



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
4:16 pm, Jun 28, 2012
Alameda County
Environmental Health

Subject: First & Second Quarter 2009 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 First & Second Quarter 2009 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: First & Second Quarter 2009 Groundwater Monitoring Report _RO0002933
1409 – 1417 12th Street, Oakland, California

Dear Mr. Wickman:

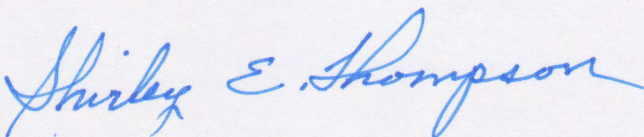
Attached is the First & Second Quarter 2009 Groundwater Monitoring Report for the property located at 1409 – 1417 12th Street, Oakland, California.

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

Sincerely,



Shirley E. Thompson
Property Owner

**FIRST & SECOND QUARTER 2009
GROUNDWATER MONITORING REPORT**

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

Prepared for

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

December 15, 2010

Prepared by

IES
Impact Environmental Services

39120 Argonaut Way, Suite 223
Fremont, California 94538

**FIRST AND SECOND QUARTER 2009
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 First and Second Quarter 2009 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 January 24, 2009 and April 28, 2009. 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 1,300 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

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.

indicated that DPE was a viable technology for mitigating petroleum hydrocarbons from unsaturated soil and groundwater from the subject property.

FIRST AND SECOND QUARTER 2009 GROUNDWATER MONITORING EVENTS

On January 24, 2009 and April 28, 2009, Impact conducted groundwater monitoring at the subject property. 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 first and second quarter of 2009 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.

Groundwater Elevations and Gradient

DTW measurements were recorded on the Well Gauging Data Sheet for both the first and second quarters of 2009 are included in Appendix A. Groundwater elevation data for wells for both quarters are also presented on Table 1. Groundwater contour maps for January 2009 and April 2009 are presented as Figures 3 and 4, respectively. Groundwater elevations were calculated by

subtracting the measured depth to water 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 groundwater elevation contour map for the first quarter 2009 indicates that the direction of shallow groundwater flow is to the west at an approximate gradient of 0.0008. The groundwater elevation contour map for the second quarter 2009 indicates that the direction of shallow groundwater flow is to the northwest at an approximate gradient of 0.0045.

Groundwater Sample Results

Groundwater sample results for the first and second quarter 2009 groundwater monitoring events are summarized in Table 2 and certified laboratory analytical reports (CARs) are presented in Appendix B. Maps showing the concentrations of TPHg and benzene detected in groundwater samples during the first quarter 2009 are presented in Figures 5 and 6, respectively. Maps showing the concentrations of TPHg/TPHd/TPHmo and benzene detected in groundwater samples during the second quarter 2009 are presented in Figures 7 and 8, respectively.

First Quarter 2009

During the first quarter 2009, constituents of concern were not detected at or above method detection limits (MDLs) in groundwater samples collected from wells MW-1 through MW-7. The groundwater sample collected from well MW-8 was found to contain 190µg/L TPHg, 2.10µg/L benzene, 1.47µg/L toluene, 4.94µg/L ethylbenzene, and 11.8µg/L total xylenes. The groundwater sample from well GW-1 contained 9,900µg/L TPHg, 767µg/L TPHd, 1,600µg/L benzene, 174µg/L toluene, 315µg/L ethylbenzene, and 915µg/L total xylenes. The groundwater sample collected from well GW-3 was found to contain 0.740µg/L of benzene.

Second Quarter 2009

During the second quarter 2009, constituents of concern were not detected at or above method detection limits (MDLs) in groundwater samples collected from wells MW-1 through MW-7, with the following exception. The groundwater sample from MW-7 was found to contain

293µg/ of TPHmo. The groundwater sample collected from well MW-8 was found to contain 110µg/L TPHg, 156µg/L TPHd, 909µg/L TPHmo, 1.4µg/L benzene, 0.81µg/L toluene, 2.4µg/L ethylbenzene, and 6.1µg/L total xylenes. The groundwater sample from well GW-1 contained 22,000µg/L TPHg, 3,010µg/L TPHd, 2.10µg/L benzene, 1.47µg/L toluene, 4.94µg/L ethylbenzene, and 11.8µg/L total xylenes. The groundwater sample from well GW-2 contained 82µg/L of TPHg, 205µg/L TPHmo, 1.7µg/L of benzene, 1.1µg/L of toluene, and 4.94µg/L ethylbenzene. The groundwater sample collected from well GW-3 was found to contain 500µg/L TPHg, 206µg/L TPHmo, 63µg/L benzene, 0.63µg/L toluene, and 2.9µg/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 exceptions.

During the first quarter 2009, the TPHg chromatograms for samples collected from MW-8 and GW-1 did not resemble the standard gasoline pattern. Although TPHg constituents were present in these samples, the TPHg value that was reported includes a significant portion of non-target hydrocarbons within the gasoline quantitative range. In addition, the sample chromatogram for GW-1 does not resemble the typical diesel pattern. Hydrocarbons in the sample collected from well GW-1 were quantified as diesel. However these detections appear to be from fuel lighter than diesel (i.e. gasoline). Significant concentrations of TPHg were also detected in sample GW-1. As a result, it is possible that all or part of the TPHd detected in sample GW-1 could be heavier fraction of TPHg.

During the second quarter 2009, the sample chromatograms for TPHg detected in groundwater sample collected from well GW-3 does not resemble the standard gasoline pattern. The reported TPHg values for sample GW-3 appear to be due to the presence of light-end non-gasoline compounds within the range of C5-C12, which were quantified as gasoline. This may bias the

TPHg result in sample GW-3. The sample chromatograms for TPHd detected in groundwater samples collected from wells MW-8 and GW-1 do not resemble the standard diesel patterns. However, hydrocarbons within the diesel range were quantified as TPHd. The sample chromatograms for TPHmo, detected in groundwater samples collected from wells MW-7, MW-8, GW-2, and GW-3 do not resemble the standard diesel patterns. However, hydrocarbons within the motor oil range were quantified as TPHmo.

DISCUSSION OF RESULTS

The results of groundwater samples collected during the first and second quarters of 2009 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.

First Quarter 2009

During the first quarter 2009, one or more constituents of concern were detected above their respective ESLs in groundwater samples collected from wells MW-8 and GW-1. The groundwater sample collected from wells MW-8 was found to contain concentrations of TPHg and benzene above their respective ESLs of 100µg/L and 1µg/L, respectively. The groundwater sample collected from well GW-1 contained TPHg, TPHd (ESL of 100µg/L), benzene, toluene (ESL of 40µg/L), ethylbenzene (ESL of 30µg/L), and total xylenes (20µg/L) above their respective ESLs.

Second Quarter 2009

During the second quarter 2009, one or more constituents of concern were detected above their respective ESLs in groundwater samples collected from wells MW-7, MW-8, GW-1, GW-2, and GW-3. The groundwater sample collected from wells MW-8 was found to contain concentrations of TPHg, TPHd, TPHmo, and benzene above their respective ESLs of 100µg/L, 100µg/L, 100µg/L, and 1µg/L, respectively. The groundwater sample collected from well GW-1 contained TPHg, TPHd, and benzene above their respective ESLs. The groundwater sample collected from well GW-2 was found to contain TPHd and benzene above their respective ESLs. The groundwater sample collected from well GW-3 was found to contain TPHg, TPHd and benzene above their respective ESLs.

Based on the comparison of site data with ESLs it appears the potential human health risks at the site include exposure from direct-contact with petroleum-impacted soils (i.e., during construction activities) and intrusion and subsequent inhalation (indoor) of petroleum-related vapors from impacted soil and groundwater in at and near wells MW-7, MW-8, GW-1, GW-2, and GW-3.

CONCLUSIONS

Based on the results of soil and groundwater results collected from the wells and confirmation exploratory borings, the following are IMPACT's conclusions regarding the subject property.

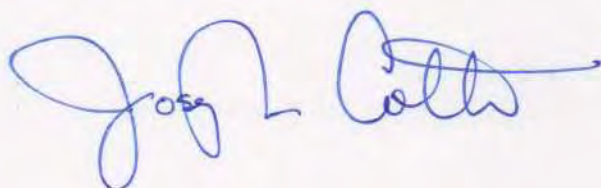
- During the first quarter of 2009, groundwater samples collected from wells MW-8 and GW-1 contained at least one COCs above respective residential ESLs.
- During the second quarter of 2009, groundwater samples collected from wells MW-7, MW-8, GW-1, GW-2, and GW-3 contained at least one COCs above respective residential ESLs.
- During the first and second quarters of 2009, the highest concentrations of COCs significantly above residential ESLs where groundwater is a potential drinking water source were detected in samples collected from well MW-8, GW-1 and GW-3.
- The groundwater elevation contour map for the first quarter 2009 indicates that the direction of shallow groundwater flow is to the west at an approximate gradient of 0.0008. The groundwater elevation contour map for the second quarter 2009 indicates that the direction of shallow groundwater flow is to the northwest at an approximate gradient of 0.0045.
- Based on the comparison of site data (including groundwater samples collected during the first and second quarters of 2009) with ESLs, it appears the potential human health risks at the site include exposure from direct contact with petroleum-impacted soils (i.e., during construction activities) and intrusion and subsequent inhalation of petroleum-related vapors from impacted soil and groundwater.

RECOMMENDATIONS

IMPACT recommends continuing periodic groundwater monitoring to evaluate temporal changes in groundwater quality and to monitor groundwater plume migration. Impact further recommends instituting dual-phase vacuum-enhanced extraction to remove petroleum hydrocarbons from soil-vapor and groundwater at the subject property.

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

Figures

Figure 1 -- Site Location Map

Figure 2 – Site Plan

Figure 3 – Groundwater Elevation Contour Map (January 24, 2009)

Figure 4 – Groundwater Elevation Contour Map (April 28, 2009)

Figure 5 – Map of TPHg/TPHd/TPHmo in Groundwater (January 24, 2009)

Figure 6 – Map of Benzene in Groundwater (January 24, 2009)

Figure 7 – Map of TPHg/TPHd/TPHmo in Groundwater (April 28, 2009)

Figure 8 – Map of Benzene in Groundwater (April 28, 2009)

Appendices

Appendix A – Well Sampling Data Sheets

Appendix B – Certified Laboratory Analytical Report

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 First & Second Quarter 2009
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	21.49	04/29/09	0.0	10.00	11.49
		01/25/09	0.0	12.40	9.09
		10/25/08	0.0	12.68	8.81
		07/27/08	0.0	11.99	9.50
		04/30/08	0.0	10.52	10.97
MW-2	20.61	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	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	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
MW-5	20.05	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	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	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

Table 1
Groundwater Elevations First & Second Quarter 2009
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-8	20.71	04/29/09	0.0	10.68	10.03
		01/25/09	0.0	11.63	9.08
		10/25/08	0.0	12.00	8.71
		07/27/08	0.0	11.29	9.42
		04/30/08	0.0	9.82	10.89
GW-1	20.23	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	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	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

Table 2
First and Second Quarter 2009 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)
MW-1	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	95x	<100	<200	1.68	1.17	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<64	<100	<200	<0.645	<0.645	<0.645	<1.94	<0.645	<12.9	<0.645	<0.645	<0.645
	04/30/08	54	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA
MW-2	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA
MW-3	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<58	<100	<200	<0.580	<0.580	<0.580	<1.74	<0.580	<11.6	<0.580	<0.580	<0.580
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA
MW-4	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	61x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA
MW-5	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA
MW-6	04/29/09	<50	<100	<200	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	72x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	53	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA
MW-7	04/29/09	<50	<100	293x	<0.50	<0.50	<0.50	<1.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	71x	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	NA	NA	NA	NA
<i>Residential ESL (DWS)</i>		<i>100</i>	<i>100</i>	<i>100</i>	<i>1</i>	<i>40</i>	<i>30</i>	<i>20</i>	<i>5</i>	<i>12</i>	<i>na</i>	<i>na</i>	<i>na</i>
<i>Residential ESL (NDWS)</i>		<i>500</i>	<i>640</i>	<i>640</i>	<i>46</i>	<i>130</i>	<i>290</i>	<i>100</i>	<i>1,800</i>	<i>18,000</i>	<i>na</i>	<i>na</i>	<i>na</i>

Table 2
First and Second Quarter 2009 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)
MW-8	04/29/09	110	156x	909x	1.4	0.81	2.4	6.1	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	190x	<100	<200	2.10	1.47	4.94	11.8	<0.500	<10.0	<0.500	<0.500	<0.500
	10/25/08	240x	<100	<200	1.41	<0.500	<0.500	3.13	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	198	<100	<200	5.37	1.25	3.77	13.3	<0.500	<10.0	<0.500	<0.0500	<0.500
	04/30/08	1,049	161	<200	13.9	12.4	9.76	160	<0.500	NA	NA	NA	NA
GW-1	04/29/09	22,000	3,010x	<800	3,000	580	830	2,100.0	<22	<440	<22	<22	<22
	01/25/09	9,900	767	<200	1,600	174	315	915	<4.40	<88.0	<4.40	<4.40	<4.40
	10/25/08	7200x	1020x	296x	1,010	161	89.8	693	<2.20	<44.0	<2.20	<2.20	<2.20
	07/27/08	18,000	1,060	<200	3,360	146	533	1,450	<22.0	<440	<22.0	<22.0	<22.0
	04/30/08	37,000	7.25	<200	2,400	769	378	3,450	<0.500	NA	NA	NA	NA
GW-2	04/29/09	82	<100	205x	1.7	1.1	1.2	4.5	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	<0.500	<0.0500	<0.500
	10/25/08	100x	126x	338x	<0.500	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	61	<100	<200	<0.500	<0.500	<0.500	<1.5	<0.500	15.3	<0.500	<0.500	<0.500
	04/30/08	<50	<100	<200	<0.500	<0.500	<0.500	<0.500	<0.500	NA	NA	NA	NA
GW-3	04/29/09	500x	<100	206x	63	0.63	<0.50	2.9	<0.50	<10.0	<0.50	<0.50	<0.50
	01/25/09	<50	<100	<200	0.740	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.0500	<0.500
	10/25/08	100x	<100	<200	8.47	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	07/27/08	63	<100	200	3.27	<0.500	<0.500	<1.5	<0.500	<10.0	<0.500	<0.500	<0.500
	04/30/08	250	<100	<200	46.5	1.36	2.16	<1.5	<0.500	NA	NA	NA	NA
<i>Residential ESL (DWS)</i>		<i>100</i>	<i>100</i>	<i>100</i>	<i>1</i>	<i>40</i>	<i>30</i>	<i>20</i>	<i>5</i>	<i>12</i>	<i>na</i>	<i>na</i>	<i>na</i>
<i>Residential ESL (NDWS)</i>		<i>500</i>	<i>640</i>	<i>640</i>	<i>46</i>	<i>130</i>	<i>290</i>	<i>100</i>	<i>1,800</i>	<i>18,000</i>	<i>na</i>	<i>na</i>	<i>na</i>

Abbreviations and Methods:

NA = Not analyzed for particular constituent of concern

na = Not applicable

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

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method 8260

TPHd= Total Petroleum Hydrocarbons as diesel by EPA Method 8015

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

DIPE= Diisopropyl Ether

ETBE= Ethyl tert-butyl ether

MTBE = methyl-tert-butyl ether (MTBE)

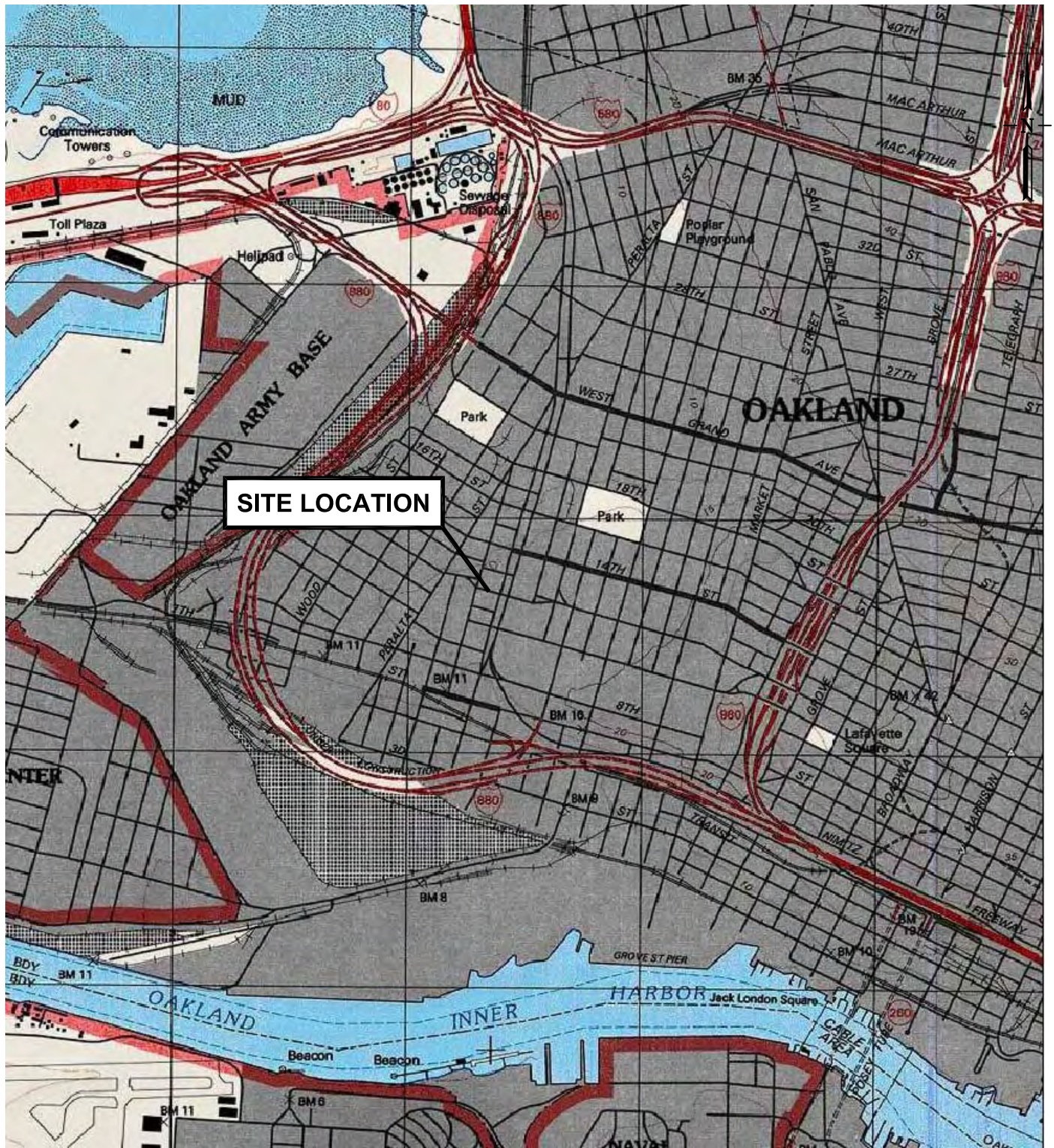
t-Butanol= t-Butyl Alcohol

TAME= tert-Amyl methyl ether

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

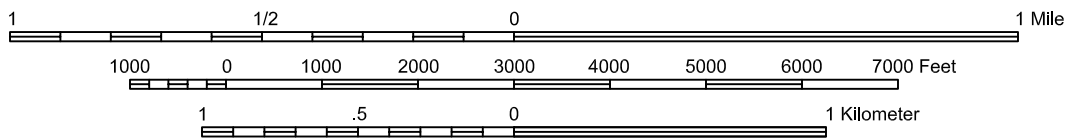
ESL= San Francisco Bay Regional Water Quality Control Board, Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater, May 2008

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



SITE LOCATION

Scale 1:24,000



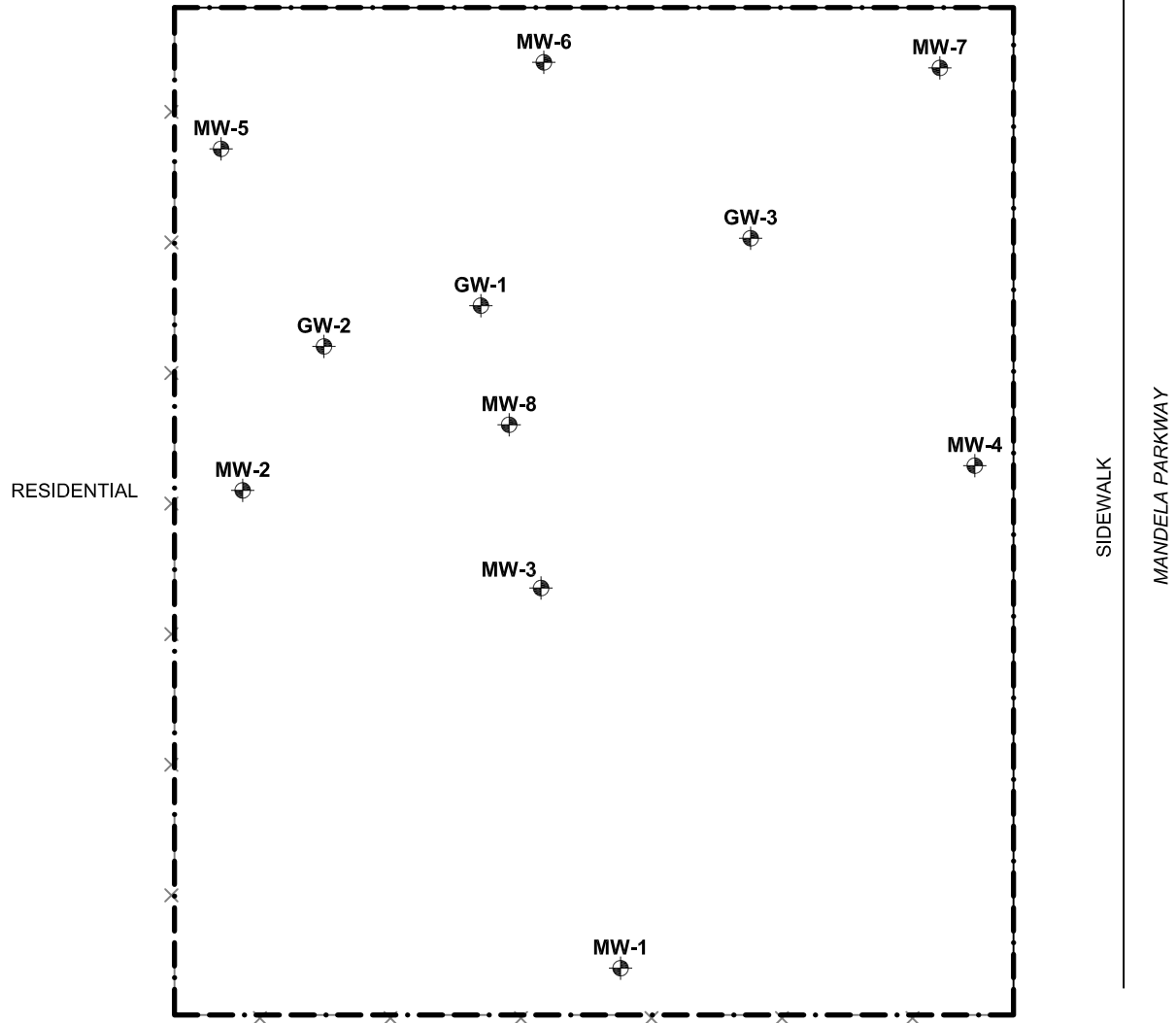
C:\WORK\IES1409 12th Street\Figure 1.dwg Layout: Fig 2 Sep 22, 2007 - 8:03pm

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

12TH STREET

SIDEWALK



RESIDENTIAL

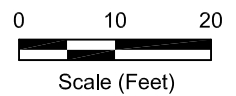
SIDEWALK

MANDELA PARKWAY

EXPLANATION:

--- Approximate Property Boundary

MW-1 Monitoring Well Location



C:\Work\EnviroCAD\EST\1409-1417 12th Street\3-4Q-08 GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 2 - Site Plan Dec 14, 2010 - 6:39pm

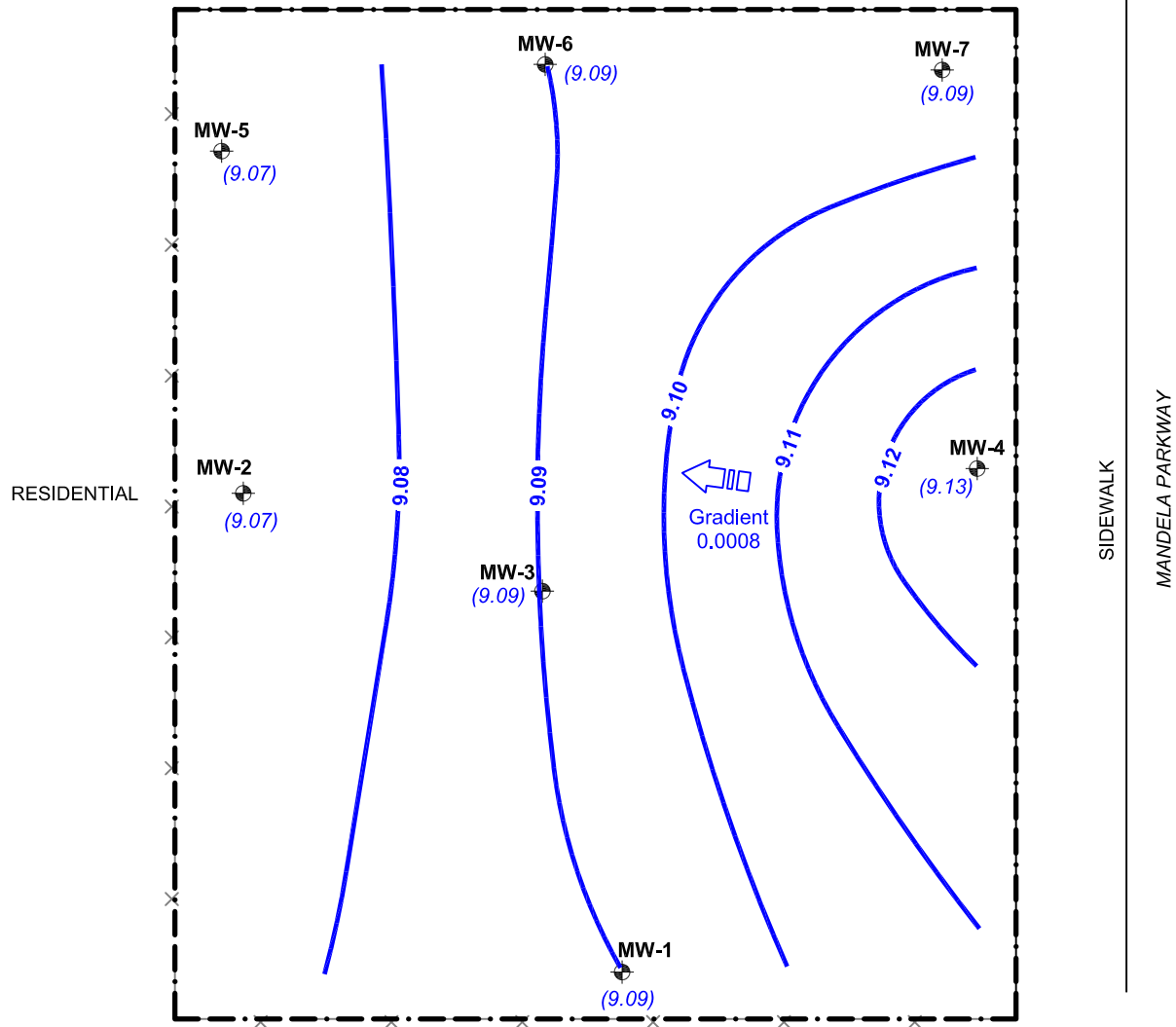
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Figure 2
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA

SITE PLAN

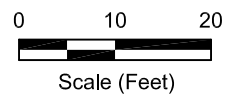
12TH STREET

SIDEWALK



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- 9.12 Groundwater Elevation Contour (ft.-MSL)
- (9.09) Groundwater Elevation (ft.-MSL);
- Groundwater Gradient

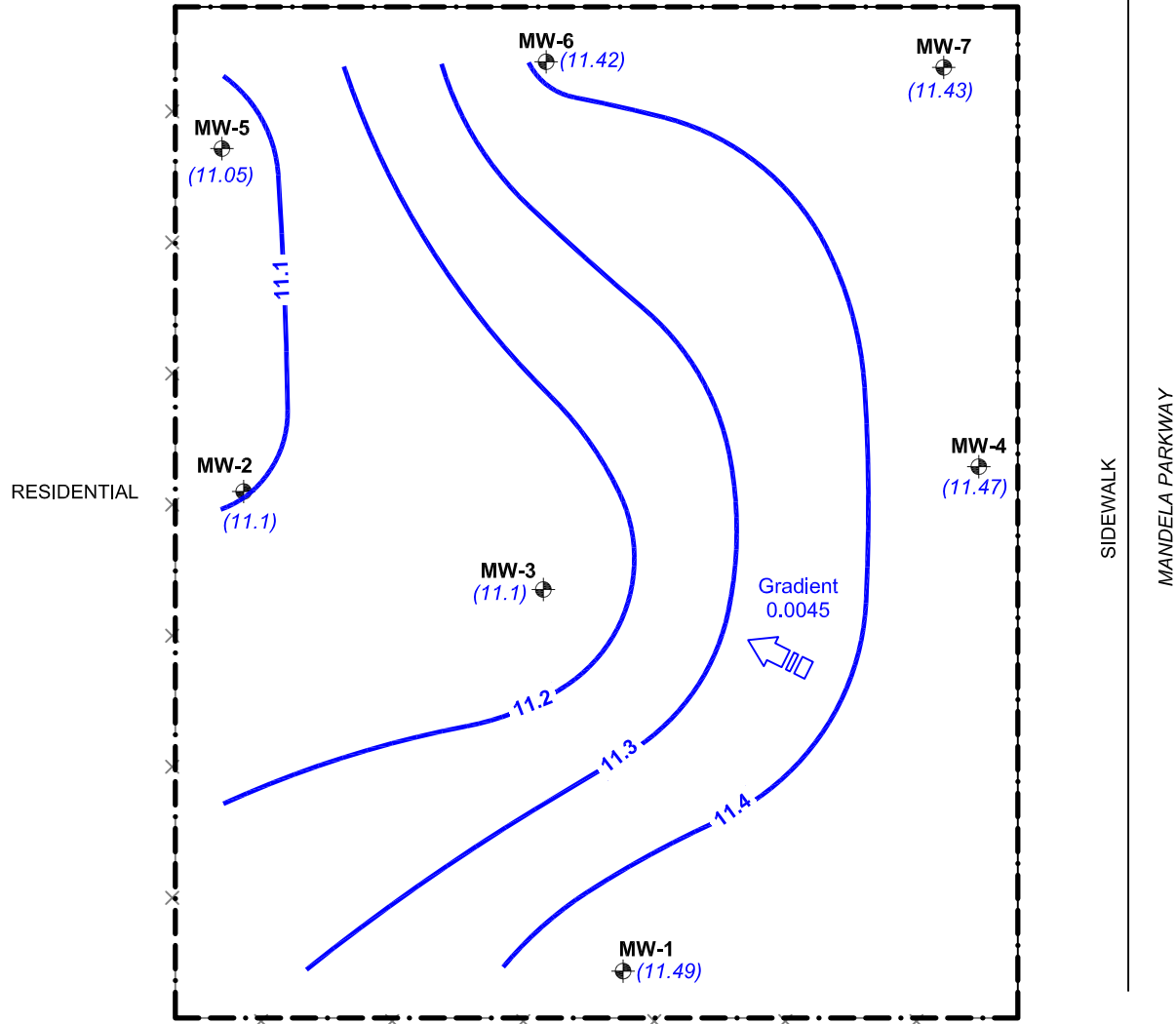


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Figure 3
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP (JANUARY 2009)

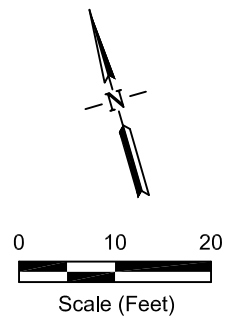
12TH STREET

SIDEWALK



EXPLANATION:

- Approximate Property Boundary
- MW-1 Monitoring Well Location
- 11.4 Groundwater Elevation Contour (ft.-MSL)
- (11.49) Groundwater Elevation (ft.-MSL);
- Groundwater Gradient

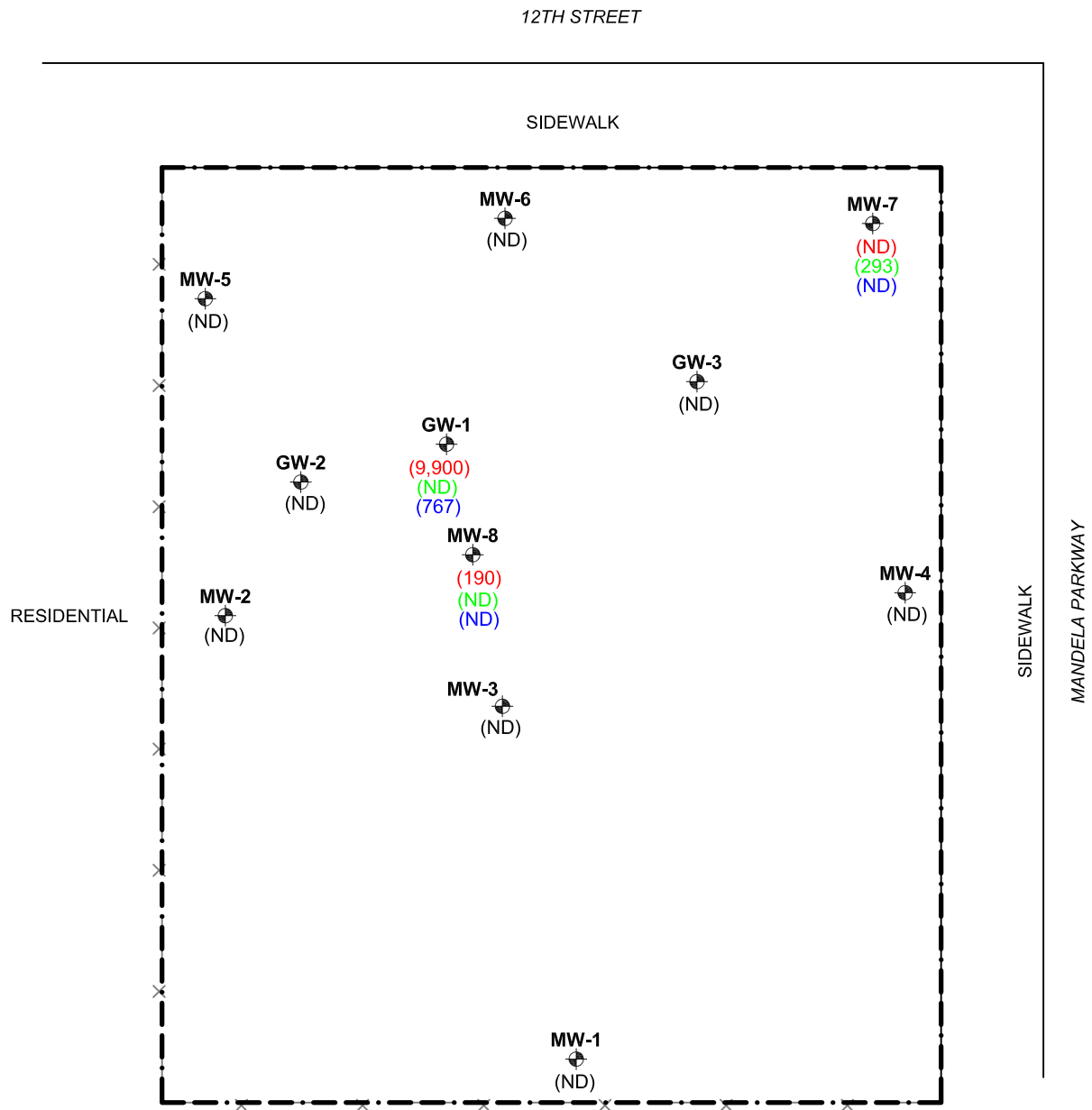


C:\Work\EnviroCAD\IES\1409-1417 12th Street\1-2Q-09 GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 4 - GW-04-09 Dec 21, 2010 - 8:57pm

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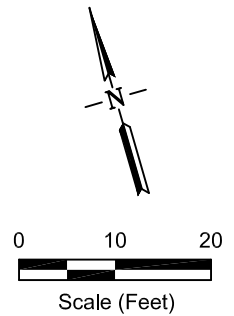
Figure 4
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
GROUNDWATER CONTOUR MAP (APRIL 2009)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\1-2Q-09 GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 5 - TPH_GW-01-09 Dec 18, 2010 - 7:50pm



EXPLANATION:

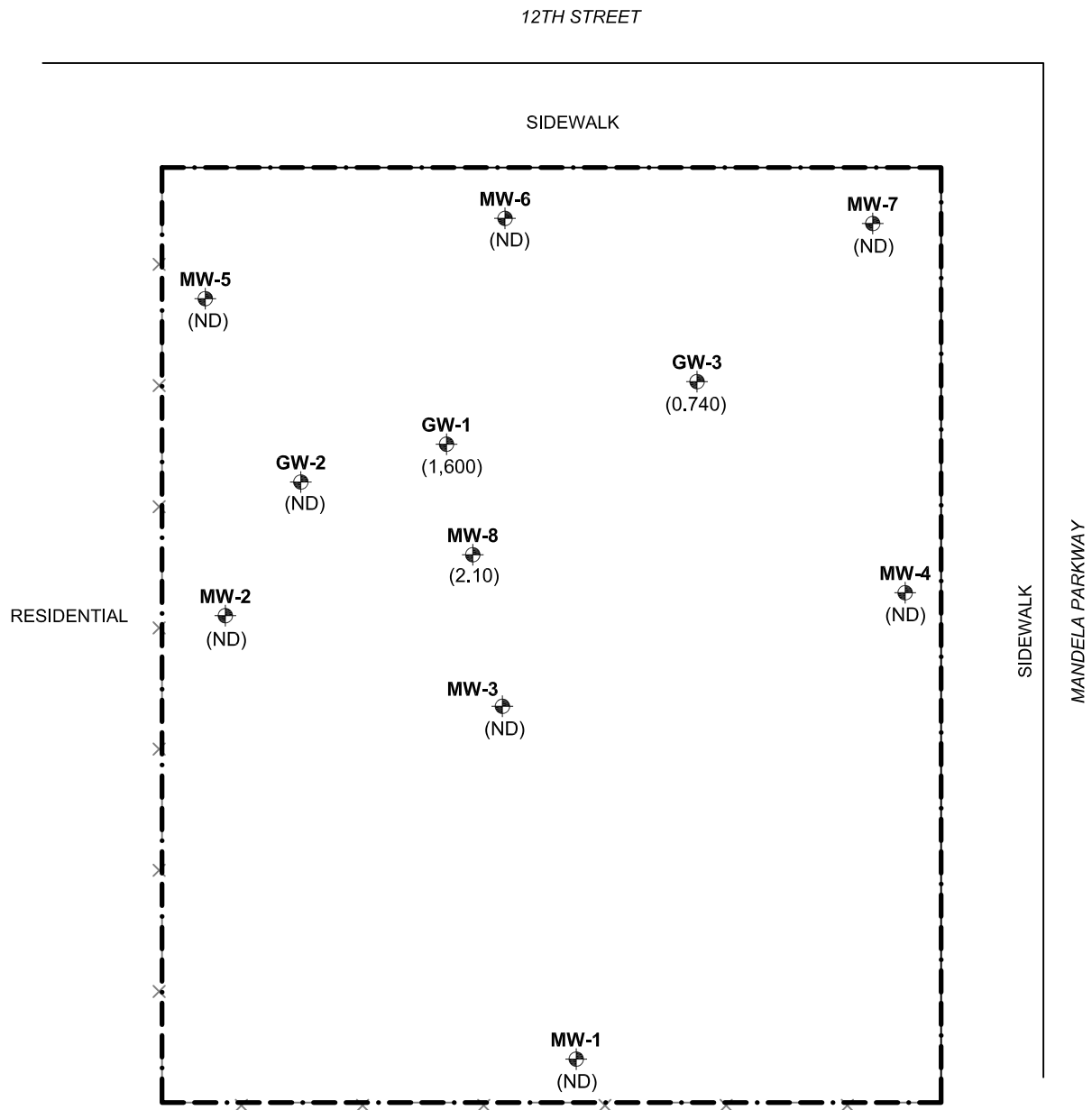
- Approximate Property Boundary
- Monitoring Well Location
- (9,900) TPHg Results in micrograms per liter (ug/L)
- (293) TPHd Results in micrograms per liter (ug/L)
- (767) TPHmo Results in micrograms per liter (ug/L)




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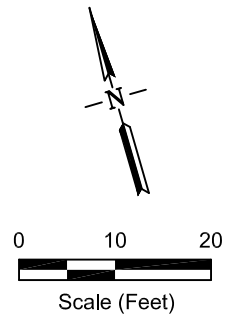
Figure 5
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
 TPHg, TPHd, and TPHmo IN GROUNDWATER (JANUARY 2009)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\1-2Q-09 GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 6 - Benzene_GW-01-09 Dec 18, 2010 - 7:51pm



EXPLANATION:

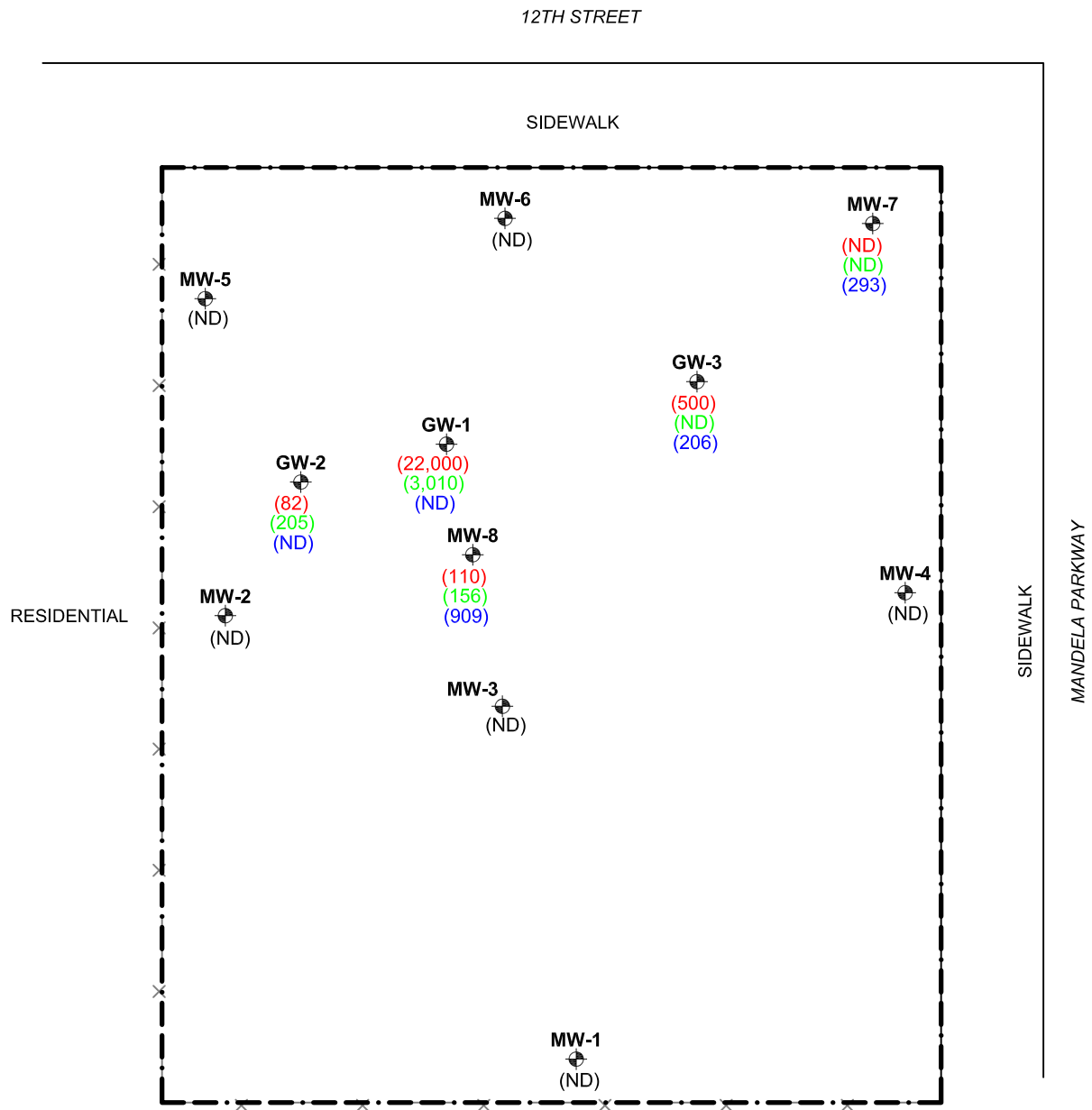
- Approximate Property Boundary
- MW-8  Monitoring Well Location
- (1,160) Benzene Results in micrograms per liter (ug/L)



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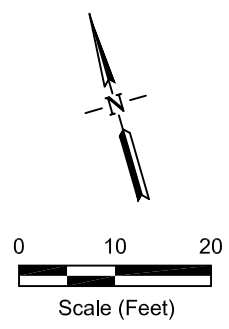
Figure 6
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
BENZENE IN GROUNDWATER (JANUARY 2009)

C:\Work\EnviroCAD\IES\1409-1417 12th Street\1-2Q-09 GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 7 - TPHg_CW-04-09 Dec 18, 2010 - 7:52pm



EXPLANATION:

- Approximate Property Boundary
- MW-8 Monitoring Well Location
- (110) TPHg Results in micrograms per liter (ug/L)
- (156) TPHd Results in micrograms per liter (ug/L)
- (909) TPHmo Results in micrograms per liter (ug/L)

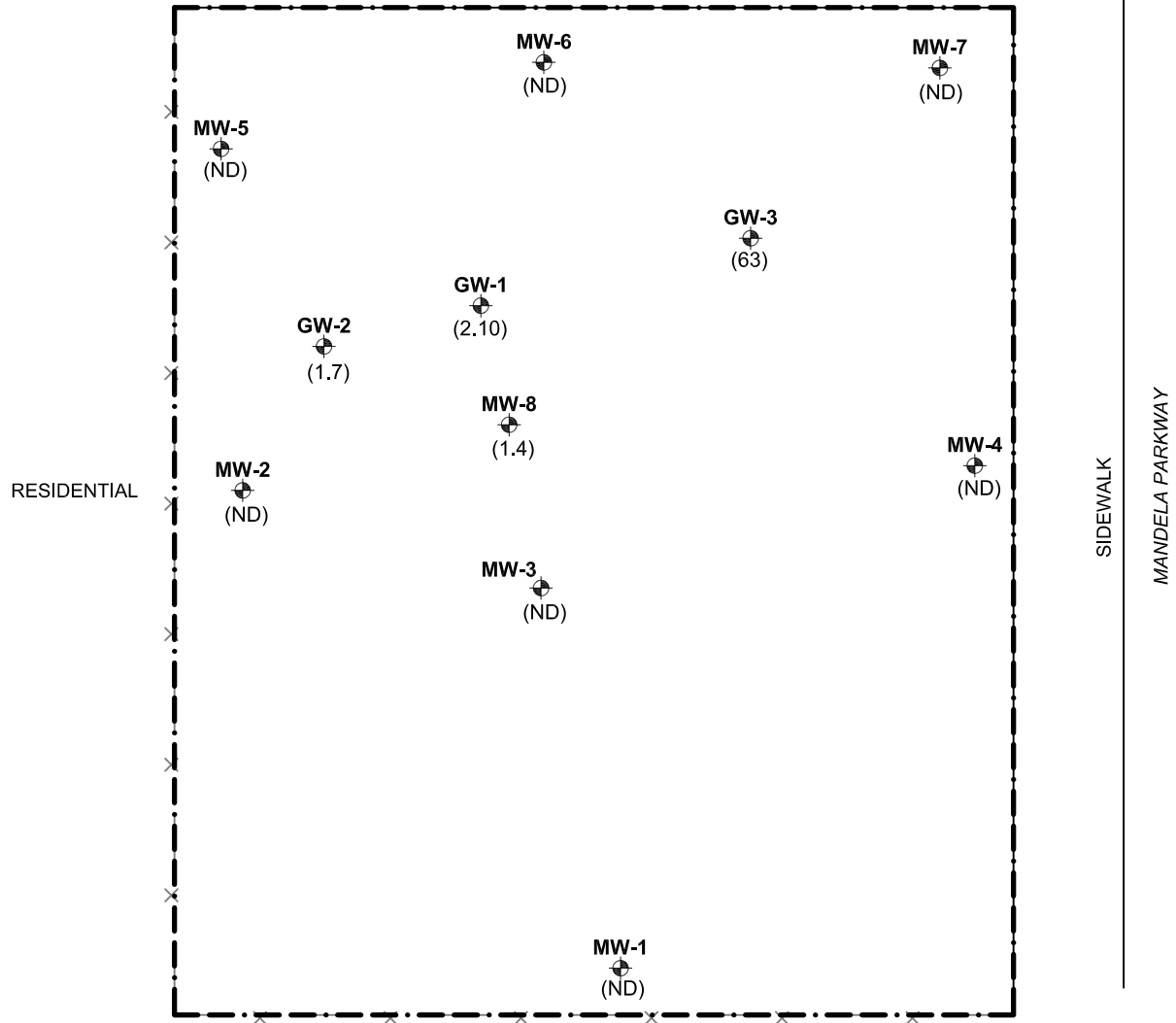


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Figure 7
 1409 to 1417 12TH STREET
 OAKLAND, CALIFORNIA
 TPHg, TPHd, and TPHmo IN GROUNDWATER (APRIL 2009)

12TH STREET

SIDEWALK



RESIDENTIAL

SIDEWALK

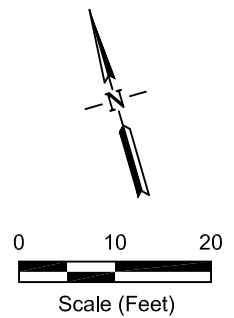
MANDELA PARKWAY

EXPLANATION:

--- Approximate Property Boundary

MW-8  Monitoring Well Location

(2.10) Benzene Results in micrograms per liter (ug/L)



C:\Work\EnviroCAD\IES\1409-1417 12th Street\1-2Q-09 GW_Mon_Rpt\Figure 3-8.dwg Layout: Fig 8 - Benzene_GW-04-09 Dec 18, 2010 - 7:52pm

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Figure 8
1409 to 1417 12TH STREET
OAKLAND, CALIFORNIA
BENZENE IN GROUNDWATER (APRIL 2008)

APPENDIX A

**Well Sampling Data Sheets & Groundwater Elevation Measurements
Sheets (First and Second Quarters 2009)**

IMPACT ENVIRONMENTAL

WELL GAUGING DATA

Project Number 1409 GWM Date JANUARY 25, 2009

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

Well ID	Time	Well Size (inches)	Depth to Water (feet bgs)	Depth to Well Bottom (feet bgs)	Sheen/Odor	Depth to Immiscible Liquid	Thickness Immiscible Liquid	Notes:
MW-1	1131	2"	12.40	13.92				
MW-2	1146	2"	11.54	13.91				
MW-3	1150	2"	12.00	13.59				
MW-4	1154	2"	11.22	13.90				
MW-5	1202	2"	10.98	13.87				
MW-6	1138	2"	10.58	14.44				
MW-7	1156	2"	10.79	13.81				
MW-8	1207	2"	11.63	27.55				Measure Last*
GW-1	1209	4"	11.15	17.05				Measure Last*
GW-2	1205	4"	11.50	17.00				
GW-3	1211	4"	11.49	17.98				Measure Last*

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409 QGWM Sampler: _____
Well Number: MW-1 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 13.92 Method of Cleaning: Alconox and D.I. Water
Diameter: 2" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

2" Well = 0.163 gallons per foot -CONVERSION FACTOR
 4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Initial Water Level: 12.40

Final Water Level: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: 0.25

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
11:49	start	0	6.95	16.5	1123		Brown/cloudy	NO
11:59		.50	7.22	17.7	1111		Clear/cloudy	NO
1:10		.7	6.71	17.3	1044			

Total Discharge: _____ **Comments:** _____

Casing Volumes Removed: _____

Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 QGWM	JANUARY 25, 2009	

13.92 - 12.4 = 1.52 x 3 = 5 gallons

spread\1409_GROUNDWATER SAMPLING FORM 1.52 x .163 = 0.25 x 3 = 0.75

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
Well Number: MW-2 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 13.91 Method of Cleaning: Alconox and D.I. Water
Diameter: 2" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data 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: 11.54
Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
Well Volume of Water: 0.38 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:28	start	0	6.76	18.1	614		Brown/cloudy	NO
12:30		0.6	6.85	17.1	594		Brown/cloudy	NO
2:47		1.16	6.69	16.3	522		Brown/cloudy	NO

Total Discharge: 1.16 gallons Comments: _____
Casing Volumes Removed: _____
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

$13.91 - 11.54 = 2.37 \times 0.163 = 0.38 \times 3 = 1.16 \text{ gallons}$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
Well Number: MW-3 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 13.59 Method of Cleaning: Alconox and D.I. Water
Diameter: 2" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data 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: 12.00

Final Water Level: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: 0.26 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
2:50	start	0	7.15	16.7	755		Clear	NO
3:02		0.5	7.14	16.7	728		Brown/Cloudy	NO
3:11		0.78	7.11	17.1	753		Brown	NO

Total Discharge: 0.78 gallons Comments: _____

Casing Volumes Removed: _____

Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

$13.59 - 12.00 = 1.59 \times 0.163 = 0.26 \times 3 = 0.78$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
Well Number: MW-4 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 13.90 Method of Cleaning: Alconox and D.I. Water
Diameter: 2" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____

Ground Water Levels:

2" Well = 0.163 gallons per foot -CONVERSION FACTOR
 4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Initial Water Level: 11.22
Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
Well Volume of Water: 6.44 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1:36	start	0	6.99	17.6	637		Clear	NO
1:42		1.3	7.05	17.8	640		Brown	NO
2:00		1.8	7.05	16.5	318		Cloudy Brown	NO

Total Discharge: 1.31 gallons Comments: _____
Casing Volumes Removed: _____
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

$13.90 - 11.22 = 2.68 \times 0.163 = 0.44 \times 3 = 1.31$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
 Well Number: MW-5 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
 Total Depth of Well: 13.87 Method of Cleaning: Alconox and D.I. Water
 Diameter: 2" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data 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: 16.98

Final Water Level: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: 6.47 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:40	start	0	6.91	16.7	1147		clear	NO
12:50		1.5	6.86	16.8	1162		cloudy Brown	NO
1:18		3	6.72	16.4	1134		cloudy Brown	NO

Total Discharge: 1.41 gallons Comments: _____

Casing Volumes Removed: _____

Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

$13.87 - 10.98 = 2.89 \times 0.163 = 0.47 \times 3 = 1.41$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
Well Number: MW-6 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 14.44 Method of Cleaning: Alconox and D.I. Water
Diameter: 2" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____
 2" Well = 0.163 gallons per foot -CONVERSION FACTOR
 4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Ground Water Levels:

Initial Water Level: 10.58
Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
Well Volume of Water: ~~3.86~~ 0.63 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:28	start	0	6.98	18.3	556		Clear/cloudy	NO
12:35		2	6.93	17.9	527		Dirty Brown	NO
12:46		2.5	7.03	17.6	572		Cloudy Brown	NO

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

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

14.44 - 10.58 = 3.86 × 0.163 = 0.63 × 3 = 1.89

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
 Well Number: MW-#7 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Date Completed: See Previous Data
 Total Depth of Well: 13.81
 Diameter: 2"
 Well Elevation and Reference: See Previous Data

Sampling Equipment & Cleaning

Sampler Type: Disposable Bailer
 Method of Cleaning: Alconox and D.I. Water
 Purging Method: Disposable Bailer
 Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____
2" Well = 0.163 gallons per foot -CONVERSION FACTOR
4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Ground Water Levels:

Initial Water Level: 8.96
 Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
 Well Volume of Water: 0.79 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1:34	start	0	6.93	18.2	557		Clear	NO
1:41		1.7	6.94	18.2	503		Brown	NO
2:37		2.3	6.85	18.0 18.0	521		Brown	NO

Total Discharge: 2.37 gallons Comments: _____
 Casing Volumes Removed: _____
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

13.81 - 8.96 = 4.85 x 0.163 = 0.79 x 3 = 2.37

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409 QGWM Sampler: _____
Well Number: MW-8 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 27.55 Method of Cleaning: Alconox and D.I. Water
Diameter: 2" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data Method of Cleaning: Alconox and D.I. Water
 pH Meter: HANNA
 Conductivity Meter: HANNA
 Comments: _____
 2" Well = 0.163 gallons per foot -CONVERSION FACTOR
 4" Well = 0.653 gallons per foot- CONVERSION FACTOR

Ground Water Levels:

Initial Water Level: 11.63
Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
Well Volume of Water: 2.59 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
2:59	start	0	7.25	18.1	615		Dark grey	NO
3:07		4.5	7.19	18.3	542		grey	NO
3:13		6.2	7.11	18.1	527		Light grey	NO
3:16		7.78	6.97	18.3	557		Light grey	NO

Total Discharge: 7.78 gallons Comments: _____
Casing Volumes Removed: _____
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409 QGWM	JANUARY 25, 2009	

$27.55 - 11.63 = 15.92 \times 0.163 = 2.59 \times 3 = 7.78$

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
Well Number: GW-1 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 17.05 Method of Cleaning: Alconox and D.I. Water
Diameter: 4" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data 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: 11.15

Final Water Level: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: 3.85 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
1:28	start	0	6.60	18.1	1164		Dark grey	Yes
1:38		4	6.64	18.0	1188		light grey	Yes
1:56		7	6.57	16.2	1180		grey	Yes
2:42		11.56	6.53	18.6	1170		clear grey	Yes

Total Discharge: 11.56 Comments: _____

Casing Volumes Removed: _____

Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

17.05 - 11.15 = 5.9 x 0.653 = 3.85 x 3 = 11.56

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409_QGWM Sampler: _____
Well Number: GW-2 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 17.00 Method of Cleaning: Alconox and D.I. Water
Diameter: 4" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data 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: 11.50
Final Water Level: _____
 Reference Point: Black Mark on Top of Casing
Well Volume of Water: 3.59 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:44	start	0	6.50	17.4	997		Cloudy Brown	NO
12:52		4	6.46	17.7	986		Cloudy Brown	NO
1:07		8	6.48	17.9	990		Clear Cloudy	NO
1:14		11	6.47	17.8	994		Clear Cloudy	NO

Total Discharge: 10.77 gallons Comments: No lock on well
Casing Volumes Removed: _____
 Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

17.00 - 11.50 = 5.5 x 0.653 = 3.59 x 3 = 10.77

GROUNDWATER SAMPLING DATA SHEET

Project Name: 1409 12TH ST., OAKLAND, CA Date: January 25, 2009
 Project Number: 1409 QGWM Sampler: _____
Well Number: GW-3 Weather: _____
 Well Location: 1409 12TH ST., OAKLAND, CA

Well Construction

Sampling Equipment & Cleaning

Date Completed: See Previous Data Sampler Type: Disposable Bailer
Total Depth of Well: 17.98 Method of Cleaning: Alconox and D.I. Water
Diameter: 4" Purging Method: Disposable Bailer
 Well Elevation and Reference: See Previous Data 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: 11.49

Final Water Level: _____

Reference Point: Black Mark on Top of Casing

Well Volume of Water: 4.24 gallons

PURGE MEASUREMENTS

Time	Discharge (gal.)		pH	Temp (°C)	Spec. Conductance (mmhos/cm)		Color/ Turbidity	Odor
	Per Time Period	Cumulative			Field	Dissolved Oxygen		
12:26	start	6	6.76	18.2	931		Cloudy	NO
12:42		4	6.77	17.2	902		Cloudy	NO
12:54		8.5	6.80	17.5	854		Dirty Brown	NO
1:03		12.7	6.82	18.0	771		Cloudy Brown	NO

Total Discharge: 12.71 gallons Comments: No lock on well

Casing Volumes Removed: _____

Method of Disposal: Drummed pending analysis and disposal or recycling

IMPACT ENVIRONMENTAL	GROUNDWATER SAMPLING DATA SHEET		
	1409 12th Street, Oakland, California		
	Project No.	Date	Well
	1409_QGWM	JANUARY 25, 2009	

17.98 - 11.49 = 6.49 × 0.653 = 4.24 × 3 = 12.71

WELL GAUGING DATA

Project # 090428-501 Date 4/28/09 Client IES

Site 1409 12th St Oakland CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	0928	2					10.00	13.86	↓	
MW-2	0933	2				9.51	13.90			
MW-3	0931	2				9.70	13.92			
MW-4	0922	2				8.88	13.80			
MW-5	0935	2				9.00	13.81			
MW-6	0918	2				8.25	14.39			
MW-7	0920	2				8.45	13.73			
MW-8	0939	2				10.68	27.51			
GW-1	0941	4				8.86	16.94			
GW-2	0943	4				8.80	16.93			
GW-3	0945	4				9.16	17.91	↓		

WELL MONITORING DATA SHEET

Project #: <u>090428-001</u>	Client: <u>IES</u>
Sampler: <u>JO</u>	Date: <u>4/28/09</u>
Well I.D.: <u>MW-1</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>13.86</u>	Depth to Water (DTW): <u>10.00</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>10.77</u>	

Purge Method: Bailer Water Sampling Method: Bailer
Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Other: _____

0.6 (Gals.) X 3 = 1.8 Gals.
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations	
1014	16.2	7.04	2367	781	0.6	Brown clouds	<u>183</u>
1015	16.1	7.03	2365	>1000	1.2	↓	<u>187</u>
1016	16.2	7.04	2362	>1000	1.8	↓	<u>193</u>

Did well dewater? Yes No Gallons actually evacuated: 1.8

Sampling Date: 4/28/09 Sampling Time: 1020 Depth to Water: 10.64

Sample I.D.: MW-1 Laboratory: Kiff CalScience Other Torrent

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See COE

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: <u>090428-101</u>	Client: <u>IES</u>
Sampler: <u>Jo</u>	Date: <u>4/28/09</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>13.90</u>	Depth to Water (DTW): <u>9.51</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>10.39</u>	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Wattera Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
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0.7 (Gals.) X 3 = 2.1 Gals.
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1120</u>	<u>18.1</u>	<u>7.17</u>	<u>503.3</u>	<u>387</u>	<u>0.7</u>	
<u>1121</u>	<u>18.2</u>	<u>7.19</u>	<u>521.6</u>	<u>861</u>	<u>1.4</u>	<u>Brown clay</u>
<u>1122</u>	<u>18.1</u>	<u>7.22</u>	<u>542.6</u>	<u>>1000</u>	<u>2.1</u>	

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Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>2.1</u>	
Sampling Date: <u>4/28/09</u>	Sampling Time: <u>1125</u>	Depth to Water: <u>10.16</u>
Sample I.D.: <u>MW-2</u>	Laboratory: Kiff CalScience Other <u>Terrant</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>See coe</u>		
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:		
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: <u>090928-502</u>	Client: <u>IES</u>
Sampler: <u>JD</u>	Date: <u>4/28/09</u>
Well I.D.: <u>MW-3</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>13.93</u>	Depth to Water (DTW): <u>9.70</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>10.55</u>	

Purge Method: <u>Bailer</u> <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
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<u>0.6</u> (Gals.) X	<u>3</u> Specified Volumes	= <u>1.8</u> Gals. Calculated Volume
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Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations	
1037	17.6	7.59	843.3	>1000	0.6	Brown clay	17
1038	17.8	7.58	824.7	>1000	1.2		17
1039	17.9	7.57	804.5	>1000	1.8		17

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>1.8</u>	
Sampling Date: <u>4/28/09</u>	Sampling Time: <u>1045</u>	Depth to Water: <u>10.48</u>
Sample I.D.: <u>MW-3</u>	Laboratory: Kiff CalScience Other <u>Torment</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>see COC</u>		
EB I.D. (if applicable): @ _____ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:		
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: <u>090428-801</u>	Client: <u>IES</u>
Sampler: <u>LD</u>	Date: <u>4/28/09</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>13.80</u>	Depth to Water (DTW): <u>8.88</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>9.86</u>	

Purge Method: Bailer (Disposable Bailer) Waterra Peristaltic Extraction Pump Other _____
 Positive Air Displacement
 Electric Submersible

Sampling Method: Bailer (Disposable Bailer) Extraction Port Dedicated Tubing
 Other: _____

$\underline{0.8} \text{ (Gals.)} \times \underline{3} = \underline{2.4} \text{ Gals.}$ I Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1056	16.9	7.6	268.4	481	0.8	
1057	17.1	7.6	277.3	918	1.6	cloudy, Brown
1058	17.3	7.6	298.5	>1000	2.4	↓

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168
169
173

Did well dewater? Yes (No) Gallons actually evacuated: 2.4

Sampling Date: 4/28/09 Sampling Time: 1105 Depth to Water: 9.73

Sample I.D.: MW-4 Laboratory: Kiff CalScience Other TORRENT

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: See col

EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable): _____

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____

D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: <u>090428-101</u>	Client: <u>IES</u>
Sampler: <u>Jo</u>	Date: <u>4/28/09</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth (TD): <u>13.81</u>	Depth to Water (DTW): <u>9.00</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>9.96</u>	

Purge Method: Bailer Waterra Sampling Method: Bailer
Disposable Bailer Peristaltic Disposable Bailer
 Positive Air Displacement Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

$\frac{0.7 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = \frac{2.1 \text{ Gals.}}{\text{Specified Volumes}} = \text{Calculated Volume}$	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1145</u>	<u>18.3</u>	<u>7.27</u>	<u>963.4</u>	<u>261</u>	<u>0.7</u>	
<u>1146</u>	<u>18.2</u>	<u>7.30</u>	<u>964.5</u>	<u>841</u>	<u>1.4</u>	
<u>1147</u>	<u>18.4</u>	<u>7.31</u>	<u>968.7</u>	<u>>1000</u>	<u>2.1</u>	

Did well dewater? Yes No Gallons actually evacuated: 2.1

Sampling Date: 4/28/09 Sampling Time: 1150 Depth to Water: 9.91

Sample I.D.: MW-5 Laboratory: Kiff CalScience Other: Torvent

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: see coe

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 090428-601	Client: IES
Sampler: SO	Date: 4/28/09
Well I.D.: MW 6	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 14.39	Depth to Water (DTW): 8.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.48	

Purge Method: Bailer (Disposable Bailer) Positive Air Displacement Electric Submersible	Water Peristaltic Extraction Pump Other _____	Sampling Method: Bailer (Disposable Bailer) Extraction Port Dedicated Tubing Other: _____
--	--	---

0.9 (Gals.) X **3** = **2.7** Gals.
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1236	19.4	7.49	523	628	0.9	167
1237	19.3	7.50	562	887	1.8	162
1238	19.4	7.51	574	>1000	2.7	153

Did well dewater? Yes No Gallons actually evacuated: **27**

Sampling Date: **4/28/09** Sampling Time: **1245** Depth to Water: **9.41**

Sample I.D.: **MW-6** Laboratory: Kiff CalScience Other **Torment**

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: **See cut**

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 090428-201	Client: TES
Sampler: SD	Date: 4/28/09
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 1373	Depth to Water (DTW): 8.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.51	

Purge Method: Bailer <input checked="" type="radio"/> Disposable Bailer <input type="radio"/> Positive Air Displacement <input type="radio"/> Electric Submersible	Waterra <input type="radio"/> Peristaltic <input type="radio"/> Extraction Pump Other: _____	Sampling Method: Bailer <input checked="" type="radio"/> Disposable Bailer <input type="radio"/> Extraction Port <input type="radio"/> Dedicated Tubing Other: _____
---	---	--

0.8 (Gals.) X	3 Specified Volumes	= 2.4 Gals. Calculated Volume
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Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations	
1257	19.1	7.45	560.3	487	0.8	Brain	180
1258	19.2	7.44	556.7	623	1.6		187
1259	19.3	7.43	557.7	831	2.4		189

Did well dewater? Yes <input type="radio"/> No <input checked="" type="radio"/>	Gallons actually evacuated: 2.4		
Sampling Date: 4/28/09	Sampling Time: 13:05	Depth to Water: 9.26	
Sample I.D.: MW-7	Laboratory: Kiff CalScience	Other: Torment	
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5)	Other: Sex cor	
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):		
Analyzed for: TPH-G BTEX MTBE TPH-D	Oxygenates (5)	Other:	
D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: <u>090428-801</u>	Client: <u>IES</u>
Sampler: <u>SD</u>	Date: <u>4/28/09</u>
Well I.D.: <u>MW-8</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth (TD): <u>27.61</u>	Depth to Water (DTW): <u>10.68</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>13.91</u> <u>14.08</u>	

Purge Method: Bailer <u>Disposable Bailer</u> Positive Air Displacement Electric Submersible	Watterra Peristaltic Extraction Pump Other _____	Sampling Method: Bailer <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
---	---	--

$\underline{2.7} \text{ (Gals.)} \times \underline{3} = \underline{8.1} \text{ Gals.}$ <p style="font-size: small; margin: 0;">1 Case Volume Specified Volumes Calculated Volume</p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1216	20.8	7.92	543.4	342	2.7	
1218	20.7	7.87	531.6	581	5.4	
1220	21.1	7.82	580.0	627	8.1	

mV
ORF
218
207
209

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>8.1</u>
Sampling Date: <u>4/28/09</u> Sampling Time: <u>1225</u> Depth to Water: <u>12.35</u>	
Sample I.D.: <u>MW-8</u> Laboratory: Kiff CalScience Other <u>Torrent</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>see coc</u>	
EB I.D. (if applicable): @ _____ Time Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:	
D.O. (if req'd): Pre-purge: _____ mg/L Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: 090428-201	Client: IES
Sampler: 50	Date: 4/28/09
Well I.D.: GW-1	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 8.86 16.94	Depth to Water (DTW): 16.94 8.86
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.48	

Purge Method: Bailer	Watera	Sampling Method: Bailer
Disposable Bailer	Peristaltic	<u>Disposable Bailer</u>
Positive Air Displacement	Extraction Pump	Extraction Port
<u>Electric Submersible</u>	Other _____	Dedicated Tubing
Other: _____		

$5.2 \text{ (Gals.)} \times 3 = 15.6 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1337	15.1	6.58	1147	58	9.2	odor
1238	18.5	6.58	1062	73	10.4	↓
1339	15.8	6.58	1120	123	15.6	↓

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: 15.6	
Sampling Date: 4/28/09	Sampling Time: 1345	Depth to Water:
Sample I.D.: GW-1	Laboratory: Kiff CalScience	Other: <u>locust</u>
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5)	Other: <u>See cor.</u>	
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5)	Other:	
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: <u>096426-201</u>	Client: <u>IES</u>
Sampler: <u>SO</u>	Date: <u>4/28/09</u>
Well I.D.: <u>GW-2</u>	Well Diameter: 2 3 <u>(4)</u> 6 8 _____
Total Well Depth (TD): <u>16.93</u>	Depth to Water (DTW): <u>6.80</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>10.43</u>	

Purge Method: Bailer Disposable Bailer Positive Air Displacement <u>Electric Submersible</u>	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port Dedicated Tubing Other: _____
---	--	---

$\underline{5.2} \text{ (Gals.)} \times \underline{3} = \underline{15.6} \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1400	19.1	6.98	1205	81	5.2	
1401	18.7	6.91	1213	218	10.2	
1402						well dewatered @ 11 gals
1405	18.5	6.88	1210	297	—	Fast recharge DTW 11.17

Did well dewater? <u>Yes</u> No	Gallons actually evacuated: <u>11.0</u>	
Sampling Date: <u>4/28/09</u>	Sampling Time: <u>1405</u>	Depth to Water: <u>10.43</u>
Sample I.D.: <u>GW-2</u>	Laboratory: Kiff CalScience Other <u>Tarent</u>	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: <u>See cor.</u>		
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):	
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:		
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L	
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV	

WELL MONITORING DATA SHEET

Project #: 090428-001	Client: IES
Sampler: SD	Date: 4/28/09
Well I.D.: CW-3	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 17.91	Depth to Water (DTW): 9.16
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.91	

Purge Method: Bailer Watertra Sampling Method: Bailer Disposable Bailer Peristaltic Disposable Bailer Positive Air Displacement Extraction Pump Extraction Port Electric Submersible Other _____ Dedicated Tubing

Other: _____

$5.7 \text{ (Gals.)} \times 3 = 17.1 \text{ Gals.}$ 1 Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1315	17.4	7.16	781.3	126	5.7	cloudy
1316	17.8	7.00	756.3	218	11.4	
1317	18.0	7.01	776	428	17.1	

Did well dewater? Yes No Gallons actually evacuated: 17.1

Sampling Date: 4/28/09 Sampling Time: 1320 Depth to Water: 10.79

Sample I.D.: CW-3 Laboratory: Kiff CalScience Other: Tarrant

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: Sec Cor

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

APPENDIX B

Certified Laboratory Analytical Reports
First and Second Quarters 2009



February 02, 2009

Mr. Joseph Cotton
Impact Environmental Services
39120 Aragonat Way, Suite 223
Fremont, CA 94538

TEL: 510-703-5420

FAX 510-713-7790

RE: 1409 12th St

Order No.: 0901148

Dear Mr. Joseph Cotton:

Torrent Laboratory, Inc. received 11 samples on 1/26/2009 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.

Reported data is applicable for only the samples received as part of the order number referenced above.

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

Sincerely,


Laboratory Director

2/2/09
Date

Patti Sandrock
QA Officer 



TORRENT LABORATORY, INC.

483 Sinclair Frontage Road * Milpitas, CA * Phone: (408) 2635258 * Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report Prepared For: Mr. Joseph Cotton
Impact Environmental Services

Date Received: 1/26/2009
Date Reported: 2/2/2009

Summary Report

MW-8	VOLATILES by GC/MS				Lab ID:	0901148-008A
<u>Parameter</u>	<u>Preped</u>	<u>Analyzed</u>	<u>Result</u>	<u>RL</u>	<u>Unit</u>	
Benzene	1/31/2009	1/31/2009	2.10	0.500	µg/L	
Ethylbenzene	1/31/2009	1/31/2009	4.94	0.500	µg/L	
m,p-Xylene	1/31/2009	1/31/2009	7.92	1.00	µg/L	
o-Xylene	1/31/2009	1/31/2009	3.89	0.500	µg/L	
Toluene	1/31/2009	1/31/2009	1.47	0.500	µg/L	
Xylenes, Total	1/31/2009	1/31/2009	11.8	1.50	µg/L	

MW-8	Gasoline by GC/MS				Lab ID:	0901148-008A
<u>Parameter</u>	<u>Preped</u>	<u>Analyzed</u>	<u>Result</u>	<u>RL</u>	<u>Unit</u>	
TPH (Gasoline)	1/31/2009	1/31/2009	190	50	µg/L	

GW-1	VOLATILES by GC/MS				Lab ID:	0901148-009A
<u>Parameter</u>	<u>Preped</u>	<u>Analyzed</u>	<u>Result</u>	<u>RL</u>	<u>Unit</u>	
Benzene	1/31/2009	1/31/2009	1600	22.0	µg/L	
Ethylbenzene	1/31/2009	1/31/2009	315	4.40	µg/L	
m,p-Xylene	1/31/2009	1/31/2009	674	8.80	µg/L	
o-Xylene	1/31/2009	1/31/2009	241	4.40	µg/L	
Toluene	1/31/2009	1/31/2009	174	4.40	µg/L	
Xylenes, Total	1/31/2009	1/31/2009	915	13.2	µg/L	

GW-1	Gasoline by GC/MS				Lab ID:	0901148-009A
<u>Parameter</u>	<u>Preped</u>	<u>Analyzed</u>	<u>Result</u>	<u>RL</u>	<u>Unit</u>	
TPH (Gasoline)	1/31/2009	1/31/2009	9900	2200	µg/L	

GW-1	Diesel/Oil Water by 8015 w/Silica Gel				Lab ID:	0901148-009A
<u>Parameter</u>	<u>Preped</u>	<u>Analyzed</u>	<u>Result</u>	<u>RL</u>	<u>Unit</u>	
TPH (Diesel-SG)	1/30/2009	2/1/2009	0.767	0.100	mg/L	

GW-3	VOLATILES by GC/MS				Lab ID:	0901148-011A
<u>Parameter</u>	<u>Preped</u>	<u>Analyzed</u>	<u>Result</u>	<u>RL</u>	<u>Unit</u>	
Benzene	1/31/2009	1/31/2009	0.740	0.500	µg/L	



TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: Mr. Joseph Cotton
Impact Environmental Services

Date Received: 1/26/2009
Date Reported: 2/2/2009

Client Sample ID: MW-1
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 10:23:00 AM

Lab Sample ID: 0901148-001
Date Prepared: 1/30/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	1/31/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	1/31/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	1/31/2009	0	1	64.2-123	94.0	%REC	R18605
Benzene	SW8260B	1/30/2009	0.5	1	0.500	ND	µg/L	R18604
Toluene	SW8260B	1/30/2009	0.5	1	0.500	ND	µg/L	R18604
Ethylbenzene	SW8260B	1/30/2009	0.5	1	0.500	ND	µg/L	R18604
Xylenes, Total	SW8260B	1/30/2009	1.5	1	1.50	ND	µg/L	R18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/30/2009	0.5	1	0.500	ND	µg/L	R18604
Diisopropyl ether (DIPE)	SW8260B	1/30/2009	0.5	1	0.500	ND	µg/L	R18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/30/2009	0.5	1	0.500	ND	µg/L	R18604
tert-Amyl methyl ether (TAME)	SW8260B	1/30/2009	0.5	1	0.500	ND	µg/L	R18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/30/2009	10	1	10.0	ND	µg/L	R18604
Surr: Dibromofluoromethane	SW8260B	1/30/2009	0	1	61.2-131	111	%REC	R18604
Surr: 4-Bromofluorobenzene	SW8260B	1/30/2009	0	1	64.1-120	110	%REC	R18604
Surr: Toluene-d8	SW8260B	1/30/2009	0	1	75.1-127	111	%REC	R18604
TPH (Gasoline)	SW8260B(TPH)	1/30/2009	50	1	50	ND	µg/L	G18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/30/2009	0	1	58.4-133	68.1	%REC	G18604

Client Sample ID: MW-2
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 10:42:00 AM

Lab Sample ID: 0901148-002
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	1/31/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	1/31/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	1/31/2009	0	1	64.2-123	87.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	89.5	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	84.8	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	103	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	87.1	%REC	S18604

Client Sample ID: MW-3
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 11:07:00 AM

Lab Sample ID: 0901148-003
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	1/31/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	1/31/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	1/31/2009	0	1	64.2-123	83.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	98.2	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	94.5	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	88.0	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	85.3	%REC	S18604

Client Sample ID: MW-4
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 12:11:00 PM

Lab Sample ID: 0901148-004
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	1/31/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	1/31/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	1/31/2009	0	1	64.2-123	77.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	85.7	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	86.2	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	99.6	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	81.9	%REC	S18604

Client Sample ID: MW-5
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 12:37:00 PM

Lab Sample ID: 0901148-005
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	1/31/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	1/31/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	1/31/2009	0	1	64.2-123	79.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	101	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	113	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	97.9	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	87.9	%REC	S18604

Client Sample ID: MW-6
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 12:53:00 PM

Lab Sample ID: 0901148-006
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	2/1/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	2/1/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	2/1/2009	0	1	64.2-123	84.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	88.6	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	89.2	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	103	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	85.3	%REC	S18604

Client Sample ID: GW-1
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 2:39:00 PM

Lab Sample ID: 0901148-009
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	2/1/2009	0.1	1	0.100	0.767x	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	2/1/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	2/1/2009	0	1	64.2-123	81.0	%REC	R18605
Note:x-Sample chromatogram does not resemble typical diesel pattern (possibly fuel lighter than diesel). Hydrocarbons within the diesel range quantitated as diesel.								
Benzene	SW8260B	1/31/2009	0.5	44	22.0	1600	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	8.8	4.40	174	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	8.8	4.40	315	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	8.8	13.2	915	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	8.8	4.40	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	8.8	4.40	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	8.8	4.40	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	8.8	4.40	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	8.8	88.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	44	61.2-131	91.2	%REC	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	8.8	61.2-131	76.4	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	44	64.1-120	107	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	8.8	64.1-120	107	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	44	75.1-127	103	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	8.8	75.1-127	90.0	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	44	2200	9900	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	44	58.4-133	69.8	%REC	S18604

Note: Although TPH as Gasoline constituents are present, TPH value includes a significant portion of non-gasoline hydrocarbons within range of C5-C12 quantitated as Gasoline that biases the quantitation.

Client Sample ID: MW-7
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 1:09:00 PM

Lab Sample ID: 0901148-007
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	2/1/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	2/1/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	2/1/2009	0	1	64.2-123	90.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	112	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	90.5	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	88.2	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	88.8	%REC	S18604

Client Sample ID: MW-8
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 1:46:00 PM

Lab Sample ID: 0901148-008
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	2/1/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	2/1/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	2/1/2009	0	1	64.2-123	81.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	2.10	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	1.47	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	4.94	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	11.8	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	95.4	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	98.1	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	92.8	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	190x	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	87.1	%REC	S18604

Note: x- Sample chromatogram does not resemble gasoline standard pattern. TPH value due to a significant amount of non-target compounds within C5-C12 range quantified as Gasoline.

Client Sample ID: GW-2
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 3:03:00 PM

Lab Sample ID: 0901148-010
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	2/1/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	2/1/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	2/1/2009	0	1	64.2-123	83.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	101	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	96.6	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	94.5	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	88.8	%REC	S18604

Client Sample ID: GW-3
Sample Location: 1409 12th St
Sample Matrix: GROUNDWATER
Date/Time Sampled 1/24/2009 4:11:00 PM

Lab Sample ID: 0901148-011
Date Prepared: 1/30/2009-1/31/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel-SG)	SW8015B	2/1/2009	0.1	1	0.100	ND	mg/L	R18605
TPH (Motor Oil-SG)	SW8015B	2/1/2009	0.2	1	0.200	ND	mg/L	R18605
Surr: Pentacosane	SW8015B	2/1/2009	0	1	64.2-123	86.0	%REC	R18605
Benzene	SW8260B	1/31/2009	0.5	1	0.500	0.740	µg/L	P18604
Toluene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethylbenzene	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Xylenes, Total	SW8260B	1/31/2009	1.5	1	1.50	ND	µg/L	P18604
Methyl tert-butyl ether (MTBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Diisopropyl ether (DIPE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
Ethyl tert-butyl ether (ETBE)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
tert-Amyl methyl ether (TAME)	SW8260B	1/31/2009	0.5	1	0.500	ND	µg/L	P18604
t-Butyl alcohol (t-Butanol)	SW8260B	1/31/2009	10	1	10.0	ND	µg/L	P18604
Surr: Dibromofluoromethane	SW8260B	1/31/2009	0	1	61.2-131	98.6	%REC	P18604
Surr: 4-Bromofluorobenzene	SW8260B	1/31/2009	0	1	64.1-120	97.9	%REC	P18604
Surr: Toluene-d8	SW8260B	1/31/2009	0	1	75.1-127	92.6	%REC	P18604
TPH (Gasoline)	SW8260B(TPH)	1/31/2009	50	1	50	ND	µg/L	S18604
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	1/31/2009	0	1	58.4-133	86.2	%REC	S18604

Definitions, legends and Notes

Note	Description
ug/kg	Microgram per kilogram (ppb, part per billion).
ug/L	Microgram per liter (ppb, part per billion).
mg/kg	Milligram per kilogram (ppm, part per million).
mg/L	Milligram per liter (ppm, part per million).
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate.
MDL	Method detection limit.
MRL	Modified reporting limit. When sample is subject to dilution, reporting limit times dilution factor yields MRL.
MS/MSD	Matrix spike/matrix spike duplicate.
N/A	Not applicable.
ND	Not detected at or above detection limit.
NR	Not reported.
QC	Quality Control.
RL	Reporting limit.
% RPD	Percent relative difference.
a	pH was measured immediately upon the receipt of the sample, but it was still done outside the holding time.
sub	Analyzed by subcontracting laboratory, Lab Certificate #

CLIENT: Impact Environmental Services
Work Order: 0901148
Project: 1409 12th St

ANALYTICAL QC SUMMARY REPORT

BatchID: P18604

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
MB-P18604	MBLK	8260B_W	µg/L	1/31/2009	18604						
Client ID: ZZZZZ	Batch ID: P18604	TestNo: SW8260B		Analysis Date: 1/31/2009	SeqNo: 267865						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500									
Diisopropyl ether (DIPE)	ND	0.500									
Ethyl tert-butyl ether (ETBE)	ND	0.500									
Ethylbenzene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
t-Butyl alcohol (t-Butanol)	ND	5.00									
tert-Amyl methyl ether (TAME)	ND	0.500									
Toluene	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: Dibromofluoromethane	9.780	0	11.36	0	86.1	61.2	131				
Surr: 4-Bromofluorobenzene	11.37	0	11.36	0	100	64.1	120				
Surr: Toluene-d8	10.83	0	11.36	0	95.3	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCS-P18604	LCS	8260B_W	µg/L	1/31/2009	18604						
Client ID: ZZZZZ	Batch ID: P18604	TestNo: SW8260B		Analysis Date: 1/31/2009	SeqNo: 267866						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.67	0.500	17.04	0	110	66.9	140				
Toluene	19.85	0.500	17.04	0	116	76.6	123				
Surr: Dibromofluoromethane	10.52	0	11.36	0	92.6	61.2	131				
Surr: 4-Bromofluorobenzene	13.67	0	11.36	0	120	64.1	120				
Surr: Toluene-d8	11.36	0	11.36	0	100	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCSD-P18604	LCSD	8260B_W	µg/L	1/31/2009	18604						
Client ID: ZZZZZ	Batch ID: P18604	TestNo: SW8260B		Analysis Date: 1/31/2009	SeqNo: 267867						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.90	0.500	17.04	0	105	66.9	140	18.67	4.21	20	
Toluene	19.57	0.500	17.04	0	115	76.6	123	19.85	1.42	20	
Surr: Dibromofluoromethane	9.150	0	11.36	0	80.5	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	11.56	0	11.36	0	102	64.1	120	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0901148
Project: 1409 12th St

ANALYTICAL QC SUMMARY REPORT

BatchID: P18604

Sample ID LCSD-P18604	SampType: LCSD	TestCode: 8260B_W	Units: µg/L	Prep Date: 1/31/2009	RunNo: 18604						
Client ID: ZZZZZ	Batch ID: P18604	TestNo: SW8260B	Analysis Date: 1/31/2009	SeqNo: 267867							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	11.28	0	11.36	0	99.3	75.1	127	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0901148
Project: 1409 12th St

ANALYTICAL QC SUMMARY REPORT

BatchID: R18604

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
MB-R18604	MBLK	8260B_W	µg/L	1/30/2009	18604						
Client ID: ZZZZZ	Batch ID: R18604	TestNo: SW8260B		Analysis Date: 1/30/2009	SeqNo: 267822						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500									
Diisopropyl ether (DIPE)	ND	0.500									
Ethyl tert-butyl ether (ETBE)	ND	0.500									
Ethylbenzene	ND	0.500									
Methyl tert-butyl ether (MTBE)	ND	0.500									
t-Butyl alcohol (t-Butanol)	ND	5.00									
tert-Amyl methyl ether (TAME)	ND	0.500									
Toluene	ND	0.500									
Xylenes, Total	ND	1.50									
Surr: Dibromofluoromethane	12.56	0	11.36	0	111	61.2	131				
Surr: 4-Bromofluorobenzene	12.63	0	11.36	0	111	64.1	120				
Surr: Toluene-d8	12.26	0	11.36	0	108	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCS-R18604	LCS	8260B_W	µg/L	1/30/2009	18604						
Client ID: ZZZZZ	Batch ID: R18604	TestNo: SW8260B		Analysis Date: 1/30/2009	SeqNo: 267822						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.09	0.500	17.04	0	106	66.9	140				
Toluene	18.54	0.500	17.04	0	109	76.6	123				
Surr: Dibromofluoromethane	13.13	0	11.36	0	116	61.2	131				
Surr: 4-Bromofluorobenzene	13.59	0	11.36	0	120	64.1	120				
Surr: Toluene-d8	12.88	0	11.36	0	113	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCSD-R18604	LCSD	8260B_W	µg/L	1/31/2009	18604						
Client ID: ZZZZZ	Batch ID: R18604	TestNo: SW8260B		Analysis Date: 1/31/2009	SeqNo: 267822						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.32	0.500	17.04	0	102	66.9	140	18.09	4.35	20	
Toluene	17.38	0.500	17.04	0	102	76.6	123	18.54	6.46	20	
Surr: Dibromofluoromethane	11.00	0	11.36	0	96.8	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	12.06	0	11.36	0	106	64.1	120	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0901148
Project: 1409 12th St

ANALYTICAL QC SUMMARY REPORT

BatchID: G18604

Sample ID MB-G18604	SampType: MBLK	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 1/30/2009	RunNo: 18604						
Client ID: ZZZZZ	Batch ID: G18604	TestNo: SW8260B(TP)	Analysis Date: 1/30/2009	SeqNo: 267842							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	50									
Surr: 4-Bromofllurobenzene	12.20	0	11.36	0	107	58.4	133				

Sample ID LCS-G18604	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 1/30/2009	RunNo: 18604						
Client ID: ZZZZZ	Batch ID: G18604	TestNo: SW8260B(TP)	Analysis Date: 1/30/2009	SeqNo: 267843							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	239.3	50	227	0	105	52.4	127				
Surr: 4-Bromofllurobenzene	12.30	0	11.36	0	108	58.4	133				

Sample ID LCSD-G18604	SampType: LCSD	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 1/31/2009	RunNo: 18604						
Client ID: ZZZZZ	Batch ID: G18604	TestNo: SW8260B(TP)	Analysis Date: 1/31/2009	SeqNo: 267844							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	215.5	50	227	0	94.9	52.4	127	239.3	10.5	20	
Surr: 4-Bromofllurobenzene	10.00	0	11.36	0	88.0	58.4	133	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0901148
Project: 1409 12th St

ANALYTICAL QC SUMMARY REPORT

BatchID: R18604

Sample ID	LCSD-R18604	SampType:	LCSD	TestCode:	8260B_W	Units:	µg/L	Prep Date:	1/31/2009	RunNo:	18604
Client ID:	ZZZZZ	Batch ID:	R18604	TestNo:	SW8260B	Analysis Date:	1/31/2009	SeqNo:	267824		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	12.99	0	11.36	0	114	75.1	127	0	0	0	

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0901148
Project: 1409 12th St

ANALYTICAL QC SUMMARY REPORT

BatchID: R18605

Sample ID WDSG090130A-MB	SampType: MBLK	TestCode: TPHDOSG_	Units: mg/L	Prep Date: 1/30/2009	RunNo: 18605						
Client ID: ZZZZZ	Batch ID: R18605	TestNo: SW8015B	Analysis Date: 1/31/2009	SeqNo: 267771							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel-SG)	ND	0.100									
TPH (Motor Oil-SG)	ND	0.200									
Surr: Pentacosane	0.09700	0	0.1	0	97.0	64.2	123				

Sample ID WDSG090130A-LCS	SampType: LCS	TestCode: TPHDOSG_	Units: mg/L	Prep Date: 1/30/2009	RunNo: 18605						
Client ID: ZZZZZ	Batch ID: R18605	TestNo: SW8015B	Analysis Date: 1/31/2009	SeqNo: 267772							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel-SG)	0.5360	0.100	1	0	53.6	34.5	95.6				
Surr: Pentacosane	0.08600	0	0.1	0	86.0	64.2	123				

Sample ID WDSG090130A-LCS	SampType: LCSD	TestCode: TPHDOSG_	Units: mg/L	Prep Date: 1/30/2009	RunNo: 18605						
Client ID: ZZZZZ	Batch ID: R18605	TestNo: SW8015B	Analysis Date: 1/31/2009	SeqNo: 267773							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Diesel-SG)	0.5320	0.100	1	0	53.2	34.5	95.6	0.536	0.749	30	
Surr: Pentacosane	0.08400	0	0.1	0	84.0	64.2	123	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0901148
Project: 1409 12th St

ANALYTICAL QC SUMMARY REPORT

BatchID: S18604

Sample ID MBG-S18604	SampType: MBLK	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 1/31/2009	RunNo: 18604						
Client ID: ZZZZZ	Batch ID: S18604	TestNo: SW8260B(TP)		Analysis Date: 1/31/2009	SeqNo: 267891						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	ND	50									
Surr: 4-Bromoflurobenzene	8.900	0	11.36	0	78.3	58.4	133				

Sample ID LCSG-S18604	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 1/31/2009	RunNo: 18604						
Client ID: ZZZZZ	Batch ID: S18604	TestNo: SW8260B(TP)		Analysis Date: 1/31/2009	SeqNo: 267892						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	231.1	50	227	0	102	52.4	127				
Surr: 4-Bromoflurobenzene	11.10	0	11.36	0	97.7	58.4	133				

Sample ID LCSDG-S18604	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 1/31/2009	RunNo: 18604						
Client ID: ZZZZZ	Batch ID: S18604	TestNo: SW8260B(TP)		Analysis Date: 1/31/2009	SeqNo: 267893						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	217.3	50	227	0	95.7	52.4	127				
Surr: 4-Bromoflurobenzene	9.200	0	11.36	0	81.0	58.4	133				

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits



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

0901148

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY.

Company Name: **IMPACT ENVIRONMENTAL** Location of Sampling: **1409 12th St., Oakland, CA**
 Address: **39120 ARGONAUT WAY, #223** Purpose: **QUARTERLY GROUNDWATER MONITORING**
 City: **FREMONT** State: **CA** Zip Code: **94538** Special Instructions / Comments:
 Telephone: **(510) 7035420** FAX: **(510) 791-0271**
 REPORT TO: **J. Cotton** SAMPLER: **J. Cotton** 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 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	MTBE	Oxygenates	THP Diesel	Si-Gel	Motor Oil	Pesticide - 8081	PCB - 8082	Metals CAM - 17	LUFT 5	7 Metals	8270 Full List	PAHs Only	REMARKS
001A	MW-1	1-24-09 10:23	WATER	4	8 VOCs 1 IL AMES			X	X			X	X									
002A	MW-2	10:42		5	3 VOCs 2 IL AMES			X	X			X	X									
003A	MW-3	11:07						X	X			X	X									
004A	MW-4	12:11						X	X			X	X									
005A	MW-5	12:37						X	X			X	X									
006A	MW-6	12:53						X	X			X	X									
007A	MW-7	13:09						X	X			X	X									
008A	MW-8	13:46						X	X			X	X									
009A	GW-1	14:39						X	X			X	X									
010A	GW-2	15:03						X	X			X	X									

Relinquished By: **[Signature]** Print: **JOSEPH COTTON** Date: **1-26-09** Time: **11:01 AM**
 Received By: **[Signature]** Print: **NAVIN** Date: **1-26-09** Time: **11:01**

Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment: **Drop off** Sample seals intact? Yes NO N/A
 by the laboratory 30 days from date of receipt unless other arrangements are made. Page **1** of **2**
 Date: _____ Log In Reviewed By: _____ Date: _____

TORRENT LAB



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

0901148

NOTE: SHADED AREAS ARE FOR TORRENT LAB USE ONLY.

Company Name: **IMPACT ENVIRONMENTAL** Location of Sampling: **1409-1417 12th St, Oakland, CA**
 Address: **39120 ARGONAUT WAY, #223** Purpose: **QUARTERLY GROUNDWATER SAMPLING**
 City: **FREMONT** State: **CA** Zip Code: **94538** Special Instructions / Comments:
 Telephone: **(510) 7035420** FAX: **510 791-0270**
 REPORT TO: **J. Cotton** SAMPLER: **J. Cotton** 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 MTBE
 Oxygenates THP Diesel Si-Gel
 Motor Oil Pesticide - 8081
 PCB - 8082
 Metals CAM - 17
 LUFT 5 7 Metals
 8270 Full List PAHs Only



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		
011A	GW-3	1-24-09 16:11	WATER	5	3 UOA 2 IL AMBZ	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" 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"/>			

1	Relinquished By: <i>[Signature]</i> Print: JOSEPH COTTON	Date: 1-26-09	Time: 11:01 AM	Received By: <i>[Signature]</i> Print: NAVIN	Date: 1-26-09	Time: 11:01 AM
2	Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Were Samples Received in Good Condition? Yes NO Samples on Ice? Yes NO Method of Shipment Drop-off 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: _____

TORRENT LAB



May 08, 2009

Mr. Joseph Cotton
Impact Environmental Services
39120 Aragonat Way, Suite 223
Fremont, CA 94538
TEL: 510-703-5420
FAX 510-713-7790

RE:

Order No.: 0904178

Dear Mr. Joseph Cotton:

Torrent Laboratory, Inc. received 11 samples on 4/29/2009 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.

Reported data is applicable for only the samples received as part of the order number referenced above.

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

Sincerely,


Laboratory Director


Date

Patti Sandrock
QA Officer 



TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: Mr. Joseph Cotton
Impact Environmental Services

Date Received: 4/29/2009
Date Reported: 5/8/2009

Client Sample ID: MW-1
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 10:20:00 AM

Lab Sample ID: 0904178-001
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/6/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/6/2009	0.2	1	0.20	ND	mg/L	R19454
Surr: Pentacosane	SW8015B	5/6/2009	0	1	57.9-125	99.0	%REC	R19454
Benzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Toluene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	P19443
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	ND	µg/L	P19443
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	112	%REC	P19443
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	86.9	%REC	P19443
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	93.0	%REC	P19443
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	ND	µg/L	G19443
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	92.2	%REC	G19443

Client Sample ID: MW-2
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 11:25:00 AM

Lab Sample ID: 0904178-002
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/4/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/4/2009	0.2	1	0.20	ND	mg/L	R19454
Surr: Pentacosane	SW8015B	5/4/2009	0	1	57.9-125	103	%REC	R19454
Benzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Toluene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	P19443
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	ND	µg/L	P19443
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	123	%REC	P19443
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	99.6	%REC	P19443
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	93.0	%REC	P19443
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	ND	µg/L	G19443
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	90.5	%REC	G19443

Client Sample ID: MW-3
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 10:45:00 AM

Lab Sample ID: 0904178-003
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	ND	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	92.0	%REC	R19454
Benzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Toluene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	P19443
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	ND	µg/L	P19443
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	114	%REC	P19443
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	90.6	%REC	P19443
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	91.9	%REC	P19443
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	ND	µg/L	G19443
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	92.2	%REC	G19443

Client Sample ID: MW-4
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 11:05:00 AM

Lab Sample ID: 0904178-004
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	ND	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	95.0	%REC	R19454
Benzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Toluene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	P19443
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	ND	µg/L	P19443
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	91.0	%REC	P19443
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	90.4	%REC	P19443
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	95.2	%REC	P19443
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	ND	µg/L	G19443
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	92.2	%REC	G19443

Client Sample ID: MW-5
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 11:50:00 AM

Lab Sample ID: 0904178-005
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	ND	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	97.0	%REC	R19454
Benzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Toluene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	P19443
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	ND	µg/L	P19443
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	104	%REC	P19443
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	103	%REC	P19443
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	90.8	%REC	P19443
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	ND	µg/L	G19443
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	0	%REC	G19443

Client Sample ID: MW-6
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 12:45:00 PM

Lab Sample ID: 0904178-006
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	ND	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	98.0	%REC	R19454
Benzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Toluene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	P19443
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	P19443
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	ND	µg/L	P19443
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	91.9	%REC	P19443
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	83.7	%REC	P19443
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	91.8	%REC	P19443
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	ND	µg/L	G19443
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	89.7	%REC	G19443

Client Sample ID: MW-7
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 1:05:00 PM

Lab Sample ID: 0904178-007
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	0.293x	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	92.0	%REC	R19454
Note:x-Sample chromatogram does not resemble typical motor oil pattern. Hydrocarbons within the motor oil range quantitated as motor oil.								
Benzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Toluene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	R19439
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	ND	µg/L	R19439
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	124	%REC	R19439
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	106	%REC	R19439
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	85.8	%REC	R19439
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	ND	µg/L	G19439
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	89.7	%REC	G19439

Client Sample ID: MW-8
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 12:25:00 PM

Lab Sample ID: 0904178-008
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	0.156x	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	0.909x	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	94.0	%REC	R19454
Note:x-Sample chromatogram does not resemble typical diesel or motor oil pattern. Hydrocarbons within the diesel range quantitated as diesel; hydrocarbons within the motor oil range quantitated as motor oil.								
Benzene	SW8260B	5/1/2009	0.5	1	0.50	1.4	µg/L	R19439
Toluene	SW8260B	5/1/2009	0.5	1	0.50	0.81	µg/L	R19439
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	2.4	µg/L	R19439
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	R19439
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	6.1	µg/L	R19439
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	102	%REC	R19439
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	98.5	%REC	R19439
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	87.4	%REC	R19439
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	110	µg/L	G19439
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	87.1	%REC	G19439

Note: Although TPH gasoline compounds are present, the reported TPH value is due to heavy end hydrocarbons within the C5-C12 quantitation range for TPH as Gasoline (possibly aged gasoline).

Client Sample ID: GW-1
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 1:45:00 PM

Lab Sample ID: 0904178-009
Date Prepared: 5/4/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	4	0.40	3.01x	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	4	0.80	ND	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	4	57.9-125	84.0	%REC	R19454
Note:x-Sample chromatogram does not resemble typical diesel pattern (possibly fuel lighter than diesel). Hydrocarbons within the diesel range quantitated as diesel.								
Benzene	SW8260B	5/7/2009	0.5	44	22	3000	µg/L	R19478
Toluene	SW8260B	5/7/2009	0.5	44	22	580	µg/L	R19478
Ethylbenzene	SW8260B	5/7/2009	0.5	44	22	830	µg/L	R19478
Methyl tert-butyl ether (MTBE)	SW8260B	5/7/2009	0.5	44	22	ND	µg/L	R19478
Diisopropyl ether (DIPE)	SW8260B	5/7/2009	0.5	44	22	ND	µg/L	R19478
Ethyl tert-butyl ether (ETBE)	SW8260B	5/7/2009	0.5	44	22	ND	µg/L	R19478
tert-Amyl methyl ether (TAME)	SW8260B	5/7/2009	0.5	44	22	ND	µg/L	R19478
t-Butyl alcohol (t-Butanol)	SW8260B	5/7/2009	10	44	440	ND	µg/L	R19478
Xylenes, Total	SW8260B	5/7/2009	1.5	44	66	2100	µg/L	R19478
Surr: Dibromofluoromethane	SW8260B	5/7/2009	0	44	61.2-131	85.3	%REC	R19478
Surr: 4-Bromofluorobenzene	SW8260B	5/7/2009	0	44	64.1-120	76.9	%REC	R19478
Surr: Toluene-d8	SW8260B	5/7/2009	0	44	75.1-127	93.8	%REC	R19478
TPH (Gasoline)	SW8260B(TPH)	5/7/2009	50	44	2200	22000	µg/L	G19478
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/7/2009	0	44	58.4-133	88.8	%REC	G19478

Note: Although TPH gasoline compounds are present, the reported TPH value is due to significant concentrations of heavy end hydrocarbons within the C5-C12 quantitation range for TPH as Gasoline (possibly aged gasoline).

Client Sample ID: GW-2
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 2:05:00 PM

Lab Sample ID: 0904178-010
Date Prepared: 5/4/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	0.205x	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	98.0	%REC	R19454
Note:x-Sample chromatogram does not resemble typical motor oil pattern. Hydrocarbons within the motor oil range quantitated as motor oil.								
Benzene	SW8260B	5/7/2009	0.5	1	0.50	1.7	µg/L	R19478
Toluene	SW8260B	5/7/2009	0.5	1	0.50	1.1	µg/L	R19478
Ethylbenzene	SW8260B	5/7/2009	0.5	1	0.50	1.2	µg/L	R19478
Methyl tert-butyl ether (MTBE)	SW8260B	5/7/2009	0.5	1	0.50	ND	µg/L	R19478
Diisopropyl ether (DIPE)	SW8260B	5/7/2009	0.5	1	0.50	ND	µg/L	R19478
Ethyl tert-butyl ether (ETBE)	SW8260B	5/7/2009	0.5	1	0.50	ND	µg/L	R19478
tert-Amyl methyl ether (TAME)	SW8260B	5/7/2009	0.5	1	0.50	ND	µg/L	R19478
t-Butyl alcohol (t-Butanol)	SW8260B	5/7/2009	10	1	10	ND	µg/L	R19478
Xylenes, Total	SW8260B	5/7/2009	1.5	1	1.5	4.5	µg/L	R19478
Surr: Dibromofluoromethane	SW8260B	5/7/2009	0	1	61.2-131	96.3	%REC	R19478
Surr: 4-Bromofluorobenzene	SW8260B	5/7/2009	0	1	64.1-120	89.4	%REC	R19478
Surr: Toluene-d8	SW8260B	5/7/2009	0	1	75.1-127	97.5	%REC	R19478
TPH (Gasoline)	SW8260B(TPH)	5/7/2009	50	1	50	82	µg/L	G19478
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/7/2009	0	1	58.4-133	107	%REC	G19478

Client Sample ID: GW-3
Sample Location: 1409-1417 12th st Oakland
Sample Matrix: WATER
Date/Time Sampled 4/28/2009 1:20:00 PM

Lab Sample ID: 0904178-011
Date Prepared: 5/1/2009

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	5/5/2009	0.1	1	0.10	ND	mg/L	R19454
TPH (Motor Oil)	SW8015B	5/5/2009	0.2	1	0.20	0.206x	mg/L	R19454
Surr: Pentacosane	SW8015B	5/5/2009	0	1	57.9-125	101	%REC	R19454
Note:x-Sample chromatogram does not resemble typical motor oil pattern. Hydrocarbons within the motor oil range quantitated as motor oil.								
Benzene	SW8260B	5/1/2009	0.5	1	0.50	63	µg/L	R19439
Toluene	SW8260B	5/1/2009	0.5	1	0.50	0.63	µg/L	R19439
Ethylbenzene	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Methyl tert-butyl ether (MTBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Diisopropyl ether (DIPE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
Ethyl tert-butyl ether (ETBE)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
tert-Amyl methyl ether (TAME)	SW8260B	5/1/2009	0.5	1	0.50	ND	µg/L	R19439
t-Butyl alcohol (t-Butanol)	SW8260B	5/1/2009	10	1	10	ND	µg/L	R19439
Xylenes, Total	SW8260B	5/1/2009	1.5	1	1.5	2.9	µg/L	R19439
Surr: Dibromofluoromethane	SW8260B	5/1/2009	0	1	61.2-131	115	%REC	R19439
Surr: 4-Bromofluorobenzene	SW8260B	5/1/2009	0	1	64.1-120	91.4	%REC	R19439
Surr: Toluene-d8	SW8260B	5/1/2009	0	1	75.1-127	84.8	%REC	R19439
TPH (Gasoline)	SW8260B(TPH)	5/1/2009	50	1	50	500x	µg/L	G19439
Surr: 4-Bromofluorobenzene	SW8260B(TPH)	5/1/2009	0	1	58.4-133	94.0	%REC	G19439

Note: x- Sample chromatogram does not resemble gasoline standard pattern. Although some of TPH as Gasoline constituents are present, TPH value includes a significant portion of light hydrocarbons within range of C5-C12 quantified as Gasoline that biases the quantitation.

Definitions, legends and Notes

Note	Description
ug/kg	Microgram per kilogram (ppb, part per billion).
ug/L	Microgram per liter (ppb, part per billion).
mg/kg	Milligram per kilogram (ppm, part per million).
mg/L	Milligram per liter (ppm, part per million).
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate.
MDL	Method detection limit.
MRL	Modified reporting limit. When sample is subject to dilution, reporting limit times dilution factor yields MRL.
MS/MSD	Matrix spike/matrix spike duplicate.
N/A	Not applicable.
ND	Not detected at or above detection limit.
NR	Not reported.
QC	Quality Control.
RL	Reporting limit.
% RPD	Percent relative difference.
a	pH was measured immediately upon the receipt of the sample, but it was still done outside the holding time.
sub	Analyzed by subcontracting laboratory, Lab Certificate #

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: G19439

Sample ID MBG-G19439	SampType: MBLK	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 5/1/2009	RunNo: 19439						
Client ID: ZZZZZ	Batch ID: G19439	TestNo: SW8260B(TP)	Analysis Date: 5/1/2009	SeqNo: 280919							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	ND	50									
Surr: 4-Bromofllurobenzene	10.50	0	11.36	0	92.4	58.4	133				

Sample ID LCSG-G19439	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 5/1/2009	RunNo: 19439						
Client ID: ZZZZZ	Batch ID: G19439	TestNo: SW8260B(TP)	Analysis Date: 5/1/2009	SeqNo: 280920							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	234.6	50	227	0	103	52.4	127				
Surr: 4-Bromofllurobenzene	10.90	0	11.36	0	96.0	58.4	133				

Sample ID LCSDG-G19439	SampType: LCSD	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 5/1/2009	RunNo: 19439						
Client ID: ZZZZZ	Batch ID: G19439	TestNo: SW8260B(TP)	Analysis Date: 5/1/2009	SeqNo: 280921							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPH (Gasoline)	228.2	50	227	0	101	52.4	127	234.6	2.77	20	
Surr: 4-Bromofllurobenzene	10.90	0	11.36	0	96.0	58.4	133	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: G19443

Sample ID MB-G19443	SampType: MBLK	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 4/30/2009	RunNo: 19443						
Client ID: ZZZZZ	Batch ID: G19443	TestNo: SW8260B(TP)	Analysis Date: 4/30/2009	SeqNo: 280983							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	ND	50									
Surr: 4-Bromofluorobenzene	8.400	0	11.36	0	73.9	58.4	133				

Sample ID LCS-G19443	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 4/29/2009	RunNo: 19443						
Client ID: ZZZZZ	Batch ID: G19443	TestNo: SW8260B(TP)	Analysis Date: 4/29/2009	SeqNo: 280984							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	244.8	50	227	0	108	52.4	127				
Surr: 4-Bromofluorobenzene	11.40	0	11.36	0	100	58.4	133				

Sample ID LCSD-G19443	SampType: LCSD	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 4/30/2009	RunNo: 19443						
Client ID: ZZZZZ	Batch ID: G19443	TestNo: SW8260B(TP)	Analysis Date: 4/30/2009	SeqNo: 280985							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	222.5	50	227	0	98.0	52.4	127	244.8	9.54	20	
Surr: 4-Bromofluorobenzene	11.40	0	11.36	0	100	58.4	133	0	0	0	

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: G19478

Sample ID MBG-G19478	SampType: MBLK	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 5/7/2009	RunNo: 19478						
Client ID: ZZZZZ	Batch ID: G19478	TestNo: SW8260B(TP)	Analysis Date: 5/7/2009	SeqNo: 281496							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	ND	50									
Surr: 4-Bromoflurobenzene	10.40	0	11.36	0	91.5	58.4	133				

Sample ID LCSDG-G19478	SampType: LCS	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 5/7/2009	RunNo: 19478						
Client ID: ZZZZZ	Batch ID: G19478	TestNo: SW8260B(TP)	Analysis Date: 5/7/2009	SeqNo: 281497							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	235.0	50	227	0	104	52.4	127				
Surr: 4-Bromoflurobenzene	11.60	0	11.36	0	102	58.4	133				

Sample ID LCSDG-G19478	SampType: LCSD	TestCode: TPH_GAS_W	Units: µg/L	Prep Date: 5/7/2009	RunNo: 19478						
Client ID: ZZZZZ	Batch ID: G19478	TestNo: SW8260B(TP)	Analysis Date: 5/7/2009	SeqNo: 281498							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Gasoline)	252.2	50	227	0	111	52.4	127	235	7.06	20	
Surr: 4-Bromoflurobenzene	12.10	0	11.36	0	107	58.4	133	0	0	0	

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
 Work Order: 0904178
 Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: P19443

Sample ID MB-P19443	SampType: MBLK	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 4/30/2009	RunNo: 19443						
Client ID: ZZZZZ	Batch ID: P19443	TestNo: SW8260B	Analysis Date: 4/30/2009	SeqNo: 281433							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
tert-Amyl methyl ether (TAME)	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	10									
Xylenes, Total	ND	1.5									
Surr: Dibromofluoromethane	9.360	0	11.36	0	82.4	61.2	131				
Surr: 4-Bromofluorobenzene	9.570	0	11.36	0	84.2	64.1	120				
Surr: Toluene-d8	9.960	0	11.36	0	87.7	75.1	127				

Sample ID LCS-P19443	SampType: LCS	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 4/30/2009	RunNo: 19443						
Client ID: ZZZZZ	Batch ID: P19443	TestNo: SW8260B	Analysis Date: 4/30/2009	SeqNo: 281436							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	14.79	0.50	17.04	0	86.8	66.9	140				
Toluene	14.02	0.50	17.04	0	82.3	76.6	123				
Surr: Dibromofluoromethane	13.65	0	11.36	0	120	61.2	131				
Surr: 4-Bromofluorobenzene	10.88	0	11.36	0	95.8	64.1	120				
Surr: Toluene-d8	12.48	0	11.36	0	110	75.1	127				

Sample ID LCSD-P19443	SampType: LCSD	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 4/30/2009	RunNo: 19443						
Client ID: ZZZZZ	Batch ID: P19443	TestNo: SW8260B	Analysis Date: 4/30/2009	SeqNo: 281435							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	14.97	0.50	17.04	0	87.9	66.9	140	14.79	1.21	20	
Toluene	15.04	0.50	17.04	0	88.3	76.6	123	14.02	7.02	20	
Surr: Dibromofluoromethane	13.79	0	11.36	0	121	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	10.87	0	11.36	0	95.7	64.1	120	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: P19443

Sample ID LCSD-P19443	SampType: LCSD	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 4/30/2009	RunNo: 19443						
Client ID: ZZZZZ	Batch ID: P19443	TestNo: SW8260B		Analysis Date: 4/30/2009	SeqNo: 281435						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	12.75	0	11.36	0	112	75.1	127	0	0	0	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R19439

Sample ID MB-R19439	SampType: MBLK	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 5/1/2009	RunNo: 19439						
Client ID: ZZZZZ	Batch ID: R19439	TestNo: SW8260B	Analysis Date: 5/1/2009	SeqNo: 280926							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
tert-Amyl methyl ether (TAME)	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	10									
Xylenes, Total	ND	1.5									
Surr: Dibromofluoromethane	12.49	0	11.36	0	110	61.2	131				
Surr: 4-Bromofluorobenzene	11.35	0	11.36	0	99.9	64.1	120				
Surr: Toluene-d8	9.010	0	11.36	0	79.3	75.1	127				

Sample ID LCS-R19439	SampType: LCS	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 5/1/2009	RunNo: 19439						
Client ID: ZZZZZ	Batch ID: R19439	TestNo: SW8260B	Analysis Date: 5/1/2009	SeqNo: 280927							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	15.65	0.50	17.04	0	91.8	66.9	140				
Toluene	14.85	0.50	17.04	0	87.1	76.6	123				
Surr: Dibromofluoromethane	12.26	0	11.36	0	108	61.2	131				
Surr: 4-Bromofluorobenzene	11.84	0	11.36	0	104	64.1	120				
Surr: Toluene-d8	10.00	0	11.36	0	88.0	75.1	127				

Sample ID LCSD-R19439	SampType: LCSD	TestCode: 8260B_W_PE	Units: µg/L	Prep Date: 5/1/2009	RunNo: 19439						
Client ID: ZZZZZ	Batch ID: R19439	TestNo: SW8260B	Analysis Date: 5/1/2009	SeqNo: 280928							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.41	0.50	17.04	0	102	66.9	140	15.65	10.6	20	
Toluene	15.43	0.50	17.04	0	90.6	76.6	123	14.85	3.83	20	
Surr: Dibromofluoromethane	13.23	0	11.36	0	116	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	10.80	0	11.36	0	95.1	64.1	120	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R19439

Sample ID	LCSD-R19439	SampType:	LCSD	TestCode:	8260B_W_PE	Units:	µg/L	Prep Date:	5/1/2009	RunNo:	19439			
Client ID:	ZZZZZ	Batch ID:	R19439	TestNo:	SW8260B			Analysis Date:	5/1/2009	SeqNo:	280928			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8		9.680		0	11.36	0		85.2	75.1	127	0	0	0	

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R19454

Sample ID WD090504A-MB	SampType: MBLK	TestCode: TPHDO_W	Units: mg/L	Prep Date: 5/4/2009	RunNo: 19454						
Client ID: ZZZZZ	Batch ID: R19454	TestNo: SW8015B		Analysis Date: 5/4/2009	SeqNo: 281102						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Diesel)	ND	0.10								
TPH (Motor Oil)	ND	0.20								
Surr: Pentacosane	0.09100	0	0.1	0	91.0	57.9	125			

Sample ID WD090505A-MB	SampType: MBLK	TestCode: TPHDO_W	Units: mg/L	Prep Date: 5/5/2009	RunNo: 19454						
Client ID: ZZZZZ	Batch ID: R19454	TestNo: SW8015B		Analysis Date: 5/6/2009	SeqNo: 281302						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Diesel)	ND	0.10								
TPH (Motor Oil)	ND	0.20								
Surr: Pentacosane	0.1180	0	0.1	0	118	57.9	125			

Sample ID WD090504A-LCS	SampType: LCS	TestCode: TPHDO_W	Units: mg/L	Prep Date: 5/4/2009	RunNo: 19454						
Client ID: ZZZZZ	Batch ID: R19454	TestNo: SW8015B		Analysis Date: 5/4/2009	SeqNo: 281103						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Diesel)	0.7850	0.10	1	0	78.5	50.3	125			
Surr: Pentacosane	0.09200	0	0.1	0	92.0	57.9	125			

Sample ID WD090504A-LCSD	SampType: LCSD	TestCode: TPHDO_W	Units: mg/L	Prep Date: 5/4/2009	RunNo: 19454						
Client ID: ZZZZZ	Batch ID: R19454	TestNo: SW8015B		Analysis Date: 5/4/2009	SeqNo: 281104						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

TPH (Diesel)	0.6870	0.10	1	0	68.7	50.3	125	0.785	13.3	30
Surr: Pentacosane	0.08700	0	0.1	0	87.0	57.9	125	0	0	0

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
 Work Order: 0904178
 Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R19478

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
MB-R19478	MBLK	8260B_W-Pet	µg/L	5/7/2009	19478						
Client ID: ZZZZZ	Batch ID: R19478	TestNo: SW8260B		Analysis Date: 5/7/2009	SeqNo: 281491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Diisopropyl ether (DIPE)	ND	0.50									
Ethyl tert-butyl ether (ETBE)	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
t-Butyl alcohol (t-Butanol)	ND	10									
tert-Amyl methyl ether (TAME)	ND	0.50									
Toluene	ND	0.50									
Xylenes, Total	ND	1.5									
Surr: Dibromofluoromethane	10.97	0	11.36	0	96.6	61.2	131				
Surr: 4-Bromofluorobenzene	10.10	0	11.36	0	88.9	64.1	120				
Surr: Toluene-d8	10.12	0	11.36	0	89.1	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCS-R19478	LCS	8260B_W-Pet	µg/L	5/7/2009	19478						
Client ID: ZZZZZ	Batch ID: R19478	TestNo: SW8260B		Analysis Date: 5/7/2009	SeqNo: 281492						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	17.16	0.50	17.04	0	101	66.9	140				
Toluene	15.46	0.50	17.04	0	90.7	76.6	123				
Surr: Dibromofluoromethane	9.420	0	11.36	0	82.9	61.2	131				
Surr: 4-Bromofluorobenzene	9.870	0	11.36	0	86.9	64.1	120				
Surr: Toluene-d8	11.05	0	11.36	0	97.3	75.1	127				

Sample ID	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCSD-R19478	LCSD	8260B_W-Pet	µg/L	5/7/2009	19478						
Client ID: ZZZZZ	Batch ID: R19478	TestNo: SW8260B		Analysis Date: 5/7/2009	SeqNo: 281493						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.06	0.50	17.04	0	106	66.9	140	17.16	5.11	20	
Toluene	16.13	0.50	17.04	0	94.7	76.6	123	15.46	4.24	20	
Surr: Dibromofluoromethane	9.680	0	11.36	0	85.2	61.2	131	0	0	0	
Surr: 4-Bromofluorobenzene	10.10	0	11.36	0	88.9	64.1	120	0	0	0	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

CLIENT: Impact Environmental Services
Work Order: 0904178
Project:

ANALYTICAL QC SUMMARY REPORT

BatchID: R19478

Sample ID	LCSD-R19478	SampType:	LCSD	TestCode:	8260B_W-Pet	Units:	µg/L	Prep Date:	5/7/2009	RunNo:	19478		
Client ID:	ZZZZZ	Batch ID:	R19478	TestNo:	SW8260B			Analysis Date:	5/7/2009	SeqNo:	281493		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8		11.31		0	11.36	0	99.6	75.1	127	0	0	0	

Qualifiers:	E Value above quantitation range	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	R RPD outside accepted recovery limits	S Spike Recovery outside accepted recovery limits

Torrent Laboratory, Inc.

WORK ORDER Summary

30-Apr-09

Work Order 0904178

Client ID: IMPACT ENV. SER.

Project:

QC Level:

Comments: 5 day TAT! Received 11 waters for TPHg,MBTEX,Oxy,TPHD/Mo.Pls invoice and report to Impact Env.Services, Attn: Joseph Cotton.

Sample ID	Client Sample ID	Collection Date	Date Received	Date Due	Matrix	Test Code	Hld	MS	SEL	Sub	Storage
0904178-001A	MW-1	4/28/2009 10:20:00 AM	4/29/2009	5/5/2009	Water	8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-002A	MW-2	4/28/2009 11:25:00 AM		5/5/2009		TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-003A	MW-3	4/28/2009 10:45:00 AM		5/5/2009		TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-004A	MW-4	4/28/2009 11:05:00 AM		5/5/2009		8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-005A	MW-5	4/28/2009 11:50:00 AM		5/5/2009		MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-006A	MW-6	4/28/2009 12:45:00 PM		5/5/2009		OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-007A	MW-7	4/28/2009 1:05:00 PM		5/5/2009		TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-008A	MW-8	4/28/2009 12:25:00 PM		5/5/2009		TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						MS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-009A	GW-1	4/28/2009 1:45:00 PM		5/5/2009		8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
						TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR

WORK ORDER Summary

30-Apr-09

Work Order 0904178

Client ID: IMPACT ENV. SER.

Project: **QC Level:**

Comments: 5 day TAT! Received 11 waters for TPHg,MBTEX,Oxy,TPHD/Mo.Pls invoice and report to Impact Env.Services, Attn: Joseph Cotton.

Sample ID	Client Sample ID	Collection Date	Date Received	Date Due	Matrix	Test Code	Hld	MS	SEL	Sub	Storage
0904178-010A	GW-2	4/28/2009 2:05:00 PM	4/29/2009	5/5/2009	Water	8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
0904178-011A	GW-3	4/28/2009 1:20:00 PM	5/5/2009	5/5/2009		TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		8260B_W_PETR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		OLEUM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		TPH_GAS_W_GC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		Mc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR
				5/5/2009		TPHDO_W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ORG/SR

0904178

1062

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB Torrent Lab DHS # _____

MUST MEET SPECIFICATIONS
 EPA
 LIA
 OTHER
 RWQCB REGION _____

CHAIN OF CUSTODY
BTS # 090428-501
CLIENT Impact Environmental Services
SITE 1409-1417 12th St.
Oakland CA

SPECIAL INSTRUCTIONS
Invoice and Report to: Impact Env. Services
Attn: Joseph Cotton

SAMPLE I.D.	DATE	TIME	MATRIX S = Soil W = H2O	CONTAINERS TOTAL	TPH-G by 8260	BTEX by 8260	MTBE by 8260	TPH-D & Motor Oil (8015B)	Oxygenates by 8260	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	4/28/09	1020	W	5	X	X	X	X	X				001A
MW-2		1125			X	X	X	X	X				002A
MW-3		1045			X	X	X	X	X				003A
MW-4		1105			X	X	X	X	X				004A
MW-5		1150			X	X	X	X	X				005A
MW-6		1245			X	X	X	X	X				006A
MW-7		1305			X	X	X	X	X				007A
MW-8		1225			X	X	X	X	X				008A
GW-1		1345			X	X	X	X	X				009A
GW-2		1405			X	X	X	X	X				010A

SAMPLING COMPLETED DATE 4/28/09 TIME 1405 SAMPLING PERFORMED BY J. Ortiz RESULTS NEEDED NO LATER THAN Standard TAT

RELEASED BY [Signature] DATE 7/22/09 TIME 1705 RECEIVED BY [Signature] DATE 4/29/09 TIME 1705

RELEASED BY [Signature] DATE 4/29/09 TIME 1320 RECEIVED BY D.G. Shodasara DATE 4/29/09 TIME 1320

RELEASED BY _____ DATE _____ TIME _____ RECEIVED BY _____ DATE _____ TIME _____

SHIPPED VIA _____ DATE SENT _____ TIME SENT _____ COOLER # _____

4°C June
4-29-09

Pick-up

0904178 2002

BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE
 SAN JOSE, CALIFORNIA 95112-1105
 FAX (408) 573-7771
 PHONE (408) 573-0555

CONDUCT ANALYSIS TO DETECT

LAB Torrent Lab DHS # _____

CHAIN OF CUSTODY BTS # 0904178-50

CLIENT Impact Environmental Services

SITE 1409-1417 12th St.

Oakland CA

MUST MEET SPECIFICATIONS
 EPA
 LIA
 OTHER
 RWQCB REGION _____

SPECIAL INSTRUCTIONS

Invoice and Report to: Impact Env. Services

Attn: Joseph Cotton

SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS	TPH-G by 8260	BTEX by 8260	MTBE by 8260	TPH-D & Motor Oil (B0158)	Oxys By 8260	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			S = Soil W = H2O	TOTAL									
<u>GLW-3</u>	<u>4/28/09</u>	<u>1320</u>	<u>W</u>	<u>5</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				<u>011A</u>

SAMPLING COMPLETED 4/28/09 1405 SAMPLING PERFORMED BY J. Ortiz RESULTS NEEDED NO LATER THAN Standard TAT

RELEASED BY [Signature] DATE 4/28/09 TIME 1705 RECEIVED BY [Signature] DATE 4/28/09 TIME 1705

RELEASED BY [Signature] (Sample Custodian) DATE 4/29/09 TIME 1320 RECEIVED BY [Signature] DATE 4/29/09 TIME 1320

RELEASED BY _____ DATE _____ TIME _____ RECEIVED BY _____ DATE _____ TIME _____

SHIPPED VIA _____ DATE SENT _____ TIME SENT _____ COOLER # _____

Pick-up