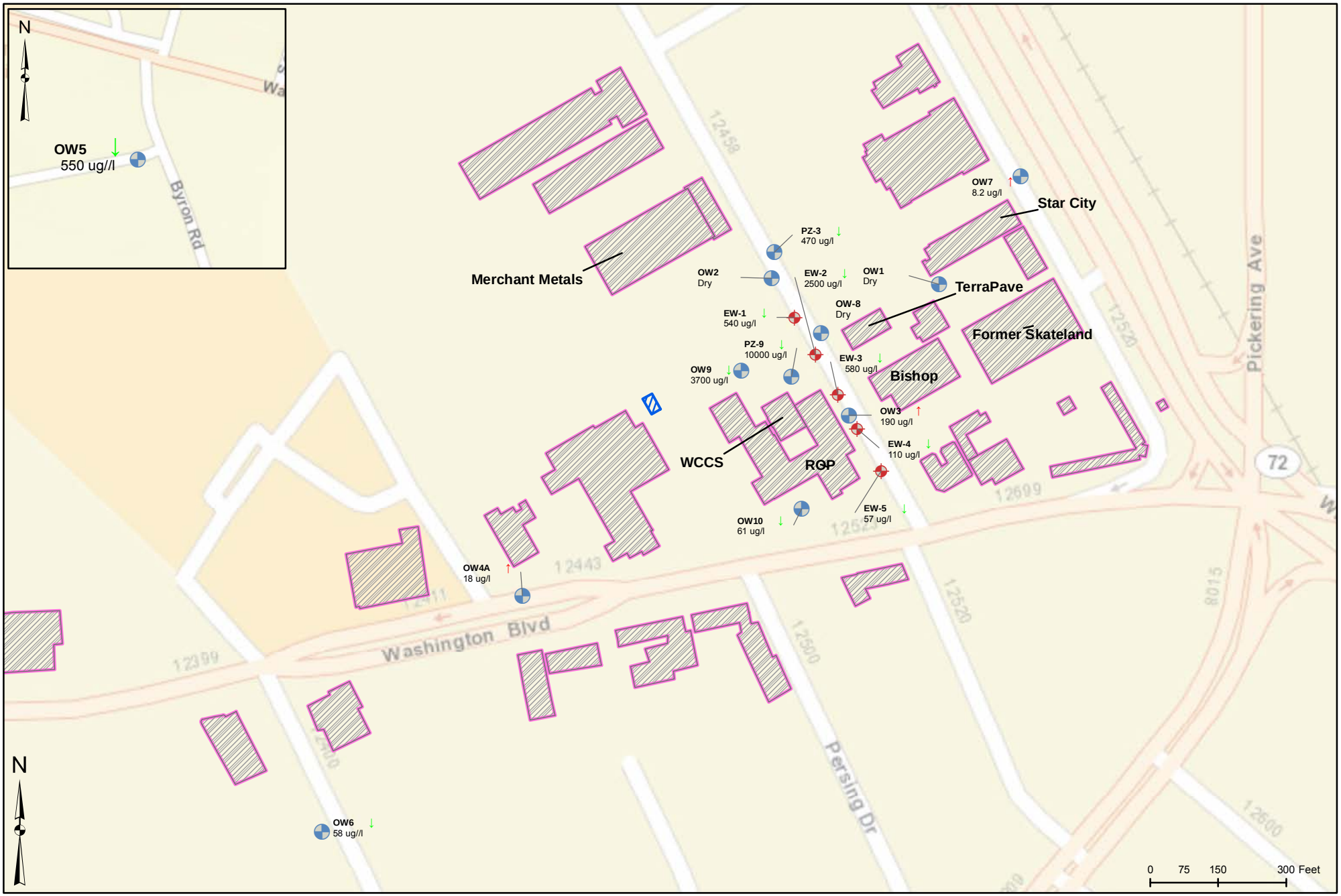
WARNING
0 1/2 1"
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

de maximis, inc.
ddms

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

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

PROJECT NO. 10500-70150
SHEET NO. Figure 3



Legend

- Extraction Well
- Shallow Observation Well/Piezometer
- Building
- Upward trend from previous sampling round
- Downward trend from previous samplling round

ddms

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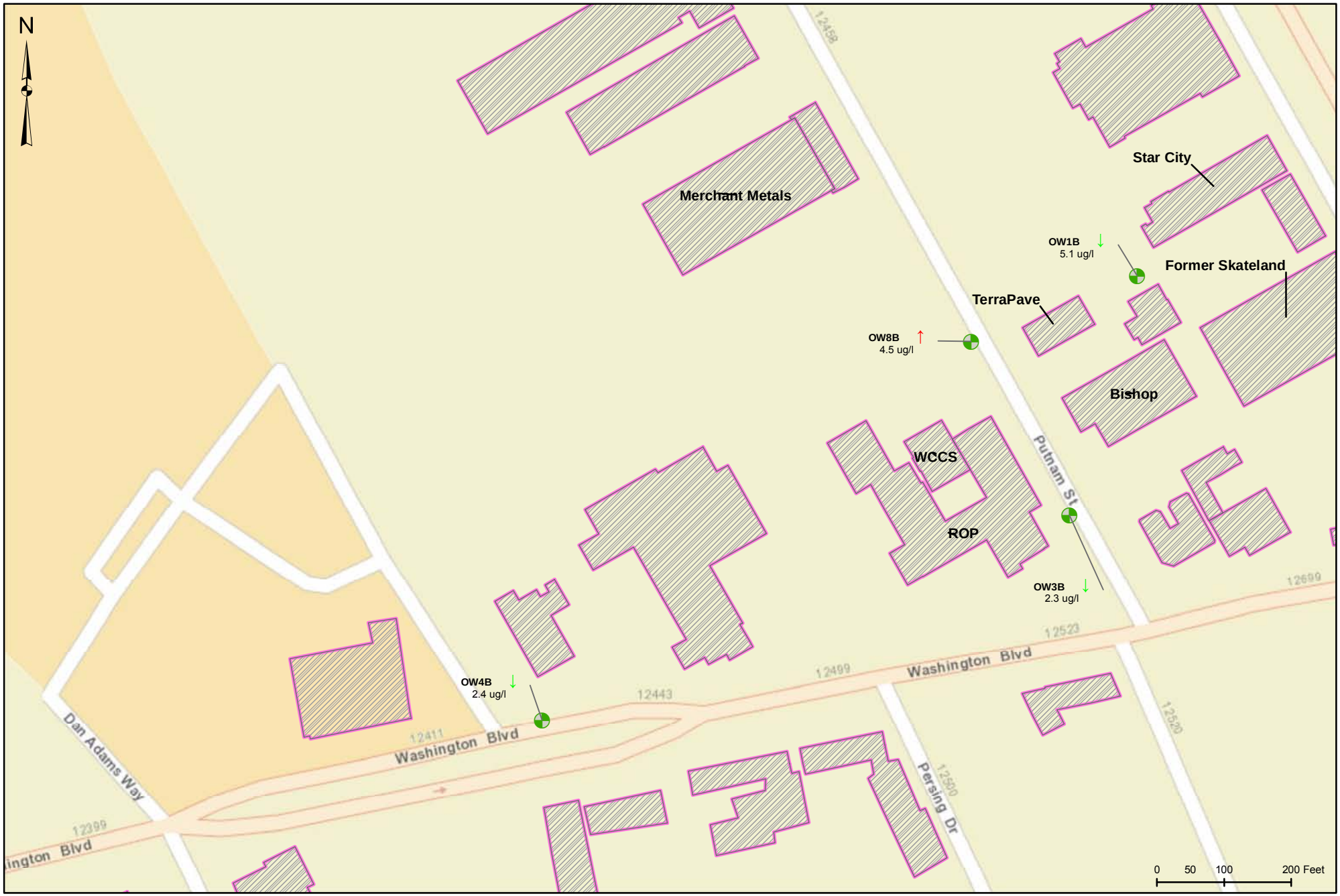
Omega Chemical
Tetrachloroethene (PCE) Zone A
Concentration Map - March 2013

Figure 4



Legend

- Deep Observation Well
- Building
- Upward trend from previous sampling round
- Downward trend from previous samplling round

ddms

de maximis, inc.

Omega Chemical
Tetrachloroethene (PCE) Zone B
Concentration Map - March 2013

Figure 5

ATTACHMENT A

SDLAC Self Monitoring Report

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

April 10, 2013

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 -1st Quarter 2013
Permit Number 020039, Surcharge Account Number 2113183

Dear Mr. Maguin,

This letter has been prepared to submit the 1st Quarterly 2013 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: 04/15/2013

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: 01/01/2013 To: 03/31/2013

9. (Print) Name of Company Collecting Wastewater Sample	10. (Print) Sample Date	11. (Print) Sample Location(s)
TEST AMERICA	2/20/13	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: 18,617	☒ Direct Measurement	☒ Time Composite
Maximum: 21,317	☐ 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)
Z01	WASTEWATER FLOW, TOTAL(GPD)	DIRECT	20,460	10256
Z02	WASTEWATER FLOW,PEAK(GPM)	DIRECT	33	10256
101	PH (UNITS)	GRAB	8.60	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

(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.

ORIGINAL

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 Medina on behalf of OPOG Date: 4/10/13

Print name of official: Edward Medina 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: 04/15/2013

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
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9. (Print) Name of Company Collecting Wastewater Sample	10. (Print) Sample Date	11. (Print) Sample Location(s)
TEST AMERICA	2/20/13	OMEGA CHEMICAL

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Average: 15,617	☑ Direct Measurement	☑ Time Composite
Maximum: 21,017	☐ 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)
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.

ORIGINAL

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 Mochino on behalf of OPG6 Date: 4/10/13

Print name of official: Edward Mochino 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: 04/15/2013

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: 01/01/2013 To: 03/31/2013

9. (Print) Name of Company Collecting Wastewater Sample	10. (Print) Sample Date	11. (Print) Sample Location(s)
TEST AMERICA	2/20/13	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: 15,617	☒ Direct Measurement	☒ Time Composite
Maximum: 21,017	☐ 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)
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	36	10256
800	ACENAPHTHENE (UG/L)	COMP/GRAB	<11	10256
801	ACENAPHTHYLENE (UG/L)	COMP/GRAB	<11	10256
802	ANTHRACENE (UG/L)	COMP/GRAB	<23	10256
803	BENZIDINE (UG/L)	COMP/GRAB	<11	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	<56	10256
813	4-BROMOPHENYL PHENYL ETHER (UG/L)	COMP/GRAB	<11	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.
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(3) Indicate the appropriate laboratory certification I.D. Code for each testing parameter.

ORIGINAL

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Signature of responsible company official: Edward Modlin on behalf of OPRG Date: 4/10/13

Print name of official: Edward Modlin 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: 04/15/2013

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: 01/01/2013 To: 03/31/2013

9. (Print) Name of Company Collecting Wastewater Sample: TEST AMERICA

10. (Print) Sample Date: 2/20/13

11. (Print) Sample Location(s): OMEGA CHEMICAL

12. Daily Wastewater Discharge For Reporting Period (Gal.)
Average: 18,617
Maximum: 21,317

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	<23	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	<23	10256
822	3,3-DICHLOROBENZIDINE (UG/L)	COMP/GRAB	<23	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	<23	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	<23	10256
829	1,2-DIPHENYLHYDRAZINE (UG/L)	COMP/GRAB	<23	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

(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.

ORIGINAL

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Signature of responsible company official: Edward Mochino on behalf of OPCG Date: 4/10/13

Print name of official: Edward Mochino 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: 04/15/2013

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: 01/01/2013 To: 03/31/2013
9. (Print) Name of Company Collecting Wastewater Sample: TEST AMERICA
10. (Print) Sample Date: 2/20/13
11. (Print) Sample Location(s): OMEGA CHEMICAL
12. Daily Wastewater Discharge For Reporting Period (Gal.)
Average: 18,617
Maximum: 21,317
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)
834	HEXACHLOROCYCLOPENTADIENE (UG/L)	COMP/GRAB	<23	10256
835	HEXACHLOROETHANE (UG/L)	COMP/GRAB	<11	10256
836	INDENO(1,2,3-C,D)PYRENE (UG/L)	COMP/GRAB	<23	10256
837	ISOPHORONE (UG/L)	COMP/GRAB	<11	10256
838	NAPHTHALENE (UG/L)	COMP/GRAB	<11	10256
839	NITROBENZENE (UG/L)	COMP/GRAB	<23	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	<23	10256
849	2,4-DINITROPHENOL (UG/L)	COMP/GRAB	<23	10256
850	2-METHYL-4,6 DINITROPHENOL (UG/L)	COMP/GRAB	<23	10256
851	2-NITROPHENOL (UG/L)	COMP/GRAB	<11	10256

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Signature of responsible company official: Edward Modiano on behalf of OPOG Date: 4/10/13

Print name of official: Edward Modiano 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: 04/15/2013

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: 01/01/2013 To: 03/31/2013

9. (Print) Name of Company Collecting Wastewater Sample	10. (Print) Sample Date	11. (Print) Sample Location(s)
TEST AMERICA	2/20/13	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: 18,617	☒ Direct Measurement	☒ Time Composite
Maximum: 21,317	☐ 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	<23	10256
853	4-CHLORO-3-METHYLPHENOL (UG/L)	COMP/GRAB	<23	10256
854	PENTACHLOROPHENOL (UG/L)	COMP/GRAB	<23	10256
855	PHENOL (UG/L)	COMP/GRAB	<11	10256
856	2,4,6-TRICHLOROPHENOL (UG/L)	COMP/GRAB	<23	10256
857	N-NITROSODIPHENYLAMINE (UG/L)	COMP/GRAB	<11	10256

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Signature of responsible company official: Edward Medina on behalf of OPCG Date: 4/10/13

Print name of official: Edward Medina Title: 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: 440-38729-1
Client Project/Site: Omega Chemical Wastewater

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

Attn: Sharon Wallin

Authorized for release by:
3/6/2013 4:28:24 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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 9
QC Sample Results 10
QC Association 25
Definitions 27
Certification Summary 28
Chain of Custody 29
Receipt Checklists 30

Sample Summary

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

TestAmerica Job ID: 440-38729-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-38729-1	Composite	Water	02/20/13 13:52	02/20/13 17:04
440-38729-2	Grab	Water	02/20/13 13:58	02/20/13 17:04

Job ID: 440-38729-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-38729-1

Comments
No additional comments.

Receipt
The samples were received on 2/20/2013 5:04 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA
No 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 89073. 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 87986. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 88232. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

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 Results

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

TestAmerica Job ID: 440-38729-1

Client Sample ID: Composite

Lab Sample ID: 440-38729-1

Date Collected: 02/20/13 13:52
Date Received: 02/20/13 17:04

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			02/25/13 16:16	1
Chemical Oxygen Demand	ND		20	mg/L			03/01/13 16:01	1

Client Sample ID: Grab

Lab Sample ID: 440-38729-2

Date Collected: 02/20/13 13:58
Date Received: 02/20/13 17:04

Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	ug/L			03/01/13 06:11	1
Acrolein	ND		5.0	ug/L			02/26/13 21:54	1
Acrylonitrile	ND		2.0	ug/L			02/26/13 21:54	1
Benzene	ND		0.50	ug/L			03/01/13 06:11	1
Bromobenzene	ND		1.0	ug/L			03/01/13 06:11	1
2-Chloroethyl vinyl ether	ND		2.0	ug/L			02/26/13 21:54	1
Bromochloromethane	ND		1.0	ug/L			03/01/13 06:11	1
Bromodichloromethane	ND		1.0	ug/L			03/01/13 06:11	1
Bromoform	ND		1.0	ug/L			03/01/13 06:11	1
Bromomethane	ND		1.0	ug/L			03/01/13 06:11	1
Carbon tetrachloride	ND		0.50	ug/L			03/01/13 06:11	1
Chlorobenzene	ND		1.0	ug/L			03/01/13 06:11	1
Chloroethane	ND		1.0	ug/L			03/01/13 06:11	1
Chloroform	ND		1.0	ug/L			03/01/13 06:11	1
Chloromethane	ND		1.0	ug/L			03/01/13 06:11	1
2-Chlorotoluene	ND		1.0	ug/L			03/01/13 06:11	1
4-Chlorotoluene	ND		1.0	ug/L			03/01/13 06:11	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			03/01/13 06:11	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			03/01/13 06:11	1
Dibromochloromethane	ND		1.0	ug/L			03/01/13 06:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			03/01/13 06:11	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			03/01/13 06:11	1
Dibromomethane	ND		1.0	ug/L			03/01/13 06:11	1
1,2-Dichlorobenzene	ND		1.0	ug/L			03/01/13 06:11	1
1,3-Dichlorobenzene	ND		1.0	ug/L			03/01/13 06:11	1
1,4-Dichlorobenzene	ND		1.0	ug/L			03/01/13 06:11	1
Dichlorodifluoromethane	ND		1.0	ug/L			03/01/13 06:11	1
1,1-Dichloroethane	ND		1.0	ug/L			03/01/13 06:11	1
1,2-Dichloroethane	ND		1.0	ug/L			03/01/13 06:11	1
1,1-Dichloroethene	ND		1.0	ug/L			03/01/13 06:11	1
1,2-Dichloropropane	ND		1.0	ug/L			03/01/13 06:11	1
1,3-Dichloropropane	ND		1.0	ug/L			03/01/13 06:11	1
2,2-Dichloropropane	ND		1.0	ug/L			03/01/13 06:11	1
1,1-Dichloropropene	ND		1.0	ug/L			03/01/13 06:11	1
Ethylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
Hexachlorobutadiene	ND		1.0	ug/L			03/01/13 06:11	1
Isopropylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
Methylene Chloride	ND		5.0	ug/L			03/01/13 06:11	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			03/01/13 06:11	1
m,p-Xylene	ND		1.0	ug/L			03/01/13 06:11	1

Client Sample ID: Grab

Lab Sample ID: 440-38729-2

Date Collected: 02/20/13 13:58
Date Received: 02/20/13 17:04

Matrix: Water

5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	ug/L			03/01/13 06:11	1
n-Butylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
N-Propylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
o-Xylene	ND		1.0	ug/L			03/01/13 06:11	1
p-Isopropyltoluene	ND		1.0	ug/L			03/01/13 06:11	1
sec-Butylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
Styrene	ND		1.0	ug/L			03/01/13 06:11	1
tert-Butylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			03/01/13 06:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			03/01/13 06:11	1
Tetrachloroethene	ND		1.0	ug/L			03/01/13 06:11	1
Toluene	ND		1.0	ug/L			03/01/13 06:11	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			03/01/13 06:11	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			03/01/13 06:11	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			03/01/13 06:11	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			03/01/13 06:11	1
1,1,1-Trichloroethane	ND		1.0	ug/L			03/01/13 06:11	1
1,1,2-Trichloroethane	ND		1.0	ug/L			03/01/13 06:11	1
Trichloroethene	ND		1.0	ug/L			03/01/13 06:11	1
Trichlorofluoromethane	ND		1.0	ug/L			03/01/13 06:11	1
1,2,3-Trichloropropane	ND		1.0	ug/L			03/01/13 06:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			03/01/13 06:11	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			03/01/13 06:11	1
Vinyl chloride	ND		0.50	ug/L			03/01/13 06:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*02/26/13 21:54*	*1*
Dibromofluoromethane (Surr)	*84*		*80 - 120*		*02/26/13 21:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*03/01/13 06:11*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*02/26/13 21:54*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/01/13 06:11*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/01/13 06:11*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**36**		3.0	ug/L		02/27/13 12:58	02/28/13 18:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*55*		*30 - 120*	*02/27/13 12:58*	*02/28/13 18:00*	*5*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Acenaphthylene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Aniline	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Anthracene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Benzidine	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Benzo[a]anthracene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Benzo[a]pyrene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1

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

TestAmerica Job ID: 440-38729-1

Client Sample ID: Grab
Date Collected: 02/20/13 13:58
Date Received: 02/20/13 17:04

Lab Sample ID: 440-38729-2
Matrix: Water

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Benzo[g,h,i]perylene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Benzoic acid	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Benzo[k]fluoranthene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Benzyl alcohol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Bis(2-chloroethoxy)methane	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Bis(2-chloroethyl)ether	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
bis (2-chloroisopropyl) ether	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Bis(2-ethylhexyl) phthalate	ND		56	ug/L		02/26/13 15:35	03/03/13 20:53	1
4-Bromophenyl phenyl ether	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Butyl benzyl phthalate	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
4-Chloroaniline	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
4-Chloro-3-methylphenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
2-Chloronaphthalene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
2-Chlorophenol	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
4-Chlorophenyl phenyl ether	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Chrysene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Dibenz(a,h)anthracene	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Dibenzofuran	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
1,2-Dichlorobenzene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
1,3-Dichlorobenzene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
1,4-Dichlorobenzene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
3,3'-Dichlorobenzidine	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
2,4-Dichlorophenol	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Diethyl phthalate	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
2,4-Dimethylphenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Dimethyl phthalate	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Di-n-butyl phthalate	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
4,6-Dinitro-2-methylphenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
2,4-Dinitrophenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
2,4-Dinitrotoluene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
2,6-Dinitrotoluene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Di-n-octyl phthalate	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Fluoranthene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Fluorene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Hexachlorobenzene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Hexachlorobutadiene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Hexachlorocyclopentadiene	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Hexachloroethane	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Indeno[1,2,3-cd]pyrene	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Isophorone	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
2-Methylnaphthalene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
2-Methylphenol	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
4-Methylphenol	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Naphthalene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
2-Nitroaniline	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
3-Nitroaniline	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
4-Nitroaniline	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1

Client Sample ID: Grab

Lab Sample ID: 440-38729-2

Date Collected: 02/20/13 13:58
Matrix: Water
Date Received: 02/20/13 17:04

5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
2-Nitrophenol	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
4-Nitrophenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
N-Nitrosodi-n-propylamine	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
N-Nitrosodiphenylamine	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Pentachlorophenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
Phenanthrene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Phenol	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
Pyrene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
1,2,4-Trichlorobenzene	ND		11	ug/L		02/26/13 15:35	03/03/13 20:53	1
2,4,5-Trichlorophenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1
2,4,6-Trichlorophenol	ND		23	ug/L		02/26/13 15:35	03/03/13 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*50 - 120*	*02/26/13 15:35*	*03/03/13 20:53*	*1*
2-Fluorophenol (Surr)	*71*		*30 - 120*	*02/26/13 15:35*	*03/03/13 20:53*	*1*
Nitrobenzene-d5 (Surr)	*94*		*45 - 120*	*02/26/13 15:35*	*03/03/13 20:53*	*1*
Phenol-d6 (Surr)	*79*		*35 - 120*	*02/26/13 15:35*	*03/03/13 20:53*	*1*
Terphenyl-d14 (Surr)	*102*		*50 - 125*	*02/26/13 15:35*	*03/03/13 20:53*	*1*
2,4,6-Tribromophenol (Surr)	*104*		*40 - 120*	*02/26/13 15:35*	*03/03/13 20:53*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.60	HF	0.100	SU			02/21/13 12:06	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved	ND	HF	0.10	mg/L		02/21/13 20:54	02/21/13 22:02	1

Lab Chronicle

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

TestAmerica Job ID: 440-38729-1

Client Sample ID: Composite

Lab Sample ID: 440-38729-1

Date Collected: 02/20/13 13:52
Date Received: 02/20/13 17:04

Matrix: Water

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	87731	02/25/13 16:16	DK	TAL IRV
Total/NA	Analysis	SM 5220D		1	2.5 mL	2.5 mL	88881	03/01/13 16:01	KYP	TAL IRV

Client Sample ID: Grab

Lab Sample ID: 440-38729-2

Date Collected: 02/20/13 13:58
Date Received: 02/20/13 17:04

Matrix: Water

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	88002	02/26/13 21:54	MR	TAL IRV
Total/NA	Analysis	8260B		1	10 mL	10 mL	88662	03/01/13 06:11	MR	TAL IRV
Total/NA	Prep	3520C			845 mL	1 mL	88232	02/27/13 12:58	AG	TAL IRV
Total/NA	Analysis	8270C SIM		5			88627	02/28/13 18:00	AI	TAL IRV
Total/NA	Prep	3520C			885 mL	2 mL	87986	02/26/13 15:35	TM	TAL IRV
Total/NA	Analysis	8270C		1			89073	03/03/13 20:53	AI	TAL IRV
Total/NA	Analysis	SM 4500 H+ B		1		50 mL	86903	02/21/13 12:06	TM	TAL IRV
Dissolved	Prep	SM 4500 S2 B			40 mL	40 mL	87061	02/21/13 20:54	NC	TAL IRV
Dissolved	Analysis	SM 4500 S2 D		1			87073	02/21/13 22:02	NC	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 440-88002/4
Matrix: Water
Analysis Batch: 88002

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		5.0	ug/L			02/26/13 20:51	1
Acrylonitrile	ND		2.0	ug/L			02/26/13 20:51	1
2-Chloroethyl vinyl ether	ND		2.0	ug/L			02/26/13 20:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*02/26/13 20:51*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 120*		*02/26/13 20:51*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*02/26/13 20:51*	*1*

Lab Sample ID: LCS 440-88002/5
Matrix: Water
Analysis Batch: 88002

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	12.3		ug/L		49	25 - 170

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*87*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-38729-2 MS
Matrix: Water
Analysis Batch: 88002

Client Sample ID: Grab
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	ND		25.0	11.8		ug/L		47	25 - 170

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*88*		*80 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

Lab Sample ID: 440-38729-2 MSD
Matrix: Water
Analysis Batch: 88002

Client Sample ID: Grab
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chloroethyl vinyl ether	ND		25.0	12.7		ug/L		51	25 - 170	8	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*80 - 120*
Toluene-d8 (Surr)	*108*		*80 - 120*

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

Lab Sample ID: MB 440-88662/5
Matrix: Water
Analysis Batch: 88662

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			02/28/13 22:45	1
Benzene	ND		0.50	ug/L			02/28/13 22:45	1
Bromobenzene	ND		1.0	ug/L			02/28/13 22:45	1
Bromochloromethane	ND		1.0	ug/L			02/28/13 22:45	1
Bromodichloromethane	ND		1.0	ug/L			02/28/13 22:45	1
Bromoform	ND		1.0	ug/L			02/28/13 22:45	1
Bromomethane	ND		1.0	ug/L			02/28/13 22:45	1
Carbon tetrachloride	ND		0.50	ug/L			02/28/13 22:45	1
Chlorobenzene	ND		1.0	ug/L			02/28/13 22:45	1
Chloroethane	ND		1.0	ug/L			02/28/13 22:45	1
Chloroform	ND		1.0	ug/L			02/28/13 22:45	1
Chloromethane	ND		1.0	ug/L			02/28/13 22:45	1
2-Chlorotoluene	ND		1.0	ug/L			02/28/13 22:45	1
4-Chlorotoluene	ND		1.0	ug/L			02/28/13 22:45	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			02/28/13 22:45	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			02/28/13 22:45	1
Dibromochloromethane	ND		1.0	ug/L			02/28/13 22:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			02/28/13 22:45	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			02/28/13 22:45	1
Dibromomethane	ND		1.0	ug/L			02/28/13 22:45	1
1,2-Dichlorobenzene	ND		1.0	ug/L			02/28/13 22:45	1
1,3-Dichlorobenzene	ND		1.0	ug/L			02/28/13 22:45	1
1,4-Dichlorobenzene	ND		1.0	ug/L			02/28/13 22:45	1
Dichlorodifluoromethane	ND		1.0	ug/L			02/28/13 22:45	1
1,1-Dichloroethane	ND		1.0	ug/L			02/28/13 22:45	1
1,2-Dichloroethane	ND		1.0	ug/L			02/28/13 22:45	1
1,1-Dichloroethene	ND		1.0	ug/L			02/28/13 22:45	1
1,2-Dichloropropane	ND		1.0	ug/L			02/28/13 22:45	1
1,3-Dichloropropane	ND		1.0	ug/L			02/28/13 22:45	1
2,2-Dichloropropane	ND		1.0	ug/L			02/28/13 22:45	1
1,1-Dichloropropene	ND		1.0	ug/L			02/28/13 22:45	1
Ethylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
Hexachlorobutadiene	ND		1.0	ug/L			02/28/13 22:45	1
Isopropylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
Methylene Chloride	ND		5.0	ug/L			02/28/13 22:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			02/28/13 22:45	1
m,p-Xylene	ND		1.0	ug/L			02/28/13 22:45	1
Naphthalene	ND		1.0	ug/L			02/28/13 22:45	1
n-Butylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
N-Propylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
o-Xylene	ND		1.0	ug/L			02/28/13 22:45	1
p-Isopropyltoluene	ND		1.0	ug/L			02/28/13 22:45	1
sec-Butylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
Styrene	ND		1.0	ug/L			02/28/13 22:45	1
tert-Butylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			02/28/13 22:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			02/28/13 22:45	1
Tetrachloroethene	ND		1.0	ug/L			02/28/13 22:45	1

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

Lab Sample ID: MB 440-88662/5
Matrix: Water
Analysis Batch: 88662

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	ug/L			02/28/13 22:45	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			02/28/13 22:45	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			02/28/13 22:45	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			02/28/13 22:45	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			02/28/13 22:45	1
1,1,1-Trichloroethane	ND		1.0	ug/L			02/28/13 22:45	1
1,1,2-Trichloroethane	ND		1.0	ug/L			02/28/13 22:45	1
Trichloroethene	ND		1.0	ug/L			02/28/13 22:45	1
Trichlorofluoromethane	ND		1.0	ug/L			02/28/13 22:45	1
1,2,3-Trichloropropane	ND		1.0	ug/L			02/28/13 22:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			02/28/13 22:45	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			02/28/13 22:45	1
Vinyl chloride	ND		0.50	ug/L			02/28/13 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*02/28/13 22:45*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*02/28/13 22:45*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/28/13 22:45*	*1*

Lab Sample ID: LCS 440-88662/6
Matrix: Water
Analysis Batch: 88662

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	13.0		ug/L		52	30 - 140
Benzene	25.0	21.5		ug/L		86	70 - 120
Bromobenzene	25.0	24.3		ug/L		97	75 - 120
Bromochloromethane	25.0	26.2		ug/L		105	70 - 130
Bromodichloromethane	25.0	24.6		ug/L		98	70 - 135
Bromoform	25.0	27.5		ug/L		110	55 - 130
Bromomethane	25.0	21.1		ug/L		84	65 - 140
Carbon tetrachloride	25.0	28.5		ug/L		114	65 - 140
Chlorobenzene	25.0	26.5		ug/L		106	75 - 120
Chloroethane	25.0	23.0		ug/L		92	60 - 140
Chloroform	25.0	22.6		ug/L		90	70 - 130
Chloromethane	25.0	24.6		ug/L		98	50 - 140
2-Chlorotoluene	25.0	22.2		ug/L		89	70 - 125
4-Chlorotoluene	25.0	23.2		ug/L		93	75 - 125
cis-1,2-Dichloroethene	25.0	24.4		ug/L		98	70 - 125
cis-1,3-Dichloropropene	25.0	25.3		ug/L		101	75 - 125
Dibromochloromethane	25.0	28.4		ug/L		114	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	17.3		ug/L		69	50 - 135
1,2-Dibromoethane (EDB)	25.0	23.1		ug/L		92	75 - 125
Dibromomethane	25.0	23.9		ug/L		95	70 - 125
1,2-Dichlorobenzene	25.0	24.0		ug/L		96	75 - 120
1,3-Dichlorobenzene	25.0	26.1		ug/L		104	75 - 120
1,4-Dichlorobenzene	25.0	25.9		ug/L		104	75 - 120

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

Lab Sample ID: LCS 440-88662/6
Matrix: Water
Analysis Batch: 88662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	25.0	19.0		ug/L		76	35 - 155
1,1-Dichloroethane	25.0	24.0		ug/L		96	70 - 125
1,2-Dichloroethane	25.0	23.6		ug/L		94	60 - 140
1,1-Dichloroethene	25.0	23.3		ug/L		93	70 - 125
1,2-Dichloropropane	25.0	23.7		ug/L		95	70 - 125
1,3-Dichloropropane	25.0	22.3		ug/L		89	70 - 120
2,2-Dichloropropane	25.0	26.4		ug/L		106	65 - 140
1,1-Dichloropropene	25.0	21.5		ug/L		86	75 - 130
Ethylbenzene	25.0	23.6		ug/L		94	75 - 125
Hexachlorobutadiene	25.0	23.6		ug/L		95	65 - 135
Isopropylbenzene	25.0	24.9		ug/L		100	75 - 130
Methylene Chloride	25.0	21.9		ug/L		88	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	19.9		ug/L		80	60 - 135
m,p-Xylene	50.0	51.4		ug/L		103	75 - 125
Naphthalene	25.0	19.3		ug/L		77	55 - 135
n-Butylbenzene	25.0	23.5		ug/L		94	70 - 130
N-Propylbenzene	25.0	22.8		ug/L		91	75 - 130
o-Xylene	25.0	25.6		ug/L		102	75 - 125
p-Isopropyltoluene	25.0	26.1		ug/L		104	75 - 125
sec-Butylbenzene	25.0	24.4		ug/L		98	70 - 125
Styrene	25.0	26.8		ug/L		107	75 - 130
tert-Butylbenzene	25.0	24.2		ug/L		97	70 - 125
1,1,1,2-Tetrachloroethane	25.0	27.7		ug/L		111	70 - 130
1,1,2,2-Tetrachloroethane	25.0	19.7		ug/L		79	55 - 130
Tetrachloroethene	25.0	27.4		ug/L		110	70 - 125
Toluene	25.0	23.6		ug/L		94	70 - 120
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	70 - 125
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	70 - 125
1,2,3-Trichlorobenzene	25.0	20.5		ug/L		82	65 - 125
1,2,4-Trichlorobenzene	25.0	21.1		ug/L		85	70 - 135
1,1,1-Trichloroethane	25.0	24.8		ug/L		99	65 - 135
1,1,2-Trichloroethane	25.0	21.6		ug/L		86	70 - 125
Trichloroethene	25.0	27.2		ug/L		109	70 - 125
Trichlorofluoromethane	25.0	25.2		ug/L		101	65 - 145
1,2,3-Trichloropropane	25.0	18.2		ug/L		73	60 - 130
1,2,4-Trimethylbenzene	25.0	24.6		ug/L		99	75 - 125
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	75 - 125
Vinyl chloride	25.0	24.3		ug/L		97	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

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

Lab Sample ID: 440-39145-B-1 MS
Matrix: Water
Analysis Batch: 88662

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	26.7		ug/L		107	20 - 150
Benzene	ND		25.0	20.9		ug/L		84	65 - 125
Bromobenzene	ND		25.0	23.3		ug/L		93	70 - 125
Bromochloromethane	ND		25.0	25.2		ug/L		101	65 - 135
Bromodichloromethane	ND		25.0	23.8		ug/L		95	70 - 135
Bromoform	ND		25.0	27.0		ug/L		108	55 - 135
Bromomethane	ND		25.0	20.5		ug/L		82	55 - 145
Carbon tetrachloride	ND		25.0	27.6		ug/L		110	65 - 140
Chlorobenzene	ND		25.0	25.9		ug/L		104	75 - 125
Chloroethane	ND		25.0	22.7		ug/L		91	55 - 140
Chloroform	ND		25.0	22.4		ug/L		90	65 - 135
Chloromethane	ND		25.0	24.6		ug/L		98	45 - 145
2-Chlorotoluene	ND		25.0	22.3		ug/L		89	65 - 135
4-Chlorotoluene	ND		25.0	23.2		ug/L		93	70 - 135
cis-1,2-Dichloroethene	ND		25.0	23.7		ug/L		95	65 - 130
cis-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	70 - 130
Dibromochloromethane	ND		25.0	28.2		ug/L		113	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	16.5		ug/L		66	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	22.8		ug/L		91	70 - 130
Dibromomethane	ND		25.0	23.0		ug/L		92	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.5		ug/L		94	75 - 125
1,3-Dichlorobenzene	ND		25.0	25.6		ug/L		102	75 - 125
1,4-Dichlorobenzene	ND		25.0	25.5		ug/L		102	75 - 125
Dichlorodifluoromethane	ND		25.0	18.3		ug/L		73	25 - 155
1,1-Dichloroethane	ND		25.0	23.2		ug/L		93	65 - 130
1,2-Dichloroethane	ND		25.0	23.0		ug/L		92	60 - 140
1,1-Dichloroethene	ND		25.0	23.5		ug/L		94	60 - 130
1,2-Dichloropropane	ND		25.0	23.1		ug/L		92	65 - 130
1,3-Dichloropropane	ND		25.0	22.5		ug/L		90	65 - 135
2,2-Dichloropropane	ND		25.0	28.4		ug/L		114	60 - 145
1,1-Dichloropropene	ND		25.0	21.5		ug/L		86	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	24.4		ug/L		98	70 - 135
Methylene Chloride	ND		25.0	21.4		ug/L		86	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	20.1		ug/L		81	55 - 145
m,p-Xylene	ND		50.0	51.3		ug/L		103	65 - 130
Naphthalene	ND		25.0	18.4		ug/L		74	50 - 140
n-Butylbenzene	ND		25.0	23.7		ug/L		95	65 - 135
N-Propylbenzene	ND		25.0	22.8		ug/L		91	70 - 135
o-Xylene	ND		25.0	25.3		ug/L		101	65 - 125
p-Isopropyltoluene	ND		25.0	25.7		ug/L		103	65 - 130
sec-Butylbenzene	ND		25.0	24.0		ug/L		96	70 - 125
Styrene	ND		25.0	26.9		ug/L		108	50 - 145
tert-Butylbenzene	ND		25.0	23.5		ug/L		94	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	27.4		ug/L		110	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	19.3		ug/L		77	55 - 135
Tetrachloroethene	ND		25.0	27.0		ug/L		108	65 - 130

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

Lab Sample ID: 440-39145-B-1 MS
Matrix: Water
Analysis Batch: 88662

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
Toluene	ND		25.0	22.9		ug/L		92	70 - 125
trans-1,2-Dichloroethene	ND		25.0	23.5		ug/L		94	65 - 130
trans-1,3-Dichloropropene	ND		25.0	25.7		ug/L		103	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	19.6		ug/L		78	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	20.6		ug/L		82	65 - 135
1,1,1-Trichloroethane	ND		25.0	24.6		ug/L		98	65 - 140
1,1,2-Trichloroethane	ND		25.0	21.3		ug/L		85	65 - 130
Trichloroethene	ND		25.0	26.1		ug/L		104	65 - 125
Trichlorofluoromethane	ND		25.0	25.1		ug/L		100	60 - 145
1,2,3-Trichloropropane	ND		25.0	17.7		ug/L		71	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	24.6		ug/L		98	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	24.2		ug/L		97	70 - 130
Vinyl chloride	ND		25.0	24.5		ug/L		98	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 440-39145-B-1 MSD
Matrix: Water
Analysis Batch: 88662

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	25.2		ug/L		101	20 - 150	6	35
Benzene	ND		25.0	21.2		ug/L		85	65 - 125	1	20
Bromobenzene	ND		25.0	24.2		ug/L		97	70 - 125	4	20
Bromochloromethane	ND		25.0	25.5		ug/L		102	65 - 135	1	25
Bromodichloromethane	ND		25.0	24.2		ug/L		97	70 - 135	2	20
Bromoform	ND		25.0	28.4		ug/L		114	55 - 135	5	25
Bromomethane	ND		25.0	20.3		ug/L		81	55 - 145	1	25
Carbon tetrachloride	ND		25.0	28.5		ug/L		114	65 - 140	3	25
Chlorobenzene	ND		25.0	26.2		ug/L		105	75 - 125	1	20
Chloroethane	ND		25.0	22.1		ug/L		88	55 - 140	3	25
Chloroform	ND		25.0	22.3		ug/L		89	65 - 135	1	20
Chloromethane	ND		25.0	23.2		ug/L		93	45 - 145	6	25
2-Chlorotoluene	ND		25.0	22.0		ug/L		88	65 - 135	1	20
4-Chlorotoluene	ND		25.0	23.2		ug/L		93	70 - 135	0	20
cis-1,2-Dichloroethene	ND		25.0	23.6		ug/L		94	65 - 130	0	20
cis-1,3-Dichloropropene	ND		25.0	25.6		ug/L		103	70 - 130	2	20
Dibromochloromethane	ND		25.0	28.6		ug/L		114	65 - 140	2	25
1,2-Dibromo-3-Chloropropane	ND		25.0	17.0		ug/L		68	45 - 145	3	30
1,2-Dibromoethane (EDB)	ND		25.0	23.1		ug/L		92	70 - 130	2	25
Dibromomethane	ND		25.0	22.5		ug/L		90	65 - 135	3	25
1,2-Dichlorobenzene	ND		25.0	24.0		ug/L		96	75 - 125	2	20
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		104	75 - 125	2	20
1,4-Dichlorobenzene	ND		25.0	25.8		ug/L		103	75 - 125	1	20
Dichlorodifluoromethane	ND		25.0	17.7		ug/L		71	25 - 155	3	30

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

Lab Sample ID: 440-39145-B-1 MSD
Matrix: Water
Analysis Batch: 88662

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-Dichloroethane	ND		25.0	23.6		ug/L		94	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	23.1		ug/L		92	60 - 140	0	20
1,1-Dichloroethene	ND		25.0	22.9		ug/L		92	60 - 130	2	20
1,2-Dichloropropane	ND		25.0	23.5		ug/L		94	65 - 130	2	20
1,3-Dichloropropane	ND		25.0	22.2		ug/L		89	65 - 135	2	25
2,2-Dichloropropane	ND		25.0	27.7		ug/L		111	60 - 145	3	25
1,1-Dichloropropene	ND		25.0	21.6		ug/L		87	70 - 135	1	20
Ethylbenzene	ND		25.0	23.7		ug/L		95	65 - 130	0	20
Hexachlorobutadiene	ND		25.0	23.0		ug/L		92	60 - 135	3	20
Isopropylbenzene	ND		25.0	24.6		ug/L		99	70 - 135	1	20
Methylene Chloride	ND		25.0	21.1		ug/L		84	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	19.9		ug/L		80	55 - 145	1	25
m,p-Xylene	ND		50.0	51.7		ug/L		103	65 - 130	1	25
Naphthalene	ND		25.0	19.5		ug/L		78	50 - 140	6	30
n-Butylbenzene	ND		25.0	23.7		ug/L		95	65 - 135	0	20
N-Propylbenzene	ND		25.0	22.7		ug/L		91	70 - 135	0	20
o-Xylene	ND		25.0	25.4		ug/L		102	65 - 125	0	20
p-Isopropyltoluene	ND		25.0	26.0		ug/L		104	65 - 130	1	20
sec-Butylbenzene	ND		25.0	24.4		ug/L		98	70 - 125	2	20
Styrene	ND		25.0	27.1		ug/L		108	50 - 145	1	30
tert-Butylbenzene	ND		25.0	23.7		ug/L		95	65 - 130	1	20
1,1,1,2-Tetrachloroethane	ND		25.0	27.7		ug/L		111	65 - 140	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	19.2		ug/L		77	55 - 135	1	30
Tetrachloroethene	ND		25.0	27.6		ug/L		110	65 - 130	2	20
Toluene	ND		25.0	23.3		ug/L		93	70 - 125	2	20
trans-1,2-Dichloroethene	ND		25.0	23.8		ug/L		95	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	65 - 135	2	25
1,2,3-Trichlorobenzene	ND		25.0	20.8		ug/L		83	60 - 135	6	20
1,2,4-Trichlorobenzene	ND		25.0	21.5		ug/L		86	65 - 135	5	20
1,1,1-Trichloroethane	ND		25.0	24.3		ug/L		97	65 - 140	1	20
1,1,2-Trichloroethane	ND		25.0	21.5		ug/L		86	65 - 130	1	25
Trichloroethene	ND		25.0	26.4		ug/L		106	65 - 125	1	20
Trichlorofluoromethane	ND		25.0	24.7		ug/L		99	60 - 145	1	25
1,2,3-Trichloropropane	ND		25.0	17.8		ug/L		71	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	24.5		ug/L		98	55 - 135	0	25
1,3,5-Trimethylbenzene	ND		25.0	24.3		ug/L		97	70 - 130	0	20
Vinyl chloride	ND		25.0	23.5		ug/L		94	45 - 140	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-87986/1-A
Matrix: Water
Analysis Batch: 89073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87986

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Acenaphthylene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Aniline	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Anthracene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzidine	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzo[a]anthracene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzo[a]pyrene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzo[b]fluoranthene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzo[g,h,i]perylene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzoic acid	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzo[k]fluoranthene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Benzyl alcohol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Bis(2-chloroethoxy)methane	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Bis(2-chloroethyl)ether	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
bis (2-chloroisopropyl) ether	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Bis(2-ethylhexyl) phthalate	ND		50	ug/L		02/26/13 15:35	03/03/13 13:40	1
4-Bromophenyl phenyl ether	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Butyl benzyl phthalate	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
4-Chloroaniline	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
4-Chloro-3-methylphenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
2-Chloronaphthalene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
2-Chlorophenol	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
4-Chlorophenyl phenyl ether	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Chrysene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Dibenz(a,h)anthracene	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Dibenzofuran	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
1,2-Dichlorobenzene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
1,3-Dichlorobenzene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
1,4-Dichlorobenzene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
3,3'-Dichlorobenzidine	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
2,4-Dichlorophenol	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Diethyl phthalate	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
2,4-Dimethylphenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Dimethyl phthalate	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Di-n-butyl phthalate	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
4,6-Dinitro-2-methylphenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
2,4-Dinitrophenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
2,4-Dinitrotoluene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
2,6-Dinitrotoluene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Di-n-octyl phthalate	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
1,2-Diphenylhydrazine(as Azobenzene)	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Fluoranthene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Fluorene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Hexachlorobenzene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Hexachlorobutadiene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Hexachlorocyclopentadiene	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Hexachloroethane	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 440-87986/1-A
Matrix: Water
Analysis Batch: 89073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87986

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Isophorone	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
2-Methylnaphthalene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
2-Methylphenol	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
4-Methylphenol	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Naphthalene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
2-Nitroaniline	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
3-Nitroaniline	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
4-Nitroaniline	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Nitrobenzene	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
2-Nitrophenol	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
4-Nitrophenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
N-Nitrosodi-n-propylamine	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
N-Nitrosodiphenylamine	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Pentachlorophenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
Phenanthrene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Phenol	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
Pyrene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
1,2,4-Trichlorobenzene	ND		10	ug/L		02/26/13 15:35	03/03/13 13:40	1
2,4,5-Trichlorophenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1
2,4,6-Trichlorophenol	ND		20	ug/L		02/26/13 15:35	03/03/13 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*50 - 120*	*02/26/13 15:35*	*03/03/13 13:40*	*1*
2-Fluorophenol (Surr)	*76*		*30 - 120*	*02/26/13 15:35*	*03/03/13 13:40*	*1*
Nitrobenzene-d5 (Surr)	*97*		*45 - 120*	*02/26/13 15:35*	*03/03/13 13:40*	*1*
Phenol-d6 (Surr)	*81*		*35 - 120*	*02/26/13 15:35*	*03/03/13 13:40*	*1*
Terphenyl-d14 (Surr)	*117*		*50 - 125*	*02/26/13 15:35*	*03/03/13 13:40*	*1*
2,4,6-Tribromophenol (Surr)	*105*		*40 - 120*	*02/26/13 15:35*	*03/03/13 13:40*	*1*

Lab Sample ID: LCS 440-87986/2-A
Matrix: Water
Analysis Batch: 89073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	100	91.7		ug/L		92	60 - 120
Acenaphthylene	100	101		ug/L		101	60 - 120
Aniline	100	81.1		ug/L		81	35 - 120
Anthracene	100	90.5		ug/L		90	65 - 120
Benzidine	100	83.1		ug/L		83	30 - 160
Benzo[a]anthracene	100	93.4		ug/L		93	65 - 120
Benzo[a]pyrene	100	94.2		ug/L		94	55 - 130
Benzo[b]fluoranthene	100	88.7		ug/L		89	55 - 125
Benzo[g,h,i]perylene	100	94.8		ug/L		95	45 - 135
Benzoic acid	100	34.4		ug/L		34	25 - 120
Benzo[k]fluoranthene	100	107		ug/L		107	50 - 125
Benzyl alcohol	100	86.4		ug/L		86	50 - 120
Bis(2-chloroethoxy)methane	100	87.8		ug/L		88	55 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-87986/2-A
Matrix: Water
Analysis Batch: 89073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	100	87.3		ug/L		87	50 - 120
bis (2-chloroisopropyl) ether	100	84.7		ug/L		85	45 - 120
Bis(2-ethylhexyl) phthalate	100	116		ug/L		116	44 - 124
4-Bromophenyl phenyl ether	100	96.7		ug/L		97	60 - 120
Butyl benzyl phthalate	100	107		ug/L		107	55 - 130
4-Chloroaniline	100	93.8		ug/L		94	55 - 120
4-Chloro-3-methylphenol	100	92.7		ug/L		93	60 - 120
2-Chloronaphthalene	100	78.8		ug/L		79	60 - 120
2-Chlorophenol	100	80.9		ug/L		81	45 - 120
4-Chlorophenyl phenyl ether	100	90.5		ug/L		91	44 - 120
Chrysene	100	93.3		ug/L		93	65 - 120
Dibenz(a,h)anthracene	100	92.3		ug/L		92	50 - 135
Dibenzofuran	100	101		ug/L		101	65 - 120
1,2-Dichlorobenzene	100	71.8		ug/L		72	40 - 120
1,3-Dichlorobenzene	100	66.1		ug/L		66	35 - 120
1,4-Dichlorobenzene	100	67.4		ug/L		67	35 - 120
3,3'-Dichlorobenzidine	100	74.1		ug/L		74	45 - 135
2,4-Dichlorophenol	100	83.8		ug/L		84	55 - 120
Diethyl phthalate	100	102		ug/L		102	55 - 120
2,4-Dimethylphenol	100	80.5		ug/L		80	40 - 120
Dimethyl phthalate	100	90.3		ug/L		90	30 - 120
Di-n-butyl phthalate	100	104		ug/L		104	60 - 125
4,6-Dinitro-2-methylphenol	100	102		ug/L		102	45 - 120
2,4-Dinitrophenol	100	92.0		ug/L		92	40 - 120
2,4-Dinitrotoluene	100	108		ug/L		108	65 - 120
2,6-Dinitrotoluene	100	98.4		ug/L		98	65 - 120
Di-n-octyl phthalate	100	117		ug/L		117	65 - 135
1,2-Diphenylhydrazine(as Azobenzene)	100	100		ug/L		100	60 - 120
Fluoranthene	100	96.4		ug/L		96	60 - 120
Fluorene	100	91.8		ug/L		92	65 - 120
Hexachlorobenzene	100	91.7		ug/L		92	60 - 120
Hexachlorobutadiene	100	65.6		ug/L		66	40 - 120
Hexachlorocyclopentadiene	100	68.8		ug/L		69	25 - 120
Hexachloroethane	100	65.0		ug/L		65	35 - 120
Indeno[1,2,3-cd]pyrene	100	95.4		ug/L		95	45 - 135
Isophorone	100	89.9		ug/L		90	50 - 120
2-Methylnaphthalene	100	89.6		ug/L		90	55 - 120
2-Methylphenol	100	83.6		ug/L		84	50 - 120
4-Methylphenol	100	81.0		ug/L		81	50 - 120
Naphthalene	100	82.9		ug/L		83	55 - 120
2-Nitroaniline	100	101		ug/L		101	65 - 120
3-Nitroaniline	100	107		ug/L		107	60 - 120
4-Nitroaniline	100	119		ug/L		119	55 - 125
Nitrobenzene	100	83.4		ug/L		83	55 - 120
2-Nitrophenol	100	83.7		ug/L		84	50 - 120
4-Nitrophenol	100	97.7		ug/L		98	45 - 120
N-Nitrosodi-n-propylamine	100	101		ug/L		101	45 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-87986/2-A
Matrix: Water
Analysis Batch: 89073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87986

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Nitrosodiphenylamine	100	99.2		ug/L		99	60 - 120
Pentachlorophenol	100	89.8		ug/L		90	24 - 121
Phenanthrene	100	98.8		ug/L		99	65 - 120
Phenol	100	74.0		ug/L		74	40 - 120
Pyrene	100	120		ug/L		120	55 - 125
1,2,4-Trichlorobenzene	100	70.7		ug/L		71	45 - 120
2,4,5-Trichlorophenol	100	87.7		ug/L		88	55 - 120
2,4,6-Trichlorophenol	100	88.0		ug/L		88	55 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*50 - 120*
2-Fluorophenol (Surr)	*67*		*30 - 120*
Nitrobenzene-d5 (Surr)	*85*		*45 - 120*
Phenol-d6 (Surr)	*72*		*35 - 120*
Terphenyl-d14 (Surr)	*114*		*50 - 125*
2,4,6-Tribromophenol (Surr)	*97*		*40 - 120*

Lab Sample ID: LCSD 440-87986/3-A
Matrix: Water
Analysis Batch: 89073

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87986

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	100	96.0		ug/L		96	60 - 120	5	20
Acenaphthylene	100	104		ug/L		104	60 - 120	3	20
Aniline	100	87.1		ug/L		87	35 - 120	7	30
Anthracene	100	91.9		ug/L		92	65 - 120	2	20
Benzidine	100	86.4		ug/L		86	30 - 160	4	35
Benzo[a]anthracene	100	92.3		ug/L		92	65 - 120	1	20
Benzo[a]pyrene	100	93.7		ug/L		94	55 - 130	0	25
Benzo[b]fluoranthene	100	87.9		ug/L		88	55 - 125	1	25
Benzo[g,h,i]perylene	100	95.6		ug/L		96	45 - 135	1	25
Benzoic acid	100	37.0		ug/L		37	25 - 120	7	30
Benzo[k]fluoranthene	100	104		ug/L		104	50 - 125	3	20
Benzyl alcohol	100	88.7		ug/L		89	50 - 120	3	20
Bis(2-chloroethoxy)methane	100	89.2		ug/L		89	55 - 120	2	20
Bis(2-chloroethyl)ether	100	87.9		ug/L		88	50 - 120	1	20
bis (2-chloroisopropyl) ether	100	86.8		ug/L		87	45 - 120	2	20
Bis(2-ethylhexyl) phthalate	100	115		ug/L		115	44 - 124	1	25
4-Bromophenyl phenyl ether	100	98.8		ug/L		99	60 - 120	2	25
Butyl benzyl phthalate	100	105		ug/L		105	55 - 130	1	20
4-Chloroaniline	100	95.6		ug/L		96	55 - 120	2	25
4-Chloro-3-methylphenol	100	92.2		ug/L		92	60 - 120	0	25
2-Chloronaphthalene	100	84.1		ug/L		84	60 - 120	6	20
2-Chlorophenol	100	79.0		ug/L		79	45 - 120	2	25
4-Chlorophenyl phenyl ether	100	93.8		ug/L		94	44 - 120	4	23
Chrysene	100	91.3		ug/L		91	65 - 120	2	20
Dibenz(a,h)anthracene	100	95.5		ug/L		95	50 - 135	3	25
Dibenzofuran	100	103		ug/L		103	65 - 120	2	20

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-87986/3-A
Matrix: Water
Analysis Batch: 89073

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87986

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	100	70.1		ug/L		70	40 - 120	2	25
1,3-Dichlorobenzene	100	65.5		ug/L		65	35 - 120	1	25
1,4-Dichlorobenzene	100	66.4		ug/L		66	35 - 120	2	25
3,3'-Dichlorobenzidine	100	75.5		ug/L		75	45 - 135	2	25
2,4-Dichlorophenol	100	83.3		ug/L		83	55 - 120	1	20
Diethyl phthalate	100	102		ug/L		102	55 - 120	0	30
2,4-Dimethylphenol	100	83.9		ug/L		84	40 - 120	4	25
Dimethyl phthalate	100	92.3		ug/L		92	30 - 120	2	30
Di-n-butyl phthalate	100	103		ug/L		103	60 - 125	0	20
4,6-Dinitro-2-methylphenol	100	104		ug/L		104	45 - 120	2	25
2,4-Dinitrophenol	100	95.0		ug/L		95	40 - 120	3	25
2,4-Dinitrotoluene	100	109		ug/L		109	65 - 120	1	20
2,6-Dinitrotoluene	100	104		ug/L		104	65 - 120	6	20
Di-n-octyl phthalate	100	113		ug/L		113	65 - 135	3	20
1,2-Diphenylhydrazine(as Azobenzene)	100	104		ug/L		104	60 - 120	4	25
Fluoranthene	100	94.9		ug/L		95	60 - 120	1	20
Fluorene	100	94.7		ug/L		95	65 - 120	3	20
Hexachlorobenzene	100	94.1		ug/L		94	60 - 120	3	20
Hexachlorobutadiene	100	67.3		ug/L		67	40 - 120	3	25
Hexachlorocyclopentadiene	100	74.4		ug/L		74	25 - 120	8	30
Hexachloroethane	100	63.8		ug/L		64	35 - 120	2	25
Indeno[1,2,3-cd]pyrene	100	96.2		ug/L		96	45 - 135	1	25
Isophorone	100	92.9		ug/L		93	50 - 120	3	20
2-Methylnaphthalene	100	87.3		ug/L		87	55 - 120	3	20
2-Methylphenol	100	82.8		ug/L		83	50 - 120	1	20
4-Methylphenol	100	81.5		ug/L		81	50 - 120	1	20
Naphthalene	100	83.4		ug/L		83	55 - 120	1	20
2-Nitroaniline	100	108		ug/L		108	65 - 120	7	20
3-Nitroaniline	100	109		ug/L		109	60 - 120	2	25
4-Nitroaniline	100	117		ug/L		117	55 - 125	2	20
Nitrobenzene	100	88.9		ug/L		89	55 - 120	6	25
2-Nitrophenol	100	87.7		ug/L		88	50 - 120	5	25
4-Nitrophenol	100	100		ug/L		100	45 - 120	3	30
N-Nitrosodi-n-propylamine	100	101		ug/L		101	45 - 120	1	20
N-Nitrosodiphenylamine	100	101		ug/L		101	60 - 120	2	20
Pentachlorophenol	100	91.8		ug/L		92	24 - 121	2	25
Phenanthrene	100	100		ug/L		100	65 - 120	1	20
Phenol	100	72.5		ug/L		72	40 - 120	2	25
Pyrene	100	119		ug/L		119	55 - 125	1	25
1,2,4-Trichlorobenzene	100	70.8		ug/L		71	45 - 120	0	20
2,4,5-Trichlorophenol	100	92.7		ug/L		93	55 - 120	6	30
2,4,6-Trichlorophenol	100	92.0		ug/L		92	55 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*50 - 120*
2-Fluorophenol (Surr)	*65*		*30 - 120*
Nitrobenzene-d5 (Surr)	*90*		*45 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 440-87986/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89073 — **Prep Batch: 87986**

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Phenol-d6 (Surr)	*70*		*35 - 120*
Terphenyl-d14 (Surr)	*109*		*50 - 125*
2,4,6-Tribromophenol (Surr)	*97*		*40 - 120*

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

Lab Sample ID: MB 440-88232/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 88627 — **Prep Batch: 88232**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	ug/L		02/27/13 12:58	02/28/13 16:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*77*		*30 - 120*	*02/27/13 12:58*	*02/28/13 16:53*	*1*

Lab Sample ID: LCS 440-88232/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 88627 — **Prep Batch: 88232**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	1.25		ug/L		63	35 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*61*		*30 - 120*

Lab Sample ID: LCSD 440-88232/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 88627 — **Prep Batch: 88232**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	2.00	1.34		ug/L		67	35 - 120	7	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*66*		*30 - 120*

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-87731/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 87731

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		10	mg/L			02/25/13 16:16	1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 440-87731/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 87731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	987		mg/L		99	85 - 115

Lab Sample ID: 440-38842-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 87731

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	70		69.0		mg/L		1	10

Method: SM 4500 H+ B - pH

Lab Sample ID: 440-38649-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 86903

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.86		6.840		SU		0.3	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 440-87061/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 87073 — **Prep Batch: 87061**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Dissolved	ND		0.10	mg/L		02/21/13 20:54	02/21/13 22:01	1

Lab Sample ID: LCS 440-87061/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 87073 — **Prep Batch: 87061**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Dissolved	0.560	0.472		mg/L		84	80 - 120

Lab Sample ID: 440-38684-X-2-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 87073 — **Prep Batch: 87061**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Dissolved	ND	HF	0.560	0.545	HF	mg/L		97	70 - 130

Lab Sample ID: 440-38684-X-2-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 87073 — **Prep Batch: 87061**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide, Dissolved	ND	HF	0.560	0.530	HF	mg/L		95	70 - 130	3	30

QC Sample Results

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

TestAmerica Job ID: 440-38729-1

Method: SM 5220D - COD

Lab Sample ID: MB 440-88881/3
Matrix: Water
Analysis Batch: 88881

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	mg/L			03/01/13 16:01	1

Lab Sample ID: LCS 440-88881/4
Matrix: Water
Analysis Batch: 88881

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	190		mg/L		95	90 - 110

Lab Sample ID: 440-38729-1 MS
Matrix: Water
Analysis Batch: 88881

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	193		mg/L		96	70 - 120

Lab Sample ID: 440-38729-1 MSD
Matrix: Water
Analysis Batch: 88881

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	204		mg/L		102	70 - 120	6	15

QC Association Summary

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

TestAmerica Job ID: 440-38729-1

GC/MS VOA

Analysis Batch: 88002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-2	Grab	Total/NA	Water	8260B	
440-38729-2 MS	Grab	Total/NA	Water	8260B	
440-38729-2 MSD	Grab	Total/NA	Water	8260B	
LCS 440-88002/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-88002/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 88662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-2	Grab	Total/NA	Water	8260B	
440-39145-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-39145-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-88662/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-88662/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 87986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-2	Grab	Total/NA	Water	3520C	
LCS 440-87986/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-87986/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-87986/1-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 88232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-2	Grab	Total/NA	Water	3520C	
LCS 440-88232/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-88232/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-88232/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 88627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-2	Grab	Total/NA	Water	8270C SIM	88232
LCS 440-88232/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	88232
LCSD 440-88232/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	88232
MB 440-88232/1-A	Method Blank	Total/NA	Water	8270C SIM	88232

Analysis Batch: 89073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-2	Grab	Total/NA	Water	8270C	87986
LCS 440-87986/2-A	Lab Control Sample	Total/NA	Water	8270C	87986
LCSD 440-87986/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	87986
MB 440-87986/1-A	Method Blank	Total/NA	Water	8270C	87986

General Chemistry

Analysis Batch: 86903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38649-A-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	
440-38729-2	Grab	Total/NA	Water	SM 4500 H+ B	

General Chemistry (Continued)

Prep Batch: 87061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38684-X-2-A MS	Matrix Spike	Dissolved	Water	SM 4500 S2 B	
440-38684-X-2-B MSD	Matrix Spike Duplicate	Dissolved	Water	SM 4500 S2 B	
440-38729-2	Grab	Dissolved	Water	SM 4500 S2 B	
LCS 440-87061/1-A	Lab Control Sample	Dissolved	Water	SM 4500 S2 B	
MB 440-87061/2-A	Method Blank	Dissolved	Water	SM 4500 S2 B	

Analysis Batch: 87073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38684-X-2-A MS	Matrix Spike	Dissolved	Water	SM 4500 S2 D	87061
440-38684-X-2-B MSD	Matrix Spike Duplicate	Dissolved	Water	SM 4500 S2 D	87061
440-38729-2	Grab	Dissolved	Water	SM 4500 S2 D	87061
LCS 440-87061/1-A	Lab Control Sample	Dissolved	Water	SM 4500 S2 D	87061
MB 440-87061/2-A	Method Blank	Dissolved	Water	SM 4500 S2 D	87061

Analysis Batch: 87731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-1	Composite	Total/NA	Water	SM 2540D	
440-38842-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	
LCS 440-87731/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 440-87731/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 88881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-38729-1	Composite	Total/NA	Water	SM 5220D	
440-38729-1 MS	Composite	Total/NA	Water	SM 5220D	
440-38729-1 MSD	Composite	Total/NA	Water	SM 5220D	
LCS 440-88881/4	Lab Control Sample	Total/NA	Water	SM 5220D	
MB 440-88881/3	Method Blank	Total/NA	Water	SM 5220D	

Qualifiers

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: 440-38729-1

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	02-28-13
Nevada	State Program	9	CA015312007A	07-31-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

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

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

H4410-387291

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	2/19-20/13	13:58	None,H2SO4	X	X								
Grab	WW	Amber, poly, voa's	9	2/20/13	13:58	HCl, NaOH			X	X	X	X	X	X		Isco Start: Feb 19th @ 1245
																Meter: 140014880
																Isco End: Feb 20th @ 1245
																Meter: 140836387
																Field pH: 7.09
																Sampling Time: 2 hours

Relinquished By	Date/Time:	Received by	Date/Time:
Efrain Figueroa	2.20.13 1:01		
Relinquished By	Date/Time:	Received by	Date/Time:
Relinquished By	Date/Time:	Received in Lab by	Date/Time:

Turnaround Time: (check)
Same Day _____ 72 Hours _____
24 Hours _____ 5 days _____
48 hours _____ normal _____
Sample Integrity: (Check)
Intact _____ On Ice: ✓ Custody Seal: _____

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: 440-38729-1

Login Number: 38729
List Number: 1
Creator: Avila, Stephanie

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT B

Laboratory 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: 440-36007-1
Client Project/Site: Omega Chemical Wastewater

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

Attn: Sharon Wallin

Authorized for release by:
2/5/2013 9:41:15 AM

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

LINKS

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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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 10
QC Sample Results 11
QC Association 18
Definitions 19
Certification Summary 20
Chain of Custody 21
Receipt Checklists 22

Sample Summary

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

TestAmerica Job ID: 440-36007-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-36007-1	OC_SP220B_EFF_12413	Water	01/24/13 12:00	01/24/13 16:45
440-36007-2	OC_SP210_INF_12413	Water	01/24/13 12:05	01/24/13 16:45
440-36007-3	OC_TB_12413	Water	01/24/13 09:30	01/24/13 16:45

Job ID: 440-36007-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-36007-1

Comments
No additional comments.

Receipt
The samples were received on 1/24/2013 4:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Acetone and 2,2-Dichloropropane associated with batch 81075 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 81705 exceeded control limits for the following analytes: Acetone, 2,2-Dichloropropane and Vinyl chloride. These analytes were biased high in the LCS and were 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: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 81537. 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 Wastewater

TestAmerica Job ID: 440-36007-1

Client Sample ID: OC_SP220B_EFF_12413
Date Collected: 01/24/13 12:00
Date Received: 01/24/13 16:45

Lab Sample ID: 440-36007-1
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			01/26/13 13:04	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/26/13 13:04	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/26/13 13:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/26/13 13:04	1
1,1-Dichloroethane	ND		1.0		ug/L			01/26/13 13:04	1
1,1-Dichloroethene	ND		1.0		ug/L			01/26/13 13:04	1
1,1-Dichloropropene	ND		1.0		ug/L			01/26/13 13:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/26/13 13:04	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/26/13 13:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/26/13 13:04	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/26/13 13:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			01/26/13 13:04	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/26/13 13:04	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/26/13 13:04	1
1,2-Dichloroethane	ND		1.0		ug/L			01/26/13 13:04	1
1,2-Dichloropropane	ND		1.0		ug/L			01/26/13 13:04	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/26/13 13:04	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/26/13 13:04	1
1,3-Dichloropropane	ND		1.0		ug/L			01/26/13 13:04	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/26/13 13:04	1
2,2-Dichloropropane	ND	*	1.0		ug/L			01/26/13 13:04	1
2-Chlorotoluene	ND		1.0		ug/L			01/26/13 13:04	1
4-Chlorotoluene	ND		1.0		ug/L			01/26/13 13:04	1
p-Isopropyltoluene	ND		1.0		ug/L			01/26/13 13:04	1
Benzene	ND		0.50		ug/L			01/26/13 13:04	1
Bromobenzene	ND		1.0		ug/L			01/26/13 13:04	1
Bromochloromethane	ND		1.0		ug/L			01/26/13 13:04	1
Bromodichloromethane	ND		1.0		ug/L			01/26/13 13:04	1
Bromoform	ND		1.0		ug/L			01/26/13 13:04	1
Bromomethane	ND		1.0		ug/L			01/26/13 13:04	1
Carbon tetrachloride	ND		0.50		ug/L			01/26/13 13:04	1
Chlorobenzene	ND		1.0		ug/L			01/26/13 13:04	1
Chloroethane	ND		1.0		ug/L			01/26/13 13:04	1
Chloroform	ND		1.0		ug/L			01/26/13 13:04	1
Chloromethane	ND		1.0		ug/L			01/26/13 13:04	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/26/13 13:04	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/26/13 13:04	1
Dibromochloromethane	ND		1.0		ug/L			01/26/13 13:04	1
Dibromomethane	ND		1.0		ug/L			01/26/13 13:04	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/26/13 13:04	1
Ethylbenzene	ND		1.0		ug/L			01/26/13 13:04	1
Hexachlorobutadiene	ND		1.0		ug/L			01/26/13 13:04	1
Isopropylbenzene	ND		1.0		ug/L			01/26/13 13:04	1
m,p-Xylene	ND		1.0		ug/L			01/26/13 13:04	1
Methylene Chloride	ND		5.0		ug/L			01/26/13 13:04	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			01/26/13 13:04	1
Naphthalene	ND		1.0		ug/L			01/26/13 13:04	1
n-Butylbenzene	ND		1.0		ug/L			01/26/13 13:04	1
N-Propylbenzene	ND		1.0		ug/L			01/26/13 13:04	1

Client Sample Results

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

TestAmerica Job ID: 440-36007-1

Client Sample ID: OC_SP220B_EFF_12413

Lab Sample ID: 440-36007-1
Date Collected: 01/24/13 12:00
Matrix: Water
Date Received: 01/24/13 16:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0	ug/L			01/26/13 13:04	1
sec-Butylbenzene	ND		1.0	ug/L			01/26/13 13:04	1
Styrene	ND		1.0	ug/L			01/26/13 13:04	1
tert-Butylbenzene	ND		1.0	ug/L			01/26/13 13:04	1
Tetrachloroethene	ND		1.0	ug/L			01/26/13 13:04	1
Toluene	ND		1.0	ug/L			01/26/13 13:04	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			01/26/13 13:04	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			01/26/13 13:04	1
Trichloroethene	ND		1.0	ug/L			01/26/13 13:04	1
Trichlorofluoromethane	ND		1.0	ug/L			01/26/13 13:04	1
Vinyl chloride	ND	*	0.50	ug/L			01/26/13 13:04	1
Acetone	ND	*	10	ug/L			01/26/13 13:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			01/26/13 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/26/13 13:04*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*01/26/13 13:04*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*01/26/13 13:04*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**33**		2.4	ug/L		01/29/13 12:29	01/31/13 12:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*55*		*30 - 120*	*01/29/13 12:29*	*01/31/13 12:36*	*5*

Client Sample ID: OC_SP210_INF_12413

Lab Sample ID: 440-36007-2
Date Collected: 01/24/13 12:05
Matrix: Water
Date Received: 01/24/13 16:45

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20	ug/L			01/26/13 18:28	20
1,1,1-Trichloroethane	ND		20	ug/L			01/26/13 18:28	20
1,1,2,2-Tetrachloroethane	ND		20	ug/L			01/26/13 18:28	20
1,1,2-Trichloroethane	ND		20	ug/L			01/26/13 18:28	20
1,1-Dichloroethane	ND		20	ug/L			01/26/13 18:28	20
1,1-Dichloroethene	**140**		20	ug/L			01/26/13 18:28	20
1,1-Dichloropropene	ND		20	ug/L			01/26/13 18:28	20
1,2,3-Trichlorobenzene	ND		20	ug/L			01/26/13 18:28	20
1,2,3-Trichloropropane	ND		20	ug/L			01/26/13 18:28	20
1,2,4-Trichlorobenzene	ND		20	ug/L			01/26/13 18:28	20
1,2,4-Trimethylbenzene	ND		20	ug/L			01/26/13 18:28	20
1,2-Dibromo-3-Chloropropane	ND		100	ug/L			01/26/13 18:28	20
1,2-Dichlorobenzene	ND		20	ug/L			01/26/13 18:28	20
1,2-Dibromoethane (EDB)	ND		20	ug/L			01/26/13 18:28	20
1,2-Dichloroethane	ND		20	ug/L			01/26/13 18:28	20
1,2-Dichloropropane	ND		20	ug/L			01/26/13 18:28	20
1,3,5-Trimethylbenzene	ND		20	ug/L			01/26/13 18:28	20
1,3-Dichlorobenzene	ND		20	ug/L			01/26/13 18:28	20

Client Sample Results

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

TestAmerica Job ID: 440-36007-1

Client Sample ID: OC_SP210_INF_12413

Date Collected: 01/24/13 12:05
Date Received: 01/24/13 16:45

Lab Sample ID: 440-36007-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		20		ug/L			01/26/13 18:28	20
1,4-Dichlorobenzene	ND		20		ug/L			01/26/13 18:28	20
2,2-Dichloropropane	ND	*	20		ug/L			01/26/13 18:28	20
2-Chlorotoluene	ND		20		ug/L			01/26/13 18:28	20
4-Chlorotoluene	ND		20		ug/L			01/26/13 18:28	20
p-Isopropyltoluene	ND		20		ug/L			01/26/13 18:28	20
Benzene	ND		10		ug/L			01/26/13 18:28	20
Bromobenzene	ND		20		ug/L			01/26/13 18:28	20
Bromochloromethane	ND		20		ug/L			01/26/13 18:28	20
Bromodichloromethane	ND		20		ug/L			01/26/13 18:28	20
Bromoform	ND		20		ug/L			01/26/13 18:28	20
Bromomethane	ND		20		ug/L			01/26/13 18:28	20
Carbon tetrachloride	ND		10		ug/L			01/26/13 18:28	20
Chlorobenzene	ND		20		ug/L			01/26/13 18:28	20
Chloroethane	ND		20		ug/L			01/26/13 18:28	20
Chloroform	**57**		20		ug/L			01/26/13 18:28	20
Chloromethane	ND		20		ug/L			01/26/13 18:28	20
cis-1,2-Dichloroethene	ND		20		ug/L			01/26/13 18:28	20
cis-1,3-Dichloropropene	ND		10		ug/L			01/26/13 18:28	20
Dibromochloromethane	ND		20		ug/L			01/26/13 18:28	20
Dibromomethane	ND		20		ug/L			01/26/13 18:28	20
Dichlorodifluoromethane	ND		20		ug/L			01/26/13 18:28	20
Ethylbenzene	ND		20		ug/L			01/26/13 18:28	20
Hexachlorobutadiene	ND		20		ug/L			01/26/13 18:28	20
Isopropylbenzene	ND		20		ug/L			01/26/13 18:28	20
m,p-Xylene	ND		20		ug/L			01/26/13 18:28	20
Methylene Chloride	ND		100		ug/L			01/26/13 18:28	20
Methyl-t-Butyl Ether (MTBE)	ND		20		ug/L			01/26/13 18:28	20
Naphthalene	ND		20		ug/L			01/26/13 18:28	20
n-Butylbenzene	ND		20		ug/L			01/26/13 18:28	20
N-Propylbenzene	ND		20		ug/L			01/26/13 18:28	20
o-Xylene	ND		20		ug/L			01/26/13 18:28	20
sec-Butylbenzene	ND		20		ug/L			01/26/13 18:28	20
Styrene	ND		20		ug/L			01/26/13 18:28	20
tert-Butylbenzene	ND		20		ug/L			01/26/13 18:28	20
Tetrachloroethene	**2000**		20		ug/L			01/26/13 18:28	20
Toluene	ND		20		ug/L			01/26/13 18:28	20
trans-1,2-Dichloroethene	ND		20		ug/L			01/26/13 18:28	20
trans-1,3-Dichloropropene	ND		10		ug/L			01/26/13 18:28	20
Trichloroethene	**94**		20		ug/L			01/26/13 18:28	20
Trichlorofluoromethane	**58**		20		ug/L			01/26/13 18:28	20
Vinyl chloride	ND	*	10		ug/L			01/26/13 18:28	20
Acetone	ND	*	200		ug/L			01/26/13 18:28	20
1,1,2-Trichloro-1,2,2-trifluoroethane	**150**		100		ug/L			01/26/13 18:28	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/26/13 18:28*	*20*
Dibromofluoromethane (Surr)	*116*		*80 - 120*		*01/26/13 18:28*	*20*
Toluene-d8 (Surr)	*104*		*80 - 120*		*01/26/13 18:28*	*20*

Client Sample Results

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

TestAmerica Job ID: 440-36007-1

Client Sample ID: OC_TB_12413

Date Collected: 01/24/13 09:30
Date Received: 01/24/13 16:45

Lab Sample ID: 440-36007-3

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			01/26/13 14:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			01/26/13 14:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			01/26/13 14:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			01/26/13 14:32	1
1,1-Dichloroethane	ND		1.0		ug/L			01/26/13 14:32	1
1,1-Dichloroethene	ND		1.0		ug/L			01/26/13 14:32	1
1,1-Dichloropropene	ND		1.0		ug/L			01/26/13 14:32	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			01/26/13 14:32	1
1,2,3-Trichloropropane	ND		1.0		ug/L			01/26/13 14:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			01/26/13 14:32	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			01/26/13 14:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			01/26/13 14:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			01/26/13 14:32	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			01/26/13 14:32	1
1,2-Dichloroethane	ND		1.0		ug/L			01/26/13 14:32	1
1,2-Dichloropropane	ND		1.0		ug/L			01/26/13 14:32	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			01/26/13 14:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			01/26/13 14:32	1
1,3-Dichloropropane	ND		1.0		ug/L			01/26/13 14:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			01/26/13 14:32	1
2,2-Dichloropropane	ND	*	1.0		ug/L			01/26/13 14:32	1
2-Chlorotoluene	ND		1.0		ug/L			01/26/13 14:32	1
4-Chlorotoluene	ND		1.0		ug/L			01/26/13 14:32	1
p-Isopropyltoluene	ND		1.0		ug/L			01/26/13 14:32	1
Benzene	ND		0.50		ug/L			01/26/13 14:32	1
Bromobenzene	ND		1.0		ug/L			01/26/13 14:32	1
Bromochloromethane	ND		1.0		ug/L			01/26/13 14:32	1
Bromodichloromethane	ND		1.0		ug/L			01/26/13 14:32	1
Bromoform	ND		1.0		ug/L			01/26/13 14:32	1
Bromomethane	ND		1.0		ug/L			01/26/13 14:32	1
Carbon tetrachloride	ND		0.50		ug/L			01/26/13 14:32	1
Chlorobenzene	ND		1.0		ug/L			01/26/13 14:32	1
Chloroethane	ND		1.0		ug/L			01/26/13 14:32	1
Chloroform	ND		1.0		ug/L			01/26/13 14:32	1
Chloromethane	ND		1.0		ug/L			01/26/13 14:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			01/26/13 14:32	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			01/26/13 14:32	1
Dibromochloromethane	ND		1.0		ug/L			01/26/13 14:32	1
Dibromomethane	ND		1.0		ug/L			01/26/13 14:32	1
Dichlorodifluoromethane	ND		1.0		ug/L			01/26/13 14:32	1
Ethylbenzene	ND		1.0		ug/L			01/26/13 14:32	1
Hexachlorobutadiene	ND		1.0		ug/L			01/26/13 14:32	1
Isopropylbenzene	ND		1.0		ug/L			01/26/13 14:32	1
m,p-Xylene	ND		1.0		ug/L			01/26/13 14:32	1
Methylene Chloride	ND		5.0		ug/L			01/26/13 14:32	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			01/26/13 14:32	1
Naphthalene	ND		1.0		ug/L			01/26/13 14:32	1
n-Butylbenzene	ND		1.0		ug/L			01/26/13 14:32	1
N-Propylbenzene	ND		1.0		ug/L			01/26/13 14:32	1

Client Sample Results

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

TestAmerica Job ID: 440-36007-1

Client Sample ID: OC_TB_12413

Lab Sample ID: 440-36007-3

Date Collected: 01/24/13 09:30

Matrix: Water

Date Received: 01/24/13 16:45

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			01/26/13 14:32	1
sec-Butylbenzene	ND		1.0		ug/L			01/26/13 14:32	1
Styrene	ND		1.0		ug/L			01/26/13 14:32	1
tert-Butylbenzene	ND		1.0		ug/L			01/26/13 14:32	1
Tetrachloroethene	ND		1.0		ug/L			01/26/13 14:32	1
Toluene	ND		1.0		ug/L			01/26/13 14:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			01/26/13 14:32	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			01/26/13 14:32	1
Trichloroethene	ND		1.0		ug/L			01/26/13 14:32	1
Trichlorofluoromethane	ND		1.0		ug/L			01/26/13 14:32	1
Vinyl chloride	ND	*	0.50		ug/L			01/26/13 14:32	1
Acetone	ND	*	10		ug/L			01/26/13 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			01/26/13 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/26/13 14:32*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*01/26/13 14:32*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*01/26/13 14:32*	*1*

Lab Chronicle

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

TestAmerica Job ID: 440-36007-1

Client Sample ID: OC_SP220B_EFF_12413

Lab Sample ID: 440-36007-1

Date Collected: 01/24/13 12:00

Matrix: Water

Date Received: 01/24/13 16:45

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	81075	01/26/13 13:04	TN	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	81537	01/29/13 12:29	AG	TAL IRV
Total/NA	Analysis	8270C SIM		5			81995	01/31/13 12:36	AI	TAL IRV

Client Sample ID: OC_SP210_INF_12413

Lab Sample ID: 440-36007-2

Date Collected: 01/24/13 12:05

Matrix: Water

Date Received: 01/24/13 16:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	10 mL	10 mL	81075	01/26/13 18:28	TN	TAL IRV

Client Sample ID: OC_TB_12413

Lab Sample ID: 440-36007-3

Date Collected: 01/24/13 09:30

Matrix: Water

Date Received: 01/24/13 16:45

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	81075	01/26/13 14:32	TN	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 440-81075/4
Matrix: Water
Analysis Batch: 81075

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			01/26/13 12:01	1
1,1,1-Trichloroethane	ND		1.0	ug/L			01/26/13 12:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			01/26/13 12:01	1
1,1,2-Trichloroethane	ND		1.0	ug/L			01/26/13 12:01	1
1,1-Dichloroethane	ND		1.0	ug/L			01/26/13 12:01	1
1,1-Dichloroethene	ND		1.0	ug/L			01/26/13 12:01	1
1,1-Dichloropropene	ND		1.0	ug/L			01/26/13 12:01	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			01/26/13 12:01	1
1,2,3-Trichloropropane	ND		1.0	ug/L			01/26/13 12:01	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			01/26/13 12:01	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			01/26/13 12:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			01/26/13 12:01	1
1,2-Dichlorobenzene	ND		1.0	ug/L			01/26/13 12:01	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			01/26/13 12:01	1
1,2-Dichloroethane	ND		1.0	ug/L			01/26/13 12:01	1
1,2-Dichloropropane	ND		1.0	ug/L			01/26/13 12:01	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			01/26/13 12:01	1
1,3-Dichlorobenzene	ND		1.0	ug/L			01/26/13 12:01	1
1,3-Dichloropropane	ND		1.0	ug/L			01/26/13 12:01	1
1,4-Dichlorobenzene	ND		1.0	ug/L			01/26/13 12:01	1
2,2-Dichloropropane	ND		1.0	ug/L			01/26/13 12:01	1
2-Chlorotoluene	ND		1.0	ug/L			01/26/13 12:01	1
4-Chlorotoluene	ND		1.0	ug/L			01/26/13 12:01	1
p-Isopropyltoluene	ND		1.0	ug/L			01/26/13 12:01	1
Benzene	ND		0.50	ug/L			01/26/13 12:01	1
Bromobenzene	ND		1.0	ug/L			01/26/13 12:01	1
Bromochloromethane	ND		1.0	ug/L			01/26/13 12:01	1
Bromodichloromethane	ND		1.0	ug/L			01/26/13 12:01	1
Bromoform	ND		1.0	ug/L			01/26/13 12:01	1
Bromomethane	ND		1.0	ug/L			01/26/13 12:01	1
Carbon tetrachloride	ND		0.50	ug/L			01/26/13 12:01	1
Chlorobenzene	ND		1.0	ug/L			01/26/13 12:01	1
Chloroethane	ND		1.0	ug/L			01/26/13 12:01	1
Chloroform	ND		1.0	ug/L			01/26/13 12:01	1
Chloromethane	ND		1.0	ug/L			01/26/13 12:01	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			01/26/13 12:01	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			01/26/13 12:01	1
Dibromochloromethane	ND		1.0	ug/L			01/26/13 12:01	1
Dibromomethane	ND		1.0	ug/L			01/26/13 12:01	1
Dichlorodifluoromethane	ND		1.0	ug/L			01/26/13 12:01	1
Ethylbenzene	ND		1.0	ug/L			01/26/13 12:01	1
Hexachlorobutadiene	ND		1.0	ug/L			01/26/13 12:01	1
Isopropylbenzene	ND		1.0	ug/L			01/26/13 12:01	1
m,p-Xylene	ND		1.0	ug/L			01/26/13 12:01	1
Methylene Chloride	ND		5.0	ug/L			01/26/13 12:01	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			01/26/13 12:01	1
Naphthalene	ND		1.0	ug/L			01/26/13 12:01	1
n-Butylbenzene	ND		1.0	ug/L			01/26/13 12:01	1

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

Lab Sample ID: MB 440-81075/4
Matrix: Water
Analysis Batch: 81075

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0	ug/L			01/26/13 12:01	1
o-Xylene	ND		1.0	ug/L			01/26/13 12:01	1
sec-Butylbenzene	ND		1.0	ug/L			01/26/13 12:01	1
Styrene	ND		1.0	ug/L			01/26/13 12:01	1
tert-Butylbenzene	ND		1.0	ug/L			01/26/13 12:01	1
Tetrachloroethene	ND		1.0	ug/L			01/26/13 12:01	1
Toluene	ND		1.0	ug/L			01/26/13 12:01	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			01/26/13 12:01	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			01/26/13 12:01	1
Trichloroethene	ND		1.0	ug/L			01/26/13 12:01	1
Trichlorofluoromethane	ND		1.0	ug/L			01/26/13 12:01	1
Vinyl chloride	ND		0.50	ug/L			01/26/13 12:01	1
Acetone	ND		10	ug/L			01/26/13 12:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			01/26/13 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*01/26/13 12:01*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*01/26/13 12:01*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*01/26/13 12:01*	*1*

Lab Sample ID: LCS 440-81075/5
Matrix: Water
Analysis Batch: 81075

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	32.2		ug/L		129	70 - 130
1,1,1-Trichloroethane	25.0	31.0		ug/L		124	65 - 135
1,1,2,2-Tetrachloroethane	25.0	23.3		ug/L		93	55 - 130
1,1,2-Trichloroethane	25.0	24.2		ug/L		97	70 - 125
1,1-Dichloroethane	25.0	26.5		ug/L		106	70 - 125
1,1-Dichloroethene	25.0	26.7		ug/L		107	70 - 125
1,1-Dichloropropene	25.0	22.2		ug/L		89	75 - 130
1,2,3-Trichlorobenzene	25.0	23.1		ug/L		92	65 - 125
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	60 - 130
1,2,4-Trichlorobenzene	25.0	24.0		ug/L		96	70 - 135
1,2,4-Trimethylbenzene	25.0	27.7		ug/L		111	75 - 125
1,2-Dibromo-3-Chloropropane	25.0	23.3		ug/L		93	50 - 135
1,2-Dichlorobenzene	25.0	27.5		ug/L		110	75 - 120
1,2-Dibromoethane (EDB)	25.0	27.1		ug/L		108	75 - 125
1,2-Dichloroethane	25.0	28.6		ug/L		115	60 - 140
1,2-Dichloropropane	25.0	23.8		ug/L		95	70 - 125
1,3,5-Trimethylbenzene	25.0	28.1		ug/L		112	75 - 125
1,3-Dichlorobenzene	25.0	27.7		ug/L		111	75 - 120
1,3-Dichloropropane	25.0	23.5		ug/L		94	70 - 120
1,4-Dichlorobenzene	25.0	27.3		ug/L		109	75 - 120
2,2-Dichloropropane	25.0	36.5	*	ug/L		146	65 - 140
2-Chlorotoluene	25.0	25.7		ug/L		103	70 - 125
4-Chlorotoluene	25.0	26.0		ug/L		104	75 - 125

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

Lab Sample ID: LCS 440-81075/5
Matrix: Water
Analysis Batch: 81075

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	25.0	27.3		ug/L		109	75 - 125
Benzene	25.0	22.8		ug/L		91	70 - 120
Bromobenzene	25.0	28.2		ug/L		113	75 - 120
Bromochloromethane	25.0	28.6		ug/L		114	70 - 130
Bromodichloromethane	25.0	26.7		ug/L		107	70 - 135
Bromoform	25.0	25.9		ug/L		103	55 - 130
Bromomethane	25.0	29.3		ug/L		117	65 - 140
Carbon tetrachloride	25.0	32.6		ug/L		130	65 - 140
Chlorobenzene	25.0	26.8		ug/L		107	75 - 120
Chloroethane	25.0	28.1		ug/L		112	60 - 140
Chloroform	25.0	26.6		ug/L		106	70 - 130
Chloromethane	25.0	29.6		ug/L		119	50 - 140
cis-1,2-Dichloroethene	25.0	27.3		ug/L		109	70 - 125
cis-1,3-Dichloropropene	25.0	27.7		ug/L		111	75 - 125
Dibromochloromethane	25.0	29.6		ug/L		119	70 - 140
Dibromomethane	25.0	26.5		ug/L		106	70 - 125
Dichlorodifluoromethane	25.0	27.6		ug/L		110	35 - 155
Ethylbenzene	25.0	25.1		ug/L		100	75 - 125
Hexachlorobutadiene	25.0	24.6		ug/L		98	65 - 135
Isopropylbenzene	25.0	28.6		ug/L		114	75 - 130
m,p-Xylene	50.0	51.9		ug/L		104	75 - 125
Methylene Chloride	25.0	24.9		ug/L		100	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	26.9		ug/L		107	60 - 135
Naphthalene	25.0	24.6		ug/L		98	55 - 135
n-Butylbenzene	25.0	25.0		ug/L		100	70 - 130
N-Propylbenzene	25.0	25.4		ug/L		102	75 - 130
o-Xylene	25.0	26.5		ug/L		106	75 - 125
sec-Butylbenzene	25.0	26.3		ug/L		105	70 - 125
Styrene	25.0	29.2		ug/L		117	75 - 130
tert-Butylbenzene	25.0	27.2		ug/L		109	70 - 125
Tetrachloroethene	25.0	27.7		ug/L		111	70 - 125
Toluene	25.0	25.2		ug/L		101	70 - 120
trans-1,2-Dichloroethene	25.0	26.1		ug/L		104	70 - 125
trans-1,3-Dichloropropene	25.0	27.0		ug/L		108	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	35.8	*	ug/L		143	55 - 135
Acetone	25.0	53.6	*	ug/L		215	30 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*105*		*80 - 120*

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

Lab Sample ID: 440-36007-1 MS
Matrix: Water
Analysis Batch: 81075

Client Sample ID: OC_SP220B_EFF_12413
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	30.0		ug/L		120	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	22.9		ug/L		91	55 - 135
1,1,2-Trichloroethane	ND		25.0	23.8		ug/L		95	65 - 130
1,1-Dichloroethane	ND		25.0	25.3		ug/L		101	65 - 130
1,1-Dichloroethene	ND		25.0	26.3		ug/L		105	60 - 130
1,1-Dichloropropene	ND		25.0	21.6		ug/L		86	70 - 135
1,2,3-Trichlorobenzene	ND		25.0	23.5		ug/L		94	60 - 135
1,2,3-Trichloropropane	ND		25.0	21.9		ug/L		88	55 - 135
1,2,4-Trichlorobenzene	ND		25.0	24.5		ug/L		98	65 - 135
1,2,4-Trimethylbenzene	ND		25.0	26.1		ug/L		104	55 - 135
1,2-Dibromo-3-Chloropropane	ND		25.0	22.8		ug/L		91	45 - 145
1,2-Dichlorobenzene	ND		25.0	26.8		ug/L		107	75 - 125
1,2-Dibromoethane (EDB)	ND		25.0	26.7		ug/L		107	70 - 130
1,2-Dichloroethane	ND		25.0	27.8		ug/L		111	60 - 140
1,2-Dichloropropane	ND		25.0	22.9		ug/L		92	65 - 130
1,3,5-Trimethylbenzene	ND		25.0	26.7		ug/L		107	70 - 130
1,3-Dichlorobenzene	ND		25.0	26.7		ug/L		107	75 - 125
1,3-Dichloropropane	ND		25.0	22.9		ug/L		92	65 - 135
1,4-Dichlorobenzene	ND		25.0	26.6		ug/L		107	75 - 125
2,2-Dichloropropane	ND	*	25.0	35.4		ug/L		142	60 - 145
2-Chlorotoluene	ND		25.0	24.5		ug/L		98	65 - 135
4-Chlorotoluene	ND		25.0	25.1		ug/L		101	70 - 135
p-Isopropyltoluene	ND		25.0	26.3		ug/L		105	65 - 130
Benzene	ND		25.0	21.8		ug/L		87	65 - 125
Bromobenzene	ND		25.0	26.9		ug/L		108	70 - 125
Bromochloromethane	ND		25.0	27.6		ug/L		110	65 - 135
Bromodichloromethane	ND		25.0	25.8		ug/L		103	70 - 135
Bromoform	ND		25.0	25.9		ug/L		104	55 - 135
Bromomethane	ND		25.0	27.9		ug/L		112	55 - 145
Carbon tetrachloride	ND		25.0	31.7		ug/L		127	65 - 140
Chlorobenzene	ND		25.0	26.0		ug/L		104	75 - 125
Chloroethane	ND		25.0	27.6		ug/L		110	55 - 140
Chloroform	ND		25.0	25.5		ug/L		102	65 - 135
Chloromethane	ND		25.0	28.0		ug/L		112	45 - 145
cis-1,2-Dichloroethene	ND		25.0	26.3		ug/L		105	65 - 130
cis-1,3-Dichloropropene	ND		25.0	27.0		ug/L		108	70 - 130
Dibromochloromethane	ND		25.0	29.3		ug/L		117	65 - 140
Dibromomethane	ND		25.0	25.9		ug/L		104	65 - 135
Dichlorodifluoromethane	ND		25.0	26.1		ug/L		105	25 - 155
Ethylbenzene	ND		25.0	24.3		ug/L		97	65 - 130
Hexachlorobutadiene	ND		25.0	24.2		ug/L		97	60 - 135
Isopropylbenzene	ND		25.0	27.2		ug/L		109	70 - 135
m,p-Xylene	ND		50.0	50.1		ug/L		100	65 - 130
Methylene Chloride	ND		25.0	23.5		ug/L		94	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.5		ug/L		106	55 - 145
Naphthalene	ND		25.0	24.7		ug/L		99	50 - 140
n-Butylbenzene	ND		25.0	24.4		ug/L		98	65 - 135

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

Lab Sample ID: 440-36007-1 MS
Matrix: Water
Analysis Batch: 81075

Client Sample ID: OC_SP220B_EFF_12413
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	ND		25.0	24.2		ug/L		97	70 - 135
o-Xylene	ND		25.0	25.8		ug/L		103	65 - 125
sec-Butylbenzene	ND		25.0	25.2		ug/L		101	70 - 125
Styrene	ND		25.0	27.0		ug/L		108	50 - 145
tert-Butylbenzene	ND		25.0	26.1		ug/L		104	65 - 130
Tetrachloroethene	ND		25.0	27.1		ug/L		108	65 - 130
Toluene	ND		25.0	24.4		ug/L		98	70 - 125
trans-1,2-Dichloroethene	ND		25.0	25.5		ug/L		102	65 - 130
trans-1,3-Dichloropropene	ND		25.0	26.7		ug/L		107	65 - 135
Trichloroethene	ND		25.0	26.5		ug/L		106	65 - 125
Trichlorofluoromethane	ND		25.0	30.6		ug/L		123	60 - 145
Vinyl chloride	ND	*	25.0	34.9		ug/L		139	45 - 140
Acetone	ND	*	25.0	32.4		ug/L		129	20 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-36007-1 MSD
Matrix: Water
Analysis Batch: 81075

Client Sample ID: OC_SP220B_EFF_12413
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	31.1		ug/L		124	65 - 140	0	20
1,1,1-Trichloroethane	ND		25.0	29.3		ug/L		117	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	23.1		ug/L		92	55 - 135	1	30
1,1,2-Trichloroethane	ND		25.0	23.6		ug/L		94	65 - 130	1	25
1,1-Dichloroethane	ND		25.0	25.3		ug/L		101	65 - 130	0	20
1,1-Dichloroethene	ND		25.0	25.6		ug/L		103	60 - 130	2	20
1,1-Dichloropropene	ND		25.0	21.5		ug/L		86	70 - 135	0	20
1,2,3-Trichlorobenzene	ND		25.0	23.6		ug/L		95	60 - 135	1	20
1,2,3-Trichloropropane	ND		25.0	22.2		ug/L		89	55 - 135	1	30
1,2,4-Trichlorobenzene	ND		25.0	24.7		ug/L		99	65 - 135	1	20
1,2,4-Trimethylbenzene	ND		25.0	26.2		ug/L		105	55 - 135	0	25
1,2-Dibromo-3-Chloropropane	ND		25.0	22.9		ug/L		91	45 - 145	0	30
1,2-Dichlorobenzene	ND		25.0	26.7		ug/L		107	75 - 125	0	20
1,2-Dibromoethane (EDB)	ND		25.0	26.4		ug/L		106	70 - 130	1	25
1,2-Dichloroethane	ND		25.0	27.5		ug/L		110	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	22.9		ug/L		92	65 - 130	0	20
1,3,5-Trimethylbenzene	ND		25.0	26.5		ug/L		106	70 - 130	0	20
1,3-Dichlorobenzene	ND		25.0	26.7		ug/L		107	75 - 125	0	20
1,3-Dichloropropane	ND		25.0	23.1		ug/L		93	65 - 135	1	25
1,4-Dichlorobenzene	ND		25.0	26.2		ug/L		105	75 - 125	2	20
2,2-Dichloropropane	ND	*	25.0	35.2		ug/L		141	60 - 145	1	25
2-Chlorotoluene	ND		25.0	24.5		ug/L		98	65 - 135	0	20
4-Chlorotoluene	ND		25.0	25.0		ug/L		100	70 - 135	1	20
p-Isopropyltoluene	ND		25.0	26.1		ug/L		104	65 - 130	1	20

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

Lab Sample ID: 440-36007-1 MSD
Matrix: Water
Analysis Batch: 81075

Client Sample ID: OC_SP220B_EFF_12413
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	21.7		ug/L		87	65 - 125	0	20
Bromobenzene	ND		25.0	26.8		ug/L		107	70 - 125	1	20
Bromochloromethane	ND		25.0	27.0		ug/L		108	65 - 135	2	25
Bromodichloromethane	ND		25.0	25.5		ug/L		102	70 - 135	1	20
Bromoform	ND		25.0	25.7		ug/L		103	55 - 135	1	25
Bromomethane	ND		25.0	27.1		ug/L		108	55 - 145	3	25
Carbon tetrachloride	ND		25.0	31.1		ug/L		124	65 - 140	2	25
Chlorobenzene	ND		25.0	25.7		ug/L		103	75 - 125	1	20
Chloroethane	ND		25.0	26.4		ug/L		106	55 - 140	4	25
Chloroform	ND		25.0	25.1		ug/L		101	65 - 135	2	20
Chloromethane	ND		25.0	27.8		ug/L		111	45 - 145	1	25
cis-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	65 - 130	2	20
cis-1,3-Dichloropropene	ND		25.0	26.7		ug/L		107	70 - 130	1	20
Dibromochloromethane	ND		25.0	29.1		ug/L		117	65 - 140	1	25
Dibromomethane	ND		25.0	25.6		ug/L		102	65 - 135	1	25
Dichlorodifluoromethane	ND		25.0	24.9		ug/L		99	25 - 155	5	30
Ethylbenzene	ND		25.0	24.5		ug/L		98	65 - 130	1	20
Hexachlorobutadiene	ND		25.0	24.1		ug/L		96	60 - 135	1	20
Isopropylbenzene	ND		25.0	27.2		ug/L		109	70 - 135	0	20
m,p-Xylene	ND		50.0	50.0		ug/L		100	65 - 130	0	25
Methylene Chloride	ND		25.0	23.0		ug/L		92	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.2		ug/L		105	55 - 145	1	25
Naphthalene	ND		25.0	25.3		ug/L		101	50 - 140	2	30
n-Butylbenzene	ND		25.0	24.4		ug/L		98	65 - 135	0	20
N-Propylbenzene	ND		25.0	24.3		ug/L		97	70 - 135	0	20
o-Xylene	ND		25.0	25.6		ug/L		102	65 - 125	1	20
sec-Butylbenzene	ND		25.0	25.2		ug/L		101	70 - 125	0	20
Styrene	ND		25.0	27.3		ug/L		109	50 - 145	1	30
tert-Butylbenzene	ND		25.0	26.1		ug/L		104	65 - 130	0	20
Tetrachloroethene	ND		25.0	26.8		ug/L		107	65 - 130	1	20
Toluene	ND		25.0	24.1		ug/L		96	70 - 125	1	20
trans-1,2-Dichloroethene	ND		25.0	24.9		ug/L		100	65 - 130	2	20
trans-1,3-Dichloropropene	ND		25.0	26.1		ug/L		104	65 - 135	2	25
Trichloroethene	ND		25.0	26.3		ug/L		105	65 - 125	1	20
Trichlorofluoromethane	ND		25.0	29.3		ug/L		117	60 - 145	4	25
Vinyl chloride	ND	*	25.0	33.9		ug/L		136	45 - 140	3	30
Acetone	ND	*	25.0	33.3		ug/L		133	20 - 150	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

QC Sample Results

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

TestAmerica Job ID: 440-36007-1

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

Lab Sample ID: MB 440-81537/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81995 — **Prep Batch: 81537**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50		ug/L		01/29/13 12:29	01/31/13 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*64*		*30 - 120*	*01/29/13 12:29*	*01/31/13 11:28*	*1*

Lab Sample ID: LCS 440-81537/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81995 — **Prep Batch: 81537**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	1.31		ug/L		65	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*67*		*30 - 120*

Lab Sample ID: LCSD 440-81537/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81995 — **Prep Batch: 81537**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			2.00	1.24		ug/L		62	35 - 120	6	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: 440-36007-1

GC/MS VOA

Analysis Batch: 81075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-36007-1	OC_SP220B_EFF_12413	Total/NA	Water	8260B	
440-36007-1 MS	OC_SP220B_EFF_12413	Total/NA	Water	8260B	
440-36007-1 MSD	OC_SP220B_EFF_12413	Total/NA	Water	8260B	
440-36007-2	OC_SP210_INF_12413	Total/NA	Water	8260B	
440-36007-3	OC_TB_12413	Total/NA	Water	8260B	
LCS 440-81075/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-81075/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 81537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-36007-1	OC_SP220B_EFF_12413	Total/NA	Water	3520C	
LCS 440-81537/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-81537/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-81537/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 81995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-36007-1	OC_SP220B_EFF_12413	Total/NA	Water	8270C SIM	81537
LCS 440-81537/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	81537
LCSD 440-81537/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	81537
MB 440-81537/1-A	Method Blank	Total/NA	Water	8270C SIM	81537

Definitions/Glossary

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

TestAmerica Job ID: 440-36007-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: 440-36007-1

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	02-28-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	02-28-13
Hawaii	State Program	9	N/A	02-28-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	02-28-13
Northern Mariana Islands	State Program	9	MP0002	02-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

#440-32007

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_SP220B_EFF_12413	1/24/2013	1200	5	x					x						x						x	x		x		
OC_SP210_INF_12413	1/24/2013	1205	3	x					x						x						x			x		
OC_TB_12413	1/24/2013	0930	2	x					x											x	x			x		

Special Instructions:

Method of Shipment:

Laboratory Comments:
Temperature Upon Receipt: 2.9-C
VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
Carlton Hamm Jr	1/24/13	1305	TAI	1/24/13	1305
TAI	1/24/13	1645	Received by TestAmerica:	01/24/13	1645

Login Sample Receipt Checklist

Client: CDM Smith, Inc.

Job Number: 440-36007-1

Login Number: 36007
List Number: 1
Creator: Avila, Stephanie

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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	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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 440-39578-1
Client Project/Site: Omega Chemical Wastewater

For:
Jacob & Hefner Associates P.C.
15375 Barranca Parkway, J-101
Irvine, California 92618

Attn: Andrew Miller

Authorized for release by:
3/14/2013 9:47:12 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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 10
QC Sample Results 11
QC Association 18
Definitions 19
Certification Summary 20
Chain of Custody 21
Receipt Checklists 22

Sample Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-39578-1	OC_SP220B_EFF_22613	Water	02/26/13 14:35	02/28/13 18:05
440-39578-2	OC_SP210_INF_22613	Water	02/26/13 14:40	02/28/13 18:05
440-39578-3	OC_TB_22613	Water	02/26/13 08:00	02/28/13 18:05

Job ID: 440-39578-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-39578-1

Comments
No additional comments.

Receipt
The samples were received on 2/28/2013 6:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C SIM: The matrix spike duplicate (MSD) recovery and MS/MSD RPD precision for 1,4-Dioxane in batch 90000 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

Client Sample ID: OC_SP220B_EFF_22613

Lab Sample ID: 440-39578-1

Date Collected: 02/26/13 14:35
Matrix: Water
Date Received: 02/28/13 18:05

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			03/05/13 12:11	1
Benzene	ND		0.50	0.28	ug/L			03/05/13 12:11	1
Bromobenzene	ND		1.0	0.27	ug/L			03/05/13 12:11	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/05/13 12:11	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/05/13 12:11	1
Bromoform	ND		1.0	0.40	ug/L			03/05/13 12:11	1
Bromomethane	ND		1.0	0.42	ug/L			03/05/13 12:11	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/05/13 12:11	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/05/13 12:11	1
Chloroethane	ND		1.0	0.40	ug/L			03/05/13 12:11	1
Chloroform	ND		1.0	0.33	ug/L			03/05/13 12:11	1
Chloromethane	ND		1.0	0.40	ug/L			03/05/13 12:11	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/05/13 12:11	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/05/13 12:11	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/05/13 12:11	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/05/13 12:11	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/05/13 12:11	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/05/13 12:11	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/05/13 12:11	1
Dibromomethane	ND		1.0	0.36	ug/L			03/05/13 12:11	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/05/13 12:11	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/05/13 12:11	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/05/13 12:11	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/05/13 12:11	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/05/13 12:11	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/05/13 12:11	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/05/13 12:11	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/05/13 12:11	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/05/13 12:11	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/05/13 12:11	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/05/13 12:11	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/05/13 12:11	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/05/13 12:11	1
Isopropyl alcohol	ND		100	50	ug/L			03/05/13 12:11	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/05/13 12:11	1
Methylene Chloride	**1.1**	**J**	5.0	0.95	ug/L			03/05/13 12:11	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/05/13 12:11	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/05/13 12:11	1
Naphthalene	ND		1.0	0.41	ug/L			03/05/13 12:11	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/05/13 12:11	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/05/13 12:11	1
o-Xylene	ND		1.0	0.30	ug/L			03/05/13 12:11	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/05/13 12:11	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/05/13 12:11	1
Styrene	ND		1.0	0.20	ug/L			03/05/13 12:11	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/05/13 12:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/05/13 12:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/05/13 12:11	1
Tetrachloroethene	ND		1.0	0.32	ug/L			03/05/13 12:11	1

Client Sample ID: OC_SP220B_EFF_22613

Lab Sample ID: 440-39578-1

Date Collected: 02/26/13 14:35

Matrix: Water

Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.36	ug/L			03/05/13 12:11	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/05/13 12:11	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/05/13 12:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/05/13 12:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/05/13 12:11	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 12:11	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 12:11	1
Trichloroethene	ND		1.0	0.26	ug/L			03/05/13 12:11	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/05/13 12:11	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/05/13 12:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/05/13 12:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/05/13 12:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/05/13 12:11	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/05/13 12:11	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/05/13 12:11*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*03/05/13 12:11*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*03/05/13 12:11*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/05/13 12:11*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**42**		2.4	0.28	ug/L		03/05/13 14:49	03/07/13 14:59	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*65*		*30 - 120*	*03/05/13 14:49*	*03/07/13 14:59*	*5*

Client Sample ID: OC_SP210_INF_22613

Lab Sample ID: 440-39578-2

Date Collected: 02/26/13 14:40

Matrix: Water

Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		400	180	ug/L			03/05/13 13:33	40
Benzene	ND		20	11	ug/L			03/05/13 13:33	40
Bromobenzene	ND		40	11	ug/L			03/05/13 13:33	40
Bromochloromethane	ND		40	16	ug/L			03/05/13 13:33	40
Bromodichloromethane	ND		40	12	ug/L			03/05/13 13:33	40
Bromoform	ND		40	16	ug/L			03/05/13 13:33	40
Bromomethane	ND		40	17	ug/L			03/05/13 13:33	40
Carbon tetrachloride	ND		20	11	ug/L			03/05/13 13:33	40
Chlorobenzene	ND		40	14	ug/L			03/05/13 13:33	40
Chloroethane	ND		40	16	ug/L			03/05/13 13:33	40
Chloroform	**48**		40	13	ug/L			03/05/13 13:33	40
Chloromethane	ND		40	16	ug/L			03/05/13 13:33	40
2-Chlorotoluene	ND		40	11	ug/L			03/05/13 13:33	40
4-Chlorotoluene	ND		40	12	ug/L			03/05/13 13:33	40
cis-1,2-Dichloroethene	ND		40	13	ug/L			03/05/13 13:33	40

Client Sample ID: OC_SP210_INF_22613
Date Collected: 02/26/13 14:40
Date Received: 02/28/13 18:05

Lab Sample ID: 440-39578-2
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		20	8.8	ug/L			03/05/13 13:33	40
Dibromochloromethane	ND		40	16	ug/L			03/05/13 13:33	40
1,2-Dibromo-3-Chloropropane	ND		200	39	ug/L			03/05/13 13:33	40
1,2-Dibromoethane (EDB)	ND		40	16	ug/L			03/05/13 13:33	40
Dibromomethane	ND		40	14	ug/L			03/05/13 13:33	40
1,2-Dichlorobenzene	ND		40	13	ug/L			03/05/13 13:33	40
1,3-Dichlorobenzene	ND		40	14	ug/L			03/05/13 13:33	40
1,4-Dichlorobenzene	ND		40	15	ug/L			03/05/13 13:33	40
Dichlorodifluoromethane	ND		40	10	ug/L			03/05/13 13:33	40
1,1-Dichloroethane	ND		40	16	ug/L			03/05/13 13:33	40
1,2-Dichloroethane	ND		40	11	ug/L			03/05/13 13:33	40
1,1-Dichloroethene	**110**		40	17	ug/L			03/05/13 13:33	40
1,2-Dichloropropane	ND		40	14	ug/L			03/05/13 13:33	40
1,3-Dichloropropane	ND		40	13	ug/L			03/05/13 13:33	40
2,2-Dichloropropane	ND		40	14	ug/L			03/05/13 13:33	40
1,1-Dichloropropene	ND		40	11	ug/L			03/05/13 13:33	40
Ethylbenzene	ND		40	10	ug/L			03/05/13 13:33	40
Hexachlorobutadiene	ND		40	15	ug/L			03/05/13 13:33	40
Isopropyl alcohol	ND		4000	2000	ug/L			03/05/13 13:33	40
Isopropylbenzene	ND		40	10	ug/L			03/05/13 13:33	40
Methylene Chloride	**70**	**J**	200	38	ug/L			03/05/13 13:33	40
Methyl-t-Butyl Ether (MTBE)	ND		40	13	ug/L			03/05/13 13:33	40
m,p-Xylene	ND		40	24	ug/L			03/05/13 13:33	40
Naphthalene	ND		40	16	ug/L			03/05/13 13:33	40
n-Butylbenzene	ND		40	15	ug/L			03/05/13 13:33	40
N-Propylbenzene	ND		40	11	ug/L			03/05/13 13:33	40
o-Xylene	ND		40	12	ug/L			03/05/13 13:33	40
p-Isopropyltoluene	ND		40	11	ug/L			03/05/13 13:33	40
sec-Butylbenzene	ND		40	10	ug/L			03/05/13 13:33	40
Styrene	ND		40	8.0	ug/L			03/05/13 13:33	40
tert-Butylbenzene	ND		40	8.8	ug/L			03/05/13 13:33	40
1,1,1,2-Tetrachloroethane	ND		40	11	ug/L			03/05/13 13:33	40
1,1,2,2-Tetrachloroethane	ND		40	12	ug/L			03/05/13 13:33	40
Tetrachloroethene	**2100**		40	13	ug/L			03/05/13 13:33	40
Toluene	ND		40	14	ug/L			03/05/13 13:33	40
trans-1,2-Dichloroethene	ND		40	12	ug/L			03/05/13 13:33	40
trans-1,3-Dichloropropene	ND		20	13	ug/L			03/05/13 13:33	40
1,2,3-Trichlorobenzene	ND		40	12	ug/L			03/05/13 13:33	40
1,2,4-Trichlorobenzene	ND		40	19	ug/L			03/05/13 13:33	40
1,1,1-Trichloroethane	ND		40	12	ug/L			03/05/13 13:33	40
1,1,2-Trichloroethane	ND		40	12	ug/L			03/05/13 13:33	40
Trichloroethene	**90**		40	10	ug/L			03/05/13 13:33	40
Trichlorofluoromethane	**35**	**J**	40	14	ug/L			03/05/13 13:33	40
1,2,3-Trichloropropane	ND		40	16	ug/L			03/05/13 13:33	40
1,1,2-Trichloro-1,2,2-trifluoroetha ne	**130**	**J**	200	20	ug/L			03/05/13 13:33	40
1,2,4-Trimethylbenzene	ND		40	9.2	ug/L			03/05/13 13:33	40
1,3,5-Trimethylbenzene	ND		40	10	ug/L			03/05/13 13:33	40
Vinyl chloride	ND		20	16	ug/L			03/05/13 13:33	40

Client Sample ID: OC_SP210_INF_22613

Lab Sample ID: 440-39578-2

Date Collected: 02/26/13 14:40

Matrix: Water

Date Received: 02/28/13 18:05

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					03/05/13 13:33	40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120		03/05/13 13:33	40
Dibromofluoromethane (Surr)	101		80 - 120		03/05/13 13:33	40
Toluene-d8 (Surr)	102		80 - 120		03/05/13 13:33	40

Client Sample ID: OC_TB_22613

Lab Sample ID: 440-39578-3

Date Collected: 02/26/13 08:00

Matrix: Water

Date Received: 02/28/13 18:05

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			03/05/13 11:44	1
Benzene	ND		0.50	0.28	ug/L			03/05/13 11:44	1
Bromobenzene	ND		1.0	0.27	ug/L			03/05/13 11:44	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/05/13 11:44	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/05/13 11:44	1
Bromoform	ND		1.0	0.40	ug/L			03/05/13 11:44	1
Bromomethane	ND		1.0	0.42	ug/L			03/05/13 11:44	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/05/13 11:44	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/05/13 11:44	1
Chloroethane	ND		1.0	0.40	ug/L			03/05/13 11:44	1
Chloroform	ND		1.0	0.33	ug/L			03/05/13 11:44	1
Chloromethane	ND		1.0	0.40	ug/L			03/05/13 11:44	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/05/13 11:44	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/05/13 11:44	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/05/13 11:44	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/05/13 11:44	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/05/13 11:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/05/13 11:44	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/05/13 11:44	1
Dibromomethane	ND		1.0	0.36	ug/L			03/05/13 11:44	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/05/13 11:44	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/05/13 11:44	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/05/13 11:44	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/05/13 11:44	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/05/13 11:44	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/05/13 11:44	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/05/13 11:44	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/05/13 11:44	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/05/13 11:44	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/05/13 11:44	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/05/13 11:44	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/05/13 11:44	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/05/13 11:44	1
Isopropyl alcohol	ND		100	50	ug/L			03/05/13 11:44	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/05/13 11:44	1
Methylene Chloride	**1.2**	**J**	5.0	0.95	ug/L			03/05/13 11:44	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/05/13 11:44	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

Client Sample ID: OC_TB_22613

Date Collected: 02/26/13 08:00
Date Received: 02/28/13 18:05

Lab Sample ID: 440-39578-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND		1.0	0.60	ug/L			03/05/13 11:44	1
Naphthalene	ND		1.0	0.41	ug/L			03/05/13 11:44	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/05/13 11:44	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/05/13 11:44	1
o-Xylene	ND		1.0	0.30	ug/L			03/05/13 11:44	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/05/13 11:44	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/05/13 11:44	1
Styrene	ND		1.0	0.20	ug/L			03/05/13 11:44	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/05/13 11:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/05/13 11:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/05/13 11:44	1
Tetrachloroethene	ND		1.0	0.32	ug/L			03/05/13 11:44	1
Toluene	ND		1.0	0.36	ug/L			03/05/13 11:44	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/05/13 11:44	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/05/13 11:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/05/13 11:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/05/13 11:44	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 11:44	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 11:44	1
Trichloroethene	ND		1.0	0.26	ug/L			03/05/13 11:44	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/05/13 11:44	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/05/13 11:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/05/13 11:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/05/13 11:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/05/13 11:44	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/05/13 11:44	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/05/13 11:44*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*03/05/13 11:44*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*03/05/13 11:44*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/05/13 11:44*	*1*

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

Client Sample ID: OC_SP220B_EFF_22613

Lab Sample ID: 440-39578-1

Date Collected: 02/26/13 14:35

Matrix: Water

Date Received: 02/28/13 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		1	10 mL	10 mL	89421	03/05/13 12:11	GK	TAL IRV
Total/NA	Prep	3520C			1060 mL	1 mL	89593	03/05/13 14:49	AG	TAL IRV
Total/NA	Analysis	8270C SIM		5			90000	03/07/13 14:59	EC	TAL IRV

Client Sample ID: OC_SP210_INF_22613

Lab Sample ID: 440-39578-2

Date Collected: 02/26/13 14:40

Matrix: Water

Date Received: 02/28/13 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		40	10 mL	10 mL	89421	03/05/13 13:33	GK	TAL IRV

Client Sample ID: OC_TB_22613

Lab Sample ID: 440-39578-3

Date Collected: 02/26/13 08:00

Matrix: Water

Date Received: 02/28/13 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		1	10 mL	10 mL	89421	03/05/13 11:44	GK	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 440-89421/5
Matrix: Water
Analysis Batch: 89421

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			03/05/13 09:49	1
Benzene	ND		0.50	0.28	ug/L			03/05/13 09:49	1
Bromobenzene	ND		1.0	0.27	ug/L			03/05/13 09:49	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/05/13 09:49	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/05/13 09:49	1
Bromoform	ND		1.0	0.40	ug/L			03/05/13 09:49	1
Bromomethane	ND		1.0	0.42	ug/L			03/05/13 09:49	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/05/13 09:49	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/05/13 09:49	1
Chloroethane	ND		1.0	0.40	ug/L			03/05/13 09:49	1
Chloroform	ND		1.0	0.33	ug/L			03/05/13 09:49	1
Chloromethane	ND		1.0	0.40	ug/L			03/05/13 09:49	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/05/13 09:49	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/05/13 09:49	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/05/13 09:49	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/05/13 09:49	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/05/13 09:49	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/05/13 09:49	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/05/13 09:49	1
Dibromomethane	ND		1.0	0.36	ug/L			03/05/13 09:49	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/05/13 09:49	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/05/13 09:49	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/05/13 09:49	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/05/13 09:49	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/05/13 09:49	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/05/13 09:49	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/05/13 09:49	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/05/13 09:49	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/05/13 09:49	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/05/13 09:49	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/05/13 09:49	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/05/13 09:49	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/05/13 09:49	1
Isopropyl alcohol	ND		100	50	ug/L			03/05/13 09:49	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/05/13 09:49	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/05/13 09:49	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/05/13 09:49	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/05/13 09:49	1
Naphthalene	ND		1.0	0.41	ug/L			03/05/13 09:49	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/05/13 09:49	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/05/13 09:49	1
o-Xylene	ND		1.0	0.30	ug/L			03/05/13 09:49	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/05/13 09:49	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/05/13 09:49	1
Styrene	ND		1.0	0.20	ug/L			03/05/13 09:49	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/05/13 09:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/05/13 09:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/05/13 09:49	1

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

Lab Sample ID: MB 440-89421/5
Matrix: Water
Analysis Batch: 89421

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			03/05/13 09:49	1
Toluene	ND		1.0	0.36	ug/L			03/05/13 09:49	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/05/13 09:49	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/05/13 09:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/05/13 09:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/05/13 09:49	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 09:49	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 09:49	1
Trichloroethene	ND		1.0	0.26	ug/L			03/05/13 09:49	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/05/13 09:49	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/05/13 09:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/05/13 09:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/05/13 09:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/05/13 09:49	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/05/13 09:49	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/05/13 09:49*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*03/05/13 09:49*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/05/13 09:49*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/05/13 09:49*	*1*

Lab Sample ID: LCS 440-89421/6
Matrix: Water
Analysis Batch: 89421

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	25.6		ug/L		102	30 - 140
Benzene	25.0	19.0		ug/L		76	70 - 120
Bromobenzene	25.0	22.8		ug/L		91	75 - 120
Bromochloromethane	25.0	24.2		ug/L		97	70 - 130
Bromodichloromethane	25.0	22.6		ug/L		90	70 - 135
Bromoform	25.0	27.5		ug/L		110	55 - 130
Bromomethane	25.0	19.3		ug/L		77	65 - 140
Carbon tetrachloride	25.0	25.1		ug/L		101	65 - 140
Chlorobenzene	25.0	23.9		ug/L		96	75 - 120
Chloroethane	25.0	20.8		ug/L		83	60 - 140
Chloroform	25.0	20.4		ug/L		81	70 - 130
Chloromethane	25.0	22.4		ug/L		90	50 - 140
2-Chlorotoluene	25.0	20.1		ug/L		80	70 - 125
4-Chlorotoluene	25.0	21.1		ug/L		84	75 - 125
cis-1,2-Dichloroethene	25.0	22.1		ug/L		88	70 - 125
cis-1,3-Dichloropropene	25.0	23.9		ug/L		96	75 - 125
Dibromochloromethane	25.0	27.8		ug/L		111	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	19.9		ug/L		80	50 - 135

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

Lab Sample ID: LCS 440-89421/6
Matrix: Water
Analysis Batch: 89421

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	22.9		ug/L		91	75 - 125
Dibromomethane	25.0	22.7		ug/L		91	70 - 125
1,2-Dichlorobenzene	25.0	23.4		ug/L		94	75 - 120
1,3-Dichlorobenzene	25.0	23.9		ug/L		96	75 - 120
1,4-Dichlorobenzene	25.0	24.1		ug/L		96	75 - 120
Dichlorodifluoromethane	25.0	17.0		ug/L		68	35 - 155
1,1-Dichloroethane	25.0	21.1		ug/L		84	70 - 125
1,2-Dichloroethane	25.0	22.1		ug/L		88	60 - 140
1,1-Dichloroethene	25.0	20.7		ug/L		83	70 - 125
1,2-Dichloropropane	25.0	21.2		ug/L		85	70 - 125
1,3-Dichloropropane	25.0	21.2		ug/L		85	70 - 120
2,2-Dichloropropane	25.0	23.5		ug/L		94	65 - 140
1,1-Dichloropropene	25.0	18.8		ug/L		75	75 - 130
Ethylbenzene	25.0	21.4		ug/L		85	75 - 125
Hexachlorobutadiene	25.0	22.5		ug/L		90	65 - 135
Isopropylbenzene	25.0	22.4		ug/L		89	75 - 130
Methylene Chloride	25.0	20.9		ug/L		84	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	19.3		ug/L		77	60 - 135
m,p-Xylene	50.0	46.2		ug/L		92	75 - 125
Naphthalene	25.0	20.8		ug/L		83	55 - 135
n-Butylbenzene	25.0	21.2		ug/L		85	70 - 130
N-Propylbenzene	25.0	20.5		ug/L		82	75 - 130
o-Xylene	25.0	23.0		ug/L		92	75 - 125
p-Isopropyltoluene	25.0	23.3		ug/L		93	75 - 125
sec-Butylbenzene	25.0	21.7		ug/L		87	70 - 125
Styrene	25.0	25.2		ug/L		101	75 - 130
tert-Butylbenzene	25.0	21.9		ug/L		88	70 - 125
1,1,1,2-Tetrachloroethane	25.0	26.1		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	25.0	20.0		ug/L		80	55 - 130
Tetrachloroethene	25.0	24.8		ug/L		99	70 - 125
Toluene	25.0	21.0		ug/L		84	70 - 120
trans-1,2-Dichloroethene	25.0	21.5		ug/L		86	70 - 125
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	70 - 125
1,2,3-Trichlorobenzene	25.0	20.3		ug/L		81	65 - 125
1,2,4-Trichlorobenzene	25.0	20.9		ug/L		84	70 - 135
1,1,1-Trichloroethane	25.0	21.6		ug/L		87	65 - 135
1,1,2-Trichloroethane	25.0	21.0		ug/L		84	70 - 125
Trichloroethene	25.0	23.9		ug/L		95	70 - 125
Trichlorofluoromethane	25.0	22.7		ug/L		91	65 - 145
1,2,3-Trichloropropane	25.0	19.1		ug/L		77	60 - 130
1,2,4-Trimethylbenzene	25.0	22.5		ug/L		90	75 - 125
1,3,5-Trimethylbenzene	25.0	22.4		ug/L		89	75 - 125
Vinyl chloride	25.0	22.1		ug/L		88	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 440-39578-1 MS
Matrix: Water
Analysis Batch: 89421

Client Sample ID: OC_SP220B_EFF_22613
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	14.8		ug/L		59	20 - 150
Benzene	ND		25.0	20.2		ug/L		81	65 - 125
Bromobenzene	ND		25.0	23.8		ug/L		95	70 - 125
Bromochloromethane	ND		25.0	24.3		ug/L		97	65 - 135
Bromodichloromethane	ND		25.0	23.7		ug/L		95	70 - 135
Bromoform	ND		25.0	28.2		ug/L		113	55 - 135
Bromomethane	ND		25.0	19.5		ug/L		78	55 - 145
Carbon tetrachloride	ND		25.0	26.8		ug/L		107	65 - 140
Chlorobenzene	ND		25.0	25.2		ug/L		101	75 - 125
Chloroethane	ND		25.0	21.7		ug/L		87	55 - 140
Chloroform	ND		25.0	21.0		ug/L		84	65 - 135
Chloromethane	ND		25.0	23.4		ug/L		93	45 - 145
2-Chlorotoluene	ND		25.0	21.3		ug/L		85	65 - 135
4-Chlorotoluene	ND		25.0	22.0		ug/L		88	70 - 135
cis-1,2-Dichloroethene	ND		25.0	22.2		ug/L		89	65 - 130
cis-1,3-Dichloropropene	ND		25.0	24.6		ug/L		98	70 - 130
Dibromochloromethane	ND		25.0	28.8		ug/L		115	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	21.0		ug/L		84	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	23.6		ug/L		94	70 - 130
Dibromomethane	ND		25.0	23.3		ug/L		93	65 - 135
1,2-Dichlorobenzene	ND		25.0	24.2		ug/L		97	75 - 125
1,3-Dichlorobenzene	ND		25.0	24.9		ug/L		100	75 - 125
1,4-Dichlorobenzene	ND		25.0	24.9		ug/L		100	75 - 125
Dichlorodifluoromethane	ND		25.0	17.0		ug/L		68	25 - 155
1,1-Dichloroethane	ND		25.0	22.3		ug/L		89	65 - 130
1,2-Dichloroethane	ND		25.0	23.9		ug/L		96	60 - 140
1,1-Dichloroethene	ND		25.0	21.7		ug/L		87	60 - 130
1,2-Dichloropropane	ND		25.0	22.8		ug/L		91	65 - 130
1,3-Dichloropropane	ND		25.0	22.0		ug/L		88	65 - 135
2,2-Dichloropropane	ND		25.0	24.4		ug/L		98	60 - 145
1,1-Dichloropropene	ND		25.0	20.3		ug/L		81	70 - 135
Ethylbenzene	ND		25.0	22.7		ug/L		91	65 - 130
Hexachlorobutadiene	ND		25.0	23.0		ug/L		92	60 - 135
Isopropylbenzene	ND		25.0	24.1		ug/L		96	70 - 135
Methylene Chloride	1.1	J	25.0	21.8		ug/L		83	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	20.1		ug/L		81	55 - 145
m,p-Xylene	ND		50.0	49.3		ug/L		99	65 - 130
Naphthalene	ND		25.0	21.3		ug/L		85	50 - 140
n-Butylbenzene	ND		25.0	22.6		ug/L		90	65 - 135
N-Propylbenzene	ND		25.0	21.9		ug/L		88	70 - 135
o-Xylene	ND		25.0	24.0		ug/L		96	65 - 125
p-Isopropyltoluene	ND		25.0	24.9		ug/L		100	65 - 130
sec-Butylbenzene	ND		25.0	23.1		ug/L		93	70 - 125
Styrene	ND		25.0	25.1		ug/L		101	50 - 145
tert-Butylbenzene	ND		25.0	23.2		ug/L		93	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	21.1		ug/L		84	55 - 135
Tetrachloroethene	ND		25.0	26.9		ug/L		108	65 - 130

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

Lab Sample ID: 440-39578-1 MS — **Client Sample ID: OC_SP220B_EFF_22613**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89421

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	ND		25.0	22.2		ug/L		89	70 - 125
trans-1,2-Dichloroethene	ND		25.0	22.1		ug/L		89	65 - 130
trans-1,3-Dichloropropene	ND		25.0	26.0		ug/L		104	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	21.1		ug/L		84	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.7		ug/L		87	65 - 135
1,1,1-Trichloroethane	ND		25.0	23.0		ug/L		92	65 - 140
1,1,2-Trichloroethane	ND		25.0	22.1		ug/L		88	65 - 130
Trichloroethene	ND		25.0	25.1		ug/L		100	65 - 125
Trichlorofluoromethane	ND		25.0	23.8		ug/L		95	60 - 145
1,2,3-Trichloropropane	ND		25.0	20.0		ug/L		80	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	23.6		ug/L		94	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	23.7		ug/L		95	70 - 130
Vinyl chloride	ND		25.0	23.3		ug/L		93	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 440-39578-1 MSD — **Client Sample ID: OC_SP220B_EFF_22613**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89421

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		25.0	12.7		ug/L		51	20 - 150	15	35
Benzene	ND		25.0	19.0		ug/L		76	65 - 125	6	20
Bromobenzene	ND		25.0	23.0		ug/L		92	70 - 125	3	20
Bromochloromethane	ND		25.0	23.7		ug/L		95	65 - 135	3	25
Bromodichloromethane	ND		25.0	22.5		ug/L		90	70 - 135	5	20
Bromoform	ND		25.0	26.2		ug/L		105	55 - 135	7	25
Bromomethane	ND		25.0	18.5		ug/L		74	55 - 145	6	25
Carbon tetrachloride	ND		25.0	25.0		ug/L		100	65 - 140	7	25
Chlorobenzene	ND		25.0	24.1		ug/L		96	75 - 125	5	20
Chloroethane	ND		25.0	19.6		ug/L		78	55 - 140	10	25
Chloroform	ND		25.0	20.1		ug/L		80	65 - 135	5	20
Chloromethane	ND		25.0	20.8		ug/L		83	45 - 145	12	25
2-Chlorotoluene	ND		25.0	20.3		ug/L		81	65 - 135	5	20
4-Chlorotoluene	ND		25.0	21.1		ug/L		84	70 - 135	4	20
cis-1,2-Dichloroethene	ND		25.0	21.7		ug/L		87	65 - 130	2	20
cis-1,3-Dichloropropene	ND		25.0	23.7		ug/L		95	70 - 130	4	20
Dibromochloromethane	ND		25.0	27.4		ug/L		110	65 - 140	5	25
1,2-Dibromo-3-Chloropropane	ND		25.0	18.4		ug/L		73	45 - 145	13	30
1,2-Dibromoethane (EDB)	ND		25.0	22.2		ug/L		89	70 - 130	6	25
Dibromomethane	ND		25.0	22.2		ug/L		89	65 - 135	5	25
1,2-Dichlorobenzene	ND		25.0	22.7		ug/L		91	75 - 125	6	20
1,3-Dichlorobenzene	ND		25.0	24.3		ug/L		97	75 - 125	3	20
1,4-Dichlorobenzene	ND		25.0	23.8		ug/L		95	75 - 125	5	20
Dichlorodifluoromethane	ND		25.0	15.1		ug/L		60	25 - 155	12	30

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

Lab Sample ID: 440-39578-1 MSD
Matrix: Water
Analysis Batch: 89421

Client Sample ID: OC_SP220B_EFF_22613
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-Dichloroethane	ND		25.0	21.1		ug/L		84	65 - 130	6	20
1,2-Dichloroethane	ND		25.0	21.9		ug/L		88	60 - 140	8	20
1,1-Dichloroethene	ND		25.0	19.9		ug/L		80	60 - 130	9	20
1,2-Dichloropropane	ND		25.0	21.2		ug/L		85	65 - 130	7	20
1,3-Dichloropropane	ND		25.0	20.8		ug/L		83	65 - 135	6	25
2,2-Dichloropropane	ND		25.0	23.3		ug/L		93	60 - 145	5	25
1,1-Dichloropropene	ND		25.0	18.9		ug/L		76	70 - 135	7	20
Ethylbenzene	ND		25.0	21.4		ug/L		85	65 - 130	6	20
Hexachlorobutadiene	ND		25.0	21.1		ug/L		84	60 - 135	9	20
Isopropylbenzene	ND		25.0	22.8		ug/L		91	70 - 135	5	20
Methylene Chloride	1.1	J	25.0	21.0		ug/L		79	50 - 135	4	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	19.3		ug/L		77	55 - 145	4	25
m,p-Xylene	ND		50.0	46.4		ug/L		93	65 - 130	6	25
Naphthalene	ND		25.0	18.5		ug/L		74	50 - 140	14	30
n-Butylbenzene	ND		25.0	21.2		ug/L		85	65 - 135	6	20
N-Propylbenzene	ND		25.0	20.9		ug/L		84	70 - 135	5	20
o-Xylene	ND		25.0	23.1		ug/L		92	65 - 125	4	20
p-Isopropyltoluene	ND		25.0	23.4		ug/L		94	65 - 130	6	20
sec-Butylbenzene	ND		25.0	22.0		ug/L		88	70 - 125	5	20
Styrene	ND		25.0	24.3		ug/L		97	50 - 145	3	30
tert-Butylbenzene	ND		25.0	22.1		ug/L		88	65 - 130	5	20
1,1,1,2-Tetrachloroethane	ND		25.0	26.4		ug/L		105	65 - 140	4	20
1,1,2,2-Tetrachloroethane	ND		25.0	18.9		ug/L		76	55 - 135	11	30
Tetrachloroethene	ND		25.0	25.3		ug/L		101	65 - 130	6	20
Toluene	ND		25.0	20.8		ug/L		83	70 - 125	6	20
trans-1,2-Dichloroethene	ND		25.0	20.8		ug/L		83	65 - 130	6	20
trans-1,3-Dichloropropene	ND		25.0	24.5		ug/L		98	65 - 135	6	25
1,2,3-Trichlorobenzene	ND		25.0	19.2		ug/L		77	60 - 135	9	20
1,2,4-Trichlorobenzene	ND		25.0	19.9		ug/L		80	65 - 135	9	20
1,1,1-Trichloroethane	ND		25.0	21.4		ug/L		85	65 - 140	7	20
1,1,2-Trichloroethane	ND		25.0	20.6		ug/L		82	65 - 130	7	25
Trichloroethene	ND		25.0	23.8		ug/L		95	65 - 125	5	20
Trichlorofluoromethane	ND		25.0	21.9		ug/L		88	60 - 145	8	25
1,2,3-Trichloropropane	ND		25.0	18.0		ug/L		72	55 - 135	10	30
1,2,4-Trimethylbenzene	ND		25.0	22.3		ug/L		89	55 - 135	5	25
1,3,5-Trimethylbenzene	ND		25.0	22.2		ug/L		89	70 - 130	6	20
Vinyl chloride	ND		25.0	21.3		ug/L		85	45 - 140	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

QC Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 440-89593/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 90000 — **Prep Batch: 89593**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50	0.060	ug/L		03/05/13 14:49	03/07/13 09:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*80*		*30 - 120*	*03/05/13 14:49*	*03/07/13 09:05*	*1*

Lab Sample ID: LCS 440-89593/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 90000 — **Prep Batch: 89593**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	2.00	1.87		ug/L		93	35 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*79*		*30 - 120*

Lab Sample ID: 440-39233-C-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 90000 — **Prep Batch: 89593**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.15	J	2.16	1.78		ug/L		76	35 - 120

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

Lab Sample ID: 440-39233-AE-1-A MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 90000 — **Prep Batch: 89593**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.15	J	2.09	2.70	F	ug/L		122	35 - 120	41	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*71*		*30 - 120*

QC Association Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

GC/MS VOA

Analysis Batch: 89421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39578-1	OC_SP220B_EFF_22613	Total/NA	Water	8260B	
440-39578-1 MS	OC_SP220B_EFF_22613	Total/NA	Water	8260B	
440-39578-1 MSD	OC_SP220B_EFF_22613	Total/NA	Water	8260B	
440-39578-2	OC_SP210_INF_22613	Total/NA	Water	8260B	
440-39578-3	OC_TB_22613	Total/NA	Water	8260B	
LCS 440-89421/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-89421/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 89593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39233-C-1-A MS	Matrix Spike	Total/NA	Water	3520C	
440-39578-1	OC_SP220B_EFF_22613	Total/NA	Water	3520C	
440-39233-AE-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	3520C	
LCS 440-89593/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 440-89593/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 90000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39233-C-1-A MS	Matrix Spike	Total/NA	Water	8270C SIM	89593
440-39578-1	OC_SP220B_EFF_22613	Total/NA	Water	8270C SIM	89593
440-39233-AE-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	8270C SIM	89593
LCS 440-89593/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	89593
MB 440-89593/1-A	Method Blank	Total/NA	Water	8270C SIM	89593

Definitions/Glossary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

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.

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	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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-39578-1

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	03-28-13
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	03-28-13
Northern Mariana Islands	State Program	9	MP0002	03-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

440-39578

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_SP220B_EFF_22613	2/26/2013	1435	5	x					x						x						x	x		x		
OC_SP210_INF_22613	2/26/2013	1440	3	x					x						x						x			x		
OC_TB_22613	2/26/2013	0850	2	x					x											x	x			x		

Special Instructions:

Method of Shipment:

Laboratory Comments:

Temperature Upon Receipt:

VOCs Free of Headspace? Y N

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	2/28/13	1615	[signature]	2/28/13	16:15
Relinquished by: [signature]	2/28/13	1800	Received by TestAmerica: [signature]	02/28/13	18:00

2.1°C

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39578-1

Login Number: 39578

List Number: 1

Creator: Escalante, Maria

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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	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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 440-41939-1
Client Project/Site: Omega Chemical Wastewater

For:
Jacob & Hefner Associates P.C.
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Irvine, California 92618

Attn: Andrew Miller

Authorized for release by:
4/10/2013 10:35:29 AM

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

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Method Summary 10
Chronicle 11
QC Sample Results 12
QC Association 19
Definitions 20
Certification Summary 21
Chain of Custody 22
Receipt Checklists 23

Sample Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-41939-1	OC_SP220B_EFF_32613	Water	03/26/13 16:20	03/27/13 11:30
440-41939-2	OC_SP210_INF_32613	Water	03/26/13 16:25	03/27/13 11:30
440-41939-3	OC_TB_32613	Water	03/26/13 16:00	03/27/13 11:30

Job ID: 440-41939-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-41939-1

Comments
No additional comments.

Receipt
The samples were received on 3/27/2013 11:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º 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 95235. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method 8270C SIM: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 95235 exceeded control limits for 1,4-Dioxane. The LCS and LCSD both had recoveries that met acceptance criteria.

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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Client Sample ID: OC_SP220B_EFF_32613

Lab Sample ID: 440-41939-1

Date Collected: 03/26/13 16:20

Matrix: Water

Date Received: 03/27/13 11:30

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			04/02/13 22:45	1
Benzene	ND		0.50		ug/L			04/02/13 22:45	1
Bromobenzene	ND		1.0		ug/L			04/02/13 22:45	1
Bromochloromethane	ND		1.0		ug/L			04/02/13 22:45	1
Bromodichloromethane	ND		1.0		ug/L			04/02/13 22:45	1
Bromoform	ND		1.0		ug/L			04/02/13 22:45	1
Bromomethane	ND		1.0		ug/L			04/02/13 22:45	1
Carbon tetrachloride	ND		0.50		ug/L			04/02/13 22:45	1
Chlorobenzene	ND		1.0		ug/L			04/02/13 22:45	1
Chloroethane	ND		1.0		ug/L			04/02/13 22:45	1
Chloroform	ND		1.0		ug/L			04/02/13 22:45	1
Chloromethane	ND		1.0		ug/L			04/02/13 22:45	1
2-Chlorotoluene	ND		1.0		ug/L			04/02/13 22:45	1
4-Chlorotoluene	ND		1.0		ug/L			04/02/13 22:45	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/02/13 22:45	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/02/13 22:45	1
Dibromochloromethane	ND		1.0		ug/L			04/02/13 22:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/02/13 22:45	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			04/02/13 22:45	1
Dibromomethane	ND		1.0		ug/L			04/02/13 22:45	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/02/13 22:45	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/02/13 22:45	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/02/13 22:45	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/02/13 22:45	1
1,1-Dichloroethane	ND		1.0		ug/L			04/02/13 22:45	1
1,2-Dichloroethane	ND		1.0		ug/L			04/02/13 22:45	1
1,1-Dichloroethene	ND		1.0		ug/L			04/02/13 22:45	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/13 22:45	1
1,3-Dichloropropane	ND		1.0		ug/L			04/02/13 22:45	1
2,2-Dichloropropane	ND		1.0		ug/L			04/02/13 22:45	1
1,1-Dichloropropene	ND		1.0		ug/L			04/02/13 22:45	1
Ethylbenzene	ND		1.0		ug/L			04/02/13 22:45	1
Hexachlorobutadiene	ND		1.0		ug/L			04/02/13 22:45	1
Isopropylbenzene	ND		1.0		ug/L			04/02/13 22:45	1
Methylene Chloride	ND		5.0		ug/L			04/02/13 22:45	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			04/02/13 22:45	1
m,p-Xylene	ND		1.0		ug/L			04/02/13 22:45	1
Naphthalene	ND		1.0		ug/L			04/02/13 22:45	1
n-Butylbenzene	ND		1.0		ug/L			04/02/13 22:45	1
N-Propylbenzene	ND		1.0		ug/L			04/02/13 22:45	1
o-Xylene	ND		1.0		ug/L			04/02/13 22:45	1
p-Isopropyltoluene	ND		1.0		ug/L			04/02/13 22:45	1
sec-Butylbenzene	ND		1.0		ug/L			04/02/13 22:45	1
Styrene	ND		1.0		ug/L			04/02/13 22:45	1
tert-Butylbenzene	ND		1.0		ug/L			04/02/13 22:45	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/02/13 22:45	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/02/13 22:45	1
Tetrachloroethene	ND		1.0		ug/L			04/02/13 22:45	1
Toluene	ND		1.0		ug/L			04/02/13 22:45	1

Client Sample ID: OC_SP220B_EFF_32613

Lab Sample ID: 440-41939-1

Date Collected: 03/26/13 16:20

Matrix: Water

Date Received: 03/27/13 11:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	ug/L			04/02/13 22:45	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			04/02/13 22:45	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			04/02/13 22:45	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			04/02/13 22:45	1
1,1,1-Trichloroethane	ND		1.0	ug/L			04/02/13 22:45	1
1,1,2-Trichloroethane	ND		1.0	ug/L			04/02/13 22:45	1
Trichloroethene	ND		1.0	ug/L			04/02/13 22:45	1
Trichlorofluoromethane	ND		1.0	ug/L			04/02/13 22:45	1
1,2,3-Trichloropropane	ND		1.0	ug/L			04/02/13 22:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			04/02/13 22:45	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			04/02/13 22:45	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			04/02/13 22:45	1
Vinyl chloride	ND		0.50	ug/L			04/02/13 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*04/02/13 22:45*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*04/02/13 22:45*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/02/13 22:45*	*1*

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**42**	*	2.4	ug/L		03/30/13 11:36	04/02/13 01:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*63*		*30 - 120*	*03/30/13 11:36*	*04/02/13 01:30*	*5*

Client Sample ID: OC_SP210_INF_32613

Lab Sample ID: 440-41939-2

Date Collected: 03/26/13 16:25

Matrix: Water

Date Received: 03/27/13 11:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	ug/L			04/02/13 22:18	25
Benzene	ND		13	ug/L			04/02/13 22:18	25
Bromobenzene	ND		25	ug/L			04/02/13 22:18	25
Bromochloromethane	ND		25	ug/L			04/02/13 22:18	25
Bromodichloromethane	ND		25	ug/L			04/02/13 22:18	25
Bromoform	ND		25	ug/L			04/02/13 22:18	25
Bromomethane	ND		25	ug/L			04/02/13 22:18	25
Carbon tetrachloride	ND		13	ug/L			04/02/13 22:18	25
Chlorobenzene	ND		25	ug/L			04/02/13 22:18	25
Chloroethane	ND		25	ug/L			04/02/13 22:18	25
Chloroform	**46**		25	ug/L			04/02/13 22:18	25
Chloromethane	ND		25	ug/L			04/02/13 22:18	25
2-Chlorotoluene	ND		25	ug/L			04/02/13 22:18	25
4-Chlorotoluene	ND		25	ug/L			04/02/13 22:18	25
cis-1,2-Dichloroethene	ND		25	ug/L			04/02/13 22:18	25
cis-1,3-Dichloropropene	ND		13	ug/L			04/02/13 22:18	25
Dibromochloromethane	ND		25	ug/L			04/02/13 22:18	25
1,2-Dibromo-3-Chloropropane	ND		130	ug/L			04/02/13 22:18	25

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Client Sample ID: OC_SP210_INF_32613

Date Collected: 03/26/13 16:25
Date Received: 03/27/13 11:30

Lab Sample ID: 440-41939-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	ND		25	ug/L			04/02/13 22:18	25
Dibromomethane	ND		25	ug/L			04/02/13 22:18	25
1,2-Dichlorobenzene	ND		25	ug/L			04/02/13 22:18	25
1,3-Dichlorobenzene	ND		25	ug/L			04/02/13 22:18	25
1,4-Dichlorobenzene	ND		25	ug/L			04/02/13 22:18	25
Dichlorodifluoromethane	ND		25	ug/L			04/02/13 22:18	25
1,1-Dichloroethane	ND		25	ug/L			04/02/13 22:18	25
1,2-Dichloroethane	ND		25	ug/L			04/02/13 22:18	25
1,1-Dichloroethene	**120**		25	ug/L			04/02/13 22:18	25
1,2-Dichloropropane	ND		25	ug/L			04/02/13 22:18	25
1,3-Dichloropropane	ND		25	ug/L			04/02/13 22:18	25
2,2-Dichloropropane	ND		25	ug/L			04/02/13 22:18	25
1,1-Dichloropropene	ND		25	ug/L			04/02/13 22:18	25
Ethylbenzene	ND		25	ug/L			04/02/13 22:18	25
Hexachlorobutadiene	ND		25	ug/L			04/02/13 22:18	25
Isopropylbenzene	ND		25	ug/L			04/02/13 22:18	25
Methylene Chloride	ND		130	ug/L			04/02/13 22:18	25
Methyl-t-Butyl Ether (MTBE)	ND		25	ug/L			04/02/13 22:18	25
m,p-Xylene	ND		25	ug/L			04/02/13 22:18	25
Naphthalene	ND		25	ug/L			04/02/13 22:18	25
n-Butylbenzene	ND		25	ug/L			04/02/13 22:18	25
N-Propylbenzene	ND		25	ug/L			04/02/13 22:18	25
o-Xylene	ND		25	ug/L			04/02/13 22:18	25
p-Isopropyltoluene	ND		25	ug/L			04/02/13 22:18	25
sec-Butylbenzene	ND		25	ug/L			04/02/13 22:18	25
Styrene	ND		25	ug/L			04/02/13 22:18	25
tert-Butylbenzene	ND		25	ug/L			04/02/13 22:18	25
1,1,1,2-Tetrachloroethane	ND		25	ug/L			04/02/13 22:18	25
1,1,2,2-Tetrachloroethane	ND		25	ug/L			04/02/13 22:18	25
Tetrachloroethene	**1900**		25	ug/L			04/02/13 22:18	25
Toluene	ND		25	ug/L			04/02/13 22:18	25
trans-1,2-Dichloroethene	ND		25	ug/L			04/02/13 22:18	25
trans-1,3-Dichloropropene	ND		13	ug/L			04/02/13 22:18	25
1,2,3-Trichlorobenzene	ND		25	ug/L			04/02/13 22:18	25
1,2,4-Trichlorobenzene	ND		25	ug/L			04/02/13 22:18	25
1,1,1-Trichloroethane	ND		25	ug/L			04/02/13 22:18	25
1,1,2-Trichloroethane	ND		25	ug/L			04/02/13 22:18	25
Trichloroethene	**77**		25	ug/L			04/02/13 22:18	25
Trichlorofluoromethane	**34**		25	ug/L			04/02/13 22:18	25
1,2,3-Trichloropropane	ND		25	ug/L			04/02/13 22:18	25
1,1,2-Trichloro-1,2,2-trifluoroethane	**130**		130	ug/L			04/02/13 22:18	25
1,2,4-Trimethylbenzene	ND		25	ug/L			04/02/13 22:18	25
1,3,5-Trimethylbenzene	ND		25	ug/L			04/02/13 22:18	25
Vinyl chloride	ND		13	ug/L			04/02/13 22:18	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*04/02/13 22:18*	*25*
Dibromofluoromethane (Surr)	*116*		*80 - 120*		*04/02/13 22:18*	*25*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/02/13 22:18*	*25*

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Client Sample ID: OC_TB_32613

Date Collected: 03/26/13 16:00
Date Received: 03/27/13 11:30

Lab Sample ID: 440-41939-3

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			04/02/13 21:50	1
Benzene	ND		0.50		ug/L			04/02/13 21:50	1
Bromobenzene	ND		1.0		ug/L			04/02/13 21:50	1
Bromochloromethane	ND		1.0		ug/L			04/02/13 21:50	1
Bromodichloromethane	ND		1.0		ug/L			04/02/13 21:50	1
Bromoform	ND		1.0		ug/L			04/02/13 21:50	1
Bromomethane	ND		1.0		ug/L			04/02/13 21:50	1
Carbon tetrachloride	ND		0.50		ug/L			04/02/13 21:50	1
Chlorobenzene	ND		1.0		ug/L			04/02/13 21:50	1
Chloroethane	ND		1.0		ug/L			04/02/13 21:50	1
Chloroform	ND		1.0		ug/L			04/02/13 21:50	1
Chloromethane	ND		1.0		ug/L			04/02/13 21:50	1
2-Chlorotoluene	ND		1.0		ug/L			04/02/13 21:50	1
4-Chlorotoluene	ND		1.0		ug/L			04/02/13 21:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			04/02/13 21:50	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			04/02/13 21:50	1
Dibromochloromethane	ND		1.0		ug/L			04/02/13 21:50	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			04/02/13 21:50	1
1,2-Dibromoethane (EDB)	ND		1.0		ug/L			04/02/13 21:50	1
Dibromomethane	ND		1.0		ug/L			04/02/13 21:50	1
1,2-Dichlorobenzene	ND		1.0		ug/L			04/02/13 21:50	1
1,3-Dichlorobenzene	ND		1.0		ug/L			04/02/13 21:50	1
1,4-Dichlorobenzene	ND		1.0		ug/L			04/02/13 21:50	1
Dichlorodifluoromethane	ND		1.0		ug/L			04/02/13 21:50	1
1,1-Dichloroethane	ND		1.0		ug/L			04/02/13 21:50	1
1,2-Dichloroethane	ND		1.0		ug/L			04/02/13 21:50	1
1,1-Dichloroethene	ND		1.0		ug/L			04/02/13 21:50	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/13 21:50	1
1,3-Dichloropropane	ND		1.0		ug/L			04/02/13 21:50	1
2,2-Dichloropropane	ND		1.0		ug/L			04/02/13 21:50	1
1,1-Dichloropropene	ND		1.0		ug/L			04/02/13 21:50	1
Ethylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
Hexachlorobutadiene	ND		1.0		ug/L			04/02/13 21:50	1
Isopropylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
Methylene Chloride	ND		5.0		ug/L			04/02/13 21:50	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			04/02/13 21:50	1
m,p-Xylene	ND		1.0		ug/L			04/02/13 21:50	1
Naphthalene	ND		1.0		ug/L			04/02/13 21:50	1
n-Butylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
N-Propylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
o-Xylene	ND		1.0		ug/L			04/02/13 21:50	1
p-Isopropyltoluene	ND		1.0		ug/L			04/02/13 21:50	1
sec-Butylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
Styrene	ND		1.0		ug/L			04/02/13 21:50	1
tert-Butylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			04/02/13 21:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			04/02/13 21:50	1
Tetrachloroethene	ND		1.0		ug/L			04/02/13 21:50	1
Toluene	ND		1.0		ug/L			04/02/13 21:50	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Client Sample ID: OC_TB_32613

Lab Sample ID: 440-41939-3

Date Collected: 03/26/13 16:00

Matrix: Water

Date Received: 03/27/13 11:30

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0		ug/L			04/02/13 21:50	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			04/02/13 21:50	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			04/02/13 21:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			04/02/13 21:50	1
1,1,1-Trichloroethane	ND		1.0		ug/L			04/02/13 21:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/13 21:50	1
Trichloroethene	ND		1.0		ug/L			04/02/13 21:50	1
Trichlorofluoromethane	ND		1.0		ug/L			04/02/13 21:50	1
1,2,3-Trichloropropane	ND		1.0		ug/L			04/02/13 21:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/L			04/02/13 21:50	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			04/02/13 21:50	1
Vinyl chloride	ND		0.50		ug/L			04/02/13 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*04/02/13 21:50*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*04/02/13 21:50*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/02/13 21:50*	*1*

Method Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8270C SIM	1,4 Dioxane by SIM	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Client Sample ID: OC_SP220B_EFF_32613

Lab Sample ID: 440-41939-1

Date Collected: 03/26/13 16:20

Matrix: Water

Date Received: 03/27/13 11:30

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	95690	04/02/13 22:45	BD	TAL IRV
Total/NA	Prep	3520C			1050 mL	1 mL	95235	03/30/13 11:36	AG	TAL IRV
Total/NA	Analysis	8270C SIM		5			95532	04/02/13 01:30	ES	TAL IRV

Client Sample ID: OC_SP210_INF_32613

Lab Sample ID: 440-41939-2

Date Collected: 03/26/13 16:25

Matrix: Water

Date Received: 03/27/13 11:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	10 mL	10 mL	95690	04/02/13 22:18	BD	TAL IRV

Client Sample ID: OC_TB_32613

Lab Sample ID: 440-41939-3

Date Collected: 03/26/13 16:00

Matrix: Water

Date Received: 03/27/13 11:30

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	95690	04/02/13 21:50	BD	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 440-95690/4
Matrix: Water
Analysis Batch: 95690

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			04/02/13 19:05	1
Benzene	ND		0.50	ug/L			04/02/13 19:05	1
Bromobenzene	ND		1.0	ug/L			04/02/13 19:05	1
Bromochloromethane	ND		1.0	ug/L			04/02/13 19:05	1
Bromodichloromethane	ND		1.0	ug/L			04/02/13 19:05	1
Bromoform	ND		1.0	ug/L			04/02/13 19:05	1
Bromomethane	ND		1.0	ug/L			04/02/13 19:05	1
Carbon tetrachloride	ND		0.50	ug/L			04/02/13 19:05	1
Chlorobenzene	ND		1.0	ug/L			04/02/13 19:05	1
Chloroethane	ND		1.0	ug/L			04/02/13 19:05	1
Chloroform	ND		1.0	ug/L			04/02/13 19:05	1
Chloromethane	ND		1.0	ug/L			04/02/13 19:05	1
2-Chlorotoluene	ND		1.0	ug/L			04/02/13 19:05	1
4-Chlorotoluene	ND		1.0	ug/L			04/02/13 19:05	1
cis-1,2-Dichloroethene	ND		1.0	ug/L			04/02/13 19:05	1
cis-1,3-Dichloropropene	ND		0.50	ug/L			04/02/13 19:05	1
Dibromochloromethane	ND		1.0	ug/L			04/02/13 19:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	ug/L			04/02/13 19:05	1
1,2-Dibromoethane (EDB)	ND		1.0	ug/L			04/02/13 19:05	1
Dibromomethane	ND		1.0	ug/L			04/02/13 19:05	1
1,2-Dichlorobenzene	ND		1.0	ug/L			04/02/13 19:05	1
1,3-Dichlorobenzene	ND		1.0	ug/L			04/02/13 19:05	1
1,4-Dichlorobenzene	ND		1.0	ug/L			04/02/13 19:05	1
Dichlorodifluoromethane	ND		1.0	ug/L			04/02/13 19:05	1
1,1-Dichloroethane	ND		1.0	ug/L			04/02/13 19:05	1
1,2-Dichloroethane	ND		1.0	ug/L			04/02/13 19:05	1
1,1-Dichloroethene	ND		1.0	ug/L			04/02/13 19:05	1
1,2-Dichloropropane	ND		1.0	ug/L			04/02/13 19:05	1
1,3-Dichloropropane	ND		1.0	ug/L			04/02/13 19:05	1
2,2-Dichloropropane	ND		1.0	ug/L			04/02/13 19:05	1
1,1-Dichloropropene	ND		1.0	ug/L			04/02/13 19:05	1
Ethylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
Hexachlorobutadiene	ND		1.0	ug/L			04/02/13 19:05	1
Isopropylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
Methylene Chloride	ND		5.0	ug/L			04/02/13 19:05	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	ug/L			04/02/13 19:05	1
m,p-Xylene	ND		1.0	ug/L			04/02/13 19:05	1
Naphthalene	ND		1.0	ug/L			04/02/13 19:05	1
n-Butylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
N-Propylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
o-Xylene	ND		1.0	ug/L			04/02/13 19:05	1
p-Isopropyltoluene	ND		1.0	ug/L			04/02/13 19:05	1
sec-Butylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
Styrene	ND		1.0	ug/L			04/02/13 19:05	1
tert-Butylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	ug/L			04/02/13 19:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	ug/L			04/02/13 19:05	1
Tetrachloroethene	ND		1.0	ug/L			04/02/13 19:05	1

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

Lab Sample ID: MB 440-95690/4
Matrix: Water
Analysis Batch: 95690

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	ug/L			04/02/13 19:05	1
trans-1,2-Dichloroethene	ND		1.0	ug/L			04/02/13 19:05	1
trans-1,3-Dichloropropene	ND		0.50	ug/L			04/02/13 19:05	1
1,2,3-Trichlorobenzene	ND		1.0	ug/L			04/02/13 19:05	1
1,2,4-Trichlorobenzene	ND		1.0	ug/L			04/02/13 19:05	1
1,1,1-Trichloroethane	ND		1.0	ug/L			04/02/13 19:05	1
1,1,2-Trichloroethane	ND		1.0	ug/L			04/02/13 19:05	1
Trichloroethene	ND		1.0	ug/L			04/02/13 19:05	1
Trichlorofluoromethane	ND		1.0	ug/L			04/02/13 19:05	1
1,2,3-Trichloropropane	ND		1.0	ug/L			04/02/13 19:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	ug/L			04/02/13 19:05	1
1,2,4-Trimethylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
1,3,5-Trimethylbenzene	ND		1.0	ug/L			04/02/13 19:05	1
Vinyl chloride	ND		0.50	ug/L			04/02/13 19:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*04/02/13 19:05*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*04/02/13 19:05*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/02/13 19:05*	*1*

Lab Sample ID: LCS 440-95690/5
Matrix: Water
Analysis Batch: 95690

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	17.6		ug/L		71	30 - 140
Benzene	25.0	21.2		ug/L		85	70 - 120
Bromobenzene	25.0	25.7		ug/L		103	75 - 120
Bromochloromethane	25.0	25.2		ug/L		101	70 - 130
Bromodichloromethane	25.0	24.1		ug/L		96	70 - 135
Bromoform	25.0	27.5		ug/L		110	55 - 130
Bromomethane	25.0	20.6		ug/L		82	65 - 140
Carbon tetrachloride	25.0	23.3		ug/L		93	65 - 140
Chlorobenzene	25.0	25.7		ug/L		103	75 - 120
Chloroethane	25.0	21.3		ug/L		85	60 - 140
Chloroform	25.0	24.2		ug/L		97	70 - 130
Chloromethane	25.0	16.5		ug/L		66	50 - 140
2-Chlorotoluene	25.0	23.7		ug/L		95	70 - 125
4-Chlorotoluene	25.0	24.3		ug/L		97	75 - 125
cis-1,2-Dichloroethene	25.0	25.7		ug/L		103	70 - 125
cis-1,3-Dichloropropene	25.0	25.9		ug/L		104	75 - 125
Dibromochloromethane	25.0	27.7		ug/L		111	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	21.9		ug/L		88	50 - 135
1,2-Dibromoethane (EDB)	25.0	26.7		ug/L		107	75 - 125
Dibromomethane	25.0	22.0		ug/L		88	70 - 125
1,2-Dichlorobenzene	25.0	25.6		ug/L		102	75 - 120
1,3-Dichlorobenzene	25.0	26.2		ug/L		105	75 - 120
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	75 - 120

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

Lab Sample ID: LCS 440-95690/5
Matrix: Water
Analysis Batch: 95690

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorodifluoromethane	25.0	10.1		ug/L		40	35 - 155
1,1-Dichloroethane	25.0	24.2		ug/L		97	70 - 125
1,2-Dichloroethane	25.0	22.8		ug/L		91	60 - 140
1,1-Dichloroethene	25.0	23.8		ug/L		95	70 - 125
1,2-Dichloropropane	25.0	23.2		ug/L		93	70 - 125
1,3-Dichloropropane	25.0	25.0		ug/L		100	70 - 120
2,2-Dichloropropane	25.0	24.3		ug/L		97	65 - 140
1,1-Dichloropropene	25.0	20.2		ug/L		81	75 - 130
Ethylbenzene	25.0	26.1		ug/L		104	75 - 125
Hexachlorobutadiene	25.0	25.4		ug/L		102	65 - 135
Isopropylbenzene	25.0	25.5		ug/L		102	75 - 130
Methylene Chloride	25.0	23.2		ug/L		93	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	22.6		ug/L		91	60 - 135
m,p-Xylene	50.0	54.0		ug/L		108	75 - 125
Naphthalene	25.0	27.4		ug/L		109	55 - 135
n-Butylbenzene	25.0	26.4		ug/L		106	70 - 130
N-Propylbenzene	25.0	25.0		ug/L		100	75 - 130
o-Xylene	25.0	27.9		ug/L		112	75 - 125
p-Isopropyltoluene	25.0	27.0		ug/L		108	75 - 125
sec-Butylbenzene	25.0	25.1		ug/L		100	70 - 125
Styrene	25.0	26.7		ug/L		107	75 - 130
tert-Butylbenzene	25.0	25.3		ug/L		101	70 - 125
1,1,1,2-Tetrachloroethane	25.0	27.3		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	25.0	22.0		ug/L		88	55 - 130
Tetrachloroethene	25.0	26.9		ug/L		107	70 - 125
Toluene	25.0	23.7		ug/L		95	70 - 120
trans-1,2-Dichloroethene	25.0	24.6		ug/L		98	70 - 125
trans-1,3-Dichloropropene	25.0	24.1		ug/L		96	70 - 125
1,2,3-Trichlorobenzene	25.0	25.3		ug/L		101	65 - 125
1,2,4-Trichlorobenzene	25.0	28.0		ug/L		112	70 - 135
1,1,1-Trichloroethane	25.0	24.4		ug/L		97	65 - 135
1,1,2-Trichloroethane	25.0	23.5		ug/L		94	70 - 125
Trichloroethene	25.0	24.7		ug/L		99	70 - 125
Trichlorofluoromethane	25.0	20.8		ug/L		83	65 - 145
1,2,3-Trichloropropane	25.0	20.2		ug/L		81	60 - 130
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	75 - 125
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	75 - 125
Vinyl chloride	25.0	23.0		ug/L		92	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

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

Lab Sample ID: 440-42125-A-1 MS
Matrix: Water
Analysis Batch: 95690

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	13.9		ug/L		56	20 - 150
Benzene	ND		25.0	21.0		ug/L		84	65 - 125
Bromobenzene	ND		25.0	25.2		ug/L		101	70 - 125
Bromochloromethane	ND		25.0	25.0		ug/L		100	65 - 135
Bromodichloromethane	ND		25.0	24.6		ug/L		96	70 - 135
Bromoform	5.0		25.0	32.0		ug/L		108	55 - 135
Bromomethane	ND		25.0	20.4		ug/L		82	55 - 145
Carbon tetrachloride	ND		25.0	22.9		ug/L		92	65 - 140
Chlorobenzene	ND		25.0	25.2		ug/L		101	75 - 125
Chloroethane	ND		25.0	20.8		ug/L		83	55 - 140
Chloroform	ND		25.0	23.5		ug/L		94	65 - 135
Chloromethane	ND		25.0	15.7		ug/L		63	45 - 145
2-Chlorotoluene	ND		25.0	23.0		ug/L		92	65 - 135
4-Chlorotoluene	ND		25.0	23.8		ug/L		95	70 - 135
cis-1,2-Dichloroethene	ND		25.0	25.1		ug/L		100	65 - 130
cis-1,3-Dichloropropene	ND		25.0	25.3		ug/L		101	70 - 130
Dibromochloromethane	2.3		25.0	29.4		ug/L		109	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	20.8		ug/L		83	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	25.9		ug/L		104	70 - 130
Dibromomethane	ND		25.0	22.1		ug/L		89	65 - 135
1,2-Dichlorobenzene	ND		25.0	24.8		ug/L		99	75 - 125
1,3-Dichlorobenzene	ND		25.0	25.5		ug/L		102	75 - 125
1,4-Dichlorobenzene	ND		25.0	25.0		ug/L		100	75 - 125
Dichlorodifluoromethane	ND		25.0	9.27		ug/L		37	25 - 155
1,1-Dichloroethane	ND		25.0	23.3		ug/L		93	65 - 130
1,2-Dichloroethane	ND		25.0	22.4		ug/L		90	60 - 140
1,1-Dichloroethene	ND		25.0	23.1		ug/L		92	60 - 130
1,2-Dichloropropane	ND		25.0	22.9		ug/L		92	65 - 130
1,3-Dichloropropane	ND		25.0	24.6		ug/L		98	65 - 135
2,2-Dichloropropane	ND		25.0	23.3		ug/L		93	60 - 145
1,1-Dichloropropene	ND		25.0	20.3		ug/L		81	70 - 135
Ethylbenzene	ND		25.0	25.8		ug/L		103	65 - 130
Hexachlorobutadiene	ND		25.0	24.8		ug/L		99	60 - 135
Isopropylbenzene	ND		25.0	24.7		ug/L		99	70 - 135
Methylene Chloride	ND		25.0	22.7		ug/L		85	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.9		ug/L		88	55 - 145
m,p-Xylene	ND		50.0	52.4		ug/L		105	65 - 130
Naphthalene	ND		25.0	26.2		ug/L		102	50 - 140
n-Butylbenzene	ND		25.0	26.1		ug/L		104	65 - 135
N-Propylbenzene	ND		25.0	24.0		ug/L		96	70 - 135
o-Xylene	ND		25.0	27.2		ug/L		109	65 - 125
p-Isopropyltoluene	ND		25.0	25.9		ug/L		104	65 - 130
sec-Butylbenzene	ND		25.0	24.4		ug/L		98	70 - 125
Styrene	ND		25.0	21.3		ug/L		85	50 - 145
tert-Butylbenzene	ND		25.0	24.5		ug/L		98	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	26.7		ug/L		107	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	20.8		ug/L		83	55 - 135
Tetrachloroethene	ND		25.0	26.3		ug/L		105	65 - 130

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

Lab Sample ID: 440-42125-A-1 MS
Matrix: Water
Analysis Batch: 95690

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
Toluene	ND		25.0	23.3		ug/L		93	70 - 125
trans-1,2-Dichloroethene	ND		25.0	23.7		ug/L		95	65 - 130
trans-1,3-Dichloropropene	ND		25.0	23.7		ug/L		95	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	25.0		ug/L		99	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	27.5		ug/L		110	65 - 135
1,1,1-Trichloroethane	ND		25.0	23.3		ug/L		93	65 - 140
1,1,2-Trichloroethane	ND		25.0	22.9		ug/L		92	65 - 130
Trichloroethene	ND		25.0	24.6		ug/L		98	65 - 125
Trichlorofluoromethane	ND		25.0	20.1		ug/L		81	60 - 145
1,2,3-Trichloropropane	ND		25.0	18.9		ug/L		75	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	23.3		ug/L		93	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	23.8		ug/L		95	70 - 130
Vinyl chloride	ND		25.0	21.7		ug/L		87	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 440-42125-A-1 MSD
Matrix: Water
Analysis Batch: 95690

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	12.5		ug/L		50	20 - 150	11	35
Benzene	ND		25.0	20.4		ug/L		81	65 - 125	3	20
Bromobenzene	ND		25.0	25.2		ug/L		101	70 - 125	0	20
Bromochloromethane	ND		25.0	24.6		ug/L		98	65 - 135	2	25
Bromodichloromethane	ND		25.0	24.3		ug/L		95	70 - 135	1	20
Bromoform	5.0		25.0	32.3		ug/L		109	55 - 135	1	25
Bromomethane	ND		25.0	19.5		ug/L		78	55 - 145	5	25
Carbon tetrachloride	ND		25.0	22.7		ug/L		91	65 - 140	1	25
Chlorobenzene	ND		25.0	24.8		ug/L		99	75 - 125	2	20
Chloroethane	ND		25.0	19.4		ug/L		78	55 - 140	7	25
Chloroform	ND		25.0	22.7		ug/L		91	65 - 135	4	20
Chloromethane	ND		25.0	15.0		ug/L		60	45 - 145	5	25
2-Chlorotoluene	ND		25.0	22.4		ug/L		90	65 - 135	3	20
4-Chlorotoluene	ND		25.0	23.1		ug/L		92	70 - 135	3	20
cis-1,2-Dichloroethene	ND		25.0	24.8		ug/L		99	65 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	24.9		ug/L		100	70 - 130	2	20
Dibromochloromethane	2.3		25.0	29.0		ug/L		107	65 - 140	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	20.2		ug/L		81	45 - 145	3	30
1,2-Dibromoethane (EDB)	ND		25.0	25.9		ug/L		103	70 - 130	0	25
Dibromomethane	ND		25.0	21.5		ug/L		86	65 - 135	3	25
1,2-Dichlorobenzene	ND		25.0	24.6		ug/L		99	75 - 125	1	20
1,3-Dichlorobenzene	ND		25.0	25.0		ug/L		100	75 - 125	2	20
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	75 - 125	1	20
Dichlorodifluoromethane	ND		25.0	8.95		ug/L		36	25 - 155	3	30

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

Lab Sample ID: 440-42125-A-1 MSD
Matrix: Water
Analysis Batch: 95690

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-Dichloroethane	ND		25.0	22.9		ug/L		91	65 - 130	2	20
1,2-Dichloroethane	ND		25.0	22.0		ug/L		88	60 - 140	2	20
1,1-Dichloroethene	ND		25.0	22.6		ug/L		91	60 - 130	2	20
1,2-Dichloropropane	ND		25.0	22.5		ug/L		90	65 - 130	2	20
1,3-Dichloropropane	ND		25.0	23.7		ug/L		95	65 - 135	4	25
2,2-Dichloropropane	ND		25.0	22.6		ug/L		90	60 - 145	3	25
1,1-Dichloropropene	ND		25.0	19.6		ug/L		78	70 - 135	4	20
Ethylbenzene	ND		25.0	25.4		ug/L		102	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	24.1		ug/L		96	60 - 135	3	20
Isopropylbenzene	ND		25.0	24.2		ug/L		97	70 - 135	2	20
Methylene Chloride	ND		25.0	21.6		ug/L		81	50 - 135	5	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.6		ug/L		87	55 - 145	1	25
m,p-Xylene	ND		50.0	52.4		ug/L		105	65 - 130	0	25
Naphthalene	ND		25.0	27.2		ug/L		106	50 - 140	4	30
n-Butylbenzene	ND		25.0	25.2		ug/L		101	65 - 135	3	20
N-Propylbenzene	ND		25.0	23.6		ug/L		95	70 - 135	2	20
o-Xylene	ND		25.0	27.0		ug/L		108	65 - 125	1	20
p-Isopropyltoluene	ND		25.0	25.5		ug/L		102	65 - 130	2	20
sec-Butylbenzene	ND		25.0	23.9		ug/L		96	70 - 125	2	20
Styrene	ND		25.0	23.9		ug/L		96	50 - 145	12	30
tert-Butylbenzene	ND		25.0	24.2		ug/L		97	65 - 130	1	20
1,1,1,2-Tetrachloroethane	ND		25.0	27.0		ug/L		108	65 - 140	1	20
1,1,2,2-Tetrachloroethane	ND		25.0	20.8		ug/L		83	55 - 135	0	30
Tetrachloroethene	ND		25.0	26.4		ug/L		106	65 - 130	0	20
Toluene	ND		25.0	23.1		ug/L		92	70 - 125	1	20
trans-1,2-Dichloroethene	ND		25.0	23.1		ug/L		93	65 - 130	3	20
trans-1,3-Dichloropropene	ND		25.0	23.7		ug/L		95	65 - 135	0	25
1,2,3-Trichlorobenzene	ND		25.0	24.8		ug/L		98	60 - 135	1	20
1,2,4-Trichlorobenzene	ND		25.0	26.7		ug/L		107	65 - 135	3	20
1,1,1-Trichloroethane	ND		25.0	22.8		ug/L		91	65 - 140	2	20
1,1,2-Trichloroethane	ND		25.0	23.1		ug/L		92	65 - 130	1	25
Trichloroethene	ND		25.0	24.1		ug/L		96	65 - 125	2	20
Trichlorofluoromethane	ND		25.0	19.4		ug/L		78	60 - 145	4	25
1,2,3-Trichloropropane	ND		25.0	19.2		ug/L		77	55 - 135	2	30
1,2,4-Trimethylbenzene	ND		25.0	24.5		ug/L		98	55 - 135	5	25
1,3,5-Trimethylbenzene	ND		25.0	24.4		ug/L		98	70 - 130	2	20
Vinyl chloride	ND		25.0	20.4		ug/L		82	45 - 140	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

QC Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

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

Lab Sample ID: MB 440-95235/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 95341 — **Prep Batch: 95235**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.50		ug/L		03/30/13 11:36	04/01/13 05:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*61*		*30 - 120*	*03/30/13 11:36*	*04/01/13 05:07*	*1*

Lab Sample ID: LCS 440-95235/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 95341 — **Prep Batch: 95235**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			2.00	1.33		ug/L		67	35 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*63*		*30 - 120*

Lab Sample ID: LCSD 440-95235/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 95341 — **Prep Batch: 95235**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			2.00	0.972	*	ug/L		49	35 - 120	31	25

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

QC Association Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

GC/MS VOA

Analysis Batch: 95690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-41939-1	OC_SP220B_EFF_32613	Total/NA	Water	8260B	
440-41939-2	OC_SP210_INF_32613	Total/NA	Water	8260B	
440-41939-3	OC_TB_32613	Total/NA	Water	8260B	
440-42125-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-42125-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-95690/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-95690/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 95235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-41939-1	OC_SP220B_EFF_32613	Total/NA	Water	3520C	
LCS 440-95235/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 440-95235/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 440-95235/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 95341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-95235/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	95235
LCSD 440-95235/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	95235
MB 440-95235/1-A	Method Blank	Total/NA	Water	8270C SIM	95235

Analysis Batch: 95532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-41939-1	OC_SP220B_EFF_32613	Total/NA	Water	8270C SIM	95235

Definitions/Glossary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and 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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Wastewater

TestAmerica Job ID: 440-41939-1

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

440-41939

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

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	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_SP220B_EFF_32613	3/26/2013	1620	5	x					x						x						x	x		x		
OC_SP210_INF_32613	3/26/2013	1625	3	x					x						x						x			x		
OC_TB_32613	3/26/2013	1600	2	x					x											x	x			x		

Special Instructions:

Method of Shipment:

Laboratory Comments:

Temperature Upon Receipt: 3.1/28

VOCs Free of Headspace? Y (N

Relinquished by:	Date	Time	Received by:	Date	Time
	3/27/13	1019		3/27/13	10:19
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
	3/27/13	11:30		3/27/13	11:30

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-41939-1

Login Number: 41939
List Number: 1
Creator: Freitag, Kevin R

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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	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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-01-1405

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 02/1/2013 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:	13-01-1405
		Project name:	Omega
		Received:	01/24/13 18:35
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_12413 (13-01-1405-1)						
Chloroform	**35**		0.52	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**2.0**		0.52	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	**6.8**		0.52	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**870**		5.0	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	**55**		0.52	ppb (v/v)	EPA TO-15	N/A
1,1,2-Trichloroethane	**0.73**		0.52	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**980**		50	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_INT_SP245_12413 (13-01-1405-2)						
Chloroform	**15**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**1.7**		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**17**		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:	13-01-1405
		Project name:	Omega
		Received:	01/24/13 18:35
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_12413 (13-01-1405-1)						
Chloroform	**170**		2.5	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**8.1**		2.1	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	**27**		2.1	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**5900**		34	ug/m3	EPA TO-15	N/A
Trichloroethene	**300**		2.8	ug/m3	EPA TO-15	N/A
1,1,2-Trichloroethane	**4.0**		2.8	ug/m3	EPA TO-15	N/A
OC_VGAC_INT_SP245_12413 (13-01-1405-2)						
Chloroform	**71**		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**6.9**		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:	01/24/13
1322 Scott Street, Suite 104		Work Order No:	13-01-1405
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_12413	**13-01-1405-1-A**	**01/24/13 12:28**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 21:09**	**130125L01**

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	0.52	1.04		Methylene Chloride	ND	5.2	1.04	
Carbon Tetrachloride	ND	0.52	1.04		Naphthalene	ND	5.2	1.04	
Chloroform	35	0.52	1.04		Tetrachloroethene	870	5.0	10	
1,1-Dichloroethane	2.0	0.52	1.04		Trichloroethene	55	0.52	1.04	
1,2-Dichloroethane	6.8	0.52	1.04		1,1,2-Trichloroethane	0.73	0.52	1.04	
1,4-Dichlorobenzene	ND	0.52	1.04		Vinyl Chloride	ND	0.52	1.04	
Methyl-t-Butyl Ether (MTBE)	ND	2.1	1.04		Total Volatile Organic Compounds	980	50	10	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	57-129		1,2-Dichloroethane-d4	101	47-137	
Toluene-d8	103	78-156					

OC_VGAC_INT_SP245_12413	**13-01-1405-2-A**	**01/24/13 12:23**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 19:19**	**130125L01**

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	15	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	1.7	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	17	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	104	78-156					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	01/24/13
1322 Scott Street, Suite 104		Work Order No:	13-01-1405
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_12413	**13-01-1405-3-A**	**01/24/13 12:18**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 17:30**	**130125L01**

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	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	103	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	104	78-156					

Method Blank	**099-15-617-14**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 14:55**	**130125L01**

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	102	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	105	78-156					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	01/24/13
1322 Scott Street, Suite 104		Work Order No:	13-01-1405
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_12413	**13-01-1405-1-A**	**01/24/13 12:28**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 21:09**	**130125L01**

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	1.7	1.04		Methylene Chloride	ND	18	1.04	
Carbon Tetrachloride	ND	3.3	1.04		Naphthalene	ND	27	1.04	
Chloroform	170	2.5	1.04		Tetrachloroethene	5900	34	10	
1,1-Dichloroethane	8.1	2.1	1.04		Trichloroethene	300	2.8	1.04	
1,2-Dichloroethane	27	2.1	1.04		1,1,2-Trichloroethane	4.0	2.8	1.04	
1,4-Dichlorobenzene	ND	3.1	1.04		Vinyl Chloride	ND	1.3	1.04	
Methyl-t-Butyl Ether (MTBE)	ND	7.5	1.04						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	57-129		1,2-Dichloroethane-d4	101	47-137	
Toluene-d8	103	78-156					

OC_VGAC_INT_SP245_12413	**13-01-1405-2-A**	**01/24/13 12:23**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 19:19**	**130125L01**

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	71	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	6.9	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	101	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	104	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:	01/24/13
1322 Scott Street, Suite 104		Work Order No:	13-01-1405
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_12413	**13-01-1405-3-A**	**01/24/13 12:18**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 17:30**	**130125L01**

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	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	103	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	104	78-156					

Method Blank	**099-15-617-14**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**01/25/13 14:55**	**130125L01**

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	102	57-129		1,2-Dichloroethane-d4	103	47-137	
Toluene-d8	105	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: 13-01-1405
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-14	**Air**	**GC/MS YY**	**N/A**	**01/25/13**	**130125L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	24.55	98	24.56	98	60-156	44-172	0	0-40	
Carbon Tetrachloride	25.00	26.16	105	25.86	103	64-154	49-169	1	0-32	
Chloroform	25.00	25.34	101	25.23	101	50-150	33-167	0	0-35	
1,1-Dichloroethane	25.00	25.12	100	24.98	100	50-150	33-167	1	0-35	
1,2-Dichloroethane	25.00	25.37	101	25.15	101	69-153	55-167	1	0-35	
1,4-Dichlorobenzene	25.00	22.90	92	22.48	90	36-156	16-176	2	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	25.02	100	25.22	101	50-150	33-167	1	0-35	
Methylene Chloride	25.00	22.88	92	22.64	91	50-150	33-167	1	0-35	
Naphthalene	25.00	30.56	122	29.99	120	40-190	15-215	2	0-35	
Tetrachloroethene	25.00	24.97	100	24.90	100	56-152	40-168	0	0-40	
Trichloroethene	25.00	24.78	99	24.66	99	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	25.00	25.42	102	25.36	101	65-149	51-163	0	0-37	
Vinyl Chloride	25.00	26.22	105	25.91	104	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: **13-01-1405**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
OC_VGAC_INF_SP241_12413	-2.00	-29.80	LC664	Summa Canister 1L
OC_VGAC_INT_SP245_12413	-2.00	-29.80	SLC035	Summa Canister 1L
OC_VGAC_EFF_SP242_12413	-2.00	-29.80	LC214	Summa Canister 1L

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 13-01-1405

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: 01/24/13
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: 13-01-1405

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_12413	SP241	SV	B2110	1L	NA	1/24/2013	1225	-30	1/24/2013	1228	-2	x				
2	OC_VGAC_INT_SP245_12413	SP245	SV	1264	1L	NA	1/24/2013	1220	-30	1/24/2013	1223	-2	x				
3	OC_VGAC_EFF_SP242_12413	SP242	SV	1180	1L	NA	1/24/2013	1215	-30	1/24/2013	1218	-2	x				
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Relinquished by: (Signature)	Received by: (Signature) Aly Mayo CSL	Date: 1/24/13	Time: 1400
Relinquished by: (Signature) Aly Mayo	Received by: (Signature) Bannyle CSL	Date: 1/24/13	Time: 18:35
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

12/01/11 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-01-1405

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: DGMAXIMS

DATE: 01/24/13

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

Temperature _____.____ °C - 0.2 °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:** Dy

CUSTODY SEALS INTACT:

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

☐ 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 ☐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® ☑Canister **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:** VOSC

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:** VOSC

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-02-1570

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 03/7/2013 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:	13-02-1570
		Project name:	Omega
		Received:	02/26/13 15:00
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_22613 (13-02-1570-1)						
Benzene	**0.70**		0.50	ppb (v/v)	EPA TO-15	N/A
Chloroform	**33**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**1.9**		0.50	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	**6.8**		0.50	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**1400**		10	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	**66**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1,2-Trichloroethane	**0.84**		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**1500**		100	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_INT_SP245_22613 (13-02-1570-2)						
Chloroform	**14**		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	**1.6**		0.50	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	**0.71**		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**17**		5.0	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_EFF_SP242_22613 (13-02-1570-3)						
Benzene	**0.76**		0.50	ppb (v/v)	EPA TO-15	N/A
Chloroform	**0.59**		0.50	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	**5.6**		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	**7.9**		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:	13-02-1570
		Project name:	Omega
		Received:	02/26/13 15:00
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_22613 (13-02-1570-1)						
Benzene	**2.2**		1.6	ug/m3	EPA TO-15	N/A
Chloroform	**160**		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**7.8**		2.0	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	**27**		2.0	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**9500**		68	ug/m3	EPA TO-15	N/A
Trichloroethene	**350**		2.7	ug/m3	EPA TO-15	N/A
1,1,2-Trichloroethane	**4.6**		2.7	ug/m3	EPA TO-15	N/A
OC_VGAC_INT_SP245_22613 (13-02-1570-2)						
Chloroform	**67**		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	**6.5**		2.0	ug/m3	EPA TO-15	N/A
Trichloroethene	**3.8**		2.7	ug/m3	EPA TO-15	N/A
OC_VGAC_EFF_SP242_22613 (13-02-1570-3)						
Benzene	**2.4**		1.6	ug/m3	EPA TO-15	N/A
Chloroform	**2.9**		2.4	ug/m3	EPA TO-15	N/A
Tetrachloroethene	**38**		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

ACCREDITED IN ACCORDANCE WITH nelac

de maximis, inc.		Date Received:	02/26/13
1322 Scott Street, Suite 104		Work Order No:	13-02-1570
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_22613	**13-02-1570-1-A**	**02/26/13 14:43**	**Air**	**GC/MS K**	**N/A**	**02/27/13 08:34**	**130226L01**

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	0.70	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	33	0.50	1		Tetrachloroethene	1400	10	20	
1,1-Dichloroethane	1.9	0.50	1		Trichloroethene	66	0.50	1	
1,2-Dichloroethane	6.8	0.50	1		1,1,2-Trichloroethane	0.84	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	1500	100	20	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	98	57-129		1,2-Dichloroethane-d4	88	47-137	
Toluene-d8	98	78-156					

OC_VGAC_INT_SP245_22613	**13-02-1570-2-A**	**02/26/13 14:38**	**Air**	**GC/MS K**	**N/A**	**02/27/13 07:38**	**130226L01**

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	14	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	1.6	0.50	1		Trichloroethene	0.71	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	17	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	93	57-129		1,2-Dichloroethane-d4	89	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:	02/26/13
1322 Scott Street, Suite 104		Work Order No:	13-02-1570
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_22613	**13-02-1570-3-A**	**02/26/13 14:33**	**Air**	**GC/MS K**	**N/A**	**02/27/13 06:46**	**130226L01**

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	0.76	0.50	1		Methylene Chloride	ND	5.0	1	
Carbon Tetrachloride	ND	0.50	1		Naphthalene	ND	5.0	1	
Chloroform	0.59	0.50	1		Tetrachloroethene	5.6	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	7.9	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	57-129		1,2-Dichloroethane-d4	89	47-137	
Toluene-d8	98	78-156					

Method Blank	**099-15-617-15**	**N/A**	**Air**	**GC/MS K**	**N/A**	**02/26/13 15:23**	**130226L01**

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	90	57-129		1,2-Dichloroethane-d4	88	47-137	
Toluene-d8	96	78-156					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	02/26/13
1322 Scott Street, Suite 104		Work Order No:	13-02-1570
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_22613	**13-02-1570-1-A**	**02/26/13 14:43**	**Air**	**GC/MS K**	**N/A**	**02/27/13 08:34**	**130226L01**

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	2.2	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	160	2.4	1		Tetrachloroethene	9500	68	20	
1,1-Dichloroethane	7.8	2.0	1		Trichloroethene	350	2.7	1	
1,2-Dichloroethane	27	2.0	1		1,1,2-Trichloroethane	4.6	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	88	47-137	
Toluene-d8	98	78-156					

OC_VGAC_INT_SP245_22613	**13-02-1570-2-A**	**02/26/13 14:38**	**Air**	**GC/MS K**	**N/A**	**02/27/13 07:38**	**130226L01**

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	67	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	6.5	2.0	1		Trichloroethene	3.8	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	93	57-129		1,2-Dichloroethane-d4	89	47-137	
Toluene-d8	98	78-156					

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

Calscience Environmental Laboratories, Inc.

Analytical Report

de maximis, inc.		Date Received:	02/26/13
1322 Scott Street, Suite 104		Work Order No:	13-02-1570
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_22613	**13-02-1570-3-A**	**02/26/13 14:33**	**Air**	**GC/MS K**	**N/A**	**02/27/13 06:46**	**130226L01**

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	2.4	1.6	1		Methylene Chloride	ND	17	1	
Carbon Tetrachloride	ND	3.1	1		Naphthalene	ND	26	1	
Chloroform	2.9	2.4	1		Tetrachloroethene	38	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	94	57-129		1,2-Dichloroethane-d4	89	47-137	
Toluene-d8	98	78-156					

Method Blank	**099-15-617-15**	**N/A**	**Air**	**GC/MS K**	**N/A**	**02/26/13 15:23**	**130226L01**

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	90	57-129		1,2-Dichloroethane-d4	88	47-137	
Toluene-d8	96	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: 13-02-1570
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-15	**Air**	**GC/MS K**	**N/A**	**02/26/13**	**130226L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	24.93	100	24.99	100	60-156	44-172	0	0-40	
Carbon Tetrachloride	25.00	25.69	103	25.44	102	64-154	49-169	1	0-32	
Chloroform	25.00	21.90	88	22.53	90	50-150	33-167	3	0-35	
1,1-Dichloroethane	25.00	23.24	93	24.10	96	50-150	33-167	4	0-35	
1,2-Dichloroethane	25.00	22.33	89	22.73	91	69-153	55-167	2	0-35	
1,4-Dichlorobenzene	25.00	19.96	80	20.15	81	36-156	16-176	1	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	20.04	80	20.62	82	50-150	33-167	3	0-35	
Methylene Chloride	25.00	25.59	102	23.57	94	50-150	33-167	8	0-35	
Naphthalene	25.00	12.04	48	12.13	49	40-190	15-215	1	0-35	
Tetrachloroethene	25.00	24.70	99	24.64	99	56-152	40-168	0	0-40	
Trichloroethene	25.00	24.51	98	24.59	98	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	25.00	23.88	96	24.05	96	65-149	51-163	1	0-37	
Vinyl Chloride	25.00	23.42	94	23.94	96	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.

Sample Analysis Summary Report

WORK ORDER #: 13-02-1570

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-A	OC_VGAC_INF_SP241_22613	EPA TO-15	N/A	02/27/2013 8:34	789	GC/MS K	2
1-A	OC_VGAC_INF_SP241_22613	EPA TO-15	N/A	02/27/2013 10:07	789	GC/MS K	2
2-A	OC_VGAC_INT_SP245_22613	EPA TO-15	N/A	02/27/2013 7:38	789	GC/MS K	2
3-A	OC_VGAC_EFF_SP242_22613	EPA TO-15	N/A	02/27/2013 6:46	789	GC/MS K	2

Location	Description
2	7445 Lampson Avenue, Garden Grove, CA 92841

Calscience Environmental Laboratories, Inc.

Summa Canister Vacuum Summary

Work Order Number: **13-02-1570**

Sample Name	Vacuum In	Vacuum Out	Equipment	Description
OC_VGAC_INF_SP241_22613	-2.00	-29.80	LC329	Summa Canister 1L
OC_VGAC_INT_SP245_22613	-2.00	-29.80	SLC129	Summa Canister 1L
OC_VGAC_EFF_SP242_22613	-2.00	-29.80	LC097	Summa Canister 1L

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 13-02-1570

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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

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: 02/26/13
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 13-02-1570

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_22613	SP241	SV	1540	1L	NA	2/26/2013	1440	-30	2/26/2013	1443	-2	x				
2	OC_VGAC_INT_SP245_22613	SP245	SV	1357	1L	NA	2/26/2013	1435	-30	2/26/2013	1438	-2	x				
3	OC_VGAC_EFF_SP242_22613	SP242	SV	1110	1L	NA	2/26/2013	1430	-30	2/26/2013	1433	-2	x				
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
		2/26/13	1422
		2/26/13	1500

12/01/11 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-02-1370

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: DE MAXIMIS

DATE: 02/26/13

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

Temperature ____.____ °C - 0.2 °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: 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® ☑Canister **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:** DS

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

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 13-03-1982

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 04/8/2013 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.

Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/28/2013. They were assigned to Work Order 13-03-1982.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with an immediate holding time (HT </= 15 minutes --40CFR-136.3 Table II footnote 4), is considered a "field" test and reported samples results are not flagged unless the analysis is performed beyond 24 hours of the time of collection.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

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

Subcontract Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Calscience Environmental Laboratories, Inc.

Client:	de maximis, inc. 1322 Scott Street, Suite 104 San Diego, CA 92106-2727	Work Order:	13-03-1982
		Project name:	Omega
		Received:	03/28/13 14:00
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_32613 (13-03-1982-1)						
Chloroform	27		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	1.7		0.50	ppb (v/v)	EPA TO-15	N/A
1,2-Dichloroethane	5.4		0.50	ppb (v/v)	EPA TO-15	N/A
Tetrachloroethene	460		10	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	44		0.50	ppb (v/v)	EPA TO-15	N/A
1,1,2-Trichloroethane	0.70		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	540		100	ppb (v/v)	EPA TO-15	N/A
OC_VGAC_INT_SP245_32613 (13-03-1982-2)						
Chloroform	16		0.50	ppb (v/v)	EPA TO-15	N/A
1,1-Dichloroethane	1.9		0.50	ppb (v/v)	EPA TO-15	N/A
Trichloroethene	3.8		0.50	ppb (v/v)	EPA TO-15	N/A
Total Volatile Organic Compounds	23		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:	13-03-1982
		Project name:	Omega
		Received:	03/28/13 14:00
Attn:	Jaime Dinello		

DETECTIONS SUMMARY

Client Sample ID Analyte	**Result**	Qualifiers	Reporting Limit	Units	Method	Extraction
OC_VGAC_INF_SP241_32613 (13-03-1982-1)						
Chloroform	130		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	6.7		2.0	ug/m3	EPA TO-15	N/A
1,2-Dichloroethane	22		2.0	ug/m3	EPA TO-15	N/A
Tetrachloroethene	3100		68	ug/m3	EPA TO-15	N/A
Trichloroethene	240		2.7	ug/m3	EPA TO-15	N/A
1,1,2-Trichloroethane	3.8		2.7	ug/m3	EPA TO-15	N/A
OC_VGAC_INT_SP245_32613 (13-03-1982-2)						
Chloroform	77		2.4	ug/m3	EPA TO-15	N/A
1,1-Dichloroethane	7.8		2.0	ug/m3	EPA TO-15	N/A
Trichloroethene	20		2.7	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:	03/28/13
1322 Scott Street, Suite 104		Work Order No:	13-03-1982
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_32613	**13-03-1982-1-A**	**03/26/13 16:13**	**Air**	**GC/MS YY**	**N/A**	**03/31/13 22:39**	**130331L01**

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	27	0.50	1		Tetrachloroethene	460	10	20	
1,1-Dichloroethane	1.7	0.50	1		Trichloroethene	44	0.50	1	
1,2-Dichloroethane	5.4	0.50	1		1,1,2-Trichloroethane	0.70	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	540	100	20	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	98	57-129		1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	95	78-156					

OC_VGAC_INT_SP245_32613	**13-03-1982-2-A**	**03/26/13 16:08**	**Air**	**GC/MS YY**	**N/A**	**03/31/13 23:29**	**130331L01**

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	16	0.50	1		Tetrachloroethene	ND	0.50	1	
1,1-Dichloroethane	1.9	0.50	1		Trichloroethene	3.8	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	23	5.0	1	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-129		1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	94	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:	03/28/13
1322 Scott Street, Suite 104		Work Order No:	13-03-1982
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_32613	**13-03-1982-3-A**	**03/26/13 16:03**	**Air**	**GC/MS YY**	**N/A**	**04/01/13 20:41**	**130401L01**

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	2.3	4.63		Methylene Chloride	ND	23	4.63	
Carbon Tetrachloride	ND	2.3	4.63		Naphthalene	ND	23	4.63	
Chloroform	ND	2.3	4.63		Tetrachloroethene	ND	2.3	4.63	
1,1-Dichloroethane	ND	2.3	4.63		Trichloroethene	ND	2.3	4.63	
1,2-Dichloroethane	ND	2.3	4.63		1,1,2-Trichloroethane	ND	2.3	4.63	
1,4-Dichlorobenzene	ND	2.3	4.63		Vinyl Chloride	ND	2.3	4.63	
Methyl-t-Butyl Ether (MTBE)	ND	9.3	4.63		Total Volatile Organic Compounds	ND	23	4.63	

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	57-129		1,2-Dichloroethane-d4	107	47-137	
Toluene-d8	100	78-156					

Method Blank	**099-15-617-17**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**03/31/13 16:17**	**130331L01**

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	103	47-137	
Toluene-d8	99	78-156					

Method Blank	**099-15-617-19**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**04/01/13 17:26**	**130401L01**

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	103	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:	03/28/13
1322 Scott Street, Suite 104		Work Order No:	13-03-1982
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_32613	**13-03-1982-1-A**	**03/26/13 16:13**	**Air**	**GC/MS YY**	**N/A**	**03/31/13 22:39**	**130331L01**

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	130	2.4	1		Tetrachloroethene	3100	68	20	
1,1-Dichloroethane	6.7	2.0	1		Trichloroethene	240	2.7	1	
1,2-Dichloroethane	22	2.0	1		1,1,2-Trichloroethane	3.8	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	96	47-137	
Toluene-d8	95	78-156					

OC_VGAC_INT_SP245_32613	**13-03-1982-2-A**	**03/26/13 16:08**	**Air**	**GC/MS YY**	**N/A**	**03/31/13 23:29**	**130331L01**

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	77	2.4	1		Tetrachloroethene	ND	3.4	1	
1,1-Dichloroethane	7.8	2.0	1		Trichloroethene	20	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	97	57-129		1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	94	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:	03/28/13
1322 Scott Street, Suite 104		Work Order No:	13-03-1982
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_32613	**13-03-1982-3-A**	**03/26/13 16:03**	**Air**	**GC/MS YY**	**N/A**	**04/01/13 20:41**	**130401L01**

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	7.4	4.63		Methylene Chloride	ND	80	4.63	
Carbon Tetrachloride	ND	15	4.63		Naphthalene	ND	120	4.63	
Chloroform	ND	11	4.63		Tetrachloroethene	ND	16	4.63	
1,1-Dichloroethane	ND	9.4	4.63		Trichloroethene	ND	12	4.63	
1,2-Dichloroethane	ND	9.4	4.63		1,1,2-Trichloroethane	ND	13	4.63	
1,4-Dichlorobenzene	ND	14	4.63		Vinyl Chloride	ND	5.9	4.63	
Methyl-t-Butyl Ether (MTBE)	ND	33	4.63						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	57-129		1,2-Dichloroethane-d4	107	47-137	
Toluene-d8	100	78-156					

Method Blank	**099-15-617-17**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**03/31/13 16:17**	**130331L01**

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	103	47-137	
Toluene-d8	99	78-156					

Method Blank	**099-15-617-19**	**N/A**	**Air**	**GC/MS YY**	**N/A**	**04/01/13 17:26**	**130401L01**

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	103	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: 13-03-1982
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-17	**Air**	**GC/MS YY**	**N/A**	**03/31/13**	**130331L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	24.78	99	24.89	100	60-156	44-172	0	0-40	
Carbon Tetrachloride	25.00	28.08	112	27.69	111	64-154	49-169	1	0-32	
Chloroform	25.00	26.74	107	26.40	106	50-150	33-167	1	0-35	
1,1-Dichloroethane	25.00	27.06	108	26.83	107	50-150	33-167	1	0-35	
1,2-Dichloroethane	25.00	26.43	106	26.17	105	69-153	55-167	1	0-35	
1,4-Dichlorobenzene	25.00	27.37	109	27.47	110	36-156	16-176	0	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	22.24	89	22.46	90	50-150	33-167	1	0-35	
Methylene Chloride	25.00	24.04	96	24.05	96	50-150	33-167	0	0-35	
Naphthalene	25.00	31.81	127	31.85	127	40-190	15-215	0	0-35	
Tetrachloroethene	25.00	25.08	100	25.25	101	56-152	40-168	1	0-40	
Trichloroethene	25.00	26.04	104	26.08	104	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	25.00	26.84	107	26.92	108	65-149	51-163	0	0-37	
Vinyl Chloride	25.00	28.64	115	28.39	114	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.

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: 13-03-1982
Preparation: N/A
Method: EPA TO-15

Project: Omega

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-617-19	**Air**	**GC/MS YY**	**N/A**	**04/01/13**	**130401L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	25.00	25.11	100	25.38	102	60-156	44-172	1	0-40	
Carbon Tetrachloride	25.00	28.48	114	28.42	114	64-154	49-169	0	0-32	
Chloroform	25.00	27.29	109	27.21	109	50-150	33-167	0	0-35	
1,1-Dichloroethane	25.00	27.87	111	27.86	111	50-150	33-167	0	0-35	
1,2-Dichloroethane	25.00	26.86	107	26.83	107	69-153	55-167	0	0-35	
1,4-Dichlorobenzene	25.00	27.93	112	28.11	112	36-156	16-176	1	0-47	
Methyl-t-Butyl Ether (MTBE)	25.00	22.99	92	23.19	93	50-150	33-167	1	0-35	
Methylene Chloride	25.00	24.53	98	24.58	98	50-150	33-167	0	0-35	
Naphthalene	25.00	32.51	130	32.75	131	40-190	15-215	1	0-35	
Tetrachloroethene	25.00	25.58	102	25.79	103	56-152	40-168	1	0-40	
Trichloroethene	25.00	26.58	106	26.78	107	63-159	47-175	1	0-34	
1,1,2-Trichloroethane	25.00	27.29	109	27.42	110	65-149	51-163	0	0-37	
Vinyl Chloride	25.00	29.29	117	29.44	118	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.

Sample Analysis Summary Report

WORK ORDER #: 13-03-1982

Lab Sample Number	Client Sample ID	Method	Extraction	Date/Time Analyzed	Chemist ID	Instrument	Analytical Location
1-A	OC_VGAC_INF_SP241_32613	EPA TO-15	N/A	03/31/2013 22:39	694	GC/MS YY	2
1-A	OC_VGAC_INF_SP241_32613	EPA TO-15	N/A	04/1/2013 19:51	694	GC/MS YY	2
2-A	OC_VGAC_INT_SP245_32613	EPA TO-15	N/A	03/31/2013 23:29	694	GC/MS YY	2
3-A	OC_VGAC_EFF_SP242_32613	EPA TO-15	N/A	04/1/2013 20:41	694	GC/MS YY	2

Location	Description
2	7445 Lampson Avenue, Garden Grove, CA 92841

Calscience Environmental Laboratories, Inc.

Summa Canister Vacuum Summary

Work Order Number: **13-03-1982**

Sample Name	Vacuum Out		Vacuum In		Equipment	Description
OC_VGAC_INF_SP241_32613	-29.80	in Hg	-2.00	in Hg	LC690	Summa Canister 1L
OC_VGAC_INT_SP245_32613	-29.80	in Hg	-2.00	in Hg	LC238	Summa Canister 1L
OC_VGAC_EFF_SP242_32613	-29.80	in Hg	-2.00	in Hg	LC122	Summa Canister 1L

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 13-03-1982

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.
BV	Sample received 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.

For any analysis identified as a "field" test with a holding time (HT) </= 15 minutes where the sample is received outside of HT, Calscience will adhere to its internal HT of 24 hours. In cases where sample analysis does not meet Calscience's internal HT, results will be appropriately qualified.

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: 03/26/13
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 13-03-1982

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_32613	SP241	SV	B2134	1L	NA	3/26/2013	1610	-29	3/26/2013	1613	-2	x				
2	OC_VGAC_INT_SP245_32613	SP245	SV	1148	1L	NA	3/26/2013	1605	-30	3/26/2013	1608	-2	x				
3	OC_VGAC_EFF_SP242_32613	SP242	SV	1074	1L	NA	3/26/2013	1600	-30	3/26/2013	1603	-2	x				
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Relinquished by: (Signature)	Received by: (Signature) Aly Mayo CEL	Date: 3/28/13	Time: 1205
Relinquished by: (Signature) Aly Mayo	Received by: (Signature)	Date: 3/28/13	Time: 1400
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

12/01/11 Revision

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 13-03- 1 9 8 2

SAMPLE RECEIPT FORM

Cooler 0 of 0

CLIENT: DE MAXIMIS

DATE: 03/28/13

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

Temperature ____.____ °C - 0.2 °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:** AY

CUSTODY SEALS INTACT:

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

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

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® ☑Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** MC

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

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:** _____

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: 440-39565-1
Client Project/Site: Omega Chemical Groundwater

For:
Jacob & Hefner Associates P.C.
15375 Barranca Parkway, J-101
Irvine, California 92618

Attn: Andrew Miller

Authorized for release by:
3/14/2013 3:49:45 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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 12
QC Sample Results 13
QC Association 20
Definitions 21
Certification Summary 22
Chain of Custody 24
Receipt Checklists 25

Sample Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-39565-1	OC_GW_OW4A_022713	Water	02/27/13 12:50	02/28/13 18:05
440-39565-2	OC_GW_OW4AK_022713	Water	02/27/13 12:50	02/28/13 18:05
440-39565-3	OC_GW_OW4B_022713	Water	02/27/13 15:03	02/28/13 18:05
440-39565-4	OC_GW_OW4BN_022713	Water	02/27/13 17:00	02/28/13 18:05

Job ID: 440-39565-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-39565-1

Comments
No additional comments.

Receipt
The samples were received on 2/28/2013 6:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Acetone associated with batch 89639 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 89639 exceeded control limits for Acetone. 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.

GC/MS Semi VOA
Method 8270C: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 163359. 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 other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Client Sample ID: OC_GW_OW4A_022713

Lab Sample ID: 440-39565-1

Date Collected: 02/27/13 12:50

Matrix: Water

Date Received: 02/28/13 18:05

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			03/05/13 22:39	1
Benzene	ND		0.50	0.28	ug/L			03/05/13 22:39	1
Bromobenzene	ND		1.0	0.27	ug/L			03/05/13 22:39	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/05/13 22:39	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/05/13 22:39	1
Bromoform	ND		1.0	0.40	ug/L			03/05/13 22:39	1
Bromomethane	ND		1.0	0.42	ug/L			03/05/13 22:39	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/05/13 22:39	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/05/13 22:39	1
Chloroethane	ND		1.0	0.40	ug/L			03/05/13 22:39	1
Chloroform	**0.86**	**J**	1.0	0.33	ug/L			03/05/13 22:39	1
Chloromethane	ND		1.0	0.40	ug/L			03/05/13 22:39	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/05/13 22:39	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/05/13 22:39	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/05/13 22:39	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/05/13 22:39	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/05/13 22:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/05/13 22:39	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/05/13 22:39	1
Dibromomethane	ND		1.0	0.36	ug/L			03/05/13 22:39	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/05/13 22:39	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/05/13 22:39	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/05/13 22:39	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/05/13 22:39	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/05/13 22:39	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/05/13 22:39	1
1,1-Dichloroethene	**19**		1.0	0.42	ug/L			03/05/13 22:39	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/05/13 22:39	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/05/13 22:39	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/05/13 22:39	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/05/13 22:39	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/05/13 22:39	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/05/13 22:39	1
Isopropyl alcohol	ND		100	50	ug/L			03/05/13 22:39	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/05/13 22:39	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/05/13 22:39	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/05/13 22:39	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/05/13 22:39	1
Naphthalene	ND		1.0	0.41	ug/L			03/05/13 22:39	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/05/13 22:39	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/05/13 22:39	1
o-Xylene	ND		1.0	0.30	ug/L			03/05/13 22:39	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/05/13 22:39	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/05/13 22:39	1
Styrene	ND		1.0	0.20	ug/L			03/05/13 22:39	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/05/13 22:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/05/13 22:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/05/13 22:39	1
Tetrachloroethene	**18**		1.0	0.32	ug/L			03/05/13 22:39	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Client Sample ID: OC_GW_OW4A_022713

Lab Sample ID: 440-39565-1
Date Collected: 02/27/13 12:50
Matrix: Water
Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.36	ug/L			03/05/13 22:39	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/05/13 22:39	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/05/13 22:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/05/13 22:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/05/13 22:39	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 22:39	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 22:39	1
Trichloroethene	**1.9**		1.0	0.26	ug/L			03/05/13 22:39	1
Trichlorofluoromethane	**28**		1.0	0.34	ug/L			03/05/13 22:39	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/05/13 22:39	1
1,1,2-Trichloro-1,2,2-trifluoroetha ne	**43**		5.0	0.50	ug/L			03/05/13 22:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/05/13 22:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/05/13 22:39	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/05/13 22:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*1.8*		*ug/L*		*3.55*	*75-43-4*		*03/05/13 22:39*	*1*
1,2-Dichloro-1,1,2-trifluoroethane	*2.7*		*ug/L*		*3.95*	*354-23-4*		*03/05/13 22:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*03/05/13 22:39*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*03/05/13 22:39*	*1*
Toluene-d8 (Surr)	*116*		*80 - 120*		*03/05/13 22:39*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.66**	**J**	0.95	0.082	ug/L		03/06/13 14:45	03/08/13 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*57 - 120*	*03/06/13 14:45*	*03/08/13 11:19*	*1*

Client Sample ID: OC_GW_OW4AK_022713

Lab Sample ID: 440-39565-2
Date Collected: 02/27/13 12:50
Matrix: Water
Date Received: 02/28/13 18:05

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			03/06/13 00:04	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 00:04	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 00:04	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 00:04	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 00:04	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 00:04	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 00:04	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 00:04	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 00:04	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 00:04	1
Chloroform	**0.88**	**J**	1.0	0.33	ug/L			03/06/13 00:04	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 00:04	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 00:04	1

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Client Sample ID: OC_GW_OW4AK_022713
Date Collected: 02/27/13 12:50
Date Received: 02/28/13 18:05

Lab Sample ID: 440-39565-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 00:04	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 00:04	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 00:04	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 00:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 00:04	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 00:04	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 00:04	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 00:04	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 00:04	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 00:04	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 00:04	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 00:04	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 00:04	1
1,1-Dichloroethene	**21**		1.0	0.42	ug/L			03/06/13 00:04	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 00:04	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 00:04	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 00:04	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 00:04	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 00:04	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 00:04	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 00:04	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 00:04	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 00:04	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 00:04	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 00:04	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 00:04	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 00:04	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 00:04	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 00:04	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 00:04	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 00:04	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 00:04	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 00:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 00:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 00:04	1
Tetrachloroethene	**19**		1.0	0.32	ug/L			03/06/13 00:04	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 00:04	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 00:04	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 00:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 00:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 00:04	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 00:04	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 00:04	1
Trichloroethene	**2.0**		1.0	0.26	ug/L			03/06/13 00:04	1
Trichlorofluoromethane	**29**		1.0	0.34	ug/L			03/06/13 00:04	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 00:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**45**		5.0	0.50	ug/L			03/06/13 00:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 00:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 00:04	1

Client Sample ID: OC_GW_OW4AK_022713

Lab Sample ID: 440-39565-2

Date Collected: 02/27/13 12:50

Matrix: Water

Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 00:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*1.9*		*ug/L*		*3.54*	*75-43-4*		*03/06/13 00:04*	*1*
1,2-Dichloro-1,1,2-trifluoroethane	*2.9*		*ug/L*		*3.94*	*354-23-4*		*03/06/13 00:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/06/13 00:04*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*03/06/13 00:04*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*03/06/13 00:04*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.50**	**J**	0.95	0.082	ug/L		03/06/13 14:45	03/08/13 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*57 - 120*	*03/06/13 14:45*	*03/08/13 11:44*	*1*

Client Sample ID: OC_GW_OW4B_022713

Lab Sample ID: 440-39565-3

Date Collected: 02/27/13 15:03

Matrix: Water

Date Received: 02/28/13 18:05

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			03/06/13 00:33	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 00:33	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 00:33	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 00:33	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 00:33	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 00:33	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 00:33	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 00:33	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 00:33	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 00:33	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 00:33	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 00:33	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 00:33	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 00:33	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 00:33	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 00:33	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 00:33	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 00:33	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 00:33	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 00:33	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 00:33	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 00:33	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 00:33	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 00:33	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 00:33	1
1,2-Dichloroethane	**0.46**	**J**	1.0	0.28	ug/L			03/06/13 00:33	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 00:33	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Client Sample ID: OC_GW_OW4B_022713

Lab Sample ID: 440-39565-3

Date Collected: 02/27/13 15:03
Matrix: Water
Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 00:33	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 00:33	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 00:33	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 00:33	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 00:33	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 00:33	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 00:33	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 00:33	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 00:33	1
Methyl-t-Butyl Ether (MTBE)	**1.0**		1.0	0.32	ug/L			03/06/13 00:33	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 00:33	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 00:33	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 00:33	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 00:33	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 00:33	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 00:33	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 00:33	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 00:33	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 00:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 00:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 00:33	1
Tetrachloroethene	**2.4**		1.0	0.32	ug/L			03/06/13 00:33	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 00:33	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 00:33	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 00:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 00:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 00:33	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 00:33	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 00:33	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 00:33	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 00:33	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 00:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 00:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 00:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 00:33	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 00:33	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/06/13 00:33*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*03/06/13 00:33*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*03/06/13 00:33*	*1*
Toluene-d8 (Surr)	*113*		*80 - 120*		*03/06/13 00:33*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.95	0.082	ug/L		03/06/13 14:45	03/08/13 12:08	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Client Sample ID: OC_GW_OW4B_022713

Lab Sample ID: 440-39565-3
Matrix: Water

Date Collected: 02/27/13 15:03
Date Received: 02/28/13 18:05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*57 - 120*	*03/06/13 14:45*	*03/08/13 12:08*	*1*

Client Sample ID: OC_GW_OW4BN_022713

Lab Sample ID: 440-39565-4
Matrix: Water

Date Collected: 02/27/13 17:00
Date Received: 02/28/13 18:05

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			03/06/13 01:01	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 01:01	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 01:01	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 01:01	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 01:01	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 01:01	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 01:01	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 01:01	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 01:01	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 01:01	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 01:01	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 01:01	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 01:01	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 01:01	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 01:01	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 01:01	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 01:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 01:01	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 01:01	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 01:01	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 01:01	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 01:01	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 01:01	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 01:01	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 01:01	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 01:01	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 01:01	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 01:01	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 01:01	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 01:01	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 01:01	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:01	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 01:01	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 01:01	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:01	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 01:01	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 01:01	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 01:01	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 01:01	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 01:01	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 01:01	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 01:01	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Client Sample ID: OC_GW_OW4BN_022713

Lab Sample ID: 440-39565-4

Date Collected: 02/27/13 17:00
Matrix: Water
Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 01:01	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:01	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 01:01	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 01:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 01:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 01:01	1
Tetrachloroethene	ND		1.0	0.32	ug/L			03/06/13 01:01	1
Toluene	**0.50**	**J**	1.0	0.36	ug/L			03/06/13 01:01	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 01:01	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 01:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 01:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 01:01	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 01:01	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 01:01	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 01:01	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 01:01	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 01:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 01:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 01:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 01:01	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 01:01	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/06/13 01:01*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*03/06/13 01:01*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*03/06/13 01:01*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*03/06/13 01:01*	*1*

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Client Sample ID: OC_GW_OW4A_022713 — Lab Sample ID: 440-39565-1

Date Collected: 02/27/13 12:50 — **Matrix: Water**
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/05/13 22:39	MP	TAL IRV
Total/NA	Prep	3520C			1052.8 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163721	03/08/13 11:19	KGV	TAL DEN

Client Sample ID: OC_GW_OW4AK_022713 — Lab Sample ID: 440-39565-2

Date Collected: 02/27/13 12:50 — **Matrix: Water**
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/06/13 00:04	MP	TAL IRV
Total/NA	Prep	3520C			1052.6 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163721	03/08/13 11:44	KGV	TAL DEN

Client Sample ID: OC_GW_OW4B_022713 — Lab Sample ID: 440-39565-3

Date Collected: 02/27/13 15:03 — **Matrix: Water**
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/06/13 00:33	MP	TAL IRV
Total/NA	Prep	3520C			1048.7 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163721	03/08/13 12:08	KGV	TAL DEN

Client Sample ID: OC_GW_OW4BN_022713 — Lab Sample ID: 440-39565-4

Date Collected: 02/27/13 17:00 — **Matrix: Water**
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/06/13 01:01	MP	TAL IRV

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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 440-89639/5
Matrix: Water
Analysis Batch: 89639

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			03/05/13 21:14	1
Benzene	ND		0.50	0.28	ug/L			03/05/13 21:14	1
Bromobenzene	ND		1.0	0.27	ug/L			03/05/13 21:14	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1
Bromoform	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Bromomethane	ND		1.0	0.42	ug/L			03/05/13 21:14	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/05/13 21:14	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/05/13 21:14	1
Chloroethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Chloroform	ND		1.0	0.33	ug/L			03/05/13 21:14	1
Chloromethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/05/13 21:14	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/05/13 21:14	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/05/13 21:14	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/05/13 21:14	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/05/13 21:14	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Dibromomethane	ND		1.0	0.36	ug/L			03/05/13 21:14	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/05/13 21:14	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/05/13 21:14	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/05/13 21:14	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/05/13 21:14	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/05/13 21:14	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/05/13 21:14	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/05/13 21:14	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/05/13 21:14	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/05/13 21:14	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/05/13 21:14	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/05/13 21:14	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/05/13 21:14	1
Isopropyl alcohol	ND		100	50	ug/L			03/05/13 21:14	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/05/13 21:14	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/05/13 21:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/05/13 21:14	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/05/13 21:14	1
Naphthalene	ND		1.0	0.41	ug/L			03/05/13 21:14	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/05/13 21:14	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/05/13 21:14	1
o-Xylene	ND		1.0	0.30	ug/L			03/05/13 21:14	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/05/13 21:14	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/05/13 21:14	1
Styrene	ND		1.0	0.20	ug/L			03/05/13 21:14	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/05/13 21:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/05/13 21:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1

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

Lab Sample ID: MB 440-89639/5
Matrix: Water
Analysis Batch: 89639

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			03/05/13 21:14	1
Toluene	ND		1.0	0.36	ug/L			03/05/13 21:14	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/05/13 21:14	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/05/13 21:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/05/13 21:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/05/13 21:14	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1
Trichloroethene	ND		1.0	0.26	ug/L			03/05/13 21:14	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/05/13 21:14	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/05/13 21:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/05/13 21:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/05/13 21:14	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/05/13 21:14	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/05/13 21:14*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/05/13 21:14*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*03/05/13 21:14*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/05/13 21:14*	*1*

Lab Sample ID: LCS 440-89639/6
Matrix: Water
Analysis Batch: 89639

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	35.4	*	ug/L		141	30 - 140
Benzene	25.0	22.0		ug/L		88	70 - 120
Bromobenzene	25.0	24.5		ug/L		98	75 - 120
Bromochloromethane	25.0	26.4		ug/L		105	70 - 130
Bromodichloromethane	25.0	25.9		ug/L		104	70 - 135
Bromoform	25.0	25.7		ug/L		103	55 - 130
Bromomethane	25.0	24.9		ug/L		99	65 - 140
Carbon tetrachloride	25.0	25.4		ug/L		102	65 - 140
Chlorobenzene	25.0	23.5		ug/L		94	75 - 120
Chloroethane	25.0	24.8		ug/L		99	60 - 140
Chloroform	25.0	24.4		ug/L		98	70 - 130
Chloromethane	25.0	21.1		ug/L		84	50 - 140
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 125
4-Chlorotoluene	25.0	24.8		ug/L		99	75 - 125
cis-1,2-Dichloroethene	25.0	27.8		ug/L		111	70 - 125
cis-1,3-Dichloropropene	25.0	28.3		ug/L		113	75 - 125
Dibromochloromethane	25.0	26.1		ug/L		104	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	50 - 135

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

Lab Sample ID: LCS 440-89639/6
Matrix: Water
Analysis Batch: 89639

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	24.5		ug/L		98	75 - 125
Dibromomethane	25.0	25.7		ug/L		103	70 - 125
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	75 - 120
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	75 - 120
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	75 - 120
Dichlorodifluoromethane	25.0	17.6		ug/L		71	35 - 155
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 125
1,2-Dichloroethane	25.0	24.2		ug/L		97	60 - 140
1,1-Dichloroethene	25.0	25.5		ug/L		102	70 - 125
1,2-Dichloropropane	25.0	24.6		ug/L		98	70 - 125
1,3-Dichloropropane	25.0	22.8		ug/L		91	70 - 120
2,2-Dichloropropane	25.0	28.7		ug/L		115	65 - 140
1,1-Dichloropropene	25.0	22.5		ug/L		90	75 - 130
Ethylbenzene	25.0	24.0		ug/L		96	75 - 125
Hexachlorobutadiene	25.0	19.8		ug/L		79	65 - 135
Isopropylbenzene	25.0	26.0		ug/L		104	75 - 130
Methylene Chloride	25.0	28.0		ug/L		112	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	25.4		ug/L		102	60 - 135
m,p-Xylene	50.0	47.3		ug/L		95	75 - 125
Naphthalene	25.0	21.9		ug/L		88	55 - 135
n-Butylbenzene	25.0	25.3		ug/L		101	70 - 130
N-Propylbenzene	25.0	24.3		ug/L		97	75 - 130
o-Xylene	25.0	24.7		ug/L		99	75 - 125
p-Isopropyltoluene	25.0	23.0		ug/L		92	75 - 125
sec-Butylbenzene	25.0	24.1		ug/L		97	70 - 125
Styrene	25.0	27.4		ug/L		109	75 - 130
tert-Butylbenzene	25.0	23.0		ug/L		92	70 - 125
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	55 - 130
Tetrachloroethene	25.0	23.5		ug/L		94	70 - 125
Toluene	25.0	24.0		ug/L		96	70 - 120
trans-1,2-Dichloroethene	25.0	26.1		ug/L		105	70 - 125
trans-1,3-Dichloropropene	25.0	28.4		ug/L		114	70 - 125
1,2,3-Trichlorobenzene	25.0	19.8		ug/L		79	65 - 125
1,2,4-Trichlorobenzene	25.0	21.1		ug/L		84	70 - 135
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	65 - 135
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 125
Trichloroethene	25.0	23.6		ug/L		94	70 - 125
Trichlorofluoromethane	25.0	26.6		ug/L		106	65 - 145
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	60 - 130
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	75 - 125
1,3,5-Trimethylbenzene	25.0	25.0		ug/L		100	75 - 125
Vinyl chloride	25.0	25.4		ug/L		102	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*112*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

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

Lab Sample ID: 440-39565-1 MS
Matrix: Water
Analysis Batch: 89639

Client Sample ID: OC_GW_OW4A_022713
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*	25.0	17.5		ug/L		70	20 - 150
Benzene	ND		25.0	21.4		ug/L		86	65 - 125
Bromobenzene	ND		25.0	25.3		ug/L		101	70 - 125
Bromochloromethane	ND		25.0	25.4		ug/L		102	65 - 135
Bromodichloromethane	ND		25.0	26.2		ug/L		105	70 - 135
Bromoform	ND		25.0	26.6		ug/L		106	55 - 135
Bromomethane	ND		25.0	23.6		ug/L		94	55 - 145
Carbon tetrachloride	ND		25.0	25.5		ug/L		102	65 - 140
Chlorobenzene	ND		25.0	22.5		ug/L		90	75 - 125
Chloroethane	ND		25.0	23.1		ug/L		92	55 - 140
Chloroform	0.86	J	25.0	25.2		ug/L		97	65 - 135
Chloromethane	ND		25.0	19.7		ug/L		79	45 - 145
2-Chlorotoluene	ND		25.0	24.0		ug/L		96	65 - 135
4-Chlorotoluene	ND		25.0	23.7		ug/L		95	70 - 135
cis-1,2-Dichloroethene	ND		25.0	27.3		ug/L		109	65 - 130
cis-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	70 - 130
Dibromochloromethane	ND		25.0	26.3		ug/L		105	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	25.4		ug/L		102	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	25.3		ug/L		101	70 - 130
Dibromomethane	ND		25.0	25.9		ug/L		103	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L		96	75 - 125
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	75 - 125
1,4-Dichlorobenzene	ND		25.0	23.6		ug/L		94	75 - 125
Dichlorodifluoromethane	ND		25.0	17.3		ug/L		69	25 - 155
1,1-Dichloroethane	ND		25.0	23.9		ug/L		96	65 - 130
1,2-Dichloroethane	ND		25.0	25.1		ug/L		100	60 - 140
1,1-Dichloroethene	19		25.0	40.9		ug/L		89	60 - 130
1,2-Dichloropropane	ND		25.0	24.7		ug/L		99	65 - 130
1,3-Dichloropropane	ND		25.0	23.4		ug/L		94	65 - 135
2,2-Dichloropropane	ND		25.0	27.2		ug/L		109	60 - 145
1,1-Dichloropropene	ND		25.0	21.6		ug/L		86	70 - 135
Ethylbenzene	ND		25.0	23.5		ug/L		94	65 - 130
Hexachlorobutadiene	ND		25.0	19.9		ug/L		80	60 - 135
Isopropylbenzene	ND		25.0	26.5		ug/L		106	70 - 135
Methylene Chloride	ND		25.0	24.3		ug/L		97	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.8		ug/L		103	55 - 145
m,p-Xylene	ND		50.0	45.7		ug/L		91	65 - 130
Naphthalene	ND		25.0	20.1		ug/L		80	50 - 140
n-Butylbenzene	ND		25.0	24.7		ug/L		99	65 - 135
N-Propylbenzene	ND		25.0	23.8		ug/L		95	70 - 135
o-Xylene	ND		25.0	23.8		ug/L		95	65 - 125
p-Isopropyltoluene	ND		25.0	23.7		ug/L		95	65 - 130
sec-Butylbenzene	ND		25.0	24.0		ug/L		96	70 - 125
Styrene	ND		25.0	19.4		ug/L		78	50 - 145
tert-Butylbenzene	ND		25.0	24.5		ug/L		98	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	25.9		ug/L		103	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	26.7		ug/L		107	55 - 135
Tetrachloroethene	18		25.0	38.7		ug/L		83	65 - 130

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

Lab Sample ID: 440-39565-1 MS
Matrix: Water
Analysis Batch: 89639

Client Sample ID: OC_GW_OW4A_022713
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	ND		25.0	23.8		ug/L		95	70 - 125
trans-1,2-Dichloroethene	ND		25.0	24.2		ug/L		97	65 - 130
trans-1,3-Dichloropropene	ND		25.0	29.3		ug/L		117	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	20.2		ug/L		81	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.8		ug/L		87	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.4		ug/L		101	65 - 140
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	65 - 130
Trichloroethene	1.9		25.0	25.2		ug/L		93	65 - 125
Trichlorofluoromethane	28		25.0	52.0		ug/L		96	60 - 145
1,2,3-Trichloropropane	ND		25.0	23.7		ug/L		95	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	22.6		ug/L		90	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	24.8		ug/L		99	70 - 130
Vinyl chloride	ND		25.0	24.1		ug/L		96	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

Lab Sample ID: 440-39565-1 MSD
Matrix: Water
Analysis Batch: 89639

Client Sample ID: OC_GW_OW4A_022713
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	18.5		ug/L		74	20 - 150	6	35
Benzene	ND		25.0	21.5		ug/L		86	65 - 125	0	20
Bromobenzene	ND		25.0	24.2		ug/L		97	70 - 125	4	20
Bromochloromethane	ND		25.0	26.3		ug/L		105	65 - 135	3	25
Bromodichloromethane	ND		25.0	26.3		ug/L		105	70 - 135	0	20
Bromoform	ND		25.0	26.7		ug/L		107	55 - 135	0	25
Bromomethane	ND		25.0	23.7		ug/L		95	55 - 145	1	25
Carbon tetrachloride	ND		25.0	25.0		ug/L		100	65 - 140	2	25
Chlorobenzene	ND		25.0	23.0		ug/L		92	75 - 125	2	20
Chloroethane	ND		25.0	23.4		ug/L		93	55 - 140	1	25
Chloroform	0.86	J	25.0	25.4		ug/L		98	65 - 135	1	20
Chloromethane	ND		25.0	20.5		ug/L		82	45 - 145	4	25
2-Chlorotoluene	ND		25.0	23.5		ug/L		94	65 - 135	2	20
4-Chlorotoluene	ND		25.0	24.0		ug/L		96	70 - 135	1	20
cis-1,2-Dichloroethene	ND		25.0	27.4		ug/L		110	65 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	29.9		ug/L		120	70 - 130	2	20
Dibromochloromethane	ND		25.0	26.2		ug/L		105	65 - 140	0	25
1,2-Dibromo-3-Chloropropane	ND		25.0	23.4		ug/L		93	45 - 145	8	30
1,2-Dibromoethane (EDB)	ND		25.0	24.9		ug/L		100	70 - 130	1	25
Dibromomethane	ND		25.0	26.4		ug/L		106	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	23.4		ug/L		94	75 - 125	2	20
1,3-Dichlorobenzene	ND		25.0	24.2		ug/L		97	75 - 125	1	20
1,4-Dichlorobenzene	ND		25.0	24.0		ug/L		96	75 - 125	2	20
Dichlorodifluoromethane	ND		25.0	17.2		ug/L		69	25 - 155	0	30

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

Lab Sample ID: 440-39565-1 MSD
Matrix: Water
Analysis Batch: 89639

Client Sample ID: OC_GW_OW4A_022713
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-Dichloroethane	ND		25.0	24.6		ug/L		99	65 - 130	3	20
1,2-Dichloroethane	ND		25.0	25.0		ug/L		100	60 - 140	1	20
1,1-Dichloroethene	19		25.0	41.8		ug/L		93	60 - 130	2	20
1,2-Dichloropropane	ND		25.0	25.0		ug/L		100	65 - 130	1	20
1,3-Dichloropropane	ND		25.0	23.2		ug/L		93	65 - 135	1	25
2,2-Dichloropropane	ND		25.0	26.8		ug/L		107	60 - 145	2	25
1,1-Dichloropropene	ND		25.0	21.8		ug/L		87	70 - 135	1	20
Ethylbenzene	ND		25.0	22.6		ug/L		91	65 - 130	4	20
Hexachlorobutadiene	ND		25.0	18.8		ug/L		75	60 - 135	6	20
Isopropylbenzene	ND		25.0	26.2		ug/L		105	70 - 135	1	20
Methylene Chloride	ND		25.0	24.9		ug/L		100	50 - 135	3	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.0		ug/L		108	55 - 145	5	25
m,p-Xylene	ND		50.0	44.6		ug/L		89	65 - 130	2	25
Naphthalene	ND		25.0	19.3		ug/L		77	50 - 140	4	30
n-Butylbenzene	ND		25.0	24.3		ug/L		97	65 - 135	1	20
N-Propylbenzene	ND		25.0	23.3		ug/L		93	70 - 135	2	20
o-Xylene	ND		25.0	22.8		ug/L		91	65 - 125	4	20
p-Isopropyltoluene	ND		25.0	23.1		ug/L		93	65 - 130	3	20
sec-Butylbenzene	ND		25.0	23.0		ug/L		92	70 - 125	4	20
Styrene	ND		25.0	16.1		ug/L		64	50 - 145	19	30
tert-Butylbenzene	ND		25.0	24.0		ug/L		96	65 - 130	2	20
1,1,1,2-Tetrachloroethane	ND		25.0	24.7		ug/L		99	65 - 140	5	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.7		ug/L		103	55 - 135	4	30
Tetrachloroethene	18		25.0	37.3		ug/L		77	65 - 130	4	20
Toluene	ND		25.0	23.9		ug/L		95	70 - 125	0	20
trans-1,2-Dichloroethene	ND		25.0	24.4		ug/L		97	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	29.4		ug/L		117	65 - 135	0	25
1,2,3-Trichlorobenzene	ND		25.0	20.4		ug/L		82	60 - 135	1	20
1,2,4-Trichlorobenzene	ND		25.0	21.3		ug/L		85	65 - 135	2	20
1,1,1-Trichloroethane	ND		25.0	25.5		ug/L		102	65 - 140	0	20
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	65 - 130	0	25
Trichloroethene	1.9		25.0	25.7		ug/L		95	65 - 125	2	20
Trichlorofluoromethane	28		25.0	50.0		ug/L		88	60 - 145	4	25
1,2,3-Trichloropropane	ND		25.0	23.5		ug/L		94	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	20.3		ug/L		81	55 - 135	11	25
1,3,5-Trimethylbenzene	ND		25.0	23.1		ug/L		92	70 - 130	7	20
Vinyl chloride	ND		25.0	24.3		ug/L		97	45 - 140	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 120*

QC Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 280-163359/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.086	ug/L		03/06/13 14:45	03/07/13 14:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*57 - 120*	*03/06/13 14:45*	*03/07/13 14:24*	*1*

Lab Sample ID: LCS 280-163359/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	7.07		ug/L		71	38 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*57 - 120*

Lab Sample ID: LCSD 280-163359/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			10.0	6.27		ug/L		63	38 - 120	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*57 - 120*

QC Association Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

GC/MS VOA

Analysis Batch: 89639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39565-1	OC_GW_OW4A_022713	Total/NA	Water	8260B	
440-39565-1 MS	OC_GW_OW4A_022713	Total/NA	Water	8260B	
440-39565-1 MSD	OC_GW_OW4A_022713	Total/NA	Water	8260B	
440-39565-2	OC_GW_OW4AK_022713	Total/NA	Water	8260B	
440-39565-3	OC_GW_OW4B_022713	Total/NA	Water	8260B	
440-39565-4	OC_GW_OW4BN_022713	Total/NA	Water	8260B	
LCS 440-89639/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-89639/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 163359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39565-1	OC_GW_OW4A_022713	Total/NA	Water	3520C	
440-39565-2	OC_GW_OW4AK_022713	Total/NA	Water	3520C	
440-39565-3	OC_GW_OW4B_022713	Total/NA	Water	3520C	
LCS 280-163359/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 280-163359/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 280-163359/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 163574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-163359/2-A	Lab Control Sample	Total/NA	Water	8270C LL	163359
LCSD 280-163359/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	163359
MB 280-163359/1-A	Method Blank	Total/NA	Water	8270C LL	163359

Analysis Batch: 163721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39565-1	OC_GW_OW4A_022713	Total/NA	Water	8270C LL	163359
440-39565-2	OC_GW_OW4AK_022713	Total/NA	Water	8270C LL	163359
440-39565-3	OC_GW_OW4B_022713	Total/NA	Water	8270C LL	163359

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 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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	03-28-13
Northern Mariana Islands	State Program	9	MP0002	03-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13

Certification Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39565-1

Laboratory: TestAmerica Denver (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

Chain of Custody Record

TestAmerica
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TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jaime Dinello	Site Contact: Trei Chatman	Date:	COC No:
de maximis	Tel/Fax: 562-756-8149	Lab Contact: Patty Mata	Carrier:	_____ of _____ COCs
1322 Scott St. Suite 104	Analysis Turnaround Time			Job No. 440-39565
San diego	Calendar (C) or Work Days (W) W			
(619) 546-8377	TAT if different from Below _____			SDG No.
(619) 546-9980	☐ 2 weeks			
Project Name: Omega Chemical	☐ 1 week			
Site: Whittier, CA	☐ 2 days			
P O #: 3139F	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOC's (8260B) (Including acetone, freons, IPA, MTBE, TICs)	1,4 Dioxane (8270M)	Hexavalent Chromium (218.6)	Sample Specific Notes:
OC_GW_OW4A_022713	02/27/13	12:50 PM	Aqueous	GW	5		x	x		
OC_GW_OW4AK_022713	02/27/13	12:50 PM	Aqueous	GW	5		x	x		
OC_GW_OW4B_022713	02/27/13	3:03 PM	Aqueous	GW	5		x	x		
OC_GW_OW4BN_022713	02/27/13	5:00 PM	Aqueous	GW	3		x	~~x~~ CH		
OC_GW_TB_022713	02/27/13	6:00 AM	Aqueous	GW	3		x	~~x~~ 2/28/13		

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Please filter and preserve OW-5 and OW-6 ASAP.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	JHA	2/28/13 1613	[signature]	TAI	2/28/13 16:20
Relinquished by: [signature]	Company: TAI	2/28/13 18:05	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TAI	Date/Time: 02/28/13 18:05

21

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39565-1

Login Number: 39565

List Source: TestAmerica Irvine

List Number: 1

Creator: Escalante, Maria

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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?	N/A	
There are no discrepancies between the containers received and the COC.	False	Did not receive TB.
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39565-1

Login Number: 39565
List Number: 1
Creator: Bindel, Aaron M

List Source: TestAmerica Denver
List Creation: 03/06/13 10:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
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?	False	
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
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: 440-39576-1
Client Project/Site: Omega Chemical Groundwater

For:
Jacob & Hefner Associates P.C.
15375 Barranca Parkway, J-101
Irvine, California 92618

Attn: Andrew Miller

Authorized for release by:
3/14/2013 5:38:47 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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 12
QC Sample Results 13
QC Association 20
Definitions 21
Certification Summary 22
Chain of Custody 24
Receipt Checklists 25

Sample Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-39576-1	OC_GW_OW7_022813	Water	02/28/13 09:10	02/28/13 18:05
440-39576-2	OC_GW_OW7K_022813	Water	02/28/13 09:10	02/28/13 18:05
440-39576-3	OC_GW_OW8B_022813	Water	02/28/13 14:30	02/28/13 18:05
440-39576-4	OC_GW_OW8BN_022813	Water	02/28/13 16:00	02/28/13 18:05

Job ID: 440-39576-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-39576-1

Comments
No additional comments.

Receipt
The samples were received on 2/28/2013 6:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C. The Trip Blank sample was not received.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Acetone associated with batch 89639 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 89639 exceeded control limits for Acetone. These analytes were biased high in the LCS and were 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: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 163359. 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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Client Sample ID: OC_GW_OW7_022813

Lab Sample ID: 440-39576-1

Date Collected: 02/28/13 09:10

Matrix: Water

Date Received: 02/28/13 18:05

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			03/06/13 01:30	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 01:30	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 01:30	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 01:30	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 01:30	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 01:30	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 01:30	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 01:30	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 01:30	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 01:30	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 01:30	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 01:30	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 01:30	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 01:30	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 01:30	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 01:30	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 01:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 01:30	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 01:30	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 01:30	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 01:30	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 01:30	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 01:30	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 01:30	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 01:30	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 01:30	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 01:30	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 01:30	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 01:30	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 01:30	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 01:30	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:30	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 01:30	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 01:30	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:30	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 01:30	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 01:30	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 01:30	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 01:30	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 01:30	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 01:30	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 01:30	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 01:30	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:30	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 01:30	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 01:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 01:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 01:30	1
Tetrachloroethene	**8.2**		1.0	0.32	ug/L			03/06/13 01:30	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Client Sample ID: OC_GW_OW7_022813

Lab Sample ID: 440-39576-1
Date Collected: 02/28/13 09:10
Matrix: Water
Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.36	ug/L			03/06/13 01:30	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 01:30	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 01:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 01:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 01:30	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 01:30	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 01:30	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 01:30	1
Trichlorofluoromethane	**1.5**		1.0	0.34	ug/L			03/06/13 01:30	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 01:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.3**	**J**	5.0	0.50	ug/L			03/06/13 01:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 01:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 01:30	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 01:30	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*4.2*		*ug/L*		*3.55*	*75-43-4*		*03/06/13 01:30*	*1*
1,2-Dichloro-1,1,2-trifluoroethane	*2.8*		*ug/L*		*3.94*	*354-23-4*		*03/06/13 01:30*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*03/06/13 01:30*	*1*
Dibromofluoromethane (Surr)	*115*		*80 - 120*		*03/06/13 01:30*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*03/06/13 01:30*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.12**	**J**	0.99	0.085	ug/L		03/06/13 14:45	03/07/13 22:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*57 - 120*	*03/06/13 14:45*	*03/07/13 22:28*	*1*

Client Sample ID: OC_GW_OW7K_022813

Lab Sample ID: 440-39576-2
Date Collected: 02/28/13 09:10
Matrix: Water
Date Received: 02/28/13 18:05

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			03/06/13 01:58	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 01:58	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 01:58	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 01:58	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 01:58	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 01:58	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 01:58	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 01:58	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 01:58	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 01:58	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 01:58	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 01:58	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 01:58	1

Client Sample ID: OC_GW_OW7K_022813
Date Collected: 02/28/13 09:10
Date Received: 02/28/13 18:05

Lab Sample ID: 440-39576-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 01:58	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 01:58	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 01:58	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 01:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 01:58	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 01:58	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 01:58	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 01:58	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 01:58	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 01:58	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 01:58	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 01:58	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 01:58	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 01:58	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 01:58	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 01:58	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 01:58	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 01:58	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:58	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 01:58	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 01:58	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:58	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 01:58	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 01:58	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 01:58	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 01:58	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 01:58	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 01:58	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 01:58	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 01:58	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 01:58	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 01:58	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 01:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 01:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 01:58	1
Tetrachloroethene	**9.1**		1.0	0.32	ug/L			03/06/13 01:58	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 01:58	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 01:58	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 01:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 01:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 01:58	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 01:58	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 01:58	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 01:58	1
Trichlorofluoromethane	**1.5**		1.0	0.34	ug/L			03/06/13 01:58	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 01:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.5**	**J**	5.0	0.50	ug/L			03/06/13 01:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 01:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 01:58	1

Client Sample ID: OC_GW_OW7K_022813

Lab Sample ID: 440-39576-2

Date Collected: 02/28/13 09:10

Matrix: Water

Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 01:58	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*4.6*		*ug/L*		*3.55*	*75-43-4*		*03/06/13 01:58*	*1*
1,2-Dichloro-1,1,2-trifluoroethane	*2.7*		*ug/L*		*3.94*	*354-23-4*		*03/06/13 01:58*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/06/13 01:58*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*03/06/13 01:58*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*03/06/13 01:58*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.95	0.082	ug/L		03/06/13 14:45	03/07/13 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*57 - 120*	*03/06/13 14:45*	*03/07/13 22:53*	*1*

Client Sample ID: OC_GW_OW8B_022813

Lab Sample ID: 440-39576-3

Date Collected: 02/28/13 14:30

Matrix: Water

Date Received: 02/28/13 18:05

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			03/06/13 02:27	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 02:27	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 02:27	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 02:27	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 02:27	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 02:27	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 02:27	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 02:27	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 02:27	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 02:27	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 02:27	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 02:27	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 02:27	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 02:27	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 02:27	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 02:27	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 02:27	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 02:27	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 02:27	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 02:27	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 02:27	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 02:27	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 02:27	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 02:27	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 02:27	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 02:27	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 02:27	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Client Sample ID: OC_GW_OW8B_022813

Lab Sample ID: 440-39576-3

Date Collected: 02/28/13 14:30
Matrix: Water
Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 02:27	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 02:27	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 02:27	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 02:27	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 02:27	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 02:27	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 02:27	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 02:27	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 02:27	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 02:27	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 02:27	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 02:27	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 02:27	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 02:27	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 02:27	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 02:27	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 02:27	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 02:27	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 02:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 02:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 02:27	1
Tetrachloroethene	**4.5**		1.0	0.32	ug/L			03/06/13 02:27	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 02:27	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 02:27	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 02:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 02:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 02:27	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 02:27	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 02:27	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 02:27	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 02:27	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 02:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 02:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 02:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 02:27	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 02:27	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/06/13 02:27*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*03/06/13 02:27*	*1*
Dibromofluoromethane (Surr)	*115*		*80 - 120*		*03/06/13 02:27*	*1*
Toluene-d8 (Surr)	*109*		*80 - 120*		*03/06/13 02:27*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.96	0.082	ug/L		03/06/13 14:45	03/07/13 23:17	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Client Sample ID: OC_GW_OW8B_022813

Lab Sample ID: 440-39576-3
Matrix: Water
Date Collected: 02/28/13 14:30
Date Received: 02/28/13 18:05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*57 - 120*	*03/06/13 14:45*	*03/07/13 23:17*	*1*

Client Sample ID: OC_GW_OW8BN_022813

Lab Sample ID: 440-39576-4
Matrix: Water
Date Collected: 02/28/13 16:00
Date Received: 02/28/13 18:05

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			03/06/13 02:55	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 02:55	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 02:55	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 02:55	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 02:55	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 02:55	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 02:55	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 02:55	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 02:55	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 02:55	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 02:55	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 02:55	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 02:55	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 02:55	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 02:55	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 02:55	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 02:55	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 02:55	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 02:55	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 02:55	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 02:55	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 02:55	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 02:55	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 02:55	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 02:55	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 02:55	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 02:55	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 02:55	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 02:55	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 02:55	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 02:55	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 02:55	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 02:55	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 02:55	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 02:55	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 02:55	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 02:55	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 02:55	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 02:55	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 02:55	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 02:55	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 02:55	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Client Sample ID: OC_GW_OW8BN_022813

Lab Sample ID: 440-39576-4

Date Collected: 02/28/13 16:00
Matrix: Water
Date Received: 02/28/13 18:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 02:55	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 02:55	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 02:55	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 02:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 02:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 02:55	1
Tetrachloroethene	ND		1.0	0.32	ug/L			03/06/13 02:55	1
Toluene	**0.43**	**J**	1.0	0.36	ug/L			03/06/13 02:55	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 02:55	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 02:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 02:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 02:55	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 02:55	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 02:55	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 02:55	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 02:55	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 02:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 02:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 02:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 02:55	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 02:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/06/13 02:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*03/06/13 02:55*	*1*
Dibromofluoromethane (Surr)	*117*		*80 - 120*		*03/06/13 02:55*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*03/06/13 02:55*	*1*

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Client Sample ID: OC_GW_OW7_022813

Lab Sample ID: 440-39576-1
Date Collected: 02/28/13 09:10
Matrix: Water
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/06/13 01:30	MP	TAL IRV
Total/NA	Prep	3520C			1010.4 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 22:28	KGV	TAL DEN

Client Sample ID: OC_GW_OW7K_022813

Lab Sample ID: 440-39576-2
Date Collected: 02/28/13 09:10
Matrix: Water
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/06/13 01:58	MP	TAL IRV
Total/NA	Prep	3520C			1049.9 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 22:53	KGV	TAL DEN

Client Sample ID: OC_GW_OW8B_022813

Lab Sample ID: 440-39576-3
Date Collected: 02/28/13 14:30
Matrix: Water
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/06/13 02:27	MP	TAL IRV
Total/NA	Prep	3520C			1043.6 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 23:17	KGV	TAL DEN

Client Sample ID: OC_GW_OW8BN_022813

Lab Sample ID: 440-39576-4
Date Collected: 02/28/13 16:00
Matrix: Water
Date Received: 02/28/13 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		1	10 mL	10 mL	89639	03/06/13 02:55	MP	TAL IRV

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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 440-89639/5
Matrix: Water
Analysis Batch: 89639

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			03/05/13 21:14	1
Benzene	ND		0.50	0.28	ug/L			03/05/13 21:14	1
Bromobenzene	ND		1.0	0.27	ug/L			03/05/13 21:14	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1
Bromoform	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Bromomethane	ND		1.0	0.42	ug/L			03/05/13 21:14	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/05/13 21:14	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/05/13 21:14	1
Chloroethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Chloroform	ND		1.0	0.33	ug/L			03/05/13 21:14	1
Chloromethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/05/13 21:14	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/05/13 21:14	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/05/13 21:14	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/05/13 21:14	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/05/13 21:14	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/05/13 21:14	1
Dibromomethane	ND		1.0	0.36	ug/L			03/05/13 21:14	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/05/13 21:14	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/05/13 21:14	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/05/13 21:14	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/05/13 21:14	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/05/13 21:14	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/05/13 21:14	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/05/13 21:14	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/05/13 21:14	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/05/13 21:14	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/05/13 21:14	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/05/13 21:14	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/05/13 21:14	1
Isopropyl alcohol	ND		100	50	ug/L			03/05/13 21:14	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/05/13 21:14	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/05/13 21:14	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/05/13 21:14	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/05/13 21:14	1
Naphthalene	ND		1.0	0.41	ug/L			03/05/13 21:14	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/05/13 21:14	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/05/13 21:14	1
o-Xylene	ND		1.0	0.30	ug/L			03/05/13 21:14	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/05/13 21:14	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/05/13 21:14	1
Styrene	ND		1.0	0.20	ug/L			03/05/13 21:14	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/05/13 21:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/05/13 21:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1

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

Lab Sample ID: MB 440-89639/5
Matrix: Water
Analysis Batch: 89639

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			03/05/13 21:14	1
Toluene	ND		1.0	0.36	ug/L			03/05/13 21:14	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/05/13 21:14	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/05/13 21:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/05/13 21:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/05/13 21:14	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/05/13 21:14	1
Trichloroethene	ND		1.0	0.26	ug/L			03/05/13 21:14	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/05/13 21:14	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/05/13 21:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/05/13 21:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/05/13 21:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/05/13 21:14	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/05/13 21:14	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/05/13 21:14*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/05/13 21:14*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*03/05/13 21:14*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/05/13 21:14*	*1*

Lab Sample ID: LCS 440-89639/6
Matrix: Water
Analysis Batch: 89639

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	35.4	*	ug/L		141	30 - 140
Benzene	25.0	22.0		ug/L		88	70 - 120
Bromobenzene	25.0	24.5		ug/L		98	75 - 120
Bromochloromethane	25.0	26.4		ug/L		105	70 - 130
Bromodichloromethane	25.0	25.9		ug/L		104	70 - 135
Bromoform	25.0	25.7		ug/L		103	55 - 130
Bromomethane	25.0	24.9		ug/L		99	65 - 140
Carbon tetrachloride	25.0	25.4		ug/L		102	65 - 140
Chlorobenzene	25.0	23.5		ug/L		94	75 - 120
Chloroethane	25.0	24.8		ug/L		99	60 - 140
Chloroform	25.0	24.4		ug/L		98	70 - 130
Chloromethane	25.0	21.1		ug/L		84	50 - 140
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 125
4-Chlorotoluene	25.0	24.8		ug/L		99	75 - 125
cis-1,2-Dichloroethene	25.0	27.8		ug/L		111	70 - 125
cis-1,3-Dichloropropene	25.0	28.3		ug/L		113	75 - 125
Dibromochloromethane	25.0	26.1		ug/L		104	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	50 - 135

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

Lab Sample ID: LCS 440-89639/6
Matrix: Water
Analysis Batch: 89639

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	24.5		ug/L		98	75 - 125
Dibromomethane	25.0	25.7		ug/L		103	70 - 125
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	75 - 120
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	75 - 120
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	75 - 120
Dichlorodifluoromethane	25.0	17.6		ug/L		71	35 - 155
1,1-Dichloroethane	25.0	25.4		ug/L		102	70 - 125
1,2-Dichloroethane	25.0	24.2		ug/L		97	60 - 140
1,1-Dichloroethene	25.0	25.5		ug/L		102	70 - 125
1,2-Dichloropropane	25.0	24.6		ug/L		98	70 - 125
1,3-Dichloropropane	25.0	22.8		ug/L		91	70 - 120
2,2-Dichloropropane	25.0	28.7		ug/L		115	65 - 140
1,1-Dichloropropene	25.0	22.5		ug/L		90	75 - 130
Ethylbenzene	25.0	24.0		ug/L		96	75 - 125
Hexachlorobutadiene	25.0	19.8		ug/L		79	65 - 135
Isopropylbenzene	25.0	26.0		ug/L		104	75 - 130
Methylene Chloride	25.0	28.0		ug/L		112	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	25.4		ug/L		102	60 - 135
m,p-Xylene	50.0	47.3		ug/L		95	75 - 125
Naphthalene	25.0	21.9		ug/L		88	55 - 135
n-Butylbenzene	25.0	25.3		ug/L		101	70 - 130
N-Propylbenzene	25.0	24.3		ug/L		97	75 - 130
o-Xylene	25.0	24.7		ug/L		99	75 - 125
p-Isopropyltoluene	25.0	23.0		ug/L		92	75 - 125
sec-Butylbenzene	25.0	24.1		ug/L		97	70 - 125
Styrene	25.0	27.4		ug/L		109	75 - 130
tert-Butylbenzene	25.0	23.0		ug/L		92	70 - 125
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L		104	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	55 - 130
Tetrachloroethene	25.0	23.5		ug/L		94	70 - 125
Toluene	25.0	24.0		ug/L		96	70 - 120
trans-1,2-Dichloroethene	25.0	26.1		ug/L		105	70 - 125
trans-1,3-Dichloropropene	25.0	28.4		ug/L		114	70 - 125
1,2,3-Trichlorobenzene	25.0	19.8		ug/L		79	65 - 125
1,2,4-Trichlorobenzene	25.0	21.1		ug/L		84	70 - 135
1,1,1-Trichloroethane	25.0	26.2		ug/L		105	65 - 135
1,1,2-Trichloroethane	25.0	23.3		ug/L		93	70 - 125
Trichloroethene	25.0	23.6		ug/L		94	70 - 125
Trichlorofluoromethane	25.0	26.6		ug/L		106	65 - 145
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	60 - 130
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	75 - 125
1,3,5-Trimethylbenzene	25.0	25.0		ug/L		100	75 - 125
Vinyl chloride	25.0	25.4		ug/L		102	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*112*		*80 - 120*
Toluene-d8 (Surr)	*110*		*80 - 120*

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

Lab Sample ID: 440-39565-A-1 MS
Matrix: Water
Analysis Batch: 89639

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	17.5		ug/L		70	20 - 150
Benzene	ND		25.0	21.4		ug/L		86	65 - 125
Bromobenzene	ND		25.0	25.3		ug/L		101	70 - 125
Bromochloromethane	ND		25.0	25.4		ug/L		102	65 - 135
Bromodichloromethane	ND		25.0	26.2		ug/L		105	70 - 135
Bromoform	ND		25.0	26.6		ug/L		106	55 - 135
Bromomethane	ND		25.0	23.6		ug/L		94	55 - 145
Carbon tetrachloride	ND		25.0	25.5		ug/L		102	65 - 140
Chlorobenzene	ND		25.0	22.5		ug/L		90	75 - 125
Chloroethane	ND		25.0	23.1		ug/L		92	55 - 140
Chloroform	0.86	J	25.0	25.2		ug/L		97	65 - 135
Chloromethane	ND		25.0	19.7		ug/L		79	45 - 145
2-Chlorotoluene	ND		25.0	24.0		ug/L		96	65 - 135
4-Chlorotoluene	ND		25.0	23.7		ug/L		95	70 - 135
cis-1,2-Dichloroethene	ND		25.0	27.3		ug/L		109	65 - 130
cis-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	70 - 130
Dibromochloromethane	ND		25.0	26.3		ug/L		105	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	25.4		ug/L		102	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	25.3		ug/L		101	70 - 130
Dibromomethane	ND		25.0	25.9		ug/L		103	65 - 135
1,2-Dichlorobenzene	ND		25.0	23.9		ug/L		96	75 - 125
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	75 - 125
1,4-Dichlorobenzene	ND		25.0	23.6		ug/L		94	75 - 125
Dichlorodifluoromethane	ND		25.0	17.3		ug/L		69	25 - 155
1,1-Dichloroethane	ND		25.0	23.9		ug/L		96	65 - 130
1,2-Dichloroethane	ND		25.0	25.1		ug/L		100	60 - 140
1,1-Dichloroethene	19		25.0	40.9		ug/L		89	60 - 130
1,2-Dichloropropane	ND		25.0	24.7		ug/L		99	65 - 130
1,3-Dichloropropane	ND		25.0	23.4		ug/L		94	65 - 135
2,2-Dichloropropane	ND		25.0	27.2		ug/L		109	60 - 145
1,1-Dichloropropene	ND		25.0	21.6		ug/L		86	70 - 135
Ethylbenzene	ND		25.0	23.5		ug/L		94	65 - 130
Hexachlorobutadiene	ND		25.0	19.9		ug/L		80	60 - 135
Isopropylbenzene	ND		25.0	26.5		ug/L		106	70 - 135
Methylene Chloride	ND		25.0	24.3		ug/L		97	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	25.8		ug/L		103	55 - 145
m,p-Xylene	ND		50.0	45.7		ug/L		91	65 - 130
Naphthalene	ND		25.0	20.1		ug/L		80	50 - 140
n-Butylbenzene	ND		25.0	24.7		ug/L		99	65 - 135
N-Propylbenzene	ND		25.0	23.8		ug/L		95	70 - 135
o-Xylene	ND		25.0	23.8		ug/L		95	65 - 125
p-Isopropyltoluene	ND		25.0	23.7		ug/L		95	65 - 130
sec-Butylbenzene	ND		25.0	24.0		ug/L		96	70 - 125
Styrene	ND		25.0	19.4		ug/L		78	50 - 145
tert-Butylbenzene	ND		25.0	24.5		ug/L		98	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	25.9		ug/L		103	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	26.7		ug/L		107	55 - 135
Tetrachloroethene	18		25.0	38.7		ug/L		83	65 - 130

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

Lab Sample ID: 440-39565-A-1 MS
Matrix: Water
Analysis Batch: 89639

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
Toluene	ND		25.0	23.8		ug/L		95	70 - 125
trans-1,2-Dichloroethene	ND		25.0	24.2		ug/L		97	65 - 130
trans-1,3-Dichloropropene	ND		25.0	29.3		ug/L		117	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	20.2		ug/L		81	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.8		ug/L		87	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.4		ug/L		101	65 - 140
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	65 - 130
Trichloroethene	1.9		25.0	25.2		ug/L		93	65 - 125
Trichlorofluoromethane	28		25.0	52.0		ug/L		96	60 - 145
1,2,3-Trichloropropane	ND		25.0	23.7		ug/L		95	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	22.6		ug/L		90	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	24.8		ug/L		99	70 - 130
Vinyl chloride	ND		25.0	24.1		ug/L		96	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

Lab Sample ID: 440-39565-A-1 MSD
Matrix: Water
Analysis Batch: 89639

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	18.5		ug/L		74	20 - 150	6	35
Benzene	ND		25.0	21.5		ug/L		86	65 - 125	0	20
Bromobenzene	ND		25.0	24.2		ug/L		97	70 - 125	4	20
Bromochloromethane	ND		25.0	26.3		ug/L		105	65 - 135	3	25
Bromodichloromethane	ND		25.0	26.3		ug/L		105	70 - 135	0	20
Bromoform	ND		25.0	26.7		ug/L		107	55 - 135	0	25
Bromomethane	ND		25.0	23.7		ug/L		95	55 - 145	1	25
Carbon tetrachloride	ND		25.0	25.0		ug/L		100	65 - 140	2	25
Chlorobenzene	ND		25.0	23.0		ug/L		92	75 - 125	2	20
Chloroethane	ND		25.0	23.4		ug/L		93	55 - 140	1	25
Chloroform	0.86	J	25.0	25.4		ug/L		98	65 - 135	1	20
Chloromethane	ND		25.0	20.5		ug/L		82	45 - 145	4	25
2-Chlorotoluene	ND		25.0	23.5		ug/L		94	65 - 135	2	20
4-Chlorotoluene	ND		25.0	24.0		ug/L		96	70 - 135	1	20
cis-1,2-Dichloroethene	ND		25.0	27.4		ug/L		110	65 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	29.9		ug/L		120	70 - 130	2	20
Dibromochloromethane	ND		25.0	26.2		ug/L		105	65 - 140	0	25
1,2-Dibromo-3-Chloropropane	ND		25.0	23.4		ug/L		93	45 - 145	8	30
1,2-Dibromoethane (EDB)	ND		25.0	24.9		ug/L		100	70 - 130	1	25
Dibromomethane	ND		25.0	26.4		ug/L		106	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	23.4		ug/L		94	75 - 125	2	20
1,3-Dichlorobenzene	ND		25.0	24.2		ug/L		97	75 - 125	1	20
1,4-Dichlorobenzene	ND		25.0	24.0		ug/L		96	75 - 125	2	20
Dichlorodifluoromethane	ND		25.0	17.2		ug/L		69	25 - 155	0	30

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

Lab Sample ID: 440-39565-A-1 MSD
Matrix: Water
Analysis Batch: 89639

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-Dichloroethane	ND		25.0	24.6		ug/L		99	65 - 130	3	20
1,2-Dichloroethane	ND		25.0	25.0		ug/L		100	60 - 140	1	20
1,1-Dichloroethene	19		25.0	41.8		ug/L		93	60 - 130	2	20
1,2-Dichloropropane	ND		25.0	25.0		ug/L		100	65 - 130	1	20
1,3-Dichloropropane	ND		25.0	23.2		ug/L		93	65 - 135	1	25
2,2-Dichloropropane	ND		25.0	26.8		ug/L		107	60 - 145	2	25
1,1-Dichloropropene	ND		25.0	21.8		ug/L		87	70 - 135	1	20
Ethylbenzene	ND		25.0	22.6		ug/L		91	65 - 130	4	20
Hexachlorobutadiene	ND		25.0	18.8		ug/L		75	60 - 135	6	20
Isopropylbenzene	ND		25.0	26.2		ug/L		105	70 - 135	1	20
Methylene Chloride	ND		25.0	24.9		ug/L		100	50 - 135	3	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.0		ug/L		108	55 - 145	5	25
m,p-Xylene	ND		50.0	44.6		ug/L		89	65 - 130	2	25
Naphthalene	ND		25.0	19.3		ug/L		77	50 - 140	4	30
n-Butylbenzene	ND		25.0	24.3		ug/L		97	65 - 135	1	20
N-Propylbenzene	ND		25.0	23.3		ug/L		93	70 - 135	2	20
o-Xylene	ND		25.0	22.8		ug/L		91	65 - 125	4	20
p-Isopropyltoluene	ND		25.0	23.1		ug/L		93	65 - 130	3	20
sec-Butylbenzene	ND		25.0	23.0		ug/L		92	70 - 125	4	20
Styrene	ND		25.0	16.1		ug/L		64	50 - 145	19	30
tert-Butylbenzene	ND		25.0	24.0		ug/L		96	65 - 130	2	20
1,1,1,2-Tetrachloroethane	ND		25.0	24.7		ug/L		99	65 - 140	5	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.7		ug/L		103	55 - 135	4	30
Tetrachloroethene	18		25.0	37.3		ug/L		77	65 - 130	4	20
Toluene	ND		25.0	23.9		ug/L		95	70 - 125	0	20
trans-1,2-Dichloroethene	ND		25.0	24.4		ug/L		97	65 - 130	1	20
trans-1,3-Dichloropropene	ND		25.0	29.4		ug/L		117	65 - 135	0	25
1,2,3-Trichlorobenzene	ND		25.0	20.4		ug/L		82	60 - 135	1	20
1,2,4-Trichlorobenzene	ND		25.0	21.3		ug/L		85	65 - 135	2	20
1,1,1-Trichloroethane	ND		25.0	25.5		ug/L		102	65 - 140	0	20
1,1,2-Trichloroethane	ND		25.0	24.8		ug/L		99	65 - 130	0	25
Trichloroethene	1.9		25.0	25.7		ug/L		95	65 - 125	2	20
Trichlorofluoromethane	28		25.0	50.0		ug/L		88	60 - 145	4	25
1,2,3-Trichloropropane	ND		25.0	23.5		ug/L		94	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	20.3		ug/L		81	55 - 135	11	25
1,3,5-Trimethylbenzene	ND		25.0	23.1		ug/L		92	70 - 130	7	20
Vinyl chloride	ND		25.0	24.3		ug/L		97	45 - 140	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 120*

QC Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 280-163359/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.086	ug/L		03/06/13 14:45	03/07/13 14:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*57 - 120*	*03/06/13 14:45*	*03/07/13 14:24*	*1*

Lab Sample ID: LCS 280-163359/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			10.0	7.07		ug/L		71	38 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*57 - 120*

Lab Sample ID: LCSD 280-163359/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane			10.0	6.27		ug/L		63	38 - 120	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*57 - 120*

QC Association Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

GC/MS VOA

Analysis Batch: 89639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39565-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-39565-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
440-39576-1	OC_GW_OW7_022813	Total/NA	Water	8260B	
440-39576-2	OC_GW_OW7K_022813	Total/NA	Water	8260B	
440-39576-3	OC_GW_OW8B_022813	Total/NA	Water	8260B	
440-39576-4	OC_GW_OW8BN_022813	Total/NA	Water	8260B	
LCS 440-89639/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-89639/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 163359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39576-1	OC_GW_OW7_022813	Total/NA	Water	3520C	
440-39576-2	OC_GW_OW7K_022813	Total/NA	Water	3520C	
440-39576-3	OC_GW_OW8B_022813	Total/NA	Water	3520C	
LCS 280-163359/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 280-163359/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 280-163359/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 163574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39576-1	OC_GW_OW7_022813	Total/NA	Water	8270C LL	163359
440-39576-2	OC_GW_OW7K_022813	Total/NA	Water	8270C LL	163359
440-39576-3	OC_GW_OW8B_022813	Total/NA	Water	8270C LL	163359
LCS 280-163359/2-A	Lab Control Sample	Total/NA	Water	8270C LL	163359
LCSD 280-163359/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	163359
MB 280-163359/1-A	Method Blank	Total/NA	Water	8270C LL	163359

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 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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	03-28-13
Northern Mariana Islands	State Program	9	MP0002	03-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13

Certification Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39576-1

Laboratory: TestAmerica Denver (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Jaime Dinello	Site Contact: Trei Chatman	Date:	COC No:
de maximis	Tel/Fax: 562-756-8149	Lab Contact: Patty Mata	Carrier:	_____ of _____ COCs
1322 Scott St. Suite 104	Analysis Turnaround Time			Job No. 440-39576
San diego	Calendar (C) or Work Days (W) W			
(619) 546-8377	TAT if different from Below _____			SDG No.
(619) 546-9980	☐ 2 weeks			
Project Name: Omega Chemical	☐ 1 week			
Site: Whittier, CA	☐ 2 days			
P O #: 3139F	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOC's (8260B) (Including acetone, freons, IPA, MTBE, TICs)	1,4 Dioxane (8270M)	Hexavalent Chromium (218.6)	Sample Specific Notes:
OC_GW_OW7_022813	02/28/13	9:10 AM	Aqueous	GW	5		x	x		
OC_GW_OW7K_022813	02/28/13	9:10 AM	Aqueous	GW	5		x	x		
OC_GW_OW8B_022813	02/28/13	2:30 PM	Aqueous	GW	5		x	x		
OC_GW_OW8BN_022813	02/28/13	4:00 PM	Aqueous	GW	3		x	~~x~~ ctl		
OC_GW_TB_022813	02/28/13	6:00 AM	Aqueous	GW	3		x			

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Special Instructions/QC Requirements & Comments:

Please filter and preserve OW-5 and OW-6 ASAP.

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	JAA	2/28/13 1613	[signature]	TAI	2/28/13 16:20
Relinquished by: [signature]	Company: TAI	Date/Time: 2/28/13 1805	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TAI	Date/Time: 02/28/13 18:05

2.1°C

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39576-1

Login Number: 39576

List Number: 1

Creator: Escalante, Maria

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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?	N/A	
There are no discrepancies between the containers received and the COC.	False	Did not receive TB
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39576-1

Login Number: 39576
List Number: 1
Creator: Bindel, Aaron M

List Source: TestAmerica Denver
List Creation: 03/06/13 10:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
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?	False	
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
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: 440-39633-1
TestAmerica Sample Delivery Group: 3139 F
Client Project/Site: Omega Chemical Groundwater

For:
de maximis, inc.
2365 Northside Drive, Suite C-100
San Diego, California 92108

Attn: Jaime Dinello

Authorized for release by:
3/14/2013 6:00:33 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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Chronicle 11
QC Sample Results 12
QC Association 26
Definitions 27
Certification Summary 28
Chain of Custody 30
Receipt Checklists 31

Sample Summary

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-39633-1	OC_GW_OW5_030113	Water	03/01/13 09:55	03/01/13 18:20
440-39633-2	OC_GW_OW6_030113	Water	03/01/13 09:15	03/01/13 18:20
440-39633-3	OC_GW_TB_030113	Water	03/01/13 06:00	03/01/13 18:20

Job ID: 440-39633-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-39633-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2013 6:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Acetone associated with batch 89977 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) for batch 89977 exceeded control limits for Acetone. 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 for batch 90027 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260B: Due to the relatively high concentration of 1,1-Dichloroethene, the matrix spike / matrix spike duplicate (MS/MSD) for batch 90027 could not be evaluated for accuracy and precision of this analyte. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC/MS Semi VOA
Method 8270C: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 163359. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.
No analytical or quality issues were noted.

HPLC / IC
No 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 Results

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Client Sample ID: OC_GW_OW5_030113

Lab Sample ID: 440-39633-1

Date Collected: 03/01/13 09:55
Matrix: Water
Date Received: 03/01/13 18:20

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			03/07/13 10:25	2
Benzene	ND		1.0	0.56	ug/L			03/07/13 10:25	2
Bromobenzene	ND		2.0	0.54	ug/L			03/07/13 10:25	2
Bromochloromethane	ND		2.0	0.80	ug/L			03/07/13 10:25	2
Bromodichloromethane	**0.71**	**J**	2.0	0.60	ug/L			03/07/13 10:25	2
Bromoform	**1.2**	**J**	2.0	0.80	ug/L			03/07/13 10:25	2
Bromomethane	ND		2.0	0.84	ug/L			03/07/13 10:25	2
Carbon tetrachloride	ND		1.0	0.56	ug/L			03/07/13 10:25	2
Chlorobenzene	ND		2.0	0.72	ug/L			03/07/13 10:25	2
Chloroethane	ND		2.0	0.80	ug/L			03/07/13 10:25	2
Chloroform	**44**		2.0	0.66	ug/L			03/07/13 10:25	2
Chloromethane	ND		2.0	0.80	ug/L			03/07/13 10:25	2
2-Chlorotoluene	ND		2.0	0.56	ug/L			03/07/13 10:25	2
4-Chlorotoluene	ND		2.0	0.58	ug/L			03/07/13 10:25	2
cis-1,2-Dichloroethene	**53**		2.0	0.64	ug/L			03/07/13 10:25	2
cis-1,3-Dichloropropene	ND		1.0	0.44	ug/L			03/07/13 10:25	2
Dibromochloromethane	ND		2.0	0.80	ug/L			03/07/13 10:25	2
1,2-Dibromo-3-Chloropropane	ND		10	1.9	ug/L			03/07/13 10:25	2
1,2-Dibromoethane (EDB)	ND		2.0	0.80	ug/L			03/07/13 10:25	2
Dibromomethane	ND		2.0	0.72	ug/L			03/07/13 10:25	2
1,2-Dichlorobenzene	ND		2.0	0.64	ug/L			03/07/13 10:25	2
1,3-Dichlorobenzene	ND		2.0	0.70	ug/L			03/07/13 10:25	2
1,4-Dichlorobenzene	ND		2.0	0.74	ug/L			03/07/13 10:25	2
Dichlorodifluoromethane	ND		2.0	0.52	ug/L			03/07/13 10:25	2
1,1-Dichloroethane	**1.6**	**J**	2.0	0.80	ug/L			03/07/13 10:25	2
1,2-Dichloroethane	**5.9**		2.0	0.56	ug/L			03/07/13 10:25	2
1,1-Dichloroethene	**150**		2.0	0.84	ug/L			03/07/13 10:25	2
1,2-Dichloropropane	ND		2.0	0.70	ug/L			03/07/13 10:25	2
1,3-Dichloropropane	ND		2.0	0.64	ug/L			03/07/13 10:25	2
2,2-Dichloropropane	ND		2.0	0.68	ug/L			03/07/13 10:25	2
1,1-Dichloropropene	ND		2.0	0.56	ug/L			03/07/13 10:25	2
Ethylbenzene	ND		2.0	0.50	ug/L			03/07/13 10:25	2
Hexachlorobutadiene	ND		2.0	0.76	ug/L			03/07/13 10:25	2
Isopropyl alcohol	ND		200	100	ug/L			03/07/13 10:25	2
Isopropylbenzene	ND		2.0	0.50	ug/L			03/07/13 10:25	2
Methylene Chloride	ND		10	1.9	ug/L			03/07/13 10:25	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.64	ug/L			03/07/13 10:25	2
m,p-Xylene	ND		2.0	1.2	ug/L			03/07/13 10:25	2
Naphthalene	ND		2.0	0.82	ug/L			03/07/13 10:25	2
n-Butylbenzene	ND		2.0	0.74	ug/L			03/07/13 10:25	2
N-Propylbenzene	ND		2.0	0.54	ug/L			03/07/13 10:25	2
o-Xylene	ND		2.0	0.60	ug/L			03/07/13 10:25	2
p-Isopropyltoluene	ND		2.0	0.56	ug/L			03/07/13 10:25	2
sec-Butylbenzene	ND		2.0	0.50	ug/L			03/07/13 10:25	2
Styrene	ND		2.0	0.40	ug/L			03/07/13 10:25	2
tert-Butylbenzene	ND		2.0	0.44	ug/L			03/07/13 10:25	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.54	ug/L			03/07/13 10:25	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.60	ug/L			03/07/13 10:25	2
Toluene	ND		2.0	0.72	ug/L			03/07/13 10:25	2

Client Sample Results

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Client Sample ID: OC_GW_OW5_030113

Lab Sample ID: 440-39633-1
Date Collected: 03/01/13 09:55
Matrix: Water
Date Received: 03/01/13 18:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**1.7**	**J**	2.0	0.60	ug/L			03/07/13 10:25	2
trans-1,3-Dichloropropene	ND		1.0	0.64	ug/L			03/07/13 10:25	2
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/L			03/07/13 10:25	2
1,2,4-Trichlorobenzene	ND		2.0	0.96	ug/L			03/07/13 10:25	2
1,1,1-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 10:25	2
1,1,2-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 10:25	2
Trichloroethene	**220**		2.0	0.52	ug/L			03/07/13 10:25	2
Trichlorofluoromethane	**53**		2.0	0.68	ug/L			03/07/13 10:25	2
1,2,3-Trichloropropane	ND		2.0	0.80	ug/L			03/07/13 10:25	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**120**		10	1.0	ug/L			03/07/13 10:25	2
1,2,4-Trimethylbenzene	ND		2.0	0.46	ug/L			03/07/13 10:25	2
1,3,5-Trimethylbenzene	ND		2.0	0.52	ug/L			03/07/13 10:25	2
Vinyl chloride	ND		1.0	0.80	ug/L			03/07/13 10:25	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*4.6*		*ug/L*		*3.26*	*75-43-4*		*03/07/13 10:25*	*2*
1,2-Dichloro-1,1,2-trifluoroethane	*8.1*		*ug/L*		*3.66*	*354-23-4*		*03/07/13 10:25*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/07/13 10:25*	*2*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*03/07/13 10:25*	*2*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/07/13 10:25*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**550**		10	3.2	ug/L			03/07/13 10:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/07/13 10:54*	*10*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*03/07/13 10:54*	*10*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/07/13 10:54*	*10*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**31**		0.95	0.082	ug/L		03/06/13 14:45	03/08/13 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*57 - 120*	*03/06/13 14:45*	*03/08/13 10:31*	*1*

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**6.9**		1.0	0.25	ug/L			03/02/13 01:27	1

Client Sample ID: OC_GW_OW6_030113

Lab Sample ID: 440-39633-2
Date Collected: 03/01/13 09:15
Matrix: Water
Date Received: 03/01/13 18:20

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			03/07/13 11:23	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 11:23	1

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Client Sample ID: OC_GW_OW6_030113
Date Collected: 03/01/13 09:15
Date Received: 03/01/13 18:20

Lab Sample ID: 440-39633-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 11:23	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 11:23	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 11:23	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 11:23	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 11:23	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 11:23	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 11:23	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 11:23	1
Chloroform	**0.61**	**J**	1.0	0.33	ug/L			03/07/13 11:23	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 11:23	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 11:23	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 11:23	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 11:23	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 11:23	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 11:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 11:23	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 11:23	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 11:23	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 11:23	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 11:23	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 11:23	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 11:23	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 11:23	1
1,2-Dichloroethane	**0.54**	**J**	1.0	0.28	ug/L			03/07/13 11:23	1
1,1-Dichloroethene	**1.6**		1.0	0.42	ug/L			03/07/13 11:23	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 11:23	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 11:23	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 11:23	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 11:23	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 11:23	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 11:23	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 11:23	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 11:23	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 11:23	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 11:23	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 11:23	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 11:23	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 11:23	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 11:23	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 11:23	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 11:23	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 11:23	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 11:23	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 11:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 11:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 11:23	1
Tetrachloroethene	**58**		1.0	0.32	ug/L			03/07/13 11:23	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 11:23	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 11:23	1

Client Sample ID: OC_GW_OW6_030113

Lab Sample ID: 440-39633-2

Date Collected: 03/01/13 09:15
Matrix: Water
Date Received: 03/01/13 18:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 11:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 11:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 11:23	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 11:23	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 11:23	1
Trichloroethene	**1.2**		1.0	0.26	ug/L			03/07/13 11:23	1
Trichlorofluoromethane	**1.6**		1.0	0.34	ug/L			03/07/13 11:23	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 11:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**4.7**	**J**	5.0	0.50	ug/L			03/07/13 11:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 11:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 11:23	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 11:23	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 11:23*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/07/13 11:23*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*03/07/13 11:23*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/07/13 11:23*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.21**	**J**	0.95	0.082	ug/L		03/06/13 14:45	03/08/13 10:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*57 - 120*	*03/06/13 14:45*	*03/08/13 10:55*	*1*

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	**3.8**		1.0	0.25	ug/L			03/02/13 00:10	1

Client Sample ID: OC_GW_TB_030113

Lab Sample ID: 440-39633-3

Date Collected: 03/01/13 06:00
Matrix: Water
Date Received: 03/01/13 18:20

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			03/07/13 06:12	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 06:12	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 06:12	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 06:12	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 06:12	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 06:12	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 06:12	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 06:12	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 06:12	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 06:12	1
Chloroform	ND		1.0	0.33	ug/L			03/07/13 06:12	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 06:12	1

Client Sample Results

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Client Sample ID: OC_GW_TB_030113

Lab Sample ID: 440-39633-3

Date Collected: 03/01/13 06:00
Matrix: Water
Date Received: 03/01/13 18:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 06:12	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 06:12	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 06:12	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 06:12	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 06:12	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 06:12	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 06:12	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 06:12	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 06:12	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 06:12	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 06:12	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 06:12	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 06:12	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 06:12	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/07/13 06:12	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 06:12	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 06:12	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 06:12	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 06:12	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 06:12	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 06:12	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 06:12	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 06:12	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 06:12	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 06:12	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 06:12	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 06:12	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 06:12	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 06:12	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 06:12	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 06:12	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 06:12	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 06:12	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 06:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 06:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 06:12	1
Tetrachloroethene	ND		1.0	0.32	ug/L			03/07/13 06:12	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 06:12	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 06:12	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 06:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 06:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 06:12	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 06:12	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 06:12	1
Trichloroethene	ND		1.0	0.26	ug/L			03/07/13 06:12	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/07/13 06:12	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 06:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/07/13 06:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 06:12	1

Client Sample Results

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Client Sample ID: OC_GW_TB_030113

Lab Sample ID: 440-39633-3

Date Collected: 03/01/13 06:00
Matrix: Water
Date Received: 03/01/13 18:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 06:12	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 06:12	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 06:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/07/13 06:12*	*1*
Dibromofluoromethane (Surr)	*119*		*80 - 120*		*03/07/13 06:12*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*03/07/13 06:12*	*1*

Lab Chronicle

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Client Sample ID: OC_GW_OW5_030113

Lab Sample ID: 440-39633-1
Date Collected: 03/01/13 09:55
Matrix: Water
Date Received: 03/01/13 18:20

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	90027	03/07/13 10:25	WC	TAL IRV
Total/NA	Analysis	8260B	DL	10	10 mL	10 mL	90027	03/07/13 10:54	WC	TAL IRV
Total/NA	Prep	3520C			1049.6 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163721	03/08/13 10:31	KGV	TAL DEN
Dissolved	Analysis	218.6		1	10 mL		88854	03/02/13 01:27	MN	TAL IRV

Client Sample ID: OC_GW_OW6_030113

Lab Sample ID: 440-39633-2
Date Collected: 03/01/13 09:15
Matrix: Water
Date Received: 03/01/13 18:20

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	90027	03/07/13 11:23	WC	TAL IRV
Total/NA	Prep	3520C			1053.3 mL	2000 uL	163359	03/06/13 14:45	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163721	03/08/13 10:55	KGV	TAL DEN
Dissolved	Analysis	218.6		1	10 mL		88854	03/02/13 00:10	MN	TAL IRV

Client Sample ID: OC_GW_TB_030113

Lab Sample ID: 440-39633-3
Date Collected: 03/01/13 06:00
Matrix: Water
Date Received: 03/01/13 18:20

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	89977	03/07/13 06:12	MR	TAL IRV

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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 440-89977/5
Matrix: Water
Analysis Batch: 89977

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			03/06/13 22:18	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 22:18	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 22:18	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 22:18	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 22:18	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 22:18	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 22:18	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 22:18	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 22:18	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 22:18	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 22:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 22:18	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 22:18	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 22:18	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 22:18	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 22:18	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 22:18	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 22:18	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 22:18	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 22:18	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 22:18	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 22:18	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 22:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 22:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 22:18	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 22:18	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 22:18	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 22:18	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 22:18	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 22:18	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 22:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 22:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1

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

Lab Sample ID: MB 440-89977/5
Matrix: Water
Analysis Batch: 89977

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			03/06/13 22:18	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 22:18	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 22:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 22:18	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 22:18	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 22:18	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 22:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 22:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 22:18	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 22:18	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/06/13 22:18*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*03/06/13 22:18*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*03/06/13 22:18*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/06/13 22:18*	*1*

Lab Sample ID: LCS 440-89977/6
Matrix: Water
Analysis Batch: 89977

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	37.4	*	ug/L		150	30 - 140
Benzene	25.0	20.4		ug/L		81	70 - 120
Bromobenzene	25.0	23.5		ug/L		94	75 - 120
Bromochloromethane	25.0	23.9		ug/L		96	70 - 130
Bromodichloromethane	25.0	25.5		ug/L		102	70 - 135
Bromoform	25.0	26.3		ug/L		105	55 - 130
Bromomethane	25.0	23.1		ug/L		92	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	23.5		ug/L		94	60 - 140
Chloroform	25.0	24.0		ug/L		96	70 - 130
Chloromethane	25.0	20.7		ug/L		83	50 - 140
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 125
4-Chlorotoluene	25.0	24.3		ug/L		97	75 - 125
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 125
cis-1,3-Dichloropropene	25.0	27.9		ug/L		111	75 - 125
Dibromochloromethane	25.0	26.7		ug/L		107	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	24.5		ug/L		98	50 - 135

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

Lab Sample ID: LCS 440-89977/6
Matrix: Water
Analysis Batch: 89977

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	24.1		ug/L		96	75 - 125
Dibromomethane	25.0	25.0		ug/L		100	70 - 125
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	75 - 120
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	75 - 120
1,4-Dichlorobenzene	25.0	22.6		ug/L		90	75 - 120
Dichlorodifluoromethane	25.0	17.4		ug/L		70	35 - 155
1,1-Dichloroethane	25.0	22.9		ug/L		92	70 - 125
1,2-Dichloroethane	25.0	24.3		ug/L		97	60 - 140
1,1-Dichloroethene	25.0	23.7		ug/L		95	70 - 125
1,2-Dichloropropane	25.0	23.0		ug/L		92	70 - 125
1,3-Dichloropropane	25.0	23.7		ug/L		95	70 - 120
2,2-Dichloropropane	25.0	27.4		ug/L		110	65 - 140
1,1-Dichloropropene	25.0	21.7		ug/L		87	75 - 130
Ethylbenzene	25.0	23.3		ug/L		93	75 - 125
Hexachlorobutadiene	25.0	20.3		ug/L		81	65 - 135
Isopropylbenzene	25.0	25.9		ug/L		104	75 - 130
Methylene Chloride	25.0	20.9		ug/L		84	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.3		ug/L		93	60 - 135
m,p-Xylene	50.0	47.3		ug/L		95	75 - 125
Naphthalene	25.0	21.9		ug/L		88	55 - 135
n-Butylbenzene	25.0	24.1		ug/L		96	70 - 130
N-Propylbenzene	25.0	24.1		ug/L		96	75 - 130
o-Xylene	25.0	23.7		ug/L		95	75 - 125
p-Isopropyltoluene	25.0	23.2		ug/L		93	75 - 125
sec-Butylbenzene	25.0	23.3		ug/L		93	70 - 125
Styrene	25.0	26.2		ug/L		105	75 - 130
tert-Butylbenzene	25.0	24.1		ug/L		96	70 - 125
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	55 - 130
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 125
Toluene	25.0	23.5		ug/L		94	70 - 120
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	70 - 125
trans-1,3-Dichloropropene	25.0	28.1		ug/L		112	70 - 125
1,2,3-Trichlorobenzene	25.0	19.6		ug/L		78	65 - 125
1,2,4-Trichlorobenzene	25.0	21.2		ug/L		85	70 - 135
1,1,1-Trichloroethane	25.0	25.7		ug/L		103	65 - 135
1,1,2-Trichloroethane	25.0	23.4		ug/L		93	70 - 125
Trichloroethene	25.0	24.3		ug/L		97	70 - 125
Trichlorofluoromethane	25.0	25.9		ug/L		104	65 - 145
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	60 - 130
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		99	75 - 125
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	75 - 125
Vinyl chloride	25.0	25.2		ug/L		101	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

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

Lab Sample ID: 440-39676-F-3 MS
Matrix: Water
Analysis Batch: 89977

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	16.4		ug/L		66	20 - 150
Benzene	ND		25.0	21.3		ug/L		85	65 - 125
Bromobenzene	ND		25.0	23.0		ug/L		92	70 - 125
Bromochloromethane	ND		25.0	24.2		ug/L		97	65 - 135
Bromodichloromethane	ND		25.0	26.3		ug/L		105	70 - 135
Bromoform	ND		25.0	24.8		ug/L		99	55 - 135
Bromomethane	ND		25.0	23.0		ug/L		92	55 - 145
Carbon tetrachloride	ND		25.0	26.2		ug/L		105	65 - 140
Chlorobenzene	ND		25.0	22.6		ug/L		91	75 - 125
Chloroethane	ND		25.0	23.0		ug/L		92	55 - 140
Chloroform	ND		25.0	23.3		ug/L		93	65 - 135
Chloromethane	ND		25.0	19.2		ug/L		77	45 - 145
2-Chlorotoluene	ND		25.0	22.9		ug/L		91	65 - 135
4-Chlorotoluene	ND		25.0	24.1		ug/L		96	70 - 135
cis-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	65 - 130
cis-1,3-Dichloropropene	ND		25.0	27.6		ug/L		110	70 - 130
Dibromochloromethane	ND		25.0	25.0		ug/L		100	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	21.6		ug/L		87	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	23.4		ug/L		94	70 - 130
Dibromomethane	ND		25.0	25.8		ug/L		103	65 - 135
1,2-Dichlorobenzene	ND		25.0	22.3		ug/L		89	75 - 125
1,3-Dichlorobenzene	ND		25.0	22.9		ug/L		92	75 - 125
1,4-Dichlorobenzene	ND		25.0	23.0		ug/L		92	75 - 125
Dichlorodifluoromethane	ND		25.0	17.1		ug/L		68	25 - 155
1,1-Dichloroethane	ND		25.0	23.0		ug/L		92	65 - 130
1,2-Dichloroethane	ND		25.0	23.6		ug/L		94	60 - 140
1,1-Dichloroethene	ND		25.0	23.5		ug/L		94	60 - 130
1,2-Dichloropropane	ND		25.0	23.1		ug/L		92	65 - 130
1,3-Dichloropropane	ND		25.0	22.0		ug/L		88	65 - 135
2,2-Dichloropropane	ND		25.0	29.5		ug/L		118	60 - 145
1,1-Dichloropropene	ND		25.0	22.8		ug/L		91	70 - 135
Ethylbenzene	ND		25.0	22.5		ug/L		90	65 - 130
Hexachlorobutadiene	ND		25.0	19.5		ug/L		78	60 - 135
Isopropylbenzene	ND		25.0	24.7		ug/L		99	70 - 135
Methylene Chloride	ND		25.0	21.5		ug/L		86	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.1		ug/L		96	55 - 145
m,p-Xylene	ND		50.0	44.1		ug/L		88	65 - 130
Naphthalene	ND		25.0	20.0		ug/L		80	50 - 140
n-Butylbenzene	ND		25.0	24.2		ug/L		97	65 - 135
N-Propylbenzene	ND		25.0	23.4		ug/L		93	70 - 135
o-Xylene	ND		25.0	22.2		ug/L		89	65 - 125
p-Isopropyltoluene	ND		25.0	22.9		ug/L		92	65 - 130
sec-Butylbenzene	ND		25.0	22.6		ug/L		91	70 - 125
Styrene	ND		25.0	23.6		ug/L		94	50 - 145
tert-Butylbenzene	ND		25.0	23.4		ug/L		94	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	24.5		ug/L		98	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	23.1		ug/L		93	55 - 135
Tetrachloroethene	2.3		25.0	24.5		ug/L		89	65 - 130

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

Lab Sample ID: 440-39676-F-3 MS
Matrix: Water
Analysis Batch: 89977

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
Toluene	ND		25.0	23.5		ug/L		94	70 - 125
trans-1,2-Dichloroethene	ND		25.0	23.8		ug/L		95	65 - 130
trans-1,3-Dichloropropene	ND		25.0	28.2		ug/L		113	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	18.9		ug/L		76	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.1		ug/L		84	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.0		ug/L		100	65 - 140
1,1,2-Trichloroethane	ND		25.0	24.3		ug/L		97	65 - 130
Trichloroethene	ND		25.0	23.9		ug/L		96	65 - 125
Trichlorofluoromethane	ND		25.0	25.9		ug/L		104	60 - 145
1,2,3-Trichloropropane	ND		25.0	21.3		ug/L		85	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	24.3		ug/L		97	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130
Vinyl chloride	ND		25.0	24.6		ug/L		99	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 120*

Lab Sample ID: 440-39676-F-3 MSD
Matrix: Water
Analysis Batch: 89977

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	15.6		ug/L		62	20 - 150	5	35
Benzene	ND		25.0	20.9		ug/L		84	65 - 125	2	20
Bromobenzene	ND		25.0	23.5		ug/L		94	70 - 125	2	20
Bromochloromethane	ND		25.0	23.1		ug/L		93	65 - 135	5	25
Bromodichloromethane	ND		25.0	25.8		ug/L		103	70 - 135	2	20
Bromoform	ND		25.0	25.1		ug/L		101	55 - 135	2	25
Bromomethane	ND		25.0	21.9		ug/L		88	55 - 145	5	25
Carbon tetrachloride	ND		25.0	25.2		ug/L		101	65 - 140	4	25
Chlorobenzene	ND		25.0	22.7		ug/L		91	75 - 125	0	20
Chloroethane	ND		25.0	22.0		ug/L		88	55 - 140	5	25
Chloroform	ND		25.0	22.9		ug/L		92	65 - 135	2	20
Chloromethane	ND		25.0	19.0		ug/L		76	45 - 145	1	25
2-Chlorotoluene	ND		25.0	22.9		ug/L		92	65 - 135	0	20
4-Chlorotoluene	ND		25.0	23.6		ug/L		94	70 - 135	2	20
cis-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	65 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	26.4		ug/L		105	70 - 130	5	20
Dibromochloromethane	ND		25.0	25.2		ug/L		101	65 - 140	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	23.2		ug/L		93	45 - 145	7	30
1,2-Dibromoethane (EDB)	ND		25.0	23.9		ug/L		96	70 - 130	2	25
Dibromomethane	ND		25.0	25.4		ug/L		102	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	22.2		ug/L		89	75 - 125	1	20
1,3-Dichlorobenzene	ND		25.0	22.8		ug/L		91	75 - 125	0	20
1,4-Dichlorobenzene	ND		25.0	22.3		ug/L		89	75 - 125	3	20
Dichlorodifluoromethane	ND		25.0	16.1		ug/L		64	25 - 155	6	30

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

Lab Sample ID: 440-39676-F-3 MSD
Matrix: Water
Analysis Batch: 89977

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-Dichloroethane	ND		25.0	22.4		ug/L		90	65 - 130	3	20
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	60 - 140	2	20
1,1-Dichloroethene	ND		25.0	22.3		ug/L		89	60 - 130	5	20
1,2-Dichloropropane	ND		25.0	23.9		ug/L		95	65 - 130	3	20
1,3-Dichloropropane	ND		25.0	22.7		ug/L		91	65 - 135	3	25
2,2-Dichloropropane	ND		25.0	27.7		ug/L		111	60 - 145	6	25
1,1-Dichloropropene	ND		25.0	21.1		ug/L		85	70 - 135	7	20
Ethylbenzene	ND		25.0	23.0		ug/L		92	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	19.1		ug/L		76	60 - 135	2	20
Isopropylbenzene	ND		25.0	23.9		ug/L		95	70 - 135	4	20
Methylene Chloride	ND		25.0	20.9		ug/L		84	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.0		ug/L		92	55 - 145	5	25
m,p-Xylene	ND		50.0	45.4		ug/L		91	65 - 130	3	25
Naphthalene	ND		25.0	20.3		ug/L		81	50 - 140	2	30
n-Butylbenzene	ND		25.0	24.3		ug/L		97	65 - 135	0	20
N-Propylbenzene	ND		25.0	23.1		ug/L		92	70 - 135	1	20
o-Xylene	ND		25.0	23.6		ug/L		95	65 - 125	6	20
p-Isopropyltoluene	ND		25.0	23.2		ug/L		93	65 - 130	1	20
sec-Butylbenzene	ND		25.0	22.9		ug/L		92	70 - 125	1	20
Styrene	ND		25.0	23.3		ug/L		93	50 - 145	1	30
tert-Butylbenzene	ND		25.0	22.7		ug/L		91	65 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	24.6		ug/L		99	65 - 140	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	24.1		ug/L		96	55 - 135	4	30
Tetrachloroethene	2.3		25.0	25.3		ug/L		92	65 - 130	3	20
Toluene	ND		25.0	23.0		ug/L		92	70 - 125	2	20
trans-1,2-Dichloroethene	ND		25.0	22.8		ug/L		91	65 - 130	4	20
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	65 - 135	0	25
1,2,3-Trichlorobenzene	ND		25.0	18.5		ug/L		74	60 - 135	2	20
1,2,4-Trichlorobenzene	ND		25.0	20.7		ug/L		83	65 - 135	2	20
1,1,1-Trichloroethane	ND		25.0	24.1		ug/L		96	65 - 140	4	20
1,1,2-Trichloroethane	ND		25.0	23.7		ug/L		95	65 - 130	2	25
Trichloroethene	ND		25.0	23.7		ug/L		95	65 - 125	1	20
Trichlorofluoromethane	ND		25.0	24.5		ug/L		98	60 - 145	5	25
1,2,3-Trichloropropane	ND		25.0	21.2		ug/L		85	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	24.9		ug/L		99	55 - 135	2	25
1,3,5-Trimethylbenzene	ND		25.0	23.8		ug/L		95	70 - 130	3	20
Vinyl chloride	ND		25.0	23.8		ug/L		95	45 - 140	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

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

Lab Sample ID: MB 440-90027/5
Matrix: Water
Analysis Batch: 90027

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			03/07/13 09:28	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 09:28	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 09:28	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 09:28	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 09:28	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 09:28	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 09:28	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 09:28	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 09:28	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 09:28	1
Chloroform	ND		1.0	0.33	ug/L			03/07/13 09:28	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 09:28	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 09:28	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 09:28	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 09:28	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 09:28	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 09:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 09:28	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 09:28	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 09:28	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 09:28	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 09:28	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 09:28	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 09:28	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 09:28	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 09:28	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/07/13 09:28	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 09:28	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 09:28	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 09:28	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 09:28	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 09:28	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 09:28	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 09:28	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 09:28	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 09:28	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 09:28	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 09:28	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 09:28	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 09:28	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 09:28	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 09:28	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 09:28	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 09:28	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 09:28	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 09:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 09:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 09:28	1

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

Lab Sample ID: MB 440-90027/5
Matrix: Water
Analysis Batch: 90027

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			03/07/13 09:28	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 09:28	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 09:28	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 09:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 09:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 09:28	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 09:28	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 09:28	1
Trichloroethene	ND		1.0	0.26	ug/L			03/07/13 09:28	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/07/13 09:28	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 09:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/07/13 09:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 09:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 09:28	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 09:28	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 09:28*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*03/07/13 09:28*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/07/13 09:28*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*03/07/13 09:28*	*1*

Lab Sample ID: LCS 440-90027/6
Matrix: Water
Analysis Batch: 90027

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	28.0		ug/L		112	30 - 140
Benzene	25.0	21.7		ug/L		87	70 - 120
Bromobenzene	25.0	25.0		ug/L		100	75 - 120
Bromochloromethane	25.0	24.9		ug/L		100	70 - 130
Bromodichloromethane	25.0	25.9		ug/L		104	70 - 135
Bromoform	25.0	23.0		ug/L		92	55 - 130
Bromomethane	25.0	25.8		ug/L		103	65 - 140
Carbon tetrachloride	25.0	25.4		ug/L		102	65 - 140
Chlorobenzene	25.0	24.0		ug/L		96	75 - 120
Chloroethane	25.0	25.6		ug/L		102	60 - 140
Chloroform	25.0	24.5		ug/L		98	70 - 130
Chloromethane	25.0	25.2		ug/L		101	50 - 140
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 125
4-Chlorotoluene	25.0	25.3		ug/L		101	75 - 125
cis-1,2-Dichloroethene	25.0	27.2		ug/L		109	70 - 125
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	75 - 125
Dibromochloromethane	25.0	26.0		ug/L		104	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	24.5		ug/L		98	50 - 135

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

Lab Sample ID: LCS 440-90027/6
Matrix: Water
Analysis Batch: 90027

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	25.3		ug/L		101	75 - 125
Dibromomethane	25.0	23.9		ug/L		96	70 - 125
1,2-Dichlorobenzene	25.0	25.0		ug/L		100	75 - 120
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	75 - 120
1,4-Dichlorobenzene	25.0	23.8		ug/L		95	75 - 120
Dichlorodifluoromethane	25.0	20.3		ug/L		81	35 - 155
1,1-Dichloroethane	25.0	25.0		ug/L		100	70 - 125
1,2-Dichloroethane	25.0	25.4		ug/L		101	60 - 140
1,1-Dichloroethene	25.0	24.2		ug/L		97	70 - 125
1,2-Dichloropropane	25.0	24.0		ug/L		96	70 - 125
1,3-Dichloropropane	25.0	23.2		ug/L		93	70 - 120
2,2-Dichloropropane	25.0	30.5		ug/L		122	65 - 140
1,1-Dichloropropene	25.0	21.7		ug/L		87	75 - 130
Ethylbenzene	25.0	24.8		ug/L		99	75 - 125
Hexachlorobutadiene	25.0	23.4		ug/L		94	65 - 135
Isopropylbenzene	25.0	24.6		ug/L		98	75 - 130
Methylene Chloride	25.0	22.9		ug/L		92	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	26.1		ug/L		104	60 - 135
m,p-Xylene	50.0	52.9		ug/L		106	75 - 125
Naphthalene	25.0	25.3		ug/L		101	55 - 135
n-Butylbenzene	25.0	26.2		ug/L		105	70 - 130
N-Propylbenzene	25.0	24.7		ug/L		99	75 - 130
o-Xylene	25.0	26.9		ug/L		107	75 - 125
p-Isopropyltoluene	25.0	25.2		ug/L		101	75 - 125
sec-Butylbenzene	25.0	24.9		ug/L		100	70 - 125
Styrene	25.0	26.5		ug/L		106	75 - 130
tert-Butylbenzene	25.0	25.4		ug/L		102	70 - 125
1,1,1,2-Tetrachloroethane	25.0	27.2		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	25.0	22.5		ug/L		90	55 - 130
Tetrachloroethene	25.0	24.6		ug/L		99	70 - 125
Toluene	25.0	24.5		ug/L		98	70 - 120
trans-1,2-Dichloroethene	25.0	23.5		ug/L		94	70 - 125
trans-1,3-Dichloropropene	25.0	25.4		ug/L		101	70 - 125
1,2,3-Trichlorobenzene	25.0	25.1		ug/L		101	65 - 125
1,2,4-Trichlorobenzene	25.0	27.3		ug/L		109	70 - 135
1,1,1-Trichloroethane	25.0	26.0		ug/L		104	65 - 135
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	70 - 125
Trichloroethene	25.0	23.4		ug/L		93	70 - 125
Trichlorofluoromethane	25.0	26.3		ug/L		105	65 - 145
1,2,3-Trichloropropane	25.0	20.6		ug/L		82	60 - 130
1,2,4-Trimethylbenzene	25.0	24.4		ug/L		98	75 - 125
1,3,5-Trimethylbenzene	25.0	24.1		ug/L		96	75 - 125
Vinyl chloride	25.0	29.2		ug/L		117	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

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

Lab Sample ID: 440-39822-A-1 MS
Matrix: Water
Analysis Batch: 90027

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	21.2		ug/L		85	20 - 150
Benzene	ND		25.0	21.4		ug/L		86	65 - 125
Bromobenzene	ND		25.0	23.8		ug/L		95	70 - 125
Bromochloromethane	ND		25.0	24.6		ug/L		98	65 - 135
Bromodichloromethane	ND		25.0	26.0		ug/L		104	70 - 135
Bromoform	ND		25.0	23.5		ug/L		94	55 - 135
Bromomethane	ND		25.0	22.8		ug/L		91	55 - 145
Carbon tetrachloride	ND		25.0	26.6		ug/L		107	65 - 140
Chlorobenzene	ND		25.0	23.3		ug/L		93	75 - 125
Chloroethane	ND		25.0	24.3		ug/L		97	55 - 140
Chloroform	ND		25.0	23.3		ug/L		93	65 - 135
Chloromethane	ND		25.0	21.4		ug/L		86	45 - 145
2-Chlorotoluene	ND		25.0	23.9		ug/L		96	65 - 135
4-Chlorotoluene	ND		25.0	24.5		ug/L		98	70 - 135
cis-1,2-Dichloroethene	0.45	J	25.0	25.8		ug/L		101	65 - 130
cis-1,3-Dichloropropene	ND		25.0	24.9		ug/L		100	70 - 130
Dibromochloromethane	ND		25.0	26.3		ug/L		105	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	26.7		ug/L		107	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	25.7		ug/L		103	70 - 130
Dibromomethane	ND		25.0	25.0		ug/L		100	65 - 135
1,2-Dichlorobenzene	ND		25.0	24.2		ug/L		97	75 - 125
1,3-Dichlorobenzene	ND		25.0	23.7		ug/L		95	75 - 125
1,4-Dichlorobenzene	ND		25.0	23.4		ug/L		94	75 - 125
Dichlorodifluoromethane	ND		25.0	16.3		ug/L		65	25 - 155
1,1-Dichloroethane	24		25.0	44.6		ug/L		84	65 - 130
1,2-Dichloroethane	0.48	J	25.0	26.3		ug/L		103	60 - 140
1,1-Dichloroethene	120		25.0	122	4	ug/L		4	60 - 130
1,2-Dichloropropane	ND		25.0	23.7		ug/L		95	65 - 130
1,3-Dichloropropane	ND		25.0	23.8		ug/L		95	65 - 135
2,2-Dichloropropane	ND		25.0	29.7		ug/L		119	60 - 145
1,1-Dichloropropene	ND		25.0	21.5		ug/L		86	70 - 135
Ethylbenzene	ND		25.0	24.8		ug/L		99	65 - 130
Hexachlorobutadiene	ND		25.0	24.4		ug/L		97	60 - 135
Isopropylbenzene	ND		25.0	23.9		ug/L		96	70 - 135
Methylene Chloride	ND		25.0	22.5		ug/L		90	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.5		ug/L		106	55 - 145
m,p-Xylene	ND		50.0	52.1		ug/L		104	65 - 130
Naphthalene	ND		25.0	26.7		ug/L		107	50 - 140
n-Butylbenzene	ND		25.0	26.2		ug/L		105	65 - 135
N-Propylbenzene	ND		25.0	24.1		ug/L		97	70 - 135
o-Xylene	ND		25.0	26.6		ug/L		106	65 - 125
p-Isopropyltoluene	ND		25.0	24.6		ug/L		99	65 - 130
sec-Butylbenzene	ND		25.0	24.5		ug/L		98	70 - 125
Styrene	ND		25.0	24.9		ug/L		99	50 - 145
tert-Butylbenzene	ND		25.0	24.6		ug/L		98	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	26.8		ug/L		107	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	23.5		ug/L		94	55 - 135
Tetrachloroethene	66		25.0	77.7	F	ug/L		48	65 - 130

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

Lab Sample ID: 440-39822-A-1 MS
Matrix: Water
Analysis Batch: 90027

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
Toluene	ND		25.0	24.6		ug/L		99	70 - 125
trans-1,2-Dichloroethene	ND		25.0	23.6		ug/L		94	65 - 130
trans-1,3-Dichloropropene	ND		25.0	25.8		ug/L		103	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	25.2		ug/L		101	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	27.2		ug/L		109	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.9		ug/L		103	65 - 140
1,1,2-Trichloroethane	0.50	J	25.0	24.9		ug/L		97	65 - 130
Trichloroethene	23		25.0	42.5		ug/L		78	65 - 125
Trichlorofluoromethane	ND		25.0	25.7		ug/L		103	60 - 145
1,2,3-Trichloropropane	ND		25.0	21.7		ug/L		87	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	23.4		ug/L		93	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	22.9		ug/L		92	70 - 130
Vinyl chloride	ND		25.0	26.7		ug/L		107	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-39822-A-1 MSD
Matrix: Water
Analysis Batch: 90027

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	20.0		ug/L		80	20 - 150	5	35
Benzene	ND		25.0	22.8		ug/L		91	65 - 125	7	20
Bromobenzene	ND		25.0	25.5		ug/L		102	70 - 125	7	20
Bromochloromethane	ND		25.0	24.5		ug/L		98	65 - 135	1	25
Bromodichloromethane	ND		25.0	27.2		ug/L		109	70 - 135	4	20
Bromoform	ND		25.0	24.0		ug/L		96	55 - 135	2	25
Bromomethane	ND		25.0	24.1		ug/L		96	55 - 145	5	25
Carbon tetrachloride	ND		25.0	28.4		ug/L		113	65 - 140	6	25
Chlorobenzene	ND		25.0	23.9		ug/L		96	75 - 125	2	20
Chloroethane	ND		25.0	25.6		ug/L		102	55 - 140	5	25
Chloroform	ND		25.0	24.7		ug/L		99	65 - 135	6	20
Chloromethane	ND		25.0	24.1		ug/L		96	45 - 145	12	25
2-Chlorotoluene	ND		25.0	25.1		ug/L		100	65 - 135	5	20
4-Chlorotoluene	ND		25.0	25.8		ug/L		103	70 - 135	5	20
cis-1,2-Dichloroethene	0.45	J	25.0	26.6		ug/L		105	65 - 130	3	20
cis-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	70 - 130	5	20
Dibromochloromethane	ND		25.0	26.8		ug/L		107	65 - 140	2	25
1,2-Dibromo-3-Chloropropane	ND		25.0	30.0		ug/L		120	45 - 145	12	30
1,2-Dibromoethane (EDB)	ND		25.0	26.9		ug/L		107	70 - 130	5	25
Dibromomethane	ND		25.0	26.0		ug/L		104	65 - 135	4	25
1,2-Dichlorobenzene	ND		25.0	25.9		ug/L		104	75 - 125	7	20
1,3-Dichlorobenzene	ND		25.0	25.4		ug/L		101	75 - 125	7	20
1,4-Dichlorobenzene	ND		25.0	24.4		ug/L		98	75 - 125	4	20
Dichlorodifluoromethane	ND		25.0	17.3		ug/L		69	25 - 155	6	30

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

Lab Sample ID: 440-39822-A-1 MSD
Matrix: Water
Analysis Batch: 90027

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-Dichloroethane	24		25.0	45.0		ug/L		86	65 - 130	1	20
1,2-Dichloroethane	0.48	J	25.0	27.7		ug/L		109	60 - 140	5	20
1,1-Dichloroethene	120		25.0	127	4	ug/L		26	60 - 130	4	20
1,2-Dichloropropane	ND		25.0	25.2		ug/L		101	65 - 130	6	20
1,3-Dichloropropane	ND		25.0	24.5		ug/L		98	65 - 135	3	25
2,2-Dichloropropane	ND		25.0	31.1		ug/L		124	60 - 145	5	25
1,1-Dichloropropene	ND		25.0	23.1		ug/L		93	70 - 135	7	20
Ethylbenzene	ND		25.0	25.9		ug/L		103	65 - 130	4	20
Hexachlorobutadiene	ND		25.0	26.2		ug/L		105	60 - 135	7	20
Isopropylbenzene	ND		25.0	25.8		ug/L		103	70 - 135	8	20
Methylene Chloride	ND		25.0	22.5		ug/L		90	50 - 135	0	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	26.8		ug/L		107	55 - 145	1	25
m,p-Xylene	ND		50.0	54.1		ug/L		108	65 - 130	4	25
Naphthalene	ND		25.0	28.9		ug/L		115	50 - 140	8	30
n-Butylbenzene	ND		25.0	27.9		ug/L		112	65 - 135	6	20
N-Propylbenzene	ND		25.0	25.9		ug/L		103	70 - 135	7	20
o-Xylene	ND		25.0	27.8		ug/L		111	65 - 125	4	20
p-Isopropyltoluene	ND		25.0	26.2		ug/L		105	65 - 130	6	20
sec-Butylbenzene	ND		25.0	26.0		ug/L		104	70 - 125	6	20
Styrene	ND		25.0	26.1		ug/L		105	50 - 145	5	30
tert-Butylbenzene	ND		25.0	26.3		ug/L		105	65 - 130	7	20
1,1,1,2-Tetrachloroethane	ND		25.0	27.4		ug/L		110	65 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	24.6		ug/L		98	55 - 135	4	30
Tetrachloroethene	66		25.0	80.6	F	ug/L		60	65 - 130	4	20
Toluene	ND		25.0	26.2		ug/L		105	70 - 125	6	20
trans-1,2-Dichloroethene	ND		25.0	24.4		ug/L		98	65 - 130	3	20
trans-1,3-Dichloropropene	ND		25.0	26.8		ug/L		107	65 - 135	4	25
1,2,3-Trichlorobenzene	ND		25.0	27.4		ug/L		110	60 - 135	8	20
1,2,4-Trichlorobenzene	ND		25.0	28.5		ug/L		114	65 - 135	5	20
1,1,1-Trichloroethane	ND		25.0	27.1		ug/L		109	65 - 140	5	20
1,1,2-Trichloroethane	0.50	J	25.0	25.6		ug/L		100	65 - 130	3	25
Trichloroethene	23		25.0	44.6		ug/L		86	65 - 125	5	20
Trichlorofluoromethane	ND		25.0	27.0		ug/L		108	60 - 145	5	25
1,2,3-Trichloropropane	ND		25.0	22.2		ug/L		89	55 - 135	2	30
1,2,4-Trimethylbenzene	ND		25.0	25.2		ug/L		101	55 - 135	8	25
1,3,5-Trimethylbenzene	ND		25.0	24.9		ug/L		99	70 - 130	8	20
Vinyl chloride	ND		25.0	28.6		ug/L		114	45 - 140	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

QC Sample Results

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 280-163359/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.086	ug/L		03/06/13 14:45	03/07/13 14:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*57 - 120*	*03/06/13 14:45*	*03/07/13 14:24*	*1*

Lab Sample ID: LCS 280-163359/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	7.07		ug/L		71	38 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*57 - 120*

Lab Sample ID: LCSD 280-163359/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163359**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	10.0	6.27		ug/L		63	38 - 120	12	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*57 - 120*

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: MB 440-88854/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 88854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		1.0	0.25	ug/L			03/01/13 14:39	1

Lab Sample ID: LCS 440-88854/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 88854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	50.0	51.1		ug/L		102	90 - 110

Lab Sample ID: 440-39051-A-9 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 88854

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	ND		50.0	49.7		ug/L		99	90 - 110

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography) (Continued)

Lab Sample ID: 440-39051-A-9 MSD
Matrix: Water
Analysis Batch: 88854

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	ND		50.0	50.6		ug/L		101	90 - 110	2	10

QC Association Summary

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

GC/MS VOA

Analysis Batch: 89977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39633-3	OC_GW_TB_030113	Total/NA	Water	8260B	
440-39676-F-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-39676-F-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-89977/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-89977/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 90027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39633-1	OC_GW_OW5_030113	Total/NA	Water	8260B	
440-39633-1 - DL	OC_GW_OW5_030113	Total/NA	Water	8260B	
440-39633-2	OC_GW_OW6_030113	Total/NA	Water	8260B	
440-39822-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
440-39822-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-90027/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-90027/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 163359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39633-1	OC_GW_OW5_030113	Total/NA	Water	3520C	
440-39633-2	OC_GW_OW6_030113	Total/NA	Water	3520C	
LCS 280-163359/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 280-163359/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 280-163359/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 163574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-163359/2-A	Lab Control Sample	Total/NA	Water	8270C LL	163359
LCSD 280-163359/3-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	163359
MB 280-163359/1-A	Method Blank	Total/NA	Water	8270C LL	163359

Analysis Batch: 163721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39633-1	OC_GW_OW5_030113	Total/NA	Water	8270C LL	163359
440-39633-2	OC_GW_OW6_030113	Total/NA	Water	8270C LL	163359

HPLC/IC

Analysis Batch: 88854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39051-A-9 MS	Matrix Spike	Dissolved	Water	218.6	
440-39051-A-9 MSD	Matrix Spike Duplicate	Dissolved	Water	218.6	
440-39633-1	OC_GW_OW5_030113	Dissolved	Water	218.6	
440-39633-2	OC_GW_OW6_030113	Dissolved	Water	218.6	
LCS 440-88854/2	Lab Control Sample	Total/NA	Water	218.6	
MB 440-88854/3	Method Blank	Total/NA	Water	218.6	

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.
*	LCS or LCSD 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.
F	MS or MSD exceeds the control limits

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
New Mexico	State Program	6	N/A	03-28-13
Northern Mariana Islands	State Program	9	MP0002	03-28-13
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13

Certification Summary

Client: de maximis, inc.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39633-1
SDG: 3139 F

Laboratory: TestAmerica Denver (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999615430	08-31-13
Wyoming (UST)	A2LA	8		10-31-13

#440-39433

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

Page 1 of 1

Client Name/Address: de maximis, 1322 Scott St. Suite 104, San Diego

Project/PO Number: 3139 F

Project Manager: Jaime Dinello

Phone Number: 619-546-8877

Sampler: Carlton Hamm

Fax Number: 619-546-9980

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOC'S (8260B) Including Acetone, Freons IPA, MTBE, TICs	1,4 Dioxane (8270M)	Hexavalent Chromium (218.6)							Special Instructions
OC-GW-OWS-030113	GW		6	3/1/13	0955		X	X	X							
OC-GW-OW6-030113	GW		6	3/1/13	0915		X	X	X							
OC-GW-TB-030113	W		3	3/1/13	0600		X									

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
	3/1/13 17:00	TAI	3/1/13 17:00	same day ____ 72 hours ____
Relinquished By: TAI	Date/Time: 3-1-13 18:20	Received By:	Date/Time:	24 hours ____ 5 days ____
				48 hours ____ normal ____
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time: 3/1/13 18:20	Sample Integrity: (Check)
				intact ____ on ice ____

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.

3/1/27

Login Sample Receipt Checklist

Client: de maximis, inc.

Job Number: 440-39633-1
SDG Number: 3139 F

Login Number: 39633
List Number: 1
Creator: Avila, Stephanie

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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	Carlton Hamm
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: de maximis, inc.

Job Number: 440-39633-1
SDG Number: 3139 F

Login Number: 39633
List Number: 1
Creator: Bindel, Aaron M

List Source: TestAmerica Denver
List Creation: 03/06/13 10:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
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?	False	
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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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: 440-39676-1
Client Project/Site: Omega Chemical Groundwater
Revision: 1

For:
Jacob & Hefner Associates P.C.
15375 Barranca Parkway, J-101
Irvine, California 92618

Attn: Andrew Miller

Authorized for release by:
3/29/2013 8:56:04 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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Method Summary 26
Chronicle 27
QC Sample Results 30
QC Association 49
Definitions 51
Certification Summary 52
Chain of Custody 54
Receipt Checklists 56

Sample Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-39676-1	OC-GW-OW10-030113	Water	03/01/13 12:58	03/01/13 20:24
440-39676-3	OC-GW-OW3B-030113	Water	03/01/13 11:30	03/01/13 20:24
440-39676-5	OC-GW-PZ3-030113	Water	03/01/13 15:45	03/01/13 20:24
440-39676-6	OC-GW-OW1B-030113	Water	03/01/13 16:54	03/01/13 20:24
440-39676-7	OC-GW-PZ9N-030113	Water	03/01/13 16:00	03/01/13 20:24
440-39676-8	OC-GW-OW3-030113	Water	03/01/13 17:57	03/01/13 20:24
440-39676-9	OC-GW-EW1-030113	Water	03/01/13 16:52	03/01/13 20:24
440-39676-10	OC-GW-EW2-030113	Water	03/01/13 17:05	03/01/13 20:24
440-39676-11	OC-GW-EW3-030113	Water	03/01/13 17:25	03/01/13 20:24
440-39676-12	OC-GW-EW4-030113	Water	03/01/13 17:35	03/01/13 20:24
440-39676-13	OC-GW-EW5-030113	Water	03/01/13 17:45	03/01/13 20:24
440-39676-14	OC-GW-TB-030113	Water	03/01/13 06:00	03/01/13 20:24

Job ID: 440-39676-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-39676-1

Comments
Sample OC-GW-OW9-030113 is reported separately due to need for Level 4 data package.
This report was revised on 3/29/13 to remove sample OC-GW-PZ9-030113 results and put them with the Level 4 data package as requested.

Receipt
The samples were received on 3/1/2013 8:24 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.7º C, 6.8º C and 15.6º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Acetone associated with batch 89977 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) for batch 89977 exceeded control limits for Acetone. 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.

GC/MS Semi VOA
Method 8270C: Due to the level of dilution required for the following sample, surrogate recoveries are considered diluted out: OC-GW-PZ9-030113 (440-39676-4).

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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-OW10-030113

Lab Sample ID: 440-39676-1

Date Collected: 03/01/13 12:58

Matrix: Water

Date Received: 03/01/13 20:24

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			03/07/13 01:28	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 01:28	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 01:28	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 01:28	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 01:28	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 01:28	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 01:28	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 01:28	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 01:28	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 01:28	1
Chloroform	ND		1.0	0.33	ug/L			03/07/13 01:28	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 01:28	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 01:28	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 01:28	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 01:28	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 01:28	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 01:28	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 01:28	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 01:28	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 01:28	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 01:28	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 01:28	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 01:28	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 01:28	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 01:28	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 01:28	1
1,1-Dichloroethene	**79**		1.0	0.42	ug/L			03/07/13 01:28	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 01:28	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 01:28	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 01:28	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 01:28	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 01:28	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 01:28	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 01:28	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 01:28	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 01:28	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 01:28	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 01:28	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 01:28	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 01:28	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 01:28	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 01:28	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 01:28	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 01:28	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 01:28	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 01:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 01:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 01:28	1
Tetrachloroethene	**61**		1.0	0.32	ug/L			03/07/13 01:28	1

Client Sample ID: OC-GW-OW10-030113

Lab Sample ID: 440-39676-1

Date Collected: 03/01/13 12:58

Matrix: Water

Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.36	ug/L			03/07/13 01:28	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 01:28	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 01:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 01:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 01:28	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 01:28	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 01:28	1
Trichloroethene	**5.3**		1.0	0.26	ug/L			03/07/13 01:28	1
Trichlorofluoromethane	**17**		1.0	0.34	ug/L			03/07/13 01:28	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 01:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**19**		5.0	0.50	ug/L			03/07/13 01:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 01:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 01:28	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 01:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dimethyl disulfide	*0.58*	*J*	*ug/L*		*8.52*	*624-92-0*		*03/07/13 01:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*		*03/07/13 01:28*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*03/07/13 01:28*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*03/07/13 01:28*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.21**	**J**	0.96	0.082	ug/L		03/06/13 15:40	03/07/13 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*57 - 120*	*03/06/13 15:40*	*03/07/13 16:24*	*1*

Client Sample ID: OC-GW-OW3B-030113

Lab Sample ID: 440-39676-3

Date Collected: 03/01/13 11:30

Matrix: Water

Date Received: 03/01/13 20:24

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			03/06/13 23:34	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 23:34	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 23:34	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 23:34	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 23:34	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 23:34	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 23:34	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 23:34	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 23:34	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 23:34	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 23:34	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 23:34	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 23:34	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 23:34	1

Client Sample ID: OC-GW-OW3B-030113
Date Collected: 03/01/13 11:30
Date Received: 03/01/13 20:24

Lab Sample ID: 440-39676-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 23:34	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 23:34	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 23:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 23:34	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 23:34	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 23:34	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 23:34	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 23:34	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 23:34	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 23:34	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 23:34	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 23:34	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 23:34	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 23:34	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 23:34	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 23:34	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 23:34	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 23:34	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 23:34	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 23:34	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 23:34	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 23:34	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 23:34	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 23:34	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 23:34	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 23:34	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 23:34	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 23:34	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 23:34	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 23:34	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 23:34	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 23:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 23:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 23:34	1
Tetrachloroethene	**2.3**		1.0	0.32	ug/L			03/06/13 23:34	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 23:34	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 23:34	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 23:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 23:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 23:34	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 23:34	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 23:34	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 23:34	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 23:34	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 23:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 23:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 23:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 23:34	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 23:34	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-OW3B-030113

Lab Sample ID: 440-39676-3
Matrix: Water
Date Collected: 03/01/13 11:30
Date Received: 03/01/13 20:24

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					03/06/13 23:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		80 - 120		03/06/13 23:34	1
Dibromofluoromethane (Surr)	106		80 - 120		03/06/13 23:34	1
Toluene-d8 (Surr)	113		80 - 120		03/06/13 23:34	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.95	0.082	ug/L		03/06/13 15:40	03/07/13 17:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	81		57 - 120	03/06/13 15:40	03/07/13 17:12	1

Client Sample ID: OC-GW-PZ3-030113

Lab Sample ID: 440-39676-5
Matrix: Water
Date Collected: 03/01/13 15:45
Date Received: 03/01/13 20:24

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			03/07/13 03:50	2
Benzene	ND		1.0	0.56	ug/L			03/07/13 03:50	2
Bromobenzene	ND		2.0	0.54	ug/L			03/07/13 03:50	2
Bromochloromethane	ND		2.0	0.80	ug/L			03/07/13 03:50	2
Bromodichloromethane	ND		2.0	0.60	ug/L			03/07/13 03:50	2
Bromoform	ND		2.0	0.80	ug/L			03/07/13 03:50	2
Bromomethane	ND		2.0	0.84	ug/L			03/07/13 03:50	2
Carbon tetrachloride	ND		1.0	0.56	ug/L			03/07/13 03:50	2
Chlorobenzene	ND		2.0	0.72	ug/L			03/07/13 03:50	2
Chloroethane	ND		2.0	0.80	ug/L			03/07/13 03:50	2
Chloroform	**1.3**	**J**	2.0	0.66	ug/L			03/07/13 03:50	2
Chloromethane	ND		2.0	0.80	ug/L			03/07/13 03:50	2
2-Chlorotoluene	ND		2.0	0.56	ug/L			03/07/13 03:50	2
4-Chlorotoluene	ND		2.0	0.58	ug/L			03/07/13 03:50	2
cis-1,2-Dichloroethene	ND		2.0	0.64	ug/L			03/07/13 03:50	2
cis-1,3-Dichloropropene	ND		1.0	0.44	ug/L			03/07/13 03:50	2
Dibromochloromethane	ND		2.0	0.80	ug/L			03/07/13 03:50	2
1,2-Dibromo-3-Chloropropane	ND		10	1.9	ug/L			03/07/13 03:50	2
1,2-Dibromoethane (EDB)	ND		2.0	0.80	ug/L			03/07/13 03:50	2
Dibromomethane	ND		2.0	0.72	ug/L			03/07/13 03:50	2
1,2-Dichlorobenzene	ND		2.0	0.64	ug/L			03/07/13 03:50	2
1,3-Dichlorobenzene	ND		2.0	0.70	ug/L			03/07/13 03:50	2
1,4-Dichlorobenzene	ND		2.0	0.74	ug/L			03/07/13 03:50	2
Dichlorodifluoromethane	ND		2.0	0.52	ug/L			03/07/13 03:50	2
1,1-Dichloroethane	**0.82**	**J**	2.0	0.80	ug/L			03/07/13 03:50	2
1,2-Dichloroethane	ND		2.0	0.56	ug/L			03/07/13 03:50	2
1,1-Dichloroethene	**240**		2.0	0.84	ug/L			03/07/13 03:50	2
1,2-Dichloropropane	ND		2.0	0.70	ug/L			03/07/13 03:50	2
1,3-Dichloropropane	ND		2.0	0.64	ug/L			03/07/13 03:50	2
2,2-Dichloropropane	ND		2.0	0.68	ug/L			03/07/13 03:50	2
1,1-Dichloropropene	ND		2.0	0.56	ug/L			03/07/13 03:50	2

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-PZ3-030113

Lab Sample ID: 440-39676-5

Date Collected: 03/01/13 15:45
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.0	0.50	ug/L			03/07/13 03:50	2
Hexachlorobutadiene	ND		2.0	0.76	ug/L			03/07/13 03:50	2
Isopropyl alcohol	ND		200	100	ug/L			03/07/13 03:50	2
Isopropylbenzene	ND		2.0	0.50	ug/L			03/07/13 03:50	2
Methylene Chloride	ND		10	1.9	ug/L			03/07/13 03:50	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.64	ug/L			03/07/13 03:50	2
m,p-Xylene	ND		2.0	1.2	ug/L			03/07/13 03:50	2
Naphthalene	ND		2.0	0.82	ug/L			03/07/13 03:50	2
n-Butylbenzene	ND		2.0	0.74	ug/L			03/07/13 03:50	2
N-Propylbenzene	ND		2.0	0.54	ug/L			03/07/13 03:50	2
o-Xylene	ND		2.0	0.60	ug/L			03/07/13 03:50	2
p-Isopropyltoluene	ND		2.0	0.56	ug/L			03/07/13 03:50	2
sec-Butylbenzene	ND		2.0	0.50	ug/L			03/07/13 03:50	2
Styrene	ND		2.0	0.40	ug/L			03/07/13 03:50	2
tert-Butylbenzene	ND		2.0	0.44	ug/L			03/07/13 03:50	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.54	ug/L			03/07/13 03:50	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.60	ug/L			03/07/13 03:50	2
Toluene	ND		2.0	0.72	ug/L			03/07/13 03:50	2
trans-1,2-Dichloroethene	ND		2.0	0.60	ug/L			03/07/13 03:50	2
trans-1,3-Dichloropropene	ND		1.0	0.64	ug/L			03/07/13 03:50	2
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/L			03/07/13 03:50	2
1,2,4-Trichlorobenzene	ND		2.0	0.96	ug/L			03/07/13 03:50	2
1,1,1-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 03:50	2
1,1,2-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 03:50	2
Trichloroethene	**100**		2.0	0.52	ug/L			03/07/13 03:50	2
Trichlorofluoromethane	**53**		2.0	0.68	ug/L			03/07/13 03:50	2
1,2,3-Trichloropropane	ND		2.0	0.80	ug/L			03/07/13 03:50	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**77**		10	1.0	ug/L			03/07/13 03:50	2
1,2,4-Trimethylbenzene	ND		2.0	0.46	ug/L			03/07/13 03:50	2
1,3,5-Trimethylbenzene	ND		2.0	0.52	ug/L			03/07/13 03:50	2
Vinyl chloride	ND		1.0	0.80	ug/L			03/07/13 03:50	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 03:50*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*		*03/07/13 03:50*	*2*
Dibromofluoromethane (Surr)	*118*		*80 - 120*		*03/07/13 03:50*	*2*
Toluene-d8 (Surr)	*111*		*80 - 120*		*03/07/13 03:50*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**470**		10	3.2	ug/L			03/07/13 04:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/07/13 04:18*	*10*
Dibromofluoromethane (Surr)	*114*		*80 - 120*		*03/07/13 04:18*	*10*
Toluene-d8 (Surr)	*109*		*80 - 120*		*03/07/13 04:18*	*10*

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-PZ3-030113

Lab Sample ID: 440-39676-5

Date Collected: 03/01/13 15:45
Matrix: Water
Date Received: 03/01/13 20:24

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	J	0.96	0.082	ug/L		03/06/13 15:40	03/07/13 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*57 - 120*	*03/06/13 15:40*	*03/07/13 18:49*	*1*

Client Sample ID: OC-GW-OW1B-030113

Lab Sample ID: 440-39676-6

Date Collected: 03/01/13 16:54
Matrix: Water
Date Received: 03/01/13 20:24

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			03/07/13 04:46	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 04:46	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 04:46	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 04:46	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 04:46	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 04:46	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 04:46	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 04:46	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 04:46	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 04:46	1
Chloroform	ND		1.0	0.33	ug/L			03/07/13 04:46	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 04:46	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 04:46	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 04:46	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 04:46	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 04:46	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 04:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 04:46	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 04:46	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 04:46	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 04:46	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 04:46	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 04:46	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 04:46	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 04:46	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 04:46	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/07/13 04:46	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 04:46	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 04:46	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 04:46	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 04:46	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 04:46	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 04:46	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 04:46	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 04:46	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 04:46	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 04:46	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 04:46	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 04:46	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-OW1B-030113

Lab Sample ID: 440-39676-6

Date Collected: 03/01/13 16:54
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 04:46	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 04:46	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 04:46	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 04:46	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 04:46	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 04:46	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 04:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 04:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 04:46	1
Tetrachloroethene	**5.1**		1.0	0.32	ug/L			03/07/13 04:46	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 04:46	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 04:46	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 04:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 04:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 04:46	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 04:46	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 04:46	1
Trichloroethene	**0.30**	**J**	1.0	0.26	ug/L			03/07/13 04:46	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/07/13 04:46	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 04:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/07/13 04:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 04:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 04:46	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 04:46	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 04:46*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/07/13 04:46*	*1*
Dibromofluoromethane (Surr)	*117*		*80 - 120*		*03/07/13 04:46*	*1*
Toluene-d8 (Surr)	*112*		*80 - 120*		*03/07/13 04:46*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.41**	**J**	0.95	0.082	ug/L		03/06/13 15:40	03/07/13 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*57 - 120*	*03/06/13 15:40*	*03/07/13 19:13*	*1*

Client Sample ID: OC-GW-PZ9N-030113

Lab Sample ID: 440-39676-7

Date Collected: 03/01/13 16:00
Matrix: Water
Date Received: 03/01/13 20:24

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			03/07/13 12:56	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 12:56	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 12:56	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 12:56	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 12:56	1

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-PZ9N-030113
Date Collected: 03/01/13 16:00
Date Received: 03/01/13 20:24

Lab Sample ID: 440-39676-7
Matrix: Water

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			03/07/13 12:56	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 12:56	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 12:56	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 12:56	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 12:56	1
Chloroform	**4.7**		1.0	0.33	ug/L			03/07/13 12:56	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 12:56	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 12:56	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 12:56	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 12:56	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 12:56	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 12:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 12:56	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 12:56	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 12:56	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 12:56	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 12:56	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 12:56	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 12:56	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 12:56	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 12:56	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/07/13 12:56	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 12:56	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 12:56	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 12:56	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 12:56	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 12:56	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 12:56	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 12:56	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 12:56	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 12:56	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 12:56	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 12:56	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 12:56	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 12:56	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 12:56	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 12:56	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 12:56	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 12:56	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 12:56	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 12:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 12:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 12:56	1
Tetrachloroethene	ND		1.0	0.32	ug/L			03/07/13 12:56	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 12:56	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 12:56	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 12:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 12:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 12:56	1

Client Sample ID: OC-GW-PZ9N-030113

Lab Sample ID: 440-39676-7

Date Collected: 03/01/13 16:00

Matrix: Water

Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 12:56	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 12:56	1
Trichloroethene	ND		1.0	0.26	ug/L			03/07/13 12:56	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/07/13 12:56	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 12:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/07/13 12:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 12:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 12:56	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 12:56	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 12:56*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/07/13 12:56*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/07/13 12:56*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/07/13 12:56*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.95	0.082	ug/L		03/06/13 15:40	03/07/13 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*57 - 120*	*03/06/13 15:40*	*03/07/13 19:38*	*1*

Client Sample ID: OC-GW-OW3-030113

Lab Sample ID: 440-39676-8

Date Collected: 03/01/13 17:57

Matrix: Water

Date Received: 03/01/13 20:24

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			03/07/13 14:19	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 14:19	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 14:19	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 14:19	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 14:19	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 14:19	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 14:19	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 14:19	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 14:19	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 14:19	1
Chloroform	**6.5**		1.0	0.33	ug/L			03/07/13 14:19	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 14:19	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 14:19	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 14:19	1
cis-1,2-Dichloroethene	**0.40**	**J**	1.0	0.32	ug/L			03/07/13 14:19	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 14:19	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 14:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 14:19	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 14:19	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 14:19	1

Client Sample ID: OC-GW-OW3-030113

Lab Sample ID: 440-39676-8

Date Collected: 03/01/13 17:57

Matrix: Water

Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 14:19	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 14:19	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 14:19	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 14:19	1
1,1-Dichloroethane	**0.58**	**J**	1.0	0.40	ug/L			03/07/13 14:19	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 14:19	1
1,1-Dichloroethene	**65**		1.0	0.42	ug/L			03/07/13 14:19	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 14:19	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 14:19	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 14:19	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 14:19	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 14:19	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 14:19	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 14:19	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 14:19	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 14:19	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 14:19	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 14:19	1
Naphthalene	**0.46**	**J**	1.0	0.41	ug/L			03/07/13 14:19	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 14:19	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 14:19	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 14:19	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 14:19	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 14:19	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 14:19	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 14:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 14:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 14:19	1
Tetrachloroethene	**190**		1.0	0.32	ug/L			03/07/13 14:19	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 14:19	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 14:19	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 14:19	1
1,2,3-Trichlorobenzene	**0.38**	**J**	1.0	0.30	ug/L			03/07/13 14:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 14:19	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 14:19	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 14:19	1
Trichloroethene	**20**		1.0	0.26	ug/L			03/07/13 14:19	1
Trichlorofluoromethane	**5.1**		1.0	0.34	ug/L			03/07/13 14:19	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 14:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**6.2**		5.0	0.50	ug/L			03/07/13 14:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 14:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 14:19	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 14:19	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 14:19*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*03/07/13 14:19*	*1*

Client Sample ID: OC-GW-OW3-030113

Lab Sample ID: 440-39676-8

Date Collected: 03/01/13 17:57

Matrix: Water

Date Received: 03/01/13 20:24

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/07/13 14:19*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*03/07/13 14:19*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.8**		0.95	0.082	ug/L		03/06/13 15:40	03/07/13 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*57 - 120*	*03/06/13 15:40*	*03/07/13 20:02*	*1*

Client Sample ID: OC-GW-EW1-030113

Lab Sample ID: 440-39676-9

Date Collected: 03/01/13 16:52

Matrix: Water

Date Received: 03/01/13 20:24

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			03/07/13 14:46	2
Benzene	ND		1.0	0.56	ug/L			03/07/13 14:46	2
Bromobenzene	ND		2.0	0.54	ug/L			03/07/13 14:46	2
Bromochloromethane	ND		2.0	0.80	ug/L			03/07/13 14:46	2
Bromodichloromethane	ND		2.0	0.60	ug/L			03/07/13 14:46	2
Bromoform	ND		2.0	0.80	ug/L			03/07/13 14:46	2
Bromomethane	ND		2.0	0.84	ug/L			03/07/13 14:46	2
Carbon tetrachloride	ND		1.0	0.56	ug/L			03/07/13 14:46	2
Chlorobenzene	ND		2.0	0.72	ug/L			03/07/13 14:46	2
Chloroethane	ND		2.0	0.80	ug/L			03/07/13 14:46	2
Chloroform	**4.0**		2.0	0.66	ug/L			03/07/13 14:46	2
Chloromethane	ND		2.0	0.80	ug/L			03/07/13 14:46	2
2-Chlorotoluene	ND		2.0	0.56	ug/L			03/07/13 14:46	2
4-Chlorotoluene	ND		2.0	0.58	ug/L			03/07/13 14:46	2
cis-1,2-Dichloroethene	ND		2.0	0.64	ug/L			03/07/13 14:46	2
cis-1,3-Dichloropropene	ND		1.0	0.44	ug/L			03/07/13 14:46	2
Dibromochloromethane	ND		2.0	0.80	ug/L			03/07/13 14:46	2
1,2-Dibromo-3-Chloropropane	ND		10	1.9	ug/L			03/07/13 14:46	2
1,2-Dibromoethane (EDB)	ND		2.0	0.80	ug/L			03/07/13 14:46	2
Dibromomethane	ND		2.0	0.72	ug/L			03/07/13 14:46	2
1,2-Dichlorobenzene	ND		2.0	0.64	ug/L			03/07/13 14:46	2
1,3-Dichlorobenzene	ND		2.0	0.70	ug/L			03/07/13 14:46	2
1,4-Dichlorobenzene	ND		2.0	0.74	ug/L			03/07/13 14:46	2
Dichlorodifluoromethane	ND		2.0	0.52	ug/L			03/07/13 14:46	2
1,1-Dichloroethane	**0.91**	**J**	2.0	0.80	ug/L			03/07/13 14:46	2
1,2-Dichloroethane	ND		2.0	0.56	ug/L			03/07/13 14:46	2
1,1-Dichloroethene	**130**		2.0	0.84	ug/L			03/07/13 14:46	2
1,2-Dichloropropane	ND		2.0	0.70	ug/L			03/07/13 14:46	2
1,3-Dichloropropane	ND		2.0	0.64	ug/L			03/07/13 14:46	2
2,2-Dichloropropane	ND		2.0	0.68	ug/L			03/07/13 14:46	2
1,1-Dichloropropene	ND		2.0	0.56	ug/L			03/07/13 14:46	2
Ethylbenzene	ND		2.0	0.50	ug/L			03/07/13 14:46	2
Hexachlorobutadiene	ND		2.0	0.76	ug/L			03/07/13 14:46	2
Isopropyl alcohol	ND		200	100	ug/L			03/07/13 14:46	2

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-EW1-030113

Date Collected: 03/01/13 16:52
Date Received: 03/01/13 20:24

Lab Sample ID: 440-39676-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		2.0	0.50	ug/L			03/07/13 14:46	2
Methylene Chloride	**3.0**	**J**	10	1.9	ug/L			03/07/13 14:46	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.64	ug/L			03/07/13 14:46	2
m,p-Xylene	ND		2.0	1.2	ug/L			03/07/13 14:46	2
Naphthalene	ND		2.0	0.82	ug/L			03/07/13 14:46	2
n-Butylbenzene	ND		2.0	0.74	ug/L			03/07/13 14:46	2
N-Propylbenzene	ND		2.0	0.54	ug/L			03/07/13 14:46	2
o-Xylene	ND		2.0	0.60	ug/L			03/07/13 14:46	2
p-Isopropyltoluene	ND		2.0	0.56	ug/L			03/07/13 14:46	2
sec-Butylbenzene	ND		2.0	0.50	ug/L			03/07/13 14:46	2
Styrene	ND		2.0	0.40	ug/L			03/07/13 14:46	2
tert-Butylbenzene	ND		2.0	0.44	ug/L			03/07/13 14:46	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.54	ug/L			03/07/13 14:46	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.60	ug/L			03/07/13 14:46	2
Toluene	ND		2.0	0.72	ug/L			03/07/13 14:46	2
trans-1,2-Dichloroethene	ND		2.0	0.60	ug/L			03/07/13 14:46	2
trans-1,3-Dichloropropene	ND		1.0	0.64	ug/L			03/07/13 14:46	2
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/L			03/07/13 14:46	2
1,2,4-Trichlorobenzene	ND		2.0	0.96	ug/L			03/07/13 14:46	2
1,1,1-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 14:46	2
1,1,2-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 14:46	2
Trichloroethene	**63**		2.0	0.52	ug/L			03/07/13 14:46	2
Trichlorofluoromethane	**39**		2.0	0.68	ug/L			03/07/13 14:46	2
1,2,3-Trichloropropane	ND		2.0	0.80	ug/L			03/07/13 14:46	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**120**		10	1.0	ug/L			03/07/13 14:46	2
1,2,4-Trimethylbenzene	ND		2.0	0.46	ug/L			03/07/13 14:46	2
1,3,5-Trimethylbenzene	ND		2.0	0.52	ug/L			03/07/13 14:46	2
Vinyl chloride	ND		1.0	0.80	ug/L			03/07/13 14:46	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*2.3*		*ug/L*		*3.42*	*75-43-4*		*03/07/13 14:46*	*2*
1,2-Dichloro-1,1,2-trifluoroethane	*5.5*		*ug/L*		*3.82*	*354-23-4*		*03/07/13 14:46*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*03/07/13 14:46*	*2*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/07/13 14:46*	*2*
Toluene-d8 (Surr)	*105*		*80 - 120*		*03/07/13 14:46*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**540**		10	3.2	ug/L			03/07/13 15:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/07/13 15:14*	*10*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*03/07/13 15:14*	*10*
Toluene-d8 (Surr)	*108*		*80 - 120*		*03/07/13 15:14*	*10*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.6**		0.97	0.083	ug/L		03/06/13 15:40	03/07/13 20:26	1

Client Sample ID: OC-GW-EW1-030113

Lab Sample ID: 440-39676-9

Date Collected: 03/01/13 16:52
Matrix: Water
Date Received: 03/01/13 20:24

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	72		57 - 120	03/06/13 15:40	03/07/13 20:26	1

Client Sample ID: OC-GW-EW2-030113

Lab Sample ID: 440-39676-10

Date Collected: 03/01/13 17:05
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50	23	ug/L			03/07/13 15:42	5
Benzene	ND		2.5	1.4	ug/L			03/07/13 15:42	5
Bromobenzene	ND		5.0	1.4	ug/L			03/07/13 15:42	5
Bromochloromethane	ND		5.0	2.0	ug/L			03/07/13 15:42	5
Bromodichloromethane	ND		5.0	1.5	ug/L			03/07/13 15:42	5
Bromoform	ND		5.0	2.0	ug/L			03/07/13 15:42	5
Bromomethane	ND		5.0	2.1	ug/L			03/07/13 15:42	5
Carbon tetrachloride	ND		2.5	1.4	ug/L			03/07/13 15:42	5
Chlorobenzene	ND		5.0	1.8	ug/L			03/07/13 15:42	5
Chloroethane	ND		5.0	2.0	ug/L			03/07/13 15:42	5
Chloroform	**83**		5.0	1.7	ug/L			03/07/13 15:42	5
Chloromethane	ND		5.0	2.0	ug/L			03/07/13 15:42	5
2-Chlorotoluene	ND		5.0	1.4	ug/L			03/07/13 15:42	5
4-Chlorotoluene	ND		5.0	1.5	ug/L			03/07/13 15:42	5
cis-1,2-Dichloroethene	ND		5.0	1.6	ug/L			03/07/13 15:42	5
cis-1,3-Dichloropropene	ND		2.5	1.1	ug/L			03/07/13 15:42	5
Dibromochloromethane	ND		5.0	2.0	ug/L			03/07/13 15:42	5
1,2-Dibromo-3-Chloropropane	ND		25	4.9	ug/L			03/07/13 15:42	5
1,2-Dibromoethane (EDB)	ND		5.0	2.0	ug/L			03/07/13 15:42	5
Dibromomethane	ND		5.0	1.8	ug/L			03/07/13 15:42	5
1,2-Dichlorobenzene	ND		5.0	1.6	ug/L			03/07/13 15:42	5
1,3-Dichlorobenzene	ND		5.0	1.8	ug/L			03/07/13 15:42	5
1,4-Dichlorobenzene	ND		5.0	1.9	ug/L			03/07/13 15:42	5
Dichlorodifluoromethane	ND		5.0	1.3	ug/L			03/07/13 15:42	5
1,1-Dichloroethane	**3.0**	**J**	5.0	2.0	ug/L			03/07/13 15:42	5
1,2-Dichloroethane	**15**		5.0	1.4	ug/L			03/07/13 15:42	5
1,1-Dichloroethene	**140**		5.0	2.1	ug/L			03/07/13 15:42	5
1,2-Dichloropropane	ND		5.0	1.8	ug/L			03/07/13 15:42	5
1,3-Dichloropropane	ND		5.0	1.6	ug/L			03/07/13 15:42	5
2,2-Dichloropropane	ND		5.0	1.7	ug/L			03/07/13 15:42	5
1,1-Dichloropropene	ND		5.0	1.4	ug/L			03/07/13 15:42	5
Ethylbenzene	ND		5.0	1.3	ug/L			03/07/13 15:42	5
Hexachlorobutadiene	ND		5.0	1.9	ug/L			03/07/13 15:42	5
Isopropyl alcohol	ND		500	250	ug/L			03/07/13 15:42	5
Isopropylbenzene	ND		5.0	1.3	ug/L			03/07/13 15:42	5
Methylene Chloride	**8.5**	**J**	25	4.8	ug/L			03/07/13 15:42	5
Methyl-t-Butyl Ether (MTBE)	ND		5.0	1.6	ug/L			03/07/13 15:42	5
m,p-Xylene	ND		5.0	3.0	ug/L			03/07/13 15:42	5
Naphthalene	ND		5.0	2.1	ug/L			03/07/13 15:42	5
n-Butylbenzene	ND		5.0	1.9	ug/L			03/07/13 15:42	5
N-Propylbenzene	ND		5.0	1.4	ug/L			03/07/13 15:42	5
o-Xylene	ND		5.0	1.5	ug/L			03/07/13 15:42	5

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-EW2-030113

Lab Sample ID: 440-39676-10

Date Collected: 03/01/13 17:05
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		5.0	1.4	ug/L			03/07/13 15:42	5
sec-Butylbenzene	ND		5.0	1.3	ug/L			03/07/13 15:42	5
Styrene	ND		5.0	1.0	ug/L			03/07/13 15:42	5
tert-Butylbenzene	ND		5.0	1.1	ug/L			03/07/13 15:42	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.4	ug/L			03/07/13 15:42	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.5	ug/L			03/07/13 15:42	5
Toluene	ND		5.0	1.8	ug/L			03/07/13 15:42	5
trans-1,2-Dichloroethene	**1.5**	**J**	5.0	1.5	ug/L			03/07/13 15:42	5
trans-1,3-Dichloropropene	ND		2.5	1.6	ug/L			03/07/13 15:42	5
1,2,3-Trichlorobenzene	ND		5.0	1.5	ug/L			03/07/13 15:42	5
1,2,4-Trichlorobenzene	ND		5.0	2.4	ug/L			03/07/13 15:42	5
1,1,1-Trichloroethane	ND		5.0	1.5	ug/L			03/07/13 15:42	5
1,1,2-Trichloroethane	ND		5.0	1.5	ug/L			03/07/13 15:42	5
Trichloroethene	**91**		5.0	1.3	ug/L			03/07/13 15:42	5
Trichlorofluoromethane	**57**		5.0	1.7	ug/L			03/07/13 15:42	5
1,2,3-Trichloropropane	ND		5.0	2.0	ug/L			03/07/13 15:42	5
1,1,2-Trichloro-1,2,2-trifluoroethane	**210**		25	2.5	ug/L			03/07/13 15:42	5
1,2,4-Trimethylbenzene	ND		5.0	1.2	ug/L			03/07/13 15:42	5
1,3,5-Trimethylbenzene	ND		5.0	1.3	ug/L			03/07/13 15:42	5
Vinyl chloride	ND		2.5	2.0	ug/L			03/07/13 15:42	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Dichlorofluoromethane	*5.5*		*ug/L*		*3.41*	*75-43-4*		*03/07/13 15:42*	*5*
1,2-Dichloro-1,1,2-trifluoroethane	*8.8*	*J*	*ug/L*		*3.83*	*354-23-4*		*03/07/13 15:42*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/07/13 15:42*	*5*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/07/13 15:42*	*5*
Toluene-d8 (Surr)	*104*		*80 - 120*		*03/07/13 15:42*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**2500**		40	13	ug/L			03/07/13 16:09	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/07/13 16:09*	*40*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/07/13 16:09*	*40*
Toluene-d8 (Surr)	*107*		*80 - 120*		*03/07/13 16:09*	*40*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**75**		0.96	0.083	ug/L		03/06/13 15:40	03/07/13 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*57 - 120*	*03/06/13 15:40*	*03/07/13 20:51*	*1*

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-EW3-030113

Lab Sample ID: 440-39676-11

Date Collected: 03/01/13 17:25
Matrix: Water
Date Received: 03/01/13 20:24

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			03/07/13 16:37	2
Benzene	ND		1.0	0.56	ug/L			03/07/13 16:37	2
Bromobenzene	ND		2.0	0.54	ug/L			03/07/13 16:37	2
Bromochloromethane	ND		2.0	0.80	ug/L			03/07/13 16:37	2
Bromodichloromethane	ND		2.0	0.60	ug/L			03/07/13 16:37	2
Bromoform	ND		2.0	0.80	ug/L			03/07/13 16:37	2
Bromomethane	ND		2.0	0.84	ug/L			03/07/13 16:37	2
Carbon tetrachloride	ND		1.0	0.56	ug/L			03/07/13 16:37	2
Chlorobenzene	ND		2.0	0.72	ug/L			03/07/13 16:37	2
Chloroethane	ND		2.0	0.80	ug/L			03/07/13 16:37	2
Chloroform	**15**		2.0	0.66	ug/L			03/07/13 16:37	2
Chloromethane	ND		2.0	0.80	ug/L			03/07/13 16:37	2
2-Chlorotoluene	ND		2.0	0.56	ug/L			03/07/13 16:37	2
4-Chlorotoluene	ND		2.0	0.58	ug/L			03/07/13 16:37	2
cis-1,2-Dichloroethene	ND		2.0	0.64	ug/L			03/07/13 16:37	2
cis-1,3-Dichloropropene	ND		1.0	0.44	ug/L			03/07/13 16:37	2
Dibromochloromethane	ND		2.0	0.80	ug/L			03/07/13 16:37	2
1,2-Dibromo-3-Chloropropane	ND		10	1.9	ug/L			03/07/13 16:37	2
1,2-Dibromoethane (EDB)	ND		2.0	0.80	ug/L			03/07/13 16:37	2
Dibromomethane	ND		2.0	0.72	ug/L			03/07/13 16:37	2
1,2-Dichlorobenzene	ND		2.0	0.64	ug/L			03/07/13 16:37	2
1,3-Dichlorobenzene	ND		2.0	0.70	ug/L			03/07/13 16:37	2
1,4-Dichlorobenzene	ND		2.0	0.74	ug/L			03/07/13 16:37	2
Dichlorodifluoromethane	ND		2.0	0.52	ug/L			03/07/13 16:37	2
1,1-Dichloroethane	**1.2**	**J**	2.0	0.80	ug/L			03/07/13 16:37	2
1,2-Dichloroethane	ND		2.0	0.56	ug/L			03/07/13 16:37	2
1,1-Dichloroethene	**180**		2.0	0.84	ug/L			03/07/13 16:37	2
1,2-Dichloropropane	ND		2.0	0.70	ug/L			03/07/13 16:37	2
1,3-Dichloropropane	ND		2.0	0.64	ug/L			03/07/13 16:37	2
2,2-Dichloropropane	ND		2.0	0.68	ug/L			03/07/13 16:37	2
1,1-Dichloropropene	ND		2.0	0.56	ug/L			03/07/13 16:37	2
Ethylbenzene	ND		2.0	0.50	ug/L			03/07/13 16:37	2
Hexachlorobutadiene	ND		2.0	0.76	ug/L			03/07/13 16:37	2
Isopropyl alcohol	ND		200	100	ug/L			03/07/13 16:37	2
Isopropylbenzene	ND		2.0	0.50	ug/L			03/07/13 16:37	2
Methylene Chloride	**3.2**	**J**	10	1.9	ug/L			03/07/13 16:37	2
Methyl-t-Butyl Ether (MTBE)	ND		2.0	0.64	ug/L			03/07/13 16:37	2
m,p-Xylene	ND		2.0	1.2	ug/L			03/07/13 16:37	2
Naphthalene	ND		2.0	0.82	ug/L			03/07/13 16:37	2
n-Butylbenzene	ND		2.0	0.74	ug/L			03/07/13 16:37	2
N-Propylbenzene	ND		2.0	0.54	ug/L			03/07/13 16:37	2
o-Xylene	ND		2.0	0.60	ug/L			03/07/13 16:37	2
p-Isopropyltoluene	ND		2.0	0.56	ug/L			03/07/13 16:37	2
sec-Butylbenzene	ND		2.0	0.50	ug/L			03/07/13 16:37	2
Styrene	ND		2.0	0.40	ug/L			03/07/13 16:37	2
tert-Butylbenzene	ND		2.0	0.44	ug/L			03/07/13 16:37	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.54	ug/L			03/07/13 16:37	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.60	ug/L			03/07/13 16:37	2
Toluene	ND		2.0	0.72	ug/L			03/07/13 16:37	2

Client Sample ID: OC-GW-EW3-030113

Lab Sample ID: 440-39676-11

Date Collected: 03/01/13 17:25

Matrix: Water

Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		2.0	0.60	ug/L			03/07/13 16:37	2
trans-1,3-Dichloropropene	ND		1.0	0.64	ug/L			03/07/13 16:37	2
1,2,3-Trichlorobenzene	ND		2.0	0.60	ug/L			03/07/13 16:37	2
1,2,4-Trichlorobenzene	ND		2.0	0.96	ug/L			03/07/13 16:37	2
1,1,1-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 16:37	2
1,1,2-Trichloroethane	ND		2.0	0.60	ug/L			03/07/13 16:37	2
Trichloroethene	**52**		2.0	0.52	ug/L			03/07/13 16:37	2
Trichlorofluoromethane	**83**		2.0	0.68	ug/L			03/07/13 16:37	2
1,2,3-Trichloropropane	ND		2.0	0.80	ug/L			03/07/13 16:37	2
1,1,2-Trichloro-1,2,2-trifluoroethane	**140**		10	1.0	ug/L			03/07/13 16:37	2
1,2,4-Trimethylbenzene	ND		2.0	0.46	ug/L			03/07/13 16:37	2
1,3,5-Trimethylbenzene	ND		2.0	0.52	ug/L			03/07/13 16:37	2
Vinyl chloride	ND		1.0	0.80	ug/L			03/07/13 16:37	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 16:37*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*03/07/13 16:37*	*2*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*03/07/13 16:37*	*2*
Toluene-d8 (Surr)	*107*		*80 - 120*		*03/07/13 16:37*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**580**		10	3.2	ug/L			03/07/13 17:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/07/13 17:05*	*10*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*03/07/13 17:05*	*10*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/07/13 17:05*	*10*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.27**	**J**	0.96	0.082	ug/L		03/06/13 15:40	03/07/13 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*57 - 120*	*03/06/13 15:40*	*03/07/13 21:15*	*1*

Client Sample ID: OC-GW-EW4-030113

Lab Sample ID: 440-39676-12

Date Collected: 03/01/13 17:35

Matrix: Water

Date Received: 03/01/13 20:24

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			03/07/13 17:32	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 17:32	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 17:32	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 17:32	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 17:32	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 17:32	1

Client Sample ID: OC-GW-EW4-030113
Date Collected: 03/01/13 17:35
Date Received: 03/01/13 20:24

Lab Sample ID: 440-39676-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 17:32	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 17:32	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 17:32	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 17:32	1
Chloroform	**1.1**		1.0	0.33	ug/L			03/07/13 17:32	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 17:32	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 17:32	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 17:32	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 17:32	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 17:32	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 17:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 17:32	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 17:32	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 17:32	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 17:32	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 17:32	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 17:32	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 17:32	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 17:32	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 17:32	1
1,1-Dichloroethene	**98**		1.0	0.42	ug/L			03/07/13 17:32	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 17:32	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 17:32	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 17:32	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 17:32	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 17:32	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 17:32	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 17:32	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 17:32	1
Methylene Chloride	**1.1**	**J**	5.0	0.95	ug/L			03/07/13 17:32	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 17:32	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 17:32	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 17:32	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 17:32	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 17:32	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 17:32	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 17:32	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 17:32	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 17:32	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 17:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 17:32	1
Tetrachloroethene	**110**		1.0	0.32	ug/L			03/07/13 17:32	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 17:32	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 17:32	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 17:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 17:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 17:32	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 17:32	1

Client Sample ID: OC-GW-EW4-030113

Lab Sample ID: 440-39676-12

Date Collected: 03/01/13 17:35

Matrix: Water

Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 17:32	1
Trichloroethene	**10**		1.0	0.26	ug/L			03/07/13 17:32	1
Trichlorofluoromethane	**46**		1.0	0.34	ug/L			03/07/13 17:32	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**72**		5.0	0.50	ug/L			03/07/13 17:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 17:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 17:32	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 17:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 17:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/07/13 17:32*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/07/13 17:32*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*03/07/13 17:32*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.31**	**J**	0.95	0.082	ug/L		03/06/13 15:40	03/07/13 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*57 - 120*	*03/06/13 15:40*	*03/07/13 21:40*	*1*

Client Sample ID: OC-GW-EW5-030113

Lab Sample ID: 440-39676-13

Date Collected: 03/01/13 17:45

Matrix: Water

Date Received: 03/01/13 20:24

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			03/07/13 18:00	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 18:00	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 18:00	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 18:00	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 18:00	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 18:00	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 18:00	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 18:00	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 18:00	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 18:00	1
Chloroform	**0.38**	**J**	1.0	0.33	ug/L			03/07/13 18:00	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 18:00	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 18:00	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 18:00	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 18:00	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 18:00	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 18:00	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 18:00	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 18:00	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 18:00	1

Client Sample ID: OC-GW-EW5-030113
Date Collected: 03/01/13 17:45
Date Received: 03/01/13 20:24

Lab Sample ID: 440-39676-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 18:00	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 18:00	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 18:00	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 18:00	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 18:00	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 18:00	1
1,1-Dichloroethene	**62**		1.0	0.42	ug/L			03/07/13 18:00	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 18:00	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 18:00	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 18:00	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 18:00	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 18:00	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 18:00	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 18:00	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 18:00	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 18:00	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 18:00	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 18:00	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 18:00	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 18:00	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 18:00	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 18:00	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 18:00	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 18:00	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 18:00	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 18:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 18:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 18:00	1
Tetrachloroethene	**57**		1.0	0.32	ug/L			03/07/13 18:00	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 18:00	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 18:00	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 18:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 18:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 18:00	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 18:00	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 18:00	1
Trichloroethene	**5.2**		1.0	0.26	ug/L			03/07/13 18:00	1
Trichlorofluoromethane	**53**		1.0	0.34	ug/L			03/07/13 18:00	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 18:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**77**		5.0	0.50	ug/L			03/07/13 18:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 18:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 18:00	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 18:00	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 18:00*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*03/07/13 18:00*	*1*

Client Sample ID: OC-GW-EW5-030113

Lab Sample ID: 440-39676-13

Date Collected: 03/01/13 17:45

Matrix: Water

Date Received: 03/01/13 20:24

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*03/07/13 18:00*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*03/07/13 18:00*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**		0.95	0.082	ug/L		03/06/13 15:40	03/07/13 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*57 - 120*	*03/06/13 15:40*	*03/07/13 22:04*	*1*

Client Sample ID: OC-GW-TB-030113

Lab Sample ID: 440-39676-14

Date Collected: 03/01/13 06:00

Matrix: Water

Date Received: 03/01/13 20:24

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			03/11/13 19:36	1
Benzene	ND		0.50	0.28	ug/L			03/11/13 19:36	1
Bromobenzene	ND		1.0	0.27	ug/L			03/11/13 19:36	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/11/13 19:36	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/11/13 19:36	1
Bromoform	ND		1.0	0.40	ug/L			03/11/13 19:36	1
Bromomethane	ND		1.0	0.42	ug/L			03/11/13 19:36	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/11/13 19:36	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/11/13 19:36	1
Chloroethane	ND		1.0	0.40	ug/L			03/11/13 19:36	1
Chloroform	ND		1.0	0.33	ug/L			03/11/13 19:36	1
Chloromethane	ND		1.0	0.40	ug/L			03/11/13 19:36	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/11/13 19:36	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/11/13 19:36	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/11/13 19:36	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/11/13 19:36	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/11/13 19:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/11/13 19:36	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/11/13 19:36	1
Dibromomethane	ND		1.0	0.36	ug/L			03/11/13 19:36	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/11/13 19:36	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/11/13 19:36	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/11/13 19:36	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/11/13 19:36	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/11/13 19:36	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/11/13 19:36	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/11/13 19:36	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/11/13 19:36	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/11/13 19:36	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/11/13 19:36	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/11/13 19:36	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/11/13 19:36	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/11/13 19:36	1
Isopropyl alcohol	ND		100	50	ug/L			03/11/13 19:36	1

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-TB-030113

Lab Sample ID: 440-39676-14

Date Collected: 03/01/13 06:00
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.25	ug/L			03/11/13 19:36	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/11/13 19:36	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/11/13 19:36	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/11/13 19:36	1
Naphthalene	ND		1.0	0.41	ug/L			03/11/13 19:36	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/11/13 19:36	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/11/13 19:36	1
o-Xylene	ND		1.0	0.30	ug/L			03/11/13 19:36	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/11/13 19:36	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/11/13 19:36	1
Styrene	ND		1.0	0.20	ug/L			03/11/13 19:36	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/11/13 19:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/11/13 19:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/11/13 19:36	1
Tetrachloroethene	ND		1.0	0.32	ug/L			03/11/13 19:36	1
Toluene	ND		1.0	0.36	ug/L			03/11/13 19:36	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/13 19:36	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/11/13 19:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/11/13 19:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/11/13 19:36	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/13 19:36	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/11/13 19:36	1
Trichloroethene	ND		1.0	0.26	ug/L			03/11/13 19:36	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/11/13 19:36	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/11/13 19:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/11/13 19:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/11/13 19:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/11/13 19:36	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/11/13 19:36	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/11/13 19:36*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*03/11/13 19:36*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*03/11/13 19:36*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/11/13 19:36*	*1*

Method Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-OW10-030113 — Lab Sample ID: 440-39676-1

Date Collected: 03/01/13 12:58 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	89977	03/07/13 01:28	MR	TAL IRV
Total/NA	Prep	3520C			1045 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 16:24	KGV	TAL DEN

Client Sample ID: OC-GW-OW3B-030113 — Lab Sample ID: 440-39676-3

Date Collected: 03/01/13 11:30 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	89977	03/06/13 23:34	MR	TAL IRV
Total/NA	Prep	3520C			1050.8 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 17:12	KGV	TAL DEN

Client Sample ID: OC-GW-PZ3-030113 — Lab Sample ID: 440-39676-5

Date Collected: 03/01/13 15:45 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	89977	03/07/13 03:50	MR	TAL IRV
Total/NA	Analysis	8260B	DL	10	10 mL	10 mL	89977	03/07/13 04:18	MR	TAL IRV
Total/NA	Prep	3520C			1044.9 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 18:49	KGV	TAL DEN

Client Sample ID: OC-GW-OW1B-030113 — Lab Sample ID: 440-39676-6

Date Collected: 03/01/13 16:54 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	89977	03/07/13 04:46	MR	TAL IRV
Total/NA	Prep	3520C			1052.7 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 19:13	KGV	TAL DEN

Client Sample ID: OC-GW-PZ9N-030113 — Lab Sample ID: 440-39676-7

Date Collected: 03/01/13 16:00 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	90022	03/07/13 12:56	WC	TAL IRV
Total/NA	Prep	3520C			1052.1 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 19:38	KGV	TAL DEN

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-OW3-030113 — Lab Sample ID: 440-39676-8

Date Collected: 03/01/13 17:57 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	90022	03/07/13 14:19	WC	TAL IRV
Total/NA	Prep	3520C			1052.5 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 20:02	KGV	TAL DEN

Client Sample ID: OC-GW-EW1-030113 — Lab Sample ID: 440-39676-9

Date Collected: 03/01/13 16:52 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	90022	03/07/13 14:46	WC	TAL IRV
Total/NA	Analysis	8260B	DL	10	10 mL	10 mL	90022	03/07/13 15:14	WC	TAL IRV
Total/NA	Prep	3520C			1034.5 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 20:26	KGV	TAL DEN

Client Sample ID: OC-GW-EW2-030113 — Lab Sample ID: 440-39676-10

Date Collected: 03/01/13 17:05 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	90022	03/07/13 15:42	WC	TAL IRV
Total/NA	Analysis	8260B	DL	40	10 mL	10 mL	90022	03/07/13 16:09	WC	TAL IRV
Total/NA	Prep	3520C			1037 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 20:51	KGV	TAL DEN

Client Sample ID: OC-GW-EW3-030113 — Lab Sample ID: 440-39676-11

Date Collected: 03/01/13 17:25 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	90022	03/07/13 16:37	WC	TAL IRV
Total/NA	Analysis	8260B	DL	10	10 mL	10 mL	90022	03/07/13 17:05	WC	TAL IRV
Total/NA	Prep	3520C			1043.8 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 21:15	KGV	TAL DEN

Client Sample ID: OC-GW-EW4-030113 — Lab Sample ID: 440-39676-12

Date Collected: 03/01/13 17:35 — **Matrix: Water**
Date Received: 03/01/13 20:24

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	90022	03/07/13 17:32	WC	TAL IRV
Total/NA	Prep	3520C			1047.3 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 21:40	KGV	TAL DEN

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Client Sample ID: OC-GW-EW5-030113

Lab Sample ID: 440-39676-13

Date Collected: 03/01/13 17:45

Matrix: Water

Date Received: 03/01/13 20:24

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	90022	03/07/13 18:00	WC	TAL IRV
Total/NA	Prep	3520C			1047.4 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		1			163574	03/07/13 22:04	KGV	TAL DEN

Client Sample ID: OC-GW-TB-030113

Lab Sample ID: 440-39676-14

Date Collected: 03/01/13 06:00

Matrix: Water

Date Received: 03/01/13 20:24

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	90718	03/11/13 19:36	SS	TAL IRV

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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 440-89977/5
Matrix: Water
Analysis Batch: 89977

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			03/06/13 22:18	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 22:18	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 22:18	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 22:18	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 22:18	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 22:18	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 22:18	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 22:18	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 22:18	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 22:18	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 22:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 22:18	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 22:18	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 22:18	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 22:18	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 22:18	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 22:18	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 22:18	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 22:18	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 22:18	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 22:18	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 22:18	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 22:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 22:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 22:18	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 22:18	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 22:18	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 22:18	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 22:18	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 22:18	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 22:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 22:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1

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

Lab Sample ID: MB 440-89977/5
Matrix: Water
Analysis Batch: 89977

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			03/06/13 22:18	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 22:18	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 22:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 22:18	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 22:18	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 22:18	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 22:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 22:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 22:18	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 22:18	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/06/13 22:18*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*03/06/13 22:18*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*03/06/13 22:18*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/06/13 22:18*	*1*

Lab Sample ID: LCS 440-89977/6
Matrix: Water
Analysis Batch: 89977

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	37.4	*	ug/L		150	30 - 140
Benzene	25.0	20.4		ug/L		81	70 - 120
Bromobenzene	25.0	23.5		ug/L		94	75 - 120
Bromochloromethane	25.0	23.9		ug/L		96	70 - 130
Bromodichloromethane	25.0	25.5		ug/L		102	70 - 135
Bromoform	25.0	26.3		ug/L		105	55 - 130
Bromomethane	25.0	23.1		ug/L		92	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	23.5		ug/L		94	60 - 140
Chloroform	25.0	24.0		ug/L		96	70 - 130
Chloromethane	25.0	20.7		ug/L		83	50 - 140
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 125
4-Chlorotoluene	25.0	24.3		ug/L		97	75 - 125
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 125
cis-1,3-Dichloropropene	25.0	27.9		ug/L		111	75 - 125
Dibromochloromethane	25.0	26.7		ug/L		107	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	24.5		ug/L		98	50 - 135

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

Lab Sample ID: LCS 440-89977/6
Matrix: Water
Analysis Batch: 89977

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	24.1		ug/L		96	75 - 125
Dibromomethane	25.0	25.0		ug/L		100	70 - 125
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	75 - 120
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	75 - 120
1,4-Dichlorobenzene	25.0	22.6		ug/L		90	75 - 120
Dichlorodifluoromethane	25.0	17.4		ug/L		70	35 - 155
1,1-Dichloroethane	25.0	22.9		ug/L		92	70 - 125
1,2-Dichloroethane	25.0	24.3		ug/L		97	60 - 140
1,1-Dichloroethene	25.0	23.7		ug/L		95	70 - 125
1,2-Dichloropropane	25.0	23.0		ug/L		92	70 - 125
1,3-Dichloropropane	25.0	23.7		ug/L		95	70 - 120
2,2-Dichloropropane	25.0	27.4		ug/L		110	65 - 140
1,1-Dichloropropene	25.0	21.7		ug/L		87	75 - 130
Ethylbenzene	25.0	23.3		ug/L		93	75 - 125
Hexachlorobutadiene	25.0	20.3		ug/L		81	65 - 135
Isopropylbenzene	25.0	25.9		ug/L		104	75 - 130
Methylene Chloride	25.0	20.9		ug/L		84	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.3		ug/L		93	60 - 135
m,p-Xylene	50.0	47.3		ug/L		95	75 - 125
Naphthalene	25.0	21.9		ug/L		88	55 - 135
n-Butylbenzene	25.0	24.1		ug/L		96	70 - 130
N-Propylbenzene	25.0	24.1		ug/L		96	75 - 130
o-Xylene	25.0	23.7		ug/L		95	75 - 125
p-Isopropyltoluene	25.0	23.2		ug/L		93	75 - 125
sec-Butylbenzene	25.0	23.3		ug/L		93	70 - 125
Styrene	25.0	26.2		ug/L		105	75 - 130
tert-Butylbenzene	25.0	24.1		ug/L		96	70 - 125
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	55 - 130
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 125
Toluene	25.0	23.5		ug/L		94	70 - 120
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	70 - 125
trans-1,3-Dichloropropene	25.0	28.1		ug/L		112	70 - 125
1,2,3-Trichlorobenzene	25.0	19.6		ug/L		78	65 - 125
1,2,4-Trichlorobenzene	25.0	21.2		ug/L		85	70 - 135
1,1,1-Trichloroethane	25.0	25.7		ug/L		103	65 - 135
1,1,2-Trichloroethane	25.0	23.4		ug/L		93	70 - 125
Trichloroethene	25.0	24.3		ug/L		97	70 - 125
Trichlorofluoromethane	25.0	25.9		ug/L		104	65 - 145
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	60 - 130
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		99	75 - 125
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	75 - 125
Vinyl chloride	25.0	25.2		ug/L		101	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

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

Lab Sample ID: 440-39676-3 MS
Matrix: Water
Analysis Batch: 89977

Client Sample ID: OC-GW-OW3B-030113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*	25.0	16.4		ug/L		66	20 - 150
Benzene	ND		25.0	21.3		ug/L		85	65 - 125
Bromobenzene	ND		25.0	23.0		ug/L		92	70 - 125
Bromochloromethane	ND		25.0	24.2		ug/L		97	65 - 135
Bromodichloromethane	ND		25.0	26.3		ug/L		105	70 - 135
Bromoform	ND		25.0	24.8		ug/L		99	55 - 135
Bromomethane	ND		25.0	23.0		ug/L		92	55 - 145
Carbon tetrachloride	ND		25.0	26.2		ug/L		105	65 - 140
Chlorobenzene	ND		25.0	22.6		ug/L		91	75 - 125
Chloroethane	ND		25.0	23.0		ug/L		92	55 - 140
Chloroform	ND		25.0	23.3		ug/L		93	65 - 135
Chloromethane	ND		25.0	19.2		ug/L		77	45 - 145
2-Chlorotoluene	ND		25.0	22.9		ug/L		91	65 - 135
4-Chlorotoluene	ND		25.0	24.1		ug/L		96	70 - 135
cis-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	65 - 130
cis-1,3-Dichloropropene	ND		25.0	27.6		ug/L		110	70 - 130
Dibromochloromethane	ND		25.0	25.0		ug/L		100	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	21.6		ug/L		87	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	23.4		ug/L		94	70 - 130
Dibromomethane	ND		25.0	25.8		ug/L		103	65 - 135
1,2-Dichlorobenzene	ND		25.0	22.3		ug/L		89	75 - 125
1,3-Dichlorobenzene	ND		25.0	22.9		ug/L		92	75 - 125
1,4-Dichlorobenzene	ND		25.0	23.0		ug/L		92	75 - 125
Dichlorodifluoromethane	ND		25.0	17.1		ug/L		68	25 - 155
1,1-Dichloroethane	ND		25.0	23.0		ug/L		92	65 - 130
1,2-Dichloroethane	ND		25.0	23.6		ug/L		94	60 - 140
1,1-Dichloroethene	ND		25.0	23.5		ug/L		94	60 - 130
1,2-Dichloropropane	ND		25.0	23.1		ug/L		92	65 - 130
1,3-Dichloropropane	ND		25.0	22.0		ug/L		88	65 - 135
2,2-Dichloropropane	ND		25.0	29.5		ug/L		118	60 - 145
1,1-Dichloropropene	ND		25.0	22.8		ug/L		91	70 - 135
Ethylbenzene	ND		25.0	22.5		ug/L		90	65 - 130
Hexachlorobutadiene	ND		25.0	19.5		ug/L		78	60 - 135
Isopropylbenzene	ND		25.0	24.7		ug/L		99	70 - 135
Methylene Chloride	ND		25.0	21.5		ug/L		86	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.1		ug/L		96	55 - 145
m,p-Xylene	ND		50.0	44.1		ug/L		88	65 - 130
Naphthalene	ND		25.0	20.0		ug/L		80	50 - 140
n-Butylbenzene	ND		25.0	24.2		ug/L		97	65 - 135
N-Propylbenzene	ND		25.0	23.4		ug/L		93	70 - 135
o-Xylene	ND		25.0	22.2		ug/L		89	65 - 125
p-Isopropyltoluene	ND		25.0	22.9		ug/L		92	65 - 130
sec-Butylbenzene	ND		25.0	22.6		ug/L		91	70 - 125
Styrene	ND		25.0	23.6		ug/L		94	50 - 145
tert-Butylbenzene	ND		25.0	23.4		ug/L		94	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	24.5		ug/L		98	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	23.1		ug/L		93	55 - 135
Tetrachloroethene	2.3		25.0	24.5		ug/L		89	65 - 130

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

Lab Sample ID: 440-39676-3 MS — **Client Sample ID: OC-GW-OW3B-030113**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89977

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	ND		25.0	23.5		ug/L		94	70 - 125
trans-1,2-Dichloroethene	ND		25.0	23.8		ug/L		95	65 - 130
trans-1,3-Dichloropropene	ND		25.0	28.2		ug/L		113	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	18.9		ug/L		76	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.1		ug/L		84	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.0		ug/L		100	65 - 140
1,1,2-Trichloroethane	ND		25.0	24.3		ug/L		97	65 - 130
Trichloroethene	ND		25.0	23.9		ug/L		96	65 - 125
Trichlorofluoromethane	ND		25.0	25.9		ug/L		104	60 - 145
1,2,3-Trichloropropane	ND		25.0	21.3		ug/L		85	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	24.3		ug/L		97	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130
Vinyl chloride	ND		25.0	24.6		ug/L		99	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 120*

Lab Sample ID: 440-39676-3 MSD — **Client Sample ID: OC-GW-OW3B-030113**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 89977

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*	25.0	15.6		ug/L		62	20 - 150	5	35
Benzene	ND		25.0	20.9		ug/L		84	65 - 125	2	20
Bromobenzene	ND		25.0	23.5		ug/L		94	70 - 125	2	20
Bromochloromethane	ND		25.0	23.1		ug/L		93	65 - 135	5	25
Bromodichloromethane	ND		25.0	25.8		ug/L		103	70 - 135	2	20
Bromoform	ND		25.0	25.1		ug/L		101	55 - 135	2	25
Bromomethane	ND		25.0	21.9		ug/L		88	55 - 145	5	25
Carbon tetrachloride	ND		25.0	25.2		ug/L		101	65 - 140	4	25
Chlorobenzene	ND		25.0	22.7		ug/L		91	75 - 125	0	20
Chloroethane	ND		25.0	22.0		ug/L		88	55 - 140	5	25
Chloroform	ND		25.0	22.9		ug/L		92	65 - 135	2	20
Chloromethane	ND		25.0	19.0		ug/L		76	45 - 145	1	25
2-Chlorotoluene	ND		25.0	22.9		ug/L		92	65 - 135	0	20
4-Chlorotoluene	ND		25.0	23.6		ug/L		94	70 - 135	2	20
cis-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	65 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	26.4		ug/L		105	70 - 130	5	20
Dibromochloromethane	ND		25.0	25.2		ug/L		101	65 - 140	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	23.2		ug/L		93	45 - 145	7	30
1,2-Dibromoethane (EDB)	ND		25.0	23.9		ug/L		96	70 - 130	2	25
Dibromomethane	ND		25.0	25.4		ug/L		102	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	22.2		ug/L		89	75 - 125	1	20
1,3-Dichlorobenzene	ND		25.0	22.8		ug/L		91	75 - 125	0	20
1,4-Dichlorobenzene	ND		25.0	22.3		ug/L		89	75 - 125	3	20
Dichlorodifluoromethane	ND		25.0	16.1		ug/L		64	25 - 155	6	30

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

Lab Sample ID: 440-39676-3 MSD
Matrix: Water
Analysis Batch: 89977

Client Sample ID: OC-GW-OW3B-030113
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-Dichloroethane	ND		25.0	22.4		ug/L		90	65 - 130	3	20
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	60 - 140	2	20
1,1-Dichloroethene	ND		25.0	22.3		ug/L		89	60 - 130	5	20
1,2-Dichloropropane	ND		25.0	23.9		ug/L		95	65 - 130	3	20
1,3-Dichloropropane	ND		25.0	22.7		ug/L		91	65 - 135	3	25
2,2-Dichloropropane	ND		25.0	27.7		ug/L		111	60 - 145	6	25
1,1-Dichloropropene	ND		25.0	21.1		ug/L		85	70 - 135	7	20
Ethylbenzene	ND		25.0	23.0		ug/L		92	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	19.1		ug/L		76	60 - 135	2	20
Isopropylbenzene	ND		25.0	23.9		ug/L		95	70 - 135	4	20
Methylene Chloride	ND		25.0	20.9		ug/L		84	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.0		ug/L		92	55 - 145	5	25
m,p-Xylene	ND		50.0	45.4		ug/L		91	65 - 130	3	25
Naphthalene	ND		25.0	20.3		ug/L		81	50 - 140	2	30
n-Butylbenzene	ND		25.0	24.3		ug/L		97	65 - 135	0	20
N-Propylbenzene	ND		25.0	23.1		ug/L		92	70 - 135	1	20
o-Xylene	ND		25.0	23.6		ug/L		95	65 - 125	6	20
p-Isopropyltoluene	ND		25.0	23.2		ug/L		93	65 - 130	1	20
sec-Butylbenzene	ND		25.0	22.9		ug/L		92	70 - 125	1	20
Styrene	ND		25.0	23.3		ug/L		93	50 - 145	1	30
tert-Butylbenzene	ND		25.0	22.7		ug/L		91	65 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	24.6		ug/L		99	65 - 140	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	24.1		ug/L		96	55 - 135	4	30
Tetrachloroethene	2.3		25.0	25.3		ug/L		92	65 - 130	3	20
Toluene	ND		25.0	23.0		ug/L		92	70 - 125	2	20
trans-1,2-Dichloroethene	ND		25.0	22.8		ug/L		91	65 - 130	4	20
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	65 - 135	0	25
1,2,3-Trichlorobenzene	ND		25.0	18.5		ug/L		74	60 - 135	2	20
1,2,4-Trichlorobenzene	ND		25.0	20.7		ug/L		83	65 - 135	2	20
1,1,1-Trichloroethane	ND		25.0	24.1		ug/L		96	65 - 140	4	20
1,1,2-Trichloroethane	ND		25.0	23.7		ug/L		95	65 - 130	2	25
Trichloroethene	ND		25.0	23.7		ug/L		95	65 - 125	1	20
Trichlorofluoromethane	ND		25.0	24.5		ug/L		98	60 - 145	5	25
1,2,3-Trichloropropane	ND		25.0	21.2		ug/L		85	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	24.9		ug/L		99	55 - 135	2	25
1,3,5-Trimethylbenzene	ND		25.0	23.8		ug/L		95	70 - 130	3	20
Vinyl chloride	ND		25.0	23.8		ug/L		95	45 - 140	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

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

Lab Sample ID: MB 440-90022/4
Matrix: Water
Analysis Batch: 90022

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			03/07/13 08:59	1
Benzene	ND		0.50	0.28	ug/L			03/07/13 08:59	1
Bromobenzene	ND		1.0	0.27	ug/L			03/07/13 08:59	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/07/13 08:59	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/07/13 08:59	1
Bromoform	ND		1.0	0.40	ug/L			03/07/13 08:59	1
Bromomethane	ND		1.0	0.42	ug/L			03/07/13 08:59	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/07/13 08:59	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/07/13 08:59	1
Chloroethane	ND		1.0	0.40	ug/L			03/07/13 08:59	1
Chloroform	ND		1.0	0.33	ug/L			03/07/13 08:59	1
Chloromethane	ND		1.0	0.40	ug/L			03/07/13 08:59	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/07/13 08:59	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/07/13 08:59	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/07/13 08:59	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/07/13 08:59	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/07/13 08:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/07/13 08:59	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/07/13 08:59	1
Dibromomethane	ND		1.0	0.36	ug/L			03/07/13 08:59	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/07/13 08:59	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/07/13 08:59	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/07/13 08:59	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/07/13 08:59	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/07/13 08:59	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/07/13 08:59	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/07/13 08:59	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/07/13 08:59	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/07/13 08:59	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/07/13 08:59	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/07/13 08:59	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/07/13 08:59	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/07/13 08:59	1
Isopropyl alcohol	ND		100	50	ug/L			03/07/13 08:59	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/07/13 08:59	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/07/13 08:59	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/07/13 08:59	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/07/13 08:59	1
Naphthalene	ND		1.0	0.41	ug/L			03/07/13 08:59	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/07/13 08:59	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/07/13 08:59	1
o-Xylene	ND		1.0	0.30	ug/L			03/07/13 08:59	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/07/13 08:59	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/07/13 08:59	1
Styrene	ND		1.0	0.20	ug/L			03/07/13 08:59	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/07/13 08:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/07/13 08:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/07/13 08:59	1

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

Lab Sample ID: MB 440-90022/4
Matrix: Water
Analysis Batch: 90022

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			03/07/13 08:59	1
Toluene	ND		1.0	0.36	ug/L			03/07/13 08:59	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/07/13 08:59	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/07/13 08:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/07/13 08:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/07/13 08:59	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 08:59	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/07/13 08:59	1
Trichloroethene	ND		1.0	0.26	ug/L			03/07/13 08:59	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/07/13 08:59	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/07/13 08:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/07/13 08:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/07/13 08:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/07/13 08:59	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/07/13 08:59	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 08:59*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*03/07/13 08:59*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/07/13 08:59*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/07/13 08:59*	*1*

Lab Sample ID: LCS 440-90022/5
Matrix: Water
Analysis Batch: 90022

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	24.3		ug/L		97	30 - 140
Benzene	25.0	24.1		ug/L		96	70 - 120
Bromobenzene	25.0	23.0		ug/L		92	75 - 120
Bromochloromethane	25.0	22.7		ug/L		91	70 - 130
Bromodichloromethane	25.0	27.1		ug/L		108	70 - 135
Bromoform	25.0	22.5		ug/L		90	55 - 130
Bromomethane	25.0	26.4		ug/L		105	65 - 140
Carbon tetrachloride	25.0	26.6		ug/L		106	65 - 140
Chlorobenzene	25.0	23.8		ug/L		95	75 - 120
Chloroethane	25.0	29.6		ug/L		118	60 - 140
Chloroform	25.0	27.1		ug/L		108	70 - 130
Chloromethane	25.0	26.6		ug/L		106	50 - 140
2-Chlorotoluene	25.0	26.6		ug/L		107	70 - 125
4-Chlorotoluene	25.0	27.4		ug/L		110	75 - 125
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	70 - 125
cis-1,3-Dichloropropene	25.0	29.5		ug/L		118	75 - 125
Dibromochloromethane	25.0	24.5		ug/L		98	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	24.0		ug/L		96	50 - 135

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

Lab Sample ID: LCS 440-90022/5
Matrix: Water
Analysis Batch: 90022

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	23.2		ug/L		93	75 - 125
Dibromomethane	25.0	24.7		ug/L		99	70 - 125
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	75 - 120
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	75 - 120
1,4-Dichlorobenzene	25.0	22.7		ug/L		91	75 - 120
Dichlorodifluoromethane	25.0	25.0		ug/L		100	35 - 155
1,1-Dichloroethane	25.0	27.2		ug/L		109	70 - 125
1,2-Dichloroethane	25.0	26.2		ug/L		105	60 - 140
1,1-Dichloroethene	25.0	24.6		ug/L		98	70 - 125
1,2-Dichloropropane	25.0	25.7		ug/L		103	70 - 125
1,3-Dichloropropane	25.0	25.1		ug/L		100	70 - 120
2,2-Dichloropropane	25.0	32.8		ug/L		131	65 - 140
1,1-Dichloropropene	25.0	24.5		ug/L		98	75 - 130
Ethylbenzene	25.0	26.4		ug/L		106	75 - 125
Hexachlorobutadiene	25.0	24.2		ug/L		97	65 - 135
Isopropylbenzene	25.0	28.1		ug/L		113	75 - 130
Methylene Chloride	25.0	24.6		ug/L		98	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	27.9		ug/L		111	60 - 135
m,p-Xylene	50.0	51.3		ug/L		103	75 - 125
Naphthalene	25.0	23.0		ug/L		92	55 - 135
n-Butylbenzene	25.0	29.3		ug/L		117	70 - 130
N-Propylbenzene	25.0	27.9		ug/L		111	75 - 130
o-Xylene	25.0	26.3		ug/L		105	75 - 125
p-Isopropyltoluene	25.0	26.2		ug/L		105	75 - 125
sec-Butylbenzene	25.0	27.0		ug/L		108	70 - 125
Styrene	25.0	27.3		ug/L		109	75 - 130
tert-Butylbenzene	25.0	26.1		ug/L		104	70 - 125
1,1,1,2-Tetrachloroethane	25.0	24.2		ug/L		97	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.8		ug/L		103	55 - 130
Tetrachloroethene	25.0	22.9		ug/L		92	70 - 125
Toluene	25.0	25.4		ug/L		101	70 - 120
trans-1,2-Dichloroethene	25.0	24.7		ug/L		99	70 - 125
trans-1,3-Dichloropropene	25.0	27.9		ug/L		112	70 - 125
1,2,3-Trichlorobenzene	25.0	22.8		ug/L		91	65 - 125
1,2,4-Trichlorobenzene	25.0	23.6		ug/L		95	70 - 135
1,1,1-Trichloroethane	25.0	27.6		ug/L		110	65 - 135
1,1,2-Trichloroethane	25.0	24.7		ug/L		99	70 - 125
Trichloroethene	25.0	20.9		ug/L		84	70 - 125
Trichlorofluoromethane	25.0	28.1		ug/L		113	65 - 145
1,2,3-Trichloropropane	25.0	23.1		ug/L		92	60 - 130
1,2,4-Trimethylbenzene	25.0	28.2		ug/L		113	75 - 125
1,3,5-Trimethylbenzene	25.0	28.2		ug/L		113	75 - 125
Vinyl chloride	25.0	31.4		ug/L		125	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

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

Lab Sample ID: 440-39676-7 MS
Matrix: Water
Analysis Batch: 90022

Client Sample ID: OC-GW-PZ9N-030113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		25.0	15.7		ug/L		63	20 - 150
Benzene	ND		25.0	24.5		ug/L		98	65 - 125
Bromobenzene	ND		25.0	22.4		ug/L		90	70 - 125
Bromochloromethane	ND		25.0	22.6		ug/L		90	65 - 135
Bromodichloromethane	ND		25.0	28.7		ug/L		115	70 - 135
Bromoform	ND		25.0	23.3		ug/L		93	55 - 135
Bromomethane	ND		25.0	25.8		ug/L		103	55 - 145
Carbon tetrachloride	ND		25.0	27.7		ug/L		111	65 - 140
Chlorobenzene	ND		25.0	23.7		ug/L		95	75 - 125
Chloroethane	ND		25.0	29.1		ug/L		116	55 - 140
Chloroform	4.7		25.0	31.3		ug/L		106	65 - 135
Chloromethane	ND		25.0	24.0		ug/L		96	45 - 145
2-Chlorotoluene	ND		25.0	25.6		ug/L		102	65 - 135
4-Chlorotoluene	ND		25.0	26.3		ug/L		105	70 - 135
cis-1,2-Dichloroethene	ND		25.0	26.3		ug/L		105	65 - 130
cis-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	70 - 130
Dibromochloromethane	ND		25.0	24.9		ug/L		99	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	24.9		ug/L		100	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	24.2		ug/L		97	70 - 130
Dibromomethane	ND		25.0	26.0		ug/L		104	65 - 135
1,2-Dichlorobenzene	ND		25.0	24.0		ug/L		96	75 - 125
1,3-Dichlorobenzene	ND		25.0	23.7		ug/L		95	75 - 125
1,4-Dichlorobenzene	ND		25.0	22.5		ug/L		90	75 - 125
Dichlorodifluoromethane	ND		25.0	20.2		ug/L		81	25 - 155
1,1-Dichloroethane	ND		25.0	27.1		ug/L		108	65 - 130
1,2-Dichloroethane	ND		25.0	27.8		ug/L		111	60 - 140
1,1-Dichloroethene	ND		25.0	24.2		ug/L		97	60 - 130
1,2-Dichloropropane	ND		25.0	25.8		ug/L		103	65 - 130
1,3-Dichloropropane	ND		25.0	24.7		ug/L		99	65 - 135
2,2-Dichloropropane	ND		25.0	33.5		ug/L		134	60 - 145
1,1-Dichloropropene	ND		25.0	24.5		ug/L		98	70 - 135
Ethylbenzene	ND		25.0	26.4		ug/L		106	65 - 130
Hexachlorobutadiene	ND		25.0	24.3		ug/L		97	60 - 135
Isopropylbenzene	ND		25.0	27.5		ug/L		110	70 - 135
Methylene Chloride	ND		25.0	23.3		ug/L		93	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	27.9		ug/L		112	55 - 145
m,p-Xylene	ND		50.0	51.6		ug/L		103	65 - 130
Naphthalene	ND		25.0	24.0		ug/L		96	50 - 140
n-Butylbenzene	ND		25.0	28.9		ug/L		115	65 - 135
N-Propylbenzene	ND		25.0	27.5		ug/L		110	70 - 135
o-Xylene	ND		25.0	26.6		ug/L		107	65 - 125
p-Isopropyltoluene	ND		25.0	26.1		ug/L		104	65 - 130
sec-Butylbenzene	ND		25.0	26.5		ug/L		106	70 - 125
Styrene	ND		25.0	27.3		ug/L		109	50 - 145
tert-Butylbenzene	ND		25.0	25.5		ug/L		102	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	25.0		ug/L		100	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	26.1		ug/L		104	55 - 135
Tetrachloroethene	ND		25.0	23.6		ug/L		94	65 - 130

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

Lab Sample ID: 440-39676-7 MS
Matrix: Water
Analysis Batch: 90022

Client Sample ID: OC-GW-PZ9N-030113
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	ND		25.0	25.7		ug/L		103	70 - 125
trans-1,2-Dichloroethene	ND		25.0	24.6		ug/L		98	65 - 130
trans-1,3-Dichloropropene	ND		25.0	29.1		ug/L		116	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	23.3		ug/L		93	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	23.8		ug/L		95	65 - 135
1,1,1-Trichloroethane	ND		25.0	28.7		ug/L		115	65 - 140
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	65 - 130
Trichloroethene	ND		25.0	21.4		ug/L		86	65 - 125
Trichlorofluoromethane	ND		25.0	28.7		ug/L		115	60 - 145
1,2,3-Trichloropropane	ND		25.0	23.9		ug/L		96	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	28.1		ug/L		112	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	27.9		ug/L		112	70 - 130
Vinyl chloride	ND		25.0	30.1		ug/L		120	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-39676-7 MSD
Matrix: Water
Analysis Batch: 90022

Client Sample ID: OC-GW-PZ9N-030113
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	16.6		ug/L		66	20 - 150	6	35
Benzene	ND		25.0	25.1		ug/L		101	65 - 125	3	20
Bromobenzene	ND		25.0	23.8		ug/L		95	70 - 125	6	20
Bromochloromethane	ND		25.0	24.4		ug/L		97	65 - 135	8	25
Bromodichloromethane	ND		25.0	28.7		ug/L		115	70 - 135	0	20
Bromoform	ND		25.0	23.7		ug/L		95	55 - 135	2	25
Bromomethane	ND		25.0	27.7		ug/L		111	55 - 145	7	25
Carbon tetrachloride	ND		25.0	28.0		ug/L		112	65 - 140	1	25
Chlorobenzene	ND		25.0	24.7		ug/L		99	75 - 125	4	20
Chloroethane	ND		25.0	30.0		ug/L		120	55 - 140	3	25
Chloroform	4.7		25.0	32.4		ug/L		111	65 - 135	3	20
Chloromethane	ND		25.0	26.7		ug/L		107	45 - 145	11	25
2-Chlorotoluene	ND		25.0	27.2		ug/L		109	65 - 135	6	20
4-Chlorotoluene	ND		25.0	27.9		ug/L		112	70 - 135	6	20
cis-1,2-Dichloroethene	ND		25.0	27.8		ug/L		111	65 - 130	6	20
cis-1,3-Dichloropropene	ND		25.0	31.3		ug/L		125	70 - 130	7	20
Dibromochloromethane	ND		25.0	25.5		ug/L		102	65 - 140	3	25
1,2-Dibromo-3-Chloropropane	ND		25.0	25.5		ug/L		102	45 - 145	3	30
1,2-Dibromoethane (EDB)	ND		25.0	24.6		ug/L		98	70 - 130	2	25
Dibromomethane	ND		25.0	26.7		ug/L		107	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	25.4		ug/L		102	75 - 125	6	20
1,3-Dichlorobenzene	ND		25.0	24.5		ug/L		98	75 - 125	3	20
1,4-Dichlorobenzene	ND		25.0	23.6		ug/L		94	75 - 125	5	20
Dichlorodifluoromethane	ND		25.0	21.9		ug/L		87	25 - 155	8	30

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

Lab Sample ID: 440-39676-7 MSD
Matrix: Water
Analysis Batch: 90022

Client Sample ID: OC-GW-PZ9N-030113
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-Dichloroethane	ND		25.0	28.5		ug/L		114	65 - 130	5	20
1,2-Dichloroethane	ND		25.0	28.1		ug/L		112	60 - 140	1	20
1,1-Dichloroethene	ND		25.0	26.2		ug/L		105	60 - 130	8	20
1,2-Dichloropropane	ND		25.0	27.5		ug/L		110	65 - 130	7	20
1,3-Dichloropropane	ND		25.0	26.4		ug/L		106	65 - 135	7	25
2,2-Dichloropropane	ND		25.0	33.7		ug/L		135	60 - 145	1	25
1,1-Dichloropropene	ND		25.0	25.9		ug/L		104	70 - 135	6	20
Ethylbenzene	ND		25.0	27.7		ug/L		111	65 - 130	5	20
Hexachlorobutadiene	ND		25.0	25.6		ug/L		103	60 - 135	5	20
Isopropylbenzene	ND		25.0	29.0		ug/L		116	70 - 135	5	20
Methylene Chloride	ND		25.0	25.6		ug/L		102	50 - 135	9	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	29.0		ug/L		116	55 - 145	4	25
m,p-Xylene	ND		50.0	54.5		ug/L		109	65 - 130	5	25
Naphthalene	ND		25.0	25.4		ug/L		102	50 - 140	6	30
n-Butylbenzene	ND		25.0	30.8		ug/L		123	65 - 135	6	20
N-Propylbenzene	ND		25.0	29.2		ug/L		117	70 - 135	6	20
o-Xylene	ND		25.0	27.4		ug/L		110	65 - 125	3	20
p-Isopropyltoluene	ND		25.0	27.0		ug/L		108	65 - 130	3	20
sec-Butylbenzene	ND		25.0	28.1		ug/L		113	70 - 125	6	20
Styrene	ND		25.0	27.8		ug/L		111	50 - 145	2	30
tert-Butylbenzene	ND		25.0	27.6		ug/L		110	65 - 130	8	20
1,1,1,2-Tetrachloroethane	ND		25.0	25.7		ug/L		103	65 - 140	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	55 - 135	5	30
Tetrachloroethene	ND		25.0	23.9		ug/L		95	65 - 130	1	20
Toluene	ND		25.0	26.8		ug/L		107	70 - 125	4	20
trans-1,2-Dichloroethene	ND		25.0	26.1		ug/L		105	65 - 130	6	20
trans-1,3-Dichloropropene	ND		25.0	29.2		ug/L		117	65 - 135	0	25
1,2,3-Trichlorobenzene	ND		25.0	23.8		ug/L		95	60 - 135	2	20
1,2,4-Trichlorobenzene	ND		25.0	25.4		ug/L		102	65 - 135	6	20
1,1,1-Trichloroethane	ND		25.0	29.5		ug/L		118	65 - 140	3	20
1,1,2-Trichloroethane	ND		25.0	26.7		ug/L		107	65 - 130	4	25
Trichloroethene	ND		25.0	22.2		ug/L		89	65 - 125	4	20
Trichlorofluoromethane	ND		25.0	29.4		ug/L		118	60 - 145	2	25
1,2,3-Trichloropropane	ND		25.0	25.1		ug/L		100	55 - 135	5	30
1,2,4-Trimethylbenzene	ND		25.0	29.2		ug/L		117	55 - 135	4	25
1,3,5-Trimethylbenzene	ND		25.0	28.9		ug/L		116	70 - 130	4	20
Vinyl chloride	ND		25.0	32.2		ug/L		129	45 - 140	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*

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

Lab Sample ID: MB 440-90718/5
Matrix: Water
Analysis Batch: 90718

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			03/11/13 10:07	1
Benzene	ND		0.50	0.28	ug/L			03/11/13 10:07	1
Bromobenzene	ND		1.0	0.27	ug/L			03/11/13 10:07	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/11/13 10:07	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/11/13 10:07	1
Bromoform	ND		1.0	0.40	ug/L			03/11/13 10:07	1
Bromomethane	ND		1.0	0.42	ug/L			03/11/13 10:07	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/11/13 10:07	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/11/13 10:07	1
Chloroethane	ND		1.0	0.40	ug/L			03/11/13 10:07	1
Chloroform	ND		1.0	0.33	ug/L			03/11/13 10:07	1
Chloromethane	ND		1.0	0.40	ug/L			03/11/13 10:07	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/11/13 10:07	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/11/13 10:07	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/11/13 10:07	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/11/13 10:07	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/11/13 10:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/11/13 10:07	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/11/13 10:07	1
Dibromomethane	ND		1.0	0.36	ug/L			03/11/13 10:07	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/11/13 10:07	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/11/13 10:07	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/11/13 10:07	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/11/13 10:07	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/11/13 10:07	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/11/13 10:07	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/11/13 10:07	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/11/13 10:07	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/11/13 10:07	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/11/13 10:07	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/11/13 10:07	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/11/13 10:07	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/11/13 10:07	1
Isopropyl alcohol	ND		100	50	ug/L			03/11/13 10:07	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/11/13 10:07	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/11/13 10:07	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/11/13 10:07	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/11/13 10:07	1
Naphthalene	ND		1.0	0.41	ug/L			03/11/13 10:07	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/11/13 10:07	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/11/13 10:07	1
o-Xylene	ND		1.0	0.30	ug/L			03/11/13 10:07	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/11/13 10:07	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/11/13 10:07	1
Styrene	ND		1.0	0.20	ug/L			03/11/13 10:07	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/11/13 10:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/11/13 10:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/11/13 10:07	1

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

Lab Sample ID: MB 440-90718/5
Matrix: Water
Analysis Batch: 90718

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			03/11/13 10:07	1
Toluene	ND		1.0	0.36	ug/L			03/11/13 10:07	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/13 10:07	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/11/13 10:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/11/13 10:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/11/13 10:07	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/13 10:07	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/11/13 10:07	1
Trichloroethene	ND		1.0	0.26	ug/L			03/11/13 10:07	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/11/13 10:07	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/11/13 10:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/11/13 10:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/11/13 10:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/11/13 10:07	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/11/13 10:07	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/11/13 10:07*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*03/11/13 10:07*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/11/13 10:07*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/11/13 10:07*	*1*

Lab Sample ID: LCS 440-90718/6
Matrix: Water
Analysis Batch: 90718

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	16.2		ug/L		65	30 - 140
Benzene	25.0	19.4		ug/L		77	70 - 120
Bromobenzene	25.0	22.7		ug/L		91	75 - 120
Bromochloromethane	25.0	22.2		ug/L		89	70 - 130
Bromodichloromethane	25.0	21.2		ug/L		85	70 - 135
Bromoform	25.0	25.9		ug/L		104	55 - 130
Bromomethane	25.0	20.8		ug/L		83	65 - 140
Carbon tetrachloride	25.0	27.6		ug/L		110	65 - 140
Chlorobenzene	25.0	24.1		ug/L		96	75 - 120
Chloroethane	25.0	22.8		ug/L		91	60 - 140
Chloroform	25.0	19.4		ug/L		78	70 - 130
Chloromethane	25.0	25.2		ug/L		101	50 - 140
2-Chlorotoluene	25.0	21.6		ug/L		86	70 - 125
4-Chlorotoluene	25.0	22.0		ug/L		88	75 - 125
cis-1,2-Dichloroethene	25.0	20.9		ug/L		83	70 - 125
cis-1,3-Dichloropropene	25.0	22.4		ug/L		90	75 - 125
Dibromochloromethane	25.0	26.4		ug/L		106	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	50 - 135

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

Lab Sample ID: LCS 440-90718/6
Matrix: Water
Analysis Batch: 90718

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	22.2		ug/L		89	75 - 125
Dibromomethane	25.0	20.9		ug/L		84	70 - 125
1,2-Dichlorobenzene	25.0	23.0		ug/L		92	75 - 120
1,3-Dichlorobenzene	25.0	24.2		ug/L		97	75 - 120
1,4-Dichlorobenzene	25.0	24.0		ug/L		96	75 - 120
Dichlorodifluoromethane	25.0	20.7		ug/L		83	35 - 155
1,1-Dichloroethane	25.0	21.0		ug/L		84	70 - 125
1,2-Dichloroethane	25.0	20.7		ug/L		83	60 - 140
1,1-Dichloroethene	25.0	21.9		ug/L		87	70 - 125
1,2-Dichloropropane	25.0	20.2		ug/L		81	70 - 125
1,3-Dichloropropane	25.0	20.6		ug/L		83	70 - 120
2,2-Dichloropropane	25.0	25.1		ug/L		100	65 - 140
1,1-Dichloropropene	25.0	20.6		ug/L		82	75 - 130
Ethylbenzene	25.0	22.6		ug/L		90	75 - 125
Hexachlorobutadiene	25.0	23.8		ug/L		95	65 - 135
Isopropylbenzene	25.0	25.1		ug/L		100	75 - 130
Methylene Chloride	25.0	18.7		ug/L		75	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	16.7		ug/L		67	60 - 135
m,p-Xylene	50.0	48.4		ug/L		97	75 - 125
Naphthalene	25.0	20.8		ug/L		83	55 - 135
n-Butylbenzene	25.0	23.7		ug/L		95	70 - 130
N-Propylbenzene	25.0	22.9		ug/L		92	75 - 130
o-Xylene	25.0	23.6		ug/L		94	75 - 125
p-Isopropyltoluene	25.0	26.0		ug/L		104	75 - 125
sec-Butylbenzene	25.0	24.6		ug/L		98	70 - 125
Styrene	25.0	24.8		ug/L		99	75 - 130
tert-Butylbenzene	25.0	24.3		ug/L		97	70 - 125
1,1,1,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	25.0	20.6		ug/L		82	55 - 130
Tetrachloroethene	25.0	27.2		ug/L		109	70 - 125
Toluene	25.0	21.4		ug/L		85	70 - 120
trans-1,2-Dichloroethene	25.0	21.8		ug/L		87	70 - 125
trans-1,3-Dichloropropene	25.0	22.5		ug/L		90	70 - 125
1,2,3-Trichlorobenzene	25.0	19.7		ug/L		79	65 - 125
1,2,4-Trichlorobenzene	25.0	20.4		ug/L		82	70 - 135
1,1,1-Trichloroethane	25.0	22.6		ug/L		91	65 - 135
1,1,2-Trichloroethane	25.0	18.8		ug/L		75	70 - 125
Trichloroethene	25.0	25.0		ug/L		100	70 - 125
Trichlorofluoromethane	25.0	24.9		ug/L		100	65 - 145
1,2,3-Trichloropropane	25.0	20.0		ug/L		80	60 - 130
1,2,4-Trimethylbenzene	25.0	23.7		ug/L		95	75 - 125
1,3,5-Trimethylbenzene	25.0	24.0		ug/L		96	75 - 125
Vinyl chloride	25.0	25.3		ug/L		101	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 440-40019-T-7 MS
Matrix: Water
Analysis Batch: 90718

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	26.6		ug/L		106	20 - 150
Benzene	ND		25.0	21.6		ug/L		87	65 - 125
Bromobenzene	ND		25.0	25.7		ug/L		103	70 - 125
Bromochloromethane	ND		25.0	27.4		ug/L		110	65 - 135
Bromodichloromethane	ND		25.0	25.3		ug/L		101	70 - 135
Bromoform	ND		25.0	29.6		ug/L		119	55 - 135
Bromomethane	ND		25.0	23.2		ug/L		93	55 - 145
Carbon tetrachloride	ND		25.0	28.4		ug/L		114	65 - 140
Chlorobenzene	ND		25.0	26.7		ug/L		107	75 - 125
Chloroethane	ND		25.0	24.6		ug/L		99	55 - 140
Chloroform	ND		25.0	23.6		ug/L		94	65 - 135
Chloromethane	ND		25.0	27.1		ug/L		108	45 - 145
2-Chlorotoluene	ND		25.0	22.6		ug/L		90	65 - 135
4-Chlorotoluene	ND		25.0	23.2		ug/L		93	70 - 135
cis-1,2-Dichloroethene	ND		25.0	25.1		ug/L		100	65 - 130
cis-1,3-Dichloropropene	ND		25.0	27.0		ug/L		108	70 - 130
Dibromochloromethane	ND		25.0	30.4		ug/L		122	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	19.0		ug/L		76	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	24.7		ug/L		99	70 - 130
Dibromomethane	ND		25.0	25.1		ug/L		100	65 - 135
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L		103	75 - 125
1,3-Dichlorobenzene	ND		25.0	26.6		ug/L		106	75 - 125
1,4-Dichlorobenzene	ND		25.0	26.5		ug/L		106	75 - 125
Dichlorodifluoromethane	ND		25.0	21.1		ug/L		84	25 - 155
1,1-Dichloroethane	ND		25.0	24.2		ug/L		97	65 - 130
1,2-Dichloroethane	ND		25.0	24.6		ug/L		98	60 - 140
1,1-Dichloroethene	ND		25.0	23.7		ug/L		95	60 - 130
1,2-Dichloropropane	ND		25.0	24.3		ug/L		97	65 - 130
1,3-Dichloropropane	ND		25.0	23.0		ug/L		92	65 - 135
2,2-Dichloropropane	ND		25.0	27.3		ug/L		109	60 - 145
1,1-Dichloropropene	ND		25.0	21.0		ug/L		84	70 - 135
Ethylbenzene	ND		25.0	23.6		ug/L		94	65 - 130
Hexachlorobutadiene	ND		25.0	23.5		ug/L		94	60 - 135
Isopropylbenzene	ND		25.0	25.3		ug/L		101	70 - 135
Methylene Chloride	ND		25.0	22.3		ug/L		89	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.6		ug/L		86	55 - 145
m,p-Xylene	ND		50.0	52.0		ug/L		104	65 - 130
Naphthalene	ND		25.0	20.3		ug/L		81	50 - 140
n-Butylbenzene	ND		25.0	23.6		ug/L		94	65 - 135
N-Propylbenzene	ND		25.0	23.0		ug/L		92	70 - 135
o-Xylene	ND		25.0	26.1		ug/L		104	65 - 125
p-Isopropyltoluene	ND		25.0	26.0		ug/L		104	65 - 130
sec-Butylbenzene	ND		25.0	24.3		ug/L		97	70 - 125
Styrene	ND		25.0	28.1		ug/L		112	50 - 145
tert-Butylbenzene	ND		25.0	24.5		ug/L		98	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	29.5		ug/L		118	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	20.9		ug/L		84	55 - 135
Tetrachloroethene	ND		25.0	27.9		ug/L		111	65 - 130

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

Lab Sample ID: 440-40019-T-7 MS
Matrix: Water
Analysis Batch: 90718

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
Toluene	ND		25.0	23.6		ug/L		95	70 - 125
trans-1,2-Dichloroethene	ND		25.0	24.4		ug/L		98	65 - 130
trans-1,3-Dichloropropene	ND		25.0	27.7		ug/L		111	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	21.2		ug/L		85	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	22.2		ug/L		89	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.4		ug/L		102	65 - 140
1,1,2-Trichloroethane	ND		25.0	23.7		ug/L		95	65 - 130
Trichloroethene	ND		25.0	26.7		ug/L		107	65 - 125
Trichlorofluoromethane	ND		25.0	26.0		ug/L		104	60 - 145
1,2,3-Trichloropropane	ND		25.0	19.9		ug/L		79	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	25.3		ug/L		101	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	25.1		ug/L		100	70 - 130
Vinyl chloride	ND		25.0	26.4		ug/L		106	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 440-40019-T-7 MSD
Matrix: Water
Analysis Batch: 90718

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	33.8		ug/L		135	20 - 150	24	35
Benzene	ND		25.0	21.1		ug/L		84	65 - 125	2	20
Bromobenzene	ND		25.0	24.6		ug/L		98	70 - 125	4	20
Bromochloromethane	ND		25.0	26.1		ug/L		104	65 - 135	5	25
Bromodichloromethane	ND		25.0	24.6		ug/L		99	70 - 135	3	20
Bromoform	ND		25.0	27.8		ug/L		111	55 - 135	6	25
Bromomethane	ND		25.0	22.6		ug/L		91	55 - 145	3	25
Carbon tetrachloride	ND		25.0	27.3		ug/L		109	65 - 140	4	25
Chlorobenzene	ND		25.0	26.1		ug/L		104	75 - 125	2	20
Chloroethane	ND		25.0	24.2		ug/L		97	55 - 140	2	25
Chloroform	ND		25.0	22.9		ug/L		92	65 - 135	3	20
Chloromethane	ND		25.0	26.7		ug/L		107	45 - 145	2	25
2-Chlorotoluene	ND		25.0	22.1		ug/L		88	65 - 135	3	20
4-Chlorotoluene	ND		25.0	22.9		ug/L		92	70 - 135	1	20
cis-1,2-Dichloroethene	ND		25.0	24.2		ug/L		97	65 - 130	4	20
cis-1,3-Dichloropropene	ND		25.0	26.1		ug/L		104	70 - 130	3	20
Dibromochloromethane	ND		25.0	29.5		ug/L		118	65 - 140	3	25
1,2-Dibromo-3-Chloropropane	ND		25.0	19.4		ug/L		77	45 - 145	2	30
1,2-Dibromoethane (EDB)	ND		25.0	24.0		ug/L		96	70 - 130	3	25
Dibromomethane	ND		25.0	24.6		ug/L		98	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	24.5		ug/L		98	75 - 125	4	20
1,3-Dichlorobenzene	ND		25.0	25.7		ug/L		103	75 - 125	4	20
1,4-Dichlorobenzene	ND		25.0	25.6		ug/L		102	75 - 125	4	20
Dichlorodifluoromethane	ND		25.0	20.2		ug/L		81	25 - 155	4	30

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

Lab Sample ID: 440-40019-T-7 MSD
Matrix: Water
Analysis Batch: 90718

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-Dichloroethane	ND		25.0	24.0		ug/L		96	65 - 130	1	20
1,2-Dichloroethane	ND		25.0	23.9		ug/L		96	60 - 140	3	20
1,1-Dichloroethene	ND		25.0	23.2		ug/L		93	60 - 130	2	20
1,2-Dichloropropane	ND		25.0	23.7		ug/L		95	65 - 130	2	20
1,3-Dichloropropane	ND		25.0	22.6		ug/L		90	65 - 135	2	25
2,2-Dichloropropane	ND		25.0	26.4		ug/L		106	60 - 145	3	25
1,1-Dichloropropene	ND		25.0	20.9		ug/L		83	70 - 135	0	20
Ethylbenzene	ND		25.0	23.4		ug/L		93	65 - 130	1	20
Hexachlorobutadiene	ND		25.0	21.9		ug/L		88	60 - 135	7	20
Isopropylbenzene	ND		25.0	24.7		ug/L		99	70 - 135	2	20
Methylene Chloride	ND		25.0	21.9		ug/L		88	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	21.6		ug/L		86	55 - 145	0	25
m,p-Xylene	ND		50.0	51.0		ug/L		102	65 - 130	2	25
Naphthalene	ND		25.0	20.1		ug/L		80	50 - 140	1	30
n-Butylbenzene	ND		25.0	23.1		ug/L		92	65 - 135	2	20
N-Propylbenzene	ND		25.0	22.7		ug/L		91	70 - 135	1	20
o-Xylene	ND		25.0	25.3		ug/L		101	65 - 125	3	20
p-Isopropyltoluene	ND		25.0	25.1		ug/L		100	65 - 130	4	20
sec-Butylbenzene	ND		25.0	23.5		ug/L		94	70 - 125	3	20
Styrene	ND		25.0	27.4		ug/L		109	50 - 145	3	30
tert-Butylbenzene	ND		25.0	23.8		ug/L		95	65 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	28.5		ug/L		114	65 - 140	3	20
1,1,2,2-Tetrachloroethane	ND		25.0	20.6		ug/L		82	55 - 135	2	30
Tetrachloroethene	ND		25.0	26.4		ug/L		105	65 - 130	6	20
Toluene	ND		25.0	23.1		ug/L		92	70 - 125	2	20
trans-1,2-Dichloroethene	ND		25.0	23.9		ug/L		95	65 - 130	2	20
trans-1,3-Dichloropropene	ND		25.0	27.1		ug/L		108	65 - 135	2	25
1,2,3-Trichlorobenzene	ND		25.0	20.6		ug/L		82	60 - 135	3	20
1,2,4-Trichlorobenzene	ND		25.0	21.3		ug/L		85	65 - 135	4	20
1,1,1-Trichloroethane	ND		25.0	24.4		ug/L		97	65 - 140	4	20
1,1,2-Trichloroethane	ND		25.0	22.4		ug/L		90	65 - 130	6	25
Trichloroethene	ND		25.0	25.8		ug/L		103	65 - 125	4	20
Trichlorofluoromethane	ND		25.0	25.1		ug/L		100	60 - 145	3	25
1,2,3-Trichloropropane	ND		25.0	19.4		ug/L		78	55 - 135	2	30
1,2,4-Trimethylbenzene	ND		25.0	24.8		ug/L		99	55 - 135	2	25
1,3,5-Trimethylbenzene	ND		25.0	24.4		ug/L		97	70 - 130	3	20
Vinyl chloride	ND		25.0	25.8		ug/L		103	45 - 140	2	30

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

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 280-163360/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.086	ug/L		03/06/13 15:40	03/07/13 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*57 - 120*	*03/06/13 15:40*	*03/07/13 15:36*	*1*

Lab Sample ID: LCS 280-163360/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	6.70		ug/L		67	38 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*57 - 120*

Lab Sample ID: 440-39676-3 MS — **Client Sample ID: OC-GW-OW3B-030113**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		9.54	6.88		ug/L		72	38 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*57 - 120*

Lab Sample ID: 440-39676-3 MSD — **Client Sample ID: OC-GW-OW3B-030113**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		9.58	6.85		ug/L		72	38 - 120	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*57 - 120*

QC Association Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

GC/MS VOA

Analysis Batch: 89977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-1	OC-GW-OW10-030113	Total/NA	Water	8260B	
440-39676-3	OC-GW-OW3B-030113	Total/NA	Water	8260B	
440-39676-3 MS	OC-GW-OW3B-030113	Total/NA	Water	8260B	
440-39676-3 MSD	OC-GW-OW3B-030113	Total/NA	Water	8260B	
440-39676-5	OC-GW-PZ3-030113	Total/NA	Water	8260B	
440-39676-5 - DL	OC-GW-PZ3-030113	Total/NA	Water	8260B	
440-39676-6	OC-GW-OW1B-030113	Total/NA	Water	8260B	
LCS 440-89977/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-89977/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 90022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-7	OC-GW-PZ9N-030113	Total/NA	Water	8260B	
440-39676-7 MS	OC-GW-PZ9N-030113	Total/NA	Water	8260B	
440-39676-7 MSD	OC-GW-PZ9N-030113	Total/NA	Water	8260B	
440-39676-8	OC-GW-OW3-030113	Total/NA	Water	8260B	
440-39676-9	OC-GW-EW1-030113	Total/NA	Water	8260B	
440-39676-9 - DL	OC-GW-EW1-030113	Total/NA	Water	8260B	
440-39676-10	OC-GW-EW2-030113	Total/NA	Water	8260B	
440-39676-10 - DL	OC-GW-EW2-030113	Total/NA	Water	8260B	
440-39676-11	OC-GW-EW3-030113	Total/NA	Water	8260B	
440-39676-11 - DL	OC-GW-EW3-030113	Total/NA	Water	8260B	
440-39676-12	OC-GW-EW4-030113	Total/NA	Water	8260B	
440-39676-13	OC-GW-EW5-030113	Total/NA	Water	8260B	
LCS 440-90022/5	Lab Control Sample	Total/NA	Water	8260B	
MB 440-90022/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 90718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-14	OC-GW-TB-030113	Total/NA	Water	8260B	
440-40019-T-7 MS	Matrix Spike	Total/NA	Water	8260B	
440-40019-T-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-90718/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-90718/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 163360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-1	OC-GW-OW10-030113	Total/NA	Water	3520C	
440-39676-3	OC-GW-OW3B-030113	Total/NA	Water	3520C	
440-39676-3 MS	OC-GW-OW3B-030113	Total/NA	Water	3520C	
440-39676-3 MSD	OC-GW-OW3B-030113	Total/NA	Water	3520C	
440-39676-5	OC-GW-PZ3-030113	Total/NA	Water	3520C	
440-39676-6	OC-GW-OW1B-030113	Total/NA	Water	3520C	
440-39676-7	OC-GW-PZ9N-030113	Total/NA	Water	3520C	
440-39676-8	OC-GW-OW3-030113	Total/NA	Water	3520C	
440-39676-9	OC-GW-EW1-030113	Total/NA	Water	3520C	
440-39676-10	OC-GW-EW2-030113	Total/NA	Water	3520C	
440-39676-11	OC-GW-EW3-030113	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 163360 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-12	OC-GW-EW4-030113	Total/NA	Water	3520C	
440-39676-13	OC-GW-EW5-030113	Total/NA	Water	3520C	
LCS 280-163360/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-163360/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 163574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-1	OC-GW-OW10-030113	Total/NA	Water	8270C LL	163360
440-39676-3	OC-GW-OW3B-030113	Total/NA	Water	8270C LL	163360
440-39676-3 MS	OC-GW-OW3B-030113	Total/NA	Water	8270C LL	163360
440-39676-3 MSD	OC-GW-OW3B-030113	Total/NA	Water	8270C LL	163360
440-39676-5	OC-GW-PZ3-030113	Total/NA	Water	8270C LL	163360
440-39676-6	OC-GW-OW1B-030113	Total/NA	Water	8270C LL	163360
440-39676-7	OC-GW-PZ9N-030113	Total/NA	Water	8270C LL	163360
440-39676-8	OC-GW-OW3-030113	Total/NA	Water	8270C LL	163360
440-39676-9	OC-GW-EW1-030113	Total/NA	Water	8270C LL	163360
440-39676-10	OC-GW-EW2-030113	Total/NA	Water	8270C LL	163360
440-39676-11	OC-GW-EW3-030113	Total/NA	Water	8270C LL	163360
440-39676-12	OC-GW-EW4-030113	Total/NA	Water	8270C LL	163360
440-39676-13	OC-GW-EW5-030113	Total/NA	Water	8270C LL	163360
LCS 280-163360/2-A	Lab Control Sample	Total/NA	Water	8270C LL	163360
MB 280-163360/1-A	Method Blank	Total/NA	Water	8270C LL	163360

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.

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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13
Wisconsin	State Program	5	999615430	08-31-13

Certification Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-1

Laboratory: TestAmerica Denver (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Wyoming (UST)	A2LA	8		10-31-13

446-39676

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013 (0911)

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6000 S. Eastern Ave., Suite 5E, Las Vegas, NV 89119 (702) 429-1264

Client Name/Address: de maximis, 1822 Scott St. Suite 104, San Diego

Project/PO Number: 3139 F

Project Manager: Jaime Dinello

Phone Number: 619-546-8877

Sampler: Carlton Hamm

Fax Number: 619-546-9980

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOC's (8260B) (Including Acetone, Freons, IPA, MTBE TICs)	1,4 Dioxane (8270M)								Special Instructions
OC_GW_OW10_030113	GW		5	3/1/13	1258		X	X								Please disregard hyphen on Sample ID listed on Bottles for the following Wells: EW1 thru EW5 & PZ9
OC_GW_OW9_030113	GW		5	3/1/13	1228		X	X								Tier II-DV
OC_GW_OW3B_030113	GW		5	3/1/13	1125		X	X								
OC_GW_OW3B_030113	GW		7	3/1/13	1130		X	X								MS/MSD
OC_GW_PZ9_030113	GW	1530	5	3/1/13	1630		X	X								
OC_GW_PZ3_030113	GW		5	3/1/13	1545		X	X								
OC_GW_OW1B_030113	GW		5	3/1/13	1654		X	X								
OC_GW_PZ9N_030113	GW		5	3/1/13	1600		X	X								
OC_GW_OW3_030113	GW		5	3/1/13	1757		X	X								
OC_GW_EW1_030113	GW		5	3/1/13	1652		X	X								See Note Above
OC_GW_EW2_030113	GW		5	3/1/13	1705		X	X								" "
OC_GW_EW3_030113	GW		5	3/1/13	1725		X	X								" "
OC_GW_EW4_030113	GW		5	3/1/13	1735		X	X								" "
OC_GW_EW5_030113	GW		5	3/1/13	1745		X	X								" "

Relinquished By: [signature] 3/1/13	Date/Time: 1900	Received By: [signature]	Date/Time: 3/1/13 1900
Relinquished By: [signature]	Date/Time: 3/1/13 2024	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received in Lab By: [signature]	Date/Time: 3/1/13 20:24

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ____

Sample Integrity: (Check)
intact ✓ on ice ✓

3.6/7.7°C/165

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.

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: de maximis, 1322 Scott St. Suite 104, San Diego

Project/PO Number: 3139 F

Project Manager: Jaime Dinello

Phone Number: 619-546-8377

Sampler: Carlton Hamm

Fax Number: 619-546-9980

Analysis Required: VOC's (8260B) (Including Acetone, Freons, 104, MTBE TICs)

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOC's (8260B) (Including Acetone, Freons, 104, MTBE TICs)									Special Instructions
OC_GW_TB_030113	W		3	3/1/13	0600		X									

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
	3/1/13 1902		3/1/13 1902	same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received By:	Date/Time:	24 hours ____ 5 days ____
	3/1/13 2024			48 hours ____ normal ____
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
			3/1/13 2024	intact ✓ on ice ✓

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.

3.6/7.7/16.5 °C

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39676-1

Login Number: 39676

List Source: TestAmerica Irvine

List Number: 1

Creator: Perez, Angel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39676-1

Login Number: 39676
List Number: 1
Creator: Bindel, Aaron M

List Source: TestAmerica Denver
List Creation: 03/06/13 10:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
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?	False	
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
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: 440-39676-2
Client Project/Site: Omega Chemical Groundwater
Revision: 1

For:
Jacob & Hefner Associates P.C.
15375 Barranca Parkway, J-101
Irvine, California 92618

Attn: Andrew Miller

Authorized for release by:
3/29/2013 9:10:07 AM

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.

Table of Contents

Cover Page 1
Table of Contents 2
Sample Summary 3
Case Narrative 4
Client Sample Results 5
Method Summary 9
Chronicle 10
QC Sample Results 11
QC Association 18
Definitions 19
Certification Summary 20
Chain of Custody 22
Receipt Checklists 24

Sample Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-39676-2	OC-GW-OW9-030113	Water	03/01/13 12:28	03/01/13 20:24
440-39676-4	OC-GW-PZ9-030113	Water	03/01/13 15:30	03/01/13 20:24

Job ID: 440-39676-2

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-39676-2

Comments
Only the results for sample OC-GW-OW9-030113 are included in this report due to need for data package.
This report was revised on 3/29/13 to include sample OC-GW-PZ9-030113 results with the Level 4 data package as requested.

Receipt
The samples were received on 3/1/2013 8:24 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.7º C, 6.8º C and 15.6º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) for Acetone associated with batch 89977 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) for batch 89977 exceeded control limits for Acetone. 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.

GC/MS Semi VOA
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 Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Client Sample ID: OC-GW-OW9-030113

Lab Sample ID: 440-39676-2

Date Collected: 03/01/13 12:28

Matrix: Water

Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	200	90	ug/L			03/07/13 01:56	20
Benzene	ND		10	5.6	ug/L			03/07/13 01:56	20
Bromobenzene	ND		20	5.4	ug/L			03/07/13 01:56	20
Bromochloromethane	ND		20	8.0	ug/L			03/07/13 01:56	20
Bromodichloromethane	ND		20	6.0	ug/L			03/07/13 01:56	20
Bromoform	ND		20	8.0	ug/L			03/07/13 01:56	20
Bromomethane	ND		20	8.4	ug/L			03/07/13 01:56	20
Carbon tetrachloride	ND		10	5.6	ug/L			03/07/13 01:56	20
Chlorobenzene	ND		20	7.2	ug/L			03/07/13 01:56	20
Chloroethane	ND		20	8.0	ug/L			03/07/13 01:56	20
Chloroform	**260**		20	6.6	ug/L			03/07/13 01:56	20
Chloromethane	ND		20	8.0	ug/L			03/07/13 01:56	20
2-Chlorotoluene	ND		20	5.6	ug/L			03/07/13 01:56	20
4-Chlorotoluene	ND		20	5.8	ug/L			03/07/13 01:56	20
cis-1,2-Dichloroethene	ND		20	6.4	ug/L			03/07/13 01:56	20
cis-1,3-Dichloropropene	ND		10	4.4	ug/L			03/07/13 01:56	20
Dibromochloromethane	ND		20	8.0	ug/L			03/07/13 01:56	20
1,2-Dibromo-3-Chloropropane	ND		100	19	ug/L			03/07/13 01:56	20
1,2-Dibromoethane (EDB)	ND		20	8.0	ug/L			03/07/13 01:56	20
Dibromomethane	ND		20	7.2	ug/L			03/07/13 01:56	20
1,2-Dichlorobenzene	ND		20	6.4	ug/L			03/07/13 01:56	20
1,3-Dichlorobenzene	ND		20	7.0	ug/L			03/07/13 01:56	20
1,4-Dichlorobenzene	ND		20	7.4	ug/L			03/07/13 01:56	20
Dichlorodifluoromethane	ND		20	5.2	ug/L			03/07/13 01:56	20
1,1-Dichloroethane	ND		20	8.0	ug/L			03/07/13 01:56	20
1,2-Dichloroethane	**50**		20	5.6	ug/L			03/07/13 01:56	20
1,1-Dichloroethene	**320**		20	8.4	ug/L			03/07/13 01:56	20
1,2-Dichloropropane	ND		20	7.0	ug/L			03/07/13 01:56	20
1,3-Dichloropropane	ND		20	6.4	ug/L			03/07/13 01:56	20
2,2-Dichloropropane	ND		20	6.8	ug/L			03/07/13 01:56	20
1,1-Dichloropropene	ND		20	5.6	ug/L			03/07/13 01:56	20
Ethylbenzene	ND		20	5.0	ug/L			03/07/13 01:56	20
Hexachlorobutadiene	ND		20	7.6	ug/L			03/07/13 01:56	20
Isopropyl alcohol	ND		2000	1000	ug/L			03/07/13 01:56	20
Isopropylbenzene	ND		20	5.0	ug/L			03/07/13 01:56	20
Methylene Chloride	ND		100	19	ug/L			03/07/13 01:56	20
Methyl-t-Butyl Ether (MTBE)	ND		20	6.4	ug/L			03/07/13 01:56	20
m,p-Xylene	ND		20	12	ug/L			03/07/13 01:56	20
Naphthalene	ND		20	8.2	ug/L			03/07/13 01:56	20
n-Butylbenzene	ND		20	7.4	ug/L			03/07/13 01:56	20
N-Propylbenzene	ND		20	5.4	ug/L			03/07/13 01:56	20
o-Xylene	ND		20	6.0	ug/L			03/07/13 01:56	20
p-Isopropyltoluene	ND		20	5.6	ug/L			03/07/13 01:56	20
sec-Butylbenzene	ND		20	5.0	ug/L			03/07/13 01:56	20
Styrene	ND		20	4.0	ug/L			03/07/13 01:56	20
tert-Butylbenzene	ND		20	4.4	ug/L			03/07/13 01:56	20
1,1,1,2-Tetrachloroethane	ND		20	5.4	ug/L			03/07/13 01:56	20
1,1,2,2-Tetrachloroethane	ND		20	6.0	ug/L			03/07/13 01:56	20
Toluene	ND		20	7.2	ug/L			03/07/13 01:56	20

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Client Sample ID: OC-GW-OW9-030113

Lab Sample ID: 440-39676-2

Date Collected: 03/01/13 12:28
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		20	6.0	ug/L			03/07/13 01:56	20
trans-1,3-Dichloropropene	ND		10	6.4	ug/L			03/07/13 01:56	20
1,2,3-Trichlorobenzene	ND		20	6.0	ug/L			03/07/13 01:56	20
1,2,4-Trichlorobenzene	ND		20	9.6	ug/L			03/07/13 01:56	20
1,1,1-Trichloroethane	ND		20	6.0	ug/L			03/07/13 01:56	20
1,1,2-Trichloroethane	ND		20	6.0	ug/L			03/07/13 01:56	20
Trichloroethene	**220**		20	5.2	ug/L			03/07/13 01:56	20
Trichlorofluoromethane	**120**		20	6.8	ug/L			03/07/13 01:56	20
1,2,3-Trichloropropane	ND		20	8.0	ug/L			03/07/13 01:56	20
1,1,2-Trichloro-1,2,2-trifluoroethane	**350**		100	10	ug/L			03/07/13 01:56	20
1,2,4-Trimethylbenzene	ND		20	4.6	ug/L			03/07/13 01:56	20
1,3,5-Trimethylbenzene	ND		20	5.2	ug/L			03/07/13 01:56	20
Vinyl chloride	ND		10	8.0	ug/L			03/07/13 01:56	20

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 01:56*	*20*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*03/07/13 01:56*	*20*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*03/07/13 01:56*	*20*
Toluene-d8 (Surr)	*110*		*80 - 120*		*03/07/13 01:56*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**3700**		100	32	ug/L			03/07/13 02:25	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*03/07/13 02:25*	*100*
Dibromofluoromethane (Surr)	*114*		*80 - 120*		*03/07/13 02:25*	*100*
Toluene-d8 (Surr)	*115*		*80 - 120*		*03/07/13 02:25*	*100*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**300**		4.8	0.41	ug/L		03/06/13 15:40	03/08/13 09:43	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*	*D*	*57 - 120*	*03/06/13 15:40*	*03/08/13 09:43*	*5*

Client Sample ID: OC-GW-PZ9-030113

Lab Sample ID: 440-39676-4

Date Collected: 03/01/13 15:30
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	500	230	ug/L			03/07/13 02:53	50
Benzene	ND		25	14	ug/L			03/07/13 02:53	50
Bromobenzene	ND		50	14	ug/L			03/07/13 02:53	50
Bromochloromethane	ND		50	20	ug/L			03/07/13 02:53	50
Bromodichloromethane	ND		50	15	ug/L			03/07/13 02:53	50
Bromoform	ND		50	20	ug/L			03/07/13 02:53	50

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Client Sample ID: OC-GW-PZ9-030113
Date Collected: 03/01/13 15:30
Date Received: 03/01/13 20:24

Lab Sample ID: 440-39676-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		50	21	ug/L			03/07/13 02:53	50
Carbon tetrachloride	ND		25	14	ug/L			03/07/13 02:53	50
Chlorobenzene	ND		50	18	ug/L			03/07/13 02:53	50
Chloroethane	ND		50	20	ug/L			03/07/13 02:53	50
Chloroform	**830**		50	17	ug/L			03/07/13 02:53	50
Chloromethane	ND		50	20	ug/L			03/07/13 02:53	50
2-Chlorotoluene	ND		50	14	ug/L			03/07/13 02:53	50
4-Chlorotoluene	ND		50	15	ug/L			03/07/13 02:53	50
cis-1,2-Dichloroethene	ND		50	16	ug/L			03/07/13 02:53	50
cis-1,3-Dichloropropene	ND		25	11	ug/L			03/07/13 02:53	50
Dibromochloromethane	ND		50	20	ug/L			03/07/13 02:53	50
1,2-Dibromo-3-Chloropropane	ND		250	49	ug/L			03/07/13 02:53	50
1,2-Dibromoethane (EDB)	ND		50	20	ug/L			03/07/13 02:53	50
Dibromomethane	ND		50	18	ug/L			03/07/13 02:53	50
1,2-Dichlorobenzene	ND		50	16	ug/L			03/07/13 02:53	50
1,3-Dichlorobenzene	ND		50	18	ug/L			03/07/13 02:53	50
1,4-Dichlorobenzene	ND		50	19	ug/L			03/07/13 02:53	50
Dichlorodifluoromethane	ND		50	13	ug/L			03/07/13 02:53	50
1,1-Dichloroethane	**21**	**J**	50	20	ug/L			03/07/13 02:53	50
1,2-Dichloroethane	**160**		50	14	ug/L			03/07/13 02:53	50
1,1-Dichloroethene	**1000**		50	21	ug/L			03/07/13 02:53	50
1,2-Dichloropropane	ND		50	18	ug/L			03/07/13 02:53	50
1,3-Dichloropropane	ND		50	16	ug/L			03/07/13 02:53	50
2,2-Dichloropropane	ND		50	17	ug/L			03/07/13 02:53	50
1,1-Dichloropropene	ND		50	14	ug/L			03/07/13 02:53	50
Ethylbenzene	ND		50	13	ug/L			03/07/13 02:53	50
Hexachlorobutadiene	ND		50	19	ug/L			03/07/13 02:53	50
Isopropyl alcohol	ND		5000	2500	ug/L			03/07/13 02:53	50
Isopropylbenzene	ND		50	13	ug/L			03/07/13 02:53	50
Methylene Chloride	ND		250	48	ug/L			03/07/13 02:53	50
Methyl-t-Butyl Ether (MTBE)	ND		50	16	ug/L			03/07/13 02:53	50
m,p-Xylene	ND		50	30	ug/L			03/07/13 02:53	50
Naphthalene	ND		50	21	ug/L			03/07/13 02:53	50
n-Butylbenzene	ND		50	19	ug/L			03/07/13 02:53	50
N-Propylbenzene	ND		50	14	ug/L			03/07/13 02:53	50
o-Xylene	ND		50	15	ug/L			03/07/13 02:53	50
p-Isopropyltoluene	ND		50	14	ug/L			03/07/13 02:53	50
sec-Butylbenzene	ND		50	13	ug/L			03/07/13 02:53	50
Styrene	ND		50	10	ug/L			03/07/13 02:53	50
tert-Butylbenzene	ND		50	11	ug/L			03/07/13 02:53	50
1,1,1,2-Tetrachloroethane	ND		50	14	ug/L			03/07/13 02:53	50
1,1,2,2-Tetrachloroethane	ND		50	15	ug/L			03/07/13 02:53	50
Toluene	ND		50	18	ug/L			03/07/13 02:53	50
trans-1,2-Dichloroethene	ND		50	15	ug/L			03/07/13 02:53	50
trans-1,3-Dichloropropene	ND		25	16	ug/L			03/07/13 02:53	50
1,2,3-Trichlorobenzene	ND		50	15	ug/L			03/07/13 02:53	50
1,2,4-Trichlorobenzene	ND		50	24	ug/L			03/07/13 02:53	50
1,1,1-Trichloroethane	ND		50	15	ug/L			03/07/13 02:53	50
1,1,2-Trichloroethane	ND		50	15	ug/L			03/07/13 02:53	50

Client Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Client Sample ID: OC-GW-PZ9-030113

Lab Sample ID: 440-39676-4

Date Collected: 03/01/13 15:30
Matrix: Water
Date Received: 03/01/13 20:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**630**		50	13	ug/L			03/07/13 02:53	50
Trichlorofluoromethane	**330**		50	17	ug/L			03/07/13 02:53	50
1,2,3-Trichloropropane	ND		50	20	ug/L			03/07/13 02:53	50
1,1,2-Trichloro-1,2,2-trifluoroethane	**950**		250	25	ug/L			03/07/13 02:53	50
1,2,4-Trimethylbenzene	ND		50	12	ug/L			03/07/13 02:53	50
1,3,5-Trimethylbenzene	ND		50	13	ug/L			03/07/13 02:53	50
Vinyl chloride	ND		25	20	ug/L			03/07/13 02:53	50

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/07/13 02:53*	*50*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*03/07/13 02:53*	*50*
Dibromofluoromethane (Surr)	*114*		*80 - 120*		*03/07/13 02:53*	*50*
Toluene-d8 (Surr)	*111*		*80 - 120*		*03/07/13 02:53*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**10000**		200	64	ug/L			03/07/13 03:21	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*03/07/13 03:21*	*200*
Dibromofluoromethane (Surr)	*117*		*80 - 120*		*03/07/13 03:21*	*200*
Toluene-d8 (Surr)	*118*		*80 - 120*		*03/07/13 03:21*	*200*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1100**		19	1.6	ug/L		03/06/13 15:40	03/08/13 10:07	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*46*	*X D*	*57 - 120*	*03/06/13 15:40*	*03/08/13 10:07*	*20*

Method Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL IRV
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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

Lab Chronicle

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Client Sample ID: OC-GW-OW9-030113

Lab Sample ID: 440-39676-2

Date Collected: 03/01/13 12:28

Matrix: Water

Date Received: 03/01/13 20:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	10 mL	10 mL	89977	03/07/13 01:56	MR	TAL IRV
Total/NA	Analysis	8260B	DL	100	10 mL	10 mL	89977	03/07/13 02:25	MR	TAL IRV
Total/NA	Prep	3520C			1051.4 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		5			163721	03/08/13 09:43	KGV	TAL DEN

Client Sample ID: OC-GW-PZ9-030113

Lab Sample ID: 440-39676-4

Date Collected: 03/01/13 15:30

Matrix: Water

Date Received: 03/01/13 20:24

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	89977	03/07/13 02:53	MR	TAL IRV
Total/NA	Analysis	8260B	DL	200	10 mL	10 mL	89977	03/07/13 03:21	MR	TAL IRV
Total/NA	Prep	3520C			1052 mL	2000 uL	163360	03/06/13 15:40	JJW	TAL DEN
Total/NA	Analysis	8270C LL		20			163721	03/08/13 10:07	KGV	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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 440-89977/5
Matrix: Water
Analysis Batch: 89977

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			03/06/13 22:18	1
Benzene	ND		0.50	0.28	ug/L			03/06/13 22:18	1
Bromobenzene	ND		1.0	0.27	ug/L			03/06/13 22:18	1
Bromochloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Bromodichloromethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
Bromoform	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Bromomethane	ND		1.0	0.42	ug/L			03/06/13 22:18	1
Carbon tetrachloride	ND		0.50	0.28	ug/L			03/06/13 22:18	1
Chlorobenzene	ND		1.0	0.36	ug/L			03/06/13 22:18	1
Chloroethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Chloroform	ND		1.0	0.33	ug/L			03/06/13 22:18	1
Chloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
2-Chlorotoluene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
4-Chlorotoluene	ND		1.0	0.29	ug/L			03/06/13 22:18	1
cis-1,2-Dichloroethene	ND		1.0	0.32	ug/L			03/06/13 22:18	1
cis-1,3-Dichloropropene	ND		0.50	0.22	ug/L			03/06/13 22:18	1
Dibromochloromethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.97	ug/L			03/06/13 22:18	1
1,2-Dibromoethane (EDB)	ND		1.0	0.40	ug/L			03/06/13 22:18	1
Dibromomethane	ND		1.0	0.36	ug/L			03/06/13 22:18	1
1,2-Dichlorobenzene	ND		1.0	0.32	ug/L			03/06/13 22:18	1
1,3-Dichlorobenzene	ND		1.0	0.35	ug/L			03/06/13 22:18	1
1,4-Dichlorobenzene	ND		1.0	0.37	ug/L			03/06/13 22:18	1
Dichlorodifluoromethane	ND		1.0	0.26	ug/L			03/06/13 22:18	1
1,1-Dichloroethane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			03/06/13 22:18	1
1,1-Dichloroethene	ND		1.0	0.42	ug/L			03/06/13 22:18	1
1,2-Dichloropropane	ND		1.0	0.35	ug/L			03/06/13 22:18	1
1,3-Dichloropropane	ND		1.0	0.32	ug/L			03/06/13 22:18	1
2,2-Dichloropropane	ND		1.0	0.34	ug/L			03/06/13 22:18	1
1,1-Dichloropropene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
Ethylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Hexachlorobutadiene	ND		1.0	0.38	ug/L			03/06/13 22:18	1
Isopropyl alcohol	ND		100	50	ug/L			03/06/13 22:18	1
Isopropylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Methylene Chloride	ND		5.0	0.95	ug/L			03/06/13 22:18	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.32	ug/L			03/06/13 22:18	1
m,p-Xylene	ND		1.0	0.60	ug/L			03/06/13 22:18	1
Naphthalene	ND		1.0	0.41	ug/L			03/06/13 22:18	1
n-Butylbenzene	ND		1.0	0.37	ug/L			03/06/13 22:18	1
N-Propylbenzene	ND		1.0	0.27	ug/L			03/06/13 22:18	1
o-Xylene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
p-Isopropyltoluene	ND		1.0	0.28	ug/L			03/06/13 22:18	1
sec-Butylbenzene	ND		1.0	0.25	ug/L			03/06/13 22:18	1
Styrene	ND		1.0	0.20	ug/L			03/06/13 22:18	1
tert-Butylbenzene	ND		1.0	0.22	ug/L			03/06/13 22:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.27	ug/L			03/06/13 22:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1

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

Lab Sample ID: MB 440-89977/5
Matrix: Water
Analysis Batch: 89977

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			03/06/13 22:18	1
Toluene	ND		1.0	0.36	ug/L			03/06/13 22:18	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
trans-1,3-Dichloropropene	ND		0.50	0.32	ug/L			03/06/13 22:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.30	ug/L			03/06/13 22:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.48	ug/L			03/06/13 22:18	1
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
1,1,2-Trichloroethane	ND		1.0	0.30	ug/L			03/06/13 22:18	1
Trichloroethene	ND		1.0	0.26	ug/L			03/06/13 22:18	1
Trichlorofluoromethane	ND		1.0	0.34	ug/L			03/06/13 22:18	1
1,2,3-Trichloropropane	ND		1.0	0.40	ug/L			03/06/13 22:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	0.50	ug/L			03/06/13 22:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.23	ug/L			03/06/13 22:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.26	ug/L			03/06/13 22:18	1
Vinyl chloride	ND		0.50	0.40	ug/L			03/06/13 22:18	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*03/06/13 22:18*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*		*03/06/13 22:18*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 120*		*03/06/13 22:18*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*03/06/13 22:18*	*1*

Lab Sample ID: LCS 440-89977/6
Matrix: Water
Analysis Batch: 89977

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	37.4	*	ug/L		150	30 - 140
Benzene	25.0	20.4		ug/L		81	70 - 120
Bromobenzene	25.0	23.5		ug/L		94	75 - 120
Bromochloromethane	25.0	23.9		ug/L		96	70 - 130
Bromodichloromethane	25.0	25.5		ug/L		102	70 - 135
Bromoform	25.0	26.3		ug/L		105	55 - 130
Bromomethane	25.0	23.1		ug/L		92	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	23.5		ug/L		94	60 - 140
Chloroform	25.0	24.0		ug/L		96	70 - 130
Chloromethane	25.0	20.7		ug/L		83	50 - 140
2-Chlorotoluene	25.0	23.8		ug/L		95	70 - 125
4-Chlorotoluene	25.0	24.3		ug/L		97	75 - 125
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 125
cis-1,3-Dichloropropene	25.0	27.9		ug/L		111	75 - 125
Dibromochloromethane	25.0	26.7		ug/L		107	70 - 140
1,2-Dibromo-3-Chloropropane	25.0	24.5		ug/L		98	50 - 135

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

Lab Sample ID: LCS 440-89977/6
Matrix: Water
Analysis Batch: 89977

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	25.0	24.1		ug/L		96	75 - 125
Dibromomethane	25.0	25.0		ug/L		100	70 - 125
1,2-Dichlorobenzene	25.0	22.7		ug/L		91	75 - 120
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	75 - 120
1,4-Dichlorobenzene	25.0	22.6		ug/L		90	75 - 120
Dichlorodifluoromethane	25.0	17.4		ug/L		70	35 - 155
1,1-Dichloroethane	25.0	22.9		ug/L		92	70 - 125
1,2-Dichloroethane	25.0	24.3		ug/L		97	60 - 140
1,1-Dichloroethene	25.0	23.7		ug/L		95	70 - 125
1,2-Dichloropropane	25.0	23.0		ug/L		92	70 - 125
1,3-Dichloropropane	25.0	23.7		ug/L		95	70 - 120
2,2-Dichloropropane	25.0	27.4		ug/L		110	65 - 140
1,1-Dichloropropene	25.0	21.7		ug/L		87	75 - 130
Ethylbenzene	25.0	23.3		ug/L		93	75 - 125
Hexachlorobutadiene	25.0	20.3		ug/L		81	65 - 135
Isopropylbenzene	25.0	25.9		ug/L		104	75 - 130
Methylene Chloride	25.0	20.9		ug/L		84	55 - 130
Methyl-t-Butyl Ether (MTBE)	25.0	23.3		ug/L		93	60 - 135
m,p-Xylene	50.0	47.3		ug/L		95	75 - 125
Naphthalene	25.0	21.9		ug/L		88	55 - 135
n-Butylbenzene	25.0	24.1		ug/L		96	70 - 130
N-Propylbenzene	25.0	24.1		ug/L		96	75 - 130
o-Xylene	25.0	23.7		ug/L		95	75 - 125
p-Isopropyltoluene	25.0	23.2		ug/L		93	75 - 125
sec-Butylbenzene	25.0	23.3		ug/L		93	70 - 125
Styrene	25.0	26.2		ug/L		105	75 - 130
tert-Butylbenzene	25.0	24.1		ug/L		96	70 - 125
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	25.0	23.2		ug/L		93	55 - 130
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 125
Toluene	25.0	23.5		ug/L		94	70 - 120
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	70 - 125
trans-1,3-Dichloropropene	25.0	28.1		ug/L		112	70 - 125
1,2,3-Trichlorobenzene	25.0	19.6		ug/L		78	65 - 125
1,2,4-Trichlorobenzene	25.0	21.2		ug/L		85	70 - 135
1,1,1-Trichloroethane	25.0	25.7		ug/L		103	65 - 135
1,1,2-Trichloroethane	25.0	23.4		ug/L		93	70 - 125
Trichloroethene	25.0	24.3		ug/L		97	70 - 125
Trichlorofluoromethane	25.0	25.9		ug/L		104	65 - 145
1,2,3-Trichloropropane	25.0	23.0		ug/L		92	60 - 130
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		99	75 - 125
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	75 - 125
Vinyl chloride	25.0	25.2		ug/L		101	55 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

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

Lab Sample ID: 440-39676-F-3 MS
Matrix: Water
Analysis Batch: 89977

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	16.4		ug/L		66	20 - 150
Benzene	ND		25.0	21.3		ug/L		85	65 - 125
Bromobenzene	ND		25.0	23.0		ug/L		92	70 - 125
Bromochloromethane	ND		25.0	24.2		ug/L		97	65 - 135
Bromodichloromethane	ND		25.0	26.3		ug/L		105	70 - 135
Bromoform	ND		25.0	24.8		ug/L		99	55 - 135
Bromomethane	ND		25.0	23.0		ug/L		92	55 - 145
Carbon tetrachloride	ND		25.0	26.2		ug/L		105	65 - 140
Chlorobenzene	ND		25.0	22.6		ug/L		91	75 - 125
Chloroethane	ND		25.0	23.0		ug/L		92	55 - 140
Chloroform	ND		25.0	23.3		ug/L		93	65 - 135
Chloromethane	ND		25.0	19.2		ug/L		77	45 - 145
2-Chlorotoluene	ND		25.0	22.9		ug/L		91	65 - 135
4-Chlorotoluene	ND		25.0	24.1		ug/L		96	70 - 135
cis-1,2-Dichloroethene	ND		25.0	25.0		ug/L		100	65 - 130
cis-1,3-Dichloropropene	ND		25.0	27.6		ug/L		110	70 - 130
Dibromochloromethane	ND		25.0	25.0		ug/L		100	65 - 140
1,2-Dibromo-3-Chloropropane	ND		25.0	21.6		ug/L		87	45 - 145
1,2-Dibromoethane (EDB)	ND		25.0	23.4		ug/L		94	70 - 130
Dibromomethane	ND		25.0	25.8		ug/L		103	65 - 135
1,2-Dichlorobenzene	ND		25.0	22.3		ug/L		89	75 - 125
1,3-Dichlorobenzene	ND		25.0	22.9		ug/L		92	75 - 125
1,4-Dichlorobenzene	ND		25.0	23.0		ug/L		92	75 - 125
Dichlorodifluoromethane	ND		25.0	17.1		ug/L		68	25 - 155
1,1-Dichloroethane	ND		25.0	23.0		ug/L		92	65 - 130
1,2-Dichloroethane	ND		25.0	23.6		ug/L		94	60 - 140
1,1-Dichloroethene	ND		25.0	23.5		ug/L		94	60 - 130
1,2-Dichloropropane	ND		25.0	23.1		ug/L		92	65 - 130
1,3-Dichloropropane	ND		25.0	22.0		ug/L		88	65 - 135
2,2-Dichloropropane	ND		25.0	29.5		ug/L		118	60 - 145
1,1-Dichloropropene	ND		25.0	22.8		ug/L		91	70 - 135
Ethylbenzene	ND		25.0	22.5		ug/L		90	65 - 130
Hexachlorobutadiene	ND		25.0	19.5		ug/L		78	60 - 135
Isopropylbenzene	ND		25.0	24.7		ug/L		99	70 - 135
Methylene Chloride	ND		25.0	21.5		ug/L		86	50 - 135
Methyl-t-Butyl Ether (MTBE)	ND		25.0	24.1		ug/L		96	55 - 145
m,p-Xylene	ND		50.0	44.1		ug/L		88	65 - 130
Naphthalene	ND		25.0	20.0		ug/L		80	50 - 140
n-Butylbenzene	ND		25.0	24.2		ug/L		97	65 - 135
N-Propylbenzene	ND		25.0	23.4		ug/L		93	70 - 135
o-Xylene	ND		25.0	22.2		ug/L		89	65 - 125
p-Isopropyltoluene	ND		25.0	22.9		ug/L		92	65 - 130
sec-Butylbenzene	ND		25.0	22.6		ug/L		91	70 - 125
Styrene	ND		25.0	23.6		ug/L		94	50 - 145
tert-Butylbenzene	ND		25.0	23.4		ug/L		94	65 - 130
1,1,1,2-Tetrachloroethane	ND		25.0	24.5		ug/L		98	65 - 140
1,1,2,2-Tetrachloroethane	ND		25.0	23.1		ug/L		93	55 - 135
Tetrachloroethene	2.3		25.0	24.5		ug/L		89	65 - 130

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

Lab Sample ID: 440-39676-F-3 MS
Matrix: Water
Analysis Batch: 89977

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
Toluene	ND		25.0	23.5		ug/L		94	70 - 125
trans-1,2-Dichloroethene	ND		25.0	23.8		ug/L		95	65 - 130
trans-1,3-Dichloropropene	ND		25.0	28.2		ug/L		113	65 - 135
1,2,3-Trichlorobenzene	ND		25.0	18.9		ug/L		76	60 - 135
1,2,4-Trichlorobenzene	ND		25.0	21.1		ug/L		84	65 - 135
1,1,1-Trichloroethane	ND		25.0	25.0		ug/L		100	65 - 140
1,1,2-Trichloroethane	ND		25.0	24.3		ug/L		97	65 - 130
Trichloroethene	ND		25.0	23.9		ug/L		96	65 - 125
Trichlorofluoromethane	ND		25.0	25.9		ug/L		104	60 - 145
1,2,3-Trichloropropane	ND		25.0	21.3		ug/L		85	55 - 135
1,2,4-Trimethylbenzene	ND		25.0	24.3		ug/L		97	55 - 135
1,3,5-Trimethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130
Vinyl chloride	ND		25.0	24.6		ug/L		99	45 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*111*		*80 - 120*
Toluene-d8 (Surr)	*112*		*80 - 120*

Lab Sample ID: 440-39676-F-3 MSD
Matrix: Water
Analysis Batch: 89977

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	15.6		ug/L		62	20 - 150	5	35
Benzene	ND		25.0	20.9		ug/L		84	65 - 125	2	20
Bromobenzene	ND		25.0	23.5		ug/L		94	70 - 125	2	20
Bromochloromethane	ND		25.0	23.1		ug/L		93	65 - 135	5	25
Bromodichloromethane	ND		25.0	25.8		ug/L		103	70 - 135	2	20
Bromoform	ND		25.0	25.1		ug/L		101	55 - 135	2	25
Bromomethane	ND		25.0	21.9		ug/L		88	55 - 145	5	25
Carbon tetrachloride	ND		25.0	25.2		ug/L		101	65 - 140	4	25
Chlorobenzene	ND		25.0	22.7		ug/L		91	75 - 125	0	20
Chloroethane	ND		25.0	22.0		ug/L		88	55 - 140	5	25
Chloroform	ND		25.0	22.9		ug/L		92	65 - 135	2	20
Chloromethane	ND		25.0	19.0		ug/L		76	45 - 145	1	25
2-Chlorotoluene	ND		25.0	22.9		ug/L		92	65 - 135	0	20
4-Chlorotoluene	ND		25.0	23.6		ug/L		94	70 - 135	2	20
cis-1,2-Dichloroethene	ND		25.0	24.7		ug/L		99	65 - 130	1	20
cis-1,3-Dichloropropene	ND		25.0	26.4		ug/L		105	70 - 130	5	20
Dibromochloromethane	ND		25.0	25.2		ug/L		101	65 - 140	1	25
1,2-Dibromo-3-Chloropropane	ND		25.0	23.2		ug/L		93	45 - 145	7	30
1,2-Dibromoethane (EDB)	ND		25.0	23.9		ug/L		96	70 - 130	2	25
Dibromomethane	ND		25.0	25.4		ug/L		102	65 - 135	2	25
1,2-Dichlorobenzene	ND		25.0	22.2		ug/L		89	75 - 125	1	20
1,3-Dichlorobenzene	ND		25.0	22.8		ug/L		91	75 - 125	0	20
1,4-Dichlorobenzene	ND		25.0	22.3		ug/L		89	75 - 125	3	20
Dichlorodifluoromethane	ND		25.0	16.1		ug/L		64	25 - 155	6	30

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

Lab Sample ID: 440-39676-F-3 MSD
Matrix: Water
Analysis Batch: 89977

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-Dichloroethane	ND		25.0	22.4		ug/L		90	65 - 130	3	20
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	60 - 140	2	20
1,1-Dichloroethene	ND		25.0	22.3		ug/L		89	60 - 130	5	20
1,2-Dichloropropane	ND		25.0	23.9		ug/L		95	65 - 130	3	20
1,3-Dichloropropane	ND		25.0	22.7		ug/L		91	65 - 135	3	25
2,2-Dichloropropane	ND		25.0	27.7		ug/L		111	60 - 145	6	25
1,1-Dichloropropene	ND		25.0	21.1		ug/L		85	70 - 135	7	20
Ethylbenzene	ND		25.0	23.0		ug/L		92	65 - 130	2	20
Hexachlorobutadiene	ND		25.0	19.1		ug/L		76	60 - 135	2	20
Isopropylbenzene	ND		25.0	23.9		ug/L		95	70 - 135	4	20
Methylene Chloride	ND		25.0	20.9		ug/L		84	50 - 135	2	20
Methyl-t-Butyl Ether (MTBE)	ND		25.0	23.0		ug/L		92	55 - 145	5	25
m,p-Xylene	ND		50.0	45.4		ug/L		91	65 - 130	3	25
Naphthalene	ND		25.0	20.3		ug/L		81	50 - 140	2	30
n-Butylbenzene	ND		25.0	24.3		ug/L		97	65 - 135	0	20
N-Propylbenzene	ND		25.0	23.1		ug/L		92	70 - 135	1	20
o-Xylene	ND		25.0	23.6		ug/L		95	65 - 125	6	20
p-Isopropyltoluene	ND		25.0	23.2		ug/L		93	65 - 130	1	20
sec-Butylbenzene	ND		25.0	22.9		ug/L		92	70 - 125	1	20
Styrene	ND		25.0	23.3		ug/L		93	50 - 145	1	30
tert-Butylbenzene	ND		25.0	22.7		ug/L		91	65 - 130	3	20
1,1,1,2-Tetrachloroethane	ND		25.0	24.6		ug/L		99	65 - 140	0	20
1,1,2,2-Tetrachloroethane	ND		25.0	24.1		ug/L		96	55 - 135	4	30
Tetrachloroethene	2.3		25.0	25.3		ug/L		92	65 - 130	3	20
Toluene	ND		25.0	23.0		ug/L		92	70 - 125	2	20
trans-1,2-Dichloroethene	ND		25.0	22.8		ug/L		91	65 - 130	4	20
trans-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	65 - 135	0	25
1,2,3-Trichlorobenzene	ND		25.0	18.5		ug/L		74	60 - 135	2	20
1,2,4-Trichlorobenzene	ND		25.0	20.7		ug/L		83	65 - 135	2	20
1,1,1-Trichloroethane	ND		25.0	24.1		ug/L		96	65 - 140	4	20
1,1,2-Trichloroethane	ND		25.0	23.7		ug/L		95	65 - 130	2	25
Trichloroethene	ND		25.0	23.7		ug/L		95	65 - 125	1	20
Trichlorofluoromethane	ND		25.0	24.5		ug/L		98	60 - 145	5	25
1,2,3-Trichloropropane	ND		25.0	21.2		ug/L		85	55 - 135	1	30
1,2,4-Trimethylbenzene	ND		25.0	24.9		ug/L		99	55 - 135	2	25
1,3,5-Trimethylbenzene	ND		25.0	23.8		ug/L		95	70 - 130	3	20
Vinyl chloride	ND		25.0	23.8		ug/L		95	45 - 140	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*113*		*80 - 120*

QC Sample Results

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 280-163360/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.086	ug/L		03/06/13 15:40	03/07/13 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*57 - 120*	*03/06/13 15:40*	*03/07/13 15:36*	*1*

Lab Sample ID: LCS 280-163360/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	10.0	6.70		ug/L		67	38 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*57 - 120*

Lab Sample ID: 440-39676-C-3-A MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	ND		9.54	6.88		ug/L		72	38 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*57 - 120*

Lab Sample ID: 440-39676-C-3-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163574 — **Prep Batch: 163360**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	ND		9.58	6.85		ug/L		72	38 - 120	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*57 - 120*

QC Association Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

GC/MS VOA

Analysis Batch: 89977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-2	OC-GW-OW9-030113	Total/NA	Water	8260B	
440-39676-2 - DL	OC-GW-OW9-030113	Total/NA	Water	8260B	
440-39676-4	OC-GW-PZ9-030113	Total/NA	Water	8260B	
440-39676-4 - DL	OC-GW-PZ9-030113	Total/NA	Water	8260B	
440-39676-F-3 MS	Matrix Spike	Total/NA	Water	8260B	
440-39676-F-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 440-89977/6	Lab Control Sample	Total/NA	Water	8260B	
MB 440-89977/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 163360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-2	OC-GW-OW9-030113	Total/NA	Water	3520C	
440-39676-4	OC-GW-PZ9-030113	Total/NA	Water	3520C	
440-39676-C-3-A MS	Matrix Spike	Total/NA	Water	3520C	
440-39676-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	3520C	
LCS 280-163360/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 280-163360/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 163574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-C-3-A MS	Matrix Spike	Total/NA	Water	8270C LL	163360
440-39676-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	8270C LL	163360
LCS 280-163360/2-A	Lab Control Sample	Total/NA	Water	8270C LL	163360
MB 280-163360/1-A	Method Blank	Total/NA	Water	8270C LL	163360

Analysis Batch: 163721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-39676-2	OC-GW-OW9-030113	Total/NA	Water	8270C LL	163360
440-39676-4	OC-GW-PZ9-030113	Total/NA	Water	8270C LL	163360

Definitions/Glossary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

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 Semi VOA

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
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
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
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: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

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
Alaska	State Program	10	CA01531	06-30-13
Arizona	State Program	9	AZ0671	10-13-13
California	LA Cty Sanitation Districts	9	10256	01-31-14
California	NELAP	9	1108CA	01-31-14
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	03-28-13
Hawaii	State Program	9	N/A	01-31-14
Nevada	State Program	9	CA015312007A	07-31-13
Northern Mariana Islands	State Program	9	MP0002	01-31-14
Oregon	NELAP	10	4005	09-12-13
USDA	Federal		P330-09-00080	06-06-14
USEPA UCMR	Federal	1	CA01531	01-31-15

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-13
A2LA	ISO/IEC 17025		2907.01	10-31-13
Alaska (UST)	State Program	10	UST-30	04-05-13
Arizona	State Program	9	AZ0713	12-19-13
Arkansas DEQ	State Program	6	88-0687	06-01-13
California	State Program	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-13
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-13
Idaho	State Program	10	CO00026	09-30-13
Illinois	NELAP	5	200017	04-30-13
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-13
Louisiana	NELAP	6	30785	06-30-13
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13
Nevada	State Program	9	CO0026	07-30-13
New Hampshire	NELAP	1	205310	04-28-13
New Jersey	NELAP	2	CO004	06-30-13
New Mexico	State Program	6	CO00026	06-30-13
New York	NELAP	2	11964	04-01-13
North Carolina DENR	State Program	4	358	12-31-13
North Dakota	State Program	8	R-034	06-30-13
Oklahoma	State Program	6	8614	08-31-13
Oregon	NELAP	10	CO200001	01-16-14
Pennsylvania	NELAP	3	68-00664	07-31-13
South Carolina	State Program	4	72002	06-30-13
Texas	NELAP	6	T104704183-08-TX	09-30-13
USDA	Federal		P330-08-00036	02-08-14
Utah	NELAP	8	QUAN5	06-30-13
Virginia	NELAP	3	460232	06-14-13
Washington	State Program	10	C583	08-03-13
West Virginia DEP	State Program	3	354	11-30-13
Wisconsin	State Program	5	999615430	08-31-13

Certification Summary

Client: Jacob & Hefner Associates P.C.
Project/Site: Omega Chemical Groundwater

TestAmerica Job ID: 440-39676-2

Laboratory: TestAmerica Denver (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Wyoming (UST)	A2LA	8		10-31-13

446-39676

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
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Client Name/Address: de maximis, 1822 Scott St. Suite 104, San Diego

Project/PO Number: 3139 F

Project Manager: Jaime Dinello

Phone Number: 619-546-8877

Sampler: Carlton Hamm

Fax Number: 619-546-9980

Analysis Required: VOC's (8260B) (including Acetone, Freons, IPA, MTBE); 1,4 Dioxane (8270M)

Please disregard hyphen on Sample ID listed on Bottles for the following Wells: EW1 thru EW5 & PZ9

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOC's (8260B) (including Acetone, Freons, IPA, MTBE)	1,4 Dioxane (8270M)							Special Instructions
OC_GW_OW10_030113	GW		5	3/1/13	1258		X	X							
OC_GW_OW9_030113	GW		5	3/1/13	1228		X	X							Tier II-DV
OC_GW_OW3B_030113	GW		5	3/1/13	1125		X	X							
OC_GW_OW3B_030113	GW		7	3/1/13	1130		X	X							MS/MSD
OC_GW_PZ9_030113	GW	1530	5	3/1/13	1630		X	X							
OC_GW_PZ3_030113	GW		5	3/1/13	1545		X	X							
OC_GW_OW1B_030113	GW		5	3/1/13	1654		X	X							
OC_GW_PZ9N_030113	GW		5	3/1/13	1600		X	X							
OC_GW_OW3_030113	GW		5	3/1/13	1757		X	X							
OC_GW_EW1_030113	GW		5	3/1/13	1652		X	X							See Note Above
OC_GW_EW2_030113	GW		5	3/1/13	1705		X	X							" "
OC_GW_EW3_030113	GW		5	3/1/13	1725		X	X							" "
OC_GW_EW4_030113	GW		5	3/1/13	1735		X	X							" "
OC_GW_EW5_030113	GW		5	3/1/13	1745		X	X							" "

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	3/1/13 1900	[signature]	3/1/13 1900
[signature]	3/1/13 2024		

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ____

Received in Lab By: [signature] Date/Time: 3/1/13 20:24

Sample Integrity: (Check)
intact ✓ on ice ✓

3.6/7.7°C/165

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.

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: de maximis, 1322 Scott St. Suite 104, San Diego

Project/PO Number: 3139 F

Project Manager: Jaime Dinello

Phone Number: 619-546-8877

Sampler: Carlton Hamm

Fax Number: 619-546-9980

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	VOC's (8260B) (Including Acetone, Freons, IPA, MTBE TICs)									Special Instructions
OC_GW_TB_030113	W		3	3/1/13	0600		X									

Relinquished By:	Date/Time:	Received By:	Date/Time:	Turnaround Time: (Check)
[signature]	3/1/13 1902	[signature]	3/1/13 1902	same day ____ 72 hours ____
[signature]	3/1/13 2024			24 hours ____ 5 days ____
				48 hours ____ normal ____
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:	Sample Integrity: (Check)
		[signature]	3/1/13 2024	intact ✓ on ice ✓

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.

3.6/7.7/16.5 °C

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39676-2

Login Number: 39676

List Source: TestAmerica Irvine

List Number: 1

Creator: Perez, Angel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Jacob & Hefner Associates P.C.

Job Number: 440-39676-2

Login Number: 39676
List Number: 1
Creator: Bindel, Aaron M

List Source: TestAmerica Denver
List Creation: 03/06/13 10:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
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?	False	
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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ATTACHMENT C

Groundwater Elevation Evaluation

Memorandum

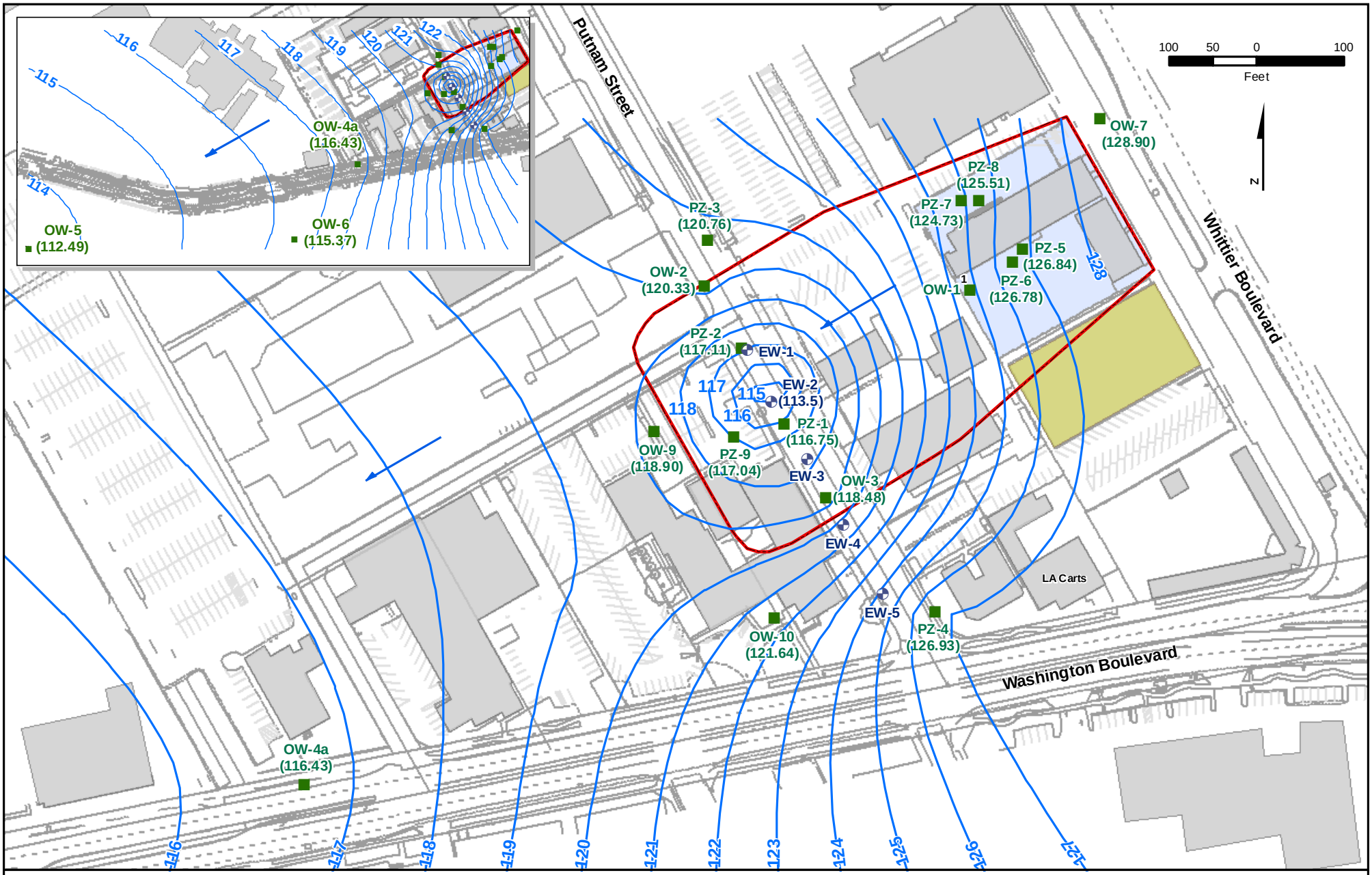
To: *Jaime Dinello, demaximis*

From: *Michael Hoffman*
Sharon Wallin

Date: *May 13, 2013*

Subject: *Omega Groundwater Elevations – March 29, 2013*

Review of the attached groundwater elevation contour map (Figure 1) illustrates that flow is converging on extraction well EW-2, which has the highest monthly average pumping rate in the system. The hydraulic gradient from the extraction wells toward the site is much steeper than the area downgradient of the extraction wells, due to the lower permeability lithology that is present upgradient of the extraction wells. The cone of depression generated by the extraction wells extends beyond monitoring well OW-9. The cone of depression appears to have expanded since December 2012 (see Figure A2-5 of the 4Q2012 Performance Standard Verification Plan Annual Monitoring Progress Report (CDM Smith, February 18, 2013). Upgradient well OW-7 is located outside the cone of depression and groundwater flow appears to be to the southwest in this area. Downgradient monitoring wells OW-5 and OW-6 are also outside the cone of depression and the groundwater flow direction is west to southwest in this area.



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.

CDM Smith

Legend

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

Omega Chemical
Groundwater Contour Map
March 29, 2013

Figure 1

ATTACHMENT D

Groundwater Monitoring Field Forms

WELL GAUGING DATA

Project # 130129-RR1 Date 1/29/13 Client CDM

Site 12511 Putnam St., Whittier CA

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	1108	4					79.10	82.56		Stored pipe
OW1b	0910	4					83.75	118.10		Tubing
OW2	0645	4					78.82	79.97		Tubing
OW3	0725	4					77.00	82.60		Tubing
OW3b	0732	4					83.82	121.73		Tubing
OW4a	0810	4					65.52	74.40		Tubing
OW4b	0817	4					71.79	126.30		Tubing
OW5	0635	4					38.94	49.70		Tubing
OW6	1155	4					54.90	58.13		Tubing
OW7	1120	4					82.60	89.04		Tubing
OW8	0707	4					DRY	79.17		Tubing
OW8b	0700	4					87.10	125.57		Tubing
OW9	1140	4					75.90	89.55		Tubing
OW10	0900	4					71.15	89.07		Tubing
PZ1	0715	2					80.60	87.31		
PZ2	0654	2					81.53	84.40		
PZ3	0755	2					79.93	88.82		

WELL GAUGING DATA

Project # 130129-7k1 Date 1/29/13 Client CDM

Site 12511 Putnam St, Whittier CA

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
PZ4	0745	2					66.84	89.22		
PZ5	1000	4					81.40	98.30		
PZ6	1020	4					80.90	96.59		
PZ7	0932	4					83.51	101.09		
PZ8	0925	4					83.20	101.13		
PZ9	1130	2					78.10	90.05		rubble

JHA ENVIRONMENTAL, INC.

GROUNDWATER MONITORING WELL GAUGING FORM

Project Name: Omega Chemical Superfund Site | **Date:** 2/27/13 | **Project Number:** E742

Well ID	Well Diameter	PID (ppm)	Depth to Water (ft btoc)	Total Depth (ft btoc)	Total Depth (ft btoc) previous	previous DTW	Remarks (Note if bottom is hard or soft)
EW-1	4"	0.0	81.87'	—	—	81.59'	N/A
EW-2	4"	0.0	81.85'	—	—	79.18'	N/A
EW-3	4"	0.0	81.13'	—	—	82.55'	N/A
EW-4	4"	0.0	77.43'	—	—	78.40'	N/A
EW-5	4"	0.0	75.69'	—	—	80.85'	N/A
PZ-1	2"	0.0	80.84'	87.23'	87.40'	80.60'	soft
PZ-2	2"	0.0	81.79'	84.42'	84.57'	81.53'	soft
PZ-3	2"	0.0	80.51'	88.90'	88.93'	79.93'	soft
PZ-4	2"	0.0	66.63'	89.21'	89.42'	66.84'	soft
PZ-5	2"	0.0	81.61'	—	98.60'	81.40'	soft
PZ-6	2"	0.0	81.22'	—	96.77'	80.90'	soft
PZ-7	2"	0.0	83.75'	—	101.30'	83.51'	soft
PZ-8	2"	0.0	83.49'	—	101.47'	83.20'	soft
PZ-9	2"	0.0	78.39'	89.93'	90.18'	78.10'	soft
OW-1	4"	0.0	79.40'	82.58'	82.75'	Dry	soft
OW-1b	4"	0.2	82.63'	118.0'	118.02'	83.75'	soft
OW-2	4"	0.0	79.43'	80.0'	79.93'	Dry	soft
OW-3	4"	0.1	77.53'	82.75'	82.77'	77.0'	soft
OW-3b	4"	0.0	83.78'	122.06'	122.06'	83.82'	soft
OW-4a	4"	0.4	65.81'	74.56'	74.71'	65.52'	soft
OW-4b	4"	0.5	71.70'	112.46'	112.46'	71.79'	soft
OW-5	4"	0.0	39.28'	49.52'	49.75'	38.94'	soft
OW-6	4"	0.0	54.93'	58.45'	58.42'	54.90'	soft
OW-7	4"	0.1	82.73'	89.30'	89.26'	82.60'	soft
OW-8	4"	0.0	N/A	79.11'	79.11'	Dry - soft	
OW-8b	4"	0.0	87.01'	125.90'	125.16'	87.10'	soft
OW-9	4"	0.0	76.44'	89.76'	89.52'	75.90'	soft
OW-10	4"	0.5	71.29'	89.36'	89.29'	71.15'	soft

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 03.01.13
Project No.: E742	**Prepared By:** ASG/PP
Well Identification: P2-3	**Weather:** CLEAR
Measurement Point Description: TOC -N	**Pump Intake:** 87.90 **Screen:** 69.8 - 89.8 **Casing Material: PVC or SS**

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
80.51	88.90	8.39	8.39	25.17	4.20	9.29	20	10

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	1 ~~0.16~~ 0.16 3.1.13	0.65	1.47

Field Equipment: GRUNDFOS + HORIBA
Purge Method: 3X VOLUME
Pump Type: GRUNDFOS

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity ( )	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1510		0	2	85.46					--	--	--	
1512		4	1	~~[illegible]~~ 87.12	7.44	26.79	-5.0	0.16	8.70 --	108 --	--	LOWED FLOW RATE OF PUM.
1518		10	1	87.92	7.35	25.96	-5.0	0.16	8.66 --	109 --	--	WELL WENT DRY
1547					7.32	26.40	-5.0	0.16	9.17 --	121 --	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
1510	1518	1	10	1	82.19	3/1/13 PP ~~[illegible]~~ 81.52	1545	OC_GW_P23_030113

Notes PUMPED WELL TOO FAST WHEN BEGAN PUMPED ONE WELL VOLUME OUT, WELL WENT DRY, TOOK 2 READINGS, WAITED FOR WELL TO RECHARGE TO SAMPLE

Drum No. : N/A Purge Equipment decontaminated? **Yes** ☒ **No** ☐ Purge/decon water containerized? **Yes** ☒ **No** ☐ Container type: Drum to treatment system 55-gallon steel

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13
Project No.: E742	**Prepared By:** K. Acher
Well Identification: PZ-9	**Weather:** Clear Skies, warm, sunny
Measurement Point Description: TOC -N	**Pump Intake:** 89' **Screen:** 70 - 90 **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
79.33	89.93	11.6	11.6	34.8	5.8	—	—	—

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	1.0 ~~0.16~~	0.65	1.47

Field Equipment: Horiba U-22
Purge Method: 3 volume
Pump Type: Grundfos Rediflo

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1410		2.5	0.5	79.25	7.23	28.50	-5.0	1.45	5.87	80--	--	
1420		7.5	0.5	79.25	6.95	24.58	4.60	1.46	5.08	94--	--	
1430		12.5	0.5	79.25	6.91	25.07	88.2	1.50	4.34	122--	--	
1440		17.5	0.5	79.12	6.84	25.27	40.8	1.47	4.12--	123--	--	
1450		22.5	0.5	79.07	6.83	25.40	35.2	1.49	4.38	122--	--	
1500		27.5	0.5	79.09	6.79	25.54	21.9	1.57	3.97	114--	--	
1510		32.5	0.5	79.09	6.83	25.42	18.3	1.50	3.93	115--	--	
1520		35	0.5	79.10	6.80	25.56	16.7	1.50	4.40	119 --	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
1405	1520	—	34.8	3	—	79.17'	1525	OC-GW-PZ9-030113

Notes

Drum No. : N/A Purge Equipment decontaminated? **Yes** ☒ **No** ☐ Purge/decon water containerized? **Yes** ☒ **No** ☐ Container type: Drum to treatment system 55gal steel drum w/ Lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 2/28/13
Project No.: E742	**Prepared By:** K. Acho / C. Hamm
Well Identification: OW-1B	**Weather:** clear skies
Measurement Point Description: TOC -N	**Pump Intake:** ~~[illegible]~~ 117' **Screen:** ~~70 - 90~~ 110' - 120' **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW) x D	Screen Volume (Screen length x D)	½ Screen Volume
82.63	~~[illegible]~~ 118	35.37	45.98	137.9	–	–	–	–

Well Diameter (in)	0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	~~0.65~~ *1.3	1.47

Field Equipment: Horiba U-22
Purge Method: 3 volume
Pump Type: Grundfos Rediflo

Well Headspace: PID(ppm)= 0.0 FID(ppm)= –

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1055		10	3	100.7	7.60	23.0	593	0.929	1.75	-121	--	
1106		35	1	106.28	7.81	23.44	364	0.873	2.29	-141	--	
1121		50	1	111.86	7.83	25.35	5.0	0.849	2.51	-78	--	
1158		55	1	116.1	7.49	26.57	-5.0	1.16	2.52	-29	--	
1213		60	<1	116.60	7.57	27.08	630	1.15	5.09	39	--	
1224		~65	<1	117.53	Well	dewatered			--	--	--	
1654				83.72	8.16	22.71	208.0	0.14	4.07	-69	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
1050	1655	–	N/A	3	–	PD 3.1.13 ~~116.54~~ 83.72	16:54	OC-GW-OW1B-030113

Notes: **Using August TD
*Includes sand pack volume
- Control box for pump shut down @ 3 gpm (290 Hz): Set ~~[illegible]~~ frequency to 260 Hz (1 gpm) to avoid control box shutting down.
- 1123: Flow decreased to <1 gpm. DTW @ 112.18'
- Pulled pump; cleaned out silty water

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system
55 gal Steel drum w/lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 2/27/13
Project No.: E742	**Prepared By:** K. Archer / C. Hamm
Well Identification: OW-1	**Weather:** clear skies, sunny
Measurement Point Description: TOC -N	**Pump Intake:** 76.5' **Screen:** 62.5'-77.5' **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
79.40	82.58	3.18	4.13	12.4	2.05	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	~~0.65~~ * 1.13	1.47

Field Equipment: Horiba U-22
Purge Method: Bailer
Pump Type: –

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/m)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1015	2.1	~~4~~ 12.1	–	81.33	9.10	22.67	28.8	0.790	--	--	--	
1020	3.0	~~8.2~~ 4	–	82.13	9.61	21.73	50.3	0.743	--	--	--	
1025 – Dewatered –		12.4	–						--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
2/28/13	1525 –			81.24	Insufficient water to collect Sample				--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	
									--	--	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
1005	1030	–	~~3.0 CA~~	3.0	–	N/A	–	OC_GW_OW1_02213

Notes * Includes gravel pack volume
3.0' of purgewater removed from well, went dry!

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system 55gal steel drum w/ lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13
Project No.: E742	**Prepared By:** K. Arthur / C. Hemm
Well Identification: OW-3B	**Weather:** Clear skies, sunny, warm
Measurement Point Description: TOC -N	**Pump Intake:** 120 **Screen:** 112-122 **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
83.93	122.06	38.13	49.57	148.7	24.79	~~49.79~~ 36.49	13	6.5

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	1.3 ~~0.65~~	1.47

Field Equipment: Horiba U-22
Purge Method: 3 volume
Pump Type: Grundfos Rediflo

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1030		10	3.0	~~92.05~~	7.90	23.57	75.0	1.26	5.30	109	--	
1037		31	3.0	92.05	7.52	23.19	37.1	1.30	4.78	115	--	
1044		52	3.0	92.05	7.44	23.07	15.2	1.31	5.58	125	--	
1051		73	3.0	92.05	7.34	23.05	5.3	1.31	5.57	134	--	
1058		94	3.0	92.05	7.31	23.06	0.0	1.32	5.39	130	--	
1105		115	3.0	92.05	7.26	23.02	0.0	1.33	5.31	127	--	
1112		136	3.0	92.05	7.26	23.05	1.6	1.34	5.33	130	--	
1117		149	3.0	92.05	7.22	23.03	4.6	1.34	5.84	129	--	
~~1714~~ PD 3.1.13			PD 3.1.13		~~[illegible]~~	~~21.92~~ PD 3.1.13	~~[illegible]~~	~~0.17~~ PD 3.1.13	~~5.16~~	~~[illegible]~~ PD 3.1.13	--	
1719					11.27	21.47	56.9	1.40	4.90	25	--	
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									--	--	--	
									--	--	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
1025	1117	3.0	149	3	91.56	92.05	1125	OC-GW-OW3B-030113
								OC-GW-OW3B-MS/MSD-030113

Notes

30.504

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum ~~to treatment system~~ 55 gal STEEL

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13
Project No.: E742	**Prepared By:** K. Acher / C. Hamm
Well Identification: ~~OW-3~~ OW-3	**Weather:** Clear skies, cool
Measurement Point Description: TOC -N	**Pump Intake:** *80' → 81' ~~82.3'~~ **Screen:** ~~69.5-89.5~~ 63' - 83' GH **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (~~Top screen – DTW~~) x D	Screen Volume (Screen length x D)	½ Screen Volume
77.49	82.70	5.21	6.77	20.32	–	–	–	–

Well Diameter (in)	0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	1.3 ~~0.65~~	1.47

Gallons/Foot

Field Equipment: Horiba U-22

Purge Method: 3 volume

Pump Type: Grundfos Rediflo

Well Headspace: PID(ppm)= 3.5 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity ( )	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
0730		3.0	.75	79.75	6.72	21.69	74.3	1.27	5.80 --	139 --	--	
0734		6.0	.75	81.0	6.92	23.0	60.5	1.29	6.75 --	130 --	--	
0738		9.0	.75	81.20	7.12	23.06	81.4	1.29	6.72 --	129 --	--	
0742		12.0	.75	81.75	7.15	24.38	127.0	1.29	8.91 --	124 --	--	
0746 —	Well Dewatered	15.0	.75	82.11	7.22	24.49	223.0	1.26	8.87 --	121 --	--	
		~~18.0~~							--	--	--	
		~~21.0~~							--	--	--	
1759				77.59	8.04	21.54	272.0	0.15	7.66 --	87 --	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
0726	0748	0.75	16.0	15	→	77.59	1759	OC_GW_OW3_030113

Notes * Lowered pump to 81'. Lowered pump to bottom

Drum No. : N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system 55 gal steel drum w/ lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 2/27/13
Project No.: E742	**Prepared By:** K. Archer / C. Hamm
Well Identification: OW-4A	**Weather:** clear skies, sunny
Measurement Point Description: TOC -N	**Pump Intake:** 65' **Screen:** 49.8-69.8 **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E/2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
65.81	74.56	8.75	11.38	34.13	5.69	—	—	—

Well Diameter (in)	Gallons/Foot			
	0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22
Purge Method: 3x Volume
Pump Type: Grundfos

Well Headspace: PID(ppm)= 0.4 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/m)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
11:40		4	0.5	65.90	7.18	25.14	16.8	1.56	--	--	--	
11:48		8	0.5	65.90	6.86	23.99	Ø	1.53	--	--	--	
11:56		12	0.5	65.90	6.73	24.03	Ø	1.52	--	--	--	
12:04		16	0.5	65.90	6.77	23.62	Ø	1.50	--	--	--	
12:12		20	0.5	65.90	6.71	24.38	Ø	1.52	--	197 --	--	
12:20		24	0.5	65.90	6.73	24.22	Ø	1.51	--	203 --	--	
12:28		28	0.5	65.90	6.71	24.06	Ø	1.51	--	193 --	--	
12:36		32	0.5	65.90	6.68	24.12	Ø	1.52	--	194 --	--	
12:40		34	0.5	65.90	6.67	24.19	Ø	1.51	--	202 --	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
11:30	1240	0.5	34.13	3	—	65.90	1250	OC_GW_OW4A_022713

Notes

OC_GW_OW4AK_022713 taken @ 1250

Drum No.: N/A Purge Equipment decontaminated? Yes ☑ No ☐ Purge/decon water containerized? Yes ☑ No ☐ Container type: Drum to treatment system 55 gal steel drum w/ lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 2/27/13 Wed
Project No.: E742	**Prepared By:** KA
Well Identification: OW-4B	**Weather:** Hot, Sunny 76°F
Measurement Point Description: TOC -N	**Pump Intake:** / **Screen:** / **Casing Material: PVC or SS**

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
71.70	112.46	40.76	~~26.49~~ 53	~~79.5~~ 158.9	13.25	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	~~0.65~~ 1.63	1.47

Field Equipment: Horiba U-22
Purge Method: 3x volume
Pump Type: Grundfos

Well Headspace: PID(ppm)= 0.5 FID(ppm)= —

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity ( )	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1415		30	~~3.0~~ 3.8	73.51	7.24	23.44	9.0	1.68	4.16 --	165 --	--	
1420		40	3.0	73.59	7.25	23.45	12.0	1.67	4.20 --	169 --	--	
1425		50	3.0	74.12	7.30	23.47	15.0	1.69	4.50 --	170 --	--	
1430		60	3.0	74.38	7.38	23.46	42.5	1.63	4.82 --	180 --	--	
1435		70	4.0	74.39	7.26	23.10	24.0	1.65	4.70 --	161 --	--	
1440		80	4.0	74.40	7.16	22.84	Ø	1.69	4.63 --	121 --	--	
1445		100	5.0	74.47	7.12	22.50	Ø	1.69	4.67 --	156 --	--	
1450		120	5.0	74.49	7.10	22.51	Ø	1.68	4.60 --	154 --	--	
1455		140	5.0	74.52	7.11	22.47	Ø	1.69	4.64 --	171 --	--	
1500		160	5.0	74.54	7.10	22.46	Ø	1.70	4.35 --	185 --	--	
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									--	--	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
1325	1500		160	3 (24 min)			1503	OC_GW_OW4B_022713

Notes * Includes gravel pack.

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system 55gal steel drum w/ Lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 03.01.13
Project No.: E742	**Prepared By:** ASG / PD
Well Identification: OW-5	**Weather:** CLEAR
Measurement Point Description: TOC -N	**Pump Intake:** 48.5 **Screen:** 30-50 **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
39.25	49.59	10.34	13.44	40.33	20.16	12.03	26	13

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	~~0.65~~ 1.3 (PD 3.1.13)	1.47

Field Equipment: GRUNDFOS + HORIBA
Purge Method: 3 VOLUME
Pump Type: GRUNDFOS

Well Headspace: PID(ppm)= 0.0 FID(ppm)=

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity ( )	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
0927		0	2	39.32	7.18	22.78	131	0.19	4.56	104	--	
0929		24	2	39.35	7.18	22.80	125	0.19	4.48	101	--	
0931	PD 3.1.13	48	2	39.35	7.20	22.82	133	0.19	4.61	94	--	
0933		12	2	39.35	7.20	22.82	117	0.19	4.61	93	--	
0938		22	2	39.35	7.21	22.83	103	0.19	4.57	89	--	
0943		32	2	39.35	7.21	22.83	73.5	0.19	4.52	89	--	
0948		42	2	39.35	7.21	22.83	58.1	0.19	4.51	90	--	
0953		52	2	39.35	7.21	22.83	51.8	0.19	4.50	91	--	
0955		58	2	39.35	7.21	22.83	45.6	0.19	4.52	92	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged (PD 3.1.13)	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification (PD 3.1.13)
0927	0955	2	58	3	41.32	39.35	0955	~~OW~~ OW-5-030113

Notes

9.272

PD 3.1.13

Drum No. : NA Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum ~~to treatment system~~ = STEEL

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13 Fri
Project No.: E742	**Prepared By:** K. Archer / C. Hamm
Well Identification: OW-6	**Weather:** Sunny 70
Measurement Point Description: TOC -N	**Pump Intake:** 57' **Screen:** ? 38'-58' **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
54.89	58.18	3.29	4.28	12.83	–	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	1.3 ~~0.65~~	1.47

Field Equipment: Horiba U-22
Purge Method: 3 volume
Pump Type: Grundfos Redi flo

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
0851		3	0.5	54.93	6.83	22.91	2.9	2.36	6.13 --	150 --	--	
0855		5	0.5	54.95	6.72	23.41	Ø	2.36	5.43 --	153 --	--	
0859		7	0.5	54.95	6.84	23.56	Ø	2.36	2.17 --	153 --	--	
0903		9	0.5	54.95	6.74	23.52	Ø	2.42	6.07	158 --	--	
0907		11	0.5	54.95	6.72	23.60	Ø	2.43	6.11 --	162 --	--	
0911		13	0.5	54.95	6.74	23.50	Ø	2.40	6.14 --	162 --	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
0845	0911	0.5	12.83	3	–	54.95	0915	OC_GW_OW6_030113

Notes

Drum No. : N/A Purge Equipment decontaminated? **Yes** ☒ **No** ☐ Purge/decon water containerized? **Yes** ☒ **No** ☐ Container type: Drum to treatment system 55gal Steel drum w/ Lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 2/28/13
Project No.: E742	**Prepared By:** K. Acher / C. Hamm
Well Identification: OW-7	**Weather:** clear skies
Measurement Point Description: TOC -N	**Pump Intake:** 85' **Screen:** 70.9'-90.9' **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
82.69	89.30	6.61	8.59	25.78	–	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	*1.3 ~~0.65~~	1.47

Field Equipment: Horiba U-22
Purge Method: 3 volume
Pump Type: Grundfos

Well Headspace: PID(ppm)= 0.1 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
0830		4	1	85.12	6.42	19.91	26.3	1.12	4.05	155	--	
0833		7	1	85.25	6.65	22.06	14.2	1.29	5.11	150	--	
0836		10	1	85.35	6.73	22.18	0.7	1.39	5.18	149	--	
0839		13	1	85.45	6.76	22.67	0.0	1.42	4.65	148	--	
0842		16	1	85.55	6.79	22.92	0.0	1.42	5.15	150	--	
0845		19	1	85.65	6.79	22.94	0.0	1.44	5.33	153	--	
0848		22	1	85.65	6.80	22.73	0.0	1.45	6.07	158	--	
0851		25	1	85.75	6.82	22.70	0.0	1.45	5.46	159	--	
0852		26	1	85.78	6.80	22.90	0.0	1.45	5.26	159	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
0825	0900	1	~27	3	–	85.78	0910	OC-GW-OW7-022813

OC-GW-OW - 022813

Notes *Includes sand pack volume

OC_GW_OW7K_022813-taken @ 0910

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system 55 gal drum/Steel w/lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 2/28/13
Project No.: E742	**Prepared By:** K. Sahu / C. Hamm
Well Identification: OW-8B	**Weather:** clear skies, sunny, warm
Measurement Point Description: TOC -N	**Pump Intake:** 122' **Screen:** 116'-126' **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
87.07	125.90	38.83	50.48	151.4	–	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	~~0.65~~ 1.3	1.47

Field Equipment: Horiba U-22
Purge Method: 3 volume purge
Pump Type: Grundfos Rediflo

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1330		30	3.5	88.16'	7.50	24.15	94.1	1.28	7.10 --	92 --	--	
1337		54.5	3.5	88.15'	7.13	23.38	17.1	1.29	6.94 --	114 --	--	
1354		54.5	4.0	88.15	7.10	23.16	16.1	1.31	6.19 --	129 --	--	
1401		80.0	4.0	88.16	7.11	23.07	16.0	1.31	6.15 --	--	--	
1408	120	~~80.0~~ CH	4.0	88.18	7.10	22.92	15.1	1.31	6.11 --	134 --	--	
1415	140	140.0	4.0	88.20	7.10	22.86	12.0	1.31	6.15 --	137 --	--	
1422		160.0	4.0	88.21	7.11	22.87	11.0	1.31	6.21 --	145 --	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
1320	1425		160.0	3		88.22	1430	OC_GW_OW8B_030113

Notes
OC_GW_OBBN_022813 taken @ 1600

Drum No.: NA Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system 55 gal drum/steel w/lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 03.01.13
Project No.: E742	**Prepared By:** ASG/PD
Well Identification: OW-9	**Weather:** CLEAR
Measurement Point Description: TOC -N	**Pump Intake:** 88.5 **Screen:** 70-90 **Casing Material: PVC or SS**

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
76.48	89.55	13.07	16.99	50.97	25.49	17.58	26	13

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	0.65 PD 3.1.13 1.3	1.47

Field Equipment: GRUNDFOS + HORIBA
Purge Method: 3 X VOLUME
Pump Type: GRUNDFOS

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity ( )	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1116		0	2	79.35	7.10	22.98	748	0.15	4.81--	-34--	--	
1118		4	2	83.43	7.15	23.00	814	0.16	4.26--	-31 --	--	
1120		8	2	84.78	7.17	22.98	539	0.16	3.55--	-16--	--	
1125		13	1	85.81	7.25	23.51	561	0.15	4.12--	[illegible] --	--	CHANGE [illegible]
1130		18	1	85.74	7.28	23.54	258	0.15	4.52--	18 --	--	
1135		23	1	85.60	7.32	23.69	153	0.16	5.39--	19 --	--	
1140		28	1	85.55	7.33	23.69	168	0.16	5.58--	16 --	--	
1145		33	1	85.58	7.33	23.69	129	0.16	5.68--	20 --	--	
1155		43	1	85.61	7.34	23.69	116	0.16	5.73--	34 --	--	
1200		48	1	85.65	7.34	23.68	111	0.16	5.70--	38 --	--	
1203		51	1	85.66	7.34	23.64	108	0.16	5.65--	40 --	--	
									--	--	--	
									--	--	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification PD 3.1.13
1116	1203	1	51	3	79.09	78.45	1228	OC-GW-OW9-030113

Notes
- OC-GW-OW9-030113 WAS SAMPLED VIA BAILER 10.456

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system PD 3.1.13 55-GAL-STEEL

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3-1-13
Project No.: E742	**Prepared By:** ASG / PD
Well Identification: MW-10	**Weather:** CLEAR
Measurement Point Description: TOC -N	**Pump Intake:** 83' **Screen:** 69.5 - 89.5 **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
71.32'	84.29'	12.97'	PD 3.1.13 ~~8.43~~ 16.86	PD 3.1.13 ~~25.29~~ 50.58	PD 3.1.13 ~~12.65~~ 25.29	2.37	26	13

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: GRUNDFOS + HORIBA
Purge Method: 3 VOLUME
Pump Type: GRUNDFOS

Well Headspace: PID(ppm)= 0.5 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (S/m)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
0734		0	1	71.32	6.53	22.80	167	0.17	5.58 --	66 --	--	
0739		5	1	74.45	6.87	22.88	152	0.17	5.66 --	68 --	--	
0743	PD 3.1.13	9	1	75.46	7.05	23.01	64.9	0.17	5.97 --	79 --	--	
0748		14	1	76.01	7.08	23.30	51.7	0.17	6.07 --	81 --	--	
0753		19	1	76.49	7.10	23.23	40.3	0.17	6.16 --	84 --	--	
0758		24	1	77.05	7.12	23.47	35.2	0.17	6.24 --	88 --	--	
0803		29	1	77.48	7.13	23.72	27.0	0.16	6.34 --	91 --	--	
0808		34	1	78.08	7.14	23.51	26.2	0.16	6.38 --	94 --	--	
0813		39	1	78.55	7.14 PD 3.1.13	~~23.30~~ 23.77	22.0	0.16	6.38 --	95 --	--	
0818		44	1	79.93	7.15	23.08	19.8	0.16	6.50 --	95 --	--	
0824		50	1	81.85	7.16	23.23	34.9	0.17	6.11 --	61 --	--	
0833		59	1	84.70	7.19	23.43	214.0	0.16	9.65 --	82 --	--	DRY
1258				71.40	7.30	23.31	239.0	0.16	9.20 --	123 --	--	

Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
0734	0833	1	59	3	73.91'	71.4	1258	OC-GW-CW10-030113

Notes: Measured TD weed

10:00

PD 3.1.13

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: ~~Drum to treatment system~~ 55 gal Drum - Steel

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13
Project No.: E742	**Prepared By:** K. Acher / C. Hamm
Well Identification: EW-1	**Weather:** Clear skies, sunny, warm
Measurement Point Description: TOC -N	**Pump Intake:** 86' **Screen:** 72' - 87' **Casing Material: PVC or SS**

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
81.87'	–	–	–	–	–	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: Horiba - U-22
Purge Method: N/A
Pump Type: N/A

Well Headspace: PID(ppm)= N/A FID(ppm)= N/A

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1652		—	—	81.87	7.28	25.55	72.5	1.39	8.18	137	--	
									--	--	--	
									--	--	--	
									--	--	--	
	EW-2								--	--	--	
									--	--	--	
1705 →	(Sample Time)				CH				--	~~161~~ --	--	
				~~79.47~~	7.03	21.87	18.7	1.45	6.78	161 --	--	
				81.85					--	--	--	
									--	--	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
–	–	–	–	–	–	81.85'	1705	OC_GW_EW2_030113
						81.87'		OC_GW_EW1_030113

Notes

Drum No. : N/A Purge Equipment decontaminated? **Yes** ☒ **No** ☐ Purge/decon water containerized? **Yes** ☒ **No** ☐ Container type: Drum to treatment system 55 gal w/lid steel drum

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13
Project No.: E742	**Prepared By:** K. Arthur
Well Identification: EW-3	**Weather:** Clear Skies, Cool
Measurement Point Description: TOC -N	**Pump Intake:** 84' **Screen:** 70'-85' **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
81.13	–	–	–	–	–	–	–	–

Well Diameter (in)	Gallons/Foot				Field Equipment: Horiba U-22	Well Headspace:	PID(ppm)= 0.0
	0.75	2	4	6	Purge Method: Grab		FID(ppm)= 0.0
D Gallons per foot of casing	0.02	0.16	0.65	1.47	Pump Type: –		

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1710	–	–	–	81.13	7.19	21.54	10.0	1.40	--	156 --	--	
									--	--	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
–	–	–	–	–	–	81.13	1725	OC_GW_EW3_030113

Notes

Drum No.: N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system 55gal Steel drum w/ Lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13
Project No.: E742	**Prepared By:** Fitzhar
Well Identification: EW-4	**Weather:** Clear skies, cool
Measurement Point Description: TOC -N	**Pump Intake:** 85' **Screen:** 71'-86' **Casing Material:** PVC or SS

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
77.43'	–	–	–	–	–	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: Horiba U-22
Purge Method: N/A
Pump Type: N/A

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (mS/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1735	–	–	–	77.43	7.55	21.88	9.1	1.46	8.05	125	--	
									--	--	--	
									--	--	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
–	–	–	–	–	–	77.43'	1735	OC-GW-EW4-030113

Notes

Drum No.: N/A Purge Equipment decontaminated? **Yes** ☒ **No** ☐ Purge/decon water containerized? **Yes** ☒ **No** ☐ Container type: Drum to treatment system 55 gal steel drum w/lid

ft-bmp = feet below measuring point

Groundwater Sampling Data Sheet

Project Name: Omega Chemical Superfund Site	**Date:** 3/1/13
Project No.: E742	**Prepared By:** KA
Well Identification: GW-5	**Weather:** clear skies
Measurement Point Description: TOC -N	**Pump Intake:** 84' **Screen:** 70'-85'- **Casing Material: PVC or SS**

A Depth to Static Water Level (ft-bmp)	B Well Total Depth (ft-bmp)	C Water Column Height (ft) (A – B = C)	E One (1) Casing Volume (gallons) (C XD=E)	Three (3) Casing Volumes (gallons) (E x 3)	½ Casing Volume (E /2)	Above Screen Volume (Top screen – DTW)x D	Screen Volume (Screen length x D)	½ Screen Volume
75.69	–	–	–	–	–	–	–	–

Well Diameter (in)	Gallons/Foot 0.75	2	4	6
D Gallons per foot of casing	0.02	0.16	0.65	1.47

Field Equipment: Horiba u-22
Purge Method: –
Pump Type: –

Well Headspace: PID(ppm)= 0.0 FID(ppm)= 0.0

Time	Casing/ Screen	Volume Purged (gallons)	Flow Rate (gpm)	Water Level (ft-bmp)	Ph	Temperature (°C)	Turbidity (NTU)	Conductivity (µ/cm)	Dissolve Oxygen (mg/L)	ORP (mV)	TDS (g/L)	Observations
1747	–	–	–	75.69	6.99	21.94	15.1	1.46	7.41	163	--	
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Purge Start Time	Purge End Time	Average Flow (gpm)	Total Gallons Purged	Volumes Purged	80% Recovery Water Level Depth B - (C x .80)	DTW - Sampling Time (ft-bmp)	Sample Time	Sample Identification
–	–	–	–	–	–	75.69	1747	OC_GW_GW5_030113

Notes

Drum No. : N/A Purge Equipment decontaminated? Yes ☒ No ☐ Purge/decon water containerized? Yes ☒ No ☐ Container type: Drum to treatment system 55 gal steel drum w/ lid

ft-bmp = feet below measuring point

JHA ENVIRONMENTAL, INC.

GROUNDWATER MONITORING WELL GAUGING FORM

Project Name: Omega Chemical Superfund Site | **Date:** 3/29/13 Fri. | **Project Number:** E742b

Well ID	Well Diameter	PID (ppm)	Depth to Water (ft btoc)	Total Depth (ft btoc)	Total Depth (ft btoc) previous	Remarks (Note if bottom is hard or soft)
EW-1	4"	0.0	82.15	N/A		
EW-2	4"	0.0	79.80	N/A		
EW-3	4"	0.0	81.85	N/A		
EW-4	4"	0.0	78.85	N/A		
EW-5	4"	0.0	81.17	N/A		
PZ-1	2"	0.0	81.21	87.29		~~Needs retapped / New bolts~~ CH
PZ-2	2"	0.0	82.18	84.51		Needs retapped / New bolts. 1/2"
PZ-3	2"	0.0	80.83	89.08		Needs retapped / New bolts.
PZ-4	2"	0.0	66.95	89.40		Needs retapped / New bolts.
PZ-5	~~2"~~ 4"	0.0	82.02	98.42		
PZ-6	~~2"~~ 4"	0.0	81.51	96.56		
PZ-7	~~2"~~ 4"	0.0	84.11	101.20		
PZ-8	~~2"~~ 4"	0.0	83.80	101.40		
PZ-9	2"	0.0	78.71	90.05		
OW-1	4"	0.0	80.37	82.57		
OW-1b	4"	0.0	83.96	113.68		
OW-2	4"	0.0	79.77	80.02		
OW-3	4"	0.0	77.85	82.76		Needs retapped / New bolts.
OW-3b	4"	0.0	84.11	121.98		
OW-4a	4"	0.0	66.04	74.55		Needs retapped / New bolts.
OW-4b	4"	0.0	72.04	126.30		Needs retapped / New bolts. 15/16"
OW-5	4"	0.0	39.47	49.55		Needs retapped / New bolts.
OW-6	4"	0.0	55.17	58.23		
OW-7	4"	0.0	83.11	89.20		Needs retapped / New bolts 15/16"
OW-8	4"	0.0	Dry	79.15		Needs retapped / New bolts.
OW-8b	4"	0.0	87.41	126.07		Dry: Needs retapped / New bolts.
OW-9	4"	0.0	76.80	89.75		Lid needs retapped / New bolts.
OW-10	4"	0.0	71.53	89.11		

Technician: bmm

Measuring Device ID: *Pine Rentzl / Solinst

ATTACHMENT E

Data Validation Report

DATA VALIDATION

FOR

GROUND WATER MONITORING
OMEGA CHEMICAL SITE
WHITTIER CALIFORNIA

ORGANIC ANALYSIS DATA
Volatiles in Water

Laboratory Job Nos.
440-39565
440-39576
440-39633
440-39676-1
440-39676-2

Analyses Performed
By:

Test America
Irvine, CA

For:

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

Data Validation By:

ddms, inc.
St. Paul, Minnesota 55108

May 7, 2013

1547-3139C/JLR
Omega\1stQrtrGW.docx

EXECUTIVE SUMMARY

Validation of the volatile organics analysis data prepared by Test America 23 ground water samples and two field blanks from the Omega Chemical Site has been completed by demaximis Data Management Solutions, Inc. (ddms). Full validation was performed on two samples (OC-GW-OW9-030113 and OC-GW-PZ9-030113) which represent 10% of the total number of ground water samples received and analyzed by Test America. The data were reported by the laboratory under Laboratory Job Nos. 440-39565, 440-39576, 440-39633, 440- 39565, 440-39676-1 and 440-39676-2. The following samples were reported:

OC-GW-OW9-030113	OC-GW-PZ9-030113	OC-GW-OW10-030113
OC-GW-OW3B-030113	OC-GW-PZ3-030113	OC-GW-OW1B-030113
OC-GW-OW3-030113	OC-GW-EW1-030113	OC-GW-EW2-030113
OC-GW-EW3-030113	OC-GW-EW4-030113	OC-GW-EW5-030113
OC-GW-PZ9N-030113	OC-GW-TB-030113	OC_GW_OW4A_022713
OC_GW_OW4AK_022713	OC_GW_OW4B_022713	OC_GW_OW4BN_022713
OC_GW_OW7_022813	OC_GW_OW7K_022813	OC_GW_OW8B_022813
OC_GW_OW8BN_022813	OC_GW_OW5_030113	OC_GW_OW6_030113
OC_GW_TB_030113		

Based on the validation effort, the following data qualifiers were applied:

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- Results for acetone, dichlorodifluoromethane and styrene in all samples were qualified as estimated (J, UJ).

All other results were determined to be valid as reported. A brief explanation of the reason for the actions taken above may be found in the Overall Assessment (Section XIV). Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report.

Documentation issues are discussed in Section XIII.

This report should be considered <u>part of the data package</u> for all future distributions of the volatile data.

INTRODUCTION

Analyses were performed in accordance with USEPA SW846 Method 8260B. These methodologies do not stipulate a reporting format; however, the laboratory provided a "CLP-type" data package for review.

ddms' validation was performed, to the extent possible, in conformance with the "Omega Chemical Superfund Site Sampling and Analysis Plan for Long Term Operations and Maintenance of the Groundwater Treatment System and Groundwater Monitoring (dated August 9, 2010)" and with EPA's "National Functional Guidelines for Organic Data Review" (Rev. 06/08). Professional judgment was applied as necessary and appropriate. Where discrepancies were found, the specifications of the analytical method took precedence.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the referenced methods. An initial assumption is that the data package is presented in accordance with the CLP requirements (or "CLP-like," as in this case). It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the National Functional Guidelines:

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

J = Analyte present. Reported value may not be accurate or precise

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

UJ= Not detected, quantitation limit may be inaccurate or imprecise.

These codes are recorded on the annotated laboratory Form 1s contained in Attachment A.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no concentration is guaranteed to be accurate even if all associated quality control is acceptable. Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation and Sample Integrity

Copies of the applicable chain of custody (COC) records were included in the data packages documenting sample collection dates of February 27, 28, March 1, and 11, 2013. The samples were hand delivered to the laboratory on February 28 and March 1, 2013. The temperatures of the coolers upon receipt at the laboratory were within acceptance limits (acceptable range is $6^{o}C \pm 2^{c}o$.).

Documentation of sample pH values on laboratory receipt was not included in the data packages. The laboratory was contacted and provided sample pH results indicating pH values were acceptable. The samples were analyzed on March 5, 6, and 7, 2013, well within the 14-day holding time for preserved samples.

II. GC/MS Instrument Performance Check

Summary forms were provided for two bromofluorobenzene (BFB) instrument performance checks run on instrument "GCMS43" representing each period during which the samples or associated standards were analyzed. All of the performance checks associated with samples receiving full validation were fully documented and were acceptable. Two additional BFB instrument performance checks were included in the data package but were not applicable to the sample analysis.

III. Calibration

A. Initial Calibration (IC)

Summary results for one initial calibration (ICs) were reported in support of the sample analyses associated with the full validation effort. Although more compounds than were specifically applicable to these analyses were reported, only project-specified target analytes were reviewed.

Documentation of all of the individual IC standards was present in the data package and relative response factors (RRFs) as well as percent relative standard deviation (%RSD) values were accurately reported. All reported %RSD values were below the maximum acceptance limit of 15 percent as defined in the analytical method and project-specific QAPP with the following exception: acetone (21.3%). Since acetone was not detected in any of the samples and because the %RSDs did not grossly exceeded the acceptance limit (> 50% RSD), no data were qualified for these analytes on this basis. All average RRF values were acceptable.

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B. Continuing Calibration (CC)

One continuing calibration (CC) standard was run on March 6, 2013, in support of the sample analyses associated with the full validation effort. Documentation was present in the data package, and the percent differences (%Ds) were acceptable (<20%D) with the exception of acetone (75.0%) and bromoform (24.0%). The responses represent an increase in instrument sensitivity and since acetone and bromoform were not detected in the associated samples no qualification was made.

For the remaining samples not receiving full validation, initial and continuing calibration data was not provided in the laboratory data packages. Information contained in the case narrative of each report regarding calibration was used to verify usability of sample results. For laboratory data packages 440-39565, 440-39576, 440-39633, 440- 39565 and 440-39676-1, the case narrative stated the continuing calibration standard associated with sample analysis recovered above the upper control limit, indicating an increase in instrument sensitivity. Acetone was not detected in any of the associated samples; therefore, no qualification of acetone results was warranted.

IV. Blanks

A laboratory method blank was reported for each day of sample analysis. Two trip blanks (OC-GW-030113) accompanying the samples were reported in data packages 440-39633 and 440-39676-1. No target analytes were detected in either the method blank or trip blanks.

V. Surrogate Compound Recovery

Recoveries of all of the surrogate compounds were within acceptance limits.

VI. Spike Analysis

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed on OC-GW-OW3B-030113 and OC-G-PZ9N-030113 (reported in data package 440-39676-1). All percent recoveries (%R) were acceptable with the exception of acetone (66 / 62%R) and dichlorodifluoromethane (68 / 64 %R) in OC-GW-OW3B-030113 and Acetone (63 / 66%R) in OC-G-PZ9N-030113. All relative percent differences (RPD) were acceptable.

MS/MSD analyses were performed on OC_GW_OW4A_022713 (reported in data package 440-39565). All %Rs were acceptable with the exception of \dichlorodifluoromethane (69 / 69%R) in the MS/MSD and styrene in the MSD (64%R). All relative percent differences (RPD) were acceptable.

Results for acetone, dichlorodifluoromethane and styrene in all samples were qualified as estimated (J, UJ) on this basis. Results may be biased low.

B. Blank Spike

A blank spike was reported for each day of sample analysis. All percent recoveries were acceptable with the exception of acetone. Acetone recovered high, outside acceptance limits in each blank spike associated with sample analysis. Acetone was previously qualified based on MS/MSD recoveries. No additional qualification was warranted.

VII. Field Duplicate

OC_GW_OW7K_022813 was collected as a field duplicate of OC_GW_OW7_022813 and OC_GW_OW4AK_022713 was collected as a field duplicate of OC_GW_OW4A_022713. Precision between field duplicates was acceptable.

VIII. Internal Standard Performance

All internal standard areas and retention times were within quality control limits for the applicable analyses.

IX. Target Compound Identification

An acceptable mass spectrum was provided for each target analyte detected in OC-GW-OW9-030113 and OC-GW-PZ9-030113. Mass spectra were not provided in the remaining data packages not receiving full validation. Analyte-specific reporting limits are equal to the lowest standard in the calibration range and are well supported by the IC (see Section III).

X. Compound Quantitation and Reporting Limits

Target compound concentrations and reporting limits (RLs) were correctly calculated and accurately reported for the samples and spike samples associated with the full validation effort. The laboratory's reporting limit (RL) for 1,2-Dichloroethane (1.0 ug/L) does not meet the required RL of 0.50 ug/L as specified in the project QAPP.

XI. Tentatively Identified Compounds (TIC)

Non-target compounds were not reported in OC-GW-OW9-030113 and OC-GW-PZ9-030113. Any non-target compounds were reported in the remaining samples could not be verified because the laboratory report does not include spectra or chromatograms in a reduced data deliverable.

XII. System Performance

The analytical system appears to have been working satisfactorily at the time of these analyses, based on evaluation of the available raw data.

XIII. Documentation

The following documentation issues were observed during the validation of these data:

- The COC was not included in the data package receiving full validation.
- The temperatures documented on the COC are inconsistent with those listed in the case narrative. The laboratory was contacted and replied that the COC's have the raw temperature noted on them. Each thermometer has a correction factor that is accounted for in the LIMS. The case narrative has the corrected temperatures noted for this project based on the laboratory's response.
- There was no documentation in the data packages regarding sample pH. The laboratory was contacted and provided the information.
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XIV. Overall Assessment

Based on the validation effort, the following qualifiers were applied:

- Acetone, dichlorodifluoromethane and styrene were qualified as estimated (J, UJ) in all samples due low MS/MSD recoveries.

All other results were determined to be valid as reported.

Documentation issues observed in the data package are described in Section XIII.

This validation report should be considered part of the data package for all future distributions of the volatiles data.

DATA VALIDATION

FOR

GROUND WATER MONITORING
OMEGA CHEMICAL SITE
WHITTIER CALIFORNIA

ORGANIC ANALYSIS DATA
1,4-dioxane in Water
Laboratory Job Nos.
440-39565
440-39576
440-39633
440-39676-1
440-39676-2

Analyses Performed
By:

Test America
Irvine, CA

For:

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

Data Validation By:

ddms, inc.
St. Paul, Minnesota 55108

May 7, 2013

1547-3139C/JLR
Omega\1stQrtrGWdioxane.docx

EXECUTIVE SUMMARY

Validation of the 1,4-dioxane analysis data prepared by Test America 21 ground water samples from the Omega Chemical Site has been completed by demaximis Data Management Solutions, Inc. (ddms). Full validation was performed on two samples (OC-GW-OW9-030113 and OC-GW-PZ9-030113) which represent 10% of the total number of ground water samples received and analyzed by Test America. The data were reported by the laboratory under Laboratory Job Nos. 440-39565, 440-39576, 440-39633, 440-39565, 440-39676-1 and 440-39676-2. The following samples were reported:

OC-GW-OW9-030113	OC-GW-PZ9-030113	OC-GW-OW10-030113
OC-GW-OW3B-030113	OC-GW-PZ3-030113	OC-GW-OW1B-030113
OC-GW-OW3-030113	OC-GW-EW1-030113	OC-GW-EW2-030113
OC-GW-EW3-030113	OC-GW-EW4-030113	OC-GW-EW5-030113
OC-GW-PZ9N-030113	OC_GW_OW4A_022713	OC_GW_OW4AK_022713
OC_GW_OW4B_022713	OC_GW_OW7_022813	OC_GW_OW7K_022813
OC_GW_OW8B_022813	OC_GW_OW5_030113	OC_GW_OW6_030113

Based on the validation effort, the following data qualifiers were applied:

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- Results for 1,4-dioxane in all samples were qualified as estimated (J, UJ).

All other results were determined to be valid as reported. A brief explanation of the reason for the actions taken above may be found in the Overall Assessment (Section XIV). Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report.

Documentation issues are discussed in Section XIII.

This report should be considered <u>part of the data package</u> for all future distributions of the volatile data.

INTRODUCTION

Analyses were performed using a modified USEPA SW846 Method 8270C. This methodology does not stipulate a reporting format; however, the laboratory provided a "CLP-type" data package for review.

ddms' validation was performed, to the extent possible, in conformance with the "Omega Chemical Superfund Site Sampling and Analysis Plan for Long Term Operations and Maintenance of the Groundwater Treatment System and Groundwater Monitoring (dated August 9, 2010)" and with EPA's "National Functional Guidelines for Organic Data Review" (Rev. 06/08). Professional judgment was applied as necessary and appropriate. Where discrepancies were found, the specifications of the analytical method took precedence.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis for chemical analyses conducted under the referenced methods. An initial assumption is that the data package is presented in accordance with the CLP requirements (or "CLP-like," as in this case). It is also assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on the findings of the evaluation, qualifier codes may be added by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by the National Functional Guidelines:

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

J = Analyte present. Reported value may not be accurate or precise

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

UJ= Not detected, quantitation limit may be inaccurate or imprecise.

All data users should note two facts. First, the "R" qualifier means that the laboratory-reported value is unusable. In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, no concentration is guaranteed to be accurate even if all associated quality control is acceptable. Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation and Sample Integrity

Copies of the applicable chain of custody (COC) records were included in the data packages documenting sample collection dates of February 27, 28, and March 1, 2013. The samples were hand delivered to the laboratory on February 28 and March 1, 2013. The temperatures of the coolers upon receipt at the laboratory were within acceptance limits (acceptable range is 6°C ±2 ^{o}C).

The samples were extracted on March 6, 2013, and analyzed on March 7, and 8, 2013, well within the holding times for extraction and analysis.

II. GC/MS Instrument Performance Check

Summary forms were provided for three decafluortriphenylphosphine (DFTPP) performance checks run on instrument "SMS_G4" representing each period during which the samples or associated standards were analyzed. All of the performance checks associated with the full validation were fully documented and were acceptable.

III. Calibration

A. Initial Calibration (IC)

Summary results for one initial calibration (IC) were reported in support of the sample analyses. Although more compounds than were specifically applicable to these analyses were reported, only the project-specified target analyte was reviewed.

Documentation of all of the individual IC standards was present in the data package and relative response factor (RRF) as well as the percent relative standard deviation (%RSD) value for 1,4-dioxane was accurately reported. The reported %RSD value was below the maximum acceptance limit of 15 % and the average RRF value was acceptable as defined in the project specific QAPP

B. Continuing Calibration (CC)

Two continuing calibration (CC) standards were run on March 7 and 8, 2013, in support of the sample analyses. Documentation was present in the data package, and the percent differences (%Ds) were acceptable (<20%D).

For the remaining samples not receiving full validation, initial and continuing calibration data was not provided in the laboratory data packages. Information contained in the case narrative of each report regarding calibration was used to verify

usability of sample results. In all instances, the case narrative did not indicate any anomalies associated with the sample analyses.

IV. Blanks

A laboratory method blank was reported for each day of sample analysis. 1,4-dioxane was not detected in any of the method blanks.

V. Surrogate Compound Recovery

The laboratory did not incorporate the use of 1,4-dioxane-d8 as a surrogate for the analysis as specified in the QAPP. The technique of isotope dilution is used to improve precision and accuracy by reducing the problems with sample preparation. By incorporating 1,4-dioxane-d8 as a surrogate, using isotope dilution, an accurate 1,4-dioxane concentration can be calculated. The results for 1,4-dioxane are qualified as estimated (J) on this basis. Comparison of 1,4-dioxane data from this sampling round and previous sampling rounds is limited to detection of the analyte only.

The laboratory reported a surrogate recovery using 2-Fluorobiphenyl. The recovery of 2-Fluorobiphenyl in OC-GW-PZ9-030113 (46%R) is outside laboratory generated acceptance limits (57-120%R). As stated above, the sample results are qualified as estimated; therefore, no additional qualification was made.

VI. Spike Analysis

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed on OC-GW-OW3B-030113. The percent recovery (72 / 72%R) and relative percent difference (RPD) of 1,4-dioxane were within laboratory generated acceptance limits.

B. Blank Spike

Two blanks spikes are associated with the sample analyses. The recovery of 1,4-dioxane was within laboratory generated limits in both blank spikes.

VII. Field Duplicate

OC_GW_OW7K_022813 was collected as a field duplicate of OC_GW_OW7_022813 and OC_GW_OW4AK_022713 was collected as a field duplicate of OC_GW_OW4A_022713. Precision between field duplicates was acceptable.

VIII. Internal Standard Performance

All internal standard areas and retention times were within quality control limits for the applicable analyses.

IX. Target Compound Identification

An acceptable mass spectrum was provided for 1,4-dioxane in OC-GW-OW9-030113 and OC-GW-PZ9-030113. Mass spectra were not provided in the remaining data packages not receiving full validation. Analyte-specific reporting limits are equal to the lowest standard in the calibration range and are well supported by the IC (see Section III).

X. Compound Quantitation and Reporting Limits

Target compound concentrations and reporting limit (RL) were correctly calculated and accurately reported for the samples and spike samples associated with the full validation effort.

XI. Tentatively Identified Compounds (TIC)

Non-target compound identification was not requested with this analysis.

XII. System Performance

The analytical system appears to have been working satisfactorily at the time of these analyses, based on evaluation of the available raw data.

XIII. Documentation

The following documentation issues were observed during the validation of these data:

- The COC was not included in the data package receiving full validation.
- The temperatures documented on the COC are inconsistent with those listed in the case narrative. The laboratory was contacted and replied that the COC's

have the raw temperature noted on them. Each thermometer has a correction factor that is accounted for in the LIMS. The case narrative has the corrected temperatures noted for this project.

XIV. Overall Assessment

Based on the validation effort, the following qualifiers were applied:

- Results for 1,4-dioxane in all samples were qualified as estimated (J,UJ) because the laboratory did not incorporate the use of 1,4-dioxane-d8 and isotope dilution as specified in the QAPP. Comparison of 1,4-dioxane data from this sampling round and previous sampling rounds is limited to detection of the analyte only.

Documentation issues observed in the data package are described in Section XIII.

This validation report should be considered <u>part of the data package</u> for all future distributions of the volatiles data.