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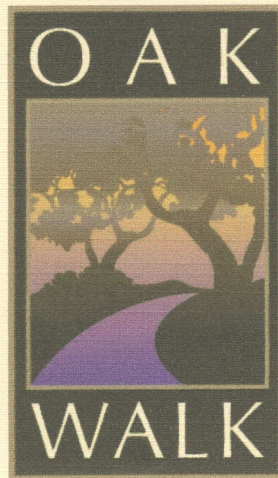
Groundwater Quality Monitoring Report Monitoring Wells MW-16A and MW-16B March 2012

Oak Walk Site
Emeryville, California

RECEIVED

10:17 am, Mar 19, 2012

Alameda County
Environmental Health



for

Bay Rock Oaks, LLC

March 2012

Project No.: 0707.1001

BAY ROCK OAKS, LLC

Alameda County Environmental Health Care Services
Local Oversight Program
1131 Harbor Way Parkway, Suite 250
Alameda, California 94502-6577

Date: March 17, 2012

Your Reference: RO2733

Attn. Mr. Mark Detterman

**SUBJECT: Groundwater Quality Monitoring Report Monitoring Wells MW-16A and MW-16B
March 2012 - Oak Walk Site, Emeryville, California**

Dear Mr. Detterman:

A copy of the: Groundwater Quality Monitoring Report Monitoring Wells MW-16A and MW-16B
March 2012 - Oak Walk Site, Emeryville California, prepared by our consultants, Dietz Engineering
and Construction, Inc. (DEC), is herewith submitted electronically to the Alameda County
Environmental Health Care Services (ACEH) website.

With respect to the report I state the following: *I declare, under penalty of perjury, that the
information and recommendations contained in the attached report are true and correct to the best
of my knowledge.*

If you have any technical questions about the report please call Dr. Watkins at (510) 336-9118. For
administrative questions please call me at (510) 350-7184.

Sincerely,



Marilyn Ponte
Bay Rock Oaks, LLC

cc: Dr. Dai Watkins, Dietz Engineering and Construction, Inc..

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PROFESSIONAL CERTIFICATION AND LIMITATIONS

This report was prepared under the direction of the engineer whose seal and signature appear below. The work was performed in accordance with generally accepted standards of engineering practice based on information available to us at the time of its preparation and within the limits of the scope of work directed by the client. No other representation, express or implied, and no warranty or guarantee is included or intended as to professional opinions, recommendations, or field or laboratory data provided.



D.J. Watkins 03/17/12

D. J. Watkins, Ph.D., P.E.
Civil Engineer
Dietz Engineering and Construction, Inc.

1.0 INTRODUCTION

This groundwater-quality monitoring report was prepared by Dietz Engineering and Construction, Inc. (**DEC**) for the Oak Walk Site in the city of Emeryville, California. As shown on Figure 1, the site occupies a major part of the city block that is bounded by 41st Street, Adeline Street, 40th Street and San Pablo Avenue. It has a total area of some 75,294 sq. ft. (1.73 acres). Figure 2 is a site plan. Figure 3 shows the neighborhood setting of the Oak Walk Site. Soil and groundwater beneath the site has been affected by the release of fuel hydrocarbons and industrial solvents, the sources of which were underground storage tanks formerly located at several off- and on-site locations.

The property, except for five residential lots that front onto 41st Street, is owned by Bay Rock Oaks, LLC (**Bay Rock Oaks**) of Emeryville California, a California Limited Liability Company.

The ownerships of the single family residences, which are located as shown on Figure 2, are as follows:

<u>Address</u>	<u>Owner</u>
1077 41st St.	Evan Pippen
1079 41st St.	Bernadette S. Arias
1081 41st St.	Duong C. Nguyen
1083 41st St.	Jessie B. Pollard
1085 41st St.	Yang Wang

DEC prepared this report for Bay Rock Oaks.

1.2 Site North

As is shown on Figure 2, true north at the Oak Walk Site is slightly to the west of the center line of Adeline Street, which runs along the eastern side of the city block on which the Oak Walk property is located. However, to simplify discussion, in this report we have established a "Site North" that parallels the alignment of San Pablo Avenue, which runs along the western side of the property. Unless otherwise stated, all compass directions used in this text should be interpreted in the context of that directional construct.

1.3 Sources of Contamination Affecting the Oak Walk Site

The program of environmental site characterization conducted at the Oak Walk Site showed that soil and groundwater beneath the property is affected by both fuel hydrocarbons and paint thinners (solvents) (The San Joaquin Company Inc. 2005). Those materials were released into the subsurface at four separate locations. Three of the those locations, two where paint solvents were released and one where fuel hydrocarbons were released, are located off the Oak Walk Site, while the fourth, at which a release of fuel

hydrocarbons occurred, is today partially outside and partially inside the Oak Walk Site boundary. Each of those sources is discussed below.

1.3.1 The Former Dunne and Boysen Paint Sites

These sites are in close proximity to each other and are situated to the east of the Oak Walk Site beyond the adjacent Ennis property and Adeline Street. Their locations are shown on Figure 3. Paint was manufactured and paint solvents were stored in underground tanks at both of these facilities. In the case of the former Boysen Paint Site (also referred to in the regulatory records as Oakland National Engraving (**ONE Oakland**)), contamination is also known to have been released from a sump on that property.

The Alameda Environmental Health Care Services (**ACEHCS**) has assigned the case number RO72/RO73 to the Dunne Paint Site and the case number RO79 to the Boysen Paint/ONE Oakland Site.

1.3.2 The Former Celis Alliance Automobile Service Station

The location of the former Celis service station, which is today beneath the 40th Street right-of-way and adjacent to the Oak Walk Site, is also shown on Figure 3. Large quantities of fuel hydrocarbons were released from underground storage tanks on that site. The releases contaminated soil and groundwater over a wide area that is, today, occupied by the 40th Street right-of-way, a portion of the Andante condominium housing site to the south, a significant portion of the Oak Walk Site to the north, beneath San Pablo Avenue and property to the west of that thoroughfare.

The Celis Site is recorded in California regulatory databases with the identifiers shown below:

The California State Water Resources Control Board (**SWRCB**) has established the following Global ID for the Celis Site: T0600101794

The California Regional Water Quality Control Board - San Francisco Bay Region (**RWQCB**) has been assigned the following case number to the Celis Site: 01-1938

The ACEHCS Local Oversight Program (**LOP**), which is the lead agency for the site, has assigned the following case number to the Celis Site: RO453/RO567

Releases of fuel hydrocarbons and, to limited extent, motor oil from the Celis Site commingled beneath the Oak Walk Site with the paint solvents released at the Boysen and Dunne Paint Sites to the east.

1.3.3 The Former San Francisco French Bread Site

The San Francisco French Bread Company (**SFFBC**) formerly occupied a part of the Oak Walk Site that today fronts onto 40th Street. SFFBC installed two ten thousand-gallon underground storage tanks on their property, which had the address 4070 San Pablo Avenue. One tank stored diesel and the other stored gasoline for use in the bread company's fleet of distribution vehicles. The former locations of the tanks are shown on Figure 2.

When the 1995 extension of 40th Street between Adeline Street and San Pablo Avenue was constructed by the City of Emeryville, the southern half of the tank sites became part of the street right-of-way and the northern half remained within the current boundaries of the Oak Walk Site.

The SFFBC tank site is recorded in California databases with the identifications shown below.

The SWRCB has established the following Global ID for the SFFBC Site:
T0600101186

The RWQCB has been assigned the following case number to the SFFBC Site: 01-1289

The ACEHCS, which is the lead agency for the site, has assigned the following case number to the SFFBC Site: RO171

1.3.4 Oak Walk Site

With the exception of the small area of the former SFFBC property that is included in the Oak Walk Site, there are no known sources of contamination on the subject property. However, in order to provide oversight of the site characterization and remediation of the Oak Walk Site, the ACEHCS has assigned the following case number to the Oak Walk Site: RO2733. At the request of the ACEHCS, the SWRCB established the following Geotracker Global ID for the Oak Walk Site: T06019705080.

1.4 Chemicals of Concern in Soil and Groundwater

Investigations of the geochemistry of the subsurface at the Oak Walk Site have shown that soil and groundwater over essentially the whole of the property is affected by petroleum hydrocarbons. As was discussed in Section 1.3 above, mineral spirits and paint thinners were released from the Frank Dunne and Boysen Paint sites located to the east of Adeline Street and diesel and gasoline were released at the Celis Site, which is today beneath 40th Street. Over large areas of the Oak Walk Site the solvents and fuels became intermingled. In addition, a limited area of the site on its southern frontage on 40th Street was affected by a release of gasoline from a tank installed by the SFFBC that was

formerly located partially within and partially outside the Oak Walk property boundary. Those release sites are shown on Figure 3.

The concentrations of COCs in soil recovered from the subsurface at the Oak Walk Site are presented in Table 1 and the concentrations of COCs in groundwater are presented in Table 3.

1.4.1. Concentrations of Analytes in Excess of the ESLs

To provide a standard process for determining whether COCs detected at a contaminated site will require additional evaluation, the RWQCB has established Environmental Screening Levels (**ESLs**) for many chemicals and for mixtures of chemicals such as gasoline and diesel (California Regional Water Quality Control Board San Francisco Bay Region 2008).

If the concentrations of COCs in soil or groundwater exceed the applicable ESLs it does not necessarily mean that active remediation of soil or groundwater is necessary or that additional corrective action measures beyond the scope of those already taken would be required. It simply means that in the case of an un-remediated site, additional evaluation is required to determine whether or not remediation measures must be implemented. In the case of the Oak Walk property, at which the remediation program is complete, comparison of the COCs remaining in situ with the applicable ESLs simply identify soil and groundwater in which the COCs remain elevated but, due to the implementation of the corrective action program, no longer pose an unacceptable risk.

The RWQCB has found that shallow groundwater in the region of the Oak Walk Site is not a source of drinking water (California Regional Water Quality Control Board - San Francisco Bay Region 1999). Given that finding and because there are both residential and commercial structures on the Oak Walk Site, the applicable ESLs are those developed for residential sites where the groundwater is not a current or potential source of drinking water. In the case of contaminants in soils, there are separate ESLs for shallow soils (*i.e.*, soil at depth less than 3 meters (9.84 ft. BGS) and for deep soils (*i.e.*, at depths greater than 9.84 ft). The applicable ESLs for the COCs at the Oak Walk Site for soil and groundwater are compiled in Tables 4 (shallow soils) and 5 (deep soils).

The results of analyses of soil and groundwater that indicated the presence of contaminants of concern at concentrations in excess of the applicable ESLs are shown in **bold font** in Tables 1 and 3. (**Note:** Although they are located slightly deeper than 9.84 ft., DEC conservatively considered soil at depths up to 10 ft. to be "shallow" when preparing the Tables.)

1.5 Completed Site Remediation and Health Risk Assessment

Following site characterization (The San Joaquin Company Inc. 2005) a Corrective Action Plan for the Oak Walk Site was prepared by the San Joaquin Company Inc. (The San Joaquin Company Inc. 2006 a,b) and approved by the ACEHCS (Alameda County

Environmental Health Care Services 2006a,b). The site remediation required by the Corrective Action Plan has been completed and a Remediation Report was filed with ACEHCS (The San Joaquin Company Inc. 2009b). In addition, a Post-remediation Health Risk Assessment for the site has also been completed and filed with ACEHCS (Dietz Engineering and Construction, Inc. 2012). There are no significant health risks to occupants of the Oak Walk Site.

2.0. MARCH 2012 GROUNDWATER-QUALITY MONITORING

In compliance with the approved Corrective Action plan a program of post-remediation groundwater-quality monitoring has been completed on at the Oak Walk Site. Monitoring rounds encompassing all of the then extant Oak Walk Site monitoring wells were conducted in September 2009 (The San Joaquin Company Inc. 2009a), March 2010 (Dietz Engineering and Construction, Inc. 2010b) and September 2010 (Dietz Engineering and Construction, Inc. 2010a). The results of those monitoring rounds are compiled in Table 3. Although the Post-remediation Health Risk Assessment (Dietz Engineering and Construction, Inc. 2012), which was based on the groundwater-quality data obtained in September 2010, demonstrated that there are no significant health risks present on the Oak Walk Site, the ACEHCS case officer was concerned about the elevated concentration of benzene present in groundwater in Monitoring Wells 16A and 16B (see Figure 2 for locations). To assess changes in the concentrations of chemicals of concern in groundwater in those wells that had occurred since September 2010, Bay Rock Oaks agreed that an additional round of monitoring of groundwater quality in those wells would be conducted. The work was conducted by DEC on March 5, 2012 and the results are presented herein.

2.1 Groundwater Elevations

On March 5, 2012, prior to recovery of samples, the depth to groundwater in Monitoring Wells MW-16A and MW-16B was measured using a conductivity probe. The depths to groundwater are recorded in Table 2, together with the water table elevations computed relative to the National Vertical Datum (NAVD) based on the previously-surveyed top of casing elevations of the wells.

Because this groundwater monitoring round included only two wells, insufficient data was generated to draw groundwater contours. However the groundwater contours shown on Figure 4, which were generated from data gathered at the time of the September 2010 monitoring round, are typical of those prevailing since site remediation was completed. At that time, the site-wide groundwater gradient was 0.02 ft./ft. and the groundwater flow direction on the scale of the site was to the southwest.

2.2 Purging of Groundwater-quality Monitoring Wells

A small-diameter, submersible pump was used to purge Monitoring Wells MW-16A and MW-16B of stagnant water. The pumped water was discharged into 5-gallon pails, each of which was, in turn, discharged into a 55-gallon drum.

During the purging procedure, the temperature, pH and electrical conductivity of the stream of purge water were monitored by checking those parameters periodically using a multi-function electronic meter. Purging continued until all three parameters stabilized (*i.e.*, variations between measurements were less than 10%). The array of parametric results for each well is recorded in DEC's field notes (see Appendix A). However, to ensure that wells were adequately purged, a minimum of 20 gallons of purge water was pumped from each well even if parametric stability had been achieved before that total

volume of water had been extracted.

2.2.1 Disposal of Purge Water

As noted above, purge water extracted from the monitoring wells was discharged into a 55 gallon drum. The drum was transported to DEC's construction yard where its contents were discharged into a holding tank. It will be held there until there is a sufficient accumulation for it to be economically transported for treatment at a permitted facility.

2.3 Recovery of Groundwater Samples from Monitoring Wells

After purging, samples were recovered from both wells using disposable bailers. Water brought to the surface in the bailers was decanted via discharge spigot valves placed in the bottom of each bailer so as to completely fill clean glassware containing pre-dispensed hydrochloric acid preservative supplied by the laboratory. The sample vials were then tightly closed, labeled for identification, entered into chain-of-custody control and packed on chemical ice for transport to TestAmerica Laboratories, Inc. in Pleasanton, California (**TestAmerica**) for analysis.

2.4 Analyses of Groundwater Samples

Each groundwater sample recovered was analyzed at the laboratory for the following suite of analytes.

<u>Analyte</u>	<u>Method of Analysis</u>
Total Petroleum Hydrocarbons (quantified as diesel)	EPA Method 8015B with pre-treatment by EPA Method 3630.
Total Petroleum Hydrocarbons (quantified as mineral spirits)	EPA Method 8015B with pre-treatment by EPA Method 3630.
Total Petroleum Hydrocarbons (quantified as gasoline)	EPA Method 8260B
Benzene	EPA Method 8260B
Toluene	EPA Method 8260B
Ethylbenzene	EPA Method 8260B
Total Xylene Isomers	EPA Method 8260B
tertiary-Butyl alcohol	EPA Method 8260B

Methyl-tertiary butyl ether	EPA Method 8260B
Di-isopropyl ether	EPA Method 8260B
Ethyl tertiary-butyl ether	EPA Method 8260B
Tertiary-amyl methyl ether	EPA Method 8260B

TestAmerica's laboratory is certified by the California Department of Health Services (**DHS**) to perform the groundwater analyses listed above.

The results of the analyses of the samples of groundwater are presented in Table 3, which includes the results of analyses of groundwater samples recovered from all previous sampling rounds conducted at the Oak Walk Site. A copy of the laboratory's Certificate of Analysis is included in Appendix B of this report.

2.5 Discussion of Results

As can be seen in Table 3, between September 23, 2010 and March 5, 2012 there had been some increase in the concentrations of diesel range (**TPHd**), mineral spirits range (**TPHms**) and gasoline range (**TPHg**) petroleum hydrocarbons and modest increases in the concentrations benzene, toluene, ethyl benzene and total xylene isomers (**the BTEX compounds**) in groundwater in Monitoring Well 16B. However, they remain moderate and are all less than those present in groundwater in Monitoring Well 16A on the latter date. Monitoring Well 16A is screened over the interval 5ft. to 15ft. BGS and Monitoring Well 16B is screened over the interval 20ft. to 25ft. BGS.

Although there were small increases in the concentrations of TPHd, and TPHms, there were significant decreases in the concentrations of TPHg and the BTEX compounds in the groundwater in Monitoring Well MW-16A over the period September 23, 2010 to March 5, 2012. The concentrations of the critical compounds benzene and ethyl benzene fell by 32% and 44%, respectively, compared to those present on September 23, 2010, which were used to perform the post-remediation health risk assessment for the site (Dietz Engineering and Construction, Inc. 2012).

Figure 5 shows a plot of the normal log of the sum of the concentrations of the BTEX compounds in groundwater in Monitoring Well MW-16A over the period September 2009 when a sample was first recovered from that well to March 5, 2012. The plot clearly shows that the concentrations of those compounds are being expeditiously reduced by an aggressive process of natural attenuation. Figure 6 shows a similar plot for benzene and shows that, as a component of the BTEX group, that critical chemical of concern is also being vigorously attenuated by natural processes.

3.0 CONCLUSIONS

By March 5, 2012, the quality of groundwater in Monitoring Well MW-16A at the Oak Walk Site has improved significantly since it was previously monitored on September 23, 2010. The concentration of benzene, the critical chemical of concern, in groundwater in that well fell from 14,000µg/L to 9,500 µg/L over that period.

The benzene concentration of 14,000 µg/L, together with the concentration of the other chemicals of concern present in the groundwater in Monitoring Well MW-16A on September 23, 2010, were used to make the post-remediation health risk assessment for the most vulnerable buildings on the Oak Walk Site (Dietz Engineering and Construction, Inc. 2012). That assessment showed that there are no significant risks to occupants of the site. The results of the March 5, 2012 monitoring round serve to reinforce the results of that assessment.

As has been demonstrated in Section 2.5 above, natural attenuation is vigorously reducing the concentrations of the chemicals of concern in groundwater in Monitoring Well MW-16A so that groundwater-quality in that well will further improve with the passage of time.

All of the required components of the Corrective Action Plan for the Oak Walk Site (The San Joaquin Company Inc. 2006 a,b) that was approved by the ACEH (Alameda County Environmental Health Care Services 2006a,b) have been completed. The results of the groundwater-quality monitoring round conducted on March 5, 2012 demonstrate that the concentrations of the chemicals in Monitoring Well MW-16 that were used in the Post-remediation Health Risk Assessment, which showed that there are no significant health risks to occupants of the site, are significantly lower than those used in the assessment.

Based on the above findings, DEC recommends that the Oak Walk Site be released from oversight by the ACEHCS and the California Regional Water Quality Control Board – San Francisco Bay Region.

4.0 REFERENCES

Alameda County Environmental Health Care Services (2006a), Letter: *TOXICS Case RO0002733, Oak Walk Redevelopment Site, Emeryville, CA 94608*. From Barney M. Chan, Hazardous Materials Specialist to Mr. Peter Schellinger, Bay Rock Residential and Mr. John Tibbits. Dated December 1, 2006.

Alameda County Environmental Health Care Services (2006b), Letter: *TOXICS Case RO0002733, Oak Walk Redevelopment Site, Emeryville, CA 94608*. From Barney M. Chan, Hazardous Materials Specialist to Mr. Peter Schellinger, Bay Rock Residential and Mr. John Tibbits. Dated October 12, 2006.

Aqua Science Engineers, Inc. (2005a), *Report of Additional Soil and Groundwater Assessment, ASE Job No. 3976, at Kozel Property, 1001 42nd Street, Oakland, California*. October 28, 2005.

Aqua Science Engineers, Inc. (2005b), *Report of Soil and Groundwater Assessment, ASE Job No. 3976, at Kozel Property, 1001 42nd Street, Oakland, California*. January 19, 2005.

Block Environmental Services (1999), *Evaluation of Site Contamination and Recent Groundwater Sampling, ONE, Dunne Paints, California Linen, Oakland/Emeryville, California*. Prepared for O.N.E. Color Communications. February 25, 1999.

California Regional Water Quality Control Board San Francisco Bay Region (2008), *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. California Regional Water Quality Control Board San Francisco Bay Region INTERIM FINAL. November 2007 (Revised May 2008).

California Regional Water Quality Control Board - San Francisco Bay Region (1999), *East Bay Plane Groundwater Basin Beneficial Use Evaluation Report - Alameda and Contra Costa Counties, C.*, California Regional Water Quality Control Board - San Francisco Bay Region Groundwater Committee. June 1999

Clayton Group Services (2007), *Workplan for Off-site Groundwater Investigation, Former Dunne Quality Paints, 1007 41st Street, Oakland, CA 94608*. Prepared for Green City Lofts and McGrath Properties. January 17, 2007.

Clayton Group Services (2005), *Green City Offsite Investigation*. Prepared for Green City Lofts. 2005.

Clayton Group Services (2004a), *Green City Offsite Investigation*. Prepared for Green City Lofts. 2004.

Clayton Group Services (2003), *Supplemental Investigation of the Former Dunne Paint Facility, 1007 41st Street in Oakland/Emeryville and 4050 Adeline Street in Emeryville, California*. Prepared for City of Emeryville. Dated June 10, 2003.

Clayton Group Services (2002), *Pre-development Investigation, Former Dunne Paints, 1007 41st Street in Oakland/Emeryville and 4050 Adeline Street in Emeryville, California*. Dated December 23, 2002.

Dietz Engineering and Construction, Inc. (2012), *Post-remediation Health Risk Assessment - Oak Walk Site, Emeryville, California*. March 2012

Dietz Engineering and Construction, Inc. (2010a), *Groundwater Quality Monitoring Report -September 2010, Oak Walk Site, Emeryville, California*. November 2010

Dietz Engineering and Construction, Inc. (2010b), *Groundwater Quality Monitoring Report -March 2010, Oak Walk Site, Emeryville, California*. May 2010

Environmental Resource Management (2006), *Aegis, Limited Soil and Groundwater Investigation Report, Kozel Property, 1001 42nd Street, Oakland, California*. June 29, 2006.

Hageman-Aquiar, Inc. (1992), *Report of Limited Soil Investigation, Frank W. Dunne Company, 1007 41st Street, Oakland, CA*. June 22, 1992.

Levine-Fricke (1994), *Further Soil and Groundwater Investigation, Fuel Station, 40th Street Right-of-Way, Emeryville, California*. Prepared for Catellus Development Corporation. Dated March 1994.

Levine-Fricke (1993), *Phase II Investigation Results, Proposed 40th Street Right-of-Way, Emeryville, California*. Prepared for Catellus Development Corporation. Dated September 8, 1993.

SEACOR Science and Engineering Analysis Corporation (1992), *Results of Monitoring Well Installation and Sampling, 4070 San Pablo Avenue, Emeryville, California*. September 30, 1992.

The San Joaquin Company Inc. (2009a), *Groundwater Quality Monitoring Report - September 2009, Oak Walk Site, Emeryville, California*. December 2009

The San Joaquin Company Inc. (2009b), *Remediation Report, Oak Walk Redevelopment Site, Emeryville, California*. August 2009

The San Joaquin Company Inc. (2006a), *Addendum to Corrective Action Plan Oak Walk Redevelopment Site Emeryville, California*. November 2006.

The San Joaquin Company Inc. (2006b), *Corrective Action Plan, Oak Walk Redevelopment Site, Emeryville, California. (Vols. I and II.)* July 2006.

The San Joaquin Company Inc. (2005), *Environmental Site Characterization, Oak Walk Redevelopment Site, Emeryville, California.* April 2005.

The San Joaquin Company Inc. (2003), *Corrective Action Report, SNK Andante Project, 3992 San Pablo Avenue, Emeryville, California.* Prepared for SNK Captec Andante LLC. August 2003.

URS Corporation (2009), *First Quarter 2008 Groundwater Monitoring at Former Celis' Alliance Service Station, 4000 San Pablo Avenue, Emeryville, California.* Prepared for the City of Emeryville Redevelopment Agency. Dated July 22, 2009.

URS Corporation (2007a), *Fourth Quarter 2007 Groundwater Monitoring at Former Celis' Alliance Service Station, 4000 San Pablo Avenue, Emeryville, California.* Prepared for the City of Emeryville Redevelopment Agency. Dated December 26, 2007.

URS Corporation (2007b), *Monitoring Well Installation at Former Celis' Alliance Service Station, 4000 San Pablo Avenue Emeryville, California.* Prepared for the City of Emeryville Redevelopment Agency. Dated August 29, 2007.

URS Corporation (2006), *Additional Investigation at Former Celis' Alliance Service Station, 4000 San Pablo Avenue Emeryville, California.* Prepared for the City of Emeryville Redevelopment Agency. Dated May 31, 2006.

Woodward-Clyde Consultants (1997), *Third Quarter 1997 Groundwater Monitoring Results, Former Celis Alliance Fueling Station, 4000 San Pablo Avenue, Emeryville, California.* Prepared for City of Emeryville Redevelopment Agency. Dated November 13, 1997.

Woodward-Clyde Consultants (1995), *Report on Soil Remediation at the Former Celis Alliance Fueling Station, 4000 San Pablo Avenue, Emeryville, California.* Prepared for City of Emeryville Redevelopment Agency. Dated January 6, 1995.

TABLES

DEC

TABLE 1

DEC

TABLE 1

RESULTS OF ORGANIC CHEMICAL ANALYSES OF SOIL SAMPLES RECOVERED FROM THE OAK WALK SITE

Sample ID	Date Sam-pled	Depth BGS ft.	Petroleum Hydrocarbons			Other Volatile Organic Compounds																	PNAs					
			Min-eral Spirits mg/Kg	TPHd (Die-sel) mg/Kg	TPHg (Gaso-line) mg/Kg	Bene-zene mg/Kg	Tolu-ene mg/Kg	Ethyl-ben-zene mg/Kg	Total Xy-lenes mg/Kg	MTBE mg/Kg	Ace-tone mg/Kg	2-Bu-ta-none mg/Kg	n-Bu-tylben-zene mg/Kg	sec-Bu-tylben-zene mg/Kg	tert-Bu-tylben-zene mg/Kg	Isopro-pylben-zene mg/Kg	p-Isopro-pylben-zene mg/Kg	p-Isopro-pyltol-uene mg/Kg	n-Pro-pylben-zene mg/Kg	1,2,4-Tri-methyl-benzene mg/Kg	1,3,5-Tri-methyl-benzene mg/Kg	52 Other VOCs by 8260B GC/MS	Naptha-lene mg/Kg	2-Methyl-napthalene mg/Kg	15 Other PNAs by 8270C mg/Kg			
Trenches																												
T1 - 7.0	12/03/03	7.0	na ²	70 ¹⁶	530 ⁵	ND	ND	8.3	4.7	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T1 - 8.5	12/03/03	8.5	na	90	1,400 ⁵	ND	ND	10	1.9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T2 - 6.5	12/03/03	6.5	na	ND	3.8 ⁵	0.026	ND	0.024	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T2 - 8.5	12/03/03	8.5	na	1.5	300 ⁵	1.1	3.1	6.4	27	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T3 - 8.0	12/03/03	8.0	na	4.3	6.4	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	ND	na	na	na	
T3 - 9.5	12/03/03	9.5	na	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T4 - 10.5	12/03/03	10.5	na	ND	ND	ND	ND	ND	ND	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	ND	na	
T5 - 9.0	12/03/03	9	ND	70 ⁴	400	ND	2.6	6.1	36	ND	na	na	ND	0.6	ND	0.88	ND	ND	3.9	25	7.6	ND	4.1	1.8	ND	na	na	
T6 - 8.5	12/02/03	8.5	na	70	3,000 ⁵	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T7 - 9.0	12/02/03	9.0	na	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T8 - 8.5	12/02/03	8.5	na	150	820 ⁵	ND	ND	ND	ND	na	na	0.51	0.81	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	ND	na	
T9-S10-D 5.0	10/04/07	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S10-D 10.0	10/04/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S10-D 14.25	10/04/07	14.3	100	67	19,000	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S30-D 5.0	10/05/07	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S30-D 10.0	10/05/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S30-D 14.0	10/05/07	14.0	14	8.9	3,900	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S50-D 5.0	10/05/07	5.0	ND	12	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S50-D 10.0	10/05/07	10.0	99	75	530	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S50-D 13.0	10/05/07	13.0	900	600	7,600	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T9-S50-D 15.0	10/05/07	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-0S-5.0	09/21/07	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-0S-10.0	09/21/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-0S-15.0	09/21/07	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S21.5-17.0	09/21/07	17.0	300	210	560	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S21.5-20.5	09/21/07	20.5	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S50-D 5.0	09/24/07	5.0	ND	3.8 ¹⁶	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S50-D 10.0	09/24/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S50-D 15.0	09/24/07	15.0	48	30	350	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S55-D 17.0	09/24/07	17.0	ND	ND	2.2	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S75-D 5.0	09/24/07	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S75-D 10.0	09/24/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S75-D 15.0	09/24/07	15.0	580	360	2,100	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S75-D 17.0	09/24/07	17.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S100-D 5.0	09/26/07	5.0	ND	2.3	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S100-D 10.0	09/26/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S100-D 15.0	09/26/07	15.0	1,300	820	4,200	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S125-D 5.0	09/26/07	5.0	ND	2.9	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
T10-S125-D 10.0	09/26/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Sample ID	Date Sampled	Depth BGS ft.	Petroleum Hydrocarbons										Other Volatile Organic Compounds										PNAs				
			Min-eral Spirits	TPHd (Diesel)	TPHg (Gasoline)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Acetone	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene	p-Isopropylbenzene	p-Isopropyltoluene	n-Propylbenzene	1,2,4-Tri-methylbenzene	1,3,5-Tri-methylbenzene	52 Other VOCs by 8260B	Napthalene	2-Methyl-napthalene	15 Other PNAs by 8270C		
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	GC/MS	mg/Kg	mg/Kg	mg/Kg	
T10-S125-D 15.0	09/26/07	15.0	ND	ND	2.1	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
T10-S150-D 5.0	09/26/07	5.0	2.2	6.2	2.6	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
T10-S150-D 10.0	09/26/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
T10-S150-D 15.0	09/26/07	15.0	550	420	1,700	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
T10-S150-D 19.0	09/26/07	19.0	ND	ND	6.9	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
T11-5	08/08/07	5.0	ND	9.2	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
T11-10	08/08/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
T11-15	08/08/07	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
Borings and Wells																											
BE-1-5.0	04/02/04	5.0	62 ³	ND	540	ND	ND	5.1	1.6	ND	ND	ND	8.4	3.1	ND	2.7	ND	0.29	13	12	3.8	ND ⁶	18	3.2	ND ⁹		
BE-1-10.0	04/02/04	10.0	130 ³	ND	3,600	13	140	80	430	ND	ND	ND	3.7	ND	ND	1.4	ND	ND	6.2	32	12	ND	7.5	ND	ND		
BE-1-13.5	04/02/04	13.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
BE-1-15.0	04/02/04	15.0	ND	ND	7.9	0.096	0.029	0.12	0.6	0.011	ND	ND	0.014	ND	ND	ND	ND	ND	0.027	0.054	0.013	ND	0.12	ND	ND		
BE-1-20.0	04/02/04	20.0	ND	ND	2.5	0.027	0.011	0.016	0.033	ND	0.031	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-1-25.0	04/02/04	25.0	ND	ND	ND	ND	0.0053	ND	0.011	0.012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-2-5.0	04/02/04	5.0	27 ³	ND	340	1.3	ND	5.7	26	ND	ND	ND	9.1	2.4	ND	2.5	ND	ND	12	37	14	ND	18	1.4	ND		
BE-2-10.0	04/02/04	10.0	24 ³	ND	820	7.4	33	16	87	ND	ND	ND	3.3	ND	ND	1.3	ND	ND	5.7	29	10	ND	6.8	0.31	ND		
BE-2-15.0	04/02/04	15.0	ND	2.5 ⁸	5.0	0.052	ND	0.027	ND	0.075	0.14	ND	0.046	0.019	ND	0.0097	ND	ND	0.046	ND	ND	ND	ND	ND	ND		
BE-2-20.0	04/02/04	20.0	ND	2.4 ⁷	ND	ND	ND	ND	0.0086	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-2-25.0	04/02/04	25.0	ND	ND	ND	0.053	0.051	0.038	0.15	0.018	ND	ND	ND	ND	ND	ND	ND	ND	0.0069	ND	ND	ND	ND	ND	ND		
BE-3-5.0	04/02/04	5.0	ND	1.1 ⁸	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-3-10.0	04/02/04	10.0	ND	ND	ND	ND	ND	ND	ND	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-3-15.0	04/02/04	15.0	ND	1.3 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-3-20.0	04/02/04	20.0	190	ND	1,600 ⁵	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-4-5.0	04/01/04	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-4-9.5	04/01/04	9.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-4-14.5	04/01/04	14.5	ND	1.3 ⁸	2.8	0.006	ND	0.047	0.024	ND	0.04	ND	0.081	0.027	ND	0.017	0.0099	ND	0.081	0.12	0.005	ND	0.086	ND	ND		
BE-4-19.5	04/01/04	19.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-5-5.0	04/01/04	5.0	ND	4.5 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-5-10.0	04/01/04	10.0	14	ND	340 ⁵	ND	ND	ND	ND	ND	ND	ND	0.092	0.046	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-5-14.5	04/01/04	14.5	ND	2.5 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-5-19.5	04/01/04	19.5	ND	12 ⁷	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
BE-6-4.0	04/01/04	4.0	ND	22 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-6-9.5	04/01/04	9.5	ND	1,200 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0066	ND	ND	ND		
BE-6-15.0	04/01/04	15.0	ND	11 ⁸	130 ⁵	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BE-6-20.0	04/01/04	20.0	ND	4.9 ⁸	2.6 ⁵	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
BG-1-5	04/06/04	5.0	ND	ND	1.3	ND	ND	ND	ND	ND	0.046	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1	ND		
BG-1-10	04/06/04	10.0	35 ³	ND	870	ND	9.0	13	75	ND	ND	ND	2.6	ND	ND	1.1	ND	ND	4.4	23	8.1	ND	4.2	3.5	ND		
BG-1-15	04/06/04	15.0	ND	3.7 ⁸	270	1.1	0.99	4.9	24	ND	0.065	ND	0.028	ND	ND	ND	ND	0.025	0.160	0.056	ND	0.055	ND	ND	ND		
BG-1-20	04/06/04	20.0	ND	ND	ND	0.0062	ND	ND	ND	0.005	0.044	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BG-1-25	04/06/04	25.0	ND	ND	ND	ND	ND	0.0051	0.023	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
BG-1-30	04/06/04	30.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
BG-1-35	04/06/04	35.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		

Sample ID	Petroleum Hydrocarbons					Other Volatile Organic Compounds																	PNAs			
	Date Sampled	Depth BGS	Min-eral Spirits	TPHd (Diesel)	TPHg (Gasoline)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Acetone	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene	p-Isopropylbenzene	p-Isopropyltoluene	n-Propylbenzene	1,2,4-Tri-methylbenzene	1,3,5-Tri-methylbenzene	52 Other VOCs by 8260B	Napthalene	2-Methyl-napthalene	15 Other PNAs by 8270C	
		ft.	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	GC/MS	mg/Kg	mg/Kg	mg/Kg
BG-2-5.0	04/06/04	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG-2-10.5	04/06/04	10.5	47 ³	ND	1,200	ND	ND	16	80	ND	ND	ND	6.0	ND	ND	2.4	ND	ND	10	50	17	ND	8.5	3.0	ND	
BG-2-15.0	04/06/04	15.0	ND	ND	ND	ND	ND	ND	ND	ND	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG-2-18.0	04/06/04	18.0	ND	ND	ND	ND	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG-2-21.0	04/06/04	21.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG-2-25.0	04/06/04	25.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BG-2-30.0	04/06/04	30.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
BG-2-35.0	04/06/04	35.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-1-4.0	04/02/04	4.0	ND	ND	ND	ND	ND	ND	0.0063	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-1-11.5	04/02/04	11.5	74	ND	2,400 ⁵	ND	ND	ND	ND	ND	ND	ND	0.023	0.022	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7	ND
MWT-1-15.0	04/02/04	15.0	ND	2.8 ⁸	ND	ND	ND	ND	ND	ND	ND	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-1-20 ¹¹	04/02/04	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-2-5.5	04/02/04	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-2-10.0	04/02/04	10.0	12 ³	ND	440	ND	ND	2.3	6.8	ND	ND	1.8	0.44	ND	0.500	ND	ND	2.4	10	3.8	ND	1.2	0.93	ND	ND	
MWT-2-15.0	04/02/04	15.0	ND	8.0 ⁸	120	ND	ND	0.67	1.2	ND	0.099	0.027	0.035	0.0079	ND	0.0055	ND	ND	0.032	0.18	0.047	ND	0.08	0.14	ND	
MWT-2-20.0	04/02/04	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-3-5.0	04/02/04	5.0	ND	1.2 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-3-10.0	04/02/04	10.0	ND	7.5 ⁸	7.0 ⁵	ND	ND	ND	ND	ND	ND	ND	ND	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-3-15.0	04/02/04	15.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-3-20.0	04/02/04	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4-4.0	04/01/04	4.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4-10.0	04/01/04	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4-15.0	04/01/04	15.0	150	ND	120 ⁵	ND	ND	ND	ND	ND	ND	0.026	0.015	0.0094	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4-20.0	04/01/04	20.0	ND	2.4 ⁸	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5-5.0	04/02/04	5.0	ND	1.3 ⁴	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5-10.0	04/02/04	10.0	ND	1.1 ⁴	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5-15.0	04/02/04	15.0	ND	7.0 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5-20.0	04/02/04	20.0	ND	7.6 ⁷	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-6-5.0	04/01/04	5.0	ND	2.1 ⁴	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-6-10.5	04/01/04	10.5	51	ND	860 ⁵	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-6-14.5	04/01/04	14.5	ND	1.4 ⁸	9.0 ⁵	ND	ND	ND	ND	0.064	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-6-19.5	04/01/04	19.5	ND	8.5 ⁸	13 ⁵	ND	ND	ND	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-7-5.0	04/01/04	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-7-10.0	04/01/04	10.0	ND	3.5 ⁸	4.40 ⁵	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-7-15.0	04/01/04	15.0	ND	3.4 ⁸	7.20 ⁵	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-7-20.0	04/01/04	20.0	ND	ND	ND	ND	ND	ND	ND	0.088	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-8-5.5	04/02/04	5.5	ND	1.5 ⁴	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-8-10.5	04/02/04	10.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-8-15.0	04/02/04	15.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-8-18.0	04/02/04	18.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-9-4.0	04/01/04	4.0	ND	3.3 ⁷	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-9-9.5	04/01/04	9.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-9-14.5	04/01/04	14.5	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-9-19.5	04/01/04	19.5	ND	14 ⁴	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample ID	Date Sampled	Depth BGS ft.	Petroleum Hydrocarbons				Other Volatile Organic Compounds																PNAs		
			Min-eral Spirits	TPHd (Diesel)	TPHg (Gasoline)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Acetone	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene	p-Isopropylbenzene	p-Isopropyltoluene	n-Propylbenzene	1,2,4-Tri-methylbenzene	1,3,5-Tri-methylbenzene	52 Other VOCs by 8260B	Napthalene	2-Methyl-napthalene	15 Other PNAs by 8270C
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	GC/MS	mg/Kg	mg/Kg
MWT-10-5.0	04/01/04	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-10-10.0	04/01/04	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-10-15.0	04/01/04	15.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-10-20.0	04/01/04	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-11-5	11/05/04	5.0	ND	1.1 ¹²	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-11-10	11/05/04	10.0	33 ¹³	ND	170 ¹⁴	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-11-15	11/05/04	15.0	ND	1.4 ¹²	27 ¹⁴	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-11-19.5	11/05/04	19.5	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-12-5	11/05/04	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-12-10	11/05/04	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-12-15	11/05/04	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-12-19.5	11/05/04	19.5	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-13-5	11/05/04	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-13-10	11/05/04	10.0	40 ¹³	ND	520 ¹⁴	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-13-15	11/05/04	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-13-19	11/05/04	19.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-14-5	11/05/04	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-14-10	11/05/04	10.0	110 ¹³	ND	360 ¹⁴	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-14-15	11/05/04	15.0	12 ¹³	ND	1.2 ¹⁴	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-14-19.5	11/05/04	19.5	15 ¹³	ND	82 ¹⁴	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-2-5.0	04/07/04	5.0	29 ³	ND	860	ND	ND	19	87	ND	ND	ND	2.9	ND	ND	0.098	ND	ND	4.4	27	9.8	ND	7.2	1.1	ND
MW-2-10.0	04/07/04	10.0	16 ³	ND	530	ND	2.4	9.2	47	ND	ND	ND	2.1	ND	ND	0.77	ND	ND	3.4	21	7.4	ND	5.0	0.23	ND
MW-2-15.0	04/07/04	15.0	ND	ND	ND	0.03	ND	0.021	0.029	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0085	ND	ND
MW-2-20.0	04/07/04	20.0	ND	ND	ND	ND	0.0062	ND	0.037	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-3-5.0	04/07/04	5.0	Lost	Core																					
MW-3-10.0	04/07/04	10.0	Lost	Core																					
MW-3-14.0	04/07/04	14.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-3-20.0	04/07/04	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4-5.5	04/30/04	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4-10.5	04/30/04	10.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4-15.5	04/30/04	15.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4-19.5	04/30/04	19.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5-6.0	04/30/04	6.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5-10.0	04/30/04	10.0	27	ND	1,000 ⁵	ND	ND	0.55	3.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5-15.5	04/30/04	15.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5-19.5	04/30/04	19.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6-5.0	04/07/04	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6-10.0	04/07/04	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6-15.0	04/07/04	15.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-6-20.0	04/07/04	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6A-5.0 ¹⁵	09/27/08	5.0	ND ²	11	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-6A-10.0	09/27/08	10.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-6A-15.0	09/27/08	15.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Sample ID	Date Sampled	Depth BGS ft.	Petroleum Hydrocarbons				Other Volatile Organic Compounds																PNAs		
			Min-eral Spirits	TPHd (Diesel)	TPHg (Gasoline)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Acetone	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene	p-Isopropylbenzene	p-Isopropyltoluene	n-Propylbenzene	1,2,4-Tri-methylbenzene	1,3,5-Tri-methylbenzene	52 Other VOCs by GC/MS	Napthalene	2-Methyl-naphthalene	15 Other PNAs by 8270C
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
MW-6A-20.0	09/27/08	20.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-7-5.0	04/06/04	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-7-10.0	04/06/04	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-7-15.0	04/06/04	15.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-7-20.0	04/06/04	20.0	ND	7.9 ⁴	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-8-5.0	04/07/04	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-8-10.0	04/07/04	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-8-15.0	04/06/04	15.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-8-20.0	04/06/04	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-9-5.0	09/27/08	5.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-9-10.0	09/27/08	10.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-9-15.0	09/27/08	15.0	ND	ND	6.5	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-9-20.0	09/27/08	20.0	ND	ND	2.7	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-10-5.0	09/27/08	5.0	ND	ND	0.92	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-10-10.0	09/27/08	10.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-10-15.0	09/27/08	15.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-10-20.0	09/27/08	20.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-11-5.0	09/27/08	5.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-11-10.0	09/27/08	10.0	79	47	540 ³	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-11-15.0	09/27/08	15.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-11-20.0	09/27/08	20.0	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-12-5.0	02/09/09	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-12-10.0	02/09/09	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-12-15.0	02/09/09	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-12-20.0	02/09/09	20.0	ND	ND	1.0	0.086	0.0075	0.036	0.046	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-13-5.0	02/09/09	5.0	ND	3.9	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-13-10.0	02/09/09	10.0	93	110	3.3	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-13-15.0	02/09/09	15.0	ND	1.3	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-13-20.0	02/09/09	20.0	2.7	2.8	2.3	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-14-5.0	02/09/09	5.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-14-10.0	02/09/09	10.0	2,400	1,700	5,600	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-14-15.0	02/09/09	15.0	ND	ND	2.5	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-14-20.0	02/09/09	20.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-15-5.0	02/09/09	5.0	1.2	15	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-15-10.0	02/09/09	10.0	2.3	1.6	1.6	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-15-15.0	02/09/09	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-15-20.0	02/09/09	20.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-16A-5.0	02/09/09	5.0	9.4	8.8	8.5	0.22	ND	0.21	0.17	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-16A-10.0	02/09/09	10.0	13	11	860	6.0	13	12	56	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-16A-15.0	02/09/09	15.0	ND	ND	2.0	0.10	0.019	0.027	0.055	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-16A-20.0	02/09/09	20.0	Lost	Core																					
MW-16B-5.0	02/10/09	5.0	Lost	Core																					
MW-16B-10.0	02/10/09	10.0	49	43	590	2.9	8.6	8.4	44	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MW-16B-15.0	02/10/09	15.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Sample ID	Date Sampled	Depth BGS ft.	Petroleum Hydrocarbons										Other Volatile Organic Compounds										PNAs				
			Min-eral Spirits	TPHd (Diesel)	TPHg (Gasoline)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Acetone	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene	p-Isopropylbenzene	p-Isopropyltoluene	n-Propylbenzene	1,2,4-Tri-methylbenzene	1,3,5-Tri-methylbenzene	52 Other VOCs by GC/MS	Napthalene	2-Methyl-naphthalene	15 Other PNAs by 8270C		
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
MW-16B-20.0	02/10/09	20.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
MW-16B-25.0	02/10/09	25.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
MW-16C-5.0	02/10/09	5.0	ND	1.9	1.7	0.12	ND	0.15	0.060	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
MW-16C-10.0	02/10/09	10.0	42	29	2,300	9.6	17	30	160	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
MW-16C-15.0	02/10/09	15.0	ND	ND	6.1	0.13	0.12	0.11	0.54	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
MW-16C-20.0	02/10/09	20.0	ND	ND	ND	ND	ND	ND	0.014	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
MW-16C-25.0	02/10/09	25.0	ND	ND	0.39	0.0075	0.012	0.0090	0.038	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
MW-16C-30.0	02/10/09	30.0	ND	ND	0.40	0.0076	0.011	0.0091	0.038	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na		
Groundwater Extraction Pit																											
GEP-1-5.0	09/26/07	5.0	ND	6.7	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
GEP-1-10.0	09/26/07	10.0	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	
GEP-1-15.0	09/26/07	15.0	310	220	3,900	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	

Concentrations in bold script exceed the 2008 San Francisco Bay Area RWQCB's Residential Environmental Screening Levels in shallow or deep soils, as appropriate, where groundwater is not a source of drinking water.

Notes:

- (1) ND = Not Detected above the Method Detection Limit (MDL).
- (2) na = Not analyzed
- (3) The laboratory reports that the detected hydrocarbon does not match its mineral spirits standard.
- (4) The laboratory reports that the detected hydrocarbon does not match its Diesel standard.
- (5) The laboratory reports that the detected hydrocarbon does not match its standard for gasoline.
- (6) Laboratory Method EPA 8260B analyzes for 108 Volatile Organic Compounds. Only those found are listed separately in this table.
- (7) The laboratory reports that the compound reported reflects individual or discrete unidentified peaks detected in the diesel range; the pattern does not match a typical fuel standard.
- (8) The laboratory reports that the hydrocarbon reported is in the early Diesel range and does not match the laboratory's Diesel standard.
- (9) Laboratory Method EPA 8270C analyzes for 17 Polynuclear Aromatics. Only those found are listed separately in this table.
- (10) Concentrations in bold script exceed the 2008 San Francisco Bay Area RWQCB's Environmental Screening Levels in shallow or deep soils, as appropriate, where groundwater is not a source of drinking water.
- (11) MWT-1-20.0 was also analyzed for 65 Semi-volatile chemicals by GC/MD - EPA8270C. None were detected in the sample.
- (12) Quantity of unknown hydrocarbon(s) in sample based on Diesel
- (13) Quantity of unknown hydrocarbon(s) in sample based on Mineral Spirits
- (14) Quantity of unknown hydrocarbon(s) in sample based on Gasoline
- (15) When first drilled, MW-6A was designated MW-17.
- (16) Concentrations of chemicals of concern that were detected in samples recovered from locations where soil has since been shipped off site are shown *italic font*. At locations where the undisturbed in situ soil was excavated and the areas were restored with engineered fill derived from on-site soil, the concentrations are shown in smaller font.

TABLE 2

DEC

TABLE 2
DEPTHS TO GROUNDWATER

Well No.	Date Measured	Casing Elevation ft. NAVD	Groundwater Depth ft.	Groundwater Elevation ft. NAVD
WCEW-1		41.73		
	05/19/04		7.88	33.85
	11/08/04		7.13	34.60
	04/15/07		7.39	34.34
	06/21/07		7.74	33.99
	08/09/07		8.00	33.73
	09/21/09		7.64	34.09
	03/12/10		5.40	36.33
	09/21/10		7.10	34.63
MW-2		44.40		
	05/19/04		5.98	38.42
	11/08/04		4.94	39.46
	04/15/07		4.86	39.54
	06/21/07		5.62	38.78
	08/09/07		5.42	38.98
	09/21/09		6.35	38.05
	03/12/10		5.40	39.00
	09/21/10		6.72	37.68
MW-3		45.49		
	05/19/04		5.66	39.83
	11/08/04		5.89	39.60
	04/15/07		5.25	40.24
	06/21/07		5.95	39.54
	08/09/07		6.57	38.92
	09/21/09		5.42	40.07
	03/12/10		2.96	42.53
	09/21/10		6.31	39.18
MW-4		47.31		
	05/19/04		6.19	41.12
	11/08/04		5.81	41.50
	09/21/09		7.42	39.89
	03/12/10		4.23	43.08
	09/21/10		7.85	39.46
MW-5		42.51		
	05/19/04		7.39	35.12
	11/08/04		7.09	35.42
	04/15/07		6.92	35.59

Well No.	Date Measured	Casing Elevation ft. NAVD	Groundwater Depth ft.	Groundwater Elevation ft. NAVD
MW-5 <i>cont.</i>	06/21/07		7.50	35.01
	08/09/07		7.42	35.09
	09/21/09		6.01	36.50
	03/12/10		5.70	36.81
	09/21/10		6.65	35.86
MW-6 ²		43.35		
	05/19/04 11/08/04		7.16 6.93	36.19 36.42
MW-6A		43.18		
	09/21/09 03/12/10 09/21/10		6.16 6.08 6.66	37.02 37.10 36.52
MW-7		44.75		
	05/19/04 11/08/04 09/21/09 03/12/10 09/21/10		8.40 8.10 6.01 6.26 7.00	36.35 36.65 38.74 38.49 37.75
MW-8		48.38		
	05/19/04 11/08/04 09/21/09 03/12/10 09/21/10		9.65 9.05 7.58 6.70 8.12	38.73 39.33 40.80 41.68 40.26
MW-9		47.85		
	09/21/09 03/12/10 09/21/10		7.91 7.07 9.28	39.94 40.78 38.57
MW-10		45.66		
	09/21/09 03/12/10 09/21/10		5.72 5.84 7.17	39.94 39.82 38.49
MW-11		45.10		
	09/21/09 03/12/10 09/21/10		7.43 6.78 7.98	37.67 38.32 37.12
MW-12		42.93		
	09/21/09 03/12/10 09/21/10		5.72 5.60 6.42	37.21 37.33 36.51

Well No.	Date Measured	Casing Elevation ft. NAVD	Groundwater Depth ft.	Groundwater Elevation ft. NAVD
MW-13		45.56		
	09/21/09		7.61	37.95
	03/12/10		7.27	38.29
	09/21/10		8.52	37.04
MW-14		45.19		
	09/21/09		7.38	37.81
	03/12/10		6.56	38.63
	09/21/10		8.12	37.07
MW-15		43.55		
	09/21/09		6.55	37.00
	03/12/10		6.88	36.67
	09/21/10		7.24	36.31
MW-16A		44.50		
	09/21/09		7.00	37.50
	03/12/10		5.22	39.28
	09/21/10		7.14	37.36
	03/05/12		5.80	38.70
MW-16B		44.59		
	09/21/09		7.24	37.35
	03/12/10		5.42	39.17
	09/21/10		7.26	37.33
	03/05/12		5.90	38.69
MW-16C		44.48		
	09/21/09		7.24	37.24
	03/12/10		12.84	31.64
	09/21/10		6.62	37.86
URS Off-site Wells				
URS MW-1		42.21		
	09/21/09		8.15	34.06
	03/12/10		7.51	34.70
URS MW-2		40.83		
	09/21/09		8.63	32.20
	03/12/10		7.41	33.42
URS MW-3		40.54		
	09/21/09		9.89	30.65
	03/12/10		8.47	32.07

Well No.	Date Measured	Casing Elevation ft. NAVD	Groundwater Depth ft.	Groundwater Elevation ft. NAVD
URS MW-4	09/21/09	41.41	9.81	31.60
	03/12/10		8.55	32.86
URS MW-5	09/21/09	43.93	5.84	38.09
	03/12/10		4.31	39.62
LFMW-LF-4	09/21/09	40.76	7.71	33.05
	03/12/10		6.98	33.78

Temporary Wells 2004

MWT-1	05/19/04	42.98	8.43	34.55
	11/08/04		6.82	36.16
MWT-2	05/19/04	45.28	7.69	37.59
	11/08/04		7.17	38.11
MWT-3	05/19/04	47.64	7.64	40.00
	11/08/04		7.66	39.98
MWT-4	05/19/04	44.74	8.43	36.31
	11/08/04		7.99	36.75
MWT-5	05/19/04	47.10	9.07	38.03
	11/08/04		8.84	38.26
MWT-6	05/19/04	45.21	9.05	36.16
	11/08/04		8.73	36.48
MWT-7 ¹	05/19/04	46.61	9.90	36.71
	11/08/04	45.69	8.60	37.09
MWT-8	05/19/04	47.23	9.65	37.58
	11/08/04		9.31	37.92

Well No.	Date Measured	Casing Elevation ft. NAVD	Groundwater Depth ft.	Groundwater Elevation ft. NAVD
MWT-9	05/19/04 11/08/04	45.78	8.70 8.23	37.08 37.55
MWT-10	05/19/04 11/08/04	47.22	9.53 9.03	37.69 38.19
MWT-11	11/08/04	46.63	9.71	36.92
MWT-12	11/08/04	47.97	10.79	37.18
MWT-13	11/08/04	48.16	10.65	37.51
MWT-14	11/08/04	47.85	9.63	38.22

Notes:

- 1) MWT-7 casing truncated by vandals. Elevation resurveyed on 11/10/04
- 2) MW-6 damaged during construction. Replaced by MW-6A on 09/27/08

TABLE 3

DEC

TABLE 3

RESULTS OF ANALYSES OF GROUNDWATER SAMPLES RECOVERED FROM TRENCHES, PITS AND WELLS ON THE OAK WALK SITE

Sample ID	Date Sampled	Petroleum Hydrocarbons			BTEX Compounds				Fuel Oxygenates				Other Volatile Organic Compounds										PNAs		
		TPHd (diesel) µg/L	Mineral Spirits µg/L	TPHg (gasoline) µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L	TAME µg/L	ETBE µg/L	DIPE µg/L	TBA µg/L	n-Butylbenzene µg/L	sec-Butylbenzene µg/L	tert-Butylbenzene µg/L	isopropylbenzene µg/L	p-Isopropylbenzene µg/L	p-Isopropyltoluene µg/L	n-propylbenzene µg/L	1,2,4-trimethylbenzene µg/L	1,3,5-trimethylbenzene µg/L	52 Other VOCs by 8260B µg/L	Naphthalene µg/L	15 Other PNAs by 8270C µg/L
Trenches																									
T3-W	12/03/03	2,300 ³	na	6,300 ⁵	ND	ND	31	30	ND	na	na	na	na	100	47	ND	ND	23	ND	230	320	110	ND	12	ND
T7-W	12/02/03	ND	na	ND	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T-10W	09/24/07	6,100	9,100	70,000	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
W11	08/08/07	4,500	5,800	1,800	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Groundwater Extraction Pit																									
GEP-1A	09/26/07	54,000	81,000	8,200	1.4	3.6	ND	2.2	1.9	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GEP-1B	10/04/07	530	810	1,100	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Monitoring Wells																									
WCEW-1	05/19/04	ND	600 ⁶	3,700	90	0.66	48	56	170	na	na	na	na	ND	8.7	ND	12	1.8	ND	31	14	5.6	ND	8.3	ND
	09/24/09	1,600	390	1,400	1.5	ND	1.2	ND	150	ND	ND	ND	21	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	1,600	460	1,200	3.5	ND	4.3	1.3	31	ND	ND	ND	5.4	na	na	na	na	na	na	na	na	na	na	na	na
	09/23/10	1,000	220	990	ND	ND	ND	ND	1.3	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-2	05/19/04	ND	2,100 ⁶	49,000	7,900	2,100	980	8,300	770	na	na	na	na	100	ND	ND	ND	ND	ND	ND	1,600	460	ND	490	ND
	09/18/07	1,400	1,500	8,300	1,500	ND	340	21	84	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
	09/24/09	400	350	4,000	1,500	ND	520	ND	47	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	780	870	8,300	1,500	47	790	740	74	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/23/10	570	460	8,800	1,800	12	710	90	61	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-3	05/19/04	ND	420 ⁶	1,300	ND	ND	ND	1.1	5.8	na	na	na	na	14	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	ND
	09/24/09	110	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	130	ND	58	4.6	ND	7.2	5.6	1.9	ND	ND	ND	4.1	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	67	ND	ND	ND	ND	ND	ND	3.0	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-4	05/19/04	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/22/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na

Sample ID	Date Sampled	TPHd (diesel) µg/L	Mineral Spirits µg/L	TPHg (gasoline) µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L	TAME µg/L	ETBE µg/L	DIPE µg/L	TBA µg/L	n-Butylbenzene µg/L	sec-Butylbenzene µg/L	tert-Butylbenzene µg/L	isopropylbenzene µg/L	p-Isopropylbenzene µg/L	p-Isopropyltoluene µg/L	n-propylbenzene µg/L	1,2,4-trimethylbenzene µg/L	1,3,5-trimethylbenzene µg/L	52 Other VOCs by 8260B µg/L	Naphthalene µg/L	15 Other PNAs by 8270C µg/L
MW-5	05/19/04	ND	330 ⁶	2,600 ⁵	ND	ND	ND	ND	17	na	na	na	na	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/09	220	250	430	ND	ND	ND	ND	0.77	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	190	230	300	ND	ND	ND	ND	0.51	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/23/10	250	120	380	ND	ND	ND	ND	0.56	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-6*	05/19/04	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6A	09/22/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-7	05/19/04	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/22/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-8	05/19/04	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/22/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-9	09/24/09	78	ND	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	150	89	140	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/23/10	200	99	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-10	09/22/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-11	09/24/09	ND	ND	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	81	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	63	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-12	09/22/09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-13	09/22/09	66	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	130	100	140	0.67	ND	0.76	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	120	130	400	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-14	09/22/09	72	ND	68	ND	ND	ND	ND	13	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	87	ND	ND	ND	ND	11	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-15	09/22/09	ND	ND	51	ND	ND	ND	ND	2.6	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	6.0	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/22/10	ND	ND	ND	ND	ND	ND	ND	7.1	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-16A	09/22/09	2,400	4,100	64,000	18,000	2,500	3,000	11,000	830	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	2,000	4,000	38,000	11,000	780	2,400	7,500	840	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/23/10	1,800	3,400	49,000	14,000	570	3,200	9,800	800	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/05/12	2200	3500	26000	9500	310	1800	2300	940	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na

Sample ID	Date Sampled	TPHd (diesel) µg/L	Mineral Spirits µg/L	TPHg (gasoline) µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L	TAME µg/L	ETBE µg/L	DIPE µg/L	TBA µg/L	n-Butylbenzene µg/L	sec-Butylbenzene µg/L	tert-Butylbenzene µg/L	isopropylbenzene µg/L	p-Isopropylbenzene µg/L	p-Isopropyltoluene µg/L	n-propylbenzene µg/L	1,2,4-trimethylbenzene µg/L	1,3,5-trimethylbenzene µg/L	52 Other VOCs by 8260B µg/L	Naphthalene µg/L	15 Other PNAs by 8270C µg/L
MW-16B	09/22/09	410	480	4,000	1,600	18	150	170	500	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	930	1,600	9,800	5,200	220	650	1,800	520	ND	ND	ND	100	na	na	na	na	na	na	na	na	na	na	na	na
	09/23/10	250	280	3,600	1,800	61	190	310	560	ND	ND	ND	87	na	na	na	na	na	na	na	na	na	na	na	na
	03/05/12	520	850	9000	3700	270	550	1500	610	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
MW-16C	09/22/09	ND	ND	270	ND	ND	ND	ND	230	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/14/10	ND	ND	270	4.9	ND	1.6	1.3	370	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	09/23/10	ND	ND	ND	ND	ND	ND	ND	400	ND	ND	ND	40	na	na	na	na	na	na	na	na	na	na	na	na
URS Wells¹⁰																									
URS-MW-1	09/21/09	90	83	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	110	ND	53	ND	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
URS-MW-2	09/21/09	210	ND	ND	ND	ND	ND	ND	49	ND	ND	ND	40	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	320	ND	ND	ND	ND	ND	ND	18	ND	ND	ND	37	na	na	na	na	na	na	na	na	na	na	na	na
URS-MW-3	09/21/09	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	ND	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
URS-MW-4	09/21/09	110	ND	ND	ND	ND	ND	ND	56	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	210	ND	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
URS-MW-5	09/21/09	1,100	99	150	ND	ND	ND	ND	63	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	1,100	160	170	ND	ND	1.0	ND	49	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
LF-MW-LF-4	09/21/09	1,600	320	490	ND	ND	7.9	ND	2.0	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
	03/13/10	820	1,100	1,200	0.5	ND	7.2	ND	1.1	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na
Temporary Wells																									
MWT-1	5/19/04	ND	74 ⁶	350	ND	ND	ND	ND	ND	na	na	na	na	8.0	ND	ND	1.0	ND	ND	1.0	ND	ND	ND	ND	ND
MWT-2	5/19/04	ND	3,200 ⁶	28,000	460	ND	1,200	2,700	66	na	na	na	na	100	ND	ND	ND	ND	ND	310	1,600	490	ND	340	ND
MWT-3	5/19/04	ND	450	1,000 ⁵	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-4	5/19/04	ND	88 ⁶	540 ⁵	ND	ND	ND	ND	ND	na	na	na	na	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-5	5/19/04	ND	ND	ND	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-6 ⁹	5/19/04	ND	980	4,200 ⁵	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-7	5/19/04	ND	3,200	56,000 ⁵	0.78	ND	ND	ND	ND	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-8	5/19/04	ND	370	800 ⁵	ND	ND	ND	ND	ND	na	na	na	na	ND	ND	1.6	ND	ND	ND	ND	0.70	ND	ND	ND	ND
MWT-9	5/19/04	ND	ND	ND	ND	ND	ND	ND	0.79	na	na	na	na	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MWT-10	5/19/04	ND	ND	59 ⁵	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Sample ID	Date Sampled	TPHd (diesel) µg/L	Mineral Spirits µg/L	TPHg (gasoline) µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	MTBE µg/L	TAME µg/L	ETBE µg/L	DIPE µg/L	TBA µg/L	n-Butylbenzene µg/L	sec-Butylbenzene µg/L	tert-Butylbenzene µg/L	isopropylbenzene µg/L	p-Isopropylbenzene µg/L	p-Isopropyltoluene µg/L	n-propylbenzene µg/L	1,2,4-trimethylbenzene µg/L	1,3,5-trimethylbenzene µg/L	52 Other VOCs by 8260B µg/L	Naphthalene µg/L	15 Other PNAs by 8270C µg/L	
MWT-11	11/6/04	ND	3,500 ⁷	930 ⁸	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-12	11/6/04	ND	830 ⁷	1,400 ⁸	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-13	11/6/04	ND	440 ⁷	1,100 ⁵	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
MWT-14	11/6/04	ND	1,200 ⁷	4,600 ⁵	ND	ND	ND	ND	ND	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Concentrations in bold script exceed the 2008 San Francisco Bay Area RWQCB's Residential Environmental Screening Levels in shallow soils where groundwater is not a source of drinking water.

Notes:

- (1) ND = Not Detected above the Method Detection Limit (MDL).
- (2) na = Not Analyzed.
- (3) The laboratory reports that the detected hydrocarbon does not match its diesel standard.
- (4) Laboratory Method 8260B tests for 66 Volatile Organic Compounds. Only those detected are presented on this table.
- (5) The laboratory reports that the detected hydrocarbon does not match its gasoline standard.
- (6) The laboratory reports that the detected hydrocarbon does not match its mineral spirits standard.
- (7) Quantity of unknown hydrocarbons in sample based on Mineral Spirits
- (8) Quantity of unknown hydrocarbons in sample based on gasoline
- (9) Monitoring Well MW-6 was destroyed on November 11, 2007 and replaced with Monitoring Well MW-6A on September 27, 2008

TABLE 4

DEC

TABLE 4

RWQCB TIER 1 CONCENTRATION LIMITS (ESLs)
FOR CHEMICALS OF CONCERN IN SHALLOW SOIL, GROUNDWATER AND SOIL GAS
AT SITES WHERE SGROUNDWATER IS NOT A SOURCE OF DRINKING WATER
Shallow = <3m BGS for soil; <1.5m BGS for soil gas.

Chemical of Concern	Limiting Concentrations to Protect Human Health				
	Soil		Groundwater	Soil Gas for Vapor Intrusion	
	Residential mg/Kg	Commercial mg/Kg	Resid. or Comm. µg/L	Residential µg/m ³	Commercial µg/m ³
Acetone	0.50	0.50	1,500	666,000	1,800,000
Aroclor® 1260 (PCBs)	0.22	0.74	0.014	n/a	n/a
Antimony	6.3	40	30	n/a	n/a
Arsenic	0.39	1.6	36	n/a	n/a
Barium	750	1,500	1,000	n/a	n/a
Benzene	0.12	0.27	46	84	280
Beryllium	4.0	8.0	0.53	n/a	n/a
2-Butatone (Metyl Ethyl Ketone)	13	13	14,000	1,000,000	2,900,000
n-Butylbenzene (1-Phenylbutane)	ne	ne	ne	ne	ne
sec-Butylbenzene (Butyl Benzene)	ne	ne	ne	ne	ne
tert-Butylbenzene	ne	ne	ne	ne	ne
Cadmium	1.7	7.4	0.25	n/a	n/a
Chromium III	750	750	180	n/a	n/a
Chromium VI	8.0	8.0	11	n/a	n/a
Cobalt	40	80	3.0	n/a	n/a
Copper	230	230	3.1	n/a	n/a
Dibromoethane (EDB)	ne	ne	ne	ne	ne
Ethyl benzene	2.3	4.7	43	980	3,300
Lead	200	750	2.5	n/a	n/a
Mercury	1.3	10	0.025	n/a	n/a
2-Methylnaphthalene	0.25	0.25	2.1	ne	ne
4-Methylphenol	ne	ne	ne	ne	ne
Methyl Teritary Butyl Ether	8.4	8.4	1,800	9,400	31,000
Methylene Chloride	7.2	17	2,200	5,200	17,000

Chemical of Concern	Limiting Concentrations to Protect Human Health				
	Soil		Groundwater	Soil Gas for Vapor Intrusion	
	Residential mg/Kg	Commercial mg/Kg	Resid. or Comm. µg/L	Residential µg/m ³	Commercial µg/m ³
Molybdenum	40	40	240	n/a	n/a
Naphthalene	1.3	2.8	24	72	240
Nickel	150	150	8.2	n/a	n/a
Isopropylbenzene (Cumene)	ne	ne	ne	ne	ne
p-Isopropylbenzene	ne	ne	ne	ne	ne
p-Isopropyltoluene (p-Cymene)	ne	ne	ne	ne	ne
n-Propylbenzene (Isocumene)	ne	ne	ne	ne	ne
Selenium	10	10	5.0	n/a	n/a
Silver	20	40	0.19	n/a	n/a
Tetrachlorethene	0.47	0.90	120	410	4100
Thallium	1.3	16	4.0	n/a	n/a
Toluene	9.3	9.3	130	63,000	180,000
TPHd, TPHms (Diesel and Mineral Spirits)	100	180	210	10,000	29,000
TPHg (Gasoline)	100	180	210	10,000	29,000
Trichloroethene	1.9	4.1	360	1,200	4,100
1,2,4 Trimethylbenzene	ne	ne	ne	ne	ne
1,3,5 Trimethylbenzene	ne	ne	ne	ne	ne
Vanadium	16	200	19	n/a	n/a
Xylene Isomers (Total)	11.0	11.0	100	21,000	58,000
Zinc	600	600	81	n/a	n/a

Notes:

n/a = not applicable to soil gas

ne = not established in the RWQCB ESL guidance document (California Regional Water Quality Control Board San Francisco Bay Region (2008), *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. California Regional Water Quality Control Board San Francisco Bay Region INTERIM FINAL. November 2007 (Revised May 2008).

TABLE 5

DEC

TABLE 5

RWQCB TIER 1 CONCENTRATION LIMITS (ESLs)
FOR CHEMICALS OF CONCERN IN DEEP SOIL, GROUNDWATER AND SOIL GAS
AT SITES WHERE SGROUNDWATER IS NOT A SOURCE OF DRINKING WATER

Deep = >3m BGS for soil; >1.5m BGS for soil gas.

Chemical of Concern	Limiting Concentrations to Protect Human Health				
	Soil		Groundwater	Soil Gas for Vapor Intrusion	
	Residential mg/Kg	Commercial mg/Kg	Resid. or Comm. µg/L	Residential µg/m ³	Commercial µg/m ³
Acetone	0.50	0.50	1,500	666,000	1,800,000
Aroclor [®] 1260 (PCBs)	6.3	6.3	0.014	n/a	n/a
Antimony	310	310	30	n/a	n/a
Arsenic	15	15	36	n/a	n/a
Barium	2,500	2,600	1,000	n/a	n/a
Benzene	2.0	2.0	46	84	280
Beryllium	98	98	0.53	n/a	n/a
2-Butatone (Metyl Ethyl Ketone)	13	13	14,000	1,000,000	2,900,000
n-Butylbenzene (1-Phenylbutane)	ne	ne	ne	ne	ne
sec-Butylbenzene (Butyl Benzene)	ne	ne	ne	ne	ne
tert-Butylbenzene	ne	ne	ne	ne	ne
Cadmium	39	39	0.25	n/a	n/a
Chromium III	2,500	5,000	180	n/a	n/a
Chromium VI	0.53	0.53	11	n/a	n/a
Cobalt	94	94	3.0	n/a	n/a
Copper	2,500	5,000	3.1	n/a	n/a
Dibromoethane (EDB)	ne	ne	ne	ne	ne
Ethyl benzene	4.7	4.7	43	980	3,300
Lead	750	750	2.5	n/a	n/a
Mercury	58	58	0.025	n/a	n/a
2-Methylnaphthalene	0.25	0.25	2.1	ne	ne
4-Methylphenol	ne	ne	ne	ne	ne
Methyl Teritary Butyl Ether	8.4	8.4	1,800	9,400	31,000
Methylene Chloride	34	34	2,200	5,200	17,000

Limiting Concentrations to Protect Human Health

Chemical of Concern	Soil		Groundwater	Soil Gas for Vapor Intrusion	
	Residential mg/Kg	Commercial mg/Kg	Resid. or Comm. µg/L	Residential µg/m ³	Commercial µg/m ³
Molybdenum	2,500	3,900	240	n/a	n/a
Naphthalene	4.8	4.8	24	72	240
Nickel	260	260	8.2	n/a	n/a
Isopropylbenzene (Cumene)	ne	ne	ne	ne	ne
p-Isopropylbenzene	ne	ne	ne	ne	ne
p-Isopropyltoluene (p-Cymene)	ne	ne	ne	ne	ne
n-Propylbenzene (Isocumene)	ne	ne	ne	ne	ne
Selenium	2,500	3,900	5.0	n/a	n/a
Silver	2,500	3,900	0.19	n/a	n/a
Tetrachlorethene	17	17	120	410	4100
Thallium	62	62	4.0	n/a	n/a
Toluene	9.3	9.3	130	63,000	180,000
TPHd, TPHms (Diesel and Mineral Spirits)	180	180	210	10,000	29,000
TPHg (Gasoline)	180	180	210	10,000	29,000
Trichloroethene	33	33	360	1,200	4,100
1,2,4 Trimethylbenzene	ne	ne	ne	ne	ne
1,3,5 Trimethylbenzene	ne	ne	ne	ne	ne
Vanadium	770	770	19	n/a	n/a
Xylene Isomers (Total)	11	11	100	21,000	58,000
Zinc	2,500	5,000	81	n/a	n/a

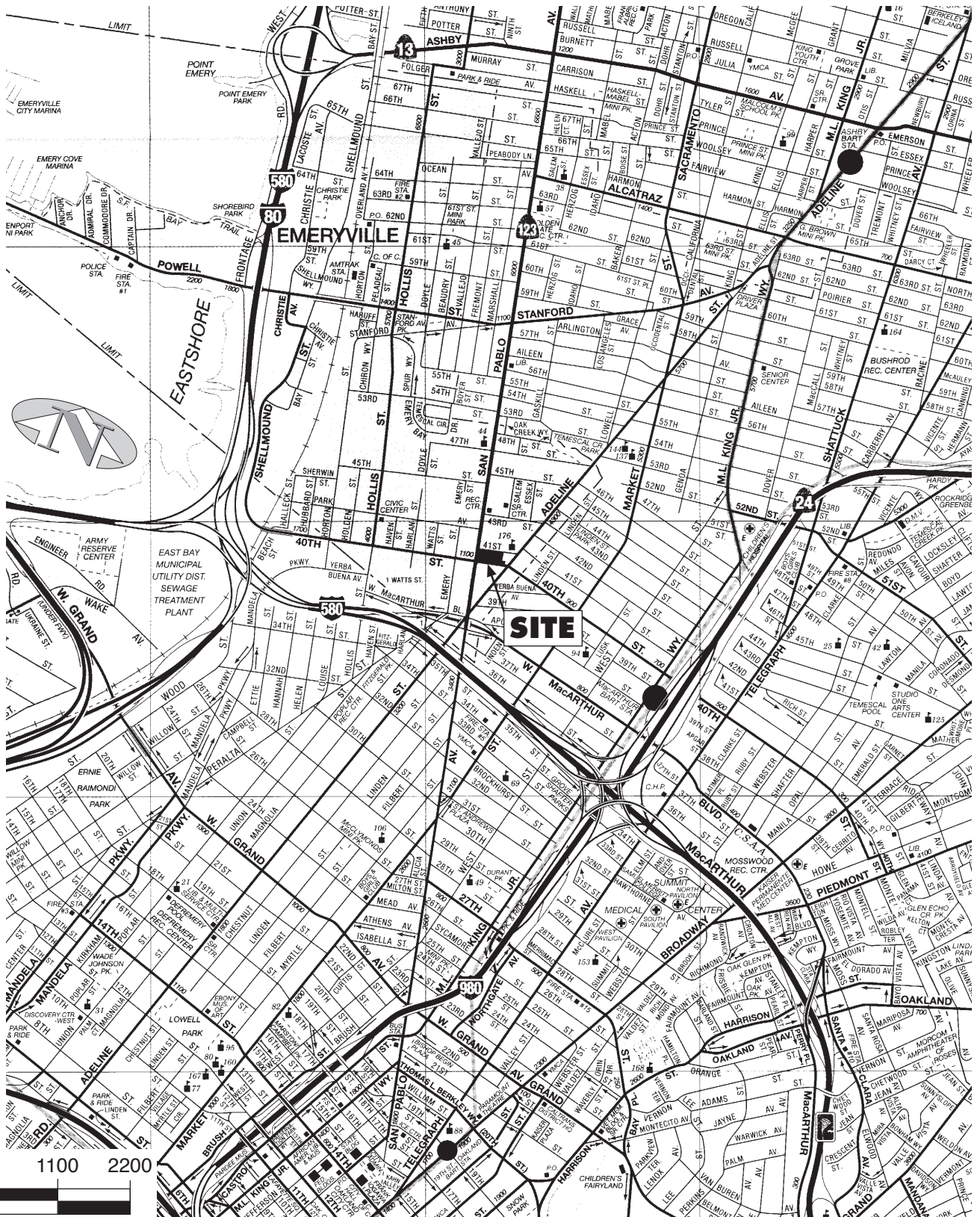
Notes:

n/a = not applicable to soil gas

ne = not established in the RWQCB ESL guidance document (California Regional Water Quality Control Board San Francisco Bay Region (2008), *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. California Regional Water Quality Control Board San Francisco Bay Region INTERIM FINAL. November 2007 (Revised May 2008).

FIGURES

DEC



SCALE IN FEET

Basemap: AAA; Oakland-Berkeley-Alameda (12/02)

SITE LOCATION
 Oak Walk Site
 Emeryville, California

FIG 1

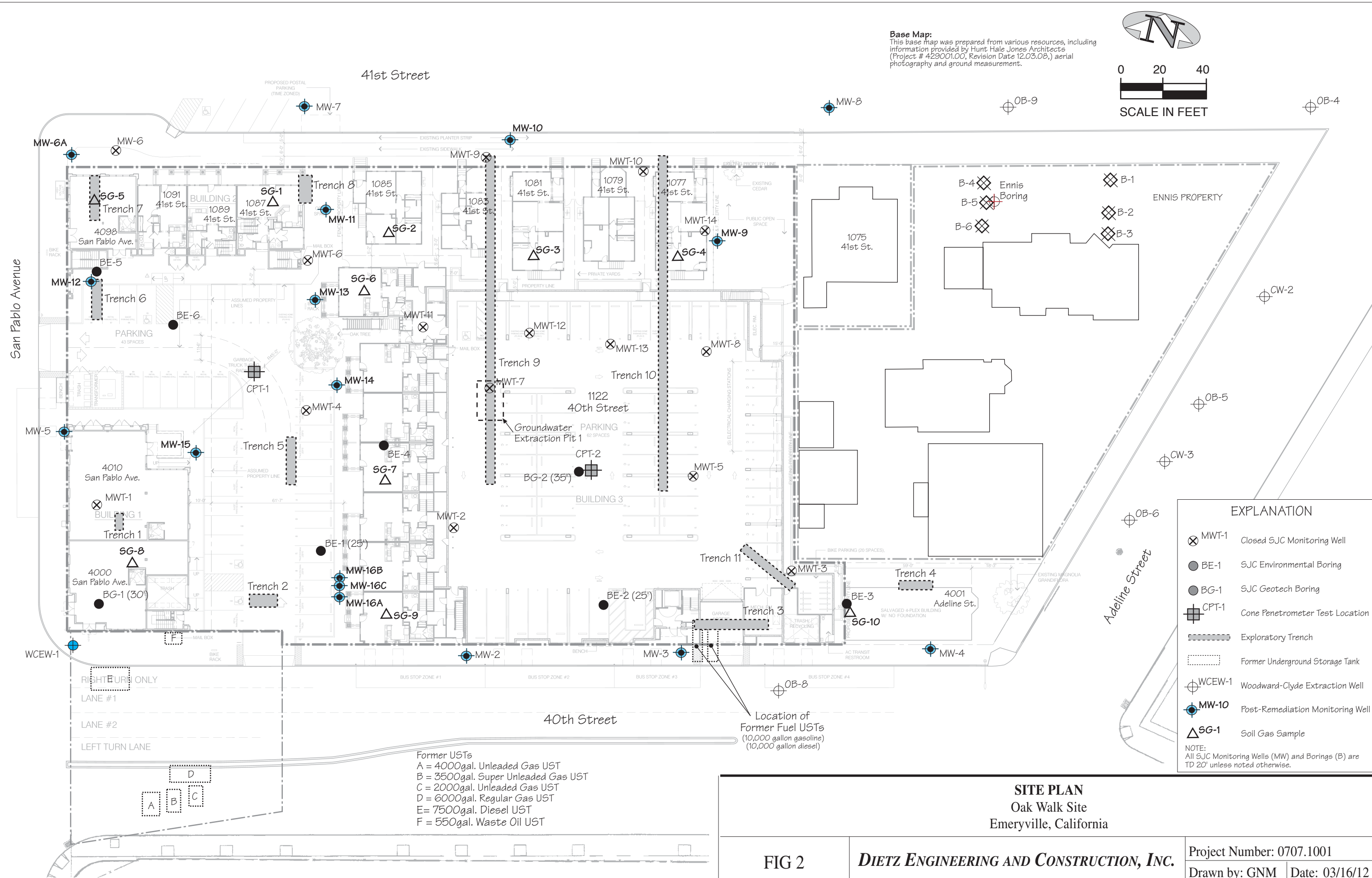
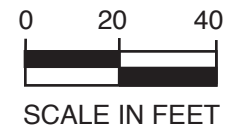
DIETZ ENGINEERING AND CONSTRUCTION, INC.

Project Number: 0707.1001

Drawn by: GNM

Date: 03/16/12

Base Map:
 This base map was prepared from various resources, including information provided by Hunt Hale Jones Architects (Project # 429001.00, Revision Date 12.03.08,) aerial photography and ground measurement.



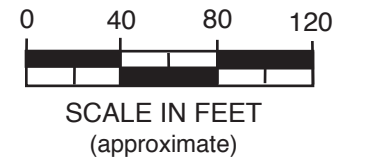
EXPLANATION	
	MWT-1 Closed SJC Monitoring Well
	BE-1 SJC Environmental Boring
	BG-1 SJC Geotech Boring
	CPT-1 Cone Penetrometer Test Location
	Exploratory Trench
	Former Underground Storage Tank
	WCEW-1 Woodward-Clyde Extraction Well
	MW-10 Post-Remediation Monitoring Well
	SG-1 Soil Gas Sample
NOTE: All SJC Monitoring Wells (MW) and Borings (B) are TD 20' unless noted otherwise.	

Former USTs
 A = 4000gal. Unleaded Gas UST
 B = 3500gal. Super Unleaded Gas UST
 C = 2000gal. Unleaded Gas UST
 D = 6000gal. Regular Gas UST
 E = 7500gal. Diesel UST
 F = 550gal. Waste Oil UST

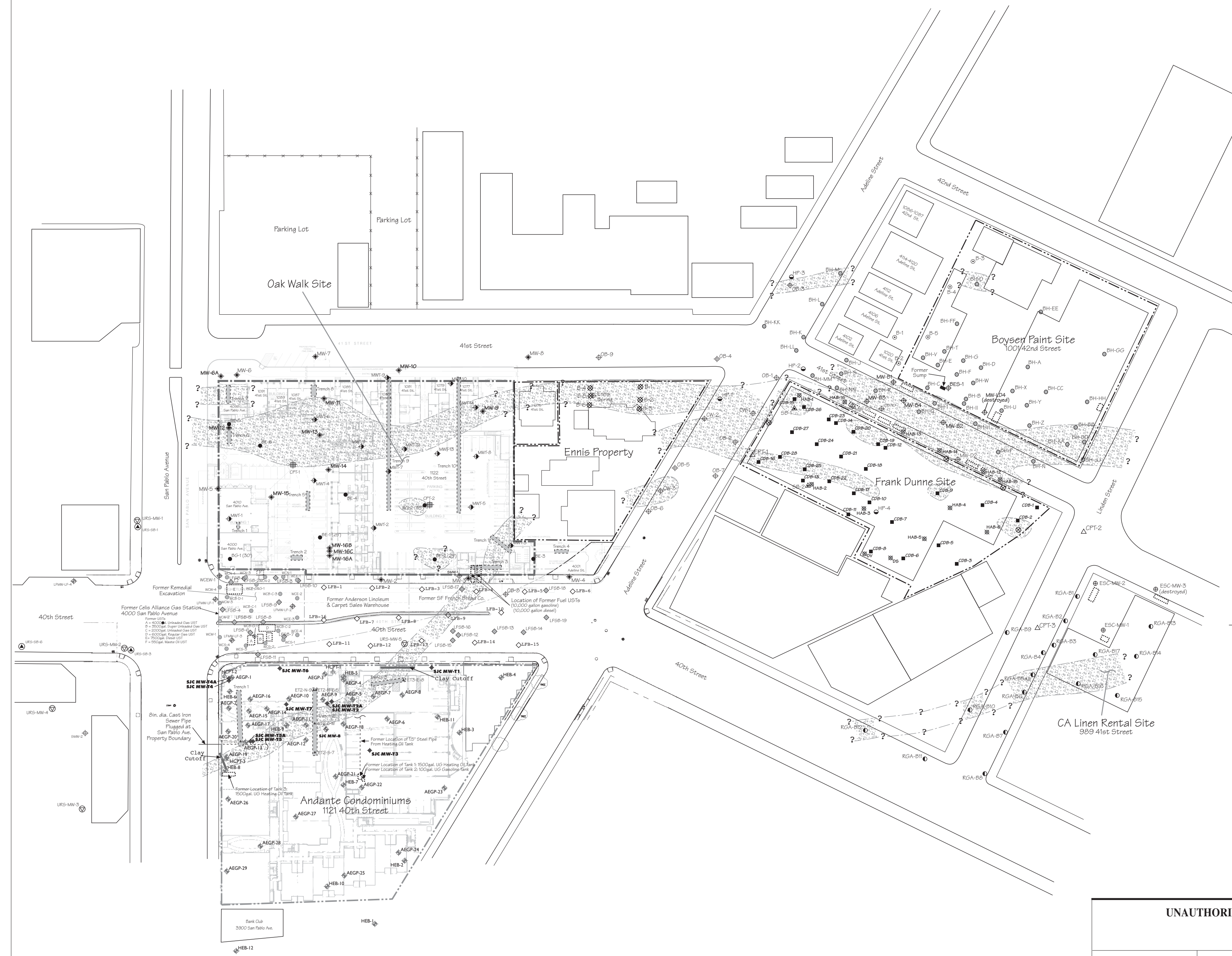
SITE PLAN
 Oak Walk Site
 Emeryville, California

Base Map:
 This base map was prepared from various resources, including information provided by:

- Hunt Hale Jones Architects (Project # 42901.00, Revision Date 12.03.08.)
- Bay Area Land Surveying - ALTA / ACSM Land Title Survey: Portion of Lots 3, 4, 5 & 6 of the H.C. Dohr's Homestead (Nov. 2003)
- Sandis Humber Jones - ALTA / ACSM Land Title Survey: San Pablo Ave. & 40th Street Extension Drawing No. 600104-ALTA (7/25/01)
- Clayton Group Services - Monitoring Well Locations Former Dunner Paints 1007 41st St., Oakland, Figure 2, Project No. 70-03365.04 (12/05/03)
- Clayton Group Services - Historical Subject Property Plan 1007 41st St. & 4050 Adeline St., Oakland, Figure 3, Project No. 70-03365.00 (09/06/02)
- Aerial Photography and Ground Measurement



Note:
 Except on Andante and Frank Dunne sites, location and continuity of paleo streambed deposits are tentative. Continuity of paleo streambed channels as shown on Boyson Paint Site, 41st Street, Ennis Property, 40th Street, California Linen Rental, and Adeline Street are assumed based on a preponderance of available boring log, hydrostratigraphic and geochemical data.



EXPLANATION			
	SJC Monitoring Well (Oak Walk)		Woodward-Clyde Soil Sample
	SJC Temporary Monitoring Well (Oak Walk)		Levine • Fricke Soil Boring
	SJC Environmental Boring (Oak Walk)		Levine • Fricke Soil Boring
	SJC Geotech Boring (Oak Walk)		Levine • Fricke Monitoring Well
	Cone Penetrometer Test Location (Oak Walk)		Harza Exploratory Boring
	Exploratory Trench		SECOR Monitoring Well
	Underground Storage Tank (removed)		APEX Envirotech, Inc. Boring
	Woodward-Clyde Extraction Well		SJC Temporary Monitoring Well (SNK Andante)
	Clayton Monitoring Well (CW) & Temporary Monitoring Well (OB)		Paleo Streambed, Gravely Areas
	Clayton Boring (Ennis)		Trench Soil Sample Location
	Clayton Boring (Dunn)		Dunne Paints Monitoring Well
	ERM Boring (6/06)		ASE Boring
	Kozel Property Monitoring Well		ASE Temporary Well
	URS Geoprobe Soil Boring		Environmental Strategies Corp Monitoring Well
	URS Monitoring Well		Hageman-Aguilar, Inc. Soil Boring
	RGA Environmental Boring		Cone Penetrometer Test (SCI)
	Extraction Well		Soil Boring (SCI)

UNAUTHORIZED RELEASE SITES IN NEIGHBORHOOD OF OAK WALK SITE	
Oak Walk Site Emeryville, California	
FIG 3	DIETZ ENGINEERING AND CONSTRUCTION, INC.
Project Number: 0707.1001	Date: 03/16/12

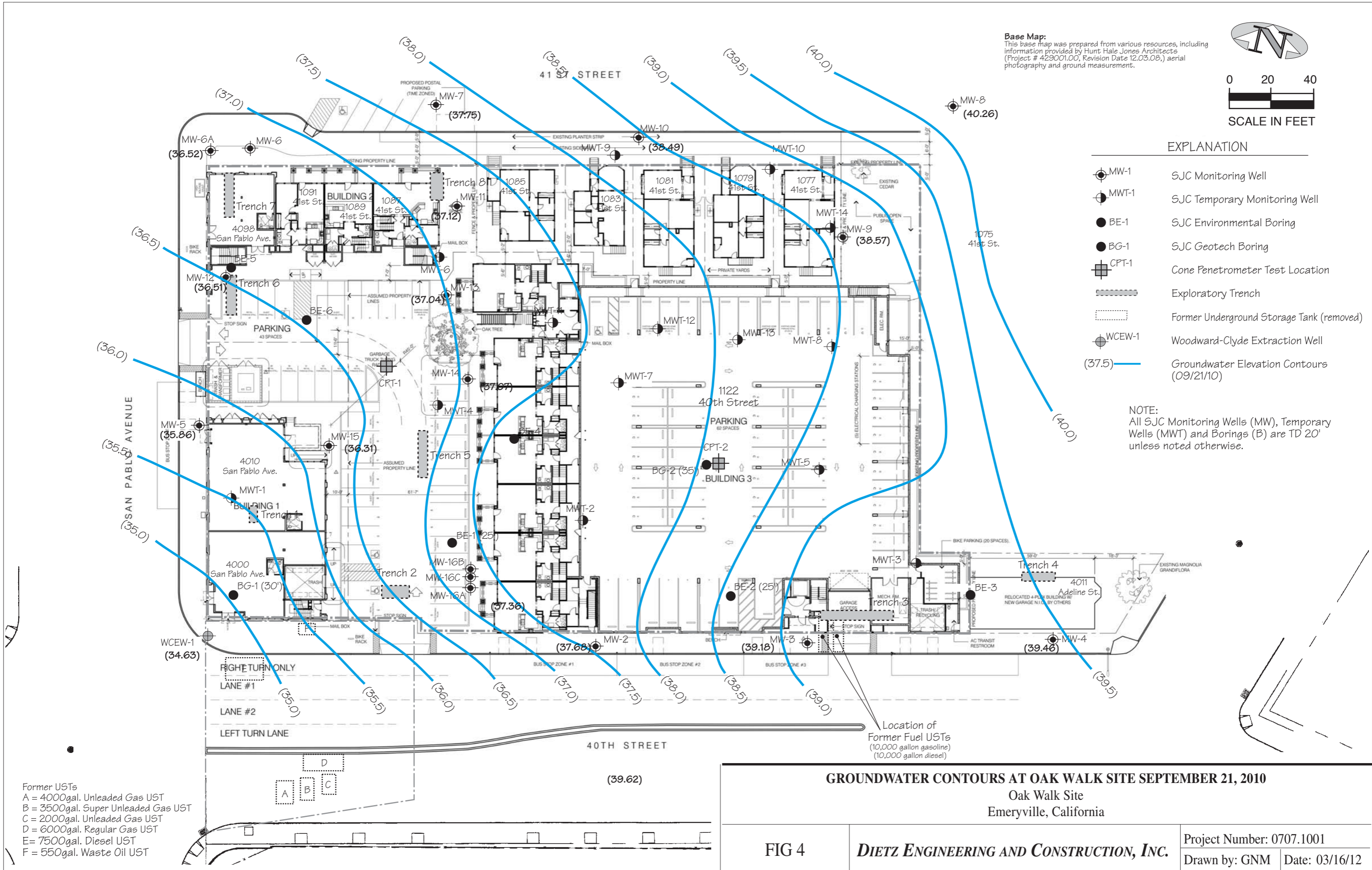


Base Map:
 This base map was prepared from various resources, including information provided by Hunt Hale Jones Architects (Project # 429001.00, Revision Date 12.03.08,) aerial photography and ground measurement.

EXPLANATION

- MW-1 SJC Monitoring Well
- MWT-1 SJC Temporary Monitoring Well
- BE-1 SJC Environmental Boring
- BG-1 SJC Geotech Boring
- CPT-1 Cone Penetrometer Test Location
- Exploratory Trench
- Former Underground Storage Tank (removed)
- WCEW-1 Woodward-Clyde Extraction Well
- (37.5) Groundwater Elevation Contours (09/21/10)

NOTE:
 All SJC Monitoring Wells (MW), Temporary Wells (MWT) and Borings (B) are TD 20' unless noted otherwise.



Former USTs
 A = 4000gal. Unleaded Gas UST
 B = 3500gal. Super Unleaded Gas UST
 C = 2000gal. Unleaded Gas UST
 D = 6000gal. Regular Gas UST
 E = 7500gal. Diesel UST
 F = 550gal. Waste Oil UST

GROUNDWATER CONTOURS AT OAK WALK SITE SEPTEMBER 21, 2010

Oak Walk Site
 Emeryville, California

FIG 4

DIETZ ENGINEERING AND CONSTRUCTION, INC.

Project Number: 0707.1001
 Drawn by: GNM Date: 03/16/12

March 2012 Oak Walk, Emeryville, CA.

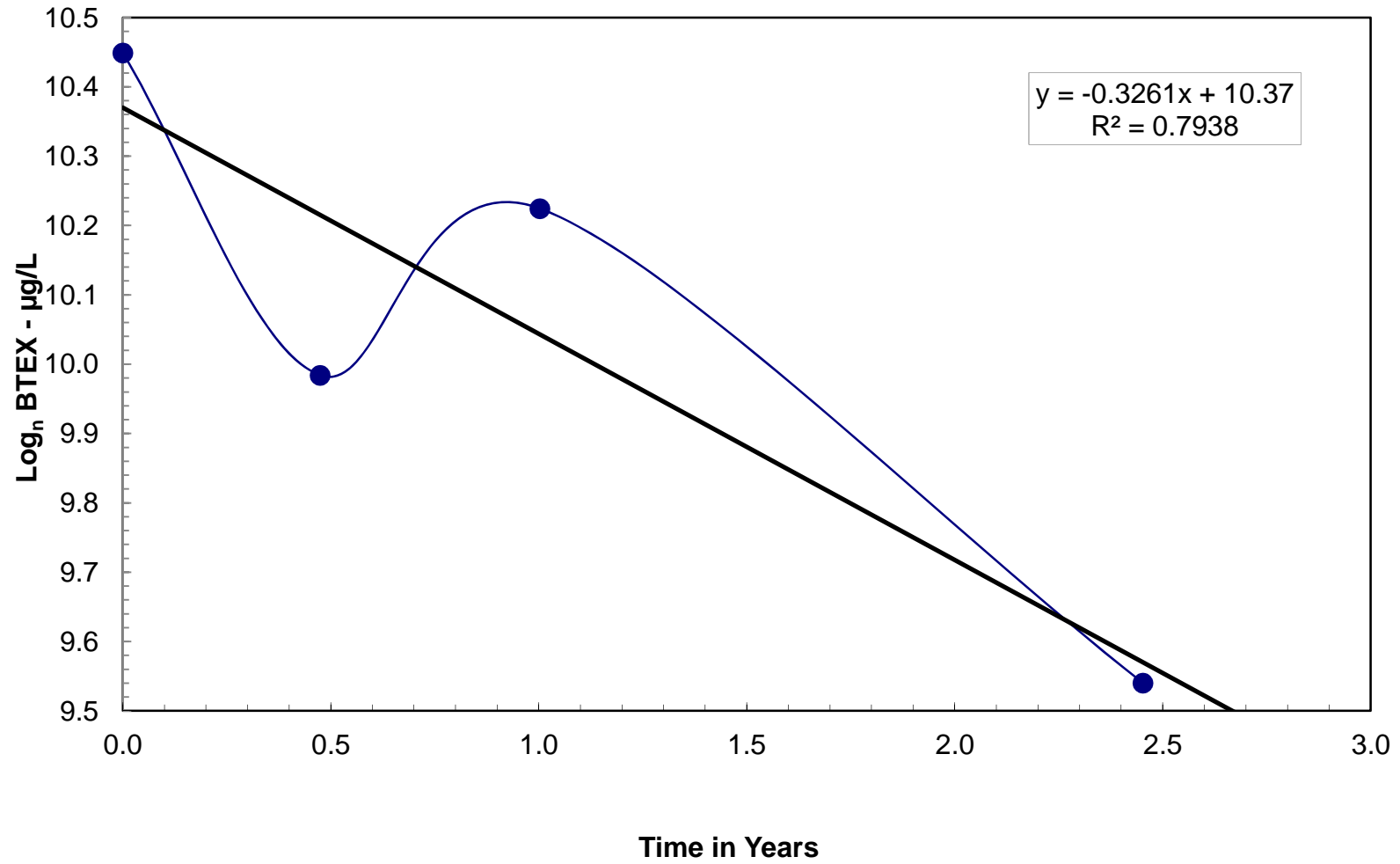


Figure 5: Log_n Concentration of BTEX vs. Time at MW-16A

March 2012 Oak Walk, Emeryville, CA.

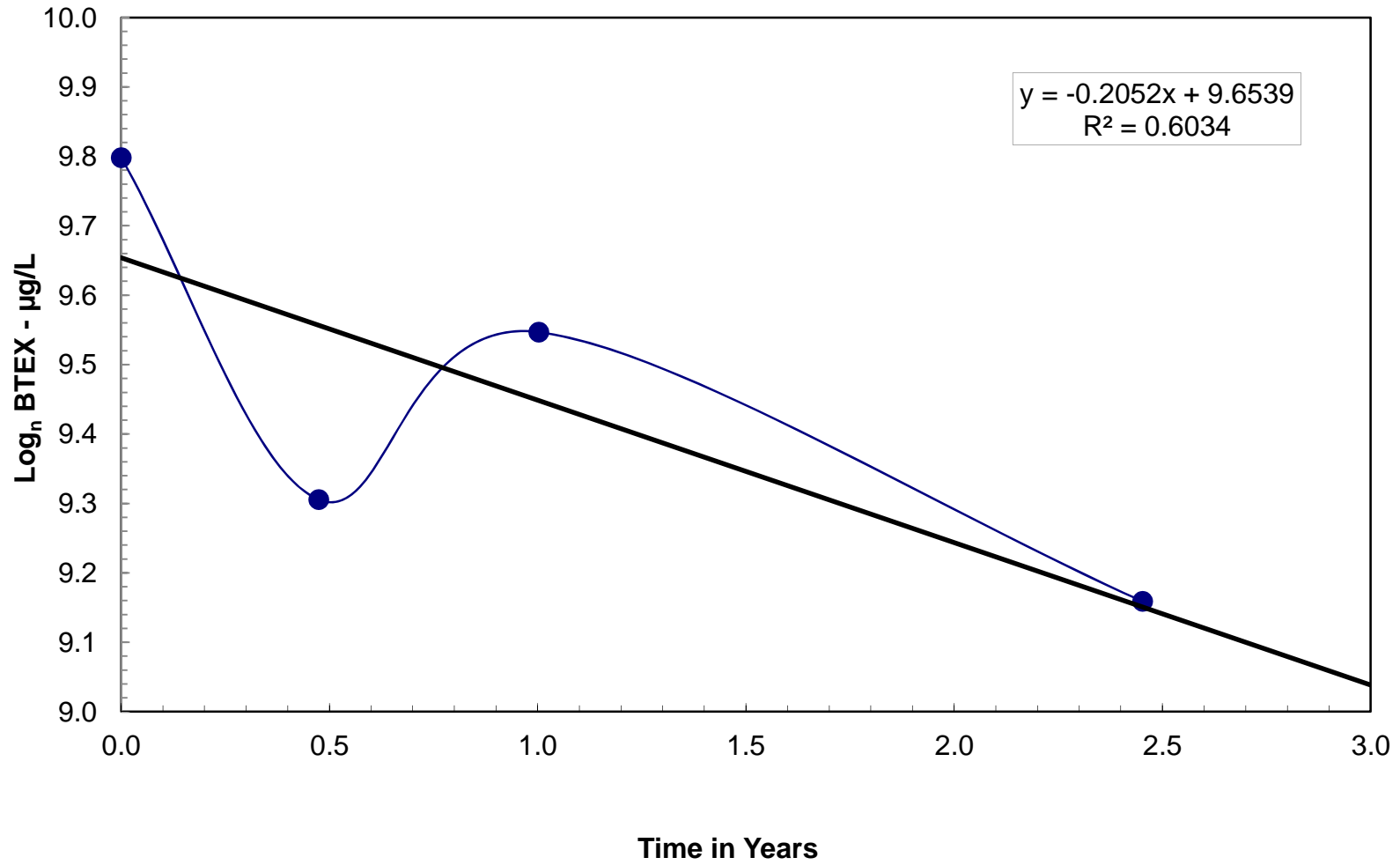


Figure 6: Log_n Concentration of Benzene vs. Time at MW-16A

APPENDIX A

Field Notes

Field Notes March 5, 2012

Oak Walk Site, Emeryville, California

Global ID: T06019705080

Well No.	Date	pH	Temperature Degrees Centigrade	Conductivity µmhos/cm	Notes
MW-16A	03/05/12	6.54	18.2	1303	slight odor of gasoline
		6.55	18.3	1371	
		6.55	18.3	1317	
MW-16B	03/05/12	6.56	19.0	1424	slight odor of solvents
		6.54	18.9	1418	
		6.54	19.0	1419	

APPENDIX B

Certificate of Analysis

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-40745-1

Client Project/Site: Bay Rock Oak Walk Emeryville

For:

Deitz Engineering and Construction, Inc.

1120 Hollywood Ave Suite 3

Oakland, California 94602-1459

Attn: Mr. Dai Watkins

Surinder Sidhu

Authorized for release by:

3/12/2012 8:23:13 AM

Surinder Sidhu

Customer Service Manager

surinder.sidhu@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Deitz Engineering and Construction, Inc.
Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Deitz Engineering and Construction, Inc.
Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Job ID: 720-40745-1

Laboratory: TestAmerica San Francisco

Narrative

Job Narrative
720-40745-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

Method(s) 8260B: The following sample 40745-1 and 2 submitted for volatiles analysis was received with insufficient preservation (pH >2):
MW-16A (720-40745-1), MW-16B (720-40745-2).

Method(s) 8260B: Due to the high concentration of TBA, the matrix spike / matrix spike duplicate (MS/MSD) for batch #109183 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

GC Semi VOA

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.



Detection Summary

Client: Deitz Engineering and Construction, Inc.
 Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Client Sample ID: MW-16A

Lab Sample ID: 720-40745-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	940		100		ug/L	200		8260B/CA_LUFTM	Total/NA
Benzene	9500		100		ug/L	200		8260B/CA_LUFTM	Total/NA
Ethylbenzene	1800		100		ug/L	200		8260B/CA_LUFTM	Total/NA
Toluene	310		100		ug/L	200		8260B/CA_LUFTM	Total/NA
Xylenes, Total	2300		200		ug/L	200		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	26000		10000		ug/L	200		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	2200		55		ug/L		1	8015B	Silica Gel Clear
Mineral Spirit Range Organics [C9-C13]	3500		55		ug/L		1	8015B	Silica Gel Clear

Client Sample ID: MW-16B

Lab Sample ID: 720-40745-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	610		10		ug/L	20		8260B/CA_LUFTM	Total/NA
Benzene	3700		10		ug/L	20		8260B/CA_LUFTM	Total/NA
Ethylbenzene	550		10		ug/L	20		8260B/CA_LUFTM	Total/NA
Toluene	270		10		ug/L	20		8260B/CA_LUFTM	Total/NA
Xylenes, Total	1500		20		ug/L	20		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C5-C12	9000		1000		ug/L	20		8260B/CA_LUFTM	Total/NA
Diesel Range Organics [C10-C28]	520		58		ug/L		1	8015B	Silica Gel Clear
Mineral Spirit Range Organics [C9-C13]	850		58		ug/L		1	8015B	Silica Gel Clear

Client Sample Results

Client: Deitz Engineering and Construction, Inc.
 Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Client Sample ID: MW-16A
Date Collected: 03/05/12 14:15
Date Received: 03/05/12 16:00

Lab Sample ID: 720-40745-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	940		100		ug/L			03/06/12 14:33	200
Benzene	9500		100		ug/L			03/06/12 14:33	200
Ethylbenzene	1800		100		ug/L			03/06/12 14:33	200
Toluene	310		100		ug/L			03/06/12 14:33	200
Xylenes, Total	2300		200		ug/L			03/06/12 14:33	200
Gasoline Range Organics (GRO) -C5-C12	26000		10000		ug/L			03/06/12 14:33	200
TBA	ND		800		ug/L			03/06/12 14:33	200
DIPE	ND		100		ug/L			03/06/12 14:33	200
TAME	ND		100		ug/L			03/06/12 14:33	200
Ethyl t-butyl ether	ND		100		ug/L			03/06/12 14:33	200
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130					03/06/12 14:33	200
1,2-Dichloroethane-d4 (Surr)	87		75 - 138					03/06/12 14:33	200
Toluene-d8 (Surr)	98		70 - 130					03/06/12 14:33	200

Client Sample ID: MW-16B
Date Collected: 03/05/12 13:35
Date Received: 03/05/12 16:00

Lab Sample ID: 720-40745-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	610		10		ug/L			03/06/12 15:02	20
Benzene	3700		10		ug/L			03/06/12 15:02	20
Ethylbenzene	550		10		ug/L			03/06/12 15:02	20
Toluene	270		10		ug/L			03/06/12 15:02	20
Xylenes, Total	1500		20		ug/L			03/06/12 15:02	20
Gasoline Range Organics (GRO) -C5-C12	9000		1000		ug/L			03/06/12 15:02	20
TBA	ND		80		ug/L			03/06/12 15:02	20
DIPE	ND		10		ug/L			03/06/12 15:02	20
TAME	ND		10		ug/L			03/06/12 15:02	20
Ethyl t-butyl ether	ND		10		ug/L			03/06/12 15:02	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		67 - 130					03/06/12 15:02	20
1,2-Dichloroethane-d4 (Surr)	86		75 - 138					03/06/12 15:02	20
Toluene-d8 (Surr)	98		70 - 130					03/06/12 15:02	20

Client Sample Results

Client: Deitz Engineering and Construction, Inc.
 Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Client Sample ID: MW-16A
Date Collected: 03/05/12 14:15
Date Received: 03/05/12 16:00

Lab Sample ID: 720-40745-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2200		55		ug/L		03/05/12 17:48	03/06/12 14:18	1
Mineral Spirit Range Organics [C9-C13]	3500		55		ug/L		03/05/12 17:48	03/06/12 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.9		0 - 5				03/05/12 17:48	03/06/12 14:18	1
p-Terphenyl	60		31 - 150				03/05/12 17:48	03/06/12 14:18	1

Client Sample ID: MW-16B
Date Collected: 03/05/12 13:35
Date Received: 03/05/12 16:00

Lab Sample ID: 720-40745-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	520		58		ug/L		03/05/12 17:48	03/06/12 14:42	1
Mineral Spirit Range Organics [C9-C13]	850		58		ug/L		03/05/12 17:48	03/06/12 14:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.09		0 - 5				03/05/12 17:48	03/06/12 14:42	1
p-Terphenyl	57		31 - 150				03/05/12 17:48	03/06/12 14:42	1

QC Sample Results

Client: Deitz Engineering and Construction, Inc.
 Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-109183/4

Matrix: Water

Analysis Batch: 109183

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			03/06/12 08:20	1
Benzene	ND		0.50		ug/L			03/06/12 08:20	1
Ethylbenzene	ND		0.50		ug/L			03/06/12 08:20	1
Toluene	ND		0.50		ug/L			03/06/12 08:20	1
Xylenes, Total	ND		1.0		ug/L			03/06/12 08:20	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			03/06/12 08:20	1
TBA	ND		4.0		ug/L			03/06/12 08:20	1
DIPE	ND		0.50		ug/L			03/06/12 08:20	1
TAME	ND		0.50		ug/L			03/06/12 08:20	1
Ethyl t-butyl ether	ND		0.50		ug/L			03/06/12 08:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		67 - 130		03/06/12 08:20	1
1,2-Dichloroethane-d4 (Surr)	80		75 - 138		03/06/12 08:20	1
Toluene-d8 (Surr)	98		70 - 130		03/06/12 08:20	1

Lab Sample ID: LCS 720-109183/5

Matrix: Water

Analysis Batch: 109183

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	25.0		ug/L		100	62 - 130
Benzene	25.0	25.6		ug/L		102	79 - 130
Ethylbenzene	25.0	23.9		ug/L		96	80 - 120
Toluene	25.0	24.9		ug/L		100	78 - 120
TBA	500	471		ug/L		94	70 - 130
DIPE	25.0	25.1		ug/L		100	69 - 134
TAME	25.0	27.0		ug/L		108	79 - 130
Ethyl t-butyl ether	25.0	23.5		ug/L		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	80		75 - 138
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCS 720-109183/7

Matrix: Water

Analysis Batch: 109183

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	500	453		ug/L		91	62 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	84		75 - 138
Toluene-d8 (Surr)	99		70 - 130

QC Sample Results

Client: Deitz Engineering and Construction, Inc.
Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-109183/6

Matrix: Water

Analysis Batch: 109183

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	25.7		ug/L		103	62 - 130	3	20
Benzene	25.0	25.6		ug/L		102	79 - 130	0	20
Ethylbenzene	25.0	23.6		ug/L		94	80 - 120	1	20
Toluene	25.0	24.8		ug/L		99	78 - 120	0	20
TBA	500	464		ug/L		93	70 - 130	2	20
DIPE	25.0	25.6		ug/L		102	69 - 134	2	20
TAME	25.0	28.0		ug/L		112	79 - 130	4	20
Ethyl t-butyl ether	25.0	24.3		ug/L		97	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	81		75 - 138
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: LCSD 720-109183/8

Matrix: Water

Analysis Batch: 109183

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	500	456		ug/L		91	62 - 120	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	85		75 - 138
Toluene-d8 (Surr)	98		70 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-109153/1-A

Matrix: Water

Analysis Batch: 109175

Client Sample ID: Method Blank

Prep Type: Silica Gel Cleanup

Prep Batch: 109153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		03/05/12 17:48	03/06/12 15:55	1
Mineral Spirit Range Organics [C9-C13]	ND		50		ug/L		03/05/12 17:48	03/06/12 15:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.001		0 - 5	03/05/12 17:48	03/06/12 15:55	1
p-Terphenyl	44		31 - 150	03/05/12 17:48	03/06/12 15:55	1

Lab Sample ID: LCS 720-109153/2-A

Matrix: Water

Analysis Batch: 109175

Client Sample ID: Lab Control Sample

Prep Type: Silica Gel Cleanup

Prep Batch: 109153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	1290		ug/L		52	32 - 119

QC Sample Results

Client: Deitz Engineering and Construction, Inc.
 Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-109153/2-A

Matrix: Water

Analysis Batch: 109175

Client Sample ID: Lab Control Sample

Prep Type: Silica Gel Cleanup

Prep Batch: 109153

Surrogate	LCS		Limits
	%Recovery	Qualifier	
p-Terphenyl	73		31 - 150

Lab Sample ID: LCSD 720-109153/3-A

Matrix: Water

Analysis Batch: 109175

Client Sample ID: Lab Control Sample Dup

Prep Type: Silica Gel Cleanup

Prep Batch: 109153

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Diesel Range Organics [C10-C28]	2500	1430		ug/L		57	32 - 119	11	35	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
p-Terphenyl	79		31 - 150

QC Association Summary

Client: Deitz Engineering and Construction, Inc.
 Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

GC/MS VOA

Analysis Batch: 109183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-40745-1	MW-16A	Total/NA	Water	8260B/CA_LUFT MS	
720-40745-2	MW-16B	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-109183/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-109183/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-109183/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-109183/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-109183/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 109153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-40745-1	MW-16A	Silica Gel Cleanup	Water	3510C SGC	
720-40745-2	MW-16B	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-109153/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-109153/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-109153/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Analysis Batch: 109175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-40745-1	MW-16A	Silica Gel Cleanup	Water	8015B	109153
720-40745-2	MW-16B	Silica Gel Cleanup	Water	8015B	109153
LCS 720-109153/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	109153
LCSD 720-109153/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	109153
MB 720-109153/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	109153

Certification Summary

Client: Deitz Engineering and Construction, Inc.
Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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Method Summary

Client: Deitz Engineering and Construction, Inc.
Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

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Sample Summary

Client: Deitz Engineering and Construction, Inc.
Project/Site: Bay Rock Oak Walk Emeryville

TestAmerica Job ID: 720-40745-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-40745-1	MW-16A	Water	03/05/12 14:15	03/05/12 16:00
720-40745-2	MW-16B	Water	03/05/12 13:35	03/05/12 16:00

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DIETZ ENGINEERING AND CONSTRUCTION, INC.

Transmit results to office checked below: **720-40745**

33233 South Koster Road, Tracy, CA 95304
Voice: (209) 832-2910 Fax: (209) 833-1288

1120 Hollywood Ave. No. 3, Oakland, CA 94602
Voice: (510) 336-9118 e-mail: daiw@sanjoco.com

Project: **Bay Rock - Oak Walk Emeryville**
Project No.: **0707.1001** Project Mgr.: **DJW**
Sampling Team: **DJW/HBD**

SITE GLOBAL I.D. No.: **T06019705080**

136917
**CHAIN OF CUSTODY /
REQUEST FOR
ANALYSIS**

LABORATORY: **TestAmerica**
CARRIER: DIETZ ENGINEERING AND CONSTRUCTION, INC.

WAYBILL NO.: N/A

Sample Number	Type	Field Point	Depth to GW in ft.	Casing Elev. in ft.	Date Sampled	Time Sampled	Analyses Requested	Lab. No.
MW-16A	Water	MW-16A	5.80	44.50	03/05/12	14:15	Analyze all samples for: TPH(g)+BTEX+ TBA, MTBE, DIPE, ETBE & TAME; TPH(d) + Mineral Spirits using silica gel cleanup	
MW-16B	▼	MW-16B	5.90	44.59	03/05/12	13:35		

Sample Hazards: Low to high concentrations of fuel hydrocarbons and solvents Priority: Routine Expedited Special

Notes: Pricing per Bay Rock Emeryville Agreement **GEOTRACKER ZIP FILE REQUIRED.**

CUSTODY RECORD	Print Name	Company	Date Received	Time Received	Date Relinquished	Time Relinquished	Signature
Originator:	Bernie Dietz	Dietz Eng. & Cons.	—	—	3/5/12	4:00 PM	H. B. Dietz
Received/ Relinquished by:	Mullen	bol Amin	3-5-12	1600			John Mullen
Received/ Relinquished by:							
Received/ Relinquished by:							
Received at Laboratory by:							

16.224 hrs

Login Sample Receipt Checklist

Client: Deitz Engineering and Construction, Inc.

Job Number: 720-40745-1

Login Number: 40745

List Source: TestAmerica San Francisco

List Number: 1

Creator: Mullen, Joan

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	