LRM
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FIRST QUARTER 2007 GROUNDWATER MONITORING REPORT

Former Val Strough Chevrolet Site
Oakland, California

Prepared by
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TABLE OF CONTENTS

List of Figures

List of Tables

List of Appendices

1.0 INTRODUCTION

At the request of the Strough Family Trust of 1983, LRM Consulting, Inc. (LRM) has prepared this *First Quarter 2007 Groundwater Monitoring Report* for the former Val Strough Chevrolet located in Oakland, California. This report documents the procedures and findings of the 1 March 2007 groundwater monitoring event. This monitoring reflects groundwater conditions following cessation of the dual phase extraction (DPE) system at the site; the operation of the DPE system was ceased on 30 June 2006. Groundwater monitoring data and well construction details are shown on the figures and presented in the tables. Groundwater monitoring protocols, field data, and analytical results are provided in the appendices.

1.1 General Site Information

Site name:	Former Val Strough Chevrolet
Site address:	327 34th Street, Oakland, California
Current property owner:	Strough Family Trust of 1983
Current site use:	Automotive Dealership and Service Center
Current phase of project:	Groundwater monitoring and evaluation of need and approaches for additional remediation
Tanks at site:	Two former tanks (1 gasoline, 1 waste-oil) removed in 1993
Number of wells:	7 (all onsite)
Site ID #:	3035
RO #:	0000134

1.2 Site Contacts

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2.0 SITE BACKGROUND

2.1 Site Description

Site Location and Land Use: The former Val Strough Chevrolet site is currently an active Honda automobile dealership and service center located on the southwestern corner of the intersection of Broadway (Auto Row) and 34th Street (Figure 1). The property is located south of Interstate 580. Land use in the area is primarily commercial.

The site is situated approximately 2 miles east of San Francisco Bay at approximately 61 feet above mean sea level (msl) (EDR, 2003). The land surface in the vicinity slopes toward the south. The nearest surface water body is Lake Merritt, located approximately 1 mile south of the site (Figure 1).

Site Features: The site consists of a multi-level building and an adjacent parking lot (Figure 2). The former fuel dispenser and underground storage tanks (USTs) were located in the northwestern portion of the site. Seven groundwater monitoring wells are located at the site. Construction details for the wells are presented in Table 1.

Underground Utilities: A box culvert for a former tributary of Glen Echo Creek is located approximately 17 feet below ground surface (bgs) in the eastern portion of the site (Figure 2). The culvert consists of a reinforced concrete box measuring 5 feet by 6 feet. During the winter of 1983, a section of the culvert collapsed and was replaced with a 5-foot-diameter pipeline.

Sanitary sewer, electrical, and natural gas utilities are generally present at depths less than 2 feet bgs at the site. Approximately 40 feet north of the site, along the northern edge of 34th Street, a storm sewer pipeline flows toward the east and into the box culvert. Sanitary sewer lines run parallel to both 34th Street and Broadway, north and east of the site, respectively. A lateral pipeline located along the western edge of the site connects to the sanitary sewer line below 34th Street. Natural gas service is located on the east side of the property. Water service appears to enter the site from the north.

Water Supply Well Search: A 2003 report compiled by EDR indicates that there are no federal U.S. Geological Survey wells and no public water supply wells located within a 1-mile radius of the site. No water supply wells were identified by the Alameda County Department of Public Works within a ½-mile radius of the site (ETIC, 2003).

2.2 Summary of Previous Investigations and Monitoring Activities

As presented in previous reports, the USTs were removed and multiple investigations, including the installation of seven groundwater monitoring wells, were conducted. In addition, a routine groundwater monitoring program has been in place since 1993. The following paragraphs summarize the findings of these activities.

Site Hydrogeology: In general, the site is underlain by silt and clay to depths ranging from approximately 15 to 20 feet bgs. Silty sand and fine-grained sand interbedded with thin clay intervals are encountered from approximately 20 feet bgs to the total explored depth of 35 feet bgs.

The depth to groundwater beneath the site has ranged from approximately 12.5 to 23 feet bgs. As shown in the modified rose diagram on Figure 2, the direction of groundwater flow is generally toward the southwest to south-southeast, with an average hydraulic gradient of approximately 0.02 to 0.03 foot/foot.

Primary Sources: Two USTs (one gasoline and one waste-oil) were located beneath the sidewalk on the northern side of the property. A fuel dispenser was located inside the building (Figure 2). These primary sources of petroleum hydrocarbons were removed from the site in 1993.

Constituents of Potential Concern: Based on the type of fuel stored in the USTs and the results of previous subsurface investigations, the constituents of potential concern (COPCs) at the site include total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl t-butyl ether (MTBE). TPH as diesel (TPH-d) and TPH as motor oil (TPH-mo) are not routinely detected in groundwater samples and are considered secondary COPCs for the site.

Residual Source Area: Elevated concentrations of TPH-g, BTEX, and MTBE have been observed in soil in the vadose zone and upper portion of the water-bearing zone near the former USTs and fuel dispenser. Separate phase petroleum hydrocarbons (SPH) have been intermittently detected in wells MW2 and MW3. These data indicate that most of the residual petroleum hydrocarbon mass is present near the former USTs and fuel dispenser, herein referred to as the residual source area.

Petroleum Hydrocarbon Distribution in Groundwater: The highest concentrations of petroleum hydrocarbons have been detected in samples collected from wells MW2 and MW3. Generally lower levels of petroleum hydrocarbons have been detected in samples collected from well MW4, and the other site wells. The extent of dissolved-phase petroleum hydrocarbons in groundwater is largely defined by relatively low and stable TPH-g, BTEX, and MTBE concentrations detected in downgradient and cross-gradient monitoring wells MW5, MW6, and MW7 (Table 2). These data suggest that the petroleum hydrocarbon plume is stable.

In addition, fuel oxygenates (tertiary amyl methyl ether, ethyl tertiary butyl ether, di-isopropyl ether, tertiary butyl alcohol and ethanol) and lead scavengers (ethylene dibromide and ethylene dichloride) were detected near laboratory reporting limits or were not detected in groundwater samples collected from borings HP1 and HP3 in December 2003 (Table 3). Note that boring HP2 was dry during the December 2003 sampling event.

2.2 Summary of Interim Remedial Action Activities

Since 2004, in addition to the routine groundwater monitoring activities, remediation pilot testing and remediation activities were conducted at the site. A summary of these activities and associated regulatory correspondence with the ACHCSA are presented below:

DPE Pilot Test: In March 2004, ETIC Engineering, Inc. (ETIC) performed a DPE pilot test at the site. As summarized in the June 2004 *Dual Phase Extraction Pilot Test and Interim Remedial Action Plan* (DPE and IRAP Report), vacuum was applied to source area wells MW2 and MW3 while water and vacuum levels were measured in nearby monitoring wells. The DPE pilot test induced more than 1 foot of drawdown up to 50 feet from the extraction wells and an estimated radius of vacuum influence of 55 to 70 feet. Based on vapor flow rates and petroleum hydrocarbon concentrations in the vapor stream during the short-term pilot test, removal rates of approximately 90 pounds of petroleum hydrocarbons per day were estimated.

June 2004 DPE and IRAP Report: The DPE and IRAP Report (ETIC, 2004) described the planned reduction of residual petroleum hydrocarbon mass in the source area through temporary DPE system installation and operation and dual phase extraction from source area wells MW2 and MW3 to extract soil vapor and groundwater simultaneously. The system was designed to consist of a knockout vessel to be used for separation of the soil vapor and water streams. A thermal oxidizer (with propane as a supplemental fuel) was proposed for treatment of extracted vapor, and aqueous-phase granular activated carbon was proposed for treatment of extracted groundwater.

Interim Remedial Action: Between February 2005 and June 2006, ETIC operated a DPE system on site. Vacuum was applied to remove groundwater and soil vapor from up to two wells (MW2 and/or MW3). The system was temporarily shutdown on 30 January 2006 for conversion of vapor treatment from thermal oxidation to carbon filtration, and remained offline until 22 May 2006, when it was restarted. Because the mass removal rates by the DPE system had reached asymptotic levels and high petroleum hydrocarbon concentrations continued to exist in extraction wells MW-2 and MW3 despite the DPE operation, the benefit of continuation of DPE in its current configuration was considered to be low and the DPE operation was ceased on 30 June 2006. ETIC subsequently dismantled the remediation system and removed the skid mounted DPE unit from the site.

25 August 2006 LRM Consulting Correspondence and 11 December 2006 LRM Supplemental Source Area Investigation Work Plan: In a 25 August 2006 correspondence, LRM notified the ACHCSA of a project consultant change from ETIC to LRM. Also, based on a review of the available site data, the response of the hydrocarbon concentrations to past DPE operations, and the ACHCSA's comments on ETIC's Work Plan, LRM recommended a technical meeting with the ACHCSA to discuss the project direction. However, because of other commitments of Don Hwang and other ACHCSA staff, a technical meeting could not be scheduled. During a 19 October 2006 telephone conversation with Don Hwang, LRM

presented an approach to conduct a supplemental investigation to define the magnitude and extent of the residual source area in the vicinity of the former fuel dispenser and wells MW2 and MW3. Based on these discussions and as agreed by Mr. Hwang, a supplemental source area investigation work plan outlining the proposed scope of work was prepared and submitted to ACHCSA on 11 December 2006; this work plan remains under review by ACHCSA. LRM understands that Mr. Hwang is no longer the lead regulator on the site.

3.0 PROTOCOLS FOR GROUNDWATER MONITORING

The following sections of this report present information relevant to the methods employed during the collection of groundwater samples from site wells on 1 March 2007. The scope of work for the quarterly groundwater monitoring event at the site included:

- Checking all wells for SPH.
- Gauging the depth to groundwater in all wells.
- Purging the monitoring wells to be sampled.
- Collecting and analyzing groundwater samples from the wells where no SPH is detected.
- Estimating the hydraulic gradient and general flow direction.
- Evaluating the data and preparing a written report summarizing the results of the monitoring event.

3.1 Groundwater Gauging

The monitoring wells were opened prior to gauging to allow the groundwater level to equilibrate with atmospheric pressure. The depth to groundwater and depth to SPH, if present, were then measured to the nearest 0.01 feet using an electronic water level meter or optical interface probe. The measurements were made from a fixed reference point at the top of the well casing.

The groundwater elevation map (Figure 2) for this monitoring event was constructed using depth-to-groundwater measurements collected during the current sampling event. Depth-to-groundwater measurements and calculated groundwater elevations are presented in Table 2. Field data forms are presented in Appendix B.

3.2 Well Purging

Approximately three well casing volumes of water were purged from wells MW1, MW2, MW3, MW4 and MW6. Field parameters including temperature, pH, specific conductance, and dissolved oxygen were measured during purging of all three wells. Groundwater monitoring protocols are presented in Appendix A.

3.3 Groundwater Sampling

After purging, groundwater in each well was sampled using dedicated tubing and a WaTerra inertial pump, or a disposable bailer. Sample containers were sealed, labeled, stored in a cooler and transported under chain-of-custody protocol to Kiff Analytical LLC (Kiff), a state-certified analytical laboratory in Davis, California. Groundwater analytical results and chain-of-custody documentation are presented in Appendix C.

4.0 MONITORING RESULTS

4.1 Separate-Phase Hydrocarbon Monitoring

The wells were monitored for the presence of SPH using a disposable bailer and/or interface probe. SPH was not detected in monitoring wells during this monitoring event.

4.2 Groundwater Elevation and Hydraulic Gradient

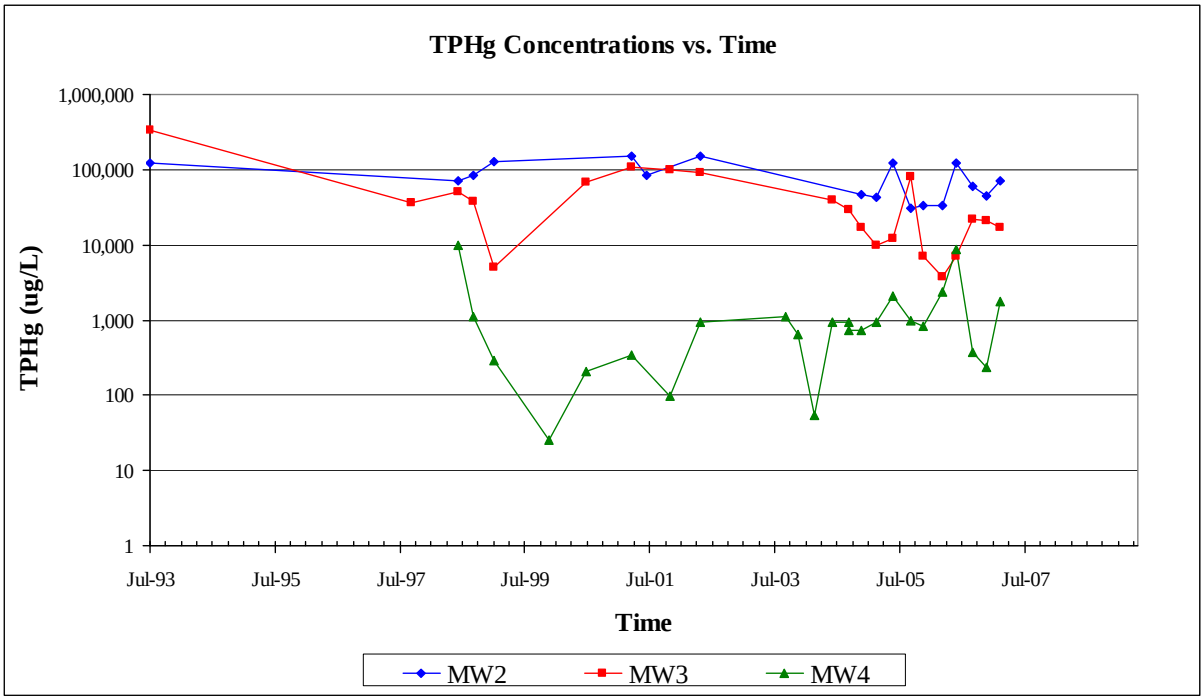
On 1 March 2007, the depth to water beneath the site ranged from 14.68 to 21.02 feet bgs (Table 2). Groundwater elevations in the site wells during this monitoring event ranged from 43.30 feet above msl in well MW6 to 46.49 feet above msl in wells MW3 (Figure 2), reflecting an approximately 1.5-foot rise in levels from the previous quarter. The hydraulic gradient is approximately 0.033 ft/ft and flow direction is generally toward the south-southeast. At the request of the ACHCSA, a rose diagram depicting historical hydraulic gradients and groundwater flow directions is also presented on Figure 2.

4.3 Groundwater Analytical Results

On 1 March 2007, groundwater samples were collected from wells MW1, MW2, MW3, MW4, MW5, MW6, and MW7 and analyzed by Kiff for TPH-g, BTEX, and MTBE by EPA Method 8260B and for TPH-d and TPH-mo by modified EPA Method 8015. Analytical results for this event are presented on Figure 3, and historical results are presented in Table 2. Copies of the chain-of-custody and laboratory analytical reports for the groundwater samples are presented in Appendix C. Laboratory analytical results are summarized below:

- TPH-g was detected in the samples collected from well MW2 at 71,000 µg/L, MW3 at 17,000 µg/L, MW4 at 1800 µg/L, and MW-5 at 54 µg/L. TPH-g was not reported above laboratory reporting limits in wells MW1, MW6, and MW7.
- Benzene was detected in the samples collected from well MW2 at 1400 µg/L, well MW3 at 1,100 µg/L, and well MW4 at 63 µg/L. Benzene was not reported above laboratory reporting limits in wells MW1, MW6, and MW7.
- MTBE was detected in the samples collected from well MW1 at 3.5 µg/L, well MW2 at 160 µg/L, well MW3 at 51 µg/L, well MW4 at 130 µg/L, and well MW6 at 78 µg/L. MTBE was not detected at above laboratory reporting limits in well MW5 and MW7.
- TPH-d was not detected in groundwater samples collected from any well this quarter.
- TPH-mo was detected at concentrations of 460 in well MW2. TPH-mo was not detected in groundwater samples collected from wells MW1, MW3, MW4, MW5, MW6, and MW7 this quarter.

TPHg concentration trends near the residual source area are shown below on the graph for wells MW2, MW3, and MW4:



As indicated on the graph, slight increases in concentrations with respect to the previous quarter are observed for wells MW2 and MW4; a decline in hydrocarbon concentrations is observed at MW3. Importantly, the detected levels in this quarter remain within the past range of detections and reflect the generally stable trend, with residual mass remaining in the immediately vicinity of MW2.

5.0 INTERIM REMEDIAL ACTION SUMMARY

5.1 DPE System Operational Status

Operational Status: The DPE system began operation on 23 February 2005 and continued to operate until 30 January 2006. The system remained offline from 30 January 2006 to 22 May 2006, when it was restarted. In the interim, the vapor abatement system was modified from a thermal oxidizer with propane supplemental fuel to vapor-phase carbon adsorption. Following the restart in May 2006, operation of the DPE system was ceased by ETIC on 30 June 2006 due to frequent shutdowns caused by reported overheating of the electrical phase-converter. Currently, the skid-mounted DPE unit has been mobilized offsite. No remediation is intended until the proposed supplemental investigation has been performed.

6.0 PLANNED ACTIVITIES

6.1 Additional Investigation/Remediation Activities

Based on the operational behavior of the DPE system and the observed responses in hydrocarbon concentrations in wells MW2 and MW3, LRM recommended further investigation of the extent and magnitude of residual hydrocarbons in the area targeted by the DPE system (i.e., former residual source area in the vicinity of these wells) (see LRM's *Supplemental Source Area Investigation Work Plan*, dated 11 December 2006). Through this investigation, LRM plans to determine the need, extent, and nature of corrective action, including additional remediation and/or monitoring. LRM is prepared to proceed with the actions set forth in the 11 December 2006 work plan as soon as written approvals provided by the ACHCSA.

6.2 Planned Monitoring Activities

Until such time that the ACHCSA provides a response to the referenced work plan, it is hereby proposed that the site move toward a semi-annual monitoring program. Table 4 reflects the proposed monitoring frequency, with all previous quarterly activities changed toward semi-annual activities; all other monitoring frequencies will remain unchanged from the past quarter (see Table 4). Once the planned supplemental investigation is approved by ACHCSA and performed, should more frequent monitoring be required in support of site closure, the monitoring frequency will be accordingly revised.

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TABLE 1 WELL CONSTRUCTION DETAILS
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well ID	Well Installation Date	Top-of-Casing Elevation* (feet)	Casing Material	Total Depth of Borehole (ft bgs)	Casing Diameter (inches)	Screened Interval (ft bgs)	Slot Size (inches)	Filter Pack Interval (ft bgs)	Filter Pack Material
MW1	07/19/93	64.69	PVC	32	2	17-32	0.020	15-32	Gravel Pack
MW2	07/20/93	65.95	PVC	33	2	18-33	0.020	16-33	Gravel Pack
MW3	07/20/93	65.99	PVC	34	2	18-34	0.020	16-34	Gravel Pack
MW4	06/26/98	63.35†	PVC	31	2	15-31	0.020	13-31.5	Lonestar #3 Sand
MW5	06/26/98	65.59	PVC	31	2	15-31	0.020	13-31.5	Lonestar #3 Sand
MW6	07/17/00	59.60	PVC	31.5	2	10-30	0.020	8-30	Lonestar #3 Sand
MW7	07/17/00	59.47	PVC	36.5	2	15-35	0.020	13-35	Lonestar #3 Sand

* Elevations based on a survey conducted August 2002 and referenced benchmark with known elevation (NGVD 29) of 60.40 feet above mean sea level.
† The casing elevation is uncertain.
PVC Polyvinyl chloride.
ft bgs Feet below ground surface.

TABLE 2 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	Concentration (mg/L) CO_2 (lab)	DO (field)	Eh (mv) (field)	pH (field)	Fe(II)	Mn	SO_4	$N\text{-}NH_3$	$N\text{-}NO_3$	$o\text{-}PO_4$
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	204	5	--	6.16	0.15	0.046	55	<0.10	<0.10	2
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	192	3.6	--	6.49	--	--	--	--	--	--
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	389	3.4	--	6.72	--	--	--	--	--	--
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	--	3.31	--	6.52	--	--	--	--	--	--
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	120	7.37	--	6.66	0.13	<0.01	54	<0.10	3.4	<0.2
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	117	NR	--	NR	<0.10	0.045	57	<0.10	6.6	0.15
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	--[C]	0.65	--	6.47	0.32	1.8	63	<0.10	--	<0.20
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	120	0.96	--	6.25	<0.10	0.5	58	<0.10	5.5	<0.20
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	--	0.14	--	--	--	--	--	--	--	--
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	--	0.15	--	--	--	--	--	--	--	--
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	--	1.01	--	6.42	--	--	--	--	--	--
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	h	<500		<0.50	--	1.96	--	6.04	--	--	--	--	--	--
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	i	<50		<500		<0.50	--	1.84	317.4	6.43	--	--	--	--	--	--
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	--	1.57	--	6.73	--	--	--	--	--	--
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	**8**	<100	0	7.9	--	0.43	--	6.40	--	--	--	--	--	--
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	--	0.38	--	6.39	--	--	--	--	--	--
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**	--	0.86	--	6.39	--	--	--	--	--	--
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	185	2.2	--	5.98	--	--	--	--	--	--
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	--	2.7	--	6.47	--	--	--	--	--	--
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	--	--	--	--	--		--		--		--	--	--	--	--	--	--	--	--	--	--

TABLE 2 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	Concentration (mg/L) CO_2 (lab)	DO (field)	Eh (mv) (field)	pH (field)	Fe(II)	Mn	SO_4	$N\text{-}NH_3$	$N\text{-}NO_3$	$o\text{-}PO_4$
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	386	0.3	--	6.69	--	--	--	--	--	--
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	*	*	*	*	*	*	*	*	*	0.88	*	6.37	*	*	*	*	*	*
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	168	NR	--	NR	3.1	2.5	16	0.14	0.19	<0.20
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	--	--	--	--	--	--	--	--	120	NR	--	6.15	1.8	2	16	<0.10	--	<0.20
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	160	0.88	--	5.99	3.9	1.7	13	<0.10	0.54	<0.20
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[e]	12/12/03	65.95	b	22.75	43.31	0.16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MW2[e]	03/15/04	65.95	b	19.24	46.72	0.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MW2[e]	06/24/04	65.95	b	22.10	44.06	0.31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MW2[e]	09/29/04	65.95	b	22.81	43.14	sheen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MW2[e]	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	*	0.27	*	6.63	*	*	*	*	*	*
MW2[j]	03/14/05	65.95	b	25.00	40.95	0.00	780	3,700	920	6,400	43,000	43,000 h	<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	--	3.05	-147.6	--	--	--	--	--	--	--
MW2	07/18/05	65.95		NM	NC	NM	2,700	13,000	1,800	15,000	120,000	17,000	--	530	--	--	--	--	--	--	--	--	--	--
MW2	09/26/05	65.95		22.93	43.02	0.00	570	4,000	620	6,200	31,000	63,000	28,000 k	<50	--	--	--	--	--	--	--	--	--	--
MW2	12/12/05	65.95		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		15.66	50.29	sheen	620	2,800	540	4,700	33,000	<4,000	<100	37	--	7.59	--	6.9	--	--	--	--	--	--
MW2	06/19/06	65.95		19.14	46.81	sheen	680	5,200	990	16,000	120,000	<30,000	1,900	170	--	1.78	--	6.21	--	--	--	--	--	--
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	--	1.71	--	6.66	--	--	--	--	--	--
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	--	1.5	--	6.61	--	--	--	--	--	--
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**	--	1.2	--	6.7	--	--	--	--	--	--
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	300	2	--	6.03	1.4	9.8	13	1.4	<0.10	2.4
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	240	2	--	6.65	--	--	--	--	--	--
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	238	1	--	7.01	--	--	--	--	--	--
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	128	2.05	--	6.73	3.9	6.6	20	<0.10	0.55	<0.20
MW3	10/11/00	101.29	a	22.24	79.05	0.00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2 CUMULATIVE GROUNDWATER ELEVATION AND ANALYTICAL DATA
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

							Concentration (µg/L)								Concentration (mg/L)								
Well Number	Date	Casing Elevation (feet)		Depth to Water (feet)	GW Elevation (feet)	SPH Thickness (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	CO_2 (lab)	DO (field)	Eh (mv) (field)	pH (field)	Fe(II)	Mn	SO_4	$N\text{-}NH_3$	$N\text{-}NO_3$	$o\text{-}PO_4$
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	137	NR	--	NR	1	6	8.2	<0.10	0.13	<0.20
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	120	2.93	--	6.67	0.84	12	31	<0.10	--	<0.20
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	130	1.01	--	6.62	4.2	9.6	25	<0.10	0.77	<0.20
MW3	06/27/03	65.99	b	21.32	44.67	sheen	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW3	09/29/03	65.99	b	22.79	43.20	sheen	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MW3[e]	12/12/03	65.99	b	22.73	43.27	0.01	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MW3[e]	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	--	0.07	--	--	--	--	--	--	--	--
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	--	0.80	--	6.42	--	--	--	--	--	--
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	--	0.16	--	6.7	--	--	--	--	--	--
MW3[j]	03/14/05	65.99	b	24.00	41.99	0.00	680	1,700	380	1,600	10,000	670 h	<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	--	1.93	-150.4	--	--	--	--	--	--	--
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 k	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	--	1.23	--	6.89	--	--	--	--	--	--
MW3	06/19/06	65.99	b	19.11	46.88	0.00	160	500	320	840	7,000	<300	<100	3.1	--	2.30	--	6.40	--	--	--	--	--	--
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	--	1.05	--	6.78	--	--	--	--	--	--
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	--	0.6	--	6.72	--	--	--	--	--	--
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**	--	1.11	--	6.76	--	--	--	--	--	--
MW4	06/30/98	98.65	a	16.93	81.72	0.00	2,200	930	850	2,100	10,000	--	--	1,800	222	2.6	--	6.18	0.14	4.3	14	0.8	0.8	1.5
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	320	3.4	--	<0.001	--	--	--	--	--	--
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	475	6.7	--	7	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	--	1.75	--	7.02	--	--	--	--	--	--
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	126	3.88	--	6.67	9.5	5.3	11	<0.10	0.04	<0.20
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	107	NR	--	NR	0.8	6.3	10	<0.10	<0.05	<0.20
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	130	0.83	--	6.51	1.6	10	11	<0.10	--	<0.20
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	150	1.65	--	6.32	3.1	8.4	9	<0.10	0.06	<0.20
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 d	<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 d	<50	<500	41	--	0.16	--	--	--	--	--	--	--	--
MW4	06/24/04	63.35	b	19.31	44.04	0.00	69	<5.0	<5.0	<10	920 d	<50	<500	1,100	--	0.15	--	--	--	--	--	--	--	--

TABLE 2 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	Concentration (mg/L) CO_2 (lab)	DO (field)	Eh (mv) (field)	pH (field)	Fe(II)	Mn	SO_4	$N\text{-}NH_3$	$N\text{-}NO_3$	$o\text{-}PO_4$
MW4	09/29/04	63.35	b	20.20	43.15	0.00	<5.0	<5.0	<5.0	<10	940	g	<50		<500	1,200	--	0.13	--	6.63	--	--	--	--	--	--
MW4	12/13/04	**	b	20.44	NC	0.00	<5.0	<5.0	<5.0	<10	740		<50		<500	860	--	0.58	--	6.84	--	--	--	--	--	--
MW4	03/14/05	**	b	18.30	NC	0.00	20	<5.0	<5.0	<10	930	i	<50		<500	930	--	0.28	--	6.34	--	--	--	--	--	--
MW4	06/15/05	**	b	20.03	NC	0.00	350	6.1	<5.0	<10	2100		89		<500	1,100	--	0.46	-98.9	--	--	--	--	--	--	--
MW4	07/18/05	**		NM	NC	NM	11	<5.0	<5.0	<10	540	i	<50		--	1,100	--	--	--	--	--	--	--	--	--	--
MW4	09/26/05	**		21.79	NC	0.00	<5.0	<5.0	<5.0	<10	960	i	<50		<500	660	--	2.20	210.4	6.73	--	--	--	--	--	--
MW4	12/12/05	**		21.89	NC	0.00	<5.0	<5.0	<5.0	<10	820		<50		<500	1,000	--	2.05	--	6.62	--	--	--	--	--	--
MW4	03/29/06	**		14.85	NC	0.00	49	160	120	300	2,400		<100		<100	130	--	1.07	--	6.82	--	--	--	--	--	--
MW4	06/19/06	**		17.96	NC	0.00	100	940	540	1,800	8,800		<400		<100	55	--	2.49	--	5.76	--	--	--	--	--	--
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	--	0.25	--	6.66	--	--	--	--	--	--
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	--	0.90	--	6.61	--	--	--	--	--	--
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**	--	0.76	--	6.6	--	--	--	--	--	--
MW5	06/30/98	100.9	a	20.60	80.30	0.00	<0.50	<0.50	<0.50	<0.50	<50		--		--	23	220	4.3	--	6.1	--	--	--	--	--	--
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	256	4.8	--	6.71	--	--	--	--	--	--
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	305	9.7	--	7.04	--	--	--	--	--	--
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	--	2.72	--	7.19	--	--	--	--	--	--
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	134	5.58	--	6.35	0.11	0.017	49	<0.10	3.9	<0.20
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	183	66	--	NR	<0.10	0.042	45	<0.10	2.9	0.11
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	--[c]	66	--	6.01	0.2	2.5	42	<0.10	--	<0.20
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	140	66	--	6.3	<0.1	0.22	44	<0.10	3	<0.20
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	d	<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	--	6.4	--	--	--	--	--	--	--	--
MW5	06/24/04	65.59	b	23.57	42.02	0.00	<0.50	<0.50	<0.50	<1.0	<50		130	f	<500	0.79	--	5.56	--	--	--	--	--	--	--	--
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	--	3.91	--	5.57	--	--	--	--	--	--
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	--	2.3	--	6.3	--	--	--	--	--	--
MW5	06/19/06	65.59	b	20.22	45.37	0.00	--	--	--	--	--		--		--	--	--	--	--	--	--	--	--	--	--	--
MW-5	09/29/06	65.59	b	22.80	42.79	0.00	--	--	--	--	--		--		--	--	--	--	--	--	--	--	--	--	--	--
MW-5	12/12/06	65.59	b	23.08	42.51	0.00	--	--	--	--	--		--		--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2 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	Concentration (mg/L) CO_2 (lab)	DO (field)	Eh (mv) (field)	pH (field)	Fe(II)	Mn	SO_4	$N\text{-}NH_3$	$N\text{-}NO_3$	$o\text{-}PO_4$
MW-5	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	--	4.35	--	6.08	--	--	--	--	--	--
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	122	2.72	--	6.66	120	1.9	53	6	0.05	<0.20
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	142	NR	--	NR	22	2.2	0.69	5.2	<0.05	<0.20
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	100	2.03	--	6.44	29	5.2	1.1	3.4	--	<0.20
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	100	0.76	--	6.6	11	3.4	1.4	8.9	0.65	<0.20
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	d	<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	--	0.11	--	--	--	--	--	--	--	--
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	--	0.05	--	--	--	--	--	--	--	--
MW6	09/29/04	59.60	b	18.55	41.05	0.00	<0.50	0.61	<0.50	1.2	210	g	<50	<500	190	--	0.37	--	6.60	--	--	--	--	--	--
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	--	0.08	--	5.65	--	--	--	--	--	--
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	--	1.52	--	6.61	--	--	--	--	--	--
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	--	6.93	--	6.06	--	--	--	--	--	--
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	--	0.16	--	6.49	--	--	--	--	--	--
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	--	0.5	--	6.68	--	--	--	--	--	--
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**	--	0.83	--	6.66	--	--	--	--	--	--
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	32.2	7.15	--	7.43	<0.1	0.002	7.5	<0.10	2.6	0.13
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	77.6	NR	--	NR	0.18	0.048	49	<0.10	2.7	0.31
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	62	0.96	--	7.11	0.16	1.8	63	<0.10	--	<0.20
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	68	1.03	--	7.57	0.11	0.35	51	<0.10	2.8	0.11
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	--	0.54	--	--	--	--	--	--	--	--
MW7	06/24/04	59.47	b	16.33	43.14	0.00	<0.50	<0.50	<0.50	<1.0	<50		300	f <500	<0.50	--	0.20	--	--	--	--	--	--	--	--
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	--	0.47	--	6.15	--	--	--	--	--	--
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	--	0.72	--	5.81	--	--	--	--	--	--
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	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2 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)								Concentration (mg/L)									
							Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	MTBE	CO_2 (lab)	DO (field)	Eh (mv) (field)	pH (field)	Fe(II)	Mn	SO_4	$N\text{-}NH_3$	$N\text{-}NO_3$	$o\text{-}PO_4$
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	--	0.92	--	6.84	--	--	--	--	--	--

SPH Separate-phase hydrocarbons.
CO_2 Carbon dioxide.
DO Dissolved oxygen.
Fe(II) Ferrous iron.
Mn Manganese.
SO_4 Sulfate.
$N\text{-}NH_3$ Ammonia.
$N\text{-}NO_3$ Nitrate.
$o\text{-}PO_4$ Ortho-Phosphate.
GW Groundwater.
TPH-g Total Petroleum Hydrocarbons as gasoline.
TPH-d Total Petroleum Hydrocarbons as diesel.
TPH-mo Total Petroleum Hydrocarbons as motor oil.
MTBE Methyl tertiary butyl ether.
NC Not calculated.
NM Not measured.
NR Not reported.
µg/L Micrograms per liter.
mg/L Milligrams per liter.
* SPH present; not sampled.
** Well MW4 elevation modified due to site renovation activities. Not Surveyed.
-- Not analyzed or not sampled.
< Less than the laboratory reporting limits.
a Elevations are referenced to monitoring well MW1, with assumed datum of 100.00 feet.
b Elevations based on a survey conducted August 2002 and referenced benchmark with known elevation (NGVD 29) of 60.40 feet above mean sea level.
c Analysis not conducted due to broken sample containers.
d Hydrocarbon reported in the gasoline range does not match laboratory gasoline standard.
e Groundwater elevation in wells with LPH are corrected by multiplying the specific gravity of gasoline (0.69) by the LPH thickness and adding this value to the water elevation.
f Hydrocarbon reported is in the early diesel range, and does not match the laboratory diesel standard.
g Sample contained discrete peak in gasoline range and identified by lab as MTBE.
h Quantity of unknown hydrocarbon(s) in sample based on diesel.
i The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.
j Depth to groundwater is based on the depth of the stingers.
k Quantity of unknown hydrocarbon(s) in sample based on mtor oil.

TABLE 3 HISTORICAL GRAB GROUNDWATER ANALYTICAL DATA
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

			Concentrations (µg/L)													
Boring ID	Date	Depth (feet)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	TPH-mo	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB
HP1	12/18/2003	26-30	<5.0	<5.0	<5.0	**11**	**410**	**180**	<500	<50	**480**	<10	<5.0	<5.0	<5.0	<5.0
HP3	12/18/2003	32-36	<0.50	<0.50	<0.50	<1.0	<50	**75**	<500	<5.0	**0.55**	<1.0	<0.50	<0.50	**1.3**	<0.50

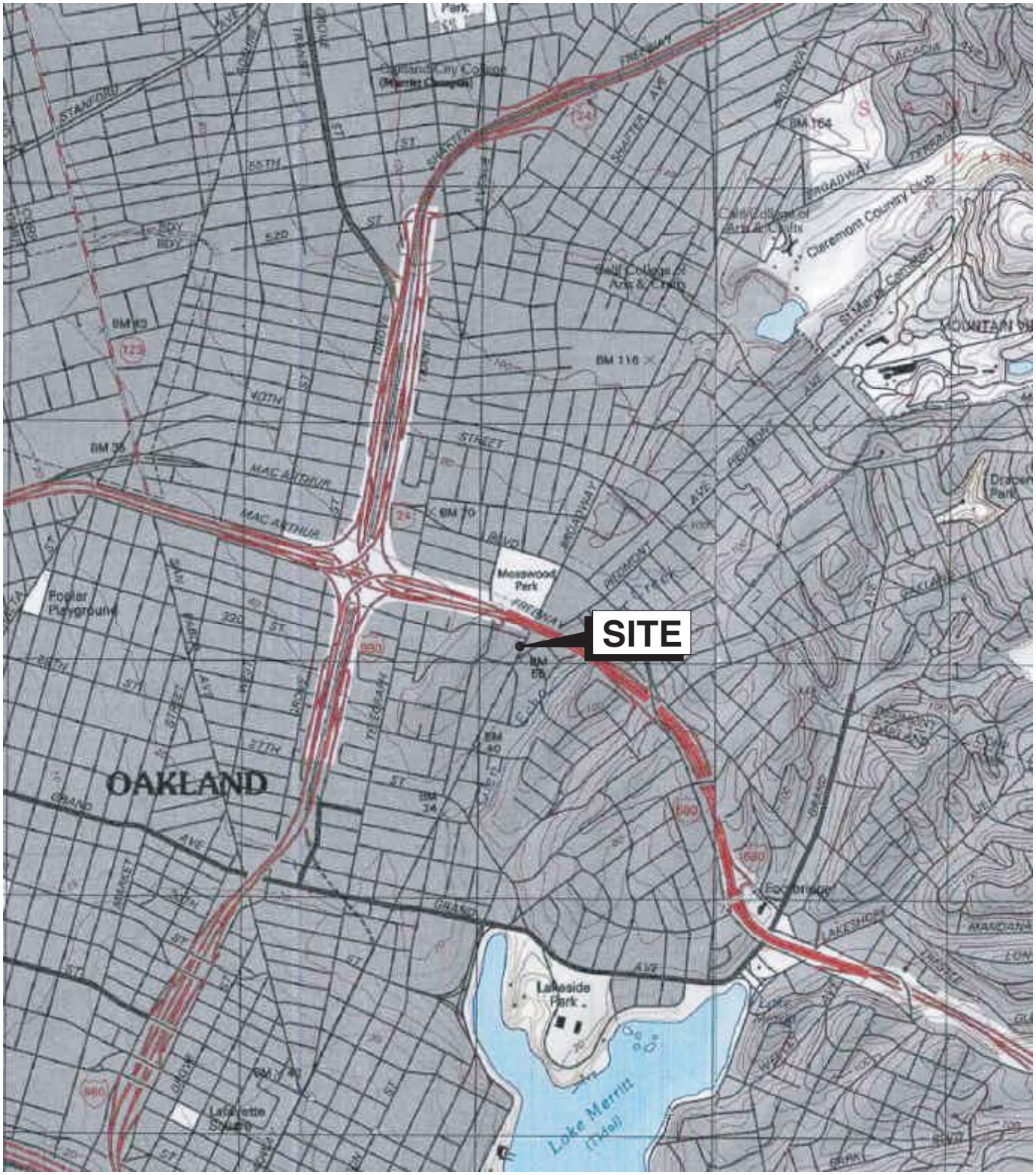
TPH-g Total Petroleum Hydrocarbons as gasoline.
TPH-d Total Petroleum Hydrocarbons as diesel.
TPH-mo Total Petroleum Hydrocarbons as motor oil.
TBA t-butyl alcohol.
MTBE Methyl tertiary butyl ether.
DIPE di-isopropyl ether.
ETBE ethyl t-butyl ether.
TAME t-amyl methyl ether.
1,2-DCA 1,2-dichloroethane.
EDB ethylene dibromide.
< less than the laboratory reporting limits.

TABLE 4 GROUNDWATER MONITORING SCHEDULE
FORMER VAL STROUGH CHEVROLET, 327 34th STREET OAKLAND, CALIFORNIA

Well Number	Groundwater Gauging Frequency	Groundwater Sampling and Analysis Frequency		
		BTEX and TPH-g	MTBE	TEPH
MW1	S	S	S	S
MW2	S	S	S	S
MW3	S	S	S	S
MW4	S	S	S	S
MW5	S	A	A	A
MW6	S	S	S	S
MW7	S	A	A	A

Q = Quarterly.
S = Semiannual.
A = Annual.

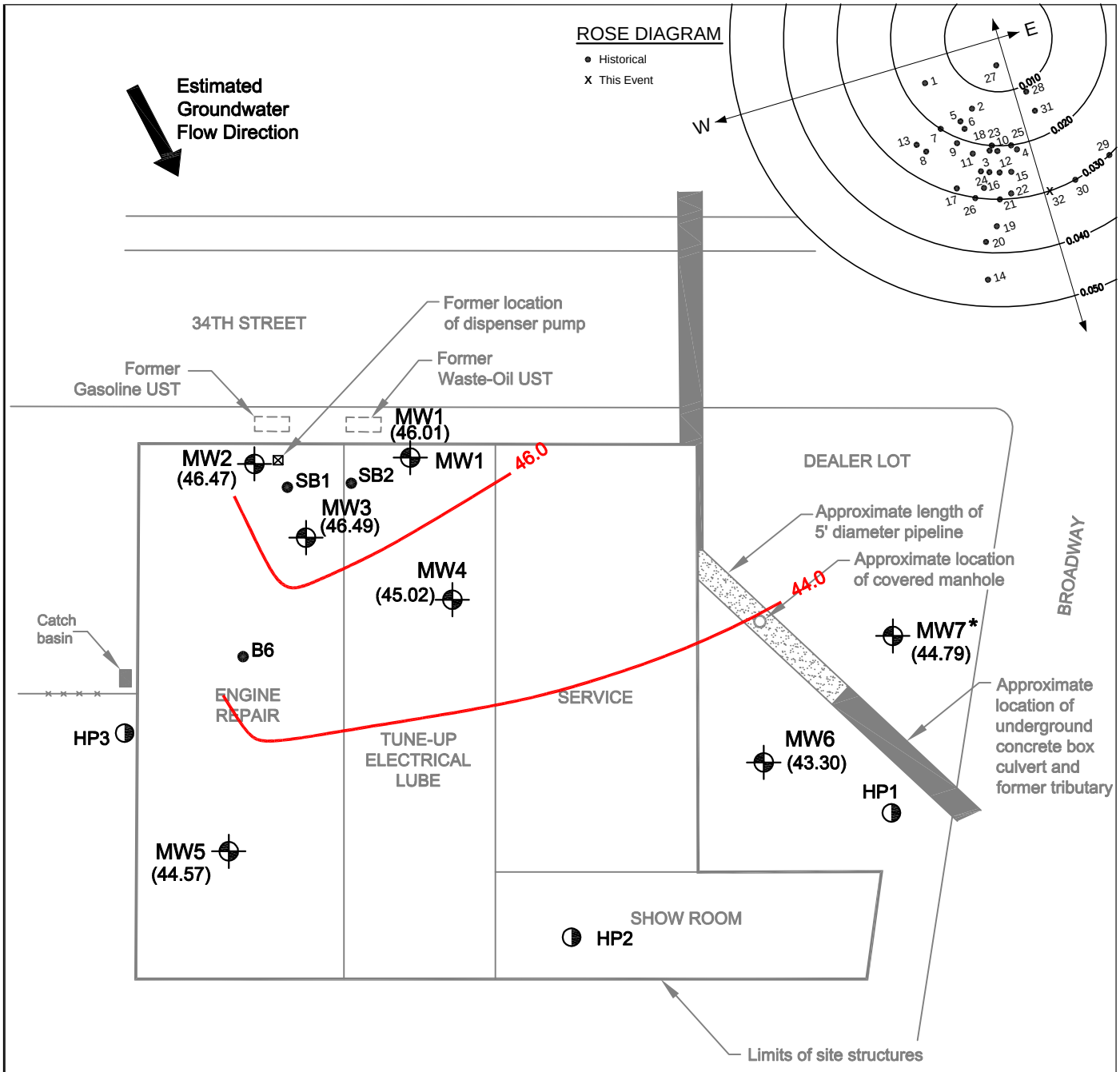
BTEX = Benzene, toluene, ethylbenzene, total xylenes.
MTBE = Methyl tertiary butyl ether.
TPH-g = Total Petroleum Hydrocarbons as gasoline.
TEPH = Total Extractable Petroleum Hydrocarbons, includes TPH-diesel and TPH-motor oil.



LRM consulting inc.

SITE LOCATION MAP
FORMER VAL STROUGH CHEVROLET
327 34TH STREET, OAKLAND, CALIFORNIA
1 MARCH 2007

FIGURE:
1



LEGEND:

SB1 ●	Soil boring
HP2 ◑	Grab groundwater sampling location
MW2 ⊕	Groundwater monitoring well
46.49	Groundwater elevation (feet above mean sea level)
44.0	Groundwater elevation contour (feet above mean sea level)
*	Data not used for contouring

N

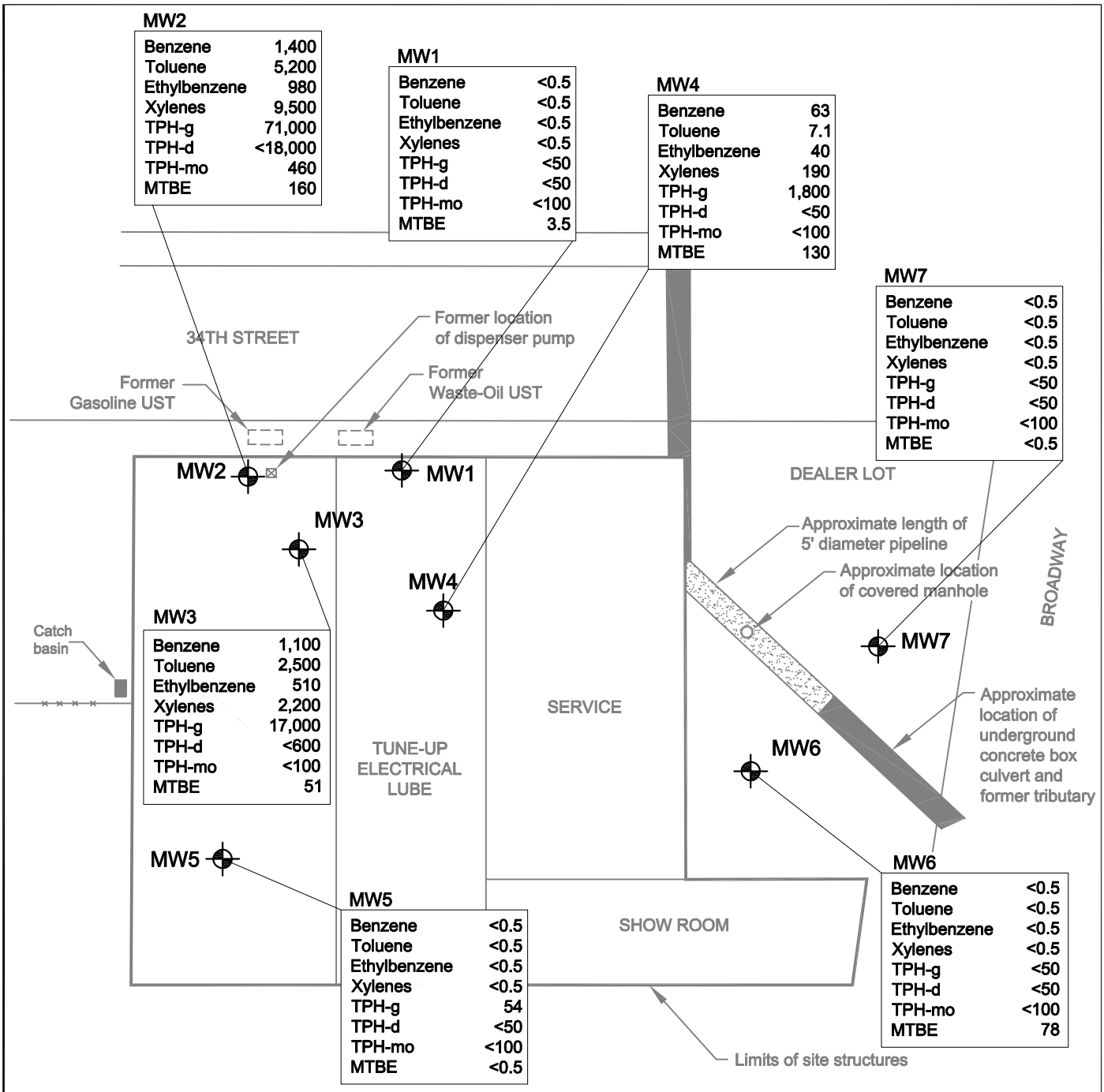
0 25 50

Scale (feet)

LRM consulting inc

GROUNDWATER CONTOUR MAP AND ROSE DIAGRAM
FORMER VAL STROUGH CHEVROLET
327 34TH STREET, OAKLAND, CALIFORNIA
1 MARCH 2007

FIGURE: **2**



LEGEND:

MW5 — **Groundwater monitoring well**

TPH-g Total Petroleum Hydrocarbons as gasoline

TPH-d Total Petroleum Hydrocarbons as diesel

TPH-mo Total Petroleum Hydrocarbons as motor oil

MTBE Methyl Tertiary Butyl Ether

All concentrations are reported in micrograms per liter (ug/L)

N

0 25 50

Scale (feet)

LRM consulting inc

GROUNDWATER ANALYTICAL DATA
FORMER VAL STROUGH CHEVROLET
327 34TH STREET, OAKLAND, CALIFORNIA
1 MARCH 2007

FIGURE: **3**

APPENDIX A

PROTOCOLS FOR GROUNDWATER MONITORING

GROUNDWATER GAUGING

Wells are opened prior to gauging to allow the groundwater level in the wells to equilibrate with atmospheric pressure. The depth to groundwater and depth to liquid-phase hydrocarbons, if present, are then measured to the nearest 0.01 feet using an electronic water level meter or optical interface probe. The measurements are made from a permanent reference point at the top of the well casing. If less than 1 foot of water is measured in a well, the water is bailed from the well and, if the well does not recover, the well is considered "functionally dry." Wells with a sheen or measurable liquid-phase hydrocarbons are generally not purged or sampled.

WELL PURGING

After the wells are gauged, each well is purged of approximately 3 well casing volumes of water to provide representative groundwater samples for analysis. Field parameters of pH, temperature, and electrical conductance are measured during purging to ensure that these parameters have stabilized before groundwater in a well is sampled. Groundwater in each well is purged using an inertial pump (WaTerra), an electric submersible pump, or a bailer. After the well is purged, the water level is checked to ensure that the well has recharged to at least 80 percent of its original water level.

GROUNDWATER SAMPLING

After purging, groundwater in each well is sampled using dedicated tubing and an inertial pump (WaTerra) or a factory-cleaned disposable bailer. Samples from extraction wells are typically collected from sample ports associated with the groundwater remediation system. Samples collected for volatile organic analysis are placed in Teflon septum-sealed 40-milliliter glass vials. Samples collected for diesel analysis are placed in 1-liter amber glass bottles. Each sample bottle is labeled with the site name, well number, date, sampler's initials, and preservative. The samples are placed in a cooler with ice for delivery to a state-certified laboratory. The information for each sample is entered on a chain-of-custody form prior to transport to the laboratory.

APPENDIX B

FIELD DOCUMENTS

WELLHEAD INSPECTION CHECKLIST

Date 3/1/07 Client LRM

Site Address 327 34th St. Oakland

Job Number 070301-MN1 Technician Mike N

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2	X							
MW-3	X							
MW-4	X							
MW-5	X							
*MW-6	X							
*MW-7	X							

NOTES:

* Original well box ~ 5" below grade, plastic sleeve in hole w/ second well lid going in side plastic sleve. plastic sleve will not last through 1 or 2 more events. Need new sleve or boxes replaced. Both in high foot traffic area.

WELL GAUGING DATA

Project # 070301-MW1 Date 7/1/2007 Client LRM

Site 327 34th Street, Oakland

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1005	2		—	—	—	18.68	29.13		*
MW-2	0943	2	odor	—	—	—	19.48	31.73		**
MW-3	0958	2	odor	—	—	—	19.50	31.88		***
MW-4	1008	2		—	—	—	18.33	27.60		*
MW-5	0950	2		—	—	—	21.02	26.47		*
MW-6	1025	2		—	—	—	16.30	26.63		*
MW-7	1018	2		—	—	—	14.68	34.46	TOC	*
			* Gauged w/ Dedicated tubing in well							
			** Gauged w/ hose in well							
			*** No tubing or hose in well when gauged							

WELL MONITORING DATA SHEET

Project #: 070304-MW1	Client: LRM
Sampler: MDW	Start Date: 3/1/07
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 29.13	Depth to Water Pre: 18.68 Post:
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump 1 cv = 1.7 Peristaltic Pump Bladder Pump (Waterra)
Sampling Method: (Dedicated Tubing) 5.1 New Tubing Other ___

Flow Rate: ___ Pump Depth: ___

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Observations
1351	18.45	6.38	1219		.86	84.4	1.7	Cloudy Brown
1358	18.45	6.39	1130		.79	92.7	3.4	Clearing
1404	18.45	6.38	1103		.80	95.2	5.1	Clearing DTW = 20.00
* Bottom foot of tubing and check valve clogged with silt upon arrival. Would not Produce water, cleared silt and restarted purging							PID Breathing Zone = 0	

Did well dewater? Yes (No) Amount actually evacuated: 5.1

Sampling Time: 1409 Sampling Date: 3/1/07

Sample I.D.: MW-1 Laboratory: Kiff

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) (TPHmo) Other: —

Equipment Blank I.D.: @ Time Duplicate I.D.: —

WELL MONITORING DATA SHEET

12.25

Project #: 070301-MW1	Client: CRM
Sampler: MWJ	Start Date: 3/1/07
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 31.73	Depth to Water Pre: 19.48 Post: 21.97
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump 1 CV = 2.0 6.0 Peristaltic Pump Bladder Pump (Disp. Bailer)
Sampling Method: Dedicated Tubing New Tubing Other Disp Bailer

Flow Rate: _____ Pump Depth: Disp. Bailer

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Observations
1449	63.1	6.1	797	—	Missed reading	102	1.7	odor/grey color
1455	63.9	6.5	823	—	1.2	23	3.4	↓
1500	63.9	6.7	838	—	1.0	-13	5.1	↓
					-			
					-			
					-			
							PID Breathing Zone = 0	

Did well dewater? Yes (No) Amount actually evacuated: 5.1 gallons

Sampling Time: 1510 Sampling Date: 3/1/07

Sample I.D.: MW-2 Laboratory: Kiff

Analyzed for: ~~TPH-G~~ (BTEX) (MTBE) (TPH-D) (TPHmo) Other:

Equipment Blank I.D.: @ Time Duplicate I.D.: —

WELL MONITORING DATA SHEET

12 38

Project #: 070301-MN1	Client: LRM
Sampler: MON	Start Date: 3/1/07
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 31.88	Depth to Water Pre: 19.50 Post:
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump
Sampling Method: ~~Dedicated Tubing~~ MON

1.0 = 2.0
6.0

Peristatic Pump (Disp Bailer) Bladder Pump (Waterra) ✓
New Tubing Other (Disp Bailer)

Flow Rate: _____ Pump Depth: _____

Time	Temp. (°C or ~~°F~~)	pH	Cond. (mS or ~~uS~~)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals or mL)	Observations
1510	16.7	6.76	906	—	.97	-43	1.9	Gray Odor
1515	17.5	6.73	908	—	1.02	-51	3.8	Gray Odor
1520	17.6	6.72	912	—	1.11	-57	5.7	Gray Odor
					-			
							PID Breathing Zone =	
							0	

Did well dewater? Yes (No) Amount actually evacuated: 5.7

Sampling Time: 1530 Sampling Date: 3/1/07

Sample I.D.: MW-3 Laboratory: K, ff

Analyzed for: (TPH-G) (BTEX) MTBE (TPH-D) TPHmo Other:

Equipment Blank I.D.: @ Time Duplicate I.D.: —

9.27

WELL MONITORING DATA SHEET

Project #: 070301-MN1	Client: CRM
Sampler: MDJ	Start Date: 3/1/07
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 27.60	Depth to Water Pre: 18.33 Post: 18.72
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump | Peristaltic Pump | Bladder Pump (Waterra)
Sampling Method: (Dedicated Tubing) | New Tubing | Other ___
Flow Rate: ___ Pump Depth: ___

1 cv = 1.5
4.5

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Observations
1251	18.61	6.60	896		.76	-4.4	1.5	Brown Cloudy
1257	18.65	6.60	895		.65	-7.6	3.0	Clearing
1302	18.66	6.60	894		.47	-8.2	4.5	Clear DTW = 18.72
							PID Breathing Zone = 0	

Did well dewater? Yes (No) Amount actually evacuated: 4.5
Sampling Time: 1307 Sampling Date: 3/1/07
Sample I.D.: MW-4 Laboratory: Kiff
Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) TPHmo Other:
Equipment Blank I.D.: ___ @ Time Duplicate I.D.: —

5.75

WELL MONITORING DATA SHEET

Project #: 070301-MN1	Client: LRM
Sampler: MDJ	Start Date: 3/1/07
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 26.47	Depth to Water Pre: 21.02 Post:
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump — 1 CV = 2.9 / 2.7 — Peristaltic Pump — Bladder Pump (Waterra)

Sampling Method: (Dedicated Tubing) — New Tubing — Other ___

Flow Rate: ___ — Pump Depth: ___

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Observations
1459	17.85	6.07	377		4.35	121.2	.9	Slightly Cloudy
1505	17.79	6.07	378		4.39	136.8	1.8	Slightly Cloudy
1509	17.90	6.08	382		4.17	139.7	2.7	Slightly Cloudy
								DTW = 22.80
							PID Breathing Zone = 0	

Did well dewater? Yes (No) — Amount actually evacuated: 2.7

Sampling Time: 1514 — Sampling Date: 3/1/07

Sample I.D.: MW-5 — Laboratory: Kiff

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) (TPH mo) Other:

Equipment Blank I.D.: — @ Time — Duplicate I.D.: —

1233

WELL MONITORING DATA SHEET

Project #: 070301-MN1	Client: LRM
Sampler: MDN	Start Date: 3/1/07
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 26.63	Depth to Water Pre: 16.30 Post: 17.51
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump 1 c.v. = 1.7 Peristaltic Pump Bladder Pump (Waterra)
Sampling Method: (Dedicated Tubing) New Tubing Other ____
5.1
Flow Rate: ____ Pump Depth: ____

Time	Temp. (°C or °F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	Observations
1156	18.15	6.65	734		.75	-131.2	1.7	Grey
1201	18.10	6.66	745		.81	-132.0	3.4	Clear
1206	18.24	6.65	753		.83	-131.4	5.1	Clear
								DTW = 17.51
							PID Breathing Zone = 0	

Did well dewater? Yes (No) Amount actually evacuated: 5.1
Sampling Time: 1211 Sampling Date: 3/1/07
Sample I.D.: MW-6 Laboratory: Kiff
Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) (TPH mo) Other:
Equipment Blank I.D.: — @ Time Duplicate I.D.: —

19.78

WELL MONITORING DATA SHEET

Project #: 070301 - MN1	Client: LRM
Sampler: MDN	Date: 3/1/07
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 34.46	Depth to Water Pre: 14.68 Post:
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump 1 CV = 3.2 Peristaltic Pump Bladder Pump Waterra
Sampling Method: X Dedicated Tubing 9.6 New Tubing Other ___

Flow Rate: ___ Pump Depth: ___

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals or mL)	Observations
1120	17.94	6.84	877		.92	150.1	3.2	cloudy
1130	18.24	6.82	845		.91	147.6	6.4	clear
1138	18.50	6.82	846		.86	147.8	9.6	clear
								DTW = 20.05'
							PID Breathing Zone =	
							0	

Did well dewater? Yes (No) Amount actually evacuated: 9.6

Sampling Time: 1143 Sampling Date: 3/1/07

Sample I.D.: MW-7 Laboratory: Kiff

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) (TPHmo) Other:

Equipment Blank I.D.: — @ Time — Duplicate I.D.: —

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	LRM @ STRAUGH HONDA			PROJECT NUMBER	070301-MN1		
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED TO: OR WITHIN 10%:	TEMP.	INITIALS
MULTI RAE, METER/PID	BTS #1	3/1/07 0700	100 ppm ISO	101	✓	~~13.8°C~~	WPS
YSI 556	BTS	3/1/07 0730	4.0 7.0 10.0 PH	3.91 6.95 9.70	4.0 7.0 10.0	13.8°C	✓
		11	3900 cond 244 ORP	3887 244.7	3900 244	11	✓

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF BTS # 070301-MN1

CLIENT: LRM Consulting, Inc.

SITE: 327 34th Street
Oakland, CA

LAB: KIFF | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION
☐ LIA
☐ OTHER

SPECIAL INSTRUCTIONS

Invoice to: LRM Consulting, Inc.
Attn: Ramkishore Rao
Report to: Ramkishore Rao

* **Silica Gel Cleanup Required**

SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H_2O	CONTAINERS TOTAL		C = COMPOSITE ALL CONTAINERS	CONDUCT ANALYSIS TO DETECT: TPH-Gas / BTEX (8260)	MTBE (8260)	TEPH (Diesel & Motor Oil) * 8015M	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	3/1/07	1409	W	6	6 HCl VOA		X	X	X				-01
MW-2	3/1/07	1510					X	X	X				-02
MW-3	3/1/07	1530					X	X	X				-03
MW-4	3/1/07	1307					X	X	X				-04
MW-5	3/1/07	1514					X	X	X				-05
MW-6	3/1/07	1211					X	X	X				-06
MW-7	3/1/07	1143					X	X	X				-07

SAMPLING COMPLETED: DATE 3/1/07 TIME 1600
SAMPLING PERFORMED BY: Michael Nimokata

RESULTS NEEDED NO LATER THAN: Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	3/1/07	1845	(Sample Custodian)	3/1/07	1845
	3/2/07	1021			
			Ron McLee Kiff Analytical	030207	1021

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

KIFF Analytical LLC

Report Number : 55105
Date : 3/7/2007

Ramkishore Rao
LRM Consulting, Inc.
1534 Plaza Lane, #145
Burlingame, CA 94010

Subject : 7 Water Samples
Project Name : 327 34th Street
Project Number : 070301-MN1

Dear Mr. Rao,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

KIFF Analytical LLC

Report Number : 55105
Date : 3/7/2007

Subject : 7 Water Samples
Project Name : 327 34th Street
Project Number : 070301-MN1

Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-2 and MW-3.

Hydrocarbons reported as TPH as Gasoline do not exhibit a typical Gasoline chromatographic pattern for sample MW-5.

Approved By: Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 55105
Date : 3/7/2007

Project Name : **327 34th Street**
Project Number : **070301-MN1**

Sample : **MW-1** Matrix : Water Lab Number : 55105-01
Sample Date :3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	**3.5**	0.50	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	96.1		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	97.7		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	3/5/2007
TPH as Motor Oil (w/ Silica Gel)	**< 100**	100	ug/L	M EPA 8015	3/5/2007
Octacosane (Diesel Silica Gel Surr)	104		% Recovery	M EPA 8015	3/5/2007

Sample : **MW-2** Matrix : Water Lab Number : 55105-02
Sample Date :3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1400**	10	ug/L	EPA 8260B	3/3/2007
Toluene	**5200**	10	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	**980**	10	ug/L	EPA 8260B	3/3/2007
Total Xylenes	**9500**	20	ug/L	EPA 8260B	3/5/2007
Methyl-t-butyl ether (MTBE)	**160**	10	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	**71000**	1000	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	97.6		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (w/ Silica Gel)	**< 18000**	18000	ug/L	M EPA 8015	3/5/2007
TPH as Motor Oil (w/ Silica Gel)	**460**	100	ug/L	M EPA 8015	3/5/2007
Octacosane (Diesel Silica Gel Surr)	118		% Recovery	M EPA 8015	3/5/2007

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 55105
Date : 3/7/2007

Project Name : **327 34th Street**
Project Number : **070301-MN1**

Sample : **MW-3** Matrix : Water Lab Number : 55105-03
Sample Date :3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1100**	5.0	ug/L	EPA 8260B	3/3/2007
Toluene	**2500**	5.0	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	**510**	5.0	ug/L	EPA 8260B	3/3/2007
Total Xylenes	**2200**	5.0	ug/L	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	**51**	5.0	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	**17000**	500	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	99.0		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (w/ Silica Gel)	**< 600**	600	ug/L	M EPA 8015	3/5/2007
TPH as Motor Oil (w/ Silica Gel)	**< 100**	100	ug/L	M EPA 8015	3/5/2007
Octacosane (Diesel Silica Gel Surr)	103		% Recovery	M EPA 8015	3/5/2007

Sample : **MW-4** Matrix : Water Lab Number : 55105-04
Sample Date :3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**63**	0.50	ug/L	EPA 8260B	3/3/2007
Toluene	**7.1**	0.50	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	**40**	0.50	ug/L	EPA 8260B	3/3/2007
Total Xylenes	**190**	0.50	ug/L	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	**130**	0.50	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	**1800**	50	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	93.9		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	99.9		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	3/5/2007
TPH as Motor Oil (w/ Silica Gel)	**< 100**	100	ug/L	M EPA 8015	3/5/2007
Octacosane (Diesel Silica Gel Surr)	103		% Recovery	M EPA 8015	3/5/2007

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 55105
Date : 3/7/2007

Project Name : **327 34th Street**
Project Number : **070301-MN1**

Sample : **MW-5** Matrix : Water Lab Number : 55105-05
Sample Date :3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	**54**	50	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	3/5/2007
TPH as Motor Oil (w/ Silica Gel)	**< 100**	100	ug/L	M EPA 8015	3/5/2007
Octacosane (Diesel Silica Gel Surr)	106		% Recovery	M EPA 8015	3/5/2007

Sample : **MW-6** Matrix : Water Lab Number : 55105-06
Sample Date :3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	**78**	0.50	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	94.8		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	98.9		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	3/6/2007
TPH as Motor Oil (w/ Silica Gel)	**< 100**	100	ug/L	M EPA 8015	3/6/2007
Octacosane (Diesel Silica Gel Surr)	102		% Recovery	M EPA 8015	3/6/2007

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 55105

Date : 3/7/2007

Project Name : **327 34th Street**

Project Number : **070301-MN1**

Sample : **MW-7** Matrix : Water Lab Number : 55105-07

Sample Date :3/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	98.0		% Recovery	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	3/3/2007
TPH as Diesel (w/ Silica Gel)	**< 50**	50	ug/L	M EPA 8015	3/6/2007
TPH as Motor Oil (w/ Silica Gel)	**< 100**	100	ug/L	M EPA 8015	3/6/2007
Octacosane (Diesel Silica Gel Surr)	101		% Recovery	M EPA 8015	3/6/2007

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 55105

Date : 3/7/2007

QC Report : Method Blank Data

Project Name : **327 34th Street**

Project Number : **070301-MN1**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (w/ Silica Gel)	< 50	50	ug/L	M EPA 8015	3/5/2007
TPH as Motor Oil (w/ Silica Gel)	< 100	100	ug/L	M EPA 8015	3/5/2007
Octacosane (Diesel Silica Gel Surr)	102		%	M EPA 8015	3/5/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/2/2007
Toluene - d8 (Surr)	99.0		%	EPA 8260B	3/2/2007
4-Bromofluorobenzene (Surr)	97.5		%	EPA 8260B	3/2/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/2/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/2/2007
Toluene - d8 (Surr)	95.0		%	EPA 8260B	3/2/2007
4-Bromofluorobenzene (Surr)	98.4		%	EPA 8260B	3/2/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/5/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/3/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/3/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/3/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/3/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/3/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/3/2007
Toluene - d8 (Surr)	98.4		%	EPA 8260B	3/3/2007
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	3/3/2007

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 55105

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 3/7/2007

Project Name : **327 34th Street**

Project Number : **070301-MN1**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	1040	958	ug/L	M EPA 8015	3/5/07	104	95.8	8.13	70-130	25
Benzene	55082-01	<0.50	39.8	39.6	43.4	43.1	ug/L	EPA 8260B	3/2/07	109	109	0.309	70-130	25
Toluene	55082-01	2.0	39.8	39.6	44.4	44.1	ug/L	EPA 8260B	3/2/07	106	106	0.182	70-130	25
Tert-Butanol	55082-01	<5.0	199	198	194	189	ug/L	EPA 8260B	3/2/07	97.8	95.6	2.24	70-130	25
Methyl-t-Butyl Ether	55082-01	<0.50	39.8	39.6	37.9	40.8	ug/L	EPA 8260B	3/2/07	95.4	103	7.66	70-130	25
Benzene	55144-10	<0.50	40.0	40.0	39.8	39.1	ug/L	EPA 8260B	3/5/07	99.6	97.8	1.86	70-130	25
Toluene	55144-10	<0.50	40.0	40.0	37.7	37.3	ug/L	EPA 8260B	3/5/07	94.3	93.2	1.21	70-130	25
Tert-Butanol	55144-10	<5.0	200	200	189	188	ug/L	EPA 8260B	3/5/07	94.5	93.8	0.789	70-130	25
Methyl-t-Butyl Ether	55144-10	<0.50	40.0	40.0	40.1	38.3	ug/L	EPA 8260B	3/5/07	100	95.7	4.61	70-130	25
Benzene	55101-04	<0.50	40.0	40.0	37.8	36.6	ug/L	EPA 8260B	3/2/07	94.6	91.4	3.42	70-130	25
Toluene	55101-04	<0.50	40.0	40.0	36.1	35.1	ug/L	EPA 8260B	3/2/07	90.3	87.8	2.74	70-130	25
Tert-Butanol	55101-04	<5.0	200	200	195	184	ug/L	EPA 8260B	3/2/07	97.3	92.2	5.41	70-130	25
Methyl-t-Butyl Ether	55101-04	<0.50	40.0	40.0	36.5	37.5	ug/L	EPA 8260B	3/2/07	91.3	93.8	2.66	70-130	25
Benzene	55124-09	<0.50	40.0	40.0	38.9	37.8	ug/L	EPA 8260B	3/3/07	97.2	94.5	2.89	70-130	25
Toluene	55124-09	<0.50	40.0	40.0	38.1	37.1	ug/L	EPA 8260B	3/3/07	95.3	92.7	2.82	70-130	25
Tert-Butanol	55124-09	<5.0	200	200	195	196	ug/L	EPA 8260B	3/3/07	97.6	98.0	0.367	70-130	25
Methyl-t-Butyl Ether	55124-09	<0.50	40.0	40.0	35.6	35.0	ug/L	EPA 8260B	3/3/07	89.1	87.6	1.66	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 55105

QC Report : Laboratory Control Sample (LCS)

Date : 3/7/2007

Project Name : **327 34th Street**

Project Number : **070301-MN1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	3/2/07	110	70-130
Toluene	40.0	ug/L	EPA 8260B	3/2/07	107	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/2/07	96.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/2/07	89.8	70-130
Benzene	40.0	ug/L	EPA 8260B	3/5/07	98.8	70-130
Toluene	40.0	ug/L	EPA 8260B	3/5/07	97.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/5/07	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/5/07	99.0	70-130
Benzene	40.0	ug/L	EPA 8260B	3/2/07	93.2	70-130
Toluene	40.0	ug/L	EPA 8260B	3/2/07	90.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/2/07	98.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/2/07	90.8	70-130
Benzene	40.0	ug/L	EPA 8260B	3/3/07	96.2	70-130
Toluene	40.0	ug/L	EPA 8260B	3/3/07	96.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/3/07	96.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/3/07	87.7	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

55105

BLAINE
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF BTS # 070301-MW1

CLIENT: LRM Consulting, Inc.

SITE: 327 34th Street
Oakland, CA

LAB: KIFF | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION
☐ LIA
☐ OTHER

SPECIAL INSTRUCTIONS

Invoice to: LRM Consulting, Inc.
Attn: Ramkishore Rao
Report to: Ramkishore Rao

*** Silica Gel Cleanup Required**

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL		C = COMPOSITE ALL CONTAINERS	CONDUCT ANALYSIS TO DETECT: TPH-Gas / BTEX (8260)	MTBE (8260)	TEPH (Diesel & Motor Oil) * 8015M	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	3/1/07	1409	W	6	6 HCl-VOA		X	X	X				-01
MW-2	3/1/07	1510					X	X	X				-02
MW-3	3/1/07	1530					X	X	X				-03
MW-4	3/1/07	1307					X	X	X				-04
MW-5	3/1/07	1514					X	X	X				-05
MW-6	3/1/07	1211					X	X	X				-06
MW-7	3/1/07	1143					X	X	X				-07

SAMPLE RECEIPT
Temp °C 2.6 Therm. ID# IR-5
Initial RLM Date 030207
Time 1714 Coolant present: (Yes) No

SAMPLING COMPLETED: DATE 3/1/07 TIME 1600
SAMPLING PERFORMED BY: Michael Nimokata

RESULTS NEEDED NO LATER THAN: Standard TAT

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	3/1/07	1845	(Sample Custodian)	3/1/07	1845
	3/2/07	1021			
			Ron McLeod Kiff Analytical	030207	1021

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #