September 5, 2012

Barbara Jakub, P.G.
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
May 22, 2012 (revised August 8, 2012)	*Semi-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,

Lynn A. Worthington

Mr. Lynn Worthington

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

RECEIVED

7:48 am, Sep 06, 2012

Alameda County
Environmental Health

STATE WATER RESOURCES CONTROL BOARD

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Submittal Type:	GEO_REPORT
Report Title:	Semi-Annual GW Monitoring Report - 2012
Report Type:	Monitoring Report - Semi-Annually
Report Date:	8/23/2012
Facility Global ID:	T0600100538
Facility Name:	EXXON
File Name:	2012-08-23_Semi-Annual-Wet-Season-2012.pdf
Organization Name:	Weber, Hayes & Associates
Username:	WEBERHAYES
IP Address:	69.111.48.162
Submittal Date/Time:	8/23/2012 2:20:45 PM
Confirmation Number:	1643843889

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
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May 22, 2012
Revised: August 8, 2012

Barbara Jakub, P.G.
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway
Alameda, California 94502

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

Subject: **Semi-Annual Groundwater Monitoring Report** (sampled March 2012)

Includes: Rationale and Proposed Schedule for Annual Groundwater Monitoring (Appendix B)

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

1.0 EXECUTIVE SUMMARY

This report documents semi-annual groundwater monitoring activities conducted during the first quarter of 2012 at the former Exxon Service Station located at 3055 35th Ave, Oakland, California (the "Site"; see Location Map, Figure 1). Alameda County Environmental Health (ACEH) requires these activities as part of post-remediation monitoring of a fuel release discovered during the 1991 closure of an underground storage tank (UST) system at the Site. Four years of dual phase extraction occurred at the site between 2000 - 2004.

Results of the current semi-annual groundwater monitoring event indicate that contaminant concentrations continue to exceed regulatory threshold limits. Overall concentrations show a downward trend since monitoring began over 17 years ago, which indicates the dissolved hydrocarbon plume is attenuating. However, the persistence of these elevated levels in Site groundwater after several phases of remediation coupled with a slight increase in benzene concentrations observed for wells MW-1 through MW-4 since early 2009 provides evidence that there is an additional upgradient contaminant source.

A detailed description of previous environmental investigation results and subsurface conditions and the updated *Site Conceptual Model* is included as a reference (Appendix A).

Per ACEH request (letter dated September 20, 2011), we have included our rationale and proposed schedule for conducting annual groundwater monitoring (see Appendix B). We propose annual sampling in September when groundwater concentrations are observed to be the highest, which will provide the worst-case scenario of residual groundwater impacts at the Site.

Fieldwork for a regulatory approved data gap assessment was recently completed on May 8 and 9, 2012. Preliminary results of this multi-phase investigation were submitted to the

ACEH in an email dated June 1, 2012 with plans for installing anticipated upgradient monitoring wells to confirm and monitor dissolved hydrocarbon concentrations originating from an upgradient source(s). In an email dated June 4, 2012 ACEH concurred with our recommendation for well installations. We are currently in the process of procuring the required encroachment permits through the City of Oakland and anticipate off-site upgradient well installation will be completed by the end of September 2012.

1.1 Groundwater Monitoring

This report describes results of an ongoing monitoring program, which includes water level gauging in fourteen (14) existing monitoring wells at the Site, and groundwater sampling and laboratory analysis of six (6) key wells (i.e. MW-1 though 4, and RW-5 and 9) installed to monitor a plume of dissolved hydrocarbons (see Site Map, Figure 2).

Overview of Quarterly Activities

Current Tasks & Reporting:	**Semi-annual groundwater monitoring (sampled on March 30, 2011)**
Current Depth to Groundwater:	**Approx. 6.5 to 11 feet below ground surface (ranges from approximately 155 to 156 feet MSL across the Site)**
Current Groundwater Gradient:	**Westerly, at a grade of 0.009 feet per foot (= 1 foot of vertical drop per 111 feet of lateral flow)**
Change $_{Avg.}$ in Groundwater elevation:	**Groundwater elevation was an average of 8.02 feet higher at the Site compared with the previous monitoring event (September 2011).**
Frequency of Groundwater Sampling:	**Semi-annual: gauging of all site wells MW-1 through MW-4 and RW-5 through RW-14; collect an analyze samples from well MW-1 through MW-4, RW-5 and RW-9.**
Is Free Product Present On-Site?	**Currently not observed**
Current Remediation Techniques:	**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).

1.2 Conclusions

Current and previous groundwater monitoring results indicate:

- The groundwater gradient has consistently been measured to flow in a west to southwesterly direction.
- Seventeen years of groundwater monitoring data collected at the Site shows a gradual degradation of the chemicals of concern over time, yet extent of groundwater degraded by hydrocarbons still significantly exceeds regulatory threshold limits. The persistence of these elevated levels in Site groundwater after several phases of remediation provides evidence that there is an additional upgradient contaminant source. Further, a slight

increase in benzene concentrations observed for wells MW-1 through MW-4 since early 2009 indicate the potential influx of a secondary, upgradient off-site dissolved hydrocarbon plume.

- Preliminary results from a recently completed *Data Gap Assessment* indicate that there is likely an upgradient source(s) commingling with existing groundwater contaminant concentrations observed at the Site. Specifically, off-site borings advanced immediately downgradient of both an abandoned and operational fueling facility yielded elevated concentrations of dissolved hydrocarbons in groundwater. Preliminary results of this multi-phase investigation were submitted to the ACEH in an email dated June 1, 2012.

1.3 Recommendations

Based on our assessment of current and previous Site conditions, we recommend the following:

- ACEH requested that an appropriate month be selected for reducing groundwater monitoring to an annual basis. Based on analysis of historical seasonal fluctuations in groundwater elevation versus TPH-g and benzene concentrations in groundwater, we determined that fall (September) represents worst-case scenario concentrations of dissolved contaminant concentrations when water levels are at their lowest point. **Therefore, we recommend that annual groundwater monitoring be completed in September.** We have included our rationale for proposed annual groundwater monitoring in Appendix B.

- Complete the installation of two (2) regulatory approved upgradient monitoring wells to confirm and monitor dissolved hydrocarbon concentrations originating from an upgradient source(s). We anticipate well installation by the end of September 2012.

This concludes the Executive Summary.

2.0 SUMMARY OF CURRENT FIELD ACTIVITIES

Current field tasks consisted of: water level gauging and field checking water quality parameters (dissolved oxygen, ORP) of all 14 existing groundwater-monitoring wells (MW-1 through MW-4, RW-5 through RW-14), and sampling of 6 key groundwater-monitoring wells (MW-1 through MW-4, and RW-5 and RW-9). A summary of current groundwater monitoring and laboratory testing follows.

2.1 Groundwater Monitoring Well Sampling and Laboratory Testing

Groundwater 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 C along with a detailed description of our *Field*

Methodology for Groundwater Monitoring. The proper disposal of purged groundwater is currently being coordinated and documentation will be included in a subsequent monitoring report.

Groundwater samples were collected as part of a regulatory mandated program required by Alameda County Environmental Health (ACEH) to monitor dissolved contaminant concentrations. Samples were submitted to a State-certified testing laboratory (Torrent Laboratories, CA-DHS ELAP #1991). The current results are tabulated on Table 1, and current and historical results including previous data collected by previous consultants are tabulated on Table 2, and the Laboratory Report and Chain-of-Custody documentation is included as Appendix D. We make no warranty regarding the quality or accuracy of data collected by others. It is presented solely for information purposes.

Submitted samples were tested for the following regulatory required set of analyses:

- Total Petroleum Hydrocarbons as Diesel (TPH-d) by EPA Method 8015M
- Total Petroleum Hydrocarbons as Gasoline (TPH-g) by GC/MS
- The volatile constituent compounds of benzene, toluene, ethylbenzene, xylenes (BTEX), and the fuel oxygenates Methyl tert-butyl ether (MTBE), tert-Butanol (TBA) by EPA Method 8260.

2.1.1 Documentation Reporting – Groundwater Monitoring:

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

- Tabulated results of current and previously collected dissolved hydrocarbon concentrations and groundwater data (Tables 1 and 2);
- Figures presenting a plan view of current groundwater gradient and analytical results at the Site (Figure 2 & 3);
- Graphs presenting the temporal distribution of TPH-g 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);
- General description of subsurface conditions and summary chronology of previous environmental work, and updated *Site Conceptual Model* (Appendix A);
- Field sheets for the current round of sampling and our groundwater sampling protocol (Appendix C);

- Chain of Custody documentation and the laboratory's *Certificate of Analysis* (Appendix D).

2.1.2 Work Tasks Scheduled for the Next Groundwater Motoring Event:

As noted above, we have requested a reduction in sampling frequency to once annually in September. Our rational presented in Appendix B. Future annual groundwater monitoring will include:

- Water level gauging and field checking water quality parameters (dissolved oxygen, ORP) in all fourteen existing groundwater-monitoring wells;
- Collecting and analyzing groundwater samples from six key monitoring wells at the Site (MW-1 through MW-4, RW-5 and RW-9);
- Preparing a summary report of the collected data.

2.1.3 Discussion of Current Results:

Seventeen years of groundwater monitoring at the Site indicates that the dissolved hydrocarbon plume exceeds regulatory threshold limits, yet appears relatively stable and is naturally attenuating. However, we note a slight increasing trend in benzene concentrations for wells MW-1, 2, 3, and 4 since early 2009 (approximately 4 years after dual phase extraction remediation occurred at the Site). We also note that downgradient well MW-4 exhibits an approximate one year lag in this observed increase of benzene concentrations, relative to well MW-1, 2, and 3 (see Figures 4 through 9). This observed trend may indicate:

- Influx of contaminants from a secondary, upgradient release of fuel hydrocarbons

As noted in the Executive Summary of this report, preliminary results from a recently completed *Data Gap Assessment* indicate that there is likely an upgradient source(s) contributing to existing contaminant levels at the Site. Specifically, off-site borings advanced immediately downgradient of both an abandoned and operational fueling facility yielded elevated concentrations of hydrocarbons in groundwater.

2.1.4 Groundwater Depth & Flow Direction

Groundwater is currently encountered at a depth of approximately 6.5 to 11 feet below the ground surface. Groundwater elevations of the surveyed 14-well network ranged from approximately 155 to 156 feet above Mean Sea Level (MSL) and flow is in a westerly direction, at a gradient of 0.009 feet per foot (= 1 foot of vertical drop per 111 feet of horizontal flow, see Figure 2).

- The groundwater gradient has consistently been measured to flow in a west to southwesterly direction.

We note that water levels measured in wells RW-5 and RW-7 were anomalously high (i.e., just below the ground surface) during the current monitoring event. The high water levels may possibly be the result of leaky remediation lateral piping coupled with wet weather conditions. Lateral piping to these wells will be cut and capped at the well head during our next field mobilization to prevent potential surface water infiltration.

2.1.5 Dissolved Contaminants of Concern

During the current monitoring event groundwater samples were collected and analyzed from six of the fourteen wells at the Site (MW-1 through MW-4, & RW-5 and RW-9). Results of the current sampling event are tabulated in Table 1, Figure 3, and in the table below.

Summary of Groundwater Sample Analytical Results

Sampled on March 30, 2012 ***(All results are in (ug/L, parts per billion, ppb)***

Well ID	*TPH As Diesel*	*TPH As Gasoline*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*
MW-1	**1,400***	**3,300****	**1,200**	3.6J	82	8.7J	< 1.5
MW-2	**1,800***	**4,100****	**620**	5.0	140	8.6	**21**
MW-3	**2,200***	**3,400****	**3,800**	14J	**360**	57.3	**63**
MW-4	**1,900***	**6,000****	**3,300**	5.0J	95	28J	**40**
RW-5	< 100	< 50	< 0.50	< 0.50	< 0.50	< 1.50	< 0.50
RW-9	< 100	< 50	**5.1**	< 0.50	< 0.50	< 1.50	< 0.50
Reporting Limit:	***100***	***50***	***0.5***			***1.5***	***0.5***
Water Quality Objectives (WQO's)	***1,000***		***1***	***150***	***300***	***1,750***	***5***

WQO's = Water Quality Objectives = Maximum Contaminant Limits or Action Levels

BOLD =Indicates concentration exceeds WQO
< = Not detected at or above the labs reporting limit

bgs = below ground surface
* = Laboratory report that result not typical of Diesel standard pattern; unknown fuel lighter than diesel.Laboratory report that result not typical of Diesel standard pattern; unknown fuel lighter than 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.

2.1.6 Discussion of Results

Dissolved hydrocarbon concentrations have significantly declined since monitoring began at the site nearly seventeen years ago, however concentrations continue to exceed regulatory threshold limits. A slight increase in benzene concentrations observed for wells MW-1 through MW-4 since early 2009 may indicate the potential influx of a secondary, upgradient off-site dissolved hydrocarbon plume.

3.0 CONCLUSIONS

Current and previous groundwater monitoring results indicate:

- The groundwater gradient has consistently been measured to flow in a west to southwesterly direction.
- Seventeen years of groundwater monitoring data collected at the Site shows a gradual degradation of the chemicals of concern over time, yet extent of groundwater degraded by hydrocarbons still significantly exceeds regulatory threshold limits. The persistence of these elevated levels in Site groundwater after several phases of remediation provides evidence that there is an additional upgradient contaminant source.
- Preliminary results from a recently completed *Data Gap Assessment* indicate that there is likely an upgradient source contributing to existing contaminant levels at the Site. Specifically, off-site borings advanced immediately downgradient of both an abandoned and operational gas station and yielded elevated hydrocarbon concentrations in groundwater.

4.0 RECOMMENDATIONS

Based on our assessment of current and previous Site conditions, we recommend the following:

- Semi-annual groundwater monitoring continues to show stable and declining trends of dissolved hydrocarbons. In our recent *Workplan for Data Gap Assessment* dated February 21, 2012, we recommended reducing groundwater monitoring from semi-annual to annual, based upon 17 years (66 events) documenting stable trends of seasonal fluctuations. ACEH requested that we provide rationale for selecting an appropriate month to complete the proposed annual groundwater sampling event. Based on analysis of historical seasonal fluctuations in groundwater elevation versus TPH-g and benzene concentrations in groundwater, we determined that fall (September) represents worst-case scenario concentrations when water levels are at their lowest point. Therefore, we recommend that annual groundwater monitoring be completed in September. We have included our rationale for annual groundwater monitoring in Appendix B.

- Complete the installation of two (2) regulatory approved upgradient monitoring wells to confirm and monitor dissolved hydrocarbon concentrations originating from an upgradient source(s). We anticipate their installation by the end of September 2012.

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 _____ And: _____

Jered Chaney, PG# 8452
Project Geologist

Pat Hoban, PG# 7795
Senior Geologist

Attachments:

Figure 1:	Location Map
Figure 2:	Site Map with Groundwater Gradient, March 30, 2012
Figure 3:	Site Map with Groundwater Analytical Results, March 30, 2012
Figure 4:	TPHg and Benzene Concentration Trends Well MW-1 (March 1997 to Present)
Figure 5:	TPHg and Benzene Concentration Trends Well MW-2 (March 1997 to Present)
Figure 6:	TPHg and Benzene Concentration Trends Well MW-3 (March 1997 to Present)
Figure 7:	TPHg and Benzene Concentration Trends Well MW-4 (March 1997 to Present)
Figure 8:	TPHg and Benzene Concentration Trends Well RW-5 (March 2005 to Present)
Figure 9:	TPHg and Benzene Concentration Trends Well RW-9 (March 2005 to Present)
Table 1:	Current Summary of Groundwater Elevation and PHC Analytical Data
Table 2:	Current & Historical Summary of Groundwater Elevation and PHC Analytical Data
Appendix A:	Site Description and Background & Site Conceptual Model
Appendix B	Rationale and Proposed Schedule for Annual Groundwater Monitoring
Appendix C:	Daily Field Record (Groundwater Sampling) – Weber, Hayes & Associates, March 30, 2012, & Field Methodology for Groundwater Sampling
Appendix D:	Certificate of Analysis (Torrent Laboratory) and Chain of Custody Documentation

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

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 Groundwater 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*

California Environmental Protection Agency

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

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

- 1996, June-20: *Investigation Work Plan*
- 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*
- 2004, Oct-29: *Groundwater Monitoring and System Progress Report*
- 2005, Feb-22: *Remediation Work Plan*
- 2006, Jan-30: *Revised Remediation Work Plan*
- 2006, July-13: *Site Conceptual Model and Off-site Work Plan.*
- 2007, Jan-12: *Offsite Soil Gas Workplan ,*

Conestoga-Rovers and Associates (CRA) reports for: 3055 35th Avenue, Oakland**:**

- 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)*
- 2011, May-5: *Semi-Annual Groundwater Monitoring Report (wet season).*

Consolidated Technologies reports for: 3055 35th Avenue, Oakland**:**

- 1991: *Results for Preliminary Subsurface Site Investigation*
-

REFERENCES (Continued)

– 1992, Sept*: Work Plan for a Subsurface Petroleum Hydrocarbon Contamination Assessment*

Leu, D. J., et al., 1989, *Leaking Underground Fuel Tank Field (LUFT) Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, State Water Resources Control Board*

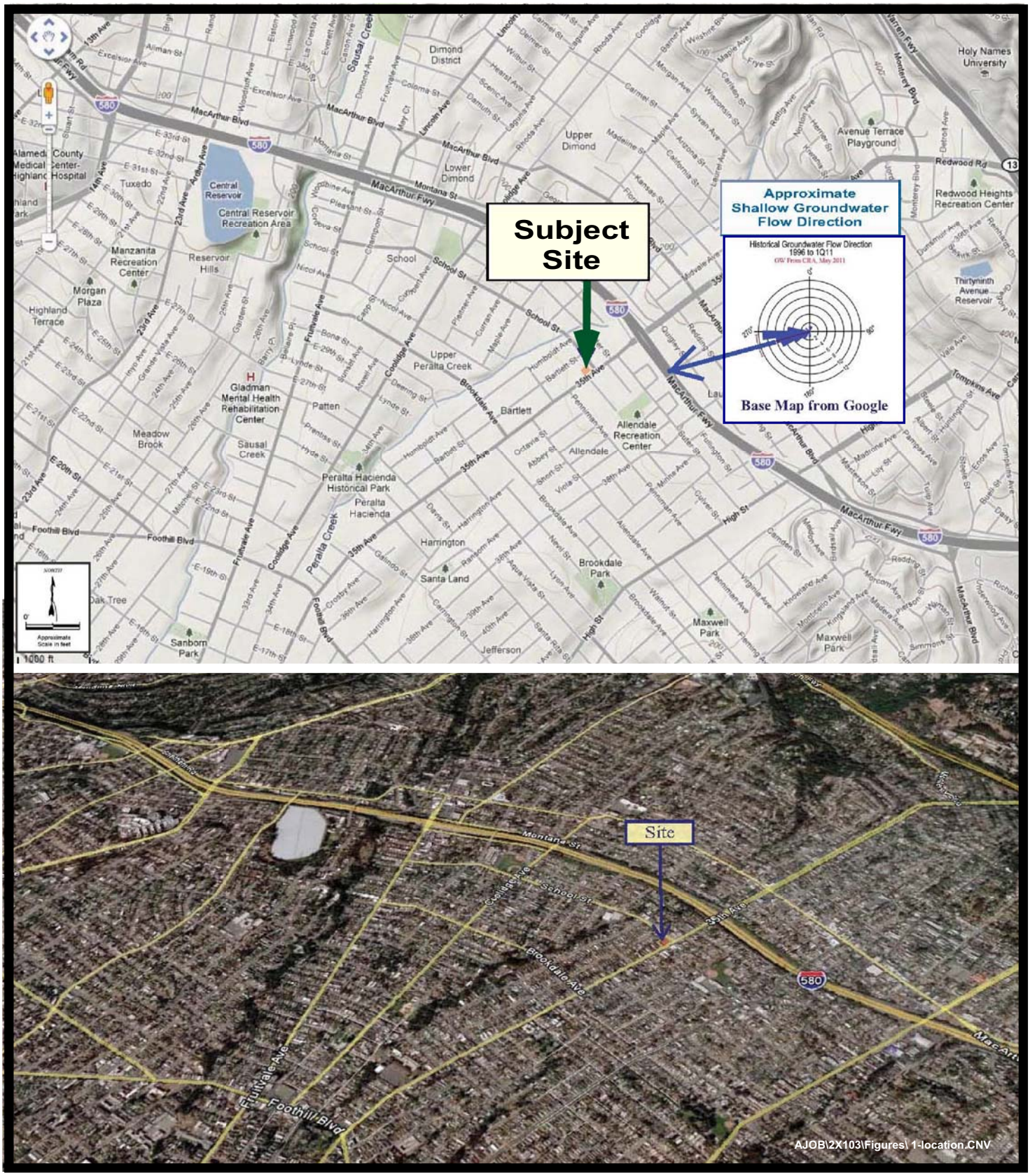
State Water Resources Control Board:
- Upload/download website (site ID#:T0600100538): http://geotracker.swrcb.ca.gov/profile_report.asp?global_id=T0600100538
- 2010, Dec-28: Division of Financial Assistance *Preliminary 5-Year Review Summary Report For Claim # 1275*
- 2005, May-2008: *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*

Weber, Hayes and Associates reports for: 3055 35th Avenue, Oakland:
- 2011, June-24: *Updated Site Conceptual Model – Fuel Release Investigation*
- 2012, February 21: *Workplan for Limited Soil and Groundwater Data Gap Assessment*
- 2012, February 21: *Semi-Annual Groundwater Monitoring Report (sampled September 2011)*

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

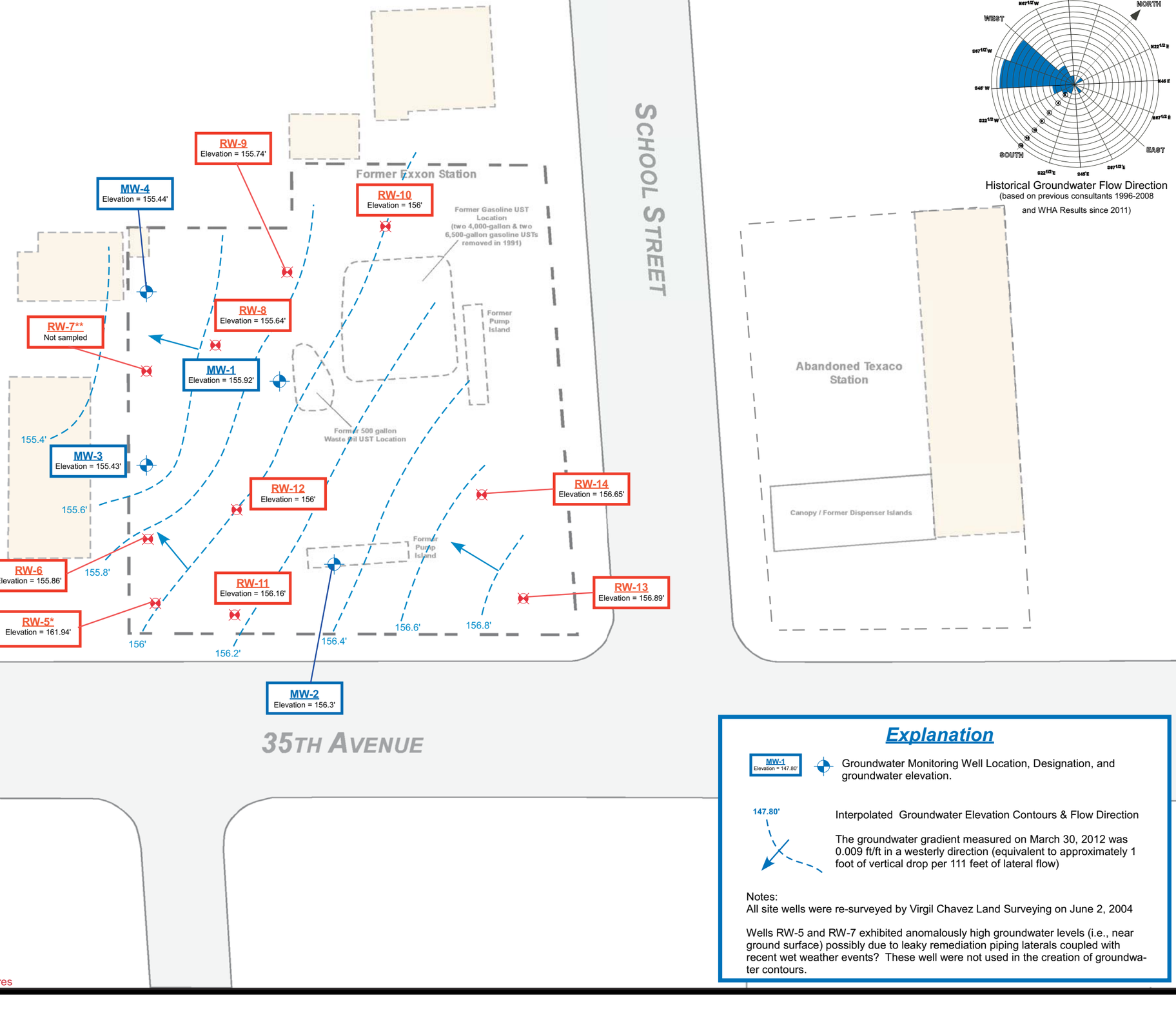
FIGURE 1
Job # 2X103

NORTH

0' 30'

Approximate Scale (in feet)

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



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

Explanation

MW-1 Elevation = 147.80' — Groundwater Monitoring Well Location, Designation, and groundwater elevation.

147.80' — Interpolated Groundwater Elevation Contours & Flow Direction

The groundwater gradient measured on March 30, 2012 was 0.009 ft/ft in a westerly direction (equivalent to approximately 1 foot of vertical drop per 111 feet of lateral flow)

Notes:
All site wells were re-surveyed by Virgil Chavez Land Surveying on June 2, 2004

Wells RW-5 and RW-7 exhibited anomalously high groundwater levels (i.e., near ground surface) possibly due to leaky remediation piping laterals coupled with recent wet weather events? These well were not used in the creation of groundwater contours.

2X103.Oakland-35th WP\QM\2012\Figures

Figure 2
Project 2X103

Groundwater Elevations and Gradient
March 30, 2012
Former Exxon Station
3055 35th Avenue
Oakland, California

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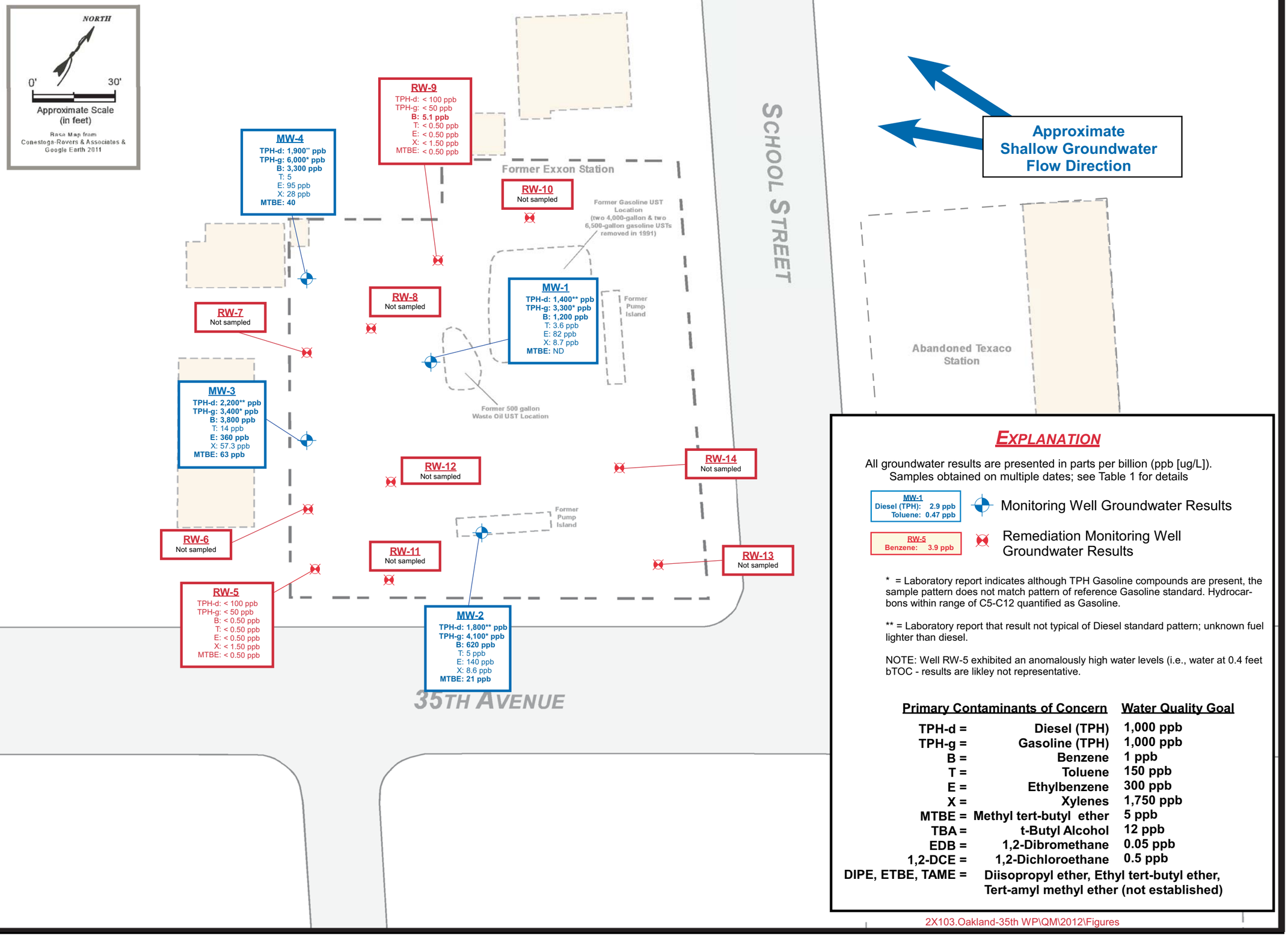


EXPLANATION

All groundwater results are presented in parts per billion (ppb [ug/L]).
Samples obtained on multiple dates; see Table 1 for details

MW-1
Diesel (TPH): 2.9 ppb
Toluene: 0.47 ppb

Monitoring Well Groundwater Results

RW-5
Benzene: 3.9 ppb

Remediation Monitoring Well Groundwater Results

* = 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 report that result not typical of Diesel standard pattern; unknown fuel lighter than diesel.

NOTE: Well RW-5 exhibited an anomalously high water levels (i.e., water at 0.4 feet bTOC - results are likley not representative.

Primary Contaminants of Concern		Water Quality Goal
TPH-d =	Diesel (TPH)	1,000 ppb
TPH-g =	Gasoline (TPH)	1,000 ppb
B =	Benzene	1 ppb
T =	Toluene	150 ppb
E =	Ethylbenzene	300 ppb
X =	Xylenes	1,750 ppb
MTBE =	Methyl tert-butyl ether	5 ppb
TBA =	t-Butyl Alcohol	12 ppb
EDB =	1,2-Dibromethane	0.05 ppb
1,2-DCE =	1,2-Dichloroethane	0.5 ppb
DIPE, ETBE, TAME =	Diisopropyl ether, Ethyl tert-butyl ether, Tert-amyl methyl ether (not established)	

2X103.Oakland-35th WP\QM\2012\Figures

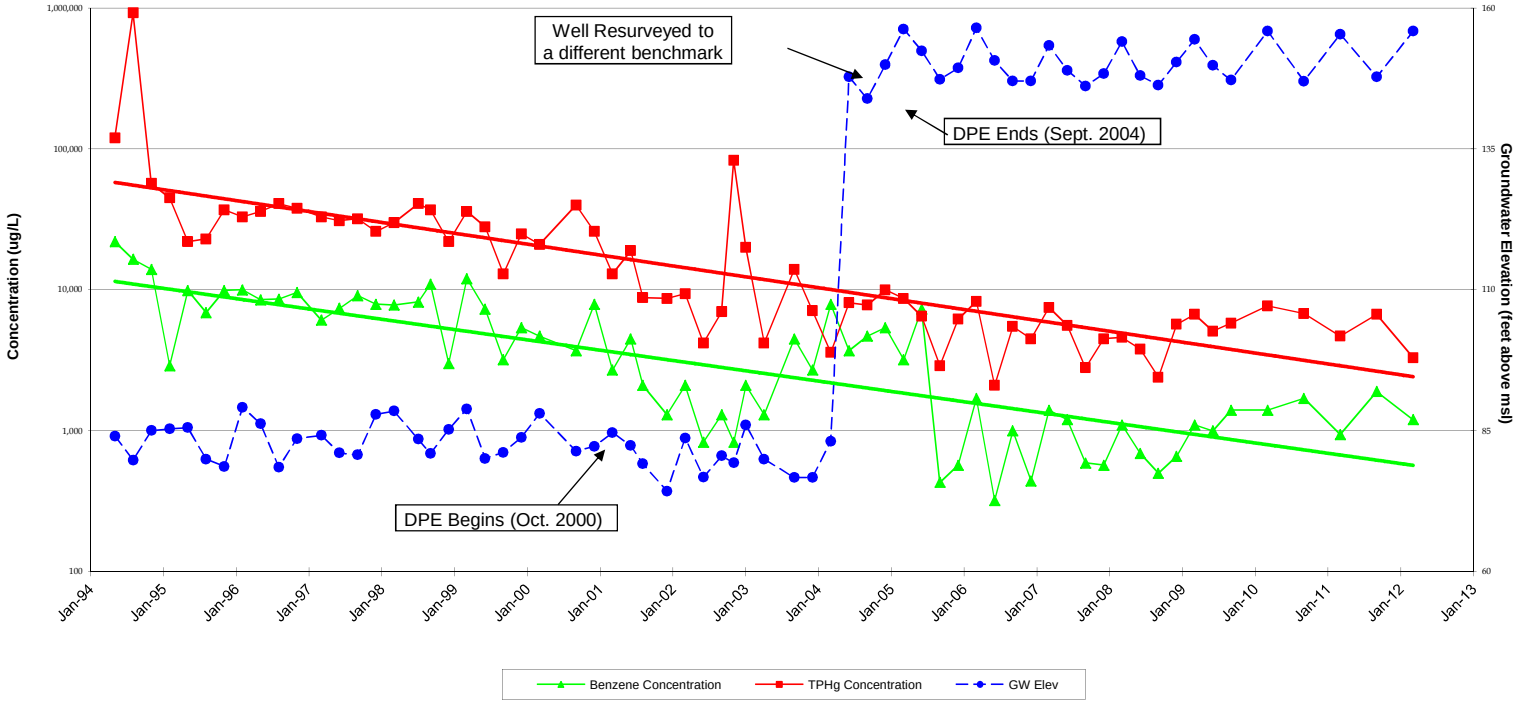
Figure 3
Project 2X103

Groundwater Monitoring Results
March 30, 2012
Former Exxon Station

3055 35th Avenue
Oakland, California

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 Fax (831) 722 - 1159
www.weber-hayes.com

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



*

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

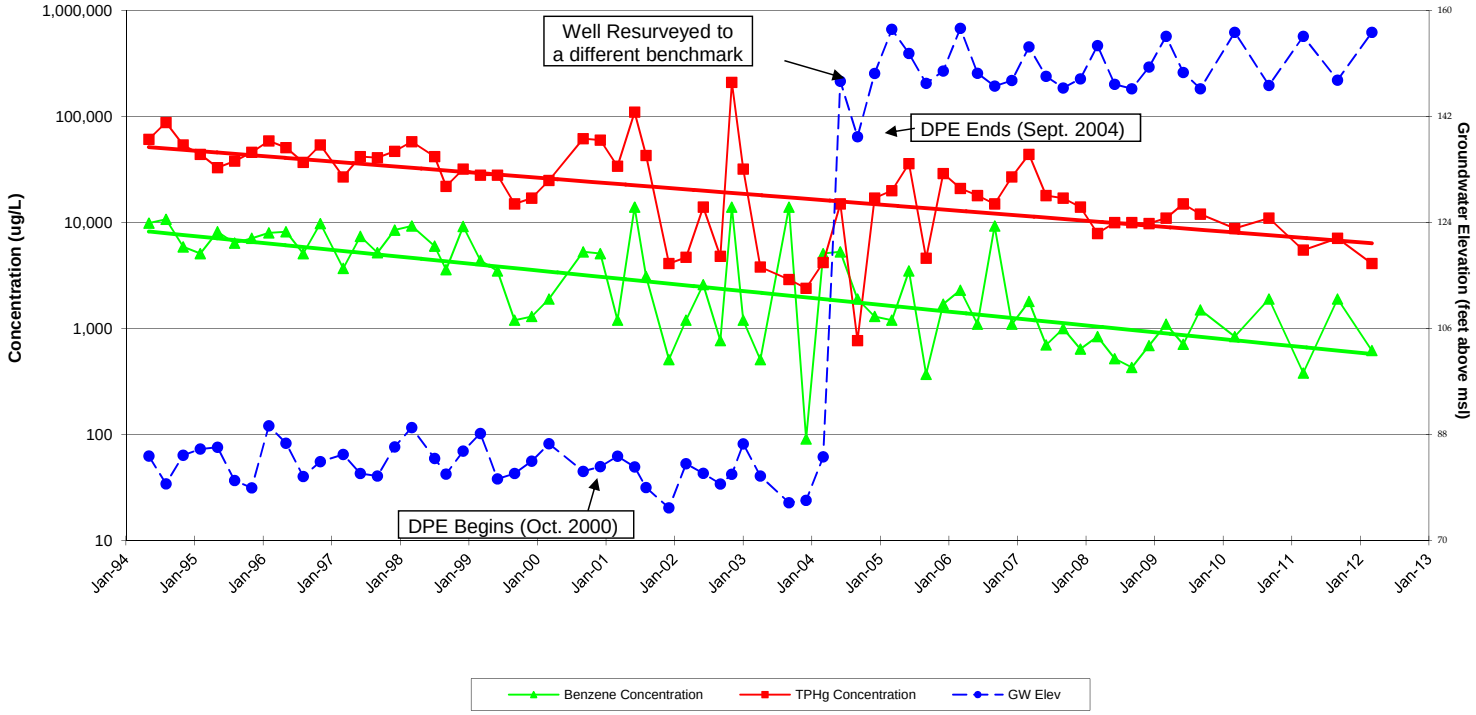


Figure 6
TPHg and Benzene Concentration Trends
Well MW-3 (March 1997 to Present)

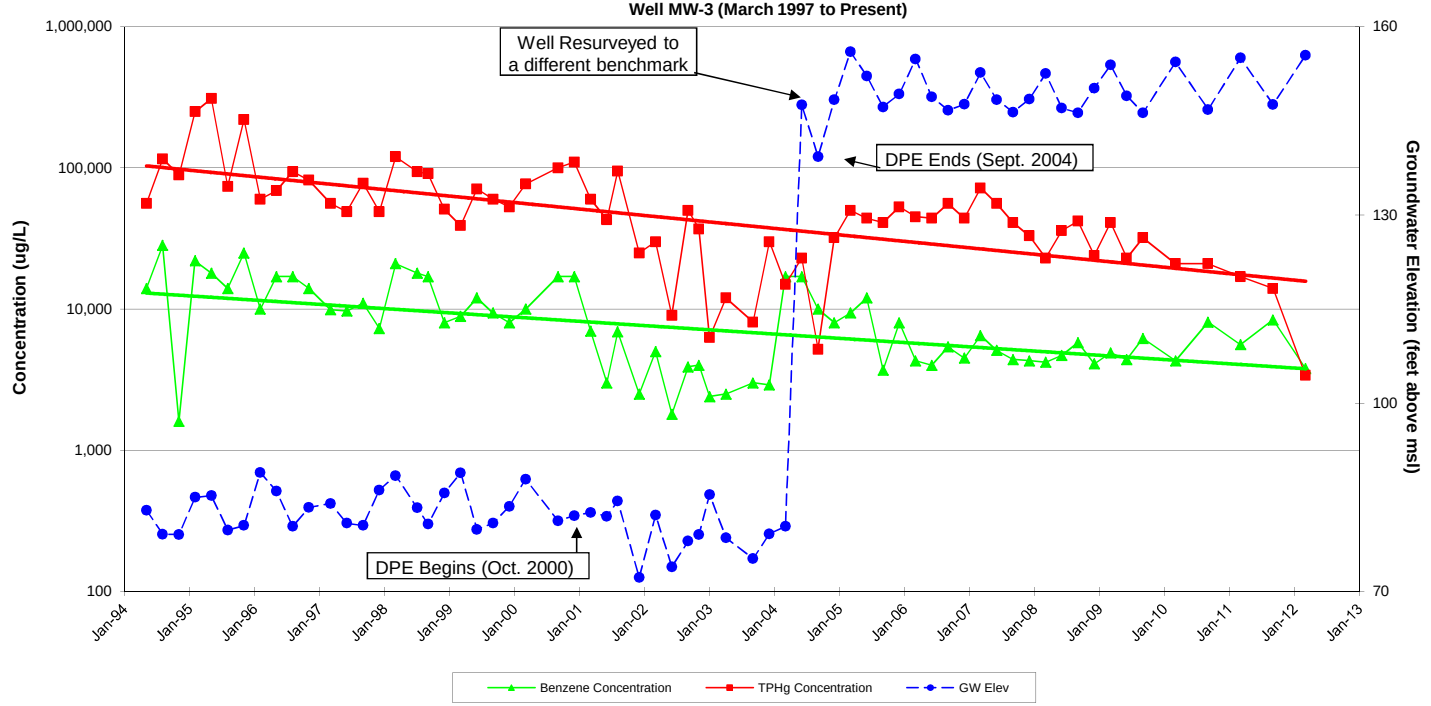
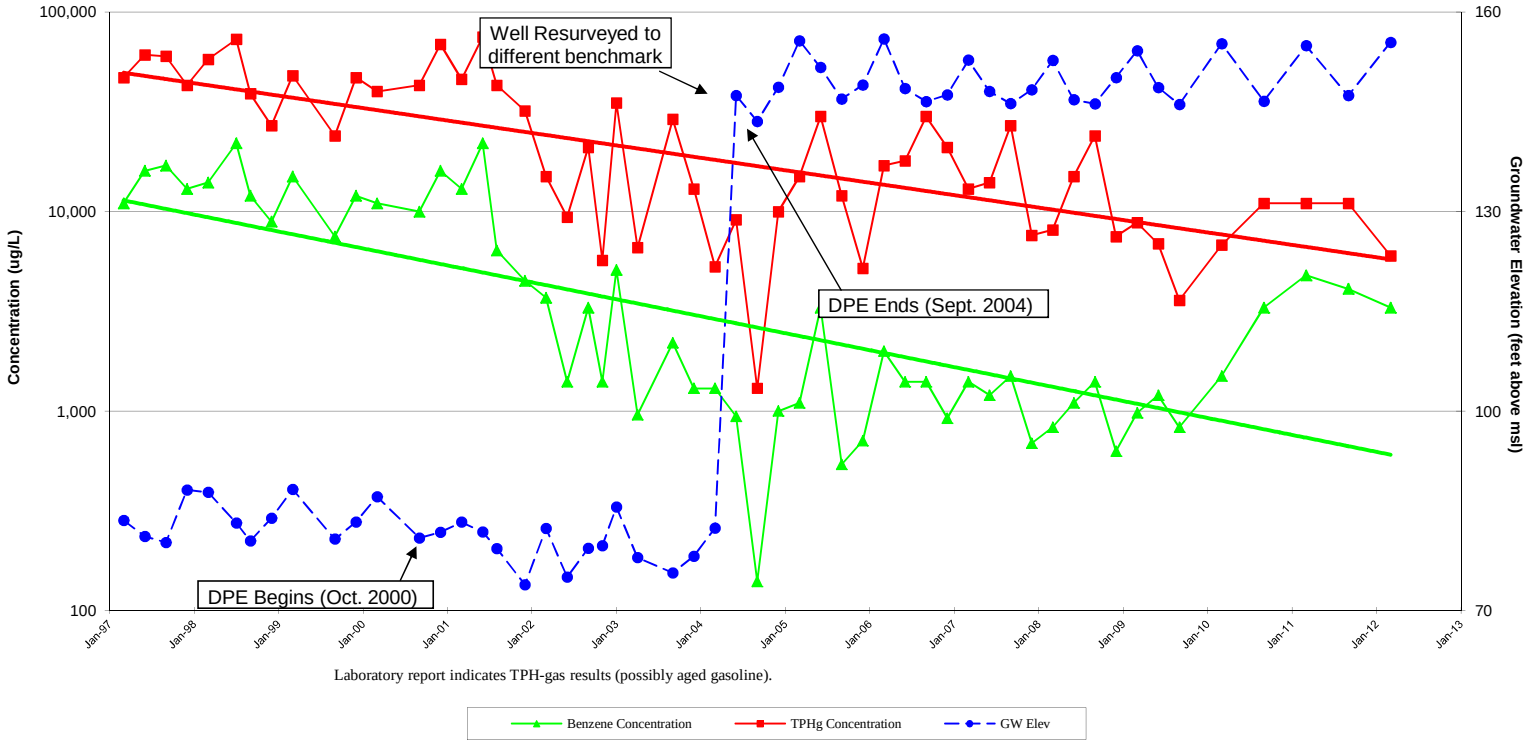


Figure 7
TPHg and Benzene Concentration Trends
Well MW-4 (March 1997 to Present)



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

Figure 8

TPHg and Benzene Concentration Trends
Well RW-5 (March 2005 to Present)

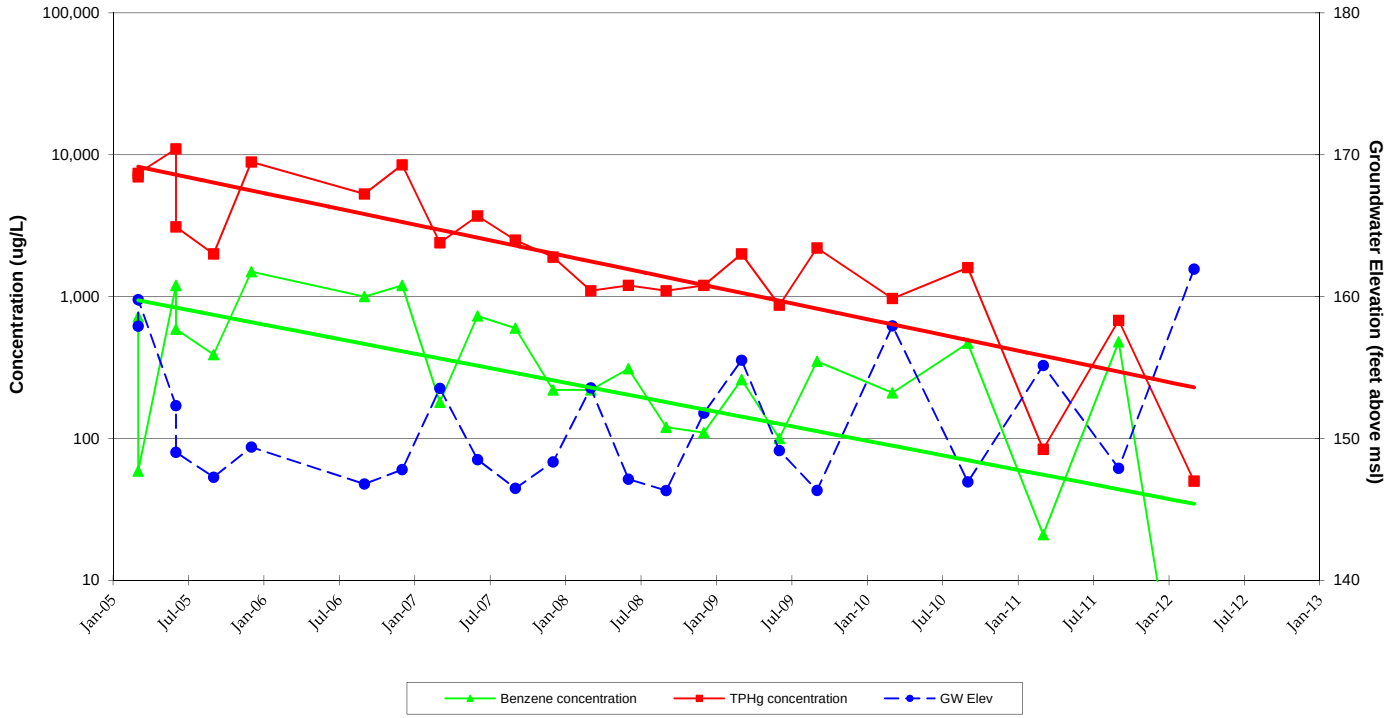
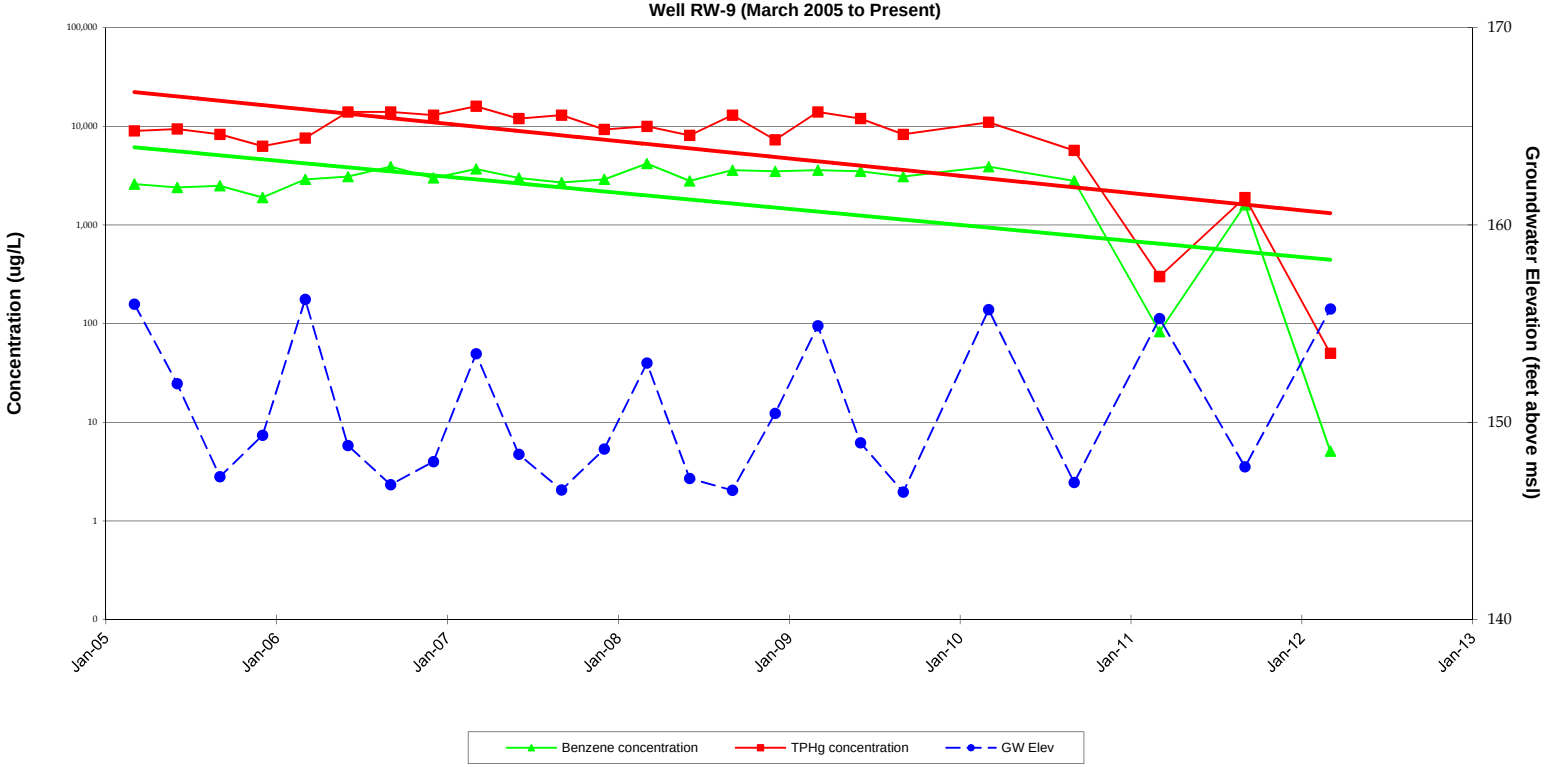


Figure 9

TPHg and Benzene Concentration Trends
Well RW-9 (March 2005 to Present)



Tables

Table 1: Current 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	DPE System Status
					Total Petroleum Hydrocarbons		Volatile Organic Compounds						
Well # TOC	TOC Elevation[2] (feet)				Diesel	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Dissolved Oxygen (mg/L)	
MW-1	167.02	3/30/2012	11.10	155.92	**1,400***	**3,300★**	**1,200**	3.6J	82	8.7J	< 1.5	2.39	-100
MW-2	166.14	3/30/2012	9.84	156.30	**1,800***	**4,100★**	**620**	5.0	140	8.6	**21**	2.66	-104
MW-3	162.94	3/30/2012	7.51	155.43	**2,200***	**3,400★**	**3,800**	14J	**360**	57.3	**63**	7.23	-113
MW-4	163.49	3/30/2012	8.05	155.44	**1,900***	**6,000★**	**3,300**	5.0J	95	28J	**40**	6.41	-101
RW-5	162.34	3/30/2012	0.40	161.94	< 100	< 50	< 0.50	< 0.50	< 0.50	< 1.50	< 0.50	7.31	-3
RW-6	162.36	3/30/2012	6.50	155.86	*Not sampled*							3.54	70
RW-7	192.72	3/30/2012	--	--	*Not sampled*							--	--
RW-8	164.13	3/30/2012	8.49	155.64	*Not sampled*							0.74	-45
RW-9	163.86	3/30/2012	8.12	155.74	< 100	< 50	**5.1**	< 0.50	< 0.50	< 1.50	< 0.50	6.13	20
RW-10	163.02	3/30/2012	7.02	156.00	*Not sampled*							0.79	-43
RW-11	162.67	3/30/2012	6.51	156.16	*Not sampled*							1.32	-106
RW-12	163.06	3/30/2012	7.06	156.00	*Not sampled*							1.09	-8
RW-13	164.34	3/30/2012	7.45	156.89	*Not sampled*							3.65	43
RW-14	163.76	3/30/2012	7.11	156.65	*Not sampled*							1.43	10
Laboratory Detection Limit:					**10**	**50**	**0.5**	**0.5**	**0.5**	**1.5**	**5**	**Field Instrument**	
Central Coast Region Water Quality Objectives (WQOs):[1]					**1,000**		**1**	**150**	**300**	**1,750**	**5**	--	--

Notes

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

ND = Not detected at or above the lab's reporting limit.

bgs = below ground surface

< # = Reporting limit elevated due to sample dilution and compound not detected at or above reporting limit.

The constituents **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),** were trace to non-detect therefore they were not included in this table. See Table 2 and 3 for details.

★ = 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 quanitified as Gasoline.

*** =** Laboratory report that result not typical of Diesel standard pattern (possibly fuel lighter than diesel).

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

Table 2: Summary of 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	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)	
MW-1	167.02																		
		3/30/2012	--		11.10	155.92	**1,400*** **	--	**3,300★**	**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
		5/30/2003	--		16.65	84.20	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		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	
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: Summary of 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	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)	
Continued		12/8/1998	--		15.62	85.23	**3,700**	--	**22,000**	**3,000**	**1,200**	**730**	**3,100**	< 900	--	--	--	--	--	
MW-1		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**	--	--	--	--	--	--	
MW-2	166.14																			
		3/30/2012	--		9.84	156.30	**1,800*****	--	**4,100★**	**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^{TPHo})	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[e])	(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**	--	--	--

Table 2: Summary of 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	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)	
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**	--	--	--

Table 2: Summary of 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	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)	
MW-3	162.94																		
		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
		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
		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 [e,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	
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: Summary of 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	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)	
Continued		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	
MW-3		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	--	--	--	--	--	--	
MW-4	163.49																			
		3/30/2012	--		8.05	155.44	**1,900*** **		**6,000★**	**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	65	--	--	--	--	--	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: Summary of 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	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[e]	
	*	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	
⌖RW-5	162.34																			
		3/30/2012	--		0.40	161.94	< 100		< 50	< 0.50	< 0.50	< 0.50	< 1.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	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^{TPHo})	16.01	146.33	(220 [k])	--	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 [k])	(< 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 [k])	(< 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
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: Summary of 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	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)	
Continued		6/16/2004	--		14.73	147.61	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
RW-5		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	
RW-6	162.36																			
		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	--	--	--	--	--	
⌖RW-7	192.72																			
		3/30/2012	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		9/22/2011	--		15.15	177.57	--	--	--	--	--	--	--	--	--	--	--	--	1.16	-69
		3/17/2011	--		7.75	184.97	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		9/10/2010	--		16.04	176.68	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		3/14/2010	--		8.70	184.02	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		9/5/2009	--		16.55	176.17	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		6/7/2009	--		13.91	178.81	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		3/14/2009	--		7.94	184.78	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		12/28/2008	--		12.62	180.10	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		9/6/2008	--		16.51	176.21	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		6/14/2008	--		15.80	176.92	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		3/9/2008	--		9.69	183.03	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		12/8/2007	--		14.46	178.26	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		9/6/2007	--		16.42	176.30	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		6/15/2007	--		14.54	178.18	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		3/16/2007	--		9.69	183.03	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		12/6/2006	--		15.13	177.59	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		9/5/2006	--		16.12	176.60	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		6/30/2006	--		14.05	178.67	--	--	--	--	--	--	--	--	--	--	--	--	--	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: Summary of 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	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)	
Continued		3/22/2006	--		5.75	186.97	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
RW-7		12/14/2005	--		13.58	179.14	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		9/21/2005	--		15.70	177.02	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		6/21/2005	--		10.85	181.87	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		3/7/2005	--		5.82	186.90	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		12/27/2004	--		9.85	182.87	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		9/27/2004	--		18.98	173.74	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
		6/16/2004	--		15.22	177.50	--	--	--	--	--	--	--	--	--	--	--	--	--	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	--	--	--	--	--	
RW-8	164.13																			
		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
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: Summary of 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	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)	
Continued		3/18/2004	--		15.34	--	--	--	760	310	9.9	11	16	< 25	--	--	--	--	--	
RW-8		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	--	--	--	--	--	
RW-9	163.86																			
		3/30/2012	--		8.12	155.74	< 100	--	< 50	**5.1**	< 0.50	< 0.50	< 1.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	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 [k])	--	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	--	--	--	--	--	
RW-10	163.02																			
		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
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: Summary of 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	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)	
Continued		12/14/2005	--		13.37	149.65	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
RW-10		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	--	--	--	--	--	
RW-11	162.67																			
		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	--	--	--	--	--	
RW-12	163.06																			
		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
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: Summary of 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	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)	
Continued		9/6/2007	--		16.42	146.64	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
RW-12		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	--	--	--	--	--	
RW-13	164.34																			
		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	--	--	--	--	--	
RW-14	163.76																			
		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
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: Summary of 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	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)	
Continued		9/5/09	--		16.71	147.05	--	--	--	--	--	--	--	--	--	--	--	--	--	Not operating
RW-14		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
		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 Previous 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)

( ) = Zemo 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

1 = Water Quality Goals: Goals established 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.

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).

*** =** Laboratory report indicates TPH-gas results (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 that result not typical of Diesel standard pattern (possibly fuel lighter than diesel).

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.

✠ = 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

Appendix A

Site Description and Background

1.0 Site Description and Background

The following summary overview has been compiled from previous consultant reports (AquaGeosciences, Inc., CKC Inc., & GeoStrategies Inc.) and recent investigation and testing (Weber, Hayes and Associates). The overview includes a description of site conditions, land use, regulatory framework, subsurface conditions, an overview of previously completed environmental investigations at the subject site (Site), and a description of the fate and transport characteristics of the detected chemicals of concern.

1.1 Site Description

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[1]) San Francisco Bay RWQCB (Case #: 01-0585[2])	Barbara Jakub Barbar.Jakub@acgov.org CherieMcCaulou cmccaulou@waterboards.ca.gov

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.

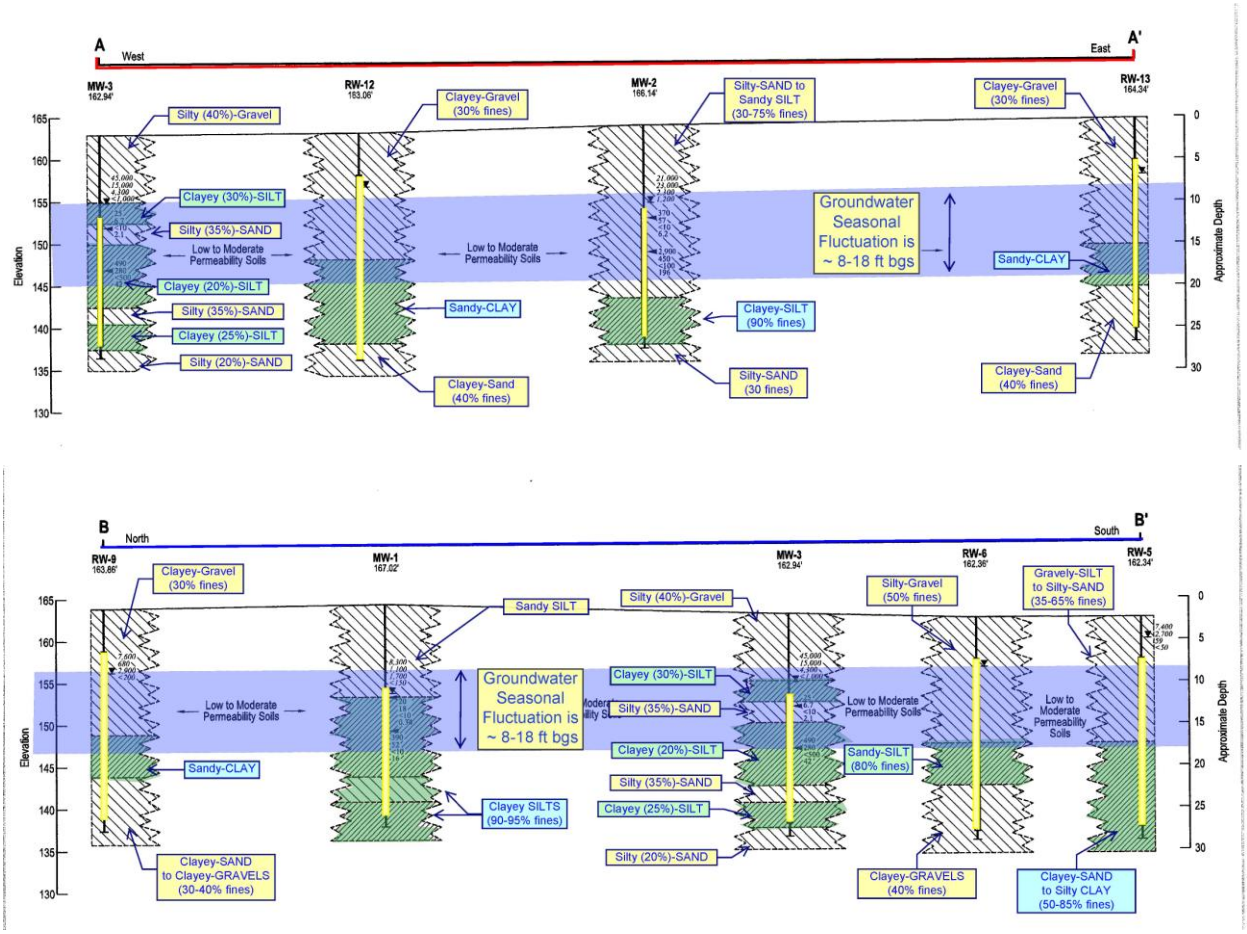
Shallow soil conditions have been logged during the installation of twenty-four (24) on-site borings and thirteen (13) off-site borings drilled to a maximum depth of 45 feet. First-encountered groundwater beneath the Site fluctuates seasonally, roughly between the depths of 8-to-18 feet below ground 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

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

- Occasionally, some relatively thin, discontinuous, highly-permeable sand lenses were encountered (low silt content silty-sands).

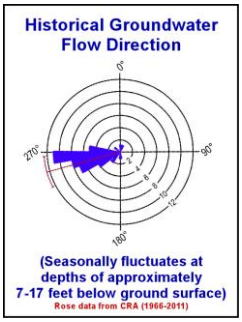
The following geologic cross-sections of soil types logged across the Site show: 1) the interbedded, heterogeneous nature of soils beneath the Site; 2) the ubiquitous presence of fine-grained clays and/or silts in the soil mixtures (low-to-moderately permeable units), which generally retard the vertical 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

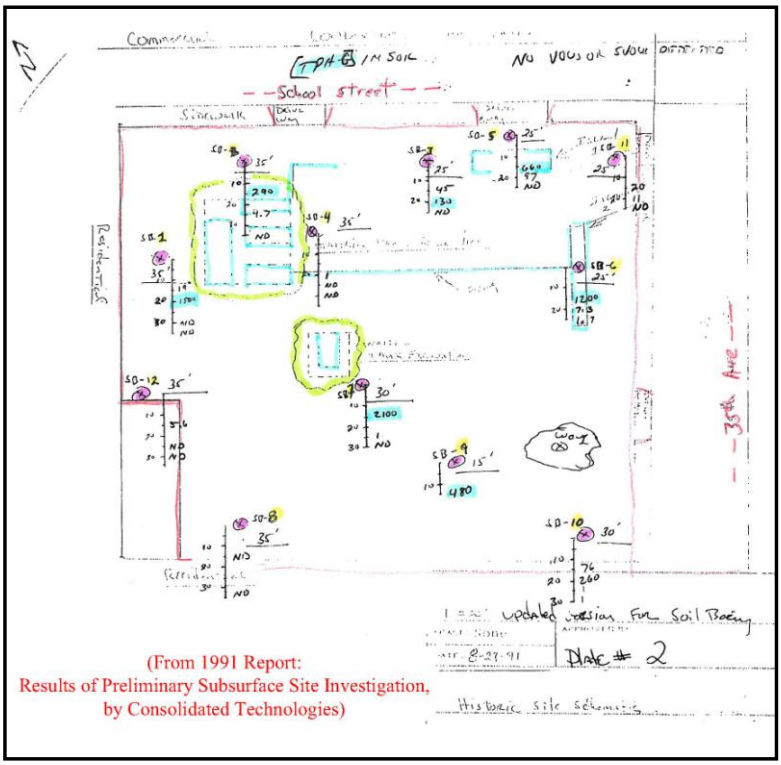
influence/easy dewatering but no groundwater drawdown at nearby wells), which confirms the low permeability conditions beneath the Site (Cambria, 1996).

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

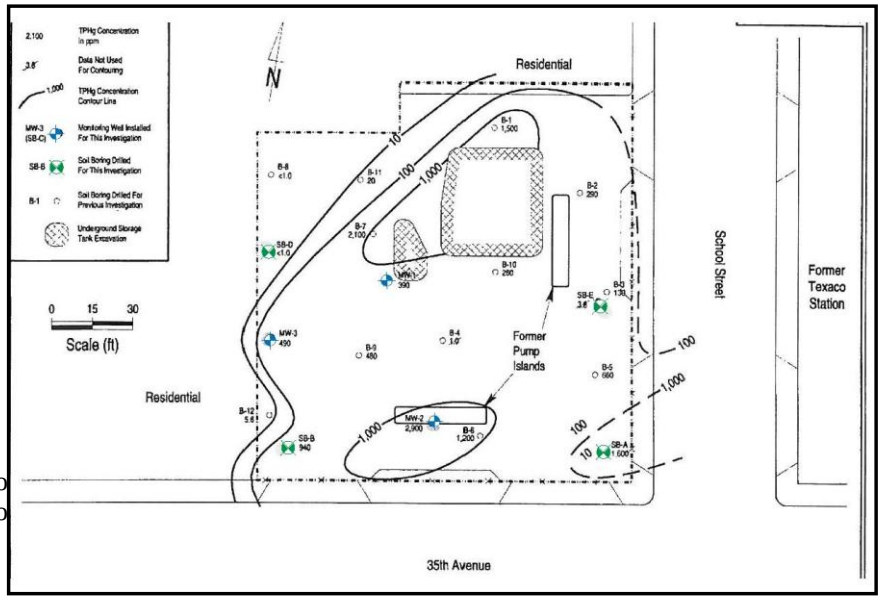


SUMMARY OF Previous Soil and Groundwater Investigations and Corrective Actions

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



[3]: Note: Water depths for MW-1 and MW-2 are no elevated casing height within monument well bo

[the maximum concentration was detected at boring B-7 = 2,100 mg/kg (or parts per million, ppm].

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 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.

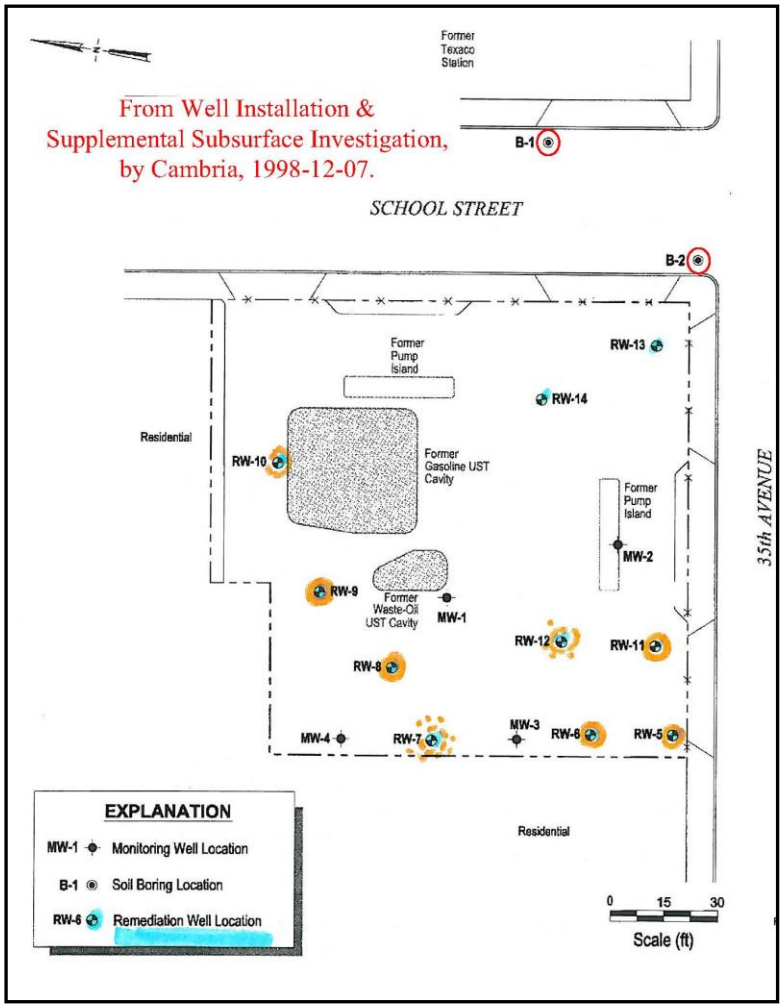
1994, Follow-up Subsurface Investigation & Monitoring Well Installations: In May 1994, Cambria drilled seven (7) hollow-stem augured soil borings (SB-A through SB-G, (see figure, right), analyzed two soil samples per boring, and converted three of the borings into on-site monitoring wells (MW-1 through 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 Appendix B.

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.

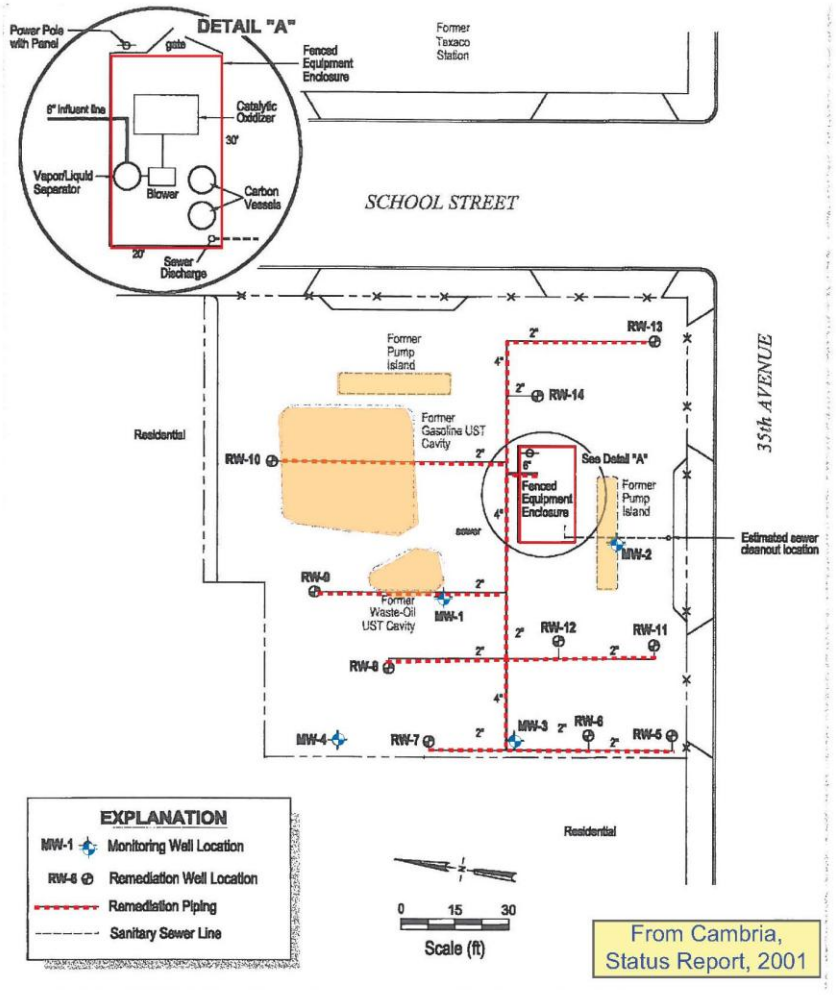
1997, Additional Downgradient, Monitoring Well: In February 1997, Cambria installed one additional on-site monitoring well (MW-4, screened from 10-30 ft bgs) at the downgradient (west) corner of the parcel. Soil samples for logging were obtained on 5-foot intervals using hollow-stem augers but no field 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*

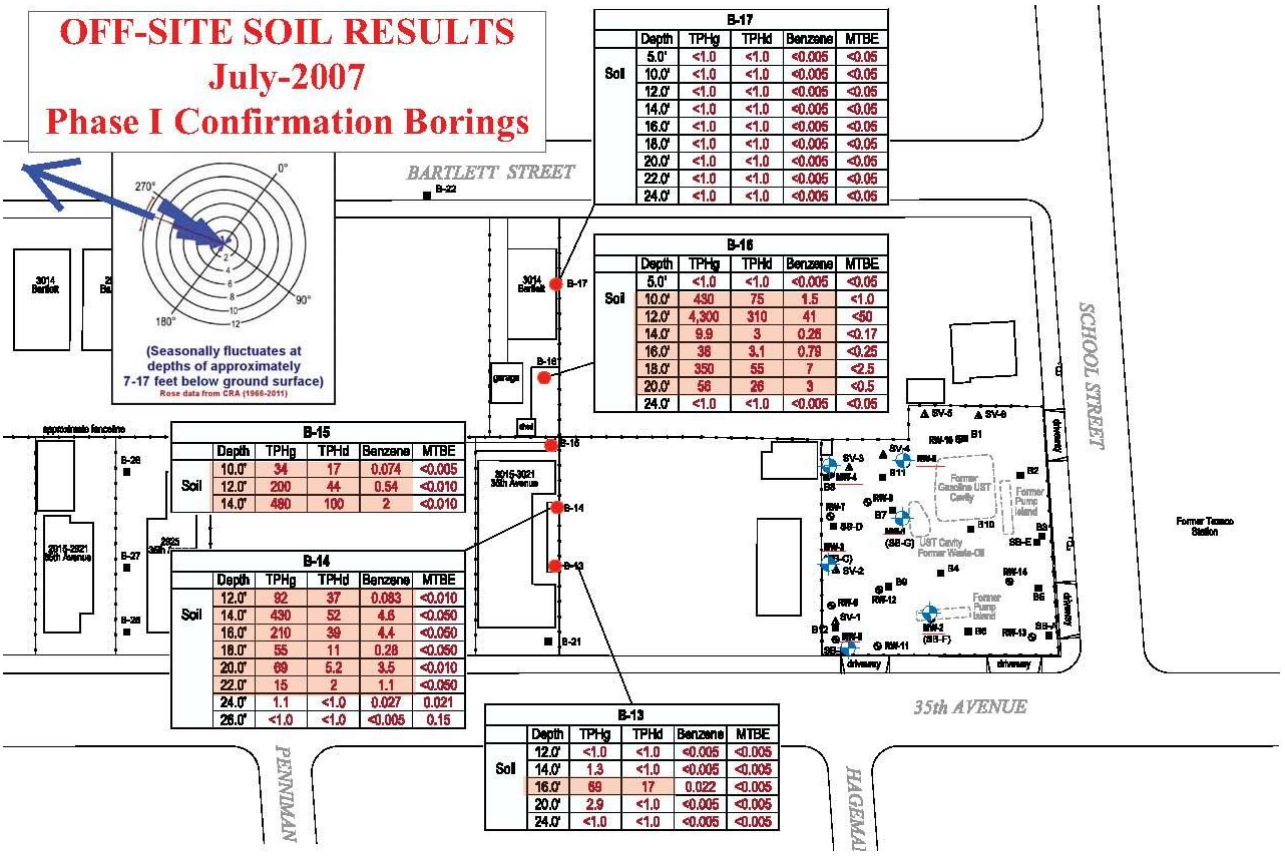
Oxidation (ISCO) injection as an option for cleanup of residual, fuel-impacted groundwater in a low-permeability, shallow aquifer. Gaseous ozone was selected as the ISCO oxidizer because of: 1) ozone gas' reported ability to transfer though fine-grained, saturated soils, and 2) ozone's ability to destroy 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

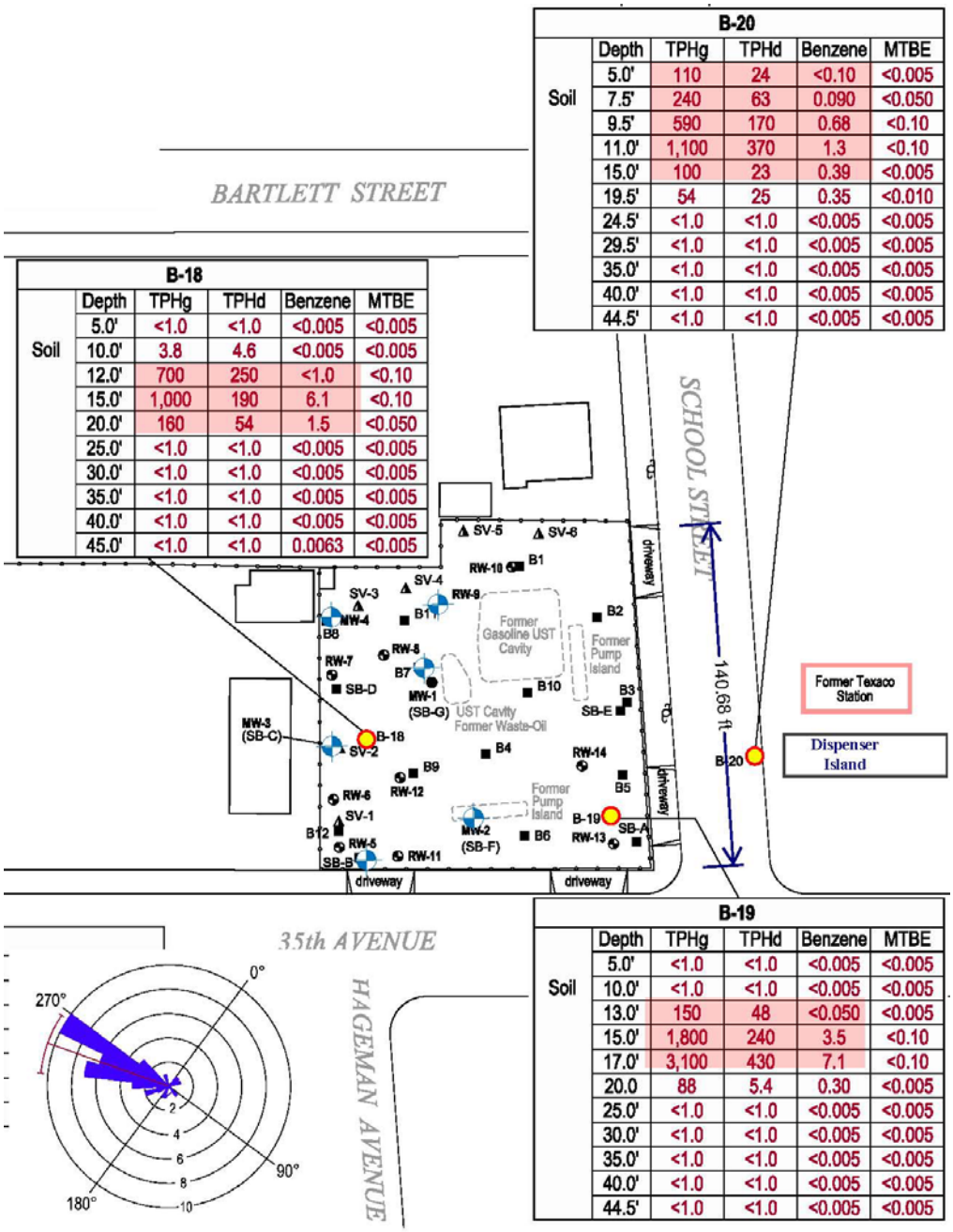
Off-site Soils: No additional off-site, smear zone gasoline contamination was observed during continuous core logging of the second, downgradient boring transect or in lab samples, which indicates smear zone impacts from lateral plume transport/fluctuating groundwater have not extended as far as the 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

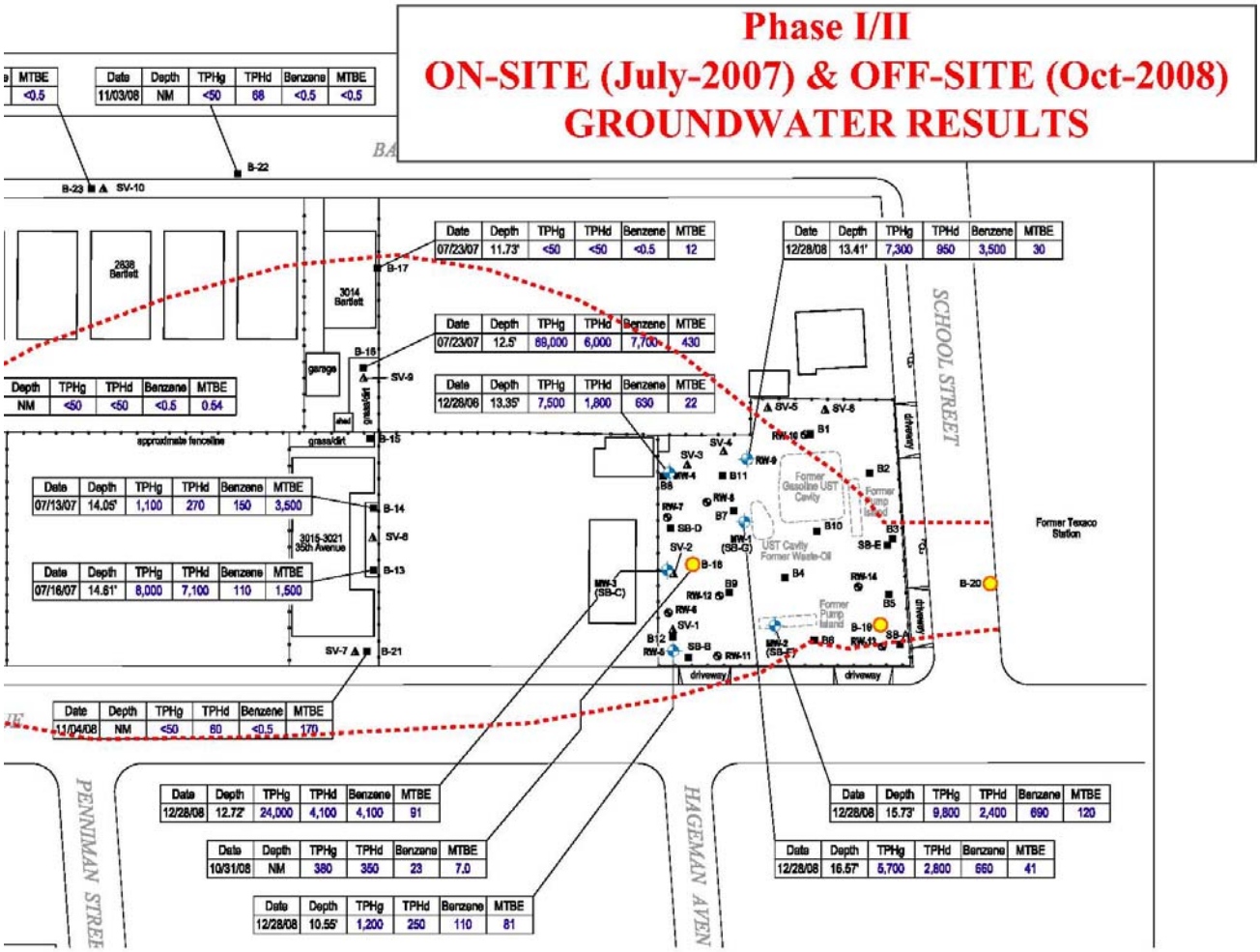
FIGURE 7

PHASE II HYDROCARBON CONCENTRATIONS in SOIL

Phase 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).



- 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[4].

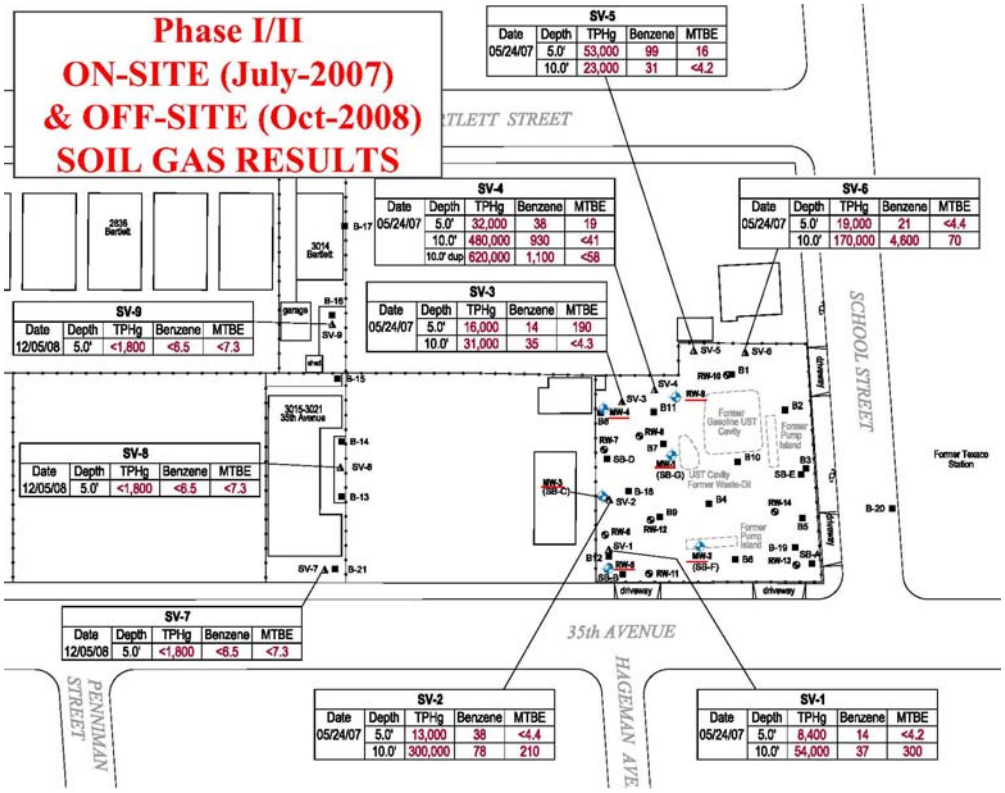
- MTBE was detected in all on-site, soil gas wells but in only three of the shallow sampling intervals (@5-ft: "not detected" to 190 ug/m^3, max at SV-3; the 10-ft sampling interval

[4]: 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 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.

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.

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

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 an off-site, upgradient exploratory boring indicates additional gasoline contamination is coming onto the Site from a second, gasoline release source and it appears to be feeding the plume. The upgradient off-site source is an abandoned, former Texaco Gas Station.

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[5] 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.

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 in Section 4 (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-

[5]: 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.

site soils (i.e., < 10 feet bgs) is very limited because only 2 of the 72 analyzed soil samples collected on-site were laboratory-analyzed. 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 apparent contribution from a secondary, upgradient source (the abandoned Texaco Station across School Street, see Figure 2).

The extent of 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.

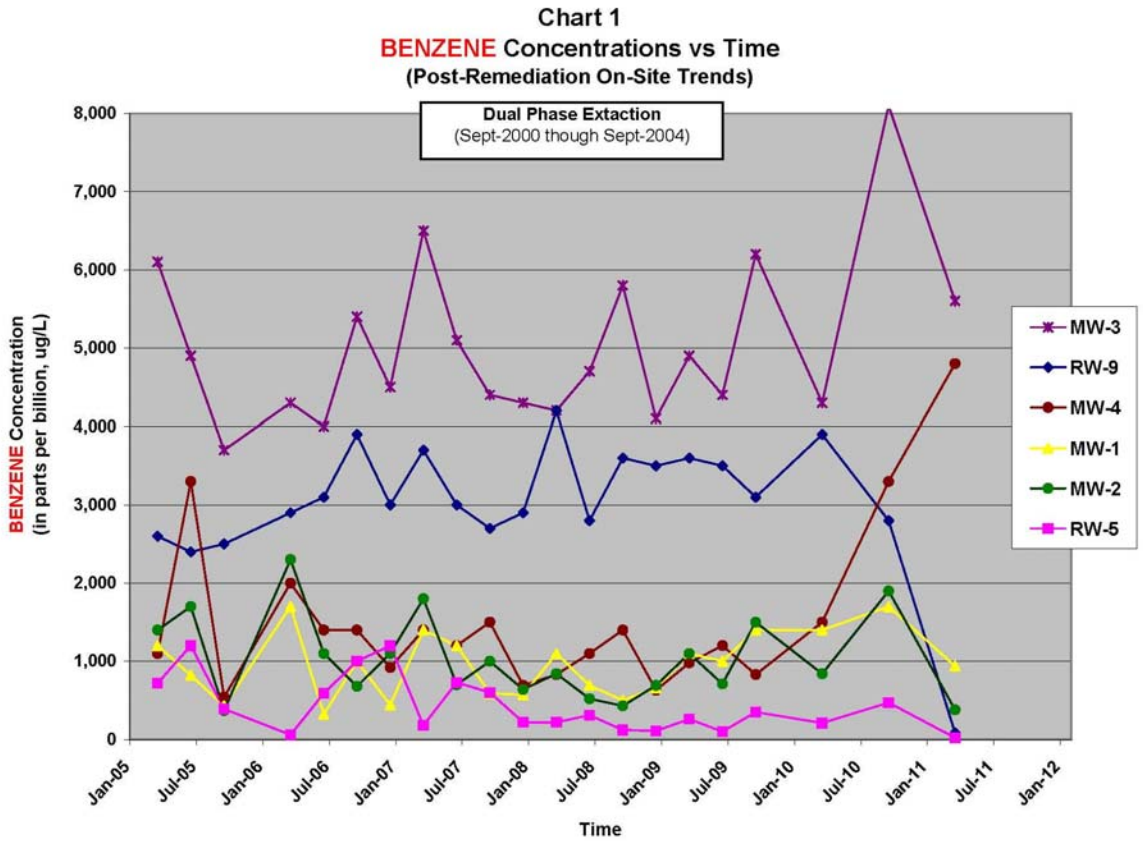
Groundwater: On-site groundwater has been sampled seasonally since 1994 and chemicals of concern have consistently been detected at concentrations in excess of ACEH groundwater quality objectives.

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. Benzene concentrations appear to be stable or deceasing in four of the monitored wells (MW-1, & -2, and RW-5, & -9), and have upward trends in two of the downgradient, property line wells (MW-3 and MW-4). The upward trends may 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. (see Chart below):



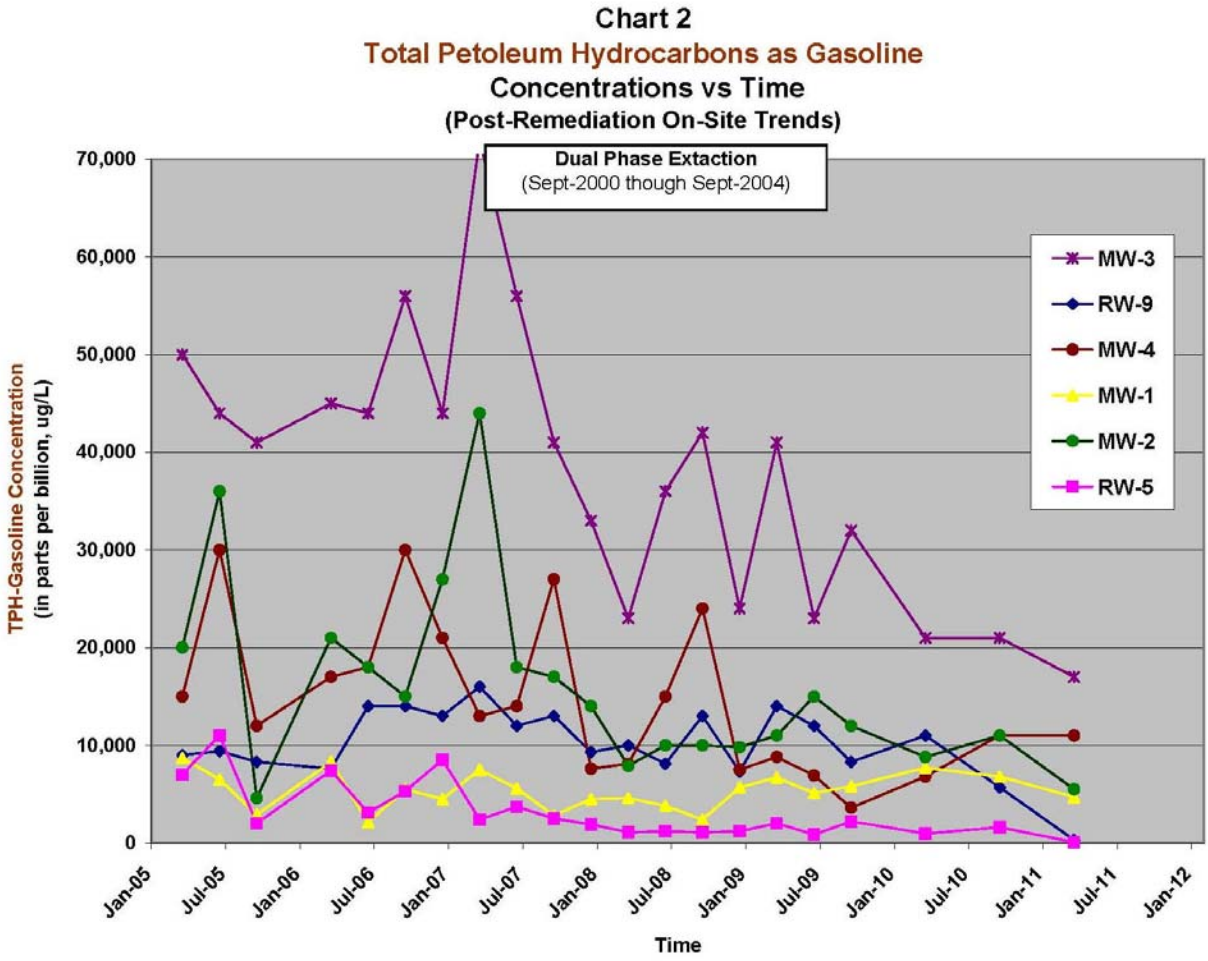
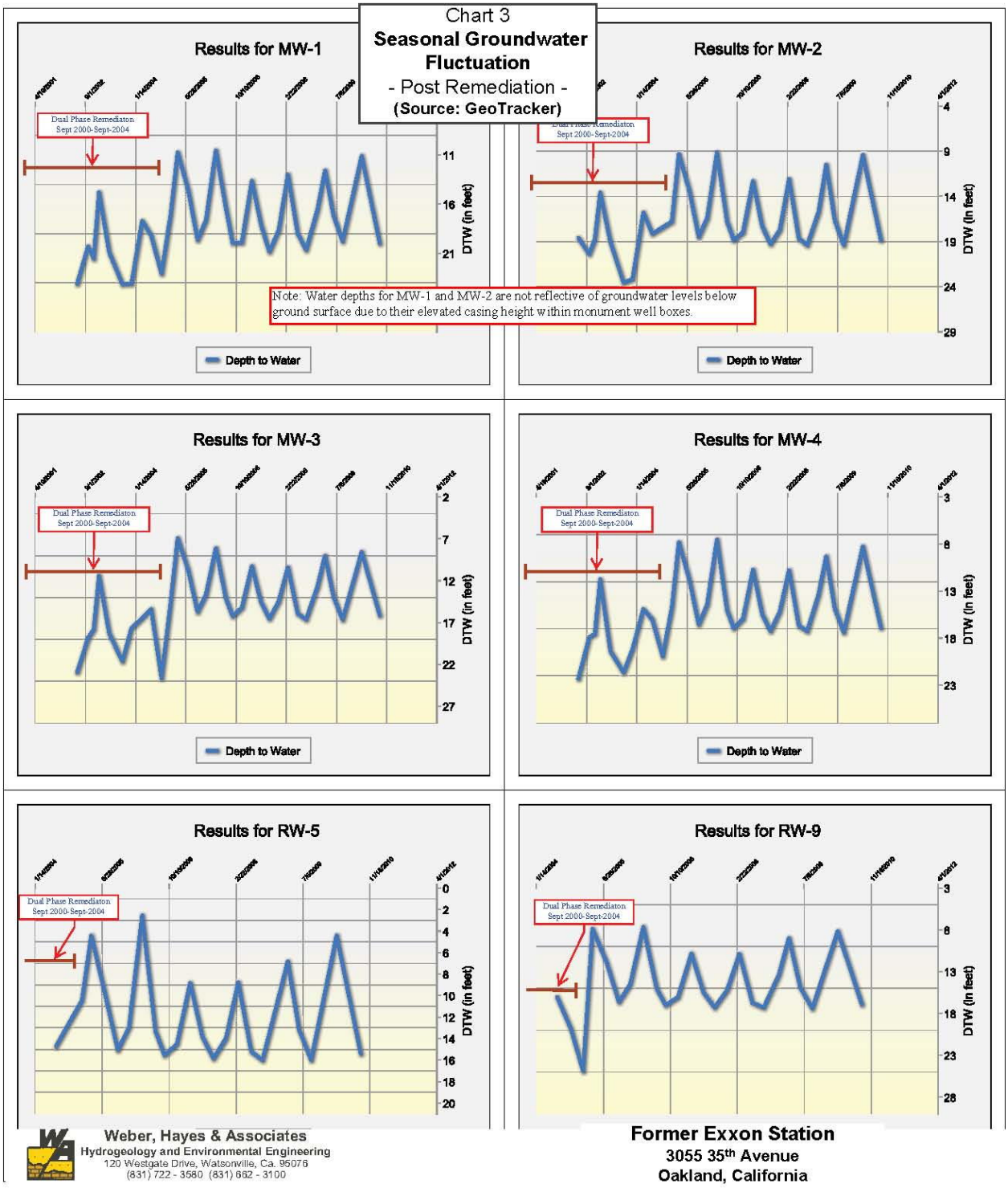


Chart 2
Total Petoleum Hydrocarbons as Gasoline
Concentrations vs Time
(Post-Remediation On-Site Trends)
Dual Phase Extaction
(Sept-2000 though Sept-2004)
TPH-Gasoline Concentration
(in parts per billion, ug/L)
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Jan-05
Jul-05
Jan-06
Jul-06
Jan-07
Jul-07
Jan-08
Jul-08
Jan-09
Jul-09
Jan-10
Jul-10
Jan-11
Jul-11
Jan-12
Time
MW-3
RW-9
MW-4
MW-1
MW-2
RW-5



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.

- The fluctuations in contaminant concentrations do not follow a consistent pattern across the Site (i.e., concentrations do not consistently rise or fall with seasonal rise/fall of groundwater).

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;
- 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*[6] *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.

[6]: 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.

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.

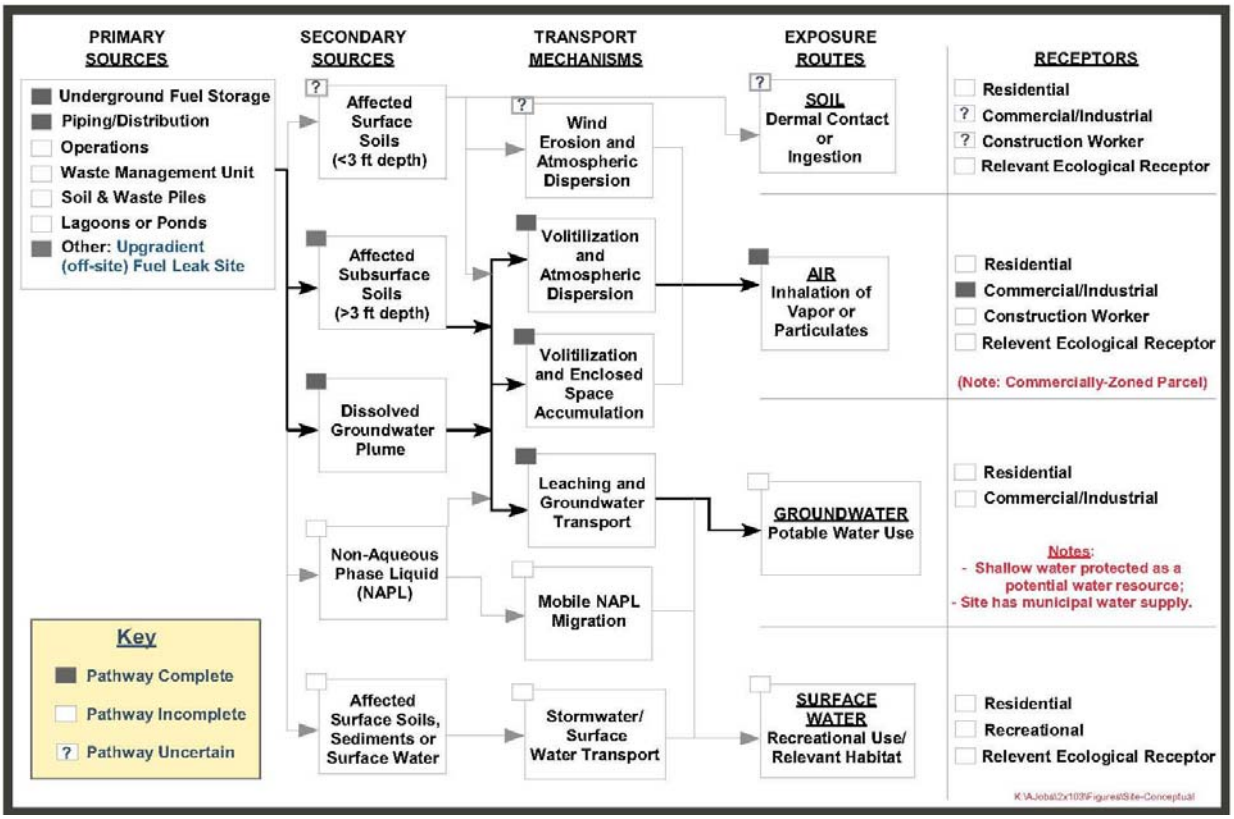
Hydrocarbons reached the saturated zone in sufficient quantity to form a sheen on top of the first encountered groundwater beneath the Site. No measurable free product has been documented during over 65 monitoring events, although sheen was observed in all 6 wells in the monitoring network.

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 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. A limited risk associated with dermal contact exists because there is a shallow soil sampling data gap. A description of potential exposure pathways follows:

- Direct exposure to residual, surface soil contamination is unlikely because the Site has remained a fenced, unpaved vacant lot since the former Exxon Service Station was completely removed approximately 20 years ago. In addition, four years of soil vapor extraction removed residual impacts to shallow soils. Direct exposure to residual, deeper soil contamination would be limited to construction trenching or grading operations. If development were to occur, a *Soil Management Plan* would be put into effect for the handling of any residually impacted soils. Additional shallow soil sampling will be proposed to confirm post remediation concentrations in shallow soils (< 10 feet bgs) at worst case locations (dispensers, product piping runs) since currently only 2 of 72 on-site soil samples have been laboratory-analyzed.

- Exposure to soil vapors containing hydrocarbons. The completed soil gas survey indicates the volatile constituent gasoline compound of benzene was detected at 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.

- 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. Protection of groundwater as a sensitive receptor, and site development vapor intrusion protection will be addressed during completion of a *Corrective Action Plan (CAP).*

Data Gaps

1) The most obvious data gap is the lack of an upgradient well(s) to confirm whether or not an abandoned Texaco Gas Station is contributing dissolved gasoline concentrations to the subject Site. The long term influx of dissolved contamination onto the subject Site would have affected the efficiency of previous remedial system operation as well as 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) Aside from samples collected from two, recent on-site borings (2007), all on-site soil data is over 14 years old, and the lab results predate active remediation at the site (2000-

2004). No samples were collected from beneath the former tank pit or dispensers (known contaminant source areas). Only two of the seventy-two laboratory-tested soil samples collected from the Site were obtained from depths shallower than 10 feet. Accordingly:

- The magnitude of known shallow sources of soil contamination (i.e., dispensers) or potential shallow sources of shallow soil contamination (i.e., product piping runs) have not been identified;
- The *Site Conceptual Model* currently does not have the data set capable of eliminating construction worker *direct exposure to soil* as pathway for site risk. As noted above, direct exposure to residual, surface soil contamination is highly unlikely because the Site has remained a fenced, unpaved vacant lot for over 20 years and four years of soil vapor extraction has actively removed residual impacts from shallow soils. Direct exposure to residual, deeper soil contamination may be present, and would be limited to construction trenching or grading operations.

As noted in this report's introduction, and described throughout, 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) apparent ongoing contribution from a secondary, upgradient source (the abandoned Texaco Station across School Street).

Once current soil conditions are confirmed (ie. identify where the bulk of the residual gasoline mass resides), and contaminant contribution from an off-site source is confirmed, a Corrective Action Plan should assess the most cost effective remedial alternative that: 1) reduces residual source contamination from continuing to significantly impact on-site and off-site groundwater[7], and 2) creates an environment for natural attenuation to thrive and reduces contaminant concentrations to cleanup goals within a reasonable timeframe. Given the lack of success with Dual Phase Extraction and the remaining budget left in the State Cleanup Fund's commitment to the Site, remedial options will likely include:

1) Targeted mass removal of source contamination (up to 20 feet bgs) using large-diameter augers/excavation equipment.

[7]: 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).

2) Multiple, high-pressure injections of specialty chemical oxidizers, with emphasis on getting the oxidizer in contact (destroying) the smear zone contamination.

3) A permeable reactive barrier installed along the downgradient property boundary.

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 20 years and previous efforts to develop the Site have been sidetracked out of fear of contaminant liability and risk. Remediation should be able to be completed in conjunctions with redevelopment in order to prevent loss of local property values and to prevent Brownfield blight.

2012: Workplan for Data Gap Assessment: In February 2012, Weber, Hayes and Associates submitted a workplan for a data gap assessment to address the following on-site and off-site data gaps:

Lack of an upgradient well(s) to confirm whether or not an abandoned Texaco Gas Station is contributing dissolved gasoline concentrations to the subject Site. The long term influx of dissolved contamination onto the subject Site would have affected the efficiency of previous remedial system operation as well as the selection of future remedial options.

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

Aside from samples collected from two, recent on-site borings (2007), all on-site soil data is over 14 years old, and the lab results predate active remediation at the site (2000-2004). No samples were collected from beneath the former tank pit or dispensers (known contaminant source areas). Only two of the seventy-two laboratory-tested soil samples collected from the Site were obtained from depths shallower than 10 feet. Accordingly:

The magnitude of known shallow sources of soil contamination (i.e., dispensers) or potential shallow sources of shallow soil contamination (i.e., product piping runs) have not been identified.

The Site Conceptual Model currently does not have the data set capable of eliminating construction worker direct exposure to soil as pathway for site risk. As noted above, direct exposure to residual, surface soil contamination is highly unlikely because the Site has remained a fenced, unpaved vacant lot for over 20 years and four years of soil vapor extraction has actively removed residual impacts from shallow soils. Direct exposure to residual, deeper soil contamination may be present, and would be limited to construction trenching or grading operations.

Once current soil conditions are confirmed (ie. identify where the bulk of the residual gasoline mass resides), and contaminant contribution from an off-site source is confirmed, a Corrective Action Plan should assess the most cost effective remedial alternative that: 1) reduces residual source contamination from continuing to significantly impact on-site and off-site groundwater, and 2) creates an environment for natural attenuation to thrive and reduces contaminant concentrations to cleanup goals within a reasonable timeframe. Given the lack of success with Dual Phase Extraction and the remaining budget left in the State Cleanup Fund's commitment to the Site, remedial options 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, with emphasis on getting the oxidizer in contact (destroying) the smear zone contamination.

A permeable reactive barrier installed along the downgradient property boundary.

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 20 years and previous efforts to develop the Site have been sidetracked out of fear of contaminant liability and risk. Remediation should be able to be completed in conjunctions with redevelopment in order to prevent loss of local property values and to prevent Brownfield blight.

2009 – 2011: Semi-Annual Groundwater Monitoring: Semi-Annual groundwater monitoring and sampling was performed at the site from Fall 2009 through the most recent event, Fall 2011. In this most recent groundwater monitoring event, WHA recommended reducing groundwater monitoring to annual, due to the extensive history of monitoring at the Site and clearly defined seasonal fluctuation levels and pattern of attenuation.

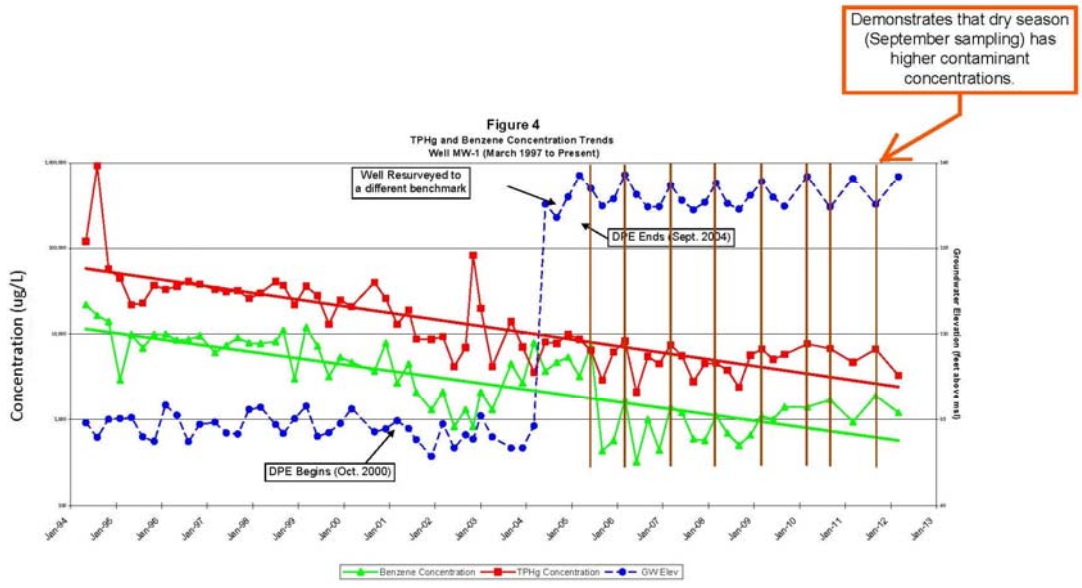
Appendix B

Rationale and Proposed Schedule for Annual Groundwater Monitoring

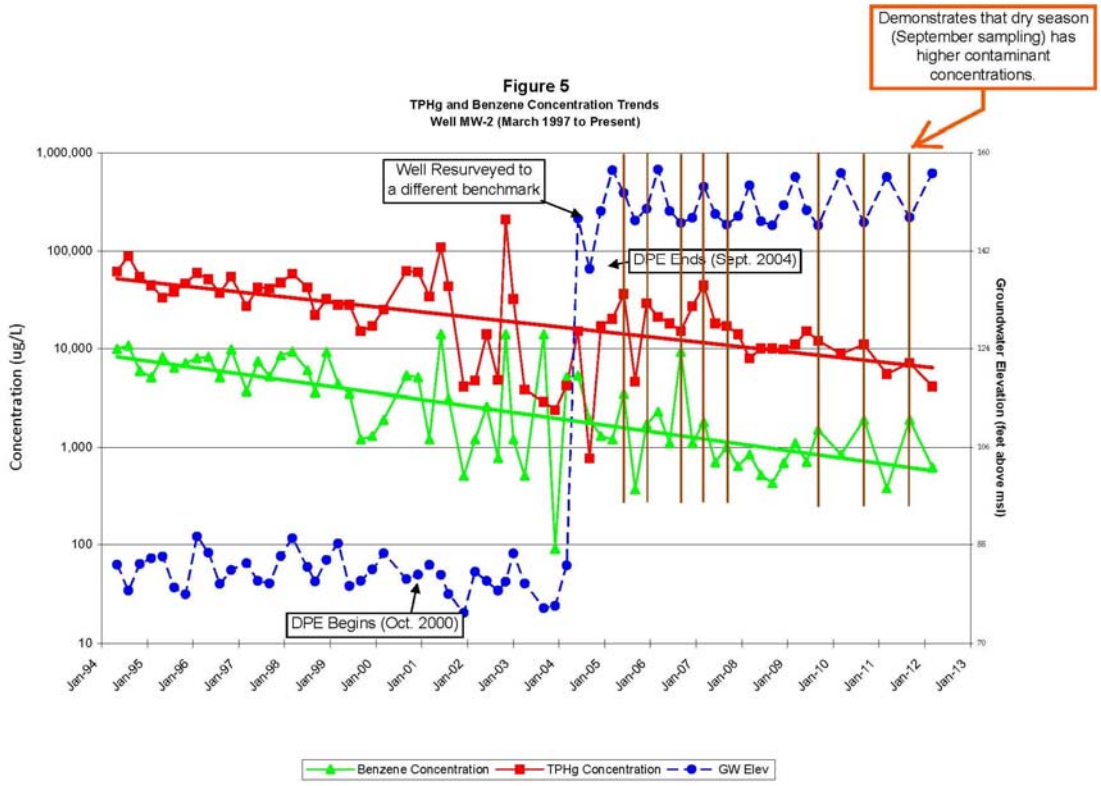
Rationale and Proposed Schedule for Annual Groundwater Monitoring

Per the Alameda County Environmental Health (ACEH) request in their letter dated September 20, 2011, we have prepared the following rationale and schedule for annual groundwater monitoring, including a historical comparison of depth-to-water *vs.* contaminant concentrations.

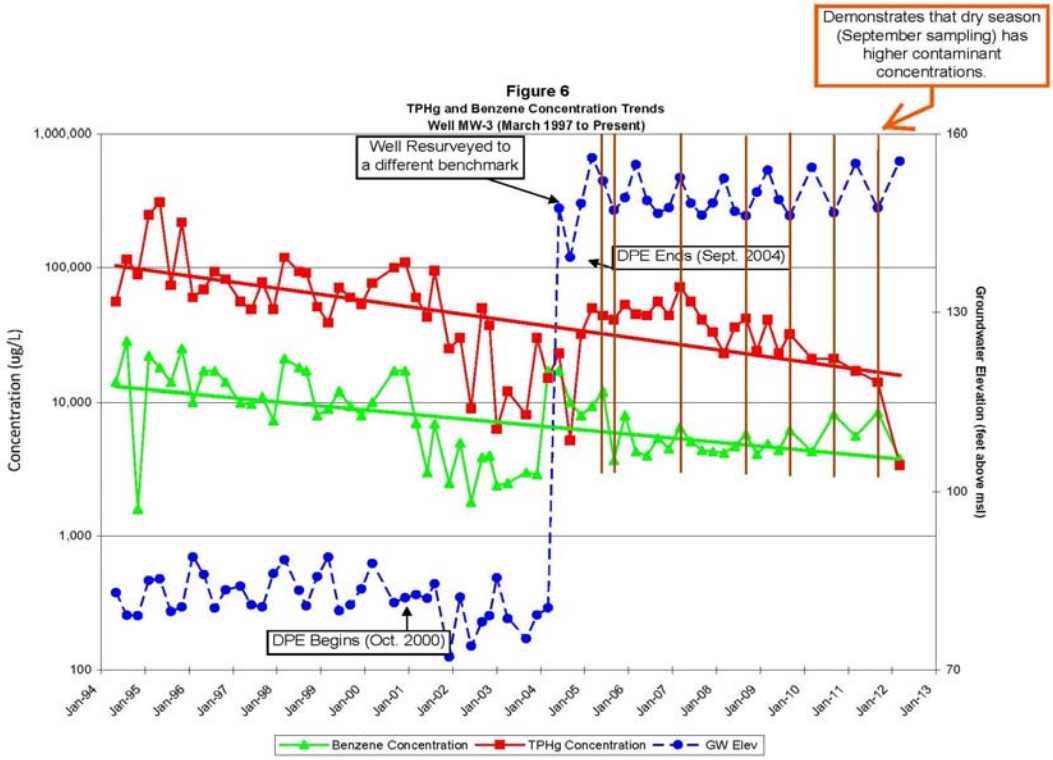
Semi-annual groundwater monitoring continues to show stable and declining trends of dissolved hydrocarbons, based upon 17 years (66 events) documenting trends of seasonal fluctuations. Below are charts documenting historical and current benzene and TPH-g concentrations versus groundwater levels for four of the six monitoring wells in use. These four wells were selected as they have the highest repeated contaminant concentrations. In general, charts demonstrate an inverse relationship between groundwater levels and contaminant concentrations. Groundwater concentrations are most significantly elevated when water levels are at their lowest point. **Therefore, we recommend that annual groundwater monitoring be completed during the dry season, or approximately September of each year in order to provide worst-case concentrations.**



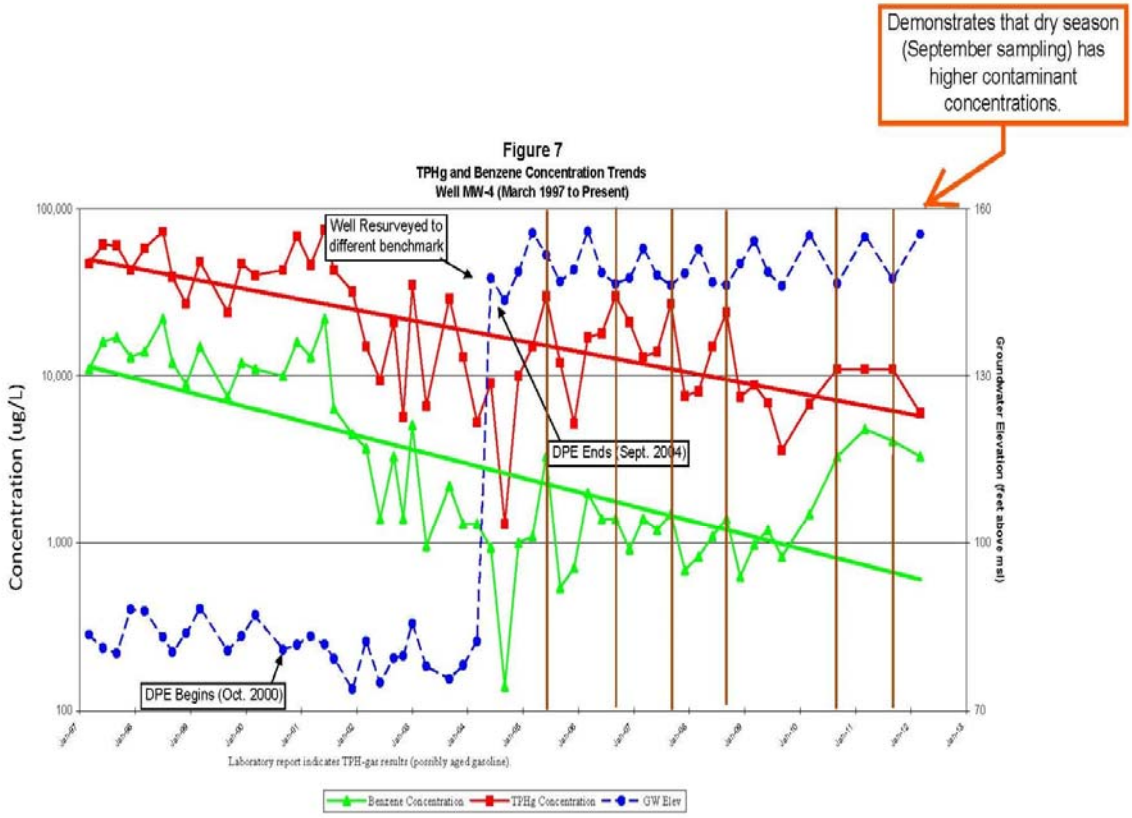
MW-1 with Historical Benzene & TPH-g Concentrations versus Groundwater Elevation



MW-2 with Historical Benzene & TPH-g Concentrations versus Groundwater Elevation



MW-3 with Historical Benzene & TPH-g Concentrations versus Groundwater Elevation



MW-4 with Historical Benzene & TPH-g Concentrations versus Groundwater Elevation

Appendix C

Weber, Hayes & Associates
Daily Field Records & Sampling Protocol

Field Date: March 30, 2012
&
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 (821) 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:*	***March 30, 2012***
Site Location:	***3055 35th Ave Oakland, CA***			*Study #:*	***2X103.Q***
Field Tasks:	☐ *Drilling*	☒ *Sampling*	☐ *Other (see below):*	*Weather Conditions:*	
Personnel / Company On-Site:	***Josh Pritchard (Weber, Hayes and Associates: WHA)***				

FIELD WORK PLANNING: Performed on: **March 29, 2012**

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-1 through 4, RW-5, & 9**
Analyze for: **TPH-G, BTEX, Lead Scavengers,& Fuel Oxygenates By EPA Method #8260**
Proposed Sampling Date: **March 30, 2012**

ON-SITE FIELD WORK:
Arrive on-site at 0830 to conduct 1st Quarter 2012 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 =** 12.42 **pH =** 7.00 **&** 10.00 **Electrical Conductivity =** 718 **Barometric Pressure =** 760mmHg
D.O. % Saturation = 100% **Oxidation Reduction Potential (ORP) =** 247

BEGIN SAMPLING WELLS:
MW-2, RW-5, MW-3, MW-4, RW-9, MW-1,

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.

3-30-12

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-4100
Fax: (831) 722-1159

Location	Groundwater Depth	Total Depth of Well	D.O. (mg/L)	ORP (mV)	Floating Product (comments)
MW-1	11.10'	26.5'	2.39	-100	NO FP, Moderate Odor
MW-2	9.84'	26.5'	2.66	-104	No FP, Moderate odor
MW-3	7.51'	26.5'	7.23	-113	No FP, High odor
MW-4	8.05'	30'	6.41	-101	NO FP, High Odor
RW-5	0.40'	25.7'	7.31	-3	NO FP, No Odor
RW-6	6.50'	25.5'	3.54	70	No FP, NO odor
RW-7	0 (@ TOC)	29.5'	—	—	No FP, No odor
RW-8	8.49'	29.5'	0.74	-45	NO FP, No odor
RW-9	8.12'	25'	6.13	20	NO FP, No Odor
RW-10	7.02'	25'	0.79	-43	No FP, No odor
RW-11	6.51'	25'	1.32	-106	No FP, Moderate Odor
RW-12	7.06'	27'	1.09	-8	No FP, No odor
RW-13	7.45'	25'	3.65	43	No FP, No Odor
RW-14	7.11'	25'	1.43	10	No FP, No Odor
JP					

HOW MANY PURGE DRUMS WERE LEFT ON-SITE: 1 APPROXIMATE VOLUME (gallons): 6
CALL PURGE WATER REMOVAL SUBCONTRACTOR ON: ? ? ?
DRUMS WILL BE PURGED ON: ? ? ?

COMMENTS: * water Levels @ or near TOC - Possible leaky lateral piping?

3-30-12
Signature of Field Personel & Date

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *March 30, 2012*

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

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

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

Sample Equipment:
- _____ Disposable Bailer
- _____ Whaler # _____
- _____ 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: 9.84 TOC → Standpipe **Pump Intake Depth:** ~ 22 feet

Well Depth: 26.5' BGS or TOC **Pump Flow Rate:** _____ mL/min

Height W-Column: 16.66' feet (well depth - depth to water)

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
0928	9.84	0	0	17.10	1.406	3.10	6.97	-113	Low: clear minor	
0930	10.32'	0.48	100	17.31	1.439	2.34	6.97	-111		
0932	10.36'	0.52	200	17.06	1.442	2.57	6.95	-107		
0934	10.45'	0.61'	300	17.07	1.441	2.57	6.96	-106		
0936	10.51'	0.67'	400	17.05	1.441	2.67	6.96	-104		
0938	10.60'	0.76'	500	17.03	1.442	2.67	6.96	-104		
0940	10.64'	0.80'	600	16.99	1.441	2.66	6.96	-104		X
Stop:	Purge	Complete	Parameters	Stabilized						

JP

Sample Well

Time: 0945 Sample ID: MW-2 Depth: 10.64' feet below TOC

Comments: No FP, moderate odor

Well Condition: Good, Standpipe

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *March 30, 2012*

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: 0.40' TOC

Well Depth: 25.7' BGS or TOC

Height W-Column: 25.3' 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
1015	0.40'	0	0	18.85	1.430	4.11	7.10	-95	Low: clear, minor	
1017	0.44'	0.04'	100	18.80	1.338	5.51	7.26	-111	↓	
1019	0.44'	0.04'	200	18.25	0.723	6.68	7.45	-108	↓	
1021	0.48'	0.08'	300	16.75	0.315	7.10	7.58	-55	↓	
1023	0.52'	0.12'	400	16.61	0.293	7.21	7.58	-32	↓	
1025	0.54'	0.14'	500	16.58	0.289	7.21	7.58	-28	↓	
1027	0.56'	0.16'	600	16.54	0.286	7.23	7.58	-21	↓	
1029	0.59'	0.19'	700	16.55	0.282	7.30	7.59	-11	↓	
1031	0.62'	0.22'	800	16.56	0.282	7.30	7.58	-7	↓	
1033	0.65'	0.25'	900	16.56	0.281	7.31	7.58	-3	↓	X
Stop:	Purge	Complete	Parameters Stabilized							

JP 3-30-12

Sample Well

Time: 1035 Sample ID: RW-5 Depth: 0.65' feet below TOC

Comments: No FP, No odor

Well Condition: Well Casing Full, surface or Rem. Piping water filling well? (See Photo)

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *March 30, 2012*

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: 7.51' TOC

Well Depth: 26.5' BGS or TOC

Height W-Column: 18.99' 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
1052	7.51'	0	0	18.24	0.876	7.31	7.15	-95	Low: clear minor	
1054	7.79'	0.28'	100	17.93	1.64	7.33	7.14	-114	↓	
1056	7.85'	0.34'	200	17.93	1.67	7.39	7.17	-116	↓	
1058	7.96'	0.45'	300	18.17	1.71	7.31	7.17	-117	↓	
1100	8.05'	0.54'	400	18.10	1.71	7.31	7.16	-116	↓	
1102	8.15'	0.64'	500	17.92	1.72	7.27	7.14	-114	↓	
1104	8.23'	0.72'	600	17.90	1.73	7.23	7.13	-113	↓	X
Stop:	Purge	Complete	Paramaters	Stabilized						

JP 3-30-12

Sample Well

Time: 1106 Sample ID: MW-3 Depth: 8.23' feet below TOC

Comments: No FP, High odor

Well Condition: No vault. Cap on tight, Cone over Casing.

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *March 30, 2012*

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: 8.05' TOC

Well Depth: 30' BGS or TOC

Height W-Column: 21.95' feet (well depth - depth to water)

Pump Intake Depth: ~23 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
1122	8.05'	0	0	18.85	1.450	5.30	7.02	-99	Low : clear, minor	
1124	8.21'	0.16'	100	18.52	1.361	5.46	7.01	-101	↓	
1126	8.28'	0.23'	200	18.30	1.269	6.21	7.04	-104	↓	
1128	8.33'	0.28'	300	17.98	1.244	6.41	7.03	-102	↓	
1130	8.37'	0.32'	400	17.96	1.241	6.42	7.03	-102	↓	
1132	8.40'	0.35'	500	17.92	1.240	6.40	7.02	-102	↓	
1134	8.43'	0.38'	600	17.90	1.239	6.41	7.02	-101	↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

JP 3-30-12

Sample Well

Time: 1135 Sample ID: MW-4 Depth: 8.43' feet below TOC

Comments: No FP, High Odor

Well Condition: No vault, Cap on tight, Cone over casing.

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: *Former Exxon Station / 2X103.Q* **Date:** *March 30, 2012*

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: 8.12' TOC
Well Depth: 25' BGS or TOC
Height W-Column: 16.88' 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
1153	8.12'	0	0	18.94	1.195	6.57	7.21	-117	Low: clear, minor	
1155	8.25'	0.13'	100	18.51	0.576	7.26	7.37	-81	↓	
1157	8.28'	0.16'	200	17.89	0.510	6.85	7.25	-35	↓	
1159	8.33'	0.21'	300	17.67	0.501	6.55	7.19	-10	↓	
1201	8.36'	0.24'	400	17.62	0.500	6.37	7.18	2	↓	
1203	8.39'	0.27'	500	17.64	0.500	6.15	7.13	15	↓	
1205	8.42'	0.30'	600	17.70	0.500	6.14	7.12	17	↓	
1207	8.45'	0.33'	700	17.74	0.500	6.13	7.09	20	↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

SP 3-30-12

Sample Well

Time: 1210 Sample ID: RW-9 Depth: 8.45' 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:** *March 30, 2012*

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: 11.10' TOC

Well Depth: 26.5' BGS or TOC

Height W-Column: 15.40' 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 Parameters Stabilized
1222	11.10'	0	0	18.84	0.559	6.82	6.99	-74	Low: clear, minor	
1224	11.25'	0.15'	100	18.10	1.232	3.57	6.88	-95		
1226	11.40'	0.30'	200	17.92	1.299	2.74	6.87	-99		
1228	11.51'	0.41'	300	17.98	1.313	2.53	6.86	-100		
1230	11.61'	0.51'	400	17.88	1.313	2.43	6.87	-100		
1232	11.67'	0.57'	500	17.85	1.313	2.39	6.87	-100		
1234	11.72'	0.62'	600	17.84	1.312	2.39	6.87	-100		
1236	11.75'	0.65'	700	17.83	1.313	2.40	6.87	-100		
1238	11.79	0.69'	800	17.81	1.313	2.39	6.87	-100	↓ ↓ ↓	X
Stop:	Purge	Complete	Parameters	Stabilized						

SP 3-30-12

Sample Well

Time: 1240 Sample ID: MW-1 Depth: 11.79' feet below TOC

Comments: NO FP, Moderate odor

Well Condition: Good, Stand Pipe.

Appendix D

Laboratory Report & Chain of Custody Documentation
Groundwater Samples

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

RE: Former Exxon / 2X103.Q

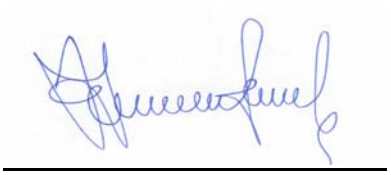
Work Order No.: 1203245

Dear Jered Chaney:

Torrent Laboratory, Inc. received 6 sample(s) on March 30, 2012 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.



G.Gueorguieva
Sr. Project Manager

April 09, 2012
Date

Date: 4/9/2012

Client: Weber, Hayes & Associates

Project: Former Exxon / 2X103.Q

Work Order: 1203245

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: 03/30/12
Date Reported: 04/09/12

MW-1 1203245-001

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Diesel	SW8015B(M)	1	40.0	100	1400	ug/L
Benzene	SW8260B	8.8	0.77	4.4	1200	ug/L
Toluene	SW8260B	8.8	0.52	4.4	3.6	ug/L
Ethyl Benzene	SW8260B	8.8	0.65	4.4	82	ug/L
m,p-Xylene	SW8260B	8.8	1.2	8.8	7.5	ug/L
o-Xylene	SW8260B	8.8	0.67	4.4	1.2	ug/L
TPH(Gasoline)	8260TPH	8.8	280	440	3300	ug/L

MW-2 1203245-002

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Diesel	SW8015B(M)	1	40.0	100	1800	ug/L
Benzene	SW8260B	6.3	0.55	3.2	620	ug/L
Toluene	SW8260B	6.3	0.37	3.2	5.0	ug/L
Ethyl Benzene	SW8260B	6.3	0.47	3.2	140	ug/L
m,p-Xylene	SW8260B	6.3	0.85	6.3	7.2	ug/L
o-Xylene	SW8260B	6.3	0.48	3.2	1.4	ug/L
MTBE	SW8260B	6.3	1.1	3.2	21	ug/L
TPH(Gasoline)	8260TPH	6.3	200	320	4100	ug/L

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

MW-3 1203245-003

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Diesel	SW8015B(M)	2	80.0	200	2200	ug/L
Benzene	SW8260B	44	3.8	22	3800	ug/L
Toluene	SW8260B	44	2.6	22	14	ug/L
Ethyl Benzene	SW8260B	44	3.3	22	360	ug/L
m,p-Xylene	SW8260B	44	5.9	44	52	ug/L
o-Xylene	SW8260B	44	3.3	22	5.3	ug/L
MTBE	SW8260B	44	7.6	22	63	ug/L
TPH(Gasoline)	8260TPH	44	1400	2200	3400	ug/L

MW-4 1203245-004

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
TPH as Diesel	SW8015B(M)	2	80.0	200	1900	ug/L
Benzene	SW8260B	44	3.8	22	3300	ug/L
Toluene	SW8260B	44	2.6	22	5.0	ug/L
Ethyl Benzene	SW8260B	44	3.3	22	95	ug/L
m,p-Xylene	SW8260B	44	5.9	44	28	ug/L
MTBE	SW8260B	44	7.6	22	40	ug/L
TPH(Gasoline)	8260TPH	8.8	280	440	6000	ug/L

RW-5 1203245-005

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit

All compounds were non-detectable for this sample.

Torrent LABORATORY, INC.

Sample Result Summary

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

RW-9

1203245-006

Parameters:	Analysis Method	DF	MDL	PQL	Results	Unit
Benzene	SW8260B	1	0.087	0.50	5.1	ug/L

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

Client Sample ID:	MW-1	**Lab Sample ID:**	1203245-001A
Project Name/Location:	Former Exxon / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	03/30/12 / 0:00		
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	04/06/12	8.8	0.77	4.4	1200		ug/L	409173	NA
Toluene	SW8260B	NA	04/06/12	8.8	0.52	4.4	3.6	J	ug/L	409173	NA
Ethyl Benzene	SW8260B	NA	04/06/12	8.8	0.65	4.4	82		ug/L	409173	NA
m,p-Xylene	SW8260B	NA	04/06/12	8.8	1.2	8.8	7.5	J	ug/L	409173	NA
o-Xylene	SW8260B	NA	04/06/12	8.8	0.67	4.4	1.2	J	ug/L	409173	NA
MTBE	SW8260B	NA	04/06/12	8.8	1.5	4.4	ND		ug/L	409173	NA
Diisopropyl ether (DIPE)	SW8260B	NA	04/06/12	8.8	1.4	4.4	ND		ug/L	409173	NA
ETBE	SW8260B	NA	04/06/12	8.8	1.1	4.4	ND		ug/L	409173	NA
TAME	SW8260B	NA	04/06/12	8.8	0.84	4.4	ND		ug/L	409173	NA
tert-Butanol	SW8260B	NA	04/06/12	8.8	14	44	ND		ug/L	409173	NA
1,2-Dichloroethane	SW8260B	NA	04/06/12	8.8	0.99	4.4	ND		ug/L	409173	NA
1,2-Dibromoethane	SW8260B	NA	04/06/12	8.8	0.59	4.4	ND		ug/L	409173	NA
(S) Dibromofluoromethane	SW8260B	NA	04/06/12	8.8	61.2	131	101		%	409173	NA
(S) Toluene-d8	SW8260B	NA	04/06/12	8.8	75.1	127	108		%	409173	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	04/06/12	8.8	64.1	120	101		%	409173	NA

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.											
TPH(Gasoline)	8260TPH	4/6/12	04/06/12	8.8	280	440	3300	x	ug/L	409173	5162
(S) 4-Bromofluorobenzene	8260TPH	4/6/12	04/06/12	8.8	41.5	125	108		%	409173	5162

NOTE: x - 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.

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.											
TPH as Diesel	SW8015B(M)	3/30/12	04/03/12	1	40.0	100	1400	x	ug/L	409097	5083
Pentacosane (S)	SW8015B(M)	3/30/12	04/03/12	1	64.2	123	98.8		%	409097	5083

NOTE: x- Sample chromatographic pattern does not resemble typical diesel standard pattern; unknown fuel pattern lighter than diesel

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

Client Sample ID:	MW-2	**Lab Sample ID:**	1203245-002A
Project Name/Location:	Former Exxon / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	03/30/12 /		
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	04/06/12	6.3	0.55	3.2	620		ug/L	409173	NA
Toluene	SW8260B	NA	04/06/12	6.3	0.37	3.2	5.0		ug/L	409173	NA
Ethyl Benzene	SW8260B	NA	04/06/12	6.3	0.47	3.2	140		ug/L	409173	NA
m,p-Xylene	SW8260B	NA	04/06/12	6.3	0.85	6.3	7.2		ug/L	409173	NA
o-Xylene	SW8260B	NA	04/06/12	6.3	0.48	3.2	1.4	J	ug/L	409173	NA
MTBE	SW8260B	NA	04/06/12	6.3	1.1	3.2	21		ug/L	409173	NA
Diisopropyl ether (DIPE)	SW8260B	NA	04/06/12	6.3	0.97	3.2	ND		ug/L	409173	NA
ETBE	SW8260B	NA	04/06/12	6.3	0.80	3.2	ND		ug/L	409173	NA
TAME	SW8260B	NA	04/06/12	6.3	0.60	3.2	ND		ug/L	409173	NA
tert-Butanol	SW8260B	NA	04/06/12	6.3	9.7	32	ND		ug/L	409173	NA
1,2-Dichloroethane	SW8260B	NA	04/06/12	6.3	0.71	3.2	ND		ug/L	409173	NA
1,2-Dibromoethane	SW8260B	NA	04/06/12	6.3	0.43	3.2	ND		ug/L	409173	NA
(S) Dibromofluoromethane	SW8260B	NA	04/06/12	6.3	61.2	131	110		%	409173	NA
(S) Toluene-d8	SW8260B	NA	04/06/12	6.3	75.1	127	108		%	409173	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	04/06/12	6.3	64.1	120	99.7		%	409173	NA

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.											
TPH(Gasoline)	8260TPH	4/6/12	04/06/12	6.3	200	320	4100	x	ug/L	409173	5162
(S) 4-Bromofluorobenzene	8260TPH	4/6/12	04/06/12	6.3	41.5	125	119		%	409173	5162

NOTE: x - 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.

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.											
TPH as Diesel	SW8015B(M)	3/30/12	04/03/12	1	40.0	100	1800	x	ug/L	409097	5083
Pentacosane (S)	SW8015B(M)	3/30/12	04/03/12	1	64.2	123	99.9		%	409097	5083

NOTE: x- Sample chromatographic pattern does not resemble typical diesel standard pattern; unknown fuel pattern lighter than diesel

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

Client Sample ID:	MW-3	**Lab Sample ID:**	1203245-003A
Project Name/Location:	Former Exxon / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	03/30/12 /		
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	04/06/12	44	3.8	22	3800		ug/L	409173	NA
Toluene	SW8260B	NA	04/06/12	44	2.6	22	14	J	ug/L	409173	NA
Ethyl Benzene	SW8260B	NA	04/06/12	44	3.3	22	360		ug/L	409173	NA
m,p-Xylene	SW8260B	NA	04/06/12	44	5.9	44	52		ug/L	409173	NA
o-Xylene	SW8260B	NA	04/06/12	44	3.3	22	5.3	J	ug/L	409173	NA
MTBE	SW8260B	NA	04/06/12	44	7.6	22	63		ug/L	409173	NA
Diisopropyl ether (DIPE)	SW8260B	NA	04/06/12	44	6.8	22	ND		ug/L	409173	NA
ETBE	SW8260B	NA	04/06/12	44	5.6	22	ND		ug/L	409173	NA
TAME	SW8260B	NA	04/06/12	44	4.2	22	ND		ug/L	409173	NA
tert-Butanol	SW8260B	NA	04/06/12	44	68	220	ND		ug/L	409173	NA
1,2-Dichloroethane	SW8260B	NA	04/06/12	44	5.0	22	ND		ug/L	409173	NA
1,2-Dibromoethane	SW8260B	NA	04/06/12	44	3.0	22	ND		ug/L	409173	NA
(S) Dibromofluoromethane	SW8260B	NA	04/06/12	44	61.2	131	113		%	409173	NA
(S) Toluene-d8	SW8260B	NA	04/06/12	44	75.1	127	107		%	409173	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	04/06/12	44	64.1	120	103		%	409173	NA

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.											
TPH(Gasoline)	8260TPH	4/6/12	04/06/12	44	1400	2200	3400	x	ug/L	409173	5162
(S) 4-Bromofluorobenzene	8260TPH	4/6/12	04/06/12	44	41.5	125	103		%	409173	5162

NOTE: x - 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.

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.											
TPH as Diesel	SW8015B(M)	3/30/12	04/03/12	2	80.0	200	2200	x	ug/L	409097	5083
Pentacosane (S)	SW8015B(M)	3/30/12	04/03/12	2	64.2	123	93.5		%	409097	5083

NOTE: x- Sample chromatographic pattern does not resemble typical diesel standard pattern; unknown fuel pattern lighter than diesel

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

Client Sample ID:	MW-4	**Lab Sample ID:**	1203245-004A
Project Name/Location:	Former Exxon / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	03/30/12 /		
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	04/06/12	44	3.8	22	3300		ug/L	409173	NA
Toluene	SW8260B	NA	04/06/12	44	2.6	22	5.0	J	ug/L	409173	NA
Ethyl Benzene	SW8260B	NA	04/06/12	44	3.3	22	95		ug/L	409173	NA
m,p-Xylene	SW8260B	NA	04/06/12	44	5.9	44	28	J	ug/L	409173	NA
o-Xylene	SW8260B	NA	04/06/12	44	3.3	22	ND		ug/L	409173	NA
MTBE	SW8260B	NA	04/06/12	44	7.6	22	40		ug/L	409173	NA
Diisopropyl ether (DIPE)	SW8260B	NA	04/06/12	44	6.8	22	ND		ug/L	409173	NA
ETBE	SW8260B	NA	04/06/12	44	5.6	22	ND		ug/L	409173	NA
TAME	SW8260B	NA	04/06/12	44	4.2	22	ND		ug/L	409173	NA
tert-Butanol	SW8260B	NA	04/06/12	44	68	220	ND		ug/L	409173	NA
1,2-Dichloroethane	SW8260B	NA	04/06/12	44	5.0	22	ND		ug/L	409173	NA
1,2-Dibromoethane	SW8260B	NA	04/06/12	44	3.0	22	ND		ug/L	409173	NA
(S) Dibromofluoromethane	SW8260B	NA	04/06/12	44	61.2	131	111		%	409173	NA
(S) Toluene-d8	SW8260B	NA	04/06/12	44	75.1	127	108		%	409173	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	04/06/12	44	64.1	120	103		%	409173	NA

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.											
TPH(Gasoline)	8260TPH	NA	04/09/12	8.8	280	440	6000	x	ug/L	409185	NA
(S) 4-Bromofluorobenzene	8260TPH	NA	04/09/12	8.8	41.5	125	113		%	409185	NA

NOTE: x - 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.

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.											
TPH as Diesel	SW8015B(M)	3/30/12	04/03/12	2	80.0	200	1900	x	ug/L	409097	5083
Pentacosane (S)	SW8015B(M)	3/30/12	04/03/12	2	64.2	123	77.8		%	409097	5083

NOTE: x- Sample chromatographic pattern does not resemble typical diesel standard pattern; unknown fuel pattern lighter than diesel

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

Client Sample ID:	RW-5	**Lab Sample ID:**	1203245-005A
Project Name/Location:	Former Exxon / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	03/30/12 /		
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	04/06/12	1	0.087	0.50	ND		ug/L	409173	NA
Toluene	SW8260B	NA	04/06/12	1	0.059	0.50	ND		ug/L	409173	NA
Ethyl Benzene	SW8260B	NA	04/06/12	1	0.074	0.50	ND		ug/L	409173	NA
m,p-Xylene	SW8260B	NA	04/06/12	1	0.13	1.0	ND		ug/L	409173	NA
o-Xylene	SW8260B	NA	04/06/12	1	0.076	0.50	ND		ug/L	409173	NA
MTBE	SW8260B	NA	04/06/12	1	0.17	0.50	ND		ug/L	409173	NA
Diisopropyl ether (DIPE)	SW8260B	NA	04/06/12	1	0.15	0.50	ND		ug/L	409173	NA
ETBE	SW8260B	NA	04/06/12	1	0.13	0.50	ND		ug/L	409173	NA
TAME	SW8260B	NA	04/06/12	1	0.095	0.50	ND		ug/L	409173	NA
tert-Butanol	SW8260B	NA	04/06/12	1	1.5	5.0	ND		ug/L	409173	NA
1,2-Dichloroethane	SW8260B	NA	04/06/12	1	0.11	0.50	ND		ug/L	409173	NA
1,2-Dibromoethane	SW8260B	NA	04/06/12	1	0.068	0.50	ND		ug/L	409173	NA
(S) Dibromofluoromethane	SW8260B	NA	04/06/12	1	61.2	131	109		%	409173	NA
(S) Toluene-d8	SW8260B	NA	04/06/12	1	75.1	127	108		%	409173	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	04/06/12	1	64.1	120	104		%	409173	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	4/6/12	04/06/12	1	31	50	ND		ug/L	409173	5162
(S) 4-Bromofluorobenzene	8260TPH	4/6/12	04/06/12	1	41.5	125	105		%	409173	5162

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	3/30/12	04/03/12	1	40.0	100	ND		ug/L	409097	5083
Pentacosane (S)	SW8015B(M)	3/30/12	04/03/12	1	64.2	123	96.5		%	409097	5083

Torrent LABORATORY, INC.

SAMPLE RESULTS

Report prepared for: Jered Chaney
Weber, Hayes & Associates

Date Received: 03/30/12
Date Reported: 04/09/12

Client Sample ID:	RW-9	**Lab Sample ID:**	1203245-006A
Project Name/Location:	Former Exxon / 2X103.Q	**Sample Matrix:**	Aqueous
Project Number:			
Date/Time Sampled:	03/30/12 /		
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	04/06/12	1	0.087	0.50	5.1		ug/L	409173	NA
Toluene	SW8260B	NA	04/06/12	1	0.059	0.50	ND		ug/L	409173	NA
Ethyl Benzene	SW8260B	NA	04/06/12	1	0.074	0.50	ND		ug/L	409173	NA
m,p-Xylene	SW8260B	NA	04/06/12	1	0.13	1.0	ND		ug/L	409173	NA
o-Xylene	SW8260B	NA	04/06/12	1	0.076	0.50	ND		ug/L	409173	NA
MTBE	SW8260B	NA	04/06/12	1	0.17	0.50	ND		ug/L	409173	NA
Diisopropyl ether (DIPE)	SW8260B	NA	04/06/12	1	0.15	0.50	ND		ug/L	409173	NA
ETBE	SW8260B	NA	04/06/12	1	0.13	0.50	ND		ug/L	409173	NA
TAME	SW8260B	NA	04/06/12	1	0.095	0.50	ND		ug/L	409173	NA
tert-Butanol	SW8260B	NA	04/06/12	1	1.5	5.0	ND		ug/L	409173	NA
1,2-Dichloroethane	SW8260B	NA	04/06/12	1	0.11	0.50	ND		ug/L	409173	NA
1,2-Dibromoethane	SW8260B	NA	04/06/12	1	0.068	0.50	ND		ug/L	409173	NA
(S) Dibromofluoromethane	SW8260B	NA	04/06/12	1	61.2	131	107		%	409173	NA
(S) Toluene-d8	SW8260B	NA	04/06/12	1	75.1	127	108		%	409173	NA
(S) 4-Bromofluorobenzene	SW8260B	NA	04/06/12	1	64.1	120	102		%	409173	NA

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH(Gasoline)	8260TPH	4/6/12	04/06/12	1	31	50	ND		ug/L	409173	5162
(S) 4-Bromofluorobenzene	8260TPH	4/6/12	04/06/12	1	41.5	125	109		%	409173	5162

Parameters:	Analysis Method	Prep Date	Date Analyzed	DF	MDL	PQL	Results	Lab Qualifier	Unit	Analytical Batch	Prep Batch
TPH as Diesel	SW8015B(M)	3/30/12	04/03/12	1	40.0	100	ND		ug/L	409097	5083
Pentacosane (S)	SW8015B(M)	3/30/12	04/03/12	1	64.2	123	105		%	409097	5083

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1203245	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	04/06/12	**Analytical Batch:**	409173
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:	1203245	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	04/06/12	**Analytical Batch:**	409173
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	0.37	
1,2,4-Trichlorobenzene	0.12	0.50	0.12	
Naphthalene	0.14	0.50	0.19	
1,2,3-Trichlorobenzene	0.23	0.50	ND	
(S) Dibromofluoromethane			120	
(S) Toluene-d8			109	
(S) 4-Bromofluorobenzene			108	
Ethanol	0.21	0.50	ND	TIC

Work Order:	1203245	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	04/09/12	**Analytical Batch:**	409185
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	31	50	ND	
(S) 4-Bromofluorobenzene			113	

Torrent LABORATORY, INC.

MB Summary Report

Work Order:	1203245	**Prep Method:**	3510_TPH	**Prep Date:**	03/30/12	**Prep Batch:**	5083
Matrix:	Water	**Analytical Method:**	SW8015B	**Analyzed Date:**	03/30/12	**Analytical Batch:**	409056
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH as Kerosene	0.0287	0.10	ND	
Pentacosane (S)			88.7	

Work Order:	1203245	**Prep Method:**	5030	**Prep Date:**	04/06/12	**Prep Batch:**	5162
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	04/06/12	**Analytical Batch:**	409173
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	31	50	ND	
(S) 4-Bromofluorobenzene			108	

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1203245	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	SW8260B	**Analyzed Date:**	04/06/12	**Analytical Batch:**	409173
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	17.04	104	111	6.77	61.4 - 129	30	
Benzene	0.087	0.50	ND	17.04	118	113	4.69	66.9 - 140	30	
Trichloroethylene	0.057	0.50	ND	17.04	99.6	98.4	1.40	69.3 - 144	30	
Toluene	0.059	0.50	ND	17.04	110	104	5.62	76.6 - 123	30	
Chlorobenzene	0.068	0.50	ND	17.04	107	101	5.88	73.9 - 137	30	
(S) Dibromofluoromethane			ND	11.36	111	107		61.2 - 131		
(S) Toluene-d8			ND	11.36	107	106		75.1 - 127		
(S) 4-Bromofluorobenzene			ND	11.36	106	104		64.1 - 120		

Work Order:	1203245	**Prep Method:**	NA	**Prep Date:**	NA	**Prep Batch:**	NA
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	04/09/12	**Analytical Batch:**	409185
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	31	50	ND	227.27	100	122	19.3	52.4 - 127	30	
(S) 4-Bromofluorobenzene			113	11.36	102	102		41.5 - 125		

Work Order:	1203245	**Prep Method:**	3510_TPH	**Prep Date:**	03/30/12	**Prep Batch:**	5083
Matrix:	Water	**Analytical Method:**	SW8015B	**Analyzed Date:**	03/30/12	**Analytical Batch:**	409056
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	0.029	0.10	ND	1	88.1	103	15.7	46.2 - 109	30	
Pentacosane (S)			ND	100	99.6	85.0		53.3 - 124		

Torrent LABORATORY, INC.

LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1203245	**Prep Method:**	5030	**Prep Date:**	04/06/12	**Prep Batch:**	5162
Matrix:	Water	**Analytical Method:**	8260TPH	**Analyzed Date:**	04/06/12	**Analytical Batch:**	409173
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	31	50	ND	227.27	94.8	81.8	14.7	52.4 - 127	30	
(S) 4-Bromofluorobenzene			108	11.36	106	118		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 / 2X103.Q

Work Order No.: 1203245

Date and Time Received: 3/30/2012 14:25

Received By: MJ

Physically Logged By: limbat

Checklist Completed By: limbat

Carrier Name:

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes			
Container/Temp Blank temperature in compliance?	Yes	Temperature:	7	°C
Water-VOA vials have zero headspace?	Yes			
Water-pH acceptable upon receipt?				

pH Checked by: pH Adjusted by:

Torrent LABORATORY, INC.

Login Summary Report

Client ID: TL5105 Weber, Hayes & Associates
QC Level:

Project Name: Former Exxon / 2X103.Q
TAT Requested: 5+ day:0

Project # :
Date Received: 3/30/2012

Report Due Date: 4/6/2012
Time Received: 14:25

Comments: 5 dayTAT,Pls. email an EDF result to Weber,Hayes&Associates Attn: Jered Chaney.

Work Order # : ***1203245***

WO Sample ID	Client Sample ID	Collection Date/Time	Matrix	Scheduled Disposal	Sample On Hold	Test On Hold	Requested Tests	Subbed
1203245-001A	MW-1	03/30/12 0:00	Water	05/14/12			EDF W_8260PetWHA W_GCMS-GRO W_TPHDO	
Sample Note:	EDF. For TPHDO-diesel only. Use MDL for any diluted samples							
1203245-002A	MW-2	03/30/12	Water	05/14/12			W_8260PetWHA W_TPHDO W_GCMS-GRO	
1203245-003A	MW-3	03/30/12	Water	05/14/12			W_8260PetWHA W_GCMS-GRO	
1203245-004A	MW-4	03/30/12	Water	05/14/12			W_GCMS-GRO W_8260PetWHA	
1203245-005A	RW-5	03/30/12	Water	05/14/12			W_8260PetWHA W_TPHDO W_GCMS-GRO	
1203245-006A	RW-9	03/30/12	Water	05/14/12			W_8260PetWHA W_GCMS-GRO W_TPHDO	

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