CONESTOGA-ROVERS & ASSOCIATES

10969 Trade Center Drive, Suite 107
Rancho Cordova, California 95670
Telephone: (916) 889-8900 Fax: (916) 889-8999
www.CRAworld.com

# TRANSMITTAL

**DATE:** June 7, 2012

**REFERENCE NO.:** RO0482, 060715

**PROJECT NAME:** 351788, Dublin, CA

**TO:** Mr. Peresh Khatri
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

**RECEIVED**
*11:46 am, Jun 12, 2012*
Alameda County
Environmental Health

**Please find enclosed:**
- ☐ Draft
- ☐ Originals
- ☐ Prints
- ☐ Final
- ☒ Other electronic copy

**Sent via:**
- ☐ Mail
- ☐ Overnight Courier
- ☐ Same Day Courier
- ☒ Other upload to FTP site

| QUANTITY | DESCRIPTION |
|---|---|
| 1 | Closure Request for 7850 Amador Valley Boulevard, Dublin, CA |
| | |
| | |
| | |

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐
- ☐

**COMMENTS:**
If you have any questions or comments please contact Ms. Katherine Brandt of Arcadis at (510) 596-9675.

Copy to: Ms. Roya Kambin (electronic copy), GAWFCO Enterprises Inc.

Completed by: Laura Heberle [Please Print] Signed: Laura Heberle

**Filing:** **Correspondence File**

**Roya C. Kambin**
Project Manager
Marketing Business Unit

**Chevron Environmental Management Company**
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6270
RKLG@chevron.com

June 7, 2012

Alameda County Health Care Services Agency
Environmental Health Department
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: UNOCAL Station #7176
Union Oil Site 351788
7850 Amador Valley Boulevard
Dublin, California

I have reviewed the attached *Case Closure Request* dated June 7, 2012.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga-Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

Roya Kambin
Union Oil of California – Project Manager

Attachment: Case Closure Request

# CASE CLOSURE REQUEST

## Unocal Station #7176 (Union Oil Site 351788)
## 7850 Amador Valley Boulevard
## Dublin, California
## ACEH Case # RO0482

**Prepared For:**

**Mr. Peresh Khatri**
**Alameda County Health Care Services Agency**
**Environmental Health Department**
**1131 Harbor Bay Parkway, Suite 250**
**Alameda, CA 94502-6577**


**Prepared by:**
**Conestoga-Rovers & Associates**

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**JUNE 7, 2012**
**REF. NO. 060715 (2)**
This report is printed on recycled paper

# CASE CLOSURE REQUEST

**Unocal Station #7176 (Union Oil Site 351788)**
**7850 Amador Valley Boulevard**
**Dublin, California**
**ACEH Case # RO0482**

**Laura Heberle**


**David W. Herzog, PG 7211**

**Prepared by:**
**Conestoga-Rovers & Associates**

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**JUNE 7, 2012**
**REF. NO. 060715 (2)**
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TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)



LIST OF APPENDICES

## 1.0 INTRODUCTION

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereinafter "EMC"), Conestoga-Rovers & Associates (CRA) is submitting this *Case Closure Request* for Union Oil Company Facility ID 351788 (Unocal Station #7176) located at 7850 Amador Valley Boulevard in Dublin, California (Figure 1). Based on CRA's review of the site background and conditions, this site meets the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) definition of a low-risk fuel site described in its memorandum "Interim Guidance on Required Clean-up at Low-Risk Fuel Sites" dated January 5, 1996. The site background, site conditions, and justification for site closure based on the low-risk fuel site criteria are presented below.

## 2.0 SITE DESCRIPTION

### 2.1 SITE BACKGROUND

The site is an active 76 Products service station located on the southwest corner of Amador Valley Boulevard and Regional Street in Dublin, California. The site was initially a Gulf Service Station, and later operated by Fill-em-Fast Service Station. Unocal Corporation (Unocal) purchased the property in 1985. Land use in the vicinity of the site is commercial with the Dublin Place, Dublin Plaza, and Shamrock Village Shopping Centers surrounding the site. A Valero Service Station (RO# 0002424-CLOSED) is located across Regional Street to the northeast. Current site facilities consist of a station building, two dispenser islands, two 12,000-gallon gasoline underground storage tanks (USTs), and one 12,000-gallon diesel UST. A site plan illustrating site layout and sample locations is presented as Figure 2.

### 2.2 ENVIRONMENTAL HISTORY

In November 1994, Unocal replaced the fuel USTs, removed the used oil UST and associated product piping, and removed the oil/water separator. No holes or signs of leakage were observed in the fuel USTs; however, eight holes up to one-half-inch in diameter were observed in the used-oil UST. Elevated hydrocarbon concentrations were detected in soil samples from the UST pit and product piping trenches; the hydrocarbon-bearing soil was removed to the extent practicable by over-excavation.

To date, 11 soil borings and 5 monitoring wells have been installed. Regular groundwater monitoring and sampling has been ongoing since 1995.

In August 2000, Environmental Resolutions Inc. (ERI) performed a receptor survey and Tier II Risk-Based Corrective Action (RBCA) analysis. Results of the receptor survey identified three groundwater production wells and one surface water body within 2,000-feet of the site. The groundwater production wells were located approximately 750 and 950 feet south-southwest (crossgradient) of the site, and 1,250 feet northwest (upgradient) of the site. The wells could not be located in the field and are presumed to be inactive or destroyed. The surface water body is a creek/drainage ditch located approximately 800 feet north (upgradient) of the site. Results of the RBCA analysis determined the residual hydrocarbons at the site do not pose a significant risk to human health or the environment.

A summary of environmental investigation and remediation activities is presented in Appendix A.

## 2.3 REGIONAL SITE GEOLOGY

The site is located in the north-central portion of the Livermore Valley, within the Coast Range Geomorphic Province, at the base of the eastern slope of the East Bay Hills. The Livermore Valley slopes gently to the west and is underlain by non-water-bearing rocks, and water-bearing rock and sediments. The non-water-bearing rocks are of marine origin and consist of sandstone, shale, and conglomerate of Eocene and Miocene age. These rocks are exposed at higher elevations surrounding Livermore Valley and are found at depths greater than 1,000 feet beneath the valley floor.

The Plio-Pleistocene age Livermore Formation overlaps the Tassajara Formation beneath the northern portion of the valley and is exposed over a broad region south of the valley. Sediments of this formation consist primarily of clayey gravel in a sandy clay matrix. Sedimentary units south of the valley dip gently north, are nearly level beneath the valley floor, and dip gently south beneath the north edge of the valley. The depth to the top of the Livermore Formation beneath the valley ranges from a few feet to greater than 40 feet.

Soils encountered beneath the site in the unsaturated zone consist of silty clay, clayey and sandy silt, and silty sand. Contacts between lithologies appear to be gradational. Horizontal and vertical distribution appears to be heterogeneous beneath the subject

property. The shallow water-bearing zone appears to primarily consist of silty clay with a thin layer of gravel with silt and sand.

Geologic cross-sections shown on Figure 3 are presented as Figures 4 and 5. Boring logs are included in Appendix B.

## 2.4 REGIONAL SITE HYDROGEOLOGY

Groundwater beneath the site is located within the Dublin sub-basin of the Livermore Valley groundwater basin. The water-bearing units comprising the basin include valley fill materials, the Tassajara Formation, and the Livermore Formation. The basin is characterized by hydrogeologic discontinuities, and is segregated into sub-basins on the basis of localized faults. The Livermore Valley groundwater system is a multi-layered system with an unconfined aquifer overlying sequential partially-confined aquifers. Groundwater in the basin generally flows to the west.[1]

Groundwater encountered beneath the site appears to be semi-confined by the predominant clayey soil within isolated silt and silty sand bodies as shown on Figures 4 and 5. Historical depth to groundwater ranges from approximately 11 to 20 feet below grade (fbg) and consistently flows to the southeast.

# 3.0 SENSITIVE RECEPTOR SURVEY

In addition to the receptor survey conducted by ERI in 2000, Delta Environmental Consultants (Delta) conducted a sensitive receptor survey to identify water supply wells within a 1-mile radius of the site and sensitive receptors within 1,000 feet from the site. The Department of Water Resources files identified 28 water supply wells within a 1-mile radius of the site. The nearest downgradient well is a cathodic protection well located approximately 0.8 miles southeast of the site. The nearest water supply well is a domestic well located approximately 0.4 miles southwest (crossgradient) of the site. No surface water bodies, schools, daycare centers, hospitals, or churches utilized as a potential school or daycare facility were identified within the survey area. A copy of Delta's July 24, 2007 *Sensitive Receptor Survey* report is presented in Appendix C.

[1] Department of Water Resources, 2003, Bulletin 118-2-10.

## 4.0 PETROLEUM HYDROCARBON DISTRIBUTION

The primary constituents of concern (COCs) are total petroleum hydrocarbons as diesel (TPHd) and total petroleum hydrocarbons as gasoline (TPHg). Benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl tertiary butyl ether (MTBE) are no longer COCs as concentrations in groundwater have declined below applicable water quality objectives as presented below in Section 4.2. Historical soil and groundwater data are presented in Appendix D.

### 4.1 SOIL

The highest residual hydrocarbon concentrations remaining in soil following over-excavation activities were detected on November 30, 1994 in sample UT-7 collected at 19.5 fbg from the base of the excavation beneath the southeastern dispenser island. The hydrocarbon concentrations detected included:

- 50 milligrams per kilogram (mg/kg) TPHd
- 1,300 mg/kg TPHg
- 31 mg/kg toluene
- 26 mg/kg ethylbenzene
- 150 mg/kg xylenes

The highest benzene concentration of 0.21 mg/kg in soil was detected on July 7, 1995 in soil boring B-6 at 19.5 fbg. No MTBE has been detected in soil.

Remaining residual hydrocarbons in soil were detected beneath the fuel USTs and product piping between 8 and 20 fbg; the horizontal extent is defined in all directions. Figures 4 and 5 depict the vertical extent of hydrocarbons in soil, which appear defined; Figures 6 and 7 present the horizontal extent of maximum TPHg and benzene concentrations detected in soil.

### 4.2 GROUNDWATER

Groundwater beneath the site has been monitored since 1995. Dissolved concentrations are minimal, and with the exception of TPHd and TPHg, are below applicable

Environmental Screening Level (ESLs).[2] Dissolved TPHd and TPHg are currently only detected in onsite wells U-1 and U-2, located adjacent to existing fuel USTs. The extent of dissolved hydrocarbons is defined downgradient by MW-5 and crossgradient by MW-4 and U-3. The extent of hydrocarbons in groundwater has been delineated upgradient by grab-groundwater samples collected from borings B-2 and SB-4. The current extent of dissolved hydrocarbons based on samples collected from wells on February 10, 2012 is shown on Figures 8 through 11.

**TABLE A: DISSOLVED HYDROCARBON CONCENTRATIONS (February 10, 2012)**

| *GW Depth* | *TPHd* | *TPHg* | *Benzene* | *MTBE* |
|---|---|---|---|---|
| *Concentrations in micrograms per liter (µg/L)* | | | | |
| ***ESL Table E-1: Potential Vapor Intrusion Concerns (Residential)*** | ***(Use Soil Gas)*** | ***(Use Soil Gas)*** | ***540*** | ***24,000*** |
| ***ESL Table F-1a Drinking Groundwater ESLs*** | ***100*** | ***100*** | ***1*** | ***5*** |
| MW-4 | Well Inaccessible | | | |
| MW-5 | <40 | <50 | <0.50 | <0.50 |
| U-1 | **650** | **2,100** | <0.50 | <0.50 |
| U-2 | **270** | **1,100** | <0.50 | <0.50 |
| U-3 | <40 | <50 | <0.50 | <0.50 |

## 4.3 SOIL VAPOR

No vapor assessment has been completed at the site; however, since no BTEX or MTBE are currently detected in groundwater, and the site is and will likely remain an active service station for the foreseeable future, there does not appear to be a potential vapor intrusion risk.

[2] *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* prepared by the California Regional Water Quality Control Board San Francisco Bay Region, Interim final dated November 2007 (Updated May 2008).

## 5.0 HYDROCARBON TRENDS

TPHd and TPHg concentrations have decreased by one to two orders of magnitude since their peak, and benzene and MTBE concentrations have declined and are no longer detected in groundwater. The declining concentrations indicate that the plume is shrinking and no longer poses a threat of migration.

CRA analyzed concentration trends to determine when TPHd and TPHg in wells U-1 and U-2 will reach ESLs using the following first order exponential decay rate calculation: [3]

$$y = be^{(ax)}$$

Where:

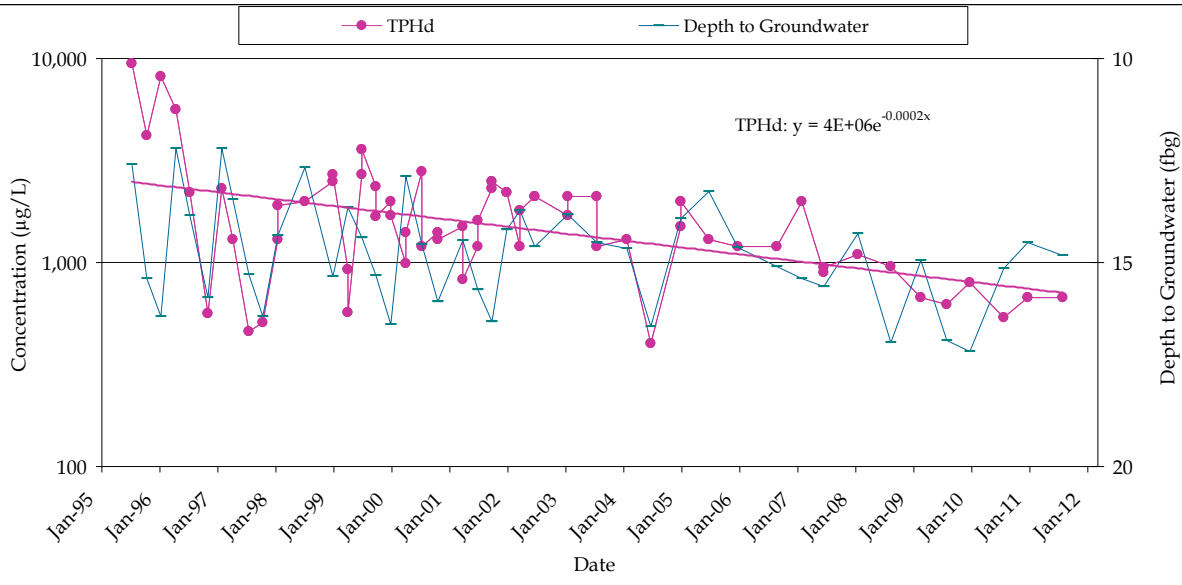
- a is a decay constant
- b is a concentration at time (x)
- y is concentration (ESL)
- x is time

A summary of maximum and current concentrations for all active site wells and projections to meet the ESLs are presented below in Table B. Trend graphs and degradation calculations are presented in Appendix E. The trend analysis graphs for U-1 and U-2 are also presented in Figures A through F below.

[3] EPA-Groundwater Issue; Calculation and Use of First-Order Rate Constants for Monitored Natural Attenuation Studies; Charles J. Newell, et al., 2003.

| TABLE B<br>SUMMARY OF DEGRADATION RATE CALCULATIONS | | | | | | |
|---|---|---|---|---|---|---|
| *Well* | *Analyte* | *Maximum Concentration (ug/L)* | *Current Concentration (ug/L)* | *ESL* | *Date to Reach ESL* | *Years to Reach ESL* |
| | | | | | | |
| U-1 | TPHd | 9,400 | 670 | 100 | Nov 2036 | 25 |
| | TPHg | 39,000 | 1,400 | 100 | Apr 2037 | 25 |
| | Benzene | 1,500 | < 0.5 | 1 | Below ESL | |
| | MTBE | 790 | < 0.5 | 5 | Below ESL | |
| | | | | | | |
| U-2 | TPHd | 8,600 | 410 | 100 | Apr 2022 | 10 |
| | TPHg | 24,000 | 460 | 100 | Jul 2032 | 21 |
| | Benzene | 430 | < 0.5 | 1 | Below ESL | |
| | MTBE | 340 | < 0.5 | 5 | Below ESL | |
| Notes:<br>ESL Environmental Screening Level for drinking water resources, Table F-1a | | | | | | |

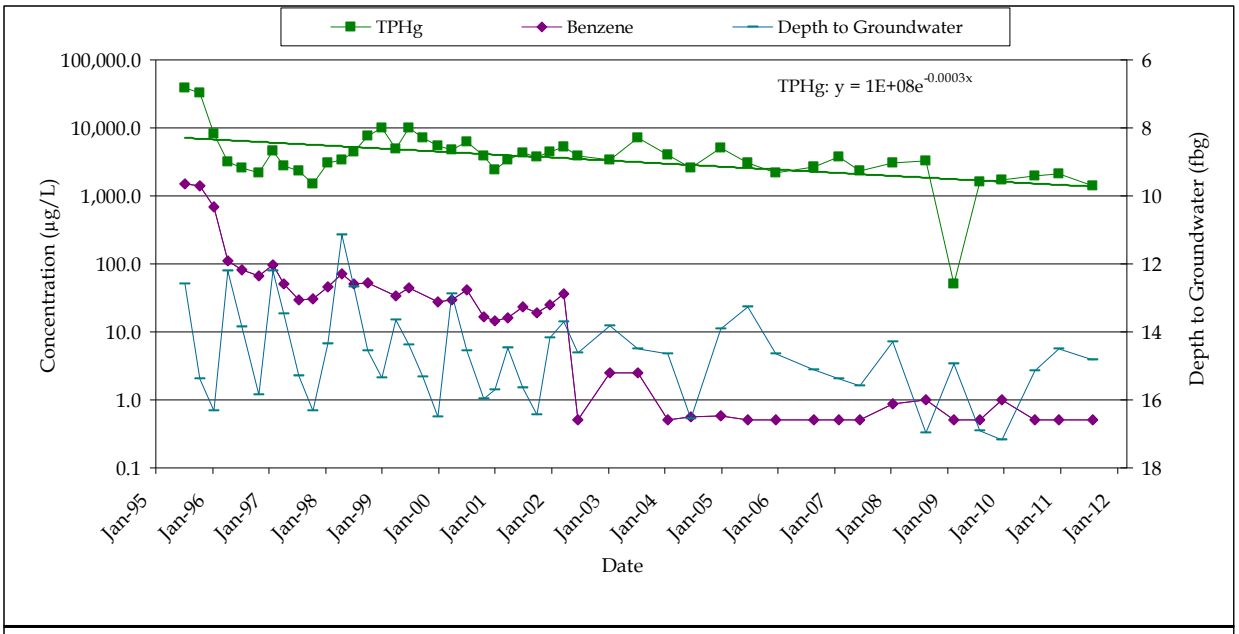
TPHd and TPHg concentrations are predicted to meet ESLs within 25 years, which is a reasonable period of time given the shrinking plume, and current and likely future site use.




UNOCAL STATION #7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN. CALIFORNIA

CONESTOGA-ROVERS & ASSOCIATES

FIGURE A. U-1: TPHd CONCENTRATIONS AND DEPTH TO GROUNDWATER

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DUBLIN. CALIFORNIA

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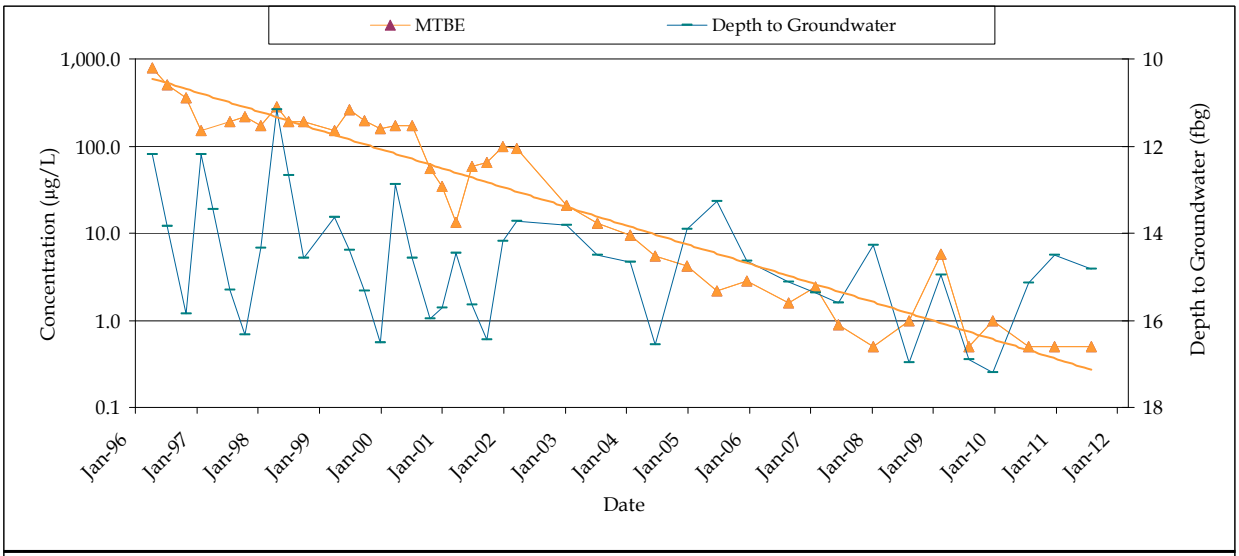
FIGURE B. U-1: TPHg AND BENZENE CONCENTRATIONS AND DEPTH TO GROUNDWATER

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DUBLIN. CALIFORNIA

FIGURE C. U-1: MTBE CONCENTRATIONS AND DEPTH TO GROUNDWATER

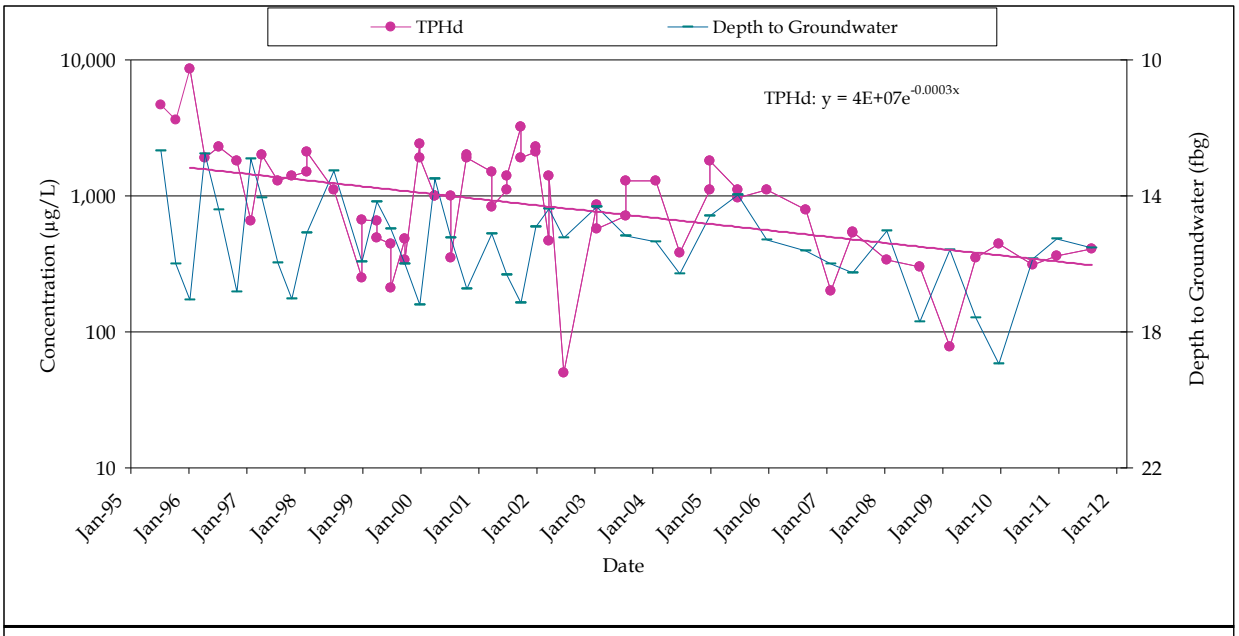


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FIGURE D. U-2: TPHd CONCENTRATIONS AND DEPTH TO GROUNDWATER

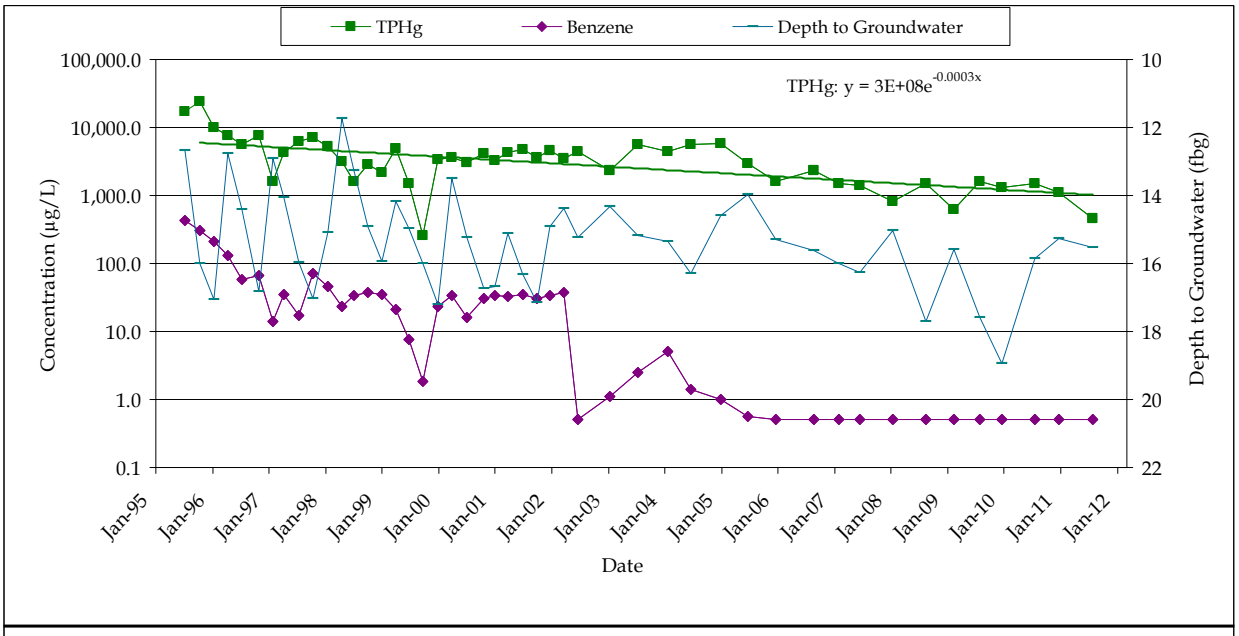


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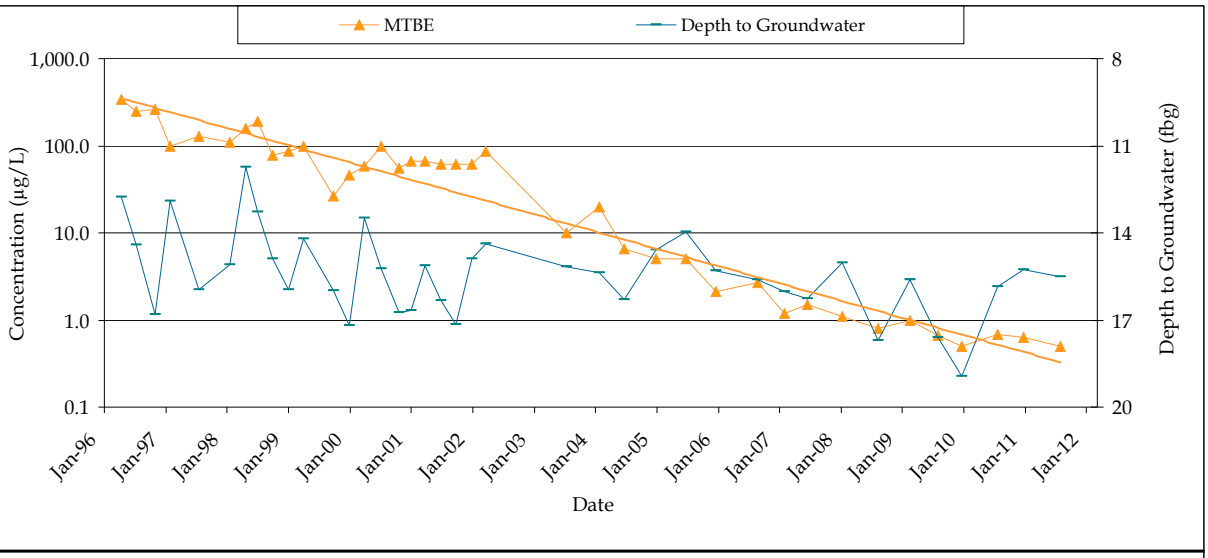
FIGURE E. U-2: TPHg AND BENZENE CONCENTRATIONS AND DEPTH TO GROUNDWATER




UNOCAL STATION #7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN. CALIFORNIA

FIGURE F. U-2: MTBE CONCENTRATIONS AND DEPTH TO GROUNDWATER

## 6.0 REMEDIAL ACTIONS

In November 1994, the fuel USTs, related product lines, and dispensers were replaced, and the used-oil UST and oil/water separator were removed. Approximately 1,860 cubic yards of petroleum hydrocarbon-bearing soil was over-excavated and 5,000 gallons of groundwater were removed from the site during UST replacement activities. Due to excavation constraints, minor residual petroleum hydrocarbons remained in soil beneath the former USTs and the southern dispenser island. Although this minor hydrocarbon mass was left in place, the remaining dissolved hydrocarbon plume is shrinking, indicating that the rate of natural degradation exceeds the rate of hydrocarbons leaching to groundwater and any remaining residual mass in soil no longer poses a risk.

Additional remediation included the installation of oxygen releasing compounds (ORC) in site wells during the fourth quarter 1995 sampling event.

## 7.0 LOW-RISK GROUNDWATER CASE CLOSURE CRITERIA

Based on the information presented above, this site meets the RWQCB criteria for a low-risk fuel site. As described in the January 5, 1996 RWQCB memorandum *Interim*

*Guidance on Required Cleanup at Low-Risk Fuel Sites* dated December 8, 1995, a low-risk groundwater case has the following general characteristics:

- The leak was stopped and ongoing sources, including light non-aqueous phase liquid (LNAPL), have been removed or remediated to the maximum extent practicable
- The site has been adequately characterized
- The dissolved petroleum hydrocarbon plume is not migrating
- No municipal or private water wells, deeper drinking water aquifers, surface waters, or other sensitive receptors will be affected by any residual concentrations onsite
- The site presents no significant risk to human health or the environment

Each of the low-risk groundwater case characteristics, as they relate to the site, is discussed below.

## 7.1 THE LEAK HAS STOPPED AND ONGOING SOURCES, INCLUDING LNAPL, HAVE BEEN REMOVED

The leak has stopped, there are no ongoing sources, and no LNAPL has ever been detected at the site. In 1994, Gettler-Ryan removed five USTs, an oil/water separator, and associated product piping from the site. Hydrocarbon-bearing soil was over-excavated to the extent practicable. Although minor residual petroleum hydrocarbons remained in soil, concentrations in wells U-1 and U-2 located adjacent to the former and current USTs continue to decline and the dissolved hydrocarbon plume is shrinking, indicating that the rate of natural degradation exceeds the rate of hydrocarbons leaching to groundwater and any remaining residual mass in soil no longer poses a risk.

## 7.2 THE SITE HAS BEEN ADEQUATELY CHARACTERIZED

As previously discussed in Sections 4.1 and 4.2, the extent of petroleum hydrocarbons in soil and groundwater has been adequately characterized. Although the risk from hydrocarbons in soil vapor has not been investigated, with no significant residual hydrocarbons in shallow soil following over-excavation, no BTEX currently detected in groundwater, and because the site is and will likely remain an active service station for the foreseeable future, there is little if any vapor intrusion risk at this site. The limited

extent of petroleum hydrocarbons remaining in soil and groundwater is depicted on Figures 4 through 11.

## 7.3 THE DISSOLVED PETROLEUM HYDROCARBON PLUME IS NOT MIGRATING

The remaining dissolved hydrocarbon plume consisting of TPHd and TPHg is limited onsite to the vicinity of the existing USTs as detected in wells U-1 and U-2. The hydrocarbon concentrations in U-1 and U-2 are declining, and are predicted to meet ESLs within 25 years, indicating that the plume is shrinking. In well MW-5, which is located downgradient of the dissolved plume, petroleum hydrocarbons are not detected, indicating that the plume has not migrated significantly downgradient of the site. Based on site data, the dissolved petroleum hydrocarbon plume is not migrating.

## 7.4 NO MUNICIPAL OR PRIVATE WATER WELLS, DEEPER DRINKING WATER AQUIFERS, SURFACE WATER, OR OTHER SENSITIVE RECEPTORS WILL BE AFFECTED BY ANY RESIDUAL CONCENTRATION ONSITE

No municipal or private water supply wells, deeper drinking water aquifers, surface water, or other sensitive receptors will be affected by any residual petroleum hydrocarbons onsite. As discussed previously in Section 3.0, no surface water bodies, schools, daycare centers, hospitals, or churches were identified within a 1-mile radius of the site. Only one supply well (domestic) was identified in the vicinity of the site, located approximately 0.4 miles southwest (crossgradient). Due to the supply well's distance and orientation, petroleum hydrocarbons originating from the site will not impact this receptor.

## 7.5 THE SITE PRESENTS NO SIGNIFICANT RISK TO HUMAN HEALTH OR THE ENVIRONMENT

A Tier II RBCA analysis performed by ERI in 2000 concluded that petroleum hydrocarbons in soil and groundwater at that time presented no significant risk to human health or the environment. Additionally, CRA completed the following Tier I risk evaluation of potential exposure pathways by comparing site data to RWQCB ESLs, which supports the previous findings that the site poses no significant risk to human health or the environment.

### 7.5.1 SOIL

The two primary exposure pathways for residual hydrocarbons in soil are leaching to groundwater and direct exposure.

*Leaching Concerns*
Following over-excavation in 1994, only four confirmation soil samples remained that exceeded soil leaching ESLs (ESL Table G). Although this minor hydrocarbon mass was left in place, the remaining dissolved hydrocarbon plume is shrinking, indicating that the rate of natural degradation exceeds the rate of hydrocarbons leaching to groundwater and any remaining residual mass in soil no longer poses a risk.

*Direct Exposure*
The site is an active service station and auto shop. If the site is ever redeveloped in the future, direct exposure to hydrocarbons in soil by construction and trench workers is possible. No hydrocarbon concentrations detected soil samples collected at the site exceed the ESLs for direct exposure to construction and trench workers (ESL Table K-3); therefore, there is no direct exposure risk.

### 7.5.2 GROUNDWATER

The three primary exposure pathways for dissolved hydrocarbons in groundwater are ingestion, discharge to surface waters, and potential vapor intrusion concerns. Table A above presents the current hydrocarbon concentrations in groundwater and applicable ESLs.

*Ingestion*
The primary exposure pathway for groundwater is ingestion. TPHd and TPHg concentrations exceed the drinking water ESLs (Table F-1a) in wells U-1 and U-2; however, the concentrations are declining at a reasonable rate, the plume is shrinking, and no receptors are at risk. No BTEX or MTBE are currently detected in groundwater.

*Surface Water*
No surface water was identified near the site that would be at risk; therefore, this pathway is not complete.

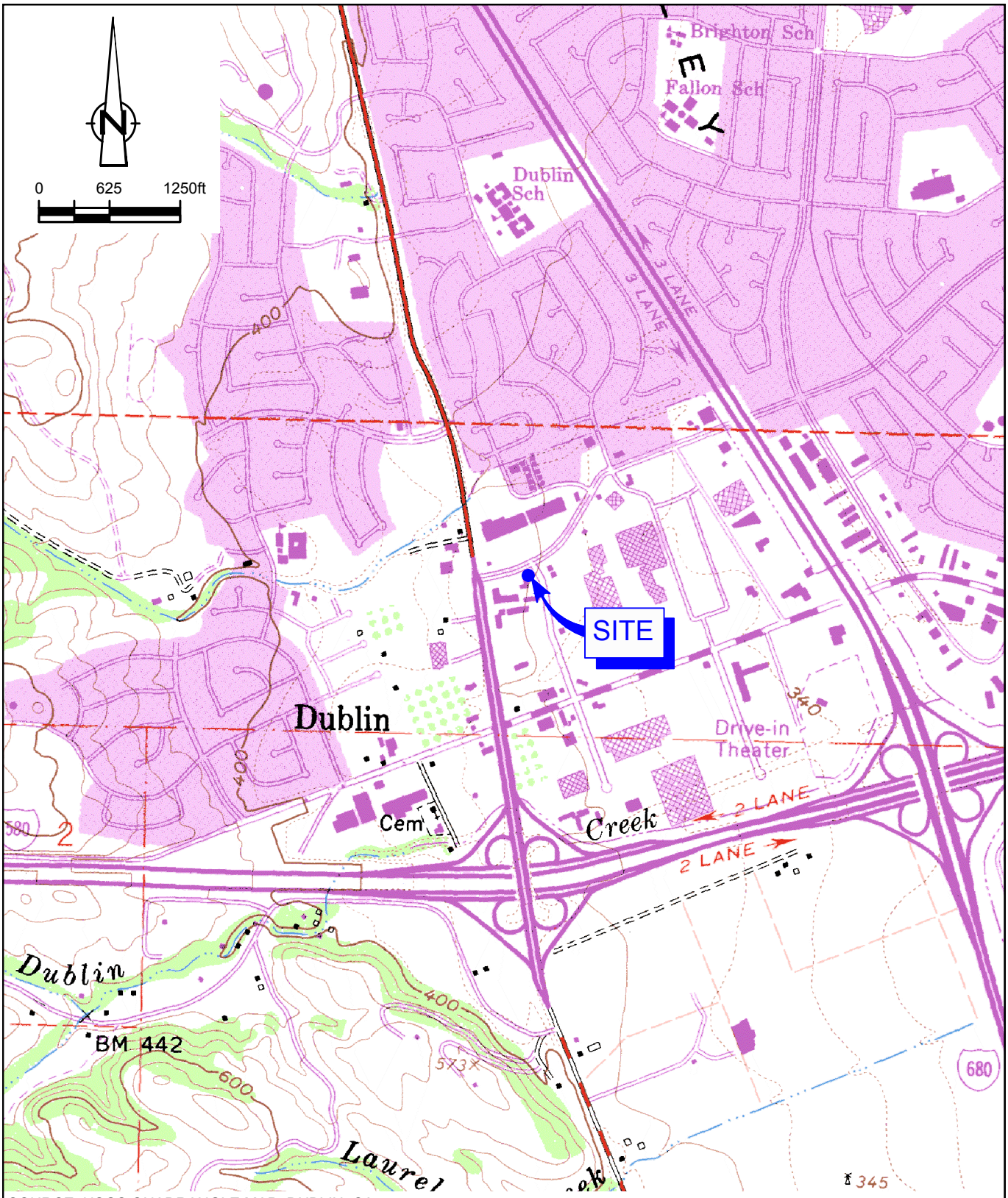
*Vapor Intrusion*

No BTEX or MTBE are detected in groundwater, and the remaining TPHd and TPHg are limited in extent away from any enclosed service station structures, and there is no indoor inhalation risk from subsurface hydrocarbons.

## 8.0 CONCLUSIONS AND RECOMMENDATIONS

Based on CRA's review of site conditions and analytical data, petroleum hydrocarbons in soil and groundwater are limited and defined, and the dissolved plume is shrinking. This site satisfies the January 5, 1996 RWQCB criteria for a low-risk fuel site; therefore, on behalf of EMC, CRA requests no further action and case closure for the site.

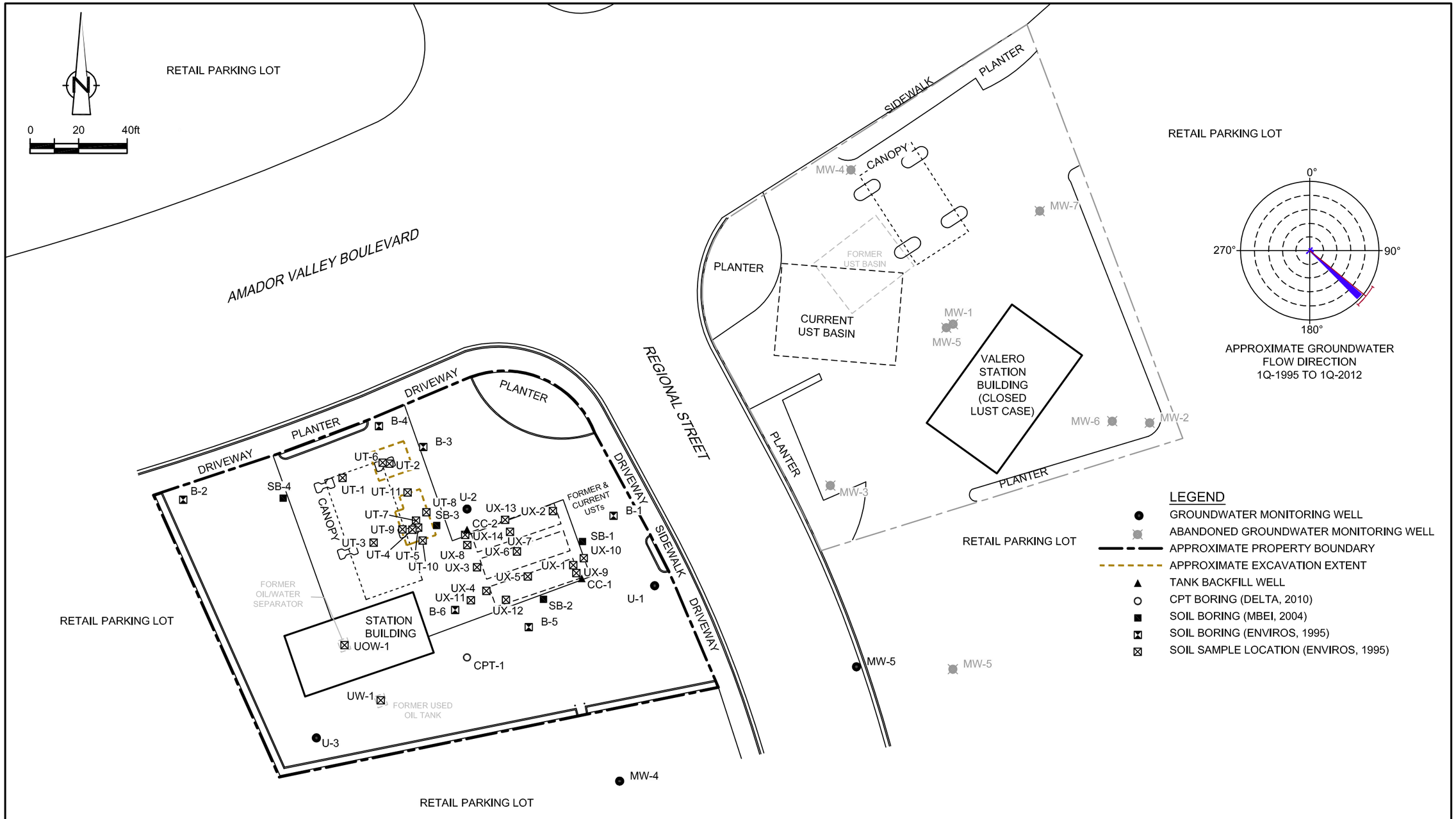
FIGURES




SOURCE: USGS QUADRANGLE MAP: DUBLIN, CA.

Figure 1

VICINITY MAP
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*




SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

Figure 2

SITE PLAN
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*

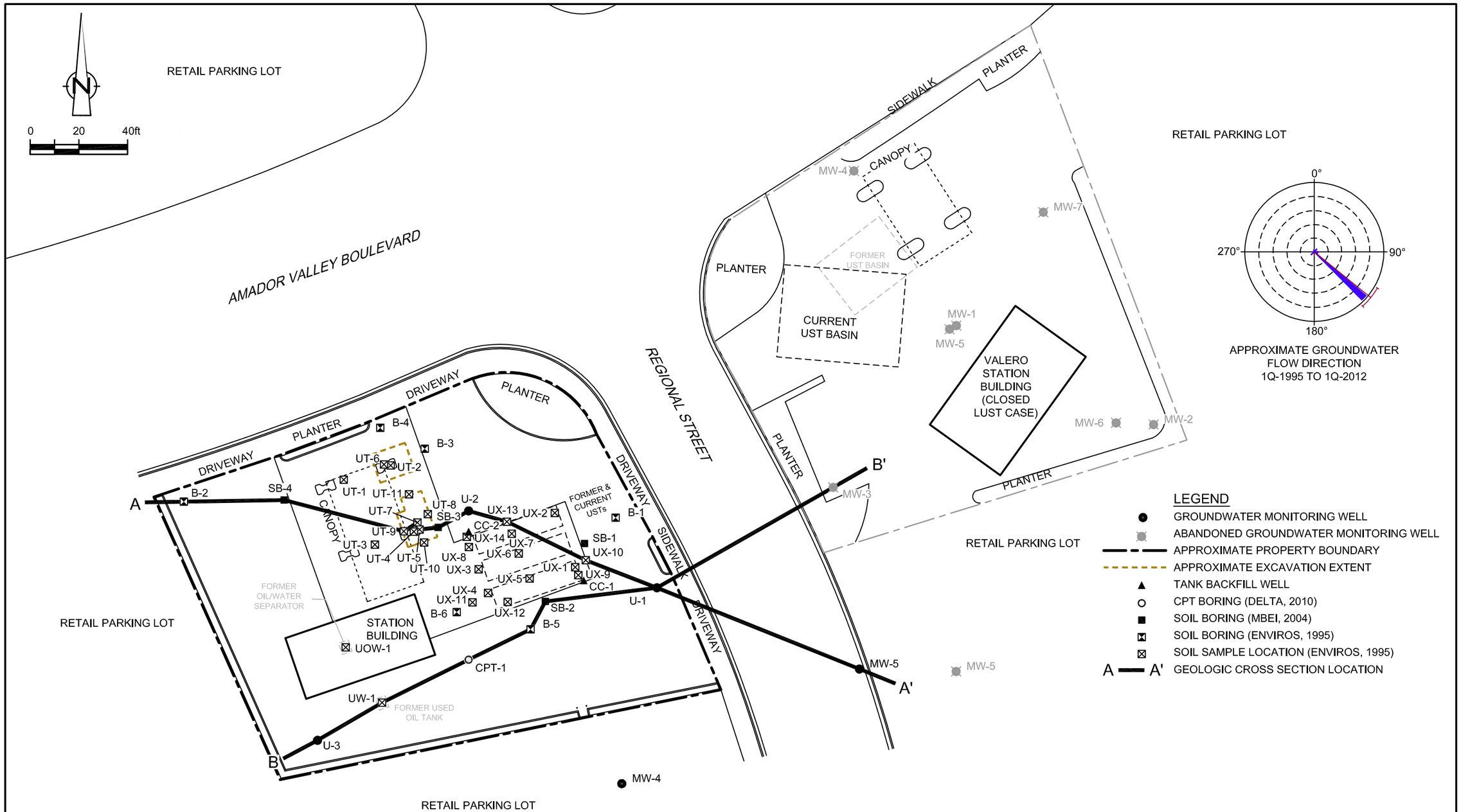
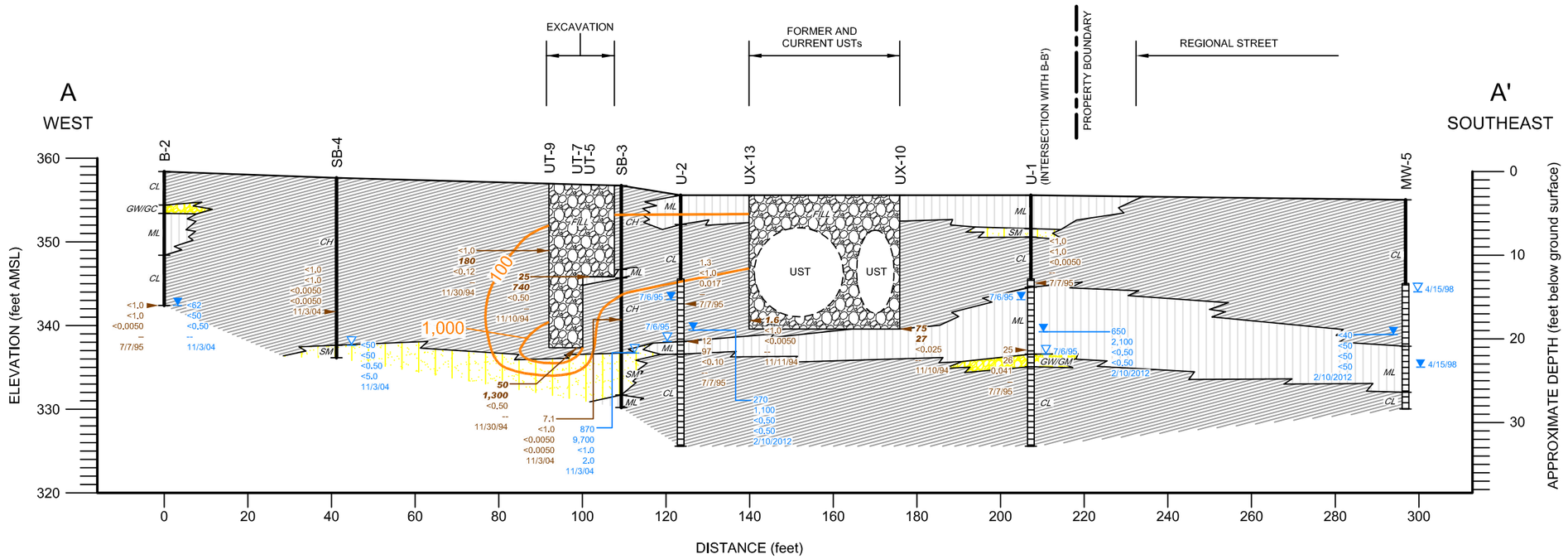



Figure 3

SITE PLAN WITH GEOLOGIC CROSS-SECTIONS
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*

SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

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VERT.
5
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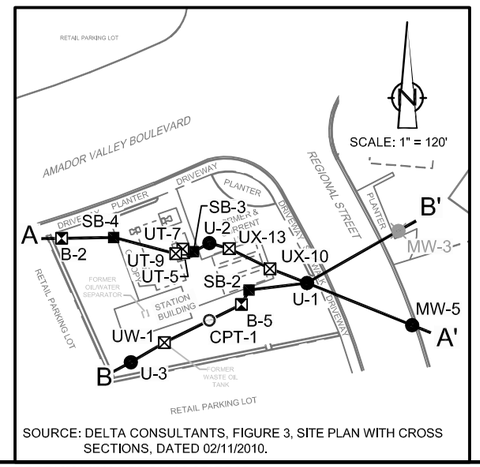
SCALE

0 10 30ft

HORZ.

VERTICAL EXAGGERATION = 2x




SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

## LEGEND

U-2 — WELL DESIGNATION

GROUND SURFACE

OBSERVATION WELL INSTALLATION

STRATIGRAPHIC BOUNDARY

CL — TYPICAL SOIL CLASSIFICATION

SCREENED INTERVAL

BOTTOM OF BORING

APPROXIMATE SOIL SAMPLE LOCATION

TPHd
TPHg
BENZENE
MTBE
DATE

HYDROCARBON CONCENTRATIONS IN SOIL (mg/kg)

APPROXIMATE GROUNDWATER SAMPLE LOCATION

TPHd
TPHg
BENZENE
MTBE
DATE

HYDROCARBON CONCENTRATIONS IN GROUNDWATER (µg/L)

*FILL* - ARTIFICIAL FILL

*CL/CH* - INORGANIC CLAYS OF LOW TO HIGH PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS

*GW/GC* - CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES

*ML* - INORGANIC SILTS, VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY

*SM* - SILTY SANDS, SAND-SILT MIXTURES

*GW/GM* - SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES

DATE ▽ FIRST ENCOUNTERED GROUNDWATER DEPTH

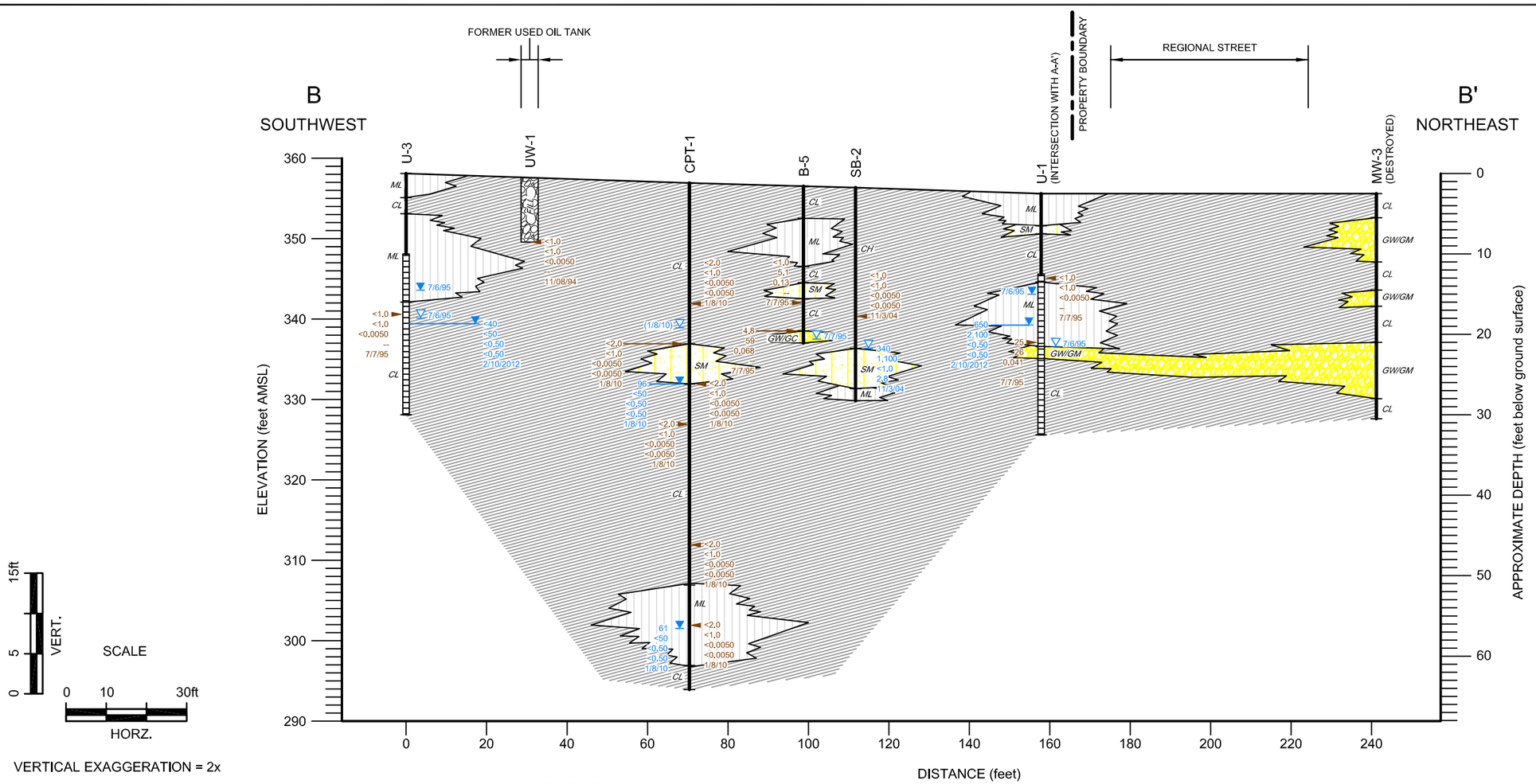
DATE ▼ STATIC GROUNDWATER DEPTH

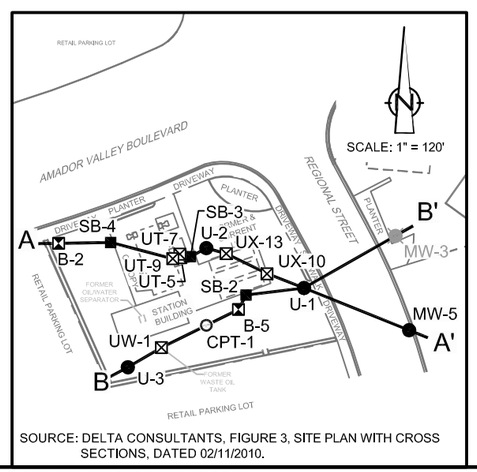
-- NOT ANALYZED

—100— TPHg ISOCONCENTRATION IN SOIL (mg/kg) DASHED WHERE INFERRED

Figure 4

# GEOLOGIC CROSS-SECTION A-A'
# UNOCAL STATION #7176 (UNION OIL SITE 351788)
# 7850 AMADOR VALLEY BOULEVARD
*Dublin, California*




SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

## LEGEND

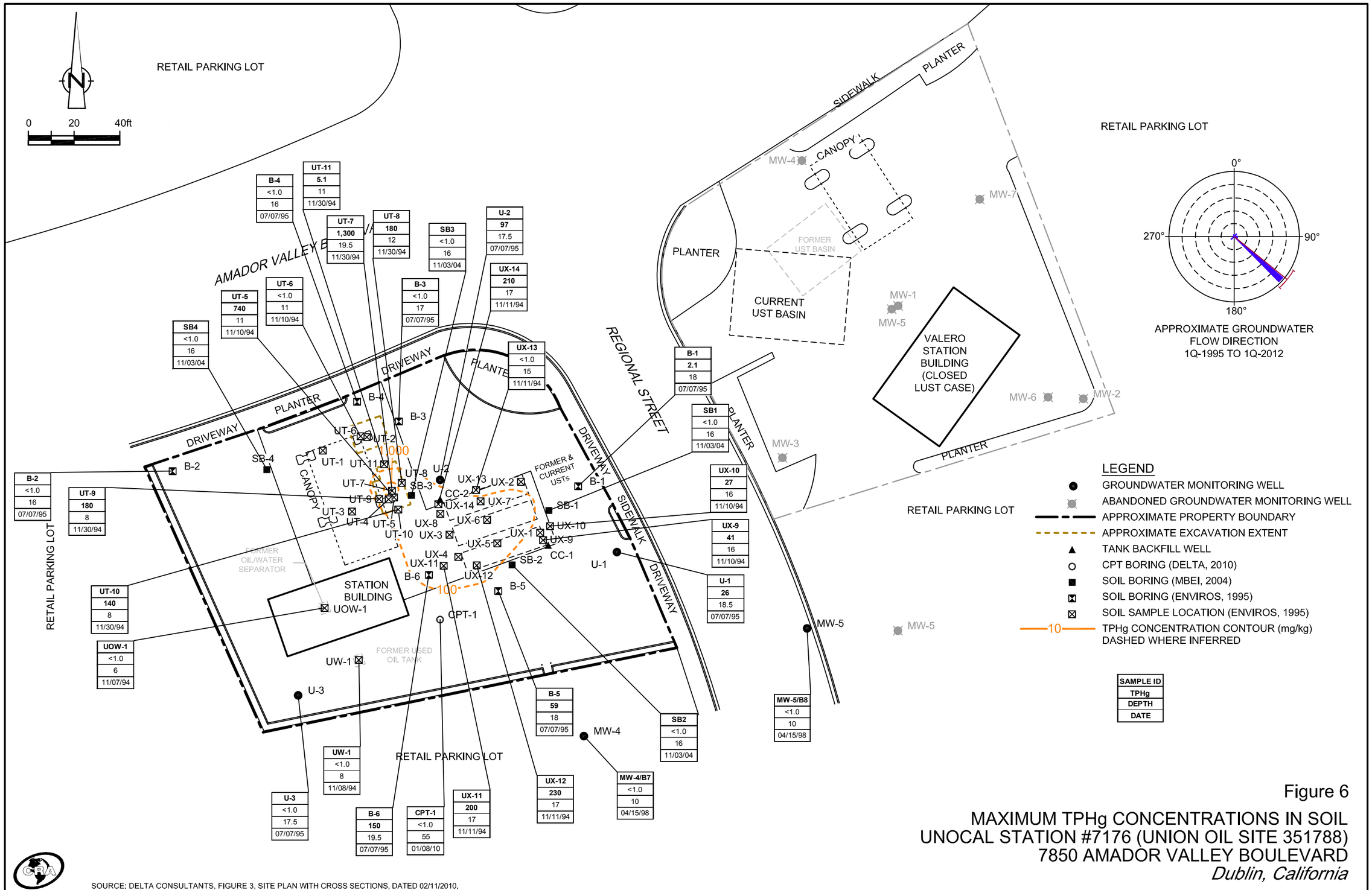
- U-1 — WELL DESIGNATION
- GROUND SURFACE
- OBSERVATION WELL INSTALLATION
- STRATIGRAPHIC BOUNDARY
- CL — TYPICAL SOIL CLASSIFICATION
- SCREENED INTERVAL
- BOTTOM OF BORING
- APPROXIMATE SOIL SAMPLE LOCATION
  - TPHd
  - TPHg
  - BENZENE
  - MTBE
  - DATE
- HYDROCARBON CONCENTRATIONS IN SOIL (mg/kg)
- APPROXIMATE GROUNDWATER SAMPLE LOCATION
  - TPHd
  - TPHg
  - BENZENE
  - MTBE
  - DATE
- HYDROCARBON CONCENTRATIONS IN GROUNDWATER (µg/L)

- *FILL* - ARTIFICIAL FILL
- *CL/CH* - INORGANIC CLAYS OF LOW TO HIGH PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
- *GW/GC* - CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
- *ML* - INORGANIC SILTS, VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY
- *SM* - SILTY SANDS, SAND-SILT MIXTURES
- *GW/GM* - SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES

- DATE ▽ FIRST ENCOUNTERED GROUNDWATER DEPTH
- DATE ▼ STATIC GROUNDWATER DEPTH
- -- NOT ANALYZED

Figure 5

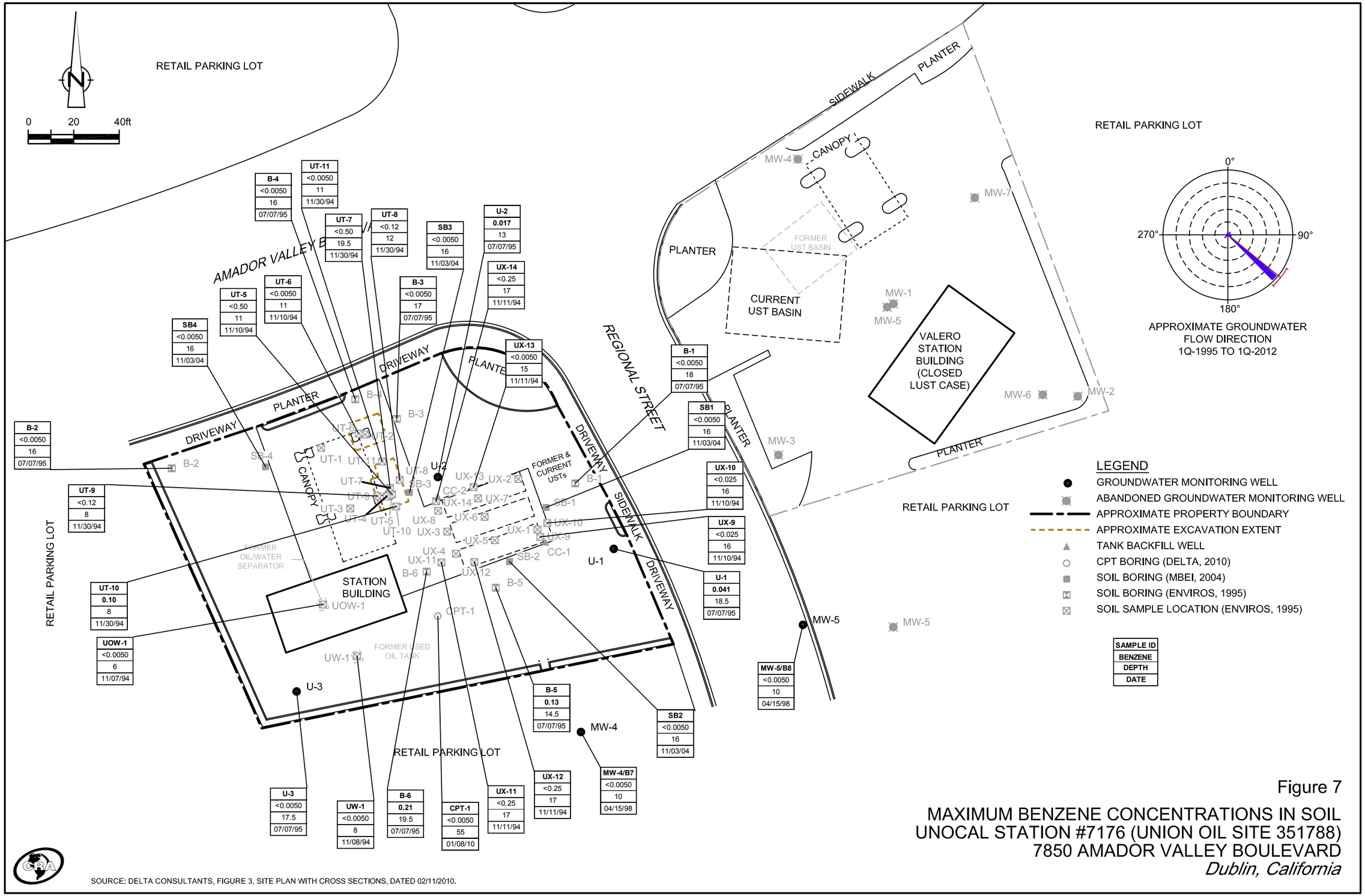
# GEOLOGIC CROSS-SECTION B-B'
# UNOCAL STATION #7176 (UNION OIL SITE 351788)
# 7850 AMADOR VALLEY BOULEVARD
*Dublin, California*




SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

Figure 6

MAXIMUM TPHg CONCENTRATIONS IN SOIL
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*




SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

Figure 7

MAXIMUM BENZENE CONCENTRATIONS IN SOIL
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*

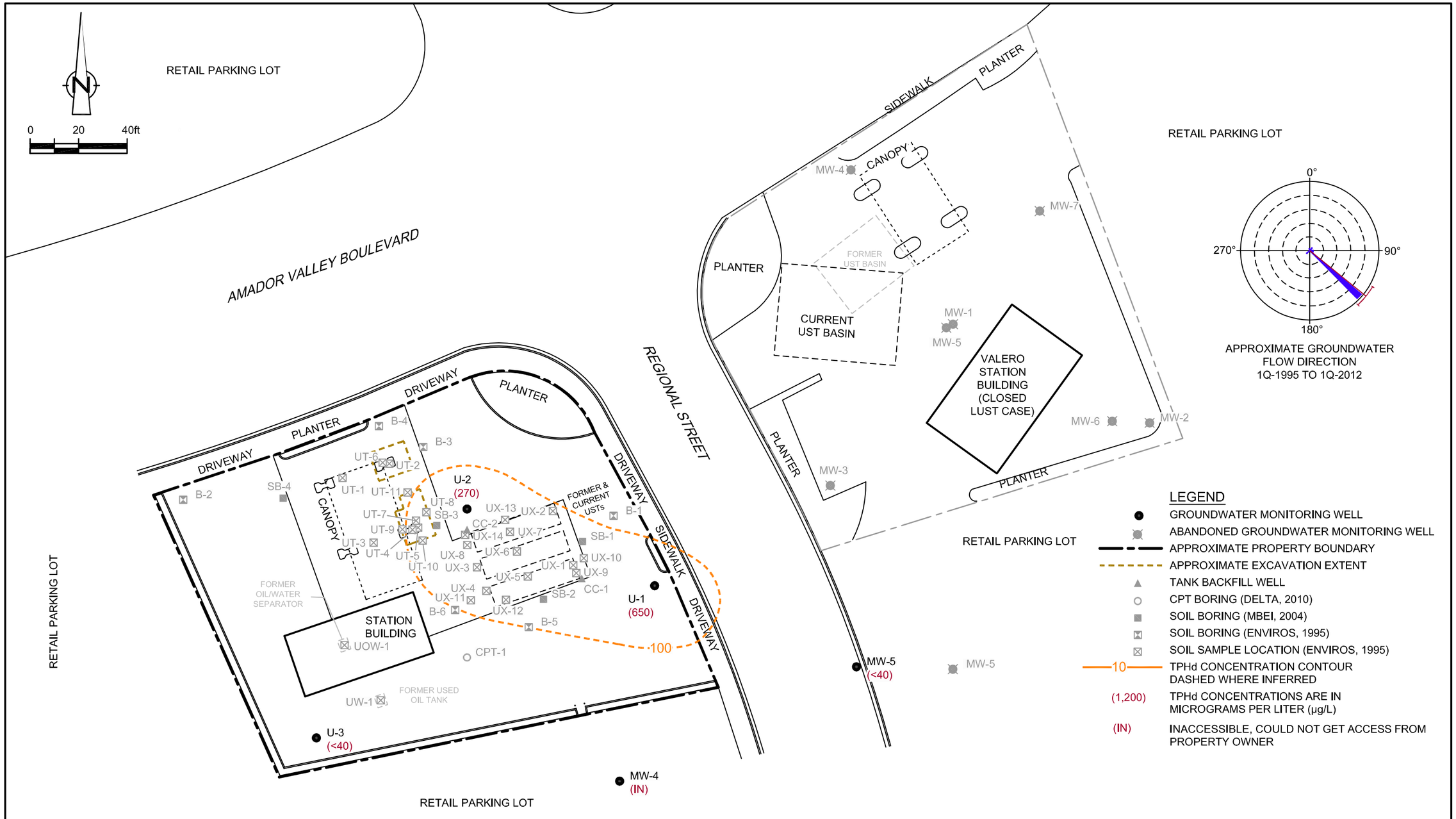



Figure 8

TPHd CONCENTRATIONS IN GROUNDWATER - FEBRUARY 10, 2012
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*

SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

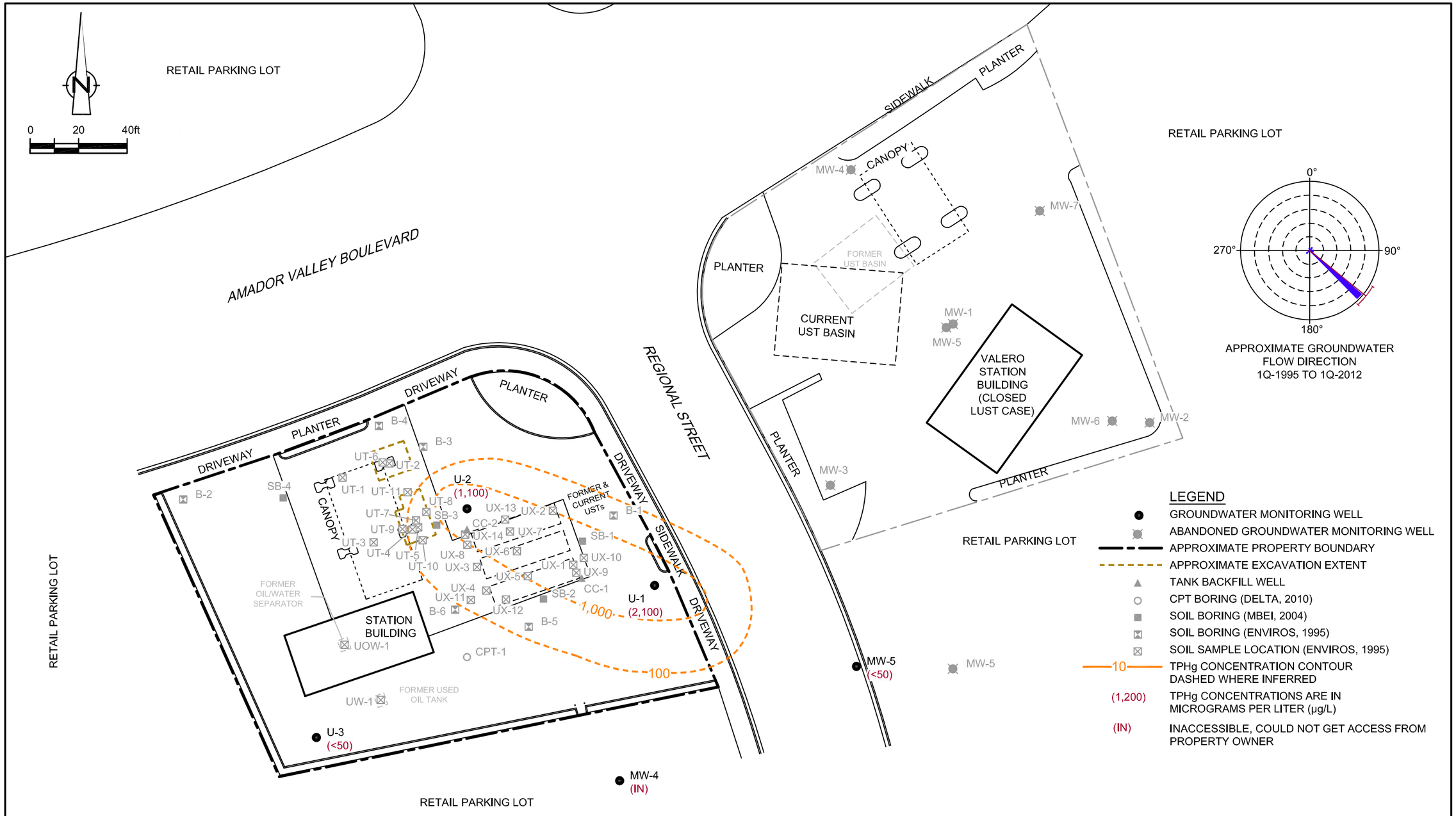



Figure 9

TPHg CONCENTRATIONS IN GROUNDWATER - FEBRUARY 10, 2012
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*

SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

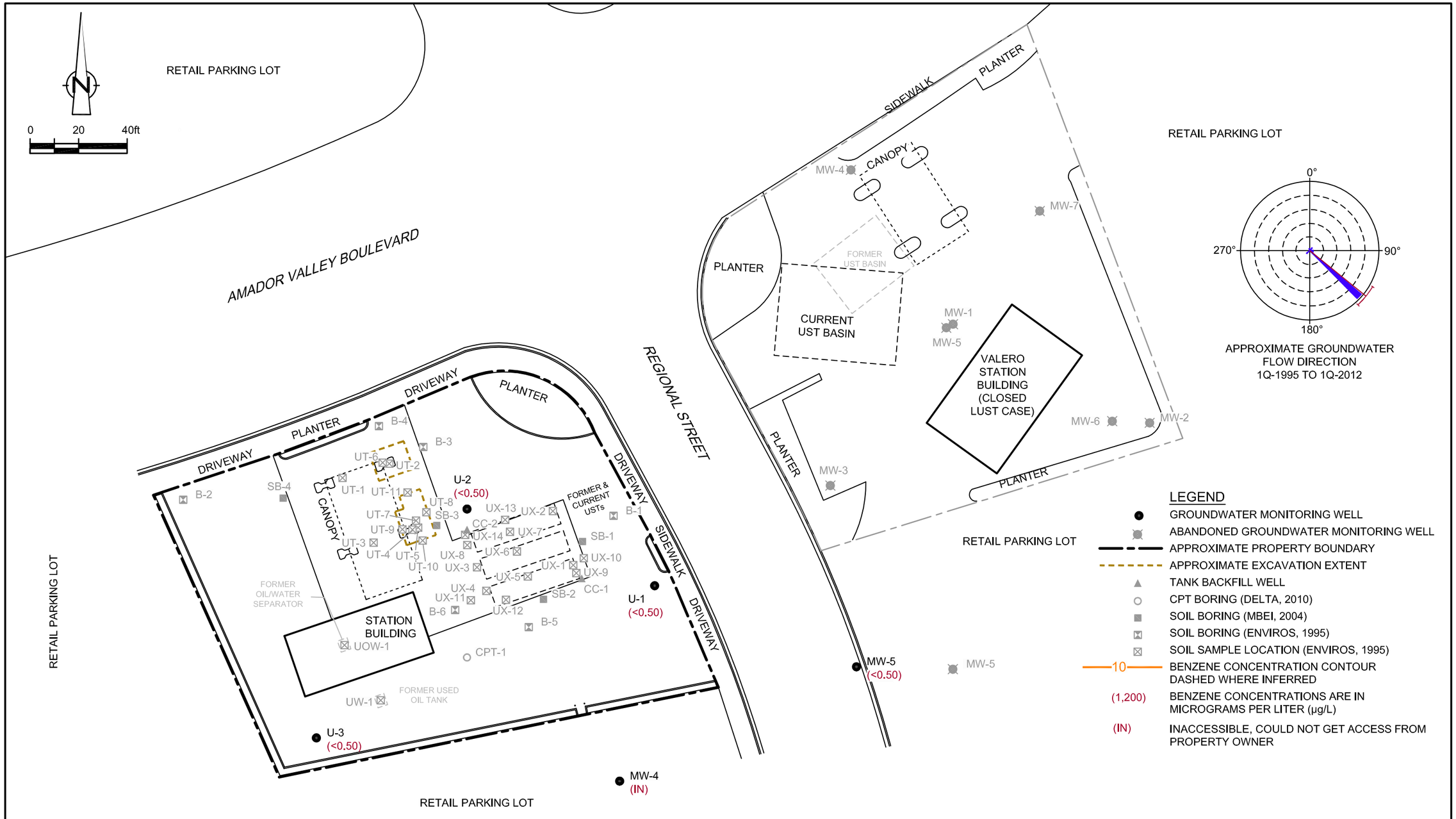
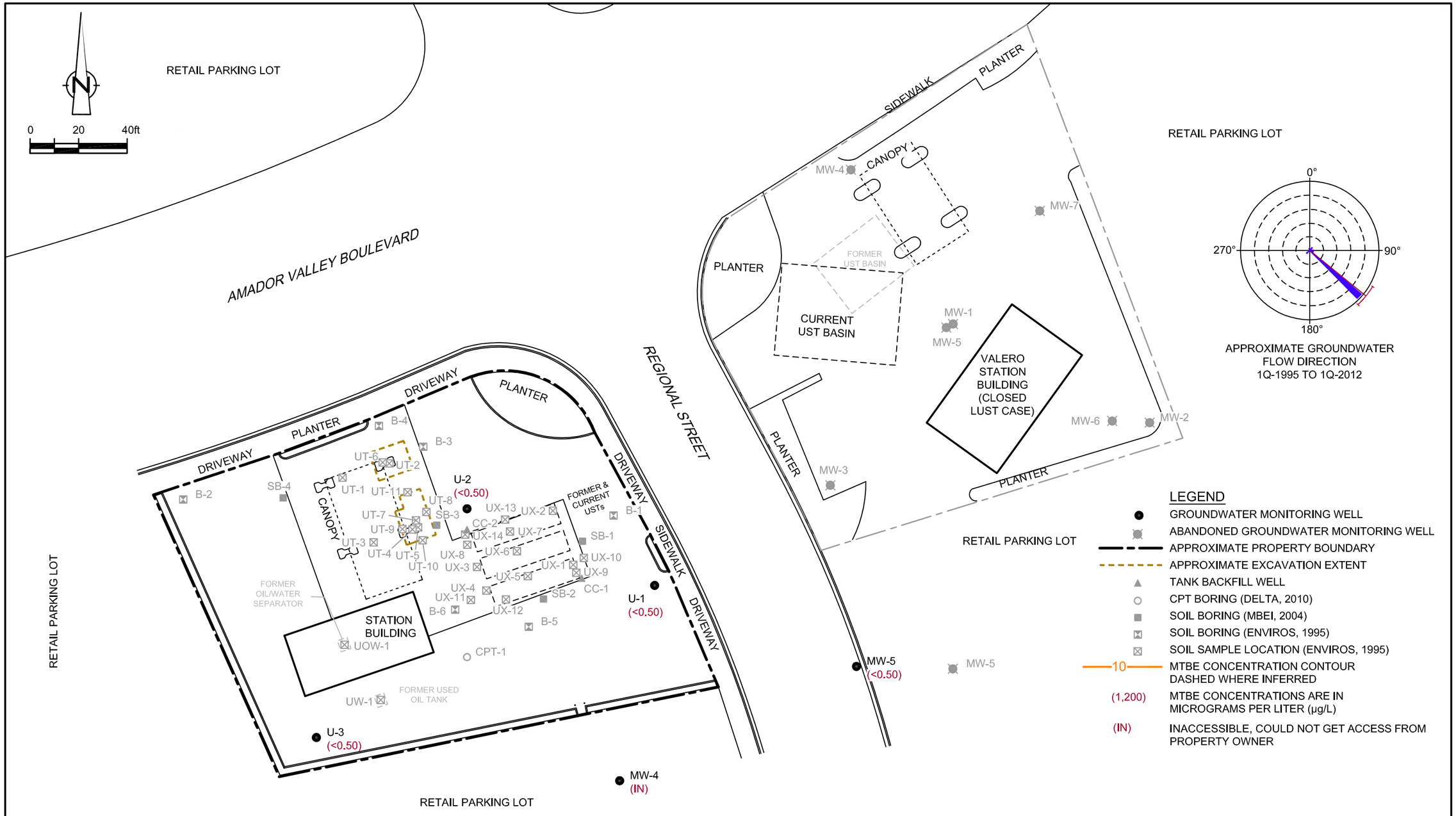



Figure 10

BENZENE CONCENTRATIONS IN GROUNDWATER - FEBRUARY 10, 2012
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*

SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.




SOURCE: DELTA CONSULTANTS, FIGURE 3, SITE PLAN WITH CROSS SECTIONS, DATED 02/11/2010.

Figure 11

MTBE CONCENTRATIONS IN GROUNDWATER - FEBRUARY 10, 2012
UNOCAL STATION #7176 (UNION OIL SITE 351788)
7850 AMADOR VALLEY BOULEVARD
*Dublin, California*

# APPENDIX A

# SUMMARY OF ENVIRONMENTAL INVESTIGATION AND REMEDIATION

**SUMMARY OF ENVIRONMENTAL INVESTIGATION AND REMEDIATION**
**UNOCAL STATION #7176 (UNION OIL SITE 351788)**
**7850 AMADOR VALLEY BLVD., DUBLIN, CALIFORNIA**

***November 1994 Underground Storage Tank Removal***

Gettler-Ryan, Inc. (G-R) removed one 10,000-gallon steel diesel underground storage tank (UST), three 10,000-gallon steel gasoline USTs, one 280 gallon steel waste-oil UST, an oil/water separator, and associated product piping. Only the waste-oil UST had holes, of which there where eight up to one-half-inch in diameter. Soil samples were collected beneath the USTs, oil/water separator, and product piping. Results detected minor total petroleum hydrocarbon (TPH) impact in soil, which was removed when portions of the fuel UST pit and product piping trenches were over-excavated. Additional information is available in Enviros, Inc. (Enviros) March 23, 1995 *Storage Tank Replacement Observation Report* and in a March 31, 1995 facsimile to Ed Ralston of Unocal from Clyde Galantine regarding site excavation.

***July 1995 Preliminary Soil and Groundwater Investigation***

Enviros advanced six soil borings (B-1 through B-6) and installed monitoring wells U-1 through U-3. Soil samples were collected at each location and grab-groundwater samples were collected from borings B-2 and B-4. A groundwater sample was collected from one UST backfill well. Additional information is available in Enviros' October 10, 1995 *Preliminary Soil and Groundwater Investigation Report.*

***April 1998 Supplemental Evaluation and Investigation***

Environmental Resolutions, Inc. (ERI) installed offsite monitoring wells MW-4 and MW-5. No petroleum hydrocarbons were detected in soil from these locations. Additional information is available in ERI's August 4, 1998 *Supplemental Evaluation and Investigation Report*.

***August 2000 Request and Work Plan for Case Closure***

ERI submitted a case closure request that contained a sensitive receptor survey (SRS) and a Tier-II risk-based corrective action (RBCA) analysis. ERI identified several wells in government records, but the wells could not be confirmed during the field survey. The closest of these wells was 750 feet south (crossgradient). The nearest surface water located during the field survey was approximately 800 feet north (upgradient). Based on the RBCA results, ERI concluded residual petroleum hydrocarbons at the site do not pose a significant risk to human health or the environment. Additional information is available in ERI's August 31, 2000 *Request and Work Plan for Case Closure*.

***June 2002 Request for Case Closure Addendum***

ERI submitted a case closure addendum that included groundwater elevation maps, dissolved-phase petroleum hydrocarbon isoconcentration maps, and a Site Closure Summary form as requested by Alameda County Environmental Health (ACEH). Additional information is available in ERI's June 21, 2002 *Isoconcentration Maps and Updated Site Closure Summary Forms Package*.

***November 2004 Limited Phase II Environmental Site Assessment***
Miller Brooks Environmental, Inc. (MBEI) advanced four soil borings (SB1 through SB4), collecting soil and grab-groundwater samples from each location. Petroleum hydrocarbons were detected in soil samples from SB3 only. Dissolved-phase petroleum hydrocarbons were detected in grab-groundwater from all borings except SB4. Additional information is available in MBEI's December 10, 2004 *Limited Phase II Environmental Site Assessment Report*.

***July 2007 Sensitive Receptor Survey***
Delta Environmental Consultants (Delta) obtained DWR records and performed field reconnaissance for a sensitive receptor survey. DWR records indicate 28 water supply wells were within 1 mile; however, the closest well was a domestic well approximately 0.4 miles southwest (crossgradient). The field survey focused on any potential sensitive receptors within 1,000 feet of the site, and no schools, daycare centers, hospitals, churches, or nursing homes were identified. No water bodies were identified within 1,000 feet of the site. Additional information is available in Delta's July 24, 2007 *Sensitive Receptor Survey.*

***January 2010 CPT Vertical Assessment***
Delta advanced one onsite cone penetrometer test (CPT) boring CPT-1 to perform a vertical assessment of groundwater at the site. With the exception of TPH as diesel (TPHd) in groundwater, no hydrocarbons were detected in soil or groundwater. The reported concentrations of TPHd were below the Bay Area Regional Water Quality Control Board's Environmental Screening Level of 100 micrograms per liter (µg/L). Additional information is available in Delta's February 15, 2010 *CPT Vertical Assessment Report.*

# APPENDIX B

# BORING LOGS

Delta
Consultants

Project No: C107176
Logged By: A. Buehler/ C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Cone Penetration Testing
Sampling Method: Macrocore
Casing Type: N/A
Slot Size: N/A
Gravel Pack: N/A

Client: **ConocoPhillips**
Location: 7850 Amador Valley Blvd.
**Dublin, CA**
Hole Diameter: 6"
Hole Depth: 63' bgs
First Water Depth: 18' bgs
Static Water Depth:N/A
Well Depth: N/A

Boring No: CPT-1
Date Drilled: 01/08/2010
Page **1** of 3

▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

| Boring Completion / Backfill | Static Water Level | Moisture Content | PID Reading (ppm) | Sample Identification | Depth (feet) | Sample Recovery | Sample Analyzed | Soil Type | LITHOLOGY / DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|
| Neat Cement | | | | Air-Knife | 1–4 | | | | **Removed two inches (2") of asphalt.** **Asphalt layer covered geo-fabric.** Airknifed material was sandy silt with clay to five feet (5') below ground surface. |
| | | moist | 0.1 | 9:55 @ 5' | 5 | | | **CL** | **Silty sand with clay;** dark brown. |
| | | moist | 0.5 | 10:03 @ 10' | 6–10 | | | **CL** | **Same as above. Increased clay.** |
| | ▽ | moist | 0.7 | 10:08 @ 15' | 11–15 | | | **CL** | **Same as above.** |
| | | wet | 35.8 | 10:14 @ 20' | 16–20 | | | **SM** | **Silty Sand with Gravel;** gray. Strong petroleum hydrocarbon odor. |
| | | | | | 21–22 | | | | |

Delta
Consultants

Project No: C107176
Logged By: A. Buehler/ C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Cone Penetration Testing
Sampling Method: Macrocore
Casing Type: N/A
Slot Size: N/A
Gravel Pack: N/A

Client: **ConocoPhillips**
Location: **7850 Amador Valley Blvd.**
**Dublin, CA**
Hole Diameter: 6"
Hole Depth: 63' bgs
First Water Depth: 18' bgs
Static Water Depth: N/A
Well Depth: N/A

Boring No: CPT-1
Date Drilled: 01/08/2010


▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

| Boring Completion / Backfill | Static Water Level | Moisture Content | PID Reading (ppm) | Sample Identification | Depth (feet) | Sample Recovery | Sample Analyzed | Soil Type | LITHOLOGY / DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|
| Neat Cement | | moist | 1.0 | 10:23 @ 25' | 25 | | | CL | **Clay with silt;** brown. |
| | | | 0.8 | 10:30 @ 30' | 30 | | | CL | **Same as above.** Increased wetness. |
| | | | 0.5 | 10:38 @ 35' | 35 | | | CL | **Same as above.** |
| | | | 0.6 | 10:47 @ 40' | 40 | | | CL | **Same as above.** |

Delta
Consultants

Project No: C107176
Logged By: A. Buehler/ C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Cone Penetration Testing
Sampling Method: Macrocore

Client: **ConocoPhillips**
Location: 7850 Amador Valley Blvd.
**Dublin, CA**
Hole Diameter: 6"
Hole Depth: 63' bgs
First Water Depth: 18' bgs
Static Water Depth:N/A

Boring No: CPT-1
Date Drilled: 01/08/2010


▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

| Boring Completion: Backfill | Static Water Level | Moisture Content | PID Reading (ppm) | Sample Identification | Depth (feet) | Sample: Recovery | Sample: Analyzed | Soil Type | LITHOLOGY / DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|
| Neat Cement | | wet | 0.5 | 10:57 @ 45' | 45 | | | CL | **Clay with silt;** firm. |
| | | | | | 46 | | | | |
| | | | | | 47 | | | | |
| | | | | | 48 | | | | |
| | | | | | 49 | | | | |
| | | sat | 0.6 | 11:12 @ 50' | 50 | | | ML | **Silty clay with some very fine grained sand;** brown. |
| | | | | | 51 | | | | |
| | | | | | 52 | | | | |
| | | | | | 53 | | | | |
| | | | | | 54 | | | | |
| | | | 0.7 | 11:22 @ 55' | 55 | | | ML | **Same as above.** |
| | | | | | 56 | | | | |
| | | | | | 57 | | | | |
| | | | | | 58 | | | | |
| | | | | | 59 | | | | |
| | | | 0.3 | 11:35 @ 60' | 60 | | | CL | **Clay;** brown to gray; very dense. |
| | | | | | 61 | | | | |
| | | | | | 62 | | | | |
| | | | | | 63 | | | | **Boring Terminated at 63' bgs** |
| | | | | | 64 | | | | |
| | | | | | 65 | | | | |
| | | | | | 66 | | | | |

| | MAJOR DIVISIONS | | USCS SYMBOL | | TYPICAL NAMES |
|---|---|---|---|---|---|
| COARSE-GRAINED SOILS MORE THAN HALF IS LARGER THAN 200 SIEVE | GRAVELS More than half coarse fraction larger than No. 4 sieve size | Clean gravels with little or no fines | GW | | Well-graded gravels, gravel-sand mixtures |
| | | | GP | | Poorly graded gravels, gravel-sand mixtures |
| | | Gravels with appreciable amounts of fines | GM | | Silty gravels, poorly graded gravel-sand-clay mixtures |
| | | | GC | | Clayey gravels, poorly graded gravel-sand-clay mixtures |
| | SANDS More than half coarse fractions smaller than No. 4 sieve size | Clean sands with little or no fines | SW | | Well graded sands, gravelly sands |
| | | | SP | | Poorly graded sands, gravelly sands |
| | | Sands with appreciable amounts of fines | SM | | Silty sands, poorly graded sand-silt mixtures |
| | | | SC | | Clayey sands, poorly graded sand-silt mixtures |
| FINE-GRAINED SOILS MORE THAN HALF IS SMALLER THAN NO. 200 SIEVE | Silts and clays Liquid limit 50% or less | | ML | | Inorganic silts and very fine sands. Rock flour, silty or clayey fine sands or clayey silts with slight plasticity |
| | | | CL | | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays |
| | | | OL | | Organic clays and organic silty clays of low plasticity |
| | Silts and clays. Liquid limit greater than 50% | | MH | | Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts |
| | | | CH | | Inorganic clays of high plasticity, fat clays |
| | | | OH | | Organic clays of medium to high plasticity, organic silts |
| Highly organic soils | | | PT | | Peat and other highly organic soils |
| Debris created or generated by man | | | | | Building debris or rubble |

## KEY TO FIELD DATA

Blows/6" - 140 lb. hammer dropped 30 inches.

PPM - Parts per million

OVM - Organic Vapor Meter

Soil Color - Munsell Color Chart (1988 Edition)

First encountered groundwater

Equilibrated groundwater level

Soil sample interval

No soil sample recovery

| PLATE | UNIFIED SOIL CLASSIFICATION SYSTEM ASTM D2487-85 | enviros® 94000.00 |
|---|---|---|
| | Drawn By: JLP Date: 11-28-94 | |

# Field Exploratory Boring Log B-1

| OVM (ppm) | Blows/6" | Sample Number | Depth (ft) | Soil Group (USCS) | Materials Description |
|---|---|---|---|---|---|
| | | | | | Asphalt |
| | | | | | Silty Clay (CL)<br>Black (10YR 2/1); very stiff, moist,<br>80% clay, 15% silt, 5% very fine sand. |
| | | | 5 | | |
| | 6<br>6 | | | | |
| 0 | 7 | | | | Color change to Gray (5Y 5/1); stiff, wet. |
| | | | 10 | | |
| | 5<br>10 | | | | |
| 0 | 13 | B-1-13' | | | Change to very stiff, moist. |
| | | | 15 | | |
| | 12<br>12 | | | | Color change to Dark Grayish Brown (10YR 4/2),<br>very stiff, moist to wet, increase in very fine sand content. |
| 0 | 15 | B-1-18' | 18 ▽ | | Saturated at 18 ft. |
| | | | | | Total Depth of Boring = 18.0 feet. |

**BORING**
**B-1**

**UNOCAL CORPORATION - CERT**
Unocal SS No. 7176
7850 Amador Valley Boulevard
Dublin, California

| | |
|---|---|
| Borehole Diameter: | 8 inches |
| Logged by: | C. Galantine |
| Driller: | Mitchell |
| Date Started: | 7-7-95 |
| Date Completed: | 7-7-95 |

*enviros* ®

95132.02

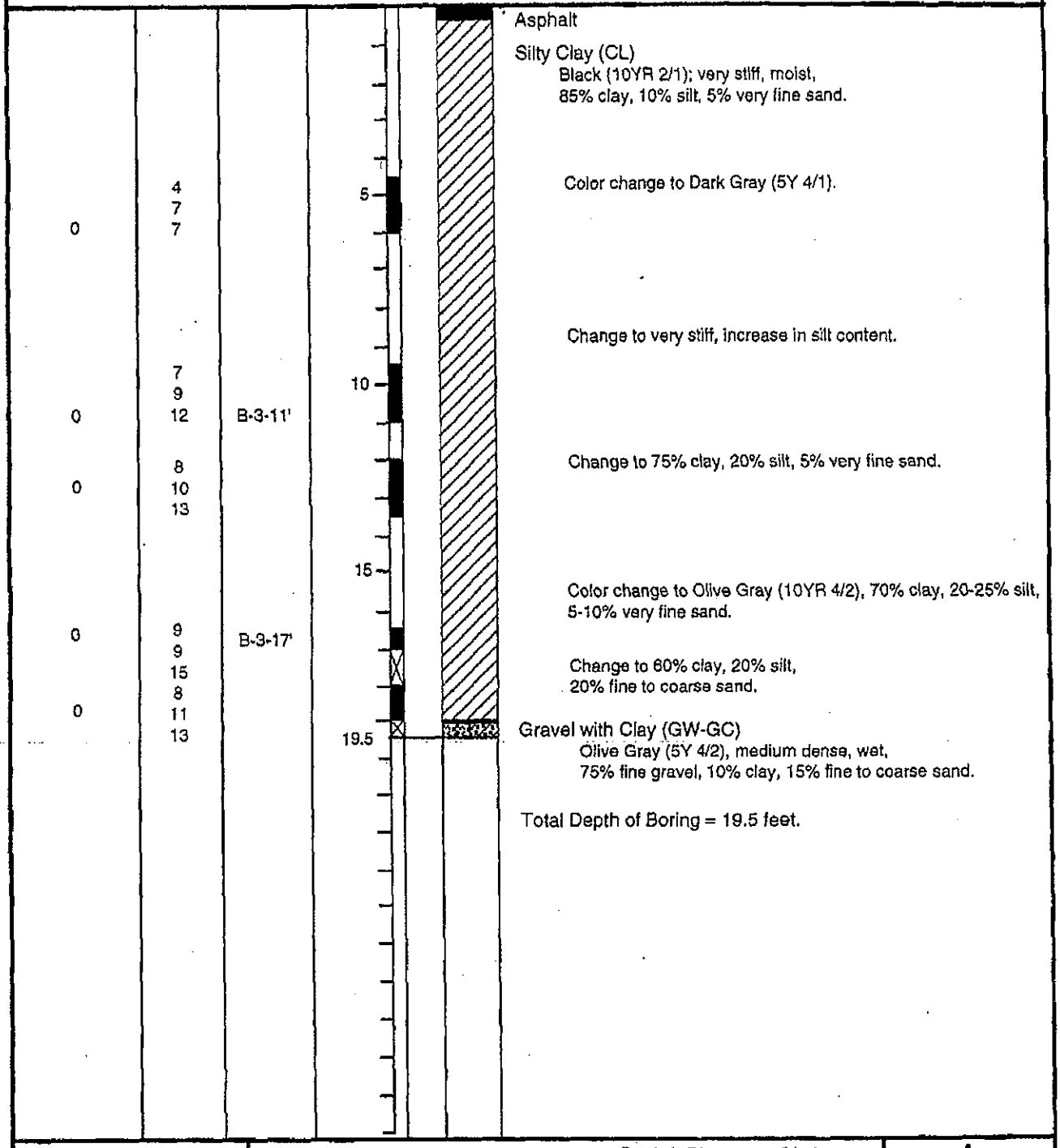
# Field Exploratory Boring Log B-2

| OVM (ppm) | Blows/6" | Sample Number | Depth (ft) | Soil Group (USCS) | Materials Description |
|---|---|---|---|---|---|
| | | | | | Asphalt |
| | | | | | Silty Clay (CL)<br>Black (10YR 2/1); very stiff, moist,<br>80% clay, 15% silt, 5% very fine sand. |
| | | | | | Gravel with Clay (GW-GC)<br>Dark Grayish Brown (10YR 4/2), medium dense, moist,<br>75% fine gravel, 10% clay, 15% fine to coarse sand. |
| | 7 | | 5 | | |
| 0 | 7<br>8 | | | | Clayey Silt (ML)<br>Dark Grayish Brown (10YR 4/2), stiff, moist, 65% silt,<br>30% clay, 5% very fine sand. |
| | | | 10 | | Silty Clay (CL)<br>Dark Grayish Brown (10YR 4/2); very stiff, moist,<br>65% clay, 30% silt, 5% very fine sand. |
| | 9<br>11 | | | | |
| 0 | 13 | | | | |
| | 9<br>13 | | | | Change to damp, increase in clay content,<br>trace fine gravel. |
| 0 | 17 | B-2-16' | 16 | | |

Total Depth of Boring = 16.0 feet.

| BORING | | | |
|---|---|---|---|
| **B-2** | **UNOCAL CORPORATION - CERT**<br>Unocal SS No. 7176<br>7850 Arnador Valley Boulevard<br>Dublin, California | Borehole Diameter: 8 inches<br>Logged by: C. Galantine<br>Driller: Mitchell<br>Date Started: 7-7-95<br>Date Completed: 7-7-95 | *enviros* ®<br>95132.02 |

# Field Exploratory Boring Log B-3



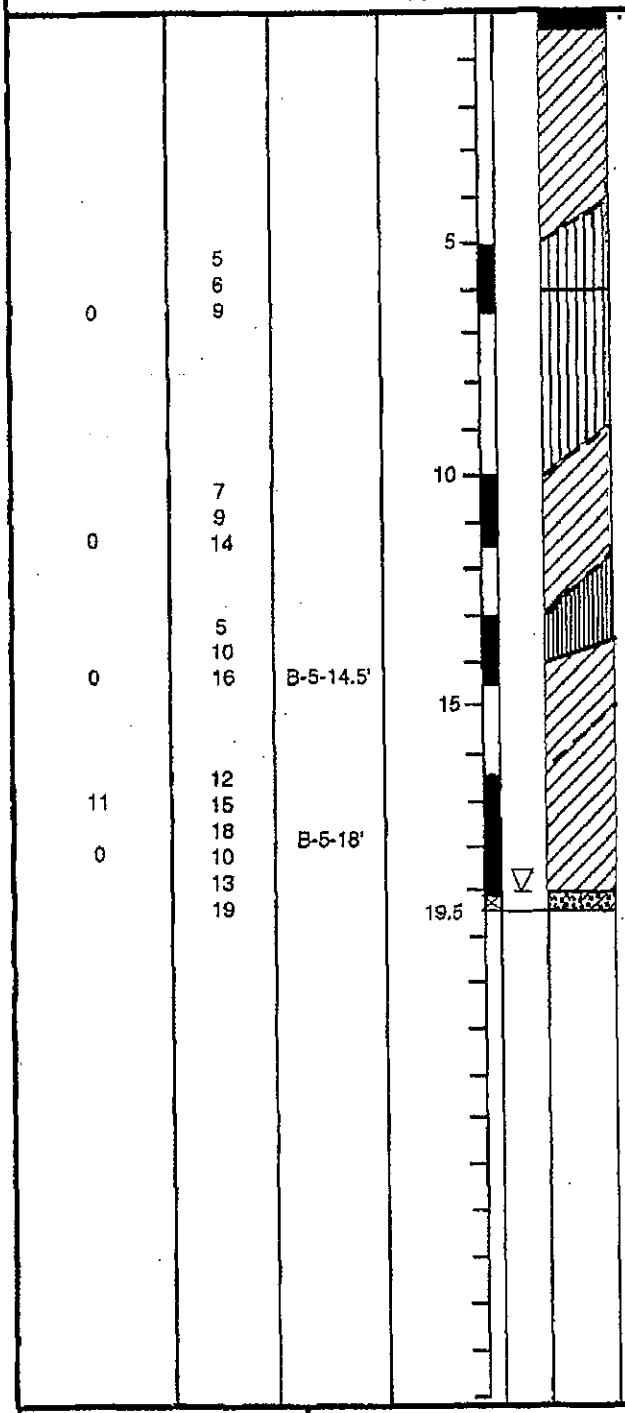

| BORING | | | |
|---|---|---|---|
| **B-3** | UNOCAL CORPORATION - CERT<br>Unocal SS No. 7176<br>7850 Amador Valley Boulevard<br>Dublin, California | Borehole Diameter: 8 inches<br>Logged by: C. Galantine<br>Driller: Mitchell<br>Date Started: 7-7-95<br>Date Completed: 7-7-95 | *enviros* ®<br>95132.02 |

# Field Exploratory Boring Log B-4

| OVM (ppm) | Blows/6" | Sample Number | Depth (ft) | Soil Group (USCS) | Materials Description |
|---|---|---|---|---|---|
| | | | | | Concrete |
| | | | | | Silty Clay (CL)<br>Black (10YR 2/1); very stiff, moist,<br>85% clay, 10% silt, 5% very fine sand. |
| | 4<br>5 | | 5 | | Clayey Silt (ML)<br>Dark Brown (10YR 3/3); stiff, moist,<br>60% silt, 35% clay, 5% very fine sand. |
| 0 | 8 | | | | |
| | 6<br>9 | | 10 | | Change to very stiff. |
| 0 | 10 | B-4-11.5' | | | |
| | 7<br>10 | | | | Color change to Olive Gray (10YR 4/2). |
| 0 | 14 | B-4-16' | 16 | | |
| | | | | | Total Depth of Boring = 16 feet. |

| | | | | |
|---|---|---|---|---|
| BORING<br>**B-4** | UNOCAL CORPORATION - CERT<br>Unocal SS No. 7176<br>7850 Amador Valley Boulevard<br>Dublin, California | Borehole Diameter: 8 inches<br>Logged by: C. Galantine<br>Driller: Mitchell<br>Date Started: 7-7-95<br>Date Completed: 7-7-95 | *enviros* ®<br>95132.02 | |

# Field Exploratory Boring Log B-5




| BORING | | | |
|---|---|---|---|
| **B-5** | UNOCAL CORPORATION - CERT<br>Unocal SS No. 7176<br>7850 Amador Valley Boulevard<br>Dublin, California | Borehole Diameter: 8 inches<br>Logged by: C. Galantine<br>Driller: Mitchell<br>Date Started: 7-7-95<br>Date Completed: 7-7-95 | *enviros* ®<br>95132.02 |

# Field Exploratory Boring Log B-6

| OVM (ppm) | Blows/6" | Sample Number | Depth (ft) | Soil Group (USCS) | Materials Description |
|---|---|---|---|---|---|
| | | | | | Concrete |
| | | | | | Silty Clay (CL)<br>Black (10YR 2/1); stiff, moist,<br>80% clay, 15% silt, 5% very fine sand. |
| | 14 | | 5 | | |
| | 20 | | | | Color change to Dark Gray (5Y 4/1); stiff, moist,<br>70% clay, 20% silt, 10% very fine sand. |
| 0 | 23 | | | | |
| | 20 | | 10 | | |
| | 21 | | | | |
| 0 | 26 | | | | Change to 80% clay, 15% silt, 5% very fine sand. |
| | 20 | | | | |
| | 23 | | | | |
| 0 | 30 | B-6-14.5' | 15 | | Color change to Dark Olive Gray (5Y 3/2). |
| | 19 | | | | |
| | 23 | | | | Color change to Dark Gray (5Y 4/1) 60% clay, 30-35% silt,<br>5-10% very fine to medium sand. |
| 0 | 29 | | | | |
| 6 | 16 | | | | |
| | 24 | | | | |
| | 31 | B-6-19.5' | 19.5 | | Gravel with Clay (GW-GC)<br>Dark Gray (10YR 4/1), very dense, wet,<br>75% fine gravel, 10% clay, 15% fine to coarse sand. |
| | | | | | Total Depth of Boring = 19.5 feet. |

BORING
**B-6**

UNOCAL CORPORATION - CERT
Unocal SS No. 7176
7850 Amador Valley Boulevard
Dublin, California

| | |
|---|---|
| Borehole Diameter: | 8 inches |
| Logged by: | C. Galantine |
| Driller: | Mitchell |
| Date Started: | 7-7-95 |
| Date Completed: | 7-7-95 |

*enviros* ®

95132.02

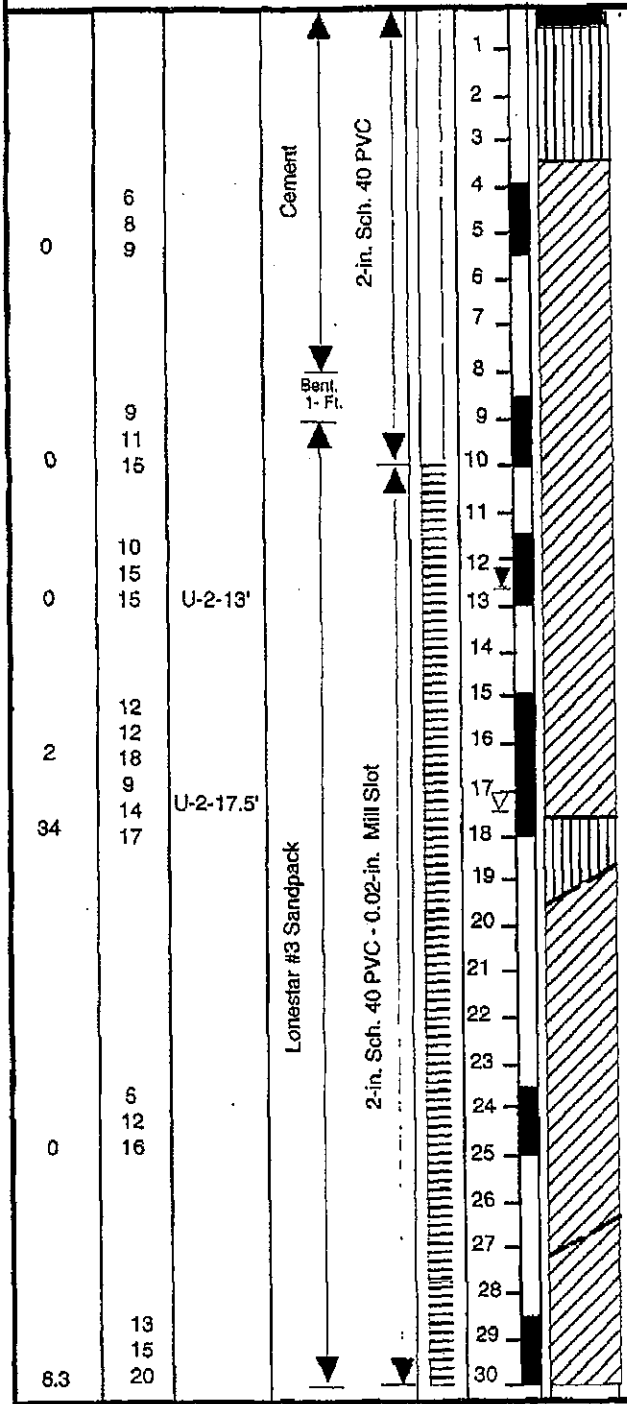
# Field Exploratory Boring Log of Well U-1

| OVM PPM | Blows/ 6" | Sample Number | Depth (ft) | Materials Description |
|---|---|---|---|---|
| | | | 1 | Asphalt |
| | | | 2 | Silt with Sand (ML) Fill Material |
| | | | 3 | Very Dark Grayish Brown (10YR 3/2); stiff, moist, 75% silt, 15% fine to coarse sand, 10% fine gravel. |
| | 7 | | 4 | |
| | 9 | | 5 | Silty Sand (SM) |
| 0 | 13 | | 6 | Dark Grayish Brown (10YR 4/2); medium dense, moist, 75% very fine sand, 20% silt, 5% fine gravel. |
| | | | 7 | |
| | | | 8 | Silty Clay (CL) |
| | | | 9 | Dark Grayish Brown (10YR 4/2); very stiff, moist, 70% clay, 25% silt, 5% very fine sand, plastic, rootlets. |
| | 8 | | 10 | |
| | 8 | | 11 | |
| 0 | 14 | U-1-10.5' | 12 | |
| | 5 | | 13 | Silt (ML) |
| | 10 | | 14 | Dark Olive Gray (5Y 3/2); very stiff, moist, 80% silt, 10 % clay, 10% fine sand. |
| 0 | 13 | | 15 | |
| | | | 16 | |
| | | | 17 | |
| | | | 18 | |
| | 12 | U-1-18.5' | 19 | Saturated at 19 ft. |
| | 14 | | 20 | Gravel with Silt and Sand (GW-GM) |
| 20 | 17 | | 21 | Olive Gray (5Y 4/2); dense, saturated, 75% fine to coarse gravel, 15% fine to coarse sand, 10% silt. |
| | | | 22 | Silty Clay (CL) |
| | | | 23 | Dark Olive Gray (5Y 3/2); stiff, wet, 70% clay, 25% silt, 5% very fine sand. |
| | 9 | | 24 | |
| | 13 | | 25 | Color change to Dark Grayish Brown (10YR 4/2); very stiff, wet, increase in clay content. |
| 0 | 16 | | 26 | |
| | | | 27 | |
| | | | 28 | |
| | 12 | | 29 | |
| | 17 | | 30 | |
| 0 | 26 | | | Total Depth of Boring = 30 ft. |

Well Construction: Cement; Bent. 1-Ft.; 2-in. Sch. 40 PVC; Lonestar #3 Sandpack; 2-in. Sch. 40 PVC - 0.02-in. Mill Slot

| WELL | | | | |
|---|---|---|---|---|
| **U-1** | UNOCAL CORPORATION - CERT<br>Unocal SS No. 7176<br>7850 Amador Valley Road<br>Dublin, California | Borehole Diameter: 8 inches<br>Logged by: C. Galantine<br>Driller: Mitchell<br>Date Started: 7-6-95<br>Date Completed: 7-6-95 | *enviros* ® | 95132.02 |

# Field Exploratory Boring Log of Well U-2




| OVM PPM | Blows/ 6" | Sample Number | Depth (ft) | Soil Group (USCS) | Materials Description |
|---|---|---|---|---|---|
| | | | 1 | | Asphalt |
| | | | 2 | | Silt with Sand (ML) Fill Material |
| | | | 3 | | Very Dark Grayish Brown (10YR 3/2); stiff, moist, 75% silt, 15% fine to coarse sand, 10% fine gravel. |
| | | | 4 | | Silty Clay (CL) |
| | 6 | | | | Black (10YR 2/1); very stiff, moist, 80% clay, |
| | 8 | | 5 | | 15% silt, 5% very fine sand. |
| 0 | 9 | | 6 | | Color change to Very Dark Grayish Brown (10YR 3/2); very stiff, |
| | | | 7 | | moist, 60% clay, 30% silt, 10% very fine sand. |
| | | | 8 | | Color change to Dark Olive Gray (5Y 3/2). |
| | 9 | | 9 | | |
| | 11 | | | | |
| 0 | 15 | | 10 | | |
| | | | 11 | | Color change to Very Dark Gray (10YR 3/1). |
| | 10 | | 12 | | |
| | 15 | | | | |
| 0 | 15 | U-2-13' | 13 | | |
| | | | 14 | | |
| | | | 15 | | Color change to Dark Olive Gray (5Y 3/2). |
| | 12 | | | | |
| | 12 | | 16 | | |
| 2 | 18 | | | | |
| | 9 | | 17 | | |
| | 14 | U-2-17.5' | | | Saturated at 17.5 ft. |
| 34 | 17 | | 18 | | Sandy Silt (ML) |
| | | | 19 | | Olive Gray (5Y 4/2); very hard, wet to saturated, 60% silt, |
| | | | 20 | | 35% very fine sand, 5% clay. |
| | | | 21 | | |
| | | | 22 | | Sandy Clay (CL) |
| | | | 23 | | Dark Gray (5Y 4/1); very stiff, wet, 60% clay, |
| | 6 | | 24 | | 20% silt, 20% very fine sand. |
| | 12 | | | | |
| 0 | 16 | | 25 | | |
| | | | 26 | | |
| | | | 27 | | |
| | | | 28 | | Silty Clay (CL) |
| | | | 29 | | Dark Brown (10YR 3/3); hard, wet, 85% clay, |
| | 13 | | | | 10% silt, 5% very fine sand. |
| | 15 | | | | |
| 8.3 | 20 | | 30 | | Total Depth of Boring = 30 ft. |

| WELL | | | | |
|---|---|---|---|---|
| **U-2** | UNOCAL CORPORATION - CERT<br>Unocal SS No. 7176<br>7850 Amador Valley Road<br>Dublin, California | Borehole Diameter: 8 inches<br>Logged by: C. Galantine<br>Driller: Mitchell<br>Date Started: 7-6-95<br>Date Completed: 7-6-95 | *enviros* ® | 95132.02 |

# Field Exploratory Boring Log of Well U-3

| OVM PPM | Blows/ 6" | Sample Number | Depth (ft) | Materials Description |
|---|---|---|---|---|
| | | | 1 | Asphalt |
| | | | 2 | Silt with Sand (ML) Fill Material |
| | | | 3 | Very Dark Gray (10YR 3/1); stiff, moist, 80% silt, 20% fine sand. |
| | 8 | | 4 | Silty Clay (CL) |
| | 16 | | 5 | Black (10YR 2/1); very stiff, moist, 80% clay, 15% silt, 5% very fine sand. |
| 0 | 16 | | 6 | Sandy Silt (ML) |
| | | | 7 | Dark Grayish Brown (10YR 4/2); hard, moist, 55% silt, 40% very fine to coarse sand, 5% clay. |
| | | | 8 | |
| | 9 | | 9 | Increase in silt and clay content. |
| | 13 | | | |
| 0 | 18 | | 10 | |
| | | | 11 | Clayey Silt (ML) |
| | | | 12 | Dark Grayish Brown (10YR 4/2); hard, moist, 60% silt, 30% clay, 10% very fine to fine sand. |
| | | | 13 | |
| | 7 | | 14 | |
| | 17 | | 15 | |
| 0 | 17 | | | |
| | | | 16 | Silty Clay (CL) |
| | 12 | | 17 | Dark Grayish Brown (10YR 4/2); very stiff, moist to saturated, 55% clay, 40% silt, 5% very fine sand. |
| | 12 | U-3-17.5' | | |
| 0 | 18 | | 18 | Saturated at 18 ft. |
| | | | 19 | |
| | | | 20 | |
| | | | 21 | |
| | | | 22 | |
| | | | 23 | Color change to Dark Grayish Brown (10YR 4/2); hard, wet, increase in clay content. |
| | 13 | | 24 | |
| | 18 | | | |
| 0 | 25 | | 25 | |
| | | | 26 | |
| | | | 27 | |
| | | | 28 | |
| | 12 | | 29 | |
| | 15 | | | |
| 0 | 22 | | 30 | Total Depth of Boring = 30 ft. |

Well Construction: Cement; Bent. 1-ft.; 2-in. Sch. 40 PVC; Lonestar #3 Sandpack; 2-in. Sch. 40 PVC - 0.02-in. Mill Slot

| WELL | | | | |
|---|---|---|---|---|
| **U-3** | UNOCAL CORPORATION - CERT<br>Unocal SS No. 7176<br>7850 Amador Valley Road<br>Dublin, California | Borehole Diameter: 8 inches<br>Logged by: C. Galantine<br>Driller: Mitchell<br>Date Started: 7-6-95<br>Date Completed: 7-6-95 | *enviros* ® | 95132.02 |

# UNIFIED SOIL CLASSIFICATION SYSTEM

| MAJOR DIVISIONS | | LTR | DESCRIPTION |
|---|---|---|---|
| COARSE GRAINED SOILS | GRAVEL AND GRAVELLY SOILS | GW | Well-graded gravels or gravel sand mixtures, little or no fines |
| | | GP | Poorly-graded gravels or gravel sand mixture, little or no fines |
| | | GM | Silty gravels, gravel-sand-clay mixtures |
| | | GC | Clayey gravels, gravel-sand-clay mixtures |
| | SAND AND SANDY SOILS | SW | Well-graded sands or gravelly sands, little or no fines |
| | | SP | Poorly-graded sands or gravelly sands, little or no fines |
| | | SM | Silty sands, sand-silt mixtures |
| | | SC | Clayey sands, sand-clay mixtures |
| FINE GRAINED SOILS | SILTS AND CLAYS LL<50 | ML | Inorganic silts and very fine-grained sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity |
| | | CL | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays |
| | | OL | Organic silts and organic silt-clays of low plasticity |
| | SILTS AND CLAYS LL>50 | MH | Inorganic silts, micaceous or diatomaceous fine-grained sandy or silty soils, elastic silts |
| | | CH | Inorganic clays of high plasticity, fat clays |
| | | OH | Organic clays of medium to high plasticity |
| HIGHLY ORGANIC SOILS | | Pt | Peat and other highly organic soils |

DEPTH THROUGH WHICH SAMPLER IS DRIVEN

RELATIVELY UNDISTURBED SAMPLE

MISSED SAMPLE

GROUNDWATER LEVEL OBSERVED FROM FIRST WET SOIL SAMPLE IN BORING

STATIC GROUNDWATER LEVEL

OVM — ORGANIC VAPOR METER READING IN PARTS PER MILLION

PID — PHOTO-IONIZATION DETECTOR READING IN PARTS PER MILLION

WELL DESIGN

SAND PACK

BENTONITE ANNULAR SEAL

NEAT CEMENT ANNULAR SEAL

BLANK PVC

MACHINE-SLOTTED PVC

S-10 — SAMPLE LOCATION

BLOW/FT REPRESENTS THE NUMBER OF BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES TO DRIVE THE SAMPLER THROUGH THE LAST 12 INCHES OF AN 18-INCH PENETRATION.

DASHED LINES SEPARATING UNITS ON THE LOG REPRESENT APPROXIMATE BOUNDARIES ONLY. ACTUAL BOUNDARIES MAY BE GRADUAL LOGS REPRESENT SUBSURFACE CONDITIONS AT THE BORING LOCATION AT THE TIME OF DRILLING ONLY

ENVIRONMENTAL RESOLUTIONS, INC.

PROJECT 2092

**UNIFIED SOIL CLASSIFICATION SYSTEM AND LOG OF BORINGS SYMBOL KEY**

TOSCO (UNION) 76 SERVICE STATION 7178
7850 Amador Valley Road
Dublin, California

**PLATE**

Appendix

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2092 Boring: B7/MW4 Plate: APPENDIX
Site: Tosco (Union) 76 Service Station 7176 Date: 4/15/98
Drill Contractor: Woodward Drilling
Sample Method: Split Spoon Geologist: ROBERT H. ENKEBOLL
Drill Rig: Mobile B-57 Bore Hole Diameter: 8" Signature:
Location: 80 Feet Southwest of Well U1 Registration: R.G. 5034
30 Feet South of Southern Site Boundary Logged by: Sue Shallenberger

| DEPTH (ft) | BLOW COUNTS | PID/OVM (Ppm) | SAMPLE | COLUMN | USCS | GEOLOGIC DESCRIPTION | WELL DESIGN |
|---|---|---|---|---|---|---|---|
| | | | | | | 2" asphalt, 8" base | |
| | | | | | ML | | |
| 5 | 20 | 0 | | | | Clayey silt, some sand and gravel, very dark greyish brown, damp, subangular gravel to 1" | |
| | | | | | CL | Transitioning to silty clay, abundant discontinuous calcium veinlets, sand and gravel interfingered at 9 feet | |
| 10 | 14 | 0 | | | | | |
| | | ▽ | | | | | |
| 15 | 26 | 0 | | | | | |
| | | | | | ML | Clayey silt, some gravel and sand, olive grey, moist, trace of sand, gravel rounded to subangular, up to 1" in size, sparse plant stems to 1 1/4", sand and gravel pocket 2" in diameter, fine-to coarse-grained sand, gravel to 1/4" | |
| | | 7 | | | | | |
| 20 | 20 | ▼ | | | | | |
| | | | | | CL | Silty clay, dark greyish brown, wet, sparse gravel | |
| | | | | | GP | Sandy gravel, dark greyish brown, wet, gravel to 1" | |
| 25 | 25 | 2 | | | | Total depth at 25 feet<br>Groundwater encountered at 20 feet | |

Casing Diameter: 2" Slot Size: 0.010 , Sand Size: 2/12 , Grout: Portland Cement

FN: 2092B007

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2092 Boring: B8/MW5 Plate: APPENDIX
Site: Tosco (Union) 76 Service Station 7176 Date: 4/15/98
Drill Contractor: Woodward Drilling
Sample Method: Split Spoon Geologist: ROBERT H. ENKEBOLL
Drill Rig: Mobile B-57 Bore Hole Diameter: 8" Signature:
Location: 95 Feet East of Well MW4 Registration: R.G. 5034
85 Feet Southeast of Well U1 Logged by: Sue Shallenberger

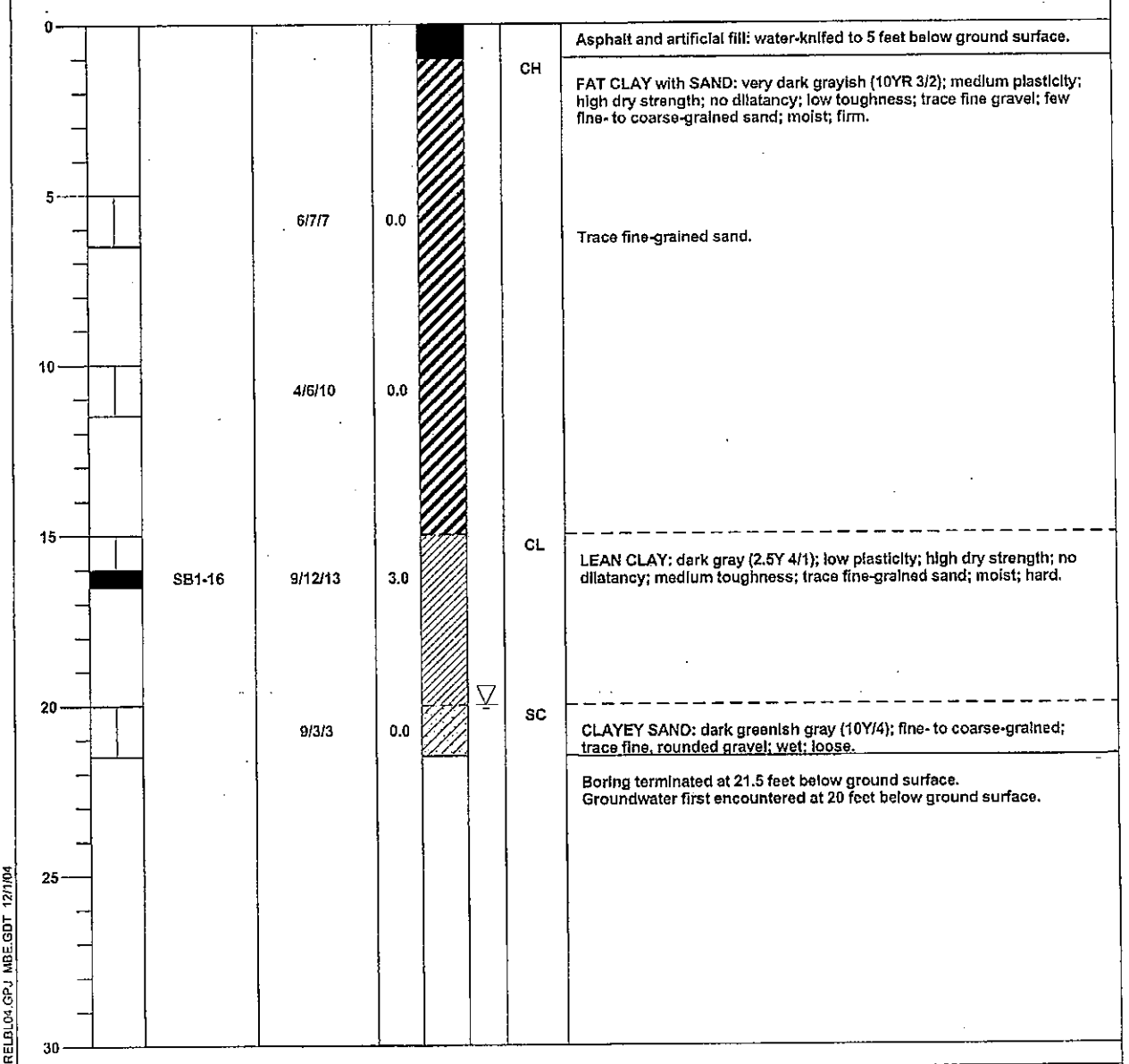
| DEPTH (ft) | BLOW COUNTS | PID/OVM (ppm) | USCS | GEOLOGIC DESCRIPTION |
|---|---|---|---|---|
| | | | | 3" asphalt, 14" baserock |
| | | | CL | Silty clay, dark greyish brown, damp with sandy gravel at 4', gravel rounded to subangular, up to 1 1/2" |
| 5 | 15 | 0 | | |
| 10 | 13 | 0 | | mottled brown and dark greyish brown, moist, with discontinuous calcium deposit veinlets, some rootlets, trace of sand, sparse gravel to 1/2" |
| 15 | 12 | 0 | | |
| | | | ML | Clayey silt, mottled brown and greenish grey, wet, some calcium veinlets, trace of sand |
| 20 | 9 | 2 | | |
| | | | CL | Clay, dark greyish brown, wet, some gravel to 1/2" |
| 25 | 22 | | | Total depth at 25 feet<br>Groundwater encountered at 20 feet |

WELL DESIGN

Casing Diameter: 2" Slot Size: 0.010 , Sand Size: 2/12 , Grout: Portland Cement

FN: 2092B008

| | | | |
|---|---|---|---|
| PROJECT NAME: CONOCOPHILLIPS STATION 7176 | SITE LOCATION: 7850 AMADOR VALLEY BLVD, DUBLIN | | |
| DRILLING COMPANY: WOODWARD | DRILL RIG: B57 | DRILL CREW: DAVID, TIM | DATE DRILLED: NOVEMBER 3, 2004 |
| DRILLING METHOD: HOLLOW-STEM AUGER | BORING DIAMETER (IN): 8" | TOTAL DEPTH OF BORING (FT): 21.5 | LOGGED BY: J. SMITH |
| SAMPLING METHOD: SPLIT-SPOON | HAMMER WEIGHT (LBS): 140 | HAMMER DROP (IN): 30 | REVIEWED BY: J. DOUGLAS |




NOTES:
- ☐ = sample interval
- ☒ = no sample recovery
- ■ = laboratory sample
- ▽ = groundwater first encountered
- ▼ = static groundwater
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- NR = not recorded
- ppm = parts per million

Jed A. Douglas, R.G. 7516

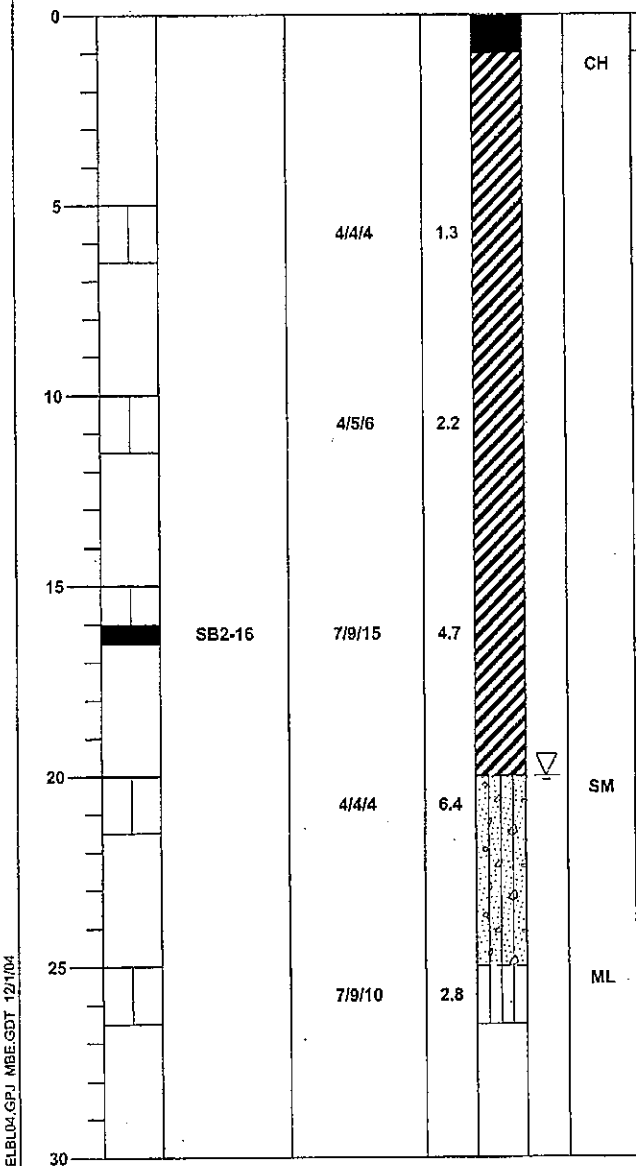
MILLER BROOKS Environmental, Inc.

# LOG OF BORING SB1

PROJECT NUMBER 06-459-7176-03 | PAGE 1 OF 1

LOG OF BORINGS REVISED BORELBL04.GPJ MBE.GDT 12/1/04

| | | | |
|---|---|---|---|
| PROJECT NAME: CONOCOPHILLIPS STATION 7176 | | SITE LOCATION: 7850 AMADOR VALLEY BLVD, DUBLIN | |
| DRILLING COMPANY: WOODWARD | DRILL RIG: B57 | DRILL CREW: DAVID, TIM | DATE DRILLED: NOVEMBER 3, 2004 |
| DRILLING METHOD: HOLLOW-STEM AUGER | BORING DIAMETER (IN): 8" | TOTAL DEPTH OF BORING (FT): 26.5 | LOGGED BY: J. SMITH |
| SAMPLING METHOD: SPLIT-SPOON | HAMMER WEIGHT (LBS): 140 | HAMMER DROP (IN): 30 | REVIEWED BY: J. DOUGLAS |




| DESCRIPTION OF SUBSURFACE MATERIALS |
|---|
| Asphalt and artificial fill: water-knifed to 5 feet below ground surface. |
| FAT CLAY with SAND: very dark grayish brown (10YR 3/2); medium plasticity; high dry strength; no dilatancy; low toughness; few fine subrounded gravel; few fine-grained sand; moist; soft. |
| Medium toughness; trace fine-grained sand. |
| SILTY SAND with GRAVEL: very dark grayish brown (10YR 3/2); fine- to coarse-grained; few fine rounded gravel; wet; loose. |
| SILT: very dark grayish brown (10YR 3/2); medium plasticity; high dry strength; low dilatancy; medium toughness; trace fine gravel; moist; firm. |
| Boring terminated at 26.5 feet below ground surface. |
| Groundwater first encountered at 20 feet below ground surface. |

NOTES:
- = sample interval
- = no sample recovery
- = laboratory sample
- ▽ = groundwater first encountered
- ▼ = static groundwater
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- NR = not recorded
- ppm = parts per million

MILLER BROOKS Environmental, Inc.

# LOG OF BORING SB2

Jed A. Douglas, R.G. 7516

PROJECT NUMBER 06-459-7176-03 | PAGE 1 OF 1

LOG OF BORINGS REVISED BORELBL04.GPJ MBE.GDT 12/1/04

| | | | |
|---|---|---|---|
| PROJECT NAME: CONOCOPHILLIPS STATION 7176 | | SITE LOCATION: 7850 AMADOR VALLEY BLVD, DUBLIN | |
| DRILLING COMPANY: WOODWARD | DRILL RIG: B57 | DRILL CREW: DAVID, TIM | DATE DRILLED: NOVEMBER 3, 2004 |
| DRILLING METHOD: HOLLOW-STEM AUGER | BORING DIAMETER (IN): 8" | TOTAL DEPTH OF BORING (FT): 26.5 | LOGGED BY: J. SMITH |
| SAMPLING METHOD: SPLIT-SPOON | HAMMER WEIGHT (LBS): 140 | HAMMER DROP (IN): 30 | REVIEWED BY: J. DOUGLAS |

| DEPTH (FT) | SAMPLE LOCATION | SAMPLE ID | BLOWS PER 6 IN | PID (ppm) | GRAPHIC LOG | GW LEVEL | USCS SOIL GROUP | DESCRIPTION OF SUBSURFACE MATERIALS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | Asphalt and artificial fill: water-knifed to 5 feet below ground surface. |
| | | | | | | | CH | FAT CLAY: dark grayish brown (10YR 4/2); medium plasticity; high dry strength; no dilatancy; medium toughness; few fine gravel; few fine-grained sand; moist; firm. |
| 5 | | | 6/8/9 | 1.1 | | | | |
| 10 | | | 7/8/10 | 1.1 | | | ML | |
| | | | | | | | CH | SILT: brown (10YR 5/3); medium plasticity; high dry strength; low dilatancy; medium toughness; moist; firm.<br>FAT CLAY: dark gray (10YR 4/1); medium plasticity; high dry strength; no dilatancy; medium toughness; few fine gravel; few fine-grained sand; moist; firm. |
| 15 | | SB3-16 | 7/8/9 | 1.4 | | | | |
| 20 | | | 6/7/7 | 44 | | | SM | SILTY SAND with GRAVEL: greenish gray (10Y/5); fine- to coarse-grained; few fine gravel; wet; loose. |
| 25 | | | 6/8/10 | 3.9 | | | ML | SILT: dark greenish gray (10Y/4); medium plasticity; high dry strength; low dilatancy; low toughness; trace fine-grained sand; moist to very moist; firm.<br>Boring terminated at 26.5 feet below ground surface.<br>Groundwater first encountered at 20 feet below ground surface. |
| 30 | | | | | | | | |

NOTES:
- = sample interval
- = no sample recovery
- = laboratory sample
- = groundwater first encountered
- = static groundwater
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- NR = not recorded
- ppm = parts per million

MILLER BROOKS Environmental, Inc.

LOG OF BORING SB3

Jed A. Douglas, R.G. 7516

PROJECT NUMBER 06-459-7176-03 | PAGE 1 OF 1

LOG OF BORINGS REVISED BORE1BL04.GPJ MBE.GDT 12/1/04

| | | | |
|---|---|---|---|
| PROJECT NAME: CONOCOPHILLIPS STATION 7176 | | SITE LOCATION: 7850 AMADOR VALLEY BLVD, DUBLIN | |
| DRILLING COMPANY: WOODWARD | DRILL RIG: B57 | DRILL CREW: DAVID, TIM | DATE DRILLED: NOVEMBER 3, 2004 |
| DRILLING METHOD: HOLLOW-STEM AUGER | BORING DIAMETER (IN): 8" | TOTAL DEPTH OF BORING (FT): 21.5 | LOGGED BY: J. SMITH |
| SAMPLING METHOD: SPLIT-SPOON | HAMMER WEIGHT (LBS): 140 | HAMMER DROP (IN): 30 | REVIEWED BY: J. DOUGLAS |

| DEPTH (FT) | SAMPLE LOCATION | SAMPLE ID | BLOWS PER 6 IN | PID (ppm) | GRAPHIC LOG | GW LEVEL | USCS SOIL GROUP | DESCRIPTION OF SUBSURFACE MATERIALS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | Asphalt and artificial fill: water-knifed to 5 feet below ground surface. |
| | | | | | | | CH | FAT CLAY: dark grayish brown (10YR 4/2); medium plasticity; trace fine-grained sand; trace fine gravel; high dry strength; no dilatancy; medium toughness; moist; firm. |
| 5 | | | 4/5/7 | 0.0 | | | | |
| 10 | | | 7/7/9 | 0.0 | | | | |
| 15 | | SB4-16 | 9/9/10 | 0.0 | | | | |
| 20 | | | 6/10/11 | 0.0 | | ▽ | SM | SILTY SAND: dark gray (10YR 4/2); fine- to coarse-grained sand; some fine gravel; wet; medium dense. |
| | | | | | | | | Boring terminated at 21.5 feet below ground surface. Groundwater first encountered at 20 feet below ground surface. |
| 25 | | | | | | | | |
| 30 | | | | | | | | |

NOTES:
- ☐ = sample interval
- ☒ = no sample recovery
- ■ = laboratory sample
- ▽ = groundwater first encountered
- ▼ = static groundwater
- PID = photoionization detector
- NM = not measured
- NA = not applicable
- NR = not recorded
- ppm = parts per million

MILLER BROOKS Environmental, Inc.

LOG OF BORING SB4

Jed A. Douglas, R.G. 7516

PROJECT NUMBER 06-459-7176-03

PAGE 1 OF 1

LOG OF BORINGS REVISED BORELBL04.GPJ MBE.GDT 12/1/04

# APPENDIX C

# SENSITIVE RECEPTOR SURVEY TABLE AND MAPS

ConocoPhillips

ConocoPhillips Company
76 Broadway
Sacramento, CA 95818
phone 916-558-7600
fax 916-558-7639

July 23, 2007

Mr. Barney Chan
Supervising Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway
Alameda, California 94502

RE: Sensitive Receptor Survey

76 Station No. 7176
7850 Amador Valley Boulevard
Dublin, California

Dear Mr. Chan,

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

Please feel free to contact me if you have any questions or require additional information.

Respectfully,

Bill Borgh

Bill Borgh
Site Manager – Risk Management and Remediation

Attachment

July 24, 2007

Mr. Barney Chan
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

**Re: Sensitive Receptor Survey**
76 Station No. 7176
7850 Amador Valley Boulevard
Dublin, California

DELTA

Dear Mr. Chan:

This report has been prepared by Delta Environmental Consultants (Delta) on behalf of ConocoPhillips Company (ConocoPhillips). The sensitive receptor survey was completed to identify all water supply wells within a one-mile radius of the site and sensitive receptors within 1,000 feet from the site referenced above (Figure 1).

## METHODS

The survey entailed a visit to the California Department of Water Resources (DWR) office in Sacramento to examine well log records and a site visit to identify any sensitive receptors within the survey area.

## FINDINGS

Water Well Survey: DWR well log records were reviewed in order to determine the location of any water-supply wells in the vicinity of the subject site. Using the DWR well logs, a total of 28 water supply wells were identified as being within a one-mile radius of the subject site. Water supply well locations located within the survey area are shown on Figure 2. Historically the groundwater flow direction at the site has been towards the southeast. Historical groundwater flow directions are shown on Figure 3. The closest down-gradient well is a cathodic protection well located approximately 0.8 miles southeast of the site. The closest water supply well is a domestic well located approximately 0.4 miles southwest of the site. The data for wells within the survey area are presented in Table 1.

Other wells located in the vicinity of the site include monitoring wells and wells whose associated DWR logs contained inadequate information to establish their precise location and/or well type.

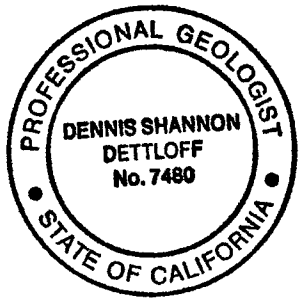
Sensitive Receptor Survey: A field survey was completed to identify any sensitive receptors within a 1,000 foot survey area. No schools, daycare centers, hospitals, or churches acting as a potential school or daycare facility were identified within the survey area. In addition, no nursing homes were identified within 1,000 feet of the site.

Bodies of Water: No bodies of water were identified within 1,000 feet of the site.

Please call Dennis Dettloff at (916) 503-1261 if you have any questions regarding the contents of this report.

Sincerely,
**Delta Environmental Consultants, Inc.**

Dennis S. Dettloff, P.G.
Senior Project Manager
California Registered Professional Geologist No. 7480




cc: Mr. William Borgh – ConocoPhillips (electronic copy)

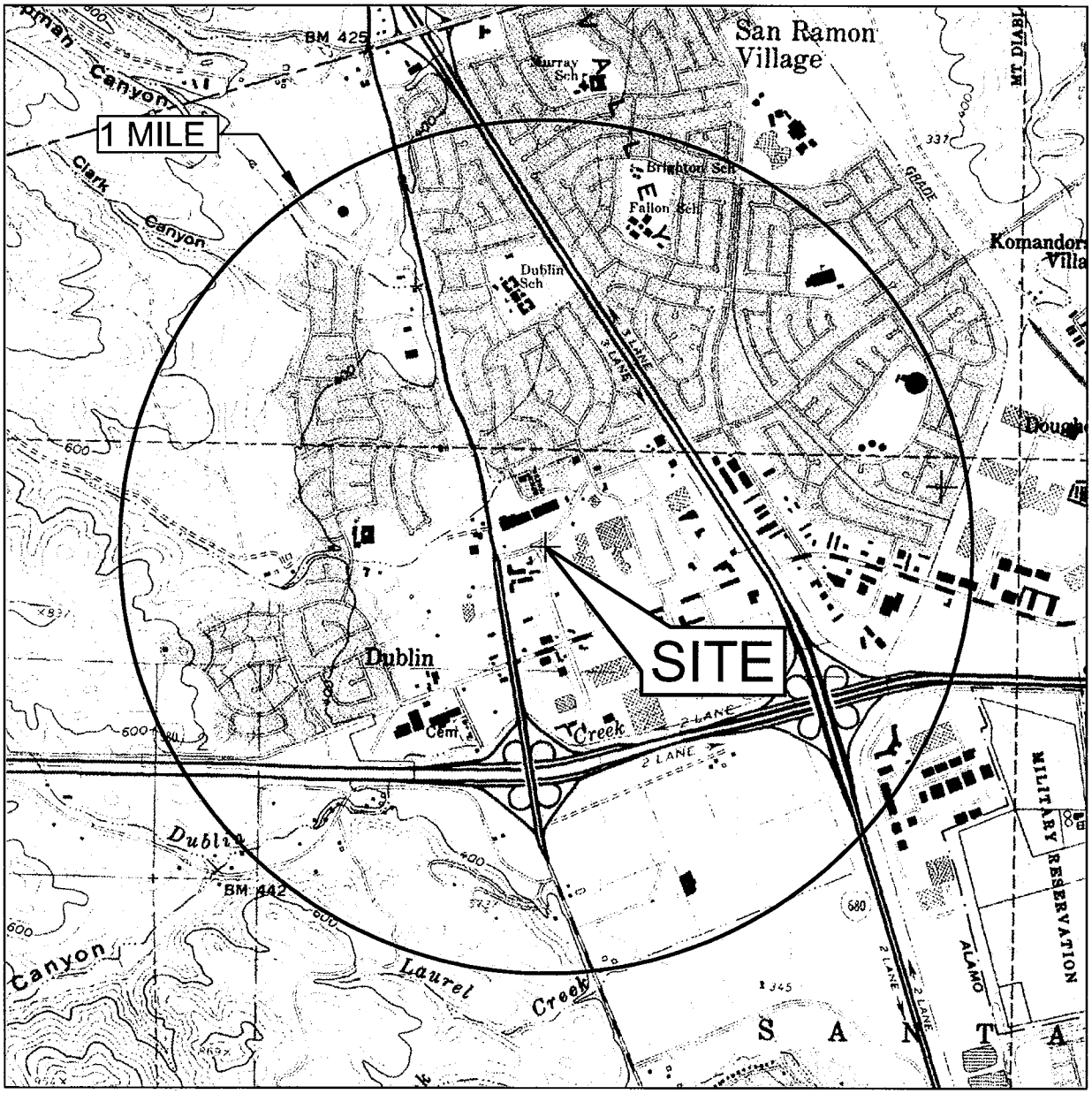
Figures:

| | |
|---|---|
| Figure 1 | Site Locator Map |
| Figure 2 | Water Supply Well Location Map |
| Figure 3 | Historical Groundwater Flow Directions |

Table:

| | |
|---|---|
| Table 1 | Water Supply Well Data |

# Figures




North

FIGURE 1

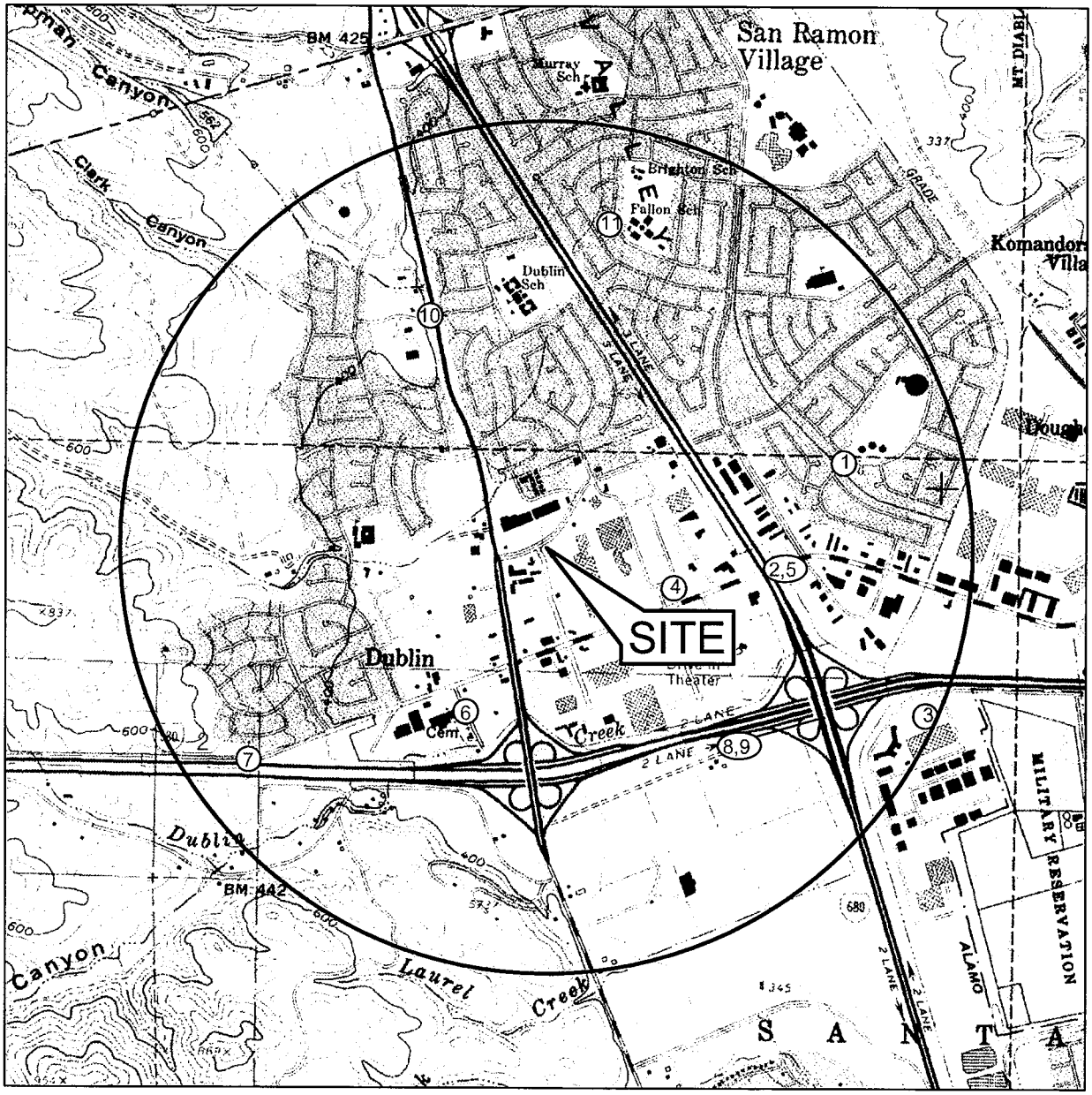
SITE LOCATOR SENSITIVE RECEPTOR MAP

76 STATION NO. 7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

| | |
|---|---|
| PROJECT NO. C107-176 | DRAWN BY MC 10/12/06 |
| FILE NO. Site Locator 7176 | PREPARED BY MC |
| REVISION NO. | REVIEWED BY |

DELTA

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, DUBLIN QUADRANGLE, 1967




North

FIGURE 2

SITE LOCATOR SENSITIVE RECEPTOR MAP

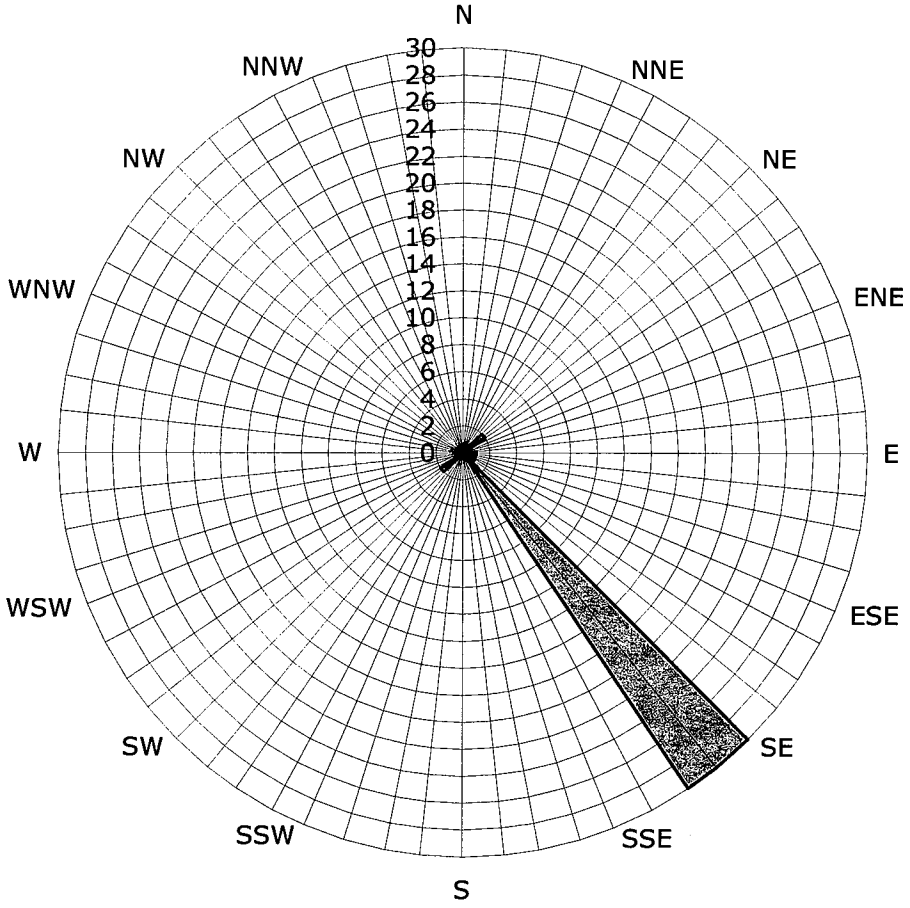
76 STATION NO. 7176
7850 AMADOR VALLEY BOULEVARD
DUBLIN, CALIFORNIA

| | |
|---|---|
| PROJECT NO. C107-176 | DRAWN BY JH 12/12/06 |
| FILE NO. Site Locator 7176 | PREPARED BY JH |
| REVISION NO. | REVIEWED BY |

DELTA

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, DUBLIN QUADRANGLE, 1967

**Historic Groundwater Flow Directions**
**ConocoPhillips Site No. 7176**
7850 Amador Valley Boulevard
Dublin, California




Groundwater Flow Direction

Legend
Concentric circles represent quarterly montoring events
Fourth Quarter 1995 through First Ouarter 2007

Table

## Table 1

One-Mile Agency Receptor Survey
ConocoPhillips Station No.7176
7850 Amador Valley Boulevard, Dublin, California

| | DWR[1] Well No. | Address | City | State | Zip | Owner | Well Type | Distance from Site (miles) | Direction Relative to Site |
|---|---|---|---|---|---|---|---|---|---|
| 1- | 3S/1W-1B5 | Maple Dr. (flood control channel and York Dr.) | Dublin | CA | | Alameda County Flood Control | Test Well/Other | 0.7 | NE |
| 2- | 3S/1W-1B2 | Village Parkway at Dublin Blvd. | Dublin | CA | | Valley Community Service District | Municipal | 0.7 | E |
| 3- | 3S/1W-1K3 | SW corner of I-580 and I-680 | Dublin | CA | | Livermore-Amador Valley Management Agency | Cathodic protection | 0.8 | SE |
| 4- | 3S/1W-1F1 | 100' N of Dublin Blvd., 4000 ft E of San Ramon Rd. | Dublin | CA | | Volk-McLain Co. | Domestic | 0.9 | SW |
| 5- | 3S/1W-1B3 | Dublin Blvd. at Village Parkway | Dublin | CA | | Valley Community Service District | Municipal | 0.7 | E |
| 6- | 3S/1W-2K4 | 6600 Donlon Way | Dublin | CA | | Dublin Historical | Domestic | 0.4 | SW |
| 7- | 3S/1W-3R3 | 10728 Dublin Rd. | Dublin | CA | 94566 | Pacific Construction & Engineering | Domestic | 0.8 | SW |
| 8- | 3S/1W-11C | Dublin Canyon Rd (3/4 mi from Foothill and 580) | Dublin | CA | | Walter Panganiban | Domestic (dry hole) | 1.0 | SW |
| 9- | 3S/1W-11C1 | Dublin Canyon Rd (3/4 mi from Foothill and 580) | Dublin | CA | | Walter Panganiban | Domestic | 1.0 | SW |
| 10- | 2S/1W-35K1 | 11000 Shannon Ave | Dublin | CA | | City of Dublin | Irrigation | 0.7 | NW |
| 11- | 2S-1W-36? | Aldea St. at Larkdale Ave. | Dublin | CA | | Volk-McLain Communities, Inc. | Domestic | 0.8 | NE |
| [2]12- | 3S/1W-1L1 | Walnut Creek Rd. to Niessen Ranch | Dublin | CA | | J.R. Cronin | Livestock | | |
| [2]13- | 3S/1W-1G1 | 2000' E of San Ramon Rd., 100' North Country Club Rd | | | | Volk-McLain Communities, Inc. | Municipal | | |
| [2]14- | 3S/1W-2 | Dublin Canyon Rd. | Dublin | CA | | Banke | | | |
| [2]15- | 3S/1W-2B1 | 1 mi E of Dublin Blvd., 0.3 mi down N Walnut Creek Rd | Dublin | CA | | R. Banke | Irrigation | | |
| [2]16- | 3S/1W-3P1 | 1 mi up Foothill Rd. from San Ramon Valley Blvd. | Dublin | CA | | Ron Stadey | Domestic | | |
| [2]17- | 3S/1W-3Q5 | Old Dublin Rd. parcel 44624 | | | | Caltrans | Test Well | | |
| [2]18- | 3S/1W-3P2 | Old Dublin Rd. west of Foothill 1 mile | | | | Livermore-Amador Valley Management Agency | | | |
| [2]19- | 3S/1W-12A1? | From Dublin S 1mile Foothill Rd. to Mexican Camp | | | | R.M. Wing | Irrigation | | |
| [2]20- | 3S/1W-12H3? | West end of Stoneridge Ave. west of Hopyard Rd. | | | | Livermore-Amador Valley Management Agency | | | |
| [2]21- | 3S/1W-12? | Foothill, section 12, SW corner | | | | Mills | | | |
| [2]22- | 3S/1W-12L1? | Rt. 1, Box 450, Foothill Road (Highway 21) | | CA | | Ralph E. Merritt | Irrigation | | |
| [2]23- | 3S/1W-12Q2 | 500' E of Foothill Road | Dublin | CA | | Lance Woods | Domestic | | |
| [2]24- | 3S/1W-2R81? | Section 2, SE quarter | Dublin | CA | | Joe Martin | | | |
| [2]25- | 3S/1W-2P? | Section 2, SW quarter | Dublin | CA | | Jim Nutt | | | |
| [2]26- | 3S/1W-2R1 | Section 2, SE quarter | Dublin | CA | | Joe Martin | | | |
| [2]27- | 3S/1W-2H91? | Section 2 | Dublin | CA | | Roy Neidt | | | |
| [2]28- | 3S/1W-2H90? | Section 2 | Dublin | CA | | Coffee | Domestic | | |

DWR: Department of Water Resources

[1] Well Locations shown on Figure 1.

[2] Specific address cannot be located on map.

# APPENDIX D

# HISTORICAL SOIL AND GROUNDWATER ANALYTICAL DATA

**CUMULATIVE HISTORICAL GRAB-GROUNDWATER DATA**
**UNOCAL STATION #7176 (UNION OIL SITE 351788)**
**7850 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA**

| *Sample ID* | *Sample Date* | *Sample Depth (fbg)* | *TPHg (µg/L)* | *TPHd (µg/L)* | *Benzene (µg/L)* | *Toluene (µg/L)* | *Ethyl-benzene (µg/L)* | *Total Xylenes (µg/L)* | *MTBE (µg/L)* |
|---|---|---|---|---|---|---|---|---|---|
| *[1] ESL: Groundwater, Drinking Water Resource (Table F-1a)* | | | ***100*** | ***100*** | ***1.0*** | ***40*** | ***30*** | ***20*** | ***5.0*** |
| **1995 Preliminary soil and groundwater investigation (Enviros, Inc.)** | | | | | | | | | |
| B-2 | 07/07/95 | --- | <50 | <62 | <0.50 | <0.50 | <0.50 | <0.50 | --- |
| B-4 | 07/07/95 | --- | <50 | **390** | <0.50 | <0.50 | <0.50 | <0.50 | --- |
| UST-1 | 07/07/95 | --- | **3,000** | **970** | **280** | **<10** | **<10** | **<10** | --- |
| **2004 Limited phase II environmental site assessment report (Miller Brooks Environmental, Inc.)** | | | | | | | | | |
| SB1 | 11/03/04 | --- | **3,100** | **1,100** | <2.5 | <2.5 | <2.5 | <5.0 | **3.0** |
| SB2 | 11/03/04 | --- | **1,100** | **340** | <1.0 | <1.0 | **1.4** | <2.0 | **2.8** |
| SB3 | 11/03/04 | --- | **9,700** | **870** | <1.0 | **2.2** | **2.6** | <2.0 | **2.0** |
| SB4 | 11/03/04 | --- | <50 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <5.0 |
| **2010 CPT Vertical Assessment Report (Delta)** | | | | | | | | | |
| CPT-1-22-24 | 01/08/10 | 22-24 | <50 | **96** | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 |
| CPT-1-50-54 | 01/08/10 | 50-54 | <50 | **61** | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 |

**CUMULATIVE HISTORICAL GRAB-GROUNDWATER DATA**
**UNOCAL STATION #7176 (UNION OIL SITE 351788)**
**7850 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA**

**Abbreviations/Notes:**

Total petroleum hydrocarbons as gasoline (TPHg) by EPA method 8015 unless otherwise noted.

Benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tert-butyl alcohol (MTBE) by EPA Method 8020 or 8260 unless otherwise noted.

[1]ESL = Environmental Screening Levels from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater,* California Regional Water Quality Control Board - San Francisco Bay Region, Intermin Final November 2007, Revised May 2008.

fbg = Feet below grade.

-- = Not analyzed or not applicable.

<x = Not detected above laboratory method detection limit.

Bold = Concentration exceeds most conservative applicable ESL.

* = The 1989 Reconnaissance Groundwater Investigation Report does not show the location of SB-1.

**CUMULATIVE SOIL ANALYTICAL TABLE**
**UNOCAL STATION #7176 (UNION OIL SITE 351788)**
**7850 AMADOR VALLEY ROAD, DUBLIN, CALIFORNIA**

| Sample ID | Sample Date | Sample Depth (fbg) | O&G (mg/kg) | TPHd (mg/kg) | TPHg (mg/kg) | B (mg/kg) | T (mg/kg) | E (mg/kg) | X (mg/kg) | MTBE (mg/kg) | Ethanol (mg/kg) | TBA (mg/kg) | DIPE (mg/kg) | ETBE (mg/kg) | TAME (mg/kg) | EDB (mg/kg) | 1,2-DCA (mg/kg) | SVOCs (mg/kg) | VOCs (mg/kg) | Cd (mg/kg) | Cr (mg/kg) | Pb (mg/kg) | Ni (mg/kg) | Zn (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *[1] ESL: Soil Leaching, Current or potential drinking water source (Table G)* | | | *---* | *83* | *83* | *0.044* | *2.9* | *3.3* | *2.3* | *0.023* | *NE* | *0.075* | *NE* | *NE* | *NE* | *0.00033* | *0.0045* | *---* | *---* | | | *2.5* | | |
| *[1] ESL: Direct Exposure, Commercial-Industrial Worker (Table K-2)* | | | *---* | *450* | *450* | *0.27* | *210* | *5.0* | *100* | *65* | *NE* | *320,000* | *NE* | *NE* | *NE* | *0.044* | *0.48* | *---* | *---* | | | *750* | | |
| *[1] ESL: Direct Exposure, Construction/Trench Worker (Table K-3)* | | | *---* | *4,200* | *4,200* | *12* | *650* | *210* | *420* | *2,800* | *NE* | *320,000* | *NE* | *NE* | *NE* | *1.7* | *21* | *---* | *---* | | | *750* | | |
| **2010 CPT Vertical Assessment Report (Delta)** | | | | | | | | | | | | | | | | | | | | | | | | |
| CPT-1-15 | 01/08/10 | 15 | --- | <2.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <1.0 | <0.05 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- |
| CPT-1-20 | 01/08/10 | 20 | --- | <2.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <1.0 | <0.05 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- |
| CPT-1-25 | 01/08/10 | 25 | --- | <2.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <1.0 | <0.05 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- |
| CPT-1-30 | 01/08/10 | 30 | --- | <2.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <1.0 | <0.05 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- |
| CPT-1-45 | 01/08/10 | 45 | --- | <2.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <1.0 | <0.05 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- |
| CPT-1-55 | 01/08/10 | 55 | --- | <2.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <1.0 | <0.05 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- |
| **2004 Limited Phase II Environmental Site Assessment Report (Miller Brooks Environmental, Inc.)** | | | | | | | | | | | | | | | | | | | | | | | | |
| SB1-16 | 11/03/04 | 16 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.1 | <0.010 | <0.010 | <0.0050 | <0.0050 | -- | --- | --- | --- | --- | --- | --- | --- | --- |
| SB2-16 | 11/03/04 | 16 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.1 | <0.010 | <0.010 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SB3-16 | 11/03/04 | 16 | --- | **7.1** | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.1 | <0.010 | <0.010 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SB4-16 | 11/03/04 | 16 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | <0.1 | <0.010 | <0.010 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1998 Supplemental Evaluation and Investigation Report (ERI)** | | | | | | | | | | | | | | | | | | | | | | | | |
| S-10-B7 | 04/15/98 | 10 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S-10-B8 | 04/15/98 | 10 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1995 Storage Tank Replacement Observation Report (Enivros, Inc.)** | | | | | | | | | | | | | | | | | | | | | | | | |
| UW-1 | 11/08/94 | 8 | <50 | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | ND | ND | *0.56* | *35* | <5.0 | *39* | *37* |
| UOW-1 | 11/07/94 | 6 | <50 | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | ND | ND | *<0.50* | *31* | 7.1* | *35* | *35* |
| UT-1 | 11/08/94 | 3.5 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ~~UT-2~~ | ~~11/07/94~~ | ~~3.5~~ | ~~—~~ | ~~1300~~ | ~~100~~ | ~~<0.10~~ | ~~<0.10~~ | ~~<0.10~~ | ~~0.13~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ |
| UT-3 | 11/08/94 | 3.5 | --- | --- | 3.1 | 0.017 | 0.25 | 0.097 | 0.56 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ~~UT-4~~ | ~~11/08/94~~ | ~~3.5~~ | ~~—~~ | ~~—~~ | ~~2,200~~ | ~~<2.5~~ | ~~26~~ | ~~36~~ | ~~300~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ |
| UT-5 (CS) | 11/10/94 | 11 | --- | 25 | 740 | <0.50 | 6.5 | 20 | 110 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-6 (CS) | 11/10/94 | 11 | --- | 1.1 | <1.0 | <0.0050 | <0.0050 | <0.0050 | 0.0070 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-7 (CS) | 11/30/94 | 19.5 | --- | 50 | 1,300 | <0.50 | 31 | 26 | 150 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-8 (CS) | 11/30/94 | 12 | --- | ~~24~~ | 180 | <0.12 | 3.8 | 3.0 | 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-9 (CS) | 11/30/94 | 8 | --- | <1.0 | 180 | <0.12 | <0.12 | <0.12 | 0.59 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-10 (CS) | 11/30/94 | 8 | --- | 12 | 140 | 0.10 | 0.62 | 0.84 | 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UT-11 (CS) | 11/30/94 | 11 | --- | 1.3 | 5.1 | <0.0050 | <0.0050 | 0.014 | 0.078 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ~~UX-1~~ | ~~11/07/94~~ | ~~14~~ | ~~—~~ | ~~9100~~ | ~~—~~ | ~~0.98~~ | ~~1.8~~ | ~~2.7~~ | ~~3.4~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ |
| ~~UX-2~~ | ~~11/08/94~~ | ~~14~~ | ~~—~~ | ~~<1.0~~ | ~~—~~ | ~~<0.0050~~ | ~~<0.0050~~ | ~~<0.0050~~ | ~~0.011~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ |
| ~~UX-3~~ | ~~11/10/94~~ | ~~15.5~~ | ~~—~~ | ~~—~~ | ~~1,600~~ | ~~1.6~~ | ~~54~~ | ~~24~~ | ~~220~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~—~~ | ~~<5.0~~ | ~~—~~ | ~~—~~ |

**CUMULATIVE SOIL ANALYTICAL TABLE**
**UNOCAL STATION #7176 (UNION OIL SITE 351788)**
**7850 AMADOR VALLEY ROAD, DUBLIN, CALIFORNIA**

| *Sample ID* | *Sample Date* | *Sample Depth (fbg)* | *O&G (mg/kg)* | *TPHd (mg/kg)* | *TPHg (mg/kg)* | *B (mg/kg)* | *T (mg/kg)* | *E (mg/kg)* | *X (mg/kg)* | *MTBE (mg/kg)* | *Ethanol (mg/kg)* | *TBA (mg/kg)* | *DIPE (mg/kg)* | *ETBE (mg/kg)* | *TAME (mg/kg)* | *EDB (mg/kg)* | *1,2-DCA (mg/kg)* | *SVOCs (mg/kg)* | *VOCs (mg/kg)* | *Cd (mg/kg)* | *Cr (mg/kg)* | *Pb (mg/kg)* | *Ni (mg/kg)* | *Zn (mg/kg)* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *[1] ESL: Soil Leaching, Current or potential drinking water source (Table G)* | | | *---* | *83* | *83* | *0.044* | *2.9* | *3.3* | *2.3* | *0.023* | *NE* | *0.075* | *NE* | *NE* | *NE* | *0.00033* | *0.0045* | *---* | *---* | | | *2.5* | | |
| *[1] ESL: Direct Exposure, Commercial-Industrial Worker (Table K-2)* | | | *---* | *450* | *450* | *0.27* | *210* | *5.0* | *100* | *65* | *NE* | *320,000* | *NE* | *NE* | *NE* | *0.044* | *0.48* | *---* | *---* | | | *750* | | |
| *[1] ESL: Direct Exposure, Construction/Trench Worker (Table K-3)* | | | *---* | *4,200* | *4,200* | *12* | *650* | *210* | *420* | *2,800* | *NE* | *320,000* | *NE* | *NE* | *NE* | *1.7* | *21* | *---* | *---* | | | *750* | | |
| ~~UX-4~~ | ~~11/10/94~~ | ~~15.5~~ | ~~---~~ | ~~---~~ | ~~1,500~~ | ~~<1.0~~ | ~~11~~ | ~~16~~ | ~~160~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~<5.0~~ | ~~---~~ | ~~---~~ |
| ~~UX-5~~ | ~~11/10/94~~ | ~~15.5~~ | ~~---~~ | ~~---~~ | ~~5.2~~ | ~~0.021~~ | ~~0.022~~ | ~~0.030~~ | ~~0.14~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ |
| ~~UX-6~~ | ~~11/10/94~~ | ~~15~~ | ~~---~~ | ~~---~~ | ~~11~~ | ~~0.011~~ | ~~0.067~~ | ~~0.046~~ | ~~0.40~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ |
| ~~UX-7~~ | ~~11/10/94~~ | ~~15~~ | ~~---~~ | ~~---~~ | ~~2.8~~ | ~~0.0062~~ | ~~<0.0050~~ | ~~0.016~~ | ~~0.16~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ |
| ~~UX-8~~ | ~~11/10/94~~ | ~~15~~ | ~~---~~ | ~~---~~ | ~~150~~ | ~~0.22~~ | ~~3.5~~ | ~~2.1~~ | ~~21~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~---~~ | ~~<5.0~~ | ~~---~~ | ~~---~~ |
| UX-9 (CS) | 11/10/94 | 16 | --- | 36 | 41 | <0.025 | 0.074 | 0.43 | 0.37 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UX-10 (CS) | 11/10/94 | 16 | --- | 75 | 27 | <0.025 | 0.062 | 0.29 | 0.049 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UX-11 (CS) | 11/11/94 | 17 | --- | 15 | 200 | <0.25 | 1.2 | 0.94 | 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UX-12(CS) | 11/11/94 | 17 | --- | 15 | 230 | <0.25 | 2.6 | 3.0 | 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UX-13 (CS) | 11/11/94 | 15 | --- | 1.6 | <1.0 | <0.0050 | <0.0050 | <0.0050 | 0.0060 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UX-14 (CS) | 11/11/94 | 17 | --- | 16 | 210 | <0.25 | 0.78 | 0.98 | 9.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1995 Preliminary Soil and Groundwater Investigation (Enviros, Inc.)** | | | | | | | | | | | | | | | | | | | | | | | | |
| U-1-10.5 | 07/07/95 | 10.5 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| U-1-18.5 | 07/07/95 | 18.5 | --- | **25** | **26** | **0.041** | **0.053** | **0.56** | **2.2** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| U-2-13 | 07/07/95 | 13 | --- | **1.3** | <1.0 | **0.017** | <0.0050 | **0.071** | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| U-2-17.5 | 07/07/95 | 17.5 | --- | **12** | **97** | <0.10 | **0.21** | **1.7** | **1.5** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| U-3-17.5 | 07/07/95 | 17.5 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-1-13 | 07/07/95 | 13 | --- | **1.5** | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-1-18 | 07/07/95 | 18 | --- | **1.0** | **2.1** | <0.0050 | <0.0050 | **0.028** | **0.0088** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-2-16 | 07/07/95 | 16 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-3-11 | 07/07/95 | 11 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-3-17 | 07/07/95 | 17 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-4-11.5 | 07/07/95 | 11.5 | --- | <1.0 | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-4-16 | 07/07/95 | 16 | --- | **1.7** | <1.0 | <0.0050 | <0.0050 | <0.0050 | <0.0050 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-5-14.5 | 07/07/95 | 14.5 | --- | <1.0 | **5.1** | **0.13** | **0.020** | **0.29** | **0.12** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-5-18 | 07/07/95 | 18 | --- | **4.8** | **59** | **0.068** | <0.0050 | **0.84** | **0.98** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-6-14.5 | 07/07/95 | 14.5 | --- | <1.0 | **4.9** | **0.088** | <0.0050 | **0.099** | **0.22** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B-6-19.5 | 07/07/95 | 19.5 | --- | **10** | **150** | **0.21** | **3.0** | **3.2** | **19** | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

**CUMULATIVE SOIL ANALYTICAL TABLE**
**UNOCAL STATION #7176 (UNION OIL SITE 351788)**
**7850 AMADOR VALLEY ROAD, DUBLIN, CALIFORNIA**

| Sample ID | Sample Date | Sample Depth (fbg) | O&G (mg/kg) | TPHd (mg/kg) | TPHg (mg/kg) | B (mg/kg) | T (mg/kg) | E (mg/kg) | X (mg/kg) | MTBE (mg/kg) | Ethanol (mg/kg) | TBA (mg/kg) | DIPE (mg/kg) | ETBE (mg/kg) | TAME (mg/kg) | EDB (mg/kg) | 1,2-DCA (mg/kg) | SVOCs (mg/kg) | VOCs (mg/kg) | Cd (mg/kg) | Cr (mg/kg) | Pb (mg/kg) | Ni (mg/kg) | Zn (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [1] ESL: Soil Leaching, Current or potential drinking water source (Table G) | | | --- | 83 | 83 | 0.044 | 2.9 | 3.3 | 2.3 | 0.023 | NE | 0.075 | NE | NE | NE | 0.00033 | 0.0045 | --- | --- | | | 2.5 | | |
| [1] ESL: Direct Exposure, Commercial-Industrial Worker (Table K-2) | | | --- | 450 | 450 | 0.27 | 210 | 5.0 | 100 | 65 | NE | 320,000 | NE | NE | NE | 0.044 | 0.48 | --- | --- | | | 750 | | |
| [1] ESL: Direct Exposure, Construction/Trench Worker (Table K-3) | | | --- | 4,200 | 4,200 | 12 | 650 | 210 | 420 | 2,800 | NE | 320,000 | NE | NE | NE | 1.7 | 21 | --- | --- | | | 750 | | |

**Abbreviations/Notes:**

Petroleum hydrocarbons as oil and grease (O&G) by Environmental Protection Agency (EPA) standard method 5520 E&F.

Total Petroleum hydrocarbons as Diesel (TPHd) by EPA method 8015B unless otherwise noted.

Total petroleum hydrocarbons as gasoline (TPHg) by EPA method 8015 unless otherwise noted.

Benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tert-butyl alcohol (MTBE), ethanol, t-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl t-butyl ether (ETBE), t-amyl methyl ether (TAME), 1,2-dibromoethane (EDB) and 1,2-dichloroethane (1,2-DCA) by EPA Method 8020 or 8260 unless otherwise noted.

Semi-volatile organic compounds (SVOCs) by EPA method 8270.

Lead by 6010

[1]ESL = Environmental Screening Levels from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater,* California Regional Water Quality Control Board - San Francisco Bay Region, Intermin Final November 2007, Revised May 2008.

fbg = Feet below grade.

Milligrams per kilogram (mg/kg).

ND = Not detectable above various or unreported laboratory detection limits.

-- = Not analyzed or not applicable.

<x = Not detected above laboratory method detection limit.

Bold = Concentration exceeds most conservative applicable ESL.

~~Strikethrough~~ = Soil excavated.

**TABLE 1**

**GROUNDWATER MONITORING AND SAMPLING DATA**
**UNION OIL #7176**
**7850 AMADOR VALLEY BLVD**
**DUBLIN, CALIFORNIA**

| | | | | | *HYDROCARBONS* | | | *PRIMARY VOCS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Date | *TOC* | *DTW* | *GWE* | *TPHd by 8015 with Silica Gel Cleanup* | *TPHg by 8015* | *Total Petro Hydro - Purgeable (GRO) by 8260* | *Benzene* | *Toluene* | *Ethylbenzene* | *Xylenes* | *MTBE by SW8260* | *Diisopropyl ether* | *tert-Butyl ethyl ether* | *tert-Amyl methyl ether* | *tert-Butyl alcohol* | *1,2-Dibromoethane (Ethylene dibromide)* | *1,2-Dichloroethane* | *Ethanol* |
| | Units | *ft* | *ft* | *ft-amsl* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* | *µg/L* |
| U-1 | 08/26/2011 | 355.59 | 14.83 | 340.76 | 670 | 1,400 | 2,400 | <0.50 | <0.50 | 0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | <0.50 | <250 |
| **U-1** | **02/10/2012** | **355.59** | **16.33** | **339.26** | **650** | **2,100** | **2,300** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<10** | **<0.50** | **<0.50** | **<250** |
| U-2 | 08/26/2011 | 356.55 | 15.52 | 341.03 | 410 | 460 | 1,100 | <0.50 | <0.50 | 0.59 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | <0.50 | <250 |
| **U-2** | **02/10/2012** | **356.55** | **17.10** | **339.45** | **270** | **1,100** | **1,200** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<10** | **<0.50** | **<0.50** | **<250** |
| U-3 | 08/26/2011 | 358.09 | 17.12 | 340.97 | <40 | <50 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | <0.50 | <250 |
| **U-3** | **02/10/2012** | **358.09** | **18.67** | **339.42** | **<40** | **<50** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<10** | **<0.50** | **<0.50** | **<250** |
| MW-4 | 08/26/2011[1] | 356.41 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **MW-4** | **02/10/2012[1]** | **356.41** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| MW-5 | 08/26/2011 | 355.03 | 14.73 | 340.30 | <40 | <50 | <50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <10 | <0.50 | <0.50 | <250 |
| **MW-5** | **02/10/2012** | **355.03** | **16.10** | **338.93** | **<40** | **<50** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<10** | **<0.50** | **<0.50** | **<250** |

**TABLE 1**

**GROUNDWATER MONITORING AND SAMPLING DATA**
**UNION OIL #7176**
**7850 AMADOR VALLEY BLVD**
**DUBLIN, CALIFORNIA**

| | | *ADDITIONAL VOCS* | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Date | *1,1,1,2-Tetrachloroethane* | *1,1,1-Trichloroethane* | *1,1,2,2-Tetrachloroethane* | *1,1,2-Trichloroethane* | *1,1-Dichloroethane* | *1,1-Dichloroethene* | *1,1-Dichloropropene* | *1,2,3-Trichlorobenzene* | *1,2,3-Trichloropropane* | *1,2,4-Trichlorobenzene* | *1,2,4-Trimethylbenzene* | *1,2-Dibromo-3-chloropropane (DBCP)* | *1,2-Dichlorobenzene* | *1,2-Dichloroethene (total)* | *1,2-Dichloropropane* | *1,3,5-Trimethylbenzene* | *1,3-Dichlorobenzene* | *1,3-Dichloropropane* | *1,3-Dichloropropene* | *1,4-Dichlorobenzene* | *2,2-Dichloropropane* | *2-Chlorotoluene* | *2-Phenylbutane (sec-Butylbenzene)* | *4-Chlorotoluene* | *Bromobenzene* | *Bromodichloromethane* | *Bromoform* | *Bromomethane (Methyl bromide)* |
| | Units | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L |
| U-1 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <1.0 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | 21 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 |
| **U-1** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **26** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** |
| U-2 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <1.0 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | 7.9 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 |
| **U-2** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **0.51** | **<1.0** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **7.6** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** |
| U-3 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <1.0 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 |
| **U-3** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** |
| MW-4 | 08/26/2011[1] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **MW-4** | **02/10/2012[1]** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| MW-5 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <1.0 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 |
| **MW-5** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** |

**TABLE 1**

**GROUNDWATER MONITORING AND SAMPLING DATA**
**UNION OIL #7176**
**7850 AMADOR VALLEY BLVD**
**DUBLIN, CALIFORNIA**

| | | ADDITIONAL VOCS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Location | Date | *Carbon tetrachloride* | *Chlorobenzene* | *Chlorobromomethane* | *Chloroethane* | *Chloroform (Trichloromethane)* | *Chloromethane (Methyl chloride)* | *cis-1,2-Dichloroethene* | *cis-1,3-Dichloropropene* | *Cymene (p-Isopropyltoluene)* | *Dibromochloromethane* | *Dibromomethane* | *Dichlorodifluoromethane (CFC-12)* | *Hexachlorobutadiene* | *Isopropyl benzene* | *Methylene chloride* | *N-Butylbenzene* | *N-Propylbenzene* | *Naphthalene* | *Styrene* | *tert-Butylbenzene* | *Tetrachloroethene* | *trans-1,2-Dichloroethene* | *trans-1,3-Dichloropropene* | *Trichloroethene* | *Trichlorofluoromethane (CFC-11)* | *Trifluorotrichloroethane (Freon 113)* | *Vinyl chloride* |
| | Units | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L | µg/L |
| U-1 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 13 | <1.0 | 36 | 56 | 1.7 | <0.50 | 1.9 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| **U-1** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **14** | **<1.0** | **51** | **55** | **<0.50** | **<0.50** | **3.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** |
| U-2 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 17 | <1.0 | <0.50 | 31 | <0.50 | <0.50 | 3.9 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| **U-2** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **13** | **<1.0** | **3.4** | **23** | **<0.50** | **<0.50** | **5.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** |
| U-3 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| **U-3** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** |
| MW-4 | 08/26/2011[1] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **MW-4** | **02/10/2012[1]** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| MW-5 | 08/26/2011 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <1.0 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| **MW-5** | **02/10/2012** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<1.0** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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-4** | | | | | | | | | | | | | | | |
| 4/23/1998 | 356.41 | 12.11 | 0 | 344.30 | -- | -- | 2500 | -- | 5.9 | 6.4 | 16 | 31 | ND | -- | |
| 7/8/1998 | 356.41 | 13.70 | 0 | 342.71 | -1.59 | 1400 | 1000 | -- | ND | ND | ND | ND | ND | -- | |
| 10/5/1998 | 356.41 | 15.18 | 0 | 341.23 | -1.48 | -- | 890 | -- | ND | ND | ND | 14 | ND | -- | |
| 1/4/1999 | 356.41 | 16.39 | 0 | 340.02 | -1.21 | 71 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/4/1999 | 356.41 | 16.39 | 0 | 340.02 | -1.21 | 71 | 230 | -- | 0.56 | 1.3 | 1.4 | 1.8 | 10 | -- | |
| 4/5/1999 | 356.41 | 14.61 | 0 | 341.80 | 1.78 | 210 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/5/1999 | 356.41 | 14.61 | 0 | 341.80 | 1.78 | 340 | 620 | -- | ND | 1.8 | 2.1 | ND | 6 | 9.3 | |
| 7/1/1999 | 356.41 | 15.43 | 0 | 340.98 | -0.82 | 310 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | 356.41 | 15.43 | 0 | 340.98 | -0.82 | 260 | 700 | -- | 2.1 | ND | 1.9 | 2.4 | ND | 21 | |
| 9/30/1999 | 356.41 | 16.27 | 0 | 340.14 | -0.84 | 420 | 582 | -- | 2.6 | 1.30 | 1.98 | ND | 23.1 | 22.5 | |
| 9/30/1999 | 356.41 | 16.27 | 0 | 340.14 | -0.84 | 220 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | 356.41 | 17.50 | 0 | 338.91 | -1.23 | 260 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | 356.41 | 17.50 | 0 | 338.91 | -1.23 | 250 | 800 | -- | 4.2 | 4.6 | 3.3 | 11 | 31 | 17 | |
| 4/4/2000 | 356.41 | 13.91 | 0 | 342.50 | 3.59 | 460 | 710 | -- | 2 | 1.3 | 4.4 | 2.0 | 21 | 22 | |
| 4/4/2000 | 356.41 | 13.91 | 0 | 342.50 | 3.59 | 340 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | 356.41 | 15.58 | 0 | 340.83 | -1.67 | 220 | 490 | -- | 0.89 | 1.3 | 0.85 | 1.8 | 21 | 12 | |
| 7/14/2000 | 356.41 | 15.58 | 0 | 340.83 | -1.67 | 76 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | 356.41 | 16.96 | 0 | 339.45 | -1.38 | 160 | 598 | -- | ND | 1.56 | 4.65 | ND | 15.4 | 14 | |
| 10/27/2000 | 356.41 | 16.96 | 0 | 339.45 | -1.38 | 120 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | 356.41 | 16.64 | 0 | 339.77 | 0.32 | -- | 522 | -- | 4.09 | 1.69 | 2.53 | 1.26 | 17.2 | 14.3 | |
| 4/3/2001 | 356.41 | 15.46 | 0 | 340.95 | 1.18 | 180 | 575 | -- | ND | ND | ND | ND | 14.0 | 11.6 | |
| 4/3/2001 | 356.41 | 15.46 | 0 | 340.95 | 1.18 | ND | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | 356.41 | 16.63 | 0 | 339.78 | -1.17 | 200 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | 356.41 | 16.63 | 0 | 339.78 | -1.17 | 230 | 720 | -- | 4.7 | 1.5 | 2.5 | 0.74 | 10 | 7.1 | |
| 10/5/2001 | 356.41 | 17.38 | 0 | 339.03 | -0.75 | 180 | 650 | -- | 4.3 | 1.2 | 1.1 | 1.8 | 5.9 | 5.4 | |
| 10/5/2001 | 356.41 | 17.38 | 0 | 339.03 | -0.75 | 140 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | 356.41 | 15.10 | 0 | 341.31 | 2.28 | 390 | 340 | -- | 2.9 | 1.4 | 1.7 | ND<1.0 | ND<10/ | 3.1 | |
| 1/3/2002 | 356.41 | 15.10 | 0 | 341.31 | 2.28 | 360 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | 356.41 | 14.85 | 0 | 341.56 | 0.25 | 160 | 340 | -- | ND<0.50 | 2.7 | ND<0.50 | 0.66 | ND<5.0 | 2.2 | |
| 4/1/2002 | 356.41 | 14.85 | 0 | 341.56 | 0.25 | 100 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | 356.41 | 15.53 | 0 | 340.88 | -0.68 | 130 | -- | 280 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 0.58 | |
| 7/1/2002 | 356.41 | 15.53 | 0 | 340.88 | -0.68 | 97 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | 356.41 | 14.52 | 0 | 341.89 | 1.01 | 52 | -- | 170 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<2.0 | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/24/2003 | 356.41 | 14.52 | 0 | 341.89 | 1.01 | ND<50 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | 356.41 | 15.47 | 0 | 340.94 | -0.95 | 110 | -- | 380 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1 | ND<2 | ND<2 | |
| 7/28/2003 | 356.41 | 15.47 | 0 | 340.94 | -0.95 | 130 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | 356.41 | 15.55 | 0 | 340.86 | -0.08 | 94 | -- | 270 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<2.0 | |
| 7/2/2004 | 356.41 | 16.52 | 0 | 339.89 | -0.97 | ND<200 | -- | 170 | ND<0.5 | ND<0.5 | ND<0.5 | ND<1 | -- | 0.83 | |
| 1/11/2005 | 356.41 | 14.83 | 0 | 341.58 | 1.69 | 85 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | 356.41 | 14.83 | 0 | 341.58 | 1.69 | 110 | -- | 460 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 0.87 | |
| 7/8/2005 | 356.41 | 14.33 | 0 | 342.08 | 0.50 | 67 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | 356.41 | 14.33 | 0 | 342.08 | 0.50 | 67 | -- | 120 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 0.60 | |
| 1/6/2006 | 356.41 | 15.59 | 0 | 340.82 | -1.26 | ND<200 | -- | 130 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 1.3 | |
| 9/11/2006 | 356.41 | 16.16 | 0 | 340.25 | -0.57 | ND<50 | -- | 110 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | 1.0 | |
| 2/16/2007 | 356.41 | 16.39 | 0 | 340.02 | -0.23 | 66 | -- | 210 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | 1.0 | |
| 7/3/2007 | 356.41 | 16.60 | 0 | 339.81 | -0.21 | ND<56 | -- | 160 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | 0.71 | |
| 2/1/2008 | 356.41 | 15.26 | 0 | 341.15 | 1.34 | 66 | -- | 91 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 9/2/2008 | 356.41 | 17.97 | 0 | 338.44 | -2.71 | 51 | -- | 380 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 0.70 | |
| 3/6/2009 | 356.41 | 15.89 | 0 | 340.52 | 2.08 | ND<50 | -- | 90 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 8/21/2009 | 356.41 | 17.80 | 0 | 338.61 | -1.91 | ND<50 | -- | 260 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/14/2010 | 356.41 | 18.12 | 0 | 338.29 | -0.32 | 66 | -- | 220 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 8/13/2010 | 359.16 | 16.07 | 0 | 343.09 | 4.80 | 87 | 55 | 110 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/17/2011 | 359.16 | 15.37 | 0 | 343.79 | 0.70 | ND<50 | 55 | 120 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| **MW-5** | | | | | | | | | | | | | | | |
| 4/23/1998 | 355.03 | 11.15 | 0 | 343.88 | -- | -- | 120 | -- | 0.53 | 0.90 | 1.0 | 3.8 | 13 | -- | |
| 7/8/1998 | 355.03 | 12.63 | 0 | 342.40 | -1.48 | 170 | ND | -- | ND | ND | ND | ND | 12 | -- | |
| 10/5/1998 | 355.03 | 14.00 | 0 | 341.03 | -1.37 | -- | ND | -- | ND | ND | ND | ND | 12 | -- | |
| 1/4/1999 | 355.03 | 15.21 | 0 | 339.82 | -1.21 | ND | ND | -- | ND | ND | ND | ND | ND | -- | |
| 4/5/1999 | 355.03 | 13.76 | 0 | 341.27 | 1.45 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 7/1/1999 | 355.03 | 14.48 | 0 | 340.55 | -0.72 | ND | ND | -- | ND | ND | ND | ND | ND | 2.3 | |
| 9/30/1999 | 355.03 | 15.15 | 0 | 339.88 | -0.67 | 60.4 | 50.8 | -- | ND | ND | ND | ND | ND | ND | |
| 9/30/1999 | 355.03 | 15.15 | 0 | 339.88 | -0.67 | ND | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | 355.03 | 16.34 | 0 | 338.69 | -1.19 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 4/4/2000 | 355.03 | 12.90 | 0 | 342.13 | 3.44 | ND | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | 355.03 | 12.90 | 0 | 342.13 | 3.44 | 69 | ND | -- | ND | ND | ND | ND | ND | ND | |
| 7/14/2000 | 355.03 | 14.48 | 0 | 340.55 | -1.58 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 10/27/2000 | 355.03 | 15.75 | 0 | 339.28 | -1.27 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/8/2001 | 355.03 | 15.25 | 0 | 339.78 | 0.50 | -- | ND | -- | ND | ND | ND | ND | ND | ND | |
| 4/3/2001 | 355.03 | 14.41 | 0 | 340.62 | 0.84 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 7/6/2001 | 355.03 | 15.52 | 0 | 339.51 | -1.11 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 10/5/2001 | 355.03 | 16.28 | 0 | 338.75 | -0.76 | ND<50 | ND<50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | ND<2.0 | |
| 1/3/2002 | 355.03 | 14.01 | 0 | 341.02 | 2.27 | ND<51 | ND<50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | 1.6 | |
| 4/1/2002 | 355.03 | 13.64 | 0 | 341.39 | 0.37 | ND<50 | ND<50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | 3.5 | |
| 7/1/2002 | 355.03 | 14.51 | 0 | 340.52 | -0.87 | ND<60 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 2.3 | |
| 1/24/2003 | 355.03 | 13.53 | 0 | 341.50 | 0.98 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 4.3 | |
| 7/28/2003 | 355.03 | 14.40 | 0 | 340.63 | -0.87 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND0.50 | ND<1.0 | -- | 3.4 | |
| 2/4/2004 | 355.03 | 14.41 | 0 | 340.62 | -0.01 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 2.6 | |
| 7/2/2004 | 355.03 | 15.41 | 0 | 339.62 | -1.00 | ND<200 | -- | 80 | ND<0.5 | ND<0.5 | ND<0.5 | ND<1 | -- | 2.0 | |
| 1/11/2005 | 355.03 | 13.74 | 0 | 341.29 | 1.67 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 0.64 | |
| 7/8/2005 | 355.03 | 13.24 | 0 | 341.79 | 0.50 | ND<50 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | 355.03 | 13.24 | 0 | 341.79 | 0.50 | 220 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/6/2006 | 355.03 | 14.33 | 0 | 340.70 | -1.09 | ND<200 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 9/11/2006 | 355.03 | 14.91 | 0 | 340.12 | -0.58 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | ND<0.50 | |
| 2/16/2007 | 355.03 | 15.13 | 0 | 339.90 | -0.22 | ND<56 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | ND<0.50 | |
| 7/3/2007 | 355.03 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Paved over |
| 2/1/2008 | 355.03 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Paved over |
| 9/2/2008 | 355.03 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Paved over |
| 3/6/2009 | 355.03 | 14.56 | 0 | 340.47 | -- | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 8/21/2009 | 355.03 | 16.69 | 0 | 338.34 | -2.13 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/14/2010 | 355.03 | 16.94 | 0 | 338.09 | -0.25 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 8/13/2010 | 357.80 | 15.01 | 0 | 342.79 | 4.70 | ND<50 | ND<50 | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/17/2011 | 357.80 | 14.35 | 0 | 343.45 | 0.66 | ND<50 | ND<50 | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| **U-1** | | | | | | | | | | | | | | | |
| 7/8/1995 | 355.62 | 12.59 | 0 | 343.03 | -- | 9400 | 39000 | -- | 1500 | 19 | 1600 | 5200 | -- | -- | |
| 10/12/1995 | 355.62 | 15.38 | 0 | 340.24 | -2.79 | 4200 | 33000 | -- | 1400 | ND | 1400 | 3100 | -- | -- | |
| 1/11/1996 | 355.62 | 16.33 | 0 | 339.29 | -0.95 | 8200 | 8300 | -- | 690 | 11 | 680 | 1500 | -- | -- | |
| 4/11/1996 | 355.62 | 12.20 | 0 | 343.42 | 4.13 | 5630 | 3200 | -- | 110 | ND | 180 | 290 | 790 | -- | |
| 7/10/1996 | 355.62 | 13.84 | 0 | 341.78 | -1.64 | 2200 | 2600 | -- | 81 | 4.4 | 210 | 230 | 510 | -- | |
| 10/30/1996 | 355.62 | 15.85 | 0 | 339.77 | -2.01 | 560 | 2200 | -- | 67 | 19 | 140 | 150 | 360 | -- | |
| 1/27/1997 | 355.62 | 12.20 | 0 | 343.42 | 3.65 | 2300 | 4600 | -- | 98 | ND | 360 | 290 | 150 | -- | |
| 4/8/1997 | 355.62 | 13.46 | 0 | 342.16 | -1.26 | 1300 | 2800 | -- | 50 | ND | 220 | 140 | ND | -- | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/17/1997 | 355.62 | 15.30 | 0 | 340.32 | -1.84 | 460 | 2300 | -- | 30 | 4.5 | 140 | 94 | 190 | -- | |
| 10/17/1997 | 355.62 | 16.33 | 0 | 339.29 | -1.03 | 510 | 1500 | -- | 31 | 6.7 | 110 | 88 | 220 | -- | |
| 1/19/1998 | 355.62 | 14.34 | 0 | 341.28 | 1.99 | 1300 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/19/1998 | 355.62 | 14.34 | 0 | 341.28 | 1.99 | 1900 | 3100 | -- | 46 | 3.4 | 310 | 200 | 170 | -- | |
| 4/23/1998 | 355.59 | 11.16 | 0 | 344.43 | 3.15 | -- | 3400 | -- | 72 | 3.8 | 470 | 350 | 280 | -- | |
| 7/8/1998 | 355.59 | 12.67 | 0 | 342.92 | -1.51 | 2000 | 4500 | -- | 51 | ND | 590 | 430 | 190 | -- | |
| 10/5/1998 | 355.59 | 14.57 | 0 | 341.02 | -1.90 | -- | 7500 | -- | 53 | ND | 680 | 350 | 190 | 180 | |
| 1/4/1999 | 355.59 | 15.35 | 0 | 340.24 | -0.78 | 2500 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/4/1999 | 355.59 | 15.35 | 0 | 340.24 | -0.78 | 2700 | 10000 | -- | ND | ND | 1200 | 540 | -- | ND | |
| 4/5/1999 | 355.59 | 13.64 | 0 | 341.95 | 1.71 | 920 | 4900 | -- | 34 | ND | 350 | 150 | 150 | 55 | |
| 4/5/1999 | 355.59 | 13.64 | 0 | 341.95 | 1.71 | 570 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | 355.59 | 14.39 | 0 | 341.20 | -0.75 | 2700 | 10000 | -- | 45 | ND | 850 | 420 | 260 | 110 | |
| 7/1/1999 | 355.59 | 14.39 | 0 | 341.20 | -0.75 | 3600 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | 355.59 | 15.32 | 0 | 340.27 | -0.93 | 2360 | 7150 | -- | ND | ND | 415 | 84.4 | ND | 195 | |
| 9/30/1999 | 355.59 | 15.32 | 0 | 340.27 | -0.93 | 1680 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | 355.59 | 16.51 | 0 | 339.08 | -1.19 | 2000 | 5400 | -- | 28 | 8.4 | 180 | 33 | 160 | 120 | |
| 1/3/2000 | 355.59 | 16.51 | 0 | 339.08 | -1.19 | 1700 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | 355.59 | 12.89 | 0 | 342.70 | 3.62 | 990 | 4800 | -- | 30 | ND | 210 | 93 | 170 | 160 | |
| 4/4/2000 | 355.59 | 12.89 | 0 | 342.70 | 3.62 | 1400 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | 355.59 | 14.56 | 0 | 341.03 | -1.67 | 2800 | 6200 | -- | 41 | 16 | 170 | 32 | 170 | 120 | |
| 7/14/2000 | 355.59 | 14.56 | 0 | 341.03 | -1.67 | 1200 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | 355.59 | 15.96 | 0 | 339.63 | -1.40 | 1400 | 3830 | -- | 16.8 | ND | 68.6 | 7.99 | 55.2 | 38 | |
| 10/27/2000 | 355.59 | 15.96 | 0 | 339.63 | -1.40 | 1300 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | 355.59 | 15.72 | 0 | 339.87 | 0.24 | -- | 2410 | -- | 14.7 | 4.30 | 30.5 | 5.04 | 34.5 | 9.33 | |
| 4/3/2001 | 355.59 | 14.46 | 0 | 341.13 | 1.26 | 1500 | 3330 | -- | 15.8 | 5.96 | 74.8 | 7.06 | ND | 13.3 | |
| 4/3/2001 | 355.59 | 14.46 | 0 | 341.13 | 1.26 | 830 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | 355.59 | 15.65 | 0 | 339.94 | -1.19 | 1200 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | 355.59 | 15.65 | 0 | 339.94 | -1.19 | 1600 | 4300 | -- | 23 | 6.4 | 57 | 6.8 | 58 | 36 | |
| 10/5/2001 | 355.59 | 16.45 | 0 | 339.14 | -0.80 | 2300 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | 355.59 | 16.45 | 0 | 339.14 | -0.80 | 2500 | 3800 | -- | 19 | ND<5.0 | 19 | ND<5.0 | 64 | 36 | |
| 1/3/2002 | 355.59 | 14.18 | 0 | 341.41 | 2.27 | 2200 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | 355.59 | 14.18 | 0 | 341.41 | 2.27 | 2200 | 4500 | -- | 25 | ND<10 | 24 | ND<10 | ND<100 | 23 | |
| 4/1/2002 | 355.59 | 13.72 | 0 | 341.87 | 0.46 | 1200 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | 355.59 | 13.72 | 0 | 341.87 | 0.46 | 1800 | 5300 | -- | 36 | 6.7 | 48 | 12 | 93 | 59 | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/1/2002 | 355.59 | 14.61 | 0 | 340.98 | -0.89 | 2100 | -- | 3900 | ND<0.50 | ND<0.50 | ND<0.50 | 3.9 | -- | 23 | |
| 7/1/2002 | 355.59 | 14.61 | 0 | 340.98 | -0.89 | 2100 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | 355.59 | 13.82 | 0 | 341.77 | 0.79 | 1700 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | 355.59 | 13.82 | 0 | 341.77 | 0.79 | 2100 | -- | 3400 | ND<2.5 | ND<2.5 | 37 | ND<5.0 | -- | 21 | |
| 7/28/2003 | 355.59 | 14.51 | 0 | 341.08 | -0.69 | 2100 | -- | 7100 | ND<2.5 | ND<2.5 | 12 | ND<5 | 13 | 13 | |
| 7/28/2003 | 355.59 | 14.51 | 0 | 341.08 | -0.69 | 1200 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | 355.59 | 14.66 | 0 | 340.93 | -0.15 | 1300 | -- | 4000 | ND<0.50 | ND<0.50 | 13 | ND<1.0 | -- | 9.6 | |
| 7/2/2004 | 355.59 | 16.57 | 0 | 339.02 | -1.91 | 400 | -- | 2600 | 0.56 | ND<0.5 | 5.3 | ND<1 | -- | 5.4 | |
| 1/11/2005 | 355.59 | 13.91 | 0 | 341.68 | 2.66 | 1500 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | 355.59 | 13.91 | 0 | 341.68 | 2.66 | 2000 | -- | 5000 | 0.59 | ND<0.50 | 7.8 | ND<1.0 | -- | 4.2 | |
| 7/8/2005 | 355.59 | 13.26 | 0 | 342.33 | 0.65 | 1300 | -- | 3100 | ND<0.50 | ND<0.50 | 4.3 | ND<1.0 | -- | 2.2 | |
| 1/6/2006 | 355.59 | 14.64 | 0 | 340.95 | -1.38 | 1200 | -- | 2200 | ND<0.50 | ND<0.50 | 3.1 | ND<1.0 | -- | 2.8 | |
| 9/11/2006 | 355.59 | 15.11 | 0 | 340.48 | -0.47 | 1200 | -- | 2700 | ND<0.50 | ND<0.50 | 2.0 | 0.79 | -- | 1.6 | |
| 2/16/2007 | 355.59 | 15.38 | 0 | 340.21 | -0.27 | 2000 | -- | 3700 | ND<0.50 | ND<0.50 | 3.1 | 0.81 | -- | 2.4 | |
| 7/3/2007 | 355.59 | 15.60 | 0 | 339.99 | -0.22 | 890 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | 355.59 | 15.60 | 0 | 339.99 | -0.22 | 950 | -- | 2300 | ND<0.50 | ND<0.50 | 1.6 | 0.74 | -- | 0.89 | |
| 2/1/2008 | 355.59 | 14.28 | 0 | 341.31 | 1.32 | 1100 | -- | 3100 | 0.88 | ND<0.50 | 1.6 | ND<1.0 | -- | ND<0.50 | |
| 9/2/2008 | 355.59 | 16.97 | 0 | 338.62 | -2.69 | 960 | -- | 3300 | ND<1.0 | ND<1.0 | 1.4 | ND<2.0 | -- | ND<1.0 | |
| 3/6/2009 | 355.59 | 14.95 | 0 | 340.64 | 2.02 | 670 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 5.7 | |
| 8/21/2009 | 355.59 | 16.90 | 0 | 338.69 | -1.95 | 620 | -- | 1600 | ND<0.50 | ND<0.50 | 0.66 | ND<1.0 | -- | ND<0.50 | |
| 1/14/2010 | 355.59 | 17.19 | 0 | 338.40 | -0.29 | 800 | -- | 1700 | ND<1.0 | ND<1.0 | ND<1.0 | ND<2.0 | -- | ND<1.0 | |
| 8/13/2010 | 358.36 | 15.15 | 0 | 343.21 | 4.81 | 540 | 1000 | 2000 | ND<0.50 | ND<0.50 | 0.68 | ND<1.0 | -- | ND<0.50 | |
| 1/17/2011 | 358.36 | 14.50 | 0 | 343.86 | 0.65 | 670 | 1200 | 2100 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| **U-2** | | | | | | | | | | | | | | | |
| 7/8/1995 | 356.59 | 12.68 | 0 | 343.91 | -- | 4700 | 17000 | -- | 430 | ND | 2200 | 590 | -- | -- | |
| 10/12/1995 | 356.59 | 16.01 | 0 | 340.58 | -3.33 | 3600 | 24000 | -- | 310 | 60 | 1900 | 190 | -- | -- | |
| 1/11/1996 | 356.59 | 17.06 | 0 | 339.53 | -1.05 | 8600 | 10000 | -- | 210 | 55 | 1400 | 240 | -- | -- | |
| 4/11/1996 | 356.59 | 12.75 | 0 | 343.84 | 4.31 | 1900 | 7700 | -- | 130 | 27 | 1100 | 110 | 340 | -- | |
| 7/10/1996 | 356.59 | 14.42 | 0 | 342.17 | -1.67 | 2300 | 5600 | -- | 59 | 15 | 610 | 42 | 250 | -- | |
| 10/30/1996 | 356.59 | 16.82 | 0 | 339.77 | -2.40 | 1800 | 7700 | -- | 67 | 35 | 1000 | 54 | 260 | -- | |
| 1/27/1997 | 356.59 | 12.91 | 0 | 343.68 | 3.91 | 660 | 1600 | -- | 14 | ND | 130 | 7.0 | 100 | -- | |
| 4/8/1997 | 356.59 | 14.07 | 0 | 342.52 | -1.16 | 2000 | 4300 | -- | 35 | ND | 400 | 16 | ND | -- | |
| 7/17/1997 | 356.59 | 15.96 | 0 | 340.63 | -1.89 | 1300 | 6200 | -- | 17 | 22 | 410 | ND | 130 | -- | |
| 10/17/1997 | 356.59 | 17.03 | 0 | 339.56 | -1.07 | 1400 | 7100 | -- | 71 | 26 | 520 | 50 | ND | -- | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/19/1998 | 356.59 | 15.10 | 0 | 341.49 | 1.93 | 1500 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/19/1998 | 356.59 | 15.10 | 0 | 341.49 | 1.93 | 2100 | 5300 | -- | 46 | 11 | 350 | 16 | 110 | -- | |
| 4/23/1998 | 356.55 | 11.74 | 0 | 344.81 | 3.32 | -- | 3200 | -- | 23 | 11 | 210 | 38 | 160 | -- | |
| 7/8/1998 | 356.55 | 13.27 | 0 | 343.28 | -1.53 | 1100 | 1600 | -- | 34 | 8.5 | 100 | 7.4 | 190 | -- | |
| 10/5/1998 | 356.55 | 14.90 | 0 | 341.65 | -1.63 | -- | 2900 | -- | 37 | 8.4 | 110 | 7.3 | 78 | -- | |
| 1/4/1999 | 356.55 | 15.94 | 0 | 340.61 | -1.04 | 250 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/4/1999 | 356.55 | 15.94 | 0 | 340.61 | -1.04 | 670 | 2200 | -- | 35 | ND | 17 | ND | 86 | -- | |
| 4/5/1999 | 356.55 | 14.19 | 0 | 342.36 | 1.75 | 660 | 4900 | -- | 21 | 77 | 130 | 310 | 100 | 6.9 | |
| 4/5/1999 | 356.55 | 14.19 | 0 | 342.36 | 1.75 | 490 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | 356.55 | 14.98 | 0 | 341.57 | -0.79 | 440 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | 356.55 | 14.98 | 0 | 341.57 | -0.79 | 210 | 1500 | -- | 7.6 | ND | ND | ND | ND | 35 | |
| 9/30/1999 | 356.55 | 16.00 | 0 | 340.55 | -1.02 | 483 | 256 | -- | 1.85 | ND | 2.42 | ND | 26.3 | 29.8 | |
| 9/30/1999 | 356.55 | 16.00 | 0 | 340.55 | -1.02 | 340 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | 356.55 | 17.20 | 0 | 339.35 | -1.20 | 2400 | 3400 | -- | 23 | 13 | ND | 44 | 46 | 14 | |
| 1/3/2000 | 356.55 | 17.20 | 0 | 339.35 | -1.20 | 1900 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | 356.55 | 13.50 | 0 | 343.05 | 3.70 | 1000 | 3600 | -- | 34 | 17 | 56 | ND | 59 | 25 | |
| 4/4/2000 | 356.55 | 13.50 | 0 | 343.05 | 3.70 | 1000 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | 356.55 | 15.23 | 0 | 341.32 | -1.73 | 1000 | 3100 | -- | 16 | 13 | 15 | 10 | 100 | 19 | |
| 7/14/2000 | 356.55 | 15.23 | 0 | 341.32 | -1.73 | 350 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | 356.55 | 16.74 | 0 | 339.81 | -1.51 | 2000 | 4180 | -- | 30.4 | 10.2 | 14.6 | ND | 55.5 | 15 | |
| 10/27/2000 | 356.55 | 16.74 | 0 | 339.81 | -1.51 | 1900 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | 356.55 | 16.68 | 0 | 339.87 | 0.06 | -- | 3300 | -- | 33.5 | 7.32 | 3.49 | ND | 66.7 | 7.49 | |
| 4/3/2001 | 356.55 | 15.12 | 0 | 341.43 | 1.56 | 1500 | 4290 | -- | 32.4 | 9.91 | 20.1 | ND | 66.6 | 18.1 | |
| 4/3/2001 | 356.55 | 15.12 | 0 | 341.43 | 1.56 | 830 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | 356.55 | 16.32 | 0 | 340.23 | -1.20 | 1100 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | 356.55 | 16.32 | 0 | 340.23 | -1.20 | 1400 | 4700 | -- | 35 | 11 | 12 | 5.3 | 62 | 19 | |
| 10/5/2001 | 356.55 | 17.15 | 0 | 339.40 | -0.83 | 3200 | 3600 | -- | 31 | 9.6 | 8.7 | 6.9 | 62 | 13 | |
| 10/5/2001 | 356.55 | 17.15 | 0 | 339.40 | -0.83 | 1900 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | 356.55 | 14.90 | 0 | 341.65 | 2.25 | 2100 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | 356.55 | 14.90 | 0 | 341.65 | 2.25 | 2300 | 4600 | -- | 34 | 11 | 15 | 5.8 | 62 | 7.5 | |
| 4/1/2002 | 356.55 | 14.38 | 0 | 342.17 | 0.52 | 470 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | 356.55 | 14.38 | 0 | 342.17 | 0.52 | 1400 | 3500 | -- | 38 | 9.3 | 10 | 6.5 | 87 | 18 | |
| 7/1/2002 | 356.55 | 15.24 | 0 | 341.31 | -0.86 | ND<50 | -- | 4500 | ND<0.50 | ND<0.50 | 5.0 | 1.7 | -- | ND<0.50 | |
| 1/24/2003 | 356.55 | 14.31 | 0 | 342.24 | 0.93 | 860 | -- | 2300 | 1.1 | 1.5 | 6.9 | 2.4 | -- | 5.9 | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/24/2003 | 356.55 | 14.31 | 0 | 342.24 | 0.93 | 570 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | 356.55 | 15.18 | 0 | 341.37 | -0.87 | 710 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | 356.55 | 15.18 | 0 | 341.37 | -0.87 | 1300 | -- | 5600 | ND<2.5 | ND<2.5 | 3.4 | ND<5 | ND<10 | ND<10 | |
| 2/4/2004 | 356.55 | 15.36 | 0 | 341.19 | -0.18 | 1300 | -- | 4400 | ND<5.0 | ND<5.0 | 7.0 | ND<10 | -- | ND<20 | |
| 7/2/2004 | 356.55 | 16.28 | 0 | 340.27 | -0.92 | 380 | -- | 5700 | 1.4 | 2.8 | 6.6 | 5.5 | -- | 6.6 | |
| 1/11/2005 | 356.55 | 14.59 | 0 | 341.96 | 1.69 | 1100 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | 356.55 | 14.59 | 0 | 341.96 | 1.69 | 1800 | -- | 5800 | 0.99 | 2.5 | 5.4 | 5.1 | -- | ND<5.0 | |
| 7/8/2005 | 356.55 | 13.97 | 0 | 342.58 | 0.62 | 1100 | -- | 3000 | 0.56 | 1.9 | 3.0 | 3.2 | -- | 5.0 | |
| 7/8/2005 | 356.55 | 13.97 | 0 | 342.58 | 0.62 | 960 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | 356.55 | 15.30 | 0 | 341.25 | -1.33 | 1100 | -- | 1600 | ND<0.50 | ND<0.50 | 0.97 | ND<1.0 | -- | 2.1 | |
| 9/11/2006 | 356.55 | 15.62 | 0 | 340.93 | -0.32 | 790 | -- | 2300 | ND<0.50 | ND<0.50 | 1.0 | 1.0 | -- | 2.7 | |
| 2/16/2007 | 356.55 | 16.01 | 0 | 340.54 | -0.39 | 200 | -- | 1500 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | 1.2 | |
| 7/3/2007 | 356.55 | 16.27 | 0 | 340.28 | -0.26 | 530 | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | 356.55 | 16.27 | 0 | 340.28 | -0.26 | 540 | -- | 1400 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | 1.5 | |
| 2/1/2008 | 356.55 | 15.02 | 0 | 341.53 | 1.25 | 340 | -- | 830 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 1.1 | |
| 9/2/2008 | 356.55 | 17.71 | 0 | 338.84 | -2.69 | 300 | -- | 1500 | ND<0.50 | ND<0.50 | 0.73 | ND<1.0 | -- | 0.80 | |
| 3/6/2009 | 356.55 | 15.60 | 0 | 340.95 | 2.11 | 77 | -- | 630 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 1.0 | |
| 8/21/2009 | 356.55 | 17.60 | 0 | 338.95 | -2.00 | 350 | -- | 1600 | ND<0.50 | 0.67 | 0.72 | 1.1 | -- | 0.66 | |
| 1/14/2010 | 356.55 | 18.94 | 0 | 337.61 | -1.34 | 440 | -- | 1300 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 8/13/2010 | 359.32 | 15.84 | 0 | 343.48 | 5.87 | 310 | 930 | 1500 | ND<0.50 | 0.53 | 0.77 | 1.2 | -- | 0.69 | |
| 1/17/2011 | 359.32 | 15.27 | 0 | 344.05 | 0.57 | 360 | 560 | 1100 | ND<0.50 | ND<0.50 | 0.59 | ND<1.0 | -- | 0.63 | |
| **U-3** | | | | | | | | | | | | | | | |
| 7/8/1995 | 358.13 | 14.58 | 0 | 343.55 | -- | 710 | 1100 | -- | 0.57 | 2.1 | 1.7 | 2.4 | -- | -- | |
| 10/12/1995 | 358.13 | 17.60 | 0 | 340.53 | -3.02 | 470 | 560 | -- | ND | 0.87 | 0.7 | 1.1 | -- | -- | |
| 1/11/1996 | 358.13 | 18.65 | 0 | 339.48 | -1.05 | 260 | 230 | -- | 0.62 | 0.91 | 0.97 | 1.9 | -- | -- | |
| 4/11/1996 | 358.13 | 13.20 | 0 | 344.93 | 5.45 | ND | 68 | -- | ND | ND | ND | ND | ND | -- | |
| 7/10/1996 | 358.13 | 15.98 | 0 | 342.15 | -2.78 | ND | ND | -- | ND | ND | ND | ND | ND | -- | |
| 10/30/1996 | 358.13 | 18.24 | 0 | 339.89 | -2.26 | ND | 70 | -- | ND | ND | ND | ND | ND | -- | |
| 1/27/1997 | 358.13 | 14.41 | 0 | 343.72 | 3.83 | ND | ND | -- | ND | ND | ND | ND | ND | -- | |
| 4/8/1997 | 358.13 | 15.73 | 0 | 342.40 | -1.32 | ND | ND | -- | ND | ND | ND | ND | ND | -- | |
| 7/17/1997 | 358.13 | 17.54 | 0 | 340.59 | -1.81 | ND | ND | -- | ND | ND | ND | ND | ND | -- | |
| 10/17/1997 | 358.13 | 18.64 | 0 | 339.49 | -1.10 | 63 | ND | -- | ND | ND | ND | ND | ND | -- | |
| 1/19/1998 | 358.13 | 16.67 | 0 | 341.46 | 1.97 | 68 | ND | -- | ND | ND | ND | ND | ND | -- | |
| 1/19/1998 | 358.13 | 16.67 | 0 | 341.46 | 1.97 | ND | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/23/1998 | 358.09 | 13.28 | 0 | 344.81 | 3.35 | -- | ND | -- | ND | ND | ND | ND | ND | -- | |
| 7/8/1998 | 358.09 | 14.90 | 0 | 343.19 | -1.62 | 80 | ND | -- | ND | ND | ND | ND | ND | -- | |
| 10/5/1998 | 358.09 | 16.50 | 0 | 341.59 | -1.60 | -- | ND | -- | ND | ND | ND | ND | ND | -- | |
| 1/4/1999 | 358.09 | 17.70 | 0 | 340.39 | -1.20 | ND | ND | -- | ND | ND | ND | ND | ND | -- | |
| 4/5/1999 | 358.09 | 15.67 | 0 | 342.42 | 2.03 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 7/1/1999 | 358.09 | 16.79 | 0 | 341.30 | -1.12 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 9/30/1999 | 358.09 | 17.60 | 0 | 340.49 | -0.81 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 1/3/2000 | 358.09 | 18.86 | 0 | 339.23 | -1.26 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 4/4/2000 | 358.09 | 15.10 | 0 | 342.99 | 3.76 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 7/14/2000 | 358.09 | 16.85 | 0 | 341.24 | -1.75 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 10/27/2000 | 358.09 | 18.35 | 0 | 339.74 | -1.50 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 1/8/2001 | 358.09 | 18.31 | 0 | 339.78 | 0.04 | -- | ND | -- | ND | ND | ND | ND | ND | ND | |
| 4/3/2001 | 358.09 | 16.70 | 0 | 341.39 | 1.61 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 7/6/2001 | 358.09 | 17.90 | 0 | 340.19 | -1.20 | ND | ND | -- | ND | ND | ND | ND | ND | ND | |
| 10/5/2001 | 358.09 | 18.71 | 0 | 339.38 | -0.81 | ND<50 | ND<50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | ND<2.0 | |
| 1/3/2002 | 358.09 | 16.41 | 0 | 341.68 | 2.30 | ND<52 | ND<50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | ND<1.0 | |
| 4/1/2002 | 358.09 | 15.87 | 0 | 342.22 | 0.54 | ND<50 | ND<50 | -- | ND<0.50 | 1.1 | ND<0.50 | 1.2 | ND<5.0 | ND<2.0 | |
| 7/1/2002 | 358.09 | 16.77 | 0 | 341.32 | -0.90 | 1500 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/24/2003 | 358.09 | 15.75 | 0 | 342.34 | 1.02 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<5.0 | ND<2.019 | |
| 7/28/2003 | 358.09 | 16.74 | 0 | 341.35 | -0.99 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1 | ND<2 | ND<2 | |
| 2/4/2004 | 358.09 | 16.87 | 0 | 341.22 | -0.13 | 90 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<2.0 | |
| 7/2/2004 | 358.09 | 17.87 | 0 | 340.22 | -1.00 | ND<200 | -- | ND<50 | ND<0.5 | ND<0.5 | ND<0.5 | ND<1 | -- | ND<0.5 | |
| 1/11/2005 | 358.09 | 16.10 | 0 | 341.99 | 1.77 | ND<50 | -- | 52 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 7/8/2005 | 358.09 | 15.57 | 0 | 342.52 | 0.53 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/6/2006 | 358.09 | 16.94 | 0 | 341.15 | -1.37 | ND<200 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 9/11/2006 | 358.09 | 17.49 | 0 | 340.60 | -0.55 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | ND<0.50 | |
| 2/16/2007 | 358.09 | 17.71 | 0 | 340.38 | -0.22 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | ND<0.50 | |
| 7/3/2007 | 358.09 | 17.91 | 0 | 340.18 | -0.20 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | ND<0.50 | |
| 2/1/2008 | 358.09 | 16.52 | 0 | 341.57 | 1.39 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 9/2/2008 | 358.09 | 19.32 | 0 | 338.77 | -2.80 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 3/6/2009 | 358.09 | 17.24 | 0 | 340.85 | 2.08 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 8/21/2009 | 358.09 | 19.13 | 0 | 338.96 | -1.89 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 1/14/2010 | 358.09 | 19.54 | 0 | 338.55 | -0.41 | ND<50 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 8/13/2010 | 360.87 | 17.38 | 0 | 343.49 | 4.94 | ND<50 | ND<50 | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |

**Table 2**
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 17, 2011**
**76 Station 7176**

| Date Sampled | TOC Elevation (feet) | Depth to Water (feet) | LPH Thickness (feet) | Ground-Water Elevation (feet) | Change in Elevation (feet) | TPH-D (µg/l) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/17/2011 | 360.87 | 16.70 | 0 | 344.17 | 0.68 | ND<50 | ND<50 | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |

**Table 2a**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | TBA (µg/l) | Ethanol (8260B) (µg/l) | Ethylene-dibromide (EDB) (µg/l) | EDB (504) (µg/l) | 1,2-DCA (EDC) (µg/l) | DIPE (µg/l) | ETBE (µg/l) | TAME (µg/l) | Bromo-benzene (µg/l) | Bromo-chloro-methane (µg/l) | Bromo-dichloro-methane (µg/l) | Bromo-form (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4** | | | | | | | | | | | | | |
| 4/5/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/1/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 9/30/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/3/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/4/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/14/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/27/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/8/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/3/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/6/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/5/2001 | ND<100 | ND<1000 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 1/3/2002 | ND<20 | ND<500 | ND<1.0 | -- | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | -- | -- | -- | -- | |
| 4/1/2002 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/1/2002 | ND<5.0 | ND<25 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/24/2003 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/28/2003 | ND<100 | ND<500 | ND<2 | -- | ND<2 | ND<2 | ND<2 | ND<2 | -- | -- | -- | -- | |
| 2/4/2004 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/2/2004 | ND<12 | ND<800 | ND<0.5 | -- | ND<0.5 | ND<1 | ND<1 | ND<1 | -- | -- | -- | -- | |
| 1/11/2005 | ND<5.0 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/8/2005 | ND<5.0 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/6/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/11/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/16/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/3/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/1/2008 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/2/2008 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 3/6/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/21/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/14/2010 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/13/2010 | ND<10 | ND<250 | ND<0.50 | ND<0.010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **MW-5** | | | | | | | | | | | | | |
| 4/5/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/1/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |

**Table 2a**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | TBA (µg/l) | Ethanol (8260B) (µg/l) | Ethylene-dibromide (EDB) (µg/l) | EDB (504) (µg/l) | 1,2-DCA (EDC) (µg/l) | DIPE (µg/l) | ETBE (µg/l) | TAME (µg/l) | Bromo-benzene (µg/l) | Bromo-chloro-methane (µg/l) | Bromo-dichloro-methane (µg/l) | Bromo-form (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/30/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/3/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/4/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/14/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/27/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/8/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/3/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/6/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/5/2001 | ND<100 | ND<1000 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 1/3/2002 | ND<20 | ND<500 | ND<1.0 | -- | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | -- | -- | -- | -- | |
| 4/1/2002 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/1/2002 | ND<5.0 | ND<25 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/24/2003 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/28/2003 | ND<100 | ND<500 | ND<2 | -- | ND<2 | ND<2 | ND<2 | ND<2 | -- | -- | -- | -- | |
| 2/4/2004 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/2/2004 | ND<12 | ND<800 | ND<0.5 | -- | ND<0.5 | ND<1 | ND<1 | ND<1 | -- | -- | -- | -- | |
| 1/11/2005 | ND<5.0 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/8/2005 | ND<5.0 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/6/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/11/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/16/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 3/6/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/21/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/14/2010 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/13/2010 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **U-1** | | | | | | | | | | | | | |
| 4/5/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/1/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 9/30/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/3/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/4/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/14/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/27/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/8/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |

**Table 2a**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | TBA (µg/l) | Ethanol (8260B) (µg/l) | Ethylene-dibromide (EDB) (µg/l) | EDB (504) (µg/l) | 1,2-DCA (EDC) (µg/l) | DIPE (µg/l) | ETBE (µg/l) | TAME (µg/l) | Bromo-benzene (µg/l) | Bromo-chloro-methane (µg/l) | Bromo-dichloro-methane (µg/l) | Bromo-form (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/6/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/5/2001 | ND<100 | ND<1000 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 1/3/2002 | ND<100 | ND<2500 | ND<5.0 | -- | ND<5.0 | ND<5.0 | ND<5.0 | ND<5.0 | -- | -- | -- | -- | |
| 4/1/2002 | ND<500 | ND<2500 | ND<10 | -- | ND<10 | ND<10 | ND<10 | ND<10 | -- | -- | -- | -- | |
| 7/1/2002 | ND<5.0 | ND<25 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/24/2003 | ND<500 | ND<2500 | ND<10 | -- | ND<10 | ND<10 | ND<10 | ND<10 | -- | -- | -- | -- | |
| 7/28/2003 | ND<500 | ND<2500 | ND<10 | -- | ND<10 | ND<10 | ND<10 | ND<10 | -- | -- | -- | -- | |
| 2/4/2004 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/2/2004 | ND<12 | ND<800 | ND<0.5 | -- | ND<0.5 | ND<1 | ND<1 | ND<1 | -- | -- | -- | -- | |
| 1/11/2005 | 5.2 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/8/2005 | ND<5.0 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/6/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/11/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/16/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/3/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/1/2008 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/2/2008 | ND<20 | ND<500 | ND<1.0 | -- | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | -- | -- | -- | -- | |
| 3/6/2009 | 16 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/21/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/14/2010 | ND<20 | ND<500 | ND<1.0 | -- | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | -- | -- | -- | -- | |
| 8/13/2010 | ND<10 | ND<250 | ND<0.50 | ND<0.010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **U-2** | | | | | | | | | | | | | |
| 4/5/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/1/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 9/30/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/3/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/4/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/14/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/27/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/8/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/3/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/6/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/5/2001 | ND<100 | ND<1000 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |

**Table 2a**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | TBA (µg/l) | Ethanol (8260B) (µg/l) | Ethylene-dibromide (EDB) (µg/l) | EDB (504) (µg/l) | 1,2-DCA (EDC) (µg/l) | DIPE (µg/l) | ETBE (µg/l) | TAME (µg/l) | Bromo-benzene (µg/l) | Bromo-chloro-methane (µg/l) | Bromo-dichloro-methane (µg/l) | Bromo-form (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3/2002 | ND<100 | ND<2500 | ND<5.0 | -- | ND<5.0 | ND<5.0 | ND<5.0 | ND<5.0 | -- | -- | -- | -- | |
| 4/1/2002 | ND<200 | ND<1000 | ND<4.0 | -- | ND<4.0 | ND<4.0 | ND<4.0 | ND<4.0 | -- | -- | -- | -- | |
| 7/1/2002 | ND<5.0 | ND<25 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/24/2003 | ND<200 | ND<1000 | ND<4.0 | -- | ND<4.0 | ND<4.0 | ND<4.0 | ND<4.0 | -- | -- | -- | -- | |
| 7/28/2003 | ND<500 | ND<2500 | ND<10 | -- | ND<10 | ND<10 | ND<10 | ND<10 | -- | -- | -- | -- | |
| 2/4/2004 | ND<1000 | ND<5000 | ND<20 | -- | ND<20 | ND<20 | ND<20 | ND<20 | -- | -- | -- | -- | |
| 7/2/2004 | ND<12 | ND<800 | ND<0.5 | -- | ND<0.5 | ND<1 | ND<1 | ND<1 | -- | -- | -- | -- | |
| 1/11/2005 | ND<50 | ND<500 | ND<5.0 | -- | ND<5.0 | ND<10 | ND<5.0 | ND<5.0 | -- | -- | -- | -- | |
| 7/8/2005 | ND<50 | ND<500 | ND<5.0 | -- | ND<5.0 | ND<5.0 | ND<5.0 | ND<5.0 | -- | -- | -- | -- | |
| 1/6/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/11/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/16/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/3/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/1/2008 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/2/2008 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 3/6/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/21/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/14/2010 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/13/2010 | ND<10 | ND<250 | ND<0.50 | ND<0.010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **U-3** | | | | | | | | | | | | | |
| 4/5/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/1/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 9/30/1999 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/3/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/4/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/14/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/27/2000 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 1/8/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 4/3/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 7/6/2001 | ND | ND | ND | -- | ND | ND | ND | ND | -- | -- | -- | -- | |
| 10/5/2001 | ND<100 | ND<1000 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 1/3/2002 | ND<20 | ND<500 | ND<1.0 | -- | ND<1.0 | ND<1.0 | ND<1.0 | ND<1.0 | -- | -- | -- | -- | |
| 4/1/2002 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/1/2002 | ND<5.0 | ND<25 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |

**Table 2a**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | TBA (µg/l) | Ethanol (8260B) (µg/l) | Ethylene-dibromide (EDB) (µg/l) | EDB (504) (µg/l) | 1,2-DCA (EDC) (µg/l) | DIPE (µg/l) | ETBE (µg/l) | TAME (µg/l) | Bromo-benzene (µg/l) | Bromo-chloro-methane (µg/l) | Bromo-dichloro-methane (µg/l) | Bromo-form (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/24/2003 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/28/2003 | ND<100 | ND<500 | ND<2 | -- | ND<2 | ND<2 | ND<2 | ND<2 | -- | -- | -- | -- | |
| 2/4/2004 | ND<100 | ND<500 | ND<2.0 | -- | ND<2.0 | ND<2.0 | ND<2.0 | ND<2.0 | -- | -- | -- | -- | |
| 7/2/2004 | ND<12 | ND<800 | ND<0.5 | -- | ND<0.5 | ND<1 | ND<1 | ND<1 | -- | -- | -- | -- | |
| 1/11/2005 | ND<5.0 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/8/2005 | ND<5.0 | ND<50 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/6/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/11/2006 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/16/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 7/3/2007 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 2/1/2008 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 9/2/2008 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 3/6/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/21/2009 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 1/14/2010 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | -- | -- | -- | -- | |
| 8/13/2010 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<10 | ND<250 | ND<0.50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |

**Table 2b**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Bromo-methane (µg/l) | n-Butyl-benzene (µg/l) | sec-Butyl-benzene (µg/l) | tert-Butyl benzene (µg/l) | Carbon Tetra-chloride (µg/l) | Chloro-benzene (µg/l) | Chloro-ethane (µg/l) | Chloroform (µg/l) | Chloro-methane (µg/l) | 2-Chloro-toluene (µg/l) | 4-Chloro-toluene (µg/l) | 1,2Dibrom-3-chloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<1.0 | 1.2 | 0.54 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| 1/17/2011 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| **MW-5** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2b**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Bromo-methane (µg/l) | n-Butyl-benzene (µg/l) | sec-Butyl-benzene (µg/l) | tert-Butyl benzene (µg/l) | Carbon Tetra-chloride (µg/l) | Chloro-benzene (µg/l) | Chloro-ethane (µg/l) | Chloroform (µg/l) | Chloro-methane (µg/l) | 2-Chloro-toluene (µg/l) | 4-Chloro-toluene (µg/l) | 1,2Dibrom-3-chloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| 1/17/2011 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| **U-1** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2b**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Bromo-methane (µg/l) | n-Butyl-benzene (µg/l) | sec-Butyl-benzene (µg/l) | tert-Butyl benzene (µg/l) | Carbon Tetra-chloride (µg/l) | Chloro-benzene (µg/l) | Chloro-ethane (µg/l) | Chloroform (µg/l) | Chloro-methane (µg/l) | 2-Chloro-toluene (µg/l) | 4-Chloro-toluene (µg/l) | 1,2Dibrom-3-chloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<1.0 | 36 | 21 | 2.4 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| 1/17/2011 | ND<1.0 | 39 | ND<0.50 | 2.6 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| **U-2** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2b**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Bromo-methane (µg/l) | n-Butyl-benzene (µg/l) | sec-Butyl-benzene (µg/l) | tert-Butyl benzene (µg/l) | Carbon Tetra-chloride (µg/l) | Chloro-benzene (µg/l) | Chloro-ethane (µg/l) | Chloroform (µg/l) | Chloro-methane (µg/l) | 2-Chloro-toluene (µg/l) | 4-Chloro-toluene (µg/l) | 1,2Dibrom-3-chloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<1.0 | 8.1 | 11 | 5.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| 1/17/2011 | ND<1.0 | 4.4 | ND<0.50 | 4.7 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| **U-3** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2b**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Bromo-methane (µg/l) | n-Butyl-benzene (µg/l) | sec-Butyl-benzene (µg/l) | tert-Butyl benzene (µg/l) | Carbon Tetra-chloride (µg/l) | Chloro-benzene (µg/l) | Chloro-ethane (µg/l) | Chloroform (µg/l) | Chloro-methane (µg/l) | 2-Chloro-toluene (µg/l) | 4-Chloro-toluene (µg/l) | 1,2Dibrom-3-chloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |
| 1/17/2011 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | |

**Table 2c**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Dibromo-chloro-methane (µg/l) | Dibromo-methane (µg/l) | 1,2-Dichloro-benzene (µg/l) | 1,3-Dichloro-benzene (µg/l) | 1,4-Dichloro-benzene (µg/l) | Dichloro-difluoro-methane (µg/l) | 1,1-DCA (µg/l) | 1,1-DCE (µg/l) | cis-1,2-DCE (µg/l) | trans-1,2-DCE (µg/l) | 1,2-Dichloro-propane (µg/l) | 1,3-Dichloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **MW-5** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2c**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Dibromo-chloro-methane (µg/l) | Dibromo-methane (µg/l) | 1,2-Dichloro-benzene (µg/l) | 1,3-Dichloro-benzene (µg/l) | 1,4-Dichloro-benzene (µg/l) | Dichloro-difluoro-methane (µg/l) | 1,1-DCA (µg/l) | 1,1-DCE (µg/l) | cis-1,2-DCE (µg/l) | trans-1,2-DCE (µg/l) | 1,2-Dichloro-propane (µg/l) | 1,3-Dichloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **U-1** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2c**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Dibromo-chloro-methane (µg/l) | Dibromo-methane (µg/l) | 1,2-Dichloro-benzene (µg/l) | 1,3-Dichloro-benzene (µg/l) | 1,4-Dichloro-benzene (µg/l) | Dichloro-difluoro-methane (µg/l) | 1,1-DCA (µg/l) | 1,1-DCE (µg/l) | cis-1,2-DCE (µg/l) | trans-1,2-DCE (µg/l) | 1,2-Dichloro-propane (µg/l) | 1,3-Dichloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **U-2** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2c**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Dibromo-chloro-methane (µg/l) | Dibromo-methane (µg/l) | 1,2-Dichloro-benzene (µg/l) | 1,3-Dichloro-benzene (µg/l) | 1,4-Dichloro-benzene (µg/l) | Dichloro-difluoro-methane (µg/l) | 1,1-DCA (µg/l) | 1,1-DCE (µg/l) | cis-1,2-DCE (µg/l) | trans-1,2-DCE (µg/l) | 1,2-Dichloro-propane (µg/l) | 1,3-Dichloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **U-3** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2c**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Dibromo-chloro-methane (µg/l) | Dibromo-methane (µg/l) | 1,2-Dichloro-benzene (µg/l) | 1,3-Dichloro-benzene (µg/l) | 1,4-Dichloro-benzene (µg/l) | Dichloro-difluoro-methane (µg/l) | 1,1-DCA (µg/l) | 1,1-DCE (µg/l) | cis-1,2-DCE (µg/l) | trans-1,2-DCE (µg/l) | 1,2-Dichloro-propane (µg/l) | 1,3-Dichloro-propane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |

**Table 2d**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 2,2-Dichloropropane (µg/l) | 1,1-Dichloropropene (µg/l) | cis-1,3-Dichloropropene (µg/l) | trans-1,3-Dichloropropene (µg/l) | Hexachlorobutadiene (µg/l) | Isopropylbenzene (µg/l) | p-Isopropyltoluene (µg/l) | Methylene chloride (µg/l) | Naphthalene (µg/l) | n-Propylbenzene (µg/l) | Styrene (µg/l) | 1,1,1,2-Tetrachloroethane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **MW-5** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2d**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 2,2-Dichloropropane (µg/l) | 1,1-Dichloropropene (µg/l) | cis-1,3-Dichloropropene (µg/l) | trans-1,3-Dichloropropene (µg/l) | Hexachlorobutadiene (µg/l) | Isopropylbenzene (µg/l) | p-Isopropyltoluene (µg/l) | Methylene chloride (µg/l) | Naphthalene (µg/l) | n-Propylbenzene (µg/l) | Styrene (µg/l) | 1,1,1,2-Tetrachloroethane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| **U-1** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2d**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 2,2-Dichloropropane (µg/l) | 1,1-Dichloropropene (µg/l) | cis-1,3-Dichloropropene (µg/l) | trans-1,3-Dichloropropene (µg/l) | Hexachlorobutadiene (µg/l) | Isopropylbenzene (µg/l) | p-Isopropyltoluene (µg/l) | Methylene chloride (µg/l) | Naphthalene (µg/l) | n-Propylbenzene (µg/l) | Styrene (µg/l) | 1,1,1,2-Tetrachloroethane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | 19 | 0.80 | ND<1.0 | ND<0.50 | 76 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | 17 | ND<0.50 | ND<1.0 | ND<0.50 | 67 | ND<0.50 | ND<0.50 | |
| **U-2** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2d**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 2,2-Dichloropropane (µg/l) | 1,1-Dichloropropene (µg/l) | cis-1,3-Dichloropropene (µg/l) | trans-1,3-Dichloropropene (µg/l) | Hexachlorobutadiene (µg/l) | Isopropylbenzene (µg/l) | p-Isopropyltoluene (µg/l) | Methylene chloride (µg/l) | Naphthalene (µg/l) | n-Propylbenzene (µg/l) | Styrene (µg/l) | 1,1,1,2-Tetrachloroethane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | 21 | ND<0.50 | ND<1.0 | ND<0.50 | 43 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | 15 | ND<0.50 | ND<1.0 | ND<0.50 | 25 | ND<0.50 | ND<0.50 | |
| **U-3** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2d**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 2,2-Dichloro-propane (µg/l) | 1,1-Dichloro-propene (µg/l) | cis-1,3-Dichloro-propene (µg/l) | trans-1,3-Dichloro-propene (µg/l) | Hexa-chloro-butadiene (µg/l) | Isopropyl-benzene (µg/l) | p-Isopropyl-toluene (µg/l) | Methylene chloride (µg/l) | Naph-thalene (µg/l) | n-Propyl-benzene (µg/l) | Styrene (µg/l) | 1,1,1,2-Tetrachloro-ethane (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | |

**Table 2e**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 1,1,2,2-Tetrachloro-ethane (µg/l) | Tetrachloro-ethene (PCE) (µg/l) | Trichloro-trifluoro-ethane (µg/l) | 1,2,4-Trichloro-benzene (µg/l) | 1,2,3-Trichloro-benzene (µg/l) | 1,1,1-Trichloro-ethane (µg/l) | 1,1,2-Trichloro-ethane (µg/l) | Trichloro-ethene (TCE) (µg/l) | Trichloro-fluoro-methane (µg/l) | 1,2,3-Trichloro-propane (µg/l) | 1,2,4-Trimethyl-benzene (µg/l) | 1,3,5-Trimethyl-benzene (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MW-4** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| **MW-5** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2e**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 1,1,2,2-Tetrachloro-ethane (µg/l) | Tetrachloro-ethene (PCE) (µg/l) | Trichloro-trifluoro-ethane (µg/l) | 1,2,4-Trichloro-benzene (µg/l) | 1,2,3-Trichloro-benzene (µg/l) | 1,1,1-Trichloro-ethane (µg/l) | 1,1,2-Trichloro-ethane (µg/l) | Trichloro-ethene (TCE) (µg/l) | Trichloro-fluoro-methane (µg/l) | 1,2,3-Trichloro-propane (µg/l) | 1,2,4-Trimethyl-benzene (µg/l) | 1,3,5-Trimethyl-benzene (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| **U-1** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2e**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 1,1,2,2-Tetrachloro-ethane (µg/l) | Tetrachloro-ethene (PCE) (µg/l) | Trichloro-trifluoro-ethane (µg/l) | 1,2,4-Trichloro-benzene (µg/l) | 1,2,3-Trichloro-benzene (µg/l) | 1,1,1-Trichloro-ethane (µg/l) | 1,1,2-Trichloro-ethane (µg/l) | Trichloro-ethene (TCE) (µg/l) | Trichloro-fluoro-methane (µg/l) | 1,2,3-Trichloro-propane (µg/l) | 1,2,4-Trimethyl-benzene (µg/l) | 1,3,5-Trimethyl-benzene (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | 31 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| **U-2** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2e**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 1,1,2,2-Tetrachloro-ethane (µg/l) | Tetrachloro-ethene (PCE) (µg/l) | Trichloro-trifluoro-ethane (µg/l) | 1,2,4-Trichloro-benzene (µg/l) | 1,2,3-Trichloro-benzene (µg/l) | 1,1,1-Trichloro-ethane (µg/l) | 1,1,2-Trichloro-ethane (µg/l) | Trichloro-ethene (TCE) (µg/l) | Trichloro-fluoro-methane (µg/l) | 1,2,3-Trichloro-propane (µg/l) | 1,2,4-Trimethyl-benzene (µg/l) | 1,3,5-Trimethyl-benzene (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| **U-3** | | | | | | | | | | | | | |
| 4/5/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/30/1999 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/4/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/14/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 10/27/2000 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/8/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/3/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/6/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |

**Table 2e**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | 1,1,2,2-Tetrachloro-ethane (µg/l) | Tetrachloro-ethene (PCE) (µg/l) | Trichloro-trifluoro-ethane (µg/l) | 1,2,4-Trichloro-benzene (µg/l) | 1,2,3-Trichloro-benzene (µg/l) | 1,1,1-Trichloro-ethane (µg/l) | 1,1,2-Trichloro-ethane (µg/l) | Trichloro-ethene (TCE) (µg/l) | Trichloro-fluoro-methane (µg/l) | 1,2,3-Trichloro-propane (µg/l) | 1,2,4-Trimethyl-benzene (µg/l) | 1,3,5-Trimethyl-benzene (µg/l) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/5/2001 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/3/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 4/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/1/2002 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/24/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/28/2003 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/4/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/2/2004 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/11/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/8/2005 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/6/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/11/2006 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/16/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 7/3/2007 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 2/1/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 9/2/2008 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 3/6/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/21/2009 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 1/14/2010 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | |
| 8/13/2010 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | ND<0.50 | ND<0.50 | |

**Table 2f**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Vinyl chloride (µg/l) | Comments |
|---|---|---|
| **MW-4** | | |
| 4/5/1999 | -- | |
| 7/1/1999 | -- | |
| 9/30/1999 | -- | |
| 1/3/2000 | -- | |
| 4/4/2000 | -- | |
| 7/14/2000 | -- | |
| 10/27/2000 | -- | |
| 1/8/2001 | -- | |
| 4/3/2001 | -- | |
| 7/6/2001 | -- | |
| 10/5/2001 | -- | |
| 1/3/2002 | -- | |
| 4/1/2002 | -- | |
| 7/1/2002 | -- | |
| 1/24/2003 | -- | |
| 7/28/2003 | -- | |
| 2/4/2004 | -- | |
| 7/2/2004 | -- | |
| 1/11/2005 | -- | |
| 7/8/2005 | -- | |
| 1/6/2006 | -- | |
| 9/11/2006 | -- | |
| 2/16/2007 | -- | |
| 7/3/2007 | -- | |
| 2/1/2008 | -- | |
| 9/2/2008 | -- | |
| 3/6/2009 | -- | |
| 8/21/2009 | -- | |
| 1/14/2010 | -- | |
| 8/13/2010 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | |
| **MW-5** | | |
| 4/5/1999 | -- | |
| 7/1/1999 | -- | |

**Table 2f**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Vinyl chloride (µg/l) | Comments |
|---|---|---|
| 9/30/1999 | -- | |
| 1/3/2000 | -- | |
| 4/4/2000 | -- | |
| 7/14/2000 | -- | |
| 10/27/2000 | -- | |
| 1/8/2001 | -- | |
| 4/3/2001 | -- | |
| 7/6/2001 | -- | |
| 10/5/2001 | -- | |
| 1/3/2002 | -- | |
| 4/1/2002 | -- | |
| 7/1/2002 | -- | |
| 1/24/2003 | -- | |
| 7/28/2003 | -- | |
| 2/4/2004 | -- | |
| 7/2/2004 | -- | |
| 1/11/2005 | -- | |
| 7/8/2005 | -- | |
| 1/6/2006 | -- | |
| 9/11/2006 | -- | |
| 2/16/2007 | -- | |
| 3/6/2009 | -- | |
| 8/21/2009 | -- | |
| 1/14/2010 | -- | |
| 8/13/2010 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | |
| **U-1** | | |
| 4/5/1999 | -- | |
| 7/1/1999 | -- | |
| 9/30/1999 | -- | |
| 1/3/2000 | -- | |
| 4/4/2000 | -- | |
| 7/14/2000 | -- | |
| 10/27/2000 | -- | |
| 1/8/2001 | -- | |

**Table 2f**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Vinyl chloride (µg/l) | Comments |
|---|---|---|
| 4/3/2001 | -- | |
| 7/6/2001 | -- | |
| 10/5/2001 | -- | |
| 1/3/2002 | -- | |
| 4/1/2002 | -- | |
| 7/1/2002 | -- | |
| 1/24/2003 | -- | |
| 7/28/2003 | -- | |
| 2/4/2004 | -- | |
| 7/2/2004 | -- | |
| 1/11/2005 | -- | |
| 7/8/2005 | -- | |
| 1/6/2006 | -- | |
| 9/11/2006 | -- | |
| 2/16/2007 | -- | |
| 7/3/2007 | -- | |
| 2/1/2008 | -- | |
| 9/2/2008 | -- | |
| 3/6/2009 | -- | |
| 8/21/2009 | -- | |
| 1/14/2010 | -- | |
| 8/13/2010 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | |
| **U-2** | | |
| 4/5/1999 | -- | |
| 7/1/1999 | -- | |
| 9/30/1999 | -- | |
| 1/3/2000 | -- | |
| 4/4/2000 | -- | |
| 7/14/2000 | -- | |
| 10/27/2000 | -- | |
| 1/8/2001 | -- | |
| 4/3/2001 | -- | |
| 7/6/2001 | -- | |
| 10/5/2001 | -- | |

**Table 2f**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Vinyl chloride (µg/l) | Comments |
|---|---|---|
| 1/3/2002 | -- | |
| 4/1/2002 | -- | |
| 7/1/2002 | -- | |
| 1/24/2003 | -- | |
| 7/28/2003 | -- | |
| 2/4/2004 | -- | |
| 7/2/2004 | -- | |
| 1/11/2005 | -- | |
| 7/8/2005 | -- | |
| 1/6/2006 | -- | |
| 9/11/2006 | -- | |
| 2/16/2007 | -- | |
| 7/3/2007 | -- | |
| 2/1/2008 | -- | |
| 9/2/2008 | -- | |
| 3/6/2009 | -- | |
| 8/21/2009 | -- | |
| 1/14/2010 | -- | |
| 8/13/2010 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | |
| **U-3** | | |
| 4/5/1999 | -- | |
| 7/1/1999 | -- | |
| 9/30/1999 | -- | |
| 1/3/2000 | -- | |
| 4/4/2000 | -- | |
| 7/14/2000 | -- | |
| 10/27/2000 | -- | |
| 1/8/2001 | -- | |
| 4/3/2001 | -- | |
| 7/6/2001 | -- | |
| 10/5/2001 | -- | |
| 1/3/2002 | -- | |
| 4/1/2002 | -- | |
| 7/1/2002 | -- | |

**Table 2f**
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**

**76 Station 7176**

| Date Sampled | Vinyl chloride (µg/l) | Comments |
|---|---|---|
| 1/24/2003 | -- | |
| 7/28/2003 | -- | |
| 2/4/2004 | -- | |
| 7/2/2004 | -- | |
| 1/11/2005 | -- | |
| 7/8/2005 | -- | |
| 1/6/2006 | -- | |
| 9/11/2006 | -- | |
| 2/16/2007 | -- | |
| 7/3/2007 | -- | |
| 2/1/2008 | -- | |
| 9/2/2008 | -- | |
| 3/6/2009 | -- | |
| 8/21/2009 | -- | |
| 1/14/2010 | -- | |
| 8/13/2010 | ND<0.50 | |
| 1/17/2011 | ND<0.50 | |

# APPENDIX E

# TRENDS AND DEGRADATION CALCULATIONS

**Table A - Summary of Degradation Rate Calculations**
**Unocal Station #7176, 7850 Amador Valley Boulevard, Dublin, California**

| Well | Analyte | Maximum Concentration (ug/L) | Current Concentration (ug/L) | Half-Life (years) | Date to Reach WQO | Years to WQO |
|---|---|---|---|---|---|---|
| U-1 | TPHd | 9,400 | 670 | 8.93 | Nov 2036 | 25 |
| | TPHg | 39,000 | 1,400 | 6.78 | Apr 2037 | 25 |
| | Benzene | 1,500 | < 0.5 | NA | AT WQO | AT WQO |
| | MTBE | 790 | < 0.5 | NA | AT WQO | AT WQO |
| U-2 | TPHd | 8,600 | 410 | 6.56 | Apr 2022 | 10 |
| | TPHg | 24,000 | 460 | 6.23 | Jul 2032 | 21 |
| | Benzene | 430 | < 0.5 | NA | AT WQO | AT WQO |
| | MTBE | 340 | < 0.5 | NA | AT WQO | AT WQO |

Notes and Abbreviations:

TPHd = Total petroleum hydrocarbons as diesel
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary butyl ether
ug/L = Micrograms per liter
WQO = Water Quality Objective
NA = Not applicable

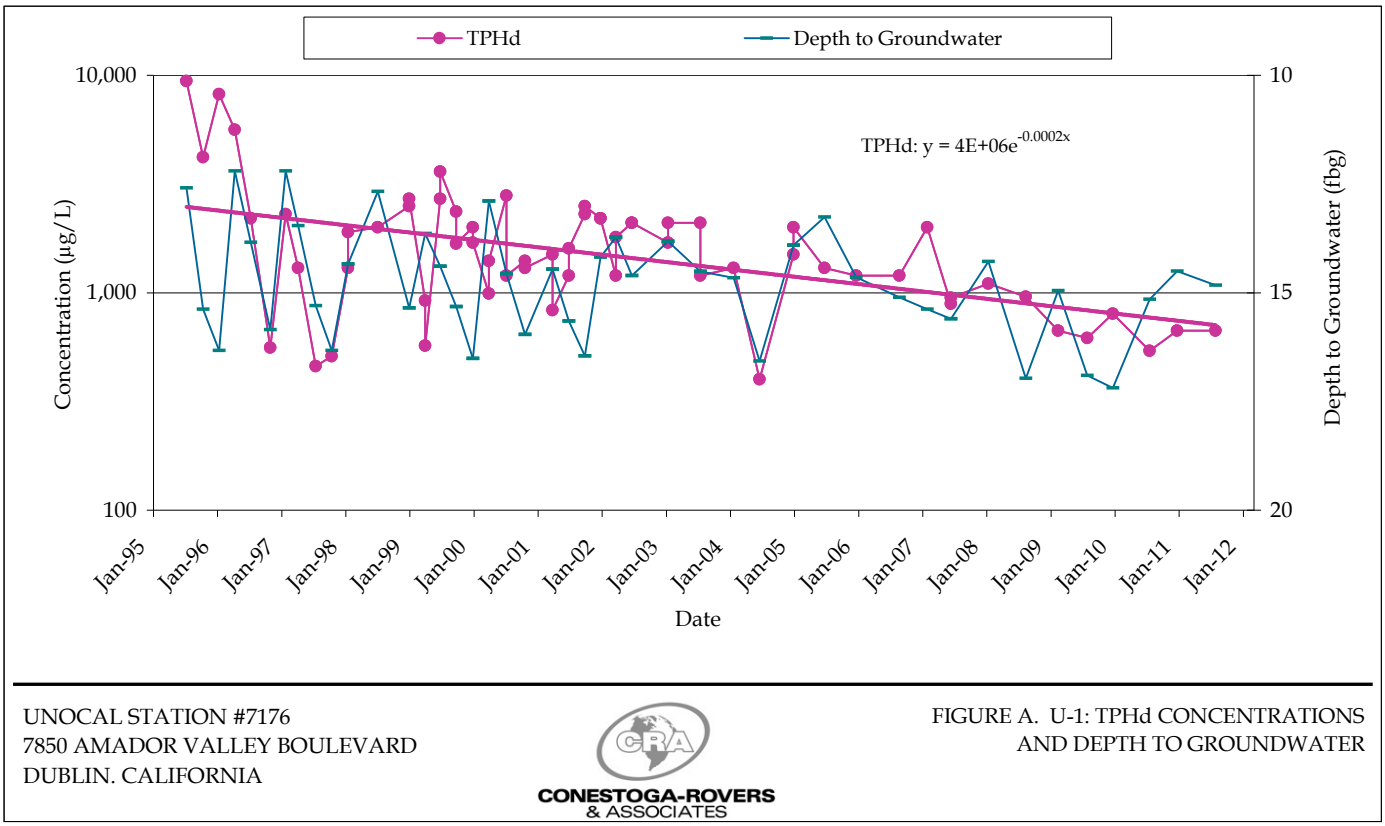
## Predicted Time to Reach Water Quality Objectives (WQO) in Well U-1

**Unocal Station #7176, 7850 Amador Valley Boulevard, Dublin, California**

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L; a = decay constant
b = concentration at time (x); x = time (x) in days

| | | Constituent: Total Petroleum Hydrocarbons as Diesel (TPHd) |
|---|---|---|
| **Given** | | |
| WQO: | y | 100 |
| Constant: | b | 4.11E+06 |
| Constant: | a | -2.12E-04 |
| Starting date for current trend: | | 7/8/1995 |
| **Calculate** | | |
| Attenuation Half Life (years): | ( -ln(2)/a)/365.25 | 8.93 |
| Estimated Date to Reach WQO: | (x = ln(y/b) / a) | Nov 2036 |




UNOCAL STATION #7176
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FIGURE A. U-1: TPHd CONCENTRATIONS AND DEPTH TO GROUNDWATER

## Predicted Time to Reach Water Quality Objectives (WQO) in Well U-1

**Unocal Station #7176, 7850 Amador Valley Boulevard, Dublin, California**

$y = b\,e^{ax}$ ===> $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

| | | Constituent | Total Petroleum Hydrocarbons as Gasoline (TPHg) | Benzene |
|---|---|---|---|---|
| Given | | | | |
| WQO: | | y | 100 | 0.5 |
| Constant: | | b | 1.23E+08 | NA |
| Constant: | | a | -2.80E-04 | NA |
| Starting date for current trend: | | | 7/8/1995 | NA |
| Calculate | | | | |
| Attenuation Half Life (years): | ( -ln(2)/a)/365.25 | | 6.78 | NA |
| Estimated Date to Reach WQO: | (x = ln(y/b) / a) | | Apr 2037 | AT WQO |

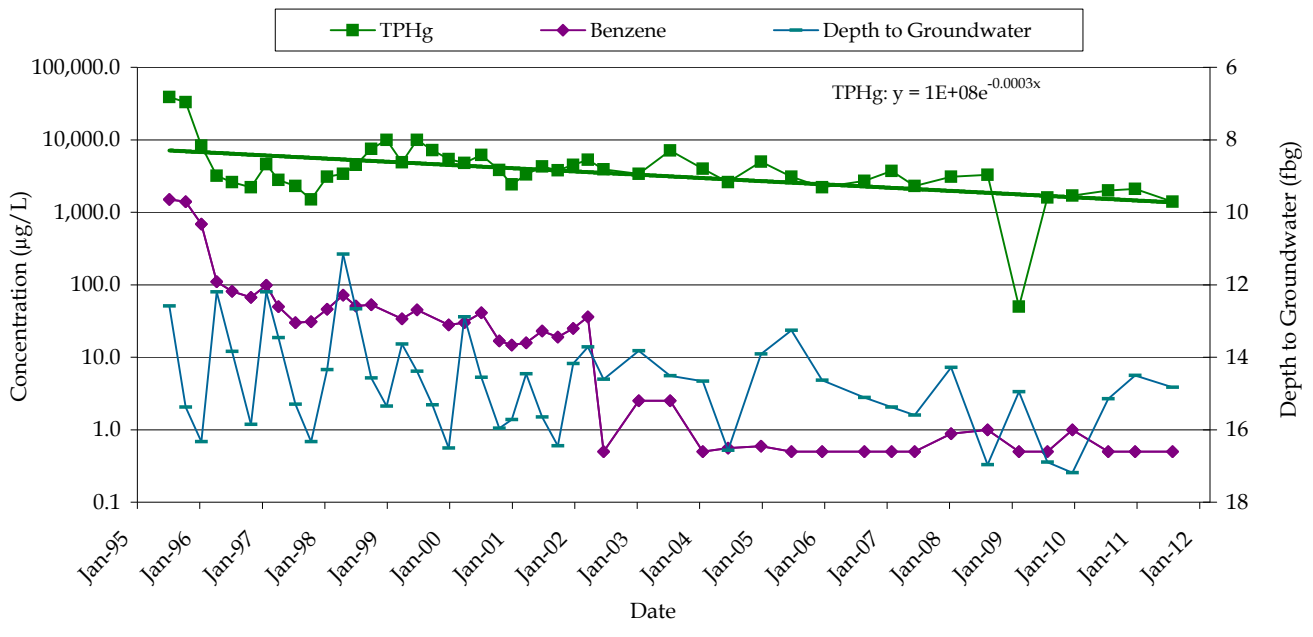


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FIGURE B. U-1: TPHg AND BENZENE CONCENTRATIONS AND DEPTH TO GROUNDWATER

## Predicted Time to Reach Water Quality Objectives (WQO) in Well U-1

### Unocal Station #7176, 7850 Amador Valley Boulevard, Dublin, California

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

| | Constituent | Methyl Tertiary Butyl Ether (MTBE) |
|---|---|---|
| **Given** | | |
| WQO: | y | 5 |
| Constant: | b | NA |
| Constant: | a | NA |
| Starting date for current trend: | | NA |
| **Calculate** | | |
| Attenuation Half Life (years): | ( -ln(2)/a)/365.25 | NA |
| Estimated Date to Reach WQO: | (x = ln(y/b) / a) | AT WQO |

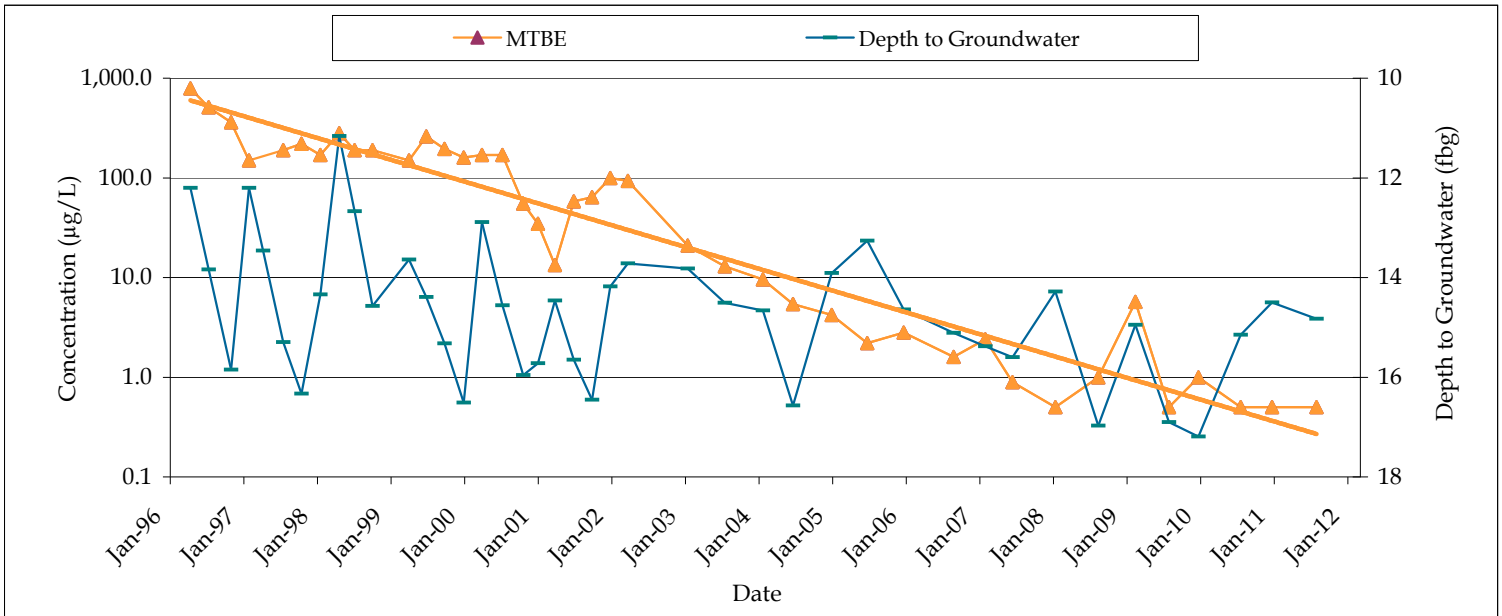


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FIGURE C. U-1: MTBE CONCENTRATIONS AND DEPTH TO GROUNDWATER

## Predicted Time to Reach Water Quality Objectives (WQO) in Well U-2

**Unocal Station #7176, 7850 Amador Valley Boulevard, Dublin, California**

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

| | | Constituent: Total Petroleum Hydrocarbons as Diesel (TPHd) |
|---|---|---|
| **Given** | | |
| WQO: | y | 100 |
| Constant: | b | 4.13E+07 |
| Constant: | a | -2.89E-04 |
| Starting date for current trend: | | 1/11/1996 |
| **Calculate** | | |
| Attenuation Half Life (years): | ( -ln(2)/a)/365.25 | 6.56 |
| Estimated Date to Reach WQO: | (x = ln(y/b) / a) | Apr 2022 |

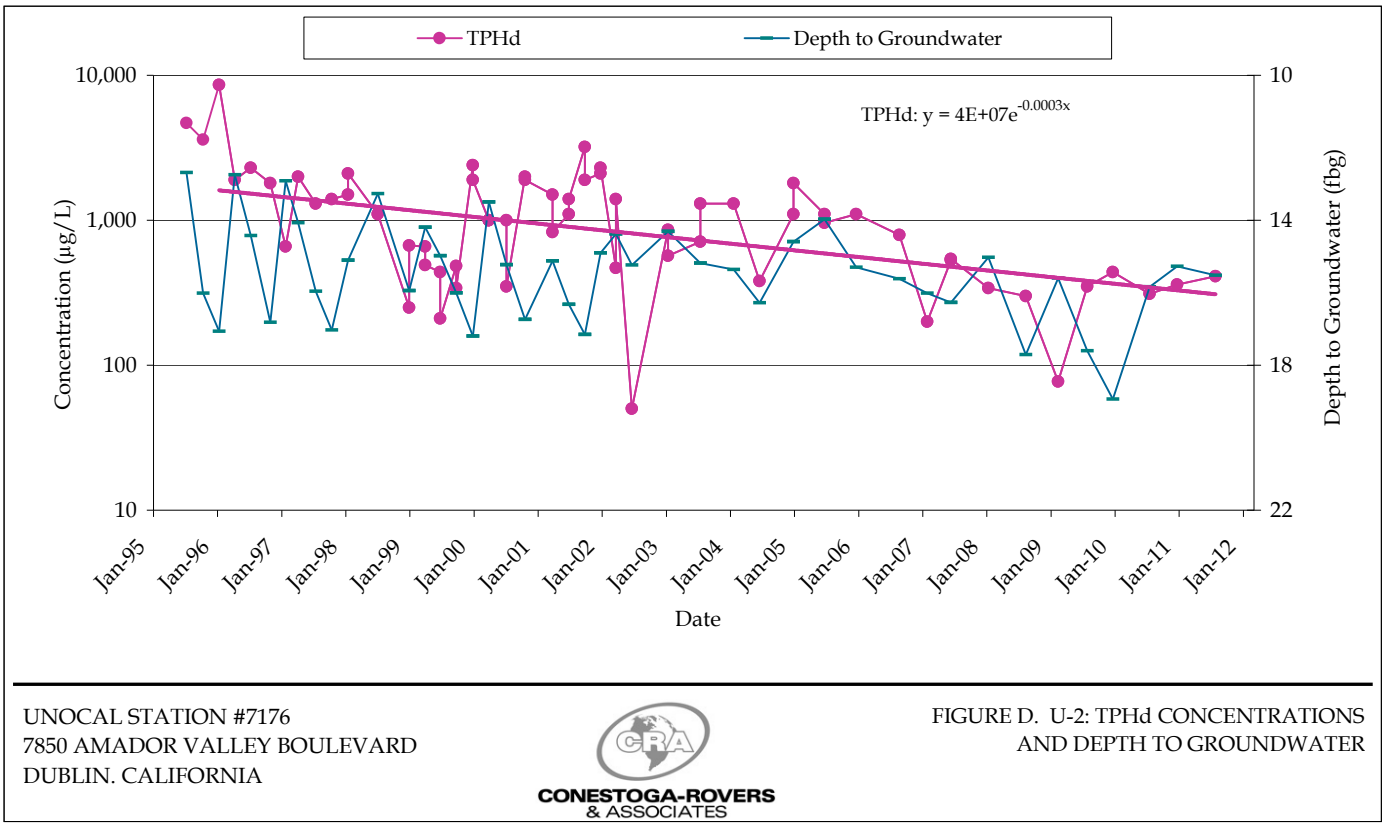


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FIGURE D. U-2: TPHd CONCENTRATIONS AND DEPTH TO GROUNDWATER

## Predicted Time to Reach Water Quality Objectives (WQO) in Well U-2

**Unocal Station #7176, 7850 Amador Valley Boulevard, Dublin, California**

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

| | | Constituent | Total Petroleum Hydrocarbons as Gasoline (TPHg) | Benzene |
|---|---|---|---|---|
| Given | | | | |
| WQO: | | y | 100 | 0.5 |
| Constant: | | b | 2.54E+08 | NA |
| Constant: | | a | -3.05E-04 | NA |
| Starting date for current trend: | | | 10/12/1995 | NA |
| Calculate | | | | |
| Attenuation Half Life (years): | ( -ln(2)/a)/365.25 | | 6.23 | NA |
| Estimated Date to Reach WQO: | (x = ln(y/b) / a) | | Jul 2032 | AT WQO |

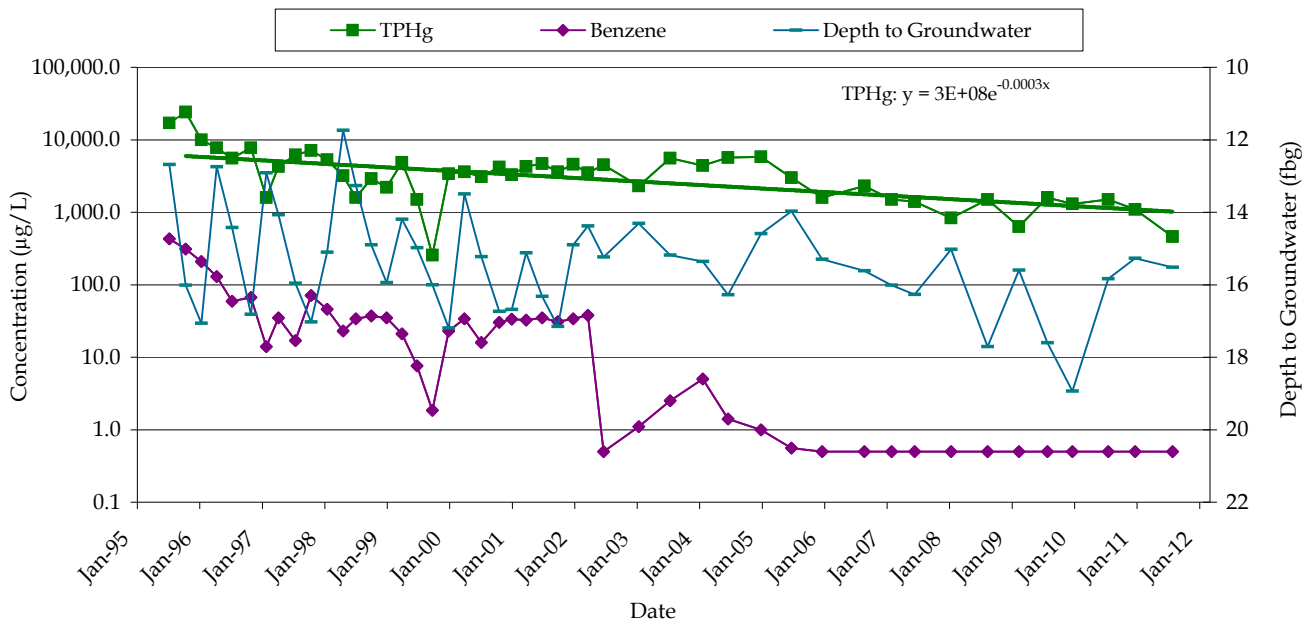


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FIGURE E. U-2: TPHg AND BENZENE CONCENTRATIONS AND DEPTH TO GROUNDWATER

## Predicted Time to Reach Water Quality Objectives (WQO) in Well U-2

### Unocal Station #7176, 7850 Amador Valley Boulevard, Dublin, California

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

| | Constituent | Methyl Tertiary Butyl Ether (MTBE) |
|---|---|---|
| **Given** | | |
| WQO: | y | 5 |
| Constant: | b | NA |
| Constant: | a | NA |
| Starting date for current trend: | | NA |
| **Calculate** | | |
| Attenuation Half Life (years): | ( -ln(2)/a)/365.25 | NA |
| Estimated Date to Reach WQO: | (x = ln(y/b) / a) | AT WQO |

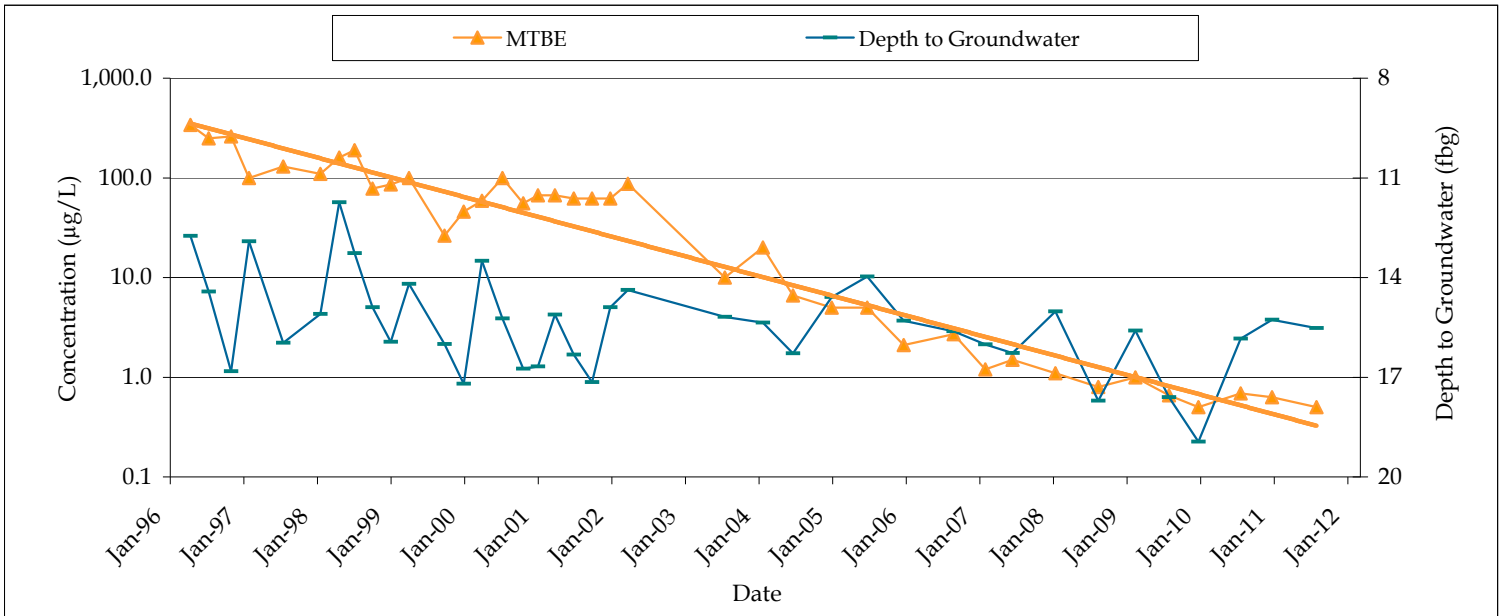


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FIGURE F. U-2: MTBE CONCENTRATIONS AND DEPTH TO GROUNDWATER