June 28, 2015

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Keith Nowell, P.G., C.HG
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: **TRANSMITTAL LETTER & CERTIFICATION STATEMENT**

Location: **Former Exxon Station, 3055 35th Avenue, Oakland ("Site")**

ACEH LOP#: **RO-0000271; GeoTracker #: T0600100538;**

Date of Report	Title of Report
March 31, 2014 (updated June 2015)	***Annual Groundwater Monitoring Report***

As the legally authorized representative for the responsible party, I certify the following statement to satisfy regulatory requirements for technical report submittals:

- ***I declare, under penalty of perjury, that the information and/or recommendations contained in the aforementioned report, prepared on my behalf by WEBER, HAYES AND ASSOCIATES, are true and correct to the best of my knowledge.***

Sincerely,

Mr. Lynn Worthington

c/o: **Golden Empire Properties, Inc.**
5942 MacArthur Blvd # B
Oakland. California 94605-1698

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

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Submittal Type:	**GEO_REPORT**
Report Title:	**2013 Annual Groundwater Monitoring Report**
Report Type:	**Monitoring Report - Annually**
Report Date:	**6/28/2015**
Facility Global ID:	**T0600100538**
Facility Name:	**EXXON**
File Name:	**2014-03_ Annual GW Monitoring Rpt (2013).pdf**
Organization Name:	**Weber, Hayes & Associates**
Username:	**WEBERHAYES**
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Submittal Date/Time:	**6/28/2015 7:00:09 PM**
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March 31, 2014
(Updated June 29, 2015)

Keith Nowell, P.G., C.HG
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway
Alameda, California 94502

Lynn Worthington
c/o: Golden Empire Properties, Inc.
5942 MacArthur Blvd # B
Oakland, CA 94605-1698

Subject: **Annual Groundwater Monitoring Report**
(sampled September 2013 and January 2014)

Site: **Former Exxon Station, 3055 35th Avenue, Oakland ("Site")**
ACEH LOP #: RO-0000271; GeoTracker #: T0600100538

1.0 EXECUTIVE SUMMARY

Fuel hydrocarbons were discovered in soil and groundwater beneath the subject Site during a 1991 gas station closure, which included the removal of the underground storage tank (UST) fueling system (tanks/dispensers/piping). Subsequent remedial actions included chemical oxidation injection (1999) and four years of dual phase extraction (2000–2004).

There currently is a 20-year record of seasonal groundwater testing of the Site's monitoring well network (Table 2). This long-term data set has shown a gradual degradation (attenuation) of the shallow, dissolved gasoline plume over time as evidenced by the downward trend lines shown in Figures 4-10. Evidence of attenuation was evident prior to, during, and after remedial efforts were completed. However, despite the overall downward trend in concentrations, there have been some late arriving upward trends primarily as benzene, which appear to be the result of off-site gasoline plumes since the subject Site has been fenced and vacated for over 24 years.

The extent of groundwater impacts have been characterized and the monitoring results show gasoline compounds are present above regulatory threshold limits. A summary of the current *Site Conceptual Model*[1], including an overview of previous environmental investigation results, remedial actions, subsurface conditions, and fate and transport details is included as a reference (Appendix A).

1.1 Summary of Groundwater Monitoring Program

This report documents the following groundwater monitoring activities conducted in September 2013 and January 2014 at the former Exxon Service Station located at 3055 35th Ave in Oakland (the "Site"; see Location Map, Figure 1).

1. Annual groundwater monitoring tasks conducted September 2013 were completed to satisfy the Site's *Monitoring & Reporting Program* which includes annual sampling of select monitoring

[1]: Weber, Hayes & Associates report: *Updated Site Conceptual Model,* June 2012.
- http://www.acgov.org/MAPS/DEH/LOPDocuments/RO0000271/SCM_ADEND_R_2011-06-24.pdf

wells [six (6) on-site wells MW-1, -2, -3 & -4, RW-5 & -9, and two (2) recently installed, off-site wells MW-5 & -6][2]. Specific monitoring tasks included:

- Field Measurements: Water level gauging and field checking water quality parameters (dissolved oxygen, ORP) in all sixteen (16) shallow groundwater wells [monitoring MW, and former remediation wells (RW)]; and
- Groundwater Sampling: Collecting and analyzing groundwater samples from six (6) on-site and two (2) off-site monitoring wells.
- Additional Groundwater Sampling: Two additional, on-site wells (RW-13 & RW-14) were sampled to evaluate potential off-site contaminant migration onto the subject Site originating from confirmed upgradient, off-site sources[3].

2. In addition to the annual sampling event, a supplementary round of monitoring tasks was completed in January 2014 in order to finish off the agency-required quarterly sampling for newly installed off-site monitoring wells MW-5 and MW-6. This quarterly sampling of all newly installed wells is necessary in order to confirm initial results as well as evaluate potential variation in seasonal sampling[4]. Specific monitoring tasks completed during the supplemental January 2014 groundwater monitoring event included:

- Field Measurements: Water level gauging and field checking water quality parameters (dissolved oxygen, ORP) in all sixteen (16) existing groundwater-monitoring wells;
- Groundwater Sampling: Representative groundwater samples were collected from upgradient, newly-installed monitoring wells MW-5 and MW-6 and laboratory tested for the site-specific, chemicals of concern This sampling event completed these required quarterly sampling events.
- Additional Groundwater Sampling: As with the September 2013 event, groundwater samples from two additional, on-site wells (RW-13 & RW-14) were tested to evaluate potential off-site contaminant migration onto the subject Site originating from recently confirmed upgradient, off-site sources.

1.2 Summary of Annual Monitoring Results

Laboratory results of tested on-site wells show overall downward trend lines (Figures 4-10) of the dissolved gasoline plume although concentrations continue to remain above regulatory threshold limits.

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[2]: Alameda County Environmental Health (ACEH) correspondence dated October 26, 2012 (case officer Barbara Jakub) agreeing that annual groundwater monitoring should occur in the 3rd quarter (i.e., September).

- http://www.acgov.org/MAPS/DEH/LOPDocuments/RO0000271/EXT_AP_L_2012-10-26.pdf

[3]: Weber, Hayes & Associates: *Limited Soil & Groundwater Data Gap Assessment*, dated December 31, 2012
Note: results of this investigation confirm there are petroleum hydrocarbon (TPH-gasoline, BTEX, TBA and/or MTBE) plumes flowing onto the 3055 35th Ave parcel from: 1) an *abandoned* Texaco station across School Street and 2) the *active* QuikStop station located across 35th Ave (see Figure 2).

[4]: ACEH email correspondence from case officer Barbara Jakub requesting quarterly sampling of newly installed wells for the first year, dated October 26, 2012

As mentioned above, these charts also show a late arriving, upward trend (primarily as benzene) indicative of a secondary source [i.e., likely to be the arrival of an off-site gasoline plume(s) since the subject Site has been fenced and vacated for over 24 years]. Given the significant remedial efforts conducted to date at the subject Site, it is our opinion that additional corrective actions at the subject Site cannot be cost effectively completed until these upgradient releases have been better defined and off-site plume contribution to the Site has been quantified and controlled[5].

The most recent laboratory results continue to show that elevated fuel contaminants are present in groundwater samples collected from the nearby, upgradient wells (i.e., , off-site wells MW-5 and MW-6, see Figures 3a and 3b). These detections indicate that comingled gasoline plumes are migrating to the Site from the following two nearby and upgradient fueling locations:

- *Active* QuikStop station (~50 feet upgradient, at 3130 35th Ave): Groundwater sampled from immediately beside the active fueling station (i.e., MW-5) contains elevated TPH-gasoline and benzene at 13,000 and 1,700 *u*g/L, Figure 3a) The GeoTracker database does not indicate the elevated gasoline concentrations detected in have been investigated.
- *Abandoned* Texaco Station (25 feet upgradient, at 3101 35th Ave): The State GeoTracker database indicates that fuel contamination was recently detected in soils underlying Underground Fuel Storage Tanks (USTs) that were discovered and removed from the *abandoned* Texaco station[6].

1.3 Summary Conclusions

Current and previous groundwater monitoring results indicate:

- The groundwater gradient has consistently been measured to flow in a west-to-southwesterly direction at a relatively flat gradient.
- Consecutive quarters of groundwater samples collected from the newly installed wells MW-5 and MW-6, coupled with the consistent and dominant groundwater flow direction indicate dissolved gasoline plumes are migrating to the subject Site from two nearby sources: 1) an operating gas station (QuikStop, located ~50 feet upgradient) and an abandoned Texaco station located across the street (see Figure 2).
- The increase of benzene concentrations, observed since early 2009, in on-site wells MW-1 through MW-4 and RW-5 can most easily be explained as the arrival of secondary, upgradient off-site dissolved hydrocarbon plumes (see Figures 4 through 7).
- On-site property line wells RW-13 & -14, installed along the upgradient property line contained elevated concentrations of TPH-gas, benzene and/or tertiary butyl alcohol (TBA). The elevated concentrations observed in these property line wells indicates that off-site, upgradient

[5]: Weber, Hayes & Associates report: *Updated Site Conceptual Model, Fuel Release Investigation,* June 24, 2011.

[6]: Three underground fuel storage tanks (USTs) were recently removed (Feb 2015) and fuel contaminates were detected at this abandoned Texaco Station. An *Unauthorized Release Form* was submitted and proposed remedial over-excavation tasks were approved by ACEH. See GeoTracker archive for details:
- http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000006539

contaminant plumes have migrated to the Site based on: 1) groundwater flow direction, which has been consistently to the west-southwest, and 2) the fuel impacts discovered in nearby off-site upgradient wells MW-5, and to a lesser extent MW-6 see Figure 3a, and 3b).

This concludes the Executive Summary.

2.0 SUMMARY OF CURRENT FIELD ACTIVITIES

Overview of Groundwater Monitoring Activities [7] **Annual Sampling Event (September 20, 2013) and Supplemental Sampling Event (January 9, 2014)**	
Monitoring Tasks Reported:	Sampling is conducted annually. The following locations are sampled: Annual Monitoring (Sept-2013): Water level gauging of all 14 monitoring network wells (MW-1 through MW-6 and RW-5 through RW-14); collection and analysis of samples from six (8) select wells (MW-1 through MW-6), and RW-5 & -9. Two additional, on-site property line wells also sampled (RW-13 & -14). New Well Quarterly Sampling Event (Jan-2014): Water level gauging of all monitoring network wells (as above) and collection and analysis of samples from 2 new, off-site wells (MW-5 & MW-6), and as above, the two additional, on-site property line wells were also sampled (RW-13 & -14).
Groundwater Depth & Gradient: (Table 1B & Figure 2B) (Table 1A, & Figure 2A)	Annual Monitoring (Sept-2013): Depth to groundwater generally encountered at depths of approximately 15-21 feet below the ground surface. - *Fluctuation*: Surveyed elevations show depth-to-water measurements have site-wide fluctuation ranging approximately 4.6 feet (between 15.87 to 20.51 feet above Mean Sea Level (MSL). - *Gradient:* Westerly, at a relatively flat, grade of 0.008 foot per foot. (equivalent to 1 foot of vertical drop per 125 feet of horizontal flow). New Well Quarterly Sampling Event (Jan-2014): Similar to the previous quarter, groundwater during the fourth quarter monitoring event was generally encountered at depths of approximately 15 to 21 feet below ground surface. - *Fluctuation*: Surveyed elevations show depth-to-water measurements have site-wide fluctuation ranging approximately 4.9 feet (between 15.69 to 20.49 feet above MSL. - *Gradient:* Relatively flat, westerly at a grade at 0.01 foot per foot. (equivalent to 1 foot of vertical drop per 100 feet of horizontal flow)
Presence of Free Product::	Not observed during these sampling events.
Remedial Action:	None at this time. Previous remediation included the operation of an on-site dual phase extraction system from October 2000 to September 2004 (see Appendix A for details).

[7]: Most recent documentation of well sampling requirements: CRA *GW Sampling Frequency Reduction Request,* dated June 18, 2009:

- http://www.acgov.org/MAPS/DEH/LOPDocuments/RO0000271/CORRES_L_2009-06-18.pdf ; and

ACEH approval of sampling reduction, dated July 24, 2009:

- http://www.acgov.org/MAPS/DEH/LOPDocuments/RO0000271/DIR_L_2009-07-24.pdf

2.1 Report Documentation

This report includes the following list of tables, figures, and supporting data for the annual groundwater monitoring program:

- Tables: Tabulated results of current and previously collected dissolved hydrocarbon concentrations and groundwater data (Tables 1A/B and 2);
- Figures: Figure presenting a plan view of recent groundwater gradient and analytical results at the Site (Figures 2A/B & 3A/B);
- Graphs/Charts: Graphs presenting the temporal distribution of TPH-gasoline and Benzene and groundwater elevations in key monitoring wells MW-1, MW-2, MW-3, MW-4, RW-5 and RW-9 (Figures 4 through 9);
- Description of Subsurface Conditions: General description of subsurface conditions and summary chronology of previous environmental work, and updated *Site Conceptual Model* (Appendix A);
- Field Documentation: Field sheets for the current round of sampling and our groundwater sampling protocol (Appendix B);
- Laboratory Documentation: *Chain of Custody* documentation and the laboratory's *Certificate of Analysis* (Appendix C).

A summary of the most recent (fourth quarter 2013) groundwater monitoring and laboratory testing follows.

2.2 Groundwater Monitoring: Well Sampling and Laboratory Testing

Groundwater samples were collected as part of a regulatory mandated program required by Alameda County Environmental Health (ACEH) to monitor dissolved contaminant concentrations. Groundwater was sampled in accordance with our *Field Methodology for Groundwater Monitoring* (Appendix B). Once appropriate well volumes were removed and/or field-measured water quality parameters stabilized to within established boundaries, water samples were collected in appropriate sample containers and placed in a chilled cooler for transport to the testing laboratory. A copy of the field observations and field instrument recordings is included in Appendix B.

2.2.1 Laboratory Analysis

Samples were submitted to a State-certified testing laboratory (Torrent Laboratories, CA-DHS ELAP #1991). The results of the January 2014 supplemental sampling and the September 2014 annual sapling events are tabulated on Tables 1A and 1B respectively, and these results have also been incorporated into the chronological summary table of all current and historical results (Table 2). The State-certified laboratory report and *Chain-of-Custody* documentation is included as Appendix C. All groundwater samples submitted for testing were analyzed for the following regulatory required set of analyses:

- Total Petroleum Hydrocarbons as Diesel (**TPH-diesel**) by EPA Method 8015M
- Total Petroleum Hydrocarbons as Gasoline (**TPH-gasoline**) by EPA Method 8260B

- The volatile constituent compounds of benzene, toluene, ethylbenzene, xylenes (**BTEX**), and the fuel oxygenates the fuel oxygenates methyl-tert-butyl ether (**MTBE**), tert-butanol (tertiary butyl alcohol, **TBA**), di-isopropyl ether (**DIPE**), ethyl tert butyl ether (ETBE), tert amyl methyl ether (**TAME**), and the lead scavenger 1,2-dichloroethane (**1,2-DCA**) by EPA Method 8260B

2.2.2 Groundwater Depth & Flow Direction

Groundwater during the most recent monitoring event (fourth quarter 2013) was encountered at depths of approximately 15.7 to 20.5 feet below the ground surface. Groundwater elevations of the surveyed 16-well network ranged from 146.29 to 148.62 feet above Mean Sea Level (MSL). Groundwater flow direction was calculated to be to the west at a relatively flat gradient of 0.01 feet per foot (= 1 foot of vertical drop per 100 feet of horizontal flow, see Figure 2A). Note: The groundwater gradient has consistently been calculated to flow in a west to southwesterly direction.

2.2.3 Laboratory Results of Tested Dissolved Contaminants of Concern

Annual Groundwater Sampling Event (September 28, 2013): The Table below provides the results of the annual groundwater monitoring event conducted September 2013. Table 1B provides some additional details. The results are presented on Figure 3B. The annual monitoring event includes sampling six (6) on-site wells (MW-1, -2, -3 & -4, RW-5 & -9), and two (2) recently installed, off-site wells MW-5 & -6. Two additional, on-site wells (RW-13 & RW-14) were sampled to evaluate potential off-site contaminant migration onto the subject Site originating from recently confirmed upgradient, off-site sources\

Summary of Annual Groundwater Sampling Results

Sampled on September 28, 2013 ***(All results are in ug/L, parts per billion, ppb)***

Well ID	*TPH As Diesel*	*TPH As Gasoline*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylenes*	*MTBE*	*TBA*
MW-1	**1,500***	**2,900****	**4,500**	9.6	150	6.8 (J)	< 1.4	**98**
MW-2	**2,300***	**4,200****	**1,800**	11	**300**	8.7	< 1.4	**120**
MW-3	**3,000***	**6,200****	**11,000**	37	**990**	118.1 (J)	< 7.2	**350**
MW-4	**2,200***	**4,400****	**6,200**	24	**420**	62	< 1.4	**160**
MW-5 (off-site)	540*	**4,400****	**2,200**	47	**1,200**	50.1 (J)	**790**	**890**
MW-6 (off-site)	470*	**1,700****	**130**	0.66J	4.6	< 1.74	< 1.4	< 13
RW-5	160*	390**	**510**	3.9	11	7.28 (J)	< 0.72	< 6.5
RW-9	370*	**5,900****	**4,600**	40	8.4 (J)	8.7 (J)	**<7.2**	**<65**
RW-13	< 100	390**	**84**	1.1	2.1	1.1	< 0.5	10

Summary of Annual Groundwater Sampling Results

Sampled on September 28, 2013 ***(All results are in ug/L, parts per billion, ppb)***

Well ID	*TPH As Diesel*	*TPH As Gasoline*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylenes*	*MTBE*	*TBA*
RW-14	150*	170**	**83**	1.6	2.4	1.1	**5.5**	**34**
Reporting Limit:	*100*	*50*	*0.5*			*1.5*	*0.5*	*5*
Water Quality Objectives (WQO's)	***1,000***		***1***	***150***	***300***	***1,750***	***5***	12

WQO's = Water Quality Objectives = *Maximum Contaminant Limits* or Action Levels
BOLD =Indicates concentration exceeds WQO. **ND** = Not detected at or above the reporting limit. **bgs** = below ground surface
* = Sample chromatographic pattern does not resemble typical diesel standard pattern; unknown organics within diesel range quantified as diesel.
** = Laboratory report indicates although TPH Gasoline compounds are present, the sample pattern does not match pattern of reference Gasoline standard. Hydrocarbons within range of C5-C12 quantified as Gasoline.
J = Laboratory indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather than quantitative.

Supplemental Groundwater Sampling Event (January 9, 2014): A supplementary round of monitoring tasks was completed in January 2014 in order to finish off the agency-required quarterly sampling for newly installed off-site monitoring wells MW-5 and MW-6. This quarterly sampling of all newly installed wells is necessary in order to confirm initial results as well as evaluate potential variation in seasonal sampling. Results of this sampling event is presented in plan view on Figure 3A.

In addition, as with the September 2013 annual sampling event, groundwater collected from two additional, on-site wells (RW-13 & RW-14) was laboratory tested to evaluate potential off-site contaminant migration onto the subject Site originating from recently confirmed upgradient, off-site sources.

- Note: During current sampling event (January 9, 2014), we collected split samples from wells RW-13 and RW-14 using:

    1. "Low-Flow/Low-Stress" Methodology: This purge/sampling protocol, which was implemented by previous consultant, generates limited purge water (i.e., approximately 0.7 liters of water from each 4-inch diameter well casing before groundwater physical parameters are stabilized and samples are collected (see Appendix B for sampling protocol). We have continued to employ this approved sampling protocol to maintain consistency with past results.

    2. Conventional Purge/Recovery Technique: To confirm that the "Low-Flow/Low-Stress" results are representative of aquifer conditions, we collected additional (split) samples from each of these two, 4-inch diameter, property boundary wells after purging several casing volumes of well water.

    Split samples were collected from wells RW-13 and RW-14, first following the "Low-Flow/Low-Stress" purge/sampling protocol, then by dewatering the wells and allowing sufficient recovery. Results of samples collected following the "Low-Flow/Low-Stress" purge/sampling protocol were similar to, but generally higher than results of samples collected following well dewatering

and recovery. These results supported the use of the "Low-Flow/Low-Stress" purge/sampling protocol as an appropriate technique for sampling Site wells. Table 2 presents the results and Appendix C contains the laboratory results of both sampling techniques.

Summary of Supplemental Groundwater Sampling Event

Sampled on January 9, 2014 *(All results are in ug/L, parts per billion, ppb)*

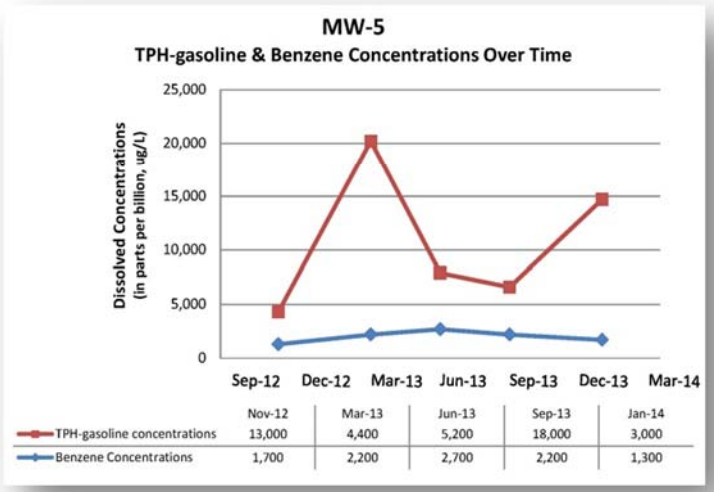
Well ID	*TPH As Diesel*	*TPH As Gasoline*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Xylenes*	*MTBE*	*TBA*
MW-5	**1,100***	**13,000****	**1,700**	33	**740**	32 J	**640**	**1,300**
MW-6	190*	**3,700****	**67**	< 0.25	3.8	1.42 J	< 0.72	< 6.5
RW-13	110*	440*	**43**	< 0.50	2.5	< 1.5	**5.2**	**200**
RW-14	360*	**1,200****	**470**	6.1	3.4	1.7	< 0.50	**98**
Reporting Limit:	*100*	*50*	*0.5*			*1.5*	*0.5*	*5*
Water Quality Objectives (WQO's)	*1,000*		1	150	300	1,750	5	12

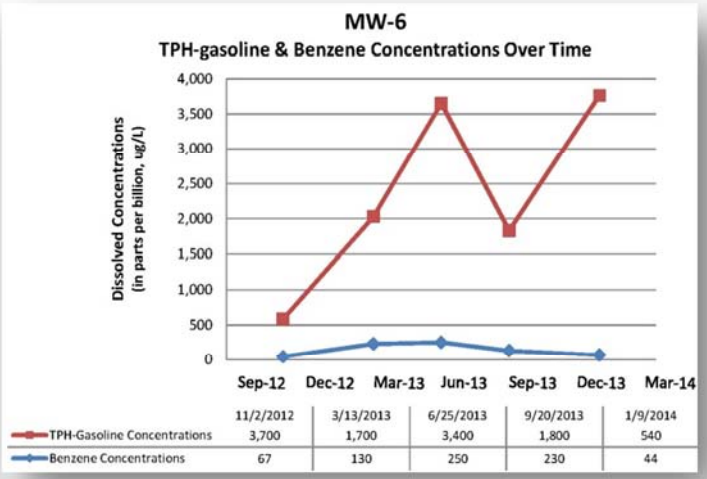
Notes: See Table on page 7 for notes and symbol descriptions.

The most recent results indicate:

- **Well MW-5** (located adjacent to the operating QuikStop station, about 50 feet upgradient of the subject Site; see Figure 3A). The result revealed elevated concentrations of TPH-gasoline, benzene, ethylbenzene, MTBE and TBA at concentrations of 13,000, 1,700, 740, 640 and 1,300 ppb, respectively. These concentrations exceed their respective Water Quality Objectives (WQOs) set at 1,000, 1,300, 300, 5, and 12 ppb, respectively.
- **Well MW**-6 (located downgradient of an abandoned Texaco station; about 25 feet upgradient of the subject Site; see Figure 3A): The current result revealed elevated concentrations of TPH-gasoline and benzene detected at 3,700 and 67 ppb, above their respective WQO's set at 1,000 and 1 ppb.
- **Well RW-13** (onsite, upgradient property line well): Current results revealed elevated concentrations of benzene and TBA at concentrations of 43 ppb, and 200 ppb, respectively, above their respective WQO's of 1 ppb and 12 ppb. MTBE was detected in well RW-13 at a concentration of 5.2 ppb, slightly above the WQO set at 5 ppb AND Low levels of TPH-gasoline and ethylbenzene were also detected below their respective WQOs.

- **Well RW-14** (onsite, upgradient property line well): Current results revealed elevated concentrations of TPH-gasoline and benzene at 1,200 and 470 ppb, respectively, above the WQO set at 1,000 ppb and 1 ppb, respectively. TBA was also detected in well RW-14 at a concentration of 98 ppb, above the WQO set at 12 ppb. Low levels of TPH-diesel, toluene, ethylbenzene, and xylenes were also detected below their respective WQOs. Concentrations of TPH-gas, TPH-diesel and benzene detected in this well during the initial three sampling events (spanning from 2002 to 2004) ranged from 220 to 3,700 ppb, 82 to 6,800 ppb, and from 42 to 230 ppb, respectively.





These results coupled with the knowledge that there has always been a consistent and dominant groundwater flow direction to the west/southwest, indicates that elevated levels of gasoline contamination are migrating to the Site from these two upgradient gas station sites (i.e., the active QuikStop station, and to a lesser extent from the abandoned Texaco station).

3.0 CONCLUSIONS

- A 20-year record of seasonal groundwater testing of the Site's monitoring well network (Table 2) has shown gradual degradation of the shallow, dissolved gasoline plume over time as evidenced by the downward trend lines shown in Figures 4-10. Evidence of attenuation was evident prior to, during, and after remedial efforts were completed. However, despite the overall downward trend in concentrations, there have been some late arriving upward trends primarily as benzene, which appear to be the result of off-site gasoline plumes since the subject Site has been fenced and vacated for over 24 years.
- Laboratory results of tested groundwater obtained from the two, upgradient, recently installed off-site wells (MW-5 and MW-6) continues to confirm that up to two plumes of elevated gasoline contamination are migrating onto the site from: 1) the active QuikStop station (located ~50 feet upgradient of the subject Site), and to a lesser extent from 2) the abandoned Texaco station (located ~25 feet upgradient of the subject Site).

- Concentrations of dissolved hydrocarbons detected in these wells during the most recent sampling event (January 2014) were generally consistent with the previous sampling events since the wells were installed in November 2012.

- On-site property line wells RW-13 & -14, installed along the upgradient property line, contained elevated concentrations of TPH-gas, benzene and/or tertiary butyl alcohol (TBA). The elevated concentrations observed in these property line wells appear to be the result of off-site, upgradient impacts that have migrated to the Site based on: 1) groundwater flow direction, which has been consistently to the west-southwest, and 2) the fuel impacts discovered in nearby off-site upgradient wells MW-5, and to a lesser extent MW-6 see Figure 3a, and 3b).

4.0 RECOMMENDATIONS

Based on the results of our current groundwater monitoring and recent *Data Gap Assessment* we recommend the following in order to move the Site towards regulatory case closure:

- Assess the Agency Path to Closure: Prepare a plan that addresses identified *Impediments to Closure*[8] as it relates to the State Water Resources Control Board's (SWRCB's) *Low Threat Underground Storage Tank Case Closure Policy (LTCP).* Conference with ACEH staff to finalize approach.

- Investigation of Upgradient, Off-site Sources: At present, we believe a cost effective *Corrective Action Plan* cannot be completed until upgradient responsible parties have defined and/or controlled their dissolved contaminant plumes. It is possible that that a Joint Corrective Action through the State Water Resources Control Boards' Commingled Plume Account could be a cost effective approach in characterizing and remediating groundwater impacts from multiple sources. ACEH has successfully initiated property owner cooperation regarding the removal and cleanup of USTs/shallow soil contamination uncovered at the long-abandoned Texaco Station located 25 feet upgradient of the subject site (3101 35th Ave).

  We recommend that ACEH also request cooperation from the owners/operators of the active QuikStop station, located approximately 50 feet upgradient of the subject site (at 3130 35th Ave., see Figure 3A), to investigate elevated TPH-gasoline (13,000 ug/L) and benzene (1,700 ug/L) concentrations that were detected in a monitoring well installed immediately adjacent to the that fueling station. We recommend that the QuickStop Gas Station's owners/operator complete an assessment of soil and groundwater impacts to determine the extent of contaminant plume migration to the Site.

- Groundwater Monitoring & Reporting: Continue annual sampling of key on-site monitoring wells [i.e., six (6) on-site wells MW-1, -2, -3 & -4, RW-5 & -9], the two (2) recently installed, off-site wells MW-5 & -6], and two additional, on-site property boundary wells (RW-13 & RW-14). The next groundwater monitoring event scheduled for September 2015 and will include:

[8]: State Geotracker: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0600100538&cmd=ptcpreport&ltcp_id=100803

- Field Measurements: Water level gauging and field checking water quality parameters (dissolved oxygen, ORP) in all sixteen (16) existing groundwater-monitoring wells;
- Groundwater Sampling: Collecting and analyzing groundwater samples from monitoring wells MW-1 through MW-6, RW-5, RW-9, RW-13 and RW-14;
- Reporting: Preparing a summary report of the collected data.

5.0 LIMITATIONS

Our service consists of professional opinions and recommendations made in accordance with generally accepted geologic and engineering principles and practices. This warranty is in lieu of all others, either express or implied. The analysis and conclusions in this report are based on sampling and testing which are necessarily limited. Additional data from future work may lead to modification of the opinions expressed herein.

All work related to the UST investigation and remediation at this site is done under the direct supervision of a Professional Geologist or Engineer, registered in California, and experienced in environmental remediation.

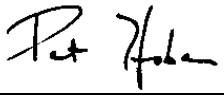
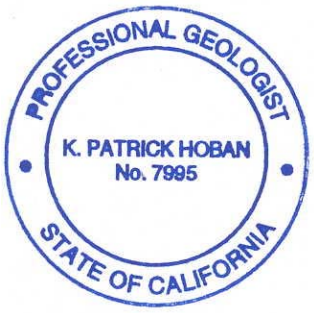
Thank you for the opportunity to participate in the assessment and remediation of this site. If you have any questions regarding this report, or any aspect of this project, please contact us at (831) 722-3580.

Sincerely,

Weber, Hayes and Associates, Inc.


By _____

Jered Chaney, PG# 8452
Project Geologist

And: _____

Pat Hoban, PG# 7795
Senior Geologist

cc: Jeffrey S. Lawson < jsl@svlg.com >
Silicon Valley Law Group
25 Metro Drive, Suite 600
San Jose, CA 95110

Attachments:

Figure 1:	Location Map
Figure 2A:	Groundwater Gradient & Flow Direction – January 9, 2014
Figure 2B:	Groundwater Gradient & Flow Direction – September 20, 2013
Figure 3A:	Laboratory Analytical Results – January 9, 2014
Figure 3B:	Laboratory Analytical Results – September 20, 2013
Figure 4:	Chart MW-1 (March 1997 to September 2013) TPH-gas and Benzene Concentration Trends
Figure 5:	Chart MW-2 (March 1997 to September 2013) TPH-gas and Benzene Concentration Trends
Figure 6:	Chart MW-3 (March 1997 to September 2013) TPH-gas and Benzene Concentration Trends
Figure 7:	Chart MW-4 (March 1997 to September 2013) TPH-gas and Benzene Concentration Trends
Figure 8:	Chart RW-5 (March 1997 to September 2013) TPH-gas and Benzene Concentration Trends
Figure 9:	Chart RW-9 (March 1997 to September 2013) TPH-gas and Benzene Concentration Trends
Table 1A:	Groundwater Elevation and Analytical Data – Supplemental Sampling (Jan-2014)
Table 1B:	Groundwater Elevation and Analytical Data – Annual (Sept-2013)
Table 2:	Current & Historical Summary (Groundwater Elevation and Analytical Data)
Appendix A:	Site Description and Background & Site Conceptual Model
Appendix B	Daily Field Record (Groundwater Sampling) – Weber, Hayes & Associates, January 9, 2014 and September 20, 2013, & *Field Methodology for Groundwater Sampling*
Appendix C:	*Certificate of Analysis* (Torrent Laboratory) and *Chain of Custody* Documentation
Appendix D:	Agency Documentation (SWRCB's *Impediments to Closure,* and the *Low Threat Underground Storage Tank Case Closure Policy (LTCP Checklist).*

6.0 REFERENCES

Alameda County Environmental Health directives for: 3055 35th Avenue, Oakland**:**

- Upload/download website (site ID#:RO-0000271): http://ehgis.acgov.org/adeh/lop_results.jsp?trigger=2&enterd_search=RO0000271&searchfield=RECORD_ID
- 2005-December: *Electronic Report Upload (ftp) Instructions,* revision.
- 2006, Dec-6: *Response to Cambria Oct-17, 2006 "Request for Reconsideration of Recommendations".*
- 2007, Mar-1: *Approval of Cambria Jan-12, 2007 "Off-site and Soil Gas Work Plan".*
- 2007, Mar-1: *Approval of Conestoga-Rovers and Associates (CRA) Apr-11, 2008: "Workplan Addendum for Additional Characterization and Soil Vapor Sampling"*
- 2008, Apr-7: *Request to Present Phase I Results and Submit a Soil Vapor Workplan.*
- 2008, Jul-24: *Groundwater Monitoring Requirements: Reduction to Semi-Annual Monitoring.*
- 2011, Jan-21: *Request for Updated Site Conceptual Model,* electronic directive
- 2011, Sept-20: *Request for Work Plan*
- 2012, May 3: *Work Plan Approval*
- 2012, Oct-26: *Data Gap Investigation Report Deadline Extension Approval*

California Environmental Protection Agency

- 1995-July: *Guidelines for Hydrogeologic Characterization of Haz-Substance Released Sites*

Cambria Environmental Technology (Cambria) reports for: 3055 35th Avenue, Oakland**:**

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- 1997, June-27: *Risk-Based Corrective Action Analysis*
- 1998, April 8: *Corrective Action Plan*
- 1998, May-28: *Corrective Action Plan Addendum*
- 1998, Dec-07: *Well Installation and Supplemental Subsurface Investigation Report*
- 1999, Aug-14: *Second Quarter 1999 Monitoring and Interim Remedial Action Report*
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- 2006, July-13: *Site Conceptual Model and Off-site Work Plan.*
- 2007, Jan-12: *Offsite Soil Gas Workplan ,*

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- 2008, Apr-11: *Workplan for Additional Characterization and Soil Vapor Sampling*
- 2009, Feb-28: *Site Characterization Report*
- 2010, Oct-18: *Semi-Annual Groundwater Monitoring Report (dry season)*
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- 2005, May-2008: *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*

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- 2011, June-24: *Updated Site Conceptual Model – Fuel Release Investigation*
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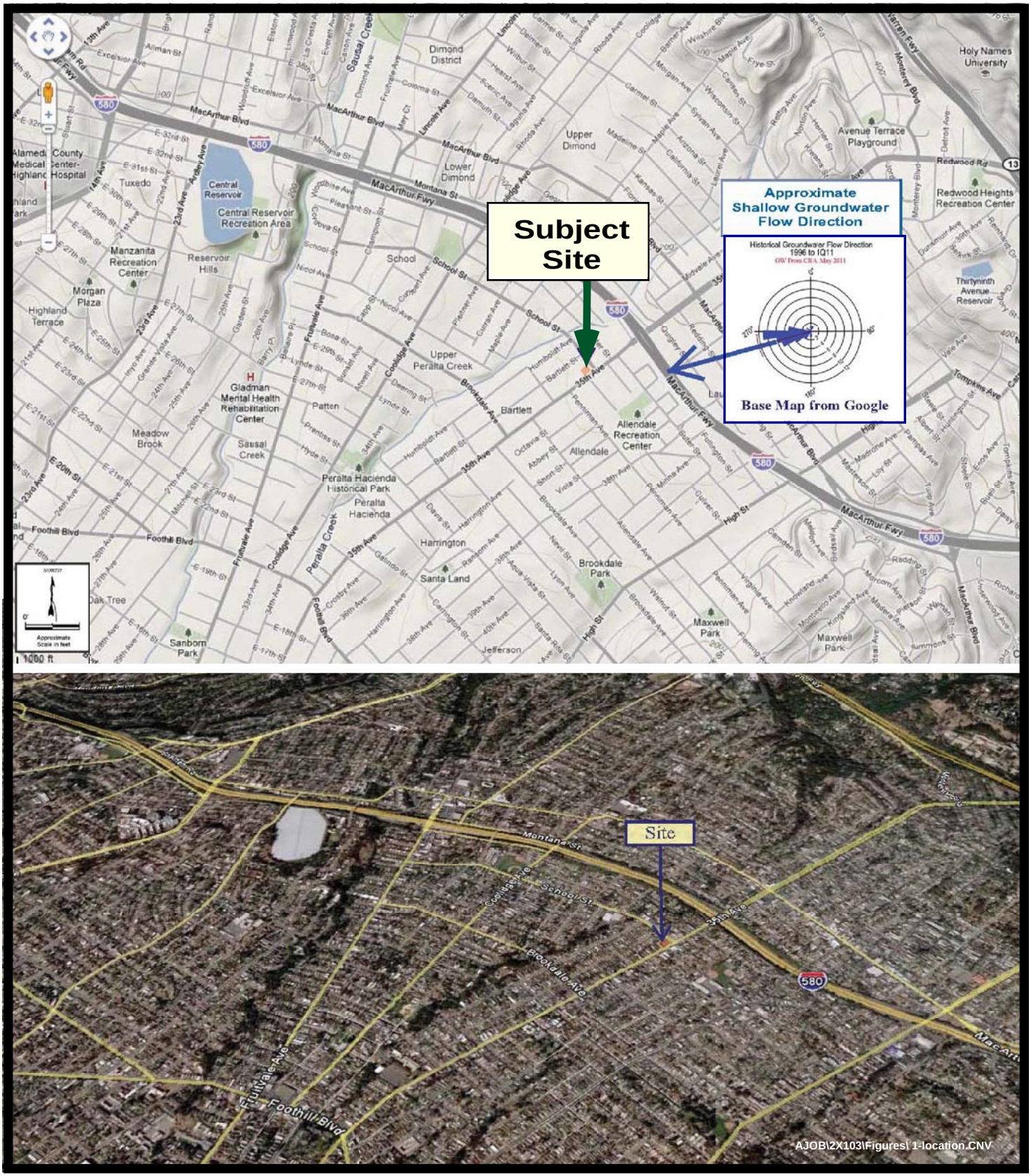
- 2012, February 21: *Semi-Annual Groundwater Monitoring Report (sampled September 2011)*
- 2012, August 8: *Semi-Annual Groundwater Monitoring Report (sampled March 2012)*
- 2012, October 29: *Semi-Annual Groundwater Monitoring Report (sampled September 2012)*
- 2012, December 31: *Limited Soil & Groundwater Data Gap Assessment*
- 2013, May 14: *Quarterly Groundwater Monitoring Report (Sampled March 2013)*
- 2013, August 22: *Quarterly Groundwater Monitoring Report (Sampled June 2013)*

ACRONYMS

ACEH	Alameda County Environmental Health
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CAP	Corrective Action Plan
CHHSL:	California Human Health Screening Level
COC:	Chemical of Concern
CRA	Conestoga-Rovers & Associates
CRWQCB:	California Regional Water Quality Control Board, Central Coast Region
DPE	Dual-Phase Extraction
EBMUD	East Bay Municipal Utility District
ESLs	Environmental Screening Levels
ISCO	In-Situ Chemical Oxidation
PHC	Petroleum Hydrocarbons
ppm_v	parts per million by volume
SCM:	Site Conceptual Model
SVE	Soil Vapor Extraction
TPH-gas	Total Petroleum Hydrocarbons as gasoline
State Cleanup Fund	State Underground Storage Tank Fund
USTs	Underground Fuel Storage Tanks
WHA:	Weber, Hayes and Associates

Figures



Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

Location Map
Former Exxon Station
3055 35th Avenue
Oakland, California

FIGURE 1
Job # 2X103

NORTH

0' 30'

Approximate Scale (in feet)

Base Map from Conestoga-Rovers & Associates & Google Earth 2011

Explanation

MW-6 Elevation = 149.69' — Groundwater Monitoring Well Location, Designation, and groundwater elevation.

RW-14 Elevation = 148.12' — Remediation Well Location, Designation, and groundwater elevation.

147.80' — Interpolated Groundwater Elevation Contours & Flow Direction

The groundwater gradient measured on January 9, 2014 was 0.01 ft/ft in a westerly direction (equivalent to approximately 1 foot of vertical drop per 100 feet of lateral flow)

SCHOOL STREET

Former Exxon Station

RW-9 Elevation = 146.48'

MW-4 Elevation = 146.10'

RW-10 Elevation = 146.69'

RW-8 Elevation = 146.44'

RW-7 Elevation = 146.29'

Former Gasoline UST Location (two 4,000-gallon & two 6,500-gallon gasoline USTs removed in 1991)

Former Pump Island

MW-1 Elevation = 146.53'

Former 500 gallon Waste Oil UST Location

MW-3 Elevation = 146.44'

RW-12 Elevation = 146.71'

Former Pump Island

RW-14 Elevation = 147.23'

RW-6 Elevation = 146.52'

RW-11 Elevation = 146.82'

MW-2 Elevation = 146.77'

RW-13 Elevation = 147.46'

RW-5 Elevation = 146.65'

146.5'

147.0'

147.5'

148.0'

Abandoned Texaco Station

MW-6 Elevation = 148.12'

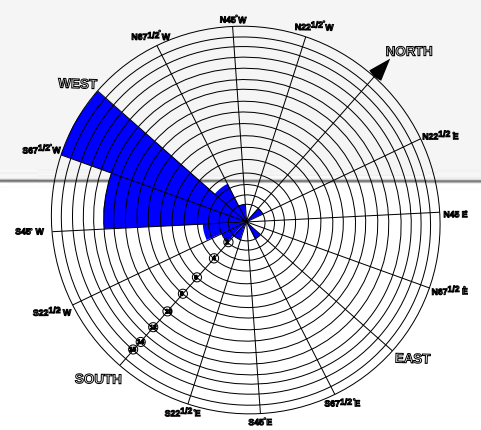
Canopy / Former Dispenser Islands

35TH AVENUE

MW-5 Elevation = 148.62'

QuikStop Station

Canopy / Dispenser Islands



Historical Groundwater Flow Direction
(based on previous consultants 1996-2008 and WHA Results since 2011)

2X103.Oakland-35th WP\QM\2013\4q13\Figures\3-Gradient and Results

Figure 2A
Project 2X103

Site Map with Groundwater Gradient & Flow Direction January 9, 2014 Former Exxon Station

3055 35th Avenue
Oakland, California

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Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

NORTH

0' 30'

Approximate Scale (in feet)

Base Map from Conestoga-Rovers & Associates & Google Earth 2011

Explanation

MW-6 Elevation = 149.69'

Groundwater Monitoring Well Location, Designation, and groundwater elevation.

RW-14 Elevation = 148.12'

Remediation Well Location, Designation, and groundwater elevation.

147.80'

Interpolated Groundwater Elevation Contours & Flow Direction

The groundwater gradient measured on September 20, 2013 was 0.008 ft/ft in a westerly direction (equivalent to approximately 1 foot of vertical drop per 125 feet of lateral flow)

SCHOOL STREET

Former Exxon Station

RW-9 Elevation = 146.47'

MW-4 Elevation = 146.10'

RW-10 Elevation = 146.49'

RW-8 Elevation = 146.18'

RW-7 Elevation = 146.11'

Former Gasoline UST Location (two 4,000-gallon & two 6,500-gallon gasoline USTs removed in 1991)

Former Pump Island

MW-1 Elevation = 146.51'

Former 500 gallon Waste Oil UST Location

MW-3 Elevation = 146.33'

RW-12 Elevation = 146.70'

RW-14 Elevation = 147.12'

Former Pump Island

RW-6 Elevation = 146.11'

RW-11 Elevation = 146.78'

MW-2 Elevation = 146.79'

RW-5 Elevation = 146.47'

RW-13 Elevation = 147.33'

146.5'

147.0'

147.5'

148.0'

Abandoned Texaco Station

MW-6 Elevation = 147.84'

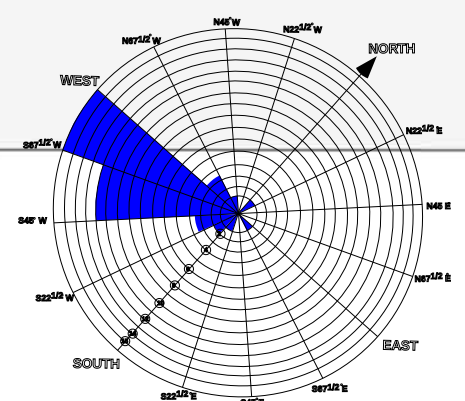
Canopy / Former Dispenser Islands

35TH AVENUE

MW-5 Elevation = 148.43'

QuikStop Station

Canopy / Dispenser Islands



Historical Groundwater Flow Direction
(based on previous consultants 1996-2008 and WHA Results since 2011)

2X103.Oakland-35th WP\QM\2013\3q13\Figures\3-Gradient and Results

Figure 2B
Project 2X103

Site Map with Groundwater Gradient & Flow Direction September 20, 2013 Former Exxon Station

3055 35th Avenue
Oakland, California

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831.722.3580 / www.weber-hayes.com

NORTH

0' 30'

Approximate Scale (in feet)

Base Map from Conestoga-Rovers & Associates & Google Earth 2011

SCHOOL STREET

Former Exxon Station

RW-10
Elevation = 146.69'

RW-9
Elevation = 146.48'

MW-4
Elevation = 146.10'

RW-8
Elevation = 146.44'

RW-7
Elevation = 146.29'

MW-1
Elevation = 146.53'

Former Gasoline UST Location (two 4,000-gallon & two 6,500-gallon gasoline USTs removed in 1991)

Former Pump Island

Former 500 gallon Waste Oil UST Location

RW-14
Elevation = 147.23'
TPH-d: 360* ppb
TPH-g: 1,200 ppb**
B: 470 ppb
T: 6.1 ppb
E: 3.4 ppb
X: 1.2 ppb
MTBE: ND
TBA: 98 ppb
D.O.: 0.63 mg/L

MW-3
Elevation = 146.44'

RW-12
Elevation = 146.71'

Former Pump Island

MW-2
Elevation = 146.77'

RW-6
Elevation = 146.52'

RW-11
Elevation = 146.82'

RW-5
Elevation = 146.65'

RW-13
Elevation = 147.46'
TPH-d: 110* ppb
TPH-g: 440** ppb
B: 43 ppb
T: ND
E: 2.5 ppb
X: ND
MTBE: 5.2 ppb
TBA: 200 ppb
D.O.: 0.74 mg/L

Abandoned Texaco Station

Canopy / Former Dispenser Islands

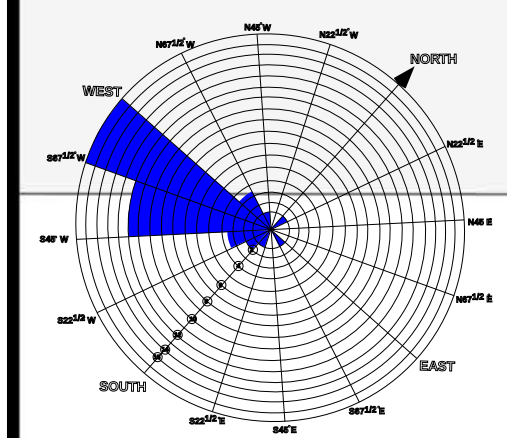
MW-6
Elevation = 148.12'
TPH-d: 190* ppb
TPH-g: 3,700 ppb**
B: 67 ppb
T: < 0.25 ppb
E: 3.8 ppb
X: 1.1 J ppb
MTBE: < 0.72 ppb
TBA: < 6.5 ppb
D.O.: 1.24 mg/L

35TH AVENUE

MW-5
Elevation = 148.62'
TPH-d: 1,100* ppb
TPH-g: 13,000 ppb**
B: 1,700 ppb
T: 33 ppb
E: 740 ppb
X: 32 J ppb
MTBE: 640 ppb
TBA: 1,300 ppb
D.O.: 1.21 mg/L

QuikStop Station

Canopy / Dispenser Islands



Historical Groundwater Flow Direction
(based on previous consultants 1996-2008
and WHA Results since 2011)

2X103.Oakland-35th WP\QM\2013\4q13\Figures\3-Results

Explanation

MW-6
Elevation = 149.69'
TPH-d: 120* ppb
TPH-g: 540** ppb
B: 44 ppb
T: 0.74 ppb
E: 7.5 ppb
X: 2.3 ppb
MTBE: ND
TBA: ND ppb
D.O.: 6.63 mg/L
Sample collected November 2, 2012

Groundwater Monitoring Well Location, Designation, and groundwater elevation.

RW-14
Elevation = 148.12'
TPH-d: ND
TPH-g: ND
B: 1.5
T: ND
E: ND
X: ND
MTBE: ND
TBA: ND
D.O.: 1.34 mg/L

Remediation Well Location, Designation, and groundwater elevation.

	Laboratory Detection Limit	Water Quality Objectives (WQO's)
TPH-d:	100	1,000
TPH-g:	50	1,000
B:	0.5	1
T:	0.5	150
E:	0.5	300
X:	1.5	1,750
MTBE:	0.5	5
TBA:	5	12

BOLD: Above WQO threshold
ND: Not detected at or above the Laboratory Detection Limit
< #: Not detected at or above the elevated Laboratory Detection Limit

*: Laboratory report indicates that the sample chromatographic pattern does not resemble typical diesel standard pattern; unknown organics within the diesel range lighter than diesel quantified as diesel.

**: Laboratory report indicates although TPH Gasoline compounds are present, the sample pattern does not match pattern of reference Gasoline standard. Hydrocarbons within range of C5-C12 quantified as Gasoline.

+: Does not match pattern of reference Gasoline standard. Reported value is the result of extractable hydrocarbon overlap.

J: Laboratory report indicates a value between the a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather than quantitative.

Figure 3A
Project 2X103

Site Map with Laboratory Analytical Results January 9, 2014 Former Exxon Station

3055 35th Avenue
Oakland, California

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

NORTH

0' 30'

Approximate Scale (in feet)

Base Map from Conestoga-Rovers & Associates & Google Earth 2011

MW-4
Elevation = 146.10'
TPH-d: 2,200* ppb
TPH-g: 4,400 ppb**
B: 6,200 ppb
T: 24 ppb
E: 420 ppb
X: 62 ppb
MTBE: < 1.4 ppb
TBA: 160 ppb
D.O.: 0.32 mg/L

RW-9
Elevation = 146.47'
TPH-d: 370*
TPH-g: 5,900 ppb**
B: 4,600 ppb
T: 40 ppb
E: 8.4J ppb
X: 8.7J ppb
MTBE: < 7.2 ppb
TBA: < 65 ppb
D.O.: 0.49 mg/L

Former Exxon Station

RW-10
Elevation = 146.49'

Former Gasoline UST Location (two 4,000-gallon & two 6,500-gallon gasoline USTs removed in 1991)

Former Pump Island

RW-8
Elevation = 146.18'

RW-7
Elevation = 146.11'

MW-1
Elevation = 146.51'
TPH-d: 1,500* ppb
TPH-g: 2,900 ppb**
B: 4,500 ppb
T: 9.6 ppb
E: 150 ppb
X: **6.8**J ppb
MTBE: < 1.4
TBA: 98 ppb
D.O.: 0.77 mg/L

Former 500 gallon Waste Oil UST Location

MW-3
Elevation = 146.33'
TPH-d: 3,000* ppb
TPH-g: **6,200** ppb**
B: 11,000 ppb
T: 37 ppb
E: 990 ppb
X: 118.1J ppb
MTBE: < 7.2
TBA: 350 ppb
D.O.: 0.39 mg/L

RW-12
Elevation = 146.70'

Former Pump Island

RW-6
Elevation = 146.40'

RW-11
Elevation = 146.78'

RW-5
Elevation = 146.67'
TPH-d: 160*
TPH-g: 390** ppb
B: 510 ppb
T: 3.9 ppb
E: 11 ppb
X: 7.28J ppb
MTBE: < 0.72 ppb
TBA: < 6.5 ppb
D.O.: 0.68 mg/L

MW-2
Elevation = 146.79'
TPH-d: 2,300* ppb
TPH-g: 4,200 ppb**
B: 1,800 ppb
T: 11 ppb
E: 300 ppb
X: 8.7 ppb
MTBE: < 1.4
TBA: 120 ppb
D.O.: 0.44 mg/L

RW-13
Elevation = 147.33'
TPH-d: ND
TPH-g: 390** ppb
B: 84 ppb
T: 1.1 ppb
E: 2.1 ppb
X: 1.1 ppb
MTBE: ND ppb
TBA: 10 ppb
D.O.: 0.18 mg/L

SCHOOL STREET

RW-14
Elevation = 147.12'
TPH-d: 150* ppb
TPH-g: 170* ppb
B: 83 ppb
T: 1.6 ppb
E: 2.4 ppb
X: 1.1 ppb
MTBE: 5.5 ppb
TBA: 34 ppb
D.O.: 0.15 mg/L

Abandoned Texaco Station

Canopy / Former Dispenser Islands

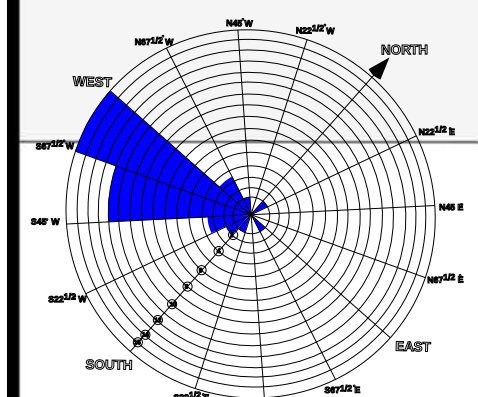
MW-6
Elevation = 147.84'
TPH-d: 470* ppb
TPH-g: **1,700** ppb**
B: 130 ppb
T: 0.66 J ppb
E: 4.6 ppb
X: < 1.74 ppb
MTBE: < 1.4 ppb
TBA: < 13 ppb
D.O.: 0.61 mg/L

35TH AVENUE

MW-5
Elevation = 148.43'
TPH-d: 540* ppb
TPH-g: 4,400 ppb**
B: 2,200 ppb
T: 47 ppb
E: 1,200 ppb
X: 50.1 J ppb
MTBE: 790 ppb
TBA: 890 ppb
D.O.: 0.50 mg/L

QuikStop Station

Canopy / Dispenser Islands



Historical Groundwater Flow Direction
(based on previous consultants 1996-2008
and WHA Results since 2011)

2X103.Oakland-35th WP\QM\2013\3q13\Figures\3-Results

Explanation

MW-6
Elevation = 149.69'
TPH-d: 120* ppb
TPH-g: 540** ppb
B: 44 ppb
T: 0.74 ppb
E: 7.5 ppb
X: 2.3 ppb
MTBE: ND
TBA: ND ppb
D.O.: 6.63 mg/L
Sample collected November 2, 2012

Groundwater Monitoring Well Location, Designation, and groundwater elevation.

RW-14
Elevation = 148.12'
TPH-d: ND
TPH-g: ND
B: 1.5
T: ND
E: ND
X: ND
MTBE: ND
TBA: ND
D.O.: 1.34 mg/L

Remediation Well Location, Designation, and groundwater elevation.

	Laboratory Detection Limit	Water Quality Objectives (WQO's)
TPH-d:	100	1,000
TPH-g:	50	1,000
B:	0.5	1
T:	0.5	150
E:	0.5	300
X:	1.5	1,750
MTBE:	0.5	5
TBA:	5	12

BOLD: Above WQO threshold
ND: Not detected at or above the Laboratory Detection Limit
< #: Not detected at or above the elevated Laboratory Detection Limit

*: Laboratory report indicates that the sample chromatographic pattern does not resemble typical diesel standard pattern; unknown organics within the diesel range lighter than diesel quantified as diesel.

**: Laboratory report indicates although TPH Gasoline compounds are present, the sample pattern does not match pattern of reference Gasoline standard. Hydrocarbons within range of C5-C12 quantified as Gasoline.

J: Laboratory report indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather than quantitative.

Figure 3B
Project 2X103

Site Map with Laboratory Analytical Results September 20, 2013 Former Exxon Station

3055 35th Avenue
Oakland, California

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

Figure 4
TPHg and Benzene Concentration Trends
Well MW-1 (March 1997 to September 2013)

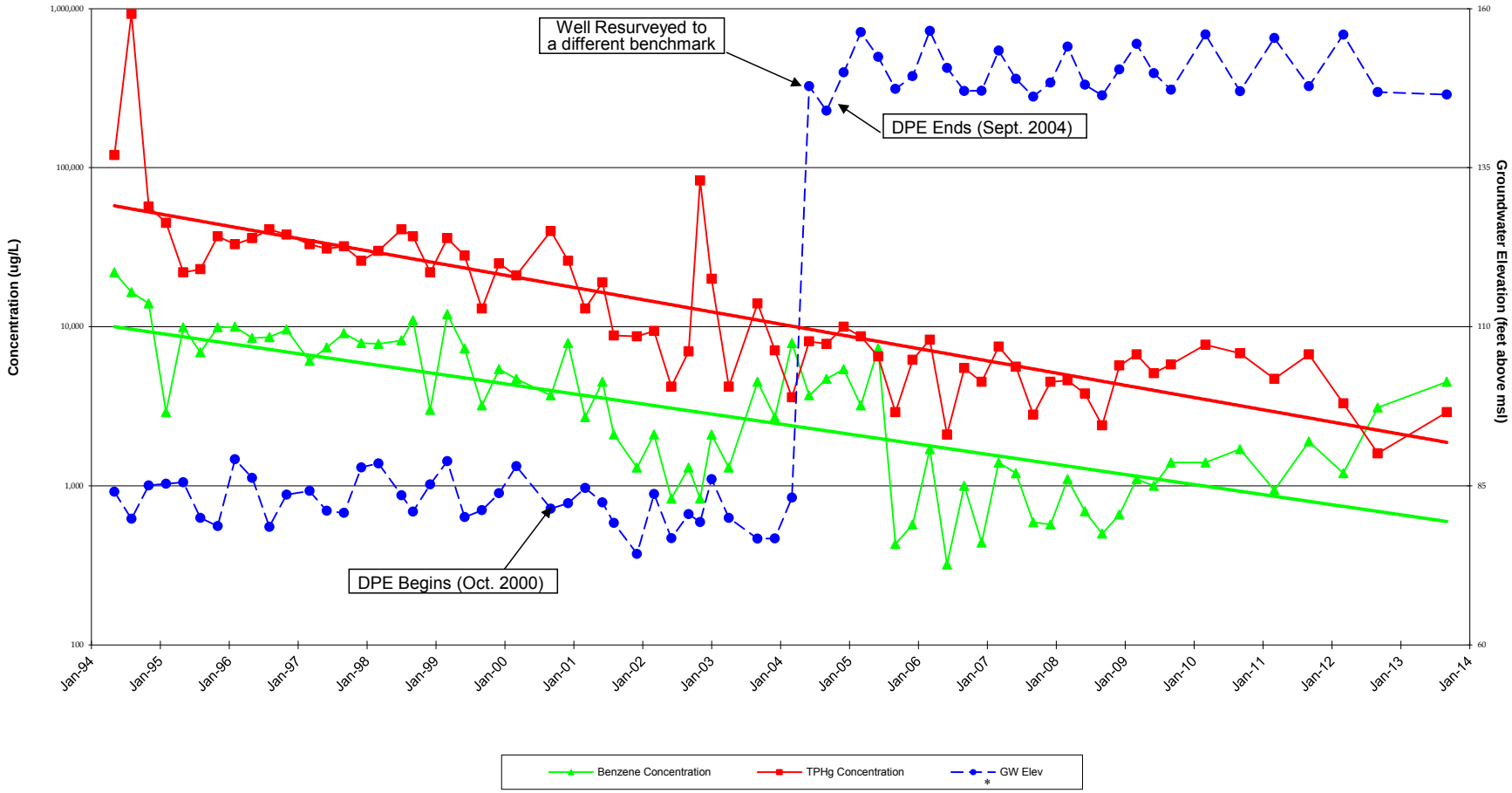


Figure 5
TPHg and Benzene Concentration Trends
Well MW-2 (March 1997 to September 2013)

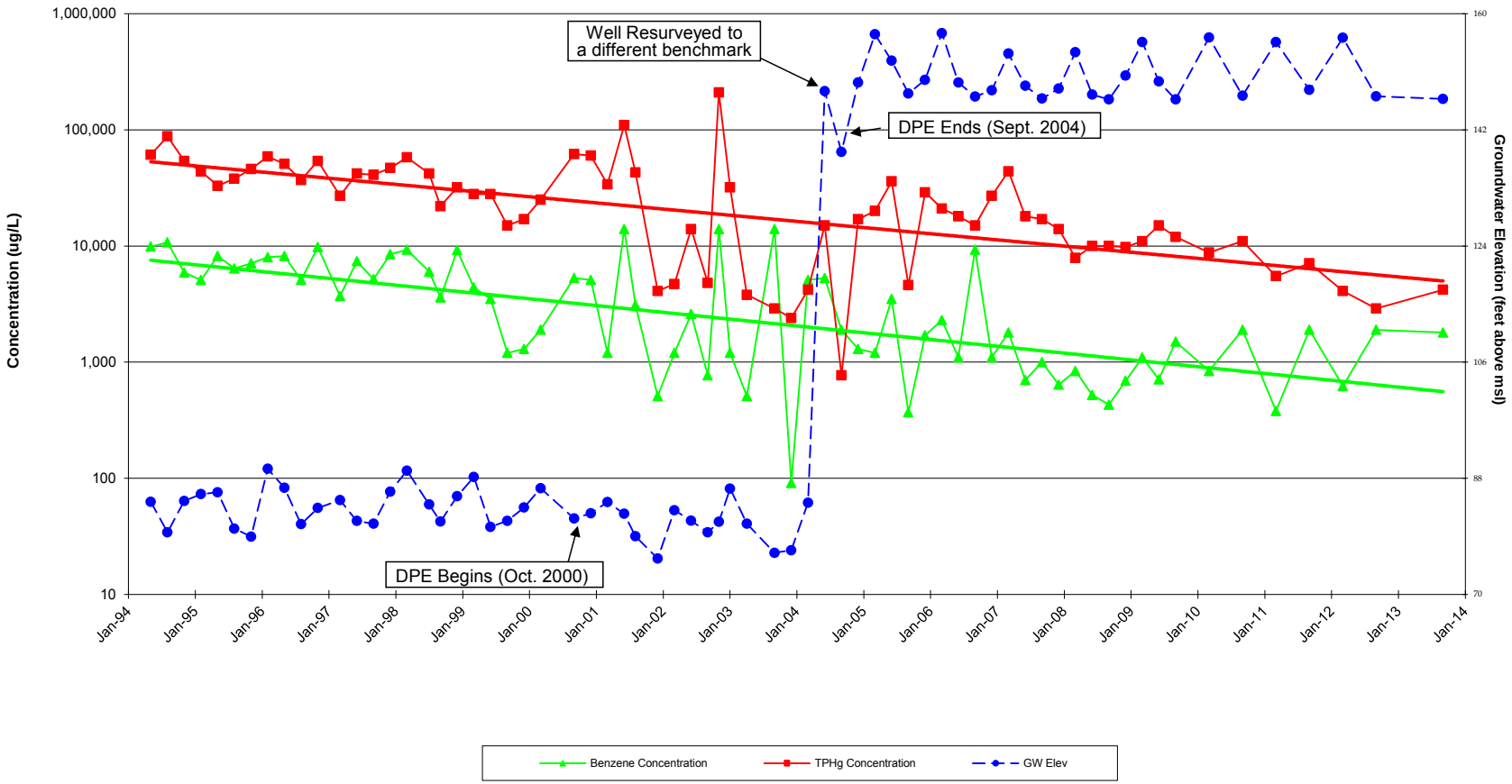


Figure 6
TPHg and Benzene Concentration Trends
Well MW-3 (March 1997 to September 2013

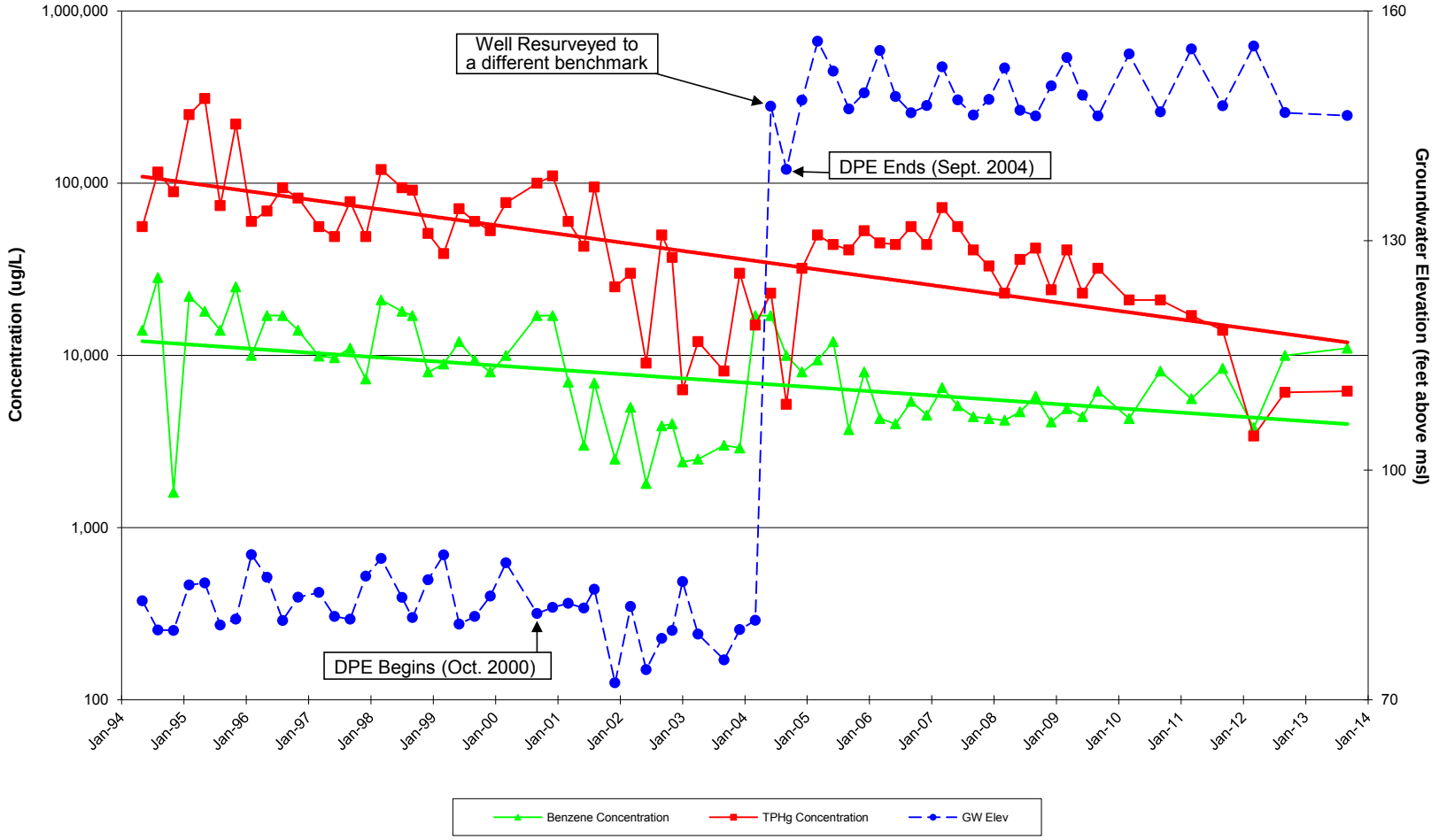
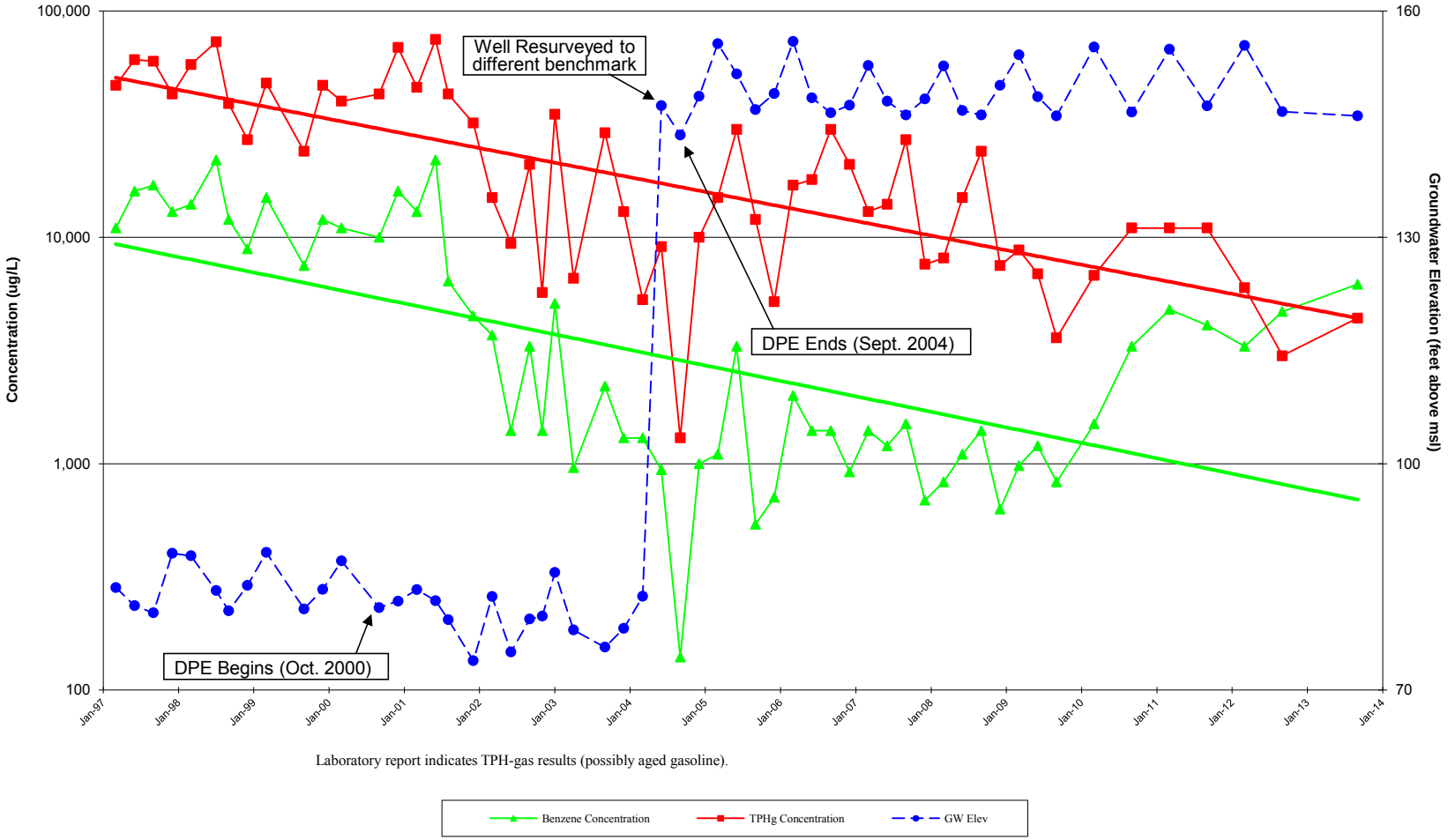


Figure 7
TPHg and Benzene Concentration Trends
Well MW-4 (March 1997 to September 2013)



Laboratory report indicates TPH-gas results (possibly aged gasoline).

Figure 8
TPHg and Benzene Concentration Trends
Well RW-5 (March 2005 to September 2013)

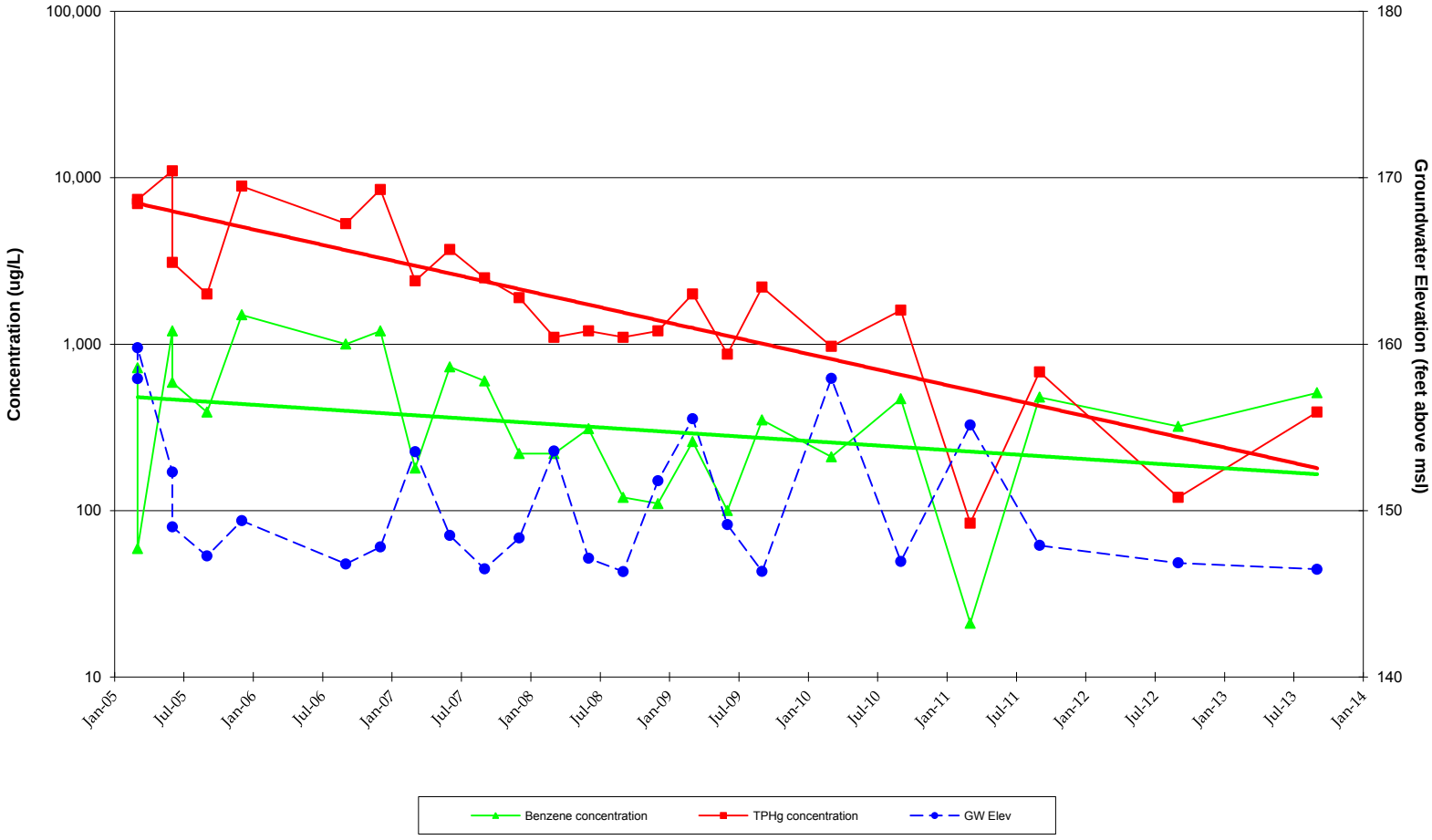


Figure 9
TPHg and Benzene Concentration Trends
Well RW-9 (March 2005 to September 2013)

Tables

Table 1A: Fourth Quarter 2013 Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data								Field Measurements	
						Total Petroleum Hydrocarbons		Volatile Organic Compounds							
Well # *Well Diameter*	**Screen Interval (feet)**	**TOC Elevation (feet)**				**Diesel**	**Gasoline**	**Benzene**	**Toluene**	**Ethylbenzene**	**Xylenes**	**MTBE**	**TBA**	**Dissolved Oxygen (mg/L)**	**Oxidation Reduction Potential (mV)**
MW-1 *4-inch*	10 - 25	167.02	1/9/2014	20.49	146.53	--								0.89	-110
MW-2 *4-inch*	10 - 25	166.14	1/9/2014	19.37	146.77	--								1.17	-78
MW-3 *2-inch*	10 - 25	162.94	1/9/2014	16.50	146.44	--								0.69	-85
MW-4 *2-inch*	10 - 30	163.49	1/9/2014	17.39	146.10	--								1.12	-31
MW-5 *2-inch*	20 - 30	165.74	1/9/2014	17.12	148.62	**1,100***	**13,000****	**1,700**	33	**740**	32 J	**640**	**1,300**	1.21	-42
MW-6 *2-inch*	20 - 30	164.3	1/9/2014	16.18	148.12	190*	**3,700**+**	**67**	< 0.25	3.8	1.1 J	< 0.72	< 6.5	1.24	-75
RW-5 *4-inch*	5 - 25.7	162.34	1/9/2014	15.69	146.65	--								1.07	-52
RW-6 *4-inch*	5 - 25.5	162.36	1/9/2014	15.84	146.52	--								0.55	-85
RW-7 *4-inch*	5 - 29.5	162.72	1/9/2014	16.43	146.29	--								1.02	-112
RW-8 *4-inch*	5 - 29.5	164.13	1/9/2014	17.69	146.44	--								1.33	-68
RW-9 *4-inch*	5 - 25	163.86	1/9/2014	17.38	146.48	--								0.87	-64
RW-10 *4-inch*	5 - 25	163.02	1/9/2014	16.33	146.69	--								1.01	-115
RW-11 *4-inch*	5 - 25	162.67	1/9/2014	15.85	146.82	--								0.85	-72
RW-12 *4-inch*	5 - 27	163.06	1/9/2014	16.35	146.71	--								1.37	-81
RW-13 *4-inch*	5 - 25	164.34	1/9/2014	16.88	147.46	110*	440**	**43**	< 0.50	2.5	< 1.5	**5.2**	**200**	0.74	-67
RW-13 (Split)[1] *4-inch*	5 - 25	164.34	1/9/2014	16.88	147.46	< 100	150**	**12**	< 0.50	< 0.50	< 1.5	**5.2**	**60**	0.27	-61
RW-14 *4-inch*	5 - 25	163.76	1/9/2014	16.53	147.23	360*	**1,200****	**470**	6.1	3.4	1.2	< 0.50	**98**	0.63	-102
RW-14 (Split)[1] *4-inch*	5 - 25	163.76	1/9/2014	16.53	147.23	**1,200***	**720****	**130**	< 0.50	1.2	2.2	< 0.50	**85**	0.24	-87
Laboratory Detection Limit:						**100**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**0.5**	**5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):						**1,000**		**1**	**150**	**300**	**1,750**	**5**	**12**	--	--

Notes

WQG = Water Quality Goals:

BOLD = Above WQG Threshold

TOC = Top of Casing

-- = Data not available.

< # = Not detected at or above reporting limit.

 # = Diesel result due to discrete unknown peaks within quantified range

*** =** Sample chromatographic pattern does not resemble typical diesel standard pattern; unknown organics within diesel range quantified as diesel.

**** =** Laboratory report indicates although TPH Gasoline compounds are present, the sample pattern does not match pattern of reference Gasoline standard. Hydrocarbons within range of C5-C12 quantified as Gasoline.

J = Laboratory indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather than quantitative.

+ = Does not match pattern of reference Gasoline standard. Reported value is the result of extractable hydrocarbons overlap.

[1] = "Split" sample was collected by traditional purging and sampling technique (i.e., submersible pump purging at 1 gpm; sample upon sufficient well recovery) rather than low-flow sampling technique in order to compare/contrast analytical results as a function of sample technique.

Table 1B: Third Quarter 2013 Groundwater Elevation and Analytical Data - Monitoring Wells

FORMER EXXON SERVICE STATION

3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data								Field Measurements	
						Total Petroleum Hydrocarbons		Volatile Organic Compounds							
Well # *Well Diameter*	Screen Interval (feet)	TOC Elevation (feet)				Diesel	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)
MW-1 *4-inch*	10 - 25	167.02	9/20/2013	20.51	146.51	**1,500***	**2,900****	**4,500**	9.6	150	6.8J	< 1.4	**98**	0.77	-88
MW-2 *4-inch*	10 - 25	166.14	9/20/2013	19.35	146.79	**2,300***	**4,200****	**1,800**	11	**300**	8.7	< 1.4	**120**	0.44	-100
MW-3 *2-inch*	10 - 25	162.94	9/20/2013	16.61	146.33	**3,000***	**6,200****	**11,000**	37	**990**	118.1J	< 7.2	**350**	0.39	-79
MW-4 *2-inch*	10 - 30	163.49	9/20/2013	17.39	146.10	**2,200***	**4,400****	**6,200**	24	**420**	62	< 1.4	**160**	0.32	-89
MW-5 *2-inch*	20 - 30	165.74	9/20/2013	17.31	148.43	540*	**4,400****	**2,200**	47	**1,200**	50.1J	**790**	**890**	0.50	-60
MW-6 *2-inch*	20 - 30	164.3	9/20/2013	16.46	147.84	470*	**1,700****	**130**	0.66J	4.6	< 1.74	< 1.4	< 13	0.61	-68
RW-5 *4-inch*	5 - 25.7	162.34	9/20/2013	15.87	146.47	160*	390**	**510**	3.9	11	7.28J	< 0.72	< 6.5	0.68	-49
RW-6 *4-inch*	5 - 25.5	162.36	9/20/2013	15.96	146.40	--								0.78	-79
RW-7 *4-inch*	5 - 29.5	162.72	9/20/2013	16.61	146.11	--								0.52	-83
RW-8 *4-inch*	5 - 29.5	164.13	9/20/2013	17.95	146.18	--								0.52	-41
RW-9 *4-inch*	5 - 25	163.86	9/20/2013	17.39	146.47	370*	**5,900****	**4,600**	40	8.4J	8.7J	< 7.2	< 65	0.49	-72
RW-10 *4-inch*	5 - 25	163.02	9/20/2013	16.53	146.49	--								0.71	-102
RW-11 *4-inch*	5 - 25	162.67	9/20/2013	15.89	146.78	--								0.9	-77
RW-12 *4-inch*	5 - 27	163.06	9/20/2013	16.36	146.70	--								0.85	-90
RW-13 *4-inch*	5 - 25	164.34	9/20/2013	17.01	147.33	< 100	390**	**84**	1.1	2.1	1.1	< 0.5	10	0.18	-55
RW-14 *4-inch*	5 - 25	163.76	9/20/2013	16.64	147.12	150*	170**	**83**	1.6	2.4	1.1	**5.5**	**34**	0.15	-88
Laboratory Detection Limit:						**100**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**0.5**	**5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):						**1,000**		**1**	**150**	**300**	**1,750**	**5**	**12**	--	--

Notes

WQG = Water Quality Goals:
BOLD = Above WQG Threshold

TOC = Top of Casing

-- = Data not available.

< # = Not detected at or above reporting limit.

 # = Diesel result due to discrete unknown peaks within quantified range
* = Sample chromatographic pattern does not resemble typical diesel standard pattern; unknown organics within diesel range quantifired as diesel.
** = Laboratory report indicates although TPH Gasoline compounds are present, the sample pattern does not match pattern of reference Gasoline standard. Hydrocarbons within range of C5-C12 quantified as Gasoline.
J = Laboratory indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather than quantitative.

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells

FORMER EXXON SERVICE STATION

3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
MW-1 *4-inch*	10 - 25	167.02																			
			1/9/2014	--		20.49	146.53	--	--	--	--	--	--	--	--	--	--	--	--	--	0.89	-110
			9/20/2013	--		20.51	146.51	**1,500*** **	--	**2,900**[d]	**4,500**	9.6	150	6.8J	< 1.4	**98**	< 0.57	< 0.95	< 0.80 - 1.3	0.77	-88
			6/25/2013	--		19.58	147.44	--	--	--	--	--	--	--	--	--	--	--	--	0.74	-100
			3/13/2013	--		16.84	150.18	--	--	--	--	--	--	--	--	--	--	--	--	1.28	-79
			11/9/2012	--		18.58	148.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		20.14	146.88	**1,800*** **	--	**1,600***	**3,100**	9	110	9.4J	< 1.5	**210**	< 0.59	< 0.99	< 0.84 - 1.4	0.85	-109
			3/30/2012	--		11.10	155.92	**1,400*** **	--	**3,300**[d]	**1,200**	3.6J	82	8.7J	< 1.5	< 14	< 0.59	< 0.99	< 0.84 - 1.4	2.39	-100
			9/22/2011	--		19.22	147.80	690**	--	**6,700***	**1,900**	< 8.4	140	< 14.4	**23**	--	--	--	--	0.72	-91
			3/17/2011	--		11.65	155.37	**1,100**[e]	--	**4,700**[d]	**940**	17	5.7	55	**(34)**	--	--	--	--	0.69	Not operating
			9/10/2010	--	(Z^{TPHd})	19.99	147.03	**1,700**[e,f] **(790)**[e,f]	--	**6,800**[d]	**1,700**	17	150	150	**(28)**	--	--	--	--	0.65	Not operating
			3/14/2010	--	(Z^{TPHd})	11.08	155.94	**2,100**[e,f] **(2,000)**[e,f]	--	**7,700**[d]	**1,400**	22	10	210	**(42)**	--	--	--	--	1.64	Not operating
			9/5/2009	--	(Z^{TPHd})	19.78	147.24	**1500**[e,f,k] **(1,200)**[e,k]	--	**5,800**[d]	**1,400**	21	60	150	**(37)**	--	--	--	--	1.22	Not operating
			6/7/2009	Sheen[Field]	(Z^{TPHd})	17.17	149.85	**1,400**[e,f,m] **(690)**[e]	--	**5,100**[d]	**1,000**	9.2	35	71	**(42)**	--	--	--	--	0.95	Not operating
			3/14/2009	Sheen[Field]	(Z^{TPHd})	12.57	154.45	**2,000**[e,f,k] **(860**[e]**)**	--	**6,700**[d]	**1,100**	23	100	180	**(35)**	--	--	--	--	1.19	Not operating
			12/28/2008	Sheen[Field]	(Z^{TPHd})	16.57	150.45	**(2,800**[e]**)**	< 250	**5,700**[d]	**660**	17	110	320	**(41)**	--	--	--	--	1.06	Not operating
			9/6/2008	--	(Z^{TPHd})	20.66	146.36	(420[e])	--	**2,400**[d]	**500**	11	30	67	< 75	--	--	--	--	1.20	Not operating
			6/14/2008	--	(Z)	18.98	148.04	(410[e])	(< 250)	**(3,800**[d]**)**	**(690)**	(12)	(64)	(240)	(< 80)	--	--	--	--	1.95	Not operating
			3/9/2008	Sheen[Field]	(Z)	12.98	154.04	(470[e])	(< 250)	**(4,600**[d]**)**	**(1,100)**	(23)	(82)	(140)	(< 50)	--	--	--	--	1.17	Not operating
			12/8/2007	Sheen[Field]		18.66	148.36	520[e,f]	--	**4,500**[d]	**570**	13	57	200	< 120	--	--	--	--	1.24	Not operating
			9/6/2007	--		20.84	146.18	690[e,f]	--	**2,800**[d]	**590**	17	35	100	< 80	--	--	--	--	0.90	Not operating
			6/15/2007	Sheen[Field]		18.07	148.95	**1,500**[e,k,f]	--	**5,600**[d]	**1,200**	29	84	190	**56**	--	--	--	--	0.74	Not operating
			3/16/2007	--		13.62	153.40	**1,800**[e,f]	--	**7,500**[d]	**1,400**	30	100	270	< 150	--	--	--	--	0.58	Not operating
			12/6/2006	Sheen[Lab]		19.92	147.10	760[e,g]	--	**4,500**[d,g]	**440**	13	42	190	< 60	--	--	--	--	0.55	Not operating
			9/5/2006	Sheen[Lab]		19.96	147.06	**1,500**[e,f,k,g]	--	**5,500**[d,g]	**1,000**	45	81	310	< 120	--	--	--	--	0.38	Not operating
			6/30/2006	Sheen[Field]		16.33	150.69	**1,500**[m,k,l]	--	**2,100**[d,l]	**320**	6.1	< 1.0	77	< 90	--	--	--	--	0.66	Not operating
			3/22/2006	Sheen[Field]		10.52	156.50	**1,100**[e,f,k]	--	**8,300**[d]	**1,700**	100	190	660	< 150	--	--	--	--	0.84	Not operating
			12/14/2005	Sheen[Field]		17.63	149.39	**4,000**[e,f,k]	--	**6,200**[d]	**570**	32	72	420	< 110	--	--	--	--	1.08	Not operating
			9/21/2005	--		19.64	147.38	860[e,k,f]	--	**2,900**[d]	**430**	19	46	150	< 50	< 66	< 8.6	< 12	< 14 - 17	1.14	Not operating
			6/21/2005	--		14.60	152.42	930[e,k]	--	**6,500**[d]	**820**	26	57	110	< 250	--	--	--	--	--	Not operating
			3/7/2005	--		10.73	156.29	**1,300**[e,f,k]	--	**8,700**[d]	**1,200**	99	140	770	< 500	--	--	--	--	0.91	Not operating
		100.85	12/27/2004	--		17.04	83.81	**1,400**[e]	--	**10,000**[d]	**2,400**	**170**	170	1,500	< 120	--	--	--	--	0.41	Not operating
			9/27/2004	--		23.07	77.78	**1,700**[e]	--	**7,800**[d]	**1,800**	110	120	670	< 180	--	--	--	--	0.28	Not operating
			6/16/2004	--		19.20	81.65	**2,300**[e,f]	--	**8,100**[d]	**1,500**	69	22	1,000	< 100	--	--	--	--	--	Not operating
			3/18/2004	--		17.70	83.15	**1,100**[e,f]	--	**3,600**[d]	**650**	59	38	370	< 90	--	--	--	--	--	Operating
			12/2/2003	Sheen[Lab]		24.12	76.73	**9,300**[e,f,g]	--	**7,100**[d,g]	**1,400**	**230**	160	820	< 100	--	--	--	--	--	Operating
			9/3/2003	--		24.16	76.69	**36,000**[e,f]	--	**14,000**[d]	**300**	50	33	480	< 50	--	--	--	--	--	Operating
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
Continued			5/30/2003	--		16.65	84.20	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
MW-1			4/25/2003	--		20.90	79.95	320[e]	--	**4,200**[d]	**580**	81	59	470	< 50	--	--	--	--	--	Operating
			1/13/2003	--		14.80	86.05	**5,300**[e,f]	--	**20,000**[d]	**2,300**	**480**	**300**	**2,100**	< 500	--	--	--	--	0.33	Not operating
			11/21/2002	--		21.55	79.30	**200,000**[e,g]	--	**83,000**[d,g]	**7,100**	**1,700**	**3,000**	**13,000**	< 1,000	--	--	--	--	0.49	Operating
			9/26/2002	--		20.30	80.55	**1,300**[e,f,k]	--	**7,000**[d]	**1,300**	**190**	200	760	< 100	--	--	--	--	0.70	Operating
			6/10/2002	--		24.10	76.75	900[e,k]	--	**4,200**[d]	**830**	**170**	110	460	< 100	--	--	--	--	--	Operating
			3/11/2002	--		17.13	83.72	**1,400**[e]	--	**9,400**[d]	**2,100**	**200**	74	470	< 20	--	--	--	--	0.39	Operating
			12/7/2001	--		26.55	74.30	**1,900**[e,f]	--	**8,700**[d]	**1,300**	**160**	38	730	< 20	--	--	--	--	0.59	Operating
			8/30/2001	--		21.70	79.15	**1,400**[d]	--	**8,800**[a]	**2,100**	45	91	240	< 130	--	--	--	--	0.27	Operating
			6/6/2001	--		18.47	82.38	**4,000**	--	**19,000**	**4,500**	130	270	430	< 400	--	--	--	--	0.39	Not operating
			3/7/2001	--		16.19	84.66	**2,400**	--	**13,000**	**2,700**	43	69	300	< 100	--	--	--	--	0.49	Not operating
			12/5/2000	--		18.60	82.25	**3,400**[e]	--	**26,000**[a]	**7,900**	**150**	**580**	810	< 300	--	--	--	--	0.35	Not operating
			9/7/2000	--		19.45	81.40	**12,000**[e,g]	--	**40,000**[d,g]	**3,700**	**1,400**	**910**	**4,900**	< 50	--	--	--	--	0.17	
			3/23/2000	--		12.76	88.09	**3,300**[f]	--	**21,000**[d]	**4,700**	140	**470**	1,100	< 350	--	--	--	--	--	
			12/10/1999	--		17.02	83.83	**2,900**[e,f]	--	**25,000**[d]	**5,400**	130	**620**	1,400	< 1,000	--	--	--	--	1.03	
			9/28/1999	--		19.68	81.17	**3,600**[e,f]	--	**13,000**[d]	**3,200**	130	**320**	1,100	< 210	--	--	--	--	0.55	
			6/29/1999	--		20.77	80.08	**3,500**[e]	--	**28,000**[d]	**7,300**	**420**	**810**	1,700	< 1,300	--	--	--	--	0.10	
			3/29/1999	--		11.98	88.87	**6,800**[e]	--	**36,000**[d]	**12,000**	**750**	**1,300**	**2,400**	**950**	--	--	--	--	0.50	
			12/8/1998	--		15.62	85.23	**3,700**	--	**22,000**	**3,000**	**1,200**	**730**	**3,100**	< 900	--	--	--	--	--	
			9/30/1998	--		19.90	80.95	**3,300**	--	**37,000**	**11,000**	**950**	**1,200**	**2,800**	< 20	--	--	--	--	2.0	
			7/14/1998	--		17.34	83.51	**8,900**[e,f]	--	**41,000**[d]	**8,200**	**1,100**	**1,200**	**3,000**	< 200	--	--	--	--	1.8	
			3/18/1998	Sheen		12.34	88.51	**4,200**[e,f]	--	**30,000**[d]	**7,800**	**820**	**840**	**2,000**	< 1,100	--	--	--	--	1.3	
			12/22/1997	--		12.95	87.90	**5,800**[e]	--	**26,000**[d]	**7,900**	**370**	**920**	1,500	< 790	--	--	--	--	0.7	
			9/17/1997	--		20.12	80.73	**3,500**[e]	--	**32,000**[d]	**9,100**	**550**	**1,000**	**2,000**	< 1,000	--	--	--	--	2.1	
			6/25/1997	--		19.77	81.08	**7,400**[a]	--	**31,000**	**7,400**	**440**	**890**	**1,800**	< 400	--	--	--	--	3.7	
			3/20/1997	--		16.65	84.20	**10,000**	--	**33,000**	**6,100**	**560**	**970**	**2,200**	< 400	--	--	--	--	8.5	
			11/27/1996	Sheen		17.24	83.61	**6,100**	--	**38,000**	**9,600**	**950**	**1,600**	**3,100**	< 400	--	--	--	--	5.6	
			8/22/1996	--		22.30	78.55	**6,200**	--	**41,000**	**8,600**	**1,300**	**1,500**	**2,900**	< 200	--	--	--	--	8.0	
			5/21/1996	--		14.62	86.23	**8,500**	--	**36,000**	**8,500**	**1,400**	**1,300**	**2,800**	**1,900**	--	--	--	--	--	
			2/21/1996	--		11.69	89.16	**4,300**	--	**33,000**	**10,000**	**480**	**1,000**	**1,800**	**3,300**	--	--	--	--	--	
			11/29/1995	--		22.19	78.66	--	--	**37,000**	**9,900**	**530**	**1,600**	**2,900**	--	--	--	--	--	--	
			8/22/1995	--		20.90	79.95	--	--	**23,000**	**6,900**	**340**	**1,200**	**1,900**	--	--	--	--	--	--	
			5/23/1995	--		15.29	85.56	--	--	**22,000**	**9,900**	**990**	**790**	**2,000**	--	--	--	--	--	--	
			2/27/1995	--		15.53	85.32	--	--	**45,000**	**2,900**	**2,500**	**760**	**4,100**	--	--	--	--	--	--	
			11/11/1994	--		15.80	85.05	--	--	**57,000**	**14,000**	**4,400**	**1,400**	**6,400**	--	--	--	--	--	--	
			8/18/1994	Sheen		21.04	79.81	--	--	**925,000**	**16,500**	**6,200**	**1,000**	**9,400**	--	--	--	--	--	--	
			7/19/1994	--		20.77		--	--	--	--	--	--	--	--	--	--	--	--	--	
			5/25/1994	Sheen		16.79	84.06	**25,000**	< 50,000	**120,000**	**22,000**	**17,000**	**2,800**	**16,000**	--	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
MW-2 *4-inch*	10 - 25	166.14																			
			1/9/2014	--		19.37	146.77	--	--	--	--	--	--	--	--	--	--	--	--	--	1.17	-78
			9/20/2013	--		19.35	146.79	**2,300***	--	**4,200[d]**	**1,800**	11	**300**	8.7	< 1.4	**120**	< 0.57	< 0.95	< 0.80 - 1.3	0.44	-100
			6/25/2013	--		18.47	147.67	--	--	--	--	--	--	--	--	--	--	--	--	1.56	-94
			3/13/2013	--		15.58	150.56	--	--	--	--	--	--	--	--	--	--	--	--	1.41	-82
			11/9/2012	--		17.41	148.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	Sheen [Field]		18.95	147.19	**1,500***	--	**2,900***	**1,900**	12	270	12J	**42**	**300**	< 0.59	< 0.99	< 1.1 - 1.5	4.27	-101
			3/30/2012	--		9.84	156.30	**1,800***	--	**4,100[d]**	**620**	5.0	140	8.6J	**21**	< 9.7	< 0.43	< 0.71	< 6.0 - 0.97	2.66	-104
			9/22/2011	--		17.94	148.20	690**	--	**7,100***	**1,900**	< 8.4	**350**	< 14.4	**39**	< 66	< 8.6	< 12	< 14 - 17	0.76	-106
			3/17/2011	--		10.51	155.63	**2,200** [e,f]	--	**5,500** [d]	**380**	12	1.8	15	**(35)**	--	--	--	--	0.68	Not operating
			9/10/2010	--		(Z[TPHd])	18.84	147.30	**2,400** [e,f] **(2,200)** [e,f]	--	**11,000** [d]	**1,900**	40	**380**	110	**(81)**	--	--	--	--	0.40	Not operating
			3/14/2010	Sheen [Lab]		(Z[TPHd])	9.82	156.32	**20,000** [e,f,k,g] **(2,900)** [e,f]	--	**8,800** [d,g]	**840**	18	67	92	**(65)**	--	--	--	--	0.81	Not operating
			9/5/2009	Sheen [Lab]		(Z[TPHd])	19.41	146.73	**11,000** [e,f,k,g] **(4,800)** [e,f,k]	--	**12,000** [d,g]	**1,500**	30	170	220	**(77)**	--	--	--	--	0.95	Not operating
			6/7/2009	Sheen [Field & Lab]		(Z[TPHd])	16.64	149.50	**13,000** [m,f] **(2,500)** [e]	--	**15,000** [d]	**710**	37	210	180	**(88)**	--	--	--	--	0.71	Not operating
			3/14/2009	Sheen [Field]		(Z[TPHd])	10.52	155.62	**3,300** [e,f,k] **(2,700** [e]**)**	--	**11,000** [d]	**1,100**	23	23	250	**(120)**	--	--	--	--	0.67	Not operating
			12/28/2008	Sheen [Field]		(Z[TPHd])	15.73	150.41	**(2,400** [e]**)**	< 250	**9,800** [d]	**690**	19	250	180	**(120)**	--	--	--	--	0.63	Not operating
			9/6/2008	Sheen [Field & Lab]		(Z[TPHd])	19.41	146.73	**(2,500** [e,g]**)**	--	**10,000** [d,g]	**430**	17	270	370	< 180	--	--	--	--	0.81	Not operating
			6/14/2008	Sheen [Field]		(Z)	18.66	147.48	**(2,500** [e]**)**	(< 250)	**(10,000** [d]**)**	**(520)**	(18)	(200)	(370)	(< 350)	--	--	--	--	0.97	Not operating
			3/9/2008	Sheen [Field]		(Z)	12.09	154.05	**(3,100** [e]**)**	(< 250)	**(7,900** [d]**)**	**(840)**	(24)	(280)	(380)	(< 380)	--	--	--	--	0.68	Not operating
			12/8/2007	Sheen [Field & Lab]			17.72	148.42	**3,600** [e,f,g]	--	**14,000** [d,g]	**640**	13	220	520	< 300	--	--	--	--	0.80	Not operating
			9/6/2007	Sheen [Field & Lab]			19.28	146.86	**8,400** [e,f,g]	--	**17,000** [a,h]	**1,000**	53	**450**	1,100	< 700	--	--	--	--	0.72	Not operating
			6/15/2007	Sheen [Field & lab]			17.31	148.83	**21,000** [e,k,f,g]	--	**18,000** [d,g]	**700**	22	290	740	< 650	--	--	--	--	0.68	Not operating
			3/16/2007	Sheen [Field & Lab]			12.31	153.83	**49,000** [e,f,k,g]	--	**44,000** [d,g]	**1,800**	71	**670**	**2,200**	< 900	--	--	--	--	0.52	Not operating
			12/6/2006	Sheen [Field & Lab]			18.01	148.13	**31,000** [e,f,k,g]	--	**27,000** [d,g]	**1,100**	51	**420**	1,600	< 900	--	--	--	--	0.48	Not operating
			9/5/2006	Sheen [Lab]			18.96	147.18	**19,000**[e,f,k,g]	--	**15,000**[d,g]	**680**	70	260	1,400	< 1,000	--	--	--	--	0.79	Not operating
			6/30/2006	Sheen [Field & Lab]			16.78	149.36	**55,000**[e,f,k,g]	--	**18,000**[d,g]	**1,100**	71	270	1,400	**1,200**	--	--	--	--	0.84	Not operating
			3/22/2006	Sheen [Lab]			9.15	156.99	**23,000**[e,f,k,g]	--	**21,000**[d,g]	**2,300**	**200**	**550**	**2,800**	**1,200**	--	--	--	--	0.91	Not operating
			12/14/2005	Sheen [Field & Lab]			16.40	149.74	**49,000**[e,f,k,g]	--	**29,000**[d,g]	**1,700**	**260**	**600**	**3,700**	**1,000**	--	--	--	--	0.99	Not operating
			9/21/2005	Sheen [Field]			18.50	147.64	**1,100**[e,f]	--	**4,600**[d]	**370**	62	110	740	**1,100**	--	--	--	--	0.86	Not operating
			6/21/2005	Sheen [Lab]			13.42	152.72	**15,000**[e,f,g]	--	**36,000**[d,g]	**1,700**	**310**	**460**	**3,100**	**1,200**	--	--	--	--	--	Not operating
			3/7/2005	Sheen [Field & Lab]			9.31	156.83	**8,300**[e,f,k,g]	--	**20,000**[d,g]	**1,400**	**330**	**430**	**2,600**	**1,100**	--	--	--	--	0.88	Not operating
			12/27/2004	--			16.81	149.33	**3,800**[e,f]	--	**17,000**[d]	**1,300**	**370**	**540**	**3,800**	**620**	--	--	--	--	0.94	Not operating
			9/27/2004	--	**		27.55	138.59	**1,000**[e,f,k]	--	770[d]	**20**	7.9	10	140	**1,600**	--	--	--	--	0.79	Operating
			6/16/2004	--			18.15	147.99	**9,800**[e,f]	--	**15,000**[d]	**800**	**210**	290	**1,800**	**2,000**	--	--	--	--	--	Not operating
Well box)		100.00	3/18/2004	--			15.78	84.22	870[e,f]	--	**4,200**[d]	**730**	89	< 5.0	480	**2,300**	--	--	--	--	--	Operating
(Monument			12/2/2003	Sheen [Lab]			23.17	76.83	**3,300**[e,f,g]	--	**2,400**[d,g]	**91**	20	14	250	**890**	--	--	--	--	--	Operating
			9/3/2003	--			23.57	76.43	**2,300**[e]	--	**2,900**[d]	**240**	57	68	380	**770**	--	--	--	--	--	Operating
			5/30/2003	--			15.23	84.77	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

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FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
Continued			4/25/2003	--		19.05	80.95	310[e]	--	**3,800[d]**	**460**	78	72	410	**310**	--	--	--	--	--	Operating
MW-2			1/13/2003	Sheen [Lab]		13.60	86.40	**14,000[e,f,g,k]**	--	**32,000[d,g]**	**4,500**	**1,600**	**920**	**3,600**	< 1000	--	--	--	--	0.39	Not operating
			11/21/2002	--		18.75	81.25	**350,000[e,g]**	--	**210,000[d,g]**	**14,000**	**23,000**	**4,400**	**28,000**	< 1,700	--	--	--	--	0.43	Operating
			9/26/2002	--		20.39	79.61	660[e]	--	**4,800[d]**	**770**	**200**	140	740	< 50	--	--	--	--	0.29	Operating
			6/10/2002	--		18.59	81.41	**2,000[e]**	--	**14,000[d]**	**2,600**	**710**	150	**2,000**	< 800	--	--	--	--	--	Operating
			3/11/2002	--		16.95	83.05	590[e]	--	**4,700[d]**	**1,200**	**150**	30	310	< 50	--	--	--	--	0.24	Operating
			12/7/2001	--		24.45	75.55	750[e,f]	--	**4,100[d]**	**510**	88	8.2	580	< 20	--	--	--	--	0.47	Operating
			8/30/2001	--		21.00	79.00	**15,000[d,h]**	--	**43,000[a,h]**	**3,100**	**720**	**980**	**5,500**	< 200	--	--	--	--	--	Operating
			6/6/2001	--		17.51	82.49	**48,000**	--	**110,000**	**14,000**	**9,000**	**1,900**	**12,000**	< 950	--	--	--	--	0.24	Not operating
			3/7/2001	--		15.68	84.32	**3,900**	--	**34,000**	**1,200**	**770**	**620**	**4,300**	< 200	--	--	--	--	0.44	Not operating
			12/5/2000	--		17.45	82.55	**87,000[e,f,g]**	--	**60,000[d,g]**	**5,100**	**2,200**	**1,600**	**9,000**	< 200	--	--	--	--	0.31	Not operating
			9/7/2000	--		18.25	81.75	**32,000[e,g]**	--	**62,000[d,g]**	**5,300**	**2,300**	**1,500**	**8,400**	< 100	--	--	--	--	0.39	
			3/23/2000	--		13.56	86.44	**3,100[i]**	--	**25,000[d]**	**1,900**	**1,100**	**660**	**3,700**	< 500	--	--	--	--	--	
			12/10/1999	--		16.53	83.47	**2,500[e,f]**	--	**17,000[d]**	**1,300**	**780**	**420**	**2,700**	< 40	--	--	--	--	0.17	
			9/28/1999	--		18.61	81.39	**3,400[e,f]**	--	**15,000[d]**	**1,200**	**540**	230	**2,300**	< 36	--	--	--	--	1.18	
			6/29/1999	--		19.54	80.46	**3,300[e]**	--	**28,000[d]**	**3,500**	**1,100**	**690**	**3,100**	< 1,000	--	--	--	--	0.41	
			3/29/1999	--		11.81	88.19	**7,500[e,f]**	--	**28,000[d]**	**4,400**	**1,600**	**950**	**4,100**	**410**	--	--	--	--	1.86	
			12/8/1998	--		14.80	85.20	**3,100**	--	**32,000**	**9,200**	**680**	**1,100**	**2,300**	< 2,000	--	--	--	--	--	
			9/30/1998	--		18.71	81.29	**2,400**	--	**22,000**	**3,600**	**1,300**	**720**	**3,200**	< 30	--	--	--	--	1.8	
			7/14/1998	--		16.07	83.93	**5,300[e,f]**	--	**42,000[d]**	**6,000**	**3,000**	**1,000**	**4,800**	< 200	--	--	--	--	1.5	
			3/18/1998	Sheen		10.83	89.17	**7,000[e,f]**	--	**58,000[d]**	**9,300**	**6,100**	**1,800**	**8,200**	< 1,100	--	--	--	--	1.1	
			12/22/1997	--		14.09	85.91	**6,100[e]**	--	**47,000[d]**	**8,500**	**4,600**	**1,800**	**8,400**	< 1,200	--	--	--	--	1.2	
			9/17/1997	Sheen		19.05	80.95	**8,900[e]**	--	**41,000[d]**	**5,200**	**3,400**	**1,300**	**5,900**	< 700	--	--	--	--	1.2	
			6/25/1997	--		18.62	81.38	**7,800[b]**	--	**42,000**	**7,400**	**3,800**	**1,200**	**5,700**	< 200	--	--	--	--	0.9	
			3/20/1997	--		15.39	84.61	**6,100**	--	**27,000**	**3,700**	**2,300**	**580**	**2,800**	< 400	--	--	--	--	8.1	
			11/27/1996	Sheen		16.61	83.39	**10,000**	--	**54,000**	**9,800**	**7,000**	**1,800**	**7,900**	< 2,000	--	--	--	--	3.1	
			8/22/1996	--		19.12	80.88	**5,700**	--	**37,000**	**5,100**	**3,500**	**960**	**4,500**	< 200	--	--	--	--	3.0	
			5/21/1996	--		13.47	86.53	**3,400**	--	**51,000**	**8,200**	**5,200**	**1,300**	**6,600**	**2,400**	--	--	--	--	--	
			2/21/1996	--		10.53	89.47	--	--	**59,000**	**8,000**	**6,000**	**1,800**	**8,900**	**4,500**	--	--	--	--	--	
			11/29/95	--		21.05	78.95	--	--	**46,000**	**7,100**	**5,300**	**1,300**	**6,000**	--	--	--	--	--	--	
			8/22/1995	--		19.80	80.20	--	--	**38,000**	**6,400**	**5,000**	**1,100**	**5,600**	--	--	--	--	--	--	
			5/23/1995	--		14.17	85.83	--	--	**33,000**	**8,200**	**5,600**	**900**	**6,600**	--	--	--	--	--	--	
			2/27/1995	Sheen		14.46	85.54	--	--	**44,000**	**5,100**	**5,300**	**930**	**6,400**	--	--	--	--	--	--	
			11/11/94	--		15.52	84.48	--	--	**54,000**	**5,900**	**6,700**	**1,300**	**7,500**	--	--	--	--	--	--	
			8/18/1994	--		20.37	79.63	--	--	**88,000**	**10,750**	**10,500**	**1,850**	**9,600**	--	--	--	--	--	--	
			7/19/1994	--		19.81	80.19	--	--	--	--	--	--	--	--	--	--	--	--	--	
			5/25/1994	--		15.65	84.35	**6,900**	< 5,000	**61,000**	**9,900**	**7,400**	**960**	**4,600**	--	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

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FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
MW-3 *2-inch*	10 - 25	162.94																			
			1/9/2014	--		16.50	146.44	--	--	--	--	--	--	--	--	--	--	--	--	--	0.69	-85
			9/20/2013	--		16.61	146.33	**3,000*** **	--	**6,200**	**11,000**	37	**990**	118.1J	< 7.2	**350**	< 2.8	< 4.7	< 4.0 - 6.4	0.39	-79
			6/25/2013	--		15.65	147.29	--	--	--	--	--	--	--	--	--	--	--	--	0.59	-92
			3/13/2013	--		12.89	150.05	--	--	--	--	--	--	--	--	--	--	--	--	2.11	-95
			11/9/2012	--		14.69	148.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		16.22	146.72	**2,700*** **	--	**6,100***	**10,000**	36	**860**	104J	**87**	**650**	< 3.0	< 5.0	< 4.2-6.8	0.75	-98
			3/30/2012	--		7.51	155.43	**2,200*** **	--	**3,400**	**3,800**	14J	**360**	57.3	**63J**	< 68	< 3.0	< 5.0	< 4.2 - 6.8	7.23	-113
			9/22/2011	--		15.34	147.60	**1,500****	--	**14,000***	**8,400**	< 17	**790**	130	**89**	< 130	< 17	< 24	< 28 - 35	1.04	-82
			3/17/2011	--		7.90	155.04	2,400 [e]	--	**17,000** [d]	**5,600**	43	**660**	210	**(83)**	--	--	--	--	0.83	Not operating
			9/10/2010	--	(Z[TPHd])	16.14	146.80	**2,500** [e,f] **(2,200)** [e,f]	--	**21,000** [d]	**8,100**	59	**800**	300	**(100)**	--	--	--	--	0.91	Not operating
			3/14/2010	Sheen [Lab]	(Z[TPHd])	8.56	154.38	**19,000** [e,f,g,k] **(4,300)** [e]	--	**21,000** [d,g]	**4,300**	76	**530**	710	**(97)**	--	--	--	--	1.07	Not operating
			9/5/2009	Sheen [Lab]	(Z[TPHd])	16.67	146.27	**31000** [e,f,k,m,g] **(11,000)** [e,f,k]	--	**32,000** [d,g]	**6,200**	120	**590**	1,000	**(80)**	--	--	--	--	0.98	Not operating
			6/7/2009	Sheen [Field & Lab]	(Z[TPHd])	13.94	149.00	**6,900** [e,f,m] **(3,700)** [e]	--	**23,000** [d]	**4,400**	81	**710**	670	**(97)**	--	--	--	--	1.02	Not operating
			3/14/2009	Sheen [Field & lab]	(Z[TPHd])	9.02	153.92	**8,700** [e,f,k,g] **(8,100** [e,g]**)**	--	**41,000** [d,g]	**4,900**	140	**940**	1,600	**(97)**	--	--	--	--	1.14	Not operating
			12/28/2008	Sheen [Field & Lab]	(Z[TPHd])	12.72	150.22	**(4,100** [e,g]**)**	< 250	**24,000** [d,g]	**4,100**	91	**380**	960	**(91)**	--	--	--	--	0.91	Not operating
			9/6/2008	Sheen [Field & Lab]	(Z[TPHd])	16.65	146.29	**(7,900** [e,f,g]**)**	--	**42,000** [d,g]	**5,800**	**190**	**1,100**	2,400	< 800	--	--	--	--	1.03	Not operating
			6/14/2008	Sheen [Field]	(Z)	15.92	147.02	**(4,900** [e]**)**	(600)	**(36,000** [d]**)**	**(4,700)**	(140)	**(830)**	(1,600)	(< 500)	--	--	--	--	1.05	Not operating
			3/9/2008	Sheen [Field]	(Z)	10.40	152.54	**(3,400** [e]**)**	(310)	**(23,000** [d]**)**	**(4,200)**	(120)	**(650)**	(1,600)	(< 250)	--	--	--	--	0.71	Not operating
			12/8/2007	Sheen [Field & Lab]		14.49	148.45	**4,000** [e,f,g]	--	**33,000** [d,g]	**4,300**	120	**370**	**2,200**	< 250	--	--	--	--	0.77	Not operating
			9/6/2007	Sheen [Field & Lab]		16.55	146.39	**14,000** [e,f,g]	--	**41,000** [d,g]	**4,400**	**180**	**1,000**	**3,800**	< 700	--	--	--	--	0.70	Not operating
			6/15/2007	Sheen [Field & Lab]		14.57	148.37	**25,000** [e,k,f,g]	--	**56,000** [d,g]	**5,100**	**200**	**1,100**	**3,200**	< 1000	--	--	--	--	0.48	Not operating
			3/16/2007	Sheen [Field & Lab]		10.25	152.69	**5,300** [e,f,k,g]	--	**72,000** [d,g]	**6,500**	**420**	**1,200**	**3,900**	< 1,000	--	--	--	--	0.61	Not operating
			12/6/2006	Sheen [Field & Lab]		15.25	147.69	**19,000** [e,f,k,g]	--	**44,000** [d,g]	**4,500**	110	**930**	**3,600**	< 500	--	--	--	--	0.70	Not operating
			9/5/2006	Sheen [Field & Lab]		16.25	146.69	**16,000** [e,f,k,g]	--	**56,000** [d,g]	**5,400**	**300**	**1,200**	**6,200**	< 500	--	--	--	--	0.55	Not operating
			6/30/2006	Sheen [Field & Lab]		14.10	148.84	**15,000** [e,f,k,g]	--	**44,000** [d,g]	**4,000**	**160**	**550**	**4,000**	< 450	--	--	--	--	0.81	Not operating
			3/22/2006	Sheen [Field & Lab]		8.10	154.84	**15,000** [e,f,k,g]	--	**45,000** [d,g]	**4,300**	**390**	**1,100**	**5,300**	< 1,000					0.88	Not operating
			12/14/2005	Sheen [Field & Lab]		13.65	149.29	**19,000** [e,f,k,g]	--	**53,000** [d,g]	**4,700**	**350**	**1,100**	**7,400**	< 1,000	--	--	--	--	0.95	Not operating
			9/21/2005	Sheen [Field & Lab]		15.73	147.21	**16,000** [e,f,k,g]	--	**41,000** [d,g]	**3,700**	**480**	**930**	**5,700**	< 500	--	--	--	--	0.90	Not operating
			6/21/2005	Sheen [Field & Lab]		10.79	152.15	**12,000** [e,g]	--	**44,000** [d,g]	**4,900**	**870**	**1,100**	**6,500**	< 1,200	--	--	--	--	--	Not operating
			3/7/2005	Sheen [Field & Lab]		6.91	156.03	**14,000** [e,f,g]	--	**50,000** [d,g]	**6,100**	**2,100**	**1,300**	**7,400**	< 500	--	--	--	--	0.62	Not operating
			12/27/2004	Sheen [Lab]		14.58	148.36	**24,000** [e,f,g,k]	--	**32,000** [d,g]	**4,400**	**2,800**	**650**	**4,800**	< 250	--	--	--	--	0.71	Not operating
			9/27/2004	--		23.65	139.29	**1,700** [e,f]	--	**5,200** [d]	**430**	**220**	100	680	**250**	--	--	--	--	0.55	Operating
		96.87	6/16/2004	--		15.40	81.47	**8,800** [e,f]	--	**23,000** [d]	**2,100**	**1,300**	**360**	**2,800**	< 1,000	--	--	--	--	--	Operating
			3/18/2004	--		16.49	80.38	**2,300** [e,f]	--	**15,000** [d]	**2,600**	**990**	260	1,700	< 300	--	--	--	--	--	Operating
			12/2/2003	Sheen [Lab]		17.70	79.17	**8,400** [e,f,g]	--	**30,000** [d,g]	**2,900**	**2,100**	**530**	**3,600**	< 500	--	--	--	--	--	Operating
			9/3/2003	--		21.65	75.22	**3,300** [e]	--	**8,100** [d]	**220**	**170**	66	560	< 50	--	--	--	--	--	Operating
			5/30/2003	--		13.30	83.57	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			4/25/2003	--		18.30	78.57	**1,200** [e]	--	**12,000** [d]	**1,800**	**850**	150	1,200	< 500	--	--	--	--	--	Operating
			1/13/2003	Sheen [Lab]		11.43	85.44	**6,300** [e,f,g,k]	--	**21,000** [d,g]	**2,400**	**2,300**	**390**	**3,000**	< 500	--	--	--	--	0.31	Not operating
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs): [1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
Continued			11/21/2002	0.05		17.85	79.02	**120,000**[e,g]	--	**37,000**[d,g]	**4,000**	**660**	**1,200**	**5,100**	< 1,700	--	--	--	--	0.28	Operating
MW-3			9/26/2002	--		18.85	78.02	**130,000**[e,g]	--	**50,000**[d,g]	**3,900**	**5,400**	**820**	**6,600**	< 500	--	--	--	--	0.19	Operating
			6/10/2002	--		22.94	73.93	990[e,k]	--	**9,000**[d]	**1,800**	**1,300**	96	1,000	< 300	--	--	--	--	--	Operating
			3/11/2002	--		14.69	82.18	**2,800**[f,e,k]	--	**30,000**[d]	**5,000**	**2,400**	190	**1,800**	< 1,300	--	--	--	--	0.30	Operating
			12/7/2001	--		24.65	72.22	**3,900**[e,f]	--	**25,000**[d]	**2,500**	**1,700**	64	**2,200**	< 200	--	--	--	--	0.19	Operating
			8/30/2001	--		12.43	84.44	**190,000**[d,h]	--	**95,000**[a,h]	**6,900**	**10,000**	**2,700**	**15,000**	< 250	--	--	--	--	0.24	Operating
			6/6/2001	--		14.88	81.99	**12,000**	--	**43,000**	**3,000**	**1,000**	**770**	**5,200**	< 400	--	--	--	--	1.71	Not operating
			3/7/2001	--		14.27	82.60	**13,000**	--	**60,000**	**7,000**	**4,600**	**900**	**7,100**	< 350	--	--	--	--	0.49	Not operating
			12/5/2000	--		14.80	82.07	**17,000**[e,g]	--	**110,000**[d,g]	**17,000**	**11,000**	**1,900**	**12,000**	< 750	--	--	--	--	0.37	Not operating
			9/7/2000	--		15.61	81.26	**19,000**[e,f,g]	--	**100,000**[d,g]	**17,000**	**12,000**	**1,600**	**11,000**	< 500	--	--	--	--	--	
			3/23/2000	--		8.98	87.89	**11,000**[g,-j]	--	**77,000**[d,g]	**10,000**	**9,400**	**1,600**	**11,000**	< 430	--	--	--	--	--	
			12/10/1999	--		13.31	83.56	**5,300**[e,f]	--	**53,000**[d]	**8,000**	**6,400**	**1,100**	**8,100**	< 200	--	--	--	--	0.48	
			9/28/1999	--		15.99	80.88	**7,800**[e]	--	**60,000**[d]	**9,400**	**9,200**	**1,000**	**9,900**	**200**	--	--	--	--	0.53	
			6/29/1999	--		16.98	79.89	**6,900**[e]	--	**71,000**[d]	**12,000**	**7,300**	**1,400**	**8,400**	< 1,700	--	--	--	--	0.19	
			3/29/1999	--		7.95	88.92	**4,600**[e]	--	**39,000**[d]	**8,900**	**4,400**	**940**	**4,500**	**810**	--	--	--	--	0.56	
			12/8/1998	--		11.20	85.67	**4,200**	--	**51,000**	**8,000**	**6,800**	**1,400**	**7,500**	< 1,100	--	--	--	--	--	
			9/30/1998	--		16.14	80.73	**9,800**	--	**91,000**	**17,000**	**13,000**	**2,100**	**12,000**	< 1300	--	--	--	--	2.0	
			7/14/1998	--		13.51	83.36	**65,000**[e,f,g]	--	**94,000**[d,g]	**18,000**	**14,000**	**1,900**	**11,000**	< 1,400	--	--	--	--	1.8	
			3/18/1998	Sheen		8.41	88.46	**20,000**[e,f]	--	**120,000**[d]	**21,000**	**19,000**	**2,600**	**15,000**	< 1,600	--	--	--	--	1.6	
			12/22/1997	Sheen		10.71	86.16	**14,000**[e]	--	**49,000**[d]	**7,300**	**5,300**	**1,400**	**7,500**	< 1,100	--	--	--	--	3.1	
			9/17/1997	Sheen		16.34	80.53	**15,000**[e]	--	**78,000**[d]	**11,000**	**9,900**	**1,800**	**10,000**	< 1,200	--	--	--	--	0.7	
			6/25/1997	--		15.98	80.89	**7,700**[b]	--	**49,000**	**9,700**	**7,100**	**1,300**	**7,000**	**220**	--	--	--	--	5.8	
			3/20/1997	--		12.86	84.01	**11,000**	--	**56,000**	**9,900**	**6,900**	**1,300**	**8,000**	**3,500**	--	--	--	--	9.0	
			11/27/1996	Sheen		13.47	83.40	**24,000**	--	**82,000**	**14,000**	**13,000**	**2,400**	**13,000**	< 1,000	--	--	--	--	2.4	
			8/22/1996	--		16.50	80.37	**16,000**	--	**94,000**	**17,000**	**15,000**	**2,100**	**12,000**	**330**	--	--	--	--	2.0	
			5/21/1996	Sheen		10.86	86.01	**13,000**	--	**69,000**	**17,000**	**9,400**	**1,700**	**9,400**	**2,600**	--	--	--	--	--	
			2/21/1996	--		7.92	88.95	--	--	**60,000**	**10,000**	**7,800**	**1,500**	**8,800**	**3,400**	--	--	--	--	--	
			11/29/1995	--		16.34	80.53	--	--	**220,000**	**25,000**	**25,000**	**3,500**	**19,000**	--	--	--	--	--	--	
			8/22/1995	--		17.10	79.77	--	--	**74,000**	**14,000**	**13,000**	**1,900**	**11,000**	--	--	--	--	--	--	
			5/23/1995	Sheen		11.60	85.27	--	--	**310,000**	**18,000**	**17,000**	**4,500**	**2,800**	--	--	--	--	--	--	
			2/27/1995	Sheen		11.86	85.01	--	--	**250,000**	**22,000**	**26,000**	**7,800**	**21,000**	--	--	--	--	--	--	
			11/11/94	--		17.80	79.07	--	--	**89,000**	**1,600**	**1,900**	**1,900**	**14,000**	--	--	--	--	--	--	
			8/18/1994	--		17.75	79.12	--	--	**116,000**	**28,300**	**26,000**	**2,400**	**15,000**	--	--	--	--	--	--	
			7/19/1994	--		17.04	79.83	--	--	--	--	--	--	--	--	--	--	--	--	--	
			5/25/1994	Sheen		13.93	82.94	**14,000**	< 50,000	**56,000**	**14,000**	**14,000**	**1,300**	**11,000**	--	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
MW-4 *2-inch*	10 - 30	163.49	1/9/2014	--		17.39	146.10	--	--	--	--	--	--	--	--	--	--	--	--	1.12	-31
			9/20/2013	--		17.39	146.10	**2,200*** **		**4,400**[y]	**6,200**	24	**420**	62	< 1.4	**160**	< 0.57	< 0.95	< 0.57 - 13	0.32	-89
			6/25/2013	--		16.48	147.01	--	--	--	--	--	--	--	--	--	--	--	--	0.73	-99
			3/13/2013	--		13.85	149.64	--	--	--	--	--	--	--	--	--	--	--	--	1.98	-72
			11/9/2012	--		15.37	148.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		17.01	146.48	**2,100*** **		**3,000***	**4,700**	13	200	67	**34**	**220**	< 0.59	< 0.99	< 0.84 - 1.4	0.66	-108
			3/30/2012	--		8.05	155.44	**1,900*** **		**6,000**[y]	**3,300**	5.0J	95	28J	**40**	< 68	< 3.0	< 5.0	< 4.2 - 6.8	6.41	-101
			9/22/2011	--		16.05	147.44	**2,000*** **	--	**11,000***	**4,100**	< 17	160	100	< 33	< 130	< 17	< 24	< 28 - 35	0.69	-98
			3/17/2011	--		8.55	154.94	**1,900** [e]	--	**11,000** [d]	**4,800**	17	190	110	**(59)**	--	--	--	--	0.75	Not operating
			9/10/2010	--	(Z^{TPHd})	16.89	146.60	**2,200** [e,f] **(2,000)** [e,f]	--	**11,000** [d]	**3,300**	24	160	330	**(46)**	--	--	--	--	0.88	Not operating
			3/14/2010	--	(Z^{TPHd})	8.25	155.24	**2,400** [e,f] **(1,800)** [e]	--	**6,800** [d]	**1,500**	21	53	120	**(33)**	--	--	--	--	1.13	Not operating
			9/5/2009	Sheen [Lab]	(Z^{TPHd})	17.39	146.10	**1,200** [e,f,m] **(1,600)** [e,f]	--	**3,600** [d]	**830**	17	13	53	**(30)**	--	--	--	--	1.01	Not operating
			6/7/2009	Sheen [Field & Lab]	(Z^{TPHd})	14.83	148.66	**4,200** [e,f,m] **(2,000)** [e]	--	**6,900** [d]	**1,200**	23	41	190	**(25)**	--	--	--	--	1.05	Not operating
			3/14/2009	Sheen [Field]	(Z^{TPHd})	9.30	154.19	**2,800** [e,f,k] **(3,200** [e]**)**	--	**8,800** [d]	**980**	23	61	220	**(22)**	--	--	--	--	1.27	Not operating
			12/28/2008	Sheen [Field & Lab]	(Z^{TPHd})	13.35	150.14	**(1,800** [e,g]**)**	< 250	**7,500** [d,g]	**630**	21	40	210	**(22)**	--	--	--	--	1.20	Not operating
			9/6/2008	Sheen [Field & Lab]	(Z^{TPHd})	17.27	146.22	**(2,800** [e,g]**)**	--	**24,000** [d,g]	**1,400**	65	130	**2,300**	< 250	--	--	--	--	1.28	Not operating
			6/14/2008	Sheen [Field]	(Z)	16.68	146.81	**(4,200** [e]**)**	(< 250)	**(15,000** [d]**)**	**(1,100)**	(50)	(86)	(1,300)	(< 150)	--	--	--	--	1.2	Not operating
			3/9/2008	Sheen [Field]	(Z)	10.77	152.72	**(3,000** [e]**)**	(< 250)	**(8,100** [d]**)**	**(830)**	(7.7)	(55)	(310)	(< 50)	--	--	--	--	0.79	Not operating
			12/8/2007	Sheen [Field & Lab]		15.15	148.34	**790** [e,f,g]	--	**7,600** [d,g]	**690**	27	39	570	< 80	--	--	--	--	0.72	Not operating
			9/6/2007	Sheen [Field & Lab]		17.25	146.24	**8,400** [e,f,k,g]	--	**27,000** [d,g]	**1,500**	**150**	120	**4,500**	< 250	--	--	--	--	0.55	Not operating
			6/15/2007	Sheen [Field & Lab]		15.43	148.06	**7,200** [e,g]	--	**14,000** [d,g]	**1,200**	46	63	850	< 110	--	--	--	--	0.61	Not operating
			3/16/2007	Sheen [Field & Lab]		10.71	152.78	**2,700** [e,f,k,g]	--	**13,000** [d,g]	**1,400**	32	93	740	< 100	--	--	--	--	0.65	Not operating
			12/6/2006	Sheen [Field & Lab]		15.95	147.54	**22,000** [e,f,g]	--	**21,000** [d,g]	**920**	56	73	1,500	< 100	--	--	--	--	0.71	Not operating
			9/5/2006	Sheen [Field & Lab]		16.96	146.53	**9,400** [e,f,k,g]	--	**30,000** [d,g]	**1,400**	**180**	110	**4,300**	< 500	--	--	--	--	0.75	Not operating
			6/30/2006	Sheen [Field & Lab]		15.00	148.49	**19,000** [e,f,g]	--	**18,000** [d,g]	**1,400**	50	60	1,300	< 100	--	--	--	--	0.85	Not operating
			3/22/2006	Sheen [Field & Lab]		7.52	155.97	**9,300** [e,f,k,g]	--	**17,000** [d,g]	**2,000**	**230**	150	**1,900**	< 50	--	--	--	--	0.80	Not operating
			12/14/2005	Sheen [Field & Lab]		14.43	149.06	**9,800** [e,f,k,g]	--	**5,200** [d,g]	**710**	41	91	540	< 50	--	--	--	--	0.91	Not operating
			9/21/2005	Sheen [Field & Lab]		16.55	146.94	**15,000** [e,f,k,g]	--	**12,000** [d,g]	**540**	100	54	**1,800**	< 50	--	--	--	--	0.89	Not operating
			6/21/2005	Sheen [Field & Lab]		11.82	151.67	**12,000** [e,g]	--	**30,000** [d,g]	**3,300**	**270**	250	**2,800**	< 500	--	--	--	--	--	Not operating
			3/7/2005	Sheen [Field & Lab]		7.81	155.68	**9,300** [e,f,g]	--	**15,000** [d,g]	**1,100**	140	88	**1,900**	< 100	--	--	--	--	0.65	Not operating
			12/27/2004	Sheen [Lab]		14.79	148.70	**5,300** [e,f,g,k]	--	**10,000** [d,g]	**1,000**	99	34	1,600	< 50	--	--	--	--	0.74	Not operating
			9/27/2004	--		19.93	143.56	980 [e,f,k]	--	**1,300** [d]	**140**	10	11	81	< 50	--	--	--	--	0.68	Not operating
			6/16/2004	--		16.02	147.47	**3,400** [e,f]	--	**9,100** [d]	**940**	96	120	800	< 50	--	--	--	--	--	Not operating
		97.34	3/18/2004	--		14.92	82.42	**1,500** [e]	--	**5,300** [d]	**1,300**	55	37	440	< 180	--	--	--	--	--	Operating
			12/2/2003	--		19.17	78.17	**5,800** [e,f]	--	**13,000** [d]	**1,300**	**180**	120	**1,900**	< 250	--	--	--	--	--	Operating
			9/3/2003	--		21.65	75.69	**27,000** [e,f]	--	**29,000** [d]	**2,200**	**380**	280	**2,300**	-	--	--	--	--	--	Operating
			5/30/2003	--		13.56	83.78	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			4/25/2003	--		19.37	77.97	**2,200** [e,f]	--	**6,600** [d]	**960**	130	100	560	< 170	--	--	--	--	--	Operating
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
Continued			1/13/2003	Sheen [Lab]		11.75	85.59	**15,000**[e,f,g,k]	--	**35,000**[d,g]	**5,100**	**1,500**	**510**	**4,500**	< 800	--	--	--	--	0.28	Not operating
MW-4			11/21/2002	--		17.55	79.79	**2,400**[e,k]	--	**5,700**[d]	**1,400**	**290**	63	640	**550**	--	--	--	--	--	Operating
			9/26/2002	--		17.93	79.41	800[e]	--	**21,000**[d]	**3,300**	**1,300**	**450**	**2,900**	< 500	--	--	--	--	0.24	Operating
			6/10/2002	--		22.30	75.04	**3,400**[e]	--	**9,400**[d]	**1,400**	50	< 5.0	690	< 200	--	--	--	--	--	Operating
			3/11/2002	--		14.95	82.39	**1,600**[e,f,k]	--	**15,000**[d]	**3,700**	**500**	92	790	< 500	--	--	--	--	0.30	Operating
			12/7/2001	--		23.45	73.89	**11,000**[e,f,g]	--	**32,000**[d,g]	**4,500**	**740**	**310**	**2,300**	< 200	--	--	--	--	0.21	Operating
			8/30/2001	--		18.00	79.34	**3,200**[d]	--	**43,000**[a]	**6,400**	**630**	**510**	**2,600**	< 200	--	--	--	--	0.32	Operating
			6/6/2001	--		15.49	81.85	**5,400**	--	**75,000**	**22,000**	**1,800**	**1,900**	**6,400**	< 1,200	--	--	--	--	2.22	Not operating
			3/20/2001	--		14.03	83.31	--	--	**46,000**	**13,000**	**1,000**	**900**	**2,800**	< 350	--	--	--	--	0.39	Not operating
			12/5/2000	--		15.55	81.79	**2,600**[e,g]	--	**69,000**[d,g]	**16,000**	**1,300**	**1,300**	**3,400**	< 200	--	--	--	--	0.35	Not operating
			9/7/2000	--		16.40	80.94	**5,900**[e]	--	**43,000**[d]	**10,000**	**1,100**	**1,100**	**3,400**	< 450	--	--	--	--	1.04	
			3/23/2000	--		10.22	87.12	**3,100**[e,f]	--	**40,000**[d]	**11,000**	**1,600**	**910**	**3,100**	**690**	--	--	--	--	--	
			12/10/1999	--		13.99	83.35	**3,100**[e,f]	--	**47,000**[d]	**12,000**	**1,800**	**1,000**	**4,400**	< 100	--	--	--	--	0.62	
			9/28/1999	--		16.58	80.76	**3,200**[e,f]	--	**24,000**[d]	**7,500**	**1,200**	190	**2,200**	**210**	--	--	--	--	14.29[#]	
		*	6/29/1999	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
			3/29/1999	--		9.10	88.24	**2,400**[e,f,h]	--	**48,000**[d]	**15,000**	**3,000**	**1,300**	**5,000**	**1,300**	--	--	--	--	1.32	
			12/8/1998	--		13.45	83.89	**1,600**	--	**27,000**	**8,900**	**1,600**	**730**	**2,300**	< 1,500	--	--	--	--	--	
			9/30/1998	--		16.84	80.50	**2,100**	--	**39,000**	**12,000**	**2,700**	**1,000**	**3,400**	**510**	--	--	--	--	1.1	
			7/14/1998	--		14.15	83.19	**2,900**[e,f]	--	**73,000**[d]	**22,000**	**7,000**	**1,800**	**7,300**	< 200	--	--	--	--	1.0	
			3/18/1998	--		9.54	87.80	**5,500**[e,f]	--	**58,000**[d]	**14,000**	**4,700**	**1,400**	**5,700**	< 1,200	--	--	--	--	0.8	
			12/22/1997	--		9.21	88.13	**3,100**[e]	--	**43,000**[d]	**13,000**	**3,900**	**1,100**	**4,200**	< 960	--	--	--	--	3.7	
			9/17/1997	--		17.10	80.24	**4,400**[e]	--	**60,000**[d]	**17,000**	**4,900**	**1,500**	**5,700**	< 1,500	--	--	--	--	1.5	
			6/25/1997	--		16.15	81.19	**5,800**[b]	--	**61,000**	**16,000**	**6,100**	**1,500**	**5,900**	**780**[c]	--	--	--	--	1.4	
			3/20/1997	--		13.75	83.59	**3,100**	--	**47,000**	**11,000**	**4,500**	**1,100**	**5,200**	3,400	--	--	--	--	8.4	
MW-5 *2-inch*	20 - 30	165.74																			
			1/9/2014	--		17.12	148.62	1,100*	--	**13,000****	**1,700**	33	**740**	32 J	**640**	**1,300**	< 1.4	< 2.4	< 2.0 - 3.2	1.21	-42
			9/20/2013	--		17.31	148.43	540***	--	**4,400**[g]	**2,200**	47	**1,200**	50.1J	**790**	**890**	< 1.4	< 2.4	< 2.0 - 3.2	0.50	-60
			6/25/2013	--		16.21	149.53	760^	--	**5,200**[g]	**2,700**	41	**860**	50.2 J	**980**	**7,800**	< 1.5	< 2.5	< 8.3	3.82	-26
			3/13/2013	--		13.89	151.85	**1,000*****	--	**18,000**[g]	**2,200**	54	**1,200**	116.1 J	**410**	< 34	< 1.5	< 2.5	< 8.3	2.09	11
			11/9/2012	--		15.11	150.63	340***	--	**3000***	**1,300**	16	**340**	35.2	**390**	**2,300**	< 0.30	< 0.50	< 0.68	1.7	90
MW-6 ***2-inch***	20 - 30	164.3																			
			1/9/2014	--		16.18	148.12	190*	--	**3,700**[c]	**67**	< 0.25	3.8	1.1 J	< 0.72	< 6.5	< 0.28	< 0.47	< 0.40 - 0.64	1.24	-75
			9/20/2013	--		16.46	147.84	470***	--	**1,700**[g]	**130**	0.66J	4.6	< 1.74	< 1.4	< 13	< 0.57	< 0.95	< 0.80 - 1.3	0.61	-68
			6/25/2013	--		14.78	149.52	**520**^	--	**3,400**[g]	**250**	2.1 J	6	1.9 J	< 1.5	**88**	< 0.59	< 0.99	< 3.34	3.39	-63
			3/13/2013	--		13.05	151.25	710***	--	**1,800**[g]	**230**	2.5 J	15	1.6 J	< 1.5	< 14	< 0.59	< 0.99	< 1.66	6.39	20
			11/9/2012	--		14.61	149.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			11/2/2012	--		14.23	150.07	120[g]	--	540[g]	44	0.74	7.5	2.3	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	6.63	62
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells

FORMER EXXON SERVICE STATION

3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-5 *4-inch*	5 - 25.7	162.34																			
			1/9/2014	--		15.69	146.65	--	--	--	--	--	--	--	--	--	--	--	--	1.07	-52
			9/20/2013	--		15.87	146.47	160***	--	390[g]	**510**	3.9	11	7.28J	< 0.72	< 6.5	< 0.28	< 0.47	< 0.40 - 0.64	0.68	-49
			6/25/2013	--		14.81	147.53	--	--	--	--	--	--	--	--	--	--	--	--	0.76	-67
			3/13/2013	--		11.93	150.41	--	--	--	--	--	--	--	--	--	--	--	--	1.24	22
			11/9/2012	--		14.46	147.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		15.49	146.85	120^	--	120[v]	**320**	1.3	0.98	1.4	0.80	5.7	< 0.5	< 0.5	< 0.5	0.73	-78
			3/30/2012	--		0.40	161.94	< 100	--	< 50	< 0.50	< 0.50	< 0.50	< 1.50	< 0.50	< 5.0	< 0.5	< 0.5	< 0.5	7.31	-3
			9/22/2011	--		14.44	147.90	120**	--	680*	**480**	< 2.1	< 1.7	16	< 4.1	< 17	< 2.1	< 3.0	< 3.5 - 4.4	0.66	-65
			3/17/2011	--		7.20	155.14	< 50	--	84 [d]	**21**	< 0.5	3.9	1.2	(< 0.5)	--	--	--	--	0.79	Not operating
			9/10/2010	--	(Z^{TPHd})	15.40	146.94	270 [e] (200) [e]	--	**1,600 [d]**	**470**	5.1	19	21	(3.6)	--	--	--	--	0.54	Not operating
			3/14/2010	--	(Z^{TPHd})	4.40	157.94	480 [e,f,k] (340) [e]	--	970 [d]	**210**	5.2	12.0	13.0	**(41)**	--	--	--	--	1.03	Not operating
			9/5/2009	--	(Z^{TPHd})	16.00	146.34	**1,700 [f,k,m] (600) [f,m]**	--	**2,200 [n,p]**	**350**	8.5	4.6	13.0	**(50)**	--	--	--	--	1.05	Not operating
			6/7/2009	Sheen [Field]	(Z^{TPHd})	13.19	149.15	720 [m,f] (210) [e]	--	**870 [d]**	**100**	4.4	1.3	2.8	**(110)**	--	--	--	--	1.13	Not operating
			3/14/2009	Sheen [Field]	(Z^{TPHd})	6.82	155.52	**2,000 [f,k,m] (750 [e])**	--	**2,000 [d]**	**260**	9.8	9.5	18.0	**(38)**	--	--	--	--	1.15	Not operating
			12/28/2008	Sheen [Field]	(Z^{TPHd})	10.55	151.79	(250 [m])	< 250	**1,200 [d,n]**	**110**	5.6	2.5	9.8	**(81)**	--	--	--	--	1.13	Not operating
			9/6/2008	Sheen [Field]	(Z^{TPHd})	16.01	146.33	(220 [e])	--	**1,100 [d]**	**120**	2.6	2.2	13	**120**	--	--	--	--	1.42	Not operating
			6/14/2008	Sheen [Field]	(Z)	15.21	147.13	(190 [e])	(< 250)	**(1,200 [d])**	**(310)**	(5.8)	(3.5)	(25)	(< 250)	--	--	--	--	1.73	Not operating
			3/9/2008	Sheen [Field]	(Z)	8.77	153.57	(90 [e])	(< 250)	**(1,100 [d])**	**(220)**	(5.3)	(4.9)	(10)	(< 90)	--	--	--	--	0.92	Not operating
			12/8/2007	Sheen [Field]		13.99	148.35	370 [e,f]	--	**1,900 [d]**	**220**	4.0	10	38	**500**	--	--	--	--	0.74	Not operating
			9/6/2007	Sheen [Field]		15.85	146.49	**1,000 [e,f]**	--	**2,500 [d]**	**600**	12	24	92	**180**	--	--	--	--	0.68	Not operating
			6/15/2007	Sheen [Field & Lab]		13.84	148.50	**2,000 [e,k,f,g]**	--	**3,700 [d,g]**	**730**	14	36	80	< 150	--	--	--	--	0.65	Not operating
			3/16/2007	Sheen [Field & Lab]		8.81	153.53	**2,500 [e,f,k,g]**	--	**2,400 [d,g]**	**180**	3.3	7.3	10	< 17	--	--	--	--	0.62	Not operating
			12/6/2006	Sheen [Field & Lab]		14.53	147.81	**5,500 [e,f,g]**	--	**8,500 [d,g]**	**1,200**	24	91	250	< 900	--	--	--	--	0.79	Not operating
			9/5/2006	Sheen [Field & Lab]		15.55	146.79	**3,200[e,f,k,g]**	--	**5,300[d,g]**	**1,000**	31	61	230	**370**	--	--	--	--	0.81	Not operating
			6/30/2006	Sheen [Field]		13.32	149.02	**3,100[e,f,k]**	--	**3,100[d]**	**590**	15	27	88	**410**	--	--	--	--	0.89	Not operating
			3/22/2006	Sheen [Field]		2.55	159.79	**2,700[e,f,k]**	--	**7,400[d]**	**59**	76	20	120	< 50	--	--	--	--	1.10	Not operating
			12/14/2005	Sheen [Field & Lab]		12.95	149.39	**6,200[e,f,k,g]**	--	**8,900[d,g]**	**1,500**	92	180	750	**2,300**	--	--	--	--	1.03	Not operating
			9/21/2005	Sheen [Field & Lab]		15.07	147.27	**2,500[e,f,k,g]**	--	**2,000[d,g]**	**390**	16	24	170	**1,300**	--	--	--	--	0.99	Not operating
			6/21/2005	Sheen [Field]		10.02	152.32	490[e]	--	**11,000[d]**	**1,200**	67	68	690	< 500	--	--	--	--	--	Not operating
			3/7/2005	Sheen [Field]		4.42	157.92	**6,100[e,f,k]**	--	**7,000[d]**	**720**	63	97	670	< 400	--	--	--	--	0.93	Not operating
			12/27/2004	--		10.45	151.89	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		25.55	136.79	--	--	--	--	--	--	--	--	--	--	--	--	--	Operating
			6/16/2004	--		14.73	147.61	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2003	--		14.48	--	--	--	**12,000**	**2,000**	**380**	190	1,500	**830**	--	--	--	--	--	
			1/13/2003	--		10.20	--	**3,000**	--	**14,000**	**2,100**	**750**	**300**	**1,800**	**950**	--	--	--	--	0.17	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells

FORMER EXXON SERVICE STATION

3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds										
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)	Dissolved Oxygen (mg/L)	
RW-6 *4-inch*	5 - 25.5	162.36																			
			1/9/2014	--		15.84	146.52	--	--	--	--	--	--	--	--	--	--	--	--	--	0.55	-85
			9/20/2013	--		15.96	146.40	--	--	--	--	--	--	--	--	--	--	--	--	--	0.78	-79
			6/25/2013	--		14.92	147.44	--	--	--	--	--	--	--	--	--	--	--	--	--	0.57	-87
			3/13/2013	--		12.15	150.21	--	--	--	--	--	--	--	--	--	--	--	--	--	1.18	61
			11/9/2012	--		14.31	148.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		15.57	146.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		6.50	155.86	--	--	--	--	--	--	--	--	--	--	--	--	--	3.54	70
			9/22/2011	--		14.52	147.84	--	--	--	--	--	--	--	--	--	--	--	--	--	0.83	-86
			3/17/2011	--		7.18	155.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		15.47	146.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2010	--		6.45	155.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2009	--		16.04	146.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/2009	--		13.21	149.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2009	--		7.16	155.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/2008	--		12.02	150.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2008	--		16.08	146.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/2008	--		15.28	147.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		8.93	153.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		14.21	148.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		15.92	146.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		13.90	148.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		8.89	153.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		14.63	147.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		15.63	146.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		13.44	148.92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		5.85	156.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		13.02	149.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		15.13	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		10.13	152.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		6.05	156.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/27/2004	--		9.82	152.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		18.46	143.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		14.80	147.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		11.47	--	--	--	**8,500**	**1,300**	**260**	71	990	**1,300**	--	--	--	--	--	--	
			1/13/2003	--		10.35	--	**2,900**	--	**15,000**	**2,200**	**1,200**	130	**2,200**	**440**	--	--	--	--	--	0.24	
			3/11/2002	--		--	--	**3,100**	--	**14,000**	**970**	**520**	170	**2,200**	< 130	--	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	--	--	--

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-7 *4-inch*	5 - 29.5	162.72																			
			1/9/2014	--		16.43	146.29	--	--	--	--	--	--	--	--	--	--	--	--	1.02	-112
			9/20/2013	--		16.61	146.11	--	--	--	--	--	--	--	--	--	--	--	--	0.52	-83
			6/25/2013	--		15.54	147.18	--	--	--	--	--	--	--	--	--	--	--	--	0.64	-95
			3/13/2013	--		12.84	149.88	--	--	--	--	--	--	--	--	--	--	--	--	1.72	77
			11/9/2012	--		14.77	147.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		18.23	144.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/22/2011	--		15.15	147.57	--	--	--	--	--	--	--	--	--	--	--	--	1.16	-69
			3/17/2011	--		7.75	154.97	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		16.04	146.68	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2010	--		8.70	154.02	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2009	--		16.55	146.17	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/2009	--		13.91	148.81	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2009	--		7.94	154.78	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/2008	--		12.62	150.10	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2008	--		16.51	146.21	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/2008	--		15.80	146.92	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		9.69	153.03	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		14.46	148.26	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		16.42	146.30	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		14.54	148.18	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		9.69	153.03	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		15.13	147.59	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		16.12	146.60	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		14.05	148.67	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		5.75	156.97	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		13.58	149.14	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		15.70	147.02	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		10.85	151.87	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		5.82	156.90	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/27/2004	--		9.85	152.87	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		18.98	143.74	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		15.22	147.50	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		15.33	--	--	--	250	**66**	4.8	3.2	10	< 15	--	--	--	--	--	
			1/13/2003	--		10.95	--	67	--	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	--	--	--	--	0.22	
			3/11/2002	--		--	--	< 50	--	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-8 *4-inch*	5 - 29.5	164.13																			
			1/9/2014	--		17.69	146.44	--	--	--	--	--	--	--	--	--	--	--	--	--	1.33	-68
			9/20/2013	--		17.95	146.18	--	--	--	--	--	--	--	--	--	--	--	--	--	0.52	-41
			6/25/2013	--		16.88	147.25	--	--	--	--	--	--	--	--	--	--	--	--	--	0.91	-59
			3/13/2013	--		14.29	149.84	--	--	--	--	--	--	--	--	--	--	--	--	--	1.33	10
			11/9/2012	--		15.81	148.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		17.38	146.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		8.49	155.64	--	--	--	--	--	--	--	--	--	--	--	--	--	0.74	-45
			9/22/2011	--		16.40	147.73	--	--	--	--	--	--	--	--	--	--	--	--	--	1.22	-58
			3/17/2011	--		8.92	155.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		17.25	146.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		17.25	146.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2010	--		8.43	155.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2009	--		17.80	146.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/2009	--		15.20	148.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2009	--		9.25	154.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/2008	--		13.80	150.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2008	--		17.70	146.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/2008	--		17.07	147.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		11.05	153.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		15.60	148.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		17.63	146.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		15.81	148.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		11.04	153.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		16.37	147.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		17.38	146.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		15.31	148.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		7.88	156.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		14.80	149.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		16.90	147.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		12.15	151.98	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		8.10	156.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/27/2004	--		12.32	151.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		19.74	144.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		16.41	147.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		15.34	--	--	--	760	**310**	9.9	11	16	< 25	--	--	--	--	--	--	
			1/13/2003	--		12.80	--	56	--	390	**150**	11	4.1	4.1	**13**	--	--	--	--	--	0.31	
			3/11/2002	--		--	--	80	--	**1,300**	**620**	11	15	14	< 60	--	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-9 *4-inch*	5 - 25	163.86																			
			1/9/2014	--		17.38	146.48	--	--	--	--	--	--	--	--	--	--	--	--	--	0.87	-64
			9/20/2013	--		17.39	146.47	370***	--	**5,900**[d]	**4,600**	40	8.4J	8.7J	< 7.2	< 65	< 2.8	< 4.7	< 4.0 - 6.4	0.49	-72
			6/25/2013	--		16.49	147.37	--	--	--	--	--	--	--	--	--	--	--	--	0.80	-89
			3/13/2013	--		13.90	149.96	--	--	--	--	--	--	--	--	--	--	--	--	2.12	37
			11/9/2012	--		15.47	148.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		17.05	146.81	230^	--	230[▽]	**980**	5.6	2.2	2.5	**7.4**	**110**	< 0.5	< 0.5	< 0.5	0.37	-133
			3/30/2012	--		8.12	155.74	< 100	--	< 50	**5.1**	< 0.50	< 0.50	< 1.50	< 0.50	< 5.0	< 0.5	< 0.5	< 0.5	6.13	20
			9/22/2011	--		16.12	147.74	230**	--	**1,900***	**1,600**	8.4	12	ND	**8.3**	< 17	< 2.1	< 3.0	< 3.5 - 4.4	1.03	-123
			3/17/2011	--		8.60	155.26	< 50	--	300 [d]	**83**	1.6	< 0.5	< 0.5	(1.9)	--	--	--	--	0.88	Not operating
			9/10/2010	--	(Z^{TPHd})	16.91	146.95	310 [e,f] (210) [e,f]	--	**5,700** [d]	**2,800**	16	< 2.5	37	**(20)**	--	--	--	--	0.70	Not operating
			3/14/2010	--	(Z^{TPHd})	8.15	155.71	770 [e] (700) [e]	--	**11,000** [d]	**3,900**	80	120.0	450	**(31)**	--	--	--	--	1.10	Not operating
			9/5/2009	--	(Z^{TPHd})	17.40	146.46	**3,000** [f,m] **(1,100)** [e,f,m]	--	**8,300** [d]	**3,100**	32	5.5	69	**(25)**	--	--	--	--	1.02	Not operating
			6/7/2009	Sheen [Field & Lab]	(Z^{TPHd})	14.90	148.96	**4,800** [m,f] **(910)** [e]	--	**12,000** [d]	**3,500**	87	150	330	**(30)**	--	--	--	--	1.19	Not operating
			3/14/2009	Sheen [Field]	(Z^{TPHd})	8.97	154.89	450 [e] (440 [e])	--	**14,000** [d]	**3,600**	71	190	380	**(31)**	--	--	--	--	1.21	Not operating
			12/28/2008	Sheen [Field]	(Z^{TPHd})	13.41	150.45	(950 [e])	< 250	**7,300** [d]	**3,500**	24	150	200	**(30)**	--	--	--	--	1.28	Not operating
			9/6/2008	Sheen [Lab]	(Z^{TPHd})	17.31	146.55	**(1,600** [e,g]**)**	--	**13,000** [d,g]	**3,600**	52	170	220	< 350	--	--	--	--	1.22	Not operating
			6/14/2008	--	(Z)	16.71	147.15	(610)	(< 250)	**(8,100** [d]**)**	**(2,800)**	(33)	(100)	(220)	(< 210)	--	--	--	--	1.29	Not operating
			3/9/2008	--	(Z)	10.86	153.00	(570 [e])	(< 250)	**(10,000** [d]**)**	**(4,200)**	(71)	(180)	(380)	(< 35)	--	--	--	--	0.86	Not operating
			12/8/2007	Sheen [Field]		15.22	148.64	**1,000** [e,f]	--	**9,300** [d]	**2,900**	24	150	170	< 250	--	--	--	--	0.89	Not operating
			9/6/2007	Sheen [Field & Lab]		17.29	146.57	**2,200** [e,f,g]	--	**13,000** [d,g]	**2,700**	61	240	350	< 400	--	--	--	--	0.66	Not operating
			6/15/2007	--		15.48	148.38	670 [e]	--	**12,000** [d]	**3,000**	44	170	220	< 250	--	--	--	--	0.68	Not operating
			3/16/2007	Sheen [Lab]		10.83	153.03	**1,200** [e]	--	**16,000** [d,g]	**3,700**	76	230	340	< 350	--	--	--	--	0.71	Not operating
			12/6/2006	Sheen [Lab]		16.04	147.82	660 [e,g]	--	**13,000** [d,g]	**3,000**	29	180	260	< 250	--	--	--	--	0.74	Not operating
			9/5/2006	--		17.02	146.84	**1,100**[e]	--	**14,000**[d]	**3,900**	39	200	230	< 330	--	--	--	--	0.69	Not operating
			6/30/2006	--		15.04	148.82	**1,400**[e]	--	**14,000**[d]	**3,100**	53	130	260	< 300	--	--	--	--	0.73	Not operating
			3/22/2006	--		7.63	156.23	680[e]	--	**7,600**[d]	**2,900**	59	190	310	< 200	--	--	--	--	0.95	Not operating
			12/14/2005	--		14.52	149.34	**1,100**[e,f]	--	**6,300**[d]	**1,900**	29	150	260	< 50	--	--	--	--	0.98	Not operating
			9/21/2005	Sheen [Lab]		16.62	147.24	820[e,f,g]	--	**8,300**[d,g]	**2,500**	36	190	310	< 170	--	--	--	--	1.04	Not operating
			6/21/2005	--		11.90	151.96	630[e]	--	**9,400**[d]	**2,400**	69	210	470	< 350	--	--	--	--	--	Not operating
			3/7/2005	--		7.87	155.99	510[e]	--	**9,000**[d]	**2,600**	69	200	550	< 500	--	--	--	--	0.91	Not operating
			12/27/2004	--		24.88	138.98	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		19.83	144.03	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		16.03	147.83	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		13.69	--	--	--	**2,300**	**770**	32	15	200	< 50	--	--	--	--	--	
			1/13/2003	--		11.85	--	**2,000**	--	**23,000**	**7,700**	**610**	**310**	310	< 500	--	--	--	--	0.39	
			3/11/2002	--		--	--	**880**	--	**12,000**	**3,400**	**230**	78	1,300	< 240	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-10 *4-inch*	5 - 25	163.02																			
			1/9/2014	--		16.33	146.69	--	--	--	--	--	--	--	--	--	--	--	--	1.01	-115
			9/20/2013	--		16.53	146.49	--	--	--	--	--	--	--	--	--	--	--	--	0.71	-102
			6/25/2013	--		15.41	147.61	--	--	--	--	--	--	--	--	--	--	--	--	0.75	-126
			3/13/2013	--		12.81	150.21	--	--	--	--	--	--	--	--	--	--	--	--	0.91	-12
			11/9/2012	--		14.52	148.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		16.01	147.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		7.02	156.00	--	--	--	--	--	--	--	--	--	--	--	--	0.79	-43
			9/22/2011	--		15.11	147.91	--	--	**1,900***	**1,600**	8.4	12	< 3.6	< 4.1	--	--	--	< 3.5 - 4.4	0.77	-104
			3/17/2011	--		7.64	155.38	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		15.87	147.15	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2010	--		6.32	156.70	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2009	--		16.36	146.66	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/2009	--		13.96	149.06	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2009	--		8.02	155.00	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/2008	--		12.42	150.60	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2008	--		16.23	146.79	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/2008	--		15.64	147.38	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		9.96	153.06	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		14.23	148.79	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		16.23	146.79	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		14.52	148.50	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		9.91	153.11	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		15.02	148.00	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		15.98	147.04	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		14.13	148.89	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		6.53	156.49	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		13.37	149.65	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		15.51	147.51	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		10.95	152.07	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		6.40	156.62	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/27/2004	--		19.39	143.63	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		18.35	144.67	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		15.03	147.99	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		13.13	--	--	--	**5,800**	**2,400**	11	< 10	110	< 300	--	--	--	--	--	
			1/13/2003	--		10.75	--	330	--	**4,300**	**1,500**	43	98	98	< 100	--	--	--	--	0.41	
			3/11/2002	--		--	--	740	--	**12,000**	**3,900**	**150**	110	1,100	< 270	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-11 *4-inch*	5 - 25	162.67																			
			1/9/2014	--		15.85	146.82	--	--	--	--	--	--	--	--	--	--	--	--	0.85	-72
			9/20/2013	--		15.89	146.78	--	--	--	--	--	--	--	--	--	--	--	--	0.90	-77
			6/25/2013	--		14.98	147.69	--	--	--	--	--	--	--	--	--	--	--	--	0.68	-85
			3/13/2013	--		12.31	150.36	--	--	--	--	--	--	--	--	--	--	--	--	2.13	-31
			11/9/2012	--		13.91	148.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		15.61	147.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		6.51	156.16	--	--	--	--	--	--	--	--	--	--	--	--	1.32	-106
			9/22/2011	--		14.50	148.17	--	--	--	--	--	--	--	--	--	--	--	--	0.94	-96
			3/17/2011	--		7.10	155.57	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		15.42	147.25	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2010	--		6.50	156.17	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2009	--		16.02	146.65	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/2009	--		13.21	149.46	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2009	--		7.14	155.53	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/2008	--		12.01	150.66	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2008	--		15.99	146.68	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/2008	--		15.26	147.41	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		8.81	153.86	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		13.83	148.84	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		15.84	146.83	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		13.90	148.77	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		8.85	153.82	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		14.55	148.12	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		15.56	147.11	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		13.36	149.31	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		5.70	156.97	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		12.96	149.71	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		15.09	147.58	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		9.96	152.71	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		5.95	156.72	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/27/2004	--		10.07	152.60	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		18.44	144.23	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		14.75	147.92	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		12.45	--	--	--	**9,300**	**980**	120	180	770	**2,000**	--	--	--	--	--	
			1/13/2003	--		9.80	--	**2,700**	--	**5,300**	**490**	110	120	120	**180**	--	--	--	--	0.24	
			3/11/2002	--		--	--	< 50	--	260	**34**	5.3	8.1	48	< 5.0	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells

FORMER EXXON SERVICE STATION

3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-12 *4-inch*	5 - 27	163.06																			
			1/9/2014	--		16.35	146.71	--	--	--	--	--	--	--	--	--	--	--	--	1.37	-81
			9/20/2013	--		16.36	146.70	--	--	--	--	--	--	--	--	--	--	--	--	0.85	-90
			6/25/2013	--		15.46	147.60	--	--	--	--	--	--	--	--	--	--	--	--	1.17	-48
			3/13/2013	--		12.83	150.23	--	--	--	--	--	--	--	--	--	--	--	--	1.96	38
			11/9/2012	--		14.98	148.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		15.94	147.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		7.06	156.00	--	--	--	--	--	--	--	--	--	--	--	--	1.09	-8
			9/22/2011	--		15.01	148.05	--	--	--	--	--	--	--	--	--	--	--	--	0.75	-77
			3/17/2011	--		7.68	155.38	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		15.93	147.13	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2010	--		6.29	156.77	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2009	--		16.59	146.47	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/2009	--		13.70	149.36	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2009	--		7.77	155.29	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/2008	--		12.80	150.26	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2008	--		16.58	146.48	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/2008	--		15.74	147.32	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		9.43	153.63	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		14.87	148.19	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		16.42	146.64	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		14.44	148.62	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		9.52	153.54	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		9.52	153.54	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		15.11	147.95	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		16.11	146.95	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		13.95	149.11	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		6.35	156.71	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		13.43	149.63	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		15.63	147.43	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		10.58	152.48	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		6.59	156.47	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/27/2004	--		10.85	152.21	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		19.09	143.97	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		15.30	147.76	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		13.63	--	--	--	**17,000**	**2,700**	**960**	230	1,500	**1,400**	--	--	--	--	--	
			1/13/2003	--		10.90	--	**1,800**	--	**4,100**	**1,000**	130	99	99	< 100	--	--	--	--	0.21	
			3/11/2002	--		--	--	900	--	**13,000**	**4,500**	130	130	270	< 5.0	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells

FORMER EXXON SERVICE STATION

3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-13 *4-inch*	5 - 25	164.34																			
			1/9/2014	--		17.01	147.33	110*	--	440**	**43**	< 0.50	2.5	< 1.5	**5.2**	**200**	< 0.5	< 0.5	< 1.5	0.74	-67
		(Split)	1/9/2014	--		17.01	147.33	< 100	--	150**	**12**	< 0.50	< 0.50	< 1.5	**5.2**	**60**	< 0.5	< 0.5	< 1.5	0.27	-61
			9/20/2013	--		17.01	147.33	< 100	--	390[#]	**84**	1.1	2.1	1.1	< 0.5	**10**	< 0.5	< 0.5	< 1.5	0.18	-55
			6/25/2013	--		16.01	148.33	< 100	--	210[#]	**86**	1.7	5.3	3.1	5.9	**110**	< 0.5	< 0.5	< 1.5	0.12	-86
			3/26/2013	--		13.92	150.42	< 100	--	< 50	< 0.5	< 0.5	< 0.5	< 1.5	< 0.5	< 5	< 0.5	< 0.5	< 1.5	1.95	70
			3/13/2013	--		13.22	151.12	--	--	--	--	--	--	--	--	--	--	--	--	1.13	97
			11/9/2012	--		15.11	149.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		16.39	147.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		7.45	156.89	--	--	--	--	--	--	--	--	--	--	--	--	3.65	43
			9/22/2011	--		15.55	148.79	--	--	--	--	--	--	--	--	--	--	--	--	0.78	-78
			3/17/2011	--		8.19	156.15	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/2010	--		16.45	147.89	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2010	--		7.49	156.85	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2009	--		17.10	147.24	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/2009	--		14.31	150.03	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/2009	--		8.16	156.18	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/2008	--		13.26	151.08	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2008	--		17.10	147.24	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/2008	--		16.32	148.02	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		9.85	154.49	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		14.97	149.37	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		16.95	147.39	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		14.98	149.36	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		9.93	154.41	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		15.70	148.64	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		16.62	147.72	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		14.44	149.90	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		6.65	157.69	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		14.11	150.23	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		16.20	148.14	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		11.05	153.29	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		6.90	157.44	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/27/2004	--		18.12	146.22	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		19.55	144.79	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		15.83	148.51	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		13.45	--	--	--	150	**47**	1.0	2.1	1.5	< 5.0	--	--	--	--	--	
			1/13/2003	--		11.20	--	92	--	210	**54**	2.0	2.7	2.7	< 5.0	--	--	--	--	0.35	
			3/11/2002	--		--	--	79	--	830	**190**	13	13	34	< 5.0	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	--	--	--

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
RW-14 *4-inch*	5 - 25	163.76																			
			1/9/2014	--		16.53	147.23	360*	--	**1,200****	**470**	6.1	3.4	1.2	< 0.50	**98**	< 0.50	< 0.50	DIPE = 0.71	0.63	-102
		(Split)	1/9/2014	--		16.53	147.23	**1,200***	--	720**	**130**	< 0.50	1.2	2.2	< 0.50	**85**	< 0.50	< 0.50	DIPE = 0.83	0.24	-87
			9/20/2013	--		16.64	147.12	150***[ð]	--	170[ð]	**83**	1.6	2.4	1.1	**5.5**	**34**	< 0.50	< 0.50	< 1.5	0.15	-88
			6/25/2013	--		15.64	148.12	280^	--	**560**[ð]	**65**	0.93	2	< 1.5	< 0.50	**34**	< 0.50	< 0.50	< 1.5	0.24	-92
			3/26/2013	--		13.49	150.27	< 100	--	< 50	**1.5**	< 0.5	< 0.5	< 1.5	< 0.5	< 5	< 0.50	< 0.5	< 1.5	1.34	23
			3/13/2013	--		12.90	150.86	--	--	--	--	--	--	--	--	--	--	--	--	1.32	62
			11/9/2012	--		14.72	149.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			9/28/2012	--		16.12	147.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			3/30/2012	--		7.11	156.65	--	--	--	--	--	--	--	--	--	--	--	--	1.43	10
			9/22/2011	--		15.22	148.54	--	--	--	--	--	--	--	--	--	--	--	--	0.80	-108
			3/17/2011	--		7.82	155.94	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/10/10	--		16.10	147.66	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/10	--		7.10	156.66	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/09	--		16.71	147.05	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/7/09	--		13.97	149.79	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/14/09	--		7.88	155.88	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/28/08	--		12.82	150.94	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/08	--		16.68	147.08	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/14/08	--		15.90	147.86	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/9/2008	--		9.60	154.16	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/8/2007	--		14.57	149.19	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/6/2007	--		16.54	147.22	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/15/2007	--		14.61	149.15	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/16/2007	--		9.66	154.10	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/6/2006	--		15.31	148.45	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/5/2006	--		16.21	147.55	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/30/2006	--		14.10	149.66	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/22/2006	--		6.43	157.33	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			12/14/2005	--		13.73	150.03	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/21/2005	--		15.82	147.94	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/21/2005	--		10.80	152.96	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/7/2005	--		6.61	157.15	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Table 2: Current & Historic Groundwater Elevation and Analytical Data - Monitoring Wells
FORMER EXXON SERVICE STATION
3055 35th AVENUE, OAKLAND, CALIFORNIA

All groundwater results are micrograms per liter (ug/L or ppb)

Monitoring Point Information			Date	SPH (feet)	Note	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	Petroleum Hydrocarbon Concentration Data												Field Measurements	Oxidation Reduction Potential (mV)
								Total Petroleum Hydrocarbons			Volatile Organic Compounds									Dissolved Oxygen (mg/L)	
Well # TOC	Screen Interval (feet)	TOC Elevation (feet)						Diesel	Fuel Oil	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA	EDB	1,2-DCE	DIPE,ETBE,TAME (µg/L)		
Continued RW-14			12/27/2004	--		12.62	151.14	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			9/27/2004	--		19.20	144.56	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			6/16/2004	--		15.41	148.35	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
			3/18/2004	--		12.81	--	--	--	220	**42**	1.4	0.99	5.2	< 5.0	--	--	--	--	--	
			1/13/2003	--		11.00	--	**6800**	--	**3700**	**230**	77	91	91	< 50	--	--	--	--	0.38	
			3/11/2002	--		--	--	82	--	270	**44**	0.99	< 0.5	4.2	< 5.0	--	--	--	--	--	
Laboratory Detection Limit:								**10**	**20**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**5**	**0.5**	**0.5**	**0.5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]								**1,000**			**1**	**150**	**300**	**1,750**	**5**	**12**	**0.05**	**0.5**	**--**	**--**	**--**

Notes

Tabulated data prior to September 22, 2011 was provided by Conestoga-Rovers & Associates (CRA).

Notes for Previously Collected Data

All site wells were re-surveyed by Virgil Chavez Land Surveying on June 2, 2004 to the CA State Coordinate System, Zone III (NAD83). Benchmark elevation = 177.397 feet (NGVD 29)

SPH = Separate-phase hydrocarbons depth measured from TOC.

(Z) = Laboratory used Zemo Gravity Separation Protocol for Extractables & Purgeables

(Z^{TPHd}) = Laboratory used Zemo Gravity Separation Protocol for Extractables (TPHd)

( ) = Zero Gravity Separation Protocol Use Prior to Analysis

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method SW8015C

TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method SW8015C; with Dawn Zemo Separation in (parentheses)

TPHmo = Total petroleum hydrocarbons as motor oil by modified EPA Method SW8015C

Benzene, Toluene, Ethylbenzene, and Xylenes by EPA Method SW8021B

MTBE = Methyl tertiary butyl ether by EPA Method SW8021B, or by SW8260B (designated by parentheses)

Sheen = A sheen was observed on the water's surface.

Field = Observed in field

Lab = Observed in analytical laboratory

Notes:

a = Result has an atypical pattern for diesel analysis

b = Result appears to be a lighter hydrocarbon than diesel

Notes:

c = There is a >40% difference between primary and confirmation analysis

d = Unmodified or weakly modified gasoline is significant

e = Gasoline range compounds are significant

f = Diesel range compounds are significant; no recognizable pattern

g = Lighter than water immiscible sheen/product is present

h = One to a few isolated peaks present

i = Medium boiling point pattern does not match diesel (stoddard solvent)

j = Aged diesel is significant

k = Oil range compounds are significant

l = Liquid sample that contains greater than ~1 vol. % sediment

m = Stoddard solvent/mineral spirit

n = Strongly aged gasoline or diesel range compounds are significant in the TPHg chromatogram.

o = MTBE by EPA Method SW8260B

p = No recognizable pattern

* = Well inaccessible during site visit

** = No water in well due to system operating in well, value reflects total well depth.

= abnormally high reading due to added hydrogen peroxide

-- = Not sampled; not analyzed ; not applicable; or no SPH measured or observed

Weber, Hayes and Associates Notes:

Newly installed wells MW-5 and MW-6 were proffesionally surveyed and tied into the existing well network by Mid-Coast Engineers on November 2, 2012.

1 = Water Quality Goals: Goals establised by the CRWQCB Central Coast Region based on Maximum Contaminant Limits (Department of Health Services) or taste & odor threshold limits. **BOLD = Above WQG Threshold Limits.**

2 = "Split" sample was collected by traditional purging and sampling technique (i.e., submersible pump purging at 1 gpm; sample upon sufficient well recovery) rather than low-flow sampling technique in order to compare/contrast analytical results as a function of sample technique.

TAME (Tert-amyl-methyl ether), TBA (tert-Butyl alcohol), EDB (1,2-Dibromoethane) , 1,2-DCE (1,2-Dichloroethene), DIPE, (Diisopropyl ether), ETBE (Ethyl Tert-Butyl Ether).

Bold Font = Detected concentration exceeds Water Quality Objectives

*** =** Laboratory report indicates that although TPH-gas results are present, sample chromatogram does not resemble pattern of reference Gasoline standard (possibly aged gasoline)

**** =** Laboratory reports that result not typical of Diesel #2 standard pattern (possibly aged diesel or other fuel within the diesel quantification range such as diesel #4 or fuel oil).

***** =** Laboratory report indicates that the sample chromatographic pattern does not resemble typical diesel standard pattern; unknown fuel pattern lighter than diesel possibly a type of naptha or weathered gasoline.

^ = Sample chromatographic pattern does not resemblr typical diesel standard pattern; unknown organics within diesel range quantifired as diesel.

∇ = Not typical of Gasoline standard pattern. Result due to discrete peak (Benzene).

J = Laboratory indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative.

❦ = Laboratory report indicates although TPH Gasoline compounds are present, the sample pattern does not match pattern of reference Gasoline standard. Hydrocarbons within range of C5-C12 quantified as Gasoline.

❁ = Laboratory reports result does not match pattern of reference Gasoline standard. Reported TPH value includes amount due to discrete peaks and non-target hydrocarbons within range of C5-C12 quantified as Gasoline.

 # = Diesel result due to discrete unknown peaks within quantified range

+ = Does not match pattern of reference Gasoline standard. Reported value is the result of extractable hydrobcarbons overlap.

₧ = Wells RW-5 and RW-7 exhibited anomalously high water levels on March 30, 2012; analytical results from well MW-5 are likely not representative.

Appendix A

Site Description and Background
&
Updated Site Conceptual Model (December 2012)

Site Description and Surrounding Land Use

The vacant, undeveloped subject Site is a former Exxon Service Station located at the northeast corner of 35th Avenue and School Street, in Oakland, California (see aerial photo, right). The Site is flat-lying, but the regional topography generally slopes southwestward from the Oakland hills towards the San Francisco Bay (see regional see terrain/aerial maps, Figure 1).

Historical aerial photographs dated 1959, 1980, and 2000, agree with reports stating the Site's gas dispensing station was constructed around 1970 and was decommissioned in 1991, when the Site's five (5) underground storage tanks (USTs) were removed and the gasoline fuel release was first discovered. The Site has remained an undeveloped, unpaved vacant lot since it was decommissioned. The general area surrounding the Site is a mixture of commercial businesses along the main thoroughfares and residential neighborhoods beyond the thoroughfares. An abandoned, former Texaco gas station is located immediately upgradient of the Site, across School Street to the east. Previous reports indicate the UST's from this station were removed in approximately 1984, but there is no record that closure soil samples were collected.

Site Information Details		
Site Address:	3055 35th Avenue, Oakland -- currently a vacant lot	(APN No. 027-0890-006-02).
Owner:	Golden Empire Properties, Inc	Mr. Lynn Worthington
Agency Contacts:	Alameda County Environmental Health (Case #RO 0000271[9]) San Francisco Bay RWQCB (Case #: 01-0585 [10])	Keith Nowell keith.nowell@acgov.org CherieMcCaulou cmccaulou@waterboards.ca.gov

[9]: ACEH Site website: http://ehgis.acgov.org/dehpublic/dehpublic.jsp
[10]: RWQCB Site website: http://geotracker.swrcb.ca.gov/profile_report.asp?global_id=T0600100538

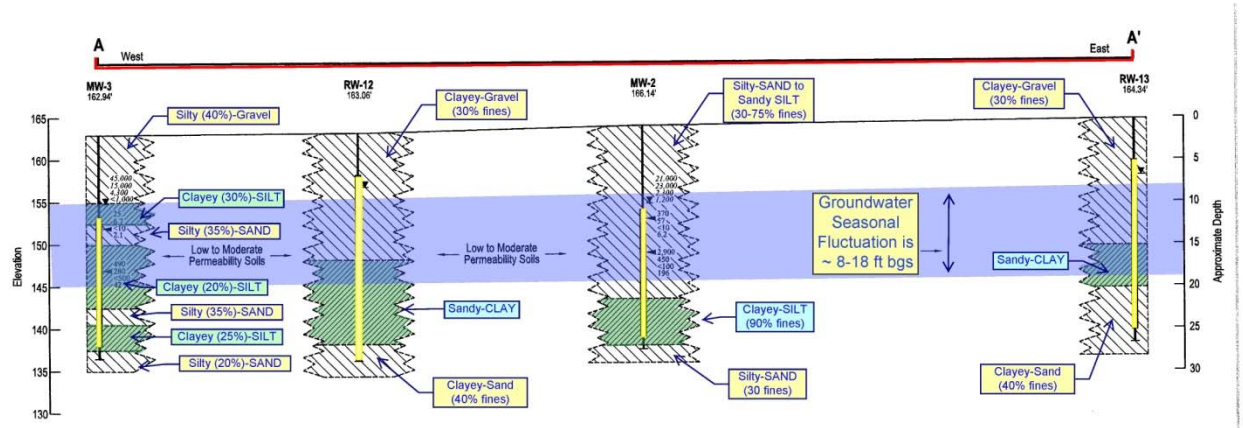
LOCAL GEOLOGY AND HYDROGEOLOGY

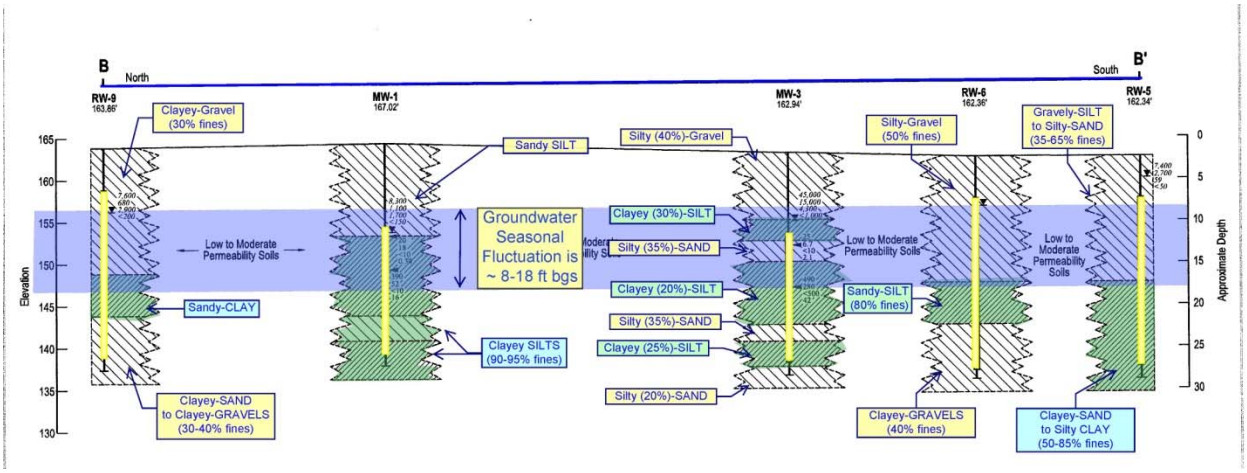
The Site is located within a large, regional, northwest-trending alluvial basin (the East Bay Plain Subbasin), that reportedly extends beneath the San Francisco Bay to the west. The Subbasin's regional aquifer in the vicinity of the Site has a westerly groundwater flow direction, towards San Francisco Bay. The East Bay Municipal Utility District (EBMUD) has provided water supply to Oakland and other communities since the 1930's because of historical over-pumping that reportedly damaged the water supply by seepage or saltwater intrusion. EBMUD obtains its drinking supply from protected Sierra runoff from the Mokelumne River watershed, which eliminated the need for local groundwater supply wells.

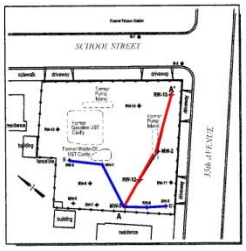
Shallow soil conditions have been logged during the installation of twenty-four (24) on-site borings and thirteen (13) off-site borings drilled to a maximum depth of 45 feet. First-encountered groundwater beneath the Site fluctuates seasonally, roughly between the depths of 8-to-18 feet below ground surface (bgs). Exploratory borings have been logged by a number of field geologists since subsurface drilling investigations were initiated in 1991. Soil samples obtained from the earlier exploratory borings and well installation borings were collected using hollow stem drill rigs (5-foot sample intervals) while more recently sampling (2007-8) was completed using driven probe rigs (continuous core sampling). Although drill logs show individual geologist variation with logging descriptions, designations, and opinions of permeability, the unifying theme is that the subsurface soils consist of an extremely heterogeneous mix of the following soil types:

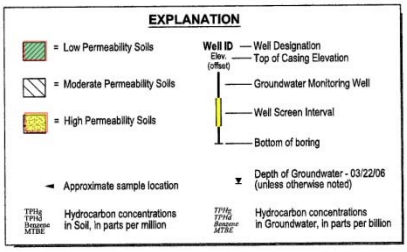
- The dominant soil type encountered consisted of low-permeability soils that included clays, clayey-mixtures (clayey-silts and clayey-sands), and silty-mixtures (sandy-silts);
- The secondary soil type encountered consisted of moderately-permeable sandy units (high silt content, fine-grained sand units identified as silty-sands with clay binder), and
- Occasionally, some relatively thin, discontinuous, highly-permeable sand lenses were encountered (low silt content silty-sands).

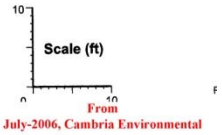
The following geologic cross-sections of soil types logged across the Site show: 1) the interbedded, heterogeneous nature of soils beneath the Site; 2) the ubiquitous presence of fine-grained clays and/or silts in the soil mixtures (low-to-moderately permeable units), which generally retard the vertical and lateral movement of precipitation, chemicals and groundwater, and 3) a visual, presentation of the seasonal groundwater fluctuation across these relatively low-permeability units.



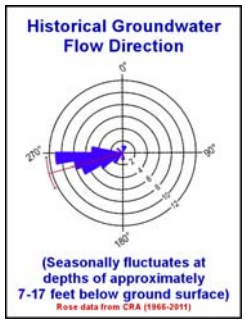








Note: Remediation feasibility testing by soil vapor extraction, air sparging, and groundwater extraction techniques showed only limited air and groundwater flow rates (no vacuum influence/easy dewatering but no groundwater drawdown at nearby wells), which confirms the low permeability conditions beneath the Site (Cambria, 1996).



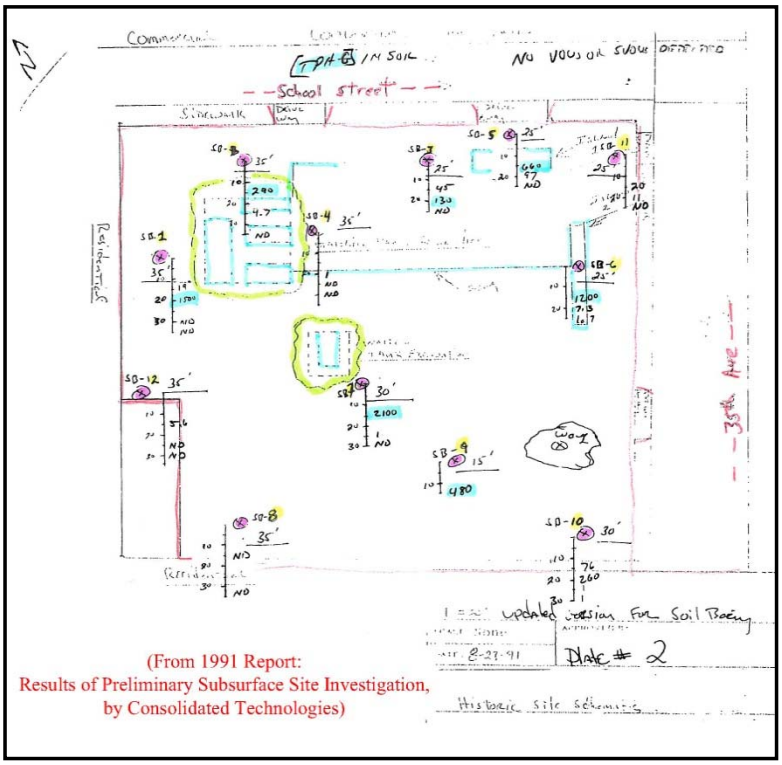
First-encountered groundwater levels in Site monitoring wells have been measured to fluctuate as much as from approximately 6 to 19-ft bgs, but seasonal

fluctuations generally fall between 8-18 feet[11]. Survey-calculated groundwater flow direction beneath the Site is primarily towards the west, as shown by the cumulative-flow, rose diagrams presented on Figures 2, 3, and 4 of this report. Gradient is approximately 0.009 ft/ft (approximately 1 foot of groundwater drop for 111 feet of lateral run).

SUMMARY OF PREVIOUS SOIL AND GROUNDWATER INVESTIGATIONS AND CORRECTIVE ACTIONS

1991, Fuel Tank Removals: In January 1991, Pacific Excavators is reported to have removed two (2) 4,000-gallon, and two (2) 6,500-gallon gasoline USTs, as well as one (1) 500-gallon waste oil UST from the Site. While there are some figures indicating soil stockpiles were present on-site, there is no record of tank pit over-excavation or off-site disposal. Figure 3 identifies tank excavation (cavity) and dispenser locations. Subsequent environmental reports indicated that no UST closure samples were analyzed.

1991, Initial Soil Sampling Investigation: In November 1991, Consolidated Technologies drilled twelve (12) hollow stem augured soil borings (B-1 to B-12) and collected soil samples from depths of 15 to 35-ft below ground surface (bgs). Locations are shown in figure clip (right). A gasoline release was confirmed based on field observations of moderate-to-strong petroleum odors in eleven of the twelve soil borings generally encountered at depths of approximately 12-to-22 feet (in the groundwater fluctuation, "smear" zone) and confirmation laboratory detections of total petroleum hydrocarbons as gasoline (TPH-gas) concentrations in samples collected from eleven of the twelve soil borings [the maximum concentration was detected at boring B-7 = 2,100 mg/kg (or parts per million, ppm].



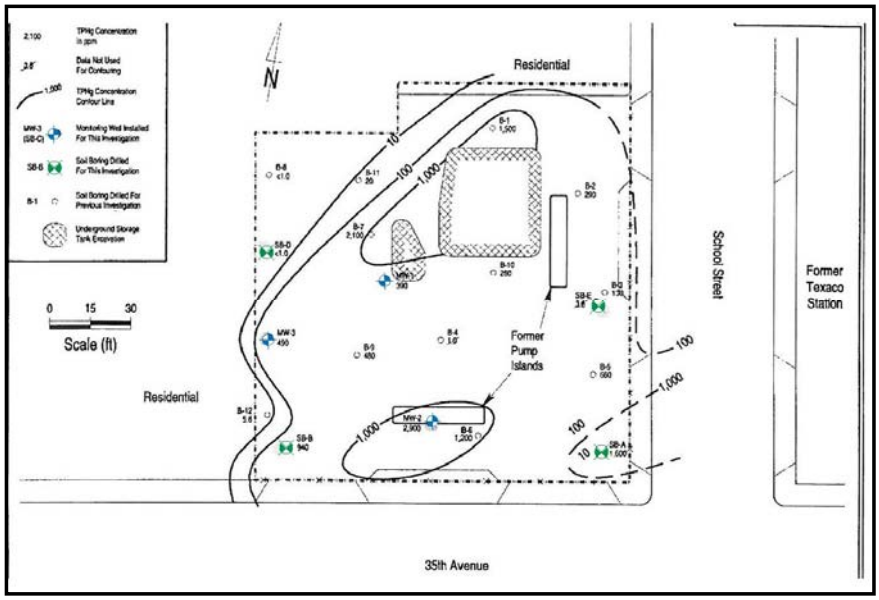
(From 1991 Report:
Results of Preliminary Subsurface Site Investigation,
by Consolidated Technologies)

The highest concentrations of TPH-gas and the volatile constituent compounds of benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in samples collected at 15 and 20 feet bgs. Note: A boring targeting the waste oil tank (B7), contained no additional contaminants of

[11]: Note: Water depths for MW-1 and MW-2 are not reflective of groundwater levels below ground surface due to their elevated casing height within monument well boxes.

concern from a suite of analysis including: diesel, petroleum oil and grease, semi volatile organics (Method 8270 SVOCs), or other volatile solvent compounds aside from BTEX (Method 8010). Of note: only limited contamination was observed in the two downgradient borings, B-8 and B-12.

1994, Follow-up Subsurface Investigation & Monitoring Well Installations: In May 1994, Cambria drilled seven (7) hollow-stem augured soil borings (SB-A through SB-G, (see figure, right), analyzed two soil samples per boring, and converted three of the borings into on-site monitoring wells (MW-1 through MW-3, each screened from 10-25 ft bgs). Groundwater samples were analyzed from the 3 newly installed wells in addition to 3 of the exploratory borings (grab samples). Boring logs indicated moderate to very strong, weathered gasoline odors in all the borings starting a depth of eight feet below ground surface.

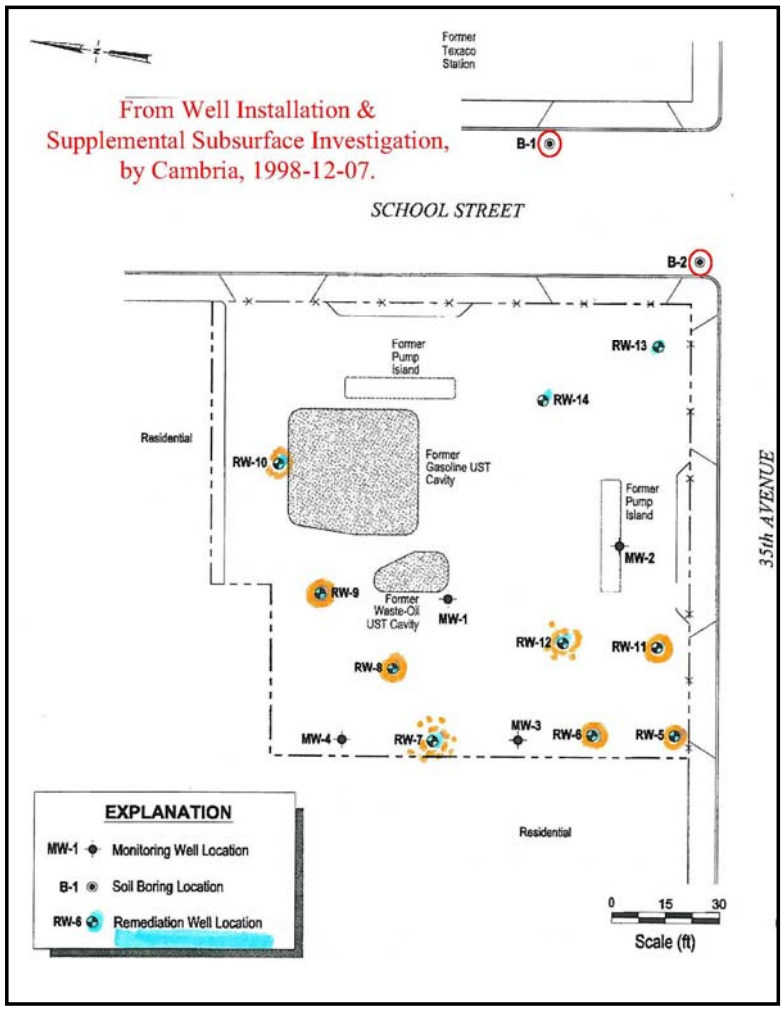


- Soil: TPH-gas concentrations were detected in soil samples collected for analysis in six of the seven soil borings, (max concentration = 2,900 ppm in MW-2 at 15-ft),
- Groundwater: TPH-gas/benzene concentrations were detected in all six groundwater samples. The maximum TPH-gas/benzene concentrations detected in grab groundwater samples were 120,000/10,000 ug/L (or parts per billion, ppb, in SB-B @ 15-ft), max TPH-gas/benzene concentrations in a developed monitoring well were 120,000/22,000 (MW-1 @ 16.8-ft). Tabulated analytical results are provided in Table 4 of this report.

1996, Feasibility Testing: In July 1996, Cambria conducted a series of remediation feasibility tests involving soil vapor extraction-only (SVE), SVE/air sparging, and SVE/aquifer pumping. SVE vacuums of up to 150 inches-of-water were applied to the three monitoring wells for 20-to-45 minutes (approx. 5-ft of well screen available for SVE above groundwater). TPH-gas soil vapor concentrations collected from each well at the end of the SVE test ranged from less than 250 parts per million by volume (ppm_v) in test wells MW-1 and MW-2, to greater than 10,000 ppm_v in test well MW-3. Cambria did not note any significant increases in air flow or soil vapor concentrations when SVE was combined with air sparging (no radius of influence of vacuum or groundwater drawdown was observed in any monitored well). However, Cambria stated that they believed dewatering combined with SVE could enhance remedial efforts.

The generally low air and groundwater flow rates are indicative of low permeability soils. Results of the remedial testing indicated that SVE-alone, or SVE combined with air sparging would not be effective in removing hydrocarbons from the subsurface soils. However, it was believed that Dual Phase Extraction was a promising remedial alternative.

1997, Additional Downgradient, Monitoring Well: In February 1997, Cambria installed one additional on-site monitoring well (MW-4, screened from 10-30 ft bgs) at the downgradient (west) corner of the parcel. Soil samples for logging were obtained on 5-foot intervals using hollow-stem augers but no field measurements (photoionization meter) or contaminant observations were logged, but two analyzed soil samples contained TPH-gasoline contamination The maximum concentration of TPH-gas in soil was detected at a depth of 15-ft bgs (@ 530 ppm). TPH-gas and benzene concentrations in groundwater were detected at concentrations of 47,000, and 11,000 ppb, respectively.



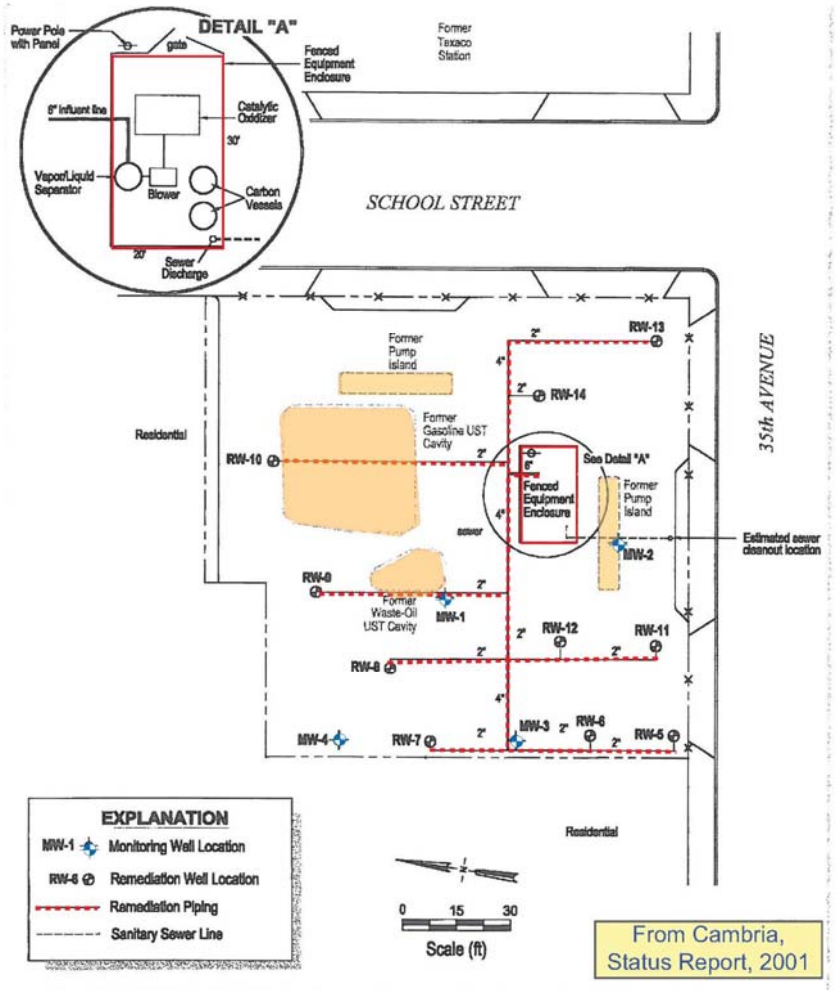
1998, Remediation Well Installation (see figure, right): In August 1998, Cambria installed ten (10), on-site, 4-inch diameter, dual-phase extraction (DPE) remediation wells (RW-5 through RW-14). Soil samples for logging were obtained from the hollow-stem augers on 5-foot intervals (5 borings) or directly from augured drill cuttings (5 borings) and the majority of borings had very similar subsurface logs (low permeability clayey sands/gravels, and sandy clays having strong to moderate petroleum hydrocarbon odors in the groundwater fluctuation, smear zone). No soil samples were laboratory analyzed.

In addition to the 10 installed remediation wells, an attempt was made to obtain upgradient, hydropunch-type, grab groundwater samples (two geoprobe borings, B-1 and B-2), on School Street. Sampling rods were advanced directly to depths of 28 and 38 feet (no soil cores collected). Apparently, the low permeability soils encountered at those depths did not produce groundwater, so no water samples could be collected.

1999, Interim Remedial Action - Injection of Hydrogen Peroxide: In August 1999, Cambria poured a limited volume (7-12 gallons) of a hydrogen peroxide solution into each of the four

monitoring wells and ten remediation wells in an attempt to oxygenate impacted groundwater while Dual Phase Extraction (DPE) remediation system planning was underway. Dissolved oxygen concentrations in groundwater did not significantly increase nor did contaminant concentrations decrease following the placement of 7.5% hydrogen peroxide into all fourteen on-site wells and the results did not change ongoing plans for installing DPE remediation system.

2000-2004, Site Remediation by Dual-Phase Vacuum Extraction: In October 2000, Cambria initiated remediation by DPE which consisted of extraction from the Site's 10 remediation wells by a 200 cfm positive-displacement blower. The blower simultaneously extracted liquid/dissolved-phase contaminants to a centrally located treatment compound where vapor phase hydrocarbons were destroyed using a catalytic oxidizer; dissolved phase hydrocarbons were treated using two, 1,000-lb carbon vessels and was discharged to the sanitary sewer. In August 2002, the blower was upgraded in an effort to increase hydrocarbon removal. The positive-placement blower was replaced by a more powerful, 20-HP liquid ring vacuum pump capable of generating higher vacuums. The system design included simultaneous extraction of soil vapor and groundwater from the 4 monitoring wells (MW-1 though MW-4) and the ten, on-site, 4-inch diameter, remediation wells (RW-5 through RW-14) using 1-inch diameter suction hose stingers lowered to depths typically ranging from 16-20 feet bgs.



In September 2004, the DPE system was dismantled due to asymptotically low hydrocarbon removal rates. Approximately 6,545 pounds of vapor-phase hydrocarbons were removed after 13,965 hours of extraction and 11 pounds of dissolved-phase hydrocarbons were removed from 1,447,419 gallons of DPE pumped groundwater (equal to an average of 1.7 gal/min extracted).

2006, Proposed Additional Remedial Actions (January), and Off-site Delineation Workplan (July): Following the cessation of the DPE remediation, Alameda County Health Care Services (AC-HCS) requested that a *Workplan* be prepared to implement an alternative remedial technique (December 2004). Post-remediation monitoring (2005) of six on-site wells (MW-1 though MW-4, RW-5 and RW-9) showed sheen was present in each of the wells along with elevated concentrations of residual dissolved fuel contaminants, primarily as TPH-gas, benzene, and MTBE. Maximum 2005 concentrations detected in these 6 monitoring wells ranged from 9,400-to-53,000 ppb for TPH-gas, 1,200-to-6,100 ppb for benzene, and non-detect-to-2,300 for MTBE.

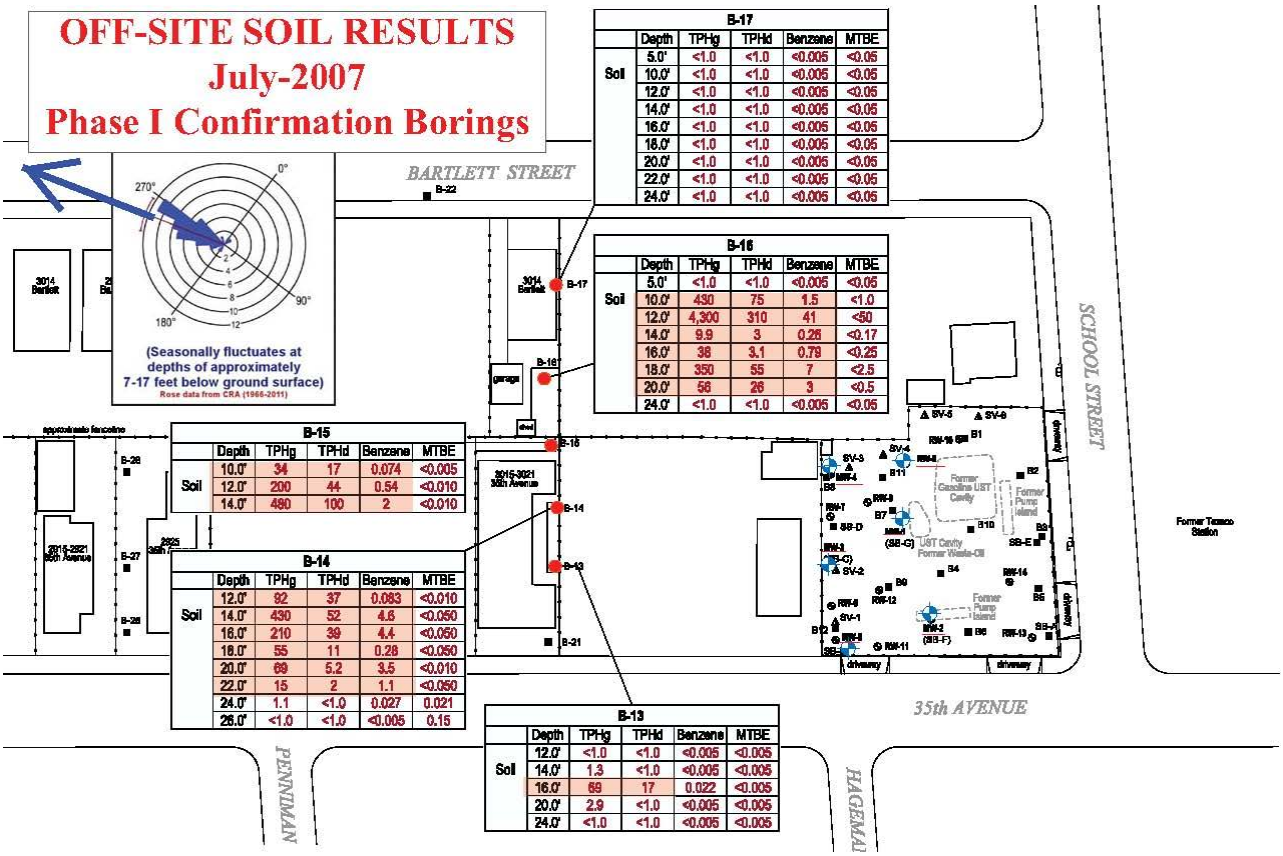
Cambria's *Revised Remediation Workplan* proposed completing interim remedial pilot testing of seven (7) sparge points in order to confirm the ability and cost-effectiveness of *In-Situ Chemical Oxidation* (ISCO) injection as an option for cleanup of residual, fuel-impacted groundwater in a low-permeability, shallow aquifer. Gaseous ozone was selected as the ISCO oxidizer because of: 1) ozone gas' reported ability to transfer though fine-grained, saturated soils, and 2) ozone's ability to destroy hydrocarbons on contact.

AC-HCS determined that previous Dual Phase Extraction remediation at the Site (2000-2004) was not successful due to the low permeability restrictions that Site soils have on air and groundwater flow, and those same restrictions would likely limit the distribution of sparged ozone from coming into contact with residual contamination (May-2006). AC-HCS instead requested that: 1) the original *Corrective Action Plan* (dated 1996) be updated with new understandings of the subsurface conditions in order to better evaluate proposed remedial options, and 2) an *Off-site Soil & Groundwater Investigation Workplan/Site Conceptual Model* be submitted to delineate extent of off-site soil contamination, the extent of groundwater plume migration, and a survey of wells within 2,000 feet and other sensitive receptors.

Cambria's *Well and Sensitive Receptor Survey* (July 2006) concluded that none of the active supply wells identified within a 2,000-foot radius of the Site were likely to be impacted based on their relative upgradient/sidegradient locations. A review of other potential sensitive receptors (schools, churches, and surface water bodies) concluded there were negligible direct risks from impacted groundwater but there did exist a potential risk for plume off-gassing (vapor intrusion) if the residual hydrocarbon plume extended under residences (identified data gap). Cambria's proposed data gap sampling plan called for off-site soil and groundwater sampling of six (6) downgradient borings installed at distances ranging between ~300-600 feet off-site.

AC-HCS's response opinion was that the distance between the proposed boring locations and the source was such that collected data would not be useful for Site characterization or delineation of the dissolved plume (Oct-2006). In addition to requesting new proposed boring locations, AC-HCS requested completion of a soil gas investigation in the vicinity of the western property boundary.

2007, Phase I Off-site Characterization and On-Site Soil Gas Investigations: In May and July 2007, a preliminary round of off-site groundwater and soil samples, and on-site soil gas samples were collected and analyzed by Conestaoga-Rovers & Associates (CRA, which mergered with Cambria). The objectives of the Phase I investigation (and a follow-up Phase II characterization



Phase I Borings –

investigation completed in Nov-2008) were to: 1) investigate the extent of the dissolved petroleum hydrocarbon plume in groundwater; 2) determine the soil smear-zone impacts resulting from lateral plume migration and seasonal groundwater fluctuation; and 3) identify whether subsurface soil gas concentrations (vapor) indicated a potential vapor intrusion risk. The Phase I investigation included the collection of soil and groundwater samples from a transect of five (5) downgradient, continuously cored driven probe locations (B-13 through B-17, see figure below), and the collection of six (6) on-site soil gas sampling locations (V-1 through V-6).

Off-site, smear zone gasoline contamination was observed during continuous core logging of the Phase I transect borings, which were placed at accessible locations, approximately perpendicular

to dominant groundwater flow and 150-ft downgradient of the Site. Results of laboratory-tested off-site soil samples confirmed field observations as elevated gasoline constituent concentrations were present within the initial transect borings (see shaded results, above). Results of laboratory-tested off-site groundwater grab samples from these initial Phase I transect borings contained elevated gasoline, benzene, and MTBE concentrations, indicating that a portion of the dissolved gasoline plume extended to this transect. In addition, Phase I, on-site soil gas sampling along the property line contained elevated vapor concentrations (summarized with Phase II results, below).

2008, Phase II Additional Off-Site Characterization and Limited On-Site Investigations: In October-November, 2008, a follow-up round of *Phase II Off-site Characterization Sampling* was completed to address previous detections of elevated gasoline constituent concentrations in soil, groundwater, and soil gas. The follow-up, Phase II investigation included:

- Eight (8), continuously cored step-out soil borings (off-site), one installed as an infill boring (B-21) and the remaining seven (B-22 to B-28) positioned downgradient of the Phase I transect (the second transect was placed at accessible locations generally 230-ft downgradient of the initial, Phase I transect).
- One upgradient (off-site) and two on-site soil borings were continuously-cored to a depth of 45-ft bgs to: 1) inspect for potential upgradient contribution from an abandoned gas station site (Texaco), and 2) inspect post-remediation, on-site soil conditions.
- Eight (8), grab groundwater samples were collected from on-site boring B-18, and off-site borings B-21 through B-28.

Phase II Soil Sampling Results

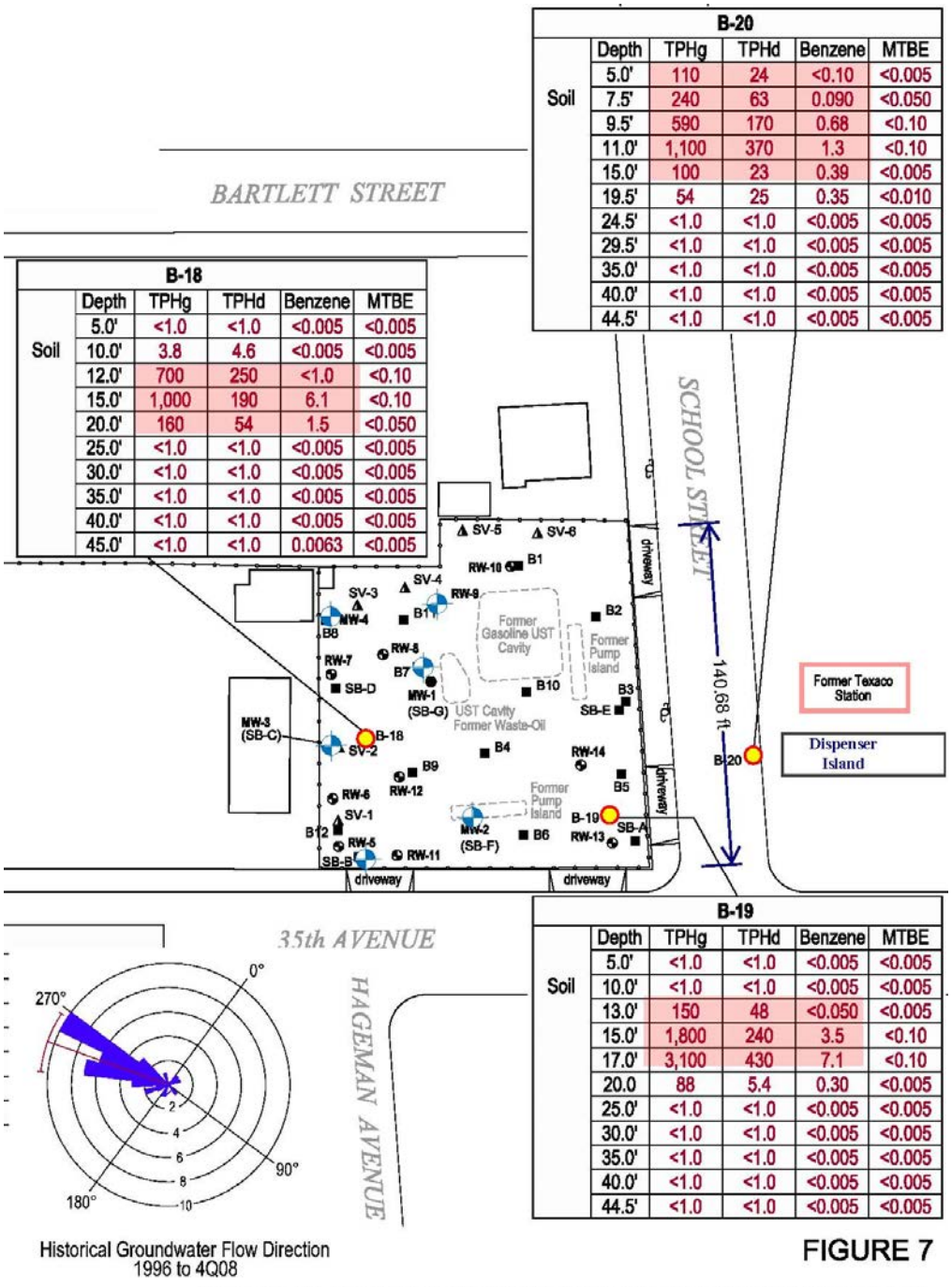
Off-site Soils: No additional off-site, smear zone gasoline contamination was observed during continuous core logging of the second, downgradient boring transect or in lab samples, which indicates smear zone impacts from lateral plume transport/fluctuating groundwater have not extended as far as the second transect. Results of laboratory-tested off-site soil samples confirmed field observations as no contaminant concentrations were detected.

On-site Soils: Smear zone gasoline contamination was observed in continuous soil cores collected from two, post-remediation borings drilled at the downgradient (B-18) and upgradient (B-19) sides of the property. Field observations and laboratory results confirm elevated concentrations of residual gasoline contamination remain within the smear zone created by fluctuating groundwater, primarily found at depths of approximately 11 to 20 feet (see highlighted impact elevations in the graphic below). Despite the removal of over 6,500 lbs of gasoline from the subsurface during four years of Dual Phase Extraction, residual constituent concentrations continue to exceed regulatory threshold limits. The lack of remedial success using Dual Phase Extraction as a cleanup technique is likely due to:

1. Dual phase extraction's inability to efficiently pull residual fuel contamination from low permeability soils present beneath the Site. And,
2. Contribution from a secondary, upgradient source (the abandoned Texaco Station across School Street). Specifically, data collected from exploratory boring B-20 (see figure on next page), which was drilled immediately adjacent to Texaco Station's former fuel dispenser islands. Field observations of soil cores and confirmation laboratory testing contained elevated gasoline contamination at very shallow depths (<5 feet below ground surface, see graphic next page). These elevated, off-site gasoline concentrations, combined with the elevated gasoline concentrations detected in borings installed along the subject Site's upgradient property line indicate the abandoned Texaco station is a secondary source of contamination (see recent boring B-19, and previous borings SB-A & B-4).

In addition to the shallow contamination detected in upgradient boring (DP-20, see figure below) indicating a nearby, off-site source, it is notable that soil and groundwater data suggest this second source has no apparent evidence of the fuel additive MTBE. Specifically:

- There were no detections of MTBE in soil samples analyzed from the upgradient Texaco Station site.
- Results of groundwater collected from upgradient property line wells (RW-13, RW-14) did not contain the fuel additive, while mid-site and downgradient property line wells (MW-1 through MW-3 and RW-6 and RW-9) have contained MTBE. These distinctively different fuel fingerprints indicate a second source originates off site and the resulting plume is migrating onto the property (discussed further below).



B-18

	Depth	TPHg	TPHd	Benzene	MTBE
Soil	5.0'	<1.0	<1.0	<0.005	<0.005
	10.0'	3.8	4.6	<0.005	<0.005
	12.0'	700	250	<1.0	<0.10
	15.0'	1,000	190	6.1	<0.10
	20.0'	160	54	1.5	<0.050
	25.0'	<1.0	<1.0	<0.005	<0.005
	30.0'	<1.0	<1.0	<0.005	<0.005
	35.0'	<1.0	<1.0	<0.005	<0.005
	40.0'	<1.0	<1.0	<0.005	<0.005
	45.0'	<1.0	<1.0	0.0063	<0.005

B-20

	Depth	TPHg	TPHd	Benzene	MTBE
Soil	5.0'	110	24	<0.10	<0.005
	7.5'	240	63	0.090	<0.050
	9.5'	590	170	0.68	<0.10
	11.0'	1,100	370	1.3	<0.10
	15.0'	100	23	0.39	<0.005
	19.5'	54	25	0.35	<0.010
	24.5'	<1.0	<1.0	<0.005	<0.005
	29.5'	<1.0	<1.0	<0.005	<0.005
	35.0'	<1.0	<1.0	<0.005	<0.005
	40.0'	<1.0	<1.0	<0.005	<0.005
	44.5'	<1.0	<1.0	<0.005	<0.005

B-19

	Depth	TPHg	TPHd	Benzene	MTBE
Soil	5.0'	<1.0	<1.0	<0.005	<0.005
	10.0'	<1.0	<1.0	<0.005	<0.005
	13.0'	150	48	<0.050	<0.005
	15.0'	1,800	240	3.5	<0.10
	17.0'	3,100	430	7.1	<0.10
	20.0	88	5.4	0.30	<0.005
	25.0'	<1.0	<1.0	<0.005	<0.005
	30.0'	<1.0	<1.0	<0.005	<0.005
	35.0'	<1.0	<1.0	<0.005	<0.005
	40.0'	<1.0	<1.0	<0.005	<0.005
	44.5'	<1.0	<1.0	<0.005	<0.005

Historical Groundwater Flow Direction
1996 to 4Q08

FIGURE 7

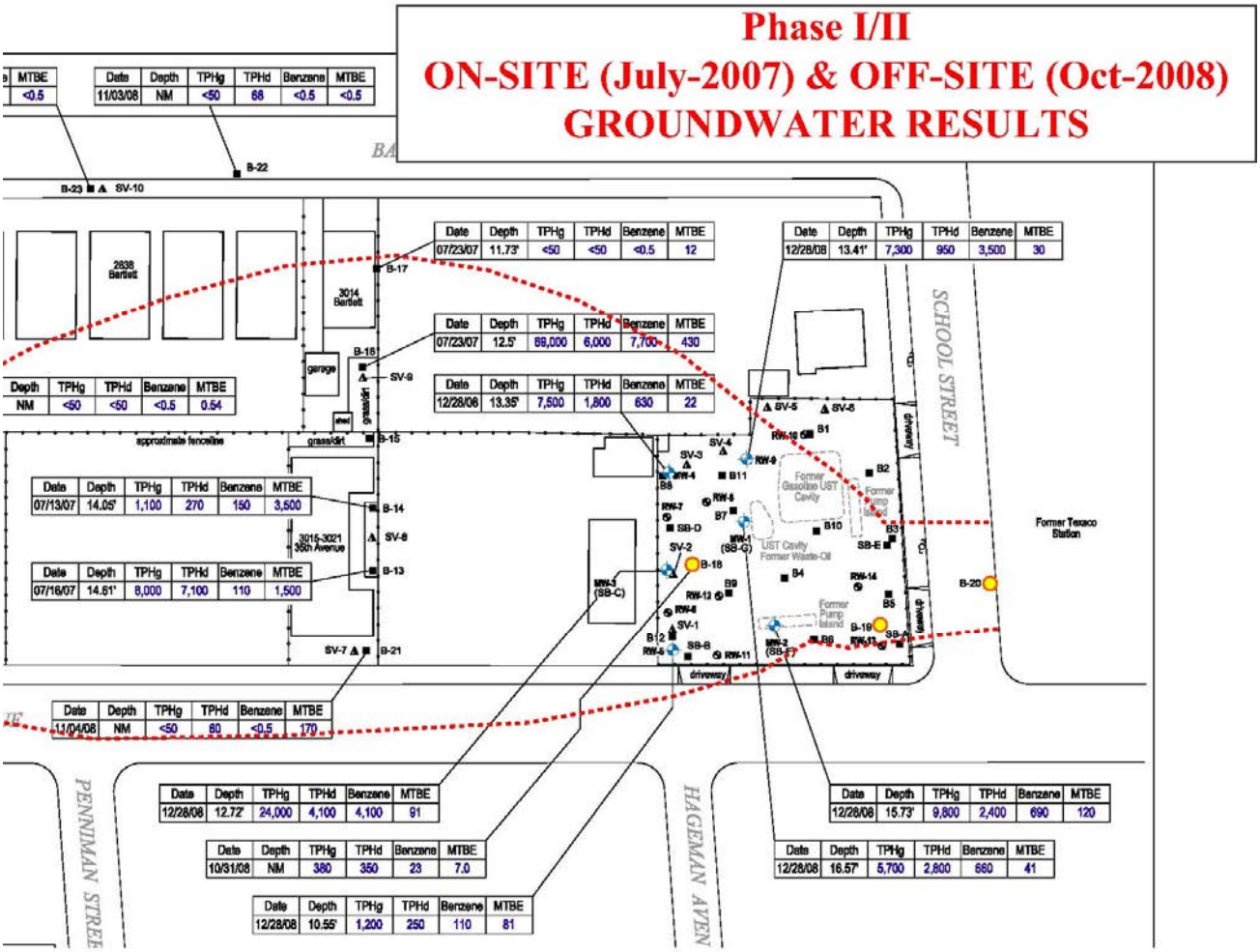
PHASE II HYDROCARBON CONCENTRATIONS in SOIL

Phase II, Post-remediation on-site borings (B-18, B-19) and upgradient boring B-20 (2008).

Phase I & II Groundwater Sampling Results:

Grab groundwater samples were collected from Phase I and Phase II transects, and from on-site boring B-18. The data was compared with monitoring well results (2008 fourth quarter event). No groundwater sample was obtained from the upgradient boring B-20.

Groundwater Results (Phase I & II borings, and monitoring wells).



Date	Depth	TPHg	TPHd	Benzene	MTBE
11/03/08	NM	<50	68	<0.5	<0.5

Date	Depth	TPHg	TPHd	Benzene	MTBE
07/23/07	11.73'	<50	<50	<0.5	12

Date	Depth	TPHg	TPHd	Benzene	MTBE
12/28/08	13.41'	7,300	950	3,500	30

Date	Depth	TPHg	TPHd	Benzene	MTBE
07/23/07	12.5'	69,000	6,000	7,700	430

Depth	TPHg	TPHd	Benzene	MTBE
NM	<50	<50	<0.5	0.54

Date	Depth	TPHg	TPHd	Benzene	MTBE
12/28/08	13.35'	7,500	1,800	630	22

Date	Depth	TPHg	TPHd	Benzene	MTBE
07/13/07	14.05'	1,100	270	150	3,500

Date	Depth	TPHg	TPHd	Benzene	MTBE
07/16/07	14.61'	8,000	7,100	110	1,500

Date	Depth	TPHg	TPHd	Benzene	MTBE
11/04/08	NM	<50	80	<0.5	170

Date	Depth	TPHg	TPHd	Benzene	MTBE
12/28/08	12.72'	24,000	4,100	4,100	91

Date	Depth	TPHg	TPHd	Benzene	MTBE
10/31/08	NM	380	350	23	7.0

Date	Depth	TPHg	TPHd	Benzene	MTBE
12/28/08	10.55'	1,200	250	110	81

Date	Depth	TPHg	TPHd	Benzene	MTBE
12/28/08	15.73'	9,800	2,400	690	120

Date	Depth	TPHg	TPHd	Benzene	MTBE
12/28/08	16.57'	5,700	2,800	660	41

- TPH-gasoline was detected in all on-site wells and borings (380-24,000 ppb, max in MW-3), and five of the six first transect borings (from "not detected" to 69,000 ppb, max. in DP-16). No TPH-gasoline was detected in the downgradient, Phase II transect borings.
- Benzene was detected in all on-site wells and borings (23-4,100 ppb, max in MW-3), and five of the six first transect borings (from "not detected" to 7,700 ppb, max. in DP-16). No benzene was detected in the downgradient, Phase II transect borings.
- MTBE, was detected in all on-site wells and borings (7-120 ppb, max in MW-2), and all the first transect borings (12 to 3,500 ppb, max. in DP-14). MTBE was detected in five

of the seven downgradient, Phase II transect borings primarily as trace to non-detectable concentrations borings (from "not detected" to 150 ppb, max. in DP-27).

- The set of groundwater data suggests two sources because results of groundwater collected from upgradient property line wells (RW-13, RW-14) did not contain the fuel additive, while mid-site and downgradient property line wells (MW-1 through MW-3 and RW-6 and RW-9) have contained MTBE. These differing fuel fingerprints indicates one source originates on-site and a second plume is migrating onto the property. It is likely that the 4 years of Dual Phase Extraction conducted at the subject Site would have also pulled residual contamination from the abandoned, upgradient Texaco Station to the on-site cleanup system.

The set of groundwater test results indicates that a thin plume of MTBE extends from the Site to the second transect (330 feet) but that the low concentrations detected in the downgradient grab samples suggests the downgradient limit of the MTBE plume is in close proximity to the Phase II transect borings. The lack of TPH-gasoline and benzene detections in the second transect indicates that TPH-gasoline and constituent compounds are attenuated and limited to a distance between the two transects (approximately 200-225 ft from the Site).

Phase I & II Soil Gas Survey Results:

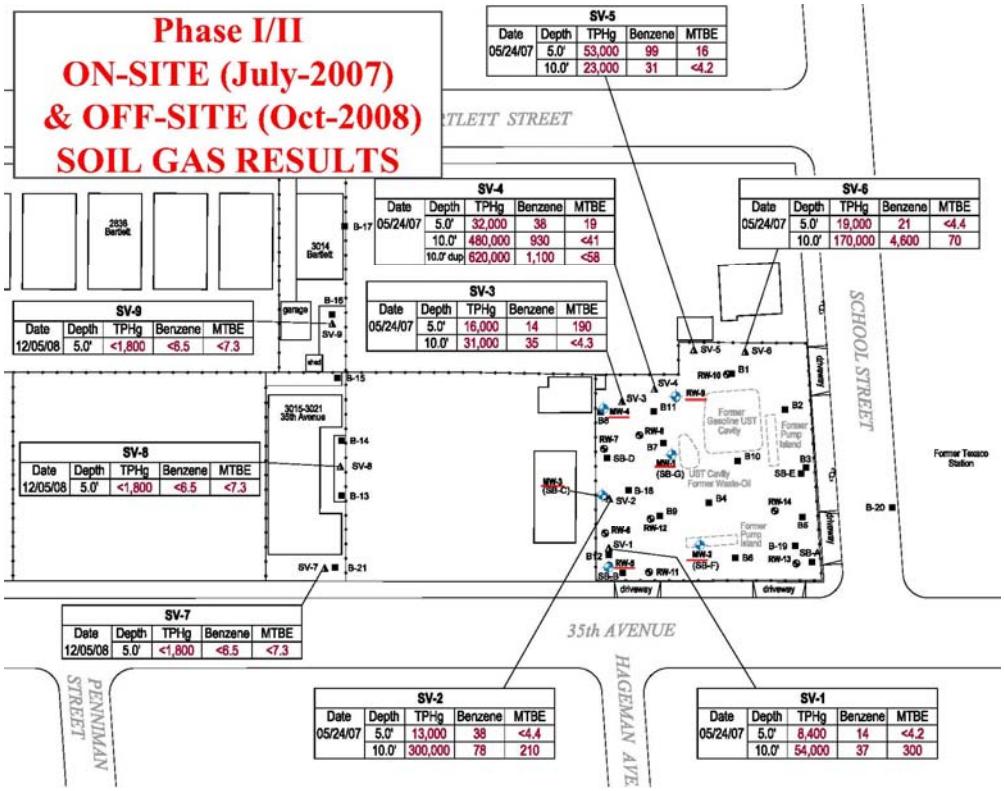
A second round of vapor samples were collected in October-2008 because elevated concentrations were detected in the initial round of Phase I, on-site soil gas sampling locations positioned along the property line (July-2007). Phase II sampling was completed at accessible locations along the two previously described soil and groundwater sampling transects, positioned approximately 150 feet (V-7 through V-9), and approximately 330 feet (V-10 through V-14), from the Site in the downgradient groundwater direction.

- TPH-gasoline was detected in all on-site, soil gas wells (@5-ft: 8,400-53,000 ug/m^3, max at SV-5; and increasing at the 10-ft sampling interval: 23,000-620,000 ug/m^3, max at SV-4_{dup}). No TPH-gasoline soil gas was detected in any of the seven, off-site soil gas wells (SV-7 through SV-14).
- Benzene was also detected in all on-site, soil gas wells (@5-ft: 14-99 ug/m^3, max at SV-5; and again increasing at the 10-ft sampling interval: 31-4,600 ug/m^3, max at SV-6). No benzene was detected in soil gas from any of the seven, off-site soil gas wells (SV-7 through SV-14). The residential/commercial threshold limits for benzene in soil gas is 36/122 ug/m^3, respectively[12].

[12]: The California Human Health Screening Levels (CHHSLs, 2005) were developed as a tool to assist in the evaluation of contaminated sites for potential adverse threats to human health. Residential and

- MTBE was detected in all on-site, soil gas wells but in only three of the shallow sampling intervals (@5-ft: "not detected" to 190 ug/m^3, max at SV-3; the 10-ft sampling interval concentrations ranged from not detected in three of the soil gas wells to 300 ug/m^3, max at SV-1). No MTBE was detected in soil gas from any of the seven, off-site soil gas wells (SV-7 through SV-14). The residential/commercial threshold limits for MTBE in soil gas is 4,000/13,400 ug/m^3, respectively
- Toluene, Ethylbenzene, and Xylenes: Trace concentrations of these constituent gasoline compounds were detected in a few offsite soil gas wells (SV-7, -10 & -13) but at levels well below established threshold limits.

Soil Vapor Survey Results
Includes Phase I borings (SV-1 thought SV-6, July 2007) & Phase II (SV-7 through SV-14) borings.



The set of soil gas test results indicates that elevated soil gas concentrations persist at the Site, 7 years after the Dual Phase Extraction system was decommissioned. The lack of soil gas detections in any of the off-site samples indicates that dissolved plume off-gassing is not a risk at distances of 150 ft from the Site.

commercial/industrial land use screening levels for soil gas are based on soil gas data collected five feet below a building foundation or the ground surface. Intended for evaluation of potential vapor intrusion into buildings and subsequent impacts to indoor-air. Screening levels apply to sites that overlie plumes of VOC impacted groundwater.

Documents relating to the discovery, investigation and remediation of the fuel releases release are listed in the reference section at the end of this report.

UPDATED SITE CONCEPTUAL MODEL – DECEMBER 2012

Source of Contamination: The source of on-site gasoline hydrocarbon contamination originated from multiple sources associated with the former USTs and associated appurtenances that were removed in 1991. Elevated gasoline concentrations were found at the former UST pit and dispensers locations and continue to have the highest detections during on-going groundwater monitoring. In addition, data collected from recent off-site, upgradient exploratory borings confirms additional gasoline contamination has migrated onto the Site from both the *abandoned* Texaco and the *active* QuikStop stations, and appears to be feeding the plume. It is also suspected that that there may have historically been some limited migration of groundwater contaminants towards the Site from an active fuel release investigation located at 3201 35th Avenue (BP #11132; GeoTracker I.D. T0600100213) situated approximately one block (~ 300 feet) to the northeast of the Site (see Appendix D). It is currently unclear whether or not contaminates from this historic release have impacted the Site.

Nature and Extent of Contamination:

Soils: After the initial source zone excavations in 1991, gasoline-range petroleum hydrocarbons and volatile constituent compounds were identified as the Contaminants of Concern (COCs) for the Site. Specifically, Total Petroleum Hydrocarbons as gasoline [TPH-gas], benzene, toluene, ethylbenzene, and xylenes [BTEX], and Methyl tert Butyl Ether [MTBE]) were found at concentrations in excess of Tier I Environmental Screening Levels[13] for Residential/Commercial land uses (ESLs), both in on-site and off-site soils. Diesel-range Total Petroleum Hydrocarbons (TPH-diesel) were also encountered but generally identified as overlapping lighter fraction gasoline hydrocarbons detected within the diesel range.

[13]: Environmental Screening Levels (ESLs): California Regional Water Quality Control Board - San Francisco Bay Region has developed these ESLs in a document entitled: Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (interim Final, November 2007, Revised May 2008). The ESLs are intended to provide guidance on whether or not remediation of detected contamination is warranted based on conservative risk.

Tier 1 Soil Screening Threshold Concentrations (mg/kg, or ppm)

(Groundwater IS a current or potential Source of Drinking Water)

Chemical of Concern	Residential		Commercial	
	Shallow (< 10 feet)	Deep (> 10 feet)	Shallow (< 10 feet)	Deep (> 10 feet)
TPH-gas TPH-diesel	83	83	83	83
Benzene	0.044	0.044	0.044	0.044
Toluene	2.9	2.9	2.9	2.9
Ethylbenzene	2.3	3.3	3.3	3.3
Xylenes	2.3	2.3	2.3	2.3
MTBE	0.023	0.023	0.023	2.3

- Reference: *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater* (November 2007), http://www.waterboards.ca.gov/sanfranciscobay/esl.htm
- No additional fuel oxygenates or lead scavengers were detected.

As noted above (see summary write-up of the 2007-8 Soils Investigation, above), on-site smear zone gasoline contamination was observed in two, post-remediation (2008) continuously-cored exploratory borings (B-18, and B-19). Field observations and laboratory results confirm that elevated concentrations of residual gasoline contamination remains within the smear zone created by fluctuating groundwater (e.g., observed smear zone is primarily encountered at depths of between 11 to 20 feet below ground surface). *Note:* confirmation lab analysis of shallow on-site soils (i.e., < 10 feet bgs) was previously very limited because only 2 of the 72 analyzed soil samples collected on-site were laboratory-analyzed. **However, results obtained during the current *Data Gap Assessment* confirm that elevated residual soil impacts are confined to depths of approximately greater than 10 feet bgs.** Despite the removal of over 6,500 lbs of gasoline from the on-site remediation wells during four years of Dual Phase Extraction, residual constituent concentrations in on-site soils continue to exceed regulatory threshold limits. The persistence of on-site petroleum hydrocarbon contamination appears due in part to: 1) DPE's inability to pull residual fuel contamination from low permeability soils, and 2) the confirmed contribution from secondary, upgradient sources (the *abandoned* Texaco station across School Street, and the active QuikStop station across 35th Avenue; see Figure 2).

The extent of downgradient, off-site, smear zone gasoline contamination was determined by logging 13 off-site borings and laboratory-analyzing 91 discrete soil samples. Smear zone gasoline was observed during continuous core logging of the Phase I transect borings, placed at accessible locations approximately 150-ft downgradient of the Site. Laboratory-tested soil and groundwater samples confirmed field observations, indicating that a portion of the dissolved gasoline plume extended to this transect. Smear zone contamination did not extend to the second

set of transect borings, placed at accessible locations approximately 330-ft downgradient of the Site.

Groundwater: On-site groundwater has been sampled seasonally since 1994 and chemicals of concern have consistently been detected at concentrations in excess of ACEH groundwater quality objectives.

Chemical of Concern	Groundwater Quality Goal (µg/L)
Total Petroleum Hydrocarbons	1,000
Benzene	1
Toluene	150
Ethylbenzene	300
Xylenes	1,750
MTBE	5

Note: The East Bay Municipal Utility District (EBMUD) provides water supply to Oakland and obtains its drinking supply from Sierra runoff (Mokelumne River watershed), which eliminated the need for local groundwater wells.

Post remediation water quality monitoring (sampling, testing, and reporting) has been completed on 6 on-site wells since 2004. Individual concentration-v-time charts for benzene and TPH-gasoline have been placed on an aerial photograph of the Site to assess changes and trends (see Figures A-1 and A-2 in this Appendix). An increase in benzene concentrations observed for wells MW-1 through MW-4 since early 2009 indicates the potential influx of confirmed upgradient off-site dissolved hydrocarbon plumes, which have been confirmed during the recent *Data Gap Assessment.* The upward trends may also be the result of post remediation rebound, lateral transport of source-zone mass (residual fuel release contaminants), or a combination of the two. No new source of contamination is expected since the site has remained undeveloped since 1991. TPH-gas concentrations on the other hand, have deceasing trends in most of the wells (MW-2, -3, & -4, and RW-5, & -9), and a stable trend in MW-1.

A number of additional charts have been generated to see if any other trends or conditions exist. Chart 1 presents post remediation benzene concentrations in all six monitored wells. Chart 2 presents a similar data for TPH-gas. Chart 3 presents seasonal groundwater fluctuation data. Charts 4 through 7 present historical and current benzene and TPH-g concentrations versus groundwater levels for wells MW- 1 through -4 (see Charts below):

Chart 1
BENZENE Concentrations vs Time
(Post-Remediation On-Site Trends)

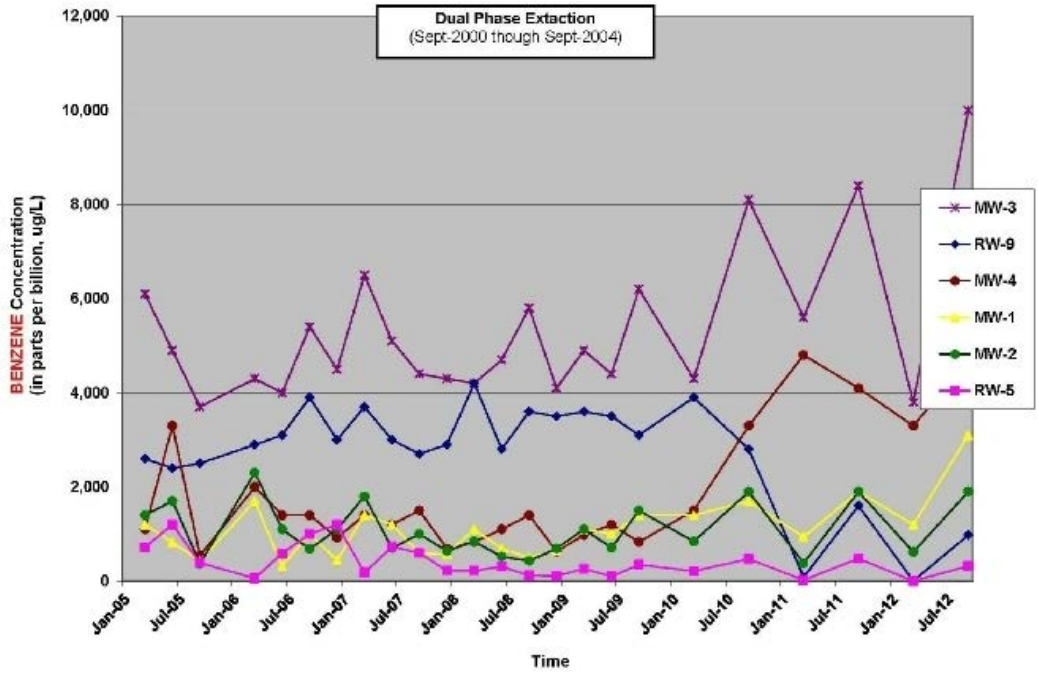
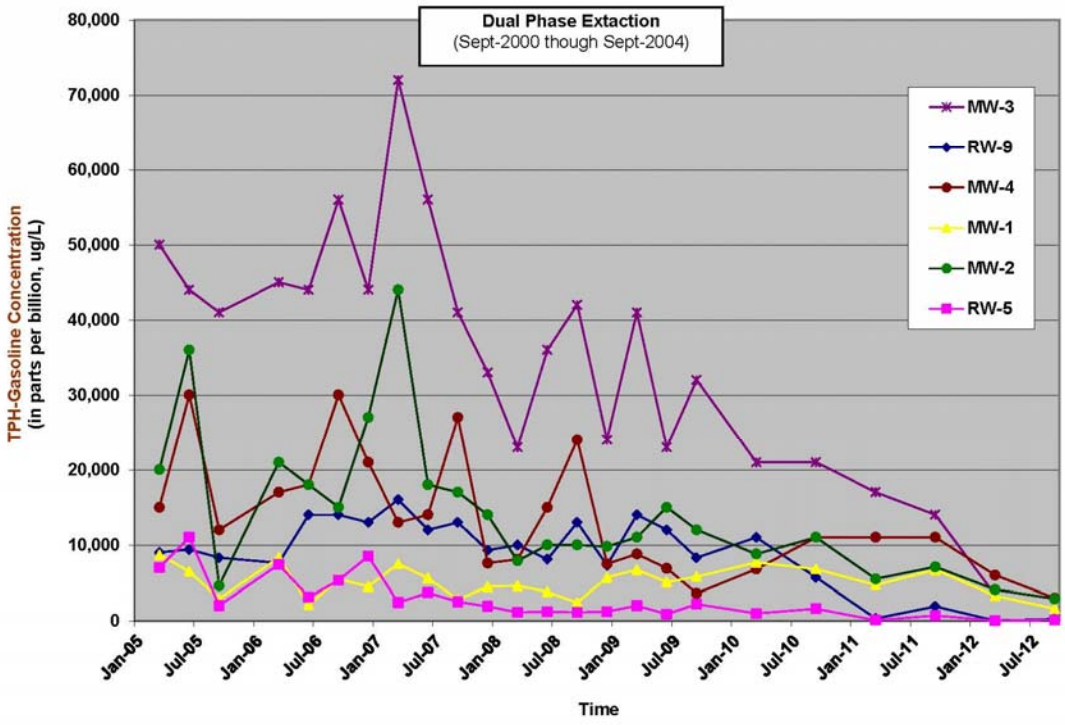
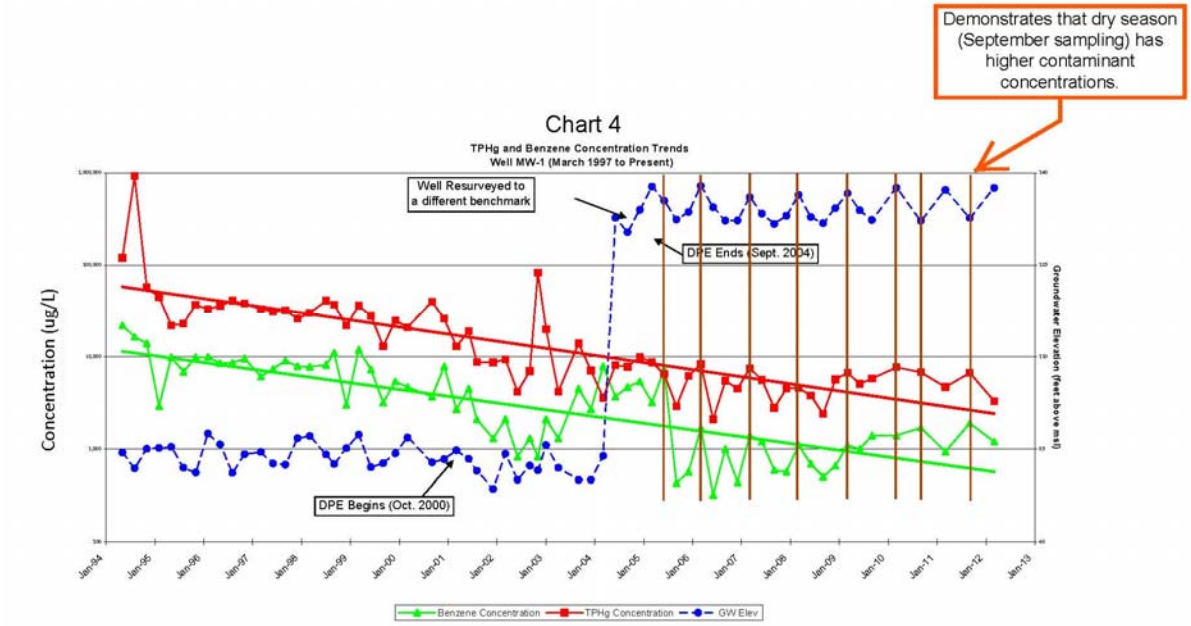
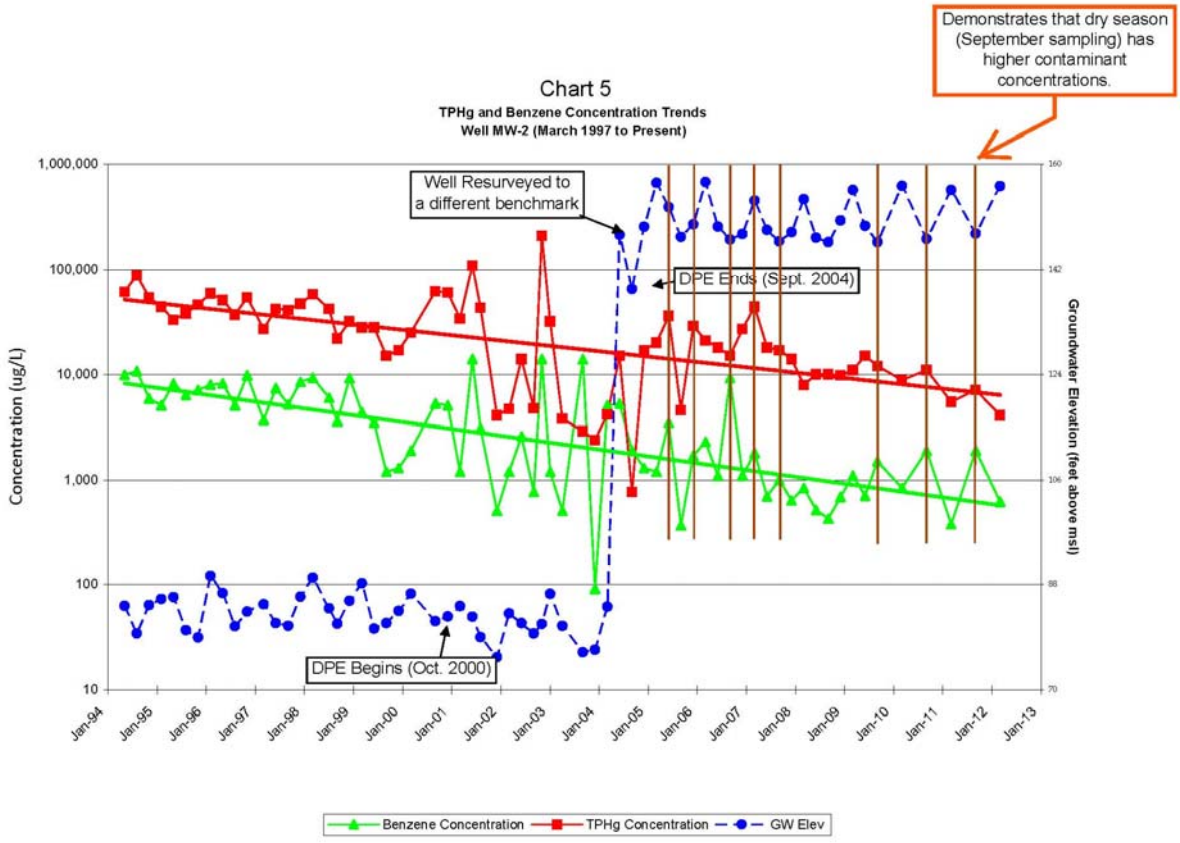
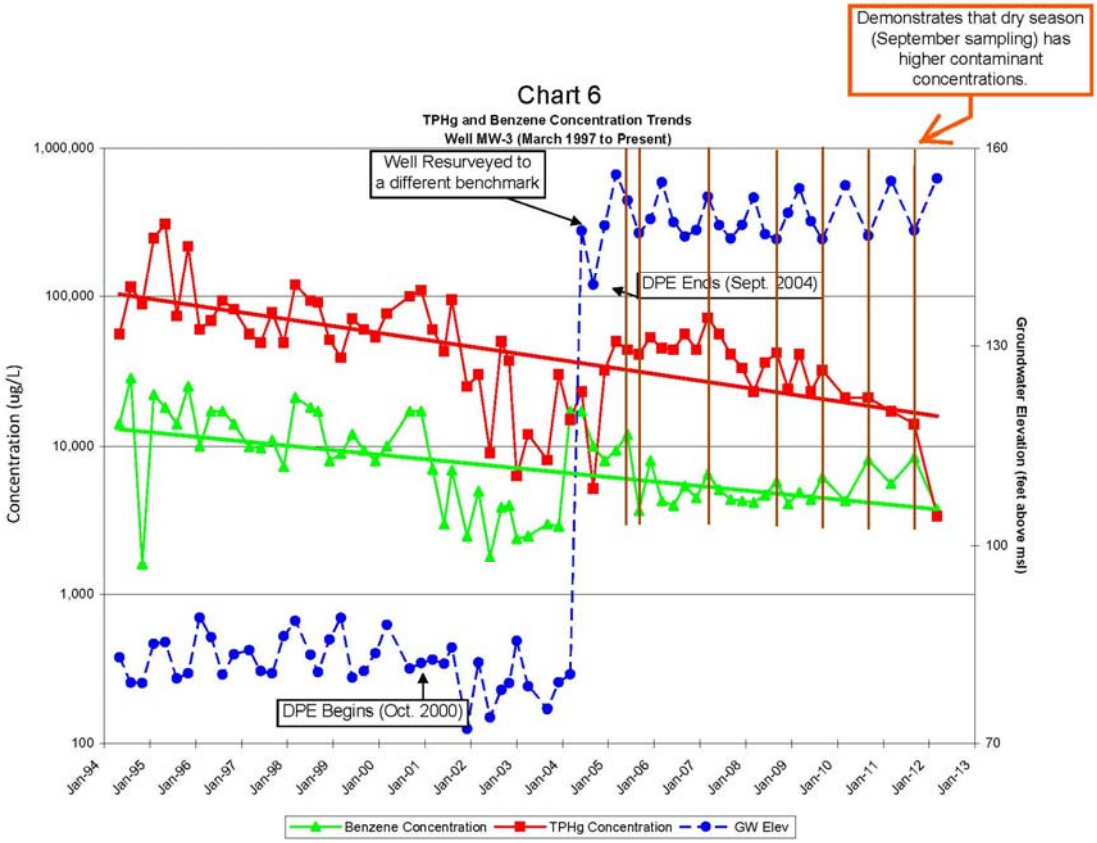


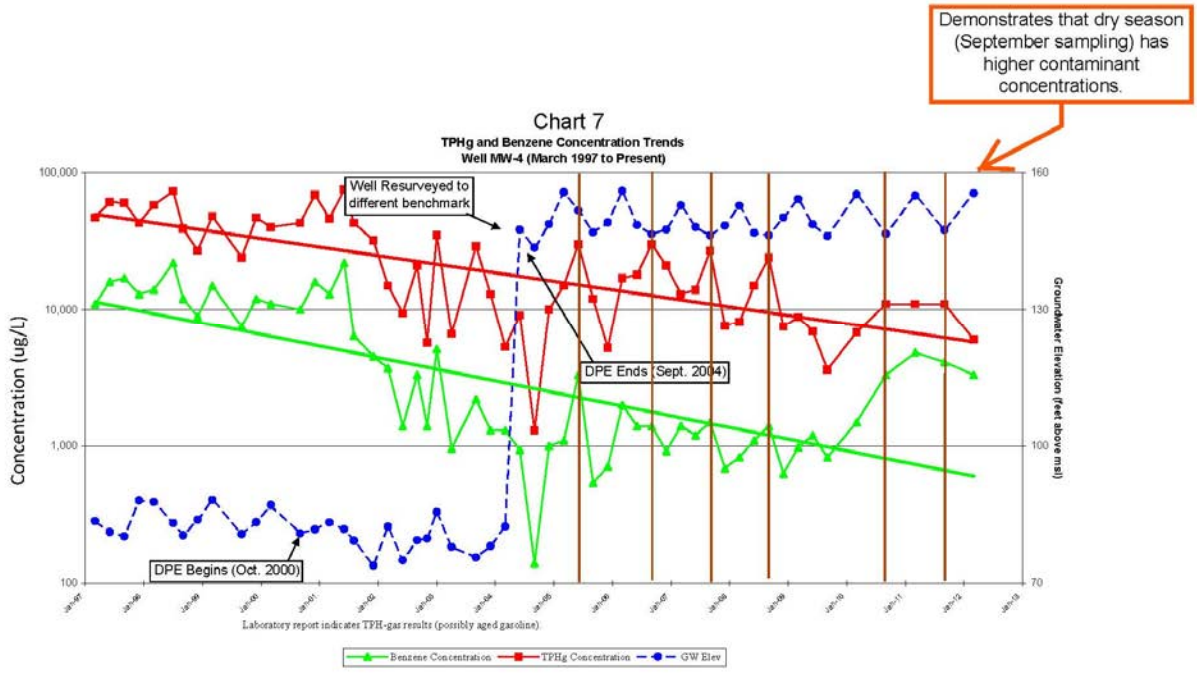
Chart 2
Total Petoleum Hydrocarbons as Gasoline
Concentrations vs Time
(Post-Remediation On-Site Trends)

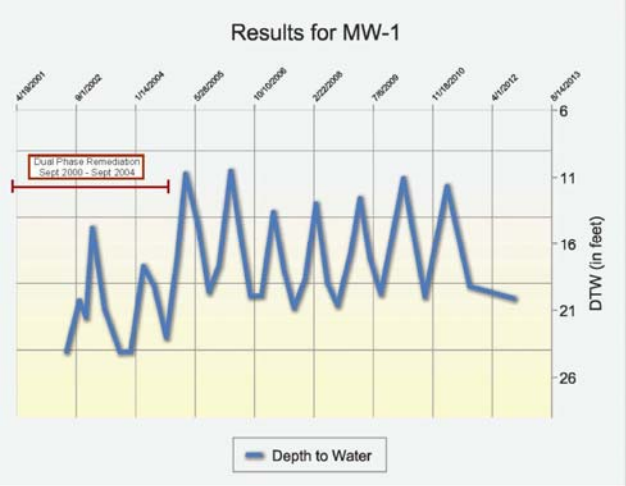


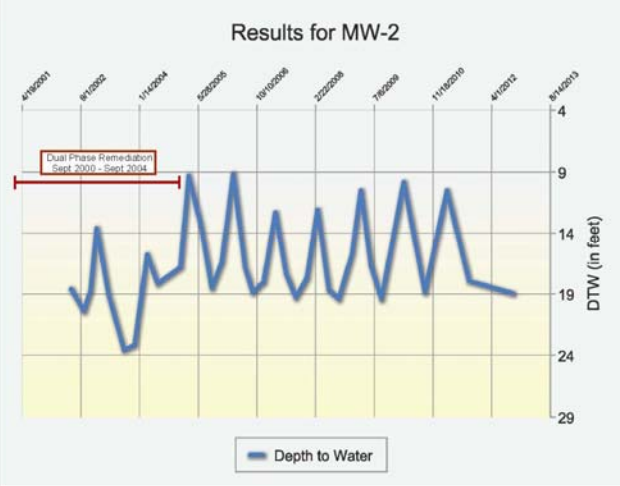

Demonstrates that dry season (September sampling) has higher contaminant concentrations.
Chart 4
TPHg and Benzene Concentration Trends
Well MW-1 (March 1997 to Present)
Well Resurveyed to a different benchmark
DPE Ends (Sept. 2004)
DPE Begins (Oct. 2000)
Concentration (ug/L)
Groundwater Elevation (feet above msl)
Benzene Concentration
TPHg Concentration
GW Elev

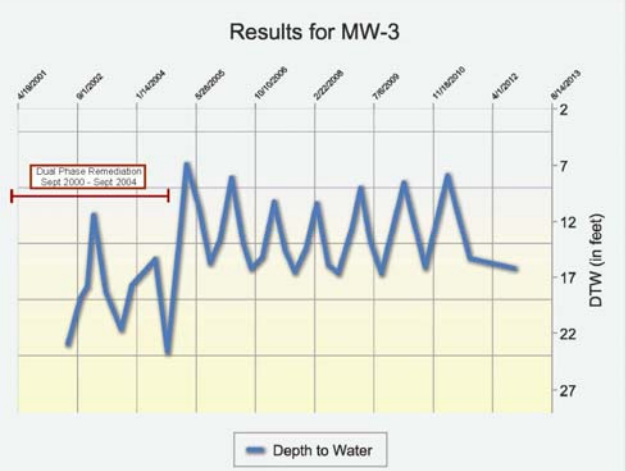

Demonstrates that dry season (September sampling) has higher contaminant concentrations.
Chart 5
TPHg and Benzene Concentration Trends
Well MW-2 (March 1997 to Present)
Well Resurveyed to a different benchmark
DPE Ends (Sept. 2004)
DPE Begins (Oct. 2000)
Concentration (ug/L)
1,000,000
100,000
10,000
1,000
100
10
Groundwater Elevation (feet above msl)
Benzene Concentration
TPHg Concentration
GW Elev

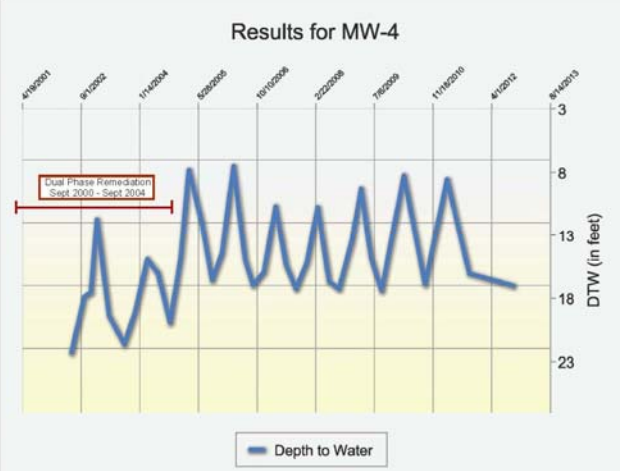

Demonstrates that dry season (September sampling) has higher contaminant concentrations.
Chart 6
TPHg and Benzene Concentration Trends
Well MW-3 (March 1997 to Present)
Well Resurveyed to a different benchmark
DPE Ends (Sept. 2004)
DPE Begins (Oct. 2000)
Concentration (ug/L)
Groundwater Elevation (feet above msl)
1,000,000
100,000
10,000
1,000
100
160
130
100
70
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Jan-01
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Benzene Concentration
TPHg Concentration
GW Elev

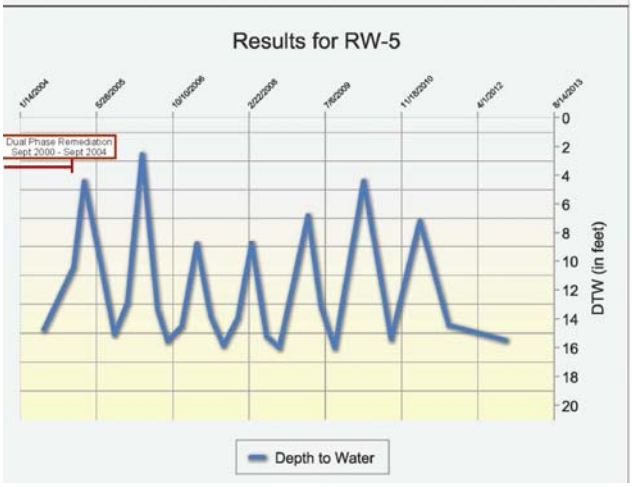

Demonstrates that dry season (September sampling) has higher contaminant concentrations.
Chart 7
TPHg and Benzene Concentration Trends
Well MW-4 (March 1997 to Present)
Well Resurveyed to different benchmark
DPE Ends (Sept. 2004)
DPE Begins (Oct. 2000)
Concentration (ug/L)
Groundwater Elevation (feet above msl)
100,000
10,000
1,000
100
160
130
100
70
Laboratory report indicates TPH-gas results (possibly aged gasoline)
Benzene Concentration
TPHg Concentration
GW Elev

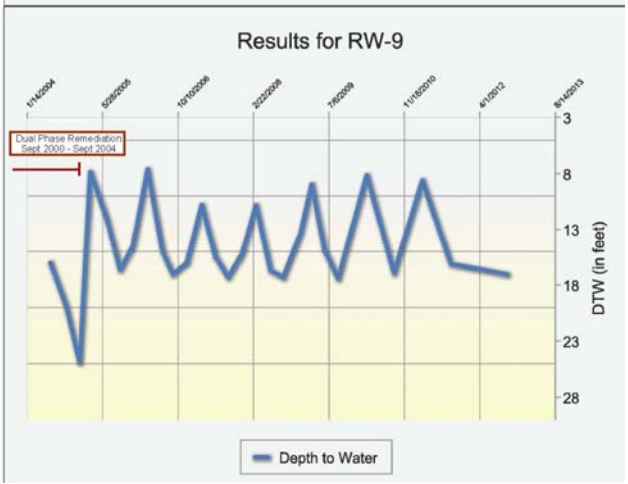

Results for MW-1
Dual Phase Remediation Sept 2000 - Sept 2004
DTW (in feet)
Depth to Water


Results for MW-2
Dual Phase Remediation Sept 2000 - Sept 2004
DTW (in feet)
Depth to Water


Results for MW-3
Dual Phase Remediation Sept 2000 - Sept 2004
DTW (in feet)
Depth to Water


Results for MW-4
Dual Phase Remediation Sept 2000 - Sept 2004
DTW (in feet)
Depth to Water


Results for RW-5
Dual Phase Remediation Sept 2000 - Sept 2004
DTW (in feet)
Depth to Water


Results for RW-9
Dual Phase Remediation Sept 2000 - Sept 2004
DTW (in feet)
Depth to Water

The data suggests:

- Seasonal fluctuations in groundwater generally fall between 8-18 feet (see Chart 3). Note MW-1 and MW-2 have casing stick-up above ground surface. Gradient is approximately 0.009 ft/ft (approximately 1 foot of groundwater drop for 111 feet of lateral run) towards the west
- Increasing benzene concentrations in wells MW-1 through -4 since 2009, and a steady decrease in TPH-gasoline concentrations since Site monitoring began
- An inverse relationship between groundwater levels and contaminant concentrations. Groundwater concentrations are most significantly elevated when water levels are at their lowest point (i.e., September/October)

In summary, the post-remediation set of groundwater test results (wells and groundwater grab samples) indicate:

- A thin plume of MTBE extends off-site to the second transect (330 feet)
- The low concentrations detected in to the second transect suggest the downgradient limit of the MTBE plume is in close proximity
- An increase in benzene concentrations observed for wells MW-1 through MW-4 since early 2009 indicates the potential influx of confirmed upgradient off-site dissolved hydrocarbon plumes, which have been confirmed during the recent *Data Gap Assessment.* The upward trends may also be the result of post remediation rebound, lateral transport of source-zone mass (residual fuel release contaminants), or a combination of the two.
- The lack of TPH-gasoline and benzene detections in the second transect indicates that TPH-gasoline and constituent compounds are attenuated and limited to a distance between the two transects (i.e., approximately 200-225 ft from the Site).

Soil Gas: The completed set of soil gas test results generated during two mobilizations (on-site, off-site) indicate that elevated soil gas concentrations persist on-site, 7 years after the Dual Phase Extraction system was decommissioned.

Tier 1 Shallow Soil Gas Human Health Screening Levels for Vapor Intrusion

(Concentrations in ug/m^3)

Chemical of Concern	Land Use	
	Residential	Commercial
TPH-gas TPH-diesel	Not Established	
Benzene	36.2	122
Toluene	135,000	378,000
Ethylbenzene	Not Established	
Xylenes	31,500	87,900
MTBE	4,000	13,400

- Reference: *California Human Health Screening Levels*[14] *for Indoor air and soil gas (CHHSLs;* January 2005). Soil gas screening levels are based on soil gas data collected five feet below a building foundation or the ground surface. Intended for evaluation of potential vapor intrusion into buildings and subsequent impacts to indoor-air. For sites with significant areas of VOC-impacted soil or sites that overlie plumes of VOC-impacted groundwater.

Benzene concentrations slightly exceeded the Tier 1 threshold limits in three of the six property boundary locations (SV-2, -4, & -5); no other volatile compound thresholds were exceeded. The lack of soil gas detections in any of the off-site samples indicates that dissolved plume off-gassing is not a risk at distances of 150 ft from the site.

Dominant Fate and Transport Characteristics

The dominant fate and transport characteristics of hydrocarbons released at the Site are that they drain by gravity through the low-to-moderately permeable soil matrix to groundwater. During this process a portion of the hydrocarbon mass is adsorbed onto soil particles in the unsaturated zone.

Hydrocarbons reached the saturated zone in sufficient quantity to form a sheen on top of the first encountered groundwater beneath the Site. No measurable free product has been documented during over 65 monitoring events, although sheen was observed in all 6 wells in the monitoring network.

In the saturated zone at this Site hydrocarbons have been transported by groundwater through advective and dispersive processes in the general downgradient direction (west). Off-site

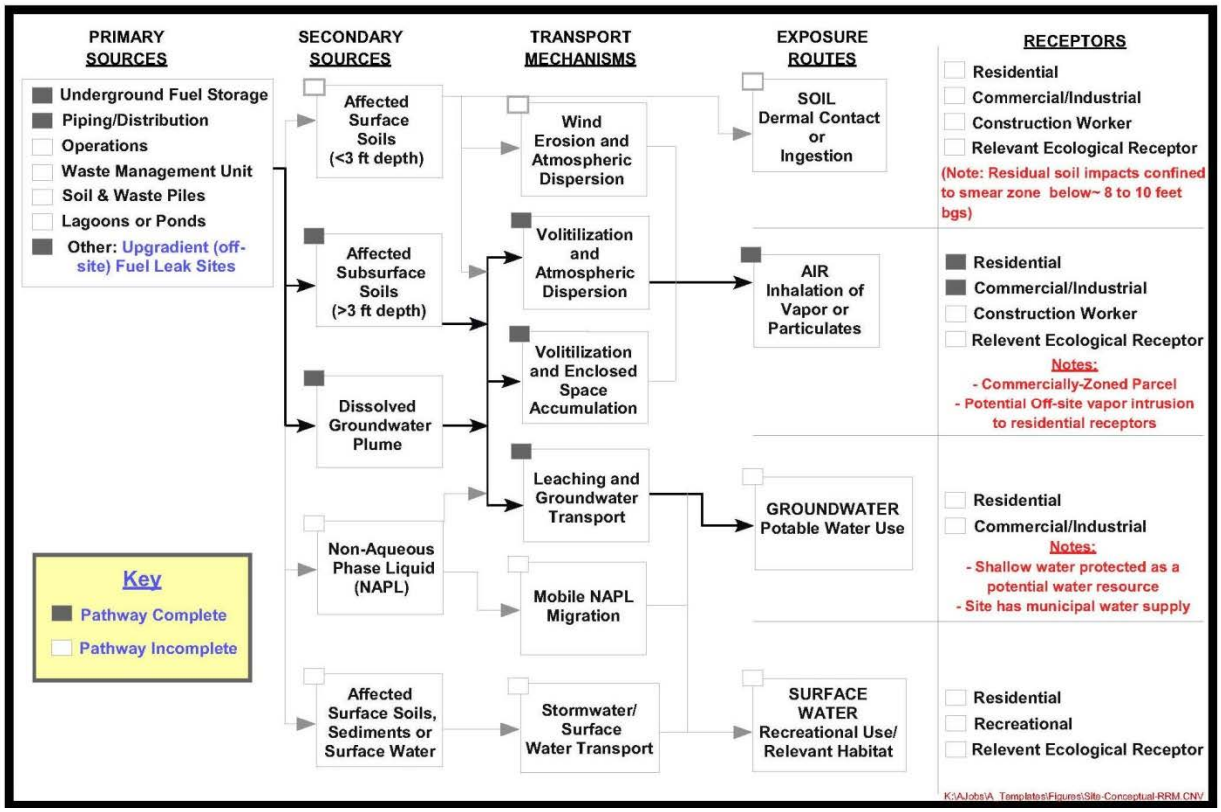
[14]: California Human Health Screening Levels for indoor air and soil gas (CHHSLs): The California Human Health Screening Levels are concentrations of 54 Hazardous Chemicals in soil or soil gas that the California Environmental Protection Agency (Cal/EPA) considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment (OEHHA) on behalf of Cal/EPA.

characterization drilling and sampling results suggest that a thin plume of MTBE extends from the Site to the second transect (330 feet); however, the low concentrations detected in the downgradient grab sample borings suggest the downgradient limit of the MTBE plume is in close proximity to the Phase II transect borings. The lack of TPH-gasoline and benzene detections in the second transect indicates that TPH-gasoline and constituent compounds are attenuated and limited to a distance between the two transects (approximately 200-225 ft from the Site). The truncated plume indicates natural attenuation processes are at equilibrium with dissolved contaminant flux at the periphery of the plume. Natural attenuation, combined with source removal of the leaking USTs/infrastructure, and four years of vapor and groundwater extraction appear to limit the advective and dispersive transport of hydrocarbons by groundwater.

When a volatile organic compound, such as gasoline's constituent compound benzene, is released to the environment, it will partition into different phases. It can: 1) be adsorbed onto soil particles, 2) be dispersed into soil vapor, 3) remain as free phase gasoline in soil interstices or floating on groundwater (this is known as "light non-aqueous phase liquid", or free product/sheen), and 4) be dissolved into groundwater. Gasoline/VOCs will reach a dynamic equilibrium between these phases, all of which have been observed at the Site.

Potential Exposure Pathways

Currently there are no buildings present on the property and groundwater is not being used for drinking water. The potential exposure pathways (the ways humans or the environment may be exposed to the hydrocarbons that have been released at the Site) are presented graphically in the flow-chart presented below.



A limited risk remains associated with on-site vapor intrusion (residual soil gas) if the Site is developed without vapor intrusion mitigations / institutional controls. There is a risk of off-site soil vapor intrusion to downgradient residences. A description of potential exposure pathways follows:

- Recent shallow soil sampling was completed to confirm post remediation concentrations in shallow soils (< 10 feet bgs) at worst case locations (dispensers, product piping runs) since previously only 2 of 72 on-site shallow soil samples were laboratory-analyzed. Current data coupled with previously collected data indicates that residual soil impacts are limited to depths greater than approximately 8 to 10 feet bgs. It is unlikely that these soils would be encountered during future Site development, unless basements or sub-grade parking were proposed for the Site.

- **Exposure to soil vapors containing hydrocarbons.** The completed soil gas survey indicates the volatile constituent gasoline compound of benzene was detected at concentrations exceeding the Tier 1 threshold limits in three of the six property boundary locations (SV-4, -5, & -6). No other volatile compound thresholds were exceeded. The lack of soil gas detections in any of the off-site samples indicates that dissolved plume off-gassing is not a risk at distances of 150 feet from the Site. Elevated grab groundwater concentrations of benzene (specifically B-16) coupled with benzene soil gas

concentrations detected in SV-4, -5, and -6 indicate that there is a potential soil vapor intrusion risk to residences immediately adjacent to the west-southwest of the Site

- **Ingesting (drinking) hydrocarbon contaminated groundwater.** This exposure pathway is incomplete – a previously completed 2,000-ft radius well survey investigation determined there are no drinking water wells screened within or near the dissolved hydrocarbon plume.

- Groundwater quality is considered a sensitive receptor that must be protected from degradation by hydrocarbons (all State groundwaters are considered a potential water supply resource). Active remediation of groundwater impacted by hydrocarbons was undertaken with the goal of removing hydrocarbons to a point where natural processes will restore groundwater quality to what it was prior to degradation by hydrocarbons.

Potential Sensitive Receptors

A 2,000-ft radius, sensitive receptor survey was completed in 2006 (Cambria, 2006), which researched potential supply wells, schools, churches, hospitals, and known daycare facilities within the target radius. The survey concluded that within the target radius, no water supply wells existed and the residual dissolved gasoline plume was not likely to impact the three identified irrigation wells, the closest well being 750 feet away in a sidegradient direction (north). Additionally, none of the other potential sensitive receptors (schools, churches, rec-parks) are located downgradient of the plume footprint, and therefore are unlikely to be impacted by the dissolved plume.

The nearest surface water body is west-flowing Peralta Creek, located approximately 600-ft northwest of the site (see Figure 1). It is highly unlikely that dissolved gasoline plume compounds could reach Peralta Creek based on distance, attenuated plume limits (approximately 300 ft), and the low transmissivity of site soils.

Potential sensitive receptors that may be exposed to hydrocarbons from the release at the Site include Site users and groundwater as a potential drinking water resource. The release poses no immediate threats to site users because the Site remains undeveloped. Though groundwater is degraded by hydrocarbons at the Site, there is no complete pathway for drinking water ingestion as there are no water supply wells in the immediate vicinity of the Site.

Data Gaps

1) **The mass of petroleum hydrocarbon contamination originating from the identified upgradient sources remains a significant data gap and the *Site Conceptual Model* is currently incomplete.** At present, a cost effective *Corrective Action Plan* cannot be completed for the Site until upgradient responsible parties have been identified and these upgradient releases have been fully defined. The long term influx of dissolved contamination

onto the subject Site has likely affected the efficiency of previous remedial system operation and will affect the selection of future remedial options.

2) The downgradient extent of dissolved gasoline plume has been reasonably defined using GeoProbe grab groundwater samples approximately 200-255 feet off-site.

3) Soil results obtained from the current *Data Gap Assessment* revealed that:

- TPH-gas concentrations outside the influence of the previous dual phase extraction system have not significantly attenuated since the investigation began over 20 years ago; however, benzene appears to have decrease by several orders of magnitude during this time period, likely due to a combination of natural attenuation coupled with four years of active soil remediation.

- The unifying theme between current and historical soil analytical data collected at the Site is that soil impacts are generally encountered at depths of greater than 10 feet bgs and attenuate at depths of approximately 20 to 23 feet bgs. This impacted soil zone corresponds with seasonal groundwater fluctuations measured to be approximately 8 to 18 feet bgs. This indicates that the mechanism for persistent residual soil impacts detected within this approximate 10 foot zone at and downgradient of the Site is via groundwater transport as smear zone contamination. Therefore, off-site plume migration to the Site is also contributing to the observed smear zone soil impacts.

- Shallow soil samples collected at depths of 4 and 8 feet bgs at several impacted on-site locations generally revealed non-detectable concentrations of hydrocarbons.

Based on the results of the current *Data Gap Assessment,* construction worker *direct exposure to soil* as pathway for Site risk does not appear to be complete as residual soil impacts are encountered at depths greater than approximately 10 feet bgs. Direct exposure to residual, deeper soil contamination (i.e., greater than 10 feet bgs) is present, and would be limited to deep construction excavation (i.e., sub-grade parking garage or basement construction).

A significant effort and expense has been made to remove residual gasoline contaminants from the Site subsurface. Despite the removal of approximately 6,500 lbs of gasoline in soil-gas and in groundwater during four years of Dual Phase Extraction, residual constituent concentrations still significantly exceed regulatory threshold limits. Residual gasoline contamination remains trapped within the seasonally-submerged, smear zone where vertically fluctuating and laterally migrating groundwater has impacted low-permeability soils, primarily at depths between 11 to 20 feet (groundwater seasonally fluctuates between approximately 8-18 feet bgs).

The lack of success with the Dual Phase Extraction remediation technology appears to be due to: 1) its inability to effectively pull residual fuel contamination sorbed within low permeability

soils, and 2) ongoing contribution from apparent upgradient sources (the *abandoned* Texaco station across School Street and the active QuikStop station across 35th Avenue).

At this time it appears that a *Joint Corrective Action* through the State Water Resources Control Boards' *Commingled Plume Account* will likely be the most cost effective approach in reducing groundwater impacts in this area. However, as it will likely take months, if not years for upgradient responsible parties to be identified and the necessary upgradient soil and groundwater assessments to be completed, a cost effective *Joint Corrective Action Plan* could potentially be years away. It is our opinion that the best current approach for: 1) reducing residual on-site soil impacts, and 2) reducing off-site plume migration downgradient of the Site will be to complete an *Interim Remedial Action Plan (IRAP)*. The *IRAP* will likely include:

- Targeted mass removal of source contamination (up to ~20 feet bgs) using large-diameter augers/excavation equipment;
- Multiple, high-pressure injections of specialty chemical oxidizers at the downgradient property line as a "barrier treatment", with emphasis on getting the oxidizer in contact (destroying) with the thin water bearing zone and smear zone contamination

An effort should be made to select a remedial option that can be incorporated with development plans for the Site, if desired. The property has remained undeveloped for over 20 years and previous efforts to develop the Site have been sidetracked out of fear of contaminant liability and risk. *Interim Remedial Action* and future *Joint Corrective Action* should be able to be completed in conjunction with redevelopment, if desired, in order to prevent loss of local property values and to prevent Brownfield blight.

Appendix B

Weber, Hayes & Associates

Daily Field Records & Sampling Protocol

Field Dates: January 9, 2014 and September 20, 2013

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Field Methodology for Groundwater Sampling

Field Methodology for Groundwater Monitoring

Weber, Hayes and Associates' groundwater monitoring field methodology is based on procedures specified in the LUFT Field Manual and US EPA Groundwater Sampling Procedure - Low Stress (Low Flow) Purging and Sampling. The first step in groundwater well sampling is for Weber, Hayes and Associates field personnel to measure the depth-to-groundwater to the nearest hundredth (0.01) of a foot with an electric sounder. If the well appears to be pressurized, or the groundwater level is fluctuating, measurements are made until the groundwater levels stabilize, and a final depth-to groundwater measurement is taken and recorded. After the depth-to-groundwater is measured, the well is then checked for the presence of free product with a clear, disposable polyethylene bailer. If free product is present, the thickness of the layer is recorded, and the product is bailed to a sheen. All field data (depth-to-groundwater, well purge volume, physical parameters, and sampling method) is recorded on field data sheets (see attached). Because removing free product may skew the data, wells that contain free product are not used in groundwater elevation and gradient calculations.

After measuring the depth-to-groundwater, each well is purged with a low flow peristaltic pump and dedicated sample tubing at a rate of less than 500 mL/min. The sample tubing intake is positioned at the center of the water column within the screened portion of the well. During purging, the water level in the well is monitored in order to maintain a drawdown of 0.33 feet or less if possible. The flow rate is adjusted to maintain minimal drawdown. During purging the physical parameters of temperature, conductivity, pH, dissolved oxygen (D.O.) concentration, and Oxidation-Reduction Potential (ORP) of the purge water are monitored with a QED MP20 Micropurge Flow Through Cell equipped meter to insure that these parameters have stabilized (i.e. +/- 0.1 for pH, +/- 3% for specific conductance, +/- 10 mV for redox potential, and +/- 10% for D.O.). The QED MP20 meter is capable of continuously monitoring the physical parameters of the purge water via the flow through cell and providing an alarm to indicate when the physical parameters have stabilized to the users specifications. Purging is determined to be complete (stabilized aquifer conditions reached) after the removal of approximately three to five well volumes of water or when the physical parameters have stabilized. Dissolved oxygen and ORP measurements are used as an indicator of intrinsic bioremediation within the contaminant plume. All field instruments are calibrated before use.

All purge water is stored on site in DOT-approved, 55-gallon drums for disposal by a state-licensed contractor pending laboratory analysis for fuel hydrocarbons.

After purging, and when groundwater parameters have stabilized, a groundwater sample is collected from each well with the dedicated sample tubing, and decanted into the appropriate

laboratory-supplied sample container(s). The sample containers at this site were three (3) 40-ml. Vials, and two (2) 1-liter amber bottles. Vials are filled until a convex meniscus formed above the vial rim, then sealed with a Teflon®-septum cap, and inverted to insure that there were no air bubbles or headspace in the vial. All other ample containers are completely filled with no headspace. All samples are labeled in the field and transported in insulated containers cooled with blue ice to state-certified laboratories under proper chain of custody procedures.

All field and sampling equipment is decontaminated before, between, and after measurements or sampling by washing in a Liqui-Nox and tap water solution, rinsing with tap water, and rinsing with distilled water

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

Text Page___/___
INDICATE ATTACHMENTS THAT APPLY
___ Site Map
___ Data Sheets
___ Geologic Logs
___ Photo Sheets
___ COC's
___ Chargeable Materials

Client	***Former Exxon Station***			*Date:* ***January 9, 2014***
Site Location:	***3055 35th Ave, Oakland***			*Study #:* ***2X103.Q***
Field Tasks:	☐ *Drilling*	☒ *Sampling*	☐ *Other (see below):*	*Weather Conditions:*
4th Quarter Groundwater Monitoring				Clear, Cool
Personnel / Company On-Site:	***Josh Pritchard (Weber, Hayes and Associates: WHA)***			

FIELD WORK PLANNING: Performed on: **January 8, 2014**

Meet with Project Manager: ☒ Yes ☐ No
Number of Wells to be Gauged: **14 Wells w/ Dissolved Oxygen (D.O.) & Depth to Groundwater**
Sample Wells: **MW-5, MW-6, RW-13, & RW-14**
Analyze for: **TPH-D, TPH-G, BTEX, EDB Fuel Oxygenates & 1,2, DCA**
Proposed Sampling Date: **January 9, 2014**

ON-SITE FIELD WORK:
Arrive on-site at 1300 to conduct 4th Quarter 2013 Quarterly Groundwater Monitoring Well Sampling.

LABORATORY:
(Initial) Send all analytical to: **Torrent Analytical Laboratory, 408.263.5258, 483 Sinclair Frontage Rd., Milpitas, CA**

JP

GROUNDWATER MONITORING FIELD WORK STANDARD OPERATING PROCEDURES:
(Initial)
JP - All sampling is conducted according to Standard Operating Procedure (SOP) 10I/
- All pertinant information regarding the well, including water quality physical parameters are recorded on the following pages.
- All samples are placed in a refrigerated cooler immediately after sampling.
- All groundwater monitoring/purging/sampling equipment is decontaminated according to SOP 10B/at the beginning of on-site work, in between each well, and at the end of work
- All purge water is propoerly containerized in 55-gallon drums, or another suitable container, for later removal by a licensed subcontractor.
- All samples are recorded on field Chain-of-Custody sheets for documentation of proper transportation to the appropriate Laboratory.

INSTRUMENT CALIBRATION:
QED MP20 Flow Through Cell: **Temperature =** 13.90 **pH =** 7.00 **&** 10.00 **Electrical Conductivity =** 718 **Barometric Pressure =** 760mm Hg
D.O. % Saturation = 100% **Oxidation Reduction Potential (ORP) =** 217

BEGIN SAMPLING WELLS:
MW-5, MW-6, RW-13, RW-14

COMMENTS:
All wells will be purged until the QED MP20 unit indicates that the physical parameters of the water (pH, Conductivity, Temp, D.O., and ORP) have stabilized to within ~ 15%, or once four casing volumes in the well column requiring sampling have been removed (see Groundwater Monitoring Well Sampling Field Data Sheet(s) for details). Wells will be purged from the bottom up and in accord with all WHA SOPs. Wells will only be sampled using a Bladder Pump or a disposable bailer, as per RWQCB guidlines.

1-9-14

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

Location	Groundwater Depth	Total Depth of Well	D.O. (mg/L)	ORP (mV)	Floating Product (comments)
MW-1	20.49'	26.5'	0.89	-110	No FP, No odor
MW-2	19.37'	26.5'	1.17	-78	No FP, Low odor
MW-3	16.50'	26.5'	0.69	-85	No FP, Trace odor
MW-4	17.39'	30'	1.12	-31	No FP, Low odor
MW-5	17.12'	30'	1.21	-42	No FP, No odor
MW-6	16.18'	30'	1.24	-75	No FP, No odor
RW-5	15.69'	25.7'	1.07	-52	No FP, No odor
RW-6	15.84'	25.5'	0.55	-85	No FP, Trace odor
RW-7	16.43'	29.5'	1.02	-112	No FP, No odor
RW-8	17.69'	25'	1.33	-68	No FP, No odor
RW-9	17.38'	25'	0.87	-64	No FP, Low odor
RW-10	16.33'	25'	1.01	-115	No FP, Low odor
RW-11	15.85'	25'	0.85	-72	No FP, No odor
RW-12	16.35'	27'	1.37	-81	No FP, No odor
RW-13	16.88'	25'	0.74	-67	No FP, No odor
RW-14	16.53'	25'	0.63	-102	No FP, No odor

HOW MANY PURGE DRUMS WERE LEFT ON-SITE: 1 APPROXIMATE VOLUME (gallons): ~ 30
CALL PURGE WATER REMOVAL SUBCONTRACTOR ON: 1-9-14
DRUMS WILL BE PURGED ON: ? ? ?

COMMENTS:

1-9-14
Signature of Field Personel & Date

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *January 9, 2014*

Sample No.: MW-5 **Sample Location:** MW-5

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:

_____ Bailer: Disposable or Acrylic
_____ Whaler # _____
X Peristaltic Pump
_____ Redi-flow Pump (Grundfus)

Sample Equipment:

_____ Disposable Bailer
_____ Whaler # _____
X Peristaltic Pump
_____ Submersible Pump

Analyses Requested :

TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:

3 x 40 mL VOA's (HCL preservative)
2 x 1 L Amber

Well Number: MW-5
Depth to Water: 17.12' TOC
Well Depth: 30' BGS or TOC
Height W-Column: 12.88' feet (well depth - depth to water)

Pump Intake Depth: ~25' feet
Pump Flow Rate: ~50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1332	17.12'	0	0	19.71	0.618	6.32	9.11	59	Low: clear, minor	
1334	17.76'	0.64'	100	20.60	1.388	1.66	7.51	-37		
1336	17.79'	0.67'	200	20.62	1.386	1.63	7.48	-37		
1338	17.81'	0.69'	300	20.71	1.393	1.49	7.49	-39		
1340	17.89'	0.73'	400	20.58	1.400	1.30	7.48	-42		
1342	17.86'	0.75'	500	20.57	1.404	1.26	7.48	-42		
1344	17.88'	0.76'	600	20.56	1.404	1.21	7.48	-42		
Stop:	Purge	Complete	Parameters	Stabilized						

JP 1-9-14

Sample Well

Time: 1345 Sample ID: MW-5 Depth: _____ feet below TOC

Comments: No FP, No odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *January 9, 2014*

Sample No.: MW-6 **Sample Location:** MW-6

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:
- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:
- ____ Disposable Bailer
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :

TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B

TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:

3 x 40 mL VOA's (HCL preservative)

2 x 1 L Amber

Well Number: MW-6

Depth to Water: 16.18' TOC

Well Depth: 30' BGS or TOC

Height W-Column: 13.82' feet (well depth - depth to water)

Pump Intake Depth: ~25' feet

Pump Flow Rate: ~50 mL/min

Lab: Torrent

Transportation: *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
1355	16.18'	0	0	22.41	1.204	2.30	7.56	-59	Cow: clear, minor	
1357	16.88'	0.70'	100	21.02	0.903	1.56	7.62	-73	↓	
1359	16.96'	0.78'	200	21.13	0.873	1.43	7.63	-73	↓	
1401	16.99'	0.81'	300	21.18	0.839	1.18	7.60	-73	↓	
1403	17.03'	0.85'	400	21.28	0.885	1.30	7.64	-78	↓	
1405	17.08'	0.90'	500	21.30	0.884	1.29	7.63	-77	↓	
1407	17.12'	0.94'	600	21.31	0.880	1.26	7.64	-77	↓	
1409	17.15'	0.97'	700	21.34	0.879	1.24	7.65	-75	↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

JP 1-9-14

Sample Well

Time: 1410 Sample ID: MW-6 Depth: 17.15' feet below TOC

Comments: No FP, No odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *January 9, 2014*

Sample No.: RW-13 **Sample Location:** RW-13

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:
- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:
- ____ Disposable Bailer
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :

TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B

TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:

3 x 40 mL VOA's (HCL preservative)

2 x 1 L Amber

Well Number: RW-13

Depth to Water: 16.88' TOC

Well Depth: 25' BGS or TOC

Height W-Column: 8.12' feet (well depth - depth to water)

Pump Intake Depth: 22.2' feet

Pump Flow Rate: ~50 mL/min

Lab: Torrent

Transportation: *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
1422	16.88'	0	0	21.61	1.157	1.67	7.56	-69	Low: clear, minor	
1424	17.02'	0.14'	100	21.20	1.373	1.00	7.54	-69	↓	
1426	17.08'	0.20'	200	21.14	1.394	0.90	7.52	-68	↓	
1428	17.12'	0.24'	300	21.14	1.399	0.81	7.52	-68	↓	
1430	17.15'	0.27'	400	21.15	1.398	0.78	7.52	-68	↓	
1432	17.18'	0.30'	500	21.15	1.397	0.76	7.51	-68	↓	
1434	17.20'	0.32'	600	21.16	1.397	0.74	7.51	-67	↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

JP 1-9-14

Sample Well

Time: 1435 Sample ID: RW-13 Depth: 17.20' feet below TOC

Comments: No FP, No odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *January 9, 2014*

Sample No.: RW-14 **Sample Location:** RW-14

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:
- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:
- ____ Disposable Bailer
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :
TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:
3 x 40 mL VOA's (HCL preservative)
2 x 1 L Amber

Well Number: RW-14
Depth to Water: 16.53' TOC
Well Depth: 25' BGS or TOC
Height W-Column: 8.47' feet (well depth - depth to water)

Pump Intake Depth: ~22' feet
Pump Flow Rate: ~50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1444	16.53'	0	0	21.70	1.252	1.72	7.54	-82	Low: clear, minor	
1446	16.66'	0.13'	100	20.85	1.215	0.97	7.51	-93	↓	
1448	16.74'	0.21'	200	20.81	1.203	0.85	7.49	-96	↓	
1450	16.81'	0.28'	300	20.63	1.176	0.70	7.49	-100	↓	
1452	16.83'	0.30'	400	20.64	1.173	0.67	7.48	-101	↓	
1454	16.86'	0.33'	500	20.68	1.178	0.64	7.48	-102	↓	
1456	16.90'	0.37'	600	20.66	1.179	0.63	7.49	-102	↓	
1458	16.93'	0.40'	700	20.60	1.179	0.63	7.48	-102	↓	X
Stop:	Purge	Complete	Paramaters	Stabilized						

JP 1-9-14

Sample Well

Time: 1500 Sample ID: RW-14 Depth: 16.95' feet below TOC

Comments: NO FP, NO odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon / 2X103.Q* **Date:** *January 9, 2014*

Sample No.: RW-14 SPLIT **Sample Location:** RW-14 SPLIT

Samplers Name: *Josh Pritchard* **Recorded by:** *JP*

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X Whaler # 1
_____ Bladder Pump
_____ SS Monsoon #

Sample Equipment:

X Disposable Bailer
_____ Whaler # _____
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (circle all that apply):

~~TPH-gas~~, ~~VOC's~~, (BTEX), ~~MtBE, 1, 2, DCA, TBA, EDB~~, (Fuel Oxygenates), ~~Naphthalene, 8010 Solvents~~, ~~TPH-D~~, ~~TPH-Motor Oil, TPH-Hydrolic Oil~~, ~~Chlorinated Solvents, Organochlorine Pesticides, Perchlorate, Diesel & Oil Range Organics, Nitrates~~

Number and Types of Bottle Used:

Well Number: RW-14 SPLIT

Depth to Water: 16.53 TOC

Well Depth: 25' BGS or TOC

Height W-Column: 8.47' feet (well depth - depth to water)

Volume in Well: 5.5 gallons (casing volume X height)

Gallons to purge: 16.5 gallons (volume X 3)

Well Diameter: 4" **with Casing Volume of:**

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
8" = (2.61 Gallon/Feet)

Lab: *Torrent* **Transportation:** *Courier*

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1507	0	20.00	1.238	3.31	7.45	-87	Low: Clear, minor	
1508	1	20.24	1.302	0.75	7.50	-84		
1509	2	20.40	1.208	0.44	7.49	-85		
1510	3	20.60	1.112	0.32	7.50	-86		
1511	4	20.68	1.079	0.40	7.53	-81		
1512	5	20.72	1.083	0.36	7.52	-83		
1513	6	20.70	1.115	0.30	7.50	-85		
1518	12	20.39	1.310	0.24	7.46	-87		
Stop.	Well	de-watered @ 12	gallons					

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 8.47' x 0.8 = 6.78' - (Well Depth) 25' = Depth to water 18.22'

Time: 1519 1st measured depth to water, 24.53' feet below TOC. Is well within 80% of original well casing volume: Yes ___ No X

Time: ___ 1st measured depth to water, ___ feet below TOC. Is well within 80% of original well casing volume: Yes ___ No ___

Time: ___ 1st measured depth to water, ___ feet below TOC. Is well within 80% of original well casing volume: Yes ___ No ___

JP SB JP

Sample Well

Time: 1520 Sample ID: RW-14 SPLIT Depth: 24.53' feet below TOC

Comments: well de watered @ 12 gallons Collect Sample. No FP, Low odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon / 2X103.Q* **Date:** *January 9, 2014*

Sample No.: RW-13 SPLIT **Sample Location:** RW-13 SPLIT

Samplers Name: *Josh Pritchard* **Recorded by:** *JP*

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X Whaler # 1
_____ Bladder Pump
_____ SS Monsoon #

Sample Equipment:

X Disposable Bailer
_____ Whaler # _____
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (circle all that apply):

(TPH-gas) ~~VOC's~~, (BTEX) ~~MtBE, 1, 2, DCA, TBA, EDB~~, (Fuel Oxygenates) ~~Naphthalene, 8010 Solvents~~,
(TPH-D) ~~TPH Motor Oil, TPH Hydrolic Oil~~
~~Chlorinated Solvents, Organochlorine Pesticides, Perchlorate, Diesel & Oil Range Organics, Nitrates~~

Number and Types of Bottle Used:

Well Number: RW-13 SPLIT **Well Diameter:** 4" **with Casing Volume of:**

Depth to Water: 16.88' TOC — 2" = (0.16 Gallon/Feet)
Well Depth: 25' BGS or TOC — (4" = (0.65 Gallon/Feet))
Height W-Column: 8.12' feet (well depth - depth to water) — 5" = (1.02 Gallon/Feet)
Volume in Well: 5.3 gallons (casing volume X height) — 6" = (1.47 Gallon/Feet)
Gallons to purge: 15.8 gallons (volume X 3) — 8" = (2.61 Gallon/Feet)

Lab: *Torrent* **Transportation:** *Courier*

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1530	0	19.55	1.433	3.40	7.47	-50	Low: clear, minor	
1531	1	20.63	1.361	0.87	7.44	-47		
1532	2	20.83	1.240	0.99	7.51	-42		
1533	3	20.88	1.220	1.18	7.53	-35		
1534	4	20.91	1.239	1.05	7.52	-31		
1536	6	20.93	1.277	0.81	7.51	-32		
1538	8	20.91	1.369	0.40	7.46	-48		
1541	11	20.70	1.427	0.27	7.47	-61		
Stop:	well de-watered	@	gallons					

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 8.12' x 0.8 = 6.50' - (Well Depth) 25' = Depth to water 18.50'

Time: 1542 1st measured depth to water, 24.72' feet below TOC.
Time: _____ 1st measured depth to water, _____ feet below TOC.
Time: _____ 1st measured depth to water, _____ feet below TOC.

Is well within 80% of original well casing volume: Yes ____ No X
Is well within 80% of original well casing volume: Yes ____ No ____
Is well within 80% of original well casing volume: Yes ____ No ____

JP JP JP

Sample Well

Time: 1545 Sample ID: RW-13 SPLIT Depth: 24.72' feet below TOC

Comments: well de watered @ 11 gallons Collect Sample.

Well Condition: Good

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

CHAIN -OF-CUSTODY RECORD

1 OF 1

PROJECT NAME AND NUMBER: Former Exxon / 2X103.Q
SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attention: Jered Chaney
ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

LABORATORY: Torrent
TURNAROUND TIME: 5 Day 72hr Rush
GLOBAL I.D.: T0600100538

Sampler: Josh Pritchard
Date: 1-9-14

Field Point Name (Geo Tracker)	Sample Identification	Date Sampled	Matrix	SAMPLE CONTAINERS: 40 mL VOAs (preserved)	250 ml Poly Bottle	1 liter Amber	Liner Acetate or Brass	REQUESTED ANALYSIS: TPH-Diesel & Motor Oil w/ silica gel cleanup EPA Method # 8015B	TPH-D EPA Method# 8015	TPH-G EPA Method# 8260	MtBE EPA Method 8260	TBA EPA Method # 8260	BTEX EPA Method # 8260	Fuel Oxygenates EPA Method # 8260	1,2,DCA & EDB EPA Method # 8260
MW-5	MW-5	1-9-14	W	2		1			X	X			X	X	X
MW-6	MW-6			2		1			X	X			X	X	X
RW-13	RW-13			2		1			X	X			X	X	X
RW-14	RW-14			2		1			X	X			X	X	X
RW-13 SPLIT	RW-13 SPLIT			2		1			X	X			X	X	X
RW-14 SPLIT	RW-14 SPLIT			2		1			X	X			X	X	X

	RELEASED BY:	Date & Time		RECEIVED BY:	Date & Time
1.)		1-9-14 1709	→	NAVEEN G	1-9-14 17:09
2.)			→		
3.)			→		
4.)			→		
5.)			→		

SAMPLE CONDITION: (circle 1)

Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen

NOTES:

[X] Please use MDL (Minimum Detection Limit) for any diluted samples.

- Please produce and email an EDF of these results to lab@weber-hayes.com
- Fuel Oxygenates should only include DIPE, TAME, EtBE, MtBE & TBA

D/O

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1158

Tool Page ___/___
INDICATE ATTACHMENTS THAT APPLY
___ Site Map
___ Data Sheets
___ Geologic Logs
___ Photo Sheets
___ COC's
___ Chargeable Materials

Client	**Former Exxon Station**			Date: **September 20, 2013**
Site Location:	**3055 35th Ave, Oakland, CA**			Study #: **2X103.Q**
Field Tasks:	[ ] Drilling	[x] Sampling	[ ] Other (see below):	Weather Conditions:
3rd Quarter Groundwater Monitoring				Overcast, 68°
Personnel / Company On-Site:	**Josh Pritchard (Weber, Hayes and Associates: WHA)**			

FIELD WORK PLANNING:

Performed on: **September 19, 2013**

Meet with Project Manager: [X] Yes [ ] No
Number of Wells to be Gauged: **16 Wells w/ Dissolved Oxygen (D.O.) & Depth to Groundwater**
Sample Wells: **MW-1 through 6 RW-5, RW-9, RW-13, & RW-14**
Analyze for: **TPH-D, TPH-G, BTEX, Fuel Oxygenates, & Lead Scavengers by EPA Method 8260 GC/MS**
Proposed Sampling Date: **June 25, 2013**

ON-SITE FIELD WORK:

Arrive on-site at 0900 to conduct 3rd Quarter 2013 Quarterly Groundwater Monitoring Well Sampling.

LABORATORY:

(Initial) Send all analytical to: **Torrent Analytical Laboratory, 408.263.5258, 483 Sinclair Frontage Rd., Milpitas, CA**

JP

GROUNDWATER MONITORING FIELD WORK STANDARD OPERATING PROCEDURES:

(Initial)
- All sampling is conducted according to Standard Operating Procedure (SOP) 10I/
JP - All pertinant information regarding the well, including water quality physical parameters are recorded on the following pages.
- All samples are placed in a refrigerated cooler immediately after sampling.
- All groundwater monitoring/purging/sampling equipment is decontaminated according to SOP 10B/at the beginning of on-site work, in between each well, and at the end of work
- All purge water is propoerly containerized in 55-gallon drums, or another suitable container, for later removal by a licensed subcontractor.
- All samples are recorded on field Chain-of-Custody sheets for documentation of proper transportation to the appropriate Laboratory.

INSTRUMENT CALIBRATION:

QED MP20 Flow Through Cell: **Temperature =** 66.66 **pH =** 7.00 **&** 10.00 **Electrical Conductivity =** 718 **Barometric Pressure =** 760 mmHg

D.O. % Saturation = 100% **Oxidation Reduction Potential (ORP) =** 218

BEGIN SAMPLING WELLS:

MW-5, MW-6, RW-9, MW-4, MW-1, MW-3, RW-5, MW-2, RW-14, RW-13

COMMENTS:

All wells will be purged until the QED MP20 unit indicates that the physical parameters of the water (pH, Conductivity, Temp, D.O., and ORP) have stabilized to within ~ 15%, or once four casing volumes in the well column requiring sampling have been removed (see Groundwater Monitoring Well Sampling Field Data Sheet(s) for details). Wells will be purged from the bottom up and in accord with all WHA SOPs. Wells will only be sampled using a Bladder Pump or a disposable bailer, as per RWQCB guidlines.

JP / 9-20-13

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
fax (831) 722-1159

Location	Groundwater Depth	Total Depth of Well	D.O. (mg/L)	ORP (mV)	Floating Product (comments)
MW-1	20.51' TOC	26.5'	0.77	-88	No FP, High odor
MW-2	19.35' TOC	26.5'	0.44	-100	No FP, High odor
MW-3	16.61'	26.5'	0.39	-79	No FP, Low odor
MW-4	17.39'	30'	0.32	-89	No FP, High odor
MW-5	17.31'	30'	0.50	-60	No FP, No odor
MW-6	16.46'	30'	0.61	-68	No FP, Trace odor
RW-5	15.87'	25.7'	0.68	-49	No FP, No odor
RW-6	15.96'	25.5'	0.78	-79	No FP, Trace odor
RW-7	16.61'	29.5'	0.52	-83	No FP, No odor
RW-8	17.95'	25'	0.52	-41	No FP, No odor
RW-9	17.39'	25'	0.49	-72	No FP, Trace odor
RW-10	16.53'	25'	0.71	-102	No FP, Low odor
RW-11	15.89'	25'	0.90	-77	No FP, No odor
RW-12	16.36'	27'	0.85	-90	No FP, No odor
RW-13	17.01'	25'	0.18	-55	No FP, No odor
RW-14	16.64'	25'	0.15	-88	No FP, No odor

HOW MANY PURGE DRUMS WERE LEFT ON-SITE: 1 APPROXIMATE VOLUME (gallons): 30
CALL PURGE WATER REMOVAL SUBCONTRACTOR ON: 9-20-13
DRUMS WILL BE PURGED ON: ? ? ?

COMMENTS:

M Pimentel 9-20-13
Signature of Field Personel & Date

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: MW-5 **Sample Location:**

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:

_____ Bailer: Disposable or Acrylic
_____ Whaler # _____
X Peristaltic Pump
_____ Redi-flow Pump (Grundfus)

Sample Equipment:

_____ Disposable Bailer
_____ Whaler # _____
X Peristaltic Pump
_____ Submersible Pump

Analyses Requested :

TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:

3 x 40 mL VOA's (HCL preservative)
2 x 1 L Amber

Well Number: MW-5
Depth to Water: 17.31' TOC
Well Depth: 30' BGS or TOC
Height W-Column: 12.69' feet (well depth - depth to water)

Pump Intake Depth: ~25' feet
Pump Flow Rate: ~50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
0937	17.31'	0	0	19.36	1.200	2.60	7.18	-45	Low: clear, minor	
0939	17.94'	0.63'	100	20.01	1.352	0.64	7.15	-48	↓	
0941	17.97'	0.66'	200	20.08	1.351	0.50	7.14	-50	↓	
0943	17.99'	0.68'	300	20.02	1.334	0.52	7.08	-54	↓	
0945	18.01'	0.70'	400	20.05	1.329	0.52	7.04	-56	↓	
0947	18.01'	0.70'	500	20.05	1.322	0.50	7.08	-60	↓	X
Stop Purge Complete Parameters Stabilized										✓
	JP									

Sample Well

Time: 0950 Sample ID: MW-5 Depth: 18.01' feet below TOC

Comments: No FP, No Odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: MW-6 **Sample Location:** MW-6

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:

_____ Bailer: Disposable or Acrylic
_____ Whaler # _____
X Peristaltic Pump
_____ Redi-flow Pump (Grundfus)

Sample Equipment:

_____ Disposable Bailer
_____ Whaler # _____
X Peristaltic Pump
_____ Submersible Pump

Analyses Requested :

TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:

3 x 40 mL VOA's (HCL preservative)
2 x 1 L Amber

Well Number: MW-6
Depth to Water: 16.46' TOC
Well Depth: 30' BGS or TOC
Height W-Column: 13.54' feet (well depth - depth to water)

Pump Intake Depth: ~25' feet
Pump Flow Rate: ~50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
1005	16.46'	0	0	20.13	0.756	1.01	7.09	-59	Low: clear, minor	
1007	17.02'	0.56'	100	20.21	0.735	0.98	7.10	-58	↓	
1009	17.36'	0.90'	200	20.64	0.726	0.84	7.05	-60	↓	
1011	17.43'	0.97'	300	20.45'	0.725	0.75	7.08	-64	↓	
1013	17.48'	1.02'	400	20.51'	0.725	0.67	7.06	-67	↓	
1015	17.50'	1.04'	500	20.58	0.725	0.65	7.07	-68	↓	
1017	17.51'	1.05'	600	20.57'	0.725	0.61	7.07	-68	↓	X
Stop:	Purge Complete		Parameters	Stabilized						

JP

Sample Well

Time: 1020 Sample ID: MW-6 Depth: 17.51' feet below TOC

Comments: NO FP, Trace Odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: RW-9 **Sample Location:** RW-9

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:
- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- x Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:
- ____ Disposable Bailer
- ____ Whaler # ____
- x Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :
- TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
- TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:
- 3 x 40 mL VOA's (HCL preservative)
- 2 x 1 L Amber

Well Number: RW-9

Depth to Water: 17.39 TOC

Well Depth: 25 BGS or TOC

Height W-Column: 7.61 feet (well depth - depth to water)

Pump Intake Depth: ~20 feet

Pump Flow Rate: ~50 mL/min

Lab: Torrent

Transportation: *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
1036	17.39'	0	0	19.31	1.126	1.30	7.08	-71	Low: Clear, minor	
1038	17.56'	0.17'	100	19.24	1.160	0.80	7.08	-74	↓	
1040	17.63'	0.24'	200	19.31	1.158	0.70	7.08	-73	↓	
1042	17.71'	0.32'	300	19.46	1.152	0.62	7.08	-73	↓	
1044	17.78'	0.39'	400	19.76	1.145	0.54	7.08	-72	↓	
1046	17.84'	0.45'	500	19.86	1.140	0.50	7.10	-72	↓	
1048	17.87'	0.48'	600	19.79	1.137	0.49	7.09	-72	↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

JP

Sample Well

Time: 1050 Sample ID: RW-9 Depth: 17.87' feet below TOC

Comments: No FP, Trace Odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: MW-4 **Sample Location:** MW-4

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:
- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:
- ____ Disposable Bailer
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :
- TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
- TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:
- 3 x 40 mL VOA's (HCL preservative)
- 2 x 1 L Amber

Well Number: MW-4

Depth to Water: 17.39' TOC

Well Depth: 30' BGS or TOC

Height W-Column: 12.61' feet (well depth - depth to water)

Pump Intake Depth: ~25' feet

Pump Flow Rate: 50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
1058	17.39'	0	0	20.01	1.225	1.08	7.11	-75	Low: clear, minor	
1100	17.48	0.09'	100	19.44	1.268	0.77	7.10	-80	↓	
1102	18.01'	0.62'	200	19.14	1.281	0.46	7.08	-85	↓	
1104	18.19'	0.80'	300	19.07	1.282	0.37	7.09	-87	↓	
1106	18.26'	0.87'	400	19.06	1.282	0.35	7.09	-88	↓	
1108	18.33'	0.94'	500	19.10	1.282	0.33	7.09	-89	↓	
1110	18.40'	1.01'	600	19.12	1.284	0.32	7.09	-89	↓	X
STOP:	Purge	Complete	Parameters	Stabilized						

JP

Sample Well

Time: 1112 Sample ID: MW-4 Depth: 18.40' feet below TOC

Comments: No FP, High odor

Well Condition: Good, No vault

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: MW-1 **Sample Location:** MW-1

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:

- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:

- ____ Disposable Bailer
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :

TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B

TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:

3 x 40 mL VOA's (HCL preservative)

2 x 1 L Amber

Well Number: MW-1

Depth to Water: 20.51' TOC

Well Depth: 26.5' BGS or TOC

Height W-Column: ____ feet (well depth - depth to water)

Pump Intake Depth: ~25' feet

Pump Flow Rate: 50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1122	20.51'	0	0	20.99	1.369	2.45	7.20	-80	Low: Clear, Minor	
1124	20.74'	0.23'	100	20.01	1.433	1.03	7.19	-84	↓	
1126	20.78'	0.27'	200	19.90	1.453	0.94	7.18	-85	↓	
1128	20.80'	0.29'	300	19.90	1.434	0.89	7.18	-86	↓	
1130	20.86'	0.35'	400	19.93	1.433	0.84	7.18	-87	↓	
1132	20.93'	0.42'	500	19.84	1.433	0.77	7.19	-88	↓	X
Stop:	Purge	Complete	Paramaters	Stabilized						
	JP									

Sample Well

Time: 1135 Sample ID: MW-1 Depth: 20.93' feet below TOC

Comments: No FP, High Odor

Well Condition: Good, Stand Pipe

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: MW-3 **Sample Location:** MW-3

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:

_____ Bailer: Disposable or Acrylic
_____ Whaler # _____
X Peristaltic Pump
_____ Redi-flow Pump (Grundfus)

Sample Equipment:

_____ Disposable Bailer
_____ Whaler # _____
X Peristaltic Pump
_____ Submersible Pump

Analyses Requested :

TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:

3 x 40 mL VOA's (HCL preservative)
2 x 1 L Amber

Well Number: MW-3
Depth to Water: 16.61' TOC
Well Depth: 26.5' BGS or TOC
Height W-Column: 9.89' feet (well depth - depth to water)

Pump Intake Depth: ~ 20' feet
Pump Flow Rate: 50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
1151	16.61'	0	0	20.56	1.94	1.20	7.15	-77	Low: Clear minor	
1153	17.52'	0.91'	100	20.03	2.03	0.84	7.14	-77	↓	
1155	18.02'	1.41'	200	19.96	2.05	0.63	7.19	-78	↓	
1157	18.34'	1.73'	300	19.85	2.05	0.53	7.15	-79	↓	
1159	18.84'	2.23'	400	19.95	2.05	0.43	7.15	-79	↓	
1201	19.22'	2.61'	500	19.97	2.06	0.39	7.14	-79	↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

JP

Sample Well

Time: 1205 Sample ID: MW-3 Depth: 19.22' feet below TOC

Comments: NO FP. Low Odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: RW-5 **Sample Location:** RW-5

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:
- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:
- ____ Disposable Bailer
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :
- TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
- TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:
- 3 x 40 mL VOA's (HCL preservative)
- 2 x 1 L Amber

Well Number: RW-5
Depth to Water: 15.87' TOC
Well Depth: 25.7' BGS or TOC
Height W-Column: 9.83' feet (well depth - depth to water)

Pump Intake Depth: ~20 feet
Pump Flow Rate: 50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1222	15.87'	0	0	22.06	0.943	1.41	7.22	-60	Low: clear, minor	
1224	16.02'	0.15'	100	21.74	0.688	1.06	7.18	-50	↓	
1226	16.06	0.19'	200	21.28	0.657	0.80	7.17	-49	↓	
1228	16.09'	0.22'	300	21.33	0.655	0.79	7.16	-49	↓	
1230	16.13'	0.26'	400	21.81	0.655	0.75	7.15	-49	↓	
1232	16.16'	0.29'	500	21.88	0.654	0.70	7.15	-49	↓	
1234	16.20'	0.33'	600	21.90	0.653	0.68	7.16	-49	↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

JP

Sample Well

Time: 1240 Sample ID: RW-5 Depth: 16.20' feet below TOC

Comments: NO FP, NO odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: MW-2 **Sample Location:** MW-2

Samplers Name: *Josh Pritchard* **Recorded by:** JP

Purge Equipment:
- ____ Bailer: Disposable or Acrylic
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Redi-flow Pump (Grundfus)

Sample Equipment:
- ____ Disposable Bailer
- ____ Whaler # ____
- X Peristaltic Pump
- ____ Submersible Pump

Analyses Requested :
- TPH-gas, BTEX, Fuel Oxygenates, Lead Scavengers by EPA Method 8260B
- TPH-diesel by EPA Method 8015M

Number and Types of Bottle Used:
- 3 x 40 mL VOA's (HCL preservative)
- 2 x 1 L Amber

Well Number: MW-2

Depth to Water: 19.35' TOC

Well Depth: 26.5' BGS or (TOC)

Height W-Column: 7.15' feet (well depth - depth to water)

Pump Intake Depth: ~20' feet

Pump Flow Rate: 50 mL/min

Lab: Torrent **Transportation:** *Courier*

Time (24 hr.)	Depth to Water (TOC)	Drawdown (feet)	Volume Purged (mL)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
1248	19.35'	0	0	22.47	1.58	0.92	7.21	-88	Low: clear, minor	
1250	19.54'	0.19'	100	22.08	1.60	0.77	7.21	-91	↓	
1252	19.63'	0.28'	200	21.86	1.60	0.65	7.22	-94	↓	
1254	19.73'	0.38'	300	21.92	1.60	0.55	7.22	-97	↓	
1256	19.81'	0.36'	400	21.92	1.61	0.47	7.23	-99	↓	
1258	19.90'	0.55'	500	22.02	1.60	0.44	7.23	-100	↓	✓
Stop: Purge Complete Parameters Stabilized										

JP

Sample Well

Time: 1300 Sample ID: MW-2 Depth: 19.90' feet below TOC

Comments: NO FP, High Odor

Well Condition: Good, Stand Pipe

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: RW-14 **Sample Location:** RW-14

Samplers Name: *Josh Pritchard* **Recorded by:** *JP*

Purge Equipment:

- ____ Bailer: Disposable or Acrylic
- X Whaler # ____
- ____ Bladder Pump
- ____ SS Monsoon #

Sample Equipment:

- X Disposable Bailer
- ____ Whaler # ____
- ____ Bladder Pump
- ____ Submersible Pump

Analyses Requested (circle all that apply): **Number and Types of Bottle Used:**

(TPH-gas), ~~VOC's~~, (BTEX), ~~MtBE, 1, 2, DCA, TBA, EDB~~, (Fuel Oxygenates), ~~Naphthalene, 8010 Solvents~~,
(TPH-D), ~~TPH-Motor Oil, TPH-Hydrolic Oil~~
~~Chlorinated Solvents, Organochlorine Pesticides, Perchlorate, Diesel & Oil Range Organics, Nitrates~~

Well Number: RW-14 **Well Diameter:** 4" **with Casing Volume of:**

Depth to Water: 16.64' TOC — 2" = (0.16 Gallon/Feet)

Well Depth: 25' BGS or TOC — (4" = (0.65 Gallon/Feet))

Height W-Column: 8.36' feet (well depth - depth to water) — 5" = (1.02 Gallon/Feet)

Volume in Well: 5.4 gallons (casing volume X height) — 6" = (1.47 Gallon/Feet)

Gallons to purge: 16.3 gallons (volume X 3) — 8" = (2.61 Gallon/Feet)

Lab: *Torrent* **Transportation:** *Courier*

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1316	0	23.34	0.794	7.27	7.32	-67	Moderate: clear Brown, mod	
1317	2	20.41	1.058	0.81	7.27	-91	Low: Clear, minor	
1318	4	20.36	0.936	0.35	7.29	-122	↓	
1320	6	20.60	0.877	0.45	7.30	-114	↓	
1321	8	20.47	0.923	0.24	7.26	-102	↓	
1323	10	20.22	1.008	0.18	7.23	-93	↓	
1324	12	20.12	1.141	0.15	7.21	-88	↓	
Stop:	Purge	Complete	Well de	watered	@	12 gallons		

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 8.36' x 0.8 = 6.69' - (Well Depth) 25' = Depth to water 18.31'

Time: 1329 1st measured depth to water, 23.54' feet below TOC. Is well within 80% of original well casing volume: Yes ____ No X

Time: 1413 1st measured depth to water, 19.02' feet below TOC. Is well within 80% of original well casing volume: Yes ____ No X

Time: ____ 1st measured depth to water, ____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No ____

JP JP JP

Sample Well

Time: 1415 Sample ID: RW-14 Depth: 19.02' feet below TOC

Comments: NO FP, No odor

Well Condition: Good

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *September 20, 2013*

Sample No.: RW-13 **Sample Location:** RW-13

Samplers Name: *Josh Pritchard* **Recorded by:** *JP*

Purge Equipment:

_____ Bailer: Disposable or Acrylic
x Whaler # _____
_____ Bladder Pump
_____ SS Monsoon #

Sample Equipment:

x Disposable Bailer
_____ Whaler # _____
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (circle all that apply):

Number and Types of Bottle Used:

TPH-gas, VOC's, BTEX, ~~MtBE, 1, 2, DCA, TBA, EDB~~, Fuel Oxygenates, ~~Naphthalene, 8010 Solvents~~,
TPH-D, ~~TPH-Motor Oil, TPH-Hydrolic Oil~~
~~Chlorinated Solvents, Organochlorine Pesticides, Perchlorate, Diesel & Oil Range Organics, Nitrates~~

Well Number: RW-13

Well Diameter: 4" **with Casing Volume of:**

Depth to Water: 17.01' TOC
Well Depth: 25' BGS or TOC
Height W-Column: 7.99' feet (well depth - depth to water)
Volume in Well: 5.2 gallons (casing volume X height)
Gallons to purge: 15.6 gallons (volume X 3)

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
8" = (2.61 Gallon/Feet)

Lab: *Torrent* **Transportation:** *Courier*

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1343	0	20.36	1.286	1.07	7.26	-65	Low; clear, minor	
1344	2	20.33	1.222	0.38	7.25	-60		
1345	4	20.63	1.130	0.28	7.29	-47		
1347	6	20.86	1.088	0.52	7.29	-35		
1349	8	20.52	1.202	0.19	7.21	-45		
1350	10	20.35	1.267	0.17	7.20	-53		
1351	11	20.32	1.284	0.18	7.21	-55	↓ ↓ ↓	
STOP:	Purge	Complete	Well de	watered	@ 11	gallons		

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 7.99' x 0.8 = 6.39' - (Well Depth) 25' = Depth to water 18.61'

Time: 1353 1st measured depth to water, 24.12' feet below TOC. Is well within 80% of original well casing volume: Yes ____ No ~~x~~
Time: 1425 1st measured depth to water, 21.78' feet below TOC. Is well within 80% of original well casing volume: Yes ____ No x
Time: ____ 1st measured depth to water, ____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No ____

JP JP JP

Sample Well

Time: 1425 Sample ID: RW-13 Depth: 21.78' feet below TOC

Comments: NO FP, No Odor

Well Condition: Good

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

CHAIN -OF-CUSTODY RECORD

1 OF 1

PROJECT NAME AND NUMBER: Former Exxon Station / 2X103.Q

SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attention: Jered Chaney

ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

LABORATORY: Torrent

TURNAROUND TIME: (5 Day) 72hr Rush

GLOBAL I.D.:

Sampler: Josh Pritchard

Date: 9-20-13

Field Point Name (Geo Tracker)	Sample Identification	Date Sampled	Matrix	SAMPLE CONTAINERS				REQUESTED ANALYSIS							
								Total Petroleum Hydrocarbons			Volatile Organics			Additional Analysis	
				40 mL VOAs (preserved)	250 ml Poly Bottle	1 liter Amber	Liner Acetate or Brass	TPH-Diesel & Motor Oil w/ silica gel cleanup EPA Method # 8015B	TPH-D EPA Method# 8015	TPH-G EPA Method# 8260	MtBE EPA Method 8260	TBA EPA Method # 8260	BTEX EPA Method # 8260	Fuel Oxygenates EPA Method # 8260	Lead Scavengers EPA Method # 8260
MW-1	MW-1	9-20-13	AA	3		1			X	X			X	X	X
MW-2	MW-2			3		1			X	X			X	X	X
MW-3	MW-3			3		1			X	X			X	X	X
MW-4	MW-4			3		1			X	X			X	X	X
MW-5	MW-5			3		1			X	X			X	X	X
MW-6	MW-6			3		1			X	X			X	X	X
RW-5	RW-5			3		1			X	X			X	X	X
RW-9	RW-9			3		1			X	X			X	X	X
RW-13	RW-13			3		1			X	X			X	X	X
RW-14	RW-14			3		1			X	X			X	X	X

	RELEASED BY:	Date & Time	RECEIVED BY:	Date & Time
1.)	[signature]	9-20-13 1555	[signature]	9/20/13 15:55
2.)				
3.)				
4.)				
5.)				

SAMPLE CONDITION: (circle 1)

Ambient	(Refrigerated)	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen

NOTES:

[X] Please use MDL (Minimum Detection Limit) for any diluted samples.

- Fuel Oxygenates should only include DIPE, TAME, EtBE, MtBE, & TBA
- Please produce and email an EDF of these results to lab@weber-hayes.com

D/C

Appendix C

Laboratory Report & Chain of Custody Documentation

Groundwater Sample Results

Weber, Hayes & Associates
120 Westgate Dr
Watsonville, CA 95076
Tel: 831-722-3580
Fax: 831-662-3100

RE: Former Exxon/2X103.Q

Work Order No.: 1401028

Dear Jered Chaney:

Torrent Laboratory, Inc. received 6 sample(s) on January 09, 2014 for the analyses presented in the following Report.

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

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

Patti Sandrock
QA Officer

January 16, 2014
Date

Date: 1/16/2014

Client: Weber, Hayes & Associates

Project: Former Exxon/2X103.Q

Work Order: 1401028

CASE NARRATIVE

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

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

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

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

MW-5 1401028-001

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	21	1.8	11	1700	ug/L
Toluene	SW8260B	21	1.2	11	33	ug/L
Ethyl Benzene	SW8260B	21	1.6	11	740	ug/L
m,p-Xylene	SW8260B	21	2.8	21	29	ug/L
o-Xylene	SW8260B	21	1.6	11	3.0	ug/L
MTBE	SW8260B	21	3.6	11	640	ug/L
tert-Butanol	SW8260B	21	32	110	1300	ug/L
TPH as Gasoline	8260TPH	21	660	1100	13000	ug/L
TPH as Diesel	SW8015B(M)	1	40.0	100	1100	ug/L

MW-6 1401028-002

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	4.2	0.37	2.1	67	ug/L
Ethyl Benzene	SW8260B	4.2	0.31	2.1	3.8	ug/L
m,p-Xylene	SW8260B	4.2	0.56	4.2	1.1	ug/L
TPH as Gasoline	8260TPH	4.2	130	210	3700	ug/L
TPH as Diesel	SW8015B(M)	1	40.0	100	190	ug/L

RW-13 1401028-003

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	1	0.087	0.50	43	ug/L
Ethyl Benzene	SW8260B	1	0.074	0.50	2.5	ug/L
MTBE	SW8260B	1	0.17	0.50	5.2	ug/L
tert-Butanol	SW8260B	1	1.5	5.0	200	ug/L
TPH as Gasoline	8260TPH	1	31	50	440	ug/L
TPH as Diesel	SW8015B(M)	1	40.0	100	110	ug/L

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

RW-14 1401028-004

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Toluene	SW8260B	1	0.059	0.50	6.1	ug/L
Ethyl Benzene	SW8260B	1	0.074	0.50	3.4	ug/L
m,p-Xylene	SW8260B	1	0.13	1.0	1.2	ug/L
Diisopropyl ether (DIPE)	SW8260B	1	0.15	0.50	0.71	ug/L
tert-Butanol	SW8260B	1	1.5	5.0	98	ug/L
TPH as Gasoline	8260TPH	1	31	50	1200	ug/L
Benzene	SW8260B	21	1.8	11	470	ug/L
TPH as Diesel	SW8015B(M)	1	40.0	100	360	ug/L

RW-13-SPLIT 1401028-005

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	1	0.087	0.50	12	ug/L
MTBE	SW8260B	1	0.17	0.50	5.2	ug/L
tert-Butanol	SW8260B	1	1.5	5.0	60	ug/L
TPH as Gasoline	8260TPH	1	31	50	150	ug/L

RW-14-SPLIT 1401028-006

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	1	0.087	0.50	130	ug/L
Ethyl Benzene	SW8260B	1	0.074	0.50	1.2	ug/L
m,p-Xylene	SW8260B	1	0.13	1.0	2.2	ug/L
Diisopropyl ether (DIPE)	SW8260B	1	0.15	0.50	0.83	ug/L
tert-Butanol	SW8260B	1	1.5	5.0	85	ug/L
TPH as Gasoline	8260TPH	1	31	50	720	ug/L
TPH as Diesel	SW8015B(M)	1	40.0	100	1200	ug/L

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	MW-5	**Lab Sample ID:**	1401028-001A
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
The results shown below are reported using their MDL.											
Benzene	SW8260B	NA	01/14/14	21	1.8	11	1700		ug/L	418872	NA
Toluene	SW8260B	NA	01/14/14	21	1.2	11	33		ug/L	418872	NA
Ethyl Benzene	SW8260B	NA	01/14/14	21	1.6	11	740		ug/L	418872	NA
m,p-Xylene	SW8260B	NA	01/14/14	21	2.8	21	29		ug/L	418872	NA
o-Xylene	SW8260B	NA	01/14/14	21	1.6	11	3.0	J	ug/L	418872	NA
MTBE	SW8260B	NA	01/14/14	21	3.6	11	640		ug/L	418872	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/14/14	21	3.2	11	ND		ug/L	418872	NA
ETBE	SW8260B	NA	01/14/14	21	2.7	11	ND		ug/L	418872	NA
TAME	SW8260B	NA	01/14/14	21	2.0	11	ND		ug/L	418872	NA
tert-Butanol	SW8260B	NA	01/14/14	21	32	110	1300		ug/L	418872	NA
1,2-Dichloroethane	SW8260B	NA	01/14/14	21	2.4	11	ND		ug/L	418872	NA
1,2-Dibromoethane	SW8260B	NA	01/14/14	21	1.4	11	ND		ug/L	418872	NA
(S) Dibromofluoromethane	SW8260B	NA	01/14/14	21	61.2	131	120		%	418872	NA
(S) Toluene-d8	SW8260B	NA	01/14/14	21	75.1	127	113		%	418872	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/14/14	21	64.1	120	113		%	418872	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	1/14/14	01/14/14	21	660	1100	13000	x	ug/L	418872	10567
(S) 4-Bromofluorobenzene	8260TPH	1/14/14	01/14/14	21	41.5	125	106		%	418872	10567

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	MW-5	**Lab Sample ID:**	1401028-001B
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/13/14	01/13/14	1	40.0	100	1100	x	ug/L	418853	10549
Pentacosane (S)	SW8015B(M)	1/13/14	01/13/14	1	64.2	123	122		%	418853	10549

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	MW-6	**Lab Sample ID:**	1401028-002A
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
The results shown below are reported using their MDL.											
Benzene	SW8260B	NA	01/14/14	4.2	0.37	2.1	67		ug/L	418872	NA
Toluene	SW8260B	NA	01/14/14	4.2	0.25	2.1	ND		ug/L	418872	NA
Ethyl Benzene	SW8260B	NA	01/14/14	4.2	0.31	2.1	3.8		ug/L	418872	NA
m,p-Xylene	SW8260B	NA	01/14/14	4.2	0.56	4.2	1.1	J	ug/L	418872	NA
o-Xylene	SW8260B	NA	01/14/14	4.2	0.32	2.1	ND		ug/L	418872	NA
MTBE	SW8260B	NA	01/14/14	4.2	0.72	2.1	ND		ug/L	418872	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/14/14	4.2	0.64	2.1	ND		ug/L	418872	NA
ETBE	SW8260B	NA	01/14/14	4.2	0.53	2.1	ND		ug/L	418872	NA
TAME	SW8260B	NA	01/14/14	4.2	0.40	2.1	ND		ug/L	418872	NA
tert-Butanol	SW8260B	NA	01/14/14	4.2	6.5	21	ND		ug/L	418872	NA
1,2-Dichloroethane	SW8260B	NA	01/14/14	4.2	0.47	2.1	ND		ug/L	418872	NA
1,2-Dibromoethane	SW8260B	NA	01/14/14	4.2	0.28	2.1	ND		ug/L	418872	NA
(S) Dibromofluoromethane	SW8260B	NA	01/14/14	4.2	61.2	131	121		%	418872	NA
(S) Toluene-d8	SW8260B	NA	01/14/14	4.2	75.1	127	115		%	418872	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/14/14	4.2	64.1	120	113		%	418872	NA

NOTE: The reporting limits were raised due to suppression of the internal standard used for peak quantitation. Suppression due to the high concentration of non-target compounds.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	1/14/14	01/14/14	4.2	130	210	3700	x	ug/L	418872	10567
(S) 4-Bromofluorobenzene	8260TPH	1/14/14	01/14/14	4.2	41.5	125	109		%	418872	10567

NOTE: x - Does not match pattern of reference Gasoline standard. Reported value is the result of extractable hydrocarbons overlap.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	MW-6	**Lab Sample ID:**	1401028-002B
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/13/14	01/13/14	1	40.0	100	190	x	ug/L	418853	10549
Pentacosane (S)	SW8015B(M)	1/13/14	01/13/14	1	64.2	123	67.3		%	418853	10549

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-13	**Lab Sample ID:**	1401028-003A
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	01/13/14	1	0.087	0.50	43		ug/L	418859	NA
Toluene	SW8260B	NA	01/13/14	1	0.059	0.50	ND		ug/L	418859	NA
Ethyl Benzene	SW8260B	NA	01/13/14	1	0.074	0.50	2.5		ug/L	418859	NA
m,p-Xylene	SW8260B	NA	01/13/14	1	0.13	1.0	ND		ug/L	418859	NA
o-Xylene	SW8260B	NA	01/13/14	1	0.076	0.50	ND		ug/L	418859	NA
MTBE	SW8260B	NA	01/13/14	1	0.17	0.50	5.2		ug/L	418859	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/13/14	1	0.15	0.50	ND		ug/L	418859	NA
ETBE	SW8260B	NA	01/13/14	1	0.13	0.50	ND		ug/L	418859	NA
TAME	SW8260B	NA	01/13/14	1	0.095	0.50	ND		ug/L	418859	NA
tert-Butanol	SW8260B	NA	01/13/14	1	1.5	5.0	200		ug/L	418859	NA
1,2-Dichloroethane	SW8260B	NA	01/13/14	1	0.11	0.50	ND		ug/L	418859	NA
1,2-Dibromoethane	SW8260B	NA	01/13/14	1	0.068	0.50	ND		ug/L	418859	NA
(S) Dibromofluoromethane	SW8260B	NA	01/13/14	1	61.2	131	120		%	418859	NA
(S) Toluene-d8	SW8260B	NA	01/13/14	1	75.1	127	114		%	418859	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/13/14	1	64.1	120	107		%	418859	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	1/13/14	01/13/14	1	31	50	440	x	ug/L	418859	10566
(S) 4-Bromofluorobenzene	8260TPH	1/13/14	01/13/14	1	41.5	125	102		%	418859	10566

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-13	**Lab Sample ID:**	1401028-003B
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/13/14	01/13/14	1	40.0	100	110	x	ug/L	418853	10549
Pentacosane (S)	SW8015B(M)	1/13/14	01/13/14	1	64.2	123	95.9		%	418853	10549

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-14	**Lab Sample ID:**	1401028-004A
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Toluene	SW8260B	NA	01/13/14	1	0.059	0.50	6.1		ug/L	418859	NA
Ethyl Benzene	SW8260B	NA	01/13/14	1	0.074	0.50	3.4		ug/L	418859	NA
m,p-Xylene	SW8260B	NA	01/13/14	1	0.13	1.0	1.2		ug/L	418859	NA
o-Xylene	SW8260B	NA	01/13/14	1	0.076	0.50	ND		ug/L	418859	NA
MTBE	SW8260B	NA	01/13/14	1	0.17	0.50	ND		ug/L	418859	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/13/14	1	0.15	0.50	0.71		ug/L	418859	NA
ETBE	SW8260B	NA	01/13/14	1	0.13	0.50	ND		ug/L	418859	NA
TAME	SW8260B	NA	01/13/14	1	0.095	0.50	ND		ug/L	418859	NA
tert-Butanol	SW8260B	NA	01/13/14	1	1.5	5.0	98		ug/L	418859	NA
1,2-Dichloroethane	SW8260B	NA	01/13/14	1	0.11	0.50	ND		ug/L	418859	NA
1,2-Dibromoethane	SW8260B	NA	01/13/14	1	0.068	0.50	ND		ug/L	418859	NA
(S) Dibromofluoromethane	SW8260B	NA	01/13/14	1	61.2	131	117		%	418859	NA
(S) Toluene-d8	SW8260B	NA	01/13/14	1	75.1	127	119		%	418859	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/13/14	1	64.1	120	110		%	418859	NA
The results shown below are reported using their MDL.											
Benzene	SW8260B	NA	01/14/14	21	1.8	11	470		ug/L	418872	NA
(S) Dibromofluoromethane	SW8260B	NA	01/14/14	21	61.2	131	118		%	418872	NA
(S) Toluene-d8	SW8260B	NA	01/14/14	21	75.1	127	113		%	418872	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/14/14	21	64.1	120	110		%	418872	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	1/13/14	01/13/14	1	31	50	1200	x	ug/L	418859	10566
(S) 4-Bromofluorobenzene	8260TPH	1/13/14	01/13/14	1	41.5	125	112		%	418859	10566

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-14	**Lab Sample ID:**	1401028-004B
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/13/14	01/13/14	1	40.0	100	360	x	ug/L	418853	10549
Pentacosane (S)	SW8015B(M)	1/13/14	01/13/14	1	64.2	123	116		%	418853	10549

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-13-SPLIT	**Lab Sample ID:**	1401028-005A
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	01/13/14	1	0.087	0.50	12		ug/L	418859	NA
Toluene	SW8260B	NA	01/13/14	1	0.059	0.50	ND		ug/L	418859	NA
Ethyl Benzene	SW8260B	NA	01/13/14	1	0.074	0.50	ND		ug/L	418859	NA
m,p-Xylene	SW8260B	NA	01/13/14	1	0.13	1.0	ND		ug/L	418859	NA
o-Xylene	SW8260B	NA	01/13/14	1	0.076	0.50	ND		ug/L	418859	NA
MTBE	SW8260B	NA	01/13/14	1	0.17	0.50	5.2		ug/L	418859	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/13/14	1	0.15	0.50	ND		ug/L	418859	NA
ETBE	SW8260B	NA	01/13/14	1	0.13	0.50	ND		ug/L	418859	NA
TAME	SW8260B	NA	01/13/14	1	0.095	0.50	ND		ug/L	418859	NA
tert-Butanol	SW8260B	NA	01/13/14	1	1.5	5.0	60		ug/L	418859	NA
1,2-Dichloroethane	SW8260B	NA	01/13/14	1	0.11	0.50	ND		ug/L	418859	NA
1,2-Dibromoethane	SW8260B	NA	01/13/14	1	0.068	0.50	ND		ug/L	418859	NA
(S) Dibromofluoromethane	SW8260B	NA	01/13/14	1	61.2	131	118		%	418859	NA
(S) Toluene-d8	SW8260B	NA	01/13/14	1	75.1	127	112		%	418859	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/13/14	1	64.1	120	110		%	418859	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	1/13/14	01/13/14	1	31	50	150	x	ug/L	418859	10566
(S) 4-Bromofluorobenzene	8260TPH	1/13/14	01/13/14	1	41.5	125	121		%	418859	10566

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-13-SPLIT	**Lab Sample ID:**	1401028-005B
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/13/14	01/13/14	1	40.0	100	ND		ug/L	418853	10549
Pentacosane (S)	SW8015B(M)	1/13/14	01/13/14	1	64.2	123	104		%	418853	10549

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-14-SPLIT	**Lab Sample ID:**	1401028-006A
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	01/13/14	1	0.087	0.50	130		ug/L	418859	NA
Toluene	SW8260B	NA	01/13/14	1	0.059	0.50	ND		ug/L	418859	NA
Ethyl Benzene	SW8260B	NA	01/13/14	1	0.074	0.50	1.2		ug/L	418859	NA
m,p-Xylene	SW8260B	NA	01/13/14	1	0.13	1.0	2.2		ug/L	418859	NA
o-Xylene	SW8260B	NA	01/13/14	1	0.076	0.50	ND		ug/L	418859	NA
MTBE	SW8260B	NA	01/13/14	1	0.17	0.50	ND		ug/L	418859	NA
Diisopropyl ether (DIPE)	SW8260B	NA	01/13/14	1	0.15	0.50	0.83		ug/L	418859	NA
ETBE	SW8260B	NA	01/13/14	1	0.13	0.50	ND		ug/L	418859	NA
TAME	SW8260B	NA	01/13/14	1	0.095	0.50	ND		ug/L	418859	NA
tert-Butanol	SW8260B	NA	01/13/14	1	1.5	5.0	85		ug/L	418859	NA
1,2-Dichloroethane	SW8260B	NA	01/13/14	1	0.11	0.50	ND		ug/L	418859	NA
1,2-Dibromoethane	SW8260B	NA	01/13/14	1	0.068	0.50	ND		ug/L	418859	NA
(S) Dibromofluoromethane	SW8260B	NA	01/13/14	1	61.2	131	124		%	418859	NA
(S) Toluene-d8	SW8260B	NA	01/13/14	1	75.1	127	115		%	418859	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	01/13/14	1	64.1	120	108		%	418859	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	1/13/14	01/13/14	1	31	50	720	x	ug/L	418859	10566
(S) 4-Bromofluorobenzene	8260TPH	1/13/14	01/13/14	1	41.5	125	94.7		%	418859	10566

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 01/09/14
Date Reported: 01/16/14

Client Sample ID:	RW-14-SPLIT	**Lab Sample ID:**	1401028-006B
Project Name/Location:	Former Exxon/2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	01/09/14 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	1/13/14	01/13/14	1	40.0	100	1200	x	ug/L	418853	10549
Pentacosane (S)	SW8015B(M)	1/13/14	01/13/14	1	64.2	123	93.7		%	418853	10549

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1401028	**Prep Method:**	3510_TPH	**Prep Date:**	01/13/14	**Prep Batch:**	10549
Matrix:	Water	**Analytical Method:**	SW8015B(M)	**Analyzed Date:**	01/13/14	**Analytical Batch:**	418853
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Diesel	0.0440	0.10	ND	
TPH as Motor Oil	0.0920	0.40	0.14	
Pentacosane (S)			112	

Work Order:	1401028	**Prep Method:**	5030	**Prep Date:**	01/13/14	**Prep Batch:**	10566
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	01/13/14	**Analytical Batch:**	418859
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Gasoline	31	50	ND	
(S) 4-Bromofluorobenzene			94.7	

Work Order:	1401028	**Prep Method:**	5030	**Prep Date:**	01/14/14	**Prep Batch:**	10567
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	01/14/14	**Analytical Batch:**	418872
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Gasoline	31	50	46	
(S) 4-Bromofluorobenzene			106	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1401028	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	01/13/14	**Analytical Batch:**	418859
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Dichlorodifluoromethane	0.18	0.50	ND		
Chloromethane	0.16	0.50	ND		
Vinyl Chloride	0.16	0.50	ND		
Bromomethane	0.18	0.50	ND		
Trichlorofluoromethane	0.18	0.50	ND		
1,1-Dichloroethene	0.15	0.50	ND		
Freon 113	0.19	0.50	ND		
Methylene Chloride	0.23	5.0	ND		
trans-1,2-Dichloroethene	0.19	0.50	ND		
MTBE	0.17	0.50	ND		
tert-Butanol	1.5	5.0	ND		
Diisopropyl ether (DIPE)	0.13	0.50	ND		
1,1-Dichloroethane	0.13	0.50	ND		
ETBE	0.17	0.50	ND		
cis-1,2-Dichloroethene	0.19	0.50	ND		
2,2-Dichloropropane	0.15	0.50	ND		
Bromochloromethane	0.20	0.50	ND		
Chloroform	0.13	0.50	ND		
Carbon Tetrachloride	0.15	0.50	ND		
1,1,1-Trichloroethane	0.097	0.50	ND		
1,1-Dichloropropene	0.15	0.50	ND		
Benzene	0.13	0.50	ND		
TAME	0.17	0.50	ND		
1,2-Dichloroethane	0.14	0.50	ND		
Trichloroethylene	0.13	0.50	ND		
Dibromomethane	0.15	0.50	ND		
1,2-Dichloropropane	0.17	0.50	ND		
Bromodichloromethane	0.13	0.50	ND		
cis-1,3-Dichloropropene	0.096	0.50	ND		
Toluene	0.14	0.50	ND		
Tetrachloroethylene	0.14	0.50	ND		
trans-1,3-Dichloropropene	0.23	0.50	ND		
1,1,2-Trichloroethane	0.14	0.50	ND		
Dibromochloromethane	0.096	0.50	ND		
1,3-Dichloropropane	0.10	0.50	ND		
1,2-Dibromoethane	0.19	0.50	ND		
Chlorobenzene	0.14	0.50	ND		
Ethyl Benzene	0.15	0.50	ND		
1,1,1,2-Tetrachloroethane	0.096	0.50	ND		
m,p-Xylene	0.13	1.0	ND		
o-Xylene	0.15	0.50	ND		

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1401028	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	01/13/14	**Analytical Batch:**	418859
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	0.21	0.50	ND		
Bromoform	0.21	1.0	ND		
Isopropyl Benzene	0.097	0.50	ND		
Bromobenzene	0.15	0.50	ND		
1,1,2,2-Tetrachloroethane	0.11	0.50	ND		
n-Propylbenzene	0.078	0.50	ND		
2-Chlorotoluene	0.076	0.50	ND		
1,3,5,-Trimethylbenzene	0.074	0.50	ND		
4-Chlorotoluene	0.088	0.50	ND		
tert-Butylbenzene	0.081	0.50	ND		
1,2,3-Trichloropropane	0.14	0.50	ND		
1,2,4-Trimethylbenzene	0.083	0.50	ND		
sec-Butyl Benzene	0.092	0.50	ND		
p-Isopropyltoluene	0.093	0.50	ND		
1,3-Dichlorobenzene	0.10	0.50	ND		
1,4-Dichlorobenzene	0.069	0.50	ND		
n-Butylbenzene	0.081	0.50	ND		
1,2-Dichlorobenzene	0.057	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.15	0.50	ND		
Hexachlorobutadiene	0.19	0.50	ND		
1,2,4-Trichlorobenzene	0.12	0.50	ND		
Naphthalene	0.14	1.0	0.15		
1,2,3-Trichlorobenzene	0.23	0.50	ND		
(S) Dibromofluoromethane			121		
(S) Toluene-d8			113		
(S) 4-Bromofluorobenzene			107		
Ethanol	0.21	0.50	ND	TIC	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1401028	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	01/14/14	**Analytical Batch:**	418872
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.18	0.50	ND	
Chloromethane	0.16	0.50	ND	
Vinyl Chloride	0.16	0.50	ND	
Bromomethane	0.18	0.50	ND	
Trichlorofluoromethane	0.18	0.50	ND	
1,1-Dichloroethene	0.15	0.50	ND	
Freon 113	0.19	0.50	ND	
Methylene Chloride	0.23	5.0	0.40	
trans-1,2-Dichloroethene	0.19	0.50	ND	
MTBE	0.17	0.50	ND	
tert-Butanol	1.5	5.0	ND	
Diisopropyl ether (DIPE)	0.13	0.50	ND	
1,1-Dichloroethane	0.13	0.50	ND	
ETBE	0.17	0.50	ND	
cis-1,2-Dichloroethene	0.19	0.50	ND	
2,2-Dichloropropane	0.15	0.50	ND	
Bromochloromethane	0.20	0.50	ND	
Chloroform	0.13	0.50	ND	
Carbon Tetrachloride	0.15	0.50	ND	
1,1,1-Trichloroethane	0.097	0.50	ND	
1,1-Dichloropropene	0.15	0.50	ND	
Benzene	0.13	0.50	ND	
TAME	0.17	0.50	ND	
1,2-Dichloroethane	0.14	0.50	ND	
Trichloroethylene	0.13	0.50	ND	
Dibromomethane	0.15	0.50	ND	
1,2-Dichloropropane	0.17	0.50	ND	
Bromodichloromethane	0.13	0.50	ND	
cis-1,3-Dichloropropene	0.096	0.50	ND	
Toluene	0.14	0.50	ND	
Tetrachloroethylene	0.14	0.50	ND	
trans-1,3-Dichloropropene	0.23	0.50	ND	
1,1,2-Trichloroethane	0.14	0.50	ND	
Dibromochloromethane	0.096	0.50	ND	
1,3-Dichloropropane	0.10	0.50	ND	
1,2-Dibromoethane	0.19	0.50	ND	
Chlorobenzene	0.14	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
1,1,1,2-Tetrachloroethane	0.096	0.50	ND	
m,p-Xylene	0.13	1.0	ND	
o-Xylene	0.15	0.50	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1401028	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	01/14/14	**Analytical Batch:**	418872
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Styrene	0.21	0.50	ND		
Bromoform	0.21	1.0	ND		
Isopropyl Benzene	0.097	0.50	ND		
Bromobenzene	0.15	0.50	ND		
1,1,2,2-Tetrachloroethane	0.11	0.50	ND		
n-Propylbenzene	0.078	0.50	ND		
2-Chlorotoluene	0.076	0.50	ND		
1,3,5,-Trimethylbenzene	0.074	0.50	ND		
4-Chlorotoluene	0.088	0.50	ND		
tert-Butylbenzene	0.081	0.50	ND		
1,2,3-Trichloropropane	0.14	0.50	ND		
1,2,4-Trimethylbenzene	0.083	0.50	ND		
sec-Butyl Benzene	0.092	0.50	ND		
p-Isopropyltoluene	0.093	0.50	ND		
1,3-Dichlorobenzene	0.10	0.50	ND		
1,4-Dichlorobenzene	0.069	0.50	ND		
n-Butylbenzene	0.081	0.50	ND		
1,2-Dichlorobenzene	0.057	0.50	ND		
1,2-Dibromo-3-Chloropropane	0.15	0.50	ND		
Hexachlorobutadiene	0.19	0.50	ND		
1,2,4-Trichlorobenzene	0.12	0.50	ND		
Naphthalene	0.14	1.0	ND		
1,2,3-Trichlorobenzene	0.23	0.50	ND		
(S) Dibromofluoromethane			118		
(S) Toluene-d8			111		
(S) 4-Bromofluorobenzene			109		
Ethanol	0.21	0.50	ND	TIC	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1401028	**Prep Method:**	3510_TPH	**Prep Date:**	01/13/14	**Prep Batch:**	10549
Matrix:	Water	**Analytical Method:**	SW8015B(M)	**Analyzed Date:**	01/13/14	**Analytical Batch:**	418853
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.0440	0.10	ND	1	88.2	89.1	1.02	50.3 - 125	30	
Pentacosane (S)			0.14	100	115	117		57.9 - 125		

Work Order:	1401028	**Prep Method:**	5030	**Prep Date:**	01/13/14	**Prep Batch:**	10566
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	01/13/14	**Analytical Batch:**	418859
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Gasoline	31	50	ND	238.1	99.6	118	17.1	52.4 - 127	30	
(S) 4-Bromofluorobenzene			94.7	11.9	95.7	97.0		41.5 - 125		

Work Order:	1401028	**Prep Method:**	5030	**Prep Date:**	01/14/14	**Prep Batch:**	10567
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	01/14/14	**Analytical Batch:**	418872
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Gasoline	31	50	46	238.1	98.2	118	18.7	52.4 - 127	30	
(S) 4-Bromofluorobenzene			106	11.9	105	108		41.5 - 125		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1401028	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	01/13/14	**Analytical Batch:**	418859
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.86	72.3	75.0	3.75	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.86	82.7	84.0	1.34	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.86	83.5	86.5	3.57	69.3 - 144	30	
Toluene	0.059	0.50	ND	17.86	80.8	80.9	0.395	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.86	85.2	86.4	1.53	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.9	118	120		61.2 - 131		
(S) Toluene-d8			ND	11.9	113	112		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.9	109	105		64.1 - 120		

Work Order:	1401028	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	01/14/14	**Analytical Batch:**	418872
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.86	112	86.1	26.1	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.86	120	97.0	21.1	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.86	120	100	18.1	69.3 - 144	30	
Toluene	0.059	0.50	ND	17.86	113	92.3	20.2	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.86	120	99.0	19.5	73.9 - 137	30	
(S) Dibromofluoromethane			ND	17.86	123	112		61.2 - 131		
(S) Toluene-d8			ND	17.86	116	104		75.1 - 127		
(S) 4-Bromofluorobenzene			0.40	17.86	110	99.5		64.1 - 120		

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg.m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Weber, Hayes & Associates

Project Name: Former Exxon/2X103.Q

Work Order No.: 1401028

Date and Time Received: 1/9/2014 17:09

Received By: ng

Physically Logged By: ldi

Checklist Completed By: ldi

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes			
Container/Temp Blank temperature in compliance?	Yes	Temperature:	8	°C
Water-VOA vials have zero headspace?	Yes			
Water-pH acceptable upon receipt?	N/A			

pH Checked by: n/a

pH Adjusted by: n/a

Torrent LABORATORY, INC.

Login Summary Report

Client ID: TL5105 Weber, Hayes & Associates

Project Name: Former Exxon/2X103.Q

Project # :

Report Due Date: 1/16/2014

QC Level:

TAT Requested: 5+ day:0

Date Received: 1/9/2014

Time Received: 17:09

Comments:

Work Order # : ***1401028***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
1401028-001A	MW-5	01/09/14	Water	02/23/14			EDF W_GCMS-GRO W_8260PetWHA	
Sample Note:	EDF, Pls. use MDL for any diluted samples. Analyze for BTEX ,Fuel Oxygenates, 1,2 DCA & EDB. Fuel Oxygenates include DIPE, TAME, ETBE, MTBE & TBA							
1401028-001B	MW-5	01/09/14	Water	02/23/14			W_TPHDO	
Sample Note:	TPHD only							
1401028-002A	MW-6	01/09/14	Water	02/23/14			W_GCMS-GRO W_8260PetWHA	
1401028-002B	MW-6	01/09/14	Water	02/23/14			W_TPHDO	
1401028-003A	RW-13	01/09/14	Water	02/23/14			W_8260PetWHA W_GCMS-GRO	
1401028-003B	RW-13	01/09/14	Water	02/23/14			W_TPHDO	
1401028-004A	RW-14	01/09/14	Water	02/23/14			W_8260PetWHA W_GCMS-GRO	
1401028-004B	RW-14	01/09/14	Water	02/23/14			W_TPHDO	
1401028-005A	RW-13-SPLIT	01/09/14	Water	02/23/14			W_8260PetWHA W_GCMS-GRO	
1401028-005B	RW-13-SPLIT	01/09/14	Water	02/23/14			W_TPHDO	
1401028-006A	RW-14-SPLIT	01/09/14	Water	02/23/14			W_8260PetWHA W_GCMS-GRO	
1401028-006B	RW-14-SPLIT	01/09/14	Water	02/23/14			W_TPHDO	

Torrent LABORATORY, INC.

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

CHAIN -OF-CUSTODY RECORD

1401028

1 OF 1

PROJECT NAME AND NUMBER: Former Exxon / 2X103.Q

SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attention: Jered Chaney

ELECTRONIC DELIVERABLE FORMAT: [x] YES [ ] NO

LABORATORY: Torrent

TURNAROUND TIME: 5 Day 72hr Rush

GLOBAL I.D.: T0600100538

Sampler: Josh Pritchard

Date: 1-9-14

	Field Point Name (Geo Tracker)	Sample Identification	Date Sampled	Matrix	SAMPLE CONTAINERS: 40 mL VOAs (preserved)	250 ml Poly Bottle	1 liter Amber	Liner Acetate or Brass	REQUESTED ANALYSIS: Total Petroleum Hydrocarbons: TPH-Diesel & Motor Oil w/ silica gel cleanup EPA Method # 8015B	TPH-D EPA Method# 8015	TPH-G EPA Method# 8260	Volatile Organics: MtBE EPA Method 8260	TBA EPA Method # 8260	BTEX EPA Method # 8260	Additional Analysis: Fuel Oxygenates EPA Method # 8260	1,2,DCA & EDB EPA Method # 8260
-001A/B	MW-5	~~MW-5~~ MW-5	1-9-14	W	2		1			X	X			X	X	X
-002A/B	MW-6	MW-6			2		1			X	X			X	X	X
-003A/B	RW-13	RW-13			2		1			X	X			X	X	X
-004A/B	RW-14	RW-14			2		1			X	X			X	X	X
-005A/B	RW-13 SPLIT	RW-13 SPLIT			2		1			X	X			X	X	X
-006A/B	RW-14 SPLIT	RW-14 SPLIT			2		1			X	X			X	X	X

	RELEASED BY:	Date & Time		RECEIVED BY:	Date & Time
1.)		1-9-14 1709	→	NAVEN G.	1-9-14 17:09
2.)			→		
3.)			→		
4.)			→		
5.)			→		

Temp 8°C

SAMPLE CONDITION: (circle 1)

1.)	Ambient	(Refrigerated)	Frozen
2.)	Ambient	Refrigerated	Frozen
3.)	Ambient	Refrigerated	Frozen
4.)	Ambient	Refrigerated	Frozen
5.)	Ambient	Refrigerated	Frozen

NOTES:

[x] Please use MDL (Minimum Detection Limit) for any diluted samples.

- Please produce and email an EDF of these results to lab@weber-hayes.com
- Fuel Oxygenates should only include DIPE, TAME, EtBE, MtBE & TBA

D/O

REC NG LI NG LBL LIR

JC\Fieldlog\FORMS - COC

1 of 1

Weber, Hayes and Associates

Weber, Hayes & Associates
120 Westgate Dr
Watsonville, CA 95076
Tel: 831-722-3580
Fax: 831-662-3100

RE: Former Exxon Station / 2X103.Q

Work Order No.: 1309106

Dear Jered Chaney:

Torrent Laboratory, Inc. received 10 sample(s) on September 20, 2013 for the analyses presented in the following Report.

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

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

Patti Sandrock
QA Officer

September 27, 2013
Date

Date: 9/27/2013

Client: Weber, Hayes & Associates

Project: Former Exxon Station / 2X103.Q

Work Order: 1309106

CASE NARRATIVE

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

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

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

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

MW-1 1309106-001

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	42	3.7	21	4500	ug/L
Toluene	SW8260B	8.4	0.50	4.2	9.6	ug/L
Ethyl Benzene	SW8260B	8.4	0.62	4.2	150	ug/L
m,p-Xylene	SW8260B	8.4	1.1	8.4	6.8	ug/L
tert-Butanol	SW8260B	8.4	13	42	98	ug/L
TPH as Gasoline	8260TPH	8.4	260	420	2900	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	1.5	mg/L

MW-2 1309106-002

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	42	3.7	21	1800	ug/L
Toluene	SW8260B	8.4	0.50	4.2	11	ug/L
Ethyl Benzene	SW8260B	8.4	0.62	4.2	300	ug/L
m,p-Xylene	SW8260B	8.4	1.1	8.4	8.7	ug/L
tert-Butanol	SW8260B	8.4	13	42	120	ug/L
TPH as Gasoline	8260TPH	8.4	260	420	4200	ug/L
TPH as Diesel	SW8015B(M)	2	0.0800	0.20	2.3	mg/L

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

MW-3 1309106-003

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Toluene	SW8260B	42	2.5	21	37	ug/L
Ethyl Benzene	SW8260B	42	3.1	21	990	ug/L
m,p-Xylene	SW8260B	42	5.6	42	110	ug/L
o-Xylene	SW8260B	42	3.2	21	8.1	ug/L
tert-Butanol	SW8260B	42	65	210	350	ug/L
TPH as Gasoline	8260TPH	42	1300	2100	6200	ug/L
Benzene	SW8260B	84	7.3	42	11000	ug/L
TPH as Diesel	SW8015B(M)	2	0.0800	0.20	3.0	mg/L

MW-4 1309106-004

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	42	3.7	21	6200	ug/L
Toluene	SW8260B	8.4	0.50	4.2	24	ug/L
Ethyl Benzene	SW8260B	8.4	0.62	4.2	420	ug/L
m,p-Xylene	SW8260B	8.4	1.1	8.4	49	ug/L
o-Xylene	SW8260B	8.4	0.64	4.2	13	ug/L
tert-Butanol	SW8260B	8.4	13	42	160	ug/L
TPH as Gasoline	8260TPH	8.4	260	420	4400	ug/L
TPH as Diesel	SW8015B(M)	2	0.0800	0.20	2.2	mg/L

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

MW-5 1309106-005

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	21	1.8	11	2200	ug/L
Toluene	SW8260B	21	1.2	11	47	ug/L
Ethyl Benzene	SW8260B	21	1.6	11	1200	ug/L
m,p-Xylene	SW8260B	21	2.8	21	47	ug/L
o-Xylene	SW8260B	21	1.6	11	3.1	ug/L
MTBE	SW8260B	21	3.6	11	790	ug/L
tert-Butanol	SW8260B	21	32	110	890	ug/L
TPH as Gasoline	8260TPH	21	660	1100	4400	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.54	mg/L

MW-6 1309106-006

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Gasoline	8260TPH	8.4	260	420	1700	ug/L
Benzene	SW8260B	8.4	0.73	4.2	130	ug/L
Toluene	SW8260B	8.4	0.50	4.2	0.66	ug/L
Ethyl Benzene	SW8260B	8.4	0.62	4.2	4.6	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.47	mg/L

RW-5 1309106-007

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Gasoline	8260TPH	1	31	50	390	ug/L
Benzene	SW8260B	4.2	0.37	2.1	510	ug/L
Toluene	SW8260B	4.2	0.25	2.1	3.9	ug/L
Ethyl Benzene	SW8260B	4.2	0.31	2.1	11	ug/L
m,p-Xylene	SW8260B	4.2	0.56	4.2	6.6	ug/L
o-Xylene	SW8260B	4.2	0.32	2.1	0.68	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.16	mg/L

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

RW-9 1309106-008

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Gasoline	8260TPH	21	660	1100	5900	ug/L
Benzene	SW8260B	42	3.7	21	4600	ug/L
Toluene	SW8260B	42	2.5	21	40	ug/L
Ethyl Benzene	SW8260B	42	3.1	21	8.4	ug/L
m,p-Xylene	SW8260B	42	5.6	42	8.7	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.37	mg/L

RW-13 1309106-009

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	1	0.087	0.50	84	ug/L
Toluene	SW8260B	1	0.059	0.50	1.1	ug/L
Ethyl Benzene	SW8260B	1	0.074	0.50	2.1	ug/L
m,p-Xylene	SW8260B	1	0.13	1.0	1.1	ug/L
tert-Butanol	SW8260B	1	1.5	5.0	10	ug/L
TPH as Gasoline	8260TPH	1	31	50	390	ug/L

RW-14 1309106-010

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	1	0.087	0.50	83	ug/L
Toluene	SW8260B	1	0.059	0.50	1.6	ug/L
Ethyl Benzene	SW8260B	1	0.074	0.50	2.4	ug/L
m,p-Xylene	SW8260B	1	0.13	1.0	1.1	ug/L
MTBE	SW8260B	1	0.17	0.50	5.5	ug/L
tert-Butanol	SW8260B	1	1.5	5.0	34	ug/L
TPH as Gasoline	8260TPH	1	31	50	170	ug/L
TPH as Diesel	SW8015B(M)	1	0.0400	0.10	0.15	mg/L

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-1	**Lab Sample ID:**	1309106-001A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 11:35		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	09/22/13	42	3.7	21	4500		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	42	61.2	131	103		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	42	75.1	127	126		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	42	64.1	120	125	S	%	417465	NA

NOTE: S - Surrogate out of limits. No corrective action required: surrogate not associated with reported compounds.

The results shown below are reported using their MDL.

Toluene	SW8260B	NA	09/22/13	8.4	0.50	4.2	9.6		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	8.4	0.62	4.2	150		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	8.4	1.1	8.4	6.8	J	ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	8.4	0.64	4.2	ND		ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	8.4	1.4	4.2	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	8.4	1.3	4.2	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	8.4	1.1	4.2	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	8.4	0.80	4.2	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	8.4	13	42	98		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	8.4	0.95	4.2	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	8.4	0.57	4.2	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	8.4	61.2	131	96.5		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	8.4	75.1	127	126		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	8.4	64.1	120	119		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	8.4	260	420	2900	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	8.4	41.5	125	84.7		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Reported TPH value includes amount due to discrete peak (Benzene) within range of C5-C12 quantified as gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-1	**Lab Sample ID:**	1309106-001B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 11:35		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/23/13	1	0.0400	0.10	1.5	x	mg/L	417481	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/23/13	1	64.2	123	95.0		%	417481	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-2	**Lab Sample ID:**	1309106-002A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 13:10		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	09/22/13	42	3.7	21	1800		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	42	61.2	131	102		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	42	75.1	127	127		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	42	64.1	120	125	S	%	417465	NA

NOTE: S - Surrogate out of limits. No corrective action required: surrogate not associated with reported compounds.

The results shown below are reported using their MDL.

Toluene	SW8260B	NA	09/22/13	8.4	0.50	4.2	11		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	8.4	0.62	4.2	300		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	8.4	1.1	8.4	8.7		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	8.4	0.64	4.2	ND		ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	8.4	1.4	4.2	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	8.4	1.3	4.2	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	8.4	1.1	4.2	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	8.4	0.80	4.2	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	8.4	13	42	120		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	8.4	0.95	4.2	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	8.4	0.57	4.2	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	8.4	61.2	131	88.9		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	8.4	75.1	127	122		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	8.4	64.1	120	112		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	8.4	260	420	4200	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	8.4	41.5	125	81.1		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-2	**Lab Sample ID:**	1309106-002B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 13:10		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/24/13	2	0.0800	0.20	2.3	x	mg/L	417482	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/24/13	2	64.2	123	86.4		%	417482	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-3	**Lab Sample ID:**	1309106-003A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 12:05		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
The results shown below are reported using their MDL.											
Toluene	SW8260B	NA	09/22/13	42	2.5	21	37		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	42	3.1	21	990		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	42	5.6	42	110		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	42	3.2	21	8.1	J	ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	42	7.2	21	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	42	6.4	21	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	42	5.3	21	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	42	4.0	21	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	42	65	210	350		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	42	4.7	21	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	42	2.8	21	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	42	61.2	131	91.2		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	42	75.1	127	127	S	%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	42	64.1	120	122	S	%	417465	NA

NOTE: S - Surrogate out of limits. No corrective action required: surrogate not associated with reported compounds.

Benzene	SW8260B	NA	09/22/13	84	7.3	42	11000		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	84	61.2	131	97.9		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	84	75.1	127	118		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	84	64.1	120	126	S	%	417465	NA

NOTE: S - Surrogate out of limits. No corrective action required: surrogate not associated with reported compounds.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	42	1300	2100	6200	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	42	41.5	125	81.7		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Reported TPH value due to discrete peak (Benzene) and non-target hydrocarbons within range of C5-C12 quantified as gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-3	**Lab Sample ID:**	1309106-003B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 12:05		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/24/13	2	0.0800	0.20	3.0	x	mg/L	417482	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/24/13	2	64.2	123	88.3		%	417482	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-4	**Lab Sample ID:**	1309106-004A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 11:15		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	09/22/13	42	3.7	21	6200		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	42	61.2	131	98.7		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	42	75.1	127	124		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	42	64.1	120	112		%	417465	NA
The results shown below are reported using their MDL.											
Toluene	SW8260B	NA	09/22/13	8.4	0.50	4.2	24		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	8.4	0.62	4.2	420		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	8.4	1.1	8.4	49		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	8.4	0.64	4.2	13		ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	8.4	1.4	4.2	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	8.4	1.3	4.2	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	8.4	1.1	4.2	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	8.4	0.80	4.2	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	8.4	13	42	160		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	8.4	0.95	4.2	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	8.4	0.57	4.2	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	8.4	61.2	131	91.2		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	8.4	75.1	127	125		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	8.4	64.1	120	116		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	8.4	260	420	4400	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	8.4	41.5	125	55.1		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Reported TPH value includes amount due to discrete peak (Benzene) and heavy end hydrocarbons within range of C5-C12 quantified as gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-4	**Lab Sample ID:**	1309106-004B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 11:15		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/24/13	2	0.0800	0.20	2.2	x	mg/L	417482	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/24/13	2	64.2	123	75.3		%	417482	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-5	**Lab Sample ID:**	1309106-005A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 9:45		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
The results shown below are reported using their MDL.											
Benzene	SW8260B	NA	09/22/13	21	1.8	11	2200		ug/L	417465	NA
Toluene	SW8260B	NA	09/22/13	21	1.2	11	47		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	21	1.6	11	1200		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	21	2.8	21	47		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	21	1.6	11	3.1	J	ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	21	3.6	11	790		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	21	3.2	11	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	21	2.7	11	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	21	2.0	11	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	21	32	110	890		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	21	2.4	11	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	21	1.4	11	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	21	61.2	131	97.2		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	21	75.1	127	126		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	21	64.1	120	114		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	21	660	1100	4400	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	21	41.5	125	70.4		%	417465	9749

NOTE: x- Although TPH as Gasoline constituents are present, sample chromatogram does not match pattern of reference Gasoline standard.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-5	**Lab Sample ID:**	1309106-005B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 9:45		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/23/13	1	0.0400	0.10	0.54	x	mg/L	417481	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/23/13	1	64.2	123	109		%	417481	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range lighter than diesel quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-6	**Lab Sample ID:**	1309106-006A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 10:20		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
The results shown below are reported using their MDL.											
Benzene	SW8260B	NA	09/22/13	8.4	0.73	4.2	130		ug/L	417465	NA
Toluene	SW8260B	NA	09/22/13	8.4	0.50	4.2	0.66	J	ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	8.4	0.62	4.2	4.6		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	8.4	1.1	8.4	ND		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	8.4	0.64	4.2	ND		ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	8.4	1.4	4.2	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	8.4	1.3	4.2	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	8.4	1.1	4.2	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	8.4	0.80	4.2	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	8.4	13	42	ND		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	8.4	0.95	4.2	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	8.4	0.57	4.2	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	8.4	61.2	131	114		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	8.4	75.1	127	122		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	8.4	64.1	120	126	S	%	417465	NA

NOTE: Sample was analyzed with dilution due to sample matrix (foamy). S - Surrogate out of limits. No corrective action required: surrogate not associated with reported compounds.

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	8.4	260	420	1700	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	8.4	41.5	125	64.9		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	MW-6	**Lab Sample ID:**	1309106-006B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 10:20		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/23/13	1	0.0400	0.10	0.47	x	mg/L	417481	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/23/13	1	64.2	123	104		%	417481	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range lighter than diesel quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-5	**Lab Sample ID:**	1309106-007A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 12:45		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
The results shown below are reported using their MDL.											
Benzene	SW8260B	NA	09/22/13	4.2	0.37	2.1	510		ug/L	417465	NA
Toluene	SW8260B	NA	09/22/13	4.2	0.25	2.1	3.9		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	4.2	0.31	2.1	11		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	4.2	0.56	4.2	6.6		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	4.2	0.32	2.1	0.68	J	ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	4.2	0.72	2.1	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	4.2	0.64	2.1	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	4.2	0.53	2.1	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	4.2	0.40	2.1	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	4.2	6.5	21	ND		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	4.2	0.47	2.1	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	4.2	0.28	2.1	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	4.2	61.2	131	94.4		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	4.2	75.1	127	122		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	4.2	64.1	120	108		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/27/13	09/27/13	1	31	50	390	x	ug/L	417553	9752
(S) 4-Bromofluorobenzene	8260TPH	9/27/13	09/27/13	1	41.5	125	77.9		%	417553	9752

NOTE: x - Does not match pattern of reference Gasoline standard. Reported value due to discrete peak (Benzene) within range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-5	**Lab Sample ID:**	1309106-007B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 12:45		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/23/13	1	0.0400	0.10	0.16	x	mg/L	417481	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/23/13	1	64.2	123	94.0		%	417481	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-9	**Lab Sample ID:**	1309106-008A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 10:50		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
The results shown below are reported using their MDL.											
Benzene	SW8260B	NA	09/22/13	42	3.7	21	4600		ug/L	417465	NA
Toluene	SW8260B	NA	09/22/13	42	2.5	21	40		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	42	3.1	21	8.4	J	ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	42	5.6	42	8.7	J	ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	42	3.2	21	ND		ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	42	7.2	21	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	42	6.4	21	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	42	5.3	21	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	42	4.0	21	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	42	65	210	ND		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	42	4.7	21	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	42	2.8	21	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	42	61.2	131	65.4		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	42	75.1	127	127	S	%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	42	64.1	120	118		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	21	660	1100	5900	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	21	41.5	125	57.9		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Reported TPH value due to discrete peak (Benzene) within range of C5-C12 quantified as gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-9	**Lab Sample ID:**	1309106-008B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 10:50		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/23/13	1	0.0400	0.10	0.37	x	mg/L	417481	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/23/13	1	64.2	123	89.2		%	417481	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-13	**Lab Sample ID:**	1309106-009A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 14:30		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	09/22/13	1	0.087	0.50	84		ug/L	417465	NA
Toluene	SW8260B	NA	09/22/13	1	0.059	0.50	1.1		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	1	0.074	0.50	2.1		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	1	0.13	1.0	1.1		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	1	0.076	0.50	ND		ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	1	0.17	0.50	ND		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	1	0.15	0.50	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	1	0.13	0.50	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	1	0.095	0.50	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	1	1.5	5.0	10		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	1	0.11	0.50	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	1	0.068	0.50	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	1	61.2	131	85.5		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	1	75.1	127	126		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	1	64.1	120	119		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	1	31	50	390	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	1	41.5	125	90.0		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-13	**Lab Sample ID:**	1309106-009B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 / 14:30		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/23/13	1	0.0400	0.10	ND		mg/L	417481	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/23/13	1	64.2	123	97.9		%	417481	9709

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-14	**Lab Sample ID:**	1309106-010A
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 /		
Tag Number:	Former Exxon/2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
Benzene	SW8260B	NA	09/22/13	1	0.087	0.50	83		ug/L	417465	NA
Toluene	SW8260B	NA	09/22/13	1	0.059	0.50	1.6		ug/L	417465	NA
Ethyl Benzene	SW8260B	NA	09/22/13	1	0.074	0.50	2.4		ug/L	417465	NA
m,p-Xylene	SW8260B	NA	09/22/13	1	0.13	1.0	1.1		ug/L	417465	NA
o-Xylene	SW8260B	NA	09/22/13	1	0.076	0.50	ND		ug/L	417465	NA
MTBE	SW8260B	NA	09/22/13	1	0.17	0.50	5.5		ug/L	417465	NA
Diisopropyl ether (DIPE)	SW8260B	NA	09/22/13	1	0.15	0.50	ND		ug/L	417465	NA
ETBE	SW8260B	NA	09/22/13	1	0.13	0.50	ND		ug/L	417465	NA
TAME	SW8260B	NA	09/22/13	1	0.095	0.50	ND		ug/L	417465	NA
tert-Butanol	SW8260B	NA	09/22/13	1	1.5	5.0	34		ug/L	417465	NA
1,2-Dichloroethane	SW8260B	NA	09/22/13	1	0.11	0.50	ND		ug/L	417465	NA
1,2-Dibromoethane	SW8260B	NA	09/22/13	1	0.068	0.50	ND		ug/L	417465	NA
(S) Dibromofluoromethane	SW8260B	NA	09/22/13	1	61.2	131	90.9		%	417465	NA
(S) Toluene-d8	SW8260B	NA	09/22/13	1	75.1	127	119		%	417465	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	09/22/13	1	64.1	120	117		%	417465	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Gasoline	8260TPH	9/22/13	09/22/13	1	31	50	170	x	ug/L	417465	9749
(S) 4-Bromofluorobenzene	8260TPH	9/22/13	09/22/13	1	41.5	125	82.9		%	417465	9749

NOTE: x - Does not match pattern of reference Gasoline standard. Hydrocarbons in the range of C5-C12 quantified as Gasoline.

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 09/20/13
Date Reported: 09/27/13

Client Sample ID:	RW-14	**Lab Sample ID:**	1309106-010B
Project Name/Location:	Former Exxon Station / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:	2X103.Q		
Date/Time Sampled:	09/20/13 /		
Tag Number:	Former Exxon Station / 2X103.Q		

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	9/23/13	09/23/13	1	0.0400	0.10	0.15	x	mg/L	417481	9709
Pentacosane (S)	SW8015B(M)	9/23/13	09/23/13	1	64.2	123	106		%	417481	9709

NOTE: x- Chromatographic pattern does not resemble typical diesel reference standard; unknown organics within diesel range quantified as diesel.

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1309106	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	09/22/13	**Analytical Batch:**	417465
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.18	0.50	ND	
Chloromethane	0.16	0.50	ND	
Vinyl Chloride	0.16	0.50	ND	
Bromomethane	0.18	0.50	ND	
Trichlorofluoromethane	0.18	0.50	ND	
1,1-Dichloroethene	0.15	0.50	ND	
Freon 113	0.19	0.50	ND	
Methylene Chloride	0.23	5.0	ND	
trans-1,2-Dichloroethene	0.19	0.50	ND	
MTBE	0.17	0.50	ND	
tert-Butanol	1.5	5.0	ND	
Diisopropyl ether (DIPE)	0.13	0.50	ND	
1,1-Dichloroethane	0.13	0.50	ND	
ETBE	0.17	0.50	ND	
cis-1,2-Dichloroethene	0.19	0.50	ND	
2,2-Dichloropropane	0.15	0.50	ND	
Bromochloromethane	0.20	0.50	ND	
Chloroform	0.13	0.50	ND	
Carbon Tetrachloride	0.15	0.50	ND	
1,1,1-Trichloroethane	0.097	0.50	ND	
1,1-Dichloropropene	0.15	0.50	ND	
Benzene	0.13	0.50	ND	
TAME	0.17	0.50	ND	
1,2-Dichloroethane	0.14	0.50	ND	
Trichloroethylene	0.13	0.50	ND	
Dibromomethane	0.15	0.50	ND	
1,2-Dichloropropane	0.17	0.50	ND	
Bromodichloromethane	0.13	0.50	ND	
cis-1,3-Dichloropropene	0.096	0.50	ND	
Toluene	0.14	0.50	ND	
Tetrachloroethylene	0.14	0.50	ND	
trans-1,3-Dichloropropene	0.23	0.50	ND	
1,1,2-Trichloroethane	0.14	0.50	ND	
Dibromochloromethane	0.096	0.50	ND	
1,3-Dichloropropane	0.10	0.50	ND	
1,2-Dibromoethane	0.19	0.50	ND	
Chlorobenzene	0.14	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
1,1,1,2-Tetrachloroethane	0.096	0.50	ND	
m,p-Xylene	0.13	1.0	ND	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1309106	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	09/22/13	**Analytical Batch:**	417465
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
o-Xylene	0.15	0.50	ND	
Styrene	0.21	0.50	ND	
Bromoform	0.21	1.0	ND	
Isopropyl Benzene	0.097	0.50	ND	
Bromobenzene	0.15	0.50	ND	
1,1,2,2-Tetrachloroethane	0.11	0.50	ND	
n-Propylbenzene	0.078	0.50	ND	
2-Chlorotoluene	0.076	0.50	ND	
1,3,5,-Trimethylbenzene	0.074	0.50	ND	
4-Chlorotoluene	0.088	0.50	ND	
tert-Butylbenzene	0.081	0.50	ND	
1,2,3-Trichloropropane	0.14	0.50	ND	
1,2,4-Trimethylbenzene	0.083	0.50	ND	
sec-Butyl Benzene	0.092	0.50	ND	
p-Isopropyltoluene	0.093	0.50	ND	
1,3-Dichlorobenzene	0.10	0.50	ND	
1,4-Dichlorobenzene	0.069	0.50	ND	
n-Butylbenzene	0.081	0.50	ND	
1,2-Dichlorobenzene	0.057	0.50	ND	
1,2-Dibromo-3-Chloropropane	0.15	0.50	ND	
Hexachlorobutadiene	0.19	0.50	ND	
1,2,4-Trichlorobenzene	0.12	0.50	ND	
Naphthalene	0.14	1.0	ND	
1,2,3-Trichlorobenzene	0.23	0.50	ND	
(S) Dibromofluoromethane			92.1	
(S) Toluene-d8			119	
(S) 4-Bromofluorobenzene			115	
Ethanol	0.21	0.50	ND	TIC

Work Order:	1309106	**Prep Method:**	3510_TPH	**Prep Date:**	09/23/13	**Prep Batch:**	9709
Matrix:	Water	**Analytical Method:**	SW8015B(M)	**Analyzed Date:**	09/23/13	**Analytical Batch:**	417481
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Diesel	0.0440	0.10	0.056	
TPH as Motor Oil	0.0920	0.40	0.13	
Pentacosane (S)			117	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1309106	**Prep Method:**	5030	**Prep Date:**	09/22/13	**Prep Batch:**	9749
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	09/22/13	**Analytical Batch:**	417465
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Gasoline	31	50	ND	
(S) 4-Bromofluorobenzene			65.1	

Work Order:	1309106	**Prep Method:**	5030	**Prep Date:**	09/27/13	**Prep Batch:**	9752
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	09/27/13	**Analytical Batch:**	417553
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Gasoline	31	50	ND	
(S) 4-Bromofluorobenzene			85.8	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1309106	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	09/22/13	**Analytical Batch:**	417465
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.86	90.8	92.9	2.38	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.86	79.8	83.2	4.51	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.86	86.0	82.5	4.41	69.3 - 144	30	
Toluene	0.059	0.50	ND	17.86	93.8	112	17.1	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.86	82.3	98.5	17.9	73.9 - 137	30	
(S) Dibromofluoromethane			ND	17.86	68.4	72.8		61.2 - 131		
(S) Toluene-d8			ND	17.86	84.6	101		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	17.86	85.3	83.2		64.1 - 120		

Work Order:	1309106	**Prep Method:**	3510_TPH	**Prep Date:**	09/23/13	**Prep Batch:**	9709
Matrix:	Water	**Analytical Method:**	SW8015B(M)	**Analyzed Date:**	09/23/13	**Analytical Batch:**	417481
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.0440	0.10	0.056	1	100	98.3	2.19	50.3 - 125	30	
Pentacosane (S)			0.13	100	102	102		57.9 - 125		

Work Order:	1309106	**Prep Method:**	5030	**Prep Date:**	09/22/13	**Prep Batch:**	9749
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	09/22/13	**Analytical Batch:**	417465
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Gasoline	31	50	ND	238.1	82.5	92.2	11.1	52.4 - 127	30	
(S) 4-Bromofluorobenzene			65.1	11.9	75.3	80.6		41.5 - 125		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1309106	**Prep Method:**	5030	**Prep Date:**	09/27/13	**Prep Batch:**	9752
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	09/27/13	**Analytical Batch:**	417553
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Gasoline	31	50	ND	238.1	117	111	5.59	52.4 - 127	30	
(S) 4-Bromofluorobenzene			85.8	11.9	79.4	111		41.5 - 125		

Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit (PQL) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - **mg/L** and ***mg/Kg*** (equivalent to PPM - parts per million in **liquid** and ***solid***), **ug/L** and ***ug/Kg*** (equivalent to PPB - parts per billion in **liquid** and ***solid***), **ug/m3**, ***mg.m3***, **ppbv** and ***ppmv*** (all units of measure for reporting concentrations in air), **%** (equivalent to 10000 ppm or 1,000,000 ppb), **ug/Wipe** (concentration found on the surface of a single Wipe usually taken over a 100cm2 surface)

LABORATORY QUALIFIERS:

B - Indicates when the anlayte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.

Sample Receipt Checklist

Client Name: Weber, Hayes & Associates

Project Name: Former Exxon Station / 2X103.Q

Work Order No.: 1309106

Date and Time Received: 9/20/2013 15:55

Received By: ng

Physically Logged By: ng

Checklist Completed By: ng

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	Yes
Chain of custody signed when relinquished and received?	Yes
Chain of custody agrees with sample labels?	Yes
Custody seals intact on sample bottles?	Not Present

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Not Present
Shipping Container/Cooler In Good Condition?	Yes
Samples in proper container/bottle?	Yes
Samples containers intact?	Yes
Sufficient sample volume for indicated test?	Yes

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes			
Container/Temp Blank temperature in compliance?	No	Temperature:	13	°C
Water-VOA vials have zero headspace?	Yes			
Water-pH acceptable upon receipt?	N/A			

pH Checked by: n/a

pH Adjusted by: n/a

Samples received in a cooler with ice at 13 deg C. Chilling begun.

Torrent LABORATORY, INC.

Login Summary Report

Client ID: TL5105 Weber, Hayes & Associates

Project Name: Former Exxon Station / 2X103.Q

Project # : 2X103.Q

Report Due Date: 9/27/2013

QC Level:

TAT Requested: 5+ day:0

Date Received: 9/20/2013

Time Received: 15:55

Comments:

Work Order # : ***1309106***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
1309106-001A	MW-1	09/20/13 11:35	Water	11/04/13			EDF W_8260PetWHA W_GCMS-GRO	
Sample Note:	Please use MDL for any diluted samples. Tests: TPHd, BTEX, Oxygenates-including MTBE, DIPE, TAME, ETBE, TBA, Lead Scavengers. Report format: EDF.							
1309106-001B	MW-1	09/20/13 11:35	Water	11/04/13			W_TPHDO	
1309106-002A	MW-2	09/20/13 13:10	Water	11/04/13			W_8260PetWHA W_GCMS-GRO	
1309106-002B	MW-2	09/20/13 13:10	Water	11/04/13			W_TPHDO	
1309106-003A	MW-3	09/20/13 12:05	Water	11/04/13			W_8260PetWHA W_GCMS-GRO	
1309106-003B	MW-3	09/20/13 12:05	Water	11/04/13			W_TPHDO	
1309106-004A	MW-4	09/20/13 11:15	Water	11/04/13			W_8260PetWHA W_GCMS-GRO	
1309106-004B	MW-4	09/20/13 11:15	Water	11/04/13			W_TPHDO	
1309106-005A	MW-5	09/20/13 9:45	Water	11/04/13			W_8260PetWHA W_GCMS-GRO	
1309106-005B	MW-5	09/20/13 9:45	Water	11/04/13			W_TPHDO	
1309106-006A	MW-6	09/20/13 10:20	Water	11/04/13			W_8260PetWHA W_GCMS-GRO	
1309106-006B	MW-6	09/20/13 10:20	Water	11/04/13			W_TPHDO	
1309106-007A	RW-5	09/20/13 12:45	Water	11/04/13			W_8260PetWHA W_GCMS-GRO	

Login Summary Report

Client ID: TL5105 Weber, Hayes & Associates

Project Name: Former Exxon Station / 2X103.Q

Project # : 2X103.Q

Report Due Date: 9/27/2013

QC Level:

TAT Requested: 5+ day:0

Date Received: 9/20/2013

Time Received: 15:55

Comments:

Work Order # : ***1309106***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
1309106-007B	RW-5	09/20/13 12:45	Water	11/04/13			W_TPHDO	
1309106-008A	RW-9	09/20/13 10:50	Water	11/04/13			W_8260PetWHA W_GCMS-GRO	
1309106-008B	RW-9	09/20/13 10:50	Water	11/04/13			W_TPHDO	
1309106-009A	RW-13	09/20/13 14:30	Water	11/04/13			W_GCMS-GRO W_8260PetWHA	
1309106-009B	RW-13	09/20/13 14:30	Water	11/04/13			W_TPHDO	
1309106-010A	RW-14	09/20/13	Water	11/04/13			W_GCMS-GRO W_8260PetWHA	
1309106-010B	RW-14	09/20/13	Water	11/04/13			W_TPHDO	

Torrent LABORATORY, INC.

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

CHAIN -OF-CUSTODY RECORD

1309106 1 OF 1

PROJECT NAME AND NUMBER: Former Exxon Station / 2X103.Q
SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attention: Jered Chaney
ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

LABORATORY: Torrent
TURNAROUND TIME: (5 Day) 72hr Rush
GLOBAL I.D.:

Sampler: Josh Pritchard
Date: 9-20-13

	Field Point Name (Geo Tracker)	Sample Identification	Date Sampled	Matrix	SAMPLE CONTAINERS 40 mL VOAs (preserved)	250 ml Poly Bottle	1 liter Amber	Liner Acetate or Brass	REQUESTED ANALYSIS: Total Petroleum Hydrocarbons TPH-Diesel & Motor Oil w/ silica gel cleanup EPA Method # 8015B	TPH-D EPA Method# 8015	TPH-G EPA Method# 8260	Volatile Organics MtBE EPA Method 8260	TBA EPA Method # 8260	BTEX EPA Method # 8260	Additional Analysis Fuel Oxygenates EPA Method # 8260	Lead Scavengers EPA Method # 8260
001A/B	MW-1	MW-1	9-20-13	AA	3		1			X	X			X	X	X
002A/B	MW-2	MW-2			3		1			X	X			X	X	X
003A/B	MW-3	MW-3			3		1			X	X			X	✓	X
004A/B	MW-4	MW-4			3		1			X	X			X	X	X
005A/B	MW-5	MW-5			3		1			X	X			X	✓	X
006A/B	MW-6	MW-6			3		1			X	X			X	X	X
007A/B	RW-5	RW-5			3		1			X	X			X	✓	X
008A/B	RW-9	RW-9			3		1			X	X			X	X	X
009A/B	RW-13	RW-13			3		1			X	X			X	X	X
010A/B	RW-14	RW-14	↓	↓	3		1			X	X			X	X	X

	RELEASED BY:	Date & Time		RECEIVED BY:	Date & Time
1.)		9-20-13 1555	→		9/20/13 15:55
2.)			→		
3.)			→		
4.)			→		
5.)			→		

SAMPLE CONDITION: (circle 1)

Ambient	(Refrigerated)	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen

NOTES:

[X] Please use MDL (Minimum Detection Limit) for any diluted samples.

- Fuel Oxygenates should only include DIPE, TAME, EtBE, MtBE, & TBA
- Please produce and email an EDF of these results to lab@weber-hayes.com

D/O.

JC/Fieldog/FORMS - COC 9/20/13

1 of 1

Weber, Hayes and Associates

Appendix D

Select Agency Documentation

SWRCB's *Impediments to Closure,*
And the
Low Threat Underground Storage Tank Case Closure Policy Checklist

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

Submittal Type:	**GEO_REPORT**
Report Title:	**2013 Annual Groundwater Monitoring Report**
Report Type:	**Monitoring Report - Annually**
Report Date:	**6/28/2015**
Facility Global ID:	**T0600100538**
Facility Name:	**EXXON**
File Name:	**2014-03_ Annual GW Monitoring Rpt (2013).pdf**
Organization Name:	**Weber, Hayes & Associates**
Username:	**WEBERHAYES**
IP Address:	**99.57.189.230**
Submittal Date/Time:	**6/28/2015 7:00:09 PM**
Confirmation Number:	**3906015753**

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

EXXON (T0600100538) - (MAP)

SIGN UP FOR EMAIL ALERTS

3055 35TH AVE.
OAKLAND, CA 94619
ALAMEDA COUNTY
LUST CLEANUP SITE
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000271
CASEWORKER: KEITH NOWELL
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0585
CASEWORKER: Cherie McCaulou

CUF Claim #:	1275
CUF Priority Assigned:	B
CUF Amount Paid:	$1,091,468

PATH TO CLOSURE PLAN FY 12/13 AS OF 6/25/2015 BACK TO LTCP CHECKLIST

IMPEDIMENT 1:

General Criteria E: A conceptual site model that assesses the nature, extent, and mobility of the release has NOT been developed

Step to Resolve Impediment 1 - Step 1:
See Media Specific Criteria: Groundwater for description of additional steps to closure.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
1/30/2017	

IMPEDIMENT 2:

General Criteria F: Secondary source has NOT been removed to the extent practicable

Step to Resolve Impediment 2 - Step 1:
See Media Specific Criteria: No excavation beneath fuel dispensers.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
1/30/2017	

IMPEDIMENT 3:

Media-Specific Criteria: Groundwater: The contaminant plume that exceeds water quality objectives is NOT stable or decreasing in areal extent, and does NOT meet all of the additional characteristics of one of the five classes of sites.

Conditions that do not meet the policy criteria:
- Plume Length (That Exceeds Water Quality Objectives): Unknown
- Plume is Stable or Decreasing in AREAL Extent: Unknown
- Free Product in Groundwater: No
- Benzene Concentration: ≥ 3,000 µg/l
- MTBE Concentration: ≥ 1,000 µg/l
- Nearest Surface Water Body (From Plume Boundary): > 250 Feet and ≤ 1,000 Feet

Step to Resolve Impediment 3 - Step 1:
ESI submittals & Meeting (2 months) Work plan for site characterization to meet LCTP criteria(3 months), Site characterization (6 months), If site characterization indicates no additional work is needed... review for case closure (2 months) closure proceedings (6 months) Closure requirements along path to closure (6 months)

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
1/30/2017	

IMPEDIMENT 4:

Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air: The site is NOT considered low-threat for the vapor-intrusion-to-air pathway and site-specific conditions do NOT satisfy items 2a, 2b, or 2c .

Conditions that do not meet the policy criteria:
- Exposure Type: Residential
- TPH in the Bioattenuation Zone: ≥ 100 mg/kg
- Bioattenuation Zone Thickness: ≥ 10 Feet and < 30 Feet
- O2 Data in Bioattenuation Zone: O_2 < 4%
- Benzene in Groundwater: ≥ 1,000 µg/l
- Soil Gas Benzene: ≥ 280 µg/m^3 and < 85,000 µg/m^3
- Soil Gas EthylBenzene: Unknown
- Soil Gas Naphthalene: Unknown

Step to Resolve Impediment 4 - Step 1:
See Media Specific Criteria: Groundwater for description of additional steps to closure.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
1/30/2017	

IMPEDIMENT 5:

Media Specific Criteria: Direct Contact and Outdoor Air Exposure: The site is NOT considered low-threat for direct contact and outdoor air exposure as it does NOT meet 1, 2, or 3.

Conditions that do not meet the policy criteria:

- Exposure Type: Residential
- Petroleum Constituents in Soil: >5 Feet bgs and ≤10 Feet bgs
- Soil Concentrations of Naphthalene: Unknown
- Soil Concentrations of PAH: Unknown

Step to Resolve Impediment 5 - Step 1:

See Media Specific Criteria: Groundwater for description of additional steps to closure.

COMPLETION DATE	
PROJECTED DATE	ACTUAL DATE
1/30/2017	

REQUIREMENTS ALONG PATH TO CLOSURE

DATE IDENTIFIED FOR CLOSURE	CLOSURE INITIATED BY	RP NOTIFICATION DATE	PUBLIC PARTICIPATION COMPLETION DATE	WELL DESTRUCTION LETTER DATE	WELL DESTRUCTION DATE	WASTE DISPOSAL DATE	LAND USE RESTRICTION DATE	SITE CLOSURE DATE

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

EXXON (T0600100538) - (MAP)

SIGN UP FOR EMAIL ALERTS

3055 35TH AVE.
OAKLAND, CA 94619
ALAMEDA COUNTY
LUST CLEANUP SITE
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000271
CASEWORKER: KEITH NOWELL
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0585
CASEWORKER: Cherie McCaulou

CUF Claim #:	1275
CUF Priority Assigned:	B
CUF Amount Paid:	$1,091,468

LTCP CHECKLIST AS OF 6/25/2015

VIEW PATH TO CLOSURE PLAN BACK TO CASE SUMMARY

General Criteria - The site satisfies the policy general criteria	NO
a. Is the unauthorized release located within the service area of a public water system? Name of Water System : EBMUD	YES
b. The unauthorized release consists only of petroleum (info).	YES
c. The unauthorized ("primary") release from the UST system has been stopped.	YES
d. Free product has been removed to the maximum extent practicable (info).	YES
e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed (info). Description: - Groundwater Assessment Incomplete - Areal Extent of Contamination Not Defined - Groundwater Assessment Incomplete - Depth of Contamination Not Defined - Potential Receptors Not Identified	NO
f. Secondary source has been removed to the extent practicable (info). Impediment to Removing Secondary Source: - Remediation Was Designed Incorrectly	NO
g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15.	YES
h. Does a nuisance exist, as defined by Water Code section 13050.	NO

1. Media-Specific Criteria: Groundwater - The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent, and meets all of the additional characteristics of one of the five classes of sites listed below.	NO
EXEMPTION - Soil Only Case (Release has not Affected Groundwater - Info)	NO
Does the site meet any of the Groundwater specific criteria scenarios?	NO

ADDITIONAL QUESTIONS - The following conditions exist that do not meet the policy criteria:

Plume Length (That Exceeds Water Quality Objectives) :
- Unknown

Plume is Stable or Decreasing in AREAL Extent :
- Unknown

Free Product in Groundwater :
- No

Benzene Concentration :
- ≥ 3,000 µg/l

MTBE Concentration :
- ≥ 1,000 µg/l

Nearest Surface Water Body (From Plume Boundary) :
- > 250 Feet and ≤ 1,000 Feet

2. Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air - The site is considered low-threat for the vapor-intrusion-to-air pathway if site-specific conditions satisfy items 2a, 2b, or 2c	NO
EXEMPTION - Active Commercial Petroleum Fueling Facility	NO
Does the site meet any of the Petroleum Vapor Intrusion to Indoor Air specific criteria scenarios?	NO

ADDITIONAL QUESTIONS - The following conditions exist that do not meet the policy criteria:

Exposure Type :
- Residential

TPH in the Bioattenuation Zone :
- ≥ 100 mg/kg

Bioattenuation Zone Thickness :
- ≥ 10 Feet and < 30 Feet

O2 Data in Bioattenuation Zone :
- O_2 < 4%

Benzene in Groundwater :
- ≥ 1,000 µg/l

Soil Gas Benzene :
- ≥ 280 µg/m^3 and < 85,000 µg/m^3

Soil Gas EthylBenzene :
- Unknown

Soil Gas Naphthalene :
- Unknown

3. Media Specific Criteria: Direct Contact and Outdoor Air Exposure - The site is considered low-threat for direct contact and outdoor air exposure if it meets 1, 2, or 3 below.	NO
EXEMPTION - The upper 10 feet of soil is free of petroleum contamination	NO
Does the site meet any of the Direct Contact and Outdoor Air Exposure criteria scenarios?	NO

ADDITIONAL QUESTIONS - The following conditions exist that do not meet the policy criteria:

Exposure Type :
- Residential

Petroleum Constituents in Soil :
- >5 Feet bgs and ≤10 Feet bgs

Soil Concentrations of Naphthalene :
- Unknown

Soil Concentrations of PAH :
- Unknown

Additional Information	
Should this case be closed in spite of NOT meeting policy criteria?	NO

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

CASE SUMMARY

REPORT DATE	HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?
1/17/1991	N

I. REPORTED BY -

UNKNOWN

CREATED BY

UNKNOWN

III. SITE LOCATION

FACILITY NAME
EXXON

FACILITY ID

FACILITY ADDRESS
3055 35TH AVE.
Oakland, CA 94619
ALAMEDA COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET
School St.

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

BENZENE
GASOLINE

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED	HOW DISCOVERED	DESCRIPTION
1/17/1991	Tank Closure	

DATE STOPPED	STOP METHOD	DESCRIPTION
1/17/1991	Close and Remove Tank	

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE
U

CAUSE OF DISCHARGE
U

DISCHARGE DESCRIPTION

VIII. CASE TYPE

CASE TYPE
Soil
Other Groundwater (uses other than drinking water)
Soil Vapor

IX. REMEDIAL ACTION

REMEDIAL ACTION	BEGIN DATE	END DATE	DESCRIPTION
In Situ Physical/Chemical Treatment (other than SVE)	9/1/2000	9/1/2004	

X. GENERAL COMMENTS

Five USTs were removed by an unlicensed contractor. Investigation was performed beginning in 1991 to verify and investigate the extent of petroleum hydrocarbons. Maximum concentrations of 2,100 mg/kg TPHg, 56 mg/kg benzene were detected in soil.
Site located in mixed use residential neighborhood. Monitoring wells subsequently installed at the site contained SPH and concentrations up to 925,000 µg/L TPHg and 22,000 µg/L benzene.
Site may be impacted by up gradient -off site sources.

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN
IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER	REGIONAL BOARD CASE NUMBER
RO0000271	01-0585

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
KEITH NOWELL	KEN	ALAMEDA COUNTY LOP	keith.nowell@acgov.org

ADDRESS
1131 Harbor Bay Parkway
ALAMEDA, CA 94502

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
PHONE	(510)-567-6764	

REGIONAL BOARD

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
Cherie McCaulou	CCM	SAN FRANCISCO BAY RWQCB (REGION 2)	cmccaulou@waterboards.ca.gov

ADDRESS
1515 CLAY STREET, SUITE 1400
OAKLAND, CA 94612

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
Front Desk	(510)-622-2300	

CSM REPORT FOR PUBLIC NOTICING

PROJECT INFORMATION (DATA PULLED FROM GEOTRACKER) - MAP THIS SITE

SITE NAME / ADDRESS	STATUS	STATUS DATE	RELEASE REPORT DATE	AGE OF CASE	CLEANUP OVERSIGHT AGENCIES
EXXON (Global ID: T0600100538) 3055 35TH AVE. OAKLAND, CA 94619	Open - Site Assessment	9/1/2004	1/17/1991	24	ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000271 CASEWORKER: KEITH NOWELL - SUPERVISOR: DILAN ROE SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0585 CASEWORKER: Cherie McCaulou - SUPERVISOR: Cheryl L. Prowell

SITE HISTORY

Five USTs were removed by an unlicensed contractor. Investigation was performed beginning in 1991 to verify and investigate the extent of petroleum hydrocarbons. Maximum concentrations of 2,100 mg/kg TPHg, 56 mg/kg benzene were detected in soil.

Site located in mixed use residential neighborhood. Monitoring wells subsequently installed at the site contained SPH and concentrations up to 925,000 µg/L TPHg and 22,000 µg/L benzene.

Site may be impacted by up gradient -off site sources.

CLEANUP ACTION INFO

ACTION TYPE	BEGIN DATE	END DATE	PHASE	CONTAMINANT MASS REMOVED	DESCRIPTION
IN SITU PHYSICAL/CHEMICAL TREATMENT (OTHER THAN SVE)	9/1/2000	9/1/2004	Other (See Description), Water	6,545 Pounds / 11 Pounds	

RISK INFORMATION

VIEW LTCP CHECKLIST | VIEW PATH TO CLOSURE PLAN | VIEW CASE REVIEWS

CONTAMINANTS OF CONCERN	CURRENT LAND USE	BENEFICIAL USE	DISCHARGE SOURCE	DATE REPORTED	STOP METHOD	NEARBY / IMPACTED WELLS
Benzene, Gasoline		GW - Municipal and Domestic Supply		1/17/1991	Close and Remove Tank	0

FREE PRODUCT	OTHER CONSTITUENTS	NAME OF WATER SYSTEM	LAST REGULATORY ACTIVITY	LAST ESI UPLOAD	LAST EDF UPLOAD	EXPECTED CLOSURE DATE	MOST RECENT CLOSURE REQUEST
NO	NO	EBMUD	6/25/2015	6/20/2014	2/3/2014		

CDPH WELLS WITHIN 1500 FEET OF THIS SITE

NONE

CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)

APN	GW BASIN NAME	WATERSHED NAME
027 089000602	Santa Clara Valley - East Bay Plain (2-9.04)	South Bay - East Bay Cities (204.20)

COUNTY: Alameda

PUBLIC WATER SYSTEM(S)
- EAST BAY MUD - 375 ELEVENTH STREET, OAKLAND, CA 94607

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN GROUNDWATER

VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
B-18A-30	10/31/2008	OTHER	23 UG/L	2.6 UG/L	5.9 UG/L	54 UG/L	ND	2.3 UG/L
B-21-30	11/4/2008	OTHER	ND	ND	ND	ND	170 UG/L	ND
B-22-30	11/3/2008	OTHER	ND	ND	ND	ND	ND	ND
B-23-30	11/3/2008	OTHER	ND	ND	ND	ND	ND	ND
B-24-30	11/7/2008	OTHER	ND	ND	ND	ND	1.2 UG/L	ND
B-25-30	11/7/2008	OTHER	ND	ND	ND	ND	12 UG/L	2.2 UG/L
B-26-30	11/6/2008	OTHER	ND	ND	ND	ND	0.54 UG/L	ND
B-27-30	11/6/2008	OTHER	ND	ND	ND	ND	150 UG/L	ND
B-28-30	11/6/2008	OTHER	ND	ND	ND	ND	29 UG/L	2.8 UG/L
MW-1	9/28/2012	OTHER	3100 UG/L	8.6 UG/L	110 UG/L	OTHER	ND	210 UG/L
MW-2	9/28/2012	OTHER	1900 UG/L	12 UG/L	270 UG/L	OTHER	42 UG/L	300 UG/L
MW-3	9/28/2012	OTHER	10000 UG/L	36 UG/L	860 UG/L	OTHER	87 UG/L	650 UG/L
MW-4	9/28/2012	OTHER	4700 UG/L	13 UG/L	200 UG/L	OTHER	34 UG/L	220 UG/L
MW-5	6/25/2013	OTHER	2700 UG/L	41 UG/L	860 UG/L	OTHER	980 UG/L	7800 UG/L
MW-6	6/25/2013	OTHER	250 UG/L	ND	5.6 UG/L	OTHER	ND	88 UG/L
RW-13	6/25/2013	OTHER	86 UG/L	1.7 UG/L	5.3 UG/L	OTHER	5.9 UG/L	110 UG/L
RW-14	6/25/2013	OTHER	65 UG/L	0.93 UG/L	1.5 UG/L	OTHER	ND	34 UG/L
RW-5	9/28/2012	OTHER	320 UG/L	1.3 UG/L	0.98 UG/L	OTHER	0.8 UG/L	5.7 UG/L
RW-9	9/28/2012	OTHER	980 UG/L	5.6 UG/L	2.2 UG/L	OTHER	7.4 UG/L	110 UG/L

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN SOIL

VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
B-18-10	10/29/2008		ND	ND	ND	0.023 MG/KG	ND	ND
B-18-12	10/29/2008		ND	1.2 MG/KG	ND	38 MG/KG	ND	ND
B-18-15	10/29/2008		6.1 MG/KG	4.3 MG/KG	11 MG/KG	53 MG/KG	ND	ND
B-18-20	10/29/2008		1.5 MG/KG	0.5 MG/KG	2 MG/KG	9.7 MG/KG	ND	ND
B-18-25	10/29/2008		ND	ND	ND	ND	ND	ND
B-18-30	10/29/2008		ND	ND	ND	ND	ND	ND

B-18-35	10/29/2008	ND	ND	ND	ND	ND	ND
B-18-40	10/29/2008	ND	ND	ND	ND	ND	ND
B-18-45	10/29/2008	0.0063 MG/KG	ND	ND	ND	ND	ND
B-18-5	10/29/2008	ND	ND	ND	ND	ND	ND
B-19-10	10/31/2008	ND	ND	ND	ND	ND	ND
B-19-13	10/31/2008	ND	0.23 MG/KG	0.17 MG/KG	0.39 MG/KG	ND	ND
B-19-15	10/31/2008	3.5 MG/KG	4.9 MG/KG	20 MG/KG	2.6 MG/KG	1.4 MG/KG	ND
B-19-17	10/31/2008	7.1 MG/KG	4.3 MG/KG	34 MG/KG	58 MG/KG	ND	ND
B-19-20	10/31/2008	0.3 MG/KG	0.15 MG/KG	0.93 MG/KG	0.61 MG/KG	ND	ND
B-19-25	10/31/2008	ND	ND	ND	ND	ND	ND
B-19-30	10/31/2008	ND	ND	ND	ND	ND	ND
B-19-35	10/31/2008	ND	ND	ND	ND	ND	ND
B-19-40	10/31/2008	ND	ND	ND	ND	ND	ND
B-19-44.5	10/31/2008	ND	ND	ND	ND	ND	ND
B-19-5	10/31/2008	ND	ND	ND	ND	ND	ND
B-20-11	10/30/2008	1.3 MG/KG	1.5 MG/KG	10 MG/KG	10 MG/KG	ND	ND
B-20-15	10/30/2008	0.39 MG/KG	0.13 MG/KG	0.52 MG/KG	0.25 MG/KG	ND	ND
B-20-19.5	10/30/2008	0.35 MG/KG	ND	0.11 MG/KG	0.068 MG/KG	ND	ND
B-20-24.5	10/30/2008	ND	ND	ND	ND	ND	ND
B-20-29.5	10/30/2008	ND	ND	ND	ND	ND	ND
B-20-35	10/30/2008	ND	ND	ND	ND	ND	ND
B-20-40	10/30/2008	ND	ND	ND	ND	ND	ND
B-20-44.5	10/30/2008	ND	ND	ND	ND	ND	ND
B-20-5	10/30/2008	ND	ND	ND	0.27 MG/KG	ND	ND
B-20-7.5	10/30/2008	0.09 MG/KG	0.058 MG/KG	1.4 MG/KG	0.94 MG/KG	ND	ND
B-20-9.5	10/30/2008	0.68 MG/KG	0.22 MG/KG	4.9 MG/KG	2.9 MG/KG	ND	ND
B-21-10	11/4/2008	ND	ND	ND	ND	ND	ND
B-21-12	11/4/2008	ND	ND	ND	ND	ND	ND
B-21-15	11/4/2008	ND	ND	ND	ND	ND	ND
B-21-20	11/4/2008	ND	ND	ND	ND	ND	ND
B-21-25	11/4/2008	ND	ND	ND	ND	ND	ND
B-21-29.5	11/4/2008	ND	ND	ND	ND	0.0064 MG/KG	ND
B-22-10	11/3/2008	ND	ND	ND	ND	ND	ND
B-22-15	11/3/2008	ND	ND	ND	ND	ND	ND
B-22-20	11/3/2008	ND	ND	ND	ND	ND	ND
B-22-25	11/3/2008	ND	ND	ND	ND	ND	ND
B-22-29.5	11/3/2008	ND	ND	ND	ND	ND	ND
B-22-5	11/3/2008	ND	ND	ND	ND	ND	ND
B-23-10	11/3/2008	ND	ND	ND	ND	ND	ND
B-23-15	11/3/2008	ND	ND	ND	ND	ND	ND
B-23-20	11/3/2008	ND	ND	ND	ND	ND	ND
B-23-25	11/3/2008	ND	ND	ND	ND	ND	ND
B-23-29.5	11/3/2008	ND	ND	ND	ND	ND	ND
B-23-5	11/3/2008	ND	ND	ND	ND	ND	ND
B-24-10	11/6/2008	ND	ND	ND	ND	ND	ND
B-24-15	11/6/2008	ND	ND	ND	ND	ND	ND
B-24-20	11/6/2008	ND	ND	ND	ND	ND	ND
B-24-25	11/6/2008	ND	ND	ND	ND	ND	ND
B-24-29.5	11/6/2008	ND	ND	ND	ND	ND	ND
B-24-5.5	11/6/2008	ND	ND	ND	ND	ND	ND
B-25-10	11/7/2008	ND	ND	ND	ND	ND	ND
B-25-15	11/7/2008	ND	ND	ND	ND	ND	ND
B-25-22	11/7/2008	ND	ND	ND	ND	ND	ND
B-25-25	11/7/2008	ND	ND	ND	ND	ND	ND
B-25-29.5	11/7/2008	ND	ND	ND	ND	ND	ND
B-25-5	11/6/2008	ND	ND	ND	ND	ND	ND
B-26-10	11/6/2008	ND	ND	ND	ND	ND	ND
B-26-15	11/6/2008	ND	ND	ND	ND	ND	ND
B-26-20	11/6/2008	ND	ND	ND	ND	ND	ND
B-26-25	11/6/2008	ND	ND	ND	ND	ND	ND
B-26-29.5	11/6/2008	ND	ND	ND	ND	ND	ND
B-26-5	11/5/2008	ND	ND	ND	ND	ND	ND
B-27-10	11/5/2008	ND	ND	ND	ND	ND	ND
B-27-15	11/5/2008	ND	ND	ND	ND	ND	ND
B-27-20	11/5/2008	ND	ND	ND	ND	ND	ND
B-27-25	11/5/2008	ND	ND	ND	ND	ND	ND
B-27-29.5	11/5/2008	ND	ND	ND	ND	ND	ND
B-28-10	11/5/2008	ND	ND	ND	ND	ND	ND
B-28-15	11/5/2008	ND	ND	ND	ND	ND	ND
B-28-20	11/5/2008	ND	ND	ND	ND	ND	ND
B-28-25	11/5/2008	ND	ND	ND	ND	ND	ND
B-28-29.5	11/5/2008	ND	ND	ND	ND	ND	ND
B-28-5	11/4/2008	ND	ND	ND	ND	ND	ND

MOST RECENT GEO_WELL DATA

VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	DEPTH TO WATER (FT)	SHEEN	DEPTH TO FREE PRODUCT (FT)
MW-1	6/25/2013	19.58	U	
MW-2	6/25/2013	18.47	U	
MW-3	6/25/2013	15.65	U	
MW-4	6/25/2013	16.48	U	
MW-5	6/25/2013	16.21	U	
MW-6	6/25/2013	14.78	U	
RW-10	6/25/2013	15.41	U	
RW-11	6/25/2013	14.98	U	
RW-12	6/25/2013	15.46	U	
RW-13	6/25/2013	16.01	U	

RW-14	6/25/2013	15.64	U
RW-5	6/25/2013	14.81	U
RW-6	6/25/2013	14.92	U
RW-7	6/25/2013	15.54	U
RW-8	6/25/2013	16.88	U
RW-9	6/25/2013	16.49	U