George Kim
2601 Telegraph Ave.
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September 19, 2012

Subject: Transmittal of Groundwater Monitoring Report- July 2012, 925 W. Grand Ave Oakland, CA 94607

ACEH Fuel Leak Case: RO0002514

Geo Tracker Global ID: T06019749466

To whom in may concern,

I'm writing to you concerning the monitoring report made by TCG for my site at 2200 Telegraph Ave. I have read the report provided by TCG and agree that all the information is true.

George Kim

THE CONSULTING GROUP
394 CECILIA WAY, TIBURON, CA 94920
TELE: 415.381.2560 / FAX: 415.381.1741
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09 August 2012

Mr. George Kim
2601 Telegraph Avenue
Oakland, CA 94612-1713

Re: Monitor Well Location, Well Head Repair, Monitoring Well Elevation Survey, and Groundwater Monitoring Report – June 2012, Fuel Leak Case RO0002514/GeoTracker Global ID T06019749466, 949 West Grand Avenue, Oakland CA, TCG Project # 114201

Dear Mr. Kim:

This document represents the Technical Report (GWMR) that describes the tasks performed in the above-referenced project located at 949 West Grand Avenue in Oakland CA during the month of June 2012 (Figure 1).

We have sent electronic copies to you, to Paresh Khatri, Case Officer for Alameda County Environmental Health (ACEH), to Leroy Griffith of Oakland Fire Department (OFD) contact and to GeoTracker.

Please review this information and let us know if you have any questions or comments. At your direction, we are prepared to provide a proposal for additional work as required by ACEH.

Sincerely,
THE CONSULTING GROUP

Jeanine C. Lovejoy
Owner

DISTRIBUTION

George Kim
Representative of Client
Glkim06@yahoo.com

Paresh Khatri
Case Officer - ACEH
Paresh.khatri@acgov.org

Leroy Griffin
OFD Contact
lgriffin@oaklandnet.com

Project File
GeoTracker

SITE INFORMATION

Site Name:	949 West Grand Avenue, Oakland CA
Site Address:	949 West Grand Avenue, Oakland CA
Owner:	Stephen S. Burke and Myung Kim
Representative	George Kim
Consultant:	The Consulting Group 394 Cecilia Way, Tiburon CA Tele: 415.381.2560
Project Manager:	Sherwood Lovejoy, Jr. Tele: 415.381.2560 Mobile: 650.714.4200
Regulator	Paresh Khatri, Case Officer Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 Paresh.Khatri@acgov.org

PROFESSIONAL CERTIFICATION

REPORT FOR GROUNDWATER MONITORING
949 WEST GRAND AVENUE, OAKLAND, CA
JUNE 2012

This report has been prepared by the staff of The Consulting Group (TCG) under the supervision of our registered engineer whose stamp and signature appear below.

This report has been prepared by TCG for the exclusive use of TCG and Mr. Kim George, Client, and not for use by any other party. Any use by a third party of any of the information contained in this report shall be at their own risk and shall constitute a release and an agreement to defend and indemnify TCG from and against any and all liability in connection therewith whether arising out of TCG's negligence or otherwise.

All interpretations, conclusions, and recommendations are based solely on information gathered during this investigative stage and on no other unspecified information. This report is prepared as a tool for the client to use in determining the condition of the site. This report makes no certification, either implied or otherwise, that the site is free from pollution; it simply reports the findings of the study. Water sampling, while being less sample-specific than soil sampling, is still area-specific and if contaminants are not found in a sample it does not universally suggest that there are none of these contaminants present in that area or at the site.

The results and findings contained in this report are based on certain information from sources outside the control of TCG. While exercising all reasonable diligence in the acceptance and use of information provided, TCG does not warrant or guarantee the accuracy thereof. The report was developed specifically for this project (949 West Grand Avenue, Oakland, California) and should not be used for any other site.

REGISTERED PROFESSIONAL ENGINEER
C. HUGH THOMPSON, Sc.D.
C 35856
CIVIL
STATE OF CALIFORNIA

C. Hugh Thompson, P.E.
Professional Engineer
Principal

Sherwood Lovejoy, Jr.
Consulting Hydrogeologist
Principal

Ryan Cozart
Geologist

ABBREVIATIONS

DRO = Diesel Range Organics
GRO = Gasoline Range Organics
ACEH = Alameda County Environmental Health
MORO = Motor Oil Range Organics
ND = Not Detected
PHCs = Petroleum Hydrocarbons
rESL = residential Environmental Screening Level
RL = Reporting Limit
TA = Test America, Inc.
TCG = The Consulting Group
VOCs = Volatile Organic Compounds
w/SG = with Silica Gel Strip

1.0 - INTRODUCTION

1.1 - PURPOSE OF INVESTIGATION

TCG, retained by Mr. George Kim, Representative of Owner, brought the site into compliance by locating wells, repair of a well head, surveying wells, performing groundwater monitoring (GWM) and reporting, and updating GeoTracker for the site located at 949 West Grand Avenue, in Oakland, California (site).

On 3 July 2008, ACEH sent a letter to the owners indicating that the site had not been claimed on GeoTracker and that in order to remain in compliance all analytical data from 1 September 2001 to current, including well monitoring surveying data and PDF reports from 1 July 2005 to current, be submitted to GeoTracker by 15 August 2008 or a Notice of Violation will be issued and possible forfeiture of reimbursement monies.

On 27 July 2009, ACEH issued a Notice of Violation for the site indicating that it was out-of-compliance and stated that "In order to regain compliance, please claim the site (www.geotracker.waterboards.ca.gov) and submit verification to ACEH by August 10 2009."

On 10 September 2010, ACEH sent a letter to the owner indicating that the site was not in compliance, that GWM was required on a semiannual basis, and that all well monitoring surveying data and PDF reports from 1 July 2005 to current be submitted to GeoTracker. The last GMW event at the property occurred in June 2005.

2.0 - WELLHEAD LOCATION AND REPAIR MW-3

On 18 June 2012, TCG located all three monitor wells (MW-1 through MW-3) and identified that monitor well, MW-3, needed repair. On 20 June 2012, Controlled Environmental Services (CES), of Oakley, CA, replaced the MW-3 Christy Box. MW-3 had been paved over and was damaged requiring Christy Box replacement.

3.0 – WELL SURVEY

On 29 June 2012, CSS Environmental Services Inc. (CSS), of Novato, CA, surveyed monitor wells MW-1, MW-2, and MW-3. Survey results indicated that the Top of Casing (TOC) for MW-1 was found at 15.07 feet above mean sea level (amsl) with a Latitude of 37° 48' 50.65647" and a Longitude of 122° 16' 47.62910". TOC for MW-2 was found at 14.36 amsl with a Latitude of 37° 48' 51.85266" and a Longitude of 122°16' 47.19883". TOC for MW-3 was found at 14.87

amsl with a Latitude of 37° 48 51.55956 and a Longitude of 122° 16' 45.78669". Survey report is in Appendix 1.

4.0 – GROUNDWATER MONITORING – JUNE 2012

4.1 - INTRODUCTION

On 27 June 2012, TCG performed groundwater monitoring (GWM) at the Site. The scope-of-work summary is outlined below:

1 Measure the depth-to-groundwater (DTW) and total depth (TD) in each of the groundwater monitor wells;
2 Purge each well prior to collecting a groundwater sample for analysis;
3 Analyze groundwater samples from each of the monitor wells for:
   a. Diesel Range Organics (DRO), and Motor Oil Range Organics (MORO) after Silica Gel Strip;[1]
   b. Volatile Organic Compounds (VOCs), including: Gasoline Range Organics (GRO);
4 Prepare a groundwater monitoring report (GWMR) that includes the results of DTW and TD measurements, and groundwater sample analysis. The report will include:
   - Tables showing tabulated DTW, TD, development and purge parameters, groundwater elevations, and analytical results;
   - Figures illustrating groundwater flow direction;
   - Appendices including: laboratory results and chain-of-custody (COC) forms, and
   - TCG observations, conclusions, and recommendations.

The fieldwork and laboratory analysis tasks are complete. This document represents the reporting phase (GWMR) task of this project. Tables 1 through 4 tabulate elevation data, purge data, parameter, analytical results and groundwater flow direction and gradient. Figures 1 through 6 illustrate site location, site layout, monitor well locations, analytical results, and groundwater flow direction and gradient.

4.2 - ELEVATION MEASUREMENTS

TCG recorded the DTW and TD measurements on 27 June 2012 for the monitor wells and Figure 2 illustrates the locations of the three wells. Analytical results are tabulated in Table 1, and illustrated on Figures 3 and 4. Tables 2 and 3 tabulate the Wellbore Volume Calculations

[1] Due to the presence of Free-Floating Hydrocarbons in MW-2, the Analysis of sample M-2 included Pattern Recognition to distinguish different medium-weight PHCs by C-ranges.

(T2) and Parameter Testing Results (T3). Figures 5 and 6 illustrate groundwater gradient (F5) and flow direction (F6).

During the 27 June event, DTW ranged from 9.63 (MW-2) and 10.52 (MW-1) feet below the top of the monitoring well casings (TOC). Due to the presence of Free-Floating Product in sample MW-2, no parameters were taken from this well. Elevations ranged from 4.55 ft-amsl (MW-1) to 5.39 ft-amsl (MW-3).

According to the EPA website calculation, the average hydraulic gradient for the 27 June 2012 event = 0.01161. The direction of flow was calculated at 274.6° of north or westerly.

4.3 - GROUNDWATER WELL PURGING & SAMPLING

The calculated total wellbore water volume using the DTW and TD measurements and determined the volume of groundwater that needs removal from each well[2]. Usually, we remove at least three wellbore volumes. The results of these calculations are shown in Table 2.

The wells were purged using a 2-stage purge/sampling pump. The down-hole tubing for the wells was dedicated to each well so it did not have to be cleaned, thus preventing cross-contamination. The purge/sampling pump was cleaned, using a triple-rinse setup[3], between wells[4]. Once purged, the groundwater was sampled using the purge/sampling pump. The samples were collected in the appropriate sample containers (3 Amber liters and three VOA Vials). The containers were sealed, checked for bubbles, labeled, and placed on ice pending transport to the laboratory. The purge volume and parameters are shown in Tables 2 and 3[5], respectively.

[2] We find the water column height (WCH) using [DTW-TD=WCH], then determine the cubic feet (ft^3) using [$WCH*\Pi*r^2$], and then convert ft^3 to gallons using [ft^3 * 7.48].

[3] A triple-rinse setup is three buckets, the first with water and TSP, the second with water, and the third with DI water. The pump is soaked and scrubbed with a scrub brush in the first bucket to remove pollutants. It is then rinsed vigorously in he second bucket, and rinsed again in the third bucket. The buckets are rinsed and refilled after each decontamination event.

[4] During this purging, the parameters: pH, conductivity, temperature, dissolved oxygen, oxidation reduction potential, salinity, and turbidity were measured, while clarity or turbidity of water is observed. The parameters were monitored after removal of a few gallons of pumping, at the mid-point of pumping, and at the end of pumping.

[5] Due to the presence of free product in sample MW-2, no parameters were taken from this well.

PURGING AND SAMPLING CHARACTERISTICS (FROM TABLE 3)					
Well #	Purge Volume	Clarity/Turbidity			Dewater
		Start	Finish	Sample	
MW-1	6	Silty	Cloudy	Cloudy	No
MW-2	No Purging or Parameters taken (Free Product in the Well)				NA
MW-3	5.5	Silty	Clear	Clear	No

4.4 - ANALYTICAL RESULTS

The groundwater samples were transported, under chain of custody, to the Test America (TA) laboratory, a California-certified laboratory located in Pleasanton, CA, for analysis within holding times. The Groundwater samples were analyzed for Diesel Range Organics (DRO) with Silica Gel Strip (w/SG), Motor Oil Range Organics (MORO) with w/SG, and Volatile Organic Compounds (VOCs), including: Gasoline Range Organics (GRO). TCG had the Free-Floating Product (FFP) in the sample MW-2 analyzed and further analyzed the FFP for Pattern Recognition to distinguish the C-ranges in the middle-weight PHCs range. The results are discussed below and tabulated in Table 1. The laboratory results and Chain–of-Custody (COC) form are included in Appendix 2.

4.4.1 – MW-1

The results of the groundwater analysis indicate that:

- GRO was ND with a Reporting Limit (RL) of 50 micrograms per Liter (ug/L),
- DRO [C10-C28] w/SG was ND with an RL of 50 ug/L, and
- MORO [C24-C36] w/SG was ND with an RL of 100 ug/L.
- All VOCs were ND with RLs ranging from 0.5 ug/L to 1 ug/L.

4.4.2 – MW-2

The results of the FFP analysis indicate that:

- GRO was detected at 870,000,000 micrograms per kilogram (ug/kg) with an RL of 250,000,000 ug/Kg,
- DRO [C10-C28] w/SG was detected at 190,000 milligrams per kilogram (mg/kg) with an RL of 3400 mg/kg,
- Stoddard Solvent Range Organics [C9-C13] were detected at 250,000 mg/kg with an RL of 3400 mg/kg,
- MORO [C24-C36] w/SG was ND with an RL of 23,000 mg/Kg,
- Jet Fuel Range Organics [C9-C19] were detected at 300,000 mg/kg with an RL of 23,000 mg/kg,
- TPH Hydraulic Oil Range was ND with an RL of 23,000 mg/kg, and
- VOCs analysis indicated that:
    - 1,2,4 Trimethylbenzene was detected at 16,000,000 ug/kg with an RL of 5,000,000 ug/kg,
    - 1,3,5 Trimethylbenzene was detected at 12,000,000 ug/kg with an RL of 50,000 ug/kg,
    - 4 Isopropyl benzene was detected at 3,600,000 ug/kg with an RL of 500,000 ug/kg,
    - m-Xylene & p-Xylene were detected at 690,000 ug/kg with an RL of 500,000 ug/kg,
    - Naphthalene was detected at 7,100,000 ug/kg with an RL of 1,000,000 ug/kg,
    - n-Butylbenzene was detected at 9,100,000 ug/kg with an RL of 500,000 ug/kg,

- N-Propylbenzene was detected at 15,000,000 ug/kg with an RL of 500,000 ug/kg, and
- sec-Butylbenzene was detected 2,300,000 ug/kg with an RL of 500,000 ug/kg,
- All other VOCs were ND with RLs ranging from 500,000 ug/kg to 5,000,000 ug/kg.

4.4.3 – MW-3

The results of the analysis indicate that:

- GRO was ND with an RL of 50 ug/L,
- DRO [C10-C28] w/SG was detected at 52 ug/L with an RL of 51 ug/L, and
- MORO [C24-C36] w/SG was detected at 180 ug/L with an RL of 100 ug/L.
- VOCs analysis indicated that:
  - Methyl tert-butyl ether (MTBE) was detected at 0.64 ug/L with an RL of 0.50 ug/L,
  - All other VOCs were ND with RLs ranging from 0.5 ug/kg to 1.0 ug/kg.

5.0 – OBSERVATIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 – OBSERVATIONS

The following observations were made:

- Regional groundwater moves westerly toward the bay, as does local groundwater.
- Monitor well MW-3 was paved over, which meant it needed to be uncovered and the well box needed to be replaced so it was flush-mounted with the pavement.
- Monitor well MW-2 contained Free-Floating Product (FFP), which meant no purging and sampling of the FFP for analysis and speciation.
- Monitor well MW-1 was non-detectable (ND) for all analytes tested.
- Monitor well MW-3 was ND for GRO, but DRO and MORO were detected.
- Monitor well MW-2 contained GRO, DRO, MORO, as well as other miscellaneous PHCs.
- None of the monitor wells contained chlorinated hydrocarbons (Cl-HCs).

5.2 - CONCLUSIONS

The following conclusions were drawn:

- We calculated the local groundwater flow direction and gradient using the **EPA On-line Site Assessment Tools**[6] **(**EPA-OTSA**)**. According to the EPA-OTSA, the 27 June 2012 groundwater flow direction was 274.6° of north (westerly) and the gradient was 0.01161 for this site.
- The results of groundwater analysis indicated that no detections were found in MW-1 while MW-2 had Free-Floating Product in the well and there were detections in the

[6] http://www.epa.gov/athens/learn2model/part-two/onsite/

FFP of GRO, DRO, Stoddard Solvent Range Organics (SSRO), and Jet Fuel Range Organics (JFRO) that were well above their respective rESLs[7]. MW-3 had detections of DRO and MORO with DRO below its rESL, but MORO was above its rESL.

5.3 - RECOMMENDATIONS

Based on our observations and conclusions, we recommend that:

1. Based on the analytical results, Groundwater Monitoring (GWM) continues, on a semi-annual basis, for a period of 1.5 years with reassessment after each GWM event.
2. A historical Search and Review to determine source(s) of contamination of groundwater.
3. Skimming of FFP in MW-2 to see if it re-accumulates or clears itself of FFP.

[7] SSRO and JFRO are considered Middle-Range Organics and their ESLs are Middle-Range Distillates.

6.0 - REFERENCES

California Code of Regulations, Title 8; Department of Industrial Relations - California Occupational Safety and Health Regulations (Title 8).

California Code of Regulations, Title 22: Social Security; Division 4: Environmental Health and Division 4.5: Chapter 11: Identification of Hazardous Waste; article 3: Characterization of Hazardous Waste (Title 22).

California State Senate Bill 1764 Advisory Committee Recommendations Report Regarding California's Underground Storage Tank Program, 31 May 1996.

California State Water Resources Control Board, 1989, Leaking Underground Fuel Tanks Manual (LUFT Manual).

California Department of Water Resources, California Well Standards, Bulletins 74-90 and 74-81.

Code of Federal Regulations, Title 29; part 1910: Occupational Safety and Health Standards (29 CFR).

Code of Federal Regulations, Title 40; part 261; subpart B - Criteria for identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste, and subpart C - Characteristics of Hazardous Waste (40 CFR).

Division of Toxic Substances Control (DTSC), 1986, California Site Mitigation Decision Tree, Chapter 3.

Designated Level Methodology for Waste Classification and Cleanup Level Determination; California Regional Water Quality Control Board; Central Valley Region (Marshack Document) 1986.

Lawrence Livermore National Laboratory, 1995, *Recommendations To improve the Cleanup Process for California's Leaking Underground Fuels Tanks (LUFTs*), LLNL, 16 October, 1995.

_____, 1995, California Leaking Underground Fuel Tank (LUFT) Historical Case Analyses LLNL, 16 November 1995.

Nielsen, David M., 1991, Practical Handbook of Ground-Water Monitoring, Lewis Publishers.

State Water Resources Control Board, 1995, Letter regarding Lawrence Livermore National Laboratory (LLNL) Report on Leaking Underground Storage Tank (UST) Cleanup, 8 December 1995.

Wikipedia, 2006, *Wikipedia – A Free Internet Encyclopedia*, WikiMedia Foundation.

J. L. Wilson, S. H. Conrad, W.R. Mason, W. Peplinski, and E. Hagan, 1990, Laboratory Investigation of Residual Liquid Organics, United States Environmental Protection Agency, EPA 600/6-90/004.

TABLES

Table 1 - Groundwater Elevation Measurement and Analytical Results
949 West Grand Avenue, Oakland, CA
TCG Project #114201

Sampling Date: **06/27/12**

WELL #	DATE	TOC	DTW	GW-ELEV	Δ-Elev	DRO	GRO	MORO	Ethylbenzene	Xylenes
MW-1*	6/12/12	15.07	10.52	4.55	NA	ND	ND	ND	ND	ND
MW-2	6/12/12	14.36	9.63	4.73	NA	**190,000**	**870,000**	ND	**17,000**	690
MW-3*	6/12/12	14.87	9.48	5.39	NA	0.052	ND	0.18	ND	ND

Notes:

TOC = top of casing elevation (ft above mean sea level - [ft-amsl])
DTW = depth to water (ft below TOC)
GW-ELEV = groundwater elevation (ft-amsl)
Δ-Elev = change in elevation (ft) from one GWM to the next
All results reported in parts-per-million (ppm)
rESL = residential Environmental Screening Level
Xylenes = m-Xylene & p-Xylene
NA = not analyzed for
NM = not measured
ND = not detected above method detection limit
Bold =greater than the rELS
* = DRO and Moro analyzed with Silica Gel Strip

Table 2 - Wellbore Volume Calculations
949 West Grand Avenue, Oakland, CA
TCG Project #114201

Sampling Date: **06/27/12**

Well #	DTW	TD	DH	Well R	Well R2	WV (ft3)	WV (gal)	VR (g)	TWV
MW-1	10.52	20.2	9.68	0.08	0.0069	0.21	1.57	6.00	3.82
MW-2	9.63	14.2	4.57	0.08	0.0069	0.10	0.74	NA	NA
MW-3	9.48	20.25	10.77	0.08	0.0069	0.23	1.74	5.50	3.16

Notes:
Wellbore volume formula used - PR2H; where H is DH
DTW = depth-to water (ft below grade)
TD = total depth of well
ΔH = water column thickness (ft)
Well R = well radius (ft)
Well R^2 = well radius squared (ft^2)
WV (ft^3) = wellbore volume (ft3)
WV (gal) = wellbore volume (gallons); where 1 ft3 = 7.48 gallons
VR (gal) = volume removed during purging (gallons)
TWV = total wellbore volumes removed during purging
NA = Not Analyzed

Table 3 - Parameter Testing Results
949 West Grand Avenue, Oakland, CA
TCG Project #114201

Sampling Date: **06/27/12**

			Parameters			
Well #	**Interval(1)**	**~Gals**	**pH**	**Cond**	**Temp**	**Notes**
MW-1	Start	0.50	7.60	1032.00	66.20	Silty at start
	Middle	3.00	7.20	1020.00	65.80	Begins clearing up @ 5 gallons.
	End	6.00	7.00	1020.00	66.00	Cloudy samples.
MW-2	Start					
	Middle	No Purging or Parameters taken (Free Product in the Well)				
	End					
MW-3	Start	0.50	8.20	992.00	69.30	Silty at start
	Middle	3.00	7.80	1003.00	67.20	Clear up @ 3 gallons
	End	5.50	7.40	1006.00	66.60	Clear samples

Notes:
~Gals = approximate gallons removed at time of measurement
pH in standard units
Cond = Conductivity (µmho/cm)
Temp = temperature (º F)

Table 4 - Flow Direction and Gradient

EPA On-line Tools for Site Assessment Calculation

Module Home Objectives Table of Contents Previous < Next >

Hydraulic Gradient

Gradient Calculation from fitting a plane to three points

$$a x_1 + b y_1 + c = h_1$$
$$a x_2 + b y_2 + c = h_2$$
$$a x_3 + b y_3 + c = h_3$$

where (x_i,y_i) are the coordinates of the well and
h_i is the head

$i = 1,2,3$

The gradient is calculated from the square root of $(a^2 + b^2)$ and the angle from the arctangent of a/b or b/a depending on the quadrant

Example Data Set 1 | Calculate | Clear
Save Data | Recall Data | Go Back

Site Name: 949 West Grand Oak
Date: 6/12/2012 Current Date
Calculation basis: Head
Coordinates: ft

x-coordinate	y-coordinate	head ft
0	0	4.550
20	55	4.730
75	30	5.390

Gradient Magnitude (i): 0.01161
Degrees from North (+ y axis): 274.6

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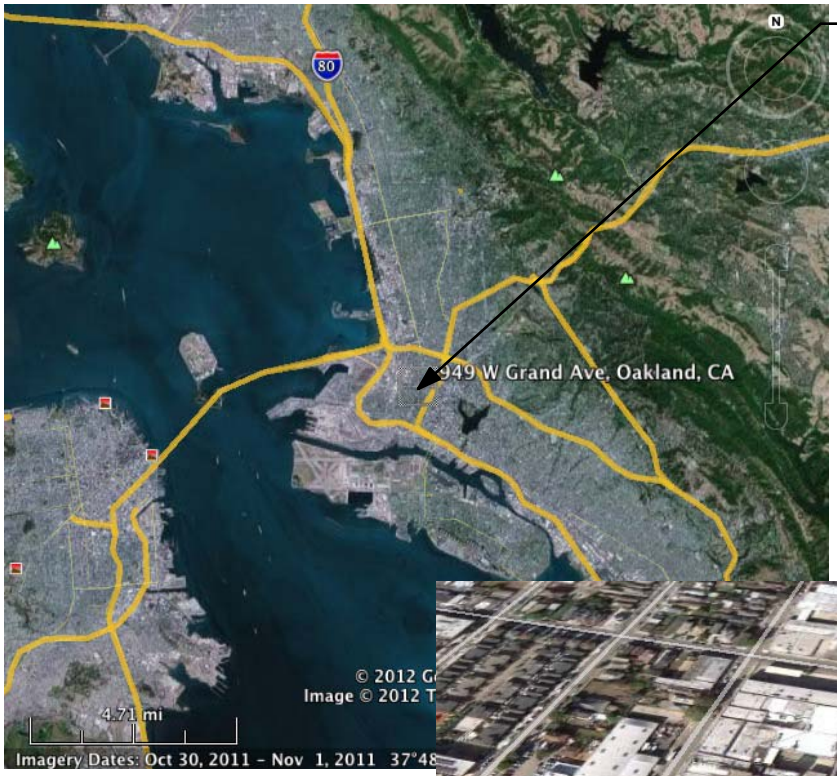
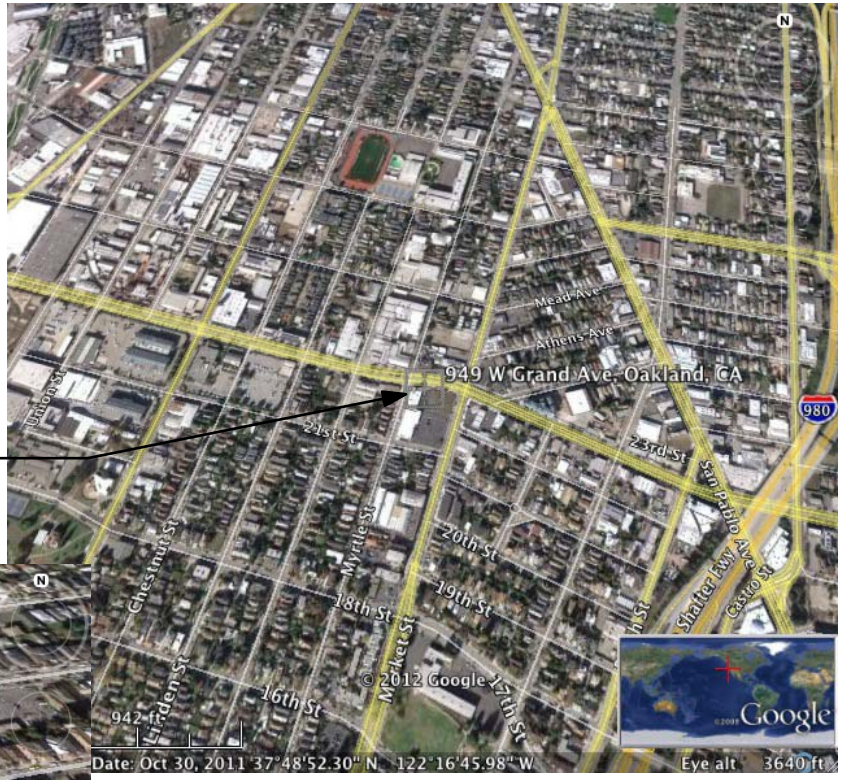
Home | Glossary | Notation | Links | References | Calculators

WCMS
Last updated on January 5, 2012

FIGURES





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Job No.	114201
Date	17 July 2012
Drawn by	RC
Rev	SL
Apprvd	SL

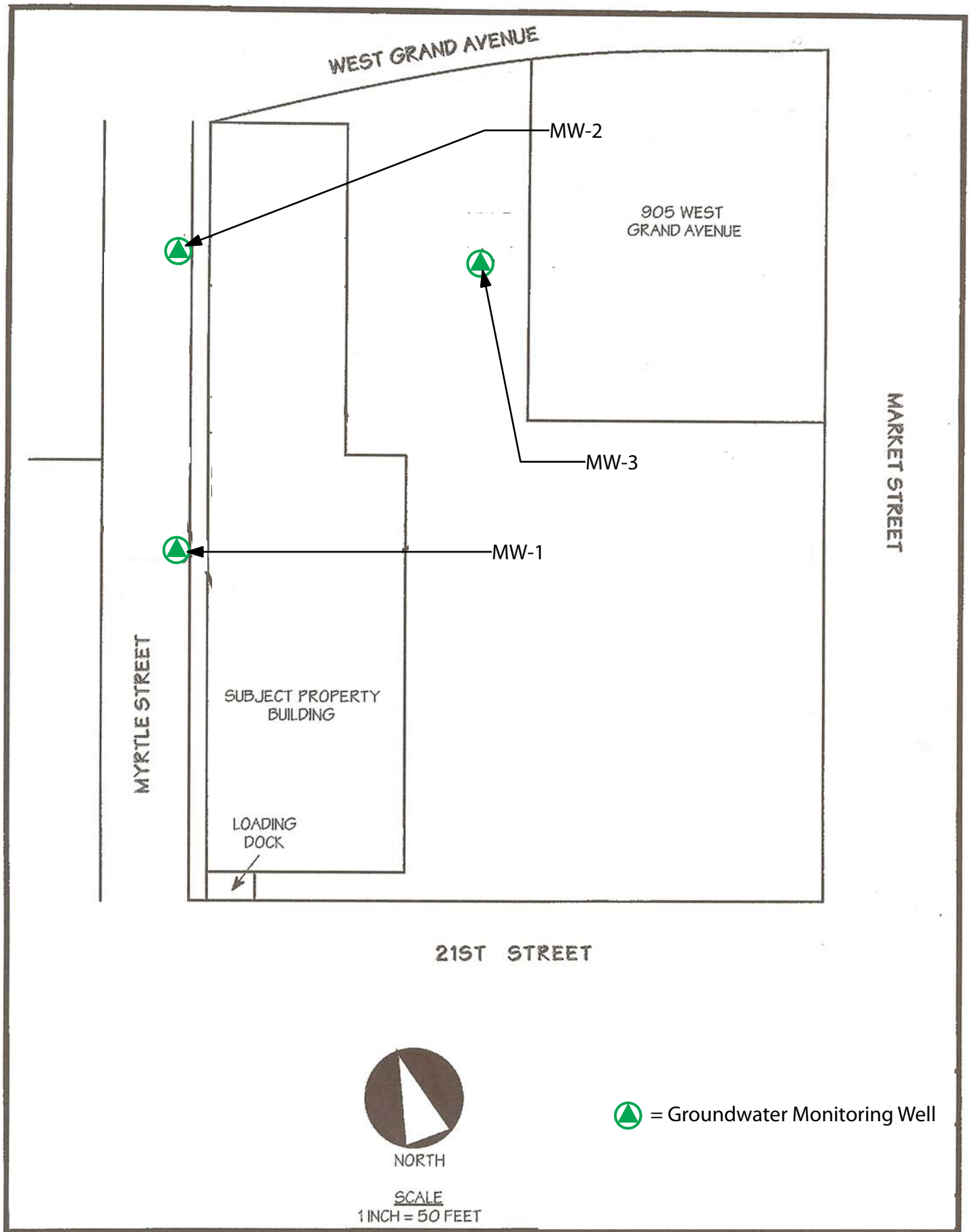
Site Location
949 West Grand Ave. Oakland, CA

for: Mr. George Kim
2601 Telegraph Avenue
Oakland, CA 94612-1713

Project

N

Figure
1



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Job No.	Date	Drawn by	Rev.	Apprvd.
114201	17 July 2012	RC	WL	WL

Project

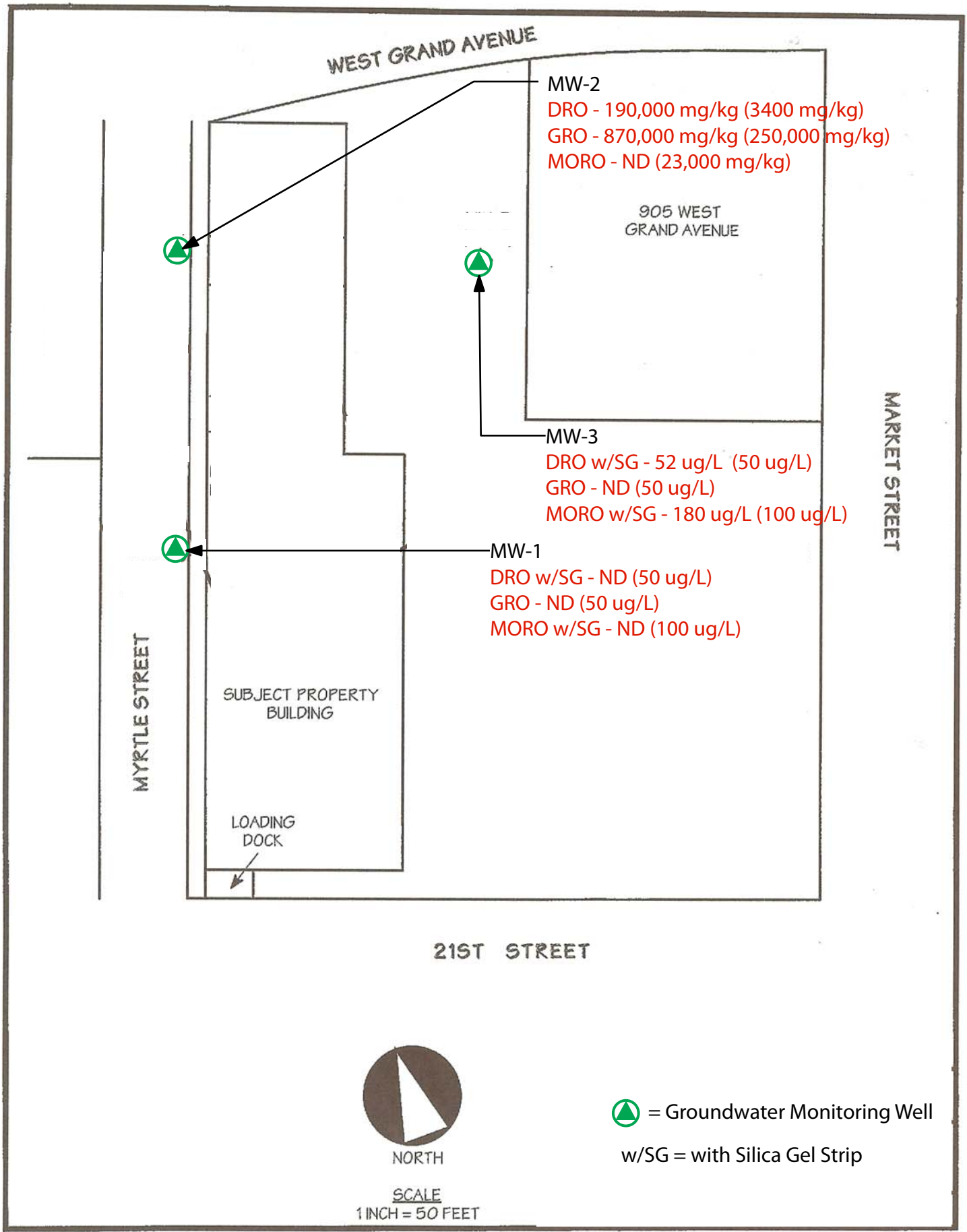
Well Locations

949 West Grand Ave. Oakland CA

For: George Kim
2601 Telegraph Road
Oakland CA, 94612-1713

Figure

2



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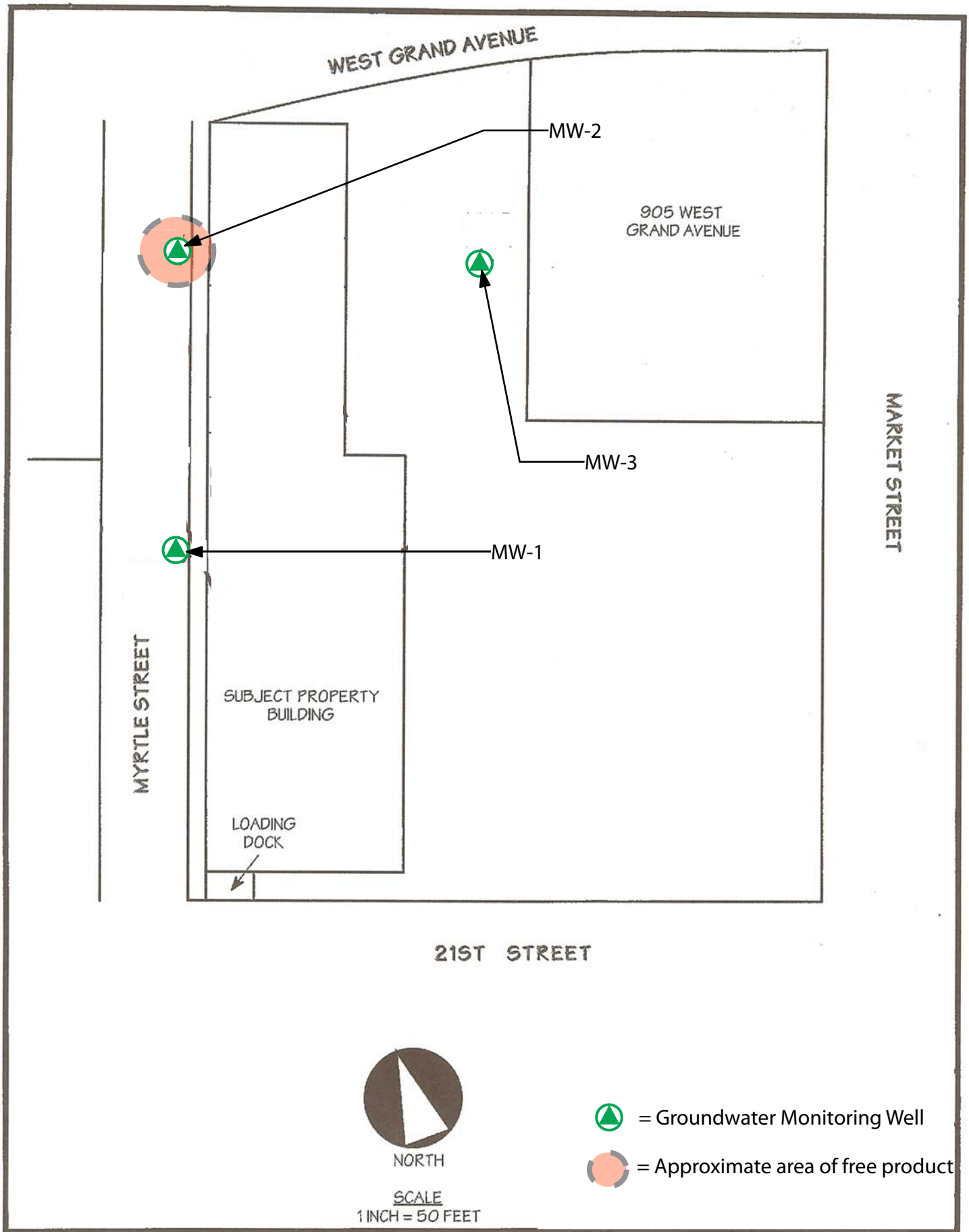
Job No.	Date	Drawn by	Rev.	Apprvd.
114201	17 July 2012	RC	WL	WL

Project
Well Locations w/ DRO, GRO and MORO results
949 West Grand Ave. Oakland, CA
For: George Kim
2601 Telegraph Road
Oakland CA, 94612-1713

Figure
3



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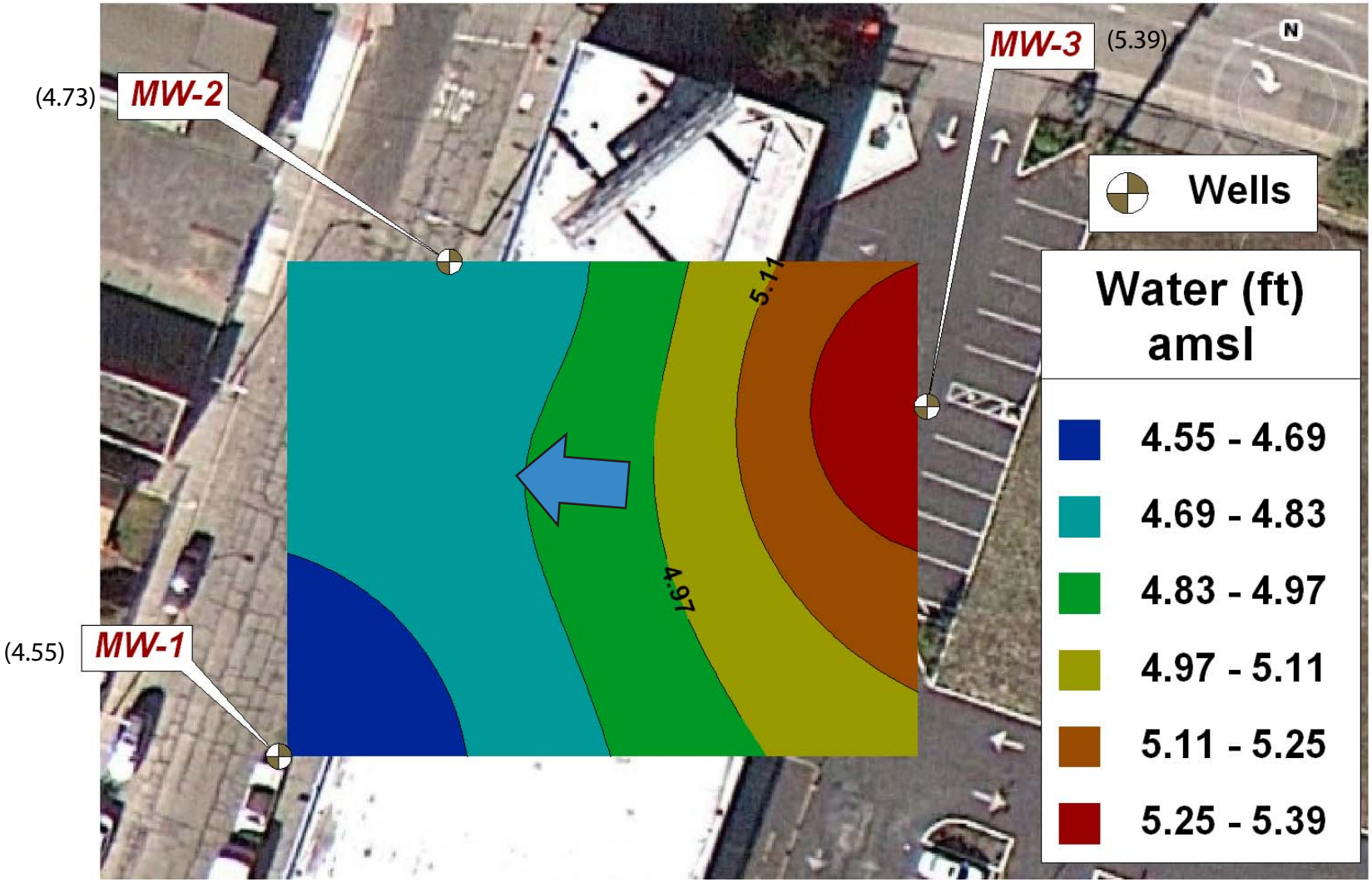
Project
Well Locations
949 West Grand Ave. Oakland CA

For: George Kim
2601 Telegraph Road
Oakland CA, 94612-1713

Figure
4

Job No.	Date	Drawn by	Rev.	Apprvd.
114201	17 July 2012	RC	WL	WL



(4.73) = feet above meam sea level
Contours by Enviroinsite

Calculated average gradient as per EPA Site Assesment Calculation = 0.01161

= Calculated flow direction 274.6 from North

THE CONSULTING GROUP
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Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	114201
Date	17 July 2012
Drawn by	RC
Rev	SL
Apprvd	SL

Well Locations w/ Groundwater Contour (6/12/12)

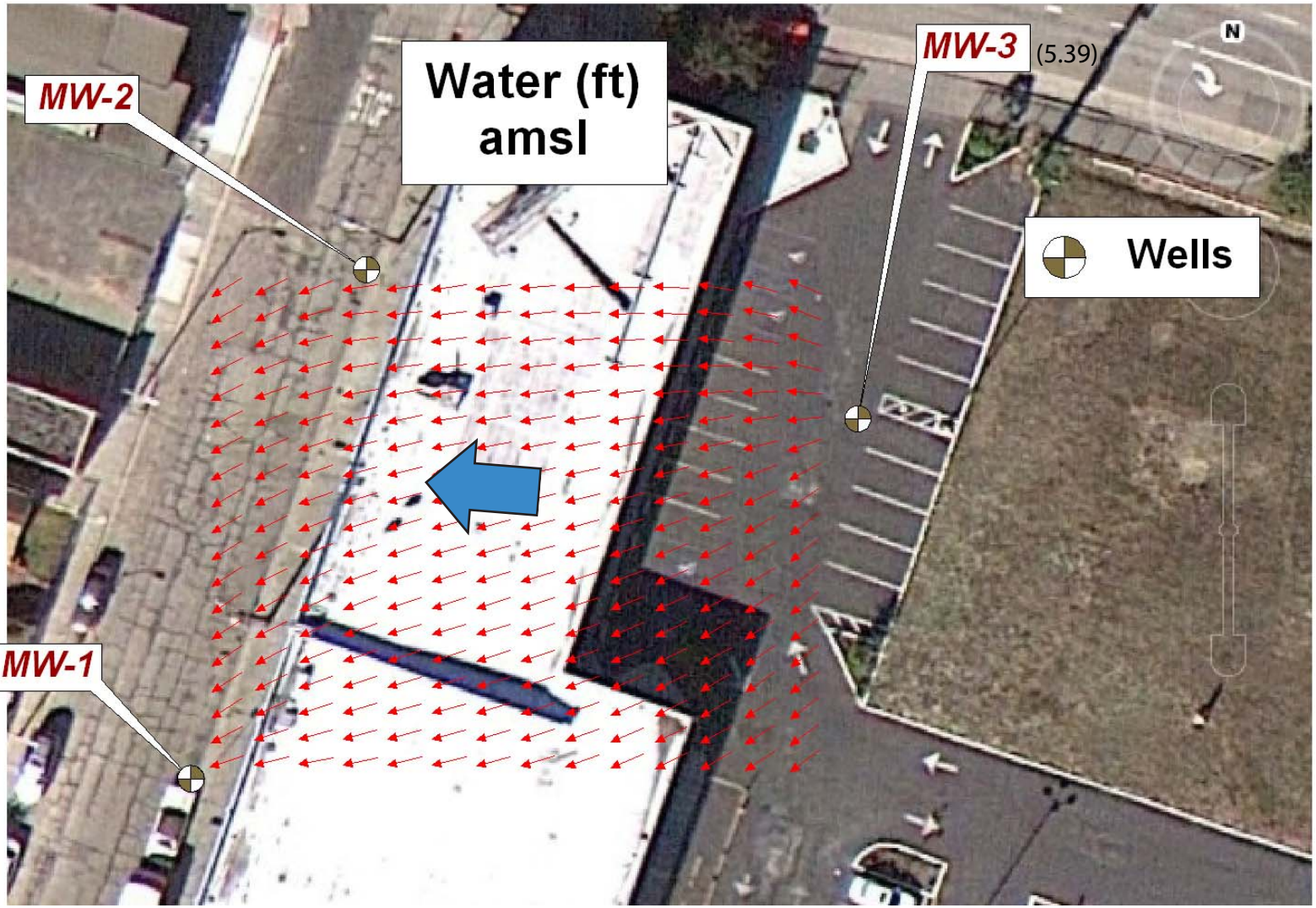
Project

949 West Grand Ave Oakland CA
For: George Kim
2601 Telegraph Road
Oakland CA, 94612-1713

N

Figure

5



(4.73) = feet above meam sea level
Groundwater Arrow Diagram by Enviroinsite

Calculated average gradient as per EPA Site Assesment Calculation = 0.01161

= Calculated flow direction 274.6 from North

THE CONSULTING GROUP
394 Cecilia Way, Tiburon, CA 94920
Tel: 415.381.2560 / Fax: 415.381.1741

Job No.	114201
Date	17 July 2012
Drawn by	RC
Rev	SL
Apprvd	SL

Well Locations w/ Groundwater Arrow Diagram (6/12/2012)

Project

949 West Grand Ave Oakland CA
For: George Kim
2601 Telegraph Road
Oakland CA, 94612-1713

N

Figure

6

APPENDIX 1 – SURVEY RESULTS

CSS ENVIRONMENTAL SERVICES, INC.
Managing Cost, Scope and Schedule
100 Galli Drive, Suite 1
Novato, CA 94949
Telephone: (415) 883-6203
Facsimile: (415) 883-6204

Site Positions

CSS Project 6734 - The Consulting Group
949 W. Grand Ave., Oakland

Horizontal Coordinate System: North American 1983-CONUS **Survey Date:** 06/29/12
Height System: North American Vertical Datum 1988-Ortho. Ht. (GEOID03)
Project file: 6734 TCG Oakland.spr
Desired Horizontal Accuracy: 0.100Ft + 1ppm
Desired Vertical Accuracy: 0.100Ft + 2ppm
Confidence Level: 95% Err.
Linear Units of Measure: Int. Feet

	Site ID	Site Descriptor	Position	95% Error	Fix Status	Position Status
1	MW-3	TBM-A ON NR	Lat. 37° 48′ 51.55956″ N	0.026		Processed
			Lon. 122° 16′ 45.78669″ W	0.026		
		N RIM WELL LOCATION	Elv. 15.32	0.039		
		N TOC	Elv. 14.87			
2	MW-2	TBM-B ON NR	Lat. 37° 48′ 51.85266″ N	0.006		Processed
			Lon. 122° 16′ 47.19883″ W	0.006		
		N RIM WELL LOCATION	Elv. 14.96			
		N TOC	Elv. 14.36			
3	0882	MONUMENT HT0882	Lat. 37° 46′ 48.05114″ N	0.000	Fixed	Processed
			Lon. 122° 17′ 53.51916″ W	0.000	Fixed	
			Elv. 9.131	0.000	Fixed	
4	MW-1	N RIM	Lat. 37° 48′ 50.65647″ N	0.006		Processed
			Lon. 122° 16′ 47.62910″ W	0.006		
		N RIM WELL LOCATION	Elv. 15.26			
		N TOC	Elv. 15.07			
5	3814	MONUMENT AA3814	Lat. 37° 44′ 59.76431″ N	0.000	Fixed	Processed
			Lon. 122° 12′ 18.12314″ W	0.000	Fixed	
			Elv. 11.581	0.000	Fixed	

APPENDIX 2 - LABORATORY REPORTS AND COC FORMS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-42973-1
Client Project/Site: 949 W. Grand Oakland
Revision: 1

For:
TCG (The Consulting Group)
394 Cecilia Way
Tiburon, California 94920-2105

Attn: Mr. Woody Lovejoy

Authorized for release by:
7/11/2012 3:56:53 PM

Onieka Howard
Project Manager I
onieka.howard@testamericainc.com

Table of Contents

Definitions/Glossary

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Glossary

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

Job ID: 720-42973-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-42973-1

Comments
No additional comments.

Receipt
The samples were received on 6/27/2012 4:33 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

Except: No sample date or time on coc. Logged sample date and times from sample containers.

GC/MS VOA
Method(s) 8260B: The following samples 42973-1 and 3 submitted for volatiles analysis was received with insufficient preservation (pH >2).

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch #116404 recovered above the upper control limit for Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted.

No other analytical or quality issues were noted.

GC Semi VOA
Method(s) 8015B: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: (720-42973-2 DU) and MW-2 (720-42973-2).

No other analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-1 — Lab Sample ID: 720-42973-1

No Detections

Client Sample ID: MW-2 — Lab Sample ID: 720-42973-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	16000000		5000000		ug/Kg	100000		8260B	Total/NA
1,3,5-Trimethylbenzene	12000000		500000		ug/Kg	10000		8260B	Total/NA
4-Isopropyltoluene	710000		500000		ug/Kg	10000		8260B	Total/NA
Ethylbenzene	17000000		5000000		ug/Kg	100000		8260B	Total/NA
Gasoline Range Organics (GRO) -C5-C12	870000000		250000000		ug/Kg	100000		8260B	Total/NA
Isopropylbenzene	3600000		500000		ug/Kg	10000		8260B	Total/NA
m-Xylene & p-Xylene	690000		500000		ug/Kg	10000		8260B	Total/NA
Naphthalene	7100000		1000000		ug/Kg	10000		8260B	Total/NA
n-Butylbenzene	9100000		500000		ug/Kg	10000		8260B	Total/NA
N-Propylbenzene	15000000		500000		ug/Kg	10000		8260B	Total/NA
sec-Butylbenzene	2300000		500000		ug/Kg	10000		8260B	Total/NA
Diesel Range Organics [C10-C28]	190000		3400		mg/Kg	5		8015B	Total/NA
Stoddard Solvent Range Organics (C9-C13)	250000		3400		mg/Kg	5		8015B	Total/NA
Jet Fuel Range Organics [C9-C19]	300000		3400		mg/Kg	5		8015B	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 720-42973-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.64		0.50		ug/L	1		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	52		51		ug/L	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	180		100		ug/L	1		8015B	Silica Gel Cleanup

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-1
Date Collected: 06/27/12 11:30
Date Received: 06/27/12 16:33

Lab Sample ID: 720-42973-1
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/03/12 03:34	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/03/12 03:34	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/03/12 03:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			07/03/12 03:34	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/03/12 03:34	1
1,1-Dichloroethane	ND		0.50		ug/L			07/03/12 03:34	1
1,1-Dichloroethene	ND		0.50		ug/L			07/03/12 03:34	1
1,1-Dichloropropene	ND		0.50		ug/L			07/03/12 03:34	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/03/12 03:34	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/03/12 03:34	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/03/12 03:34	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			07/03/12 03:34	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			07/03/12 03:34	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/03/12 03:34	1
1,2-Dichloroethane	ND		0.50		ug/L			07/03/12 03:34	1
1,2-Dichloropropane	ND		0.50		ug/L			07/03/12 03:34	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/03/12 03:34	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/03/12 03:34	1
1,3-Dichloropropane	ND		1.0		ug/L			07/03/12 03:34	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/03/12 03:34	1
2,2-Dichloropropane	ND		0.50		ug/L			07/03/12 03:34	1
2-Butanone (MEK)	ND		50		ug/L			07/03/12 03:34	1
2-Chlorotoluene	ND		0.50		ug/L			07/03/12 03:34	1
2-Hexanone	ND		50		ug/L			07/03/12 03:34	1
4-Chlorotoluene	ND		0.50		ug/L			07/03/12 03:34	1
4-Isopropyltoluene	ND		1.0		ug/L			07/03/12 03:34	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/03/12 03:34	1
Acetone	ND		50		ug/L			07/03/12 03:34	1
Benzene	ND		0.50		ug/L			07/03/12 03:34	1
Bromobenzene	ND		1.0		ug/L			07/03/12 03:34	1
Bromoform	ND		1.0		ug/L			07/03/12 03:34	1
Bromomethane	ND		1.0		ug/L			07/03/12 03:34	1
Carbon disulfide	ND		5.0		ug/L			07/03/12 03:34	1
Carbon tetrachloride	ND		0.50		ug/L			07/03/12 03:34	1
Chlorobenzene	ND		0.50		ug/L			07/03/12 03:34	1
Chlorobromomethane	ND		1.0		ug/L			07/03/12 03:34	1
Chlorodibromomethane	ND		0.50		ug/L			07/03/12 03:34	1
Chloroethane	ND		1.0		ug/L			07/03/12 03:34	1
Chloroform	ND		1.0		ug/L			07/03/12 03:34	1
Chloromethane	ND		1.0		ug/L			07/03/12 03:34	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/03/12 03:34	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/03/12 03:34	1
Dibromomethane	ND		0.50		ug/L			07/03/12 03:34	1
Dichlorobromomethane	ND		0.50		ug/L			07/03/12 03:34	1
Dichlorodifluoromethane	ND		0.50		ug/L			07/03/12 03:34	1
Ethylbenzene	ND		0.50		ug/L			07/03/12 03:34	1
Ethylene Dibromide	ND		0.50		ug/L			07/03/12 03:34	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			07/03/12 03:34	1
Hexachlorobutadiene	ND		1.0		ug/L			07/03/12 03:34	1
Isopropylbenzene	ND		0.50		ug/L			07/03/12 03:34	1

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-1
Date Collected: 06/27/12 11:30
Date Received: 06/27/12 16:33

Lab Sample ID: 720-42973-1
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			07/03/12 03:34	1
Methylene Chloride	ND		5.0		ug/L			07/03/12 03:34	1
Naphthalene	ND		1.0		ug/L			07/03/12 03:34	1
n-Butylbenzene	ND		1.0		ug/L			07/03/12 03:34	1
N-Propylbenzene	ND		1.0		ug/L			07/03/12 03:34	1
sec-Butylbenzene	ND		1.0		ug/L			07/03/12 03:34	1
Styrene	ND		0.50		ug/L			07/03/12 03:34	1
tert-Butylbenzene	ND		1.0		ug/L			07/03/12 03:34	1
Tetrachloroethene	ND		0.50		ug/L			07/10/12 14:50	1
Toluene	ND		0.50		ug/L			07/03/12 03:34	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/03/12 03:34	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/03/12 03:34	1
Trichloroethene	ND		0.50		ug/L			07/03/12 03:34	1
Trichlorofluoromethane	ND		1.0		ug/L			07/03/12 03:34	1
Vinyl acetate	ND		10		ug/L			07/03/12 03:34	1
Vinyl chloride	ND		0.50		ug/L			07/03/12 03:34	1
Xylenes, Total	ND		1.0		ug/L			07/03/12 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 138*		*07/03/12 03:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 138*		*07/10/12 14:50*	*1*
4-Bromofluorobenzene	*92*		*67 - 130*		*07/03/12 03:34*	*1*
4-Bromofluorobenzene	*100*		*67 - 130*		*07/10/12 14:50*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/03/12 03:34*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/10/12 14:50*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		07/02/12 14:27	07/03/12 18:44	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		07/02/12 14:27	07/03/12 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*07/02/12 14:27*	*07/03/12 18:44*	*1*
p-Terphenyl	*73*		*31 - 150*	*07/02/12 14:27*	*07/03/12 18:44*	*1*

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-2
Date Collected: 06/27/12 11:40
Date Received: 06/27/12 16:33

Lab Sample ID: 720-42973-2
Matrix: Waste

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,1,1-Trichloroethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,1,2,2-Tetrachloroethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,1,2-Trichloroethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,1-Dichloroethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,1-Dichloroethene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,1-Dichloropropene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,2,3-Trichlorobenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,2,3-Trichloropropane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,2,4-Trichlorobenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,2,4-Trimethylbenzene	**16000000**		5000000		ug/Kg		07/02/12 07:30	07/03/12 13:51	100000
1,2-Dibromo-3-Chloropropane	ND		5000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,2-Dichlorobenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,2-Dichloroethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,2-Dichloropropane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,3,5-Trimethylbenzene	**12000000**		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,3-Dichlorobenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,3-Dichloropropane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
1,4-Dichlorobenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
2,2-Dichloropropane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
2-Butanone (MEK)	ND	*	5000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
2-Chlorotoluene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
2-Hexanone	ND		5000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
4-Chlorotoluene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
4-Isopropyltoluene	**710000**		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
4-Methyl-2-pentanone (MIBK)	ND		5000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Acetone	ND		5000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Benzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Bromobenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Bromoform	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Bromomethane	ND		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Carbon disulfide	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Carbon tetrachloride	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Chlorobenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Chlorobromomethane	ND		2000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Chlorodibromomethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Chloroethane	ND		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Chloroform	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Chloromethane	ND		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
cis-1,2-Dichloroethene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
cis-1,3-Dichloropropene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Dibromomethane	ND		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Dichlorobromomethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Dichlorodifluoromethane	ND		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Ethylbenzene	**17000000**		5000000		ug/Kg		07/02/12 07:30	07/03/12 13:51	100000
Ethylene Dibromide	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Gasoline Range Organics (GRO) -C5-C12	**870000000**		250000000		ug/Kg		07/02/12 07:30	07/03/12 13:51	100000
Hexachlorobutadiene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Isopropylbenzene	**3600000**		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-2
Date Collected: 06/27/12 11:40
Date Received: 06/27/12 16:33

Lab Sample ID: 720-42973-2
Matrix: Waste

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Methylene Chloride	ND		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
m-Xylene & p-Xylene	**690000**		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Naphthalene	**7100000**		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
n-Butylbenzene	**9100000**		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
N-Propylbenzene	**15000000**		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
o-Xylene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
sec-Butylbenzene	**2300000**		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Styrene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
tert-Butylbenzene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Tetrachloroethene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Toluene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
trans-1,2-Dichloroethene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
trans-1,3-Dichloropropene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Trichloroethene	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Trichlorofluoromethane	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Vinyl acetate	ND		5000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Vinyl chloride	ND		500000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000
Xylenes, Total	ND		1000000		ug/Kg		07/02/12 07:30	07/02/12 15:36	10000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*66 - 148*	*07/02/12 07:30*	*07/02/12 15:36*	*10000*
4-Bromofluorobenzene	*101*		*66 - 148*	*07/02/12 07:30*	*07/03/12 13:51*	*100000*
1,2-Dichloroethane-d4 (Surr)	*92*		*62 - 137*	*07/02/12 07:30*	*07/02/12 15:36*	*10000*
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*	*07/02/12 07:30*	*07/03/12 13:51*	*100000*
Toluene-d8 (Surr)	*101*		*65 - 141*	*07/02/12 07:30*	*07/02/12 15:36*	*10000*
Toluene-d8 (Surr)	*104*		*65 - 141*	*07/02/12 07:30*	*07/03/12 13:51*	*100000*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**190000**		3400		mg/Kg		07/05/12 11:08	07/06/12 15:54	5
Stoddard Solvent Range Organics (C9-C13)	**250000**		3400		mg/Kg		07/05/12 11:08	07/06/12 15:54	5
Motor Oil Range Organics [C24-C36]	ND		23000		mg/Kg		07/05/12 11:08	07/06/12 15:54	5
Jet Fuel Range Organics [C9-C19]	**300000**		3400		mg/Kg		07/05/12 11:08	07/06/12 15:54	5
TPH-Hydraulic Oil Range (C19-C36)	ND		23000		mg/Kg		07/05/12 11:08	07/06/12 15:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*50 - 130*	*07/05/12 11:08*	*07/06/12 15:54*	*5*

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-3
Date Collected: 06/27/12 10:55
Date Received: 06/27/12 16:33

Lab Sample ID: 720-42973-3
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/03/12 04:03	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/03/12 04:03	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/03/12 04:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			07/03/12 04:03	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/03/12 04:03	1
1,1-Dichloroethane	ND		0.50		ug/L			07/03/12 04:03	1
1,1-Dichloroethene	ND		0.50		ug/L			07/03/12 04:03	1
1,1-Dichloropropene	ND		0.50		ug/L			07/03/12 04:03	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/03/12 04:03	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/03/12 04:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/03/12 04:03	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			07/03/12 04:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			07/03/12 04:03	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/03/12 04:03	1
1,2-Dichloroethane	ND		0.50		ug/L			07/03/12 04:03	1
1,2-Dichloropropane	ND		0.50		ug/L			07/03/12 04:03	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/03/12 04:03	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/03/12 04:03	1
1,3-Dichloropropane	ND		1.0		ug/L			07/03/12 04:03	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/03/12 04:03	1
2,2-Dichloropropane	ND		0.50		ug/L			07/03/12 04:03	1
2-Butanone (MEK)	ND		50		ug/L			07/03/12 04:03	1
2-Chlorotoluene	ND		0.50		ug/L			07/03/12 04:03	1
2-Hexanone	ND		50		ug/L			07/03/12 04:03	1
4-Chlorotoluene	ND		0.50		ug/L			07/03/12 04:03	1
4-Isopropyltoluene	ND		1.0		ug/L			07/03/12 04:03	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/03/12 04:03	1
Acetone	ND		50		ug/L			07/03/12 04:03	1
Benzene	ND		0.50		ug/L			07/03/12 04:03	1
Bromobenzene	ND		1.0		ug/L			07/03/12 04:03	1
Bromoform	ND		1.0		ug/L			07/03/12 04:03	1
Bromomethane	ND		1.0		ug/L			07/03/12 04:03	1
Carbon disulfide	ND		5.0		ug/L			07/03/12 04:03	1
Carbon tetrachloride	ND		0.50		ug/L			07/03/12 04:03	1
Chlorobenzene	ND		0.50		ug/L			07/03/12 04:03	1
Chlorobromomethane	ND		1.0		ug/L			07/03/12 04:03	1
Chlorodibromomethane	ND		0.50		ug/L			07/03/12 04:03	1
Chloroethane	ND		1.0		ug/L			07/03/12 04:03	1
Chloroform	ND		1.0		ug/L			07/03/12 04:03	1
Chloromethane	ND		1.0		ug/L			07/03/12 04:03	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/03/12 04:03	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/03/12 04:03	1
Dibromomethane	ND		0.50		ug/L			07/03/12 04:03	1
Dichlorobromomethane	ND		0.50		ug/L			07/03/12 04:03	1
Dichlorodifluoromethane	ND		0.50		ug/L			07/03/12 04:03	1
Ethylbenzene	ND		0.50		ug/L			07/03/12 04:03	1
Ethylene Dibromide	ND		0.50		ug/L			07/03/12 04:03	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			07/03/12 04:03	1
Hexachlorobutadiene	ND		1.0		ug/L			07/03/12 04:03	1
Isopropylbenzene	ND		0.50		ug/L			07/03/12 04:03	1

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-3
Date Collected: 06/27/12 10:55
Date Received: 06/27/12 16:33

Lab Sample ID: 720-42973-3
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	**0.64**		0.50		ug/L			07/10/12 15:21	1
Methylene Chloride	ND		5.0		ug/L			07/03/12 04:03	1
Naphthalene	ND		1.0		ug/L			07/03/12 04:03	1
n-Butylbenzene	ND		1.0		ug/L			07/03/12 04:03	1
N-Propylbenzene	ND		1.0		ug/L			07/03/12 04:03	1
sec-Butylbenzene	ND		1.0		ug/L			07/03/12 04:03	1
Styrene	ND		0.50		ug/L			07/03/12 04:03	1
tert-Butylbenzene	ND		1.0		ug/L			07/03/12 04:03	1
Tetrachloroethene	ND		0.50		ug/L			07/10/12 15:21	1
Toluene	ND		0.50		ug/L			07/03/12 04:03	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/03/12 04:03	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/03/12 04:03	1
Trichloroethene	ND		0.50		ug/L			07/03/12 04:03	1
Trichlorofluoromethane	ND		1.0		ug/L			07/03/12 04:03	1
Vinyl acetate	ND		10		ug/L			07/03/12 04:03	1
Vinyl chloride	ND		0.50		ug/L			07/03/12 04:03	1
Xylenes, Total	ND		1.0		ug/L			07/03/12 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 138*		*07/03/12 04:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 138*		*07/10/12 15:21*	*1*
4-Bromofluorobenzene	*95*		*67 - 130*		*07/03/12 04:03*	*1*
4-Bromofluorobenzene	*100*		*67 - 130*		*07/10/12 15:21*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/03/12 04:03*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/10/12 15:21*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**52**		51		ug/L		07/02/12 14:27	07/03/12 19:08	1
Motor Oil Range Organics [C24-C36]	**180**		100		ug/L		07/02/12 14:27	07/03/12 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*07/02/12 14:27*	*07/03/12 19:08*	*1*
p-Terphenyl	*73*		*31 - 150*	*07/02/12 14:27*	*07/03/12 19:08*	*1*

Report Date: 03-Jul-2012 14:31:52 Chrom Revision: 2.0 18-Jan-2012 10:56:12

Data File: \\taisfchrom\chromdata\HP5\20120703-16876.b\070312014.D

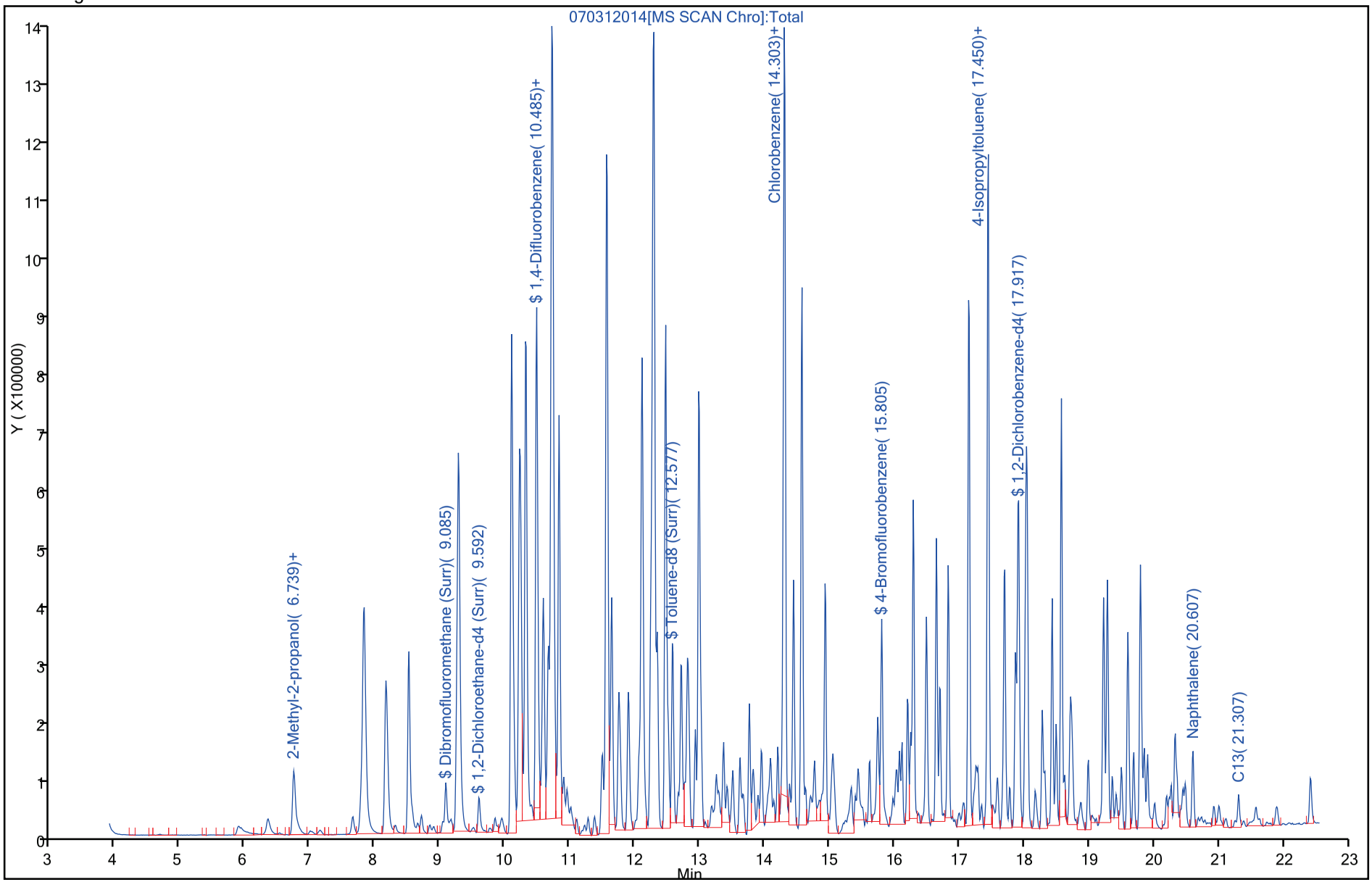
Injection Date: 03-Jul-2012 13:51:30 Limit Group: 8260B

Client ID: MW-2 Instrument ID: HP5

Lims Batch ID: 116485 Lims Sample ID: 14

Operator ID: yb

Y Scaling:



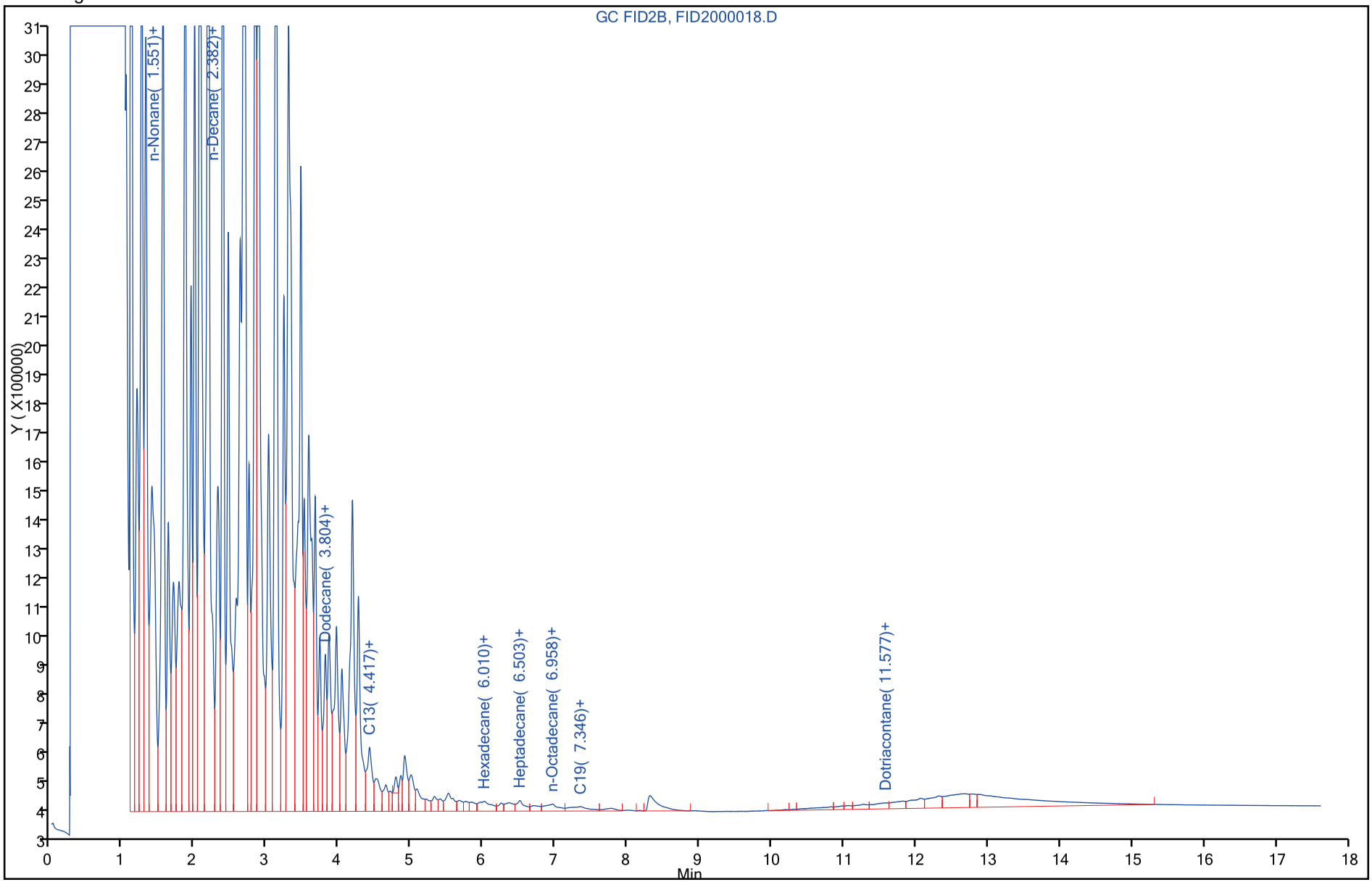
7/11/2012

Report Date: 07-Jul-2012 10:49:34 Chrom Revision: 2.0 18-Jan-2012 10:56:12

Data File: \\Taisfchrom\ChromData\CHDRO6\20120706-16918.b\FID2000018.D

Injection Date:	06-Jul-2012 15:54:26	Limit Group:	DRO
Client ID:	MW-2	Instrument ID:	CHDRO6
Lims Batch ID:	116686	Lims Sample ID:	18
Operator ID:		Injection Vol:	1.00 ul

Y Scaling: Method Defined: Set to Absolute Y Value



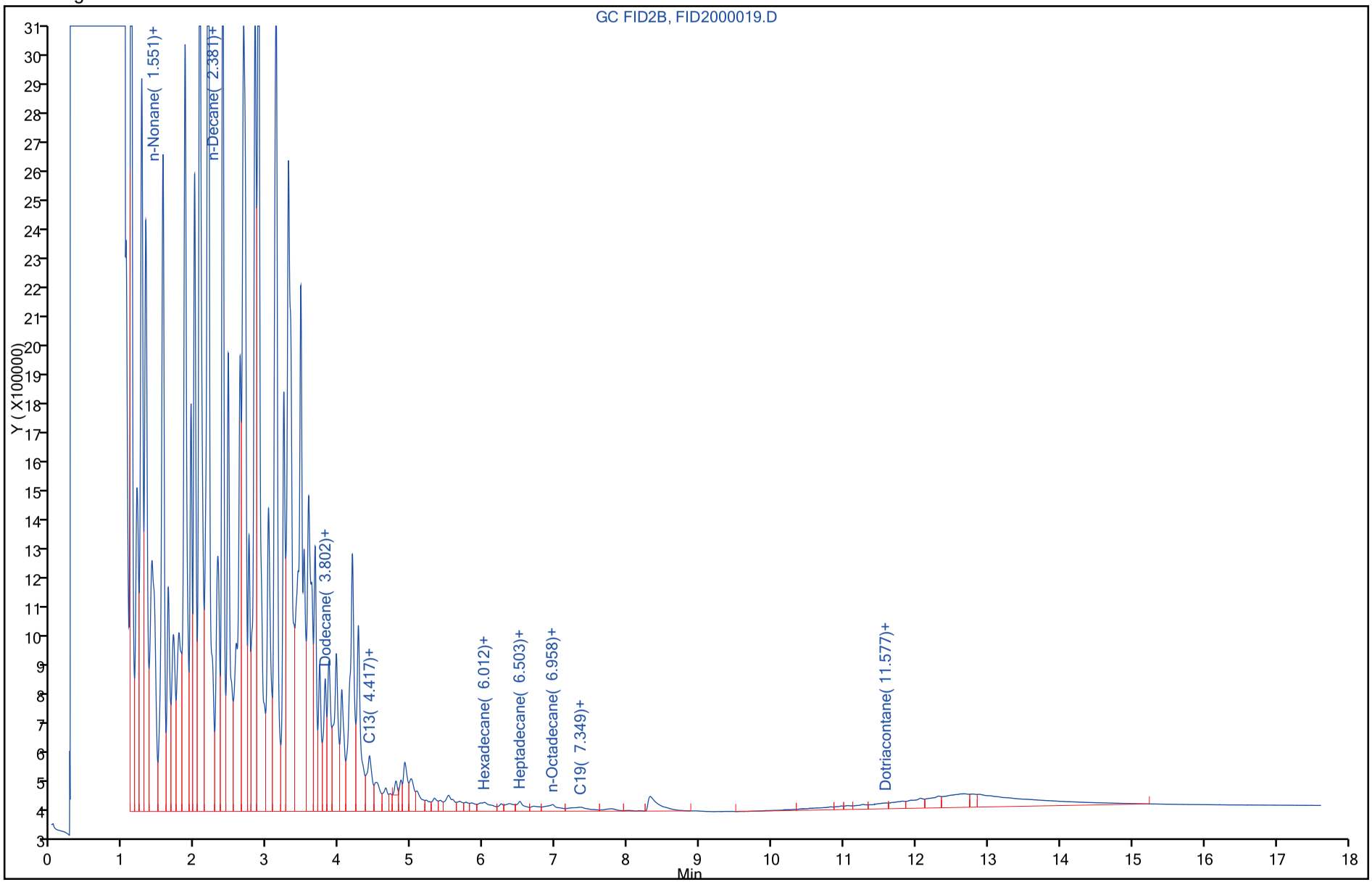
7/11/2012

Report Date: 07-Jul-2012 10:50:43 Chrom Revision: 2.0 18-Jan-2012 10:56:12

Data File: \\Taisfchrom\ChromData\CHDRO6\20120706-16918.b\FID2000019.D

Injection Date:	06-Jul-2012 16:18:50	Limit Group:	DRO
Client ID:		Instrument ID:	CHDRO6
Lims Batch ID:	116686	Lims Sample ID:	19
Operator ID:		Injection Vol:	1.00 ul

Y Scaling: Method Defined: Set to Absolute Y Value



7/11/2012

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

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

Lab Sample ID: MB 720-116433/1-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,1,1-Trichloroethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,1,2,2-Tetrachloroethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,1,2-Trichloroethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,1-Dichloroethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,1-Dichloroethene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,1-Dichloropropene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2,3-Trichlorobenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2,3-Trichloropropane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2,4-Trichlorobenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2,4-Trimethylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2-Dibromo-3-Chloropropane	ND		5000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2-Dichlorobenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2-Dichloroethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,2-Dichloropropane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,3,5-Trimethylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,3-Dichlorobenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,3-Dichloropropane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
1,4-Dichlorobenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
2,2-Dichloropropane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
2-Butanone (MEK)	ND		5000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
2-Chlorotoluene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
2-Hexanone	ND		5000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
4-Chlorotoluene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
4-Isopropyltoluene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
4-Methyl-2-pentanone (MIBK)	ND		5000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Acetone	ND		5000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Benzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Bromobenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Bromoform	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Bromomethane	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Carbon disulfide	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Carbon tetrachloride	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Chlorobenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Chlorobromomethane	ND		2000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Chlorodibromomethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Chloroethane	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Chloroform	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Chloromethane	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
cis-1,2-Dichloroethene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
cis-1,3-Dichloropropene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Dibromomethane	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Dichlorobromomethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Dichlorodifluoromethane	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Ethylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Ethylene Dibromide	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Gasoline Range Organics (GRO) -C5-C12	ND		25000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Hexachlorobutadiene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100

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

Lab Sample ID: MB 720-116433/1-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Methyl tert-butyl ether	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Methylene Chloride	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
m-Xylene & p-Xylene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Naphthalene	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
n-Butylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
N-Propylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
o-Xylene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
sec-Butylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Styrene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
tert-Butylbenzene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Tetrachloroethene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Toluene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
trans-1,2-Dichloroethene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
trans-1,3-Dichloropropene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Trichloroethene	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Trichlorofluoromethane	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Vinyl acetate	ND		5000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Vinyl chloride	ND		500		ug/Kg		07/02/12 07:30	07/02/12 09:17	100
Xylenes, Total	ND		1000		ug/Kg		07/02/12 07:30	07/02/12 09:17	100

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*62 - 137*	*07/02/12 07:30*	*07/02/12 09:17*	*100*
4-Bromofluorobenzene	*97*		*66 - 148*	*07/02/12 07:30*	*07/02/12 09:17*	*100*
Toluene-d8 (Surr)	*100*		*65 - 141*	*07/02/12 07:30*	*07/02/12 09:17*	*100*

Lab Sample ID: LCS 720-116433/2-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	2500	2680		ug/Kg		107	72 - 129
1,1,1-Trichloroethane	2500	2810		ug/Kg		112	69 - 132
1,1,2,2-Tetrachloroethane	2500	2890		ug/Kg		116	69 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2970		ug/Kg		119	66 - 128
1,1,2-Trichloroethane	2500	3010		ug/Kg		120	80 - 140
1,1-Dichloroethane	2500	2800		ug/Kg		112	79 - 125
1,1-Dichloroethene	2500	2530		ug/Kg		101	74 - 122
1,1-Dichloropropene	2500	2770		ug/Kg		111	81 - 134
1,2,3-Trichlorobenzene	2500	2560		ug/Kg		102	72 - 159
1,2,3-Trichloropropane	2500	2980		ug/Kg		119	74 - 135
1,2,4-Trichlorobenzene	2500	2460		ug/Kg		98	71 - 163
1,2,4-Trimethylbenzene	2500	2730		ug/Kg		109	62 - 155
1,2-Dibromo-3-Chloropropane	2500	ND		ug/Kg		113	52 - 156
1,2-Dichlorobenzene	2500	2700		ug/Kg		108	77 - 140
1,2-Dichloroethane	2500	2820		ug/Kg		113	67 - 126
1,2-Dichloropropane	2500	2860		ug/Kg		114	84 - 129
1,3,5-Trimethylbenzene	2500	2780		ug/Kg		111	69 - 142
1,3-Dichlorobenzene	2500	2730		ug/Kg		109	71 - 135

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

Lab Sample ID: LCS 720-116433/2-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichloropropane	2500	3010		ug/Kg		120	73 - 133
1,4-Dichlorobenzene	2500	2640		ug/Kg		106	76 - 130
2,2-Dichloropropane	2500	2770		ug/Kg		111	67 - 146
2-Butanone (MEK)	12500	15300		ug/Kg		122	58 - 159
2-Chlorotoluene	2500	2780		ug/Kg		111	66 - 143
2-Hexanone	12500	14900		ug/Kg		119	63 - 165
4-Chlorotoluene	2500	2710		ug/Kg		108	73 - 136
4-Isopropyltoluene	2500	2690		ug/Kg		108	62 - 153
4-Methyl-2-pentanone (MIBK)	12500	15100		ug/Kg		121	66 - 150
Acetone	12500	14700		ug/Kg		117	12 - 234
Benzene	2500	2780		ug/Kg		111	76 - 122
Bromobenzene	2500	2720		ug/Kg		109	77 - 125
Bromoform	2500	2830		ug/Kg		113	54 - 149
Bromomethane	2500	2370		ug/Kg		95	14 - 175
Carbon disulfide	2500	2490		ug/Kg		100	13 - 151
Carbon tetrachloride	2500	2730		ug/Kg		109	72 - 136
Chlorobenzene	2500	2690		ug/Kg		108	81 - 128
Chlorobromomethane	2500	2880		ug/Kg		115	74 - 134
Chlorodibromomethane	2500	2990		ug/Kg		120	76 - 134
Chloroethane	2500	2490		ug/Kg		100	53 - 124
Chloroform	2500	2840		ug/Kg		114	75 - 133
Chloromethane	2500	1970		ug/Kg		79	43 - 146
cis-1,2-Dichloroethene	2500	3180		ug/Kg		127	77 - 132
cis-1,3-Dichloropropene	2500	3140		ug/Kg		126	79 - 144
Dibromomethane	2500	2890		ug/Kg		116	76 - 139
Dichlorobromomethane	2500	2990		ug/Kg		120	80 - 131
Dichlorodifluoromethane	2500	1450		ug/Kg		58	30 - 120
Ethylbenzene	2500	2630		ug/Kg		105	76 - 137
Ethylene Dibromide	2500	3040		ug/Kg		122	80 - 138
Hexachlorobutadiene	2500	2360		ug/Kg		94	63 - 150
Isopropylbenzene	2500	2750		ug/Kg		110	65 - 128
Methyl tert-butyl ether	2500	3290		ug/Kg		132	71 - 146
Methylene Chloride	2500	2720		ug/Kg		109	79 - 128
m-Xylene & p-Xylene	5000	5320		ug/Kg		106	71 - 142
Naphthalene	2500	2610		ug/Kg		104	62 - 151
n-Butylbenzene	2500	2700		ug/Kg		108	57 - 164
N-Propylbenzene	2500	2630		ug/Kg		105	65 - 144
o-Xylene	2500	2760		ug/Kg		110	71 - 142
sec-Butylbenzene	2500	2740		ug/Kg		110	62 - 153
Styrene	2500	2770		ug/Kg		111	79 - 139
tert-Butylbenzene	2500	2760		ug/Kg		110	72 - 136
Tetrachloroethene	2500	2760		ug/Kg		110	79 - 130
Toluene	2500	2640		ug/Kg		106	77 - 120
trans-1,2-Dichloroethene	2500	2330		ug/Kg		93	74 - 128
trans-1,3-Dichloropropene	2500	3060		ug/Kg		122	78 - 144
Trichloroethene	2500	2830		ug/Kg		113	69 - 129
Trichlorofluoromethane	2500	2450		ug/Kg		98	49 - 140
Vinyl acetate	2500	ND		ug/Kg		126	56 - 200
Vinyl chloride	2500	1780		ug/Kg		71	10 - 118

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

Lab Sample ID: LCS 720-116433/2-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116433

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*62 - 137*
4-Bromofluorobenzene	*99*		*66 - 148*
Toluene-d8 (Surr)	*100*		*65 - 141*

Lab Sample ID: LCS 720-116433/4-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116433

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C5-C12			50000	45600		ug/Kg		91	60 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*97*		*62 - 137*
4-Bromofluorobenzene	*100*		*66 - 148*
Toluene-d8 (Surr)	*98*		*65 - 141*

Lab Sample ID: LCSD 720-116433/3-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			2500	2560		ug/Kg		102	72 - 129	5	20
1,1,1-Trichloroethane			2500	2650		ug/Kg		106	69 - 132	6	20
1,1,2,2-Tetrachloroethane			2500	2630		ug/Kg		105	69 - 133	9	20
1,1,2-Trichloro-1,2,2-trifluoroethane			2500	2840		ug/Kg		114	66 - 128	4	20
1,1,2-Trichloroethane			2500	2740		ug/Kg		110	80 - 140	9	20
1,1-Dichloroethane			2500	2660		ug/Kg		106	79 - 125	5	20
1,1-Dichloroethene			2500	2410		ug/Kg		96	74 - 122	5	20
1,1-Dichloropropene			2500	2670		ug/Kg		107	81 - 134	4	20
1,2,3-Trichlorobenzene			2500	2460		ug/Kg		98	72 - 159	4	20
1,2,3-Trichloropropane			2500	2640		ug/Kg		106	74 - 135	12	20
1,2,4-Trichlorobenzene			2500	2380		ug/Kg		95	71 - 163	3	20
1,2,4-Trimethylbenzene			2500	2640		ug/Kg		106	62 - 155	3	20
1,2-Dibromo-3-Chloropropane			2500	ND		ug/Kg		102	52 - 156	10	20
1,2-Dichlorobenzene			2500	2570		ug/Kg		103	77 - 140	5	20
1,2-Dichloroethane			2500	2600		ug/Kg		104	67 - 126	8	20
1,2-Dichloropropane			2500	2720		ug/Kg		109	84 - 129	5	20
1,3,5-Trimethylbenzene			2500	2680		ug/Kg		107	69 - 142	4	20
1,3-Dichlorobenzene			2500	2610		ug/Kg		104	71 - 135	4	20
1,3-Dichloropropane			2500	2760		ug/Kg		110	73 - 133	9	20
1,4-Dichlorobenzene			2500	2540		ug/Kg		102	76 - 130	4	20
2,2-Dichloropropane			2500	2670		ug/Kg		107	67 - 146	4	20
2-Butanone (MEK)			12500	12100	*	ug/Kg		97	58 - 159	23	20
2-Chlorotoluene			2500	2660		ug/Kg		106	66 - 143	4	20
2-Hexanone			12500	12800		ug/Kg		103	63 - 165	15	20
4-Chlorotoluene			2500	2580		ug/Kg		103	73 - 136	5	20
4-Isopropyltoluene			2500	2600		ug/Kg		104	62 - 153	3	20
4-Methyl-2-pentanone (MIBK)			12500	13200		ug/Kg		105	66 - 150	14	20

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

Lab Sample ID: LCSD 720-116433/3-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			12500	12300		ug/Kg		98	12 - 234	18	30
Benzene			2500	2630		ug/Kg		105	76 - 122	6	20
Bromobenzene			2500	2580		ug/Kg		103	77 - 125	5	20
Bromoform			2500	2590		ug/Kg		104	54 - 149	9	20
Bromomethane			2500	2290		ug/Kg		92	14 - 175	3	20
Carbon disulfide			2500	2390		ug/Kg		96	13 - 151	4	20
Carbon tetrachloride			2500	2600		ug/Kg		104	72 - 136	5	20
Chlorobenzene			2500	2570		ug/Kg		103	81 - 128	5	20
Chlorobromomethane			2500	2690		ug/Kg		108	74 - 134	7	20
Chlorodibromomethane			2500	2730		ug/Kg		109	76 - 134	9	20
Chloroethane			2500	2390		ug/Kg		96	53 - 124	4	20
Chloroform			2500	2670		ug/Kg		107	75 - 133	6	20
Chloromethane			2500	1920		ug/Kg		77	43 - 146	3	20
cis-1,2-Dichloroethene			2500	3020		ug/Kg		121	77 - 132	5	20
cis-1,3-Dichloropropene			2500	2910		ug/Kg		116	79 - 144	8	20
Dibromomethane			2500	2660		ug/Kg		106	76 - 139	8	20
Dichlorobromomethane			2500	2740		ug/Kg		110	80 - 131	9	20
Dichlorodifluoromethane			2500	1420		ug/Kg		57	30 - 120	2	20
Ethylbenzene			2500	2520		ug/Kg		101	76 - 137	4	20
Ethylene Dibromide			2500	2800		ug/Kg		112	80 - 138	8	20
Hexachlorobutadiene			2500	2330		ug/Kg		93	63 - 150	1	20
Isopropylbenzene			2500	2670		ug/Kg		107	65 - 128	3	20
Methyl tert-butyl ether			2500	2970		ug/Kg		119	71 - 146	10	20
Methylene Chloride			2500	2570		ug/Kg		103	79 - 128	6	20
m-Xylene & p-Xylene			5000	5140		ug/Kg		103	71 - 142	3	20
Naphthalene			2500	2460		ug/Kg		98	62 - 151	6	20
n-Butylbenzene			2500	2620		ug/Kg		105	57 - 164	3	20
N-Propylbenzene			2500	2550		ug/Kg		102	65 - 144	3	20
o-Xylene			2500	2660		ug/Kg		106	71 - 142	4	20
sec-Butylbenzene			2500	2660		ug/Kg		106	62 - 153	3	20
Styrene			2500	2660		ug/Kg		106	79 - 139	4	20
tert-Butylbenzene			2500	2660		ug/Kg		106	72 - 136	4	20
Tetrachloroethene			2500	2640		ug/Kg		106	79 - 130	4	20
Toluene			2500	2530		ug/Kg		101	77 - 120	4	20
trans-1,2-Dichloroethene			2500	2240		ug/Kg		90	74 - 128	4	20
trans-1,3-Dichloropropene			2500	2820		ug/Kg		113	78 - 144	8	20
Trichloroethene			2500	2650		ug/Kg		106	69 - 129	7	20
Trichlorofluoromethane			2500	2320		ug/Kg		93	49 - 140	5	20
Vinyl acetate			2500	ND		ug/Kg		113	56 - 200	10	20
Vinyl chloride			2500	1700		ug/Kg		68	10 - 118	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*62 - 137*
4-Bromofluorobenzene	*98*		*66 - 148*
Toluene-d8 (Surr)	*99*		*65 - 141*

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

Lab Sample ID: LCSD 720-116433/5-A
Matrix: Waste
Analysis Batch: 116404

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			50000	45900		ug/Kg		92	60 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*62 - 137*
4-Bromofluorobenzene	*99*		*66 - 148*
Toluene-d8 (Surr)	*99*		*65 - 141*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-116460/5
Matrix: Water
Analysis Batch: 116460

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/02/12 19:18	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/02/12 19:18	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/02/12 19:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			07/02/12 19:18	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/02/12 19:18	1
1,1-Dichloroethane	ND		0.50		ug/L			07/02/12 19:18	1
1,1-Dichloroethene	ND		0.50		ug/L			07/02/12 19:18	1
1,1-Dichloropropene	ND		0.50		ug/L			07/02/12 19:18	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/02/12 19:18	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/02/12 19:18	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/02/12 19:18	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			07/02/12 19:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			07/02/12 19:18	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/02/12 19:18	1
1,2-Dichloroethane	ND		0.50		ug/L			07/02/12 19:18	1
1,2-Dichloropropane	ND		0.50		ug/L			07/02/12 19:18	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/02/12 19:18	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/02/12 19:18	1
1,3-Dichloropropane	ND		1.0		ug/L			07/02/12 19:18	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/02/12 19:18	1
2,2-Dichloropropane	ND		0.50		ug/L			07/02/12 19:18	1
2-Butanone (MEK)	ND		50		ug/L			07/02/12 19:18	1
2-Chlorotoluene	ND		0.50		ug/L			07/02/12 19:18	1
2-Hexanone	ND		50		ug/L			07/02/12 19:18	1
4-Chlorotoluene	ND		0.50		ug/L			07/02/12 19:18	1
4-Isopropyltoluene	ND		1.0		ug/L			07/02/12 19:18	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/02/12 19:18	1
Acetone	ND		50		ug/L			07/02/12 19:18	1
Benzene	ND		0.50		ug/L			07/02/12 19:18	1
Bromobenzene	ND		1.0		ug/L			07/02/12 19:18	1
Bromoform	ND		1.0		ug/L			07/02/12 19:18	1
Bromomethane	ND		1.0		ug/L			07/02/12 19:18	1
Carbon disulfide	ND		5.0		ug/L			07/02/12 19:18	1
Carbon tetrachloride	ND		0.50		ug/L			07/02/12 19:18	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-116460/5
Matrix: Water
Analysis Batch: 116460

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.50		ug/L			07/02/12 19:18	1
Chlorobromomethane	ND		1.0		ug/L			07/02/12 19:18	1
Chlorodibromomethane	ND		0.50		ug/L			07/02/12 19:18	1
Chloroethane	ND		1.0		ug/L			07/02/12 19:18	1
Chloroform	ND		1.0		ug/L			07/02/12 19:18	1
Chloromethane	ND		1.0		ug/L			07/02/12 19:18	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/02/12 19:18	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/02/12 19:18	1
Dibromomethane	ND		0.50		ug/L			07/02/12 19:18	1
Dichlorobromomethane	ND		0.50		ug/L			07/02/12 19:18	1
Dichlorodifluoromethane	ND		0.50		ug/L			07/02/12 19:18	1
Ethylbenzene	ND		0.50		ug/L			07/02/12 19:18	1
Ethylene Dibromide	ND		0.50		ug/L			07/02/12 19:18	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			07/02/12 19:18	1
Hexachlorobutadiene	ND		1.0		ug/L			07/02/12 19:18	1
Isopropylbenzene	ND		0.50		ug/L			07/02/12 19:18	1
Methyl tert-butyl ether	ND		0.50		ug/L			07/02/12 19:18	1
Methylene Chloride	ND		5.0		ug/L			07/02/12 19:18	1
m-Xylene & p-Xylene	ND		1.0		ug/L			07/02/12 19:18	1
Naphthalene	ND		1.0		ug/L			07/02/12 19:18	1
n-Butylbenzene	ND		1.0		ug/L			07/02/12 19:18	1
N-Propylbenzene	ND		1.0		ug/L			07/02/12 19:18	1
o-Xylene	ND		0.50		ug/L			07/02/12 19:18	1
sec-Butylbenzene	ND		1.0		ug/L			07/02/12 19:18	1
Styrene	ND		0.50		ug/L			07/02/12 19:18	1
tert-Butylbenzene	ND		1.0		ug/L			07/02/12 19:18	1
Tetrachloroethene	ND		0.50		ug/L			07/02/12 19:18	1
Toluene	ND		0.50		ug/L			07/02/12 19:18	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/02/12 19:18	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/02/12 19:18	1
Trichloroethene	ND		0.50		ug/L			07/02/12 19:18	1
Trichlorofluoromethane	ND		1.0		ug/L			07/02/12 19:18	1
Vinyl acetate	ND		10		ug/L			07/02/12 19:18	1
Vinyl chloride	ND		0.50		ug/L			07/02/12 19:18	1
Xylenes, Total	ND		1.0		ug/L			07/02/12 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 138*		*07/02/12 19:18*	*1*
4-Bromofluorobenzene	*97*		*67 - 130*		*07/02/12 19:18*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/02/12 19:18*	*1*

Lab Sample ID: LCS 720-116460/6
Matrix: Water
Analysis Batch: 116460

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.7		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	26.4		ug/L		106	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	70 - 130

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-116460/6
Matrix: Water
Analysis Batch: 116460

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.9		ug/L		104	42 - 162
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	70 - 130
1,1-Dichloroethane	25.0	23.7		ug/L		95	70 - 130
1,1-Dichloroethene	25.0	22.6		ug/L		90	64 - 128
1,1-Dichloropropene	25.0	24.8		ug/L		99	70 - 130
1,2,3-Trichlorobenzene	25.0	25.0		ug/L		100	70 - 130
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	25.0	25.2		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	25.0	24.8		ug/L		99	70 - 132
1,2-Dibromo-3-Chloropropane	25.0	25.6		ug/L		102	70 - 136
1,2-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130
1,2-Dichloroethane	25.0	24.3		ug/L		97	61 - 132
1,2-Dichloropropane	25.0	23.7		ug/L		95	70 - 130
1,3,5-Trimethylbenzene	25.0	25.1		ug/L		100	70 - 130
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	70 - 130
1,3-Dichloropropane	25.0	24.2		ug/L		97	70 - 130
1,4-Dichlorobenzene	25.0	23.7		ug/L		95	70 - 130
2,2-Dichloropropane	25.0	28.1		ug/L		112	70 - 140
2-Butanone (MEK)	125	111		ug/L		89	54 - 130
2-Chlorotoluene	25.0	24.4		ug/L		98	70 - 130
2-Hexanone	125	118		ug/L		94	60 - 164
4-Chlorotoluene	25.0	24.0		ug/L		96	70 - 130
4-Isopropyltoluene	25.0	25.2		ug/L		101	70 - 130
4-Methyl-2-pentanone (MIBK)	125	127		ug/L		102	58 - 130
Acetone	125	90.9		ug/L		73	26 - 180
Benzene	25.0	23.1		ug/L		92	79 - 130
Bromobenzene	25.0	23.4		ug/L		94	70 - 130
Bromoform	25.0	26.1		ug/L		104	68 - 136
Bromomethane	25.0	21.8		ug/L		87	43 - 151
Carbon disulfide	25.0	21.7		ug/L		87	58 - 130
Carbon tetrachloride	25.0	27.8		ug/L		111	70 - 146
Chlorobenzene	25.0	23.7		ug/L		95	70 - 130
Chlorobromomethane	25.0	24.4		ug/L		98	70 - 130
Chlorodibromomethane	25.0	26.2		ug/L		105	70 - 145
Chloroethane	25.0	22.0		ug/L		88	62 - 138
Chloroform	25.0	24.5		ug/L		98	70 - 130
Chloromethane	25.0	18.4		ug/L		74	52 - 175
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	70 - 130
cis-1,3-Dichloropropene	25.0	26.4		ug/L		106	70 - 130
Dibromomethane	25.0	24.4		ug/L		98	70 - 130
Dichlorobromomethane	25.0	28.1		ug/L		112	70 - 130
Dichlorodifluoromethane	25.0	13.4		ug/L		54	34 - 132
Ethylbenzene	25.0	23.9		ug/L		96	80 - 120
Ethylene Dibromide	25.0	25.7		ug/L		103	70 - 130
Hexachlorobutadiene	25.0	24.9		ug/L		100	70 - 130
Isopropylbenzene	25.0	25.4		ug/L		102	70 - 130
Methyl tert-butyl ether	25.0	27.8		ug/L		111	62 - 130
Methylene Chloride	25.0	23.0		ug/L		92	70 - 147
m-Xylene & p-Xylene	50.0	48.3		ug/L		97	70 - 142

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-116460/6
Matrix: Water
Analysis Batch: 116460

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	25.0	25.6		ug/L		102	70 - 130
n-Butylbenzene	25.0	25.7		ug/L		103	70 - 142
N-Propylbenzene	25.0	23.9		ug/L		96	70 - 130
o-Xylene	25.0	24.8		ug/L		99	70 - 130
sec-Butylbenzene	25.0	24.5		ug/L		98	70 - 134
Styrene	25.0	25.1		ug/L		100	70 - 130
tert-Butylbenzene	25.0	24.7		ug/L		99	70 - 135
Tetrachloroethene	25.0	24.4		ug/L		98	70 - 130
Toluene	25.0	23.3		ug/L		93	78 - 120
trans-1,2-Dichloroethene	25.0	20.3		ug/L		81	68 - 130
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	70 - 140
Trichloroethene	25.0	23.9		ug/L		96	70 - 130
Trichlorofluoromethane	25.0	23.2		ug/L		93	66 - 132
Vinyl acetate	25.0	27.2		ug/L		109	43 - 163
Vinyl chloride	25.0	20.2		ug/L		81	54 - 135

Lab Sample ID: LCS 720-116460/8
Matrix: Water
Analysis Batch: 116460

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	500	508		ug/L		102	62 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*75 - 138*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 720-116460/7
Matrix: Water
Analysis Batch: 116460

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	27.0		ug/L		108	70 - 130	1	20
1,1,1-Trichloroethane	25.0	27.0		ug/L		108	70 - 130	2	20
1,1,2,2-Tetrachloroethane	25.0	25.0		ug/L		100	70 - 130	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.7		ug/L		107	42 - 162	3	20
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	70 - 130	3	20
1,1-Dichloroethane	25.0	24.2		ug/L		97	70 - 130	2	20
1,1-Dichloroethene	25.0	23.0		ug/L		92	64 - 128	2	20
1,1-Dichloropropene	25.0	25.2		ug/L		101	70 - 130	2	20
1,2,3-Trichlorobenzene	25.0	26.1		ug/L		104	70 - 130	4	20
1,2,3-Trichloropropane	25.0	24.6		ug/L		98	70 - 130	0	20
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	70 - 130	3	20
1,2,4-Trimethylbenzene	25.0	25.1		ug/L		100	70 - 132	1	20
1,2-Dibromo-3-Chloropropane	25.0	26.6		ug/L		106	70 - 136	4	20
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	4	20
1,2-Dichloroethane	25.0	24.7		ug/L		99	61 - 132	2	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-116460/7
Matrix: Water
Analysis Batch: 116460

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	25.0	24.4		ug/L		98	70 - 130	3	20
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 130	2	20
1,3-Dichlorobenzene	25.0	24.5		ug/L		98	70 - 130	2	20
1,3-Dichloropropane	25.0	24.9		ug/L		100	70 - 130	3	20
1,4-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	3	20
2,2-Dichloropropane	25.0	30.2		ug/L		121	70 - 140	7	20
2-Butanone (MEK)	125	115		ug/L		92	54 - 130	4	20
2-Chlorotoluene	25.0	24.6		ug/L		98	70 - 130	1	20
2-Hexanone	125	125		ug/L		100	60 - 164	6	20
4-Chlorotoluene	25.0	24.3		ug/L		97	70 - 130	1	20
4-Isopropyltoluene	25.0	25.5		ug/L		102	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		105	58 - 130	4	20
Acetone	125	92.9		ug/L		74	26 - 180	2	30
Benzene	25.0	23.7		ug/L		95	79 - 130	3	20
Bromobenzene	25.0	23.8		ug/L		95	70 - 130	2	20
Bromoform	25.0	26.2		ug/L		105	68 - 136	0	20
Bromomethane	25.0	22.2		ug/L		89	43 - 151	2	20
Carbon disulfide	25.0	22.2		ug/L		89	58 - 130	2	20
Carbon tetrachloride	25.0	28.0		ug/L		112	70 - 146	1	20
Chlorobenzene	25.0	24.2		ug/L		97	70 - 130	2	20
Chlorobromomethane	25.0	24.7		ug/L		99	70 - 130	1	20
Chlorodibromomethane	25.0	26.7		ug/L		107	70 - 145	2	20
Chloroethane	25.0	22.6		ug/L		90	62 - 138	3	20
Chloroform	25.0	24.9		ug/L		100	70 - 130	2	20
Chloromethane	25.0	18.8		ug/L		75	52 - 175	2	20
cis-1,2-Dichloroethene	25.0	26.5		ug/L		106	70 - 130	2	20
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	70 - 130	3	20
Dibromomethane	25.0	25.0		ug/L		100	70 - 130	2	20
Dichlorobromomethane	25.0	28.6		ug/L		114	70 - 130	2	20
Dichlorodifluoromethane	25.0	13.4		ug/L		54	34 - 132	0	20
Ethylbenzene	25.0	24.2		ug/L		97	80 - 120	1	20
Ethylene Dibromide	25.0	26.4		ug/L		106	70 - 130	3	20
Hexachlorobutadiene	25.0	25.4		ug/L		102	70 - 130	2	20
Isopropylbenzene	25.0	25.7		ug/L		103	70 - 130	1	20
Methyl tert-butyl ether	25.0	29.0		ug/L		116	62 - 130	4	20
Methylene Chloride	25.0	23.5		ug/L		94	70 - 147	2	20
m-Xylene & p-Xylene	50.0	48.8		ug/L		98	70 - 142	1	20
Naphthalene	25.0	26.9		ug/L		108	70 - 130	5	20
n-Butylbenzene	25.0	26.6		ug/L		106	70 - 142	3	20
N-Propylbenzene	25.0	24.2		ug/L		97	70 - 130	1	20
o-Xylene	25.0	25.1		ug/L		100	70 - 130	1	20
sec-Butylbenzene	25.0	25.0		ug/L		100	70 - 134	2	20
Styrene	25.0	25.5		ug/L		102	70 - 130	2	20
tert-Butylbenzene	25.0	25.0		ug/L		100	70 - 135	1	20
Tetrachloroethene	25.0	24.6		ug/L		98	70 - 130	1	20
Toluene	25.0	23.5		ug/L		94	78 - 120	1	20
trans-1,2-Dichloroethene	25.0	20.9		ug/L		84	68 - 130	3	20
trans-1,3-Dichloropropene	25.0	26.6		ug/L		106	70 - 140	3	20
Trichloroethene	25.0	24.4		ug/L		98	70 - 130	2	20
Trichlorofluoromethane	25.0	23.2		ug/L		93	66 - 132	0	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-116460/7
Matrix: Water
Analysis Batch: 116460

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vinyl acetate			25.0	27.6		ug/L		110	43 - 163	1	20
Vinyl chloride			25.0	20.6		ug/L		82	54 - 135	2	20

Lab Sample ID: LCSD 720-116460/9
Matrix: Water
Analysis Batch: 116460

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	513		ug/L		103	62 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 138*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 720-116861/4
Matrix: Water
Analysis Batch: 116861

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			07/10/12 08:26	1
1,1,1-Trichloroethane	ND		0.50		ug/L			07/10/12 08:26	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			07/10/12 08:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			07/10/12 08:26	1
1,1,2-Trichloroethane	ND		0.50		ug/L			07/10/12 08:26	1
1,1-Dichloroethane	ND		0.50		ug/L			07/10/12 08:26	1
1,1-Dichloroethene	ND		0.50		ug/L			07/10/12 08:26	1
1,1-Dichloropropene	ND		0.50		ug/L			07/10/12 08:26	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			07/10/12 08:26	1
1,2,3-Trichloropropane	ND		0.50		ug/L			07/10/12 08:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			07/10/12 08:26	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			07/10/12 08:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			07/10/12 08:26	1
1,2-Dichlorobenzene	ND		0.50		ug/L			07/10/12 08:26	1
1,2-Dichloroethane	ND		0.50		ug/L			07/10/12 08:26	1
1,2-Dichloropropane	ND		0.50		ug/L			07/10/12 08:26	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			07/10/12 08:26	1
1,3-Dichlorobenzene	ND		0.50		ug/L			07/10/12 08:26	1
1,3-Dichloropropane	ND		1.0		ug/L			07/10/12 08:26	1
1,4-Dichlorobenzene	ND		0.50		ug/L			07/10/12 08:26	1
2,2-Dichloropropane	ND		0.50		ug/L			07/10/12 08:26	1
2-Butanone (MEK)	ND		50		ug/L			07/10/12 08:26	1
2-Chlorotoluene	ND		0.50		ug/L			07/10/12 08:26	1
2-Hexanone	ND		50		ug/L			07/10/12 08:26	1
4-Chlorotoluene	ND		0.50		ug/L			07/10/12 08:26	1
4-Isopropyltoluene	ND		1.0		ug/L			07/10/12 08:26	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			07/10/12 08:26	1
Acetone	ND		50		ug/L			07/10/12 08:26	1
Benzene	ND		0.50		ug/L			07/10/12 08:26	1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-116861/4
Matrix: Water
Analysis Batch: 116861

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		1.0		ug/L			07/10/12 08:26	1
Bromoform	ND		1.0		ug/L			07/10/12 08:26	1
Bromomethane	ND		1.0		ug/L			07/10/12 08:26	1
Carbon disulfide	ND		5.0		ug/L			07/10/12 08:26	1
Carbon tetrachloride	ND		0.50		ug/L			07/10/12 08:26	1
Chlorobenzene	ND		0.50		ug/L			07/10/12 08:26	1
Chlorobromomethane	ND		1.0		ug/L			07/10/12 08:26	1
Chlorodibromomethane	ND		0.50		ug/L			07/10/12 08:26	1
Chloroethane	ND		1.0		ug/L			07/10/12 08:26	1
Chloroform	ND		1.0		ug/L			07/10/12 08:26	1
Chloromethane	ND		1.0		ug/L			07/10/12 08:26	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			07/10/12 08:26	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			07/10/12 08:26	1
Dibromomethane	ND		0.50		ug/L			07/10/12 08:26	1
Dichlorobromomethane	ND		0.50		ug/L			07/10/12 08:26	1
Dichlorodifluoromethane	ND		0.50		ug/L			07/10/12 08:26	1
Ethylbenzene	ND		0.50		ug/L			07/10/12 08:26	1
Ethylene Dibromide	ND		0.50		ug/L			07/10/12 08:26	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			07/10/12 08:26	1
Hexachlorobutadiene	ND		1.0		ug/L			07/10/12 08:26	1
Isopropylbenzene	ND		0.50		ug/L			07/10/12 08:26	1
Methyl tert-butyl ether	ND		0.50		ug/L			07/10/12 08:26	1
Methylene Chloride	ND		5.0		ug/L			07/10/12 08:26	1
m-Xylene & p-Xylene	ND		1.0		ug/L			07/10/12 08:26	1
Naphthalene	ND		1.0		ug/L			07/10/12 08:26	1
n-Butylbenzene	ND		1.0		ug/L			07/10/12 08:26	1
N-Propylbenzene	ND		1.0		ug/L			07/10/12 08:26	1
o-Xylene	ND		0.50		ug/L			07/10/12 08:26	1
sec-Butylbenzene	ND		1.0		ug/L			07/10/12 08:26	1
Styrene	ND		0.50		ug/L			07/10/12 08:26	1
tert-Butylbenzene	ND		1.0		ug/L			07/10/12 08:26	1
Tetrachloroethene	ND		0.50		ug/L			07/10/12 08:26	1
Toluene	ND		0.50		ug/L			07/10/12 08:26	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			07/10/12 08:26	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			07/10/12 08:26	1
Trichloroethene	ND		0.50		ug/L			07/10/12 08:26	1
Trichlorofluoromethane	ND		1.0		ug/L			07/10/12 08:26	1
Vinyl acetate	ND		10		ug/L			07/10/12 08:26	1
Vinyl chloride	ND		0.50		ug/L			07/10/12 08:26	1
Xylenes, Total	ND		1.0		ug/L			07/10/12 08:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 138*		*07/10/12 08:26*	*1*
4-Bromofluorobenzene	*96*		*67 - 130*		*07/10/12 08:26*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/10/12 08:26*	*1*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-116861/5
Matrix: Water
Analysis Batch: 116861

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	23.2		ug/L		93	70 - 130
1,1,1-Trichloroethane	25.0	22.9		ug/L		92	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.7		ug/L		95	42 - 162
1,1,2-Trichloroethane	25.0	25.8		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	23.0		ug/L		92	70 - 130
1,1-Dichloroethene	25.0	20.8		ug/L		83	64 - 128
1,1-Dichloropropene	25.0	23.3		ug/L		93	70 - 130
1,2,3-Trichlorobenzene	25.0	20.7		ug/L		83	70 - 130
1,2,3-Trichloropropane	25.0	26.1		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	25.0	20.0		ug/L		80	70 - 130
1,2,4-Trimethylbenzene	25.0	23.4		ug/L		94	70 - 132
1,2-Dibromo-3-Chloropropane	25.0	24.1		ug/L		96	70 - 136
1,2-Dichlorobenzene	25.0	23.2		ug/L		93	70 - 130
1,2-Dichloroethane	25.0	23.0		ug/L		92	61 - 132
1,2-Dichloropropane	25.0	23.4		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	25.0	23.8		ug/L		95	70 - 130
1,3-Dichlorobenzene	25.0	23.6		ug/L		94	70 - 130
1,3-Dichloropropane	25.0	25.2		ug/L		101	70 - 130
1,4-Dichlorobenzene	25.0	23.0		ug/L		92	70 - 130
2,2-Dichloropropane	25.0	23.7		ug/L		95	70 - 140
2-Butanone (MEK)	125	136		ug/L		109	54 - 130
2-Chlorotoluene	25.0	24.0		ug/L		96	70 - 130
2-Hexanone	125	131		ug/L		105	60 - 164
4-Chlorotoluene	25.0	23.2		ug/L		93	70 - 130
4-Isopropyltoluene	25.0	23.1		ug/L		92	70 - 130
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	58 - 130
Acetone	125	126		ug/L		101	26 - 180
Benzene	25.0	23.0		ug/L		92	79 - 130
Bromobenzene	25.0	23.6		ug/L		94	70 - 130
Bromoform	25.0	25.4		ug/L		102	68 - 136
Bromomethane	25.0	24.6		ug/L		98	43 - 151
Carbon disulfide	25.0	20.4		ug/L		82	58 - 130
Carbon tetrachloride	25.0	22.5		ug/L		90	70 - 146
Chlorobenzene	25.0	23.2		ug/L		93	70 - 130
Chlorobromomethane	25.0	24.2		ug/L		97	70 - 130
Chlorodibromomethane	25.0	25.5		ug/L		102	70 - 145
Chloroethane	25.0	24.9		ug/L		100	62 - 138
Chloroform	25.0	23.2		ug/L		93	70 - 130
Chloromethane	25.0	22.6		ug/L		90	52 - 175
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	70 - 130
cis-1,3-Dichloropropene	25.0	26.2		ug/L		105	70 - 130
Dibromomethane	25.0	24.6		ug/L		98	70 - 130
Dichlorobromomethane	25.0	24.4		ug/L		98	70 - 130
Dichlorodifluoromethane	25.0	22.0		ug/L		88	34 - 132
Ethylbenzene	25.0	22.5		ug/L		90	80 - 120
Ethylene Dibromide	25.0	25.9		ug/L		104	70 - 130
Hexachlorobutadiene	25.0	19.0		ug/L		76	70 - 130
Isopropylbenzene	25.0	23.7		ug/L		95	70 - 130

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-116861/5
Matrix: Water
Analysis Batch: 116861

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	27.3		ug/L		109	62 - 130
Methylene Chloride	25.0	22.4		ug/L		90	70 - 147
m-Xylene & p-Xylene	50.0	45.9		ug/L		92	70 - 142
Naphthalene	25.0	21.7		ug/L		87	70 - 130
n-Butylbenzene	25.0	23.3		ug/L		93	70 - 142
N-Propylbenzene	25.0	22.6		ug/L		90	70 - 130
o-Xylene	25.0	23.7		ug/L		95	70 - 130
sec-Butylbenzene	25.0	23.5		ug/L		94	70 - 134
Styrene	25.0	24.1		ug/L		96	70 - 130
tert-Butylbenzene	25.0	23.4		ug/L		94	70 - 135
Tetrachloroethene	25.0	23.0		ug/L		92	70 - 130
Toluene	25.0	22.7		ug/L		91	78 - 120
trans-1,2-Dichloroethene	25.0	19.5		ug/L		78	68 - 130
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	70 - 140
Trichloroethene	25.0	23.3		ug/L		93	70 - 130
Trichlorofluoromethane	25.0	24.7		ug/L		99	66 - 132
Vinyl acetate	25.0	30.0		ug/L		120	43 - 163
Vinyl chloride	25.0	23.3		ug/L		93	54 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 138*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCS 720-116861/7
Matrix: Water
Analysis Batch: 116861

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	500	458		ug/L		92	62 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 138*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 720-116861/6
Matrix: Water
Analysis Batch: 116861

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.4		ug/L		98	70 - 130	5	20
1,1,1-Trichloroethane	25.0	24.6		ug/L		98	70 - 130	7	20
1,1,2,2-Tetrachloroethane	25.0	28.7		ug/L		115	70 - 130	11	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.6		ug/L		102	42 - 162	8	20
1,1,2-Trichloroethane	25.0	27.0		ug/L		108	70 - 130	5	20
1,1-Dichloroethane	25.0	24.9		ug/L		100	70 - 130	8	20
1,1-Dichloroethene	25.0	22.3		ug/L		89	64 - 128	7	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-116861/6
Matrix: Water
Analysis Batch: 116861

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloropropene	25.0	25.0		ug/L		100	70 - 130	7	20
1,2,3-Trichlorobenzene	25.0	22.6		ug/L		90	70 - 130	9	20
1,2,3-Trichloropropane	25.0	28.8		ug/L		115	70 - 130	10	20
1,2,4-Trichlorobenzene	25.0	21.6		ug/L		86	70 - 130	8	20
1,2,4-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 132	9	20
1,2-Dibromo-3-Chloropropane	25.0	27.1		ug/L		108	70 - 136	12	20
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	70 - 130	9	20
1,2-Dichloroethane	25.0	25.0		ug/L		100	61 - 132	8	20
1,2-Dichloropropane	25.0	25.0		ug/L		100	70 - 130	7	20
1,3,5-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 130	9	20
1,3-Dichlorobenzene	25.0	25.5		ug/L		102	70 - 130	8	20
1,3-Dichloropropane	25.0	26.9		ug/L		108	70 - 130	7	20
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	70 - 130	8	20
2,2-Dichloropropane	25.0	25.7		ug/L		103	70 - 140	8	20
2-Butanone (MEK)	125	146		ug/L		117	54 - 130	7	20
2-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	8	20
2-Hexanone	125	142		ug/L		114	60 - 164	8	20
4-Chlorotoluene	25.0	25.4		ug/L		102	70 - 130	9	20
4-Isopropyltoluene	25.0	25.2		ug/L		101	70 - 130	9	20
4-Methyl-2-pentanone (MIBK)	125	141		ug/L		113	58 - 130	8	20
Acetone	125	138		ug/L		110	26 - 180	9	30
Benzene	25.0	24.6		ug/L		98	79 - 130	7	20
Bromobenzene	25.0	25.5		ug/L		102	70 - 130	8	20
Bromoform	25.0	27.0		ug/L		108	68 - 136	6	20
Bromomethane	25.0	24.5		ug/L		98	43 - 151	0	20
Carbon disulfide	25.0	22.3		ug/L		89	58 - 130	9	20
Carbon tetrachloride	25.0	24.4		ug/L		98	70 - 146	8	20
Chlorobenzene	25.0	24.8		ug/L		99	70 - 130	7	20
Chlorobromomethane	25.0	26.0		ug/L		104	70 - 130	7	20
Chlorodibromomethane	25.0	26.6		ug/L		106	70 - 145	4	20
Chloroethane	25.0	25.1		ug/L		100	62 - 138	1	20
Chloroform	25.0	25.2		ug/L		101	70 - 130	8	20
Chloromethane	25.0	22.7		ug/L		91	52 - 175	0	20
cis-1,2-Dichloroethene	25.0	28.2		ug/L		113	70 - 130	8	20
cis-1,3-Dichloropropene	25.0	27.7		ug/L		111	70 - 130	6	20
Dibromomethane	25.0	26.3		ug/L		105	70 - 130	7	20
Dichlorobromomethane	25.0	25.7		ug/L		103	70 - 130	5	20
Dichlorodifluoromethane	25.0	22.2		ug/L		89	34 - 132	1	20
Ethylbenzene	25.0	24.3		ug/L		97	80 - 120	8	20
Ethylene Dibromide	25.0	28.0		ug/L		112	70 - 130	8	20
Hexachlorobutadiene	25.0	21.2		ug/L		85	70 - 130	11	20
Isopropylbenzene	25.0	25.4		ug/L		102	70 - 130	7	20
Methyl tert-butyl ether	25.0	29.0		ug/L		116	62 - 130	6	20
Methylene Chloride	25.0	24.3		ug/L		97	70 - 147	8	20
m-Xylene & p-Xylene	50.0	49.0		ug/L		98	70 - 142	7	20
Naphthalene	25.0	24.3		ug/L		97	70 - 130	11	20
n-Butylbenzene	25.0	25.4		ug/L		102	70 - 142	9	20
N-Propylbenzene	25.0	24.9		ug/L		100	70 - 130	10	20
o-Xylene	25.0	25.2		ug/L		101	70 - 130	6	20
sec-Butylbenzene	25.0	25.8		ug/L		103	70 - 134	9	20

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-116861/6
Matrix: Water
Analysis Batch: 116861

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Styrene			25.0	25.5		ug/L		102	70 - 130	6	20
tert-Butylbenzene			25.0	25.9		ug/L		104	70 - 135	10	20
Tetrachloroethene			25.0	24.7		ug/L		99	70 - 130	7	20
Toluene			25.0	24.4		ug/L		98	78 - 120	7	20
trans-1,2-Dichloroethene			25.0	20.8		ug/L		83	68 - 130	6	20
trans-1,3-Dichloropropene			25.0	27.0		ug/L		108	70 - 140	7	20
Trichloroethene			25.0	25.1		ug/L		100	70 - 130	7	20
Trichlorofluoromethane			25.0	25.0		ug/L		100	66 - 132	1	20
Vinyl acetate			25.0	30.9		ug/L		124	43 - 163	3	20
Vinyl chloride			25.0	24.0		ug/L		96	54 - 135	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 138*
4-Bromofluorobenzene	*98*		*67 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 720-116861/8
Matrix: Water
Analysis Batch: 116861

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	468		ug/L		94	62 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 138*
4-Bromofluorobenzene	*100*		*67 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-116628/1-A
Matrix: Waste
Analysis Batch: 116686

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116628

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		750		mg/Kg		07/05/12 11:08	07/06/12 17:32	1
Stoddard Solvent Range Organics (C9-C13)	ND		750		mg/Kg		07/05/12 11:08	07/06/12 17:32	1
Motor Oil Range Organics [C24-C36]	ND		5000		mg/Kg		07/05/12 11:08	07/06/12 17:32	1
Jet Fuel Range Organics [C9-C19]	ND		750		mg/Kg		07/05/12 11:08	07/06/12 17:32	1
TPH-Hydraulic Oil Range (C19-C36)	ND		5000		mg/Kg		07/05/12 11:08	07/06/12 17:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*124*		*50 - 130*	*07/05/12 11:08*	*07/06/12 17:32*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-116628/2-A
Matrix: Waste
Analysis Batch: 116686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116628

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			50000	44500		mg/Kg		89	50 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*72*		*50 - 130*

Lab Sample ID: LCSD 720-116628/3-A
Matrix: Waste
Analysis Batch: 116686

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116628

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			50000	43200		mg/Kg		86	50 - 130	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*68*		*50 - 130*

Lab Sample ID: 720-42973-2 DU
Matrix: Waste
Analysis Batch: 116686

Client Sample ID: MW-2
Prep Type: Total/NA
Prep Batch: 116628

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Diesel Range Organics [C10-C28]	190000			161000		mg/Kg				15	20
Stoddard Solvent Range Organics (C9-C13)	250000			213000		mg/Kg				17	20
Motor Oil Range Organics [C24-C36]	ND			ND		mg/Kg				18	20
Jet Fuel Range Organics [C9-C19]	300000			257000		mg/Kg				17	20
TPH-Hydraulic Oil Range (C19-C36)	ND			ND		mg/Kg				4	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
p-Terphenyl	*0*	*X D*	*50 - 130*

Lab Sample ID: MB 720-116446/1-A
Matrix: Water
Analysis Batch: 116487

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 116446

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		07/02/12 14:27	07/03/12 18:19	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		07/02/12 14:27	07/03/12 18:19	1
TPH-Hydraulic Oil Range (C19-C36)	ND		500		ug/L		07/02/12 14:27	07/03/12 18:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*07/02/12 14:27*	*07/03/12 18:19*	*1*
p-Terphenyl	*90*		*31 - 150*	*07/02/12 14:27*	*07/03/12 18:19*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-116446/2-A
Matrix: Water
Analysis Batch: 116487

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 116446

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			2500	1010		ug/L		40	32 - 119		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*62*		*31 - 150*

Lab Sample ID: LCSD 720-116446/3-A
Matrix: Water
Analysis Batch: 116487

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 116446

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1160		ug/L		46	32 - 119	14	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*66*		*31 - 150*

GC/MS VOA

Analysis Batch: 116404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-2	MW-2	Total/NA	Waste	8260B	116433
LCS 720-116433/2-A	Lab Control Sample	Total/NA	Waste	8260B	116433
LCS 720-116433/4-A	Lab Control Sample	Total/NA	Waste	8260B	116433
LCSD 720-116433/3-A	Lab Control Sample Dup	Total/NA	Waste	8260B	116433
LCSD 720-116433/5-A	Lab Control Sample Dup	Total/NA	Waste	8260B	116433
MB 720-116433/1-A	Method Blank	Total/NA	Waste	8260B	116433

Prep Batch: 116433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-2	MW-2	Total/NA	Waste	5030B	
LCS 720-116433/2-A	Lab Control Sample	Total/NA	Waste	5030B	
LCS 720-116433/4-A	Lab Control Sample	Total/NA	Waste	5030B	
LCSD 720-116433/3-A	Lab Control Sample Dup	Total/NA	Waste	5030B	
LCSD 720-116433/5-A	Lab Control Sample Dup	Total/NA	Waste	5030B	
MB 720-116433/1-A	Method Blank	Total/NA	Waste	5030B	

Analysis Batch: 116460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
720-42973-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-116460/6	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-116460/8	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-116460/7	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-116460/9	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-116460/5	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 116485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-2	MW-2	Total/NA	Waste	8260B	116433

Analysis Batch: 116861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
720-42973-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-116861/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-116861/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-116861/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-116861/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-116861/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

GC Semi VOA

Prep Batch: 116446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-1	MW-1	Silica Gel Cleanup	Water	3510C SGC	
720-42973-3	MW-3	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-116446/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-116446/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-116446/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 116487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-1	MW-1	Silica Gel Cleanup	Water	8015B	116446
720-42973-3	MW-3	Silica Gel Cleanup	Water	8015B	116446
LCS 720-116446/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	116446
LCSD 720-116446/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	116446
MB 720-116446/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	116446

Prep Batch: 116628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-2	MW-2	Total/NA	Waste	3580A	
720-42973-2 DU	MW-2	Total/NA	Waste	3580A	
LCS 720-116628/2-A	Lab Control Sample	Total/NA	Waste	3580A	
LCSD 720-116628/3-A	Lab Control Sample Dup	Total/NA	Waste	3580A	
MB 720-116628/1-A	Method Blank	Total/NA	Waste	3580A	

Analysis Batch: 116686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-42973-2	MW-2	Total/NA	Waste	8015B	116628
720-42973-2 DU	MW-2	Total/NA	Waste	8015B	116628
LCS 720-116628/2-A	Lab Control Sample	Total/NA	Waste	8015B	116628
LCSD 720-116628/3-A	Lab Control Sample Dup	Total/NA	Waste	8015B	116628
MB 720-116628/1-A	Method Blank	Total/NA	Waste	8015B	116628

Lab Chronicle

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Client Sample ID: MW-1

Lab Sample ID: 720-42973-1

Date Collected: 06/27/12 11:30

Matrix: Water

Date Received: 06/27/12 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	116460	07/03/12 03:34	AC	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		1	116861	07/10/12 14:50	AC	TAL SF
Silica Gel Cleanup	Prep	3510C SGC			116446	07/02/12 14:27	RU	TAL SF
Silica Gel Cleanup	Analysis	8015B		1	116487	07/03/12 18:44	JZ	TAL SF

Client Sample ID: MW-2

Lab Sample ID: 720-42973-2

Date Collected: 06/27/12 11:40

Matrix: Waste

Date Received: 06/27/12 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			116433	07/02/12 07:30	DH	TAL SF
Total/NA	Analysis	8260B		10000	116404	07/02/12 15:36	AC	TAL SF
Total/NA	Analysis	8260B		100000	116485	07/03/12 13:51	AC	TAL SF
Total/NA	Prep	3580A			116628	07/05/12 11:08	JRM	TAL SF
Total/NA	Analysis	8015B		5	116686	07/06/12 15:54	JZ	TAL SF

Client Sample ID: MW-3

Lab Sample ID: 720-42973-3

Date Collected: 06/27/12 10:55

Matrix: Water

Date Received: 06/27/12 16:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	116460	07/03/12 04:03	AC	TAL SF
Total/NA	Analysis	8260B/CA_LUFTMS		1	116861	07/10/12 15:21	AC	TAL SF
Silica Gel Cleanup	Prep	3510C SGC			116446	07/02/12 14:27	RU	TAL SF
Silica Gel Cleanup	Analysis	8015B		1	116487	07/03/12 19:08	JZ	TAL SF

Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Pleasanton	California	State Program	9	2496

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

Method Summary

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
8260B/CA_LUFTMS	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

Protocol References:

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

Laboratory References:

TAL SF = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: TCG (The Consulting Group)
Project/Site: 949 W. Grand Oakland

TestAmerica Job ID: 720-42973-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-42973-1	MW-1	Water	06/27/12 11:30	06/27/12 16:33
720-42973-2	MW-2	Waste	06/27/12 11:40	06/27/12 16:33
720-42973-3	MW-3	Water	06/27/12 10:55	06/27/12 16:33

1 2 3 4 5 6 7 8 9 10 11 12 13 14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756

Phone: (925) 484-1919 • Fax: (925) 600-3002

720-42973

Reference #: 139157

Date 6/27/12 Page 1 of 1

Report To

Attn: Woody Lovejoy

Company: TCG

Address:

Email:

Bill To:

Sampled By: RYAN Cozart

Attn:

Phone: 415 342-9735

Analysis Request

Sample ID	Date	Time	Mat rix	Preserv	Volatile Organics GC/MS (VOCs) ☐ EPA 8260B	HVOCs by ☐ EPA 8260B	EPA 8260B: ☑ Gas ☐ BTEX ☐ 5 Oxygenates ☐ DCA, EDB ☐ Ethanol	TEPH EPA 8015B ☑ Silica Gel ☑ Diesel ☐ Motor Oil ☐ Other	SemiVolatile Organics GC/MS ☐ EPA 8270C	PNA/PAH's by ☐ 8270C ☐ 8270C SIM	Oil and Grease ☐ Petroleum ☐ Total (EPA 1664/9071)	Pesticides ☐ EPA 8081 PCBs ☐ EPA 8082	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ 6010B ☐ 200.7 ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	Metals: ☐ 6020 ☐ 200.8 (ICP-MS):	☐ W.E.T (STLC) ☐ W.E.T (DI) ☐ TCLP	Hex. Chrom by ☐ EPA 7196 ☐ or EPA 7199	pH ☐ 9040 ☐ SM4500	☐ Spec. Cond. ☐ Alkalinity ☐ TSS ☐ SS ☐ TDS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4	☐ Perchlorate by EPA 314.0	COD ☐ EPA 410.4 ☐ SM5220D ☐ Turbidity	PATTERN Recognition		Number of Containers
MW-1			W	N			X	X																	5
MW-2			W	N			X	X															X		1
MW-3			W	N			X	X																	5

Project Info

Project Name/ #: 949 W. Grand Oakland

PO#: 114201

Credit Card Y/N: If yes, please call with payment information ASAP

Sample Receipt

of Containers: 11

Head Space:

Temp: 1.8°C

TAT	10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
		(circled)					

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF

Special Instructions / Comments: ☐ Global ID

See Terms and Conditions on reverse

1) Relinquished by:	2) Relinquished by:	3) Relinquished by:
Signature: [signature] Time: 433pm	Signature Time	Signature Time
Printed Name: RYAN Cozart Date: 6-27-12	Printed Name Date	Printed Name Date
Company: TCG	Company	Company

1) Received by:	2) Received by:	3) Received by:
Signature: [signature] Time: 1633	Signature Time	Signature Time
Printed Name: [signature] Date: 6/27/12	Printed Name Date	Printed Name Date
Company: TASF	Company	Company

Rev.01/2012

Login Sample Receipt Checklist

Client: TCG (The Consulting Group)

Job Number: 720-42973-1

Login Number: 42973

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Mullen, Joan

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

APPENDIX 3 – STANDARD OPERATING PROCEDURES

SOP-4 - GROUNDWATER PURGING AND SAMPLING

Prior to water sampling, 72 hrs after well development, each well is purged by evacuating a minimum of three well-casing volumes of groundwater or until the one or more of parameters: temperature, conductivity, and pH of the discharge water stabilize. If a well is purged dry before three casing volumes have been removed, the sample will be taken after the well has recovered to within 80 percent of the static water level. Purged water is drummed so that it can be profiled and disposed of appropriately.

A well is purged the wells using a 2-stage purge/sampling pump. We dedicate the down-hole tubing for the wells to avoid the introduction of foreign material thus preventing cross-contamination. We cleaned the purge/sampling pump, using a triple-rinse setup[8], between wells. During purging, we measured the parameters: pH, conductivity, and temperature, while we observed clarity and/or turbidity of water. We monitored the parameters after a few gallons have been removed, at the mid-point of pumping, and at the end of pumping. Sampling of groundwater proceeded once purging was complete.

Forty-milliliter (ml) glass volatile-organic-analysis (VOA) vials, with Teflon septa, are used as sample containers for volatile organic compounds (VOC) analysis. For other analyses, the appropriate EPA-approved sampling containers are used. The groundwater sample is decanted into each VOA vial in such a manner that there is a meniscus at the top of the vial. The cap is quickly placed over the top of the vial and securely tightened. The VOA vial is then inverted and tapped to see if air bubbles are present. If none are present, the sample is labeled and refrigerated for delivery under chain-of-custody to the laboratory. Label information should include a sample identification number, job identification number, date, time, type of analysis requested, and the sampler's name.

For quality control purposes, a duplicate water sample is collected from at least one well. This sample is put on hold at the laboratory. A trip blank is prepared at the laboratory and placed in the transport cooler. It remains with the cooler and is analyzed by the laboratory along with the groundwater samples. The trip blank is placed on hold pending any anomalous results. A field blank is prepared in the field when sampling equipment is not dedicated. The field blank is prepared after a pump or bailer has been cleaned, prior to use in a second well, and is analyzed along with the other samples. The field blank demonstrates the quality of in-field cleaning procedures to prevent cross-contamination.

To minimize the potential for cross-contamination between wells, all the well purging and water sampling equipment that is not dedicated to a well is triple-rinsed between each well. As a second precautionary measure, wells will be sampled in order of least to highest concentrations as established by previous analyses.

[8] A triple-rinse setup is three buckets, the first with water and TSP, the second with water, and the third with DI water. The pump is soaked and scrubbed with a scrub brush in the first bucket to remove pollutants from the outside and we run the pump to clean the inside. We rinse the pump vigorously in the second bucket, and rinse again in the third bucket. We run the pump at each stage to the flush the inside. The order in which we purge the wells is cleanest to dirtiest.

SOP-8 - LIQUID LEVEL GAUGING USING WATER LEVEL METER OR INTERFACE PROBE

The complete list of field equipment for liquid level gauging is assembled in the Technical office prior to departure to the field. This includes the probe(s), light filter(s), and product bailer(s) to be used for liquid levels (tested in test well before departure). The field kit also includes cleaning supplies (buckets, TSP, spray bottles, and deionized water) to clean the equipment between gauging wells.

When using the water level probe to gauge liquid levels, the probe tip is lowered into the well until the unit sounds. The top-of-casing (TOC) point is determined. This point is marked with a dot or a groove, or is an obvious high point on the casing, or is the north side of the casing. The place on the probe-cord that corresponds with this TOC point is marked and an engineer's tape is used to measure the distance between the probe end and marking on the cord. This measurement is then recorded on the liquid level data sheet as depth to water (DTW).[9]

When using the interface probe to gauge liquid levels, clamping it to the metal stovepipe or another metal object nearby first grounds the probe. When no ground is available, reproducible measurements can be obtained by clipping the ground lead to the handle of the interface probe case. After grounding the probe, the top of the well casing is fitted with a light filter to insure that sunlight does not interfere with the operation of the probe's optical mechanisms. The probe tip is then lowered into the well and submerged in the groundwater. An oscillating (beeping) tone indicates that the probe is in water. The probe is slowly raised until either the oscillating tone ceases or becomes a solid tone. In either case, this is the depth-to-groundwater (DTW) measurement. The solid tone indicates that floating hydrocarbons are present on top of the groundwater. To determine the thickness of the floating hydrocarbons, the probe is slowly raised until the solid tone ceases. This is the depth-to-floating hydrocarbon (DTFH) measurement. The process of lowering and raising the probe must be repeated several times to insure accurate measurements. DTW and DTFH measurements are recorded in hundredths of feet on the liquid level data sheet. When floating hydrocarbons are found in a well, a bottom-loading product bailer must be lowered partially through the water/liquid hydrocarbon interface to confirm the thickness of floating hydrocarbons on the water surface. This measurement is recorded on the data sheet as liquid hydrocarbon thickness (PT).

In order to avoid cross contamination of wells during the liquid level gauging process, wells are gauged in a clean to dirty order (where this information is available). In addition, any gauging equipment is cleaned with TSP and water and thoroughly rinsed with deionized water before daily use, before gauging another well on a site, and at the completion of daily use.

[9] The volume of groundwater that needs removal from each well is determined by calculating the water column height (WCH), using [DTW-TD=WCH], then determining the cubic feet (ft^3), using [$WCH*\Pi*r^2$], where r = radius of the well casing, and then converting ft^3 to gallons, using [ft^3 * 7.48].

SOP-10 - SAMPLE LABELING & CHAIN-OF-CUSTODY

To ensure correct analysis and integrity of any sample, correct sample labeling and the accompaniment of a chain-of-custody (COC) form with all samples from the field to the designated analytic laboratory is mandatory. The label of a sample must include, at a minimum, the following items:

- Sample identification number
- Location of sample collection
- Date and time of sample collection
- Name of sampler
- Analysis required

Once this data has been put on the sample container, it must be transferred to the COC. A COC accompanies every shipment of samples and establishes the documentation necessary to trace sample possession, as well as evidence of collection, shipment, laboratory receipt, analysis requested and laboratory custody until the time of disposal. The COC form must include, at a minimum, the following items:

- Sample identification number
- Location of sample collection
- Date and time of sample collection
- Analysis required
- Sample type
- Sample container type
- Preservative used, if any
- Names of all samplers
- Signatures of personnel relinquishing and receiving samples
- Laboratory name and address
- Laboratory sample number and log number (recorded by laboratory personnel)
- Company contact name and project number
- Sample condition and temperature (recorded by laboratory personnel)

Sample transfer and shipment is always accompanied by a COC. The initial preparation of the COC occurs in the office and completed in the field by the personnel collecting the samples. Each sample is assigned a unique identification number that represents the specific sampling location. The identification numbers are entered on the COC accompanied by the requested analysis, preservative used, if any, type of sample collected, and type of sample container. Any special instructions are included here.

If the field personnel deliver the samples to the laboratory, they will at that time sign the COC form and relinquish the samples. At this point, the Quality Control Coordinator, or the representative for the laboratory, will check to make sure all samples are present and note the condition and integrity of each sample. After all samples have been documented as received by the laboratory personnel, they will sign the COC form and issue the delivering personnel a copy. The laboratory with the analytic data report should also return a copy of the signed COC form.

If the samples are delivered by courier, or other commercial carrier, the container of samples shall be sealed, and a custody tape will be applied to the container to seal it and to signal any tampering with the container. The courier will sign the COC taking ownership of the samples that the samplers have relinquished by also signing the COC. The receipt form the courier will be attached to the COC copy retained by the relinquishing personnel and serve as an extension of the COC.

Any changes to a COC must be initialed and copies of the revised COC must be distributed to all appropriate personnel.

APPENDIX 3 – SUMMARY RESUMES

DR. C. HUGH THOMPSON, P.E., DEE
PRINCIPAL CONSULTING ENVIRONMENTAL ENGINEER

Years of Experience with This Firm: 9 with Other Firms: 31

Education: Degree(s)/ Year/ Specialization:
- ScD, 1968, Environmental Engineering, Washington University, St. Louis, MO
- M.S., 1965, Civil Engineering – Water Resources, New Mexico State University
- B.S., 1964, Civil Engineering – Sanitary, New Mexico State University

Active Registrations:
- Professional Engineer # 35856, State of California
- Professional Engineer # 17893, State of Michigan
- Professional Engineer # 8298, State of Virginia
- Professional Engineer #47437, State of Arizona,
- Professional Engineer #19905 State of New Mexico
- General Engineering Contractor (Class A) California #813806
- 40 hours OSHA Management Training
- Diplomat # 92-20070 American Academy of Environmental Engineers

Experience and Qualifications:
-1997 – Present - Principal Environmental Engineering Consultant, TCG/ProTech/HTA
-1985 – 1997 - Officer in 3 national environmental consulting firms: URS Corp., Roy F. Weston Law Engineering and Environmental
-1980 – 1985 - Corporate Director of Environmental Affairs and Operations, Aerojet General Corporation
-1978 – 1980 - Director Office of Hazardous Materials Research, Battelle Memorial Institute
-1970 – 1978 - US Government: Director Office of Hazardous and Toxic Substances, USEPA
- Industrial Environmental Issue Definition and Strategic Planning and Resolution
- Pollution Prevention/Waste Minimization Plans
- Site and Building Investigations, Mitigation Design and Implementation
- Risk Management and Large Program Management
- Corporate Compliance Program Design and Implementation
- Industrial Waste Treatment Design and Pilot Studies
- Treatment Technology Development and Applications
- SPCC and Spill Response Plans
- Environmental and OSHA Training
- International Pollution Agreement Technical Support
- Installation Restoration Programs
- Municipal Waste Treatment Operation and Design

Dr. Thompson heads up the engineering group for TCG. Clients are well represented by Dr. Thompson's wealth of experience in site investigation and assessment, remedial design and implementation. Dr. Thompson also provides expert witness services to clients on a myriad of engineering disciplines.

SHERWOOD LOVEJOY, JR., P.G., R.E.A., C.E.I., C.E.C., C.M.A., C.M.I.
PRINCIPAL CONSULTING HYDROGEOLOGIST / REGISTERED ENVIRONMENTAL ASSESSOR

Years of Experience with This Firm: 21 with Other Firms: 8

Education: Degree(s) / Year / Specialization:

- M.S., 1993, Environmental Science and Management, University of San Francisco
- B.A., 1982, Geology, University of Rhode Island, Kingston, Rhode Island
- B.S., 1981, Zoology, University of Rhode Island, Kingston, Rhode Island
- Graduate Studies, 1982 - 1983 Hydrology, Geophysics, Advanced Structural Geology and Geochemistry, University of Maryland, College Park, Maryland

Active Registrations:

- Professional Geologist #TN-1566, State of Tennessee
- Professional Geologist #PG-2166, State of Wyoming
- Registered Environmental Assessor # REA (I)-03171, State of California
- General Engineering Contractor's (Class A) #540389, State of California
- Class A - Hazardous Waste Removal Certification #540389, State of California
- Well Driller License (C-57), #540389, State of California
- Certified Environmental Inspector #6331, National Registration for EAA,
- Certified Environmental Consultant, #6331, National Registration for EAA
- Certified Mold Assessor, #6331, National Registration for EAA
- Certified Mold Inspector, #6331, National Registration for EAA
- 40 Hour OSHA and 8 Hour OSHA Management Training

Experience and Qualifications:

- 1991-Present - Principal Consulting Hydrogeologist, TCG/ProTech/HTA
- 1994 -1995 - President/Principal Hydrogeologist, MRD - Environmental Services, Inc.
- 1990 -1991 - President/CEO/Principal Hydrogeologist, Hawaiian Geologic Resources, Inc.
- 1988 -1991 - President/CEO/Principal Hydrogeologist, Western Geologic Resources, Inc.
  - ***Environmental Site Investigation & Assessment***
  - Remediation Strategy Development
  - Facility Demolition/Plant Reclamation Strategy Development and Oversight
  - Underground Tank Compliance & Soil Remediation of Fuel Contamination
  - Demolition/Reconstruction Management and Oversight
  - Hydrogeological Assessment and Modeling
  - Groundwater Monitor Well Installation, Sampling, and Monitoring
  - Chemical Stabilization of Metals and pH in Soil
  - Mine Audits, Investigations, Reclamation Studies, and Reclamation Design
  - Regulatory Liaison, Negotiation, and Site Closure
  - Construction Management and Contractor Oversight

Mr. Lovejoy heads TCG's surface and subsurface contamination investigation and remediation program. Clients are well represented by Mr. Lovejoy's extensive experience and expertise in the latest soil and groundwater investigation and remediation techniques and methods. In addition, clients benefit as they are skillfully represented during regulatory agency interaction, negotiation and permitting.

RYAN COZART
GEOLOGIST/ENVIRONMENTAL ASSESSOR/ASBESTOS & LEAD TECHNICIAN

Years of Experience with This Firm: 7 with Other Firms: 4

Education: Degrees / Year / Specialization:
- B.S., 1998, Geology, California State – Hayward

Active Registrations:
- 40 Hour OSHA Training

Experience and Qualifications:
- 2001 – Present - Geologist/Environmental Assessor, TCG/ProTech/HTA
- 2000 – 2001 – Polarized Light Microscope Analyst, EMSL
- 1998 – 2000 – Geologist, Burns and McDonnell
  - ***Environmental Site Investigation & Assessment***
  - Facility Demolition/ Oversight
  - Underground Storage Tank Compliance
  - Groundwater Monitor Well Installation, Sampling, and Monitoring
  - Chemical Stabilization of Metals and pH in Soil
  - Construction Management and Contractor Oversight
  - Asbestos and lead building Surveys
  - Asbestos/lead air monitoring and analysis

TCG's field geologic operations are well handled by Mr. Cozart. Clients are well represented by Mr. Cozart's experience in the latest soil and groundwater investigation techniques and methods. In addition, clients benefit as they are skillfully represented in the field.