



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
4:57 pm, Jun 28, 2012
Alameda County
Environmental Health

Subject: Annual 2010 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 2010 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
Alameda, CA 94502-6577

Subject: Annual 2010 Groundwater Monitoring Report _RO0002933
1409 – 1417 12th Street, Oakland, California

Dear Mr. Wickman:

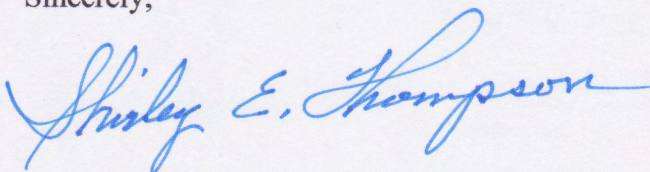
Attached is the Annual 2010 Groundwater Monitoring Report for the property located at 1409 – 1417 12th Street, Oakland, California.

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 2010 GROUNDWATER
MONITORING REPORT**

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

Prepared for

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

January 23, 2011

Prepared by

IES
Impact Environmental Services

39120 Argonaut Way, Suite 223
Fremont, California 94538

**ANNUAL 2010 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 2010 Groundwater Monitoring Annual 2010 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 July 27th and 28th, and on December 30th. Groundwater samples were also collected from soil and groundwater vacuum extraction wells on October 11th and 12th, 2010, following 6 months of full-scale operation of the Dual-Phase Vacuum Extraction (DPE) and Treatment remediation system. 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

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.

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 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 20 feet bgs. Groundwater is first encountered between 10 and 13 feet below ground surface (bgs) and stabilizes between approximately 9 to 11 feet bgs.

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.

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 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.

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.

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 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 wells.

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 ran continuously through July 23, 2010, except on occasions when the DPE unit was automatically turned off (tripped) due to low pressure of natural gas supply from PG&E.

JULY AND DECEMBER 2010 GROUNDWATER MONITORING EVENTS

On July 27, 2010 Impact contracted TEC Accutite to conduct groundwater monitoring at he subject property. Impact conducted groundwater monitoring at the subject property on December 30, 2010. During both groundwater-monitoring events, groundwater samples were collected from groundwater monitoring wells MW-1 through MW-8 and GW-1 through GW-3. Prior to collecting groundwater samples, depth-to-water (DTW) measurements were collected from all eleven wells.

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, dissolved oxygen, and turbidity) were monitored and recorded on Groundwater Monitoring Data Sheets for the July and December are presented in Appendix A. Each well was purged until temperature, conductivity, and pH stabilized. Samples were collected using a disposable bailer, 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 was contained in a 55-gallon drum, which was left at the subject site pending disposal in accordance with groundwater analytical results. Groundwater samples were submitted to Torrent Laboratory and 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 were also analyzed for chlorinated hydrocarbons by EPA Method 8260, during the December 2010 event.

Groundwater Elevations and Gradient

DTW measurements were recorded on the Well Gauging Data Sheet for both the July 2010 and December 2010 monitoring events are included in Appendix A. Groundwater elevation data are presented on Table 1. 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-8, GW-1, GW-2, and GW-3 were not used in developing groundwater contour maps because these wells were screened and constructed at deeper depths than monitoring wells MW-1 through MW-7. As a result, only groundwater elevations for wells MW-1 through MW-7 were used to calculate and construct groundwater contour maps and gradients.

The initial groundwater contour maps generated during July 2010 and December 2010 were highly irregular. It appears that DTW measurements in the wells were not allowed to fully equilibrate resulting in apparent unreliable groundwater elevation contour maps for July and December 2010. Groundwater elevations are noted next to wells for the July and December 2010 and presented as Figures 3 and 4, respectively. However, because of the irregularity of the groundwater elevation data, contour maps were not developed during the July and December

2010 monitoring events. Future DTW measurements will only be collected after open wells have been allowed to equilibrate for at least 2 hours.

Groundwater Sample Results

Groundwater sample results for the July 2010 and December 2010 groundwater monitoring events are summarized in Table 2 and certified laboratory analytical reports (CARs) are presented in Appendix B. Only those chlorinated hydrocarbons that were detected above method detection limits (MDLs) were included in Table 2. Maps showing the concentrations of TPHg/TPHd/TPHmo and benzene detected in groundwater samples during the July 2010 monitoring event are presented in Figures 5 and 6, respectively. Maps showing the concentrations of TPHg/TPHd/TPHmo and 1, 1-DCA/benzene detected in groundwater samples during the December 2010 monitoring event are presented in Figures 7 and 8, respectively.

July 2010

During the July 2010 monitoring event, constituents of concern were not detected at or above MDLs in groundwater samples collected from all wells with the exception of well GW-1. The groundwater sample from well GW-1 contained 89µg/L TPHg, 0.65µg/L benzene, and 1.3µg/L xylenes.

December 2010

During the December 2010 monitoring event, constituents of concern were not detected at or above MDLs in groundwater samples collected from all wells with the exception of wells MW-4 and GW-1. The groundwater sample from well MW-4 was found to contain 150µg/L TPHd and 250µg/L TPHmo. The groundwater sample from well GW-1 contained 100µg/L TPHd, 0.93µg/L xylenes, and 4.8µg/L 1, 1-DCA.

DUAL-PHASE VACUUM EXTRACTION WELL GROUNDWATER SAMPLING

On October 11th and 12th 2010, Impact collected groundwater samples from eleven vacuum extraction wells including DPE wells DPE-1, DPE-1B, DPE-2, DPE-2B, DPE-3, DPE-5, DPE-6, DPE-7 and dual-use monitoring/extraction wells MW-8, GW-1, and GW-3. The DPE wells were

sampled following six months of full-scale operation of the DPE system from January 22, 2010 to July 23, 2010.

Approximately 2,049,960 gallons of water was removed during this six-month period. During the first quarter 2010, approximately 84 pounds of TPH were removed from the subsurface. Of that amount removed, 95.4% was by soil vapor removal (80 pounds) and 4.6% by groundwater extraction (4 pounds). During the second quarter 2010, approximately 72 pounds of TPH was removed from subsurface of the site from April through July. Of that amount removed, 96.7% was by soil vapor removal (69.6 pounds) and 3.3% by groundwater extraction (2.4 pounds). From the start of the remediation system to the shutdown on July 23, 2010, a total of 156 pounds of TPH was removed from subsurface of the site, of which 150 pounds was removed through soil vapor and 5.6 pounds was removed through groundwater.

The results of groundwater samples collected from groundwater monitoring wells in July 2010 indicated that concentrations in constituents of concern were at or approaching levels below residential ESLs. As a result, groundwater samples were collected from DPE wells to evaluate whether constituents of concern had been reduced to concentrations below ESLs in all wells at the subject property.

Depth-to-water measurements were recorded for all DPE wells during the October 2010. However, a groundwater contour map was not generated for this sampling event due variations in DPE well designs and depths. DPE well sampling data sheets are presented in Appendix C.

Dual-Phase Vacuum Extraction Technology

DPE is an in-situ technology by which the volatilization of VOCs is induced in the subsurface and the constituents are removed in extracted vapor and groundwater. The removal of VOCs by DPE may be controlled by one or more of the following processes: advection, volatilization, desorption and diffusion. During DPE, as air and groundwater is drawn through the soil pore space, VOCs volatilize and are carried with the air to extraction wells via advection. This removal induces further volatilization from the impacted soils. Impacted areas that are not in

direct contact with the advective airflow rely on diffusion of VOCs toward zones of enhanced airflow. Diffusion is a slower, rate-limiting process compared to advection¹⁰.

After a typical DPE system has been operating continuously for an extended period of time, the system becomes diffusion driven and removal rates decrease to a non-zero asymptotic level. If the system is turned off at this point, diffusion of VOCs from lower to higher permeability zones can occur, resulting in more effective mass removal upon restarting the system. This phenomenon is generally known as the “rebound” effect. In these situations, cycling or pulsing of the system is generally employed to remove additional VOC mass at the final stage of site cleanup. Termination of the DPE system operation generally occurs when, following system cycling, the system has achieved the maximum practical removal effectiveness. As a result, the groundwater system was turned off on July 23, 2010 to allow the subsurface conditions to rebound and for existing site data to be evaluated. In addition, groundwater samples were collected from all DPE wells in October 2010. DPE operations have been shutdown at the site until additional funding is secured for site cleanup and monitoring.

DPE Extraction Well Groundwater Sample Collection

Groundwater samples were collected from DPE wells using the same methods and protocol described in the groundwater monitoring section of this report. Groundwater Monitoring Data Sheets for the October DPE well event are presented in Appendix C. Groundwater samples were submitted to Torrent Laboratory and analyzed for several constituents of concern (COCs) including TPHd and TPHmo by EPA Method 8015; and TPHg, BTEX, and MTBE by EPA Method 8260.

DPE Extraction Well Groundwater Sample Results

Groundwater sample results for the October 2010 groundwater-monitoring event are summarized in Table 3 and CARs are presented in Appendix D. Maps showing the concentrations of TPHg and benzene detected in groundwater samples collected from DPE wells during the October 2010 monitoring event are presented in Figures 9 and 10, respectively.

¹⁰ United States Army Corp of Engineers, Engineering and Design: Soil Vapor Extraction and Bioventing (Engineer Manual No. 1110-1-4001), June 3, 2002.

During the October 2010 DPE well sampling event, COCs were not detected at or above MDLs in groundwater samples collected from DPE-2, DPE-6, and DPE-7. The groundwater sample from well DPE-1 was found to contain 0.84µg/L ethylbenzene, and 2.6µg/L total xylenes. The groundwater sample from DPE well DPE-1B contained 98µg/L TPHg, 1.1µg/L toluene, 1.8µg/L ethylbenzene, and 5.4µg/L xylenes. The groundwater sample from well DPE-2B contained 100µg/L TPHg, 6.8µg/L benzene, and 1.4µg/L toluene, 2.2µg/L ethylbenzene, and 7.2µg/L total xylenes. The groundwater sample from well DPE-3 contained 1,600µg/L TPHg, 100µg/L TPHd, 93µg/L benzene, 21µg/L toluene, 63µg/L ethylbenzene, and 109µg/L total xylenes. The groundwater sample from well DPE-5 contained 87µg/L TPHg, 7.5µg/L benzene, 0.78µg/L toluene, 2.9µg/L ethylbenzene, and 3.4µg/L total xylenes. The groundwater sample from DPE well GW-1 contained 120µg/L TPHg, 0.71µg/L benzene, 0.70µg/L toluene, 1.3µg/L ethylbenzene, and 4.0µg/L total xylenes. The groundwater sample from DPE well GW-3 contained 180µg/L TPHg, 4.1µg/L benzene, 6.0µg/L toluene, 7.1µg/L ethylbenzene, and 20.7µg/L total xylenes. The groundwater sample from DPE well MW-8 contained 79µg/L TPHg, 1.0µg/L toluene, 1.6µg/L ethylbenzene, and 4.7µg/L total xylenes.

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 exception.

During the July 2010 monitoring event, reporting limits were increased for groundwater samples collected from wells MW-2, MW-7, and MW-8, due to a limited sample volume.

During the October 2010 monitoring event of DPE wells, TPHg detected in groundwater samples collected from DPE wells DPE-1B, DPE-2B, DPE-3, GW-1, GW-3, did not match the reference gasoline standard. The reported TPH value for these samples appears to be due to contribution from heavier hydrocarbons in the range of C5-C12 quantified as gasoline. TPHd detected in the

groundwater sample collected from well DPE-3 did not match the reference diesel standard. This may be due to the presence of possible fuel that is lighter than diesel.

During the December 2010 monitoring event, surrogate recoveries for TPHd and TPHmo analyses for groundwater samples collected from wells MW-1, MW-3, MW-4, MW-7, and MW-8 were outside (below) the control limits. As a result, the reported TPHd and TPHmo sample results for these wells may be biased low.

DISCUSSION OF GROUNDWATER SAMPLING RESULTS

The results of groundwater samples collected during the July, October, and December 2010 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.

July 2010 Groundwater Monitoring Well Monitoring Event

During the July 2010 monitoring event, COCs were not detected above their respective ESLs in groundwater samples collected from all eleven groundwater-monitoring wells.

December 2010 Groundwater Monitoring Well Monitoring Event

During the December 2010 monitoring event, no constituents of concern were detected above their respective ESLs in groundwater samples collected from any of the groundwater monitoring wells with the exception of samples collected from wells MW-4 and GW-1. The sample from well MW-4 contained 150µg/L TPHd and 250µg/L TPHmo. The sample from well GW-1 contained 100µg/L TPHd.

October 2010 Dual-Phase Vacuum Extraction Well Groundwater Sampling Event

During the October 2010 DPE well groundwater sampling event, constituents of concern were not detected above their respective ESLs in groundwater samples collected from dual-phase vacuum extraction wells DPE-1, DPE-1B, DPE-2, DPE-5, DPE-6, DPE-7, and MW-8. However, groundwater samples collected the following DPE wells were found to contain at least one COC above their respective residential ESL. The groundwater sample collected from well DPE-2B contained 100µg/L TPHg (ESL of 100µg/L) and 6.8µg/L of benzene (ESL of 1µg/L).

The groundwater sample collected from well DPE-3 contained 1,600µg/L TPHg, 100µg/L TPHd (ESL of 100µg/L, 93µg/L benzene, 63µg/L ethylbenzene (ESL of 30µg/L), and 109µg/L total xylenes (ESL of 20). The groundwater sample collected from well DPE-5 contained 7.5µg/L of benzene. The groundwater sample from DPE well GW-1 contained 120µg/L TPHg. The groundwater sample from DPE well GW-3 contained 180µg/L TPHg, 4.1µg/L benzene, and 20.7µg/L total xylenes. It should also be noted that well DPE-2B contained 98µg/L TPHg, which is very close to the ESL for TPHg.

Based on the comparison of the most recent groundwater monitoring well data (December 2010) and from samples collected from DPE wells (October 2010) with ESLs, 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 and groundwater at and near groundwater monitoring wells MW-4, and DPE wells DPE-2B, DPE-3, GW-1, and possibly well DPE-1B.

CONCLUSIONS

Based on the results of soil and groundwater results collected from the groundwater monitoring well, dual-phase vacuum extraction wells, confirmation 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 July 2010 monitoring event, constituents of concern were not detected above their respective ESLs in groundwater samples collected from all eleven groundwater-monitoring wells.
- During the December 2010 monitoring event, no constituents of concern were detected above their respective ESLs in groundwater samples collected from any of the groundwater monitoring wells with the exception of samples collected from wells MW-4 and GW-1. The sample from well MW-4 contained 150µg/L TPHd and 250µg/L TPHmo. The sample from well GW-1 contained 100µg/L TPHd.
- The initial groundwater contour maps generated during July 2010 and December 2010 were highly irregular. It appears that DTW measurements in the wells were gauged

before groundwater was allowed to fully equilibrate resulting in questionable groundwater elevation contour maps for July and December 2010. Because of the irregularity of the groundwater elevation data, contour maps were not presented in this report for July and December 2010 monitoring events. Instead groundwater elevations were listed next to each well. Future DTW measurements will only be collected after open wells have been allowed to equilibrate for at least 2 hours.

- Approximately 2,049,960 gallons of petroleum-impacted groundwater was removed (via vacuum-enhanced extraction) from the site from January 2010 through July 2010. From the start of the remediation system in January 2010 to the shutdown on July 23, 2010, a total of 156 pounds of TPH was removed from subsurface of the site, of which 150 pounds was removed through soil vapor and 5.6 pounds was removed through groundwater.
- During the first quarter 2010, approximately 84 pounds of TPH were removed from the subsurface. Of that amount removed, 95.4% was by soil vapor removal (80 pounds) and 4.6% by groundwater extraction (4 pounds). During the second quarter 2010, approximately 72 pounds of TPH was removed from subsurface of the site from April through July. Of that amount removed, 96.7% was by soil vapor removal (69.6 pounds) and 3.3% by groundwater extraction (2.4 pounds).
- Dual-phase vacuum extraction operations were shutdown in July 2010 to allow subsurface conditions to “rebound” and to secure additional funding for site cleanup and monitoring.
- During the October 2010 DPE well groundwater sampling event, at least one COC was detected at or above the respective residential ESLs in groundwater samples collected from wells DPE-2B, DPE-3, DPE-5, GW-1, and GW-3. It should also be noted that well DPE-1B contained 98µg/L TPHg, which is very close to the ESL for TPHg.
- Based on the comparison of the most recent groundwater monitoring well data (December 2010) and from samples collected from DPE wells (October 2010) with ESLs, 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 and groundwater at and near groundwater monitoring wells MW-4, and DPE wells DPE-2B, DPE-3, GW-1, and possibly well DPE-1B.

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.

- Continuing quarterly groundwater monitoring to evaluate temporal changes in groundwater quality and to monitor groundwater plume migration. In addition to groundwater monitoring wells (MW-1 through MW-8 and GW-1 through GW-3), Impact recommends that DPE wells DPE-1B, DPE-2B, DPE3, and DPE-5 be included in the quarterly groundwater-monitoring network.
- Impact also recommends restarting the dual-phase vacuum-enhanced extraction (DPE) system to further remove petroleum hydrocarbons from soil-vapor and groundwater at the subject property. Impact recommend instituting pulse extraction of DPE wells using a cycle to two weeks active DPE extraction and one week rebound period.
- Impact further recommends installing soil-vapor monitoring wells in the vicinity of wells DPE-1B, DPE-2B, DPE-3, GW-1, and GW-3. The soil-vapor monitoring wells will allow soil-vapor remediation confirmation samples to be collected and analyzed for site closure purposes.
- Impact also recommends installing a deep groundwater extraction well (DPE-3B) to 27 feet bgs in the vicinity of DPE well DPE-3.
- Impact also recommends manually treating wells MW-7, GW-2, and DPE-6, with 8% hydrogen peroxide every two to three weeks until ESLs are achieved in all DPE and monitoring wells at the site.
- Impact recommends that future DTW measurements will only be collected after open wells have been allowed to equilibrate for at least 2 hours.

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 Environmental Geologist



Distribution:

- (1) Copies – Mrs. Shirley E. Thompson, 1155 Hopkins Way, Berkeley, CA
- (1) Copies – Mr. Steven Plunkett, Alameda County Environmental Health

Attachments:

Tables

- Table 1 –Summary of Groundwater Elevations Measurements
- Table 2 –Summary of Groundwater Analytical Results
- Table 3 –Summary of DPE Well Groundwater Analytical Results

Figures

- Figure 1 -- Site Location Map
- Figure 2 – Site Plan
- Figure 3 – Groundwater Elevation Map (July 2010)
- Figure 4 – Groundwater Elevation Map (December 2010)
- Figure 5 – Map of TPHg/TPHd/TPHmo in Groundwater (July 2010)
- Figure 6 – Map of Benzene in Groundwater (July 2010)
- Figure 7 – Map of TPHg/TPHd/TPHmo in Groundwater (December 2010)
- Figure 8 – Map of Benzene in Groundwater (December 2010)
- Figure 9 – Map of TPHg/TPHd/TPHmo in Groundwater (October 2010)
- Figure 10 – Map of Benzene/1, 1-DCA in Groundwater (October 2010)

Appendices

- Appendix A – Groundwater Monitoring Well Sampling Data Sheets
- Appendix B – Certified Laboratory Analytical Report-Groundwater Monitoring Wells
- Appendix C – DPE Vacuum Extraction Groundwater Sampling Data Sheets
- Appendix D – Certified Laboratory Analytical Report-DPE Vacuum Extraction Wells

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.

Table 1
Groundwater Elevations_Annual 2010
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	21.29	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	20.61	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	21.09	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	20.35	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 2010
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	20.05	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	19.67	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	19.88	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	20.71	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

Table 1
Groundwater Elevations_Annual 2010
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
GW-1	20.23	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	20.57	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	20.57	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

MSL= Mean Sea Level
 NM= Not measured or gauged

Table 2
Annual 2010 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)	t-Butanol (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)	1,1-DCA (ug/L)
MW-1	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	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	NA
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	95x	<100	<200	1.68	1.17	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	<64	<100	<200	<0.645	<0.645	<0.645	<1.94	<0.645	<12.9	<0.645	<0.645	<0.645	NA
04/30/08	54	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA	NA	
MW-2	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<120	<240	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.0500	<0.500	NA
04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA	NA	
MW-3	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	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	NA
	07/26/09	<50	<120	<230	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	<58	<100	<200	<0.580	<0.580	<0.580	<1.74	<0.580	<11.6	<0.580	<0.580	<0.580	NA
04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	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>0.5</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>	<i>200</i>

Table 2
Annual 2010 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)	t-Butanol (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)	1,1-DCA (ug/L)
MW-4	12/30/10	<50	150	250	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	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	NA
	07/26/09	<50	<110	<220	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	61x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.0500	<0.500	NA
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA	NA
MW-5	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	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	NA
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.0500	<0.500	NA
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA	NA
MW-6	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	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	NA
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	72x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.0500	<0.500	NA
	04/30/08	53	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA	NA
MW-7	12/30/10	<50	<120	<230	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<110	<230	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	<50	<100	293x	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.0500	<0.500	NA
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	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>0.5</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>	<i>200</i>

Table 2
Annual 2010 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)	t-Butanol (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)	1.1-DCA (ug/L)
MW-8	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<110	<230	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	NA	NA	NA	NA
	11/12/09	220x	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	110	156x	909x	1.4	0.81	2.4	6.1	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	190x	<100	<200	2.10	1.47	4.94	11.8	<0.500	<10	<0.500	<0.500	<0.500	NA
	10/25/08	240x	<100	<200	1.41	<0.500	<0.500	3.13	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	198	<100	<200	5.37	1.25	3.77	13.3	<0.500	<10	<0.500	<0.0500	<0.500	NA
	04/30/08	1,049	161	<200	13.9	12.4	9.76	160	<0.500	NA	NA	NA	NA	NA
GW-1	12/30/10	<50	100	<200	<0.50	<0.50	<0.50	0.93	<0.50	<5.0	<0.50	<0.50	<0.50	4.8
	07/28/10	89x	<100	<200	0.65	<0.50	<0.50	1.3	<0.50	NA	NA	NA	NA	NA
	11/12/09	120x	138x	<200	3.9	<0.50	2.1	12	<0.50	<10	<0.50	<0.50	<0.50	NA
	07/26/09	5,700	540x	<200	1,100	54	120	100	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	22,000	3,010x	<800	3,000	580	830	2,100	<22	<440	<22	<22	<22	NA
	01/25/09	9,900	767	<200	1,600	174	315	915	<4.40	<88.0	<4.40	<4.40	<4.40	NA
	10/25/08	7200x	1020x	296x	1,010	161	89.8	693	<2.20	<44.0	<2.20	<2.20	<2.20	NA
	07/27/08	18,000	1,060	<200	3,360	146	533	1,450	<22.0	<440	<22.0	<22.0	<22.0	NA
	04/30/08	37,000	7.25	<200	2,400	769	378	3,450	<0.500	NA	NA	NA	NA	NA
GW-2	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	NA	NA	NA	NA
	11/06/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	07/26/09	550	<110	<230	25	9.5	12	79	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	82	< 100	205x	1.7	1.1	1.2	4.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<0.500	<0.500	<10	<0.500	<0.0500	<0.500	NA
	10/25/08	100x	126x	338x	<0.500	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	61	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	15.3	<0.500	<0.500	<0.500	NA
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<0.500	<0.500	NA	NA	NA	NA	NA
GW-3	12/30/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50
	07/28/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/0.05	<0.50	NA	NA	NA	NA	NA
	11/12/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	0.72	<10	<0.50	<0.50	<0.50	NA
	07/26/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10	<0.50	<0.50	<0.50	NA
	04/29/09	500x	<100	206x	63	0.63	<0.50	2.9	<0.50	<10	<0.50	<0.50	<0.50	NA
	01/25/09	<50	<100	<200	0.740	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.0500	<0.500	NA
	10/25/08	100x	<100	<200	8.47	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	07/27/08	63	<100	200	3.27	<0.500	<0.500	<1.5	<0.500	<10	<0.500	<0.500	<0.500	NA
	04/30/08	250	<100	<200	46.5	1.36	2.16	<1.5	<0.500	NA	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>0.5</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>	<i>200</i>

Table 2
Annual 2010 Groundwater Analytical Results
1409-1417 12th Street,
Oakland, California

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-targeted hydrocarbons causing potentially 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 = t-Butyl Alcohol

TAME = tert-Amyl methyl ether

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

1,1-DCA = 1,1 Dichloroethane

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
October 2010
Vacuum Extraction Well
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)
DPE-1	10/11/10	<100	<100	<200	<0.50	<0.50	0.84	1.3/ 1.3	<0.50
DPE-1B	10/12/10	98	<100	<200	<0.50	1.1	1.8	3.0/ 2.4	<0.50
DPE-2	10/11/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/ 0.50	<0.50
DPE-2B	10/12/10	100	<100	<200	6.8	1.4	2.2	3.4/ 2.8	<0.50
DPE-3	10/12/10	1,600	170	<200	93	21	63	55/ 54	<0.50
DPE-5	10/11/10	87	<100	<200	7.5	0.78	2.9	2.0/ 1.4	<0.50
DPE-6	10/12/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/ 0.50	<0.50
DPE-7	10/11/10	<50	<100	<200	<0.50	<0.50	<0.50	<1.0/ 0.50	<0.50
GW-1	10/12/10	120	<100	<200	0.71	0.70	1.3	2.1/ 1.9	<0.50
GW-3	10/12/10	180	<100	<200	4.1	6.0	7.1	11/ 9.7	<0.50
MW-8	10/12/10	79	<100	<200	<0.50	1.0	1.6	2.5/ 2.2	<0.50
<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>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>

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

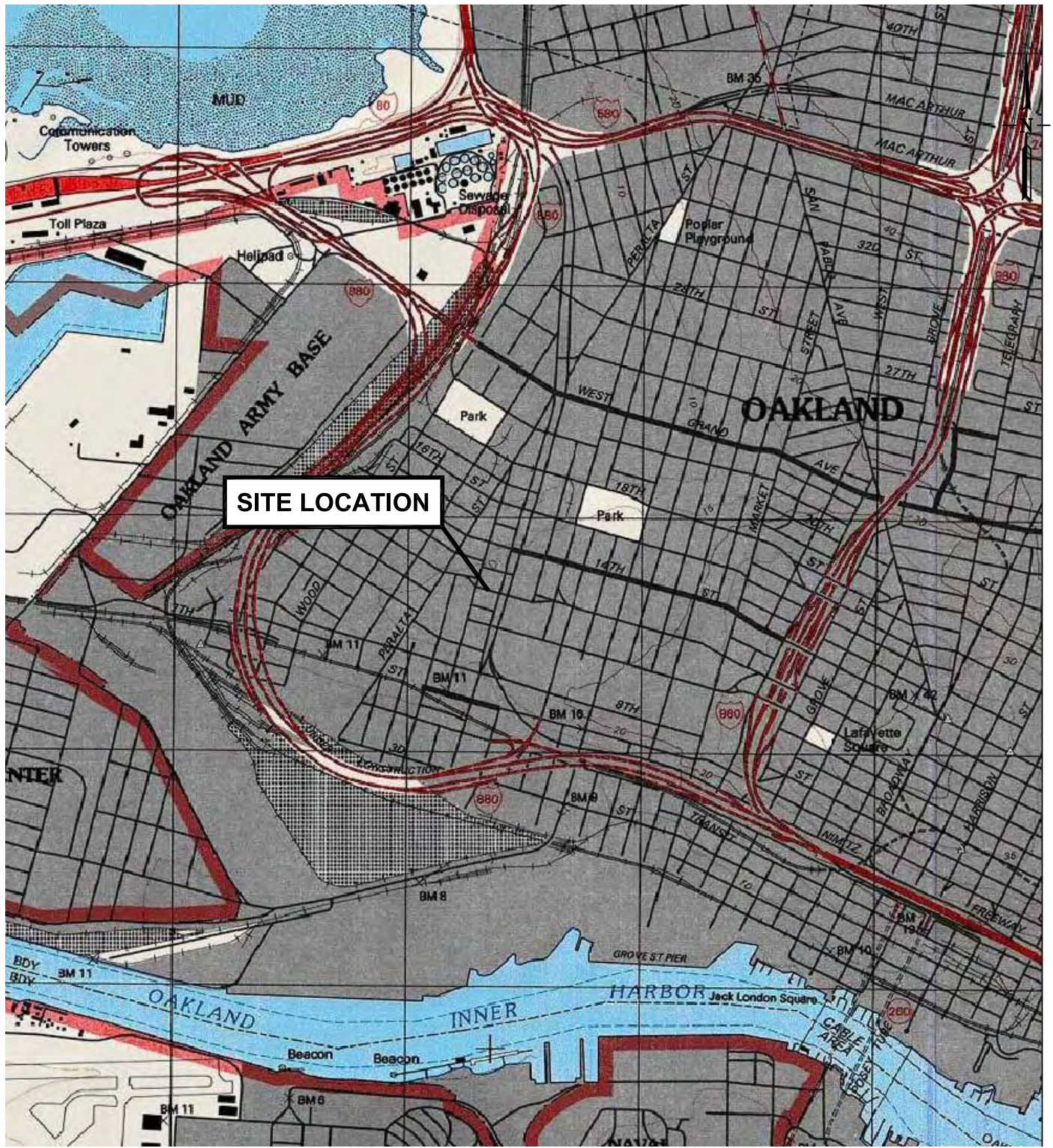
Benzene, methyl-tert-butyl ether, toluene (MTBE), ethylbenzene, and xylenes by EPA Method 8260

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.

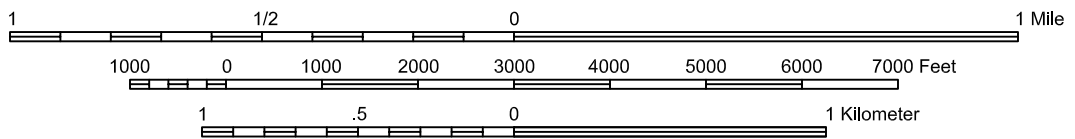
DWS- Groundwater beneath site is a drinking water source

NDWS- Groundwater beneath site is not a drinking water source



SITE LOCATION

Scale 1:24,000



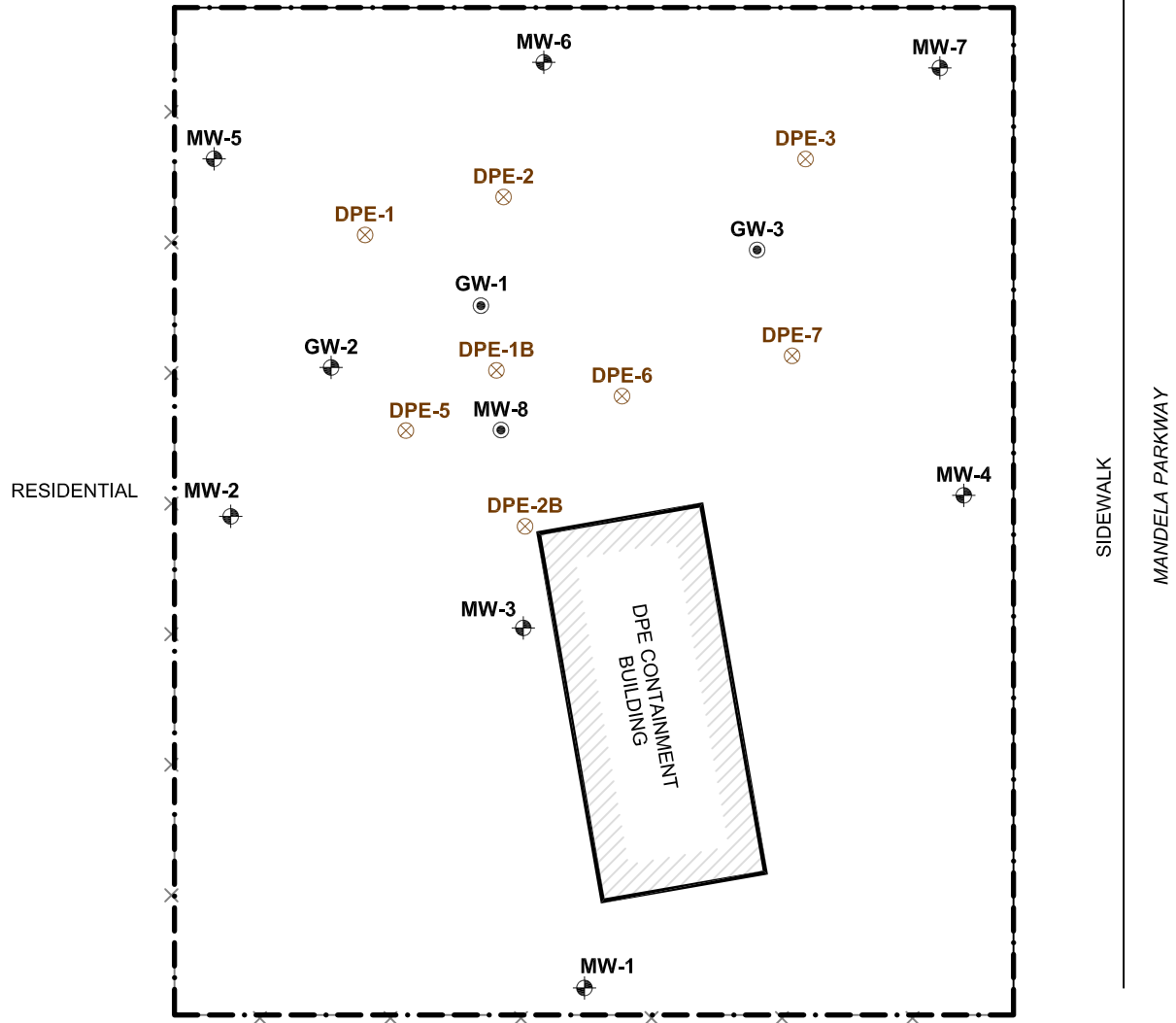
C:\WORK\IES1409 12th Street\Figure 1.dwg Layout: Fig 2 Sep 22, 2007 - 8:03pm

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

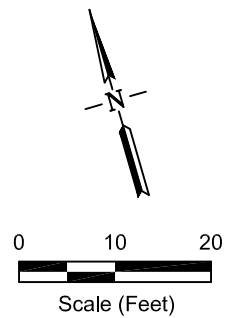
12TH STREET

SIDEWALK



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- DPE-1 DPE Well Location

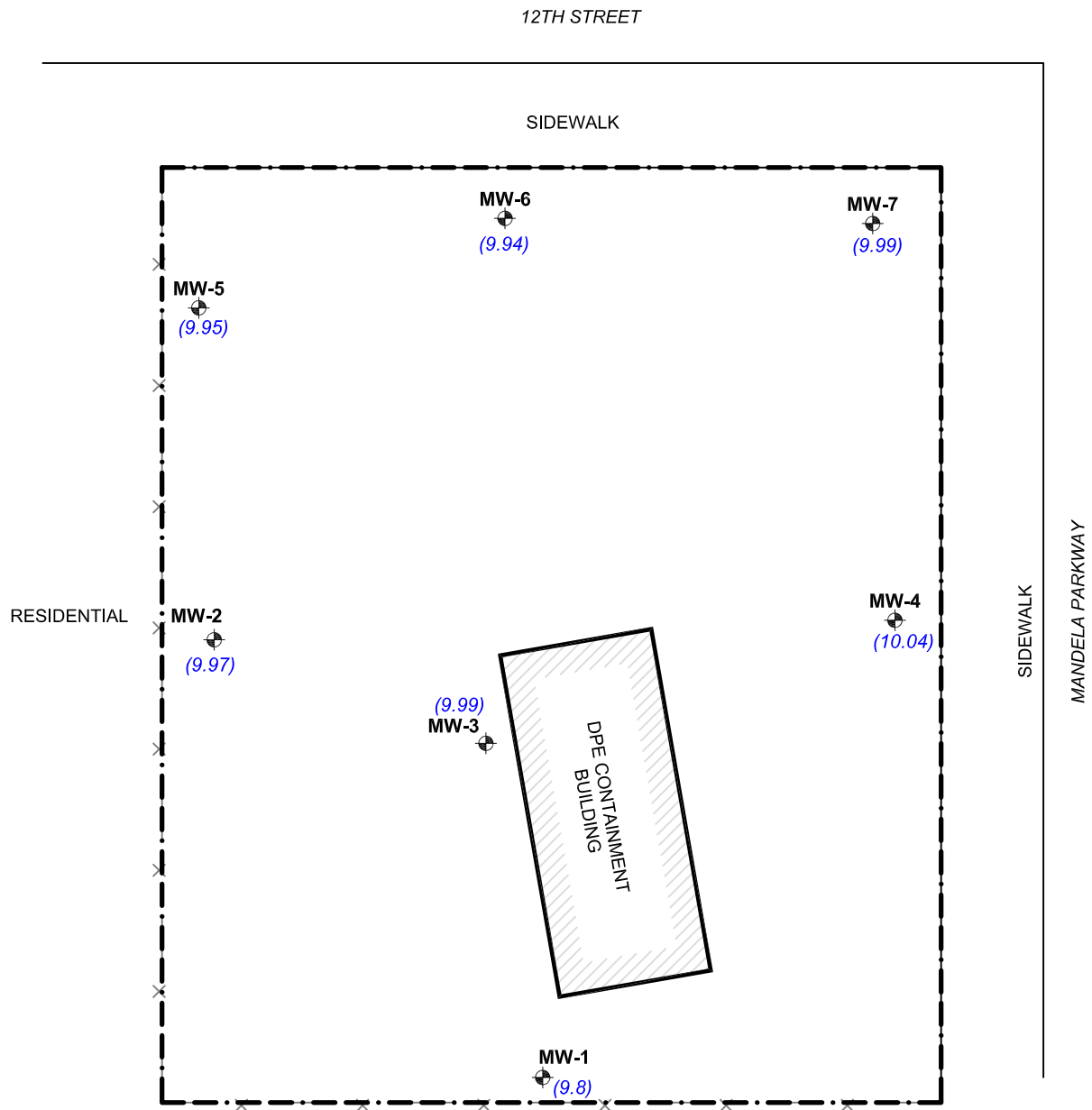


C:\Work\EnviroCAD\IES\1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 2 - Site Plan Jan 13, 2011 - 8:15pm

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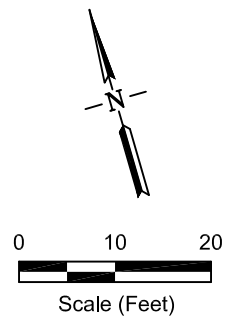
Figure 2
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
SITE PLAN

C:\Work\EnviroCAD\IES\1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 3 - GW-07-10 Jan 20, 2011 - 8:51pm



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- (9.68) Groundwater Elevation (ft.-MSL);

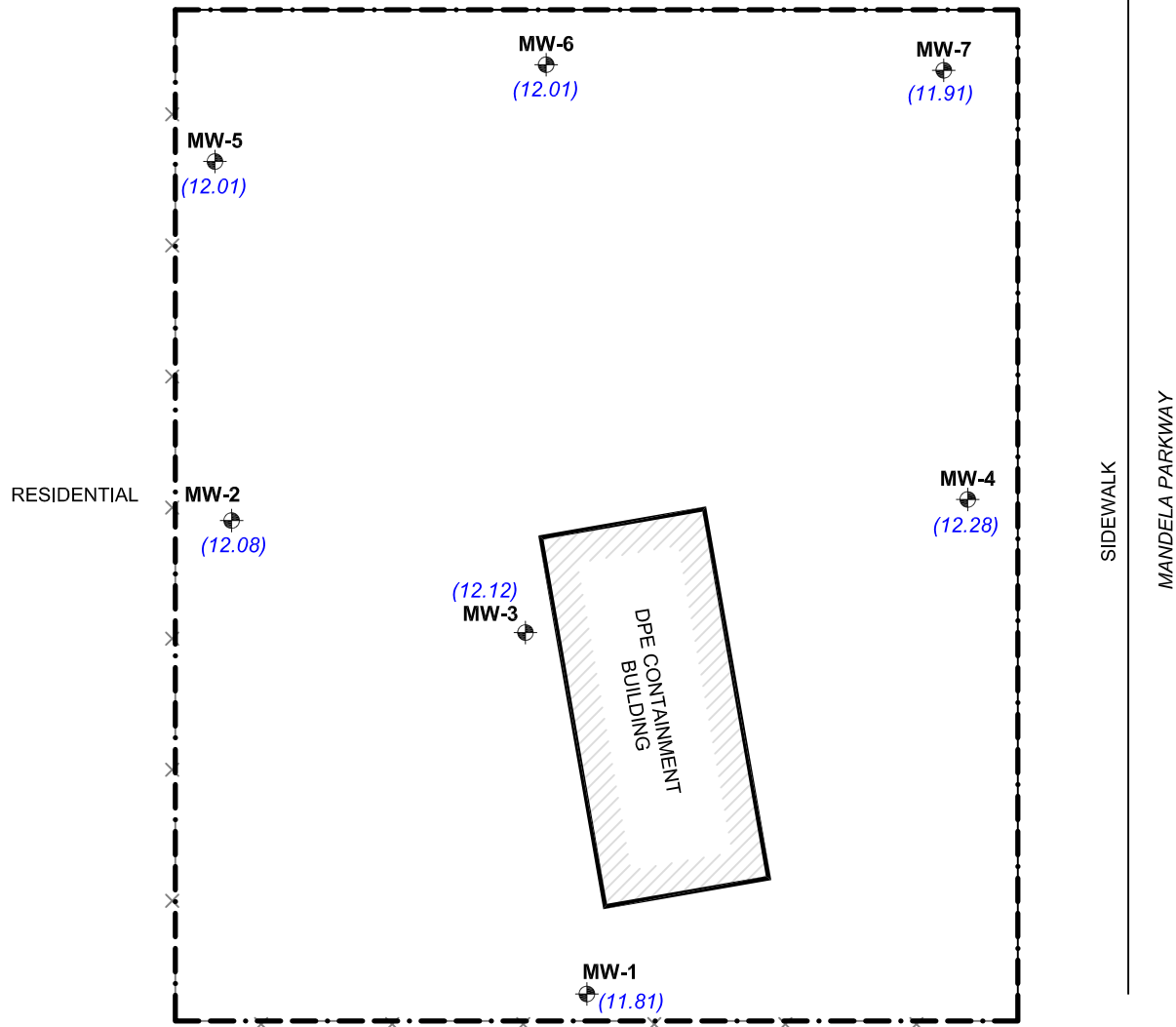


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Figure 3
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP (JULY 2010)

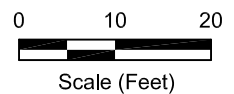
12TH STREET

SIDEWALK



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- (11.81) Groundwater Elevation (ft.-MSL);



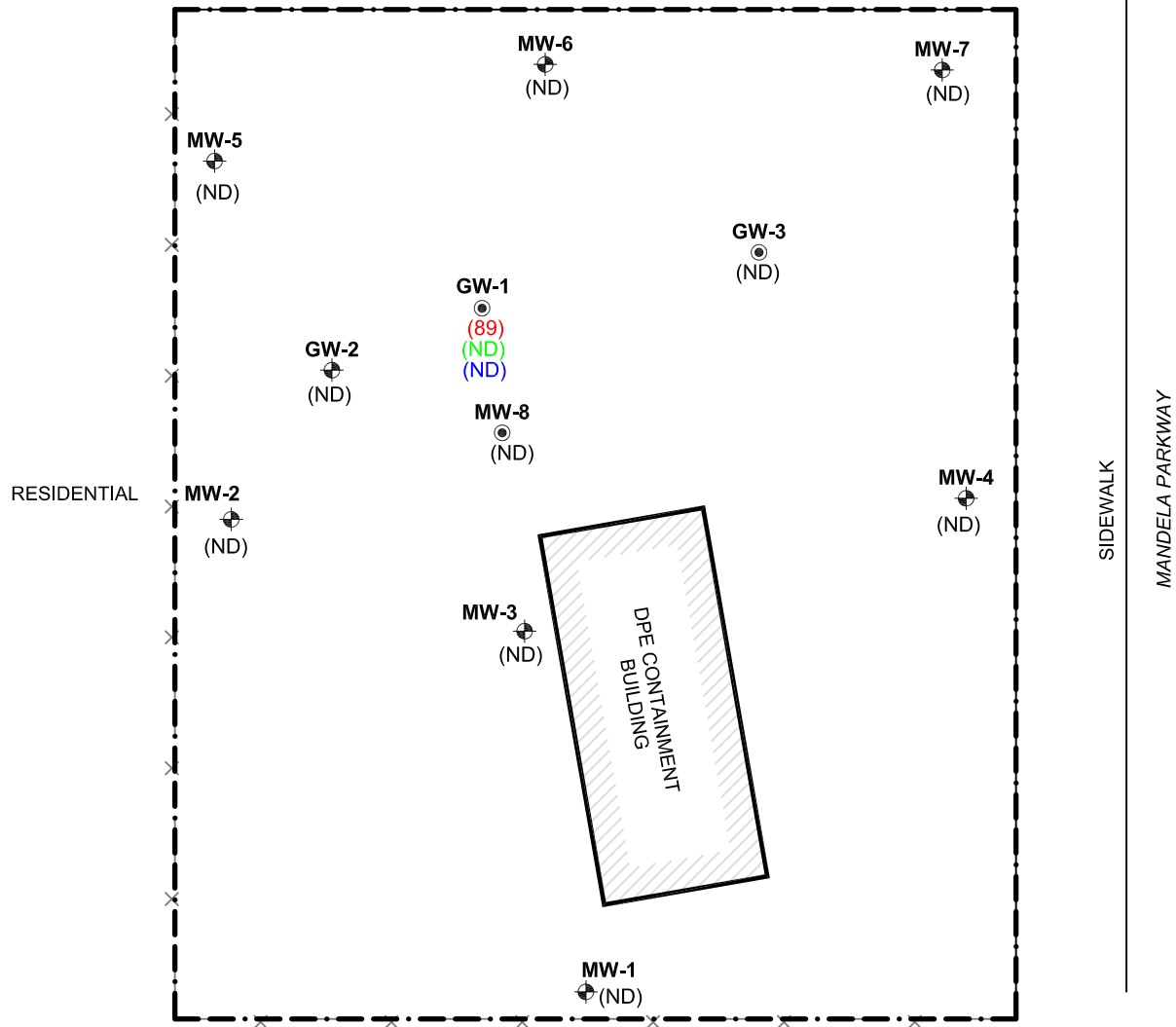
C:\Work\EnviroCAD\IES\1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 4 - GW-12-10 Jan 20, 2011 - 8:52pm

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Figure 4
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP (NOVEMBER 2010)

12TH STREET

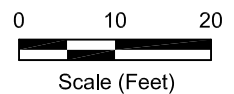
SIDEWALK



Monitoring Well Location

EXPLANATION:

- · — · — Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- (89) TPHg Results in micrograms per liter (ug/L)
- (ND) TPHd Results in micrograms per liter (ug/L)
- (ND) TPHmo non-detect
- (ND) TPHg, TPHd, and TPHmo all non-detect



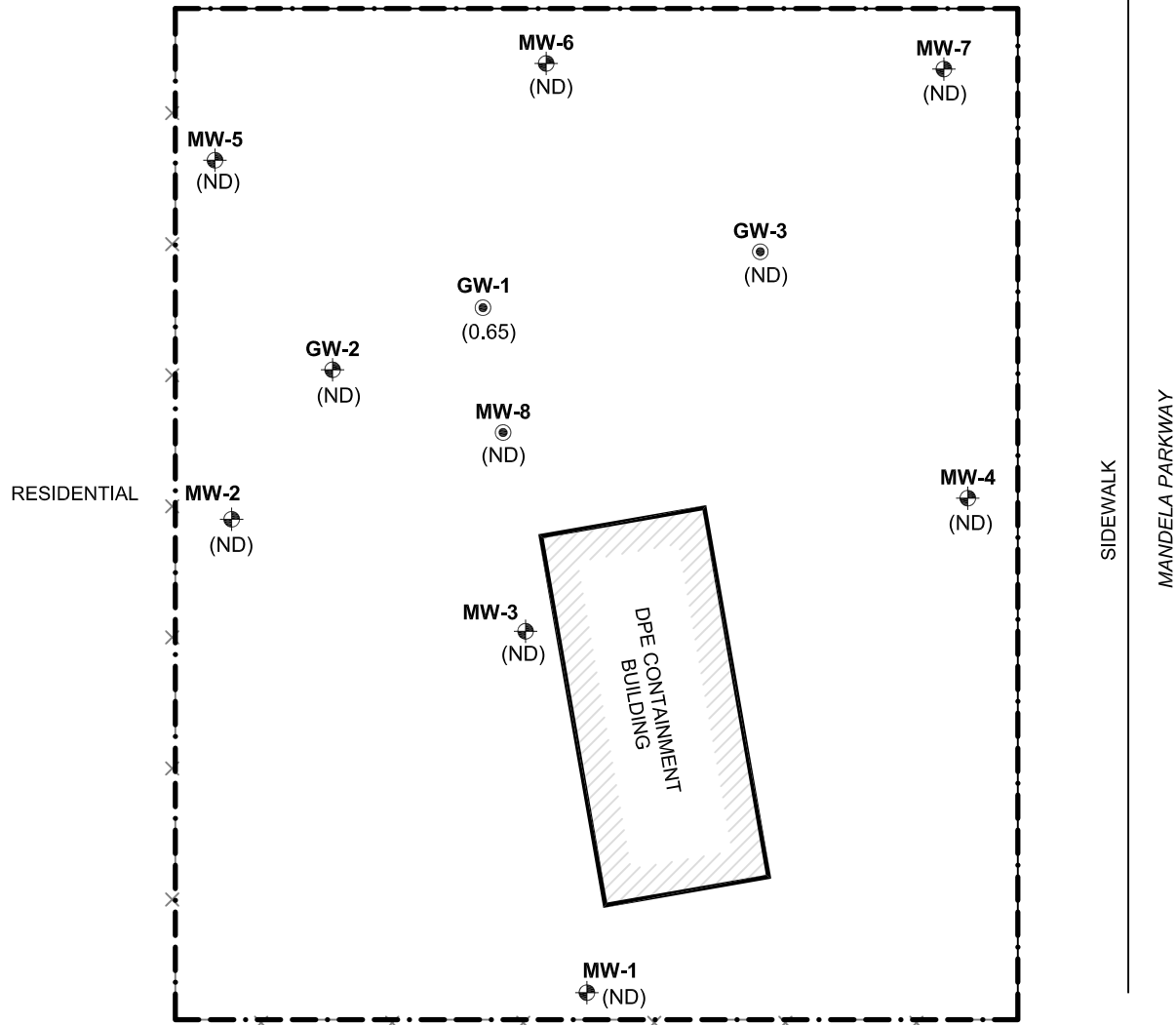
C:\Work\EnviroCAD\IES1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 5 - TPH_GW-07-10 Jan 20, 2011 - 8:52pm

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Figure 5
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
 TPHg, TPHd, and TPHmo IN GROUNDWATER (JULY 2010)

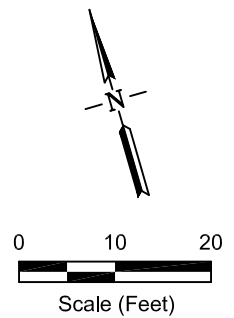
12TH STREET

SIDEWALK



EXPLANATION:

- · — · — Approximate Property Boundary
- MW-1 ⊕ Monitoring Well Location
- GW-3 ⊙ DPE/Monitoring Well Location (Dual-Use Well)
- (0.65) Benzene Results in micrograms per liter (ug/L)



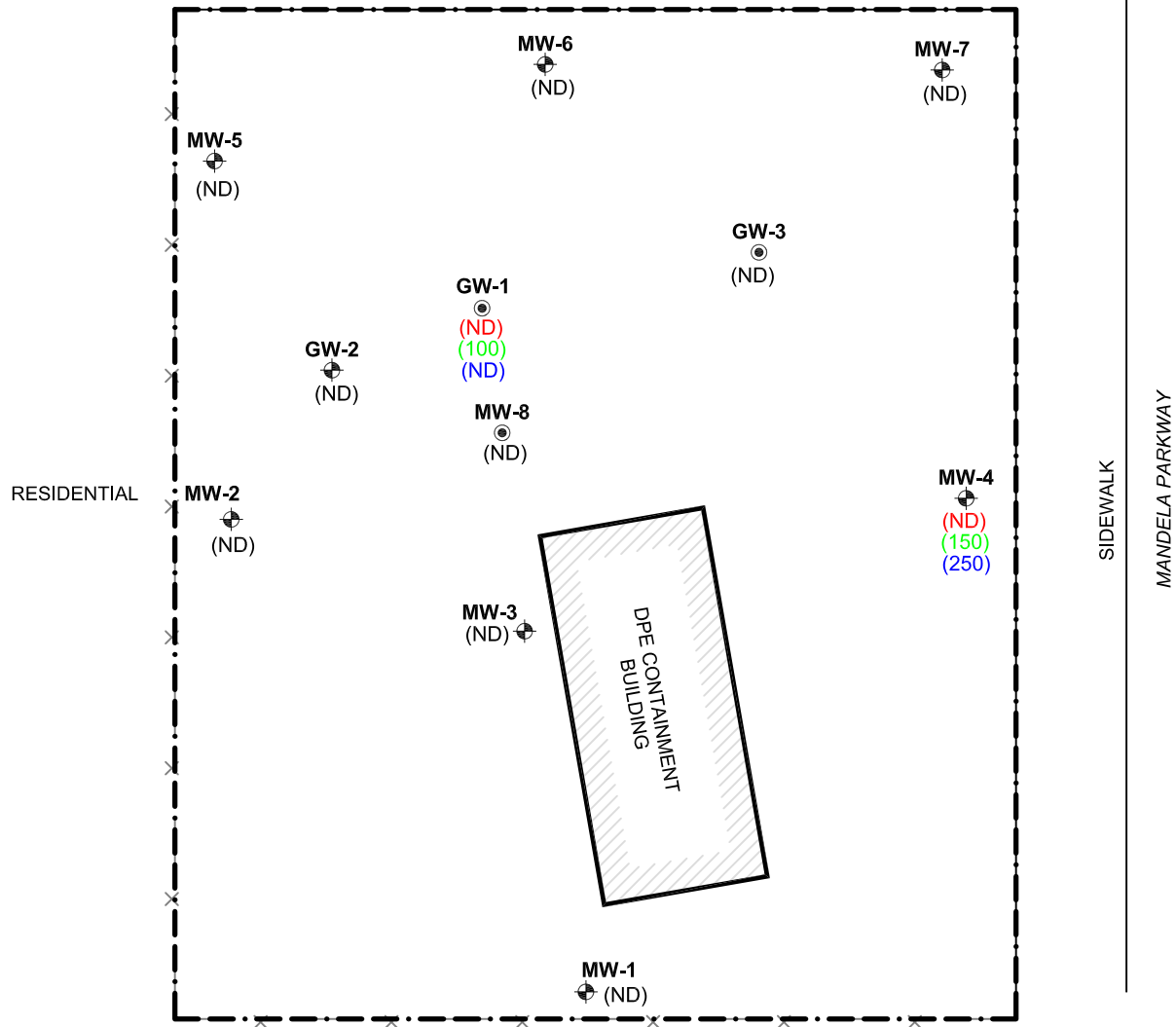
C:\Work\EnviroCAD\IES\1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 6 - Benzene_GW-0710 Jan 20, 2011 - 8:53pm

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Figure 6
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
BENZENE IN GROUNDWATER (JULY 2010)

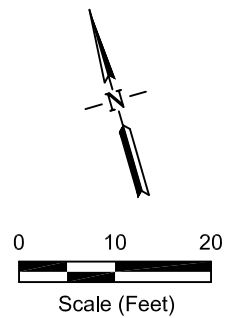
12TH STREET

SIDEWALK



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- (120) TPHg Results in micrograms per liter (ug/L)
- (138) TPHd Results in micrograms per liter (ug/L)
- (ND) TPHmo non-detect
- (ND) TPHg, TPHd, and TPHmo all non-detect



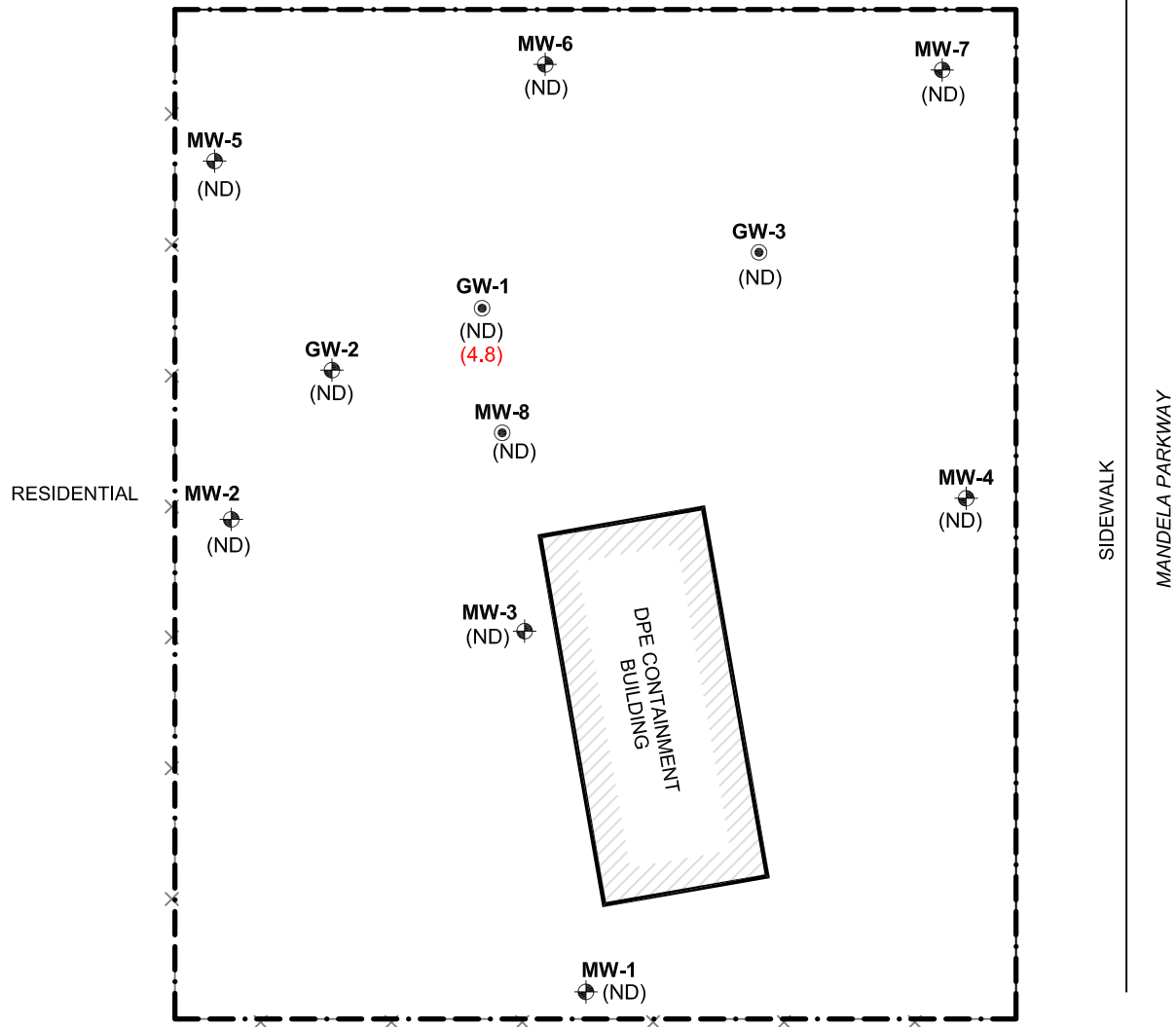
C:\Work\EnviroCAD\IES1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 7 - TPHg_GW-12-10 Jan 13, 2011 - 8:17pm

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Figure 7
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
TPHg, TPHd, and TPHmo IN GROUNDWATER (DECEMBER 2010)

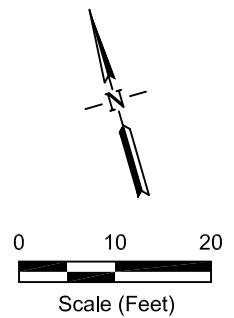
12TH STREET

SIDEWALK



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- GW-3 DPE/Monitoring Well Location (Dual-Use Well)
- (ND) Benzene Results in micrograms per liter (ug/L)
- (4.8) 1,1-Dichloroethene (ug/L)

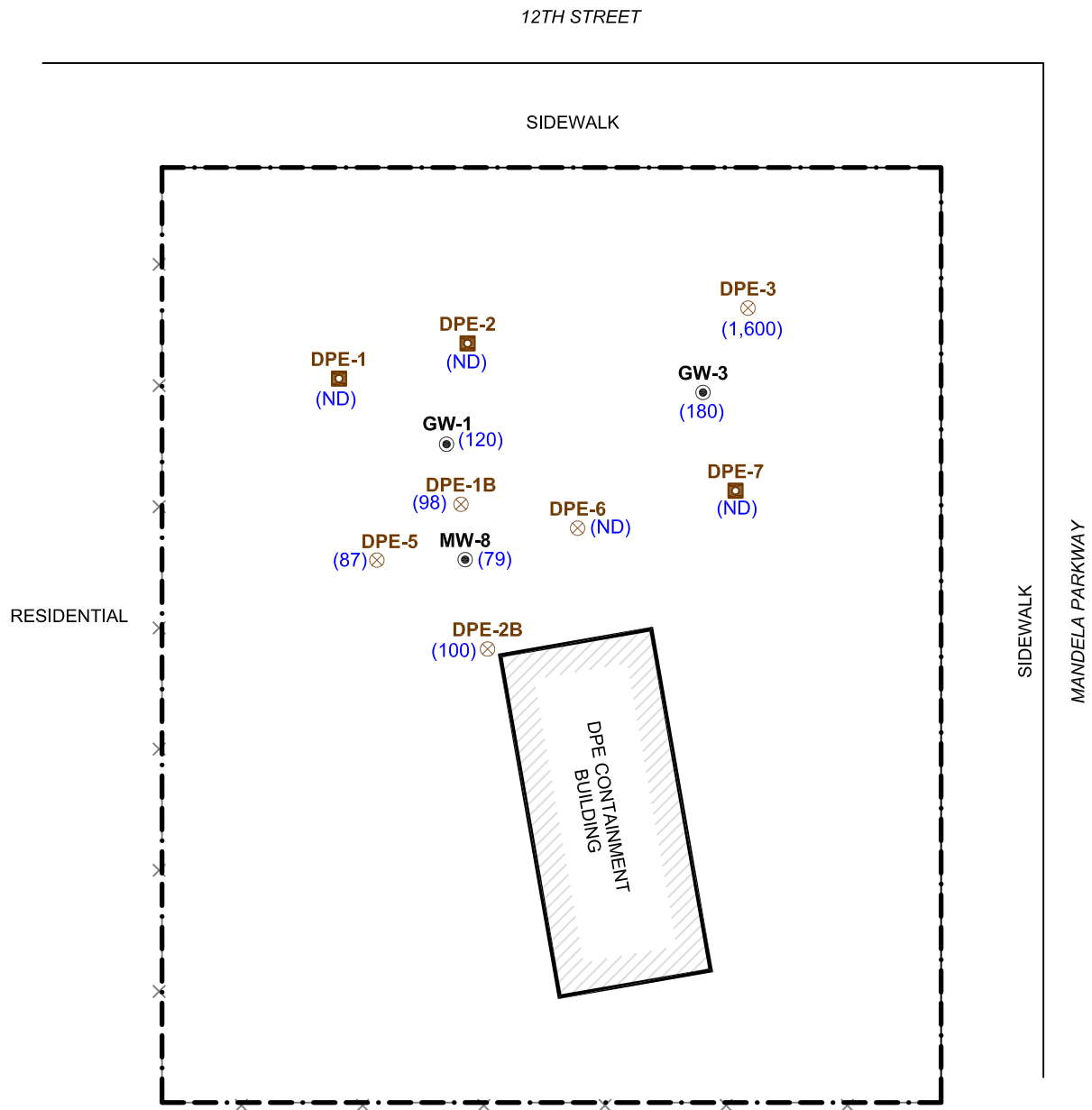


C:\Work\EnviroCAD\IES\1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 8 - Benzene_GW-12-10 Jan 13, 2011 - 8:18pm

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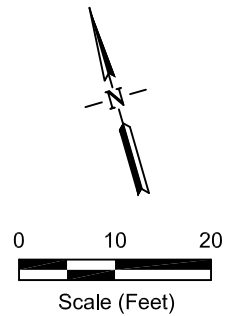
Figure 8
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
1,1-DCA AND BENZENE IN GROUNDWATER (DECEMBER 2010)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 9-10.dwg Layout: Fig 9 - TPHg_DPE-10-10 Jan 13, 2011 - 8:42pm



EXPLANATION:

- · — · — Approximate Property Boundary
- GW-3 ● DPE/Monitoring Well Location (Dual-Use Well)
- DPE-3 ⊗ DPE Well Location
- DPE-1 ■ DPE Bleeder Well Location
- (1,600) TPHg Results in micrograms per liter (ug/L)



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Figure 9
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
TPHg IN DPE WELLS (OCTOBER 2010)

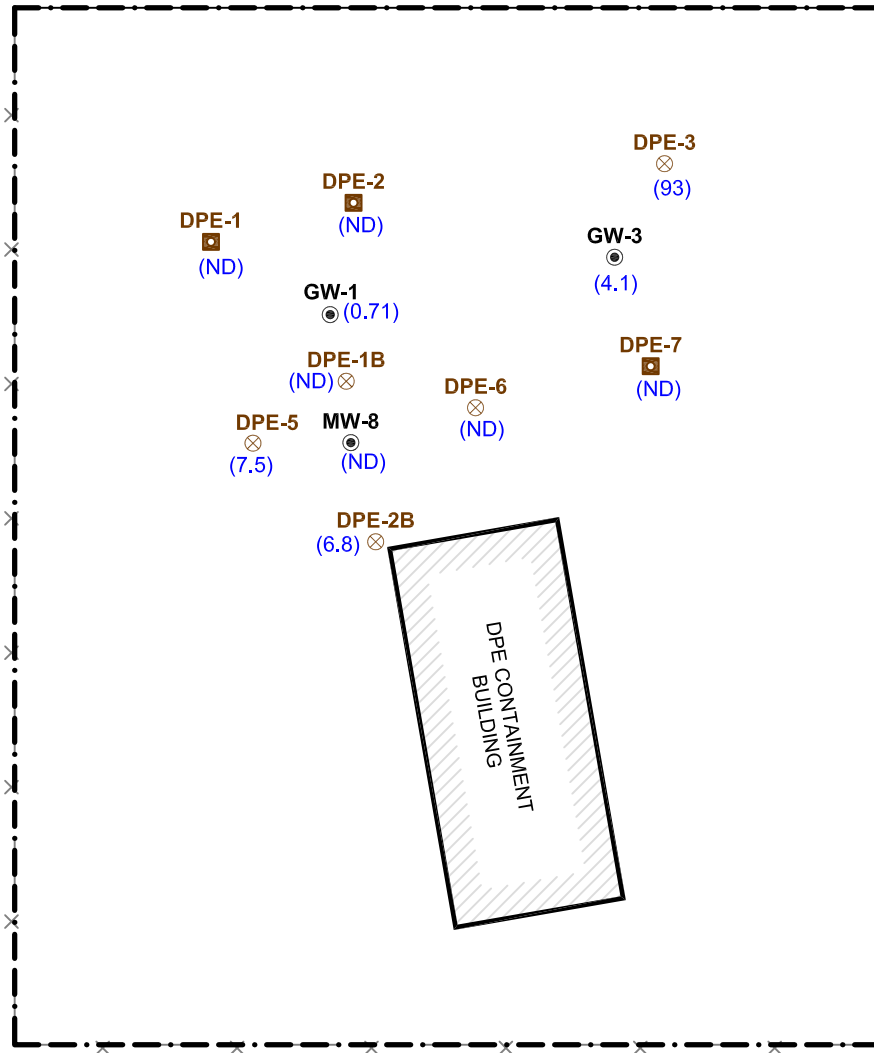
12TH STREET

SIDEWALK

RESIDENTIAL

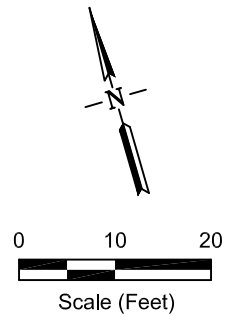
SIDEWALK

MANDELA PARKWAY



EXPLANATION:

- Approximate Property Boundary
- GW-3 ● DPE/Monitoring Well Location (Dual-Use Well)
- DPE-3 ⊗ DPE Well Location
- DPE-1 ■ DPE Bleeder Well Location
- (93) Benzene Results in micrograms per liter (ug/L)



C:\Work\EnviroCAD\IES\1409-1417 12th Street\2010 Annual_GW_Mon_Rpt\Figure 9-10.dwg Layout: Fig 10 - Benzene_DP-10-10 Jan 13, 2011 - 8:42pm

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Figure 10
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
BENZENE IN DPE WELLS (OCTOBER 2010)

APPENDIX A

Groundwater Monitoring Well Sampling Data Sheets
(July 2010 & December 2010)

**TEC Accutite
Water Sample Field Data Sheet**

Project #: E-410 Purged By: BD Well ID: MW-1

Client Name: J. Cotton Sampled By: BD Sample ID: MW-1

Location: 1409 12th Street, Oakland QA Samples: ---

Purge Information

Date: 7/28/10 Start (2400hr): 1018 End (2400hr): 1024

<11.97 Depth to Bottom: 13.93 Depth to Water: 11.49 Casing Diameter: 2"

DTB - DTW: 2.44 Purge (gal): 0.41 x 3 volumes: 1.24

Field Measurements

Time (2400hr)	Volume (gal)	Temp (°C)	Conductivity (µmhos/cm)	pH (units)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
1019	0.50	18.3	813	7.23	low	known	12.51
1021	1.00	18.2	846	6.98	mod.	"	13.23
1024	1.25	18.1	840	6.93	"	lots of sed.	13.58

Sample Information

Date: 7/28/10 Time: 1119 DTW: 11.95 Turbidity: low
 Odor: slight Analysis: 8015 & 8066 Sample Vessels: 2 amber & 3 vac.
 Preservative: none & HCl

Purging Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Sampling Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Well Integrity: good Lock: yes

Note: To convert water column height to total amount of gallons in one well volume, multiply the water column height by: .17 for 2" well diameter, .65 for 4", 1.47 for 6", or 2.62 for 8".

Signature: Brian Doherty

**TEC Accutite
Water Sample Field Data Sheet**

Project #: E-410 Purged By: BD Well ID: MW-2

Client Name: J. Cotton Sampled By: BD Sample ID: MW-2

Location: 1409 12th Street, Oakland QA Samples: ---

Purge Information

Date: 7/27/10 Start (2400hr): 1158 End (2400hr): 1206

Depth to Bottom: 14.00 Depth to Water: 10.64 Casing Diameter: 2"

DTB - DTW: 3.36 Purge (gal): 0.57 x 3 volumes: 1.71

41.38

Field Measurements

Time (2400hr)	Volume (gal)	Temp (°C)	Conductivity (µmhos/cm)	pH (units)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
1200	0.50	19.6	345	6.93	low	cloudy	11.15
1203	1.00	19.4	325	6.70	"	"	11.43
1206	1.75	19.3	322	6.67	mod.	brown	12.78

Sample Information

Date: 7/27/10 Time: 1226 DTW: 11.27 Turbidity: low

Odor: none Analysis: 8015 & 8260 Sample Vessels: 2 amber & 3 VOA
Preservative: none & HCl

Purging Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Sampling Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Well Integrity: good Lock: yes

Note: To convert water column height to total amount of gallons in one well volume, multiply the water column height by: .17 for 2" well diameter, .65 for 4", 1.47 for 6", or 2.62 for 8".

Signature: Brian Deberry

**TEC Accutite
Water Sample Field Data Sheet**

Project #: E-410 Purged By: BD Well ID: MW-3
 Client Name: J. Cotton Sampled By: BD Sample ID: MW-3
 Location: 1409 12th Street, Oakland QA Samples: ---

Purge Information

Date: 7/27/10 Start (2400hr): 1247 End (2400hr): 1256
 Depth to Bottom: 14.00 Depth to Water: 11.10 Casing Diameter: 2"
 DTB - DTW: 2.90 Purge (gal): 0.49 x 3 volumes: 1.48

<11.68

Field Measurements

Time (2400hr)	Volume (gal)	Temp (°C)	Conductivity (µmhos/cm)	pH (units)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
<u>1249</u>	<u>0.5</u>	<u>18.7</u>	<u>878</u>	<u>6.75</u>	<u>low</u>	<u>cloudy</u>	<u>11.83</u>
<u>1252</u>	<u>1.0</u>	<u>18.6</u>	<u>867</u>	<u>7.04</u>	<u>"</u>	<u>"</u>	<u>12.43</u>
<u>1256</u>	<u>1.5</u>	<u>18.4</u>	<u>860</u>	<u>7.02</u>	<u>"</u>	<u>"</u>	<u>13.34</u>

Sample Information

Date: 7/27/10 Time: 1340 DTW: 11.52 Turbidity: low
 Odor: slight Sample Vessels: Zambo #3 VDs
 Analysis: FD15 & 6260 Preservative: none & HCl

Purging Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Sampling Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Well Integrity: good Lock: yes

Note: To convert water column height to total amount of gallons in one well volume, multiply the water column height by: .17 for 2" well diameter, .65 for 4", 1.47 for 6", or 2.62 for 8".

Signature: Brian Doherty

**TEC Accutite
Water Sample Field Data Sheet**

Project #: E-410 Purged By: BD Well ID: MW-4

Client Name: J. Cotton Sampled By: BD Sample ID: MW-4

Location: 1409 12th Street, Oakland QA Samples: ---

Purge Information

Date: 7/27/10 Start (2400hr): 1316 End (2400hr): 1325

<11.05
Depth to Bottom: 13.98 Depth to Water: 10.31 Casing Diameter: 2"

DTB - DTW: 3.67 Purge (gal): 0.62 x 3 volumes: 1.87

Field Measurements

Time (2400hr)	Volume (gal)	Temp (°C)	Conductivity (µmhos/cm)	pH (units)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
1318	0.50	20.7	533	7.28	low	cloudy	10.90
1321	1.25	20.1	534	7.16	"	brown	11.98
1325	2.00	19.9	532	7.69	"	"	12.43

Sample Information

Date: 7/27/10 Time: 1356 DTW: 10.56 Turbidity: low

Odor: NM Analysis: 8015 & 8260 Sample Vessels: 2 amber & 3 WAs
Preservative: none & HCl

Purging Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Sampling Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Well Integrity: good Lock: yes

Note: To convert water column height to total amount of gallons in one well volume, multiply the water column height by: .17 for 2" well diameter, .65 for 4", 1.47 for 6", or 2.62 for 8".

Signature: Brian Doherty

**TEC Accutite
Water Sample Field Data Sheet**

Project #: E-410 Purged By: BD Well ID: MW-5
 Client Name: J. Cotton Sampled By: BD Sample ID: MW-5
 Location: 1409 12th Street, Oakland QA Samples: ---

Purge Information

Date: 7/27/10 Start (2400hr): 1125 End (2400hr): 1132
 Depth to Bottom: 13.88 Depth to Water: 10.10 Casing Diameter: 2"
 DTB - DTW: 3.78 Purge (gal): 0.64 x 3 volumes: 1.93

Field Measurements

Time (2400hr)	Volume (gal)	Temp (°C)	Conductivity (µmhos/cm)	pH (units)	Turbidity (NTU)	color DO (mg/l)	Depth (ft)
1127	0.75	20.2	504	6.69	low/mod	brown	12.00
1130	1.50	19.5	442	6.82	mod.	"	12.60
1132	2.00	19.4	431	6.87	"	"	12.87

Sample Information

Date: 7/27/10 Time: 1143 DTW: 10.83 Turbidity: low
 Odor: none Analysis: 8015 & 8260 Sample Vessels: 2 amber & 3 VDA's
 Preservative: none & HCl

Purging Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Sampling Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Well Integrity: good Lock: yes

Note: To convert water column height to total amount of gallons in one well volume, multiply the water column height by: .17 for 2" well diameter, .65 for 4", 1.47 for 6", or 2.62 for 8".

Signature: Brian J. J. [Signature]

< 10.86

**TEC Accutite
Water Sample Field Data Sheet**

Project #: E-410 Purged By: BD Well ID: MW-7

Client Name: J. Cotton Sampled By: BD Sample ID: MW-7

Location: 1409 12th Street, Oakland QA Samples: ---

Purge Information

Date: 7/27/10 Start (2400hr): 1105 End (2400hr): 1112

<10.69 Depth to Bottom: 13.92 Depth to Water: 9.89 Casing Diameter: 2"

DTB - DTW: 4.03 Purge (gal): 0.69 x 3 volumes: 2.06

Field Measurements

Time (2400hr)	Volume (gal)	Temp (°C)	Conductivity (µmhos/cm)	pH (units)	Turbidity (NTU)	color DO (mg/l)	Depth (ft)
1107	0.75	21.4	457	7.04	low	clear	11.06
1110	1.50	21.3	341	6.92	"	cloudy	12.00
1112	2.00	21.1	323	6.92	"	"	12.45

Sample Information

Date: 7/27/10 Time: 12:12 DTW: 10.58 Turbidity: low

Odor: none Analysis: FO15 & E260 Preservative: none & HCl
 Sample Vessels: 2 amber & 3 vials

Purging Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Sampling Equipment

submersible pump peristaltic pump
 bailer (disposable) bailer (st. steel)
 dedicated bladder pump
 other: _____

Well Integrity: good Lock: yes

Note: To convert water column height to total amount of gallons in one well volume, multiply the water column height by: .17 for 2" well diameter, .65 for 4", 1.47 for 6", or 2.62 for 8".

Signature: Brian Doherty

**TEC Accutite
Water Sample Field Data Sheet**

Project #: E-410 **Purged By:** BD **Well ID:** MW-8
Client Name: J. Cotton **Sampled By:** BD **Sample ID:** MW-8
Location: 1409 12th Street, Oakland **QA Samples:** ---

Purge Information

Date: 7/28/10 **Start (2400hr):** 1215 **End (2400hr):** 1222
Depth to Bottom: 27.49 **Depth to Water:** 10.93 **Casing Diameter:** 2"
DTB - DTW: 16.56 **Purge (gal):** 2.82 **x 3 volumes:** 8.45

Field Measurements

Time (2400hr)	Volume (gal)	Temp (°C)	Conductivity (µmhos/cm)	pH (units)	Turbidity (NTU)	color D ₂₀ (mg/l)	Depth (ft)
1217	3.0	19.3	793	6.87	low	clear	16.93
1220	5.5	19.1	800	6.78	"	"	16.83
1222	8.5	19.0	802	6.76	"	"	17.90

Sample Information

Date: 7/28/10 **Time:** 1228 **DTW:** 11.10 **Turbidity:** low
Odor: none **Analysis:** 8015 & 8260 **Sample Vessels:** 2 amber & SVDAs
Preservative: none & HCl

Purging Equipment

submersible pump ___ peristaltic pump
___ bailer (disposable) ___ bailer (st. steel)
___ dedicated ___ bladder pump
other: _____

Sampling Equipment

___ submersible pump ___ peristaltic pump
 bailer (disposable) ___ bailer (st. steel)
___ dedicated ___ bladder pump
other: _____

Well Integrity: good **Lock:** n/a

Note: To convert water column height to total amount of gallons in one well volume, multiply the water column height by: .17 for 2" well diameter, .65 for 4", 1.47 for 6", or 2.62 for 8".

Signature: Brian Schetty

**TEC Accutite
Field Form**

Date: 7/27-7/28/10

Project Name: 1409 12th St.

Location: Oakland

Project Number: E-410

Work Performed by: BD

Work Summary:

- opened & gauged all on-site wells
- all wells ~~purged~~ w/ bailer or sub. pump ~~purge~~
- all wells sampled once water table reached at least 80%.
- purge H₂O left in on-site drum to be pumped back into system

TEC Equipment	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Number Used	Unit Rate	Daily Rate	Weekly Rate	Total	Comments
Utility Truck/Van		X	X					---	---	\$60.00	\$240.00	120	
2" Purge Pump			X					---	---	\$25.00	\$100.00	25	
LoFlo purge Pump/ Control box								---	---	\$125.00	\$500.00		
GeoTech. Peristaltic Pump								---	---	\$35.00	\$140.00		
Tubing 3/8" (per foot)			X					90	\$0.40	---	---	36	
Tubing 3/8" (Box)									\$40.00	---	---		
Tubing 1/4" (per foot)									\$0.40	---	---		
Disposable 2" Bailers (36" Long)		X	X					11	\$8.00	---	---	88	
Disposable Bladders									\$11.00	---	---		
Nuts & Ferrules (set)									\$3.00	---	---		
Tedlar Bags									\$14.00	---	---		
SNAP Sampler 40 ml VOA									\$20.00	---	---		
SNAP Sampler 350 ml POLY									\$20.00	---	---		
Soil Tubes, Caps and Teflon® tape									\$10.00	---	---		
Marking Paint Cans									\$10.00	---	---		
Monitoring Well Locks									\$15.00	---	---		
Monitoring Well Caps									\$22.00	---	---		
55 Gallon Drums									\$55.00	---	---		
CO ₂ Tank/Gas								---	---	\$30.00	\$120.00		
Ice Chest/Ice		X	X					---	---	\$5.00	\$20.00	10	
Digital Camera								---	---	\$5.00	\$20.00		
Vapor Sampling Kit								---	---	\$25.00	\$100.00		
Oakton Multimeter		X	X					---	---	\$25.00	\$100.00	50	
YSI Multimeter								---	---	\$150.00	\$600.00		
Oil/Water Meter		X	X					---	---	\$40.00	\$120.00	80	
Water Level Meter								---	---	\$25.00	\$100.00		
Drawdown Meter								---	---	\$25.00	\$100.00		
P.I.D. Meter (Carried/not used in Field)								---	---	\$35.00	\$140.00		
P.I.D. Meter (Used in Field)								---	---	\$100.00	\$400.00		
L.E.L. Meter								---	---	\$100.00	\$400.00		
Laptop Computer								---	---	\$50.00	\$200.00		
Health & Safety Kit (Hard Hat, Safety Glasses, Safety Vest, Work Gloves, PPE Gloves, Steel-toe Boots, Twine, Ziplock Bags, Trash Bags, etc.)		X	X					---	---	\$25.00	\$100.00	50	
Tool Kit		X	X					---	---	\$10.00	\$40.00	20	
Small Parts Kit		X	X					---	---	\$10.00	\$40.00	20	
Bucket		X	X					---	---	\$5.00	\$20.00	10	
Total												509	

Dad

Dad

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
 Well Number: MW-1 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 14.07 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2 Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Initial Water Level: 9.48
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
12:59	start	0	6.55	18.4	1143		slightly cloudy	no
1:00		1	6.67	18.4	1211		slightly cloudy	no
1:11		2	6.70	18.4	1239		cloudy	no
1:27		3	6.58	18.3	1130		cloudy	no

Total Discharge: 3 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	MW-1

$$14.07 - 9.48 = 4.59 \times 1.03 = .748 \times 3 = 2.5$$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
Well Number: MW-2 Weather: Sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 14.02 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2 Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Initial Water Level: 8.53
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field			
2:03	start	0	6.50	17.4	372		clear	no
2:18		1	6.40	17.3	352		cloudy	no
2:28		2	6.27	17.3	330		cloudy	no
2:31		3	6.37	17.4	350		cloudy	no

Total Discharge: 3 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	MW-2

$$\begin{array}{r}
 14.02 \\
 - 8.53 \\
 \hline
 5.49 \times .163 = .89 \times 3 \approx 3
 \end{array}$$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
 Well Number: MW-3 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 14.72 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA

Ground Water Levels:

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

Initial Water Level: 8.97
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
2:40	start	0	6.73	16.5	877		clear	no
2:49		1	6.76	17.1	920		cloudy	no
2:53		2	6.70	17.3	880		cloudy	no
2:58		3	6.66	17.3	900		cloudy	no

Total Discharge: 3 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	MW-3

$$14.72 - 8.97 = 5.75 \times .163 = .94 \times 3 = 3 \text{ gal}$$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
Well Number: MW-4 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 14.02 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Initial Water Level: 8.01
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field			
1:00	start	0	7.00	18.9	400		cloudy	no
1:13		1	6.83	19.0	403		cloudy	no
1:18		2	6.74	19.0	388		cloudy	no
1:31		3	6.79	19.0	399		slightly cloudy	no

Total Discharge: 3 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	MW-4

$$\begin{array}{r}
 14.02 \\
 - 8.01 \\
 \hline
 5.95 \times 0.163 = .97 \times 3 = 3 \text{ gal}
 \end{array}$$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409_QGWM Sampler: Joseph Cotton
Well Number: MW-5 Weather: ~~cloudy~~ sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 13.89 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Initial Water Level: 8.04
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
3:07	start	0	4.44	17.5	496		cloudy	no
3:11		1	4.49	17.5	512		slightly cloudy	no
3:17		2	6.43	17.5	507		slightly cloudy	no
3:20		3	6.41	17.8	482		slightly cloudy	no

Total Discharge: 3 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409_QGWM	December 30, 2010	MW-5

$$13.89 - 8.04 = 5.85 \times 0.163 = .95 \times 3 = 3 \text{ gal}$$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409_QGWM Sampler: Joseph Cotton
Well Number: MW-6 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 14.60 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
 _____ 4" Well = 0.653 gallons per foot- CONVERSION FACTOR

12:09 Initial Water Level: 7.57
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
3:18	start	0	6.91	17.9	484		clear	no
3:25		2	6.82	17.4	480		clear	no
3:28		3	6.80	18.0	474		cloudy	no
3:34		4	6.64	18.3	458		slightly cloudy	no

Total Discharge: 4 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409_QGWM	December 30, 2010	MW-6

$$14.60 - 7.57 = 7.03 \times .163 = 1.14 \times 3 = 3.5 \text{ gal}$$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
Well Number: MW-7 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 13.95 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Initial Water Level: 7.97
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
2:47	start	0	6.50	18.5	370		clear	no
2:52		1	6.45	18.2	387		clear	no
2:57		2	6.49	18.2	381		clear	no
3:02		3	6.53	18.5	368		slightly cloudy	no

Total Discharge: 3 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	

$$\begin{array}{r}
 13.95 \\
 - 7.97 \\
 \hline
 5.98 \times 0.163 = .97 \times 3 = 3 \text{ gal}
 \end{array}$$

GROUNDWATER SAMPLING DATA SHEET

Marcus

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
Well Number: MW-8 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 27.65 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

12:12

Initial Water Level: 8.75
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
12:50	start	0 10	6.59	17.1	909		clear	no no
1:09		5	6.51	19.1	900		clear	no no
1:19		7	6.49	18.7	913		clear	yes
1:36		10	6.49	19.5	917		clear	yes

Total Discharge: 10 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	MW-8

$$27.65 - 8.75 = 18.9 \times .163 = 3.1 \times 3 = 9.5 \text{ gal}$$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
 Well Number: GW-1 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 17.11 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

12:18
~~12:18~~

Initial Water Level: ~~8.12~~ 8.12
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
12:55	start	0	6.19	17.9	1886		clear brown dirt particles	yes
1:33		10	6.36	19.6	1111		clear	yes
1:57		15	6.53	18.6	920		dirt particles	yes
2:30		20	6.48	18.2	860		clear	yes

Total Discharge: 20 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	GW-1

17.11
 - 8.12

 8.99 x 0.653 = 5.9 x 3 = 18 gal

GROUNDWATER SAMPLING DATA SHEET

Dad

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
Well Number: GW-2 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 17.11 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

12/14

Initial Water Level: 8.48
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
12:53	start	0	7.10	17.3	230		clear	no
1:30		10	6.77	18.8	274		clear	no
1:50		15	6.59	18.5	295		clear	no
2:15		20	6.55	18.2	278		clear	no

Total Discharge: 20 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	GW-2

17.11
 - 8.48

 8.63 x .653 = 5.7 x 3 = 17 gal

Marcus

GROUNDWATER SAMPLING DATA SHEET

Marcus

Project Name: 1409 12th Street, Oakland, CA Date: December 30, 2010
 Project Number: 1409 QGWM Sampler: Joseph Cotton
 Well Number: GW-3 Weather: sunny
 Well Location: 1409-1417 12th Street, Oakland, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer or Peristaltic Pump
 Total Depth of Well: 1808 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Disposable Bailer or Peristaltic Pump
 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 -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

12:10

Initial Water Level: 7.47
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: _____

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/Turbidity	Odor
	Per Time Period	Cumulative			Field			
12:57	start	0	6.79	17.7	909		clear	no
1:22		7	6.72	18.9	914		clear	no
1:39		14	6.68	19.2	916		clear	no
2:01		21	6.70	18.3	882		clear	no

Total Discharge: 21 gallons Comments: _____
 Casing Volumes Removed: plus 3
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1300 Filbert Street, Richmond, California		
	Project No.	Date	Well
	1409 QGWM	December 30, 2010	GW-3

18.08
~~7.47~~
 $10.41 \times 0.653 = 6.8 \times 3 = 20.5 \text{ gal}$

APPENDIX B

Certified Laboratory Analytical Reports-Groundwater Monitoring Wells
(July & December 2010)



Tec Accutite
262 Michelle Ct
South San Francisco, California 94080
Tel: (650) 616-1200
Fax: (650) 616-1244
Email: tecaccutite@gmail.com
RE: 1409 12th St

Work Order No.: 1007139

Dear Brian Doherty:

Torrent Laboratory, Inc. received 11 sample(s) on July 29, 2010 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.

N. S. Kabir

Nutan Kabir

August 05, 2010

Date



Date: 8/5/2010

Client: Tec Accutite

Project: 1409 12th St

Work Order: 1007139

CASE NARRATIVE

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



Sample Result Summary

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10
1007139-001

MW-1

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
--------------------	------------------------	-----------	------------	------------	----------------	-------------

All compounds were non-detectable for this sample.

MW-2

1007139-002

<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-3

1007139-003

<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-4

1007139-004

<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-5

1007139-005

<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: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10
1007139-006

MW-6

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
--------------------	------------------------	-----------	------------	------------	----------------	-------------

All compounds were non-detectable for this sample.

MW-7

1007139-007

<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.

MW-8

1007139-008

<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.

GW-1

1007139-009

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1	22	50	89	ug/L
Benzene	SW8260B	1	0.33	0.50	0.65	ug/L
o-Xylene	SW8260B	1	0.13	0.50	1.3	ug/L

GW-2

1007139-010

<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: Brian Doherty
Tec Accutite

Date Received: 07/29/10

Date Reported: 08/05/10

GW-3

1007139-011

Parameters:

Analysis
Method

DF

MDL

PQL

Results

Unit

All compounds were non-detectable for this sample.



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-1	Lab Sample ID:	1007139-001A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/28/10 / 11:19		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	102		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	99.7		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	91.6		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	70.8		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	78.1		%	401665	0765



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-2	Lab Sample ID:	1007139-002A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/27/10 / 12:26		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	102		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	81.4		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	102		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	74.1		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0476	0.12	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.107	0.24	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	94.5		%	401665	0765

NOTE: Reporting limits increased due to limited sample volume available.



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-3	Lab Sample ID:	1007139-003A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/27/10 / 13:40		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	106		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	92.3		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	97.0		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	94.7		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	99.5		%	401665	0765



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-4	Lab Sample ID:	1007139-004A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/27/10 / 13:56		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	104		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	92.4		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	99.8		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	102		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	89.1		%	401665	0765



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-5	Lab Sample ID:	1007139-005A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/27/10 / 11:43		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	116		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	82.1		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	102		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	83.1		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	99.3		%	401665	0765



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-6	Lab Sample ID:	1007139-006A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/28/10 / 10:06		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	102		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	80.5		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	90.5		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	98.4		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	90.4		%	401665	0765



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-7	Lab Sample ID:	1007139-007A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/27/10 / 12:12		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	112		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	93.0		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	111		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	93.3		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
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The results shown below are reported using their MDL.

TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0468	0.12	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.105	0.23	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	96.9		%	401665	0765

NOTE: Reporting limits increased due to limited sample volume available.



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	MW-8	Lab Sample ID:	1007139-008A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/28/10 / 12:28		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	101		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	112		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	101		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	104		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0452	0.11	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.102	0.23	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	106		%	401665	0765

NOTE: Reporting limits increased due to limited sample volume available.



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	GW-1	Lab Sample ID:	1007139-009A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/28/10 / 13:39		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	0.65		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	1.3		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	110		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	110		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	97.9		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	89	x	ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	110		%	401638	NA

NOTE: x - Not typical of Gasoline standard pattern. Hydrocarbons in the range of C5-C12 quantified as Gasoline (possibly aged gasoline).

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	104		%	401665	0765



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	GW-2	Lab Sample ID:	1007139-010A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/28/10 / 11:34		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	120		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	92.3		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	107		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	86.4		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	113		%	401665	0765



SAMPLE RESULTS

Report prepared for: Brian Doherty
Tec Accutite

Date Received: 07/29/10
Date Reported: 08/05/10

Client Sample ID:	GW-3	Lab Sample ID:	1007139-011A
Project Name/Location:	1409 12th St	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	07/28/10 / 11:50		
Tag Number:	1409 12th St		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	07/30/10	1	0.38	0.50	ND		ug/L	401630	NA
Benzene	SW8260B	NA	07/30/10	1	0.33	0.50	ND		ug/L	401630	NA
Toluene	SW8260B	NA	07/30/10	1	0.19	0.50	ND		ug/L	401630	NA
Ethyl Benzene	SW8260B	NA	07/30/10	1	0.15	0.50	ND		ug/L	401630	NA
m,p-Xylene	SW8260B	NA	07/30/10	1	0.20	1.0	ND		ug/L	401630	NA
o-Xylene	SW8260B	NA	07/30/10	1	0.13	0.50	ND		ug/L	401630	NA
(S) Dibromofluoromethane	SW8260B	NA	07/30/10	1	61.2	131	104		%	401630	NA
(S) Toluene-d8	SW8260B	NA	07/30/10	1	75.1	127	93.8		%	401630	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	07/30/10	1	64.1	120	103		%	401630	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	07/30/10	1	22	50	ND		ug/L	401638	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	07/30/10	1	34	114	90.9		%	401638	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	8/3/10	08/04/10	1	0.0400	0.10	ND		mg/L	401665	0765
TPH as Motor Oil	SW8015B(M)	8/3/10	08/04/10	1	0.0900	0.20	ND		mg/L	401665	0765
Pentacosane (S)	SW8015B(M)	8/3/10	08/04/10	1	64.2	123	111		%	401665	0765



MB Summary Report

Work Order:	1007139	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	07/30/10	Analytical Batch:	401630
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		
2-Chloroethyl vinyl ether	0.91	2.0	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		



MB Summary Report

Work Order:	1007139	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	07/30/10	Analytical Batch:	401630
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
m,p-Xylene	0.20	1.0	ND		
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			91.5		
(S) Toluene-d8			98.2		
(S) 4-Bromofluorobenzene			94.3		

Work Order:	1007139	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	07/30/10	Analytical Batch:	401638
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH(Gasoline)	22	50	ND		
(S) 4-Bromofluorobenzene			67.8		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1007139	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	07/30/10	Analytical Batch:	401630
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		17.04	86.7	84.6	2.67	61.4 - 129	30	
Benzene	0.33	0.50		17.04	93.4	93.9	0.627	66.9 - 140	30	
Trichloroethylene	0.38	0.50		17.04	93.6	88.1	6.39	69.3 - 144	30	
Toluene	0.19	0.50		17.04	96.5	93.8	3.14	76.6 - 123	30	
Chlorobenzene	0.14	0.50		17.04	99.5	99.7	0.0588	73.9 - 137	30	
(S) Dibromofluoromethane				11.36	92.4	88.6		61.2 - 131		
(S) Toluene-d8				11.36	98.1	99.1		75.1 - 127		
(S) 4-Bromofluorobenzene				11.36	90.4	94.0		64.1 - 120		

Work Order:	1007139	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	07/30/10	Analytical Batch:	401638
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		227.27	80.1	94.8	16.9	52.4 - 127	30	
(S) 4-Bromofluorobenzene				11.36	93.2	82.9		58.4 - 133		



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 100cm ² surface)

LABORATORY QUALIFIERS:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>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.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>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</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>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</p> <p>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.</p>



Login Summary Report

Client ID: TL5132 Tec Accutite

QC Level:

Project Name: 1409 12th St

TAT Requested: 5+ day:0

Project # :

Date Received: 7/29/2010

Report Due Date: 8/5/2010

Time Received: 15:50

Comments: 5 day TAT!!! Recv'd 11 ground waters for BTEX ; MTBE ; TPHg ; TPHDO.Pls. email an EDF result to tecaccutite@gmail.com.Run to ESLs.

Work Order # : 1007139

<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>
1007139-001A	MW-1	07/28/10 11:19	Water	09/12/10			EDF W_GCMS-GRO W_TPHDO W_8260MBTEX	
Sample Note: Run to ESLs								
1007139-002A	MW-2	07/27/10 12:26	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1007139-003A	MW-3	07/27/10 13:40	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1007139-004A	MW-4	07/27/10 13:56	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1007139-005A	MW-5	07/27/10 11:43	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1007139-006A	MW-6	07/28/10 10:06	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1007139-007A	MW-7	07/27/10 12:12	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1007139-008A	MW-8	07/28/10 12:28	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1007139-009A	GW-1	07/28/10 13:39	Water	09/12/10			W_GCMS-GRO	



Login Summary Report

Client ID: TL5132 Tec Accutite

QC Level:

Project Name: 1409 12th St

TAT Requested: 5+ day:0

Project # :

Date Received: 7/29/2010

Report Due Date: 8/5/2010

Time Received: 15:50

Comments: 5 day TAT!!! Recv'd 11 ground waters for BTEX ; MTBE ; TPHg ; TPHDO.Pls. email an EDF result to tecaccutite@gmail.com.Run to ESLs.

Work Order # : **1007139**

<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>
1007139-010A	GW-2	07/28/10 11:34	Water	09/12/10			W_TPHDO W_8260MBTEX	
1007139-011A	GW-3	07/28/10 11:50	Water	09/12/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
							W_GCMS-GRO W_TPHDO W_8260MBTEX	



262 Michelle Court
 South San Francisco, CA 94080
 Ph No.: (650)616 1200, Fax No.: (650)616 1244

CHAIN OF CUSTODY

1007139

Lab Work Order #: TEC

Project Name: 1409 12th St		Report to: <u>Brian</u> tecaccutite@gmail.com		Analysis Required								Turn-around Time (work days)					
Project Address: 1409 12th Street Oakland, CA 94607		Bill to: TEC Accutite (650) 616-1200		8260 TPHg BTEX MTBE	8015 TPHd	8015 TPHmo							ASAP	1 Day	2 Days	3 Days	
Global ID: T0600158621		PO #: <u>17814</u>													5 Days	10 Days	Other:
Sampler: BD Date: <u>7/28/10</u>				Sample Type													
				ground water													
				Report Format													
				EDF													
				Remarks													
Field Point ID	Sample ID	Sample Matrix	# of Containers	Container Type	Sample Date & Time												
MW-1	MW-1	W	5	3 VOAs w/HCl & 2 ambers	7/28/10 1119	V	V	V									Run to ESLs
MW-2	MW-2	W	5	3 VOAs w/HCl & 2 ambers	7/27/10 1226	V	V	V									
MW-3	MW-3	W	5	3 VOAs w/HCl & 2 ambers	7/27/10 1340	V	V	V									
MW-4	MW-4	W	5	3 VOAs w/HCl & 2 ambers	7/27/10 1356	V	V	V									
MW-5	MW-5	W	5	3 VOAs w/HCl & 2 ambers	7/27/10 1143	V	V	V									
MW-6	MW-6	W	5	3 VOAs w/HCl & 2 ambers	7/28/10 1006	V	V	V									
MW-7	MW-7	W	5	3 VOAs w/HCl & 2 ambers	7/27/10 1212	V	V	V									
MW-8	MW-8	W	5	3 VOAs w/HCl & 2 ambers	7/28/10 1228	V	V	V									Temp 5°C
GW-1	GW-1	W	5	3 VOAs w/HCl & 2 ambers	7/28/10 1339	V	V	V									
GW-2	GW-2	W	5	3 VOAs w/HCl & 2 ambers	7/28/10 1134	V	V	V									

Relinquished by: Brian Doherty Date: 7/29/10 Time: 2:20 Received by: Gold Bullet/M Vasquez Date: 7/29/10 Time: 2:20
 Relinquished by: Gold Bullet Date: 7/29/10 Time: 1550 Received by: Jane L.D. Dubois Date: 7-29-10 Time: 1550

Page 1 of 2



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

Work Order No.: 1012184

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 11 sample(s) on December 30, 2010 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.

Patti Sandrock

January 06, 2011

Date



Date: 1/6/2011

Client: Impact Environmental Services

Project: 1409 12th St, Oakland, CA

Work Order: 1012184

CASE NARRATIVE

Analytical Comments for Method W_TPHDO, Note: Surrogate recovery falls outside of the control limits (bias low) in several samples. Standard corrective action is to re-extract the sample for confirmation of matrix interference however, due to insufficient sample volume provided, no re-extraction was possible.



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11
1012184-001

MW-1

<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-2

1012184-002

<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-3

1012184-003

<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-4

1012184-004

<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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TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.15	mg/L
TPH as Motor Oil	SW8015B(M)	1	0.0900	0.20	0.25	mg/L

MW-5

1012184-005

<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: 12/30/10
Date Reported: 01/06/11
1012184-006

MW-6

<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

1012184-007

<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.

MW-8

1012184-008

<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.

GW-1

1012184-009

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
1,2-Dichloroethane	SW8260B	1	0.28	0.50	4.8	ug/L
o-Xylene	SW8260B	1	0.13	0.50	0.93	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.10	mg/L



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11
1012184-010

GW-2

<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-3

1012184-011

<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: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-1	Lab Sample ID:	1012184-001A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 13:30		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	115		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	106		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	115		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-1	Lab Sample ID:	1012184-001A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 13:30		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	115		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	106		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	115		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	40.3		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	53.1	S	%	403480	1792

NOTE: Surrogate recovery falls outside of the control limits (bias low) - see case narrative.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-2	Lab Sample ID:	1012184-002A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:35		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	104		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	98.5		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	113		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-2	Lab Sample ID:	1012184-002A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:35		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	104		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	98.5		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	113		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	46.8		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	71.7		%	403480	1792



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-3	Lab Sample ID:	1012184-003A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:05		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	115		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	109		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	111		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-3	Lab Sample ID:	1012184-003A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:05		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	115		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	109		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	111		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/5/11	01/05/11	1	22	50	ND		ug/L	403477	1803
(S) 4-Bromofluorobenzene	8260TPH	1/5/11	01/05/11	1	34	114	64.1		%	403477	1803

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	63.0	S	%	403480	1792

NOTE: Surrogate recovery falls outside of the control limits (bias low) - see case narrative.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-4	Lab Sample ID:	1012184-004A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 13:35		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	110		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	112		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	108		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-4	Lab Sample ID:	1012184-004A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 13:35		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	110		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	112		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	108		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/5/11	01/05/11	1	22	50	ND		ug/L	403477	1803
(S) 4-Bromofluorobenzene	8260TPH	1/5/11	01/05/11	1	34	114	65.4		%	403477	1803

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	0.15		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	0.25		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	62.3	S	%	403480	1792

NOTE: Surrogate recovery falls outside of the control limits (bias low) - see case narrative.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-5	Lab Sample ID:	1012184-005A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:25		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	106		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	111		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	114		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-5	Lab Sample ID:	1012184-005A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:25		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	106		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	111		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	114		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	46.7		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	74.7		%	403480	1792



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-6	Lab Sample ID:	1012184-006A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:36		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	109		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	104		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	109		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-6	Lab Sample ID:	1012184-006A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:36		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	109		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	104		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	109		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	57.4		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	66.9		%	403480	1792



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-7	Lab Sample ID:	1012184-007A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:05		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	107		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	103		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	110		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-7	Lab Sample ID:	1012184-007A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 15:05		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	107		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	103		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	110		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	56.1		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	62.0	S	%	403480	1792

NOTE: Surrogate recovery falls outside of the control limits (bias low) - see case narrative.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-8	Lab Sample ID:	1012184-008A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 13:39		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	114		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	106		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	113		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	MW-8	Lab Sample ID:	1012184-008A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 13:39		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	114		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	106		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	113		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	63.7		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	60.4	S	%	403480	1792

NOTE: Surrogate recovery falls outside of the control limits (bias low) - see case narrative.



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	GW-1	Lab Sample ID:	1012184-009A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:35		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	4.8		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	109		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	114		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	106		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	GW-1	Lab Sample ID:	1012184-009A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:35		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	0.93		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	109		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	114		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	106		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	60.0		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	0.10		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	85.2		%	403480	1792



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	GW-2	Lab Sample ID:	1012184-010A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:17		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	116		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	114		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	111		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	GW-2	Lab Sample ID:	1012184-010A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:17		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	116		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	114		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	111		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	58.0		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	83.2		%	403480	1792



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	GW-3	Lab Sample ID:	1012184-011A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:05		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Dichlorodifluoromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Chloromethane	SW8260B	NA	01/03/11	1	0.41	0.50	ND		ug/L	403467	NA
Vinyl Chloride	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromomethane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Trichlorofluoromethane	SW8260B	NA	01/03/11	1	0.34	0.50	ND		ug/L	403467	NA
1,1-Dichloroethene	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Freon 113	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
Methylene Chloride	SW8260B	NA	01/03/11	1	0.18	5.0	ND		ug/L	403467	NA
trans-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,1-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
cis-1,2-Dichloroethene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
Chloroform	SW8260B	NA	01/03/11	1	0.29	0.50	ND		ug/L	403467	NA
Carbon Tetrachloride	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,1,1-Trichloroethane	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
1,1-Dichloropropene	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
1,2-Dichloroethane	SW8260B	NA	01/03/11	1	0.28	0.50	ND		ug/L	403467	NA
Trichloroethylene	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
1,2-Dichloropropane	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
Bromodichloromethane	SW8260B	NA	01/03/11	1	0.23	0.50	ND		ug/L	403467	NA
2-Chloroethyl vinyl ether	SW8260B	NA	01/03/11	1	0.91	2.0	ND		ug/L	403467	NA
cis-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.30	0.50	ND		ug/L	403467	NA
Tetrachloroethylene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
trans-1,3-Dichloropropene	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
1,1,2-Trichloroethane	SW8260B	NA	01/03/11	1	0.20	0.50	ND		ug/L	403467	NA
Dibromochloromethane	SW8260B	NA	01/03/11	1	0.21	0.50	ND		ug/L	403467	NA
Chlorobenzene	SW8260B	NA	01/03/11	1	0.14	0.50	ND		ug/L	403467	NA
1,1,1,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.10	0.50	ND		ug/L	403467	NA
Bromoform	SW8260B	NA	01/03/11	1	0.45	1.0	ND		ug/L	403467	NA
1,1,2,2-Tetrachloroethane	SW8260B	NA	01/03/11	1	0.26	0.50	ND		ug/L	403467	NA
1,3-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.31	0.50	ND		ug/L	403467	NA
1,4-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.37	0.50	ND		ug/L	403467	NA
1,2-Dichlorobenzene	SW8260B	NA	01/03/11	1	0.39	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	117		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	112		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	110		%	403467	NA



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 12/30/10
Date Reported: 01/06/11

Client Sample ID:	GW-3	Lab Sample ID:	1012184-011A
Project Name/Location:	1409 12th St, Oakland, CA	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	12/30/10 / 14:05		
Tag Number:	1409 12th St, Oakland, CA		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	01/03/11	1	0.38	0.50	ND		ug/L	403467	NA
tert-Butanol	SW8260B	NA	01/03/11	1	1.5	5.0	ND		ug/L	403467	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/03/11	1	0.36	0.50	ND		ug/L	403467	NA
ETBE	SW8260B	NA	01/03/11	1	0.40	0.50	ND		ug/L	403467	NA
Benzene	SW8260B	NA	01/03/11	1	0.33	0.50	ND		ug/L	403467	NA
TAME	SW8260B	NA	01/03/11	1	0.32	0.50	ND		ug/L	403467	NA
Toluene	SW8260B	NA	01/03/11	1	0.19	0.50	ND		ug/L	403467	NA
Ethyl Benzene	SW8260B	NA	01/03/11	1	0.15	0.50	ND		ug/L	403467	NA
m,p-Xylene	SW8260B	NA	01/03/11	1	0.20	1.0	ND		ug/L	403467	NA
o-Xylene	SW8260B	NA	01/03/11	1	0.13	0.50	ND		ug/L	403467	NA
(S) Dibromofluoromethane	SW8260B	NA	01/03/11	1	61.2	131	117		%	403467	NA
(S) Toluene-d8	SW8260B	NA	01/03/11	1	75.1	127	112		%	403467	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/03/11	1	64.1	120	110		%	403467	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	1/3/11	01/03/11	1	22	50	ND		ug/L	403467	1800
(S) 4-Bromofluorobenzene	8260TPH	1/3/11	01/03/11	1	34	114	60.4		%	403467	1800

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/4/11	01/05/11	1	0.0400	0.10	ND		mg/L	403480	1792
TPH as Motor Oil	SW8015B(M)	1/4/11	01/05/11	1	0.0900	0.20	ND		mg/L	403480	1792
Pentacosane (S)	SW8015B(M)	1/4/11	01/05/11	1	64.2	123	82.6		%	403480	1792



MB Summary Report

Work Order:	1012184	Prep Method:	3510_TPH	Prep Date:	01/04/11	Prep Batch:	1792
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	01/05/11	Analytical Batch:	403480
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Diesel	0.0440	0.10	ND	
TPH as Motor Oil	0.0920	0.20	ND	
Pentacosane (S)			78.8	

Work Order:	1012184	Prep Method:	5030	Prep Date:	01/03/11	Prep Batch:	1800
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	01/03/11	Analytical Batch:	403467
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	22	50	ND	
(S) 4-Bromofluorobenzene			68.7	

Work Order:	1012184	Prep Method:	5030	Prep Date:	01/05/11	Prep Batch:	1803
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	01/05/11	Analytical Batch:	403477
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	22	50	ND	
(S) 4-Bromofluorobenzene			69.9	



MB Summary Report

Work Order:	1012184	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	01/03/11	Analytical Batch:	403467
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	
2-Chloroethyl vinyl ether	0.91	2.0	ND	
cis-1,3-Dichloropropene	0.30	0.50	ND	
Toluene	0.19	0.50	ND	
Tetrachloroethylene	0.15	0.50	0.17	
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:	1012184	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	01/03/11	Analytical Batch:	403467
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			110		
(S) Toluene-d8			109		
(S) 4-Bromofluorobenzene			112		



MB Summary Report

Work Order:	1012184	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	01/05/11	Analytical Batch:	403477
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	
2-Chloroethyl vinyl ether	0.91	2.0	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:	1012184	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	01/05/11	Analytical Batch:	403477
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			104		
(S) Toluene-d8			105		
(S) 4-Bromofluorobenzene			114		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1012184	Prep Method:	3510_TPH	Prep Date:	01/04/11	Prep Batch:	1792
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	01/05/11	Analytical Batch:	403480
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	0.0440	0.10	ND	1	84.5	85.0	0.627	50.3 - 125	0,	
Pentacosane (S)			ND	100	64.1	87.6		57.9 - 125		

Work Order:	1012184	Prep Method:	5030	Prep Date:	01/03/11	Prep Batch:	1800
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	01/03/11	Analytical Batch:	403467
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	96.4	94.7	1.73	52.4 - 127	30	
(S) 4-Bromofluorobenzene			68.7	11.36	73.6	73.8		58.4 - 133		

Work Order:	1012184	Prep Method:	5030	Prep Date:	01/05/11	Prep Batch:	1803
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	01/05/11	Analytical Batch:	403477
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	93.6	95.1	1.64	52.4 - 127	30	
(S) 4-Bromofluorobenzene			69.9	11.36	69.9	67.4		58.4 - 133		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1012184	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	01/03/11	Analytical Batch:	403467
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	95.8	91.0	4.97	61.4 - 129	30	
Benzene	0.33	0.50	ND	17.04	94.0	98.9	5.18	66.9 - 140	30	
Trichloroethylene	0.38	0.50	ND	17.04	98.2	104	6.32	69.3 - 144	30	
Toluene	0.19	0.50	ND	17.04	103	103	0.456	76.6 - 123	30	
Chlorobenzene	0.14	0.50	ND	17.04	96.0	103	6.83	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	105	86.5		61.2 - 131		
(S) Toluene-d8			ND	11.36	113	107		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.36	115	115		64.1 - 120		

Work Order:	1012184	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	01/05/11	Analytical Batch:	403477
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	96.9	3.45	61.4 - 129	30	
Benzene	0.33	0.50	ND	17.04	93.4	87.4	6.49	66.9 - 140	30	
Trichloroethylene	0.38	0.50	ND	17.04	104	95.8	8.61	69.3 - 144	30	
Toluene	0.19	0.50	ND	17.04	103	94.5	8.33	76.6 - 123	30	
Chlorobenzene	0.14	0.50	ND	17.04	95.1	98.0	3.04	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	90.0	94.6		61.2 - 131		
(S) Toluene-d8			ND	11.36	105	114		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.36	115	110		64.1 - 120		



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:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>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.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>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</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>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</p> <p>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.</p>



Login Summary Report

Client ID:	TL5130 Impact Environmental Services	QC Level:	
Project Name:	1409 12th St, Oakland, CA	TAT Requested:	5+ day:0
Project # :		Date Received:	12/30/2010
Report Due Date:	1/6/2011	Time Received:	17:30
Comments:	5 day TAT!!! Recv'd 11 samples for HVOC ; TPHg ; BTEX ; MTBE ; Fuel oxygenates. Only sample -011 (GW-3) marked for SiO2 clean-up - check with Joseph!		
Work Order # :	1012184		

<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>
1012184-001A	MW-1	12/30/10 13:30	Water	02/13/11			W_8260Pet EDF W_GCMS-GRO W_TPHDO W_8260HVOC	
1012184-002A	MW-2	12/30/10 14:35	Water	02/13/11			W_8260Pet W_TPHDO W_GCMS-GRO W_8260HVOC	
1012184-003A	MW-3	12/30/10 15:05	Water	02/13/11			W_8260Pet W_TPHDO W_8260HVOC W_GCMS-GRO	
1012184-004A	MW-4	12/30/10 13:35	Water	02/13/11			W_8260Pet W_8260HVOC W_TPHDO W_GCMS-GRO	
1012184-005A	MW-5	12/30/10 15:25	Water	02/13/11			W_8260Pet W_8260HVOC W_TPHDO W_GCMS-GRO	
1012184-006A	MW-6	12/30/10 15:36	Water	02/13/11			W_8260Pet W_8260HVOC W_GCMS-GRO W_TPHDO	
1012184-007A	MW-7	12/30/10 15:05	Water	02/13/11			W_8260Pet W_GCMS-GRO W_TPHDO W_8260HVOC	



Login Summary Report

Client ID:	TL5130 Impact Environmental Services	QC Level:	
Project Name:	1409 12th St, Oakland, CA	TAT Requested:	5+ day:0
Project # :		Date Received:	12/30/2010
Report Due Date:	1/6/2011	Time Received:	17:30
Comments:	5 day TAT!!! Recv'd 11 samples for HVOC ; TPHg ; BTEX ; MTBE ; Fuel oxygenates. Only sample -011 (GW-3) marked for SiO2 clean-up - check with Joseph!		
Work Order # :	1012184		

<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>
1012184-008A	MW-8	12/30/10 13:39	Water	02/13/11			W_8260Pet W_TPHDO W_GCMS-GRO W_8260HVOC	
1012184-009A	GW-1	12/30/10 14:35	Water	02/13/11			W_8260Pet W_TPHDO W_8260HVOC W_GCMS-GRO	
1012184-010A	GW-2	12/30/10 14:17	Water	02/13/11			W_8260Pet W_TPHDO W_8260HVOC W_GCMS-GRO	
1012184-011A	GW-3	12/30/10 14:05	Water	02/13/11			W_8260Pet W_TPHDO W_8260HVOC W_GCMS-GRO	

Sample Note: Pls. check w/ client if silica gel clean-up.

CHAIN OF CUSTODY

LAB WORK ORDER NO

1012184

• NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY •

Company Name: <u>IMPACT ENVIRONMENTAL</u>			Location of Sampling: <u>1409 12th Street, Oakland, CA</u>		
Address: <u>39120 ARGONAUT WAY, #223</u>			Purpose: <u>SEMI ANNUAL GROUNDWATER MONITORING</u>		
City: <u>FREMONT</u>	State: <u>CA</u>	Zip Code: <u>94538</u>	Special Instructions / Comments:		
Telephone: <u>(510) 703-5420</u> FAX: <u>510 791-0271</u>			P.O. #: _____ EMAIL: <u>jac21462@acorn.com</u>		
REPORT TO: <u>Joseph Cotton</u>			SAMPLER: _____		

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

- EPA 8260B - Full List
 EPA 8260B - 8010 List
 THP gas BTEX
 Oxygenates MTBE
 THP Diesel Si-Gel
 Motor Oil
 Pesticide - 8081
 PCB - 8082
 Metals CAM - 17
 LUFT 5 7 Metals
 8270 Full List
 PAHs Only

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	EPA 8260B - Full List	EPA 8260B - 8010 List	THP gas	Oxygenates	MTBE	THP Diesel	Si-Gel	Motor Oil	Pesticide - 8081	PCB - 8082	Metals	CAM - 17	LUFT 5	7 Metals	8270 Full List	PAHs Only	REMARKS			
	MW-1	12-30-10 1:30 PM	W	1	AMBIENT			X	X																
	MW-2	12-30-10 2:35 P	}	1	}			X	X																
	MW-3	12-30-10 3:05 P		2					X	X															
	MW-4	12-30-10 1:35 P		1					X	X															
	MW-5	12-30-10 2:25 P		2					X	X															
	MW-6	12-30-10 3:36		1					X	X															
	MW-7	12-30-10 3:05		2					X	X															
	MW-8	12-30-10 1:39		1					X	X															
	GW-1	12-30-10 2:35		2					X	X															
	GW-2	12-30-10 2:17		W		1	AMBIENT			X	X														

1	Relinquished By: <u>[Signature]</u>	Print: _____	Date: <u>12/30/10</u>	Time: <u>17:30</u>	Received By: <u>[Signature]</u>	Print: _____	Date: <u>1/1/11</u>	Time: <u>17:30</u>
2	Relinquished By: <u>[Signature]</u>	Print: <u>Cotton</u>	Date: <u>12-30-10</u>	Time: <u>17:30</u>	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 2

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____

CLIENT

APPENDIX C

Dual-Phase Vacuum Extraction Well Sampling Data Sheets
(October 2010)

IMPACT ENVIRONMENTAL

WELL GAUGING DATA

Project Number 1469 12th STREET Date October 5, 2010

Site Location 1409- 1417 12th Street, Oakland, California

Well ID	Time	Well Size (inches)	Depth to Water	Depth to Well Bottom	Sheen/Odor	Depth to Immiscible Liquid	Thickness Immiscible Liquid	Survey Point	Notes:
DPE-1	0934	4	10.44	20.34					
DPE-1B	1027		10.75	26.65					Measure 3 RD Last*
DPE-2	0942		10.41	20.02					
DPE-2B	1020		10.88	27.77					Measure 4 TH Last*
DPE-3	1008		10.28	20.32					
DPE-5	0957		10.92	20.05					
DPE-6	0948		10.42	18.76					
DPE-7	1002	↓	10.62	20.15					
MW-8	1038	2	11.63	27.55					Measure 2 ND Last*
GW-1	1044	4	11.16	16.89					Measure Last*
GW-3	1015	4	11.12	17.11					Measure 5 TH Last*

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-1 Weather: SUNNY / HOT
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Date Completed: 10/11/10
 Total Depth of Well: 20.34
 Diameter: 4"
 Well Elevation and Reference: _____

Sampling Equipment & Cleaning

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

Ground Water Levels:

Initial: 10.44 Comments: 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: 6.46

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1116	start	0.5	6.81	74.1		3800	BROWN	N/A
1122		3	6.75	73.3		4100		
1129		6	6.81	71.6		4000	LT. BROWN	
1135		9	6.82	70.5		4000	CLOUDY	
1141		12	6.81	70.3		3900		
1147		15	6.82	69.9		4000	CLEAR	

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-1B Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/12/10 Sampler Type: Suction Pump
 Total Depth of Well: 26.65 Method of Cleaning: Alconox and D.I. Water
 Diameter: _____ Pump/Bailer Type: Suction Pump
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 _____ pH Meter: HANNA
 _____ Conductivity Meter: HANNA
 _____ Comments: _____

Ground Water Levels:

Initial: 10.75 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: 10.38

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1316	start	5	6.77	74.2		7090	CLEAR ↓	
1328		5.0	6.76	73.1		6830		
1340		10.0	6.78	72.0		7060		
1351		15.0	6.79	70.4		7000		
1403		20.0	6.79	69.8		7170		
1416		25.0	6.75	69.8		7170		

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-2 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/11/10 Sampler Type: Suction Pump
 Total Depth of Well: 20.02 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4 Pump/Bailer Type: Suction Pump
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 10.41 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: 6.27

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1211	start	15	4.60	74.1		3990	VERY CLOUDY	
1216		30	5.45	73.3		4110		
1220		40	4.95	71.4		4000		
1225		9.0	6.08	70.5		3970	CLOUDY	
1230		12.0	6.49	70.2		3980		
1236		15.0	6.49	70.1		3980	SLIGHTLY CLOUDY	

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-2B Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/12/10 Sampler Type: Suction Pump
 Total Depth of Well: 27.77 Method of Cleaning: Alconox and D.I. Water
 Diameter: _____ Pump/Bailer Type: Suction Pump
 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: 10.88
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: 11.02

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1149	start	5	6.81	74.9		6160	CLEAR	
1202		5.5	6.80	70.7		5700	↓	
1214		11.0	6.82	69.1		5880		
1227		14.5	6.85	68.7		6450		
1240		27.	6.82	68.7		6280		
1253		27.5	6.82	68.7		6280		

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/12/10 Sampler Type: Suction Pump
 Total Depth of Well: 20.32 Method of Cleaning: Alconox and D.I. Water
 Diameter: _____ Pump/Bailer Type: Suction Pump
 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: 10.28
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: 6.55

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
0951	start	.5	6.68	74.0		5560	CLEAR	HEAVY
0958		3.0	6.51	73.1		5910	↓	PASTRY
1005		6.0	6.52	71.1		6120		
1012		9.0	6.14	69.8		5910		
1019		12.0	6.12	69.8		5720		
1026		15.0	6.12	69.8		5720		

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-5 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/11/10 Sampler Type: Suction Pump
 Total Depth of Well: 20.05 Method of Cleaning: Alconox and D.I. Water
 Diameter: _____ Pump/Bailer Type: Suction Pump
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 10.92 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: 5.96

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1410	start	.5	6.30	70.5		5990	CLOUDY	
1416		3.0	5.65	70.4		5960	↓	
1422		6.0	5.80	69.2		5860	↓	
1429		9.0	6.12	68.6		5600	CLEAR	
1435		12.0	6.12	68.6		5350	↓	
1441		15.0	6.12	68.5		5350	↓	

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-6 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/11/10
 Total Depth of Well: 18.76
 Diameter: 4"
 Well Elevation and Reference: _____

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

Ground Water Levels:

Initial: 10.42 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: 5.44

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1330	start	1.5	4.30	74.2		6530	CLOUDY	
1334		2.5	3.91	72.5		6800		
1340		5.0	6.24	72.0		6530		
1345		7.5	6.29	71.2		6970	CLEAR	
1351		10.0	6.34	70.8		7000		
1356		12.5	6.34	70.8		7000		

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: DPE-7 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/11/10 Sampler Type: Suction Pump
 Total Depth of Well: 20.15 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4" Pump/Bailer Type: Suction Pump
 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: 10.62
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: 6.22

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1454	start	.5	6.37	68.1		5300	CLOUDY	
1501		3.0	6.24	68.0		5980		
1508		4.0	6.16	67.8		6290	CLEAR	
1515		9.0	6.31	67.8		7140		
1522		12.0	6.31	67.7		7710		
1530		15.0	6.31	67.7		7710		

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: MW-8 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction | **Sampling Equipment & Cleaning**
 Date Completed: 10/12/10 Sampler Type: Suction Pump
 Total Depth of Well: 27.55 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2 Pump/Bailer Type: Suction Pump
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA

Ground Water Levels:
 Initial: 11.63 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: 2.62

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/ Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1432	start	1.5	6.97	75.6		6360	clear	
1435		1.5	7.02	72.8		5980		
1438		3.0	7.00	70.9		5950		
1441		4.5	69.7	70.7		6070		
1445		6.0	69.6	69.5		6190		
1448		7.5	69.6	69.5		6190		

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	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: GW-1 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/12/10 Sampler Type: Suction Pump
 Total Depth of Well: 16.89 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4 Pump/Bailer Type: Suction Pump
 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: 11.16
 Final: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: 3.74

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1538	start	.5	6.91	15.4		9910	DARK-ORANGE	HEAVY
1541		2.0	6.93	13.8		8580	MATERIAL	CLAS
1544		4.0	6.74	11.6		7406	FLOATING	
1547		6.0	6.81	69.9		7160		

Total Discharge: _____ Comments: DREW WELL DOWN, ALLOWED WELL TO RECOVER 80% THEN SAMPLED
 Casing Volumes Removed: _____
 Method of Disposal: _____

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 GW SAMPLING	OCTOBER 2010	

IMPACT ENVIRONMENTAL

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12th Street, OAKLAND, CA Date: October 5, 2010
 Project Number: 1409 12th Street Groundwater Monitoring Sampler: Marvin Mendoza
 Well Number: GW-3 Weather: _____
 Well Location: 1409 12th Street, OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: 10/12/10 Sampler Type: Suction Pump
 Total Depth of Well: 17.11 Method of Cleaning: Alconox and D.I. Water
 Diameter: 4 Pump/Bailer Type: Suction Pump
 Well Elevation and Reference: _____ Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

Initial: 11.12 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: 3.91

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°F)	Spec. Conductance (mmhos/cm)		Color/Turbidity (NTU)	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1105	start	5	6.49	74.9		7120	CLOUDY	
1109		2.0	6.52	74.5		8040		
1113		4.0	6.49	73.1		7910	CLEAR	
1117		6.0	6.47	72.5		7910		
1121		8.0	6.47	72.4		7980		
1125		10.0	6.47	72.4		7980		

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	OCTOBER 2010	

APPENDIX D

DPE Well Certified Laboratory Analytical Reports
(October 2010)



Impact Environmental Services
39120 Argonaut Way, Suite 223
Fremont, California 94538
Tel: 510-703-5420
Fax: 510-713-7790
RE: 1409-1417 12th St Oakland

Work Order No.: 1010101

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 5 sample(s) on October 12, 2010 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.

Patti Sandrock

October 21, 2010

Date



Date: 10/21/2010

Client: Impact Environmental Services

Project: 1409-1417 12th St Oakland

Work Order: 1010101

CASE NARRATIVE

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



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10
1010101-001

DPE-1

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Ethyl Benzene	SW8260B	1	0.15	0.50	0.84	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	1.3	ug/L
o-Xylene	SW8260B	1	0.13	0.50	1.3	ug/L

DPE-2

1010101-002

<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.

DPE-6

1010101-003

<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.

DPE-5

1010101-004

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1	22	50	87	ug/L
Benzene	SW8260B	1	0.33	0.50	7.5	ug/L
Toluene	SW8260B	1	0.19	0.50	0.78	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	2.9	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	2.0	ug/L
o-Xylene	SW8260B	1	0.13	0.50	1.4	ug/L



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10
1010101-005

DPE-7

<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.

Trip Blank 1010101-006

<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: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-1	Lab Sample ID:	1010101-001A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/11/10 / 12:00		
Tag Number:	12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	ND		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	ND		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	0.84		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	1.3		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	1.3		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	110		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	96.0		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	96.4		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	ND		ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	118	S	%	402653	NA

NOTE: S-Surrogate (BFB) recovery was out of limit-high bias. Data was acceptable as no target analytes were present in sample. No corrective action required.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/18/10	1	0.0400	0.10	ND		mg/L	402650	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/18/10	1	0.0900	0.20	ND		mg/L	402650	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/18/10	1	64.2	123	105		%	402650	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-2	Lab Sample ID:	1010101-002A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/11/10 / 12:38		
Tag Number:	12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	ND		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	ND		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	ND		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	ND		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	ND		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	112		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	99.6		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	106		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	ND		ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	110		%	402653	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/18/10	1	0.0400	0.10	ND		mg/L	402650	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/18/10	1	0.0900	0.20	ND		mg/L	402650	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/18/10	1	64.2	123	85.5		%	402650	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-6	Lab Sample ID:	1010101-003A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/11/10 / 14:01		
Tag Number:	12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	ND		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	ND		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	ND		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	ND		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	ND		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	120		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	108		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	105		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	ND		ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	89.3		%	402653	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/18/10	1	0.0400	0.10	ND		mg/L	402650	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/18/10	1	0.0900	0.20	ND		mg/L	402650	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/18/10	1	64.2	123	98.3		%	402650	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-5	Lab Sample ID:	1010101-004A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/11/10 / 14:45		
Tag Number:	12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	7.5		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	0.78		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	2.9		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	2.0		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	1.4		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	117		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	112		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	101		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	87		ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	95.7		%	402653	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/18/10	1	0.0400	0.10	ND		mg/L	402650	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/18/10	1	0.0900	0.20	ND		mg/L	402650	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/18/10	1	64.2	123	79.2		%	402650	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-7	Lab Sample ID:	1010101-005A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/11/10 / 15:35		
Tag Number:	12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	ND		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	ND		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	ND		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	ND		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	ND		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	120		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	100		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	98.7		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	ND		ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	65.2		%	402653	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/18/10	1	0.0400	0.10	ND		mg/L	402650	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/18/10	1	0.0900	0.20	ND		mg/L	402650	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/18/10	1	64.2	123	99.1		%	402650	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	Trip Blank	Lab Sample ID:	1010101-006A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Water
Project Number:			
Date/Time Sampled:	10/11/10 / 8:00		
Tag Number:	12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	ND		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	ND		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	ND		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	ND		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	ND		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	109		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	99.3		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	99.7		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	ND		ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	61.1		%	402653	NA



MB Summary Report

Work Order:	1010101	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	10/14/10	Analytical Batch:	402599
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		
2-Chloroethyl vinyl ether	0.91	2.0	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		



MB Summary Report

Work Order:	1010101	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	10/14/10	Analytical Batch:	402599
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
m,p-Xylene	0.20	1.0	ND		
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			110		
(S) Toluene-d8			102		
(S) 4-Bromofluorobenzene			88.6		

Work Order:	1010101	Prep Method:	3510_TPH	Prep Date:	10/18/10	Prep Batch:	1345
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	10/18/10	Analytical Batch:	402650
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel	0.0440	0.10	ND		
TPH as Motor Oil	0.0920	0.20	0.11		
Pentacosane (S)			95.0		



MB Summary Report

Work Order:	1010101	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	10/18/10	Analytical Batch:	402653
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	22	50	ND	
(S) 4-Bromofluorobenzene			110	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1010101	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	10/14/10	Analytical Batch:	402599
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		17.04	81.7	87.3	6.74	61.4 - 129	30	
Benzene	0.33	0.50		17.04	103	104	0.397	66.9 - 140	30	
Trichloroethylene	0.38	0.50		17.04	101	103	1.56	69.3 - 144	30	
Toluene	0.19	0.50		17.04	103	104	1.25	76.6 - 123	30	
Chlorobenzene	0.14	0.50		17.04	97.6	101	3.96	73.9 - 137	30	
(S) Dibromofluoromethane				11.36	106	93.2		61.2 - 131		
(S) Toluene-d8				11.36	104	104		75.1 - 127		
(S) 4-Bromofluorobenzene				11.36	101	93.9		64.1 - 120		

Work Order:	1010101	Prep Method:	3510_TPH	Prep Date:	10/18/10	Prep Batch:	1345
Matrix:	Water	Analytical Method:	SW8015B(M)	Analyzed Date:	10/18/10	Analytical Batch:	402650
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	0.0440	0.10		1	95.3	82.5	14.3	50.3 - 125	30	
Pentacosane (S)				100	103	120		57.9 - 125		

Work Order:	1010101	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	10/18/10	Analytical Batch:	402653
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		227.27	123	116	5.69	52.4 - 127	30	
(S) 4-Bromofluorobenzene				11.36	63.0	98.3		58.4 - 133		



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 100cm ² surface)

LABORATORY QUALIFIERS:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>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.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>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</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>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</p> <p>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.</p>



Sample Receipt Checklist

Client Name: Impact Environmental Services

Date and Time Received: 10/12/2010 22:38

Project Name: 1409-1417 12th St Oakland

Received By: NK

Work Order No.: 1010101

Physically Logged By: NK

Checklist Completed By: NK

Carrier Name: Client Dropped 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? Yes

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes
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: °C
Water-VOA vials have zero headspace?
Water-pH acceptable upon receipt?

pH Checked by: pH Adjusted by:

Received 6 voas for sample DPE-2 (3 in amber vials one vial frozen). Received 1 set for trip blank not on the coc logged in as sample 006A.



Login Summary Report

Client ID: TL5130 Impact Environmental Services

QC Level:

Project Name: 1409-1417 12th St Oakland

TAT Requested: 7 Day

Project # :

Date Received: 10/12/2010

Report Due Date: 10/21/2010

Time Received: 22:38

Comments: 5 DAY TAT!! 6 samples received for TPHDO, TPHG, MBTEX. Report to Joseph Cotton!

Work Order # : 1010101

<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>
1010101-001A	DPE-1	10/11/10 12:00	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	
Sample Note: TPHg,MBTEX,TPHD/MO for all samples.								
1010101-002A	DPE-2	10/11/10 12:38	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	
1010101-003A	DPE-6	10/11/10 14:01	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	
1010101-004A	DPE-5	10/11/10 14:45	Water	11/26/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1010101-005A	DPE-7	10/11/10 15:35	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	
1010101-006A	Trip Blank	10/11/10 8:00	Water	11/26/10			W_GCMS-GRO W_8260MBTEX	



483 Sinclair Frontage Road
 Milpitas, CA 95035
 Phone: 408.263.5258
 FAX: 408.263.8293
 www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO

1010101

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY

Company Name: IMPACT ENVIRONMENTAL SERVICES Location of Sampling: 1409-1417 12th ST. OAKLAND, CA
 Address: 39120 ARGONAUT WY. SUITE 223 Purpose:
 City: FREMONT State: CA Zip Code: 94538 Special Instructions / Comments:
 Telephone: 510-703-5420 FAX: 510-713-7790
 REPORT TO: JOSEPH COTTON SAMPLER: MARVIN MENDOZA P.O. #: EMAIL: JAC 214626@POL.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

EPA 8260B - Full List
 EPA 8260B - 8010 List
 THP gas BTEX
 Oxygenates MTBE
 THP Diesel Si-Gel
 Motor Oil
 Pesticide - 8081
 PCB - 8082
 Metals CAM - 17
 LUFT 5 7 Metals
 8270 Full List
 PAHs Only

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	EPA 8260B - Full List	EPA 8260B - 8010 List	THP gas	BTEX	Oxygenates	MTBE	THP Diesel	Si-Gel	Motor Oil	Pesticide - 8081	PCB - 8082	Metals CAM - 17	LUFT 5	7 Metals	8270 Full List	PAHs Only	REMARKS	
001	DPE-1	10/11/10 1240	W	2	AMBER																		
002	DPE-2	10/11/10 1238																					
003	DPE-6	1401																					
004	DPE-5	1445																					
005	DPE-7	1535																					

TORRENT LAB

Requisitioned By: <u>[Signature]</u> Print: <u>MARVIN MENDOZA</u> Date: <u>10/12/10</u> Time: <u>2238</u>	Received By: <u>[Signature]</u> Print: <u>L-D. [Signature]</u> Date: <u>10-12-10</u> Time: <u>2238</u>
Requisitioned By: <u>2</u> Print: _____ Date: _____ Time: _____	Received By: _____ Print: _____ Date: _____ Time: _____

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment D/O 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 2 of 2
 Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____



483 Sinclair Frontage Road
 Milpitas, CA 95035
 Phone: 408.263.5258
 FAX: 408.263.8293
 www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY.

1010101

Company Name: IMPACT ENVIRONMENTAL SERVICES Location of Sampling: 1409-1417 12th ST. OAKLAND, CA.
 Address: 39120 AERONAUT WY. SUITE 223 Purpose:
 City: FREMONT State: CA. Zip Code: 94538 Special Instructions / Comments:
 Telephone: 510-703-5420 FAX: 510-713-7790
 REPORT TO: JOSEPH COTTON SAMPLER: MARVIN MENDOZA P.O. #: EMAIL: JAC21462@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 QC Level IV
 Waste Water Other EDF
 Ground Water Excel / EDD
 Soil

REPORT FORMAT: EPA 8260B - Full List EPA 8260B - 8010 List
 THP gas BTEX MTBE
 Oxygenates Si-Gel
 THP Diesel Motor Oil
 Pesticide - 8081
 PCB - 8082
 Metals CAM - 17
 LUFT 5 7 Metals
 8270 Full List
 PAHs Only

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	EPA 8260B - Full List	EPA 8260B - 8010 List	THP gas	BTEX	MTBE	Oxygenates	Si-Gel	THP Diesel	Motor Oil	Pesticide - 8081	PCB - 8082	Metals CAM - 17	LUFT 5	7 Metals	8270 Full List	PAHs Only	REMARKS
001	DPE-1	10/11 1208	W	3	YoA	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
002	DPE-2	10/11 1238	W	3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
003	DPE-6	10/11 1401	W	3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
004	DPE-5	10/11 1445	W	3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
005	DPE-7	10/11 1535	W	3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
006	Trip blank					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Relinquished By: MARVIN MENDOZA Print: MARVIN MENDOZA Date: 10/12/10 Time: 2238
 Received By: JAMES L. D. JAMES Print: JAMES L. D. JAMES Date: 10-12-10 Time: 2238

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment: D/O 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 2
 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: 1409-1417 12th St Oakland

Work Order No.: 1010102

Dear Joseph Cotton:

Torrent Laboratory, Inc. received 6 sample(s) on October 12, 2010 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 "Patti Sandrock", is written over a horizontal line.

Patti Sandrock

October 21, 2010

Date



Date: 10/21/2010

Client: Impact Environmental Services

Project: 1409-1417 12th St Oakland

Work Order: 1010102

CASE NARRATIVE

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



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10

Date Reported: 10/21/10

DPE-3

1010102-001

<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	93	ug/L
Toluene	SW8260B	1	0.19	0.50	21	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	63	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	55	ug/L
o-Xylene	SW8260B	1	0.13	0.50	54	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.17	mg/L
TPH(Gasoline)	8260TPH	4.4	95	220	1600	ug/L

GW-3

1010102-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1	22	50	180	ug/L
Benzene	SW8260B	1	0.33	0.50	4.1	ug/L
Toluene	SW8260B	1	0.19	0.50	6.0	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	7.1	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	11	ug/L
o-Xylene	SW8260B	1	0.13	0.50	9.7	ug/L

DPE-2B

1010102-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1	22	50	100	ug/L
Benzene	SW8260B	1	0.33	0.50	0.68	ug/L
Toluene	SW8260B	1	0.19	0.50	1.4	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	2.2	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	3.4	ug/L
o-Xylene	SW8260B	1	0.13	0.50	2.8	ug/L



Sample Result Summary

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10

Date Reported: 10/21/10

DPE-1B

1010102-004

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1	22	50	98	ug/L
Toluene	SW8260B	1	0.19	0.50	1.1	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	1.8	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	3.0	ug/L
o-Xylene	SW8260B	1	0.13	0.50	2.4	ug/L

MW-8

1010102-005

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1	22	50	79	ug/L
Toluene	SW8260B	1	0.19	0.50	1.0	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	1.6	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	2.5	ug/L
o-Xylene	SW8260B	1	0.13	0.50	2.2	ug/L

GW-1

1010102-006

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1	22	50	120	ug/L
Benzene	SW8260B	1	0.33	0.50	0.71	ug/L
Toluene	SW8260B	1	0.19	0.50	0.70	ug/L
Ethyl Benzene	SW8260B	1	0.15	0.50	1.3	ug/L
m,p-Xylene	SW8260B	1	0.20	1.0	2.1	ug/L
o-Xylene	SW8260B	1	0.13	0.50	1.9	ug/L



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-3	Lab Sample ID:	1010102-001A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/12/10 / 10:32		
Tag Number:	1409-1417 12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	93		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	21		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	63		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	55		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	54		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	114		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	108		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	103		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	4.4	95	220	1600	x	ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	4.4	34	114	39.9		%	402653	NA

NOTE: x-Does not match pattern of reference gasoline standard. Reported TPH value includes a portion of end hydrocarbons within range of C5-C12 quantified as gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/21/10	1	0.0400	0.10	0.17	x	mg/L	402689	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/21/10	1	0.0900	0.20	ND		mg/L	402689	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/21/10	1	64.2	123	96.7		%	402689	1345

NOTE: x- Not typical of Diesel standard pattern (possibly fuel lighter than diesel)



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	GW-3	Lab Sample ID:	1010102-002A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/12/10 / 11:31		
Tag Number:	1409-1417 12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	4.1		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	6.0		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	7.1		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	11		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	9.7		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	113		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	107		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	103		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	180	x	ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	75.6		%	402653	NA

NOTE: x-Does not match pattern of reference gasoline standard. Reported TPH value due to contribution from heavier hydrocarbons to range of C5-C12 quantified as gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/19/10	1	0.0400	0.10	ND		mg/L	402688	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/19/10	1	0.0900	0.20	ND		mg/L	402688	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/19/10	1	64.2	123	89.7		%	402688	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-2B	Lab Sample ID:	1010102-003A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/12/10 / 13:00		
Tag Number:	1409-1417 12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	0.68		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	1.4		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	2.2		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	3.4		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	2.8		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	114		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	104		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	99.7		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	100	x	ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	102		%	402653	NA

NOTE: x-Does not match pattern of reference gasoline standard. Reported TPH value due to contribution from heavier hydrocarbons to range of C5-C12 quantified as gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/19/10	1	0.0400	0.10	ND		mg/L	402688	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/19/10	1	0.0900	0.20	ND		mg/L	402688	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/19/10	1	64.2	123	103		%	402688	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	DPE-1B	Lab Sample ID:	1010102-004A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/12/10 / 14:21		
Tag Number:	1409-1417 12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	ND		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	1.1		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	1.8		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	3.0		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	2.4		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	119		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	106		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	109		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	98	x	ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	110		%	402653	NA

NOTE: x-Does not match pattern of reference gasoline standard. Reported TPH value due to contribution from heavier hydrocarbons to range of C5-C12 quantified as gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/19/10	1	0.0400	0.10	ND		mg/L	402688	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/19/10	1	0.0900	0.20	ND		mg/L	402688	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/19/10	1	64.2	123	88.2		%	402688	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	MW-8	Lab Sample ID:	1010102-005A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/12/10 / 14:55		
Tag Number:	1409-1417 12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	ND		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	1.0		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	1.6		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	2.5		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	2.2		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	120		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	110		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	97.4		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	79	x	ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	112		%	402653	NA

NOTE: x-Does not match pattern of reference gasoline standard. Reported TPH value due to contribution from heavier hydrocarbons to range of C5-C12 quantified as gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/19/10	1	0.0400	0.10	ND		mg/L	402688	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/19/10	1	0.0900	0.20	ND		mg/L	402688	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/19/10	1	64.2	123	91.8		%	402688	1345



SAMPLE RESULTS

Report prepared for: Joseph Cotton
Impact Environmental Services

Date Received: 10/12/10
Date Reported: 10/21/10

Client Sample ID:	GW-1	Lab Sample ID:	1010102-006A
Project Name/Location:	1409-1417 12th St Oakland	Sample Matrix:	Groundwater
Project Number:			
Date/Time Sampled:	10/12/10 / 17:10		
Tag Number:	1409-1417 12th St Oakland		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
MTBE	SW8260B	NA	10/14/10	1	0.38	0.50	ND		ug/L	402599	NA
Benzene	SW8260B	NA	10/14/10	1	0.33	0.50	0.71		ug/L	402599	NA
Toluene	SW8260B	NA	10/14/10	1	0.19	0.50	0.70		ug/L	402599	NA
Ethyl Benzene	SW8260B	NA	10/14/10	1	0.15	0.50	1.3		ug/L	402599	NA
m,p-Xylene	SW8260B	NA	10/14/10	1	0.20	1.0	2.1		ug/L	402599	NA
o-Xylene	SW8260B	NA	10/14/10	1	0.13	0.50	1.9		ug/L	402599	NA
(S) Dibromofluoromethane	SW8260B	NA	10/14/10	1	61.2	131	114		%	402599	NA
(S) Toluene-d8	SW8260B	NA	10/14/10	1	75.1	127	110		%	402599	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	10/14/10	1	64.1	120	101		%	402599	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	NA	10/18/10	1	22	50	120	x	ug/L	402653	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	10/18/10	1	34	114	113		%	402653	NA

NOTE: x-Does not match pattern of reference gasoline standard. Reported TPH value due to contribution from heavier hydrocarbons to range of C5-C12 quantified as gasoline.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	10/18/10	10/19/10	1	0.0400	0.10	ND		mg/L	402688	1345
TPH as Motor Oil	SW8015B(M)	10/18/10	10/19/10	1	0.0900	0.20	ND		mg/L	402688	1345
Pentacosane (S)	SW8015B(M)	10/18/10	10/19/10	1	64.2	123	80.6		%	402688	1345



MB Summary Report

Work Order:	1010102	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	10/14/10	Analytical Batch:	402599
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		
2-Chloroethyl vinyl ether	0.91	2.0	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		



MB Summary Report

Work Order:	1010102	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	10/14/10	Analytical Batch:	402599
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
m,p-Xylene	0.20	1.0	ND		
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			110		
(S) Toluene-d8			102		
(S) 4-Bromofluorobenzene			88.6		

Work Order:	1010102	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	10/18/10	Analytical Batch:	402653
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH(Gasoline)	22	50	ND		
(S) 4-Bromofluorobenzene			110		



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1010102	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	10/14/10	Analytical Batch:	402599
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		17.04	81.7	87.3	6.74	61.4 - 129	30	
Benzene	0.33	0.50		17.04	103	104	0.397	66.9 - 140	30	
Trichloroethylene	0.38	0.50		17.04	101	103	1.56	69.3 - 144	30	
Toluene	0.19	0.50		17.04	103	104	1.25	76.6 - 123	30	
Chlorobenzene	0.14	0.50		17.04	97.6	101	3.96	73.9 - 137	30	
(S) Dibromofluoromethane				11.36	106	93.2		61.2 - 131		
(S) Toluene-d8				11.36	104	104		75.1 - 127		
(S) 4-Bromofluorobenzene				11.36	101	93.9		64.1 - 120		

Work Order:	1010102	Prep Method:	NA	Prep Date:	NA	Prep Batch:	NA
Matrix:	Water	Analytical Method:	8260TPH	Analyzed Date:	10/18/10	Analytical Batch:	402653
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		227.27	123	116	5.69	52.4 - 127	30	
(S) 4-Bromofluorobenzene				11.36	63.0	98.3		58.4 - 133		



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 100cm ² surface)

LABORATORY QUALIFIERS:

<p>B - Indicates when the analyte is found in the associated method or preparation blank</p> <p>D - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p>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.</p> <p>H- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p>J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p>NA - Not Analyzed</p> <p>N/A - Not Applicable</p> <p>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</p> <p>R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p>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</p> <p>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.</p>



Sample Receipt Checklist

Client Name: Impact Environmental Services

Date and Time Received: 10/12/2010 22:38

Project Name: 1409-1417 12th St Oakland

Received By: NK

Work Order No.: 1010102

Physically Logged By: NK

Checklist Completed By: NK

Carrier Name: Client Dropped 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? Yes

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes
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: °C
Water-VOA vials have zero headspace?
Water-pH acceptable upon receipt?

pH Checked by: pH Adjusted by:



Login Summary Report

Client ID:	TL5130 Impact Environmental Services	QC Level:	
Project Name:	1409-1417 12th St Oakland	TAT Requested:	7 Day
Project # :		Date Received:	10/12/2010
Report Due Date:	10/21/2010	Time Received:	22:38
Comments:	5 Day TAT!! 6 Samples rec'd for TPHDO, MBTEX, TPHG! Report to Joseph Cotton!!		
Work Order # :	1010102		

<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>
1010102-001A	DPE-3	10/12/10 10:32	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	
Sample Note:	TPHg,MBTEX,TPHD/Mo for all samples.							
1010102-002A	GW-3	10/12/10 11:31	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	
1010102-003A	DPE-2B	10/12/10 13:00	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	
1010102-004A	DPE-1B	10/12/10 14:21	Water	11/26/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1010102-005A	MW-8	10/12/10 14:55	Water	11/26/10			W_GCMS-GRO W_TPHDO W_8260MBTEX	
1010102-006A	GW-1	10/12/10 17:10	Water	11/26/10			W_GCMS-GRO W_8260MBTEX W_TPHDO	



483 Sinclair Frontage Road
 Milpitas, CA 95035
 Phone: 408.263.5258
 FAX: 408.263.8293
 www.torrentlab.com

CHAIN OF CUSTODY

LAB WORK ORDER NO

1010102

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY

Company Name: IMPACT ENVIRONMENTAL SERVICES Location of Sampling: 1409-1417 12th ST. OAKLAND, CA
 Address: 39120 ARGONAUT WY. SUITE 228 Purpose:
 City: DREHONT State: CA Zip Code: 94538 Special Instructions / Comments:
 Telephone: 510-703-5420 FAX: 510-713-7790
 REPORT TO: JOSEPH COTTON SAMPLER: MARVIN MENDOZA P.O. #: EMAIL: JAC21462@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

EPA 8260B - Full List
 EPA 8260B - 8010 List
 THP gas BTEX
 Oxygenates MTBE
 THP Diesel Si-Gel
 Motor Oil Pesticide - 8081
 PCB - 8082
 Metals CAM - 17
 LUFT 5 7 Metals
 8270 Full List
 PAHs Only

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	EPA 8260B - Full List	EPA 8260B - 8010 List	THP gas	BTEX	Oxygenates	MTBE	THP Diesel	Si-Gel	Motor Oil	Pesticide - 8081	PCB - 8082	Metals	CAM - 17	LUFT 5	7 Metals	8270 Full List	PAHs Only	REMARKS
001	DPE-3	10/12/10 1032	W	2	AMBER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
002	GW-3	1131				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
003	DPE-2B	1306				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
004	DPE-1B	1421				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
005	MW-8	1455				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
006	GW-1	1710				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

TORRENT LAB

1	Relinquished By: <u>[Signature]</u>	Print: <u>MARVIN MENDOZA</u>	Date: <u>10/12/10</u>	Time: <u>12:38</u>	Received By: <u>[Signature]</u>	Print: <u>L.D. Jimenez</u>	Date: <u>10-12-10</u>	Time: <u>2238</u>
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 D/O 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 10 of 2
 Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____



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CHAIN OF CUSTODY

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY.

LAB WORK ORDER NO
 1010102

Company Name: IMPACT ENVIRONMENTAL SERVICES Location of Sampling: 1409-1417 12TH ST. OAKLAND, CA
 Address: 39120 ARGONAUT WY. SUITE 223 Purpose:
 City: PREMONT State: CA Zip Code: 94538 Special Instructions / Comments:
 Telephone: 510-703-5420 FAX: 510-713-7790
 REPORT TO: JOSEPH COTTON SAMPLER: MARVIN MENDOZA P.O. #: EMAIL: JAL21462@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 QC Level IV Waste Water Other EDF Ground Water Soil Excel / EDD

REPORT FORMAT: EPA 8260B - Full List EPA 8260B - 8010 List THP gas BTEX MTBE THP Diesel St-Gel Motor Oil Pesticide - 8081 PCB - 8082 Metals CAM - 17 LUFT 5 7 Metals 8270 Full List PAHs Only

ANALYSIS REQUESTED

LAB ID	CLIENT'S SAMPLE I.D.	DATE / TIME SAMPLED	MATRIX	# OF CONT	CONT TYPE	REMARKS
001	DPE-3	10/12/10 1032	W	3	VOA	
002	GW-3	1131				
003	DPE-2B	1300				
004	DPE-1B	1421				
005	MW-8	1455				
006	GW-1	1710				

1	Relinquished By: <u>MARVIN MENDOZA</u>	Print: <u>MARVIN MENDOZA</u>	Date: <u>10/12/10</u>	Time: <u>2238</u>	Received By: <u>Jane L.D. Limson</u>	Print: <u>Jane L.D. Limson</u>	Date: <u>10-12-10</u>	Time: <u>2238</u>
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 D/O 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 2 of 2

Log In By: _____ Date: _____ Log In Reviewed By: _____ Date: _____