



FITZGERALD ABBOTT & BEARDSLEY LLP  
ATTORNEYS AT LAW

1221 Broadway, 21st Floor Oakland, CA 94612  
reply to: P.O. Box 12867 Oakland, CA 94604-2867

**RECEIVED**

8:10 am, May 25, 2007

Alameda County  
Environmental Health

tel 510.451.3300  
fax 510.451.1527  
www.fablaw.com

May 23, 2007

Mr. Don Hwang  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Re: **Connell Automobile Dealership**  
3093 Broadway  
Oakland, California

Dear Mr. Hwang:

The Hill Family Trust & Linden Broadway Property Trust (Trusts) have retained Pangea Environmental Services, Inc. (Pangea) to provide environmental consulting services for corrective action at the site referenced above. Pangea is submitting the attached report on behalf of the Trusts.

I, Paul Kibel of Fitzgerald Abbot & Beardsley, am a legal representative 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,

FITZGERALD ABBOTT & BEARDSLEY LLP

Paul S. Kibel



May 23, 2007

***VIA ALAMEDA COUNTY FTP SITE***

Mr. Don Hwang  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Re: **Groundwater Monitoring Report – First Quarter 2007**  
Connell Automobile Dealership  
3093 Broadway  
Oakland, California  
ACEH Case No. 469

Dear Mr. Hwang:

On behalf of the Hill Family Trust and Linden Broadway Trust, Pangea Environmental Services, Inc., has prepared this *Groundwater Monitoring Report – First Quarter 2007* for the subject site. This report describes groundwater monitoring, sampling, and other site activities.

The report will be uploaded to the Alameda County ftp site and the SWRCB *Geotracker* database. As requested, Pangea will not submit a hard copy of this report to the ACEH.

If you have any questions or comments, please call me at (510) 435-8664.

Sincerely,  
**Pangea Environmental Services, Inc.**

A handwritten signature in blue ink, appearing to read "Bob Clark-Riddell".

Bob Clark-Riddell, P.E.  
Principal Engineer

Attachments: *Groundwater Monitoring Report – First Quarter 2007*

cc: Mr. George Hill, 305 Sheridan Avenue, Piedmont, California 94611  
Mr. Gordon Linden, 150 La Salle Avenue, Piedmont, California 94611  
Mr. Paul Kibel, Fitzgerald, Abbott & Beardsley, LLP, 1221 Broadway, 21<sup>st</sup> Floor, Oakland, California 94612  
SWRCB Geotracker (electronic copy)

**PANGEA Environmental Services, Inc.**



**GROUNDWATER MONITORING REPORT – FIRST QUARTER 2007**

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

**May 23, 2007**

*Prepared for:*

Hill Family Trust  
c/o Mr. George Hill  
305 Sheridan Avenue  
Piedmont, California 94611

and

Linden Broadway Trust  
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

**PANGEA Environmental Services, Inc.**

## **INTRODUCTION**

As required by the Alameda County Environmental Health (ACEH), Pangea Environmental Services, Inc. (Pangea), has prepared this *Groundwater Monitoring Report –First Quarter 2007* for the subject site. On behalf of the Hill Family Trust and Linden Broadway Trust, Pangea conducted groundwater monitoring, sampling, and separate-phase hydrocarbon (SPH) measurement during this quarter 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 the thickness of SPH. Current analytical data and groundwater elevations are shown on Figure 2. Current and historical data are summarized on Tables 1 and 2. Table 3 summarizes SPH removal to date.

## **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), 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.



## **GROUNDWATER MONITORING AND SAMPLING**

On February 12, 2007, Pangea gauged depth-to-water and inspected for SPH in site monitoring wells in accordance with the well monitoring protocol in Appendix A. The well monitoring protocol consists of quarterly gauging and annual sampling (during the first quarter of each year) of source area groundwater monitoring wells (MW-1, MW-6, MW-14 and MW-15) and quarterly gauging and sampling of select downgradient and crossgradient groundwater monitoring wells (MW-4, MW-7, MW-8, MW-9 and MW-13).

Prior to sampling the wells, groundwater levels and SPH thickness were measured to evaluate groundwater elevation and flow direction 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 or electric submersible pump. 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, water-based 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. In accordance with the approved sampling protocol, groundwater samples were analyzed for TPHg by modified EPA Method 8015C; TPHd and TPHmo by EPA Method 8015C with silica gel cleanup; and BTEX and MTBE by EPA Method 8021B. During the first quarter of each year, groundwater samples are also analyzed for halogenated volatile organic compounds (HVOCs) by EPA Method 8010. Table 1 summarizes current and historical analytical results for purgeable hydrocarbons and volatile organic compounds, and presents dissolved oxygen data. This quarter, DO concentrations ranged from 0.20 milligrams per liter (mg/L) in well MW-4 to 0.75 mg/L in well MW-7. 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 February 12, 2007, the inferred groundwater flow direction beneath the site is eastwards, while groundwater beneath Broadway flows northwards to northeastwards (Figure 2). These inferred flow directions are consistent with previous monitoring. Depth-to-water and groundwater elevation data are presented in Table 1.

## **Hydrocarbon Distribution in Groundwater**

SPH were measured in wells MW-1, MW-6 and MW-14 ranging from 0.02 to 0.03 feet in thickness, and those wells were not sampled. As proposed in Pangea's *Groundwater Monitoring Report – Fourth Quarter 2006* dated March 14, 2007, SPH removal activities have been discontinued due to the planned implementation of active remediation. The maximum TPHg, TPHd, and benzene concentrations were detected in well MW-4 at 140,000 micrograms per liter ( $\mu\text{g/L}$ ), 16,000  $\mu\text{g/L}$ , and 11,000  $\mu\text{g/L}$ , respectively. No hydrocarbons were detected in down/crossgradient well MW-7 or downgradient well MW-13. The presence of SPH and the concentrations of detected hydrocarbons are consistent with prior monitoring results.

## **Halogenated Volatile Organic Compounds in Groundwater**

The only halogenated volatile organic compound detected was 1,2-dichloroethane (1,2-DCA), which is a common gasoline additive used as a lead scavenger. The maximum 1,2-DCA concentration detected was 210  $\mu\text{g/L}$  in MW-9. The detected concentrations of 1,2-DCA are consistent with prior monitoring results, except for well MW-15, which contained 99  $\mu\text{g/L}$  1,2-DCA, which apparently had not been previously detected in the well.

## **OTHER SITE ACTIVITIES**

### **Ongoing Monitoring**

Pangea will continue quarterly groundwater monitoring in accordance with the approved monitoring protocol. All program wells will be gauged for depth to water and checked for SPH. For program wells without SPH, Pangea will collect groundwater samples and measure dissolved oxygen. All groundwater samples will be analyzed for TPHg/BTEX/MTBE by EPA Method 8015Cm/8021B and for TPHd/TPHmo by EPA Method 8015C with silica gel cleanup. During the first quarter of each year,

groundwater samples will also be analyzed for HVOCs by EPA Method 8010. Pangea will summarize groundwater monitoring activities and results in a groundwater monitoring report.

### **Interim Remedial Action**

The ACEH authorized Pangea to commence implementation of dual-phase extraction and air sparging (DPE/AS), the approved remedial approach, in a letter dated March 17, 2006. Pangea has completed the installation and development of fifteen remediation wells and two monitoring wells, and has commenced system design. System startup is anticipated to occur during summer 2007. Pangea will submit a report detailing well installation and system design.

### **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 State Water Resource Control Board's Geotracker database. As requested, report hard copies will no longer be provided to the ACEH.

### **ATTACHMENTS**

Figure 1 – Site Location Map

Figure 2 – Groundwater Elevation Contours and Hydrocarbon Concentration Map

Table 1 – Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs and DO

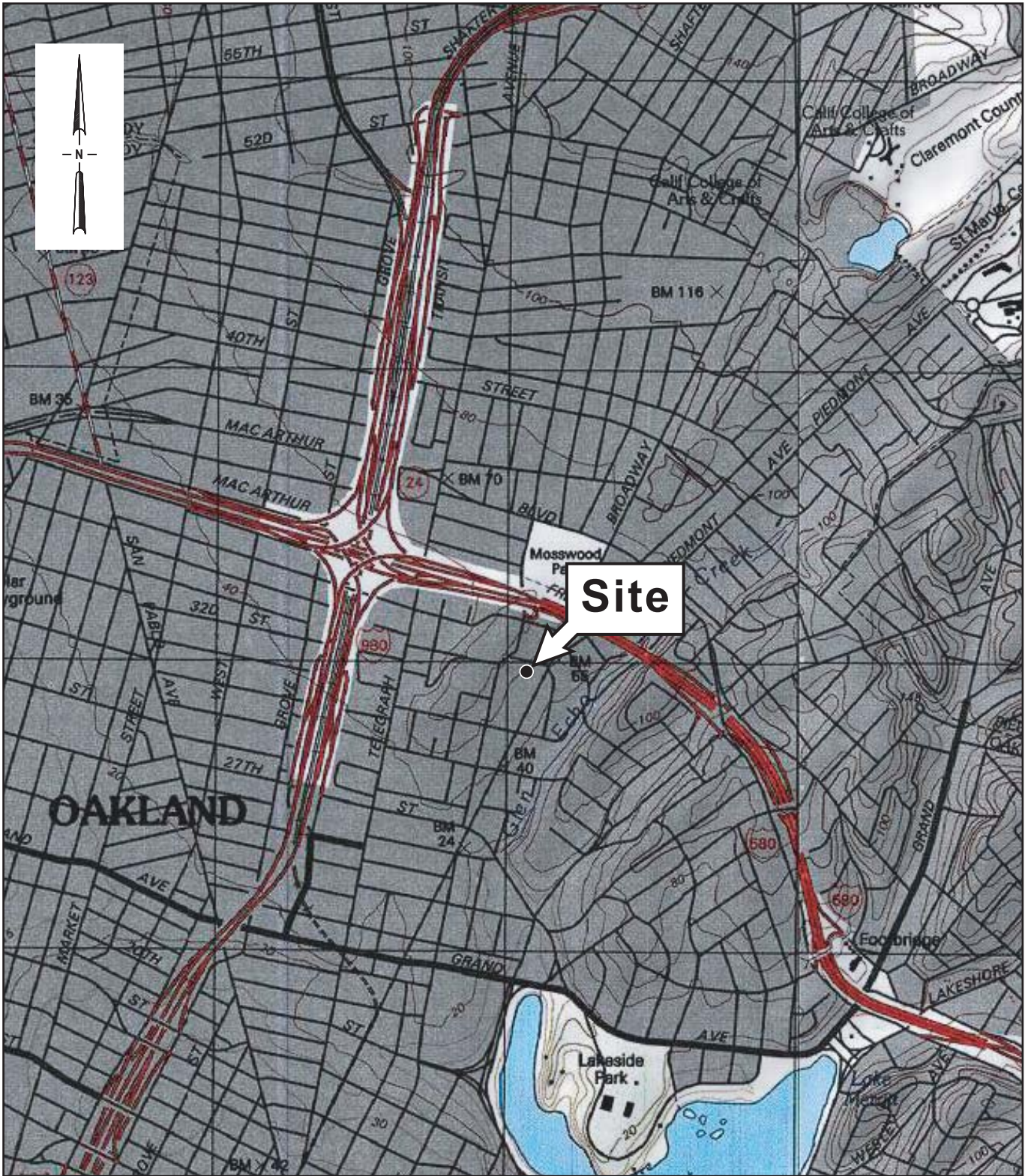
Table 2 – Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs

Table 3 – Separate-Phase Hydrocarbon Removal

Appendix A – Well Monitoring Protocol

Appendix B – Groundwater Monitoring Field Data Sheets

Appendix C – Laboratory Analytical Report



SOURCE: TOPOI MAPS



SCALE : 1" = 1/4 MILE

Figure 1

**Connell Automobile Dealership**  
 3093 Broadway  
 Oakland, California



Vicinity Map



WEBSTER STREET

HAWTHORNE STREET

BROOK STREET

BROADWAY

Connell Automobile Dealership  
3093 Broadway

Office Building

Auto Repair Shop

shed

shed

**EXPLANATION**

MW-1 ● Monitoring well location

LF2 ☒ Abandoned monitoring well location  
(installed by Levine-Fricke)

Well ID ● Well Designation

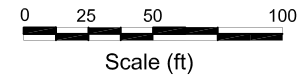
ELEV ● Groundwater Elevation

TPHg  
Benzene  
MTBE ● Hydrocarbon concentrations in  
groundwater in micrograms  
per liter (µg/L)

➔ Approximate groundwater flow  
direction

61.00 Groundwater elevation contour,  
in feet (measured to an  
arbitrary datum)

SPH Separate Phase Hydrocarbons  
present (thickness in feet)



Scale (ft)

Figure  
**2**

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

**MW-1**  
71.32  
SPH (0.03)

**MW-15**  
70.96  
58,000  
8,900  
<1,000

**MW-14**  
71.23  
SPH (0.03)

**MW-6**  
61.87  
SPH (0.02)

**MW-8**  
59.21  
1,000  
310.0  
<5.0

**MW-13**  
60.79  
<5.0  
<0.5  
<5.0

**MW-9**  
69.89  
520  
14  
<5.0

**MW-4**  
69.86  
140,000  
11,000  
<3,600

**MW-7**  
67.21  
<5.0  
<0.5  
<5.0

**MW-3**

**MW-5**

**MW-11**

**MW-2**

**MW-10**

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

2

# Pangea

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Sampling	Depth to	Groundwater				Ethyl-					
<i>TOC Elev.</i>	Date	Groundwater	Elevation	TVH/TPHg	Benzene	Toluene	benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs	DO
(ft)		(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
<b>Monitoring Well Data</b>												
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)	--	--	--	--	--	--	--	--

# Pangea

**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-1 (continued)	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)	--	--	--	--	--	--	--	--
	<b>2/12/2007</b>	<b>23.18</b>	<b>71.32</b>	<b>SPH (0.03)</b>	--	--	--	--	--	--	--	--
	MW-2 94.85	3/1/1991	27.90	66.95	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND
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	--
MW-3 90.08		3/1/1991	23.17	66.91	<50	<50	0.6	<0.5	<0.5	--	--	ND
	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 88.84	3/1/1991	23.79	65.05	150,000	20,000	38,000	2,800	14,000	**	--	ND
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	--	--	--



# Pangea

**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-4	5/1/1998	16.11	72.73	130,000	15,000	31,000	2,000	13,400	<1,000	--	ND	--
(continued)	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 <sup>4</sup>	--	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 <sup>6</sup>	--	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	--	2-MNE: 620, NE: 1000	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	<2,700	--	--	0.39
	2/17/2006	17.63	71.21	100,000	12,000	17,000	2,100	7,800	<2,500	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
	<b>2/12/2007</b>	<b>18.98</b>	<b>69.86</b>	<b>140,000</b>	<b>11,000</b>	<b>16,000</b>	<b>2,100</b>	<b>7,800</b>	<b>&lt;3,600</b>	<b>32</b>	<b>&lt;5<sup>7</sup></b>	<b>0.20</b>

# Pangea

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	Sampling Date	Depth to Groundwater <i>(ft)</i>	Groundwater Elevation <i>(ft)</i>	TVH/TPHg <i>(µg/L)</i>	Benzene <i>(µg/L)</i>	Toluene <i>(µg/L)</i>	Ethyl- benzene <i>(µg/L)</i>	Xylenes <i>(µg/L)</i>	MTBE <i>(µg/L)</i>	1,2-DCA <i>(µg/L)</i>	Other HVOCs <i>(µg/L)</i>	DO <i>(mg/L)</i>
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	--	--	--	--	--	--	--	--
86.94	12/1/1995	27.58	58.04	SPH	--	--	--	--	<8,000,000	--	--	--
	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)	--	--	--	--	--	--	--	--	

# Pangea

**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-6	8/5/2003	23.98	61.87	SPH (0.04)	--	--	--	--	--	--	--	--
(continued)	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)	--	--	--	--	--	--	--	--
	<b>2/12/2007</b>	<b>23.97</b>	<b>61.87</b>	<b>SPH (0.02)</b>	--	--	--	--	--	--	--	--
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	--
	11/9/1993	20.65	64.76	<50	<0.5	1	<0.5	1.7	--	--	ND	--
	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	--	<sup>5</sup>	--
	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

# Pangea

**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 (continued)	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	
<b>2/12/2007</b>	<b>18.20</b>	<b>67.21</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;5.0</b>	<b>&lt;0.5</b>	<b>&lt;0.5<sup>7</sup></b>	<b>0.75</b>
MW-8 85.50	10/12/1992	27.70	57.80	70	20	1	1	3	--	--	--	--
	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	--
	11/5/1997	26.82	58.68	<50	9.4	<0.5	<0.5	<0.5	<2	--	--	--
	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	--

# Pangea

**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-8	7/1/1999	26.59	58.91	140	58	0.9	3	2.3	<0.5	--	<sup>5</sup>	--
(continued)	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 <sup>f</sup>	<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
	<b>2/12/2007</b>	<b>26.29</b>	<b>59.21</b>	<b>1,000</b>	<b>310</b>	<b>5.1</b>	<b>25</b>	<b>27</b>	<b>&lt;5.0</b>	<b>25</b>	<b>&lt;0.5<sup>7</sup></b>	<b>0.37</b>
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	--

# Pangea

**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-9	8/30/1995	19.59	70.78	3,200	3,900	49	80	22.8	--	--	--	--
(continued)	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 <sup>1,2</sup>	<0.5	<0.5	<0.5	0.78 <sup>3</sup>	<2	--	ND	--
	11/5/1997	21.55	68.82	490 <sup>1</sup>	<0.5	<0.5	6	<0.5	<2	--	--	--
	2/9/1998	20.21	70.16	270 <sup>1</sup>	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 <sup>1</sup>	88	<0.5	13	1.9 <sup>3</sup>	<2	--	ND	--
	11/2/1998	20.43	69.94	580	<0.5	<0.5	7.5 <sup>3</sup>	1.6 <sup>3</sup>	<2	--	ND	--
	3/25/1999	18.46	71.91	1,100	160	<0.5	21	2.1 <sup>3</sup>	5.7 <sup>4</sup>	--	ND	--
	7/1/1999	19.95	70.42	540	100	7.4	26	16.9	<1.3	--	<sup>5</sup>	--
	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	--
	11/5/2001	19.85	70.52	2,200	170	4.5	100	0.54	<5.0	--	ND	--
	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 <sup>a</sup>	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
	<b>2/12/2007</b>	<b>20.48</b>	<b>69.89</b>	<b>520</b>	<b>14</b>	<b>0.74</b>	<b>1.2</b>	<b>&lt;0.5</b>	<b>&lt;5.0</b>	<b>210</b>	<b>&lt;5<sup>7</sup></b>	<b>0.51</b>

# Pangea

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Sampling	Depth to	Groundwater				Ethyl-					
<i>TOC Elev.</i>	Date	Groundwater	Elevation	TVH/TPHg	Benzene	Toluene	benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs	DO
(ft)		(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
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 <sup>1</sup>	33	<0.5	<0.5	<0.5	<2	--	ND	--
	3/31/1999	23.11	60.95	130	0.56	<0.5	<0.5	<0.5	<2	--	ND	--



# Pangea

**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	7/1/1999	23.40	60.66	160	370	19	1.2	3.5	<1	--	<sup>5</sup>	--
(continued)	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
	<b>2/12/2007</b>	<b>23.27</b>	<b>60.79</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;5.0</b>	<b>&lt;0.5</b>	<b>&lt;0.5<sup>7</sup></b>	<b>0.52</b>
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)	--	--	--	--	--	--	--	--

# Pangea

**Table 1. Groundwater Elevation and Analytical Data: Volatile Hydrocarbons, HVOCs, and Dissolved Oxygen**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	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 (continued)	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)	--	--	--	--	--	--	--	--	
		<b>2/12/2007</b>	<b>23.45</b>	<b>71.23</b>	<b>SPH (0.03)</b>	--	--	--	--	--	--	--	--
	MW-15 94.76	5/26/1998	21.87	72.89	130,000	30,000	38,000	2,500	12,600	<1000	--	ND	--
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)	--	--	--	--	--	--	--	--		

# Pangea

**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-15	2/18/2005	23.27	71.57	SPH (0.10)	--	--	--	--	--	--	--	--
(continued)	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 (0.03)	--	--	--	--	--	--	--	--
	5/12/2006	21.88	72.90	SPH (0.03)	--	--	--	--	--	--	--	--
	8/7/2006	22.05	72.73	SPH (0.01)	--	--	--	--	--	--	--	--
	11/21/2006	23.70	71.06	--	--	--	--	--	--	--	--	0.15
	<b>2/12/2007</b>	<b>23.80</b>	<b>70.96</b>	<b>58,000</b>	<b>8,900</b>	<b>8,000</b>	<b>800</b>	<b>2,500</b>	<b>&lt;1,000</b>	<b>99</b>	<b>&lt;5<sup>7</sup></b>	<b>0.22</b>

## Grab Sampling Data

Sample ID

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	--	--

# Pangea

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Sampling	Depth to	Groundwater				Ethyl-					
<i>TOC Elev.</i>	Date	Groundwater	Elevation	TVH/TPHg	Benzene	Toluene	benzene	Xylenes	MTBE	1,2-DCA	Other HVOCs	DO
(ft)		(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)

**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; value in parentheses by EPA Method 8260

MTBE = Methyl tertiary butyl ether by EPA Method 8021B; values in parentheses by EPA Method 8260

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

NE = Naphthalene (results for MW-1 from 1995 through 1998 from SCI reporting of SVOC results)

TCM = Chloroform = trichloromethane

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.

# Pangea

**Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	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)	--	--	--	--

# Pangea

**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 (cont'd)	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)	--	--	--	--
	<b>2/12/2007</b>	<b>23.18</b>	<b>71.33</b>	--	<b>SPH (0.03)</b>	--	--	--	--
	MW-2 94.81	3/1/1991	27.86	66.95	<50	--	--	--	--
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 90.08	3/1/1991	23.17	66.91	<50	--	--	--	--	--
	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	--	--	--	--	--

# Pangea

**Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs**  
 Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	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	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	--	--	--	--



# Pangea

**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 (cont'd)	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	--	--	--
	5/11/2005	17.93	70.91	--	16,000	<1,200	--	--	--
	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	--	--	--
	<b>2/12/2007</b>	<b>18.98</b>	<b>69.86</b>	--	<b>16,000</b>	<b>460</b>	--	--	--
MW-5 84.84	3/15/1991	26.31	58.53	<50	--	--	--	--	--
	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 85.62	3/15/1991	25.82	59.80	<50	--	--	--	--	--
	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	--	--	--	--	

# Pangea

**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	7/1/1999	24.45	61.37	SPH	--	--	--	--	--
(cont'd)	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)	--	--	--	--
	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)	--	--	--	--
	<b>2/12/2007</b>	<b>23.97</b>	<b>61.87</b>	--	<b>SPH (0.02)</b>	--	--	--	--
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	--	--	--	--	--

# Pangea

**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	12/1/1995	19.47	65.94	<50	--	--	--	--	--
(cont'd)	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	--	--	--
	8/5/2003	17.00	68.41	--	<50	<250	--	--	--
	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	--	--	--

# Pangea

**Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	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	5/11/2005	15.79	69.62	--	<50	<250	--	--	--
<i>(cont'd)</i>	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	--	--	--
	<b>2/12/2007</b>	<b>18.20</b>	<b>67.21</b>	--	<b>&lt;50</b>	<b>&lt;250</b>	--	--	--
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	--	--	--

# Pangea

**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	2/13/2002	26.15	59.35	--	83	<250	--	--	--
(cont'd)	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	--	--	--
	8/5/2003	26.51	58.99	--	2,700	380	--	--	--
	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	--	--	--
	<b>2/12/2007</b>	<b>26.29</b>	<b>59.21</b>	--	<b>120</b>	<b>&lt;250</b>	--	--	--
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	--	--	--	--	--

# Pangea

**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	8/8/1997	20.84	69.53	480	--	--	--	--	--
(cont'd)	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	--	--	--	--
	2/18/2004	18.41	71.96	--	250	--	--	--	--
	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	--	--	--
	<b>2/12/2007</b>	<b>20.48</b>	<b>69.89</b>	--	<b>74</b>	<b>&lt;250</b>	--	--	--

# Pangea

**Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs**  
 Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	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-10 <i>88.60</i>	10/12/1992	21.55	67.05	--	--	--	--	--	--
	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 <i>102.06</i>	11/24/1992	33.65	68.41	220	--	--	--	--	--
	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	--	--	--	--	--
MW-13 <i>84.06</i>	5/8/1997	29.93	72.13	<50	--	--	--	--	--
	4/29/1998	27.22	74.84	<47	--	--	--	--	--
	11/24/1992	26.05	58.01	3,600	--	--	--	--	--
	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	--	--	--	--	--	



# Pangea

**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	--	--	--	--	--
(cont'd)	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	--	--	--
	<b>2/12/2007</b>	<b>23.27</b>	<b>60.79</b>	--	<b>&lt;50</b>	<b>&lt;250</b>	--	--	--

# Pangea

**Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	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 94.66	5/26/1998	21.67	72.99	7,700	--	--	--	--	--
	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)	--	--	--	--
	11/26/2002	24.35	70.31	--	SPH (sheen)	--	--	--	--
	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)	--	--	--	--	
	<b>2/12/2007</b>	<b>23.45</b>	<b>71.23</b>	--	<b>SPH (0.03)</b>	--	--	--	--
MW-15 94.76	5/26/1998	21.87	72.89	1,700	--	--	--	--	--
	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	--	--	--	--

# Pangea

**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	11/14/2000	24.15	70.61	--	SPH	--	--	--	--
(cont'd)	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)	--	--	--	--
	11/21/2006	23.70	71.10	--	--	--	--	--	--
	<b>2/12/2007</b>	<b>23.80</b>	<b>71.00</b>	--	<b>1,100</b>	<b>&lt;250</b>	--	--	--

## Grab Sampling Data

B (boring)	5/16/1998	--	--	77**	--	--	--	--	--
C (boring)	5/16/1998	--	--	48**	--	--	--	--	--
G (boring)	5/16/1998	--	--	35,000**	--	--	--	--	--

# Pangea

**Table 2. Groundwater Elevation and Analytical Data: Extractable Hydrocarbons and SVOCs**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Sampling	Depth to	Groundwater				2-Methyl		
<i>TOC Elev.</i>	Date	water	Elevation	TEH	TPHd	TPHmo	naphthalene	Naphthalene	Other SVOCs
(ft)		(ft)	(ft)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)

**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 µg/l 2,4 dichlorophenol, 240 µg/l bis (2-ethyl hexyl) phthalate. Also 10 mg/l oil and grease.

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

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

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

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

< n = Not detected above n µg/l

-- = Not analyzed/not available

\* = Duplicate sample sent to a different chemical laboratory

\*\* = Does not match TPHd or TEH pattern

# Pangea

**Table 3. Separate-Phase Hydrocarbon Removal**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Date	Depth to	SPH	SPH	SPH	SPH	Cumulative SPH	Notes
<i>TOC Elev.</i>	<i>Sampled</i>	<i>Groundwater</i>	<i>Thickness</i>	<i>Removed</i>	<i>Removed</i>	<i>Removed</i>	<i>Removed</i>	
<i>(ft)</i>		<i>(feet)</i>	<i>(feet)</i>	<i>(mL)</i>	<i>(gallons)</i>	<i>(lbs)</i>	<i>(gallons)</i>	
MW-1	12/23/1991	26.86	1.15		2.00	12.20	2.00	1
94.48	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
	9/21/1999	23.81	0.08		0.20	1.22	13.98	1
	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

# Pangea

**Table 3. Separate-Phase Hydrocarbon Removal**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Date	Depth to	SPH	SPH	SPH	SPH	Cumulative SPH	Notes
TOC Elev.	Sampled	Groundwater	Thickness	Removed	Removed	Removed	Removed	
(ft)		(feet)	(feet)	(mL)	(gallons)	(lbs)	(gallons)	
MW-1	2/9/2000	23.95	0.07		0.05	0.31	14.04	1
(cont'd)	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
	4/9/2004	22.61	0.00	0	0.000	0.00	17.14	1, 2
	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

# Pangea

**Table 3. Separate-Phase Hydrocarbon Removal**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Date	Depth to	SPH	SPH	SPH	SPH	Cumulative SPH	Notes
<i>TOC Elev.</i>	<i>Sampled</i>	<i>Groundwater</i>	<i>Thickness</i>	<i>Removed</i>	<i>Removed</i>	<i>Removed</i>	<i>Removed</i>	
<i>(ft)</i>		<i>(feet)</i>	<i>(feet)</i>	<i>(mL)</i>	<i>(gallons)</i>	<i>(lbs)</i>	<i>(gallons)</i>	
MW-1	12/27/2004	24.18	0.44	450	0.119	0.73	18.72	1,2
<i>(cont'd)</i>	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	
	<b>2/12/2007</b>	<b>23.18</b>	<b>0.03</b>	<b>0</b>	<b>0.000</b>	<b>0.00</b>	<b>18.82</b>	
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
	6/29/1992	21.38	0.53		0.25	1.53	41.09	1
	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

# Pangea

**Table 3. Separate-Phase Hydrocarbon Removal**

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Date	Depth to	SPH	SPH	SPH	SPH	Cumulative SPH	Notes
TOC Elev. (ft)	Sampled	Groundwater (feet)	Thickness (feet)	Removed (mL)	Removed (gallons)	Removed (lbs)	Removed (gallons)	
MW-4	7/9/1996	18.29	0.50		0.16	0.98	47.85	1
(cont'd)	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
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
	8/28/1992	25.09	2.62		2.40	14.64	25.83	1
	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



# Pangea

**Table 3. Separate-Phase Hydrocarbon Removal**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Date	Depth to	SPH	SPH	SPH	SPH	Cumulative SPH	Notes
TOC Elev.	Sampled	Groundwater	Thickness	Removed	Removed	Removed	Removed	
(ft)		(feet)	(feet)	(mL)	(gallons)	(lbs)	(gallons)	
MW-6	12/2/1996	--	NM		0.00	0.00	83.41	4
(cont'd)	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
	7/1/1999	24.45	0.42		0.06	0.38	85.31	1
	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	

# Pangea

**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	5/7/2001	--	--		0.08	0.48	86.80	
(cont'd)	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
	2/6/2004	22.39	0.05	80	0.021	0.13	87.24	1, 3
	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	
	<b>2/12/2007</b>	<b>23.97</b>	<b>0.02</b>	<b>0</b>	<b>0.000</b>	<b>0.00</b>	<b>87.47</b>	
MW-9 90.37	8/8/1996	19.89	0.35		0.10	0.61	0.61	1

# Pangea

**Table 3. Separate-Phase Hydrocarbon Removal**  
Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> <i>(ft)</i>	Date Sampled	Depth to Groundwater <i>(feet)</i>	SPH Thickness <i>(feet)</i>	SPH Removed <i>(mL)</i>	SPH Removed <i>(gallons)</i>	SPH Removed <i>(lbs)</i>	Cumulative SPH Removed <i>(gallons)</i>	Notes
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	
	12/1/2000	23.90	0.04		0.04	0.24	0.33	1, 2
	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

# Pangea

**Table 3. Separate-Phase Hydrocarbon Removal**

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID	Date	Depth to	SPH	SPH	SPH	SPH	Cumulative SPH	Notes
<i>TOC Elev.</i>	<i>Sampled</i>	<i>Groundwater</i>	<i>Thickness</i>	<i>Removed</i>	<i>Removed</i>	<i>Removed</i>	<i>Removed</i>	
<i>(ft)</i>		<i>(feet)</i>	<i>(feet)</i>	<i>(mL)</i>	<i>(gallons)</i>	<i>(lbs)</i>	<i>(gallons)</i>	
MW-14	4/9/2004	22.81	0.00	0	0.000	0.00	0.77	1,2
<i>(cont'd)</i>	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	
	11/21/2006	23.41	0.03	50	0.013	0.08	1.03	
	<b>2/12/2007</b>	<b>23.45</b>	<b>0.03</b>	<b>0</b>	<b>0.000</b>	<b>0.00</b>	<b>1.03</b>	
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	
	<b>2/12/2007</b>	<b>23.80</b>	<b>0.00</b>	<b>0</b>	<b>0.000</b>	<b>0.00</b>	<b>0.13</b>	
<b>Total SPH Removed (gallons):</b>							<b>155.57</b>	
<b>Total SPH Removed (pounds):</b>						<b>948.81</b>		

**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.

## **APPENDIX A**

### Well Monitoring Protocol

## APPENDIX A


### Well Monitoring Protocol

Well Monitoring Protocol			
Well	Gauging Frequency	Sampling Frequency	Analytes
Source Area Wells			
MW-1	<b>Quarterly</b>	<b>Annually</b> (1 <sup>st</sup> Qtr)	TPHd, TPHmo, TPHg, BTEX, MTBE, <i>HVOCs</i> , DO
MW-6			(SVOCs and LUFT Metals no longer required)
MW-14			
MW-15			
Down-Gradient/Cross-Gradient Wells			
MW-4	<b>Quarterly</b>	<b>Quarterly</b>	TPHd, TPHmo, TPHg, BTEX, MTBE, DO
MW-7			( <i>HVOCs</i> 1 <sup>st</sup> qtr only)
MW-8			
MW-9			(SVOCs and LUFT Metals no longer required)
MW-13			
<ol style="list-style-type: none"> <li>1. Per the May 3, 1999, ACHCSA letter to Messrs. Hill and Linden, monitoring wells MW-2, MW-3, MW-5, MW-10, and MW-11 were dropped from the monitoring program.</li> <li>2. For cost control purposes, frequency for <i>HVOC</i> sample analysis for the cross/downgradient wells was reduced from quarterly to annually.</li> <li>3. SVOCs and LUFT Metal analysis no longer required by ACHCSA for this site.</li> <li>4. Wells will not be sampled if SPH is observed.</li> </ol>			

## **APPENDIX B**

Groundwater Monitoring Field Data Sheets

Well Gauging Data Sheet

Project Task #: 1005001 210			Project Name: Connell						
Address: 3093 Broadway, Oakland, CA						Date: 2-12-07			
Name: Sanjiv Gill			Signature: 						
Well ID	Well Size (in.)	Time	Depth to Water (ft)	Time	Depth to Water (ft)	Time	Depth to Water (ft)	Total Depth (ft)	Measuring Point
MW-1	2"	10:06	23.19	10:54	23.18				TDC
MW-4		9:51	18.98	10:40	18.98			24.25	
MW-6		10:10	23.98	11:01	23.97				
MW-7	*	9:40	18.20	10:30	18.20			30.16	
MW-8	6"	9:43	26.29	10:33	26.29			39.30	
MW-9	2"	9:48	20.48	10:36	20.48			30.63	
MW-13		9:33	23.26	10:25	23.27			39.50	
MW-14		10:02	23.45	10:51	23.45				
MW-15	*	9:57	23.80	10:45	23.80			37.15 <del>37.15</del>	A

Comments: <sup>1st</sup> Round MW-14 SPH at 23.42, MW-1 SPH at 23.15, MW-6 SPH at 23.96  
<sup>2nd</sup> Round MW-14 SPH at 23.42, MW-7 SPH at 23.15, MW-6 SPH at 23.95













**MONITORING FIELD DATA SHEET**

Well ID: *MW-9*

Project Task #: <i>1005 001 210</i>	Project Name: <i>Cannell</i>						
Address: <i>3093 Broadway, Oakland, CA</i>							
Date: <i>2-17-07</i>	Weather: <i>Cloudy</i>						
Well Diameter: <i>2"</i>	Volume/ft. <table border="1"> <tr> <td>1" = 0.04</td> <td>3" = 0.37</td> <td>6" = 1.47</td> </tr> <tr> <td>2" = 0.16</td> <td>4" = 0.65</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table>	1" = 0.04	3" = 0.37	6" = 1.47	2" = 0.16	4" = 0.65	radius <sup>2</sup> * 0.163
1" = 0.04	3" = 0.37	6" = 1.47					
2" = 0.16	4" = 0.65	radius <sup>2</sup> * 0.163					
Total Depth (TD): <i>30.63</i>	Depth to Product:						
Depth to Water (DTW): <i>20.48</i>	Product Thickness:						
Water Column Height: <i>10.15</i>	1 Casing Volume: <i>1.62</i> gallons						
Reference Point: <i>TOC</i>	3 Casing Volumes: <i>4.87</i> gallons						

Purging Device: *Disposable Bailer, 3" PVC Bailer, Whal Pump*

Sampling Device: *Disposable Bailer*

Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<i>1:20</i>	<i>18.7</i>	<i>6.94</i>	<i>590</i>				<i>1.5</i>	
<i>1:25</i>	<i>19.0</i>	<i>6.88</i>	<i>548</i>				<i>3</i>	
<i>1:30</i>	<i>19.4</i>	<i>6.87</i>	<i>578</i>				<i>5</i>	

Comments: *Oakton DO meter* pre purge DO = *0.51* mg/l  
 post purge DO =  mg/l

*very turbid*

Sample ID: <i>MW-9</i>	Sample Time: <i>1:35</i>
Laboratory: <i>McC Campbell Analytical, INC.</i>	Sample Date: <i>2-17-07</i>
Containers/Preservative: <i>Voa/HCL, Amber Liter/HCL</i>	
Analyzed for: <i>8015, 8021</i>	
Sampler Name: <i>Sanjiv Gill</i>	Signature:



**MONITORING FIELD DATA SHEET**

Well ID: MW-13

Project Task #: <u>1005-001 210</u>		Project Name: <u>Cenre II</u>						
Address: <u>3093 Broadway Oakland, CA</u>								
Date: <u>2-12-07</u>		Weather: <u>Sunny</u>						
Well Diameter: <u>2"</u>		Volume/ft. <u>1" = 0.04</u> <u>3" = 0.37</u> <u>6" = 1.47</u> <u>2" = 0.16</u> <u>4" = 0.65</u> <u>radius** 0.163</u>						
Total Depth (TD): <u>39.50</u>		Depth to Product:						
Depth to Water (DTW): <u>23.27</u>		Product Thickness:						
Water Column Height: <u>16.23</u>		1 Casing Volume: <u>2.59</u> gallons						
Reference Point: <u>TOC</u>		3 Casing Volumes: <u>7.79</u> gallons						
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Whal Pump								
Sampling Device: <u>Disposable Bailer</u>								
Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>11:15</u>	<u>20.4</u>	<u>6.86</u>	<u>796</u>				<u>2.5</u>	
<u>11:20</u>	<u>20.0</u>	<u>6.81</u>	<u>728</u>				<u>5</u>	
<u>11:25</u>	<u>20.0</u>	<u>6.79</u>	<u>756</u>				<u>8</u>	

Comments: Oakton DO meter pre purge DO = 0.52 mg/l  
 post purge DO =    mg/l  
very turbid, Silty

Sample ID: <u>MW-13</u>	Sample Time: <u>11:30</u>
Laboratory: <u>McC Campbell Analytical, INC.</u>	Sample Date: <u>2-12-07</u>
Containers/Preservative: <u>Voa/HCL, Amber Liter/HCl</u>	
Analyzed for: <u>8015, 8021</u>	
Sampler Name: <u>Sanjiv Gill</u>	Signature:



**MONITORING FIELD DATA SHEET**

Well ID: MW-15

Project Task #: <u>1005.001 210</u>		Project Name: <u>Cannell</u>							
Address: <u>3093 Broadway, Oakland, CA</u>									
Date: <u>2-12-07</u>		Weather: <u>Cloudy</u>							
Well Diameter: <u>2"</u>		Volume/ft. <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td>1" = 0.04</td><td>3" = 0.37</td><td>6" = 1.47</td></tr><tr><td>2" = 0.16</td><td>4" = 0.65</td><td>radius<sup>2</sup> * 0.163</td></tr></table>		1" = 0.04	3" = 0.37	6" = 1.47	2" = 0.16	4" = 0.65	radius <sup>2</sup> * 0.163
1" = 0.04	3" = 0.37	6" = 1.47							
2" = 0.16	4" = 0.65	radius <sup>2</sup> * 0.163							
Total Depth (TD): <u>37.15</u>		Depth to Product:							
Depth to Water (DTW): <u>23.80</u>		Product Thickness:							
Water Column Height: <u>13.35</u>		1 Casing Volume: <u>2.13</u> gallons							
Reference Point: TOC		3 Casing Volumes: <u>6.39</u> gallons							
Purging Device: <u>Disposable Bailer, 3" PVC Bailer, Whal Pump</u>									
Sampling Device: <u>Disposable Bailer</u>									
Time	Temp @	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW	
<u>2:15</u>	<u>18.6</u>	<u>7.02</u>	<u>520</u>				<u>2</u>		
<u>2:20</u>	<u>18.2</u>	<u>6.89</u>	<u>561</u>				<u>4</u>		
<u>2:25</u>	<u>18.0</u>	<u>6.86</u>	<u>553</u>				<u>6</u>		

Comments: Oakton DO meter pre purge DO = 0.22 mg/l  
 post purge DO =    mg/l

very turbid, silty

Sample ID: <u>MW-15</u>	Sample Time: <u>2:30</u>
Laboratory: <u>McC Campbell Analytical, INC.</u>	Sample Date: <u>2-12-07</u>
Containers/Preservative: <u>Voal/HCL, Amber Liter/HCl</u>	
Analyzed for: <u>8015, 8021</u>	
Sampler Name: <u>Sanjiv Gill</u>	Signature:

## **APPENDIX C**

Laboratory Analytical Report





**McC Campbell Analytical, Inc.**

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mccampbell.com E-mail: main@mccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell	Date Sampled: 02/12/07
		Date Received: 02/13/07
	Client Contact: Bob Clark-Riddell	Date Reported: 02/20/07
	Client P.O.:	Date Completed: 02/20/07

**WorkOrder: 0702284**

February 20, 2007

Dear Bob:

Enclosed are:

- 1). the results of **6** analyzed samples from your **#1005.001; Connell project**,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

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

If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager











# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mcccampbell.com E-mail: main@mcccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc.  1710 Franklin Street, Ste. 200  Oakland, CA 94612	Client Project ID: #1005.001; Connell	Date Sampled: 02/12/07
		Date Received: 02/13/07
	Client Contact: Bob Clark-Riddell	Date Extracted: 02/13/07-02/14/07
	Client P.O.:	Date Analyzed 02/13/07-02/14/07

### Halogenated Volatile Organics by P&T and GC-MS (8010 Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0702284

Lab ID	0702284-001C	0702284-002C	0702284-003C	0702284-004C	Reporting Limit for DF =1	
Client ID	MW-4	MW-7	MW-8	MW-9	S	W
Matrix	W	W	W	W		
DF	10	1	1	10		
Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Bromoform	ND<5.0	ND	ND	ND<5.0	NA	0.5
Bromomethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Carbon Tetrachloride	ND<5.0	ND	ND	ND<5.0	NA	0.5
Chlorobenzene	ND<5.0	ND	ND	ND<5.0	NA	0.5
Chloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
2-Chloroethyl Vinyl Ether	ND<10	ND	ND	ND<10	NA	1.0
Chloroform	ND<5.0	ND	ND	ND<5.0	NA	0.5
Chloromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Dibromochloromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,2-Dichlorobenzene	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,3-Dichlorobenzene	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,4-Dichlorobenzene	ND<5.0	ND	ND	ND<5.0	NA	0.5
Dichlorodifluoromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1-Dichloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,2-Dichloroethane (1,2-DCA)	32	ND	25	210	NA	0.5
1,1-Dichloroethene	ND<5.0	ND	ND	ND<5.0	NA	0.5
cis-1,2-Dichloroethene	ND<5.0	ND	ND	ND<5.0	NA	0.5
trans-1,2-Dichloroethene	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,2-Dichloropropane	ND<5.0	ND	ND	ND<5.0	NA	0.5
cis-1,3-Dichloropropene	ND<5.0	ND	ND	ND<5.0	NA	0.5
trans-1,3-Dichloropropene	ND<5.0	ND	ND	ND<5.0	NA	0.5
Methylene chloride	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1,2,2-Tetrachloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Tetrachloroethene	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1,1-Trichloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
1,1,2-Trichloroethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Trichloroethene	ND<5.0	ND	ND	ND<5.0	NA	0.5
Trichlorofluoromethane	ND<5.0	ND	ND	ND<5.0	NA	0.5
Vinyl Chloride	ND<5.0	ND	ND	ND<5.0	NA	0.5

### Surrogate Recoveries (%)

%SS1:	98	102	101	101	
%SS2:	94	99	98	99	
%SS3:	90	103	98	103	
Comments	h				

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

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



# McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701  
Web: www.mccampbell.com E-mail: main@mccampbell.com  
Telephone: 877-252-9262 Fax: 925-252-9269

Pangea Environmental Svcs., Inc.  1710 Franklin Street, Ste. 200  Oakland, CA 94612	Client Project ID: #1005.001; Connell	Date Sampled: 02/12/07
		Date Received: 02/13/07
	Client Contact: Bob Clark-Riddell	Date Extracted: 02/13/07-02/14/07
	Client P.O.:	Date Analyzed 02/13/07-02/14/07

## Halogenated Volatile Organics by P&T and GC-MS (8010 Basic Target List)\*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0702284

Lab ID	0702284-005C	0702284-006C			Reporting Limit for DF =1	
Client ID	MW-13	MW-15				
Matrix	W	W			S	W
DF	1	10				

Compound	Concentration			µg/kg	µg/L
Bromodichloromethane	ND	ND<5.0		NA	0.5
Bromoform	ND	ND<5.0		NA	0.5
Bromomethane	ND	ND<5.0		NA	0.5
Carbon Tetrachloride	ND	ND<5.0		NA	0.5
Chlorobenzene	ND	ND<5.0		NA	0.5
Chloroethane	ND	ND<5.0		NA	0.5
2-Chloroethyl Vinyl Ether	ND	ND<10		NA	1.0
Chloroform	ND	ND<5.0		NA	0.5
Chloromethane	ND	ND<5.0		NA	0.5
Dibromochloromethane	ND	ND<5.0		NA	0.5
1,2-Dichlorobenzene	ND	ND<5.0		NA	0.5
1,3-Dichlorobenzene	ND	ND<5.0		NA	0.5
1,4-Dichlorobenzene	ND	ND<5.0		NA	0.5
Dichlorodifluoromethane	ND	ND<5.0		NA	0.5
1,1-Dichloroethane	ND	ND<5.0		NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	99		NA	0.5
1,1-Dichloroethene	ND	ND<5.0		NA	0.5
cis-1,2-Dichloroethene	ND	ND<5.0		NA	0.5
trans-1,2-Dichloroethene	ND	ND<5.0		NA	0.5
1,2-Dichloropropane	ND	ND<5.0		NA	0.5
cis-1,3-Dichloropropene	ND	ND<5.0		NA	0.5
trans-1,3-Dichloropropene	ND	ND<5.0		NA	0.5
Methylene chloride	ND	ND<5.0		NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND<5.0		NA	0.5
Tetrachloroethene	ND	ND<5.0		NA	0.5
1,1,1-Trichloroethane	ND	ND<5.0		NA	0.5
1,1,2-Trichloroethane	ND	ND<5.0		NA	0.5
Trichloroethene	ND	ND<5.0		NA	0.5
Trichlorofluoromethane	ND	ND<5.0		NA	0.5
Vinyl Chloride	ND	ND<5.0		NA	0.5

### Surrogate Recoveries (%)

%SS1:	104	99		
%SS2:	97	97		
%SS3:	106	95		

### Comments

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

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

# surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.





**QC SUMMARY REPORT FOR SW8260B**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0702284

Analyte	Extraction SW5030B			BatchID: 26210					Spiked Sample ID: 0702251-001B			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Chlorobenzene	ND	10	104	102	2.23	99.5	97.7	1.79	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	95.3	92.8	2.63	99.7	98.2	1.55	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	113	105	6.80	94.7	96.8	2.21	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	82.3	81.2	1.37	79.2	79.1	0.155	70 - 130	30	70 - 130	30
%SS1:	107	10	103	102	1.03	107	107	0	70 - 130	30	70 - 130	30
%SS2:	98	10	97	95	1.40	85	83	1.72	70 - 130	30	70 - 130	30
%SS3:	107	10	94	94	0	87	87	0	70 - 130	30	70 - 130	30

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

**BATCH 26210 SUMMARY**

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702284-001	2/12/07 2:00 PM	2/13/07	2/13/07 8:34 PM	0702284-002	2/12/07	2/13/07	2/13/07 9:20 PM
0702284-003	2/12/07	2/14/07	2/14/07 3:05 PM	0702284-004	2/12/07	2/13/07	2/13/07 10:54 PM
0702284-005	2/12/07	2/14/07	2/14/07 1:16 AM	0702284-006	2/12/07	2/14/07	2/14/07 2:05 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.

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.



**QC SUMMARY REPORT FOR SW8021B/8015Cm**

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0702284

Analyte	EPA Method SW8021B/8015Cm		Extraction SW5030B			BatchID: 26211			Spiked Sample ID: 0702251-003A			
	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) <sup>f</sup>	ND	60	97.2	93	4.47	102	95.6	5.97	70 - 130	30	70 - 130	30
MTBE	ND	10	98	91.2	7.18	95	102	7.18	70 - 130	30	70 - 130	30
Benzene	ND	10	106	106	0	106	114	7.38	70 - 130	30	70 - 130	30
Toluene	ND	10	103	103	0	103	112	8.67	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	103	98.7	4.56	104	109	4.24	70 - 130	30	70 - 130	30
Xylenes	ND	30	96.3	95.7	0.694	100	100	0	70 - 130	30	70 - 130	30
%SS:	92	10	109	112	2.38	108	117	7.98	70 - 130	30	70 - 130	30

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

**BATCH 26211 SUMMARY**

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702284-001	2/12/07 2:00 PM	2/13/07	2/13/07 11:30 PM	0702284-002	2/12/07	2/14/07	2/14/07 12:13 PM
0702284-003	2/12/07	2/14/07	2/14/07 12:19 AM	0702284-004	2/12/07	2/14/07	2/14/07 12:51 AM
0702284-005	2/12/07	2/14/07	2/14/07 1:24 AM	0702284-006	2/12/07	2/15/07	2/15/07 12:28 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.



### QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder 0702284

EPA Method SW8015C		Extraction SW3510C/3630C				BatchID: 26214			Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	102	102	0	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	102	102	0	N/A	N/A	70 - 130	30

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

#### BATCH 26214 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0702284-001	2/12/07 2:00 PM	2/13/07	2/13/07 8:58 PM	0702284-002	2/12/07	2/13/07	2/14/07 9:36 PM
0702284-003	2/12/07	2/13/07	2/13/07 11:15 PM	0702284-004	2/12/07	2/13/07	2/14/07 12:23 AM
0702284-005	2/12/07	2/13/07	2/15/07 2:26 PM	0702284-006	2/12/07	2/13/07	2/14/07 6:05 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.

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.

**McC Campbell Analytical, Inc.**



1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 0702284

ClientID: PEO

EDF     Fax     Email     HardCopy     ThirdParty

**Report to:**

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

Email: bcr@pangeaenv.com  
TEL: (510) 836-3700 FAX: (510) 836-3709  
ProjectNo: #1005.001; Connell  
PO:

**Bill to:**

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

**Requested TAT: 5 days**

*Date Received: 02/13/2007*

*Date Printed: 02/13/2007*

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
0702284-001	MW-4	Water	2/12/07 2:00:00 PM	<input type="checkbox"/>	C	A	A	B									
0702284-002	MW-7	Water	2/12/07	<input type="checkbox"/>	C	A		B									
0702284-003	MW-8	Water	2/12/07	<input type="checkbox"/>	C	A		B									
0702284-004	MW-9	Water	2/12/07	<input type="checkbox"/>	C	A		B									
0702284-005	MW-13	Water	2/12/07	<input type="checkbox"/>	C	A		B									
0702284-006	MW-15	Water	2/12/07	<input type="checkbox"/>	C	A		B									

**Test Legend:**

<b>1</b>	8010BMS_W	<b>2</b>	G-MBTX_W	<b>3</b>	PREF REPORT	<b>4</b>	TPH(DMO)WSG_W	<b>5</b>	
<b>6</b>		<b>7</b>		<b>8</b>		<b>9</b>		<b>10</b>	
<b>11</b>		<b>12</b>							

**Prepared by: Melissa Valles**

**Comments:**

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



# McCAMPBELL ANALYTICAL, INC.

110 2<sup>nd</sup> AVENUE SOUTH, #D7  
PACHECO, CA 94553-5560

Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: (925) 798-1620 Fax: (925) 798-1622

# CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

EDF Required? Yes No

Report To: Bob Clark-Riddel Bill To: Pangea Environmental

Company: Pangea Environmental Services Inc.

1710 Franklin Street Suite 200

Oakland, CA 94612

E-Mail: [bcr@pangeaenv.com](mailto:bcr@pangeaenv.com)

Tele: 510-836-3702

Fax: 510-836-3709

Project #: 1005.001

Project Name: Connell

Project Location: 3093 Broadway, Oakland, CA

Sampler Signature: Muskan Environmental Sampling *[Signature]*

## Analysis Request

Other

Comments

MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)  
MTBE / BTEX ONLY (EPA 602 / 8021)  
TPH as Diesel (8015) / TPH as Diesel  
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)  
Total Petroleum Hydrocarbons (418.1)  
EPA 507.2 / 601 / 8010 / 8021 (HVOCs)  
EPA 505 / 608 / 8081 (CI Pesticides)  
EPA 608 / 8062 PCB's ONLY; Aroclors / Congeners  
EPA 507 / 8141 (NP Pesticides)  
EPA 515 / 8151 (Acidic CI Herbicides)  
EPA 504.2 / 604 / 8260 (VOCs)  
Fuel Additives (MTBE, ETBE, TAME, DIPE, TBA,  
1,2 - DCA, 1,2 - EDI, ethanol) by 8260B  
If MTBE is detected by 8021 confirm by 8260B

HVOCs 8010

Filter Samples for Metals analysis: Yes / No

+  
+  
+  
+  
+  
+

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request	Other	Comments
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO <sub>3</sub>	Other			
MW-4		2-12-07	2:00	3	voc, Amb	X						X	X				
MW-7			12:00	1								X	X				
MW-8			1:05	1								X	X				
MW-9			1:35	1								X	X				
MW-13			11:30	1								X	X				
MW-15		X	2:30	X	X	X						X	X				

Relinquished By: *[Signature]* Date: 2-13-07 Time: 5:15pm Received By: *[Signature]*

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received By: \_\_\_\_\_

ICE# 021c  
GOOD CONDITION   
HEAD SPACE ABSENT   
DECHLORINATED IN LAB   
PRESERVATION  VOCs  O&G  METALS  OTHER   
APPROPRIATE CONTAINERS   
PRESERVED IN LAB