



IMPACT ENVIRONMENTAL SERVICES

June 19, 2012

Mr. Ross Wickham
Alameda County Health Care Services
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RECEIVED

11:26 am, Jul 11, 2012

Alameda County
Environmental Health

Subject: Annual 2011 Groundwater Monitoring Report _RO0002933
1409 – 1417 12th Street, Oakland, California

Dear Mr. Wickman:

On behalf of Mrs. Shirley E. Thompson (property owner), Impact Environmental Services (IES) is pleased to submit this Annual 2011 Groundwater Monitoring Report for the property located at 1409 – 1417 12th Street, Oakland, California.

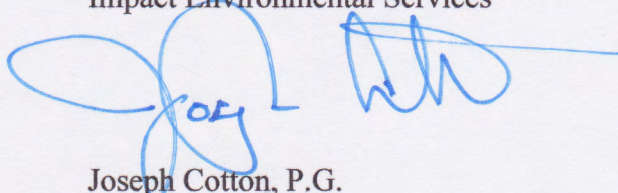
Funding for this project has been provided by a grant from the Orphan Site Cleanup Fund through an agreement with California State Water Resources Control Board.

Certification

I certify under penalty of law that this document and attachments are prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing the violations.

Please contact Joseph Cotton at (510)703-5420 if you have questions or comments.

Sincerely
Impact Environmental Services



Joseph Cotton, P.G.
Principal Geologist



June 19, 2012

Mr. Ross Wickham
Alameda County Health Care Services
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
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Subject: Annual 2011 Groundwater Monitoring Report _RO0002933
1409 – 1417 12th Street, Oakland, California

Dear Mr. Wickman:

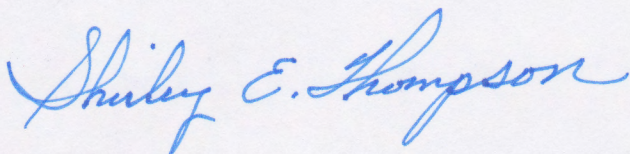
Attached is the Annual 2011 Groundwater Monitoring Report for the property located at 1409 – 1417 12th Street, Oakland, California.

Certification

I certify under penalty of law that this document and attachments are prepared under my direction or supervision in accordance with the system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing the violations.

Please contact Joseph Cotton at (510)703-5420 if you have questions or comments.

Sincerely,



Shirley E. Thompson
Property Owner

ANNUAL 2011 GROUNDWATER MONITORING REPORT

**1409 – 1417 12th Street
OAKLAND, CALIFORNIA**

Prepared for

**Shirley Thompson
1155 Hopkins Street
Berkeley, CA 94702**

May 3, 2012

Prepared by

IES
Impact Environmental Services

39120 Argonaut Way, Suite 223
Fremont, California 94538

ANNUAL 2011 GROUNDWATER MONITORING REPORT
1409-1417 12TH STREET
OAKLAND CALIFORNIA
ACEH File No. RO2933

On behalf of Mrs. Shirley E. Thompson, Impact Environmental Services (IMPACT) is presenting this Annual 2011 Groundwater Monitoring Report for the property located at 1409-1417 12th Street in Oakland, California (Figure 1). This report presents results of groundwater monitoring conducted at the subject property on June 8th and 9th and December 1st, 2nd, and 6th. Groundwater samples were also collected from eight Dual-Phase Vacuum Extraction (DPE) wells during both groundwater monitoring events. This document is being prepared at the request of Alameda County Environmental Health (ACEH) for a groundwater monitoring for the unauthorized release of fuel at the subject property¹.

SITE CONTACT INFORMATION

The site address and contact information is as follows:

Site Address:

1409-1417 12th Street
Oakland, CA
APN 004-063-06

Contact Information:

Mrs. Shirley Thompson
Edward C. and Shirley E. Thompson Trust
1155 Hopkins Street, Berkeley, CA 94702-1359

SITE BACKGROUND

The Subject Property is located in a predominately residential area in the western section of the city of Oakland, Alameda County, California (Figure 1). The subject Property comprises the Alameda County assessor parcel 004-063-06 and is bordered to the north by 12th Street and residential development, to the south by a vacant lot, on the east by Mandela Parkway, and to the west by a residential development (Figure 2). The property is located approximately 1-mile

¹ Alameda County Environmental Health Services Letter_Fuel Leak Case No. RO2933 Global ID T0600158621, Thompson Property, 1409-1417 12th Street, Oakland, CA 94607-2003, dated July 31, 2008.

southeast of San Francisco Bay and 1-mile north of Oakland Inner Harbor. The elevation of the site is approximately 17 feet above mean sea level (USGS West Oakland 7.5 Minute Quadrangle). Portions of the site are paved with asphalt and the remainder is covered by grass and soil.

Historical records indicate that the property was occupied by a service station from circa 1957 to circa 1969. The subject property was either vacant or occupied by residential dwellings from at least 1902 to circa 1956. Sanborn maps from 1957 to 1967 appear to show three underground fuel storage tanks (USTs) located in the southeast corner of the service station. The 1961 Sanborn map appears to show a fourth UST or AST along the west property boundary. According to a previous report, a magnetometer survey performed at the subject property (circa 1999) revealed no magnetic anomalies indicative of buried underground storage tanks. However, communications with the Oakland Fire Department Hazardous Materials Division, confirmed that no records exist of UST removal from the Subject Property².

Geologic Setting

The Subject Property is located in the East Bay Plain of the San Francisco Bay Area. This region is dominated by northwest trending topography enclosed in the Coast Range Province of California. The site is located in the “Merritt Sand Outcrop” groundwater subarea, which has a maximum thickness of 65 feet, and the regional gradient is directed toward the west to southwest³. Based on information provided by a previous investigation, soil beneath the property consists primarily of silty-sand to at least 27 feet bgs. Groundwater is first encountered between 10 and 13 feet below ground surface (bgs) and stabilizes between approximately 9 to 11 feet bgs.

Previous Phased Environmental Investigations

The 1409-1417 12th Street site has been the subject of numerous environmental investigations^{4,5,6,7,8} beginning in 1999. The suspected source of on-site contamination is

² Verbal Communication, LeRoy Griffin, Oakland Fire Department Hazardous Materials Division, May 25, 2006.

³ Hickenbottom and Muir, *Geohydrology and Groundwater Quality Overview of the East Bay Plain Area, Alameda County, California, 205 (J) Report*, 1988.

⁴ Blymer Engineers, Inc., *Subsurface Investigation Vacant Parcel 1409-1417 12th Street, Oakland, California*, August 25, 1999.

⁵ Impact Environmental Services, *Phase I Environmental Site Assessment 1409-1417 12th Street Oakland California*, August 25, 2006 (revised December 13, 2006).

⁶ Impact Environmental Services, *Site Characterization Report 1409-1417 12th Street Oakland California*, June 5, 2007.

believed to be from residual fuel from former underground storage tanks (USTs) associated with service station operations. Petroleum hydrocarbons have been detected in on-site soil, soil-vapor, and groundwater samples at concentrations that exceed environmental screening levels (ESLs)⁹ for residential land-use. Significant concentrations of (total petroleum hydrocarbons (TPH) as gasoline (TPHg) up to 20,000 milligrams per kilogram (mg/kg) and volatile organic compounds (VOCs) to 120 mg/kg were detected in soil samples collected from the site. TPHg was detected in groundwater samples at a maximum concentration of 52,000µg/L. Benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected in groundwater at maximum concentrations of 8,700µg/L, 2,200µg/L, 2,000µg/L, 7,200µg/L, respectively. 1,2-Dichloroethane was detected at a maximum concentration of 570µg/L. Soil-vapor samples collected from the site were found to contain TPHg at a maximum concentration of 52,000ug/m³, benzene as high as 1,200 ug/m³, and vinyl chloride to 260ug/m³.

In March 2008, eleven groundwater-monitoring wells (MW-1 through MW-8 and GW-1 through GW-3) were installed at the subject property. Shallow groundwater elevations occur from 9 to 11 feet below ground surface. In general, shallow groundwater flow is toward the south towards San Francisco Bay.

A dual-phase vacuum extraction (DPE) pilot test was conducted at the subject property in October 2008. The pilot test was conducted to evaluate DPE technology as a viable method to cleanup petroleum hydrocarbons from soil and groundwater at the site. The results of pilot test indicated that DPE was a viable technology for mitigating petroleum hydrocarbons from unsaturated soil and groundwater from the subject property.

In January 2009, eight dual phase extraction wells (DPE-1, DPE-1B, DPE-2, DPE-2B, DPE-3, DPE-5, DPE-6, and DPE-7) were installed at the property under the direction of IMPACT. In addition, existing wells GW-1, GW-3, and MW-8 were converted for dual use as both groundwater monitoring and DPE extraction wells. Figure 2 shows the location of exploratory soil borings, soil-vapor sample locations, and groundwater monitoring and DPE wells.

⁷ Impact Environmental Services, Remediation Workplan Site 1409-1417 12th Street Oakland California, October 17, 2007.

⁸ Impact Environmental Services, Groundwater Well Installation & Initial Quarterly Groundwater Monitoring Report for 1409 - 1417 Street, Oakland, California, October 9, 2008.

⁹ San Francisco Bay Regional Water Quality Control Board, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater-Interim Final*, May 2008.

In February 2009, IMPACT and its subcontractor's OTG Environmental Engineering were retained to design the DPE system for the site. In April 2009, Ashby Excavation and Construction was retained by IMPACT to construct the DPE containment building. Mako Industries Inc. was contracted by IMPACT to build the liquid-ring, high vacuum extraction and thermal oxidizer treatment system trailer. Ashby completed the containment building and underground DPE groundwater/vapor recovery piping in October 2009. Pacific Gas & Electric completed gas and electric connections to the site in November 2009. Piping from the eleven DPE wells were connected to a central manifold located within the containment building. Final connections were made to the DPE trailer, manifold, thermal oxidizer system, and liquid-phase granular activated carbon vessels in December 2009.

On January 13, 2010, the remediation system was turned on again after laboratory results of the Day 1 samples met the discharge requirements. The discharge of the treated water began on January 13, 2010. The remediation system ran continuously for another five days and was then sampled again on January 18 following the NPDES permit requirement. The Day 5 samples were delivered to Torrent Laboratory under 24-hr turnaround time analysis. The remediation system was turned off on July 23, 2010 to evaluate remediation effectiveness and to resolve project funding issues.

On May 5, 2011 the DPE system was restarted and monthly NPDES groundwater sampling was resumed. Groundwater-soil vapor extraction wells DPE-1 and DPE-2 were disconnected from the DPE collection system and used as bleeder wells to supplement air flow to the subsurface. The DPE system ran continuously from May 5, 2011 to October 31, 2011, except on occasions when the DPE system automatically tripped. The DPE system was shut-down on October 31, 2011 for manual hydrogen peroxide treatment of select groundwater wells (MW-8, GW-1, GW-3, DPE-1B, and DPE-3) and further evaluation of remediation effectiveness. Semiannual groundwater monitoring for 2011 were conducted in the months in June and December.

JUNE AND DECEMBER 2011 GROUNDWATER MONITORING EVENTS

Impact conducted the first and second semiannual 2011 groundwater monitoring events on June 8th and 9th and December 1st, 2nd, and 6th, respectively. During both groundwater-monitoring events, groundwater samples were collected from eleven groundwater monitoring wells (MW-1 through MW-8 and GW-1 through GW-3) and eight Dual-Phase soil-vapor and groundwater extraction wells (DPE-1, DPE-1B, DPE-2, DPE-2B, DPE-3, DPE-5, DPE-6, and DPE-7). Prior

to collecting groundwater samples from any wells, depth-to-water (DTW) measurements were collected from all nineteen wells. Depth-to-groundwater measurements for the June and December 2011 monitoring events were recorded on the Well Gauging Data sheets contained in Appendix A.

Groundwater Sample Collection and Analysis

Groundwater samples were collected from groundwater monitoring and extraction/treatment wells in accordance with standard industry practices. Wells were purged of at least three casing volumes using a disposable bailer or a suction pump. During the purging of each well, field parameters (temperature, conductivity, pH, and turbidity) were monitored and recorded on Groundwater Monitoring Data Sheets for the June and December 2011 Groundwater Monitoring events are presented in Appendix A.

Prior to the collection of a groundwater sample, each well was purged until temperature, conductivity, and pH stabilized. Samples were collected using disposable bailer or discharge tubing from a peristaltic pump. The samples were then placed in laboratory-supplied containers, and properly preserved in an ice-cooled container. Chain-of-custody documentation accompanied the samples through collection and delivery to the analytical laboratory. Purge water from the June 2011 was contained in 55-gallon drums and pumped into the DPE collection system when the system was restarted. Purge water from the December 2011 was contained in 55-gallon drums and left at the subject site pending disposal in accordance with groundwater analytical results. Groundwater samples were submitted to Curtis-Tompkins Laboratory of Berkeley, California for the first semiannual 2011 monitoring event in June 2011 and to Torrent Laboratory Inc. of Milpitas, California for the second semiannual 2011 in December 2011 groundwater monitoring event. Groundwater samples were analyzed for several constituents of concern (COCs) including TPHd and TPHmo by EPA Method 8015; and TPHg, BTEX, and oxygenates methyl tert-butyl ether (MTBE), diisopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-Amyl methyl ether (TAME), and t-butyl alcohol (t-Butanol) by EPA Method 8260. Samples from the first semiannual 2011 event were also analyzed for a full list of volatile organic compounds by EPA Method 8260.

Groundwater Elevations and Gradient

The depth to groundwater (GTW) measurements were recorded on the Well Gauging Data Sheet this first and second semiannual 2011 events are included in Appendix A. DTW measurements

for the first semiannual groundwater monitoring event were collected on June 6, 2011 and measurements for the second semiannual event were collected on November 29, 2011. Groundwater elevation data for Monitoring Wells and DPE Wells are presented on Tables 1 and 2, respectively. Groundwater elevations were calculated by subtracting the measured depth to water (DTW) from the surveyed top of well casings elevations. Groundwater elevations for wells MW-1 through MW-7 were used to generate calculate a contour map and gradient for wells screened from 7-14 feet bgs. Groundwater elevations for wells DPE-1, DPE-2, DPE-3, DPE-5, DPE-6, and DPE-7 were used to calculate the groundwater contour map and gradient for wells that were screened from 6-20 feet bgs.

Groundwater contour maps for groundwater monitoring wells and DPE wells for elevations June 6, 2011 are presented as Figures 3 and 4, respectively. Groundwater contour maps for groundwater monitoring wells and DPE wells for elevations November 29, 2011 are presented as Figures 5 and 6, respectively.

Groundwater Sample Results

Groundwater sample results for the June and December 2011 groundwater monitoring events are summarized in Tables 3 and 4 and certified laboratory analytical reports (CARs) are presented in Appendix B. Total petroleum hydrocarbons, BTEX, and fuel oxygenate results are summarized in Table 3. The results of chlorinated volatile organic compounds are presented in Table 4. Maps showing TPHg (the primary constituent of concern) that was detected in groundwater samples collected from select monitoring wells and DPE wells for June 2011 is presented in Figures 7 and 8. Maps showing TPHg (the primary constituent of concern) that was detected in groundwater samples collected from select monitoring wells and DPE wells for December 2011 is presented in Figures 9 and 10.

QUALITY CONTROL RESULTS

Quality control (QC) sample results and laboratory QC data for soil and groundwater samples were evaluated to assess the acceptability of the analytical data. Laboratory QC results are included with the CARs presented in Appendix B. All laboratory analyses occurred within EPA recommended sample holding times and all sample containers were received in acceptable condition by the laboratory. Based on the laboratory QA/QC summaries, all method blanks, laboratory control samples (LCS), matrix spikes (MS), and matrix spike duplicates (MSD) were within laboratory control limits, with the following exceptions. During the June 2011

monitoring event, all detections of TPHd above the method detection limit exhibited chromatographic patterns that did not resemble the standard. During the December 2011 monitoring event, the TPHg result for the groundwater sample from well GW-1 did not match the gasoline standard. The reported value for TPHg in this sample may contain contributions from non-target heavy hydrocarbons in the range of C5-C12.

DISCUSSION OF GROUNDWATER SAMPLING RESULTS

The results of groundwater samples collected during the June and December 2011 groundwater monitoring events were compared to RWQCB ESLs for a residential land-use where shallow groundwater is a source of drinking water. The RWQCB developed ESLs for commercial/industrial and residential land-use scenarios to provide a measure of whether additional investigation, remedial action, or a more detailed risk assessment should be pursued.

June 2011 Groundwater Monitoring Well Monitoring Event

During the June 2011 monitoring event, constituents of concern were not detected above their respective ESLs in groundwater samples collected from any of the groundwater monitoring and or DPE wells, with the exception of samples collected from wells GW-1, GW-3, DPE-1, DPE-3, DPE-5, and DPE-7. The groundwater sample collected from well GW-1 was found to contain 230µg/L of TPHg, 210µg/L of TPHd, and 1.8µg/L of benzene. The sample collected from well GW-3 was found to contain 120µg/L of TPHd, 340µg/L of TPHmo, and 10µg/L of benzene. The groundwater sample collected from well DPE-1 was found to contain 1.8µg/L of benzene. The sample from well DPE-3 was found to contain 1,100µg/L of TPHg, 280µg/L of TPHd, 53µg/L of benzene, 62µg/L of toluene, 42µg/L of ethylbenzene, and 135µg/L of total xylenes. The groundwater sample collected from well DPE-7 was found to contain 130µg/L of TPHd.

December 2011 Groundwater Monitoring Well Monitoring Event

During the December 2011 monitoring event, constituents of concern were not detected above their respective ESLs in groundwater samples collected from any of the groundwater monitoring wells or DPE wells, with the exception of the groundwater sample collected from well DPE-3. The groundwater sample collected from well DPE-3 was found to contain 7.7µg/L of benzene.

CONCLUSIONS

Based on the results of soil and groundwater results collected from the groundwater monitoring well, dual-phase vacuum extraction wells, exploratory borings, and soil-vapor samples collected from the site to date, the following are IMPACT's conclusions regarding the current environmental disposition at the subject property.

- During the June 2011 monitoring event, constituents of concern were detected above their respective ESLs in groundwater samples collected from wells GW-1, GW-3, DPE-1, DPE-3, DPE-5, and DPE-7. The groundwater sample collected from well GW-1 was found to contain 230µg/L of TPHg, 210µg/L of TPHd, and 1.8µg/L of benzene. The groundwater sample collected from well GW-3 was found to contain 120µg/L of TPHd, 340µg/L of TPHmo, and 10µg/L of benzene. The groundwater sample collected from well DPE-1 was found to contain 1.8µg/L of benzene. The groundwater sample collected from well DPE-3 was found to contain 1,100µg/L of TPHg, 280µg/L of TPHd, 53µg/L of benzene, 62µg/L of toluene, 42µg/L of ethylbenzene, and 135µg/L of total xylenes. The groundwater sample collected from well DPE-7 was found to contain 130µg/L of TPHd.
- During the December 2011 monitoring event, one constituent of concern was detected above its respective ESL. The groundwater samples collected from well DPE-3 was found to contain 7.7µg/L of benzene.
- The DPE remediation system removed a total of 36 pounds of total petroleum hydrocarbons (TPH) from subsurface of the site during 2011. The remediation system removed 15.9 pounds of TPH (100% from soil vapor) during the second quarter 2011. The remediation system removed 20.1 pounds of TPH (96% from soil vapor and 4% from groundwater) during the third quarter 2011 and the month of October. From the start of the remediation system (January 12, 2010) to the end of this reporting period (October 31, 2011), a total of 191.6 pounds of TPH was removed from subsurface of the site, of which 184.9 pounds was removed through soil vapor and 6.7 pounds was removed through groundwater.
- Based on the comparison of the most recent groundwater monitoring well data June 2011, it appears that potential human health and environmental risks from groundwater at the site have been mitigated.

- Based on the comparison of the historical soil and soil-vapor data it appears that potential human health risks at the site includes exposure from direct-contact with petroleum-impacted soils (i.e., during construction activities) and intrusion and subsequent inhalation (indoor) of petroleum-related vapors from petroleum impacted soil near wells GW-1 and DPE-3.

RECOMMENDATIONS

IMPACT recommends the following tasks be conducted at the subject property to continue to evaluate and mitigate the existing petroleum contamination at the subject property.

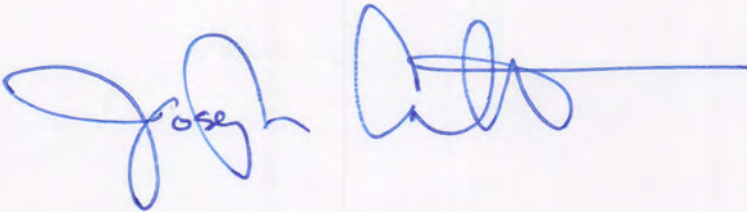
- Impact recommends shutting-off and discontinuing operation of the dual-phase vacuum-enhanced extraction (DPE) and treatment systems at the property.
- Impact recommends conducting groundwater monitoring of select wells for two additional quarters to evaluate the possibility of temporal changes in groundwater quality.
- Impact further recommends collecting and analyzing soil remediation verification samples near wells MW-8, GW-1, GW-3 and DPE-3 for site closure purposes. The location of exploratory soil borings showing historical TPHg detected in soil samples is shown on Figure 11. Proposed closure verification soil boring locations are shown in Figure 12.
- Impact further recommends installing soil-vapor monitoring wells in the vicinity of wells MW-8, GW-1, GW-3 and DPE-3 and collecting corrective action closure verification soil-vapor samples for site closure purposes. The location of soil-vapor probes and historical concentrations of TPHg that have been detected in soil-vapor wells is shown on Figure 13. Proposed closure verification soil-vapor well locations are shown in Figure 14.
- If COCs are detected in soil and soil-vapor closure verification samples above respective ESLs, IMPACT recommends excavation of TPH-contaminated soil to a depth of approximately 15 feet in the TPH-impacted area(s).

LIMITATIONS

Impact Environmental's actions on this project were performed in accordance with current generally accepted environmental consulting principles and practices. This warranty is in lieu of all others, be it expressed or implied. Environmental conditions may exist at the site that could not be observed. Where the scope of services was limited to observations made during site reconnaissance, interviews, and/or review of readily available reports and literature, our conclusions and recommendations are necessarily based largely on information supplied by others, the accuracy and sufficiency of which may not have been independently reviewed by us. Our professional analyses are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions between such sampling points. Additional data from future work or changing conditions may lead to modifications to our professional opinions and recommendations. Any reliance on this report, or portions thereof, by a third party shall be at such party's sole risk.

PERJURY STATEMENT

I declare, under penalty of perjury, that the information and/or recommendations contained in this document or report is true and correct to the best of my knowledge.



Joseph A. Cotton, P.G.7378
Principal Geologist



Distribution:

(1) Copies – Mrs. Shirley E. Thompson, 1155 Hopkins Way, Berkeley, CA

Attachments:

Tables

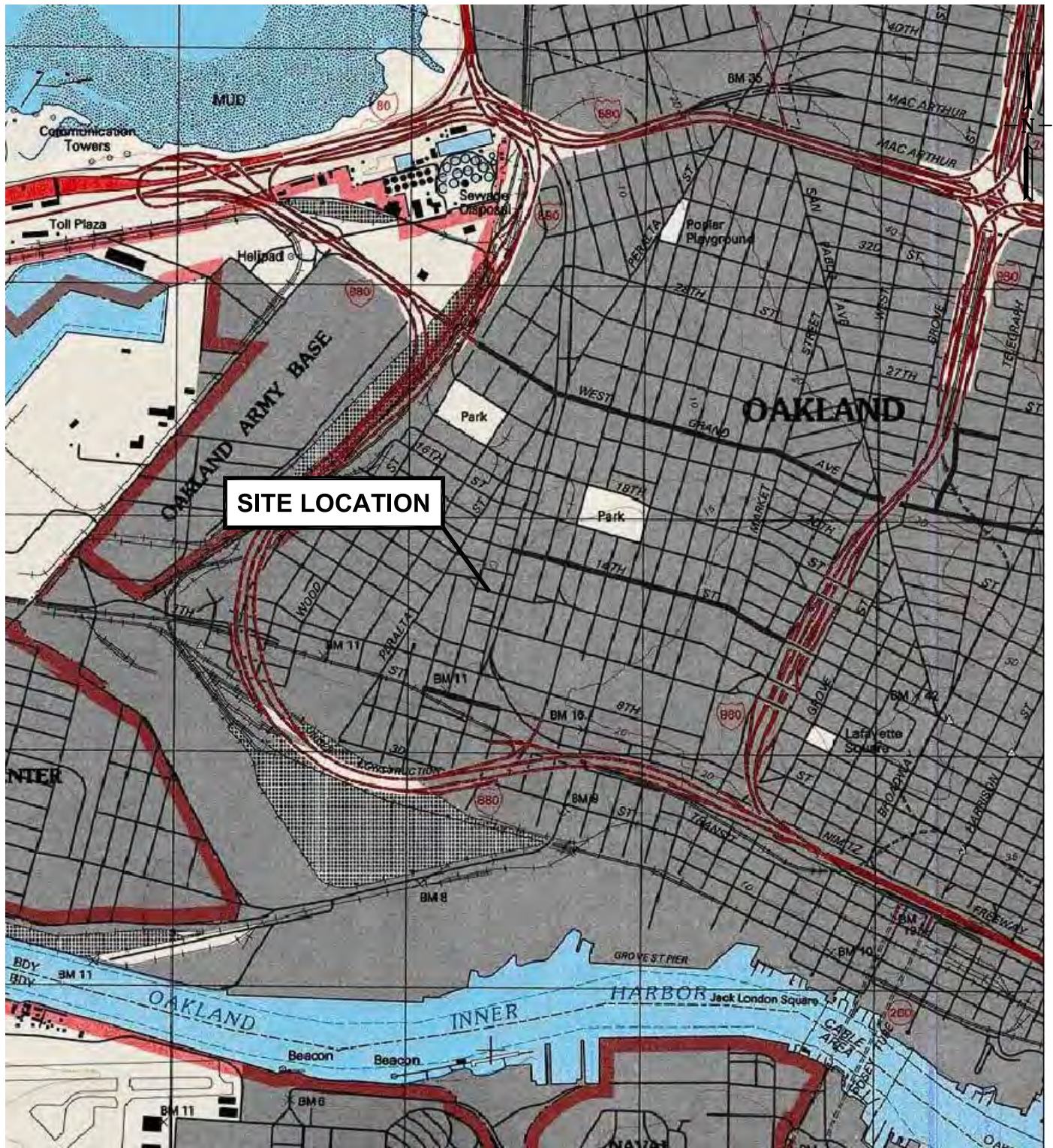
- Table 1 –Summary of Groundwater Elevations Measurements for Groundwater Monitoring Wells
- Table 2 –Summary of Groundwater Elevations Measurements for DPE Wells
- Table 3 –Summary of Groundwater Analytical Results for Groundwater Monitoring Wells: TPH, BTEX, and Fuel Oxygenates
- Table 4 –Summary of Groundwater Analytical Results for DPE Wells: TPH, BTEX, and Fuel Oxygenates
- Table 5 –Summary of Groundwater Analytical Results for Groundwater Monitoring Well: Chlorinated VOCs
- Table 6 –Summary of Groundwater Analytical Results for DPE Wells: Chlorinated VOCs

Figures

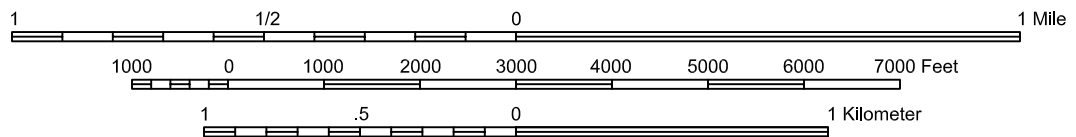
- Figure 1 -- Site Location Map
- Figure 2 – Site Plan
- Figure 3 – Groundwater Monitoring Well Groundwater Elevation Contour Map_ June 2011
- Figure 4 – DPE Well Groundwater Elevation Contour Map_ June 2011
- Figure 5 – Monitoring Well Groundwater Elevation Contour Map_ November 2011
- Figure 6 – DPE Well Groundwater Elevation Contour Map_ November 2011
- Figure 7 – Groundwater Monitoring Well TPHg Results _ June 2011
- Figure 8 – DPE Well TPHg Results _ June 2011
- Figure 9 – Groundwater Monitoring Well TPHg Results _ December 2011
- Figure 10 – DPE Well TPHg Results _ December 2011
- Figure 11 –Historical TPHg in Soil Samples from Exploratory Soil Borings
- Figure 12 –Proposed Closure Verification Soil Boring Locations
- Figure 13 –Historical TPHg in Soil-Vapor Samples
- Figure 14 –Proposed Closure Verification Soil-Vapor Well Locations

Appendices

- Appendix A – Groundwater Monitoring Data Sheets
- Appendix B – Certified Laboratory Analytical Reports



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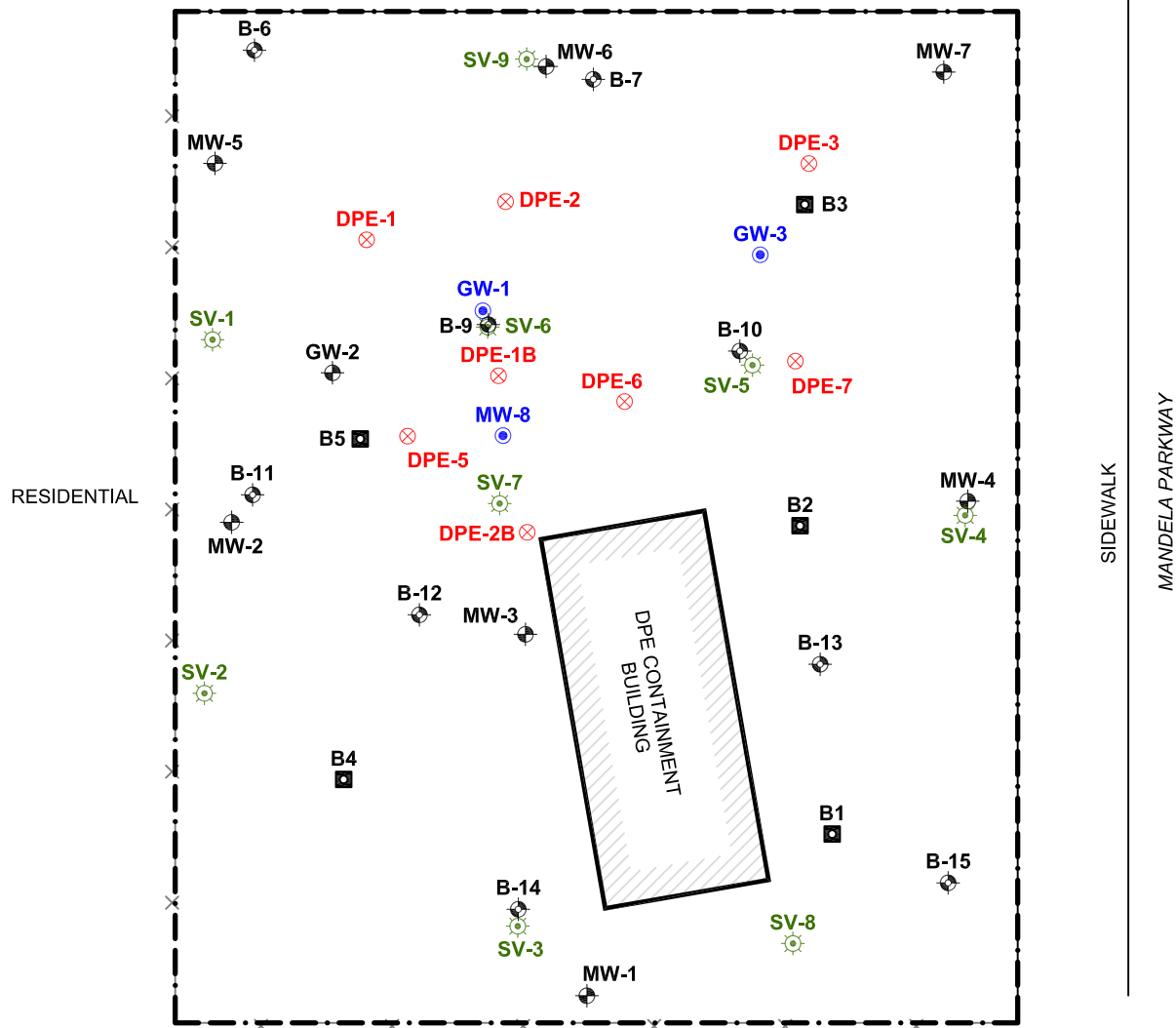


Impact Environmental Services
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Fremont, CA 94538

Figure 1
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
SITE LOCATION MAP

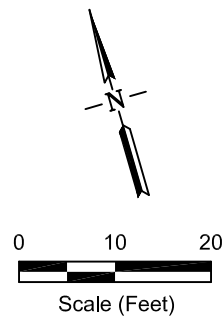
12TH STREET

SIDEWALK



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- DPE-1 DPE Well Location
- B-14 Exploratory Boring Location
- B4 Geoprobe Location
- SV-2 Soil Vapor Sample Location

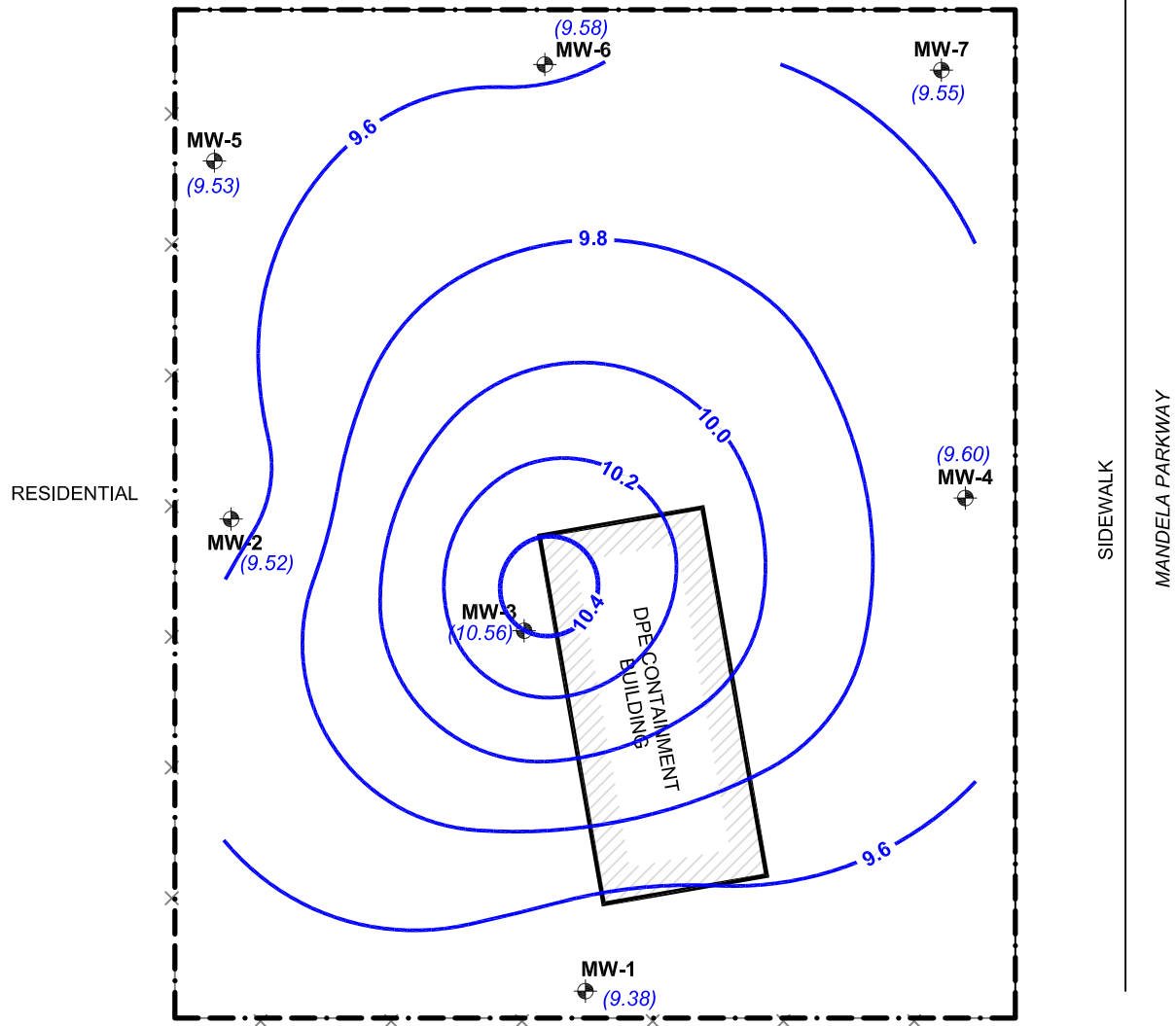


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Fremont, CA 94538

Figure 2
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
SITE PLAN

12TH STREET

SIDEWALK



EXPLANATION:

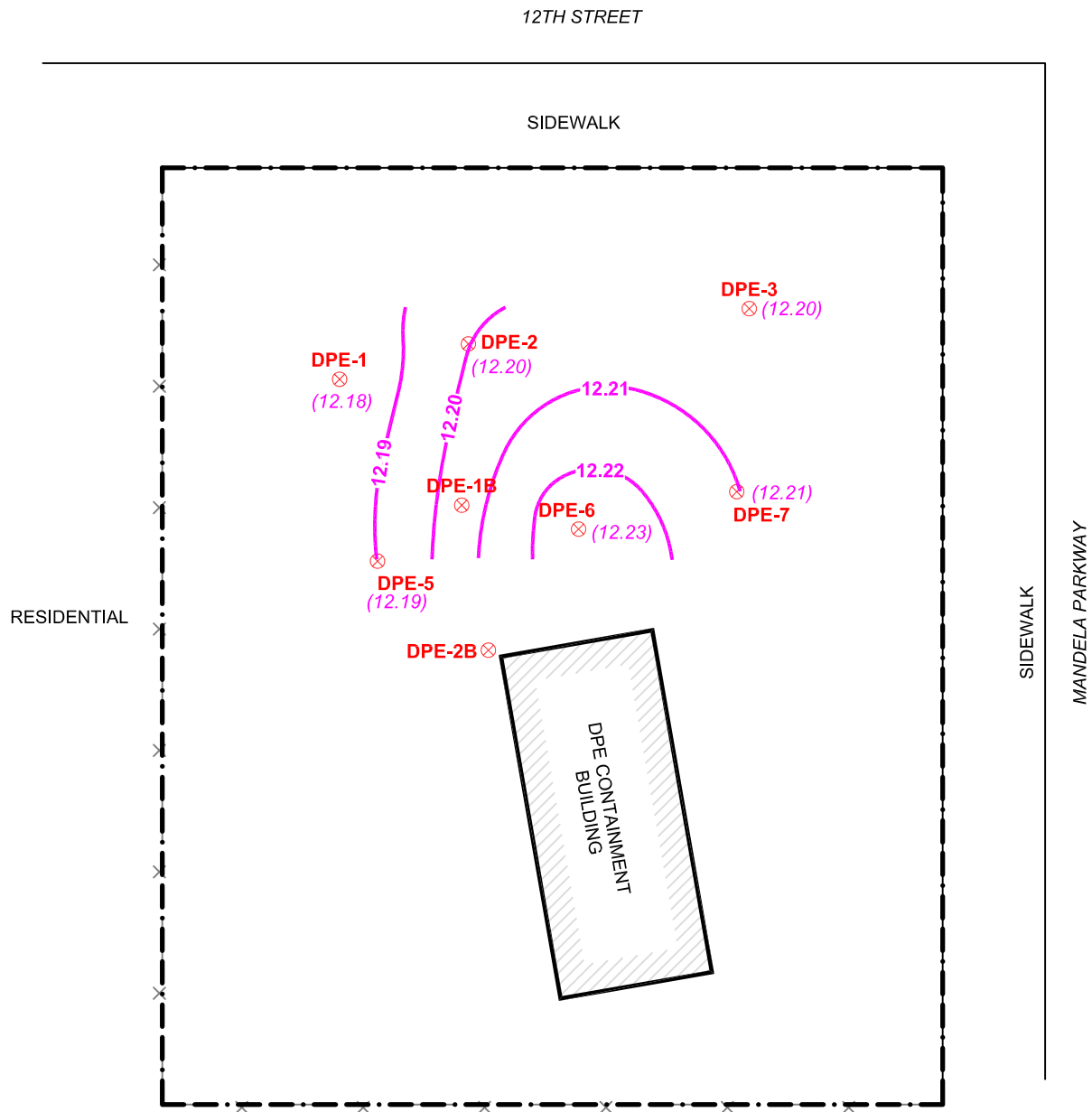
- Approximate Property Boundary
- MW-1  Monitoring Well Location
- (9.38) Groundwater Elevation (ft.-MSL)
- 9.8 — Groundwater Elevation Contour at Groundwater Monitoring Wells



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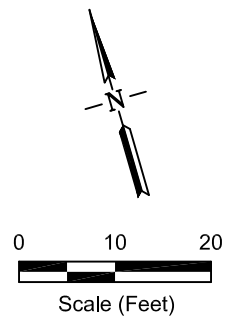
Figure 3
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP - GROUNDWATER MONITORING WELLS (JUNE 2011)

C:\Work\Enviro\CAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 2-6.dwg Layout: Fig 4 - GW_DPE_wells_06-11 May 04, 2012 - 8:00pm



EXPLANATION:

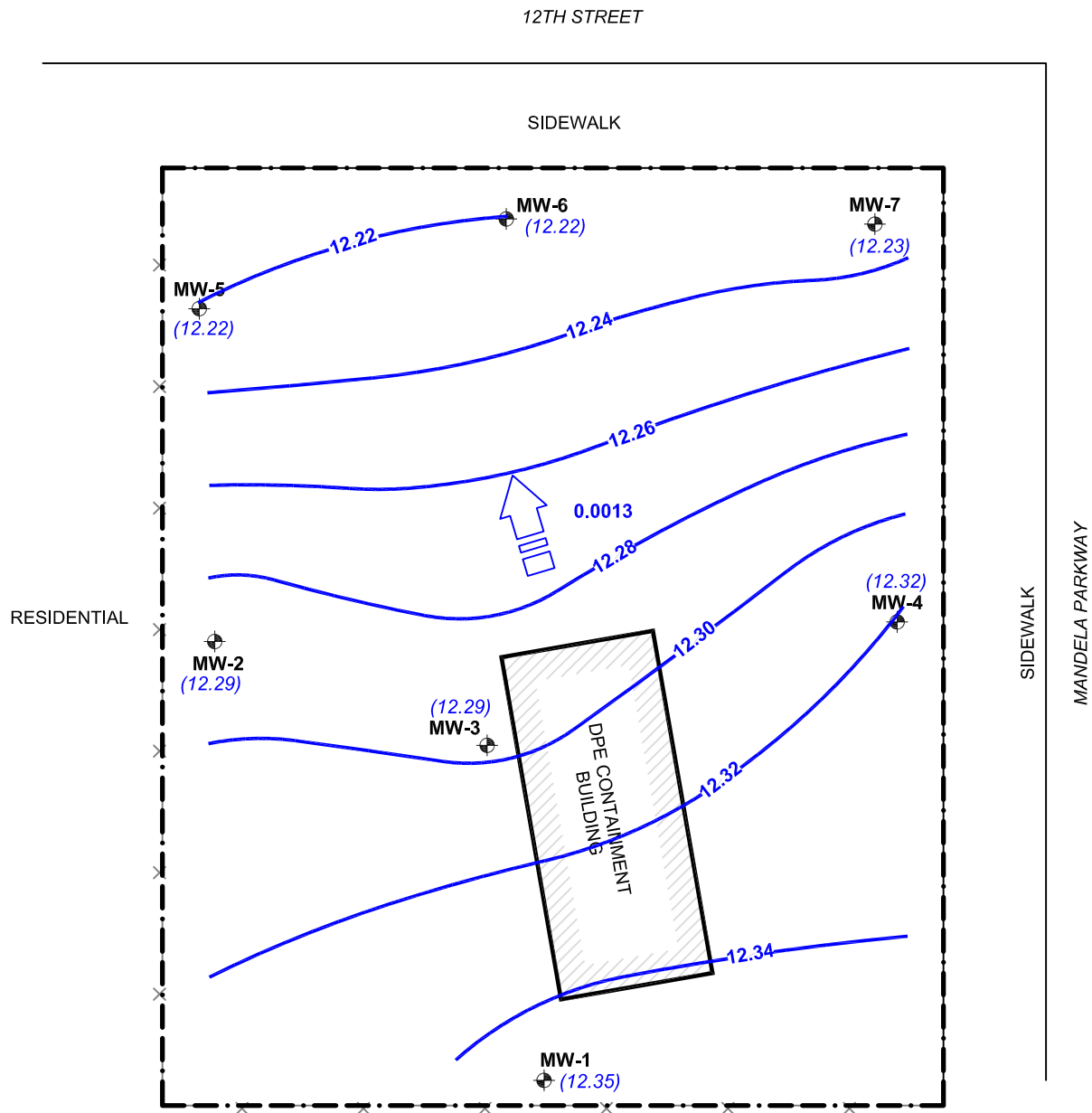
- Approximate Property Boundary
- DPE-1 ⊗ DPE Well Location
- (9.39) Groundwater Elevation at DPE Wells
- 9.5— Groundwater Elevation Contour at DPE Wells



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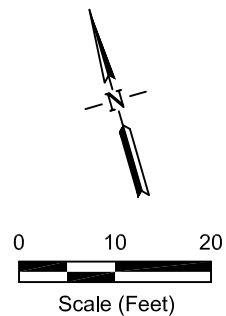
Figure 4
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP - DPE WELLS (JUNE 2011)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 2-6.dwg Layout: Fig 5 - GW-11-11 May 04, 2012 - 5:15pm



EXPLANATION:

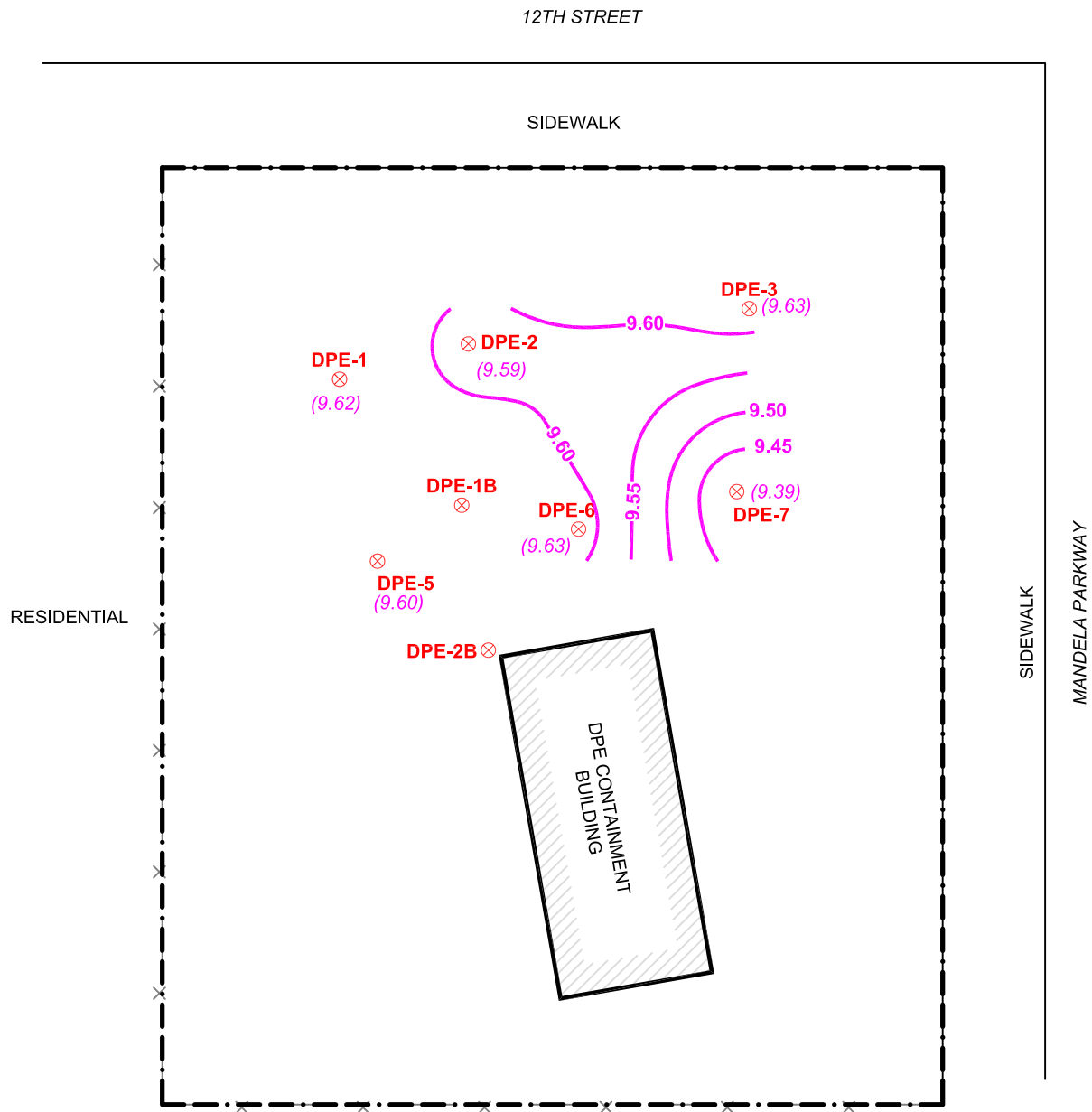
- Approximate Property Boundary
- MW-1 Monitoring Well Location
- (12.35) Groundwater Elevation (ft.-MSL)
- 12.34— Groundwater Elevation Contour at Groundwater Monitoring Wells



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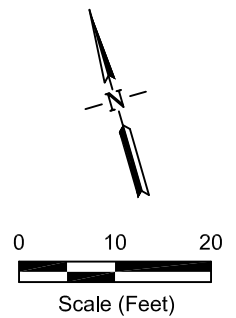
Figure 5
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP - GROUNDWATER MONITORING WELLS (NOVEMBER 2011)

C:\Work\Enviro\CAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 2-6.dwg Layout: Fig 6 - GW_DPE_wells_11-11 May 04, 2012 - 8:01pm



EXPLANATION:

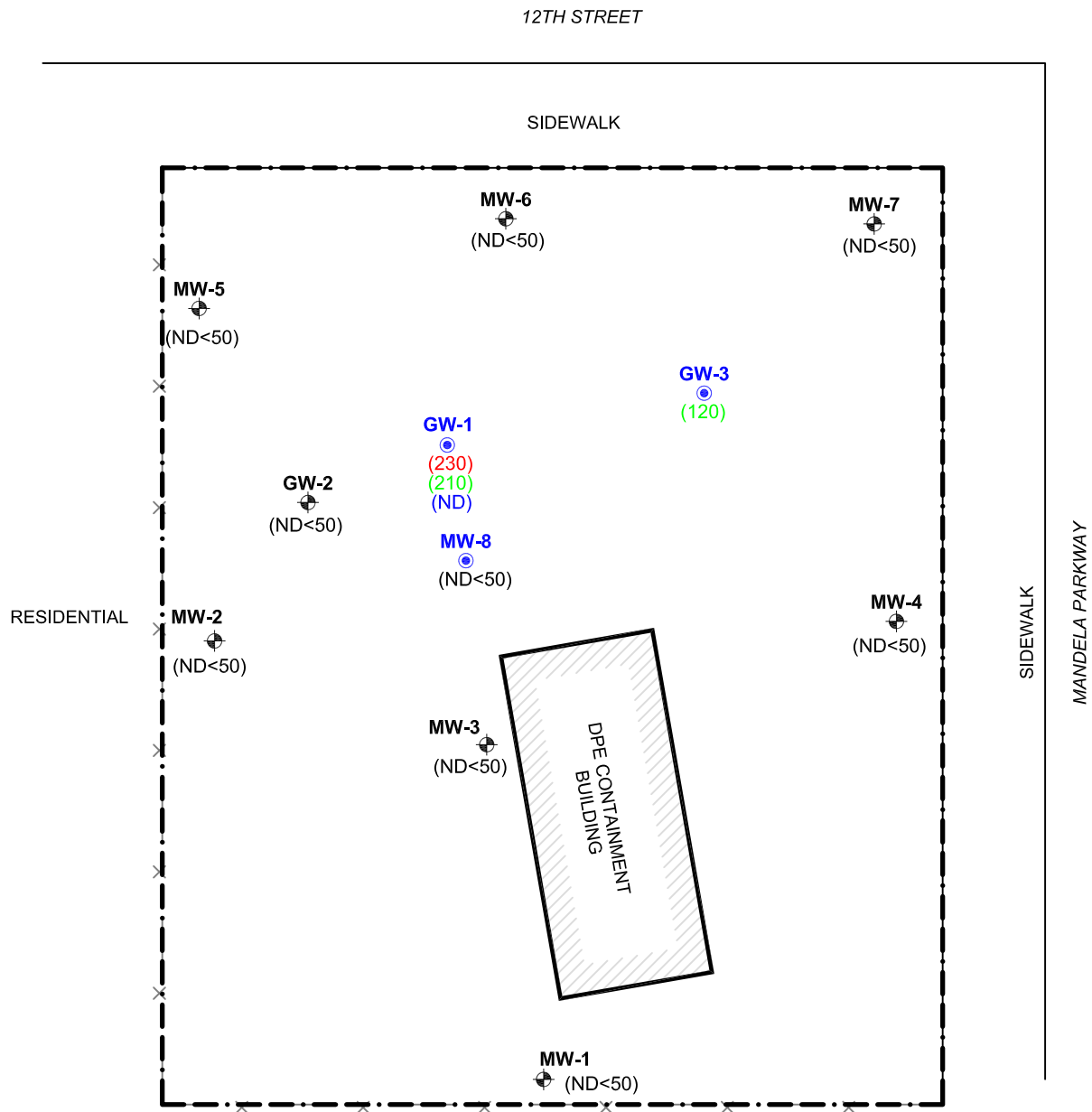
- Approximate Property Boundary
- MW-1 Monitoring Well Location
- (9.39) Groundwater Elevation at DPE Wells
- 9.5— Groundwater Elevation Contour at DPE Wells



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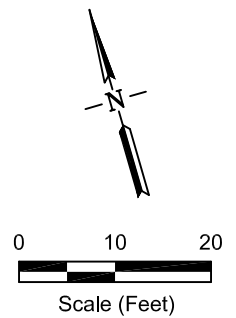
Figure 6
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP - DPE WELLS (NOVEMBER 2011)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 7_9.dwg Layout: Fig 7 - TPH_GW-07-11 Apr 27, 2012 - 5:07pm



EXPLANATION:

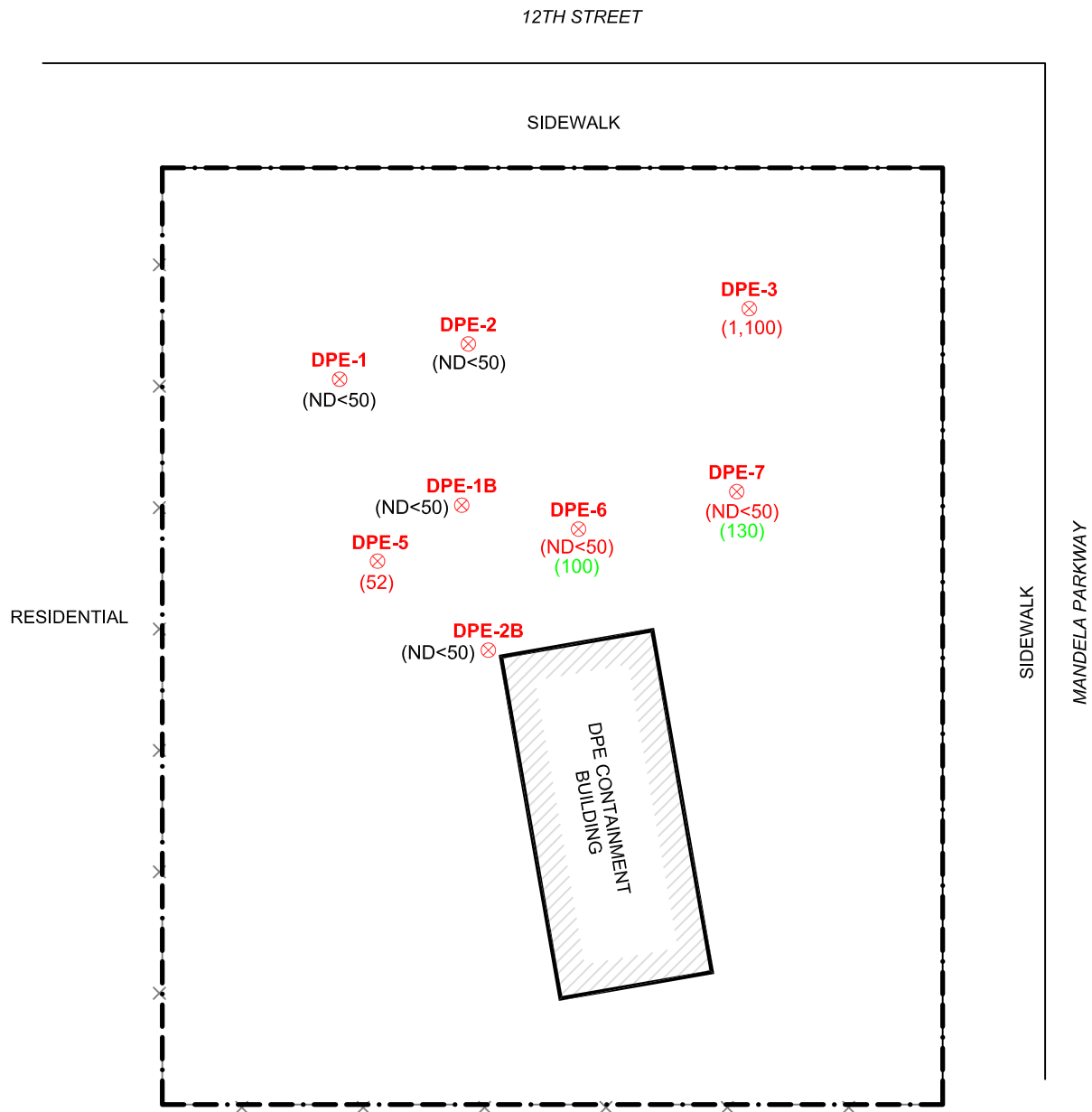
- · — · — Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- (230) TPHg Results in Micrograms Per Liter (ug/L)
- (210) TPHd Results in Micrograms Per Liter (ug/L)
- (ND<50) TPHg, TPHd, and TPHmo All Non-Detect



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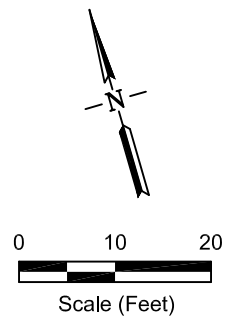
Figure 7
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
TPHg, TPHd, and TPHmo IN GROUNDWATER (JUNE 2011)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 8_10.dwg Layout: Fig 8 - TPH_DPE-06-11 Apr 24, 2012 - 9:55pm



EXPLANATION:

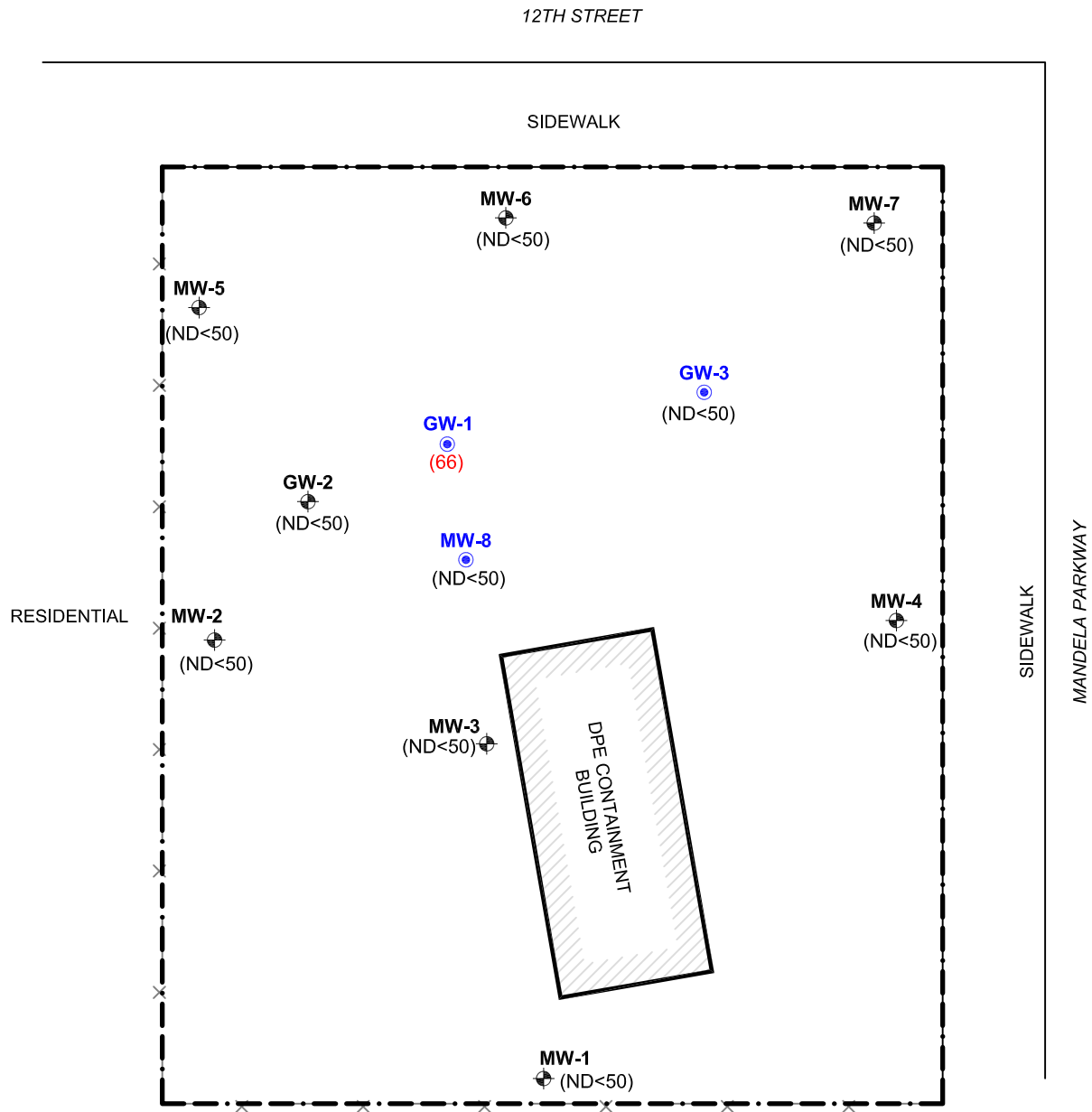
- · — · — Approximate Property Boundary
- DPE-1 ⊗ DPE Well Location
- (1,100) TPHg Results in Micrograms Per Liter (ug/L)
- (130) TPHd Results in Micrograms Per Liter (ug/L)
- (ND<50) TPHg and TPHd All Non-Detect



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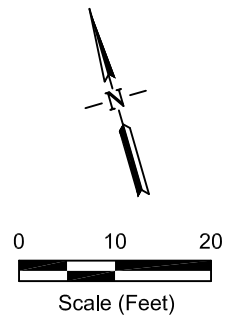
Figure 8
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
TPHg AND TPHd IN DPE WELLS (JUNE 2011)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 7-14.dwg Layout: Fig 7 - TPH_GW-12-11 Apr 23, 2012 - 6:02pm



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- (66) TPHg Results in Micrograms Per Liter (ug/L)
- (ND<50) TPHg, TPHd, and TPHmo All Non-Detect



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Figure 9
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
TPHg, TPHd, and TPHmo IN GROUNDWATER (DECEMBER 2011)

12TH STREET

SIDEWALK

RESIDENTIAL

SIDEWALK
MANDELA PARKWAY

DPE-1 ⊗
(ND<50)

DPE-2 ⊗
(ND<50)

DPE-3 ⊗ (66)

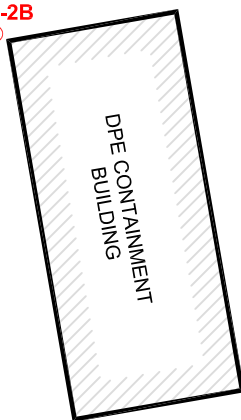
DPE-5 ⊗
(ND<50)

DPE-1B ⊗
(ND<50)

DPE-6 ⊗ (ND<50)

DPE-7 ⊗ (ND<50)

DPE-2B ⊗
(ND<50)



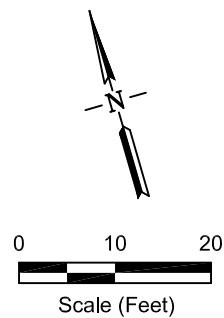
EXPLANATION:

— · — · — Approximate Property Boundary

DPE-1 ⊗ DPE Well Location

(1,100) TPHg Results in Micrograms Per Liter (ug/L)

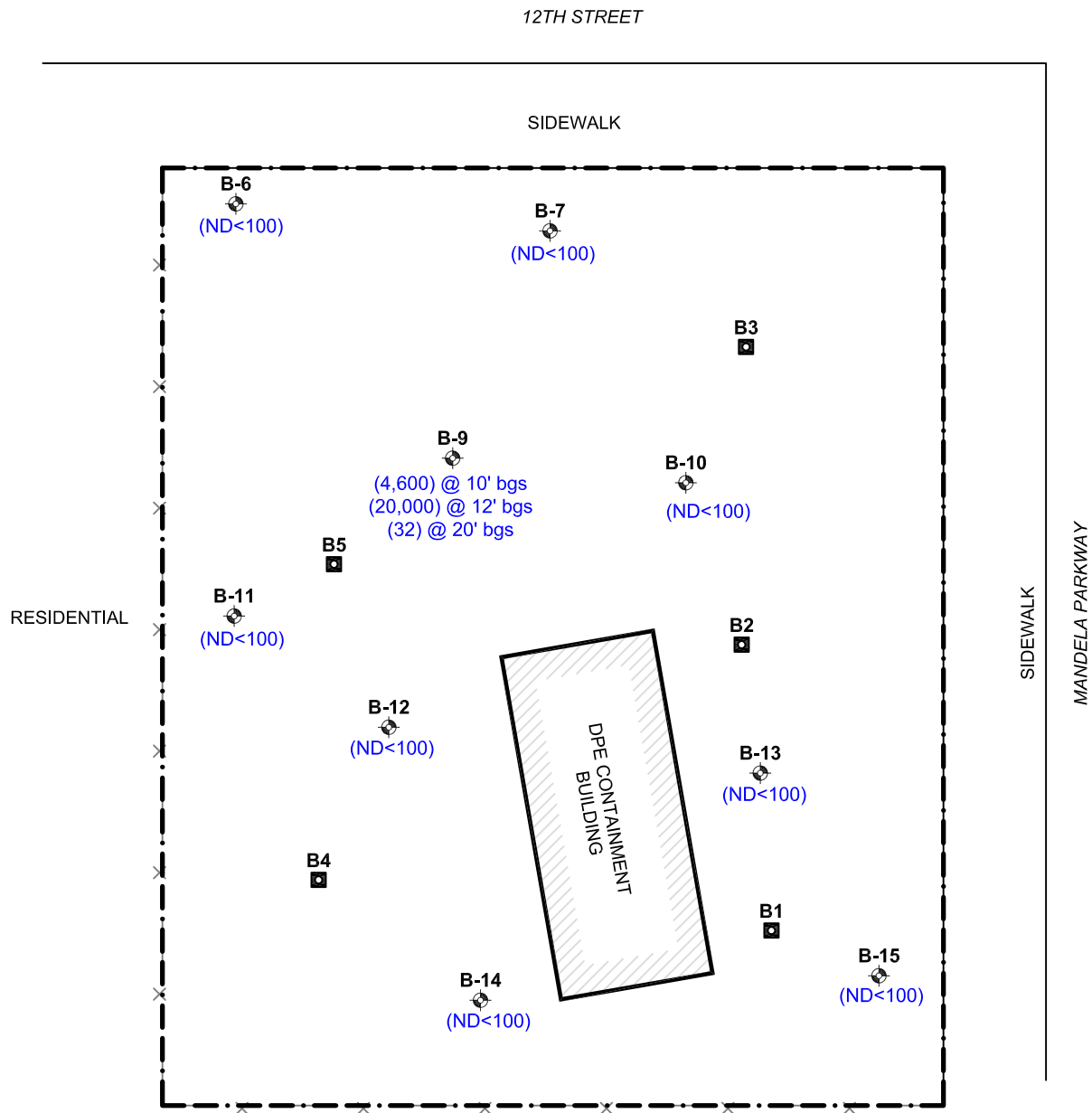
ND<50 TPHg, TPHd, TPHmo All Non-Detect



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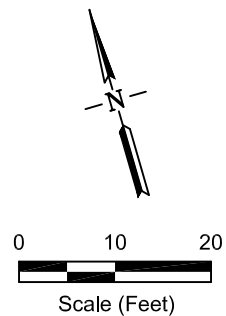
Figure 10
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
TPHg, TPHd, TPHmo IN DPE WELLS (DECEMBER 2011)

C:\Work\Enviro\CAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 11-13.dwg Layout: Fig 11 - TPH_Soil_Samples Apr 27, 2012 - 5:04pm



EXPLANATION:

- · — · — Approximate Property Boundary
- B-14 Exploratory Boring Location
- B-4 Geoprobe Location
- (4,600) TPHg Results in Micrograms Per Liter (ug/L)



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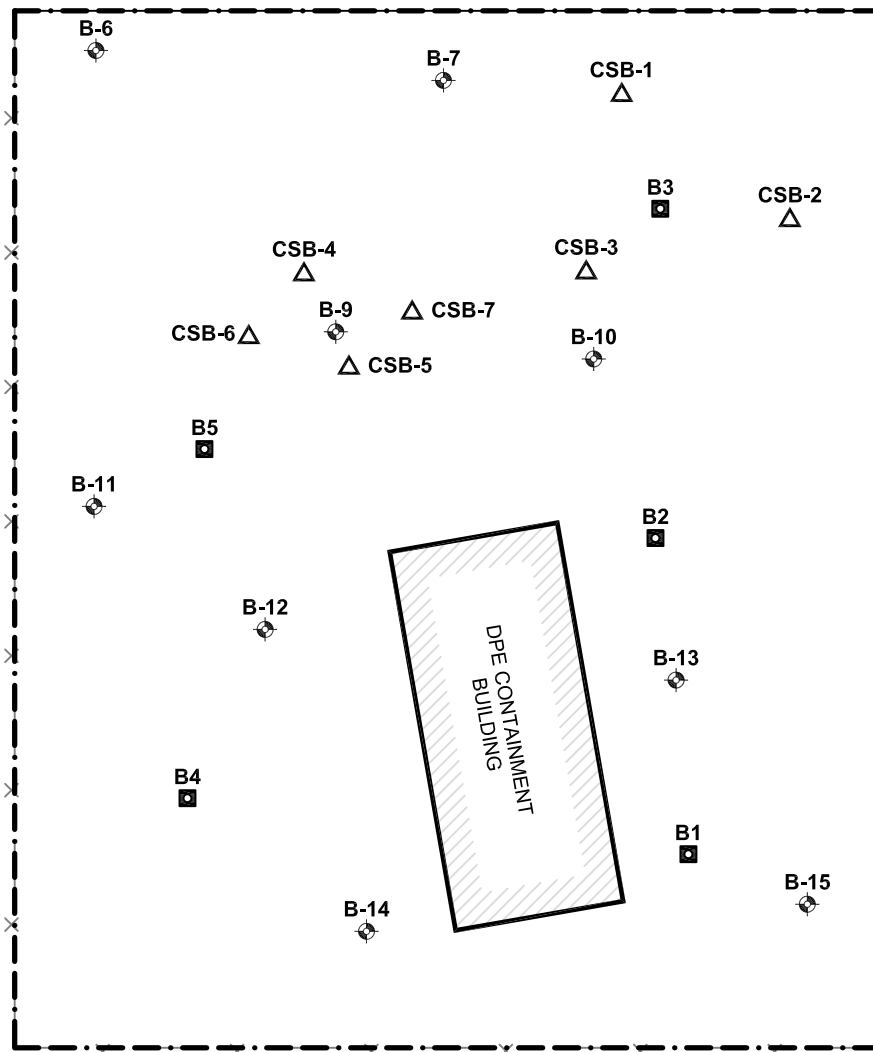
Figure 11
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
HISTORICAL EXPLORATORY BORING SOIL RESULTS - TPHg

12TH STREET

SIDEWALK

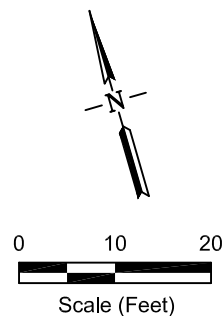
RESIDENTIAL

SIDEWALK
MANDELA PARKWAY



EXPLANATION:

- · — · — Approximate Property Boundary
- B-14 Exploratory Boring Location
- B-4 Geoprobe Location
- CSB-4 Proposed Closure Verification Soil Boring Locations

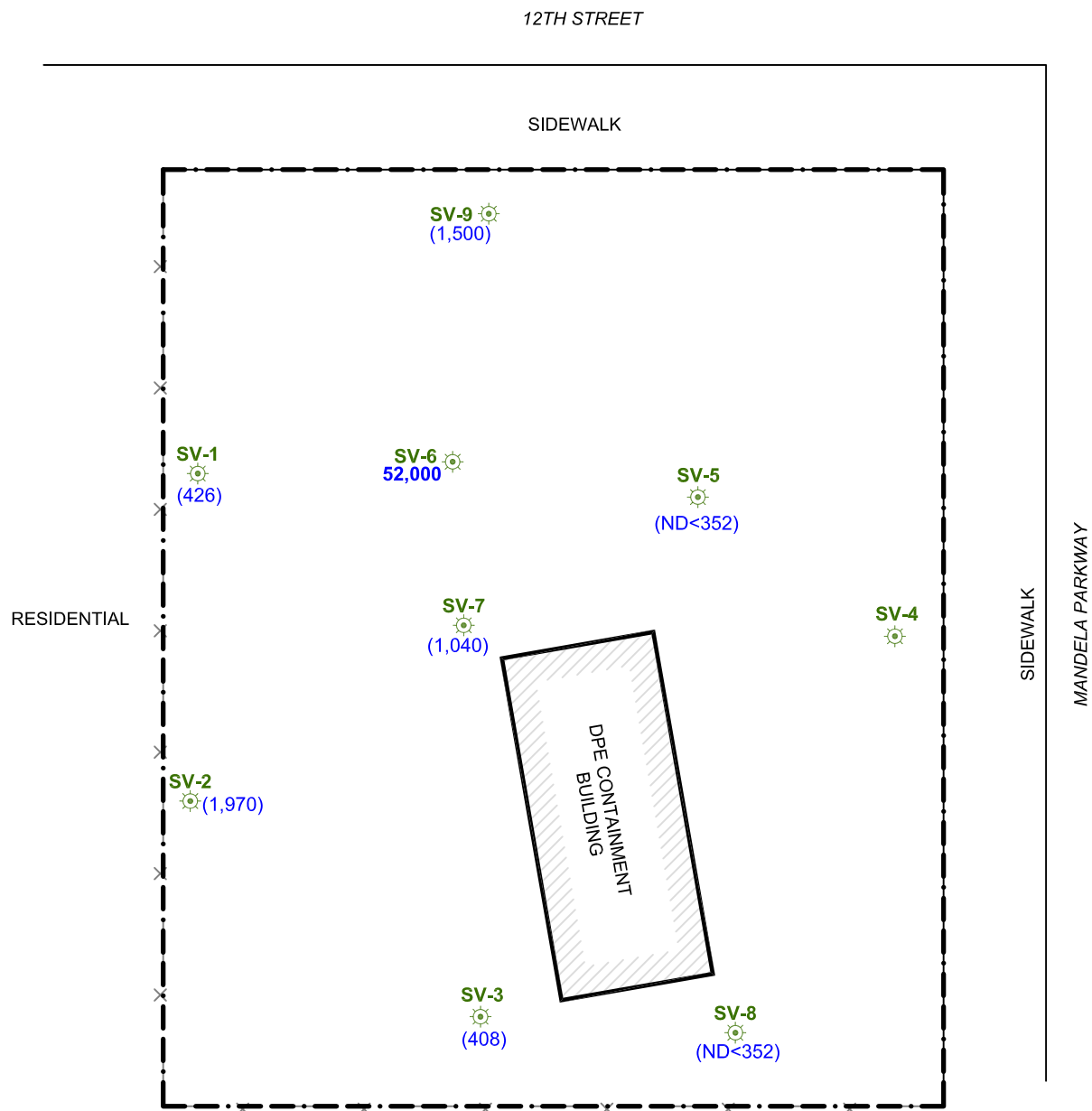


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Figure 12
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA

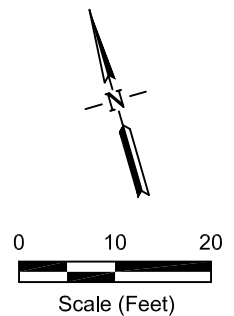
PROPOSED CLOSURE VERIFICATION SOIL BORING LOCATIONS

C:\Work\EnviroCAD\IES\1409-1417 12th Street\Corrective Action Closure Verification\Figure 13-14.dwg Layout: Fig 13 -TPHg Soil Vapor Apr 27, 2012 - 5:06pm



EXPLANATION:

- Approximate Property Boundary
- SV-1 Soil Vapor Sample Location
- (408) TPHg Results in Micrograms Per Liter (ug/L)



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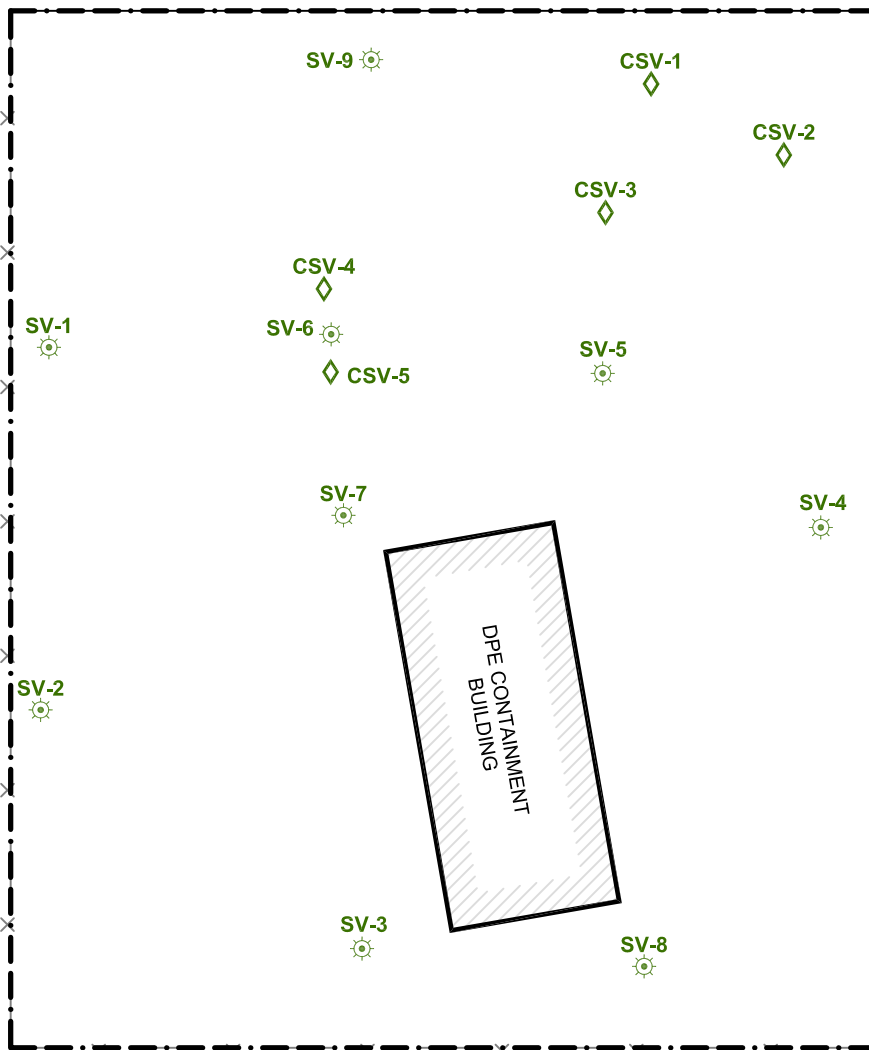
Figure 13
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
HISTORICAL TPHg RESULTS IN SOIL VAPOR SAMPLES

12TH STREET

SIDEWALK

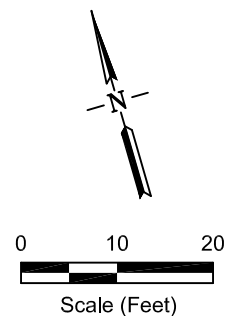
RESIDENTIAL

SIDEWALK
MANDELA PARKWAY



EXPLANATION:

-  Approximate Property Boundary
-  Soil Vapor Sample Location
-  Proposed Closure Verification Soil Vapor Boring Location



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Figure 14
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA

PROPOSED CLOSURE VERIFICATION SOIL VAPOR BORING LOCATIONS

Table 1
Groundwater Elevations_Annual 2011 Groundwater Monitoring Reoprt
1409-1417 12th Street
Oakland, California

Well No.	Top-of-Casing Elevation (feet, MSL) ¹	Date Measured	Floating Product Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet, MSL) ¹
MW-1	21.56	11/29/11	0.0	9.21	12.35
	21.29	06/08/11	0.0	11.91	9.38
		12/30/10	0.0	9.48	11.81
		07/27/10	0.0	11.49	9.80
		11/06/09	0.0	11.79	9.50
		07/26/09	0.0	11.81	9.48
		04/29/09	0.0	10.00	11.29
		01/25/09	0.0	12.40	8.89
		10/25/08	0.0	12.68	8.61
		07/27/08	0.0	11.99	9.30
		04/30/08	0.0	10.52	10.77
MW-2	20.68	11/29/11	0.0	8.39	12.29
	20.61	06/08/11	0.0	11.09	9.52
		12/30/10	0.0	8.53	12.08
		07/27/10	0.0	10.64	9.97
		11/06/09	0.0	11.01	9.60
		07/26/09	0.0	10.99	9.62
		04/29/09	0.0	9.51	11.10
		01/25/09	0.0	11.54	9.07
		10/25/08	0.0	11.90	8.71
		07/27/08	0.0	11.20	9.41
		04/30/08	0.0	9.64	10.97
MW-3	21.16	11/29/11	0.0	8.87	12.29
	21.09	06/08/11	0.0	10.53	10.56
		12/30/10	0.0	8.97	12.12
		07/27/10	0.0	11.10	9.99
		11/06/09	0.0	11.44	9.65
		07/26/09	0.0	11.42	9.67
		04/29/09	0.0	9.70	11.39
		01/25/09	0.0	12.00	9.09
		10/25/08	0.0	12.36	8.73
		07/27/08	0.0	11.65	9.44
		04/30/08	0.0	10.20	10.89
MW-4	20.40	11/29/11	0.0	8.08	12.32
	20.35	06/08/11	0.0	10.75	9.60
		12/30/10	0.0	8.07	12.28
		07/27/10	0.0	10.31	10.04
		11/06/09	0.0	10.69	9.66
		07/26/09	0.0	10.65	9.70
		04/29/09	0.0	8.88	11.47
		01/25/09	0.0	11.22	9.13
		10/25/08	0.0	11.55	8.80
		07/27/08	0.0	10.85	9.50
		04/30/08	0.0	9.43	10.92

Table 1
Groundwater Elevations_Annual 2011 Groundwater Monitoring Reoprt
1409-1417 12th Street
Oakland, California

Well No.	Top-of-Casing Elevation (feet, MSL) ¹	Date Measured	Floating Product Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet, MSL) ¹
MW-5	20.12	06/08/11	0.0	7.90	12.22
	20.05	06/08/11	0.0	10.52	9.53
		12/30/10	0.0	8.04	12.01
		07/27/10	0.0	10.10	9.95
		11/06/09	0.0	10.41	9.64
		07/26/09	0.0	10.42	9.63
		04/29/09	0.0	9.00	11.05
		01/25/09	0.0	10.98	9.07
		10/25/08	0.0	11.37	8.68
		07/27/08	0.0	10.68	9.37
		04/30/08	0.0	9.10	10.95
MW-6	19.73	11/29/11	0.0	7.45	12.22
	19.67	06/08/11	0.0	10.09	9.58
		12/30/10	0.0	7.57	12.10
		07/27/10	0.0	9.73	9.94
		11/06/09	0.0	10.02	9.65
		07/26/09	0.0	10.03	9.64
		04/29/09	0.0	8.25	11.42
		01/25/09	0.0	10.58	9.09
		10/25/08	0.0	10.92	8.75
		07/27/08	0.0	10.25	9.42
		04/30/08	0.0	8.60	11.07
MW-7	19.95	11/29/11	0.0	7.72	12.23
	19.88	06/08/11	0.0	10.33	9.55
		12/30/10	0.0	7.97	11.91
		07/27/10	0.0	9.89	9.99
		11/06/09	0.0	10.23	9.65
		07/26/09	0.0	10.21	9.67
		04/29/09	0.0	8.45	11.43
		01/25/09	0.0	10.79	9.09
		10/25/08	0.0	11.11	8.77
		07/27/08	0.0	10.41	9.47
		04/30/08	0.0	8.96	10.92
MW-8	20.93	11/29/11	0.0	8.70	12.23
	20.71	06/08/11	0.0	11.32	9.39
		12/30/10	0.0	8.75	11.96
		07/27/10	0.0	10.93	9.78
		11/06/09	NM	NM	NM
		07/26/09	0.0	11.07	9.64
		04/29/09	0.0	10.68	10.03
		01/25/09	0.0	11.63	9.08
		10/25/08	0.0	12.00	8.71
		07/27/08	0.0	11.29	9.42
		04/30/08	0.0	9.82	10.89
GW-1	20.29	11/29/11	0.0	8.07	12.22
	20.23	06/08/11	0.0	10.68	9.55

Table 1
Groundwater Elevations_Annual 2011 Groundwater Monitoring Reoprt
1409-1417 12th Street
Oakland, California

Well No.	Top-of-Casing Elevation (feet, MSL) ¹	Date Measured	Floating Product Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet, MSL) ¹
		12/30/10	0.0	8.12	12.11
		07/27/10	0.0	10.26	9.97
		11/06/09	NM	NM	NM
		07/26/09	0.0	10.59	9.64
		04/29/09	0.0	8.86	11.37
		01/25/09	0.0	11.15	9.08
		10/25/08	0.0	11.51	8.72
		07/27/08	0.0	10.81	9.42
		04/30/08	0.0	9.34	10.89
GW-2	20.29	11/29/11	0.0	8.35	11.94
	20.57	06/08/11	0.0	11.03	9.54
		12/30/10	0.0	8.48	12.09
		07/27/10	0.0	10.61	9.96
		11/06/09	0.0	10.93	9.64
		07/26/09	0.0	11.21	9.36
		04/29/09	0.0	8.80	11.77
		01/25/09	0.0	11.50	9.07
		10/25/08	0.0	11.82	8.75
		07/27/08	0.0	11.16	9.41
		04/30/08	0.0	9.70	10.87
GW-3	20.28	11/29/11	0.0	8.06	12.22
	20.57	06/08/11	0.0	10.67	9.90
		12/30/10	0.0	7.67	12.90
		07/27/10	0.0	10.24	10.33
		11/06/09	0.0	10.64	9.93
		07/26/09	0.0	10.89	9.68
		04/29/09	0.0	9.16	11.41
		01/25/09	0.0	11.49	9.08
		10/25/08	0.0	11.92	8.65
		07/27/08	0.0	11.12	9.45
		04/30/08	0.0	9.60	10.97

Re-surveyed DPE, MW, and GW Wells on 4-12-2012 applied to November 29, 2011 gauged measurements

MSL= Mean Sea Level

NM= Not measured or gauged

Table 2
Well Groundwater Elevations_Annual 2011 Groundwater Monitoring Report
1409-1417 12th Street
Oakland, California

Well No.	Top-of-Casing Elevation (feet, MSL) ¹	Date Measured	Floating Product Thickness (feet)	Depth to Water (feet)	Groundwater Elevation (feet, MSL) ¹
DPE-1	19.54	11/29/11	0.0	9.92	9.62
	19.52	06/08/11	0.0	7.34	12.18
		10/11/10	0.0	10.44	9.08
DPE-1B	19.88	11/29/11	0.0	10.25	9.63
	19.85	06/08/11	0.0	7.65	12.20
		10/11/10	0.0	10.75	9.10
DPE-2	19.52	11/29/11	0.0	9.93	9.59
	19.51	06/08/11	0.0	7.31	12.20
		10/11/10	0.0	10.41	9.10
DPE-2B	20.03	11/29/11	0.0	10.40	9.63
	20.00	06/08/11	0.0	7.78	12.22
		10/11/10	0.0	10.88	9.12
DPE-3	19.43	11/29/11	0.0	9.80	9.63
	19.40	06/08/11	0.0	7.20	12.20
		10/11/10	0.0	10.28	9.12
DPE-5	20.05	11/29/11	0.0	10.45	9.60
	20.02	06/08/11	0.0	7.83	12.19
		10/11/10	0.0	10.92	9.10
DPE-6	19.53	11/29/11	0.0	9.90	9.63
	19.54	06/08/11	0.0	7.31	12.23
		10/11/10	0.0	10.42	9.12
DPE-7	19.79	11/29/11	0.0	10.40	9.39
	19.76	06/08/11	0.0	7.55	12.21
		10/11/10	0.0	10.62	9.14

Notes: MSL=Mean Sea Level

Re-surveyed DPE, MW, and GW Wells on 4-12-2012 applied to November 29, 2011 gauged measurements

Table 2
First Semiannual 2011 Groundwater Analytical Results
1409-1417 12th Street,
Oakland, California

Sample ID	Date Sampled	TPHg (ug/L)	TPHd (ug/L)	TPHmo (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	TBA (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)
MW-1	12/02/11	<50	<100	<210	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	76 Y	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<55	<100	<200	<0.55	<0.55	<0.55	<1.6	<0.55	<5.5	<0.55	<0.55	<0.55
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	95x	<100	<200	1.68	1.17	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<64	<100	<200	<0.645	<0.645	<0.645	<1.94	<0.645	<12.9	<0.645	<0.645	<0.645
	04/30/08	54x	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	NA	NA	NA	NA
MW-2	12/01/11	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	7/27/010	<50	<120	<240	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<0.50	<0.50	<0.50
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	NA	NA	NA	NA
MW-3	12/02/11	<50	<100	<210	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	07/27/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<0.50	<0.50	<0.50
	07/26/09	<50	<120	<230	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<58	<100	<200	<0.580	<0.580	<0.580	<1.74	<0.580	<11.6	<0.580	<0.580	<0.580
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	NA	NA	NA	NA
Residential ESL (DWS)		100	100	100	1	40	30	20	5	12	na	na	na
Residential ESL (NDWS)		500	640	640	46	130	290	100	1,800	18,000	na	na	na

Table 2
First Semiannual 2011 Groundwater Analytical Results
1409-1417 12th Street,
Oakland, California

Sample ID	Date Sampled	TPHg (ug/L)	TPHd (ug/L)	TPHmo (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MtBE (ug/L)	TBA (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)
MW-4	12/02/11	<50	<100	<210	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<150	<250	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	07/27/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<0.50	<0.50	<0.50
	07/26/09	<50	<110	<220	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500
	10/25/08	61x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.0500	<0.500
	04/30/08	<58	<100	<200	<0.610	<0.610	<0.610	<1.83	<0.610	NA	NA	NA	NA
MW-5	12/01/11	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	07/27/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<0.50	<0.50	<0.50
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	<58	<100	<200	<0.580	<0.580	<0.580	<1.50	<0.580	NA	NA	NA	NA
MW-6	12/02/11	<50	<110	<220	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/0.5		<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<5.0	<0.50	<0.50	<0.50
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	72x	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	53x	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	NA	NA	NA	NA
Residential ESL (DWS)		100	100	100	1	40	30	20	5	12	na	na	na
Residential ESL (NDWS)		500	640	640	46	130	290	100	1,800	18,000	na	na	na

Table 2
First Semiannual 2011 Groundwater Analytical Results
1409-1417 12th Street,
Oakland, California

Sample ID	Date Sampled	TPHg (ug/L)	TPHd (ug/L)	TPHmo (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MtBE (ug/L)	TBA (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)
MW-7	12/01/11	<50	<100	<200	<0.5	<0.5	<0.5	<1.0/0.50	<0.5	<10	<0.5	<0.5	<0.5
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	07/28/10	<50	<120	<230	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	<50	<100	293x	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.50	<0.500	NA	NA	NA	NA
MW-8	12/01/11	<50	<100	<200	<0.50	<0.50	<0.50	<1.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	71Y	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	10/12/10	79x	<100	<200	<0.50	1.0	1.6	<2.5/<2.2	<0.50	NA	NA	NA	<0.50
	07/28/10	<50	<110	<230	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/12/09	220x	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	110	156x	909x	1.4	0.81	2.4	6.1	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	190x	<100	<200	2.10	1.47	4.94	11.8	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	240x	<100	<200	1.41	<0.500	<0.500	3.13	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	198x	<100	<200	5.37	1.25	3.77	13.3	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	1049x	161x	<200	13.9	12.4	9.76	160	<0.500	NA	NA	NA	NA
GW-1	12/01/11	66	<110	<220	0.52	<0.50	0.85	1.4/3.1	<0.50	11	<0.50	<0.50	<0.50
	06/08/11	230	210Y	<300	1.8	0.6	4.5	11/8.2	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	100	<200	<0.50	<0.50	<0.50	<1.0/0.93	<0.50	<5.0	<0.50	<0.50	<0.50
	10/12/10	120x	<100	<200	0.71	0.70	1.3	2.1/1.9	<0.50	NA	NA	NA	NA
	07/28/10	89x	<100	<200	0.65	<0.50	<0.50	1.0/1.3	<0.50	NA	NA	NA	NA
	11/12/09	120x	138x	<200	3.9	<0.50	2.1	12	<0.50	<10.0	<0.50	<0.50	<0.50
	07/26/09	5,700	540x	<200	1,100	54	120	100	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	22,000	3,010x	<800	3,000	580	830	2,100	<22	<440	<22	<22	<22
	01/24/09	9,900	767x	<200	1,600	174	315	915	<4.40	<88.0	<4.40	<4.40	<4.40
	10/25/08	7200x	1020x	296x	1,010	161	89.8	693	<2.20	<44.0	<2.20	<2.20	<2.20
	07/27/08	18,000	1060x	<200	3,360	146	533	1,450	<22.0	<440	<22.0	<22.0	<22.0
	04/30/08	37,000	7.25x	<2000	2,400	769	378	3,450	<22.0	NA	NA	NA	NA
Residential ESL (DWS)		100	100	100	1	40	30	20	5	12	na	na	na
Residential ESL (NDWS)		500	640	640	46	130	290	100	1,800	18,000	na	na	na

Table 2
First Semiannual 2011 Groundwater Analytical Results
1409-1417 12th Street,
Oakland, California

Sample ID	Date Sampled	TPHg (ug/L)	TPHd (ug/L)	TPHmo (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MtBE (ug/L)	TBA (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)
GW-2	12/01/11	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/0.5	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	07/26/09	550	<110	<230	25	9.5	12	79	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	82	<100	205x	1.7	1.1	1.2	4.5	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.0500	<0.500
	10/25/08	100x	126x	338x	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	61x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	15.3	<0.500	<0.500	<0.500
	04/30/08	<74x	<100	<200	<0.500	<0.500	<0.500	<0.500	<0.500	NA	NA	NA	NA
GW-3	12/01/11	<50	<100	<200	0.59	0.62	<0.50	1.1/0.87	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	120Y	340	10	<0.5	2.5	2.2/0.7	<0.5	<10	<0.5	<0.5	<0.5
	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	<5.0	<0.50	<0.50	<0.50
	10/12/10	180x	<100	<200	4.1	6.0	7.1	11/9.7	<0.50	NA	NA	NA	NA
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.50	<0.50	NA	NA	NA	NA
	11/12/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	0.72	<10.0	<0.50	<0.50	<0.50
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50
	04/28/09	500x	<100	206x	63	0.63	<0.50	2.9	<0.50	<10	<0.50	<0.50	<0.50
	01/24/09	<50	<100	<200	0.740	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.0500	<0.500
	10/25/08	100x	<100	<200	8.47	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	63x	<100	200	3.27	<0.500	<0.500	<1.50	<0.500	<10.0	<0.500	<0.500	<0.500
	04/30/08	250	<100	<200	46.5	1.36	2.16	6.27	<0.500	NA	NA	NA	NA
<i>Residential ESL (DWS)</i>		<i>100</i>	<i>100</i>	<i>100</i>	<i>1</i>	<i>40</i>	<i>30</i>	<i>20</i>	<i>5</i>	<i>12</i>	<i>na</i>	<i>na</i>	<i>na</i>
<i>Residential ESL (NDWS)</i>		<i>500</i>	<i>640</i>	<i>640</i>	<i>46</i>	<i>130</i>	<i>290</i>	<i>100</i>	<i>1,800</i>	<i>18,000</i>	<i>na</i>	<i>na</i>	<i>na</i>

Abbreviations and Methods:

NA = Not analyzed for particular constituent of concern

na = Not applicable

x = Chromatogram does not resemble typical pattern for specific TPH compound or other non-trageted hydrocarbons causing potetially biasing data

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8260

TPHd= Total Petroleum Hydrocarbons as diesel by EPA Method 8015

TPHmo= Total Petroleum Hydrocarbons as motor oil by EPA Method 8015

DIPE= Diisopropyl Ether

ETBE= Ethyl tert-butyl ether

MTBE = methyl-tert-butyl ether (MTBE)

t-Butanol= tert-Butyl Alcohol (TBA)

TAME= tert-Amyl methyl ether

Xylenes are separated into o-xylene and m,p-xylene and reported as m,p-xylene/o-xylene

Benzene, , toluene, ethylbenzene, xylenes, MTBE, DIPE, ETBE, TAME, and t-Butanol by EPA Method 8260

ESL= San Francisco Bay Regional Water Quality Control Board, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, May 2008.

DWS- Groundwater beneath site is a drinking water source NDWS- Groundwater beneath site is not a drinking water source

Table 3
First Semiannual 2011
DPE Well Groundwater Analytical Results
1409-1417 12th Street Oakland, California

	Date	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	ETBE	DIPE	TAME
Sample ID	Sampled	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
DPE-1	12/01/11	<50	<100	<200	<0.50	<0.50	<0.50	<0.50/ 1.0	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/ 0.5	<0.5	<10	<0.5	<0.5	<0.5
	10/11/10	50	<100	<200	<0.50	<0.50	0.84	1.3/ 1.3	<0.50	NA	NA	NA	NA
DPE-1B	12/01/11	<50	<100	<200	<0.50	<0.50	<0.50	<0.50/ 1.0	<0.50	<5.0	<0.50	<0.50	<0.50
	06/09/11	<50	<50	<300	<0.5	<0.5	<0.5	<0.5/ 0.5	<0.5	<10	<0.5	<0.5	<0.5
	10/12/10	98x	<100	<200	<0.50	1.1	1.8	3.0/ 2.4	<0.5	NA	NA	NA	NA
DPE-2	12/01/11	<50	<110	<220	<0.50	<0.50	<0.50	0.50/ 1.0	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	<50	<300	<0.5	<0.5	<0.5	0.5/ 0.5	<0.5	<10	<0.5	<0.5	<0.5
	10/11/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/ 0.50	<0.50	NA	NA	NA	NA
DPE-2B	12/01/11	<50	<100	<210	<0.50	<0.50	<0.50	0.50/ 1.0	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	110Y	<300	<0.5	<0.5	<0.5	0.5/ 0.5	<0.5	<10	<0.5	<0.5	<0.5
	10/12/10	100x	<100	<200	6.8	1.4	2.2	3.4/ 2.8	<0.50	NA	NA	NA	NA
DPE-3	12/01/11	66	<100	<210	7.7	3.2	1.8	7.5/9.8	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	1,100	280Y	<300	53	62	42	75/ 60	<0.5	<10	<0.5	<0.5	<0.5
	10/12/10	1600x	170x	<200	93	21	63	55/ 54	<0.50	NA	NA	NA	NA
DPE-5	12/01/11	<50	<100	<210	<0.50	<0.50	<0.50	0.50/ 1.0	<0.5	<5.0	<0.50	<0.50	<0.50
	06/08/11	52	<50	<300	1.6	<0.5	<0.5	5.0/ 3.9	<0.5	<10	<0.5	<0.5	<0.5
	10/11/10	87	<100	<200	7.5	0.78	2.9	2.0/ 1.4	<0.50	NA	NA	NA	NA
DPE-6	12/01/11	<50	<100	<210	<0.50	<0.50	<0.50	0.50/ 1.0	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	100Y	<300	<0.5	<0.5	<0.5	0.5/ 0.5	<0.5	<10	<0.5	<0.5	<0.5
	10/11/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/ 0.50	<0.50	NA	NA	NA	NA
DPE-7	12/01/11	<50	<100	<200	<0.50	<0.50	<0.50	0.50/ 1.0	<0.50	<5.0	<0.50	<0.50	<0.50
	06/08/11	<50	130Y	<300	<0.5	<0.5	<0.5	0.5/ 0.5	<0.5	<10	<0.5	<0.5	<0.5
	10/11/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/ 0.50	<0.50	NA	NA	NA	NA
Residential ESL (DWS)		100	100	100	1	40	30	20	5	12	NA	NA	NA
Residential ESL (NDWS)		500	640	640	46	130	290	100	1,800	18,000	NA	NA	NA

Abbreviations and Methods:

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8260

TPHd= Total Petroleum Hydrocarbons as diesel by EPA Method 8015

TPHmo= Total Petroleum Hydrocarbons as motor oil by EPA Method 8015

Benzene, methyl-tert-butyl ether, toluene (MTBE), ethylbenzene, and xylenes by EPA Method 8260

Xylenes are separated into m,p-xylene and o-xylene and reported as m,p-xylene/o-xylene

ug/L= Micrograms per liter, equivalent to parts per billion (ppb)

ESL= San Francisco Bay Regional Water Quality Control Board, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, May 2008.

DWS- Groundwater beneath site is a drinking water source

NDWS- Groundwater beneath site is not a drinking water source

Sample ID	ESL	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	GW-1	GW-2	GW-3
Sample Date Units	(ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)
Freon 12	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acetone	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Freon 113	N/A	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans -1, 2-Dichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Acetate	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5
2-Butanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Methyl-2-Pentanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans -1, 3-Dichloropropene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Hexanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromomethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5
1,1,2,2-Tetrachloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Propylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	0.5
Bromobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.3	<0.5	<0.5
2-Chlorotoluene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chlorotoluene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	18	<0.5	2.2
sec-Butylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
para-Isopropyl Toluene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5
1,2-Dichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-Chloropropane	N/A	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	N/A	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Napthalene	17	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	<2.0
1,2,3-Trichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes and abbreviations:

mg/kg - milligrams per kilogram

< - not detected at the method detection limit shown.

NA - Compound not analyzed using this EPA Method.

ND - All compounds not in EPA Method 8270 not detected above respective reporting limits.

ESL= San Francisco Bay Regional Water Quality Control Board, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, May 2008.

Sample ID	ESL	DPE-1	DPE-1B	DPE-2	DPE-2B	DPE-3	DPE-5	DPE-6	DPE-7
Sample Date Units	(ug/L)	6/8/2011 (ug/L)	6/9/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)	6/8/2011 (ug/L)
Freon 12	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl Chloride	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromomethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Acetone	N/A	<10	<10	<10	<10	<10	<10	<10	<10
Freon 113	N/A	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methylene Chloride	N/A	<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans -1, 2-Dichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl Acetate	N/A	<10	<10	<10	<10	<10	<10	<10	<10
1,1-Dichloroethane	5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5
2-Butanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,2-Dichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2-Dichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-Dichloropropene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon Tetrachloride	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	N/A	1.8	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-Methyl-2-Pentanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans -1, 3-Dichloropropene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-Hexanone	N/A	<10	<10	<10	<10	<10	<10	<10	<10
1,3-Dichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromomethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-Tetrachloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform	N/A	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	2.9	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-Trichloropropane	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Propylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	7.7	<0.5	<0.5	<0.5
Bromobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-Trimethylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	14	0.7	<0.5	<0.5
2-Chlorotoluene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1-Chlorotoluene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-Butylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-Trimethylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	50	2.2	<0.5	<0.5
sec-Butylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
para-Isopropyl Toluene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-Butylbenzene	N/A	<0.5	<0.5	<0.5	<0.5	3.0	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-Dibromo-3-Chloropropane	N/A	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	N/A	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Napthalene	17	<2.0	<2.0	<2.0	<2.0	14	<2.0	<2.0	<2.0
1,2,3-Trichlorobenzene	N/A	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes and abbreviations:

mg/kg - milligrams per kilogram

< - not detected at the method detection limit shown.

NA - Compound not analyzed using this EPA Method.

ND - All compounds not in EPA Method 8270 not detected above respective reporting limits.

ESL= San Francisco Bay Regional Water Quality Control Board, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, May 2008.

APPENDIX A

Well Gauging Data Sheets & Well Sampling Data Sheets **(June 2011 & November 2011)**

IMPACT ENVIRONMENTAL

WELL GAUGING DATA

Project Number THMP-2011 Date June 6, 2011

Site Location 1409 12TH Street, Richmond, California

Well ID	Time	Well Size (inches)	Depth to Water (feet bgs)	Total Depth of Well (feet bgs)	Sheen/Odor	Depth to Immiscible Liquid	Thickness Immiscible Liquid	Notes:
MW-1	4:02	2	9.21	14.07		N/A	N/A	
MW-2	4:04	2	8.39	14.02		N/A	N/A	
MW-3	4:18	2	8.87	14.72		N/A	N/A	
MW-4	4:14	2	8.08	14.02		N/A	N/A	
MW-5	4:00	2	7.90	13.89		N/A	N/A	
MW-6	4:12	2	7.45	14.00		N/A	N/A	
MW-7	4:10	2	7.72	13.95		N/A	N/A	
MW-8	4:39	2	8.70	20.45		N/A	N/A	
GW-1	4:20	4	8.07	17.11		N/A	N/A	
GW-2	4:10	4	8.35	17.11		N/A	N/A	
GW-3	4:22	4	8.00	18.08		N/A	N/A	
DPE-1	4:08	4	7.34	20.34		N/A	N/A	
DPE-1B	4:24	4	7.65	26.65		N/A	N/A	
DPE-2	4:26	4	7.31	20.02		N/A	N/A	
DPE-2B	4:33	4	7.78	27.77		N/A	N/A	
DPE-3	4:35	4	7.20	20.32		N/A	N/A	
DPE-5	4:28	4	7.83	20.05		N/A	N/A	
DPE-6	4:30	4	7.31	18.74		N/A	N/A	
DPE-7	4:37	4	7.55	20.15		N/A	N/A	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-1 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 14.07
 Diameter: 2"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 9.21
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

Comments:
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
5:40	start	0	6.75	17.3	836		Clear	None
5:45		1.5	6.81	16.9	927		Cloudy Brown	"
5:51		3	6.90	17.0	877		cloudy brown	none
5:59		4.5	6.93	16.8	851		cloudy brown	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	MW-1

14.07 4.80 .792
 - 9.21 x .103 x 3
 4.80 .792 3 gal

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-2 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 14.02 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 8.39
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
3:32	start	0	6.30	22.1	191		cloudy	none
3:34		1	6.34	20.7	196		muddy cloudy	none
3:35		2	6.35	20.0	200		muddy cloudy	none
3:37		3	6.45	19.7	197		muddy cloudy	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	MW-2	

$$\begin{array}{r}
 14.02 \\
 - 8.39 \\
 \hline
 5.63
 \end{array}
 \quad
 \begin{array}{r}
 5.63 \\
 \times .163 \\
 \hline
 .917
 \end{array}
 \quad
 \begin{array}{r}
 .917 \\
 \times 3 \\
 \hline
 3 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 14.72 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Teflon Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 8.87 2" Well = 0.163 gallons per foot
 Final: _____ 4" Well = 0.653 gallons per foot
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
5:42	start	0	6.71	17.2	713		Clear	None
5:43		1	6.87	17.0	758		Opaque	None
5:57		2	6.86	16.9	727		cloudy	none
6:05		3	6.80	16.3	768		cloudy brown	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	MW-3

14.72 5.85 .953
 * 8.87 x .163 x 3
 5.85 .953 3 gal

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

8

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-4 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 14.02 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 8.08
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1:57	start	0	6.52	21.5	370		cloudy	no
1:59		1.5	6.56	21.0	372		cloudy	no
2:34		2.5	6.46	21.9	343		cloudy	no
2:36		3.5	6.53	21.2	360		cloudy	no

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	MW-4	

IMPACT ENVIRONMENTAL

$$\begin{array}{r}
 14.02 \\
 - 8.08 \\
 \hline
 5.94
 \end{array}
 \quad
 \begin{array}{r}
 5.94 \\
 \times 0.163 \\
 \hline
 .968
 \end{array}
 \quad
 \begin{array}{r}
 .968 \\
 \times 3 \\
 \hline
 2.904
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-5 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 13.89 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 7.09
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp °F	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
11:58	start	0	6.30	24.1	303		clear	none
12:00		1	6.37	21.3	374		clear	none
12:04		2	6.45	20.8	397		clear cloudy	none
12:10		4	6.34	21.5	348		cloudy	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	Mw-5	

IMPACT ENVIRONMENTAL

13.89 4.80 1.11
 - 7.09 x 1.163 x 3
 4.80 1.11 3.33 gal

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-0 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 14.60 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

Ground Water Levels:

pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 7.45
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F) C°	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
5:11	start	0	6.79	19.4	300		clear	none
5:16		1.5	6.93	19.3	317		cloudy	none
5:17		3	6.83	19.2	302		cloudy	none
5:21		4	6.85	19.1	303		cloudy	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	MW-0

$$\begin{array}{r}
 14.60 \\
 7.45 \\
 \hline
 7.15
 \end{array}
 \quad
 \begin{array}{r}
 7.15 \\
 \times 1.63 \\
 \hline
 1.16
 \end{array}
 \quad
 \begin{array}{r}
 1.16 \\
 \times 3 \\
 \hline
 3.5 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 6, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-7 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 13.95 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 7.72
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F) C	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1:18	start	0	6.39	21.8	341		clear	none
1:25		1.5	6.43	21.6	341		cloudy	none
1:27		2.5	6.46	22.1	334		cloudy	none
1:28		3.5	6.48	21.4	333		cloudy	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	MW-7

$$\begin{array}{r}
 13.95 \\
 - 7.72 \\
 \hline
 6.23
 \end{array}
 \quad
 \begin{array}{r}
 6.23 \\
 \times 1.63 \\
 \hline
 1.01
 \end{array}
 \quad
 \begin{array}{r}
 1.01 \\
 \times 3 \\
 \hline
 3.05 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: MW-8 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 27.45 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

Ground Water Levels:

Initial: 8.70 pH Meter: HANNA
 Final: _____ Conductivity Meter: HANNA
 Reference Point: Black Mark on Top of Casing Comments: _____
 Well Volume of Water: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
4:00	start	0	6.42	22.8	711		clear	None
4:11		3	6.44	20.5	684		clear	None
4:22		6	6.51	19.4	685		clear	none
4:34		10	6.45	20.1	688		clear	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	MW-8	

$$\begin{array}{r}
 27.45 \\
 - 8.70 \\
 \hline
 18.75
 \end{array}
 \quad
 \begin{array}{r}
 18.95 \\
 \times 1.63 \\
 \hline
 3.08
 \end{array}
 \quad
 \begin{array}{r}
 3.08 \\
 \times 3 \\
 \hline
 10 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: GW-1 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 17.11 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Suction Pump or Teflon Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

Ground Water Levels:

pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 8.07
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F) C°	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
3:55	start	0	6.34	23.4	497		clear with partic.	yes
4:17		6	6.52	20.8	523		clear	yes
4:33		12	6.58	20.3	482		clear	yes
4:59		18	6.63	19.5	424		clear	yes

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	GW-1

$$\begin{array}{r}
 17.11 \\
 8.07 \\
 \hline
 9.04
 \end{array}
 \quad
 \begin{array}{r}
 9.04 \\
 \times 0.53 \\
 \hline
 5.90
 \end{array}
 \quad
 \begin{array}{r}
 5.90 \\
 \times 3 \\
 \hline
 18 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 6, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: GW-2 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 17.11
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 8.35
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1:13	start	0	6.18	23.2	326		clear	no
1:33		6	6.47	22.0	194		clear	no
1:57		12	6.30	22.0	247		cloudy	no
2:19		18	6.28	22.0	230		clear	no

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	GW-2	

17.11 8.76 5.72
 8.35 x 0.653
 8.76 5.72 18 gal

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 6, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: GW-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 18.08
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Ground Water Levels:

Initial: 8.06
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
4:59	start	0	6.41	19.0	943		clear	no
5:23		10	6.45	18.5	893		clear	yes
5:49		15	6.42	18.3	850		clear	yes
6:10		20	6.34	18.0	842		clear	yes

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	GW-3

$$\begin{array}{r}
 18.08 \\
 - 8.06 \\
 \hline
 10.02
 \end{array}
 \quad
 \begin{array}{r}
 10.02 \\
 \times 0.53 \\
 \hline
 4.54
 \end{array}
 \quad
 \begin{array}{r}
 0.54 \\
 \times 3 \\
 \hline
 1.62 \approx 20 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 6, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-1 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 20.34 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Suction Pump or Teflon Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 7.34
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F) C°	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
11:30	start	0	6.57	22.7	650		Cloudy Brown	None
12:13		10	6.31	22.1	510		clear	none
12:35		20	6.33	23.0	485		clear	none
12:54		26	6.32	23.0	473		clear	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409_GW SAMPLING	June 2011	DPE-1	

IMPACT ENVIRONMENTAL

$$\begin{array}{r}
 20.34 \\
 - 7.34 \\
 \hline
 13.00
 \end{array}
 \quad
 \begin{array}{r}
 13.00 \\
 \times 0.653 \\
 \hline
 8.48
 \end{array}
 \quad
 \begin{array}{r}
 8.48 \\
 \times 3 \\
 \hline
 25.44 \approx 20
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 9, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-1B Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 26.65
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 7.65
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
4:55	start	0	6.49	20.9	602		Clear	None
5:20		10	6.45	20.4	601		Clear	None
6:00		20	6.44	20.9	585		Clear	None
6:30		30	6.49	19.9	574		Clear	None
7:03		40	6.48	19.5	567		Clear	None

Total Discharge: 40 gallons Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409_GW SAMPLING	June 2011	DPE-1B	

$$\begin{array}{r}
 26.65 \\
 - 7.65 \\
 \hline
 19.00
 \end{array}
 \quad
 \begin{array}{r}
 19.00 \\
 \times 0.53 \\
 \hline
 12.4
 \end{array}
 \quad
 \begin{array}{r}
 12.40 \\
 \times 3 \\
 \hline
 37.2
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-2 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 20.02 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 7.31 2" Well = 0.163 gallons per foot
 Final: _____ 4" Well = 0.653 gallons per foot
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:43	start	0	6.44	25.3	338		slightly cloudy	none
1:35		10	6.42	23.8	331		cloudy	none
2:25		20	6.44	22.6	333		cloudy	none
2:40		25	6.40	23.0	335		slightly cloudy	none

Total Discharge: _____ Comments: well had been clogged with sand @
 Casing Volumes Removed: 3+ initial reading
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	DPE-2	

$$\begin{array}{r}
 20.02 \\
 - 7.31 \\
 \hline
 12.71
 \end{array}
 \quad
 \begin{array}{r}
 12.71 \\
 \times 0.53 \\
 \hline
 8.24
 \end{array}
 \quad
 \begin{array}{r}
 8.24 \\
 \times 3 \\
 \hline
 24.8 \approx 25 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-2B Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 27.77 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 7.78 2" Well = 0.163 gallons per foot
 Final: _____ 4" Well = 0.653 gallons per foot
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F) C°	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
4:10	start	0	6.32	20.3	711		clear	none
5:19		15	6.35	18.4	688		clear	none
6:12		30	6.37	17.7	675		clear	none
6:47		40	6.40	17.0	676		clear	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	DPE-2B	

$$\begin{array}{r}
 27.77 \\
 - 7.78 \\
 \hline
 19.99
 \end{array}
 \quad
 \begin{array}{r}
 19.99 \\
 \times 0.53 \\
 \hline
 13.05
 \end{array}
 \quad
 \begin{array}{r}
 13.05 \\
 \times 3 \\
 \hline
 39.16 \approx 40 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 20.32 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water

Ground Water Levels:

Initial: 7.20 Comments: _____
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:49	start	0	6.37	24.4	689		gray w/particles	yes
1:22		10	6.31	22.1	709		clear w/particles	yes
1:54		20	6.24	24.0	704		clear	yes
2:11		25	6.26	22.9	682		clear	yes

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	DPE-3	

$$\begin{array}{r}
 20.32 \\
 - 7.20 \\
 \hline
 13.12
 \end{array}
 \quad
 \begin{array}{r}
 13.12 \\
 \times 1.653 \\
 \hline
 8.50
 \end{array}
 \quad
 \begin{array}{r}
 8.50 \\
 \times 3 \\
 \hline
 25.7 \approx 26 \text{ gal}
 \end{array}$$

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-5 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 20.05
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 7.83
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
5:44	start	0	6.44	19.0	557		clear	none
5:47		10	6.47	17.7	533		clear	yes
6:40		20	6.45	17.6	529		clear	yes
6:51		24	6.46	17.3	529		clear	yes

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

GROUNDWATER SAMPLING DATA SHEET			
1409 12th Street, Oakland, California			
Project No.	Date	Well	
1409 GW SAMPLING	June 2011	DPE-5	

20.05
 - 7.83
 12.22
 12.22
 12.22
 x .653
 7.97
 7.97
 x 3
 23.91 25 gal

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

8

Project Name: 1409 12th Street, OAKLAND, CA Date: June 6, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-4 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 18.76 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 7.31 2" Well = 0.163 gallons per foot
 Final: _____ 4" Well = 0.653 gallons per foot
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
4:53	start	0	6.50	19.2	984		Clear	Note
5:23		7	6.40	18.0	741		clear	none
6:07		14	6.43	17.6	802		clear	none
6:37		23	6.43	17.7	738		clear	Note

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	DPE-4

18.76 11.45 7.47
 7.31 1.653 1.3

 11.45 7.47 22.4 ≈ 23 gal

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: June 8, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton
 Well Number: DPE-7 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 20.15
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 7.55
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F) C	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:41	start	0	6.58	25.3	747		clear	none
1:15		10	6.43	22.1	817		clear	none
1:47		20	6.41	22.4	777		clear	none
2:03		25	6.46	21.9	710		clear	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: Incorporated into on-site DPE groundwater treatment system

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	June 2011	DPE-7

20.15 12.60 8.22
 - 7.55 x .653 x 3
 12.60 8.22
 24.6 ~ 25 gal

IMPACT ENVIRONMENTAL

WELL GAUGING DATA

Project Number 1409 12th Street_QGWM Date November 29, 2011

Site Location 1409 12TH Street, Richmond, California

Well ID	Time	Well Size (inches)	Depth to Water (feet bgs)	Total Depth of Well (feet bgs)	Sheen/Odor	Depth to Immiscible Liquid	Thickness Immiscible Liquid	Notes:
MW-1	1:58	2	11.91	13.92		N/A	N/A	blue mark
MW-2	2:03	2	11.09	13.91		N/A	N/A	red mark
MW-3	2:08	2	10.32	13.59		N/A	N/A	red
MW-4	2:13	2	10.75	13.90		N/A	N/A	black
MW-5	2:05	2	10.52	13.85		N/A	N/A	black
MW-6	2:10	2	10.09	14.44		N/A	N/A	black
MW-7	2:14	2	10.75 ³³	13.81		N/A	N/A	red
MW-8	2:40	2	11.32	27.55		N/A	N/A	
GW-1	2:37	4	10.68	17.05		N/A	N/A	
GW-2	2:35	4	11.03	17.00		N/A	N/A	red/black
GW-3	2:31	4	10.67	17.98		N/A	N/A	
DPE-1	2:25	4	9.92	20.34				black
DPE-1B	2:38	4	10.25	26.65				black
DPE-2	2:23	4	9.93	20.02				black
DPE-2B	2:28	4	10.40	27.77				black
DPE-3	2:43	4	9.80	20.32				
DPE-5	2:33	4	10.45	20.05				black
DPE-6	2:21	4	9.90	18.76				black
DPE-7	2:19	4	10.14	20.15				black

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: December 1, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: MW-1 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record Sampler Type: Teflon Bailer
 Total Depth of Well: 13.92 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Initial: 11.91
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $13.92 - 11.91 = 2.01 \times 0.163 = .32 \times 3 \text{ well volumes} = .98 \text{ gal.}$

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
2:15 PM	start	0	6.52	66.9°	888		Clear	NONE
2:22 PM		0.5	6.48	66.0°	879		DARK OPAQUE	NONE
2:28 PM		1.1	6.61	66.1°	872		DARK OPAQUE	NONE
2:35		1.5	6.62	66.0°	838		DARK OPAQUE	NONE
		2.0						

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: _____
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	MW-1

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA
 Project Number: 1409 12th Street Groundwater Monitoring
 Well Number: Mw-2
 Well Location: 1409 12th Street, OAKLAND, CA

Date: December 1, 2011
 Sampler: Joseph Cotton et. El.
 Weather: _____

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 13.91
 Diameter: 2"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 11.09'
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $13.91' - 11.09' = 2.82 \times .163 = .45$ gallon = 1 well volume
 $.45 \times 3$ well volumes = 1.37

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1737	start	0	6.64	62.7	453		Clear	
1740	1.5	0.5	6.67	63.4	430		Opague	
1741	1.0	1.5	6.62	64.0	483		Opague	
1745	1.5	3	6.74	64.2	510		Opague	

Total Discharge: 3 Comments: _____
 Casing Volumes Removed: 3
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	Mw-2

Tom

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: December 18 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: MW-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 13.59
 Diameter: 2"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 10.53
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $13.59 - 10.53 = 3.06 \times .163 = 0.49 \text{ gallons} \times 3 = 1.49 \text{ gallons}$

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
3:50	start	0	6.73	63.8	910		Moderate Open	None
3:56	—	1.5	6.70	64.1	995		Cloudy	None
4:05	—	1.0	6.68	63.4	954	954	Cloudy	None
4:10	—	1.5		63.4	980		Cloudy	None

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: _____
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	MW-3

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: December 1, 2011
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: MW-4 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 13.90
 Diameter: 2"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 10.75
 Final: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $13.90 - 10.75 = 3.15 \times .163 = .513 \text{ gallons} \times 3 = 1.54 \text{ gallons} = 3 \text{ well casing volume.}$

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
3:10pm	start	0	6.37	62.0°	462		Clear	NONE
3:14pm		1	6.42	62.10	512		Light opaque	NONE
3:22pm		2	6.49	67.2°	515		opaque	NONE
3:27pm		3	6.49	66.8°	514		opaque	NONE

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: _____
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	MW-4

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA
 Project Number: 1409 12th Street Groundwater Monitoring
 Well Number: MW-5
 Well Location: 1409 12th Street, OAKLAND, CA

Date: December 1, 2011
 Sampler: Joseph Cotton et. El.
 Weather: _____

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 13.85
 Diameter: 2"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 10.52
 Final: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $13.85 - 10.52 = 3.33 \times .163 = 0.54 \text{ gallons} \times 3 = 1.62 \text{ gallons}$

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1644	start	<u>0</u>	6.82	64.3	304		Murky	
1650	1	1	6.86	65.8	319		Murky	
1652	1.5	2.5	6.90	66.2	311		Murky	
1654	2	4.5	6.94	65.9	315		Murky	

Total Discharge: 4.5 Comments: Starting to go dry
 Casing Volumes Removed: 8+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	MW-5

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

December 1, 2011

Project Name: 1409 12th Street, OAKLAND, CA
 Project Number: 1409 12th Street Groundwater Monitoring
 Well Number: MW-6
 Well Location: 1409 12th Street, OAKLAND, CA

Date:
 Sampler: Joseph Cotton et. El.
 Weather:

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record
 Total Depth of Well: 14.44
 Diameter: 2"
 Well Elevation and Reference:

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments:

Ground Water Levels:

Initial: 10.09'
 Final:

2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $14.44 - 10.09 = 4.35 \times .163 = 0.71 \times 3 = 2.12$

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
2:42pm	start	0	6.54	69.0°	342		Clear	NONE
2:45pm		0.5	6.57	69.1°	358		opaque	NONE
2:48pm		1	6.58	69.3°	358		opaque	NONE
2:52pm		1.5	6.71	67.8°	356		opaque	NONE

Total Discharge:
 Casing Volumes Removed:
 Method of Disposal:
 Comments:

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	MW-6

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA
 Project Number: 1409 12th Street Groundwater Monitoring
 Well Number: Mw-7
 Well Location: 1409 12th Street, OAKLAND, CA

Date: 12-1-11
 Sampler: Joseph Cotton et. El.
 Weather:

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 13.81
 Diameter: 2"
 Well Elevation and Reference:

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments:

Ground Water Levels:

Initial: 10.33
 Final: 13.81 - 10.33 = 3.48 x 0.163 = 0.57 gallon x 3 = 1.71 gal
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: 7 = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp. (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
—	start	0	—	—	345		—	—
3:03pm		0.5	6.33	68.9°	345		clear	none
3:07pm		1	6.33	68.9°	341		Clear	none
3:17pm		1.5	6.22	68.9°	339		Slightly opaque	none

Total Discharge: _____ Comments: _____
 Casing Volumes Removed: _____
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	Mw-7

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: MW-8 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 27.55
 Diameter: 2"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 11.32'
 Final: 27.55' - 11.32' = 16.23'
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: 16.23 x 0.163 = 2.64 x 3 = 7.92 Gallon = 3 Well Casing Volumes
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1638	start	0	7.07	62.5	615		Cloudy	
1645	3	3	6.96	63.7	617		Cloudy	
1655	3	6	6.92	64.5	631		Clear	
1706	3	9	6.86	63.7	663		Clear	

Total Discharge: 9 Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	MW-8

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IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: GW-1 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 17.05
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 10.68
 Final: 17.05 - 10.68 = 6.37
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $6.37 \times 0.653 = 4.16 \times 3 = 12.48 \text{ Gallon} = 3$
 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1720	start	0	6.80	64.3	597		Opaque w/ Sediment	
1730	4	4	6.76	65.1	576		Cloudy	
1743	4	8	7.0	64.3	516		Clear	
1805	5	13	7.03	65.2	464		Clear	Strong

Total Discharge: 13 Comments: Well needs development
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	GW-1

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA
 Project Number: 1409 12th Street Groundwater Monitoring
 Well Number: GW-2
 Well Location: 1409 12th Street, OAKLAND, CA

Date: 12-1-11
 Sampler: Joseph Cotton et. El.
 Weather: _____

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 17'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 11.03'
 Final: _____

Comments: _____
 2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $17.00' - 11.03' = 5.97 \times 0.653 = 3.90 \times 3 = 11.7$
Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1200	start	0	6.82	67.9	418		Clear	
1230	4	4	6.76	71.0	227		Clear	
1235	4	8	6.74	69.5	227		Clear	
1252	4	12	6.67	68.7	228		Clear	

Total Discharge: 12 Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	GW-2

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: GW-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 17.98'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 10.67

Final: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $17.98' - 10.67' = 7.31 \times 0.653 = 4.77 \times 3 = 14.31$ Gallons
= 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1630	start	0	6.97	65.3	1113		Clear	Sewer Smell
1645	5	5	7.12	65.6	654		Clear	Sewer Smell
1655	5	10	7.15	64.6	932		Clear	Sewer Smell
1705	5	15	7.19	65.6	913		Black/Green	Sewer Smell

Total Discharge: 15

Casing Volumes Removed: 3+

Method of Disposal: _____

Comments: Well needs Development

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	GW-3

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-1 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 20.34'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 9.92'
 Final: _____

2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $20.34' - 9.92' = 10.42 \times 0.653 = 6.80 \times 3 = 20.4$
Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1221	start	0	6.72	70.1	443		Opague	
1247	7	7	6.69	69.1	427		Clear	
1315	7	14	6.65	68.0	408		Clear	
1335	7	21	6.67	67.3	410		Clear	

Total Discharge: 21 Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	DPE-1

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-1B Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 26.65'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:

Initial: 10.25'
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $26.65' - 10.25' = 16.4 \times 0.653 = 10.71 \times 3 = 32.13$
Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1640	start	0	7.07	64.3	384		Clear	
1720	11	11	6.92	63.8	528		Clear	
1800	11	22	6.90	63.7	554		Clear	
1830	11	33	6.92	64.2	561		Clear	

Total Discharge: 33 Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	<u>DPE-1B</u>

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-2 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 20.02'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 9.93'
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $20.02' - 9.93' = 10.09' \times 0.653 = 6.59 \times 3 = 19.77$
Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1237	start	0	6.67	70.0	349		Opaque	
1303	7	7	6.65	69.6	346		Cloudy	
1351	1	14	6.69	67.7	337		Clear	
1412	7	21	6.67	67.9	332		Clear	

Total Discharge: 21 Comments: Well needs development
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	DPE-2

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-2B Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 27.77'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 10.40'
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $27.77' - 10.40' = 17.37 \times 0.653 = 11.34 \times 3 = 34.02$
Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1430	start	0	6.79	64.1	563		Clear	
1515	12	12	6.66	64.1	649		Clear	
1555	12	24	6.72	63.9	632		Clear	
1632	12	36	6.72	63.6	661		Clear	

Total Discharge: 36 Comments: _____
 Casing Volumes Removed: 34
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	DPE-2B

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record

Sampler Type: Teflon Bailer

Total Depth of Well: 20.32'

Method of Cleaning: Alconox and D.I. Water

Diameter: 4"

Pump/Bailer Type: Suction Pump or Teflon Bailer

Well Elevation and Reference: _____

Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA

Conductivity Meter: HANNA

Comments: _____

Ground Water Levels:

Initial: 9.80'

2" Well = 0.163 gallons per foot

Final: _____

4" Well = 0.653 gallons per foot

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $20.32' - 9.80' = 10.52 \times 0.653 = 6.87 \times 3 = 20.61$
20.61 Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1502	start	0	6.81	65.0	838		Black	Strong
1530	3	3	6.93	67.0	827		Clear	Strong
1555	6	14	6.84	66.5	764		Clear	Strong
1622	7	21	6.77	66.6	753		Clear	Moderate

Total Discharge: 21 Comments: _____

Casing Volumes Removed: 3+

Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	DPE-3

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-5 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Historical Record

Sampler Type: Teflon Bailer

Total Depth of Well: 20.05'

Method of Cleaning: Alconox and D.I. Water

Diameter: 4"

Pump/Bailer Type: Suction Pump or Tefloen Bailer

Well Elevation and Reference: _____

Method of Cleaning: Alconox and D.I. Water

pH Meter: HANNA

Conductivity Meter: HANNA

Ground Water Levels:

Comments: _____

2" Well = 0.163 gallons per foot

4" Well = 0.653 gallons per foot

Initial: 10.45'

Final: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $20.05' - 10.45' = 9.6 \times 0.653 = 6.27 \times 3 = 18.81$

Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1525	start	0	6.90	64.5	816		Cloudy w/ Sediment	
1540	6	6	6.83	65.5	728		Clear w/ some Sediment	
1557	6	12	6.84	64.8	689		Clear	
1619	6	18	6.82	64.8	614		Cloudy	

Total Discharge: 18 Comments: Recommend Well development
 Casing Volumes Removed: 3
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	DPE-5

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-6 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 18.76'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 9.90'
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: $18.76' - 9.90' = 8.86 \times 0.653 = 5.78 \times 3 = 17.34$
Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1405	start	0	7.19	64.6	624		Opaque	
1433	6	6	6.80	65.6	596		Cloudy	
1450	6	12	6.75	65.3	625		Clear	
1510	6	18	6.79	65.0	664		Clear	

Total Discharge: 18 Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	December 2011	DPE-6

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: 12-1-11
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Joseph Cotton et. El.
 Well Number: DPE-7 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: See Historical Record
 Total Depth of Well: 20.15'
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

Sampler Type: Teflon Bailer
 Method of Cleaning: Alconox and D.I. Water
 Pump/Bailer Type: Suction Pump or Tefloen Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 10.14'
 Final: _____

2" Well = 0.163 gallons per foot
 4" Well = 0.653 gallons per foot

Reference Point: Black Mark on Top of Casing

Well Volume of Water: $20.15' - 10.14' = 10.0' \times 0.653 = 6.54 \times 3 = 19.62$
Gallons = 3 well casing volumes

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1325	start	0	6.97	67.2	931		Clear	
1405	10	10	6.76	66.7	924		Clear	
1425	5	15	6.69	66.4	946		Clear	
1443	5	20	6.67	66.4	924		Clear	

Total Discharge: 20 Comments: _____
 Casing Volumes Removed: 3+
 Method of Disposal: _____

IMPACT ENVIRONMENTAL				GROUNDWATER SAMPLING DATA SHEET		
				1409 12th Street, Oakland, California		
				Project No.	Date	Well
				1409 GW SAMPLING	December 2011	DPE-7

APPENDIX B

Certified Laboratory Analytical
(June 2011 & December 2011)



Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 228624
ANALYTICAL REPORT**

Impact Environmental

Project : THMP-2011
Location : 1409 12th St., Oakland
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
MW-1	228624-001
MW-2	228624-002
MW-3	228624-003
MW-4	228624-004
MW-5	228624-005
MW-6	228624-006
MW-7	228624-007
MW-8	228624-008
GW-1	228624-009
GW-2	228624-010
GW-3	228624-011
TB-1	228624-012
TB-2	228624-013
DPE-1	228624-014
DPE-2	228624-015
DPE-2B	228624-016
DPE-3	228624-017
DPE-5	228624-018
DPE-6	228624-019
DPE-7	228624-020

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: *Devin N. Tetrault*
Project Manager

Date: 06/22/2011

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 228624
Client: Impact Environmental
Project: THMP-2011
Location: 1409 12th St., Oakland
Request Date: 06/09/11
Samples Received: 06/09/11

This data package contains sample and QC results for twenty water samples, requested for the above referenced project on 06/09/11. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

TB-1 (lab # 228624-012) was analyzed with more than 1 mL of headspace in the VOA vial. No other analytical problems were encountered.

ct Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY

Phone (510) 486-0900
Fax (510) 486-0532

#228624

Page 1 of 2

Chain of Custody #

Sampler: JOSEPH COTTON

Report To: JOSEPH COTTON

Company: IMPACT ENVIRONMENTAL

Telephone: (510) 703-5420

☒ Standard

Email: jac21462@aol.com

[illegible]

**SAMPLE
RECEIPT**

☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:

RELINQUISHED
 [Signature] Joseph Carter DA

DATE: TIME:

DATE: TIME:

DATE: TIME:

RECEIVED BY:

REC

DATE: 6/9 TIME: 1547

DATE: TIME:

DATE: TIME:

CHAIN OF CUSTODY

ct Curtis & Tompkins Laboratories
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
 In Business Since 1878

2323 Fifth Street
 Berkeley, CA 94710

Phone (510) 486-0900
 Fax (510) 486-0532

C&T LOGIN # _____

Page 2 of 2

Chain of Custody # _____

Project No: THMP-2011

Sampler: JOSEPH COTTON

Project Name: 1409 12th St, OAKLAND

Report To: JOSEPH COTTON

Project P. O. No: _____

Company: IMPACT ENVIRONMENTAL

EDD Format: _____

Report Level ☐ II ☐ III ☐ IV

Telephone: (510) 703-5420

Turnaround Time: ☐ RUSH

☒ Standard

Email: JAC21462@aol.com

Lab No.	Sample ID.	SAMPLING		MATRIX			# of Containers	CHEMICAL PRESERVATIVE				
		Date Collected	Time Collected	Water	Solid			HCl	H2SO4	HNO3	NaOH	None
14	DPE-1	6-8-11	1:05 PM	X				4				2
15	DPE-1B			X								
15	DPE-2	6-8-11	2:55 PM	X								
16	DPE-2B		6:55 PM	X								
17	DPE-3		2:15 PM	X								
18	DPE-5		6:55 PM	X								
19	DPE-6		6:42 PM	X								
20	DPE-7	6-8-11	2:10 PM	X				4				2

ANALYTICAL REQUEST												
TPH, TPHm (EPA 8015)	TPH, BTEX, MTBE (EPA 8260)	DCE, PCE, TCE, Vinyl Chloride (EPA 8260)	Oxyanions (EPA 8260)	DCA, EDB (EPA 8260)								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								

Notes:

SAMPLE RECEIPT

- ☐ Intact
☐ Cold
☐ On Ice
☐ Ambient

RELINQUISHED BY:

DATE: _____ TIME: _____

DATE: _____ TIME: _____

DATE: _____ TIME: _____

RECEIVED BY:

DATE: 6/9 TIME: 1545

DATE: _____ TIME: _____

DATE: _____ TIME: _____

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 228624 Date Received 6/9/11 Number of coolers 2
 Client Impact Environmental Project 1409 12th st, Oakland
 Date Opened 6/9/11 By (print) Vidica Darchi (sign) [Signature]
 Date Logged in 6/10/11 By (print) R. Pans (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO

Shipping info _____

2A. Were custody seals present? ☐ YES (circle) on cooler on samples NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO YES

4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO YES

5. Is the project identifiable from custody papers? (If so fill out top of form) _____ YES NO YES

6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap

☐ Foam blocks

☒ Bags

☐ None

☐ Cloth material

☐ Cardboard

☐ Styrofoam

☐ Paper towels

7. Temperature documentation:

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 2.5, 4.9

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are samples in the appropriate containers for indicated tests? _____ YES NO YES

11. Are sample labels present, in good condition and complete? _____ YES NO NO

12. Do the sample labels agree with custody papers? _____ YES NO NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO NO

14. Are the samples appropriately preserved? _____ YES NO N/A YES

15. Did you check preservatives for all bottles for each sample? _____ YES NO N/A YES

16. Did you document your preservative check _____ YES NO N/A YES

17. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A YES

18. Was the client contacted concerning this sample delivery? _____ YES NO NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

11. Rec'd one 500ml amber bottle w/ no label. Label as sample -015.

12. Rec'd 4 VOAs for sample -010, instead of 2 listed on COC.

- No time or date is listed on sample labels only sample IDs

13. Rec'd only 1 VOA for sample -012 & -013

11. -015 only sample missing - 1 amber bottle.

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/08/11
Units:	ug/L	Received:	06/09/11
Diln Fac:	1.000		

Field ID: MW-1 Batch#: 175733
Type: SAMPLE Prepared: 06/10/11
Lab ID: 228624-001 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	76 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	83	68-120

Field ID: MW-2 Batch#: 175733
Type: SAMPLE Prepared: 06/10/11
Lab ID: 228624-002 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	101	68-120

Field ID: MW-3 Batch#: 175733
Type: SAMPLE Prepared: 06/10/11
Lab ID: 228624-003 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	94	68-120

Field ID: MW-4 Batch#: 175733
Type: SAMPLE Prepared: 06/10/11
Lab ID: 228624-004 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	96	68-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/08/11
Units:	ug/L	Received:	06/09/11
Diln Fac:	1.000		

Field ID: MW-5 Batch#: 175733
 Type: SAMPLE Prepared: 06/10/11
 Lab ID: 228624-005 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	104	68-120

Field ID: MW-6 Batch#: 175733
 Type: SAMPLE Prepared: 06/10/11
 Lab ID: 228624-006 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	101	68-120

Field ID: MW-7 Batch#: 175733
 Type: SAMPLE Prepared: 06/10/11
 Lab ID: 228624-007 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	107	68-120

Field ID: MW-8 Batch#: 175733
 Type: SAMPLE Prepared: 06/10/11
 Lab ID: 228624-008 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	71 Y	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	101	68-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/08/11
Units:	ug/L	Received:	06/09/11
Diln Fac:	1.000		

Field ID: GW-1 Batch#: 175733
Type: SAMPLE Prepared: 06/10/11
Lab ID: 228624-009 Analyzed: 06/14/11

Analyte	Result	RL
Diesel C10-C24	210 Y	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	101	68-120

Field ID: GW-2 Batch#: 175787
Type: SAMPLE Prepared: 06/13/11
Lab ID: 228624-010 Analyzed: 06/15/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	110	68-120

Field ID: GW-3 Batch#: 175787
Type: SAMPLE Prepared: 06/13/11
Lab ID: 228624-011 Analyzed: 06/15/11

Analyte	Result	RL
Diesel C10-C24	120 Y	50
Motor Oil C24-C36	340	300
Surrogate	%REC	Limits
o-Terphenyl	105	68-120

Field ID: DPE-1 Batch#: 175787
Type: SAMPLE Prepared: 06/13/11
Lab ID: 228624-014 Analyzed: 06/15/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	90	68-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/08/11
Units:	ug/L	Received:	06/09/11
Diln Fac:	1.000		

Field ID:	DPE-2	Batch#:	175787
Type:	SAMPLE	Prepared:	06/13/11
Lab ID:	228624-015	Analyzed:	06/16/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	88	68-120

Field ID:	DPE-2B	Batch#:	175787
Type:	SAMPLE	Prepared:	06/13/11
Lab ID:	228624-016	Analyzed:	06/16/11

Analyte	Result	RL
Diesel C10-C24	100 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	92	68-120

Field ID:	DPE-3	Batch#:	175787
Type:	SAMPLE	Prepared:	06/13/11
Lab ID:	228624-017	Analyzed:	06/16/11

Analyte	Result	RL
Diesel C10-C24	280 Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	87	68-120

Field ID:	DPE-5	Batch#:	175787
Type:	SAMPLE	Prepared:	06/13/11
Lab ID:	228624-018	Analyzed:	06/16/11

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	92	68-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	06/08/11
Units:	ug/L	Received:	06/09/11
Diln Fac:	1.000		

Field ID: DPE-6 Batch#: 175787
 Type: SAMPLE Prepared: 06/13/11
 Lab ID: 228624-019 Analyzed: 06/16/11

Analyte	Result	RL
Diesel C10-C24	100 Y	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	79	68-120

Field ID: DPE-7 Batch#: 175787
 Type: SAMPLE Prepared: 06/13/11
 Lab ID: 228624-020 Analyzed: 06/16/11

Analyte	Result	RL
Diesel C10-C24	130 Y	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	88	68-120

Type: BLANK Prepared: 06/10/11
 Lab ID: QC595772 Analyzed: 06/13/11
 Batch#: 175733

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	94	68-120

Type: BLANK Prepared: 06/13/11
 Lab ID: QC595989 Analyzed: 06/15/11
 Batch#: 175787

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	103	68-120

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC595773	Batch#:	175733
Matrix:	Water	Prepared:	06/10/11
Units:	ug/L	Analyzed:	06/13/11

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,357	94	61-120

Surrogate	%REC	Limits
o-Terphenyl	109	68-120

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	175733
MSS Lab ID:	228622-005	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Prepared:	06/10/11
Diln Fac:	1.000	Analyzed:	06/13/11

Type: MS Lab ID: QC595774

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	438.8	2,500	2,713	91	33-140

Surrogate	%REC	Limits
o-Terphenyl	98	68-120

Type: MSD Lab ID: QC595775

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,560	85	33-140	6	30

Surrogate	%REC	Limits
o-Terphenyl	93	68-120

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC595990	Batch#:	175787
Matrix:	Water	Prepared:	06/13/11
Units:	ug/L	Analyzed:	06/15/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,111	84	61-120

Surrogate	%REC	Limits
o-Terphenyl	86	68-120

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	175787
MSS Lab ID:	228576-002	Sampled:	06/07/11
Matrix:	Water	Received:	06/08/11
Units:	ug/L	Prepared:	06/13/11
Diln Fac:	1.000	Analyzed:	06/15/11

Type: MS
Lab ID: QC595991

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<9.639	2,500	1,716	69	33-140

Surrogate	%REC	Limits
o-Terphenyl	76	68-120

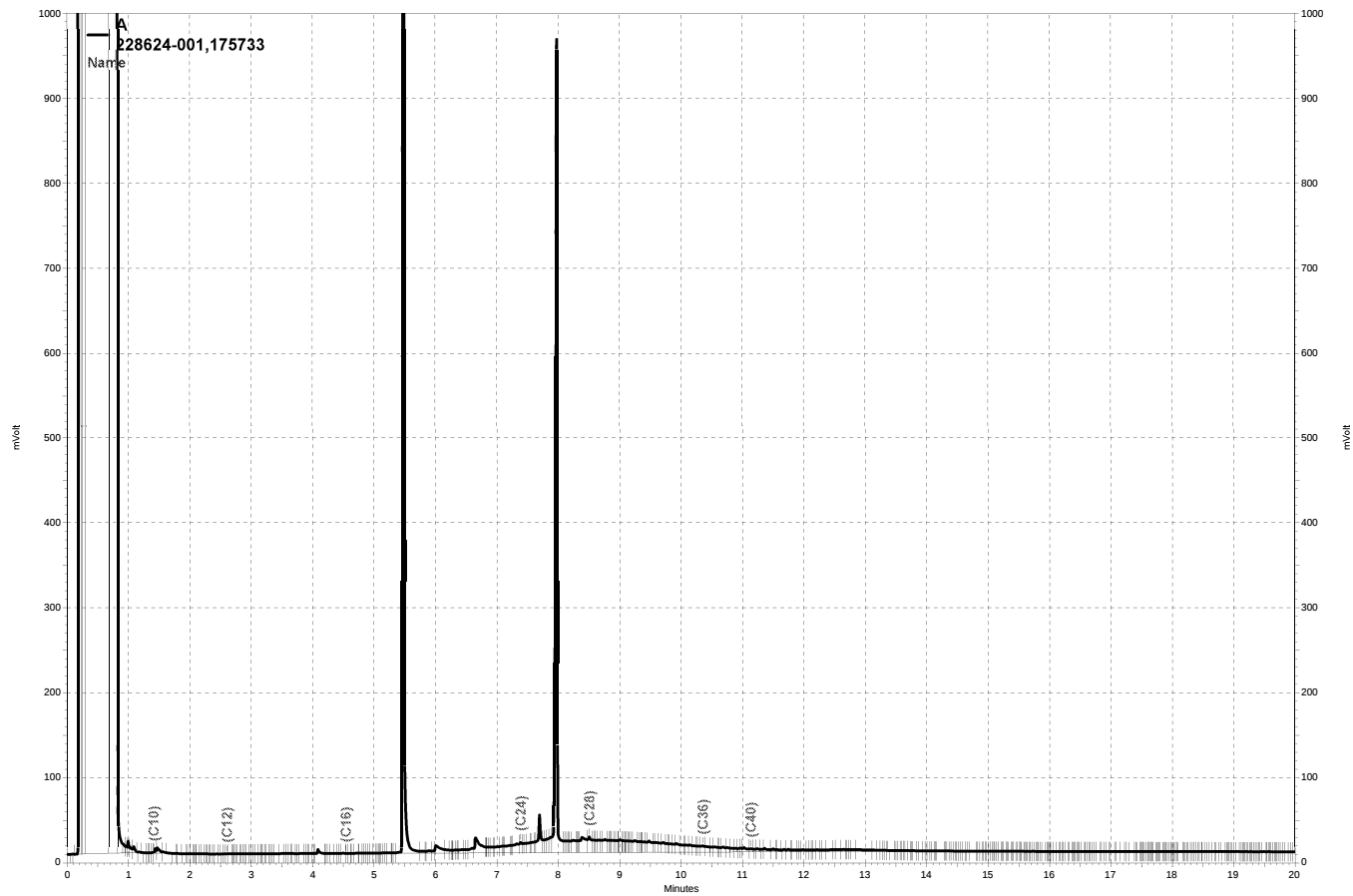
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Lab ID: QC595992

Cleanup Method: EPA 3630C

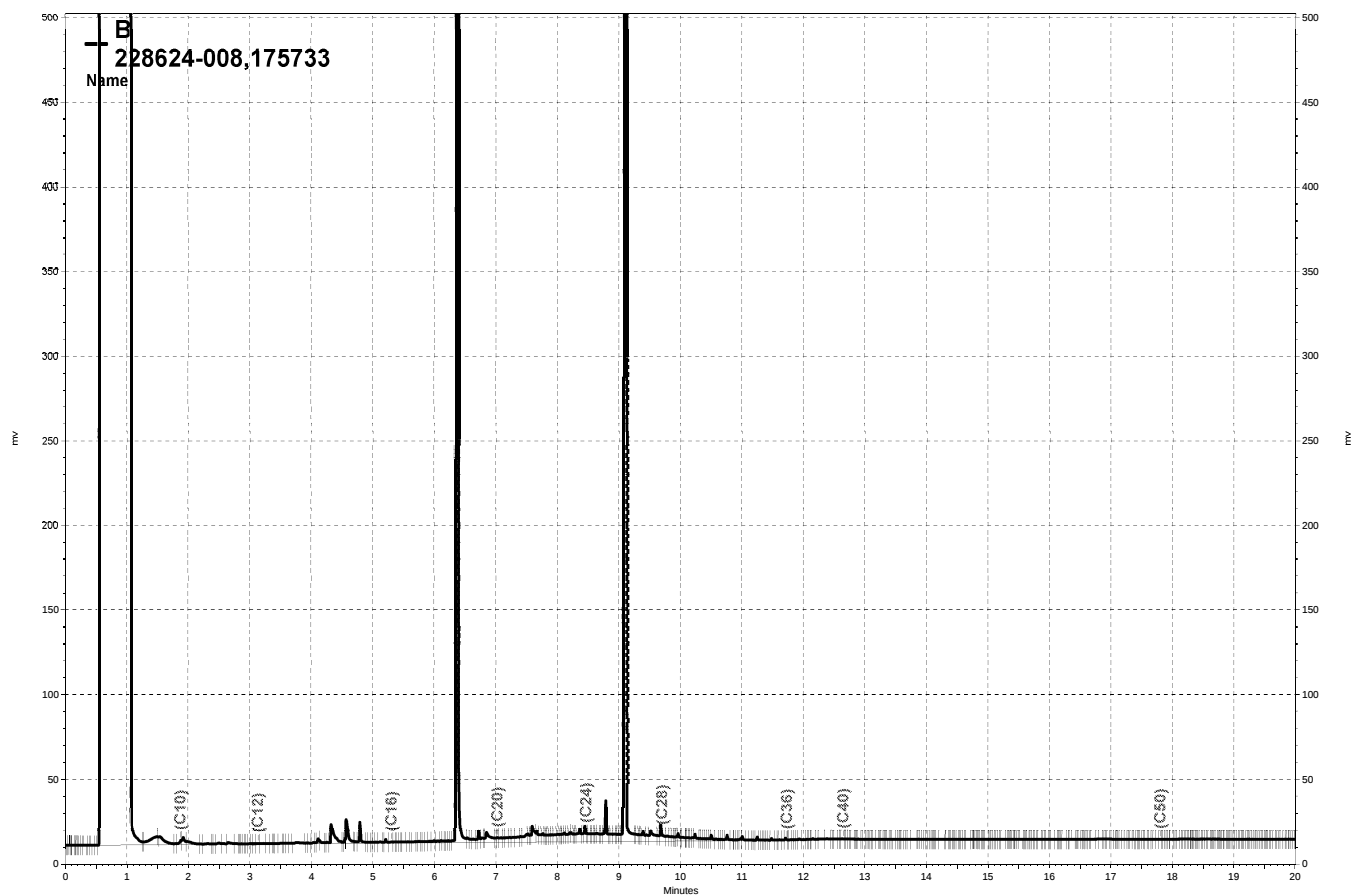
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,022	81	33-140	16	30

Surrogate	%REC	Limits
o-Terphenyl	91	68-120

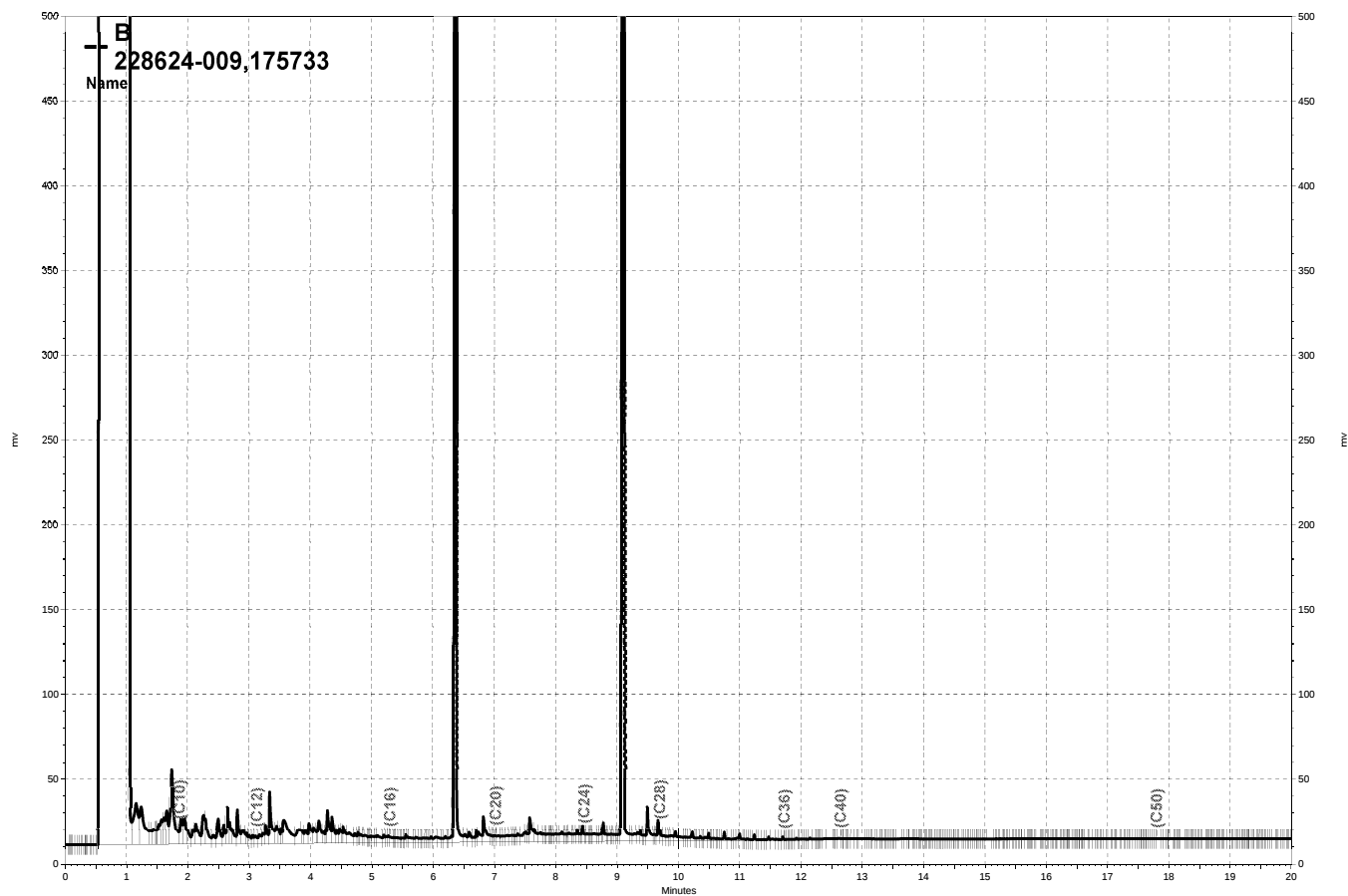
RPD= Relative Percent Difference



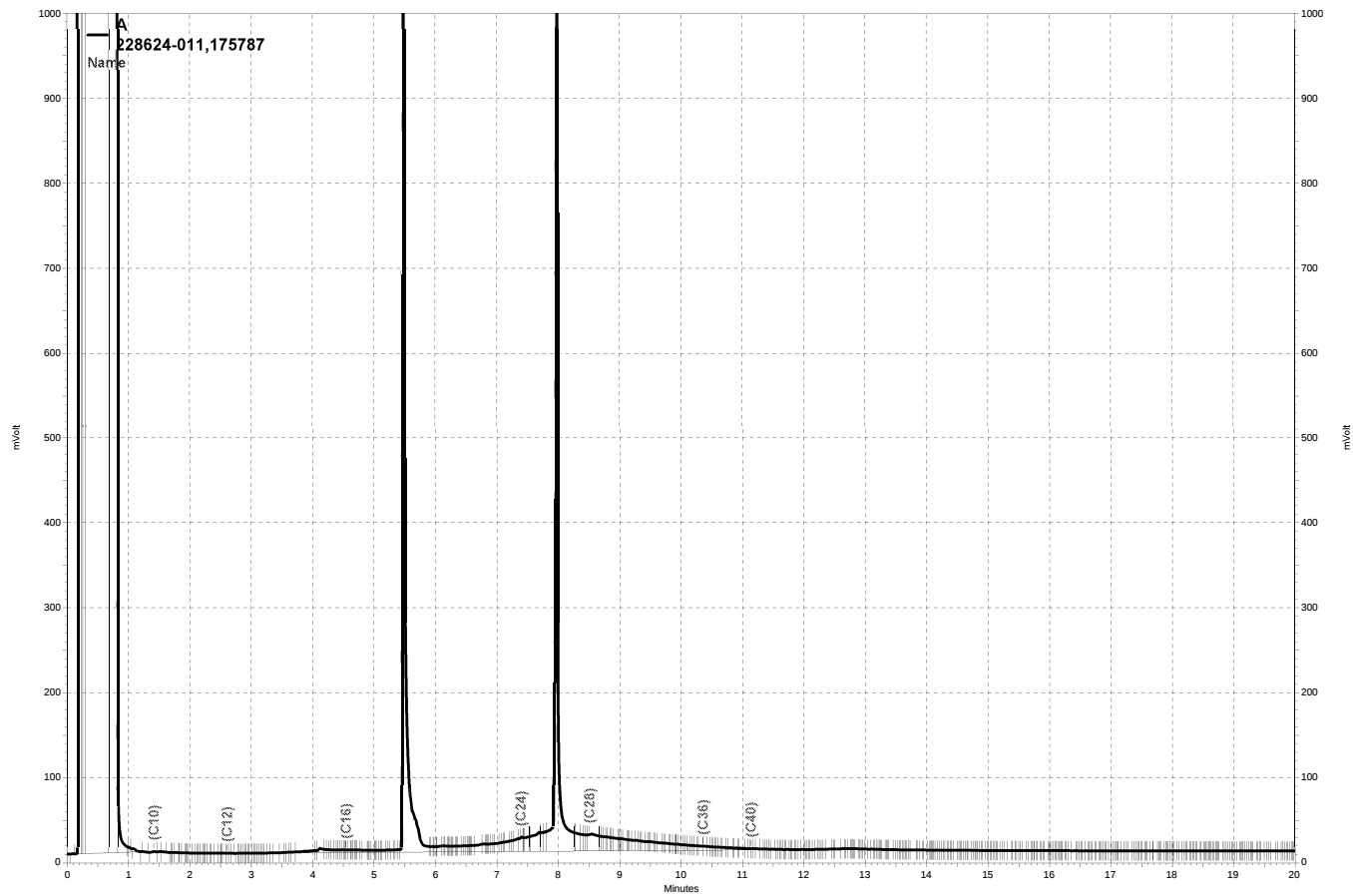
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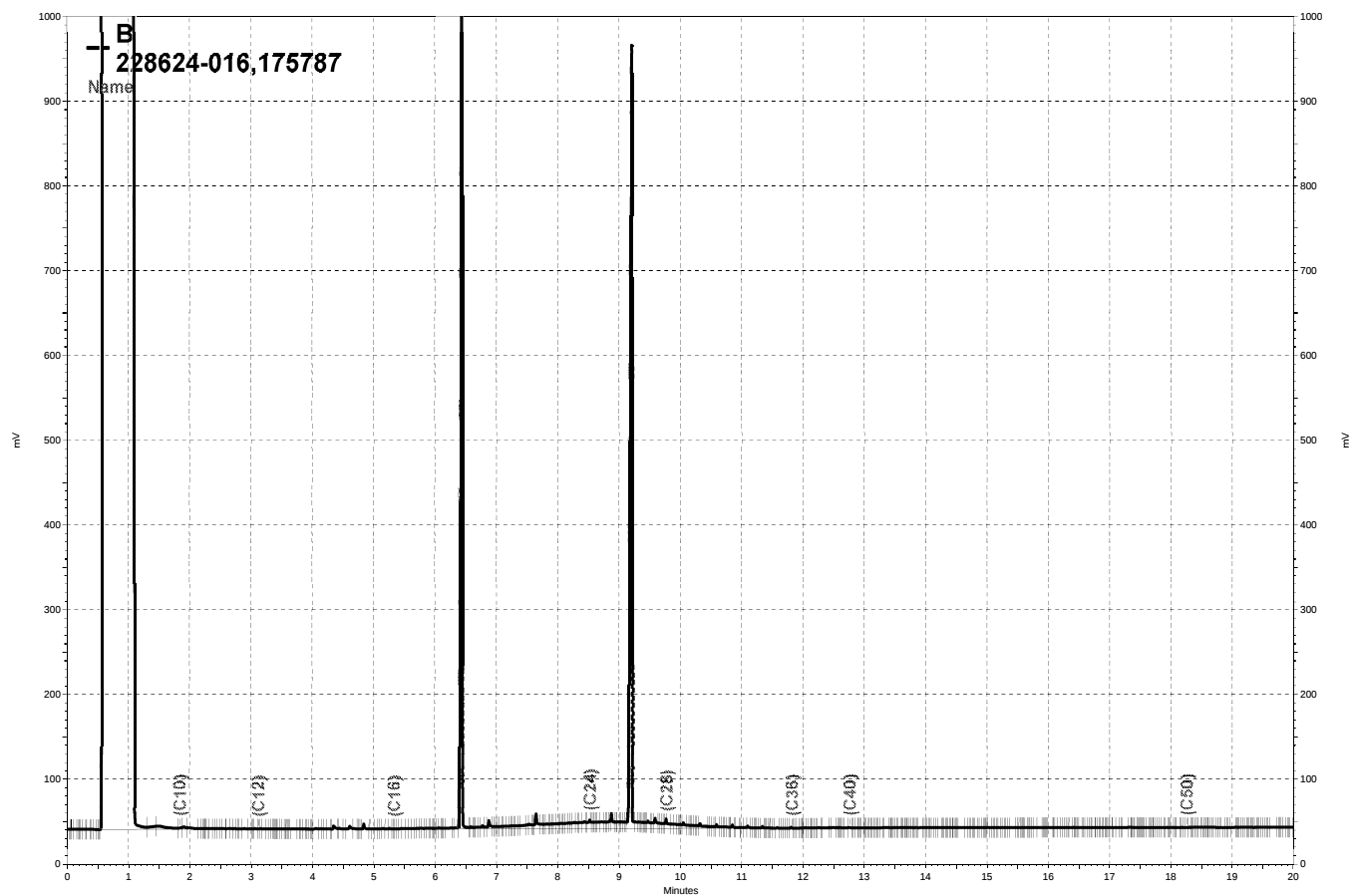
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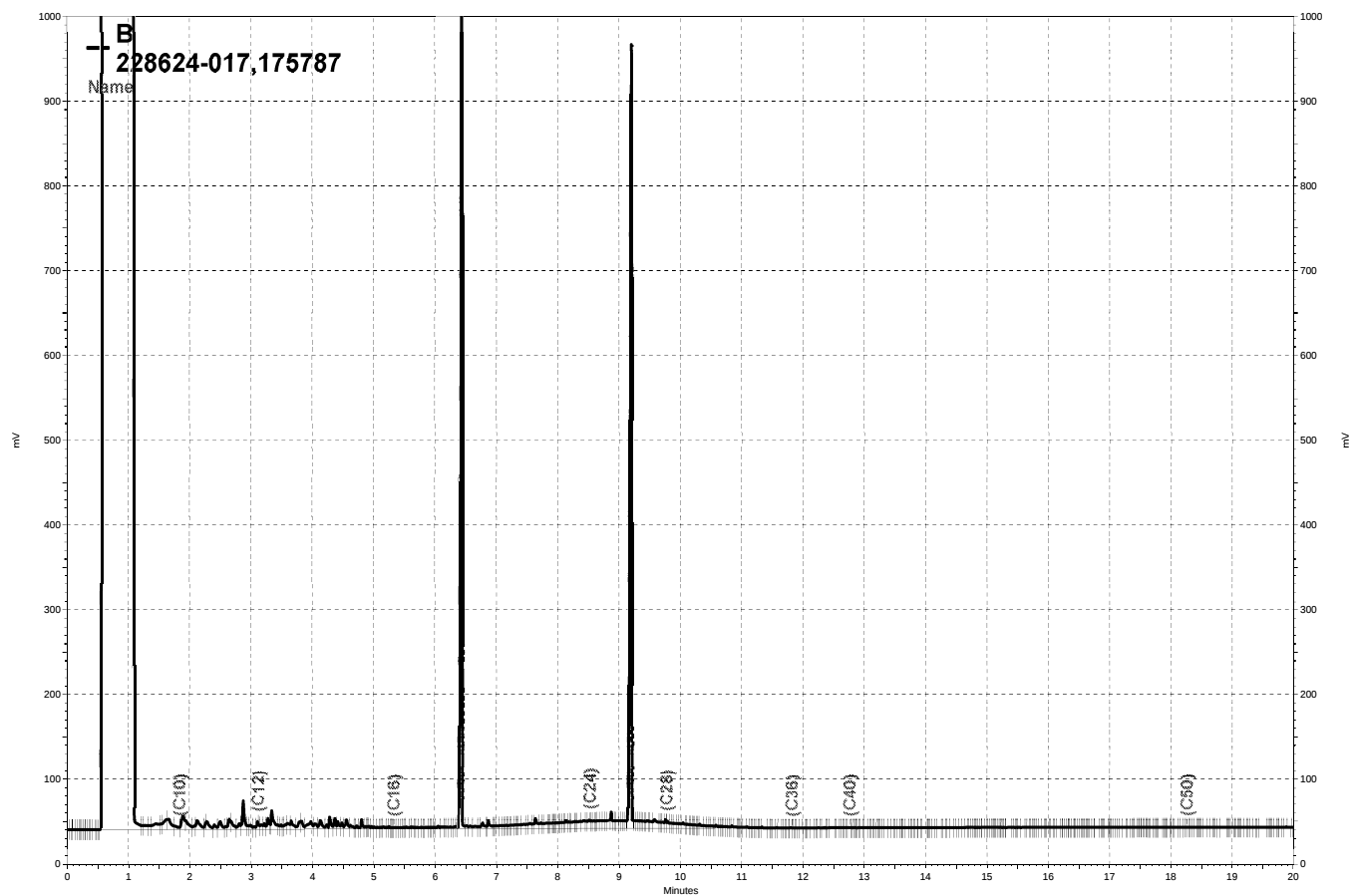
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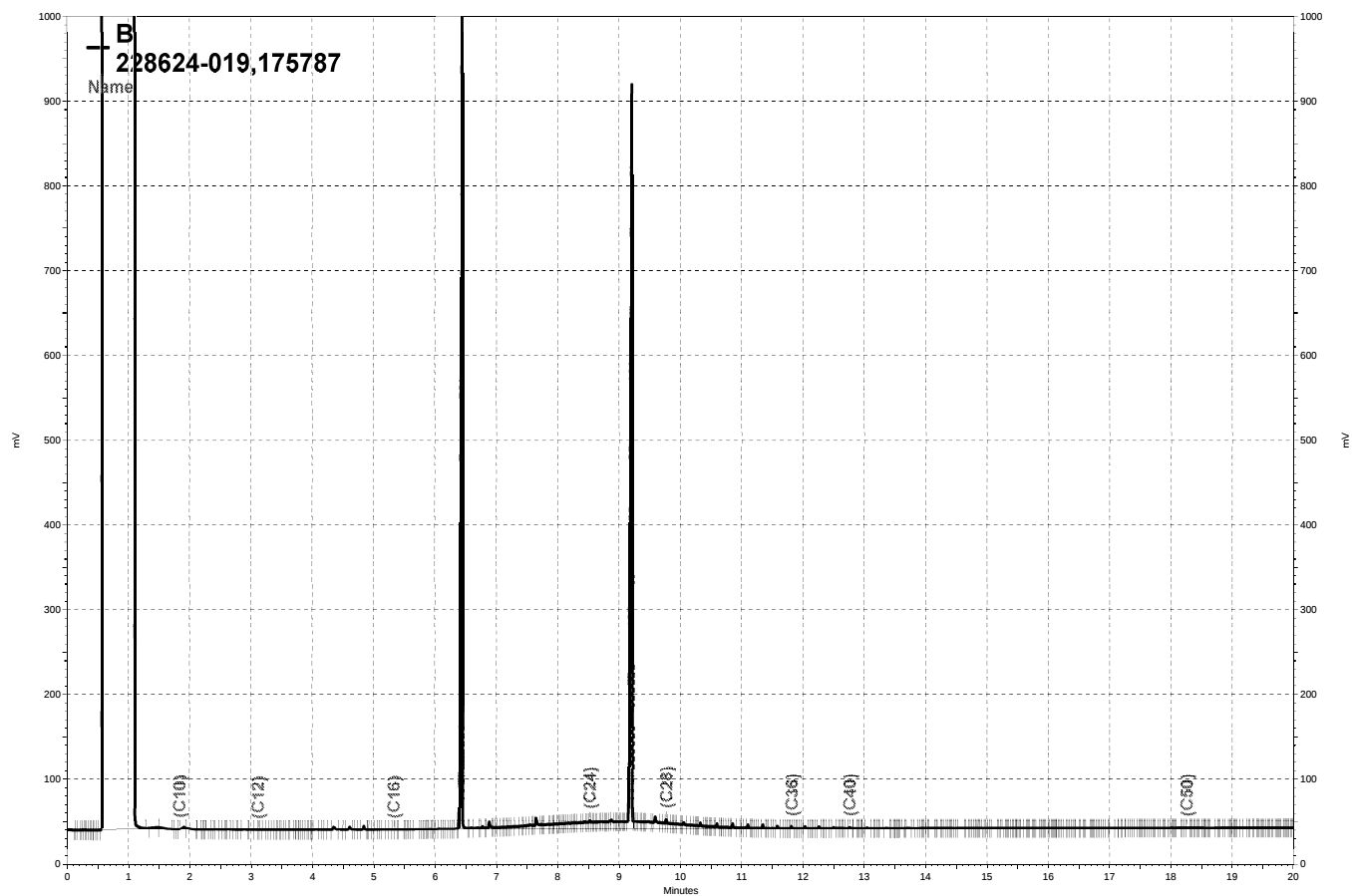
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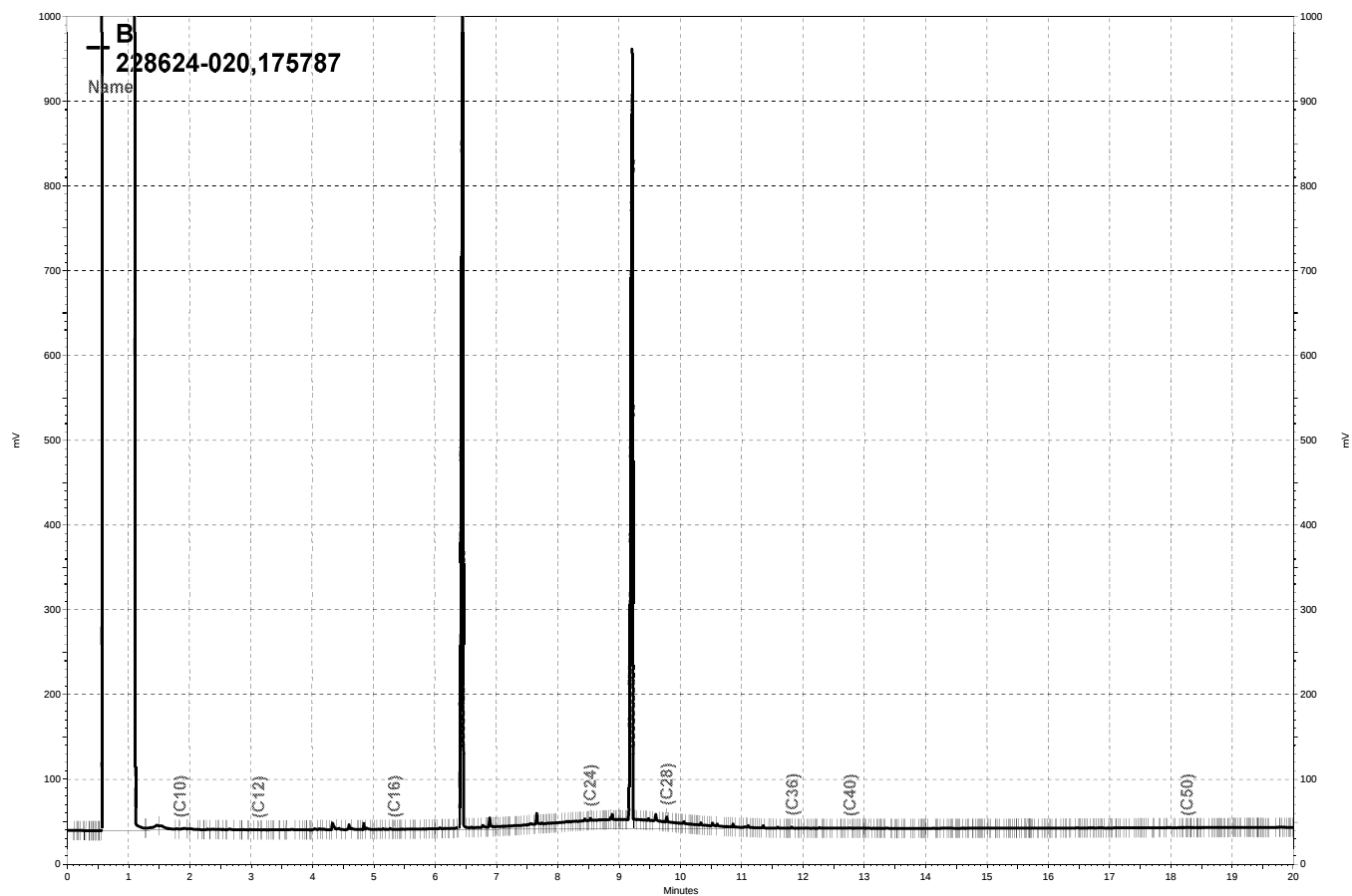
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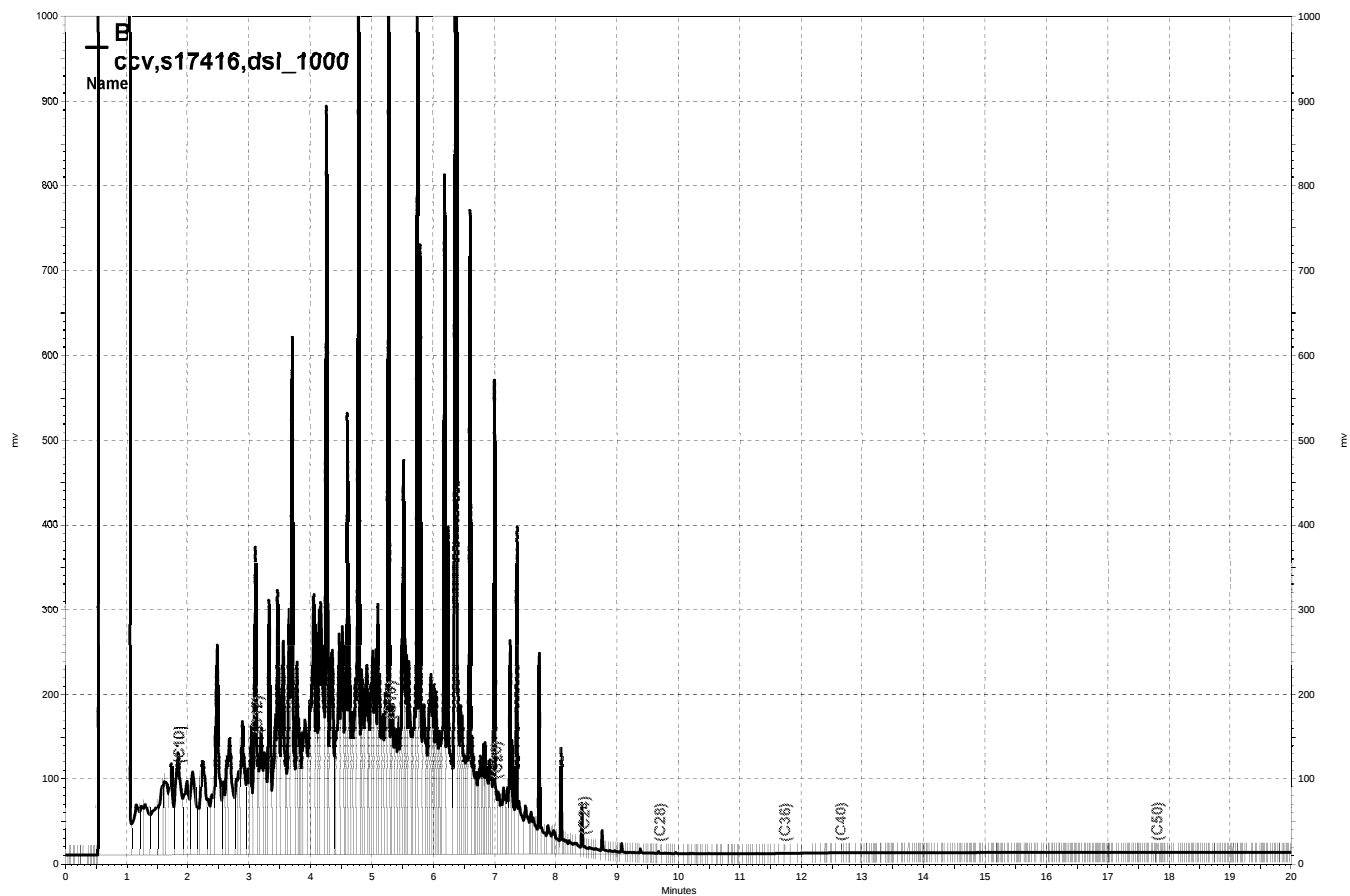
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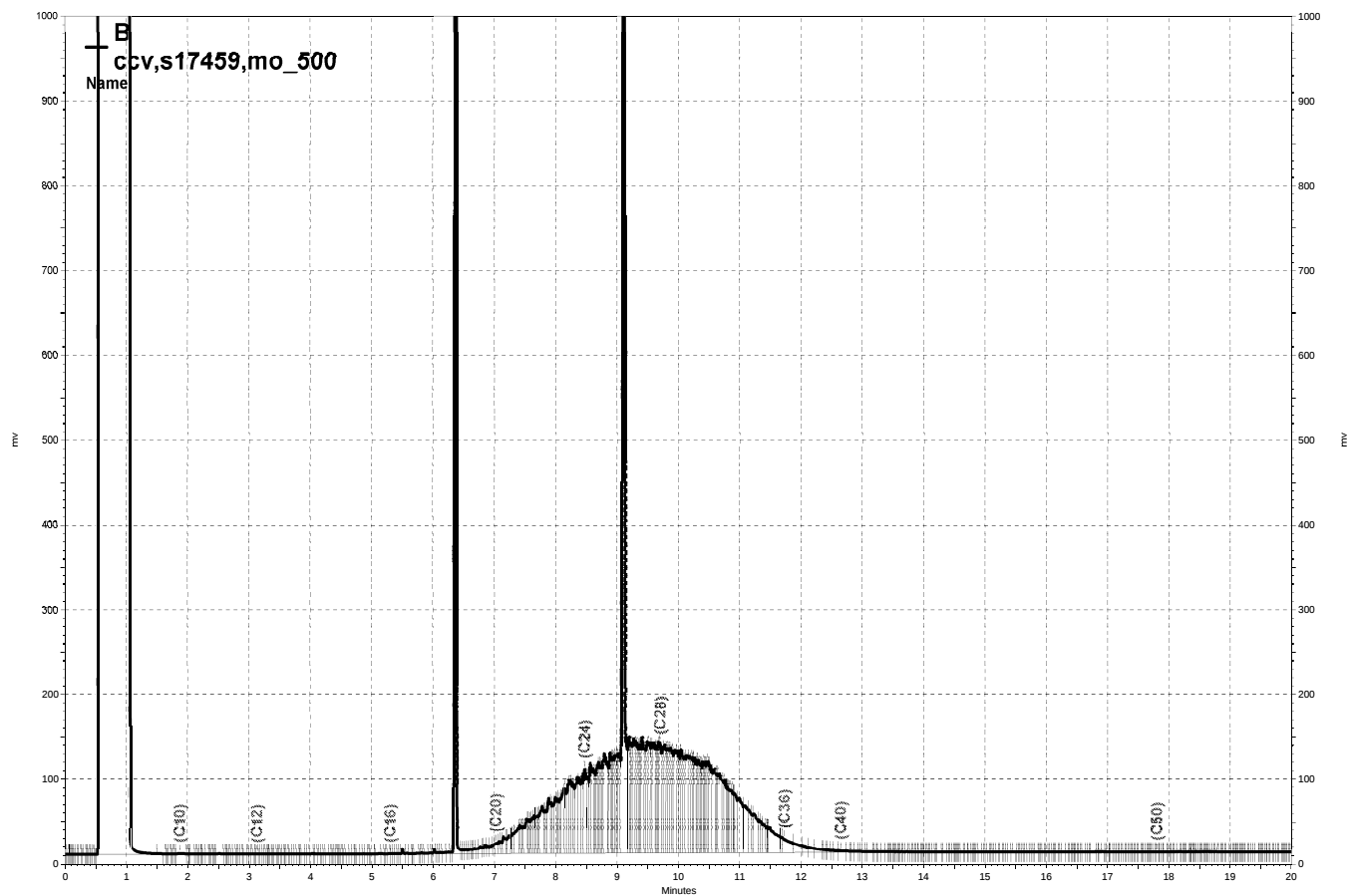
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\\Lims\gdrive\ezchrom\Projects\GC15B\Data\163b074, B



\\Lims\gdrive\ezchrom\Projects\GC15B\Data\163b073, B

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	175892
Lab ID:	228624-001	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-1	Batch#:	175892
Lab ID:	228624-001	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	105	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	175892
Lab ID:	228624-002	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	175892
Lab ID:	228624-002	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	175892
Lab ID:	228624-003	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	175892
Lab ID:	228624-003	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	106	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	175892
Lab ID:	228624-004	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	175892
Lab ID:	228624-004	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	106	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	175892
Lab ID:	228624-005	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-5	Batch#:	175892
Lab ID:	228624-005	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	109	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	175892
Lab ID:	228624-006	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	175892
Lab ID:	228624-006	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	103	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	175892
Lab ID:	228624-007	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-7	Batch#:	175892
Lab ID:	228624-007	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	175892
Lab ID:	228624-008	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	175892
Lab ID:	228624-008	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	111	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	GW-1	Batch#:	175892
Lab ID:	228624-009	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	230	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	1.6	0.5
Benzene	1.8	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	0.6	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	4.5	0.5
m,p-Xylenes	11	0.5
o-Xylene	8.2	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	0.7	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	GW-1	Batch#:	175892
Lab ID:	228624-009	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	1.9	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	3.3	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	18	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	1.0	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	2.4	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	109	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	GW-2	Batch#:	175892
Lab ID:	228624-010	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	GW-2	Batch#:	175892
Lab ID:	228624-010	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	109	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-120

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	GW-3	Batch#:	175892
Lab ID:	228624-011	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	10	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	2.5	0.5
m,p-Xylenes	2.2	0.5
o-Xylene	0.7	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	GW-3	Batch#:	175892
Lab ID:	228624-011	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	0.5	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	2.2	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	TB-1	Batch#:	175947
Lab ID:	228624-012	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	TB-1	Batch#:	175947
Lab ID:	228624-012	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	95	80-120
Bromofluorobenzene	95	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	TB-2	Batch#:	175947
Lab ID:	228624-013	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	TB-2	Batch#:	175947
Lab ID:	228624-013	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	111	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-1	Batch#:	175947
Lab ID:	228624-014	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	1.8	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-1	Batch#:	175947
Lab ID:	228624-014	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	96	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-2	Batch#:	175947
Lab ID:	228624-015	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-2	Batch#:	175947
Lab ID:	228624-015	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-2B	Batch#:	175947
Lab ID:	228624-016	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-2B	Batch#:	175947
Lab ID:	228624-016	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-3	Batch#:	175947
Lab ID:	228624-017	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1,100	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	0.8	0.5
Benzene	53	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	62	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	42	0.5
m,p-Xylenes	75	0.5
o-Xylene	60	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	2.9	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-3	Batch#:	175947
Lab ID:	228624-017	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	7.7	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	14	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	50	0.5
sec-Butylbenzene	0.7	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	3.0	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	14	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	105	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-5	Batch#:	175947
Lab ID:	228624-018	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	52	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	1.6	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	5.0	0.5
o-Xylene	3.9	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-5	Batch#:	175947
Lab ID:	228624-018	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	0.7	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	2.2	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	106	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-6	Batch#:	175947
Lab ID:	228624-019	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-6	Batch#:	175947
Lab ID:	228624-019	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-7	Batch#:	175947
Lab ID:	228624-020	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-7	Batch#:	175947
Lab ID:	228624-020	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	106	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	97	80-120

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175892
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596491

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	66.17	106	46-141
Isopropyl Ether (DIPE)	12.50	12.30	98	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	11.34	91	56-131
Methyl tert-Amyl Ether (TAME)	12.50	10.61	85	65-120
1,1-Dichloroethene	12.50	11.50	92	64-133
Benzene	12.50	13.86	111	80-122
Trichloroethene	12.50	12.13	97	78-120
Toluene	12.50	13.01	104	80-120
Chlorobenzene	12.50	13.18	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	103	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC596492

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	64.19	103	46-141	3	31
Isopropyl Ether (DIPE)	12.50	10.97	88	52-139	11	20
Ethyl tert-Butyl Ether (ETBE)	12.50	10.65	85	56-131	6	20
Methyl tert-Amyl Ether (TAME)	12.50	9.916	79	65-120	7	20
1,1-Dichloroethene	12.50	10.70	86	64-133	7	20
Benzene	12.50	12.68	101	80-122	9	20
Trichloroethene	12.50	11.30	90	78-120	7	20
Toluene	12.50	11.46	92	80-120	13	20
Chlorobenzene	12.50	11.89	95	80-120	10	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175892
Units:	ug/L	Analyzed:	06/16/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596493

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	800.0	921.1	115	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	101	73-145
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC596494

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	800.0	897.9	112	70-130	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	105	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596495	Batch#:	175892
Matrix:	Water	Analyzed:	06/16/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596495	Batch#:	175892
Matrix:	Water	Analyzed:	06/16/11
Units:	ug/L		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-127
1,2-Dichloroethane-d4	105	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175947
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596711

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	56.07	90	46-141
Isopropyl Ether (DIPE)	12.50	10.52	84	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	10.40	83	56-131
Methyl tert-Amyl Ether (TAME)	12.50	9.512	76	65-120
1,1-Dichloroethene	12.50	10.30	82	64-133
Benzene	12.50	12.69	102	80-122
Trichloroethene	12.50	11.80	94	78-120
Toluene	12.50	12.07	97	80-120
Chlorobenzene	12.50	12.19	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC596712

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	59.38	95	46-141	6	31
Isopropyl Ether (DIPE)	12.50	10.43	83	52-139	1	20
Ethyl tert-Butyl Ether (ETBE)	12.50	10.28	82	56-131	1	20
Methyl tert-Amyl Ether (TAME)	12.50	9.629	77	65-120	1	20
1,1-Dichloroethene	12.50	9.916	79	64-133	4	20
Benzene	12.50	12.08	97	80-122	5	20
Trichloroethene	12.50	11.10	89	78-120	6	20
Toluene	12.50	11.94	96	80-120	1	20
Chlorobenzene	12.50	11.96	96	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	98	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596713	Batch#:	175947
Matrix:	Water	Analyzed:	06/17/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596713	Batch#:	175947
Matrix:	Water	Analyzed:	06/17/11
Units:	ug/L		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	100	73-145
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228624	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175947
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596744

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,019	102	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC596745

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,053	105	70-130	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	100	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

Data File: \\Gomsserver\DD\chem\MSVOA10.i\061611.b\JFG20.D

Date : 16-JUN-2011 18:45

Client ID: DYNA P&T

Sample Info: s,228624-009

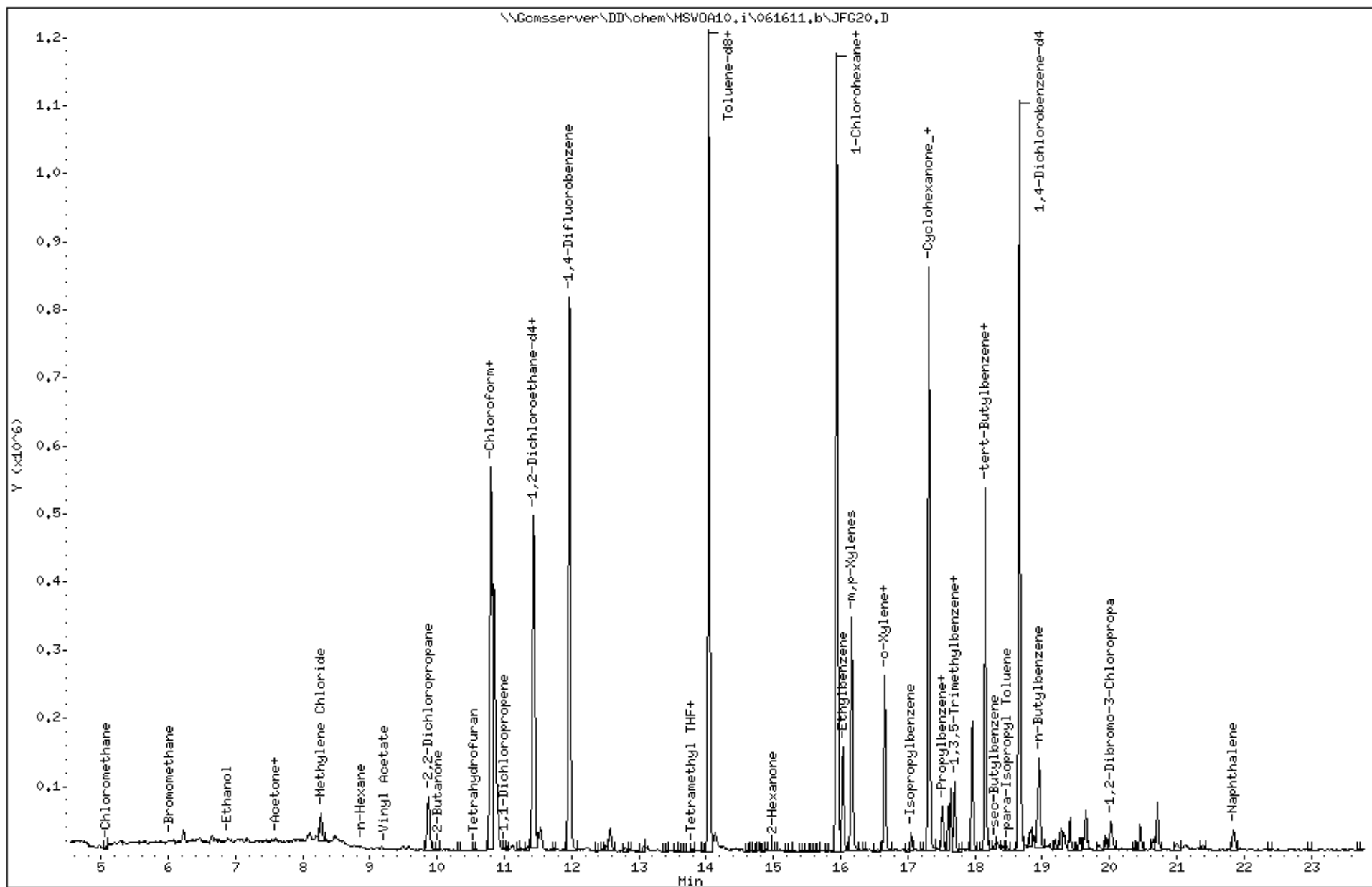
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Column phase: RTX Volatiles

Instrument: MSVOA10.i

Operator: VOA

Column diameter: 0.32



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Date : 17-JUN-2011 19:08

Client ID: DYNA P&T

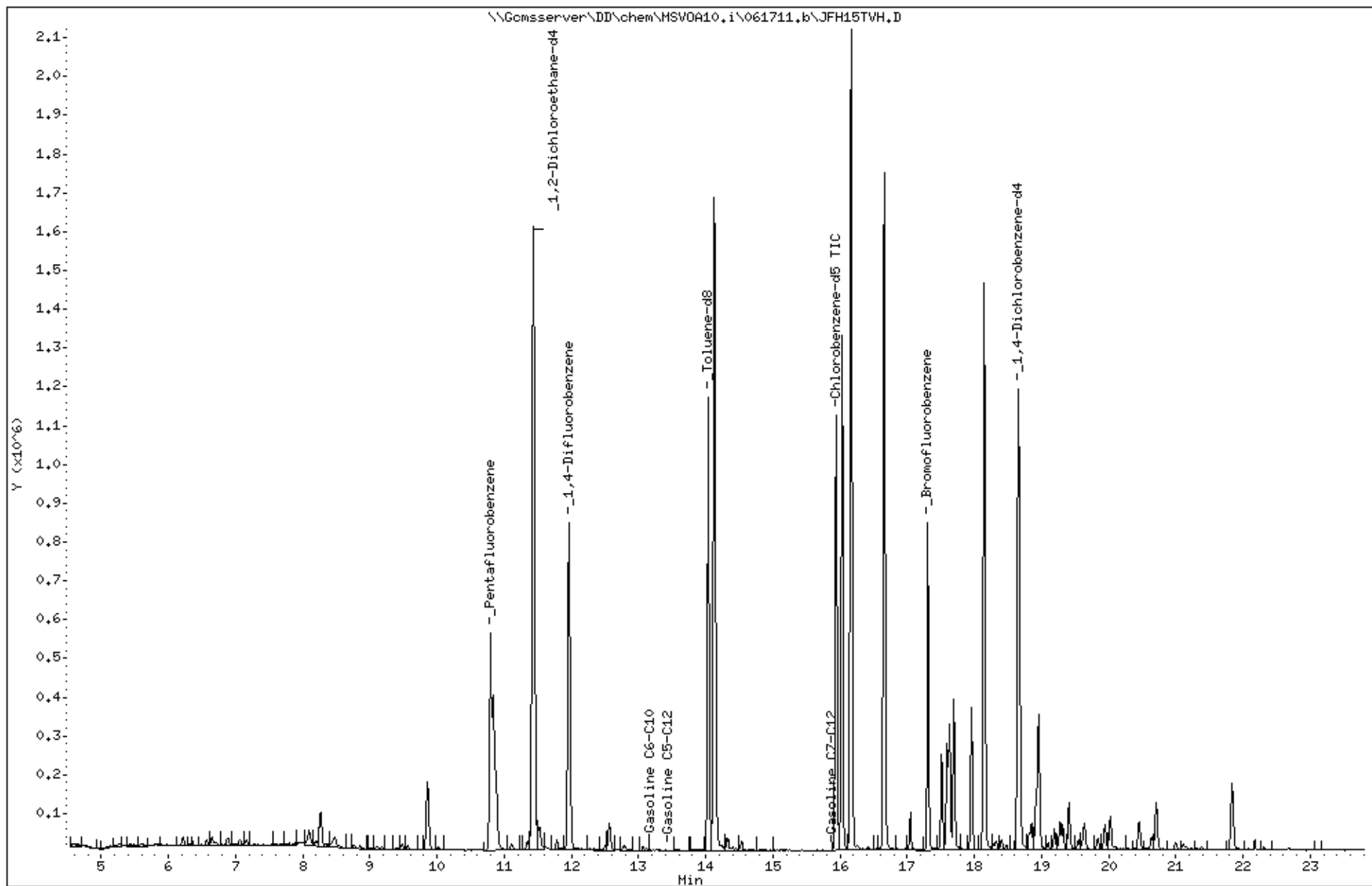
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Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



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Date : 17-JUN-2011 19:45

Client ID: DYNA P&T

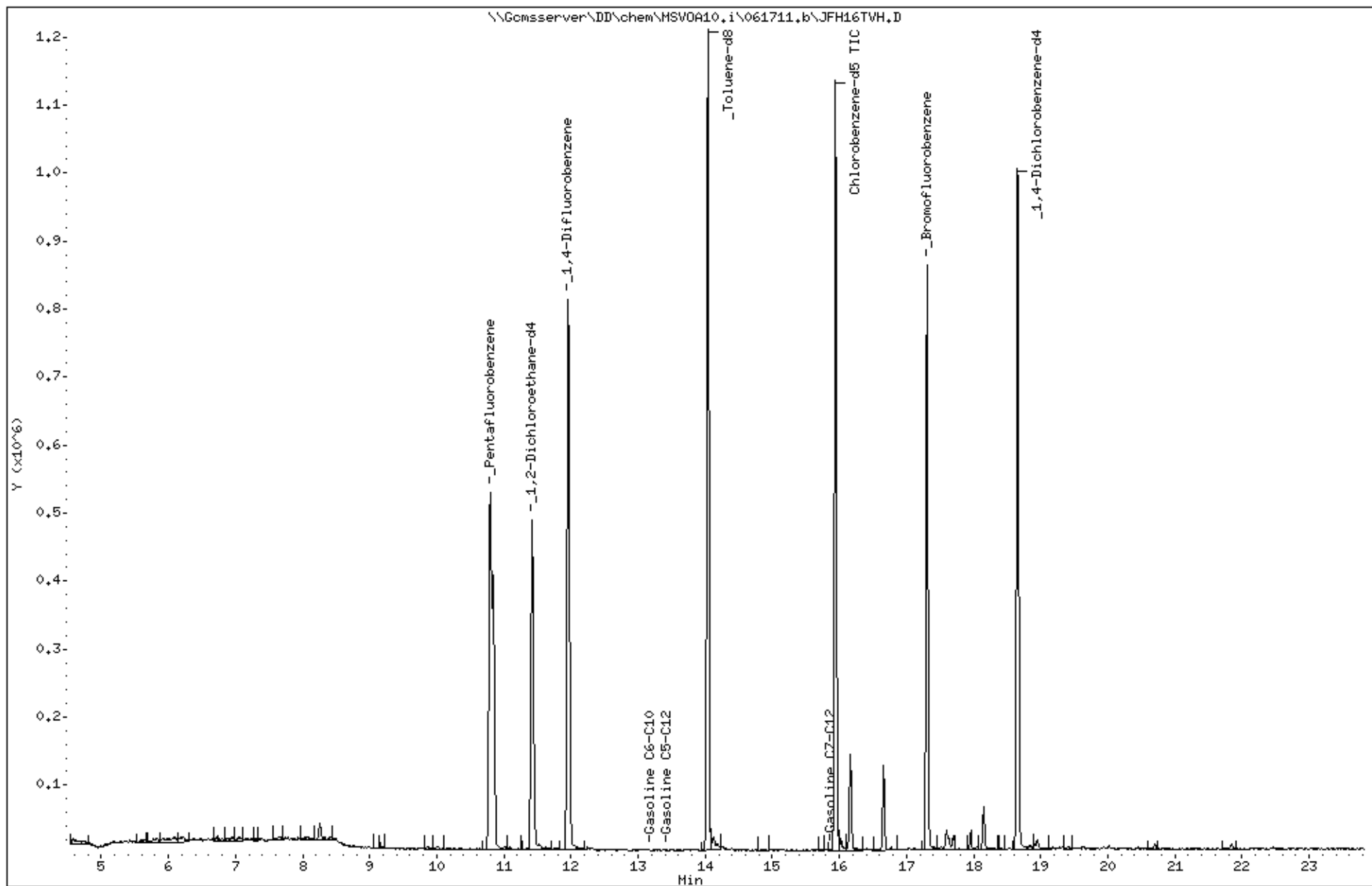
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Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:



Data File: \\Gomsserver\DD\chem\MSV0A10.i\061611.b\JFG06TVH.D

Date : 16-JUN-2011 10:10

Client ID: DYNA P&T

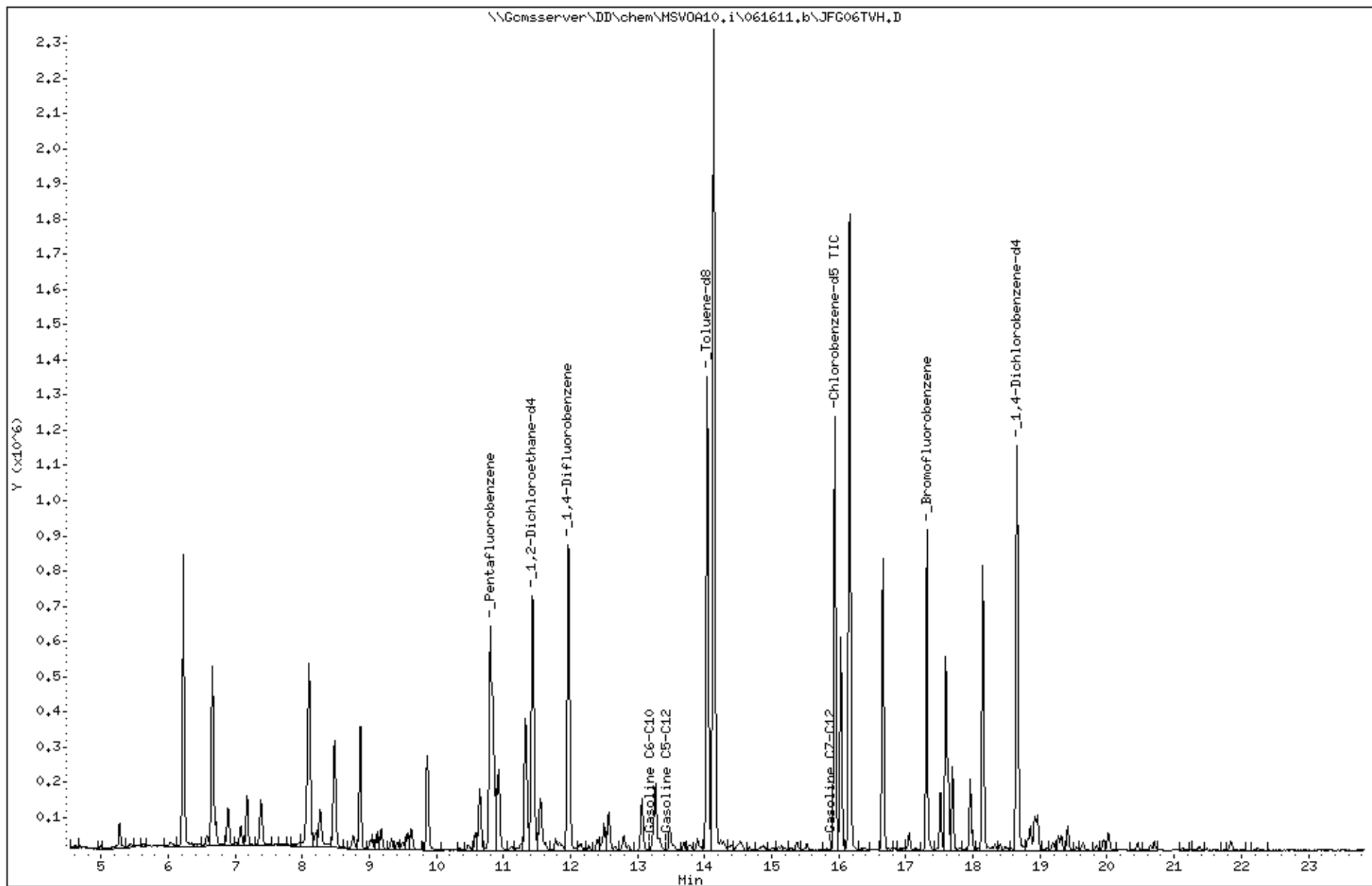
Sample Info: CCV/BS, QC596493, 175892, S17254, 12500X

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 2.00

Column phase:





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Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 228653
ANALYTICAL REPORT

Impact Environmental

Project : THMP-2011
Location : 1409 12th St., Oakland
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DPE-1B	228653-001
TRIP-BLANK(TB-3)	228653-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: *Devin N. Tetrault*
Project Manager

Date: 06/22/2011

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 228653
Client: Impact Environmental
Project: THMP-2011
Location: 1409 12th St., Oakland
Request Date: 06/10/11
Samples Received: 06/10/11

This data package contains sample and QC results for two water samples, requested for the above referenced project on 06/10/11. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

High recoveries were observed for tert-butyl alcohol (TBA) in the MS/MSD for batch 175805; the parent sample was not a project sample, the BS/BSD were within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample. TRIP-BLANK(TB-3) (lab # 228653-002) was analyzed with more than 1 mL of headspace in the VOA vial. No other analytical problems were encountered.

dt **Curtis & Tompkins Laboratories**
ENVIRONMENTAL ANALYTICAL TESTING LABORATORY
In Business Since 1878

Phone (510) 486-0900
Fax (510) 486-0532

Sampler: JOSEPH (OTTO)

Report To: JOSEPH CATTON

Company: IMPACT ENVIRONMENTS

Telephone: (510) 703-5420

Email: jac21462@aol.com

C&T LOGIN #228453

Page 1 of 1

Chain of Custody #

ANALYTICAL REQUEST

[illegible]

ANALYTICAL REQUEST	
XX	TPHd, TPHmd (EPA 8015)
XX	TPHq, BTEX, MTBE (EPA 8260)
XX	Oxygenates (EPA 8260)
XX	DCA, DCE, TCE, PCE
XX	EDB, Vinyl Chloride (EPA 8260)

**SAMPLE
RECEIPT**

- ☐ Intact
☐ Cold
☒ On Ice
☐ Ambient

RELINQUISHED BY:

JOSEPH 6-10-11
COTTON DATE:

DATE: TIME:

DATE: TIME:

RECEIVED BY:

RECEIVED BY: Pat Mang DATE: 6/10/11 TIME: 5:30

DATE: TIME:

DATE: TIME:

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 228653 Date Received 6/10/11 Number of coolers 1
 Client IMPACT Environmental Project 1709 12th St, Oakland

Date Opened 6/10/11 By (print) Vidya Oarshi (sign) [Signature]
 Date Logged in 6/13/11 By (print) R. Parus (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
 Shipping info _____

2A. Were custody seals present? ☐ YES (circle) on cooler on samples X NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C
 Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☒ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
 If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are samples in the appropriate containers for indicated tests? YES NO

11. Are sample labels present, in good condition and complete? YES NO

12. Do the sample labels agree with custody papers? YES NO

13. Was sufficient amount of sample sent for tests requested? _____ YES NO

14. Are the samples appropriately preserved? YES NO N/A

15. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

16. Did you document your preservative check? _____ YES NO N/A

17. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

18. Are bubbles > 6mm absent in VOA samples? YES NO N/A

19. Was the client contacted concerning this sample delivery? _____ YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS
 13) -002 Rez'd only 1 VOA for 8260.

Total Extractable Hydrocarbons

Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Field ID:	DPE-1B	Sampled:	06/09/11
Matrix:	Water	Received:	06/10/11
Units:	ug/L	Prepared:	06/13/11
Diln Fac:	1.000	Analyzed:	06/15/11
Batch#:	175787		

Type: SAMPLE Lab ID: 228653-001

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	98	68-120

Type: BLANK Lab ID: QC595989

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	103	68-120

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC595990	Batch#:	175787
Matrix:	Water	Prepared:	06/13/11
Units:	ug/L	Analyzed:	06/15/11

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,111	84	61-120

Surrogate	%REC	Limits
o-Terphenyl	86	68-120

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 3520C
Project#:	THMP-2011	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	175787
MSS Lab ID:	228576-002	Sampled:	06/07/11
Matrix:	Water	Received:	06/08/11
Units:	ug/L	Prepared:	06/13/11
Diln Fac:	1.000	Analyzed:	06/15/11

Type: MS
Lab ID: QC595991

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<9.639	2,500	1,716	69	33-140

Surrogate	%REC	Limits
o-Terphenyl	76	68-120

Type: MSD
Lab ID: QC595992

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,022	81	33-140	16	30

Surrogate	%REC	Limits
o-Terphenyl	91	68-120

RPD= Relative Percent Difference

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-1B	Batch#:	175947
Lab ID:	228653-001	Sampled:	06/09/11
Matrix:	Water	Received:	06/10/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	1.8	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	DPE-1B	Batch#:	175947
Lab ID:	228653-001	Sampled:	06/09/11
Matrix:	Water	Received:	06/10/11
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	103	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	TRIP-BLANK(TB-3)	Diln Fac:	1.000
Lab ID:	228653-002	Sampled:	06/07/11
Matrix:	Water	Received:	06/10/11
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	ND	50	175857	06/15/11
Freon 12	ND	1.0	175805	06/14/11
tert-Butyl Alcohol (TBA)	ND	10	175805	06/14/11
Chloromethane	ND	1.0	175805	06/14/11
Isopropyl Ether (DIPE)	ND	0.5	175805	06/14/11
Vinyl Chloride	ND	0.5	175805	06/14/11
Bromomethane	ND	1.0	175805	06/14/11
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	175805	06/14/11
Chloroethane	ND	1.0	175805	06/14/11
Methyl tert-Amyl Ether (TAME)	ND	0.5	175805	06/14/11
Trichlorofluoromethane	ND	1.0	175805	06/14/11
Acetone	ND	10	175805	06/14/11
Freon 113	ND	2.0	175805	06/14/11
1,1-Dichloroethene	ND	0.5	175805	06/14/11
Methylene Chloride	ND	10	175805	06/14/11
Carbon Disulfide	ND	0.5	175805	06/14/11
MTBE	ND	0.5	175805	06/14/11
trans-1,2-Dichloroethene	ND	0.5	175805	06/14/11
Vinyl Acetate	ND	10	175805	06/14/11
1,1-Dichloroethane	ND	0.5	175805	06/14/11
2-Butanone	ND	10	175805	06/14/11
cis-1,2-Dichloroethene	ND	0.5	175805	06/14/11
2,2-Dichloropropane	ND	0.5	175805	06/14/11
Chloroform	ND	0.5	175805	06/14/11
Bromochloromethane	ND	0.5	175805	06/14/11
1,1,1-Trichloroethane	ND	0.5	175805	06/14/11
1,1-Dichloropropene	ND	0.5	175805	06/14/11
Carbon Tetrachloride	ND	0.5	175805	06/14/11
1,2-Dichloroethane	ND	0.5	175805	06/14/11
Benzene	ND	0.5	175805	06/14/11
Trichloroethene	ND	0.5	175805	06/14/11
1,2-Dichloropropane	ND	0.5	175805	06/14/11
Bromodichloromethane	ND	0.5	175805	06/14/11
Dibromomethane	ND	0.5	175805	06/14/11
4-Methyl-2-Pentanone	ND	10	175805	06/14/11
cis-1,3-Dichloropropene	ND	0.5	175805	06/14/11
Toluene	ND	0.5	175805	06/14/11
trans-1,3-Dichloropropene	ND	0.5	175805	06/14/11
1,1,2-Trichloroethane	ND	0.5	175805	06/14/11
2-Hexanone	ND	10	175805	06/14/11
1,3-Dichloropropane	ND	0.5	175805	06/14/11
Tetrachloroethene	ND	0.5	175805	06/14/11
Dibromochloromethane	ND	0.5	175805	06/14/11
1,2-Dibromoethane	ND	0.5	175805	06/14/11
Chlorobenzene	ND	0.5	175805	06/14/11
1,1,1,2-Tetrachloroethane	ND	0.5	175805	06/14/11
Ethylbenzene	ND	0.5	175805	06/14/11
m,p-Xylenes	ND	0.5	175805	06/14/11
o-Xylene	ND	0.5	175805	06/14/11
Styrene	ND	0.5	175805	06/14/11
Bromoform	ND	1.0	175805	06/14/11
Isopropylbenzene	ND	0.5	175805	06/14/11
1,1,2,2-Tetrachloroethane	ND	0.5	175805	06/14/11
1,2,3-Trichloropropane	ND	0.5	175805	06/14/11
Propylbenzene	ND	0.5	175805	06/14/11

ND= Not Detected
RL= Reporting Limit

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	TRIP-BLANK(TB-3)	Diln Fac:	1.000
Lab ID:	228653-002	Sampled:	06/07/11
Matrix:	Water	Received:	06/10/11
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Bromobenzene	ND	0.5	175805	06/14/11
1,3,5-Trimethylbenzene	ND	0.5	175805	06/14/11
2-Chlorotoluene	ND	0.5	175805	06/14/11
4-Chlorotoluene	ND	0.5	175805	06/14/11
tert-Butylbenzene	ND	0.5	175805	06/14/11
1,2,4-Trimethylbenzene	ND	0.5	175805	06/14/11
sec-Butylbenzene	ND	0.5	175805	06/14/11
para-Isopropyl Toluene	ND	0.5	175805	06/14/11
1,3-Dichlorobenzene	ND	0.5	175805	06/14/11
1,4-Dichlorobenzene	ND	0.5	175805	06/14/11
n-Butylbenzene	ND	0.5	175805	06/14/11
1,2-Dichlorobenzene	ND	0.5	175805	06/14/11
1,2-Dibromo-3-Chloropropane	ND	2.0	175805	06/14/11
1,2,4-Trichlorobenzene	ND	0.5	175805	06/14/11
Hexachlorobutadiene	ND	2.0	175805	06/14/11
Naphthalene	ND	2.0	175805	06/14/11
1,2,3-Trichlorobenzene	ND	0.5	175805	06/14/11

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	102	80-127	175857	06/15/11
1,2-Dichloroethane-d4	102	73-145	175857	06/15/11
Toluene-d8	103	80-120	175857	06/15/11
Bromofluorobenzene	110	80-120	175857	06/15/11

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175805
Units:	ug/L	Analyzed:	06/14/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596080

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	110.0	88	46-141
Isopropyl Ether (DIPE)	25.00	25.41	102	52-139
Ethyl tert-Butyl Ether (ETBE)	25.00	26.28	105	56-131
Methyl tert-Amyl Ether (TAME)	25.00	23.38	94	65-120
1,1-Dichloroethene	25.00	23.31	93	64-133
Benzene	25.00	24.43	98	80-122
Trichloroethene	25.00	24.18	97	78-120
Toluene	25.00	24.01	96	80-120
Chlorobenzene	25.00	23.77	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	98	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	87	80-120

Type: BSD Lab ID: QC596081

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	114.7	92	46-141	4	31
Isopropyl Ether (DIPE)	25.00	25.44	102	52-139	0	20
Ethyl tert-Butyl Ether (ETBE)	25.00	26.30	105	56-131	0	20
Methyl tert-Amyl Ether (TAME)	25.00	23.59	94	65-120	1	20
1,1-Dichloroethene	25.00	22.75	91	64-133	2	20
Benzene	25.00	24.20	97	80-122	1	20
Trichloroethene	25.00	24.46	98	78-120	1	20
Toluene	25.00	23.88	96	80-120	1	20
Chlorobenzene	25.00	23.70	95	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	100	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	88	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596082	Batch#:	175805
Matrix:	Water	Analyzed:	06/14/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596082	Batch#:	175805
Matrix:	Water	Analyzed:	06/14/11
Units:	ug/L		

Analyte	Result	RL
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	102	73-145
Toluene-d8	96	80-120
Bromofluorobenzene	92	80-120

NA= Not Analyzed
ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	175805
MSS Lab ID:	228620-001	Sampled:	06/08/11
Matrix:	Water	Received:	06/09/11
Units:	ug/L	Analyzed:	06/14/11
Diln Fac:	1.000		

Type: MS Lab ID: QC596203

Analyte	MSS	Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.701		125.0	184.8	148 *	62-143
Isopropyl Ether (DIPE)	<0.1000		25.00	28.27	113	69-126
Ethyl tert-Butyl Ether (ETBE)	<0.1000		25.00	28.52	114	72-121
Methyl tert-Amyl Ether (TAME)	<0.1000		25.00	24.11	96	75-120
1,1-Dichloroethene	<0.1268		25.00	25.32	101	73-126
Benzene	<0.1000		25.00	25.61	102	80-120
Trichloroethene	0.9323		25.00	26.29	101	69-122
Toluene	<0.1000		25.00	24.62	98	80-120
Chlorobenzene	<0.1000		25.00	23.98	96	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	115	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

Type: MSD Lab ID: QC596204

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	182.1	146 *	62-143	2	30
Isopropyl Ether (DIPE)	25.00	28.94	116	69-126	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	28.87	115	72-121	1	20
Methyl tert-Amyl Ether (TAME)	25.00	24.71	99	75-120	2	20
1,1-Dichloroethene	25.00	25.99	104	73-126	3	20
Benzene	25.00	26.58	106	80-120	4	20
Trichloroethene	25.00	27.03	104	69-122	3	20
Toluene	25.00	25.29	101	80-120	3	20
Chlorobenzene	25.00	24.77	99	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	112	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	91	80-120

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference
Page 1 of 1

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175857
Units:	ug/L	Analyzed:	06/15/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596336

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	114.9	92	46-141
Isopropyl Ether (DIPE)	25.00	24.92	100	52-139
Ethyl tert-Butyl Ether (ETBE)	25.00	24.33	97	56-131
Methyl tert-Amyl Ether (TAME)	25.00	22.96	92	65-120
1,1-Dichloroethene	25.00	22.09	88	64-133
Benzene	25.00	25.95	104	80-122
Trichloroethene	25.00	23.82	95	78-120
Toluene	25.00	26.49	106	80-120
Chlorobenzene	25.00	25.12	100	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	99	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC596337

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	120.7	97	46-141	5	31
Isopropyl Ether (DIPE)	25.00	23.72	95	52-139	5	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.42	98	56-131	0	20
Methyl tert-Amyl Ether (TAME)	25.00	21.73	87	65-120	6	20
1,1-Dichloroethene	25.00	24.32	97	64-133	10	20
Benzene	25.00	24.57	98	80-122	5	20
Trichloroethene	25.00	22.91	92	78-120	4	20
Toluene	25.00	26.66	107	80-120	1	20
Chlorobenzene	25.00	25.40	102	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	94	73-145
Toluene-d8	103	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175857
Units:	ug/L	Analyzed:	06/15/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596338

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,008	101	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	96	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC596339

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,015	102	70-130	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	99	73-145
Toluene-d8	102	80-120
Bromofluorobenzene	106	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596340	Batch#:	175857
Matrix:	Water	Analyzed:	06/15/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	2.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	2.0

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596340	Batch#:	175857
Matrix:	Water	Analyzed:	06/15/11
Units:	ug/L		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	97	73-145
Toluene-d8	105	80-120
Bromofluorobenzene	106	80-120

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	175857
MSS Lab ID:	228590-009	Sampled:	06/06/11
Matrix:	Water	Received:	06/08/11
Units:	ug/L	Analyzed:	06/15/11
Diln Fac:	1.000		

Type: MS Lab ID: QC596391

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<2.239	125.0	141.8	113	62-143
Isopropyl Ether (DIPE)	<0.1000	25.00	26.45	106	69-126
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	26.43	106	72-121
Methyl tert-Amyl Ether (TAME)	<0.1002	25.00	22.26	89	75-120
1,1-Dichloroethene	1.853	25.00	27.61	103	73-126
Benzene	<0.1000	25.00	25.65	103	80-120
Trichloroethene	21.63	25.00	40.14	74	69-122
Toluene	<0.1000	25.00	28.00	112	80-120
Chlorobenzene	<0.1296	25.00	27.89	112	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	105	73-145
Toluene-d8	107	80-120
Bromofluorobenzene	106	80-120

Type: MSD Lab ID: QC596392

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	140.5	112	62-143	1	30
Isopropyl Ether (DIPE)	25.00	26.50	106	69-126	0	20
Ethyl tert-Butyl Ether (ETBE)	25.00	26.95	108	72-121	2	20
Methyl tert-Amyl Ether (TAME)	25.00	23.70	95	75-120	6	20
1,1-Dichloroethene	25.00	27.64	103	73-126	0	20
Benzene	25.00	27.00	108	80-120	5	20
Trichloroethene	25.00	42.46	83	69-122	6	20
Toluene	25.00	28.78	115	80-120	3	20
Chlorobenzene	25.00	27.08	108	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	109	73-145
Toluene-d8	111	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175947
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596711

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	56.07	90	46-141
Isopropyl Ether (DIPE)	12.50	10.52	84	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	10.40	83	56-131
Methyl tert-Amyl Ether (TAME)	12.50	9.512	76	65-120
1,1-Dichloroethene	12.50	10.30	82	64-133
Benzene	12.50	12.69	102	80-122
Trichloroethene	12.50	11.80	94	78-120
Toluene	12.50	12.07	97	80-120
Chlorobenzene	12.50	12.19	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC596712

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	59.38	95	46-141	6	31
Isopropyl Ether (DIPE)	12.50	10.43	83	52-139	1	20
Ethyl tert-Butyl Ether (ETBE)	12.50	10.28	82	56-131	1	20
Methyl tert-Amyl Ether (TAME)	12.50	9.629	77	65-120	1	20
1,1-Dichloroethene	12.50	9.916	79	64-133	4	20
Benzene	12.50	12.08	97	80-122	5	20
Trichloroethene	12.50	11.10	89	78-120	6	20
Toluene	12.50	11.94	96	80-120	1	20
Chlorobenzene	12.50	11.96	96	80-120	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	98	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596713	Batch#:	175947
Matrix:	Water	Analyzed:	06/17/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC596713	Batch#:	175947
Matrix:	Water	Analyzed:	06/17/11
Units:	ug/L		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	100	73-145
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS			
Lab #:	228653	Location:	1409 12th St., Oakland
Client:	Impact Environmental	Prep:	EPA 5030B
Project#:	THMP-2011	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175947
Units:	ug/L	Analyzed:	06/17/11
Diln Fac:	1.000		

Type: BS Lab ID: QC596744

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,019	102	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC596745

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,053	105	70-130	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	100	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference



Impact Environmental Services
39120 Argonaut Way, Suite 223
Fremont, California 94538
Tel: 510-703-5420
Fax: 510-713-7790
RE: 1409 12th Street

Work Order No.: 1112009

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 15 sample(s) on December 02, 2011 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "G. Gueorguieva", is positioned above a horizontal line.

G.Gueorguieva
Sr. Project Manager

December 09, 2011

Date



Date: 12/9/2011

Client: Impact Environmental Services

Project: 1409 12th Street

Work Order: 1112009

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

Per client request, a Total Xylenes value is reported in the comment section of each EPA 8260B sample.



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

MW-2

1112009-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

MW-5

1112009-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

MW-8

1112009-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

GW-1

1112009-004

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
tert-Butanol	SW8260B	1	1.5	5.0	11	ug/L
Benzene	SW8260B	1	0.33	0.50	0.52	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	0.85	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	1.4	ug/L
o-Xylene	SW8260B	1	0.13	0.50	3.1	ug/L
TPH(Gasoline)	8260TPH	1	22	50	66	ug/L

GW-2

1112009-005

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

GW-3

1112009-006

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Benzene	SW8260B	1	0.33	0.50	0.59	ug/L
Toluene	SW8260B	1	0.19	0.50	0.62	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	1.1	ug/L
o-Xylene	SW8260B	1	0.13	0.50	0.87	ug/L

DPE-1

1112009-007

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

DPE-1B

1112009-008

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

DPE-2

1112009-009

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

DPE-2B

1112009-010

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

DPE-3

1112009-011

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Benzene	SW8260B	1	0.33	0.50	7.7	ug/L
Toluene	SW8260B	1	0.19	0.50	3.2	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	1.8	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	7.5	ug/L
o-Xylene	SW8260B	1	0.13	0.50	9.8	ug/L
TPH(Gasoline)	8260TPH	1	22	50	66	ug/L

DPE-5

1112009-012

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

DPE-6

1112009-013

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

DPE-7

1112009-014

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	MW-2	Lab Sample ID:	1112009-001A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 17:50		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	101		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	95.2		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	98.5		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	76.1		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	MW-2	Lab Sample ID:	1112009-001B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 17:50		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	91.3		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	MW-5	Lab Sample ID:	1112009-002A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:58		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	104		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	96.6		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	96.3		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	75.6		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	MW-5	Lab Sample ID:	1112009-002B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:58		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	96.7		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	MW-8	Lab Sample ID:	1112009-003A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 17:10		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	102		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	95.7		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	97.1		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	67.2		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	MW-8	Lab Sample ID:	1112009-003B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 17:10		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	99.2		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	GW-1	Lab Sample ID:	1112009-004A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 18:10		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/07/11	1	0.38	0.50	ND		ug/L	407721	NA
tert-Butanol	SW8260B	NA	12/07/11	1	1.5	5.0	11		ug/L	407721	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/07/11	1	0.36	0.50	ND		ug/L	407721	NA
ETBE	SW8260B	NA	12/07/11	1	0.40	0.50	ND		ug/L	407721	NA
Benzene	SW8260B	NA	12/07/11	1	0.33	0.50	0.52		ug/L	407721	NA
TAME	SW8260B	NA	12/07/11	1	0.32	0.50	ND		ug/L	407721	NA
Toluene	SW8260B	NA	12/07/11	1	0.19	0.50	ND		ug/L	407721	NA
Ethyl Benzene	SW8260B	NA	12/07/11	1	0.15	0.50	0.85		ug/L	407721	NA
m,p-Xylene	SW8260B	NA	12/07/11	1	0.20	1.0	1.4		ug/L	407721	NA
o-Xylene	SW8260B	NA	12/07/11	1	0.13	0.50	3.1		ug/L	407721	NA
(S) Dibromofluoromethane	SW8260B	NA	12/07/11	1	61.2	131	116		%	407721	NA
(S) Toluene-d8	SW8260B	NA	12/07/11	1	75.1	127	104		%	407721	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/07/11	1	64.1	120	107		%	407721	NA

NOTE: Total Xylenes = 4.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	66	x	ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	50.3		%	407709	4284

NOTE: x - Does not match pattern of reference Gasoline standard. Reported value due to contribution from non-target heavy hydrocarbons in range of C5-C12 quantified as gasoline (possibly aged gasoline).



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	GW-1	Lab Sample ID:	1112009-004B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 18:10		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0444	0.11	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0999	0.22	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	108		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	GW-2	Lab Sample ID:	1112009-005A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 12:55		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	114		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	95.4		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	100		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	63.4		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	GW-2	Lab Sample ID:	1112009-005B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 12:55		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	92.0		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11
Date Reported: 12/09/11

Client Sample ID:	GW-3	Lab Sample ID:	1112009-006A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 17:08		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	0.59		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	0.62		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	1.1		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	0.87		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	106		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	96.2		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	98.4		%	407709	NA

NOTE: Total Xylenes = 2.0 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	72.1		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	GW-3	Lab Sample ID:	1112009-006B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 17:08		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	102		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-1	Lab Sample ID:	1112009-007A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 13:40		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	109		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	95.9		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	99.4		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	64.9		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-1	Lab Sample ID:	1112009-007B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 13:40		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	99.0		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-1B	Lab Sample ID:	1112009-008A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 18:35		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/07/11	1	0.38	0.50	ND		ug/L	407721	NA
tert-Butanol	SW8260B	NA	12/07/11	1	1.5	5.0	ND		ug/L	407721	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/07/11	1	0.36	0.50	ND		ug/L	407721	NA
ETBE	SW8260B	NA	12/07/11	1	0.40	0.50	ND		ug/L	407721	NA
Benzene	SW8260B	NA	12/07/11	1	0.33	0.50	ND		ug/L	407721	NA
TAME	SW8260B	NA	12/07/11	1	0.32	0.50	ND		ug/L	407721	NA
Toluene	SW8260B	NA	12/07/11	1	0.19	0.50	ND		ug/L	407721	NA
Ethyl Benzene	SW8260B	NA	12/07/11	1	0.15	0.50	ND		ug/L	407721	NA
m,p-Xylene	SW8260B	NA	12/07/11	1	0.20	1.0	ND		ug/L	407721	NA
o-Xylene	SW8260B	NA	12/07/11	1	0.13	0.50	ND		ug/L	407721	NA
(S) Dibromofluoromethane	SW8260B	NA	12/07/11	1	61.2	131	114		%	407721	NA
(S) Toluene-d8	SW8260B	NA	12/07/11	1	75.1	127	102		%	407721	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/07/11	1	64.1	120	104		%	407721	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/7/11	12/07/11	1	22	50	ND		ug/L	407721	4291
(S) 4-Bromofluorobenzene	8260TPH	12/7/11	12/07/11	1	41.5	125	65.4		%	407721	4291



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-1B	Lab Sample ID:	1112009-008B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 18:35		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	101		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-2	Lab Sample ID:	1112009-009A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 14:15		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	116		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	97.4		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	100		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/06/11	1	22	50	ND		ug/L	407709	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/06/11	1	41.5	125	50.9		%	407709	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-2	Lab Sample ID:	1112009-009B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 14:15		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0432	0.11	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0972	0.22	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	96.7		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11
Date Reported: 12/09/11

Client Sample ID:	DPE-2B	Lab Sample ID:	1112009-010A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:36		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	124		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	97.8		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	102		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	52.9		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-2B	Lab Sample ID:	1112009-010B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:36		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0412	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0927	0.21	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	107		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11
Date Reported: 12/09/11

Client Sample ID:	DPE-3	Lab Sample ID:	1112009-011A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:25		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/07/11	1	0.38	0.50	ND		ug/L	407721	NA
tert-Butanol	SW8260B	NA	12/07/11	1	1.5	5.0	ND		ug/L	407721	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/07/11	1	0.36	0.50	ND		ug/L	407721	NA
ETBE	SW8260B	NA	12/07/11	1	0.40	0.50	ND		ug/L	407721	NA
Benzene	SW8260B	NA	12/07/11	1	0.33	0.50	7.7		ug/L	407721	NA
TAME	SW8260B	NA	12/07/11	1	0.32	0.50	ND		ug/L	407721	NA
Toluene	SW8260B	NA	12/07/11	1	0.19	0.50	3.2		ug/L	407721	NA
Ethyl Benzene	SW8260B	NA	12/07/11	1	0.15	0.50	1.8		ug/L	407721	NA
m,p-Xylene	SW8260B	NA	12/07/11	1	0.20	1.0	7.5		ug/L	407721	NA
o-Xylene	SW8260B	NA	12/07/11	1	0.13	0.50	9.8		ug/L	407721	NA
(S) Dibromofluoromethane	SW8260B	NA	12/07/11	1	61.2	131	121		%	407721	NA
(S) Toluene-d8	SW8260B	NA	12/07/11	1	75.1	127	103		%	407721	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/07/11	1	64.1	120	106		%	407721	NA

NOTE: Total Xylenes = 17.3 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	66		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	58.2		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-3	Lab Sample ID:	1112009-011B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:25		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0412	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0927	0.21	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	98.1		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11
Date Reported: 12/09/11

Client Sample ID:	DPE-5	Lab Sample ID:	1112009-012A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:27		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	114		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	96.0		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	102		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	57.8		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-5	Lab Sample ID:	1112009-012B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 16:27		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0412	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0927	0.21	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	60.9		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-6	Lab Sample ID:	1112009-013A
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 15:15		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/06/11	1	0.38	0.50	ND		ug/L	407709	NA
tert-Butanol	SW8260B	NA	12/06/11	1	1.5	5.0	ND		ug/L	407709	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/06/11	1	0.36	0.50	ND		ug/L	407709	NA
ETBE	SW8260B	NA	12/06/11	1	0.40	0.50	ND		ug/L	407709	NA
Benzene	SW8260B	NA	12/06/11	1	0.33	0.50	ND		ug/L	407709	NA
TAME	SW8260B	NA	12/06/11	1	0.32	0.50	ND		ug/L	407709	NA
Toluene	SW8260B	NA	12/06/11	1	0.19	0.50	ND		ug/L	407709	NA
Ethyl Benzene	SW8260B	NA	12/06/11	1	0.15	0.50	ND		ug/L	407709	NA
m,p-Xylene	SW8260B	NA	12/06/11	1	0.20	1.0	ND		ug/L	407709	NA
o-Xylene	SW8260B	NA	12/06/11	1	0.13	0.50	ND		ug/L	407709	NA
(S) Dibromofluoromethane	SW8260B	NA	12/06/11	1	61.2	131	124		%	407709	NA
(S) Toluene-d8	SW8260B	NA	12/06/11	1	75.1	127	97.6		%	407709	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/06/11	1	64.1	120	105		%	407709	NA

NOTE: Total Xylenes = ND @ 1.5 ug/Kg

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/6/11	12/06/11	1	22	50	ND		ug/L	407709	4284
(S) 4-Bromofluorobenzene	8260TPH	12/6/11	12/06/11	1	41.5	125	57.5		%	407709	4284



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-6	Lab Sample ID:	1112009-013B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 15:15		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0412	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0927	0.21	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	100		%	407748	4252



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/09/11

Client Sample ID:	DPE-7	Lab Sample ID:	1112009-014B
Project Name/Location:	1409 12th Street	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/01/11 / 14:47		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0400	0.10	ND		mg/L	407748	4252
TPH as Motor Oil (SG)	SW8015B(M)	12/2/11	12/06/11	1	0.0900	0.20	ND		mg/L	407748	4252
Pentacosane (S)	SW8015B(M)	12/2/11	12/06/11	1	57.9	125	106		%	407748	4252



MB Summary Report

Work Order:	1112009	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/06/11	Analytical Batch:	407709
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.41	0.50	ND	
Chloromethane	0.41	0.50	ND	
Vinyl Chloride	0.37	0.50	ND	
Bromomethane	0.37	0.50	ND	
Trichlorofluoromethane	0.34	0.50	ND	
1,1-Dichloroethene	0.29	0.50	ND	
Freon 113	0.38	0.50	ND	
Methylene Chloride	0.18	5.0	ND	
trans-1,2-Dichloroethene	0.31	0.50	ND	
MTBE	0.38	0.50	ND	
tert-Butanol	1.5	5.0	ND	
Diisopropyl ether (DIPE)	0.36	0.50	ND	
1,1-Dichloroethane	0.28	0.50	ND	
ETBE	0.40	0.50	ND	
cis-1,2-Dichloroethene	0.33	0.50	ND	
2,2-Dichloropropane	0.37	0.50	ND	
Bromochloromethane	0.34	0.50	ND	
Chloroform	0.29	0.50	ND	
Carbon Tetrachloride	0.26	0.50	ND	
1,1,1-Trichloroethane	0.32	0.50	ND	
1,1-Dichloropropene	0.40	0.50	ND	
Benzene	0.33	0.50	ND	
TAME	0.32	0.50	ND	
1,2-Dichloroethane	0.28	0.50	ND	
Trichloroethylene	0.38	0.50	ND	
Dibromomethane	0.21	0.50	ND	
1,2-Dichloropropane	0.37	0.50	ND	
Bromodichloromethane	0.23	0.50	ND	
cis-1,3-Dichloropropene	0.30	0.50	ND	
Toluene	0.19	0.50	ND	
Tetrachloroethylene	0.15	0.50	ND	
trans-1,3-Dichloropropene	0.20	0.50	ND	
1,1,2-Trichloroethane	0.20	0.50	ND	
Dibromochloromethane	0.21	0.50	ND	
1,3-Dichloropropane	0.18	0.50	ND	
1,2-Dibromoethane	0.19	0.50	ND	
Chlorobenzene	0.14	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
1,1,1,2-Tetrachloroethane	0.10	0.50	ND	
m,p-Xylene	0.20	1.0	ND	



MB Summary Report

Work Order:	1112009	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/06/11	Analytical Batch:	407709
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
o-Xylene	0.13	0.50	ND		
Styrene	0.20	0.50	ND		
Bromoform	0.45	1.0	ND		
Isopropyl Benzene	0.28	0.50	ND		
Bromobenzene	0.39	0.50	ND		
1,1,2,2-Tetrachloroethane	0.26	0.50	ND		
n-Propylbenzene	0.30	0.50	ND		
2-Chlorotoluene	0.33	0.50	ND		
1,3,5-Trimethylbenzene	0.20	0.50	ND		
4-Chlorotoluene	0.32	0.50	ND		
tert-Butylbenzene	0.29	0.50	ND		
1,2,3-Trichloropropane	0.59	1.0	ND		
1,2,4-Trimethylbenzene	0.33	0.50	ND		
sec-Butyl Benzene	0.24	0.50	ND		
p-Isopropyltoluene	0.25	0.50	ND		
1,3-Dichlorobenzene	0.31	0.50	ND		
1,4-Dichlorobenzene	0.37	0.50	ND		
n-Butylbenzene	0.32	0.50	ND		
1,2-Dichlorobenzene	0.39	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.45	1.0	ND		
Hexachlorobutadiene	0.22	0.50	ND		
1,2,4-Trichlorobenzene	0.48	1.0	ND		
Naphthalene	0.57	1.0	ND		
1,2,3-Trichlorobenzene	0.52	1.0	ND		
Ethanol	100	100	ND	TIC	
(S) Dibromofluoromethane			107		
(S) Toluene-d8			101		
(S) 4-Bromofluorobenzene			101		



MB Summary Report

Work Order:	1112009	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/07/11	Analytical Batch:	407721
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.41	0.50	ND	
Chloromethane	0.41	0.50	ND	
Vinyl Chloride	0.37	0.50	ND	
Bromomethane	0.37	0.50	ND	
Trichlorofluoromethane	0.34	0.50	ND	
1,1-Dichloroethene	0.29	0.50	ND	
Freon 113	0.38	0.50	ND	
Methylene Chloride	0.18	5.0	ND	
trans-1,2-Dichloroethene	0.31	0.50	ND	
MTBE	0.38	0.50	ND	
tert-Butanol	1.5	5.0	ND	
Diisopropyl ether (DIPE)	0.36	0.50	ND	
1,1-Dichloroethane	0.28	0.50	ND	
ETBE	0.40	0.50	ND	
cis-1,2-Dichloroethene	0.33	0.50	ND	
2,2-Dichloropropane	0.37	0.50	ND	
Bromochloromethane	0.34	0.50	ND	
Chloroform	0.29	0.50	ND	
Carbon Tetrachloride	0.26	0.50	ND	
1,1,1-Trichloroethane	0.32	0.50	ND	
1,1-Dichloropropene	0.40	0.50	ND	
Benzene	0.33	0.50	ND	
TAME	0.32	0.50	ND	
1,2-Dichloroethane	0.28	0.50	ND	
Trichloroethylene	0.38	0.50	ND	
Dibromomethane	0.21	0.50	ND	
1,2-Dichloropropane	0.37	0.50	ND	
Bromodichloromethane	0.23	0.50	ND	
cis-1,3-Dichloropropene	0.30	0.50	ND	
Toluene	0.19	0.50	ND	
Tetrachloroethylene	0.15	0.50	ND	
trans-1,3-Dichloropropene	0.20	0.50	ND	
1,1,2-Trichloroethane	0.20	0.50	ND	
Dibromochloromethane	0.21	0.50	ND	
1,3-Dichloropropane	0.18	0.50	ND	
1,2-Dibromoethane	0.19	0.50	ND	
Chlorobenzene	0.14	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
1,1,1,2-Tetrachloroethane	0.10	0.50	ND	
m,p-Xylene	0.20	1.0	ND	
o-Xylene	0.13	0.50	ND	



MB Summary Report

Work Order:	1112009	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/07/11	Analytical Batch:	407721
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	0.20	0.50	ND		
Bromoform	0.45	1.0	ND		
Isopropyl Benzene	0.28	0.50	ND		
Bromobenzene	0.39	0.50	ND		
1,1,2,2-Tetrachloroethane	0.26	0.50	ND		
n-Propylbenzene	0.30	0.50	ND		
2-Chlorotoluene	0.33	0.50	ND		
1,3,5-Trimethylbenzene	0.20	0.50	ND		
4-Chlorotoluene	0.32	0.50	ND		
tert-Butylbenzene	0.29	0.50	ND		
1,2,3-Trichloropropane	0.59	1.0	ND		
1,2,4-Trimethylbenzene	0.33	0.50	ND		
sec-Butyl Benzene	0.24	0.50	ND		
p-Isopropyltoluene	0.25	0.50	ND		
1,3-Dichlorobenzene	0.31	0.50	ND		
1,4-Dichlorobenzene	0.37	0.50	ND		
n-Butylbenzene	0.32	0.50	ND		
1,2-Dichlorobenzene	0.39	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.45	1.0	ND		
Hexachlorobutadiene	0.22	0.50	ND		
1,2,4-Trichlorobenzene	0.48	1.0	ND		
Naphthalene	0.57	1.0	ND		
1,2,3-Trichlorobenzene	0.52	1.0	ND		
Ethanol	100	100	ND	TIC	
(S) Dibromofluoromethane			102		
(S) Toluene-d8			82.1		
(S) 4-Bromofluorobenzene			86.8		

Work Order:	1112009	Prep Method:	3510_TPHSG	Prep Date:	12/02/11	Prep Batch:	4252
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	12/06/11	Analytical Batch:	407748
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel (SG)	0.0440	0.10	ND		
TPH as Motor Oil (SG)	0.0920	0.20	ND		
Pentacosane (S)			101		



MB Summary Report

Work Order:	1112009	Prep Method:	5030	Prep Date:	12/06/11	Prep Batch:	4284
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/06/11	Analytical Batch:	407709
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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TPH(Gasoline)	22	50	ND		
(S) 4-Bromofluorobenzene			74.6		

Work Order:	1112009	Prep Method:	5030	Prep Date:	12/07/11	Prep Batch:	4291
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/07/11	Analytical Batch:	407721
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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TPH(Gasoline)	22	50	ND		
(S) 4-Bromofluorobenzene			64.8		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1112009	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/06/11	Analytical Batch:	407709
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.29	0.50	ND	17.04	100	96.4	3.39	61.4 - 129	30	
Benzene	0.33	0.50	ND	17.04	114	121	6.47	66.9 - 140	30	
Trichloroethylene	0.38	0.50	ND	17.04	95.1	96.0	1.01	69.3 - 144	30	
Toluene	0.19	0.50	ND	17.04	94.6	96.5	2.13	76.6 - 123	30	
Chlorobenzene	0.14	0.50	ND	17.04	95.6	96.3	0.721	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	110	114		61.2 - 131		
(S) Toluene-d8			ND	11.36	101	99.6		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.36	101	100		64.1 - 120		

Work Order:	1112009	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/07/11	Analytical Batch:	407721
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.29	0.50	ND	17.04	81.2	89.4	9.90	61.4 - 129	30	
Benzene	0.33	0.50	ND	17.04	91.8	100	8.84	66.9 - 140	30	
Trichloroethylene	0.38	0.50	ND	17.04	75.9	83.4	9.65	69.3 - 144	30	
Toluene	0.19	0.50	ND	17.04	84.5	83.4	1.34	76.6 - 123	30	
Chlorobenzene	0.14	0.50	ND	17.04	83.0	82.0	0.926	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	88.6	89.6		61.2 - 131		
(S) Toluene-d8			ND	11.36	91.3	82.0		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.36	86.0	89.7		64.1 - 120		

Work Order:	1112009	Prep Method:	3510_TPHSG	Prep Date:	12/02/11	Prep Batch:	4252
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	12/06/11	Analytical Batch:	407748
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel (SG)	0.0440	0.10	ND	1	45.0	53.0	16.3	34.5 - 95.6	30	
Pentacosane (S)			ND	100	93.0	102		57.9 - 125		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1112009	Prep Method:	5030	Prep Date:	12/06/11	Prep Batch:	4284
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/06/11	Analytical Batch:	407709
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	22	50	ND	227.27	111	118	5.91	52.4 - 127	30	
(S) 4-Bromofluorobenzene			74.6	11.36	74.0	66.4		41.5 - 125		

Work Order:	1112009	Prep Method:	5030	Prep Date:	12/07/11	Prep Batch:	4291
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/07/11	Analytical Batch:	407721
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	22	50	ND	227.27	97.5	108	10.5	52.4 - 127	30	
(S) 4-Bromofluorobenzene			64.8	11.36	67.8	58.6		41.5 - 125		



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg.m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank D - Surrogate is not recoverable due to the necessary dilution of the sample E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated. H- Indicates that the recommended holding time for the analyte or compound has been exceeded J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative NA - Not Analyzed N/A - Not Applicable NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Impact Environmental Services

Date and Time Received: 12/2/2011 12:34

Project Name: 1409 12th Street

Received By: GG

Work Order No.: 1112009

Physically Logged By: NG

Checklist Completed By: NG

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present? Yes
Chain of custody signed when relinquished and received? Yes
Chain of custody agrees with sample labels? Yes
Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present
Shipping Container/Cooler In Good Condition? Yes
Samples in proper container/bottle? Yes
Samples containers intact? Yes
Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes
Container/Temp Blank temperature in compliance? Temperature: 11 °C
Water-VOA vials have zero headspace? Yes
Water-pH acceptable upon receipt? N/A
pH Checked by: pH Adjusted by:

All samples present. Sample 014A -id DPE-7 -3 VOA's not recd.



Login Summary Report

Client ID: TL5130 Impact Environmental Services

Project Name: 1409 12th Street

Project # :

Report Due Date: 12/9/2011

QC Level:

TAT Requested: 5+ day:0

Date Received: 12/2/2011

Time Received: 12:34

Comments: For sample 014 only 2 ambers received client informed 12/2/2011. Report Total Xylenes ALWAYS. The vials provided on 12/6/2011 under WO1112047.

Work Order # : **1112009**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1112009-001A	MW-2	12/01/11 17:50	Water	01/16/12			W_8260Pet EDF W_GCMS-GRO	
Sample Note: For sample 014 only 2 ambers received client informed 12/2/2011. Report Total Xylenes ALWAYS. The vials provided on 12/6/2011 under WO1112047.								
1112009-001B	MW-2	12/01/11 17:50	Water	01/16/12			W_TPHDOSG	
Sample Note: For sample 014 only 2 ambers received client informed 12/2/2011. Report Total Xylenes ALWAYS.								
1112009-002A	MW-5	12/01/11 16:58	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-002B	MW-5	12/01/11 16:58	Water	01/16/12			W_TPHDOSG	
1112009-003A	MW-8	12/01/11 17:10	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-003B	MW-8	12/01/11 17:10	Water	01/16/12			W_TPHDOSG	
1112009-004A	GW-1	12/01/11 18:10	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-004B	GW-1	12/01/11 18:10	Water	01/16/12			W_TPHDOSG	
1112009-005A	GW-2	12/01/11 12:55	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-005B	GW-2	12/01/11 12:55	Water	01/16/12			W_TPHDOSG	
1112009-006A	GW-3	12/01/11 17:08	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-006B	GW-3	12/01/11 17:08	Water	01/16/12			W_TPHDOSG	
1112009-007A	DPE-1	12/01/11 13:40	Water	01/16/12				



Login Summary Report

Client ID: TL5130 Impact Environmental Services

Project Name: 1409 12th Street

Project # :

Report Due Date: 12/9/2011

Comments: For sample 014 only 2 ambers received client informed 12/2/2011. Report Total Xylenes ALWAYS. The vials provided on 12/6/2011 under WO1112047.

Work Order # : 1112009

QC Level:

TAT Requested: 5+ day:0

Date Received: 12/2/2011

Time Received: 12:34

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1112009-007B	DPE-1	12/01/11 13:40	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-008A	DPE-1B	12/01/11 18:35	Water	01/16/12			W_TPHDOSG	
1112009-008B	DPE-1B	12/01/11 18:35	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-009A	DPE-2	12/01/11 14:15	Water	01/16/12			W_TPHDOSG	
1112009-009B	DPE-2	12/01/11 14:15	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-010A	DPE-2B	12/01/11 16:36	Water	01/16/12			W_TPHDOSG	
1112009-010B	DPE-2B	12/01/11 16:36	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-011A	DPE-3	12/01/11 16:25	Water	01/16/12			W_TPHDOSG	
1112009-011B	DPE-3	12/01/11 16:25	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-012A	DPE-5	12/01/11 16:27	Water	01/16/12			W_TPHDOSG	
1112009-012B	DPE-5	12/01/11 16:27	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-013A	DPE-6	12/01/11 15:15	Water	01/16/12			W_TPHDOSG	
1112009-013B	DPE-6	12/01/11 15:15	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112009-014A	DPE-7	12/01/11 14:47	Water	01/16/12			W_TPHDOSG	
							Hold Samples	



Login Summary Report

Client ID: TL5130 Impact Environmental Services

Project Name: 1409 12th Street

Project # :

Report Due Date: 12/9/2011

Comments: For sample 014 only 2 ambers received client informed 12/2/2011. Report Total Xylenes ALWAYS. The vials provided on 12/6/2011 under WO1112047.

Work Order # : **1112009**

QC Level:

TAT Requested: 5+ day:0

Date Received: 12/2/2011

Time Received: 12:34

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
Sample Note: For sample 014 only 2 ambers received client informed 12/2/2011. The vials provided on 12/6/2011 under WO1112047.								
1112009-014B	DPE-7	12/01/11 14:47	Water	01/16/12			W_TPHDOSG	
1112009-015A	Trip Blank #1		Water	01/16/12	On-Hold		Hold Samples	



483 Sinclair Frontage Road
Milpitas, CA 95035
Phone: 408.263.5258
FAX: 408.263.8293
www.torrentlab.com

CHAIN OF CUSTODY

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY.

LAB WORK ORDER NO

1112009

Company Name: IMPACT ENVIRONMENTAL	Location of Sampling: 1409 12th STREET, OAKLAND, CA
Address: 39120 ARGONAUT WAY, #223	Purpose: SEMI-ANNUAL GROUNDWATER MONITORING
City: FREEMONT State: CA Zip Code: 94538	Special Instructions / Comments: Total Xylenes always for IMPACT
Telephone: 510-703-5420 FAX:	
REPORT TO: Joseph Cotton SAMPLER: Joseph Cotton P.O. #:	EMAIL: jac21462e@aol.com

TURNAROUND TIME:

- ☐ 10 Work Days ☐ 3 Work Days ☐ Noon - Nxt Day
☐ 7 Work Days ☐ 2 Work Days ☐ 2 - 8 Hours
☒ 5 Work Days ☐ 1 Work Day ☐ Other

SAMPLE TYPE:

- ☐ Storm Water ☐ Air
☐ Waste Water ☐ Other
☒ Ground Water
☐ Soil

REPORT FORMAT:

- ☐ QC Level IV
☒ EDF
☒ Excel / EDD

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	TPH/g, BTEX X	Fuel Oxygenates X	TPH/d, TPH/mo X	Silica gel cleanup	REMARKS
001#1B	MW-2	12-1-11 17:50	W	5	3 J008 2 amb	X	X			T = 11°C
002#1B	MW-5	16:58				X	X			
003#1B	MW-8	17:10				X	X			
004#1B	GW-1	18:10				X	X			
005#1B	GW-2	12:55				X	X			
006#1B	GW-3	17:08				X	X			
007#1B	DPE-1	13:40				X	X			
008#1B	DPE-1B	18:35				X	X			
009#1B	DPE-2	14:15				X	X			
010#1B	DPE-2B	12-1-11 16:36	W	5	3 V008 2 amb	X	X			

Relinquished By: Joseph Cotton Print: Joseph Cotton Date: 12-2-11 Time:	Received By: Georgette Quijano Print: Georgette Quijano Date: 12/2/11 Time: 12:34 pm
Relinquished By: _____ Print: _____ Date: _____ Time: _____	Received By: _____ Print: _____ Date: _____ Time: _____

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made. Page 1 of 1

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____



CHAIN OF CUSTODY

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

LAB WORK ORDER NO. _____

1112009

Company Name: IMPACT ENVIRONMENTAL			Location of Sampling: 1409 12th Street, Fremont, CA		
Address: 39120 ALGONAT WAY, #223			Purpose: Semi Annual GROUNDWATER MONITORING		
City: Fremont	State: CA	Zip Code: 94538	Special Instructions / Comments:		
Telephone: 510-703-5420 FAX:			Total Xylenes always		
REPORT TO: Joseph Cotton		SAMPLER: Joseph Cotton	P.O. #:		EMAIL: jac21462@aol.com

TURNAROUND TIME:			SAMPLE TYPE:			REPORT FORMAT:	
☐ 10 Work Days	☐ 3 Work Days	☐ Noon - Nxt Day	☐ Storm Water	☐ Air	☐ QC Level IV		
☐ 7 Work Days	☐ 2 Work Days	☐ 2 - 8 Hours	☐ Waste Water	☐ Other	☒ EDF		
☒ 5 Work Days	☐ 1 Work Day	☐ Other	☒ Ground Water		☒ Excel / EDD		
			☐ Soil				

ANALYSIS
REQUESTED[illegible]

1	Relinquished By: 	Print: Joseph Cotton	Date: 12-2-11	Time:	Received By: 	Print: G. Gueorguieva	Date: 12/2/11	Time: 12:34p
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Were Samples Received in Good Condition? ☐ Yes ☐ NO Samples on Ice? ☐ Yes ☐ NO Method of Shipment _____ Sample seals intact? ☐ Yes ☐ NO ☐ N/A

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____



Impact Environmental Services
39120 Argonaut Way, Suite 223
Fremont, California 94538
Tel: 510-703-5420
Fax: 510-713-7790
RE: 1409 12th Street, Oakland, CA

Work Order No.: 1112017

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 5 sample(s) on December 02, 2011 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "G. Gueorguieva", is positioned above a horizontal line.

G.Gueorguieva
Sr. Project Manager

December 12, 2011

Date



Date: 12/12/2011

Client: Impact Environmental Services

Project: 1409 12th Street, Oakland, CA

Work Order: 1112017

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory

Per client request, Total Xylenes is reported in the comment section of each sample.



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

MW-1

1112017-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

MW-3

1112017-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

MW-4

1112017-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

MW-6

1112017-004

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.

MW-7

1112017-005

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
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All compounds were non-detectable for this sample.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-1	Lab Sample ID:	1112017-001A
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 14:40		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/08/11	1	0.38	0.50	ND		ug/L	407776	NA
tert-Butanol	SW8260B	NA	12/08/11	1	1.5	5.0	ND		ug/L	407776	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/08/11	1	0.36	0.50	ND		ug/L	407776	NA
ETBE	SW8260B	NA	12/08/11	1	0.40	0.50	ND		ug/L	407776	NA
Benzene	SW8260B	NA	12/08/11	1	0.33	0.50	ND		ug/L	407776	NA
TAME	SW8260B	NA	12/08/11	1	0.32	0.50	ND		ug/L	407776	NA
Toluene	SW8260B	NA	12/08/11	1	0.19	0.50	ND		ug/L	407776	NA
Ethyl Benzene	SW8260B	NA	12/08/11	1	0.15	0.50	ND		ug/L	407776	NA
m,p-Xylene	SW8260B	NA	12/08/11	1	0.20	1.0	ND		ug/L	407776	NA
o-Xylene	SW8260B	NA	12/08/11	1	0.13	0.50	ND		ug/L	407776	NA
(S) Dibromofluoromethane	SW8260B	NA	12/08/11	1	61.2	131	114		%	407776	NA
(S) Toluene-d8	SW8260B	NA	12/08/11	1	75.1	127	101		%	407776	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/08/11	1	64.1	120	105		%	407776	NA

NOTE: Total Xylene- ND @ 1.5 ug/L

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/8/11	12/08/11	1	22	50	ND		ug/L	407776	4314
(S) 4-Bromofluorobenzene	8260TPH	12/8/11	12/08/11	1	41.5	125	64.3		%	407776	4314



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-1	Lab Sample ID:	1112017-001B
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 14:40		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0412	0.10	ND		mg/L	407765	4285
TPH as Motor Oil (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0927	0.21	ND		mg/L	407765	4285
Pentacosane (S)	SW8015B(M)	12/7/11	12/07/11	1	57.9	125	88.4		%	407765	4285



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11
Date Reported: 12/12/11

Client Sample ID:	MW-3	Lab Sample ID:	1112017-002A
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 16:15		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/08/11	1	0.38	0.50	ND		ug/L	407776	NA
tert-Butanol	SW8260B	NA	12/08/11	1	1.5	5.0	ND		ug/L	407776	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/08/11	1	0.36	0.50	ND		ug/L	407776	NA
ETBE	SW8260B	NA	12/08/11	1	0.40	0.50	ND		ug/L	407776	NA
Benzene	SW8260B	NA	12/08/11	1	0.33	0.50	ND		ug/L	407776	NA
TAME	SW8260B	NA	12/08/11	1	0.32	0.50	ND		ug/L	407776	NA
Toluene	SW8260B	NA	12/08/11	1	0.19	0.50	ND		ug/L	407776	NA
Ethyl Benzene	SW8260B	NA	12/08/11	1	0.15	0.50	ND		ug/L	407776	NA
m,p-Xylene	SW8260B	NA	12/08/11	1	0.20	1.0	ND		ug/L	407776	NA
o-Xylene	SW8260B	NA	12/08/11	1	0.13	0.50	ND		ug/L	407776	NA
(S) Dibromofluoromethane	SW8260B	NA	12/08/11	1	61.2	131	111		%	407776	NA
(S) Toluene-d8	SW8260B	NA	12/08/11	1	75.1	127	103		%	407776	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/08/11	1	64.1	120	107		%	407776	NA

NOTE: Total Xylene- ND @ 1.5 ug/L

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/8/11	12/08/11	1	22	50	ND		ug/L	407776	4314
(S) 4-Bromofluorobenzene	8260TPH	12/8/11	12/08/11	1	41.5	125	67.6		%	407776	4314



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-3	Lab Sample ID:	1112017-002B
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 16:15		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0412	0.10	ND		mg/L	407765	4285
TPH as Motor Oil (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0927	0.21	ND		mg/L	407765	4285
Pentacosane (S)	SW8015B(M)	12/7/11	12/07/11	1	57.9	125	86.6		%	407765	4285



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-4	Lab Sample ID:	1112017-003A
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 15:30		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/08/11	1	0.38	0.50	ND		ug/L	407776	NA
tert-Butanol	SW8260B	NA	12/08/11	1	1.5	5.0	ND		ug/L	407776	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/08/11	1	0.36	0.50	ND		ug/L	407776	NA
ETBE	SW8260B	NA	12/08/11	1	0.40	0.50	ND		ug/L	407776	NA
Benzene	SW8260B	NA	12/08/11	1	0.33	0.50	ND		ug/L	407776	NA
TAME	SW8260B	NA	12/08/11	1	0.32	0.50	ND		ug/L	407776	NA
Toluene	SW8260B	NA	12/08/11	1	0.19	0.50	ND		ug/L	407776	NA
Ethyl Benzene	SW8260B	NA	12/08/11	1	0.15	0.50	ND		ug/L	407776	NA
m,p-Xylene	SW8260B	NA	12/08/11	1	0.20	1.0	ND		ug/L	407776	NA
o-Xylene	SW8260B	NA	12/08/11	1	0.13	0.50	ND		ug/L	407776	NA
(S) Dibromofluoromethane	SW8260B	NA	12/08/11	1	61.2	131	114		%	407776	NA
(S) Toluene-d8	SW8260B	NA	12/08/11	1	75.1	127	105		%	407776	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/08/11	1	64.1	120	105		%	407776	NA

NOTE: Total Xylene- ND @ 1.5 ug/L

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/8/11	12/08/11	1	22	50	ND		ug/L	407776	4314
(S) 4-Bromofluorobenzene	8260TPH	12/8/11	12/08/11	1	41.5	125	69.0		%	407776	4314



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-4	Lab Sample ID:	1112017-003B
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 15:30		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0412	0.10	ND		mg/L	407765	4285
TPH as Motor Oil (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0927	0.21	ND		mg/L	407765	4285
Pentacosane (S)	SW8015B(M)	12/7/11	12/07/11	1	57.9	125	87.8		%	407765	4285



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-6	Lab Sample ID:	1112017-004A
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 14:57		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/08/11	1	0.38	0.50	ND		ug/L	407776	NA
tert-Butanol	SW8260B	NA	12/08/11	1	1.5	5.0	ND		ug/L	407776	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/08/11	1	0.36	0.50	ND		ug/L	407776	NA
ETBE	SW8260B	NA	12/08/11	1	0.40	0.50	ND		ug/L	407776	NA
Benzene	SW8260B	NA	12/08/11	1	0.33	0.50	ND		ug/L	407776	NA
TAME	SW8260B	NA	12/08/11	1	0.32	0.50	ND		ug/L	407776	NA
Toluene	SW8260B	NA	12/08/11	1	0.19	0.50	ND		ug/L	407776	NA
Ethyl Benzene	SW8260B	NA	12/08/11	1	0.15	0.50	ND		ug/L	407776	NA
m,p-Xylene	SW8260B	NA	12/08/11	1	0.20	1.0	ND		ug/L	407776	NA
o-Xylene	SW8260B	NA	12/08/11	1	0.13	0.50	ND		ug/L	407776	NA
(S) Dibromofluoromethane	SW8260B	NA	12/08/11	1	61.2	131	115		%	407776	NA
(S) Toluene-d8	SW8260B	NA	12/08/11	1	75.1	127	102		%	407776	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/08/11	1	64.1	120	107		%	407776	NA

NOTE: Total Xylene- ND @ 1.5 ug/L

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/8/11	12/08/11	1	22	50	ND		ug/L	407776	4314
(S) 4-Bromofluorobenzene	8260TPH	12/8/11	12/08/11	1	41.5	125	71.9		%	407776	4314



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-6	Lab Sample ID:	1112017-004B
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 14:57		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0432	0.11	ND		mg/L	407765	4285
TPH as Motor Oil (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0972	0.22	ND		mg/L	407765	4285
Pentacosane (S)	SW8015B(M)	12/7/11	12/07/11	1	57.9	125	69.7		%	407765	4285



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-7	Lab Sample ID:	1112017-005A
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 15:21		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/08/11	1	0.38	0.50	ND		ug/L	407776	NA
tert-Butanol	SW8260B	NA	12/08/11	1	1.5	5.0	ND		ug/L	407776	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/08/11	1	0.36	0.50	ND		ug/L	407776	NA
ETBE	SW8260B	NA	12/08/11	1	0.40	0.50	ND		ug/L	407776	NA
Benzene	SW8260B	NA	12/08/11	1	0.33	0.50	ND		ug/L	407776	NA
TAME	SW8260B	NA	12/08/11	1	0.32	0.50	ND		ug/L	407776	NA
Toluene	SW8260B	NA	12/08/11	1	0.19	0.50	ND		ug/L	407776	NA
Ethyl Benzene	SW8260B	NA	12/08/11	1	0.15	0.50	ND		ug/L	407776	NA
m,p-Xylene	SW8260B	NA	12/08/11	1	0.20	1.0	ND		ug/L	407776	NA
o-Xylene	SW8260B	NA	12/08/11	1	0.13	0.50	ND		ug/L	407776	NA
(S) Dibromofluoromethane	SW8260B	NA	12/08/11	1	61.2	131	112		%	407776	NA
(S) Toluene-d8	SW8260B	NA	12/08/11	1	75.1	127	102		%	407776	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/08/11	1	64.1	120	106		%	407776	NA

NOTE: Total Xylene- ND @ 1.5 ug/L

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	12/8/11	12/08/11	1	22	50	ND		ug/L	407776	4314
(S) 4-Bromofluorobenzene	8260TPH	12/8/11	12/08/11	1	41.5	125	68.4		%	407776	4314



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/02/11

Date Reported: 12/12/11

Client Sample ID:	MW-7	Lab Sample ID:	1112017-005B
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Aqueous
Project Number:			
Date/Time Sampled:	12/02/11 / 15:21		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0400	0.10	ND		mg/L	407765	4285
TPH as Motor Oil (SG)	SW8015B(M)	12/7/11	12/07/11	1	0.0900	0.20	ND		mg/L	407765	4285
Pentacosane (S)	SW8015B(M)	12/7/11	12/07/11	1	57.9	125	79.0		%	407765	4285



MB Summary Report

Work Order:	1112017	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	0.41	0.50	ND		
Chloromethane	0.41	0.50	ND		
Vinyl Chloride	0.37	0.50	ND		
Bromomethane	0.37	0.50	ND		
Trichlorofluoromethane	0.34	0.50	ND		
1,1-Dichloroethene	0.29	0.50	ND		
Freon 113	0.38	0.50	ND		
Methylene Chloride	0.18	5.0	0.25		
trans-1,2-Dichloroethene	0.31	0.50	ND		
MTBE	0.38	0.50	ND		
tert-Butanol	1.5	5.0	ND		
Diisopropyl ether (DIPE)	0.36	0.50	ND		
1,1-Dichloroethane	0.28	0.50	ND		
ETBE	0.40	0.50	ND		
cis-1,2-Dichloroethene	0.33	0.50	ND		
2,2-Dichloropropane	0.37	0.50	ND		
Bromochloromethane	0.34	0.50	ND		
Chloroform	0.29	0.50	ND		
Carbon Tetrachloride	0.26	0.50	ND		
1,1,1-Trichloroethane	0.32	0.50	ND		
1,1-Dichloropropene	0.40	0.50	ND		
Benzene	0.33	0.50	ND		
TAME	0.32	0.50	ND		
1,2-Dichloroethane	0.28	0.50	ND		
Trichloroethylene	0.38	0.50	ND		
Dibromomethane	0.21	0.50	ND		
1,2-Dichloropropane	0.37	0.50	ND		
Bromodichloromethane	0.23	0.50	ND		
cis-1,3-Dichloropropene	0.30	0.50	ND		
Toluene	0.19	0.50	ND		
Tetrachloroethylene	0.15	0.50	ND		
trans-1,3-Dichloropropene	0.20	0.50	ND		
1,1,2-Trichloroethane	0.20	0.50	ND		
Dibromochloromethane	0.21	0.50	ND		
1,3-Dichloropropane	0.18	0.50	ND		
1,2-Dibromoethane	0.19	0.50	ND		
Chlorobenzene	0.14	0.50	ND		
Ethyl Benzene	0.15	0.50	ND		
1,1,1,2-Tetrachloroethane	0.10	0.50	ND		
m,p-Xylene	0.20	1.0	ND		



MB Summary Report

Work Order:	1112017	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
o-Xylene	0.13	0.50	ND		
Styrene	0.20	0.50	ND		
Bromoform	0.45	1.0	ND		
Isopropyl Benzene	0.28	0.50	ND		
Bromobenzene	0.39	0.50	ND		
1,1,2,2-Tetrachloroethane	0.26	0.50	ND		
n-Propylbenzene	0.30	0.50	ND		
2-Chlorotoluene	0.33	0.50	ND		
1,3,5-Trimethylbenzene	0.20	0.50	ND		
4-Chlorotoluene	0.32	0.50	ND		
tert-Butylbenzene	0.29	0.50	ND		
1,2,3-Trichloropropane	0.59	1.0	ND		
1,2,4-Trimethylbenzene	0.33	0.50	ND		
sec-Butyl Benzene	0.24	0.50	ND		
p-Isopropyltoluene	0.25	0.50	ND		
1,3-Dichlorobenzene	0.31	0.50	ND		
1,4-Dichlorobenzene	0.37	0.50	ND		
n-Butylbenzene	0.32	0.50	ND		
1,2-Dichlorobenzene	0.39	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.45	1.0	ND		
Hexachlorobutadiene	0.22	0.50	ND		
1,2,4-Trichlorobenzene	0.48	1.0	ND		
Naphthalene	0.57	1.0	ND		
1,2,3-Trichlorobenzene	0.52	1.0	ND		
Ethanol	100	100	ND	TIC	
(S) Dibromofluoromethane			116		
(S) Toluene-d8			103		
(S) 4-Bromofluorobenzene			104		

Work Order:	1112017	Prep Method:	3510_TPHSG	Prep Date:	12/07/11	Prep Batch:	4285
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	12/07/11	Analytical Batch:	407765
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel (SG)	0.0440	0.10	ND		
TPH as Motor Oil (SG)	0.0920	0.20	ND		
Pentacosane (S)			101		



MB Summary Report

Work Order:	1112017	Prep Method:	5030	Prep Date:	12/08/11	Prep Batch:	4314
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
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TPH(Gasoline)	22	50	ND		
(S) 4-Bromofluorobenzene			79.3		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1112017	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.29	0.50	ND	17.04	108	121	10.5	61.4 - 129	30	
Benzene	0.33	0.50	ND	17.04	116	129	10.5	66.9 - 140	30	
Trichloroethylene	0.38	0.50	ND	17.04	95.7	101	5.16	69.3 - 144	30	
Toluene	0.19	0.50	ND	17.04	103	108	4.04	76.6 - 123	30	
Chlorobenzene	0.14	0.50	ND	17.04	100	105	4.87	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	104	113		61.2 - 131		
(S) Toluene-d8			ND	11.36	104	102		75.1 - 127		
(S) 4-Bromofluorobenzene			0.25	11.36	106	108		64.1 - 120		

Work Order:	1112017	Prep Method:	3510_TPHSG	Prep Date:	12/07/11	Prep Batch:	4285
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	12/07/11	Analytical Batch:	407765
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel (SG)	0.0440	0.10	ND	1	66.5	54.1	20.6	34.5 - 95.6	30	
Pentacosane (S)			ND	100	98.3	85.9		57.9 - 125		

Work Order:	1112017	Prep Method:	5030	Prep Date:	12/08/11	Prep Batch:	4314
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	22	50	ND	227.27	107	110	2.44	52.4 - 127	30	
(S) 4-Bromofluorobenzene			79.3	11.36	67.5	67.2		41.5 - 125		



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg.m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Impact Environmental Services

Date and Time Received: 12/2/2011 19:09

Project Name: 1409 12th Street, Oakland, CA

Received By: NG

Work Order No.: 1112017

Physically Logged By: NG

Checklist Completed By: NG

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present? Yes
Chain of custody signed when relinquished and received? Yes
Chain of custody agrees with sample labels? Yes
Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present
Shipping Container/Cooler In Good Condition? Yes
Samples in proper container/bottle? Yes
Samples containers intact? Yes
Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes
Container/Temp Blank temperature in compliance? Temperature: 6 °C
Water-VOA vials have zero headspace? Yes
Water-pH acceptable upon receipt?

pH Checked by: pH Adjusted by:

One Voa of Sample id MW-7 received broken. Clint was notified at the time of sampls drop off.



Login Summary Report

Client ID: TL5130 Impact Environmental Services

Project Name: 1409 12th Street, Oakland, CA

Project # :

Report Due Date: 12/12/2011

QC Level:

TAT Requested: 5+ day:0

Date Received: 12/2/2011

Time Received: 19:09

Comments:

Work Order # : **1112017**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1112017-001A	MW-1	12/02/11 14:40	Water	01/16/12			W_8260Pet EDF W_GCMS-GRO	
Sample Note:	Total Xylenes Always. TPHG/BTEX/OXY							
1112017-001B	MW-1	12/02/11 14:40	Water	01/16/12			W_TPHDOSG	
Sample Note:	TPHDOSG							
1112017-002A	MW-3	12/02/11 16:15	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112017-002B	MW-3	12/02/11 16:15	Water	01/16/12			W_TPHDOSG	
1112017-003A	MW-4	12/02/11 15:30	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112017-003B	MW-4	12/02/11 15:30	Water	01/16/12			W_TPHDOSG	
1112017-004A	MW-6	12/02/11 14:57	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112017-004B	MW-6	12/02/11 14:57	Water	01/16/12			W_TPHDOSG	
1112017-005A	MW-7	12/02/11 15:21	Water	01/16/12			W_8260Pet W_GCMS-GRO	
1112017-005B	MW-7	12/02/11 15:21	Water	01/16/12			W_TPHDOSG	



CHAIN OF CUSTODY

1112017

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: IMPACT ENVIRONMENTAL		Location of Sampling: 1409 6th STREET, OAKLAND, CA	
Address: 39120 ARGONAUT WAY, #223		Purpose: Semi-Annual GROUNDWATER MONITORING	
City: FREMONT	State: CA	Zip Code:	Special Instructions / Comments:
Telephone: 810-703-5410 FAX:		TOTAL XYLENES	
REPORT TO: Joseph Cotton	SAMPLER: Joseph Cotton	P.O. #:	EMAIL: lac21462@aol.com

TURNAROUND TIME:			SAMPLE TYPE:		REPORT FORMAT:		1/PTM Gel Clean		 ANALYSIS REQUESTED
☐ 10 Work Days ☐ 7 Work Days ☒ 5 Work Days	☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day	☐ Noon - Nxt Day ☐ 2 - 8 Hours ☐ Other	☐ Storm Water ☐ Waste Water ☒ Ground Water ☐ Soil	☐ Air ☐ Other	☐ QC Level IV ☒ EDF ☒ Excel / EDD	1/PTM Gel Clean			

[illegible]

Relinquished By: 	Print: Joseph Cotton	Date: 12-2-11	Time: 11:05	Received By: 	Print: NAYIN S	Date: 12-2-11	Time: 19:09
2 Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

NOTE: Samples are discarded by the laboratory 30 days from date of receipt unless other arrangements are made.

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____



Impact Environmental Services
39120 Argonaut Way, Suite 223
Fremont, California 94538
Tel: 510-703-5420
Fax: 510-713-7790
RE: 1409 12th Street, Oakland, CA

Work Order No.: 1112047

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 1 sample(s) on December 06, 2011 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "G. Gueorguieva", is positioned above a horizontal line.

G.Gueorguieva
Sr. Project Manager

December 13, 2011

Date



Date: 12/13/2011

Client: Impact Environmental Services

Project: 1409 12th Street, Oakland, CA

Work Order: 1112047

CASE NARRATIVE

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/06/11

Date Reported: 12/13/11

DPE-7

1112047-001

Parameters:

Analysis
Method

DF

MDL

PQL

Results

Unit

All compounds were non-detectable for this sample.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/06/11

Date Reported: 12/13/11

Client Sample ID:	DPE-7	Lab Sample ID:	1112047-001A
Project Name/Location:	1409 12th Street, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/06/11 / 13:45		
Tag Number:	1409 12th Street, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	12/08/11	1	0.38	0.50	ND		ug/L	407776	NA
tert-Butanol	SW8260B	NA	12/08/11	1	1.5	5.0	ND		ug/L	407776	NA
Diisopropyl ether (DIPE)	SW8260B	NA	12/08/11	1	0.36	0.50	ND		ug/L	407776	NA
ETBE	SW8260B	NA	12/08/11	1	0.40	0.50	ND		ug/L	407776	NA
Benzene	SW8260B	NA	12/08/11	1	0.33	0.50	ND		ug/L	407776	NA
TAME	SW8260B	NA	12/08/11	1	0.32	0.50	ND		ug/L	407776	NA
Toluene	SW8260B	NA	12/08/11	1	0.19	0.50	ND		ug/L	407776	NA
Ethyl Benzene	SW8260B	NA	12/08/11	1	0.15	0.50	ND		ug/L	407776	NA
m,p-Xylene	SW8260B	NA	12/08/11	1	0.20	1.0	ND		ug/L	407776	NA
o-Xylene	SW8260B	NA	12/08/11	1	0.13	0.50	ND		ug/L	407776	NA
(S) Dibromofluoromethane	SW8260B	NA	12/08/11	1	61.2	131	115		%	407776	NA
(S) Toluene-d8	SW8260B	NA	12/08/11	1	75.1	127	104		%	407776	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	12/08/11	1	64.1	120	111		%	407776	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	12/08/11	1	22	50	ND		ug/L	407776	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	12/08/11	1	41.5	125	66.2		%	407776	NA



MB Summary Report

Work Order:	1112047	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.41	0.50	ND	
Chloromethane	0.41	0.50	ND	
Vinyl Chloride	0.37	0.50	ND	
Bromomethane	0.37	0.50	ND	
Trichlorofluoromethane	0.34	0.50	ND	
1,1-Dichloroethene	0.29	0.50	ND	
Freon 113	0.38	0.50	ND	
Methylene Chloride	0.18	5.0	0.25	
trans-1,2-Dichloroethene	0.31	0.50	ND	
MTBE	0.38	0.50	ND	
tert-Butanol	1.5	5.0	ND	
Diisopropyl ether (DIPE)	0.36	0.50	ND	
1,1-Dichloroethane	0.28	0.50	ND	
ETBE	0.40	0.50	ND	
cis-1,2-Dichloroethene	0.33	0.50	ND	
2,2-Dichloropropane	0.37	0.50	ND	
Bromochloromethane	0.34	0.50	ND	
Chloroform	0.29	0.50	ND	
Carbon Tetrachloride	0.26	0.50	ND	
1,1,1-Trichloroethane	0.32	0.50	ND	
1,1-Dichloropropene	0.40	0.50	ND	
Benzene	0.33	0.50	ND	
TAME	0.32	0.50	ND	
1,2-Dichloroethane	0.28	0.50	ND	
Trichloroethylene	0.38	0.50	ND	
Dibromomethane	0.21	0.50	ND	
1,2-Dichloropropane	0.37	0.50	ND	
Bromodichloromethane	0.23	0.50	ND	
cis-1,3-Dichloropropene	0.30	0.50	ND	
Toluene	0.19	0.50	ND	
Tetrachloroethylene	0.15	0.50	ND	
trans-1,3-Dichloropropene	0.20	0.50	ND	
1,1,2-Trichloroethane	0.20	0.50	ND	
Dibromochloromethane	0.21	0.50	ND	
1,3-Dichloropropane	0.18	0.50	ND	
1,2-Dibromoethane	0.19	0.50	ND	
Chlorobenzene	0.14	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
1,1,1,2-Tetrachloroethane	0.10	0.50	ND	
m,p-Xylene	0.20	1.0	ND	



MB Summary Report

Work Order:	1112047	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
o-Xylene	0.13	0.50	ND		
Styrene	0.20	0.50	ND		
Bromoform	0.45	1.0	ND		
Isopropyl Benzene	0.28	0.50	ND		
Bromobenzene	0.39	0.50	ND		
1,1,2,2-Tetrachloroethane	0.26	0.50	ND		
n-Propylbenzene	0.30	0.50	ND		
2-Chlorotoluene	0.33	0.50	ND		
1,3,5-Trimethylbenzene	0.20	0.50	ND		
4-Chlorotoluene	0.32	0.50	ND		
tert-Butylbenzene	0.29	0.50	ND		
1,2,3-Trichloropropane	0.59	1.0	ND		
1,2,4-Trimethylbenzene	0.33	0.50	ND		
sec-Butyl Benzene	0.24	0.50	ND		
p-Isopropyltoluene	0.25	0.50	ND		
1,3-Dichlorobenzene	0.31	0.50	ND		
1,4-Dichlorobenzene	0.37	0.50	ND		
n-Butylbenzene	0.32	0.50	ND		
1,2-Dichlorobenzene	0.39	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.45	1.0	ND		
Hexachlorobutadiene	0.22	0.50	ND		
1,2,4-Trichlorobenzene	0.48	1.0	ND		
Naphthalene	0.57	1.0	ND		
1,2,3-Trichlorobenzene	0.52	1.0	ND		
Ethanol	100	100	ND	TIC	
(S) Dibromofluoromethane			116		
(S) Toluene-d8			103		
(S) 4-Bromofluorobenzene			104		

Work Order:	1112047	Prep Method:	5030	Prep Date:	12/08/11	Prep Batch:	4314
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH(Gasoline)	22	50	ND		
(S) 4-Bromofluorobenzene			79.3		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1112047	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.29	0.50	ND	17.04	108	121	10.5	61.4 - 129	30	
Benzene	0.33	0.50	ND	17.04	116	129	10.5	66.9 - 140	30	
Trichloroethylene	0.38	0.50	ND	17.04	95.7	101	5.16	69.3 - 144	30	
Toluene	0.19	0.50	ND	17.04	103	108	4.04	76.6 - 123	30	
Chlorobenzene	0.14	0.50	ND	17.04	100	105	4.87	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	104	113		61.2 - 131		
(S) Toluene-d8			ND	11.36	104	102		75.1 - 127		
(S) 4-Bromofluorobenzene			0.25	11.36	106	108		64.1 - 120		

Work Order:	1112047	Prep Method:	5030	Prep Date:	12/08/11	Prep Batch:	4314
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	12/08/11	Analytical Batch:	407776
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	22	50	ND	227.27	107	110	2.44	52.4 - 127	30	
(S) 4-Bromofluorobenzene			79.3	11.36	67.5	67.2		41.5 - 125		



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg.m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Impact Environmental Services

Date and Time Received: 12/6/2011 17:40

Project Name: 1409 12th Street, Oakland, CA

Received By: NG

Work Order No.: 1112047

Physically Logged By: NG

Checklist Completed By: NG

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present? Yes

Chain of custody signed when relinquished and received? Yes

Chain of custody agrees with sample labels? Yes

Custody seals intact on sample bottles? Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present

Shipping Container/Cooler In Good Condition? Yes

Samples in proper container/bottle? Yes

Samples containers intact? Yes

Sufficient sample volume for indicated test? Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes

Container/Temp Blank temperature in compliance? Yes Temperature: 7 °C

Water-VOA vials have zero headspace? Yes

Water-pH acceptable upon receipt? N/A

pH Checked by: pH Adjusted by:

All samples present and correct.



Login Summary Report

Client ID: TL5130 Impact Environmental Services

Project Name: 1409 12th Street, Oakland, CA

Project # :

Report Due Date: 12/13/2011

QC Level:

TAT Requested: 5+ day:0

Date Received: 12/6/2011

Time Received: 17:40

Comments:

Work Order # : **1112047**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1112047-001A	DPE-7	12/06/11 13:45	Water	01/20/12			W_8260Pet EDF W_GCMS-GRO	

Sample Note: Total Xylene. Do not seperate O,m, p, Xylene.



CHAIN OF CUSTODY

1112047

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: IMPACT ENVIRONMENTAL		Location of Sampling: 1409 12th Street, OAKLAND, CA	
Address: 39120 ARGONAUT WAY, #223		Purpose: Semi Annual Groundwater Monitoring	
City: Fremont	State: CA	Zip Code: 94538	Special Instructions / Comments: Separate O-xylene & m,p-xylene
Telephone: (510)	FAX:	Total Xylenes only do not use m,p-xylene	
REPORT TO: Joseph Cotton	SAMPLER: Joseph Cotton	P.O. #:	EMAIL: Joe21462@aol.com

☐ QC Level IV
☒ EDF
☒ Excel / EDD

ANALYSIS
REQUESTED[illegible]

TORRENTI AB

Temp. 7°C

1	Relinquished By: 	Print: Joseph Otter	Date: 12-6-11	Time: 17:40	Received By: 	Print: NAYIN G	Date: 12-6-11	Time: 17:40
2	Relinquished By:	Print:	Date:	Time:	Received By:	Print:	Date:	Time:

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____