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Environmental Health

April 30, 2009

VIA ALAMEDA COUNTY FTP SITE

Mr. Paresh Khatri
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Re: **Groundwater Monitoring and Remediation Progress Report – First Quarter 2009**
Connell Automobile Dealership
3093 Broadway
Oakland, California
ACEH Case No. 199

Dear Mr. Khatri:

On behalf of the Hill Family Trust and Linden Broadway Trust, Pangea Environmental Services, Inc., (Pangea) has prepared this *Groundwater Monitoring and Remediation Progress Report – First Quarter 2009* 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 State Water Resources Control Board (SWRCB) *Geotracker* database. As requested, Pangea will not submit a hard copy of this report to Alameda County Environmental Health or to the RWQCB.

In the *Groundwater Monitoring and Remediation Progress Report – Third Quarter 2008* Pangea proposed reducing the groundwater monitoring frequency from quarterly to semi-annually (first and third quarters). Pangea respectfully requests that ACEH concur with this recommendation.

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

Sincerely,
Pangea Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer

Attachments: *Groundwater Monitoring and Remediation Progress Report – First Quarter 2009*

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



**GROUNDWATER MONITORING AND REMEDIATION PROGRESS REPORT --
FIRST QUARTER 2009**

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

April 30, 2009

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 Alameda County Environmental Health (ACEH), Pangea has prepared this *Groundwater Monitoring and Remediation Progress Report – First Quarter 2009* for the subject site. On behalf of the Hill Family Trust and Linden Broadway Trust, Pangea conducted groundwater monitoring, sampling, and inspected wells for separate-phase hydrocarbons (SPH) 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 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.

SITE DESCRIPTION AND BACKGROUND

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

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

On February 27 through April 4, 2007, Pangea installed two groundwater monitoring wells (MW-16A and MW-16B) to monitor groundwater during remediation and installed fifteen remediation wells (AS-1A, AS-1B, AS-2A, AS-3A, AS-3B, AS-4A, RW-1, RW-2, RW-3A, RW-3B, RW-4, RW-5, MW-17A, MW-17B and VE-1) to implement air sparging (AS) and dual phase extraction (DPE). New wells installed at the site were labeled according to the depths of their screen intervals: shallow (A-zone) wells

have screen intervals above approximately 30 feet below grade surface (bgs), which generally straddle the top of the water table, while deeper (B-zone) wells are screened below approximately 30 feet bgs to target deeper contamination. Site remediation will commence upon completion of system installation and utility startup by Pacific Gas and Electric (PG&E).

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

GROUNDWATER MONITORING AND SAMPLING

On February 19, 2009, 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 semi-annual 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 semi-annual gauging and sampling of select *downgradient* and *crossgradient* groundwater monitoring and remediation wells (MW-4, MW-7, MW-8, MW-9, MW-13, MW-16A, MW-16B, MW-17A, MW-17B, RW-2 and RW-4). Samples are not collected from wells with SPH. Therefore, Pangea gauged 15 wells, sampled 10 wells, and removed SPH from 5 wells this quarter.

Prior to sampling the wells, groundwater levels and SPH thickness were measured to evaluate groundwater elevation, flow direction, and the presence of free product in groundwater at the site. Before well purging, the dissolved oxygen (DO) concentration was measured in each well by lowering a down-well sensor to the approximate middle of the water column, and allowing the reading to stabilize during gentle height adjustment. Prior to sample collection, approximately three well-casing volumes of groundwater were purged using a disposable bailer, PVC bailer 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 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 total petroleum hydrocarbons as gasoline (TPHg) by modified EPA Method 8015C; total petroleum hydrocarbons as diesel (TPHd) and motor oil (TPHmo) by EPA Method 8015C with silica gel cleanup; and benzene, toluene, ethylbenzene, xylenes (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 TPHg, BTEX and HVOCs and presents dissolved oxygen field measurement data. This quarter, DO concentrations ranged from 0.29 milligrams per liter (mg/L) in well MW-14 to 2.61 mg/L in well MW-13. 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 19, 2009, the inferred groundwater flow direction beneath the site is eastwards, while groundwater beneath Broadway flows northwards to northeastwards. The inferred flow directions this quarter are consistent with previous monitoring events. Depth-to-water and groundwater elevation data are presented in Table 1 and on Figure 2.

Hydrocarbon and Fuel Oxygenate Distribution in Groundwater

SPH were found in wells MW-1, MW-6, MW-14, MW-15 and RW-2 during this monitoring event. Well MW-1 contained the maximum thickness of SPH at 0.82 ft and approximately 1,500 ml of SPH were removed from well MW-1 by bailing. During initial water level measurement/SPH inspection no SPH were present in wells MW-6, MW-14, MW-15 and RW-2. After purging approximately 1 gallon or less of groundwater, SPH was observed on the bailer and was measured at thicknesses of 0.07 (MW-6), 0.05 (MW-14), 0.08 (MW-15) and 0.08 ft (RW-2). Cumulative SPH removal data is summarized on Table 3.

The distribution of petroleum hydrocarbons in groundwater this quarter is illustrated on Figure 2. The maximum TPHg (230,000 µg/L) and TPHd (73,000 µg/L) concentrations this quarter were detected in well MW-4. The maximum benzene concentration was detected in well MW-16B (15,000 µg/L).

Hydrocarbon concentrations have generally been stable in most site wells over the last few years of monitoring. Concentrations of detected hydrocarbons are consistent with prior monitoring results.

Analytical results from wells MW-16A and MW-16B, installed a short distance downgradient from the initial contaminant source area (the former USTs and well MW-1), may indicate that deeper horizons are more highly impacted than shallow horizons at these locations within the upper portion of the plume. Well MW-16B, screened from 35-40 ft bgs, contains significantly higher concentrations of TPHd, TPHg, and BTEX than well MW-16A, screened from 20-30 ft bgs. However, the opposite condition is indicated by well pair MW-17A and MW-17B located at the southern edge of the upper plume. Contaminant concentrations are significantly higher in shallow well MW-17A than deeper well MW-17B.

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

OTHER SITE ACTIVITIES

Proposed Groundwater Monitoring Program – Sampling Reduction

In the *Groundwater Monitoring and Remediation Progress Report – Third Quarter 2008* Pangea proposed to reduce the groundwater monitoring frequency from quarterly to semi-annually (first and third quarters). This reduction is merited since over 15 years of monitoring data indicates that the contaminant plume appears stable. Upon startup of the active remediation system, Pangea recommends resuming quarterly monitoring to monitor remedial effectiveness. Pangea respectfully requests that ACEH concur with this recommendation.

Pangea will continue groundwater monitoring in accordance with the monitoring program presented in Appendix A. The monitoring program includes gauging of depth-to-water, inspection for SPH and water sample collection. For wells designated for sampling that do not contain SPH, Pangea will collect groundwater samples and measure dissolved oxygen. All groundwater samples will be analyzed for TPHg/BTEX/MTBE by EPA Method 8015C/8021B and for TPHd/TPHmo by EPA Method 8015 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 and Remediation Progress Report.

Site Remediation

Pangea has completed the design of the dual-phase extraction and air sparging (DPE/AS) system approved by ACEH, and coordinated with utilities for installation of a high-pressure gas line and electrical power. The high-pressure gas line was installed on August 19, 2008. The electrical power feed has been approved by Pacific Gas and Electricity and will be installed concurrently with future system installation. After reviewing competitive bids, an installation contractor was selected and the contractor obtained an installation permit from the City of Oakland Building Department. The property owners have postponed system installation due to prospective property sale and redevelopment.

Electronic Reporting

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

ATTACHMENTS

Figure 1 – Vicinity Map

Figure 2 – Groundwater Elevation and Hydrocarbon Concentration Map

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

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

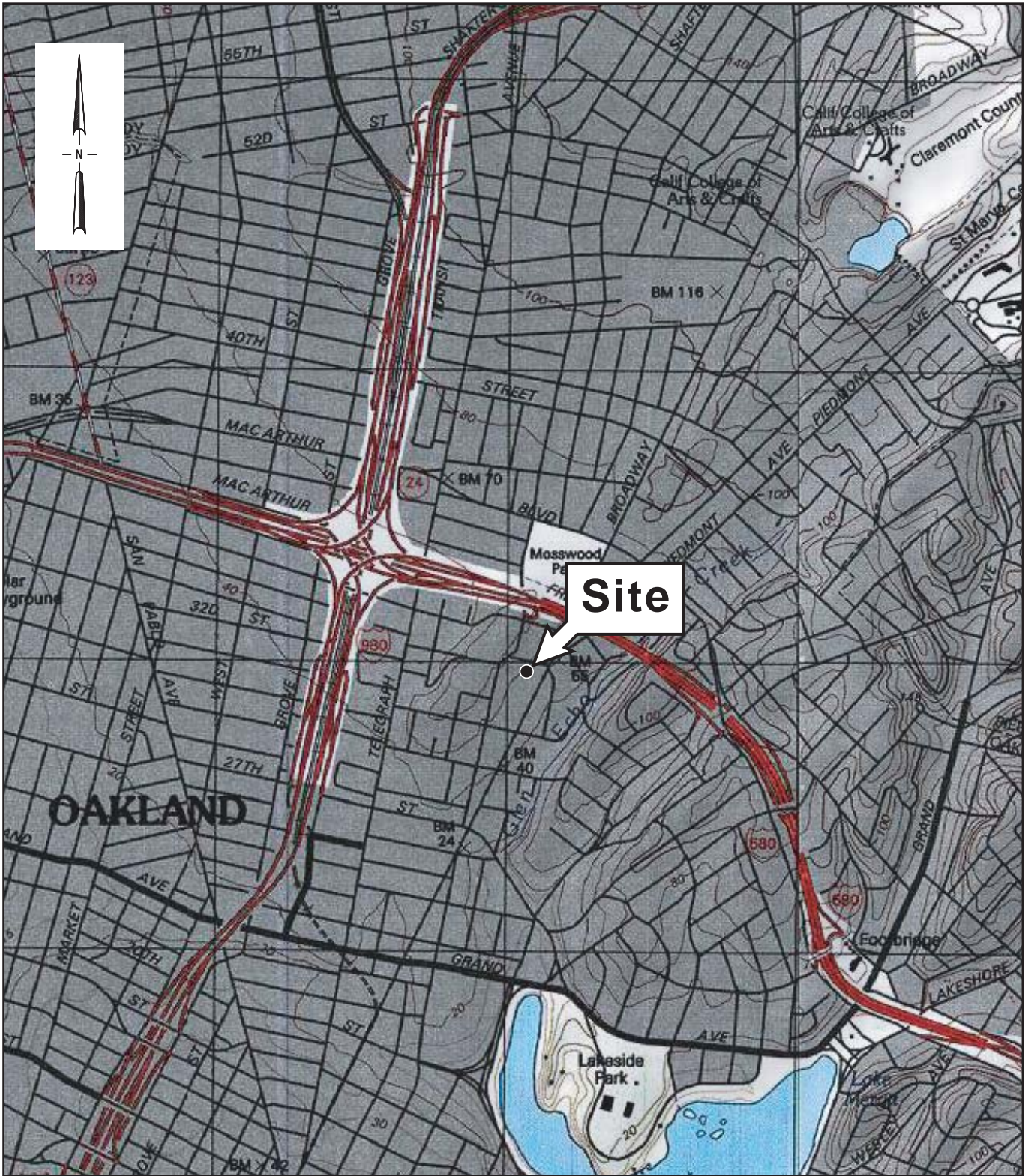
Table 3 – Separate-Phase Hydrocarbon Removal

Table 4 – Well Construction Details

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

LF2 LF3

HAWTHORNE STREET

CPT-3

MW-16A
NM
1,300
12
<10

sidewalk LF4

MW-16B
NM
67,000
15,000
<500

Connell Automobile Dealership
3093 Broadway
Office Building

MW-6
60.86
SPH (0.07)

MW-8
58.76
120
29
<5.0

CPT-16

SB-1

MW-11

MW-1
69.22
SPH (0.82)

MW-15
69.17
SPH (0.08)

MW-14
69.46
SPH (0.05)

MW-17A
NM
150,000
5,600
<3,000

MW-17B
NM
150
3.6
<15

RW-2
NM
SPH (0.08)

SB-12/CPT-17

MW-13
60.09
<50
<0.5
<5.0

BROOK STREET

RW-4
NM
120,000
7,700
<2,700

parking lot

Auto Repair Shop

MW-9
68.46
420
3.4
<5.0

MW-10
68.26
230,000
10,000
<5,000

MW-7
67.11
<50
<0.5
<5.0

parking lot

parking lot

MW-3

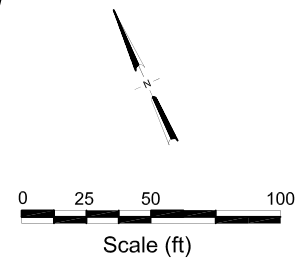
shed

shed

BROADWAY

EXPLANATION

MW-1 ●	Monitoring well location	CPT-16 ⊕	Penetration test boring
RW-4 ▨	Remediation well location	SB-1 ●	Soil Boring
Well ID	Well Designation	LF2 ⊗	Abandoned monitoring well location (installed by Levine-Fricke)
ELEV	Groundwater Elevation		
TPHg	Hydrocarbon concentrations in groundwater in micrograms per liter (ug/L)		
Benzene			
MTBE			
SPH (0.82)	Separate phase hydrocarbons (thickness in feet)		
NS	Not sampled	NM	Not measured



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

Figure 2

Connell Automobile Dealership
3093 Broadway
Oakland, California



Groundwater Elevation and Hydrocarbon Concentration Map

February 19, 2009

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-1	10/5/1990	26.40	68.08	620,000	33,000	50,000	7,900	41,000	--	--	ND	--
94.48	3/1/1991	27.46	67.02	SPH	--	--	--	--	--	--	--	--
	10/12/1992	26.44	68.04	490,000	51,000	59,000	5,000	27,000	--	--	--	--
	11/24/1992	26.63	67.85	320,000	35,000	43,000	4,200	22,000	--	--	ND	--
	4/5/1993	23.77	70.71	270,000	50,000	58,000	4,600	25,000	--	--	ND	--
	7/21/1993	24.51	69.97	SPH	--	--	--	--	--	--	--	--
	11/9/1993	26.06	68.42	SPH	--	--	--	--	--	--	--	--
	8/30/1995	21.73	72.75	SPH	--	--	--	--	--	--	--	--
	12/4/1995	21.94	72.54	SPH	--	--	--	--	<200	--	--	--
	5/2/1996	20.65	73.83	340,000	57,000	73,000	7,200	38,000	--	--	--	--
	11/5/1996	24.29	70.19	270,000	43,000	56,000	4,500	34,000	--	--	--	--
	5/9/1997	22.79	71.69	240,000	36,000	45,000	3,300	17,900	--	--	--	--
	11/5/1997	25.06	69.42	240,000	42,000	48,000	3,600	18,800	<1,000	--	--	--
	2/9/1998	22.64	71.84	220,000	47,000	60,000	5,200	29,800	<1,000	--	ND	--
	5/1/1998	19.95	74.53	160,000	35,000	42,000	2,800	16,000	<1,000	--	ND	--
	11/3/1998	23.29	71.19	200,000	39,000	49,000	4,400	26,000	<500	--	ND	--
	3/24/1999	22.30	72.18	SPH	--	--	--	--	--	--	--	--
	7/1/1999	22.70	71.78	SPH	--	--	--	--	--	--	--	--
	9/21/1999	23.81	70.67	SPH	--	--	--	--	--	--	--	--
	2/9/2000	23.95	70.59	SPH	--	--	--	--	--	--	--	--
	5/31/2000	22.05	72.43	SPH	--	--	--	--	--	--	--	--
	8/8/2000	22.49	71.99	SPH	--	--	--	--	--	--	--	--
	11/14/2000	24.65	69.83	SPH	--	--	--	--	--	--	--	--
	3/1/2001	24.22	70.28	SPH	--	--	--	--	--	--	--	--
	5/7/2001	23.85	70.67	SPH (0.05)	--	--	--	--	--	--	--	--
	8/1/2001	23.91	70.64	SPH (0.09)	--	--	--	--	--	--	--	--
	11/5/2001	23.95	70.67	SPH (0.18)	--	--	--	--	--	--	--	--
	2/13/2002	23.15	71.39	SPH(0.07)	--	--	--	--	--	--	--	--
	5/2/2002	23.91	70.60	SPH (0.04)	--	--	--	--	--	--	--	--
	8/4/2002	24.02	70.48	SPH (0.03)	--	--	--	--	--	--	--	--
	11/26/2002	24.47	70.05	SPH (0.05)	--	--	--	--	--	--	--	--
	1/20/2003	22.37	72.14	SPH (0.04)	--	--	--	--	--	--	--	--
	5/28/2003	21.77	72.73	SPH (0.02)	--	--	--	--	--	--	--	--
	8/5/2003	23.07	71.44	SPH (0.04)	--	--	--	--	--	--	--	--
	11/10/2003	22.53	71.97	SPH (0.03)	--	--	--	--	--	--	--	--
	2/18/2004	22.61	71.91	SPH (0.05)	--	--	--	--	--	--	--	--
	5/27/2004	22.08	72.44	SPH (0.05)	--	--	--	--	--	--	--	--
	8/19/2004	24.35	70.43	SPH (0.38)	--	--	--	--	--	--	--	--
	12/27/2004	24.62	70.21	SPH (0.44)	--	--	--	--	--	--	--	--
	2/18/2005	23.14	71.37	SPH (0.04)	--	--	--	--	--	--	--	--
	5/11/2005	22.71	71.79	SPH (0.02)	--	--	--	--	--	--	--	--
	8/3/2005	23.03	71.50	SPH (0.06)	--	--	--	--	--	--	--	--

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)	11/30/2005	23.98	70.52	SPH (0.03)	--	--	--	--	--	--	--	--
	2/17/2006	23.81	70.68	SPH (0.01)	--	--	--	--	--	--	--	--
	5/12/2006	21.75	72.75	SPH (0.02)	--	--	--	--	--	--	--	--
	8/7/2006	21.35	73.14	SPH (0.01)	--	--	--	--	--	--	--	--
	11/21/2006	23.38	71.13	SPH (0.04)	--	--	--	--	--	--	--	--
	2/12/2007	23.18	71.32	SPH (0.03)	--	--	--	--	--	--	--	--
	5/11/2007	22.68	71.80	--	--	--	--	--	--	--	--	0.20
	8/16/2007	23.74	70.74	--	--	--	--	--	--	--	--	0.08
	11/26/2007	24.98	69.50	--	--	--	--	--	--	--	--	0.13
	5/29/2008	23.83	70.65	--	--	--	--	--	--	--	--	0.14
	8/22/2008	25.50	69.54	SPH (0.70)	--	--	--	--	--	--	--	--
2/19/2009	25.92	69.22	SPH (0.82)	--	--	--	--	--	--	--	--	
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	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 ⁴	--	⁵	--
	7/1/1999	18.80	70.04	110,000	13,000	23,000	1,600	12,000	<83	--	⁵	--
	9/21/1999	19.85	68.99	140,000	16,000	31,000	2,400	14,800	ND	--	⁵	3.27
	2/9/2000	19.76	69.08	140,000	16,000	28,000	2,100	14,000	<400	--	DCB: 5.9, MCB: 5.9	--
	5/31/2000	17.90	70.94	15,000	17,000	28,000	2,400	14,000	<0.5 ⁶	--	ND	--
	8/8/2000	18.62	70.22	140,000	15,000	25,000	2,100	13,000	<300	--	ND	0.60
	11/14/2000	19.63	69.21	150,000	19,000	36,000	2,900	17,000	<200	--	ND	0.32
	3/1/2001	19.68	69.16	120,000	10,000	15,000	1,300	10,000	<2000	--	ND	0.13
	5/7/2001	18.60	70.24	210,000	12,000	19,000	1,900	12,000	<200	--	ND	0.23
	8/1/2001	18.73	70.11	160,000	13,000	21,000	2,200	13,000	<200	--	ND	--
	11/5/2001	18.97	69.87	220,000	15,000	26,000	3,100	16,000	<200	--	ND	--
	2/13/2002	18.59	70.25	180,000	6,100	11,000	1,400	13,000	<200	--	ND	0.43
	5/2/2002	18.77	70.07	110,000	13,000	20,000	2,000	10,000	<1,200	--	ND	0.21
	8/4/2002	18.95	69.89	92,000	9,200	15,000	1,800	10,000	<2,000	--	ND	0.35
	11/26/2002	20.83	68.01	110,000	16,000	26,000	2,700	12,000	<1,000	--	ND	0.29
	1/20/2003	16.90	71.94	110,000	9,000	16,000	1,900	11,000	<1,200	--	ND	0.35
	5/28/2003	15.25	73.59	110,000	13,000	17,000	1,800	8,500	<1,000	--	ND	0.59
	8/5/2003	17.05	71.79	110,000	13,000	20,000	2,200	9,800	<1,000	--	<25	0.66
	11/10/2003	16.60	72.24	130,000	14,000	23,000	2,700	12,000	<2,700	--	--	0.74
88.84	2/18/2004	16.59	72.25	110,000	11,000	17,000	1,600	9,900	<3,500	--	--	0.46
	5/27/2004	15.97	72.87	97,000	12,000	18,000	2,100	8,900	<3,000	--	--	0.59
	8/19/2004	18.11	70.73	92,000	9,500	15,000	1,900	8,600	<2,500	--	--	0.77
	12/27/2004	19.53	69.31	120,000	16,000	28,000	2,800	12,000	<1,000	--	--	0.2
	2/18/2005	18.40	70.44	97,000	11,000	16,000	1,700	7,400	<4,000	<50	<50	0.89
	5/11/2005	17.93	70.91	110,000	10,000	16,000	1,900	8,400	<3,000	--	--	1.03
	8/3/2005	18.14	70.70	110,000	12,000	18,000	2,200	8,000	<3,600	--	--	0.77
	11/30/2005	19.70	69.14	100,000	12,000	18,000	2,200	9,400	<2700	--	--	0.39
	2/17/2006	17.63	71.21	100,000	12,000	17,000	2,100	7,800	<2500	39	<10	0.2
	5/12/2006	15.53	73.31	100,000	11,000	15,000	2,100	8,700	2,000	--	--	0.27
	8/7/2006	17.75	71.09	97,000	11,000	15,000	2,200	8,700	<1,500	--	--	0.47
	11/21/2006	19.14	69.70	99,000	9,200	13,000	2,000	8,100	<2,100	--	--	0.20
	2/12/2007	18.98	69.86	140,000	11,000	16,000	2,100	7,800	<3,600	32	<5 ⁷	0.20
	5/11/2007	18.27	70.57	140,000	9,900	15,000	2,000	7,200	<2,700	32	--	0.62
	8/16/2007	19.54	69.30	100,000	9,300	14,000	2,100	8,800	1,600	--	--	0.53
	11/26/2007	20.47	68.37	110,000	9,200	16,000	2,400	10,000	<2,400	--	--	0.57
	5/29/2008	19.60	69.24	94,000	6,400	11,000	1,700	6,300	<3,500	--	--	0.24
	8/22/2008	20.30	68.54	150,000	9,500	17,000	2,900	13,000	<1,500	--	--	1.82
	2/19/2009	20.58	68.26	230,000	10,000	17,000	2,900	12,000	<5000	<50	ND	1.95

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

Well ID TOC Elev. (ft)	Sampling Date	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TVH/TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
MW-5 84.84	3/15/1991	26.31	58.53	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	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 85.62	3/15/1991	25.82	59.80	80,000	12,000	13,000	1,100	5,400	--	--	DBCM: 160	--
	10/12/1992	25.02	60.60	19,000	3,200	1,400	200	560	--	--	--	--
	12/1/1992	28.87	56.75	SPH	--	--	--	--	--	--	--	--
	4/2/1993	26.96	58.66	SPH	--	--	--	--	--	--	--	--
	7/21/1993	26.17	59.45	SPH	--	--	--	--	--	--	--	--
	11/9/1993	27.51	58.11	SPH	--	--	--	--	--	--	--	--
	8/30/1995	28.00	57.62	SPH	--	--	--	--	--	--	--	--
	12/1/1995	27.58	58.04	SPH	--	--	--	--	<8,000,000	--	--	--
86.94	5/3/1996	28.15	58.79	130,000	37,000	50,000	3,200	14,200	--	--	ND	--
	5/9/1997	26.54	60.40	1,700,000	14,000	27,000	4,000	28,200	--	--	--	--
	11/5/1997	26.16	60.78	160,000	13,000	19,000	1,900	14,300	<200	--	--	--
	5/1/1998	22.96	62.86	130,000	15,000	23,000	1,700	13,200	<500	--	ND	--
85.82	11/3/1998	24.35	61.47	110,000	17,000	21,000	1,800	10,700	<200	--	ND	--
	3/26/1999	23.82	62.00	SPH	--	--	--	--	--	--	--	--
	7/1/1999	24.45	61.37	SPH	--	--	--	--	--	--	--	--
	9/21/1999	24.58	61.24	SPH	--	--	--	--	--	--	--	--
	2/9/2000	24.93	61.24	SPH	--	--	--	--	--	--	--	--
	5/31/2000	23.47	62.41	SPH	--	--	--	--	--	--	--	--
	8/8/2000	23.85	61.97	SPH	--	--	--	--	--	--	--	--
	11/14/2000	24.61	61.21	SPH	--	--	--	--	--	--	--	--
	3/1/2001	23.97	61.85	SPH	--	--	--	--	--	--	--	--
	5/7/2001	23.17	62.71	SPH	--	--	--	--	--	--	--	--
	8/1/2001	obstruction in well		--	--	--	--	--	--	--	--	--
	11/5/2001	obstruction in well		--	--	--	--	--	--	--	--	--
	2/13/2002	obstruction in well		--	--	--	--	--	--	--	--	--
	5/2/2002	23.25	62.41	SPH (0.05)	--	--	--	--	--	--	--	--
	8/4/2002	23.55	62.29	SPH (0.03)	--	--	--	--	--	--	--	--
	11/26/2002	24.22	61.62	SPH (0.03)	--	--	--	--	--	--	--	--
	1/20/2003	22.49	63.36	SPH (0.04)	--	--	--	--	--	--	--	--
	5/28/2003	21.92	63.93	SPH (0.04)	--	--	--	--	--	--	--	--

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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 (continued)	8/5/2003	23.98	61.87	SPH (0.04)	--	--	--	--	--	--	--	--
	11/10/2003	23.50	62.40	SPH (0.10)	--	--	--	--	--	--	--	--
	2/18/2004	22.21	63.64	SPH (0.04)	--	--	--	--	--	--	--	--
	5/27/2004	22.01	63.85	SPH (0.05)	--	--	--	--	--	--	--	--
	8/19/2004	24.16	61.68	SPH (0.03)	--	--	--	--	--	--	--	--
	12/27/2004	24.69	61.13	SPH (sheen)	--	--	--	--	--	--	--	--
	2/18/2005	23.55	62.33	SPH (0.08)	--	--	--	--	--	--	--	--
	5/11/2005	22.90	62.97	SPH (0.06)	--	--	--	--	--	--	--	--
	8/3/2005	23.68	62.19	SPH (0.06)	--	--	--	--	--	--	--	--
	11/30/2005	24.17	61.67	SPH (0.02)	--	--	--	--	--	--	--	--
	2/17/2006	23.89	61.95	SPH (0.03)	--	--	--	--	--	--	--	--
	5/12/2006	22.66	63.18	SPH (0.03)	--	--	--	--	--	--	--	--
	8/7/2006	22.83	63.01	SPH (0.02)	--	--	--	--	--	--	--	--
	11/21/2006	23.92	61.92	SPH (0.02)	--	--	--	--	--	--	--	--
	2/12/2007	23.97	61.87	SPH (0.02)	--	--	--	--	--	--	--	--
	5/11/2007	23.54	62.28	--	--	--	--	--	--	--	--	0.70
	8/16/2007	24.18	61.64	--	--	--	--	--	--	--	--	0.63
	11/26/2007				Unable to gauge or sample-Vehicle parked over well							
	5/29/2008	24.29	61.53	--	--	--	--	--	--	--	--	0.48
	8/22/2008	24.80	61.02	--	--	--	--	--	--	--	--	2.55
	2/19/2009	24.96	60.86	SPH (0.07)†	--	--	--	--	--	--	--	1.88
MW-7 85.41	3/15/1991	21.63	63.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	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	--	⁵	--
	9/21/1999	18.91	66.50	<50	0.7	1.8	<0.5	1.5	<5.0	--	ND	4.32
	2/9/2000	16.74	68.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	--
	5/31/2000	16.21	69.20	<50	3	6	1	9	<0.5	--	ND	--
	8/8/2000	16.92	68.49	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.43
	11/14/2000	17.00	68.41	< 50	< 0.5	0.63	< 0.5	< 0.5	< 5.0	--	ND	0.44

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>>MW-7	3/1/2001	17.09	68.32	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	--	ND	--
(continued)	5/7/2001	17.19	68.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.51
	8/1/2001	17.25	68.16	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	--
	11/5/2001	17.35	68.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	--
	2/13/2002	17.50	67.91	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.80
	5/2/2002	17.30	68.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.31
	8/4/2002	17.58	67.83	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.37
	11/26/2002	18.35	67.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.28
	1/20/2003	15.84	69.57	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.61
	5/28/2003	15.19	70.22	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	ND	0.74
	8/5/2003	17.00	68.41	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	<0.5	0.61
	11/10/2003	16.54	68.87	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.65
	2/18/2004	16.47	68.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.74
	5/27/2004	15.93	69.48	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.65
	8/19/2004	18.05	67.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.71
	12/27/2004	17.35	68.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	2.0
	2/18/2005	16.23	69.18	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	0.93
	5/11/2005	15.79	69.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.18
	8/3/2005	17.52	67.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.89
	11/30/2005	19.57	65.84	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.70
	2/17/2006	16.82	68.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<1.0	0.99
	5/12/2006	15.86	69.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.11
	8/7/2006	17.52	67.89	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.33
	11/21/2006	18.67	66.74	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.39
	2/12/2007	18.20	67.21	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5 ⁷	0.75
	5/11/2007	17.73	67.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.93
	8/16/2007	18.86	66.55	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.66
	11/26/2007	19.51	65.90	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.59
	5/29/2008	18.58	66.83	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.71
	8/22/2008	19.35	66.06	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	3.45
	2/19/2009	18.30	67.11	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND	1.90
MW-8	10/12/1992	27.70	57.80	70	20	1	1	3	--	--	--	--
85.50	11/25/1992	27.62	57.88	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	4/8/1993	26.64	58.86	490	15	45	5.1	73	--	--	ND	--
	7/21/1993	26.60	58.90	180	2.5	3	<0.5	1.9	--	--	ND	--
	11/11/1993	27.18	58.32	310	23	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	26.35	59.15	660	360	6.8	13	2.8	--	--	--	--
	12/4/1995	26.72	58.78	250	46	0.9	4.9	<0.5	--	--	ND	--
	5/3/1996	25.47	60.03	69	110	<0.5	<0.5	1.5	--	--	ND	--
	8/8/1996	26.41	59.09	120	11	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1996	26.77	58.73	110	20	<1	1	<1	--	--	ND	--
	2/6/1997	25.84	59.66	67	51	<0.5	0.56	<0.5	<2	--	ND	--
	5/9/1997	26.39	59.11	110	59	<0.5	<0.5	<0.5	--	--	--	--
	8/7/1997	26.72	58.78	<50	12	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1997	26.82	58.68	<50	9.4	<0.5	<0.5	<0.5	<2	--	--	--

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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	2/9/1998	25.57	59.93	<50	6	<0.5	<0.5	<0.5	<2	--	--	--
(continued)	5/1/1998	25.64	59.86	430	490	7.1	27	26	<10	--	ND	--
	8/5/1998	25.96	59.54	140	19	<0.5	5.2	5.3	<2	--	ND	--
	11/3/1998	26.27	59.23	150	110	1.1	4.3	4.5	<2	--	ND	--
	3/31/1999	20.93	64.57	54	170	1.5	4.1	1.9	4.4	--	1,1 DCA: 0.7	--
	7/1/1999	26.59	58.91	140	58	0.9	3	2.3	<0.5	--	5	--
	9/21/1999	26.89	58.61	670	170	2.6	11	7.9	<5	--	ND	2.61
	2/9/2000	26.60	58.90	300	60	1.2	4.8	1.2	<5.0	--	<0.5	--
	8/8/2000	26.43	59.07	270	56	1.2	4.1	1.0	<5.0	--	ND	0.25
	11/14/2000	26.60	58.90	330	64	1.3	3.5	0.60	<5.0	--	ND	0.51
	3/1/2001	26.41	59.09	400	140	<0.5	<0.5	0.55	<5.0	--	ND	--
	5/7/2001	26.55	58.95	240	37	0.71	2.5	0.77	<5.0	--	ND	0.49
	8/1/2001	26.71	58.79	130	5.2	<0.5	<0.5	<0.5	<5.0	--	ND	--
	11/5/2001	26.67	58.83	140	3.3	<0.5	<0.5	<0.5	<5.0	--	ND	--
	2/13/2002	26.15	59.35	1,100	440	0.087	0.66	2.0	<5.0	--	ND	0.71
	5/2/2002	26.63	58.87	90	3.9	<0.5	<0.5	<0.5	<5.0	--	ND	0.37
	8/4/2002	26.80	58.70	120	2.4	0.77	<0.5	<0.5	<5.0	--	ND	0.44
	11/26/2002	27.50	58.00	85	3.7	<0.5	<0.5	<0.5	<5.0	--	ND	0.48
	1/20/2003	24.93	60.57	90	3.9	0.67	<0.5	<0.5	<5.0	--	ND	0.65
	5/28/2003	24.28	61.22	120	1.4	<0.5	<0.5	<0.5	<5.0	--	ND	0.71
	8/5/2003	26.51	58.99	150 ^f	<0.5	<0.5	<0.5	<0.5	<5.0	--	<1.0	0.67
	11/10/2003	26.04	59.46	50	0.84	<0.5	<0.5	<0.5	<5.0	--	--	0.70
	2/18/2004	25.97	59.53	52	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.69
	5/27/2004	25.31	60.19	75	0.76	<0.5	<0.5	<0.5	<5.0	--	--	0.98
	8/19/2004	27.55	57.95	72	1.7	<0.5	<0.5	<0.5	<5.0	--	--	1.41
	12/27/2004	26.50	59.00	160	22	0.74	2.2	0.55	<5.0	--	--	0.2
	2/18/2005	26.00	59.50	130	27	0.70	2.3	0.69	<5.0	47	<1.0	0.91
	5/11/2005	25.47	60.03	550	190	2.5	2.9	9.3	<5.0	--	--	1.22
	8/3/2005	26.31	59.19	240	36	0.86	3.1	1.2	<5.0	--	--	1.05
	11/30/2005	26.51	58.99	160	28	1.7	2.0	1.3	<5.0	--	--	0.71
	2/17/2006	26.11	59.39	200	39	0.67	2.7	1.6	<5.0	37	<1.0	0.64
	5/12/2006	25.38	60.12	770	260	7.40	5.1	5.8	<5.0	--	--	0.19
	8/7/2006	26.10	59.40	320	52	1.0	2.7	1.2	<5.0	--	--	0.17
	11/21/2006	26.43	59.07	54	9.2	<0.5	0.56	0.64	<5.0	--	--	0.22
	2/12/2007	26.29	59.21	1,000	310	5.1	25	27	<5.0	25	<0.5 ⁷	0.37
	5/11/2007	26.23	59.27	300	48	0.74	2.9	1.2	<5.0	--	--	0.55
	8/16/2007	26.81	58.69	700	190	2.3	10	1.9	<10	--	--	0.59
	11/26/2007	26.99	58.51	130	33	0.74	0.93	<0.5	<5.0	--	--	0.51
	5/29/2008	26.70	58.80	510	100	0.93	1.2	<0.5	<10	--	--	0.97
	8/22/2008	27.03	58.47	100	19	<0.5	<0.5	<0.5	<5.0	--	--	2.88
	2/19/2009	26.74	58.76	120	29	0.56	<0.5	<0.5	<5.0	19	ND	2.12
MW-9	11/24/1992	23.51	66.86	19,000	180	590	23	2,000	--	--	TCM: 15	--
90.37	4/5/1993	21.14	69.23	2,300	48	4	0.6	13	--	--	TCM: 2	--
	7/21/1993	21.54	68.83	2,300	170	8.1	15	<0.5	--	--	ND	--
	11/10/1993	27.53	62.84	4,400	69	7.3	21	9.7	--	--	ND	--
	8/30/1995	19.59	70.78	3,200	3,900	49	80	22.8	--	--	--	--

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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	12/4/1995	20.65	69.72	--	--	--	--	--	<2	--	--	--
(continued)	5/2/1996	18.63	71.74	<1300	2,600	<13	200	<13	--	--	ND	--
	11/5/1996	20.69	69.68	1,800	280	<5	65	<5	--	--	ND	--
	5/9/1997	19.96	70.41	1,100	160	<0.5	42	<0.5	--	--	--	--
	8/8/1997	20.84	69.53	570 ^{1,2}	<0.5	<0.5	<0.5	0.78 ³	<2	--	ND	--
	11/5/1997	21.55	68.82	490 ¹	<0.5	<0.5	6	<0.5	<2	--	--	--
	2/9/1998	20.21	70.16	270 ¹	48	17	5.8	<0.5	<2	--	--	--
	5/1/1998	19.27	71.10	550	70	<0.5	22	2.2	<2	--	ND	--
	8/5/1998	19.35	71.02	550 ¹	88	<0.5	13	1.9 ³	<2	--	ND	--
	11/2/1998	20.43	69.94	580	<0.5	<0.5	7.5 ³	1.6 ³	<2	--	ND	--
	3/25/1999	18.46	71.91	1,100	160	<0.5	21	2.1 ³	5.7 ⁴	--	ND	--
	7/1/1999	19.95	70.42	540	100	7.4	26	16.9	<1.3	--	⁵	--
	9/21/1999	21.15	69.22	2,700	320	98	88	47	<20	--	ND	5.86
	2/9/2000	21.08	69.29	1,600	81	3.6	19	18	<5.0	--	<0.5	--
	5/31/2000	19.11	71.26	1,500	170	13	25	<1.0	<0.5	--	ND	--
	8/8/2000	19.86	70.51	1,300	140	2.1	19	<0.5	<5.0	--	ND	2.4
	11/14/2000	20.90	69.47	1,700	250	2.6	44	2.1	<5.0	--	ND	0.29
	3/1/2001	20.45	69.92	1,800	170	5.6	30	2.5	<20	--	ND	0.31
	5/7/2001	19.83	70.54	1,500	120	2.6	24	<0.5	<5.0	--	ND	0.18
	8/1/2001	20.02	70.35	2,600	280	4.8	50	<0.5	<5.0	--	ND	--
	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 ^a	62	0.99	25	<0.5	<5.0	--	<10	0.54
	11/10/2003	18.65	71.72	1,500	120	7.6	41	<1.0	<10	--	--	0.62
	2/18/2004	18.41	71.96	820	50	1.2	19	<0.5	<5.0	--	--	0.58
	5/27/2004	17.89	72.48	730	36	2.0	11	1.6	<5.0	--	--	0.90
	8/19/2004	20.14	70.23	1,200	95	2.5	24	<0.5	<25	--	--	0.98
	12/27/2004	21.65	68.72	720	25	14	2.0	3.5	<15	--	--	2.5
	2/18/2005	19.97	70.40	600	24	<0.5	3.8	<0.5	<5.0	220	<5.0	0.88
	5/11/2005	19.41	70.96	510	11	<0.5	1.6	<0.5	<5.0	--	--	0.95
	8/3/2005	19.35	71.02	620	26	5.7	4.0	<0.5	<5.0	--	--	0.65
	11/30/2005	20.96	69.41	1,300	120	2.9	22	<0.5	<10	--	--	0.49
	2/17/2006	19.13	71.24	540	11	<0.5	1.1	<0.5	<5.0	160	<10	0.70
	5/12/2006	17.70	72.67	600	12	0.54	1.7	<0.5	<5.0	--	--	0.30
	8/7/2006	18.82	71.55	600	31	1.8	4.2	<0.5	<5.0	--	--	0.24
	11/21/2006	20.10	70.27	670	32	2.6	3.4	<0.5	<5.0	--	--	0.25
	2/12/2007	20.48	69.89	520	14	0.74	1.2	<0.5	<5.0	210	<5 ⁷	0.51
	5/11/2007	19.55	70.82	710	4.8	1.8	<0.5	<0.5	<10	--	--	0.60
	8/16/2007	20.83	69.54	740	6.8	1.3	0.86	<0.5	<5.0	--	--	0.40
	11/26/2007	21.79	68.58	550	5.8	1.0	0.66	<0.5	<5.0	--	--	0.54
	5/29/2008	20.70	69.67	1,200	4.9	2.9	1.2	<0.5	<5.0	--	--	0.68
	8/22/2008	21.61	68.76	780	11	4.5	1.7	<0.5	<25	--	--	2.17
	2/19/2009	21.91	68.46	420	3.4	<0.5	<0.5	<0.5	<5.0	120	ND	1.94

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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-10 88.60	10/12/1992	21.55	67.05	28,000	2,700	3,800	210	1,300	--	--	--	--
	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-11 102.06	11/24/1992	33.65	68.41	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	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 84.06	11/24/1992	26.05	58.01	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	12/8/92***	25.08	58.98	<50	<0.1	<0.1	<0.1	<0.1	--	--	--	--
	12/8/1992	25.08	58.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
	4/5/1993	24.64	59.42	<50	<0.5	0.9	<0.5	<0.5	--	--	ND	--
	7/21/1993	24.29	59.77	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	11/9/1993	24.23	59.83	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/30/1995	23.30	60.76	<50	49	<0.5	<0.5	<0.5	--	--	--	--
	12/1/1995	23.80	60.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	5/3/1996	23.19	60.87	<50	<0.5	<0.5	<0.5	<0.5	--	--	ND	--
	8/8/1996	23.44	60.62	<50	32	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1996	24.04	60.02	<50	<1	<1	<1	<1	--	--	ND	--
	2/6/1997	23.24	60.82	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	5/8/1997	23.46	60.60	<50	81	<0.5	<0.5	<0.5	--	--	--	--
	8/8/1997	23.92	60.14	<50	<0.5	<0.5	<0.5	<0.5	<2	--	ND	--
	11/5/1997	24.27	59.79	<50	<0.5	<0.5	<0.5	<0.5	<2	--	--	--
	2/9/1998	22.89	61.17	<50	<0.5	<0.5	<0.5	<0.5	<2	--	--	--
	4/29/1998	22.27	61.79	<50	24	<0.5	<0.5	<0.5	<2	--	ND	--
	8/4/1998	22.75	61.31	120	200	<1	<1	<1	<4	--	ND	--
	11/3/1998	23.90	60.16	59 ¹	33	<0.5	<0.5	<0.5	<2	--	ND	--
	3/31/1999	23.11	60.95	130	0.56	<0.5	<0.5	<0.5	<2	--	ND	--

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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)	Ethylbenzene (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	--	5	--
(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
	2/12/2007	23.27	60.79	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5 ⁷	0.52
	5/11/2007	23.07	60.99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.79
	8/16/2007	23.67	60.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.84
	11/26/2007	24.13	59.93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	0.65
	5/29/2008	23.81	60.25	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.07
	8/22/2008	24.13	59.93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	3.32
	2/19/2009	23.97	60.09	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	ND	2.61
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)	--	--	--	--	--	--	--	--

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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)	11/5/2001	23.50	71.18	SPH (0.03)	--	--	--	--	--	--	--	--
	2/13/2002	22.99	71.70	SPH (0.04)	--	--	--	--	--	--	--	--
	5/2/2002	23.51	71.17	SPH (0.02)	--	--	--	--	--	--	--	--
	8/4/2002	23.61	71.06	SPH (0.01)	--	--	--	--	--	--	--	--
	1/20/2003	22.35	72.31	SPH (sheen)	--	--	--	--	--	--	--	--
	5/28/2003	21.95	72.74	SPH (0.04)	--	--	--	--	--	--	--	--
	8/5/2003	23.03	71.66	SPH (0.04)	--	--	--	--	--	--	--	--
	11/10/2003	22.70	72.02	SPH (0.07)	--	--	--	--	--	--	--	--
	2/18/2004	22.37	72.32	SPH (0.04)	--	--	--	--	--	--	--	--
	5/27/2004	21.78	72.92	SPH (0.05)	--	--	--	--	--	--	--	--
	8/19/2004	24.13	70.57	SPH (0.05)	--	--	--	--	--	--	--	--
	12/27/2004	24.19	70.47	SPH (sheen)	--	--	--	--	--	--	--	--
	2/18/2005	23.24	71.46	SPH (0.05)	--	--	--	--	--	--	--	--
	5/11/2005	22.77	71.92	SPH (0.04)	--	--	--	--	--	--	--	--
	8/3/2005	23.17	71.51	SPH (0.02)	--	--	--	--	--	--	--	--
	11/30/2005	24.02	70.66	SPH (0.02)	--	--	--	--	--	--	--	--
	2/17/2006	23.87	70.81	SPH (0.02)	--	--	--	--	--	--	--	--
	5/12/2006	21.74	72.93	SPH (0.01)	--	--	--	--	--	--	--	--
	8/7/2006	21.66	73.01	SPH (0.01)	--	--	--	--	--	--	--	--
	11/21/2006	23.41	71.27	SPH (0.03)	--	--	--	--	--	--	--	--
	2/12/2007	23.45	71.23	SPH (0.03)	--	--	--	--	--	--	--	--
	5/11/2007	22.95	71.71	--	--	--	--	--	--	--	--	0.41
	8/16/2007	24.14	70.52	--	--	--	--	--	--	--	--	0.29
	11/26/2007	24.94	69.72	--	--	--	--	--	--	--	--	0.11
	5/29/2008	24.02	70.64	--	--	--	--	--	--	--	--	0.33
8/22/2008	24.97	69.69	--	--	--	--	--	--	--	--	0.37	
2/19/2009	25.20	69.46	SPH (0.05)†	--	--	--	--	--	--	--	--	0.29
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)	--	--	--	--	--	--	--	--	

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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)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
>>MW-15 (continued)	2/18/2005	23.27	71.57	SPH (0.10)	--	--	--	--	--	--	--	--
	5/11/2005	22.80	72.03	SPH (0.09)	--	--	--	--	--	--	--	--
	8/3/2005	23.29	71.48	SPH (0.01)	--	--	--	--	--	--	--	--
	11/30/2005	24.11	70.69	SPH (0.05)	--	--	--	--	--	--	--	--
	2/17/2006	23.91	70.87	SPH (0.03)	--	--	--	--	--	--	--	--
	5/12/2006	21.88	72.90	SPH (0.03)	--	--	--	--	--	--	--	--
	8/7/2006	22.05	72.72	SPH (0.01)	--	--	--	--	--	--	--	--
	11/21/2006	23.70	71.06	--	--	--	--	--	--	--	--	0.15
	2/12/2007	23.80	70.96	58,000	8,900	8,000	800	2,500	<1,000	99	<5'	0.22
	5/11/2007	23.28	71.48	--	--	--	--	--	--	--	--	0.49
	8/16/2007	24.38	70.38	--	--	--	--	--	--	--	--	0.41
	11/26/2007	25.30	69.46	--	--	--	--	--	--	--	--	0.27
	5/29/2008	24.32	70.44	--	--	--	--	--	--	--	--	0.47
	8/22/2008	25.24	69.52	--	--	--	--	--	--	--	--	2.49
	2/19/2009	25.59	69.17	SPH (0.08)†	--	--	--	--	--	--	--	--
MW-16A	5/17/2007	25.12	--	1,700	3.1	4.1	21	25	<30	--	--	0.94
	8/16/2007	26.02	--	920	3.4	22	13	13	<5.0	--	--	0.62
	11/26/2007	26.16	--	870	2.0	16	6.9	10	<5.0	--	--	0.55
	5/29/2008	25.73	--	600	2.9	14	8.2	14	<5.0	--	--	0.48
	8/22/2008	26.11	--	1,300	9.2	45	29	100	<17	--	--	0.94
	2/19/2009	26.32	--	1,300	12	17	7.0	33	<10	<0.5	Chloroform: 1.0	0.88
MW-16B	5/17/2007	28.98	--	110,000	11,000	3,300	1,300	7,700	<500	--	--	0.65
	8/16/2007	31.02	--	58,000	14,000	1,500	1,100	4,100	<1,000	--	--	0.66
	11/26/2007	30.00	--	76,000	14,000	1,900	1,200	2,700	<1,000	--	--	0.61
	5/29/2008	29.95	--	70,000	12,000	1,600	1,300	1,900	<500	--	--	0.51
	8/22/2008	32.02	--	39,000	9,700	480	870	1,600	<500	--	--	0.93
	2/19/2009	31.70	--	67,000	15,000	1,300	1,400	2,500	<500	1,100	ND	0.97
MW-17A	4/12/2007	23.87	--	130,000	8,400	31,000	3,100	17,000	<4,000	--	--	--
	5/29/2008	24.05	--	180,000	11,000	24,000	1,600	9,600	<3,500	--	--	2.12
	8/22/2008	24.96	--	150,000	17,000	30,000	1,700	16,000	<2,700	--	--	0.94
	2/19/2009	25.29	--	150,000	5,600	26,000	1,900	12,000	<3,000	800	EDB: 410	0.97
MW-17B	4/12/2007	23.14	--	3,200	130	470	70	470	<200	--	--	--
	5/29/2008	24.30	--	53	<0.5	2.1	<0.5	3.3	<5.0	--	--	2.78
	8/22/2008	25.19	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	1.41
	2/19/2009	25.51	--	150	3.6	14	0.82	11	<15	0.81	TCM: 0.51	1.12
RW-2	4/16/2007	16.66	--	160,000	20,000	30,000	3,700	19,000	<2,400	--	--	--
	5/29/2008	17.66	--	140,000	11,000	16,000	2,100	8,700	<2,000	--	--	1.46
	8/22/2008	18.51	--	110,000	13,000	19,000	2,700	13,000	<1,800	--	--	0.95
	2/19/2009	18.87	--	SPH (0.08)†	--	--	--	--	--	--	--	0.79
RW-4	4/11/2007	22.50	--	120,000	4,600	23,000	2,400	16,000	<2,500	--	--	--
	5/29/2008	23.72	--	92,000	4,800	15,000	1,900	14,000	<1,800	--	--	1.09
	8/22/2008	24.69	--	91,000	4,800	13,000	1,800	13,000	<1,600	--	--	0.94
	2/19/2009	24.98	--	120,000	7,700	19,000	2,300	13,000	<2,700	110	EDB: 240	0.76

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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)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	1,2-DCA (µg/L)	Other HVOCs (µg/L)	DO (mg/L)
Grab Groundwater Sampling Data												
SB-1-40-GW	8/5/2008	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--
CPT-1****	10/6/1992	--	--	490	20	60	10	60	--	1	--	--
CPT-3	10/6/1992	--	--	50	<0.4	<0.4	3	3	--	<4	--	--
CPT-4	10/6/1992	--	--	1,100	60	50	80	15	--	110	--	--
CPT-5	10/6/1992	--	--	600,000	2,300	53,000	8,000	43,000	--	730	--	--
CPT-7	10/6/1992	--	--	1,700,000	40,000	120,000	25,000	120,000	--	2,900	--	--
CPT-9	10/7/1992	--	--	2,100,000	49,000	140,000	28,000	145,000	--	620	--	--
CPT-10	10/7/1992	--	--	190,000	13,000	16,000	3,900	18,000	--	1,400	--	--
CPT-11	10/7/1992	--	--	2,000	200	50	30	70	--	11	--	--
CPT-12	10/7/1992	--	--	130,000	4,100	10,000	2,600	10,000	--	9	--	--
CPT-13(MW-10)	10/7/1992	--	--	28,000	2,700	3,800	210	1,300	--	150	--	--
CPT-17 (B-12)	10/6/1992	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	<1	ND	--
B (boring)	5/16/1998	--	--	140	37	0.64	6.6	1.7	<2	17	--	--
C (boring)	5/16/1998	--	--	<50	0.72	<0.5	<0.5	<0.5	<2	210	--	--
G (boring)	5/16/1998	--	--	590,000	15,000	25,000	2,100	10,800	<500	880	--	--

Abbreviations and Notes:

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

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

-- = Not measured or not analyzed

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

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

TVH = Total Volatile Hydrocarbons

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

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

MTBE = Methyl tertiary butyl ether by EPA Method 8021B

HVOCs = Halogenated volatile organic compounds by EPA Method 8010

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

DCB = 1, 3 Dichlorobenzene

DBCM = Dibromochloromethane

MCB = Chlorobenzene

TCM = Trichlorofluoromethane

EDB = 1,2-Dibromoethane

DO = Dissolved oxygen, measured in the field.

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

* = Suspect laboratory contamination contributing to test result.

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

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

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

1 = Sample exhibits fuel pattern which does not resemble standard

2 = Lighter hydrocarbons than indicated standard

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

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

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

See laboratory results for details.

6 = Confirmed by GC/MS.

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

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

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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 <i>(ft)</i>	Groundwater Elevation <i>(ft)</i>	TEH <i>(µg/L)</i>	TPHd <i>(µg/L)</i>	TPHmo <i>(µg/L)</i>	2-Methyl naphthalene <i>(µg/L)</i>	Naphthalene <i>(µg/L)</i>	Other SVOCs <i>(µg/L)</i>
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)	--	--	--	--	

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID <i>TOC Elev.</i> (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)
>> <i>MW-1</i> <i>(continued)</i>	11/10/2003	22.53	71.97	--	SPH (0.03)	--	--	--	--
	2/18/2004	22.61	71.91	--	SPH (0.05)	--	--	--	--
	5/27/2004	22.08	72.44	--	SPH (0.05)	--	--	--	--
	8/19/2004	24.35	70.43	--	SPH (0.38)	--	--	--	--
	12/27/2004	24.62	70.21	--	SPH (0.44)	--	--	--	--
	2/18/2005	23.14	71.37	--	SPH (0.04)	--	--	--	--
	5/11/2005	22.71	71.79	--	SPH (0.02)	--	--	--	--
	8/3/2005	23.03	71.50	--	SPH (0.06)	--	--	--	--
	11/30/2005	23.98	70.52	--	SPH (0.03)	--	--	--	--
	2/17/2006	23.81	70.68	--	SPH (0.01)	--	--	--	--
	5/12/2006	21.75	72.75	--	SPH (0.02)	--	--	--	--
	8/7/2006	21.35	73.14	--	SPH (0.01)	--	--	--	--
	11/21/2006	23.38	71.13	--	SPH (0.04)	--	--	--	--
	2/12/2007	23.18	71.32	--	SPH (0.03)	--	--	--	--
	5/11/2007	22.68	71.80	--	--	--	--	--	--
	8/16/2007	23.74	70.74	--	--	--	--	--	--
	11/26/2007	24.98	69.50	--	--	--	--	--	--
	5/29/2008	23.83	70.65	--	--	--	--	--	--
	8/22/2008	25.50	69.54	--	SPH (0.70)	--	--	--	--
	2/19/2009	25.92	69.22	--	SPH (0.82)	--	--	--	--
MW-2	3/1/1991	27.86	66.95	<50	--	--	--	--	--
94.81	11/24/1992	27.91	66.90	<50	--	--	--	--	--
	4/5/1993	25.95	68.86	870	--	--	--	--	--
	7/21/1993	25.59	69.22	<50	--	--	--	--	--
	11/10/1993	26.72	68.09	240	--	--	--	--	--
	8/30/1995	25.75	69.06	150	--	--	--	--	--
	5/3/1996	23.28	71.53	<50	--	--	--	--	--
	5/8/1997	24.58	70.23	<50	--	--	--	--	--
	4/29/1998	22.18	72.63	<47	--	--	--	--	--

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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 <i>(ft)</i>	Groundwater Elevation <i>(ft)</i>	TEH <i>(µg/L)</i>	TPHd <i>(µg/L)</i>	TPHmo <i>(µg/L)</i>	2-Methyl naphthalene <i>(µg/L)</i>	Naphthalene <i>(µg/L)</i>	Other SVOCs <i>(µg/L)</i>
MW-3 <i>90.08</i>	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	--	--	--	--	--
MW-4 <i>88.84</i>	3/1/1991	23.79	65.05	<500	--	--	--	--	--
	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	--	--	--	

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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	8/1/2001	18.73	70.11	--	42,000	6,700	--	--	--
(continued)	11/5/2001	18.97	69.87	--	49,000	14,000	--	--	--
	2/13/2002	18.59	70.25	--	140,000	11,000	620	1000	--
	5/2/2002	18.77	70.07	--	68,000	<25,000	--	--	--
	8/4/2002	18.95	69.89	--	58,000	<25,000	--	--	--
	11/26/2002	20.83	68.01	--	7,100	<250	--	--	--
	1/20/2003	16.90	71.94	--	29,000	<2500	--	--	--
	5/28/2003	15.25	73.59	--	12,000	300	--	--	--
	8/5/2003	17.05	71.79	--	6,600	<250	--	--	--
	11/10/2003	16.60	72.24	--	15,000	--	--	--	--
	2/18/2004	16.59	72.25	--	16,000	--	--	--	--
	5/27/2004	15.97	72.87	--	23,000	<2,500	--	--	--
	8/19/2004	18.11	70.73	--	19,000	--	--	--	--
	12/27/2004	19.53	69.31	--	8,700	<2,500	--	--	--
	2/18/2005	18.40	70.44	--	13,000	<250	--	--	--
	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	--	--	--
	2/12/2007	18.98	69.86	--	16,000	460	--	--	--
	5/11/2007	18.27	70.57	--	23,000	--	--	--	--
	8/16/2007	19.54	69.30	--	30,000	<2,500	--	--	--
	11/26/2007	20.47	68.37	--	14,000	270	--	--	--
	5/29/2008	19.60	69.24	--	19,000	<2,500	--	--	--
	8/22/2008	20.30	68.54	--	13,000	<1,200	--	--	--
	2/19/2009	20.58	68.26	--	73,000	<2,500	--	--	--

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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 <i>(ft)</i>	Groundwater Elevation <i>(ft)</i>	TEH <i>(µg/L)</i>	TPHd <i>(µg/L)</i>	TPHmo <i>(µg/L)</i>	2-Methyl naphthalene <i>(µg/L)</i>	Naphthalene <i>(µg/L)</i>	Other SVOCs <i>(µg/L)</i>
MW-5	3/15/1991	26.31	58.53	<50	--	--	--	--	--
84.84	11/10/1992	26.83	58.01	50	--	--	--	--	--
	4/2/1993	26.62	58.22	<50	--	--	--	--	--
	7/21/1993	26.60	58.24	190	--	--	--	--	--
	11/9/1993	27.24	57.60	170	--	--	--	--	--
	8/30/1995	27.46	57.38	180	--	--	--	--	--
	5/3/1996	26.02	58.82	<50	--	--	--	--	--
	5/8/1997	26.76	58.08	<50	--	--	--	--	--
	4/29/1998	26.55	58.29	<47	--	--	--	--	--
MW-6	3/15/1991	25.82	59.80	<50	--	--	--	--	--
85.62	10/12/1992	25.02	60.60	--	--	--	--	--	--
	12/1/1992	28.87	56.75	SPH	--	--	--	--	--
	4/2/1993	26.96	58.66	SPH	--	--	--	--	--
	7/21/1993	26.17	59.45	SPH	--	--	--	--	--
	11/9/1993	27.51	58.11	SPH	--	--	--	--	--
	8/30/1995	28.00	57.62	SPH	--	--	--	--	--
	12/1/1995	27.58	58.04	SPH	--	--	--	--	--
	5/3/1996	26.83	58.79	9,000	--	--	--	--	--
86.94	5/9/1997	26.54	60.40	53,000	--	--	--	--	--
	11/5/1997	26.16	60.78	65,000	--	--	--	--	--
85.82	5/1/1998	22.96	62.86	25,000	--	--	--	--	--
	11/3/1998	24.35	61.47	30,000	--	--	--	--	--
	3/26/1999	23.82	62.00	SPH	--	--	--	--	--
	7/1/1999	24.45	61.37	SPH	--	--	--	--	--
	9/21/1999	24.58	61.24	SPH	--	--	--	--	--
	2/9/2000	24.93	61.24	--	SPH	--	--	--	--
	5/31/2000	23.47	62.41	--	SPH	--	--	--	--
	11/14/2000	24.61	61.21	--	SPH	--	--	--	--
	3/1/2001	23.97	61.85	--	SPH	--	--	--	--
	5/7/2001	23.17	62.71	--	SPH	--	--	--	--
	8/1/2001		obstruction in well	--	--	--	--	--	--
	11/5/2001		obstruction in well	--	--	--	--	--	--
	2/13/2002		obstruction in well	--	--	--	--	--	--

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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	5/2/2002	23.25	62.41	--	SPH (0.05)	--	--	--	--
(continued)	8/4/2002	23.55	62.29	--	SPH (0.03)	--	--	--	--
	11/26/2002	24.22	61.62	--	SPH (0.03)	--	--	--	--
	1/20/2003	22.49	63.36	--	SPH (0.04)	--	--	--	--
	5/28/2003	21.92	63.93	--	SPH (0.04)	--	--	--	--
	8/5/2003	23.98	61.87	--	SPH (0.04)	--	--	--	--
	11/10/2003	23.50	62.40	--	SPH (0.10)	--	--	--	--
	2/18/2004	22.21	63.64	--	SPH (0.04)	--	--	--	--
	5/27/2004	22.01	63.85	--	SPH (0.05)	--	--	--	--
	8/19/2004	24.16	61.68	--	SPH (0.03)	--	--	--	--
	12/27/2004	24.69	61.13	--	SPH (sheen)	--	--	--	--
	2/18/2005	23.55	62.33	--	SPH (0.08)	--	--	--	--
	5/11/2005	22.90	62.97	--	SPH (0.06)	--	--	--	--
	8/3/2005	23.68	62.19	--	SPH (0.06)	--	--	--	--
	11/30/2005	24.17	61.67	--	SPH (0.02)	--	--	--	--
	2/17/2006	23.89	61.95	--	SPH (0.03)	--	--	--	--
	5/12/2006	22.66	63.18	--	SPH (0.03)	--	--	--	--
	8/7/2006	22.83	63.01	--	SPH (0.02)	--	--	--	--
	11/21/2006	23.92	61.92	--	SPH (0.02)	--	--	--	--
	2/12/2007	23.97	61.87	--	SPH (0.02)	--	--	--	--
	5/11/2007	23.54	62.28	--	--	--	--	--	--
	8/16/2007	24.18	61.64	--	--	--	--	--	--
	11/26/2007				Unable to gauge or sample - vehicle parked over well				
	5/29/2008	24.29	61.53	--	--	--	--	--	--
	8/22/2008	24.80	61.02	--	--	--	--	--	--
	2/19/2009	24.96	60.86	--	SPH (0.07)†	--	--	--	--

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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 <i>(ft)</i>	Groundwater Elevation <i>(ft)</i>	TEH <i>(µg/L)</i>	TPHd <i>(µg/L)</i>	TPHmo <i>(µg/L)</i>	2-Methyl naphthalene <i>(µg/L)</i>	Naphthalene <i>(µg/L)</i>	Other SVOCs <i>(µg/L)</i>
MW-7	3/15/1991	21.63	63.78	<50	--	--	--	--	--
85.41	11/24/1992	21.52	63.89	<50	--	--	--	--	--
	4/2/1993	20.08	65.33	<50	--	--	--	--	--
	7/21/1993	19.59	65.82	150	--	--	--	--	--
	11/9/1993	20.65	64.76	200	--	--	--	--	--
	8/30/1995	18.78	66.63	170	--	--	--	--	--
	12/1/1995	19.47	65.94	<50	--	--	--	--	--
	5/2/1996	17.15	68.26	<50	--	--	--	--	--
	8/8/1996	18.48	66.93	<50	--	--	--	--	--
	11/4/1996	18.69	66.72	<50	--	--	--	--	--
	2/6/1997	17.44	67.97	<50	--	--	--	--	--
	5/8/1997	17.72	67.69	<50	--	--	--	--	--
	8/7/1997	18.49	66.92	<50	--	--	--	--	--
	11/5/1997	18.86	66.55	<50	--	--	--	--	--
	2/9/1998	17.56	67.85	<50	--	--	--	--	--
	4/29/1998	16.23	69.18	<47	--	--	--	--	--
	8/4/1998	17.24	68.17	<50	--	--	--	--	--
	11/2/1998	17.91	67.50	<50	--	--	--	--	--
	3/26/1999	16.42	68.99	<50	--	--	--	--	--
	7/1/1999	17.90	67.51	<50	--	--	<10	<10	ND
	9/21/1999	18.91	66.50	<48	--	--	<9.5	<9.5	ND
	2/9/2000	16.74	68.67	--	<50	<250	<10	<10	ND
	5/31/2000	16.21	69.20	--	<50	<500	--	--	--
	11/14/2000	17.00	68.41	--	< 50	< 250	--	--	--
	3/1/2001	17.09	68.32	--	<50	<250	<10	<10	ND
	5/7/2001	17.19	68.22	--	<50	<250	--	--	--
	8/1/2001	17.25	68.16	--	<50	<250	--	--	--
	11/5/2001	17.35	68.06	--	<50	<250	--	--	--
2/13/2002	17.50	67.91	--	<50	<250	--	--	--	
5/2/2002	17.30	68.11	--	<50	<250	--	--	--	
8/4/2002	17.58	67.83	--	<50	<250	--	--	--	
11/26/2002	18.35	67.06	--	<50	<250	--	--	--	
1/20/2003	15.84	69.57	--	--	83	<250	--	--	
5/28/2003	15.19	70.22	--	--	<50	<250	--	--	

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-7	8/5/2003	17.00	68.41	--	<50	<250	--	--	--
(continued)	11/10/2003	16.54	68.87	--	<50	--	--	--	--
	2/18/2004	16.47	68.94	--	<50	--	--	--	--
	5/27/2004	15.93	69.48	--	<50	<250	--	--	--
	8/19/2004	18.05	67.36	--	<50	--	--	--	--
	12/27/2004	17.35	68.06	--	<50	<250	--	--	--
	2/18/2005	16.23	69.18	--	<50	<250	--	--	--
	5/11/2005	15.79	69.62	--	<50	<250	--	--	--
	8/3/2005	17.52	67.89	--	<50	<250	--	--	--
	11/30/2005	19.57	65.84	--	<50	<250	--	--	--
	2/17/2006	16.82	68.59	--	<50	<250	--	--	--
	5/12/2006	15.86	69.55	--	<50	<250	--	--	--
	8/7/2006	17.52	67.89	--	<50	<250	--	--	--
	11/21/2006	18.67	66.74	--	<50	<250	--	--	--
	2/12/2007	18.20	67.21	--	<50	<250	--	--	--
	5/11/2007	17.73	67.68	--	<50	--	--	--	--
	8/16/2007	18.86	66.55	--	<50	<250	--	--	--
	5/29/2008	18.58	66.83	--	<50	<250	--	--	--
	8/22/2008	19.35	66.06	--	<50	<250	--	--	--
	2/19/2009	18.30	67.11	--	<50	<250	--	--	--
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	--	--	--	--	--

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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	11/5/1997	26.82	58.68	110	--	--	--	--	--
(continued)	2/9/1998	25.57	59.93	75	--	--	--	--	--
	5/1/1998	25.64	59.86	210	--	--	--	--	--
	8/5/1998	25.96	59.54	260	--	--	--	--	--
	11/3/1998	26.27	59.23	190	--	--	--	--	--
	3/31/1999	20.93	64.57	200	--	--	--	--	--
	7/1/1999	26.59	58.91	170	--	--	<9.6	<9.6	ND
	9/21/1999	26.89	58.61	420	--	--	<9.4	<9.4	ND
	2/9/2000	26.60	58.90	--	120	280	<10	<10	ND
	5/31/2000	26.16	59.34	--	160 **	<500	--	--	--
	11/14/2000	26.60	58.90	--	150	<250	--	--	--
	3/1/2001	26.41	59.09	--	54	<250	<10	<10	Phenol: 25
	5/7/2001	26.55	58.95	--	<50	<250	--	--	--
	8/1/2001	26.71	58.79	--	58	<250	--	--	--
	11/5/2001	26.67	58.83	--	84	<250	--	--	--
	2/13/2002	26.15	59.35	--	83	<250	--	--	--
	5/2/2002	26.63	58.87	--	<50	<250	--	--	--
	8/4/2002	26.80	58.70	--	260	<250	--	--	--
	11/26/2002	27.50	58.00	--	<50	<250	--	--	--
	1/20/2003	24.93	60.57	--	63	<250	--	--	--
	5/28/2003	24.28	61.22	--	<50	<250	--	--	--
	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	--	--	--

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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 (continued)	11/21/2006	26.43	59.07	--	<50	<250	--	--	--
	2/12/2007	26.29	59.21	--	120	<250	--	--	--
	5/11/2007	26.23	59.27	--	<50	--	--	--	--
	8/16/2007	26.81	58.69	--	56	<250	--	--	--
	11/26/2007	26.99	58.51	--	<50	<250	--	--	--
	5/29/2008	26.70	58.80	--	<50	<250	--	--	--
	8/22/2008	27.03	58.47	--	<50	<250	--	--	--
	2/19/2009	26.74	58.76	--	<50	<250	--	--	--
MW-9 90.37	11/24/1992	23.51	66.86	320	--	--	--	--	--
	4/5/1993	21.14	69.23	920	--	--	--	--	--
	7/21/1993	21.54	68.83	450	--	--	--	--	--
	11/10/1993	27.53	62.84	450	--	--	--	--	--
	8/30/1995	19.59	70.78	680	--	--	--	--	--
	12/4/1995	20.65	69.72	--	--	--	--	--	--
	5/2/1996	18.63	71.74	710	--	--	--	--	--
	11/5/1996	20.69	69.68	420	--	--	--	--	--
	5/9/1997	19.96	70.41	490	--	--	--	--	--
	8/8/1997	20.84	69.53	480	--	--	--	--	--
	11/5/1997	21.55	68.82	370	--	--	--	--	--
	2/9/1998	20.21	70.16	410	--	--	--	--	--
	5/1/1998	19.27	71.10	450	--	--	--	--	--
	8/5/1998	19.35	71.02	630	--	--	--	--	--
	11/2/1998	20.43	69.94	500	--	--	--	--	--
	3/25/1999	18.46	71.91	630	--	--	--	--	--
	7/1/1999	19.95	70.42	570	--	--	<9.5	<9.5	ND
	9/21/1999	21.15	69.22	770	--	--	<9.4	<9.4	ND
	2/9/2000	21.08	69.29	--	320	<250	<10	<10	ND
	5/31/2000	19.11	71.26	--	390 **	<500	--	--	--
11/14/2000	20.90	69.47	--	160	< 250	--	--	--	
3/1/2001	20.45	69.92	--	220	<250	<10	<10	ND	
5/7/2001	19.83	70.54	--	290	<250	--	--	--	
8/1/2001	20.02	70.35	--	460	<250	--	--	--	
11/5/2001	19.85	70.52	--	230	<250	--	--	--	

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-9	2/13/2002	19.80	70.57	--	210	<250	--	--	--
(continued)	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	--	--	--
	2/12/2007	20.48	69.89	--	74	<250	--	--	--
	5/11/2007	19.55	70.82	--	57	--	--	--	--
	8/16/2007	20.83	69.54	--	82	<250	--	--	--
	11/26/2007	21.79	68.58	--	81	<250	--	--	--
	5/29/2008	20.70	69.67	--	170	<250	--	--	--
	8/22/2008	21.61	68.76	--	190	<250	--	--	--
	2/19/2009	21.91	68.46	--	58	<250	--	--	--

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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 <i>(ft)</i>	Groundwater Elevation <i>(ft)</i>	TEH <i>(µg/L)</i>	TPHd <i>(µg/L)</i>	TPHmo <i>(µg/L)</i>	2-Methyl naphthalene <i>(µg/L)</i>	Naphthalene <i>(µg/L)</i>	Other SVOCs <i>(µg/L)</i>
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	--	--	--	--	--
	5/8/1997	29.93	72.13	<50	--	--	--	--	--
4/29/1998	27.22	74.84	<47	--	--	--	--	--	
MW-13 <i>84.06</i>	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	--	--	--	--	--	

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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 (continued)	11/5/1997	24.27	59.79	<50	--	--	--	--	--
	2/9/1998	22.89	61.17	<50	--	--	--	--	--
	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	--	--	--	

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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 (continued)	11/21/2006	23.11	60.95	--	<50	<250	--	--	--
	2/12/2007	23.27	60.79	--	<50	<250	--	--	--
	5/11/2007	23.07	60.99	--	<50	--	--	--	--
	8/16/2007	23.67	60.39	--	<50	<250	--	--	--
	11/26/2007	24.13	59.93	--	<50	<250	--	--	--
	5/29/2008	23.81	60.25	--	<50	<250	--	--	--
	8/22/2008	24.13	59.93	--	<50	<250	--	--	--
	2/19/2009	23.97	60.09	--	<50	<250	--	--	--
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)	--	--	--	--	

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

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Sampling Date	Depth to water (ft)	Groundwater Elevation (ft)	TEH (µg/L)	TPHd (µg/L)	TPHmo (µg/L)	2-Methyl naphthalene (µg/L)	Naphthalene (µg/L)	Other SVOCs (µg/L)
>>MW-14 (continued)	11/30/2005	24.02	70.66	--	SPH (0.02)	--	--	--	--
	2/17/2006	23.87	70.81	--	SPH (0.02)	--	--	--	--
	5/12/2006	21.74	72.93	--	SPH (0.01)	--	--	--	--
	8/7/2006	21.66	73.01	--	SPH (0.01)	--	--	--	--
	11/21/2006	23.41	71.27	--	SPH (0.03)	--	--	--	--
	2/12/2007	23.45	71.23	--	SPH (0.03)	--	--	--	--
	5/11/2007	22.95	71.71	--	--	--	--	--	--
	8/16/2007	24.14	70.52	--	--	--	--	--	--
	11/26/2007	24.94	69.72	--	--	--	--	--	--
	5/29/2008	24.02	70.64	--	--	--	--	--	--
	8/22/2008	24.97	69.69	--	--	--	--	--	--
	2/19/2009	25.20	69.46	--	SPH (0.05)†	--	--	--	--
	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	--	--	--	--
11/14/2000		24.15	70.61	--	SPH	--	--	--	--
3/1/2001		23.99	70.77	--	SPH	--	--	--	--
5/7/2001		23.50	71.26	--	SPH	--	--	--	--
8/1/2001		23.62	71.14	--	SPH	--	--	--	--
11/5/2001		23.65	71.11	--	SPH (sheen)	--	--	--	--
2/13/2002		23.09	71.67	--	3,100	<250	17	68	5
5/2/2002		23.59	71.17	--	SPH (sheen)	--	--	--	--
8/4/2002		23.65	71.11	--	SPH (sheen)	--	--	--	--
11/26/2002		24.59	70.17	--	SPH (sheen)	--	--	--	--
1/20/2003		22.08	72.68	--	3,700	340	--	--	--
5/28/2003		21.68	73.08	--	SPH (sheen)	--	--	--	--
8/5/2003		24.05	70.71	--	SPH (sheen)	--	--	--	--
11/10/2003	23.68	71.08	--	SPH (sheen)	--	--	--	--	
2/18/2004	23.51	71.25	--	1,100	--	--	--	--	
5/27/2004	22.98	71.78	--	SPH (sheen)	--	--	--	--	
8/19/2004	25.31	69.45	--	SPH (sheen)	--	--	--	--	

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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 (continued)	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	--	--	--	--	--	--
	2/12/2007	23.80	71.00	--	1,100	<250	--	--	--
	5/11/2007	23.28	71.48	--	--	--	--	--	--
	8/16/2007	24.38	70.38	--	--	--	--	--	--
	11/26/2007	25.30	69.46	--	--	--	--	--	--
	5/29/2008	24.32	70.44	--	--	--	--	--	--
	8/22/2008	25.24	69.52	--	--	--	--	--	--
	2/19/2009	25.59	69.17	--	SPH (0.08)†	--	--	--	--
MW-16A	5/11/2007	25.12	--	--	760	--	--	--	--
	8/16/2007	26.02	--	--	620	250	--	--	--
	11/26/2007	26.16	--	--	160	<250	--	--	--
	5/29/2008	25.73	--	--	81	<250	--	--	--
	8/22/2008	26.11	--	--	310	<250	--	--	--
	2/19/2009	26.32	--	--	<50	<250	--	--	--
MW-16B	5/11/2007	28.98	--	--	15,000	--	--	--	--
	8/16/2007	31.02	--	--	7,700	<250	--	--	--
	11/26/2007	30.00	--	--	6,400	<250	--	--	--
	5/29/2008	29.95	--	--	5,400	<500	--	--	--
	8/22/2008	32.02	--	--	4,600	<250	--	--	--
	2/19/2009	31.70	--	--	7,400	<250	--	--	--
MW-17A	5/29/2008	24.05	--	--	22,000	1,800	--	--	--
	8/22/2008	24.96	--	--	11,000	<1,200	--	--	--
	2/19/2009	25.29	--	--	20,000	440	--	--	--

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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 <i>(ft)</i>	Groundwater Elevation <i>(ft)</i>	TEH <i>(µg/L)</i>	TPHd <i>(µg/L)</i>	TPHmo <i>(µg/L)</i>	2-Methyl naphthalene <i>(µg/L)</i>	Naphthalene <i>(µg/L)</i>	Other SVOCs <i>(µg/L)</i>
MW-17B	5/29/2008	24.30	--	--	<50	<250	--	--	--
	8/22/2008	25.19	--	--	<50	<250	--	--	--
	2/19/2009	25.51	--	--	<50	<250	--	--	--
RW-2	5/29/2008	17.66	--	--	6,100	<250	--	--	--
	8/22/2008	18.51	--	--	10,000	<1,200	--	--	--
	2/19/2009	18.87	--	--	SPH (0.08)	--	--	--	--
RW-4	5/29/2008	23.72	--	--	19,000	<2,500	--	--	--
	8/22/2008	24.69	--	--	18,000	<1,200	--	--	--
	2/19/2009	24.98	--	--	25,000	<2,500	--	--	--
Grab Sampling Data									
B (boring)	5/16/1998	--	--	77**	--	--	--	--	--
C (boring)	5/16/1998	--	--	48**	--	--	--	--	--
G (boring)	5/16/1998	--	--	35,000**	--	--	--	--	--

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

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

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

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

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

< n = Not detected above n ug/l

-- = Not analyzed/not available

* = Duplicate sample sent to a different chemical laboratory

** = Does not match diesel pattern

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

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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-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

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Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-1	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

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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-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	1
	2/12/2007	23.18	0.03	0	0.000	0.00	18.82	
	8/22/2008	25.50	0.70	2000	0.528	3.22	19.35	1
	2/19/2009	25.92	0.82	1500	0.396	2.42	19.74	1
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

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Table 3. Separate-Phase Hydrocarbon Removal

Connell Automobile Dealership, 3093 Broadway, Oakland, California

Well ID TOC Elev. (ft)	Date Sampled	Depth to Groundwater (feet)	SPH Thickness (feet)	SPH Removed (mL)	SPH Removed (gallons)	SPH Removed (lbs)	Cumulative SPH Removed (gallons)	Notes
MW-4	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

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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	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	

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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	
	2/12/2007	23.97	0.02	0	0.000	0.00	87.47	
	2/19/2009	25.19*	0.07**	100	0.026	0.16	87.50	
MW-9 90.37	8/8/1996	19.89	0.35		0.10	0.61	0.61	1

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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

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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	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	1
	2/12/2007	23.45	0.03	0	0.000	0.00	1.03	
	2/19/2009	25.92*	0.05**	50	0.013	0.08	1.04	1
MW-15	2/18/2005	23.27	0.10	20	0.005	0.03	0.01	1
	5/11/2005	22.80	0.09	450	0.119	0.73	0.12	1
	8/3/2005	23.29	0.01	0	0.000	0.00	0.12	
	11/30/2005	24.11	0.05	0	0.000	0.00	0.12	
	2/17/2006	23.91	0.05	10	0.003	0.02	0.13	1
	5/12/2006	21.88	0.03	0	0.000	0.00	0.13	
	8/7/2006	22.05	0.01	0	0.000	0.00	0.13	
	11/21/2006	23.70	0.00	0	0.000	0.00	0.13	
	2/12/2007	23.80	0.00	0	0.000	0.00	0.13	
	2/19/2009	27.09*	0.08**	400	0.106	0.64	0.23	1
RW-2	4/16/2007	16.66	0.00	0	0.000	0.00	0.00	
	5/29/2008	17.66	0.00	0	0.000	0.00	0.00	
	8/22/2008	18.51	0.00	0	0.000	0.00	0.00	
	2/19/2009	19.03*	0.08**	200	0.053	0.32	0.05	1
Total SPH Removed (gallons):							156.69	
Total SPH Removed (pounds):						955.66		

Abbreviations and Notes:

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

SPH = Separate-phase hydrocarbons

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

-- = Not measured or not applicable

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

1 = SPH removed by manual bailing

2 = SPH removed from well by absorbent sock

3 = SPH removed from well by passive skimmer

4 = Vapor extraction system operating in well

5 = No product removed; skimmer adjusted incorrectly.

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

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

Table 4 - Well Construction Details – 3093 Broadway, Oakland, CA

Well ID (TOC Elev)	Date(s) Construction Completed	Total Depth of Well (feet bgs) and elevation (feet MSL)	Screened Interval (ft bgs) and elevation (feet MSL)	Well Casing Nominal Diameter (inches)	Filter Pack Interval (ft bgs) and elevation (feet MSL)
MW-1 (94.48)	9/28/90	30	19-35	2	19-35
MW-2 (94.85)	2/25/91	40	25-40	2	23-40
MW-3 (90.08)	2/25/91	35	20-35	2	18-35
MW-4 (88.84)	2/25/91	30	15-30	2	13-30
MW-5 (84.84)	3/8/91	35	15-35	2	14-35
MW-6 (85.82)	3/8/91	35	15-35	2	14-35
MW-7 (85.41)	3/8/91	33	13-33	2	12-33
MW-8 (85.50)	10/6/92	40	20-40	6	17-40
MW-9 (90.37)	10/6/92	32	18-32	2	17-32
MW-10 (88.60)	10/6/92	35	17-35	6	15-35
MW-11 (102.60)	10/6/92	40	25-40	2	23-40
MW-13 (84.06)	10/6/92	40	25-40	2	23-40
MW-14 (94.66)	5/16/98	40	10-40	2	8-40
MW-15 (94.76)	5/17/98	40	15-40	2	8-40
MW-16A	3/11/07	30	20-30	2	19-30
MW-16B	3/4/07	40	35-40	2	34-40
MW-17A	3/18/07	30	27-30	2	26.5-30
MW-17B	3/11/07	40	35-40	2	32-40
RW-2	3/1/07	30	15-30	2	14-40
RW-4	3/25/07	38	23-31	4	22-32

No Well MW-12.

Wells MW-16A, MW-16B, MW-17A, MW-17B, RW-2, and RW-4 have not been surveyed to obtain TOC elevations.

bgs = below ground surface (determined from top of well casing)

MSL=feet from mean sea level (shown when available and calculated)

APPENDIX A

Well Monitoring Protocol

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

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

Notes and Abbreviations:

1 = Summary: 11 wells sampled semi-annually during 1st and 3rd quarters, 15 wells sampled 1st quarter.

2 = Sample Analytes: Total Petroleum Hydrocarbons as Motor Oil, Diesel and Gasoline (TPHmo, TPHd and TPHg, respectively), benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8015C/8021B. Halogenated Volatile Organic Compounds (HVOCs) by EPA Method 8010.

1st, 3rd = 1st and 3rd quarters (Typically February and August)

1st = 1st quarter (Typically February)

Mon = Groundwater Monitoring Only

AS= Air Sparging

DPE = Dual Phase Extraction



N, S, W, E = Cardinal directions North, South, West, East and other directions (e.g., Northeast = NE)

--- = Not gauged or sampled.

APPENDIX B


Groundwater Monitoring Field Data Sheets

Well Gauging Data Sheet

Project.Task #:1005.001 218				Project Name: Connell - 3093 Broadway				
Address: 3093 Broadway, Oakland, CA						Date:2/19/09		
Name: Sanjiv Gill				Signature: 				
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)	Measuring Point	
MW-1	2	9:30	25.10	0.82	25.92	34.64	TOC	
MW-4	2	9:06			20.58	24.25		
MW-6	2	9:37			24.96	32.30		
MW-7	2	8:45			18.30	30.16		
MW-8	6	8:48			26.74	39.30		
MW-9	2	8:56			21.91	30.63		
MW-13	2	8:40			23.97	39.50		
MW-14	2	9:25			25.20	26.77		
MW-15	2	9:21			25.59	37.15		
MW-16A	2	9:00			26.32	30.04		
MW-16B	2	9:02			31.70	40.08		X

Comments:

Well Gauging Data Sheet

Project.Task #:1005.001 218				Project Name: Connell - 3093 Broadway			
Address: 3093 Broadway, Oakland, CA						Date:2/19/09	
Name: Sanjiv Gill				Signature: 			
Well ID	Well Size (in.)	Time	Depth to Immiscible Liquid (ft)	Thickness of Immiscible Liquid (ft)	Depth to Water (ft)	Total Depth (ft)	Measuring Point
MW-17A	2	9:10			25.29	28.71	TCC
MW-17B	2	8:52			25.51	40.15	
RW-2	2	9:17			18.87	30.05	
RW-4	4	9:13			24.98	28.90	X

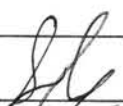
Comments:

MONITORING FIELD DATA SHEET

Well ID: MW-7

Project.Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.						
Address: 3093 Broadway, Oakland, CA								
Date: 2/19/09		Weather: <u>Sunny</u>						
Well Diameter: <u>2"</u>	Volume/ft.							
	1" = 0.04	3" = 0.37	6" = 1.47					
	2" = 0.16	4" = 0.65	radius ² * 0.163					
Total Depth (TD): <u>30.16</u>		Depth to Product:						
Depth to Water (DTW): <u>18.30</u>		Product Thickness:						
Water Column Height: <u>11.86</u>		1 Casing Volume: <u>1.89</u> gallons						
Reference Point: TOC		<u>3</u> Casing Volumes: <u>5.67</u> gallons						
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>10:45</u>	<u>20.7</u>	<u>6.68</u>	<u>920</u>				<u>2</u>	
<u>10:50</u>	<u>21.0</u>	<u>6.60</u>	<u>910</u>				<u>4</u>	
<u>10:55</u>	<u>20.9</u>	<u>6.64</u>	<u>897</u>				<u>5.5</u>	

Comments: YSI 550A DO meter pre purge DO = 1.90 mg/l
 post purge DO = mg/l
very turbid, very silty


Sample ID: <u>MW-7</u>	Sample Time: <u>11:00</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/19/09</u>
Containers/Preservative: <u>Voa/HCl</u>	
Analyzed for: 8015, 8021, <u>8010</u>	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-8

Project Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.						
Address: 3093 Broadway, Oakland, CA								
Date: 2/19/09				Weather: <u>Sunny</u>				
Well Diameter: <u>6"</u>				Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	
					2" = 0.16	4" = 0.65	radius ² * 0.163	
Total Depth (TD): <u>39.30</u>				Depth to Product:				
Depth to Water (DTW): <u>26.74</u>				Product Thickness:				
Water Column Height: <u>12.56</u>				1 Casing Volume: <u>18.46</u> gallons				
Reference Point: TOC				<u>3</u> Casing Volumes: <u>55.38</u> gallons				
Purging Device: Disposable Bailer, 3" PVC Bailer, Check Valve Tubing, <u>Whal Pump</u>								
Sampling Device: Disposable Bailer								
Time	Temp (°C)	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>11:15</u>	<u>21.5</u>	<u>6.47</u>	<u>930</u>				<u>19</u>	
<u>11:40</u>	<u>20.7</u>	<u>6.49</u>	<u>1017</u>				<u>38</u>	
<u>12:05</u>	<u>20.9</u>	<u>6.49</u>	<u>1011</u>				<u>55</u>	

Comments: YSI 550A DO meter pre purge DO = 2.12 mg/l
 post purge DO = mg/l
vc + turbid, silty


Sample ID: <u>MW-8</u>	Sample Time: <u>12:10</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/19/09</u>
Containers/Preservative: <u>Voac/HCl</u>	
Analyzed for: <u>8015, 8021, 8010</u>	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-13

Project Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.						
Address: 3093 Broadway, Oakland, CA								
Date: 2/19/09		Weather: <u>Sunny</u>						
Well Diameter: <u>2"</u>	Volume/ft.	1" = 0.04	3" = 0.37					
		2" = 0.16	4" = 0.65					
6" = 1.47		radius ² * 0.163						
Total Depth (TD): <u>39.50</u>	Depth to Product:							
Depth to Water (DTW): <u>23.97</u>	Product Thickness:							
Water Column Height: <u>15.53</u>	1 Casing Volume: <u>2.48</u>		gallons					
Reference Point: TOC	3 Casing Volumes: <u>7.44</u>		gallons					
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
10:15	20.3	6.71	735				2.5	
10:20	20.5	6.80	696				5	
10:25	20.1	6.75	708				7.5	

Comments: YSI 550A DO meter pre purge DO = 2.61 mg/l
 post purge DO = mg/l
very turbid, silty


Sample ID: <u>MW-13</u>	Sample Time: <u>10:30</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/19/09</u>
Containers/Preservative: <u>Voal/HCl</u>	
Analyzed for: 8015, 8021, <u>8010</u>	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-15

Project Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.						
Address: 3093 Broadway, Oakland, CA								
Date: 2/19/09		Weather: <u>Sunny</u>						
Well Diameter: <u>2"</u>	Volume/ft.							
	1" = 0.04 2" = 0.16	3" = 0.37 4" = 0.65	6" = 1.47 radius ² * 0.163					
Total Depth (TD): <u>37.15</u>	Depth to Product:							
Depth to Water (DTW): <u>25.59</u>	Product Thickness:							
Water Column Height: <u>11.59</u>	1 Casing Volume: <u>1.84</u>		gallons					
Reference Point: TOC	3 Casing Volumes: <u>5.52</u>		gallons					
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: <u>Disposable Bailer</u>								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
		<u>SPH after 1 gallon</u>					<u>2</u>	
							<u>4</u>	
							<u>5.5</u>	

Comments: YSI 550A DO meter pre purge DO = 0.53 mg/l
 post purge DO = mg/l
Removed ~ 400 ml SPH / DTW at 27.09
SPH at 27.01


Sample ID:	Sample Time:
Laboratory: McCampbell Analytical, INC.	Sample Date: 2/ /09
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021, <u>8010</u>	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-16A

Project Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.						
Address: 3093 Broadway, Oakland, CA								
Date: 2/19/09				Weather: <u>Sunny</u>				
Well Diameter: <u>2''</u>		Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47			
			2" = 0.16	4" = 0.65	radius ² * 0.163			
Total Depth (TD): <u>30.04</u>				Depth to Product:				
Depth to Water (DTW): <u>26.32</u>				Product Thickness:				
Water Column Height: <u>3.72</u>				1 Casing Volume: <u>0.59</u>		gallons		
Reference Point: TOC				3 Casing Volumes: <u>1.77</u>		gallons		
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>7:50</u>	<u>20.9</u>	<u>7.39</u>	<u>629</u>				<u>0.5</u>	
<u>7:52</u>	<u>20.5</u>	<u>7.40</u>	<u>630</u>				<u>1.0</u>	
<u>7:54</u>	<u>20.7</u>	<u>7.40</u>	<u>637</u>				<u>1.5</u>	

Comments: YSI 550A DO meter pre purge DO = 0.88 mg/l
 post purge DO = mg/l
strong odor


Sample ID: <u>MW-16A</u>	Sample Time: <u>7:58</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/20/09</u>
Containers/Preservative: <u>Voal/HCl</u>	
Analyzed for: <u>8015, 8021, 8010</u>	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: MW-16B

Project.Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.						
Address: 3093 Broadway, Oakland, CA								
Date: 2/19/09		Weather: <u>Sunny</u>						
Well Diameter: <u>2''</u>	Volume/ft.	1" = 0.04	3" = 0.37					
		2" = 0.16	4" = 0.65					
6" = 1.47		radius ² * 0.163						
Total Depth (TD): <u>40.08</u>	Depth to Product:							
Depth to Water (DTW): <u>31.70</u>	Product Thickness:							
Water Column Height: <u>8.38</u>	1 Casing Volume: <u>1.34</u>		gallons					
Reference Point: TOC	<u>3</u> Casing Volumes: <u>4.02</u>		gallons					
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
<u>8:10</u>	<u>20.1</u>	<u>7.27</u>	<u>847</u>				<u>1.5</u>	
<u>8:12</u>	<u>19.8</u>	<u>7.36</u>	<u>871</u>				<u>3</u>	
<u>8:14</u>	<u>20.0</u>	<u>7.31</u>	<u>863</u>				<u>4</u>	

Comments: YSI 550A DO meter pre purge DO = 0.97 mg/l
 post purge DO = mg/l
Strangadar, Henry Sheen

Sample ID: <u>MW-16B</u>	Sample Time: <u>8:17</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/20/09</u>
Containers/Preservative: <u>Voa/HCl</u>	
Analyzed for: <u>8015, 8021, 8010</u>	
Sampler Name: Sanjiv Gill	Signature: 


MONITORING FIELD DATA SHEET

Well ID: MW-17A

Project Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.								
Address: 3093 Broadway, Oakland, CA										
Date: 2/19/09				Weather: <u>Sunny</u>						
Well Diameter: <u>2"</u>				Volume/ft.	1" = 0.04	3" = 0.37	6" = 1.47	2" = 0.16	4" = 0.65	radius ² * 0.163
Total Depth (TD): <u>28.71</u>				Depth to Product:						
Depth to Water (DTW): <u>25.29</u>				Product Thickness:						
Water Column Height: <u>3.42</u>				1 Casing Volume: <u>0.54</u>		gallons				
Reference Point: TOC				<u>3</u> Casing Volumes: <u>1.62</u>		gallons				
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump										
Sampling Device: Disposable Bailer										
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW		
<u>7:30</u>	<u>19.1</u>	<u>7.35</u>	<u>869</u>				<u>.5</u>			
<u>7:32</u>	<u>19.2</u>	<u>7.41</u>	<u>855</u>				<u>1.0</u>			
<u>7:34</u>	<u>19.4</u>	<u>7.38</u>	<u>857</u>				<u>1.5</u>			

Comments: YSI 550A DO meter pre purge DO = 0.97 mg/l
 post purge DO = mg/l

very turbid, silt, strong odor, shen

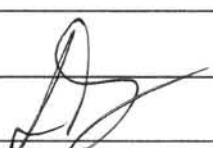
Sample ID: <u>MW-17A</u>	Sample Time: <u>7:37</u>
Laboratory: McCampbell Analytical, INC.	Sample Date: <u>2/20/09</u>
Containers/Preservative: <u>Voal/HCl</u>	
Analyzed for: <u>8015, 8021, 8010</u>	
Sampler Name: Sanjiv Gill	Signature: 

MONITORING FIELD DATA SHEET

Well ID: RW-2

Project.Task #: 1005.001 218		Project Name: Connell - 3093 Broadway.						
Address: 3093 Broadway, Oakland, CA								
Date: 2/19/09		Weather: <u>Sunny</u>						
Well Diameter: <u>2"</u>	Volume/ft.	1" = 0.04	3" = 0.37					
		2" = 0.16	4" = 0.65					
		6" = 1.47	radius ² * 0.163					
Total Depth (TD): <u>30.05</u>		Depth to Product:						
Depth to Water (DTW): <u>18.87</u>		Product Thickness:						
Water Column Height: <u>11.18</u>		1 Casing Volume: <u>1.78</u> gallons						
Reference Point: TOC		<u>3</u> Casing Volumes: <u>5.34</u> gallons						
Purging Device: <u>Disposable Bailer</u> , 3" PVC Bailer, Check Valve Tubing, Whal Pump								
Sampling Device: Disposable Bailer								
Time	Temp ©	pH	Cond (µs)	NTU	DO(mg/L)	ORP (mV)	Vol(gal)	DTW
		<u>SPM after purging</u>			<u>1 gallon</u>		#5	
							<u>3</u>	
							<u>5</u>	

Comments: YSI 550A DO meter pre purge DO = 0.79 mg/l
 post purge DO = _____ mg/l
Removed ≈ 200ml SPM / DTW at 19.03
SPM at 18.95

Sample ID:	Sample Time:
Laboratory: McCampbell Analytical, INC.	Sample Date: 2/ /09
Containers/Preservative: Voa/HCl	
Analyzed for: 8015, 8021, <u>8010</u>	
Sampler Name: Sanjiv Gill	Signature: 

APPENDIX C

Laboratory Analytical Report



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-3093 Broadway	Date Sampled: 02/19/09-02/20/09
	Client Contact: Erica Ray	Date Received: 02/20/09
	Client P.O.:	Date Reported: 02/26/09
		Date Completed: 02/26/09

WorkOrder: 0902536

February 26, 2009

Dear Erica:

Enclosed within are:

- 1) The results of the **10** analyzed samples from your project: **#1005.001; Connell-3093 Broadway,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice 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 or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

0902536

McCAMPBELL ANALYTICAL, INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560

Website: www.mccampbell.com Email: 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

EDE Required: Coelt (Normal) No Write On (DW) No

Report To: Erica Ray Bill To: Pangea Environmental

Company: Pangea Environmental Services, Inc.
1710 Franklin Street, Suite 200
Oakland, CA 94612 E-Mail: eray@pangeaenv.com

Tele: 510-836-3702 Fax: (510) 836-3709
Project #: 1005001 Project Name: Connell
3093 Broadway

Project Location: 3093 Broadway, Oakland, CA
Sampler Signature: Muskan Environmental Sampling ll

Analysis Request

Other

Comments

with sludge cleanup
BTEX & TPH as Gas (602/8020 + 8015)/MTBE
TPH as Diesel (8015) /mo
Total Petroleum Oil & Grease (5520 E&F/B&F)
Total Petroleum Hydrocarbons (418.1)
EPA 601 / 8010 / 8021
BTEX ONLY (EPA 602 / 8020)
EPA 608 / 8081
EPA 608 / 8082 PCB'S ONLY
EPA 8140 / 8141
EPA 8150 / 8151
EPA 524.2 / 624 / 8260
EPA 525 / 625 / 8270
PAH's / PNA's by EPA 625 / 8270 / 8310
CAM-17 Metals (6010 / 6020)
LUFT 5 Metals (6010 / 6020)
Lead (200.8 / 200.9 / 6010)
HVCs by 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 ₃
MW-4		2-19-09	1:30	3	VIA Amb	X						X	X			
MW-7		2-19-09	11:00									X	X			
MW-8		2-19-09	12:10									X	X			
MW-9		2-19-09	1:10									X	X			
MW-13		2-19-09	10:30									X	X			
MW-16A		2-20-09	7:58									X	X			
MW-16B		2-20-09	8:17									X	X			
MW-17A		2-20-09	7:37									X	X			
MW-17B		2-20-09	7:20									X	X			
RW-4		2-20-09	8:45	X	X	X						X	X			

+
+1
+
+
+1
+
+
+2
+
+2

Relinquished By: [Signature] Date: 2/20/09 Time: 1140 Received By: [Signature]
Relinquished By: _____ Date: _____ Time: _____ Received By: _____
Relinquished By: _____ Date: _____ Time: _____ Received By: _____

COMMENTS:
ICE 1.6
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB ✓
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ✓
VOAS ✓ D&G METALS OTHER

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0902536

ClientCode: PEO

WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Erica Ray	Email: eray@pangeaenv.com	Bill to:	Bob Clark-Riddell	Requested TAT: 5 days
	Pangea Environmental Svcs., Inc.	cc:		Pangea Environmental Svcs., Inc.	Date Received: 02/20/2009
	1710 Franklin Street, Ste. 200	PO:		1710 Franklin Street, Ste. 200	Date Printed: 02/20/2009
	Oakland, CA 94612	ProjectNo: #1005.001; Connell-3093 Broadway		Oakland, CA 94612	
	(510) 836-3700 FAX (510) 836-3709				

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0902536-001	MW-4	Water	2/19/2009 13:30	<input type="checkbox"/>	C	A	A	B								
0902536-002	MW-7	Water	2/19/2009 11:00	<input type="checkbox"/>	C	A		B								
0902536-003	MW-8	Water	2/19/2009 12:10	<input type="checkbox"/>	C	A		B								
0902536-004	MW-9	Water	2/19/2009 13:10	<input type="checkbox"/>	C	A		B								
0902536-005	MW-13	Water	2/19/2009 10:30	<input type="checkbox"/>	C	A		B								
0902536-006	MW-16A	Water	2/20/2009 7:58	<input type="checkbox"/>	C	A		B								
0902536-007	MW-16B	Water	2/20/2009 8:17	<input type="checkbox"/>	C	A		B								
0902536-008	MW-17A	Water	2/20/2009 7:37	<input type="checkbox"/>	C	A		B								
0902536-009	MW-17B	Water	2/20/2009 7:20	<input type="checkbox"/>	C	A		B								
0902536-010	RW-4	Water	2/20/2009 8:45	<input type="checkbox"/>	C	A		B								

Test Legend:

1	8010BMS_W	2	G-MBTEX_W	3	PREF REPORT	4	TPH(DMO)WSG_W	5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

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



Sample Receipt Checklist

Client Name: **Pangea Environmental Svcs., Inc.**

Date and Time Received: **02/20/09 12:23:30 PM**

Project Name: **#1005.001; Connell-3093 Broadway**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **0902536** Matrix Water

Carrier: Client Drop-In

Chain of Custody (COC) Information

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

Sample Receipt Information

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

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: 1.6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- TTLC Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

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

Client contacted:

Date contacted:

Contacted by:

Comments:



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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-3093 Broadway	Date Sampled: 02/19/09-02/20/09
	Client Contact: Erica Ray	Date Received: 02/20/09
	Client P.O.:	Date Extracted: 02/24/09-02/25/09
		Date Analyzed: 02/24/09-02/25/09

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0902536

Lab ID	0902536-001C	0902536-002C	0902536-003C	0902536-004C	Reporting Limit for DF =1	
Client ID	MW-4	MW-7	MW-8	MW-9	S	W
Matrix	W	W	W	W		
DF	100	1	1	5		

Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND<50	ND	ND	ND<2.5	NA	0.5
Bromoform	ND<50	ND	ND	ND<2.5	NA	0.5
Bromomethane	ND<50	ND	ND	ND<2.5	NA	0.5
Carbon Tetrachloride	ND<50	ND	ND	ND<2.5	NA	0.5
Chlorobenzene	ND<50	ND	ND	ND<2.5	NA	0.5
Chloroethane	ND<50	ND	ND	ND<2.5	NA	0.5
Chloroform	ND<50	ND	ND	ND<2.5	NA	0.5
Chloromethane	ND<50	ND	ND	ND<2.5	NA	0.5
Dibromochloromethane	ND<50	ND	ND	ND<2.5	NA	0.5
1,2-Dibromoethane (EDB)	ND<50	ND	ND	ND<2.5	NA	0.5
1,2-Dichlorobenzene	ND<50	ND	ND	ND<2.5	NA	0.5
1,3-Dichlorobenzene	ND<50	ND	ND	ND<2.5	NA	0.5
1,4-Dichlorobenzene	ND<50	ND	ND	ND<2.5	NA	0.5
Dichlorodifluoromethane	ND<50	ND	ND	ND<2.5	NA	0.5
1,1-Dichloroethane	ND<50	ND	ND	ND<2.5	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<50	ND	19	120	NA	0.5
1,1-Dichloroethene	ND<50	ND	ND	ND<2.5	NA	0.5
cis-1,2-Dichloroethene	ND<50	ND	ND	ND<2.5	NA	0.5
trans-1,2-Dichloroethene	ND<50	ND	ND	ND<2.5	NA	0.5
1,2-Dichloropropane	ND<50	ND	ND	ND<2.5	NA	0.5
cis-1,3-Dichloropropene	ND<50	ND	ND	ND<2.5	NA	0.5
trans-1,3-Dichloropropene	ND<50	ND	ND	ND<2.5	NA	0.5
Freon 113	ND<1000	ND	ND	ND<50	NA	10
Methylene chloride	ND<50	ND	ND	ND<2.5	NA	0.5
1,1,1,2-Tetrachloroethane	ND<50	ND	ND	ND<2.5	NA	0.5
1,1,2,2-Tetrachloroethane	ND<50	ND	ND	ND<2.5	NA	0.5
Tetrachloroethene	ND<50	ND	ND	ND<2.5	NA	0.5
1,1,1-Trichloroethane	ND<50	ND	ND	ND<2.5	NA	0.5
1,1,2-Trichloroethane	ND<50	ND	ND	ND<2.5	NA	0.5
Trichloroethene	ND<50	ND	ND	ND<2.5	NA	0.5
Trichlorofluoromethane	ND<50	ND	ND	ND<2.5	NA	0.5
Vinyl Chloride	ND<50	ND	ND	ND<2.5	NA	0.5

Surrogate Recoveries (%)

%SS1:	76	77	77	77	
%SS2:	96	96	96	95	
%SS3:	97	92	98	97	

Comments a3,b6 b1

* 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.

a3) sample diluted due to high organic content / matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

b6) lighter than water immiscible sheen/product is present



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Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell-3093 Broadway	Date Sampled: 02/19/09-02/20/09
	Client Contact: Erica Ray	Date Received: 02/20/09
	Client P.O.:	Date Extracted: 02/24/09-02/25/09
		Date Analyzed: 02/24/09-02/25/09

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0902536

Lab ID	0902536-005C	0902536-006C	0902536-007C	0902536-008C	Reporting Limit for DF=1	
Client ID	MW-13	MW-16A	MW-16B	MW-17A	S	W
Matrix	W	W	W	W		
DF	1	1	100	100		

Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND	ND	ND<50	ND<50	NA	0.5
Bromoform	ND	ND	ND<50	ND<50	NA	0.5
Bromomethane	ND	ND	ND<50	ND<50	NA	0.5
Carbon Tetrachloride	ND	ND	ND<50	ND<50	NA	0.5
Chlorobenzene	ND	ND	ND<50	ND<50	NA	0.5
Chloroethane	ND	ND	ND<50	ND<50	NA	0.5
Chloroform	ND	1.0	ND<50	ND<50	NA	0.5
Chloromethane	ND	ND	ND<50	ND<50	NA	0.5
Dibromochloromethane	ND	ND	ND<50	ND<50	NA	0.5
1,2-Dibromoethane (EDB)	ND	ND	ND<50	410	NA	0.5
1,2-Dichlorobenzene	ND	ND	ND<50	ND<50	NA	0.5
1,3-Dichlorobenzene	ND	ND	ND<50	ND<50	NA	0.5
1,4-Dichlorobenzene	ND	ND	ND<50	ND<50	NA	0.5
Dichlorodifluoromethane	ND	ND	ND<50	ND<50	NA	0.5
1,1-Dichloroethane	ND	ND	ND<50	ND<50	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	1100	800	NA	0.5
1,1-Dichloroethene	ND	ND	ND<50	ND<50	NA	0.5
cis-1,2-Dichloroethene	ND	ND	ND<50	ND<50	NA	0.5
trans-1,2-Dichloroethene	ND	ND	ND<50	ND<50	NA	0.5
1,2-Dichloropropane	ND	ND	ND<50	ND<50	NA	0.5
cis-1,3-Dichloropropene	ND	ND	ND<50	ND<50	NA	0.5
trans-1,3-Dichloropropene	ND	ND	ND<50	ND<50	NA	0.5
Freon 113	ND	ND	ND<1000	ND<1000	NA	10
Methylene chloride	ND	ND	ND<50	ND<50	NA	0.5
1,1,1,2-Tetrachloroethane	ND	ND	ND<50	ND<50	NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND	ND<50	ND<50	NA	0.5
Tetrachloroethene	ND	ND	ND<50	ND<50	NA	0.5
1,1,1-Trichloroethane	ND	ND	ND<50	ND<50	NA	0.5
1,1,2-Trichloroethane	ND	ND	ND<50	ND<50	NA	0.5
Trichloroethene	ND	ND	ND<50	ND<50	NA	0.5
Trichlorofluoromethane	ND	ND	ND<50	ND<50	NA	0.5
Vinyl Chloride	ND	ND	ND<50	ND<50	NA	0.5

Surrogate Recoveries (%)

%SS1:	79	74	77	83	
%SS2:	95	94	97	89	
%SS3:	94	100	98	96	

Comments b1 b6,b1

* 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.

a3) sample diluted due to high organic content / matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

b6) lighter than water immiscible sheen/product is present



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	Client Contact: Erica Ray	Date Received: 02/20/09
	Client P.O.:	Date Extracted: 02/24/09-02/25/09
		Date Analyzed: 02/24/09-02/25/09

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

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0902536

Lab ID	0902536-009C	0902536-010C			Reporting Limit for DF =1	
Client ID	MW-17B	RW-4			S	W
Matrix	W	W				
DF	1	100				

Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND	ND<50			NA	0.5
Bromoform	ND	ND<50			NA	0.5
Bromomethane	ND	ND<50			NA	0.5
Carbon Tetrachloride	ND	ND<50			NA	0.5
Chlorobenzene	ND	ND<50			NA	0.5
Chloroethane	ND	ND<50			NA	0.5
Chloroform	ND	ND<50			NA	0.5
Chloromethane	ND	ND<50			NA	0.5
Dibromochloromethane	ND	ND<50			NA	0.5
1,2-Dibromoethane (EDB)	ND	240			NA	0.5
1,2-Dichlorobenzene	ND	ND<50			NA	0.5
1,3-Dichlorobenzene	ND	ND<50			NA	0.5
1,4-Dichlorobenzene	ND	ND<50			NA	0.5
Dichlorodifluoromethane	ND	ND<50			NA	0.5
1,1-Dichloroethane	ND	ND<50			NA	0.5
1,2-Dichloroethane (1,2-DCA)	0.81	110			NA	0.5
1,1-Dichloroethene	ND	ND<50			NA	0.5
cis-1,2-Dichloroethene	ND	ND<50			NA	0.5
trans-1,2-Dichloroethene	ND	ND<50			NA	0.5
1,2-Dichloropropane	ND	ND<50			NA	0.5
cis-1,3-Dichloropropene	ND	ND<50			NA	0.5
trans-1,3-Dichloropropene	ND	ND<50			NA	0.5
Freon 113	ND	ND<1000			NA	10
Methylene chloride	ND	ND<50			NA	0.5
1,1,1,2-Tetrachloroethane	ND	ND<50			NA	0.5
1,1,2,2-Tetrachloroethane	ND	ND<50			NA	0.5
Tetrachloroethene	ND	ND<50			NA	0.5
1,1,1-Trichloroethane	ND	ND<50			NA	0.5
1,1,2-Trichloroethane	ND	ND<50			NA	0.5
Trichloroethene	ND	ND<50			NA	0.5
Trichlorofluoromethane	0.51	ND<50			NA	0.5
Vinyl Chloride	ND	ND<50			NA	0.5

Surrogate Recoveries (%)

%SS1:	76	77		
%SS2:	95	96		
%SS3:	88	101		

Comments

b6,b1

* 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.

a3) sample diluted due to high organic content / matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment

b6) lighter than water immiscible sheen/product is present



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	Client Contact: Erica Ray	Date Received: 02/20/09
	Client P.O.:	Date Extracted: 02/23/09-02/24/09
		Date Analyzed 02/23/09-02/24/09

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

Extraction method SW5030B

Analytical methods SW8021B/8015Bm

Work Order: 0902536

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-4	W	230,000,d1,b6	ND<5000	10,000	17,000	2900	12,000	1000	98
002A	MW-7	W	ND,b1	ND	ND	ND	ND	ND	1	98
003A	MW-8	W	120,d1	ND	29	0.56	ND	ND	1	108
004A	MW-9	W	420,d1	ND	3.4	ND	ND	ND	1	98
005A	MW-13	W	ND,b1	ND	ND	ND	ND	ND	1	98
006A	MW-16A	W	1300,d1	ND<10	12	17	7.0	33	1	115
007A	MW-16B	W	67,000,d1	ND<500	15,000	1300	1400	2500	100	108
008A	MW-17A	W	150,000,d1,b6,b1	ND<3000	5600	26,000	1900	12,000	100	116
009A	MW-17B	W	150,d1	ND<15	3.6	14	0.82	11	1	119
010A	RW-4	W	120,000,d1,b6,b1	ND<2700	7700	19,000	2300	13,000	100	116

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5	0.5	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

- b1) aqueous sample that contains greater than ~1 vol. % sediment
- b6) lighter than water immiscible sheen/product is present
- d1) weakly modified or unmodified gasoline is significant



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Pangea Environmental Svcs., Inc. 1710 Franklin Street, Ste. 200 Oakland, CA 94612	Client Project ID: #1005.001; Connell-3093 Broadway	Date Sampled: 02/19/09-02/20/09
	Client Contact: Erica Ray	Date Received: 02/20/09
	Client P.O.:	Date Extracted: 02/20/09
		Date Analyzed: 02/21/09-02/25/09

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 0902536

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	TPH-Motor Oil (C18-C36)	DF	% SS
0902536-001B	MW-4	W	73,000,e4,b6	ND<2500	10	81
0902536-002B	MW-7	W	ND,b1	ND	1	101
0902536-003B	MW-8	W	ND	ND	1	100
0902536-004B	MW-9	W	58,e2	ND	1	96
0902536-005B	MW-13	W	ND,b1	ND	1	100
0902536-006B	MW-16A	W	ND	ND	1	100
0902536-007B	MW-16B	W	7400,e4	ND	1	103
0902536-008B	MW-17A	W	20,000,e4,b6,b1	440	1	118
0902536-009B	MW-17B	W	ND	ND	1	98
0902536-010B	RW-4	W	25,000,e4,b6,b1	ND<2500	10	112

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

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

#) cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract; &) low or no surrogate due to matrix interference.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

- b1) aqueous sample that contains greater than ~1 vol. % sediment
- b6) lighter than water immiscible sheen/product is present
- e2) diesel range compounds are significant; no recognizable pattern
- e4) gasoline range compounds are significant.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41534

WorkOrder: 0902536

Analyte	Extraction SW5030B		EPA Method SW8260B						Spiked Sample ID: 0902520-004A			
	Sample µg/L	Spiked µg/L	MS % Rec.	MSD % Rec.	MS-MSD % RPD	LCS % Rec.	LCSD % Rec.	LCS-LCSD % RPD	Acceptance Criteria (%)			
Chlorobenzene	ND<5.0	10	94.8	94.5	0.229	102	104	1.24	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND<5.0	10	96.3	95.6	0.706	100	105	5.08	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND<5.0	10	113	111	2.27	104	113	7.66	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND<5.0	10	77.2	78.3	1.43	87.2	90.5	3.74	70 - 130	30	70 - 130	30
Trichloroethene	90	10	NR	NR	NR	104	110	5.78	70 - 130	30	70 - 130	30
%SS1:	94	25	83	82	1.30	74	75	1.76	70 - 130	30	70 - 130	30
%SS2:	108	25	99	100	1.19	97	97	0	70 - 130	30	70 - 130	30
%SS3:	89	2.5	75	76	1.43	93	91	2.66	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 41534 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0902536-001C	02/19/09 1:30 PM	02/24/09	02/24/09 12:08 AM	0902536-002C	02/19/09 11:00 AM	02/24/09	02/24/09 12:52 AM
0902536-003C	02/19/09 12:10 PM	02/24/09	02/24/09 1:35 AM	0902536-004C	02/19/09 1:10 PM	02/24/09	02/24/09 10:14 PM

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

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

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

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.

Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41546

WorkOrder: 0902536

Analyte	EPA Method SW8260B			Extraction SW5030B					Spiked Sample ID: 0902536-005C			
	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	103	104	0.692	109	111	1.67	70 - 130	30	70 - 130	30
1,2-Dibromoethane (EDB)	ND	10	97.1	101	4.28	105	105	0	70 - 130	30	70 - 130	30
1,2-Dichloroethane (1,2-DCA)	ND	10	100	101	1.08	117	117	0	70 - 130	30	70 - 130	30
1,1-Dichloroethene	ND	10	81.7	83	1.56	85.4	85.3	0.154	70 - 130	30	70 - 130	30
Trichloroethene	ND	10	97.9	100	2.35	109	111	1.71	70 - 130	30	70 - 130	30
%SS1:	79	25	71	71	0	80	78	1.69	70 - 130	30	70 - 130	30
%SS2:	95	25	99	101	1.69	99	100	0.219	70 - 130	30	70 - 130	30
%SS3:	94	2.5	88	89	0.397	76	76	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 41546 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0902536-005C	02/19/09 10:30 AM	02/24/09	02/24/09 3:02 AM	0902536-006C	02/20/09 7:58 AM	02/25/09	02/25/09 5:22 PM
0902536-007C	02/20/09 8:17 AM	02/24/09	02/24/09 4:29 AM	0902536-008C	02/20/09 7:37 AM	02/24/09	02/24/09 5:12 AM
0902536-009C	02/20/09 7:20 AM	02/24/09	02/24/09 5:01 PM	0902536-010C	02/20/09 8:45 AM	02/24/09	02/24/09 6:39 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.

Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 41526

WorkOrder 0902536

EPA Method SW8015B		Extraction SW3510C/3630C							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-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	88.8	88.7	0.0400	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 41526 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0902536-001B	02/19/09 1:30 PM	02/20/09	02/25/09 9:40 AM	0902536-002B	02/19/09 11:00 AM	02/20/09	02/21/09 1:18 AM
0902536-003B	02/19/09 12:10 PM	02/20/09	02/25/09 5:04 AM	0902536-004B	02/19/09 1:10 PM	02/20/09	02/23/09 11:08 AM
0902536-005B	02/19/09 10:30 AM	02/20/09	02/23/09 7:22 PM	0902536-006B	02/20/09 7:58 AM	02/20/09	02/25/09 6:12 AM
0902536-007B	02/20/09 8:17 AM	02/20/09	02/23/09 1:34 PM	0902536-008B	02/20/09 7:37 AM	02/20/09	02/23/09 2:44 PM
0902536-009B	02/20/09 7:20 AM	02/20/09	02/24/09 6:22 AM	0902536-010B	02/20/09 8:45 AM	02/20/09	02/25/09 8:30 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

BatchID: 41540

WorkOrder 0902536

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 0902530-008A			
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(btex) ^f	ND	60	96.4	107	10.0	88	98.1	10.9	70 - 130	20	70 - 130	20
MTBE	ND	10	118	119	0.293	89.9	98.3	8.86	70 - 130	20	70 - 130	20
Benzene	ND	10	102	102	0	100	97.6	2.92	70 - 130	20	70 - 130	20
Toluene	ND	10	112	112	0	92.6	90.4	2.39	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	110	110	0	103	97.6	5.09	70 - 130	20	70 - 130	20
Xylenes	ND	30	123	122	0.524	100	95.6	4.63	70 - 130	20	70 - 130	20
%SS:	92	10	95	97	2.20	103	103	0	70 - 130	20	70 - 130	20

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

BATCH 41540 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
0902536-001A	02/19/09 1:30 PM	02/24/09	02/24/09 1:30 AM	0902536-002A	02/19/09 11:00 AM	02/23/09	02/23/09 9:38 PM
0902536-003A	02/19/09 12:10 PM	02/23/09	02/23/09 10:09 PM	0902536-004A	02/19/09 1:10 PM	02/23/09	02/23/09 10:39 PM
0902536-005A	02/19/09 10:30 AM	02/23/09	02/23/09 11:10 PM	0902536-006A	02/20/09 7:58 AM	02/24/09	02/24/09 12:10 AM
0902536-007A	02/20/09 8:17 AM	02/24/09	02/24/09 2:03 AM	0902536-008A	02/20/09 7:37 AM	02/24/09	02/24/09 2:36 AM
0902536-009A	02/20/09 7:20 AM	02/24/09	02/24/09 1:40 AM	0902536-010A	02/20/09 8:45 AM	02/24/09	02/24/09 4:48 AM

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

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

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

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

cluttered chromatogram; sample peak coelutes with surrogate peak.

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

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