



March 29, 2013

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RECEIVED

By Alameda County Environmental Health at 11:01 am, Apr 01, 2013

RE: Conceptual Site Model and Closure Request

15008 East 14th Street, San Leandro, California
Fuel Leak Case No.: RO0000366

Dear Mr. Nowell,

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

If you have any questions or need additional information, please contact me at (925) 790-6270.

Sincerely,

A handwritten signature in black ink, appearing to read "Roya Kambin".

Roya Kambin
Union Oil of California – Project Manager

Attachment
Conceptual Site Model and Closure Report Submittal

Union Oil Company of California

**Conceptual Site Model and
Closure Request**

76 Service Station No. 3292
15008 East 14th Street
San Leandro, California
Case No. RO0000366

March 29, 2013



DS

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**Conceptual Site Model and
Closure Request**

76 Service Station No. 3292
15008 East 14th Street
San Leandro, California
Case No. RO0000366

Prepared for:
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Our Ref.:
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Date:
March 29, 2013

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Acronyms and Abbreviations

ACDEH	Alameda County Environmental Health Department
amsl	above mean sea level
ARCADIS	ARCADIS U.S., Inc.
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CDWR	California Department of Water Resources
COPC	constituent of potential concern
CSM	conceptual site model
Delta	Delta Consultants, Inc.
EBMUD	East Bay Municipal Utilities District
G-R	Gettler-Ryan, Inc.
GEIMS	Geotracker Environmental Information Management System
GSI	GeoStrategies
KEI	Kaprealian Engineering, Inc.
Low-Threat Closure Policy	Low-Threat Underground Storage Tank Case Closure Policy
LRL	laboratory reporting limit
LUST	leaking underground storage tank
MCL	California Maximum Contaminant Level
mg/kg	milligrams per kilogram
MTBE	methyl tertiary butyl ether
NAPL	nonaqueous phase liquid
OWS	oil-water separator
R ² value	coefficient of determination
request	Conceptual Site Model and Closure Request



Conceptual Site Model and Closure Request

76 Service Station No. 3292
San Leandro, California

site	76 Service Station No. 3292, located at 15008 East 14 th Street in San Leandro, California
SFRWQCB	San Francisco Regional Water Quality Control Board
SWRCB	State Water Resources Control Board
TOG	total organic gas
TPH-d	total petroleum hydrocarbons as diesel
TPH-g	total petroleum hydrocarbons as gasoline
UST	underground storage tank
WQO	water quality objective
WRCC	Western Regional Climate Center
°F	degrees Fahrenheit
µg/L	micrograms per liter



Conceptual Site Model and Closure Request

76 Service Station No. 3292
San Leandro, California

1. Introduction

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California, ARCADIS U.S., Inc. (ARCADIS) is pleased to submit this Conceptual Site Model and Closure Request (request) for the 76 Service Station No. 3292, located at 15008 East 14th Street in San Leandro, California (site; Figure 1). This request summarizes existing site data that were used to support a request for low-threat case closure. The site qualifies for closure as a low-threat fuel site, as described in the State Water Resources Control Board (SWRCB) Low-Threat Underground Storage Tank Case Closure Policy (Low-Threat Closure Policy) adopted by the SWRCB on May 1, 2012 and effective August 17, 2012 (SWRCB 2012a). A completed Low-Threat Closure Checklist is included as Appendix A.

This request includes a comprehensive site assessment and remediation history, regional and site-specific geology and hydrogeology, review of the soil and groundwater conditions at the site (including the distribution of constituents of potential concern [COPCs]), and evaluation of human health exposure from site-related COPCs. Based on the information provided in the following sections, the site meets General and Media-Specific Criteria of the Low-Threat Closure Policy (SWRCB 2012a); therefore, ARCADIS requests that the site be considered for low-threat closure.



2. Site Description

The site is an operating 76-branded gas station located at 15008 East 14th Street in San Leandro, California (Alameda County Assessor's Parcel # 80-18-21-3; Figure 1). The site currently consists of a station building with three mechanical service bays, four product dispenser islands, two 12,000-gallon gasoline underground storage tanks (USTs), and one 520-gallon waste oil UST. A Site Plan is presented on Figure 2.

The site is bounded to the northwest by 150th Avenue and commercial property, to the southwest by East 14th Street and commercial property, to the southeast by commercial property, and to the northeast by residential properties. According to the Alameda County Unincorporated Communities and Neighborhoods map (Alameda County 2010), the site is located in the Bayfair Business District, which is a sub-district within the Ashland/Cherryland Business District. The zoning in this sub-district is mostly C-1 (Retail Business) with small amounts of land zoned C-N (Neighborhood Commercial) and PD (Bayfair Specific Plan-Retail Commercial or High-Density Residential). Existing land use in this sub-district is almost exclusively commercial property (including restaurants, realty offices, and auto service stations) (Alameda County Planning Department 1995).

Sensitive populations include people who may potentially have increased susceptibility to risks resulting from exposure to site-related petroleum hydrocarbons, such as school-age children, medically compromised people, and the elderly. The nearest sensitive receptor is the San Leandro Surgery Center, which is located approximately 300 feet south and hydraulically downgradient from the site.



3. Conceptual Site Model

This section summarizes the conceptual site model (CSM), as well as the site geology and hydrogeology, previous work, distribution of fuel hydrocarbons and oxygenates in the subsurface, and an evaluation of risks to human health and the environment.

3.1 Regional Setting

3.1.1 Topography and Site Elevation

The site is located on relatively flat land at an elevation of approximately 35 feet above mean sea level (amsl; Delta Consultants, Inc. [Delta] 2009).

3.1.2 Geography

The site is located on the east corner of the intersection of East 14th Street and 150th Avenue in San Leandro, California (Figure 2). The site is bounded to the northwest by 150th Avenue and commercial property, to the southwest by East 14th Street and commercial property, to the southeast by commercial property, and to the northeast by residential properties.

3.1.3 Surface Water Drainage

The nearest surface-water bodies are the Estudillo Canal and the San Leandro Creek, which are located approximately 2,800 feet and 1.4 miles south (downgradient) of the site, respectively.

3.1.4 Climate

According to the Western Regional Climate Center's (WRCC's) Upper San Leandro, California (0490185) weather station (the closest weather station to the site), the average rainfall for the area is approximately 25.42 inches a year. The average high temperature is 67.4 degrees Fahrenheit (°F) and the average low temperature is 47.1°F (WRCC 2013).

3.1.5 Vegetation

The site is completely paved with asphalt. The offsite areas are also paved, with the exception of small areas used for landscaping.



3.2 Regional and Site Geology and Hydrogeology

The site is located in the East Bay Plain Subbasin within the Santa Clara Valley Groundwater Basin. According to the California Department of Water Resources (CDWR) Bulletin 118, this subbasin is a northwest-trending alluvial plain bounded to the north by San Pablo Bay, to the east by Franciscan Basement Rock, and to the south by the Niles Cone Groundwater Basin. The East Bay Plain Subbasin extends to the west beneath San Francisco Bay. The East Bay Plain aquifer consists of unconsolidated sediments of Quaternary age. These deposits include the early Pleistocene Santa Clara Formation, late Pleistocene Alameda Formation, early Holocene Temescal Formation, and Artificial Fill (CDWR 2004).

The site is underlain by silts and clays, with minor interbeds of silty and clayey sands to depths of approximately 21.5 feet bgs (Gettler-Ryan, Inc. [G-R] 1999). Copies of available boring logs are provided in Appendix B. Geologic cross-sections are included in Appendix C.

Water in the City of San Leandro is provided by the East Bay Municipal Utilities District (EBMUD). A majority of EBMUD's water supply (90 percent) comes from the Mokelumne River watershed in the Sierra Nevada Mountains. EBMUD uses its six water treatment facilities to filter and process more than 375 million gallons of water per day (EBMUD 2013).

Groundwater beneath the site was first encountered in borings drilled in 1991 and 1992 at approximately 21.5 feet bgs (Delta 2009). Groundwater elevations at the site have historically ranged from approximately 31.29 to 22.53 feet amsl (or 5.75 to 13.30 feet below top of casing). Groundwater elevations fluctuate seasonally by only a few feet. Ten active groundwater monitoring wells are located at the site (Table 1). Previous groundwater data have indicated a groundwater flow direction to the south and southwest beneath the site. During the most recent groundwater monitoring event in the second half of 2012, groundwater flow was also to the south-southwest with a hydraulic gradient of 0.004 foot per foot (ARCADIS 2013). The groundwater elevation contour map for the most recent sampling event conducted in December 2012 is presented on Figure 3. Historical water levels are provided in Appendix D.



3.3 Summary of Previous Work

Investigation activities at the site commenced in 1991 during the UST, dispenser, and associated product line removal. This section summarizes previous work, including release history, site assessment, and site remediation activities.

3.3.1 Release History

On January 16, 1991, one single-walled steel 10,000-gallon regular unleaded gasoline UST, one single-walled steel 10,000-gallon super unleaded gasoline UST, and one single-walled steel 280-gallon waste oil UST were excavated and removed from the site. Associated product lines and dispensers were also removed and replaced. Following removal, two small holes up to 0.5 inch in diameter were visible in the 10,000-gallon super unleaded gasoline UST (Kaprealian Engineering, Inc. [KEI] 1991a). Unknown amounts of gasoline were released to the subsurface.

Based on the presence of total petroleum hydrocarbons as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and total xylenes (BTEX, collectively) in soil beneath the product piping near the northern-most fuel dispenser islands during February 1991 dispenser upgrade activities, a release of an unknown amount of petroleum hydrocarbons was suspected to have occurred (Delta 2009).

In May and June 1995, an oil-water separator (OWS) with dimensions of 1.6 by 3 by 2.8 feet was removed (GeoStrategies [GSI] 1995). Based on the presence of total petroleum hydrocarbons as diesel (TPH-d), total organic gas (TOG), and metals in soil observed beneath the OWS after its removal, a release of unknown quantity from the OWS was suspected to have occurred (Delta 2009).

3.3.2 Site Assessment History

During the January 1991 UST removal, one soil sample was collected from beneath the waste oil UST and four soil samples were collected from beneath the two gasoline USTs. Additional soil samples were not collected from the UST area due to the presence of groundwater. Post-excavation soil samples were collected from bulk material. One groundwater sample was collected from the excavation pit area.

On February 11 and 12, 1991, nine soil samples were collected from the product piping trenches at depths ranging from 3.5 to 7.5 feet bgs. TPH-g and BTEX were identified in the soil sample collected beneath the gasoline USTs. Maximum concentrations of

TPH-g and BTEX in the soil samples collected were 2,600, 7.1, 55, 55, and 170 milligrams per kilogram (mg/kg), respectively. This soil was over-excavated during tank replacement. TPH-g and BTEX were not detected above the laboratory reporting limits (LRLs) in the soil sample collected from beneath the waste oil UST. TPH-g and BTEX were generally not detected above the LRL in the soil samples collected from beneath the product piping. However, maximum pre-excavation concentrations of TPH-g and BTEX at these locations were 130, 0.89, 0.37, 0.66, and 0.70 mg/kg, respectively. A water sample was collected from the UST pit area after soil excavation. The groundwater sample detected TPH-g (13,000 micrograms per liter [$\mu\text{g/L}$]), and BTEX at concentrations of 64, 37, 85, and 25 $\mu\text{g/L}$, respectively (KEI 1991a).

To determine groundwater flow and characterize impacted media at the site, five groundwater monitoring wells (MW-1 through MW-5) were installed in April 1991. MW-1 through MW-5 were installed to depths ranging from approximately 19.5 to 22.5 feet bgs. Soil samples were collected during well installation. The groundwater monitoring wells were developed in April 1991 and groundwater was sampled in May 1991. TPH-g and BTEX were generally observed in soil samples collected at depths greater than 5 feet bgs. The highest concentrations observed in these borings were also generally observed in the deepest samples collected. Maximum concentrations of TPH-g and BTEX were detected in the sample collected from monitoring well MW-5 at a depth of approximately 14.5 feet bgs (620, 6.8, 4.4, 18, and 75 mg/kg, respectively). TPH-g and BTEX were also detected in the water samples collected in May 1991. Maximum concentrations of TPH-g and BTEX were detected in the water sample collected from MW-5 (69,000, 1,400, 2,500, 15,000, and 3,500 $\mu\text{g/L}$, respectively [KEI 1991b]).

On May 5 and 6, 1992, four off-site monitoring wells (MW-6 through MW-9) were installed to the north and southwest of the site. The wells were installed to depths ranging from 19 to 21.5 feet bgs. Eleven soil samples were collected during well installation and were analyzed for TPH-g and BTEX. The maximum concentrations of TPH-g were observed in the soil samples collected from monitoring well MW-7 at depths of 9 feet bgs (280 mg/kg) and 12.5 feet bgs (540 mg/kg). BTEX compounds were detected in the soil samples from well locations MW-7, MW-8, and MW-9, with the highest concentrations observed in the sample from MW-7 at 12.5 feet bgs. Maximum concentrations of BTEX compounds were benzene at 1.9 mg/kg, toluene at 0.47 mg/kg, ethylbenzene at 15 mg/kg, and total xylenes at 47 mg/kg. TPH-g and BTEX were not detected above LRLs in the soil samples collected from MW-6 (5.5 and 10.5 feet bgs) and from MW-8 (5, 10, and 11 feet bgs) (Delta 2009).



Two additional off-site monitoring wells (MW-10 and MW-11) were installed on August 13, 1992. Soil samples were collected during the installation of these wells and were analyzed for TPH-g and BTEX compounds. The maximum concentrations were TPH-g at 47 mg/kg (MW-11 at 12 feet bgs), benzene at 0.013 (MW-10 at 10 feet bgs), toluene at 0.056 mg/kg (MW-11 at 12 feet bgs), ethylbenzene at 0.99 mg/kg (MW-10 at 13 feet bgs), and total xylenes at 0.38 mg/kg (MW-11 at 12 feet bgs) (Delta 2009).

In May and June 1995, an OWS was abandoned. One soil sample was collected from beneath the OWS. TPH-d, TOG, and petroleum oil and grease were detected at concentrations of 10, 50, and 40 mg/kg, respectively (GSI 1995). To further evaluate impacted soil and groundwater at the site, four soil borings and four grab groundwater samples were collected. Two onsite soil borings (EB-1 and EB-2) and two offsite soil borings (EB-3 and EB-4) were advanced in May 1998. The soil borings were advanced to 12 feet bgs and one grab groundwater sample was collected from each soil boring. Concentrations of TPH-g, BTEX, and methyl tertiary butyl ether (MTBE) were not detected above LRLs in all soil samples. TPH-g was detected in each of the grab groundwater samples at concentrations ranging from 140 to 11,000 µg/L. Benzene was detected in two of the grab groundwater samples at concentrations of 1 and 23 µg/L. Ethylbenzene was detected in three of the grab groundwater samples at concentrations ranging from 4 to 370 µg/L. Total xylenes were detected in two of the grab groundwater samples at concentrations of 3.2 and 35 µg/L. MTBE was detected in each of the grab groundwater samples collected at concentrations ranging from 3.4 to 300 µg/L. Toluene was not detected above its LRL in any of the grab groundwater samples (G-R 1999).

Groundwater monitoring activities were initiated at the site in September 1991. Currently, the monitoring well network consists of 13 groundwater monitoring wells. Monitoring wells MW-1 through MW-11 and monitoring wells MW-2(SP) and MW-3(SP), which are associated with the Shadrall Associates Property (former liquor barn), are sampled semiannually during the second and fourth quarters (ARCADIS 2013).

3.3.3 Remediation History

One steel 10,000-gallon regular unleaded gasoline UST, one steel 10,000-gallon super unleaded gasoline UST, one steel 280-gallon waste oil UST, associated product piping, and dispensers were removed from the site and replaced in January 1991. The UST pit area was over-excavated to approximately 17.5 feet bgs. In addition, approximately



15,700 gallons of groundwater were pumped from the UST pit area on January 28, 1991, after over-excavation activities occurred.

In May and June 1995, an OWS with dimensions of 1.6 by 3 by 2.8 feet deep was abandoned. The contents of the OWS were bailed into a 55-gallon drum. The OWS and pipes were steam cleaned and the rinsate water was also bailed into 55-gallon drums. After cleaning, the inside surfaces were dried with absorbent pads. The concrete bottom of the OWS was then destroyed with a jackhammer and one soil sample was collected beneath the OWS on May 31, 1995. The former OWS was backfilled with clean base rock to approximately 4 inches bgs. Concrete was poured on top of the base rock to match existing surface conditions (GSI 1995).

3.4 Offsite Sources

Based on a review of the Geotracker Environmental Information Management System (GEIMS; <http://geotracker.waterboards.ca.gov>), two closed and three open leaking underground storage tank (LUST) cleanup sites are located within 1,000 feet of the site. Each site is summarized below:

Former Mobil Service Station #04-FGN, located at 14994 East 14th Street, approximately 75 feet northwest of the site, is an open remediation LUST cleanup site with gasoline impacts. Of the sites identified on GEIMS, the former Mobil Service Station Site (upgradient source) has the most potential to significantly impact the site. The Mobil Service Station Site operated as a gasoline service station prior to 1984, when Mobil Oil Corporation discontinued fuel dispensing operations. In December 1986, three 6,000-gallon USTs and one 300-gallon waste oil tank were removed from this site.

In September 1987, during work by Pacific Gas and Electric Company in the northern area of the eastern sidewalk adjacent to the site, hydrocarbon concentrations were reported in soil samples collected by the Alameda County Environmental Health Department (ACEHD). In December 1987, the area was over-excavated to a depth that ranged from 5 to 10 feet bgs. In April 2012, Cardno ERI conducted a soil vapor study and submitted its results and along with a low-threat closure request in the Soil Vapor Sampling and Evaluation of Low-Threat Closure Criteria Report (Cardno ERI 2012).

Current groundwater monitoring results at the upgradient source show petroleum hydrocarbon impacts in groundwater extending approximately 110 to 140 feet



Conceptual Site Model and Closure Request

76 Service Station No. 3292
San Leandro, California

southwest of this site (Cardno ERI 2012). Monitoring well MW-7, which is part of the monitoring well network of the site, is located immediately south of the upgradient source (Section 3.6). Historical soil data for MW-7 is presented in Table 2. Current and historical groundwater analytical results at MW-7 are presented in Table 3 and in Appendix D, respectively.

Nella Oil Site located at 14880 East 14th Street, approximately 300 feet southwest of the site, was a LUST cleanup site with gasoline impacts and was closed on May 12, 2006. The Nella Oil Site was a former Shell-branded service station that closed in 1981. The USTs and fuel dispensers were removed in November 1981. The Nella Oil Site operated as an automobile service and truck rental business in May 2001 and was redeveloped as a Flyers-branded service station in 2003 (Delta 2005).

Chevron #9-2013 located at 15002 Hesperian Boulevard, approximately 250 feet southwest of the site, was a LUST cleanup site with gasoline impacts and was closed on July 27, 1999. No additional information is available regarding the status of this site.

Quality Tune-Up located at 14901 East 14th Street, approximately 150 feet west of the site, is an open remediation LUST cleanup site with diesel, gasoline, and waste oil impacts. In 1997, four USTs were removed from this site. A phase II site assessment conducted by Ninyo & Moore in June 2005 confirmed the presence of hydrocarbon contamination near the former USTs and southwestern dispenser island (Ninyo & Moore 2007). A Remedial Action Plan was prepared in 2007 and approved by the ACDEH in January 2008. The Final Remedial Action Plan, dated January 10, 2008, proposed removal of soil in four areas of the site, followed by groundwater monitoring (Ninyo & Moore 2008). In April 2012, petroleum-impacted source soil was removed from the site. Groundwater monitoring is required at this site to assess the effectiveness of the source removal and to evaluate the current groundwater conditions at the site (San Francisco Regional Water Quality Control Board [SFRWQCB] 2012).

TLC Cleaners located at 15070 Hesperian Blvd, approximately 500 feet south of the site, is a cleanup site that is currently open, but has been listed as inactive since June 4, 2009. No further information is available regarding the status of this site.

3.5 Current and Historical Distribution of Residual Hydrocarbons and Oxygenates

COPCs at the site include TPH-g, benzene, and MTBE. The current distribution of residual petroleum hydrocarbons and fuel oxygenates in soil and groundwater are described in the following sections.

3.5.1 Soil

More than 50 soil samples have been collected at the site at depths ranging from 3.5 to 16 feet bgs to characterize concentrations of fuel hydrocarbons and oxygenates in site soil. Soil analytical results are summarized in Table 2. Soil sample locations are provided on Figure 2.

Detectable petroleum hydrocarbon impacts were identified between 3.5 and 16 feet bgs. Note that soil samples collected below approximately 5 feet bgs represent saturated soil conditions. Petroleum hydrocarbon impacts were reported in vadose and saturated zone soil samples collected underneath the USTs, dispenser islands, and product lines. Generally, the highest concentrations of COPCs were reported in the saturated zone and capillary fringe soil near the USTs, northernmost fuel dispenser islands, and southwestern portion of the site near MW-5.

Maximum historical concentrations of fuel hydrocarbons and oxygenates in soil from 0 to 10 feet bgs include:

- TPH-g at 280 mg/kg from MW-7 at 9 feet bgs;
- benzene at 0.89 mg/kg from P-7 at 3.5 feet bgs;
- toluene at 0.45 mg/kg from MW-7 at 9 feet bgs;
- ethylbenzene at 7.2 mg/kg from MW-7 at 9 feet bgs; and
- total xylenes at 23 mg/kg from MW-7 at 9 feet bgs.

Constituents detected in the soil samples collected from P7 at 3.5 feet bgs, beneath the product piping in the northern portion of the site. Environmental screening levels (ESLs) established by the SFRWQCB (2008) for groundwater that is a current or potential drinking water resource in a commercial/industrial land use area (Table A-2) were compared against available data. For the site, TPH-g, benzene, ethylbenzene,

and total xylenes in shallow soil (<3m bgs) exceeded their respective ESLs. It should be noted that soil analytical results presented in this document are from investigations conducted approximately 20 years ago. This data, though older, still allows for a comprehensive analysis of site conditions under the assumption soil analytical results have attenuated over time.

-

Overall, the maximum concentrations reported in these depth intervals represent fuel hydrocarbon and oxygenate impacts in soil collected approximately 20 years ago.

As such, it is reasonable to assume that current concentrations of COPCs in soil are lower compared to these older data, as reflected in the lower concentrations of COPCs currently observed in groundwater compared to their historical values. In addition, natural attenuation processes have also likely helped to lower current concentrations to some degree since the collection of these older soil data.

Upgradient and offsite monitoring well MW-7 exhibited elevated concentrations of site COPCs at depths of 9 and 12.5 feet bgs, suggesting that impacts to soil observed at this upgradient well location may be from an upgradient source (Section 3.4).

3.5.2 Nonaqueous Phase Liquid

There is no evidence of nonaqueous phase liquid (NAPL) at the site.

3.5.3 Groundwater

COPCs in groundwater at the site have been monitored since September 1991. The monitoring well network consists of 13 wells (MW-1 through MW-11, MW-2 (SP), and MW-3 (SP)). Monitoring wells are sampled semiannually during the second and fourth quarters (ARCADIS 2013). Well construction details and current groundwater analytical results are presented in Tables 1 and 3, respectively. Historical groundwater analytical results are included in Appendix D.

Dissolved-phase concentrations in groundwater samples collected as of fourth quarter 2012 (ARCADIS 2013) indicate the following:

- *TPH-g*. TPH-g concentrations at the site ranged from less than the LRL of 50 µg/L in monitoring wells MW-3 and MW-4 to 7,600 µg/L in well MW-5, located on the

southern part of the site. The historical maximum concentration for TPH-g was 840,000 µg/L at MW-5 on May 19, 1992.

- *Benzene and toluene.* Benzene and toluene were not detected above the LRL of 0.50 µg/L (elevated LRLs of 1 µg/L in MW-5 and 2.5 µg/L in MW-7) in the groundwater samples collected during the December 2012 sampling event. The historical maximum concentration for benzene was 1,600 µg/L at MW-5 on September 19 and December 18, 1991. The historical maximum concentration for toluene was 3,100 µg/L at MW-5 on December 18, 1991.
- *Ethylbenzene.* Ethylbenzene was detected in monitoring wells MW-5 (160 µg/L) and MW-7 (290 µg/L). Ethylbenzene was not detected above the LRL of 0.50 µg/L in the groundwater samples collected in the remaining monitoring wells during the December 2012 sampling event. The historical maximum concentration for ethylbenzene was 5,200 µg/L at MW-5 on December 19, 1991.
- *Total xylenes.* Total xylenes were not detected above the LRL of 1 µg/L (elevated LRLs of 2 µg/L in MW-5 and 5 µg/L in MW-7) during the December 2012 sampling event. The maximum concentration for total xylenes was 20,000 µg/L at MW-5 on September 19, 1991.
- *MTBE.* MTBE was detected in monitoring wells MW-1 (10 µg/L), MW-5 (2.4 µg/L), and MW-11 (8.7 µg/L). MTBE was not detected above the LRLs in any of the groundwater samples collected during the fourth quarter 2012. MTBE was reported at a historical maximum concentration of 21,000 µg/L at MW-1 on May 12, 1999.

The data presented above establishes that the groundwater plume is stable and decreasing. An analytical summary map from the December 2012 monitoring and sampling event is shown on Figure 4. Isoconcentration maps for TPH-g, benzene, and MTBE are shown on Figures 5, 6, and 7, respectively. Reasonably expected monitoring well concentrations, based on a review of historical trend graphs from 2004 to present, were used in contouring. These concentrations are included on Figures 5, 6, and 7. The historical trend graphs displaying site COPCs in monitoring wells are displayed in Appendix E.

3.6 Linear Regression Analysis and Plume Stability

A statistical analysis of the historical groundwater monitoring data was completed to assess trends in COPC concentrations with time. The screening process included a



comparison of the historical monitoring data for TPH-g, benzene, and MTBE to the water quality objectives (WQOs) summarized below and to select a list of candidates for linear regression analyses. A statistical analysis of the groundwater monitoring data at monitoring well MW-7 was not completed because it appears that groundwater impacts at that location are from an upgradient source (Section 3.4).

WQOs used in this analysis are presented in the following table.

COPC	WQO	Source
TPH-g	100 µg/L	SFRWQCB
Benzene	1 µg/L	MCL
MTBE	13 µg/L	MCL

Note:
MCL = California Maximum Contaminant Level

The WQOs for benzene and MTBE are the established MCLs (California Department of Public Health 2011). To be conservative, environmental screening levels established by the SFRWQCB (2008) for groundwater that is a current or potential drinking water resource (Table F-1a) were used as WQOs for TPH-g in this analysis.

Constituents were selected for linear regression analysis if there were more than eight data points with a minimum of 75 percent detections in the complete monitoring history, and a minimum of 50 percent WQO exceedances in the last 3 years or the most recent 12 data points. This screening method allowed selection of:

- Only those monitoring well constituent combinations that had sufficient data to run statistically significant tests.
- Locations where constituents exceeded WQOs for a reasonably significant number of times in the recent past.



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The selected candidates for the linear regression analyses are listed in the table below.

Well ID	TPH-g	Benzene	MTBE
MW-1	X	--	--
MW-2	X	--	--
MW-2 (SP)	X	--	--
MW-3	--	--	--
MW-3(SP)	X	--	--
MW-4	--	--	--
MW-5	X	--	--
MW-6	--	--	--
MW-8	X	--	--
MW-9	X	--	--
MW-10	X	--	--
MW-11	X	--	X

Notes:

X = Failed screening criteria; selected for regression analysis

-- = Passed screening criteria; not selected for regression analysis

3.6.1 Linear Regression Methodology

Linear regression analyses using natural log-normalized concentration data were conducted to estimate trend direction, attenuation rates, and approximate time to achieve cleanup goals for the selected locations and constituents (United States Environmental Protection Agency 2002). The results of the linear regression analyses, including coefficients of determination (R^2 values), p-values of the correlation, and trend directions are summarized in Table 4, with the individual analyses included in Appendix F.

The R^2 value is a measure of how well the linear regression fits the site data; R^2 values <0.1 indicate weak model fits, $0.1 > R^2 < 0.5$ indicate moderate model fits, and $R^2 > 0.5$ indicate stronger model fits. The p-value of the correlation provides a measure of the level of significance of the statistical test. Correlations were accepted as significant for p-values less than or equal to 0.05 (95 percent confidence level) and not significant for

p-values greater than 0.05. The trend direction was defined as decreasing if the slope of the linear regression was negative and increasing if the slope of the regression was positive. Predictions of time to reach WQOs could not be made for statistically insignificantly decreasing (potentially stable) trends.

Where non-detect or qualified values were used in computations, the concentrations were set equal to the LRLs or reported value, where available. Use of the LRL for concentrations that were below detection provides a conservative estimate for evaluating the concentration trends through time.

Data were evaluated using two separate methods:

- *MW-1, MW-2, MW-2 (SP), MW-3 (SP), MW-8, MW-9, MW-10, and MW-11.* The overall trend for the specified constituents at these wells was decreasing from the earliest monitoring data; therefore, the complete, historical petroleum constituent concentration dataset for these well/constituent pairs was evaluated.
- *MW-5.* This monitoring well constituent pair exhibited stable concentration trends when monitoring began in 1991. This is likely attributable to the approximate time required for the dissolved-phase COPCs to arrive at this monitoring location from the source area. To accurately assess current decreasing trends observed at MW-5, only data from June 2009 through the present were included in the regression analyses for TPH-g.

The results of the linear regression analyses are discussed below for each constituent.

3.6.1.1 Total Petroleum Hydrocarbons as Gasoline

Results of the regression analysis for the TPH-g dataset indicate statistically significant decreasing concentration trends at all monitoring wells evaluated for this constituent, except for MW-3 (SP). The longest time to reach the WQO for TPH-g of 100 µg/L was projected to be at MW-10 (year 2042). A projected date to reach the WQO is not available for MW-3 (SP) because a decreasing but not statistically significant concentration trend was observed. TPH-g concentrations at monitoring well MW-3 (SP) have been stable and no more than two orders of magnitude above the WQO since the beginning of monitoring in May 1996. Overall, TPH-g concentrations at the site have been decreasing and it is expected that TPH-g concentrations will decrease in MW-3 (SP) in the future.

3.6.1.2 Methyl Tertiary Butyl Ether

Results of the regression analysis for the MTBE dataset indicate a statistically significant decreasing concentration trend at monitoring well MW-11. This monitoring well location was projected to reach the MCL for MTBE of 13 µg/L in 2010. The linear regression considers all historical data and can be used to predict an approximate time that WQOs will be reached. MTBE concentrations have been at or below the WQO of 13 µg/L for MTBE at MW-11 since June 2011.

3.6.2 Summary of Linear Regression Analysis

Results of the regression analysis indicate significant attenuation of TPH-g and MTBE in groundwater beneath the site. All monitoring wells evaluated in this analysis revealed statistically significant decreasing concentration trends, except for TPH-g in monitoring well MW-3 (SP), which was decreasing but not statistically significant. Constituents will reach their respective WQO in a maximum of 29 years.

3.7 Assessment of Impacts of Residual Constituents on Public Health and the Environment

Based on the assessment of data presented in this request, the residual concentrations of COPCs in site environmental media are unlikely to pose adverse effects to human health and the environment. This section summarizes sensitive receptors observed near the site, as well as a water supply well survey, potential exposure pathways, and comparison of residual COPC concentrations in site media to human health risk-based screening levels.

3.7.1 Sensitive Receptors and Water Supply Well Survey

The site is an operating service station surrounded by commercial and residential properties. The closest residences are just offsite to the east, approximately 5 feet from the site boundary. Potential receptors were identified based on current and expected future land use(s) at the site. Current and reasonably anticipated future land use of the site is commercial (i.e., continued operation as a gasoline service station).

The site is located within the Bayfair Business District, a sub-district within the Ashland/Cherryland Business District. Existing land use in this district is almost exclusively commercial property (including restaurants, realty offices, and auto service stations). One apartment complex was described to exist within this business district.



Based on review of aerial photographs, the apartment complex is located approximately 0.5 mile southwest of the site. Based on the description of revitalization opportunities and the revitalization strategy of this district, properties located in this district should capture sales from visitors of the nearby mall and residents east of the district. Residential development in this district is not planned (Alameda County Planning Department 1995). Therefore, it is unlikely that the site would be redeveloped as residential property.

Groundwater beneath the site is not currently used as a potable source and is not expected to be used as a drinking water source in the future. The EBMUD currently supplies water to the site and surrounding properties and is expected to provide water to these areas in the future (EBMUD 2013). Water used within the EBMUD public water system, which includes drinking water at the site, is imported water from the Mokelumne River watershed in the Sierra Nevada mountains (90 percent; EBMUD 2013).

According to a well search performed in 2007 (TRC 2007) with the CDWR, 13 water supply wells were located with a ½-mile radius of the site. Nine of these wells are designated as irrigation wells and were located at distances of 1,320 to 1,881 feet from the site. One domestic well (located 1,980 feet west of the site) and one domestic irrigation well (located 1,254 feet southwest of the site) were also identified. Two additional wells were identified at distances of 1,584 and 1,848 feet from the site; however, use of these wells was not described in the well completion reports. While six of these wells were located downgradient of the site, they are located at least 1,000 feet from the site and are unlikely to be impacted by historical or current operations at the site.

The Estudillo Canal and the San Leandro Creek are the nearest surface-water bodies to the site and are located approximately 2,800 feet and 1.4 miles south of the site, respectively. The site is devoid of ecological habitat and surface water; therefore, ecological receptors are assumed to be generally absent from the site. It is expected that the site will remain the same in the future. Therefore, given these features at the site, potential exposure pathways for ecological receptors are incomplete.

3.7.2 Potential Transport and Release Mechanisms and Receptors

The site is an active commercial petroleum fueling and service station and is expected to remain an active commercial gasoline service station in the reasonably anticipated

future. This section discusses the potential transport and release mechanisms and receptors at the site.

3.7.2.1 Volatilization

A potential release mechanism at the site may include the volatilization of COPCs in subsurface soil or groundwater to indoor air of onsite commercial/industrial buildings, outdoor air, or air within a trench used by a future onsite utility worker. Therefore, volatilization of COPCs in the subsurface and migrating into buildings is a potentially complete exposure pathway. However, the maximum detected benzene concentration is below the low-threat closure threshold level, assuming a minimum of 4 percent oxygen in the subsurface. Based on the relatively low benzene concentration in groundwater, the volatilization pathway is likely insignificant.

In general, exposure to petroleum vapors migrating from soil or groundwater to indoor air may pose unacceptable human health risks. However, in many petroleum release cases, potential human exposures to vapors are mitigated by bioattenuation processes as vapors migrate toward the ground surface. The Low-Threat Closure Policy (SWRCB 2012a) does not require satisfaction of the Media-Specific Criteria for petroleum vapor migration to indoor air at active petroleum fueling facilities. Exposure to historical releases through the indoor air inhalation pathway is considered insignificant compared to typical volatile petroleum hydrocarbon constituent concentrations found at active fueling stations. Therefore, the pathway for inhalation of indoor air from volatilization of groundwater or soil constituents is considered complete but insignificant for current and future onsite commercial gasoline service station workers.

Ambient air is likely to dissipate potential vapors from groundwater and soil. Moreover, soil samples collected at the site did not reveal benzene or ethylbenzene concentrations at any depth that exceed the volatilization to outdoor air levels specified in Table 1 of the Low-Threat Closure Policy (SWRCB 2012a) for commercial/industrial workers. Therefore, the pathway for inhalation of outdoor air from volatilization of groundwater and soil constituents is considered incomplete for current and future onsite and offsite commercial workers, current and future offsite residents, and future onsite utility workers.

It is assumed that utility workers do not spend any time indoors; thus, inhalation of vapors potentially migrating indoors from groundwater and soil is an incomplete pathway for the future onsite utility worker.

The closest residence to the site lies approximately 15 feet to the east of the site boundary. Based on the groundwater flow direction at the site (south-southeast), the residence is upgradient of the impacted area. Therefore, the pathway for inhalation of indoor air from volatilization of groundwater and soil constituents is incomplete for current and future offsite residents.

3.7.2.2 Leaching to Groundwater

The release of petroleum hydrocarbons from former USTs and associated piping also can leach from soil to groundwater. This release mechanism is likely responsible for the majority of historical groundwater impacts. However, decreasing petroleum hydrocarbon trends in groundwater (Section 3.6) indicate that this release mechanism has likely been mitigated through remediation, weathering, and natural attenuation.

3.7.2.3 Direct Contact with Groundwater

As described in Section 3.7.1, drinking water is supplied to the site by EBMUD. A well survey completed in 2007 (TRC 2007) identified 13 water supply wells within ½ mile of the site. The closest well (a domestic irrigation well) was identified approximately 1,254 feet southwest of the site. A domestic well was also identified 1,980 feet west of the site. It is unlikely that the groundwater plume will reach the nearest drinking supply well given the distance of the wells from the site. Potential direct contact exposures to COPCs in groundwater, such as tap water ingestion, dermal contact with tap water, and inhalation of volatile organic compounds released from tap water, are incomplete for current and future onsite and offsite commercial workers and offsite residents.

Typically, utility trenches are located at a depth of no greater than 8 feet bgs. Historically, the depth to groundwater at the site ranged from approximately 5.02 to 14.72 feet bgs, with the shallowest depth to groundwater of 5.02 feet recorded in December 1998. Recent groundwater depths recorded an average of 9.15 feet bgs, with the shallowest depth of 7.94 feet bgs. Thus, it is unlikely that future onsite utility workers will be directly exposed to residual petroleum hydrocarbons in groundwater. The direct contact with groundwater pathway future onsite utility workers is therefore considered complete but insignificant for future onsite utility workers.

3.7.2.4 Direct Contact with Soil

Because the site and surrounding area are completely covered with buildings, fuel dispensers, concrete and asphalt paving, and perimeter landscaping, it is anticipated

that current and future onsite and offsite commercial workers will not be exposed to constituents in soil via direct contact exposure pathways (i.e., incidental ingestion, dermal contact, and inhalation of particulates). Therefore, the pathway for direct contact with surface and subsurface soil for the current and future onsite and offsite commercial worker is incomplete.

Future onsite utility workers may be directly exposed to petroleum hydrocarbon constituents in subsurface soil during intrusive soil activities. Impacted soil appears at depths of approximately 3.5 to 16 feet bgs. Typically, utility trenches are located at a depth of no greater than 8 feet bgs. These depths may be encountered by construction, excavation, and utility workers; however, there are currently no plans for redevelopment or station upgrades now or in the near future. Therefore, future onsite utility workers' potential direct contact exposure to constituents in surface and subsurface soil is considered to be complete and insignificant.

Constituents adhered onto dust particles may migrate from exposed subsurface soil by wind erosion to outdoor air and be breathed by potential onsite and offsite receptors. This transport mechanism is unlikely because redevelopment of the site is not planned and the site is covered by a building, landscaping, concrete, or asphalt pavement, with little soil exposed at the surface and releases occurred in the subsurface.

3.7.2.5 Potential Ecological Receptors

The site is devoid of ecological habitat and surface water; therefore, it is anticipated that ecological receptors are absent from the site. It is expected that the site will remain the same in the future. The nearest surface-water body (the Estudillo Canal) is located more than 2,800 feet south of the site. The possible impacts to the nearest surface-water body are unlikely due to the distance of the water body from the site. Based on this information, potential exposure pathways for ecological receptors are incomplete.

3.8 Summary of Potential Exposure Pathways

Potential human receptors at the site were identified based on current and future land use(s) at and near the site. As discussed previously, current and reasonably anticipated future land use at the site is commercial (i.e., continued operation of the service station). Potential receptors include current and future onsite and offsite commercial workers, current and future offsite residents, and future onsite utility/construction workers. As described above, no complete and potentially significant



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exposure pathways were identified. These pathways are also summarized on Figure 8. Potentially complete but insignificant exposure pathways include:

- Current and future onsite and offsite commercial workers: Inhalation of COPCs migrating to indoor air
- Current and future offsite residents: COPCs migrating to indoor air from groundwater
- Future onsite utility workers:
 - Inhalation (outdoor air) of air vapors
 - Inhalation (outdoor air) of dust particles
 - Ingestion of surface and subsurface soil
 - Dermal contact with groundwater
 - Dermal contact with surface and subsurface soil

4. Assessment of Site Conditions Relative to Low-Threat Closure Policy

The Low-Threat Closure Policy (SWRCB 2012a) outlines eight General Criteria to assess whether sites are candidates for low-threat case closure, and three categories of Media-Specific Criteria (groundwater, petroleum vapor intrusion to indoor air, and direct contact and outdoor air exposure) that also must be met. This section evaluates current site conditions against the General and Media-Specific Criteria. Based on this evaluation, ARCADIS concludes that the site meets the General and Media-Specific Criteria requirements for low-threat case closure.

4.1 Evaluation of Low-Threat Closure General Criteria

This section evaluates the site conditions related to each of the eight General Criteria.

4.1.1 Criteria A – The unauthorized release is located within the service area of a public water system

The site lies within the East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin. The site is located within the service area of the City of San Leandro public water system. All water used within the City of San Leandro public water system, which includes drinking water at the site, is imported water supplied by the EBMUD. A majority of the EBMUD's water supply (90 percent) comes from the Mokelumne River watershed in the Sierra Nevada Mountains. As discussed in Section 3.7.1, well survey results of active and inactive wells identified 13 water supply wells located with a ½-mile radius of the site. The nearest well identified is a domestic irrigation well located 1,254 feet southwest of the site.

4.1.2 Criteria B – The unauthorized release consists only of petroleum

Soil and groundwater impacts occurred as a result of undocumented releases from USTs, dispenser islands, and/or product piping. COPCs at the site include TPH-g, benzene, and fuel oxygenates including MTBE, which are indicative of a petroleum release. There have been no non-petroleum impacts or releases documented at the site.

4.1.3 Criteria C – The unauthorized (“primary”) release from the UST system has been stopped

In January and February 1991, the USTs, dispenser islands, and associated product lines were removed from the site and replaced. During UST replacement, soil was



over-excavated to approximately 17.5 feet bgs. The amount of soil removed is unknown. Following excavation, 15,700 gallons of groundwater were purged from the gasoline tank pit. In May and June 1995, an OWS with dimensions of 1.6 by 3 by 2.8 feet was abandoned (Section 3.3.3). The unauthorized releases ceased with the removal of this infrastructure.

4.1.4 Criteria D – Free product has been removed to the maximum extent practicable

Site monitoring wells have been screened for free product accumulation during groundwater monitoring events from 1991 to the present. NAPL has never been observed at the site.

4.1.5 Criteria E – A conceptual site model that assesses the nature, extent, and mobility of the release has been developed

A CSM that includes a comprehensive site assessment and remediation history, regional and site-specific geology and hydrogeology, review of the soil and groundwater conditions at the site, and evaluation of human health exposure from site-related COPCs is presented in Section 3 of this request.

4.1.6 Criteria F – Secondary source has been removed to the extent practicable

As detailed in section 3.6, results of the regression analysis indicate significant attenuation of TPH-g and MTBE in groundwater beneath the site. These decreasing trends provide evidence that it is likely that secondary source removal at the site has been achieved to the extent practicable through MNA and bio-attenuation.

4.1.7 Criteria G – Soil and groundwater have been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15

MTBE was analyzed in soil samples collected in 1998 (Table 2) and in groundwater samples collected during site investigation and monitoring events from 1996 to the present (Table 3, Appendix D). MTBE was not detected above LRLs in the soil samples collected from the site. During the most recent monitoring event, the maximum concentration of MTBE (10 µg/L) was detected in the groundwater sample collected from monitoring well MW-1.

4.1.8 Criteria H – Nuisance as defined by Water Code Section 13050 does not exist at the site

No nuisance exists at the site, as defined by Water Code Section 13050. Site conditions and the treatment and disposal of site wastes are not injurious to health, are not indecent or offensive to the senses, and do not obstruct free use of property or interfere with the comfortable enjoyment of life or property. Site conditions and the treatment and disposal of site wastes do not affect an entire community or neighborhood or any considerable number of persons. Site impacts are restricted to the subsurface and are present in a limited area that does not adversely affect the community at large.

4.2 Evaluation of Low-Threat Closure: Media-Specific Criteria

This section evaluates the site conditions related to each of the three categories of Media-Specific Criteria.

4.2.1 Groundwater

Groundwater at the site does not currently pose a risk to existing or anticipated future beneficial uses of groundwater and meets the groundwater-specific criteria outlined in the Low-Threat Closure Policy (SWRCB 2012a). The Low-Threat Closure Policy (SWRCB 2012a) states that “the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites.”

4.2.1.1 Plume Stability

According to the Technical Justification for Groundwater Media Specific Criteria (SWRCB 2012b), plume stability can be demonstrated in two ways:

- “[R]outinely observed non-detect values for groundwater parameters in down-gradient wells”
- “[S]table or decreasing concentration levels in down-gradient wells.”

Plume stability is discussed in Section 3.6 of this request. The results of the linear regression analyses are summarized in Table 4 and the individual analyses are included in Appendix F. Results of the regression analysis indicate significant attenuation of TPH-g and MTBE in groundwater beneath the site (Section 3.6.1).

Evaluation of groundwater monitoring data indicates plume stability at the site as defined by the Technical Justification for Groundwater Media-Specific Criteria (SWRCB 2012b).

4.2.1.2 Additional Groundwater-Specific Criteria

As described in the Low-Threat Closure Policy (SWRCB 2012a), a site can meet the groundwater media-specific criteria through one of five main classes. This site falls into **Class 4** as described below.

4a. The contaminant plume that exceeds water quality objectives is less than 1000 feet in length

To determine the classification of groundwater impacts, the length of the plume exceeding WQOs for each of the current site COPCs was measured from the most recent isoconcentration maps included on Figures 5, 6, and 7. Plume lengths were measured from the center of the suspected source zone to the furthest downgradient isoconcentration contour:

- The TPH-g plume exceeding 100 µg/L is approximately 410 feet long.
- The benzene plume exceeding 1 µg/L is approximately 31 feet long.
- The MTBE plume exceeding 13 µg/L is approximately 118 feet long.

4b. There is no free product

No free product has been observed in site monitoring wells since monitoring started in 1991, as detailed in General Criteria (D) and Section 3.5.2. Free product is not currently present at the site.

4c. The nearest existing water supply well or surface-water body is greater than 1,000 feet from the defined plume boundary

As described in General Criteria (A) and Section 3.7.1, no water supply wells were identified within 1,000 feet from the site. The Estudillo Canal and the San Leandro Creek are the nearest surface-water bodies and are located approximately 2,800 feet and 1.4 miles south of the site, respectively (Section 3.7.1).

4d. The dissolved concentration of benzene is less than 1,000 µg/L, and the dissolved concentration of MTBE is less than 1,000 µg/L

Benzene was not detected above the LRL during the fourth quarter 2012 groundwater monitoring event. MTBE was detected at a maximum concentration of 10 µg/L (MW-1) during the fourth quarter 2012 groundwater monitoring event. Thus, concentrations of benzene and MTBE are below the 1,000 µg/L limit.

4.2.2 Petroleum Vapor Intrusion to Indoor Air

As described in the Low-Threat Closure Policy (SWRCB 2012a), satisfaction of the Media-Specific Criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities where there are no site-specific characteristics that would pose an unacceptable health risk. The site is an active commercial petroleum fueling facility with no unacceptable risk characteristics; therefore, the site is exempt from the Media-Specific Criteria.

The benzene plume exceeding 1 µg/L that seems to be originating from the site (MW-5) does not extend beneath buildings on offsite properties and only partially flows beneath the major roadway (East 14th Street) adjacent to the site (Figure 6). Therefore, this criterion is met and the site is exempt. The benzene plume exceeding 1 µg/L that seems to be originating from an upgradient source extends only around MW-7 and only partially flows beneath the major roadway (150th Avenue).

4.2.3 Direct Contact and Outdoor Air Exposure

As described in the Low-Threat Closure Policy (SWRCB 2012a), sites will meet the Media-Specific Criteria for direct contact with contaminated soil or inhalation of contaminants volatilized to outdoor air if:

- The maximum concentrations of COPCs in soil are less than or equal to those listed in Table 1 of the Low-Threat Closure Policy (SWRCB 2012a).
- A site-specific risk assessment shows that COPCs present in soil will not adversely affect human health.
- Exposure to COPCs is mitigated through engineering controls.

This site meets the first criteria as summarized below:

- Because the site is completely covered with a building and pavement, there is little or no potential for direct human contact with site soil or for off-site wind dispersion

of soil. Therefore, direct contact exposure pathways (i.e., ingestion, dermal contact, and inhalation of particulates) with soil are considered incomplete and are expected to remain the same in the future.

- Historical soil data are included in Table 2. Benzene and ethylbenzene concentrations were evaluated using concentrations for commercial/industrial exposure because the site is not anticipated to be developed for residential use (Table 1 of SWRCB 2012a). Soil samples were not analyzed for naphthalene and other polycyclic aromatic hydrocarbons.

Chemical	Commercial/Industrial				Utility Worker	
	0 to 5 feet bgs mg/kg		Volatilization to outdoor air (5 to 10 feet bgs) mg/kg		0 to 10 feet bgs mg/kg	
	LTC Policy Table 1	Site Maximum	LTC Policy Table 1	Site Maximum	LTC Policy Table 1	Site Maximum
Benzene	8.2	0.89	12	0.68	14	0.89
Ethylbenzene	89	0.57	134	7.2	314	7.2

As shown in the table above, the maximum concentrations of benzene and ethylbenzene are below the No Significant Risk Values (Table 1 of SWRCB 2012a) for commercial/industrial direct contact and volatilization to outdoor air and utility worker direct contact in soil samples collected from 0 to 10 feet bgs.



5. Recommendations

ARCADIS respectfully requests that the ACEHD grant low-threat site closure because site conditions meet all General and Media-Specific Criteria established in the Low-Threat Closure Policy (SWRCB 2012a); therefore, the site poses a low threat to human health, safety, and the environment, and satisfies the case closure requirements of Health and Safety Code Section 25296.10. In addition, case closure is consistent with Resolution 92-49, which requires that cleanup goals be met within a reasonable time frame.

Groundwater data presented in this request support a conclusion that the site and the impacted groundwater are not expected to pose a significant threat to human health or the environment.

ARCADIS recommends that a status of no further action be received, and the site be granted regulatory closure. Suspension of groundwater monitoring and reporting is also recommended during the low-threat case closure evaluation process. A work plan for monitoring well destruction and decommissioning will be prepared following the case closure evaluation process and upon site closure approval from the ACEHD.

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San Leandro, California

Regional Climate Center. 2013. Upper San Leandro FLTR, California (049185)
weather station. <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?causlf+sfo> Viewed
on February 5.

Tables

Table 1
Well Construction Details

Conceptual Site Model and Closure Request
76 Service Station No. 3292
15008 West 14th Street
San Leandro, California

Monitoring Well ID	Well Installation Date	Well Depth (feet bgs)	Screen Interval (feet bgs)
MW-1	April 1991	19	7 - 19
MW-2	April 1991	19.5	7 - 19.5
MW-3	April 1991	22.5	7 - 22.5
MW-4	April 1991	20.5	7 - 20.5
MW-5	April 1991	22.5	7 - 22.5
MW-6	May 1992	20	8 - 20
MW-7	May 1992	21.5	11 - 21.5
MW-8	May 1992	19	8 - 19
MW-9	May 1992	19	8 - 19
MW-10	August 1992	20	8 - 20
MW-11	August 1992	20	7 - 20

bgs - below ground surface

**Table 2
Historical Soil Analytical Summary**

Conceptual Site Model and Closure Request
76 Service Station No. 3292
15008 East 14th Street
San Leandro, California

Boring Sample Name	Location	Date Collected	Depth Collected (ft bgs)	TPH-g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE ¹ (mg/kg)	Lead (mg/kg)
A1	Beneath USTs	1/16/1991	15.5	2,600	7.1	55	55	170	--	--
A2		1/16/1991	16.0	290	1.3	1.1	1.5	1.3	--	--
B1		1/16/1991	15.5	840	1.5	2.7	1.3	9.9	--	--
B2		1/16/1991	15.0	150	1.6	3.3	2	11	--	--
Comp WOA	--	1/17/1991	--	--	--	--	--	--	--	40
W1	Waste Oil UST	1/28/1991	--	130	0.64	0	0.25	0.85	--	--
Comp A	UST/Product Piping Composite Samples	Jan/Feb 1991	--	120	0.035	0.24	1.0	4.5	--	--
Comp B		Jan/Feb 1991	--	67	0.021	0.076	0.32	1.3	--	--
Comp C		Jan/Feb 1991	--	200	0.057	0.60	1.4	7.9	--	--
Comp D		Jan/Feb 1991	--	41	0.010	0.084	0.22	0.95	--	--
Comp E		Jan/Feb 1991	--	200	0.010	0.39	1.1	5.9	--	--
Comp F		Jan/Feb 1991	--	95	0.013	0.16	0.21	3.7	--	--
Comp G		Jan/Feb 1991	--	47	0.015	0.30	0.24	2.2	--	--
Comp H		Jan/Feb 1991	--	28	0.010	0.16	0.14	0.80	--	--
Comp I		Jan/Feb 1991	--	120	0.088	1.7	1.1	6.5	--	--
Comp J		Jan/Feb 1991	--	110	0.074	1.1	0.98	6.4	--	--
Comp K		Jan/Feb 1991	--	2.1	0.0063	0.010	<0.0050	0.026	--	--
Comp L		Jan/Feb 1991	--	5.0	0.0067	0.011	<0.0050	0.0063	--	--
Comp M		Jan/Feb 1991	--	210	0.73	0.67	1.1	0.83	--	--
Comp N		Jan/Feb 1991	--	260	1.0	0.93	1.7	1.9	--	--
Comp O		Jan/Feb 1991	--	170	0.75	0.70	1.1	2.3	--	--
Comp 1		Jan/Feb 1991	--	39	0.012	0.020	<0.0050	<0.0050	--	--
Comp 2		Jan/Feb 1991	--	35	0.010	0.060	0.040	<0.0050	--	--
Comp 3		Jan/Feb 1991	--	2.7	0.016	<0.0050	0.029	<0.0050	--	--
Comp 4		Jan/Feb 1991	--	26	0.014	0.034	0.029	0.040	--	--
Comp 5		Jan/Feb 1991	--	8.8	<0.0050	0.013	0.028	0.032	--	--
P1	Beneath Product Piping	2/11/1991	3.5	<1.0	0.0072	0.019	<0.0050	0.26	--	--
P2		2/11/1991	4.75	1.2	0.014	0.041	0.019	0.11	--	--
P3		2/11/1991	3.75	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
P4		2/11/1991	3.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
P5		2/11/1991	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
P6		2/11/1991	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
P7		2/11/1991	3.5	7.1	0.89	0.23	0.57	0.70	--	--
P8		2/12/1991	3.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
P9		2/12/1991	7.5	130	0.68	0.37	0.66	0.076	--	--
W01	Beneath Waste Oil UST	1/16/1991	8.25	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW1(5)	MW1	4/23/1991	5	<1.0	<0.0050	<0.0050	<0.0050	0.0070	--	--
MW1(10)		4/23/1991	10	82	0.20	0.23	0.14	0.31	--	--
MW1(12)		4/23/1991	12	420	1.2	1.3	0.78	0.72	--	--
MW2(5)	MW2	4/23/1991	5	<1.0	<0.0050	<0.0050	0.0085	0.022	--	--
MW2(10)		4/23/1991	10	2.2	0.089	<0.0050	<0.0050	0.0064	--	--
MW2(12)		4/23/1991	12	12	<0.0050	0.017	0.14	0.075	--	--
MW3(5)	MW3	4/23/1991	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW3(10)		4/23/1991	10	1.4	0.015	0.0051	<0.0050	0.014	--	--
MW3(13)		4/23/1991	13	3.5	0.026	0.026	0.0088	0.03	--	--
MW4(5)	MW4	4/23/1991	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW4(10)		4/23/1991	10	<1.0	<0.0050	<0.0050	<0.0050	0.0060	--	--
MW4(13)		4/23/1991	13	<1.0	<0.0050	<0.0050	0.0088	0.012	--	--
MW5(5)	MW5	4/23/1991	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW5(10)		4/23/1991	10	7.7	0.029	0.14	0.13	0.090	--	--
MW5(14.5)		4/23/1991	14.5	620	6.8	4.4	18	75	--	--
MW6(5.5)	MW6	5/5/1992	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW6(10.5)		5/5/1992	10.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW7(9)	MW7	5/5/1992	9	280	0.45	0.45	7.2	23	--	--
MW7(12.5)		5/5/1992	12.5	540	1.9	0.47	15	47	--	--
MW8(5)	MW8	5/6/1992	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW8(10)		5/6/1992	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW8(11.5)		5/6/1992	11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	--	--
MW8(13.5)		5/6/1992	13.5	1.2	0.011	0.0054	<0.0050	0.014	--	--
MW9(5)	MW9	5/6/1992	5	<1.0	<0.0050	0.0053	<0.0050	0.014	--	--
MW9(10)		5/6/1992	10	<1.0	<0.0050	<0.0050	<0.0050	0.0078	--	--
MW9(12)		5/6/1992	12	<1.0	<0.0050	<0.0050	<0.0050	0.0074	--	--
MW10(5)	MW10	8/13/1992	5	<1.0	<0.0050	<0.0050	<0.0050	0.0098	--	--
MW10(10)		8/13/1992	10	1.2	0.013	0.0064	0.019	0.013	--	--
MW10(13)		8/13/1992	13	32	<0.0050	0.011	0.99	0.065	--	--

Table 2
Historical Soil Analytical Summary

Conceptual Site Model and Closure Request
76 Service Station No. 3292
15008 East 14th Street
San Leandro, California

Boring Sample Name	Location	Date Collected	Depth Collected (ft bgs)	TPH-g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE ¹ (mg/kg)	Lead (mg/kg)
MW11(5)	MW11	8/13/1992	5	<1.0	<0.0050	<0.0050	<0.0050	0.0098	--	--
MW11(10)		8/13/1992	10	2.3	<0.0050	0.0050	0.037	0.014	--	--
MW11(12)		8/13/1992	12	47	<0.0050	0.056	0.46	0.38	--	--
OWS-S-4.5 ²	OWS	5/31/1995	4.5	<0.2	<0.005	<0.005	<0.005	<0.005	--	--
EB1-7.5	Near Station Building	5/7/1998	7.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--
EB2-7.5	SE of MW5	5/7/1998	7.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--
EB3-7.0	Off-site, SSW of MW5	5/7/1998	7.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--
EB4-5.5	Off-site, SW of site across East 14th Street	5/7/1998	5.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--

Notes

< = concentration is below laboratory reporting limit

-- = not analyzed or not applicable

ft bgs = feet below ground surface

TPH-g = total petroleum hydrocarbons in the gasoline organics range

TPH-d = total petroleum hydrocarbons in the diesel organics range

MTBE = methyl tert butyl ether

mg/kg = milligrams per kilogram

BOLD = concentration detected above laboratory reporting limit

1 - In situations where MTBE was analyzed using multiple analytical methods, the highest reported value was used.

2 - OWS-S-4.5 - Detectable concentrations of TPH-d (10 mg/kg), chromium (41 mg/kg), lead (8 mg/kg), nickel (46 mg/kg) zinc (45 mg/kg), hydrocarbons (40 mg/kg) and Oil and Grease (50 mg/kg).

Table 3
Current Groundwater Gauging and Analytical Results
76 Service Station No. 3292
15008 East 14th Street, San Leandro, California

Well ID	Date Sampled	TOC Elevation (feet MSL)	DTW (feet bTOC)	LPH Thickness (feet)	GW Elevation (feet MSL)	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TBA	TAME	ETBE	DIPE	EDB	EDC	Ethanol	Comments
MW-1	12/3/2012	36.34	9.10	--	27.24	1,900	<0.50	<0.50	<0.50	<1.0	10	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
MW-2	12/3/2012	36.30	8.86	--	27.44	1,000	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-2(SP)	12/3/2012	35.44	9.73	--	25.71	73	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-3	12/3/2012	36.42	8.73	--	27.69	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-3(SP)	12/3/2012	35.82	9.47	--	26.35	1,800	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-4	12/3/2012	37.04	9.10	--	27.94	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-5	12/3/2012	35.92	8.65	--	27.27	7,600	<1.0	<1.0	160	<2.0	2.4	--	--	--	--	<1.0	<1.0	<500	A01
MW-6	12/3/2012	35.68	7.94	--	27.74	86	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-7	12/3/2012	36.06	8.81	--	27.25	5,800	<2.5	<2.5	290	<5.0	<2.5	--	--	--	--	<2.5	<2.5	<1,200	A01
MW-8	12/3/2012	36.87	10.41	--	26.46	120	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-9	12/3/2012	36.27	9.77	--	26.50	51	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-10	12/3/2012	36.02	9.29	--	26.73	1,300	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	--	<0.50	<0.50	<250	
MW-11	12/3/2012	35.50	9.07	--	26.43	520	<0.50	<0.50	<0.50	<1.0	8.7	--	--	--	--	<0.50	<0.50	<250	

Notes

- A01 Practical quantitation limits (PQLs) and method detection limits (MDLs) are raised due to sample dilution
 - not analyzed, measured, or collected
 - < not detected at or above PQL
 - bTOC below top of casing
 - DIPE di-isopropyl ether
 - DTW depth to water
 - EDB 1,2-dibromoethane
 - EDC 1,2-dichloroethane (ethylene dichloride)
 - ETBE ethyl tertiary butyl ether
 - GW groundwater
 - LPH liquid-phase hydrocarbons
 - MSL relative to mean sea level
 - MTBE methyl tertiary butyl ether
 - TAME tertiary amyl methyl ether
 - TBA tertiary butyl alcohol
 - TOC top of casing (surveyed reference elevation)
 - TPH-G TPPH total purgeable petroleum hydrocarbons as gasoline, range C4-C12 analyzed by Method Luft-gas chromatography/mass-spectrometry (GC/MS)
 - µg/l micrograms per liter (approx. equivalent to parts per billion, ppb)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) analyzed by laboratory EPA method 8260B
Analytical results given in micrograms per liter (µg/l) unless otherwise noted

Table 4
Summary of Statistical Analysis of Groundwater Analytical Data

Conceptual Site Model and Closure Request
 76 Service Station No. 3292
 15008 East 14th Street
 San Leandro, CA

Constituent	Well	Cleanup Goal/Screening Level/Remediation goal (µg/L) ¹	Data Range					Linear Regression Analysis						
			Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	Concentration Measured Most Recently (µg/L)	% of Data Above Laboratory Reporting Limit	Start Date	End Date	Coefficient of Determination, R ²	p-value of Correlation (Significance of Slope)	Attenuation Half-life (days)	Trend Direction	Significance of Trend ²	Projected Year to Screening Level
TPH-g	MW-1	100	195	38,000	1,900	99	9/19/1991	12/3/2012	3.72E-01	6.26E-09	2,441	Decreasing	Significant	2041
TPH-g	MW-2	100	460	36,000	1,000	100	5/4/1991	12/3/2012	6.36E-01	8.25E-19	2,033	Decreasing	Significant	2029
TPH-g	MW-2 (SP)	100	50	540	73	83	5/8/1996	12/3/2012	3.69E-01	8.44E-05	3,013	Decreasing	Significant	2009
TPH-g	MW-3 (SP)	100	110	4,700	1,800	100	5/8/1996	12/3/2012	3.07E-02	2.86E-01	11,147	Decreasing	NS	NA
TPH-g	MW-5 (Since June 2009)	100	4,800	32,000	7,600	100	6/22/2009	12/3/2012	6.83E-01	1.14E-02	612	Decreasing	Significant	2022
TPH-g	MW-8	100	79	14,000	120	100	5/19/1992	12/3/2012	6.45E-01	2.71E-13	1,822	Decreasing	Significant	2013
TPH-g	MW-9	100	51	8,100	51	100	5/19/1992	12/3/2012	8.17E-01	1.21E-28	1,394	Decreasing	Significant	2011
TPH-g	MW-10	100	1,000	23,000	1,000	100	8/20/1992	12/3/2012	7.39E-01	5.14E-23	2,574	Decreasing	Significant	2042
TPH-g	MW-11	100	50	18,000	520	96	8/20/1992	12/3/2012	4.74E-01	8.55E-12	1,852	Decreasing	Significant	2019
MTBE	MW-11	13	2	6,400	9	98	11/2/1995	12/3/2012	8.72E-01	1.98E-28	646	Decreasing	Significant	2010

Notes, Abbreviations and Assumptions:

µg/L = micrograms per liter

NS = not significant

NA = not applicable due to increasing trend or non-significant trend

¹ Maximum contaminant levels (MCLs) where available (California Department of Public Health 2011)

and environmental screening levels (ESLs) used where groundwater is a current or potential source of drinking water, Table F-1a, Final Groundwater Screening Level, California Regional Water Quality Control Board, San Francisco Region (CRWQCB-SF 2008).

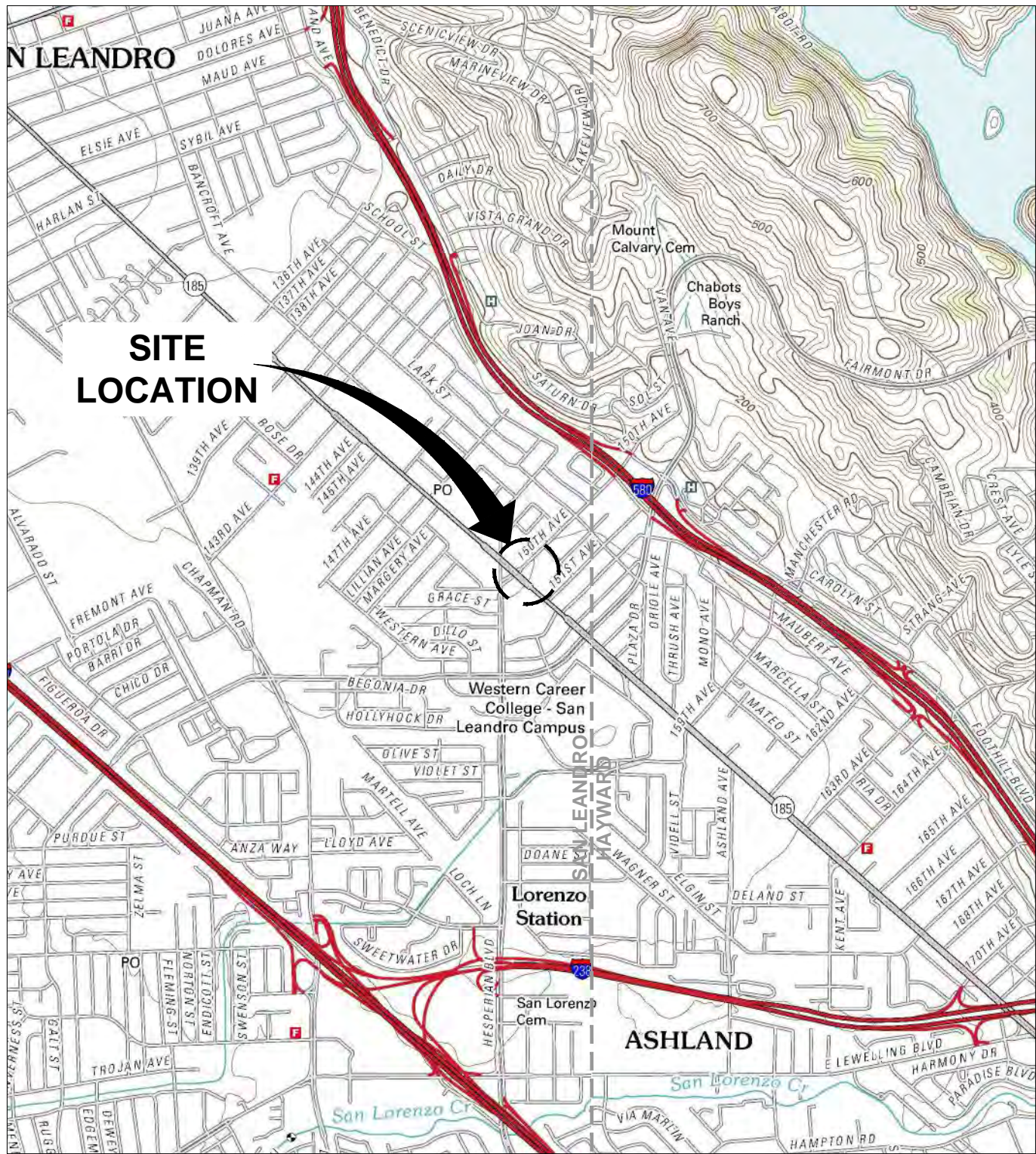
² Statistically significant ND taken at reporting limit/reported value

Qualified data converted to reported value



Figures

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS
 C:\Users\jhamis\Desktop\ENV\CAD\B0047946\2012\0002\DWG\347946\01.dwg LAYOUT: 1 SAVED: 7/5/2012 8:30 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 7/5/2012 8:31 AM BY: HARRIS, JESSICA



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., SAN LEANDRO AND HAYWARD, CALIFORNIA, 2012.



Approximate Scale: 1 in. = 2000 ft.



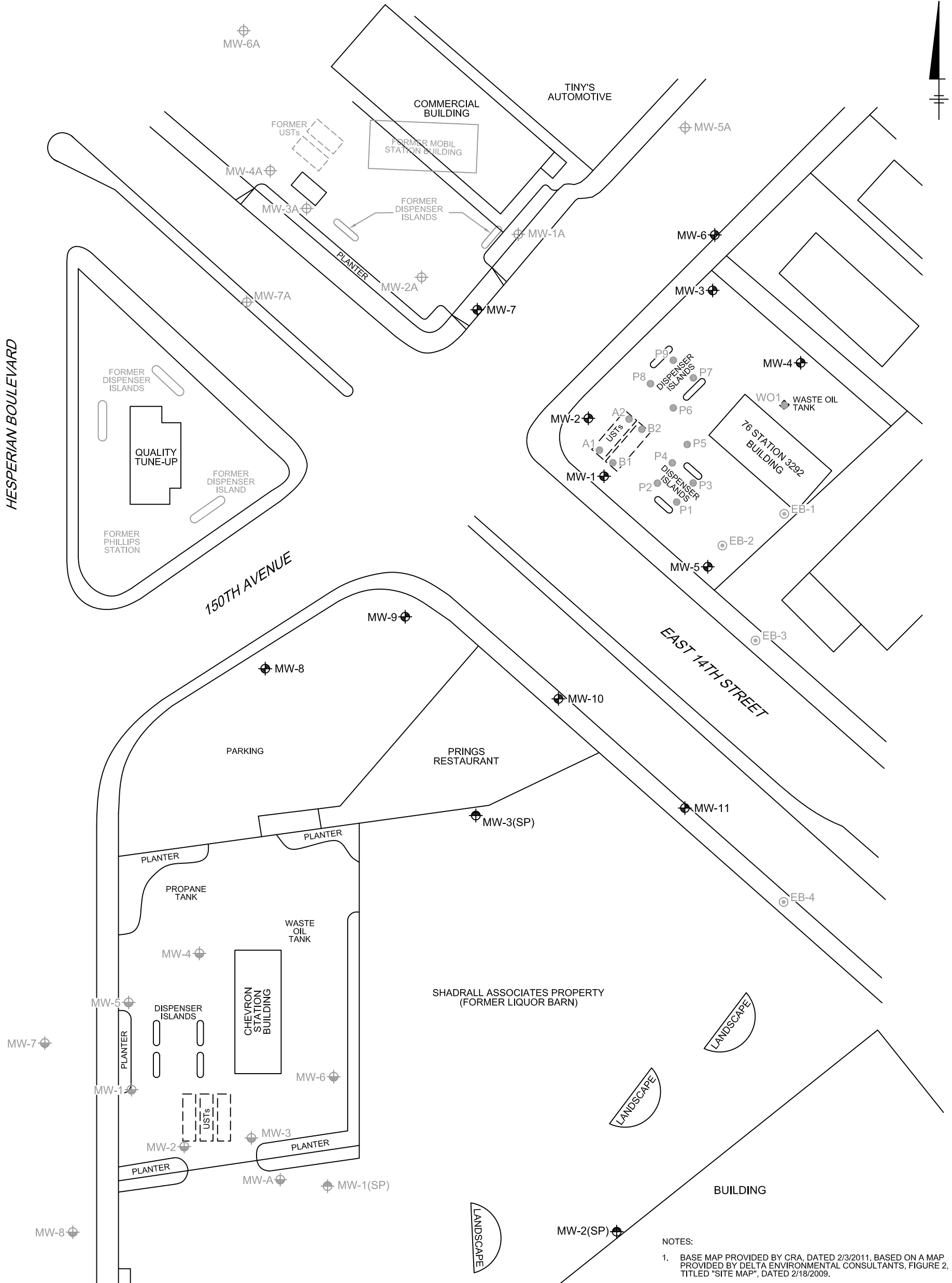
UNION OIL COMPANY OF CALIFORNIA
 76 SERVICE STATION 35-1565
 15008 EAST 14TH STREET
 SAN LEANDRO, CALIFORNIA

SITE LOCATION MAP

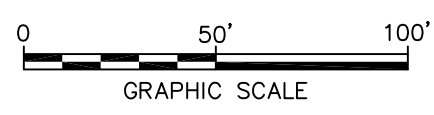


FIGURE
1

XREFS: IMAGES: PROJECTNAME: ---
 47945X01



- NOTES:
1. BASE MAP PROVIDED BY CRA, DATED 2/3/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 2/18/2009.
 2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



LEGEND

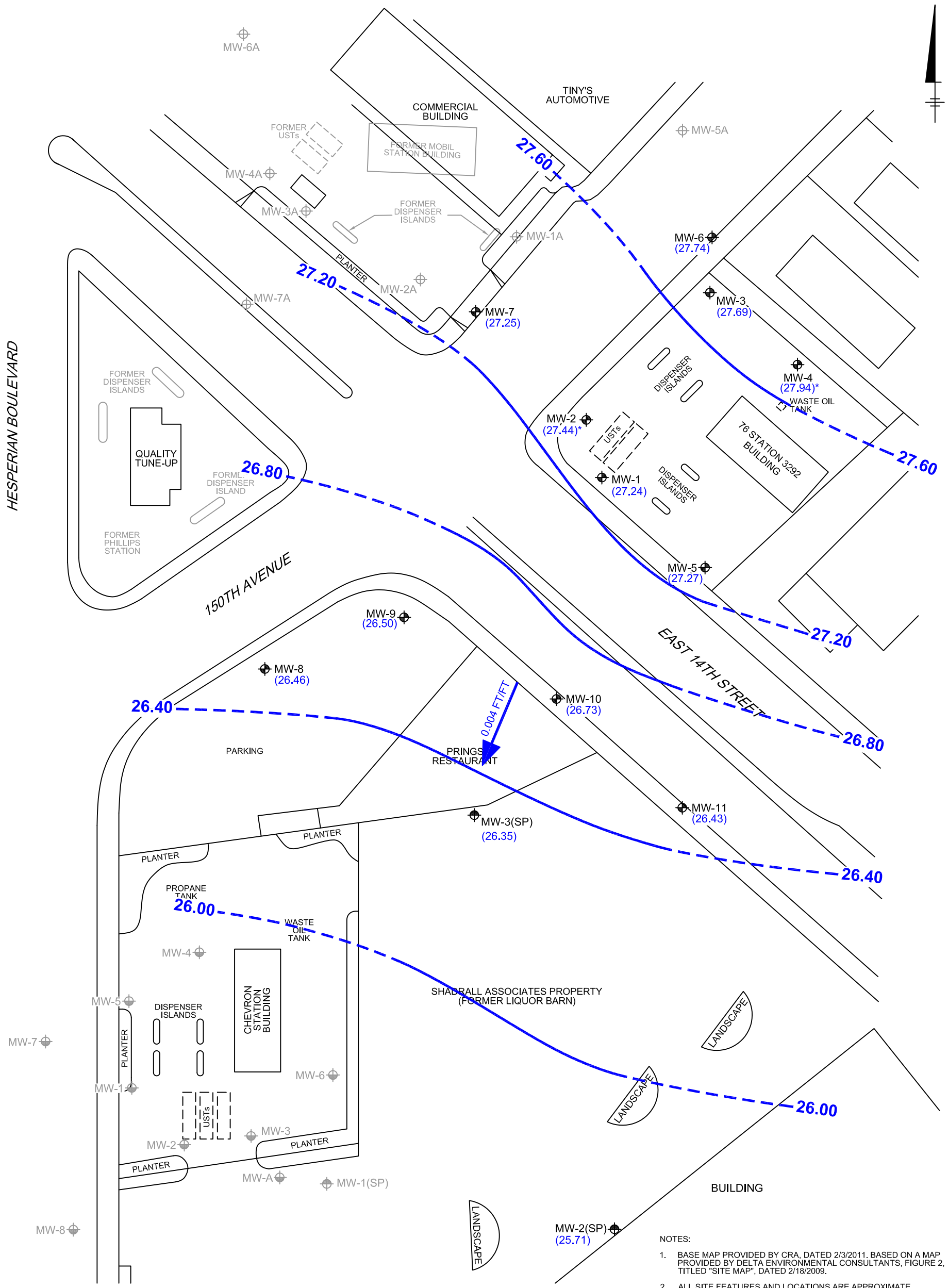
- MW-1 ⊕ 76 STATION MONITORING WELL
- MW-2(SP) ⊕ SHADRALL MONITORING WELL
- MW-1 ⊕ CHEVRON MONITORING WELL
- MW-1A ⊕ FORMER MOBIL STATION WELL
- EB-1 ⊙ SOIL BORING
- P1 ● SOIL SAMPLE LOCATION

UNION OIL COMPANY OF CALIFORNIA
 76 SERVICE STATION 35-1565
 15008 EAST 14TH STREET
 SAN LEANDRO, CALIFORNIA

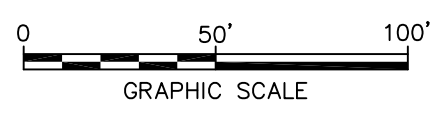
SITE PLAN



XREFS: IMAGES: PROJECTNAME: ---
 47945X01



- NOTES:
1. BASE MAP PROVIDED BY CRA, DATED 2/3/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 2/18/2009.
 2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



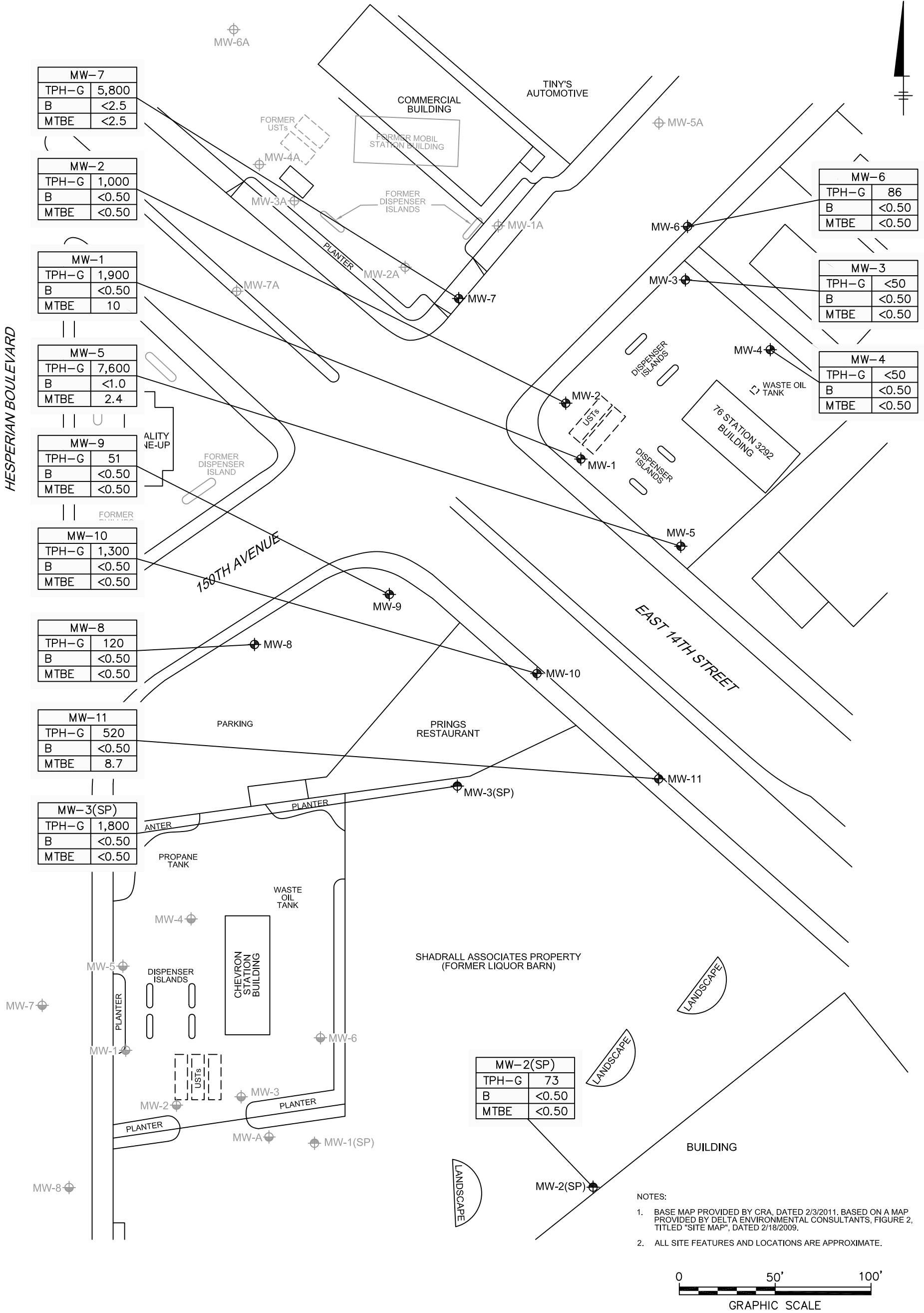
LEGEND	
MW-1	76 STATION MONITORING WELL
MW-2(SP)	SHADRALL MONITORING WELL
MW-1	CHEVRON MONITORING WELL
MW-1A	FORMER MOBIL STATION WELL
(27.24)	GROUNDWATER ELEVATION (FT AMSL)
27.80	GROUNDWATER ELEVATION CONTOUR (FT AMSL; DASHED WHERE INFERRED)
← 0.004 FT/FT	APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT)
(NM)	NOT MEASURED
*	NOT USED FOR CONTOURING
FT AMSL	FEET ABOVE MEAN SEA LEVEL

UNION OIL COMPANY OF CALIFORNIA
 76 SERVICE STATION 35-1565
 15008 EAST 14TH STREET
 SAN LEANDRO, CALIFORNIA

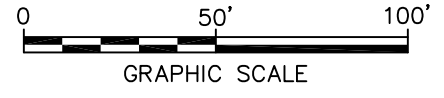
**GROUNDWATER ELEVATION CONTOUR MAP
 DECEMBER 3, 2012**

ARCADIS

FIGURE **3**



NOTES:
 1. BASE MAP PROVIDED BY CRA, DATED 2/3/2011. BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 2/18/2009.
 2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.



LEGEND	
MW-1	76 STATION MONITORING WELL
MW-2(SP)	SHADRALL MONITORING WELL
MW-1	CHEVRON MONITORING WELL
MW-1A	FORMER MOBIL STATION WELL
TPH-G	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (C4-C12)
B	BENZENE
MTBE	METHYL TERTIARY BUTYL ETHER
<	DENOTES LESS THAN THE LABORATORY REPORTING LIMIT
ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER (µg/L)	

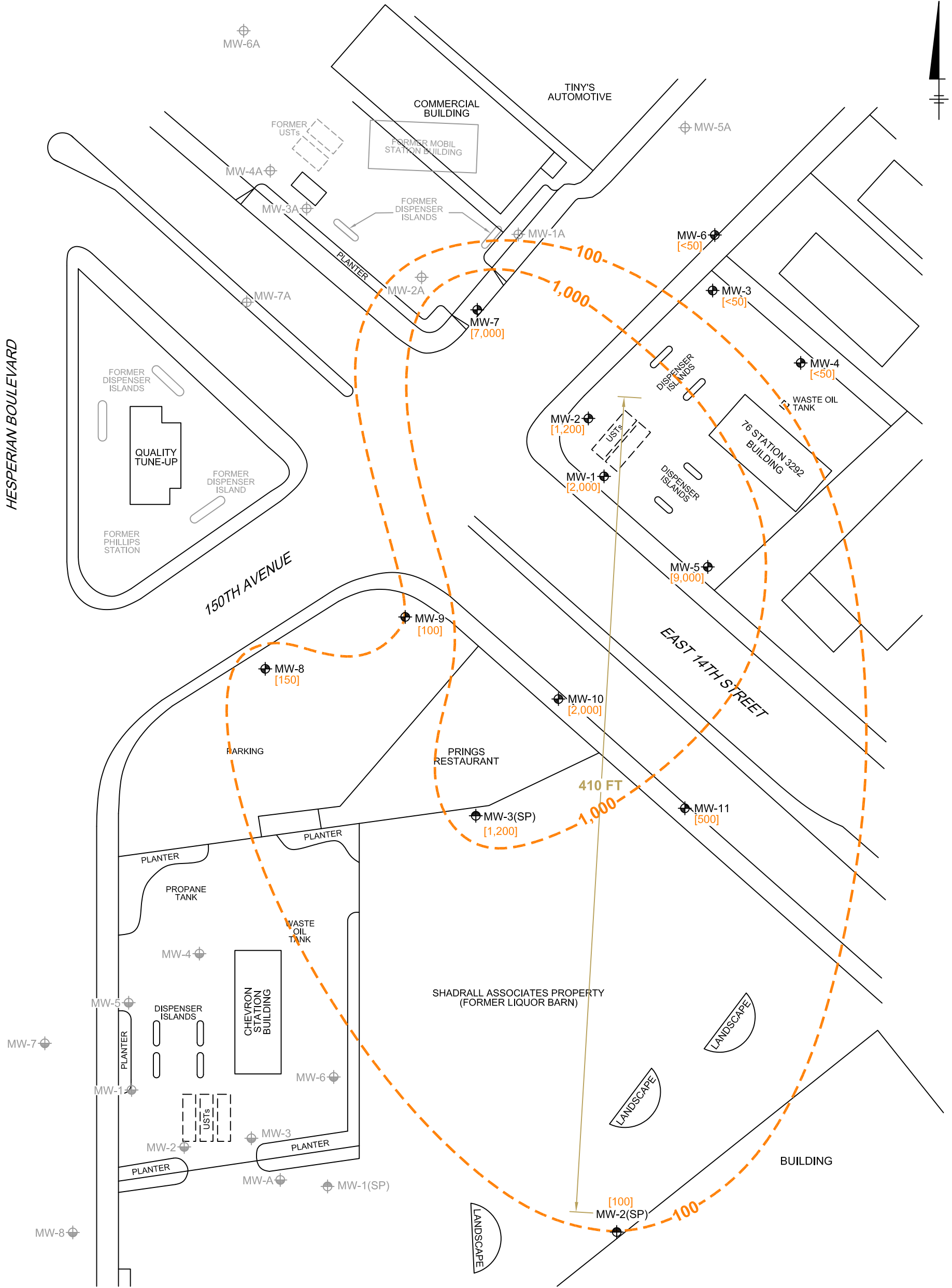
UNION OIL COMPANY OF CALIFORNIA
 76 SERVICE STATION 35-1565
 15008 EAST 14TH STREET
 SAN LEANDRO, CALIFORNIA

**ANALYTICAL SUMMARY MAP
 DECEMBER 3, 2012**

ARCADIS

FIGURE
4

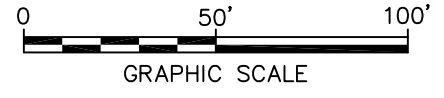
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 47945X01



LEGEND

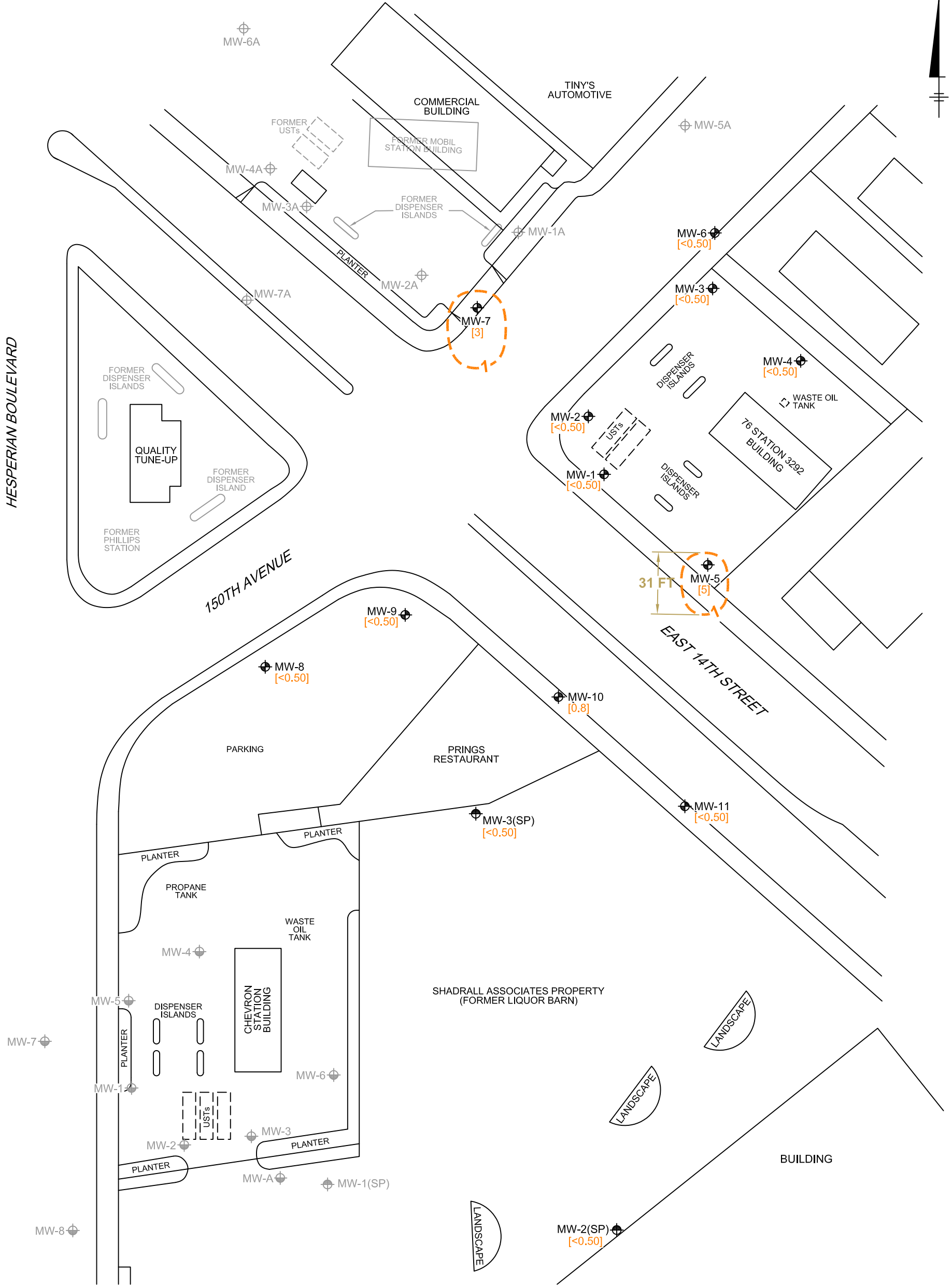
- MW-1 76 STATION MONITORING WELL
- MW-2(SP) SHADRALL MONITORING WELL
- MW-1 CHEVRON MONITORING WELL
- MW-1A FORMER MOBIL STATION WELL
- 100** TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (C4-C12) CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- [TPH-G]** TPH-g ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- <** DENOTES LESS THAN THE LABORATORY REPORTING LIMIT
- 410 FT** PLUME LENGTH (FEET)

- NOTES:**
1. BASE MAP PROVIDED BY CRA, DATED 2/3/2011, BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 2/18/2009.
 2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
 3. REASONABLY EXPECTED MONITORING WELL CONCENTRATIONS, BASED OFF OF REVIEW OF HISTORICAL TREND GRAPHS FROM 2004 TO PRESENT, WERE USED IN PLUME CONTOURING. TREND GRAPHS CAN BE FOUND IN APPENDIX E.
 4. PLUME LENGTHS WERE MEASURED FROM THE CENTER OF THE SUSPECTED SOURCE ZONE TO THE FURTHEST DOWNGRADIENT ISOCONCENTRATION CONTOUR.



UNION OIL COMPANY OF CALIFORNIA 76 SERVICE STATION 35-1565 15008 EAST 14TH STREET SAN LEANDRO, CALIFORNIA	
TPH-G ISOCONCENTRATION MAP	
	FIGURE 5

XREFS: IMAGES: PROJECTNAME: ---
 47945X01

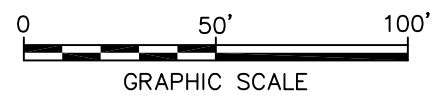


LEGEND

- MW-1 76 STATION MONITORING WELL
- MW-2(SP) SHADRALL MONITORING WELL
- MW-1 CHEVRON MONITORING WELL
- MW-1A FORMER MOBIL STATION WELL
- BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- [BENZ] BENZENE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN THE LABORATORY REPORTING LIMIT
- 31 FT PLUME LENGTH (FEET)

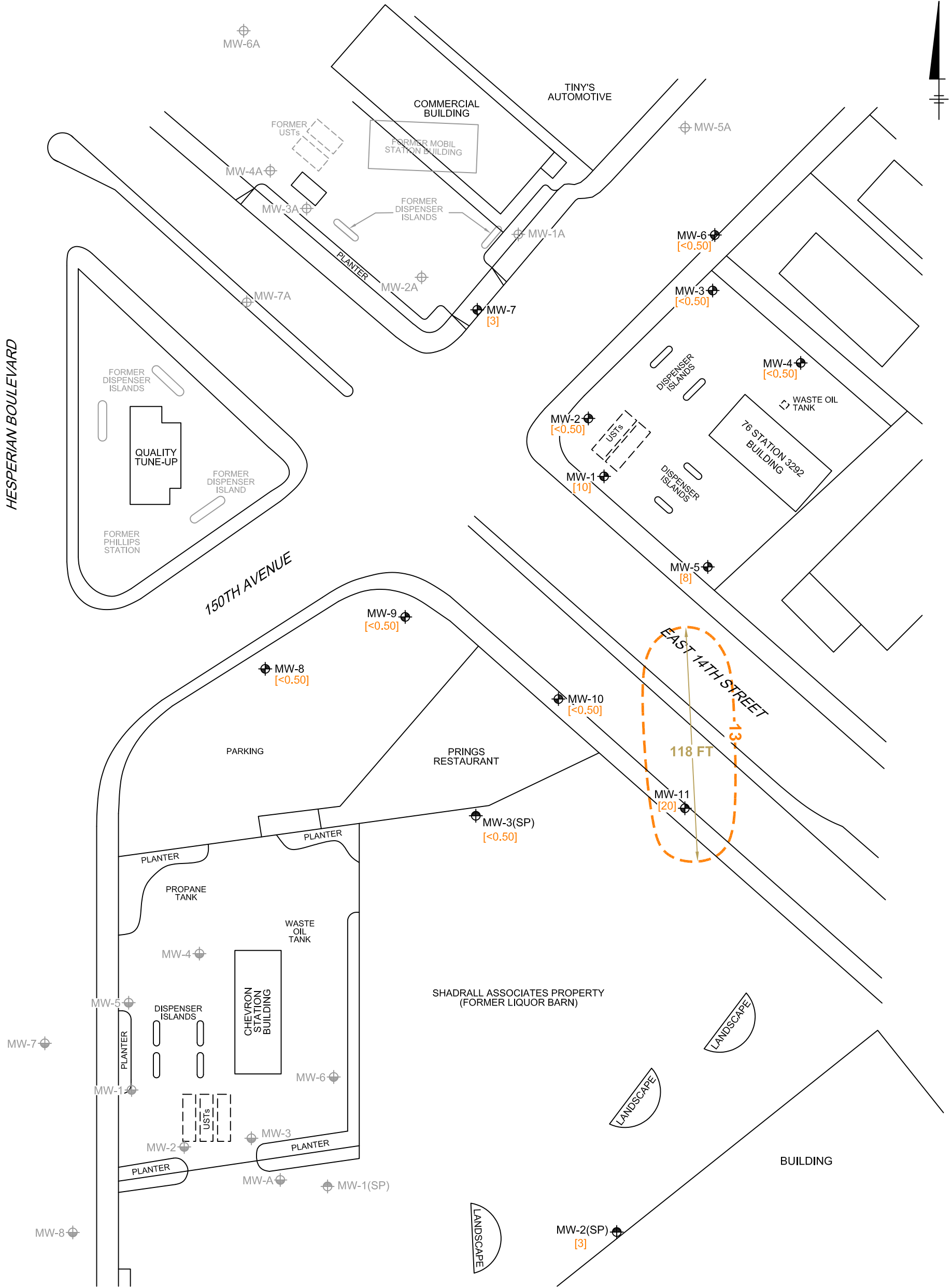
NOTES:

1. BASE MAP PROVIDED BY CRA, DATED 2/3/2011, BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 2/18/2009.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
3. REASONABLY EXPECTED MONITORING WELL CONCENTRATIONS, BASED OFF OF REVIEW OF HISTORICAL TREND GRAPHS FROM 2004 TO PRESENT, WERE USED IN PLUME CONTOURING. TREND GRAPHS CAN BE FOUND IN APPENDIX E.
4. PLUME LENGTHS WERE MEASURED FROM THE CENTER OF THE SUSPECTED SOURCE ZONE TO THE FURTHEST DOWNGRADIENT ISOCONCENTRATION CONTOUR.



UNION OIL COMPANY OF CALIFORNIA 76 SERVICE STATION 35-1565 15008 EAST 14TH STREET SAN LEANDRO, CALIFORNIA	
BENZENE ISOCONCENTRATION MAP	
	FIGURE 6

XREFS: IMAGES: PROJECTNAME: ---
 47945X01

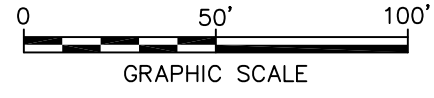


LEGEND

- MW-1 76 STATION MONITORING WELL
- MW-2(SP) SHADRALL MONITORING WELL
- MW-1 CHEVRON MONITORING WELL
- MW-1A FORMER MOBIL STATION WELL
- 13** METHYL TERTIARY BUTYL ETHER CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- [MTBE]** MTBE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- <** DENOTES LESS THAN THE LABORATORY REPORTING LIMIT
- 118 FT** PLUME LENGTH (FEET)

NOTES:

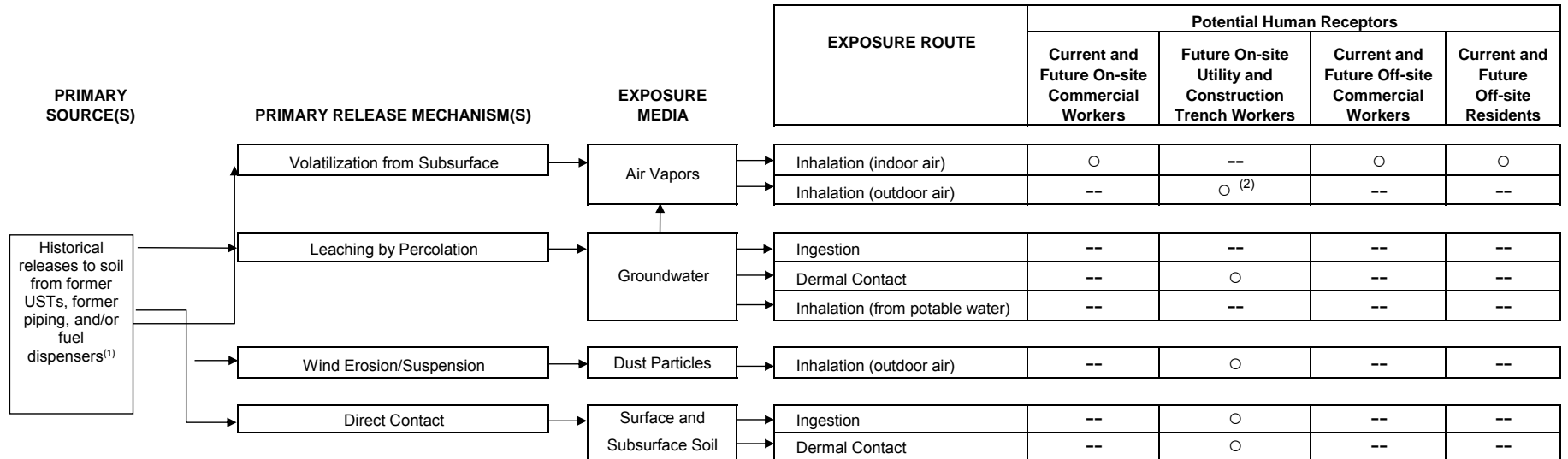
1. BASE MAP PROVIDED BY CRA, DATED 2/3/2011, BASED ON A MAP PROVIDED BY DELTA ENVIRONMENTAL CONSULTANTS, FIGURE 2, TITLED "SITE MAP", DATED 2/18/2009.
2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.
3. REASONABLY EXPECTED MONITORING WELL CONCENTRATIONS, BASED OFF OF REVIEW OF HISTORICAL TREND GRAPHS FROM 2004 TO PRESENT, WERE USED IN PLUME CONTOURING. TREND GRAPHS CAN BE FOUND IN APPENDIX E.
4. PLUME LENGTHS WERE MEASURED FROM THE CENTER OF THE SUSPECTED SOURCE ZONE TO THE FURTHEST DOWNGRADIENT ISOCONCENTRATION CONTOUR.



UNION OIL COMPANY OF CALIFORNIA 76 SERVICE STATION 35-1565 15008 EAST 14TH STREET SAN LEANDRO, CALIFORNIA	
MTBE ISOCONCENTRATION MAP	
	FIGURE 7

**FIGURE 8
EXPOSURE PATHWAY SUMMARY**

**76 Service Station No. 3292
15008 East 14th Street
San Leandro, CA**



- Exposure pathway is complete or potentially complete; however, exposure is not considered significant at this time.
- Exposure pathway is incomplete.

NOTES:
 (1) Piping and dispensers were replaced in 1991.
 (2) Ambient air within a utility trench



Appendix A

Low-Threat Closure Checklist

Site Name:
 Site Address:

Site meets the criteria of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.¹

<p><u>General Criteria</u> General criteria that must be satisfied by all candidate sites:</p> <p>Is the unauthorized release located within the service area of a public water system?</p> <p>Does the unauthorized release consist only of petroleum?</p> <p>Has the unauthorized (“primary”) release from the UST system been stopped?</p> <p>Has free product been removed to the maximum extent practicable?</p> <p>Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?</p> <p>Has secondary source been removed to the extent practicable?</p> <p>Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?</p> <p>Does nuisance as defined by Water Code section 13050 exist at the site?</p> <p>Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p><u>Media-Specific Criteria</u> Candidate sites must satisfy all three of these media-specific criteria:</p> <p>1. Groundwater: To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:</p> <p>Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?</p> <p>Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites?</p> <p>If YES, check applicable class: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>

¹ Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

Site Name:
 Site Address:

<p>For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>
<p>2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies.</p> <p>Is the site an active commercial petroleum fueling facility? Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk.</p> <p>a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4? If YES, check applicable scenarios: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4</p> <p>b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>
<p>3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c).</p> <p>a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?</p> <p>b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?</p> <p>c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p>



Appendix B

Boring Logs/Well Construction
Diagrams

B O R I N G L O G

Project No. KEI-P91-0102	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal 15008 E. 14th San L	Well Cover Elevation	Date Drilled 4/24/91
Boring No. MW1	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with sand and silt, gravel to 4" diameter, moist, stiff, brown.
6/11/12		5	ML/ MH	Clayey silt, with fine-grained sand, trace gravel to 1/2" diameter, trace caliche, very stiff, moist, very dark grayish brown.
4/5/6		10	CL/ CH	Clay, with silt, root holes common, a 2" sandy clay lens observed at 9-1/2', moist, stiff, olive to olive gray.
5/6/9	▽			Clay, trace silt, sand and caliche, root holes common, moist to very moist, light olive brown and dark yellowish brown.
3/2/4		15	MH	Clay, as above, sheen present, firm, gray and olive brown mottled.
			MH	Silt, saturated, sheen present, firm, dark greenish gray.
			CL/ CH	Clay, trace sand and caliche, porous, moist, stiff, gray and brown mottled.
6/7/9		20	MH	Clayey silt, trace sand, very moist, stiff to very stiff, olive gray.

TOTAL DEPTH: 20.5'

B O R I N G L O G

Project No. KEI-P91-0102	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal 15008 E. 14th San L	Well Cover Elevation	Date Drilled 4/24/91
Boring No. MW2	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt, with cobbles to 12" diameter, moist, stiff, gray to greenish gray.
			CH	Silty clay, trace sand, moist, stiff, black.
3/4/5		5	ML/ MH	Clayey silt with fine-grained sand, trace caliche, moist, stiff, dark brown to very dark grayish brown. Clayey silt, trace fine-grained sand, porous, moist, stiff, olive gray.
4/5/6		10	CL	Clay, with silt, trace fine-grained sand, trace caliche, gray staining around roots, moist, olive brown mottled with dark grayish brown.
3/4/5	▽			Silty clay, saturated, trace caliche nodules to 3/8" diameter, stiff, olive brown and olive gray mottled with gray staining.
3/4/6		15	MH	Silty clay, as above, olive gray and dark yellowish brown. Clayey silt, trace caliche, saturated, free product present, stiff, olive gray and dark yellowish brown.
4/5/8			CL/ CH	Clay, trace very fine sand, trace caliche, porous, very moist, stiff, dark gray and very dark grayish brown mottled.
		20		TOTAL DEPTH: 19.5'

B O R I N G L O G

Project No. KEI-P91-0102	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal 15008 E. 14th San L	Well Cover Elevation	Date Drilled 4/23/91
Boring No. MW3	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt, trace sand, gravel to 3-1/2" diameter, firm, dark brown.
7/9/13		5	CL/ CH	Silty clay, trace sand, firm, very dark gray.
			ML	Clayey silt, trace gap graded sand, trace gravel to 1/2" diameter, moist, very stiff, dark gray to dark greenish gray.
4/4/5		10	ML/ MH to CL/ CH	Clayey silt to silty clay, porous, caliche common, stiff, greenish gray.
2/3/2	▽		SC	Clayey sand, trace gravel to 1/2" dia. saturated, loose, greenish gray.
		15	ML/ MH	Clayey silt, trace sand, very moist to saturated, firm, greenish gray.
4/6/7		20	CL/ CH	Clay, with fine-grained sand, trace silt, caliche common, porous, very moist, dark gray and dark greenish gray.

B O R I N G L O G

Project No. KEI-P91-0102		Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal 15008 E. 14th San L		Well Cover Elevation	Date Drilled 4/23/91
Boring No. MW3		Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
6/8/11		22.5	CL/ CH	Clay, trace fine-grained sand, trace caliche, porous, moist, very stiff, very dark gray.
		25		
		30		
		35		
		40		
			TOTAL DEPTH: 22.5'	

BORING LOG

Project No. KEI-P91-0102	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal 15008 E. 14th San L	Well Cover Elevation	Date Drilled 4/23/91
Boring No. MW4	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet)	Samples	Stratigraphy USCS	Description
		0			Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt and sand, gravel to 3-1/2" diameter, moist, firm, brown.
				CH	Silty clay, with fine-grained sand, porous, moist, stiff to very stiff, very dark gray.
7/9/7		5		ML/ MH	Clayey silt, with fine-grained sand, porous, trace angular gravel to 1/2" diameter, moist, stiff, dark brown.
					Sandy silt, trace clay, trace organic matter, very moist to saturated, stiff, brown to light olive brown.
4/5/7		10		CL/ CH	Clay, trace sand and silt, porous, caliche common, moist, stiff, brown and light olive brown mottled.
				SC	Clay, as above, except greenish gray.
3/5/6	▽				Clayey sand with gravel to 1/2" diameter, saturated, medium dense, greenish gray.
		15		ML/ MH	Clayey silt, trace fine-grained sand, porous, very moist to saturated, stiff, light olive gray.
				CL/ CH	Clay, trace silt, trace fine-grained sand, saturated, stiff, moist, very dark gray.
3/6/8		20		MH	Clayey silt, trace sand and caliche, very moist, stiff, greenish gray.
TOTAL DEPTH: 20.5'					

B O R I N G L O G

Project No. KEI-P91-0102	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal 15008 E. 14th San L	Well Cover Elevation	Date Drilled 4/23/91
Boring No. MW5	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description
		0		Asphalt pavement over sand and gravel. Fill material consisting of gravelly clay with silt, trace sand, moist, gravel to 3" diameter, firm, dark brown.
			CL/ CH	Silty clay, trace sand, moist, firm, trace rootlets, very dark gray.
7/9/13		5	ML/ MH	Clayey silt, trace sand and trace gravel to 1/2" diameter, moist, very stiff, brown with slight mottling of yellowish brown.
			CL/ CH	Clay, with silt, trace sand, porous, caliche nodules to 3/8" diameter, moist, olive gray.
4/4/5	▽	10		
			ML/ MH to CL/ CH	Clayey silt to silty clay, pores locally contain free product, very moist to saturated, firm, olive gray to greenish gray.
2/2/3	initially ▽	15		
			CL/ CH	Silty clay, trace sand, very moist to saturated, porous, trace caliche, stiff, dark gray to olive gray to 20-1/4 feet.
4/5/		20		

BORING LOG

Project No. KEI-P91-0102	Boring & Casing Diameter 9" 2"	Logged By <i>JGG</i> D.L. <i>EG 1633</i>
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro	Well Cover Elevation	Date Drilled 5-5-92
Boring No. MW7	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling


Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
		0		Concrete slab over sand and gravel base.	
NO BLOW COUNT DATA - SAMPLES PUSHED Very poor recovery at 7.5 feet.			ML/CL	Silt, clayey silt, and silty clay in pockets, with minor sand and gravel, soft to firm, moist, yellowish brown to black (fill and disturbed native soil).	
		5			
				CL/SM	Pocketed clay, silt, and sand, soft, moist (fill).
				CH	Silty clay, stiff, moist, olive brown and dark grayish brown mottled, very dark gray discolored root holes, occasionally wet inside root holes.
		10			Silty clay as above except olive brown.
				ML	Silt, trace very fine-grained sand, firm, wet, olive gray.
				MH	Clayey silt, firm to stiff, very moist, dark olive gray, root holes common.
				ML	Sandy silt, trace clay, sand is very fine-grained, firm to stiff, wet, dark olive gray.
				CH	Clay with silt, trace very fine-grained sand, stiff, moist, very dark grayish brown and dark gray mottled. Lenses of grayish brown clayey silt below 19.5 feet.
			20		Clay, very stiff, moist, black, trace caliche.
				TOTAL DEPTH: 21.5'	

BORING LOG

Project No. KEL-91-0102	Boring & Casing Diameter 9" 2"	Logged By <i>JGG</i> W.W. <i>EG 1633</i>
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro	Well Cover Elevation	Date Drilled 5/6/92
Boring No. MW8	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description
		0		2 inches of asphalt pavement and 4 inches of concrete pavement over sand and gravel base.
			CL	Silty clay, minor gravel, moist, grayish green.
			ML	Clayey silt, estimated at 25% clay, 5% sand and gravel to 1/2 inches in diameter, stiff, moist, very dark grayish brown.
7/9/13		5	CL	Clay, estimated at 10-15% fine sand and 5% subrounded gravel to 3/4 inches in diameter, trace silt, very stiff, moist, brown to dark yellowish brown.
		10		Clay, stiff to very stiff, moist, light olive brown, root pores with decomposed rootlets common.
4/7/9				
			GC	Clayey gravel with well graded sand and well rounded gravel to 3/4 inches in diameter, moist, medium dense.
			ML	Clayey silt, estimated at 5% fine-grained sand, very moist, olive gray.
6/7/5			SC	Clayey sand with silt, estimated at 30% clay and 10-15% silt sand, well graded, saturated, greenish gray.
		15	CL	Clay, trace silt and sand, moist, firm, olive gray and light olive brown mottled, trace root pores.
			ML	Clayey silt, saturated, firm, greenish gray.
2/2/3			SM	Silty sand, estimated at 25% silt, sand is well sorted, fine grained, saturated, olive gray and greenish gray mottled,
			CL/CH	Clay, high plasticity, trace silt, moist, stiff, gray and brown mottled, saturated root pores.
3/4/6			CL	Sandy clay with silt, very moist, olive gray.
		20		
4/5/7				
				TOTAL DEPTH: 19.0'

BORING LOG

Project No. KBI-P91-0102		Boring & Casing Diameter 9" 2"		Logged By W.W. <i>JGG</i> <i>EG 1633</i>	
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro		Well Cover Elevation		Date Drilled 5/6/92	
Boring No. MW9		Drilling Method Hollow-stem Auger		Drilling Company Woodward Drilling	
Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description	
		0		2 inches of asphalt over 4 inches of concrete pavement.	
			CL	Silty clay with fine sand, estimated at 15% fine-grained sand, trace gravel, yellowish brown.	
				As above except dark grayish brown.	
				Silty clay, estimated 20% silt, stiff, moist, very dark gray.	
7/15/15		5		Silty clay, estimated 15-20% silt and 5% sand, minor gravel, very stiff, brown.	
				Clay, estimated at 5-10% silt, trace sand and caliche, very stiff, light olive brown and brownish gray, root pores common.	
7/9/9		10		Clay, estimated at 5-10% silt, trace sand and caliche, stiff, very moist to saturated, grayish brown to light olive brown, root pores common.	
				Clay as above, color change to gray and greenish gray.	
7/7/6				Silty clay, estimated at 15% silt, stiff, saturated, greenish gray and light olive brown mottled, root pores common.	
4/5/6		15		Silty clay, estimated at 15-20% silt, trace sand, saturated, stiff, greenish gray and grayish brown mottled.	
4/6/8				CL/CH	Clay, high plasticity, trace fine sand, stiff, moist, mottled brown and dark gray, trace root pores.
		20		TOTAL DEPTH 19'	

BORING LOG







Project No. KEI-P91-0102	Boring Diameter 9"	Logged By <i>JGG</i> D.L. <i>CEG 1633</i>
	Casing Diameter 2"	
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro	Well Cover Elevation	Date Drilled 8/13/92
Boring No. MW10	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
		0		Concrete slab.	
NO BLOW COUNT DATA - SAMPLES PUSHED				Sand and gravel mixed with black silty clay (fill and disturbed native soil).	
			SC	Silty clay with trace sand and gravel, very stiff, moist, very dark brown (10YR 2/1) and black (10YR 1/1), mottled.	
			5		Clayey sand with trace gravel to 3/4 inch in diameter, sand is fine to coarse-grained, medium dense, moist, dark brown (10YR 3/3), with iron-oxide stained root holes.
				ML	Silt with trace fine-grained sand, stiff, moist, dark greenish gray (5GY 4/1).
			10	CL	Silty clay, stiff, moist, dark gray (5Y 4/1), olive brown (2.5YR 4/4) below 10.5 feet with dark greenish gray (5GY 4/1) discolored root holes.
				MH CL	Clayey silt, stiff, moist, olive gray (5Y 4/2). Silty clay, as at 11 feet.
				MH	Clayey silt, stiff, moist, olive gray (5Y 4/2).
				SM	Silty sand with trace clay, sand is fine-grained, medium dense, wet, dark greenish gray (5GY 4/1).
			15	CH	Silty clay, stiff, moist, olive gray (5Y 4/2) and very dark grayish brown (10YR 3/2), mottled.
				ML	Silt and sandy silt, stiff, very moist to wet, dark greenish gray (5Y 4/1), sand is very fine to fine-grained.
				CH	Silty clay, stiff, moist, olive gray (5Y 4/1) with minor iron oxide staining.
				CH	Clay with silt and trace sand, stiff, moist, very dark brown (10YR 2/2) and very dark gray (10YR 3/1), mottled, minor caliche.
			20		TOTAL DEPTH 20'

BORING LOG

Project No. KEI-P91-0102		Boring Diameter 9" Casing Diameter 2"		Logged By <i>JGG</i> D.L. <i>CEG 1633</i>	
Project Name Unocal S/S #3292 15008 E. 14th, San Leandro		Well Cover Elevation		Date Drilled 8/13/92	
Boring No. MW11		Drilling Method Hollow-stem Auger		Drilling Company Woodward Drilling	
Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati- graphy USCS	Description	
NO BLOW COUNT DATA - SAMPLES PUSHED		0		Concrete slab.	
		1		Sand and gravel mixed with black silty clay: fill and disturbed native soil.	
		2	CL	Silty clay with trace sand and gravel, very stiff, moist, black (10YR 2/1).	
		3			
		4			
		5	SC	Clayey sand with trace silt, sand is fine to coarse-grained, medium dense, moist, dark brown (10YR 3/3).	
		6			
		7			
		8			
		9	CH	Silty clay, stiff, moist, dark olive gray (5Y 4/2), olive gray (5Y 4/2) below 10 feet, with root holes, root holes are discolored, dark greenish gray below (5GY 4/1) below 10 feet.	
		10			
		11	MH	Clayey silt with trace fine-grained sand, stiff, moist to very moist, olive gray (5Y 4/2), grading to dark greenish gray (5GY 4/1) below 12.5 feet with root holes.	
		12			
	13				
	14	ML	Silt with sand, sand is very fine-grained, stiff, very moist, dark greenish gray (5GY 4/1).		
	15	SP	Poorly graded sand, fine-grained, trace silt, medium dense, saturated, dark greenish gray (5GY 4/1).		
	16				
	17	CH	Silty clay, stiff, moist, dark greenish gray (5GY 4/1).		
	18				
	19	CH	Clay with silt and trace sand, stiff, moist, very dark brown (10YR 2/2) and very dark gray (10YR 3/1), mottled, with trace caliche.		
	20	MH	Clayey silt, stiff, moist olive gray (5Y 4/2).		
	21	CL	Silty clay, stiff, moist, dark greenish gray (5GY 4/1).		
		22	TOTAL DEPTH 20'		

PROJECT: <i>Tosco 78 Facility #3292</i>	LOCATION: <i>15008 East 14th Street, San Leandro, CA</i>
GR PROJECT NO.: <i>140071.02</i>	SURFACE ELEVATION: <i>ft. MSL</i>
DATE STARTED: <i>05/07/98</i>	WL (ft. bgs): <i>8.5</i> DATE: <i>05/07/98</i> TIME: <i>12:45</i>
DATE FINISHED: <i>05/07/98</i>	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: <i>2 in. GeoProbe</i>	TOTAL DEPTH: <i>12.0 Feet</i>
DRILLING COMPANY: <i>Fisch Environmental</i>	GEOLOGIST: <i>Barbara Sieminski</i>

DEPTH feet	PIID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						GW	PAVEMENT - asphalt.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
			EBI-5			CL	GRAVEL WITH SAND (GW) - dark yellowish brown (10YR 4/4), moist; 70% angular fine to coarse gravel, 25% fine to coarse sand, 5% clay.	
5	0		EBI-6.5			ML-CL	CLAY (CL) - very dark brown (10YR 3/3), moist, medium plasticity; 95% clay, 5% fine sand.	
	0		EBI-7.5			ML/SM	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), moist, low plasticity; 40% silt, 40% clay, 20% fine sand.	
	0		EBI-8.5			ML/SM	SANDY SILT (ML/SM) - dark brown (10YR 4/3), moist; 50% silt, 40% fine to coarse sand, 10% clay.	
	0						↓ Becomes saturated at 8.5 feet.	
10	0.6					CL	CLAY (CL) - dark gray (5Y 4/1), saturated, medium plasticity; 95% clay, 5% fine to coarse sand; carbonate nodules.	
							Bottom of boring at 12 feet.	
15							(* = not applicable - boring advanced using direct-push technology)	
20								

Gettler-Ryan, Inc.

Log of Boring EB-2








PROJECT: <i>Tosco 76 Facility #3292</i>	LOCATION: <i>15008 East 14th Street, San Leandro, CA</i>
GR PROJECT NO.: <i>140071.02</i>	SURFACE ELEVATION: <i>ft. MSL</i>
DATE STARTED: <i>05/07/98</i>	WL (ft. bgs): <i>7.9</i> DATE: <i>05/07/98</i> TIME: <i>10:45</i>
DATE FINISHED: <i>05/07/98</i>	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: <i>2 in. GeoProbe</i>	TOTAL DEPTH: <i>12.0 Feet</i>
DRILLING COMPANY: <i>Fisch Environmental</i>	GEOLOGIST: <i>Barbara Sieminski</i>

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							PAVEMENT - asphalt.	
						CL	SANDY CLAY (CL) - very dark grayish brown (10YR 3/2), moist, low plasticity; 70% clay, 30% fine to coarse sand.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
						CL	CLAY (CL) - very dark brown (10YR 2/2), moist, medium plasticity; 95% clay, 5% fine sand.	
5	0					ML-CL	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), moist, low plasticity; 40% silt, 40% clay, 20% fine sand.	
	0					SM/ML	SILTY SAND (SM) - dark brown (10YR 4/3), moist; 55% fine sand, 35% silt, 10% clay.	
	0		EB2-7.5			SM/ML	Color changes to olive gray (5Y 5/2), becomes saturated at 7.9 feet.	
1.8						SM/ML		
10						CL	SANDY CLAY (CL) - olive gray (5Y 5/2), saturated, low plasticity; 70% clay, 30% fine sand.	
	9.8					SC	CLAYEY SAND (SC) - olive gray (5Y 5/2), saturated; 60% fine sand, 40% clay.	
						CL	CALY (CL) - dark grayish brown (2.5Y 4/2) mottled gray (2.5Y 4/0), saturated, medium plasticity; 95% clay, 5% fine sand.	
							Bottom of boring at 12 feet.	
15							(* = not applicable - boring advanced using direct-push technology)	
20								

Gettler-Ryan, Inc.

Log of Boring EB-3

PROJECT: <i>Tosco 76 Facility #3292</i>	LOCATION: <i>15008 East 14th Street, San Leandro, CA</i>
GR PROJECT NO.: <i>140071.02</i>	SURFACE ELEVATION: <i>ft. MSL</i>
DATE STARTED: <i>05/07/98</i>	WL (ft. bgs): <i>7.85</i> DATE: <i>05/07/98</i> TIME: <i>13:45</i>
DATE FINISHED: <i>05/07/98</i>	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: <i>2 in. GeoProbe</i>	TOTAL DEPTH: <i>12.0 Feet</i>
DRILLING COMPANY: <i>Fisch Environmental</i>	GEOLOGIST: <i>Barbara Sieminski</i>

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							PAVEMENT - asphalt.	
						CL	GRAVELLY CLAY (CL) - very dark grayish brown (10YR 3/2), moist, low plasticity; 50% clay, 40% well rounded fine gravel, 10% fine to coarse sand.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
						CL	CLAY (CL) - very dark brown (10YR 3/3), moist, medium plasticity; 95% clay, 5% fine sand.	
						ML-CL	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), moist, low plasticity; 40% silt, 40% clay, 20% fine sand.	
5	0		EB3-7			ML/SM	SANDY SILT (ML/SM) - light olive brown (2.5Y 5/4) mottled strong brown (7.5YR 4/8), moist; 45% silt, 45% fine to coarse sand, 10% clay.	
							∇ Becomes saturated at 7.85 feet.	
						ML-CL	CLAYEY SILT WITH SAND (ML-CL) - dark yellowish brown (10YR 4/3), saturated, low plasticity; 40% silt, 40% clay, 20% fine sand.	
10	0.3					CL	CLAY (CL) - dark gray (5Y 4/1), saturated, medium plasticity; 95% clay, 5% fine to coarse sand.	
							Bottom of boring at 12 feet.	
15							(* = not applicable - boring advanced using direct-push technology)	
20								

Gettler-Ryan, Inc.

Log of Boring EB-4

PROJECT: *Tosco 76 Facility #3292*

LOCATION: *15008 East 14th Street, San Leandro, CA*

GR PROJECT NO.: *140071.02*

SURFACE ELEVATION: *ft. MSL*

DATE STARTED: *05/07/98*

WL (ft. bgs): *8.15* DATE: *05/07/98* TIME: *14:40*

DATE FINISHED: *05/07/98*





WL (ft. bgs): DATE: TIME:

DRILLING METHOD: *2 in. GeoProbe*

TOTAL DEPTH: *12.0 Feet*

DRILLING COMPANY: *Fisch Environmental*

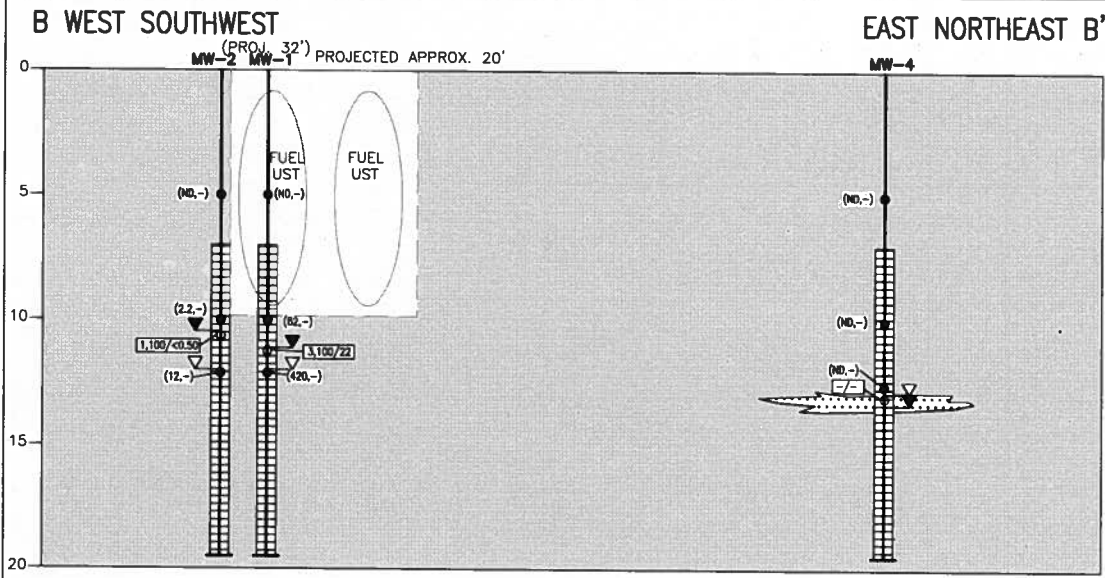
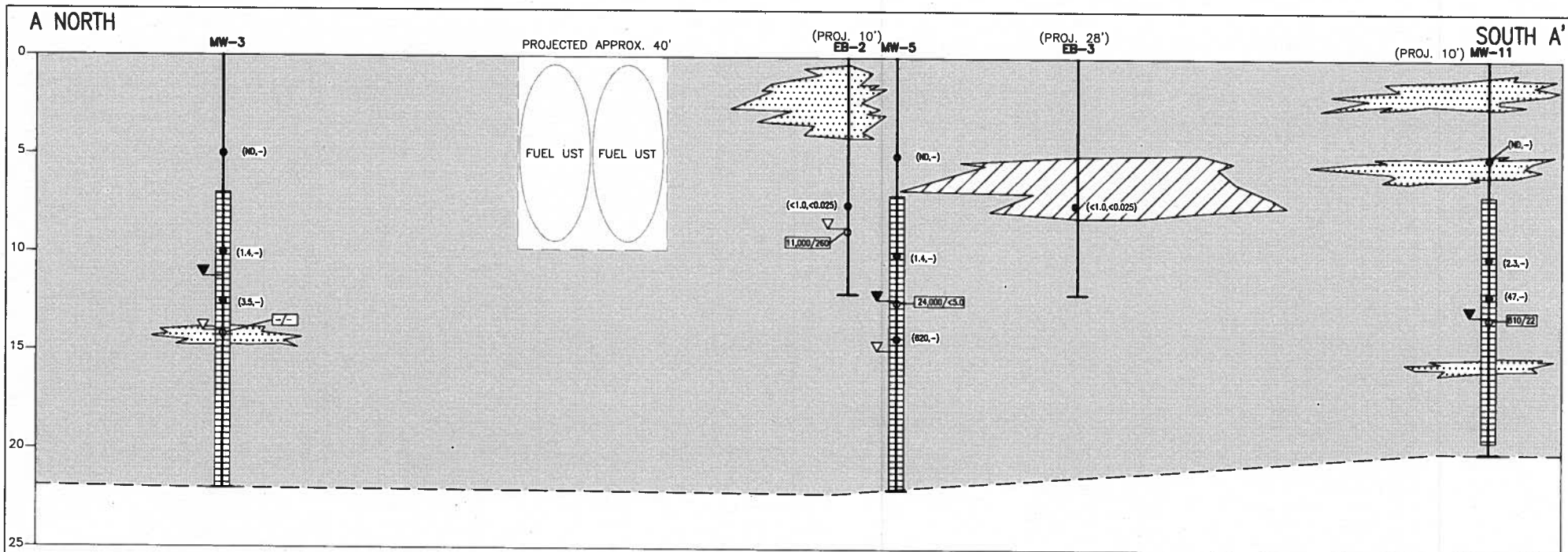
GEOLOGIST: *Barbara Sieminski*

DEPTH feet	P10 (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
							PAVEMENT - asphalt.	
						CL	CLAY (CL) - very dark brown (10YR 2/2), damp, low plasticity; 70% clay, 20% silt, 10% fine sand.	Boring backfilled with neat cement from the bottom to 5 feet below ground surface (bgs), soil cuttings from 5 feet bgs to ground surface, and capped with concrete.
5	0		EB4-5.5			ML-CL	CLAYEY SILT (ML-CL) - dark brown (10YR 3/3), damp, low plasticity; 50% silt, 40% clay, 10% fine sand.	
	0					ML/SM	SANDY SILT (ML/SM) - dark brown (10YR 5/3), saturated, medium plasticity; 45% silt, 45% fine sand, 10% clay.	
10	0.6					CL	CLAY (CL) - dark grayish brown (2.5Y 4/2), saturated, medium plasticity; 90% clay, 10% fine sand. Color changes to olive gray (5Y 5/2), sand decreases to 5% at 11 feet.	
15							Bottom of boring at 12 feet.	
20							(* = not applicable - boring advanced using direct-push technology)	



Appendix C

Geologic Cross-Sections



LEGEND

- MW-2: MONITORING WELL/BORING NAME
- WELL CASING/EXPLORATORY BORING
- SOIL SAMPLE LOCATION
- WELL SCREEN
- DEPTH TO STATIC GROUNDWATER (4Q08)
- DEPTH TO FIRST ENCOUNTERED WATER
- (3.5.-) SOIL SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, MTBE (mg/kg)
- 3100/22 GROUNDWATER SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, MTBE (ug/L)
- LOW PERMEABILITY CLAY, SILT (CL, ML, CH)
- MEDIUM PERMEABILITY SAND/GRAVEL WITH CLAY/SILT (GC, SM, SC)
- HIGH PERMEABILITY SANDS AND GRAVELS (SP, CW)
- APPROXIMATE STRATIGRAPHIC BOUNDARY

FEET BELOW GROUND SURFACE

NOTES:

- ND-<5.0=NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
- =NOT ANALYZED
TPHg=TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
MTBE=METHYL TERT BUTYL ETHER
mg/kg=MILLIGRAMS PER KILOGRAM
ug/L=MICROGRAMS PER LITER
- STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.
- GROUNDWATER DATA FROM STATIC LEVEL COLLECTED ON 12/17/08.
GROUNDWATER DATA FROM SOIL BORINGS COLLECTED ON DATE OF DRILLING.

SCALE IN FEET

0 5 20

FIGURE 4
GEOLOGIC CROSS SECTIONS
A-A' AND B-B'
 76 STATION 3292
 15008 EAST 14TH STREET
 SAN LEANDRO, CALIFORNIA

PROJECT NO. C1032-9200-2	PREPARED BY NP	DRAWN BY JH	
DATE 03/20/09	REVIEWED BY DB	FILE NAME 3292_QMS(NEW)	



Appendix D

Historical Groundwater Results
from TRC

Appendix D
Historical Groundwater Results from TRC
Conceptual Site Model and Closure Request
76 Service Station No. 3292
15008 East 14th Street, San Leandro, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-1														
9/19/1991	--	--	--	--	--	26000	--	130	16	1300	1800	--	--	--
12/18/1991	--	--	--	--	--	17000	--	160	20	1400	1600	--	--	--
3/17/1992	--	--	--	--	--	23000	--	320	19	1000	940	--	--	--
5/19/1992	--	--	--	--	--	29000	--	650	370	1100	1200	--	--	--
8/20/1992	--	--	--	--	--	18000	--	230	22	640	950	--	--	--
9/16/1992	36.72	13.67	0	23.05	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.72	14.07	0	22.65	-0.40	--	--	--	--	--	--	--	--	--
11/10/1992	36.72	13.96	0	22.76	0.11	18000	--	220	ND	690	830	--	--	--
12/10/1992	36.72	13.15	0	23.57	0.81	--	--	--	--	--	--	--	--	--
1/15/1993	36.72	10.02	0	26.70	3.13	--	--	--	--	--	--	--	--	--
2/20/1993	36.72	9.01	0	27.71	1.01	19000	--	190	ND	880	620	--	--	--
3/18/1993	36.72	9.48	0	27.24	-0.47	--	--	--	--	--	--	--	--	--
4/20/1993	36.72	9.15	0	27.57	0.33	--	--	--	--	--	--	--	--	--
5/21/1993	36.72	9.80	0	26.92	-0.65	27000	--	150	200	1200	950	--	--	--
6/22/1993	36.72	10.33	0	26.39	-0.53	--	--	--	--	--	--	--	--	--
7/23/1993	36.72	10.79	0	25.93	-0.46	--	--	--	--	--	--	--	--	--
8/23/1993	36.72	11.27	0	25.45	-0.48	24000	--	160	110	840	810	--	--	--
9/24/1993	36.37	11.35	0	25.02	-0.43	--	--	--	--	--	--	--	--	--
11/23/1993	36.37	11.84	0	24.53	-0.49	18000	--	210	63	900	620	--	--	--
2/24/1994	36.37	9.45	0	26.92	2.39	18000	--	74	30	940	480	--	--	--
5/25/1994	36.37	10.45	0	25.92	-1.00	6400	--	72	ND	170	67	--	--	--
8/23/1994	36.37	11.98	0	24.39	-1.53	24000	--	130	57	970	320	--	--	--
11/23/1994	36.37	11.17	0	25.20	0.81	23000	--	180	44	970	270	--	--	--
2/3/1995	36.37	8.01	0	28.36	3.16	20000	--	77	17	950	390	--	--	--
5/10/1995	36.37	8.51	0	27.86	-0.50	16000	--	230	27	880	630	--	--	--
8/2/1995	36.37	10.00	0	26.37	-1.49	18000	--	190	ND	860	590	--	--	--
11/2/1995	36.37	11.11	0	25.26	-1.11	--	--	--	--	--	--	--	--	--
11/20/1995	36.37	11.19	0	25.18	-0.08	20000	--	180	ND	960	450	970	--	--
2/8/1996	36.37	7.74	0	28.63	3.45	15000	--	43	16	940	410	5200	--	--
5/8/1996	36.37	8.50	0	27.87	-0.76	16000	--	37	16	930	410	1600	--	--
8/9/1996	36.37	9.72	0	26.65	-1.22	2300	--	25	ND	77	39	1200	--	--
11/7/1996	36.37	10.74	0	25.63	-1.02	38000	--	140	ND	1900	5600	ND	--	--
2/10/1997	36.37	7.92	0	28.45	2.82	7300	--	91	ND	170	68	1700	--	--
2/11/1997	36.37	--	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1997	36.37	9.24	0	27.13	--	11000	--	120	ND	470	110	1200	--	--
8/5/1997	36.37	10.20	0	26.17	-0.96	530	--	5.9	ND	5.6	ND	430	--	--
11/4/1997	36.37	10.71	0	25.66	-0.51	4100	--	50	7	64	14	97	--	--
2/12/1998	36.37	6.27	0	30.10	4.44	8500	--	160	ND	550	ND	1900	--	--
5/15/1998	36.34	7.62	0	28.72	-1.38	5600	--	57	ND	290	ND	1500	--	--
8/12/1998	36.34	8.85	0	27.49	-1.23	ND	--	ND	ND	ND	ND	5800	--	--
11/12/1998	36.34	9.71	0	26.63	-0.86	ND	--	16	ND	ND	ND	12000	13000	--

Appendix D
Historical Groundwater Results from TRC
Conceptual Site Model and Closure Request
76 Service Station No. 3292
15008 East 14th Street, San Leandro, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/1/1999	36.34	7.85	0	28.49	1.86	5700	--	43	ND	320	ND	5000	9600	--
5/12/1999	36.34	8.70	0	27.64	-0.85	ND	--	36	ND	ND	ND	12000	21000	--
8/11/1999	36.34	9.81	0	26.53	-1.11	ND	--	ND	ND	ND	ND	5760	8650	--
11/4/1999	36.34	10.72	0	25.62	-0.91	1640	--	11	ND	ND	ND	3330	3630	--
2/29/2000	36.34	7.31	0	29.03	3.41	195	--	ND	ND	ND	ND	580	657	--
5/8/2000	36.34	8.27	0	28.07	-0.96	9010	--	60.5	ND	402	ND	2260	1780	--
8/8/2000	36.34	9.85	0	26.49	-1.58	2060	--	34.8	ND	38.7	ND	1710	1990	--
11/6/2000	36.34	10.05	0	26.29	-0.20	2300	--	19.3	ND	4.37	ND	592	--	--
2/7/2001	36.34	9.64	0	26.70	0.41	2700	--	25	ND	38	ND	1500	840	--
5/9/2001	36.34	9.81	0	26.53	-0.17	5550	--	42.7	ND	48.4	ND	605	431	--
8/24/2001	36.34	11.21	0	25.13	-1.40	15000	--	130	ND<20	170	ND<20	820	--	--
11/16/2001	36.34	11.49	0	24.85	-0.28	8900	--	65	ND<10	46	ND<10	640	490	--
2/21/2002	36.34	8.93	0	27.41	2.56	7400	--	73	ND<10	100	ND<10	400	170	--
5/10/2002	36.34	9.82	0	26.52	-0.89	6000	--	67	6.7	58	ND<5.0	ND<50	--	--
8/26/2002	36.34	11.03	0	25.31	-1.21	--	9200	ND<10	ND<10	62	ND<20	--	120	--
11/7/2002	36.34	11.53	0	24.81	-0.50	--	2200	ND<2.5	ND<2.5	4.6	ND<5.0	--	20	--
2/14/2003	36.34	9.03	0	27.31	2.50	--	4300	ND<2.5	ND<2.5	23	ND<5.0	--	35	--
5/12/2003	36.34	8.61	0	27.73	0.42	--	5000	ND<0.50	0.50	13	ND<1.0	--	32	--
8/11/2003	36.34	10.37	0	25.97	-1.76	--	2900	ND<0.50	ND<0.50	4.4	ND<1.0	--	17	--
11/13/2003	36.34	11.21	0	25.13	-0.84	--	8100	ND<5.0	ND<5.0	45	ND<10	--	82	--
2/17/2004	36.34	9.35	0	26.99	1.86	--	8200	ND<2.5	ND<2.5	84	ND<5.0	--	33	--
5/20/2004	36.34	10.15	0	26.19	-0.80	--	9200	ND<5.0	ND<5.0	78	ND<10	--	24	--
8/25/2004	36.34	11.37	0	24.97	-1.22	--	8500	ND<2.5	ND<2.5	64	ND<5.0	--	33	--
11/2/2004	36.34	10.93	0	25.41	0.44	--	9500	ND<5.0	ND<5.0	34	ND<10	--	61	--
3/17/2005	36.34	8.28	0	28.06	2.65	--	10000	ND<0.50	0.96	35	ND<1.0	--	21	--
6/13/2005	36.34	8.59	0	27.75	-0.31	--	8500	ND<5.0	ND<5.0	48	ND<10	--	10	--
9/27/2005	36.34	10.25	0	26.09	-1.66	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	100	--
12/20/2005	36.34	9.61	0	26.73	0.64	--	6000	ND<0.50	0.62	20	ND<1.0	--	9.9	--
3/10/2006	36.34	7.58	0	28.76	2.03	--	4500	ND<2.5	ND<2.5	22	ND<5.0	--	10	--
6/20/2006	36.34	8.76	0	27.58	-1.18	--	4700	ND<2.5	ND<2.5	10	ND<5.0	--	3.2	--
9/25/2006	36.34	9.01	0	27.33	-0.25	--	5600	ND<1.0	ND<1.0	7.8	ND<1.0	--	3.0	--
12/18/2006	36.34	9.25	0	27.09	-0.24	--	8300	2.1	1.2	220	37	--	ND<0.50	--
3/29/2007	36.34	9.53	0	26.81	-0.28	--	5300	ND<0.50	ND<0.50	12	ND<0.50	--	5.8	--
6/26/2007	36.34	10.46	0	25.88	-0.93	--	5300	ND<0.50	ND<0.50	7.4	ND<0.50	--	4.9	--
9/26/2007	36.34	11.46	0	24.88	-1.00	--	2600	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	17	--
12/18/2007	36.34	11.24	0	25.10	0.22	--	6100	ND<2.5	ND<2.5	2.9	ND<5.0	--	42	--
3/25/2008	36.34	9.57	0	26.77	1.67	--	3100	ND<2.5	ND<2.5	4.0	ND<5.0	--	8.6	--
6/18/2008	36.34	10.78	0	25.56	-1.21	--	1400	ND<0.50	0.56	1.4	ND<1.0	--	6.3	--
9/15/2008	36.34	11.91	0	24.43	-1.13	--	3500	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	21	--
12/17/2008	36.34	12.01	0	24.33	-0.10	--	3100	ND<1.0	ND<1.0	1.7	ND<2.0	--	22	--
3/26/2009	36.34	9.64	0	26.70	2.37	--	2900	ND<1.0	ND<1.0	4.2	ND<2.0	--	ND<1.0	--
6/22/2009	36.34	10.84	0	25.50	-1.20	--	2100	ND<1.0	ND<1.0	1.2	ND<2.0	--	ND<1.0	--

Appendix D
Historical Groundwater Results from TRC
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
12/15/2009	36.34	10.89	0	25.45	-0.05	--	4100	ND<0.50	ND<0.50	3.0	ND<1.0	--	15	--
6/30/2010	36.34	9.83	0	26.51	1.06	--	2100	ND<0.50	ND<0.50	1.7	ND<1.0	--	ND<0.50	--
12/21/2010	36.34	9.06	0	27.28	0.77	--	2000	ND<1.0	ND<1.0	1.9	ND<2.0	--	3.8	--
6/20/2011	36.34	8.97	0	27.37	0.09	--	2000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/6/2011	36.34	10.31	0	26.03	-1.34	--	2500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.5	--
6/20/2012	36.34	10.05	0	26.29	0.26	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.7	--
MW-2														
5/4/1991	--	--	--	--	--	19000	--	6.6	1.4	460	630	--	--	--
9/19/1991	--	--	--	--	--	19000	--	100	6.8	790	310	--	--	--
12/18/1991	--	--	--	--	--	10000	--	110	5.1	420	96	--	--	--
3/17/1992	--	--	--	--	--	16000	--	110	ND	730	220	--	--	--
5/19/1992	--	--	--	--	--	17000	--	140	87	680	170	--	--	--
8/20/1992	--	--	--	--	--	13000	--	52	ND	660	70	--	--	--
9/16/1992	36.89	13.80	0	23.09	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.89	14.19	0	22.70	-0.39	--	--	--	--	--	--	--	--	--
11/10/1992	36.89	14.06	0	22.83	0.13	11000	--	36	7.2	570	45	--	--	--
12/10/1992	36.89	13.21	0	23.68	0.85	--	--	--	--	--	--	--	--	--
1/15/1993	36.89	10.12	0	26.77	3.09	--	--	--	--	--	--	--	--	--
2/20/1993	36.89	9.07	0	27.82	1.05	1500	--	2.9	3.8	9.1	ND	--	--	--
3/18/1993	36.89	9.55	0	27.34	-0.48	--	--	--	--	--	--	--	--	--
4/20/1993	36.89	9.19	0	27.70	0.36	--	--	--	--	--	--	--	--	--
5/21/1993	36.89	9.84	0	27.05	-0.65	9500	--	37	ND	470	62	--	--	--
6/22/1993	36.89	10.37	0	26.52	-0.53	--	--	--	--	--	--	--	--	--
7/23/1993	36.89	10.83	0	26.06	-0.46	--	--	--	--	--	--	--	--	--
8/23/1993	36.89	11.30	0	25.59	-0.47	15000	--	110	ND	590	64	--	--	--
9/24/1993	36.34	11.14	0	25.20	-0.39	--	--	--	--	--	--	--	--	--
11/23/1993	36.34	11.69	0	24.65	-0.55	11000	--	80	10	480	20	--	--	--
2/24/1994	36.34	9.27	0	27.07	2.42	11000	--	44	ND	580	32	--	--	--
5/25/1994	36.34	10.30	0	26.04	-1.03	11000	--	50	ND	400	22	--	--	--
8/23/1994	36.34	11.82	0	24.52	-1.52	12000	--	45	10	360	20	--	--	--
11/23/1994	36.34	10.97	0	25.37	0.85	15000	--	61	24	440	ND	--	--	--
2/3/1995	36.34	7.87	0	28.47	3.10	9700	--	5.7	ND	250	10	--	--	--
5/10/1995	36.34	8.38	0	27.96	-0.51	7500	--	56	4.7	310	33	--	--	--
8/2/1995	36.34	9.36	0	26.98	-0.98	8200	--	53	22	220	25	--	--	--
11/2/1995	36.34	10.95	0	25.39	-1.59	5000	--	56	4.5	170	7.7	110	--	--
2/8/1996	36.34	7.52	0	28.82	3.43	7200	--	ND	ND	170	ND	ND	--	--
5/8/1996	36.34	8.21	0	28.13	-0.69	8400	--	5.6	9	170	10	130	--	--
8/9/1996	36.34	9.54	0	26.80	-1.33	3100	--	24	ND	80	ND	64	--	--
11/7/1996	36.34	10.69	0	25.65	-1.15	36000	--	140	ND	1900	5600	ND	--	--
2/10/1997	36.34	7.75	0	28.59	2.94	4600	--	27	ND	53	ND	ND	--	--
2/11/1997	36.34	--	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1997	36.34	9.14	0	27.20	--	5300	--	61	ND	78	20	180	--	--

Appendix D
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
8/5/1997	36.34	10.23	0	26.11	-1.09	3100	--	35	ND	13	ND	58	--	--
11/4/1997	36.34	10.65	0	25.69	-0.42	1200	--	16	ND	11	25	53	--	--
2/12/1998	36.34	6.20	0	30.14	4.45	630	--	12	ND	7.3	ND	48	--	--
5/15/1998	36.30	7.50	0	28.80	-1.34	3600	--	19	ND	33	ND	72	--	--
8/12/1998	36.30	8.82	0	27.48	-1.32	3100	--	44	6.1	15	5.7	270	--	--
11/12/1998	36.30	9.60	0	26.70	-0.78	3200	--	44	ND	15	ND	180	--	--
3/1/1999	36.30	7.81	0	28.49	1.79	3600	--	45	6.2	7.5	ND	570	--	--
5/12/1999	36.30	8.65	0	27.65	-0.84	3100	--	65	ND	15	17	450	--	--
8/11/1999	36.30	9.95	0	26.35	-1.30	3260	--	33.6	ND	ND	ND	154	--	--
11/4/1999	36.30	10.78	0	25.52	-0.83	3160	--	38.9	7.1	ND	ND	120	--	--
2/29/2000	36.30	7.44	0	28.86	3.34	3770	--	13.5	ND	12	ND	105	--	--
5/8/2000	36.30	8.42	0	27.88	-0.98	3840	--	ND	ND	9.54	ND	ND	--	--
8/8/2000	36.30	9.66	0	26.64	-1.24	3080	--	40.8	ND	ND	ND	149	--	--
11/6/2000	36.30	9.79	0	26.51	-0.13	2510	--	38.8	4.42	ND	ND	82.6	--	--
2/7/2001	36.30	9.43	0	26.87	0.36	9300	--	140	120	71	140	790	--	--
5/9/2001	36.30	9.65	0	26.65	-0.22	3300	--	37.9	ND	ND	ND	120	--	--
8/24/2001	36.30	11.06	0	25.24	-1.41	3100	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<50	--	--
11/16/2001	36.30	11.19	0	25.11	-0.13	2200	--	28	ND<5.0	ND<5.0	ND<5.0	76	--	--
2/21/2002	36.30	8.73	0	27.57	2.46	2700	--	33	ND<5.0	ND<5.0	ND<5.0	100	--	--
5/10/2002	36.30	9.71	0	26.59	-0.98	2300	--	30	ND<5.0	ND<5.0	ND<5.0	ND<50	--	--
8/26/2002	36.30	10.88	0	25.42	-1.17	--	4400	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<20	--
11/7/2002	36.30	11.16	0	25.14	-0.28	--	1100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<10	--
2/14/2003	36.30	8.91	0	27.39	2.25	--	1800	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
5/12/2003	36.30	8.73	0	27.57	0.18	--	2900	ND<0.50	ND<0.50	0.89	ND<1.0	--	ND<2.0	--
8/11/2003	36.30	10.51	0	25.79	-1.78	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
11/13/2003	36.30	11.06	0	25.24	-0.55	--	1100	1.2	0.68	0.78	2.6	--	ND<2.0	--
2/17/2004	36.30	9.17	0	27.13	1.89	--	2800	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
5/20/2004	36.30	10.02	0	26.28	-0.85	--	2500	ND<0.50	0.96	1.1	ND<1.0	--	ND<0.50	--
8/25/2004	36.30	11.19	0	25.11	-1.17	--	2900	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
11/2/2004	36.30	10.74	0	25.56	0.45	--	2500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/17/2005	36.30	8.13	0	28.17	2.61	--	2700	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/13/2005	36.30	8.47	0	27.83	-0.34	--	4100	ND<0.50	ND<0.50	1.4	ND<1.0	--	ND<0.50	--
9/27/2005	36.30	10.11	0	26.19	-1.64	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/20/2005	36.30	9.39	0	26.91	0.72	--	2100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/10/2006	36.30	7.43	0	28.87	1.96	--	2300	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	--
6/20/2006	36.30	8.59	0	27.71	-1.16	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/25/2006	36.30	9.76	0	26.54	-1.17	--	2300	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
12/18/2006	36.30	9.07	0	27.23	0.69	--	1200	ND<0.50	ND<0.50	ND<0.50	0.58	--	ND<0.50	--
3/29/2007	36.30	10.36	0	25.94	-1.29	--	1100	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
6/26/2007	36.30	10.30	0	26.00	0.06	--	1800	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
9/26/2007	36.30	11.30	0	25.00	-1.00	--	500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
12/18/2007	36.30	11.05	0	25.25	0.25	--	460	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--

Sampled on 12/26/2006

Appendix D
Historical Groundwater Results from TRC
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/25/2008	36.30	9.42	0	26.88	1.63	--	1600	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/18/2008	36.30	10.63	0	25.67	-1.21	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/15/2008	36.30	11.75	0	24.55	-1.12	--	1400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/17/2008	36.30	11.80	0	24.50	-0.05	--	1100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/26/2009	36.30	9.48	0	26.82	2.32	--	1300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/22/2009	36.30	10.72	0	25.58	-1.24	--	1300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/15/2009	36.30	10.70	0	25.60	0.02	--	1700	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/30/2010	36.30	9.70	0	26.60	1.00	--	1400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/21/2010	36.30	8.88	0	27.42	0.82	--	1400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2011	36.30	8.81	0	27.49	0.07	--	970	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/6/2011	36.30	10.17	0	26.13	-1.36	--	1300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2012	36.30	9.90	0	26.40	0.27	--	1200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
MW-2(SP)														
5/8/1996	35.44	9.12	0	26.32	--	540	--	0.68	21	1	1.7	ND	--	--
8/9/1996	35.44	9.98	0	25.46	-0.86	170	--	ND	7.8	ND	ND	ND	--	--
11/7/1996	35.44	10.98	0	24.46	-1.00	430	--	8.9	1.5	ND	ND	10	--	--
2/10/1997	35.44	8.63	0	26.81	2.35	230	--	4.6	1	ND	ND	10	--	--
2/11/1997	35.44	--	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1997	35.44	9.58	0	25.86	--	ND	--	ND	ND	ND	ND	14	--	--
8/5/1997	35.44	10.62	0	24.82	-1.04	360	--	5.5	50	ND	ND	ND	--	--
11/4/1997	35.44	11.06	0	24.38	-0.44	280	--	2.9	13	ND	0.54	ND	--	--
2/12/1998	35.44	7.71	0	27.73	3.35	440	--	10	1.6	ND	0.69	13	--	--
5/15/1998	35.44	8.50	0	26.94	-0.79	540	--	10	1.1	ND	1.1	15	--	--
8/12/1998	35.44	9.43	0	26.01	-0.93	ND	--	ND	ND	ND	ND	ND	--	--
11/12/1998	35.44	9.98	0	25.46	-0.55	300	--	6.1	ND	ND	4	ND	--	--
3/1/1999	35.44	8.70	0	26.74	1.28	57	--	ND	ND	ND	ND	4.5	--	--
5/12/1999	35.44	9.45	0	25.99	-0.75	ND	--	ND	ND	ND	ND	5	--	--
8/11/1999	35.44	10.08	0	25.36	-0.63	337	--	ND	ND	ND	ND	12.4	--	--
11/4/1999	35.44	10.91	0	24.53	-0.83	317	--	8.31	ND	ND	ND	7.81	--	--
2/29/2000	35.44	8.04	0	27.40	2.87	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/8/2000	35.44	9.10	0	26.34	-1.06	131	--	ND	ND	ND	ND	ND	4.83	--
8/8/2000	35.44	9.91	0	25.53	-0.81	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/6/2000	35.44	10.20	0	25.24	-0.29	183	--	ND	ND	ND	ND	ND	--	--
2/7/2001	35.44	9.70	0	25.74	0.50	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/9/2001	35.44	9.98	0	25.46	-0.28	ND	--	ND	ND	ND	ND	ND	--	--
8/24/2001	35.44	11.15	0	24.29	-1.17	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/16/2001	35.44	11.31	0	24.13	-0.16	250	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
2/21/2002	35.44	9.55	0	25.89	1.76	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/10/2002	35.44	10.01	0	25.43	-0.46	180	--	ND<0.50	ND<0.50	ND<0.50	0.71	10	--	--
8/26/2002	35.44	11.03	0	24.41	-1.02	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/7/2002	35.44	11.12	0	24.32	-0.09	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.4	--
2/14/2003	35.44	9.60	0	25.84	1.52	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only

Appendix D
Historical Groundwater Results from TRC
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15008 East 14th Street, San Leandro, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
5/12/2003	35.44	9.21	0	26.23	0.39	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	8.4	--
8/11/2003	35.44	10.87	0	24.57	-1.66	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/13/2003	35.44	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
2/17/2004	35.44	9.79	0	25.65	--	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/20/2004	35.44	10.29	0	25.15	-0.50	--	260	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11	--
8/25/2004	35.44	11.25	0	24.19	-0.96	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/2/2004	35.44	10.87	0	24.57	0.38	--	150	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.1	--
3/17/2005	35.44	8.91	0	26.53	1.96	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/13/2005	35.44	9.10	0	26.34	-0.19	--	260	ND<0.50	ND<0.50	0.64	ND<1.0	--	10	--
9/27/2005	35.44	10.34	0	25.10	-1.24	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/20/2005	35.44	10.48	0	24.96	-0.14	--	260	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.6	--
3/10/2006	35.44	8.50	0	26.94	1.98	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/20/2006	35.44	9.26	0	26.18	-0.76	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.9	--
9/25/2006	35.44	10.11	0	25.33	-0.85	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2006	35.44	9.64	0	25.80	0.47	--	120	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.6	--
3/29/2007	35.44	9.77	0	25.67	-0.13	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/26/2007	35.44	10.48	0	24.96	-0.71	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	4.0	--
9/26/2007	35.44	11.32	0	24.12	-0.84	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2007	35.44	11.15	0	24.29	0.17	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/25/2008	35.44	9.02	0	26.42	2.13	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/18/2008	35.44	10.75	0	24.69	-1.73	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.3	--
9/15/2008	35.44	11.71	0	23.73	-0.96	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/17/2008	35.44	11.85	0	23.59	-0.14	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.4	--
3/26/2009	35.44	9.88	0	25.56	1.97	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/22/2009	35.44	10.74	0	24.70	-0.86	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.5	--
12/15/2009	35.44	10.92	0	24.52	-0.18	--	91	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.0	--
6/30/2010	35.44	9.97	0	25.47	0.95	--	140	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.3	--
12/21/2010	35.44	9.72	0	25.72	0.25	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.7	--
6/2/2011	35.44	9.32	0	26.12	0.40	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.8	--
12/6/2011	35.44	10.28	0	25.16	-0.96	--	ND<50	ND<0.50	ND<0.50	0.63	ND<1.0	--	0.87	--
6/20/212	35.44	10.01	0	25.43	0.27	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.4	--
MW-3														
5/4/1991	--	--	--	--	--	9100	--	2	ND	55	180	--	--	--
9/19/1991	--	--	--	--	--	7600	--	ND	13	190	170	--	--	--
12/18/1991	--	--	--	--	--	5900	--	54	6.4	110	64	--	--	--
3/17/1992	--	--	--	--	--	5800	--	66	7.5	100	58	--	--	--
5/19/1992	--	--	--	--	--	3400	--	25	3.6	66	41	--	--	--
8/20/1992	--	--	--	--	--	4500	--	58	ND	65	35	--	--	--
9/16/1992	36.84	13.74	0	23.10	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.84	14.13	0	22.71	-0.39	--	--	--	--	--	--	--	--	--
11/10/1992	36.84	14.03	0	22.81	0.10	3400	--	37	ND	85	34	--	--	--
12/10/1992	36.84	13.15	0	23.69	0.88	--	--	--	--	--	--	--	--	--

Appendix D
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
1/15/1993	36.84	10.07	0	26.77	3.08	--	--	--	--	--	--	--	--	--
2/20/1993	36.84	9.02	0	27.82	1.05	1600	--	12	18	8.9	12	--	--	--
3/18/1993	36.84	9.50	0	27.34	-0.48	--	--	--	--	--	--	--	--	--
4/20/1993	36.84	9.02	0	27.82	0.48	--	--	--	--	--	--	--	--	--
5/21/1993	36.84	9.70	0	27.14	-0.68	2600	--	42	ND	43	15	--	--	--
6/22/1993	36.84	10.28	0	26.56	-0.58	--	--	--	--	--	--	--	--	--
7/23/1993	36.84	10.74	0	26.10	-0.46	--	--	--	--	--	--	--	--	--
8/23/1993	36.84	11.24	0	25.60	-0.50	2900	--	25	ND	50	18	--	--	--
9/24/1993	36.42	11.20	0	25.22	-0.38	--	--	--	--	--	--	--	--	--
11/23/1993	36.42	11.78	0	24.64	-0.58	2300	--	34	ND	24	5.6	--	--	--
2/24/1994	36.42	9.21	0	27.21	2.57	3400	--	46	ND	53	11	--	--	--
5/25/1994	36.42	10.34	0	26.08	-1.13	1400	--	20	ND	ND	ND	--	--	--
8/23/1994	36.42	11.88	0	24.54	-1.54	2900	--	37	49	14	2.9	--	--	--
11/23/1994	36.42	10.98	0	25.44	0.90	3200	--	48	ND	22	ND	--	--	--
2/3/1995	36.42	7.82	0	28.60	3.16	780	--	13	ND	2.1	ND	--	--	--
5/10/1995	36.42	8.38	0	28.04	-0.56	1300	--	ND	ND	ND	ND	--	--	--
8/2/1995	36.42	9.49	0	26.93	-1.11	1500	--	6.3	ND	16	2.1	--	--	--
11/2/1995	36.42	11.00	0	25.42	-1.51	1100	--	5.2	2.1	7.4	0.5	15	--	--
2/8/1996	36.42	7.41	0	29.01	3.59	450	--	ND	ND	ND	ND	ND	--	--
5/8/1996	36.42	8.20	0	28.22	-0.79	590	--	ND	11	10	ND	ND	--	--
8/9/1996	36.42	9.53	0	26.89	-1.33	ND	--	ND	ND	ND	ND	ND	--	--
11/7/1996	36.42	10.96	0	25.46	-1.43	140	--	1.2	ND	ND	ND	5.6	--	--
2/10/1997	36.42	7.71	0	28.71	3.25	89	--	1.8	ND	ND	ND	ND	--	--
2/11/1997	36.42	--	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1997	36.42	9.17	0	27.25	--	52	--	ND	ND	ND	5.1	5.1	--	--
8/5/1997	36.42	10.27	0	26.15	-1.10	ND	--	ND	ND	ND	ND	ND	--	--
11/4/1997	36.42	10.83	0	25.59	-0.56	93	--	1.8	ND	ND	ND	6.2	--	--
2/12/1998	36.42	6.00	0	30.42	4.83	56	--	0.59	ND	ND	ND	2.7	--	--
5/15/1998	36.42	7.42	0	29.00	-1.42	130	--	0.68	ND	ND	0.63	10	--	--
8/12/1998	36.42	8.84	0	27.58	-1.42	50	--	ND	ND	ND	ND	ND	--	--
11/12/1998	36.42	9.57	0	26.85	-0.73	60	--	ND	ND	ND	ND	3.8	--	--
3/1/1999	36.42	8.74	0	27.68	0.83	66	--	ND	ND	ND	ND	3.2	--	--
5/12/1999	36.42	8.92	0	27.50	-0.18	ND	--	ND	ND	ND	ND	ND	--	--
8/11/1999	36.42	10.18	0	26.24	-1.26	ND	--	ND	ND	ND	ND	ND	--	--
11/4/1999	36.42	11.06	0	25.36	-0.88	ND	--	ND	ND	ND	ND	ND	--	--
2/29/2000	36.42	--	--	--	--	--	--	--	--	--	--	--	--	Not monitored/sampled
8/8/2000	36.42	10.03	0	26.39	--	--	--	--	--	--	--	--	--	--
11/6/2000	36.42	10.10	0	26.32	-0.07	--	--	--	--	--	--	--	--	--
2/7/2001	36.42	9.81	0	26.61	0.29	--	--	--	--	--	--	--	--	--
5/9/2001	36.42	9.58	0	26.84	0.23	--	--	--	--	--	--	--	--	--
8/24/2001	36.42	11.12	0	25.30	-1.54	--	--	--	--	--	--	--	--	--
11/16/2001	36.42	10.84	0	25.58	0.28	--	--	--	--	--	--	--	--	--

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
2/21/2002	36.42	8.68	0	27.74	2.16	--	--	--	--	--	--	--	--	
5/10/2002	36.42	9.71	0	26.71	-1.03	--	--	--	--	--	--	--	--	
8/26/2002	36.42	10.85	0	25.57	-1.14	--	--	--	--	--	--	--	--	
11/7/2002	36.42	10.89	0	25.53	-0.04	--	--	--	--	--	--	--	--	
2/14/2003	36.42	8.72	0	27.70	2.17	--	--	--	--	--	--	--	--	
5/12/2003	36.42	8.25	0	28.17	0.47	--	--	--	--	--	--	--	--	
8/11/2003	36.42	10.64	0	25.78	-2.39	--	--	--	--	--	--	--	--	
11/13/2003	36.42	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
2/17/2004	36.42	9.17	0	27.25	--	--	--	--	--	--	--	--	--	Monitored only
5/20/2004	36.42	10.03	0	26.39	-0.86	--	--	--	--	--	--	--	--	Monitored only
8/25/2004	36.42	11.26	0	25.16	-1.23	--	--	--	--	--	--	--	--	Monitored only
11/2/2004	36.42	10.78	0	25.64	0.48	--	--	--	--	--	--	--	--	Monitored only
3/17/2005	36.42	8.13	0	28.29	2.65	--	--	--	--	--	--	--	--	Monitored only
6/13/2005	36.42	8.41	0	28.01	-0.28	--	--	--	--	--	--	--	--	Monitored only
9/27/2005	36.42	10.13	0	26.29	-1.72	--	--	--	--	--	--	--	--	Monitored only
12/20/2005	36.42	10.20	0	26.22	-0.07	--	--	--	--	--	--	--	--	Monitored only
3/10/2006	36.42	7.39	0	29.03	2.81	--	--	--	--	--	--	--	--	Monitored only
6/20/2006	36.42	8.17	0	28.25	-0.78	--	--	--	--	--	--	--	--	Monitored only
9/25/2006	36.42	9.53	0	26.89	-1.36	--	--	--	--	--	--	--	--	Monitored only
12/18/2006	36.42	9.01	0	27.41	0.52	--	--	--	--	--	--	--	--	Monitored only
3/29/2007	36.42	9.19	0	27.23	-0.18	--	--	--	--	--	--	--	--	Monitored only
6/26/2007	36.42	10.09	0	26.33	-0.90	--	--	--	--	--	--	--	--	Monitored only
9/26/2007	36.42	11.10	0	25.32	-1.01	--	--	--	--	--	--	--	--	Monitored only
12/18/2007	36.42	11.12	0	25.30	-0.02	--	--	--	--	--	--	--	--	Monitored only
3/25/2008	36.42	9.62	0	26.80	1.50	--	--	--	--	--	--	--	--	Monitored only
6/18/2008	36.42	10.27	0	26.15	-0.65	--	--	--	--	--	--	--	--	Monitored only
9/15/2008	36.42	11.89	0	24.53	-1.62	--	--	--	--	--	--	--	--	Monitored only
12/17/2008	36.42	11.83	0	24.59	0.06	--	--	--	--	--	--	--	--	Monitored only
3/26/2009	36.42	9.91	0	26.51	1.92	--	--	--	--	--	--	--	--	Monitored only
6/22/2009	36.42	10.67	0	25.75	-0.76	--	--	--	--	--	--	--	--	Monitored only
MW-3(SP)														
5/8/1996	35.81	8.73	0	27.08	--	4700	--	7.9	36	13	4	42	--	--
8/9/1996	35.81	9.73	0	26.08	-1.00	2000	--	ND	14	7.6	ND	ND	--	--
11/7/1996	35.81	10.88	0	24.93	-1.15	1800	--	29	ND	ND	ND	40	--	--
2/10/1997	35.81	8.16	0	27.65	2.72	3500	--	70	14	ND	ND	150	--	--
5/7/1997	35.81	9.35	0	26.46	-1.19	3100	--	48	ND	ND	ND	110	--	--
8/5/1997	35.81	10.44	0	25.37	-1.09	3200	--	43	5.7	ND	ND	61	--	--
11/4/1997	35.81	10.90	0	24.91	-0.46	2600	--	34	ND	ND	ND	53	--	--
2/12/1998	35.81	6.77	0	29.04	4.13	3200	--	62	ND	ND	ND	100	--	--
5/15/1998	35.82	8.02	0	27.80	-1.24	ND	--	ND	ND	ND	ND	2.5	--	--
8/12/1998	35.82	9.11	0	26.71	-1.09	110	--	ND	4.1	ND	ND	ND	--	--
11/12/1998	35.82	9.81	0	26.01	-0.70	1800	--	37	2.8	ND	ND	55	--	--

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3/1/1999	35.82	8.27	0	27.55	1.54	2900	--	12	3.6	ND	ND	110	--	--
5/12/1999	35.82	8.92	0	26.90	-0.65	4100	--	34	ND	ND	ND	45	--	--
8/11/1999	35.82	9.59	0	26.23	-0.67	3220	--	22.8	ND	ND	ND	50.8	--	--
11/4/1999	35.82	10.86	0	24.96	-1.27	2460	--	26.6	ND	ND	ND	52.1	--	--
2/29/2000	35.82	7.92	0	27.90	2.94	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/8/2000	35.82	9.07	0	26.75	-1.15	1080	--	ND	ND	ND	ND	ND	ND	--
8/8/2000	35.82	9.86	0	25.96	-0.79	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/6/2000	35.82	10.12	0	25.70	-0.26	3100	--	35	ND	ND	ND	95.7	--	--
2/7/2001	35.82	9.65	0	26.17	0.47	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/9/2001	35.82	9.79	0	26.03	-0.14	3350	--	34	ND	ND	ND	ND	--	--
8/24/2001	35.82	11.09	0	24.73	-1.30	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/16/2001	35.82	11.29	0	24.53	-0.20	3300	--	47	ND<10	ND<10	ND<10	ND<100	--	--
2/21/2002	35.82	9.19	0	26.63	2.10	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/10/2002	35.82	9.84	0	25.98	-0.65	4700	--	55	ND<5.0	ND<5.0	ND<5.0	140	--	--
8/26/2002	35.82	10.95	0	24.87	-1.11	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/7/2002	35.82	11.33	0	24.49	-0.38	--	2600	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<20	--
2/14/2003	35.82	9.92	0	25.90	1.41	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/12/2003	35.82	9.74	0	26.08	0.18	--	420	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
8/11/2003	35.82	11.26	0	24.56	-1.52	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/13/2003	35.82	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
2/17/2004	35.82	9.54	0	26.28	--	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/20/2004	35.82	10.11	0	25.71	-0.57	--	3200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
8/25/2004	35.82	11.22	0	24.60	-1.11	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/2/2004	35.82	10.85	0	24.97	0.37	--	4500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/17/2005	35.82	8.55	0	27.27	2.30	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/13/2005	35.82	8.75	0	27.07	-0.20	--	4100	ND<0.50	ND<0.50	1.1	ND<1.0	--	ND<0.50	--
9/27/2005	35.82	10.20	0	25.62	-1.45	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/20/2005	35.82	10.35	0	25.47	-0.15	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/10/2006	35.82	7.80	0	28.02	2.55	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/20/2006	35.82	8.88	0	26.94	-1.08	--	1100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/25/2006	35.82	9.93	0	25.89	-1.05	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2006	35.82	9.40	0	26.42	0.53	--	1900	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
3/29/2007	35.82	9.55	0	26.27	-0.15	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/26/2007	35.82	10.37	0	25.45	-0.82	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
9/26/2007	35.82	11.33	0	24.49	-0.96	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2007	35.82	11.11	0	24.71	0.22	--	2200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/25/2008	35.82	9.61	0	26.21	1.50	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/18/2008	35.82	10.70	0	25.12	-1.09	--	1600	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/15/2008	35.82	11.75	0	24.07	-1.05	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/17/2008	35.82	11.89	0	23.93	-0.14	--	2000	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	ND<1.0	--
3/26/2009	35.82	9.68	0	26.14	2.21	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/22/2009	35.82	10.97	0	24.85	-1.29	--	1500	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	ND<1.0	--

Appendix D
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
12/15/2009	35.82	10.88	0	24.94	0.09	--	1900	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/30/2010	35.82	9.82	0	26.00	1.06	--	1500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/21/2010	35.82	9.38	0	26.44	0.44	--	1200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2011	35.82	9.03	0	26.79	0.35	--	1300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/6/2011	35.82	10.23	0	25.59	-1.20	--	1800	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2012	35.82	9.96	0	25.86	0.27	--	2300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
MW-4														
5/4/1991	--	--	--	--	--	6300	--	ND	ND	2.8	61	--	--	--
9/19/1991	--	--	--	--	--	1800	--	0.83	ND	54	46	--	--	--
12/18/1991	--	--	--	--	--	2500	--	28	2.5	54	22	--	--	--
3/17/1992	--	--	--	--	--	1800	--	3.7	1.4	90	21	--	--	--
5/19/1992	--	--	--	--	--	2000	--	20	3.5	42	8.3	--	--	--
8/20/1992	--	--	--	--	--	1000	--	15	ND	11	3	--	--	--
9/16/1992	37.40	14.31	0	23.09	--	--	--	--	--	--	--	--	--	--
10/12/1992	37.40	14.72	0	22.68	-0.41	--	--	--	--	--	--	--	--	--
11/10/1992	37.40	14.57	0	22.83	0.15	690	--	9.1	ND	16	2.8	--	--	--
12/10/1992	37.40	13.67	0	23.73	0.90	--	--	--	--	--	--	--	--	--
1/15/1993	37.40	10.62	0	26.78	3.05	--	--	--	--	--	--	--	--	--
2/20/1993	37.40	9.59	0	27.81	1.03	2400	--	40	2.1	33	ND	--	--	--
3/18/1993	37.40	9.97	0	27.43	-0.38	--	--	--	--	--	--	--	--	--
4/20/1993	37.40	9.67	0	27.73	0.30	--	--	--	--	--	--	--	--	--
5/21/1993	37.40	10.32	0	27.08	-0.65	1900	--	31	ND	20	4.5	--	--	--
6/22/1993	37.40	10.91	0	26.49	-0.59	--	--	--	--	--	--	--	--	--
7/23/1993	37.40	11.38	0	26.02	-0.47	--	--	--	--	--	--	--	--	--
8/23/1993	37.40	11.86	0	25.54	-0.48	1200	--	5	ND	16	ND	--	--	--
9/24/1993	37.04	11.85	0	25.19	-0.35	--	--	--	--	--	--	--	--	--
11/23/1993	37.04	12.44	0	24.60	-0.59	720	--	10	ND	8.7	ND	--	--	--
2/24/1994	37.04	9.89	0	27.15	2.55	1300	--	8.9	ND	20	ND	--	--	--
5/25/1994	37.04	11.02	0	26.02	-1.13	1700	--	22	ND	4.5	ND	--	--	--
8/23/1994	37.04	12.57	0	24.47	-1.55	690	--	9.2	1.3	7.1	1.9	--	--	--
11/23/1994	37.04	11.65	0	25.39	0.92	420	--	5	1.1	4.2	1.2	--	--	--
2/3/1995	37.04	8.52	0	28.52	3.13	620	--	6.4	ND	9.3	ND	--	--	--
5/10/1995	37.04	9.97	0	27.07	-1.45	280	--	2.8	ND	2.7	2.4	--	--	--
8/2/1995	37.04	10.18	0	26.86	-0.21	290	--	3.6	ND	2.8	ND	--	--	--
11/2/1995	37.04	11.67	0	25.37	-1.49	42000	--	390	210	2800	6300	270	--	--
2/8/1996	37.04	8.15	0	28.89	3.52	130	--	2.1	ND	1.5	0.69	ND	--	--
5/8/1996	37.04	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
8/9/1996	37.04	10.24	0	26.80	--	ND	--	ND	ND	ND	ND	ND	--	--
11/7/1996	37.04	11.58	0	25.46	-1.34	ND	--	ND	ND	ND	ND	ND	--	--
2/10/1997	37.04	8.45	0	28.59	3.13	ND	--	ND	ND	ND	ND	ND	--	--
5/7/1997	37.04	9.85	0	27.19	-1.40	ND	--	ND	ND	ND	ND	ND	--	--
8/5/1997	37.04	11.04	0	26.00	-1.19	50	--	0.76	ND	ND	ND	ND	--	--

Appendix D
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
11/4/1997	37.04	11.46	0	25.58	-0.42	ND	--	ND	ND	ND	ND	ND	--	--
2/12/1998	37.04	5.75	0	31.29	5.71	ND	--	ND	ND	ND	ND	ND	--	--
5/15/1998	37.04	7.28	0	29.76	-1.53	ND	--	ND	ND	ND	ND	ND	--	--
8/12/1998	37.04	9.85	0	27.19	-2.57	ND	--	ND	ND	ND	ND	ND	--	--
11/12/1998	37.04	10.28	0	26.76	-0.43	ND	--	ND	ND	ND	ND	ND	--	--
3/1/1999	37.04	8.51	0	28.53	1.77	ND	--	ND	ND	ND	ND	ND	--	--
5/12/1999	37.04	9.32	0	27.72	-0.81	ND	--	ND	ND	ND	ND	ND	--	--
8/11/1999	37.04	10.65	0	26.39	-1.33	ND	--	ND	ND	ND	ND	ND	--	--
11/4/1999	37.04	11.48	0	25.56	-0.83	ND	--	ND	ND	ND	ND	ND	--	--
2/29/2000	37.04	--	--	--	--	--	--	--	--	--	--	--	--	Not monitored/sampled
8/8/2000	37.04	10.67	0	26.37	--	--	--	--	--	--	--	--	--	--
11/6/2000	37.04	10.56	0	26.48	0.11	--	--	--	--	--	--	--	--	--
2/7/2001	37.04	10.40	0	26.64	0.16	--	--	--	--	--	--	--	--	--
5/9/2001	37.04	9.16	0	27.88	1.24	--	--	--	--	--	--	--	--	--
8/24/2001	37.04	11.80	0	25.24	-2.64	--	--	--	--	--	--	--	--	--
11/16/2001	37.04	10.46	0	26.58	1.34	--	--	--	--	--	--	--	--	--
2/21/2002	37.04	9.37	0	27.67	1.09	--	--	--	--	--	--	--	--	--
5/10/2002	37.04	10.41	0	26.63	-1.04	--	--	--	--	--	--	--	--	--
8/26/2002	37.04	11.55	0	25.49	-1.14	--	--	--	--	--	--	--	--	--
11/7/2002	37.04	10.44	0	26.60	1.11	--	--	--	--	--	--	--	--	--
2/14/2003	37.04	9.28	0	27.76	1.16	--	--	--	--	--	--	--	--	--
5/12/2003	37.04	8.69	0	28.35	0.59	--	--	--	--	--	--	--	--	--
8/11/2003	37.04	10.83	0	26.21	-2.14	--	--	--	--	--	--	--	--	--
11/13/2003	37.04	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
2/17/2004	37.04	9.84	0	27.20	--	--	--	--	--	--	--	--	--	Monitored only
5/20/2004	37.04	10.68	0	26.36	-0.84	--	--	--	--	--	--	--	--	Monitored only
8/25/2004	37.04	11.59	0	25.45	-0.91	--	--	--	--	--	--	--	--	Monitored only
11/2/2004	37.04	11.49	0	25.55	0.10	--	--	--	--	--	--	--	--	Monitored only
3/17/2005	37.04	9.01	0	28.03	2.48	--	--	--	--	--	--	--	--	Monitored only
6/13/2005	37.04	9.17	0	27.87	-0.16	--	--	--	--	--	--	--	--	Monitored only
9/27/2005	37.04	10.50	0	26.54	-1.33	--	--	--	--	--	--	--	--	Monitored only
12/20/2005	37.04	10.66	0	26.38	-0.16	--	--	--	--	--	--	--	--	Monitored only
3/10/2006	37.04	8.42	0	28.62	2.24	--	--	--	--	--	--	--	--	Monitored only
6/20/2006	37.04	9.09	0	27.95	-0.67	--	--	--	--	--	--	--	--	Monitored only
9/25/2006	37.04	10.03	0	27.01	-0.94	--	--	--	--	--	--	--	--	Monitored only
12/18/2006	37.04	9.70	0	27.34	0.33	--	--	--	--	--	--	--	--	Monitored only
3/29/2007	37.04	9.93	0	27.11	-0.23	--	--	--	--	--	--	--	--	Monitored only
6/26/2007	37.04	10.72	0	26.32	-0.79	--	--	--	--	--	--	--	--	Monitored only
9/26/2007	37.04	11.95	0	25.09	-1.23	--	--	--	--	--	--	--	--	Monitored only
12/18/2007	37.04	11.79	0	25.25	0.16	--	--	--	--	--	--	--	--	Monitored only
3/25/2008	37.04	10.53	0	26.51	1.26	--	--	--	--	--	--	--	--	Monitored only
6/18/2008	37.04	11.40	0	25.64	-0.87	--	--	--	--	--	--	--	--	Monitored only

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9/15/2008	37.04	12.47	0	24.57	-1.07	--	--	--	--	--	--	--	--	Monitored only
12/17/2008	37.04	12.50	0	24.54	-0.03	--	--	--	--	--	--	--	--	Monitored only
3/26/2009	37.04	10.09	0	26.95	2.41	--	--	--	--	--	--	--	--	Monitored only
6/22/2009	37.04	11.28	0	25.76	-1.19	--	--	--	--	--	--	--	--	Monitored only
MW-5														
5/4/1991	--	--	--	--	--	69000	--	1400	2500	3500	15000	--	--	--
9/19/1991	--	--	--	--	--	57000	--	1600	2700	5200	20000	--	--	--
12/18/1991	--	--	--	--	--	31000	--	1600	3100	4800	19000	--	--	--
3/17/1992	--	--	--	--	--	81000	--	850	1600	4800	18000	--	--	--
5/19/1992	--	--	--	--	--	84000	--	760	1500	4000	17000	--	--	--
8/20/1992	--	--	--	--	--	58000	--	660	1700	4200	19000	--	--	--
9/16/1992	36.40	13.37	0	23.03	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.40	13.75	0	22.65	-0.38	--	--	--	--	--	--	--	--	--
11/10/1992	36.40	13.68	0	22.72	0.07	57000	--	800	1800	4400	18000	--	--	--
12/10/1992	36.40	12.58	0	23.82	1.10	--	--	--	--	--	--	--	--	--
1/15/1993	36.40	9.71	0	26.69	2.87	--	--	--	--	--	--	--	--	--
2/20/1993	36.40	8.69	0	27.71	1.02	17000	--	75	ND	1000	620	--	--	--
3/18/1993	36.40	9.16	0	27.24	-0.47	--	--	--	--	--	--	--	--	--
4/20/1993	36.40	8.88	0	27.52	0.28	--	--	--	--	--	--	--	--	--
5/21/1993	36.40	9.56	0	26.84	-0.68	55000	--	ND	160	3500	12000	--	--	--
6/22/1993	36.40	10.05	0	26.35	-0.49	--	--	--	--	--	--	--	--	--
7/23/1993	36.40	10.53	0	25.87	-0.48	--	--	--	--	--	--	--	--	--
8/23/1993	36.40	10.98	0	25.42	-0.45	61000	--	340	380	3600	14000	--	--	--
9/24/1993	35.94	10.94	0	25.00	-0.42	--	--	--	--	--	--	--	--	--
11/23/1993	35.94	11.45	0	24.49	-0.51	46000	--	290	310	4100	15000	--	--	--
2/24/1994	35.94	9.02	0	26.92	2.43	57000	--	140	400	4400	16000	--	--	--
5/25/1994	35.94	10.03	0	25.91	-1.01	53000	--	ND	ND	4000	14000	--	--	--
8/23/1994	35.94	11.57	0	24.37	-1.54	61000	--	360	380	4800	17000	--	--	--
11/23/1994	35.94	10.71	0	25.23	0.86	46000	--	230	260	3900	14000	--	--	--
2/3/1995	35.94	7.69	0	28.25	3.02	56000	--	140	330	3500	13000	--	--	--
5/10/1995	35.94	8.20	0	27.74	-0.51	27000	--	160	170	2200	5200	--	--	--
8/2/1995	35.94	9.23	0	26.71	-1.03	65000	--	260	300	3500	12000	--	--	--
11/2/1995	35.94	10.70	0	25.24	-1.47	240	--	0.76	ND	1.1	ND	ND	--	--
2/8/1996	35.94	7.36	0	28.58	3.34	54000	--	210	150	3400	12000	170	--	--
5/8/1996	35.94	8.25	0	27.69	-0.89	52000	--	170	200	3600	11000	170	--	--
8/9/1996	35.94	9.37	0	26.57	-1.12	25000	--	54	16	1700	4700	ND	--	--
11/7/1996	35.94	10.65	0	25.29	-1.28	2100	--	42	ND	9.3	ND	2300	--	--
2/10/1997	35.94	7.63	0	28.31	3.02	15000	--	46	29	1400	4100	ND	--	--
5/7/1997	35.94	8.98	0	26.96	-1.35	38000	--	120	ND	2000	5100	380	--	--
8/5/1997	35.94	11.08	0	24.86	-2.10	310	--	1	ND	17	40	ND	--	--
11/4/1997	35.94	10.72	0	25.22	0.36	20000	--	ND	ND	1500	2800	280	--	--
2/12/1998	35.94	6.08	0	29.86	4.64	33000	--	120	ND	1700	3800	ND	--	--

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5/15/1998	35.92	7.40	0	28.52	-1.34	30000	--	ND	ND	2200	4900	ND	--	--
8/12/1998	35.92	8.69	0	27.23	-1.29	24000	--	100	ND	ND	3400	1000	--	--
11/12/1998	35.92	9.48	0	26.44	-0.79	13000	--	65	ND	1100	1400	780	--	--
3/1/1999	35.92	7.54	0	28.38	1.94	29000	--	75	ND	2000	4100	690	--	--
5/12/1999	35.92	8.48	0	27.44	-0.94	19000	--	110	ND	990	1900	330	--	--
8/11/1999	35.92	9.74	0	26.18	-1.26	24300	--	ND	ND	1540	1740	ND	--	--
11/4/1999	35.92	10.56	0	25.36	-0.82	19500	--	37.1	ND	1300	1030	ND	--	--
2/29/2000	35.92	7.19	0	28.73	3.37	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/8/2000	35.92	8.23	0	27.69	-1.04	25700	--	37.6	ND	2020	3500	ND	--	--
8/8/2000	35.92	9.51	0	26.41	-1.28	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/6/2000	35.92	10.04	0	25.88	-0.53	14100	--	37.1	ND	1250	497	ND	--	--
2/7/2001	35.92	9.23	0	26.69	0.81	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/9/2001	35.92	9.44	0	26.48	-0.21	15600	--	ND	ND	1290	476	ND	--	--
8/24/2001	35.92	10.75	0	25.17	-1.31	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/16/2001	35.92	10.93	0	24.99	-0.18	15000	--	40	ND<25	1100	54	ND<250	--	--
2/21/2002	35.92	8.52	0	27.40	2.41	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/10/2002	35.92	9.47	0	26.45	-0.95	23000	--	86	ND<25	1500	450	ND<250	--	--
8/26/2002	35.92	10.60	0	25.32	-1.13	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/7/2002	35.92	10.83	0	25.09	-0.23	--	8000	ND<2.5	ND<2.5	650	ND<5.0	--	ND<10	--
2/14/2003	35.92	8.70	0	27.22	2.13	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/12/2003	35.92	8.62	0	27.30	0.08	--	10000	ND<25	ND<25	1200	ND<50	--	ND<100	--
8/11/2003	35.92	10.52	0	25.40	-1.90	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/13/2003	35.92	10.82	0	25.10	-0.30	--	31000	ND<20	ND<20	2100	71	--	ND<80	--
2/17/2004	35.92	8.96	0	26.96	1.86	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/20/2004	35.92	9.80	0	26.12	-0.84	--	23000	ND<20	ND<20	1600	62	--	ND<20	--
8/25/2004	35.92	10.95	0	24.97	-1.15	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/2/2004	35.92	10.48	0	25.44	0.47	--	21000	ND<20	ND<20	1300	ND<40	--	ND<20	--
3/17/2005	35.92	7.99	0	27.93	2.49	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/13/2005	35.92	8.31	0	27.61	-0.32	--	27000	ND<10	ND<10	1800	100	--	11	--
9/27/2005	35.92	9.90	0	26.02	-1.59	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/20/2005	35.92	9.16	0	26.76	0.74	--	27000	ND<25	ND<25	1700	ND<50	--	27	--
3/10/2006	35.92	7.29	0	28.63	1.87	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/20/2006	35.92	8.45	0	27.47	-1.16	--	37000	ND<12	ND<12	1300	25	--	19	--
9/25/2006	35.92	9.37	0	26.55	-0.92	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2006	35.92	8.90	0	27.02	0.47	--	6400	2.0	ND<0.50	250	ND<0.50	--	44	--
3/29/2007	35.92	9.14	0	26.78	-0.24	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/26/2007	35.92	10.10	0	25.82	-0.96	--	20000	0.87	ND<0.50	770	12	--	12	--
9/26/2007	35.92	11.06	0	24.86	-0.96	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2007	35.92	10.76	0	25.16	0.30	--	9800	ND<2.5	ND<2.5	420	ND<5.0	--	6.2	--
3/25/2008	35.92	9.22	0	26.70	1.54	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/18/2008	35.92	10.38	0	25.54	-1.16	--	17000	ND<5.0	ND<5.0	510	ND<10	--	ND<5.0	--
9/15/2008	35.92	11.49	0	24.43	-1.11	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only

Appendix D
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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
12/17/2008	35.92	11.55	0	24.37	-0.06	--	24000	ND<5.0	ND<5.0	730	ND<10	--	ND<5.0	--
3/26/2009	35.92	9.25	0	26.67	2.30	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/22/2009	35.92	10.45	0	25.47	-1.20	--	17000	ND<6.2	ND<6.2	630	ND<12	--	ND<6.2	
12/15/2009	35.92	10.41	0	25.51	0.04	--	32000	ND<0.50	ND<0.50	770	2.8	--	ND<0.50	
6/30/2010	35.92	9.47	0	26.45	0.94	--	14000	ND<0.50	ND<0.50	400	1.5	--	ND<0.50	
12/21/2010	35.92	8.62	0	27.30	0.85	--	14000	ND<5.0	ND<5.0	360	ND<10	--	6.3	
6/20/2011	35.92	8.64	0	27.28	-0.02	--	16000	ND<5.0	ND<5.0	320	ND<10	--	ND<5.0	
12/6/2011	35.92	9.92	0	26.00	-1.28	--	6900	6.2	ND<2.5	160	ND<5.0	--	7.4	
6/20/2012	35.92	9.68	0	26.24	0.24	--	4800	ND<0.50	ND<0.50	100	1	--	2.5	
MW-6														
5/19/1992	--	--	--	--	--	1300	--	2	2.1	ND	2.7	--	--	--
8/20/1992	--	--	--	--	--	280	--	8.4	ND	0.51	0.84	--	--	--
9/16/1992	36.03	12.91	0	23.12	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.03	13.28	0	22.75	-0.37	--	--	--	--	--	--	--	--	--
11/10/1992	36.03	13.18	0	22.85	0.10	490	--	7	1.2	1.7	ND	--	--	--
12/10/1992	36.03	12.33	0	23.70	0.85	--	--	--	--	--	--	--	--	--
1/15/1993	36.03	9.25	0	26.78	3.08	--	--	--	--	--	--	--	--	--
2/20/1993	36.03	8.24	0	27.79	1.01	2400	--	43	ND	33	2	--	--	--
3/18/1993	36.03	8.74	0	27.29	-0.50	--	--	--	--	--	--	--	--	--
4/20/1993	36.03	8.12	0	27.91	0.62	--	--	--	--	--	--	--	--	--
5/21/1993	36.03	8.83	0	27.20	-0.71	940	--	18	1	7.1	2.7	--	--	--
6/22/1993	36.03	9.38	0	26.65	-0.55	--	--	--	--	--	--	--	--	--
7/23/1993	36.03	9.87	0	26.16	-0.49	--	--	--	--	--	--	--	--	--
8/23/1993	36.03	10.35	0	25.68	-0.48	1000	--	9.4	2.3	5	2.3	--	--	--
9/24/1993	35.67	10.34	0	25.33	-0.35	--	--	--	--	--	--	--	--	--
11/23/1993	35.67	10.96	0	24.71	-0.62	520	--	ND	1.7	1.9	0.82	--	--	--
2/24/1994	35.67	8.39	0	27.28	2.57	810	--	12	ND	2.6	0.77	--	--	--
5/25/1994	35.67	9.55	0	26.12	-1.16	500	--	11	ND	ND	0.73	--	--	--
8/23/1994	35.67	10.97	0	24.70	-1.42	570	--	8.8	2.5	3.2	2.6	--	--	--
11/23/1994	35.67	10.21	0	25.46	0.76	460	--	6.4	1.1	1.9	1.1	--	--	--
2/3/1995	35.67	6.99	0	28.68	3.22	660	--	4.8	13	1.4	ND	--	--	--
5/10/1995	35.67	7.53	0	28.14	-0.54	470	--	ND	0.65	1.4	0.67	--	--	--
8/2/1995	35.67	8.68	0	26.99	-1.15	360	--	3.2	ND	1.6	ND	--	--	--
11/2/1995	35.67	10.20	0	25.47	-1.52	470	--	ND	0.92	0.89	0.58	5.5	--	--
2/8/1996	35.67	6.66	0	29.01	3.54	450	--	3.1	ND	1.1	0.68	ND	--	--
5/8/1996	35.67	7.40	0	28.27	-0.74	ND	--	ND	ND	ND	ND	ND	--	--
8/9/1996	35.67	8.72	0	26.95	-1.32	ND	--	ND	ND	ND	ND	ND	--	--
11/7/1996	35.67	10.12	0	25.55	-1.40	ND	--	ND	ND	ND	ND	ND	--	--
2/10/1997	35.67	6.88	0	28.79	3.24	ND	--	ND	ND	ND	ND	ND	--	--
5/7/1997	35.67	8.32	0	27.35	-1.44	ND	--	ND	1.1	ND	ND	ND	--	--
8/5/1997	35.67	9.64	0	26.03	-1.32	55	--	0.79	ND	ND	ND	ND	--	--
11/4/1997	35.67	10.30	0	25.37	-0.66	ND	--	ND	ND	ND	ND	ND	--	--

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
2/12/1998	35.67	5.10	0	30.57	5.20	ND	--	ND	ND	ND	ND	ND	--	--
5/15/1998	35.68	6.61	0	29.07	-1.50	ND	--	ND	ND	ND	ND	ND	--	--
8/12/1998	35.68	8.02	0	27.66	-1.41	ND	--	ND	ND	ND	ND	ND	--	--
11/12/1998	35.68	8.74	0	26.94	-0.72	ND	--	ND	ND	ND	ND	ND	--	--
3/1/1999	35.68	7.22	0	28.46	1.52	ND	--	ND	ND	ND	ND	ND	--	--
5/12/1999	35.68	8.05	0	27.63	-0.83	ND	--	ND	ND	ND	ND	ND	--	--
8/11/1999	35.68	9.53	0	26.15	-1.48	ND	--	ND	ND	ND	ND	ND	--	--
11/4/1999	35.68	10.44	0	25.24	-0.91	ND	--	ND	ND	ND	ND	ND	--	--
2/29/2000	35.68	--	--	--	--	--	--	--	--	--	--	--	--	Not monitored/sampled
8/8/2000	35.68	9.16	0	26.52	--	--	--	--	--	--	--	--	--	--
11/6/2000	35.68	9.28	0	26.40	-0.12	--	--	--	--	--	--	--	--	--
2/7/2001	35.68	9.18	0	26.50	0.10	--	--	--	--	--	--	--	--	--
5/9/2001	35.68	8.76	0	26.92	0.42	--	--	--	--	--	--	--	--	--
8/24/2001	35.68	10.33	0	25.35	-1.57	--	--	--	--	--	--	--	--	--
11/16/2001	35.68	9.97	0	25.71	0.36	--	--	--	--	--	--	--	--	--
2/21/2002	35.68	7.86	0	27.82	2.11	--	--	--	--	--	--	--	--	--
5/10/2002	35.68	8.93	0	26.75	-1.07	--	--	--	--	--	--	--	--	--
8/26/2002	35.68	10.09	0	25.59	-1.16	--	--	--	--	--	--	--	--	--
11/7/2002	35.68	9.93	0	25.75	0.16	--	--	--	--	--	--	--	--	--
2/14/2003	35.68	7.90	0	27.78	2.03	--	--	--	--	--	--	--	--	--
5/12/2003	35.68	7.51	0	28.17	0.39	--	--	--	--	--	--	--	--	--
8/11/2003	35.68	9.44	0	26.24	-1.93	--	--	--	--	--	--	--	--	--
11/13/2003	35.68	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
2/17/2004	35.68	8.38	0	27.30	--	--	--	--	--	--	--	--	--	Monitored only
5/20/2004	35.68	9.23	0	26.45	-0.85	--	--	--	--	--	--	--	--	Monitored only
8/25/2004	35.68	10.79	0	24.89	-1.56	--	--	--	--	--	--	--	--	Monitored only
11/2/2004	35.68	10.00	0	25.68	0.79	--	--	--	--	--	--	--	--	Monitored only
3/17/2005	35.68	7.27	0	28.41	2.73	--	--	--	--	--	--	--	--	Monitored only
6/13/2005	35.68	7.64	0	28.04	-0.37	--	--	--	--	--	--	--	--	Monitored only
9/27/2005	35.68	9.36	0	26.32	-1.72	--	--	--	--	--	--	--	--	Monitored only
12/20/2005	35.68	9.43	0	26.25	-0.07	--	--	--	--	--	--	--	--	Monitored only
3/10/2006	35.68	6.45	0	29.23	2.98	--	--	--	--	--	--	--	--	Monitored only
6/20/2006	35.68	7.74	0	27.94	-1.29	--	--	--	--	--	--	--	--	Monitored only
9/25/2006	35.68	8.96	0	26.72	-1.22	--	--	--	--	--	--	--	--	Monitored only
12/18/2006	35.68	8.19	0	27.49	0.77	--	--	--	--	--	--	--	--	Monitored only
3/29/2007	35.68	9.52	0	26.16	-1.33	--	--	--	--	--	--	--	--	Monitored only
6/26/2007	35.68	9.57	0	26.11	-0.05	--	--	--	--	--	--	--	--	Monitored only
9/26/2007	35.68	10.56	0	25.12	-0.99	--	--	--	--	--	--	--	--	Monitored only
12/18/2007	35.68	10.28	0	25.40	0.28	--	--	--	--	--	--	--	--	Monitored only
3/25/2008	35.68	8.62	0	27.06	1.66	--	--	--	--	--	--	--	--	Monitored only
6/18/2008	35.68	9.92	0	25.76	-1.30	--	--	--	--	--	--	--	--	Monitored only
9/15/2008	35.68	11.04	0	24.64	-1.12	--	--	--	--	--	--	--	--	Monitored only

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
12/17/2008	35.68	11.10	0	24.58	-0.06	--	--	--	--	--	--	--	--	Monitored only
3/26/2009	35.68	8.68	0	27.00	2.42	--	--	--	--	--	--	--	--	Monitored only
6/22/2009	35.68	9.98	0	25.70	-1.30	--	--	--	--	--	--	--	--	Monitored only
MW-7														
5/19/1992	--	--	--	--	--	17000	--	540	90	1200	1900	--	--	--
8/20/1992	--	--	--	--	--	13000	--	460	54	ND	3100	--	--	--
9/16/1992	36.40	13.23	0	23.17	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.40	13.65	0	22.75	-0.42	--	--	--	--	--	--	--	--	--
11/10/1992	36.40	13.54	0	22.86	0.11	1800	--	74	ND	230	350	--	--	--
12/10/1992	36.40	12.52	0	23.88	1.02	--	--	--	--	--	--	--	--	--
1/15/1993	36.40	9.59	0	26.81	2.93	--	--	--	--	--	--	--	--	--
2/20/1993	36.40	8.55	0	27.85	1.04	1800	--	37	4.6	11	7.7	--	--	--
3/18/1993	36.40	8.98	0	27.42	-0.43	--	--	--	--	--	--	--	--	--
4/20/1993	36.40	8.52	0	27.88	0.46	--	--	--	--	--	--	--	--	--
5/21/1993	36.40	9.16	0	27.24	-0.64	22000	--	330	37	2100	2900	--	--	--
6/22/1993	36.40	9.66	0	26.74	-0.50	--	--	--	--	--	--	--	--	--
7/23/1993	36.40	10.15	0	26.25	-0.49	--	--	--	--	--	--	--	--	--
8/23/1993	36.40	10.65	0	25.75	-0.50	33000	--	360	ND	2500	4300	--	--	--
9/24/1993	36.09	10.77	0	25.32	-0.43	--	--	--	--	--	--	--	--	--
11/23/1993	36.09	11.28	0	24.81	-0.51	19000	--	310	30	2500	2300	--	--	--
2/24/1994	36.09	8.95	0	27.14	2.33	16000	--	220	19	2400	3200	--	--	--
5/25/1994	36.09	10.00	0	26.09	-1.05	14000	--	200	ND	1500	1800	--	--	--
8/23/1994	36.09	11.43	0	24.66	-1.43	19000	--	210	50	2000	2800	--	--	--
11/23/1994	36.09	10.69	0	25.40	0.74	10000	--	220	ND	1000	730	--	--	--
2/3/1995	36.09	7.49	0	28.60	3.20	26000	--	170	ND	2300	3700	--	--	--
5/10/1995	36.09	7.88	0	28.21	-0.39	1300	--	13	1.5	170	230	--	--	--
8/2/1995	36.09	9.02	0	27.07	-1.14	15000	--	200	ND	2200	2000	--	--	--
11/2/1995	36.09	10.55	0	25.54	-1.53	18000	--	190	9.4	2100	2200	72	--	--
2/8/1996	36.09	7.13	0	28.96	3.42	19000	--	150	ND	2100	3000	ND	--	--
5/8/1996	36.09	7.11	0	28.98	0.02	13000	--	130	18	1900	1600	85	--	--
8/9/1996	36.09	9.07	0	27.02	-1.96	11000	--	67	ND	1700	1800	ND	--	--
11/7/1996	36.09	10.76	0	25.33	-1.69	32000	--	160	ND	3300	8400	570	--	--
2/10/1997	36.09	7.22	0	28.87	3.54	7100	--	55	ND	ND	620	ND	--	--
2/11/1997	36.09	--	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1997	36.09	8.47	0	27.62	--	6000	--	74	ND	560	330	250	--	--
8/5/1997	36.09	10.25	0	25.84	-1.78	5000	--	66	ND	420	240	ND	--	--
11/4/1997	36.09	10.69	0	25.40	-0.44	20000	--	67	ND	2300	4300	430	--	--
2/12/1998	36.09	5.02	0	31.07	5.67	5500	--	95	ND	150	110	ND	--	--
5/15/1998	36.06	6.98	0	29.08	-1.99	1300	--	ND	ND	69	64	88	--	--
8/12/1998	36.06	8.42	0	27.64	-1.44	1400	--	12	2.3	67	ND	30	--	--
11/12/1998	36.06	9.10	0	26.96	-0.68	6300	--	63	ND	230	100	ND	--	--
3/1/1999	36.06	7.14	0	28.92	1.96	1000	--	24	ND	23	26	39	--	--

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5/12/1999	36.06	8.07	0	27.99	-0.93	4700	--	79	ND	120	210	210	--	--
8/11/1999	36.06	9.44	0	26.62	-1.37	4700	--	61.6	ND	58.2	23.6	187	--	--
11/4/1999	36.06	10.38	0	25.68	-0.94	5980	--	56.3	ND	44.5	21.2	194	--	--
2/29/2000	36.06	7.06	0	29.00	3.32	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/8/2000	36.06	8.15	0	27.91	-1.09	6600	--	80	ND	99.6	66.5	ND	--	--
8/8/2000	36.06	9.21	0	26.85	-1.06	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/6/2000	36.06	9.77	0	26.29	-0.56	6030	--	56.3	ND	156	63.1	281	--	--
2/7/2001	36.06	9.02	0	27.04	0.75	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/9/2001	36.06	9.38	0	26.68	-0.36	7460	--	45	ND	186	94.4	ND	--	--
8/24/2001	36.06	10.73	0	25.33	-1.35	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/16/2001	36.06	10.97	0	25.09	-0.24	8000	--	50	ND<10	61	18	ND<100	--	--
2/21/2002	36.06	8.60	0	27.46	2.37	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/10/2002	36.06	9.28	0	26.78	-0.68	7100	--	ND<5.0	ND<5.0	140	63	ND<50	--	--
8/26/2002	36.06	10.40	0	25.66	-1.12	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/7/2002	36.06	10.95	0	25.11	-0.55	--	3400	3.1	ND<0.50	25	7.8	--	ND<2.0	--
2/14/2003	36.06	8.82	0	27.24	2.13	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/12/2003	36.06	8.46	0	27.60	0.36	--	4900	3.7	0.74	130	47	--	ND<2.0	--
8/11/2003	36.06	10.27	0	25.79	-1.81	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/13/2003	36.06	10.82	0	25.24	-0.55	--	20000	10	ND<10	1600	740	--	ND<40	--
2/17/2004	36.06	10.13	0	25.93	0.69	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/20/2004	36.06	9.60	0	26.46	0.53	--	12000	ND<10	ND<10	1000	380	--	ND<10	--
8/25/2004	36.06	10.85	0	25.21	-1.25	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/2/2004	36.06	10.67	0	25.39	0.18	--	12000	ND<10	ND<10	860	280	--	ND<10	--
3/17/2005	36.06	7.65	0	28.41	3.02	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/13/2005	36.06	7.96	0	28.10	-0.31	--	13000	ND<5.0	ND<5.0	840	250	--	ND<5.0	--
9/27/2005	36.06	9.66	0	26.40	-1.70	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/20/2005	36.06	9.67	0	26.39	-0.01	--	19000	2.2	1.2	100	20	--	ND<0.50	--
3/10/2006	36.06	7.56	0	28.50	2.11	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/20/2006	36.06	8.07	0	27.99	-0.51	--	8300	ND<2.5	ND<2.5	310	80	--	ND<2.5	--
9/25/2006	36.06	9.27	0	26.79	-1.20	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2006	36.06	9.12	0	26.94	0.15	--	2500	ND<0.50	ND<0.50	2.3	0.58	--	3.8	--
3/29/2007	36.06	9.61	0	26.45	-0.49	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/26/2007	36.06	9.87	0	26.19	-0.26	--	7800	1.5	1.2	230	34	--	ND<0.50	--
9/26/2007	36.06	10.85	0	25.21	-0.98	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2007	36.06	10.12	0	25.94	0.73	--	7100	ND<2.5	ND<2.5	310	20	--	ND<2.5	--
3/25/2008	36.06	9.37	0	26.69	0.75	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/18/2008	36.06	9.98	0	26.08	-0.61	--	10000	ND<2.5	ND<2.5	420	39	--	ND<2.5	--
9/15/2008	36.06	11.00	0	25.06	-1.02	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/17/2008	36.06	11.25	0	24.81	-0.25	--	6900	ND<5.0	ND<5.0	330	15	--	ND<5.0	--
3/26/2009	36.06	11.58	0	24.48	-0.33	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/22/2009	36.06	10.88	0	25.18	0.70	--	1100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	--
12/15/2009	36.06	10.90	0	25.16	-0.02	--	4100	0.93	1.5	250	10	--	ND<0.50	--

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
6/30/2010	36.06	9.28	0	26.78	1.62	--	7300	ND<0.50	1.7	420	9.2	--	ND<0.50	--
12/21/2010	36.06	8.45	0	27.61	0.83	--	7100	ND<2.5	ND<2.5	380	5.6	--	ND<2.5	--
6/20/2011	36.06	7.96	0	28.10	0.49	--	6100	ND<0.50	1.5	280	7.2	--	ND<0.50	--
12/6/2011	36.06	9.78	0	26.28	-1.82	--	5800	37	ND<2.5	300	6.6	--	ND<2.5	--
6/20/2012	36.06	9.69	0	26.37	0.09	--	8600	ND<5.0	ND<5.0	250	ND<10	--	ND<5.0	--
MW-8														
5/19/1992	--	--	--	--	--	5300	--	28	3.3	2.6	2.1	--	--	--
8/20/1992	--	--	--	--	--	3500	--	67	11	ND	ND	--	--	--
9/16/1992	37.14	14.13	0	23.01	--	--	--	--	--	--	--	--	--	--
10/12/1992	37.14	14.51	0	22.63	-0.38	--	--	--	--	--	--	--	--	--
11/10/1992	37.14	14.46	0	22.68	0.05	1800	--	20	ND	ND	ND	--	--	--
12/10/1992	37.14	13.51	0	23.63	0.95	--	--	--	--	--	--	--	--	--
1/15/1993	37.14	10.50	0	26.64	3.01	--	--	--	--	--	--	--	--	--
2/20/1993	37.14	9.50	0	27.64	1.00	2200	--	32	ND	42	5	--	--	--
3/18/1993	37.14	9.89	0	27.25	-0.39	--	--	--	--	--	--	--	--	--
4/20/1993	37.14	9.91	0	27.23	-0.02	--	--	--	--	--	--	--	--	--
5/21/1993	37.14	10.40	0	26.74	-0.49	2500	--	44	ND	ND	ND	--	--	--
6/22/1993	37.14	10.86	0	26.28	-0.46	--	--	--	--	--	--	--	--	--
7/23/1993	37.14	11.29	0	25.85	-0.43	--	--	--	--	--	--	--	--	--
8/23/1993	37.14	11.76	0	25.38	-0.47	280	--	49	4.5	ND	ND	--	--	--
9/24/1993	36.89	12.00	0	24.89	-0.49	--	--	--	--	--	--	--	--	--
11/23/1993	36.89	12.38	0	24.51	-0.38	1800	--	ND	3.4	ND	ND	--	--	--
2/24/1994	36.89	10.44	0	26.45	1.94	1200	--	10	2.3	ND	3.2	--	--	--
5/25/1994	36.89	11.12	0	25.77	-0.68	14000	--	29	ND	ND	ND	--	--	--
8/23/1994	36.89	12.61	0	24.28	-1.49	3200	--	46	18	2	7.2	--	--	--
11/23/1994	36.89	11.98	0	24.91	0.63	1700	--	34	ND	ND	3.1	--	--	--
2/3/1995	36.89	9.16	0	27.73	2.82	800	--	6.1	ND	ND	ND	--	--	--
5/10/1995	36.89	9.35	0	27.54	-0.19	1400	--	15	1.5	0.65	0.84	--	--	--
8/2/1995	36.89	10.40	0	26.49	-1.05	690	--	8.3	1.9	ND	ND	--	--	--
11/2/1995	36.89	11.80	0	25.09	-1.40	1200	--	ND	1.9	0.56	ND	6.4	--	--
2/8/1996	36.89	8.98	0	27.91	2.82	--	--	--	--	--	--	--	--	--
2/14/1996	36.89	9.24	0	27.65	-0.26	650	--	9	1.2	ND	0.52	ND	--	--
5/8/1996	36.89	9.46	0	27.43	-0.22	1200	--	0.7	35	2.2	3	ND	--	--
8/9/1996	36.89	10.47	0	26.42	-1.01	350	--	ND	12	0.81	0.95	ND	--	--
11/7/1996	36.89	11.71	0	25.18	-1.24	1000	--	23	ND	ND	ND	ND	--	--
2/10/1997	36.89	8.84	0	28.05	2.87	630	--	13	ND	ND	8.1	ND	--	--
5/7/1997	36.89	10.12	0	26.77	-1.28	1200	--	26	3.4	ND	20	20	--	--
8/5/1997	36.89	11.26	0	25.63	-1.14	590	--	9.8	ND	ND	ND	ND	--	--
11/4/1997	36.89	11.58	0	25.31	-0.32	640	--	14	1.9	5.7	11	ND	--	--
2/12/1998	36.89	7.34	0	29.55	4.24	770	--	20	3	ND	ND	ND	--	--
5/15/1998	36.87	8.67	0	28.20	-1.35	840	--	10	ND	ND	3.1	ND	--	--
8/12/1998	36.87	9.78	0	27.09	-1.11	240	--	0.75	ND	ND	ND	ND	--	--

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
11/12/1998	36.87	10.62	0	26.25	-0.84	300	--	14	2	ND	ND	ND	--	--
3/1/1999	36.87	9.02	0	27.85	1.60	1100	--	22	4.6	2.1	4.9	12	--	--
5/12/1999	36.87	9.65	0	27.22	-0.63	650	--	17	ND	ND	ND	ND	--	--
8/11/1999	36.87	10.85	0	26.02	-1.20	168	--	6.68	ND	0.544	ND	ND	--	--
11/4/1999	36.87	11.72	0	25.15	-0.87	1010	--	15.8	2.28	ND	ND	16.2	--	--
2/29/2000	36.87	8.25	0	28.62	3.47	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/8/2000	36.87	9.21	0	27.66	-0.96	199	--	6.26	ND	ND	ND	ND	--	--
8/8/2000	36.87	10.35	0	26.52	-1.14	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/6/2000	36.87	10.76	0	26.11	-0.41	797	--	ND	ND	ND	ND	ND	--	--
2/7/2001	36.87	10.16	0	26.71	0.60	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/9/2001	36.87	10.62	0	26.25	-0.46	695	--	ND	ND	ND	ND	ND	--	--
8/24/2001	36.87	11.97	0	24.90	-1.35	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/16/2001	36.87	12.27	0	24.60	-0.30	1000	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<20	--	--
2/21/2002	36.87	10.03	0	26.84	2.24	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/10/2002	36.87	10.63	0	26.24	-0.60	400	--	ND<0.50	0.78	ND<0.50	ND<0.50	ND<5.0	--	--
8/26/2002	36.87	11.80	0	25.07	-1.17	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/7/2002	36.87	11.97	0	24.90	-0.17	--	200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.0	--
2/14/2003	36.87	9.97	0	26.90	2.00	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
5/12/2003	36.87	9.58	0	27.29	0.39	--	730	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
8/11/2003	36.87	11.33	0	25.54	-1.75	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
11/13/2003	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
2/17/2004	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
5/20/2004	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
8/25/2004	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
11/2/2004	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
3/17/2005	36.87	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
6/13/2005	36.87	9.46	0	27.41	--	--	430	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/27/2005	36.87	11.00	0	25.87	-1.54	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/20/2005	36.87	11.09	0	25.78	-0.09	--	390	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/10/2006	36.87	8.73	0	28.14	2.36	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/20/2006	36.87	9.47	0	27.40	-0.74	--	360	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/25/2006	36.87	10.66	0	26.21	-1.19	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2006	36.87	10.24	0	26.63	0.42	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
3/29/2007	36.87	10.32	0	26.55	-0.08	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/26/2007	36.87	11.15	0	25.72	-0.83	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
9/26/2007	36.87	12.21	0	24.66	-1.06	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/18/2007	36.87	12.00	0	24.87	0.21	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/25/2008	36.87	10.43	0	26.44	1.57	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
6/18/2008	36.87	11.50	0	25.37	-1.07	--	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/15/2008	36.87	12.65	0	24.22	-1.15	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only
12/17/2008	36.87	12.84	0	24.03	-0.19	--	230	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/26/2009	36.87	10.35	0	26.52	2.49	--	--	--	--	--	--	--	--	Sampled Q2 and Q4 only

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
6/22/2009	36.87	11.54	0	25.33	-1.19	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/15/2009	36.87	11.86	0	25.01	-0.32	--	230	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/30/2010	36.87	10.62	0	26.25	1.24	--	200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/21/2010	36.87	10.29	0	26.58	0.33	--	160	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2011	36.87	9.79	0	27.08	0.50	--	79	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/6/2011	36.87	11.06	0	25.81	-1.27	--	110	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2012	36.87	10.79	0	26.08	0.27	--	130	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
MW-9														
5/19/1992	--	--	--	--	--	8100	--	11	ND	25	5.8	--	--	--
8/20/1992	--	--	--	--	--	3800	--	37	ND	ND	ND	--	--	--
9/16/1992	36.92	13.90	0	23.02	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.92	14.28	0	22.64	-0.38	--	--	--	--	--	--	--	--	--
11/10/1992	36.92	14.22	0	22.70	0.06	4200	--	ND	ND	21	23	--	--	--
12/10/1992	36.92	13.40	0	23.52	0.82	--	--	--	--	--	--	--	--	--
1/15/1993	36.92	10.24	0	26.68	3.16	--	--	--	--	--	--	--	--	--
2/20/1993	36.92	9.22	0	27.70	1.02	2300	--	47	ND	32	ND	--	--	--
3/18/1993	36.92	9.55	0	27.37	-0.33	--	--	--	--	--	--	--	--	--
4/20/1993	36.92	9.62	0	27.30	-0.07	--	--	--	--	--	--	--	--	--
5/21/1993	36.92	10.16	0	26.76	-0.54	3200	--	32	ND	8.1	ND	--	--	--
6/22/1993	36.92	10.62	0	26.30	-0.46	--	--	--	--	--	--	--	--	--
7/23/1993	36.92	11.07	0	25.85	-0.45	--	--	--	--	--	--	--	--	--
8/23/1993	36.92	11.54	0	25.38	-0.47	3000	--	29	ND	ND	ND	--	--	--
9/24/1993	36.29	11.18	0	25.11	-0.27	--	--	--	--	--	--	--	--	--
11/23/1993	36.29	11.80	0	24.49	-0.62	2500	--	23	2.1	ND	ND	--	--	--
2/24/1994	36.29	9.74	0	26.55	2.06	2900	--	35	ND	ND	ND	--	--	--
5/25/1994	36.29	10.48	0	25.81	-0.74	ND	--	ND	ND	ND	ND	--	--	--
8/23/1994	36.29	11.99	0	24.30	-1.51	2800	--	28	32	ND	ND	--	--	--
11/23/1994	36.29	11.31	0	24.98	0.68	2000	--	24	2.2	2.2	2.5	--	--	--
2/3/1995	36.29	8.45	0	27.84	2.86	2100	--	26	2.5	ND	ND	--	--	--
5/10/1995	36.29	8.70	0	27.59	-0.25	1700	--	0.81	2.2	1	1.4	--	--	--
8/2/1995	36.29	9.75	0	26.54	-1.05	1900	--	26	6.6	ND	3.9	--	--	--
11/2/1995	36.29	11.16	0	25.13	-1.41	1600	--	ND	1.3	ND	ND	11	--	--
2/8/1996	36.29	8.15	0	28.14	3.01	1900	--	ND	ND	ND	ND	--	--	--
5/8/1996	36.29	8.75	0	27.54	-0.60	1700	--	1.9	22	1.7	2.7	ND	--	--
8/9/1996	36.29	9.84	0	26.45	-1.09	200	--	ND	4.5	ND	0.58	ND	--	--
11/7/1996	36.29	11.10	0	25.19	-1.26	920	--	24	ND	ND	ND	ND	--	--
2/10/1997	36.29	8.15	0	28.14	2.95	580	--	14	2.4	ND	ND	16	--	--
5/7/1997	36.29	9.45	0	26.84	-1.30	810	--	11	3.9	1.7	9.9	13	--	--
8/5/1997	36.29	10.70	0	25.59	-1.25	850	--	21	ND	ND	ND	33	--	--
11/4/1997	36.29	11.05	0	25.24	-0.35	730	--	11	ND	5.1	11	ND	--	--
2/12/1998	36.29	6.60	0	29.69	4.45	820	--	23	3.2	ND	ND	18	--	--
5/15/1998	36.27	8.01	0	28.26	-1.43	390	--	5.5	1.2	ND	13	13	--	--

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8/12/1998	36.27	9.18	0	27.09	-1.17	780	--	14	ND	0.52	ND	12	--	--
11/12/1998	36.27	9.91	0	26.36	-0.73	180	--	6.3	ND	ND	0.62	8.1	--	--
3/1/1999	36.27	8.34	0	27.93	1.57	790	--	24	ND	ND	1.7	32	--	--
5/12/1999	36.27	9.04	0	27.23	-0.70	930	--	13	2.2	1.2	1.5	10	--	--
8/11/1999	36.27	10.25	0	26.02	-1.21	1120	--	19.7	ND	ND	ND	ND	--	--
11/4/1999	36.27	11.10	0	25.17	-0.85	756	--	14.2	1.94	ND	ND	22.8	--	--
2/29/2000	36.27	8.12	0	28.15	2.98	955	--	22.9	ND	ND	ND	ND	--	--
5/8/2000	36.27	9.09	0	27.18	-0.97	895	--	ND	ND	ND	ND	ND	--	--
8/8/2000	36.27	10.08	0	26.19	-0.99	630	--	18.2	ND	ND	ND	ND	--	--
11/6/2000	36.27	10.52	0	25.75	-0.44	712	--	ND	ND	ND	ND	ND	--	--
2/7/2001	36.27	9.78	0	26.49	0.74	750	--	ND	ND	ND	ND	66	--	--
5/9/2001	36.27	9.98	0	26.29	-0.20	704	--	ND	ND	ND	ND	ND	--	--
8/24/2001	36.27	11.34	0	24.93	-1.36	770	--	ND<1.2	ND<1.2	ND<1.2	ND<1.2	ND<12	--	--
11/16/2001	36.27	11.63	0	24.64	-0.29	540	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<10	--	--
2/21/2002	36.27	9.35	0	26.92	2.28	380	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
5/10/2002	36.27	10.00	0	26.27	-0.65	300	--	ND<0.50	0.67	ND<0.50	ND<0.50	ND<5.0	--	--
8/26/2002	36.27	11.17	0	25.10	-1.17	--	680	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
11/7/2002	36.27	11.56	0	24.71	-0.39	--	250	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
2/14/2003	36.27	9.41	0	26.86	2.15	--	460	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
5/12/2003	36.27	9.22	0	27.05	0.19	--	720	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
8/11/2003	36.27	11.18	0	25.09	-1.96	--	170	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
11/13/2003	36.27	11.41	0	24.86	-0.23	--	400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
2/17/2004	36.27	9.89	0	26.38	1.52	--	600	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
5/20/2004	36.27	11.22	0	25.05	-1.33	--	590	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
8/25/2004	36.27	11.49	0	24.78	-0.27	--	240	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
11/2/2004	36.27	11.12	0	25.15	0.37	--	300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/17/2005	36.27	8.87	0	27.40	2.25	--	750	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/13/2005	36.27	8.92	0	27.35	-0.05	--	560	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/27/2005	36.27	10.31	0	25.96	-1.39	--	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/20/2005	36.27	10.41	0	25.86	-0.10	--	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/10/2006	36.27	8.22	0	28.05	2.19	--	470	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2006	36.27	8.89	0	27.38	-0.67	--	360	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/25/2006	36.27	9.95	0	26.32	-1.06	--	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
12/18/2006	36.27	9.63	0	26.64	0.32	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
3/29/2007	36.27	9.71	0	26.56	-0.08	--	190	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
6/26/2007	36.27	10.56	0	25.71	-0.85	--	200	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
9/26/2007	36.27	11.65	0	24.62	-1.09	--	140	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
12/18/2007	36.27	11.40	0	24.87	0.25	--	70	ND<0.50	1.1	ND<0.50	ND<1.0	--	ND<0.50	--
3/25/2008	36.27	9.73	0	26.54	1.67	--	130	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/18/2008	36.27	10.90	0	25.37	-1.17	--	220	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
9/15/2008	36.27	12.02	0	24.25	-1.12	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/17/2008	36.27	12.22	0	24.05	-0.20	--	140	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--

Appendix D
Historical Groundwater Results from TRC
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15008 East 14th Street, San Leandro, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/26/2009	36.27	9.83	0	26.44	2.39	--	250	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/22/2009	36.27	10.92	0	25.35	-1.09	--	82	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/15/2009	36.27	11.20	0	25.07	-0.28	--	150	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/30/2010	36.27	9.97	0	26.30	1.23	--	140	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/21/2010	36.27	9.58	0	26.69	0.39	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2011	36.27	9.13	0	27.14	0.45	--	68	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/6/2011	36.27	10.40	0	25.87	-1.27	--	58	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2012	36.27	10.13	0	26.14	0.27	--	82	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
MW-10														
8/20/1992	--	--	--	--	--	15000	--	230	ND	1000	350	--	--	--
9/16/1992	36.26	13.28	0	22.98	--	--	--	--	--	--	--	--	--	--
10/12/1992	36.26	13.67	0	22.59	-0.39	--	--	--	--	--	--	--	--	--
11/10/1992	36.26	13.59	0	22.67	0.08	15000	--	300	42	3500	330	--	--	--
12/10/1992	36.26	12.53	0	23.73	1.06	--	--	--	--	--	--	--	--	--
1/15/1993	36.26	9.60	0	26.66	2.93	--	--	--	--	--	--	--	--	--
2/20/1993	36.26	8.57	0	27.69	1.03	17000	--	74	ND	1000	620	--	--	--
3/18/1993	36.26	9.03	0	27.23	-0.46	--	--	--	--	--	--	--	--	--
4/20/1993	36.26	9.09	0	27.17	-0.06	--	--	--	--	--	--	--	--	--
5/21/1993	36.26	9.63	0	26.63	-0.54	23000	--	250	ND	3000	240	--	--	--
6/22/1993	36.26	10.12	0	26.14	-0.49	--	--	--	--	--	--	--	--	--
7/23/1993	36.26	10.54	0	25.72	-0.42	--	--	--	--	--	--	--	--	--
8/23/1993	36.26	10.99	0	25.27	-0.45	20000	--	230	13	3200	140	--	--	--
9/24/1993	36.04	11.17	0	24.87	-0.40	--	--	--	--	--	--	--	--	--
11/23/1993	36.04	11.67	0	24.37	-0.50	18000	--	300	10	2800	110	--	--	--
2/24/1994	36.04	9.57	0	26.47	2.10	15000	--	330	19	2000	83	--	--	--
5/25/1994	36.04	10.32	0	25.72	-0.75	14000	--	240	ND	230	62	--	--	--
8/23/1994	36.04	11.81	0	24.23	-1.49	16000	--	250	41	1800	74	--	--	--
11/23/1994	36.04	11.10	0	24.94	0.71	16000	--	260	ND	1600	49	--	--	--
2/3/1995	36.04	8.32	0	27.72	2.78	17000	--	310	ND	1500	93	--	--	--
5/10/1995	36.04	8.70	0	27.34	-0.38	12000	--	260	16	1200	54	--	--	--
8/2/1995	36.04	9.55	0	26.49	-0.85	8900	--	240	ND	780	40	--	--	--
11/2/1995	36.04	11.03	0	25.01	-1.48	9300	--	190	ND	470	1.7	110	--	--
2/8/1996	36.04	8.05	0	27.99	2.98	9700	--	170	ND	440	ND	ND	--	--
5/8/1996	36.04	8.70	0	27.34	-0.65	7100	--	100	ND	240	ND	43	--	--
8/9/1996	36.04	9.76	0	26.28	-1.06	4400	--	59	7.5	110	6.5	73	--	--
11/7/1996	36.04	10.92	0	25.12	-1.16	6300	--	65	ND	110	ND	130	--	--
2/10/1997	36.04	8.10	0	27.94	2.82	6800	--	91	ND	100	ND	210	--	--
5/7/1997	36.04	9.28	0	26.76	-1.18	4800	--	76	ND	50	ND	160	--	--
8/5/1997	36.04	10.51	0	25.53	-1.23	4200	--	52	ND	40	ND	81	--	--
11/4/1997	36.04	11.02	0	25.02	-0.51	4500	--	49	ND	63	ND	84	--	--
2/12/1998	36.04	6.85	0	29.19	4.17	6200	--	98	ND	91	ND	420	--	--
5/15/1998	36.02	8.05	0	27.97	-1.22	7200	--	84	ND	84	ND	260	--	--

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
8/12/1998	36.02	9.27	0	26.75	-1.22	7500	--	6.9	11	47	ND	130	--	--
11/12/1998	36.02	10.03	0	25.99	-0.76	4200	--	23	ND	24	ND	130	--	--
3/1/1999	36.02	8.56	0	27.46	1.47	5900	--	37	ND	50	26	300	--	--
5/12/1999	36.02	8.92	0	27.10	-0.36	7400	--	37	ND	32	ND	170	--	--
8/11/1999	36.02	10.10	0	25.92	-1.18	5060	--	38.1	ND	12.9	ND	75.5	--	--
11/4/1999	36.02	11.03	0	24.99	-0.93	6190	--	76.7	8.01	13.4	ND	234	--	--
2/29/2000	36.02	9.67	0	26.35	1.36	7120	--	27.8	ND	24.7	ND	208	--	--
5/8/2000	36.02	10.54	0	25.48	-0.87	5830	--	51.7	10.6	24.7	24.8	142	--	--
8/8/2000	36.02	10.92	0	25.10	-0.38	5010	--	50.6	ND	13.9	ND	113	--	--
11/6/2000	36.02	11.34	0	24.68	-0.42	6260	--	47.9	ND	12.5	ND	118	--	--
2/7/2001	36.02	10.75	0	25.27	0.59	4800	--	56	10	ND	ND	780	--	--
5/9/2001	36.02	9.84	0	26.18	0.91	6810	--	52.4	ND	ND	ND	161	--	--
8/24/2001	36.02	11.16	0	24.86	-1.32	5600	--	56	ND<10	ND<10	ND<10	ND<100	--	--
11/16/2001	36.02	11.38	0	24.64	-0.22	5600	--	49	ND<10	ND<10	ND<10	190	--	--
2/21/2002	36.02	9.20	0	26.82	2.18	5000	--	38	ND<5.0	8.5	ND<5.0	140	--	--
5/10/2002	36.02	9.87	0	26.15	-0.67	5300	--	57	6.3	8.2	ND<5.0	ND<50	--	--
8/26/2002	36.02	11.02	0	25.00	-1.15	--	7000	ND<5.0	ND<5.0	5.4	ND<10	--	ND<20	--
11/7/2002	36.02	11.32	0	24.70	-0.30	--	3500	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<10	--
2/14/2003	36.02	9.36	0	26.66	1.96	--	5200	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<20	--
5/12/2003	36.02	9.12	0	26.90	0.24	--	4300	2.6	0.56	2.9	ND<1.0	--	4.8	--
8/11/2003	36.02	11.25	0	24.77	-2.13	--	3100	1.9	ND<0.50	1.0	1.0	--	4.0	--
11/13/2003	36.02	11.20	0	24.82	0.05	--	7300	ND<25	ND<25	ND<25	ND<50	--	ND<100	--
2/17/2004	36.02	10.95	0	25.07	0.25	--	7100	4.1	ND<2.5	3.8	ND<5.0	--	ND<10	--
5/20/2004	36.02	10.00	0	26.02	0.95	--	7300	3.0	ND<2.5	2.8	ND<5.0	--	ND<2.5	--
8/25/2004	36.02	11.24	0	24.78	-1.24	--	6900	2.7	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	--
11/2/2004	36.02	10.95	0	25.07	0.29	--	6100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	--
3/17/2005	36.02	8.75	0	27.27	2.20	--	6700	2.4	ND<0.50	1.0	ND<1.0	--	3.4	--
6/13/2005	36.02	8.71	0	27.31	0.04	--	7500	2.8	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	--
9/27/2005	36.02	10.08	0	25.94	-1.37	--	4300	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<5.0	--
12/20/2005	36.02	10.12	0	25.90	-0.04	--	3700	1.4	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
3/10/2006	36.02	7.91	0	28.11	2.21	--	4100	3.7	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/20/2006	36.02	8.81	0	27.21	-0.90	--	4100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	--
9/25/2006	36.02	9.94	0	26.08	-1.13	--	2800	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	ND<1.0	--
12/18/2006	36.02	9.42	0	26.60	0.52	--	4000	1.4	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
3/29/2007	36.02	9.47	0	26.55	-0.05	--	4300	1.2	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
6/26/2007	36.02	10.25	0	25.77	-0.78	--	4600	0.94	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	--
9/26/2007	36.02	11.43	0	24.59	-1.18	--	3100	1.1	ND<1.0	ND<1.0	ND<1.0	--	ND<1.0	--
12/18/2007	36.02	11.20	0	24.82	0.23	--	2500	1.0	1.1	ND<0.50	1.3	--	ND<0.50	--
3/25/2008	36.02	9.25	0	26.77	1.95	--	3100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	ND<2.5	--
6/18/2008	36.02	10.77	0	25.25	-1.52	--	3700	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	ND<1.0	--
9/15/2008	36.02	11.84	0	24.18	-1.07	--	2100	0.67	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
12/17/2008	36.02	12.00	0	24.02	-0.16	--	3900	ND<5.0	ND<5.0	ND<5.0	ND<10	--	ND<5.0	--

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Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/26/2009	36.02	9.72	0	26.30	2.28	--	2800	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	ND<1.0	--
6/22/2009	36.02	10.75	0	25.27	-1.03	--	2100	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	ND<1.0	--
12/15/2009	36.02	10.95	0	25.07	-0.20	--	4300	0.86	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
6/30/2010	--	9.59	0	--	--	--	1800	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	Casing elevation modified on 1/15/2010
12/21/2010	--	9.20	0	--	--	--	1600	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	ND<1.0	--
6/22/2011	--	8.92	0	--	--	--	1900	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<1.0	--
12/6/2011	--	10.12	0	--	--	--	1800	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<1.0	--
6/20/2012	--	9.82	0	--	--	--	2500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1	--
MW-11														
8/20/1992	--	--	--	--	--	4600	--	62	ND	ND	54	--	--	--
9/16/1992	35.83	12.93	0	22.90	--	--	--	--	--	--	--	--	--	--
10/12/1992	35.83	13.30	0	22.53	-0.37	--	--	--	--	--	--	--	--	--
11/10/1992	35.83	13.20	0	22.63	0.10	5800	--	130	ND	260	42	--	--	--
12/10/1992	35.83	12.24	0	23.59	0.96	--	--	--	--	--	--	--	--	--
1/15/1993	35.83	9.23	0	26.60	3.01	--	--	--	--	--	--	--	--	--
2/20/1993	35.83	8.20	0	27.63	1.03	18000	--	76	ND	1000	630	--	--	--
3/18/1993	35.83	8.77	0	27.06	-0.57	--	--	--	--	--	--	--	--	--
4/20/1993	35.83	8.86	0	26.97	-0.09	--	--	--	--	--	--	--	--	--
5/21/1993	35.83	9.40	0	26.43	-0.54	7100	--	64	ND	340	120	--	--	--
6/22/1993	35.83	9.87	0	25.96	-0.47	--	--	--	--	--	--	--	--	--
7/23/1993	35.83	10.29	0	25.54	-0.42	--	--	--	--	--	--	--	--	--
8/23/1993	35.83	10.73	0	25.10	-0.44	5400	--	68	ND	230	43	--	--	--
9/24/1993	35.50	10.83	0	24.67	-0.43	--	--	--	--	--	--	--	--	--
11/23/1993	35.50	11.28	0	24.22	-0.45	3400	--	105	ND	120	43	--	--	--
2/24/1994	35.50	9.20	0	26.30	2.08	4600	--	170	ND	140	36	--	--	--
5/25/1994	35.50	9.94	0	25.56	-0.74	1400	--	49	ND	26	ND	--	--	--
8/23/1994	35.50	11.39	0	24.11	-1.45	7300	--	250	13	150	42	--	--	--
11/23/1994	35.50	10.67	0	24.83	0.72	5800	--	250	10	120	22	--	--	--
2/3/1995	35.50	8.02	0	27.48	2.65	4400	--	110	ND	150	37	--	--	--
5/10/1995	35.50	8.36	0	27.14	-0.34	4200	--	120	ND	170	38	--	--	--
8/2/1995	35.50	9.31	0	26.19	-0.95	4200	--	110	ND	110	22	--	--	--
11/2/1995	35.50	10.85	0	24.65	-1.54	6100	--	150	ND	78	6.8	6200	--	--
2/8/1996	35.50	7.76	0	27.74	3.09	--	--	--	--	--	--	--	--	--
2/14/1996	35.50	8.18	0	27.32	-0.42	3100	--	60	ND	98	ND	4000	--	--
5/8/1996	35.50	8.50	0	27.00	-0.32	3500	--	120	ND	160	ND	6400	--	--
8/9/1996	35.50	9.46	0	26.04	-0.96	1100	--	42	ND	15	ND	4300	--	--
11/7/1996	35.50	10.58	0	24.92	-1.12	2900	--	57	ND	13	ND	3400	--	--
2/10/1997	35.50	7.88	0	27.62	2.70	600	--	9.5	ND	ND	ND	3100	--	--
5/7/1997	35.50	9.07	0	26.43	-1.19	1900	--	45	ND	31	ND	2400	--	--
8/5/1997	35.50	10.23	0	25.27	-1.16	2100	--	35	ND	24	ND	1800	--	--
11/4/1997	35.50	10.51	0	24.99	-0.28	98	--	1.6	ND	ND	ND	ND	--	--
2/12/1998	35.50	6.59	0	28.91	3.92	670	--	12	ND	ND	ND	1400	--	--

Appendix D
Historical Groundwater Results from TRC
Conceptual Site Model and Closure Request
76 Service Station No. 3292
15008 East 14th Street, San Leandro, CA

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
5/15/1998	35.50	7.73	0	27.77	-1.14	1200	--	7.9	ND	30	ND	1600	--	--
8/12/1998	35.50	8.85	0	26.65	-1.12	1600	--	ND	ND	ND	ND	2000	--	--
11/12/1998	35.50	9.52	0	25.98	-0.67	1700	--	9.3	ND	ND	ND	1700	--	--
3/1/1999	35.50	8.00	0	27.50	1.52	530	--	4.9	ND	ND	ND	870	--	--
5/12/1999	35.50	8.64	0	26.86	-0.64	900	--	6.6	ND	ND	ND	840	--	--
8/11/1999	35.50	9.92	0	25.58	-1.28	1660	--	5.52	ND	ND	ND	764	--	--
11/4/1999	35.50	10.88	0	24.62	-0.96	2600	--	8.71	ND	2.76	ND	1490	--	--
2/29/2000	35.50	7.56	0	27.94	3.32	420	--	ND	ND	ND	ND	1010	--	--
5/8/2000	35.50	8.50	0	27.00	-0.94	513	--	3.56	ND	1.11	ND	1320	--	--
8/8/2000	35.50	9.39	0	26.11	-0.89	960	--	10.0	1.28	ND	ND	1600	--	--
11/6/2000	35.50	9.81	0	25.69	-0.42	3000	--	17.7	ND	ND	ND	1280	1360	--
2/7/2001	35.50	9.16	0	26.34	0.65	1600	--	ND	ND	ND	ND	590	--	--
5/9/2001	35.50	9.51	0	25.99	-0.35	1010	--	11.4	ND	1.24	ND	586	--	--
8/24/2001	35.50	--	--	--	--	--	--	--	--	--	--	--	870	--
8/29/2001	35.50	10.78	0	24.72	--	3100	--	23	ND<5.0	ND<5.0	ND<5.0	840	870	--
11/16/2001	35.50	10.95	0	24.55	-0.17	1000	--	9.2	ND<2.0	ND<2.0	ND<2.0	600	--	--
2/21/2002	35.50	8.85	0	26.65	2.10	1100	--	7.4	ND<2.5	ND<2.5	ND<2.5	270	--	--
5/10/2002	35.50	9.51	0	25.99	-0.66	910	--	7.4	1.4	2.8	ND<12	330	270	--
8/26/2002	35.50	10.62	0	24.88	-1.11	--	1900	ND<0.50	ND<0.50	0.87	ND<1.0	--	170	--
11/7/2002	35.50	10.77	0	24.73	-0.15	--	550	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	330	--
2/14/2003	35.50	8.97	0	26.53	1.80	--	2600	1.8	0.51	1.7	ND<1.0	--	ND<2.0	--
5/12/2003	35.50	8.90	0	26.60	0.07	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	290	--
8/11/2003	35.50	11.04	0	24.46	-2.14	--	930	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	320	--
11/13/2003	35.50	10.79	0	24.71	0.25	--	1300	ND<2.5	ND<2.5	5.0	ND<5.0	--	300	--
2/17/2004	35.50	9.19	0	26.31	1.60	--	830	ND<2.5	ND<2.5	3.8	ND<5.0	--	170	--
5/20/2004	35.50	9.81	0	25.69	-0.62	--	930	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	230	--
8/25/2004	35.50	10.90	0	24.60	-1.09	--	1100	ND<1.0	ND<1.0	2.1	ND<2.0	--	210	--
11/2/2004	35.50	10.47	0	25.03	0.43	--	850	ND<1.0	ND<1.0	1.4	ND<2.0	--	180	--
3/17/2005	35.50	8.22	0	27.28	2.25	--	1500	0.63	ND<0.50	2.9	ND<1.0	--	120	--
6/13/2005	35.50	8.48	0	27.02	-0.26	--	1100	ND<0.50	ND<0.50	3.5	ND<1.0	--	120	--
9/27/2005	35.50	9.88	0	25.62	-1.40	--	320	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	110	--
12/20/2005	35.50	9.96	0	25.54	-0.08	--	290	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	92	--
3/10/2006	35.50	7.65	0	27.85	2.31	--	620	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	140	--
6/20/2006	35.50	8.63	0	26.87	-0.98	--	680	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	88	--
9/25/2006	35.50	9.64	0	25.86	-1.01	--	180	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	65	--
12/18/2006	35.50	9.10	0	26.40	0.54	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	48	--
3/29/2007	35.50	9.31	0	26.19	-0.21	--	810	ND<0.50	ND<0.50	1.0	ND<0.50	--	47	--
6/26/2007	35.50	10.08	0	25.42	-0.77	--	510	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	37	--
9/26/2007	35.50	11.00	0	24.50	-0.92	--	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	39	--
12/18/2007	35.50	10.74	0	24.76	0.26	--	ND<50	ND<0.50	0.64	ND<0.50	ND<1.0	--	23	--
3/25/2008	35.50	9.29	0	26.21	1.45	--	320	ND<0.50	0.84	ND<0.50	1.2	--	31	--
6/18/2008	35.50	10.78	0	24.72	-1.49	--	390	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	28	--

Appendix D
Historical Groundwater Results from TRC
Conceptual Site Model and Closure Request
76 Service Station No. 3292
15008 East 14th Street, San Leandro, CA

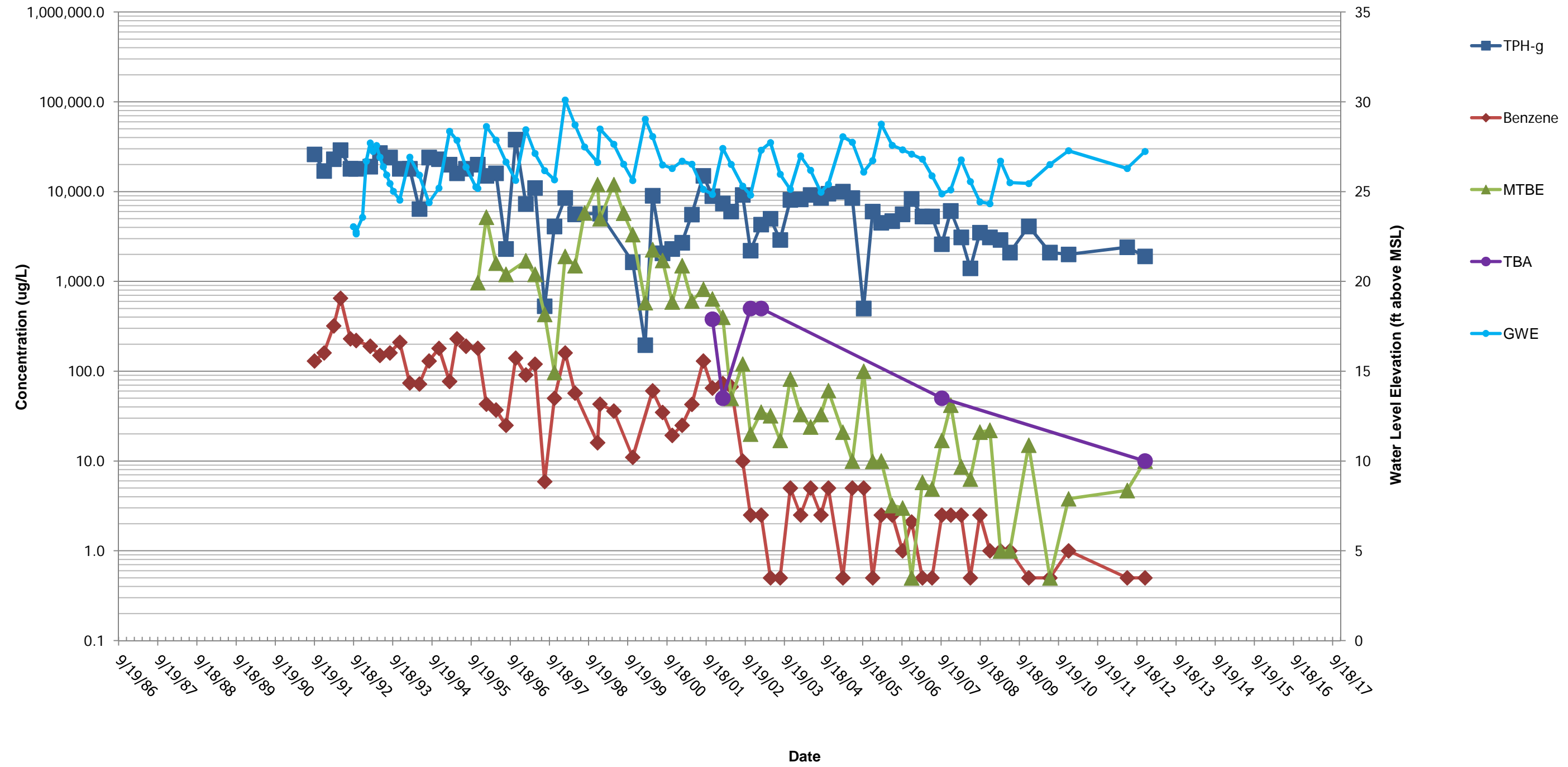
Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
9/15/2008	35.50	11.42	0	24.08	-0.64	--	580	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25	--
12/17/2008	35.50	11.53	0	23.97	-0.11	--	810	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	22	--
3/26/2009	35.50	9.33	0	26.17	2.20	--	670	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25	--
6/22/2009	35.50	10.36	0	25.14	-1.03	--	650	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	23	--
12/15/2009	35.50	10.50	0	25.00	-0.14	--	810	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	19	--
6/30/2010	35.50	9.50	0	26.00	1.00	--	650	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	16	--
12/21/2010	35.50	9.00	0	26.50	0.50	--	650	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	14	--



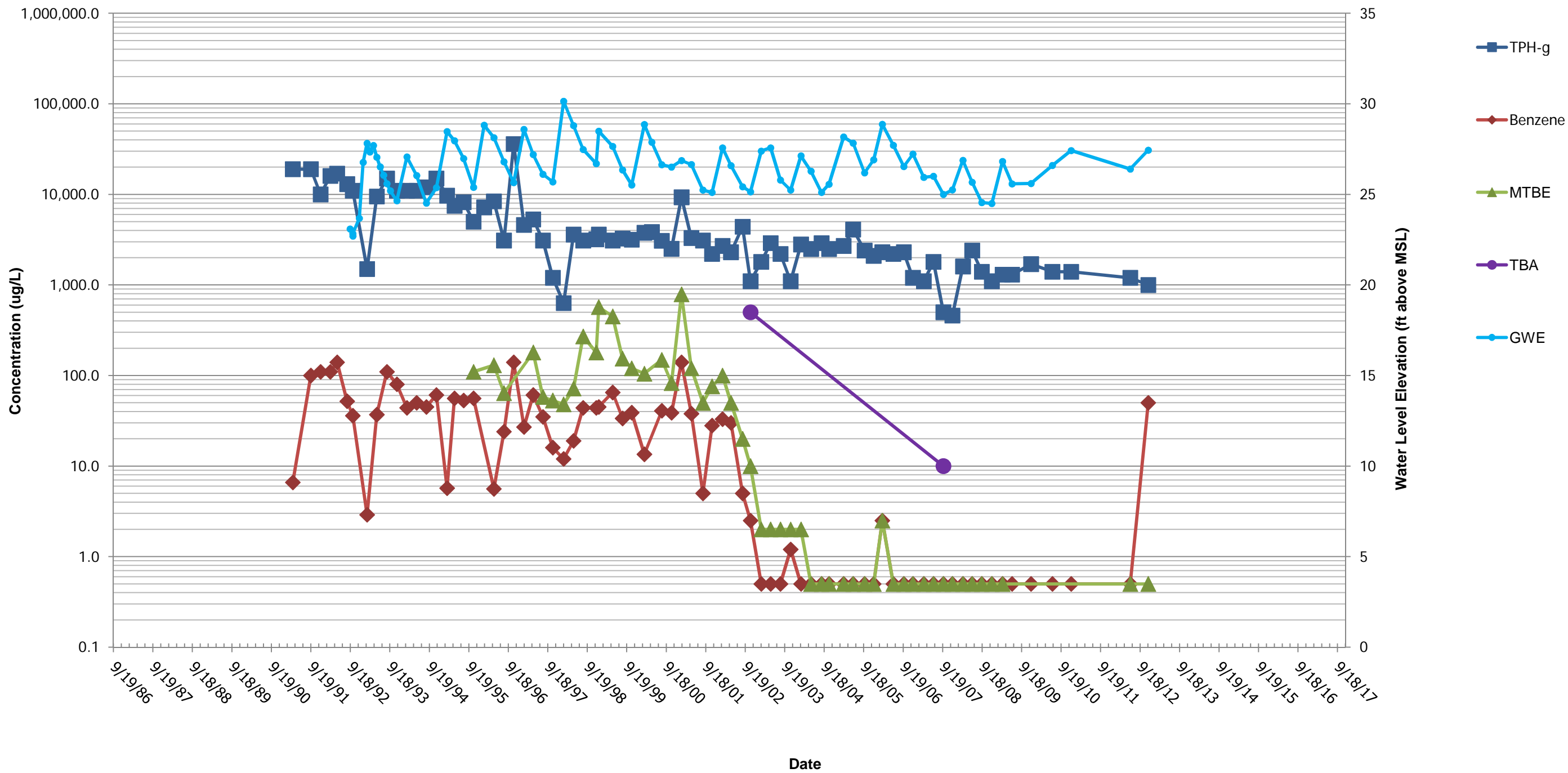
Appendix E

Trend Graphs

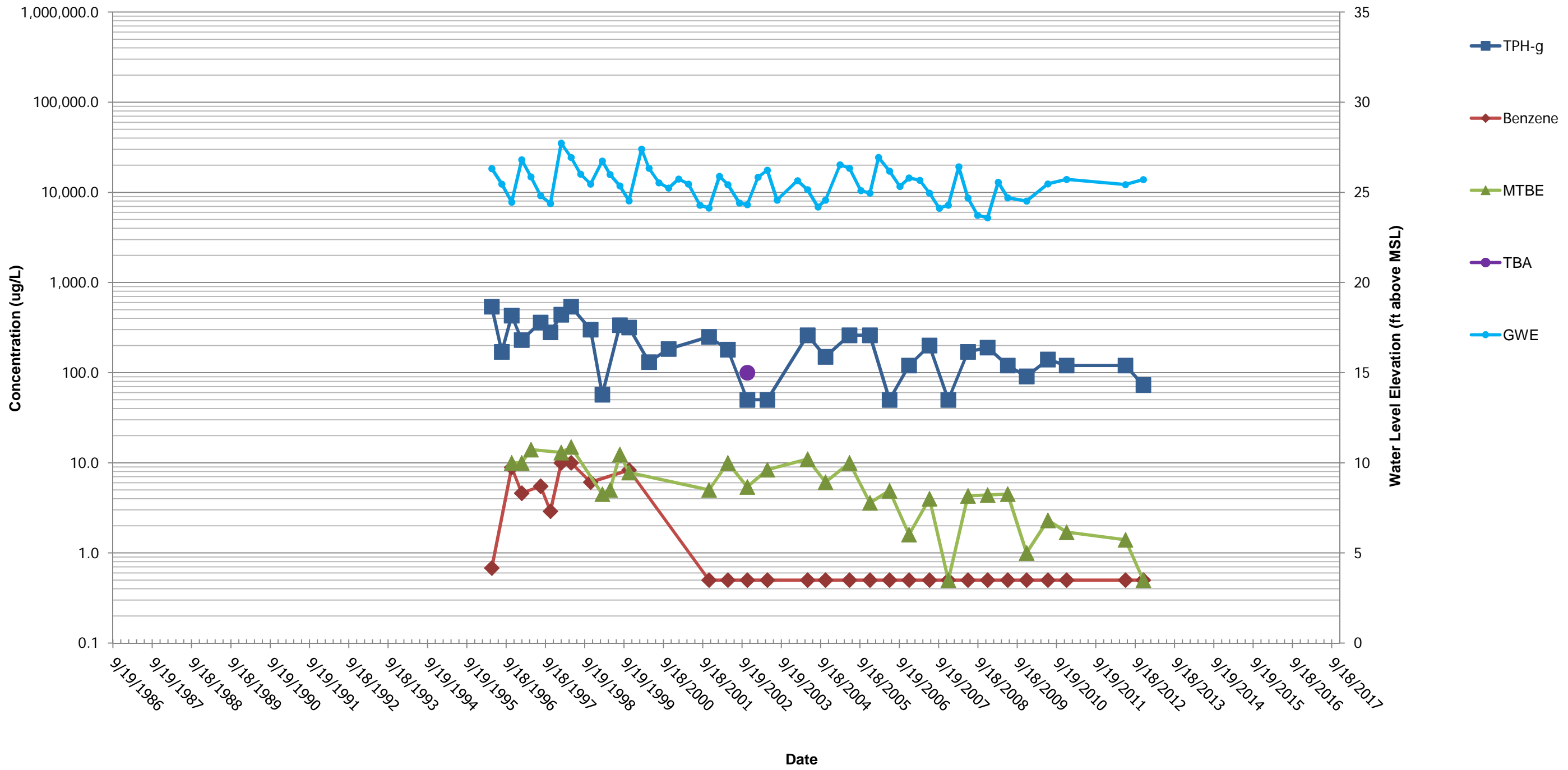
MW-1
76 Station No.3292
15008 East 14th Street, CA



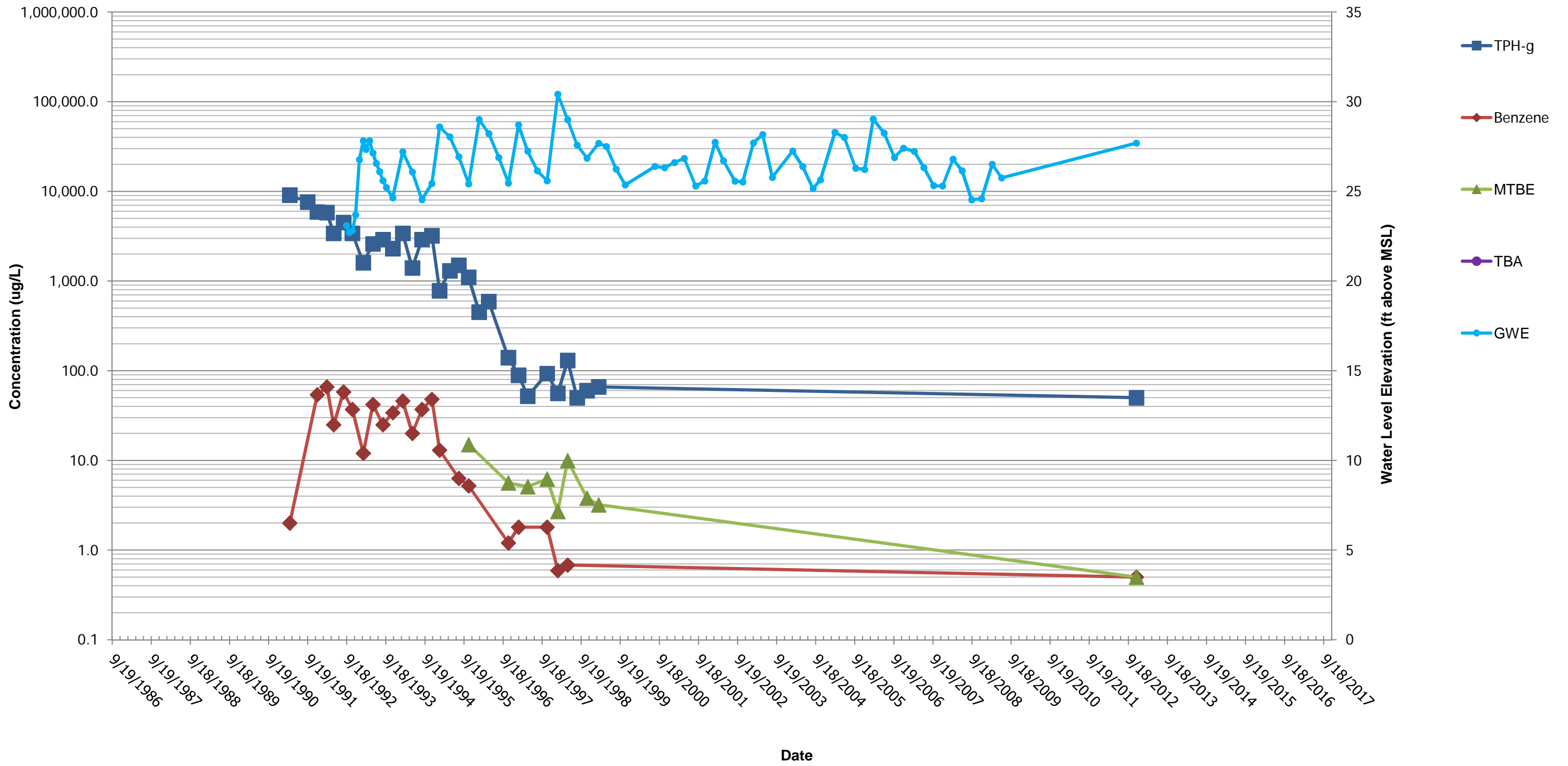
MW-2
 76 Station No.3292
 15008 East 14th Street, San Leandro, CA



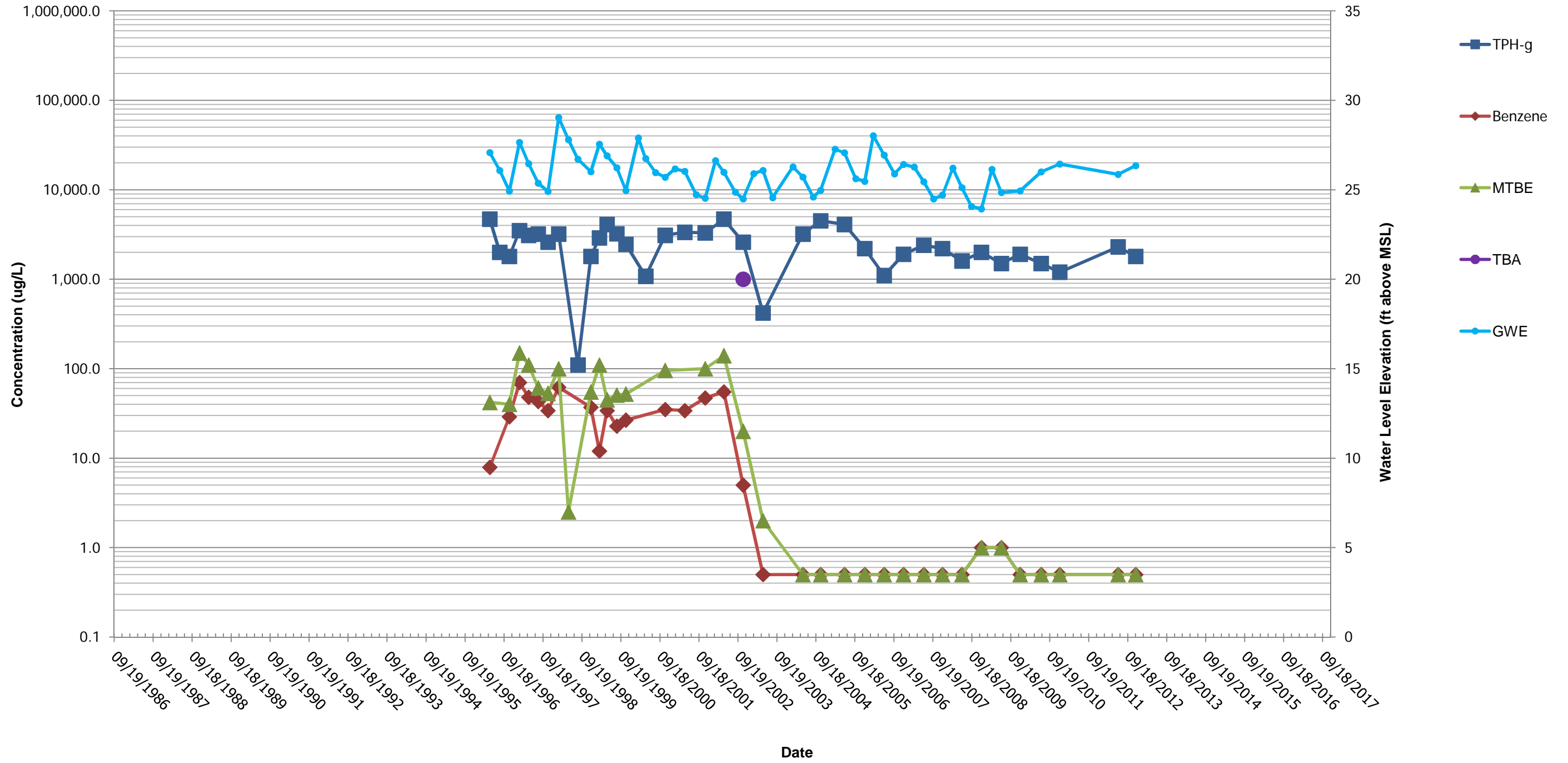
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 76 Station No.3292
 15008 East 14th Street, San Leandro, CA



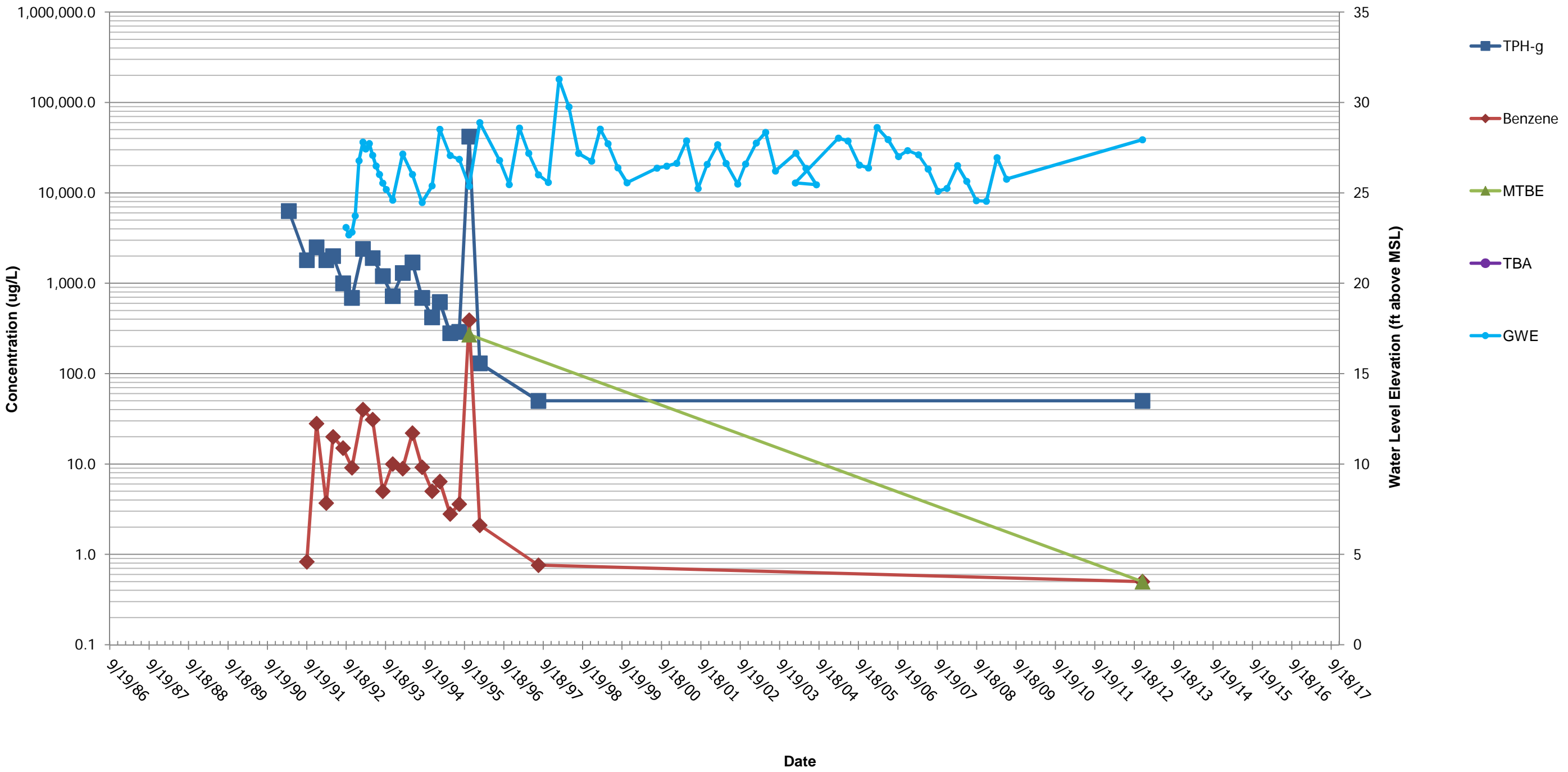
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76 Station No.3292
15008 East 14th Street, San Leandro, CA



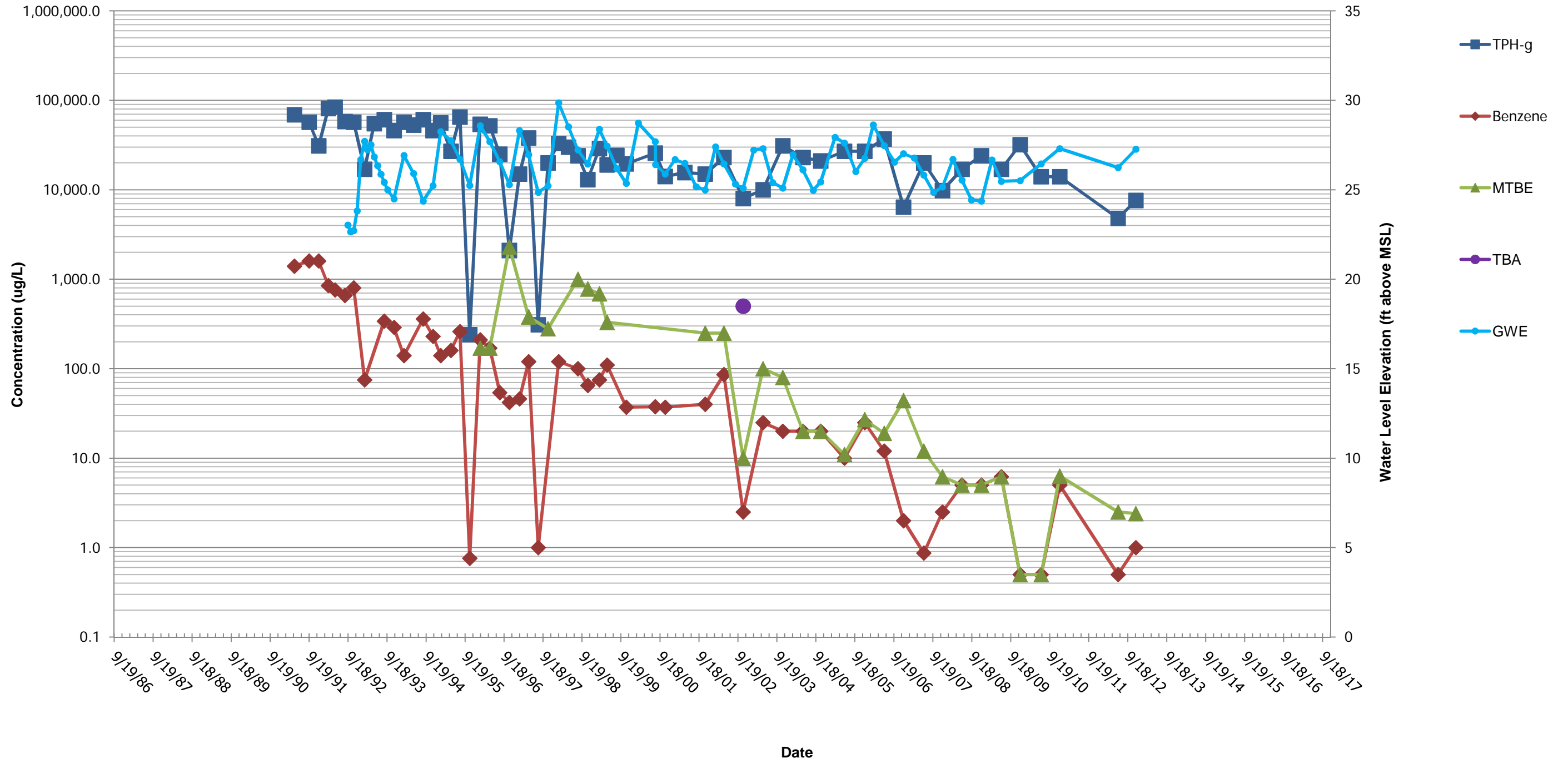
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76 Station No.3292
15008 East 14th Street, San Leandro, CA



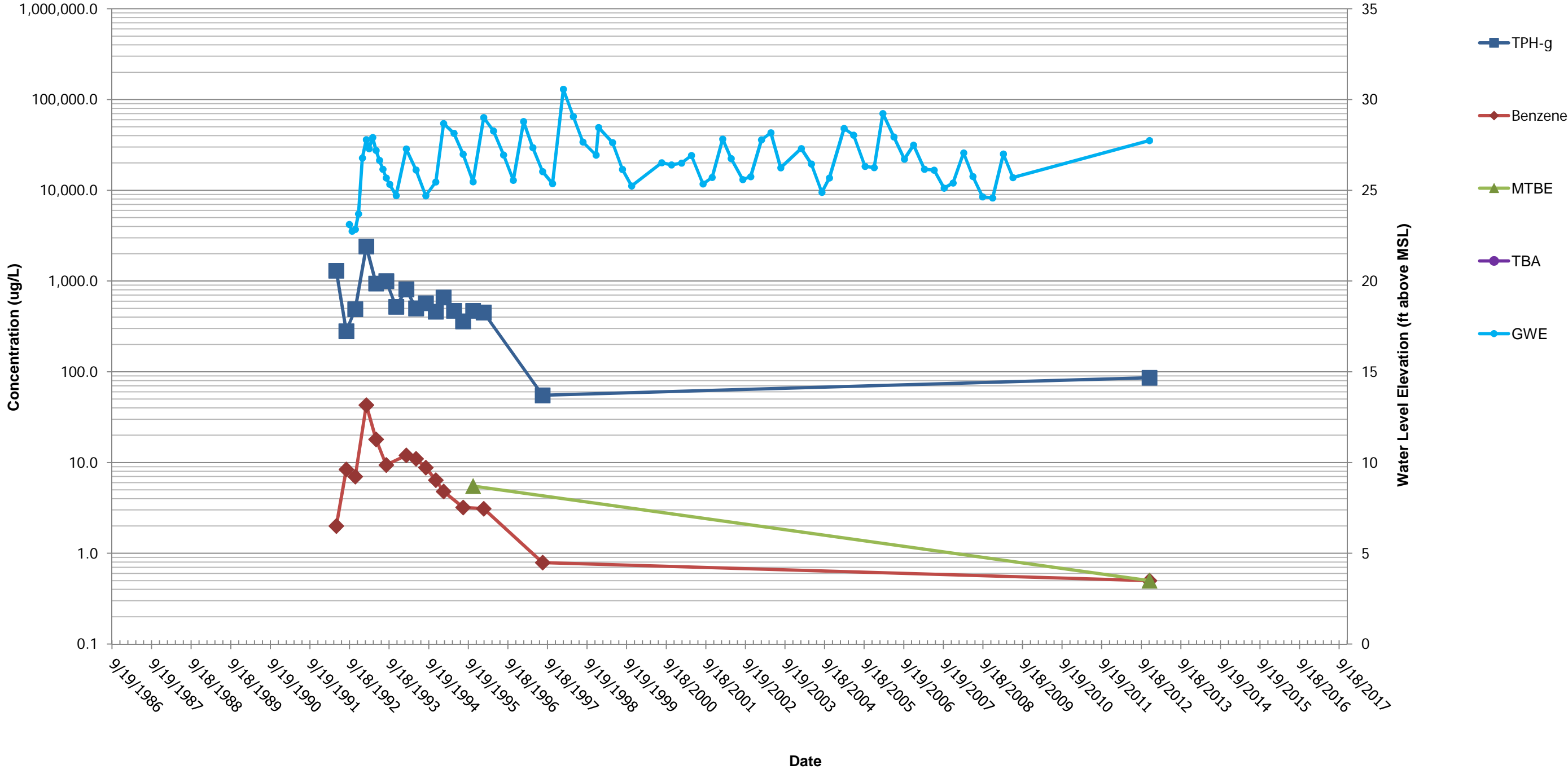
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76 Station No.3292
15008 East 14th Street, San Leandro, CA



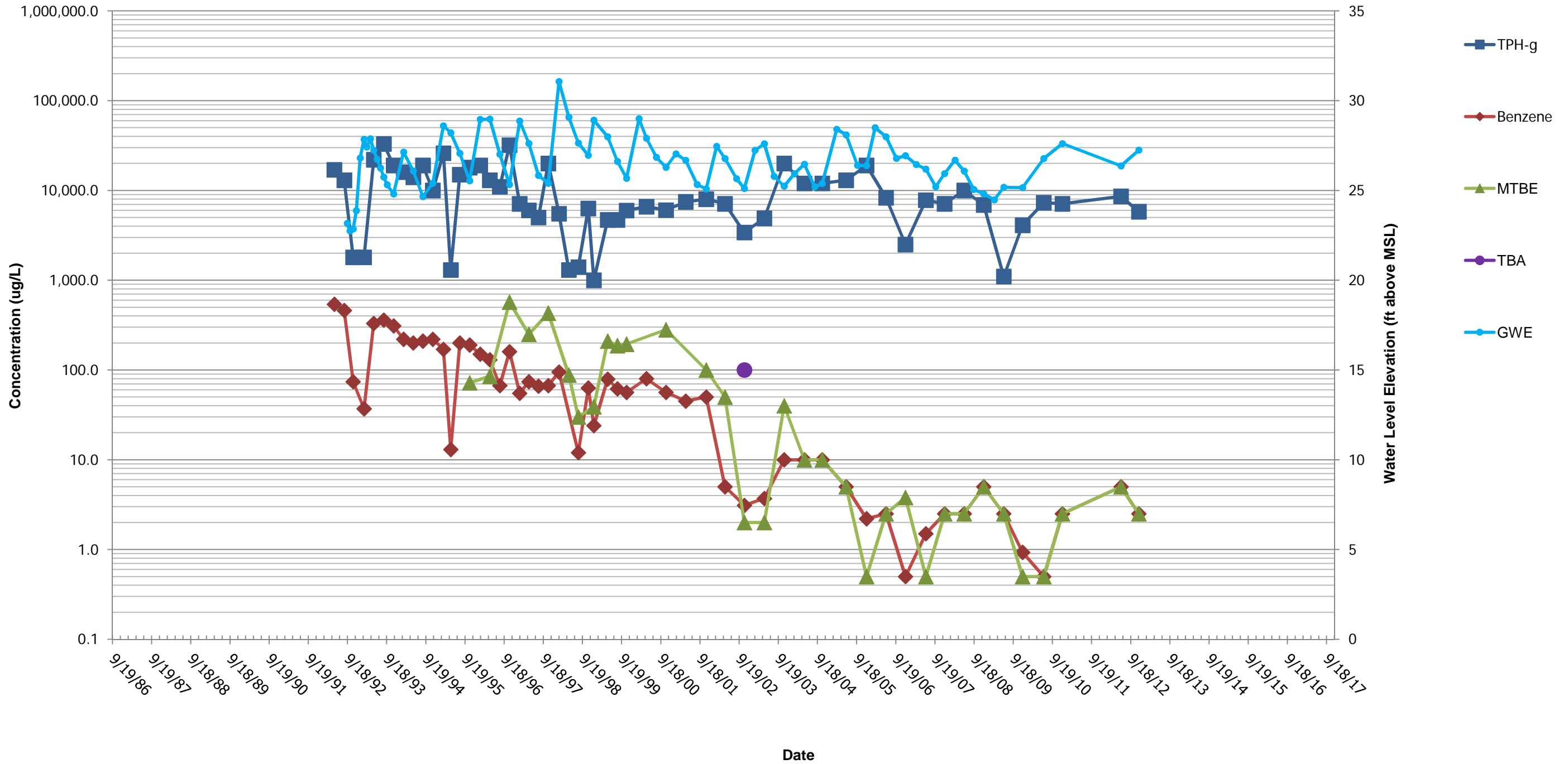
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76 Station No.3292
15008 East 14th Street, San Leandro, CA



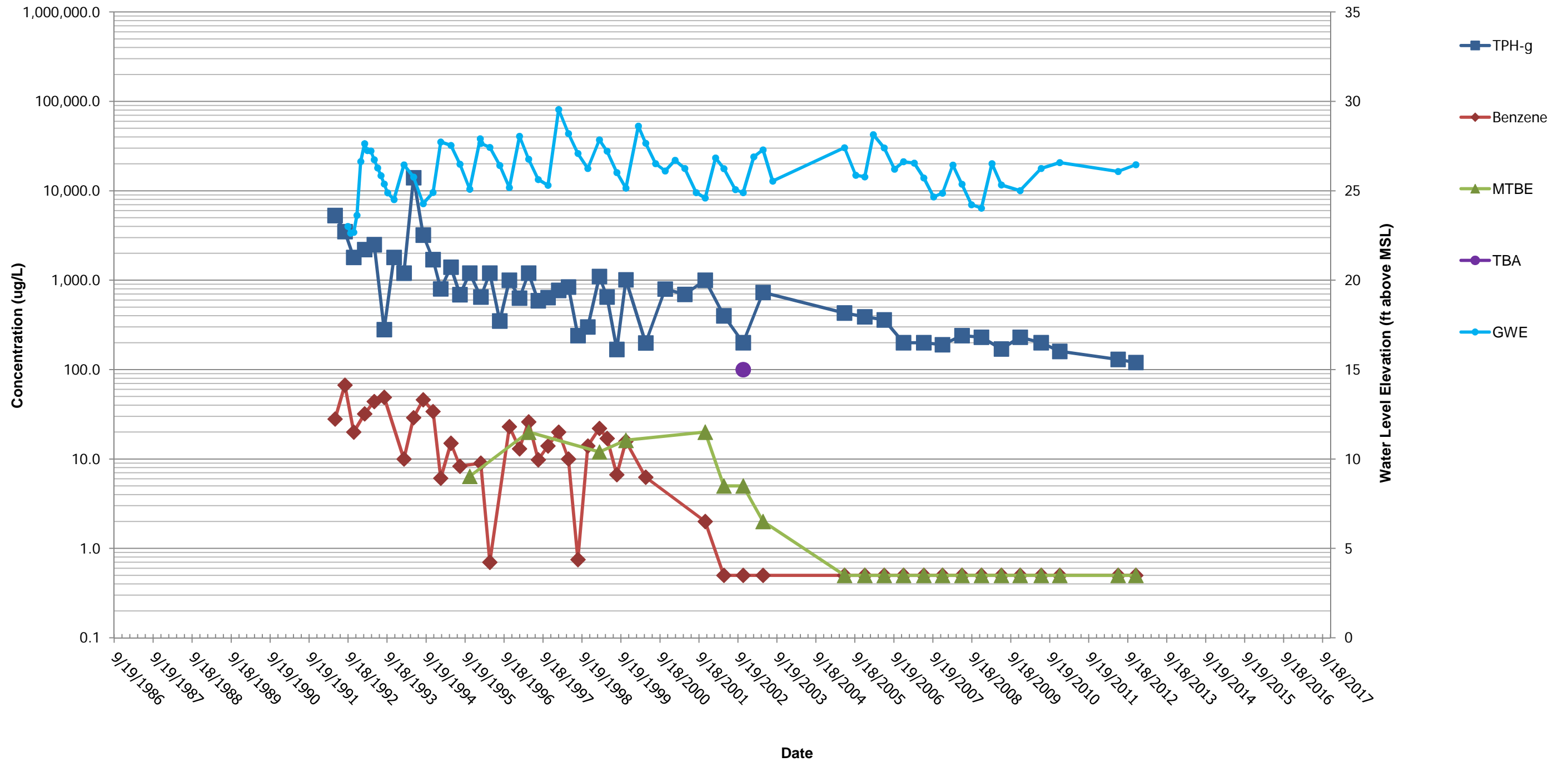
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76 Station No.3292
15008 East 14th Street, San Leandro, CA



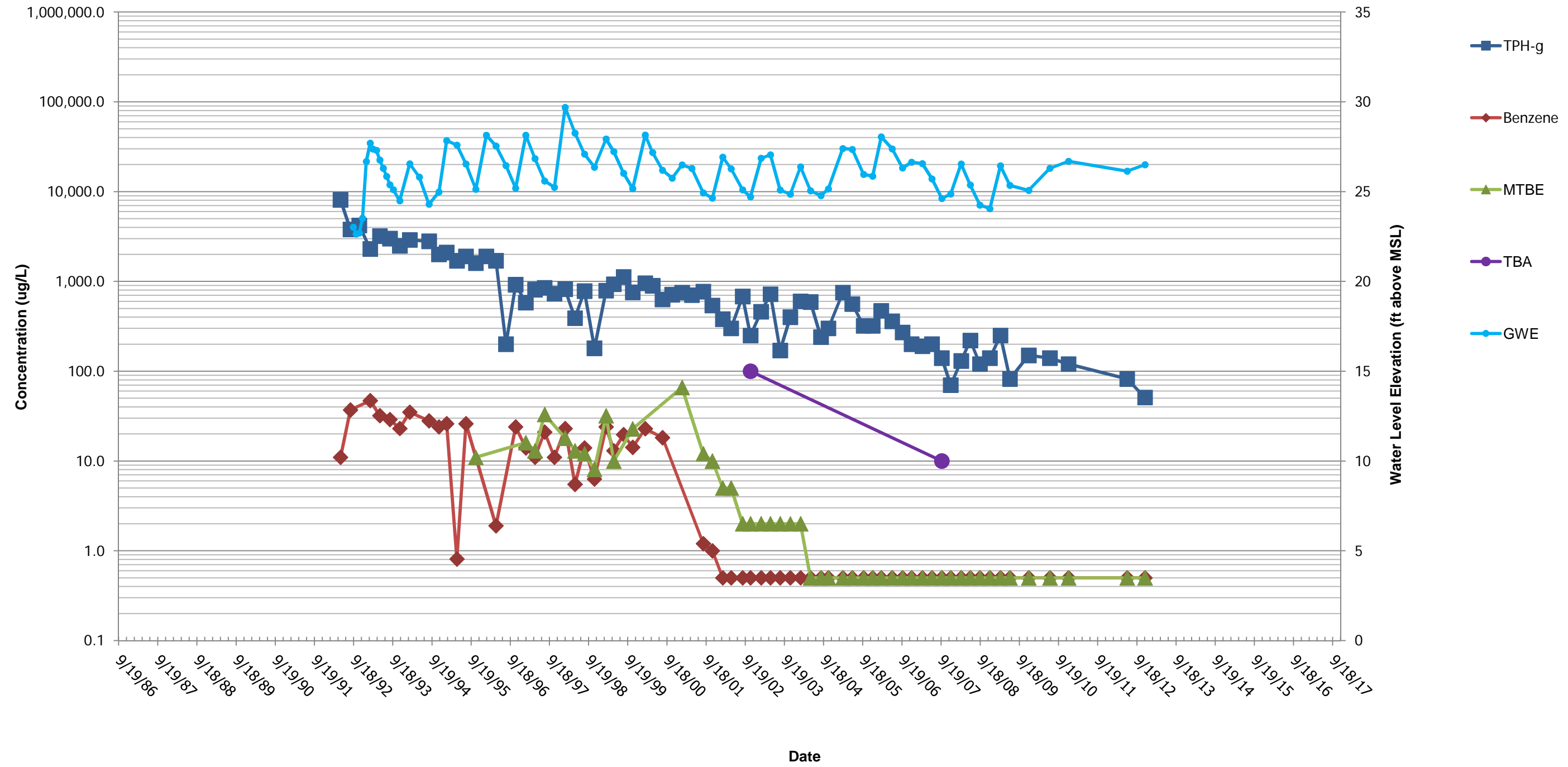
MW-7
 76 Station No.3292
 15008 East 14th Street, San Leandro, CA



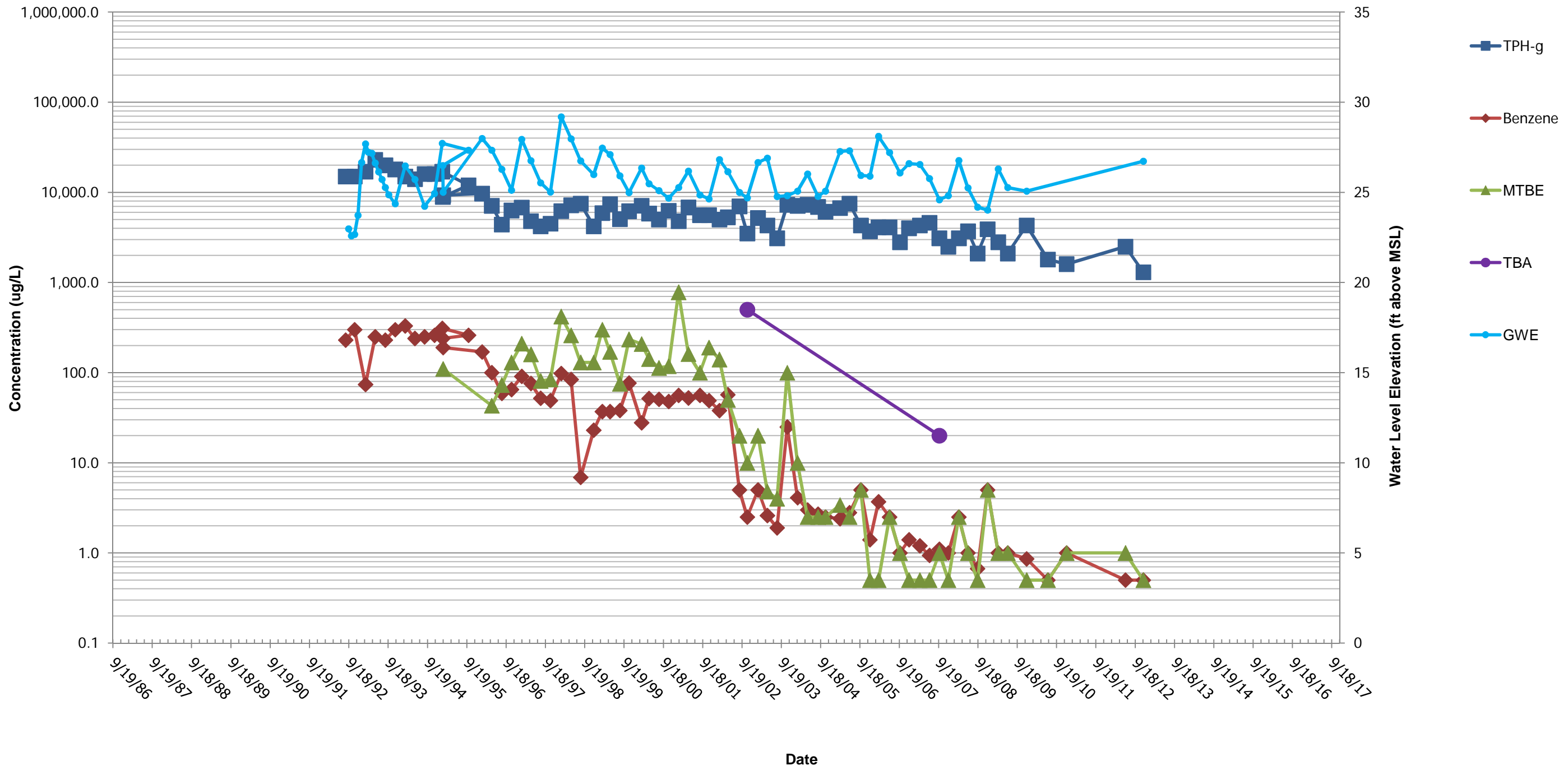
MW-8
76 Station No.3292
15008 East 14th Street, San Leandro, CA



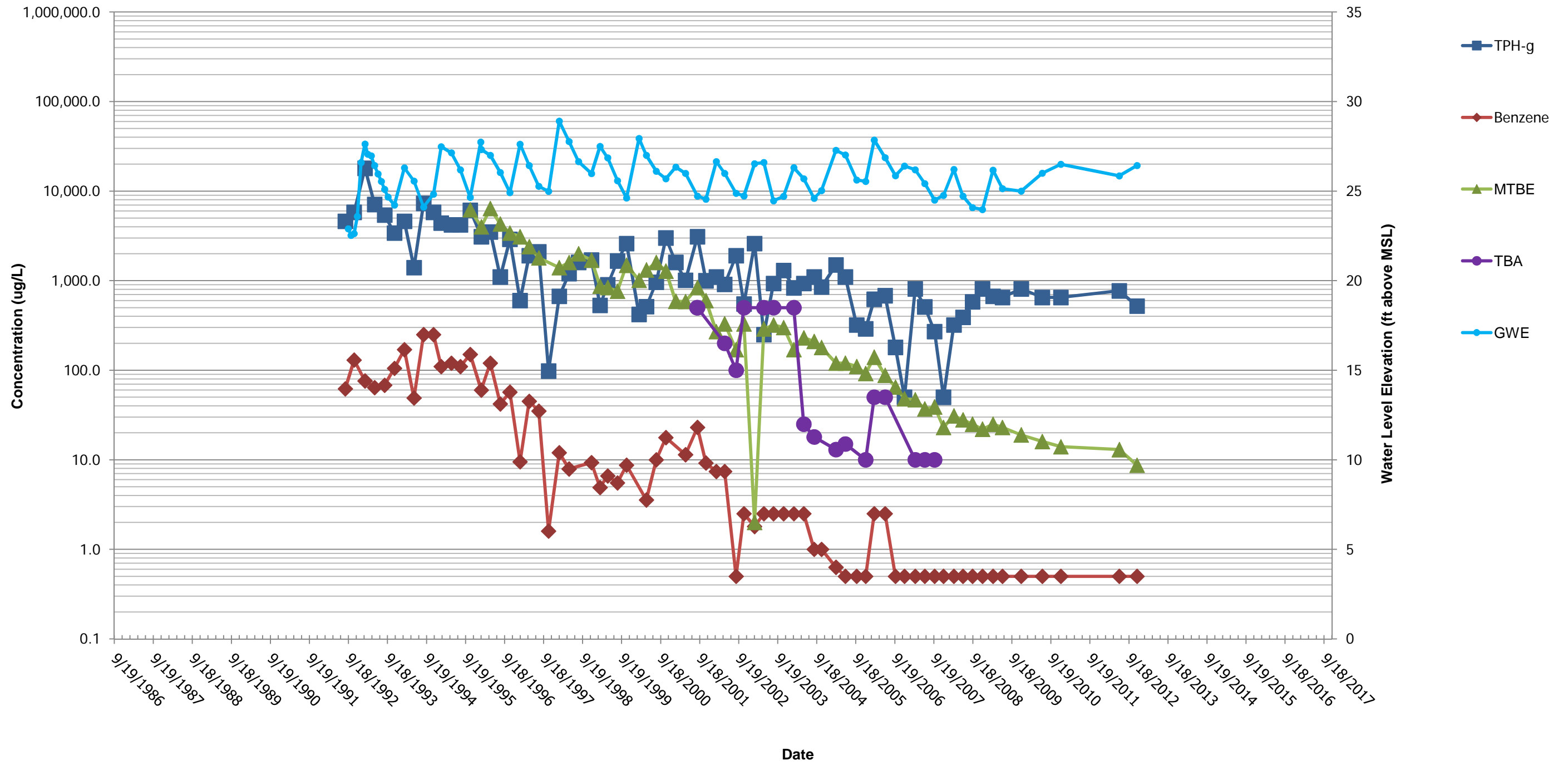
MW-9
76 Station No.3292
15008 East 14th Street, San Leandro, CA



MW-10
76 Station No.3292
15008 East 14th Street, San Leandro, CA



MW-11
76 Station No.3292
15008 East 14th Street, San Leandro, CA



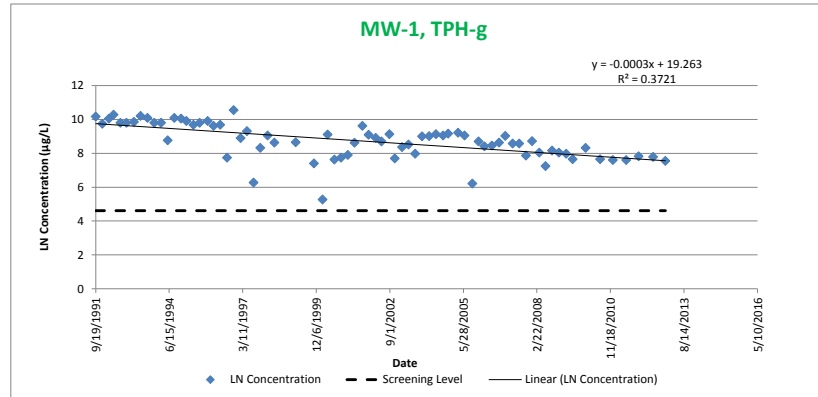


Appendix F

Linear Regression Analysis
Outputs

Sample Information
 Sample Location MW-1
 Constituent TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
9/19/1991	26000	10.17
12/18/1991	17000	9.74
3/17/1992	23000	10.04
5/19/1992	29000	10.28
8/20/1992	18000	9.80
11/10/1992	18000	9.80
2/20/1993	19000	9.85
5/21/1993	27000	10.20
8/23/1993	24000	10.09
11/23/1993	18000	9.80
2/24/1994	18000	9.80
5/25/1994	6400	8.76
8/23/1994	24000	10.09
11/23/1994	23000	10.04
2/3/1995	20000	9.90
5/10/1995	16000	9.68
8/2/1995	18000	9.80
11/20/1995	20000	9.90
2/8/1996	15000	9.62
5/8/1996	16000	9.68
8/9/1996	2300	7.74
11/7/1996	38000	10.55
2/10/1997	7300	8.90
5/7/1997	11000	9.31
8/5/1997	530	6.27
11/4/1997	4100	8.32
2/7/1998	8500	9.05
5/15/1998	5600	8.63
3/1/1999	5700	8.65
11/4/1999	1640	7.40
2/29/2000	195	5.27
5/8/2000	9010	9.11
8/8/2000	2060	7.63
11/6/2000	2300	7.74
2/7/2001	2700	7.90
5/9/2001	5550	8.62
8/24/2001	15000	9.62
11/16/2001	8900	9.09
2/21/2002	7400	8.91
5/10/2002	6000	8.70
8/26/2002	9200	9.13
11/7/2002	2200	7.70
2/14/2003	4300	8.37
5/12/2003	5000	8.52
8/11/2003	2900	7.97
11/13/2003	8100	9.00
2/17/2004	8200	9.01
5/20/2004	9200	9.13
8/25/2004	8500	9.05
11/2/2004	9500	9.16
3/17/2005	10000	9.21
6/13/2005	8500	9.05
9/27/2005	500	6.21
12/20/2005	6000	8.70
3/10/2006	4500	8.41
6/20/2006	4700	8.46
9/25/2006	5600	8.63
12/18/2006	8300	9.02
3/29/2007	5300	8.58
6/26/2007	5300	8.58
9/26/2007	2600	7.86
12/18/2007	6100	8.72
3/25/2008	3100	8.04
6/18/2008	1400	7.24
9/15/2008	3500	8.16
12/17/2008	3100	8.04
3/26/2009	2900	7.97
6/22/2009	2100	7.65
12/15/2009	4100	8.32
6/30/2010	2100	7.65
12/21/2010	2000	7.60
6/20/2011	2000	7.60
12/6/2011	2500	7.82
6/20/2012	2400	7.78
12/3/2012	1900	7.55



Notes:
 ND taken at reporting limit/reported value
 Qualified data converted to reported value
 GCMS

Data quality	
Total # of data points used in regression	75
# of nondetects	1
% of data as detects	99

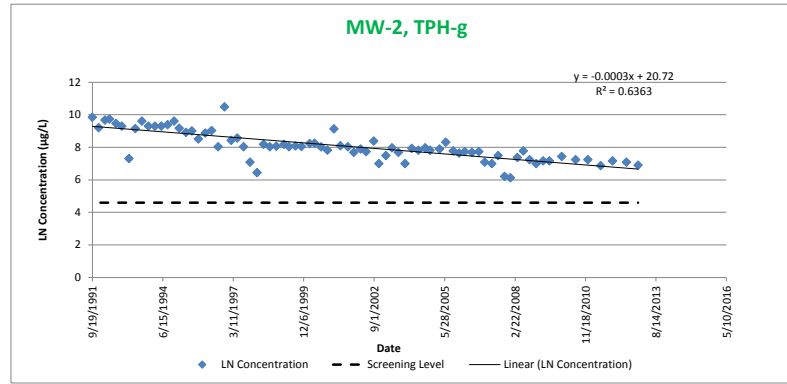
Results	
Coefficient of Determination (R ²) =	0.3721
p-Value =	6.26E-09
Attenuation Rate in Groundwater (K) =	0.0003 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0002 days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	2.44E+03 days

Date Screening Level Reached	
Screening Level	100
LN Screening Level	4.6
Intercept	19.263
Slope	-0.0003
Date to Screening Level	5/3/2041

Abbreviations and Notes
 ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location MW-2
 Constituent TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
5/4/1991	19000	9.85
9/19/1991	19000	9.85
12/18/1991	10000	9.21
3/17/1992	16000	9.68
5/19/1992	17000	9.74
8/20/1992	13000	9.47
11/10/1992	11000	9.31
2/20/1993	1500	7.31
5/21/1993	9500	9.16
8/23/1993	15000	9.62
11/23/1993	11000	9.31
2/24/1994	11000	9.31
5/25/1994	11000	9.31
8/23/1994	12000	9.39
11/23/1994	15000	9.62
2/3/1995	9700	9.18
5/10/1995	7500	8.92
8/2/1995	8200	9.01
11/2/1995	5000	8.52
2/8/1996	7200	8.88
5/8/1996	8400	9.04
8/9/1996	3100	8.04
11/7/1996	36000	10.49
2/10/1997	4600	8.43
5/7/1997	5300	8.58
8/5/1997	3100	8.04
11/4/1997	1200	7.09
2/12/1998	630	6.45
5/15/1998	3600	8.19
8/12/1998	3100	8.04
11/12/1998	3200	8.07
3/1/1999	3600	8.19
5/12/1999	3100	8.04
8/11/1999	3260	8.09
11/4/1999	3160	8.06
2/29/2000	3770	8.23
5/8/2000	3840	8.25
8/8/2000	3080	8.03
11/6/2000	2510	7.83
2/7/2001	9300	9.14
5/9/2001	3300	8.10
8/24/2001	3100	8.04
11/16/2001	2200	7.70
2/21/2002	2700	7.90
5/10/2002	2300	7.74
8/26/2002	4400	8.39
11/7/2002	1100	7.00
2/14/2003	1800	7.50
5/12/2003	2900	7.97
8/1/2003	2200	7.70
11/13/2003	1100	7.00
2/17/2004	2800	7.94
5/20/2004	2500	7.82
8/25/2004	2900	7.97
11/2/2004	2500	7.82
3/17/2005	2700	7.90
6/13/2005	4100	8.32
9/27/2005	2400	7.78
12/20/2005	2100	7.65
3/10/2006	2300	7.74
6/20/2006	2200	7.70
9/25/2006	2300	7.74
12/18/2006	1200	7.09
3/29/2007	1100	7.00
6/26/2007	1800	7.50
9/26/2007	500	6.21
12/18/2007	460	6.13
3/25/2008	1600	7.38
6/18/2008	2400	7.78
9/15/2008	1400	7.24
12/17/2008	1100	7.00
3/26/2009	1300	7.17
6/22/2009	1300	7.17
12/15/2009	1700	7.44
6/30/2010	1400	7.24
12/21/2010	1400	7.24
6/20/2011	970	6.88
12/6/2011	1300	7.17
6/20/2012	1200	7.09
12/3/2012	1000	6.91



Notes:

ND taken at reporting limit/reported value
 Qualified data converted to reported value
 GCMS

Data quality	
Total # of data points used in regression	80
# of nondetects	0
% of data as detects	100

Results	
Coefficient of Determination (R ²) =	0.6363
p-Value =	8.25E-19
Attenuation Rate in Groundwater (K) =	0.0003 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0003 days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	2.03E+03 days

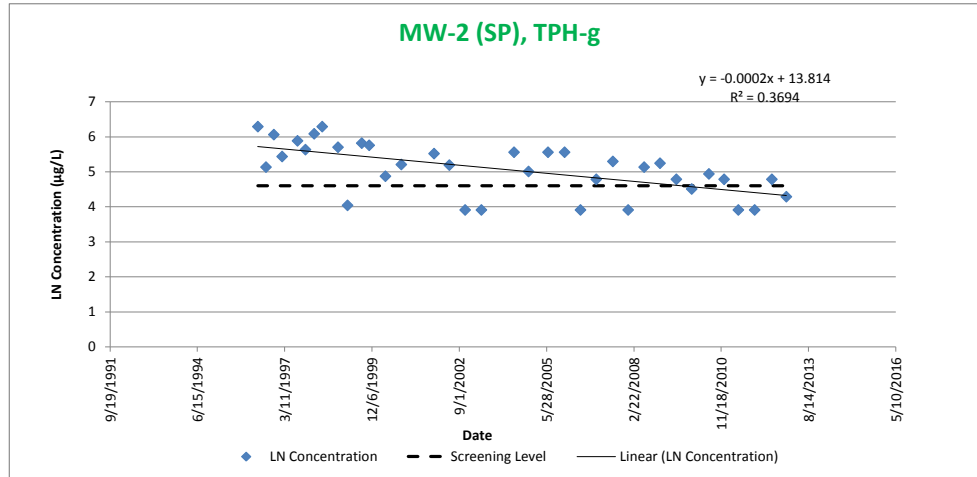
Date Screening Level Reached	
Screening Level	100
LN Screening Level	4.6
Intercept	20.720
Slope	-0.0003
Date to Screening Level	6/10/2029

Abbreviations and Notes
 ug/L = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-2 (SP)
 TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
5/8/1996	540	6.29
8/9/1996	170	5.14
11/7/1996	430	6.06
2/10/1997	230	5.44
8/5/1997	360	5.89
11/4/1997	280	5.63
2/12/1998	440	6.09
5/15/1998	540	6.29
11/12/1998	300	5.70
3/1/1999	57	4.04
8/11/1999	337	5.82
11/4/1999	317	5.76
5/8/2000	131	4.88
11/6/2000	183	5.21
11/16/2001	250	5.52
5/10/2002	180	5.19
11/7/2002	50	3.91
5/12/2003	50	3.91
5/20/2004	260	5.56
11/2/2004	150	5.01
6/13/2005	260	5.56
12/20/2005	260	5.56
6/20/2006	50	3.91
12/18/2006	120	4.79
6/26/2007	200	5.30
12/18/2007	50	3.91
6/18/2008	170	5.14
12/17/2008	190	5.25
6/22/2009	120	4.79
12/15/2009	91	4.51
6/30/2010	140	4.94
12/21/2010	120	4.79
6/2/2011	50	3.91
12/6/2011	50	3.91
6/20/2012	120	4.79
12/3/2012	73	4.29



Notes:

 ND taken at reporting limit/reported value
 Qualified data converted to reported value
 GCMS

Data quality

Total # of data points used in regression	36
# of nondetects	6
% of data as detects	83

Results

Coefficient of Determination (R ²) =	0.3694
p-Value =	8.44E-05
Attenuation Rate in Groundwater (K) =	0.0002 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0002 days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	3.01E+03 days

Date Screening Level Reached

Screening Level	100
LN Screening Level	4.6
Intercept	13.814
Slope	-0.0002
Date to Screening Level	8/8/2009

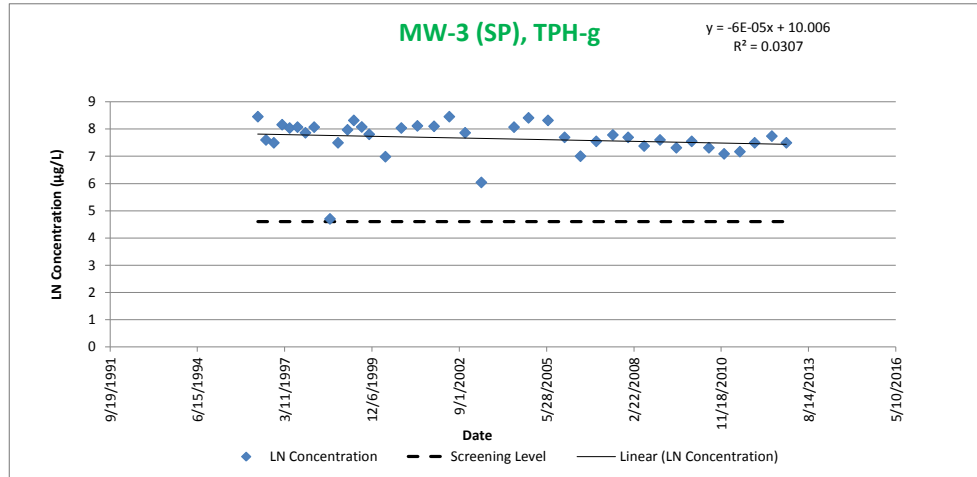
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-3 (SP)
 TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
5/8/1996	4700	8.46
8/9/1996	2000	7.60
11/7/1996	1800	7.50
2/10/1997	3500	8.16
5/7/1997	3100	8.04
8/5/1997	3200	8.07
11/4/1997	2600	7.86
2/12/1998	3200	8.07
8/12/1998	110	4.70
11/12/1998	1800	7.50
3/1/1999	2900	7.97
5/12/1999	4100	8.32
8/11/1999	3220	8.08
11/4/1999	2460	7.81
5/8/2000	1080	6.98
11/6/2000	3100	8.04
5/9/2001	3350	8.12
11/16/2001	3300	8.10
5/10/2002	4700	8.46
11/7/2002	2600	7.86
5/12/2003	420	6.04
5/20/2004	3200	8.07
11/2/2004	4500	8.41
6/13/2005	4100	8.32
12/20/2005	2200	7.70
6/20/2006	1100	7.00
12/18/2006	1900	7.55
6/26/2007	2400	7.78
12/18/2007	2200	7.70
6/18/2008	1600	7.38
12/17/2008	2000	7.60
6/22/2009	1500	7.31
12/15/2009	1900	7.55
6/30/2010	1500	7.31
12/21/2010	1200	7.09
6/20/2011	1300	7.17
12/6/2011	1800	7.50
6/20/2012	2300	7.74
12/3/2012	1800	7.50



Notes:

ND taken at reporting limit/reported value
 Qualified data converted to reported value

GCMS

Data quality

Total # of data points used in regression	39
# of nondetects	0
% of data as detects	100

Results

Coefficient of Determination (R ²) =	0.0307
p-Value =	2.86E-01
Attenuation Rate in Groundwater (K) =	0.0001 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0000 days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	1.11E+04 days

Date Screening Level Reached

Screening Level	100
LN Screening Level	4.6
Intercept	10.006
Slope	-0.0001
Date to Screening Level	NA

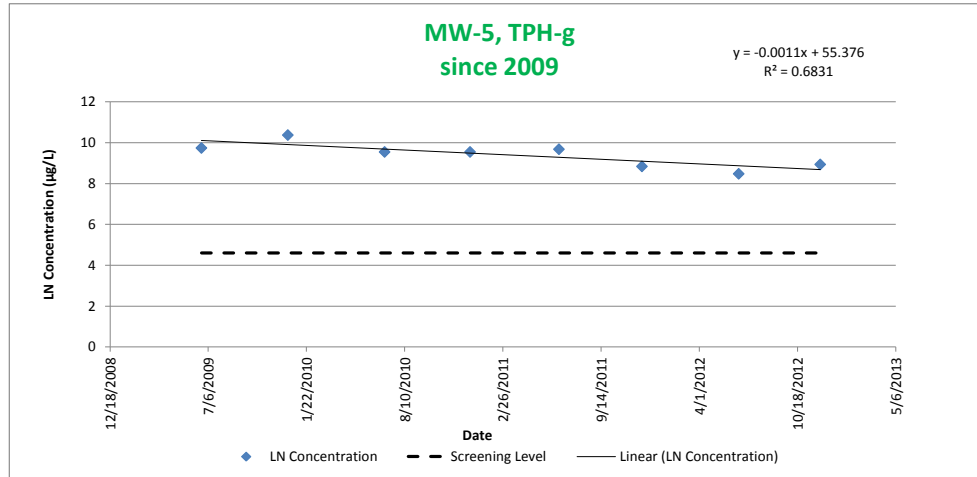
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-5 [Since June 2009]
 TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
6/22/2009	17000	9.74
12/15/2009	32000	10.37
6/30/2010	14000	9.55
12/21/2010	14000	9.55
6/20/2011	16000	9.68
12/6/2011	6900	8.84
6/20/2012	4800	8.48
12/3/2012	7600	8.94



Notes:

ND taken at reporting limit/reported value
 Qualified data converted to reported value

GCMS

Data quality	
Total # of data points used in regression	8
# of nondetects	0
% of data as detects	100

Results		
Coefficient of Determination (R^2) =	0.6831	
p-Value =	1.14E-02	
Attenuation Rate in Groundwater (K) =	0.0011	days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0007	days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	6.12E+02	days

Date Screening Level Reached	
Screening Level	100
LN Screening Level	4.6
Intercept	55.376
Slope	-0.0011
Date to Screening Level	10/15/2022

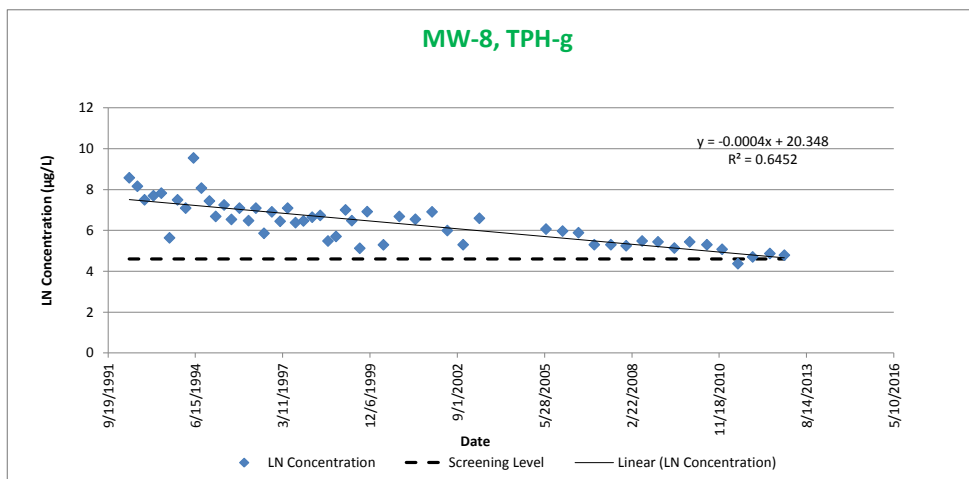
Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-8
 TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
5/19/1992	5300	8.58
8/20/1992	3500	8.16
11/10/1992	1800	7.50
2/20/1993	2200	7.70
5/21/1993	2500	7.82
8/23/1993	280	5.63
11/23/1993	1800	7.50
2/24/1994	1200	7.09
5/25/1994	14000	9.55
8/23/1994	3200	8.07
11/23/1994	1700	7.44
2/3/1995	800	6.68
5/10/1995	1400	7.24
8/2/1995	690	6.54
11/2/1995	1200	7.09
2/14/1996	650	6.48
5/8/1996	1200	7.09
8/9/1996	350	5.86
11/7/1996	1000	6.91
2/10/1997	630	6.45
5/7/1997	1200	7.09
8/5/1997	590	6.38
11/4/1997	640	6.46
2/12/1998	770	6.65
5/15/1998	840	6.73
8/12/1998	240	5.48
11/12/1998	300	5.70
3/1/1999	1100	7.00
5/12/1999	650	6.48
8/11/1999	168	5.12
11/4/1999	1010	6.92
5/8/2000	199	5.29
11/6/2000	797	6.68
5/9/2001	695	6.54
11/16/2001	1000	6.91
5/10/2002	400	5.99
11/7/2002	200	5.30
5/12/2003	730	6.59
6/13/2005	430	6.06
12/20/2005	390	5.97
6/20/2006	360	5.89
12/18/2006	200	5.30
6/26/2007	200	5.30
12/18/2007	190	5.25
6/18/2008	240	5.48
12/17/2008	230	5.44
6/22/2009	170	5.14
12/15/2009	230	5.44
6/30/2010	200	5.30
12/21/2010	160	5.08
6/20/2011	79	4.37
12/6/2011	110	4.70
6/20/2012	130	4.87
12/3/2012	120	4.79



Notes:

ND taken at reporting limit/reported value
 Qualified data converted to reported value
 GCMS

Data quality

Total # of data points used in regression	54
# of nondetects	0
% of data as detects	100

Results

Coefficient of Determination (R^2) =	0.6452
p-Value =	2.71E-13
Attenuation Rate in Groundwater (K) =	0.0004 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0003 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	1.82E+03 days

Date Screening Level Reached

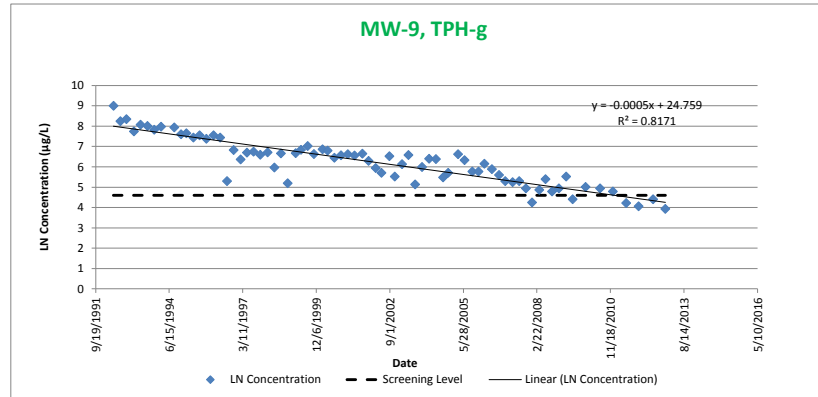
Screening Level	100
LN Screening Level	4.6
Intercept	20.348
Slope	-0.0004
Date to Screening Level	4/27/2013

Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location MW-9
 Constituent TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
5/19/1992	8100	9.00
8/20/1992	3800	8.24
11/10/1992	4200	8.34
2/20/1993	2300	7.74
5/21/1993	3200	8.07
8/23/1993	3000	8.01
11/23/1993	2500	7.82
2/24/1994	2900	7.97
8/23/1994	2800	7.94
11/23/1994	2000	7.60
2/3/1995	2100	7.65
5/10/1995	1700	7.44
8/2/1995	1900	7.55
11/2/1995	1600	7.38
2/8/1996	1900	7.55
5/8/1996	1700	7.44
8/9/1996	200	5.30
11/7/1996	920	6.82
2/10/1997	580	6.36
5/7/1997	810	6.70
8/5/1997	850	6.75
11/4/1997	730	6.59
2/7/1998	820	6.71
5/15/1998	390	5.97
8/12/1998	780	6.66
11/12/1998	180	5.19
3/1/1999	790	6.67
5/12/1999	930	6.84
8/1/1999	1120	7.02
11/4/1999	756	6.63
2/29/2000	955	6.86
5/8/2000	895	6.80
8/8/2000	630	6.45
11/6/2000	712	6.57
2/7/2001	750	6.62
5/9/2001	704	6.56
8/24/2001	770	6.65
11/16/2001	540	6.29
2/21/2002	380	5.94
5/10/2002	300	5.70
8/26/2002	680	6.52
11/7/2002	250	5.52
2/14/2003	460	6.13
5/12/2003	720	6.58
8/1/2003	170	5.14
11/13/2003	400	5.99
2/17/2004	600	6.40
5/20/2004	590	6.38
8/25/2004	240	5.48
11/2/2004	300	5.70
3/17/2005	750	6.62
6/13/2005	560	6.33
9/27/2005	320	5.77
12/20/2005	320	5.77
3/10/2006	470	6.15
6/20/2006	360	5.89
9/25/2006	270	5.60
12/18/2006	200	5.30
3/29/2007	190	5.25
6/26/2007	200	5.30
9/26/2007	140	4.94
12/18/2007	70	4.25
3/25/2008	130	4.87
6/18/2008	220	5.39
9/15/2008	120	4.79
12/17/2008	140	4.94
3/26/2009	250	5.52
6/22/2009	82	4.41
12/15/2009	150	5.01
6/30/2010	140	4.94
12/21/2010	120	4.79
6/20/2011	68	4.22
12/6/2011	58	4.06
6/20/2012	82	4.41
12/3/2012	51	3.93



Notes:
 ND taken at reporting limit/reported value
 Qualified data converted to reported value
 GCMS

Data quality	
Total # of data points used in regression	75
# of nondetects	0
% of data as detects	100

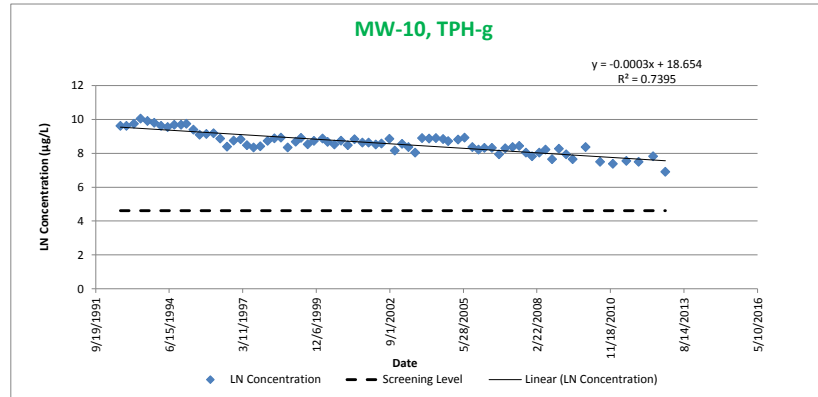
Results	
Coefficient of Determination (R ²) =	0.8171
p-Value =	1.21E-28
Attenuation Rate in Groundwater (K) =	0.0005 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0005 days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	1.39E+03 days

Date Screening Level Reached	
Screening Level	100
LN Screening Level	4.6
Intercept	24.759
Slope	-0.0005
Date to Screening Level	1/8/2011

Abbreviations and Notes
 ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location MW-10
 Constituent TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
8/20/1992	15000	9.62
11/10/1992	15000	9.62
2/20/1993	17000	9.74
5/21/1993	23000	10.04
8/23/1993	20000	9.90
11/23/1993	18000	9.80
2/24/1994	15000	9.62
5/25/1994	14000	9.55
8/23/1994	16000	9.68
11/23/1994	16000	9.68
2/3/1995	17000	9.74
5/10/1995	12000	9.39
8/2/1995	8900	9.09
11/2/1995	9300	9.14
2/8/1996	9700	9.18
5/8/1996	7100	8.87
8/9/1996	4400	8.39
11/7/1996	6300	8.75
2/10/1997	6800	8.82
5/7/1997	4800	8.48
8/5/1997	4200	8.34
11/4/1997	4500	8.41
2/7/1998	6200	8.73
5/15/1998	7200	8.98
8/12/1998	7500	8.92
11/12/1998	4200	8.34
3/1/1999	5900	8.68
5/12/1999	7400	8.91
8/1/1999	5060	8.53
11/4/1999	6190	8.73
2/29/2000	7120	8.87
5/8/2000	5830	8.67
8/8/2000	5010	8.52
11/6/2000	6260	8.74
2/7/2001	4800	8.48
5/9/2001	6810	8.83
8/24/2001	5600	8.63
11/16/2001	5600	8.63
2/21/2002	5000	8.52
5/10/2002	5300	8.58
8/26/2002	7000	8.85
11/7/2002	3500	8.16
2/14/2003	5200	8.56
5/12/2003	4300	8.37
8/1/2003	3100	8.04
11/13/2003	7300	8.90
2/17/2004	7100	8.87
5/20/2004	7300	8.90
8/25/2004	6900	8.84
11/2/2004	6100	8.72
3/17/2005	6700	8.81
6/13/2005	7500	8.92
9/27/2005	4300	8.37
12/20/2005	3700	8.22
3/10/2006	4100	8.32
6/20/2006	4100	8.32
9/25/2006	2800	7.94
12/18/2006	4000	8.29
3/29/2007	4300	8.37
6/26/2007	4600	8.43
9/26/2007	3100	8.04
12/18/2007	2500	7.82
3/25/2008	3100	8.04
6/18/2008	3700	8.22
9/15/2008	2100	7.65
12/17/2008	3900	8.27
3/26/2009	2800	7.94
6/22/2009	2100	7.65
12/15/2009	4300	8.37
6/30/2010	1800	7.50
12/21/2010	1600	7.38
6/22/2011	1900	7.55
12/6/2011	1800	7.50
6/20/2012	2500	7.82
12/3/2012	1000	6.91



Notes:
 ND taken at reporting limit/reported value
 Qualified data converted to reported value
 GCMS

Data quality	
Total # of data points used in regression	75
# of nondetects	0
% of data as detects	100

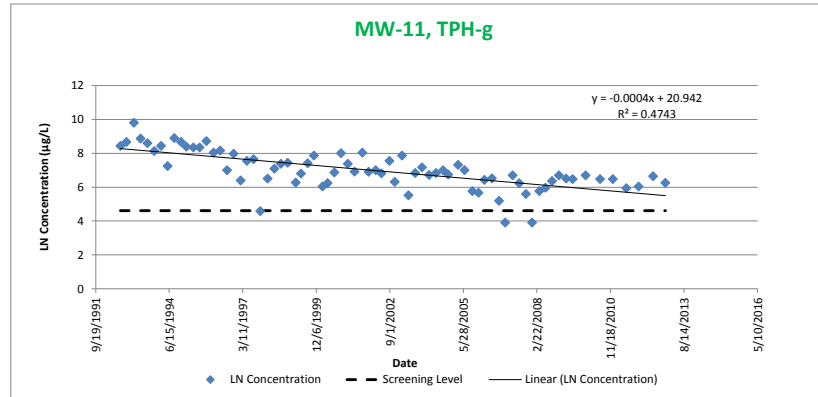
Results	
Coefficient of Determination (R ²) =	0.7395
p-Value =	5.14E-23
Attenuation Rate in Groundwater (K) =	0.0003 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0002 days ⁻¹
Chemical Half Life in Groundwater (t _{1/2}) =	2.57E+03 days

Date Screening Level Reached	
Screening Level	100
LN Screening Level	4.6
Intercept	18.654
Slope	-0.0003
Date to Screening Level	11/14/2042

Abbreviations and Notes
 ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location MW-11
 Constituent TPH-g

Sample Date	Concentration (ug/L)	LN Concentration
8/20/1992	4600	8.43
11/10/1992	5800	8.67
2/20/1993	18000	9.80
5/21/1993	7100	8.87
8/23/1993	5400	8.59
11/23/1993	3400	8.13
2/24/1994	4600	8.43
5/25/1994	1400	7.24
8/23/1994	7300	8.90
11/23/1994	5800	8.67
2/3/1995	4400	8.39
5/10/1995	4200	8.34
8/2/1995	4200	8.34
11/2/1995	6100	8.72
2/8/1996	3100	8.04
5/8/1996	3500	8.16
8/9/1996	1100	7.00
11/7/1996	2900	7.97
2/10/1997	600	6.40
5/7/1997	1900	7.55
8/5/1997	2100	7.65
11/4/1997	98	4.58
2/7/1998	670	6.51
5/15/1998	1200	7.09
8/12/1998	1600	7.38
11/12/1998	1700	7.44
3/1/1999	530	6.27
5/12/1999	900	6.80
8/1/1999	1660	7.41
11/4/1999	2600	7.86
2/29/2000	420	6.04
5/8/2000	513	6.24
8/8/2000	960	6.87
11/6/2000	3000	8.01
2/7/2001	1600	7.38
5/9/2001	1010	6.92
8/24/2001	3100	8.04
11/16/2001	1000	6.91
2/21/2002	1100	7.00
5/10/2002	910	6.81
8/26/2002	1900	7.55
11/7/2002	550	6.31
2/14/2003	2600	7.86
5/12/2003	250	5.52
8/1/2003	930	6.84
11/13/2003	1300	7.17
2/17/2004	830	6.72
5/20/2004	930	6.84
8/25/2004	1100	7.00
11/2/2004	850	6.75
3/17/2005	1500	7.31
6/13/2005	1100	7.00
9/27/2005	320	5.77
12/20/2005	290	5.67
3/10/2006	620	6.43
6/20/2006	680	6.52
9/25/2006	180	5.19
12/18/2006	50	3.91
3/29/2007	810	6.70
6/26/2007	510	6.23
9/26/2007	270	5.60
12/18/2007	50	3.91
3/25/2008	320	5.77
6/18/2008	390	5.97
9/15/2008	580	6.36
12/17/2008	810	6.70
3/26/2009	670	6.51
6/22/2009	650	6.48
12/15/2009	810	6.70
6/30/2010	650	6.48
12/21/2010	650	6.48
6/22/2011	380	5.84
12/6/2011	420	6.04
6/20/2012	770	6.65
12/3/2012	520	6.25



Notes:
 ND taken at reporting limit/reported value
 Qualified data converted to reported value
 GCMS

Data quality	
Total # of data points used in regression	75
# of nondetects	3
% of data as detects	96

Results	
Coefficient of Determination (R^2) =	0.4743
p-Value =	8.55E-12
Attenuation Rate in Groundwater (K) =	0.0004 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0003 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	1.85E+03 days

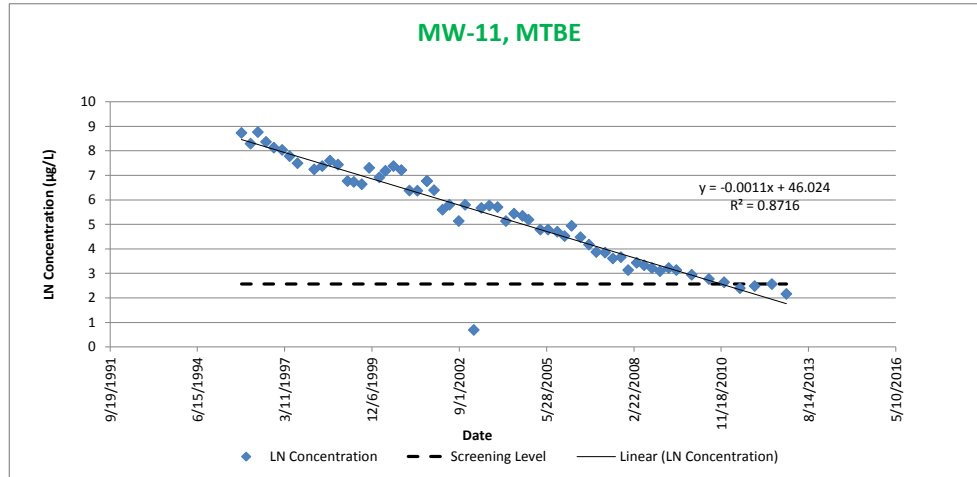
Date Screening Level Reached	
Screening Level	100
LN Screening Level	4.6
Intercept	20.942
Slope	-0.0004
Date to Screening Level	7/6/2019

Abbreviations and Notes
 ug/l = micrograms per liter
 LN = Natural Logarithm

Sample Information
 Sample Location
 Constituent

MW-11
 MTBE

Sample Date	Concentration (ug/L)	LN Concentration
11/2/1995	6200	8.73
2/14/1996	4000	8.29
5/8/1996	6400	8.76
8/9/1996	4300	8.37
11/7/1996	3400	8.13
2/10/1997	3100	8.04
5/7/1997	2400	7.78
8/5/1997	1800	7.50
2/12/1998	1400	7.24
5/15/1998	1600	7.38
8/12/1998	2000	7.60
11/12/1998	1700	7.44
3/1/1999	870	6.77
5/12/1999	840	6.73
8/11/1999	764	6.64
11/4/1999	1490	7.31
2/29/2000	1010	6.92
5/8/2000	1320	7.19
8/8/2000	1600	7.38
11/6/2000	1360	7.22
2/7/2001	590	6.38
5/9/2001	586	6.37
8/24/2001	870	6.77
8/29/2001	870	6.77
11/16/2001	600	6.40
2/21/2002	270	5.60
5/10/2002	330	5.80
8/26/2002	170	5.14
11/7/2002	330	5.80
2/14/2003	2.0	0.69
5/12/2003	290	5.67
8/11/2003	320	5.77
11/13/2003	300	5.70
2/17/2004	170	5.14
5/20/2004	230	5.44
8/25/2004	210	5.35
11/2/2004	180	5.19
3/17/2005	120	4.79
6/13/2005	120	4.79
9/27/2005	110	4.70
12/20/2005	92	4.52
3/10/2006	140	4.94
6/20/2006	88	4.48
9/25/2006	65	4.17
12/18/2006	48	3.87
3/29/2007	47	3.85
6/26/2007	37	3.61
9/26/2007	39	3.66
12/18/2007	23	3.14
3/25/2008	31	3.43
6/18/2008	28	3.33
9/15/2008	25	3.22
12/17/2008	22	3.09
3/26/2009	25	3.22
6/22/2009	23	3.14
12/15/2009	19	2.94
6/30/2010	16	2.77
12/21/2010	14	2.64
6/20/2011	11	2.40
12/6/2011	12	2.48
6/20/2012	13	2.56
12/3/2012	8.7	2.16



Notes:

- ND taken at reporting limit/reported value
- Qualified data converted to reported value

Data quality	
Total # of data points used in regression	62
# of nondetects	1
% of data as detects	98

Results

Coefficient of Determination (R^2) =	0.8716
p-Value =	1.98E-28
Attenuation Rate in Groundwater (K) =	0.0011 days ⁻¹
Attenuation Rate in Groundwater at 90% confidence (K) =	0.0010 days ⁻¹
Chemical Half Life in Groundwater ($t_{1/2}$) =	6.46E+02 days

Date Screening Level Reached

Screening Level	13
LN Screening Level	2.6
Intercept	46.024
Slope	-0.0011
Date to Screening Level	11/16/2010

Abbreviations and Notes

ug/l = micrograms per liter
 LN = Natural Logarithm