Karel Detterman
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Connell Automobile Dealership**
3093 Broadway
Oakland, California
ACEH Case No. 199

Dear Karel Detterman:

The Hill Family Trust & Linden Broadway Property Trust (Trusts) have retained Pangea Environmental Services, Inc. (Pangea) as the environmental consultant for the project referenced above. Pangea is submitting the attached report on behalf of the Trusts.

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

Sincerely,

George Hill
Hill Family Trust

August 6, 2013

VIA ALAMEDA COUNTY FTP SITE

Mr. Mark Detterman, PG
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Groundwater Monitoring and Remediation Report – First Half 2013**
Connell Automobile Dealership
3093 Broadway
Oakland, California
ACEH Case No. 199

Dear Mr. Detterman:

On behalf of the Hill Family Trust and Hawthorne Broadway LLC, Pangea Environmental Services, Inc., (Pangea) has prepared this *Groundwater Monitoring and Remediation Report – First Half 2013* for the subject site. This report describes groundwater monitoring, site remediation, and other site activities. This report presents the third groundwater monitoring results since insitu remediation commenced in April 2011. Monitoring results suggests that site remediation has remediated site free product and continues to decrease hydrocarbon concentrations in groundwater in key wells. The remediation system was temporarily shutdown on October 4, 2012 and was restarted on February 6, 2013.

If you have questions, please call (510) 435-8664.

Sincerely,
Pangea Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer

Attachments: *Groundwater Monitoring and Remediation Report – First Half 2013*

cc: SWRCB/RWQCB Geotracker (electronic copy)
Mr. George Hill, Geotracker
Mr. Gordon Linden, Geotracker

GROUNDWATER MONITORING AND REMEDIATION REPORT

FIRST HALF 2013

Connell Automobile Dealership
3093 Broadway
Oakland, California
ACEH Case No. 469

August 6, 2013

Prepared for:

Hill Family Trust
C/O Mr. George Hill
305 Sheridan Avenue
Piedmont, California 94611

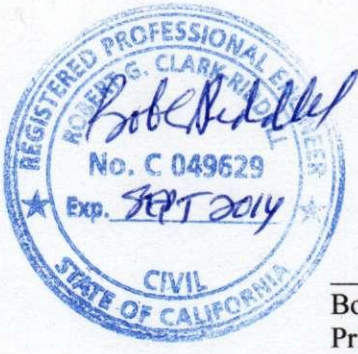
and

Hawthorne Broadway LLC
C/O Mr. Gordon Linden
150 La Salle Avenue
Piedmont, California 94611

Prepared by:

Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland, California 94612

Written by:



Morgan Gillies
Project Manager

Bob Clark-Riddell, P.E.
Principal Engineer

INTRODUCTION

As required by Alameda County Environmental Health (ACEH), Pangea has prepared this *Groundwater Monitoring and Remediation Report – First Half 2013* for the subject site. Pangea conducted groundwater monitoring and sampling, inspected wells for separate-phase hydrocarbons (SPH) and performed remediation system operation and sampling during this half year at the site (Figure 1). The purpose of the monitoring and sampling is to evaluate groundwater flow direction, concentrations of dissolved hydrocarbons in groundwater, and thickness of SPH. The purpose of the remediation system is to clean up petroleum hydrocarbons from a historic fuel release. Current analytical data and groundwater elevations are shown on Figure 2. The contaminant distribution and trends are illustrated on Figures 4 through 9. Current and historical data are summarized on Tables 1 and 2. SPH thickness and removal volumes are summarized on Table 3. Site remediation data are summarized on Tables 4 and 5.

SITE DESCRIPTION AND BACKGROUND

The site is located on the east side of "Pill Hill" south of Hawthorne Avenue, between Broadway and Webster Street. The northern portion of the site is occupied by the auto repair shop, offices and showrooms of the Connell automobile dealership, while the southern portion of the site is occupied by parking lots. The ground surface elevation ranges from approximately 80 to 100 feet above mean sea level (msl) and slopes southeastwards towards the base of "Pill Hill" at Broadway. Three underground storage tanks (USTs) that previously contained gasoline, diesel, and waste oil were removed from the upper (northwest) portion of the site in December 1989. Soil and groundwater assessment have been ongoing since 1990.

Between October 1996 and March 1998, operation of a soil vapor extraction (SVE) remediation system removed approximately 1,421 pounds of hydrocarbons. Manual removal of separate-phase hydrocarbons (SPH) from monitoring wells has removed a total of approximately 950 pounds (156 gallons) of SPH since 1991. Chemicals of concern at the site are petroleum hydrocarbons (i.e. diesel and gasoline), the lead scavenger 1, 2-dichloroethane, and fuel-related semi-volatile organic compounds (e.g., naphthalene). In some prior analytical results from the site, extractable hydrocarbons have been quantified as total petroleum hydrocarbons as motor oil (TPHmo), although these hydrocarbons may represent the heavier fraction of diesel contamination. Methyl tertiary butyl ether (MTBE) is not a constituent of concern at this site.

On February 27 through April 4, 2007, Pangea installed two groundwater monitoring wells (MW-16A and MW-16B) to monitor groundwater during remediation and installed fifteen remediation wells (AS-1A, AS-1B, AS-2A, AS-3A, AS-3B, AS-4A, RW-1, RW-2, RW-3A, RW-3B, RW-4, RW-5, MW-17A, MW-17B and VE-1) to implement air sparging (AS) and dual phase extraction (DPE). New wells

installed at the site were labeled according to the depths of their screen intervals: shallow (A-zone) wells have screen intervals above approximately 30 feet below grade surface (bgs), which generally straddle the top of the water table, while deeper (B-zone) wells are screened below approximately 30 feet bgs to target deeper contamination. After delays associated with the UST Cleanup Fund and prospective property sale, operation of the DPE system began on April 26, 2011 and operation of the AS system began on May 29, 2011.

In August 2008, Pangea conducted additional downgradient soil and groundwater assessment per ACEH direction. No petroleum hydrocarbons were detected above reporting limits in analyzed soil or groundwater from boring SB-1. Based on these and historical results, the lateral extent of hydrocarbon contamination appears to be adequately characterized.

GROUNDWATER MONITORING AND SAMPLING

On June 21, 2013, Pangea gauged depth-to-water and inspected for SPH in select site monitoring wells. During this monitoring event, Pangea limited the monitoring program to control costs and help evaluate remedial progress at the site as summarized on Table A in Appendix A. Samples are not collected from wells with SPH or insufficient water. Therefore, during this monitoring event Pangea gauged and sampled 8 wells.

Prior to sampling the wells, groundwater levels and SPH thickness (if any) were measured to evaluate groundwater elevation, flow direction, and the presence of free product in groundwater at the site. Before well purging, the dissolved oxygen (DO) concentration was measured in each well by lowering a down-well sensor to the approximate middle of the water column, and allowing the reading to stabilize during gentle height adjustment. Prior to sample collection, approximately three well-casing volumes of groundwater were purged using a disposable bailer, PVC bailer, an electric submersible pump or new polyethylene tubing with check valve (although fewer casing volumes were purged if the well dewatered). During well purging, field technicians measured and recorded groundwater pH, conductivity, and temperature. Groundwater samples were collected from each well with a disposable bailer and decanted into the appropriate containers supplied by the analytical laboratory. Samples were labeled, placed in protective plastic bags, stored on crushed ice at or below 4 degrees Celsius, and transported under chain-of-custody to the laboratory. Groundwater monitoring field data sheets are presented as Appendix B.

MONITORING RESULTS

Current groundwater elevation and analytical data are summarized on Figure 2. Current and historical data are described below and summarized on Tables 1 and 2. Groundwater samples from eight key wells were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015C; and benzene, toluene, ethylbenzene, xylenes (BTEX) and MTBE by EPA Method 8021B. Table 1 summarizes current and historical analytical results for TPHg, BTEX and HVOCs and presents dissolved oxygen field measurement data. This quarter, DO concentrations ranged from 0.78 milligrams per liter (mg/L) in well MW-1 to 1.81 mg/L in well RW-2. Table 2 summarizes extractable hydrocarbons (TPHd and TPHmo) and semi-volatile organic compounds (SVOCs). Laboratory analyses were performed by McCampbell Analytical of Pittsburg, California, a State-certified laboratory. The laboratory analytical report and chain of custody are included in Appendix C.

Groundwater Flow Direction

Based on depth-to-water measurements from June 21, 2013, the inferred groundwater flow direction onsite is primarily *eastward* as shown on Figure 2. The dual phase extraction (DPE) remediation system was shutdown on June 10, 2013, allowing the subsurface to equilibrate for approximately 11 days prior to groundwater sampling. The groundwater flow observed this quarter is consistent with the inferred flow direction prior to DPE remediation startup. Depth-to-water and groundwater elevation data are presented in Table 1 and on Figure 2.

Hydrocarbon and Fuel Oxygenate Distribution in Groundwater

Current hydrocarbon analytical results are summarized on Figure 2. The lateral distribution of TPHg and benzene in groundwater is illustrated on Figures 4 and 5, respectively. TPHg concentration trends in groundwater for the upper and lower plume areas are graphed on Figures 6 and 7, respectively. Benzene concentration trends in groundwater for the upper and lower plume areas are graphed on Figures 8 and 9, respectively. These graphs illustrate concentration reductions in key site wells since remediation implementation. The lack of measurable SPH (discussed below) also reflects the effectiveness of DPE/AS remediation. A cross section illustrating pre-remediation conditions and conceptual DPE/AS activity is shown on Figure 10.

Current monitoring results indicate that DPE/AS remediation continues to effectively remediate subsurface hydrocarbons. The extent of benzene in groundwater (Figure 5) has been reduced compared to prior monitoring events. The maximum benzene concentration detected this quarter was 4,400 µg/L in well MW-4. The benzene graphs (Figures 8 and 9) indicate that significant concentration reduction have been achieved in all wells, except MW-4 where slight reduction occurred but limited has been performed to date.

For the current monitoring event the most significant benzene concentration reduction has been in upper plume wells MW-16B and MW-4 and in lower plume well RW-2. *Historic low* or near historic low hydrocarbon concentrations were detected in wells MW-1, MW-4, MW-6, MW-14, MW-16B, and RW-2. *This reduction in hydrocarbon concentrations is likely due to operation of the remediation system at the site.*

Most notably, well MW-6 was sampled for the first time since November 1998. In May 2013 Pangea removed blockage in well MW-6 and used an air lift to remove debris from the well (the field data sheet is presented in Appendix B). Well MW-6 contained TPHg (15,000 µg/L) and benzene (2,400 µg/L) concentrations on June 21, 2013, which is significantly lower than the TPHg (110,000 µg/L) and benzene (21,000 µg/L) concentrations detected during the most recent sampling in November 1998.

MTBE was not detected in any of the sampled wells this quarter. Historically, MTBE has not been considered a compound of concern at the site, and has only been detected during three prior monitoring events, and only in well MW-4.

Separate-Phase Hydrocarbon Removal

During this monitoring event, no SPH was measured in any wells with historic free product (MW-1, MW-6, MW-14, MW-15 and RW-2). The lack of measurable SPH reflects the effectiveness of DPE/AS remediation. Approximately 962 pounds (158 gallons) of SPH have been removed via manual SPH removal, which began in December 1991. Table 3 presents the SPH thickness measurements, amount of SPH removed from the wells, and cumulative volume of SPH removal. Additional but unquantifiable SPH removal has been provided by the DPE/AS remediation system.

REMEDIATION SYSTEM SUMMARY

Dual Phase Extraction/Air Sparging System

The dual phase extraction (DPE) remediation system simultaneously extracts groundwater and soil vapor from site remediation wells. The remediation system layout is shown on Figure 3. Extraction and treatment is performed using a 25 hp liquid ring vacuum pump with a 400 cubic foot per minute (cfm) thermal oxidizer. To maximize groundwater depression, a “stinger” (vacuum tube inserted below the water table) is used to both depress the water table and extract soil vapor in each of the 15 remediation wells (MW-1, MW-6, MW-10, MW-14, MW-15, MW-16B, MW-17A/B, RW-1 through RW-5 and VE-1). Well construction details are summarized on Table A in Appendix A. Extracted vapors are routed through an air/water separator and then treated by the thermal oxidizer. The treated vapor is discharged to the atmosphere in accordance with Bay Area Air Quality Management District (BAAQMD) requirements. Groundwater captured within the air/water separator is pumped through two 1,000-lb

canisters of granular activated carbon plumbed in series. The treated groundwater is discharged into the sewer in accordance with East Bay Municipal Utility District's (EBMUD) requirements.

The air sparging (AS) system consists of a 7.5 hp Ingersoll-Rand rotary-screw air compressor capable of injecting 28 cfm of air and reaching pressures of 125 psig. Injection into the six air sparge wells (AS-1A/B, AS-2A, AS-3A/B and AS-4A) is controlled by timer-activated solenoid valves and individual well needle valves on the well flow meters. The remediation system layout is shown on Figure 3.

Operation and Performance

DPE and AS system operation commenced on April 26, 2011 and May 29, 2011, respectively. The DPE system was initially operated to target elevated impact within the lower portion of the site, and then expanded to the upper portion of the site to enhance contaminant mass removal rates. More recently the DPE remediation was focused on the lower portion of the site (wells MW-6, MW-10, and RW-2). AS was initiated on wells AS-3A, AS-3B and AS-4A near the lower portion of the site, and later to upper plume wells AS-1A, AS-1B, and AS-2A. System operation and performance data is summarized on Tables 4 and 5.

As of June 10, 2013, the DPE system operated for a total of about 11,870 hours (approximately 16.5 months). Laboratory analytical and performance data indicates that soil vapor removal rates observed during this reporting period (September 14, 2012 to June 10, 2013) ranged from 0.7 to 24.1 lbs/day TPHg and 0.02 to 1.39 lbs/day benzene. As of June 10, 2013, the vapor-phase portion of the DPE system removed a total of approximately 8,837 lbs TPHg and 541 lbs benzene. As of June 10, 2013, the groundwater portion of the DPE system removed approximately 45 lbs TPHg and 4 lbs benzene.

The DPE/AS system is monitored in accordance with air permit requirements of the *Permit to Operate* issued by the Bay Area Air Quality Management District (BAAQMD) and groundwater discharge requirements of the *Wastewater Discharge Permit* issued by East Bay Municipal Utility District.

FUTURE SITE ACTIVITIES

Cleanup costs for this site now exceed the available cost recovery limit of $1.5MM from the UST Cleanup Fund for this unauthorized release of petroleum hydrocarbons. The responsible parties wish to maximize the benefit of future resources used for groundwater monitoring and site remediation. The responsible parties are also considering sale of the property. Operation of the DPE/AS is temporarily on hold pending prospective property sale.

Site Remediation and Cleanup Levels

In early June 2013 site remediation was temporarily discontinued to allow subsurface equilibrium piror to groundwter monitoring about two weeks later in June 2013. Groundwater monitoring results from June 21, 2013 suggest that the DPE/AS is effectively improving site conditions.

Benzene concentrations in groundwater are approaching the 1,000 ug/L cleanup levels proposed in the approved remediation plan. This 1,000 ug/L cleanup level is also in accordance with the groundwater-specific criteria from the recently adopted Low Threat Closure Policy (LTCP) of the State Water Resources Control Board. Since the plume length is greater than 250 ft, the site apparently falls under LTCP groundwater-specific criteria #4 for groundwater:

a. The contaminant plume that exceeds water quality objectives is less than 1,000 feet in length.

b. There is no free product.

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

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

Once monitoring confirms that there is no free product and benzene concentrations are below 1,000 ug/L, this site should satisfy groundwater-specific criteria of the LTCP.

Optional Enhanced Site Remediation

To help accelerate site cleanup and reduce overall cleanup costs, Pangea previously proposed to implement the *Workplan for Enhanced Remediation* dated January 18, 2012. The workplan proposed using a bio-organic catalyst (BOC) to help desorb subsurface hydrocarbons for capture by the DPE/AS system and to enhance biodegradation of site hydrocarbons. BOC is enjoying increasing use for hydrocarbon remediation, and a similar product was recently introduced by Regenesis called PetroCleanze™. The proposed products are safe and inexpensive, and the Water Board has approved their use at other sites. The products will help desorb the contamination from site soil and accelerate contaminant extraction and biodegradation. The products can be injected into site wells and the DPE system can then pull the products across the residual impact area toward the extraction wells. Air sparging in deeper wells to further distribute the products and simultaneously provide dissolved oxygen to further stimulate biodegradation. Air sparging can also agitate the products to create bubbles and help 'activate' the surfactant qualities of the products, bringing together the product's enzymes, oxygen and contaminants for enhanced biodegradation.

This letter notifies ACEH that Pangea may begin implementation of the Workplan for Enhanced Remediation, if authorized by the responsible parties. Section 2722 in Title 23 of the California Code of Regulation stipulates that a responsible party may implement proposed corrective action if no regulatory comments have been received within 60 days of submission, as long as written notification is provided to the lead regulatory agency stating the responsible party's intent regarding the proposed corrective action and their willingness to comply with agency conditions or required mitigation provided in the future.

Groundwater Monitoring

Pangea will conduct groundwater monitoring in accordance with the semi-annual monitoring program presented in Appendix A. The monitoring program includes gauging of depth-to-water, inspection for SPH, measurement of dissolved oxygen, and water sample collection. All groundwater samples will be analyzed for TPHg/BTEX/MTBE by EPA Method 8015C/8021B. Pangea will summarize groundwater monitoring activities and results in a Groundwater Monitoring and Remediation Report.

Electronic Reporting

This report will be uploaded to the Alameda County FTP site. The report, laboratory data, and other applicable information will also be uploaded to the SWRCB's Geotracker database. As requested, report hard copies will no longer be provided to ACEH or the RWQCB.

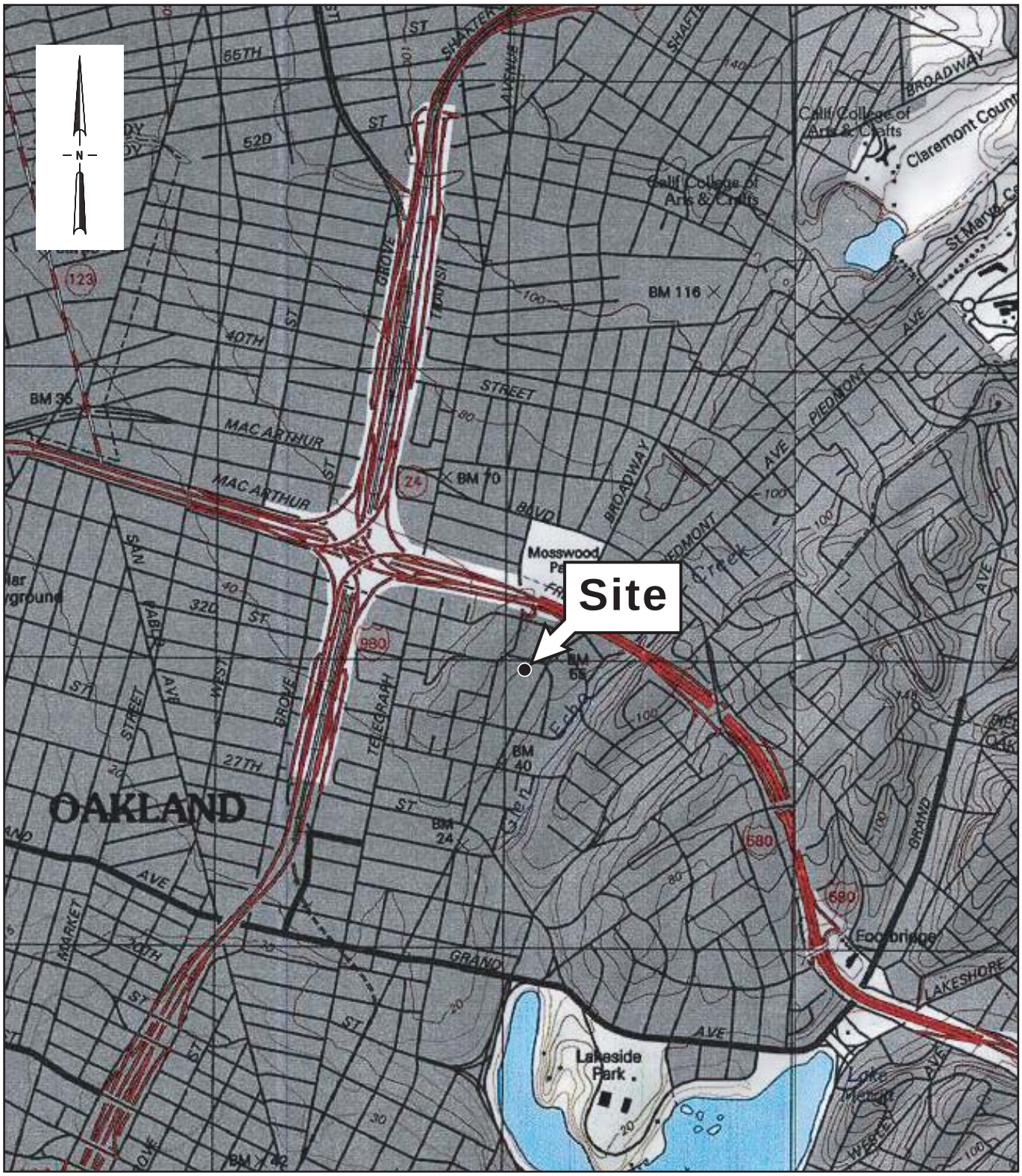
ATTACHMENTS

Figure 1 – Vicinity Map
Figure 2 – Groundwater Elevation and Hydrocarbon Concentration Map
Figure 3 – Remediation System Layout
Figure 4 – TPHg Distribution in Groundwater
Figure 5 – Benzene Distribution in Groundwater
Figure 6 - TPHg Concentration Trends in Groundwater for Upper Plume Area
Figure 7 – TPHg Concentration Trends in Groundwater for Lower Plume Area
Figure 8 – Benzene Concentration Trends in Groundwater for Upper Plume Area
Figure 9 – Benzene Concentration Trends in Groundwater for Lower Plume Area
Figure 10 – Cross Section with Remediation Illustration (Pre-Remediation)

Table 1 – Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs and Dissolved Oxygen
Table 2 – Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs
Table 3 – Separate-Phase Hydrocarbon Removal
Table 4 – SVE (DPE) Performance Data
Table 5 – GWE (DPE) Performance Data

Appendix A – Well Monitoring Protocol
Appendix B – Groundwater Monitoring Field Data Sheets
Appendix C – Laboratory Analytical Report

6/3/2005



SOURCE: TOPO! MAPS

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SCALE : 1" = 1/4 MILE

Figure

1

Vicinity Map

Connell Automobile Dealership
3093 Broadway
Oakland, California

PANGEA

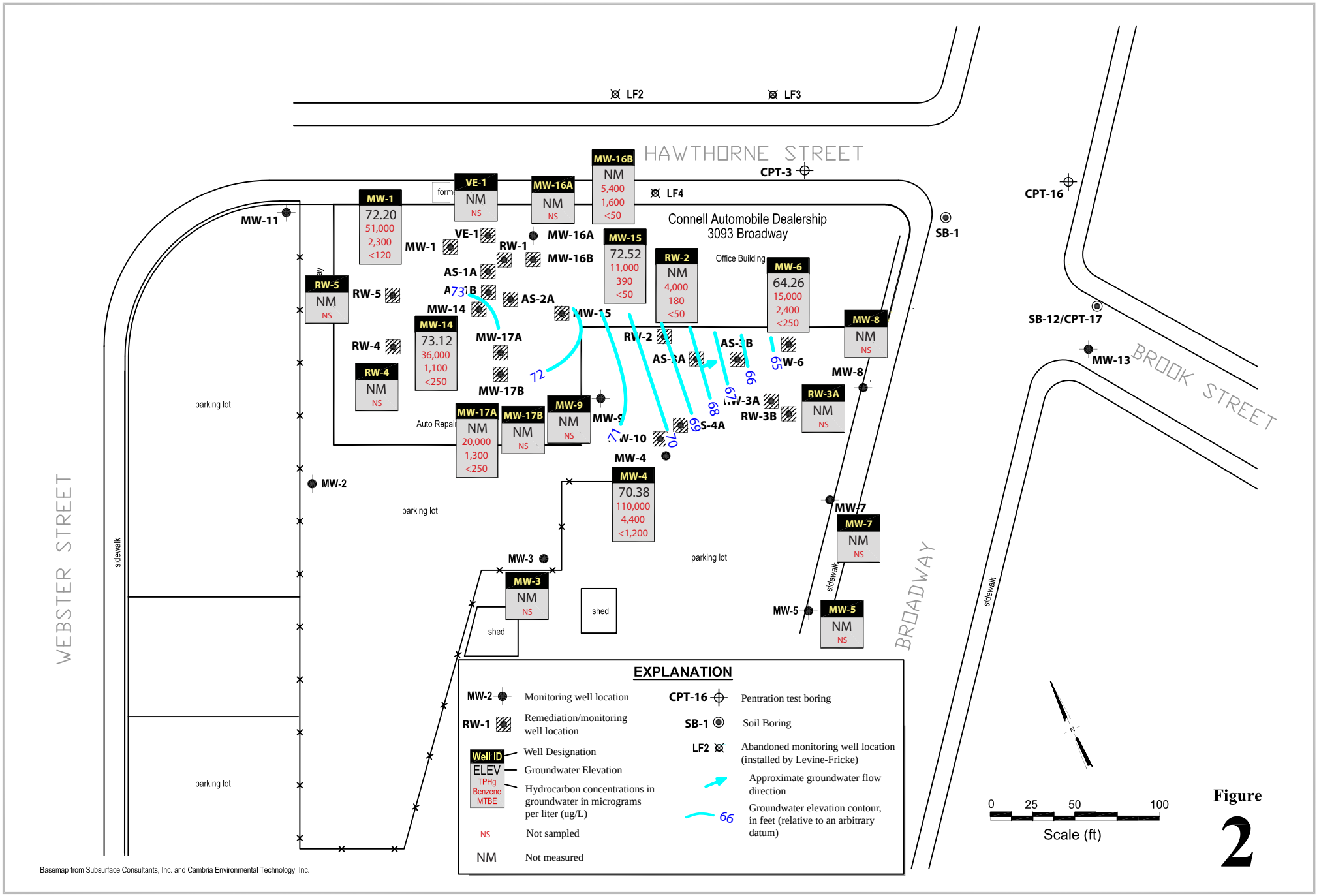


Figure 2

Connell Automobile Dealership
3093 Broadway
Oakland, California

PANGEA

Groundwater Elevation and Hydrocarbon Concentration Map
June 21, 2013

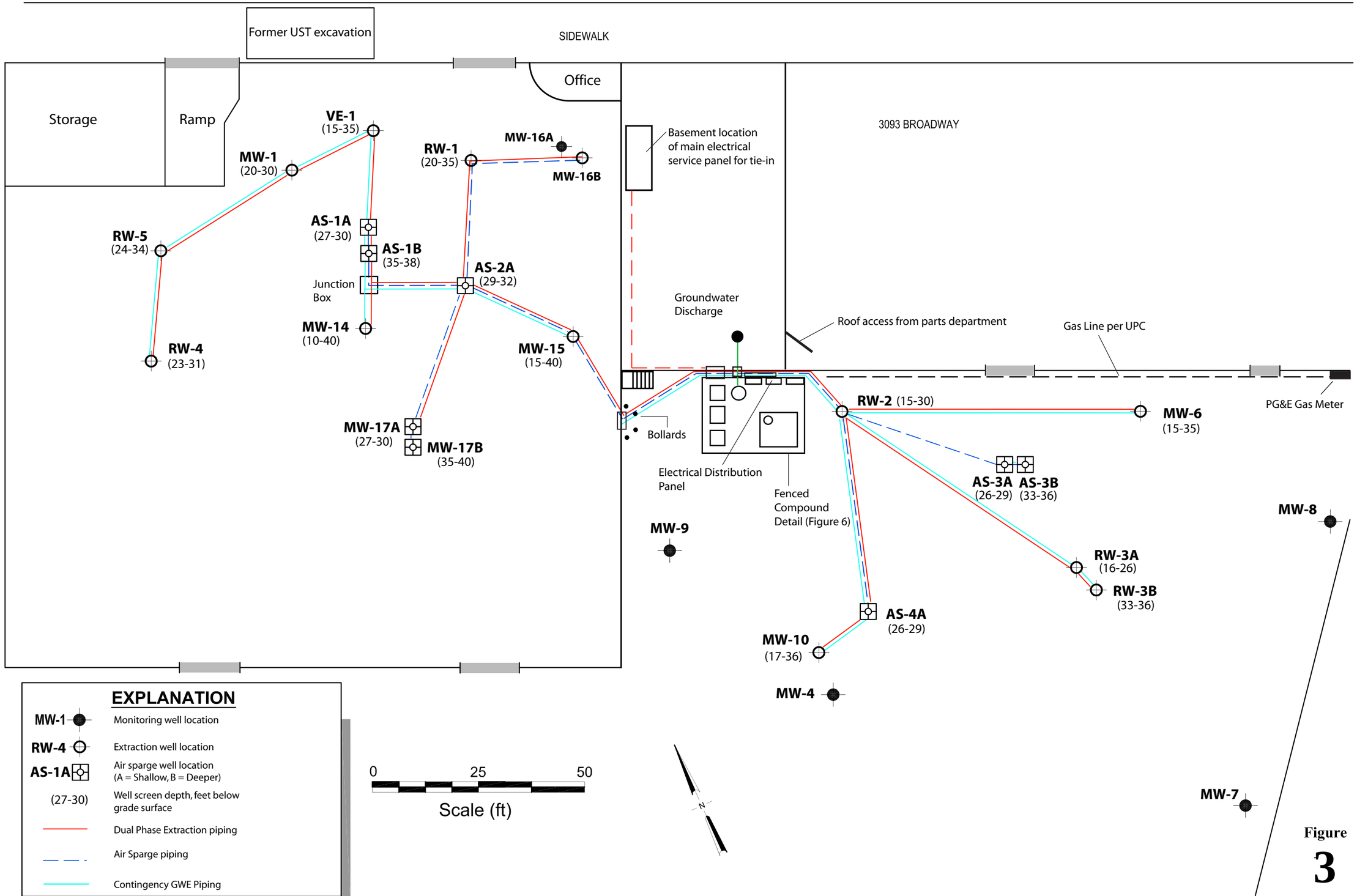
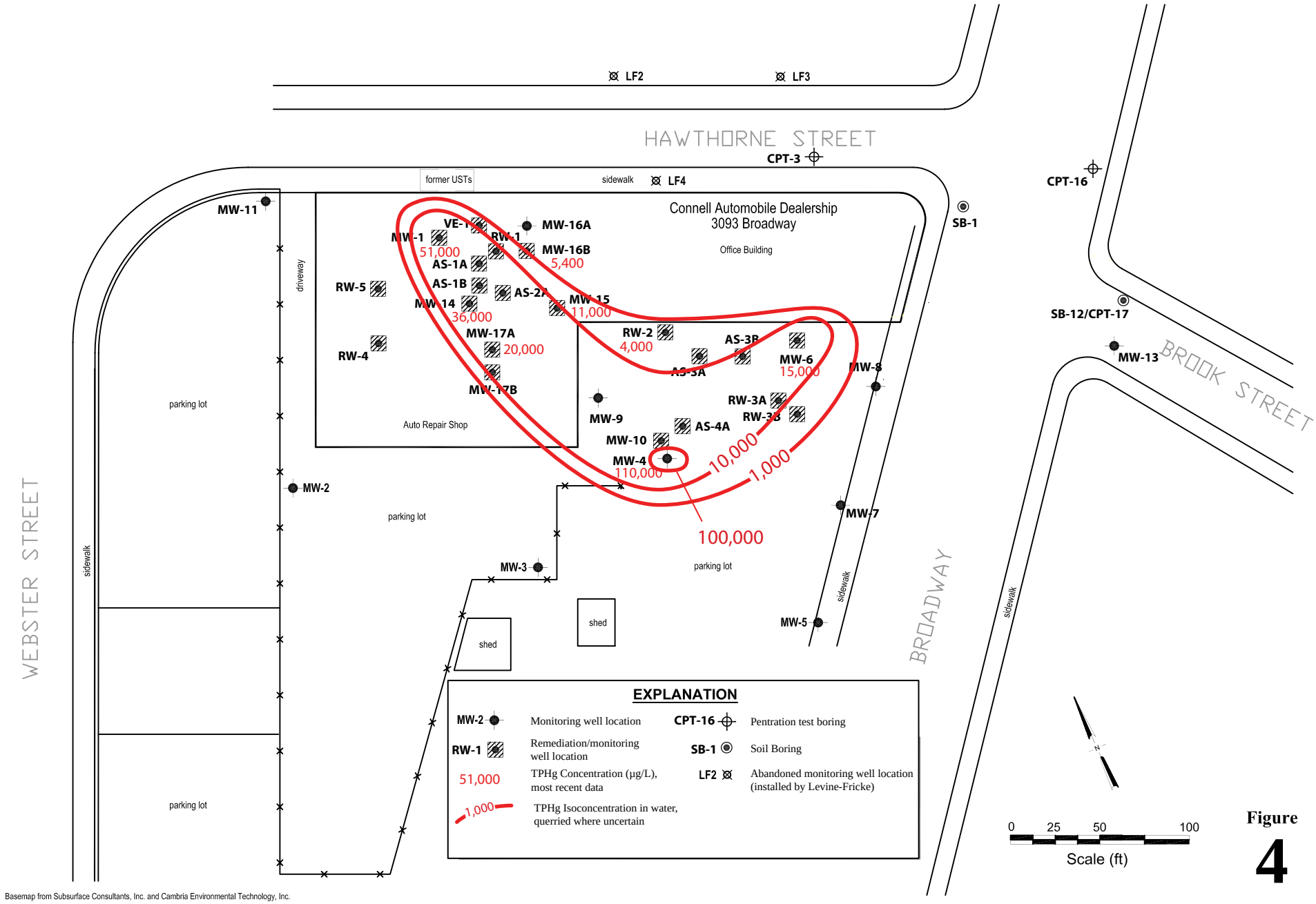


Figure
3

Connell Automobile Dealership
3093 Broadway
Oakland, California

PANGEA

Remediation System
Trenching Layout



Basemap from Subsurface Consultants, Inc. and Cambria Environmental Technology, Inc.

Figure 4

Connell Automobile Dealership
3093 Broadway
Oakland, California

PANGEA

TPHg Distribution in Groundwater

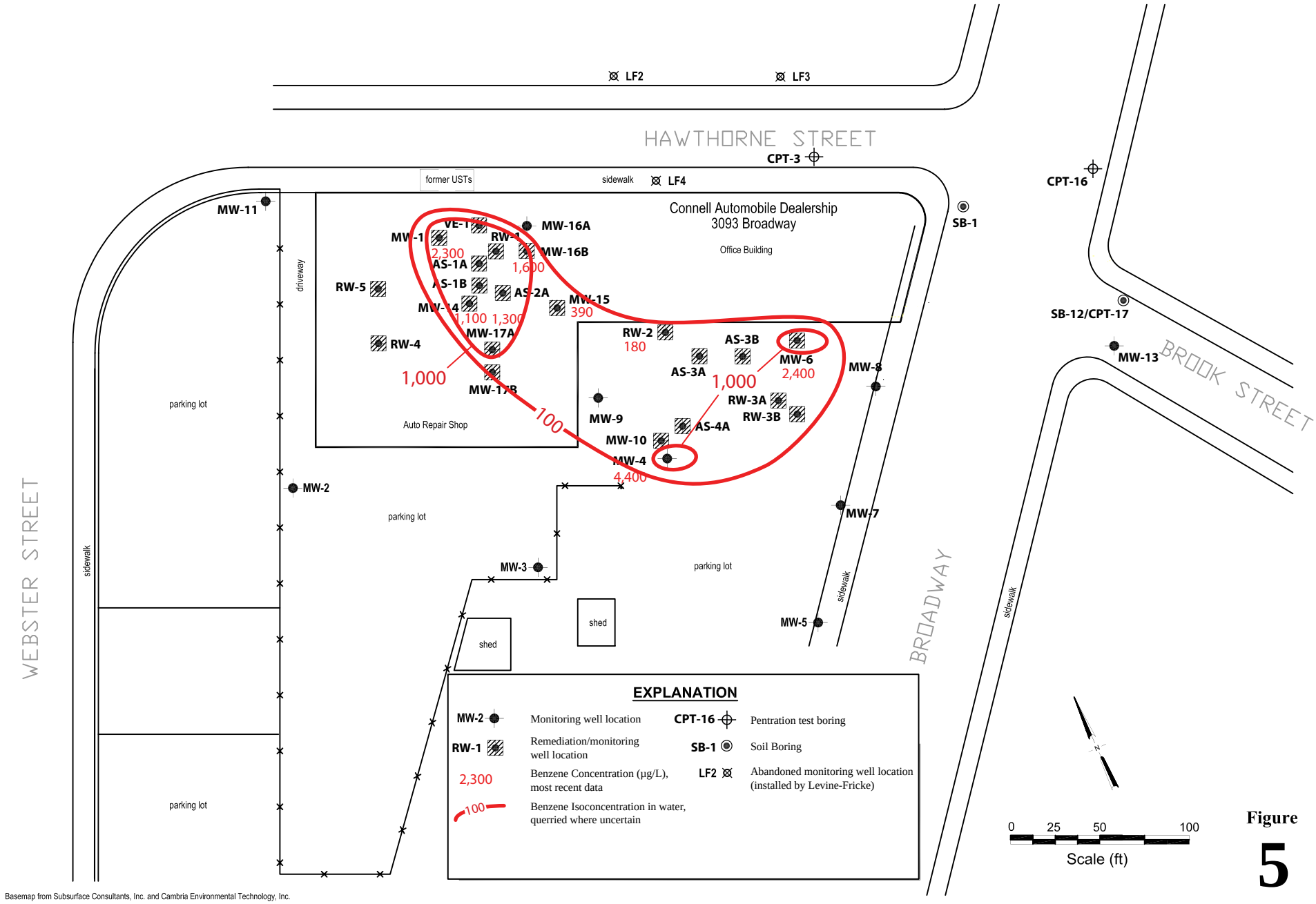


Figure 5

Basemap from Subsurface Consultants, Inc. and Cambria Environmental Technology, Inc.

Connell Automobile Dealership
3093 Broadway
Oakland, California

PANGEA

Benzene Distribution in Groundwater

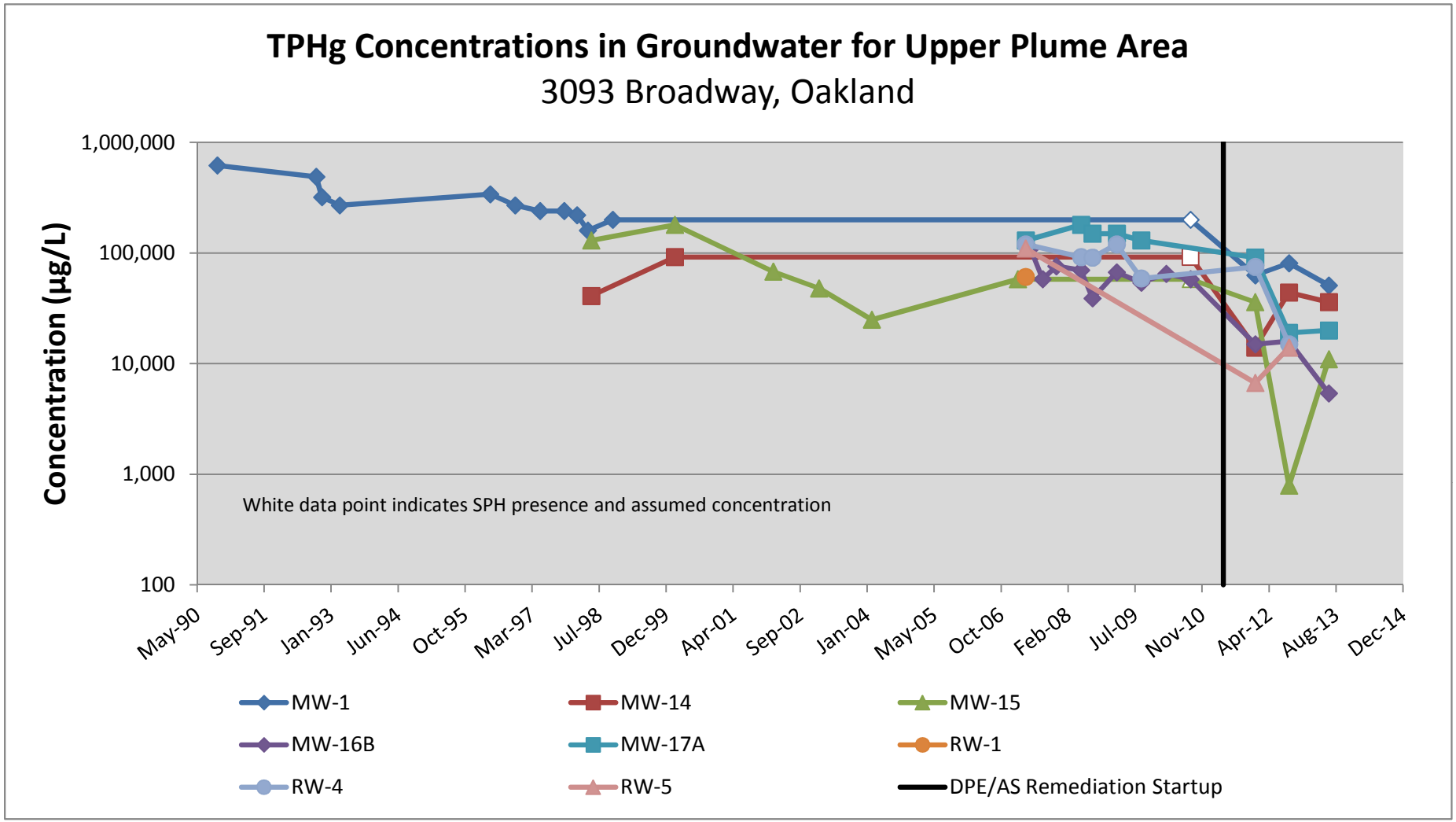


Figure 6 - TPHg Concentration Trends in Groundwater for Upper Plume Area

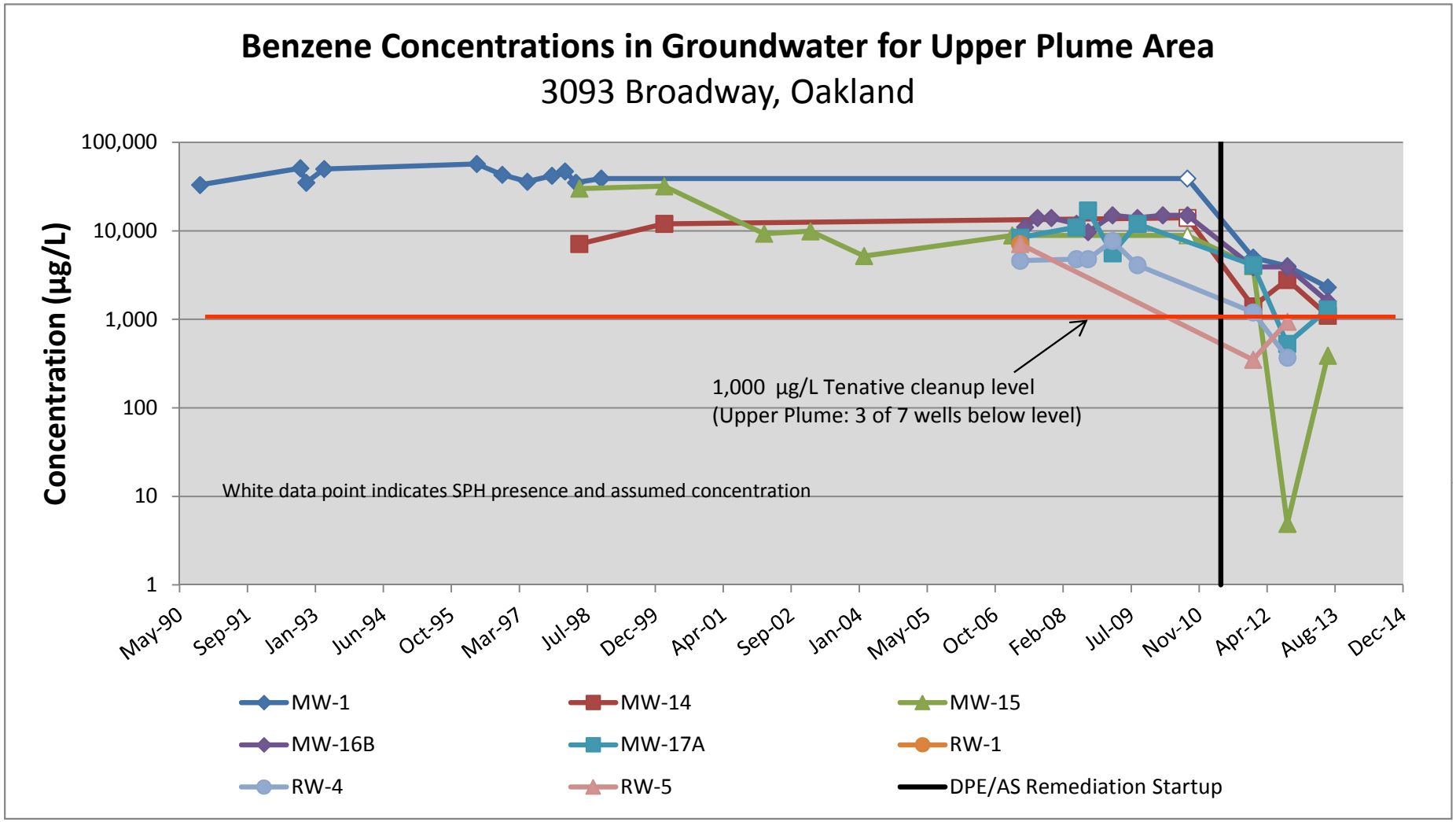


Figure 7 - Benzene Concentration Trends in Groundwater for Upper Plume Area

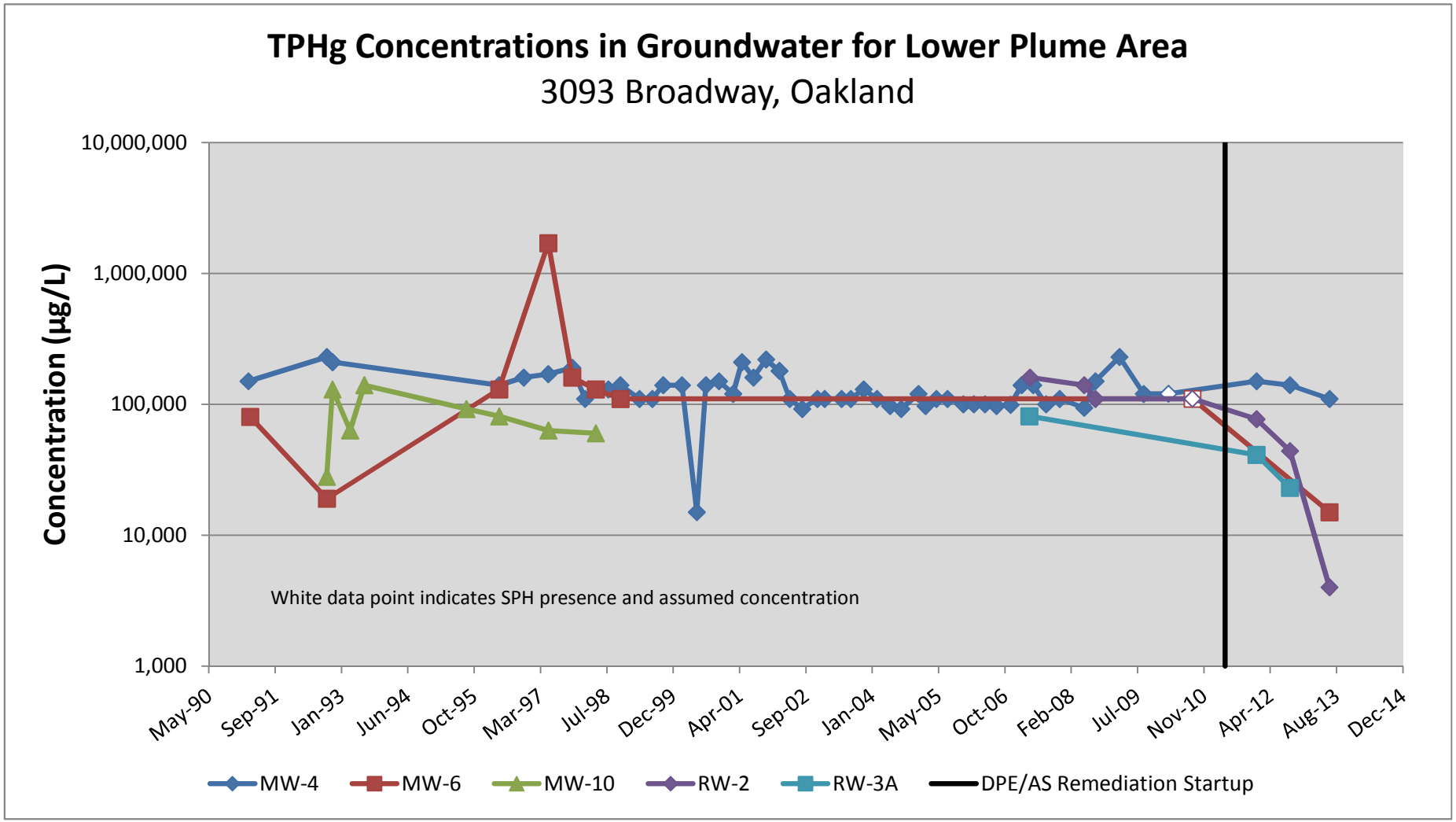


Figure 8 - TPHg Concentration Trends in Groundwater for Lower Plume Area

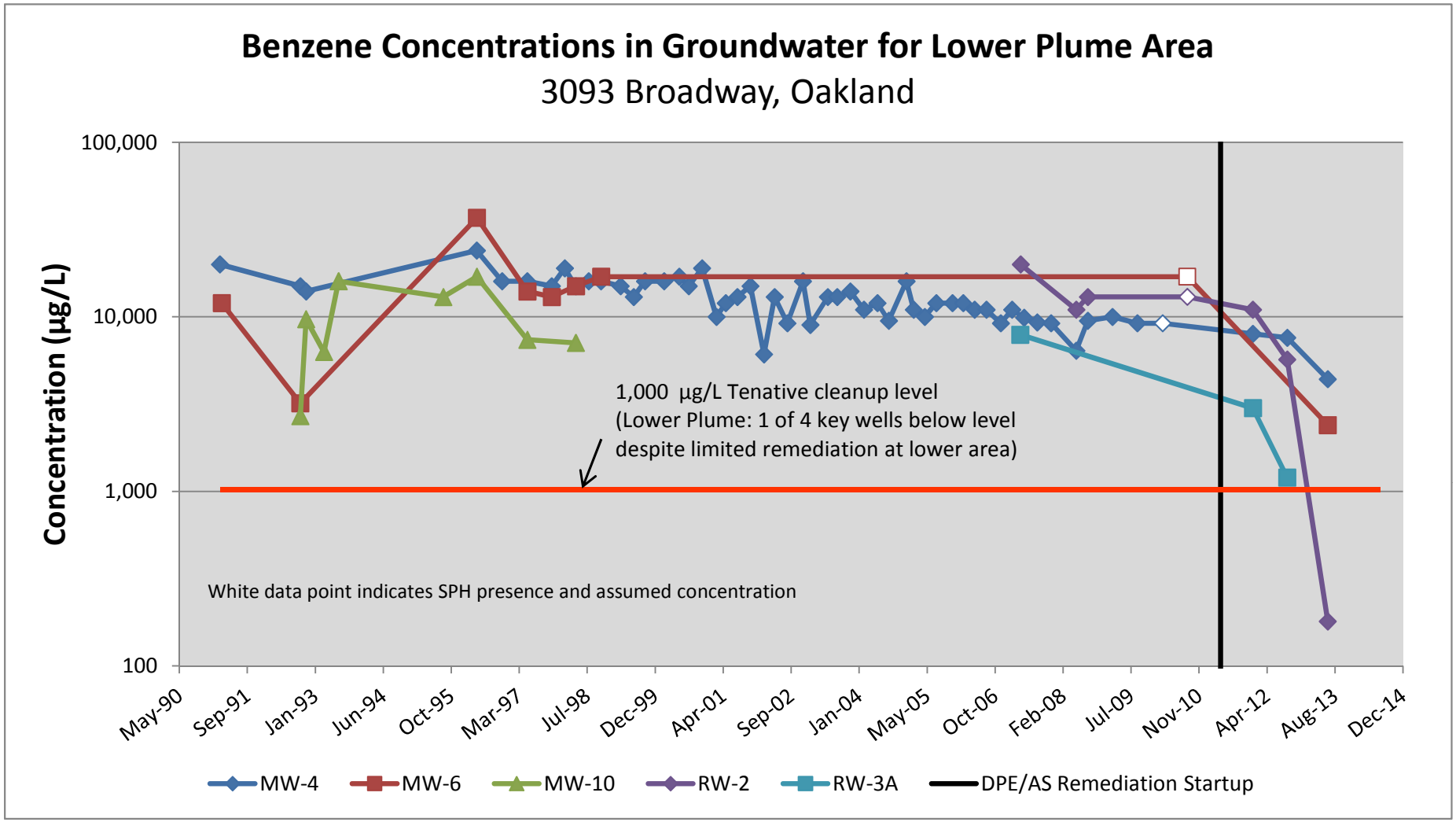
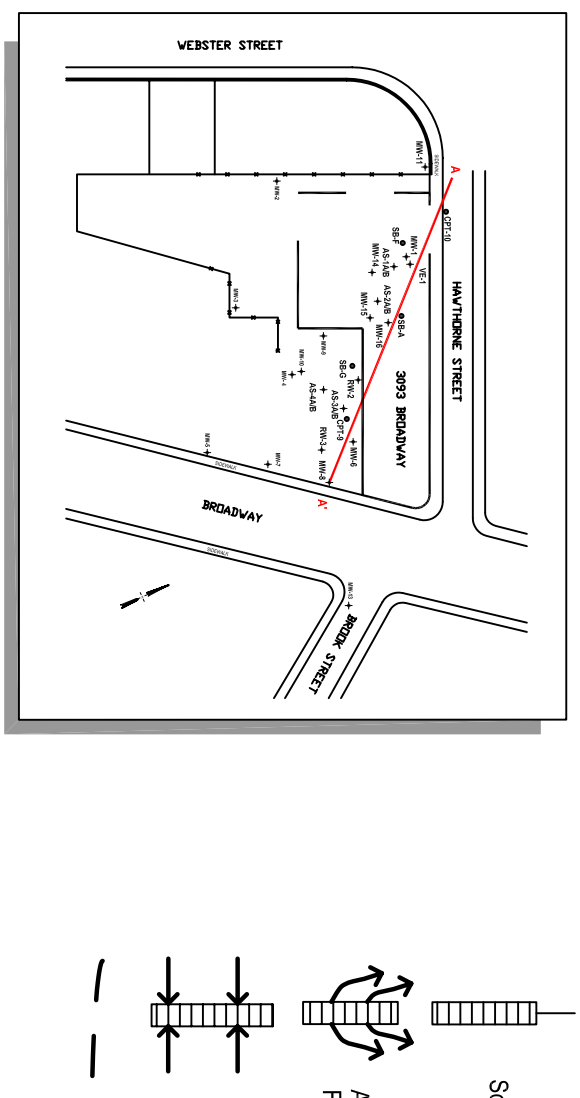
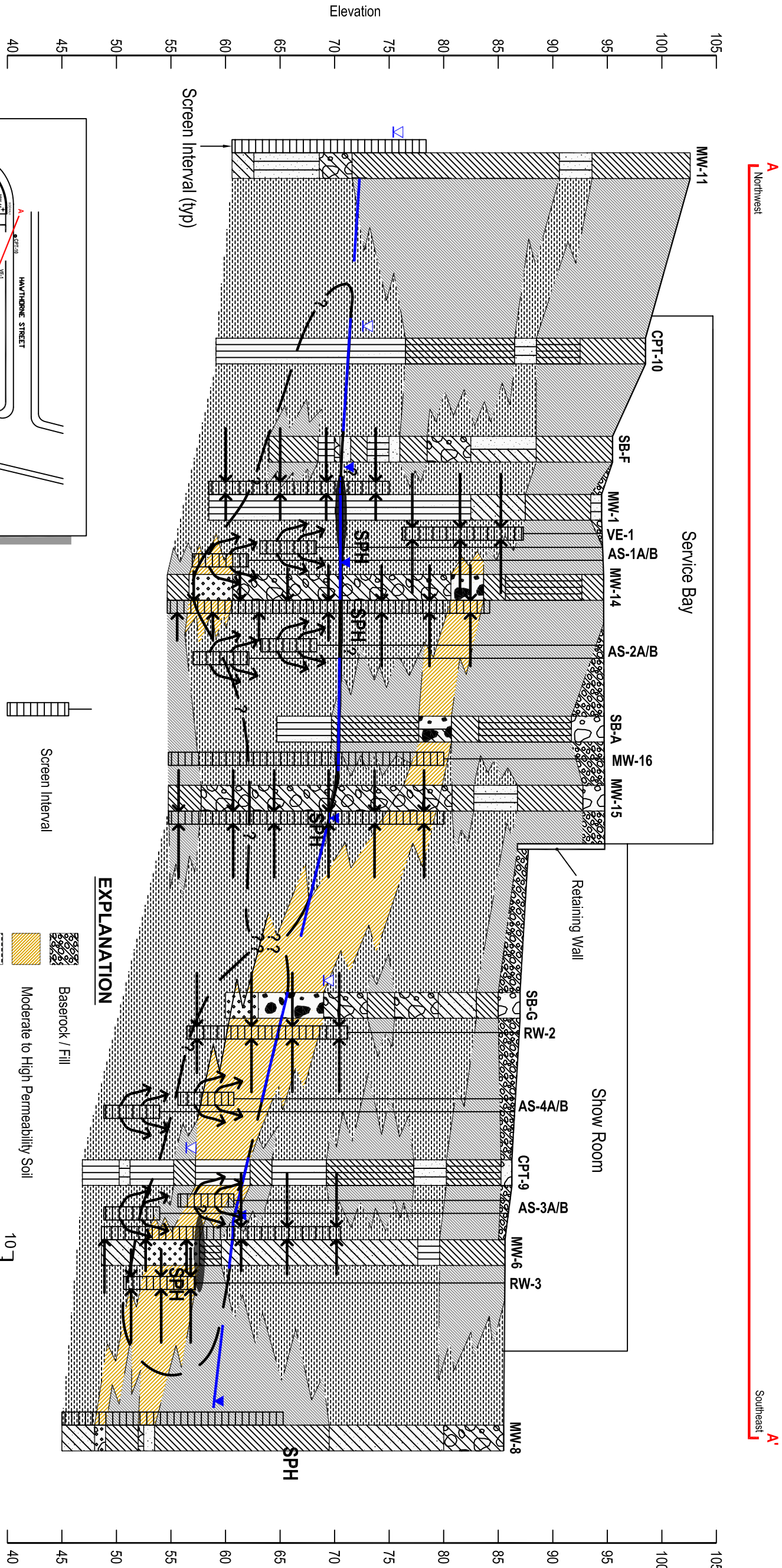


Figure 9 - Benzene Concentration Trends in Groundwater for Lower Plume Area





Figure

10

11/30/2005

Connell Automobile Dealership
3093 Broadway
Oakland, California

Pangea
Environmental Services, Inc.

Cross Section with Remediation Illustration (Pre-Remediation)

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
Monitoring Well Data												
MW-1	10/5/1990	26.40	68.08	620,000	33,000	50,000	7,900	41,000	--	--	ND	--
94.48	3/1/1991	27.46	67.02	SPH	--	--	--	--	--	--	--	--
	10/12/1992	26.44	68.04	490,000	51,000	59,000	5,000	27,000	--	--	--	--
	11/24/1992	26.63	67.85	320,000	35,000	43,000	4,200	22,000	--	--	ND	--
	4/5/1993	23.77	70.71	270,000	50,000	58,000	4,600	25,000	--	--	ND	--
	7/21/1993	24.51	69.97	SPH	--	--	--	--	--	--	--	--
	11/9/1993	26.06	68.42	SPH	--	--	--	--	--	--	--	--
	8/30/1995	21.73	72.75	SPH	--	--	--	--	--	--	--	--
	12/4/1995	21.94	72.54	SPH	--	--	--	--	<200	--	--	--
	5/2/1996	20.65	73.83	340,000	57,000	73,000	7,200	38,000	--	--	--	--
	11/5/1996	24.29	70.19	270,000	43,000	56,000	4,500	34,000	--	--	--	--
	5/9/1997	22.79	71.69	240,000	36,000	45,000	3,300	17,900	--	--	--	--
	11/5/1997	25.06	69.42	240,000	42,000	48,000	3,600	18,800	<1,000	--	--	--
	2/9/1998	22.64	71.84	220,000	47,000	60,000	5,200	29,800	<1,000	--	ND	--
	5/1/1998	19.95	74.53	160,000	35,000	42,000	2,800	16,000	<1,000	--	ND	--
	11/3/1998	23.29	71.19	200,000	39,000	49,000	4,400	26,000	<500	--	ND	--
	3/24/1999	22.30	72.18	SPH	--	--	--	--	--	--	--	--
	7/1/1999	22.70	71.78	SPH	--	--	--	--	--	--	--	--
	9/21/1999	23.81	70.67	SPH	--	--	--	--	--	--	--	--
	2/9/2000	23.95	70.59	SPH	--	--	--	--	--	--	--	--
	5/31/2000	22.05	72.43	SPH	--	--	--	--	--	--	--	--
	8/8/2000	22.49	71.99	SPH	--	--	--	--	--	--	--	--
	11/14/2000	24.65	69.83	SPH	--	--	--	--	--	--	--	--
	3/1/2001	24.22	70.28	SPH	--	--	--	--	--	--	--	--
	5/7/2001	23.85	70.67	SPH (0.05)	--	--	--	--	--	--	--	--
	8/1/2001	23.91	70.64	SPH (0.09)	--	--	--	--	--	--	--	--
	11/5/2001	23.95	70.67	SPH (0.18)	--	--	--	--	--	--	--	--
	2/13/2002	23.15	71.39	SPH(0.07)	--	--	--	--	--	--	--	--
	5/2/2002	23.91	70.60	SPH (0.04)	--	--	--	--	--	--	--	--
	8/4/2002	24.02	70.48	SPH (0.03)	--	--	--	--	--	--	--	--
	11/26/2002	24.47	70.05	SPH (0.05)	--	--	--	--	--	--	--	--
	1/20/2003	22.37	72.14	SPH (0.04)	--	--	--	--	--	--	--	--
	5/28/2003	21.77	72.73	SPH (0.02)	--	--	--	--	--	--	--	--
	8/5/2003	23.07	71.44	SPH (0.04)	--	--	--	--	--	--	--	--
	11/10/2003	22.53	71.97	SPH (0.03)	--	--	--	--	--	--	--	--
	2/18/2004	22.61	71.91	SPH (0.05)	--	--	--	--	--	--	--	--
	5/27/2004	22.08	72.44	SPH (0.05)	--	--	--	--	--	--	--	--
	8/19/2004	24.35	70.43	SPH (0.38)	--	--	--	--	--	--	--	--
	12/27/2004	24.62	70.21	SPH (0.44)	--	--	--	--	--	--	--	--
	2/18/2005	23.14	71.37	SPH (0.04)	--	--	--	--	--	--	--	--
	5/11/2005	22.71	71.79	SPH (0.02)	--	--	--	--	--	--	--	--
	8/3/2005	23.03	71.50	SPH (0.06)	--	--	--	--	--	--	--	--
	11/30/2005	23.98	70.52	SPH (0.03)	--	--	--	--	--	--	--	--
	2/17/2006	23.81	70.68	SPH (0.01)	--	--	--	--	--	--	--	--
	5/12/2006	21.75	72.75	SPH (0.02)	--	--	--	--	--	--	--	--
	8/7/2006	21.35	73.14	SPH (0.01)	--	--	--	--	--	--	--	--
	11/21/2006	23.38	71.13	SPH (0.04)	--	--	--	--	--	--	--	--
	2/12/2007	23.18	71.32	SPH (0.03)	--	--	--	--	--	--	--	--
	5/11/2007	22.68	71.80	--	--	--	--	--	--	--	--	0.20
	8/16/2007	23.74	70.74	--	--	--	--	--	--	--	--	0.08
	11/26/2007	24.98	69.50	--	--	--	--	--	--	--	--	0.13
	5/29/2008	23.83	70.65	--	--	--	--	--	--	--	--	0.14
	8/22/2008	25.50	69.54	SPH (0.70)	--	--	--	--	--	--	--	--
	2/19/2009	25.92	69.22	SPH (0.82)	--	--	--	--	--	--	--	--
	8/21/2009	25.98	69.12	SPH (0.77)	--	--	--	--	--	--	--	--
	2/24/2010	29.24	65.34	SPH (0.13)	--	--	--	--	--	--	--	--
	8/24/2010	26.84	68.14	SPH (0.63)	--	--	--	--	--	--	--	--
	12/20/2011	27.58	66.90	63,000	5,000	9,700	1,300	11,000	<1,000	--	--	0.83
	8/28/2011	27.63	66.85	81,000	4,000	6,500	180	16,000	<1,000	--	--	1.39
	6/21/2013	**22.28**	**72.20**	**51,000**	**2,300**	**3,500**	**340**	**8,100**	**<120**	**--**	**--**	**0.78**
MW-2	3/1/1991	27.90	66.95	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
94.85	11/24/1992	27.95	66.90	<50	<0.5	1.1	<0.5	1.5	--	--	ND	--
	4/5/1993	25.99	68.86	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	7/21/1993	25.63	69.22	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	11/10/1993	26.76	68.09	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	25.79	69.06	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	5/3/1996	23.32	71.53	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	5/8/1997	24.62	70.23	<50	<0.5	0.7	<0.5	<0.5	--	--	--	--
	4/29/1998	22.22	72.63	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
MW-3	3/1/1991	23.17	66.91	<50	<50	0.6	<0.5	<0.5	--	--	ND	--
90.08	11/25/1992	23.01	67.07	50	<0.5	0.9	<0.5	2	--	--	ND	--
	4/5/1993	22.11	67.97	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	7/21/1993	23.93	66.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	11/10/1993	23.14	66.94	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	20.61	69.47	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	5/3/1996	18.43	71.65	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	5/8/1997	19.77	70.31	<50	<0.5	0.7	<0.5	<0.5	--	--	--	--
	4/29/1998	17.92	72.16	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
MW-4	3/1/1991	23.79	65.05	150,000	20,000	38,000	2,800	14,000	**	--	ND	--
88.84	10/12/1992	22.48	66.36	230,000	15,000	32,000	2,500	14,000	--	--	--	--
	11/24/1992	22.60	66.24	210,000	14,000	31,000	2,500	14,000	--	--	ND	--
	4/2/1993	20.11	68.73	SPH	--	--	--	--	--	--	--	--
	7/21/1993	20.48	68.36	SPH	--	--	--	--	--	--	--	--
	11/9/1993	21.71	67.13	SPH	--	--	--	--	--	--	--	--
	8/30/1995	19.90	68.94	SPH	--	--	--	--	--	--	--	--
	12/1/1995	19.40	69.44	SPH	--	--	--	--	--	--	--	--
	5/2/1996	17.50	71.34	140,000	24,000	50,000	3,000	15,100	--	--	ND	--
	11/4/1996	20.13	68.71	160,000	16,000	38,000	2,700	14,000	--	--	ND	--
	5/8/1997	18.63	70.21	170,000	16,000	37,000	2,400	15,900	--	--	--	--
	11/5/1997	20.19	68.65	190,000	15,000	31,000	2,200	14,600	<400	--	--	--
	2/9/1998	18.28	70.56	110,000	19,000	42,000	2,500	18,300	<500	--	--	--
	5/1/1998	16.11	72.73	130,000	15,000	31,000	2,000	13,400	<1,000	--	ND	--
	8/4/1998	17.54	71.30	130,000	16,000	34,000	2,400	15,700	<400	--	ND	--
	11/2/1998	19.21	69.63	140,000	16,000	32,000	2,300	15,500	<400	--	ND	--
	3/26/1999	17.51	71.33	110,000	15,000	30,000	1,600	15,000	450 [4]	--	[5]	--
	7/1/1999	18.80	70.04	110,000	13,000	23,000	1,600	12,000	<83	--	[5]	--
	9/21/1999	19.85	68.99	140,000	16,000	31,000	2,400	14,800	ND	--	[5]	3.27
	2/9/2000	19.76	69.08	140,000	16,000	28,000	2,100	14,000	<400	--	DCB: 5.9, MCB: 5.9	--
	5/31/2000	17.90	70.94	15,000	17,000	28,000	2,400	14,000	<0.5 [6]	--	ND	--
	8/8/2000	18.62	70.22	140,000	15,000	25,000	2,100	13,000	<300	--	ND	0.60
	11/14/2000	19.63	69.21	150,000	19,000	36,000	2,900	17,000	< 200	--	ND	0.32
	3/1/2001	19.68	69.16	120,000	10,000	15,000	1,300	10,000	<2000	--	ND	0.13
	5/7/2001	18.60	70.24	210,000	12,000	19,000	1,900	12,000	<200	--	ND	0.23
	8/1/2001	18.73	70.11	160,000	13,000	21,000	2,200	13,000	<200	--	ND	--
	11/5/2001	18.97	69.87	220,000	15,000	26,000	3,100	16,000	<200	--	ND	--
	2/13/2002	18.59	70.25	180,000	6,100	11,000	1,400	13,000	<200	--	ND	0.43
	5/2/2002	18.77	70.07	110,000	13,000	20,000	2,000	10,000	<1,200	--	ND	0.21
	8/4/2002	18.95	69.89	92,000	9,200	15,000	1,800	10,000	<2,000	--	ND	0.35
	11/26/2002	20.83	68.01	110,000	16,000	26,000	2,700	12,000	<1,000	--	ND	0.29
	1/20/2003	16.90	71.94	110,000	9,000	16,000	1,900	11,000	<1,200	--	ND	0.35
	5/28/2003	15.25	73.59	110,000	13,000	17,000	1,800	8,500	<1,000	--	ND	0.59
	8/5/2003	17.05	71.79	110,000	13,000	20,000	2,200	9,800	<1,000	--	<25	0.66
	11/10/2003	16.60	72.24	130,000	14,000	23,000	2,700	12,000	<2,700	--	--	0.74
88.84	2/18/2004	16.59	72.25	110,000	11,000	17,000	1,600	9,900	<3,500	--	--	0.46
	5/27/2004	15.97	72.87	97,000	12,000	18,000	2,100	8,900	<3,000	--	--	0.59
	8/19/2004	18.11	70.73	92,000	9,500	15,000	1,900	8,600	<2,500	--	--	0.77
	12/27/2004	19.53	69.31	120,000	16,000	28,000	2,800	12,000	<1,000	--	--	0.2
	2/18/2005	18.40	70.44	97,000	11,000	16,000	1,700	7,400	<4,000	<50	<50	0.89
	5/11/2005	17.93	70.91	110,000	10,000	16,000	1,900	8,400	<3,000	--	--	1.03
	8/3/2005	18.14	70.70	110,000	12,000	18,000	2,200	8,000	<3,600	--	--	0.77
	11/30/2005	19.70	69.14	100,000	12,000	18,000	2,200	9,400	<2700	--	--	0.39
	2/17/2006	17.63	71.21	100,000	12,000	17,000	2,100	7,800	<2500	39	<10	0.2
	5/12/2006	15.53	73.31	100,000	11,000	15,000	2,100	8,700	2,000	--	--	0.27
	8/7/2006	17.75	71.09	97,000	11,000	15,000	2,200	8,700	<1,500	--	--	0.47
	11/21/2006	19.14	69.70	99,000	9,200	13,000	2,000	8,100	<2,100	--	--	0.20
	2/12/2007	18.98	69.86	140,000	11,000	16,000	2,100	7,800	<3,600	32	<5 [7]	0.20
	5/11/2007	18.27	70.57	140,000	9,900	15,000	2,000	7,200	<2,700	32	--	0.62
	8/16/2007	19.54	69.30	100,000	9,300	14,000	2,100	8,800	1,600	--	--	0.53
	11/26/2007	20.47	68.37	110,000	9,200	16,000	2,400	10,000	<2,400	--	--	0.57
	5/29/2008	19.60	69.24	94,000	6,400	11,000	1,700	6,300	<3,500	--	--	0.24
	8/22/2008	20.30	68.54	150,000	9,500	17,000	2,900	13,000	<1,500	--	--	1.82
	2/19/2009	20.58	68.26	230,000	10,000	17,000	2,900	12,000	<5000	<50	ND	1.95
	8/21/2009	20.63	68.21	120,000	9,200	16,000	2,400	11,000	<3,500	--	--	1.70
	2/24/2010						Dry Well - No Sample					
	8/24/2010	21.60	67.24	---	SPH present upon sample collection				---	---	---	0.79
	12/19/2011	21.46	67.38	150,000	8,000	27,000	3,200	22,000	<2,000	---	---	0.60
	8/27/2012	19.35	69.49	140,000	7,600	19,000	2,500	15,000	<2,500	--	--	1.10
	6/21/2013	**18.46**	**70.38**	**110,000**	**4,400**	**15,000**	**1,700**	**13,000**	**<1,200**	--	--	**0.85**

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
MW-5	3/15/1991	26.31	58.53	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
84.84	11/10/1992	26.83	58.01	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	4/2/1993	26.62	58.22	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	7/21/1993	26.60	58.24	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	11/9/1993	27.24	57.60	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	27.46	57.38	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	5/3/1996	26.02	58.82	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	5/8/1997	26.76	58.08	<50	<0.5	0.5	<0.5	<0.5	--	--	--	--
	4/29/1998	26.55	58.29	<50	<0.5	0.5	<0.5	<0.5	<2	--	ND	--
										--		
MW-6	3/15/1991	25.82	59.80	80,000	12,000	13,000	1,100	5,400	--	--	DBCM: 160	--
85.62	10/12/1992	25.02	60.60	19,000	3,200	1,400	200	560	--	--	--	--
	12/1/1992	28.87	56.75	SPH	--	--	--	--	--	--	--	--
	4/2/1993	26.96	58.66	SPH	--	--	--	--	--	--	--	--
	7/21/1993	26.17	59.45	SPH	--	--	--	--	--	--	--	--
	11/9/1993	27.51	58.11	SPH	--	--	--	--	--	--	--	--
	8/30/1995	28.00	57.62	SPH	--	--	--	--	--	--	--	--
	12/1/1995	27.58	58.04	SPH	--	--	--	--	<8,000,000	--	--	--
86.94	5/3/1996	28.15	58.79	130,000	37,000	50,000	3,200	14,200	--	--	ND	--
	5/9/1997	26.54	60.40	1,700,000	14,000	27,000	4,000	28,200	--	--	--	--
	11/5/1997	26.16	60.78	160,000	13,000	19,000	1,900	14,300	<200	--	--	--
	5/1/1998	22.96	62.86	130,000	15,000	23,000	1,700	13,200	<500	--	ND	--
85.82	11/3/1998	24.35	61.47	110,000	17,000	21,000	1,800	10,700	<200	--	ND	--
	3/26/1999	23.82	62.00	SPH	--	--	--	--	--	--	--	--
	7/1/1999	24.45	61.37	SPH	--	--	--	--	--	--	--	--
	9/21/1999	24.58	61.24	SPH	--	--	--	--	--	--	--	--
	2/9/2000	24.93	61.24	SPH	--	--	--	--	--	--	--	--
	5/31/2000	23.47	62.41	SPH	--	--	--	--	--	--	--	--
	8/8/2000	23.85	61.97	SPH	--	--	--	--	--	--	--	--
	11/14/2000	24.61	61.21	SPH	--	--	--	--	--	--	--	--
	3/1/2001	23.97	61.85	SPH	--	--	--	--	--	--	--	--
	5/7/2001	23.17	62.71	SPH	--	--	--	--	--	--	--	--
	8/1/2001	obstruction in well		--	--	--	--	--	--	--	--	--
	11/5/2001	obstruction in well		--	--	--	--	--	--	--	--	--
	2/13/2002	obstruction in well		--	--	--	--	--	--	--	--	--
	5/2/2002	23.25	62.41	SPH (0.05)	--	--	--	--	--	--	--	--
	8/4/2002	23.55	62.29	SPH (0.03)	--	--	--	--	--	--	--	--
	11/26/2002	24.22	61.62	SPH (0.03)	--	--	--	--	--	--	--	--
	1/20/2003	22.49	63.36	SPH (0.04)	--	--	--	--	--	--	--	--
	5/28/2003	21.92	63.93	SPH (0.04)	--	--	--	--	--	--	--	--
	8/5/2003	23.98	61.87	SPH (0.04)	--	--	--	--	--	--	--	--
	11/10/2003	23.50	62.40	SPH (0.10)	--	--	--	--	--	--	--	--
	2/18/2004	22.21	63.64	SPH (0.04)	--	--	--	--	--	--	--	--
	5/27/2004	22.01	63.85	SPH (0.05)	--	--	--	--	--	--	--	--
	8/19/2004	24.16	61.68	SPH (0.03)	--	--	--	--	--	--	--	--
	12/27/2004	24.69	61.13	SPH (sheen)	--	--	--	--	--	--	--	--
	2/18/2005	23.55	62.33	SPH (0.08)	--	--	--	--	--	--	--	--
	5/11/2005	22.90	62.97	SPH (0.06)	--	--	--	--	--	--	--	--
	8/3/2005	23.68	62.19	SPH (0.06)	--	--	--	--	--	--	--	--
	11/30/2005	24.17	61.67	SPH (0.02)	--	--	--	--	--	--	--	--
	2/17/2006	23.89	61.95	SPH (0.03)	--	--	--	--	--	--	--	--
	5/12/2006	22.66	63.18	SPH (0.03)	--	--	--	--	--	--	--	--
	8/7/2006	22.83	63.01	SPH (0.02)	--	--	--	--	--	--	--	--
	11/21/2006	23.92	61.92	SPH (0.02)	--	--	--	--	--	--	--	--
	2/12/2007	23.97	61.87	SPH (0.02)	--	--	--	--	--	--	--	--
	5/11/2007	23.54	62.28	--	--	--	--	--	--	--	--	0.70
	8/16/2007	24.18	61.64	--	--	--	--	--	--	--	--	0.63
	11/26/2007	Unable to gauge or sample-Vehicle parked over well										
	5/29/2008	24.29	61.53	--	--	--	--	--	--	--	--	0.48
	8/22/2008	24.80	61.02	--	--	--	--	--	--	--	--	2.55
	2/19/2009	24.96	60.86	SPH (0.07)†	--	--	--	--	--	--	--	1.88
	8/21/2009	25.10	60.74	SPH (0.03)	--	--	--	--	--	--	--	--
	2/24/2010	26.71	59.13	SPH (0.03)	--	--	--	--	--	--	--	--
	8/24/2010	26.13	59.73	SPH (0.05)	--	--	--	--	--	--	--	---
	12/19/2011	25.19	60.63					Insufficient water to sample				
	8/27/2012	24.16	61.66					Insufficient water to sample				
	6/21/2013	**21.56**	**64.26**	**15,000**	**2,400**	**300**	**370**	**680**	**<250**	**--**	**--**	**0.81**
MW-7	3/15/1991	21.63	63.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
85.41	11/24/1992	21.52	63.89	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	4/2/1993	20.08	65.33	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	7/21/1993	19.59	65.82	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
>>MW-7	11/9/1993	20.65	64.76	<50	<0.5	1	<0.5	1.7	--	--	ND	--
(continued)	8/30/1995	18.78	66.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	12/1/1995	19.47	65.94	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	5/2/1996	17.15	68.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/8/1996	18.48	66.93	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	11/4/1996	18.69	66.72	<50	<1	<1	<1	<1	--	--	ND	--
	2/6/1997	17.44	67.97	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	5/8/1997	17.72	67.69	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	8/7/1997	18.49	66.92	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1997	18.86	66.55	<50	<0.5	<0.5	<0.5	<0.5	<2	--	--	--
	2/9/1998	17.56	67.85	<50	<0.5	<0.5	<0.5	<0.5	<2	--	--	--
	4/29/1998	16.23	69.18	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	8/4/1998	17.24	68.17	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	11/2/1998	17.91	67.50	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	3/26/1999	16.42	68.99	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	7/1/1999	17.90	67.51	85	<0.5	1.1	0.55	2.5	<0.5	--	[5]	--
	9/21/1999	18.91	66.50	<50	0.7	1.8	<0.5	1.5	<5.0	--	ND	4.32
	2/9/2000	16.74	68.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--
	5/31/2000	16.21	69.20	<50	3	6	1	9	<0.5	--	ND	--
	8/8/2000	16.92	68.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.43
	11/14/2000	17.00	68.41	< 50	< 0.5	0.63	< 0.5	< 0.5	< 5.0	--	ND	0.44
	3/1/2001	17.09	68.32	< 50	< 0.5	<0.5	< 0.5	< 0.5	< 5.0	--	ND	--
	5/7/2001	17.19	68.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.51
	8/1/2001	17.25	68.16	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	--
	11/5/2001	17.35	68.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	--
	2/13/2002	17.50	67.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.80
	5/2/2002	17.30	68.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.31
	8/4/2002	17.58	67.83	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.37
	11/26/2002	18.35	67.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.28
	1/20/2003	15.84	69.57	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.61
	5/28/2003	15.19	70.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.74
	8/5/2003	17.00	68.41	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	0.61
	11/10/2003	16.54	68.87	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.65
	2/18/2004	16.47	68.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.74
	5/27/2004	15.93	69.48	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.65
	8/19/2004	18.05	67.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.71
	12/27/2004	17.35	68.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	2.0
	2/18/2005	16.23	69.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	0.93
	5/11/2005	15.79	69.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.18
	8/3/2005	17.52	67.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.89
	11/30/2005	19.57	65.84	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.70
	2/17/2006	16.82	68.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<1.0	0.99
	5/12/2006	15.86	69.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.11
	8/7/2006	17.52	67.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.33
	11/21/2006	18.67	66.74	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.39
	2/12/2007	18.20	67.21	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5[7]	0.75
	5/11/2007	17.73	67.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.93
	8/16/2007	18.86	66.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.66
	11/26/2007	19.51	65.90	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.59
	5/29/2008	18.58	66.83	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.71
	8/22/2008	19.35	66.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	3.45
	2/19/2009	18.30	67.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND	1.90
	8/21/2009	18.50	66.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.42
	2/24/2010	19.27	66.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	1.19
	8/24/2010	20.68	64.73	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.06
	12/19/2011	18.88	66.53	--	--	--	--	--	--	--	--	--
	8/27/2012	17.85	67.56	--	--	--	--	--	--	--	--	--
MW-8	10/12/1992	27.70	57.80	70	20	1	1	3	--	--	--	--
85.50	11/25/1992	27.62	57.88	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	4/8/1993	26.64	58.86	490	15	45	5.1	73	--	--	ND	--
	7/21/1993	26.60	58.90	180	2.5	3	<0.5	1.9	--	--	ND	--
	11/11/1993	27.18	58.32	310	23	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	26.35	59.15	660	360	6.8	13	2.8	--	--	--	--
	12/4/1995	26.72	58.78	250	46	0.9	4.9	<0.5	--	--	ND	--
	5/3/1996	25.47	60.03	69	110	<0.5	<0.5	1.5	--	--	ND	--
	8/8/1996	26.41	59.09	120	11	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1996	26.77	58.73	110	20	<1	1	<1	--	--	ND	--
	2/6/1997	25.84	59.66	67	51	<0.5	0.56	<0.5	<2	--	ND	--
	5/9/1997	26.39	59.11	110	59	<0.5	<0.5	<0.5	--	--	--	--
	8/7/1997	26.72	58.78	<50	12	<0.5	<0.5	<0.5	<2	--	ND	--

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Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
>>MW-8	11/5/1997	26.82	58.68	<50	9.4	<0.5	<0.5	<0.5	<2	--	--	--
(continued)	2/9/1998	25.57	59.93	<50	6	<0.5	<0.5	<0.5	<2	--	--	--
	5/1/1998	25.64	59.86	430	490	7.1	27	26	<10	--	ND	--
	8/5/1998	25.96	59.54	140	19	<0.5	5.2	5.3	<2	--	ND	--
	11/3/1998	26.27	59.23	150	110	1.1	4.3	4.5	<2	--	ND	--
	3/31/1999	20.93	64.57	54	170	1.5	4.1	1.9	4.4	--	1,1 DCA: 0.7	--
	7/1/1999	26.59	58.91	140	58	0.9	3	2.3	<0.5	--	[5]	--
	9/21/1999	26.89	58.61	670	170	2.6	11	7.9	<5	--	ND	2.61
	2/9/2000	26.60	58.90	300	60	1.2	4.8	1.2	<5.0	--	<0.5	--
	8/8/2000	26.43	59.07	270	56	1.2	4.1	1.0	<5.0	--	ND	0.25
	11/14/2000	26.60	58.90	330	64	1.3	3.5	0.60	< 5.0	--	ND	0.51
	3/1/2001	26.41	59.09	400	140	<0.5	<0.5	0.55	<5.0	--	ND	--
	5/7/2001	26.55	58.95	240	37	0.71	2.5	0.77	<5.0	--	ND	0.49
	8/1/2001	26.71	58.79	130	5.2	<0.5	<0.5	<0.5	<5.0	--	ND	--
	11/5/2001	26.67	58.83	140	3.3	<0.5	<0.5	<0.5	<5.0	--	ND	--
	2/13/2002	26.15	59.35	1,100	440	0.087	0.66	2.0	<5.0	--	ND	0.71
	5/2/2002	26.63	58.87	90	3.9	<0.5	<0.5	<0.5	<5.0	--	ND	0.37
	8/4/2002	26.80	58.70	120	2.4	0.77	<0.5	<0.5	<5.0	--	ND	0.44
	11/26/2002	27.50	58.00	85	3.7	<0.5	<0.5	<0.5	<5.0	--	ND	0.48
	1/20/2003	24.93	60.57	90	3.9	0.67	<0.5	<0.5	<5.0	--	ND	0.65
	5/28/2003	24.28	61.22	120	1.4	<0.5	<0.5	<0.5	<5.0	--	ND	0.71
	8/5/2003	26.51	58.99	150[f]	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	0.67
	11/10/2003	26.04	59.46	50	0.84	<0.5	<0.5	<0.5	<5.0	--	--	0.70
	2/18/2004	25.97	59.53	52	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.69
	5/27/2004	25.31	60.19	75	0.76	<0.5	<0.5	<0.5	<5.0	--	--	0.98
	8/19/2004	27.55	57.95	72	1.7	<0.5	<0.5	<0.5	<5.0	--	--	1.41
	12/27/2004	26.50	59.00	160	22	0.74	2.2	0.55	<5.0	--	--	0.2
	2/18/2005	26.00	59.50	130	27	0.70	2.3	0.69	<5.0	47	<1.0	0.91
	5/11/2005	25.47	60.03	550	190	2.5	2.9	9.3	<5.0	--	--	1.22
	8/3/2005	26.31	59.19	240	36	0.86	3.1	1.2	<5.0	--	--	1.05
	11/30/2005	26.51	58.99	160	28	1.7	2.0	1.3	<5.0	--	--	0.71
	2/17/2006	26.11	59.39	200	39	0.67	2.7	1.6	<5.0	37	<1.0	0.64
	5/12/2006	25.38	60.12	770	260	7.40	5.1	5.8	<5.0	--	--	0.19
	8/7/2006	26.10	59.40	320	52	1.0	2.7	1.2	<5.0	--	--	0.17
	11/21/2006	26.43	59.07	54	9.2	<0.5	0.56	0.64	<5.0	--	--	0.22
	2/12/2007	26.29	59.21	1,000	310	5.1	25	27	<5.0	25	<0.5[7]	0.37
	5/11/2007	26.23	59.27	300	48	0.74	2.9	1.2	<5.0	--	--	0.55
	8/16/2007	26.81	58.69	700	190	2.3	10	1.9	<10	--	--	0.59
	11/26/2007	26.99	58.51	130	33	0.74	0.93	<0.5	<5.0	--	--	0.51
	5/29/2008	26.70	58.80	510	100	0.93	1.2	<0.5	<10	--	--	0.97
	8/22/2008	27.03	58.47	100	19	<0.5	<0.5	<0.5	<5.0	--	--	2.88
	2/19/2009	26.74	58.76	120	29	0.56	<0.5	<0.5	<5.0	19	ND	2.12
	8/21/2009	26.72	58.78	81	11	<0.5	<0.5	<0.5	<5.0	--	--	2.20
	2/24/2010	29.09	56.41	88	14	0.70	<0.5	<0.5	<5.0	17	<0.5	1.73
	8/24/2010	28.35	57.15	120	11	0.95	<0.5	<0.5	<5.0	---	---	1.29
	12/19/2011	27.52	57.98	--	--	--	--	--	--	--	--	--
	8/27/2012	26.70	58.80	--	--	--	--	--	--	--	--	--
MW-9	11/24/1992	23.51	66.86	19,000	180	590	23	2,000	--	--	TCM: 15	--
90.37	4/5/1993	21.14	69.23	2,300	48	4	0.6	13	--	--	TCM: 2	--
	7/21/1993	21.54	68.83	2,300	170	8.1	15	<0.5	--	--	ND	--
	11/10/1993	27.53	62.84	4,400	69	7.3	21	9.7	--	--	ND	--
	8/30/1995	19.59	70.78	3,200	3,900	49	80	22.8	--	--	--	--
	12/4/1995	20.65	69.72	--	--	--	--	--	<2	--	--	--
	5/2/1996	18.63	71.74	<1300	2,600	<13	200	<13	--	--	ND	--
	11/5/1996	20.69	69.68	1,800	280	<5	65	<5	--	--	ND	--
	5/9/1997	19.96	70.41	1,100	160	<0.5	42	<0.5	--	--	--	--
	8/8/1997	20.84	69.53	570 [1,c]	<0.5	<0.5	<0.5	0.78 [3]	<2	--	ND	--
	11/5/1997	21.55	68.82	490 [1]	<0.5	<0.5	6	<0.5	<2	--	--	--
	2/9/1998	20.21	70.16	270 [1]	48	17	5.8	<0.5	<2	--	--	--
	5/1/1998	19.27	71.10	550	70	<0.5	22	2.2	<2	--	ND	--
	8/5/1998	19.35	71.02	550 [1]	88	<0.5	13	1.9 [3]	<2	--	ND	--
	11/2/1998	20.43	69.94	580	<0.5	<0.5	7.5 [3]	1.6 [3]	<2	--	ND	--
	3/25/1999	18.46	71.91	1,100	160	<0.5	21	2.1 [3]	5.7 [4]	--	ND	--
	7/1/1999	19.95	70.42	540	100	7.4	26	16.9	<1.3	--	[5]	--
	9/21/1999	21.15	69.22	2,700	320	98	88	47	<20	--	ND	5.86
	2/9/2000	21.08	69.29	1,600	81	3.6	19	18	<5.0	--	<0.5	--
	5/31/2000	19.11	71.26	1,500	170	13	25	<1.0	<0.5	--	ND	--
	8/8/2000	19.86	70.51	1,300	140	2.1	19	<0.5	<5.0	--	ND	2.4
	11/14/2000	20.90	69.47	1,700	250	2.6	44	2.1	< 5.0	--	ND	0.29
	3/1/2001	20.45	69.92	1,800	170	5.6	30	2.5	<20	--	ND	0.31
	5/7/2001	19.83	70.54	1,500	120	2.6	24	<0.5	<5.0	--	ND	0.18
	8/1/2001	20.02	70.35	2,600	280	4.8	50	<0.5	<5.0	--	ND	--

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>>MW-9	11/5/2001	19.85	70.52	2,200	170	4.5	100	0.54	<5.0	--	ND	--
(continued)	2/13/2002	19.80	70.57	1,800	98	3	58	1.5	<5.0	--	ND	0.53
	5/2/2002	19.93	70.44	1,100	82	1.4	20	<0.5	<10	--	ND	0.28
	8/4/2002	20.20	70.17	1,200	130	2.5	50	0.58	<10	--	ND	0.51
	11/26/2002	20.37	70.00	1,200	150	3.3	48	<2.5	<25	--	ND	0.53
	1/20/2003	17.93	72.44	840	110	1.2	31	0.76	<5.0	--	ND	0.31
	5/28/2003	17.25	73.12	1,100	40	1.9	3.0	<0.5	<20	--	ND	0.60
	8/5/2003	19.03	71.34	1,100[a]	62	0.99	25	<0.5	<5.0	--	<10	0.54
	11/10/2003	18.65	71.72	1,500	120	7.6	41	<1.0	<10	--	--	0.62
	2/18/2004	18.41	71.96	820	50	1.2	19	<0.5	<5.0	--	--	0.58
	5/27/2004	17.89	72.48	730	36	2.0	11	1.6	<5.0	--	--	0.90
	8/19/2004	20.14	70.23	1,200	95	2.5	24	<0.5	<25	--	--	0.98
	12/27/2004	21.65	68.72	720	25	14	2.0	3.5	<15	--	--	2.5
	2/18/2005	19.97	70.40	600	24	<0.5	3.8	<0.5	<5.0	220	<5.0	0.88
	5/11/2005	19.41	70.96	510	11	<0.5	1.6	<0.5	<5.0	--	--	0.95
	8/3/2005	19.35	71.02	620	26	5.7	4.0	<0.5	<5.0	--	--	0.65
	11/30/2005	20.96	69.41	1,300	120	2.9	22	<0.5	<10	--	--	0.49
	2/17/2006	19.13	71.24	540	11	<0.5	1.1	<0.5	<5.0	160	<10	0.70
	5/12/2006	17.70	72.67	600	12	0.54	1.7	<0.5	<5.0	--	--	0.30
	8/7/2006	18.82	71.55	600	31	1.8	4.2	<0.5	<5.0	--	--	0.24
	11/21/2006	20.10	70.27	670	32	2.6	3.4	<0.5	<5.0	--	--	0.25
	2/12/2007	20.48	69.89	520	14	0.74	1.2	<0.5	<5.0	210	<5[7]	0.51
	5/11/2007	19.55	70.82	710	4.8	1.8	<0.5	<0.5	<10	--	--	0.60
	8/16/2007	20.83	69.54	740	6.8	1.3	0.86	<0.5	<5.0	--	--	0.40
	11/26/2007	21.79	68.58	550	5.8	1.0	0.66	<0.5	<5.0	--	--	0.54
	5/29/2008	20.70	69.67	1,200	4.9	2.9	1.2	<0.5	<5.0	--	--	0.68
	8/22/2008	21.61	68.76	780	11	4.5	1.7	<0.5	<25	--	--	2.17
	2/19/2009	21.91	68.46	420	3.4	<0.5	<0.5	<0.5	<5.0	120	ND	1.94
	8/21/2009	21.97	68.40	610	17	0.89	<0.5	<0.5	<5.0	--	--	2.14
	2/24/2010	25.65	64.72	270	6.6	0.95	<0.5	<0.5	<5.0	75	<1.7	1.60
	8/24/2010	22.92	67.45	740	21	1.5	<0.5	<0.5	<5.0	---	---	1.10
	12/19/2011	22.63	67.74	--	--	--	--	--	--	--	--	--
	8/27/2012	20.74	69.63	--	--	--	--	--	--	--	--	--
MW-10	10/12/1992	21.55	67.05	28,000	2,700	3,800	210	1,300	--	--	--	--
88.60	11/24/1992	21.86	66.74	130,000	9,700	19,000	1,400	8,400	--	--	ND	--
	4/5/1993	19.14	69.46	63,000	6,300	14,000	1,100	7,500	--	--	ND	--
	7/21/1993	19.79	68.81	140,000	16,000	31,000	2,200	13,000	--	--	ND	--
	8/30/1995	17.99	70.61	92,000	13,000	24,000	1,800	9,100	--	--	--	--
	5/3/1996	17.04	71.56	81,000	17,000	29,000	2,100	8,500	--	--	ND	--
	5/9/1997	18.36	70.24	63,000	7,400	13,000	940	4,100	--	--	--	--
	5/1/1998	15.84	72.76	60,000	7,100	14,000	1,100	5,300	<250	--	ND	--
MW-11	11/24/1992	33.65	68.41	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
102.06	12/8/92***	33.37	68.69	<50	<0.1	<0.1	<0.1	<0.1	--	--	--	--
	12/8/1992	33.37	68.69	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	4/5/1993	31.03	71.03	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	7/21/1993	31.90	70.16	160	<0.5	1.8	<0.5	<0.5	--	--	ND	--
	11/9/1993	32.60	69.46	80	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	28.92	73.14	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	5/3/1996	28.00	74.06	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	5/8/1997	29.93	72.13	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	4/29/1998	27.22	74.84	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
MW-13	11/24/1992	26.05	58.01	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
84.06	12/8/92***	25.08	58.98	<50	<0.1	<0.1	<0.1	<0.1	--	--	--	--
	12/8/1992	25.08	58.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	4/5/1993	24.64	59.42	<50	<0.5	0.9	<0.5	<0.5	--	--	ND	--
	7/21/1993	24.29	59.77	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	11/9/1993	24.23	59.83	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	23.30	60.76	<50	49	<0.5	<0.5	<0.5	--	--	--	--
	12/1/1995	23.80	60.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	5/3/1996	23.19	60.87	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/8/1996	23.44	60.62	<50	32	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1996	24.04	60.02	<50	<1	<1	<1	<1	--	--	ND	--
	2/6/1997	23.24	60.82	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	5/8/1997	23.46	60.60	<50	81	<0.5	<0.5	<0.5	--	--	--	--
	8/8/1997	23.92	60.14	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1997	24.27	59.79	<50	<0.5	<0.5	<0.5	<0.5	<2	--	--	--
	2/9/1998	22.89	61.17	<50	<0.5	<0.5	<0.5	<0.5	<2	--	--	--
	4/29/1998	22.27	61.79	<50	24	<0.5	<0.5	<0.5	<2	--	ND	--
	8/4/1998	22.75	61.31	120	200	<1	<1	<1	<4	--	ND	--
	11/3/1998	23.90	60.16	59[1]	33	<0.5	<0.5	<0.5	<2	--	ND	--

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
>>MW-13	3/31/1999	23.11	60.95	130	0.56	<0.5	<0.5	<0.5	<2	--	ND	--
(continued)	7/1/1999	23.40	60.66	160	370	19	1.2	3.5	<1	--	[5]	--
	9/21/1999	21.91	62.15	370	150	1.0	0.8	0.8	<5.0	--	ND	3.76
	2/9/2000	23.84	60.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--
	8/8/2000	23.31	60.75	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	1.76
	11/14/2000	24.00	60.06	< 50	< 0.5	0.52	< 0.5	< 0.5	< 5.0	--	ND	0.49
	3/1/2001	23.93	60.13	< 50	< 0.5	<0.5	< 0.5	< 0.5	< 5.0	--	ND	--
	5/7/2001	23.93	60.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.59
	8/1/2001	24.10	59.96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	--
	11/5/2001	24.02	60.04	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	--
	2/13/2002	23.70	60.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.55
	5/2/2002	23.97	60.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.63
	8/4/2002	24.19	59.87	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.31
	11/26/2002	24.78	59.28	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.47
	1/20/2003	22.10	61.96	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.53
	5/28/2003	21.72	62.34	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.75
	8/5/2003	23.99	60.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	0.59
	11/10/2003	23.47	60.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.70
	2/18/2004	22.58	61.48	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.52
	5/27/2004	21.95	62.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.84
	8/19/2004	24.29	59.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.98
	12/27/2004	23.70	60.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	5.5
	2/18/2005	23.15	60.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	0.97
	5/11/2005	22.68	61.38	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.05
	8/3/2005	23.04	61.02	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.12
	11/30/2005	23.65	60.41	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	2.28
	2/17/2006	23.07	60.99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<1.0	1.35
	5/12/2006	22.02	62.04	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.39
	8/7/2006	22.61	61.45	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.24
	11/21/2006	23.11	60.95	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.94
	2/12/2007	23.27	60.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5[7]	0.52
	5/11/2007	23.07	60.99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.79
	8/16/2007	23.67	60.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.84
	11/26/2007	24.13	59.93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.65
	5/29/2008	23.81	60.25	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.07
	8/22/2008	24.13	59.93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	3.32
	2/19/2009	23.97	60.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND	2.61
	8/21/2009	23.75	60.31	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.97
	2/24/2010	26.64	57.42	930	330	1.3	<0.5	0.99	<45	<0.5	<0.5	1.88
	8/24/2010	25.43	58.63	<50	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	1.41
	12/19/2011	24.65	59.41	--	--	--	--	--	--	--	--	--
	8/27/2012	23.86	60.20	--	--	--	--	--	--	--	--	--
MW-14	5/26/1998	21.67	72.99	41,000	7,100	11,000	720	3,900	<1000	--	ND	--
94.66	7/1/1999	22.95	71.71	SPH	--	--	--	--	--	--	--	--
	9/21/1999	24.26	70.40	SPH	--	--	--	--	--	--	--	--
	2/9/2000	24.13	70.53	92,000	12,000	17,000	1,300	8,700	<140	--	<0.5	--
	5/31/2000	22.09	72.57	SPH	--	--	--	--	--	--	--	--
	8/8/2000	22.88	71.78	SPH	--	--	--	--	--	--	--	--
	11/14/2000	23.90	70.76	SPH	--	--	--	--	--	--	--	--
	3/1/2001	23.97	70.69	SPH	--	--	--	--	--	--	--	--
	5/7/2001	23.45	71.23	SPH (sheen)	--	--	--	--	--	--	--	--
	8/1/2001	23.57	71.12	SPH (0.06)	--	--	--	--	--	--	--	--
	11/5/2001	23.50	71.18	SPH (0.03)	--	--	--	--	--	--	--	--
	2/13/2002	22.99	71.70	SPH (0.04)	--	--	--	--	--	--	--	--
	5/2/2002	23.51	71.17	SPH (0.02)	--	--	--	--	--	--	--	--
	8/4/2002	23.61	71.06	SPH (0.01)	--	--	--	--	--	--	--	--
	1/20/2003	22.35	72.31	SPH (sheen)	--	--	--	--	--	--	--	--
	5/28/2003	21.95	72.74	SPH (0.04)	--	--	--	--	--	--	--	--
	8/5/2003	23.03	71.66	SPH (0.04)	--	--	--	--	--	--	--	--
	11/10/2003	22.70	72.02	SPH (0.07)	--	--	--	--	--	--	--	--
	2/18/2004	22.37	72.32	SPH (0.04)	--	--	--	--	--	--	--	--
	5/27/2004	21.78	72.92	SPH (0.05)	--	--	--	--	--	--	--	--
	8/19/2004	24.13	70.57	SPH (0.05)	--	--	--	--	--	--	--	--
	12/27/2004	24.19	70.47	SPH (sheen)	--	--	--	--	--	--	--	--
	2/18/2005	23.24	71.46	SPH (0.05)	--	--	--	--	--	--	--	--
	5/11/2005	22.77	71.92	SPH (0.04)	--	--	--	--	--	--	--	--
	8/3/2005	23.17	71.51	SPH (0.02)	--	--	--	--	--	--	--	--
	11/30/2005	24.02	70.66	SPH (0.02)	--	--	--	--	--	--	--	--
	2/17/2006	23.87	70.81	SPH (0.02)	--	--	--	--	--	--	--	--
	5/12/2006	21.74	72.93	SPH (0.01)	--	--	--	--	--	--	--	--
	8/7/2006	21.66	73.01	SPH (0.01)	--	--	--	--	--	--	--	--
	11/21/2006	23.41	71.27	SPH (0.03)	--	--	--	--	--	--	--	--

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
>>MW-14	2/12/2007	23.45	71.23	SPH (0.03)	--	--	--	--	--	--	--	--
(continued)	5/11/2007	22.95	71.71	--	--	--	--	--	--	--	--	0.41
	8/16/2007	24.14	70.52	--	--	--	--	--	--	--	--	0.29
	11/26/2007	24.94	69.72	--	--	--	--	--	--	--	--	0.11
	5/29/2008	24.02	70.64	--	--	--	--	--	--	--	--	0.33
	8/22/2008	24.97	69.69	--	--	--	--	--	--	--	--	0.37
	2/19/2009	25.20	69.46	SPH (0.05)†	--	--	--	--	--	--	--	0.29
	8/21/2009	25.23	69.43	--	--	--	--	--	--	--	--	0.15
	2/24/2010	28.39	68.67	SPH (0.03)	--	--	--	--	--	--	--	---
	8/24/2010	26.31	68.38	SPH (0.04)	--	--	--	--	--	--	--	---
	12/20/2011	25.67	68.99	14,000	1,400	2,600	220	2,100	<300	--	--	0.73
	8/28/2012	23.57	71.09	44,000	2,800	5,700	260	7,900	<500	--	--	0.89
	6/21/2013	**21.54**	**73.12**	**36,000**	**1,100**	**4,000**	**550**	**6,400**	**<250**	**--**	**--**	**0.95**
MW-15	5/26/1998	21.87	72.89	130,000	30,000	38,000	2,500	12,600	<1000	--	ND	--
94.76	7/1/1999	22.25	72.51	SPH	--	--	--	--	--	--	--	--
	9/21/1999	24.12	70.64	SPH	--	--	--	--	--	--	--	--
	2/9/2000	24.42	70.34	180,000	32,000	37,000	2,800	14,000	<200	--	<0.5	--
	5/31/2000	22.40	72.36	SPH	--	--	--	--	--	--	--	--
	8/8/2000	23.17	71.59	SPH	--	--	--	--	--	--	--	--
	11/14/2000	24.15	70.61	SPH	--	--	--	--	--	--	--	--
	3/1/2001	23.99	70.77	SPH	--	--	--	--	--	--	--	--
	5/7/2001	23.50	71.26	SPH (sheen)	--	--	--	--	--	--	--	--
	8/1/2001	23.62	71.14	SPH (sheen)	--	--	--	--	--	--	--	--
	11/5/2001	23.65	71.11	SPH (sheen)	--	--	--	--	--	--	--	--
	2/13/2002	23.09	71.67	68,000	9,300	8,500	760	2,600	<200	--	ND	0.59
	5/2/2002	23.59	71.17	SPH (sheen)	--	--	--	--	--	--	--	--
	8/4/2002	23.65	71.11	SPH (sheen)	--	--	--	--	--	--	--	--
	11/26/2002	24.59	70.17	SPH (sheen)	--	--	--	--	--	--	--	--
	1/20/2003	22.08	72.68	48,000	9,900	10,000	1,000	3,600	<1,200	--	ND	0.24
	5/28/2003	21.68	73.08	SPH (sheen)	--	--	--	--	--	--	--	--
	8/5/2003	24.05	70.71	SPH (sheen)	--	--	--	--	--	--	--	--
	11/10/2003	23.68	71.08	SPH (sheen)	--	--	--	--	--	--	--	--
	2/18/2004	23.51	71.25	25,000	5,200	3,600	390	1,100	<1,000	--	--	0.63
	5/27/2004	22.98	71.78	SPH (sheen)	--	--	--	--	--	--	--	--
	8/19/2004	25.31	69.45	SPH (sheen)	--	--	--	--	--	--	--	0.42
	12/27/2004	24.46	70.30	SPH (sheen)	--	--	--	--	--	--	--	--
	2/18/2005	23.27	71.57	SPH (0.10)	--	--	--	--	--	--	--	--
	5/11/2005	22.80	72.03	SPH (0.09)	--	--	--	--	--	--	--	--
	8/3/2005	23.29	71.48	SPH (0.01)	--	--	--	--	--	--	--	--
	11/30/2005	24.11	70.69	SPH (0.05)	--	--	--	--	--	--	--	--
	2/17/2006	23.91	70.87	SPH (0.03)	--	--	--	--	--	--	--	--
	5/12/2006	21.88	72.90	SPH (0.03)	--	--	--	--	--	--	--	--
	8/7/2006	22.05	72.72	SPH (0.01)	--	--	--	--	--	--	--	--
	11/21/2006	23.70	71.06	--	--	--	--	--	--	--	--	0.15
	2/12/2007	23.80	70.96	58,000	8,900	8,000	800	2,500	<1,000	99	<5′	0.22
	5/11/2007	23.28	71.48	--	--	--	--	--	--	--	--	0.49
	8/16/2007	24.38	70.38	--	--	--	--	--	--	--	--	0.41
	11/26/2007	25.30	69.46	--	--	--	--	--	--	--	--	0.27
	5/29/2008	24.32	70.44	--	--	--	--	--	--	--	--	0.47
	8/22/2008	25.24	69.52	--	--	--	--	--	--	--	--	2.49
	2/19/2009	25.59	69.17	SPH (0.08)†	--	--	--	--	--	--	--	0.53
	8/21/2009	25.61	69.15	--	--	--	--	--	--	--	--	0.47
	2/24/2010	28.51	66.28	SPH (0.04)	--	--	--	--	--	--	--	---
	8/24/2010	26.53	68.26	SPH (0.04)	--	--	--	--	--	--	--	---
	12/19/2011	26.18	68.58	36,000	4,000	4,100	770	4,600	<1,000	--	--	0.67
	8/28/2012	24.35	70.41	790	4.9	8.5	1.9	98	<5.0	--	--	1.96
	6/21/2013	**22.24**	**72.52**	**11,000**	**390**	**710**	**120**	**2,200**	**<50**	**--**	**--**	**1.12**
MW-16A	5/17/2007	25.12	--	1,700	3.1	4.1	21	25	<30	--	--	0.94
	8/16/2007	26.02	--	920	3.4	22	13	13	<5.0	--	--	0.62
	11/26/2007	26.16	--	870	2.0	16	6.9	10	<5.0	--	--	0.55
	5/29/2008	25.73	--	600	2.9	14	8.2	14	<5.0	--	--	0.48
	8/22/2008	26.11	--	1,300	9.2	45	29	100	<17	--	--	0.94
	2/19/2009	26.32	--	1,300	12	17	7.0	33	<10	<0.5	Chloroform: 1.0	0.88
	8/21/2009	26.28	--	1,500	20	73	50	230	<30	--	--	1.02
	2/24/2010	29.08	--	Insufficient water to sample			---	---	---	--	--	3.19
	8/24/2010	27.40	--	3,400	210	48	11	27	<10	--	--	2.78
	12/19/2011	29.20	--	SPH (Sheen)	--	--	--	--	--	--	--	--
	2/18/2012	26.93	--	49,000	100	270	370	5,900	<500	<5.0	ND	--
	8/27/2012	28.75	--	Insufficient water to sample								--

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
MW-16B	5/17/2007	28.98	--	110,000	11,000	3,300	1,300	7,700	<500	--	--	0.65
	8/16/2007	31.02	--	58,000	14,000	1,500	1,100	4,100	<1,000	--	--	0.66
	11/26/2007	30.00	--	76,000	14,000	1,900	1,200	2,700	<1,000	--	--	0.61
	5/29/2008	29.95	--	70,000	12,000	1,600	1,300	1,900	<500	--	--	0.51
	8/22/2008	32.02	--	39,000	9,700	480	870	1,600	<500	--	--	0.93
	2/19/2009	31.70	--	67,000	15,000	1,300	1,400	2,500	<500	1,100	ND	0.97
	8/21/2009	31.62	--	54,000	14,000	2,300	1,500	2,800	<1,000	--	--	1.05
	2/24/2010	35.05	--	65,000	15,000	3,500	1,500	3,900	<500	1,200	EDB: 33	1.08
	8/24/2010	33.36	--	58,000	15,000	3,800	1,500	3,700	<1,000	---	---	0.65
	12/20/2011	36.68	--	15,000	3,900	1,000	140	740	<170	---	---	0.73
	8/28/2012	28.10	--	16,000	3,900	1,200	350	930	<170	--	--	2.21
	6/21/2013	**25.99**	**--**	**5,400**	**1,600**	**350**	**56**	**170**	**<50**	**--**	**--**	**1.74**
MW-17A	4/12/2007	23.87	--	130,000	8,400	31,000	3,100	17,000	<4,000	--	--	--
	5/29/2008	24.05	--	180,000	11,000	24,000	1,600	9,600	<3,500	--	--	2.12
	8/22/2008	24.96	--	150,000	17,000	30,000	1,700	16,000	<2,700	--	--	0.94
	2/19/2009	25.29	--	150,000	5,600	26,000	1,900	12,000	<3,000	800	EDB: 410	0.97
	8/21/2009	25.37	--	130,000	12,000	21,000	1,600	12,000	<2,500	--	--	0.81
	2/24/2010	28.39	--	Insufficient water to sample			---	---	---	--	--	---
	8/24/2010	26.30	--	Insufficient water to sample			---	---	---	--	--	1.20
	12/20/2011	25.52	--	91,000	4,100	16,000	2,000	15,000	<1,500	--	--	0.32
	8/27/2012	23.43	--	19,000	530	1,300	96	4,400	<250	--	--	1.98
	6/21/2013	**21.55**	**--**	**20,000**	**1,300**	**1,500**	**73**	**3,400**	**<250**	**--**	**--**	**1.31**
MW-17B	4/12/2007	23.14	--	3,200	130	470	70	470	<200	--	--	--
	5/29/2008	24.30	--	53	<0.5	2.1	<0.5	3.3	<5.0	--	--	2.78
	8/22/2008	25.19	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.41
	2/19/2009	25.51	--	150	3.6	14	0.82	11	<15	0.81	TCM: 0.51	1.12
	8/21/2009	25.44	--	350	4.0	13	3.3	26	<5.0	--	--	1.15
	2/24/2010	28.53	--	54	1.5	4.8	0.51	4.0	<5.0	4.9	EDB: 0.89	1.02
	8/24/2010	26.48	--	<50	<0.5	1.5	<0.5	<0.5	<5.0	---	---	0.96
	12/19/2011	26.58	--	--	--	--	--	--	--	--	--	--
	8/27/2012	23.45	--	--	--	--	--	--	--	--	--	--
REMEDIATION WELLS												
AS-1A	4/11/2007	22.61	--	230,000	40,000	51,000	2,900	18,000	<2,400	--	--	--
AS-1B	4/11/2007	23.69	--	230,000	28,000	27,000	3,500	15,000	<2,400	--	--	--
AS-2A	4/16/2007	22.71	--	300,000	34,000	57,000	5,700	35,000	<5,000	--	--	--
AS-3A	4/12/2007	15.79	--	7,900	470	1,100	210	1,200	<350	--	--	--
AS-3B	4/12/2007	20.31	--	50,000	2,000	4,800	1,400	8,200	<900	--	--	--
AS-4A	4/16/2007	15.18	--	20,000	4,300	1,200	460	890	<500	--	--	--
RW-1	4/11/2007	23.37	--	61,000	7,100	12,000	970	4,300	<1,000	--	--	--
RW-2	4/16/2007	16.66	--	160,000	20,000	30,000	3,700	19,000	<2,400	--	--	--
	5/29/2008	17.66	--	140,000	11,000	16,000	2,100	8,700	<2,000	--	--	1.46
	8/22/2008	18.51	--	110,000	13,000	19,000	2,700	13,000	<1,800	--	--	0.95
	2/19/2009	18.87	--	SPH (0.08)†	--	--	--	--	--	--	--	0.79
	8/21/2009	18.89	--	SPH (0.31)†	--	--	--	--	--	--	--	0.71
	2/24/2010	25.05	--	SPH (0.04)	--	--	--	--	--	--	--	---
	8/24/2010	19.79	--	SPH (0.04)	--	--	--	--	--	--	--	---
	12/19/2011	19.71	--	77,000	11,000	11,000	1,400	12,000	<2,100	--	--	0.42
	8/27/2012	18.26	--	44,000	5,700	4,100	1,200	5,600	<900	--	--	2.06
	6/21/2013	**16.35**	**--**	**4,000**	**180**	**350**	**65**	**530**	**<50**	**--**	**--**	**1.81**
RW-3A	4/12/2007	15.40	--	81,000	7,900	16,000	1,800	8,400	<1,500	--	--	--
	12/19/2011	18.37	--	41,000	3,000	2,700	89	6,500	<750	--	--	0.43
	8/27/2012	17.11	--	23,000	1,200	2,600	310	4,800	<500	--	--	2.91
RW-3B	4/12/2007	24.06	--	5,100	340	330	37	400	<150	--	--	--
RW-4	4/11/2007	22.50	--	120,000	4,600	23,000	2,400	16,000	<2,500	--	--	--
	5/29/2008	23.72	--	92,000	4,800	15,000	1,900	14,000	<1,800	--	--	1.09
	8/22/2008	24.69	--	91,000	4,800	13,000	1,800	13,000	<1,600	--	--	0.94
	2/19/2009	24.98	--	120,000	7,700	19,000	2,300	13,000	<2,700	110	EDB: 240	0.76
	8/21/2009	25.15	--	59,000	4,100	9,300	370	7,300	<1,500	--	--	0.80
	2/24/2010	28.65	--	Insufficient water to sample			---	---	---	--	--	---
	8/24/2010	26.02	--	Insufficient water to sample			---	---	---	--	--	0.72
	12/20/2011	25.80	--	75,000	1,200	8,800	1,400	13,000	<1,000	--	--	0.62
	8/28/2012	23.02	--	15,000	370	1,700	280	1,400	<450	--	--	1.70

Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
RW-5	4/11/2007	22.37	--	110,000	7,100	13,000	2,000	9,800	<2,000	--	--	--
	12/20/2011	26.32	--	6,700	350	880	93	980	<120	--	--	0.63
	8/28/2012	22.81	--	14,000	940	2,100	140	1,900	<300	--	--	1.96
VE-1	4/11/2007	33.02	--	260,000	35,000	42,000	3,600	17,000	<4,000	--	--	--
	12/20/2011	33.38	--	90,000	9,700	18,000	1,400	14,000	<1,000	--	--	0.62
	8/27/2012	31.60	--	Unable to sample due to sludge present during purging								0.62
Grab Groundwater Sampling Data												
SB-1-40-GW	8/5/2008	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--
CPT-1****	10/6/1992	--	--	490	20	60	10	60	--	1	--	--
CPT-3	10/6/1992	--	--	50	<0.4	<0.4	3	3	--	<4	--	--
CPT-4	10/6/1992	--	--	1,100	60	50	80	15	--	110	--	--
CPT-5	10/6/1992	--	--	600,000	2,300	53,000	8,000	43,000	--	730	--	--
CPT-7	10/6/1992	--	--	1,700,000	40,000	120,000	25,000	120,000	--	2,900	--	--
CPT-9	10/7/1992	--	--	2,100,000	49,000	140,000	28,000	145,000	--	620	--	--
CPT-10	10/7/1992	--	--	190,000	13,000	16,000	3,900	18,000	--	1,400	--	--
CPT-11	10/7/1992	--	--	2,000	200	50	30	70	--	11	--	--
CPT-12	10/7/1992	--	--	130,000	4,100	10,000	2,600	10,000	--	9	--	--
CPT-13(MW-10)	10/7/1992	--	--	28,000	2,700	3,800	210	1,300	--	150	--	--
CPT-17 (B-12)	10/6/1992	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<1	ND	--
B (boring)	5/16/1998	--	--	140	37	0.64	6.6	1.7	<2	17		
C (boring)	5/16/1998	--	--	<50	0.72	<0.5	<0.5	<0.5	<2	210		
G (boring)	5/16/1998	--	--	590,000	15,000	25,000	2,100	10,800	<500	880		
AS-4B-50	3/1/2007	50.0	--	88	7.2	7.1	1.2	3.5	<5.0	--	--	--
RW-4	3/25/2007	--	--	5,700	94	590	120	950	<50	--	--	--

Abbreviations and Notes:

TOC Elev. (ft) = Top of casing elevation, surveyed to an arbitrary datum (measured in feet)

µg/L = micrograms per liter = parts per billion = ppb

-- = Not measured or not analyzed

ND = Not detected above laboratory reporting limit; see laboratory reports for individual reporting limits.

SPH = Separate-phase hydrocarbons encountered in well (value in parentheses is thickness in feet)

TVH = Total Volatile Hydrocarbons

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015C

Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8021B

MTBE = Methyl tertiary butyl ether by EPA Method 8021B

HVOCs = Halogenated volatile organic compounds by EPA Method 8010

1,2-DCA = 1,2 Dichloroethane by EPA Method 8010

DCB = 1, 3 Dichlorobenzene

DBCM = Dibromochloromethane

MCB = Chlorobenzene

TCM = Trichlorofluoromethane

EDB = 1,2-Dibromoethane

DO = Dissolved oxygen, measured in the field.

<*n* = Chemical not present at a concentration in excess of detection limit shown.

* = Suspect laboratory contamination contributing to test result.

** = Fuel fingerprint analysis indicates MTBE is not present in the free product sample collected from this well.

*** = Duplicate sample sent to a different chemical laboratory.

**** = CPT-2, 6, 8, 14, 15 and 16 were not sampled.

1 = Sample exhibits fuel pattern which does not resemble standard

2 = Lighter hydrocarbons than indicated standard

3 = Presence of this compound confirmed by second column, however, the confirmation concentration differed from the reported result by more than a factor of two.

4 = Detection may potentially be a false positive, to be checked during the next event.

5 = One or more of the following substances found: Acetone, 1,2-Dibromoethane, 1,3,5-Trimethylbenzene, 2-Chlorotoluene, 1,2,4-Trimethylbenzene, n-Butylbenzene, and Naphthalene. See laboratory results for details.

6 = Confirmed by GC/MS.

7 = Detection levels for 2-chloroethyl vinyl ether are twice the indicated detection level which is applicable to all other target HVOCs.

† = SPH thickness not used to calculate groundwater elevation because SPH not present in well until after beginning purge.

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
MW-1	10/5/1990	26.40	68.08	<500	--	--	--	--	--
94.48	3/1/1991	27.46	67.02	SPH	--	--	--	--	--
	10/12/1992	26.44	68.04	--	--	--	--	--	--
	11/24/1992	26.63	67.85	4,600	--	--	--	--	--
	4/5/1993	23.77	70.71	25,000	--	--	--	--	--
	7/21/1993	24.51	69.97	SPH	--	--	--	--	--
	11/9/1993	26.06	68.42	SPH	--	--	--	--	--
	8/30/1995	21.73	72.75	SPH	--	--	630	1,200	1
	12/4/1995	21.94	72.54	SPH	--	--	--	--	--
	5/2/1996	20.65	73.83	32,000	--	--	250	640	ND
	11/5/1996	24.29	70.19	--	--	--	--	--	--
	5/9/1997	22.79	71.69	28,000	--	--	280	650	2
	11/5/1997	25.06	69.42	28,000	--	--	720	1,500	ND
	2/9/1998	22.64	71.84	27,000	--	--	160	570	3
	5/1/1998	19.95	74.53	29,000	--	--	--	--	--
	5/27/1998	--	--	--	--	--	120	630	4
	11/3/1998	23.29	71.19	37,000	--	--	500	1,100	ND?
	3/24/1999	22.30	72.18	SPH	--	--	--	--	--
	7/1/1999	22.70	71.78	SPH	--	--	--	--	--
	9/21/1999	23.81	70.67	SPH	--	--	--	--	--
	2/9/2000	23.95	70.59	--	SPH	--	--	--	--
	5/31/2000	22.05	72.43	--	SPH	--	--	--	--
	11/14/2000	24.65	69.83	--	SPH	--	--	--	--
	3/1/2001	24.22	70.28	--	SPH	--	--	--	--
	5/7/2001	23.85	70.67	--	SPH	--	--	--	--
	8/1/2001	23.91	70.64	--	SPH	--	--	--	--
	11/5/2001	23.95	70.67	--	SPH	--	--	--	--
	2/13/2002	23.15	71.39	--	SPH (0.07)	--	--	--	--
	5/2/2002	23.91	70.60	--	SPH (0.04)	--	--	--	--
	8/4/2002	24.02	70.48	--	SPH (0.03)	--	--	--	--
	11/26/2002	24.47	70.05	--	SPH (0.05)	--	--	--	--
	1/20/2003	22.37	72.14	--	SPH (0.04)	--	--	--	--
	5/28/2003	21.77	72.73	--	SPH (0.02)	--	--	--	--
	8/5/2003	23.07	71.44	--	SPH (0.04)	--	--	--	--
	11/10/2003	22.53	71.97	--	SPH (0.03)	--	--	--	--
	2/18/2004	22.61	71.91	--	SPH (0.05)	--	--	--	--
	5/27/2004	22.08	72.44	--	SPH (0.05)	--	--	--	--
	8/19/2004	24.35	70.43	--	SPH (0.38)	--	--	--	--
	12/27/2004	24.62	70.21	--	SPH (0.44)	--	--	--	--
	2/18/2005	23.14	71.37	--	SPH (0.04)	--	--	--	--
	5/11/2005	22.71	71.79	--	SPH (0.02)	--	--	--	--
	8/3/2005	23.03	71.50	--	SPH (0.06)	--	--	--	--
	11/30/2005	23.98	70.52	--	SPH (0.03)	--	--	--	--
	2/17/2006	23.81	70.68	--	SPH (0.01)	--	--	--	--
	5/12/2006	21.75	72.75	--	SPH (0.02)	--	--	--	--
	8/7/2006	21.35	73.14	--	SPH (0.01)	--	--	--	--
	11/21/2006	23.38	71.13	--	SPH (0.04)	--	--	--	--
	2/12/2007	23.18	71.32	--	SPH (0.03)	--	--	--	--
	5/11/2007	22.68	71.80	--	--	--	--	--	--
	8/16/2007	23.74	70.74	--	--	--	--	--	--
	11/26/2007	24.98	69.50	--	--	--	--	--	--
	5/29/2008	23.83	70.65	--	--	--	--	--	--
	8/22/2008	25.50	69.54	--	SPH (0.70)	--	--	--	--
	2/19/2009	25.92	69.22	--	SPH (0.82)	--	--	--	--
	8/21/2009	25.98	69.12	--	SPH (0.77)	--	--	--	--
	2/24/2010	29.24	65.34	--	SPH (0.13)	--	--	--	--
	8/24/2010	26.84	68.14	--	SPH (0.63)	--	--	--	--
	12/20/2011	27.58	66.90	--	240,000	95,000	--	--	--
	8/28/2012	27.63	66.85	--	610,000	140,000	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
MW-2	3/1/1991	27.86	66.95	<50	--	--	--	--	--
94.81	11/24/1992	27.91	66.90	<50	--	--	--	--	--
	4/5/1993	25.95	68.86	870	--	--	--	--	--
	7/21/1993	25.59	69.22	<50	--	--	--	--	--
	11/10/1993	26.72	68.09	240	--	--	--	--	--
	8/30/1995	25.75	69.06	150	--	--	--	--	--
	5/3/1996	23.28	71.53	<50	--	--	--	--	--
	5/8/1997	24.58	70.23	<50	--	--	--	--	--
	4/29/1998	22.18	72.63	<47	--	--	--	--	--
MW-3	3/1/1991	23.17	66.91	<50	--	--	--	--	--
90.08	11/25/1992	23.01	67.07	160	--	--	--	--	--
	4/5/1993	22.11	67.97	<50	--	--	--	--	--
	7/21/1993	23.93	66.15	<50	--	--	--	--	--
	11/10/1993	23.14	66.94	<50	--	--	--	--	--
	8/30/1995	20.61	69.47	<50	--	--	--	--	--
	5/3/1996	18.43	71.65	<50	--	--	--	--	--
	5/8/1997	19.77	70.31	<50	--	--	--	--	--
	4/29/1998	17.92	72.16	<47	--	--	--	--	--
MW-4	3/1/1991	23.79	65.05	<500	--	--	--	--	--
88.84	10/12/1992	22.48	66.36	--	--	--	--	--	--
	11/24/1992	22.60	66.24	1,600	--	--	--	--	--
	4/2/1993	20.11	68.73	SPH	--	--	--	--	--
	7/21/1993	20.48	68.36	SPH	--	--	--	--	--
	11/9/1993	21.71	67.13	SPH	--	--	--	--	--
	8/30/1995	19.90	68.94	SPH	--	--	--	--	--
	12/1/1995	19.40	69.44	SPH	--	--	--	--	--
	5/2/1996	17.50	71.34	9,200	--	--	--	--	--
	11/4/1996	20.13	68.71	4,700	--	--	--	--	--
	5/8/1997	18.63	70.21	5,100	--	--	--	--	--
	11/5/1997	20.19	68.65	3,700	--	--	--	--	--
	2/9/1998	18.28	70.56	4,800	--	--	--	--	--
	5/1/1998	16.11	72.73	5,000	--	--	--	--	--
	8/4/1998	17.54	71.30	3,500	--	--	--	--	--
	11/2/1998	19.21	69.63	7,200	--	--	--	--	--
	3/26/1999	17.51	71.33	14,000	--	--	--	--	--
	7/1/1999	18.80	70.04	17,000	--	--	370	860	ND
	9/21/1999	19.85	68.99	14,000	--	--	360	820	ND
	2/9/2000	19.76	69.08	--	12,000	1,000	290	700	ND
	5/31/2000	17.90	70.94	--	14,000 **	<500	--	--	--
	11/14/2000	19.63	69.21	--	8,000	290	--	--	--
	3/1/2001	19.68	69.16	--	57,000	2,800	210	510	ND
	5/7/2001	18.60	70.24	--	56,000	3,600	--	--	--
	8/1/2001	18.73	70.11	--	42,000	6,700	--	--	--
	11/5/2001	18.97	69.87	--	49,000	14,000	--	--	--
	2/13/2002	18.59	70.25	--	140,000	11,000	620	1000	--
	5/2/2002	18.77	70.07	--	68,000	<25,000	--	--	--
	8/4/2002	18.95	69.89	--	58,000	<25,000	--	--	--
	11/26/2002	20.83	68.01	--	7,100	<250	--	--	--
	1/20/2003	16.90	71.94	--	29,000	<2500	--	--	--
	5/28/2003	15.25	73.59	--	12,000	300	--	--	--
	8/5/2003	17.05	71.79	--	6,600	<250	--	--	--
	11/10/2003	16.60	72.24	--	15,000	--	--	--	--
	2/18/2004	16.59	72.25	--	16,000	--	--	--	--
	5/27/2004	15.97	72.87	--	23,000	<2,500	--	--	--
	8/19/2004	18.11	70.73	--	19,000	--	--	--	--
	12/27/2004	19.53	69.31	--	8,700	<2,500	--	--	--
	2/18/2005	18.40	70.44	--	13,000	<250	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-4	5/11/2005	17.93	70.91	--	16,000	<1,200	--	--	--
(continued)	8/3/2005	18.14	70.70	--	20,000	<5,000	--	--	--
	11/30/2005	19.70	69.14	--	19,000	<2,500	--	--	--
	2/17/2006	17.63	71.21	--	10,000	340	--	--	--
	5/12/2006	15.53	73.31	--	7,500	<1200	--	--	--
	8/7/2006	17.75	71.09	--	17,000	440	--	--	--
	11/21/2006	19.14	69.70	--	21,000	540	--	--	--
	2/12/2007	18.98	69.86	--	16,000	460	--	--	--
	5/11/2007	18.27	70.57	--	23,000	--	--	--	--
	8/16/2007	19.54	69.30	--	30,000	<2,500	--	--	--
	11/26/2007	20.47	68.37	--	14,000	270	--	--	--
	5/29/2008	19.60	69.24	--	19,000	<2,500	--	--	--
	8/22/2008	20.30	68.54	--	13,000	<1,200	--	--	--
	2/19/2009	20.58	68.26	--	73,000	<2,500	--	--	--
	8/21/2009	20.63	68.21	--	45,000	<5,000	--	--	--
	2/24/2010	Dry	---	--	---	---	--	--	--
	8/24/2010	21.60	67.24	No sample, SPH encountered during purging					
	12/19/2011	21.46	67.38	--	220,000	<5,000	--	--	--
	8/27/2012	19.35	69.49	--	21,000	1,900	--	--	--
MW-5	3/15/1991	26.31	58.53	<50	--	--	--	--	--
84.84	11/10/1992	26.83	58.01	50	--	--	--	--	--
	4/2/1993	26.62	58.22	<50	--	--	--	--	--
	7/21/1993	26.60	58.24	190	--	--	--	--	--
	11/9/1993	27.24	57.60	170	--	--	--	--	--
	8/30/1995	27.46	57.38	180	--	--	--	--	--
	5/3/1996	26.02	58.82	<50	--	--	--	--	--
	5/8/1997	26.76	58.08	<50	--	--	--	--	--
	4/29/1998	26.55	58.29	<47	--	--	--	--	--
MW-6	3/15/1991	25.82	59.80	<50	--	--	--	--	--
85.62	10/12/1992	25.02	60.60	--	--	--	--	--	--
	12/1/1992	28.87	56.75	SPH	--	--	--	--	--
	4/2/1993	26.96	58.66	SPH	--	--	--	--	--
	7/21/1993	26.17	59.45	SPH	--	--	--	--	--
	11/9/1993	27.51	58.11	SPH	--	--	--	--	--
	8/30/1995	28.00	57.62	SPH	--	--	--	--	--
	12/1/1995	27.58	58.04	SPH	--	--	--	--	--
	5/3/1996	26.83	58.79	9,000	--	--	--	--	--
86.94	5/9/1997	26.54	60.40	53,000	--	--	--	--	--
	11/5/1997	26.16	60.78	65,000	--	--	--	--	--
85.82	5/1/1998	22.96	62.86	25,000	--	--	--	--	--
	11/3/1998	24.35	61.47	30,000	--	--	--	--	--
	3/26/1999	23.82	62.00	SPH	--	--	--	--	--
	7/1/1999	24.45	61.37	SPH	--	--	--	--	--
	9/21/1999	24.58	61.24	SPH	--	--	--	--	--
	2/9/2000	24.93	61.24	--	SPH	--	--	--	--
	5/31/2000	23.47	62.41	--	SPH	--	--	--	--
	11/14/2000	24.61	61.21	--	SPH	--	--	--	--
	3/1/2001	23.97	61.85	--	SPH	--	--	--	--
	5/7/2001	23.17	62.71	--	SPH	--	--	--	--
	8/1/2001	obstruction in well		--	--	--	--	--	--
	11/5/2001	obstruction in well		--	--	--	--	--	--
	2/13/2002	obstruction in well		--	--	--	--	--	--
	5/2/2002	23.25	62.41	--	SPH (0.05)	--	--	--	--
	8/4/2002	23.55	62.29	--	SPH (0.03)	--	--	--	--
	11/26/2002	24.22	61.62	--	SPH (0.03)	--	--	--	--
	1/20/2003	22.49	63.36	--	SPH (0.04)	--	--	--	--
	5/28/2003	21.92	63.93	--	SPH (0.04)	--	--	--	--
	8/5/2003	23.98	61.87	--	SPH (0.04)	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-6	11/10/2003	23.50	62.40	--	SPH (0.10)	--	--	--	--
(continued)	2/18/2004	22.21	63.64	--	SPH (0.04)	--	--	--	--
	5/27/2004	22.01	63.85	--	SPH (0.05)	--	--	--	--
	8/19/2004	24.16	61.68	--	SPH (0.03)	--	--	--	--
	12/27/2004	24.69	61.13	--	SPH (sheen)	--	--	--	--
	2/18/2005	23.55	62.33	--	SPH (0.08)	--	--	--	--
	5/11/2005	22.90	62.97	--	SPH (0.06)	--	--	--	--
	8/3/2005	23.68	62.19	--	SPH (0.06)	--	--	--	--
	11/30/2005	24.17	61.67	--	SPH (0.02)	--	--	--	--
	2/17/2006	23.89	61.95	--	SPH (0.03)	--	--	--	--
	5/12/2006	22.66	63.18	--	SPH (0.03)	--	--	--	--
	8/7/2006	22.83	63.01	--	SPH (0.02)	--	--	--	--
	11/21/2006	23.92	61.92	--	SPH (0.02)	--	--	--	--
	2/12/2007	23.97	61.87	--	SPH (0.02)	--	--	--	--
	5/11/2007	23.54	62.28	--	--	--	--	--	--
	8/16/2007	24.18	61.64	--	--	--	--	--	--
	11/26/2007	Unable to gauge or sample - vehicle parked over well							
	5/29/2008	24.29	61.53	--	--	--	--	--	--
	8/22/2008	24.80	61.02	--	--	--	--	--	--
	2/19/2009	24.96	60.86	--	SPH (0.07)†	--	--	--	--
	8/21/2009	25.10	60.74	--	SPH (0.03)	--	--	--	--
	2/24/2010	26.71	59.13	--	SPH (0.03)	--	--	--	--
	8/24/2010	26.13	59.73	--	SPH (0.05)	--	--	--	--
	12/19/2011	25.19	60.63	Insufficient water to sample					
	8/27/2012	24.16	61.66	--	--	--	--	--	--
MW-7	3/15/1991	21.63	63.78	<50	--	--	--	--	--
85.41	11/24/1992	21.52	63.89	<50	--	--	--	--	--
	4/2/1993	20.08	65.33	<50	--	--	--	--	--
	7/21/1993	19.59	65.82	150	--	--	--	--	--
	11/9/1993	20.65	64.76	200	--	--	--	--	--
	8/30/1995	18.78	66.63	170	--	--	--	--	--
	12/1/1995	19.47	65.94	<50	--	--	--	--	--
	5/2/1996	17.15	68.26	<50	--	--	--	--	--
	8/8/1996	18.48	66.93	<50	--	--	--	--	--
	11/4/1996	18.69	66.72	<50	--	--	--	--	--
	2/6/1997	17.44	67.97	<50	--	--	--	--	--
	5/8/1997	17.72	67.69	<50	--	--	--	--	--
	8/7/1997	18.49	66.92	<50	--	--	--	--	--
	11/5/1997	18.86	66.55	<50	--	--	--	--	--
	2/9/1998	17.56	67.85	<50	--	--	--	--	--
	4/29/1998	16.23	69.18	<47	--	--	--	--	--
	8/4/1998	17.24	68.17	<50	--	--	--	--	--
	11/2/1998	17.91	67.50	<50	--	--	--	--	--
	3/26/1999	16.42	68.99	<50	--	--	--	--	--
	7/1/1999	17.90	67.51	<50	--	--	<10	<10	ND
	9/21/1999	18.91	66.50	<48	--	--	<9.5	<9.5	ND
	2/9/2000	16.74	68.67	--	<50	<250	<10	<10	ND
	5/31/2000	16.21	69.20	--	<50	<500	--	--	--
	11/14/2000	17.00	68.41	--	< 50	< 250	--	--	--
	3/1/2001	17.09	68.32	--	<50	<250	<10	<10	ND
	5/7/2001	17.19	68.22	--	<50	<250	--	--	--
	8/1/2001	17.25	68.16	--	<50	<250	--	--	--
	11/5/2001	17.35	68.06	--	<50	<250	--	--	--
	2/13/2002	17.50	67.91	--	<50	<250	--	--	--
	5/2/2002	17.30	68.11	--	<50	<250	--	--	--
	8/4/2002	17.58	67.83	--	<50	<250	--	--	--
	11/26/2002	18.35	67.06	--	<50	<250	--	--	--
	1/20/2003	15.84	69.57	--	83	<250	--	--	--
	5/28/2003	15.19	70.22	--	<50	<250	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-7	8/5/2003	17.00	68.41	--	<50	<250	--	--	--
(continued)	11/10/2003	16.54	68.87	--	<50	--	--	--	--
	2/18/2004	16.47	68.94	--	<50	--	--	--	--
	5/27/2004	15.93	69.48	--	<50	<250	--	--	--
	8/19/2004	18.05	67.36	--	<50	--	--	--	--
	12/27/2004	17.35	68.06	--	<50	<250	--	--	--
	2/18/2005	16.23	69.18	--	<50	<250	--	--	--
	5/11/2005	15.79	69.62	--	<50	<250	--	--	--
	8/3/2005	17.52	67.89	--	<50	<250	--	--	--
	11/30/2005	19.57	65.84	--	<50	<250	--	--	--
	2/17/2006	16.82	68.59	--	<50	<250	--	--	--
	5/12/2006	15.86	69.55	--	<50	<250	--	--	--
	8/7/2006	17.52	67.89	--	<50	<250	--	--	--
	11/21/2006	18.67	66.74	--	<50	<250	--	--	--
	2/12/2007	18.20	67.21	--	<50	<250	--	--	--
	5/11/2007	17.73	67.68	--	<50	--	--	--	--
	8/16/2007	18.86	66.55	--	<50	<250	--	--	--
	5/29/2008	18.58	66.83	--	<50	<250	--	--	--
	8/22/2008	19.35	66.06	--	<50	<250	--	--	--
	2/19/2009	18.30	67.11	--	<50	<250	--	--	--
	8/21/2009	18.50	66.91	--	<50	<250	--	--	--
	2/24/2010	19.27	66.14	--	<50	<250	--	--	--
	8/24/2010	20.68	64.73	--	<50	<250	--	--	--
	12/19/2011	18.88	66.53	--	--	--	--	--	--
	8/27/2012	17.85	67.56	--	--	--	--	--	--
MW-8	10/12/1992	27.70	57.80	--	--	--	--	--	--
85.50	11/25/1992	27.62	57.88	170	--	--	--	--	--
	4/8/1993	26.64	58.86	100	--	--	--	--	--
	7/21/1993	26.60	58.90	90	--	--	--	--	--
	11/11/1993	27.18	58.32	170	--	--	--	--	--
	8/30/1995	26.35	59.15	240	--	--	--	--	--
	12/4/1995	26.72	58.78	<50	--	--	--	--	--
	5/3/1996	25.47	60.03	94	--	--	--	--	--
	8/8/1996	26.41	59.09	250	--	--	--	--	--
	11/5/1996	26.77	58.73	<50	--	--	--	--	--
	2/6/1997	25.84	59.66	130	--	--	--	--	--
	5/9/1997	26.39	59.11	120	--	--	--	--	--
	8/7/1997	26.72	58.78	150	--	--	--	--	--
	11/5/1997	26.82	58.68	110	--	--	--	--	--
	2/9/1998	25.57	59.93	75	--	--	--	--	--
	5/1/1998	25.64	59.86	210	--	--	--	--	--
	8/5/1998	25.96	59.54	260	--	--	--	--	--
	11/3/1998	26.27	59.23	190	--	--	--	--	--
	3/31/1999	20.93	64.57	200	--	--	--	--	--
	7/1/1999	26.59	58.91	170	--	--	<9.6	<9.6	ND
	9/21/1999	26.89	58.61	420	--	--	<9.4	<9.4	ND
	2/9/2000	26.60	58.90	--	120	280	<10	<10	ND
	5/31/2000	26.16	59.34	--	160 **	<500	--	--	--
	11/14/2000	26.60	58.90	--	150	< 250	--	--	--
	3/1/2001	26.41	59.09	--	54	<250	<10	<10	Phenol: 25
	5/7/2001	26.55	58.95	--	<50	<250	--	--	--
	8/1/2001	26.71	58.79	--	58	<250	--	--	--
	11/5/2001	26.67	58.83	--	84	<250	--	--	--
	2/13/2002	26.15	59.35	--	83	<250	--	--	--
	5/2/2002	26.63	58.87	--	<50	<250	--	--	--
	8/4/2002	26.80	58.70	--	260	<250	--	--	--
	11/26/2002	27.50	58.00	--	<50	<250	--	--	--
	1/20/2003	24.93	60.57	--	63	<250	--	--	--
	5/28/2003	24.28	61.22	--	<50	<250	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-8	8/5/2003	26.51	58.99	--	2,700	380	--	--	--
(continued)	11/10/2003	26.04	59.46	--	<50	--	--	--	--
	2/18/2004	25.97	59.53	--	<50	--	--	--	--
	5/27/2004	25.31	60.19	--	<50	<250	--	--	--
	8/19/2004	27.55	57.95	--	<50	--	--	--	--
	12/27/2004	26.50	59.00	--	<50	<250	--	--	--
	2/18/2005	26.00	59.50	--	<50	<250	--	--	--
	5/11/2005	25.47	60.03	--	<50	<250	--	--	--
	8/3/2005	26.31	59.19	--	53	<250	--	--	--
	11/30/2005	26.51	58.99	--	<50	<250	--	--	--
	2/17/2006	26.11	59.39	--	<50	<250	--	--	--
	5/12/2006	25.38	60.12	--	<50	<250	--	--	--
	8/7/2006	26.10	59.40	--	<50	<250	--	--	--
	11/21/2006	26.43	59.07	--	<50	<250	--	--	--
	2/12/2007	26.29	59.21	--	120	<250	--	--	--
	5/11/2007	26.23	59.27	--	<50	--	--	--	--
	8/16/2007	26.81	58.69	--	56	<250	--	--	--
	11/26/2007	26.99	58.51	--	<50	<250	--	--	--
	5/29/2008	26.70	58.80	--	<50	<250	--	--	--
	8/22/2008	27.03	58.47	--	<50	<250	--	--	--
	2/19/2009	26.74	58.76	--	<50	<250	--	--	--
	8/21/2009	26.72	58.78	--	<50	<250	--	--	--
	2/24/2010	29.09	56.41	--	<50	<250	--	--	--
	8/24/2010	28.35	57.15	--	<50	<250	--	--	--
	12/19/2011	27.52	57.98	--	--	--	--	--	--
	8/27/2012	26.70	58.80	--	--	--	--	--	--
MW-9	11/24/1992	23.51	66.86	320	--	--	--	--	--
90.37	4/5/1993	21.14	69.23	920	--	--	--	--	--
	7/21/1993	21.54	68.83	450	--	--	--	--	--
	11/10/1993	27.53	62.84	450	--	--	--	--	--
	8/30/1995	19.59	70.78	680	--	--	--	--	--
	12/4/1995	20.65	69.72	--	--	--	--	--	--
	5/2/1996	18.63	71.74	710	--	--	--	--	--
	11/5/1996	20.69	69.68	420	--	--	--	--	--
	5/9/1997	19.96	70.41	490	--	--	--	--	--
	8/8/1997	20.84	69.53	480	--	--	--	--	--
	11/5/1997	21.55	68.82	370	--	--	--	--	--
	2/9/1998	20.21	70.16	410	--	--	--	--	--
	5/1/1998	19.27	71.10	450	--	--	--	--	--
	8/5/1998	19.35	71.02	630	--	--	--	--	--
	11/2/1998	20.43	69.94	500	--	--	--	--	--
	3/25/1999	18.46	71.91	630	--	--	--	--	--
	7/1/1999	19.95	70.42	570	--	--	<9.5	<9.5	ND
	9/21/1999	21.15	69.22	770	--	--	<9.4	<9.4	ND
	2/9/2000	21.08	69.29	--	320	<250	<10	<10	ND
	5/31/2000	19.11	71.26	--	390 **	<500	--	--	--
	11/14/2000	20.90	69.47	--	160	< 250	--	--	--
	3/1/2001	20.45	69.92	--	220	<250	<10	<10	ND
	5/7/2001	19.83	70.54	--	290	<250	--	--	--
	8/1/2001	20.02	70.35	--	460	<250	--	--	--
	11/5/2001	19.85	70.52	--	230	<250	--	--	--
	2/13/2002	19.80	70.57	--	210	<250	--	--	--
	5/2/2002	19.93	70.44	--	250	<250	--	--	--
	8/4/2002	20.20	70.17	--	300	<250	--	--	--
	11/26/2002	20.37	70.00	--	270	<250	--	--	--
	1/20/2003	17.93	72.44	--	350	<250	--	--	--
	5/28/2003	17.25	73.12	--	91	<250	--	--	--
	8/5/2003	19.03	71.34	--	210	<250	--	--	--
	11/10/2003	18.65	71.72	--	250	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-9	2/18/2004	18.41	71.96	--	250	--	--	--	--
(continued)	5/27/2004	17.89	72.48	--	160	<250	--	--	--
	8/19/2004	20.14	70.23	--	160	--	--	--	--
	12/27/2004	21.65	68.72	--	91	<250	--	--	--
	2/18/2005	19.97	70.40	--	120	<250	--	--	--
	5/11/2005	19.41	70.96	--	76	<250	--	--	--
	8/3/2005	19.35	71.02	--	110	<250	--	--	--
	11/30/2005	20.96	69.41	--	210	<250	--	--	--
	2/17/2006	19.13	71.24	--	120	<250	--	--	--
	5/12/2006	17.70	72.67	--	88	<250	--	--	--
	8/7/2006	18.82	71.55	--	130	<250	--	--	--
	11/21/2006	20.10	70.27	--	110	<250	--	--	--
	2/12/2007	20.48	69.89	--	74	<250	--	--	--
	5/11/2007	19.55	70.82	--	57	--	--	--	--
	8/16/2007	20.83	69.54	--	82	<250	--	--	--
	11/26/2007	21.79	68.58	--	81	<250	--	--	--
	5/29/2008	20.70	69.67	--	170	<250	--	--	--
	8/22/2008	21.61	68.76	--	190	<250	--	--	--
	2/19/2009	21.91	68.46	--	58	<250	--	--	--
	8/21/2009	21.97	68.40	--	<50	<250	--	--	--
	2/24/2010	25.65	64.72	--	<50	<250	--	--	--
	8/24/2010	22.92	67.45	--	91	<250	--	--	--
	12/19/2011	22.63	67.74	--	--	--	--	--	--
	8/27/2012	20.74	69.63	--	--	--	--	--	--
MW-10	10/12/1992	21.55	67.05	--	--	--	--	--	--
88.60	11/24/1992	21.86	66.74	1,300	--	--	--	--	--
	4/5/1993	19.14	69.46	5,000	--	--	--	--	--
	7/21/1993	19.79	68.81	20,000	--	--	--	--	--
	8/30/1995	17.99	70.61	5,900	--	--	--	--	--
	5/3/1996	17.04	71.56	5,600	--	--	--	--	--
	5/9/1997	18.36	70.24	2,500	--	--	--	--	--
	5/1/1998	15.84	72.76	2,000	--	--	--	--	--
MW-11	11/24/1992	33.65	68.41	220	--	--	--	--	--
102.06	12/8/92*	33.37	68.69	140	--	--	--	--	--
	12/8/1992	33.37	68.69	120	--	--	--	--	--
	4/5/1993	31.03	71.03	<50	--	--	--	--	--
	7/21/1993	31.90	70.16	150	--	--	--	--	--
	11/9/1993	32.60	69.46	60	--	--	--	--	--
	8/30/1995	28.92	73.14	240	--	--	--	--	--
	5/3/1996	28.00	74.06	<50	--	--	--	--	--
	5/8/1997	29.93	72.13	<50	--	--	--	--	--
	4/29/1998	27.22	74.84	<47	--	--	--	--	--
MW-13	11/24/1992	26.05	58.01	3,600	--	--	--	--	--
84.06	12/8/92*	25.08	58.98	210	--	--	--	--	--
	12/8/1992	25.08	58.98	100	--	--	--	--	--
	4/5/1993	24.64	59.42	<50	--	--	--	--	--
	7/21/1993	24.29	59.77	<50	--	--	--	--	--
	11/9/1993	24.23	59.83	160	--	--	--	--	--
	8/30/1995	23.30	60.76	<50	--	--	--	--	--
	12/1/1995	23.80	60.26	<50	--	--	--	--	--
	5/3/1996	23.19	60.87	<50	--	--	--	--	--
	8/8/1996	23.44	60.62	<50	--	--	--	--	--
	11/5/1996	24.04	60.02	<50	--	--	--	--	--
	2/6/1997	23.24	60.82	<50	--	--	--	--	--
	5/8/1997	23.46	60.60	<50	--	--	--	--	--
	8/8/1997	23.92	60.14	<50	--	--	--	--	--
	11/5/1997	24.27	59.79	<50	--	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-13	2/9/1998	22.89	61.17	<50	--	--	--	--	--
(continued)	4/29/1998	22.27	61.79	<47	--	--	--	--	--
	8/4/1998	22.75	61.31	78	--	--	--	--	--
	11/3/1998	23.90	60.16	<50	--	--	--	--	--
	3/31/1999	23.11	60.95	<48	--	--	--	--	--
	7/1/1999	23.40	60.66	100	--	--	<9.6	<9.6	ND
	9/21/1999	21.91	62.15	<48	--	--	<9.4	<9.4	ND
	2/9/2000	23.84	60.22	--	<50	<250	<10	<10	ND
	5/31/2000	22.97	61.09	--	<50	<500	--	--	--
	11/14/2000	24.00	60.06	--	65	< 250	--	--	--
	3/1/2001	23.93	60.13	--	<50	<250	<10	<10	ND
	5/7/2001	23.93	60.13	--	<50	<250	--	--	--
	8/1/2001	24.10	59.96	--	<50	<250	--	--	--
	11/5/2001	24.02	60.04	--	350	610	--	--	--
	2/13/2002	23.70	60.36	--	<50	<250	--	--	--
	5/2/2002	23.97	60.09	--	<50	<250	--	--	--
	8/4/2002	24.19	59.87	--	810	310	--	--	--
	11/26/2002	24.78	59.28	--	66	<250	--	--	--
	1/20/2003	22.10	61.96	--	<50	<250	--	--	--
	5/28/2003	17.25	66.81	--	<50	<250	--	--	--
	8/5/2003	23.99	60.07	--	<50	<250	--	--	--
	11/10/2003	23.47	60.59	--	<50	--	--	--	--
	2/18/2004	22.58	61.48	--	<50	--	--	--	--
	5/27/2004	21.95	62.11	--	<50	<250	--	--	--
	8/19/2004	24.29	59.77	--	<50	--	--	--	--
	12/27/2004	23.70	60.36	--	<50	<250	--	--	--
	2/18/2005	23.15	60.91	--	<50	<250	--	--	--
	5/11/2005	22.68	61.38	--	<50	<250	--	--	--
	8/3/2005	23.04	61.02	--	56	<250	--	--	--
	11/30/2005	23.65	60.41	--	<50	<250	--	--	--
	2/17/2006	23.07	60.99	--	<50	<250	--	--	--
	5/12/2006	22.02	62.04	--	<50	<250	--	--	--
	8/7/2006	22.61	61.45	--	<50	<250	--	--	--
	11/21/2006	23.11	60.95	--	<50	<250	--	--	--
	2/12/2007	23.27	60.79	--	<50	<250	--	--	--
	5/11/2007	23.07	60.99	--	<50	--	--	--	--
	8/16/2007	23.67	60.39	--	<50	<250	--	--	--
	11/26/2007	24.13	59.93	--	<50	<250	--	--	--
	5/29/2008	23.81	60.25	--	<50	<250	--	--	--
	8/22/2008	24.13	59.93	--	<50	<250	--	--	--
	2/19/2009	23.97	60.09	--	<50	<250	--	--	--
	8/21/2009	23.75	60.31	--	<50	<250	--	--	--
	2/24/2010	26.64	57.42	--	<50	<250	--	--	--
	8/24/2010	25.43	58.63	--	<50	<250	--	--	--
	12/19/2011	24.67	59.41	--	--	--	--	--	--
	8/27/2012	23.86	60.22	--	--	--	--	--	--
MW-14	5/26/1998	21.67	72.99	7,700	--	--	--	--	--
94.66	7/1/1999	22.95	71.71	SPH	--	--	--	--	--
	9/21/1999	24.26	70.40	SPH	--	--	--	--	--
	2/9/2000	24.13	70.53	--	14,000	1,500	290	600	ND
	5/31/2000	22.09	72.57	--	SPH	--	--	--	--
	11/14/2000	23.90	70.76	--	SPH	--	--	--	--
	3/1/2001	23.97	70.69	--	SPH	--	--	--	--
	5/7/2001	23.45	71.23	--	SPH	--	--	--	--
	8/1/2001	23.57	71.12	--	SPH	--	--	--	--
	11/5/2001	23.50	71.18	--	SPH	--	--	--	--
	2/13/2002	22.99	71.70	--	SPH (0.04)	--	--	--	--
	5/2/2002	23.51	71.17	--	SPH (0.02)	--	--	--	--
	8/4/2002	23.61	71.06	--	SPH (0.01)	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-14	11/26/2002	24.35	70.31	--	SPH (sheen)	--	--	--	--
(continued)	1/20/2003	22.35	72.31	--	SPH (sheen)	--	--	--	--
	5/28/2003	21.95	72.74	--	SPH (0.04)	--	--	--	--
	8/5/2003	23.03	71.66	--	SPH (0.04)	--	--	--	--
	11/10/2003	22.70	72.02	--	SPH (0.07)	--	--	--	--
	2/18/2004	22.37	72.32	--	SPH (0.04)	--	--	--	--
	5/27/2004	21.78	72.92	--	SPH (0.05)	--	--	--	--
	8/19/2004	24.13	70.57	--	SPH (0.05)	--	--	--	--
	12/27/2004	24.19	70.47	--	SPH (sheen)	--	--	--	--
	2/18/2005	23.24	71.46	--	SPH (0.05)	--	--	--	--
	5/11/2005	22.77	71.92	--	SPH (0.04)	--	--	--	--
	8/3/2005	23.17	71.51	--	SPH (0.02)	--	--	--	--
	11/30/2005	24.02	70.66	--	SPH (0.02)	--	--	--	--
	2/17/2006	23.87	70.81	--	SPH (0.02)	--	--	--	--
	5/12/2006	21.74	72.93	--	SPH (0.01)	--	--	--	--
	8/7/2006	21.66	73.01	--	SPH (0.01)	--	--	--	--
	11/21/2006	23.41	71.27	--	SPH (0.03)	--	--	--	--
	2/12/2007	23.45	71.23	--	SPH (0.03)	--	--	--	--
	5/11/2007	22.95	71.71	--	--	--	--	--	--
	8/16/2007	24.14	70.52	--	--	--	--	--	--
	11/26/2007	24.94	69.72	--	--	--	--	--	--
	5/29/2008	24.02	70.64	--	--	--	--	--	--
	8/22/2008	24.97	69.69	--	--	--	--	--	--
	2/19/2009	25.20	69.46	--	SPH (0.05)†	--	--	--	--
	2/19/2009	25.20	69.46	--	SPH (0.05)†	--	--	--	--
	8/21/2009	25.23	69.43	--	--	--	--	--	--
	2/24/2010	28.39	66.29	--	SPH (0.03)	--	--	--	--
	8/24/2010	26.31	68.38	--	SPH (0.04)	--	--	--	--
	12/20/2011	25.67	68.99	--	2,800	1,800	--	--	--
	8/28/2012	23.57	71.09	--	6,500	<250	--	--	--
MW-15	5/26/1998	21.87	72.89	1,700	--	--	--	--	--
94.76	7/1/1999	22.25	72.51	SPH	--	--	--	--	--
	9/21/1999	24.12	70.64	SPH	--	--	--	--	--
	2/9/2000	24.42	70.34	--	4,000	1,200	50	270	ND
	5/31/2000	22.40	72.36	--	SPH	--	--	--	--
	11/14/2000	24.15	70.61	--	SPH	--	--	--	--
	3/1/2001	23.99	70.77	--	SPH	--	--	--	--
	5/7/2001	23.50	71.26	--	SPH	--	--	--	--
	8/1/2001	23.62	71.14	--	SPH	--	--	--	--
	11/5/2001	23.65	71.11	--	SPH (sheen)	--	--	--	--
	2/13/2002	23.09	71.67	--	3,100	<250	17	68	5
	5/2/2002	23.59	71.17	--	SPH (sheen)	--	--	--	--
	8/4/2002	23.65	71.11	--	SPH (sheen)	--	--	--	--
	11/26/2002	24.59	70.17	--	SPH (sheen)	--	--	--	--
	1/20/2003	22.08	72.68	--	3,700	340	--	--	--
	5/28/2003	21.68	73.08	--	SPH (sheen)	--	--	--	--
	8/5/2003	24.05	70.71	--	SPH (sheen)	--	--	--	--
	11/10/2003	23.68	71.08	--	SPH (sheen)	--	--	--	--
	2/18/2004	23.51	71.25	--	1,100	--	--	--	--
	5/27/2004	22.98	71.78	--	SPH (sheen)	--	--	--	--
	8/19/2004	25.31	69.45	--	SPH (sheen)	--	--	--	--
	12/27/2004	24.46	70.30	--	SPH (sheen)	--	--	--	--
	2/18/2005	23.27	71.57	--	SPH (0.10)	--	--	--	--
	5/11/2005	22.80	72.03	--	SPH (0.09)	--	--	--	--
	8/3/2005	23.29	71.48	--	SPH (0.01)	--	--	--	--
	11/30/2005	24.11	70.69	--	SPH (0.05)	--	--	--	--
	2/17/2006	23.91	70.89	--	SPH (0.05)	--	--	--	--
	5/12/2006	21.88	72.92	--	SPH (0.03)	--	--	--	--
	8/7/2006	22.05	72.75	--	SPH (0.01)	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-15	11/21/2006	23.70	71.10	--	--	--	--	--	--
(continued)	2/12/2007	23.80	71.00	--	1,100	<250	--	--	--
	5/11/2007	23.28	71.48	--	--	--	--	--	--
	8/16/2007	24.38	70.38	--	--	--	--	--	--
	11/26/2007	25.30	69.46	--	--	--	--	--	--
	5/29/2008	24.32	70.44	--	--	--	--	--	--
	8/22/2008	25.24	69.52	--	--	--	--	--	--
	2/19/2009	25.59	69.17	--	SPH (0.08)†	--	--	--	--
	8/21/2009	25.61	69.15	--	--	--	--	--	--
	2/24/2010	28.51	66.25	--	SPH (0.04)	--	--	--	--
	8/24/2010	26.53	68.23	--	SPH (0.04)	--	--	--	--
	12/19/2011	26.18	68.58	--	14,000	1,600	--	--	--
	8/28/2012	24.35	70.41	--	370	370	--	--	--
MW-16A	5/11/2007	25.12	--	--	760	--	--	--	--
	8/16/2007	26.02	--	--	620	250	--	--	--
	11/26/2007	26.16	--	--	160	<250	--	--	--
	5/29/2008	25.73	--	--	81	<250	--	--	--
	8/22/2008	26.11	--	--	310	<250	--	--	--
	2/19/2009	26.32	--	--	<50	<250	--	--	--
	8/21/2009	26.28	--	--	82	<250	--	--	--
	2/24/2010	29.08	--	--	--	--	--	--	--
	8/24/2010	27.40	--	--	80	<250	--	--	--
	12/19/2011	29.20	--	--	SPH (Sheen)	--	--	--	--
	2/18/2012	26.92	--	--	14,000	730	--	--	--
	8/27/2012	28.75	--			Insufficient water to sample			
MW-16B	5/11/2007	28.98	--	--	15,000	--	--	--	--
	8/16/2007	31.02	--	--	7,700	<250	--	--	--
	11/26/2007	30.00	--	--	6,400	<250	--	--	--
	5/29/2008	29.95	--	--	5,400	<500	--	--	--
	8/22/2008	32.02	--	--	4,600	<250	--	--	--
	2/19/2009	31.70	--	--	7,400	<250	--	--	--
	8/21/2009	31.62	--	--	6,400	<250	--	--	--
	2/24/2010	35.05	--	--	2,000	<250	--	--	--
	8/24/2010	33.36	--	--	5,300	<5,000	--	--	--
	12/20/2011	36.68	--	--	720	590	--	--	--
	8/28/2012	28.10	--	--	900	300	--	--	--
MW-17A	5/29/2008	24.05	--	--	22,000	1,800	--	--	--
	8/22/2008	24.96	--	--	11,000	<1,200	--	--	--
	2/19/2009	25.29	--	--	20,000	440	--	--	--
	8/21/2009	25.37	--	--	16,000	700	--	--	--
	2/24/2010	28.39				Insufficient water to sample			
	8/24/2010	26.30				Insufficient water to sample			
	12/20/2011	25.52	--	--	66,000	<1,300	--	--	--
	8/27/2012	23.43	--	--	1,700	480	--	--	--
MW-17B	5/29/2008	24.30	--	--	<50	<250	--	--	--
	8/22/2008	25.19	--	--	<50	<250	--	--	--
	2/19/2009	25.51	--	--	<50	<250	--	--	--
	8/21/2009	25.44	--	--	150	<250	--	--	--
	2/24/2010	28.53	--	--	<50	<250	--	--	--
	8/24/2010	26.48	--	--	<50	<250	--	--	--
	12/19/2011	26.58	--	--	--	--	--	--	--
	8/27/2012	23.45	--	--	--	--	--	--	--
RW-2	5/29/2008	17.66	--	--	6,100	<250	--	--	--
	8/22/2008	18.51	--	--	10,000	<1,200	--	--	--
	2/19/2009	18.87	--	--	SPH (0.08)†	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>RW-2	8/21/2009	18.89	--	--	SPH (0.31)†	--	--	--	--
(continued)	2/24/2010	25.05	--	--	SPH (0.04)	--	--	--	--
	8/24/2010	19.79	--	--	SPH (0.04)	--	--	--	--
	12/19/2011	19.71	--	--	8,200	420	--	--	--
	8/27/2012	18.26	--	--	4,300	400	--	--	--
RW-3A	12/19/2011	18.37	--	--	71,000	35,000	--	--	--
	8/27/2012	17.11	--	--	9,800	3,500	--	--	--
RW-4	5/29/2008	23.72	--	--	19,000	<2,500	--	--	--
	8/22/2008	24.69	--	--	18,000	<1,200	--	--	--
	2/19/2009	24.98	--	--	25,000	<2,500	--	--	--
	8/21/2009	25.15	--	--	9,600	<250	--	--	--
	2/24/2010	28.65			Insufficient water to sample				
	8/24/2010	26.02			Insufficient water to sample				
	12/20/2011	25.80	--	--	38,000	<2,500	--	--	--
	8/28/2012	23.02	--	--	5,800	1,300	--	--	--
RW-5	12/20/2011	26.32	--	--	3,100	270	--	--	--
	8/28/2012	22.81	--	--	640	<250	--	--	--
VE-1	12/20/2011	33.38	--	--	410,000	420,000	--	--	--
	8/27/2012	31.60	--		Unable to sample due to sludge present during purging				
Grab Sampling Data									
B (boring)	5/16/1998	--	--	77**	--	--	--	--	--
C (boring)	5/16/1998	--	--	48**	--	--	--	--	--
G (boring)	5/16/1998	--	--	35,000**	--	--	--	--	--

Abbreviations and Notes:

TOC Elev. (ft) = Top of casing elevation, surveyed to an arbitrary datum

TEH = Total extractable hydrocarbons

TPHd = Total petroleum hydrocarbons as diesel

TPHmo = Total petroleum hydrocarbons as motor oil

SVOCs = Semi-volatile organic compounds

Other SVOC's = All other compounds analyzed by EPA Method 8270

µg/l = micrograms per liter = parts per billion = ppb

ND = None detected above laboratory reporting limit, see laboratory report for individual reporting limits

1 = ND except for 1,700 ug/l 2,4 dichlorophenol, 240 ug/l bis (2-ethyl hyxly) phthalate. Also 10 mg/l oil and grease.

2 = ND except for 570 ug/l benzoic acid and 93 ug/l phenol. Also 20 mg/l oil and grease.

3 = ND except for 700 ug/l benzoic acid, 92 ug/l phenol, and 52 ug/l 3,4 methyl phenol.

4 = ND except for 74 ug/l benzoic acid and 68 ug/l creosol.

5 = ND except for 480 ug/l phenol, 110 ug/l 2,4 dimethylphenol, 210 ug/l 2-methylphenol, 200 ug/l 3,4-methylphenol, and 5.7 mg/l oil and grease.

< *n* = Not detected above n ug/l

-- = Not analyzed/not available

* = Duplicate sample sent to a different chemical laboratory

** = Does not match diesel pattern

† = SPH thickness not used to calculate groundwater elevation because SPH not present in wells until after beginning purge.

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev. (ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-1 *94.48*	12/23/1991	26.86	1.15		2.00	12.20	2.00	1
	12/26/1991	26.08	0.22		0.50	3.05	2.50	1
	1/13/1992	26.53	0.66		1.00	6.10	3.50	1
	2/28/1992	27.75	0.42		2.00	12.20	5.50	1
	11/9/1993	26.06	1.17		0.50	3.05	6.00	1
	11/3/1995	23.10	0.76		0.75	4.58	6.75	1
	11/30/1995	23.38	0.70		0.25	1.53	7.00	1
	1/3/1996	23.30	0.78		0.53	3.23	7.53	1
	2/2/1996	22.96	0.84		0.75	4.58	8.28	1
	3/1/1996	21.69	0.14		0.10	0.61	8.38	1
	4/4/1996	21.11	0.00		0.00	0.00	8.38	1
	5/2/1996	20.96	0.00		0.00	0.00	8.38	1
	6/5/1996	20.98	0.04		0.10	0.61	8.48	1
	7/9/1996	21.64	0.20		0.10	0.61	8.58	1
	8/8/1996	22.43	0.33		0.05	0.31	8.63	1
	9/10/1996	23.25	0.60		0.10	0.61	8.73	1
	10/1/1996	23.58	0.60		0.25	1.53	8.98	1
	11/4/1996	24.29	0.78		0.13	0.79	9.11	1
	12/2/1996	24.63	0.88		0.26	1.59	9.37	1
	1/3/1997	24.08	0.81		0.39	2.38	9.76	1
	2/6/1997	22.46	0.30		0.01	0.06	9.77	1
	3/5/1997	23.00	0.00		0.00	0.00	9.77	1
	4/1/1997	22.29	0.20		0.01	0.06	9.78	1
	5/8/1997	22.79	0.33		0.02	0.12	9.80	1
	6/6/1997	24.33	1.69		0.26	1.59	10.06	1
	7/8/1997	24.00	0.96		0.20	1.22	10.26	1
	8/7/1997	24.58	1.29		1.00	6.10	11.26	1
	9/10/1997	24.93	1.21		1.50	9.15	12.76	1
	10/1/1997	24.89	0.86		0.26	1.59	13.02	1
	11/4/1997	25.06	0.77		0.26	1.59	13.28	1
	12/4/1997	24.76	0.54		0.19	1.16	13.47	1
	1/8/1998	23.66	0.00		0.00	0.00	13.47	1
	2/5/1998	22.64	0.00		0.00	0.00	13.47	1
	3/6/1998	20.80	0.00		0.00	0.00	13.47	1
	4/2/1998	20.31	0.00		0.00	0.00	13.47	1
	4/29/1998	19.95	0.00		0.00	0.00	13.47	1
	6/3/1998	20.41	0.00		0.00	0.00	13.47	1
	7/9/1998	20.97	0.07		0.00	0.00	13.47	1
	8/4/1998	21.40	trace		0.00	0.00	13.47	1
	8/26/1998	21.85	0.10		0.00	0.00	13.47	1
	11/2/1998	22.92	0.39		0.00	0.00	13.47	1
	12/4/1998	23.29	0.29		0.01	0.06	13.48	1
	1/5/1999	23.51	0.42		0.03	0.18	13.51	1
	2/8/1999	23.08	0.05		0.25	1.53	13.76	1
	3/24/1999	21.90	0.01		0.01	0.06	13.77	1
	4/30/1999	21.52	0.00		0.00	0.00	13.77	1
	7/1/1999	22.70	0.03		0.01	0.06	13.78	1

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev. (ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-1	9/21/1999	23.81	0.08		0.20	1.22	13.98	1
(cont'd)	10/20/1999	23.90	0.10		0.01	0.06	13.99	1
	12/13/1999	24.24	trace		0.00	0.00	13.99	1
	2/9/2000	23.95	0.07		0.05	0.31	14.04	1
	2/15/2000	--	0.00		0.00	0.00	14.04	2
	2/25/2000	23.69	0.00		0.06	0.38	14.10	2
	3/3/2000	23.27	0.00		0.05	0.31	14.15	2
	3/28/2000	22.39	0.00		0.13	0.76	14.28	2
	5/2/2000	22.29	0.00		0.05	0.29	14.32	2
	5/31/2000	22.05	0.00		0.00	0.00	14.32	2
	7/3/2000	22.10	trace		0.02	0.12	14.34	2
	8/4/2000	22.40	0.00		0.01	0.06	14.35	2
	10/6/2000	23.47	0.46		0.01	0.06	14.36	1
	11/3/2000	24.14	0.78		0.00	0.00	14.36	
	12/1/2000	25.40	0.83		1.75	10.68	16.11	1,2
	1/4/2001	25.13	0.09		0.25	1.53	16.36	2
	2/2/2001	25.12	0.03		0.13	0.76	16.49	2
	4/3/2001	23.19	0.24		0.10	0.61	16.59	
	5/4/2001	23.31	0.47		0.00	0.00	16.59	
	5/7/2001	23.85	0.05		0.03	0.16	16.62	2
	6/11/2001	23.77	0.67		0.00	0.00	16.62	2
	5/2/2002	23.41	0.46		0.01	0.04	16.62	
	6/14/2002	23.95	0.03		0.01	0.04	16.63	2
	8/4/2002	24.02	0.03		0.01	0.06	16.64	2
	9/24/2002	24.59	0.01		0.003	0.02	16.64	2
	10/16/2002	25.08	0.03		0.003	0.02	16.64	2
	11/6/2002	25.71	0.08		0.005	0.03	16.65	2
	11/26/2002	24.47	0.05		0.003	0.02	16.65	2
	12/9/2002	24.08	0.07		0.009	0.06	16.66	2
	1/17/2003	22.14	0.07		0.005	0.03	16.67	1, 2
	1/27/2003	22.55	0.02		0.003	0.02	16.67	2
	3/5/2003	23.53	0.02		0.25	1.53	16.92	1, 2
	4/11/2003	23.11	0.03		0.007	0.04	16.93	1, 2
	5/13/2003	22.95	0.02		0.007	0.04	16.93	1, 2
	5/28/2003	21.77	0.02		0.008	0.05	16.94	1, 2
	6/13/2003	21.84	0.03		0.013	0.08	16.95	1, 2
	7/24/2003	23.19	0.05		0.003	0.02	16.96	1, 2
	8/5/2003	23.07	0.04		0.013	0.08	16.97	1, 2
	9/12/2003	23.74	0.05		0.021	0.13	16.99	1, 2
	10/10/2003	23.90	0.06		0.026	0.16	17.02	1, 2
	11/10/2003	22.53	0.03		0.016	0.10	17.03	1, 2
	11/21/2003	23.12	0.02		0.026	0.16	17.06	1, 2
	12/4/2003	22.95	0.03		0.026	0.16	17.09	1, 2
	1/23/2004	22.40	0.04	70	0.018	0.11	17.10	1, 2
	2/6/2004	22.74	0.05	65	0.017	0.10	17.12	1, 2
	2/18/2004	22.61	0.05	70	0.018	0.11	17.14	1, 2
	3/28/2004	22.81	0.01	5	0.001	0.01	17.14	1, 2

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-1	4/9/2004	22.61	0.00	0	0.000	0.00	17.14	1, 2
(cont'd)	5/27/2004	22.08	0.05	35	0.009	0.06	17.15	1, 2
	7/29/2004	24.52	0.92	2500	0.660	4.03	17.81	1, 2
	8/6/2004	23.98	0.25	1000	0.264	1.61	18.08	1, 2
	8/19/2004	24.35	0.38	1000	0.264	1.61	18.34	1, 2
	9/3/2004	24.47	0.29	1000	0.264	1.61	18.60	1, 2
	12/27/2004	24.18	0.44	450	0.119	0.73	18.72	1,2
	2/18/2005	23.14	0.04	250	0.066	0.40	18.79	1,2
	5/11/2005	22.71	0.02	0	0.000	0.00	18.79	
	8/3/2005	23.03	0.06	0	0.000	0.00	18.79	
	11/30/2005	23.98	0.03	0	0.000	0.00	18.79	
	2/17/2006	23.81	0.01	10	0.003	0.02	18.79	1
	5/12/2006	21.75	0.03	0	0.000	0.00	18.79	
	8/7/2006	21.35	0.01	0	0.000	0.00	18.79	
	11/21/2006	23.34	0.04	100	0.026	0.00	18.82	1
	2/12/2007	23.18	0.03	0	0.000	0.00	18.82	
	8/22/2008	25.50	0.70	2000	0.528	3.22	19.35	1
	2/19/2009	25.92	0.82	1500	0.396	2.42	19.74	1
	8/21/2009	25.98	0.77	1800	0.476	2.90	20.22	1
	2/24/2010	29.24	0.13	350	0.092	0.56	20.31	1
	8/24/2010	26.84	0.63	1500	0.396	2.42	20.71	1
MW-4	12/23/1991	22.63	0.98		2.50	15.25	2.50	1
88.84	12/26/1991	22.52	0.96		6.00	36.60	8.50	1
	1/10/1992	22.74	0.99		5.00	30.50	13.50	1
	2/28/1992	22.00	0.67		4.00	24.40	17.50	1
	3/11/1992	21.71	0.55		3.50	21.35	21.00	1
	3/13/1992	21.56	0.49		3.50	21.35	24.50	1
	3/17/1992	25.46	0.44		2.25	13.73	26.75	1
	3/18/1992	21.38	0.44		2.50	15.25	29.25	1
	3/19/1992	21.33	0.48		1.50	9.15	30.75	1
	3/23/1992	21.29	0.42		4.00	24.40	34.75	1
	3/24/1992	21.31	0.38		1.50	9.15	36.25	1
	3/25/1992	21.17	0.36		1.00	6.10	37.25	1
	3/26/1992	21.08	0.35		1.00	6.10	38.25	1
	3/27/1992	20.92	0.26		0.50	3.05	38.75	1
	3/31/1992	21.15	0.44		0.50	3.05	39.25	1
	4/1/1992	20.90	0.24		0.25	1.53	39.50	1
	4/2/1992	20.90	0.17		0.13	0.79	39.63	1
	4/6/1992	--	--		0.13	0.79	39.76	1
	4/10/1992	20.91	0.33		0.25	1.53	40.01	1
	4/13/1992	21.04	0.42		0.25	1.53	40.26	1
	4/20/1992	20.74	0.19		0.13	0.79	40.39	1
	5/4/1992	20.83	0.33		0.13	0.79	40.52	1
	5/18/1992	21.33	0.23		0.13	0.79	40.65	1
	5/26/1992	20.83	0.17		0.13	0.79	40.78	1
	6/1/1992	20.85	0.19		0.06	0.37	40.84	1

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-4	6/29/1992	21.38	0.53		0.25	1.53	41.09	1
(cont'd)	7/29/1992	21.69	0.56		1.11	6.77	42.20	1
	8/28/1992	21.35	0.63		1.68	10.25	43.88	1
	4/3/1993	20.11	0.51		0.13	0.79	44.01	1
	11/9/1993	20.48	0.52		0.03	0.18	44.04	1
	8/30/1995	21.71	0.63		1.75	10.68	45.79	1
	10/2/1995	19.90	2.20		0.50	3.05	46.29	1
	11/3/1995	18.76	0.57		0.25	1.53	46.54	1
	11/30/1995	19.17	0.65		0.25	1.53	46.79	1
	1/3/1996	19.45	0.44		0.05	0.31	46.84	1
	2/2/1996	19.50	0.32		0.10	0.61	46.94	1
	3/1/1996	19.31	0.20		0.20	1.22	47.14	1
	4/4/1996	17.53	0.18		0.20	1.22	47.34	1
	5/2/1996	17.50	0.25		0.20	1.22	47.54	1
	6/5/1996	17.67	0.39		0.15	0.92	47.69	1
	7/9/1996	18.29	0.50		0.16	0.98	47.85	1
	8/8/1996	18.84	0.00		0.00	0.00	47.85	1
	9/10/1996	19.31	0.34		0.05	0.31	47.90	1
	10/1/1996	19.51	0.29		0.05	0.31	47.95	1
	11/4/1996	20.13	0.35		0.02	0.12	47.97	1
	12/2/1996	20.23	0.33		0.02	0.12	47.99	1
	1/3/1997	19.33	0.10		0.02	0.12	48.01	1
	2/6/1997	18.13	0.01		0.01	0.06	48.02	1
	4/30/1999	17.28	trace		0.00	0.00	48.02	1
	2/9/2000	19.76	0.00		0.00	0.00	48.02	1
	2/15/2000	--	0.00		0.00	0.00	48.02	2
	2/25/2000	19.30	0.00		0.00	0.00	48.02	2
	8/25/2010	22.72*	---	30	0.01	0.05	48.03	1
MW-6	12/23/1991	28.40	3.21		7.50	45.75	7.50	1
85.62	12/26/1991	27.25	1.67		2.00	12.20	9.50	1
	1/10/1992	27.23	0.90		1.00	6.10	10.50	1
	2/4/1992	27.71	2.04		2.00	12.20	12.50	1
	2/28/1992	27.92	3.00		3.00	18.30	15.50	1
	3/10/1992	27.16	2.06		2.75	16.78	18.25	1
	3/12/1992	25.96	0.52		2.00	12.20	20.25	1
	3/23/1992	26.34	1.09		1.00	6.10	21.25	1
	3/30/1992	25.73	0.35		0.50	3.05	21.75	1
	4/10/1992	25.29	0.05		0.25	1.53	22.00	1
	4/13/1992	25.52	0.21		0.13	0.79	22.13	1
	4/20/1992	25.38	0.10		0.13	0.79	22.26	1
	5/4/1992	25.40	--		0.13	0.79	22.39	1
	5/8/1992	25.50	0.17		0.06	0.37	22.45	1
	5/26/1992	25.46	0.13		0.13	0.79	22.58	1
	6/1/1992	25.46	0.09		0.06	0.37	22.64	1
	6/29/1992	25.59	0.14		0.19	1.16	22.83	1
	7/29/1992	26.90	1.71		0.60	3.66	23.43	1

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev. (ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-6	8/28/1992	25.09	2.62		2.40	14.64	25.83	1
(cont'd)	12/2/1992	--	--		0.00	0.00	25.83	1
	4/3/1993	26.96	2.86		1.75	10.68	27.58	1
	11/9/1993	27.51	3.06		0.83	5.06	28.41	1
	8/30/1995	28.00	7.96		4.50	27.45	32.91	1
	10/2/1995	28.24	6.14		4.00	24.40	36.91	1
	11/3/1995	28.39	6.13		3.00	18.30	39.91	1
	11/30/1995	26.91	3.44		2.50	15.25	42.41	1
	1/3/1996	27.58	4.41		2.50	15.25	44.91	1
	2/2/1995	27.58	4.37		5.00	30.50	49.91	1
	3/1/1996	27.96	5.15		4.00	24.40	53.91	1
	4/4/1996	27.96	5.41		5.00	30.50	58.91	1
	5/2/1996	26.83	4.66		4.50	27.45	63.41	1
	6/5/1996	27.15	5.17		4.00	24.40	67.41	1
	7/9/1996	27.08	4.86		4.50	27.45	71.91	1
	8/8/1996	26.71	4.05		4.00	24.40	75.91	1
	9/10/1996	26.83	3.82		3.50	21.35	79.41	1
	10/1/1996	26.96	3.77		4.00	24.40	83.41	1
86.94	11/4/1996	--	NM		0.00	0.00	83.41	4
	12/2/1996	--	NM		0.00	0.00	83.41	4
	1/3/1997	--	NM		0.00	0.00	83.41	4
	2/6/1997	25.08	0.20		0.00	0.00	83.41	4
	3/5/1997	24.20	0.00		0.00	0.00	83.41	4
	4/1/1997	24.04	0.00		0.00	0.00	83.41	4
	5/8/1997	26.54	1.88		0.40	2.44	83.81	1
	6/6/1997	25.33	0.21		0.03	0.18	83.84	1
85.82	7/8/1997	25.30	0.07		0.00	0.00	83.84	1
	8/7/1997	25.52	0.00		0.00	0.00	83.84	1
	9/10/1997	25.76	0.00		0.00	0.00	83.84	1
	10/1/1997	25.12	0.00		0.00	0.00	83.84	1
	11/4/1997	26.16	0.18		0.02	0.12	83.86	1
	12/4/1997	26.08	0.16		0.05	0.31	83.91	1
	1/8/1998	25.79	0.10		0.66	4.03	84.57	1
	2/5/1998	25.31	0.89		0.00	0.00	84.57	4
	3/6/1998	24.63	0.46		0.04	0.24	84.61	1
	4/2/1998	24.45	0.59		0.10	0.61	84.71	1
	4/29/1998	22.96	0.55		0.09	0.55	84.80	1
	6/3/1998	22.81	0.41		0.03	0.18	84.83	1
	7/9/1998	23.04	0.35		0.05	0.31	84.88	1
	8/4/1998	23.29	0.35		0.04	0.24	84.92	1
	8/26/1998	23.50	0.31		0.01	0.06	84.93	1
	11/2/1998	24.24	0.43		0.02	0.12	84.95	1
	12/4/1998	24.35	0.32		0.01	0.06	84.96	1
	1/5/1999	24.51	0.40		0.03	0.18	84.99	1
	2/8/1999	24.00	0.03		0.13	0.76	85.12	1
	3/24/1999	23.82	0.19		0.03	0.18	85.15	1
	4/30/1999	23.60	1.13		0.10	0.61	85.25	1

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev. (ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-6	7/1/1999	24.45	0.42		0.06	0.38	85.31	1
(cont'd)	7/27/1999	25.35	0.24		0.06	0.38	85.37	1
	8/19/1999	24.87	0.24		0.06	0.37	85.43	1
	9/21/1999	24.58	0.10		0.20	1.22	85.63	1
	10/20/1999	25.05	0.17		0.20	1.22	85.83	1
	12/13/1999	25.08	0.10		0.06	0.37	85.89	1
	2/9/2000	24.93	0.44		0.25	1.53	86.14	1
	2/15/2000	--	0.00		0.07	0.43	86.21	3
	2/25/2000	24.23	0.00		0.01	0.06	86.22	3
	3/3/2000	24.00	0.00		0.00	0.01	86.22	3
	3/28/2000	23.54	0.00		0.05	0.31	86.27	3
	5/2/2000	23.52	0.06		0.03	0.15	86.30	3
	5/31/2000	23.39	0.08		0.00	0.00	86.30	3
	7/3/2000	23.61	trace		0.02	0.12	86.32	3
	8/4/2000	23.80	0.10		0.01	0.06	86.33	3
	10/6/2000	24.22	0.04		0.01	0.06	86.34	
	11/3/2000	24.30	0.09		0.00	0.00	86.34	
	12/1/2000	24.38	0.07		0.03	0.18	86.37	2, 3
	1/4/2001	24.65	0.17		0.00	0.00	86.37	5
	2/2/2001	24.72	0.22		0.25	1.53	86.62	3
	4/3/2001	23.90	0.06		0.05	0.31	86.67	
	5/4/2001	23.95	0.07		0.05	0.31	86.72	
	5/7/2001	--	--		0.08	0.48	86.80	
	6/11/2001	24.25	0.10		0.00	0.00	86.80	
	5/2/2002	23.25	0.01		0.00	0.02	86.80	2
	6/14/2002	23.17	0.07		0.01	0.04	86.81	1
	8/4/2002	23.55	0.03		0.01	0.06	86.82	1
	9/24/2002	23.98	0.02		0.007	0.04	86.82	1
	10/16/2002	24.20	0.09		0.005	0.03	86.83	1
	11/6/2002	25.78	0.07		0.005	0.03	86.83	1
	11/26/2002	24.22	0.03		0.009	0.06	86.84	1, 3
	12/9/2002	23.97	0.05		0.021	0.13	86.86	1, 3
	1/17/2003	21.30	0.06		0.013	0.08	86.88	1, 3
	1/27/2003	22.49	0.02		0.016	0.10	86.89	1, 3
	3/5/2003	24.35	0.06		0.013	0.08	86.91	1, 3
	4/11/2003	24.05	0.07		0.029	0.18	86.93	3
	5/13/2003	23.98	0.03		0.016	0.10	86.95	3
	5/28/2003	21.92	0.04		0.021	0.13	86.97	1, 3
	6/13/2003	21.98	0.06		0.020	0.12	86.99	1, 3
	7/24/2003	24.11	0.07		0.040	0.24	87.03	1, 3
	8/5/2003	23.98	0.04		0.021	0.13	87.05	1, 3
	9/12/2003	24.53	0.06		0.026	0.16	87.08	1, 3
	10/10/2003	24.88	0.10		0.026	0.16	87.11	1, 3
	11/10/2003	23.50	0.10		0.032	0.19	87.14	1, 3
	11/21/2003	23.81	0.06		0.026	0.16	87.16	1, 3
	12/4/2003	23.61	0.08		0.029	0.18	87.19	1, 3
	1/23/2004	23.09	0.10	100	0.026	0.16	87.22	1, 3

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev. (ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-6	2/6/2004	22.39	0.05	80	0.021	0.13	87.24	1, 3
(cont'd)	2/18/2004	22.21	0.04	70	0.018	0.11	87.26	1, 3
	3/28/2004	23.91	0.06	50	0.013	0.08	87.27	1, 3
	4/9/2004	23.89	0.03	100	0.026	0.16	87.30	1, 3
	5/27/2004	22.01	0.05	140	0.037	0.23	87.34	1, 3
	5/27/2004	22.01	0.05	140	0.037	0.23	87.37	1, 3
	7/29/2004	24.35	0.00	0	0.000	0.00	87.37	1, 3
	8/6/2004	24.05	0.03	20	0.005	0.03	87.38	1, 3
	8/19/2004	24.16	0.03	10	0.003	0.02	87.38	1, 3
	9/3/2004	24.29	0.02	10	0.003	0.02	87.38	1, 3
	12/27/2004	24.69	sheen	80	0.021	0.13	87.40	3
	2/18/2005	23.55	0.08	130	0.034	0.21	87.44	1,3
	5/11/2005	22.90	0.06	120	0.032	0.19	87.47	1,3
	8/3/2005	23.68	0.06	0	0.000	0.00	87.47	
	11/30/2005	24.17	0.02	0	0.000	0.00	87.47	
	2/17/2006	23.89	0.03	10	0.003	0.02	87.47	1,3
	5/12/2006	22.66	0.03	0	0.000	0.00	87.47	
	8/7/2006	22.83	0.02	0	0.000	0.00	87.47	
	11/21/2006	23.92	0.02	0	0.000	0.00	87.47	
	2/12/2007	23.97	0.02	0	0.000	0.00	87.47	
	2/19/2009	25.19*	0.07**	100	0.026	0.16	87.50	
	8/21/2009	25.10	0.03	20	0.005	0.03	87.50	1
	2/24/2010	26.71	0.03	10	0.003	0.02	87.51	1
	8/24/2010	26.13	0.05	30	0.008	0.05	87.51	1
MW-9	8/8/1996	19.89	0.35		0.10	0.61	0.61	1
90.37								
MW-14	12/4/1998	23.42	0.23		0.01	0.06	0.01	1
94.66	1/5/1999	23.36	0.12		0.01	0.06	0.02	1
	2/8/1999	23.17	trace		0.01	0.06	0.03	1
	3/24/1999	22.08	trace		0.00	0.00	0.03	1
	4/30/1999	21.17	0.01		0.00	0.00	0.03	1
	7/1/1999	22.95	0.04		0.00	0.00	0.03	1
	9/21/1999	24.26	trace		0.00	0.00	0.03	1
	10/20/1999	24.10	0.00		0.00	0.00	0.03	1
	2/9/2000	24.13	0.00		0.00	0.00	0.03	1
	2/15/2000	--	0.00		0.00	0.00	0.03	1
	2/25/2000	--	0.00		0.00	0.00	0.03	2
	3/3/2000	23.27	0.00		0.05	0.31	0.08	2
	3/28/2000	22.40	0.00		0.13	0.76	0.21	2
	5/2/2000	22.22	0.00		0.04	0.24	0.25	2
	5/31/2000	22.09	0.00		0.00	0.00	0.25	2
	7/3/2000	22.35	trace		0.01	0.06	0.26	2
	8/4/2000	22.78	0.00		0.03	0.18	0.29	2
	10/6/2000	23.48	0.00		0.00	0.00	0.29	
	11/3/2000	23.60	0.00		0.00	0.00	0.29	

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-14	12/1/2000	23.90	0.04		0.04	0.24	0.33	1, 2
(cont'd)	1/4/2001	24.10	0.00		0.00	0.00	0.33	
	2/2/2001	24.27	0.00		0.10	0.61	0.43	2
	4/3/2001	23.06	0.00		0.05	0.31	0.48	
	5/4/2001	23.05	0.00		0.00	0.00	0.48	
	5/7/2001	23.45	0.02		0.01	0.05	0.48	2
	6/11/2001	23.40	0.00		0.00	0.00	0.48	
	5/2/2002	23.51	0.02		0.003	0.02	0.49	2
	6/14/2002	23.88	0.01		0.003	0.02	0.49	2
	8/4/2002	23.61	0.01		0.004	0.02	0.49	2
	9/24/2002	24.07	0.01		0.007	0.04	0.50	2
	10/16/2002	24.29	trace		0.007	0.04	0.51	2
	11/6/2002	25.85	0.00		0.00	0.00	0.51	2
	11/26/2002	24.35	trace		0.00	0.00	0.51	2
	12/9/2002	24.05	trace		0.00	0.00	0.51	2
	1/17/2003	22.09	0.00		0.00	0.00	0.51	2
	1/27/2003	22.60	0.00		0.00	0.00	0.51	2
	3/5/2003	23.63	0.00		0.13	0.79	0.64	1,2
	4/11/2003	23.63	0.02		0.003	0.02	0.64	1,2
	5/13/2003	23.11	0.03		0.003	0.02	0.64	1,2
	5/28/2003	21.95	0.04		0.007	0.04	0.65	1,2
	6/13/2003	22.05	0.03		0.004	0.02	0.65	1,2
	7/24/2003	23.10	0.02		0.003	0.02	0.65	1,2
	8/5/2003	23.03	0.04		0.011	0.06	0.66	1,2
	9/12/2003	23.81	0.06		0.013	0.08	0.68	1,2
	10/10/2003	24.03	0.05		0.021	0.13	0.70	1,2
	11/10/2003	22.70	0.07		0.013	0.08	0.71	1,2
	11/21/2003	22.85	0.05		0.013	0.08	0.73	1,2
	12/4/2003	22.69	0.02		0.008	0.05	0.73	1,2
	1/23/2004	22.05	0.04	40	0.011	0.06	0.74	1,2
	2/6/2004	22.49	0.04	50	0.013	0.08	0.76	1,2
	2/18/2004	22.37	0.04	50	0.013	0.08	0.77	1,2
	3/28/2004	22.79	0.00	5	0.001	0.01	0.77	1,2
	4/9/2004	22.81	0.00	0	0.000	0.00	0.77	1,2
	5/27/2004	21.78	0.05	40	0.011	0.06	0.78	1,2
	7/29/2004	23.80	0.02	10	0.003	0.02	0.78	1,2
	8/6/2004	23.99	0.02	100	0.026	0.16	0.81	1,2
	8/19/2004	24.13	0.05	100	0.026	0.16	0.84	1,2
	9/3/2004	24.22	0.02	50	0.013	0.08	0.85	1,2
	12/27/2004	24.19	sheen	5	0.001	0.01	0.85	2
	2/18/2005	23.24	0.05	120	0.032	0.19	0.88	1,2
	5/11/2005	22.77	0.04	500	0.132	0.81	1.02	1,2
	8/3/2005	23.17	0.02	0	0.000	0.00	1.02	
	11/30/2005	24.02	0.02	0	0.000	0.00	1.02	
	2/17/2006	23.87	0.02	10	0.003	0.02	1.02	1,2
	5/12/2006	21.74	0.01	0	0.000	0.00	1.02	
	8/7/2006	21.66	0.01	0	0.000	0.00	1.02	

Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID *TOC Elev.* *(ft)*	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-14	11/21/2006	23.41	0.03	50	0.013	0.08	1.03	1
(cont'd)	2/12/2007	23.45	0.03	0	0.000	0.00	1.03	
	2/19/2009	25.92*	0.05**	50	0.013	0.08	1.04	1
	2/24/2010	28.39	0.03	50	0.013	0.08	1.06	1
	8/24/2010	26.31	0.04	50	0.013	0.08	1.07	1
MW-15	2/18/2005	23.27	0.10	20	0.005	0.03	0.01	1
	5/11/2005	22.80	0.09	450	0.119	0.73	0.12	1
	8/3/2005	23.29	0.01	0	0.000	0.00	0.12	
	11/30/2005	24.11	0.05	0	0.000	0.00	0.12	
	2/17/2006	23.91	0.05	10	0.003	0.02	0.13	1
	5/12/2006	21.88	0.03	0	0.000	0.00	0.13	
	8/7/2006	22.05	0.01	0	0.000	0.00	0.13	
	11/21/2006	23.70	0.00	0	0.000	0.00	0.13	
	2/12/2007	23.80	0.00	0	0.000	0.00	0.13	
	2/19/2009	27.09*	0.08**	400	0.106	0.64	0.23	1
	2/24/2010	28.51	0.04	50	0.013	0.08	0.25	1
	8/24/2010	26.53	0.04	50	0.013	0.08	0.26	1
RW-2	4/16/2007	16.66	0.00	0	0.000	0.00	0.00	
	5/29/2008	17.66	0.00	0	0.000	0.00	0.00	
	8/22/2008	18.51	0.00	0	0.000	0.00	0.00	
	2/19/2009	19.03*	0.08**	200	0.053	0.32	0.05	1
	8/21/2009	20.09*	0.31**	230	0.061	0.37	0.11	1
	2/24/2010	25.05	0.04	50	0.013	0.08	0.13	1
	8/24/2010	19.79	0.04	50	0.013	0.08	0.14	1
			Total SPH Removed (gallons):				***157.82***	
			Total SPH Removed (pounds):			***962.54***		

Abbreviations and Notes:

TOC Elev. (ft) = Top of casing elevation, surveyed to an arbitrary datum (measured in feet)

SPH = Separate-phase hydrocarbons

SPH converted from volume to weight using the estimated relation 1 gallon SPH = 6.1 pounds.

-- = Not measured or not applicable

NM = Not Measured. Product was being removed by vapor extraction at time of measurement.

1 = SPH removed by manual bailing

2 = SPH removed from well by absorbent sock

3 = SPH removed from well by passive skimmer

4 = Vapor extraction system operating in well

5 = No product removed; skimmer adjusted incorrectly.

* = Depth to water re-measured after beginning purge due to the appearance of SPH after beginning purge.

** = SPH not present in well until beginning purge; SPH thickness measured after beginning purge.

Pangea

Table 4. SVE (DPE) Performance Data - 3093 Broadway, Oakland, CA

										Removal				Emission Reporting						
Date	Wells	Oxidizer Hr Meter Reading (hours)	Interval Time (days)	System Vapor Flow Rate (scfm)	Pump Vacuum ("Hg)	Lab Sample ID	Influent TPHg Lab (ppmv)	Influent Benzene Lab Data (ppmv)	Influent OVA Reading (ppmv)	SVE TPHg Removal Rate (lbs/day)	SVE Benzene Removal Rate (lbs/day)	Cumulative SVE TPHg Removal (lbs)	Cumulative SVE Benzene Removal (lbs)	Effluent TPHg Lab (ppmv)	Effluent Benzene Lab Data (ppmv)	TPHg Abatement Efficiency (%)	Benzene Abatement Efficiency (%)	Benzene Emission Rate (lbs/day)	Cumulative Vapor Flow (cf)	Notes
04/26/11	MW-10, MW-6, RW-2	15276.5	0.0	15.4	19	---	---	---	1,850	0.0	0.00	0.0	0	---	---	---	---	---	0	Startup Test
04/27/11	RW-2, RW-3A, RW-3B, MW-6	15282.4	0.2	15.4	19	INF-V	**650**	**27.0**	1,850	3.2	0.33	0.8	0.08	< **7.0**	< **0.077**	> **98.9**	> **99.7**	> **0.001**	14,868	Off. Restart.
05/05/11	RW-2, RW-3A, RW-3B, MW-6	15304.0	0.9	15.4	19	---	1,000	36.0	2,890	4.9	0.44	5.2	0.48	---	---	---	---	---	69,300	On. Air Sparge Testing.
05/11/11	RW-2, RW-3A, RW-3B, MW-6	15448.0	6.0	15.4	19	---	1,000	36.0	---	4.9	0.44	34.9	3.12	---	---	---	---	---	432,180	On. K/O tank slow to drain.
05/24/11	RW-2, RW-3A, RW-3B, MW-6	15579.0	5.5	15.4	19	---	1,000	36.0	---	4.9	0.44	61.8	5.52	---	---	---	---	---	762,300	Off. Restart 5/25.
05/27/11	RW-2, RW-3A, RW-3B, MW-6	15627.0	2.0	12.6	21	---	1,000	36.0	---	4.0	0.44	69.9	6.40	---	---	---	---	---	883,260	On.
05/29/11	RW-2, MW-1, MW-6, MW-10, VE-1	15673.0	1.9	12.6	21	INF-V	**4,300**	**150**	---	17.4	1.83	103.3	9.91	---	---	---	---	---	999,180	On. Start AS
06/01/11	RW-2, MW-1, MW-6, MW-10, VE-1	15716.0	1.8	12.6	21	---	4,300	150	---	17.4	1.83	134.4	13.20	---	---	---	---	---	1,107,540	On. Transfer pump very slow.
06/02/11	VE-1, RW-3B	15742.0	1.1	12.6	21	---	4,300	150	---	17.4	1.83	153.2	15.18	---	---	---	---	---	1,173,060	Off. Transfer pump very slow.
06/03/11	RW-2, RW-3A, VE-1, MW-1	15768.1	1.1	64.6	17	INF-V	**4,700**	**130**	8980	97.4	5.64	259.1	21.31	---	---	---	---	---	1,406,394	Off. Air Sparge turned off.
07/06/11	RW-2, RW-3A, VE-1, MW-1	16556.6	32.9	58.9	17	---	550	20	574	10.4	0.79	600.8	47.32	---	---	---	---	---	7,840,554	On. Air Sparge Off.
07/11/11	RW-2, RW-3A, VE-1, MW-1	16675.5	5.0	54.4	18	---	715	30	748	12.5	1.19	662.6	53.20	---	---	---	---	---	8,810,778	On. Air Sparge Off.
07/14/11	RW-2, RW-3A, RW-4, RW-5, VE-1, MW-1	16747.0	3.0	49.9	19	INF-V	**370**	**14**	10250	5.9	0.55	680.2	54.85	---	---	---	---	---	9,394,218	Off. Restart
07/19/11	RW-2, RW-3A, RW-4, RW-5, VE-1, MW-1	16866.9	5.0	49.9	19	---	370	14	---	5.9	0.55	709.8	57.62	---	---	---	---	---	10,372,602	Off. Will not restart.
07/21/11	RW-2, RW-3A, RW-4, RW-5, VE-1, MW-1	16867.0	0.0	45.3	20	---	370	14	---	5.4	0.55	709.8	57.62	---	---	---	---	---	10,373,418	Off. Restart.
07/28/11	RW-2, RW-3A, RW-4, RW-5, VE-1, MW-1	17036.5	7.1	49.9	19	---	7,600	200	11,520	121.6	7.91	1568.5	113.52	---	---	---	---	---	11,756,538	On.
08/01/11	RW-2, RW-3A, RW-4, RW-5, VE-1, MW-1	17132.0	4.0	46.2	19	INF-V	**7,800**	**210**	11, 650	115.6	7.70	2028.6	144.15	---	---	---	---	---	12,478,518	On.
08/08/11	RW-2, RW-3A, RW-4, RW-5, VE-1, MW-1	17298.9	7.0	43.6	19	---	4,000	105	4,940	56.0	3.64	2418.0	169.44	---	---	---	---	---	13,670,184	On.
08/18/11	RW-2, RW-3A, RW-4, RW-5, VE-1, MW-1	17541.1	10.1	43.6	19	---	4,000	105	5,060	56.0	3.64	2983.1	206.13	---	---	---	---	---	15,399,492	On.
09/01/11	VE-1, MW-1, MW-14, MW-15, MW-17A	17708.2	7.0	40.0	20	---	7,000	150	9,362	89.8	5.24	3608.5	242.60	---	---	---	---	---	16,602,612	Off. Restart.
09/21/11	VE-1, MW-1, MW-14, MW-15, MW-17A	17888.9	7.5	44.6	17	---	4,500	105	5,370	64.4	3.15	4093.7	266.29	---	---	---	---	---	17,719,338	On.
09/22/11	VE-1, MW-1, MW-14, MW-15, MW-17A	17915.4	1.1	43.3	17	INF-V	**3,000**	**87**	3,810	41.7	2.53	4139.8	269.09	---	---	---	---	---	17,878,338	On.
09/26/11	VE-1, MW-1, MW-14, MW-15, MW-17A	18007.7	3.8	42.4	18	---	3,000	87	3,762	40.8	2.68	4296.7	279.41	---	---	---	---	---	18,465,366	On.
10/05/11	VE-1, MW-1, MW-14, MW-15, MW-17A	18223.1	9.0	39.7	18	---	1,000	35	1,883	12.8	1.01	4411.1	288.49	---	---	---	---	---	19,749,495	On.
10/10/11	VE-1, MW-1, MW-14, MW-15, MW-17A	18291.8	2.9	40.1	18	---	3,700	95	4,250	47.6	2.77	4547.5	296.43	---	---	---	---	---	20,162,972	Off. Restart.
10/18/11	VE-1, MW-1, MW-14, MW-15, MW-17A	18486.1	8.1	42.5	17	---	1,800	70	2,067	24.5	2.00	4746.1	312.59	---	---	---	---	---	21,305,690	On.
11/02/11	VE-1, MW-1, MW-14, MW-15, MW-17A	18844.3	14.9	38.9	18	---	1,100	60	1,903	13.7	1.70	4950.9	337.92	---	---	---	---	---	23,394,927	On.
11/15/11	VE-1, MW-1, MW-14, MW-15, MW-17A	19160.9	13.2	39.3	18	---	600	20	614	7.6	0.57	5050.6	345.46	---	---	---	---	---	25,260,524	On.
11/22/11	MW-16B, RW-4, RW-5, VE-1	19324.6	6.8	39.5	18	---	700	30	756	8.9	0.86	5111.1	351.33	---	---	---	---	---	26,229,268	On.
11/29/11	MW-16B, RW-4, RW-5, VE-1	19493.8	7.1	41.4	18	---	800	40	811	10.6	1.21	5186.0	359.83	---	---	---	---	---	27,281,015	On.
12/08/11	MW-16B, RW-4, RW-5, VE-1	19711.4	9.1	37.3	18	---	700	30	693	8.4	0.81	5262.0	367.21	---	---	---	---	---	28,497,965	On.
12/14/11	MW-16B, RW-4, RW-5, VE-1	19853.4	5.9	24.8	23	---	500	20	591	4.0	0.62	5285.5	370.87	---	---	---	---	---	29,402,874	On.
12/19/11	MW-16B, RW-4, RW-5, VE-1	19973.2	5.0	42.4	18	---	500	20	---	6.8	0.62	5319.4	373.95	---	---	---	---	---	30,164,802	On. Turn off for QM event. Restart 12/20.
12/22/11	MW-16B, RW-4, RW-5, VE-1	20020.0	1.9	36.5	19	INF-V	**620**	**15**	499	7.3	0.43	5333.6	374.80	---	---	---	---	---	30,444,535	On. Off at departure.
01/16/12	MW-16B, RW-3A, RW-4, MW-15, VE-1	20619.8	25.0	44.2	17	---	900	50	927	12.8	1.49	5652.9	411.92	---	---	---	---	---	34,119,270	On.
01/24/12	MW-1, 14, 15, 17A, VE-1	20812.5	8.0	42.6	17	---	800	40	863	10.9	1.14	5740.6	421.10	---	---	---	---	---	35,254,774	On.
01/26/12	MW-1, 14, 15, 17A, VE-1	20864.0	2.1	42.6	17	---	800	40	---	10.9	1.14	5764.1	423.56	---	---	---	---	---	35,558,243	Off. Leave off for carbon switch out.
02/18/12	MW-1, 14, 15, 17A, VE-1	20864.8	0.0	39.3	18	---	400	10	423	5.0	0.29	5764.2	423.56	---	---	---	---	---	35,562,957	Carbon Changeout 2/16. Off. Restart.
03/06/12	MW-1, 14, 15, 17A, VE-1	21252.1	16.1	42.6	17	---	350	7	376	4.8	0.20	5841.3	426.79	---	---	---	---	---	37,845,161	Off. Restart.
03/14/12	MW-1, 14, 15, 17A, VE-1	21443.3	8.0	39.3	18	---	200	5	229	2.5	0.14	5861.4	427.93	---	---	---	---	---	38,971,826	On.
03/19/12	MW-1, 14, 15, VE-1	21568.0	5.2	42.6	17	---	200	5	---	2.7	0.14	5875.6	428.67	---	---	---	---	---	39,706,633	On.
03/27/12	MW-14, 15, VE-1	21673.8	4.4	37.8	19	INF-V	**1,800**	**21**	1,148	21.8	0.63	5971.8	431.45	---	---	---	---	---	40,361,112	Off. Restart.
03/29/12	MW-14, 15, VE-1	21721.6	2.0	33.7	19	---	2,500	40	2,580	27.1	1.02	6025.7	433.49	---	---	---	---	---	40,613,496	On.
04/04/12	MW-1, 14, 15, VE-1	21869.0	6.1	45.1	18	---	1,600	21	1,656	23.2	0.69	6168.0	437.72	---	---	---	---	---	41,611,099	On.
04/11/12	MW-1, 14, 15, VE-1	22062.1	8.0	50.3	18	---	1,200	15	1,215	19.4	0.53	6323.9	441.97	---	---	---	---	---	43,010,688	On.
04/20/12	MW-1, 14, 15, VE-1	22254.8	8.0	59.2	17	---	1,000	15	1,030	19.0	0.60	6476.5	446.76	---	---	---	---	---	44,591,213	On.
05/04/12	MW-1, 14, 15, VE-1	22591.1	14.0	24.6	22	---	2,300	40	2,380	18.1	1.07	6730.4	461.78	---	---	---	---	---	46,449,607	On.
05/23/12	MW-1, 14, 15, VE-1	22688.4	4.1	34.5	20	INF-V	**4,100**	**32**	2,860	45.4	0.96	6914.4	465.69	---	---	---	---	---	47,053,840	Off. Restart.
06/05/12	MW-1, 14, 15, VE-1	22694.7	0.3	20.0	23	---	1,400	21	1,408	9.0	0.52	6916.8	465.82	---	---	---	---	---	47,086,272	Off. Restart.
06/19/12	MW-1, 14, 15, VE-1	23002.4	12.8	36.9	20	---	800	10	810	9.5	0.32	7038.3	469.96	---	---	---	---	---	49,131,862	Off. Restart.
07/05/12	MW-1, 14, 15, VE-1	23387.2	16.0	37.6	19	---	440	5	445	5.3	0.15	7123.4	472.35	---	---	---	---	---	51,498,382	On.
07/19/12	MW-1, 14, 15, VE-1	23719.0	13.8	43.7	17	---	325	5	332	4.6	0.15	7186.4	474.38	---	---	---	---	---	53,507,099	On.
08/07/12	MW-1, 14, 15, VE-1	23864.9	6.1	51.9	18	INF-V	**1,800**	**18**	1,701	30.0	0.68	7368.5	478.51	---	---	---	---	---	54,642,493	Off. Restart.
08/26/12	MW-1, 14, 15, RW-1, 5, VE-1	24321.0	19.0	49.0	16	---	1,800	18	---	28.3	0.68	7906.3	491.42	---	---	---	---	---	58,191,863	On. Shutdown for QM on 8/27.
09/14/12	MW-1, 14, 15, RW-1, 5, VE-1	24324.8	0.2	29.1	21	---	940	10	949	8.8	0.28	7907.7	491.46	---	---	---	---	---	58,214,002	Off. Restart.
10/04/12	MW-1, 14, 15, RW-1, 5, VE-1	24754.8	17.9	29.1	21	---	940	10	---	8.8	0.28	8065.1	496.52	---	---	---	---	---	60,719,182	Off.Leave off.
02/06/13	MW-1, 14, 15, RW-1, 5, VE-1	24757.1	0.1	22.0	20	---	480	5	485	3.4	0.10	8065.4	496.53	---	---	---	---	---	60,728,300	Off.Restart DPE, leave AS off.

Pangea

Table 4. SVE (DPE) Performance Data - 3093 Broadway, Oakland, CA										Removal				Emission Reporting						
Date	Wells	Oxidizer Hr Meter Reading (hours)	Interval Time (days)	System Vapor Flow Rate (scfm)	Pump Vacuum ("Hg)	Lab Sample ID	Influent TPHg Lab (ppmv)	Influent Benzene Lab Data (ppmv)	Influent OVA Reading (ppmv)	SVE TPHg Removal Rate (lbs/day)	SVE Benzene Removal Rate (lbs/day)	Cumulative SVE TPHg Removal (lbs)	Cumulative SVE Benzene Removal (lbs)	Effluent TPHg Lab (ppmv)	Effluent Benzene Lab Data (ppmv)	TPHg Abatement Efficiency (%)	Benzene Abatement Efficiency (%)	Benzene Emission Rate (lbs/day)	Cumulative Vapor Flow (cf)	Notes
02/15/13	MW-1, 14, 15, RW-1, 5, VE-1	24971.0	8.9	22.7	20	---	100	1	175	0.7	0.02	8071.9	496.71	---	---	---	---	---	61,601,012	On.
03/01/13	MW-1, 14, 15, RW-1, 5, VE-1	25307.0	14.0	23.8	19	---	100	1	95	0.8	0.02	8082.6	496.97	---	---	---	---	---	62,911,412	On.
03/28/13	MW-1, 14, 15, RW-1, 5, VE-1	25953.0	26.9	23.8	19	---	100	1	---	0.8	0.02	8103.2	497.48	---	---	---	---	---	65,430,812	On.
04/11/13	MW-1, 14, 15, RW-1, 5, VE-1	26290.9	14.1	23.8	19	---	300	4	345	2.3	0.08	8135.5	498.55	---	---	---	---	---	66,748,622	On. Turn off.
04/17/13	MW-1, 10, 14, 16B, RW-2, VE-1	26290.9	0.0	23.8	19	---	3,000	45	3,640	22.9	0.85	8135.5	498.55	---	---	---	---	---	66,748,622	Off. Restart.
04/18/13	MW-10, RW-2	26307.2	0.7	16.9	23	---	3,000	45	---	16.3	0.95	8146.5	499.19	---	---	---	---	---	66,819,429	On.
04/22/13	MW-10, RW-2	26412.4	4.4	16.9	23	---	3,000	45	---	16.3	0.95	8217.8	503.35	---	---	---	---	---	67,276,418	On.
04/23/13	MW-10, RW-2	26428.5	0.7	16.9	23	INF-V	**2,700**	**40**	---	14.6	0.84	8227.6	503.91	---	---	---	---	---	67,346,356	On.
04/25/13	MW-10, RW-2	26474.6	1.9	16.9	23	---	2,700	40	---	14.6	0.84	8255.7	505.53	---	---	---	---	---	67,546,615	On.
04/30/13	MW-10, RW-2	26501.7	1.1	16.9	23	---	2,700	40	---	14.6	0.84	8272.2	506.48	---	---	---	---	---	67,664,337	Off. Leave off.
05/01/13	MW-10, RW-2	26505.0	0.1	19.2	22	---	2,700	40	---	1.7	0.84	8272.5	506.60	---	---	---	---	---	67,678,593	Off. Restart.
05/02/13	MW-10, RW-2	26528.0	1.0	19.7	22	INF-V	**3,800**	**63**	---	24.1	1.36	8295.5	507.90	---	---	---	---	---	67,780,713	On.
05/14/13	MW-10, RW-2	26723.0	8.1	19.7	22	---	3,800	63	---	24.1	1.36	8491.0	518.92	---	---	---	---	---	68,646,513	Off. Restrart. Transfer pump slow; turn off.
05/15/13	MW-10, RW-2	26725.0	0.1	17.7	23	---	3,800	63	---	21.6	1.39	8492.8	519.04	---	---	---	---	---	68,655,633	Off. Repair; restart.
05/30/13	MW-6, 10, RW-2	27090.0	15.2	17.7	23	---	3,800	63	---	21.6	1.39	8821.6	540.23	---	---	---	---	---	70,320,033	On.
06/05/13	MW-6, 10, RW-2	27146.0	2.3	18.1	22	INF-V	**1,100**	**16**	---	6.4	0.32	8836.5	540.96	---	---	---	---	---	70,548,513	Off. Restart.
06/10/13	MW-6, 10, RW-2	27146.2	0.0	18.1	22	---	1,100	16	---	6.4	0.32	8836.6	540.97	---	---	---	---	---	70,549,329	Off. Shutdown for QM in two weeks.

Notes:
ALL = Wells MW-1, MW-6, MW-10, MW-14, MW-15, RW-1, RW-2, RW-3A, RW-3B, RW-4, RW-5 and VE-1.
NA = not analyzed; NM = not measured; --- = not available
System data estimated when specific data not available.
scfm = Anemometer readings provide actual cubic feet per minute (acfm) flow rate. ACFM flow rate from vacuum side of pump converted to SCFM. SCFM = ACFM x (30" Hg - Vacuum Hg")/30 "Hg.
ppmv = parts per million on volume to volume basis. Actual lab data shown in **bold.** Lab data estimated for dates without lab data to allow mass removal calculation.
lbs = Pounds
"Hg = Inches of mercury vacuum
SVE = Soil Vapor Extraction
OVA = Organic Vapor Analyzer (Horiba Model MEXA 324JU)
TPHg and Benzene Removal Rates = For dates where no laboratory analytical data was collected, the lab data is estimated based on prior lab data and OVA readings to calculate period and cumulative mass removal.
Hydrocarbon Removal/Emission Rate = Rate based on Bay Area Air Quality Management District's Manual of Procedures for Soil Vapor Extraction dated July 17, 1991.
Rate = lab concentration (ppmv) x system flowrate (scfm) x (1lb-mole/386 ft³) x molecular weight (86 lb/lb-mole for TPH-Gas hexane) x 1440 min/day x 1/1,000,000.

Table 5. GWE (DPE) System Performance Summary - 3093 Broadway, Oakland, California

Well ID	Date	Totalizer Reading (gallons)	Interval Flow Volume (gallons)	Interval Duration (days)	Average Flow Rate (gpm)	**TPHg** Concentration (ug/L)	**Benzene** Concentration (ug/L)	**MTBE** Concentration (ug/L)	TPHg Removed (Lbs)	Benzene Removed (Lbs)	MTBE Removed (Lbs)	Comments
System	04/15/11	40	40	0	--	---	---	---	0.000	0.000	0.000	Startup testing, water not discharged to sewer.
Influent	04/27/11	1,267	1,227	12	0.07	**8,300**	**1,500**	**ND (<100)**	0.085	0.015	0.000	Startup water sampling of influent
	05/05/11	7,858	6,591	8	0.57	---	---	---	0.455	0.082	0.000	System on
	05/29/11	36,261	28,403	24	0.82	---	---	---	1.960	0.354	0.000	On. Broken transfer pump
	06/03/11	39,361	3,100	5	0.43	---	---	---	0.214	0.039	0.000	System off. Restart
	07/06/11	94,837	55,476	33	1.17	---	---	---	3.829	0.692	0.000	System on
	07/11/11	94,837	0	5	0.00	---	---	---	0.000	0.000	0.000	On.
	07/14/11	97,337	2,500	3	0.58	---	---	---	0.173	0.031	0.000	Off. Restart.
	07/19/11	112,225	14,888	5	2.07	---	---	---	1.028	0.186	0.000	Off on arrival & depature. Blower malfunction.
	07/21/11	112,225	0	2	0.00	---	---	---	0.000	0.000	0.000	Off. Reset high temp control. Restart.
	07/28/11	142,936	30,711	7	3.05	---	---	---	2.120	0.383	0.000	On.
	08/01/11	155,689	12,753	4	2.21	---	---	---	0.880	0.159	0.000	On.
	08/08/11	175,705	20,016	7	1.99	---	---	---	1.382	0.250	0.000	On.
	08/18/11	204,566	28,861	10	2.00	---	---	---	1.992	0.360	0.000	On.
	09/01/11	220,420	15,854	14	0.79	---	---	---	1.094	0.198	0.000	Off. Restart system
	09/22/11	251,290	30,870	21	1.02	---	---	---	2.131	0.385	0.000	On.
	09/26/11	261,174	9,884	4	1.72	---	---	---	0.682	0.123	0.000	On.
	10/05/11	266,388	5,214	9	0.40	**5,700**	**400**	**ND (<50)**	0.247	0.017	0.000	On.
	10/10/11	276,750	10,362	5	1.44	---	---	---	0.491	0.034	0.000	Off. Restart.
	10/18/11	296,101	19,351	8	1.68	---	---	---	0.917	0.064	0.000	On.
	11/15/11	315,133	19,032	28	0.47	---	---	---	0.902	0.063	0.000	On.
	11/22/11	315,907	774	7	0.08	---	---	---	0.037	0.003	0.000	On.
	11/29/11	326,151	10,244	7	1.02	---	---	---	0.486	0.034	0.000	On.
	12/08/11	337,285	11,134	9	0.86	---	---	---	0.528	0.037	0.000	On.
	12/14/11	344,270	6,985	6	0.81	---	---	---	0.331	0.023	0.000	On.
	12/19/11	349,720	5,450	5	0.76	---	---	---	0.258	0.018	0.000	On. Turn off for QM event. Restart 12/20.
	12/22/11	351,767	2,047	3	0.47	---	---	---	0.097	0.007	0.000	On. Off at departure.
	01/16/12	382,493	30,726	25	0.85	---	---	---	1.456	0.102	0.000	On.
	01/26/12	405,236	22,743	10	1.58	**12,000**	**330**	**ND (<500)**	2.270	0.062	0.000	On. Shutdown for carbon changeout.
	02/18/12	405,237	22,744	33	0.48	---	---	---	2.270	0.062	0.000	Off. Restart.
	03/06/12	406,378	1,141	17	0.05	---	---	---	0.114	0.003	0.000	Off. Restart.
	03/14/12	406,627	249	8	0.02	**2,700**	**35**	**ND (<50)**	0.006	0.000	0.000	On.
	03/27/12	411,055	4,428	13	0.24	---	---	---	0.099	0.001	0.000	Off. Restart.
	03/29/12	419,143	8,089	2	2.81	---	---	---	0.182	0.002	0.000	On.
	04/04/12	438,857	19,713	6	2.28	---	---	---	0.443	0.006	0.000	On.
	04/11/12	464,211	25,354	7	2.52	---	---	---	0.569	0.007	0.000	On.
	04/20/12	487,971	23,760	9	1.83	---	---	---	0.533	0.007	0.000	On.
	05/04/12	520,526	32,555	14	1.61	---	---	---	0.731	0.009	0.000	On.
	05/23/12	530,295	9,770	19	0.36	**15,000**	**170**	**ND (<50)**	1.219	0.014	0.000	Off. Restart.
	06/05/12	532,663	2,368	13	0.13	---	---	---	0.295	0.003	0.000	Off. Restart.
	06/19/12	552,072	19,409	14	0.96	---	---	---	2.421	0.027	0.000	Off. Restart.
	07/05/12	569,188	17,116	16	0.74	---	---	---	2.135	0.024	0.000	On.
	07/19/12	578,546	9,358	14	0.46	---	---	---	1.167	0.013	0.000	On.
	08/07/12	590,297	11,751	19	0.43	**5,800**	**100**	**ND (<50)**	0.567	0.010	0.000	Off. Restart.
	08/26/12	634,340	44,044	19	1.61	---	---	---	2.124	0.037	0.000	On. Turn off for QM event.
	09/14/12	634,764	424	19	0.02	---	---	---	0.020	0.000	0.000	Off. Restart.
	10/04/12	650,875	16,111	20	0.56	---	---	---	0.777	0.013	0.000	Off. Leave off.
	02/06/13	651,506	631	125	0.00	---	---	---	0.030	0.001	0.000	Off. Resart DPE, leave AS off.
	02/15/13	679,080	27,574	9	2.13	---	---	---	1.330	0.023	0.000	On.
	03/01/13	701,730	22,650	14	1.12	---	---	---	1.092	0.019	0.000	On.
	03/28/13	735,690	33,960	27	0.87	**310**	**6.4**	**ND (<5.0)**	0.088	0.002	0.000	On.

Table 5. GWE (DPE) System Performance Summary - 3093 Broadway, Oakland, California

Well ID	Date	Totalizer Reading (gallons)	Interval Flow Volume (gallons)	Interval Duration (days)	Average Flow Rate (gpm)	**TPHg** Concentration (ug/L)	**Benzene** Concentration (ug/L)	**MTBE** Concentration (ug/L)	TPHg Removed (Lbs)	Benzene Removed (Lbs)	MTBE Removed (Lbs)	Comments
	04/11/13	750,310	14,620	14	0.73	---	---	---	0.038	0.001	0.000	On.
	04/17/13	752,027	1,717	6	0.20	---	---	---	0.004	0.000	0.000	Off. Restart.
	04/18/13	758,623	6,596	1	4.58	---	---	---	0.017	0.000	0.000	On.
	04/22/13	784,350	25,727	4	4.47	---	---	---	0.066	0.001	0.000	On.
	04/23/13	787,690	3,340	1	2.32	---	---	---	0.009	0.000	0.000	On.
	04/25/13	796,930	9,240	2	3.21	---	---	---	0.024	0.000	0.000	On.
	04/30/13	801,771	4,841	5	0.67	---	---	---	0.012	0.000	0.000	Off. Leave off.
	05/01/13	804,220	2,449	1	1.70	---	---	---	0.006	0.000	0.000	Off. Turn on.
	05/02/13	805,286	1,066	1	0.74	---	---	---	0.003	0.000	0.000	On.
	05/14/13	818,081	12,795	12	0.74	---	---	---	0.033	0.001	0.000	Off. Restart. Transfer pump slow; turn off.
	05/15/13	818,100	19	1	0.01	---	---	---	0.000	0.000	0.000	Off. Repair. Restart.
	05/30/13	832,100	14,000	15	0.65	**3,800**	**21**	**ND (<50)**	0.442	0.002	0.000	On.
	06/05/13	832,960	860	6	0.10	---	---	---	0.027	0.000	0.000	Off. Restart.
	06/10/13	833,868	1,768	11	0.11	---	---	---	0.056	0.000	0.000	Off. Shutdown system for QM in two weeks.
									44.995	**4.016**	**0.000**	**Total Cumulative Removal (Lbs)***
System Midpoint	07/06/11	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	--	--	--	
	10/05/11	---	---	---	---	**ND (<50)**	**1.9**	**ND (<5.0)**	--	--	--	
	01/26/12	---	---	---	---	**95**	**13**	**ND (<5.0)**	--	--	--	
	03/28/13	---	---	---	---	**67**	**1.4**	**ND (<5.0)**	--	--	--	
System Effluent**	04/27/11	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	Startup water sampling of effluent
	07/06/11	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	
	10/05/11	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	
	01/26/12	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	
	03/14/12	---	---	---	---	**ND (<50)**	**0.52**	**ND (<5.0)**	---	---	---	
	05/23/12	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	
	03/28/13	---	---	---	---	**ND (<50)**	**ND (<0.5)**	**ND (<5.0)**	---	---	---	

Discharge Limits (ug/L):	***5***	***5***	***5***	***5***
	Benzene	***Toluene***	***Ethylbenzene***	***Total Xylenes***

ABBREVIATIONS AND NOTES:

gpm = Gallons per minute

TPHg = Total Petroleum Hydrocarbon as Gasoline analyzed by EPA Method 8015B

Benzene analyzed by EPA Method 8021B

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021 Cm

Toulene, Ethylbenzene and Total Xylenes analyzed by EPA Method 8015B

-- = not measured/not available

* Estimated contaminant mass calculated by multiplying average concentration detected during period (Table 1) by volume of extracted groundwater. Uses most recent lab data.

**Unless noted Toulene, Ethylbenzene and Total Xylenes non-detect (<0.5 µg/L)

APPENDIX A

Well Monitoring Protocol

Table A. Groundwater Monitoring Program - Connell Auto, 3093 Broadway, Oakland, CA

Well ID	Well Type	Screened Interval (ft bgs)	Well Location for Monitoring	Casing Diam. (in)	Gauge Frequency	Sample Frequency	TPHg, BTEX, MTBE	HVOCs
Upper Plume Wells								
AS-1A	AS	27-30	Source Area	2	---	---	---	---
AS-1B	AS	35-38	Source Area	2	---	---	---	---
AS-2A	AS	29-32	Source Area	2	---	---	---	---
MW-1	DPE + Mon	19-35	Source Area	2	2nd	2nd	2nd	--
MW-2	Mon	25-40	W, Perimeter	2	---	---	---	---
MW-3	Mon	20-35	S, Perimeter	2	---	---	---	---
MW-11	Mon	25-40	W, Perimeter	2	---	---	---	---
MW-14	DPE + Mon	10-40	Source Area	2	2nd	2nd	2nd	---
MW-15	DPE + Mon	15-40	Intermediate Downgradient	2	2nd	2nd	2nd	---
MW-16A	Mon	20-30	Source Area	2	--	--	--	---
MW-16B	Mon	35-40	Source Area	2	2nd	2nd	2nd	---
MW-17A	AS + Mon	27-30	Intermediate Downgradient	2	2nd	2nd	2nd	---
MW-17B	AS + Mon	35-40	Intermediate Downgradient	2	--	--	--	---
RW-1	DPE	20-35	Source Area	4	---	---	---	---
RW-4	DPE + Mon	23-31	Intermediate Downgradient	4	---	---	--	---
RW-5	DPE	24-34	Source Area	4	---	---	--	---
VE-1	DPE	15-35	Source Area	4	---	---	--	---
Lower Plume Wells								
AS-3A	AS	26-29	Intermediate Downgradient	2	---	---	---	---
AS-3B	AS	33-36	Intermediate Downgradient	2	---	---	---	---
AS-4A	AS	26-29	Intermediate Downgradient	2	---	---	---	---
MW-4	Mon	15-30	Intermediate Downgradient	2	2nd	2nd	2nd	---
MW-5	Mon	15-35	S, Perimeter	2	---	---		---
MW-6	DPE + Mon	15-35	Intermediate Downgradient	2	2nd	2nd	2nd	---
MW-7	Mon	13-33	SE, Perimeter	2	--	--	--	---
MW-8	Mon	20-40	E, Perimeter	6	--	--	--	---
MW-9	Mon	18-32	Intermediate Downgradient	2	--	--	--	---
MW-10	DPE + Mon	17-35	Intermediate Downgradient	6	--	--	--	---
MW-13	Mon	25-40	E, Perimeter, Offsite	2	--	--	--	---
RW-2	DPE + Mon	15-30	Intermediate Downgradient	2	2nd	2nd	2nd	---
RW-3A	DPE	16-26	Intermediate Downgradient	4	--	--	--	---
RW-3B	DPE	32-37	Intermediate Downgradient	4	---	---	---	---

Notes and Abbreviations:

Sample Analytes: Total Petroleum Hydrocarbons as Gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8015C/8021B.

HVOCs = Halogenated Volatile Organic Compounds (HVOCs) by EPA Method 8010.

2nd = 2nd quarter (Typically June)
Mon = Groundwater Monitoring Only
AS= Air Sparging
DPE = Dual Phase Extraction
N, S, W, E = Cardinal directions North, South, West, East and other directions (e.g., Northeast = NE)
--- = Not gauged or sampled.

APPENDIX B

Groundwater Monitoring Field Data Sheets

Pangea
ENVIRONMENTAL SERVICES INC.

Well Gauging Data Sheet

Project.Task #:1005.001 220				Project Name: Connell			
Address: 3093 Broadway, Oakland, CA						Date: 6/21/13	
Name: Sanjiv Gill				Signature:			
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)	Measuring Point
MW-1	2	09:39			22.28	33.70	TOC
MW-4	2	09:56			18.46	24.25	
MW-6	2	09:47			21.56	33.97	
MW-14	2	09:35			21.54	37.12	
MW-15	2	09:20			22.24	39.20	
MW-16B	2	09:25			25.99	39.64	
MW-17A	2	09:29			21.55	28.52	
RW-2	2	09:52			16.35	29.60	X

Comments:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-1

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 33.70	Depth to Product:
Depth to Water (DTW): 22.28	Product Thickness:
Water Column Height: 11.42	1 Casing Volume: 1.82 gallons
Reference Point: TOC	3 Casing Volumes: 5.46 gallons
Purging Device: (Disposable Bailer), 3" PVC Bailer, Check Valve Tubing, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
12:35	18.3	7.05	993				2.0	
12:40	18.1	7.09	1015				4.0	
12:45	18.1	7.10	1019				5.5	

Comments: YSI 550A DO meter pre purge DO = 0.78 mg/l

post purge DO = mg/l

very turbid

Sample ID: MW-1	Sample Time: 12:50
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-4

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 24.25	Depth to Product:
Depth to Water (DTW): 18.46	Product Thickness:
Water Column Height: 5.79	1 Casing Volume: 0.92 gallons
Reference Point: TOC	3 Casing Volumes: 2.76 gallons
Purging Device: (Disposable Bailer), 3" PVC Bailer, Check Valve Tubing, Whal Pump	
Sampling Device: Disposable Bailer	

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
14:05	18.7	7.22	1520				1	
14:07	18.8	7.21	1529				2	
14:10	18.9	7.25	1532				3	

Comments: YSI 550A DO meter

pre purge DO = 0.85 mg/l

post purge DO = mg/l

turbid, odor

Sample ID: MW-4	Sample Time: 14:15
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-6

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 3" = 0.37 | 6" = 1.47 | 2" = 0.16 | 4" = 0.65 | radius² * 0.163
Total Depth (TD): 33.97	Depth to Product:
Depth to Water (DTW): 21.56	Product Thickness:
Water Column Height: 12.41	1 Casing Volume: 1.98 gallons
Reference Point: TOC	3 Casing Volumes: 5.94 gallons

Purging Device: Disposable Bailer, 3" PVC Bailer, Check Valve Tubing, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
13:05	18.4	7.25	1802				2.0	
13:10	18.8	7.31	1790				4.0	
13:15	18.9	7.30	1788				6.0	

Comments: YSI 550A DO meter

pre purge DO = 0.81 mg/l

post purge DO = mg/l

very turbid

Sample ID: MW-6	Sample Time: 13:20
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-14

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 3" = 0.37 | 6" = 1.47 | 2" = 0.16 | 4" = 0.65 | radius^2 * 0.163
Total Depth (TD): 37.12	Depth to Product:
Depth to Water (DTW): 21.54	Product Thickness:
Water Column Height: 15.58	1 Casing Volume: 2.49 gallons
Reference Point: TOC	3 Casing Volumes: 7.47 gallons

Purging Device: Disposable Bailer, 3" PVC Bailer, Check Valve Tubing, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
11:55	17.9	6.85	1013				2.5	
12:07	18.1	6.87	1046				5.0	
12:15	18.3	6.83	1049				7.5	

Comments: YSI 550A DO meter pre purge DO = 0.95 mg/l

post purge DO = mg/l

turbid

Sample ID: MW-14	Sample Time: 12:20
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-15

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 39.20	Depth to Product:
Depth to Water (DTW): 22.24	Product Thickness:
Water Column Height: 16.96	1 Casing Volume: 2.71 gallons
Reference Point: TOC	3 Casing Volumes: 8.13 gallons

Purging Device: (Disposable Bailer), 3" PVC Bailer, Check Valve Tubing, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
10:15	17.7	7.23	1358				3.0	
10:20	17.9	7.21	1390				6.0	
10:25	17.9	7.24	1376				8.0	

Comments: YSI 550A DO meter

pre purge DO = 1.12 mg/l

post purge DO = mg/l

very turbid

Sample ID: MW-15	Sample Time: 10:30
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-16B

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 39.64	Depth to Product:
Depth to Water (DTW): 25.99	Product Thickness:
Water Column Height: 13.65	1 Casing Volume: 2.18 gallons
Reference Point: TOC	3 Casing Volumes: 6.54 gallons

Purging Device: (Disposable Bailer) 3" PVC Bailer, Check Valve Tubing, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
10:45	17.6	6.91	1159				2.5	
10:55	17.5	6.90	1126				5.0	
11:05	17.8	6.87	1123				6.5	

Comments: YSI 550A DO meter — pre purge DO = 1.74 mg/l

post purge DO = mg/l

turbid

Sample ID: MW-16B	Sample Time: 11:10
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

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ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: MW-17A

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius^2 * 0.163
Total Depth (TD): 28.52	Depth to Product:
Depth to Water (DTW): 21.55	Product Thickness:
Water Column Height: 6.97	1 Casing Volume: 1.11 gallons
Reference Point: TOC	3 Casing Volumes: 3.33 gallons

Purging Device: Disposable Bailer, 3" PVC Bailer, Check Valve Tubing, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
11:25	17.6	7.12	851				1.0	
11:27	17.8	7.17	860				2.0	
11:30	18.1	7.19	863				3.0	

Comments: YSI 550A DO meter

pre purge DO = 1.31 mg/l

post purge DO = mg/l

turbid

Sample ID: MW-17A	Sample Time: 11:35
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Pangea
ENVIRONMENTAL SERVICES, INC.

MONITORING FIELD DATA SHEET

Well ID: RW-2

Project.Task #: 1005.001 218	Project Name: Connell - 3093 Broadway.
Address: 3093 Broadway, Oakland, CA	
Date: 6/21/13	Weather: Sunny
Well Diameter: 2"	Volume/ft. 1" = 0.04 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 6" = 1.47 | radius² * 0.163
Total Depth (TD): 29.60	Depth to Product:
Depth to Water (DTW): 16.35	Product Thickness:
Water Column Height: 13.25	1 Casing Volume: 2.12 gallons
Reference Point: TOC	3 Casing Volumes: 6.36 gallons

Purging Device: (Disposable Bailer), 3" PVC Bailer, Check Valve Tubing, Whal Pump

Sampling Device: Disposable Bailer

Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
13:35	18.2	7.18	940				2.0	
13:40	18.0	7.16	960				4.0	
13:45	18.0	7.16	967				6.0	

Comments: YSI 550A DO meter — pre purge DO = 1.81 mg/l

post purge DO = mg/l

turbid

Sample ID: RW-2	Sample Time: 13:50
Laboratory: McCampbell Analytical, INC.	Sample Date: 6/21/13
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021	
Sampler Name: Sanjiv Gill	Signature:

Development Data Sheet

Job#: Cornell	**Developer:**	**Client:** Pangea
Well ID: MW-6	**Date:** 5/10/13	**Site:** 3093 Broadway
Well diam: 1/4" 1" (2") 3" 4" 6" Other:	**DTW:**	**TD Before:** **TD After:**
Purge equip: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other:	**Surge block used:** Y N	
Length of time surged prior to development:		
Pump depth/ intake:	**Multipliers:** 1"= 0.04 2"= 0.16 3"= 0.37 4"= 0.65 5"=1.02 6"= 1.47 Radius² X 0.163	
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)	

1 Volume = _____ X **10** = _____ (Total Purge) Meter(s): _____

Time	Temp (°C / °F)	pH	Cond (mS / µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal / L)	DTW	Notes
	Tried to camera well - could not see anything							
	Tried PAD + removed ~ 6 inches of silt + 20 gallons H2O							
	Unable to develop well - silt is extremely							
	packed - too tight to purge w/ PAD,							
	slurry bailer or regular stainless bailer							
								TD ~ 25.80'

Did well dewater? YES NO	Total volume removed:	(gal / L)
Sample method (if applicable): Disp Bailer Ded. Tubing New Tubing Ext. Port Other:		
Sample date:	Sample time:	DTW at sample:
Sample ID:	Lab:	Number of bottles:
Analysis:		

DAILY LOG

Date: 5/14	Site Address: 3093 Broadway
Task/Purpose: Remove blockage from MW-6	Project Name: Cowell
Log Notes By (Name): MF	Project Number: 1005.001

NOTES

1400 - To site w/ Scott
- Attempt to suspend silt by blasting w/ water. No silt
- Attempt to hand auger through blockage - no progress.
- To Scott's house to p/u air lift.
- Return to site and try to use water and air to remove silt - no silt.
- Attach screw to rods and remove old shiner and rope, old measuring tape from well.
- Used air lift to remove remaining debris from well, including sponge, rag and more measuring tape debris.
- Transfer pump on system very slow. Air stuck in pump. Remove air. Pump still running slowly. Partially clogged?
- Attempt to resolve pump issues, but no easy fix.
- Shutdown system and plan to return to add junction to piping between k/o tank + transfer pump, so that we can clean out pipe.

1830 - Depart site

Hrs 26723

TOTAL 618080

Compressor 14564

APPENDIX C

Laboratory Analytical Report

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001 232; Connell-3093 Broadway	Date Sampled: 06/21/13
		Date Received: 06/21/13
	Client Contact: Tina De La Fuente	Date Reported: 06/26/13
	Client P.O.:	Date Completed: 06/24/13

WorkOrder: 1306570

June 27, 2013

Dear Tina:

Enclosed within are:

1) The results of the **8** analyzed samples from your project: **#1005.001 232; Connell-3093 Broadway,**
2) QC data for the above samples, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1306570

McCampbell Analytical, Inc.

1534 Willow Pass Rd. / Pittsburg, Ca. 94565-1701
www.mccampbell.com / main@mccampbell.com
Telephone: (877) 252-9262 / Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY ☒

GeoTracker EDF ☒ PDF ☒ EDD ☐ Write On (DW) ☐ EQuIS ☐ 10 DAY ☐

Effluent Sample Requiring "J" flag ☐ UST Clean Up Fund Project ☐; Claim #_____

Report To: Tina delafuente	**Bill To:** Pangea
Company: Pangea Environmental Services	
1718 Franklin Street, Ste:200 Oakland, CA	**E-Mail:** tdelafuente@pangeaenv.com
Tele: (510) 836-3700	**Fax:** (510) 836-3709
Project #: 1005.001 232	**Project Name:** Connell - 3093 Broadway
Project Location: 3093 Broadway Oakland, CA	**Purchase Order#**
Sampler Signature: Muskan Environmental Sampling	

SAMPLE ID	Location/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	MATRIX: Ground Water	Waste Water	Drinking Water	Sea Water	Soil	Air	Sludge	Other	METHOD PRESERVED: HCL	HNO_3	Other	BTEX/ MTBE & TPH as Gas (8021/ 8015)	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	BTEX/ MTBE & TPH as Gas (8260)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Metals (200.7 / 200.8 / 6010 / 6020)	Filter sample for DISSOLVED metals analysis
MW-1		6/21/13	12:50	3	X								X			X																
MW-4			14:15																													
MW-6			13:20																													
MW-14			12:20																													
MW-15			10:30																													
MW-16B			11:10																													
MW-17A			11:35																													
RW-2			13:50																													

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By:	Date:	Time:	Received By:
	6/21/13	1518	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 1.1
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB_____

PRESERVATION VOAS ✓ O&G METALS OTHER HAZARDOUS: pH<2

COMMENTS:

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1306570 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Tina De La Fuente
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX: (510) 836-3709

Email: tdelafuente@pangeaenv.com
cc:
PO:
ProjectNo: #1005.001 232; Connell-3093 Broadway

Bill to:
Bob Clark-Riddell
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Requested TAT: 5 days

Date Received: **06/21/2013**
Date Printed: **06/21/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1306570-001	MW-1	Water	6/21/2013 12:50	☐	A	A										
1306570-002	MW-4	Water	6/21/2013 14:15	☐	A											
1306570-003	MW-6	Water	6/21/2013 13:20	☐	A											
1306570-004	MW-14	Water	6/21/2013 12:20	☐	A											
1306570-005	MW-15	Water	6/21/2013 10:30	☐	A											
1306570-006	MW-16B	Water	6/21/2013 11:10	☐	A											
1306570-007	MW-17A	Water	6/21/2013 11:35	☐	A											
1306570-008	RW-2	Water	6/21/2013 13:50	☐	A											

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

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Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **6/21/2013 3:21:39 PM**

Project Name: **#1005.001 232; Connell-3093 Broadway**
LogIn Reviewed by: Maria Venegas

WorkOrder N°: **1306570** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 7.1°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
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Pangea Environmental Svcs., Inc.	Client Project ID: #1005.001 232; Connell-3093 Broadway	Date Sampled: 06/21/13
		Date Received: 06/21/13
1710 Franklin Street, Ste. 200	Client Contact: Tina De La Fuente	Date Extracted: 06/22/13
Oakland, CA 94612	Client P.O.:	Date Analyzed: 06/22/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1306570

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1	W	51,000	ND<120	2300	3500	340	8100	25	98	d1
002A	MW-4	W	110,000	ND<1200	4400	15,000	1700	13,000	100	99	d1,b6
003A	MW-6	W	15,000	ND<250	2400	300	370	680	10	107	d1
004A	MW-14	W	36,000	ND<250	1100	4000	550	6400	50	84	d1
005A	MW-15	W	11,000	ND<50	390	710	120	2200	10	98	d1
006A	MW-16B	W	5400	ND<50	1600	350	56	170	10	96	d1
007A	MW-17A	W	20,000	ND<250	1300	1500	73	3400	50	82	d1
008A	RW-2	W	4000	ND<50	180	350	65	530	10	83	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
b6) lighter than water immiscible sheen/product is present
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 78588 | WorkOrder: 1306570

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1306546-005A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	104	101	3.19	98.2	70 - 130	20	70 - 130
MTBE	ND	10	97.1	93.1	4.16	88.9	70 - 130	20	70 - 130
Benzene	ND	10	93.7	92.2	1.60	90.1	70 - 130	20	70 - 130
Toluene	ND	10	96.2	96.9	0.799	91.4	70 - 130	20	70 - 130
Ethylbenzene	ND	10	99.8	99.9	0.0659	94.3	70 - 130	20	70 - 130
Xylenes	ND	30	108	106	1.87	99.7	70 - 130	20	70 - 130
%SS:	95	10	87	88	1.23	88	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 78588 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306570-001A	06/21/13 12:50 PM	06/22/13	06/22/13 5:28 PM	1306570-002A	06/21/13 2:15 PM	06/22/13	06/22/13 1:23 PM
1306570-003A	06/21/13 1:20 PM	06/22/13	06/22/13 4:01 PM	1306570-004A	06/21/13 12:20 PM	06/22/13	06/22/13 8:50 AM
1306570-005A	06/21/13 10:30 AM	06/22/13	06/22/13 9:04 PM	1306570-006A	06/21/13 11:10 AM	06/22/13	06/22/13 9:51 AM
1306570-007A	06/21/13 11:35 AM	06/22/13	06/22/13 10:21 AM	1306570-008A	06/21/13 1:50 PM	06/22/13	06/22/13 11:18 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell Auto	Date Sampled: 03/28/13
		Date Received: 03/28/13
	Client Contact: Morgan Gillies	Date Reported: 04/04/13
	Client P.O.: 3093 Broadway, Oakland, CA	Date Completed: 04/03/13

WorkOrder: 1303807

April 04, 2013

Dear Morgan:

Enclosed within are:

1) The results of the **3** analyzed samples from your project: **#1005.001; Connell Auto,**
2) QC data for the above samples, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
Pittsburg, CA 94565
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

1303807

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Morgan Gillies	Bill To: Pangea
Company: Pangea Environmental Services, Inc.	
1710 Franklin Street, Suite 200, Oakland, CA 94612	
	E-Mail: mgillies@pangeaenv.com
Tele: (510) 836-3700	Fax: (510) 836-3709
PO#: 3093 Broadway, Oakland, CA	Project Name: Connell Auto
Project Location: 3093 Broadway, Oakland, Ca	Project #: 1005.001
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED ICE	HCL	HNO_3	Other	Analysis Request: BTEX & TPH as gas (602/8020 + 8015)/MTBE	Other	Comments
INF-W		3/28/13	12:30	3	VOA	X					X				X		Filter Samples for Metals analysis: Yes / No
MID-W			12:35														
EFF-W			12:40														

Relinquished By:	Date: 3/28/13	Time: 2:45	Received By:
Relinquished By:	Date: 3/28/13	Time: 1530	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t 3.4
COMMENTS:
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS
PRESERVED IN LAB

	VOAS	O&G	METALS	OTHER
PRESERVATION			pH<2	

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1303807 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Morgan Gillies
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX: (510) 836-3709

Email: mgillies@pangeaenv.com; tdelafuente@pa
cc:
PO: 3093 Broadway, Oakland, CA
ProjectNo: #1005.001; Connell Auto

Bill to:
Bob Clark-Riddell
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Requested TAT: 5 days

Date Received: **03/28/2013**
Date Printed: **03/28/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1303807-001	INF-W	Water	3/28/2013 12:30	☐	A	A										
1303807-002	MID-W	Water	3/28/2013 12:35	☐	A											
1303807-003	EFF-W	Water	3/28/2013 12:40	☐	A											

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

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Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **3/28/2013 3:59:56 PM**

Project Name: **#1005.001; Connell Auto**
LogIn Reviewed by: Zoraida Cortez

WorkOrder N°: **1303807** Matrix: Water
Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 3.4°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Pangea Environmental Svcs., Inc.	Client Project ID: #1005.001; Connell Auto	Date Sampled: 03/28/13
		Date Received: 03/28/13
1710 Franklin Street, Ste. 200	Client Contact: Morgan Gillies	Date Extracted: 04/02/13-04/03/13
Oakland, CA 94612	Client P.O.: 3093 Broadway, Oakland,	Date Analyzed: 04/02/13-04/03/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1303807

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-W	W	310	ND	6.4	6.6	1.5	34	1	100	d1
002A	MID-W	W	67	ND	1.4	ND	ND	ND	1	106	d1
003A	EFF-W	W	ND	ND	ND	ND	ND	ND	1	107	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 76021 | WorkOrder: 1303807

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1303856-033A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	94.7	93.6	1.14	93.7	70 - 130	20	70 - 130
MTBE	ND	10	97.8	80.5	19.4	83.9	70 - 130	20	70 - 130
Benzene	ND	10	101	97.4	3.71	97.6	70 - 130	20	70 - 130
Toluene	ND	10	102	98.8	3.39	97.9	70 - 130	20	70 - 130
Ethylbenzene	ND	10	101	99.1	2.32	96.7	70 - 130	20	70 - 130
Xylenes	ND	30	102	99.8	2.42	97.1	70 - 130	20	70 - 130
%SS:	103	10	102	102	0	101	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 76021 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1303807-001A	03/28/13 12:30 PM	04/02/13	04/02/13 1:56 AM	1303807-002A	03/28/13 12:35 PM	04/03/13	04/03/13 3:33 AM
1303807-003A	03/28/13 12:40 PM	04/03/13	04/03/13 4:02 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell Auto	Date Sampled: 04/23/13
		Date Received: 04/23/13
	Client Contact: Morgan Gillies	Date Reported: 04/25/13
	Client P.O.: #3093 Broadway, Oakland, CA	Date Completed: 04/25/13

WorkOrder: 1304704

April 29, 2013

Dear Morgan:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **#1005.001; Connell Auto,**
2) QC data for the above sample, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
Pittsburg, CA 94565
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Telephone: (925) 252-9262 Fax: (925) 252-9269

130470 4

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ■ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Morgan Gillies	Bill To: Pangea
Company: Pangea Environmental Services, Inc.	
1710 Franklin Street, Suite 200, Oakland, CA 94612	
	E-Mail: mgillies@pangeaenv.com
Tele: (510) 836-3700	Fax: (510) 836-3709
PO#: 3093 Broadway, Oakland, CA	Project Name: Connell Auto
Project Location: 3093 Broadway, Oakland, Ca	Project #: 1005.001
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED ICE	HCL	HNO_3	Other	Analysis Request: BTEX & TPH as gas (602/8020 + 8015)/MTBE	Other	Comments
INF-V	INF	4/23/13	1100	1	T			X							X		

Relinquished By:	Date:	Time:	Received By:
	4/23/13	16:44	
Relinquished By:	Date:	Time:	Received By:
	4/23	1857	
Relinquished By:	Date:	Time:	Received By:

ICE/t° _____ COMMENTS:
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
APPROPRIATE CONTAINERS _____
PRESERVED IN LAB _____

	VOAS	O&G	METALS	OTHER
PRESERVATION			pH<2	

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1304704 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Morgan Gillies
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX: (510) 836-3709

Email: mgillies@pangeaenv.com; tdelafuente@pa
cc:
PO: #3093 Broadway, Oakland, CA
ProjectNo: #1005.001; Connell Auto

Bill to:
Bob Clark-Riddell
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Requested TAT: **5 days**

Date Received: **04/23/2013**
Date Printed: **04/23/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1304704-001	INF-V	Air	4/23/2013 11:00	☐	A	A										

Test Legend:

1	G-MBTEX_AIR	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **4/23/2013 7:51:32 PM**

Project Name: **#1005.001; Connell Auto**
LogIn Reviewed by: Zoraida Cortez

WorkOrder N°: **1304704** Matrix: Air
Carrier: David Valles (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Comments:

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Pangea Environmental Svcs., Inc.	Client Project ID: #1005.001; Connell Auto	Date Sampled: 04/23/13
		Date Received: 04/23/13
1710 Franklin Street, Ste. 200	Client Contact: Morgan Gillies	Date Extracted: 04/24/13
Oakland, CA 94612	Client P.O.: #3093 Broadway, Oakland,	Date Analyzed: 04/24/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1304704

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-V	A	9500	ND<80	140	200	18	440	20	---#	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Pangea Environmental Svcs., Inc.	Client Project ID: #1005.001; Connell Auto	Date Sampled: 04/23/13
		Date Received: 04/23/13
1710 Franklin Street, Ste. 200	Client Contact: Morgan Gillies	Date Extracted: 04/24/13
Oakland, CA 94612	Client P.O.: #3093 Broadway, Oakland,	Date Analyzed: 04/24/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1304704

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-V	A	2700	ND<25	44	53	4.1	100	20	---#	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 76667 | WorkOrder: 1304704

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1304692-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	86.6	91.3	6.84	83.8	70 - 130	20	70 - 130
MTBE	ND	10	107	114	7.95	84.3	70 - 130	20	70 - 130
Benzene	ND	10	110	114	14.4	107	70 - 130	20	70 - 130
Toluene	ND	10	110	114	14.2	106	70 - 130	20	70 - 130
Ethylbenzene	ND	10	110	114	15.1	107	70 - 130	20	70 - 130
Xylenes	ND	30	113	116	16.5	109	70 - 130	20	70 - 130
%SS:	97	10	97	97	0	97	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 76667 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1304704-001A	04/23/13 11:00 AM	04/24/13	04/24/13 6:20 PM	1304704-001A	04/23/13 11:00 AM	04/24/13	04/24/13 6:20 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: Connell	Date Sampled: 05/02/13
		Date Received: 05/02/13
	Client Contact: Morgan Gillies	Date Reported: 05/07/13
	Client P.O.:	Date Completed: 05/03/13

WorkOrder: 1305066

May 08, 2013

Dear Morgan:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **Connell,**
2) QC data for the above sample, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1305066

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
Pittsburg, CA 94565
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Morgan Gillies	Bill To: Pangea
Company: Pangea Environmental Services, Inc.	
1710 Franklin Street, Suite 200, Oakland, CA 94612	
	E-Mail: mgillies@pangeaenv.com
Tele: (510) 836-3702	Fax: (510) 836-3709
Project #:	Project Name: Connell
Project Location: 3093 BROADWAY / OAKLAND	
Sampler Signature:	

SAMPLE ID	LOCATION (Field Point Name)	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED ICE	HCL	HNO_3	Other
INF-V	INF-V	5/2/13	0913	1	B			X						X

Analysis Request	Other	Comments
BTEX & TPH as Gas (602/8020 + 8015)/MTBE		Filter Samples for Metals analysis: Yes / No
TPH as Diesel (8015) w/ Silica Gel Cleanup		
Total Petroleum Oil & Grease (5520 E&F/B&F)		
Total Petroleum Hydrocarbons (418.1)		
EPA 601 / 8010 / 8021		
BTEX ONLY (EPA 602 / 8020)		
EPA 608 / 8081		
EPA 608 / 8082 PCB's ONLY		
EPA 8140 / 8141		
EPA 8150 / 8151		
EPA 524.2 / 624 / 8260		
EPA 525 / 625 / 8270		
PAH's / PNA's by EPA 625 / 8270 / 8310		
CAM-17 Metals (6010 / 6020)		
LUFT 5 Metals (6010 / 6020)		
Lead (200.8 / 200.9 / 6010)		
X		

	Date:	Time:	Received By:
Relinquished By:	5/2/13	1452	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t°_____ COMMENTS:
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER
PRESERVATION pH<2

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1305066 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Morgan Gillies
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX: (510) 836-3709

Email: mgillies@pangeaenv.com; tdelafuente@pa
cc:
PO:
ProjectNo: Connell

Bill to:
Bob Clark-Riddell
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Requested TAT: 5 days

Date Received: **05/02/2013**
Date Printed: **05/02/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1305066-001	INF-V	Air	5/2/2013 9:13	☐	A											

Test Legend:

1	G-MBTEX_AIR	2		3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Jena Alfaro

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **5/2/2013 2:51:31 PM**

Project Name: **Connell**
LogIn Reviewed by: Jena Alfaro

WorkOrder N°: **1305066** Matrix: Air
Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Comments:

McCampbell Analytical, Inc.
"When Quality Counts"

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Pangea Environmental Svcs., Inc.	Client Project ID: Connell	Date Sampled: 05/02/13
		Date Received: 05/02/13
1710 Franklin Street, Ste. 200	Client Contact: Morgan Gillies	Date Extracted: 05/02/13
Oakland, CA 94612	Client P.O.:	Date Analyzed: 05/02/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1305066

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-V	A	14,000	ND<250	200	400	39	300	20	---#	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Pangea Environmental Svcs., Inc.	Client Project ID: Connell	Date Sampled: 05/02/13
		Date Received: 05/02/13
1710 Franklin Street, Ste. 200	Client Contact: Morgan Gillies	Date Extracted: 05/02/13
Oakland, CA 94612	Client P.O.:	Date Analyzed: 05/02/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1305066

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-V	A	3800	ND<60	63	110	8.8	68	20	---#	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

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http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 76940 | WorkOrder: 1305066

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1305040-002C**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	92.8	95.5	2.86	91.6	70 - 130	20	70 - 130
MTBE	ND	10	98	97.2	0.734	96.5	70 - 130	20	70 - 130
Benzene	ND	10	88.2	86.7	1.70	89.6	70 - 130	20	70 - 130
Toluene	ND	10	89.7	88.9	0.851	90.4	70 - 130	20	70 - 130
Ethylbenzene	ND	10	92.5	91	1.56	92.5	70 - 130	20	70 - 130
Xylenes	ND	30	93.2	91.9	1.43	93.1	70 - 130	20	70 - 130
%SS:	96	10	95	95	0	98	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 76940 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1305066-001A	05/02/13 9:13 AM	05/02/13	05/02/13 6:14 PM	1305066-001A	05/02/13 9:13 AM	05/02/13	05/02/13 6:14 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell Auto	Date Sampled: 05/30/13
		Date Received: 05/30/13
	Client Contact: Morgan Gillies	Date Reported: 06/06/13
	Client P.O.: 3093 Broadway, Oakland, CA	Date Completed: 06/05/13

WorkOrder: 1305910

June 06, 2013

Dear Morgan:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **#1005.001; Connell Auto,**
2) QC data for the above sample, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

13105910

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
Pittsburg, CA 94565
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY
EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Morgan Gillies	Bill To: Pangea
Company: Pangea Environmental Services, Inc.	
1710 Franklin Street, Suite 200, Oakland, CA 94612	E-Mail: mgillies@pangeaenv.com
Tele: (510) 836-3700	Fax: (510) 836-3709
PO#: 3093 Broadway, Oakland, CA	Project Name: Connell Auto
Project Location: 3093 Broadway, Oakland, Ca	Project #: 1005.001
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED ICE	HCL	HNO_3	Other	Analysis Request: BTEX & TPH as gas (602/8020 + 8015)/MTBE	Other	Comments
INF-W	INF	5/30/13	11:30	2	V	X					X				X		

Analysis Request: Filter Samples for Metals analysis: Yes / No

Relinquished By:	Date: 5/30/13	Time: 1250	Received By:
Relinquished By:	Date: 5/30/13	Time: 1600	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 3.3
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB

	VOAS	O&G	METALS	OTHER
PRESERVATION	✓		pH<2	

COMMENTS:

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1305910 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Morgan Gillies
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX: (510) 836-3709

Email: mgillies@pangeaenv.com; tdelafuente@pa
cc:
PO: 3093 Broadway, Oakland, CA
ProjectNo: #1005.001; Connell Auto

Bill to:
Bob Clark-Riddell
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Requested TAT: **5 days**

Date Received: **05/30/2013**
Date Printed: **05/30/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1305910-001	INF-W	Water	5/30/2013 11:30	☐	A	A										

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **5/30/2013 4:40:58 PM**

Project Name: **#1005.001; Connell Auto**
LogIn Reviewed by: Maria Venegas

WorkOrder N°: **1305910** Matrix: Water
Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 3.3°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

** NOTE: If the "No" box is checked, see comments below.*

Comments:

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Pangea Environmental Svcs., Inc.	Client Project ID: #1005.001; Connell Auto	Date Sampled: 05/30/13
		Date Received: 05/30/13
1710 Franklin Street, Ste. 200	Client Contact: Morgan Gillies	Date Extracted: 06/04/13
Oakland, CA 94612	Client P.O.: 3093 Broadway, Oakland,	Date Analyzed: 06/04/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1305910

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-W	W	3800	ND<50	21	22	ND<5.0	650	10	110	d2

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d2) heavier gasoline range compounds are significant (aged gasoline?)

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water | QC Matrix: Water | BatchID: 77970 | WorkOrder: 1305910

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1306006-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	87.9	82.6	6.17	109	70 - 130	20	70 - 130
MTBE	ND	10	93.8	98.1	4.42	89.5	70 - 130	20	70 - 130
Benzene	ND	10	100	107	6.62	105	70 - 130	20	70 - 130
Toluene	ND	10	98.6	104	5.39	104	70 - 130	20	70 - 130
Ethylbenzene	ND	10	98.6	105	5.81	105	70 - 130	20	70 - 130
Xylenes	ND	30	113	109	3.11	113	70 - 130	20	70 - 130
%SS:	102	10	84	97	13.8	88	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 77970 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1305910-001A	05/30/13 11:30 AM	06/04/13	06/04/13 2:44 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.

DHS ELAP Certification 1644

QA/QC Officer

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell Auto	Date Sampled: 06/05/13
		Date Received: 06/05/13
	Client Contact: Morgan Gillies	Date Reported: 06/10/13
	Client P.O.: 3093 Broadway, Oakland, CA	Date Completed: 06/06/13

WorkOrder: 1306102

June 11, 2013

Dear Morgan:

Enclosed within are:

1) The results of the **1** analyzed sample from your project: **#1005.001; Connell Auto,**
2) QC data for the above sample, and
3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1306102

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Road
Pittsburg, CA 94565
Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Morgan Gillies	Bill To: Pangea
Company: Pangea Environmental Services, Inc.	
1710 Franklin Street, Suite 200, Oakland, CA 94612	E-Mail: mgillies@pangeaenv.com
Tele: (510) 836-3700	Fax: (510) 836-3709
PO#: 3093 Broadway, Oakland, CA	Project Name: Connell Auto
Project Location: 3093 Broadway, Oakland, Ca	Project #: 1005.001
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED ICE	HCL	HNO_3	Other	Analysis Request: BTEX & TPH as gas (602/8020 + 8015)/MTBE	Other	Comments
INF.V	INF.	6/5/13	1015	1	1B			X						X	X		Filter Samples for Metals analysis: Yes / No

Relinquished By:	Date:	Time:	Received By:
	6/5/13	1018	
Relinquished By:	Date:	Time:	Received By:
	6/5/13	1330	
Relinquished By:	Date:	Time:	Received By:
	6/5/13	1530	

ICE/t°_____ COMMENTS:
GOOD CONDITION_____
HEAD SPACE ABSENT_____
DECHLORINATED IN LAB_____
APPROPRIATE CONTAINERS_____
PRESERVED IN LAB_____

VOAS O&G METALS OTHER
PRESERVATION_____ pH<2_____

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1306102 **ClientCode: PEO**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Morgan Gillies
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612
(510) 836-3700 FAX: (510) 836-3709

Email: mgillies@pangeaenv.com; tdelafuente@pa
cc:
PO: 3093 Broadway, Oakland, CA
ProjectNo: #1005.001; Connell Auto

Bill to:
Bob Clark-Riddell
Pangea Environmental Svcs., Inc.
1710 Franklin Street, Ste. 200
Oakland, CA 94612

Requested TAT: 5 days

Date Received: **06/05/2013**
Date Printed: **06/05/2013**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1306102-001	INF-V	Air	6/5/2013 10:15	☐	A	A										

Test Legend:

1	G-MBTEX_AIR	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**
Date and Time Received: **6/5/2013 6:00:16 PM**

Project Name: **#1005.001; Connell Auto**
LogIn Reviewed by: Zoraida Cortez

WorkOrder N°: **1306102** Matrix: Air
Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

** NOTE: If the "No" box is checked, see comments below.*

Comments:

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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Pangea Environmental Svcs., Inc.	Client Project ID: #1005.001; Connell Auto	Date Sampled: 06/05/13
		Date Received: 06/05/13
1710 Franklin Street, Ste. 200	Client Contact: Morgan Gillies	Date Extracted: 06/05/13
Oakland, CA 94612	Client P.O.: 3093 Broadway, Oakland,	Date Analyzed: 06/05/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1306102

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-V	A	4000	ND<25	53	92	11	110	10	---#	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
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http://www.mccampbell.com / E-mail: main@mccampbell.com

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell Auto	Date Sampled: 06/05/13
		Date Received: 06/05/13
	Client Contact: Morgan Gillies	Date Extracted: 06/05/13
	Client P.O.: 3093 Broadway, Oakland,	Date Analyzed: 06/05/13

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1306102

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-V	A	1100	ND<6.8	16	24	2.4	26	10	---#	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

DHS ELAP Certification 1644 IA Analyst's Initial Angela Rydelius, Lab Manager

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"When Quality Counts"

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http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 78048 | WorkOrder: 1306102

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: 1306116-004A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	ND	60	98.9	98.3	0.572	91.5	70 - 130	20	70 - 130
MTBE	ND	10	102	106	4.17	94.7	70 - 130	20	70 - 130
Benzene	ND	10	103	104	1.06	99.4	70 - 130	20	70 - 130
Toluene	ND	10	104	104	0	99.4	70 - 130	20	70 - 130
Ethylbenzene	ND	10	106	107	0.981	101	70 - 130	20	70 - 130
Xylenes	ND	30	106	108	1.14	101	70 - 130	20	70 - 130
%SS:	107	10	96	96	0	98	70 - 130	20	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 78048 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1306102-001A	06/05/13 10:15 AM	06/05/13	06/05/13 6:46 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

QA/QC Officer