



June 28, 2004

Mr. Don Hwang  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Number 250  
Alameda, California 94502

Alameda

JUL 08 2004

Environ

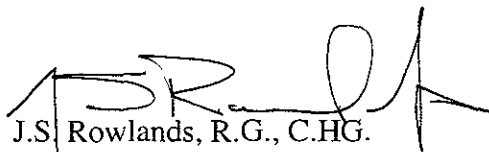
**Subject: 2004 First Quarter Groundwater Monitoring  
Former Sears Retail Center #1039  
1901- 1911 Telegraph Avenue  
Oakland, California  
Case I.D. #STID 1630  
For Sears, Roebuck & Co.**

Dear Mr. Hwang:

Submitted with this letter is a URS report prepared on behalf of Sears, Roebuck & Co. Presented in the report are results of groundwater monitoring conducted at the above-referenced site during the first quarter 2004. Please feel free to contact me at (714) 648-2793 if you have questions or comments.

Respectfully Submitted,

**URS CORPORATION**

  
J.S. Rowlands, R.G., C.H.G.  
Project Manager

cc: Mr. Scott DeMuth, Sears Roebuck and Co.  
Mr. Ryan Hartley, URS Corporation



Alameda  
June 28, 2004  
E. 11

2004 FIRST QUARTER  
GROUNDWATER MONITORING REPORT  
FORMER SEARS RETAIL CENTER #1039  
1901-1911 TELEGRAPH AVENUE  
OAKLAND, CALIFORNIA  
CASE I.D. # STID 1630  
FOR SEARS, ROEBUCK & CO.

URS Job No. 29863493  
June 28, 2004

**TABLE OF CONTENTS**

<u>SECTION</u>	<u>PAGE</u>
<b>1.0 INTRODUCTION .....</b>	<b>1-1</b>
<b>2.0 SITE DESCRIPTION .....</b>	<b>2-1</b>
2.1 Regional Geology and Hydrogeology.....	2-1
<b>3.0 BACKGROUND .....</b>	<b>3-1</b>
<b>4.0 HEALTH AND SAFETY PLAN .....</b>	<b>4-1</b>
<b>5.0 QUARTERLY GROUNDWATER MONITORING.....</b>	<b>5-1</b>
5.1 Groundwater Gauging.....	5-1
5.2 Purging and Sampling Methods .....	5-1
5.3 Laboratory Analysis Program .....	5-2
5.4 Well Head Maintenance .....	5-2
5.5 Waste Management.....	5-2
<b>6.0 FINDINGS .....</b>	<b>6-1</b>
6.1 Shallow Groundwater Conditions.....	6-1
6.2 Laboratory Analytical Results.....	6-1
<b>7.0 DISCUSSION .....</b>	<b>7-1</b>
<b>8.0 SCHEDULE .....</b>	<b>8-1</b>
<b>9.0 REFERENCES.....</b>	<b>9-1</b>

## List of Tables

- 1 2004 First Quarter Groundwater Levels and Parameters
- 2 2004 First Quarter Groundwater Analytical Results

## List of Figures

- 1 Vicinity Map
- 2 Plot Plan
- 3 Groundwater Contour Map – 2004 First Quarter
- 4 TPHg Isoconcentration Map – 2004 First Quarter
- 5 Benzene Isoconcentration Map – 2004 First Quarter

## List of Appendices

- A SWRCB Geotracker Site Data
- B Historical Groundwater Monitoring Results
- C Laboratory Reports and Chain-of-Custody Documents
- D URS Data Validation Reports

### 1.0 INTRODUCTION

This report has been prepared by URS Corporation on behalf of Sears, Roebuck & Co., (Sears). It presents results of the 2004 first quarter groundwater monitoring conducted at the Sears Auto Center (Site) located at 1901-1911 Telegraph Avenue in Oakland, California (Figure 1). The groundwater monitoring event consisted of "post purge" groundwater sample collection from nine monitoring wells (MW-1 through MW-9). The purpose of the groundwater monitoring was to assess current groundwater conditions in the vicinity of a former gasoline concession area (Figure 2). The work is being performed under regulatory oversight of the Alameda County Environmental Health Services (ACEHS) pursuant to quarterly monitoring and reporting requirements under Title 23, Division 3, Chapter 16 of the California Code of Regulations.

### 2.0 SITE DESCRIPTION

The Site is located at 1901-1911 Telegraph Avenue, Oakland, California (Figure 1). The Site is bordered on the north by Williams Street, Telegraph Avenue to the east, 19<sup>th</sup> Street to the south, and San Pablo Avenue to the west (Figure 2). A Sears Auto Center, a former Chevron Service Station, a three-story above-grade-parking garage, and a paved parking lot occupy the property.

#### 2.1 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Site is approximately 1.5 miles east of the San Francisco Bay and three miles west of the Diablo Range in Oakland, California. The area is located on the eastern flank of The San Francisco Basin, a broad Franciscan depression. Basement rock of the basin is respectively overlain by the Santa Clara Formation, the Alameda Formation, and the Temescal Formation. These formations consist of unconsolidated sediments varying in total thickness from approximately 300 to 1,000 feet. The Pleistocene Santa Clara Formation consists primarily of alluvial fan deposits that are interspersed with lake, swamp, river channel, and flood plain deposits. The overlying Alameda Formation was deposited in an estuary environment and consists of organic clays and alluvial fan deposits of sands, gravels, and silts. The uppermost Holocene Temescal Formation is an alluvial deposit ranging in thickness from 1 to 50 feet, which primarily consists of silts and clays overlying a basal gravel unit. (California Regional Water Quality Control Board [RWQCB], San Francisco Bay Region, June 1999).

The Site is located within the Oakland sub-area of the East Bay Plain groundwater basin. The East Bay Plain groundwater basin encompasses approximately 115 square miles and is bounded by San Pablo Bay to the north, Alameda County to the south, the Hayward Fault to the east, and San Francisco Bay to the west. Groundwater flow direction in the basin typically follows surface topography. Historical high production wells in the Oakland sub-area were screened at depths greater than 200 feet below ground surface (bgs) beneath the Yerba Buena Mud Member of the Alameda Formation. The Yerba Buena Mud is a black organic clay with an average thickness of 25 to 50 feet that forms an aquitard between upper and lower groundwater bearing units. From the 1860's until water importation programs were initiated in the 1930's, groundwater in the East Bay Plain was utilized as the primary municipal water source. Current beneficial uses of groundwater in the basin are minimal due to "readily available high quality imported surface water" (RWQCB, June 1999). Alameda County Well permit applications indicated 91% of groundwater wells within the basin are used for "backyard" or commercial irrigation, 8.6% of the wells are used for industrial process water, and 0.4% are used for drinking water supply (RWQCB, June 1999).

### 3.0 BACKGROUND

The Site consists of a Sears Auto Center, a multiple level parking structure, a paved parking lot, and a former Chevron Service Station. The Sears Auto Center is currently in operation; it is a converted former Goodyear Tire Center. Three gasoline underground storage tanks (USTs) and a used oil UST were installed at the former Chevron Service Station. On January 29, 1988, prior to Sears' ownership of the Site, one 3,000 gallon gasoline UST, one 5,000 gallon gasoline UST, one 7,000 gallon gasoline UST, and one 500 gallon used oil UST were removed under oversight of the Oakland Fire Department and the ACEHS. Approximately 20 to 30 cubic yards of gasoline impacted soil was removed from the "south area" of the gasoline USTs excavation and subsequently disposed at a Class I landfill in Buttonwillow, California. Following excavation, residual concentrations of total petroleum hydrocarbons as gasoline (TPHg) and benzene in soil were below 100 mg/kg and 0.7 mg/kg, respectively. The UST excavations were subsequently backfilled with imported crushed rock and "clean excavated material" (Dames & Moore, 1988).

A total of nine groundwater monitoring wells (MW-1 through MW-9) have been installed, before and after the property's purchase by Sears, to evaluate the extent of gasoline impacted groundwater emanating from the former Chevron Station's UST area. The prior owners, Broadway/Federated Department Stores, began initial investigation work and groundwater monitoring. Subsequent to the property's purchase by Sears during a bankruptcy proceeding, Sears has continued quarterly groundwater monitoring (since June 1996), and has installed additional wells to define the down-gradient extent of the gasoline groundwater plume (The IT Group, February 2000).

Groundwater has been monitored since January 1988. Well MW-1 has been monitored on a periodic basis since January 1988 while wells MW-2, MW-3, and MW-4 have been monitored on a periodic basis since June 1993. Wells MW-5, MW-6, and MW-7 have been monitored on a periodic basis since June 1994. Wells MW-8 and MW-9 have been monitored on a periodic basis since November 1999. Historical monitoring data shows that dissolved phase TPHg have been detected in six of the nine wells and dissolved phase benzene has been detected in seven of the nine wells. Available historical groundwater data (since October 1995); including depth to water, groundwater elevation, hydrocarbon and volatile organic compounds (VOCs) concentrations; are summarized in Appendix B.

## 4.0 HEALTH AND SAFETY PLAN

Prior to initiating the field activities, URS prepared a site-specific Health & Safety (H&S) Plan to:

- ◆ Identify and describe potentially hazardous substances which may be encountered during field operations;
- ◆ Specify protective equipment and clothing for onsite activities;
- ◆ Outline measures to be implemented in the event of an emergency.

URS field personnel reviewed the H&S Plan prior to commencing the field procedures. Field monitoring activities were recorded in the H&S Plan and were maintained in the project files at URS's Santa Ana office. A copy of the H&S Plan remained onsite during field operations.



## 5.0 QUARTERLY GROUNDWATER MONITORING

The 2004 first quarter groundwater monitoring was performed on February 11, 2004. The monitoring consisted of groundwater gauging, purging, and sampling of all nine wells (MW-1 through MW-9). A description of the monitoring procedures is presented in the following section.

### 5.1 GROUNDWATER GAUGING

Prior to gauging, the groundwater monitoring wells were checked for the presence of separate phase product using a product interface probe. Separate phase product was not observed in any of the wells. Water levels in each well were measured using a Solinst™ water level indicator relative to a defined measuring point on the surveyed top of casing. Water level data was recorded to the nearest 0.01 foot. Before and after each well the water level indicator sensor and tape was rinsed with a solution of Alconox followed by rinsing with tap water or deionized water. Groundwater depths and elevations for the 2004 first quarter are listed in Table 1 and Appendix B.

### 5.2 PURGING AND SAMPLING METHODS

Prior to sample collection, wells were purged of approximately three well casing volumes using a Grundfos™ RediFlo 2 submersible well pump. Water purged from each well was monitored for various field parameters including temperature, pH, turbidity, electrical conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP) using a YSI™ multi-parameter meter equipped with a flow-through cell. Purging continued until temperature, pH, and conductivity had stabilized. The stabilized field parameters are listed in Table 1.

Groundwater samples were collected from nine monitoring wells for laboratory analysis during the 2004 first quarter groundwater monitoring event. Groundwater samples were collected from the discharge tubing of the well pump following purging. The Grundfos RediFlo 2™ submersible well pump was cleaned prior to use (and between wells) by washing in a solution of Alconox, rinsing with tap water, final rinsing with deionized water, and air drying. Pre-cleaned, disposable, polyethylene discharge tubing was attached to the pump following each decontamination and was changed between each well purging event. A blind duplicate was collected from well MW-7 and labeled DUP-1. One equipment blank sample, EB-1, was collected by pumping deionized water through the pump and into sample containers following decontamination procedures.

Sample containers and handling procedures for groundwater samples conformed to the established protocols for each specific parameter as described in EPA SW-846. The sample bottles, once filled and preserved as required, were properly labeled and logged on a chain of custody form. The label included well identification number, sample number, date and time sampled, job number, site/client name and location, and sampling personnel's initials. The sealed and labeled samples were placed in an ice chest with ice and transported to Southland Technical Services, Inc. (STS), a California Department of Health Services (CDHS) accredited laboratory for analysis. The ice chest temperature was recorded at 4 degrees

## 2004 First Quarter Groundwater Monitoring Report

---

centigrade by the laboratory upon receipt. Chain-of-custody records were maintained throughout the sampling program.

### 5.3 LABORATORY ANALYSIS PROGRAM

All groundwater samples and duplicates were analyzed by STS for TPHg by modified EPA Method 8015M. Groundwater samples were also analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and fuel oxygenates Methyl tert-Butyl Ether (MTBE), Di-isopropyl Ether (DIPE), Ethyl tert-butyl Ether (ETBE), tert-Amyl Methyl Ether (TAME), tert-Butanol (TBA), and other volatile organic compounds (VOCs) by EPA Method 8260B.

### 5.4 WELL HEAD MAINTENANCE

As part of the quarterly monitoring program each well head is inspected to ensure that wells are properly sealed and secured. The routine well maintenance associated with the quarterly groundwater sampling consists of: inspection of water-tight well caps and locks on all monitoring wells and replacement as necessary; replacement of missing or damaged bolts on well box covers; and removal and replacement of damaged well boxes and associated concrete aprons. During this quarterly event, all wells were properly sealed and secured.

### 5.5 WASTE MANAGEMENT

Well purge water was collected and stored in three 55-gallon DOT-approved drums. Containers were labeled to identify the source of the wastes and individually numbered. The containers were stored onsite and properly disposed of by a licensed waste transporter under contract with Sears, Roebuck & Co., following review of the chemical analysis data.

### 6.0 FINDINGS

#### 6.1 SHALLOW GROUNDWATER CONDITIONS

The measured depth to groundwater beneath the Site during the first quarter monitoring event ranged from 12.87 feet to 17.26 feet bgs. Calculated groundwater elevations ranged from 3.15 feet to 6.02 feet above mean sea level (msl). Groundwater elevations in the wells have decreased an average of 0.42 feet since the 2003 fourth quarter monitoring event. Groundwater depths and elevations are listed in Table 1 and Appendix B. An interpretive groundwater elevation contour map, based on the 2004 first quarter groundwater-level measurements, is provided as Figure 3. Groundwater elevation contours for the Site were generated by a geostatistical gridding method using SURFER™, a graphical, contouring software program. The resultant groundwater contours indicate an easterly groundwater flow direction with a gradient of about 0.012 (Figure 3).

#### 6.2 LABORATORY ANALYTICAL RESULTS

TPHg were detected in groundwater samples collected from wells MW-2 and MW-7 with concentrations of 353 micrograms per liter ( $\mu\text{g/L}$ ) and 30,300  $\mu\text{g/L}$ , respectively. Benzene was detected in samples collected from monitoring wells MW-2, MW-4, and MW-7, with concentrations ranging from 1.5  $\mu\text{g/L}$  to 15,300  $\mu\text{g/L}$ . Ethylbenzene and xylene were detected in the sample collected from MW-7 at concentrations of 663  $\mu\text{g/L}$  and 660  $\mu\text{g/L}$ , respectively.

Various chlorinated VOCs, including tetrachloroethene (PCE), trichloroethene (TCE) and 1,2-dichloroethane (1,2-DCA) were detected in the groundwater samples collected from wells MW-1, MW-2, MW-3, MW-8, and MW-9. PCE was detected in wells MW-1, MW-3, MW-8, and MW-9 with concentrations ranging from 5.0  $\mu\text{g/L}$  to 42.0  $\mu\text{g/L}$ . TCE was detected in wells MW-1, MW-2, MW-3 and MW-9 with concentrations ranging from 4.0  $\mu\text{g/L}$  to 13.9  $\mu\text{g/L}$ . 1,2-DCA was detected in wells MW-2 and MW-9 at concentrations of 5.5  $\mu\text{g/L}$  and 17.6  $\mu\text{g/L}$ , respectively.

Chemical analysis results of the 2004 first quarter groundwater monitoring are presented in Table 2. A copy of the laboratory reports and chain-of-custody records are included in Appendix C. Groundwater isoconcentration maps for TPHg and Benzene for the 2004 first quarter are shown on Figures 4 and 5, respectively. URS conducted a check of data completeness for the analytical laboratory reports. Results indicate that "these data are considered to be useable for meeting project objectives." A copy of URS' Data Validation Report is included in Appendix D.

### 7.0 DISCUSSION

The 2004 first quarter groundwater monitoring event represents the 34<sup>th</sup> groundwater-sampling event conducted at the Site. Groundwater elevations have decreased approximately 0.42 feet since the last sampling event conducted in December 2003. Groundwater flow direction is towards the east with a gradient of 0.012, which is consistent with previous monitoring events.

TPHg were detected in two of the nine monitoring wells sampled with concentrations up to 30,300 µg/L. Benzene was detected in three of nine monitoring wells sampled with concentrations up to 15,300 µg/L. The suspected source is the former gasoline USTs and fuel dispensing area of the former Chevron station located near the central portion of the Site.

Chlorinated VOCs have been detected in both the upgradient well MW-1 as well as the downgradient well MW-9 during this, and previous, groundwater sampling events. Potential onsite sources of chlorinated VOCs have not been identified; however, a widespread groundwater plume containing chlorinated compounds has been identified in the Site vicinity by Harding ESE and is referenced in the Fourth Quarter 2001 Groundwater Monitoring Report for the Site (IT Corp., May 2002).

Based on the data collected during this and previous monitoring events, the lateral limits of TPHg and BTEX affected groundwater can be described by an oval shaped plume with the long axis trending southeast with a length of approximately 220 feet, and the short axis trending northeast with a length of approximately 120 feet. The plume is defined by the existing monitoring well network and is limited to the Site. Although TPHg and benzene concentrations have increased in well MW-7 since 1995, they have remained relatively stable during the last year. In general, monitoring data collected during the last year suggests that the dissolved phase TPHg and BTEX plume is stable and is not migrating laterally or further down gradient.

## 8.0 SCHEDULE

The schedule for work to be conducted during the following quarter is as follows:

- ◆ Quarterly groundwater monitoring of wells MW-1 through MW-9: May 2004.
- ◆ Submittal of 2004 Second Quarter Groundwater Monitoring Report to ACEHS: July 2004.


ACEHS will be notified of upcoming field activities.

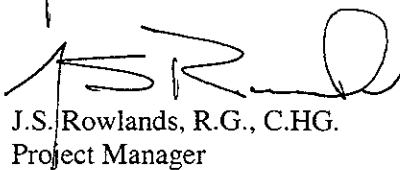
-o0o-

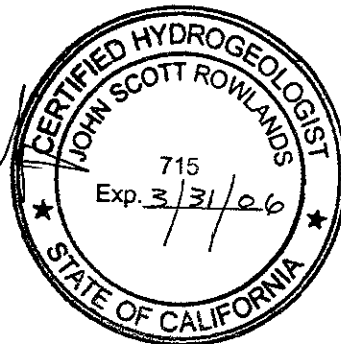
Should you have any questions or comments, please do not hesitate to contact us.

Respectfully Submitted,

URS CORPORATION

  
Jordan Mandel  
Staff Environmental Scientist

  
J.S. Rowlands, R.G., C.H.G.  
Project Manager



## 2004 First Quarter Groundwater Monitoring Report

---

URS Corporation, 2004. *2003 Fourth Quarter Groundwater Monitoring*, Former Sears Retail Center #1039, 1901-1911 Telegraph Avenue, Oakland, California, February 5.

**TABLES**

**Table 1**  
**2004 1st Quarter Groundwater Levels and Parameters**  
**Sears Retail Center Store No. 1039**  
**Oakland, California**

Monitoring Well No.	Date Collected	Notes	GROUNDWATER LEVELS				GROUNDWATER SAMPLING FIELD PARAMETERS							
			Product Thickness (ft)	Depth to Groundwater (feet bgs)	Casing Elevation (MSL)	Groundwater Elevation (MSL)	Temperature (Celsius)	pH	Conductivity (µS/cm)	O.R.P. (mV)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Ferrous Iron* (mg/L)	
MW-1	2/11/04	--	0.0	14.97	20.99	6.02	19.99	6.15	702	46.0	10.9	0.56	0.00	
MW-2	2/11/04	--	0.0	14.85	20.50	5.65	22.14	6.30	1328	-56.1	2.8	0.30	3.00	
MW-3	2/11/04	--	0.0	16.92	22.29	5.37	22.02	6.08	470	120.9	10.0	0.00	0.00	
MW-4	2/11/04	--	0.0	14.14	18.61	4.47	22.10	6.43	1425	-54.4	2.8	0.13	1.30	
MW-5	2/11/04	1	0.0	12.87	18.76	5.89	21.54	6.62	1211	-131.4	66.8	0.00	4.80	
MW-6	2/11/04	--	0.0	14.67	18.91	4.24	21.65	6.38	1489	-2.5	13.2	0.14	0.00	
MW-7	2/11/04	1	0.0	16.18	20.39	4.21	21.81	6.34	906	-95.7	25.4	0.00	4.80	
MW-8	2/11/04	--	0.0	17.26	21.12	3.86	21.93	6.28	409	69.2	49.6	1.55	0.00	
MW-9	2/11/04	--	0.0	16.05	19.20	3.15	22.23	6.33	817	113.0	29.2	0.05	0.00	

Notes: MSL - Mean Sea Level  
BGS - Below ground surface  
Groundwater Elevation reference to MSL.  
Groundwater Elevation = Top of casing elevation - Depth to Water  
1 - Petroleum odor in groundwater

µS/cm - microSiemens per centimeter  
mV - millivolt  
mg/L - milligrams per liter  
NTU - nephelometric turbidity units  
O.R.P. - Oxidation Reduction Potential

\* - Ferrous Iron Field Results



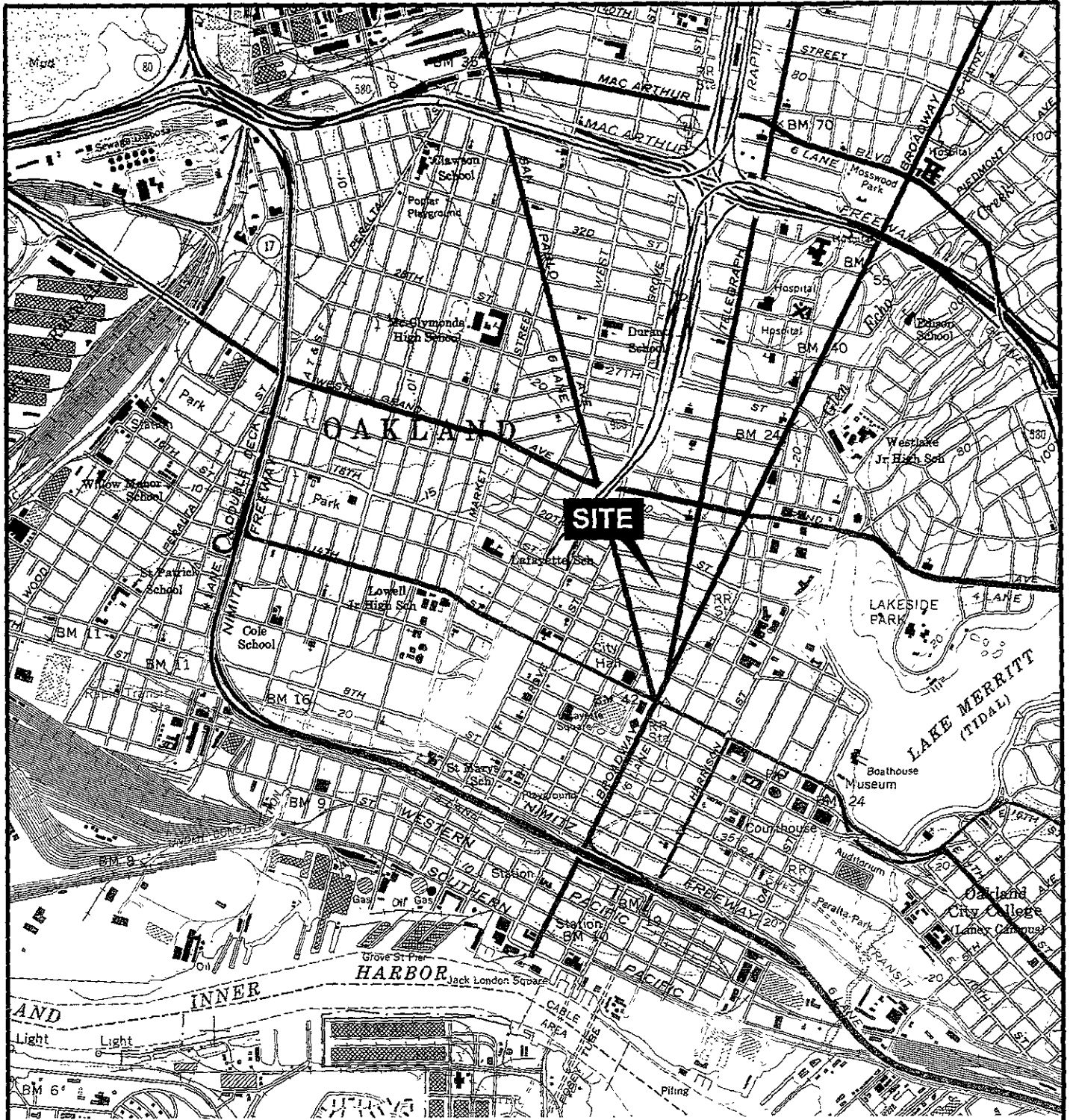
**Table 2**  
**2004 1st Quarter Groundwater Analytical Results**  
**Sears Retail Center Store No. 1039**  
**Oakland, California**

Monitoring Well No.	Sample Date	LABORATORY ANALYTICAL RESULTS														
		EPA Method 8015M		EPA Method 8260B												
		Notes	TPH <sub>g</sub> (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	TBA (µg/L)	PCE (µg/L)	TCE (µg/L)	1,2-DCA (µg/L)	
MW-1	2/11/04	--	< 50	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	36.6	5.9	< 5
MW-2	2/11/04	--	353	36.4	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	4.0	5.5
MW-3	2/11/04	--	< 50	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	29.6	11.1	< 5
MW-4	2/11/04	--	< 50	1.5	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5
MW-5	2/11/04	--	< 50	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5
MW-6	2/11/04	--	< 50	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5
MW-7	2/11/04	--	30,300	15,300	< 1	663	660	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5
	2/11/04	1	33,500	15,200	< 1	630	600	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5
MW-8	2/11/04	--	< 50	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	5.0	< 2.5	< 5
MW-9	2/11/04	--	< 50	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	42.0	13.9	17.6

Notes:

- 1: Duplicate sample
- < - Analyte not detected above indicated method detection limit
- TPH<sub>g</sub> = Total Petroleum Hydrocarbons as gasoline
- MTBE - Methyl tertiary-butyl ether
- DIPE - Di-isopropyl Ether
- TAME - Tertiary Amyl Methyl Ether
- TBA - Tertiary Butyl Alcohol
- ETBE - Ethyl Tertiary Butyl Ether
- PCE - Tetrachloroethane
- TCE - Trichloroethene
- 1,2-DCA - 1,2-Dichloroethane (EDC)

FIGURES

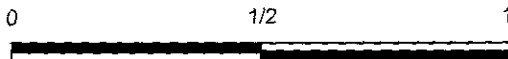


REFERENCE: USGS 7.5 Minute Series Oakland West, CA Quad, 1959, Photorevised 1980

FIGURE 1

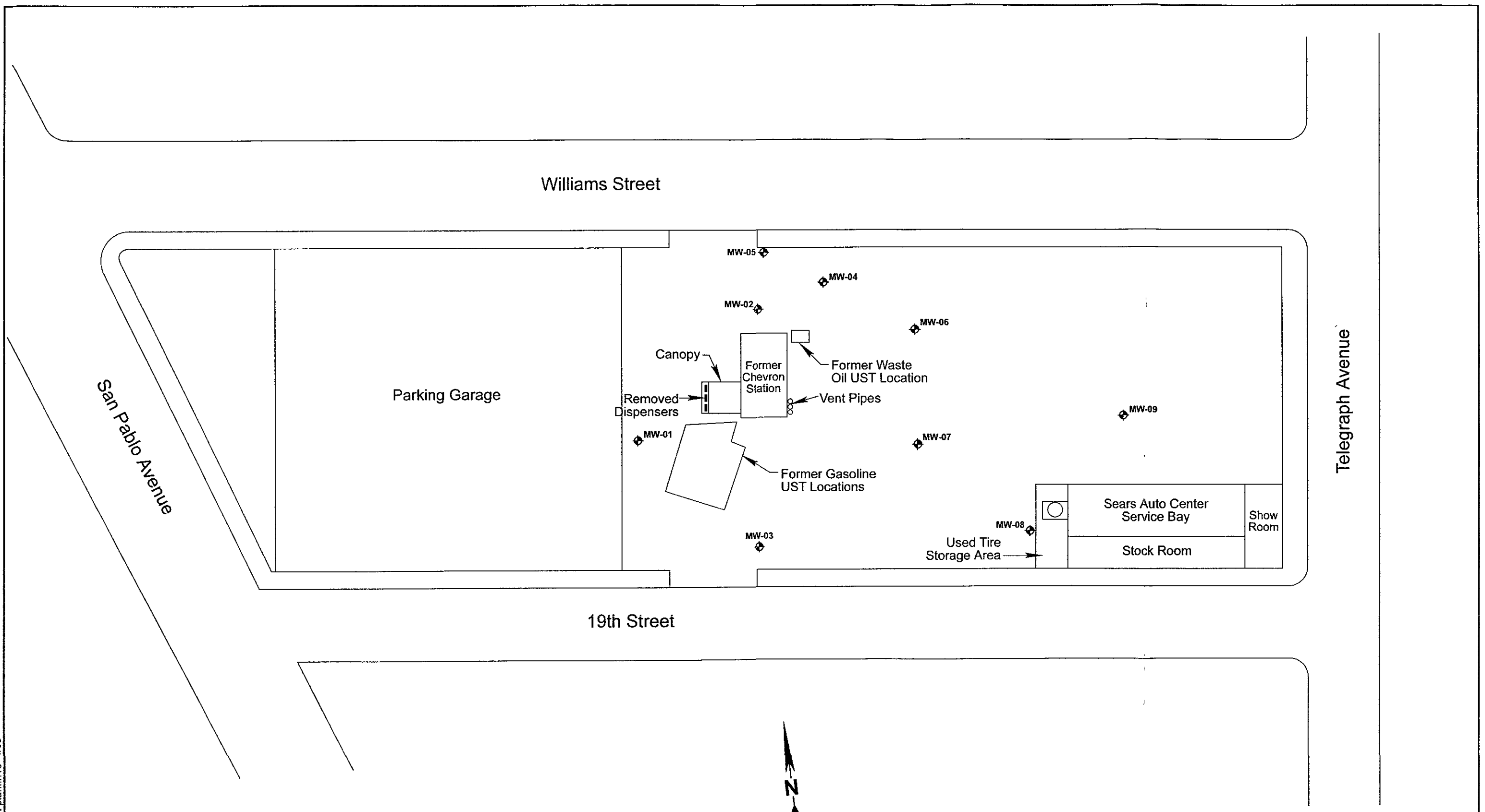
**VICINITY MAP**

SEARS AUTO CENTER #1039  
 1901-1911 TELEGRAPH AVENUE  
 OAKLAND, CALIFORNIA  
 For Sears, Roebuck & Co.



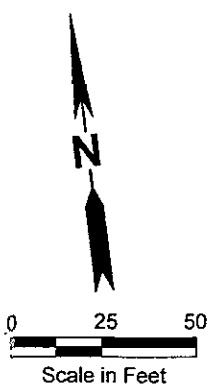
Scale in Miles





**EXPLANATION**

MW-1  MONITORING WELL LOCATION



**PLOT PLAN**

Project: SEARS AUTO CENTER #1039,  
1901-1911 TELEGRAPH AVE., OAKLAND, CA

Project No.: 29863493 Figure 2

C:\Users\oakland\appdata\local\temp\planning\4103

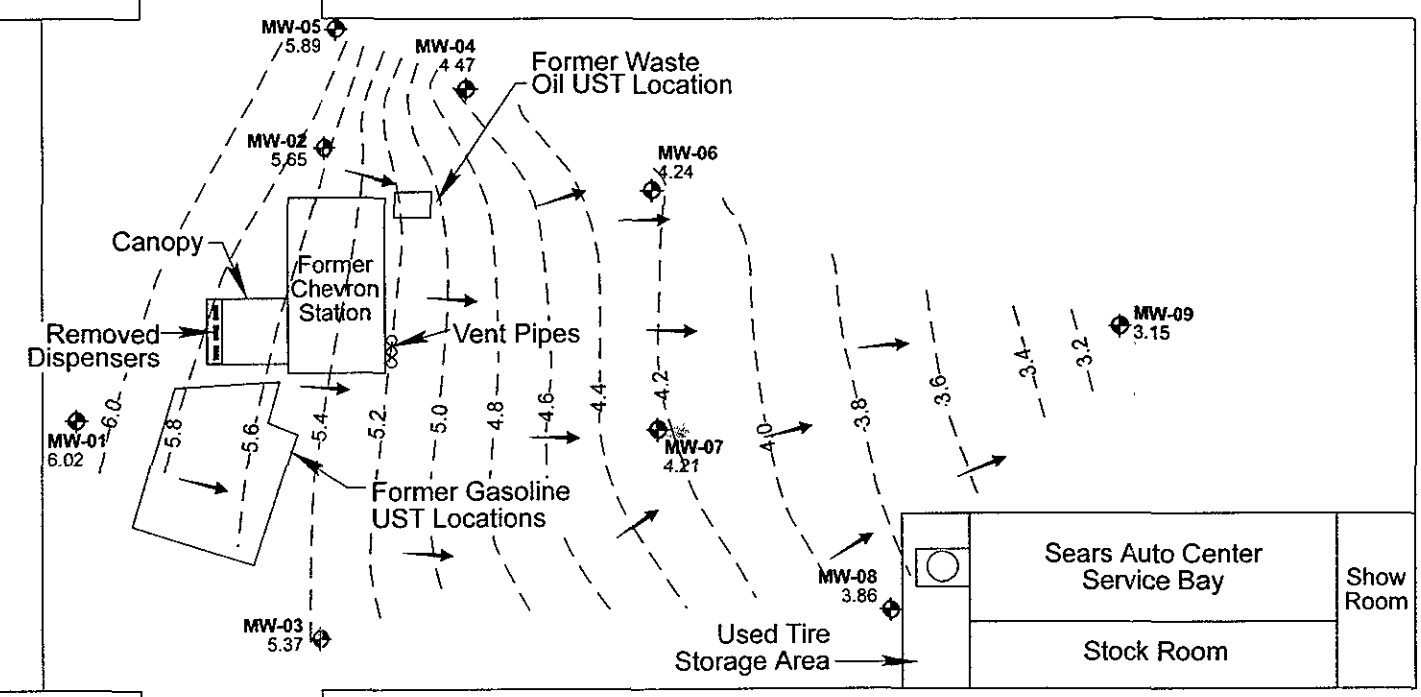
Williams Street

San Pablo Avenue

Telegraph Avenue

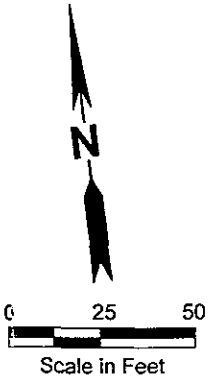
19th Street

Parking Garage



**EXPLANATION**

- MW-05 MONITORING WELL LOCATION
- 3.6 - GROUNDWATER CONTOUR
- GROUNDWATER FLOW DIRECTION
- 6.02 GROUNDWATER ELEVATION



**GROUNDWATER CONTOUR MAP  
2004 FIRST QUARTER**

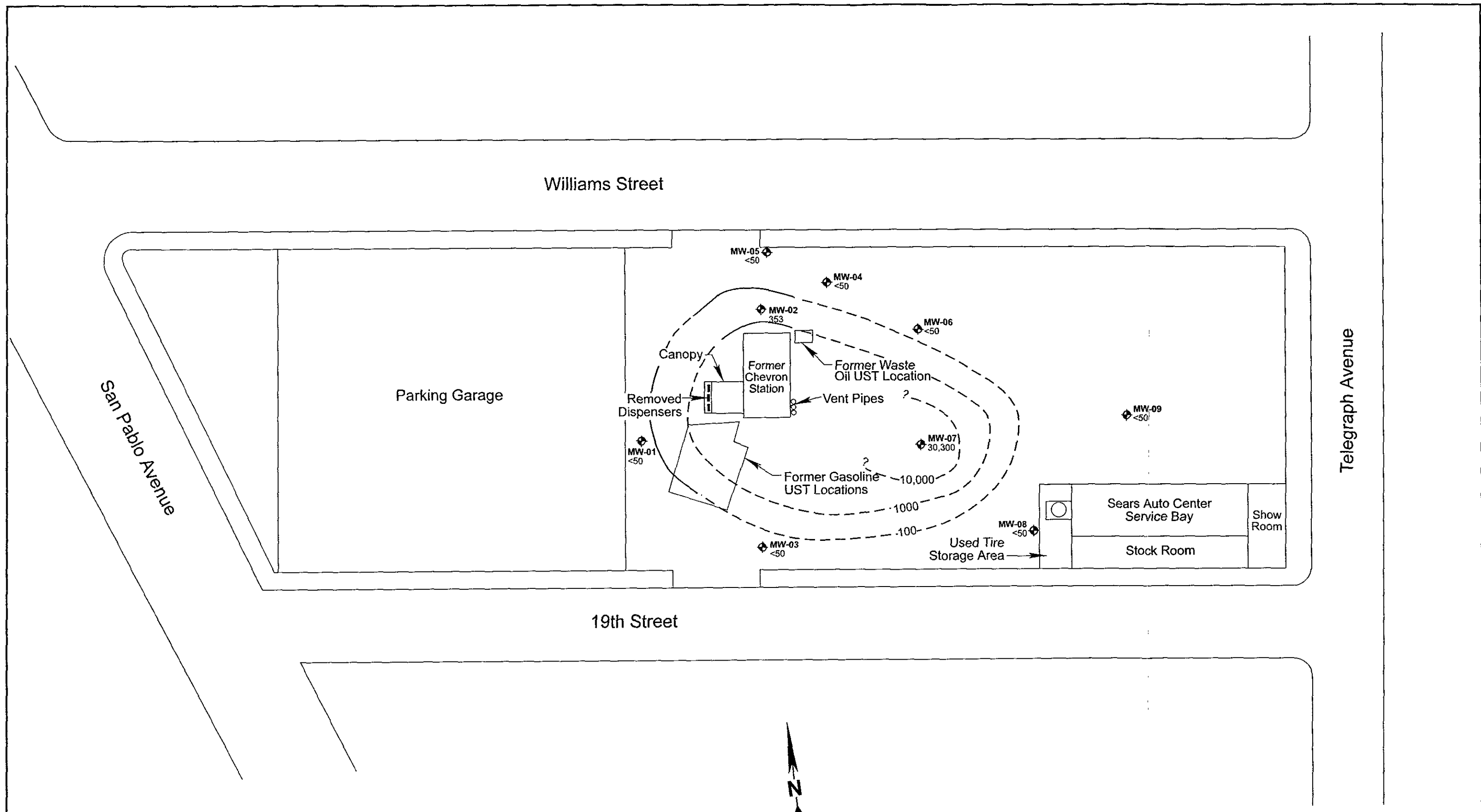
Project: SEARS AUTO CENTER #1039,  
1901-1911 TELEGRAPH AVE., OAKLAND, CA

Project No.: 29863493

Date Measured: February 11, 2004

Figure 3

C:\Users\paul\Documents\GW\_Environment\1\_Sears\2004\_04.flw\_004

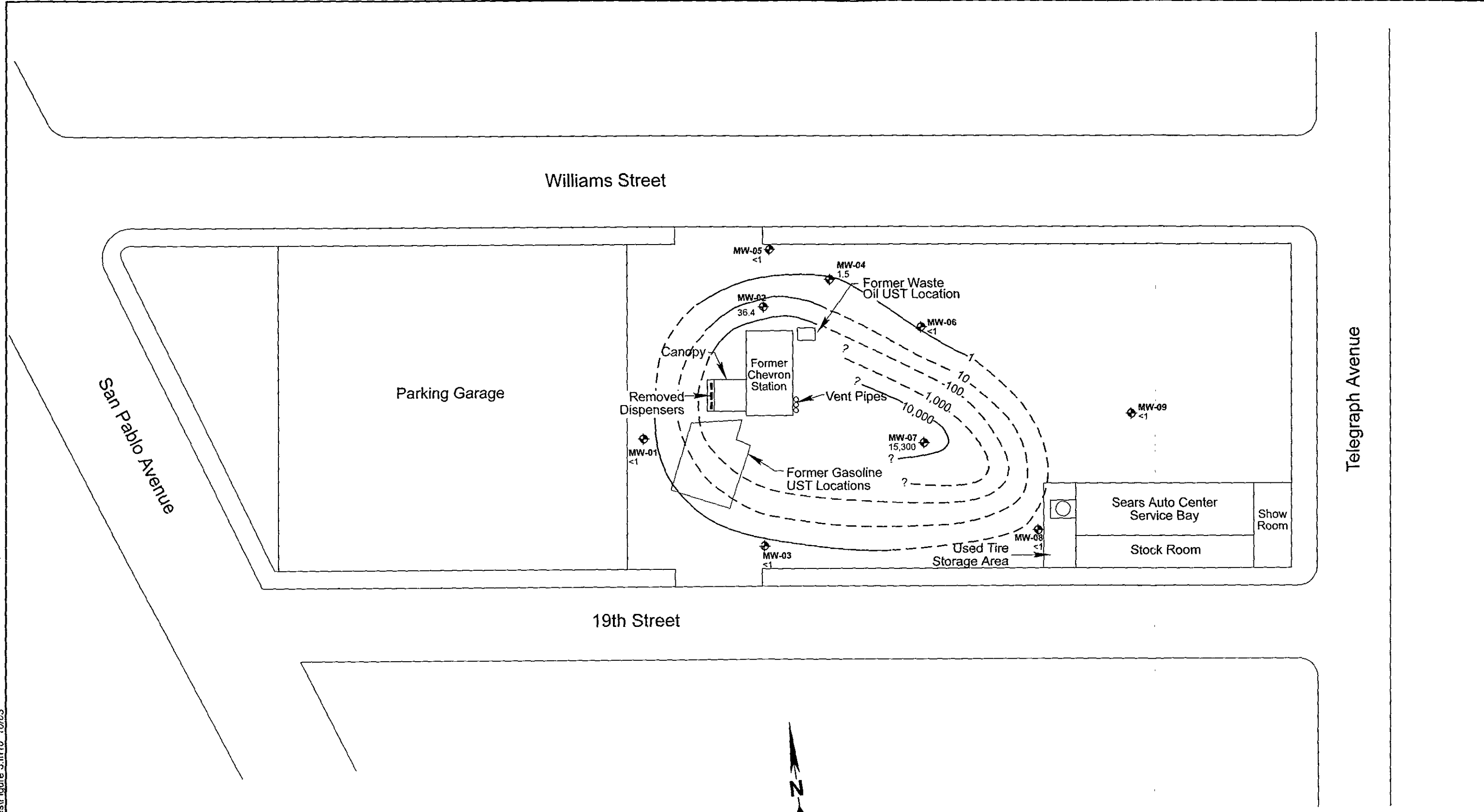


**EXPLANATION**

- MW-7 30,300 MONITORING WELL LOCATION WITH TPHg CONCENTRATION IN µg/L
- 100— TPHg ISOCONCENTRATION CONTOUR



<b>TPHg ISOCONCENTRATION CONTOUR MAP- 2004 FIRST QUARTER</b>	
Project: SEARS AUTO CENTER #1039, 1901-1911 TELEGRAPH AVE., OAKLAND, CA	
Date Sampled: FEBRUARY 11, 2004	Figure 4



**EXPLANATION**

- MW-7 15,300 MONITORING WELL LOCATION WITH BENZENE CONCENTRATION IN µg/L
- 100— BENZENE ISOCONCENTRATION CONTOUR



<b>BENZENE ISOCONCENTRATION CONTOUR MAP- 2004 FIRST QUARTER</b>	
Project: SEARS AUTO CENTER #1039, 1901-1911 TELEGRAPH AVE., OAKLAND, CA	
Date Sampled: February 11, 2004	Figure 5

**APPENDIX A**  
**SWRCB GEOTRACKER SITE DATA**



# LUFT ANALYTICAL DATA REPORT

**CHEVRON (OAKLAND)**  
1911 TELEGRAPH AVE  
OAKLAND , CA 94612  
**CASE STATUS: CLOSED**  
[SHOW THIS SITE ON MAP](#)  
[RETURN TO REPORT MAIN MENU](#)

**REGIONAL BOARD - CASE #: 01-0336**  
SAN FRANCISCO BAY RWQCB (REGION 2) - (BG)  
**CONTACT: BETTY GRAHAM - (510) 622-2300**  
**LOCAL AGENCY (LEAD AGENCY) - CASE #: 1630**  
ALAMEDA COUNTY LOP - (UNK)

[Plt. Select Chemicals](#)

[Results](#)

Note: You may select up to 6 chemicals.

[\(All Data\)](#) | [\(Most Recent\)](#) | [\(Maximum Concentrations\)](#)

<u>NAME</u>	<u>DATE</u>	<u>PARAMETER</u>	<u>MATRIX</u>	<u>QUALIFIER</u>	<u>RESULT</u>	<u>UNITS</u>	<u>PLOT</u>
NO DATA HAS BEEN SUBMITTED TO THE SWRCB FOR THIS MONITORING WELL.							

\* DENOTES A HISTORICAL VALUE

[Geotracker Home](#) | [Site/Facility Finder](#) | [Case Finder](#) | [MTBE/Case Reports](#)

<b>Locational Information</b>		
<b>CHEVRON (OAKLAND)</b> 1911 TELEGRAPH AVE OAKLAND , CA 94612 <b>CASE STATUS: CLOSED</b> <a href="#">SHOW THIS SITE ON MAP</a> <a href="#">RETURN TO REPORT MAIN MENU</a>		<b>REGIONAL BOARD - CASE #: 01-0336</b> SAN FRANCISCO BAY RWQCB (REGION 2) - (BG) <b>CONTACT: BETTY GRAHAM - (510) 622-2300</b> <b>LOCAL AGENCY (LEAD AGENCY) - CASE #: 1630</b> ALAMEDA COUNTY LOP - (UNK)
<b>PHYSICAL LOCATION:</b>		
<b>GLOBAL ID</b>	<b>LATITUDE</b>	<b>LONGITUDE</b>
T0600100308	37.80913	-122.269338
<b>GEOGRAPHIC DATA DETAILS:</b>		
<b>DATUM</b>		<b>SURVEY METHOD</b>
North American Datum 1983		Geocoded
<b>PROJECTION</b>		<b>ESTIMATED ACCURACY</b>
Geographic Projection		376.24 feet
<b>SOURCE OF DATA</b>		
ETAK Geocoding Class 1 Block Match - Street Segment Exact Address Match		

[Geotracker Home](#) | 
 [Site/Facility Finder](#) | 
 [Case Finder](#) | 
 [MTBE/Case Reports](#)

## REGULATORY HISTORY

**CHEVRON (OAKLAND)**  
1911 TELEGRAPH AVE  
OAKLAND , CA 94612

**CASE STATUS: CLOSED**  
[SHOW THIS SITE ON MAP](#)  
[RETURN TO REPORT MAIN MENU](#)

**REGIONAL BOARD - CASE #: 01-0336**  
SAN FRANCISCO BAY RWQCB (REGION 2) - (BG)  
**CONTACT: BETTY GRAHAM - (510) 622-2300**

**LOCAL AGENCY (LEAD AGENCY) - CASE #: 1630**  
ALAMEDA COUNTY LOP - (UNK)

## REGULATORY HISTORY

<u>BEGIN DATE</u>	<u>STATUS</u>
2/23/1988	Leak Discovery
2/23/1988	Leak Reported
4/12/1988	8 - Verification Monitoring Underway
4/15/1988	Leak Stopped
3/12/1992	System Entry
8/21/1998	9 - Case Closed
8/21/1998	Regulatory Review

[Geotracker Home](#) | [Site/Facility Finder](#) | [Case Finder](#) | [MTBE/Case Reports](#)

## Detailed Release Information

**CHEVRON (OAKLAND)**  
1911 TELEGRAPH AVE  
OAKLAND , CA 94612

**CASE STATUS:** CLOSED  
[SHOW THIS SITE ON MAP](#)  
[RETURN TO REPORT MAIN MENU](#)

**REGIONAL BOARD - CASE #: 01-0336**  
SAN FRANCISCO BAY RWQCB (REGION 2) - (BG)  
**CONTACT:** BETTY GRAHAM - (510) 622-2300

**LOCAL AGENCY (LEAD AGENCY) - CASE #: 1630**  
ALAMEDA COUNTY LOP - (UNK)

**CASE TYPE:**

Soil Only

**ENFORCEMENT TYPE:**

**FUNDING:**

F

**HOW LEAK WAS DISCOVERED:**

Tank Closure

**METHOD USED TO STOP DISCHARGE:**

Close Tank

**INTERIM:**

Y = Interim Action Taken

**CAUSE OF LEAK:**

Structural Failure

**SOURCE OF LEAK:**

Tank

**SUBSTANCES RELEASED:**

<u>Begin Date</u>	<u>Substance</u>	<u>Quantity</u>
UNKNOWN	WASTE OIL	

[Geotracker Home](#) | [Site/Facility Finder](#) | [Case Finder](#) | [MTBE/Case Reports](#)

## Remediation On Site

**CHEVRON (OAKLAND)**  
1911 TELEGRAPH AVE  
OAKLAND, CA 94612

**CASE STATUS:** CLOSED  
[SHOW THIS SITE ON MAP](#)  
[RETURN TO REPORT MAIN MENU](#)

**REGIONAL BOARD - CASE #: 01-0336**  
SAN FRANCISCO BAY RWQCB (REGION 2) - (BG)  
**CONTACT:** BETTY GRAHAM - (510) 622-2300

**LOCAL AGENCY (LEAD AGENCY) - CASE #: 1630**  
ALAMEDA COUNTY LOP - (UNK)

<u>Start Date</u>	<u>Method</u>	<u>Phase</u>
4/5/2000	Excavate And Dispose	Soil
4/5/2000	Excavate And Treat	Soil

[Geotracker Home](#) | [Site/Facility Finder](#) | [Case Finder](#) | [MTBE/Case Reports](#)

**APPENDIX B**

**HISTORICAL GROUNDWATER MONITORING RESULTS**

Appendix B  
 Historical Groundwater Monitoring Results  
 Sears Auto Center # 1039  
 Oakland California  
 (Page 1 of 5)

Well No.	Sample No.	Notes	Sample Date	Sample Period	Depth to Groundwater (ft bgs)	Stand Prod Thickness (ft)	Casing Elevation (ft MSL)	Groundwater Elevation (ft MSL)	TPHg $\mu\text{g/L}$	TPHd $\mu\text{g/L}$	TPHo $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	MTBE $\mu\text{g/L}$	ETBE $\mu\text{g/L}$	DIPE $\mu\text{g/L}$	TAME $\mu\text{g/L}$	TBA $\mu\text{g/L}$	PCE $\mu\text{g/L}$	TCE $\mu\text{g/L}$	1,2-DCA $\mu\text{g/L}$	cis-1,2 DCE $\mu\text{g/L}$	1,1-DCE $\mu\text{g/L}$	1,2,4-TMB $\mu\text{g/L}$	Naphthalene $\mu\text{g/L}$		
MW-1	MW-1	5	10/1/1995	Oct-95	--	--	94.34	--	< 50	--	--	ND	ND	ND	ND	--	--	--	--	--	9.9	ND	ND	--	--	--	--	--	--
MW-1	MW-1	5	1/1/1996	Jan-96	--	--	94.34	--	< 50	--	--	ND	ND	ND	ND	--	--	--	--	--	9.9	14	ND	--	--	--	--	--	--
MW-1	MW-1	5	6/12/1996	Jun-96	16.21	0.00	94.34	78.13	< 50	--	--	< 0.5	1.4	< 0.5	< 2	--	--	--	--	--	12	< 0.5	< 0.5	--	--	--	--	--	--
MW-1	MW-1	5	9/5/1996	Sep-96	16.89	0.00	94.34	77.45	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	12	< 0.5	< 0.5	--	--	--	--	--	--
MW-1	MW-1	5	12/3/1996	Dec-96	17.07	0.00	94.34	77.27	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--
MW-1	MW-1	5	2/27/1997	Feb-97	15.55	0.00	94.34	78.79	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	31	1.3	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	6/10/1997	Jun-97	16.46	0.00	94.34	77.88	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	19	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	8/27/1997	Aug-97	16.97	0.00	94.34	77.37	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	11/26/1997	Nov-97	17.24	0.00	94.34	77.10	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	17	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	2/1/1998	Feb-98	16.07	0.00	94.34	78.27	< 50	--	--	< 0.5	< 0.5	< 0.5	< 3	< 5.0	--	--	--	--	20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	5/19/1998	May-98	15.43	0.00	94.34	78.91	< 50	--	--	< 0.5	< 0.5	< 0.5	< 4	< 5.0	--	--	--	--	14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	8/10/1998	Aug-98	15.98	0.00	94.34	78.36	< 50	--	--	< 0.5	< 0.5	< 0.5	< 5	< 2.5	--	--	--	--	14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	11/9/1998	Nov-98	16.63	0.00	94.34	77.71	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	3.1	--	--	--	--	16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	2/8/1999	Feb-99	--	--	94.34	--	< 50	--	--	< 0.5	< 0.5	< 0.5	< 5	< 2.5	--	--	--	--	< 0.5	20	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	2/11/1999	Feb-99	16.55	0.00	94.34	77.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	MW-1	5	5/10/1999	May-99	15.50	0.00	94.34	78.84	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	8/9/1999	Aug-99	15.82	0.00	94.34	78.52	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	14	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	11/5/1999	Nov-99	16.29	0.00	94.34	78.05	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	20	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	2/1/2000	Feb-00	16.02	0.00	94.34	78.32	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	24	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	5/2/2000	May-00	14.48	0.00	94.34	79.86	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	23	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	8/1/2000	Aug-00	15.20	0.00	94.34	79.14	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	21	0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	11/6/2000	Nov-00	15.63	0.00	94.34	78.71	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	31	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	2/16/2001	Feb-01	15.45	0.00	94.34	78.89	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	32	0.7	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	4/27/2001	Apr-01	14.86	0.00	94.34	79.48	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	33	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	5	7/24/2001	Jul-01	--	0.00	94.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	MW-1	2	3/28/2002	Mar-02	14.52	0.00	94.34	79.82	< 50	77	< 500	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	--	--	--	--	33	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-1	MW-1	2	6/5/2002	Jun-02	14.72	0.00	20.99	6.27	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	27.1	< 2.5	< 5	< 5	< 5	--	--	--
MW-1	MW-1	2	9/6/2002	Sep-02	15.15	0.00	20.99	5.84	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	32.3	< 2.5	< 5	< 5	< 5	--	--	--
MW-1	MW-1	2	12/12/2002	Dec-02	15.67	0.00	20.99	5.32	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	35.1	2.7	< 5	< 5	< 5	--	--	--
MW-1	MW-1	2	3/13/2003	Mar-03	14.95	0.00	20.99	6.04	76	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	45.4	5.0	< 5	< 5	< 5	< 5	< 5	< 5	
MW-1	MW-1	2	6/4/2003	Jun-03	14.68	0.00	20.99	6.31	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	37.1	3.5	< 5	< 5	< 5	< 5	< 5	< 5	
MW-1	MW-1	2	9/25/2003	Sep-03	15.32	0.00	20.99	5.67	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	46.5	6.2	< 5	< 5	< 5	< 5	< 5	< 5	
MW-1	MW-1	2	12/4/2003	Dec-03	15.61	0.00	20.99	5.38	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	26.7	4.8	< 5	< 5	< 5	< 5	< 5	< 5	
MW-1	MW-1	2	2/1/2004	Feb-04	14.97	0.00	20.99	6.02	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	36.6	5.9	< 5	< 5	< 5	< 5	< 5	< 5	
MW-2	MW-2	5	10/1/1995	Oct-95	--	--	93.95	--	2,900	--	--	1,200	5.4	41	5.9	--	--	--	--	--	ND	40	280	--	--	--	--	--	
MW-2	MW-2	5	1/1/1996	Jan-96	--	--	93.95	--	780	--	--	1,100	11.0	100	6.9	--	--	--	--	--	ND	38	270	--	--	--	--	--	
MW-2	MW-2	5	6/12/1996	Jun-96	16.01	0.00	93.95	77.94	3,600	--	--	890	7.0	56	10	--	--	--	--	--	< 3	40	160	--	--	--	--	--	
MW-2	MW-2	5	9/5/1996	Sep-96	16.66	0.00	93.95	77.29	2,100	--	--	350	3.0	17	10	< 5.0	--	--	--	--	< 0.5	29	55	1.9	55	--	--	--	
MW-2	MW-2	5	12/3/1996	Dec-96	16.20	0.00	93.95	77.75	1,100	--	--	230	2.4	7.8	7	40	--	--	--	--	< 0.5	20	86	7	< 0.5	--	--	--	
MW-2	MW-2	5	2/27/1997	Feb-97	14.46	0.00	93.95	79.49	1,000	--	--	210	2.2	6	3	12	--	--	--	--	1	25	43	< 0.5	< 0.5	--	--	--	
MW-2	MW-2	5	6/10/1997	Jun-97	14.00	0.00	93.95	79.95	1.8	--	--	510	3.0	6	< 10	< 30	--	--	--	--	1	19	47	4.9	< 0.5	--	--	--	
MW-2	MW-2	5	8/27/1997	Aug-97	16.55	0.00	93.95	77.40	450	--	--	51	< 0.5	1.4	< 2	11	--	--	--	--	0.5	16	29	4.2	< 0.5	--	--	--	
MW-2	MW-2	5	11/26/1997	Nov-97	16.86	0.00	93.95	77.09	1,200	--	--	380	5.0	9	12	< 30	--	--											

Appendix B  
 Historical Groundwater Monitoring Results  
 Sears Auto Center # 1039  
 Oakland California  
 (Page 2 of 5)

Well No.	Sample No.	Notes	Sample Date	Sample Period	Depth to Groundwater (ft bgs)	Stand Prod Thickness (ft)	Casing Elevation (ft MSL)	Groundwater Elevation (ft MSL)	TPHg $\mu\text{g/L}$	TPHd $\mu\text{g/L}$	TPHo $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	MTBE $\mu\text{g/L}$	ETBE $\mu\text{g/L}$	DIPE $\mu\text{g/L}$	TAME $\mu\text{g/L}$	TBA $\mu\text{g/L}$	PCE $\mu\text{g/L}$	TCE $\mu\text{g/L}$	1,2-DCA $\mu\text{g/L}$	cis-1,2 DCE $\mu\text{g/L}$	1,1-DCE $\mu\text{g/L}$	1,2,4-TMB $\mu\text{g/L}$	Naphthalene $\mu\text{g/L}$	
MW-2	MW-2	2	9/6/2002	Sep-02	14.91	0.00	20.50	5.59	71	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	15.7	< 2.5	2.7	9.7	< 5	< 5	--	--	--
MW-2	MW-2	2	12/12/2002	Dec-02	15.41	0.00	20.50	5.09	461	< 500	< 2000	86.5	< 1	2.9	8.6	< 2	< 2	< 2	< 2	< 10	< 2.5	6.5	8.4	< 5	< 5	--	--	--
MW-2	MW-2	2,3	12/12/2002	Dec-02	15.41	0.00	20.50	5.09	493	< 500	< 2000	87.2	< 1	3.7	9.5	< 2	< 2	< 2	< 2	< 10	< 2.5	7.3	9.3	< 5	< 5	--	--	--
MW-2	MW-2	2	3/13/2003	Mar-03	14.75	0.00	20.50	5.75	729	< 500	< 2000	151	< 1	4.8	9.5	< 2	< 2	< 2	< 2	28	< 2.5	9.0	14.1	< 5	< 5	< 5	< 5	< 5
MW-2	MW-2	2,3	3/13/2003	Mar-03	14.75	0.00	20.50	5.75	757	--	--	172	< 1	5.9	10.8	< 2	< 2	< 2	< 2	26	< 2.5	9.6	17.6	< 5	< 5	< 5	< 5	< 5
MW-2	MW-2	2,3	6/4/2003	Jun-03	14.43	0.00	20.50	6.07	930	< 500	< 2000	399.0	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	3.5	7.0	< 5	< 5	< 5	< 5	< 5
MW-2	MW-2	2,3	9/25/2003	Sep-03	15.25	0.00	20.50	5.25	180	--	--	23.7	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	6.8	9.8	< 5	< 5	< 5	< 5	< 5
MW-2	MW-2	2	9/25/2003	Sep-03	15.25	0.00	20.50	5.25	184	--	--	24.5	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	7.8	9.1	< 5	< 5	< 5	< 5	< 5
MW-2	MW-2	2	12/4/2003	Dec-03	15.40	0.00	20.50	5.10	174	--	--	5.2	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	4.4	5.7	< 5	< 5	< 5	< 5	< 5
MW-2	MW-2	2	2/11/2004	Feb-04	14.85	0.00	20.50	5.65	353	--	--	36.4	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	4	5.5	< 5	< 5	< 5	< 5	< 5
MW-3	MW-3	5	10/1/1995	Oct-95	--	--	96.15	--	< 50	--	--	ND	--	ND	ND	--	--	--	--	--	ND	ND	ND	--	--	--	--	--
MW-3	MW-3	5	1/1/1996	Jan-96	--	--	96.15	--	ND	--	--	ND	ND	ND	ND	--	--	--	--	--	ND	ND	ND	--	--	--	--	--
MW-3	MW-3	5	6/12/1996	Jun-96	17.56	0.00	96.15	78.59	< 50	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2	--	--	--	--	--	< 0.5	< 0.5	< 0.5	--	--	--	--	--
MW-3	MW-3	5	9/5/1996	Sep-96	18.32	0.00	96.15	77.83	< 50	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	--	--	--	--	--
MW-3	MW-3	5	12/3/1996	Dec-96	18.57	0.00	96.15	77.58	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	2.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	2/27/1997	Feb-97	17.43	0.00	96.15	78.72	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	6.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	6/10/1997	Jun-97	18.12	0.00	96.15	78.03	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	5.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	8/27/1997	Aug-97	18.47	0.00	96.15	77.68	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	5.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	11/26/1997	Nov-97	18.70	0.00	96.15	77.45	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	7.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	2/11/1998	Feb-98	17.76	0.00	96.15	78.39	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	7.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	5/19/1998	May-98	16.99	0.00	96.15	79.16	< 50	--	--	< 0.5	< 0.5	< 0.5	< 2	< 5.0	--	--	--	--	5.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	8/10/1998	Aug-98	17.51	0.00	96.15	78.64	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	11/9/1998	Nov-98	18.07	0.00	96.15	78.08	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	5.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	2/8/1999	Feb-99	--	--	96.15	--	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	6.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	2/11/1999	Feb-99	18.07	0.00	96.15	78.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	MW-3	5	5/10/1999	May-99	17.04	0.00	96.15	79.11	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	5.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	8/9/1999	Aug-99	17.77	0.00	96.15	78.38	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	4.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	11/5/1999	Nov-99	18.00	0.00	96.15	78.15	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	7.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	2/1/2000	Feb-00	17.95	0.00	96.15	78.20	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	6.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	5/2/2000	May-00	16.83	0.00	96.15	79.32	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	6.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	8/1/2000	Aug-00	17.13	0.00	96.15	79.02	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	5.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	11/6/2000	Nov-00	17.54	0.00	96.15	78.61	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	7.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	2/16/2001	Feb-01	17.42	0.00	96.15	78.73	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	8.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	4/27/2001	Apr-01	16.80	0.00	96.15	79.35	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	8.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	5	7/24/2001	Jul-01	17.08	0.00	96.15	79.07	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	11.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
MW-3	MW-3	4	3/27/2002	Mar-02	16.50	0.00	96.15	79.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	MW-3	2	6/5/2002	Jun-02	16.53	0.00	22.29	5.76	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	20.9	4.5	< 5	< 5	< 5	< 5	--	--
MW-3	MW-3	2	9/6/2002	Sep-02	16.95	0.00	22.29	5.34	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	28.0	9.3	< 5	< 5	< 5	< 5	--	--
MW-3	MW-3	2	12/12/2002	Dec-02	17.36	0.00	22.29	4.93	50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	28.7	12.7	< 5	< 5	< 5	< 5	--	--
MW-3	MW-3	2	3/13/2003	Mar-03	16.84	0.00	22.29	5.45	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	35.1	12.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-3	MW-3	2	6/4/2003	Jun-03	16.54	0.00	22.29	5.75	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	40.8	11.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-3	MW-3	2	9/25/2003	Sep-03	17.13	0.00	22.29	5.16	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	32.6	14.0	< 5	< 5	< 5	< 5	< 5	< 5
MW-3	MW-3	2	12/4/2003	Dec-03	17.40	0.00	22.29	4.89	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	25.9	13.2	< 5	< 5	< 5	< 5	< 5	< 5
MW-3	MW-3	2	2/11/2004	Feb-04	16.92	0.00	22.29	5.37	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	29.6	11.1	< 5	< 5	< 5	< 5	< 5	< 5
MW-4	MW-4	5	10/1/1995	Oct-95	--	--	92.01	--	< 50	--	--	4.1	ND	ND	ND	--	--	--	--	--	ND	ND	ND	--	--	--	--	--
MW-4	MW-4	5	1/1/1996	Jan-96	--	--	92.01	--	< 50	--	--	5.8	ND	ND	ND	--	--	--	--	--	ND	ND	ND	--	--	--	--	--
MW-4	MW-4	5	6/12/1996	Jun-96	14.21	0.00	92.01	77.80	320	--	< 0.5	11	< 0.5	< 0.5	< 2	--	--	--	--	--	< 0.5	< 0.5	< 0.5	--	--	--	--	--
MW-4	MW-4	5	9/5/1996	Sep-96	14.83	0.00	92.01	77.18																				



Appendix B  
 Historical Groundwater Monitoring Results  
 Sears Auto Center # 1039  
 Oakland California  
 (Page 3 of 5)

Well No.	Sample No.	Notes	Sample Date	Sample Period	Depth to Groundwater (ft bgs)	Stand Prod Thickness (ft)	Casing Elevation (ft MSL)	Groundwater Elevation (ft MSL)	TPHg $\mu\text{g/L}$	TPHd $\mu\text{g/L}$	TPHo $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	MTBE $\mu\text{g/L}$	ETBE $\mu\text{g/L}$	DIPE $\mu\text{g/L}$	TAME $\mu\text{g/L}$	TBA $\mu\text{g/L}$	PCE $\mu\text{g/L}$	TCE $\mu\text{g/L}$	1,2-DCA $\mu\text{g/L}$	cis-1,2 DCE $\mu\text{g/L}$	1,1-DCE $\mu\text{g/L}$	1,2,4-TMB $\mu\text{g/L}$	Naphthalene $\mu\text{g/L}$		
MW-4	MW-4	5	8/1/2000	Aug-00	13.70	0.00	92.01	78.31	< 50	--	< 1000	0.9	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	
MW-4	MW-4	5	11/6/2000	Nov-00	14.00	0.00	92.01	78.01	88	--	< 1000	22	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	
MW-4	MW-4	5	2/16/2001	Feb-01	13.45	0.00	92.01	78.36	55	--	< 1000	16	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	
MW-4	MW-4	5	4/27/2001	Apr-01	13.40	0.00	92.01	78.61	< 50	--	< 1000	0.7	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	
MW-4	MW-4	5	7/24/2001	Jul-01	13.49	0.00	92.01	78.32	< 50	--	< 1000	0.7	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	
MW-4	MW-4	2	3/27/2002	Mar-02	13.22	0.00	92.01	78.79	< 50	< 50	< 500	1.4	< 0.50	< 0.50	< 1.0	< 5.0	--	--	--	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	--
MW-4	MW-4	2	6/5/2002	Jun-02	13.00	0.00	18.61	5.61	< 50	< 500	< 2000	2.1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-4	MW-4	2	9/6/2002	Sep-02	13.46	0.00	18.61	5.15	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-4	MW-4	2	12/12/2002	Dec-03	13.98	0.00	18.61	4.63	115	< 500	< 2000	4.3	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-4	MW-4	2	3/13/2003	Mar-03	13.28	0.00	18.61	5.33	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-4	MW-4	2	6/4/2003	Jun-03	13.03	0.00	18.61	5.58	< 50	< 500	< 2000	4.4	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-4	MW-4	2	9/25/2003	Sep-03	13.67	0.00	18.61	4.94	< 50	--	--	1.6	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-4	MW-4	2	12/4/2003	Dec-03	13.94	0.00	18.61	4.67	< 50	--	--	2.5	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-4	MW-4	2	2/11/2004	Feb-04	14.14	0.00	18.61	4.47	< 50	--	--	1.5	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.0	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-5	MW-5	5	10/1/1995	Oct-95	--	0.00	92.09	--	260	--	--	86	ND	ND	ND	--	--	--	--	--	--	ND	ND	ND	--	--	--	--	--
MW-5	MW-5	5	1/1/1996	Jan-96	--	0.00	92.09	--	180	--	--	160	3.6	ND	ND	--	--	--	--	--	--	ND	ND	ND	--	--	--	--	--
MW-5	MW-5	5	6/12/1996	Jun-96	14.13	0.00	92.09	77.96	260	--	--	54	1.1	< 0.5	< 2	--	--	--	--	--	< 0.5	< 0.5	< 0.5	--	--	--	--	--	--
MW-5	MW-5	5	9/5/1996	Sep-96	14.77	0.00	92.09	77.32	160	--	--	22	1.0	< 0.5	< 2	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	--	--	--	--	--	--
MW-5	MW-5	5	12/3/1996	Dec-96	13.99	0.00	92.09	78.10	170	--	--	18	0.6	< 0.5	< 2	6	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	2/27/1997	Feb-97	12.08	0.00	92.09	80.01	230	--	--	74	2.0	< 0.5	< 2	< 5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	6/10/1997	Jun-97	16.00	0.00	92.09	76.09	1,200	--	--	490	19.0	< 3.0	< 10	< 30	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	8/27/1997	Aug-97	14.55	0.00	92.09	77.54	340	--	--	100	4.6	< 0.5	< 2	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	11/26/1997	Nov-97	14.95	0.00	92.09	77.14	400	--	--	78	4.5	0.6	< 2	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	2/11/1998	Feb-98	13.97	0.00	92.09	78.12	320	--	--	62	2.9	< 0.5	< 2	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	5/19/1998	May-98	13.52	0.00	92.09	78.57	330	--	--	97	2.6	< 0.5	< 2	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	8/10/1998	Aug-98	13.97	0.00	92.09	78.12	190	--	--	48	1.9	< 0.5	< 0.5	11	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	11/9/1998	Nov-98	14.47	0.00	92.09	77.42	81	--	--	3.8	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	2/8/1999	Feb-99	--	--	92.09	--	82	--	--	3	< 0.5	< 0.5	< 0.5	3.8	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	2/11/1999	Feb-99	14.50	0.00	92.09	77.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	MW-5	5	5/10/1999	May-99	13.23	0.00	92.09	78.86	< 50	--	--	8.8	< 0.5	< 0.5	< 0.5	2.6<2.0*	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	8/9/1999	Aug-99	13.90	0.00	92.09	78.19	150	--	--	25	< 0.5	< 0.5	< 0.5	5.6<2.0*	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	11/5/1999	Nov-99	14.40	0.00	92.09	77.69	160	--	--	20	< 0.5	< 0.5	0.76	4.3<2.0*	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	2/1/2000	Feb-00	14.15	0.00	92.09	77.94	180	--	--	42	1.2	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	5/2/2000	May-00	13.10	0.00	92.09	78.99	120	--	--	12	0.7	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	8/1/2000	Aug-00	13.52	0.00	92.09	78.57	69	--	--	11	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	11/6/2000	Nov-00	13.93	0.00	92.09	78.16	72	--	--	7.0	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	2/16/2001	Feb-01	13.75	0.00	92.09	78.34	< 50	--	--	1.6	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	4/27/2001	Apr-01	12.95	0.00	92.09	79.14	< 50	--	--	3.1	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	5	7/24/2001	Jul-01	13.46	0.00	92.09	78.63	< 50	--	--	3.8	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-5	MW-5	2	3/27/2002	Mar-02	12.43	0.00	92.09	79.66	81	70	< 500	< 0.50	< 0.50	< 0.5	< 1.0	< 5.0	--	--	--	--	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	--
MW-5	MW-5	2	6/5/2002	Jun-02	12.68	0.00	18.76	6.08	50	< 500	< 2000	2.0	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-5	MW-5	2.3	6/5/2002	Jun-02	12.68	0.00	18.76	6.08	59	< 500	< 2000	2.5	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-5	MW-5	2	9/6/2002	Sep-02	13.18	0.00	18.76	5.58	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-5	MW-5	2	12/12/2002	Dec-03	13.76	0.00	18.76	5.00	91	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-5	MW-5	2	3/13/2003	Mar-03	13.09	0.00	18.76	5.67	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-5	MW-5	2	6/4/2003	Jun-03	12.69	0.00	18.76	6.07	57	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	<										

Appendix B  
 Historical Groundwater Monitoring Results  
 Sears Auto Center # 1039  
 Oakland California  
 (Page 4 of 5)

Well No.	Sample No.	Notes	Sample Date	Sample Period	Depth to Groundwater (ft bgs)	Stand Prod Thickness (ft)	Casing Elevation (ft MSL)	Groundwater Elevation (ft MSL)	TPHg $\mu\text{g/L}$	TPHd $\mu\text{g/L}$	TPHo $\mu\text{g/L}$	Benzene $\mu\text{g/L}$	Toluene $\mu\text{g/L}$	Ethylbenzene $\mu\text{g/L}$	Xylenes $\mu\text{g/L}$	MTBE $\mu\text{g/L}$	ETBE $\mu\text{g/L}$	DIPE $\mu\text{g/L}$	TAME $\mu\text{g/L}$	TBA $\mu\text{g/L}$	PCE $\mu\text{g/L}$	TCE $\mu\text{g/L}$	1,2-DCA $\mu\text{g/L}$	cis-1,2 DCE $\mu\text{g/L}$	1,1-DCE $\mu\text{g/L}$	1,2,4-TMB $\mu\text{g/L}$	Naphthalene $\mu\text{g/L}$	
MW-6	MW-6	5	5/10/1999	Mar-99	14.12	0.00	92.16	78.04	< 50	--	< 5000	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	8/9/1999	Aug-99	15.00	0.00	92.16	77.16	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	0.52	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	11/5/1999	Nov-99	15.55	0.00	92.16	76.61	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	--	--	--	--	0.89	0.89	1.2	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	2/1/2000	Feb-00	15.40	0.00	92.16	76.76	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	1.2	0.9	2.2	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	5/2/2000	May-00	14.55	0.00	92.16	77.61	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	2.6	0.8	1.3	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	3/1/2000	Aug-00	14.85	0.00	92.16	77.31	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	0.8	0.9	2.3	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	11/6/2000	Nov-00	15.10	0.00	92.16	77.86	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	0.9	0.9	3.3	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	2/16/2001	Feb-01	14.93	0.00	92.16	77.23	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	0.9	1.1	6.2	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	4/27/2001	Apr-01	14.40	0.00	92.16	77.76	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	0.7	0.7	3.9	< 0.5	< 0.5	--	--	--
MW-6	MW-6	5	7/24/2001	Jul-01	14.68	0.00	92.16	77.48	< 50	--	< 1000	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--	--	--	0.6	1	4.8	< 0.5	< 0.5	--	--	--
MW-6	MW-6	4	3/27/2002	Mar-02	14.09	0.00	92.16	78.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	MW-6	4	6/5/2002	Jun-02	14.26	0.00	18.91	4.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	MW-6	4	9/6/2002	Sep-02	14.69	0.00	18.91	4.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	MW-6	2	12/12/2002	Dec-03	15.13	0.00	18.91	3.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	MW-6	2	3/13/2003	Mar-03	14.65	0.00	18.91	4.26	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-6	MW-6	2	6/4/2003	Jun-03	14.27	0.00	18.91	4.64	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-6	MW-6	2	9/25/2003	Sep-03	14.89	0.00	18.91	4.02	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-6	MW-6	2	12/4/2003	Dec-03	15.07	0.00	18.91	3.84	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-6	MW-6	2	2/11/2004	Feb-04	14.67	0.00	18.91	4.24	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-7	MW-7	5	10/1/1995	Oct-95	--	0.00	93.80	--	< 50	--	--	ND	ND	ND	ND	--	--	--	--	--	5.3	3.5	8.3	--	--	--	--	--
MW-7	MW-7	5	1/1/1996	Jan-96	--	0.00	93.80	--	< 50	--	--	ND	ND	ND	ND	--	--	--	--	--	9.3	4.8	5.7	--	--	--	--	--
MW-7	MW-7	5	6/12/1996	Jun-96	16.56	0.00	93.80	77.24	< 50	--	--	0.6	< 0.5	< 0.5	< 2	--	--	--	--	--	6.1	3.4	2.9	--	--	--	--	--
MW-7	MW-7	5	9/5/1996	Sep-96	17.10	0.00	93.80	76.70	< 50	--	--	1.2	< 0.5	< 0.5	< 2	< 5	--	--	--	--	8.3	4.2	5.9	--	--	--	--	--
MW-7	MW-7	5	12/3/1996	Dec-96	17.12	0.00	93.80	76.68	120	--	< 0.5	850	< 5	< 5	< 30	< 5	--	--	--	--	4	4	75	< 3	< 3	--	--	--
MW-7	MW-7	5	2/27/1997	Feb-97	16.20	0.00	93.80	77.60	2,500	--	--	1500	3.0	23	< 10	< 30	--	--	--	--	2	4	65	< 0.5	< 0.5	--	--	--
MW-7	MW-7	5	6/10/1997	Jun-97	17.00	0.00	93.80	76.80	3,200	--	--	1700	< 5	59	< 20	< 50	--	--	--	--	2	4.2	85	< 0.5	< 0.5	--	--	--
MW-7	MW-7	5	8/27/1997	Aug-97	17.18	0.00	93.80	76.62	3,900	--	--	1700	8.0	200	40	90	--	--	--	--	< 3	5	93	< 3	< 3	--	--	--
MW-7	MW-7	5	11/26/1997	Nov-97	17.40	0.00	93.80	76.40	5,600	--	--	3,100	15.0	190	30	90	--	--	--	--	3	5.9	120	1	< 0.5	--	--	--
MW-7	MW-7	5	2/11/1998	Feb-98	16.65	0.00	93.80	77.15	8,500	--	--	3,800	25.0	250	80	90	--	--	--	--	4	8.9	93	1.2	< 0.5	--	--	--
MW-7	MW-7	5	5/19/1998	May-98	15.96	0.00	93.80	77.84	5,000	--	--	2,100	440.0	150	220	300	--	--	--	--	2	3.8	74	0.6	< 0.5	--	--	--
MW-7	MW-7	5	8/10/1998	Aug-98	16.48	0.00	93.80	77.32	1,600	--	--	690	< 10	13	< 10	< 50	--	--	--	--	< 3	3.3	100	< 2.5	< 2.5	--	--	--
MW-7	MW-7	5	11/9/1998	Nov-98	16.58	0.00	93.80	76.82	930	--	--	295	5.5	4.3	1.5	8.7	--	--	--	--	4.2	6.5	110	< 2.5	< 2.5	--	--	--
MW-7	MW-7	5	2/8/1999	Feb-99	--	--	93.80	--	1,500	--	--	670	< 10	14	< 10	< 50	--	--	--	--	6	3.4	74	< 1.2	< 1.2	--	--	--
MW-7	MW-7	5	2/11/1999	Feb-99	16.94	0.00	93.80	76.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	MW-7	5	5/10/1999	May-99	15.87	0.00	93.80	77.93	2,800	--	--	1,800	16.0	81	130	63/2.0*	--	--	--	--	1	2.6	65	0.63	< 0.5	--	--	--
MW-7	MW-7	5	8/9/1999	Aug-99	16.60	0.00	93.80	77.20	1,500	--	--	570	5.1	28	30	300/6.5*	--	--	--	--	< 1	1.2	95	0.57	< 0.5	--	--	--
MW-7	MW-7	5	11/5/1999	Nov-99	17.01	0.00	93.80	76.79	2,100	--	--	1,200	< 5	61	25	150/11*	--	--	--	--	4	7.8	95	1.6	< 0.5	--	--	--
MW-7	MW-7	5	2/1/2000	Feb-00	17.00	0.00	93.80	76.80	4,600	--	--	2,600	16.0	140	210	6.6	--	--	--	--	3	6	110	1.7	< 0.5	--	--	--
MW-7	MW-7	5	5/2/2000	May-00	16.00	0.00	93.80	77.80	4,200	--	--	2,700	25	80	270	< 5.0	--	--	--	--	< 5.0	< 5.0	84	< 5.0	< 5.0	--	--	--
MW-7	MW-7	5	8/1/2000	Aug-00	16.40	0.00	93.80	77.40	5,600	--	--	5,500	27	300	390	< 10	--	--	--	--	< 10	< 10	85	< 10	< 10	--	--	--
MW-7	MW-7	5	11/6/2000	Nov-00	16.67	0.00	93.80	77.13	6,000	--	--	3,400	29	230	330	< 10	--	--	--	--	< 10	< 10	66	< 10	< 10	--	--	--
MW-7	MW-7	5	2/16/2001	Feb-01	16.60	0.00	93.80	77.20	4,400	--	--	3,400	27	200	290	3.1	--	--	--	--	< 2	< 2	60	< 2	< 2	--	--	--
MW-7	MW-7	5	4/27/2001	Apr-01	16.00	0.00	93.80	77.80	6,100	--	--	6,000	44	390	620	2.7	--	--	--	--	< 2.5	< 2.5	37	< 2.5	< 2.5	--	--	--
MW-7	MW-7	5	7/24/2001	Jul-01	16.22	0.00	93.80	77.58	6,000	--	--	4,500	16	390	840	< 2.0	--	--	--	--	< 2.0	< 2.0	39	< 2.0	< 2.0	--	--	--
MW-7	MW-7	5	3/27/2002	Mar-02	15.74	0.00	93.80	78.06	34,000	570	< 500	6,400	< 50	230	370	< 500	--	--	--	--	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	--	--	--
MW-7	MW-7	2	3/27/2002	Mar-02	15.74	0.00	93.80	78.06	27,000	740	< 500	6,500	< 50	280	500	< 500	--	--	--	--	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	--	--	--
MW-7	MW-7	2	6/5/2002	Jun-02	15.71	0.00	20.39	4.68	12,100	< 500	< 2000	8,700	25	173	510	< 2	< 2	< 2	< 2	< 10	< 2.0	< 2.5	< 5	< 5	< 5	--	--	--
MW-7	MW-7	2	9/6/2002	Sep-02	16.16	0.00	20.39	4.23	15,600	< 500	< 2000	11,500	< 1	< 1	515	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-7	MW-7	2,3	9/6/2002	Sep-02	16.16	0.00	20.39	4.23	17,400	< 500	< 2000	11,300	< 1	< 1	510	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-7	MW-7	2	12/12/2002	Dec-03	16.57	0.00	20.39	3.82	27,200	< 500	< 2000	15,100	21.3	248	640	< 2	< 2	< 2	< 2	< 10	< 2.5							

Appendix B  
 Historical Groundwater Monitoring Results  
 Sears Auto Center # 1039  
 Oakland California  
 (Page 5 of 5)

Well No.	Sample No.	Notes	Sample Date	Sample Period	Depth to Groundwater (ft bgs)	Stand Prod Thickness (ft)	Casing Elevation (ft MSL)	Groundwater Elevation (ft MSL)	TPHg	TPHd	TPHo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	ETBE	DIPE	TAME	TBA	PCE	TCE	1,2-DCA	cis-1,2 DCE	1,1-DCE	1,2,4-TMB	Naphthalene	
MW-8	MW-8	4	6/5/2002	Jun-02	16.81	0.00	21.12	4.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	MW-8	2	9/6/2002	Sep-02	17.26	0.00	21.12	3.86	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	4.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-8	MW-8	2	12/12/2002	Dec-02	17.62	0.00	21.12	3.50	69	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	< 2.5	< 2.5	< 5	< 5	< 5	--	--	--
MW-8	MW-8	2	3/13/2003	Mar-03	17.19	0.00	21.12	3.93	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	6.2	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-8	MW-8	2	6/4/2003	Jun-03	16.80	0.00	21.12	4.32	< 50	< 500	< 2000	1.2	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	2.5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-8	MW-8	2	9/25/2003	Sep-03	17.39	0.00	21.12	3.73	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	4.7	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-8	MW-8	2	12/4/2003	Dec-03	17.63	0.00	21.12	3.49	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	3.3	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-8	MW-8	2	2/11/2004	Feb-04	17.26	0.00	21.12	3.86	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	5	< 2.5	< 5	< 5	< 5	< 5	< 5	< 5
MW-9	MW-9	5	11/8/1999	Nov-99	16.86	0.00	92.54	75.68	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	37.4*	--	--	--	--	65	29	32	< 0.5	< 0.5	--	--	--
MW-9	MW-9	5	2/1/2000	Feb-00	16.70	0.00	92.54	75.84	< 50	--	--	2.6	< 0.5	< 0.5	< 0.5	3.0*	--	--	--	--	60	22	36	0.7	< 0.5	--	--	--
MW-9	MW-9	5	5/2/2000	May-00	16.02	0.00	92.54	76.52	77	--	--	0.6	< 0.5	< 0.5	< 0.5	2.0*	--	--	--	--	39	19	30	0.5	< 0.5	--	--	--
MW-9	MW-9	5	8/1/2000	Aug-00	16.34	0.00	92.54	76.20	70	--	--	< 0.5	< 0.5	< 0.5	< 0.5	2.7	--	--	--	--	41	19	37	0.7	< 0.5	--	--	--
MW-9	MW-9	5	11/6/2000	Nov-00	16.55	0.00	92.54	75.99	74	--	--	0.6	< 0.5	< 0.5	< 0.5	3.2	--	--	--	--	31	15	34	0.8	< 0.5	--	--	--
MW-9	MW-9	5	2/16/2001	Feb-01	16.31	0.00	92.54	76.23	52	--	--	< 0.5	< 0.5	< 0.5	< 0.5	3.4	--	--	--	--	26	14	33	0.9	< 0.5	--	--	--
MW-9	MW-9	5	4/27/2001	Apr-01	15.90	0.00	92.54	76.64	64	--	--	< 0.5	< 0.5	< 0.5	< 0.5	1.9	--	--	--	--	42	16	38	0.6	< 0.5	--	--	--
MW-9	MW-9	5	7/24/2001	Jul-01	16.19	0.00	92.54	76.35	< 50	--	--	< 0.5	< 0.5	< 0.5	< 0.5	1.7	--	--	--	--	31	12	34	0.7	< 0.5	--	--	--
MW-9	MW-9	2	3/27/2002	Mar-02	15.61	0.00	92.54	76.93	< 50	< 50	< 500	< 0.50	< 0.50	< 0.50	< 1.0	< 5.0	--	--	--	--	32	10	17	0.73	< 0.50	--	--	--
MW-9	MW-9	2	6/5/2002	Jun-02	15.71	0.00	19.20	3.49	33.2	< 500	< 2000	< 1	< 1	< 1	< 2	2.3	< 2	< 2	< 2	< 10	33.2	12	< 5	< 5	< 5	--	--	
MW-9	MW-9	2	9/6/2002	Sep-02	16.13	0.00	19.20	3.49	< 50	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	28.1	10.6	24.2	< 5	< 5	--	--	--
MW-9	MW-9	2	12/12/2002	Dec-02	16.48	0.00	19.20	2.72	68	< 500	< 2000	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	26.3	10.3	12.0	< 5	< 5	--	--	--
MW-9	MW-9	2	3/13/2003	Mar-03	16.07	0.00	19.20	3.13	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	31.3	13.8	16.5	< 5	< 5	< 5	< 5	
MW-9	MW-9	4	6/4/2003	Jun-03	15.68	0.00	19.20	3.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	MW-9	2	9/25/2003	Sep-03	16.27	0.00	19.20	2.93	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	25.2	9.7	11.7	< 5	< 5	< 5	< 5	
MW-9	MW-9	2	12/4/2003	Dec-03	16.39	0.00	19.20	2.81	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	25.3	12.0	13.0	< 5	< 5	< 5	< 5	
MW-9	MW-9	2	2/11/2004	Feb-04	16.05	0.00	19.20	3.15	< 50	--	--	< 1	< 1	< 1	< 2	< 2	< 2	< 2	< 2	< 10	42	13.9	17.6	< 5	< 5	< 5	< 5	

Notes

- 1: "Pre-purge" sample
- 2: "Post-purge" sample
- 3: Duplicate sample
- 4: Well not sampled
- 5: Data obtained from Previous Consultant
- = Not applicable and/or no measurements taken/provided
- Historical data before June 1996 as reported by previous consultants
- MSL = Mean Sea Level
- \* = Duplicate Sample

< = Analyte not detected above indicated method detection limit  
 TPHg = Total Petroleum Hydrocarbons as gasoline range hydrocarbons by EPA Method 8015 (modified)  
 TPHd = Total Petroleum Hydrocarbons as diesel range hydrocarbons by EPA Method 8015 (modified)  
 TPHo = Total Petroleum Hydrocarbons as oil range by EPA Method 8015 (modified)  
 ND = Not detected at or above the method detection limit  
 SP = Seperate-phase petroleum hydrocarbons present, not sampled  
 PCE = Tetrachloroethene  
 1,2-DCA = 1,2-Dichloroethane  
 TCE = Trichloroethene  
 cis-1,2-DCE = cis-1,2 Dichloroethene  
 1,1-DCE = 1,1-Dichloroethene  
 1,2,4-TMB = 1,2,4- Trimethylbenzene

MTBE - Methyl tert-Butyl ether (Prior to 5/99 analyzed using EPA Method 8020; 1999 duplicates and all post-1999 samples analyzed using EPA Method 8260)  
 DIPE - Di-isopropyl Ether  
 TAME - Tertiary Amyl Methyl Ether  
 TBA - Tertiary Butyl Alcohol  
 ETBE - Ethyl Tertiary Butyl Ether

**APPENDIX C**

**LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS**



Southland Technical Services, Inc.  
Environmental Laboratories

02-20-2004

Mr. Scott Rowlands  
URS Corporation  
2020 E. First Street, Suite 400  
Santa Ana, CA 92705

Project: 29863493.04012/Sears Oakland 1039  
Project Site: 1901 Telegraph Ave., Oakland, CA  
Sample Date: 02-11-2004  
Lab Job No.: UR402083

Dear Mr. Rowlands:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 02-13-2004 and analyzed for the following parameters:

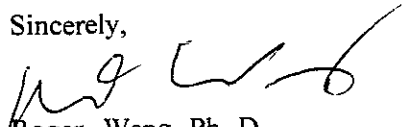
EPA 8015M (Gasoline)  
EPA 8260B (VOCs by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled at 4°C, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

  
Roger Wang, Ph. D.  
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.



# Southland Technical Services, Inc.

Environmental Laboratories

02-20-2004

Client: URS Corporation  
 Project: 29863493.04012/Sears Oakland 1039  
 Project Site: 1901 Telegraph Ave., Oakland, CA  
 Matrix: Water  
 Batch No.: AB16-GW1

Lab Job No.: UR402083  
 Date Sampled: 02-11-2004  
 Date Received: 02-13-2004  
 Date Analyzed: 02-16-2004

**EPA 8015M (Gasoline)**  
**Reporting Unit: µg/L (ppb)**

Date of Analysis for TPH (Gasoline)		02-16-04	02-16-04	02-16-04	02-16-04	02-16-04
Preparation Method for TPH (Gasoline)		5030	5030	5030	5030	5030
LAB SAMPLE LD.			UR402083-1	UR402083-2	UR402083-3	UR402083-4
CLIENT SAMPLE LD.			MW-1	MW-2	MW-3	MW-4
Analyte	MDL	MB				
TPH-Gasoline (C4 - C12)	50	ND	ND	353	ND	ND
Surrogate	Spk Conc.	ACP%	MB %RC	%RC	%RC	%RC
BFB (for TPH-Gasoline)	20 ppb	70-130	85	75	79	80

Date of Analysis for TPH (Gasoline)		02-16-04	02-16-04	02-16-04	02-16-04	02-16-04
Preparation Method for TPH (Gasoline)		5030	5030	5030	5030	5030
LAB SAMPLE LD.		UR402083-5	UR402083-6	UR402083-7	UR402083-8	UR402083-9
CLIENT SAMPLE LD.		MW-5	MW-6	MW-7	MW-8	MW-9
Analyte	MDL					
TPH-Gasoline (C4 - C12)	50	ND	ND	30,300	ND	ND
Surrogate	Spk Conc.	ACP%	%RC	%RC	%RC	%RC
BFB (for TPH-Gasoline)	20 ppb	70-130	85	80	86	82

Date of Analysis for TPH (Gasoline)		02-16-04	02-16-04	02-16-04	02-16-04	
Preparation Method for TPH (Gasoline)		5030	5030	5030	5030	
LAB SAMPLE LD.			UR402083-10	UR402083-12	UR402083-11	
CLIENT SAMPLE LD.			DUP-1	EB-1	TB-1	
Analyte	MDL	MB				
TPH-Gasoline (C4 - C12)	50	ND	33,500	ND	ND	
Surrogate	Spk Conc.	ACP%	MB %RC	%RC	%RC	%RC
BFB (for TPH-Gasoline)	20 ppb	70-130	85	85	82	81

SPK Conc.=Spiking Concentration; ACP%=Acceptable Range of Percent; %RC=% Recovery  
 MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected(Below MDL); NA=Not Analyzed

Checked & approved by:

Roger Wang, Ph.D.  
 Laboratory Director.



# Southland Technical Services, Inc.

Environmental Laboratories

Client: URS Corporation

Lab Job No.: UR402083

Date Reported: 02-20-2004

Project: 29863493.04012/Sears Oakland 1039

Matrix: Water

Date Sampled: 02-11-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L(ppb)**

Date ANALYZED		02-16-04	02-16-04	02-16-04	02-16-04	02-16-04	02-16-04	02-16-04
PREPARATION METHOD		5030	5030	5030	5030	5030	5030	5030
DILUTION FACTOR		1	1	1	1	1	1	1
LAB SAMPLE LD.			UR402083-1	UR402083-2	UR402083-3	UR402083-4	UR402083-5	UR402083-6
CLIENT SAMPLE LD.			MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
COMPOUND	MDL	MB						
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Iodomethane	5	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane(EDC)	5	ND	ND	5.5	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	36.4	ND	1.5	ND	ND
Trichloroethene	2.5	ND	5.9	4.0	11.1	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	5	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND
Toluene	1	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.5	ND	36.6	ND	29.6	ND	ND	ND
1,2-Dibromoethane(EDB)	5	ND	ND	ND	ND	ND	ND	ND



# Southland Technical Services, Inc.

## Environmental Laboratories

Client: URS Corporation

Lab Job No.: UR402083

Date Reported: 02-20-2004

Project: 29863493.04012/Sears Oakland 1039

Matrix: Water

Date Sampled: 02-11-2004

### EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	MB	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	2	ND	ND	ND	ND	ND	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
Acetone	25	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	25	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	25	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	25	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	25	ND	ND	ND	ND	ND	ND	ND
Ethanol	500	ND	ND	ND	ND	ND	ND	ND
MTBE	2	ND	ND	ND	ND	ND	ND	ND
ETBE	2	ND	ND	ND	ND	ND	ND	ND
DIPE	2	ND	ND	ND	ND	ND	ND	ND
TAME	2	ND	ND	ND	ND	ND	ND	ND
t-Butyl Alcohol	10	ND	ND	ND	ND	ND	ND	ND
SURROGATE	Accept Limit%	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Dibromofluoro-methane	79-126	99	101	100	102	100	98	100
Toluene-d8	79-121	103	97	91	96	97	97	98
Bromofluoro-benzene	71-131	84	83	84	84	80	81	83

MB=Method Blank; MDL=Method Detection Limit; ND=Not Detected (below DF × MDL).

Note: Surrogate spike concentration is 25 ppb for all compounds.





# Southland Technical Services, Inc.

Environmental Laboratories

Client: URS Corporation

Lab Job No.: UR402083

Date Reported: 02-20-2004

Project: 29863493.04012/Sears Oakland 1039 Matrix: Water

Date Sampled: 02-11-2004

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: µg/L(ppb)

Date ANALYZED		02-16-04	02-16-04	02-16-04	02-16-04	02-16-04	02-16-04	02-16-04
PREPARATION METHOD		5030	5030	5030	5030	5030	5030	5030
DILUTION FACTOR		1	100	1	1	50	1	1
LAB SAMPLE LD.			UR402083-7	UR402083-8	UR402083-9	UR402083-10	UR402083-12	UR402083-11
CLIENT SAMPLE LD.			MW-7	MW-8	MW-9	DUP-1	EB-1	TB-1
COMPOUND	MDL	MB						
Dichlorodifluoromethane	5	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Iodomethane	5	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane(EDC)	5	ND	ND	ND	17.6	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	15,300	ND	ND	15,200	ND	ND
Trichloroethene	2.5	ND	ND	ND	13.9	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	5	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	ND	ND	ND
Toluene	1	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	2.5	ND	ND	5.0	42.0	ND	ND	ND
1,2-Dibromoethane(EDB)	5	ND	ND	ND	ND	ND	ND	ND



# Southland Technical Services, Inc.

## Environmental Laboratories

Client: URS Corporation

Lab Job No.: UR402083

Date Reported: 02-20-2004

Project: 29863493.04012/Sears Oakland 1039 Matrix: Water

Date Sampled: 02-11-2004

### EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: ppb

COMPOUND	MDL	MB	MW-7	MW-8	MW-9	DUP-1	EB-1	TB-1
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	ND	663	ND	ND	660	ND	ND
Total Xylenes	2	ND	630	ND	ND	600	ND	ND
Styrene	5	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	ND	ND	ND
Sec-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
Acetone	25	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	25	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	25	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	25	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	25	ND	ND	ND	ND	ND	ND	ND
Ethanol	500	ND	ND	ND	ND	ND	ND	ND
MTBE	2	ND	ND	ND	ND	ND	ND	ND
ETBE	2	ND	ND	ND	ND	ND	ND	ND
DIPE	2	ND	ND	ND	ND	ND	ND	ND
TAME	2	ND	ND	ND	ND	ND	ND	ND
t-Butyl Alcohol	10	ND	ND	ND	ND	ND	ND	ND
SURROGATE	Accept Limit%	%RC	%RC	%RC	%RC	%RC	%RC	%RC
Dibromofluoro-methane	79-126	99	104	99	100	105	109	101
Toluene-d4	79-121	103	99	100	97	95	95	100
Bromofluoro-benzene	71-131	84	84	88	83	82	82	80

MB=Method Blank; MDL=Method Detection Limit; ND=Not Detected (below DF x MDL).

Note: Surrogate spike concentration is 25 ppb for all compounds.



**Southland Technical Services, Inc.**  
Environmental Laboratories

02-20-2004

**EPA 8015M (TPH)  
Batch QA/QC Report**

Client: URS Corporation  
Project: 29863493.04012/Sears Oakland 1039  
Matrix: Water  
Batch No.: AB16-GW1

Lab Job No.: UR402083  
Lab Sample ID: UR402083-6  
Date Analyzed: 02-16-2004

**I. MS/MSD Report  
Unit: ppb**

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-G	ND	1000	983	1,120	98.3	112.0	13.0	30	70-130

**II. LCS Result  
Unit: ppb**

Analyte	LCS Report Value	True Value	Rec.%	%Rec Accept. Limit
TPH-G	1,030	1000	103.0	80-120

ND: Not Detected (at the specified limit).



**Southland Technical Services, Inc.**  
Environmental Laboratories

02-20-2004

**EPA 8260B  
Batch QA/QC Report**

Client: URS Corporation  
Project: 29863493.04012/Sears Oakland 1039  
Matrix: Water  
Batch No: 0216-VOAW

Lab Job No.: UR402083  
Sample ID: UR402083-1  
Date Analyzed: 02-16-2004

**I MS/MSD Report  
Unit: ppb**

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	17.0	19.1	85.0	95.5	11.6	30	70-130
Benzene	ND	20	17.7	19.5	88.5	97.5	9.7	30	70-130
Trichloro-ethene	5.9	20	22.2	25.3	81.5	97.0	17.4	30	70-130
Toluene	ND	20	17.8	19.3	89.0	96.5	8.1	30	70-130
Chlorobenzene	ND	20	19.3	20.1	96.5	100.5	4.1	30	70-130

**II. LCS Result  
Unit: ppb**

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	19.7	20.0	98.5	80-120
Benzene	20.1	20.0	100.5	80-120
Trichloro-ethene	20.2	20.0	101.0	80-120
Toluene	20.2	20.0	101.0	80-120
Chlorobenzene	21.8	20.0	109.0	80-120

ND: Not Detected.

**URS CORPORATION**  
 2020 East First Street, Suite 400  
 Santa Ana, CA 92705  
 (714) 835-6886  
 FAX (714) 667-7147

**CHAIN OF CUSTODY RECORD**

J.M. 02  
 Date: 4/11/04

Page 2 of 2

Data Requested in GISKey Format

UR 402083

82608 VOCs, MTBE, BTEX, Fuel, OY  
 8015 MTPH

Lab Name <b>STS</b>	URS Project/PO Number <b>29863493.04012</b>	Requested Analyses:
Client Name/Project Name/Location <b>Sears Oakland #1039</b>	GeoTracker Information <b>NA</b>	Special Instructions: Please include in 5060 analysis: <b>DEPE, ETBE, C-Hanol, TAME TBA, EOB EDL call pm with quest</b>
URS Project Manager <b>Scott Rowlands</b>	EDF Reporting Y N Global ID <b>NA</b>	
Sampler Name and Signature <b>Jordan Mandel</b>	COELT Log Number <b>NA</b>	

Sample Name	Sample Date	Sample Time	Preserved	Matrix	Container Type	# of Cont.	Requested Analyses										HOLD				
DUP-1-402083-10	2/1/04	1703	Y N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X													
EB-1-12	2/1/04	1730	Y N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X													
			Y N	S L G	Acetate SS Brass Jar Encore ml Amb. Plas. Glass VOA																
			Y N	S L G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA																
			Y N	S L G	Acetate SS Brass Jar Encore ml Amb. Plas. Glass VOA																
			Y N	S L G	Acetate SS Brass Jar Encore ml Amb. Plas. Glass VOA																
			Y N	S L G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA																
			Y N	S L G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA																

Relinquished by: <i>Jordan Mandel</i>	Date: 2/13/04	Received by: <i>W. W. S. S.</i>	Date/Time: 2/12/04 2:30P	Turnaround Time: (Check)	Lab Use Only
Relinquished by:	Date:	Received by:	Date/Time:	Same Day _____ 72 Hour _____	Cooler Temperature: <u>6°C</u>
Relinquished by:	Date:	Received by:	Date/Time:	24 Hour _____ 5 Day _____	*Record upon arrival
				48 Hour _____ Standard <input checked="" type="checkbox"/>	<b>URS</b>

S=Solid L=Liquid G= Gas White Copy in Final Report, Yellow to File, Pink to URS at Dropoff

# URS CORPORATION

2020 East First Street, Suite 400  
 Santa Ana, CA 92705  
 (714) 835-6886  
 FAX (714) 667-7147

## CHAIN OF CUSTODY RECORD

Date: 02/11/04  
 Page 1 of 2

Data Requested in GISKey Format

UR 402083

Ex-Field  
 MTBE  
 82603 VOGS  
 4015M TPA

Lab Name <b>STS</b>	URS Project/PO Number <b>29863493, 04012</b>	Requested Analyses:
Client Name/Project Name/Location <b>Sears Oakland #1039</b>	GeoTracker Information <b>NA</b>	Special Instructions: please include in 8200 analysis DIE, ETBE, Ethanol, TAME TBA, EDB EDC / <sup>call</sup> pm w/aur tion
URS Project Manager <b>Scott Rowlands</b>	EDF Reporting Y N Global ID <b>NT</b>	
Sampler Name and Signature <b>Jordan Mandel</b>	COELT Log Number <b>NA</b>	

Sample Name:	Sample Date	Sample Time	Preserved	Matrix:	Container Type:	# of Cont.	82603 VOGS	4015M TPA	HOLD
TB-1 402083-14	2/11/04	0730	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	2	X	X	X
MW-5 -5	2/11/04	1000	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-6 -6	2/11/04	1043	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-4 -4	2/11/04	1155	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-8 -8	2/11/04	1233	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-2 -2	2/11/04	1400	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-1 -1	2/11/04	1439	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-3 -3	2/11/04	1534	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-9 -9	2/11/04	1614	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	
MW-7 -7	2/11/04	1653	<input checked="" type="radio"/> N	S G	Acetate SS. Brass Jar Encore ml Amb. Plas. Glass VOA	3	X	X	

2/11/04

Relinquished by: <i>[Signature]</i> Date: <u>2/13/04</u>	Received By: <i>[Signature]</i> STS Date/Time: <u>2:30 pm</u>	Turnaround Time: (Check) Same Day: _____ 72 Hour: _____ 24 Hour: _____ 5 Day: _____ 48 Hour: _____ Standard: <input checked="" type="checkbox"/>	Lab Use Only Cooler Temperature*: <u>4°C</u> *Record upon arrival
Relinquished by: _____ Date: _____	Received By: _____ Date/Time: <u>2/13/04</u>		<div style="font-size: 2em; font-weight: bold; text-align: center;">URS</div>

**APPENDIX D**  
**URS DATA VALIDATION REPORTS**

### Level III Data Validation Summary

**PROJECT:** Sears Oakland 1039  
**LABORATORY:** Southland Technical Services, Inc. (STS)  
**MATRIX:** Water  
**LAB PROJECT #:** UR402083  
**SAMPLES:** See table below

Field ID	QC Designations	Lab ID	TPH-Gasoline	VOCs (including Fuel Oxygenates)
TB-1	Trip blank	UR402083-11	X	X
MW-5		UR402083-5	X	X
MW-6		UR402083-6	X	X
MW-4		UR402083-4	X	X
MW-8		UR402083-8	X	X
MW-2		UR402083-2	X	X
MW-1		UR402083-1	X	X
MW-3		UR402083-3	X	X
MW-9		UR402083-9	X	X
MW-7		UR402083-7	X	X
DUP-1	Field duplicate of MW-7	UR402083-10	X	X
EB-1	Equipment blank	UR402083-12	X	X

Date Sampled: 2/11/04

TPH-Gasoline= Total petroleum hydrocarbon – gasoline range (C4-C12), VOCs = Volatile organic compounds

Fuel Oxygenates = t-butyl alcohol (TBA), t-amyl methyl ether (TAME), di - isopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), Methyl tertiary butyl ether (MTBE).

STS is certified by California Department of Health Services, Environmental Laboratory Accreditation Program (ELAP Certificate Number 1986).

### DATA REVIEW MATRIX

QC Parameter	TPH-Gasoline EPA5030/8015M	VOCs EPA5030/8260B
Chain-of-custody (COC)	✓	✓
Sample Receipt	✓	✓
Holding Times	✓	✓
Method Blank	✓	✓
Surrogate Recovery	✓	✓
Laboratory Control Sample	✓	✓
Matrix Spike	✓(1)	✓(2)
Duplicate or Spike Duplicate	✓(1)	✓(2)
Field Duplicate	✓	✓
Trip Blank	✓	✓
Equipment Blank	✓	✓

✓ = Quality control evaluation criteria met

Notes:

1. MS/MSD was conducted on sample MW-6. The results were within acceptance criterion.
2. MS/MSD was conducted on sample MW-1. The results were within acceptance criterion.



Summary: Based on this Limited validation covering the QC parameters listed in the table above, these data are considered to be useable for meeting project objectives. However, the data user must evaluate the ultimate usability of the data based on the reporting limits obtained. The table below lists the detection limits obtained for undiluted samples.

Analyte	Detection Limits Obtained
TPH-Gasoline	50
VOCs	1 to 25
Ethanol	500
MTBE	2
TBA	10
TAME, DIPE, ETBE	2

Aqueous units are microgram per Liter ( $\mu\text{g/L}$ ).

Two samples (MW-7 and Dup-1) required dilution for the 8260B analysis in order to quantitate detected target analytes. For these samples, there were also non-detect MTBE, and fuel oxygenates results with elevated reporting limits. The data user must evaluate the utility of non-detect MTBE, and fuel oxygenates results with elevated reporting limits.