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**5:36 pm, Oct 08, 2012**

Alameda County  
Environmental Health

Ms. Barbara Jakub  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, CA 9502-6577

Subject: Former Val Strough Chevrolet Site  
327 34<sup>th</sup> Street, Oakland, CA  
Site ID #3035, RO#0000134

Dear Ms. Jakub:

This enclosed report has been prepared by LRM Consulting, Inc. on behalf of the Strough Family Trust. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

If you have any questions, please contact Mr. Mehrdad Javaherian of LRM Consulting, Inc. at 650-343-4633.

Sincerely,



Linda L. Strough, Trustee

cc: Mehrdad Javaherian, LRM Consulting, Inc.  
534 Plaza Lane, #145, Burlingame, CA 94010

Greggory Brandt, Wendel Rosen Black & Dean  
1111 Broadway, 24<sup>th</sup> Floor, Oakland, CA 94607



## **DUAL PHASE EXTRACTION IMPLEMENTATION MEMORANDUM**

Former Val Strough Chevrolet Site  
327 34<sup>th</sup> Street, Oakland, California  
Fuel Leak Case No. RO0000134

Prepared by  
**LRM Consulting, Inc.**  
**1534 Plaza Lane, #145**  
**Burlingame, CA 94010**

October 2012



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October 2, 2012

## MEMORANDUM

**To:** Ms. Barbara Jakub  
Alameda County Health Care Services Agency (ACHCSA)  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

**From:** Mehrdad Javaherian  
LRM Consulting, Inc.

**Re:** **DPE Implementation Report**  
Former Val Strough Chevrolet  
327 34<sup>th</sup> Street, Oakland, California  
Site ID #3035, RO #0000134

On behalf of the Strough Family Trust, LRM Consulting, Inc. (LRM) has prepared this memorandum which summarizes implementation of the dual phase extraction (DPE) activities at the above-reference site in accordance with the ACHCSA-approved Corrective Action Plan (CAP) for the site. The CAP was approved on December 28, 2011, outlining two remedial alternatives for the site; the first involved application of DPE within the residual source area at the site, targeting separate phase hydrocarbon (SPH) and highly concentrated hydrocarbon source material at the soil-groundwater interface. The CAP also outlined implementation if in-situ chemical oxidation (ISCO) using RegenOx as necessary, in order to treat hydrocarbons dissolved in groundwater once source removal operations using DPE are completed. Per the CAP, the need for ISCO remediation will be evaluated following completion of DPE activities.

Based on the above-summary of the CAP, this memorandum summarizes DPE system permitting, startup, and routine operation and maintenance (O&M) activities which remain ongoing at the site. These activities are summarized in the respective sections below.

### **DPE System Permitting**

As the first step in implementing DPE system operations, permits were obtained from the East Bay Municipal Utilities District (EBMUD) and from the Bay Area Air Quality Management District (BAAQMD); the former targeted discharge of groundwater generated from DPE operations and treated thereafter, while the latter targeted vapor extraction component of DPE activities. Specifically, EBMUD permit number 82809400 issued on April 24, 2012, allowing for discharge of treated groundwater to the sanitary sewer. This permit requires monthly recording of totalizer readings; monthly influent, midpoint, and effluent sampling; confirmation



of system compliance via flow meter and analytical samples, and semi-annual self-monitoring discharge reporting to EBMUD.

Permit number 24211 was obtained from the BAAQMD, allowing for operation of the vapor extraction component of the DPE system. The permit authorizes discharge of extracted vapors to the atmosphere following treatment of system influent through two 1,000-pound carbon vessels connected in series for a one-year period. The permit calls for weekly O&M site visits for measurement of influent, midpoint, and effluent using PID. Carbon change-out is triggered when midpoint concentration is greater than 10% of inlet concentration, or 10 ppmv. Vacuum and flow readings are recorded to insure unit is operating under 200 scfm. Monthly influent, midpoint, and effluent samples are to be analyzed for TPH-g and BTEX, ensuring that the system does not emit more than 0.01 pounds of benzene per day, or 3.8 pounds of benzene per year. Reporting to the BAAQMD of a total throughout form after one year of operation is also required.

### **DPE System Startup**

The DPE system was mobilized to the site on June 20, 2012, allowing for system connection, startup and shakedown, and optimization. Per the CAP, the DPE system was connected to wells MW2 and MW3 via existing subsurface trenching, allowing for extraction to occur from both wells via stingers placed in each well. As shown on Figure 1 and discussed in the CAP, these wells represent the key boundaries of the residual source area along the path of groundwater flow, marking two of the highest impacted wells within the residual source area. Figure 2 depicts system connections for both liquid and vapor-phase application.

Full-time system startup occurred beginning July 2, 2012, wherein a vacuum of 340 inches of water and a total system flow rate of approximately 30 scfm was applied. Within the first several days of system startup and shakedown, the flow rate and vacuum were adjusted, while the pressure response in residual source area wells MW2, MW3, MW9A, MW9B, and O1 were measured. With a measured vapor pressure response of 0.66 inches of water in monitoring well MW4 and 1.9 inches of water in well MW1, the radius of vapor influence of the DPE system was estimated at over 50 feet. Moreover, the optimal system flow rate and vacuum rate were defined at 30 scfm and 340 inches of water, respectively.

### **DPE System O&M Activities**

In concert with the afore-mentioned permits, continuous system operations were initiated on July 2, 2012 and remain active at the time of this writing. This report covers operations from startup through September 17, 2012. Over this 2.5-month period, several system shutdown periods were observed for system repairs, including a three-week period to resolve electrical issues, and for periodic carbon change-out to address carbon breakthrough. Total system operational time during this period approximated 860 hours.

Appendix A contains field sheets reflecting the weekly O&M visits. The weekly O&M activities allowed for preparation of Table 1, which summarizes system operational data for the vapor



extraction component of the DPE system since full-time startup in July 2012. As indicated in the table, over the first 860 hours of system operations, TPH-g system influent concentrations ranged from 675 to over 8,000 ppmv. Vacuum levels varied from 217 to 240 inches of water. With four observed carbon breakthrough/change-out events through August 30, 2012 events, the vacuum was intentionally reduced from 340 to 217 inches of water to maintain an efficient system operational schedule, minimizing system down-time for carbon change-out and significantly reducing operational costs.

Table 2 summarizes vapor-phase mass removal estimates based on data collected during O&M activities. As indicated, the vapor mass removal rate of the system varied from 7 to 82 pounds per day, and was intentionally reduced from 17 pounds per day to 8 pounds per day to maintain an efficient system operational scheme. This resulted in an optimal mass removal rate of 8 pounds per day, while reducing carbon change-out frequency and related costs. Importantly, over the 860 hours of operation, an estimated 823 pounds of TPH-g were removed, yielding a rate of nearly one pound per hour (see Table 2). The vacuum and mass removal rates will be increased as necessary over time to maximize mass removal, while balancing the need for system efficiency (i.e, elimination of down-time and cost of carbon change-out).

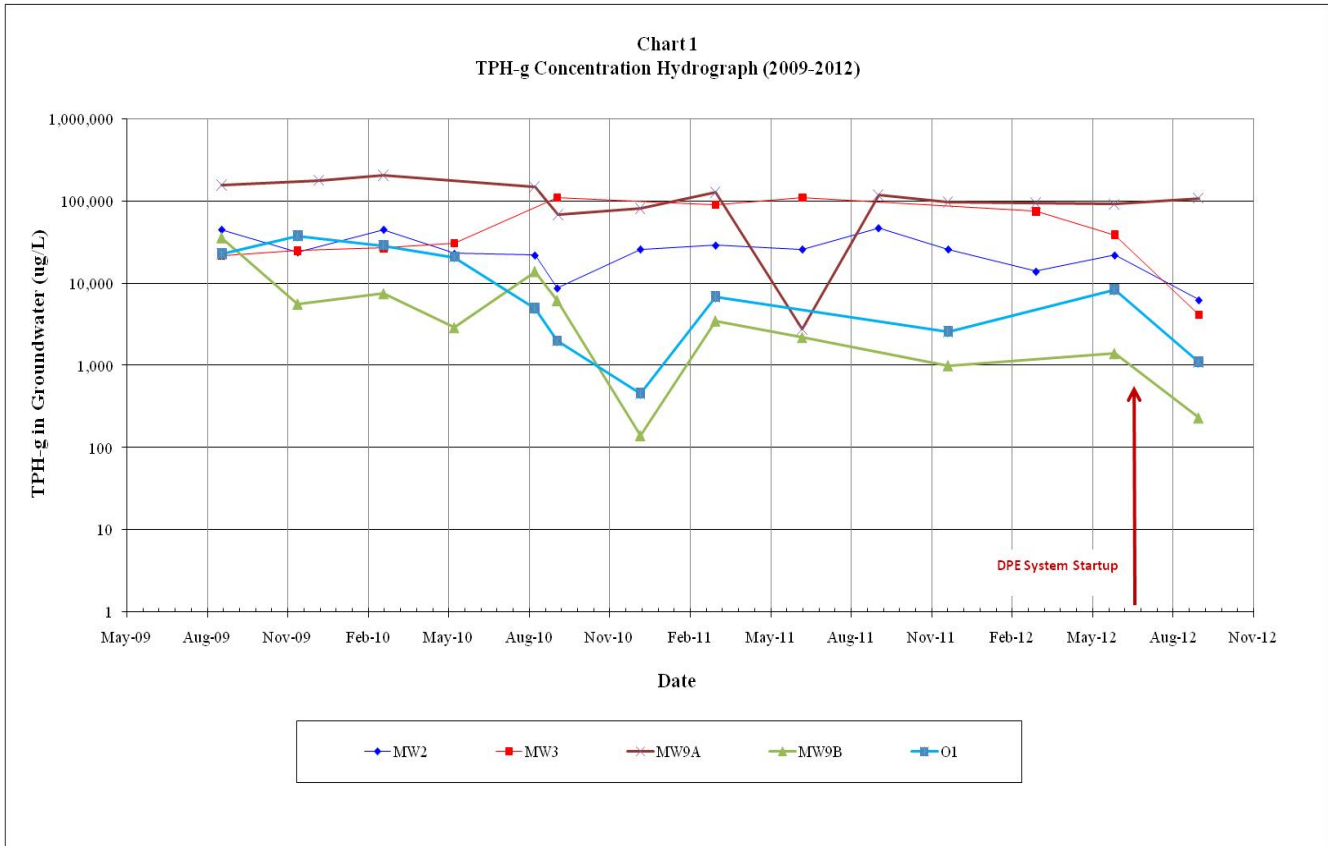
Table 3 summarizes analytical data on water quality associated with the liquid extracted via the DPE system, while Table 4 summarizes operational data for this component of the DPE system. As indicated in Table 4, over 200,000 gallons of water were extracted, treated, and disposed of in the sewer, with mass removal estimates via liquid phase approximating 12.5 pounds of TPH-g.

Table 5 summarizes historical groundwater analytical results for the site, including the results of sampling conducted during the routine 3<sup>rd</sup> Quarter 2012 groundwater monitoring event at the site. The 3<sup>rd</sup> Quarter 2012 event occurred on September 6, 2012, approximately two months following full-time startup of active DPE operations. For key source area wells, the data in Table 5 was used to prepare the chart below, which summarizes total petroleum hydrocarbon as gasoline (TPH-g) concentrations in key source area wells since 2009; including the past two months of active DPE operations.

As shown on the chart below (and summarized in Table 5, operation of the DPE system for two months resulted in a significant decline in TPH-g concentrations at MW2 (from 22,000 to 6,300 µg/L), MW3 (from 39,000 to 4,200 µg/L), MW9B (from 1,400 to 230 µg/L), and O1 (from 8,500 to 1,100 µg/L) relative to the previous quarter. Relative to the other source area wells, well MW9A shows a lesser hydraulic response (estimated at 1 foot of drawdown following DPE restart events- See field sheets for September 6<sup>th</sup> and September 11, 2012 O&M events in Appendix A) to the DPE operations; correspondingly, this well does not show a significant decline in hydrocarbon concentrations.

## **PLANNED ACTIVITIES**

Per the CAP, LRM will continue to operate the DPE system, continuing to balance high-mass removal rates with reduced carbon breakthrough and related change-out events. DPE operations



will continue until mass removal rates decline or reach asymptotic levels. Based on the observed responses to DPE operations within residual source area wells, LRM plans to connect well MW9A to the DPE system to maximize mass removal local to this well. Importantly, this well is located within the driveway to the service area of the active car dealership at the site and does not have the benefit of a subsurface trench. Hence, this connection will occur above the ground and remain periodic in nature (i.e. over weekends) in order to not adversely impact daily site operations.

**CLOSING**

We appreciate your assistance with this project. If you have any questions or require further information, please contact Mehrdad Javaherian ([mehrdad@lrm-consulting.com](mailto:mehrdad@lrm-consulting.com)) of LRM Consulting, Inc. at 415-706-8935.

  
Mehrdad Javaherian



## **ATTACHMENTS**

Table 1 – Groundwater Monitoring Well Analytical Results

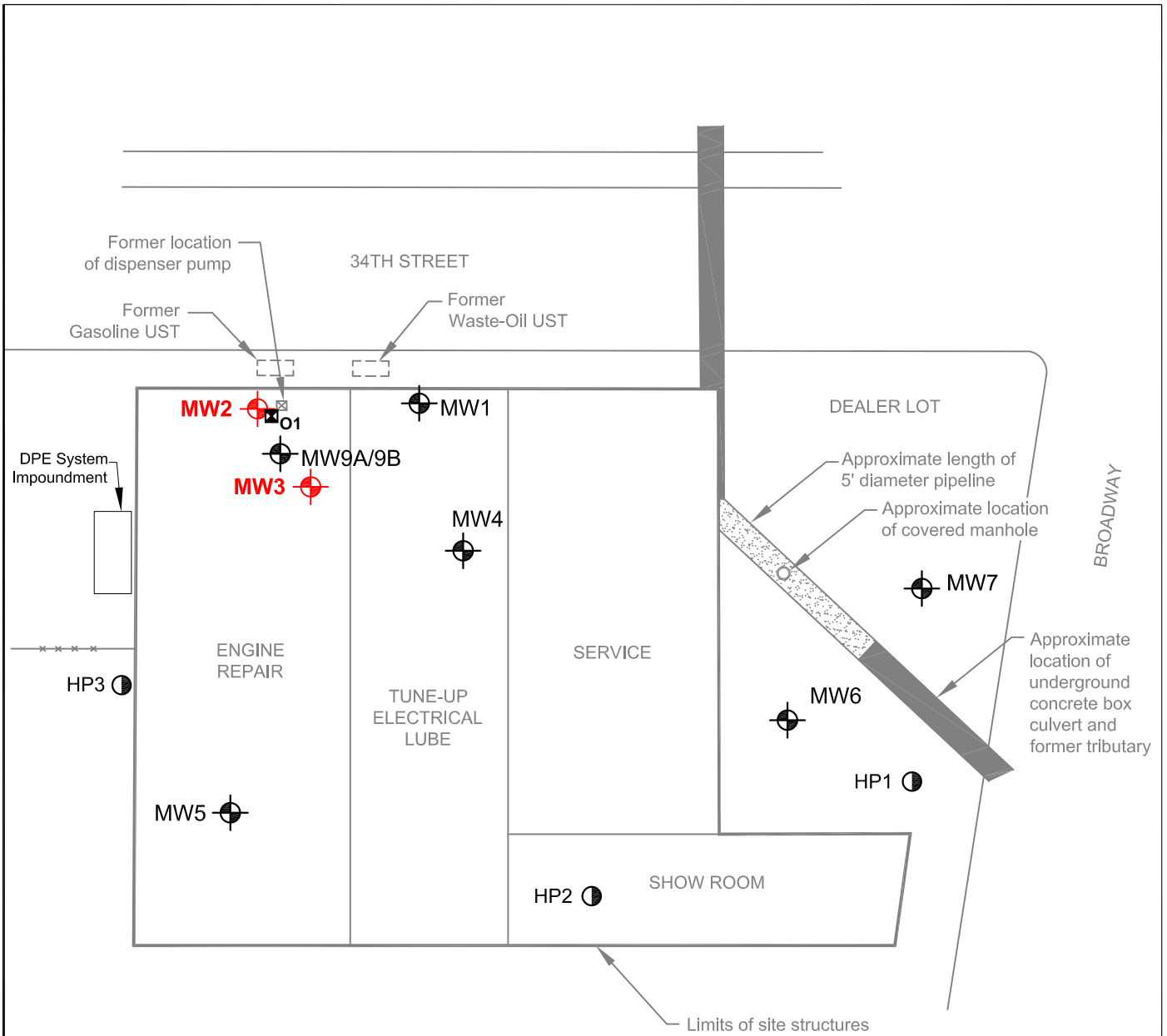
Figure 1 –Monitoring Well Location Map

Appendix A - O&M Field Sheets

cc: Jonathan Redding, Esq., Wendel, Rosen, Black & Dean, 1111 Broadway, 24th Floor,  
Oakland, California 94607  
Strough Family Trust of 1983, 2 Sea View Avenue, Piedmont, California 94611

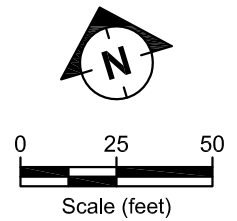
## FIGURES





**LEGEND:**

- HP2 ● Grab groundwater sampling location
- MW5 ● Groundwater monitoring well
- MW2** ● DPE Extraction Well

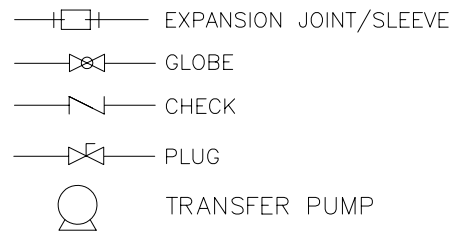
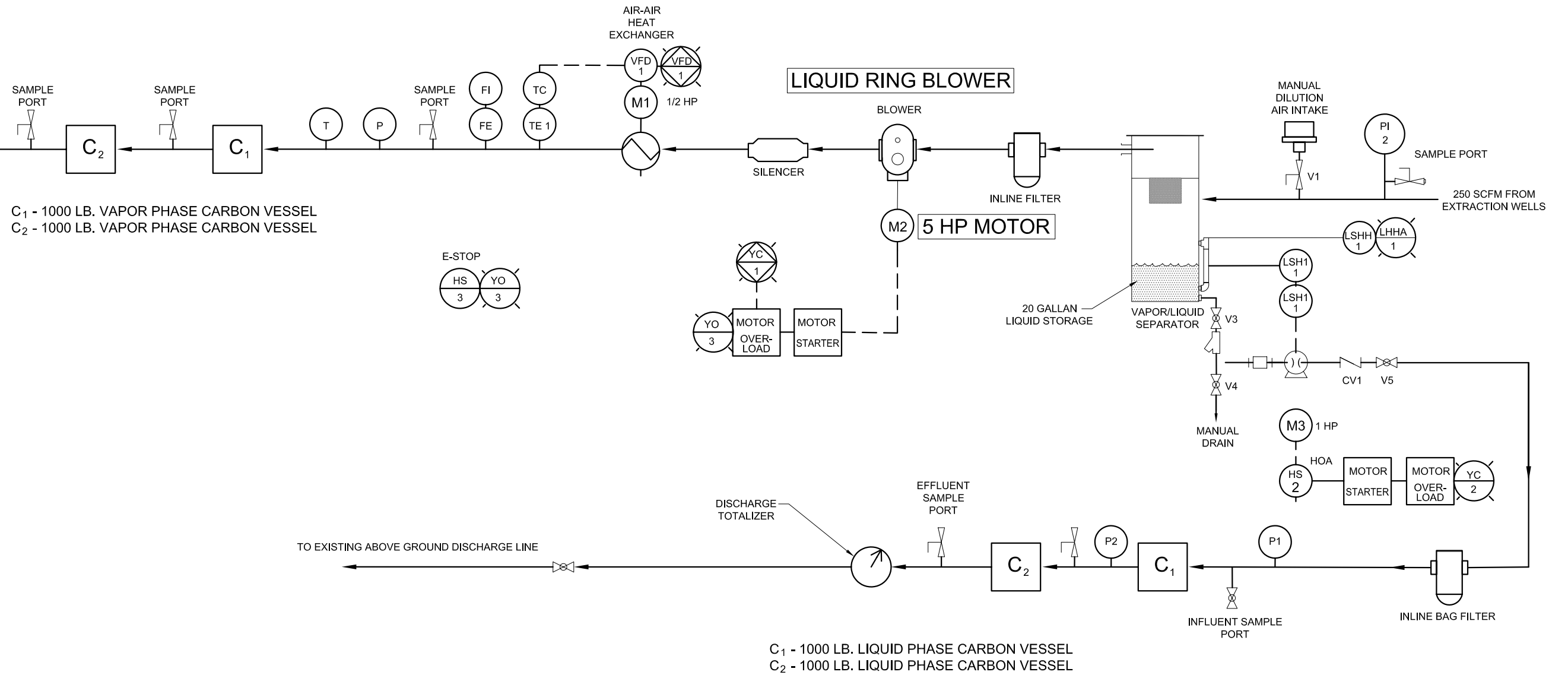


NOTES

1) FOR COMPONENT INFORMATION AND WIRING DETAILS  
SEE ELECTRICAL SCHEMATICS

2) UTILITIES - 230-VAC/1PH/60Hz  
230-VAC/3PH/60Hz  
460-VAC/3PH/60Hz

Exhaust stack  
12 ft above  
grade.  
3 inch SCH40  
PVC  
construction  
with sample  
port and flow  
port



**DE-61 PROCESS AND INSTRUMENTATION DIAGRAM**

FORMER VAL STROUGH CHEVROLET  
327 34TH STREET  
OAKLAND, CALIFORNIA



Date:  
10/01/2012

Figure:  
**2**

## **TABLES**

**Table 1 - Summary of VES Field Monitoring Data**

Former Val Strough Chevrolet  
 327 34th Street  
 Oakland CA 94609

Date	Hour Meter Reading	Wellhead Influent Monitoring Data							Effluent Monitoring Data					
		Pipe Dia. (in.)	Area (in. <sup>2</sup> )	dP (in. H <sub>2</sub> O)	Vacuum (in. H <sub>2</sub> O)	Temp. (°F)	Velocity (fpm)	TPHg (ppmv)	Pipe Dia. (in.)	Area (in. <sup>2</sup> )	dP (in. H <sub>2</sub> O)	Temp. (°F)	Velocity (fpm)	TPHg (ppmv)
06-20-12	0.0	2	0.02	0.720	340	65	8,341	1,840	3	0.05	0.025	65	631	<5.7
07-02-12	4.1	2	0.02	0.680	340	65	8,106	675	3	0.05	0.020	65	564	0.0
07-03-12	26.7	2	0.02	0.650	340	65	7,925	1,081	3	0.05	0.019	65	550	0.0
07-04-12	49.6	2	0.02	0.670	340	65	8,046	1,510	3	0.05	0.026	71	647	0.0
07-05-12	72.8	2	0.02	0.730	340	69	8,434	1,382	3	0.05	0.027	65	656	0.0
07-06-12	97.8	2	0.02	0.850	340	69	9,100	1,206	3	0.05	0.031	67	704	0.0
07-13-12	245.0	2	0.02	0.770	340	69	8,662	1,800	3	0.05	0.022	65	592	0.0
07-17-12	247.5	2	0.02	0.800	340	69	8,829	1,080	3	0.05	0.022	65	592	0.0
7-19-2012*	291.8	2	0.02	0.750	340	69	8,548	8,490	3	0.05	0.022	65	592	0.0
07-23-12	320.0	2	0.02	0.810	340	69	8,884	2,800	3	0.05	0.030	65	691	0.0
07-30-12	415.0	2	0.02	0.790	366	71	11,228	2,100	3	0.05	0.030	71	695	0.0
08-06-12	541.0	2	0.02	0.800	353	61	9,755	1,400	3	0.05	0.027	70	659	0.0
08-25-12	543.0	2	0.02	0.810	312	69	7,462	1,419	3	0.05	0.027	65	656	0.0
8-30-2012*	574.0	2	0.02	0.790	366	71	11,228	1,415	3	0.05	0.025	71	634	0.0
09-07-12	690.0	2	0.02	0.850	353	61	10,055	4,000	3	0.05	0.030	70	694	0.0
09-11-12	782.0	2	0.02	0.810	340	69	8,884	5,000	3	0.05	0.030	65	691	0.0
09-14-12	785.1	2	0.02	0.220	217	65	2,739	850	3	0.05	0.016	65	505	0.0
9-17-2012*	859.5	2	0.02	0.220	217	65	2,739	990	3	0.05	0.016	65	505	0.0

**Explanation:**

°F = degree Fahrenheit

dia. = diameter

dP = differential pressure

in. = inches

in.<sup>2</sup> = square inchesin. H<sub>2</sub>O = inches of water column

\* = Analytical results from Tedlar bag sample

fpm = feet per minute

Temp. = temperature

mg/m<sup>3</sup> = milligrams per cubic meter

ppmv = parts per million by volume

TPHg = Total Petroleum Hydrocarbons as gasoline

## Table 2 - Summary of VES Operation

Former Val Strough Chevrolet

327 34th Street

Oakland CA 94609

Date	Hour Meter Reading	Wellhead Influent				Date	Effluent		
		Flow Rate (scfm)	TPHg (ppmv)	MTPHg (lbs/day)	Cumulative Mass Removed-TPHg (lbs)		Flow Rate (scfm)	TPHg (ppmv)	MTPHg (lbs/day)
06-20-12	0.0	30.3	1,840	16	0	06-20-12	31.3	<5.66	<0.06
07-02-12	4.1	29.4	675	6.3	1.9	07-17-01	28.0	0.00	0.00
07-03-12	26.7	28.8	1,081	9.9	12.5	07-02-01	27.3	0.00	0.00
07-04-12	49.6	29.2	1,510	14.0	20.2	07-04-12	31.7	0.00	0.00
07-05-12	72.8	30.3	1,382	13.3	31.7	07-05-12	32.5	0.00	0.00
07-06-12	97.8	32.7	1,206	12.5	46.0	07-06-12	34.7	0.00	0.00
07-13-12	245.0	31.2	1,800	17.8	125.1	07-13-12	29.3	0.00	0.00
07-17-12	247.5	31.8	1,080	10.9	126.7	07-17-12	29.3	0.00	0.00
7-19-2012*	291.8	30.8	8,490	82.8	153.2	7-19-2012*	29.3	0.00	0.00
07-23-12	320.0	32.0	2,800	28.4	208.2	07-23-12	34.2	0.00	0.00
07-30-12	415.0	24.7	2,100	16.4	428.3	07-30-12	34.1	0.00	0.00
08-06-12	541.0	28.8	1,400	12.8	545.9	08-06-12	32.3	0.00	0.00
08-25-12	543.0	38.1	1,419	17.1	547.2	08-25-12	32.5	0.00	0.00
8-30-2012*	574.0	24.7	1,415	11.1	566.5	8-30-2012*	31.1	0.00	0.00
09-07-12	690.0	29.6	4,000	37.6	634.6	09-07-12	34.1	0.00	0.00
09-11-12	782.0	32.0	5,000	50.7	727.9	09-11-12	34.2	0.00	0.00
09-14-12	785.1	28.2	850	7.0	733.6	09-14-12	25.0	0.00	0.00
9-17-2012*	859.5	28.2	990	8.1	822.9	9-17-2012*	25.0	0.00	0.00

**TABLE 3**  
**GROUNDWATER EXTRACTION AND TREATMENT SYSTEM**  
**ANALYTICAL DATA**

Former Val Strough Chevrolet  
327 34th Street  
Oakland CA 94609

Sample Date	Sample Location	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Tphd (ppb)	TPHmo (ppb)
06-20-12	Influent	5,400	190	570	110	890	140	230	<100
07-19-12	Influent	7,600	130	650	52	1600	60	< 50	< 100
08-30-12	Influent	5700	91	420	57	780	18	<5	<100
09-17-12	Influent	8700	120	600	9	1800	43	<50	<100
06-20-12	Midpoint 1	<50	<0.5	1.9	<0.5	<0.5	<2.0	<100	<2.0
07-19-12	Midpoint 1	<50.0	< 0.50	< 0.50	< 0.50	< 0.50	<0.5	<50	<100
08-30-12	Midpoint 1	<50.0	<0.50	<0.50	<0.50	<0.50	<2.0	<100	<2.0
09-17-12	Midpoint 1	<50.0	<0.50	<0.50	<0.50	<0.50	<2.0	<100	<2.0
06-20-12	Effluent	110	<0.5	0.5	<0.5	0.5	<0.5	<100	<100
07-19-12	Effluent	<50.0	<0.50	< 0.50	< 0.50	< 0.50	<0.5	<50	<100
08-30-12	Effluent	<50.0	<0.50	<0.50	<0.50	<0.50	<2.0	<100	<2.0
09-17-12	Effluent	<50.0	<0.50	<0.50	<0.50	<0.50	<2.0	<100	<2.0

**EXPLANATIONS:**

TPHg = Total Petroleum Hydrocarbons as Gasoline  
MTBE= Methyl tertiary butyl ether  
TPHd = Total petroleum Hydrocarbons as Diesel  
TPHmo = Total petroleum Hydrocarbons as Motor Oil  
NA = Not Available

**Table 4**  
**GROUNDWATER EXTRACTION AND TREATMENT SYSTEM**  
**OPERATIONAL DATA**

Former Val Strough Chevrolet  
327 34th Street  
Oakland CA 94609

Sample Date	Operation (days)	Cumulative Operation (days)	Flow Meter Reading (gallons)	Flow Rate (gpm)	Mass Extraction Rates			Cumulative Mass Extraction			Mass Discharge Rates			
					TPHg (lbs/day)	MTBE (lbs/day)	benzene (lbs/day)	TPHg (lbs)	MTBE (lbs)	benzene (lbs)	TPHg (lbs/day)	MTBE (lbs/day)	benzene (lbs/day)	
06-20-12			100											
06-20-12	0	0	890	2.61	0.17	0.00	0.004	0.04	0.00	0.0009	<3.4E-03	<1.6E-05	<1.6E-05	
07-19-12	29	29	82,000	1.94	0.177	0.001	0.004	5.170	0.041	0.129	<1.2E-03	<1.2E-05	<1.2E-05	
08-30-12	42	71	153,500	1.18	0.081	0.000	0.000	8.565	0.052	0.129	<7.1E-04	<2.8E-05	<7.1E-06	
09-17-12	18	89	207,600	2.09	0.218	0.001	0.000	12.486	0.072	0.129	<1.3E-03	<5.0E-05	<1.3E-05	

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW1	07/27/93	100.00	a 20.79	79.21	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--	
MW1	10/02/97	100.00	a 21.22	78.78	0.00	<0.50	<0.50	<0.50	<0.50	<50	--	--	<2.0	--	
MW1	06/30/98	100.00	a 18.21	81.79	0.00	<0.50	<0.50	2.1	0.6	84	--	--	2.1	--	
MW1	07/29/98	100.00	a 18.74	81.26	0.00	--	--	--	--	--	--	--	--	--	
MW1	08/26/98	100.00	a 19.28	80.72	0.00	--	--	--	--	--	--	--	--	--	
MW1	10/01/98	100.00	a 19.93	80.07	0.00	<1.0	<1.0	<1.0	<1.0	<50	--	--	<2.0	--	
MW1	10/30/98	100.00	a 20.22	79.78	0.00	--	--	--	--	--	--	--	--	--	
MW1	11/30/98	100.00	a 19.99	80.01	0.00	--	--	--	--	--	--	--	--	--	
MW1	12/28/98	100.00	a 19.81	80.19	0.00	--	--	--	--	--	--	--	--	--	
MW1	01/25/99	100.00	a 19.62	80.38	0.00	<1.0	<1.0	<1.0	<1.0	<50	--	--	<2.0	--	
MW1	02/26/99	100.00	a 17.18	82.82	0.00	--	--	--	--	--	--	--	--	--	
MW1	03/24/99	100.00	a 17.28	82.72	0.00	--	--	--	--	--	--	--	--	--	
MW1	05/12/99	100.00	a 17.91	82.09	0.00	--	--	--	--	--	--	--	--	--	
MW1	12/15/99	100.00	a 21.01	78.99	0.00	<0.50	<0.50	<0.50	<0.50	<50	--	--	<0.50	--	
MW1	03/20/00	100.00	a 16.25	83.75	0.00	--	--	--	--	--	--	--	--	--	
MW1	07/20/00	100.00	a 19.63	80.37	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	3.4	--	
MW1	10/11/00	100.00	a 20.80	79.20	0.00	--	--	--	--	--	--	--	--	--	
MW1	04/10-11/01	100.00	a 18.81	81.19	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	1.2	--	
MW1	07/10/01	100.00	a 20.51	79.49	0.00	--	--	--	--	--	--	--	--	--	
MW1	11/20/01	64.69	b 21.36	43.33	0.00	<0.50	1.3	<0.50	0.81	<50	<50	<300	<2.0	--	
MW1	02/19/02	64.69	b 18.95	45.74	0.00	--	--	--	--	--	--	--	--	--	
MW1	05/21/02	64.69	b 19.82	44.87	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	<2.0	--	
MW1	06/27/03	64.69	b 19.93	44.76	0.00	--	--	--	--	--	--	--	--	--	
MW1	09/29/03	64.69	b 21.24	43.45	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--	
MW1	12/12/03	64.69	b 21.27	43.42	0.00	<0.50	<0.50	<0.50	1.1	<50	58	<500	<0.50	--	
MW1	03/15/04	64.69	b 18.18	46.51	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--	
MW1	06/24/04	64.69	b 20.48	44.21	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--	
MW1	09/29/04	64.69	b 21.37	43.32	0.00	<0.50	0.51	<0.50	<1.0	<50	<50	<500	<0.50	--	
MW1	12/13/04	64.69	b 20.63	44.06	0.00	--	--	--	--	--	--	--	--	--	
MW1	03/14/05	64.69	b 18.69	46.00	0.00	<0.50	<0.50	<0.50	<1.0	<50	73	<500	<0.50	--	
MW1	06/15/05	64.69	b 20.32	44.37	0.00	--	--	--	--	--	--	--	--	--	
MW1	09/26/05	64.69	b 22.10	42.59	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--	
MW1	12/12/05	64.69	b 22.39	42.30	0.00	--	--	--	--	--	--	--	--	--	
MW1	03/29/06	64.69	b 15.24	49.45	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	74	--	
MW1	06/19/06	64.69	b 18.27	46.42	0.00	--	--	--	--	--	--	--	--	--	
MW1	09/29/06	64.69	b 20.06	44.63	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	7.9	--	
MW1	12/12/06	64.69	b 20.32	44.37	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	9.4	--	
MW1	03/01/07	64.69	b 18.68	46.01	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	3.5	--	
MW1	06/12/07	64.69	b 20.28	44.41	0.00	--	--	--	--	--	--	--	--	--	
MW1	09/25/07	64.69	b 21.37	43.32	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	1.8	--	
MW1	12/20/07	64.69	b 21.48	43.21	0.00	--	--	--	--	--	--	--	--	--	
MW1	03/26/08	64.69	b 20.98	43.71	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	--	
MW1	06/03/08	64.69	b 20.70	43.99	0.00	--	--	--	--	--	--	--	--	--	
MW1	09/25/08	64.69	b 22.30	42.39	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	0.57	<5.0	
MW1	12/29/08	64.69	b 21.77	42.92	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0	
MW1	03/24/09	64.71	l 18.68	46.03	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0	
MW1	06/02/09	64.71	l 19.60	45.11	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0	
MW1	09/10/09	64.71	l 21.20	43.51	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0	
MW1	12/04/09	64.71	l 22.86	41.85	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0	



TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW1	03/10/10	64.71	l	21.06	43.65	0.00	< 0.50	0.97	< 0.50	1.6	< 50	< 50	< 100	< 0.50	--
MW1	05/28/10	64.71	l	21.19	43.52	0.00	--	--	--	--	--	--	--	--	--
MW1	08/26/10	64.71	l	21.82	42.89	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	--
MW1	12/22/10	64.71	l	21.42	43.29	0.00	--	--	--	--	--	--	--	--	--
MW1	03/16/11	64.71	l	19.18	45.53	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--
MW1	03/16/11	64.71	l	19.18	45.53	0.00	--	--	--	--	--	--	--	--	--
MW1	06/21/11	64.71	l	19.18	45.53	0.00	--	--	--	--	--	--	--	--	--
MW1	09/14/11	64.71	l	20.87	43.84	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--
MW1	12/01/11	64.71	l	21.69	43.02	0.00	--	--	--	--	--	--	--	--	--
MW1	03/08/12	64.71	l	21.51	43.20	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--
MW1	06/04/12	64.71	l	19.31	45.40	0.00	--	--	--	--	--	--	--	--	--
MW1	09/06/12	64.71	l	22.10	42.61	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--
MW2	07/27/93	101.27	a	22.10	79.17	0.00	10,000	27,000	2,900	20,000	120,000	--	--	--	--
MW2	10/02/97	101.27	a	22.91	78.36	0.43	*	*	*	*	*	*	*	*	--
MW2	06/30/98	101.27	a	19.69	81.58	0.45	7,300	18,000	2,500	15,600	72,000	--	--	5,500	--
MW2	07/29/98	101.27	a	20.11	81.16	0.29	--	--	--	--	--	--	--	--	--
MW2	08/26/98	101.27	a	20.54	80.73	0.08	--	--	--	--	--	--	--	--	--
MW2	10/01/98	101.27	a	21.52	79.75	0.42	6,400	17,000	2,600	17,000	84,000	--	--	2,000	--
MW2	10/30/98	101.27	a	21.54	79.73	0.10	--	--	--	--	--	--	--	--	--
MW2	11/30/98	101.27	a	21.21	80.06	0.04	--	--	--	--	--	--	--	--	--
MW2	12/28/98	101.27	a	21.10	80.17	0.02	--	--	--	--	--	--	--	--	--
MW2	01/25/99	101.27	a	20.80	80.47	0.01	9,000	26,000	3,800	27,500	130,000	--	--	5,800	--
MW2	02/26/99	101.27	a	18.00	83.27	sheen	--	--	--	--	--	--	--	--	--
MW2	03/24/99	101.27	a	18.27	83.00	trace	--	--	--	--	--	--	--	--	--
MW2	05/12/99	101.27	a	19.08	82.19	trace	--	--	--	--	--	--	--	--	--
MW2	12/15-16/99	101.27	a	22.42	78.85	0.025	*	*	*	*	*	*	*	*	--
MW2	03/20/00	101.27	a	17.09	84.18	0.026	--	--	--	--	--	--	--	--	--
MW2	07/20/00	101.27	a	20.86	80.41	0.017	*	*	*	*	*	*	*	*	--
MW2	10/11/00	101.27	a	22.10	79.17	0.00	--	--	--	--	--	--	--	--	--
MW2	04/10-11/01	101.27	a	19.98	81.29	0.00	8,000	22,000	2,600	23,500	150,000	1,500	<600	3,600	--
MW2	07/10/01	101.27	a	21.85	79.42	0.00	5,900	15,000	2,300	12,100	83,000	5,700	<1,500	2,800	--
MW2	11/20/01	65.95	b	22.75	43.20	0.00	--	--	--	--	--	--	--	--	--
MW2	02/19/02	65.95	b	20.12	45.83	0.00	--	--	--	--	--	--	--	--	--
MW2	05/21/02	65.95	b	21.10	44.85	0.00	8,600	25,000	3,500	26,000	150,000	31,000	<3,000	4,800	--
MW2	06/27/03	65.95	b	21.48	44.47	0.35	--	--	--	--	--	--	--	--	--
MW2	09/29/03	65.95	b	23.04	42.91	0.48	*	*	*	*	*	*	*	*	--
MW2 <sup>e</sup>	12/12/03	65.95	b	22.75	43.31	0.16	*	*	*	*	*	*	*	*	--
MW2 <sup>e</sup>	03/15/04	65.95	b	19.24	46.72	0.01	*	*	*	*	*	*	*	*	--
MW2 <sup>e</sup>	06/24/04	65.95	b	22.10	44.06	0.31	*	*	*	*	*	*	*	*	--
MW2 <sup>e</sup>	09/29/04	65.95	b	22.81	43.14	sheen	*	*	*	*	*	*	*	*	--
MW2 <sup>e</sup>	12/13/04	65.95	b	22.06	43.95	0.08	3,700	12,000	1,900	10,000	47,000	2,600	<500	1,200	--
MW2 <sup>j</sup>	03/14/05	65.95	b	25.00	40.95	0.00	780	3,700	920	6,400	43,000	43,000	<5,000	<200	--
MW2	06/15/05	65.95	b	21.14	44.81	0.00	2,900	15,000	2,400	22,000	120,000	13,000	<2,500	810	--
MW2	07/18/05	65.95	b	NM	NC	NM	2,700	13,000	1,800	15,000	120,000	17,000	--	530	--
MW2	09/26/05	65.95	b	22.93	43.02	0.00	570	4,000	620	6,200	31,000	63,000	28,000	<50	--
MW2	12/12/05	65.95	b	25.40	40.55	0.00	670	5,300	1,100	9,800	34,000	2,800	<500	65	--
MW2	03/29/06	65.95	b	15.66	50.29	sheen	620	2,800	540	4,700	33,000	<4,000	<100	37	--
MW2	06/19/06	65.95	b	19.14	46.81	sheen	680	5,200	990	16,000	120,000	<30,000	1,900	170	--
MW2	09/29/06	65.95	b	21.16	44.79	0.00	1,200	5,100	1,200	9,300	59,000	<8000	300	230	--

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW2	12/12/06	65.95	b 21.46	44.49	0.00	850	4,400	1,100	8,900	45,000	<10000	360	110	--	
MW2	03/01/07	65.95	b 19.48	46.47	0.00	1,400	5,200	980	9,500	71,000	<18000	460	160	--	
MW2	06/12/07	65.95	b 20.98	44.97	0.00	1,300	4,900	1,200	8,900	40,000	<3000	<100	130	--	
MW2	09/25/07	65.95	b 22.57	43.38	0.00	1,400	6,500	1,900	13,000	68,000	<12000	250	240	--	
MW2	12/20/07	65.95	b 22.70	43.25	0.00	1,400	7,000	2,400	16,000	75,000	<5000	650	270	--	
MW2	03/26/08	65.95	b 22.51	43.44	0.00	1,400	6,200	1,800	16,000	83,000	<10000	360	480	--	
MW2	06/03/08	65.95	b 21.85	44.10	0.00	1,900	11,000	2,500	18,000	98,000	<12000	500	660	--	
MW2	09/25/08	65.95	b 23.30	42.65	0.00	740	3,500	1,700	10,000	46,000	<8000	170	340	180	
MW2	12/29/08	65.95	b 22.95	43.00	0.00	260	1,500	1,100	6,400	29,000	<4000	<100	110	<50	
MW2	03/24/09	65.71	l 19.58	46.13	0.00	410	2,000	900	8,900	45,000	<8,000	420	300	210	
MW2	06/02/09	65.71	l 20.50	45.21	0.00	680	3,100	1,200	10,000	80,000	<12000	480	330	180	
MW2	09/10/09	65.71	l 22.40	43.31	0.00	700	3,000	1,300	9,400	45,000	< 8000	190	370	220	
MW2	12/04/09	65.71	l 24.30	41.41	0.00	290	1,500	930	4,900	24,000	< 2000	170	200	92	
MW2	03/10/10	65.71	l 22.20	43.51	0.00	200	1,300	700	9,500	45,000	< 6,000	< 100	340	--	
MW2	05/28/10	65.71	l 22.41	43.30	0.00	260	1,100	650	4,700	23,000	< 8000	170	380	--	
MW2	08/26/10	65.71	l 23.00	42.71	0.00	160	980	490	4,200	22,000	<2000	<100	180	--	
MW2	09/20/10	65.71	l NM	NC	0.00	52	360	210	1,600	8,800	--	--	--	--	
MW2	12/22/10	65.71	l 22.47	43.24	0.00	130	1,100	430	6,000	26,000	<3000	<100	640	--	
MW2	03/16/11	65.71	l 19.00	46.71	0.00	430	1700	490	3700	29,000	< 3000	190	500	--	
MW2	06/21/11	65.71	l 20.10	45.61	0.00	640	2100	680	4000	26,000	< 3000	< 100	660	--	
MW2	09/14/11	65.71	l 21.97	43.74	0.00	460	3200	1200	7600	47,000	< 30000	520	380	--	
MW2	12/01/11	65.71	l 22.73	42.98	0.00	350	2,200	1,100	4,600	26,000	<1000	<100	510	--	
MW2	03/08/12	65.71	l 22.62	43.09	0.00	150	1000	560	2500	14,000	< 200	< 100	200	--	
MW2	06/04/12	65.71	l 20.31	45.40	0.00	380	2,000	560	3,200	22,000	<100	<100	320	--	
MW2	09/06/12	65.71	l 29.10	36.61	0.00	220	520	130	780	6,300	< 50	< 100	18	--	
MW3	07/27/93	101.29	a 22.28	79.01	0.02	9,100	24,000	5,300	33,000	330,000	--	--	--	--	
MW3	10/02/97	101.29	a 22.71	78.58	0.03	4,200	11,000	1,800	10,600	36,000	--	--	3,500	--	
MW3	06/30/98	101.29	a 19.47	81.82	0.00	4,800	11,000	1,200	7,100	51,000	--	--	3,900	--	
MW3	07/29/98	101.29	a 20.01	81.28	0.00	--	--	--	--	--	--	--	--	--	
MW3	08/26/98	101.29	a 20.62	80.67	0.00	--	--	--	--	--	--	--	--	--	
MW3	10/01/98	101.29	a 21.33	79.96	0.00	3,900	8,500	1,200	6,000	38,000	--	--	2,300	--	
MW3	10/30/98	101.29	a 21.62	79.67	0.00	--	--	--	--	--	--	--	--	--	
MW3	11/30/98	101.29	a 21.31	79.98	0.00	--	--	--	--	--	--	--	--	--	
MW3	12/28/98	101.29	a 21.15	80.14	0.06	--	--	--	--	--	--	--	--	--	
MW3	01/25/99	101.29	a 20.79	80.50	0.00	4,000	10,000	1200	6700	5,100	--	--	2900	--	
MW3	02/26/99	101.29	a 18.02	83.27	0.00	--	--	--	--	--	--	--	--	--	
MW3	03/24/99	101.29	a 18.37	82.92	0.00	--	--	--	--	--	--	--	--	--	
MW3	05/12/99	101.29	a 19.22	82.07	0.0083	--	--	--	--	--	--	--	--	--	
MW3	12/15-16/99	101.29	a 22.43	78.86	0.00	*	*	*	*	*	*	*	*	--	
MW3	03/20/00	101.29	a 17.14	84.15	0.00	--	--	--	--	--	--	--	--	--	
MW3	07/20/00	101.29	a 20.98	80.31	0.00	5,700	14,000	1,600	9,300	69,000	2,900	<300	3,300	--	
MW3	10/11/00	101.29	a 22.24	79.05	0.00	--	--	--	--	--	--	--	--	--	
MW3	04/10-11/01	101.29	a 20.70	80.59	0.00	7,200	<0.001	2,300	12,900	110,000	4,700	<1,500	4,300	--	
MW3	07/10/01	101.29	a 21.97	79.32	0.00	--	--	--	--	--	--	--	--	--	
MW3	11/20/01	65.99	b 22.80	43.19	0.00	6,300	16,000	2,400	14,900	100,000	5,900	<900	4,000	--	
MW3	02/19/02	65.99	b 20.11	45.88	0.00	--	--	--	--	--	--	--	--	--	
MW3	05/21/02	65.99	b 21.20	44.79	0.00	6,500	17,000	2,200	12,700	91,000	14,000	<3,000	2,200	--	
MW3	06/27/03	65.99	b 21.32	44.67	sheen	--	--	--	--	--	--	--	--	--	
MW3	09/29/03	65.99	b 22.79	43.20	sheen	*	*	*	*	*	*	*	*	--	

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW3 <sup>c</sup>	12/12/03	65.99	b 22.73	43.27	0.01	*	*	*	*	*	*	*	*	*	--
MW3 <sup>e</sup>	03/15/04	65.99	b 19.32	46.67	sheen	*	*	*	*	*	*	*	*	*	--
MW3	06/24/04	65.99	b 21.99	44.00	0.00	3,400	7,700	1,000	4,800	39,000	1,700	<500	1,100	--	
MW3	09/29/04	65.99	b 22.54	43.45	0.00	2,900	6,700	980	4,300	29,000	2,200	<500	1,100	--	
MW3	12/13/04	65.99	b 22.06	43.93	0.00	1,700	2,900	790	3,400	17,000	1,300	<500	490	--	
MW3 <sup>j</sup>	03/14/05	65.99	b 24.00	41.99	0.00	680	1,700	380	1,600	10,000	670	<500	67	--	
MW3	06/15/05	65.99	b 21.13	44.86	0.00	260	960	330	1,400	12,000	1,200	<500	31	--	
MW3	07/18/05	65.99	b NM	NC	NM	1,000	5,600	1,100	4,300	23,000	1,700	--	81	--	
MW3	09/26/05	65.99	b 22.92	43.07	0.00	4,000	17,000	1,900	17,000	79,000	5,100	540	270	--	
MW3	12/12/05	65.99	b 23.30	42.69	0.00	200	710	450	1,400	7,000	550	<500	<10	--	
MW3	03/29/06	65.99	b 15.70	50.29	0.00	110	300	130	490	3,800	<200	<100	13	--	
MW3	06/19/06	65.99	b 19.11	46.88	0.00	160	500	320	840	7,000	<300	<100	3.1	--	
MW3	09/29/06	65.99	b 21.15	44.84	0.00	1,300	2,300	720	2,900	22,000	<1500	<100	110	--	
MW3	12/12/06	65.99	b 21.38	44.61	0.00	1,400	2,200	670	2,600	21,000	<1500	<100	130	--	
MW3	03/01/07	65.99	b 19.50	46.49	0.00	1,100	2,500	510	2,200	17,000	<600	<100	51	--	
MW3	06/12/07	65.99	b 21.00	44.99	0.00	1,800	4,000	800	3,300	22,000	<1500	<100	150	--	
MW3	09/25/07	65.99	b 22.59	43.40	0.00	2,400	5,000	1,000	4,600	29,000	<500	<100	220	--	
MW3	12/20/07	65.99	b 22.59	43.40	0.00	2,400	4,900	1,100	4,700	36,000	<2000	<100	240	--	
MW3	03/26/08	65.99	b 22.13	43.86	0.00	4,500	11,000	1,700	7,800	54,000	<1500	<100	340	--	
MW3	06/03/08	65.99	b 21.81	44.18	0.00	3,900	8,700	1,500	7,000	47,000	<1500	<100	470	--	
MW3	09/25/08	65.99	b 23.30	42.69	0.00	1,600	3,700	700	3,300	22,000	<3000	<100	220	180	
MW3	12/29/08	65.99	b 22.92	43.07	0.00	310	910	320	1,300	11,000	<1500	<100	35	23	
MW3	03/24/09	65.70	l 19.43	46.27	0.00	1,400	4,200	600	2,500	19,000	<1,000	<100	160	60	
MW3	06/02/09	65.70	l 20.70	45.00	0.00	2,800	7,600	1,300	5,600	39,000	<1,500	<100	240	180	
MW3	09/10/09	65.70	l 22.32	43.38	0.00	1,800	3,900	790	3,500	22,000	<1500	<100	190	110	
MW3	12/04/09	65.70	l 24.20	41.50	0.00	1,600	3,400	860	3,900	25,000	<800	<100	210	81	
MW3	03/10/10	65.70	l 22.03	43.67	0.00	420	2,400	640	3,600	27,000	<3,000	<100	24	--	
MW3	05/28/10	65.70	l 22.84	42.86	0.00	1,200	4,600	920	4,800	31,000	<5000	<100	120	--	
MW3	08/26/10	65.70	l 23.42	42.28	sheen	--	--	--	--	--	--	--	--	--	
MW3	09/20/10	65.70	l NM	NC	sheen	2700	13000	2900	18000	110000	--	--	--	--	
MW3	12/22/10	65.70	l 22.70	43.00	0.20	--	--	--	--	--	--	--	--	--	
MW3	03/16/11	65.70	l 20.13	45.57	0.00	4000	16000	2800	15000	91000	<3000	<100	230	--	
MW3	06/21/11	65.70	l 20.20	45.50	0.00	5200	16000	3200	18000	110000	<10000	130	490	--	
MW3	09/14/11	65.70	l 22.15	43.55	0.17	--	--	--	--	--	--	--	--	--	
MW3	12/01/11	65.70	l 22.86	42.84	0.02	--	--	--	--	--	--	--	--	--	
MW3	03/08/12	65.70	l 22.69	43.01	0.00	3,400	11,000	2200	10000	75000	<2000	150	330	--	
MW3	06/04/12	65.70	l 20.28	45.42	0.00	2,500	5,600	1,100	4,000	39,000	<100	<100	280	--	
MW3	09/06/12	65.70	l 27.50	38.20	0.00	70	190	160	540	4,200	<200	<100	20	--	
MW4	06/30/98	98.65	a 16.93	81.72	0.00	2,200	930	850	2,100	10,000	--	--	1,800	--	
MW4	07/29/98	98.65	a 17.48	81.17	0.00	--	--	--	--	--	--	--	--	--	
MW4	08/26/98	98.65	a 18.65	80.00	0.00	--	--	--	--	--	--	--	--	--	
MW4	10/01/98	98.65	a 18.74	79.91	0.00	570	46	130	36	1,100	--	--	1,300	--	
MW4	10/30/98	98.65	a 19.02	79.63	0.00	--	--	--	--	--	--	--	--	--	
MW4	11/30/98	98.65	a 18.74	79.91	0.00	--	--	--	--	--	--	--	--	--	
MW4	12/28/98	98.65	a 18.60	80.05	0.00	--	--	--	--	--	--	--	--	--	
MW4	01/25-26/99	98.65	a 18.32	80.33	0.00	230	<8.3	<8.3	<8.3	290	--	--	1,300	--	
MW4	02/26/99	98.65	a 15.81	82.84	0.00	--	--	--	--	--	--	--	--	--	
MW4	03/24/99	98.65	a 16.01	82.64	0.00	--	--	--	--	--	--	--	--	--	
MW4	05/12/99	98.65	a 17.71	80.94	0.00	--	--	--	--	--	--	--	--	--	

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW4	12/15-16/99	98.65	a	19.83	78.82	0.00	5.8	<0.50	<0.50	<0.50	<50	--	--	1,400	--
MW4	03/20/00	98.65	a	14.9	83.75	0.00	--	--	--	--	--	--	--	--	--
MW4	07/20/00	98.65	a	18.38	80.27	0.00	91	4.6	19	12.9	210	<50	<300	1,500	--
MW4	10/11/00	98.65	a	19.61	79.04	0.00	--	--	--	--	--	--	--	--	--
MW4	04/10-11/01	98.65	a	17.55	81.10	0.00	110	<5.0	<5.0	<5.0	350	<50	<300	1,100	--
MW4	07/10/01	98.65	a	19.34	79.31	0.00	--	--	--	--	--	--	--	--	--
MW4	11/20/01	63.35	b	20.16	43.19	0.00	<2.5	4	<2.5	3.7	96	<50	<300	2,500	--
MW4	02/19/02	63.35	b	17.34	46.01	0.00	--	--	--	--	--	--	--	--	--
MW4	05/21/02	63.35	b	18.57	44.78	0.00	340	5.7	70	<1.0	940	83	<300	1,600	--
MW4	06/27/03	63.35	b	18.72	44.63	0.00	--	--	--	--	--	--	--	--	--
MW4	09/29/03	63.35	b	20.11	43.24	0.00	<5.0	<5.0	<5.0	<10	1,100	<50	<500	1,700	--
MW4	12/12/03	63.35	b	20.06	43.29	0.00	<13	<13	<13	<25	<1,300	<50	<500	1,000	--
MW4	03/15/04	63.35	b	16.89	46.46	0.00	1.5	<0.50	<0.50	<1.0	54	<50	<500	41	--
MW4	06/24/04	63.35	b	19.31	44.04	0.00	69	<5.0	<5.0	<10	920	<50	<500	1,100	--
MW4	09/29/04	63.35	b	20.20	43.15	0.00	<5.0	<5.0	<5.0	<10	940	<50	<500	1,200	--
MW4	12/13/04	**	b	20.44	NC	0.00	<5.0	<5.0	<5.0	<10	740	<50	<500	860	--
MW4	03/14/05	**	b	18.30	NC	0.00	20	<5.0	<5.0	<10	930	<50	<500	930	--
MW4	06/15/05	**	b	20.03	NC	0.00	350	6.1	<5.0	<10	2100	89	<500	1,100	--
MW4	07/18/05	**	b	NM	NC	NM	11	<5.0	<5.0	<10	540	<50	--	1,100	--
MW4	09/26/05	**	b	21.79	NC	0.00	<5.0	<5.0	<5.0	<10	960	<50	<500	660	--
MW4	12/12/05	**	b	21.89	NC	0.00	<5.0	<5.0	<5.0	<10	820	<50	<500	1,000	--
MW4	03/29/06	**	b	14.85	NC	0.00	49	160	120	300	2,400	<100	<100	130	--
MW4	06/19/06	**	b	17.96	NC	0.00	100	940	540	1,800	8,800	<400	<100	55	--
MW4	09/29/06	63.35	b	19.85	43.50	0.00	18.0	2.6	1.5	3.5	370.0	<50	<100	180	--
MW4	12/12/06	63.35	b	20.03	43.32	0.00	11.0	0.77	<0.5	<0.5	230.0	<50	<100	260	--
MW4	03/01/07	63.35	b	18.33	45.02	0.00	63.0	7.10	40.0	190.0	1,800.0	<50	<100	130	--
MW4	06/12/07	63.35	b	19.70	43.65	0.00	9.3	<0.5	<0.5	<0.5	70.0	<50	<100	150	--
MW4	09/25/07	63.35	b	21.27	42.08	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50	<100	300	--
MW4	12/20/07	63.35	b	21.30	42.05	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50	<100	370	--
MW4	03/26/08	63.35	b	20.89	42.46	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50	<100	260	--
MW4	06/03/08	63.35	b	20.51	42.84	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50	<100	190	--
MW4	09/25/08	63.35	b	22.03	41.32	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50	<100	380	<5.0
MW4	12/29/08	63.35	b	21.62	41.73	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50	<100	230	<5.0
MW4	03/24/09	64.37	l	18.38	45.99	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50	<100	370	<5.0
MW4	06/02/09	64.37	l	19.32	45.05	0.00	0.64	<0.5	<0.5	<0.5	<50	<50	<100	320	<5.0
MW4	09/10/09	64.37	l	21.00	43.37	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	280	< 5.0
MW4	12/04/09	64.37	l	22.76	41.61	0.00	< 0.50	< 0.50	< 0.50	2.9	< 50	< 50	< 100	430	< 5.0
MW4	03/10/10	64.37	l	20.87	43.50	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	130	--
MW4	05/28/10	64.37	l	21.07	43.30	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	140	--
MW4	08/26/10	64.37	l	21.71	42.66	0.00	<0.50	<0.50	<0.50	2.0	<50	<50	<100	160	--
MW4	12/02/10	64.37	l	21.21	43.16	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	50	--
MW4	03/16/11	64.37	l	18.82	45.55	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	220	--
MW4	06/21/11	64.37	l	18.95	45.42	0.00	0.70	< 0.50	1.4	< 0.50	< 50	< 50	< 100	220	--
MW4	09/14/11	64.37	l	20.68	43.69	0.00	< 0.50	< 0.50	< 0.50	2.9	63	< 50	< 100	150	--
MW4	12/01/11	64.37	l	21.59	42.78	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	200	--
MW4	03/08/12	64.37	l	21.32	43.05	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	210	--
MW4	06/04/12	64.37	l	19.01	45.36	0.00	35.00	1.10	19.0	6.1	220.0	<50	<100	160	--
MW4	09/06/12	64.37	l	21.88	42.49	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	240	--
MW5	06/30/98	100.9	a	20.60	80.30	0.00	<0.50	<0.50	<0.50	<0.50	<50	--	--	23	--

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW5	07/29/98	100.9	a 21.52	79.38	0.00	--	--	--	--	--	--	--	--	--	
MW5	08/26/98	100.9	a 22.21	78.69	0.00	--	--	--	--	--	--	--	--	--	
MW5	10/01/98	100.9	a 22.95	77.95	0.00	<1.0	<1.0	<1.0	<1.0	<50	--	--	<2.0	--	
MW5	10/30/98	100.9	a 23.23	77.67	0.00	--	--	--	--	--	--	--	--	--	
MW5	11/30/98	100.9	a 23.12	77.78	0.00	--	--	--	--	--	--	--	--	--	
MW5	12/28/98	100.9	a 23.18	77.72	0.00	--	--	--	--	--	--	--	--	--	
MW5	01/25-26/99	100.9	a 22.61	78.29	0.00	<1.0	<1.0	<1.0	<1.0	<50	--	--	<2.0	--	
MW5	02/26/99	100.9	a 19.78	81.12	0.00	--	--	--	--	--	--	--	--	--	
MW5	03/24/99	100.9	a 20.25	80.65	0.00	--	--	--	--	--	--	--	--	--	
MW5	05/12/99	100.9	a 21.06	79.84	0.00	--	--	--	--	--	--	--	--	--	
MW5	12/15-16/99	100.9	a 24.19	76.71	0.00	<0.50	<0.50	<0.50	<0.50	<50	--	--	<0.50	--	
MW5	03/20/00	100.9	a 19.15	81.75	0.00	--	--	--	--	--	--	--	--	--	
MW5	07/20/00	100.9	a 21.84	79.06	0.00	<0.50	0.98	<0.50	<0.50	<50	<50	<300	1.9	--	
MW5	10/11/00	100.9	a 23.4	77.50	0.00	--	--	--	--	--	--	--	--	--	
MW5	04/10-11/01	100.9	a 22.3	78.60	0.00	<0.50	2.6	<0.50	0.6	<50	<50	<300	1.5	--	
MW5	07/10/01	100.9	a 23.64	77.26	0.00	--	--	--	--	--	--	--	--	--	
MW5	11/20/01	65.59	b 24.65	40.94	0.00	0.83	12	1.2	11	140	860	2,500	10	--	
MW5	02/19/02	65.59	b 22.37	43.22	0.00	--	--	--	--	--	--	--	--	--	
MW5	05/21/02	65.59	b 23.10	42.49	0.00	<0.50	<0.50	<0.50	<0.50	<50	2,200	<300	<2.0	--	
MW5	06/27/03	65.59	b 23.07	42.52	0.00	--	--	--	--	--	--	--	--	--	
MW5	09/29/03	65.59	b 24.38	41.21	0.00	<0.50	0.52	7.1	35	100	<50	<500	1.4	--	
MW5	12/12/03	65.59	b 23.90	41.69	0.00	<0.50	<0.50	<0.50	<1	<50	<50	<500	1.5	--	
MW5	03/15/04	65.59	b 20.82	44.77	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--	
MW5	06/24/04	65.59	b 23.57	42.02	0.00	<0.50	<0.50	<0.50	<1.0	<50	130	<500	0.79	--	
MW5	09/29/04	65.59	b 24.44	41.15	0.00	--	--	--	--	--	--	--	--	--	
MW5	12/13/04	65.59	b 23.87	41.72	0.00	--	--	--	--	--	--	--	--	--	
MW5	03/14/05	65.59	b 20.18	45.41	0.00	<0.50	1.3	1.5	8.6	82	<50	<500	<0.50	--	
MW5	06/15/05	65.59	b 12.96	52.63	0.00	--	--	--	--	--	--	--	--	--	
MW5	09/26/05	65.59	b 23.60	41.99	0.00	--	--	--	--	--	--	--	--	--	
MW5	12/12/05	65.59	b 23.84	41.75	0.00	--	--	--	--	--	--	--	--	--	
MW5	03/29/06	65.59	b 17.19	48.40	0.00	<0.50	<0.50	<0.50	<0.50	73	<50	<100	<0.50	--	
MW5	06/19/06	65.59	b 20.22	45.37	0.00	--	--	--	--	--	--	--	--	--	
MW5	09/29/06	65.59	b 22.80	42.79	0.00	--	--	--	--	--	--	--	--	--	
MW5	12/12/06	65.59	b 23.08	42.51	0.00	--	--	--	--	--	--	--	--	--	
MW5	03/01/07	65.59	b 21.02	44.57	0.00	<0.50	<0.50	<0.50	<0.50	54	<50	<100	<0.50	--	
MW5	06/12/07	65.59	b 22.78	42.81	0.00	--	--	--	--	--	--	--	--	--	
MW5	09/25/07	65.59	b 24.45	41.14	0.00	<0.50	1.5	<0.50	<0.50	<50	<50	<100	0.64	--	
MW5	12/20/07	65.59	b 24.52	41.07	0.00	--	--	--	--	--	--	--	--	--	
MW5	03/26/08	65.59	b 24.08	41.51	0.00	<0.50	1.5	<0.50	<0.50	<50	<50	<100	<0.5	--	
MW5	06/03/08	65.59	b 23.68	41.91	0.00	--	--	--	--	--	--	--	--	--	
MW5	09/25/08	65.59	b 25.00	40.59	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	0.66	<5.0	
MW5	12/29/08	65.59	b 24.92	40.67	0.00	<0.50	<0.50	<0.50	<0.50	71	<50	<100	<0.5	<5.0	
MW5	03/24/09	65.59	l 21.85	43.74	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	0.54	<5.0	
MW5	06/02/09	65.59	l 22.70	42.89	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.5	<5.0	
MW5	09/10/09	65.59	l 24.12	41.47	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	0.56	< 5.0	
MW5	12/04/09	65.59	l dry	--	0.00	--	--	--	--	--	--	--	--	--	
MW5	03/10/10	65.59	l 25.90	39.69	0.00	< 0.50	< 0.50	< 0.50	< 0.50	55	< 50	< 100	0.71	--	
MW5	05/28/10	65.59	l 25.54	40.05	0.00	--	--	--	--	--	--	--	--	--	
MW5	08/26/10	65.59	l 25.59	40.00	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	0.52	--	
MW5	12/22/10	65.59	l 24.80	40.79	0.00	--	--	--	--	--	--	--	--	--	

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW5	03/16/11	65.59	l 22.02	43.57	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--	
MW5	06/21/11	65.59	l 22.41	43.18	0.00	--	--	--	--	--	--	--	--	--	
MW5	09/14/11	65.59	l 24.39	41.20	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--	
MW5	12/01/11	65.59	l 25.22	40.37	0.00	--	--	--	--	--	--	--	--	--	
MW5	03/08/12	65.59	l 24.90	40.69	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--	
MW5	06/04/12	65.59	l 22.30	43.29	0.00	--	--	--	--	--	--	--	--	--	
MW5	09/06/12	65.59	l 23.86	41.73	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--	
MW6	07/20/00	96.60	a 18.30	78.30	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	160	--	
MW6	10/11/00	96.60	a 18.69	77.91	0.00	--	--	--	--	--	--	--	--	--	
MW6	04/10-11/01	96.60	a 17.85	78.75	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	180	--	
MW6	07/10/01	96.60	a 18.43	78.17	0.00	--	--	--	--	--	--	--	--	--	
MW6	11/20/01	59.60	b 18.67	40.93	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	450	--	
MW6	02/19/02	59.60	b 17.40	42.20	0.00	--	--	--	--	--	--	--	--	--	
MW6	05/21/02	59.60	b 17.68	41.92	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	170	--	
MW6	06/27/03	59.60	b 17.73	41.87	0.00	--	--	--	--	--	--	--	--	--	
MW6	09/29/03	59.60	b 18.48	41.12	0.00	<1.0	<1.0	<1.0	<2.0	230	<50	<500	340	--	
MW6	12/12/03	59.60	b 17.89	41.71	0.00	<2.5	<2.5	<2.5	<5.0	<250	51	<500	190	--	
MW6	03/15/04	59.60	b 16.46	43.14	0.00	<1.0	<1.0	<1.0	<2.0	200	<50	<500	220	--	
MW6	06/24/04	59.60	b 17.97	41.63	0.00	<1.0	<1.0	<1.0	<2.0	130	<50	<500	190	--	
MW6	09/29/04	59.60	b 18.55	41.05	0.00	<0.50	0.61	<0.50	1.2	210	<50	<500	190	--	
MW6	12/13/04	59.60	b 17.88	41.72	0.00	--	--	--	--	--	--	--	--	--	
MW6	03/14/05	59.60	b 16.82	42.78	0.00	<0.50	<0.50	<0.50	1.8	160	<50	<500	190	--	
MW6	06/15/05	59.60	b 17.60	42.00	0.00	--	--	--	--	--	--	--	--	--	
MW6	09/26/05	59.60	b NM	NM	0.00	--	--	--	--	--	--	--	--	--	
MW6	12/12/05	59.60	b 18.33	41.27	0.00	0.62	<0.50	<0.50	1.0	81	<50	<500	140	--	
MW6	03/29/06	59.60	b 14.53	45.07	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	120	--	
MW6	06/19/06	59.60	b 16.46	43.14	0.00	--	--	--	--	--	--	--	--	--	
MW6	09/29/06	59.60	b 17.60	42.00	0.00	0.87	<0.50	<0.50	<0.50	<50	<50	<100	140	--	
MW6	12/12/06	59.60	b 16.93	42.67	0.00	0.67	<0.50	<0.50	<0.50	<50	<50	230	89	--	
MW6	03/01/07	59.60	b 16.30	43.30	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	78	--	
MW6	06/12/07	59.60	b 17.38	42.22	0.00	--	--	--	--	--	--	--	--	--	
MW6	09/25/07	59.60	b 18.36	41.24	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	89	--	
MW6	12/20/07	59.60	b 17.90	41.70	0.00	--	--	--	--	--	--	--	--	--	
MW6	03/26/08	59.60	b 17.37	42.23	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	68	--	
MW6	06/03/08	59.60	b 17.11	42.49	0.00	--	--	--	--	--	--	--	--	--	
MW6	09/25/08	59.60	b 18.82	40.78	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	78	<5.0	
MW6	12/29/08	59.60	b 18.30	41.30	0.00	0.77	<0.50	<0.50	<0.50	<50	<50	<100	44	<5.0	
MW6	03/24/09	59.60	l 16.80	42.80	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	51	<5.0	
MW6	06/02/09	59.60	l 17.27	42.33	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	59	<5.0	
MW6	09/10/09	59.60	l 18.20	41.40	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	73	< 5.0	
MW6	12/04/09	59.60	l 19.07	40.53	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	50	< 5.0	
MW6	03/10/10	59.60	l 17.80	41.80	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	51	--	
MW6	05/28/10	59.60	l 18.02	41.58	0.00	--	--	--	--	--	--	--	--	--	
MW6	08/26/10	59.60	l 18.70	40.90	0.00	<0.50	<0.50	<0.50	<0.50	<50	<0.50	<100	47	--	
MW6	12/22/10	59.60	l 17.84	41.76	0.00	--	--	--	--	--	--	--	--	--	
MW6	03/16/11	59.60	l 16.94	42.66	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	44	--	
MW6	06/21/11	59.60	l 17.05	42.55	0.00	--	--	--	--	--	--	--	--	--	
MW6	09/14/11	59.60	l 17.97	41.63	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	50	--	
MW6	12/01/11	59.60	l 18.46	41.14	0.00	--	--	--	--	--	--	--	--	--	

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW6	03/08/12	59.60	1	18.49	41.11	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	41	--
MW6	06/04/12	59.60	1	17.05	42.55	0.00	--	--	--	--	--	--	--	--	--
MW6	09/06/12	59.60	1	18.50	41.10	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	51	--
MW7	07/20/00	96.75	a	15.93	80.82	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	<0.50	--
MW7	10/11/00	96.75	a	16.90	79.85	0.00	--	--	--	--	--	--	--	--	--
MW7	04/10-11/01	96.75	a	15.80	80.95	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	<0.50	--
MW7	07/10/01	96.75	a	16.71	80.04	0.00	--	--	--	--	--	--	--	--	--
MW7	11/20/01	59.47	b	16.17	43.30	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	<2.0	--
MW7	02/19/02	59.47	b	14.92	44.55	0.00	--	--	--	--	--	--	--	--	--
MW7	05/21/02	59.47	b	15.18	44.29	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<300	<0.50	--
MW7	06/27/03	59.47	b	16.28	43.19	0.00	--	--	--	--	--	--	--	--	--
MW7	09/29/03	59.47	b	16.88	42.59	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	0.62	--
MW7	12/12/03	59.47	b	14.95	44.52	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--
MW7	03/15/04	59.47	b	14.77	44.70	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--
MW7	06/24/04	59.47	b	16.33	43.14	0.00	<0.50	<0.50	<0.50	<1.0	<50	300	<500	<0.50	--
MW7	09/29/04	59.47	b	16.88	42.59	0.00	--	--	--	--	--	--	--	--	--
MW7	12/13/04	59.47	b	15.26	44.21	0.00	--	--	--	--	--	--	--	--	--
MW7	03/14/05	59.47	b	15.00	44.47	0.00	<0.50	<0.50	<0.50	<1.0	<50	<50	<500	<0.50	--
MW7	06/15/05	59.47	b	15.32	44.15	0.00	--	--	--	--	--	--	--	--	--
MW7	09/26/05	59.47	b	NM	NM	0.00	--	--	--	--	--	--	--	--	--
MW7	12/12/05	59.47	b	15.99	43.48	0.00	--	--	--	--	--	--	--	--	--
MW7	03/29/06	59.47	b	12.65	46.82	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	--
MW7	06/19/06	59.47	b	14.49	44.98	0.00	--	--	--	--	--	--	--	--	--
MW7	09/29/06	59.47	b	16.67	42.80	0.00	--	--	--	--	--	--	--	--	--
MW7	12/12/06	59.47	b	15.21	44.26	0.00	--	--	--	--	--	--	--	--	--
MW7	03/01/07	59.47	b	14.68	44.79	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	--
MW7	06/12/07	59.47	b	16.2	43.27	0.00	--	--	--	--	--	--	--	--	--
MW7	09/25/07	59.47	b	16.72	42.75	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	--
MW7	12/20/07	59.47	b	15.02	44.45	0.00	--	--	--	--	--	--	--	--	--
MW7	03/26/08	59.47	b	15.95	43.52	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	--
MW7	06/03/08	59.47	b	14.24	45.23	0.00	--	--	--	--	--	--	--	--	--
MW7	09/25/08	59.47	b	17.07	42.40	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0
MW7	12/29/08	59.47	b	15.64	43.83	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0
MW7	03/24/09	59.49	1	14.57	44.92	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0
MW7	06/02/09	59.49	1	16.10	43.39	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0
MW7	09/10/09	59.49	1	17.10	42.39	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0
MW7	12/04/09	59.49	1	17.10	42.39	0.00	--	--	--	--	--	--	--	--	--
MW7	03/10/10	59.49	1	15.17	44.32	0.00	--	--	--	--	--	--	--	--	--
MW7	05/28/10	59.49	1	15.20	44.29	0.00	--	--	--	--	--	--	--	--	--
MW7	08/26/10	59.49	1	17.10	42.39	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	--
MW7	12/22/10	59.49	1	14.94	44.55	0.00	--	--	--	--	--	--	--	--	--
MW7	03/16/11	59.49	1	14.75	44.74	0.00	--	--	--	--	--	--	--	--	--
MW7	06/21/11	59.49	1	15.74	43.75	0.00	--	--	--	--	--	--	--	--	--
MW7	09/14/11	59.49	1	16.68	42.81	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--
MW7	12/01/11	59.49	1	16.65	42.84	0.00	--	--	--	--	--	--	--	--	--
MW7	03/08/12	59.49	1	16.07	43.42	0.00	--	--	--	--	--	--	--	--	--
MW7	06/04/12	59.49	1	16.19	43.30	0.00	--	--	--	--	--	--	--	--	--
MW7	09/06/12	59.49	1	16.97	42.52	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	< 0.50	--

TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)									
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA	
MW8	12/29/08	NS	b 15.71	NC	0.00	<0.50	0.64	<0.50	0.78	<50	<50	<100	1.5	<5.0	
MW8	03/24/09	57.07	1 16.08	40.99	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0	
MW8	06/02/09	57.07	1 15.46	41.61	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	<0.50	<5.0	
MW8	09/10/09	57.07	1 15.58	41.49	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	2.4	< 5.0	
MW8	12/04/09	57.07	1 16.27	40.80	0.00	--	--	--	--	--	--	--	--	--	
MW8	03/10/10	57.07	1 14.47	42.60	0.00	--	--	--	--	--	--	--	--	--	
MW8	05/28/10	57.07	1 16.12	40.95	0.00	--	--	--	--	--	--	--	--	--	
MW8	08/26/10	57.07	1 16.36	40.71	0.00	<0.50	<0.50	<0.50	<0.50	<50	<50	<100	1.1	--	
MW8	12/22/10	57.07	1 16.25	40.82	0.00	--	--	--	--	--	--	--	--	--	
MW8	03/16/11	57.07	1 15.66	41.41	0.00	--	--	--	--	--	--	--	--	--	
MW8	06/21/11	57.07	1 15.72	41.35	0.00	--	--	--	--	--	--	--	--	--	
MW8	09/14/11	57.07	1 15.88	41.19	0.00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	< 50	< 100	1.4	--	
MW8	12/01/11	57.07	1 16.01	41.06	0.00	--	--	--	--	--	--	--	--	--	
MW8	03/08/12	57.07	1 16.07	41.00	0.00	--	--	--	--	--	--	--	--	--	
MW8	06/04/12	57.07	1 12.45	44.62	0.00	--	--	--	--	--	--	--	--	--	
MW8	09/06/12	57.07	1 14.66	42.41	0.00	--	--	--	--	--	--	--	--	--	
MW9A	09/10/09	65.90	22.51	43.39	0.00	7,800	33,000	4,500	25,000	160,000	< 20,000	410	1,800	780	
MW9A	12/04/09	65.90	24.42	41.48	0.00	--	--	--	--	--	--	--	--	--	
MW9A (m)	12/28/09	65.90	24.62	41.28	sheen	12,000	34,000	4,300	24,000	180,000	<200,000	3,400	2,100	680	
MW9A	03/10/10	65.90	22.30	43.60	0.00	15,000	42,000	4,800	26,000	210,000	< 40,000	250	2,300	--	
MW9A	05/28/10	65.90	22.62	43.29	(n) 0.02	Not Sampled due to Free Product									
MW9A	08/26/10	65.90	23.21	42.70	0.00	2,600	19,000	3,000	22,000	150,000	<500,000	11,000	75	--	
MW9A	09/21/10	65.90	NM	NC	0.00	1,400	9,600	1,600	12,000	70,000	--	--	--	--	
MW9A	12/22/10	65.90	22.63	43.28	0.00	4,400	17,000	1,900	13,000	83,000	<1500	<100	250	--	
MW9A	03/16/11	65.90	20.31	45.60	0.00	4,900	22,000	2,800	20,000	130,000	< 1500	230	620	--	
MW9A	06/21/11	65.90	20.36	45.55	0.00	16	33	39	230	2800	< 300	< 100	28	--	
MW9A	09/14/11	65.90	22.24	43.67	0.00	3700	17000	2800	21000	120000	< 25000	1400	720	--	
MW9A	12/01/11	65.90	23.02	42.89	0.00	3,700	14,000	2,000	15,000	98,000	<2000	410	670	--	
MW9A	03/08/12	65.90	22.90	43.01	0.00	4600	16000	2100	17000	97000	< 300	< 100	810	--	
MW9A	06/04/12	65.90	21.51	44.40	0.00	3,800	12,000	1,300	13,000	93,000	< 300	< 100	860	--	
MW9A	09/06/12	65.90	23.60	42.31	0.00	2,800	13,000	1,800	13,000	110,000	< 800	430	420	--	
MW9B	09/10/09	65.85	22.30	43.55	0.00	640	4,500	1,100	6,500	36,000	< 3,000	< 100	61	< 50	
MW9B	12/04/09	65.85	24.00	41.85	0.00	63	250	180	620	5,600	< 300	< 100	3.1	< 5.0	
MW9B	03/10/10	65.85	22.41	43.44	0.00	98	310	340	900	7,500	< 600	< 100	5.7	--	
MW9B	05/28/10	65.85	22.50	43.35	0.00	31	75	150	270	2,900	< 400	< 100	2.9	--	
MW9B	08/26/10	65.85	23.31	42.54	0.00	13	160	310	2,000	14,000	<1000	<100	88	--	
MW9B	09/20/10	65.85	NM	NC	0.00	7	110	140	830	6,200	--	--	--	--	
MW9B	12/22/10	65.85	23.20	42.65	0.00	<0.5	3	1	10	140	<50	<100	4.5	--	
MW9B	03/16/11	65.85	20.14	45.71	0.00	22	39	47	290	3,500	< 300	< 100	38	--	
MW9B	06/21/11	65.85	20.30	45.55	0.00	9.2	29	38	260	2200	< 300	< 100	41	--	
MW9B	09/14/11	65.85	21.44	44.41	0.00	17	22	47	220	2200	< 400	< 100	66	--	
MW9B	12/01/11	65.85	23.17	42.68	0.00	9	68	32	190	1,000	<50	<100	79	--	
MW9B	03/08/12	65.85	23.59	42.26	0.00	3.8	6.4	13	59	560	< 50	< 100	48	--	
MW9B	06/04/12	65.85	21.50	44.35	0.00	34	56	38	160	1,400	< 50	< 100	40	--	
MW9B	09/06/12	65.85	23.65	42.20	0.00	1.5	1.4	2.4	15	230	< 50	< 100	11	--	
O1	09/10/09	65.91	22.44	43.47	0.00	960	2,400	1,000	4,600	23,000	< 1,500	< 100	180	84	



TABLE 5 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA  
 FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Concentration (µg/L)								
						Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	TBA
O1	12/04/09	65.91	24.33	41.58	0.00	1,000	3,700	1,700	7,400	38,000	< 1000	< 100	310	200
O1	03/10/10	65.91	22.20	43.71	0.00	660	2,600	970	5,300	29,000	< 1000	< 100	200	--
O1	05/28/10	65.91	22.49	43.42	0.00	610	2,000	1,000	4,200	21,000	< 1500	< 100	270	--
O1	08/26/10	65.91	23.25	42.66	0.00	29	160	59	680	5,000	<500	<100	97	--
O1	09/20/10	65.91	NM	NC	0.00	24	140	28	330	2,000	--	--	--	--
O1	12/22/10	65.91	22.70	43.21	0.00	10	35	3	30	460	<50	<100	220	--
O1	03/16/11	65.91	20.19	45.72	0.00	200	440	240	850	6,900	< 300	< 100	180	--
O1	06/21/11	65.91	20.31	45.60	0.00	320	530	400	1500	8900	< 400	< 100	260	--
O1	09/14/11	65.91	22.16	43.75	0.00	320	540	510	1500	9000	< 1000	< 100	170	--

**Appendix A**  
**O&M Field Sheets**



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SP  
 Date: 7/3/12

System Parameters	Arrival		Departure
Total Hour Meter (blower)	23.1		26.7
Blower Amps			
<b>Influent</b>			
Time	0945	1114	1310
Pipe ID diameter (in.)	2"	2"	2"
Differential Pressure (in. H <sub>2</sub> O)			
Vacuum (in. H <sub>2</sub> O)	26" Hg		
Temperature (°F)	65		
Total hydrocarbons (ppmv)	800	426	1081
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
<b>Effluent</b>	n/a	0.0	0.0
Time	0951		
Pipe ID diameter (in.)	3"	3"	3"
Differential Pressure (in. H <sub>2</sub> O)	0.19		
Temperature (°F)	65		
Total hydrocarbons (ppmv)	0.0	0.0	0.0
Sample ID #	EFFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
	Active on arrival? <small>(circle one)</small> <input checked="" type="radio"/> Yes <input type="radio"/> No		Monitoring device: <small>(circle one)</small> FID <input type="radio"/> <input checked="" type="radio"/> PID <input type="radio"/> IR
	Active on departure? <small>(circle one)</small> <input checked="" type="radio"/> Yes <input type="radio"/> No		Dilution Air Yes <input type="radio"/> No <input checked="" type="radio"/>
	Shut Down Date		Restart date:
<b>Wells</b>			
Name			
Pipe ID diameter (in.)	2"	2"	2"
Vacuum (in. H <sub>2</sub> O)			
Differential Pressure (in. H <sub>2</sub> O)			
Temperature (°F)			
Total hydrocarbons (ppmv)			

Comments: \_\_\_\_\_

TOTALIZER = 8427, Instant GPM = 5.0, After 16 gm  
 Midpoint - 0.0 ppm  
 MW-2 Struger @ 28.5 Lower to 30' BG  
 MW-3 " @ 24.0  
 Changed BAG Filter Diff pressure @ 20 psi  
 1215 TOTALIZER 9233 Instant 15.0 gpm



**SYSTEM MONITORING DATA SHEET**

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SP  
 Date: 7/4/12

System Parameters		Arrival	Departure
Total Hour Meter (blower)		48.1	49.6
Blower Amps		13.1 12.9 12.8	13.1, 12.7, 12.7
<b>Influent</b>			
Time		10:45	12:00
Pipe ID diameter (in.)		2"	2"
Differential Pressure (in. H <sub>2</sub> O)		.67	.68
Vacuum (in. H <sub>2</sub> O)		-25 Hg	-25 Hg
Temperature (°F)		65	65
Total hydrocarbons (ppmv)		1480	1510
Sample ID #		INFLUENT	Sample Time
Analyses		TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil	
<b>Effluent</b>			
Time		10:46	11:58
Pipe ID diameter (in.)		3"	3"
Differential Pressure (in. H <sub>2</sub> O)		.02	.026
Temperature (°F)		67	71
Total hydrocarbons (ppmv)		0.0	0.0
Sample ID #		EFFLUENT	Sample Time
Analyses		TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil	
	Active on arrival?	(circle one) Yes No	Monitoring device: FID (circle one) PID IR
	Active on departure?	Yes No	Dilution Air Yes (circle one) No
	Shut Down Date		Restart date:
<b>Wells</b>			
Name			
Pipe ID diameter (in.)		2"	2"
Vacuum (in. H <sub>2</sub> O)			
Differential Pressure (in. H <sub>2</sub> O)			
Temperature (°F)			
Total hydrocarbons (ppmv)			

Comments: TOTALIZER 17301, Instant Flow Bag Filter pressure  
115, 137, 136 } Bag Filter Diff - In - 12psi out 2psi  
11, 12 LZT3 T3-L1 midpoint 0.0  
226 227 227



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough

Job #: TMSTROUGH

Site: 327 34th Street

Technician: SO

Oakland, CA

Date: 7/5/12

System Parameters	Arrival		Departure
Total Hour Meter (blower)	71.0		72.8
Blower Amps			13.6 13.1, 12.9
<b>Influent</b>			
Time	0920	1030	1115
Pipe ID diameter (in.)	2"	2"	2"
Differential Pressure (in. H <sub>2</sub> O)	.73		
Vacuum (in. H <sub>2</sub> O)	25" Hg	-25 Hg	-25 Hg
Temperature (°F)	65	65	65
Total hydrocarbons (ppmv)	1239	1341	1382
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
<b>Midpoint</b>			
Total hydrocarbons (ppmv)	0.0	0.0	0.0
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
<b>Effluent</b>			
Time	0923		
Pipe ID diameter (in.)	3"	3"	3"
Differential Pressure (in. H <sub>2</sub> O)	.025	.027	
Temperature (°F)	65	65	
Total hydrocarbons (ppmv)	0.0	0.0	
Sample ID #	EFFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
	Active on arrival? <input checked="" type="radio"/> Yes <input type="radio"/> No Active on departure? <input checked="" type="radio"/> Yes <input type="radio"/> No Shut Down Date		Monitoring device: FID <input type="radio"/> <input checked="" type="radio"/> PID <input type="radio"/> IR Dilution Air Yes <input type="radio"/> <input checked="" type="radio"/> No Restart date:
<b>Wells</b>			
Name			
Pipe ID diameter (in.)	2"	2"	2"
Vacuum (in. H <sub>2</sub> O)			
Differential Pressure (in. H <sub>2</sub> O)			
Temperature (°F)			
Total hydrocarbons (ppmv)			

Comments: TOTALIZER = 21488 Instant = 15 ppm  
MW-3 strough @ 28.5, MW-2 @ 30" BG  
21790 @ 1046

L1 233/L2 234/T3 233/L1  
120V 143V 140V

*Siobhan*



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: [Signature]  
 Date: 7/6/12

System Parameters	Arrival	Departure	
Total Hour Meter (blower)	95.6	97.8	
Blower Amps	14.3/13.5/13.5	14.1 13.2 13.3	
<b>Influent</b>			
Time	1019		
Pipe ID diameter (in.)	2"	2"	2"
Differential Pressure (in. H <sub>2</sub> O)	.85		.85
Vacuum (in. H <sub>2</sub> O)	23"		23
Temperature (°F)	67		67
Total hydrocarbons (ppmv)	1296	1209	1206
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
<b>Midpoint</b>			
Total hydrocarbons (ppmv)	0.0	0.0	0.0
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
<b>Effluent</b>			
Time			
Pipe ID diameter (in.)	3"	3"	3"
Differential Pressure (in. H <sub>2</sub> O)	.025		.031
Temperature (°F)	64		67
Total hydrocarbons (ppmv)	0.0	0.0	0.0
Sample ID #	EFFLUENT		Sample Time
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
Active on arrival? <input checked="" type="radio"/> Yes <input type="radio"/> No Active on departure? <input checked="" type="radio"/> Yes <input type="radio"/> No Shut Down Date		Monitoring device: FID <input checked="" type="radio"/> PID <input type="radio"/> IR Dilution Air Yes <input checked="" type="radio"/> No Restart date:	
<b>Wells</b>			
Name			
Pipe ID diameter (in.)	2"	2"	2"
Vacuum (in. H <sub>2</sub> O)			
Differential Pressure (in. H <sub>2</sub> O)			
Temperature (°F)			
Total hydrocarbons (ppmv)			

Comments: 28742 Total @ 15ppm | Bag 14 PSI  
MW9A @ 15" VAC oil filter press - 1psi | 8out  
MW-9B 5.0" Blower Temp 160°F  
MW-1 1.8"  
MW-4 0.26"  
0-1 2.2"

L1 118v 232  
 L2 143v 232  
 T3 140v 234



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SP  
 Date: 7/13/12

System Parameters	Arrival	Departure
Total Hour Meter (blower)	243.50	245.0
Blower Amps		
<b>Influent</b>		
Time		
Pipe ID diameter (in.)	2"	2"
Differential Pressure (in. H <sub>2</sub> O)	.770	
Vacuum (in. H <sub>2</sub> O)	- 25	
Temperature (°F)	63	
Total hydrocarbons (ppmv)	1656	1880
Sample ID #	INFLUENT	Sample Time
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil	
<b>Midpoint</b>		
Total hydrocarbons (ppmv)		300
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil	
<b>Effluent</b>		
Time		
Pipe ID diameter (in.)	3"	3"
Differential Pressure (in. H <sub>2</sub> O)		.020
Temperature (°F)		67
Total hydrocarbons (ppmv)		0.0
Sample ID #	EFFLUENT	Sample Time
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil	
	<del>High</del> <u>Knockout</u> (circle one) Active on arrival? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Active on departure? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Shut Down Date _____	(circle one) Monitoring device: FID <input type="checkbox"/> <u>PID</u> <input type="checkbox"/> IR Dilution Air Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Restart date: <u>7/13/12</u>
<b>Wells</b>		
Name		
Pipe ID diameter (in.)	2"	2"
Vacuum (in. H <sub>2</sub> O)		
Differential Pressure (in. H <sub>2</sub> O)		
Temperature (°F)		
Total hydrocarbons (ppmv)		

Comments: Effluent 67300  
Unit Down High Knockout / clogged Bag Filter  
Changed Filter - Restarted Unit  
Primary Carbon had Breakthrough, water in  
Carbon Vessel, scheduled C/O for Monday.  
Left system off, Departed



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SP  
 Date: 7/17/12

System Parameters	Arrival		Departure
Total Hour Meter (blower)	245		277.50
Blower Amps	13, 12.9, 13		
<b>Influent</b>			
Time			
Pipe ID diameter (in.)	2"	2"	2"
Differential Pressure (in. H <sub>2</sub> O)	.80		
Vacuum (in. H <sub>2</sub> O)	.25		
Temperature (°F)	69		
Total hydrocarbons (ppmv)	1080		
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
<b>Midpoint</b>			
Total hydrocarbons (ppmv)	0.0		
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
<b>Effluent</b>			
Time			
Pipe ID diameter (in.)	3"	3"	3"
Differential Pressure (in. H <sub>2</sub> O)	.022		
Temperature (°F)	65		
Total hydrocarbons (ppmv)	0.0		
Sample ID #	EFFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
	(circle one) Active on arrival? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		(circle one) Monitoring device: FID <input checked="" type="checkbox"/> IR <input type="checkbox"/>
	Active on departure? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Dilution Air Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Shut Down Date <u>7/13/12</u>		Restart date: <u>7/17/12</u>
<b>Wells</b>			
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)
<b>Water System</b>			
EFF-67700 Instant Flow 15gpm			
Filter Inlet pressure = 12 outlet press = 8			
Inlet Amp 32, 32			
APDEN p 13.3, 13.2, 13.9			





# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SP  
 Date: 7/19/12

Vapor System Parameters		Arrival	Departure	
Total Hour Meter (blower)		290.3	291.8	
Blower Amps		14.1/13.1/12.6		
<b>Influent</b>				
Time		1149		
Pipe ID diameter (in.)		2"	2"	
Differential Pressure (in. H <sub>2</sub> O)		.75		
Vacuum (in. H <sub>2</sub> O)		-25		
Temperature (°F)		65		
Total hydrocarbons (ppmv)		1785		
Sample ID #	INFLUENT	Sample Time	1132	
Analyses	TPH as Gas, BTEX, MTBE			
<b>Midpoint</b>				
Total hydrocarbons (ppmv)		30.0		
Analyses	TPH as Gas, BTEX, MTBE <i>sample time / H32</i>			
<b>Effluent</b>				
Time		1152		
Pipe ID diameter (in.)		3"	3"	
Differential Pressure (in. H <sub>2</sub> O)		.022		
Temperature (°F)		71		
Total hydrocarbons (ppmv)		0.0		
Sample ID #	EFFLUENT	Sample Time	1125	
Analyses	TPH as Gas, BTEX, MTBE			
		(circle one)	(circle one)	
Active on arrival?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Monitoring device: FID <input checked="" type="radio"/> PID <input type="radio"/> IR		
Active on departure?	<input checked="" type="radio"/> Yes <input type="radio"/> No	Dilution Air Yes <input checked="" type="radio"/> No		
Shut Down Date		Restart date:		
<b>Wells</b>				
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	
			Temperature (°F)	
			TPH (ppmv)	
<b>Water System Parameters</b>		Arrival	Departure	
Bag Filter LCO-8 micron?	Effluent Totalizer	82,000		
	Flow Rate (gpm)	129 gpm		
	Bag Filter inlet (psi)	16	Bag Filter outlet (psi)	8
	Analyses	TPH as Gas, BTEX, MTBE		TPH diesel TPH motor oil
Sample Times	INFLUENT	1106	MIDPOINT 1110	
#	EFFLUENT	1115		

MAIN = 28A - 25A

1129



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough

Job #: TMSTROUGH

Site: 327 34th Street  
Oakland, CA

Technician: [Signature]

Date: 7/23/12

Vapor System Parameters		Arrival	Departure
Total Hour Meter (blower)		317.7	32010
Blower Amps			
Influent			
Time		1430	
Pipe ID diameter (in.)		2"	2"
Differential Pressure (in. H <sub>2</sub> O)		.81	
Vacuum (in. H <sub>2</sub> O)		27"	
Temperature (°F)		70	
Total hydrocarbons (ppmv)		2200	2800
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
Midpoint			
Total hydrocarbons (ppmv)		0.0	0.0
Sample ID #	MIDPOINT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
Effluent			
Time			
Pipe ID diameter (in.)		3"	3"
Differential Pressure (in. H <sub>2</sub> O)		.030	.031
Temperature (°F)		71	71
Total hydrocarbons (ppmv)		0.0	0.0
Sample ID #	EFFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
		Active on arrival? Yes <input checked="" type="radio"/> No <input type="radio"/>	Monitoring device: FID <input type="radio"/> PID <input checked="" type="radio"/> IR <input type="radio"/>
		Active on departure? Yes <input checked="" type="radio"/> No <input type="radio"/>	Dilution Air Yes <input type="radio"/> No <input checked="" type="radio"/>
		Shut Down Date <u>7/20/12</u>	Restart date:
Wells			
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)
			Temperature (°F)
			TPH (ppmv)
Water System Parameters		Arrival	Departure
Effluent Totalizer			<del>87400</del>
Flow Rate (gpm)		10	16
Bag Filter inlet (psi)		22	12
Bag Filter outlet (psi)		7	5
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
H <sub>2</sub> O Sample Times	INFLUENT		MIDPOINT
	EFFLUENT		



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SP  
 Date: 7/30/12

Vapor System Parameters		Arrival	Departure
Total Hour Meter (blower)		415	
Blower Amps			
Influent			
Time			
Pipe ID diameter (in.)		2"	2"
Differential Pressure (in. H <sub>2</sub> O)		0.79	
Vacuum (in. H <sub>2</sub> O)		27" Hg	
Temperature (°F)		71	
Total hydrocarbons (ppmv)		2100	
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
Midpoint			
Total hydrocarbons (ppmv)		0.0	
Sample ID #	MIDPOINT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
Effluent			
Time			
Pipe ID diameter (in.)		3"	3"
Differential Pressure (in. H <sub>2</sub> O)		0.30	
Temperature (°F)		71	
Total hydrocarbons (ppmv)		0.0	
Sample ID #	EFFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
	Active on arrival? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (circle one) Active on departure? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Shut Down Date	Monitoring device: FID <input checked="" type="checkbox"/> PID <input type="checkbox"/> IR <input type="checkbox"/> (circle one) Dilution Air Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Restart date:	
Wells			
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	TPH (ppmv)
		Diff. press (in. H <sub>2</sub> O)	Temperature (°F)
Water System Parameters		Arrival	Departure
Effluent Totalizer		113900	
Flow Rate (gpm)			
Bag Filter inlet (psi)			Bag Filter outlet (psi)
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
H <sub>2</sub> O Sample Times	INFLUENT	MIDPOINT	
	EFFLUENT		



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: JP  
 Date: 8/6/12

Vapor System Parameters		Arrival		Departure	
Total Hour Meter (blower)		541			
Blower Amps					
Influent					
Time					
Pipe ID diameter (in.)		2"	2"	2"	
Differential Pressure (in. H <sub>2</sub> O)		.80			
Vacuum (in. H <sub>2</sub> O)		26"			
Temperature (°F)		61			
Total hydrocarbons (ppmv)		1400			
Sample ID #		INFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
Midpoint					
Total hydrocarbons (ppmv)		40			
Sample ID #		MIDPOINT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
Effluent					
Time					
Pipe ID diameter (in.)		3"	3"	3"	
Differential Pressure (in. H <sub>2</sub> O)		.027			
Temperature (°F)		70			
Total hydrocarbons (ppmv)		0.0			
Sample ID #		EFFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
		(circle one) Active on arrival? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Monitoring device: FID <input type="checkbox"/> PID <input checked="" type="checkbox"/> IR <input type="checkbox"/>		
		Active on departure? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Dilution Air Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
		Shut Down Date <u>~8/4/12</u>	Restart date:		
Wells					
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	Temperature (°F)	TPH (ppmv)
Water System Parameters		Arrival		Departure	
Effluent Totalizer		146300			
Flow Rate (gpm)		~12			
Bag Filter inlet (psi)		20	10	Bag Filter outlet (psi) <u>10</u>	
Analyses		TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil			
H <sub>2</sub> O Sample Times		INFLUENT		MIDPOINT	
		EFFLUENT			



### SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SP  
 Date: 8/25/12

Vapor System Parameters		Arrival		Departure	
Total Hour Meter (blower)		541		543	
Blower Amps					
<b>Influent</b>					
Time					
Pipe ID diameter (in.)		2"	2"	2"	
Differential Pressure (in. H <sub>2</sub> O)					
Vacuum (in. H <sub>2</sub> O)		23" Hg			
Temperature (°F)		65			
Total hydrocarbons (ppmv)		1419			
Sample ID #	INFLUENT	Sample Time			
Analyses	TPH as Gas, BTEX, MTBE				
<b>Midpoint</b>					
Total hydrocarbons (ppmv)		0			
Sample ID #	MIDPOINT	Sample Time			
Analyses	TPH as Gas, BTEX, MTBE				
<b>Effluent</b>					
Time					
Pipe ID diameter (in.)		3"	3"	3"	
Differential Pressure (in. H <sub>2</sub> O)		.027			
Temperature (°F)		65			
Total hydrocarbons (ppmv)		0			
Sample ID #	EFFLUENT	Sample Time			
Analyses	TPH as Gas, BTEX, MTBE				
		(circle one) Active on arrival? Yes <input type="radio"/> No <input checked="" type="radio"/>		(circle one) Monitoring device: FID <input checked="" type="radio"/> PID <input type="radio"/> IR <input type="radio"/>	
		Active on departure? Yes <input checked="" type="radio"/> No <input type="radio"/>		Dilution Air Yes <input type="radio"/> No <input checked="" type="radio"/>	
		Shut Down Date <u>8/7/12</u>		Restart date: <u>8/25/12</u>	
<b>Wells</b>					
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	Temperature (°F)	TPH (ppmv)
<b>Water System Parameters</b>					
Effluent Totalizer		Arrival		Departure	
Flow Rate (gpm)				146500	
Bag Filter inlet (psi)				15	
Analyses			Bag Filter outlet (psi)	5	3
TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil					
H <sub>2</sub> O Sample Times		INFLUENT		MIDPOINT	
		EFFLUENT			



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: 370  
 Date: 8/30/12

Vapor System Parameters		Arrival	Departure
Total Hour Meter (blower)			
Blower Amps		<del>571</del> 571	<del>574</del> 574
Influent			
Time			
Pipe ID diameter (in.)		2"	2"
Differential Pressure (in. H <sub>2</sub> O)			.79
Vacuum (in. H <sub>2</sub> O)			27
Temperature (°F)		71	1329
Total hydrocarbons (ppmv)			↓
Sample ID #		INFLUENT	Sample Time <del>847</del> 852
Analyses		TPH as Gas, BTEX, MTBE	
Midpoint			
Total hydrocarbons (ppmv)		0.0	
Sample ID #		MIDPOINT	Sample Time 847
Analyses		TPH as Gas, BTEX, MTBE	
Effluent			
Time			
Pipe ID diameter (in.)		3"	3"
Differential Pressure (in. H <sub>2</sub> O)			.025
Temperature (°F)			71
Total hydrocarbons (ppmv)			0.0
Sample ID #		EFFLUENT	Sample Time 845
Analyses		TPH as Gas, BTEX, MTBE	
		(circle one) Active on arrival? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	(circle one) Monitoring device: FID <input type="checkbox"/> PID <input checked="" type="checkbox"/> IR
		Active on departure? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Dilution Air Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		Shut Down Date 8/24	Restart date: 8/30/12
Wells			
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)
Water System Parameters		Arrival	Departure
Effluent Totalizer		<del>15100</del>	153500
Flow Rate (gpm)		15	
Bag Filter inlet (psi)		20	Bag Filter outlet (psi) 20
Analyses		TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil	
H <sub>2</sub> O Sample Times		INFLUENT 830	MIDPOINT 829
		EFFLUENT 825	



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough

Job #: TMSTROUGH

Site: 327 34th Street  
Oakland, CA

Technician: SP  
Date: 9/6/12

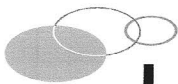
<b>Vapor System Parameters</b>		Arrival		Departure	
		Total Hour Meter (blower)	666		
		Blower Amps			
<b>Influent</b>					
		Time			
		Pipe ID diameter (in.)	2"	2"	
		Differential Pressure (in. H <sub>2</sub> O)			
		Vacuum (in. H <sub>2</sub> O)			
		Temperature (°F)			
		Total hydrocarbons (ppmv)			
		Sample ID #	INFLUENT	Sample Time	
		Analyses	TPH as Gas, BTEX, MTBE		
<b>Midpoint</b>					
		Total hydrocarbons (ppmv)			
		Sample ID #	MIDPOINT	Sample Time	
		Analyses	TPH as Gas, BTEX, MTBE		
<b>Effluent</b>					
		Time			
		Pipe ID diameter (in.)	3"	3"	
		Differential Pressure (in. H <sub>2</sub> O)			
		Temperature (°F)			
		Total hydrocarbons (ppmv)			
		Sample ID #	EFFLUENT	Sample Time	
		Analyses	TPH as Gas, BTEX, MTBE		
		Active on arrival?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Monitoring device: FID <input type="checkbox"/> PID <input checked="" type="checkbox"/> IR <input type="checkbox"/>	
		Active on departure?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Dilution Air Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
		Shut Down Date	2 9/2/12		
		Restart date:	8/6/12		
<b>Wells</b>					
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	Temperature (°F)	TPH (ppmv)
<b>Water System Parameters</b>					
		Arrival		Departure	
		Effluent Totalizer	174200		
		Flow Rate (gpm)	15		
		Bag Filter inlet (psi)		Bag Filter outlet (psi)	
		Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
H <sub>2</sub> O Sample Times		INFLUENT		MIDPOINT	
		EFFLUENT			

# Water Level Measurements

Job Number:	TMSTROUGH	Date:	<del>3/8/2012</del> 9/5/12	Client:	VAL STROUGH			
Site: FORMER VAL STROUGH CHEVROLET, 327 34TH STREET, OAKLAND								
Well ID.	Time	Diam	Depth to Product	Product Thickness	Depth To Water (DTW)	Total Depth (Measured)	Total Depth (Historical)	Notes
MW1	1154	2			22.10		31.20	
MW2	1208	2			29.1		32.00	
MW3	1212	2			27.5		32.00	
MW4	1152	2			21.88		27.90	
MW5	1150	2			23.86		26.55	
MW6	1141	2			18.5		27.00	
MW7	1132	2			16.97		34.80	
MW8	1146	2			14.66		26.70	
MW9A	1204	2			23.6		24.90	
MW9B	1205	2			23.65		38.85	
O1	1202	2			25.1		39.82	

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**SYSTEM MONITORING DATA SHEET**

Client: Former Val Strough  
Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
Technician: SP  
Date: 9/7/12

Vapor System Parameters		Arrival	Departure
Total Hour Meter (blower)		68215	690.0
Blower Amps			12.7, 13.2, 12.5
Influent			
Time			1331
Pipe ID diameter (in.)	2"	2"	2"
Differential Pressure (in. H <sub>2</sub> O)			.85
Vacuum (in. H <sub>2</sub> O)			24
Temperature (°F)			65
Total hydrocarbons (ppmv)			4000
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
Midpoint			
Total hydrocarbons (ppmv)			0.0
Sample ID #	MIDPOINT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
Effluent			
Time			
Pipe ID diameter (in.)	3"	3"	3"
Differential Pressure (in. H <sub>2</sub> O)			.050
Temperature (°F)			78
Total hydrocarbons (ppmv)			0.0
Sample ID #	EFFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
Active on arrival? <input checked="" type="radio"/> Yes <input type="radio"/> No		Monitoring device: FID <input checked="" type="radio"/> PID <input type="radio"/> IR	
Active on departure? <input checked="" type="radio"/> Yes <input type="radio"/> No		Dilution Air Yes <input checked="" type="radio"/> No	
Shut Down Date		Restart date:	
Wells			
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)
Water System Parameters		Arrival	Departure
Effluent Totalizer			182,300
Flow Rate (gpm)			15 gpm
Bag Filter inlet (psi)		Bag Filter outlet (psi)	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
H <sub>2</sub> O Sample Times	INFLUENT	MIDPOINT	
	EFFLUENT		

661 174200



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: [Signature]  
 Date: 9/11/12

Vapor System Parameters		Arrival	Departure
Total Hour Meter (blower)		780.6	782.1
Blower Amps			
<b>Influent</b>			
Time			
Pipe ID diameter (in.)		2"	2"
Differential Pressure (in. H <sub>2</sub> O)		0.81	
Vacuum (in. H <sub>2</sub> O)		25	
Temperature (°F)		69	
Total hydrocarbons (ppmv)		>5000 ppm	
Sample ID #	INFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
<b>Midpoint</b>			
Total hydrocarbons (ppmv)		37.0	
Sample ID #	MIDPOINT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
<b>Effluent</b>			
Time			
Pipe ID diameter (in.)		3"	3"
Differential Pressure (in. H <sub>2</sub> O)		1.030	
Temperature (°F)		65	
Total hydrocarbons (ppmv)		0.0	
Sample ID #	EFFLUENT	Sample Time	
Analyses	TPH as Gas, BTEX, MTBE		
	Active on arrival?	(circle one) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Monitoring device: FID <input type="checkbox"/> PID <input checked="" type="checkbox"/> IR <input type="checkbox"/>
	Active on departure?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Dilution Air Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Shut Down Date	9-11-12	
<b>Wells</b>			
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)
<b>Water System Parameters</b>		Arrival	Departure
Effluent Totalizer		203400	
Flow Rate (gpm)		10 gpm	
Bag Filter inlet (psi)		18	8
Bag Filter outlet (psi)			
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil		
H <sub>2</sub> O Sample Times	INFLUENT	MIDPOINT	
	EFFLUENT		

went





# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: [Signature]  
 Date: 9/14

Vapor System Parameters		Arrival		Departure	
Total Hour Meter (blower)		782		785	
Blower Amps					
Influent					
Time					
Pipe ID diameter (in.)		2"	2"	2"	
Differential Pressure (in. H <sub>2</sub> O)		0.22			
Vacuum (in. H <sub>2</sub> O)		217			
Temperature (°F)		45			
Total hydrocarbons (ppmv)		850			
Sample ID #		INFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
Midpoint					
Total hydrocarbons (ppmv)		0.0			
Sample ID #		MIDPOINT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
Effluent					
Time					
Pipe ID diameter (in.)		3"	3"	3"	
Differential Pressure (in. H <sub>2</sub> O)		0.016			
Temperature (°F)		65			
Total hydrocarbons (ppmv)		0.0			
Sample ID #		EFFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
Active on arrival? Yes <input type="radio"/> No <input checked="" type="radio"/>		(circle one)		Monitoring device: FID <input type="radio"/> PID <input checked="" type="radio"/> IR	
Active on departure? <input checked="" type="radio"/> Yes <input type="radio"/> No				Dilution Air <input checked="" type="radio"/> Yes <input type="radio"/> No	
Shut Down Date		9/14/12		Restart date: 9/14/12	
Wells					
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	Temperature (°F)	TPH (ppmv)
Water System Parameters		Arrival		Departure	
Effluent Totalizer		203400		203600	
Flow Rate (gpm)		15			
Bag Filter inlet (psi)		10	Bag Filter outlet (psi)	10	
Analyses		TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil			
H <sub>2</sub> O Sample Times		INFLUENT		MIDPOINT	
		EFFLUENT			



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough

Job #: TMSTROUGH

Site: 327 34th Street

Technician: [Signature]

Oakland, CA

Date: 9/12/12

Vapor System Parameters		Arrival			Departure
Total Hour Meter (blower)		859.5			861.4
Blower Amps					
<b>Influent</b>					
Time					
Pipe ID diameter (in.)		2"		2"	2"
Differential Pressure (in. H <sub>2</sub> O)		.22			
Vacuum (in. H <sub>2</sub> O)		16			
Temperature (°F)					
Total hydrocarbons (ppmv)		1000	Bag	834	
Sample ID #		INFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
<b>Midpoint</b>					
Total hydrocarbons (ppmv)		0.0			
Sample ID #		MIDPOINT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
<b>Effluent</b>					
Time					
Pipe ID diameter (in.)		3"		3"	3"
Differential Pressure (in. H <sub>2</sub> O)					
Temperature (°F)					
Total hydrocarbons (ppmv)		0.0			
Sample ID #		EFFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
		(circle one) Active on arrival? <input checked="" type="radio"/> Yes <input type="radio"/> No		(circle one) Monitoring device: <input checked="" type="radio"/> FID <input checked="" type="radio"/> PID <input type="radio"/> IR	
		(circle one) Active on departure? <input checked="" type="radio"/> Yes <input type="radio"/> No		Dilution Air <input checked="" type="radio"/> Yes <input type="radio"/> No	
		Shut Down Date			
<b>Wells</b>					
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	Temperature (°F)	TPH (ppmv)
<b>Water System Parameters</b>					
		Arrival			Departure
Effluent Totalizer		207600			
Flow Rate (gpm)					
Bag Filter inlet (psi)			Bag Filter outlet (psi)		
Analyses		TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil			
H <sub>2</sub> O Sample Times		INFLUENT		MIDPOINT	
		EFFLUENT			



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: [Signature]  
 Date: 9/21/12

Vapor System Parameters		Arrival		Departure	
Total Hour Meter (blower)		951.5		953.0	
Blower Amps					
<b>Influent</b>		MW-2 only			
Time					
Pipe ID diameter (in.)		2"	2"	2"	
Differential Pressure (in. H <sub>2</sub> O)		0			
Vacuum (in. H <sub>2</sub> O)		16"		18"	
Temperature (°F)		65		65	
Total hydrocarbons (ppmv)		975		250	
Sample ID #	INFLUENT	Sample Time			
Analyses	TPH as Gas, BTEX, MTBE				
<b>Midpoint</b>					
Total hydrocarbons (ppmv)		0.0			
Sample ID #	MIDPOINT	Sample Time			
Analyses	TPH as Gas, BTEX, MTBE				
<b>Effluent</b>					
Time					
Pipe ID diameter (in.)		3"	3"	3"	
Differential Pressure (in. H <sub>2</sub> O)		1016		1014	
Temperature (°F)		67		67	
Total hydrocarbons (ppmv)		0.0			
Sample ID #	EFFLUENT	Sample Time			
Analyses	TPH as Gas, BTEX, MTBE				
		(circle one) Active on arrival? <input checked="" type="radio"/> Yes <input type="radio"/> No		(circle one) Monitoring device: FID <input checked="" type="radio"/> PID <input type="radio"/> IR	
		Active on departure? <input checked="" type="radio"/> Yes <input type="radio"/> No		Dilution Air <input checked="" type="radio"/> Yes <input type="radio"/> No	
		Shut Down Date		Restart date:	
<b>Wells</b>					
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	Temperature (°F)	TPH (ppmv)
<b>Water System Parameters</b>		Arrival		Departure	
Effluent Totalizer		212700		212724	
Flow Rate (gpm)					
Bag Filter inlet (psi)	20		Bag Filter outlet (psi)	10	
Analyses	TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil				
H <sub>2</sub> O Sample Times	INFLUENT		MIDPOINT		
	EFFLUENT				

Switch 2 MW-3 As per Mechanic  
 changed Bag Filter



# SYSTEM MONITORING DATA SHEET

Client: Former Val Strough  
 Site: 327 34th Street  
Oakland, CA

Job #: TMSTROUGH  
 Technician: SB  
 Date: 9/26/12

Vapor System Parameters		Arrival		Departure	
Total Hour Meter (blower)		999.4		1001.1	
Blower Amps					
<b>Influent</b>					
Time					
Pipe ID diameter (in.)		2"	2"	2"	
Differential Pressure (in. H <sub>2</sub> O)					
Vacuum (in. H <sub>2</sub> O)		16"		20"	
Temperature (°F)		67		67	
Total hydrocarbons (ppmv)		125		257	
Sample ID #		INFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
<b>Midpoint</b>					
Total hydrocarbons (ppmv)		0.0			
Sample ID #		MIDPOINT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
<b>Effluent</b>					
Time					
Pipe ID diameter (in.)		3"	3"	3"	
Differential Pressure (in. H <sub>2</sub> O)					
Temperature (°F)					
Total hydrocarbons (ppmv)		0.0			
Sample ID #		EFFLUENT	Sample Time		
Analyses		TPH as Gas, BTEX, MTBE			
Down High Knockout clogged Bag	Active on arrival?	(circle one) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Monitoring device: FID <input checked="" type="checkbox"/> PID <input type="checkbox"/> IR	
	Active on departure?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Dilution Air <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Shut Down Date	~ 9/23/12		Restart date: 9/26/12	
<b>Wells</b>					
Name	Diam (in)	Vacuum (in. H <sub>2</sub> O)	Diff. press (in. H <sub>2</sub> O)	Temperature (°F)	TPH (ppmv)
<b>Water System Parameters</b>					
Effluent Totalizer		Arrival		Departure	
Flow Rate (gpm)		217900		217820	
Bag Filter inlet (psi)		8		15	
Bag Filter outlet (psi)		30	20	10   17	
Analyses		TPH as Gas, BTEX, MTBE TPH diesel TPH motor oil			
H <sub>2</sub> O Sample Times	INFLUENT		MIDPOINT		
	EFFLUENT				

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